RHI DEC 12

PROJECT ID: 1170-01-70/71/73, 6999-18-70 COUNTY: MARATHON

WITH:

ORDER OF SHEETS

Section No.	1	Title
Section No.	2	Typical Sections and Details (includes erosion control)
Section No.	3	Estimate of Quantities
Section No.	3	Miscellaneous Quantities
Section No.	4	Right of Way Plat
Section No.	5	Plan and Profile
Section No.	6	Standard Detail Drawings
Section No.	7	Sign Plates
Section No.	8	Structure Plans
Section No.	9	Computer Earthwork Data
Section No.	9	Cross Sections

TOTAL SHEETS = 1394

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

WAUSAU - MERRILL
USH 51
MARATHON COUNTY

MERRILL AVENUE/COUNTY ROAD U
CITY OF WAUSAU

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1170-01-70	WISC 2012708	1
1170-01-71	———	1
1170-01-73	WISC 2012709	1
6999-18-70	WISC 2012714	1

CTH K/B51 INTERCHANGE — STATE PROJECT NUMBER 1170-01-70

CTH U OVERHEAD — STATE PROJECT NUMBER 1170-01-71

BRIDGE STREET TO DECATOR DRIVE — STATE PROJECT NUMBER 1170-01-73

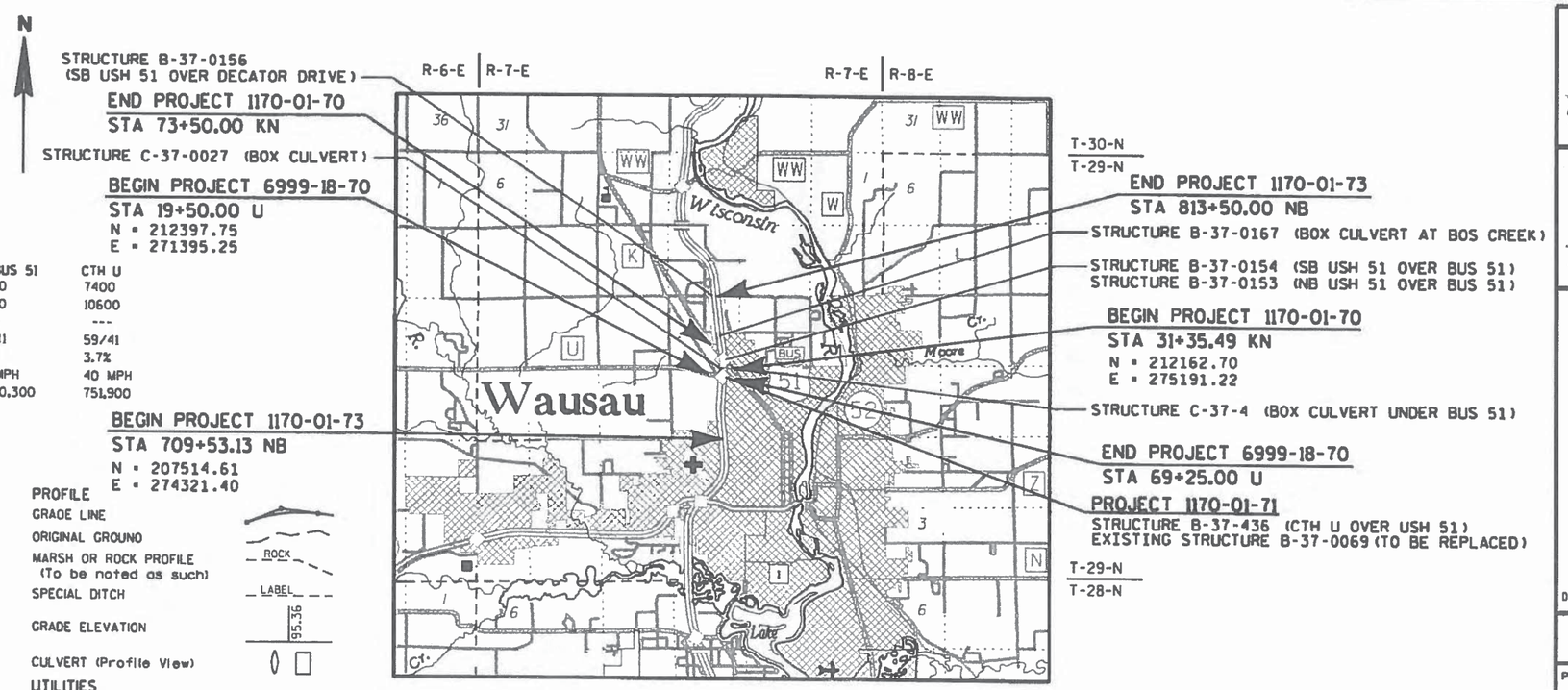
BUSINESS 51 TO WESTWOOD DRIVE — STATE PROJECT NUMBER 6999-18-70



27

DESIGN DESIGNATION

		USH 51	CTH K/BUS 51	CTH U
A.A.D.T. (2015)	=	31000	14500	7400
A.A.D.T. (2035)	=	41300	16800	10600
D.H.V.	=	---	---	---
O.D.	=	63/37	59/41	59/41
T.	=	11.46%	5.5%	3.7%
DESIGN SPEED	=	70 MPH	40 MPH	40 MPH
ESALS	=	12,285,900	3,000,300	751,900



CONVENTIONAL SYMBOLS

PLAN

- CORPORATE LIMITS
- PROPERTY LINE
- LOT LINE
- LIMITED HIGHWAY EASEMENT
- EXISTING RIGHT OF WAY
- PROPOSED OR NEW R/W LINE
- SLOPE INTERCEPT
- REFERENCE LINE
- EXISTING CULVERT
- PROPOSED CULVERT (Box or Pipe)
- COMBUSTIBLE FLUIDS (CAUTION)
- MARSH AREA
- WOODED OR SHRUB AREA

PROFILE

- GRADE LINE
- ORIGINAL GROUND
- MARSH OR ROCK PROFILE (To be noted as such) (ROCK)
- SPECIAL DITCH (LABEL)
- GRADE ELEVATION (95.36)
- CULVERT (Profile View)

UTILITIES

- ELECTRIC (E)
- FIBER OPTIC (FO)
- GAS (G)
- SANITARY SEWER (SAN)
- STORM SEWER (SS)
- TELEPHONE (T)
- WATER (W)
- UTILITY PEDESTAL
- POWER POLE
- TELEPHONE POLE

LAYOUT

SCALE 0 1 MI.

6999-18-70 TOTAL NET LENGTH OF CENTERLINE = 0.942 MI.
1170-01-70 TOTAL NET LENGTH OF CENTERLINE = 0.571 MI.
1170-01-71 TOTAL NET LENGTH OF CENTERLINE = 0.000 MI.
1170-01-73 TOTAL NET LENGTH OF CENTERLINE = 1.969 MI.

COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM (WCCS), MARATHON COUNTY.

ELEVATIONS SHOWN ON THIS PLAN ARE REFERENCED TO THE GEODETIC VERTICAL DATUM OF 1929 (NGVD29).

ACCEPTED FOR CITY OF WAUSAU

7/30/12 DATE — James E. Tipple MAYOR (Signature & Title of Official)

ACCEPTED FOR MARATHON COUNTY

7-26-12 DATE — COUNTY COMMISSIONER

ORIGINAL PLANS PREPARED BY

AYRES ASSOCIATES

WISCONSIN — MARK R. PETERSEN — E-36785 — EAU CLAIRE — PROFESSIONAL ENGINEER

DATE: July 23, 2012

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	WISDOT / EMCS
Designer	AYRES ASSOCIATES INC
Project Manager	DAN ERVA
Regional Examiner	CHERYL SIMON
Regional Supervisor	ANNA WISNER
C.O. Examiner	

APPROVED FOR THE DEPARTMENT

DATE: 7/26/12 — Anna Wisner (Signature)

E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\010101_ti.dgn PLOT DATE : 7/23/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:200

WISDOT/CADDS SHEET 10

UTILITIES

* CHARTER COMMUNICATIONS - CABLE TV
853 MCINTOSH STREET
P.O. BOX 1818
WAUSAU, WI 54403
ATTN: SCOTT OLSON
(715) 301-4079
scott.olson@chartercom.com

* FRONTIER COMMUNICATIONS - COMMUNICATIONS
1851 NORTH 14th AVENUE
WAUSAU, WI 54401
ATTN: CALVIN KLADE
(715) 847-1525

* WISCONSIN PUBLIC SERVICE CORPORATION - ELECTRIC
1700 SHERMAN STREET
P.O. BOX 1166
WAUSAU, WI 54401
ATTN: CLAY VIRCKS
(715) 848-7317
chvircks@wisconsinpublicservice.com

* WISCONSIN PUBLIC SERVICE CORPORATION - GAS
1700 SHERMAN STREET
P.O. BOX 1166
WAUSAU, WI 54401
ATTN: MICHAEL BOSI, PE
(715) 848-7471
mabosi@wisconsinpublicservice.com

STATE TRAFFIC OPERATIONS CENTER - TRAFFIC
433 WEST ST PAUL AVENUE
SUITE 300
MILWAUKEE, WI 53203
(414) 227-2148

VILLAGE OF BROKAW WATER UTILITY - WATER
2737 SOUTH RIDGE ROAD, SUITE 400
GREEN BAY, WI 54304
ATTN: DENNIS STEIGENBERGER
(920) 455-7004
dennis.steigenberger@cedarcorp.com

WAUSAU WATER WORKS - SANITARY & WATER
407 GRANT STREET
WAUSAU, WI 54403
ATTN: ALLEN WESOLOWSKI, PE
(715) 449-2541
allen.wesolowski@ci.wausau.wi.us

* MEMBER OF DIGGERS HOTLINE

DIGGERS HOTLINE

Call 811 3 Work Days Before You Dig
or Toll Free (800) 242-8511
Hearing Impaired TDD (800) 542-2289
www.DiggersHotline.com

ENVIRONMENTAL COORDINATOR

WISCONSIN DEPARTMENT OF NATURAL RESOURCES
473 GRIFFITH AVENUE
WISCONSIN RAPIDS, WI 54494
ATTN: MARC HIRSHFIELD
(715) 421-7867

GENERAL NOTES

REMOVALS
NO TREES OR SHRUBS ARE TO BE REMOVED UNLESS INDICATED FOR REMOVAL BY THE ENGINEER.

GRADING/EROSION CONTROL
OVER EXCAVATION OF ROCK PER STANDARD SPECIFICATIONS IS NOT SHOWN ON THE CROSS SECTIONS, BUT IS INCLUDED IN THE MISCELLANEOUS QUANTITIES. DO NOT UNDERCUT ROCK ON SIDE SLOPES WHERE ROCK FACE WILL BE LEFT IN PLACE.

USE SELECTED MATERIAL OBTAINED FROM ROADWAY AND DRAINAGE EXCAVATION TO BACKFILL AREA OF EBS IN ROCK EXCAVATION.

EXCAVATION BELOW SUBGRADE (ebs) IS NOT USED TO BALANCE YARDAGE AND IS NOT SHOWN ON THE CROSS SECTIONS BUT IS MEASURED AND PAID FOR AS COMMON EXCAVATION. THE LOCATION FOR EBS WILL BE DETERMINED BY THE ENGINEER.

PAVING
DO NOT APPLY FERTILIZER WITHIN 20 FEET OF A WATER BODY OR WETLAND.

MISCELLANEOUS
A SAWED JOINT WILL BE REQUIRED WHERE NEW PAVEMENT IS TO MEET AN EXISTING PAVED SURFACE.

ALL CURB AND GUTTER RADII DIMENSIONS ARE TO THE FLANGE OF CURB, UNLESS OTHERWISE NOTED.

DETAILS OF CONSTRUCTION NOT SHOWN SHALL BE IN ACCORDANCE WITH THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS.

THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT THAT ARE NOT SHOWN.

TOTAL LAYER THICKNESS	LAYERS	ASPHALTIC MATERIAL
3"	3" UPPER LAYER	PG 64-34
4"	2" UPPER LAYER	PG 64-34
	2" LOWER LAYER	PG 64-22
5"	2" UPPER LAYER	PG 64-34
	3" LOWER LAYER	PG 64-22
5 1/2"	2.5" UPPER LAYER	PG 64-34
	3" LOWER LAYER	PG 64-22
6 1/2"	2" UPPER LAYER	PG 64-34
	2" UPPER-LOWER LAYER	PG 64-22
	2.5" LOWER LAYER	PG 64-22

ALIGNMENT DESIGNATION	ROADWAY SEGMENT	PROJECT ID	ROADWAY TYPE
NB	USH 51 NORTHBOUND	1170-01-73	RURAL
SB	USH 51 SOUTHBOUND	1170-01-73	RURAL
A	USH 51 NB OFF RAMP TO CTH K	1170-01-70	RURAL
B	CTH K ON RAMP TO USH 51 NB	1170-01-70	RURAL
C	USH 51 SB OFF RAMP TO CTH K	1170-01-70	RURAL
D	CTH K ON RAMP TO USH 51 SB	1170-01-70	RURAL
E	USH 51 NB OFF RAMP TO CTH U	1170-01-70	RURAL
F	CTH U ON RAMP TO USH 51 SB	1170-01-70	RURAL
U	CTH U	6999-18-70	URBAN
KN/KS	CTH K	1170-01-70	URBAN
KE/KW	ROUNDABOUT CIRCLE	1170-01-70	URBAN
K	BUSINESS 51	1170-01-70	URBAN
V	OVERLOOK DR	1170-01-70	RURAL
R	ARTHUR AVE	6999-18-70	URBAN
L	N 18TH AVE CUL-DE-SAC	6999-18-70	RURAL
N	CASSIDY DR CUL-DE-SAC	1170-01-70	RURAL
M	MERRILL AVE CUL-DE-SAC	6999-18-70	RURAL
ME	MERRILL AVE	1170-01-70	RURAL
TL	MULTI-USE PATH	1170-01-70	RURAL
TR	MULTI-USE PATH	1170-01-70	RURAL
SW	N 14TH AVE SIDEWALK	1170-01-70	URBAN

PROJECT NO: 1170-01-70/71/73 & 6999-18-70	HWY: USH 51	COUNTY: MARATHON	PROJECT OVERVIEW	SHEET	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\020201_po.dgn PLOT DATE : 8/1/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:800
WISDOT/CADDS SHEET 42

2

2

202+00

OVERLOOK DR

201+00 V

PROJECT ID 1170-01-70
PROJECT ID 6999-18-70

N

CTH U

22+00 U

23+00 U

24+00 U

200+00 V

25+00 U

26+00 U

27+00 U

CTH U

WESTWOOD DR

PROJECT NO: 1170-01-70/71/73 & 6999-18-70	HWY: USH 51	COUNTY: MARATHON	PROJECT LIMITS	SHEET 4	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\020202_po.dgn PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42

2

N

44+00 U

45+00 U

46+00 U

47+00 U

48+00 U

49+00 U

CTH U

CTH U

PROJECT ID 6999-18-70
PROJECT ID 1170-01-70

PROJECT ID 1170-01-71
(STRUCTURE ONLY)

751+00 F

USH 51 SB

754+0

753+00 SB

752+00 SB

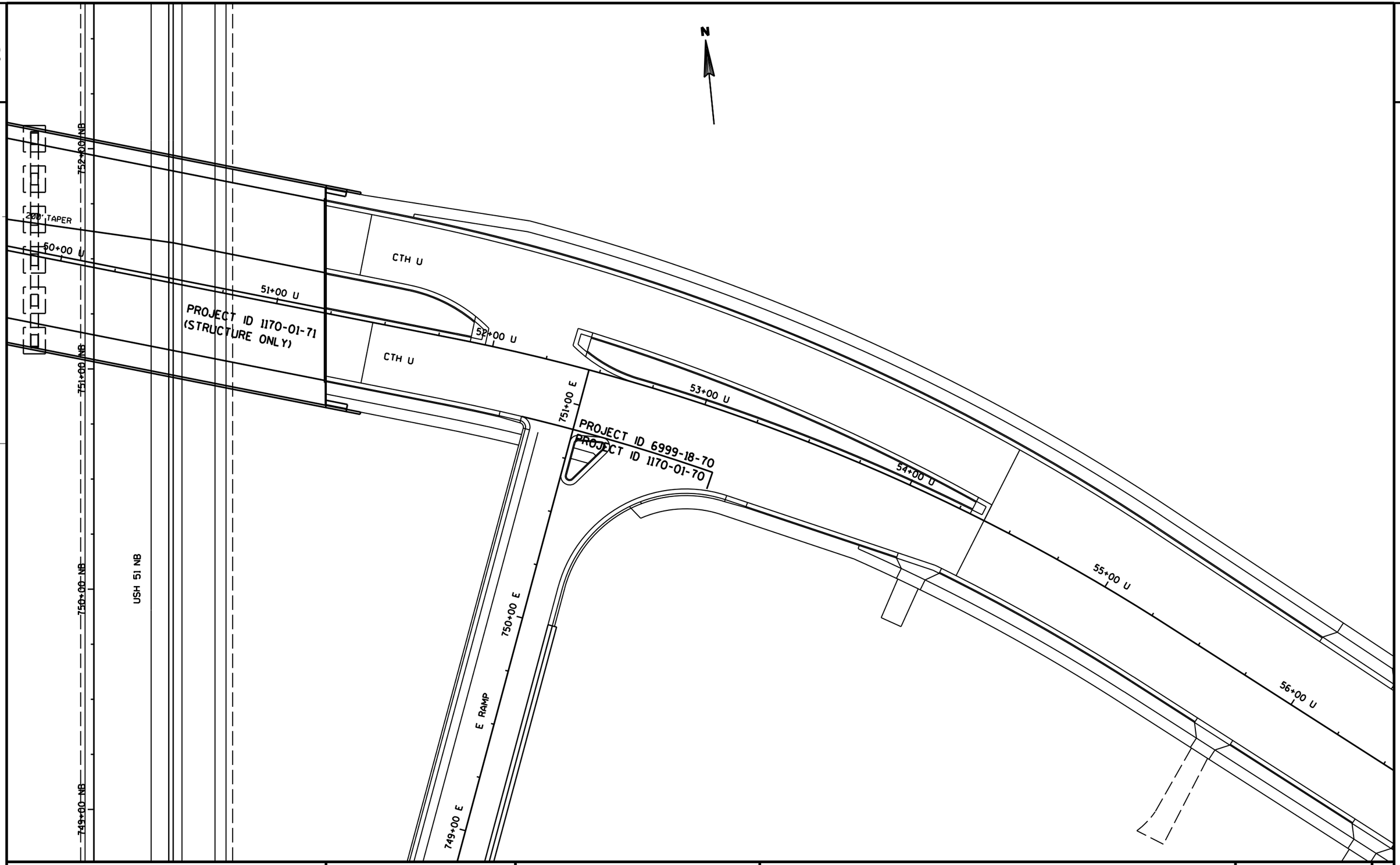
751+00 SB

50+

2

PROJECT NO: 1170-01-70/71/73 & 6999-18-70	HWY: USH 51	COUNTY: MARATHON	PROJECT LIMITS	SHEET 5	E

2



PROJECT NO: 1170-01-70/71/73 & 6999-18-70	HWY: USH 51	COUNTY: MARATHON	PROJECT LIMITS	SHEET E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\020204_po.dgn PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:40
WISDOT/CADDS SHEET 42

2

2

BUSINESS 51

BUSINESS 51

BUSINESS 51

PROJECT ID 1170-01-70 CATEGORY 0090
PROJECT ID 1170-01-70 CATEGORY 0010

N

SIGNALS ARE PART OF
PROJECT ID 1170-01-70

PROJECT ID 1170-01-70
PROJECT ID 6999-18-70

72+00 U

71+00 U

70+00 U

69+00 U

68+00 U

CTH U

PROJECT ID 1170-01-70
PROJECT ID 6999-18-70

GUY

MH

WV

PROJECT NO: 1170-01-70/71/73 & 6999-18-70	HWY: USH 51	COUNTY: MARATHON	PROJECT LIMITS	SHEET 7	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\020205_po.dgn | PLOT DATE : 9/4/2012 | PLOT BY : AYRES-EC | PLOT NAME : | PLOT SCALE : 1:40

2

2

N

PROJECT ID 1170-01-73

PROJECT ID 1170-01-70

738+00 F

739+00 F

740+00 F

741+00 F

742+00 F

743+00 F

F RAMP

PROJECT ID 1170-01-70

USH 51 SB

PROJECT ID 1170-01-73

737+00 SB

738+00 SB

739+00 SB

740+00 SB

741+00 SB

742+00 SB

743+00 SB

737+00 NB

738+00 NB

739+00 NB

740+00 NB

741+00 NB

742+00 NB

743+00 NB

USH 51 NB

PROJECT ID 1170-01-73

739+00 A

739+00 E

740+00 A

740+00 E

741+00 A

741+00 E

PROJECT ID 1170-01-70

742+00 A

742+00 E

E RAMP

743+00 A

743+00 E

PROJECT ID 1170-01-73

PROJECT ID 1170-01-70

PROJECT NO: 1170-01-70/71/73 & 6999-18-70	HWY: USH 51	COUNTY: MARATHON	PROJECT LIMITS	SHEET 8	E

2

N

CTH U

CTH U

PROJECT ID 1170-01-73

PROJECT ID 1170-01-70

752+00 D

753+00 D

754+00 D

755+00 D

756+00 D

D RAMP

PROJECT ID 1170-01-73

SB

751+00 SB

752+00 SB

753+00 SB

754+00 SB USH 51 SB

755+00 SB

756+00 SB

00 NB

751+00 NB

752+00 NB

753+00 NB

754+00 NB

755+00 NB

756+00 NB

PROJECT ID 1170-01-73

USH 51 NB

+00 A

751+00 A

752+00 A

PROJECT ID 1170-01-70

753+00 A

A RAMP

754+00 A

755+00 A

756+00 A

PROJECT NO: 1170-01-70/71/73 & 6999-18-70	HWY: USH 51	COUNTY: MARATHON	PROJECT LIMITS	SHEET 9	E

2

2

N

756+00 D
757+00 D
758+00 D
759+00 D
760+00 D
761+00 D
D RAMP
PROJECT ID 1170-01-70
PROJECT ID 1170-01-73
USH 51 SB
756+00 SB
757+00 SB
758+00 SB
759+00 SB
760+00 SB
761+00 SB
762+00 SB
756+00 NB
757+00 NB
758+00 NB
759+00 NB
760+00 NB
761+00 NB
762+00
USH 51 NB
PROJECT ID 1170-01-73
PROJECT ID 1170-01-70
756+00 A
757+00 A
A RAMP
758+00 A
759+00 A
760+00 A
761+00 A

PROJECT NO: 1170-01-70/71/73 & 6999-18-70	HWY: USH 51	COUNTY: MARATHON	PROJECT LIMITS	SHEET	E

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WISDOT/CADDS SHEET 42

2

777+00 C

778+00 C

779+00 C

780+00 C

781+00 C

782+00 C

C RAMP

PROJECT ID 1170-01-70

N

PROJECT ID 1170-01-73

USH 51 SB

777+00 SB

778+00 SB

779+00 SB

780+00 SB

781+00 SB

782+00 SB

777+00 NB

778+00 NB

779+00 NB

780+00 NB

781+00 NB

782+00 NB

USH 51 NB

PROJECT ID 1170-01-73

PROJECT ID 1170-01-70

777+00 B

778+00 B

B RAMP

779+00 B

780+00 B

781+00 B

782+00 B

PROJECT ID 1170-01-70

PROJECT ID 1170-01-73

2

PROJECT NO: 1170-01-70/71/73 & 6999-18-70	HWY: USH 51	COUNTY: MARATHON	PROJECT LIMITS	SHEET	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\020210_po.dgn PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42

2

2

N

PROJECT ID 1170-01-73

783+00 C

784+00 C

785+00 C

786+00 C

787+00 C

788+00 C

789+00 C

PROJECT ID 1170-01-70

C RAMP

PROJECT ID 1170-01-70

PROJECT ID 1170-01-73

USH 51 SB

783+00 SB

784+00 SB

785+00 SB

786+00 SB

787+00 SB

788+00 SB

789+00 SB

3+00 NB

784+00 NB

785+00 NB

786+00 NB

787+00 NB

788+00 NB

789+00 NB

USH 51 NB

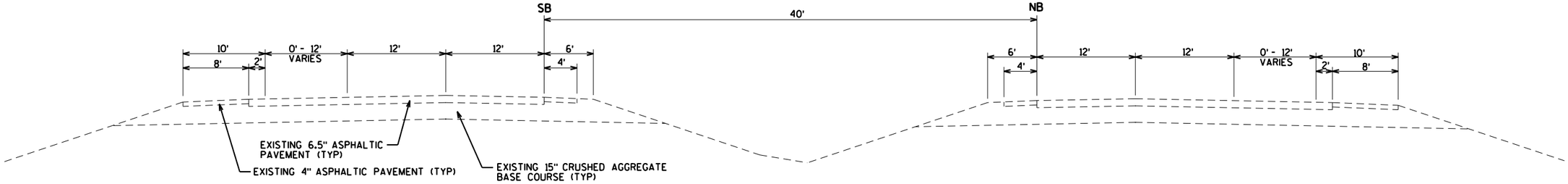
PROJECT ID 1170-01-73

3+00 B

784+00 B

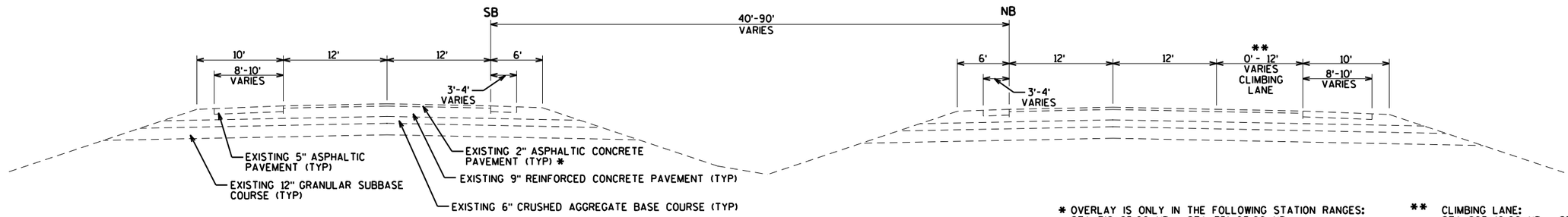
PROJECT ID 1170-01-73

PROJECT NO: 1170-01-70/71/73 & 6999-18-70	HWY: USH 51	COUNTY: MARATHON	PROJECT LIMITS	SHEET 12	E



TYPICAL EXISTING SECTION - USH 51

STA 709+53.25 NB - STA 718+65.00 NB
STA 710+30.00 SB - STA 718+60.00 SB

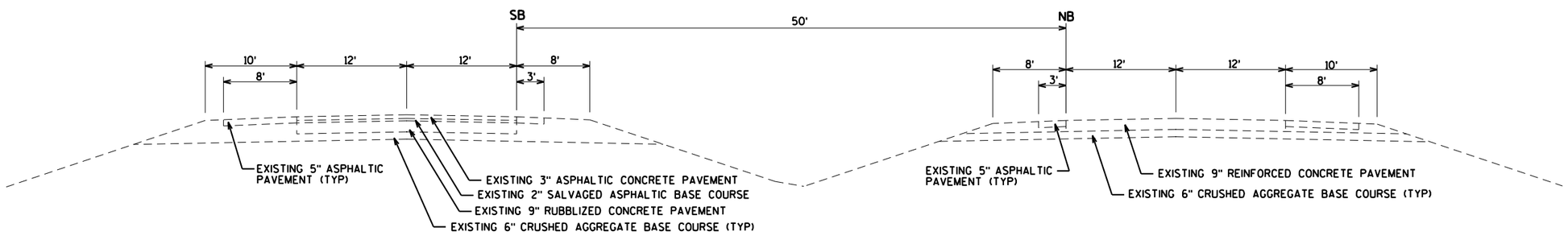


TYPICAL EXISTING SECTION - USH 51

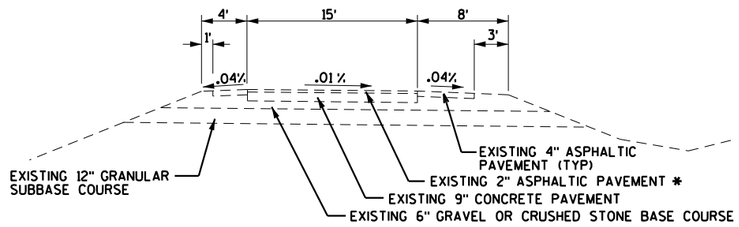
STA 718+65.00 NB - STA 811+34.42 NB
STA 718+60.00 SB - STA 813+50.00 SB

* OVERLAY IS ONLY IN THE FOLLOWING STATION RANGES:
STA 718+65.00 NB - STA 751+03.00 NB
STA 718+60.00 SB - STA 751+44.00 SB
STA 807+40.00 SB - STA 813+50.00 SB
STA 807+85.00 NB - STA 811+34.42 NB

** CLIMBING LANE:
STA 803+10.00 NB - STA 811+34.56 NB

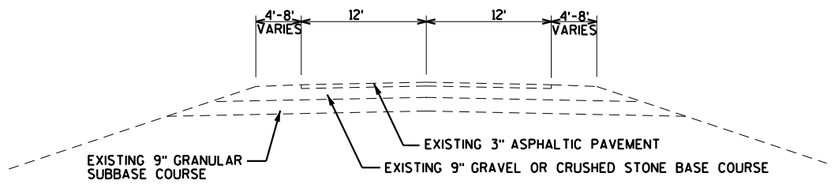


TYPICAL EXISTING SECTION - BUS 51/CTH K



TYPICAL EXISTING SECTION - RAMPS

* OVERLAY IS ONLY ON USH 51 NB EXIT AND SB ON RAMPS TO/FROM CTH U

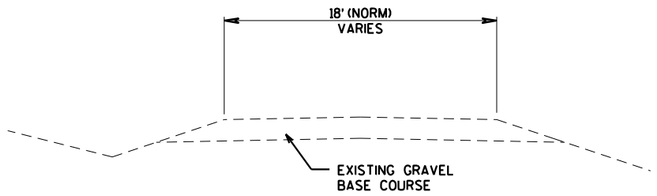


TYPICAL EXISTING SECTION - CTH U

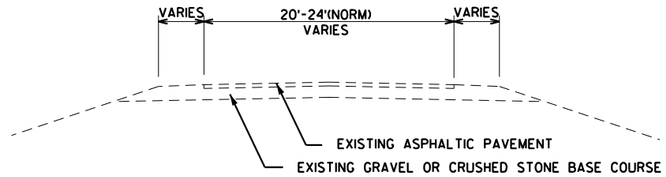
PROJECT NO: 1170-01-70/71/73 & 6999-18-70	HWY: USH 51	COUNTY: MARATHON	TYPICAL SECTIONS - EXISTING	SHEET 13	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\020301_ts.dgn PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:200

WISDOT/CADDS SHEET 42

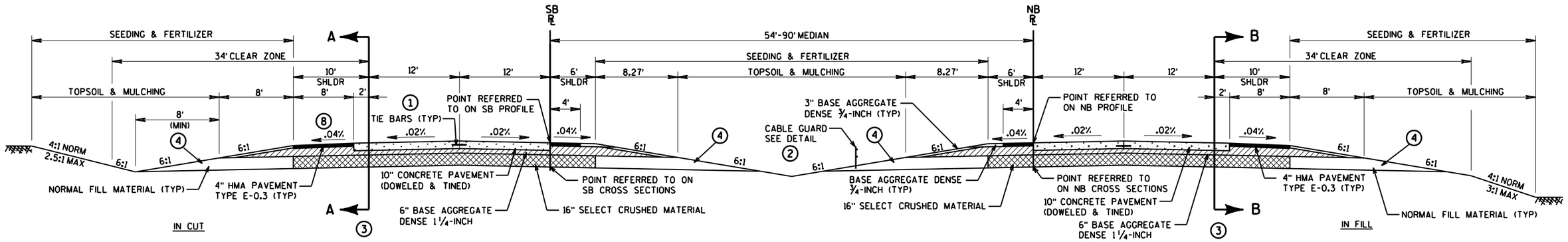


TYPICAL EXISTING SECTION - OVERLOOK DR



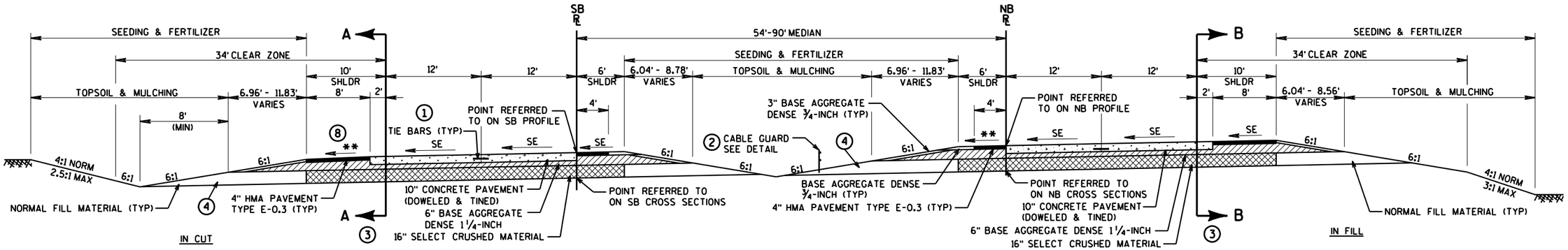
TYPICAL EXISTING SECTION

CASSIDY DR
18TH AVE
MERRILL AVE
ARTHUR AVE



TYPICAL FINISHED SECTION - USH 51

STA 709+53.13 NB - STA 723+05.30 NB
STA 737+76.25 NB - STA 756+95.69 NB
STA 762+93.92 NB - STA 811+34.42 NB
STA 811+34.42 SB - STA 813+50.00 SB (SB LANES ONLY)



TYPICAL SUPERELEVATED FINISHED SECTION - USH 51

STA 723+05.30 NB - STA 737+76.25 NB
STA 756+95.69 NB - STA 762+93.92 NB

** THE LOW SIDE SHOULDER SLOPE ON SUPERELEVATED SECTION EQUALS THE SUPERELEVATION RATE WHEN THE SUPERELEVATION RATE IS GREATER THAN 4%. IF THE SUPERELEVATION RATE IS LESS THAN OR EQUAL TO 4%. THE LOW SIDE SHOULDER SLOPE IS 4%. HIGH SIDE SHOULDER SLOPE ON SUPERELEVATED SECTIONS EQUALS THE SUPERELEVATION RATE. SEE SUPERELEVATION TABLES FOR SE

(1) TIE BARS ARE INCIDENTAL TO CONCRETE PAVEMENT (UNLESS DRILLED INTO EXISTING PAVEMENT)

(2) CABLE GUARD REQUIRED WHERE MEDIAN IS LESS THAN 60 FT STA 709+53.25 NB - STA 757+00.00 NB SEE PLAN SHEET FOR HORIZONTAL LOCATION OF CABLE GUARD (LT/RT)

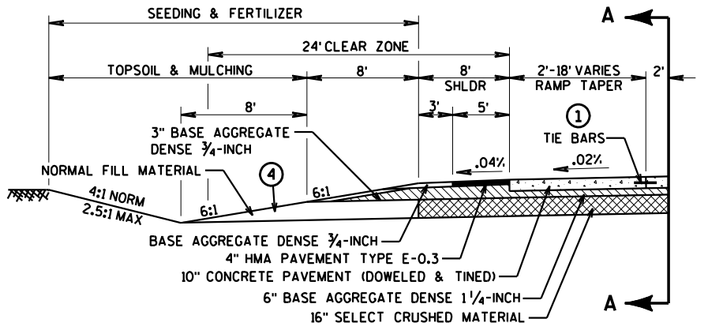
(3) ALTERNATE SECTIONS SHOWN ON NEXT SHEET

(4) CONSTRUCT RELIEF TRENCH AT SAG POINTS OR EVERY 250 FT ON LOW SIDE OF SUPERELEVATION ONLY (SEE DETAIL)

(8) PAVED AS 5.5" HMA PAVEMENT TYPE E-3 FROM STA 716+00 SB - STA 733+00 SB AND STA 740+18 SB - STA 748+00 SB

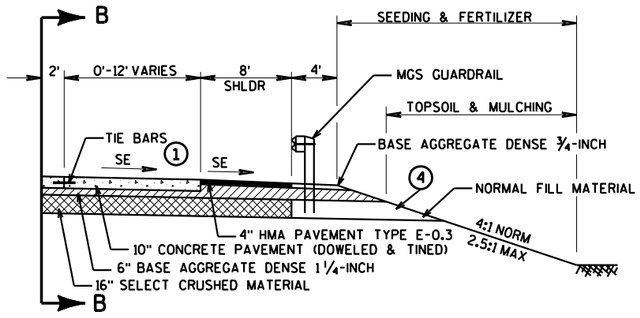
NOTE: ROUTE AND SEAL ALL CONCRETE/ASPHALT JOINTS (SEE DETAIL)

PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	TYPICAL SECTIONS - USH 51	SHEET 15	E



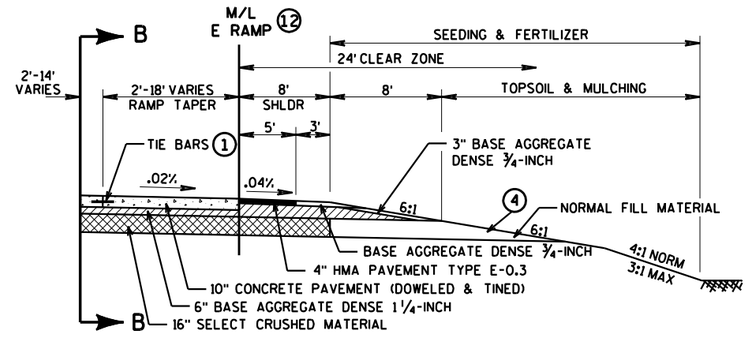
SECTION A-A (AT C, D, F & BRIDGE ST RAMPS)

STA 710+30.98 SB - STA 712+91.48 SB
STA 730+61.90 SB - STA 740+18.72 SB
STA 745+01.16 SB - STA 751+58.31 SB
STA 786+76.74 SB - STA 789+10.41 SB



SECTION B-B (AT BRIDGE ST RAMP)

STA 709+53.13 NB - STA 713+00.00 NB
STA 756+95.69 NB - STA 762+35.00 NB (MATCH SUPERELEVATION)



SECTION B-B (AT A, B, E & BRIDGE ST RAMPS)

STA 713+00.00 NB - STA 714+88.78 NB (PAVE ENTIRE 8' SHLDR)
STA 727+54.90 NB - STA 740+00.00 NB (MATCH SUPERELEVATION)
STA 781+05.03 NB - STA 796+73.56 NB

SECTION B-B (AT A & E RAMPS)

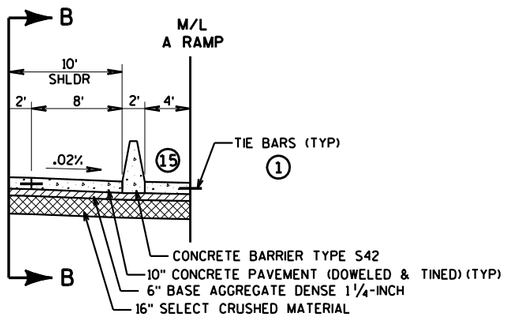
STA 740+00.00 NB - STA 745+23.00 NB
STA 747+50.00 NB - STA 753+24.55 NB

1. TIE BARS ARE INCIDENTAL TO CONCRETE PAVEMENT (UNLESS DRILLED INTO EXISTING PAVEMENT)
4. CONSTRUCT RELIEF TRENCH AT SAG POINTS OR EVERY 250 FT ON LOW SIDE OF SUPERELEVATION ONLY (SEE DETAIL)
12. MATCH LINE TO E RAMP FROM STA 738+11.90 NB - STA 745+23.00 NB
15. SEE INTERCHANGE DETAIL FOR LAYOUT OF CONCRETE BARRIER SPLIT FROM STA 753+24.55 NB - STA 755+11.22 NB. CONCRETE PAVEMENT BEHIND CONCRETE BARRIER FROM STA 755+11.22 NB - STA 756+95.69 NB IS NOT REO'D.

NOTE: ROUTE AND SEAL ALL CONCRETE/ASPHALT JOINTS (SEE DETAIL)

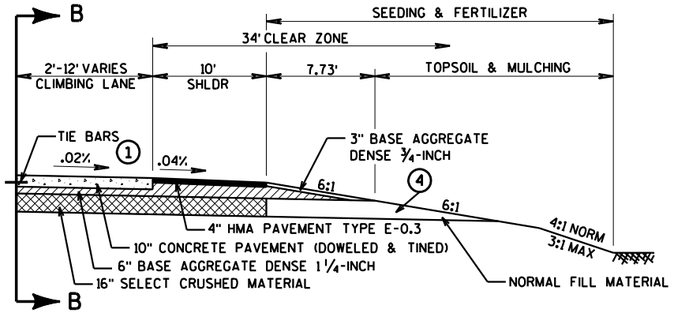
SECTION B-B (AT A & E RAMPS)

STA 745+23.00 NB - STA 747+50.00 NB



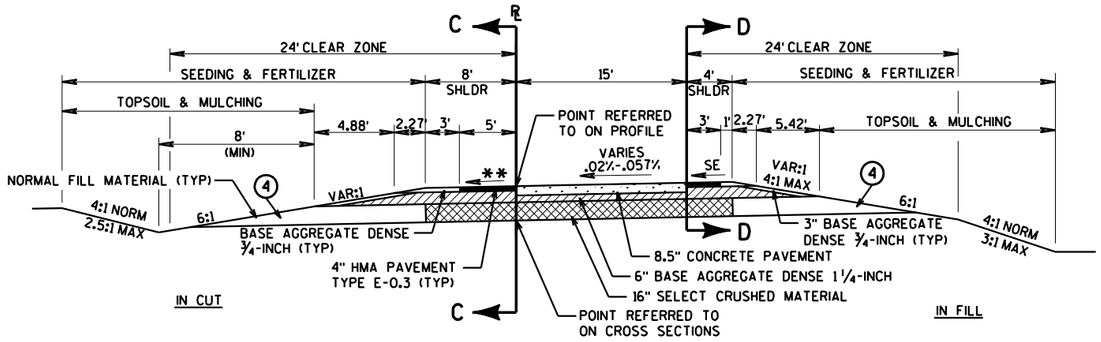
SECTION B-B (AT A & E RAMPS)

STA 753+24.55 NB - STA 756+95.69 NB



SECTION B-B (AT CLIMBING LANE)

STA 801+97.42 NB - STA 811+34.42 NB



TYPICAL FINISHED SECTION - RAMPS

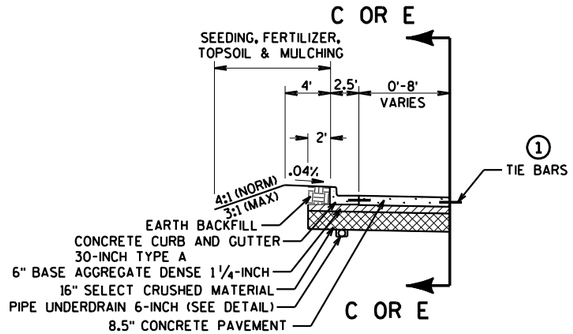
C RAMP (SB 51 OFF RAMP TO CTH K)
D RAMP (SB 51 ON RAMP FROM CTH K)

(1) TIE BARS ARE INCIDENTAL TO CONCRETE PAVEMENT (UNLESS DRILLED INTO EXISTING PAVEMENT)

(4) CONSTRUCT RELIEF TRENCH AT SAG POINTS OR EVERY 250 FT ON LOW SIDE OF SUPERELEVATION ONLY (SEE DETAIL)

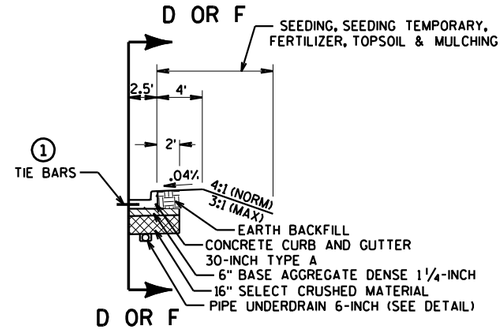
NOTE: ROUTE AND SEAL ALL CONCRETE/ASPHALT JOINTS (SEE DETAIL)

** THE LOW SIDE SHOULDER SLOPE ON SUPERELEVATED SECTION EQUALS THE SUPERELEVATION RATE WHEN THE SUPERELEVATION RATE IS GREATER THAN 4%. IF THE SUPERELEVATION RATE IS LESS THAN OR EQUAL TO 4%. THE LOW SIDE SHOULDER SLOPE IS 4%. HIGH SIDE SHOULDER SLOPE ON SUPERELEVATED SECTIONS EQUALS THE SUPERELEVATION RATE. SEE SUPERELEVATION TABLES FOR SE



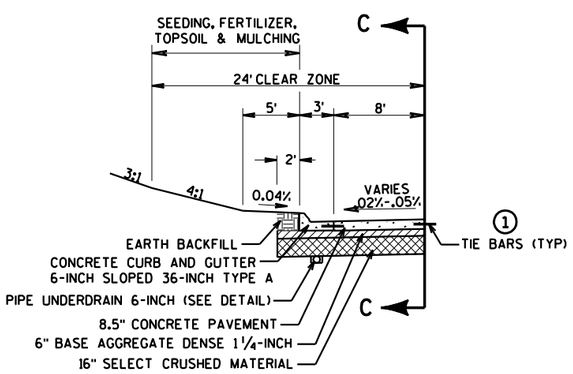
SECTION C-C OR E-E

STA 755+10.00 A - STA 761+09.89 A
STA 761+86.80 B - STA 764+80.00 B
STA 771+18.04 C - STA 775+50.00 C
STA 764+50.00 D - STA 771+05.00 D



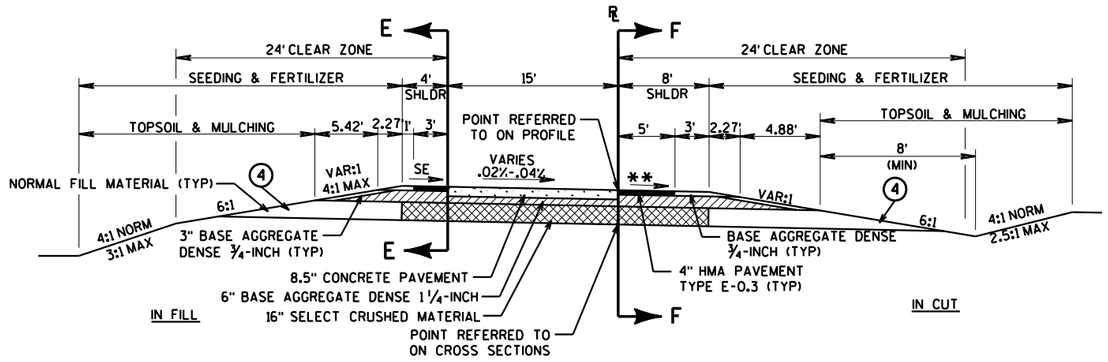
SECTION D-D OR F-F

STA 757+10.00 A - STA 761+32.76 A
STA 761+29.34 B - STA 766+80.00 B
STA 771+42.18 C - STA 775+50.00 C
STA 768+00.00 D - STA 770+46.82 D



SECTION C-C

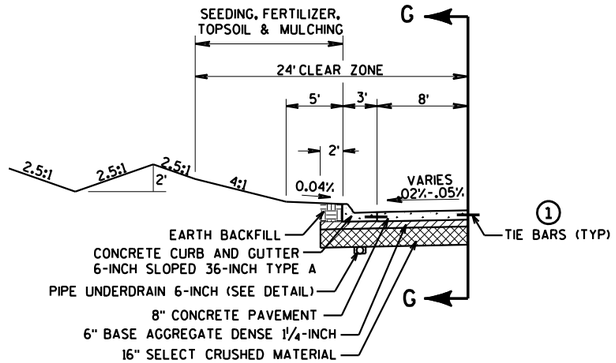
STA 764+50.00 D - STA 769+03.00 D



TYPICAL FINISHED SECTION - RAMPS

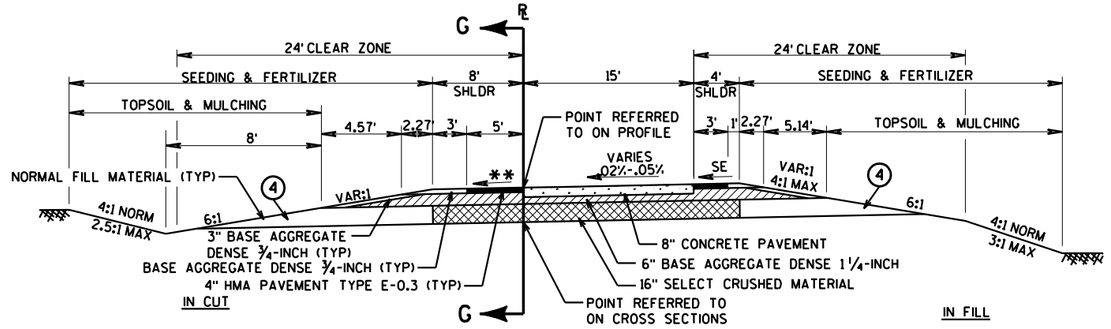
A RAMP (NB 51 OFF RAMP TO CTH K)
B RAMP (NB 51 ON RAMP FROM CTH K)

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	TYPICAL SECTIONS - RAMPS	SHEET 17	E



SECTION G-G

STA 743+00.00 F - STA 751+96.00 F



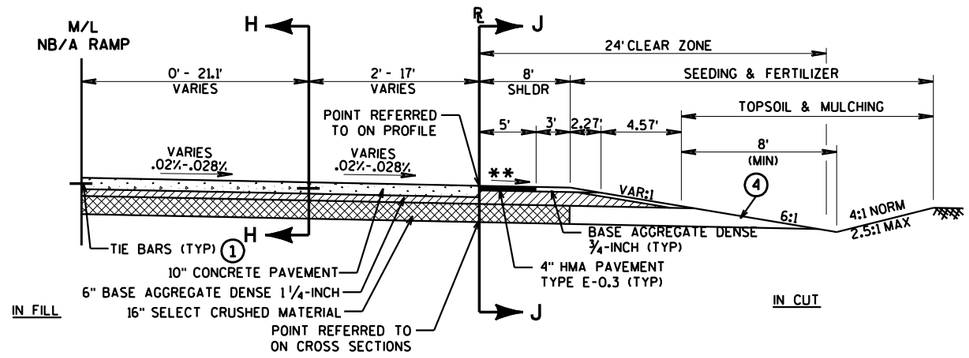
TYPICAL FINISHED SECTION - F RAMP

1 TIE BARS ARE INCIDENTAL TO CONCRETE PAVEMENT (UNLESS DRILLED INTO EXISTING PAVEMENT)

4 CONSTRUCT RELIEF TRENCH AT SAG POINTS OR EVERY 250 FT ON LOW SIDE OF SUPERELEVATION ONLY (SEE DETAIL)

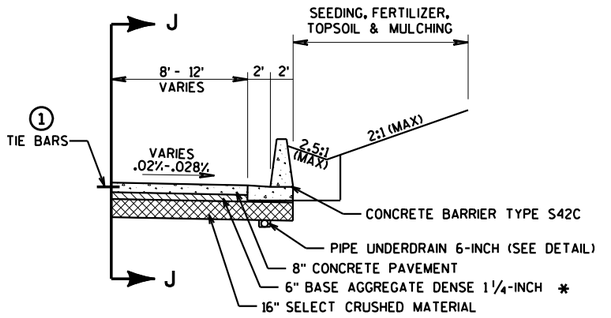
NOTE: ROUTE AND SEAL ALL CONCRETE/ASPHALT JOINTS (SEE DETAIL)

** THE LOW SIDE SHOULDER SLOPE ON SUPERELEVATED SECTION EQUALS THE SUPERELEVATION RATE WHEN THE SUPERELEVATION RATE IS GREATER THAN 4%. IF THE SUPERELEVATION RATE IS LESS THAN OR EQUAL TO 4%. THE LOW SIDE SHOULDER SLOPE IS 4%. HIGH SIDE SHOULDER SLOPE ON SUPERELEVATED SECTIONS EQUALS THE SUPERELEVATION RATE. SEE SUPERELEVATION TABLES FOR SE



TYPICAL FINISHED SECTION - E RAMP

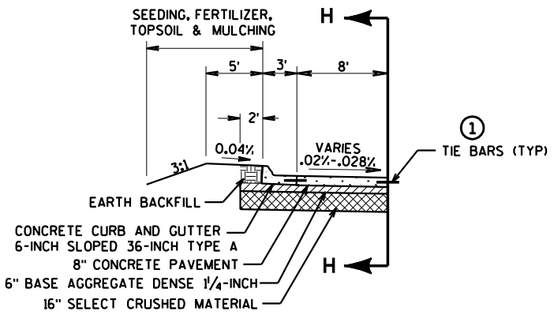
STA 738+11.90 E - STA 745+20.81 E



SECTION J-J

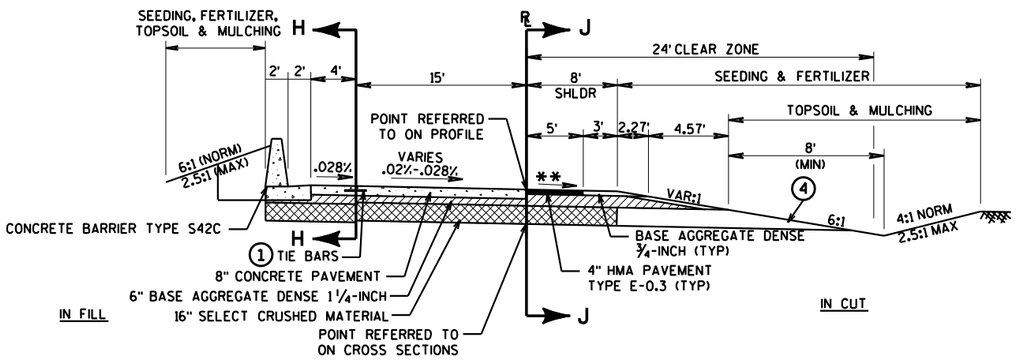
STA 743+75.00 E - STA 750+00.00 E

* USE 8" BASE AGGREGATE DENSE 1 1/4-INCH FROM STA 743+75 E - STA 745+20.81 E



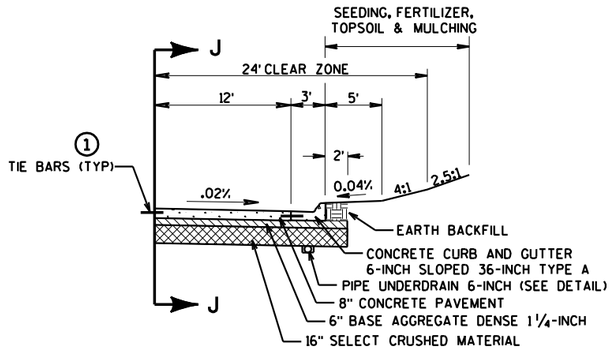
SECTION H-H

STA 748+00.00 E - STA 750+88.00 E



TYPICAL FINISHED SECTION - E RAMP

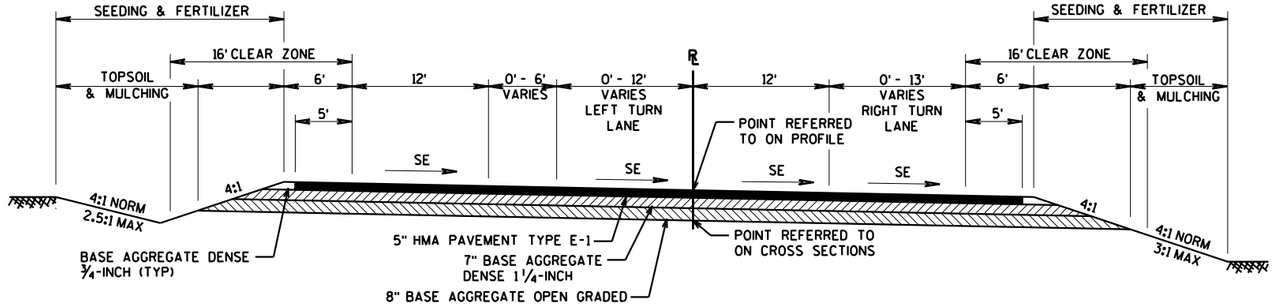
STA 745+20.81 E - STA 750+88.00 E



SECTION J-J

STA 750+00.00 E - STA 750+88.00 E

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	TYPICAL SECTIONS - RAMPS	SHEET 18 E



(1) TIE BARS ARE INCIDENTAL TO CONCRETE PAVEMENT (UNLESS DRILLED INTO EXISTING PAVEMENT)

(6) NO TERRACE ON STRUCTURE APPROACH. SIDEWALK WIDTH OF 6'IN AREAS WHERE NO TERRACE IS PROVIDED

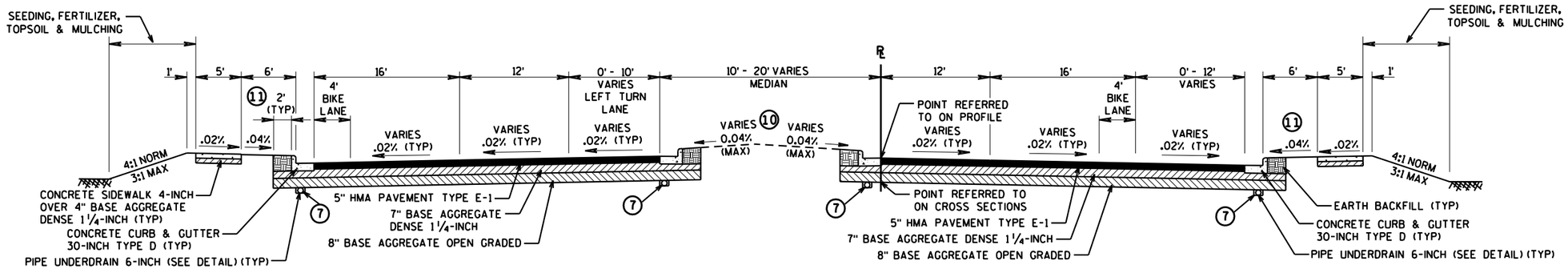
(7) SEE PIPE UNDERDRAIN LAYOUT ON STORM SEWER SHEETS FOR LIMITS

(10) PLACE CONCRETE SIDEWALK 4-INCH IN MEDIAN WHERE BACK OF CURB TO BACK OF CURB WIDTH IS 10' OR LESS. USE TOPSOIL, SEEDING AND FERTILIZER WHEN 10' OR GREATER.

(11) SEEDING, FERTILIZER & TOPSOIL

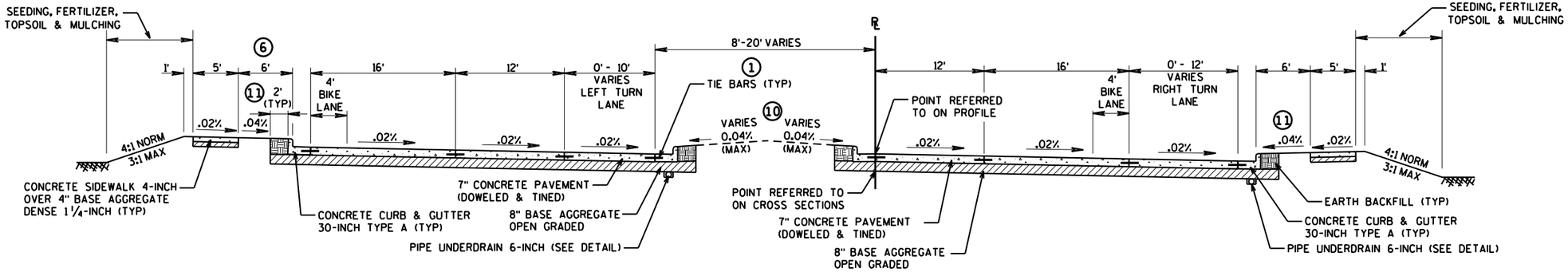
TYPICAL FINISHED SECTION - CTH U

STA 19+50.00 U - STA 25+10.00 U



TYPICAL FINISHED SECTION - CTH U
WEST OF F RAMP TERMINAL

STA 25+10.00 U - STA 44+28.23 U

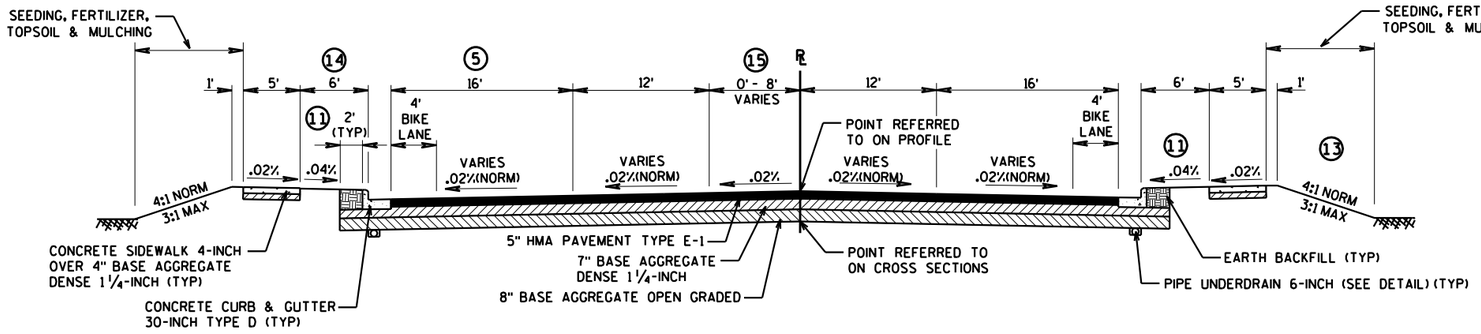


TYPICAL FINISHED SECTION - CTH U
BETWEEN RAMP TERMINALS

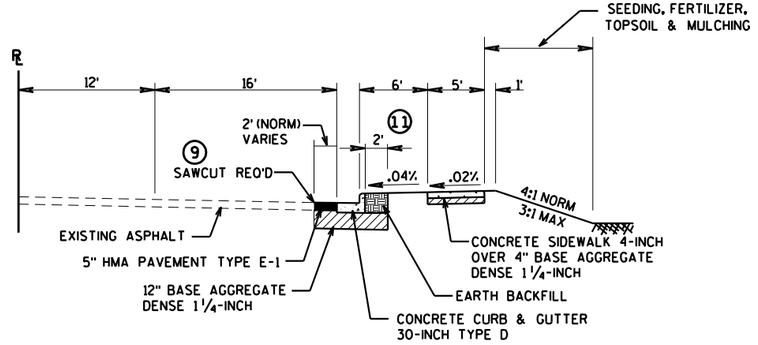
STA 44+28.23 U - STA 54+37.33 U

PROJECT NO: 1170-01-71 / 6999-18-70	HWY: USH 51	COUNTY: MARATHON	TYPICAL SECTIONS - CTH U	SHEET	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\020301_ts.dgn PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:200
WISDOT/CADDS SHEET 42



TYPICAL FINISHED SECTION - CTH U
EAST OF E RAMP TERMINAL
STA 54+37.33 U - STA 69+25.00 U



TYPICAL FINISHED SECTION - CTH U
STA 69+25.00 U - STA 71+45.44 U

(5) WIDTH VARIES FROM 16' - 26.2' FROM STA 67+53.50 U - STA 69+00.00 U

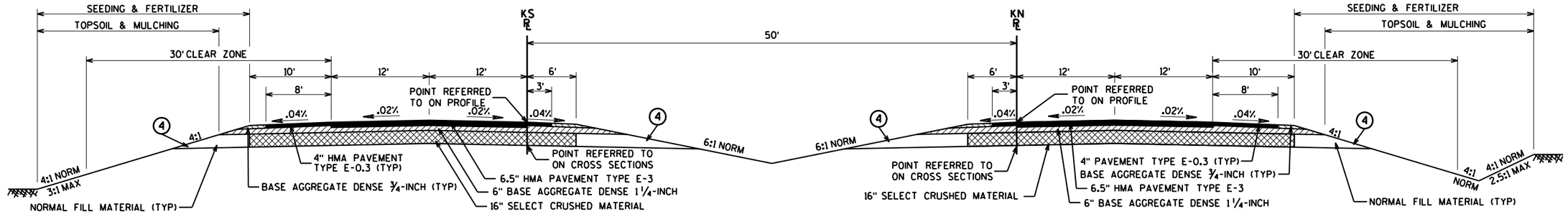
(9) FIELD VERIFY EXISTING ELEVATIONS AT EDGE OF ASPHALT PAVEMENT PRIOR TO PLACING CURB AND GUTTER

(11) SEEDING, FERTILIZER & TOPSOIL

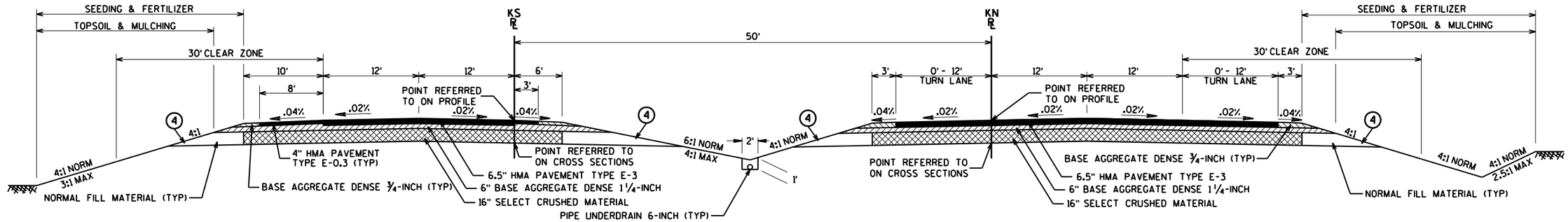
(13) RETAINING WALL STA 63+50 U - STA 64+75 U SEE DETAIL

(14) 4' TERRACE FROM STA 60+90 U - STA 61+50 U

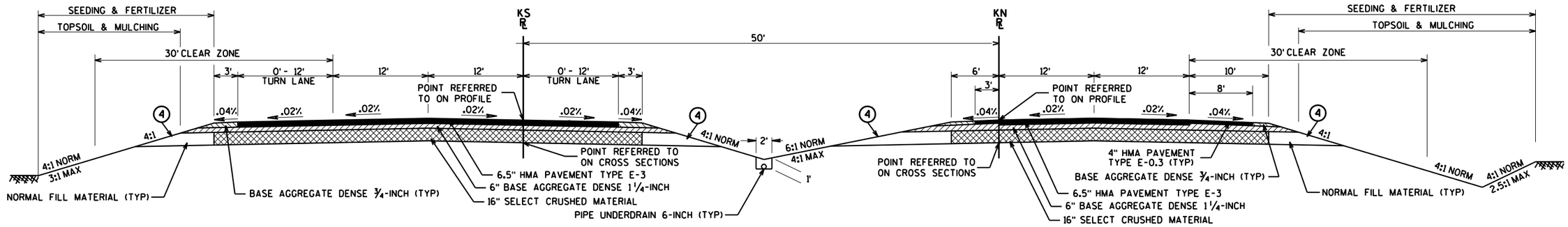
(15) KEEP EXISTING MEDIAN CURB AND GUTTER FROM STA 69+00 U - STA 69+50 U. REPLACE PAVEMENT ON WB LANES ONLY FROM STA 69+25 U - STA 69+50 U.



TYPICAL FINISHED SECTION - CTH K
STA 58+00.00 KN - STA 64+72.61 KN



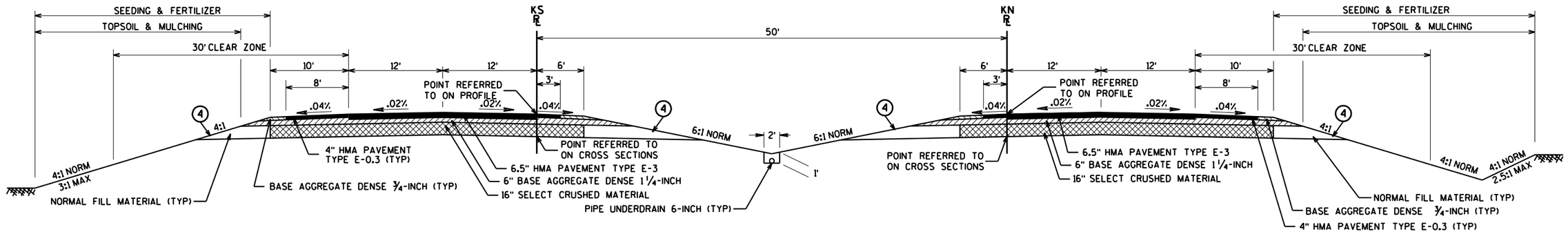
TYPICAL FINISHED SECTION - CTH K
STA 64+72.61 KN - STA 68+77.66 KN



TYPICAL FINISHED SECTION - CTH K
STA 68+77.66 KN - 73+09.45 KN

(4) CONSTRUCT RELIEF TRENCH AT SAG POINTS OR EVERY 250 FT ON LOW SIDE OF SUPERELEVATION ONLY (SEE DETAIL)

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	TYPICAL SECTIONS - CTH K/BUS 51	SHEET 21	E



TYPICAL FINISHED SECTION - CTH K

STA 73+09.45 KN - STA 73+50.00 KN

(4) CONSTRUCT RELIEF TRENCH AT SAG POINTS OR EVERY 250 FT ON LOW SIDE OF SUPERELEVATION ONLY (SEE DETAIL)

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	TYPICAL SECTIONS - CTH K/BUS 51	SHEET 22	E

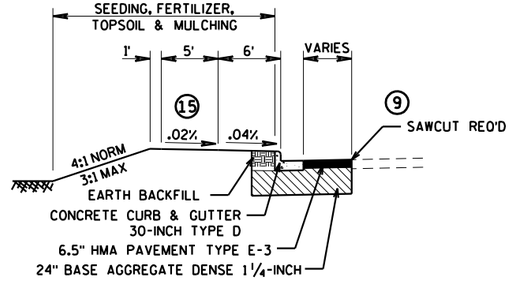
(1) TIE BARS ARE INCIDENTAL TO CONCRETE PAVEMENT (UNLESS DRILLED INTO EXISTING PAVEMENT)

(9) FIELD VERIFY EXISTING ELEVATIONS AT EDGE OF ASPHALT PAVEMENT PRIOR TO PLACING CURB & GUTTER

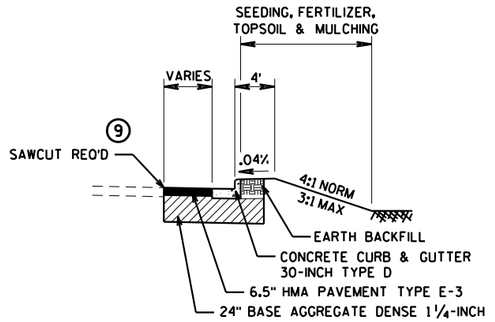
(10) PLACE CONCRETE SIDEWALK 4-INCH IN MEDIAN WHERE BACK OF CURB TO BACK OF CURB WIDTH IS 10'OR LESS. USE TOPSOIL, MULCHING, SEEDING AND FERTILIZER WHEN 10' OR GREATER.

(11) SEEDING, FERTILIZER, TOPSOIL & MULCHING

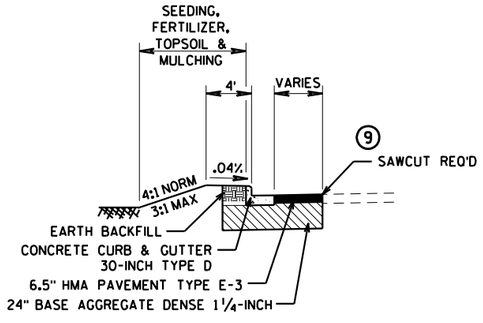
(15) GRADE FOR FUTURE 5'WIDE CONCRETE SIDEWALK FROM STA 31+35.00 KN - STA 36+55.00 KN, RT AND STA 30+65.00 KS - STA 36+65.00 KS, LT



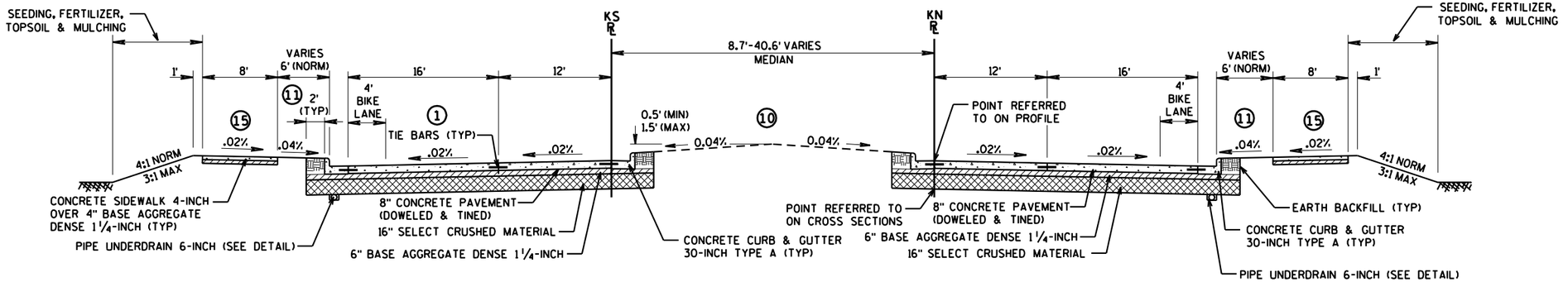
STA 30+65.00 KS - STA 32+93.00 KS (LT)



STA 30+65.00 KS - STA 32+93.00 KS (RT)

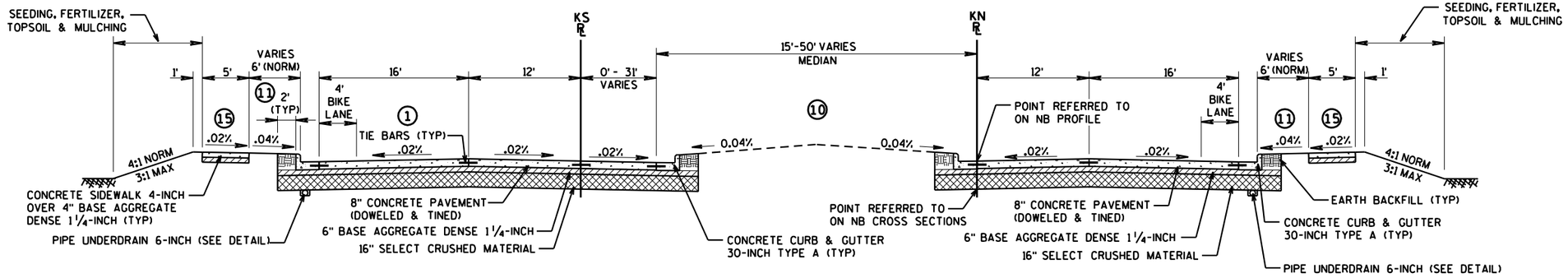


STA 30+80.00 KN - STA 31+35.00 KN (LT)



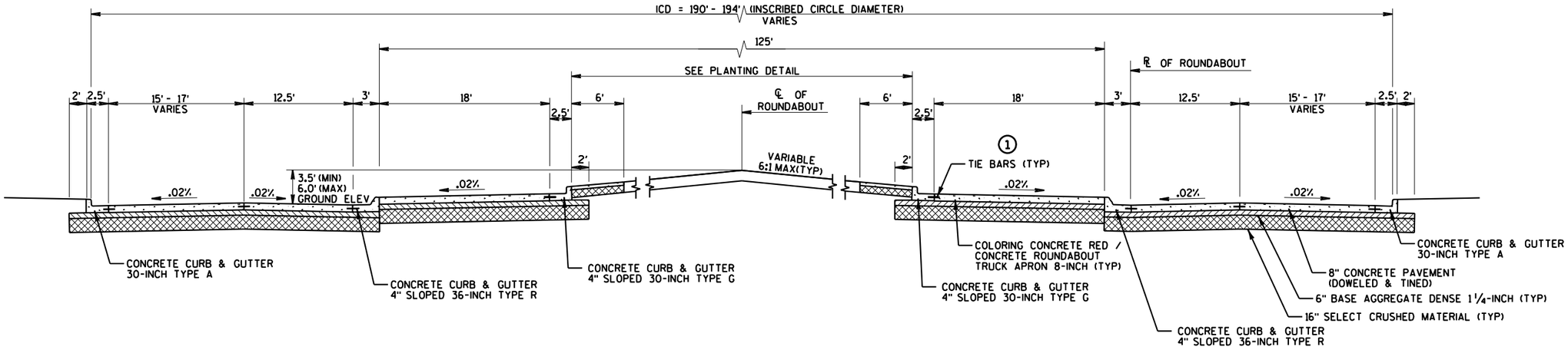
TYPICAL FINISHED SECTION - CTH K/BUS 51

STA 31+35.49 KN - STA 55+50.00 KN
STA 35+50.00 KS - STA 56+00.00 KS



TYPICAL FINISHED SECTION - CTH K/BUS 51

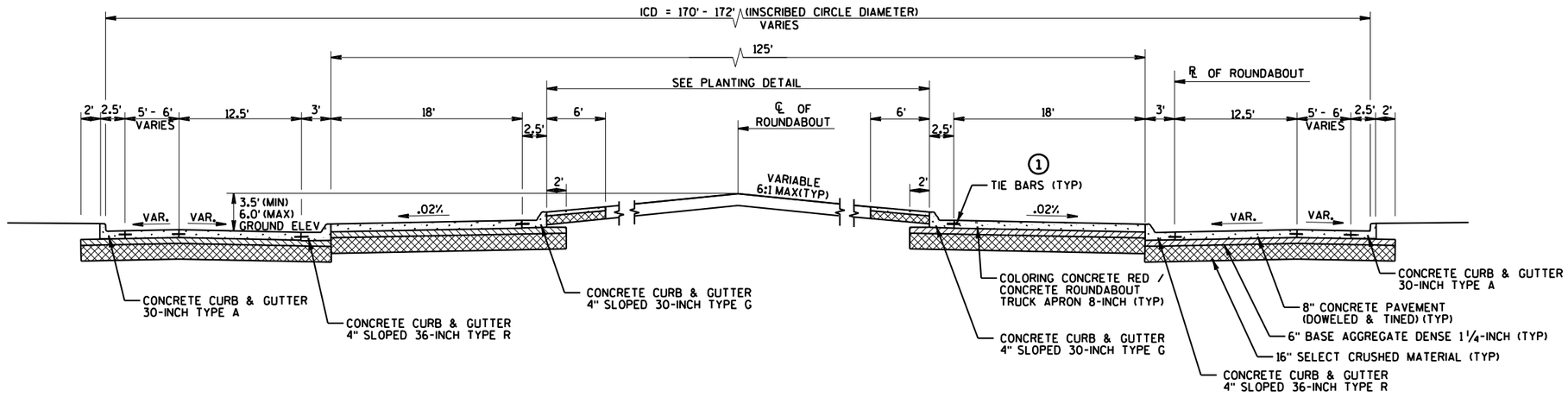
STA 32+93.45 KS - STA 35+50.00 KS
STA 55+50.00 KN - STA 58+00.00 KN
STA 56+00.00 KS - STA 58+00.00 KS



TYPICAL FINISHED SECTION CTH K/BUS 51 - SECTION 1-1

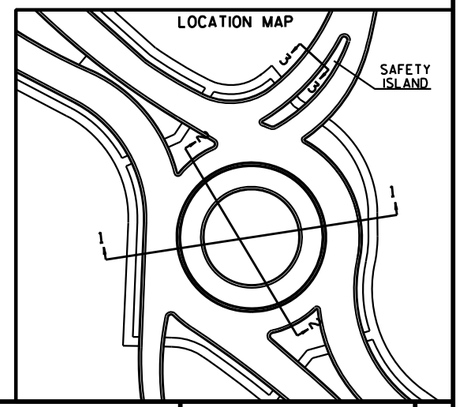
ROUNDABOUT DETAIL

(1) TIE BARS ARE INCIDENTAL TO CONCRETE PAVEMENT (UNLESS DRILLED INTO EXISTING PAVEMENT)



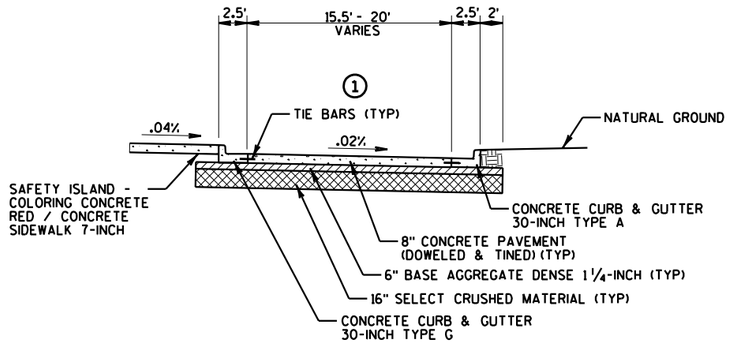
TYPICAL FINISHED SECTION CTH K/BUS 51 - SECTION 2-2

ROUNDABOUT DETAIL



PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	TYPICAL SECTIONS - CTH K ROUNDABOUT	SHEET 24	E

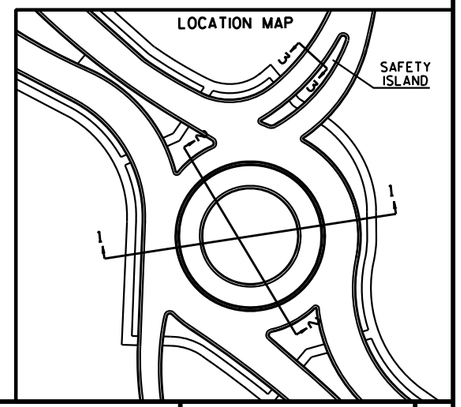
2



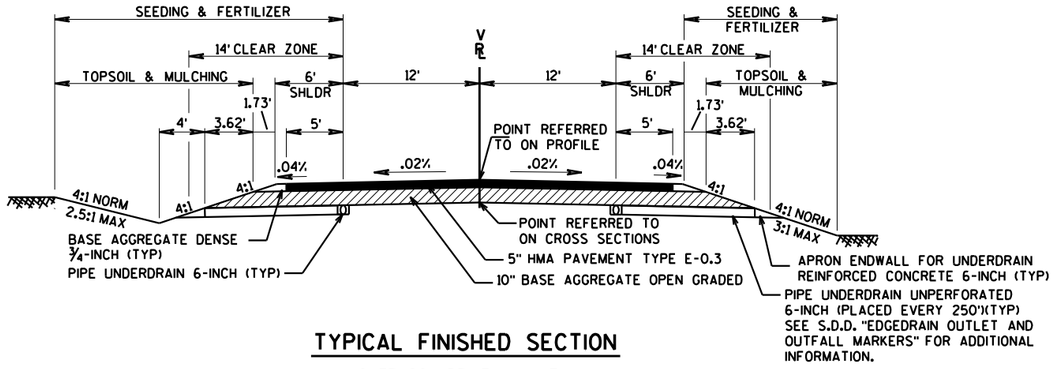
TYPICAL FINISHED SECTION USH 51 RAMPS - SECTION 3-3

PARTIAL BYPASS LANE

① TIE BARS ARE INCIDENTAL TO CONCRETE PAVEMENT (UNLESS DRILLED INTO EXISTING PAVEMENT)

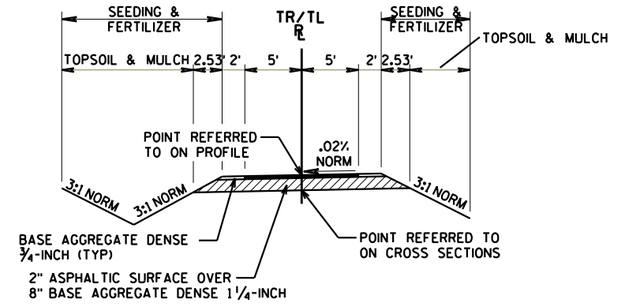


PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	TYPICAL SECTIONS - CTH K ROUNDABOUT	SHEET 25	E



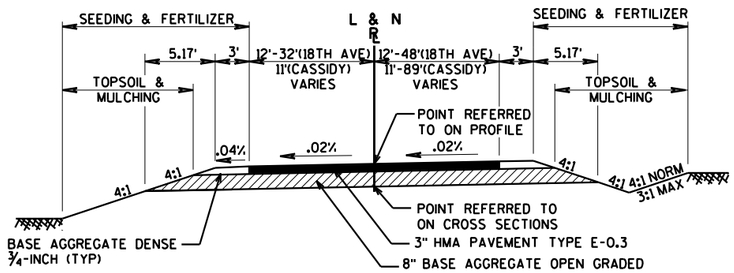
TYPICAL FINISHED SECTION

OVERLOOK DRIVE (V LINE)



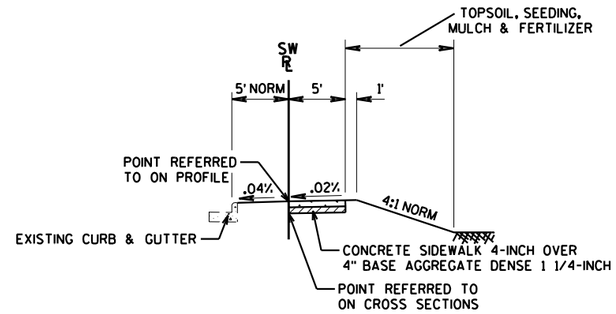
TYPICAL FINISHED SECTION

NTC TRAIL ('TR'/'TL' LINES)



TYPICAL FINISHED SECTION

18TH AVE CUL-DE-SAC (L LINE)
CASSIDY CUL-DE-SAC (N LINE)

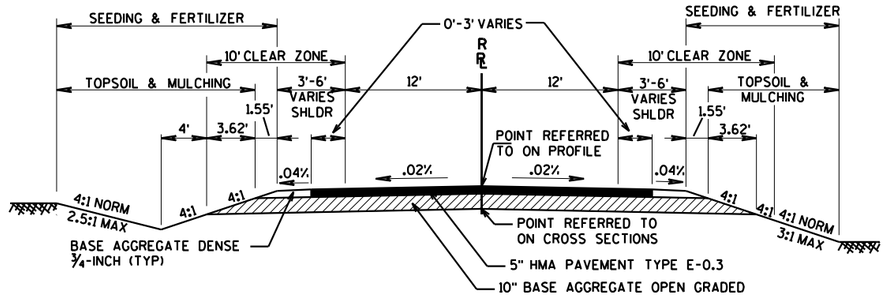


TYPICAL FINISHED SECTION

N 14TH AVE SIDEWALK ('SW' LINE)

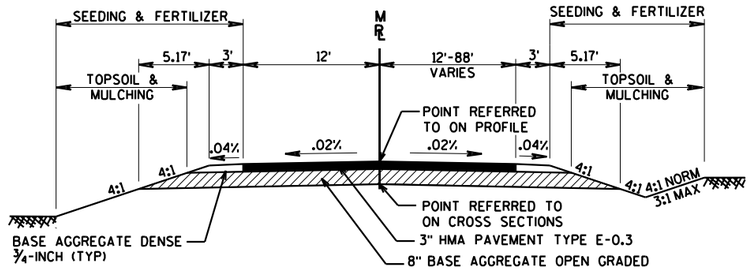
PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	TYPICAL SECTIONS	SHEET 26	E

2



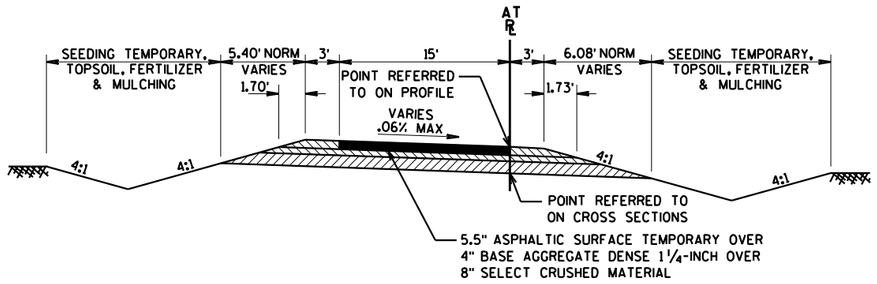
TYPICAL FINISHED SECTION

ARTHUR AVENUE (R LINE)

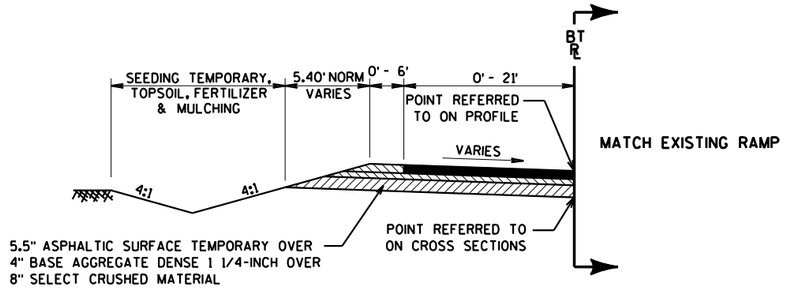


TYPICAL FINISHED SECTION

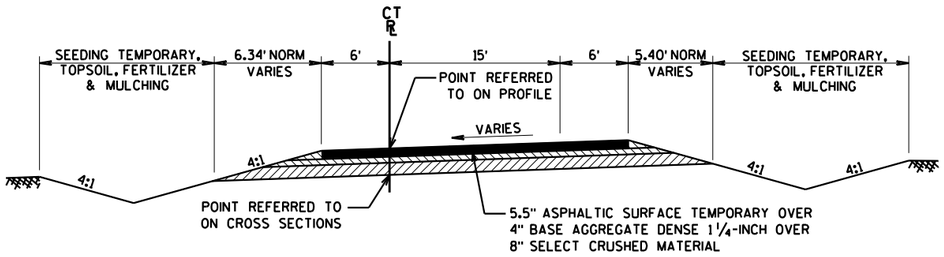
MERRILL CUL-DE-SAC (M LINE)



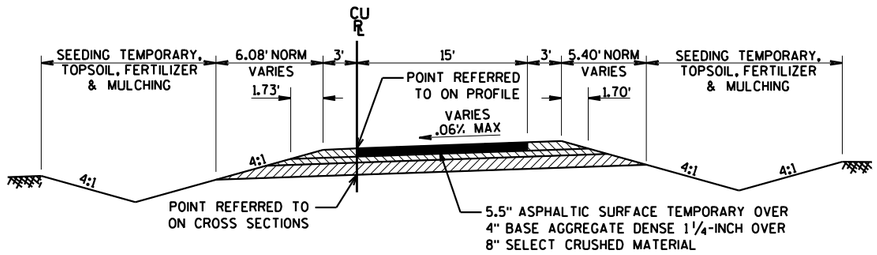
TYPICAL FINISHED SECTION - 'AT' RAMP



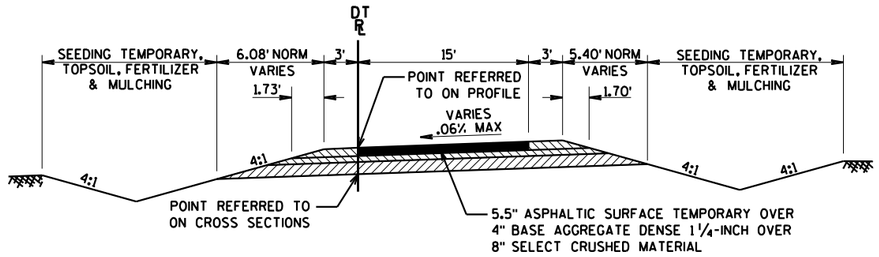
TYPICAL FINISHED SECTION - 'BT' RAMP



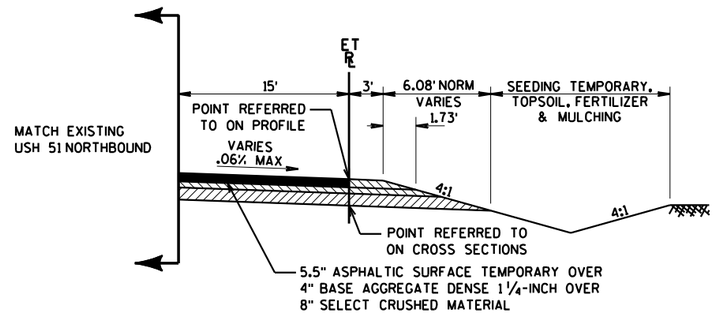
TYPICAL FINISHED SECTION - 'CT' RAMP



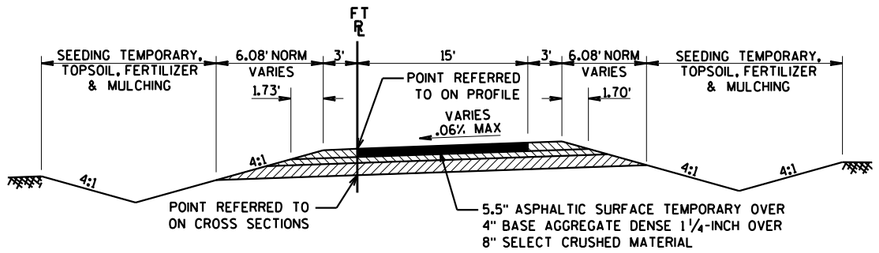
TYPICAL FINISHED SECTION - 'CU' RAMP



TYPICAL FINISHED SECTION - 'DT' RAMP

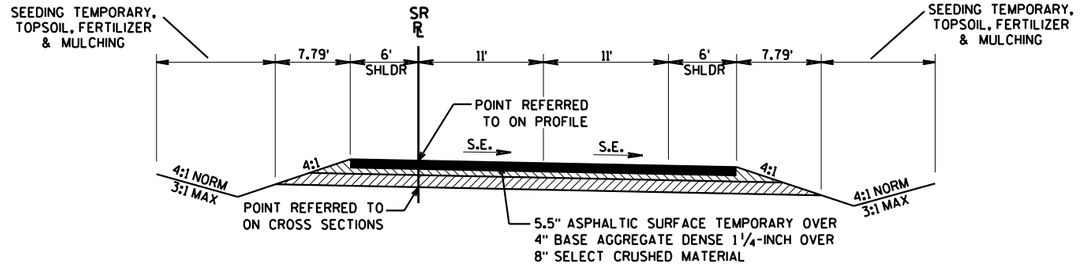


TYPICAL FINISHED SECTION - 'ET' RAMP



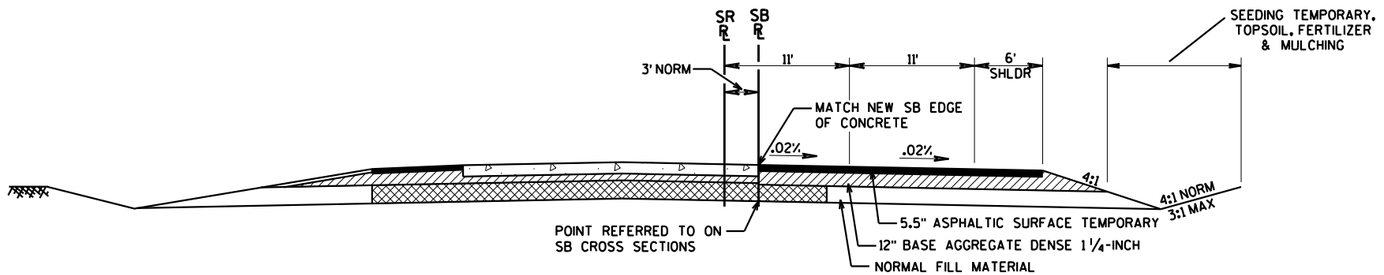
TYPICAL FINISHED SECTION - 'FT' RAMP

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	TYPICAL SECTIONS - TEMPORARY	SHEET 29	E



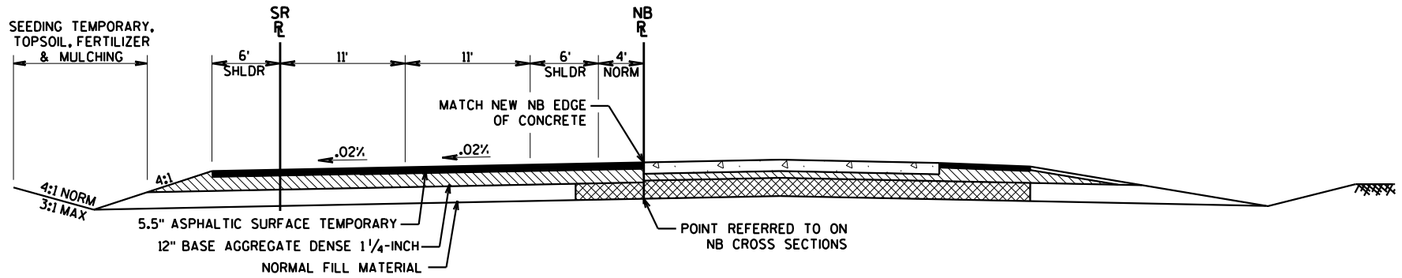
TYPICAL FINISHED SECTION - 'SR' LINE (CROSSOVER)

STA 311+85.00 SR - STA 321+20.00 SR
STA 351+92.00 SR - STA 362+85.00 SR



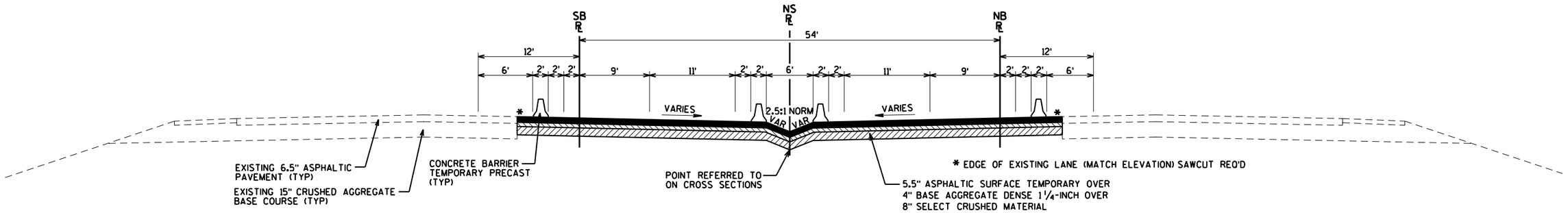
TYPICAL FINISHED SECTION - 'SR' LINE

STA 321+20.00 SR - STA 351+92.00 SR
SEE USH 51 SB TYPICAL SECTION FOR ADDITIONAL INFORMATION.



TYPICAL FINISHED SECTION - 'SR' LINE

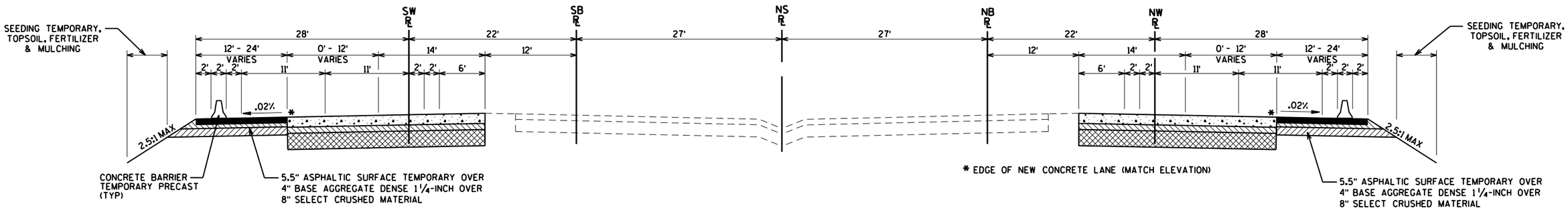
STA 362+85.00 SR - STA 385+11.16 SR
SEE USH 51 NB TYPICAL SECTION FOR ADDITIONAL INFORMATION.



TYPICAL FINISHED SECTION - STAGE 1A

NOTE: BUILD CROSS SECTIONS OFF OF 'NS' ALIGNMENT

NOTE: INSTALL CONCRETE BARRIER TEMPORARY BASED ON 'NM' AND 'SM' ALIGNMENTS

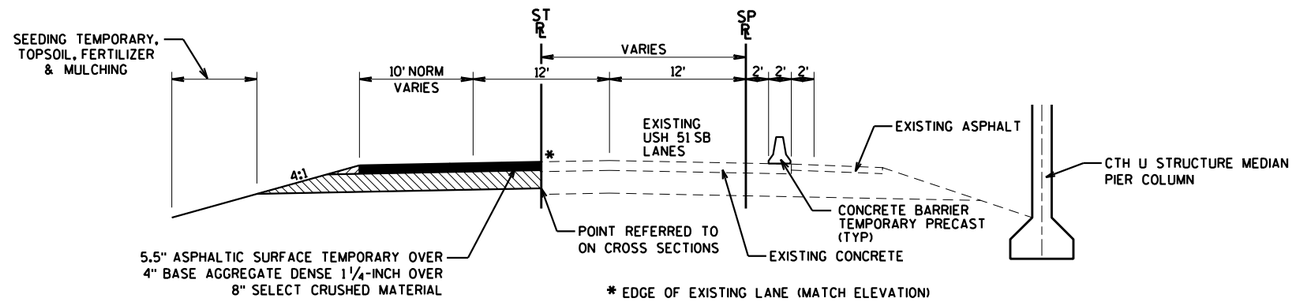


TYPICAL FINISHED SECTION - STAGE 1B

SEE USH 51 TYPICAL SECTION FOR ADDITIONAL INFORMATION.

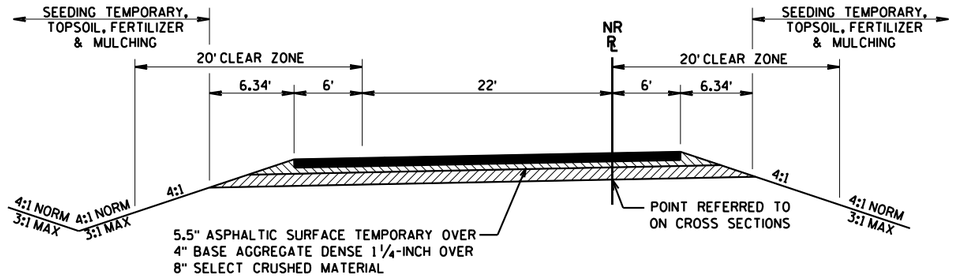
NOTE: BUILD CROSS SECTIONS OFF OF 'NS' ALIGNMENT

NOTE: INSTALL CONCRETE BARRIER TEMPORARY BASED ON 'NW' AND 'SW' ALIGNMENTS



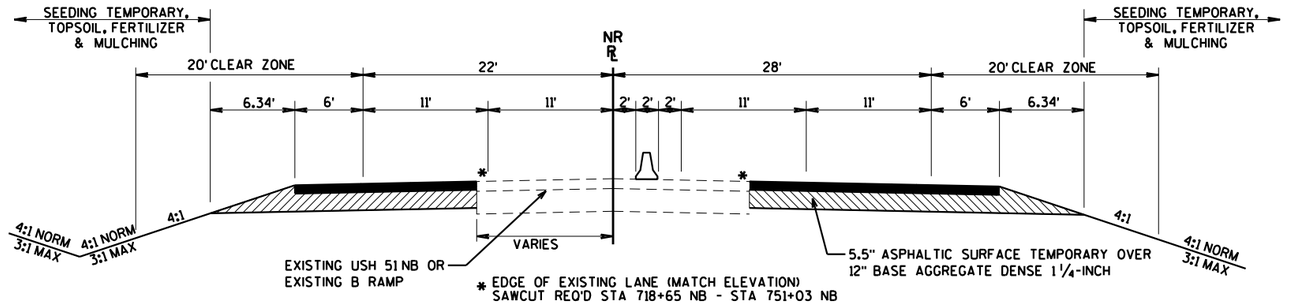
TYPICAL FINISHED SECTION - ST/SP ALIGNMENT

NOTE: CONSTRUCT WIDENING OFF 'ST' ALIGNMENT AND INSTALL TEMPORARY CONCRETE BARRIER BASED ON 'SP' ALIGNMENT



TYPICAL FINISHED SECTION - 'NR' LINE (CROSSOVER)

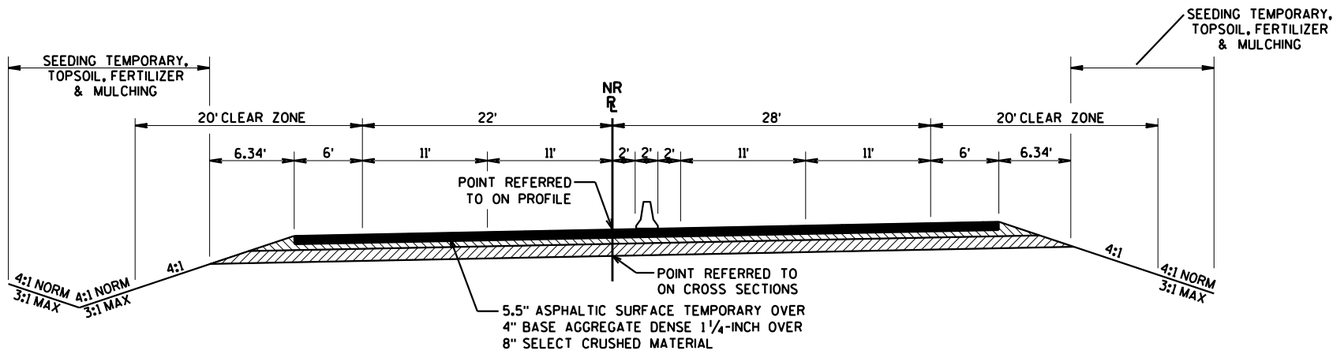
STA 311+91.00 NR - STA 320+00.00 NR
STA 412+87.00 NR - STA 423+62.00 NR



TYPICAL FINISHED SECTION - 'NR' LINE
(WIDENING BOTH SIDES OF EXISTING LANE)

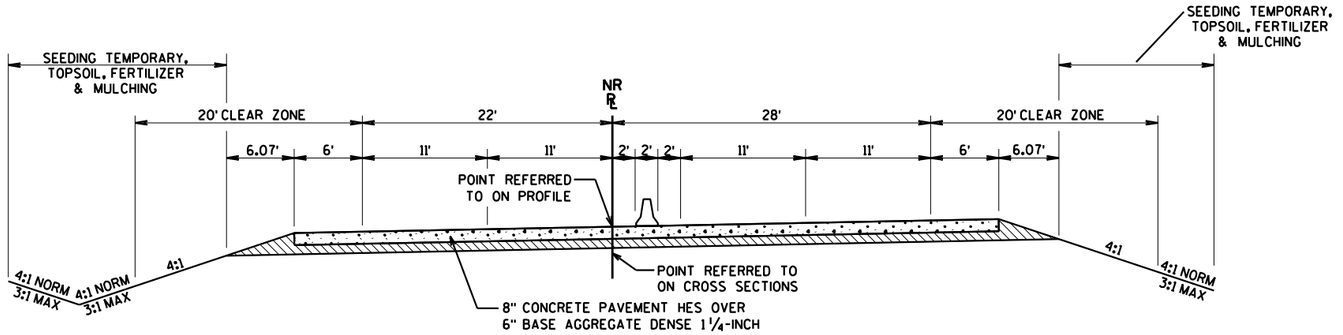
STA 320+00.00 NR - STA 355+42.00 NR

PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	TYPICAL SECTIONS - TEMPORARY	SHEET 32	E



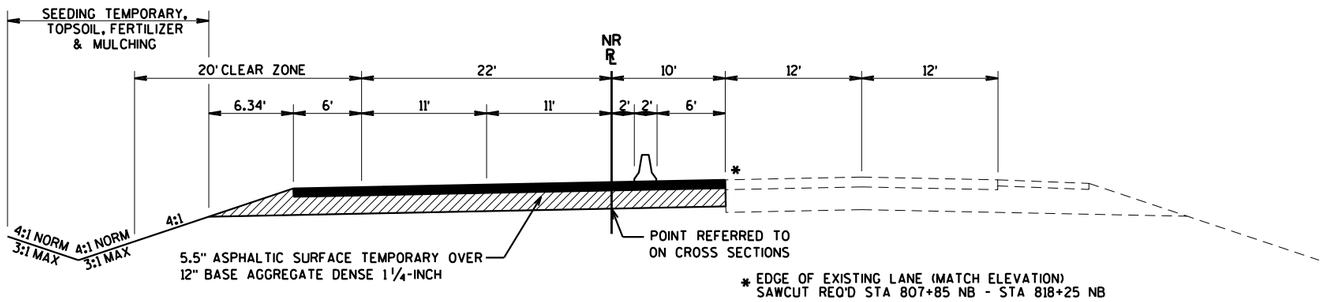
TYPICAL FINISHED SECTION - 'NR' LINE (OFF ALIGNMENT)

STA 355+42.00 NR - STA 361+00.00 NR
STA 364+50.00 NR - STA 378+25.00 NR



TYPICAL FINISHED SECTION - 'NR' LINE (OFF ALIGNMENT)

STA 361+00.00 NR - STA 364+50.00 NR



TYPICAL FINISHED SECTION - 'NR' LINE (MEDIAN WIDENING)

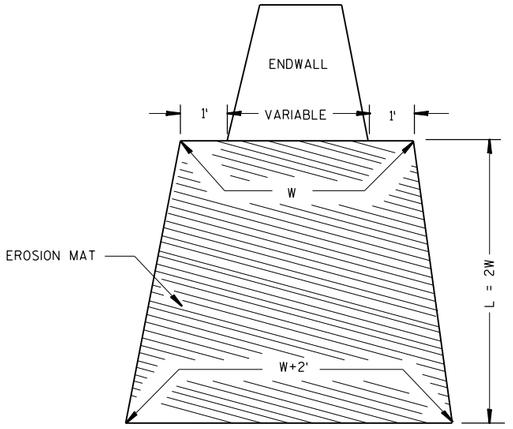
STA 378+25.00 NR - STA 411+25.00 NR

PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	TYPICAL SECTIONS - TEMPORARY	SHEET 33	E

RUNOFF COEFFICIENT TABLE

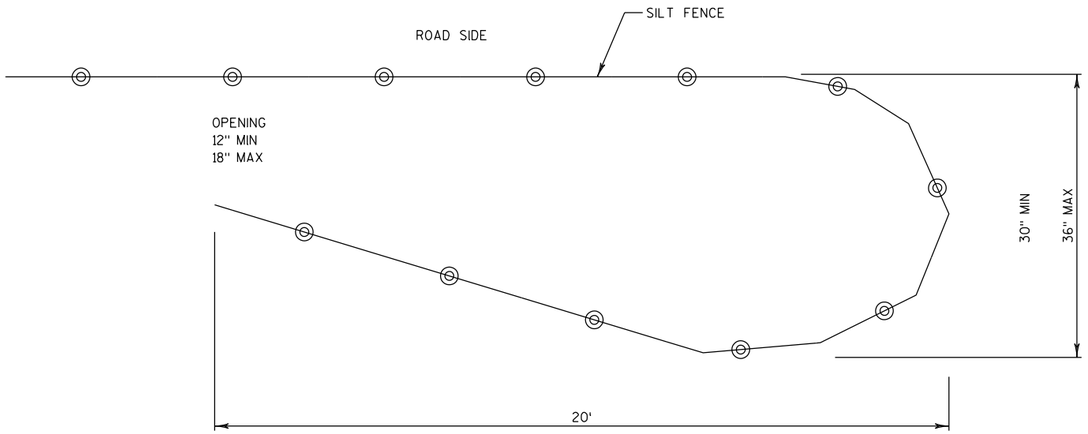
	HYDROLOGIC SOIL GROUP											
	A			B			C			D		
	SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)		
LAND USE:	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER
ROW CROPS	.08 .22	.16 .30	.22 .38	.12 .26	.20 .34	.27 .44	.15 .30	.24 .37	.33 .50	.19 .34	.28 .41	.38 .56
MEDIAN STRIP-TURF	.19 .24	.20 .26	.24 .30	.19 .25	.22 .28	.26 .33	.20 .26	.23 .30	.30 .37	.20 .27	.25 .32	.30 .40
SIDE SLOPE-TURF			.25 .32			.27 .34			.28 .36			.30 .38
PAVEMENT:												
ASPHALT	.70 - .95											
CONCRETE	.80 - .95											
BRICK	.70 - .80											
DRIVES, WALKS	.75 - .85											
ROOFS	.75 - .95											
GRAVEL ROADS, SHOULDERS	.40 - .60											

TOTAL PROJECT AREA = 180 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 120 ACRES



EROSION MAT TREATMENT AT CULVERTS

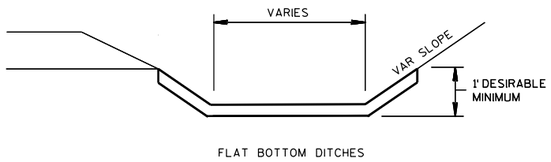
STA 205+10 V



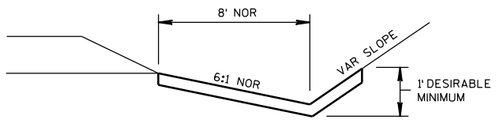
NOTES:
THE PURPOSE OF THE TURTLE TURN AROUNDS ARE TO REDIRECT THE TURTLES AWAY FROM THE CONSTRUCTION ZONE.
DESIGN SHOULD ALSO INCLUDE TRENCHED - IN SEDIMENT FENCING AND FENCING SUPPORTS ON UPSLOPE SIDE OF FENCE.
SILT FENCE POSTS FOR THE TURN - AROUND SHOULD BE ON THE OUTSIDE OF THE TURN - AROUND.

TEMPORARY TURTLE TURN - AROUND DETAIL

INSTALL TURNAROUNDS ADJACENT TO BOS
CREEK AND WETLAND AREAS



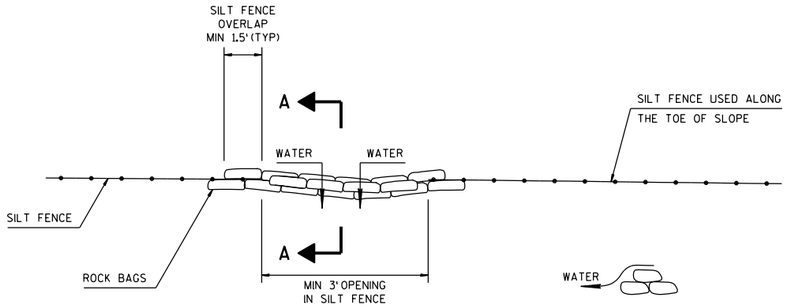
FLAT BOTTOM DITCHES



EROSION MAT DETAIL FOR DITCHES

PROJECT NO: 1170-01-70/71/73 & 6999-18-70	HWY: USH 51	COUNTY: MARATHON	CONSTRUCTION DETAIL	SHEET 34	E

2

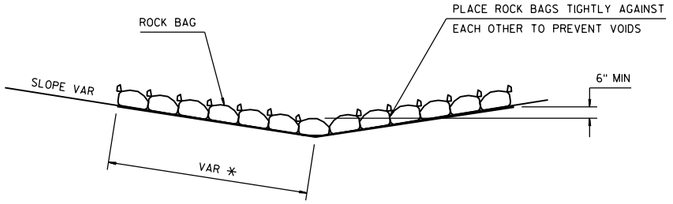


TOP VIEW

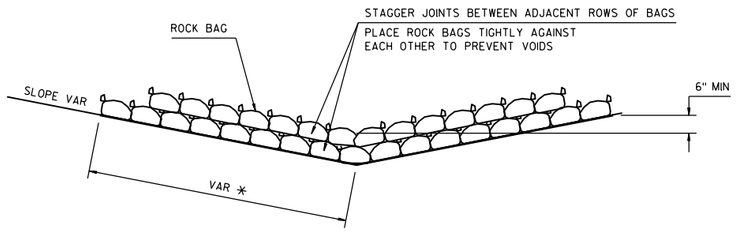
SECTION A-A

ROCK BAGS USED FOR SILT FENCE RELIEF DETAIL

PAID AS ROCK BAGS



SIDE VIEW (SINGLE LAYER)

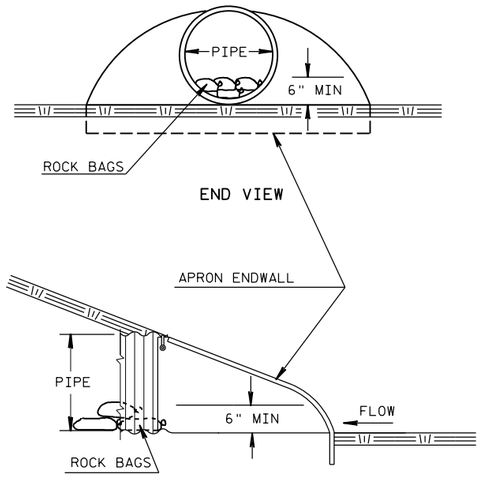


* LENGTH AND NUMBER OF BAGS MAY VARY
DEPENDING ON DESIRED DEPTH OF WATER POOL

SIDE VIEW (MULTIPLE LAYER)

ROCK BAGS DITCH CHECK

PAID AS ROCK BAGS



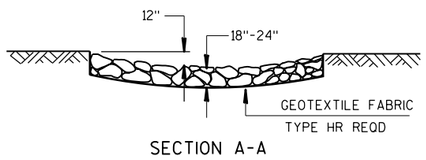
END VIEW

SIDE VIEW

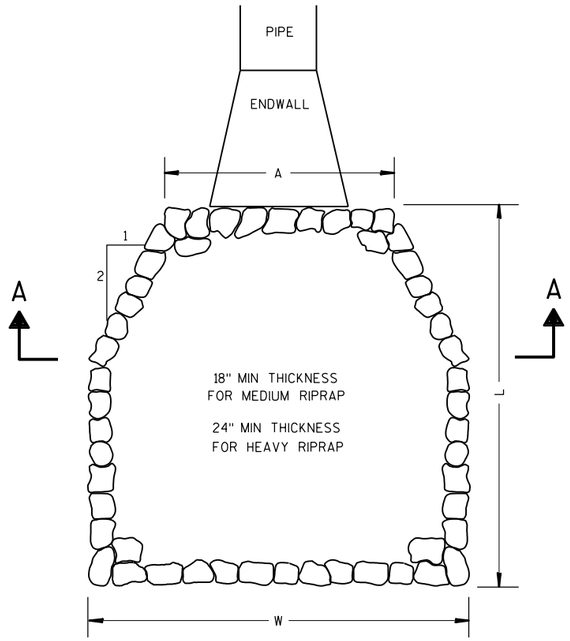
CULVERT PIPE CHECK

ROCK BAGS DETAIL

PROJECT NO: 1170-01-70/71/73 & 6999-18-70	HWY: USH 51	COUNTY: MARATHON	CONSTRUCTION DETAIL	SHEET 35	E



SECTION A-A



PROJECT ID 1170-01-70					
STATION	LOCATION	A FT	L FT	W FT	
753+10 NB	RT	4.5	21	13	
763+00 B	LT	3.8	17	11	
767+00 B	RT	6.0	29	18	*
772+20 C	LT	4.5	21	13	
759+00 D	LT	3.0	14	9	
770+50 D	LT	3.8	17	11	
740+05 E	RT	7.5	20	22	*
31+25 KN	RT	3.8	17	11	
34+00 KN	RT	3.8	17	11	
41+00 KN	RT	6.0	29	18	
52+10 KN	RT	9.0	46	27	
55+70 KN	RT	3.8	17	11	
57+75 KN	RT	3.8	17	11	
60+50 KN	RT	40.0	50	55	*
30+75 KS	LT	3.0	14	9	
222+67 V	LT	13.0	21	21	*
230+38 V	LT	6.0	28	17	

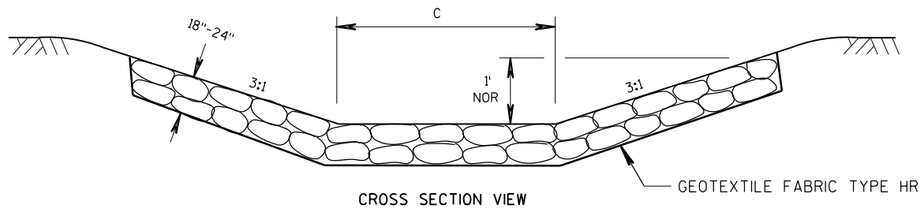
PROJECT ID 1170-01-73					
STATION	LOCATION	A FT	L FT	W FT	
723+45 NB	RT	9.0	25	27	*
725+50 NB	RT	4.5	21	13	
733+57 NB	RT	10.5	18	29	*
738+68 NB	RT	12.0	13	24	*
755+75 NB	RT	9.0	16	15	*
774+00 NB	RT	4.5	21	13	
787+66 NB	RT	5.3	26	16	
801+29 SB	LT	4.5	22	13	
776+00 C	LT	7.5	37	22	

PROJECT ID 6999-18-70				
STATION	LOCATION	A FT	L FT	W FT
52+00 U	LT	9.0	48	28

RIPRAP TREATMENT AT APRON ENDWALL DETAIL

NOTE: ALL LOCATIONS LISTED ARE MEDIUM RIPRAP
EXCEPT STATION 738+68 NB IS HEAVY RIPRAP

* IRREGULAR AREAS - SEE PLANS, AVERAGE
DIMENSIONS SHOWN



CROSS SECTION VIEW

PROJECT ID 1170-01-70				
STATION	LOCATION	C FT	LENGTH FT	RIPRAP TYPE
781+00 C	LT	4	68	MEDIUM RIPRAP
767+50 D	RT	4	50	MEDIUM RIPRAP
749+00 F	RT	4	63	MEDIUM RIPRAP
746+00 F	RT	4	20	MEDIUM RIPRAP
55+25 KN	RT	6	29	HEAVY RIPRAP
35+00 KS	LT	4	20	MEDIUM RIPRAP

PROJECT ID 1170-01-73				
STATION	LOCATION	C FT	LENGTH FT	RIPRAP TYPE
789+40 SB	LT	4	20	MEDIUM RIPRAP

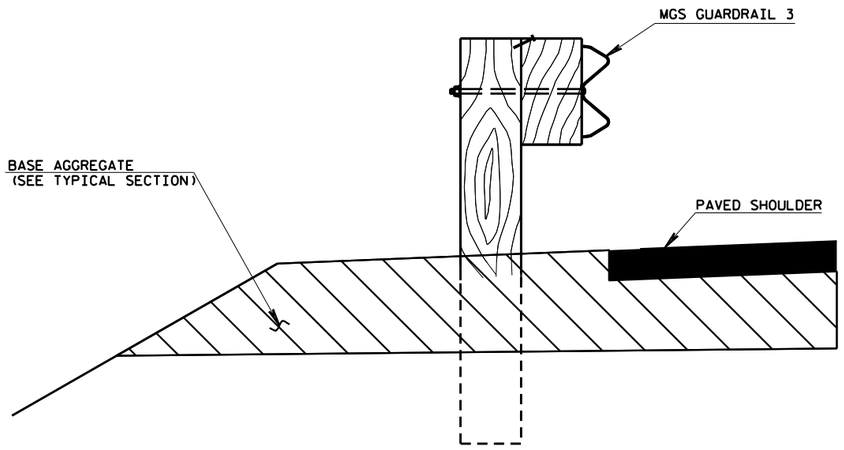
PROJECT ID 6999-18-70				
STATION	LOCATION	C FT	LENGTH FT	RIPRAP TYPE
44+63 U	LT	10	71	GROUTED HEAVY RIPRAP
47+80 U	LT	10	86	GROUTED HEAVY RIPRAP
48+50 U	LT	8	118	HEAVY RIPRAP
51+50 U	LT	4	115	MEDIUM RIPRAP
254+00 M	RT	10	359	HEAVY RIPRAP

DETAIL FOR SPECIAL DITCH WITH RIPRAP AND GEOTEXTILE FABRIC

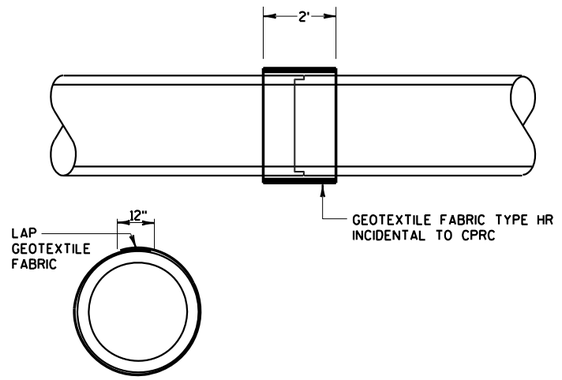
NOTES: PLACE RIPRAP AT 18-INCHES MINIMUM THICKNESS
FOR MEDIUM RIPRAP AND 24-INCHES MINIMUM
THICKNESS FOR HEAVY RIPRAP

STATION IS SHOWN AT END OF APRON ENDWALLS

2

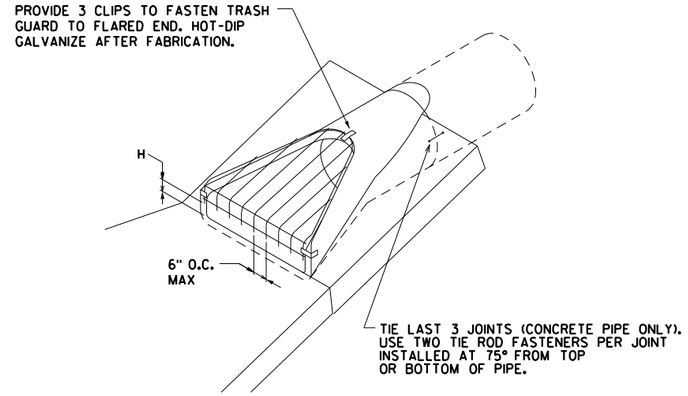


ASPHALTIC MATERIAL AT GUARDRAIL INSTALLATIONS



JOINT DETAIL CPRC

(NEW OR SALVAGED)
SEE MISCELLANEOUS QUANTITIES
FOR LOCATIONS

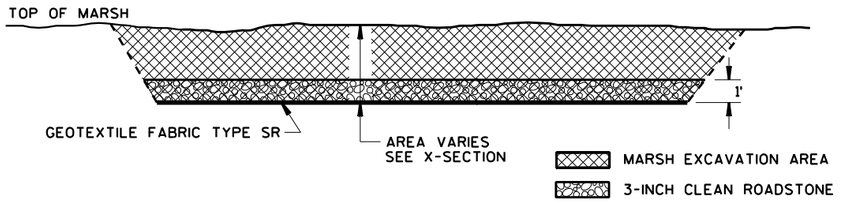


SIZE OF PIPE	DIA OF BARS	H	BOLTS
12" TO 18"	¾"	4"	⅝"
21" TO 42"	1"	6"	¾"
42" TO 72"	1 ¼"	12"	1"

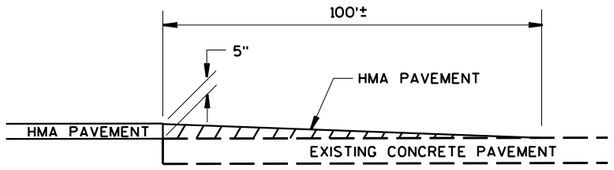
APRON ENDWALL W/PIPE GRATES

SEE STORM SEWER PLANS FOR LOCATIONS

2

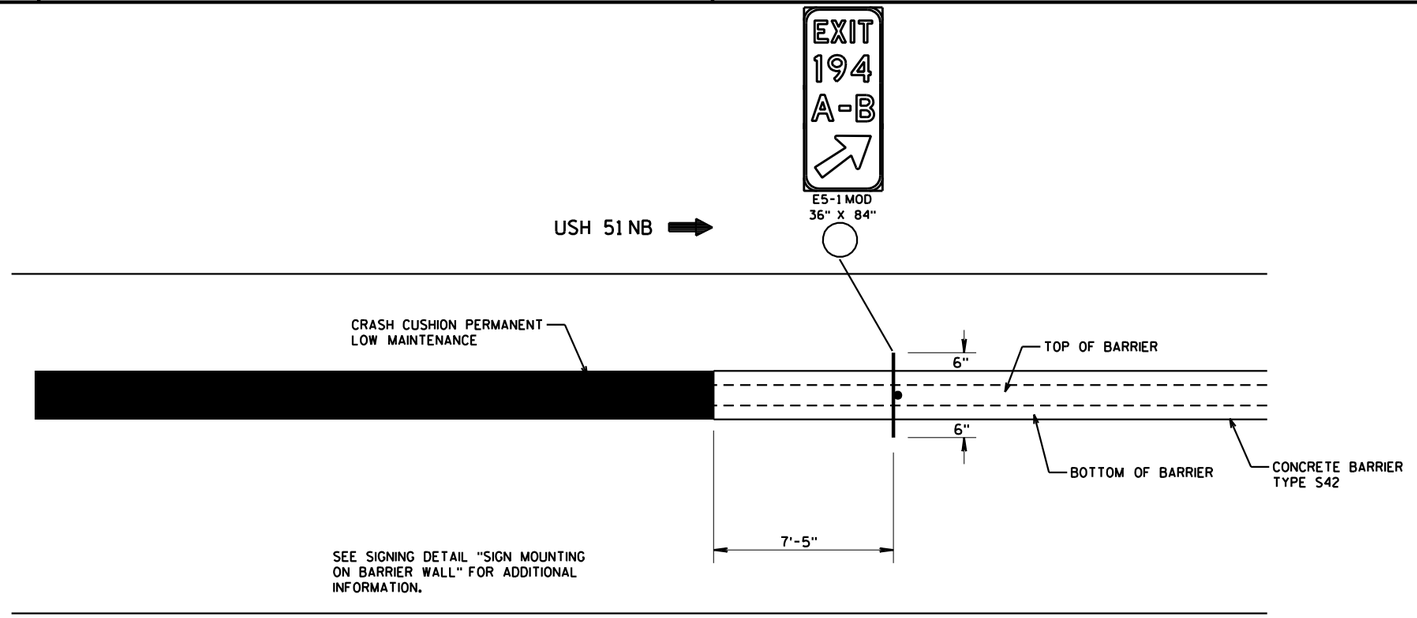


TYPICAL MARSH EXCAVATION SECTION



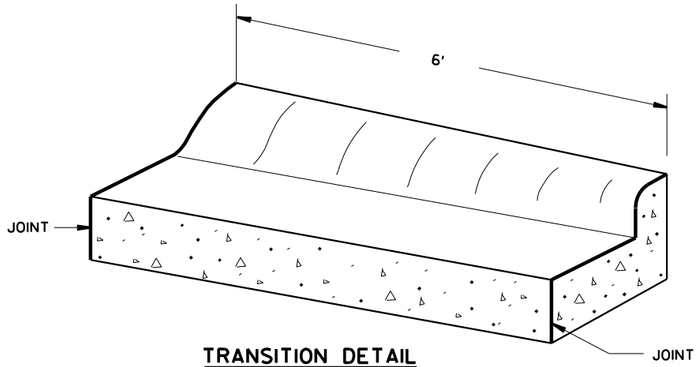
FEATHER JOINT DETAIL - CTH K

STA 73+50 KN
STA 73+50 KS



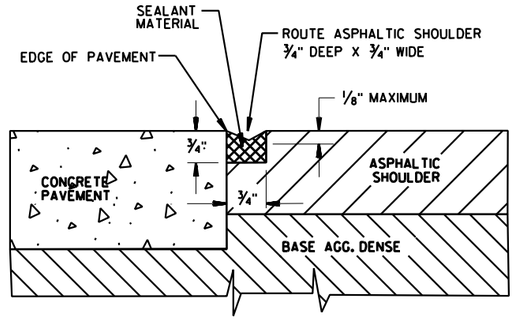
SIGNING AT CRASH CUSHION

STA 740+00 NB

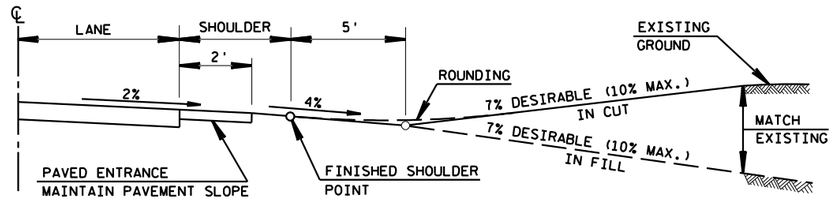


TRANSITION DETAIL

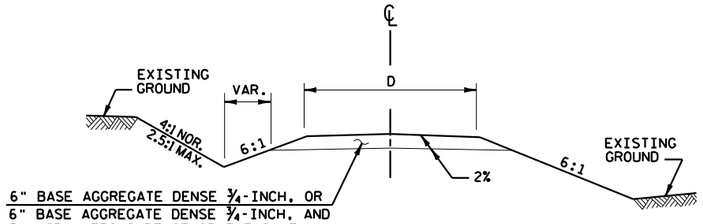
36" TYPE A/D CURB & GUTTER TO 30" TYPE A/D CURB & GUTTER
(TO BE MEASURED & PAID FOR AS CONCRETE CURB & GUTTER
36-INCH TYPE A/D)



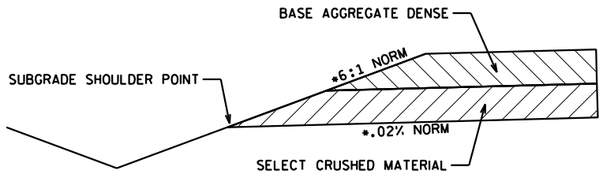
ROUTE AND SEAL DETAIL



PROFILE VIEW

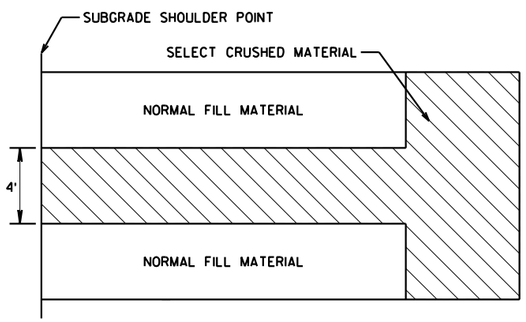


TYPICAL CROSS SECTION

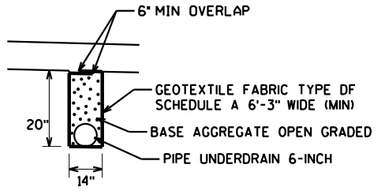


*VARIABLE (SEE TYPICAL SECTIONS)

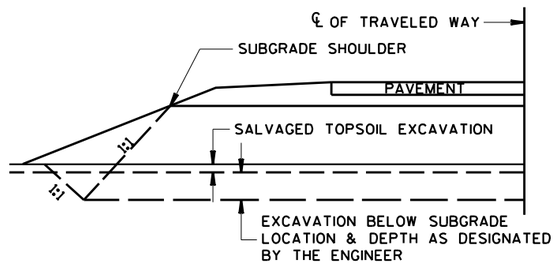
RELIEF TRENCH DETAIL PROFILE VIEW



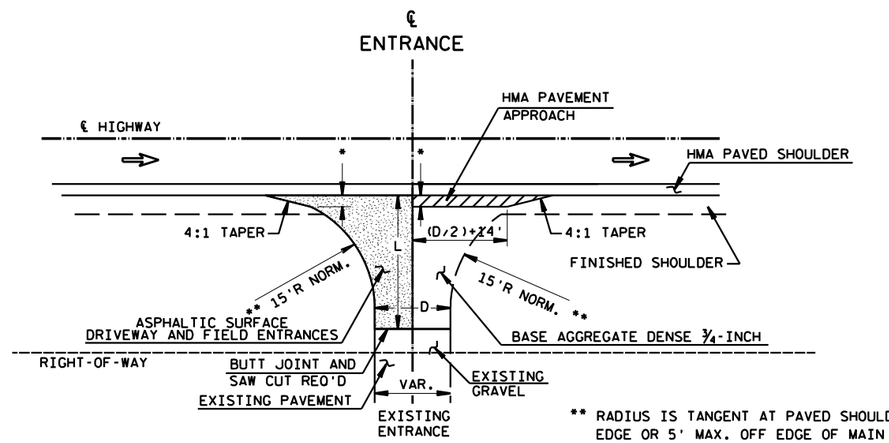
RELIEF TRENCH DETAIL PLAN VIEW



PIPE UNDERDRAIN DETAIL



DETAIL FOR EXCAVATION BELOW SUBGRADE



L=VARIABLE. EXACT LENGTH TO BE DETERMINED IN THE FIELD BY THE ENGINEER. BLEND BACK ON THE ENTRANCE FAR ENOUGH TO GET A SMOOTH PROFILE.

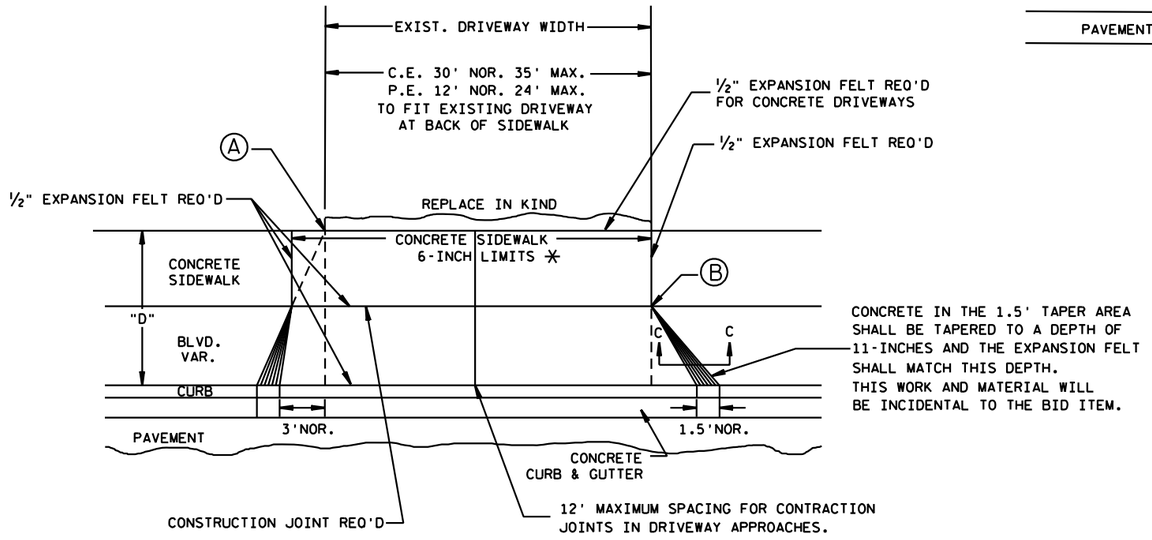
D=DRIVEWAY WIDTH
D=20'TYP. (PE's & FE's) (16'MIN.-24'MAX.)
D=28'TYP. (CE's & FARM ENT.) (24'MIN.-35'MAX.)

** RADIUS IS TANGENT AT PAVED SHOULDER EDGE OR 5' MAX. OFF EDGE OF MAIN LINE PAVEMENT WHICH EVER IS LESS.

* 3' MAX. OR TO FINISHED SHOULDER WHICH EVER IS LESS.

PLAN VIEW

RURAL DRIVEWAY INTERSECTION DETAIL
(PE's, FE's & CE'S)
(FOR NEW CONSTRUCTION)



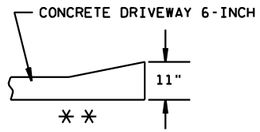
CONCRETE IN THE 1.5' TAPER AREA SHALL BE TAPERED TO A DEPTH OF 11-INCHES AND THE EXPANSION FELT SHALL MATCH THIS DEPTH. THIS WORK AND MATERIAL WILL BE INCIDENTAL TO THE BID ITEM.

PLAN VIEW

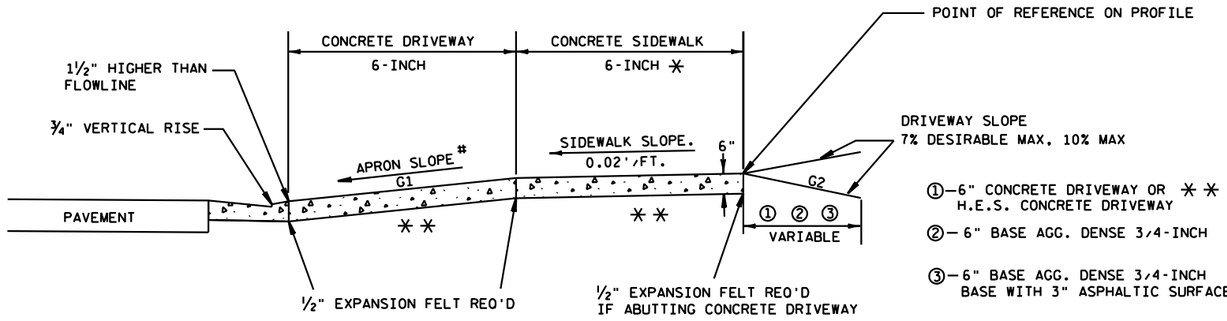
Ⓐ WHEN "D" IS 13' OR LESS, ALIGN TAPER WITH BACK OF SIDEWALK

Ⓑ WHEN "D" IS GREATER THAN 13', ALIGN TAPER WITH FRONT OF SIDEWALK

✳ = PAID FOR AS CONCRETE DRIVEWAY 6-INCH



SECTION C-C



TYPICAL SIDEWALK SECTION

✳ = PAID FOR AS CONCRETE DRIVEWAY 6-INCH

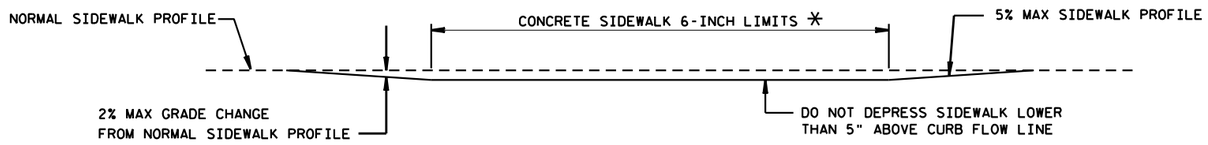
✳✳ = 6" BASE AGG. DENSE 3/4-INCH REQ'D UNDER CONCRETE DRIVEWAY

\#

TERRACE WIDTH	APRON SLOPE (G1) MIN %	DESIRABLE %	MAX %
3 FT	7.0	8.5	9.0
4 FT	5.0	7.0	9.0
5 FT	4.0	7.0	9.0
6 FT	4.0	7.0	9.0
7 FT	3.5	7.0	9.0
8 FT	3.0	7.0	9.0

NOTE: ALGEBRAIC DIFFERENCE BETWEEN TANGENT GRADES G1 & G2 TO NOT EXCEED 15%

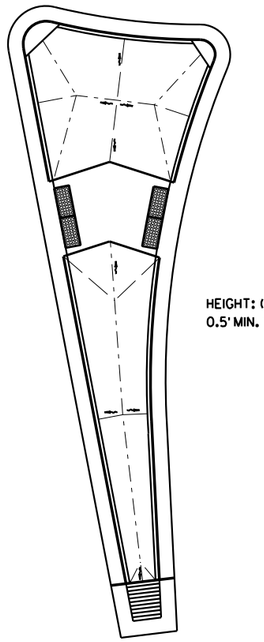
DEPRESS SIDEWALK PROFILE IF DRIVEWAY APRON EXCEEDS MAX SLOPE



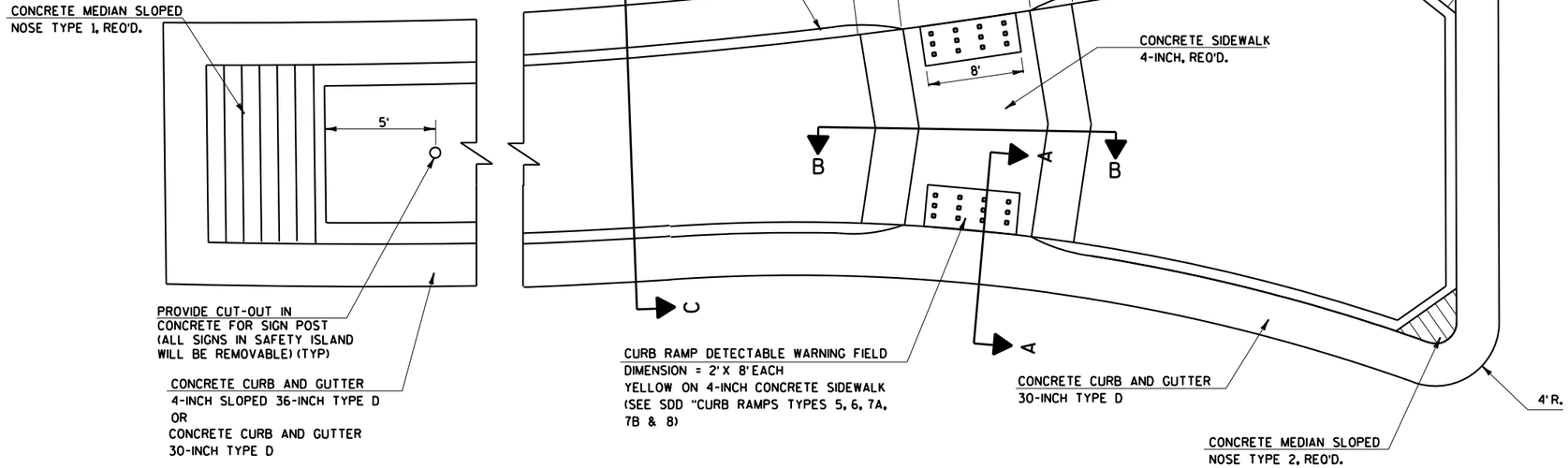
DEPRESSED SIDEWALK PROFILE DETAIL

✳ = PAID FOR AS CONCRETE DRIVEWAY 6-INCH

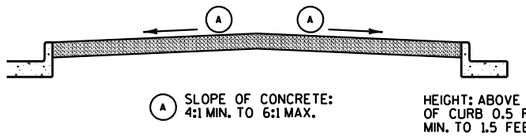
DRIVEWAY ENTRANCE DETAIL WITH SIDEWALK, CURB & GUTTER



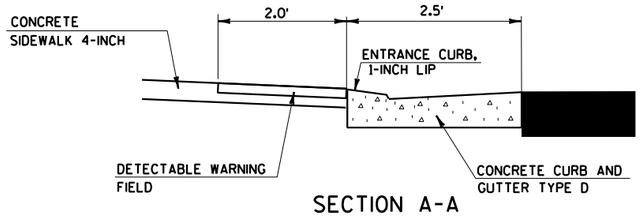
HEIGHT: (ABOVE TOP OF CURB)
0.5' MIN. TO 1.5' MAX.



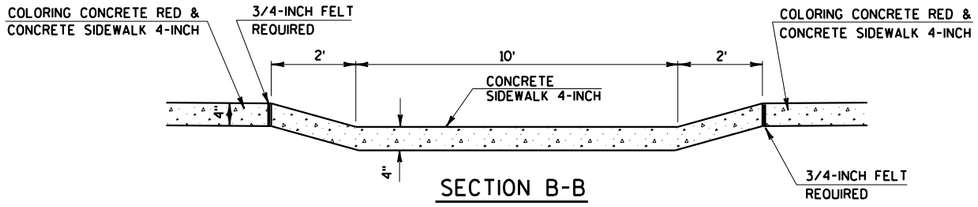
SPLITTER ISLAND DETAIL



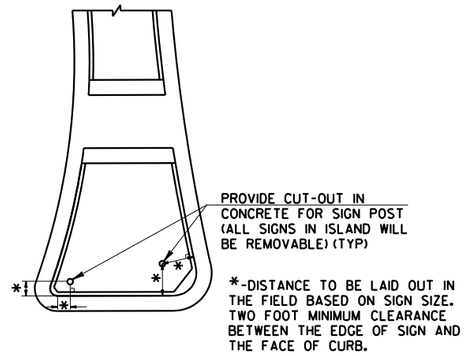
SECTION C-C



SECTION A-A



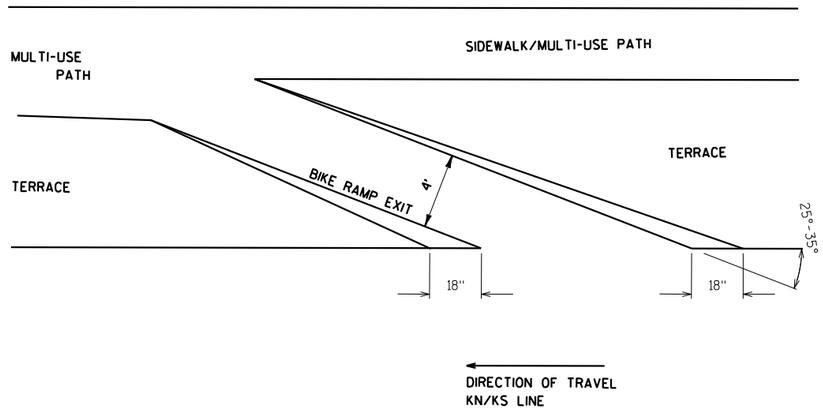
SECTION B-B

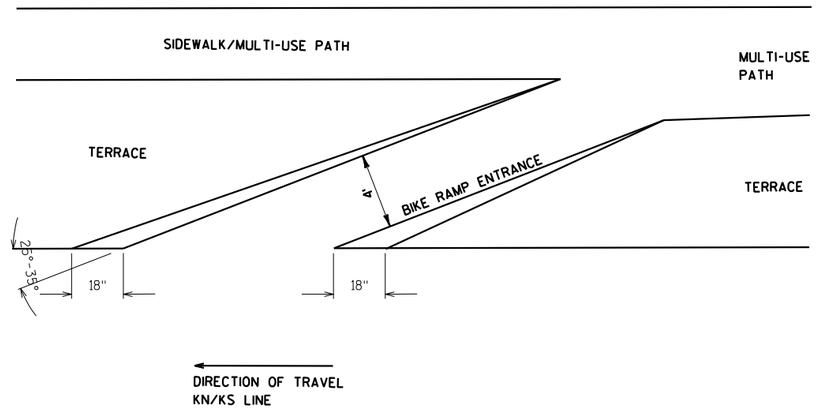


ISLAND SIGN LOCATION DETAIL (TYP)

PROJECT NO: 1170-01-70/71/73 & 6999-18-70	HWY: USH 51	COUNTY: MARATHON	CONSTRUCTION DETAILS	SHEET 40	E

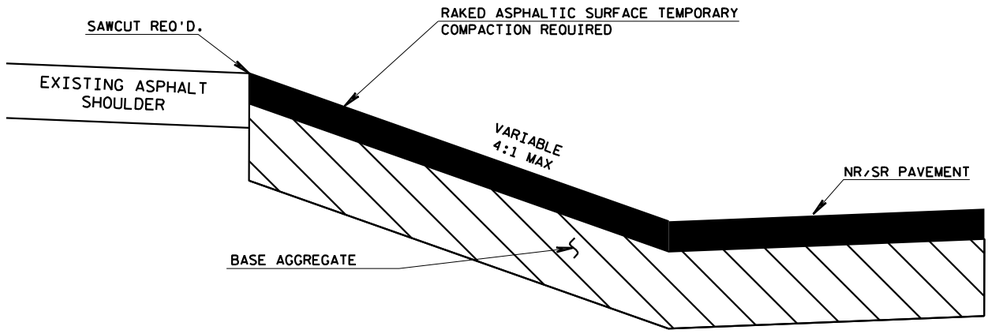
2





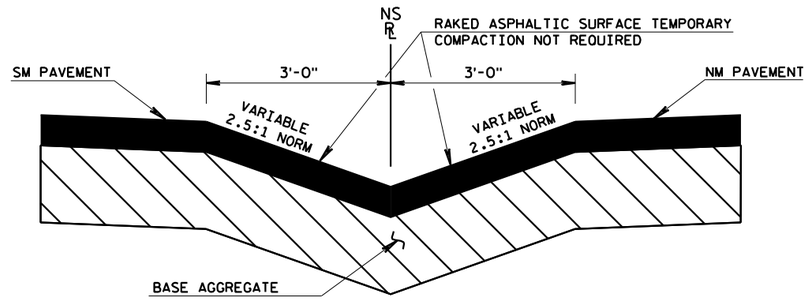
BIKE RAMP ENTRANCE AND EXIT

KN & KS ALIGNMENTS
PAID FOR AS CONCRETE SIDEWALK 4-INCH



ASPHALTIC SURFACE AT TEMPORARY GORE AREAS

NR & SR ALIGNMENTS

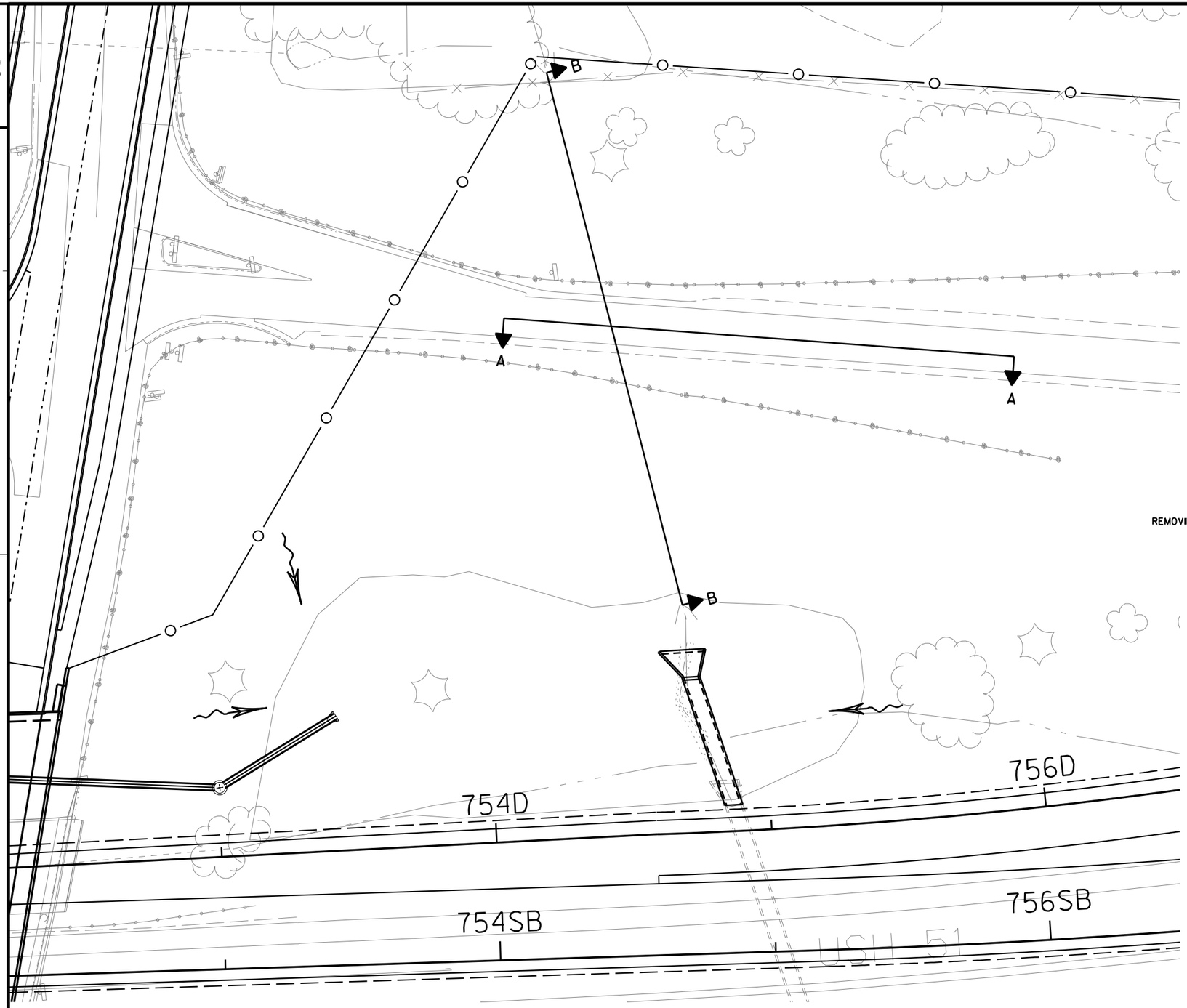


ASPHALTIC SURFACE ALONG 'NS' ALIGNMENT MEDIAN

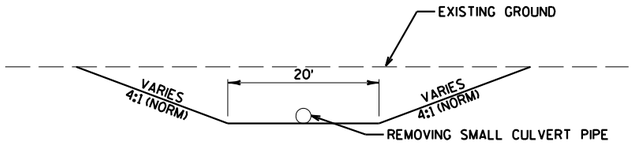
STAGE 1A

2

2

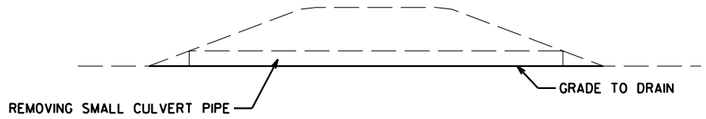


DITCH THRU EXISTING FRONTAGE ROAD DETAIL



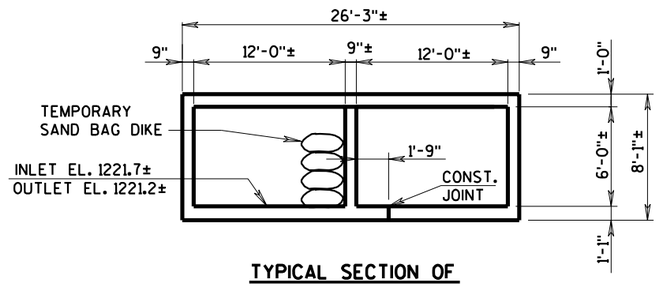
SECTION A-A

SEE EROSION CONTROL PLANS
FOR EROSION CONTROL ITEMS



SECTION B-B

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CONSTRUCTION DETAIL	SHEET 42	E



TYPICAL SECTION OF TEMPORARY BYPASS CHANNEL

THE CONTRACTOR MAY ALTER THE CHANNEL LOCATION AND CONFIGURATION WITH THE ENGINEERS APPROVAL

(LOOKING WEST)

BOS CREEK

TEMPORARY SAND BAG DIKE

5'-6" BOX EXTENSION

12'-6"

1230

EXISTING STRUCTURE B-37-167

56'-0"±

℄ OF USH 51 SB

787SB

788SB

90°

789SB

790SB

EXISTING BOX CULVERT TO REMAIN IN PLACE

208'-6"±

787NB

788NB

789NB

790NB

62'-6"±

℄ OF USH 51 NB

1230

1225

12'-6"

5'-6" BOX EXTENSION

TEMPORARY SAND BAG DIKE

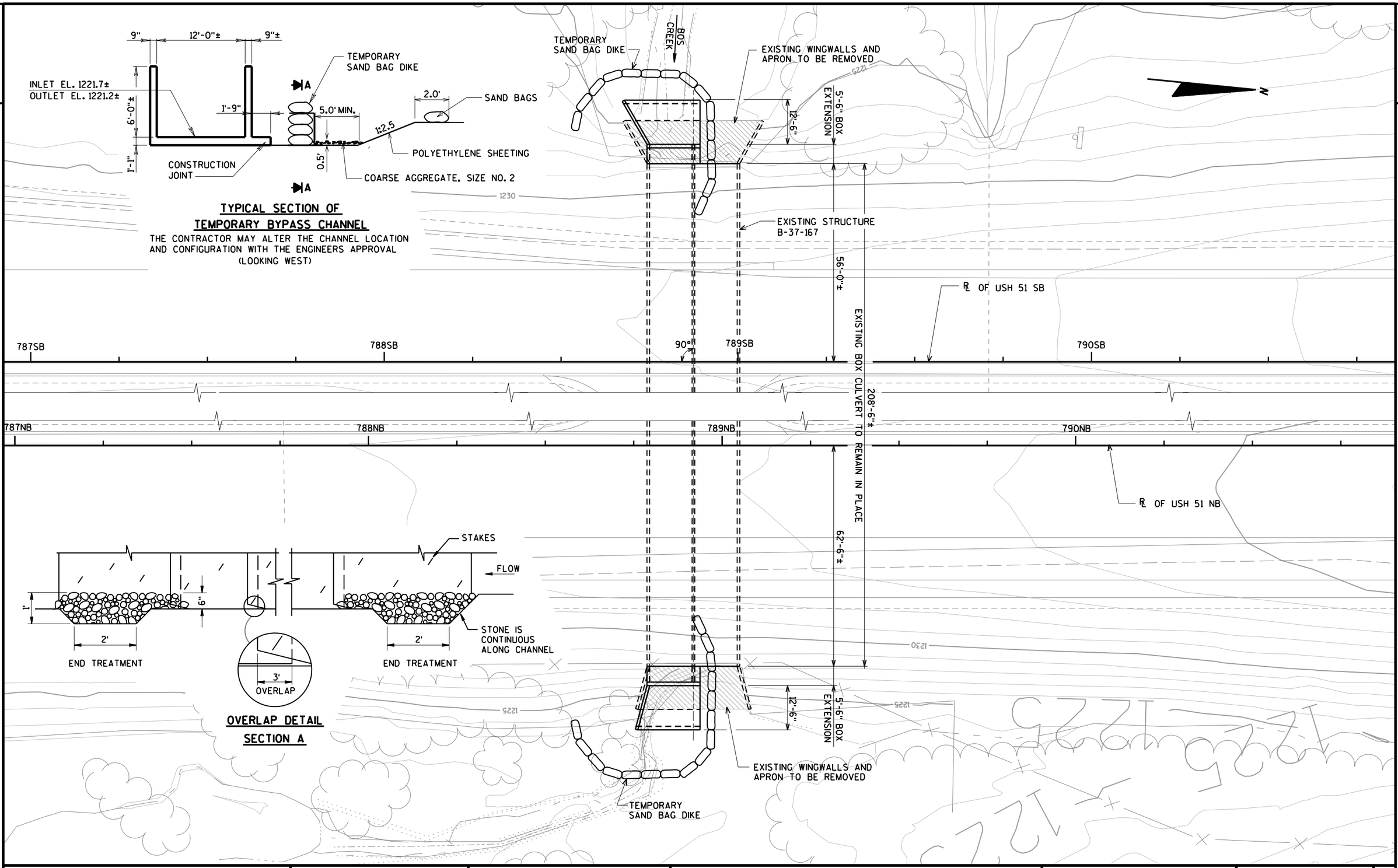
N

2

PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	B-37-167 TEMPORARY BYPASS CHANNEL STAGE 2	SCALE, FEET 0 25	SHEET 43	E

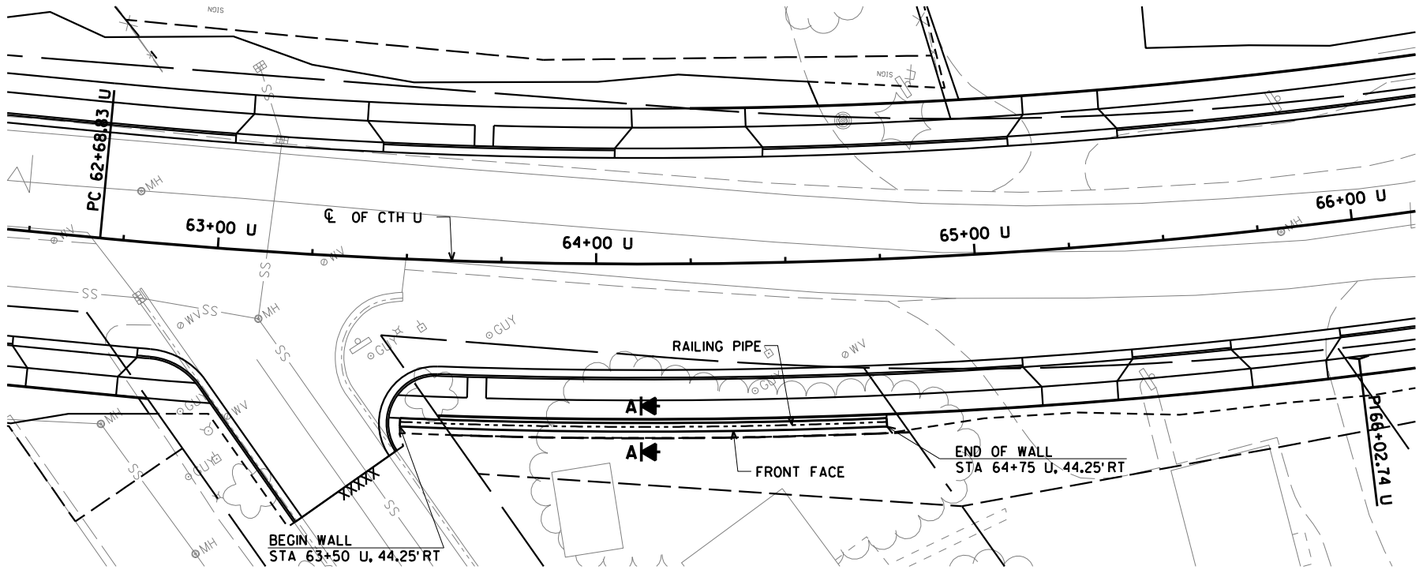
TYPICAL SECTION OF
TEMPORARY BYPASS CHANNEL

THE CONTRACTOR MAY ALTER THE CHANNEL LOCATION AND CONFIGURATION WITH THE ENGINEERS APPROVAL
(LOOKING WEST)



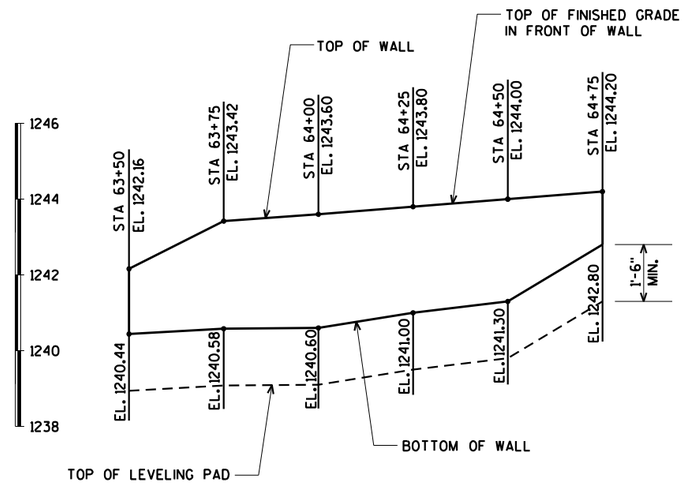
OVERLAP DETAIL
SECTION A

PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	B-37-167 TEMPORARY BYPASS CHANNEL STAGE 1	SCALE, FEET 0 25	SHEET 44	E



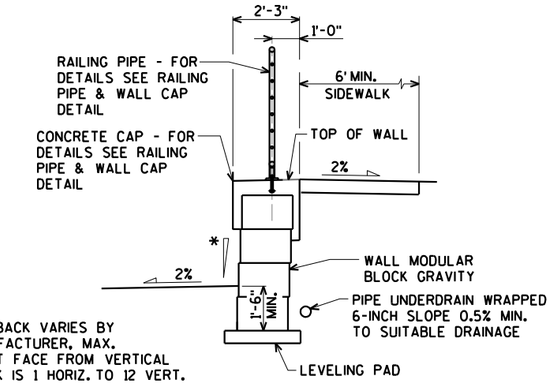
PLAN

ALL DIMENSIONS ARE MEASURED ALONG FRONT FACE
ALIGNMENT PARALLELS CTH U ROADWAY ALIGNMENT



ELEVATION

(LOOKING AT FRONT FACE OF WALL)



* SET BACK VARIES BY MANUFACTURER, MAX. FRONT FACE FROM VERTICAL BLOCK IS 1 HORIZ. TO 12 VERT.

SECTION A-A

GENERAL NOTES

WALL PROFILE SHOWS MINIMUM ELEVATION FOR THE TOP OF WALL. THE AREA CALCULATED FOR ESTIMATED QUANTITIES IS FROM THE MINIMUM TOP OF WALL ELEVATION TO THE TOP OF LEVELING PAD.

DRAWINGS SHALL NOT BE SCALED.

BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS SHOWN OR NOTED OTHERWISE.

DESIGN DATA

THE CONTRACTOR SHALL PROVIDE COMPLETE DESIGN PLANS, DETAILS, SPECIFICATIONS AND SHOP DRAWINGS FOR THE RETAINING WALLS IN ACCORDANCE WITH THE SPECIAL PROVISIONS. THE RETAINING WALL MANUFACTURER SHALL PROVIDE TECHNICAL ASSISTANCE TO THE CONTRACTOR DURING CONSTRUCTION. THE COST OF FURNISHING THESE ITEMS SHALL BE INCLUDED IN THE BID ITEM "WALL MODULAR BLOCK GRAVITY".

PLANS, ELEVATIONS AND DETAILS SHOWN ON THESE DRAWINGS ARE INTENDED TO INDICATE WALL LOCATIONS, LENGTHS, HEIGHTS AND DETAILS COMMON TO ANY WALL SYSTEM SELECTED. THE CONTRACTOR SHALL VERIFY THAT THE WALL SYSTEM SELECTED WILL CONFORM TO THE REQUIRED ALIGNMENTS AND DETAILS.

THE RETAINING WALL IS TO BE DESIGNED USING THE ELEVATIONS GIVEN ON THIS SHEET.

BLOCKS SHALL BE STRAIGHT FACE. COLOR SHALL BE SELECTED BY THE ENGINEER.

DESIGN FOR RETAINING WALL TO PROVIDE FOR FINISHED GRADE SLOPED BEHIND WALL AS SHOWN.

CONCRETE MASONRY _____ f'c = 3,500 p.s.i.
HIGH STRENGTH BAR STEEL REINFORCEMENT (GRADE 60) _____ fy = 60,000 p.s.i.

SOIL PARAMETERS

ALLOWABLE BEARING CAPACITY = 1.0 TONS/SF
ANGLE OF INTERNAL FRICTION = 15 DEGREE
COHESION = 0.8 TONS/SF
COEFFICIENT OF SLIDING FRICTION = 0.4

SAFETY FACTORS

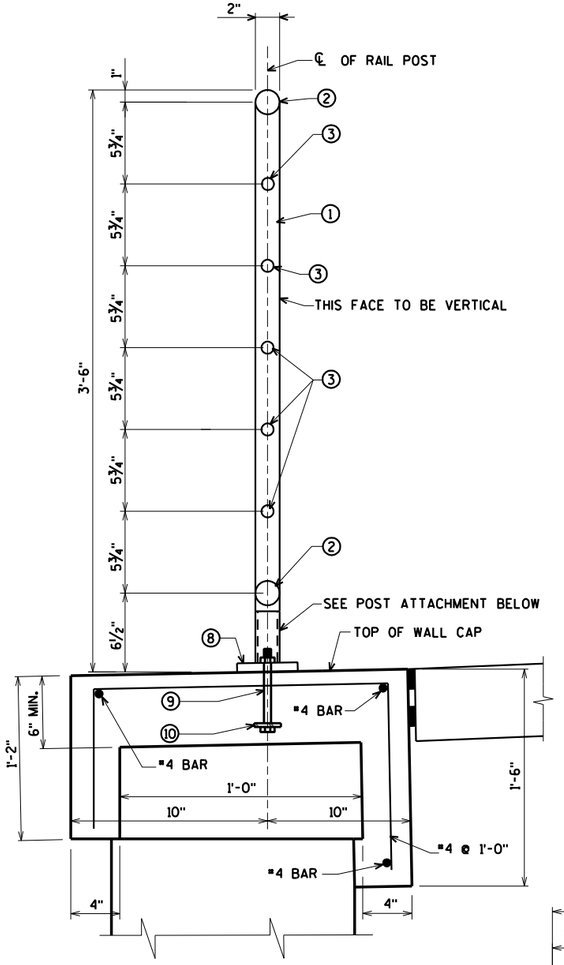
SLIDING (FS > 1.5)
OVERTURNING (FS > 2.0)
GLOBAL STABILITY (FS > 1.3)
MINIMUM WALL EMBEDMENT 1'-6"

TOTAL ESTIMATED QUANTITIES

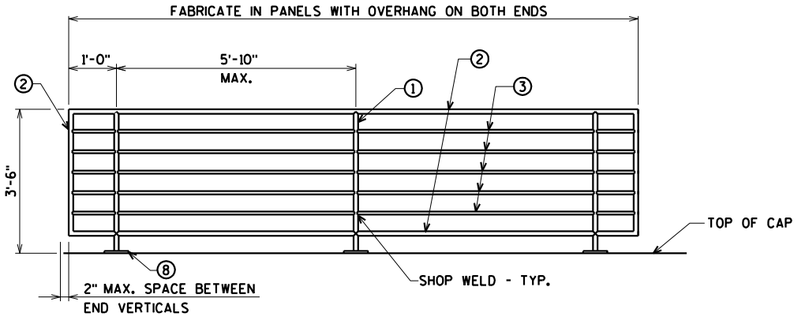
WALL MODULAR BLOCK GRAVITY	322 SF
PIPE UNDERDRAIN WRAPPED	125 LF
RAILING PIPE	1 LS

NOTE: COST OF CONCRETE MASONRY AND BAR STEEL REINFORCEMENT IN WALL CAP CONSIDERED INCIDENTAL TO THE BID ITEM "WALL MODULAR BLOCK GRAVITY".

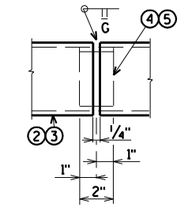
PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	RETAINING WALL DETAIL - CTH U	SHEET 45	E



SECTION THRU RAILING AND CAP



PART ELEVATION OF RAILING



SHOP RAIL SPLICE DETAIL

(LOCATION MUST BE SHOWN ON THE SHOP DRAWINGS)

LEGEND

① 2" ϕ STEEL PIPE FOR POST. CUT BOTTOM OF POST TO MATCH TOP OF CONCRETE. PLACE POSTS VERTICAL.

② 2" ϕ STEEL PIPE FOR TOP & BOT. RAIL. WELD TO NO. 1.

③ 1" ϕ STEEL PIPE FOR INTERMEDIATE RAILS. WELD TO NO. 1.

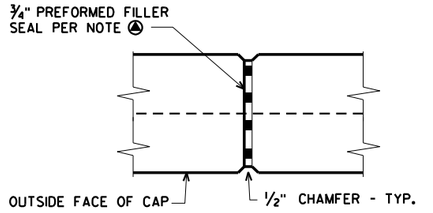
④ 1½" ϕ PIPE SLEEVE FOR NO. 2. PROVIDE "SLIDING FIT" WITH A MINIMUM OUT TO OUT DIMENSION OF 1 3/16".

⑤ ½" ϕ ROD SLEEVE FOR NO. 3. PROVIDE "SLIDING FIT" WITH A MINIMUM OUT TO OUT DIMENSION OF 5/8".

⑧ PLATE ¾" x 5" x 8", WITH 5/8" ϕ HOLE FOR ANCHOR BOLTS NO. 9. WELD TO NO. 1 OR PIPE SLEEVE AS SHOWN.

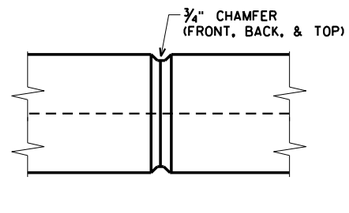
⑨ A325 - ½" ϕ x 6⅞" LONG HEX BOLTS (GALVANIZED) WITH A325 NUT AND WASHER. 2 REQ'D. PER POST. THREAD 3" AND PLACE NORMAL TO PLATE NO. 8. CHAMFER TOP OF BOLTS BEFORE THREADING.

⑩ ¼" x 2" x 8" FLAT BAR, WITH 5/8" ϕ HOLES FOR ANCHOR BOLTS NO. 9.



WALL CAP EXPANSION JOINT

DO NOT RUN ANY BAR STEEL THRU JOINT
MAX. SPACING OF JOINT = 50'



WALL CAP CONTRACTION JOINT

DO NOT RUN ANY BAR STEEL THRU JOINT
MAX. SPACING OF JOINT = 12'

▲ SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW DURFACE OF CONCRETE).

GENERAL NOTES

BID ITEM SHALL BE "RAILING PIPE", WHICH INCLUDES ALL ITEMS SHOWN.

RAILING SHALL BE FABRICATED IN LENGTHS THAT INCLUDE 2 OR 3 POSTS.

RAILING SHALL BE CURVED TO FIT THE WALL ALIGNMENT.

POST BASE PLATES SHALL BE FLAT WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT AND VERTICAL. ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUT.

ALL MATERIAL EXCEPT ANCHORAGE DETAIL (NO. 10) SHALL BE GALVANIZED AFTER FABRICATION. PRIOR TO GALVANIZING, ALL STEEL RAILING POSTS AND STEEL TUBING SHALL BE GIVEN A NO. 6 BLAST CLEANING BY S.S.P.C. SPECIFICATIONS.

FILL BOLT SLOT OPENINGS IN POST SHIMS AND PLATE NO. 8 AND CAULK AROUND PERIMETER OF PLATE NO. 8 WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER.

ALL MATERIALS USED IN FABRICATION SHALL BE MADE FROM MATERIALS CONFORMING TO A.S.T.M. DESIGNATION A709 GRADE 36 UNLESS NOTED OTHERWISE.

STEEL POST SHIMS SHALL BE PROVIDED & USED UNDER BASE PLATES WHERE REQ'D. FOR ALIGNMENT.

ALL RAILS, POSTS AND SLEEVES ARE STANDARD WEIGHT PIPE, SCHEDULE 40.

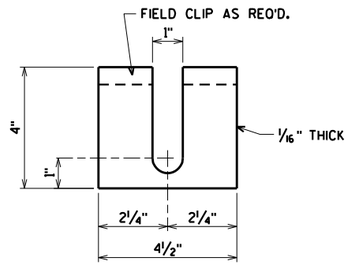
PLACE ALL NUTS ON OUTSIDE OF POSTS.

ANCHORAGES SHALL BE ACCURATELY PLACE TO PROVIDE CORRECT ALIGNMENT OF RAILING. SET NORMAL TO GRADE.

CUT BOTTOM OF POST TO MAKE POST VERTICAL IN BOTH TRANSVERSE AND LONGITUDINAL DIRECTION.

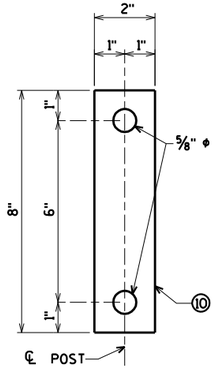
¼" ϕ VENT HOLES LOCATED IN TOP RAIL OVER POSTS AND AT LOW END OF OTHER RAILS.

⊗ ½" ϕ CONCRETE MASONRY ANCHOR, TYPE "S", 6" EMBEDMENT (EPOXY ANCHORED) MIN. PULLOUT OF 10 KIPS. THREADED LENGTH OF ANCHOR, WASHER AND NUT SHALL BE GALVANIZED.

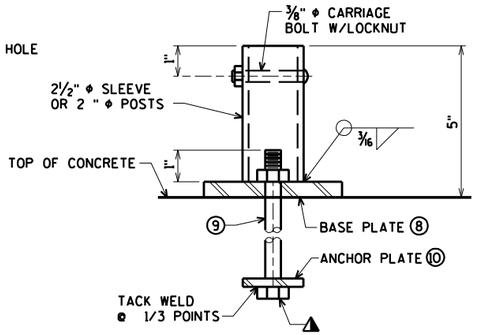


POST SHIM DETAILS

PROVIDE 4 SHIMS PER POST.



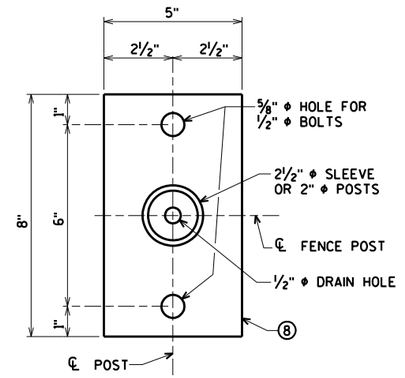
PLAN ANCHOR PLATE



ELEVATION

POST ATTACHMENT

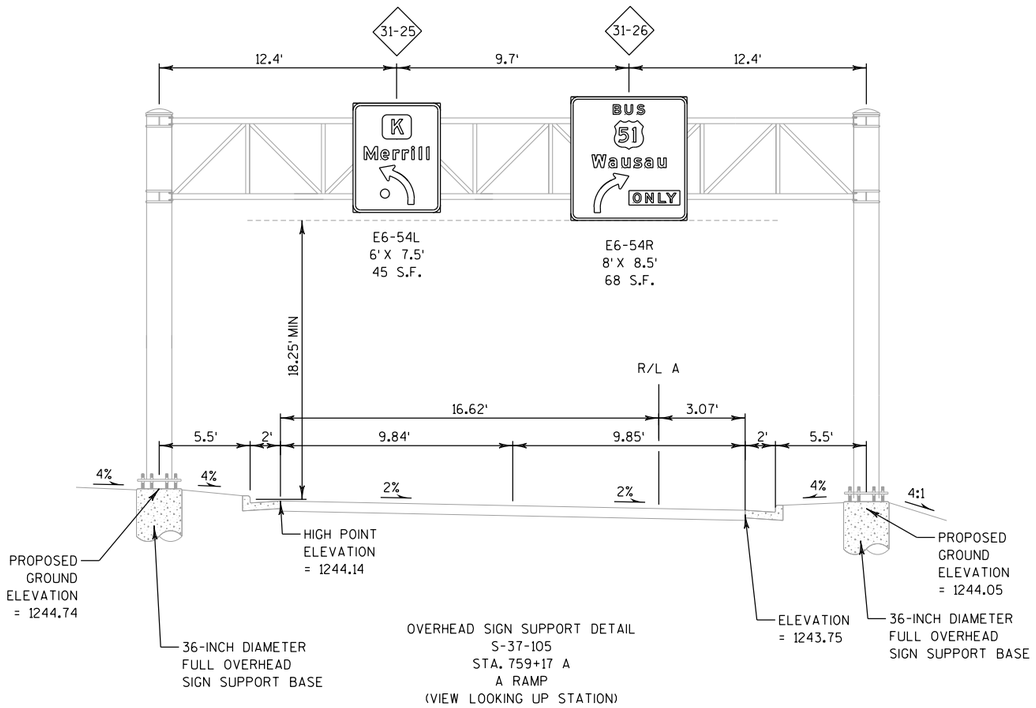
UNIT SHALL BE GALV. AFTER FABRICATION



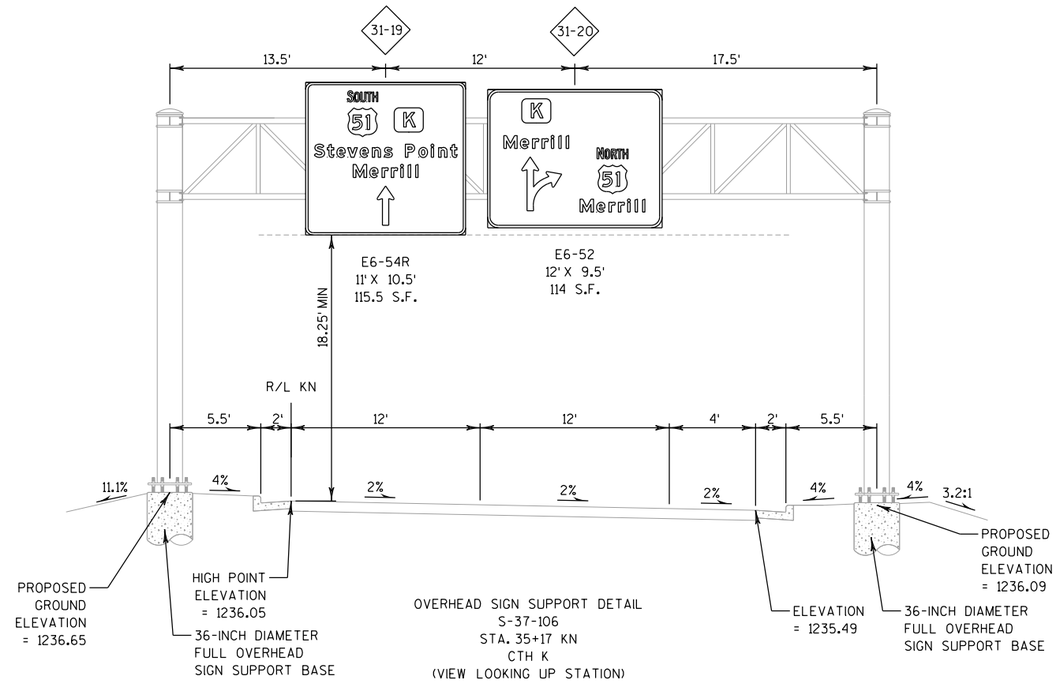
PLAN BASE PLATE

▲ ½" ϕ x 6⅞" LONG GALVANIZED HEX. BOLT WITH NUT AND WASHER. TYPE S, ½" ϕ CONCRETE MASONRY ANCHORS MAY BE SUBSTITUTED FOR ½" ϕ BOLTS. ANCHOR PLATE NOT REQUIRED WHEN TYPE S ANCHORS ARE USED. SEE ⊗ IN "GENERAL NOTES".

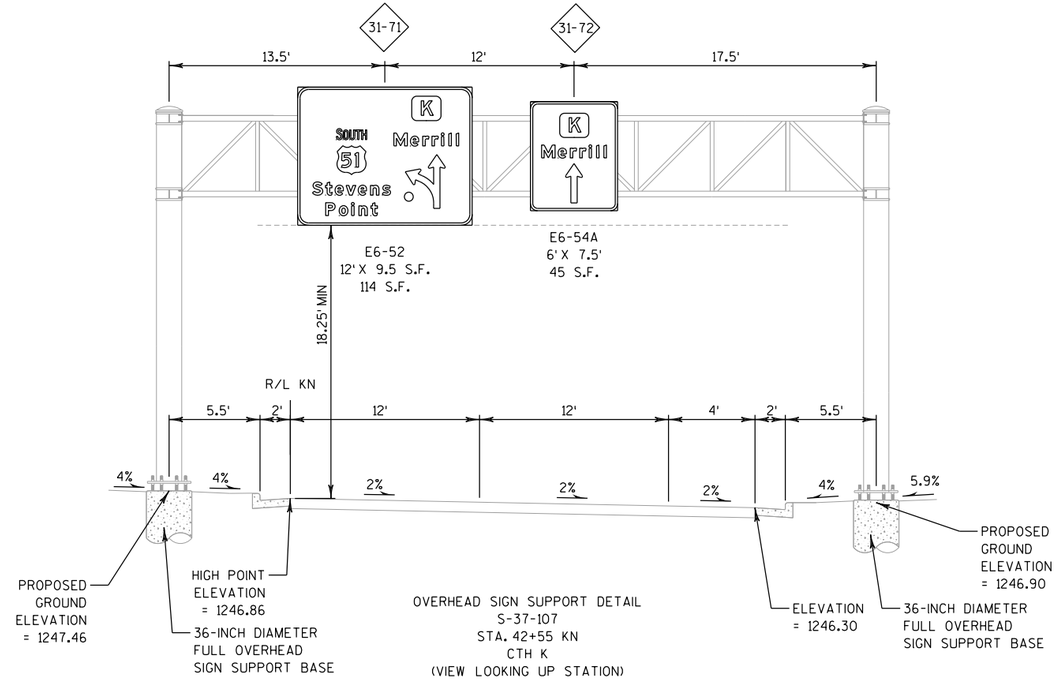
PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	RAILING PIPE & WALL CAP DETAIL	SHEET 46	E



OVERHEAD SIGN SUPPORT DETAIL
S-37-105
STA. 759+17 A
A RAMP
(VIEW LOOKING UP STATION)



OVERHEAD SIGN SUPPORT DETAIL
S-37-106
STA. 35+17 KN
CTH K
(VIEW LOOKING UP STATION)



OVERHEAD SIGN SUPPORT DETAIL
S-37-107
STA. 42+55 KN
CTH K
(VIEW LOOKING UP STATION)

GENERAL NOTES

1) DRAWINGS NOT TO SCALE

2) DESIGN NEW OVERHEAD SIGN SUPPORTS ACCORDING TO THE LATEST EDITION OF, AND SUPPLEMENTAL TO THE STATE OF WISCONSIN "STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION" AND AASHTO "STANDARD SPECIFICATIONS FOR STRUCTURALSUPPORTS FOR HIGHWAY SIGNS, LUMINAIRIES, AND TRAFFIC SIGNALS."

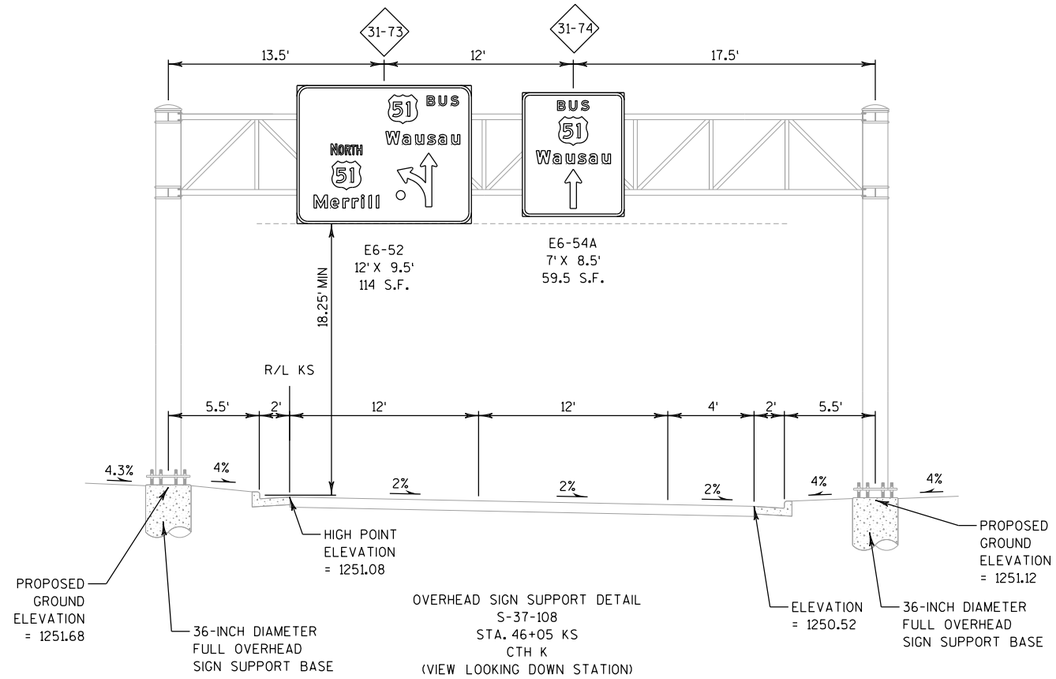
3) PROVIDE AN IDENTIFICATION PLAQUE FOR ALL OVERHEAD SIGN SUPPORTS, TO BE CONSIDERED INCIDENTIAL TO THE BID ITEM "OVERHEAD SIGN SUPPORT".

4) SIZE THE ANCHOR BOLT/TEMPLATE ASSEMBLY TO FIT WITHIN THE BAR CAGE OF THE FOOTING BASE SHOWN IN THE CONTRACT PLANS IN ADDITION TO MEETING ALL APPLICABLE DESIGN REQUIREMENTS FOR THE DESIGN OF THE UPRIGHT BASE CONNECTION.

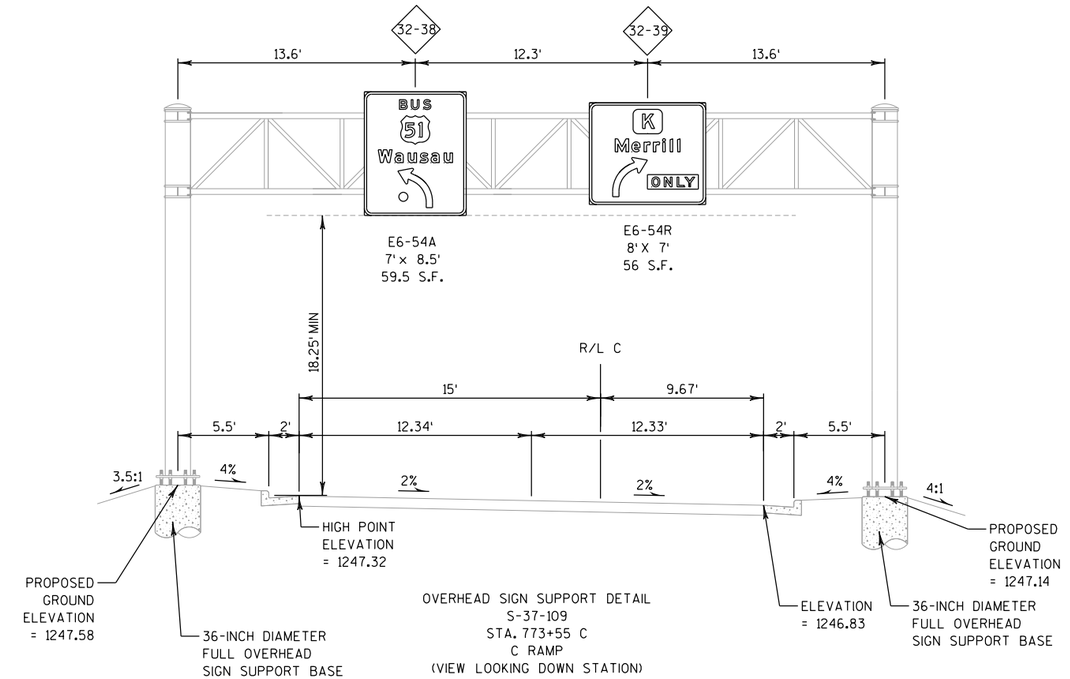
5) PROVIDE DESIGN CALCULATIONS.

6) SIGNS OR BLANKS SHALL BE INSTALLED ON THE OVERHEAD SIGN SUPPORT AT THE TIME OF ERECTION. BLANKS, IF USED, SHALL BE OF THE SAME SIZE AND LOCATION AS PERMANENT SIGNS.

7) DESIGN THE STRUCTURE BASE PLATE CONNECTION TO ACCOMODATE A MINIMUM OF SIX (6) ANCHOR BOLTS.



OVERHEAD SIGN SUPPORT DETAIL
S-37-108
STA. 46+05 KS
CTH K
(VIEW LOOKING DOWN STATION)



OVERHEAD SIGN SUPPORT DETAIL
S-37-109
STA. 773+55 C
C RAMP
(VIEW LOOKING DOWN STATION)

2

GENERAL NOTES

1) DRAWINGS NOT TO SCALE

2) DESIGN NEW OVERHEAD SIGN SUPPORTS ACCORDING TO THE LATEST EDITION OF, AND SUPPLEMENTAL TO THE STATE OF WISCONSIN "STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION" AND AASHTO "STANDARD SPECIFICATIONS FOR STRUCTURALSUPPORTS FOR HIGHWAY SIGNS, LUMINAIRIES, AND TRAFFIC SIGNALS."

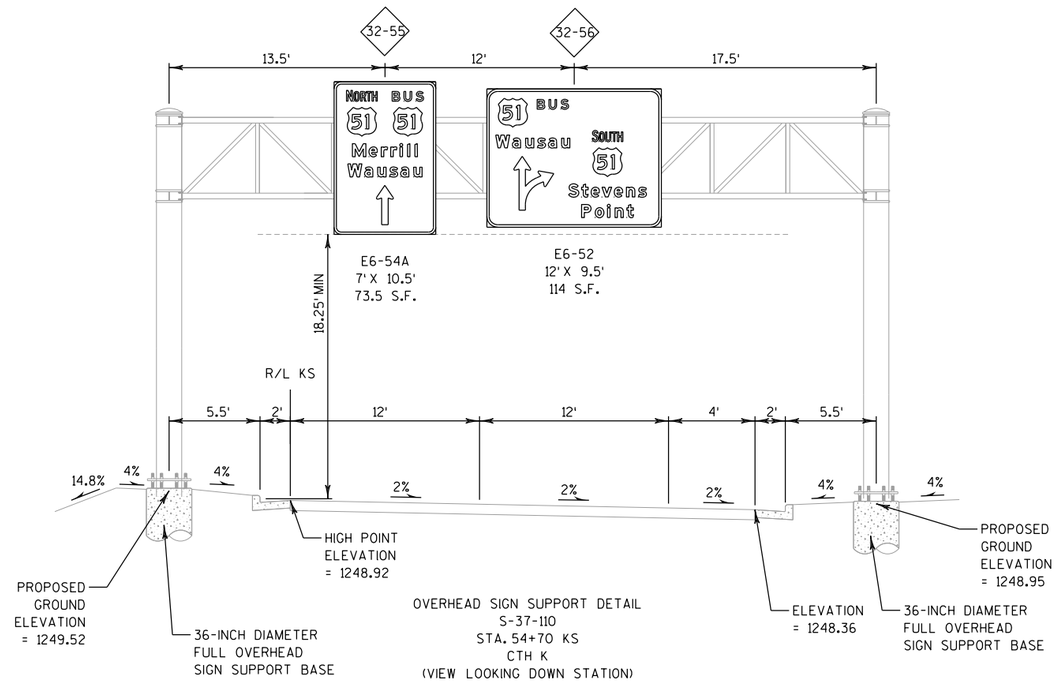
3) PROVIDE AN IDENTIFICATION PLAQUE FOR ALL OVERHEAD SIGN SUPPORTS, TO BE CONSIDERED INCIDENTIAL TO THE BID ITEM "OVERHEAD SIGN SUPPORT".

4) SIZE THE ANCHOR BOLT/TEMPLATE ASSEMBLY TO FIT WITHIN THE BAR CAGE OF THE FOOTING BASE SHOWN IN THE CONTRACT PLANS IN ADDITION TO MEETING ALL APPLICABLE DESIGN REQUIREMENTS FOR THE DESIGN OF THE UPRIGHT BASE CONNECTION.

5) PROVIDE DESIGN CALCULATIONS.

6) SIGNS OR BLANKS SHALL BE INSTALLED ON THE OVERHEAD SIGN SUPPORT AT THE TIME OF ERECTION. BLANKS, IF USED, SHALL BE OF THE SAME SIZE AND LOCATION AS PERMANENT SIGNS.

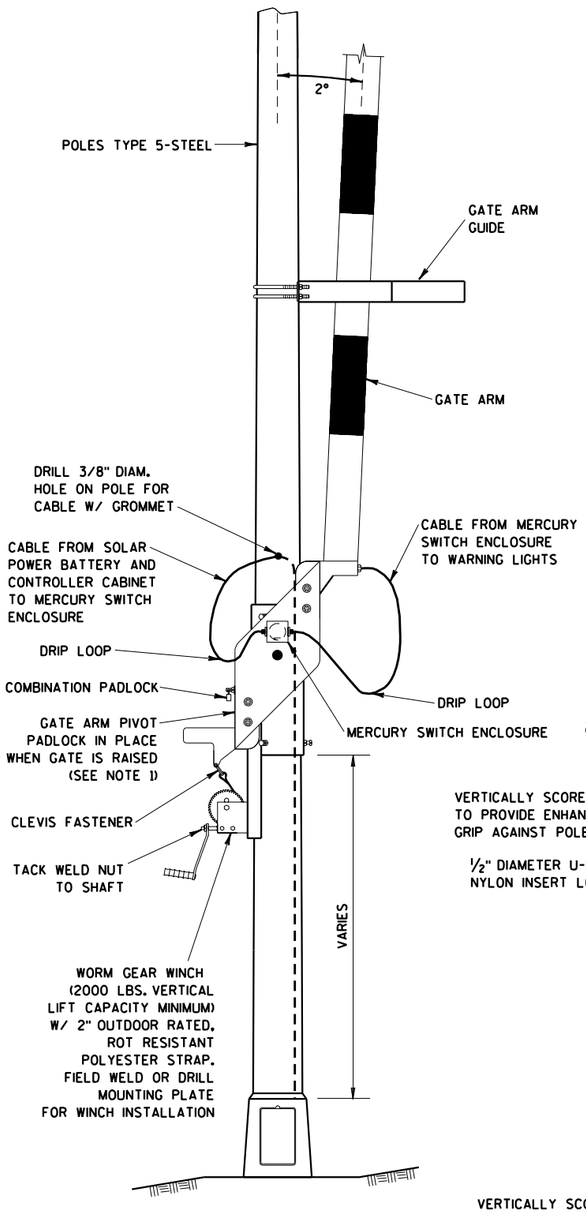
7) DESIGN THE STRUCTURE BASE PLATE CONNECTION TO ACCOMODATE A MINIMUM OF SIX (6) ANCHOR BOLTS.



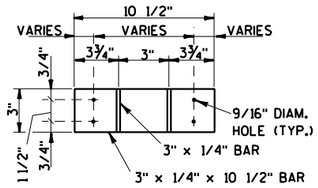
OVERHEAD SIGN SUPPORT DETAIL
S-37-110
STA. 54+70 KS
CTH K
(VIEW LOOKING DOWN STATION)

GENERAL NOTES

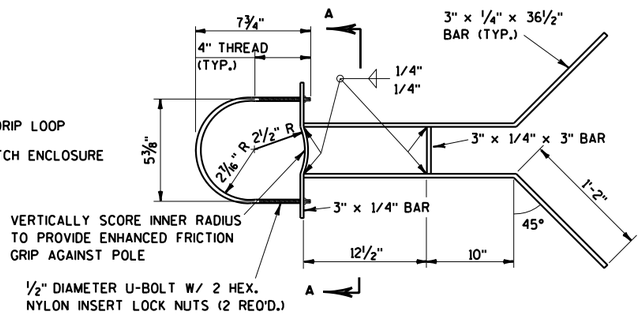
1. WHEN THE GATE IS FULLY RAISED, THE NUT AND WASHER SHALL BE PLACED SNUGLY AGAINST THE OUTSIDE OF THE REAR CHANNEL AND PADLOCKED IN PLACE.
2. WHEN THE GATE IS FULLY LOWERED, THE NUT AND WASHER SHALL BE PLACED SNUGLY AGAINST THE INSIDE OF THE REAR CHANNEL AND PADLOCKED INTO PLACE.
3. ANTI-SEIZE LUBRICATING MATERIAL SHALL BE USED ON ALL BOLT THREADS BEFORE INSTALLATION.
4. ALL BOLTS SHALL BE GALVANIZED AND CONFORM TO ASTM A307, GRADE A, UNLESS DESIGNATED AS HS (HIGH STRENGTH), WHICH SHALL CONFORM TO ASTM A325. BOLTS OF 1/2" NOMINAL DIAMTER OR LESS MAY BE STAINLESS STEEL.



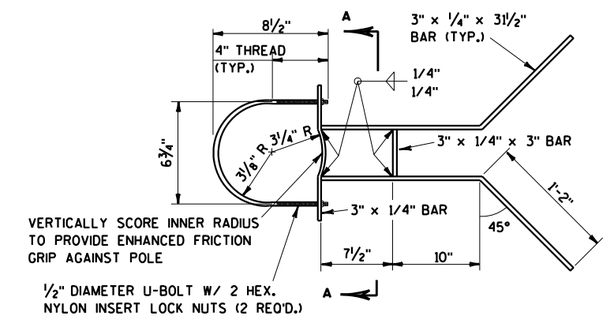
GATE PIVOT ASSEMBLY



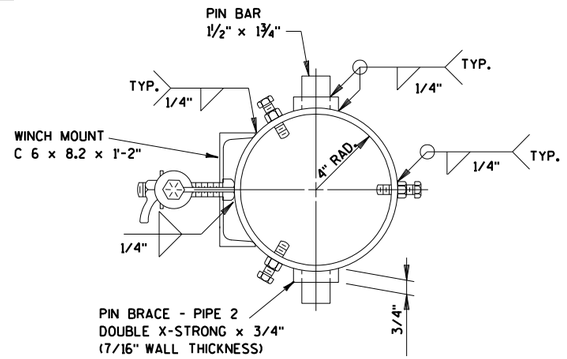
SECTION A-A
U-BOLTS NOT SHOWN



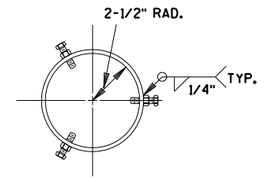
UPPER GATE ARM GUIDE DETAIL



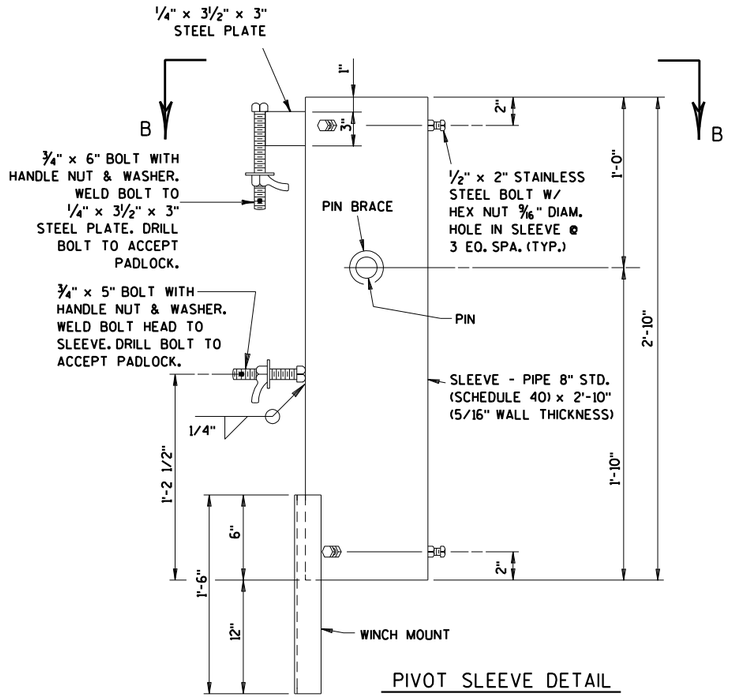
LOWER GATE ARM GUIDE DETAIL



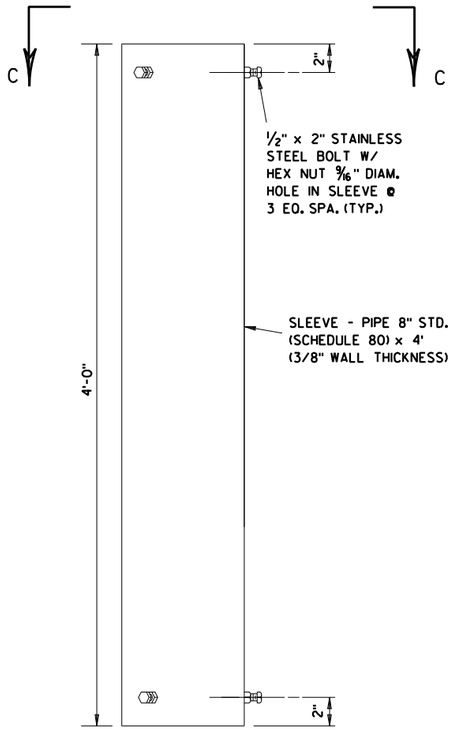
SECTION B-B



SECTION C-C

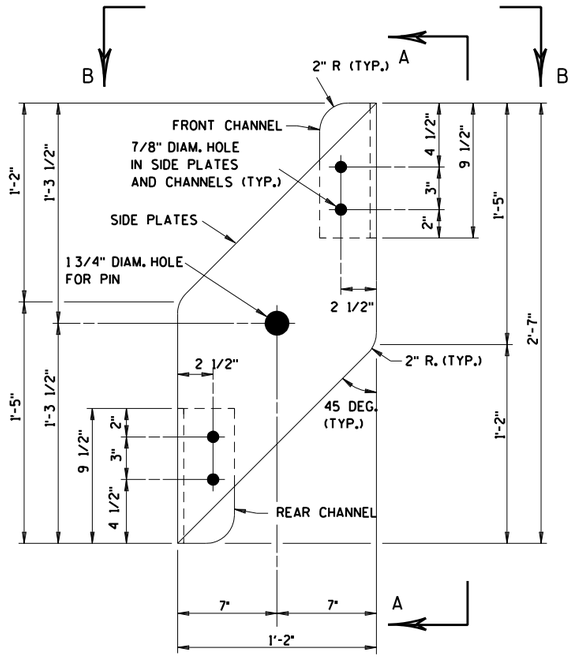


PIVOT SLEEVE DETAIL

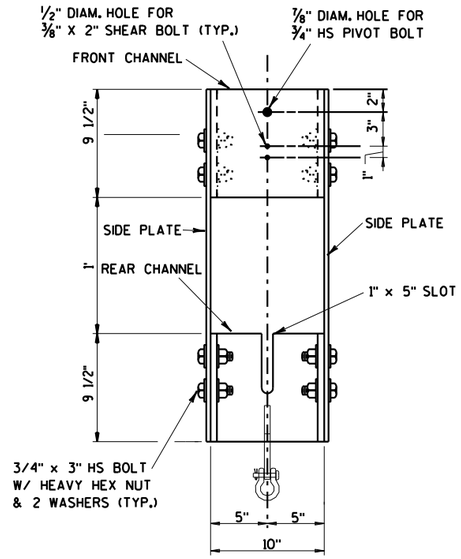


TOP COLLAR

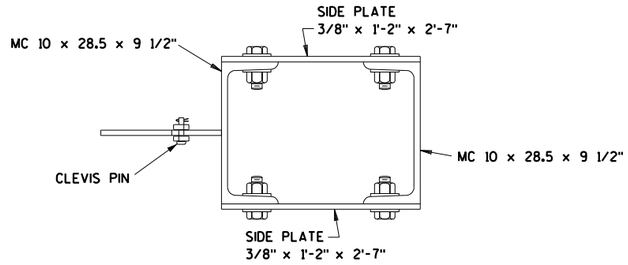
PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CONSTRUCTION DETAIL - RAMP GATE (SOLAR)	SHEET 49	E



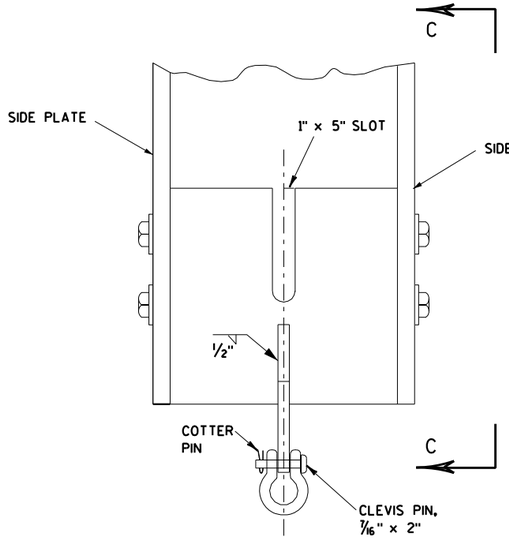
SIDE PLATE DETAIL



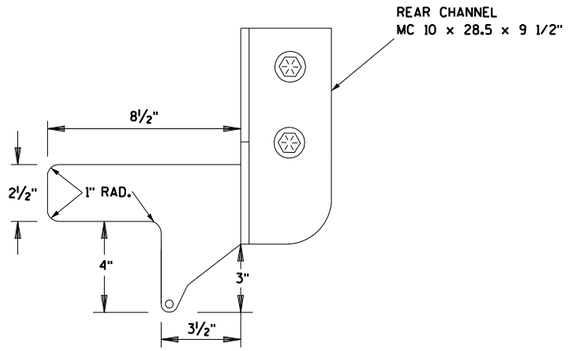
SECTION A-A



SECTION B-B

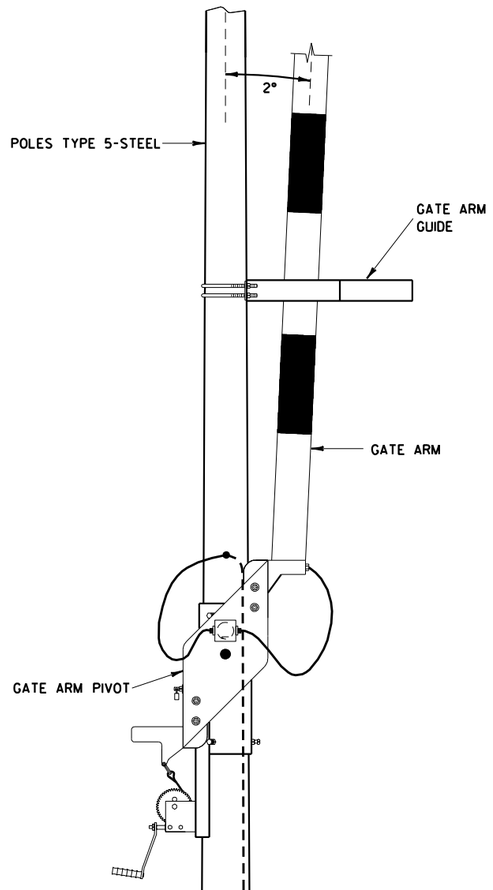


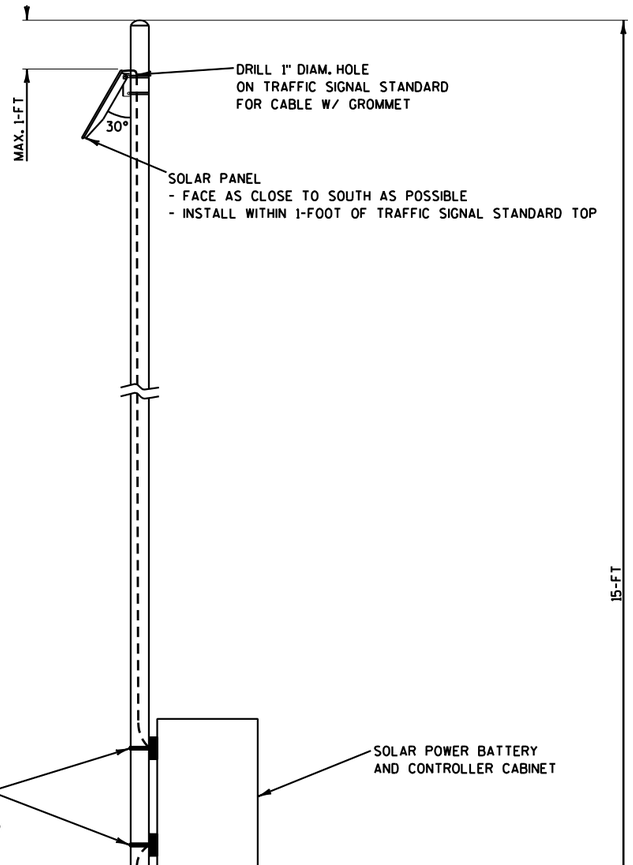
YOKE ASSEMBLY DETAIL



SECTION C-C

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CONSTRUCTION DETAIL - RAMP GATE (SOLAR)	SHEET 50	E



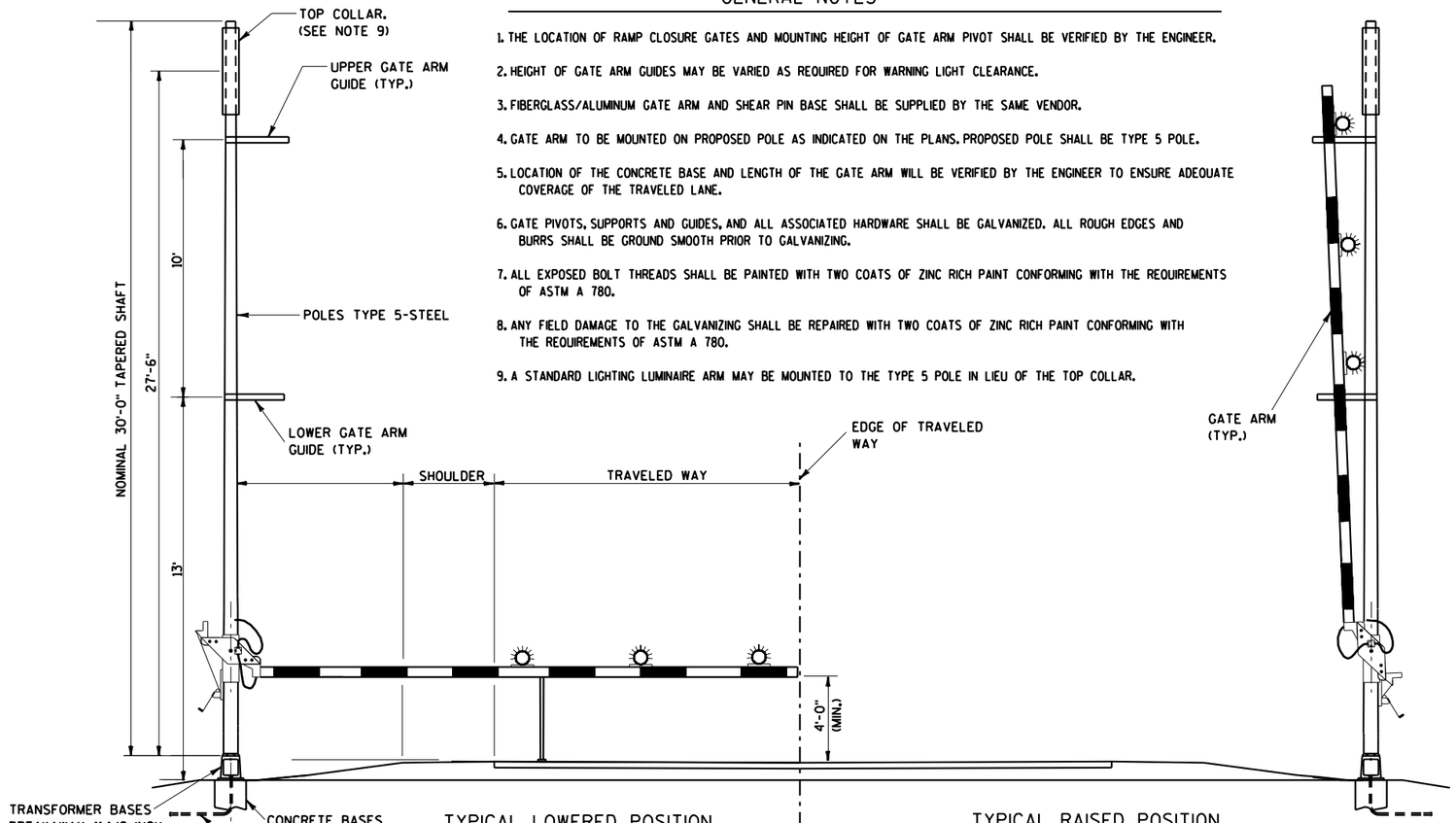


BASE AND PULLBOX DETAIL
(SOLAR POWER OPTION)

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CONSTRUCTION DETAIL - RAMP GATE (SOLAR)	SHEET 51	E

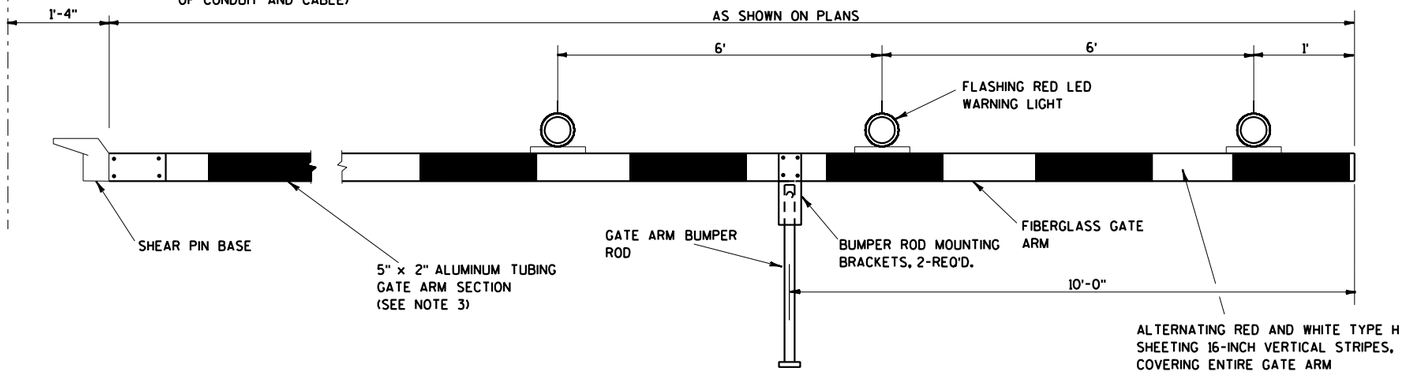
GENERAL NOTES

1. THE LOCATION OF RAMP CLOSURE GATES AND MOUNTING HEIGHT OF GATE ARM PIVOT SHALL BE VERIFIED BY THE ENGINEER.
2. HEIGHT OF GATE ARM GUIDES MAY BE VARIED AS REQUIRED FOR WARNING LIGHT CLEARANCE.
3. FIBERGLASS/ALUMINUM GATE ARM AND SHEAR PIN BASE SHALL BE SUPPLIED BY THE SAME VENDOR.
4. GATE ARM TO BE MOUNTED ON PROPOSED POLE AS INDICATED ON THE PLANS. PROPOSED POLE SHALL BE TYPE 5 POLE.
5. LOCATION OF THE CONCRETE BASE AND LENGTH OF THE GATE ARM WILL BE VERIFIED BY THE ENGINEER TO ENSURE ADEQUATE COVERAGE OF THE TRAVELED LANE.
6. GATE PIVOTS, SUPPORTS AND GUIDES, AND ALL ASSOCIATED HARDWARE SHALL BE GALVANIZED. ALL ROUGH EDGES AND BURRS SHALL BE GROUND SMOOTH PRIOR TO GALVANIZING.
7. ALL EXPOSED BOLT THREADS SHALL BE PAINTED WITH TWO COATS OF ZINC RICH PAINT CONFORMING WITH THE REQUIREMENTS OF ASTM A 780.
8. ANY FIELD DAMAGE TO THE GALVANIZING SHALL BE REPAIRED WITH TWO COATS OF ZINC RICH PAINT CONFORMING WITH THE REQUIREMENTS OF ASTM A 780.
9. A STANDARD LIGHTING LUMINAIRE ARM MAY BE MOUNTED TO THE TYPE 5 POLE IN LIEU OF THE TOP COLLAR.

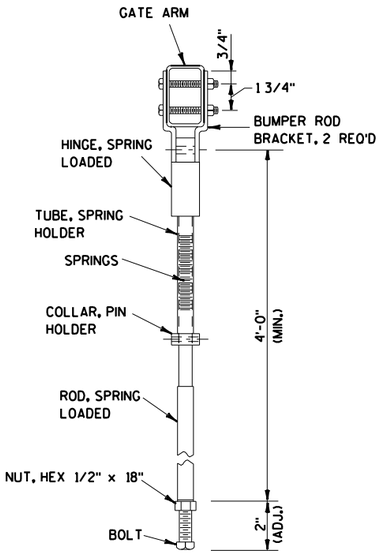


TYPICAL LOWERED POSITION
NOT TO SCALE

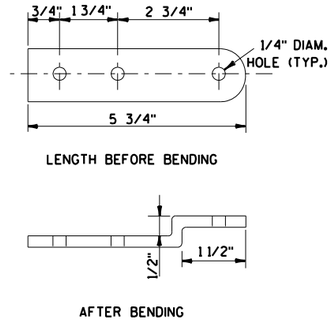
TYPICAL RAISED POSITION
NOT TO SCALE



GATE DETAIL
(SOLAR POWER OPTION)



GATE ARM BUMPER ROD DETAIL

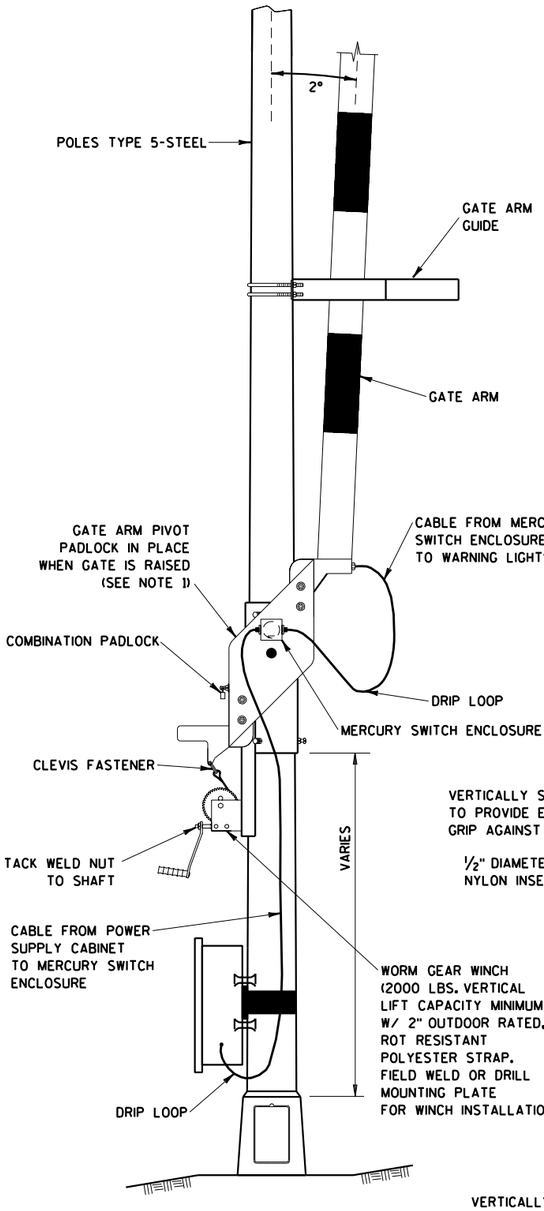


BUMPER ROD MOUNTING BRACKET DETAIL

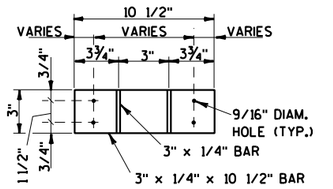
PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CONSTRUCTION DETAIL - RAMP GATE (SOLAR)	SHEET 52	E

GENERAL NOTES

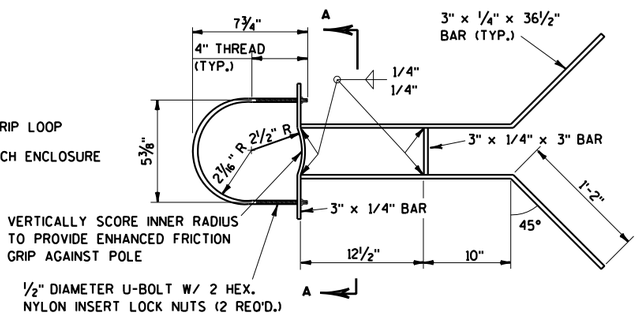
1. WHEN THE GATE IS FULLY RAISED, THE NUT AND WASHER SHALL BE PLACED SNUGLY AGAINST THE OUTSIDE OF THE REAR CHANNEL AND PADLOCKED IN PLACE.
2. WHEN THE GATE IS FULLY LOWERED, THE NUT AND WASHER SHALL BE PLACED SNUGLY AGAINST THE INSIDE OF THE REAR CHANNEL AND PADLOCKED INTO PLACE.
3. ANTI-SEIZE LUBRICATING MATERIAL SHALL BE USED ON ALL BOLT THREADS BEFORE INSTALLATION.
4. ALL BOLTS SHALL BE GALVANIZED AND CONFORM TO ASTM A307, GRADE A, UNLESS DESIGNATED AS HS (HIGH STRENGTH), WHICH SHALL CONFORM TO ASTM A325. BOLTS OF ½" NOMINAL DIAMTER OR LESS MAY BE STAINLESS STEEL.



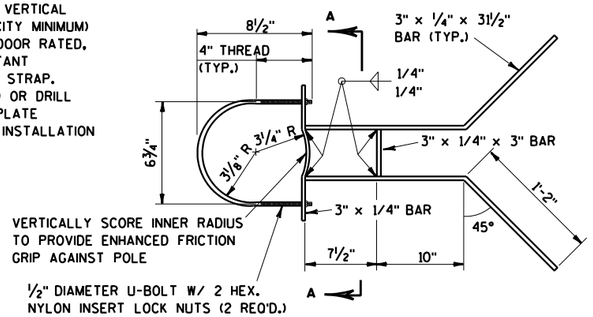
GATE PIVOT ASSEMBLY



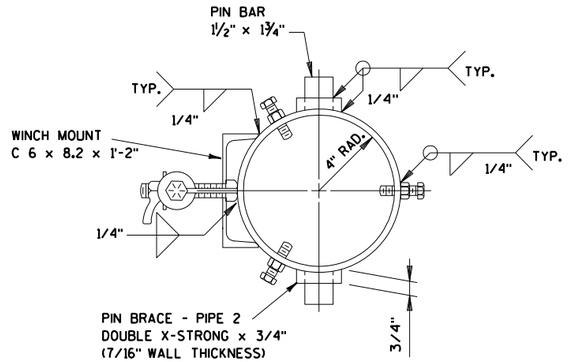
SECTION A-A
U-BOLTS NOT SHOWN



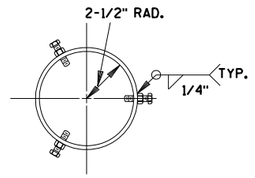
UPPER GATE ARM GUIDE DETAIL



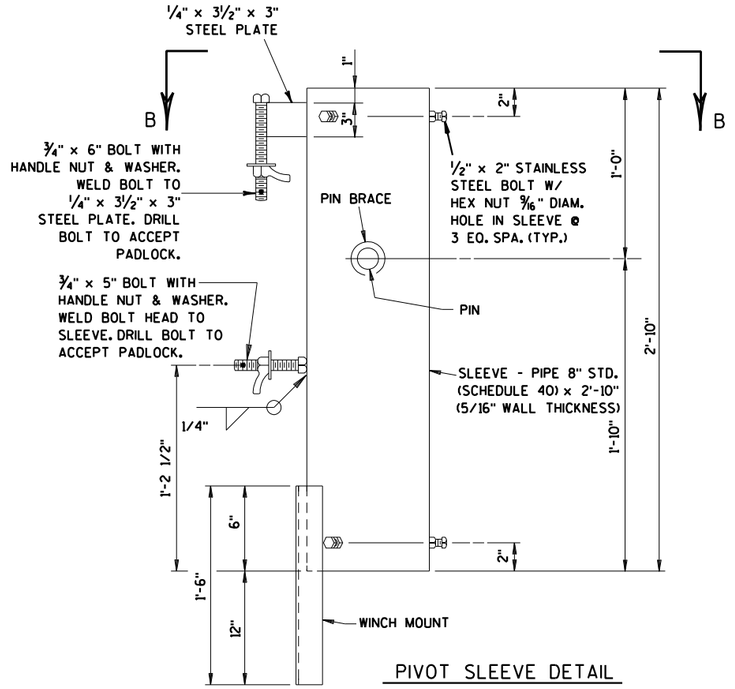
LOWER GATE ARM GUIDE DETAIL



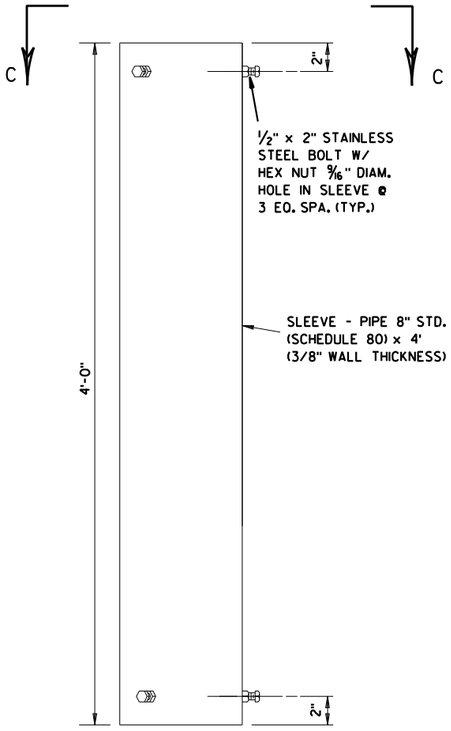
SECTION B-B



SECTION C-C

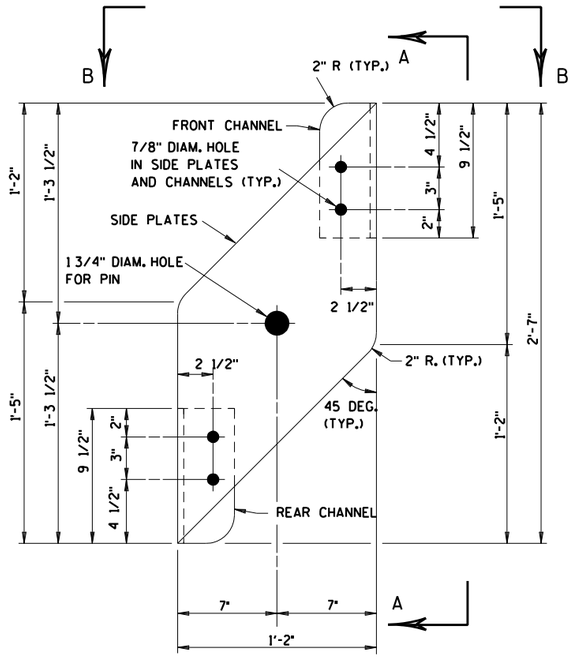


PIVOT SLEEVE DETAIL

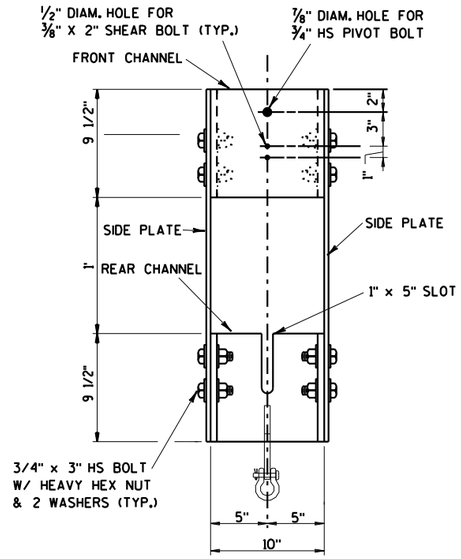


TOP COLLAR

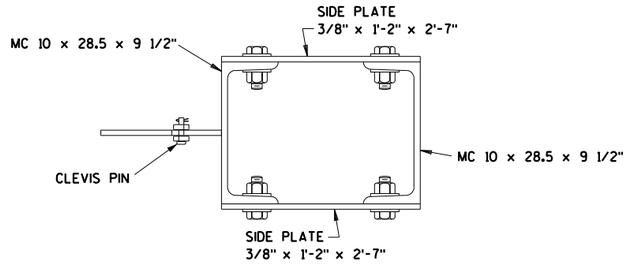
PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CONSTRUCTION DETAIL - RAMP GATE (HARDWIRED)	SHEET 53	E



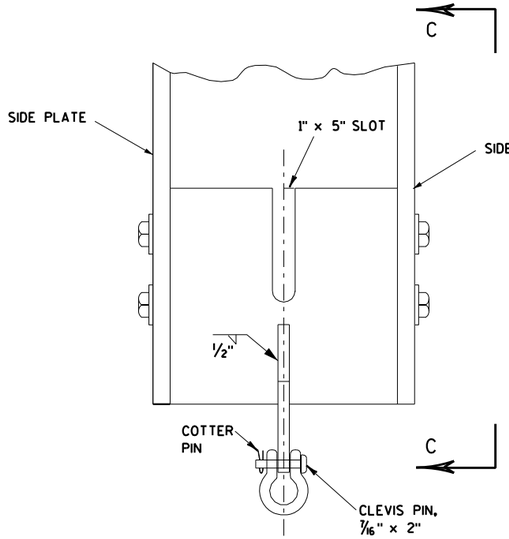
SIDE PLATE DETAIL



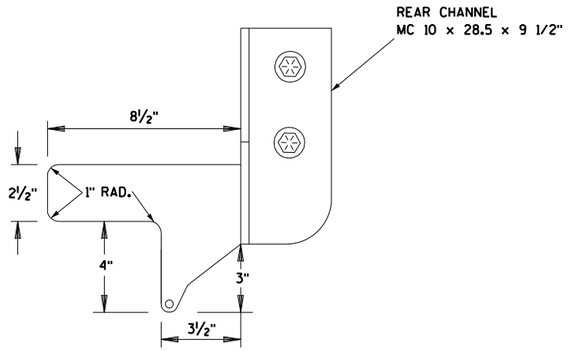
SECTION A-A



SECTION B-B



YOKE ASSEMBLY DETAIL

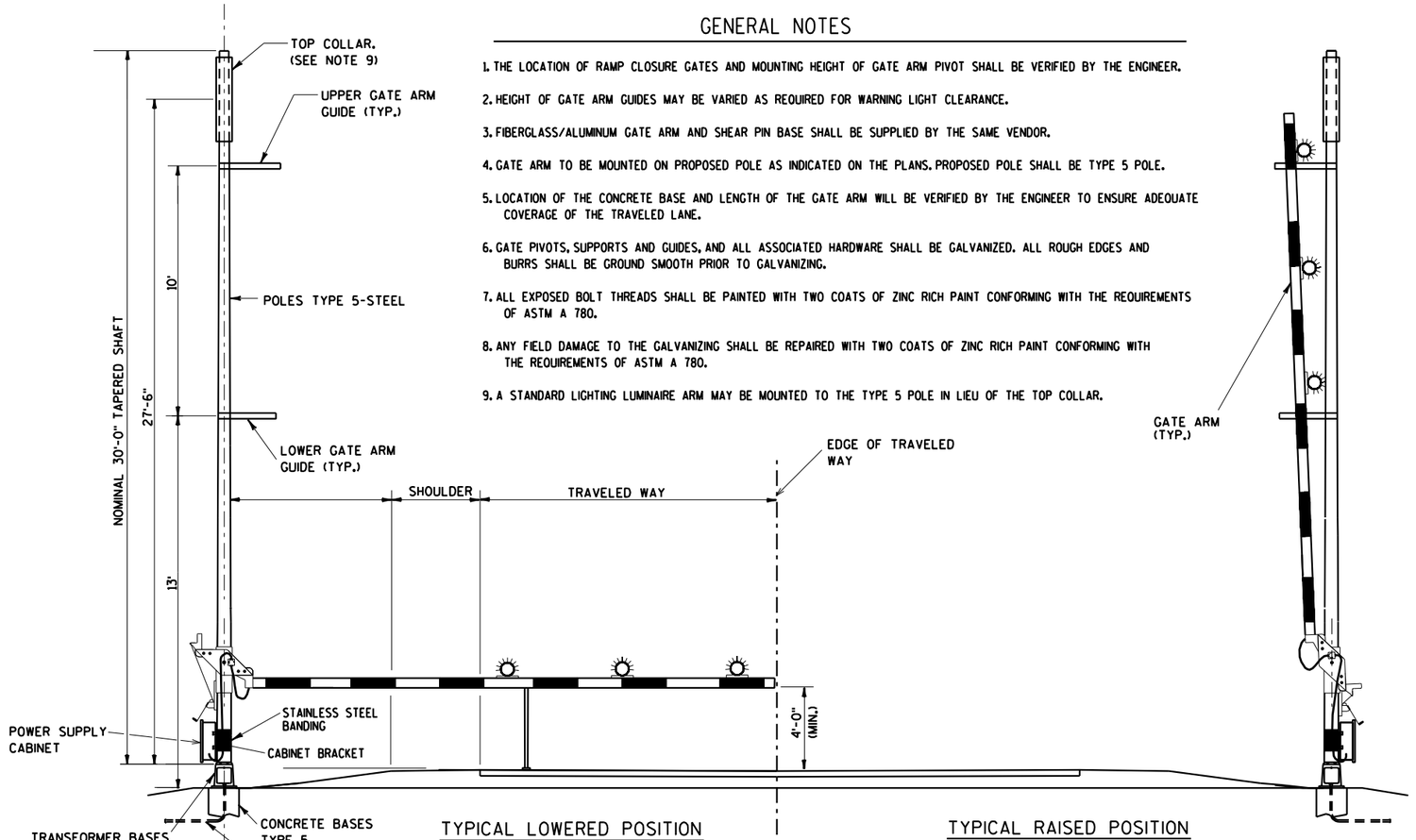


SECTION C-C

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CONSTRUCTION DETAIL - RAMP GATE (HARDWIRED)	SHEET 54	E

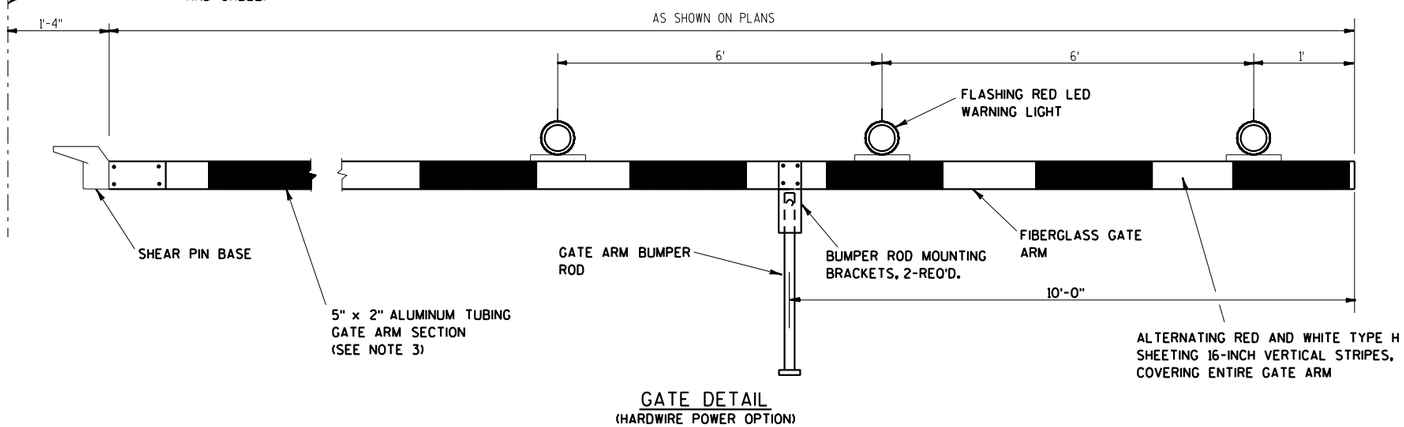
GENERAL NOTES

1. THE LOCATION OF RAMP CLOSURE GATES AND MOUNTING HEIGHT OF GATE ARM PIVOT SHALL BE VERIFIED BY THE ENGINEER.
2. HEIGHT OF GATE ARM GUIDES MAY BE VARIED AS REQUIRED FOR WARNING LIGHT CLEARANCE.
3. FIBERGLASS/ALUMINUM GATE ARM AND SHEAR PIN BASE SHALL BE SUPPLIED BY THE SAME VENDOR.
4. GATE ARM TO BE MOUNTED ON PROPOSED POLE AS INDICATED ON THE PLANS. PROPOSED POLE SHALL BE TYPE 5 POLE.
5. LOCATION OF THE CONCRETE BASE AND LENGTH OF THE GATE ARM WILL BE VERIFIED BY THE ENGINEER TO ENSURE ADEQUATE COVERAGE OF THE TRAVELED LANE.
6. GATE PIVOTS, SUPPORTS AND GUIDES, AND ALL ASSOCIATED HARDWARE SHALL BE GALVANIZED. ALL ROUGH EDGES AND BURRS SHALL BE GROUND SMOOTH PRIOR TO GALVANIZING.
7. ALL EXPOSED BOLT THREADS SHALL BE PAINTED WITH TWO COATS OF ZINC RICH PAINT CONFORMING WITH THE REQUIREMENTS OF ASTM A 780.
8. ANY FIELD DAMAGE TO THE GALVANIZING SHALL BE REPAIRED WITH TWO COATS OF ZINC RICH PAINT CONFORMING WITH THE REQUIREMENTS OF ASTM A 780.
9. A STANDARD LIGHTING LUMINAIRE ARM MAY BE MOUNTED TO THE TYPE 5 POLE IN LIEU OF THE TOP COLLAR.

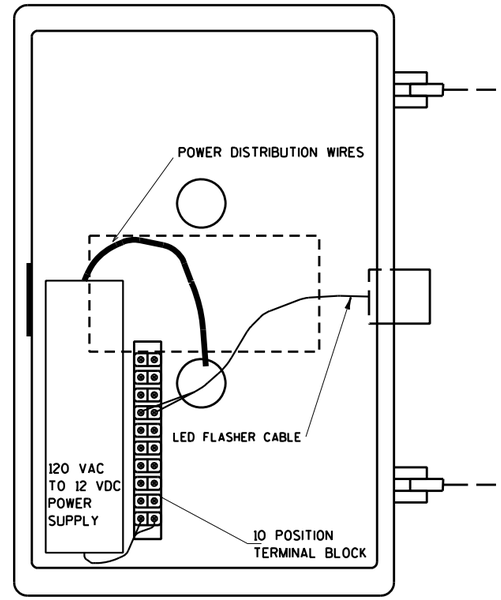


TYPICAL LOWERED POSITION
NOT TO SCALE

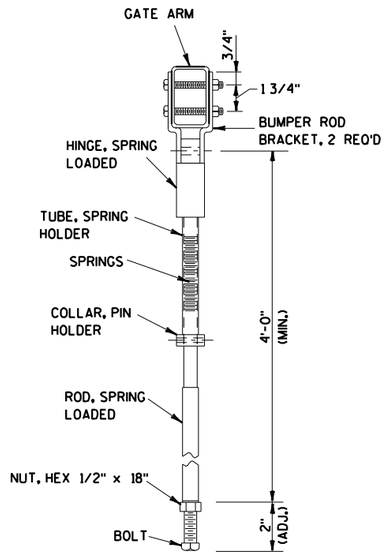
TYPICAL RAISED POSITION
NOT TO SCALE



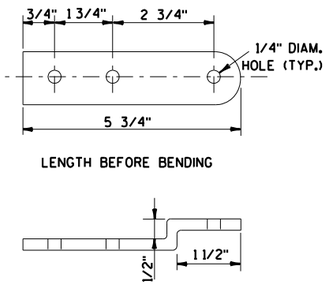
GATE DETAIL
(HARDWIRE POWER OPTION)



POWER SUPPLY CABINET

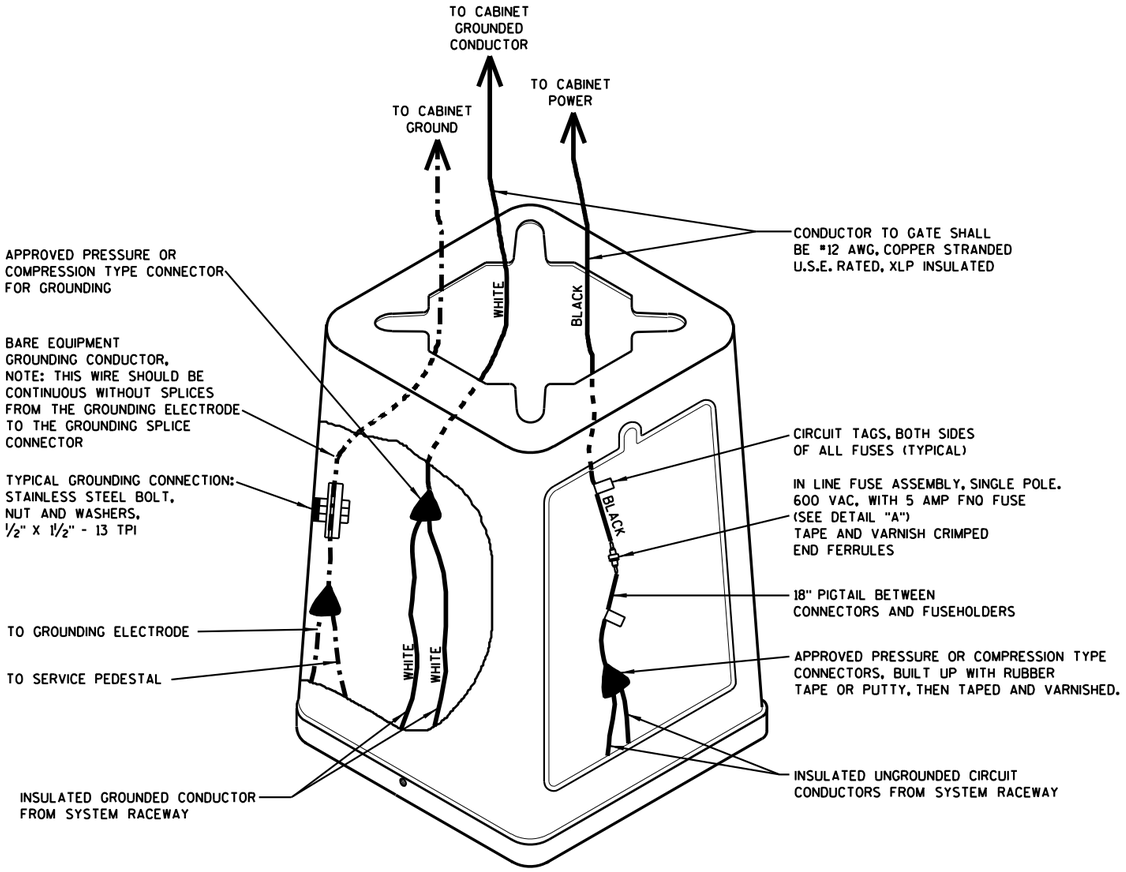


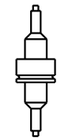
GATE ARM BUMPER ROD DETAIL



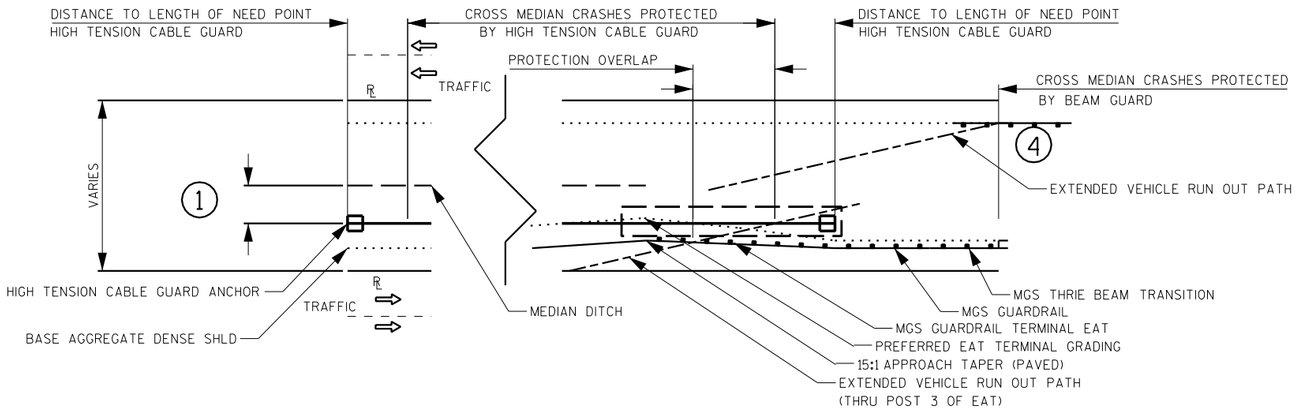
BUMPER ROD MOUNTING BRACKET DETAIL

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CONSTRUCTION DETAIL - RAMP GATE (HARDWIRED)	SHEET 55	E





DETAIL "A"
SINGLE POLE

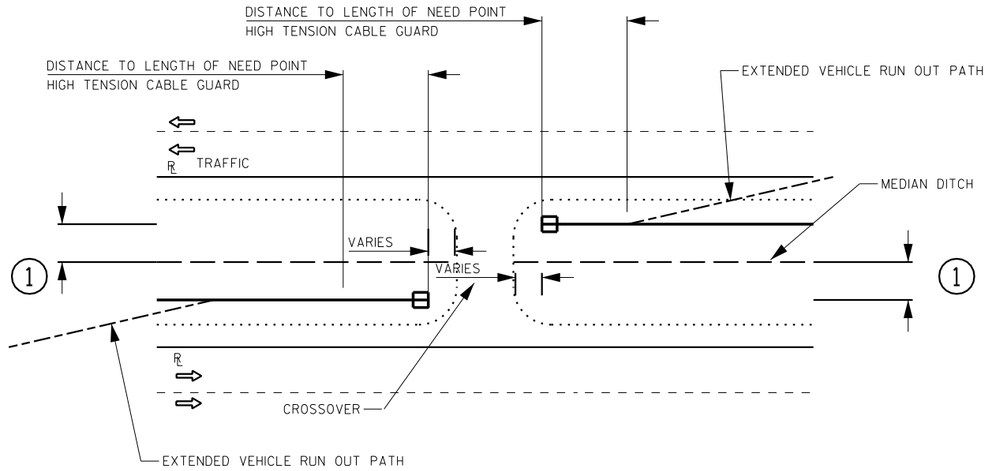


EAT & GENERAL INSTALLATION

(1) OFFSET OF HIGH TENSION CABLE GUARD:
DESIRABLE: 10'
MINIMUM: 8'

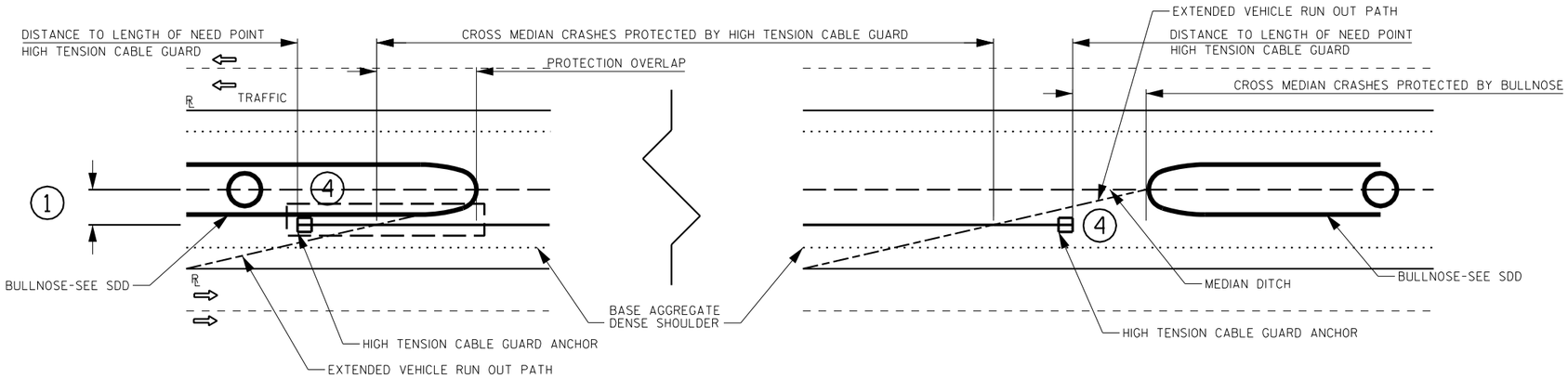
(4) IT IS PREFERRED THAT TERMINAL FOR HIGH TENSION CABLE GUARD IS INSTALLED IN A LOCATION THAT PROTECT IT FROM BEING STRUCK FROM OPPOSITE DIRECTION OF TRAVEL.

THE DASHED BOX INDICATES WHERE POST SPACE SHOULD DECREASE, SO THAT HIGH TENSION CABLE GUARD CABLE DEFLECTIONS DO NOT INTERFERE WITH OTHER ROADSIDE SAFETY DEVICES.



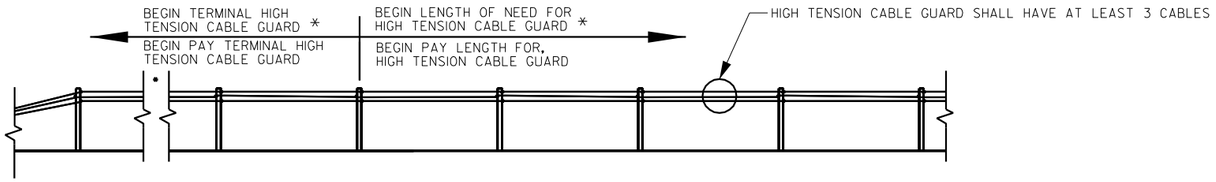
CROSSOVER INSTALLATION

(1) OFFSET OF HIGH TENSION CABLE GUARD:
DESIRABLE: 10'
MINIMUM: 8'



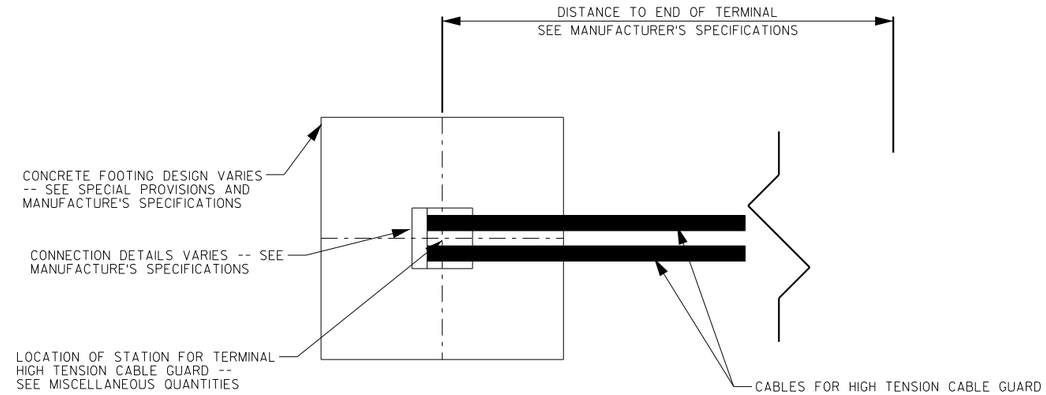
BULLNOSE INSTALLATION

PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	CONSTRUCTION DETAIL	SHEET 57	E



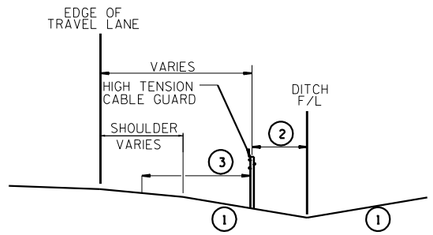
HIGH TENSION CABLE GUARD, PAY LIMIT DETAIL
AND
TERMINAL, HIGH TENSION CABLE GUARD, PAY LIMIT DETAIL

* AS DETERMINED BY MANUFACTURER



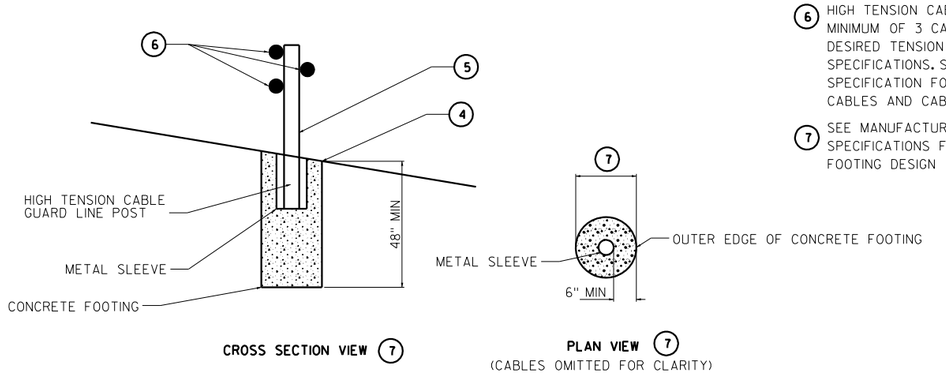
PLAN VIEW OF CONCRETE ANCHOR

CONCRETE ANCHORS FOR TERMINAL FOR HIGH TENSION CABLE GUARD SHALL BE FLUSH WITH FINISHED SURFACE



HIGH TENSION CABLE GUARD LINE POST PLACEMENT

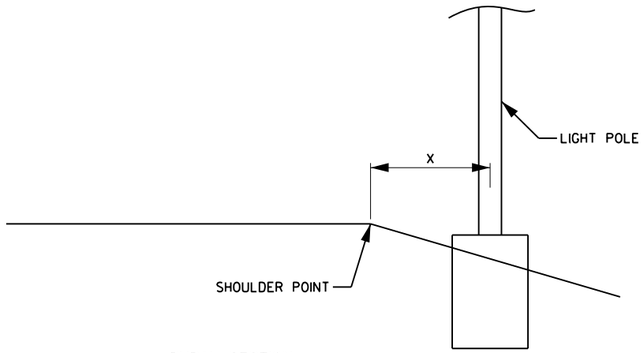
1. DO NOT INSTALL HIGH TENSION CABLE GUARD ON SLOPES STEEPER THAN 6:1
2. OFFSET OF HIGH TENSION CABLE GUARD:
   DESIRABLE: 10'
   MINIMUM: 8'
3. DEFLECTION IS MEASURED FROM MIDPOINT OF SHOULDER TO LINE POST. FOR DEFLECTION CRITERIA SEE SPECIAL PROVISIONS
4. CONCRETE FOOTING FOR HIGH TENSION CABLE GUARD LINE POST SHALL BE FLUSH WITH FINISH SURFACE
5. LINE POST FOR HIGH TENSION CABLE GUARD SHALL BE PLUMB, EASILY REMOVED FROM STEEL SLEEVE, AND MAINTAIN CABLES AT THE CORRECT ELEVATION
6. HIGH TENSION CABLE GUARD SHALL HAVE A MINIMUM OF 3 CABLES. CABLES SHALL HOLD DESIRED TENSION PER MANUFACTURE'S SPECIFICATIONS. SEE MANUFACTURE'S SPECIFICATION FOR CORRECT HEIGHT OF CABLES AND CABLE CONFIGURATION.
7. SEE MANUFACTURE'S DETAILS AND SPECIFICATIONS FOR LINE POST FOOTING DESIGN



CROSS SECTION VIEW (7)

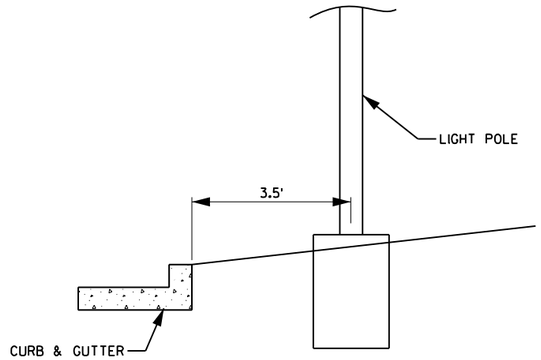
PLAN VIEW (7)
(CABLES OMITTED FOR CLARITY)

HIGH TENSION CABLE GUARD LINE POST DETAIL

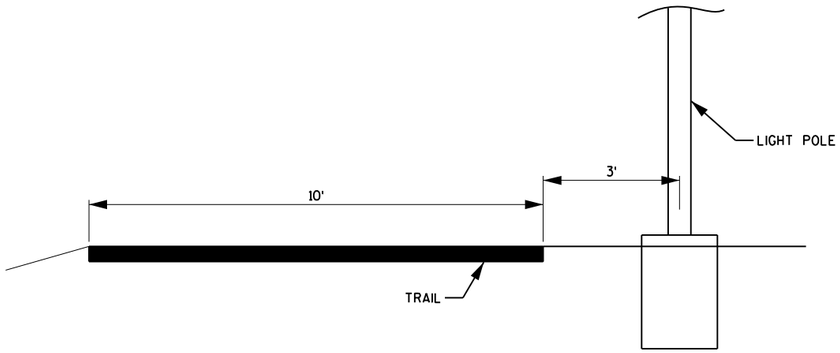


RURAL SECTION

X = VAR (12' TYP), STA 18+00 K TO STA 28+00 K
X = 4', STA 58+75 KN TO STA 61+50 KN

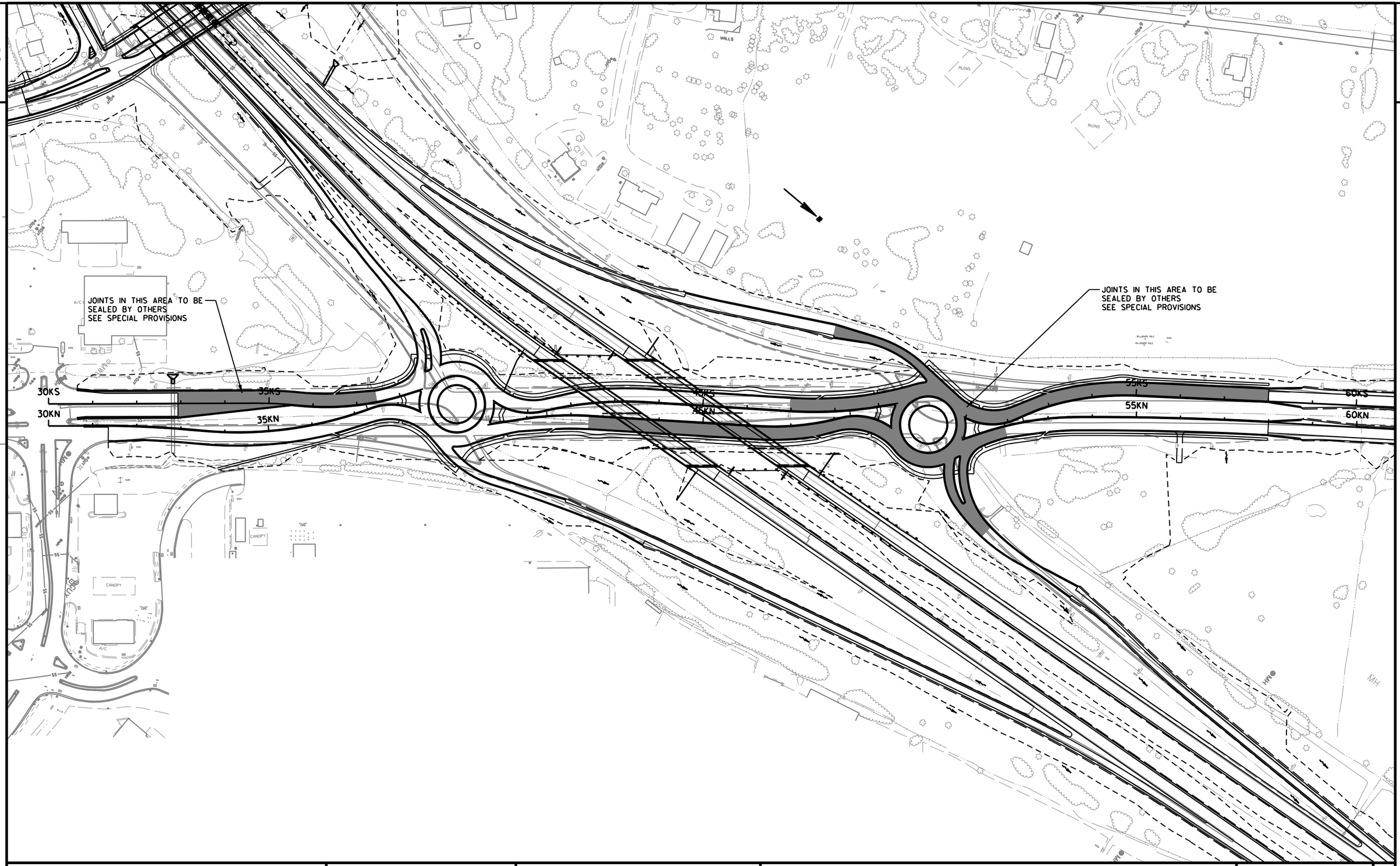


URBAN SECTION



TRAIL SECTION

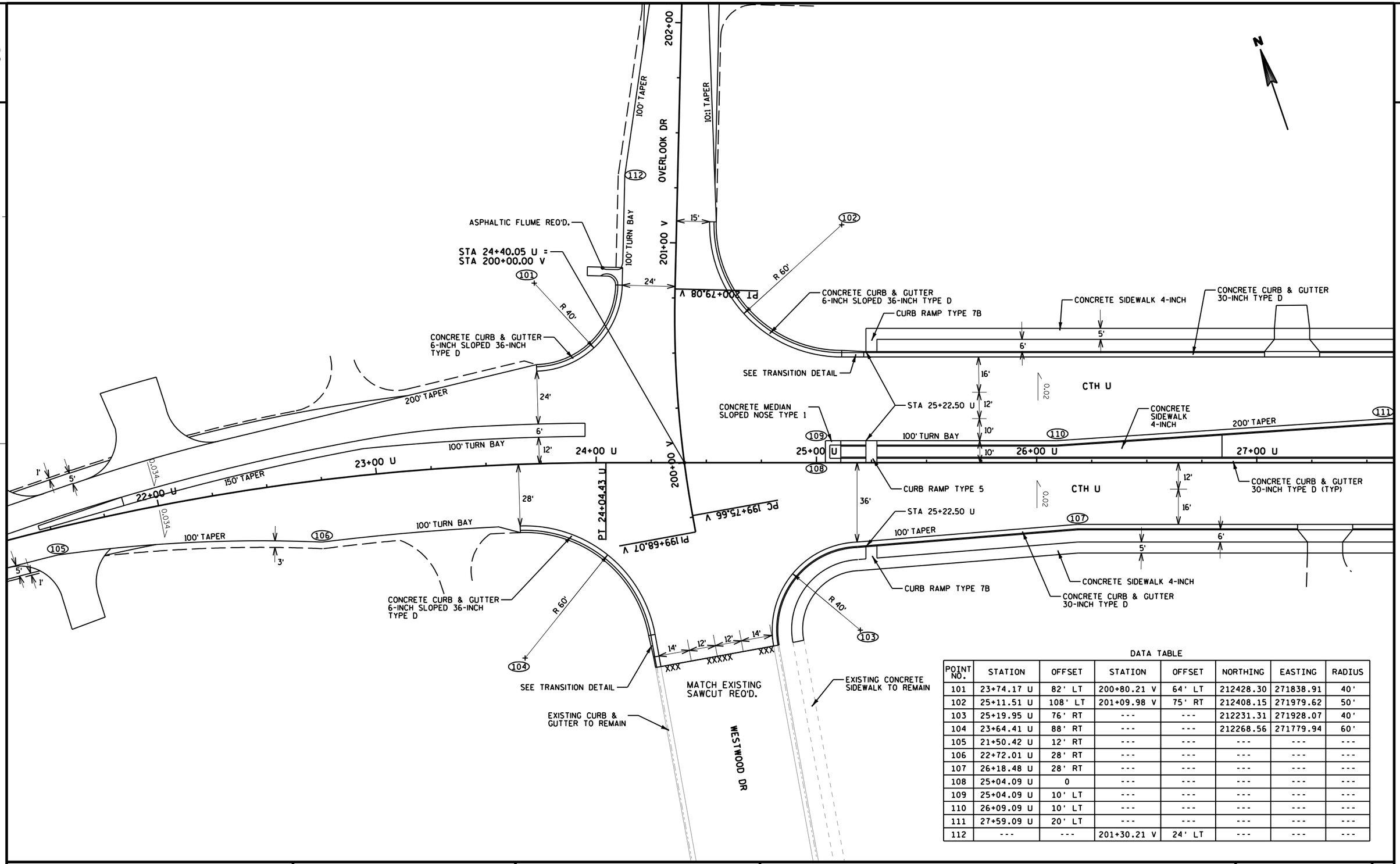
TYPICAL LIGHT POLE PLACEMENT



PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CONSTRUCTION DETAIL - SEALING JOINTS (BY OTHERS)	SHEET 60	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\021009_cd.dgn PLOT DATE : 9/25/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:200

WISDOT/CADDS SHEET 42



DATA TABLE

POINT NO.	STATION	OFFSET	STATION	OFFSET	NORTHING	EASTING	RADIUS
101	23+74.17 U	82' LT	200+80.21 V	64' LT	212428.30	271838.91	40'
102	25+11.51 U	108' LT	201+09.98 V	75' RT	212408.15	271979.62	50'
103	25+19.95 U	76' RT	---	---	212231.31	271928.07	40'
104	23+64.41 U	88' RT	---	---	212268.56	271779.94	60'
105	21+50.42 U	12' RT	---	---	---	---	---
106	22+72.01 U	28' RT	---	---	---	---	---
107	26+18.48 U	28' RT	---	---	---	---	---
108	25+04.09 U	0	---	---	---	---	---
109	25+04.09 U	10' LT	---	---	---	---	---
110	26+09.09 U	10' LT	---	---	---	---	---
111	27+59.09 U	20' LT	---	---	---	---	---
112	---	---	201+30.21 V	24' LT	---	---	---

PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	INTERSECTION DETAIL - CTH U/WESTWOOD DR/OVERLOOK DR	SHEET	E

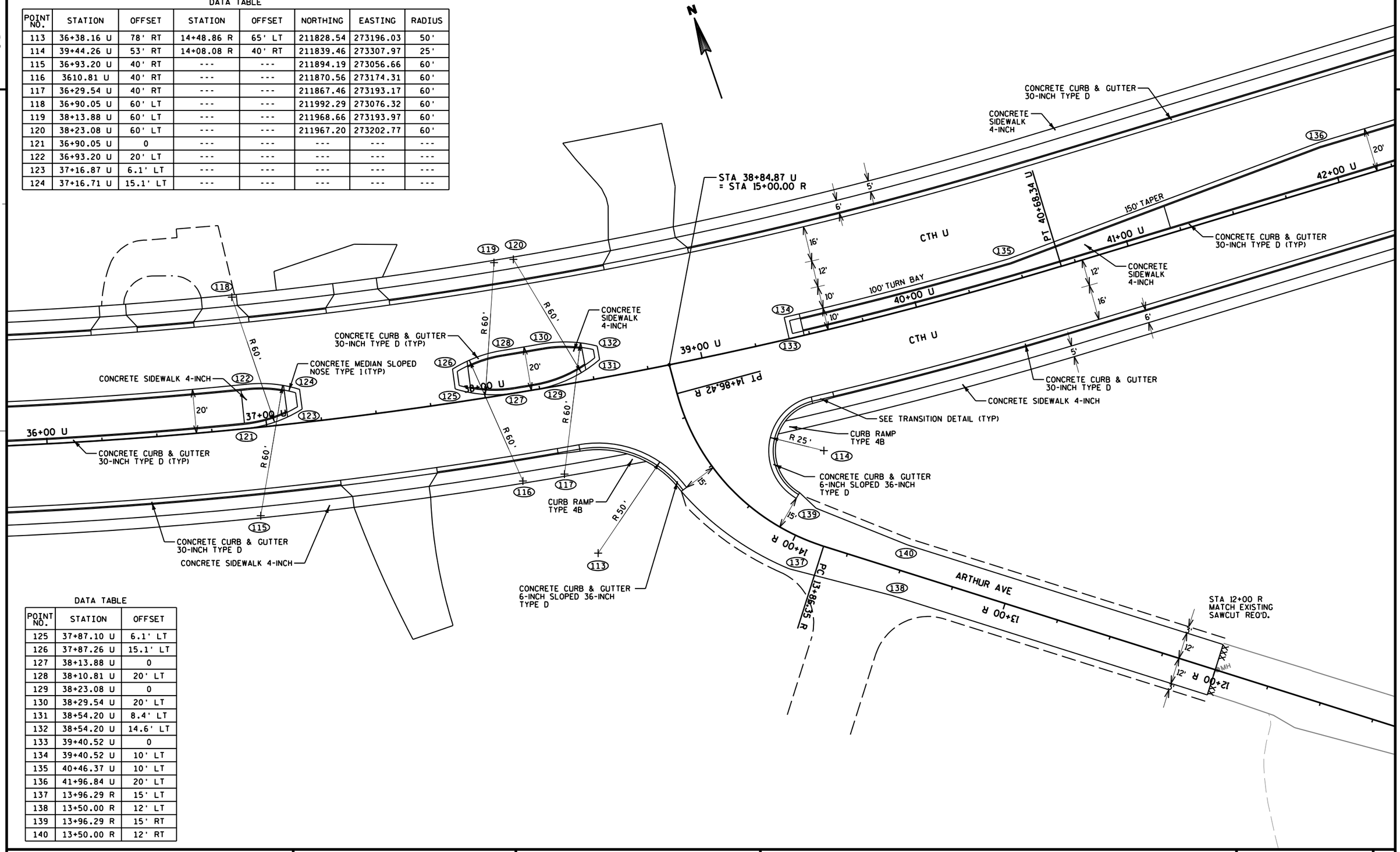
FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\021101_id.dgn PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:40
WISDOT/CADDS SHEET 42

DATA TABLE

POINT NO.	STATION	OFFSET	STATION	OFFSET	NORTHING	EASTING	RADIUS
113	36+38.16 U	78' RT	14+48.86 R	65' LT	211828.54	273196.03	50'
114	39+44.26 U	53' RT	14+08.08 R	40' RT	211839.46	273307.97	25'
115	36+93.20 U	40' RT	---	---	211894.19	273056.66	60'
116	3610.81 U	40' RT	---	---	211870.56	273174.31	60'
117	36+29.54 U	40' RT	---	---	211867.46	273193.17	60'
118	36+90.05 U	60' LT	---	---	211992.29	273076.32	60'
119	38+13.88 U	60' LT	---	---	211968.66	273193.97	60'
120	38+23.08 U	60' LT	---	---	211967.20	273202.77	60'
121	36+90.05 U	0	---	---	---	---	---
122	36+93.20 U	20' LT	---	---	---	---	---
123	37+16.87 U	6.1' LT	---	---	---	---	---
124	37+16.71 U	15.1' LT	---	---	---	---	---

DATA TABLE

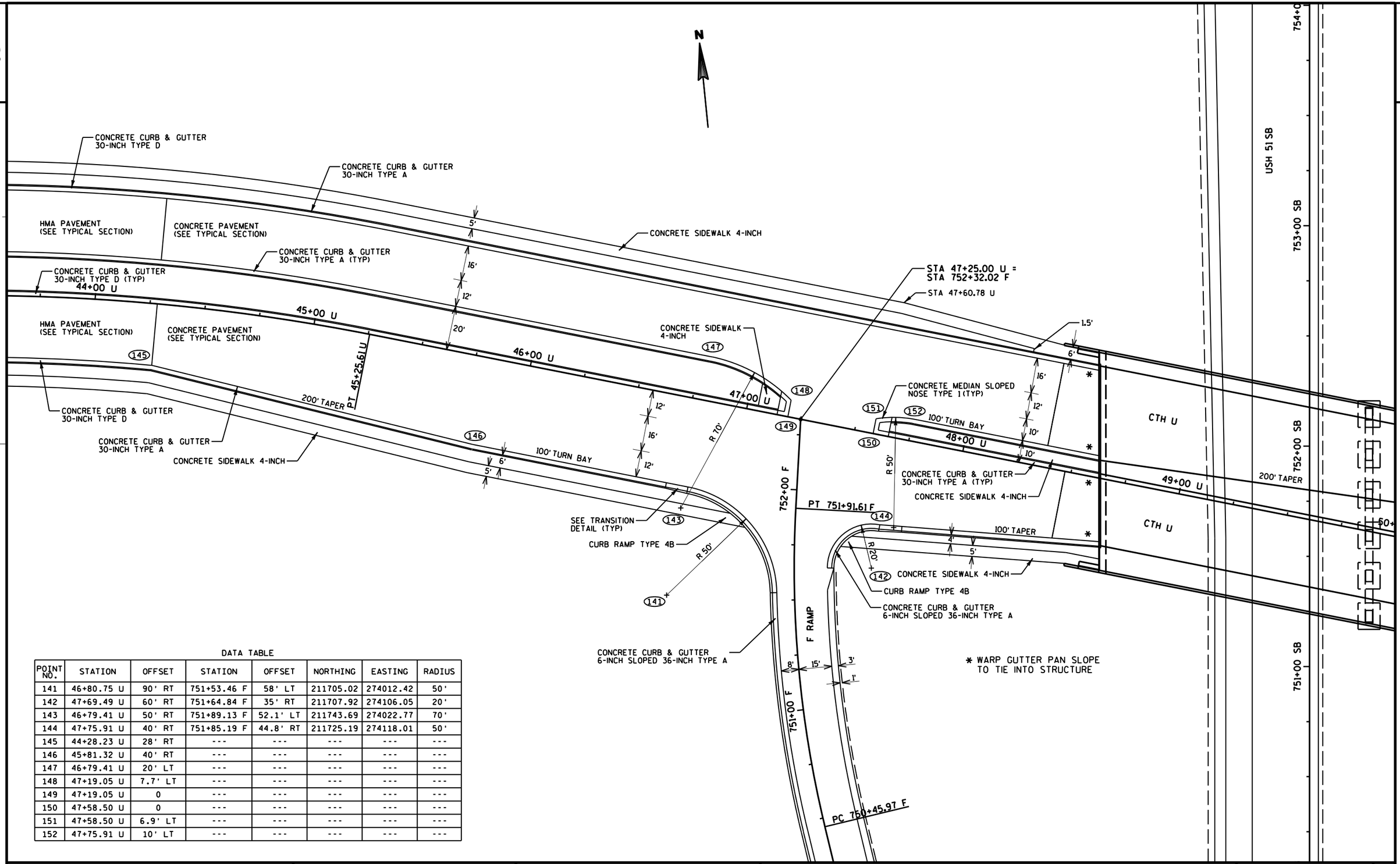
POINT NO.	STATION	OFFSET
125	37+87.10 U	6.1' LT
126	37+87.26 U	15.1' LT
127	38+13.88 U	0
128	38+10.81 U	20' LT
129	38+23.08 U	0
130	38+29.54 U	20' LT
131	38+54.20 U	8.4' LT
132	38+54.20 U	14.6' LT
133	39+40.52 U	0
134	39+40.52 U	10' LT
135	40+46.37 U	10' LT
136	41+96.84 U	20' LT
137	13+96.29 R	15' LT
138	13+50.00 R	12' LT
139	13+96.29 R	15' RT
140	13+50.00 R	12' RT



PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	INTERSECTION DETAIL - CTH U & ARTHUR AVE	SHEET	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\021102_id.dgn PLOT DATE : 9/25/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42



DATA TABLE

POINT NO.	STATION	OFFSET	STATION	OFFSET	NORTHING	EASTING	RADIUS
141	46+80.75 U	90' RT	751+53.46 F	58' LT	211705.02	274012.42	50'
142	47+69.49 U	60' RT	751+64.84 F	35' RT	211707.92	274106.05	20'
143	46+79.41 U	50' RT	751+89.13 F	52.1' LT	211743.69	274022.77	70'
144	47+75.91 U	40' RT	751+85.19 F	44.8' RT	211725.19	274118.01	50'
145	44+28.23 U	28' RT	---	---	---	---	---
146	45+81.32 U	40' RT	---	---	---	---	---
147	46+79.41 U	20' LT	---	---	---	---	---
148	47+19.05 U	7.7' LT	---	---	---	---	---
149	47+19.05 U	0	---	---	---	---	---
150	47+58.50 U	0	---	---	---	---	---
151	47+58.50 U	6.9' LT	---	---	---	---	---
152	47+75.91 U	10' LT	---	---	---	---	---

PROJECT NO: 1170-01-70/6999-18-70	HWY: USH 51	COUNTY: MARATHON	INTERSECTION DETAIL - CTH U & F RAMP TERMINAL	SHEET	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\021103_id.dgn PLOT DATE : 9/25/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:40
WISDOT/CADDS SHEET 42

DATA TABLE

POINT NO.	STATION	OFFSET	STATION	OFFSET	NORTHING	EASTING	RADIUS
153	52+20.12 U	33' RT	750+83.30 E	24' LT	211602.37	274543.54	5'
154	52+49.15 U	33.8' RT	750+82.82 E	4' RT	211591.99	274569.55	4'
155	52+59.64 U	32' RT	750+84.55 E	14.1' RT	211590.02	274579.64	4'
156	52+49.22 U	48.9' RT	750+67.70 E	4' RT	211577.86	274564.20	4'
157	53+25.31 U	95.7' RT	750+17.81 E	72' RT	211507.10	274610.10	60'
158	51+57.06 U	50.1' RT	750+62.84 E	84.5' LT	211604.67	274479.74	70'
159	52+67.92 U	70' LT	---	---	211681.47	274625.53	70'
159A	---	---	---	---	210780.96	274215.67	935'
160	51+58.12 U	19.9' LT	---	---	---	---	---
161	51+96.54 U	7.7' LT	---	---	---	---	---
162	51+96.54 U	0	---	---	---	---	---
163	52+35.20 U	8.9' LT	---	---	---	---	---
164	52+35.54 U	17' LT	---	---	---	---	---
165	52+67.92 U	0	---	---	---	---	---
166	54+37.33 U	0	---	---	---	---	---
167	54+37.35 U	8' LT	---	---	---	---	---
168	54+26.31 U	28' RT	---	---	---	---	---

N

752+00 NB
751+00 NB
750+00 NB
749+00 NB
USH 51 NB
50+00 U
51+00 U
52+00 U
53+00 U
54+00 U
55+00 U
56+00 U
751+00 E
750+00 E
749+00 E
CTH U
CTH U
200' TAPER
100' TAPER
E RAMP
150' TURN BAY
R 70'
R 60'
R 935'
PC 51+82.22 U
PT 56+33.23 U
STA 52+04.18 U
STA 52+45.00 U = STA 751+16.62 E
STA 52+87.80 U, 58' LT
STA 53+90.26 U
1.5'
6'
16'
12'
20'
5'
4'
15'
8'
CONCRETE SIDEWALK 4-INCH
CONCRETE SIDEWALK 4-INCH
CONCRETE SIDEWALK 4-INCH
CONCRETE SIDEWALK 4-INCH
CONCRETE SIDEWALK 4-INCH
CURB RAMP TYPE 4B
CURB RAMP TYPE 6
CURB RAMP TYPE 7A
SEE TRANSITION DETAIL (TYP)
CONCRETE CURB & GUTTER 30-INCH TYPE A (TYP)
CONCRETE CURB & GUTTER 30-INCH TYPE A
CONCRETE CURB & GUTTER 30-INCH TYPE A
CONCRETE CURB & GUTTER 30-INCH TYPE D (TYP)
CONCRETE CURB PEDESTRIAN
CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE A (TYP)
CONCRETE BARRIER TYPE S42C
CONCRETE PAVEMENT (SEE TYPICAL SECTION)
CONCRETE PAVEMENT (SEE TYPICAL SECTION)
HMA PAVEMENT (SEE TYPICAL SECTION)
HMA PAVEMENT (SEE TYPICAL SECTION)
CONCRETE MEDIAN SLOPED NOSE TYPE 1 (TYP)
CONCRETE SIDEWALK 4-INCH
* WARP GUTTER PAN SLOPE TO TIE INTO STRUCTURE

PROJECT NO: 1170-01-70/6999-18-70	HWY: USH 51	COUNTY: MARATHON	INTERSECTION DETAIL - CTH U & E RAMP TERMINAL	SHEET 64 E

DATA TABLE

POINT NO.	STATION	OFFSET	NORTHING	EASTING	RADIUS
300	60+29.55 U	38' RT	211145.09	275192.70	10'
301	60+28.03 U	52.1' RT	---	---	---
302	60+45.79 U	74.1' RT	---	---	---
303	61+10.10 U	48' RT	211087.20	275249.59	20'
304	62+84.59 U	48' RT	210978.53	275386.76	20'
305	63+26.26 U	69.4' RT	---	---	---
306	63+47.62 U	52.1' RT	---	---	---
307	63+59.18 U	43' RT	210936.96	275451.58	15'
308	60+65.00 U	41' LT	---	---	---
309	60+90.00 U	39' LT	---	---	---
310	61+50.00 U	39' LT	---	---	---
311	61+75.00 U	41' LT	---	---	---

CONCRETE SIDEWALK 4-INCH
CONCRETE CURB & GUTTER 30-INCH TYPE D (TYP)
PC 62+68.03 U
STA 63+66.90 U
CURB RAMP TYPE 7B
60+00 U
61+00 U
62+00 U
63+00 U
64+00 U
65+00 U
CTH U
CURB RAMP TYPE 4B
R 100'
R 20'
R 15'
MATCH EXISTING SAWCUT REQ'D.
ARLINGTON LN
N 13TH AVE
5'
6'
16'
12'
12'
15'

PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	INTERSECTION DETAIL - CTH U	SHEET	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\021105_id.dgn PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:40
WISDOT/CADDS SHEET 42

DATA TABLE

POINT NO.	STATION	OFFSET	NORTHING	EASTING	RADIUS
169	67+52.05 U	53' RT	210741.71	275805.74	25'
170	67+53.46 U	628' LT	211381.53	276038.97	600'
171	70+92.42 U	178' RT	210577.89	276208.11	150'
172	69+00.00 U	0	---	---	---
173	69+00.00 U	8.1' LT	---	---	---
174	69+25.00 U	0	---	---	---
175	69+25.02 U	26' RT	---	---	---
176	69+48.26 U	14.6' LT	---	---	---
177	69+44.15 U	44.5' LT	---	---	---
178	71+46.77 U	44.6' RT	---	---	---
179	25+15.77 TR	30' RT	210930.80	276326.07	25'
180	66+67.67 U	53' RT	210773.83	275724.50	25'
181	66+94.45 U	63' RT	---	---	---
182	67+11.14 U	59.8' RT	---	---	---
183	67+17.40 U	82.7' RT	---	---	---
184	67+33.71 U	77.3' RT	---	---	---
185	71+71.84 U	74.3' RT	---	---	---

* PLACEMENT OF CURB RAMPS WILL REQUIRE REMOVING CURB & GUTTER, SAWING CONCRETE, AND CONCRETE CURB & GUTTER 30-INCH TYPE D.

NOTE: LINE UP SIDEWALK/CURB RAMP TO MATCH EXISTING CURB RAMP.

BUSINESS 51

BUSINESS 51

00+91 K

00+15 K

00+71 K

25+00 TR

R 25'

179

CONCRETE SIDEWALK 4-INCH

5'

* CURB RAMP TYPE 4B (TYP)

CURB RAMP TYPE 4B (TYP) *

CURB RAMP * TYPE 5 (TYP)

STA 14+60.34 K, 46.9' RT

STA 14+82.56 K, 40.8' RT

CONCRETE SIDEWALK 4-INCH

* CURB RAMP TYPE 5 (TYP)

23.5'

CURB RAMP * TYPE 4B

14.3'

CURB RAMP * TYPE 7B

8'

5'

CONCRETE SIDEWALK 4-INCH

CURB RAMP * TYPE 4B

PI 72+12.56 U

PI 72+42.00 U

72+00 U

CURB RAMP * TYPE 7B

5'

6'

CONCRETE SIDEWALK 4-INCH

170

R 600'

CURB RAMP * TYPE 6

CONCRETE SIDEWALK 4-INCH

5'

CURB RAMP * TYPE 6

EXISTING CURB & GUTTER TO REMAIN

177

MATCH EXISTING SAWCUT REO'D.

PCC 69+25.94 U

176

67+00 U

16'

12'

68+00 U

173

69+00 U

70+00 U

71+00 U

178

185

MATCH EXISTING SAWCUT REO'D.

EXISTING CURB & GUTTER TO REMAIN

CURB RAMP * TYPE 7B

CONCRETE SIDEWALK 4-INCH

EXISTING SIDEWALK TO REMAIN

CURB RAMP TYPE 4B

CURB RAMP TYPE 4B

R 25'

180

172

174

CTH U

SAWCUT REO'D.

MATCH EXISTING SAWCUT REO'D.

175

R 150'

171

12'

16'

6'

5'

R 25'

169

CONCRETE CURB & GUTTER 30-INCH TYPE D (TYP)

CONCRETE SIDEWALK 4-INCH

181

182

183

184

MATCH EXISTING SAWCUT REO'D.

N 12TH AVE

N

PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	INTERSECTION DETAIL - CTH U & BUSINESS 51	SHEET	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\021106_id.dgn PLOT DATE : 8/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42

DATA TABLE

POINT NO.	STATION	OFFSET	STATION	OFFSET	NORTHING	EASTING	RADIUS
185	38+44.07 KS	5' RT	100+26.19	23.5' RT	212650.69	274675.94	5'
186	38+49.80 KN	3' LT	100+56.37	20.5' RT	212676.59	274706.50	3'
187	40+21.88 KS	3' RT	102+20.89	20.5' RT	212796.51	274583.67	3'
188	40+19.56 KN	5' LT	102+53.86	23.5' RT	212819.31	274620.94	5'
189	761+27.46 A	3' LT	104+03.83	37.8' RT	212630.04	274629.14	3'
190	761+19.62 A	8.8' LT	103+97.61	39.1' RT	212630.43	274619.21	7'
191	761+10.02 A	36.9' LT	103+78.54	32.5' RT	212646.85	274593.97	3'
192	760+37.21 A	5' LT	---	---	212565.68	274564.36	5'
193	36+99.11 KS	95.3' LT	---	---	212490.85	274724.77	182'
194	37+78.56 KS	96.4' LT	---	---	212532.06	274672.35	136'
195	760+92.38 A	81' RT	---	---	212546.86	274658.10	65'
196	37+51.93 KS	274' LT	---	---	212378.61	274581.19	250'
197	100+98.65	152.4' RT	---	---	212718.60	274858.73	124'
198	761+87.33 A	23.1' LT	101+45.13	34.5' RT	212792.78	274721.21	5'
199	40+66.69 KS	22.9' LT	---	---	212829.59	274548.08	182'
200	41+45.64 KS	146' LT	---	---	212781.21	274429.79	122'
500	103+81.54 KE	50.2' LT	---	---	212718.98	274634.54	100'
501	762+83.59 B	26.1' LT	---	---	212878.39	274711.12	50'

DATA TABLE

POINT NO.	STATION	OFFSET	NORTHING	EASTING	RADIUS
179	100+00.00	65.5' LT	212732.67	274641.29	44.5'
180	100+00.00	65.5' LT	212732.67	274641.29	65.5'
181	100+00.00	65.5' LT	212732.67	274641.29	95'
182	100+00.00	65.5' LT	212732.67	274641.29	95'
183	100+18.61	59.5' LT	212726.87	274642.98	78'
184	102+16.57	59.5' LT	212738.60	274640.30	78'

DATA TABLE

POINT NO.	STATION	OFFSET
201	36+76.41 KS	28' LT
202	37+47.05 KS	24' LT
203	36+51.66 KN	28' RT
204	41+45.79 KS	24' LT
205	42+23.39 KS	28' LT
206	41+64.11 KN	28' RT
207	763+15.55 B	15' LT
208	760+92.38 A	15' RT

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	INTERSECTION DETAIL - CTH K/BUS 51 & A RAMP/B RAMP	SHEET	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\021107_id.dgn PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:40
WISDOT/CADDS SHEET 42

DATA TABLE

POINT NO.	STATION	OFFSET	STATION	OFFSET	NORTHING	EASTING	RADIUS
209	200+00.00	65.5' LT	---	---	213577.77	273983.73	44.5'
210	200+00.00	65.5' LT	---	---	213577.77	273983.73	65.5'
211	200+00.00	65.5' LT	---	---	213577.77	273983.73	95'
212	200+00.00	65.5' LT	---	---	213577.77	273983.73	95'
213	200+10.89	59.5' LT	---	---	213571.84	273984.73	78'
214	202+23.66	59.4' LT	---	---	213583.60	273982.10	78'
215	200+14.13	23.5' RT	49+33.20 KS	5' RT	213490.83	274002.79	5'
216	200+48.09	20.5' RT	49+30.62 KN	3' LT	213513.92	274041.35	3'
217	202+61.57	20.5' RT	51+02.79 KS	3' RT	213634.41	273919.02	3'
218	202+32.10	23.5' RT	51+08.68 KN	5' LT	213659.68	273948.92	5'
219	203+60.12	34.5' RT	770+45.98 D	24.9' RT	213507.04	273913.04	5'
220	201+93.97	38.3' RT	771+29.44 C	6.9' RT	213679.87	274002.34	7'
221	201+99.31	36.3' RT	771+21.94 C	3' RT	213679.06	273993.76	3'
222	772+23.00 C	5' RT	---	---	213751.60	274065.45	5'

769+00 D
770+00 D
771+00 D
15' D RAMP
235
R 227'
223 STA 770+28.46 D
CURB RAMP TYPE 2
503
R 58'
R 5'
219
CURB RAMP TYPE 7B
STA 770+28.64 D
224
R 902'
CURB RAMP TYPE 7B
STA 47+77.20 KS
CONCRETE SIDEWALK 4-INCH
8'
6'
STA 49+01.82 KS
231
28'
CTH K (NORTH)
STA 48+99.60 KN, 22.0' LT
49+00 KS
48+00 KS
215
R 5'
6'
CURB RAMP TYPE 5
48+00 KN
49+00 KN
CONCRETE SIDEWALK 4-INCH
R 3'
5'
216
CTH K (SOUTH)
28'
232
STA 48+98.30 KN
STA 47+64.20 KN
BICYCLE RAMP (TYP)
(SEE DETAIL)
R 126'
226
6'
8'
CURB RAMP TYPE 7B
CONCRETE CURB & GUTTER
30-INCH TYPE A (TYP)
200+00 KW
203+00 KW
CONCRETE CURB & GUTTER
4-INCH SLOPED
30-INCH TYPE G
R 78'
12.5'
213
214
R 65.5'
209
210
211
212
R 44.5'
201+00 KW
202+00 KW
CONCRETE CURB & GUTTER
4-INCH SLOPED
36-INCH TYPE R
R 95'
N 213578.72
E 274094.73
STA 771+58.46 C
502
CONCRETE SIDEWALK 4-INCH
CURB RAMP TYPE 2
228 R 142'
227 R 136'
STA 771+52.83 C
220
R 7'
R 3'
221
C RAMP
772+00 C
R 5'
222
R 59'
229
STA 771+51.52 C
STA 771+51.60 C
CURB RAMP TYPE 7B
CURB RAMP TYPE 5
CONCRETE SIDEWALK 7-INCH
STA 51+23.55 KS
CONCRETE ROUNDABOUT
TRUCK APRON 8-INCH
CURB RAMP TYPE 7B
225
R 117.5'
8'
6'
51+00 KS
51+00 KN
STA 51+32.03 KN, 14.3' LT
52+00 KS
52+00 KN
5'
R 3'
217
R 5'
218
CONCRETE CURB & GUTTER
30-INCH TYPE A (TYP)
234
28'
CONCRETE SIDEWALK 4-INCH
CURB RAMP TYPE 5
6'
8'
STA 51+34.94 KN
CURB RAMP TYPE 7B
R 400'
230
CONCRETE SIDEWALK 4-INCH
STA 52+88.04 KS
5'
STA 52+83.19 KS
STA 52+88.90 KS
CONCRETE SIDEWALK 4-INCH
233
28'
53+00 KS
53+00 KN
STA 52+77.92 KN
STA 52+77.31 KN
STA 52+71.91 KN
69+00 SB
USH 51 SB
770+0

DATA TABLE

POINT NO.	STATION	OFFSET	NORTHING	EASTING	RADIUS
223	48+17.18 KN	52.5' RT	213461.00	274130.22	227'
224	203+73.38	931.5' RT	212745.32	273435.07	902'
225	52+31.06 KS	144.4' LT	213594.62	273773.92	117.5'
226	48+02.50 KN	150.8' RT	213532.01	274199.95	126'
227	771+56.88 C	101.8' LT	213778.38	273952.67	136'
228	771+59.04 C	127' LT	213797.68	273936.43	142'
229	771+46.85 C	75.3' LT	213754.66	273965.75	59'
230	52+05.48 KN	424' RT	214059.05	274119.45	400'
231	48+70.36 KS	28' LT	---	---	---
232	47+53.07 KN	28' RT	---	---	---
233	53+00.00 KS	28' LT	---	---	---
234	52+74.48 KN	28' RT	---	---	---
235	769+28.29 D	15' RT	---	---	---
502	201+82.01 KW	43.5' LT	213598.37	273991.56	95'
503	769+65.71 D	22.8' RT	213431.43	273912.71	58'

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	INTERSECTION DETAIL - CTH K/BUS 51 & C RAMP/D RAMP	SHEET 68	E

DATA TABLE

POINT NO.	STATION	OFFSET	STATION	OFFSET	NORTHING	EASTING	RADIUS
236	68+07.89 KS	86' LT	230+23.52 V	65' RT	214895.01	272775.59	50'
237	69+67.69 KS	86' LT	230+23.74 V	96' LT	215029.15	272686.55	50'
238	68+89.33 KS	52' LT	230+57.35 V	17' LT	214982.02	272758.31	5'
239	228+77.60 V	5.1' LT	---	---	214872.49	272615.29	5'
240	229+57.35 V	12' LT	---	---	---	---	---
241	229+56.61 V	22' LT	---	---	---	---	---
242	71+67.07 KS	36' LT	---	---	---	---	---
243	73+17.17 KS	24' LT	---	---	---	---	---
244	72+66.95 KS	0'	---	---	---	---	---
245	71+16.95 KS	12' RT	---	---	---	---	---
246	69+14.48 KN	22.2' LT	---	---	215052.40	272807.47	10'
247	69+41.41 KN	37' LT	---	---	215107.40	272842.10	75'
248	70+60.00 KN	24' RT	---	---	---	---	---
249	65+75.41 KN	36' RT	---	---	---	---	---
250	64+25.20 KN	24' RT	---	---	---	---	---
251	64+94.45 KN	0'	---	---	---	---	---
252	66+44.70 KN	12' LT	---	---	---	---	---
253	68+19.58 KS	37' LT	---	---	214932.12	272809.68	75'
254	68+46.43 KS	22.2' RT	---	---	214987.41	272843.87	10'
255	67+45.40 KS	0'	---	---	---	---	---
256	67+08.12 KS	24' LT	---	---	---	---	---
257	70+15.23 KN	0'	---	---	---	---	---

CONCRETE MEDIAN SLOPED NOSE TYPE 1
CONCRETE SIDEWALK 4-INCH
CONCRETE CURB AND GUTTER 30-INCH TYPE D (TYP)
CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D
CONCRETE MEDIAN SLOPED NOSE TYPE 1
CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D
CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D
STA 68+72.41 KS = STA 231+09.34 V
STA 68+66.23 KN = STA 231+59.34 V
MATCH EXISTING SAWCUT REO'D. 24' RT OF ℄ CTH K NB
OVERLOOK DR
CASSIDY DR
N 20TH AVE
CTH K (SOUTH)
CTH K (NORTH)
200' TURN BAY
150' TAPER
45' TAPER
70' TAPER
R 50'
R 75'
R 10'
R 5'
N 00+5
N 00+9
66+00 KS
67+00 KS
68+00 KS
69+00 KS
70+00 KS
71+00 KS
66+00 KN
67+00 KN
68+00 KN
69+00 KN
70+00 KN
71+00 KN
230+00 V
231+00 V
.02%

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	INTERSECTION DETAIL - CTH K & OVERLOOK DR	SHEET 69	E

2

2

N

OVERLOOK DR

201+00 V

200+00 V

WESTWOOD DR

CTH U

20+00 U

21+00 U

22+00 U

23+00 U

24+00 U

25+00 U

0.033

0.034

0.020

0.020

0.020

24'

6'

12'

28'

15'

16'

12'

10'

10'

36'

1330.75

1332.12

1333.05

1330.86

1330.29

1330.14

1329.98

MATCH

MATCH

1328.90

1328.85

1328.27

1327.92

1327.53

1327.0

1328.68

1328.29

1327.81

1328.88

1328.41

1327.85

1327.84

1327.70

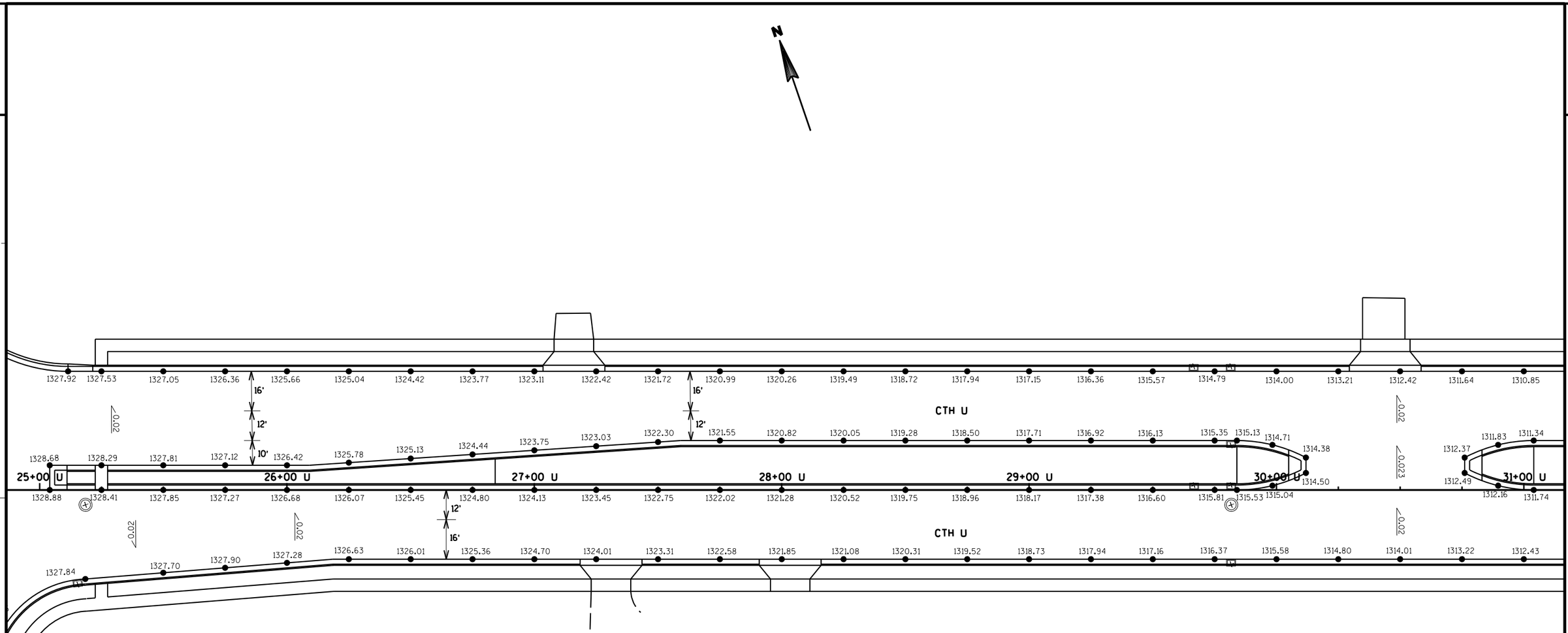
1328.85

PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	PAVING DETAIL - CTH U	SHEET 70	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\021201_pd.dgn PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42

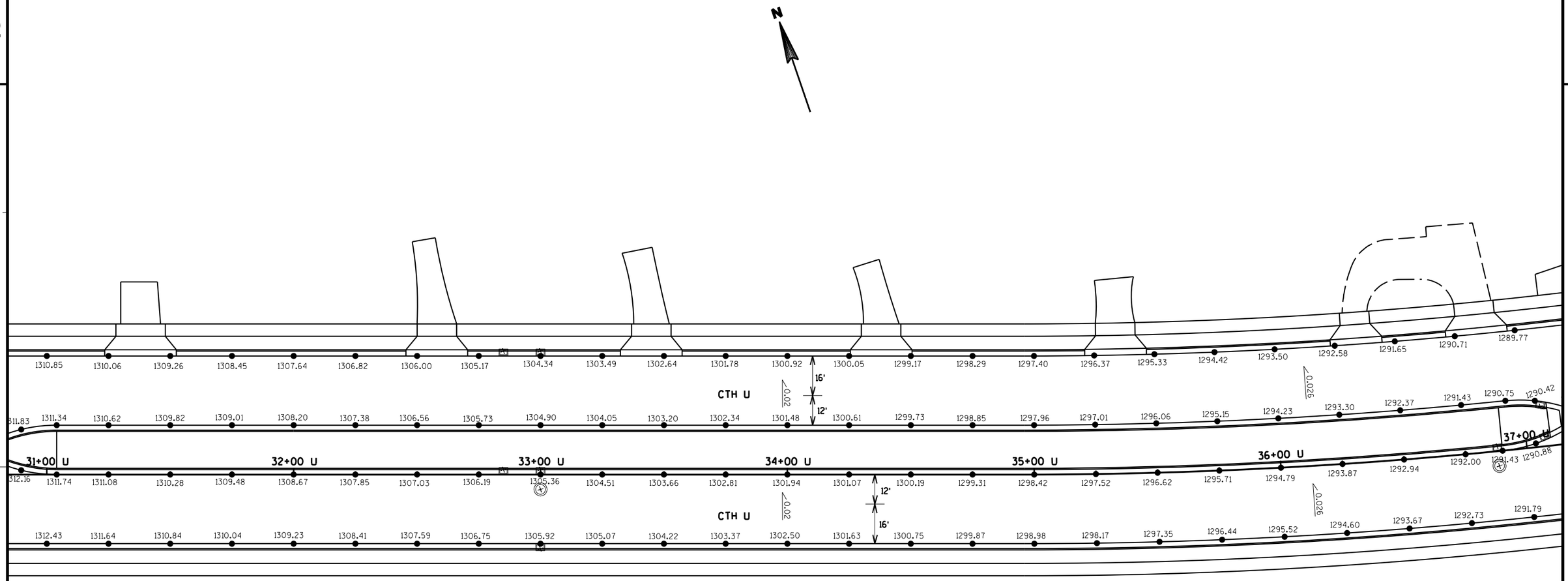
2



PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	PAVING DETAIL - CTH U	SHEET	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\021202_pd.dgn PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:40

2



PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	PAVING DETAIL - CTH U	SHEET 72	E

2

N

1289.77 1288.82 1287.86 1286.89 1285.92 1284.94 1283.96 1283.00 1282.03 1281.01 1279.98 1278.98 1277.98 1276.98 1275.98 1275.52 1275.06 1274.68 1274.30 1273.32 1272.33 1271.50 1270.67 1270.04 1269.40

1290.75 1290.42 1290.03 1290.26 1290.88 1291.43

37+00 U

0.02%

16'

12'

CTH U

1287.32 1286.78 1286.28 1285.54 1285.09 1284.72 1284.88 1286.32 1286.68 1287.17 1287.56

38+00 U

0.02%

1281.39 1280.97 1279.97 1278.97 1277.97 1276.96 1276.05 1275.13 1274.41 1273.68 1272.73 1271.77 1270.94 1270.11 1269.48 1268.84

10'

39+00 U

40+00 U

41+00 U

42+00 U

43+00 U

1281.65 1281.27 1280.27 1279.27 1278.27 1277.27 1276.27 1275.27 1274.27 1273.27 1272.27 1271.30 1270.42 1269.64 1268.96 1268.37

0.02%

12'

16'

CTH U

1291.79 1290.84 1289.88 1288.92 1287.95 1287.00 1286.45 1285.63 1285.74

0.04

1282.23 1282.00 1281.00 1280.00 1279.00 1278.00 1276.67 1275.33 1274.02 1272.71 1271.71 1270.74 1269.86 1269.08 1268.40 1267.81

1284.33 1285.79

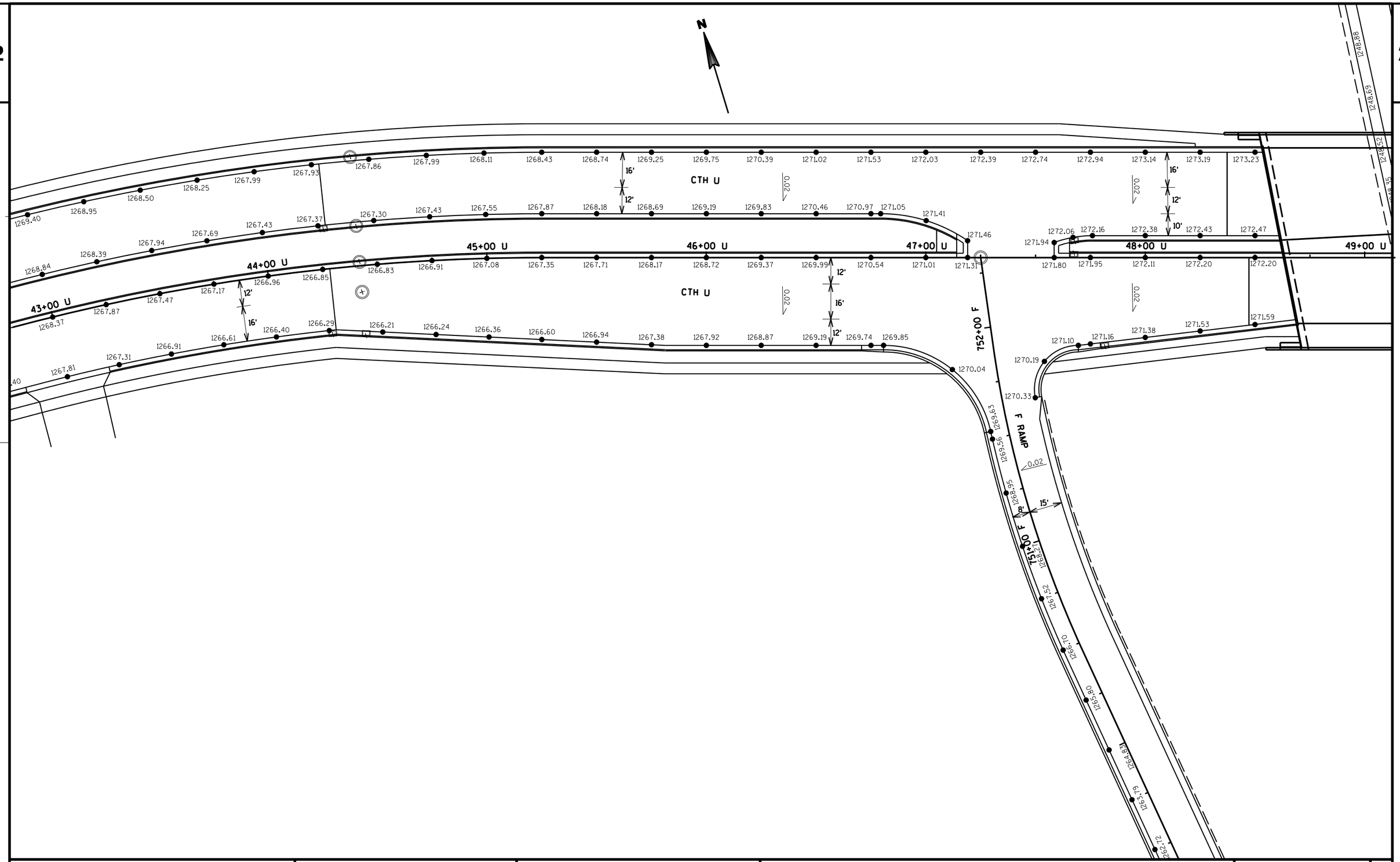
14+00 R

ARTHUR AVE

13+00 R

PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	PAVING DETAIL - CTH U	SHEET	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\021204_pd.dgn PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:40



PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	PAVING DETAIL - CTH U	SHEET 74	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\021205_pd.dgn PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:40

2

PIPE UNDERDRAIN 6-INCH

NOTE: TIE PIPE UNDERDRAIN INTO INLETS/MANHOLES.

N

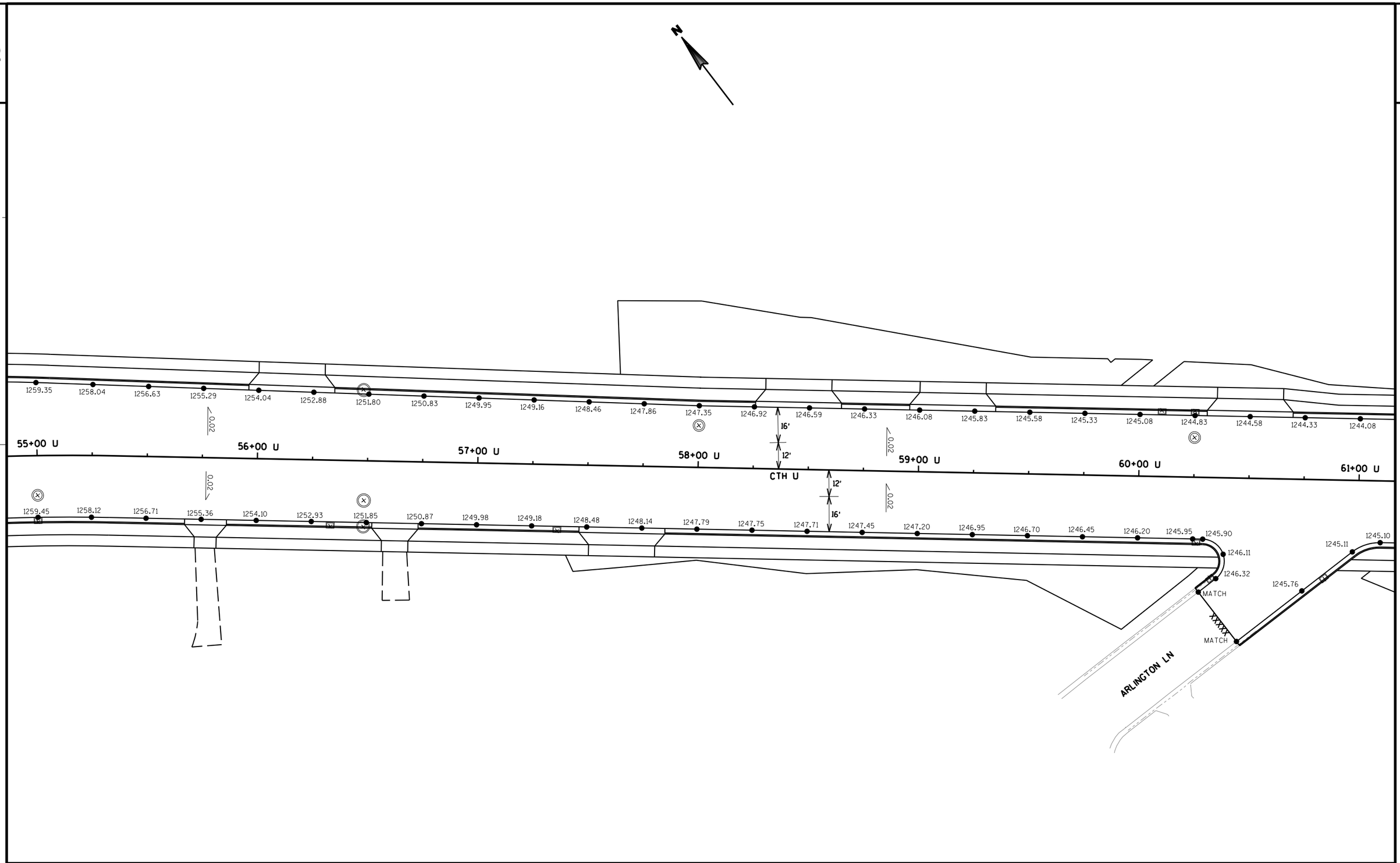
USH 51 SB

USH 51 NB

CTH U

E RAMP

PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	PAVING DETAIL - CTH U	SHEET 75	E

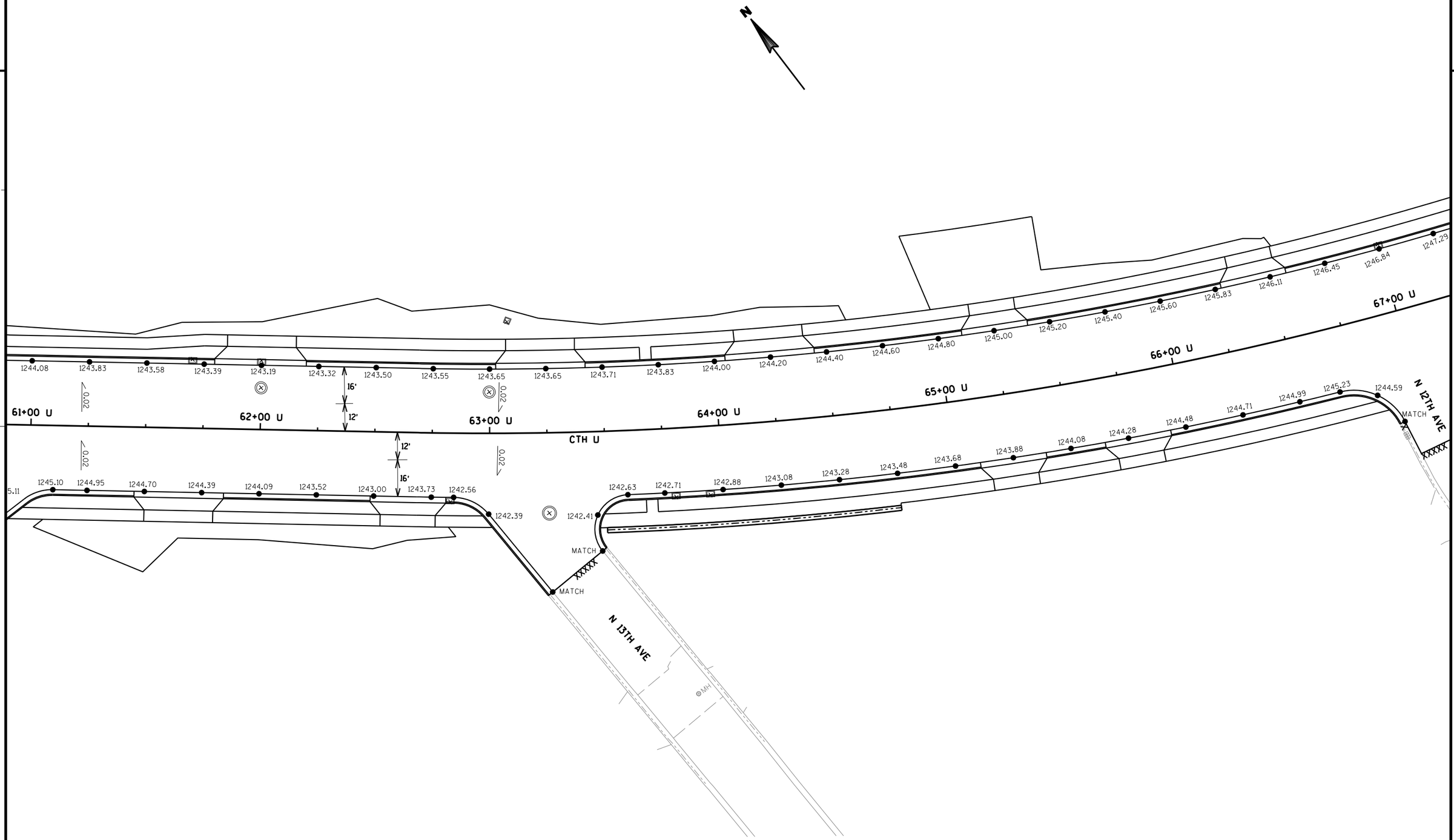


PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	PAVING DETAIL - CTH U	SHEET 76	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\021207_pd.dgn PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:40

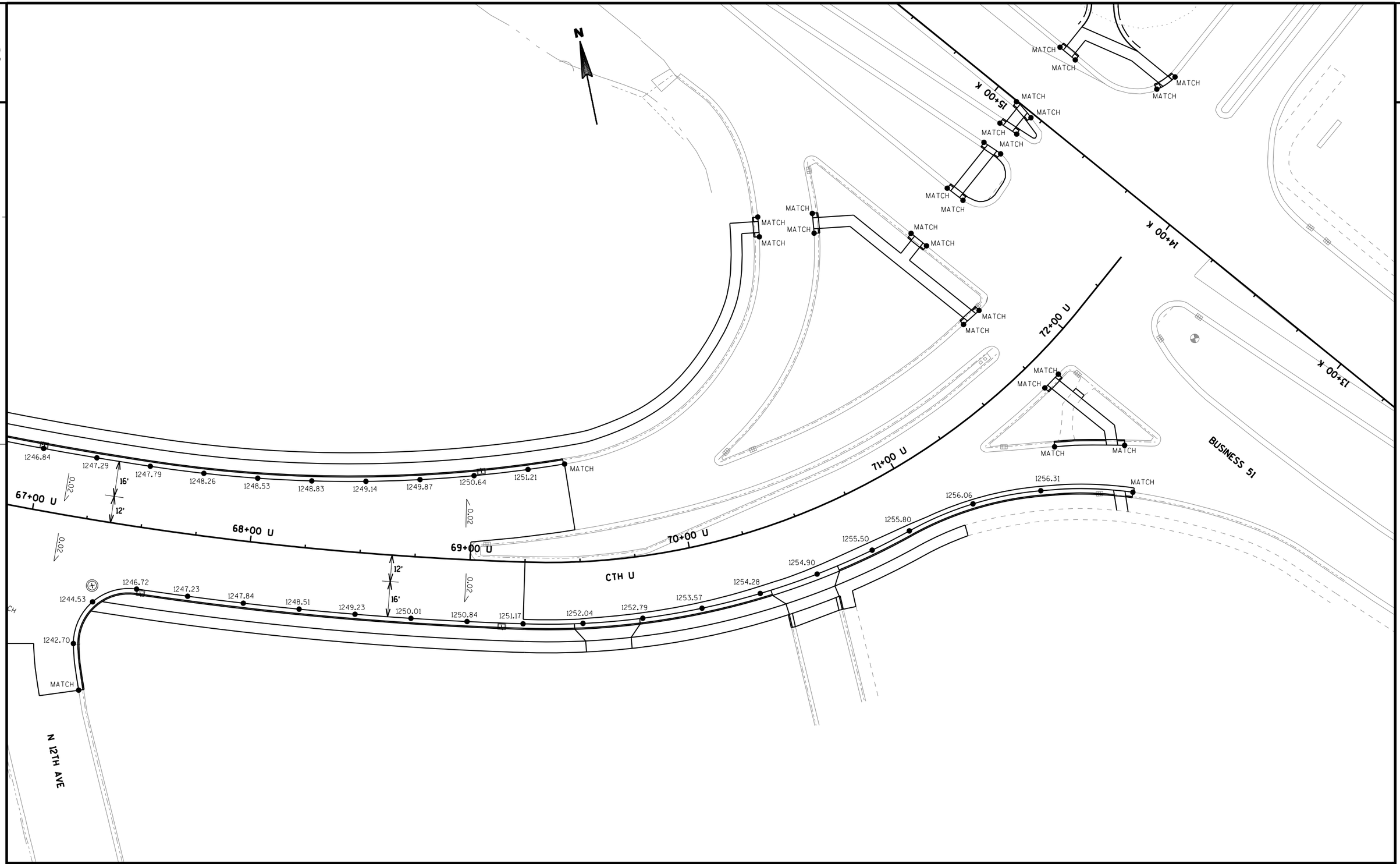
WISDOT/CADDS SHEET 42

2



PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	PAVING DETAIL - CTH U	SHEET 77	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\021208_pd.dgn PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:40

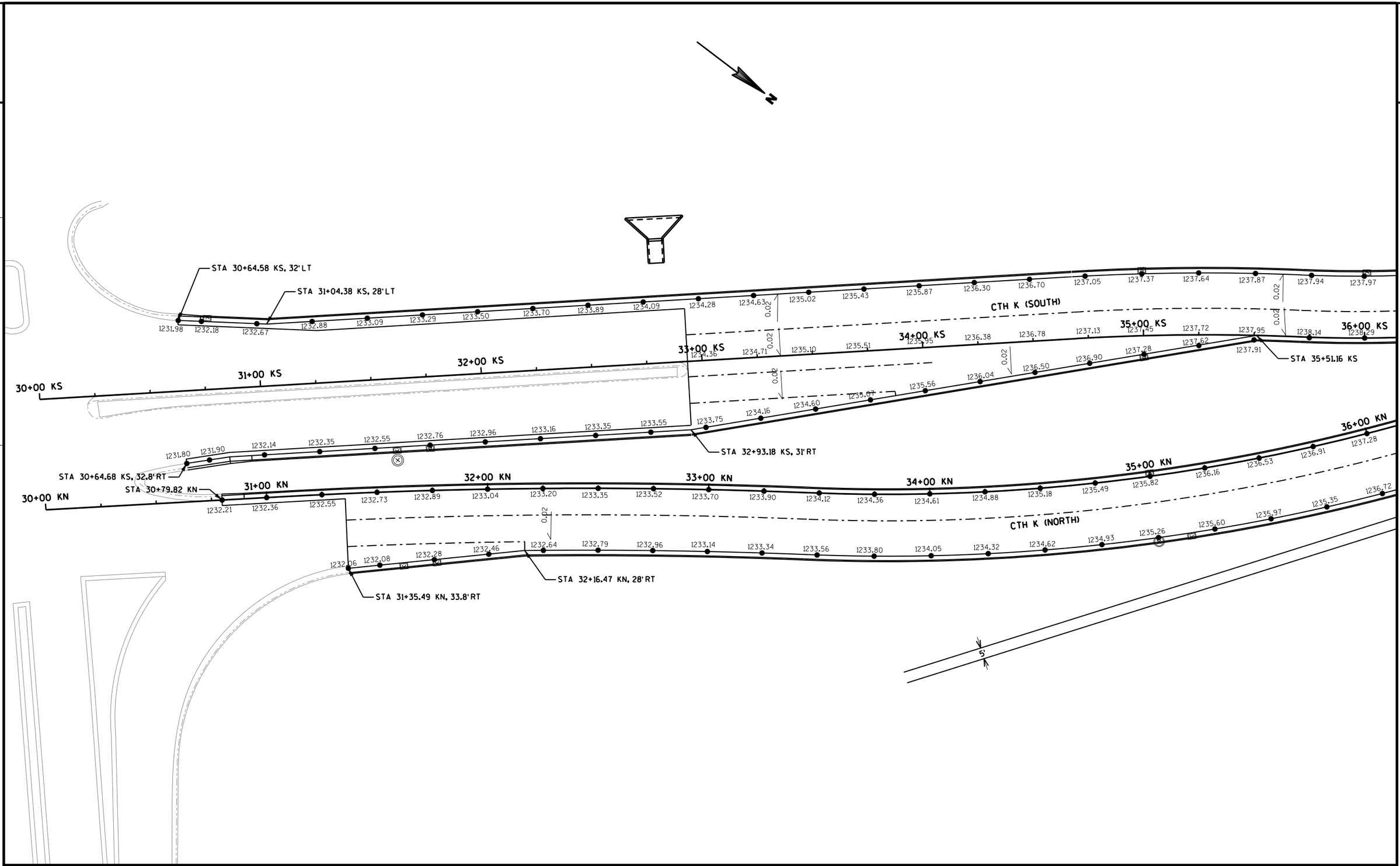


PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	PAVING DETAIL - CTH U	SHEET 78	E

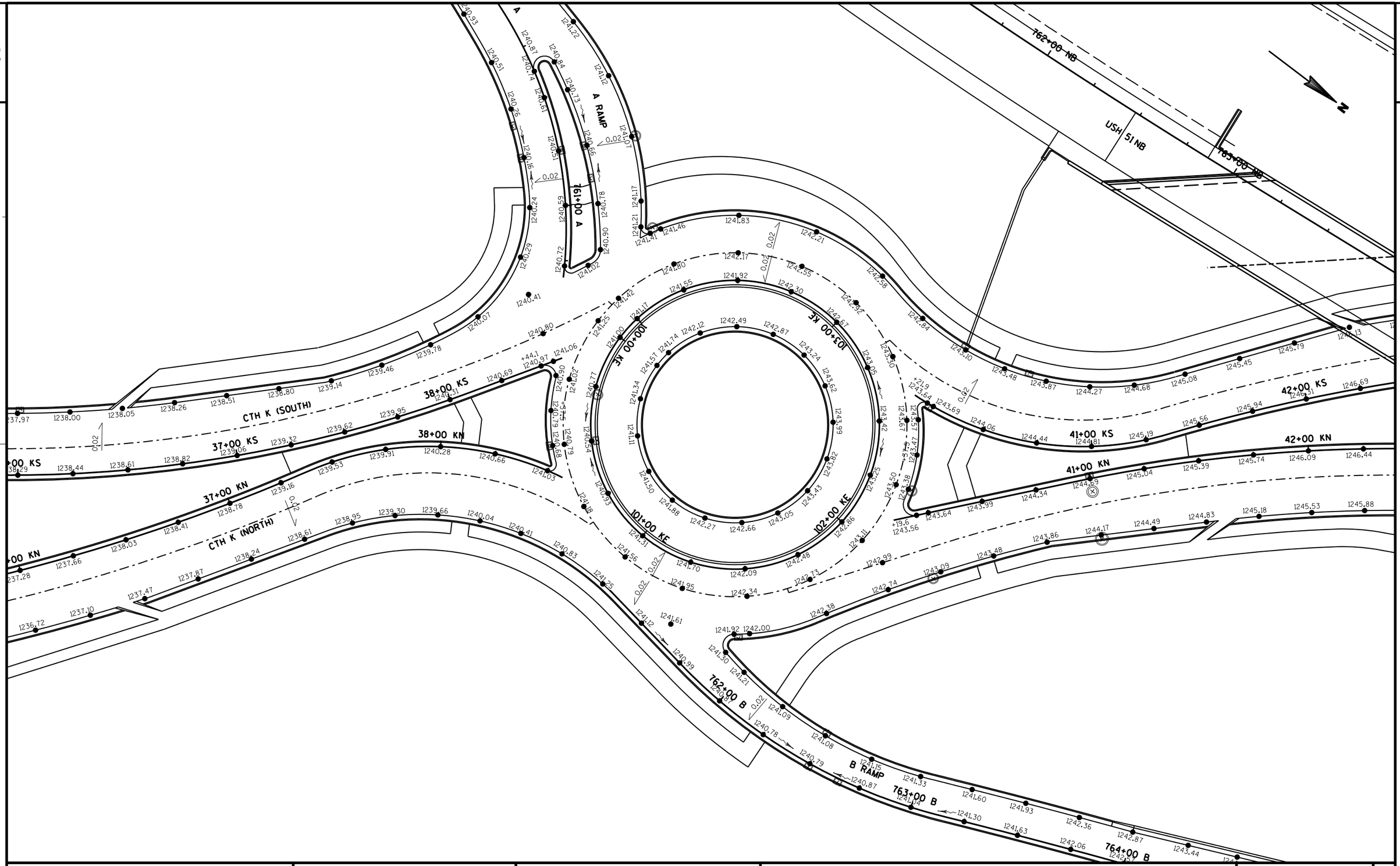
FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\021209_pd.dgn PLOT DATE : 9/5/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42

2



PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	PAVING DETAIL - CTH K	SHEET 79	E



PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	PAVING DETAIL - CTH K	SHEET	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\021211_pd.dgn PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42

2

763+00 SB
764+00 SB
765+00 SB
766+00 SB
767+00 SB
768+00 SB
769+00 SB
763+00 NB
764+00 NB
765+00 NB
766+00 NB
767+00 NB
768+00 NB

N

100' R
STA 45+62.05 KS, 136' LT
N 213128.15
E 274135.32

100' R
STA 46+04.81 KS, 59.5' RT
N 213279.57
E 274266.23

100' R
STA 46+47.57 KS, 136' LT
N 213196.61
E 274084.07

CTH K (SOUTH)

42+00 KS 43+00 KS 44+00 KS 45+00 KS 46+00 KS 47+00 KS

1245.45 1245.79 1246.13 1246.50 1246.88 1247.25 1247.63 1247.99 1248.33 1248.66 1248.96 1249.24 1249.50 1249.74 1249.96 1250.16 1250.33 1250.49 1250.63 1250.74 1250.83 1250.91 1250.96 1250.99 1251.00

1245.94 1246.31 1246.69 1247.06 1247.44 1247.81 1248.19 1248.55 1248.89 1249.22 1249.52 1249.80 1250.06 1250.30 1250.52 1250.72 1250.89 1251.05 1251.19 1251.30 1251.39 1251.47 1251.52 1251.55 1251.56

USH 51 NB

USH 51 SB

42+00 KN 43+00 KN 44+00 KN 45+00 KN 46+00 KN 47+00 KN

1245.74 1246.09 1246.44 1246.79 1247.14 1247.49 1247.84 1248.19 1248.54 1248.88 1249.20 1249.49 1249.77 1250.03 1250.26 1250.47 1250.67 1250.84 1250.99 1251.12 1251.22 1251.31 1251.38 1251.42 1251.45

0.02

CTH K (NORTH)

1245.18 1245.53 1245.88 1246.23 1246.58 1246.93 1247.28 1247.63 1247.98 1248.32 1248.64 1248.93 1249.21 1249.47 1249.70 1249.91 1250.11 1250.28 1250.43 1250.56 1250.66 1250.75 1250.82 1250.86 1250.93

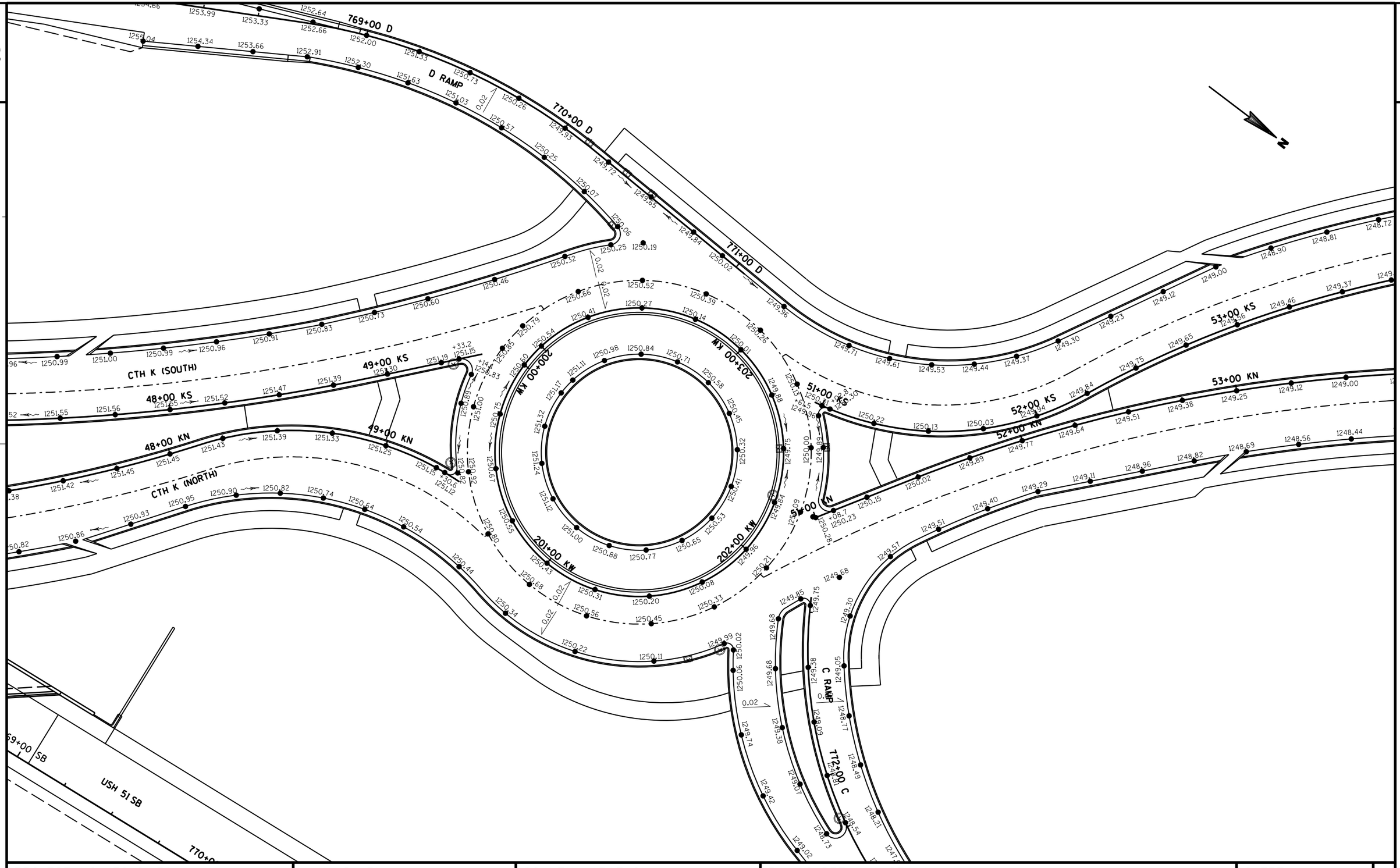
0.02

100' R
STA 42+10.35 KN, 136' RT
N 213041.46
E 274591.72

100' R
STA 42+53.02 KN, 59.5' LT
N 212955.30
E 274411.16

100' R
STA 42+98.77 KN, 136' RT
N 213106.92
E 274541.84

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	PAVING DETAIL - CTH K	SHEET 81	E

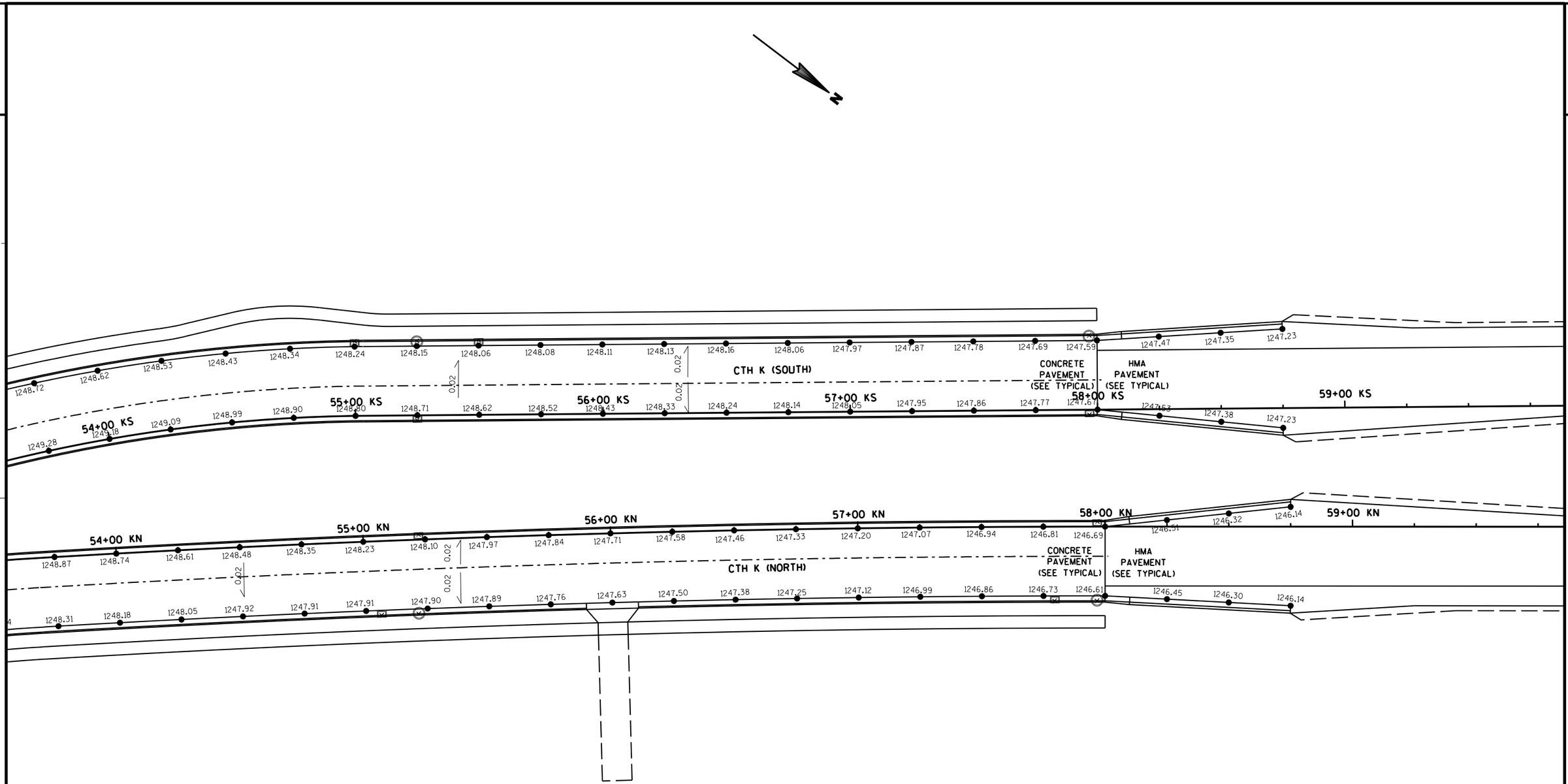


PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	PAVING DETAIL - CTH K	SHEET 82	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\021213_pd.dgn PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42

2



PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	PAVING DETAIL - CTH K	SHEET 83	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\021214_pd.dgn PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:40

NOTE: ASPHALT WILL BE IN PLACE
PRIOR TO CURB & GUTTER, ADJUST
CURB & GUTTER GRADES AS NECESSARY

OVERLOOK DR
230+00 V
229+00 V
231+00 V

CASSIDY DR
N 00+59
N 00+9

CTH K (SOUTH)
CTH K (NORTH)
66+00 KS
67+00 KS
68+00 KS
69+00 KS
70+00 KS
71+00 KS
66+00 KN
67+00 KN
68+00 KN
69+00 KN
70+00 KN
71+00 KN

N 20TH AVE

MATCH EXISTING
SAWCUT REQ'D.
24'RT OF ℄ CTH K NB

MATCH

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	PAVING DETAIL - CTH K & OVERLOOK DR	SHEET 84	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\021215_pd.dgn
PLOT DATE : 7/31/2012
PLOT BY : AYRES-EC
PLOT NAME :
PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42

2

SEE S.D.D. "CONCRETE JOINT DETAIL FOR EXIT RAMP TERMINI" AND "CONCRETE JOINT DETAIL FOR ENTRANCE RAMP TERMINI" FOR ADDITIONAL INFORMATION.

N

STA 710+31.12 SB
MATCH EXISTING

STA 712+46.48 SB, 28' LT

8'
12'
14'
12'

MATCH 1262.50 1262.36 1262.22 1262.08 1261.94 1261.80 1261.66 1261.51 1261.37 1261.04 1260.82
0.02
MATCH 1262.73 1262.57 1262.40 1262.24 1262.07 1261.91 1261.74 1261.58 1261.41 1261.08 1260.86

250' TAPER

USH 51 SB

9+00 SB | 710+00 SB | 711+00 SB | 712+00 SB | 713+00 SB | 714+00 SB | 715+00 SB

8'
14'
12'
5'
2'

CABLE GUARD

9+00 NB | 710+00 NB | 711+00 NB | 712+00 NB | 713+00 NB | 714+00 NB | 715+00 NB

2'
5'
12'
14'
8'

12'
14'
12'
8'

MATCH 1262.93 1262.77 1262.61 1262.44 1262.28 1262.12 1261.96 1261.79 1261.63 1261.47 1261.31 1261.14 1260.98 1260.82 1260.66 1260.49 1260.33 1260.17 1260.01 1259.85 1259.69 1259.59
0.02
MATCH 1262.70 1262.55 1262.40 1262.24 1262.10 1261.95 1261.79 1261.64 1261.49 1261.34 1261.19 1261.04 1260.89 1260.74 1260.59 1260.43 1260.28 1260.13 1259.97 1259.81 1259.65 1259.55

450' TAPER

USH 51 NB

STA 713+88.77 NB, 28' RT

STA 709+52.34 NB
MATCH EXISTING

STEEL PLATE BEAMGUARD

PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	INTERCHANGE DETAIL	SHEET 85	E

2

N

USH 51 SB

725+00 SB

726+00 SB

727+00 SB

728+00 SB

729+00 SB

730+00 SB

731+00 SB

8'

14'

12'

1250.24 1250.16 1250.00

1250.19 1250.11 1249.95

CABLE GUARD

725+00 NB

726+00 NB

727+00 NB

728+00 NB

729+00 NB

730+00 NB

731+00 NB

USH 51 NB

12'

14'

8'

1250.77 1250.64 1250.47 1250.31 1250.15 1249.99 1249.82 1249.66 1249.50 1249.34 1249.18 1249.02 1248.85 1248.69 1248.53

1250.72 1250.59 1250.42 1250.22 1250.02 1249.82 1249.63 1249.43 1249.25 1249.06 1248.88 1248.72 1248.55 1248.39 1248.23

250' TAPER

300' PARALLEL EXIT RAMP

A/E RAMP

0.02

5'

3'

STA 728+00 NB, 28' RT

STA 729+92.11 NB, 38' RT

PROJECT NO: 1170-01-70/73	HWY: USH 51	COUNTY: MARATHON	INTERCHANGE DETAIL	SHEET	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\021501_ic.dgn PLOT DATE : 8/1/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42

2

N

STA 731+00.00 SB, 28'LT

STA 734+00.00 SB, 28'LT

1250.00 1249.84 1249.67 1249.52 1249.38 1249.24 1249.10 1248.96 1248.81 1248.67 1248.53 1248.40 1248.26 1248.12 1247.95 1247.79 1247.63 1247.49 1247.35 1247.23 1247.10 1246.99 1246.87 1246.78 1246.68

1249.95 1249.79 1249.62 1249.46 1249.29 1249.13 1248.96 1248.80 1248.63 1248.47 1248.30 1248.14 1247.98 1247.82 1247.65 1247.49 1247.33 1247.19 1247.05 1246.93 1246.80 1246.69 1246.57 1246.48 1246.38

360' TAPER

600' PARALLEL ENTRANCE

F RAMP

USH 51 SB

5' 12' 14' 12' 3'

731+00 SB 732+00 SB 733+00 SB 734+00 SB 735+00 SB 736+00 SB 737+00 SB

CABLE GUARD

731+00 NB 732+00 NB 733+00 NB 734+00 NB 735+00 NB 736+00 NB 737+00 NB

12' 14' 12'

USH 51 NB

1248.53 1248.37 1248.20 1248.04 1247.88 1247.72 1247.55 1247.39 1247.23 1247.07 1246.90 1246.74 1246.58 1246.42 1246.25 1246.10 1245.95 1245.81 1245.67 1245.55 1245.42 1245.31 1245.20 1245.11 1245.01

1248.23 1248.07 1247.90 1247.74 1247.58 1247.42 1247.25 1247.09 1246.93 1246.75 1246.57 1246.40 1246.22 1246.04 1245.86 1245.69 1245.52 1245.36 1245.20 1245.05 1244.90 1244.77 1244.63 1244.51 1244.39

5' 3' 2' 15' 5' 3'

0.02

STA 732+93.54 NB, 38'RT

STA 734+96.65 NB, 28'RT

25:1 TAPER

A/E RAMP

PROJECT NO: 1170-01-70/73	HWY: USH 51	COUNTY: MARATHON	INTERCHANGE DETAIL	SHEET 87	E

2

N

738+00 F 739+00 F 740+00 F 741+00 F 742+00 F 743+00 F

1246.68 1246.05 1245.26 1245.18 1245.11 1245.05 1244.99 1244.95 1244.90 1244.87 1244.84 1244.77 1244.70 1244.54 1244.38 1244.34 1244.30 1244.29 1244.28 1244.27 1244.26 1244.21 1244.16 1244.29 1244.43

0.02 0.05

STA 740+18.79 F, 15' RT

3' 5' 15' 3'

1246.38 1246.30 1246.22 1246.15 1246.08 1246.03 1245.98 1245.95 1245.91 1245.89 1245.87 1245.86 1245.85 1245.86 1245.08 1245.05 1245.09 1245.05 1245.04 1245.03 1245.02 1245.01 1244.96 1244.91 1245.04 1245.18

F RAMP

100' TAPER

USH 51 SB

14'

12'

37+00 SB 738+00 SB 739+00 SB 740+00 SB 741+00 SB 742+00 SB 743+00 SB

CABLE GUARD

737+00 NB 738+00 NB 739+00 NB 740+00 NB 741+00 NB 742+00 NB 743+00 NB

USH 51 NB

12' 14' 8'

CRASH CUSHION PERMANENT LOW MAINTENANCE

STA 740+00 NB, 34' RT

CONCRETE BARRIER TYPE S42

STA 742+90 NB, 32.67' RT
STA 742+90 NB, 37.33' RT
STA 742+63 NB, 34' RT
STA 742+63 NB, 36' RT

1245.01 1244.93 1244.91 1244.94 1244.94 1244.96 1244.98 1245.01 1245.04 1245.08 1245.11 1245.11 1245.10

14'

1244.76 1244.65 1244.64 1244.69 1244.67 1244.68 1244.70 1244.73 1244.76 1244.80 1244.83 1244.83 1244.82 1244.83 1244.84 1244.87 1244.89 1244.93 1244.96 1245.02 1245.07 1245.14 1245.21 1245.29 1245.36

0.02

4' 15'

1244.39 1244.27 1244.30 1244.39 1244.37 1244.38 1244.40 1244.43 1244.46 1244.50 1244.53 1244.53 1244.52 1244.53 1244.54 1244.57 1244.59 1244.63 1244.66 1244.72 1244.77 1244.84 1244.91 1244.99 1245.06

739+00 A 740+00 A 741+00 A 742+00 A 743+00 A

741+00 E 742+00 E E RAMP 743+00 E

5' 3'

STA 738+12.14 NB, 40' RT

60'

STA 738+73.11 E

15:1 TAPER

STA 740+18.74 E, 5' RT

10'

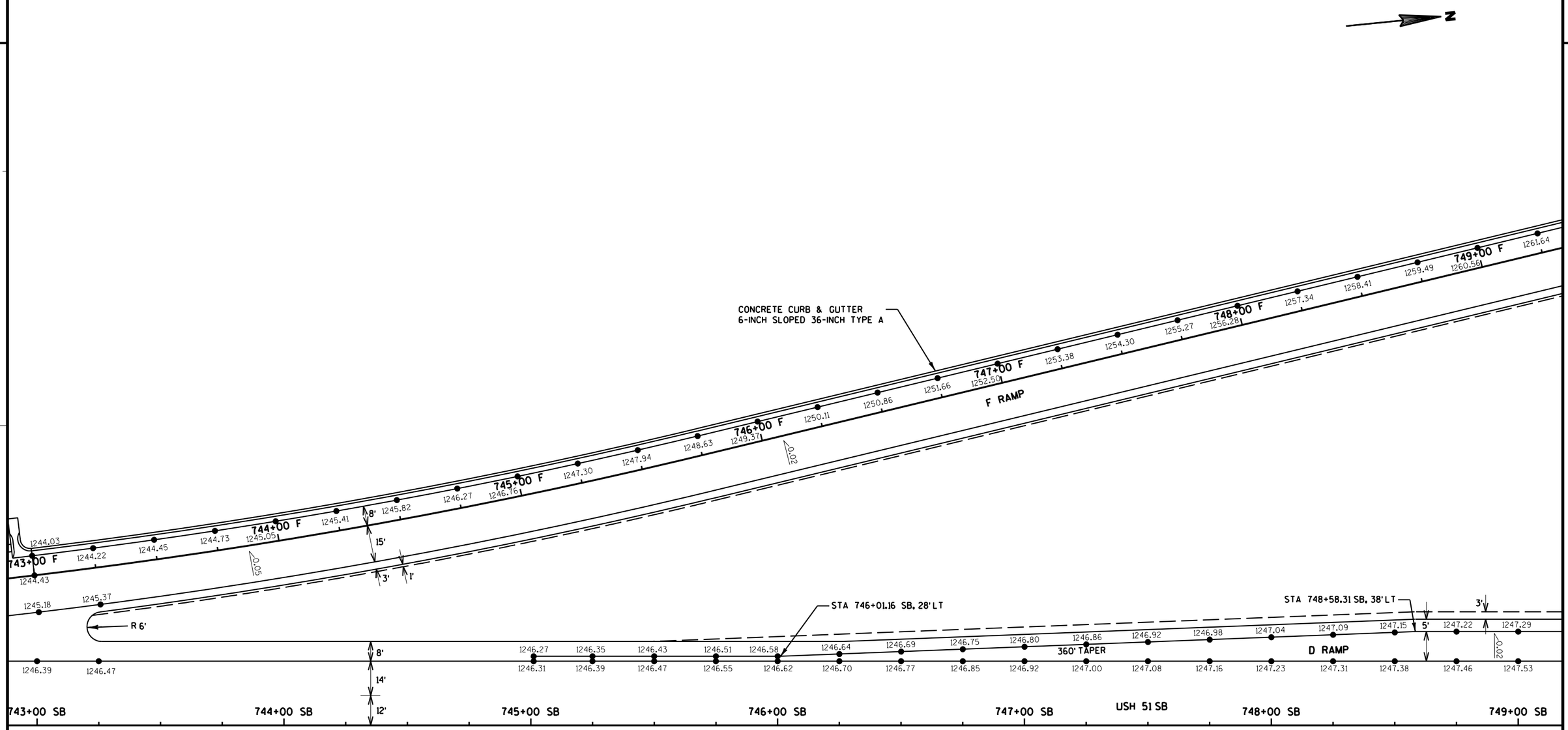
STA 741+21.56 E, 12' RT

MGS GUARDRAIL

PROJECT NO: 1170-01-70/73	HWY: USH 51	COUNTY: MARATHON	INTERCHANGE DETAIL	SHEET	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\021503_ic.dgn PLOT DATE : 8/1/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:40

2



PROJECT NO: 1170-01-70/73	HWY: USH 51	COUNTY: MARATHON	INTERCHANGE DETAIL	SHEET 89	E

2

N

CABLE GUARD

743+00 NB — 744+00 NB — 745+00 NB — 746+00 NB — 747+00 NB — 748+00 NB — 749+00 NB

STA 743+10 NB, 32.67' RT
STA 743+10 NB, 37.33' RT
STA 743+37 NB, 34' RT
STA 743+37 NB, 36' RT

12'
14'
8'

CONCRETE BARRIER TYPE S42

USH 51 NB

4'

1245.36 1245.44 1245.52 1245.60 1245.67 1245.75 1245.82 1245.90 1245.97 1246.05 1246.13 1246.21 1246.28 1246.36 1246.43 1246.51 1246.58 1246.66 1246.74 1246.82 1246.89 1246.97 1247.04 1247.12 1247.19

743+00 A — 744+00 A — 745+00 A — 746+00 A — 747+00 A — A RAMP — 748+00 A — 749+00 A

15'
8'

1245.06 2' 1244.94 1245.14 1245.22 1245.30 1245.37 1245.45 1245.52 1245.60 1245.67 1245.75 1245.83 1245.91 1245.98 1246.06 1246.13 1246.21 1246.28 1246.36 1246.44 1245.97 1246.05 1246.12 1246.20 1246.28 1246.52 1246.59 1246.67 1246.74 1246.82 1246.89

743+00 E — 744+00 E — 745+00 E — 746+00 E — 747+00 E — E RAMP — 748+00 E — 749+00 E

15'
10'

1244.37 1244.39 1244.40 1244.49 1244.67 1244.95 1245.33 1245.58 1245.67 1245.75 1245.82 1245.90 1246.08 1246.56 1247.13 1247.80 1248.56 1249.43 1250.39 1251.44 1252.60 1253.85 1255.20 1256.62 1258.04 1259.34 1260.78 1262.21 1262.95

0.028

15'
8'

1244.99 1245.01 1245.03 1245.04 1245.13 1245.31 1245.59 1246.38 1247.05 1247.81 1248.68 1249.64 1250.69 1251.85 1253.10 1254.45 1255.87 1257.30 1258.76 1260.16 1261.59

0.022

4'
12'

STA 743+17.42 E, 15' LT

MGS GUARDRAIL

CRASH CUSHION
PERMANENT
LOW MAINTENANCE

CONCRETE BARRIER TYPE S42C

CONCRETE BARRIER TYPE S42C

STA 748+20 NB, 5' RT

CONCRETE CURB & GUTTER
6-INCH SLOPED 36-INCH TYPE A

STA 748+16.59 E, 8' RT

STA 748+78.36 E, 12' RT

PIPE UNDERDRAIN 6-INCH

NOTE: TIE PIPE UNDERDRAIN
INTO INLETS/MANHOLES.

PROJECT NO: 1170-01-70/73	HWY: USH 51	COUNTY: MARATHON	INTERCHANGE DETAIL	SHEET 90	E

2

N

CTH U

CTH U

STA 754+58.07 D, 15'RT

752+00 D

753+00 D

754+00 D

755+00 D

756+00 D

50:1 TAPER

D RAMP

751+00 SB

752+00 SB

753+00 SB

754+00 SB USH 51 SB

755+00 SB

756+00 SB

STEEL THRIE BEAM BULLNOSE TERMINAL
SEE SDD

CABLE GUARD

STEEL THRIE BEAM

CABLE GUARD

751+00 NB

752+00 NB

753+00 NB

754+00 NB

755+00 NB

756+00 NB

USH 51 NB

STA 754+59.30 A, 19'LT

STA 755+09.93 A, 17'LT

751+00 A

752+00 A

753+00 A

A RAMP

754+00 A

755+00 A

756+00 A

CONCRETE BARRIER
TYPE S42

PROJECT NO: 1170-01-70/73	HWY: USH 51	COUNTY: MARATHON	INTERCHANGE DETAIL	SHEET	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\021506_ic.dgn PLOT DATE : 8/1/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:40

2

N

D RAMP

756+00 D
1251.81
1252.19
1252.60
1253.03
757+00 D
1253.50
1254.00
1254.53
1255.09
758+00 D
1255.68
1256.77
759+00 D
760+00 D
761+00 D

1252.67
1253.05
1253.46
1253.89
1254.36
1254.86
1255.39
1255.95

1252.41
1252.92
1253.43
1253.97
1254.52
1255.11
1255.70
1256.33
1256.96
1257.39

R 6'

3'
5'
15'
3'
0.05
8'
14'
12'
4'

USH 51 SB

756+00 SB
757+00 SB
758+00 SB
759+00 SB
760+00 SB
761+00 SB
762+00 SB

MGS GUARDRAIL

CABLE GUARD

756+00 NB
757+00 NB
758+00 NB
759+00 NB
25:1 TAPER
760+00 NB
761+00 NB
762+00

4'
12'
14'
8'

USH 51 NB

MGS GUARDRAIL

CONCRETE BARRIER
TYPE S42

0.028
1251.16
1251.01
1250.79
1250.51
1250.15
1249.73
1249.23
1248.67
1248.03
1247.32
1246.54
1245.70
1244.82
1243.94
1243.05
1242.31
1241.77
1241.22
1241.12

756+00 A
1250.74
1250.59
1250.37
1250.09
1249.73
1249.31
1248.81
1248.25
1247.61
1246.91
1246.13
1245.29
1244.41
1243.53
1242.65
1241.89
1241.29
1240.87
1240.84
1240.73
1240.66
1241.07
1241.17
1241.21
1241.41
1241.46

15'
5'
3'

0.02

A RAMP

757+00 A
758+00 A
759+00 A
760+00 A
761+00 A

1244.38
1243.43
1242.45
1241.58
1240.93
1240.51
1240.36
1240.16
1240.51
1240.61
1240.74
1240.78
1240.90

1241.80
1241.83
1242.21
1242.55
1242.30
1242.87
1242.49
1242.12
1241.92
1241.17

200
200

STA 756+50 A, 5' RT

STA 757+10.31 A, 10.98' RT

CONCRETE CURB & GUTTER
6-INCH SLOPED 36-INCH TYPE A

PROJECT NO: 1170-01-70/73	HWY: USH 51	COUNTY: MARATHON	INTERCHANGE DETAIL	SHEET	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\021507_ic.dgn PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42

2

2

N

777+00 C

778+00 C

779+00 C

780+00 C

781+00 C

782+00 C

C RAMP

3'

5'

0.02

1'

3'

8'

14'

12'

4'

USH 51 SB

777+00 SB

778+00 SB

779+00 SB

780+00 SB

781+00 SB

782+00 SB

2'

777+00 NB

778+00 NB

779+00 NB

780+00 NB

781+00 NB

782+00 NB

4'

12'

14'

8'

USH 51 NB

1'

3' R 6'

15'

5'

3'

0.04

B RAMP

777+00 B

778+00 B

779+00 B

780+00 B

781+00 B

782+00 B

0.02

3'

STA 781+04.97 B, 15' LT

1251.11	1250.63	1249.76	1248.88	1248.01	1247.13
1246.26	1245.38	1244.51	1243.64	1242.83	1242.01
1241.25	1240.49	1239.80	1239.10	1238.46	1237.82
1237.24	1236.66	1236.14	1235.61	1235.15	
1250.25	1249.15	1248.37	1247.54	1246.69	1245.85
1245.01	1244.20	1243.38	1242.56	1241.75	1241.06
1240.37	1239.68	1238.75	1238.39	1237.87	1237.36
1236.84	1236.33	1235.85	1235.37	1234.88	
1249.65	1248.55	1247.77	1246.94	1246.09	1245.25
1244.41	1243.60	1242.78	1241.96	1241.15	1240.46
1239.77	1239.08				

PROJECT NO: 1170-01-70/73	HWY: USH 51	COUNTY: MARATHON	INTERCHANGE DETAIL	SHEET 93	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\021508_ic.dgn PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42

2

N

783+00 C 784+00 C 785+00 C 786+00 C 787+00 C 788+00 C

5' 3' 14' 3' 1' 8' 14' 12' 4' 2'

1233.69 1233.52 1233.13 1232.75 1232.36 1232.20 0.02 1232.04 1231.93 1231.82 1231.77 1231.71 1231.71 2'

1233.64 1233.50 1233.19 1232.94 1232.68 1232.48 1232.28 1232.13 1231.98 1231.89 1231.79 1231.75 1231.70 1231.70 1231.72 1231.78 1231.83 1231.95 2232.06 1232.23 1232.39

1233+59 1233.22 1232.83 1232.45 1232.06 1231.90 1231.74 1231.63 1231.52 1231.47 1231.41 1231.41 1231.40 1231.44 1231.50 1231.59 1231.69 1231.84 1232.00 1232.19 1232.35

C RAMP

R 6'

STA 786+77.18 C, 15'RT

STA 788+65.14 SB, 28'LT

USH 51 SB

783+00 SB 784+00 SB 785+00 SB 786+00 SB 787+00 SB 788+00 SB 789+00 SB

783+00 NB 784+00 NB 785+00 NB 786+00 NB 787+00 NB 788+00 NB 789+00 NB

2' 4' 12' 14' 12' 5' 3'

USH 51 NB

1234.69 1234.29 1233.88 1233.54 1233.19 1232.91 1232.62 1262.39 1232.16 1231.99 1231.82 1231.71 1231.60 1231.55 1231.50 1231.51 1231.52 1231.59 1231.65 1231.78 1231.90 2232.09 2232.27 1232.52 1232.76

1234.40 1234.04 1233.67 1233.31 1232.94 1232.67 1232.38 1232.15 1231.92 1231.75 1231.58 1231.47 1231.36 1231.31 1231.26 1231.27 1231.28 1231.35 1231.41 1231.54 1231.66 1231.85 2232.03 1232.28 1232.52

0.02

783+00 B 784+00 B

PROJECT NO: 1170-01-70/73	HWY: USH 51	COUNTY: MARATHON	INTERCHANGE DETAIL	SHEET	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\021509_ic.dgn PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:40

2

N

.44
32.48

USH 51 SB

790+00 SB | 791+00 SB | 792+00 SB | 793+00 SB | 794+00 SB | 795+00 SB

790+00 NB | 791+00 NB | 792+00 NB | 793+00 NB | 794+00 NB | 795+00 NB

2'
4'
12'
USH 51 NB
14'
12'
5'
3'

33.07 1233.37 1233.73 1234.09 1234.51 1234.93 1235.41 1235.89 1236.43 1236.96 1237.56 1238.16 1238.82 1239.47 1240.19 1240.90 1241.67 1242.44 1243.28 1244.11 1245.00 1245.89 1246.84 1247.78 1248.74 1249.

0.02

1200' PARELLEL ENTRANCE

250' TAPER

32.83 1233.13 1233.49 1233.85 1234.27 1234.69 1235.17 1235.65 1236.19 1236.72 1237.32 1237.92 1238.58 1239.23 1239.95 1240.66 1241.44 1242.23 1243.08 1243.94 1244.84 1245.75 1246.72 1247.68 1248.66 1249.

STA 793+16.41 NB, 38' RT

PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	INTERCHANGE DETAIL	SHEET 95	E

2

2

N

USH 51 SB

796+00 SB | 797+00 SB | 798+00 SB | 799+00 SB | 800+00 SB | 801+00 SB

SEE S.D.D. "MAINTENANCE CROSSOVER FOR FREEWAY"

796+00 NB | 797+00 NB | 798+00 NB | 799+00 NB | 800+00 NB | 801+00 NB

2'
4'
12'
14'
8'

USH 51 NB

1250.66 1251.63 1252.62 1253.60 1254.58
1250.62 1251.59 1252.58 1253.56 1254.50

STA 795+73.56 NB, 28' RT

STA 800+84.00 NB

PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	INTERCHANGE DETAIL	SHEET 96	E

2

N

USH 51 SB

802+00 SB | 803+00 SB | 804+00 SB | 805+00 SB | 806+00 SB | 807+00 SB | 808+00 S

802+00 NB | 803+00 NB | 804+00 NB | 805+00 NB | 806+00 NB | 807+00 NB | 808+00 NB

USH 51 NB

12' | 14' | 12' | 4' | 12' | 12' | 10'

1275.60 1276.71 1277.73 1278.74 1279.75 1280.77 1281.77 1282.78 1283.78 1284.79 1285.79 1286.80 1287.80 1288.81 1289.81 1290.81 1291.81 1292.82 1293.82 1294.83 1295.83 1296.84 1297.84 1298.85 1299.85

1275.56 1276.67 1277.67 1278.68 1279.68 1280.68 1281.68 1282.68 1283.67 1284.67 1285.66 1286.66 1287.66 1288.65 1289.65 1290.64 1291.63 1292.63 1293.63 1294.62 1295.62 1296.62 1297.61 1298.61 1299.61

700' TAPER

0.02

120'

STA 803+17.42 NB, 28' RT

STA 807+84.09 NB, 36' RT

2

PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	INTERCHANGE DETAIL	SHEET 97	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\021512_ic.dgn PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42

2

2

N

MGS GUARDRAIL

USH 51 SB

808+00 SB | 809+00 SB | 810+00 SB | 811+00 SB | 812+00 SB | 813+00 SB | 814+00 SB

MGS GUARDRAIL

MGS GUARDRAIL

08+00 NB | 809+00 NB | 810+00 NB | 811+00 NB | 812+00 NB | 813+00 NB | 814+00 NB

6'

12'

12'

12'

10'

USH 51 NB

0.02

1299.85	1300.86	1301.86	1302.87	1303.87	1304.88	1305.88	1306.89	1307.89	1308.90	1309.90	1310.91	1311.91	1312.92
1299.61	1300.62	1301.62	1302.63	1303.63	1304.64	1305.64	1306.65	1307.65	1308.66	1309.66	1310.67	1311.67	1312.68

25:1 TAPER

MGS GUARDRAIL

PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	INTERCHANGE DETAIL	SHEET 98	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\021513_ic.dgn PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42

2

EROSION CONTROL GENERAL NOTES

EROSION CONTROL MEASURES ARE SHOWN IN THE STAGE WHICH THEY ARE TO BE PLACED.

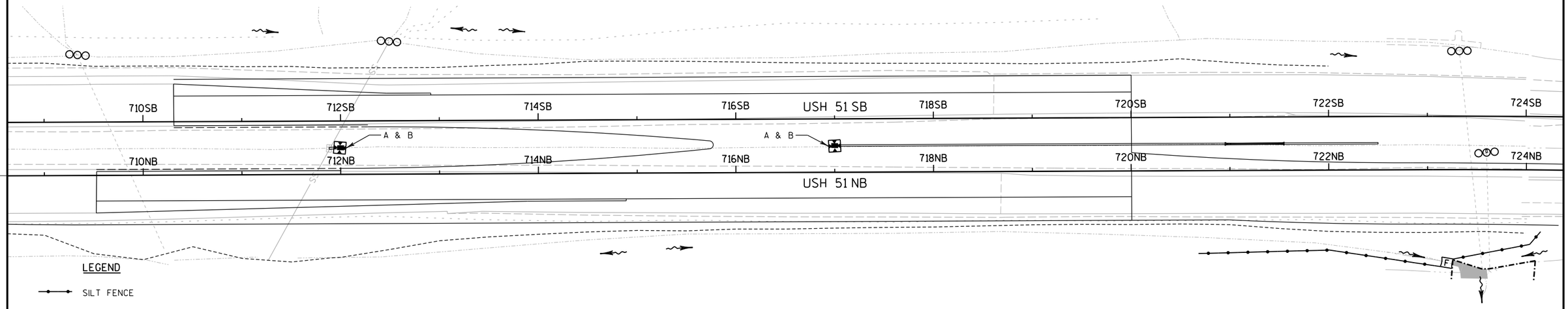
MAINTAIN EROSION CONTROL MEASURES PLACED IN PREVIOUS STAGES IF WARRANTED.

PERMANENT WORK ALIGNMENTS ARE SHOWN IN BLACK COLOR.

TEMPORARY WORK ALIGNMENTS ARE SHOWN IN GRAY SCREENED COLOR.

FOR RIPRAP AREAS AT APRON ENDWALLS AND SPECIAL DITCHES, SEE CONSTRUCTION DETAILS UNLESS OTHERWISE NOTED.

FINISH ALL DISTURBED AREAS WITH TOPSOIL, FERTILIZER, SEED, AND MULCH OR EROSION MAT. AREAS WITHIN THE SLOPE INTERCEPTS SHOWN WITHOUT SHADING OR PATTERNING SHALL BE COVERED WITH MULCH.



LEGEND

- SILT FENCE
- #### EROSION MAT CLASS I TYPE B
- EROSION MAT CLASS II TYPE B
- EROSION MAT URBAN CLASS I TYPE A
- RIPRAP MEDIUM (UNLESS OTHERWISE NOTED)
- ROCK BAGS (DITCH CHECK)
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- F ROCK BAGS (SILT FENCE RELIEF)
- INLET PROTECTION TYPE A & C (UNLESS OTHERWISE NOTED)
- WETLAND BOUNDARY
- SLOPE INTERCEPT
- SURFACE WATER FLOW
- PERMITTED WETLAND IMPACT

PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	EROSION CONTROL - STAGE 1	SHEET 99	E

FILE NAME : P:\44xx\4448\Plan\Erosion Control\022001_ec.dgn PLOT DATE : 7/30/2012 PLOT BY : walkup PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2

2

N 18TH AVE

ID 6999-18-70

ARLINGTON LN

ARTHUR AVE

CTH U

46U

48U

EXISTING SB CONNECTOR RAMP

F RAMP (EXISTING)

744SB 746SB 748SB 750SB USH 51 SB 752SB 754SB 756SB 758SB

352AT 354DT 356DT

ID 1170-01-70

ID 1170-01-73

D RAMP (TEMP)

744NB 746NB 748NB 750NB 752NB 754NB 756NB 758NB

50U

B

A & B

348AT 350AT 352AT 354AT 356AT

ID 1170-01-73

ID 1170-01-70

USH 51 NB

E RAMP (EXISTING)

A RAMP (TEMP)

N 16TH AVE

52U

CTH U

54U

EXISTING NB CONNECTOR RAMP

N

LEGEND

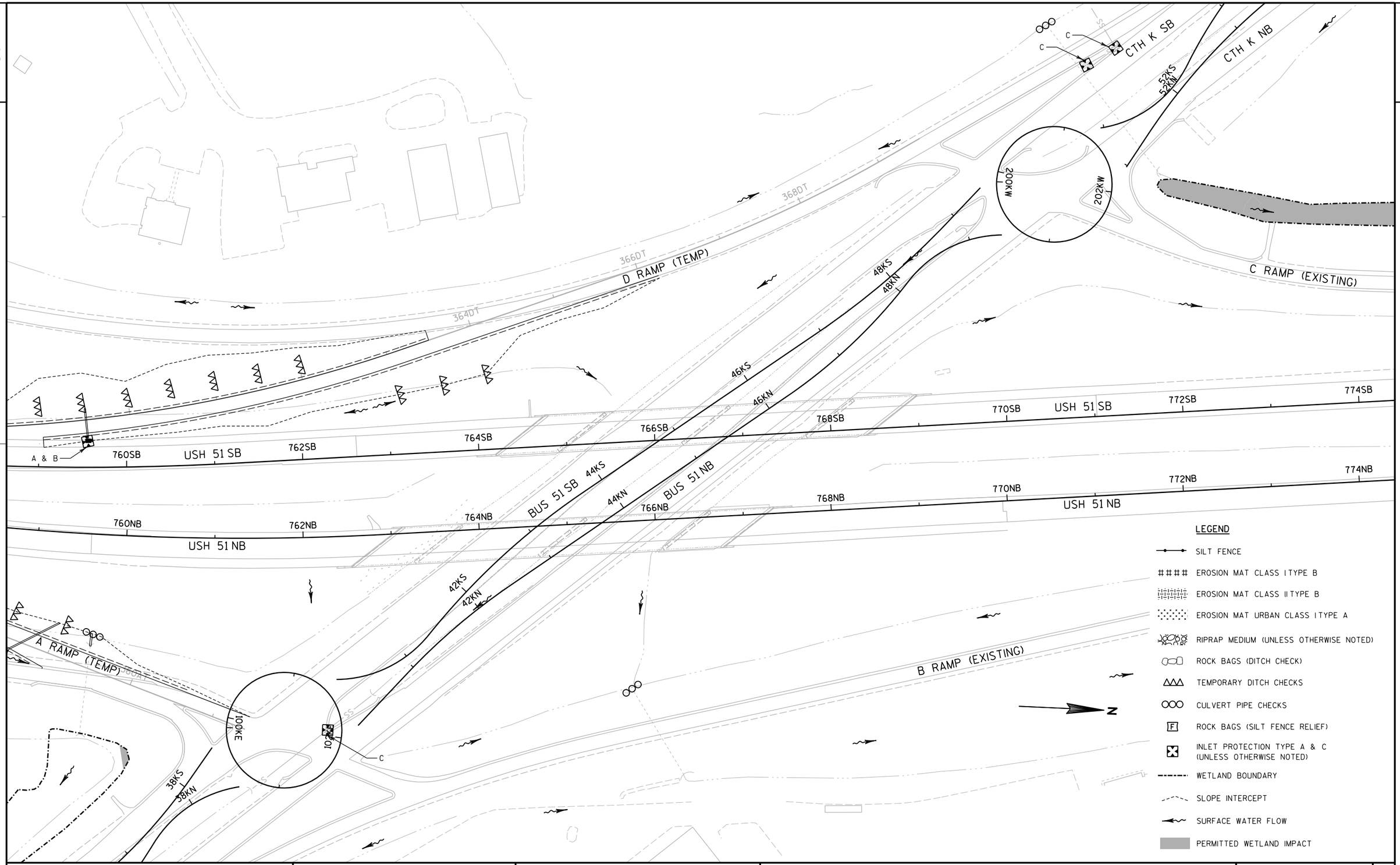
- SILT FENCE
- EROSION MAT CLASS I TYPE B
- EROSION MAT CLASS II TYPE B
- EROSION MAT URBAN CLASS I TYPE A
- RIPRAP MEDIUM (UNLESS OTHERWISE NOTED)
- ROCK BAGS (DITCH CHECK)
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- ROCK BAGS (SILT FENCE RELIEF)
- INLET PROTECTION TYPE A & C (UNLESS OTHERWISE NOTED)
- WETLAND BOUNDARY
- SLOPE INTERCEPT
- SURFACE WATER FLOW
- PERMITTED WETLAND IMPACT

PROJECT NO: 6999-18-70/1170-01-70/73	HWY: USH 51	COUNTY: MARATHON	EROSION CONTROL - STAGE 1	SHEET 100	E

FILE NAME : P:\44xx\4448\Plan\Erosion Control\022002_ec.dgn PLOT DATE : 7/30/2012 PLOT BY : walkup PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2



LEGEND

- SILT FENCE
- EROSION MAT CLASS I TYPE B
- EROSION MAT CLASS II TYPE B
- EROSION MAT URBAN CLASS I TYPE A
- RIPRAP MEDIUM (UNLESS OTHERWISE NOTED)
- ROCK BAGS (DITCH CHECK)
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- ROCK BAGS (SILT FENCE RELIEF)
- INLET PROTECTION TYPE A & C (UNLESS OTHERWISE NOTED)
- WETLAND BOUNDARY
- SLOPE INTERCEPT
- SURFACE WATER FLOW
- PERMITTED WETLAND IMPACT

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	EROSION CONTROL - STAGE 1	SHEET 101	E

FILE NAME : P:\44xx\4448\Plan\Erosion Control\022003_ec.dgn PLOT DATE : 7/30/2012 PLOT BY : walkup PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2

2

LEGEND

- SILT FENCE
- EROSION MAT CLASS I TYPE B
- EROSION MAT CLASS II TYPE B
- EROSION MAT URBAN CLASS I TYPE A
- RIPRAP MEDIUM (UNLESS OTHERWISE NOTED)
- ROCK BAGS (DITCH CHECK)
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- ROCK BAGS (SILT FENCE RELIEF)
- INLET PROTECTION TYPE A & C (UNLESS OTHERWISE NOTED)
- WETLAND BOUNDARY
- SLOPE INTERCEPT
- SURFACE WATER FLOW
- PERMITTED WETLAND IMPACT

N

BUS 51 NB

BUS 51 SB

NTC TRAIL

COLLEGE DR

ARLINGTON LN

CTH U

N 13TH AVE

N 12TH AVE

ID 6999-18-70

ID 1170-01-70

NOTE: PLACE INLET PROTECTION ON EXISTING INLETS

PROJECT NO: 6999-18-70/1170-01-70	HWY: USH 51	COUNTY: MARATHON	EROSION CONTROL - STAGE 1	SHEET 102	E

FILE NAME : P:\44xx\4448\Plan\Erosion Control\022004_ec.dgn PLOT DATE : 7/30/2012 PLOT BY : walkup PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2

BUS 51 SB

BUS 51 NB

24K 26K 28K 30KS 32KS 34KS 36KS 38KS

30KN 32KN 34KN 36KN 38KN

A & B

A RAMP (TEMP)

CAMPUS DR

N 14TH AVE

34TR NTC TRAIL 36TR

40SW

42SW

C B SS HW

NOTE: PLACE INLET PROTECTION ON EXISTING INLETS

LEGEND

- SILT FENCE
- #### EROSION MAT CLASS I TYPE B
- EROSION MAT CLASS II TYPE B
- EROSION MAT URBAN CLASS I TYPE A
- RIPRAP MEDIUM (UNLESS OTHERWISE NOTED)
- ROCK BAGS (DITCH CHECK)
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- F ROCK BAGS (SILT FENCE RELIEF)
- INLET PROTECTION TYPE A & C (UNLESS OTHERWISE NOTED)
- WETLAND BOUNDARY
- SLOPE INTERCEPT
- SURFACE WATER FLOW
- PERMITTED WETLAND IMPACT

N

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	EROSION CONTROL - STAGE 1	SHEET 103	E

FILE NAME : P:\44xx\4448\Plan\Erosion Control\022005_ec.dgn PLOT DATE : 7/30/2012 PLOT BY : walkup PLOT NAME : PLOT SCALE : 1:100

2

CASSIDY DR

MERRILL AVE

CTH K SB

CTH K NB

72KS

72KN

70KS

70KN

68KS

68KN

66KS

66KN

64KS

64KN

OVERLOOK DR

220V

222V

224V

226V

228V

230V

N 20TH AVE

C

F

N

LEGEND

- SILT FENCE
- EROSION MAT CLASS I TYPE B
- EROSION MAT CLASS II TYPE B
- EROSION MAT URBAN CLASS I TYPE A
- RIPRAP MEDIUM (UNLESS OTHERWISE NOTED)
- ROCK BAGS (DITCH CHECK)
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- ROCK BAGS (SILT FENCE RELIEF)
- INLET PROTECTION TYPE A & C (UNLESS OTHERWISE NOTED)
- WETLAND BOUNDARY
- SLOPE INTERCEPT
- SURFACE WATER FLOW
- PERMITTED WETLAND IMPACT

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	EROSION CONTROL - STAGE 1	SHEET 104	E

FILE NAME : P:\44xx\4448\Plan\Erosion Control\022006_ec.dgn PLOT DATE : 7/30/2012 PLOT BY : walkup PLOT NAME : PLOT SCALE : 1:100

2

2

LEGEND

- SILT FENCE
- EROSION MAT CLASS I TYPE B
- EROSION MAT CLASS II TYPE B
- EROSION MAT URBAN CLASS I TYPE A
- RIPRAP MEDIUM (UNLESS OTHERWISE NOTED)
- ROCK BAGS (DITCH CHECK)
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- ROCK BAGS (SILT FENCE RELIEF)
- INLET PROTECTION TYPE A & C (UNLESS OTHERWISE NOTED)
- WETLAND BOUNDARY
- SLOPE INTERCEPT
- SURFACE WATER FLOW
- PERMITTED WETLAND IMPACT

N

700SB 702SB 704SB 706SB USH 51 SB 708SB 710SB 712SB 714SB

700NB 702NB 704NB 706NB 708NB 710NB 712NB 714NB

USH 51 NB

PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	EROSION CONTROL - STAGE 2	SHEET 105	E

FILE NAME : P:\44xx\4448\Plan\Erosion Control\022007_ec.dgn PLOT DATE : 7/30/2012 PLOT BY : walkup PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2

2

LEGEND

- SILT FENCE
- EROSION MAT CLASS I TYPE B
- EROSION MAT CLASS II TYPE B
- EROSION MAT URBAN CLASS I TYPE A
- RIPRAP MEDIUM (UNLESS OTHERWISE NOTED)
- ROCK BAGS (DITCH CHECK)
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- ROCK BAGS (SILT FENCE RELIEF)
- INLET PROTECTION TYPE A & C (UNLESS OTHERWISE NOTED)
- WETLAND BOUNDARY
- SLOPE INTERCEPT
- SURFACE WATER FLOW
- PERMITTED WETLAND IMPACT

N

714SB 716SB 718SB 720SB USH 51 SB 722SB 724SB 726SB 728SB

714NB 716NB 718NB 720NB 722NB 724NB 726NB 728NB

USH 51 NB

PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	EROSION CONTROL - STAGE 2	SHEET 106	E

2

2

LEGEND

- SILT FENCE
- EROSION MAT CLASS I TYPE B
- EROSION MAT CLASS II TYPE B
- EROSION MAT URBAN CLASS I TYPE A
- RIPRAP MEDIUM (UNLESS OTHERWISE NOTED)
- ROCK BAGS (DITCH CHECK)
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- F — ROCK BAGS (SILT FENCE RELIEF)
- INLET PROTECTION TYPE A & C (UNLESS OTHERWISE NOTED)
- WETLAND BOUNDARY
- SLOPE INTERCEPT
- SURFACE WATER FLOW
- PERMITTED WETLAND IMPACT

N

730SB 732SB 734SB USH 51 SB 736SB 738SB 740SB 742SB F RAMP (TEMP) 744SB

730NB 732NB 734NB 736NB 738NB 740NB 742NB 744NB USH 51 NB

A & B

738F 740F 742F 744F F RAMP

ID 1170-01-70
ID 1170-01-73

344FT

738E 740E 742E 744E E RAMP (TEMP) E RAMP

N 16TH AVE

PROJECT NO: 1170-01-70/73	HWY: USH 51	COUNTY: MARATHON	EROSION CONTROL - STAGE 2	SHEET 107	E

FILE NAME : P:\44xx\4448\Plan\Erosion Control\022009_ec.dgn PLOT DATE : 7/30/2012 PLOT BY : walkup PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2

N 18TH AVE

ARLINGTON LN

ARTHUR AVE

CTH U

RIPRAP MEDIUM
DEPTH 18"
GEOTEXTILE FABRIC HR
STA 744+00 F - 748+00 F
INSTALL RIPRAP BETWEEN
CLEAR ZONE AND TOP
INTERCEPTING DITCH

ID 1170-01-70

F RAMP

F RAMP (TEMP)

744F

746F

748F

750F

344FT

346FT

348FT

744SB

746SB

748SB

750SB

USH 51 SB

752SB

754SB

756SB

758SB

744NB

746NB

748NB

750NB

USH 51 NB

752NB

754NB

756NB

758NB

ID 1170-01-73

ID 1170-01-70

A & B

744E

746E

748E

750E

E RAMP

348AT

350AT

352AT

354AT

356AT

358AT

352DT

354DT

356DT

358DT

D RAMP (TEMP)

A RAMP (TEMP)

HEAVY RIPRAP
(SEE STRUCTURE PLANS)

POND B

RIPRAP MEDIUM
DEPTH 18"
GEOTEXTILE FABRIC HR
SEEP POND B DETAIL

LEGEND

- SILT FENCE
- EROSION MAT CLASS I TYPE B
- EROSION MAT CLASS II TYPE B
- EROSION MAT URBAN CLASS I TYPE A
- RIPRAP MEDIUM (UNLESS OTHERWISE NOTED)
- ROCK BAGS (DITCH CHECK)
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- ROCK BAGS (SILT FENCE RELIEF)
- INLET PROTECTION TYPE A & C (UNLESS OTHERWISE NOTED)
- WETLAND BOUNDARY
- SLOPE INTERCEPT
- SURFACE WATER FLOW
- PERMITTED WETLAND IMPACT

N

PROJECT NO: 1170-01-70/73	HWY: USH 51	COUNTY: MARATHON	EROSION CONTROL - STAGE 2	SHEET 108 E

FILE NAME : P:\44xx\4448\Plan\Erosion Control\022010_ec.dgn PLOT DATE : 7/30/2012 PLOT BY : walkup PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2

2

LEGEND

- SILT FENCE
- EROSION MAT CLASS I TYPE B
- EROSION MAT CLASS II TYPE B
- EROSION MAT URBAN CLASS I TYPE A
- RIPRAP MEDIUM (UNLESS OTHERWISE NOTED)
- ROCK BAGS (DITCH CHECK)
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- [F] ROCK BAGS (SILT FENCE RELIEF)
- INLET PROTECTION TYPE A & C (UNLESS OTHERWISE NOTED)
- WETLAND BOUNDARY
- SLOPE INTERCEPT
- SURFACE WATER FLOW
- PERMITTED WETLAND IMPACT

N

CTH K SB

CTH K NB

C RAMP (EXISTING)

D RAMP (TEMP)

360DT 362DT 364DT 366DT 368DT

760SB USH 51 SB 762SB 764SB 766SB 768SB 770SB 772SB 774SB

BUS 51 SB

BUS 51 NB

760NB USH 51 NB 762NB 764NB 766NB 768NB 770NB 772NB 774NB USH 51 NB

360NR 362NR 364NR 366NR 368NR 370NR 372NR 374NR

A RAMP (TEMP)

NB RUNAROUND

B RAMP (EXISTING)

SS

PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	EROSION CONTROL - STAGE 2	SHEET 109	E

FILE NAME : P:\44xx\4448\Plan\Erosion Control\022011_ec.dgn PLOT DATE : 7/30/2012 PLOT BY : walkup PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2

C RAMP (EXISTING)

BOS CREEK

A & B

A & B

ID 1170-01-70
ID 1170-01-73

774SB 776SB 778SB 780SB USH 51 SB 782SB 784SB 786SB 788SB

A & B

774NB 776NB 778NB 780NB 782NB 384NR 784NB 386NR 786NB 388NR 788NB

380NR USH 51 NB

ID 1170-01-73
ID 1170-01-70

A & B

376NR 378NR

374NR NB RUNAROUND

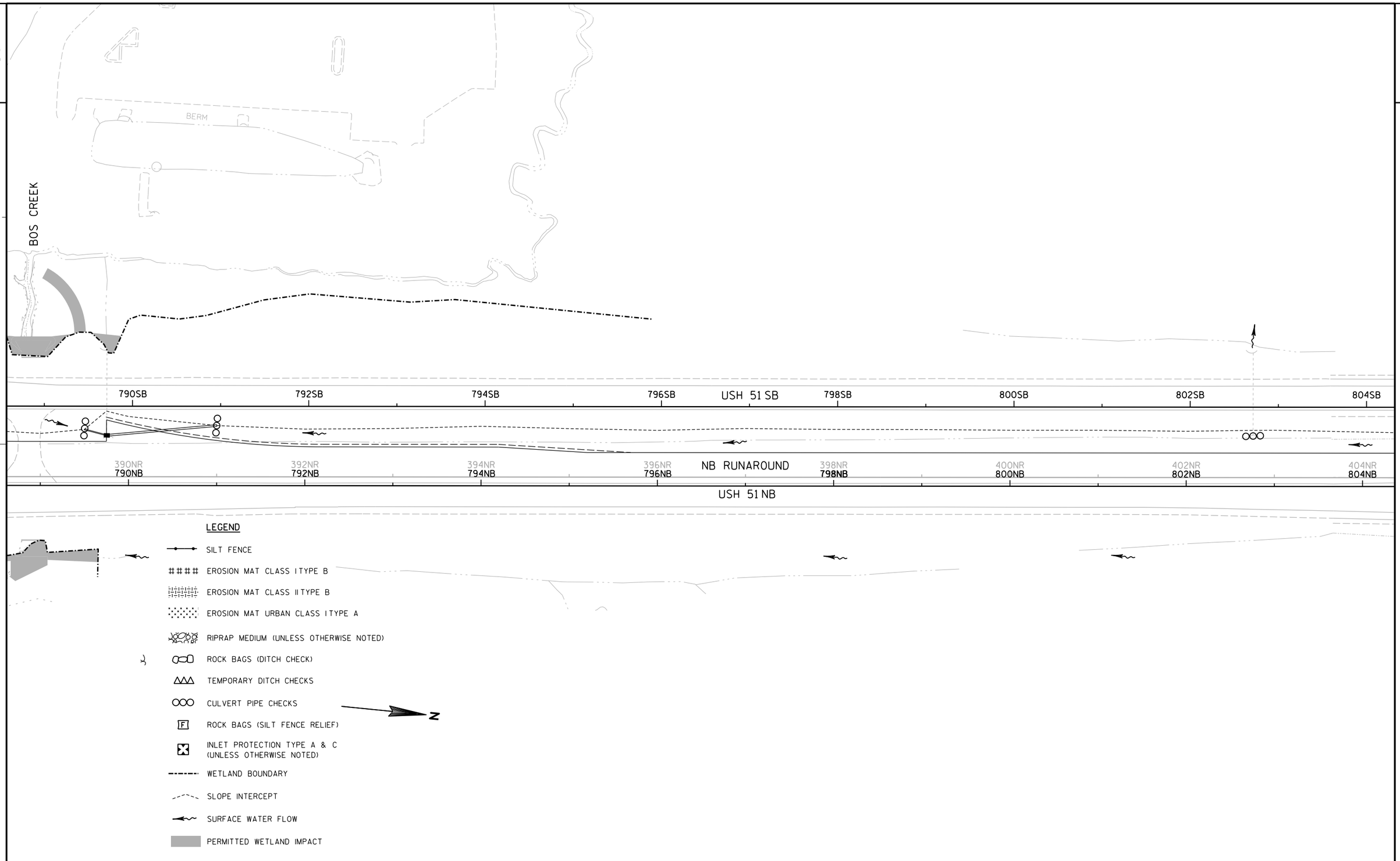
N

LEGEND

- SILT FENCE
- #### EROSION MAT CLASS I TYPE B
- EROSION MAT CLASS II TYPE B
- EROSION MAT URBAN CLASS I TYPE A
- RIPRAP MEDIUM (UNLESS OTHERWISE NOTED)
- ROCK BAGS (DITCH CHECK)
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- F ROCK BAGS (SILT FENCE RELIEF)
- INLET PROTECTION TYPE A & C (UNLESS OTHERWISE NOTED)
- WETLAND BOUNDARY
- SLOPE INTERCEPT
- SURFACE WATER FLOW
- PERMITTED WETLAND IMPACT

PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	EROSION CONTROL - STAGE 2	SHEET 110	E

2



PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	EROSION CONTROL - STAGE 2	SHEET 111	E

2

2

LEGEND

- SILT FENCE
- EROSION MAT CLASS I TYPE B
- EROSION MAT CLASS II TYPE B
- EROSION MAT URBAN CLASS I TYPE A
- RIPRAP MEDIUM (UNLESS OTHERWISE NOTED)
- ROCK BAGS (DITCH CHECK)
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- ROCK BAGS (SILT FENCE RELIEF)
- INLET PROTECTION TYPE A & C (UNLESS OTHERWISE NOTED)
- WETLAND BOUNDARY
- SLOPE INTERCEPT
- SURFACE WATER FLOW
- PERMITTED WETLAND IMPACT

N

804SB 806SB 808SB 810SB USH 51 SB 812SB 814SB 816SB 818SB

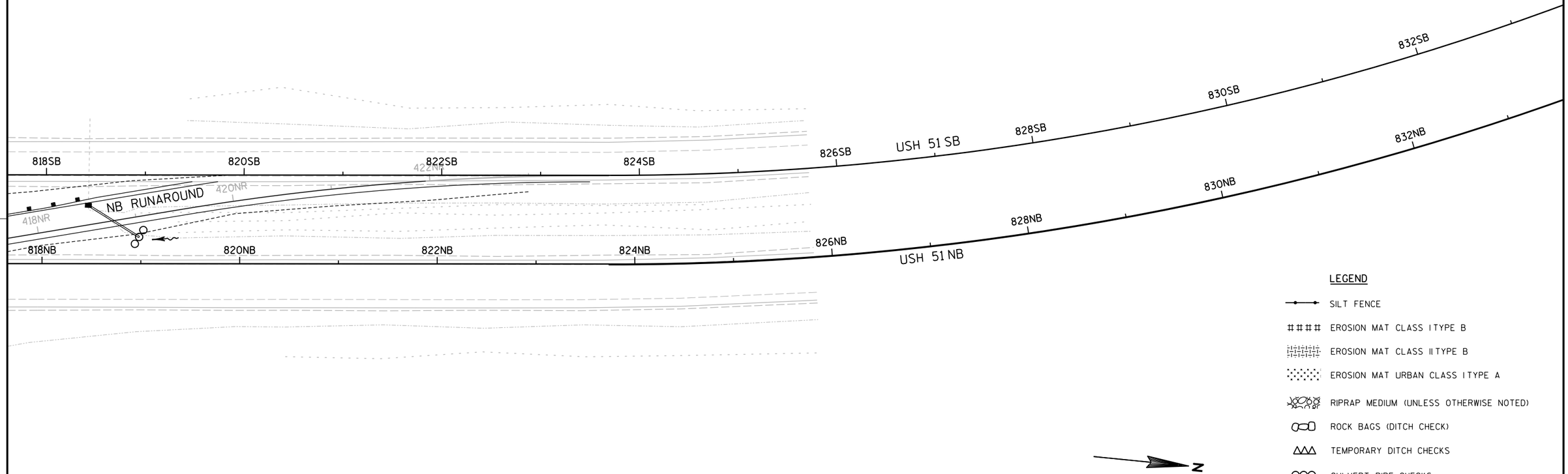
404NR 804NB 406NR 806NB 808NB 410NR 810NB USH 51 NB 412NR 812NB 414NR 814NB 816NB NB RUNAROUND 418NR 818NB

PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	EROSION CONTROL - STAGE 2	SHEET 112	E

FILE NAME : P:\44xx\4448\Plan\Erosion Control\022014_ec.dgn PLOT DATE : 7/30/2012 PLOT BY : walkup PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2



LEGEND

- SILT FENCE
- #### EROSION MAT CLASS I TYPE B
- EROSION MAT CLASS II TYPE B
- EROSION MAT URBAN CLASS I TYPE A
- RIPRAP MEDIUM (UNLESS OTHERWISE NOTED)
- ROCK BAGS (DITCH CHECK)
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- F ROCK BAGS (SILT FENCE RELIEF)
- INLET PROTECTION TYPE A & C (UNLESS OTHERWISE NOTED)
- WETLAND BOUNDARY
- SLOPE INTERCEPT
- SURFACE WATER FLOW
- PERMITTED WETLAND IMPACT

PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	EROSION CONTROL - STAGE 2	SHEET 113	E

FILE NAME : P:\44xx\4448\Plan\Erosion Control\022015_ec.dgn PLOT DATE : 7/30/2012 PLOT BY : walkup PLOT NAME : PLOT SCALE : 1:100

2

LEGEND

- SILT FENCE
- EROSION MAT CLASS I TYPE B
- EROSION MAT CLASS II TYPE B
- EROSION MAT URBAN CLASS I TYPE A
- RIPRAP MEDIUM (UNLESS OTHERWISE NOTED)
- ROCK BAGS (DITCH CHECK)
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- F — ROCK BAGS (SILT FENCE RELIEF)
- INLET PROTECTION TYPE A & C (UNLESS OTHERWISE NOTED)
- WETLAND BOUNDARY
- SLOPE INTERCEPT
- SURFACE WATER FLOW
- PERMITTED WETLAND IMPACT

N

SLUDGE POND

OVERLOOK DR

20U

20U V

ID 1170-01-70
ID 6999-18-70

F

CTH U

18U

22U

24U

26U

28U

30U

WESTWOOD DR

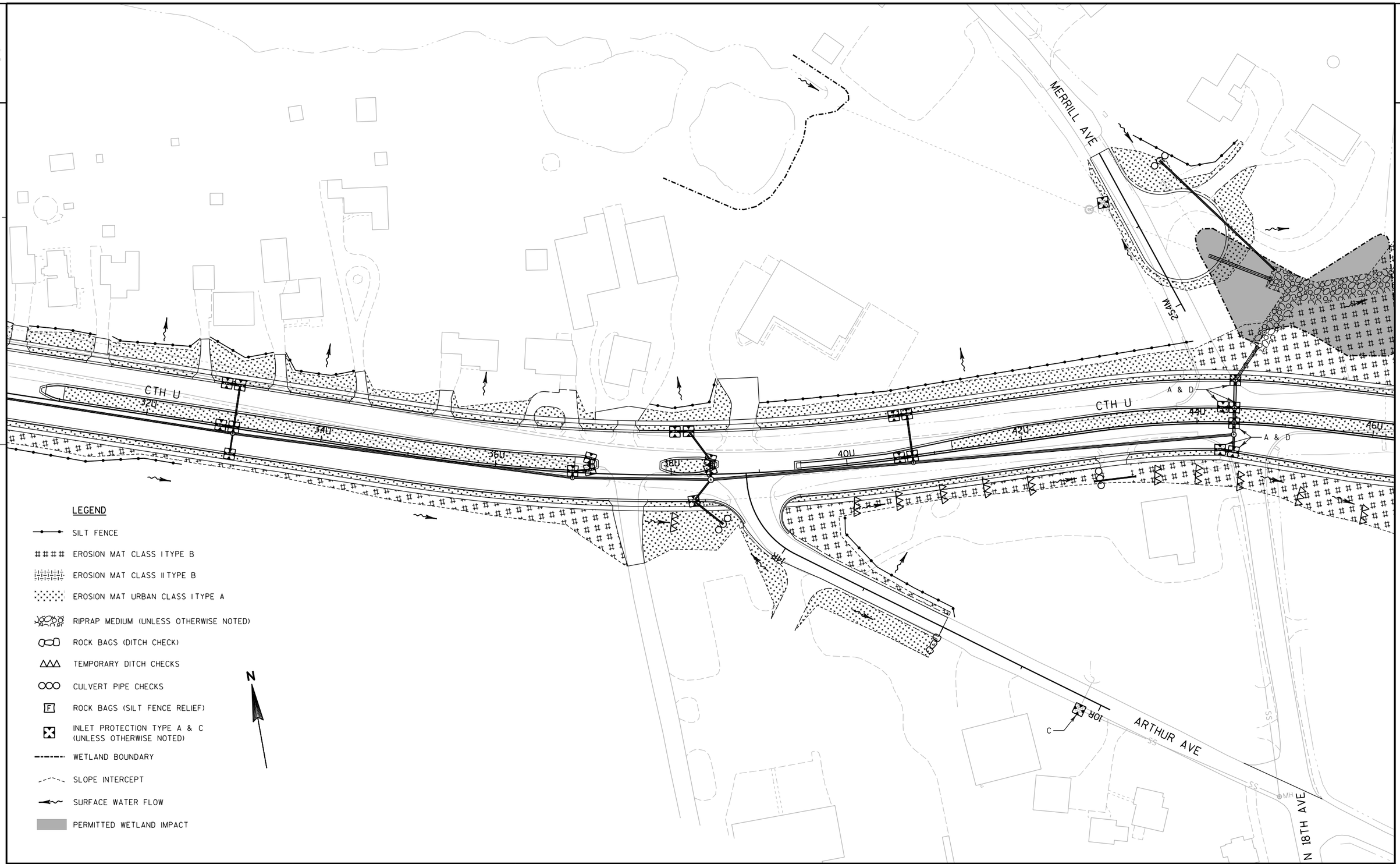
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PROJECT NO:6999-18-70	HWY:USH 51	COUNTY:MARATHON	EROSION CONTROL - STAGE 2	SHEET 114	E

FILE NAME : P:\44xx\4448\Plan\Erosion Control\022016_ec.dgn PLOT DATE : 7/30/2012 PLOT BY : walkup PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

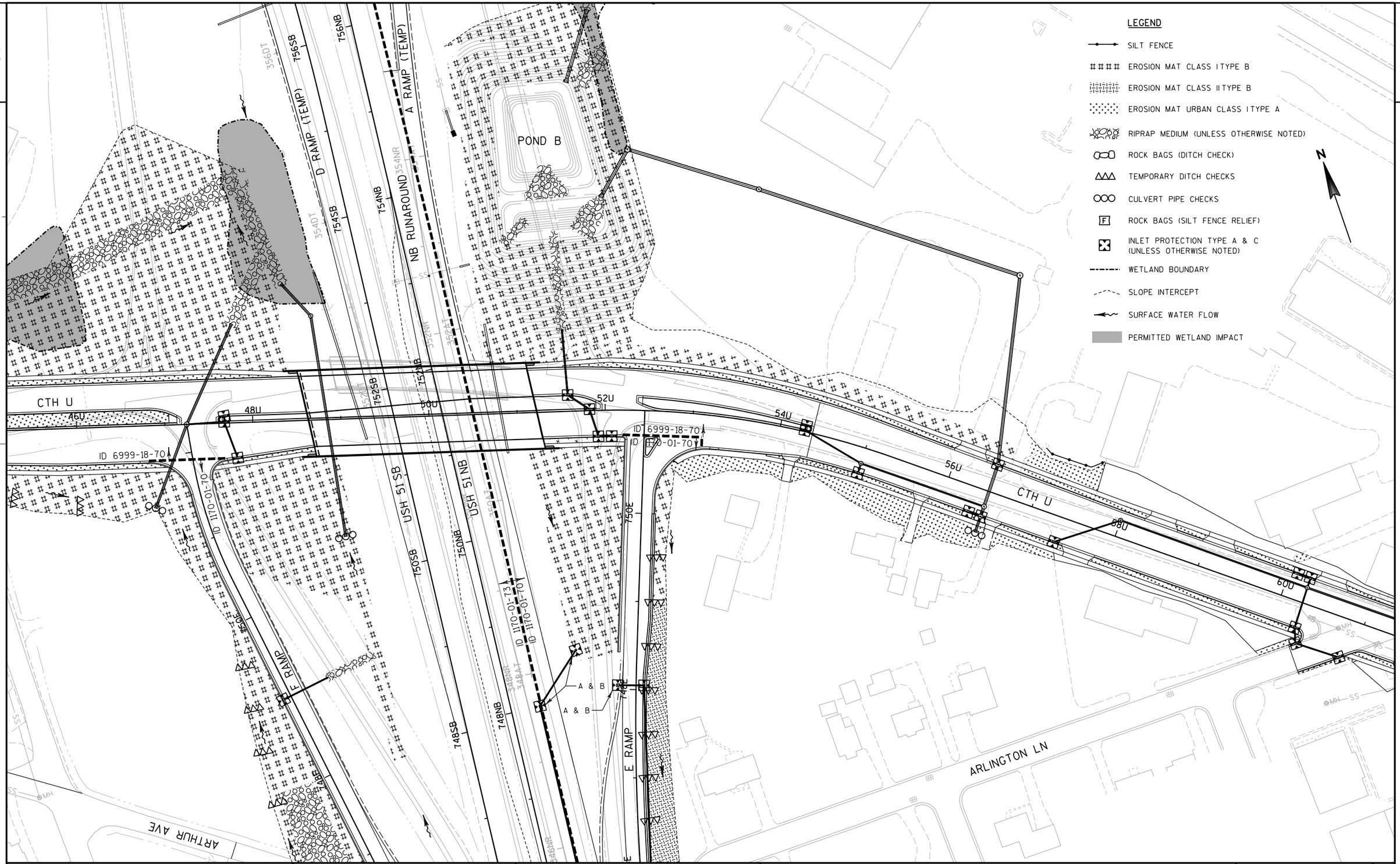
2



PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	EROSION CONTROL - STAGE 2	SHEET 115 E

FILE NAME : P:\44xx\4448\Plan\Erosion Control\022017_ec.dgn PLOT DATE : 7/30/2012 PLOT BY : walkup PLOT NAME : PLOT SCALE : 1:100

2



PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	EROSION CONTROL - STAGE 2	SHEET 116	E

FILE NAME : P:\44xx\4448\Plan\Erosion Control\022018_ec.dgn PLOT DATE : 7/30/2012 PLOT BY : walkup PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2

2

LEGEND

- SILT FENCE
- EROSION MAT CLASS I TYPE B
- EROSION MAT CLASS II TYPE B
- EROSION MAT URBAN CLASS I TYPE A
- RIPRAP MEDIUM (UNLESS OTHERWISE NOTED)
- ROCK BAGS (DITCH CHECK)
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- ROCK BAGS (SILT FENCE RELIEF)
- INLET PROTECTION TYPE A & C (UNLESS OTHERWISE NOTED)
- WETLAND BOUNDARY
- SLOPE INTERCEPT
- SURFACE WATER FLOW
- PERMITTED WETLAND IMPACT

N

BUS 51 NB

BUS 51 SB

20K

18K

16K

14K

12K

NTC TRAIL

COLLEGE DR

N 13TH AVE

N 12TH AVE

CTH U

62U

64U

66U

68U

70U

72U

ID 6999-18-70

ID 1170-01-70

A & B

A & D

A & D

SS

MH

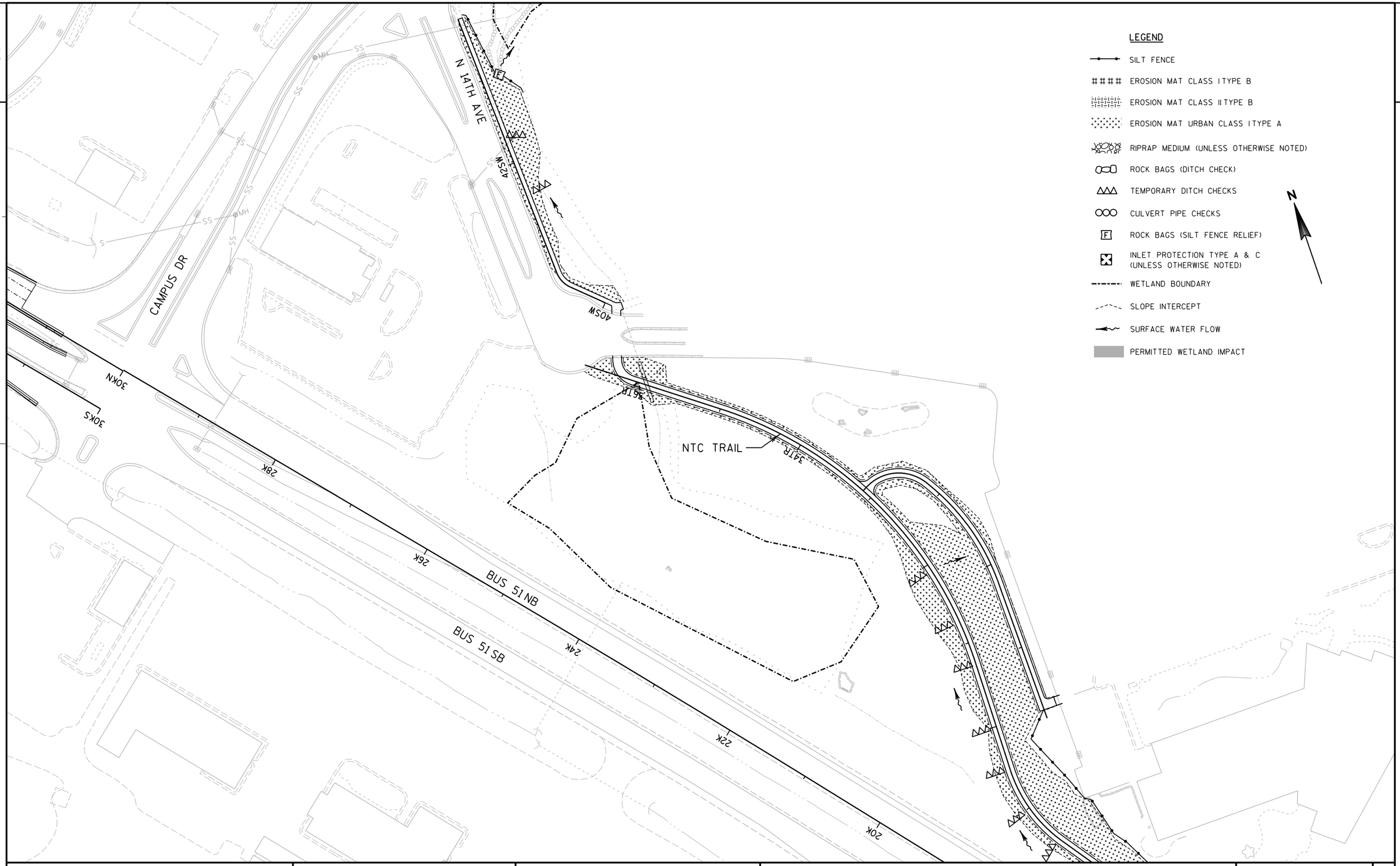
U/C

PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	EROSION CONTROL - STAGE 2	SHEET 117	E

FILE NAME : P:\44xx\4448\Plan\Erosion Control\022019_ec.dgn PLOT DATE : 8/31/2012 PLOT BY : walkup PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2



LEGEND

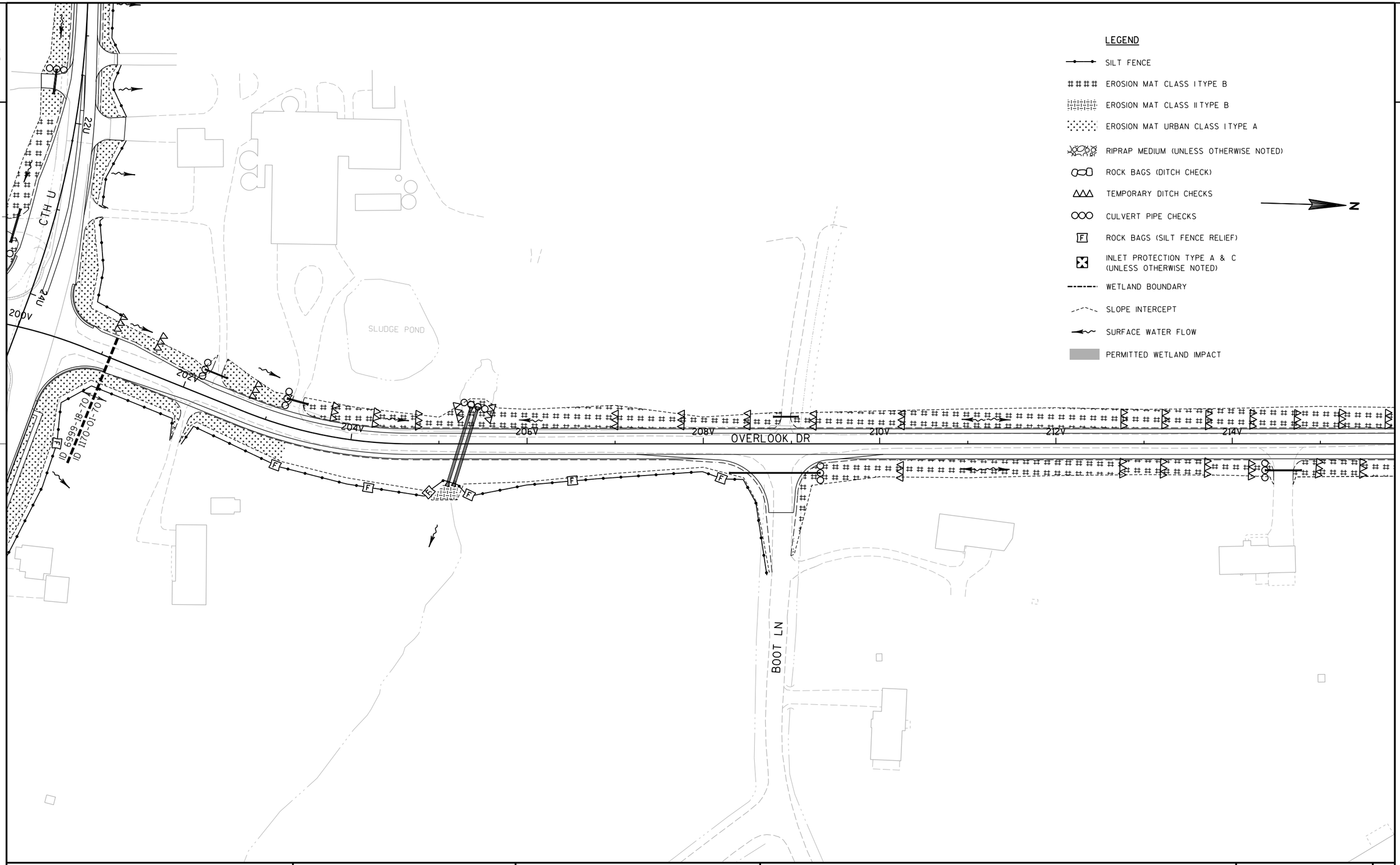
- SILT FENCE
- EROSION MAT CLASS I TYPE B
- EROSION MAT CLASS II TYPE B
- EROSION MAT URBAN CLASS I TYPE A
- RIPRAP MEDIUM (UNLESS OTHERWISE NOTED)
- ROCK BAGS (DITCH CHECK)
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- ROCK BAGS (SILT FENCE RELIEF)
- INLET PROTECTION TYPE A & C (UNLESS OTHERWISE NOTED)
- WETLAND BOUNDARY
- SLOPE INTERCEPT
- SURFACE WATER FLOW
- PERMITTED WETLAND IMPACT

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	EROSION CONTROL - STAGE 2	SHEET 118	E

FILE NAME : P:\44xx\4448\Plan\Erosion Control\022020_ec.dgn PLOT DATE : 7/30/2012 PLOT BY : walkup PLOT NAME : PLOT SCALE : 1:100

2

2



PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	EROSION CONTROL - STAGE 2	SHEET 119	E

2

LEGEND

- SILT FENCE
- EROSION MAT CLASS I TYPE B
- EROSION MAT CLASS II TYPE B
- EROSION MAT URBAN CLASS I TYPE A
- RIPRAP MEDIUM (UNLESS OTHERWISE NOTED)
- ROCK BAGS (DITCH CHECK)
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- ROCK BAGS (SILT FENCE RELIEF)
- INLET PROTECTION TYPE A & C (UNLESS OTHERWISE NOTED)
- WETLAND BOUNDARY
- SLOPE INTERCEPT
- SURFACE WATER FLOW
- PERMITTED WETLAND IMPACT

N

MERRILL AVE

CASSIDY DR

OVERLOOK, DR

224V

226V

228V

230V

222V

220V

218V

216V

72KS

70KS

68KS

66KS

64KS

CTH K SB

MERRILL AVE

2

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	EROSION CONTROL - STAGE 2	SHEET 120	E

FILE NAME : P:\44xx\4448\Plan\Erosion Control\022022_ec.dgn PLOT DATE : 7/30/2012 PLOT BY : walkup PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2

N 18TH AVE

ARLINGTON LN

ARTHUR AVE

CTH U

460

480

520

540

752F

750F

748F

746F

744F

F RAMP

F RAMP (TEMP)

344FT

744SB

746SB

748SB

750SB

752SB

USH 51 SB

744NB

746NB

748NB

750NB

752NB

USH 51 NB

ID 1170-01-73

ID 1170-01-70

744E

746E

748E

750E

E RAMP

N 16TH AVE

344NR

346NR

348NR

350NR

352NR

354NR

356NR

354DT

356DT

358DT

754SB

756SB

758SB

754NB

756NB

758NB

D RAMP

ID 1170-01-70

ID 1170-01-73

NB RUNAROUND

358NR

POND B

LEGEND

- SILT FENCE
- EROSION MAT CLASS I TYPE B
- EROSION MAT CLASS II TYPE B
- EROSION MAT URBAN CLASS I TYPE A
- RIPRAP MEDIUM (UNLESS OTHERWISE NOTED)
- ROCK BAGS (DITCH CHECK)
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- ROCK BAGS (SILT FENCE RELIEF)
- INLET PROTECTION TYPE A & C (UNLESS OTHERWISE NOTED)
- WETLAND BOUNDARY
- SLOPE INTERCEPT
- SURFACE WATER FLOW
- PERMITTED WETLAND IMPACT

N

PROJECT NO: 1170-01-70/73	HWY: USH 51	COUNTY: MARATHON	EROSION CONTROL - STAGE 3	SHEET 121	E

FILE NAME : P:\44xx\4448\Plan\Erosion Control\022023_ec.DGN PLOT DATE : 7/30/2012 PLOT BY : walkup PLOT NAME : PLOT SCALE : 1:100

2

2

LEGEND

- SILT FENCE
- EROSION MAT CLASS I TYPE B
- EROSION MAT CLASS II TYPE B
- EROSION MAT URBAN CLASS I TYPE A
- RIPRAP MEDIUM (UNLESS OTHERWISE NOTED)
- ROCK BAGS (DITCH CHECK)
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- ROCK BAGS (SILT FENCE RELIEF)
- INLET PROTECTION TYPE A & C (UNLESS OTHERWISE NOTED)
- WETLAND BOUNDARY
- SLOPE INTERCEPT
- SURFACE WATER FLOW
- PERMITTED WETLAND IMPACT

N

CTH K SB

CTH K NB

32KS
52KN

200KW

202KW

372CT

C RAMP (TEMP)

374CT

368DT

366DT

364DT

362DT

360DT

D RAMP (TEMP)

48KS
48KN

46KS
46KN

760SB USH 51 SB 762SB 764SB 766SB 768SB 770SB 772SB 774SB

BUS 51 SB 44KS
44KN
BUS 51 NB

760NB 762NB 764NB 766NB 768NB 770NB 772NB 774NB

USH 51 NB

42KS
42KN

NB RUNAROUND 360NR

362NR

364NR

NB RUNAROUND 366NR

368NR

370NR

372NR

374NR

A & B

366BT

364BT

B RAMP (TEMP)

100KE

102KE

38KS
38KN

PROJECT NO: 1170-01-70/73	HWY: USH 51	COUNTY: MARATHON	EROSION CONTROL - STAGE 3	SHEET 122	E

FILE NAME : P:\44xx\4448\Plan\Erosion Control\022024_ec.DGN PLOT DATE : 7/30/2012 PLOT BY : walkup PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2

2

LEGEND

- SILT FENCE
- EROSION MAT CLASS I TYPE B
- EROSION MAT CLASS II TYPE B
- EROSION MAT URBAN CLASS I TYPE A
- RIPRAP MEDIUM (UNLESS OTHERWISE NOTED)
- ROCK BAGS (DITCH CHECK)
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- ROCK BAGS (SILT FENCE RELIEF)
- INLET PROTECTION TYPE A & C (UNLESS OTHERWISE NOTED)
- WETLAND BOUNDARY
- SLOPE INTERCEPT
- SURFACE WATER FLOW
- PERMITTED WETLAND IMPACT

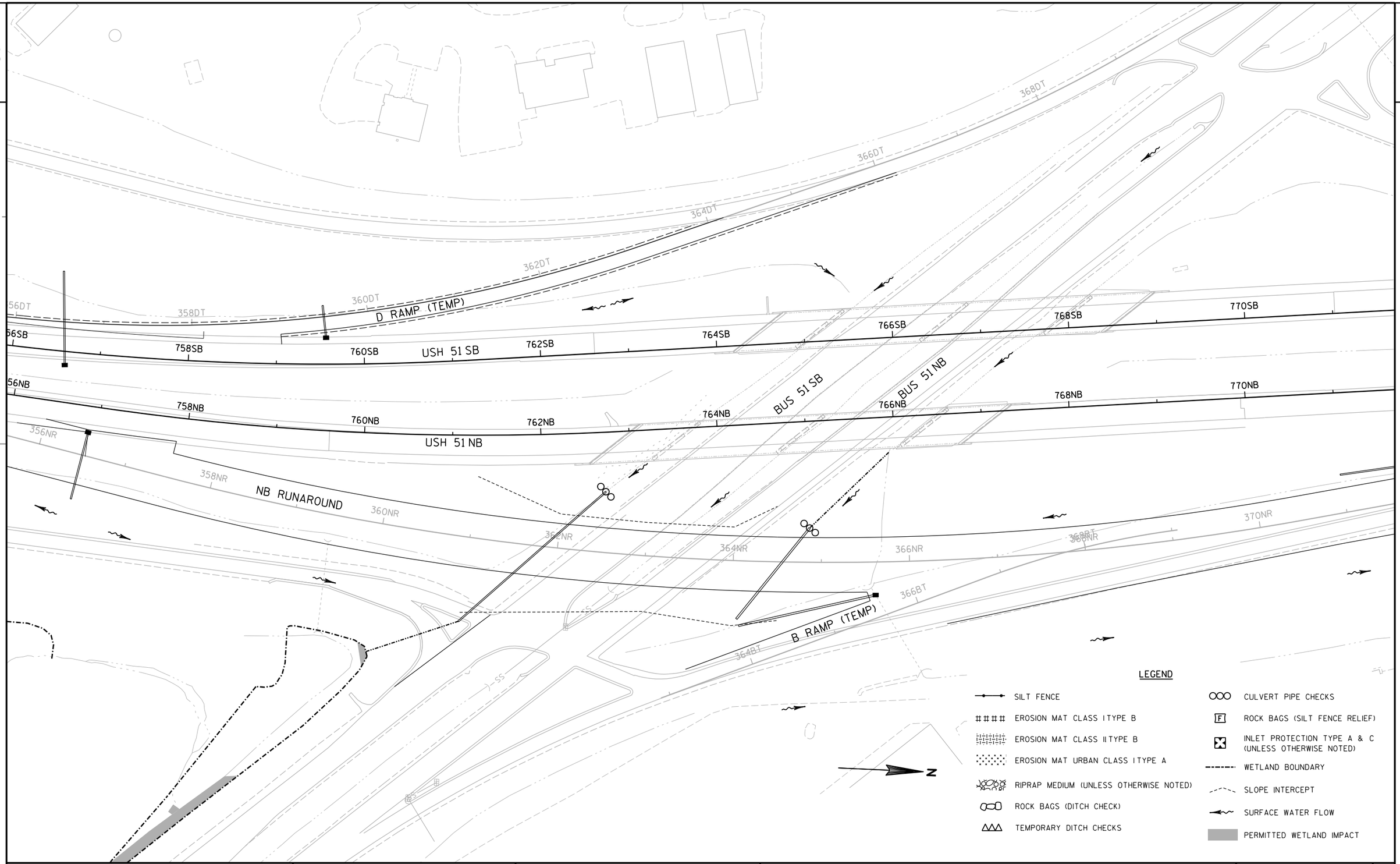
N

374CT
376CT
378CT
380CT
382CT
384CT
386CT
388CT
C RAMP (TEMP)
A & B
BOS CREEK
ID 1170-01-70A
ID 1170-01-73Y
774SB
776SB
778SB
USH 51 SB
780SB
782SB
784SB
786SB
788SB
774NB
776NB
778NB
780NB
782NB
384NR
784NB
386NR
786NB
388NR
788NB
USH 51 NB
380NR
ID 1170-01-73A
378NR
ID 1170-01-70Y
376NR
374NR
NB RUNAROUND
F

PROJECT NO: 1170-01-70/73	HWY: USH 51	COUNTY: MARATHON	EROSION CONTROL - STAGE 3	SHEET 123	E

FILE NAME : P:\44xx\4448\Plan\Erosion Control\022025_ec.DGN PLOT DATE : 7/30/2012 PLOT BY : walkup PLOT NAME : PLOT SCALE : 1:100

2



PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	EROSION CONTROL - STAGE 4	SHEET 124	E

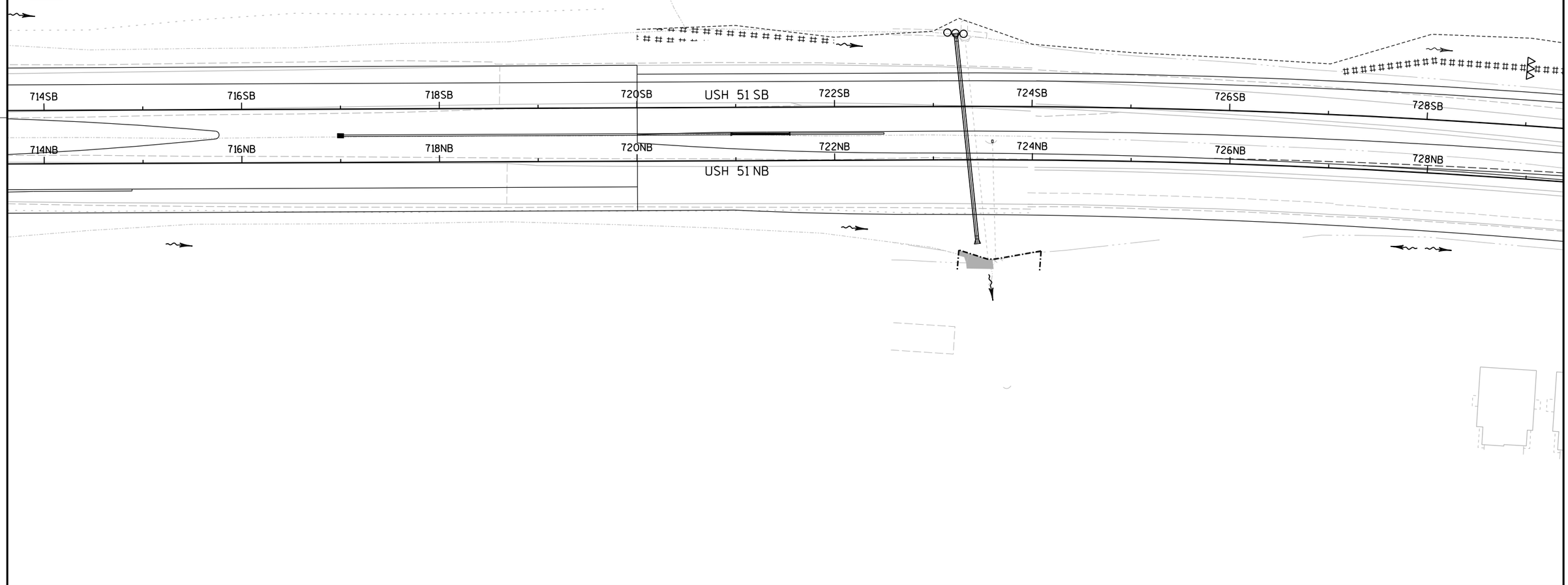
2

2

LEGEND

- SILT FENCE
- EROSION MAT CLASS I TYPE B
- EROSION MAT CLASS II TYPE B
- EROSION MAT URBAN CLASS I TYPE A
- RIPRAP MEDIUM (UNLESS OTHERWISE NOTED)
- ROCK BAGS (DITCH CHECK)
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- F ROCK BAGS (SILT FENCE RELIEF)
- INLET PROTECTION TYPE A & C (UNLESS OTHERWISE NOTED)
- WETLAND BOUNDARY
- SLOPE INTERCEPT
- SURFACE WATER FLOW
- PERMITTED WETLAND IMPACT

N



PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	EROSION CONTROL - STAGE 5	SHEET 125	E

2

2

LEGEND

- SILT FENCE
- EROSION MAT CLASS I TYPE B
- EROSION MAT CLASS II TYPE B
- EROSION MAT URBAN CLASS I TYPE A
- RIPRAP MEDIUM (UNLESS OTHERWISE NOTED)
- ROCK BAGS (DITCH CHECK)
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- ROCK BAGS (SILT FENCE RELIEF)
- INLET PROTECTION TYPE A & C (UNLESS OTHERWISE NOTED)
- WETLAND BOUNDARY
- SLOPE INTERCEPT
- SURFACE WATER FLOW
- PERMITTED WETLAND IMPACT

N

730SB 732SB 734SB USH 51 SB 736SB 738SB 740SB 742SB F RAMP ID 1170-01-70 ID 1170-01-73 744SB

730NB 732NB 734NB USH 51 NB 736NB 738NB 740NB 742NB 744NB

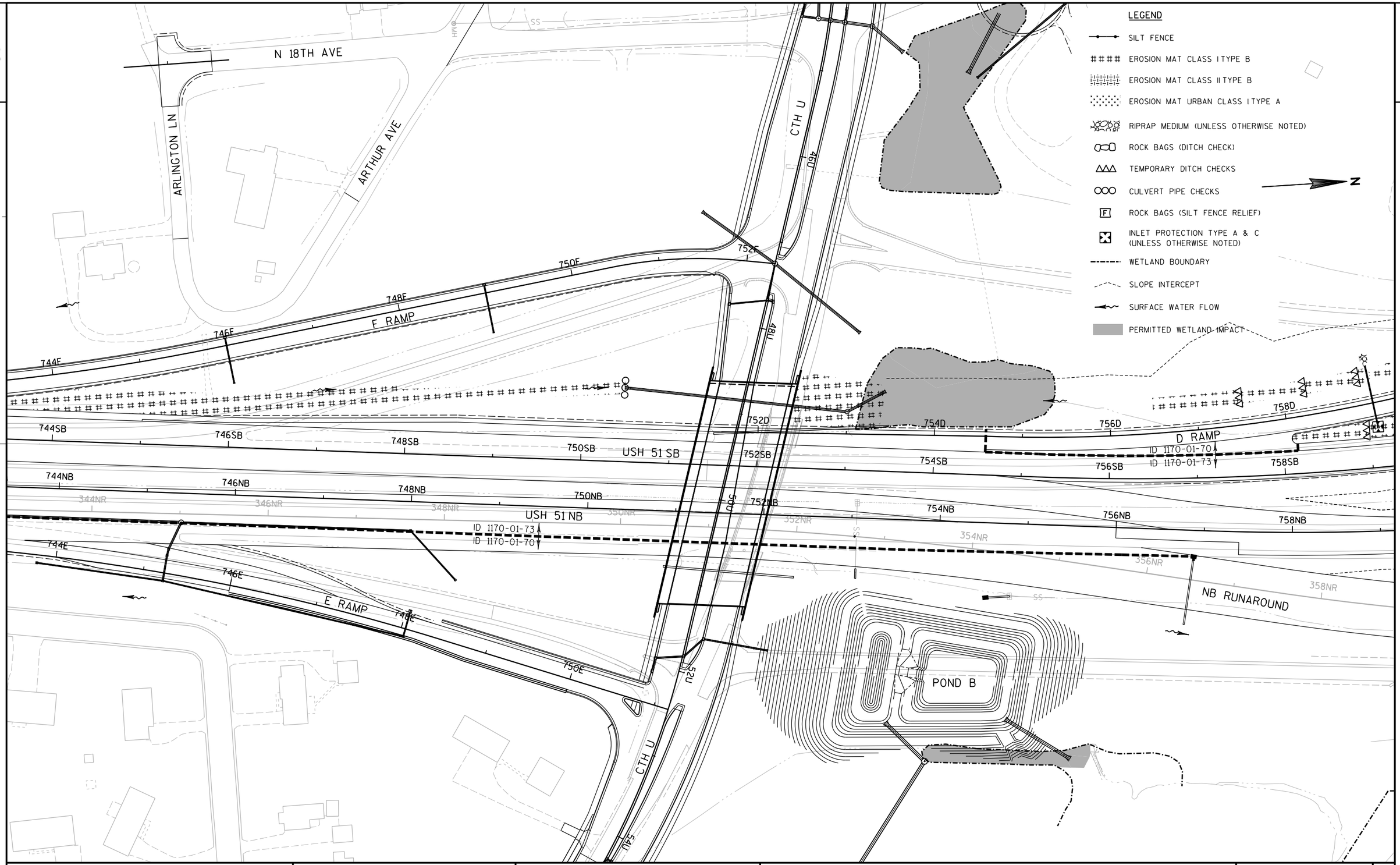
738F 740F 742F 744F

738E 740E 742E E RAMP (TEMP) E RAMP 744E

PROJECT NO: 1170-01-70/73	HWY: USH 51	COUNTY: MARATHON	EROSION CONTROL - STAGE 5	SHEET 126	E

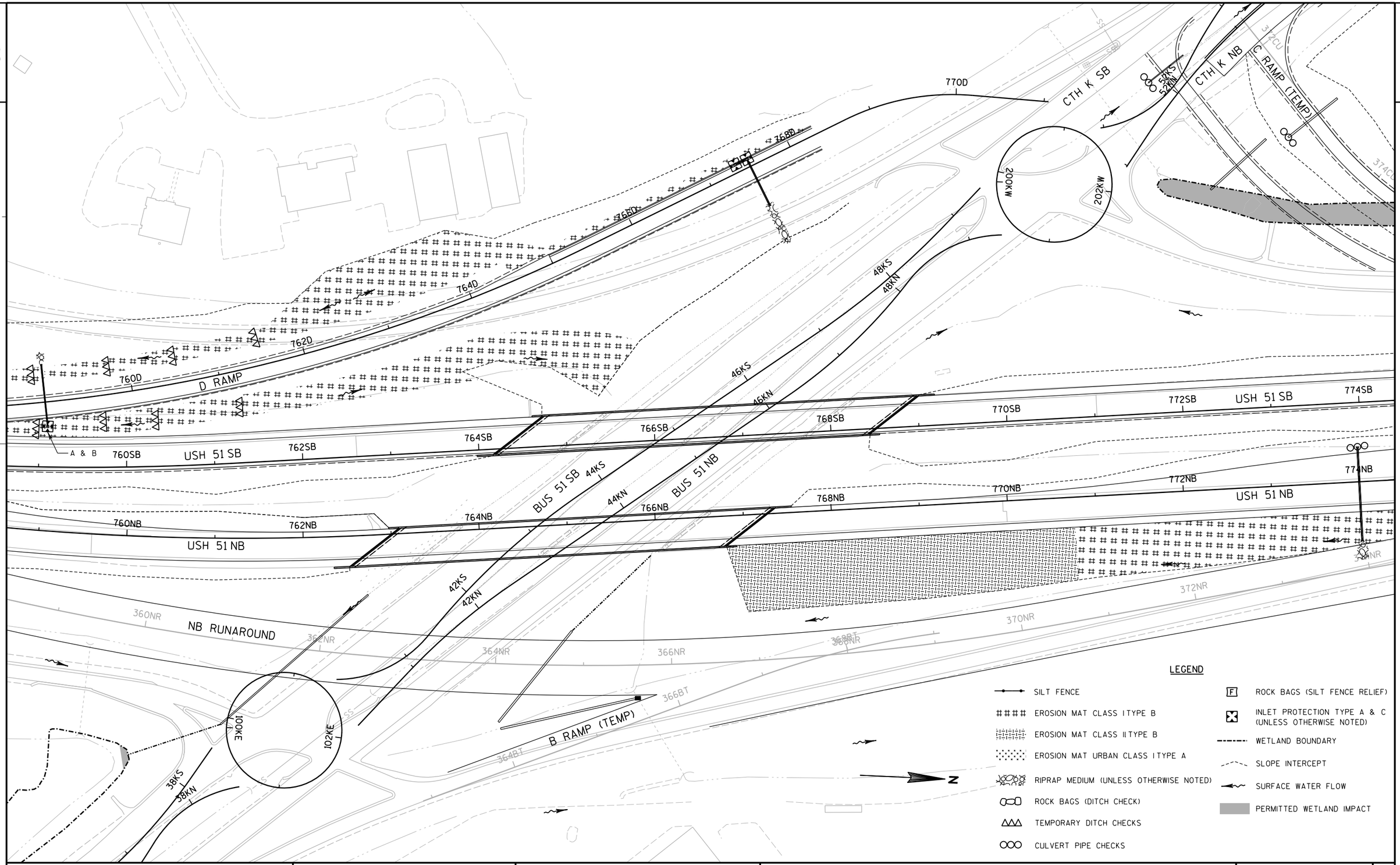
FILE NAME : P:\44xx\4448\Plan\Erosion Control\022029_ec.dgn PLOT DATE : 7/30/2012 PLOT BY : walkup PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42



PROJECT NO: 1170-01-70/73	HWY: USH 51	COUNTY: MARATHON	EROSION CONTROL - STAGE 5	SHEET 127 E

2



PROJECT NO: 1170-01-70/73	HWY: USH 51	COUNTY: MARATHON	EROSION CONTROL - STAGE 5	SHEET 128	E

2

2

TEMPORARY TURTLE TURN - AROUND

C RAMP (TEMP)

374CU

376CU

774C

776C

778C

780C

C RAMP

782C

784C

786C

788C

A & B

A & B

RIPRAP HEAVY
(SEE STRUCTURE PLANS)

BOS CREEK

ID 1170-01-70
ID 1170-01-73

774SB 776SB 778SB 780SB 782SB USH 51 SB 784SB 786SB 788SB

774NB 776NB 778NB 780NB 782NB 784NB 786NB 788NB

USH 51 NB

ID 1170-01-73
ID 1170-01-70

380NR

378NR

376NR

374NR

384NR

386NR

388NR

NB RUNAROUND

RIPRAP HEAVY
(SEE STRUCTURE PLANS)

N

LEGEND

- SILT FENCE
- EROSION MAT CLASS I TYPE B
- EROSION MAT CLASS II TYPE B
- EROSION MAT URBAN CLASS I TYPE A
- RIPRAP MEDIUM (UNLESS OTHERWISE NOTED)
- ROCK BAGS (DITCH CHECK)
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- ROCK BAGS (SILT FENCE RELIEF)
- INLET PROTECTION TYPE A & C (UNLESS OTHERWISE NOTED)
- WETLAND BOUNDARY
- SLOPE INTERCEPT
- SURFACE WATER FLOW
- PERMITTED WETLAND IMPACT

PROJECT NO: 1170-01-70/73	HWY: USH 51	COUNTY: MARATHON	EROSION CONTROL - STAGE 5	SHEET 129	E

FILE NAME : P:\44xx\4448\Plan\Erosion Control\022032_ec.dgn PLOT DATE : 7/30/2012 PLOT BY : walkup PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2

2

BERM

RIPRAP HEAVY
(SEE STRUCTURE PLAN)

BOS CREEK

F

N

A & B

790SB 792SB 794SB 796SB USH 51 SB 798SB 800SB 802SB 804SB

390CU

C RAMP (TEMP)

392CU

390NR 790NB 392NR 792NB 394NR 794NB 396NR 796NB 398NR 798NB 400NR 800NB 402NR 802NB 404NR 804NB

USH 51 NB

RIPRAP HEAVY
(SEE STRUCTURE PLAN)

LEGEND

- SILT FENCE
- EROSION MAT CLASS I TYPE B
- EROSION MAT CLASS II TYPE B
- EROSION MAT URBAN CLASS I TYPE A
- RIPRAP MEDIUM (UNLESS OTHERWISE NOTED)
- ROCK BAGS (DITCH CHECK)
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- ROCK BAGS (SILT FENCE RELIEF)
- INLET PROTECTION TYPE A & C (UNLESS OTHERWISE NOTED)
- WETLAND BOUNDARY
- SLOPE INTERCEPT
- SURFACE WATER FLOW
- PERMITTED WETLAND IMPACT

PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	EROSION CONTROL - STAGE 5	SHEET 130	E

FILE NAME : P:\44xx\4448\Plan\Erosion Control\022033_ec.dgn PLOT DATE : 7/30/2012 PLOT BY : walkup PLOT NAME : PLOT SCALE : 1:100

2

2

LEGEND

- SILT FENCE
- #### EROSION MAT CLASS I TYPE B
- EROSION MAT CLASS II TYPE B
- EROSION MAT URBAN CLASS I TYPE A
- RIPRAP MEDIUM (UNLESS OTHERWISE NOTED)
- ROCK BAGS (DITCH CHECK)
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- F ROCK BAGS (SILT FENCE RELIEF)
- INLET PROTECTION TYPE A & C (UNLESS OTHERWISE NOTED)
- WETLAND BOUNDARY
- SLOPE INTERCEPT
- SURFACE WATER FLOW
- PERMITTED WETLAND IMPACT

N

TEMPORARY TURTLE TURN - AROUND

804SB 806SB 808SB 810SB USH 51 SB 812SB 814SB 816SB 818SB

404NR 804NB 406NB 806NB 808NB 410NR 810NB USH 51 NB 412NR 812NB 414NR 814NB 816NB NB RUNAROUND 418NR 818NB

PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	EROSION CONTROL - STAGE 5	SHEET 131	E

FILE NAME : P:\44xx\4448\Plan\Erosion Control\022034_ec.dgn PLOT DATE : 7/30/2012 PLOT BY : walkup PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2

2

LEGEND

- SILT FENCE
- EROSION MAT CLASS I TYPE B
- EROSION MAT CLASS II TYPE B
- EROSION MAT URBAN CLASS I TYPE A
- RIPRAP MEDIUM (UNLESS OTHERWISE NOTED)
- ROCK BAGS (DITCH CHECK)
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- ROCK BAGS (SILT FENCE RELIEF)
- INLET PROTECTION TYPE A & C (UNLESS OTHERWISE NOTED)
- WETLAND BOUNDARY
- SLOPE INTERCEPT
- SURFACE WATER FLOW
- PERMITTED WETLAND IMPACT

N

54KS
56KS
CTH K SB
58KS
60KS
62KS
64KS
66KS
A & B
52KS
52KN
54KN
56KN
58KN
60KN
62KN
64KN
66KN
372CU
374CU
376CU
C RAMP (TEMP)
USH 51 SB

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	EROSION CONTROL - STAGE 5	SHEET 132	E

FILE NAME : P:\44xx\4448\Plan\Erosion Control\022035_ec.dgn PLOT DATE : 7/30/2012 PLOT BY : walkup PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2

2

LEGEND

- SILT FENCE
- EROSION MAT CLASS I TYPE B
- EROSION MAT CLASS II TYPE B
- EROSION MAT URBAN CLASS I TYPE A
- RIPRAP MEDIUM (UNLESS OTHERWISE NOTED)
- ROCK BAGS (DITCH CHECK)
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- ROCK BAGS (SILT FENCE RELIEF)
- INLET PROTECTION TYPE A & C (UNLESS OTHERWISE NOTED)
- WETLAND BOUNDARY
- SLOPE INTERCEPT
- SURFACE WATER FLOW
- PERMITTED WETLAND IMPACT

OVERLOOK DR

CASSIDY DR

N9

230V

CTH K SB

CTH K NB

60KS 62KS 64KS 66KS 68KS 70KS 72KS 74KS

60KN 62KN 64KN 66KN 68KN 72KN 74KN

A & B

F

N 20TH AVE

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	EROSION CONTROL - STAGE 5	SHEET 133	E

FILE NAME : P:\44xx\4448\Plan\Erosion Control\022035A_ec.dgn PLOT DATE : 7/30/2012 PLOT BY : walkup PLOT NAME : PLOT SCALE : 1:100

2

2

LEGEND

- SILT FENCE
- EROSION MAT CLASS I TYPE B
- EROSION MAT CLASS II TYPE B
- EROSION MAT URBAN CLASS I TYPE A
- RIPRAP MEDIUM (UNLESS OTHERWISE NOTED)
- ROCK BAGS (DITCH CHECK)
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- ROCK BAGS (SILT FENCE RELIEF)
- INLET PROTECTION TYPE A & C (UNLESS OTHERWISE NOTED)
- WETLAND BOUNDARY
- SLOPE INTERCEPT
- SURFACE WATER FLOW
- PERMITTED WETLAND IMPACT

N

714SB 716SB 718SB 720SB USH 51 SB 722SB 724SB 726SB 728SB

714NB 716NB 718NB 720NB 722NB 724NB 726NB 728NB

USH 51 NB

A & B

A & B

PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	EROSION CONTROL - STAGE 6	SHEET 134	E

FILE NAME : P:\44xx\4448\Plan\Erosion Control\022036_ec.DGN PLOT DATE : 7/30/2012 PLOT BY : walkup PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2

2

LEGEND

- SILT FENCE
- EROSION MAT CLASS I TYPE B
- EROSION MAT CLASS II TYPE B
- EROSION MAT URBAN CLASS I TYPE A
- RIPRAP MEDIUM (UNLESS OTHERWISE NOTED)
- ROCK BAGS (DITCH CHECK)
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- ROCK BAGS (SILT FENCE RELIEF)
- INLET PROTECTION TYPE A & C (UNLESS OTHERWISE NOTED)
- WETLAND BOUNDARY
- SLOPE INTERCEPT
- SURFACE WATER FLOW
- PERMITTED WETLAND IMPACT

N

730SB 732SB 734SB USH 51 SB 736SB 738SB 738F 740F 740SB 742F 742SB 744F F RAMP ID 1170-01-70 ID 1170-01-73 744SB

730NB 732NB 734NB USH 51 NB 736NB 738NB 740NB 742NB 744NB

A & B

A & D

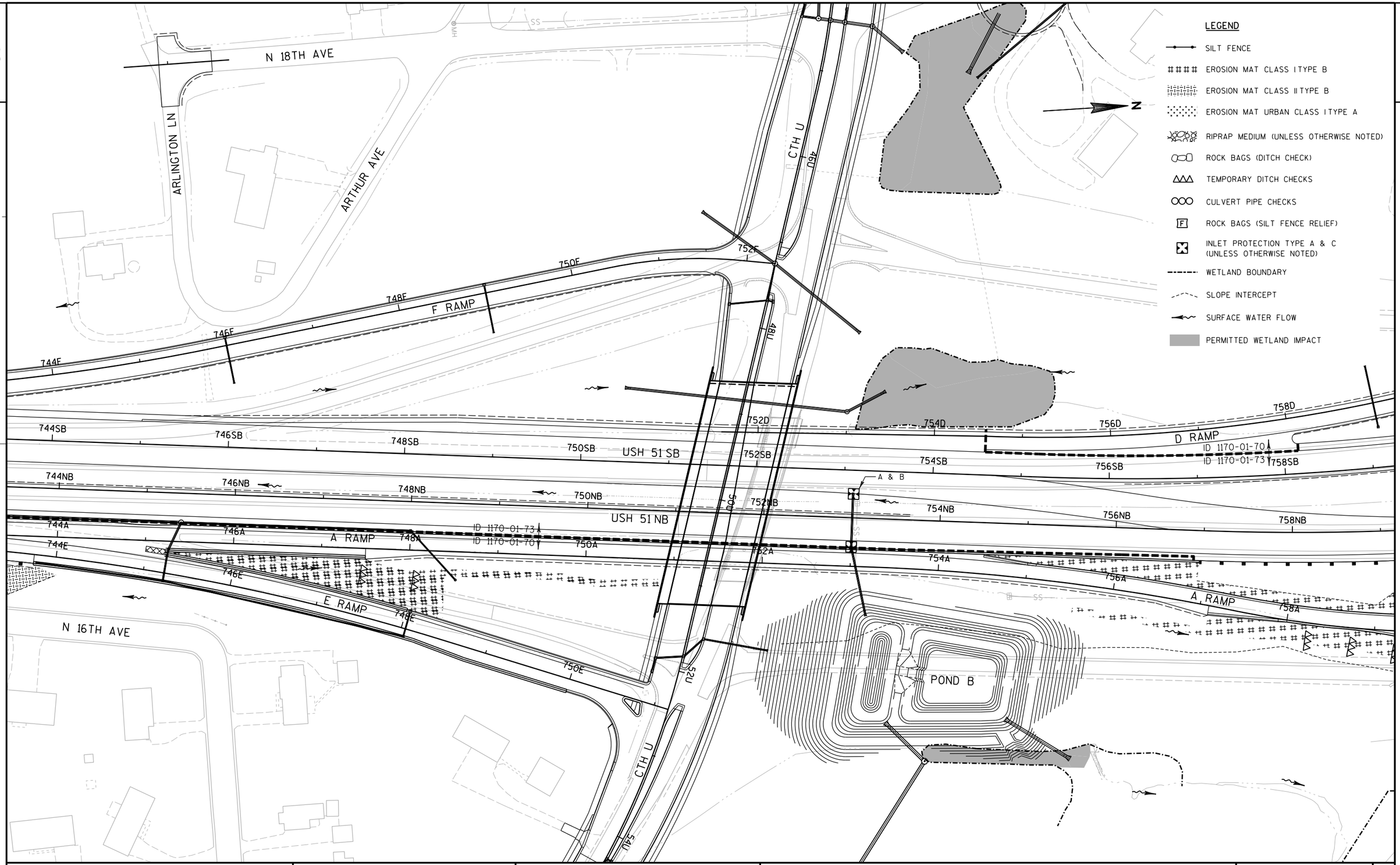
ID 1170-01-73A ID 1170-01-70Y 740E 742A 742E A RAMP E RAMP 744A 744E

N 16TH AVE

PROJECT NO: 1170-01-70/73	HWY: USH 51	COUNTY: MARATHON	EROSION CONTROL - STAGE 6	SHEET 135	E

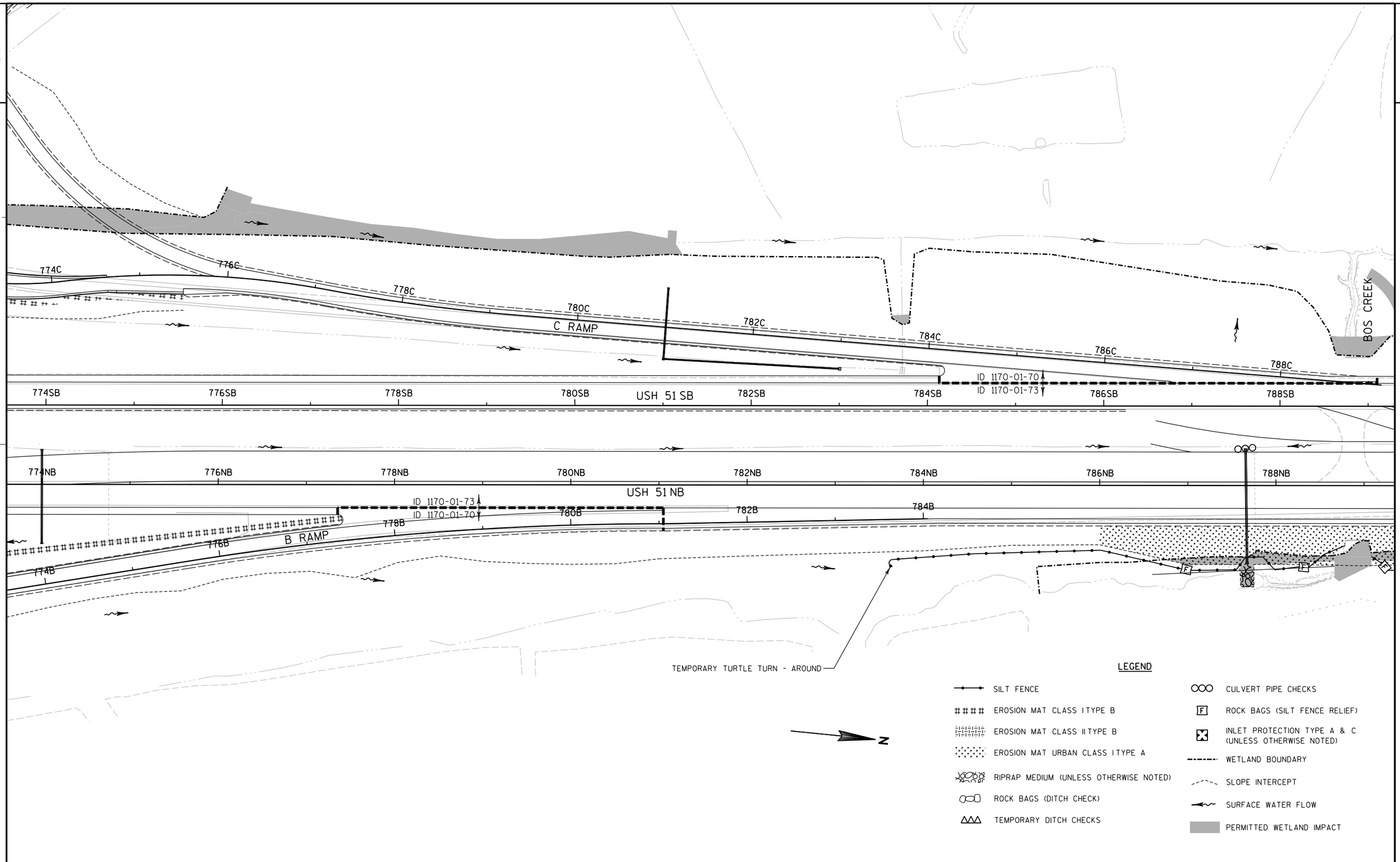
FILE NAME : P:\44xx\4448\Plan\Erosion Control\022037_ec.DGN PLOT DATE : 7/30/2012 PLOT BY : walkup PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42



PROJECT NO: 1170-01-70/73	HWY: USH 51	COUNTY: MARATHON	EROSION CONTROL - STAGE 6	SHEET 136	E

2

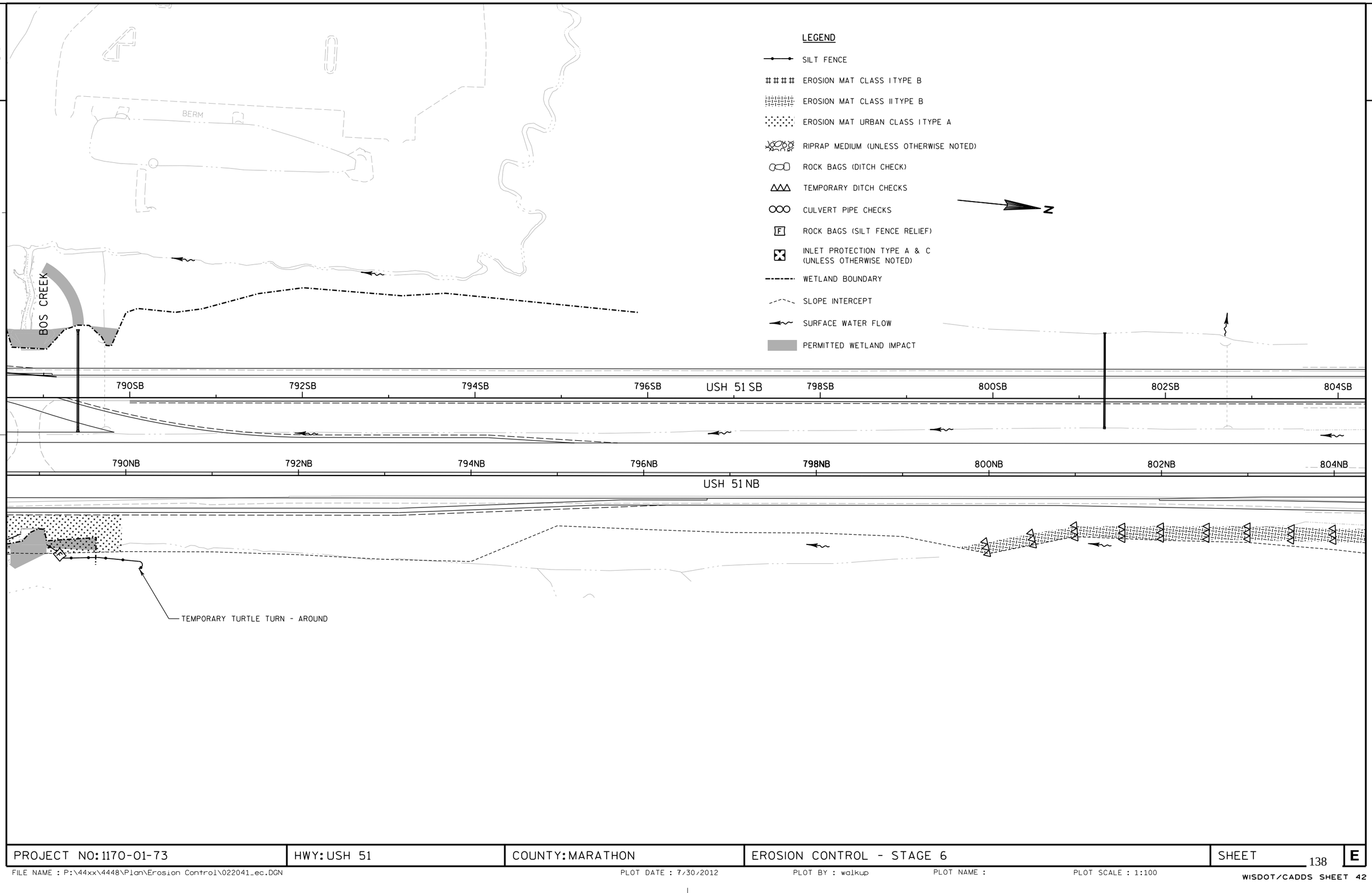


PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	EROSION CONTROL - STAGE 6	SHEET 137	E

FILE NAME : P:\44xx\4448\Plan\Erosion Control\022040_ec.DGN PLOT DATE : 7/30/2012 PLOT BY : walkup PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2



PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	EROSION CONTROL - STAGE 6	SHEET 138	E

2

2

LEGEND

- SILT FENCE
- EROSION MAT CLASS I TYPE B
- EROSION MAT CLASS II TYPE B
- EROSION MAT URBAN CLASS I TYPE A
- RIPRAP MEDIUM (UNLESS OTHERWISE NOTED)
- ROCK BAGS (DITCH CHECK)
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- ROCK BAGS (SILT FENCE RELIEF)
- INLET PROTECTION TYPE A & C (UNLESS OTHERWISE NOTED)
- WETLAND BOUNDARY
- SLOPE INTERCEPT
- SURFACE WATER FLOW
- PERMITTED WETLAND IMPACT

N

804SB 806SB 808SB 810SB USH 51 SB 812SB 814SB 816SB 818SB

804NB 806NB 808NB 810NB 812NB 814NB 816NB 818NB

USH 51 NB

PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	EROSION CONTROL - STAGE 6	SHEET 139	E

FILE NAME : P:\44xx\4448\Plan\Erosion Control\022042_ec.DGN PLOT DATE : 7/30/2012 PLOT BY : walkup PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

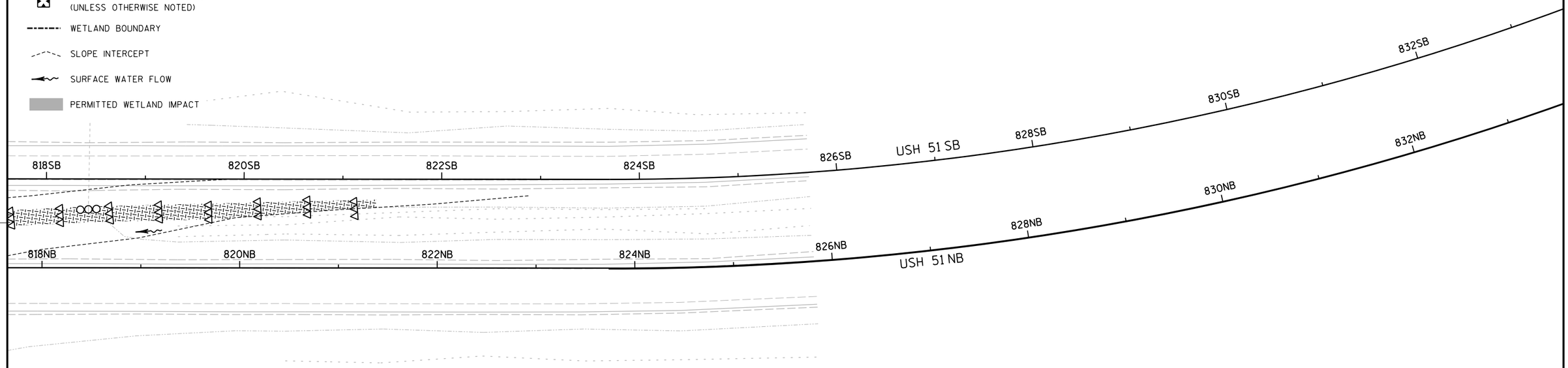
2

2

LEGEND

- SILT FENCE
- EROSION MAT CLASS I TYPE B
- EROSION MAT CLASS II TYPE B
- EROSION MAT URBAN CLASS I TYPE A
- RIPRAP MEDIUM (UNLESS OTHERWISE NOTED)
- ROCK BAGS (DITCH CHECK)
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- F ROCK BAGS (SILT FENCE RELIEF)
- INLET PROTECTION TYPE A & C (UNLESS OTHERWISE NOTED)
- WETLAND BOUNDARY
- SLOPE INTERCEPT
- SURFACE WATER FLOW
- PERMITTED WETLAND IMPACT

N



PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	EROSION CONTROL - STAGE 6	SHEET 140	E

FILE NAME : P:\44xx\4448\Plan\Erosion Control\022043_ec.DGN PLOT DATE : 7/30/2012 PLOT BY : walkup PLOT NAME : PLOT SCALE : 1:100

2

LEGEND

- SILT FENCE
- EROSION MAT CLASS I TYPE B
- EROSION MAT CLASS II TYPE B
- EROSION MAT URBAN CLASS I TYPE A
- RIPRAP MEDIUM (UNLESS OTHERWISE NOTED)
- ROCK BAGS (DITCH CHECK)
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- ROCK BAGS (SILT FENCE RELIEF)
- INLET PROTECTION TYPE A & C (UNLESS OTHERWISE NOTED)
- WETLAND BOUNDARY
- SLOPE INTERCEPT
- SURFACE WATER FLOW
- PERMITTED WETLAND IMPACT

HEAVY RIPRAP
(SEE STRUCTURE PLANS)

HEAVY RIPRAP
(SEE STRUCTURE PLANS)

BUS 51 SB

BUS 51 NB

USH 51 SB

USH 51 NB

A RAMP

B RAMP

D RAMP

32KS 34KS 36KS 38KS 38KN 36KN 34KN 32KN

42KS 42KN 44KS 44KN 46KS 46KN

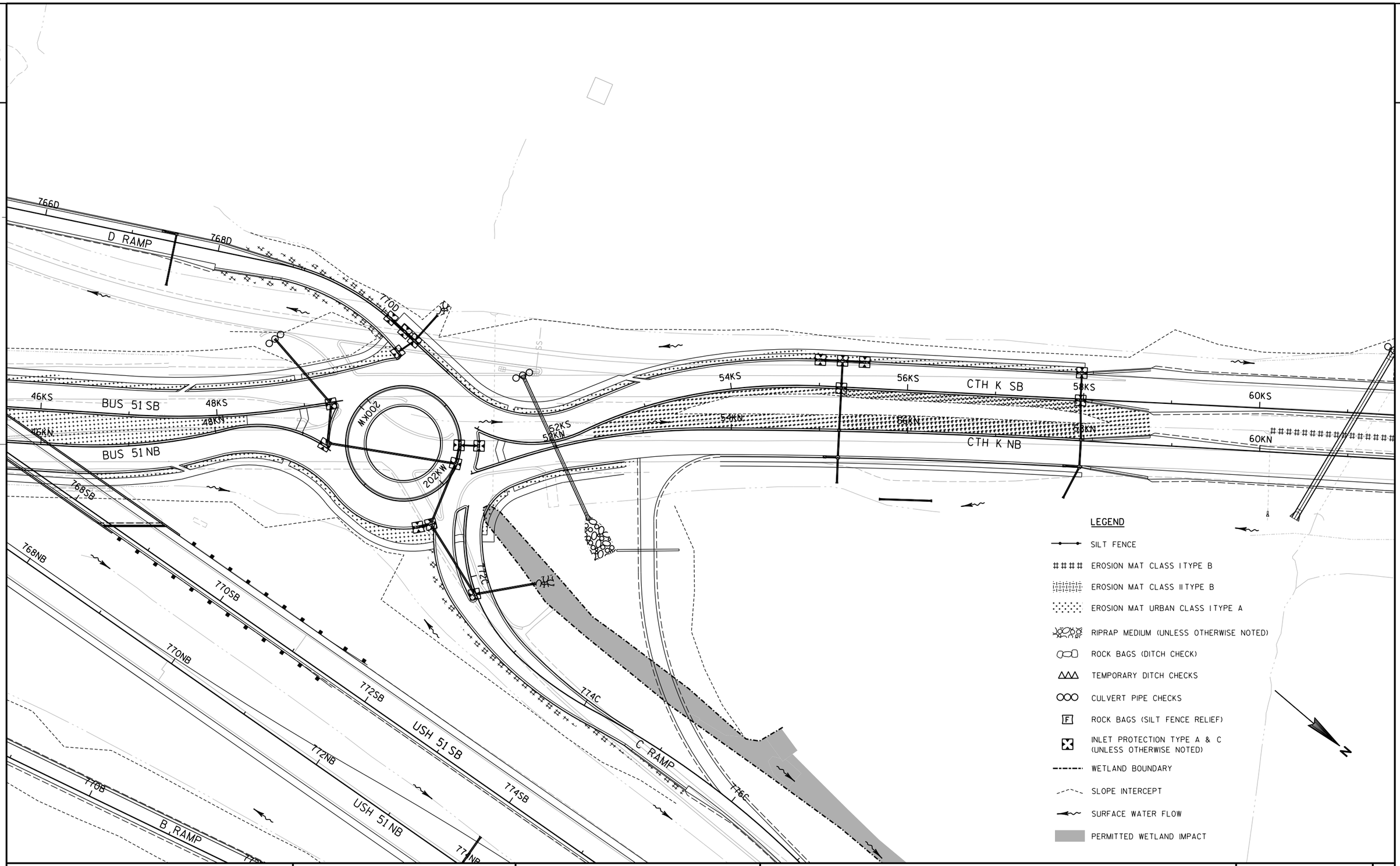
102KE 100KE

758SB 758NB 758A 760A 760D 760SB 760NB 762D 762SB 762NB 764D 764SB 764NB 766D 766SB 766NB 768NB 762B 764B 766B 768B

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	EROSION CONTROL - STAGE 6	SHEET 141	E

FILE NAME : P:\44xx\4448\Plan\Erosion Control\022044_ec.DGN PLOT DATE : 7/30/2012 PLOT BY : walkup PLOT NAME : PLOT SCALE : 1:100

2



PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	EROSION CONTROL - STAGE 6	SHEET 142	E

FILE NAME : P:\44xx\4448\Plan\Erosion Control\022045_ec.DGN PLOT DATE : 7/30/2012 PLOT BY : walkup PLOT NAME : PLOT SCALE : 1:100

2

LEGEND

- SILT FENCE
- EROSION MAT CLASS I TYPE B
- EROSION MAT CLASS II TYPE B
- EROSION MAT URBAN CLASS I TYPE A
- RIPRAP MEDIUM (UNLESS OTHERWISE NOTED)
- ROCK BAGS (DITCH CHECK)
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- F ROCK BAGS (SILT FENCE RELIEF)
- INLET PROTECTION TYPE A & C (UNLESS OTHERWISE NOTED)
- WETLAND BOUNDARY
- SLOPE INTERCEPT
- SURFACE WATER FLOW
- PERMITTED WETLAND IMPACT

OVERLOOK DR

CASSIDY DR

N9

N9

22822

230V

60KS 62KS 64KS 66KS CTH K SB 68KS 70KS 72KS 74KS

60KN 62KN 64KN 66KN 68KN 70KN 72KN 74KN

CTH K NB

N 20TH AVE

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	EROSION CONTROL - STAGE 6	SHEET 143	E

FILE NAME : P:\44xx\4448\Plan\Erosion Control\022045A_ec.dgn PLOT DATE : 7/30/2012 PLOT BY : walkup PLOT NAME : PLOT SCALE : 1:100

2

2

LEGEND

- SILT FENCE
- EROSION MAT CLASS I TYPE B
- EROSION MAT CLASS II TYPE B
- EROSION MAT URBAN CLASS I TYPE A
- RIPRAP MEDIUM (UNLESS OTHERWISE NOTED)
- ROCK BAGS (DITCH CHECK)
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- ROCK BAGS (SILT FENCE RELIEF)
- INLET PROTECTION TYPE A & C (UNLESS OTHERWISE NOTED)
- WETLAND BOUNDARY
- SLOPE INTERCEPT
- SURFACE WATER FLOW
- PERMITTED WETLAND IMPACT

N

700SB 702SB 704SB 706SB USH 51 SB 708SB 710SB 712SB 714SB

700NB 702NB 704NB 706NB 708NB 710NB 712NB 714NB

USH 51 NB

PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	EROSION CONTROL - STAGE 7	SHEET 144	E

FILE NAME : P:\44xx\4448\Plan\Erosion Control\022046_ec.DGN PLOT DATE : 7/30/2012 PLOT BY : walkup PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

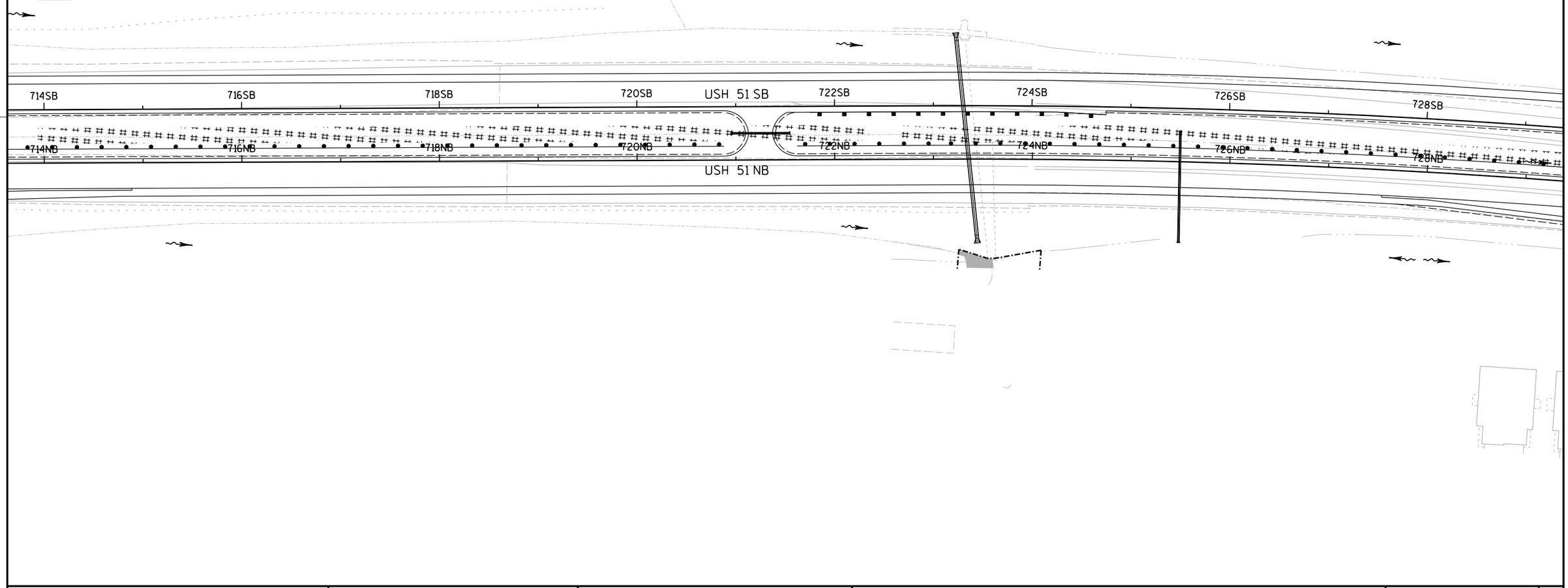
2

2

LEGEND

- SILT FENCE
- EROSION MAT CLASS I TYPE B
- EROSION MAT CLASS II TYPE B
- EROSION MAT URBAN CLASS I TYPE A
- RIPRAP MEDIUM (UNLESS OTHERWISE NOTED)
- ROCK BAGS (DITCH CHECK)
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- ROCK BAGS (SILT FENCE RELIEF)
- INLET PROTECTION TYPE A & C (UNLESS OTHERWISE NOTED)
- WETLAND BOUNDARY
- SLOPE INTERCEPT
- SURFACE WATER FLOW
- PERMITTED WETLAND IMPACT

N



PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	EROSION CONTROL - STAGE 7	SHEET 145	E

2

2

LEGEND

- SILT FENCE
- EROSION MAT CLASS I TYPE B
- EROSION MAT CLASS II TYPE B
- EROSION MAT URBAN CLASS I TYPE A
- RIPRAP MEDIUM (UNLESS OTHERWISE NOTED)
- ROCK BAGS (DITCH CHECK)
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- F — ROCK BAGS (SILT FENCE RELIEF)
- INLET PROTECTION TYPE A & C (UNLESS OTHERWISE NOTED)
- WETLAND BOUNDARY
- SLOPE INTERCEPT
- SURFACE WATER FLOW
- PERMITTED WETLAND IMPACT

N

730SB 732SB 734SB USH 51 SB 736SB 738F 738SB 740F 740SB 742F 742SB 744F 744SB

750NB 752NB 754NB 736NB 738NB 740NB 742NB 744NB

USH 51 NB

ID 1170-01-70 A
ID 1170-01-73 Y
F RAMP

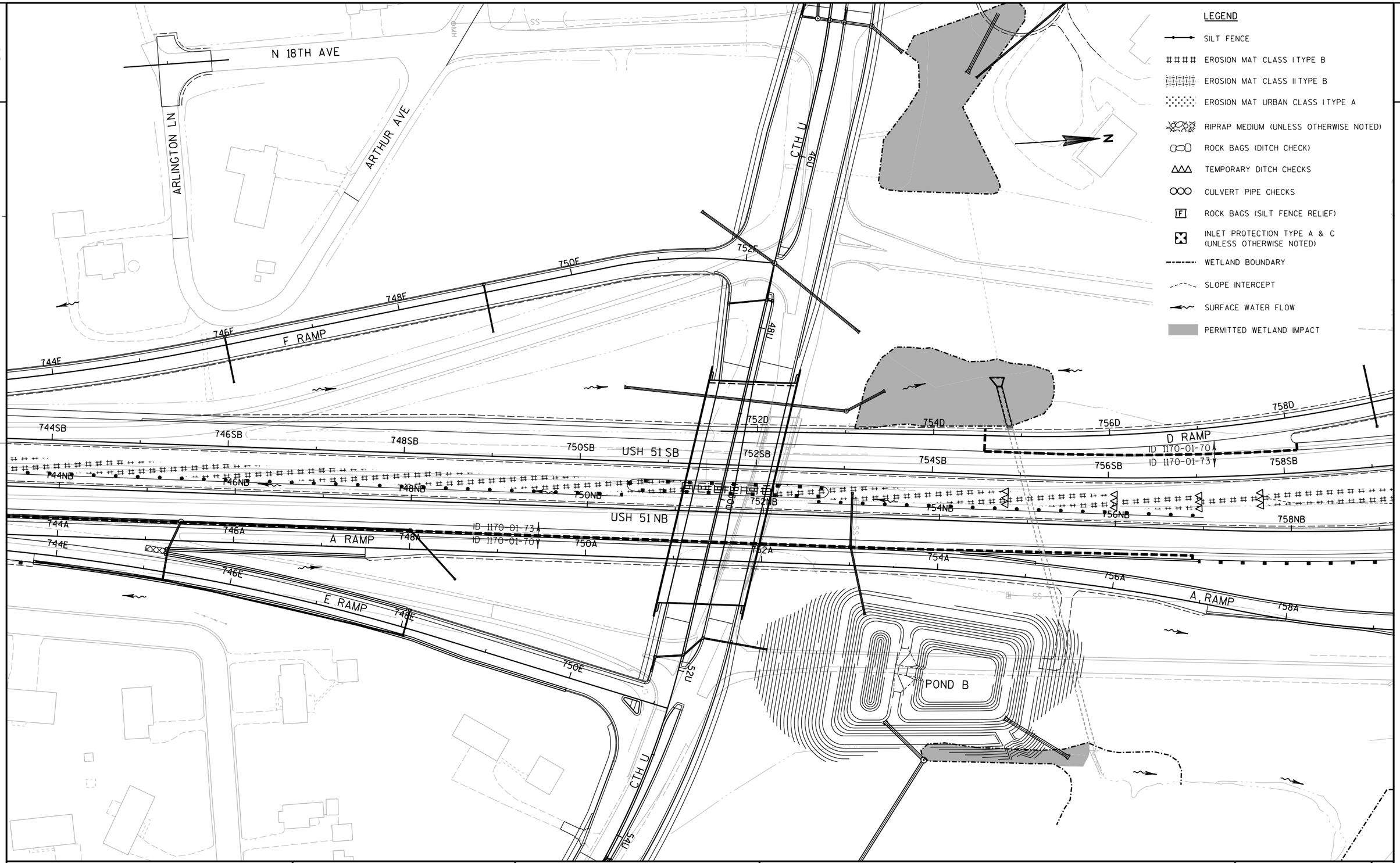
ID 1170-01-73 A
ID 1170-01-70 Y
740A 740E 742A 742E 744A 744E
A RAMP
E RAMP

N 16TH AVE

PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	EROSION CONTROL - STAGE 7	SHEET 146	E

FILE NAME : P:\44xx\4448\Plan\Erosion Control\022048_ec.DGN PLOT DATE : 7/30/2012 PLOT BY : walkup PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42



PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	EROSION CONTROL - STAGE 7	SHEET 147	E

FILE NAME : P:\44xx\4448\Plan\Erosion Control\022049_ec.DGN PLOT DATE : 7/30/2012 PLOT BY : walkup PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2

2

LEGEND

- SILT FENCE
- EROSION MAT CLASS I TYPE B
- EROSION MAT CLASS II TYPE B
- EROSION MAT URBAN CLASS I TYPE A
- RIPRAP MEDIUM (UNLESS OTHERWISE NOTED)
- ROCK BAGS (DITCH CHECK)
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- ROCK BAGS (SILT FENCE RELIEF)
- INLET PROTECTION TYPE A & C (UNLESS OTHERWISE NOTED)
- WETLAND BOUNDARY
- SLOPE INTERCEPT
- SURFACE WATER FLOW
- PERMITTED WETLAND IMPACT

N

770D
768D
766D
764D
762D
760D
D RAMP
760SB
USH 51 SB
762SB
764SB
766SB
768SB
770SB
772SB
774SB
760NB
762NB
764NB
766NB
768NB
770NB
772NB
774NB
USH 51 NB
BUS 51 SB
BUS 51 NB
44KS
44KN
46KS
46KN
48KS
48KN
50KS
50KN
CTH K SB
CTH K NB
POND A
200KW
202KW
772C
774C
C RAMP
RIPRAP MEDIUM
DEPTH 18"
GEOTEXTILE FABRIC HR
SEEP POND A DETAIL
42KS
42KN
A RAMP
760A
100KE
102KE
38KS
38KN
762B
764B
766B
768B
770B
772B
774B
B RAMP

PROJECT NO: 1170-01-70/73	HWY: USH 51	COUNTY: MARATHON	EROSION CONTROL - STAGE 7	SHEET 148	E

FILE NAME : P:\44xx\4448\Plan\Erosion Control\022050_ec.DGN PLOT DATE : 7/30/2012 PLOT BY : walkup PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2

POND A

774C 776C 778C 780C C RAMP 782C 784C 786C 788C

774SB 776SB 778SB 780SB USH 51 SB 782SB 784SB 786SB 788SB

ID 1170-01-70
ID 1170-01-73

BOS CREEK

774NB 776NB 778NB 780NB 782NB 784NB 786NB 788NB

USH 51 NB

ID 1170-01-73
ID 1170-01-70

774B 776B 778B 780B 782B 784B B RAMP

N

LEGEND

- SILT FENCE
- EROSION MAT CLASS I TYPE B
- EROSION MAT CLASS II TYPE B
- EROSION MAT URBAN CLASS I TYPE A
- RIPRAP MEDIUM (UNLESS OTHERWISE NOTED)
- ROCK BAGS (DITCH CHECK)
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- ROCK BAGS (SILT FENCE RELIEF)
- INLET PROTECTION TYPE A & C (UNLESS OTHERWISE NOTED)
- WETLAND BOUNDARY
- SLOPE INTERCEPT
- SURFACE WATER FLOW
- PERMITTED WETLAND IMPACT

PROJECT NO: 1170-01-70/73	HWY: USH 51	COUNTY: MARATHON	EROSION CONTROL - STAGE 7	SHEET 149	E

2

2

BERM

BOS CREEK

LEGEND

- SILT FENCE
- EROSION MAT CLASS I TYPE B
- EROSION MAT CLASS II TYPE B
- EROSION MAT URBAN CLASS I TYPE A
- RIPRAP MEDIUM (UNLESS OTHERWISE NOTED)
- ROCK BAGS (DITCH CHECK)
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- ROCK BAGS (SILT FENCE RELIEF)
- INLET PROTECTION TYPE A & C (UNLESS OTHERWISE NOTED)
- WETLAND BOUNDARY
- SLOPE INTERCEPT
- SURFACE WATER FLOW
- PERMITTED WETLAND IMPACT

N

790SB 792SB 794SB 796SB USH 51 SB 798SB 800SB 802SB 804SB

790NB 792NB 794NB 796NB 798NB 800NB 802NB 804NB

USH 51 NB

PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	EROSION CONTROL - STAGE 7	SHEET 150	E

FILE NAME : P:\44xx\4448\Plan\Erosion Control\022052_ec.DGN PLOT DATE : 7/30/2012 PLOT BY : walkup PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2

2

LEGEND

- SILT FENCE
- EROSION MAT CLASS I TYPE B
- EROSION MAT CLASS II TYPE B
- EROSION MAT URBAN CLASS I TYPE A
- RIPRAP MEDIUM (UNLESS OTHERWISE NOTED)
- ROCK BAGS (DITCH CHECK)
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- F ROCK BAGS (SILT FENCE RELIEF)
- INLET PROTECTION TYPE A & C (UNLESS OTHERWISE NOTED)
- WETLAND BOUNDARY
- SLOPE INTERCEPT
- SURFACE WATER FLOW
- PERMITTED WETLAND IMPACT

N

804SB 806SB 808SB 810SB USH 51 SB 812SB 814SB 816SB 818SB

804NB 806NB 808NB 810NB 812NB 814NB 816NB 818NB

USH 51 NB

PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	EROSION CONTROL - STAGE 7	SHEET 151	E

FILE NAME : P:\44xx\4448\Plan\Erosion Control\022053_ec.DGN PLOT DATE : 7/30/2012 PLOT BY : walkup PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2

LEGEND

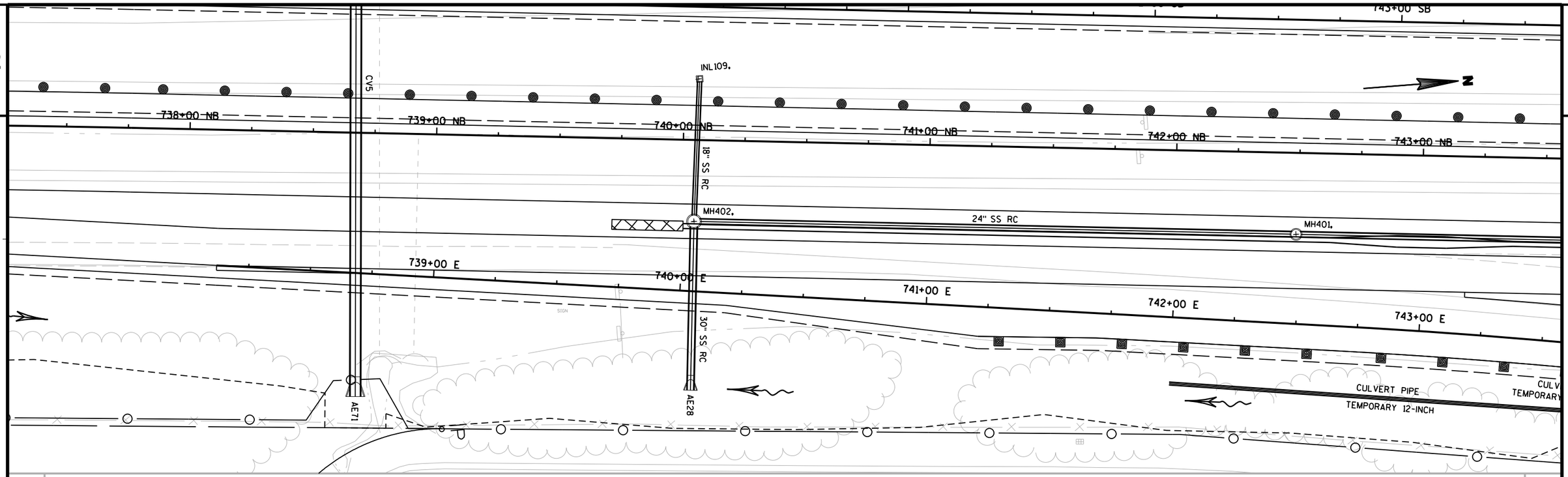
- SILT FENCE
- EROSION MAT CLASS I TYPE B
- EROSION MAT CLASS II TYPE B
- EROSION MAT URBAN CLASS I TYPE A
- RIPRAP MEDIUM (UNLESS OTHERWISE NOTED)
- ROCK BAGS (DITCH CHECK)
- TEMPORARY DITCH CHECKS
- CULVERT PIPE CHECKS
- ROCK BAGS (SILT FENCE RELIEF)
- INLET PROTECTION TYPE A & C (UNLESS OTHERWISE NOTED)
- WETLAND BOUNDARY
- SLOPE INTERCEPT
- SURFACE WATER FLOW
- PERMITTED WETLAND IMPACT

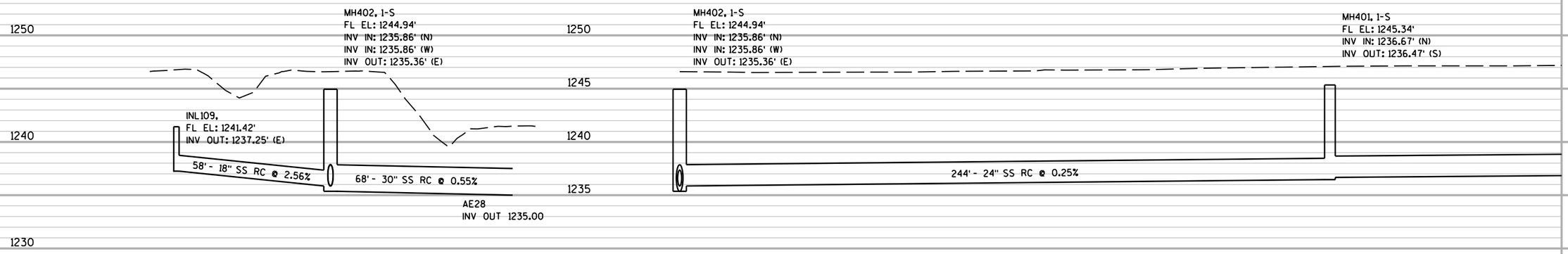
766D
D RAMP
768D
770D
46KS
BUS 51 SB
48KS
48KN
46KN
BUS 51 NB
200KW
202KW
52KS
52KN
54KS
54KN
56KS
56KN
CTH K SB
CTH K NB
58KS
58KN
60KS
60KN
768SB
768NB
770SB
770NB
772SB
772NB
USH 51 SB
USH 51 NB
772C
POND A
774C
C RAMP
776C
774SB
776B
B RAMP

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	EROSION CONTROL - STAGE 7	SHEET 152	E

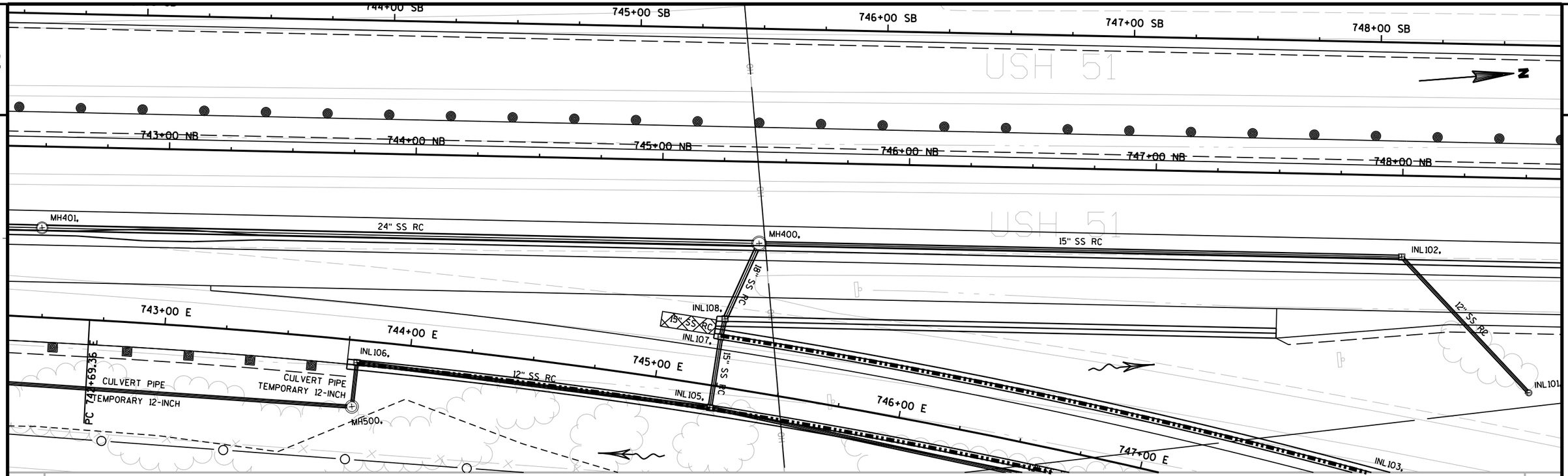
FILE NAME : P:\44xx\4448\Plan\Erosion Control\022054_ec.DGN PLOT DATE : 7/30/2012 PLOT BY : walkup PLOT NAME : PLOT SCALE : 1:100

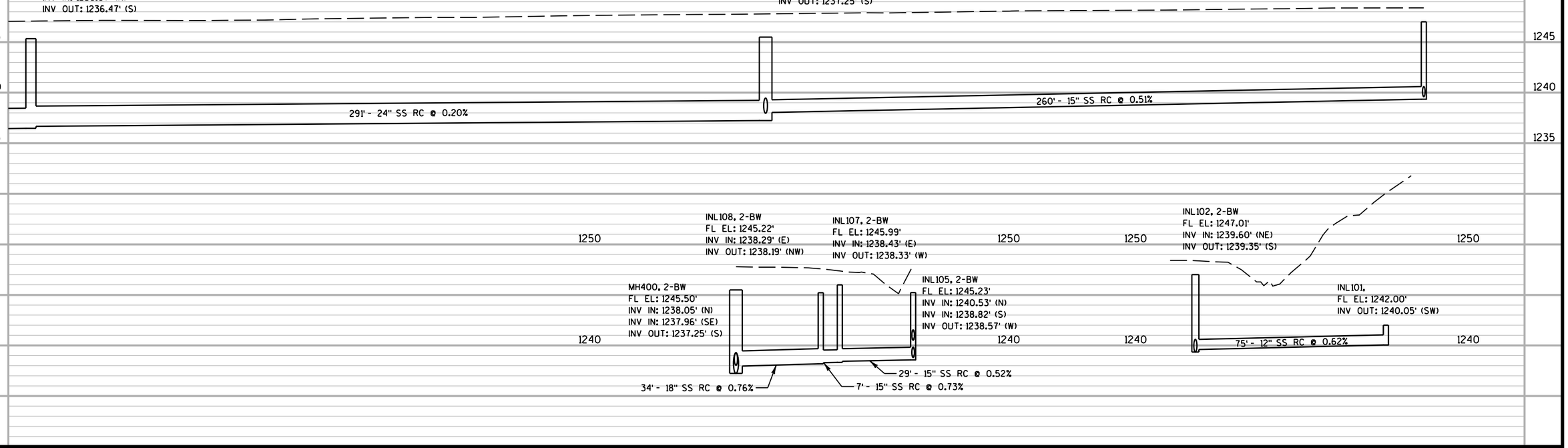
WISDOT/CADDS SHEET 42



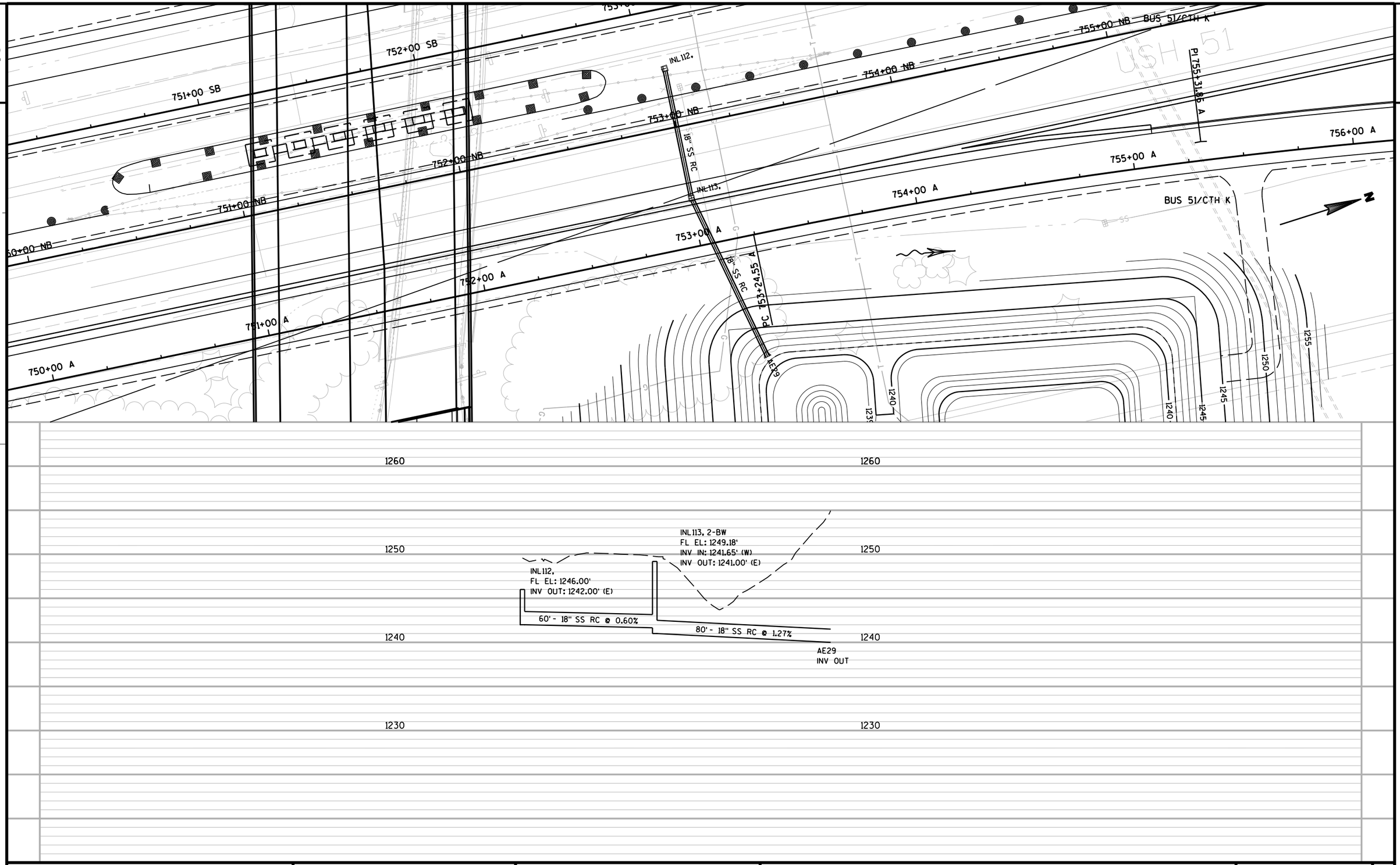


PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	STORM SEWER - USH 51 NB	SHEET 153	E

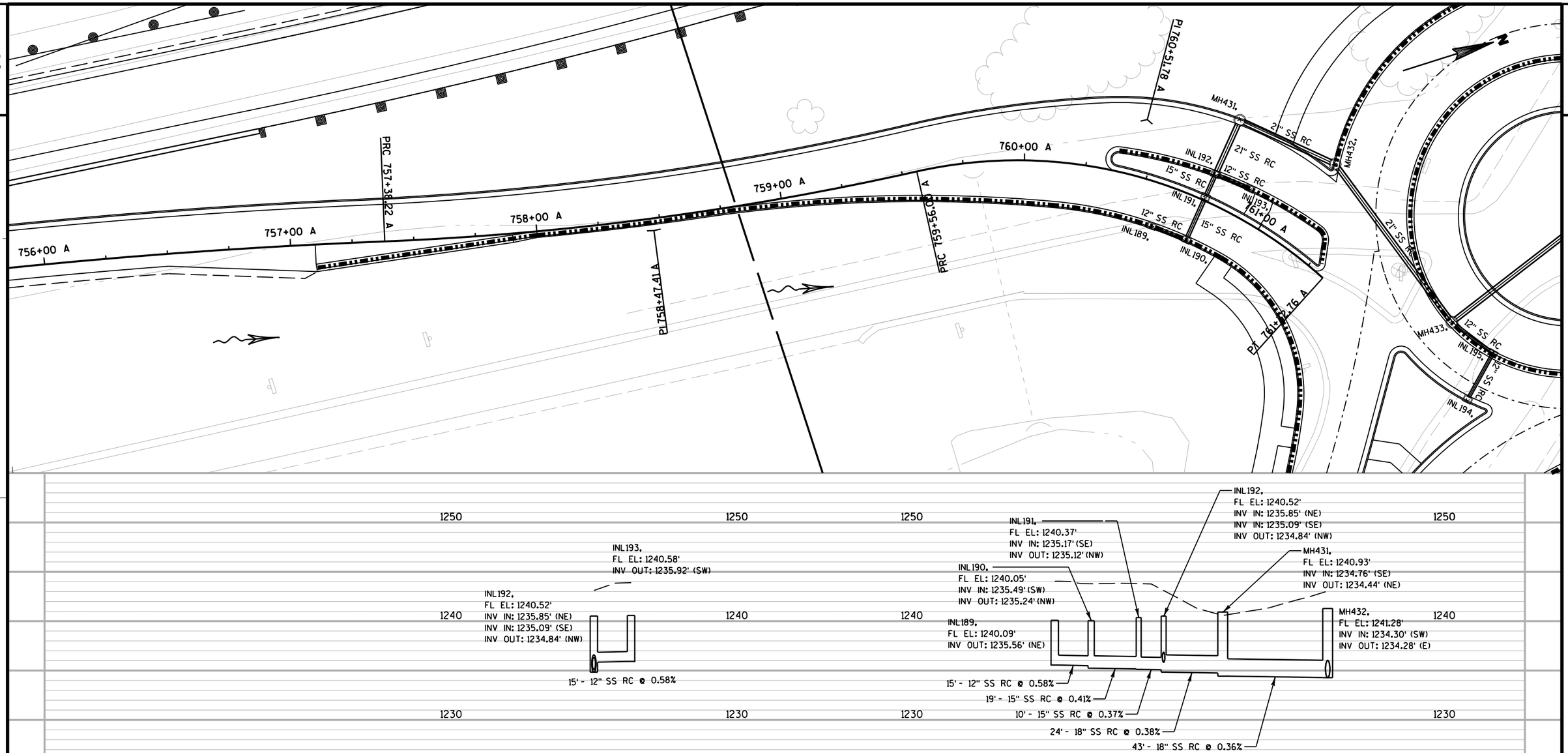




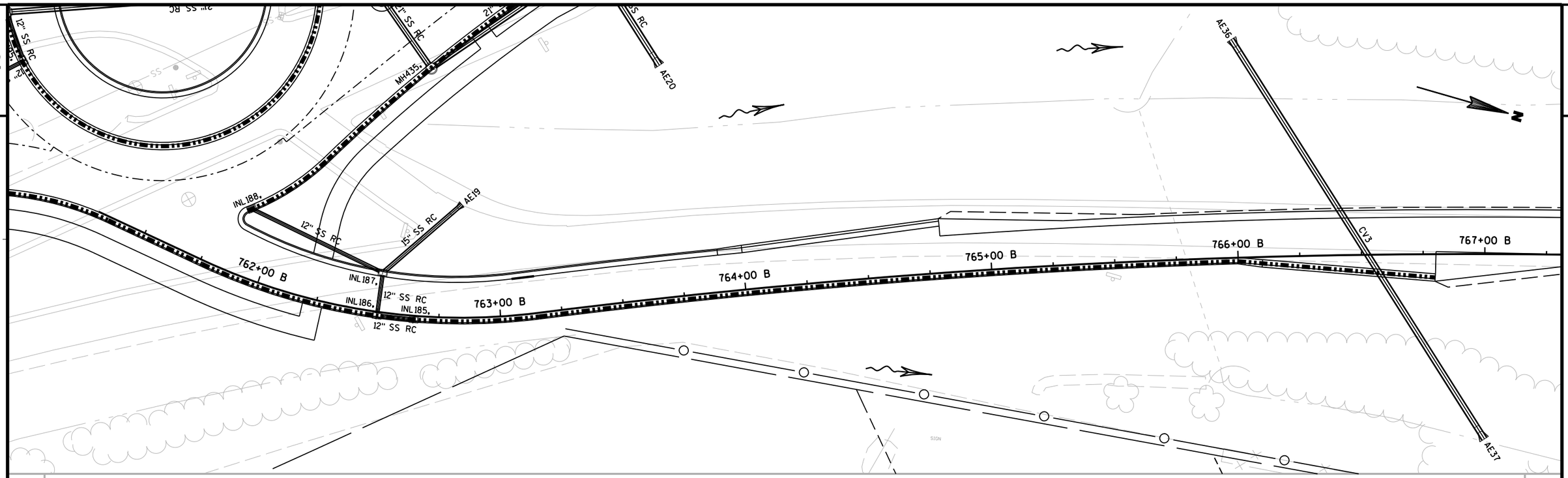
PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	STORM SEWER - USH 51 NB	SHEET 154	E



PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	STORM SEWER - US 51 NB	SHEET 155	E



PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	STORM SEWER - CTH K	SHEET 156	E



1260 1250 1240 1230

INL188.
FL EL: 1241.80'
INV OUT: 1236.97' (N)

INL187.
FL EL: 1240.95'
INV IN: 1235.75' (E)
INV IN: 1236.25' (S)
INV OUT: 1235.50' (NW)

59' - 12" SS RC @ 1.28%

INL186.
FL EL: 1240.65'
INV IN: 1235.96' (N)
INV OUT: 1235.85' (W)

INL187.
FL EL: 1240.95'
INV IN: 1235.75' (E)
INV IN: 1236.25' (S)
INV OUT: 1235.50' (NW)

INL185.
FL EL: 1240.68'
INV OUT: 1236.03' (S)

AE19
INV OUT 1235.33

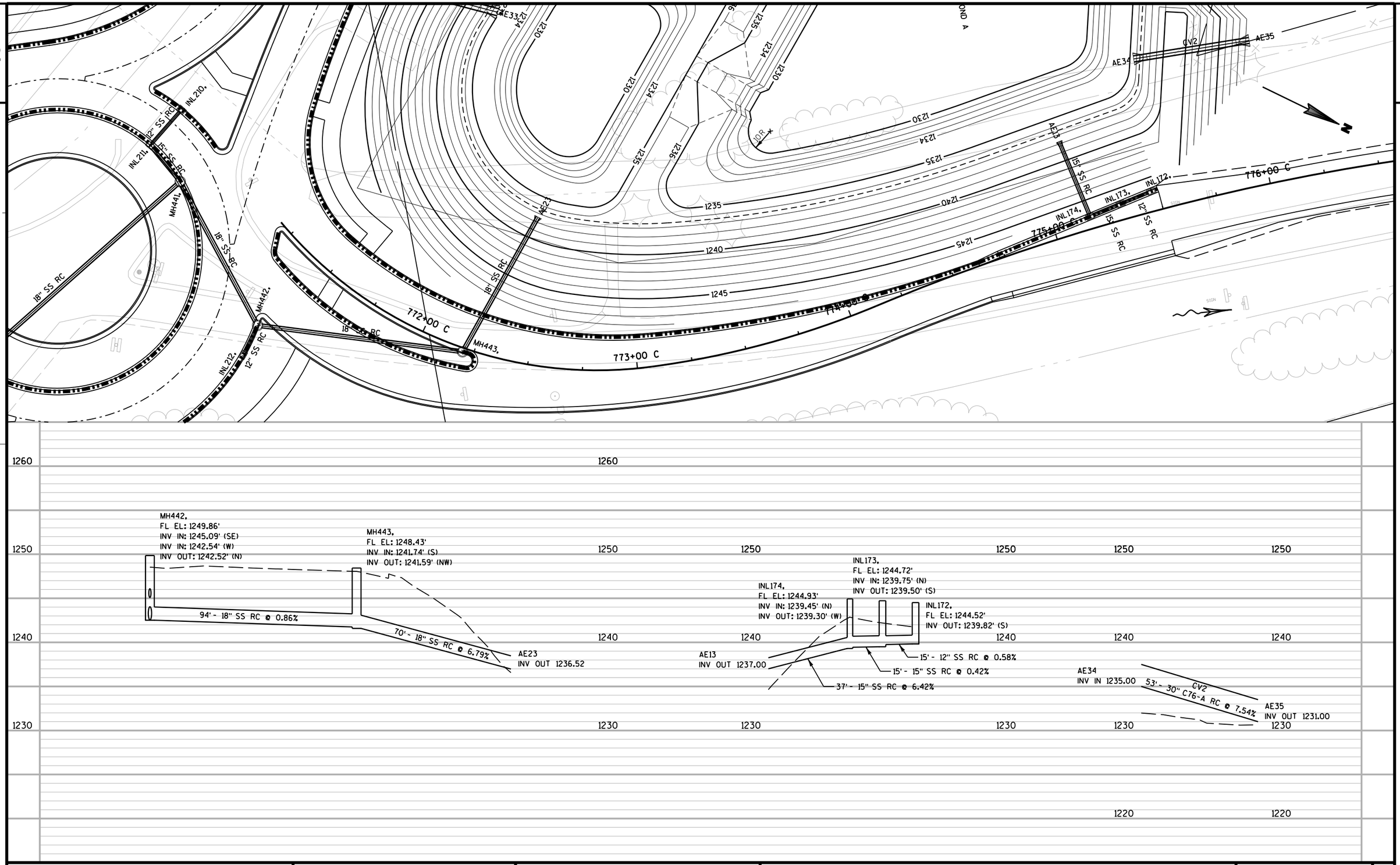
42' - 15" SS RC @ 0.41%
18' - 12" SS RC @ 0.64%
15' - 12" SS RC @ 0.58%

CV3
192' - 24" C76-A RC @ 0.47%

AE36
INV IN 1231.40

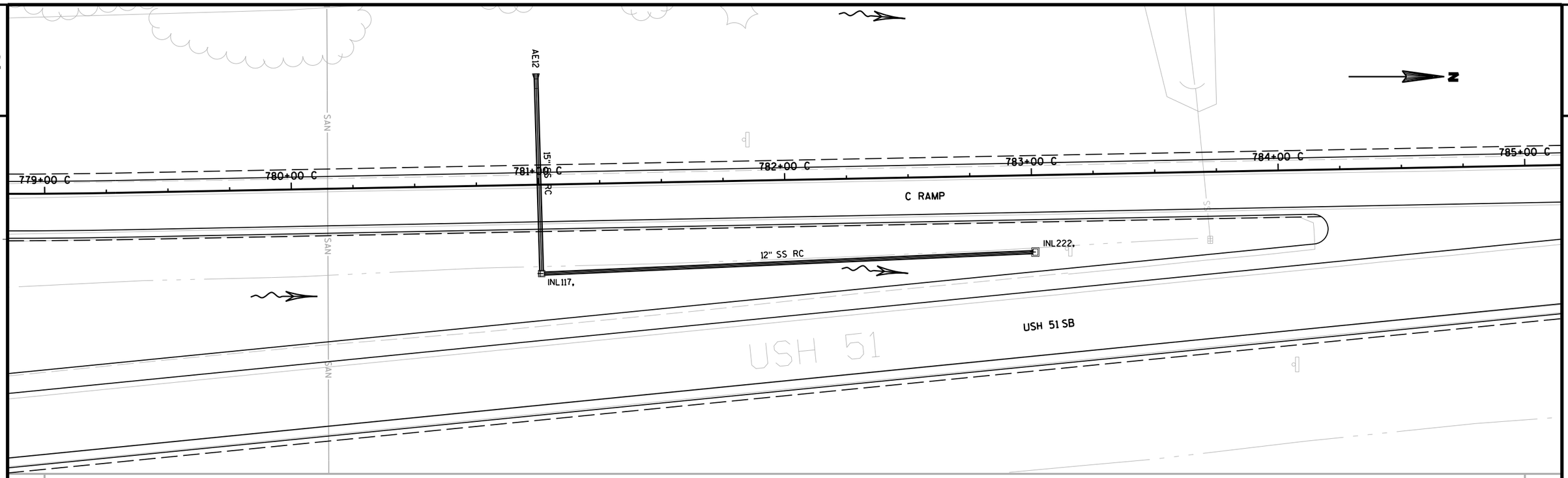
AE37
INV OUT 1230.50

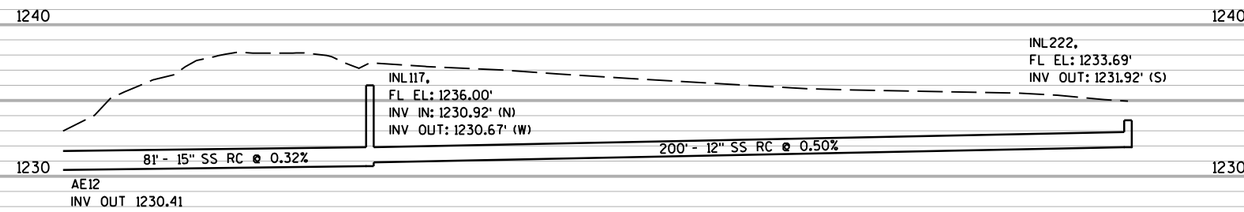
PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	STORM SEWER - CTH K	SHEET 157	E



PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	STORM SEWER - CTH K	SHEET 158	E

2

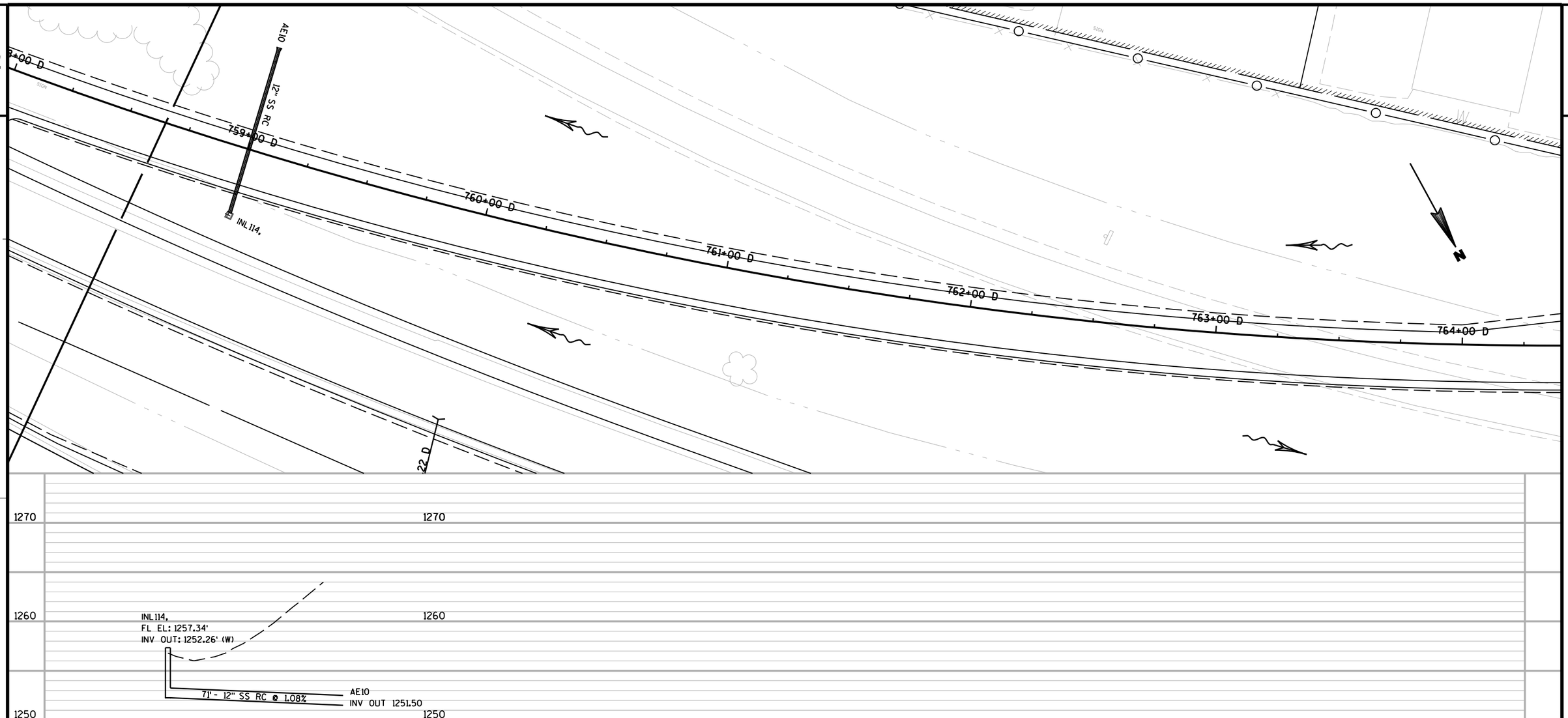




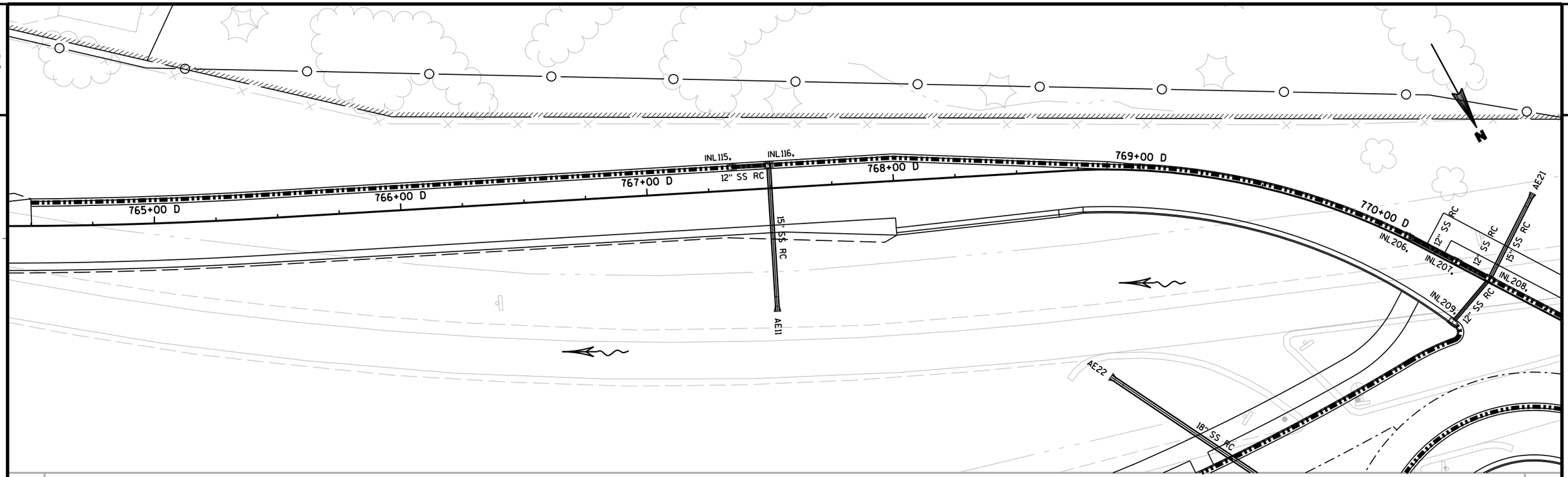
PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	STORM SEWER - CTH K	SHEET 159	E

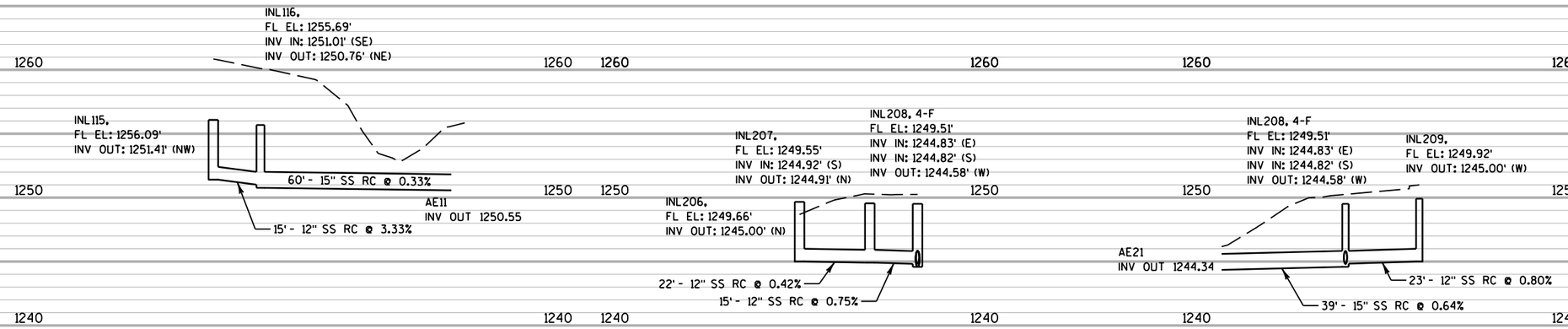
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2



PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	STORM SEWER - CTH K	SHEET 160	E





PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	STORM SEWER - CTH K	SHEET 161	E

2

MH400.

18" SS RC

INL108.

15" SS RC

INL107.

15" SS RC

INL103.

12" SS RC

INL104.

INL105.

12" SS RC

INL106.

MH401.

24" SS RC

742+00 E

743+00 E

744+00 E

745+00 E

746+00 E

747+00 E

748+00

CULVERT PIPE
TEMPORARY 12-INCH

CULVERT PIPE
TEMPORARY 12-INCH

MH500.

GRADE TO DRAIN

CTH U

N

1260

1250

1240

INL103, 4-F
FL EL: 1256.50'
INV OUT: 1252.07' (E)

INL104, 2-BW
FL EL: 1256.04'
INV IN: 1251.34' (W)
INV OUT: 1251.24' (S)

INL105, 2-BW
FL EL: 1245.23'
INV IN: 1240.53' (N)
INV IN: 1238.82' (S)
INV OUT: 1238.57' (W)

INL106, 2-BW
FL EL: 1244.24'
INV IN: 1239.52' (E)
INV OUT: 1239.54' (N)

144' - 12" SS RC @ 0.51%

280' - 12" SS RC @ 3.85%

30' - 12" SS RC @ 2.65%

MH500,
RIM: 1244.00'
INV IN: 1239.50' (S)
INV OUT: 1239.50' (W)

177' - 12" SS RC @ 0.00%

18' - 12" SS RC @ -0.13%

INV OUT 1239.50

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	STORM SEWER - E RAMP	SHEET 162	E

2

2

PT 745+75.43

INL 111,

INL 110,

+00 F

745+00 F

746+00 F

747+00 F

748+00 F

749+00 F

750+00 F

N 7°48'25" W

12" SS RC

12" SS RC

AE09

AE08

1270

1260

1250

1240

INL111, 4-F
FL EL: 1249.23'
INV OUT: 1244.88' (E)

AE09
54' - 12" SS RC @ 0.50%
INV OUT 1244.56

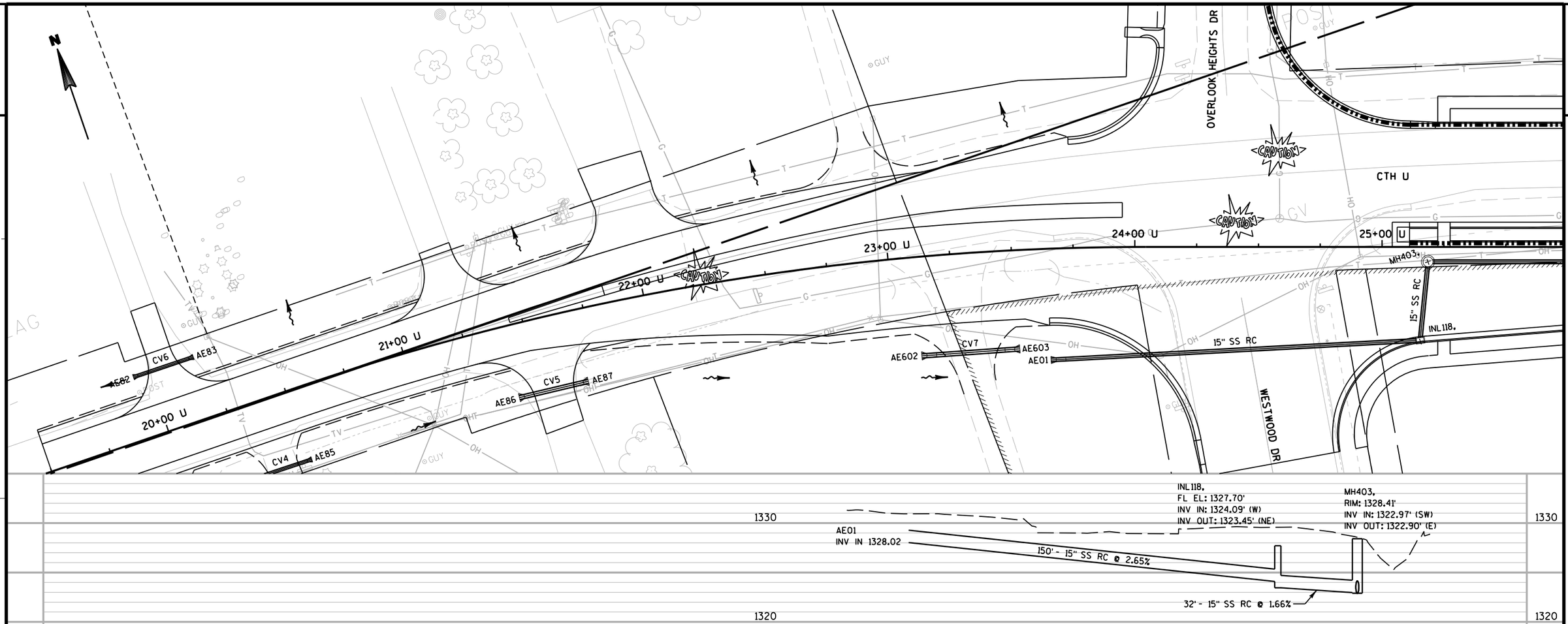
INL110, 4-F
FL EL: 1260.42'
INV OUT: 1255.74' (E)

AE08
56' - 12" SS RC @ 0.83%
INV OUT 1255.25

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	STORM SEWER - F RAMP	SHEET	E

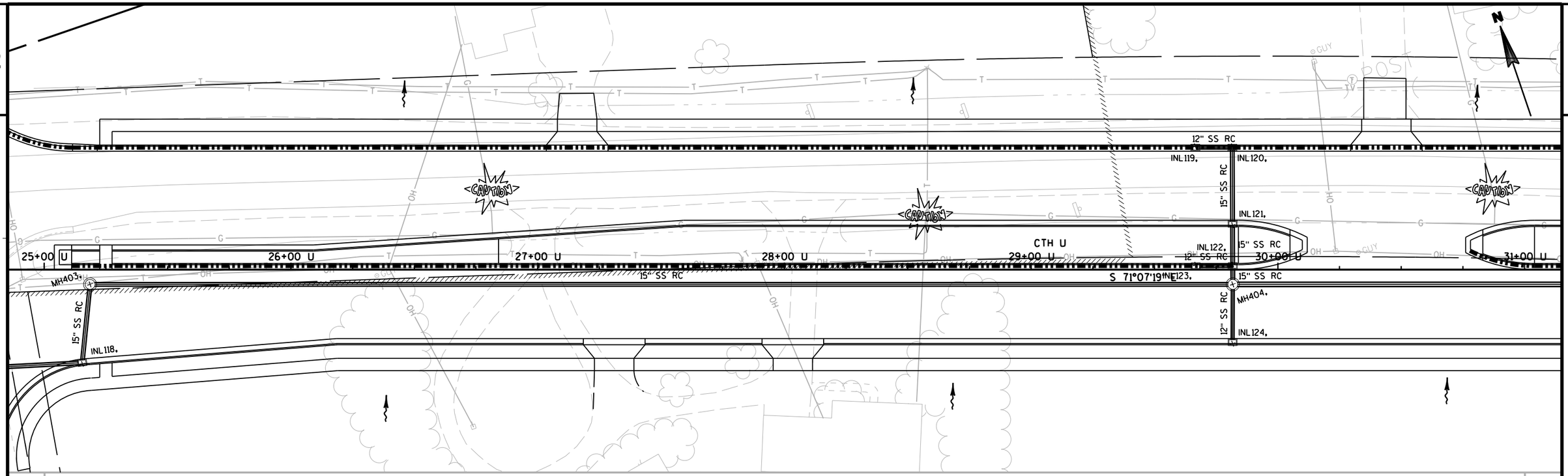
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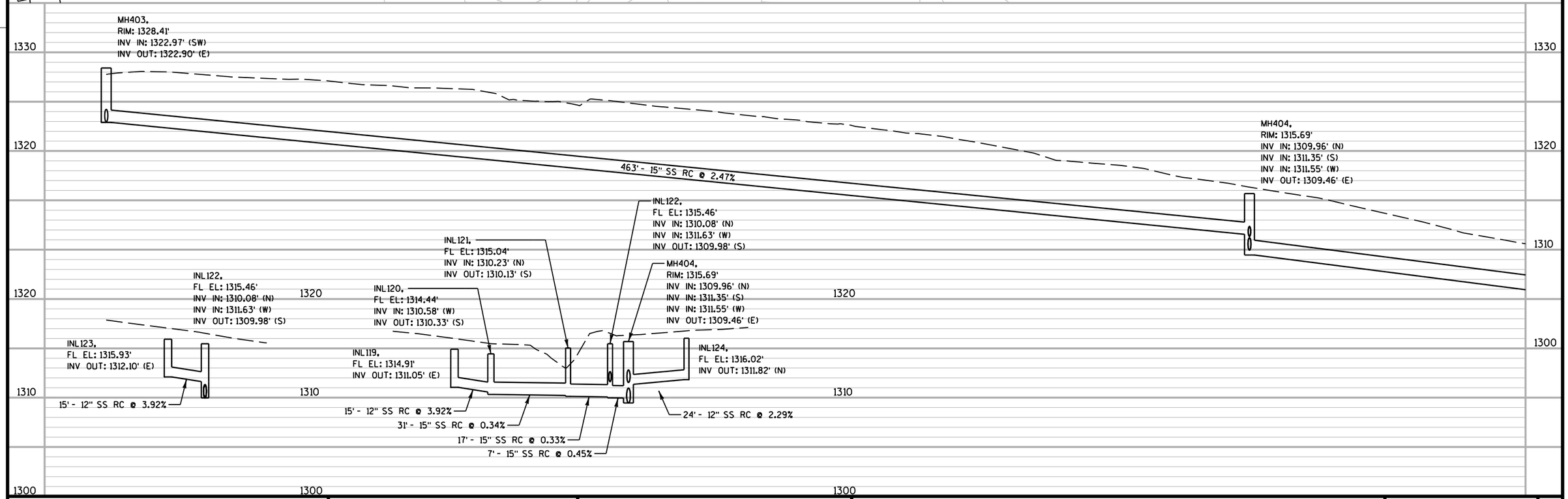
WISDOT/CADDS SHEET 41



2

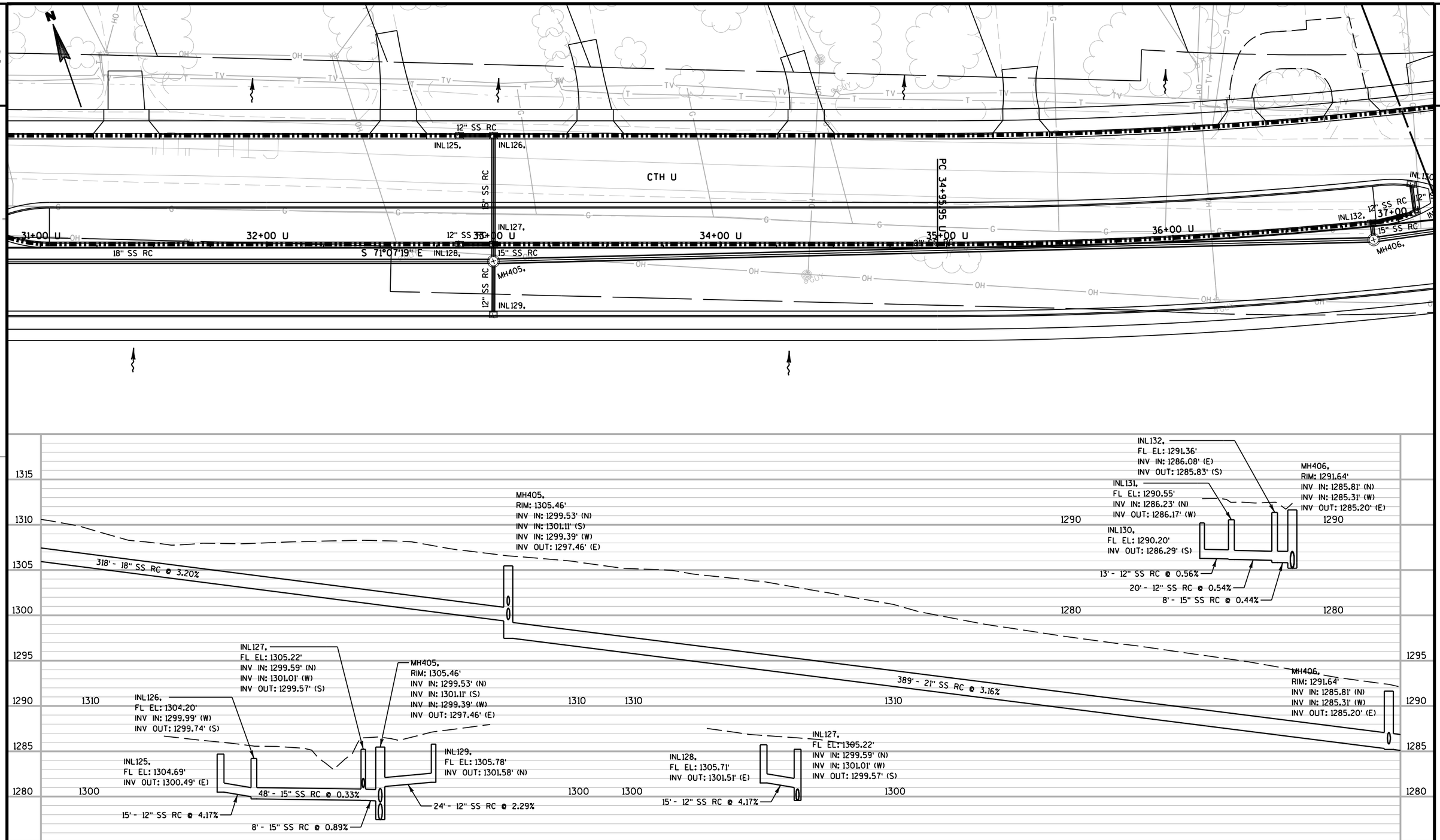
PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	STORM SEWER - CTH U	SHEET 164	E



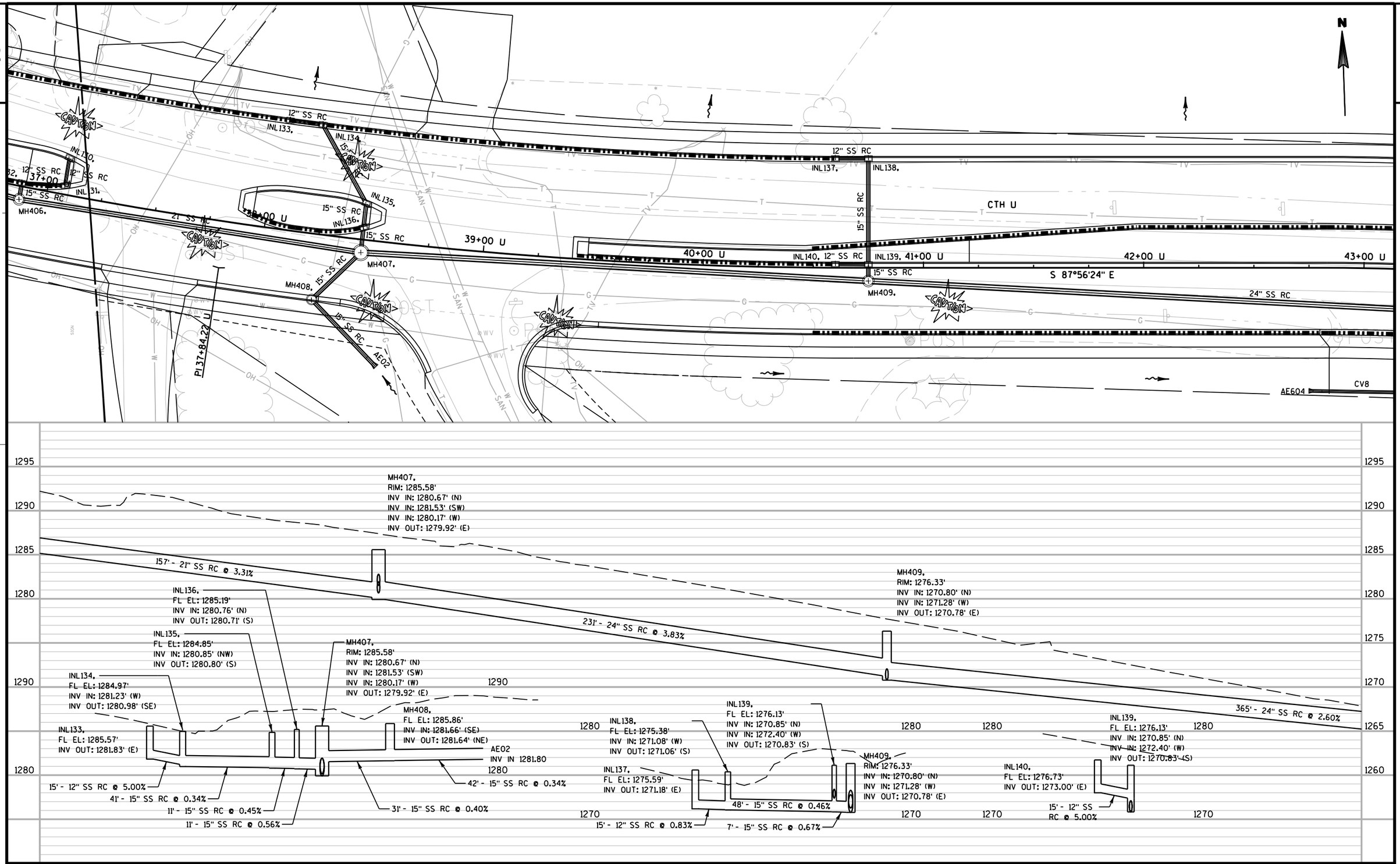


PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	STORM SEWER - CTH U	SHEET	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\022513_ss_u.dgn PLOT DATE : 8/1/2012 PLOT BY : cb685 PLOT NAME : PLOT SCALE : 1:40



PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	STORM SEWER - CTH U	SHEET 166 E



PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	STORM SEWER - CTH U	SHEET 167	E

2

2

MH34.
30" SS RC
AE03
CAUTION
MH413.
30" SS RC
CTH U
12" SS RC
MH412.
INL143.
30" SS RC
MH411.
44+00 U
45+00 U
46+00 U
47+00 U
24" SS RC
INL146.
12" SS RC
48+00 U
49+00
12" SS RC
MH414.
INL145.
12" SS RC
24" SS RC
30" SS RC
MH410.
43+00 U
18" SS RC
12" SS RC
INL144.
INL141.
INL142.
MH33.
24" SS RC
CV8
AE605
AE604
AE04
AE05
N

MH411.
FL EL: 1266.68'
INV IN: 1260.81' (S)
INV OUT: 1260.70' (N)

MH410.
RIM: 1266.55'
INV IN: 1261.84' (S)
INV IN: 1261.42' (W)
INV OUT: 1260.92' (N)

MH412.
FL EL: 1267.18'
INV IN: 1260.56' (S)
INV IN: 1263.20' (W)
INV OUT: 1260.46' (N)

INL142.
FL EL: 1266.06'
INV IN: 1262.21' (W)
INV OUT: 1261.90' (N)

INL146.
FL EL: 1271.92'
INV OUT: 1267.72' (S)

INL145.
FL EL: 1271.74'
INV IN: 1267.68' (N)
INV IN: 1266.18' (S)
INV OUT: 1266.08' (W)

MH410.
RIM: 1266.55'
INV IN: 1261.84' (S)
INV IN: 1261.42' (W)
INV OUT: 1260.92' (N)

MH413.
FL EL: 1267.74'
INV IN: 1260.21' (S)
INV OUT: 1259.71' (NE)

INL141.
FL EL: 1266.14'
INV OUT: 1262.28' (E)

6' - 12" SS RC @ 0.93%

0%

AE03
INV OUT 1259.26

46' - 30" SS RC @ 1.03%
32' - 30" SS RC @ 0.94%
16' - 30" SS RC @ 1.22%
14' - 30" SS RC @ 1.26%
19' - 18" SS RC @ 0.38%
15' - 12" SS RC @ 0.58%

8" SANITARY SEWER

INL145.
FL EL: 1271.74'
INV IN: 1266.77' (N)
INV IN: 1266.18' (S)
INV OUT: 1266.08' (W)

MH412.
FL EL: 1267.18'
INV IN: 1260.56' (S)
INV IN: 1263.20' (W)
INV OUT: 1260.46' (N)

INL143.
FL EL: 1267.22'
INV OUT: 1263.35' (E)

15' - 12" SS RC @ 1.36%

MH414.
RIM: 1271.36'
INV IN: 1265.87' (E)
INV IN: 1256.80' (SW)
INV OUT: 1256.68' (NE)

INL144.
FL EL: 1271.07'
INV OUT: 1266.40' (N)

44' - 12" SS RC @ 0.53%
43' - 12" SS RC @ 0.54%

MH414.
RIM: 1271.36'
INV IN: 1265.87' (E)
INV IN: 1256.80' (SW)
INV OUT: 1256.68' (NE)

AE05
INV OUT 1255.06

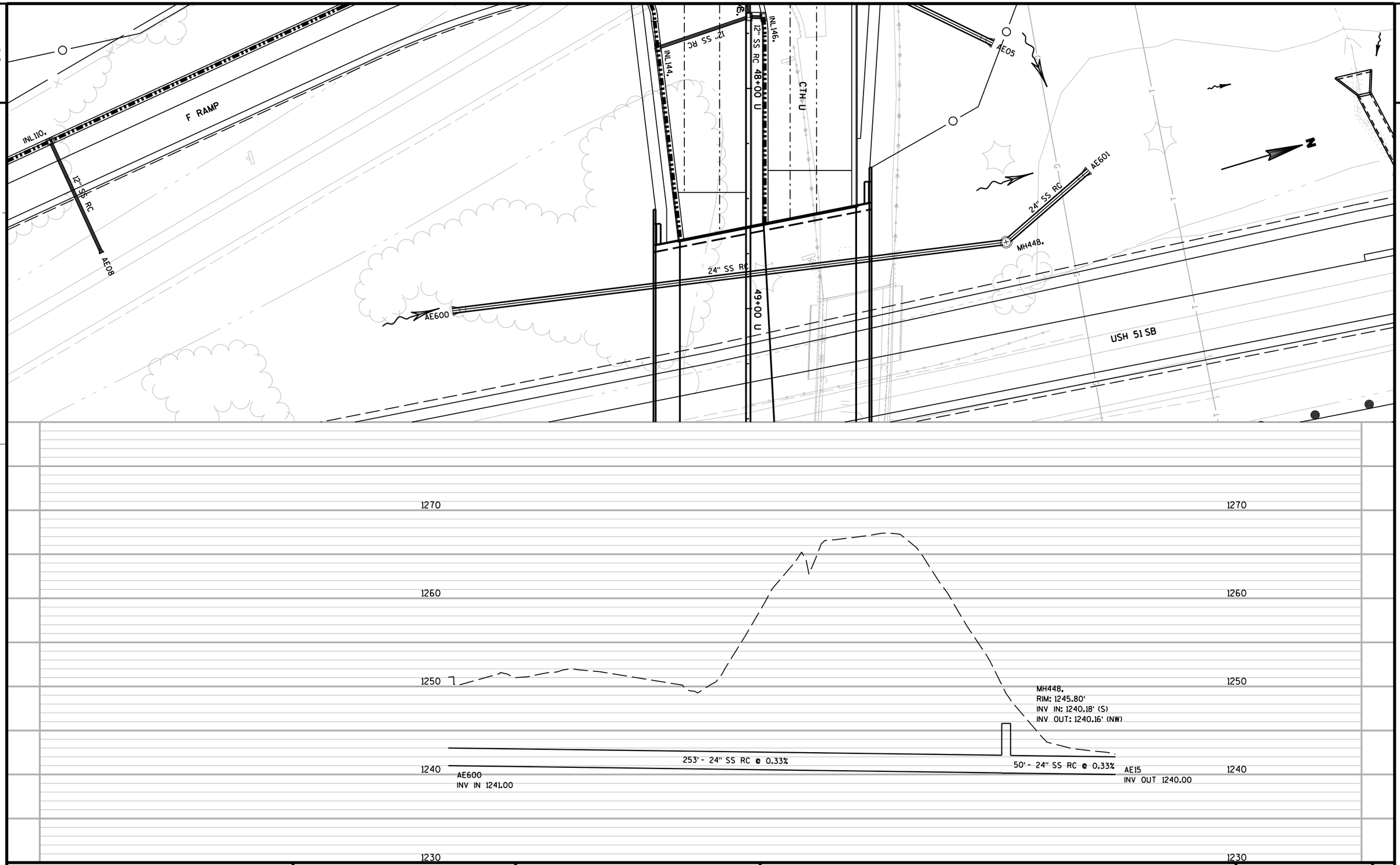
125' - 24" SS RC @ 1.33%
101' - 24" SS RC @ 1.22%

AE04
INV IN 1258.00

1270
1260

PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	STORM SEWER - CTH U	SHEET	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\022516_ss_u.dgn PLOT DATE : 8/1/2012 PLOT BY : cb685 PLOT NAME : PLOT SCALE : 1:40
WISDOT/CADDS SHEET 41

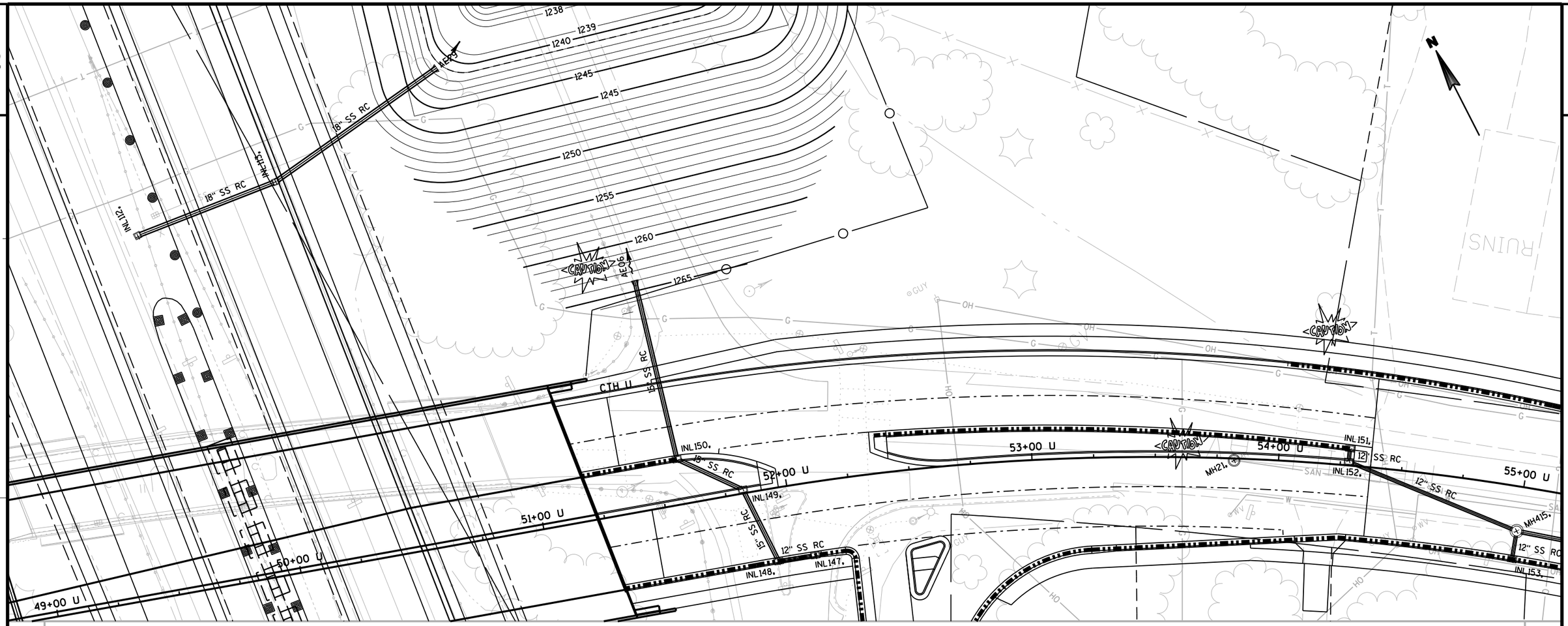


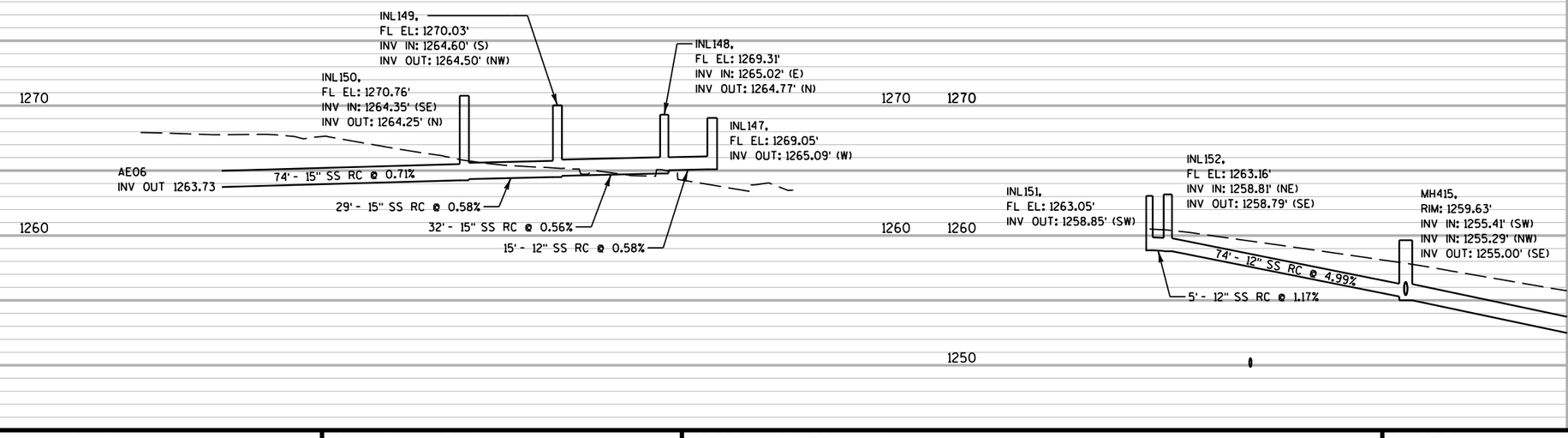
PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	STORM SEWER - CTH U	SHEET	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\022517_ss_u.dgn PLOT DATE : 8/1/2012 PLOT BY : cb685 PLOT NAME : PLOT SCALE : 1:40

WISDOT/CADDS SHEET 41

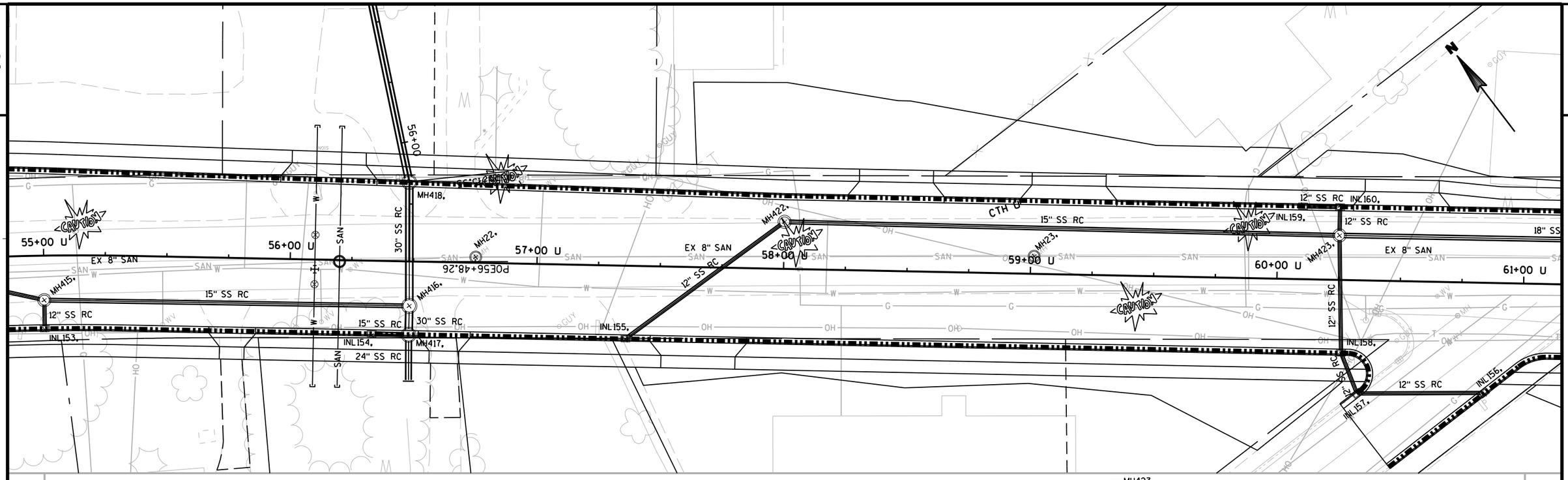
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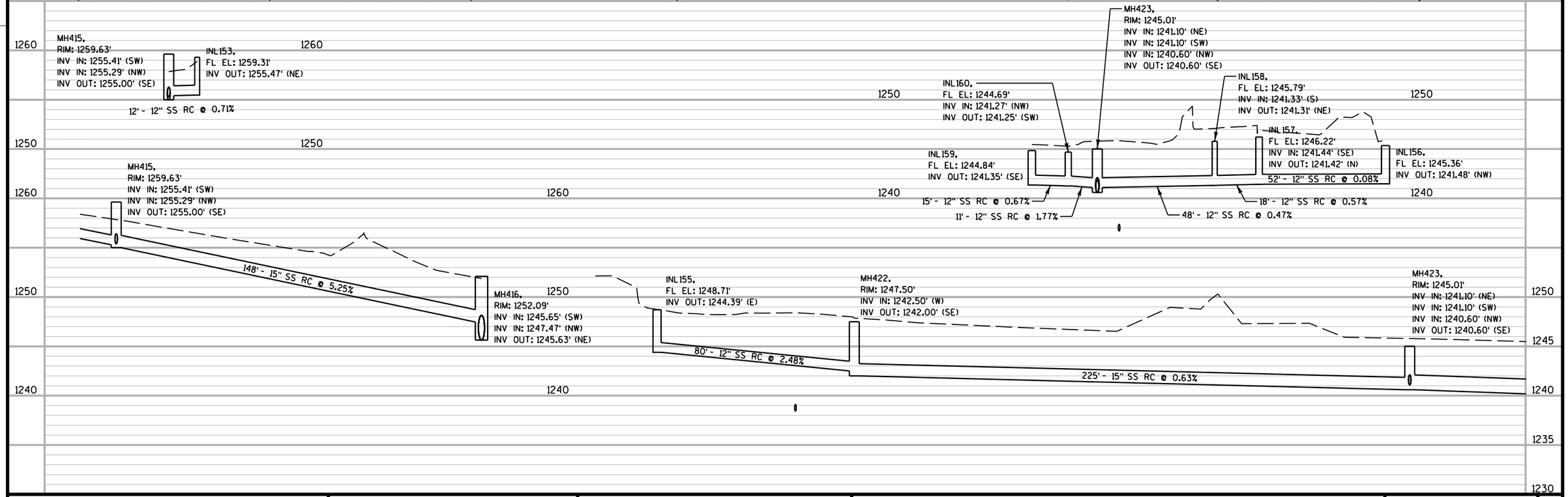




PROJECT NO:6999-18-70	HWY: USH 51	COUNTY: MARATHON	STORM SEWER - CTH U	SHEET 170	E

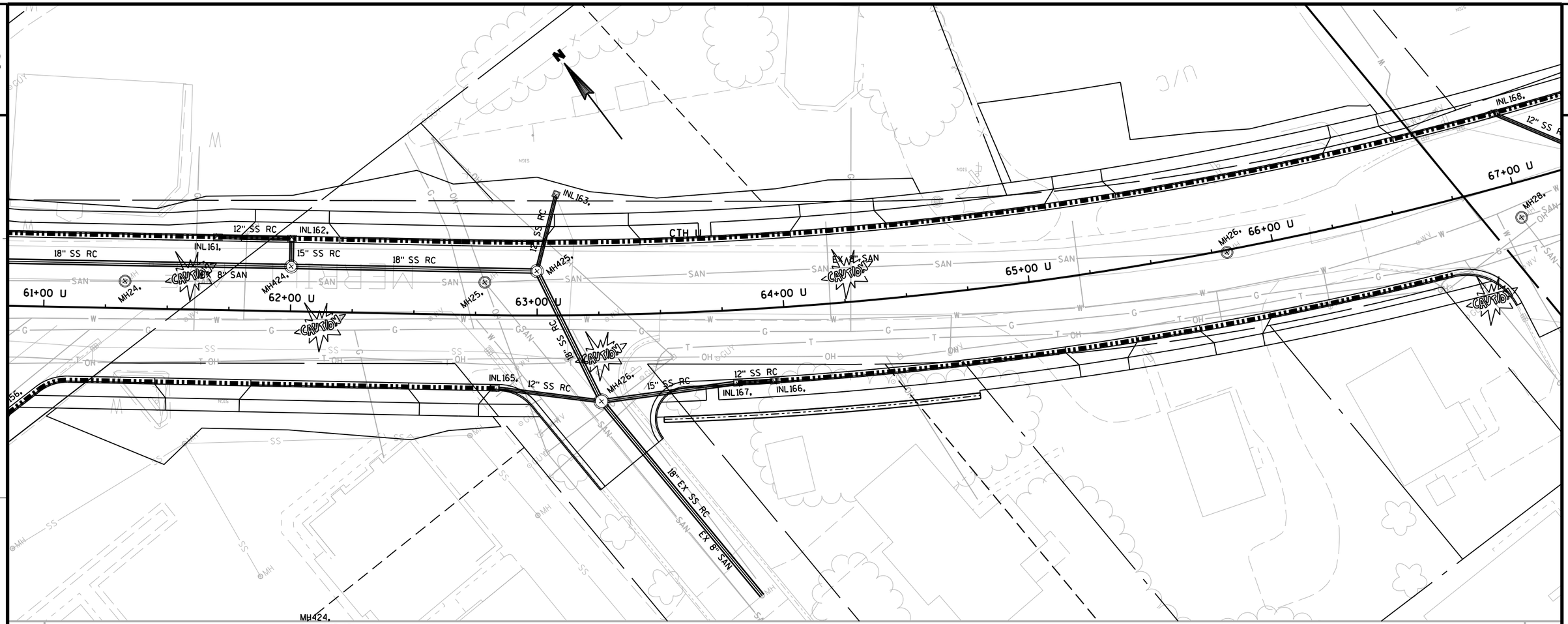
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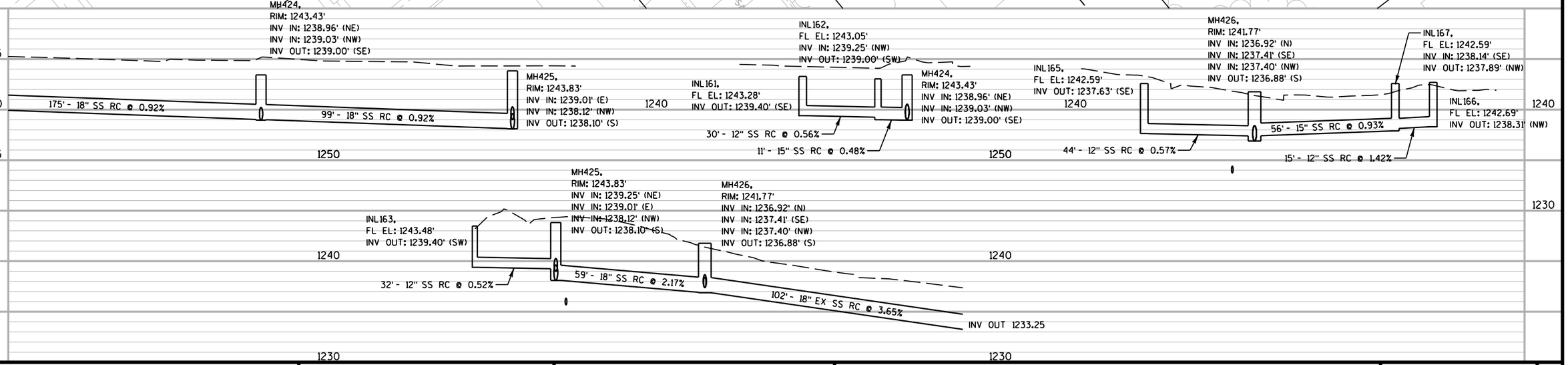




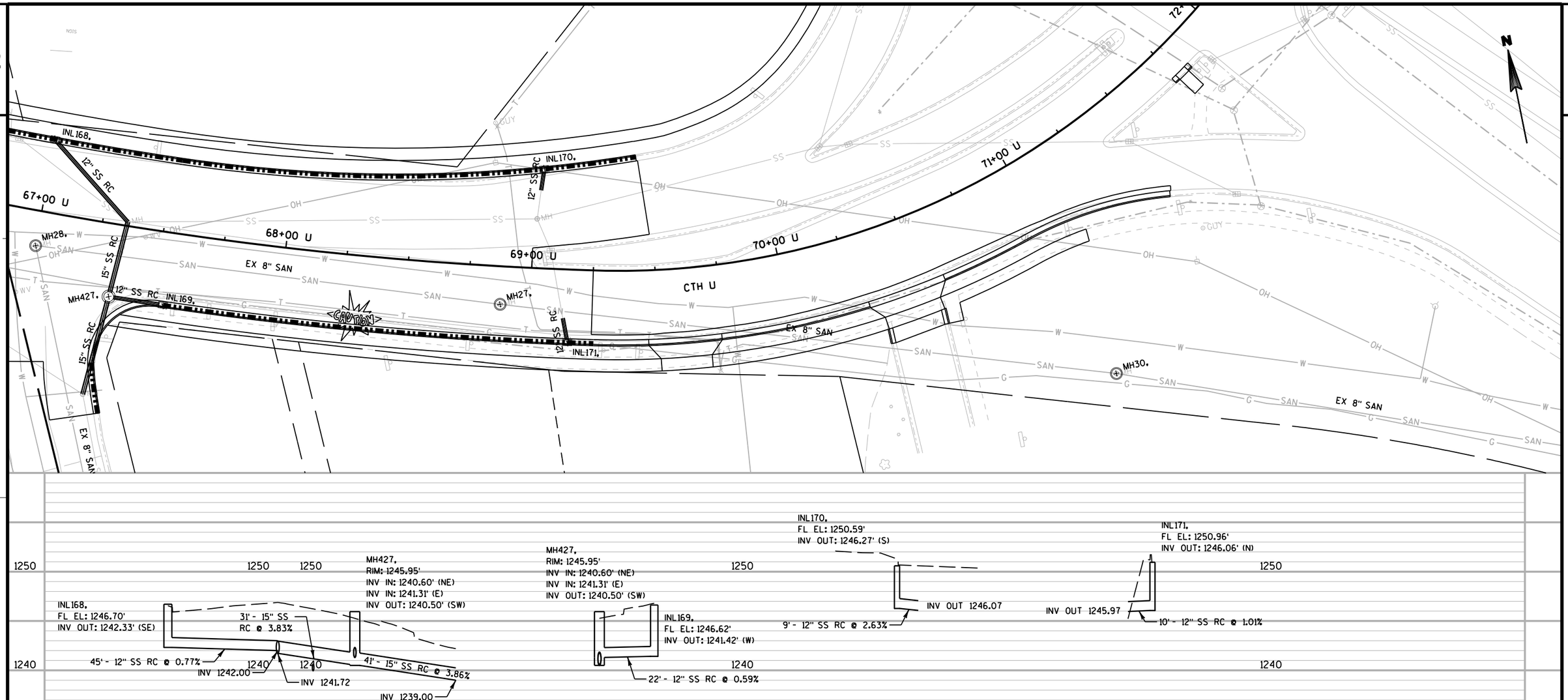
PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	STORM SEWER - CTH U	SHEET 171	E

2



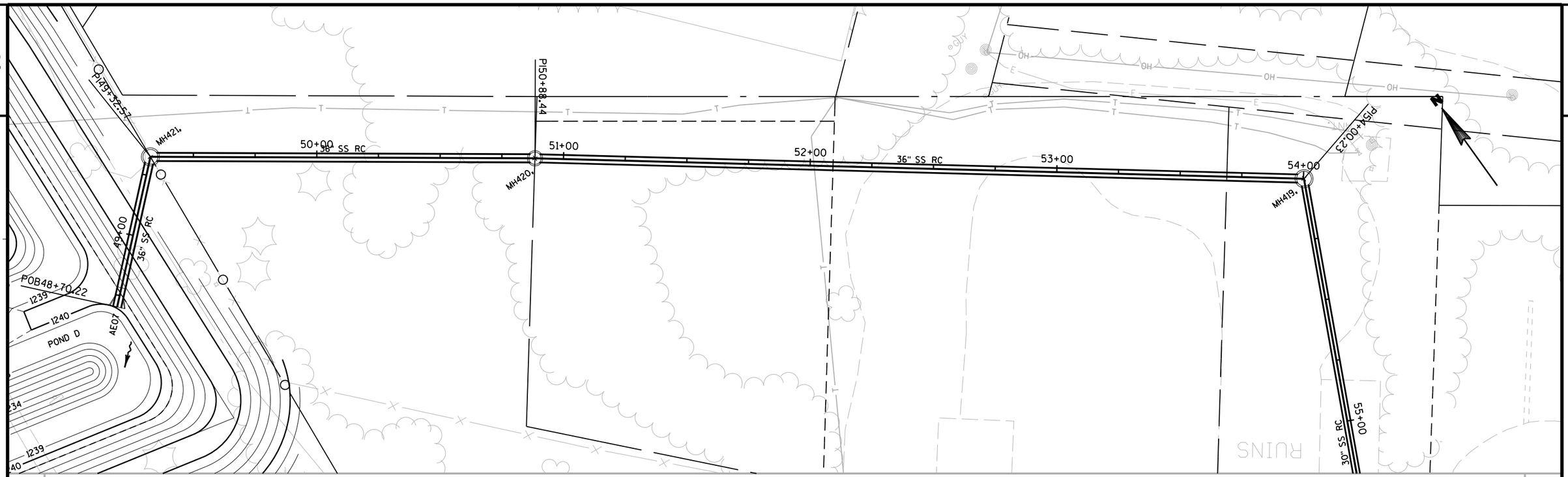


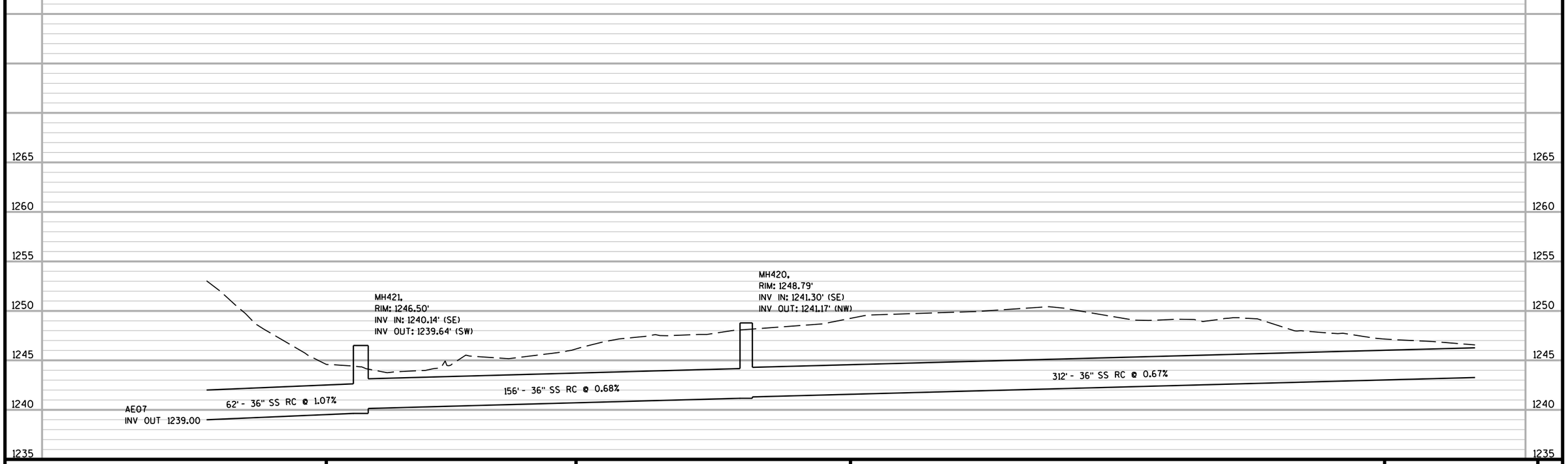
PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	STORM SEWER - CTH U	SHEET 172	E



PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	STORM SEWER - CTH U	SHEET 173	E

2



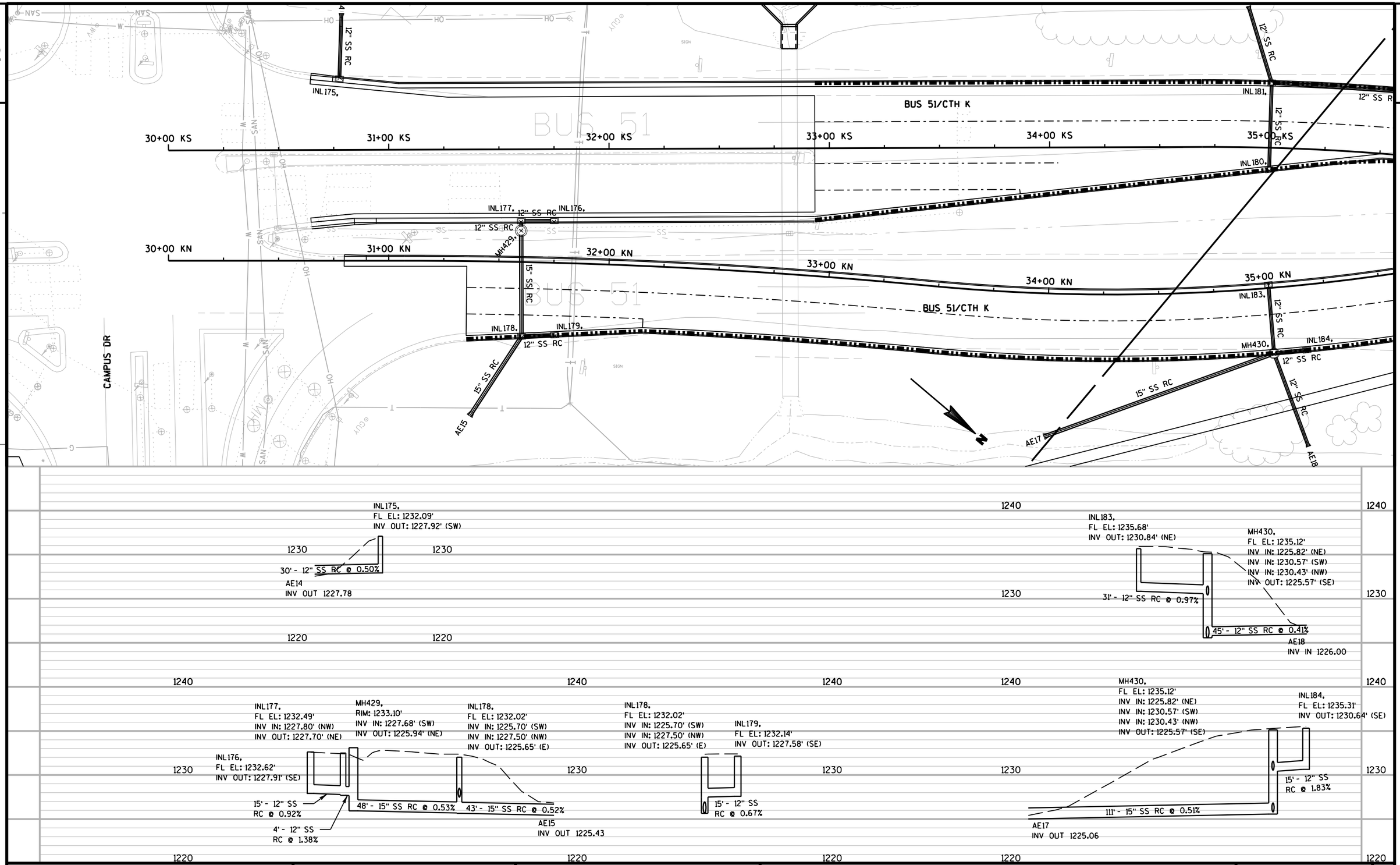


PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	STORM SEWER - CTH U	SHEET E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\022522_ss_u.dgn PLOT DATE : 8/1/2012 PLOT BY : cb685 PLOT NAME : PLOT SCALE : 1:40
WISDOT/CADDS SHEET 41



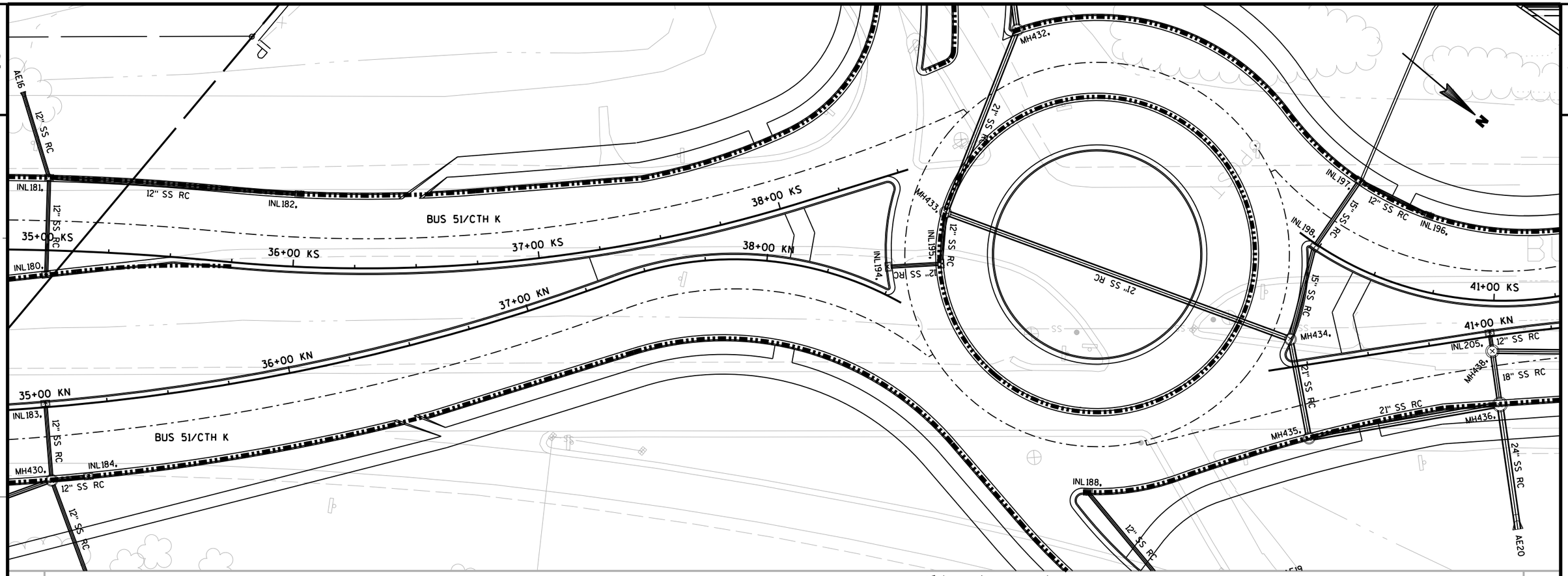
PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	STORM SEWER - CTH U	SHEET 175	E

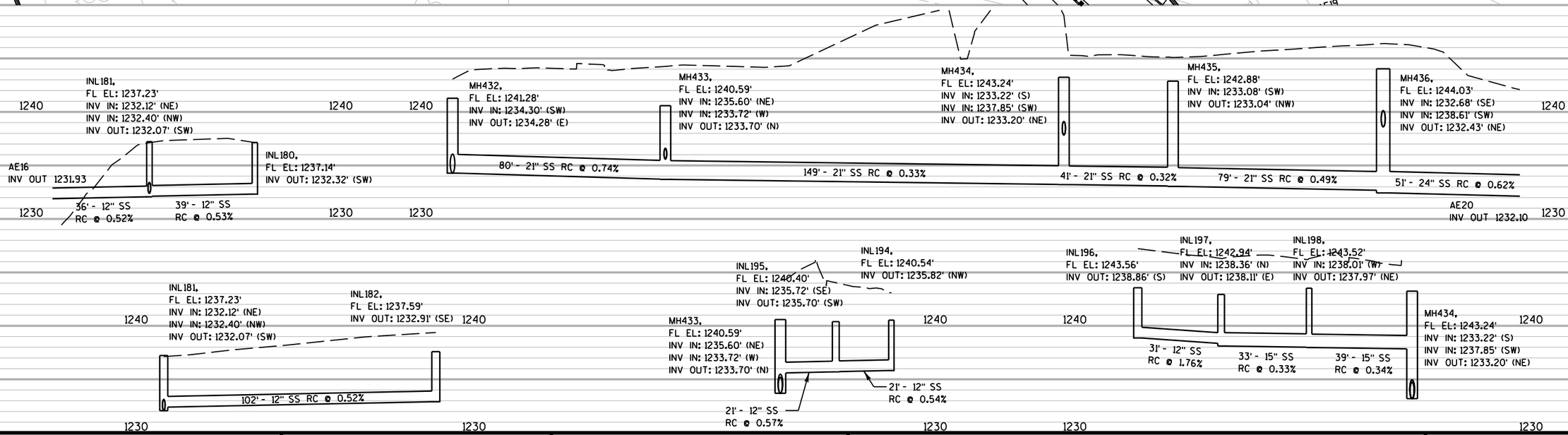


PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	STORM SEWER - CTH K	SHEET E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\022524_ss_k.dgn PLOT DATE : 8/1/2012 PLOT BY : cb685 PLOT NAME : PLOT SCALE : 1:40
WISDOT/CADDS SHEET 41

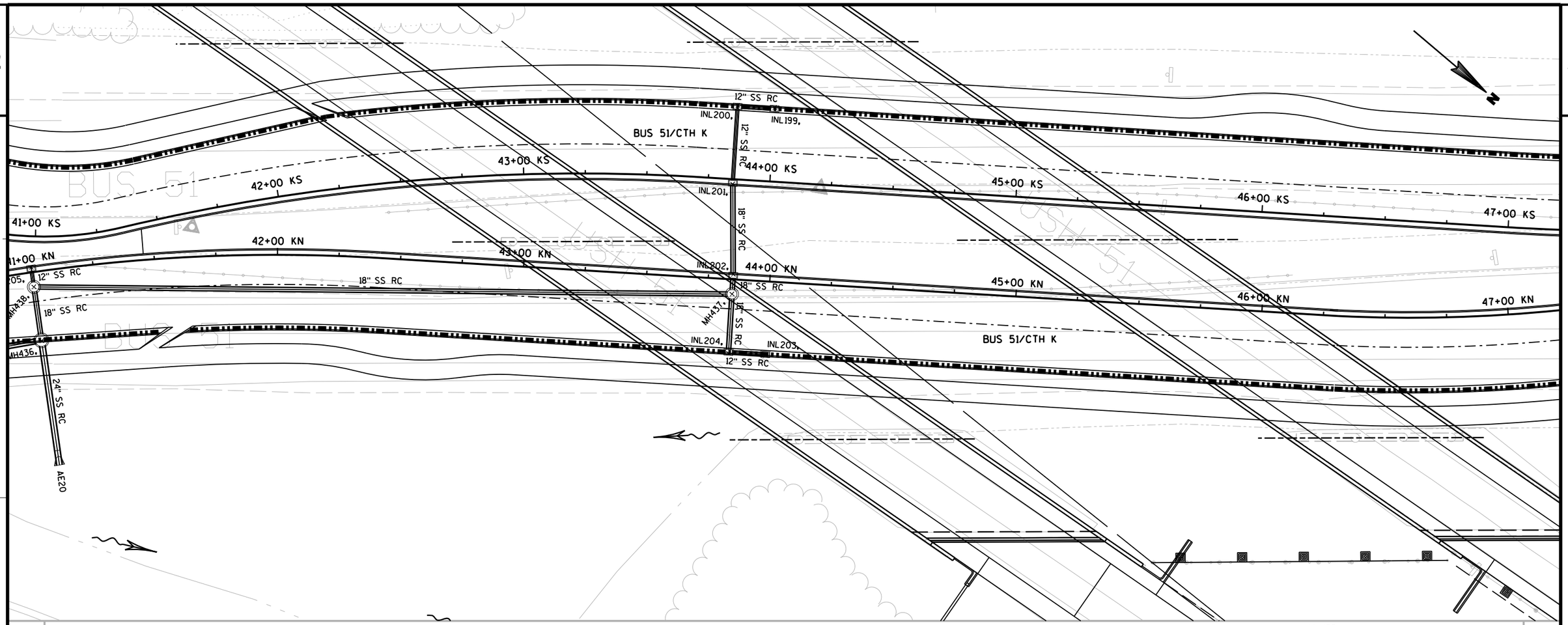
2

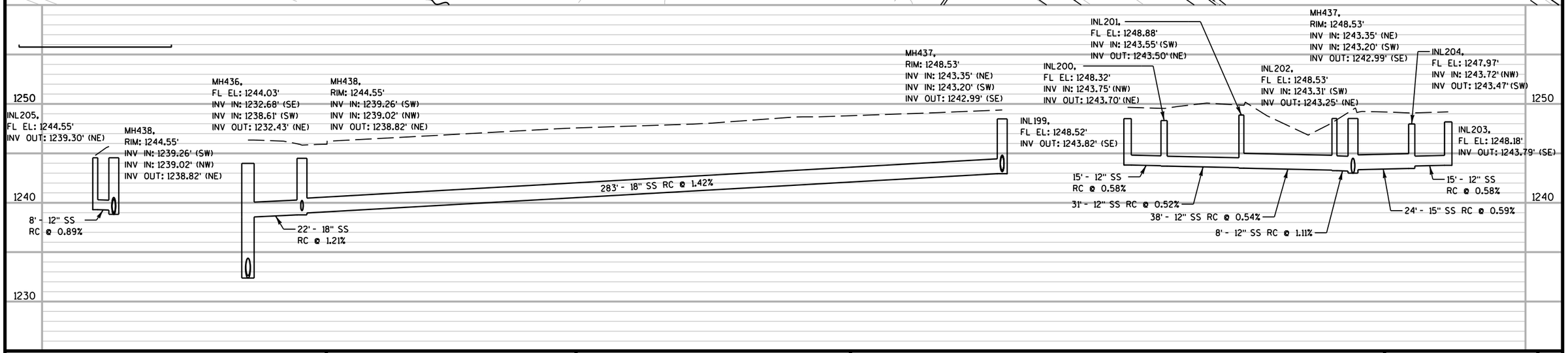




PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	STORM SEWER - CTH K	SHEET 177	E

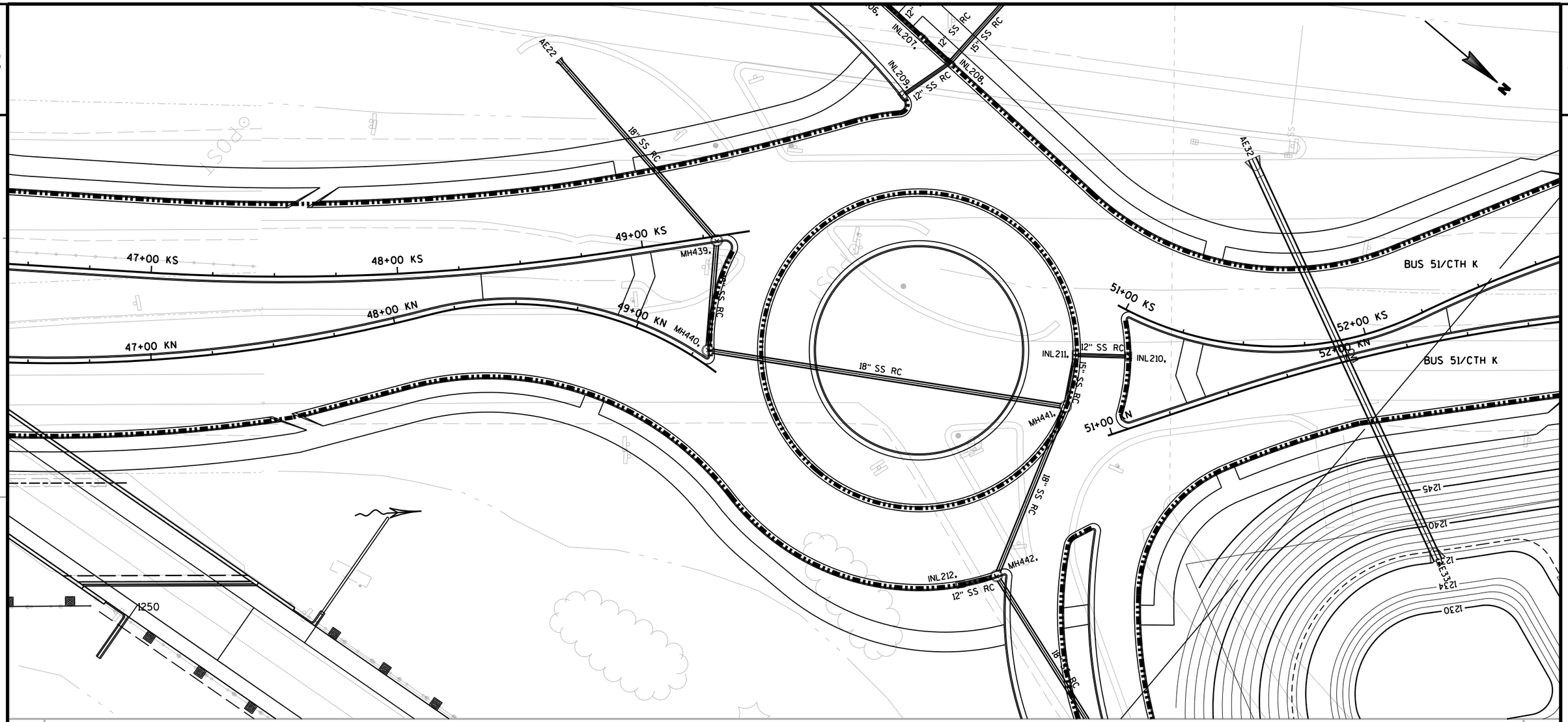
2

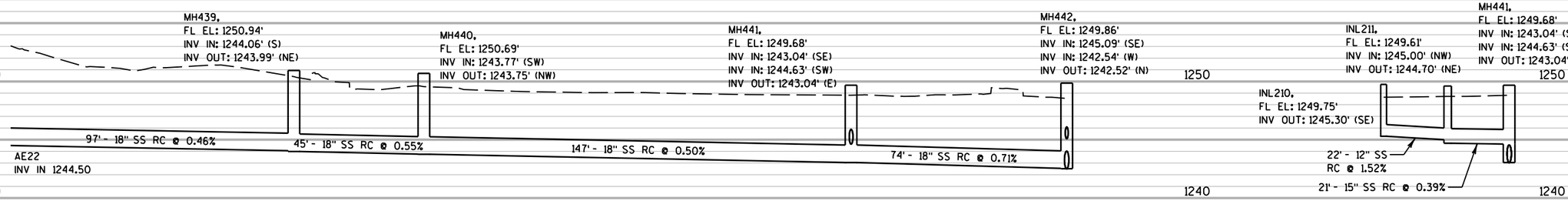




PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	STORM SEWER - CTH K	SHEET 178	E

2





PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	STORM SEWER - CTH K	SHEET 179	E

2

2

INL206.
12" SS RC
INL207.
12" SS RC
15" SS RC
AE21
INL208.
12" SS RC
INL209.
AE22
18" SS RC
AE32
BUS 51/CTH K
47+00 KS
48+00 KS
49+00 KS
MH439.
18" SS RC
53+00 KS
51+00 KS
52+00 KS
47+00 KN
48+00 KN
49+00 KN
MH440.
18" SS RC
52+00 KN
53+00 KN
BUS 51/CTH K
18" SS RC
INL211.
12" SS RC
INL210.
15" SS RC
MH441.
51+00 KN
18" SS RC
1245
1240
1234
AE33
1230
INL212.
12" SS RC
MH442.
18" SS RC

MH442.
FL EL: 1249.86'
INV IN: 1245.09' (SE)
INV IN: 1242.54' (W)
INV OUT: 1242.52' (N)

INL212.
FL EL: 1249.91'
INV OUT: 1245.17' (NW)

15' - 12" SS
RC @ 0.67%

1250
1240
1230

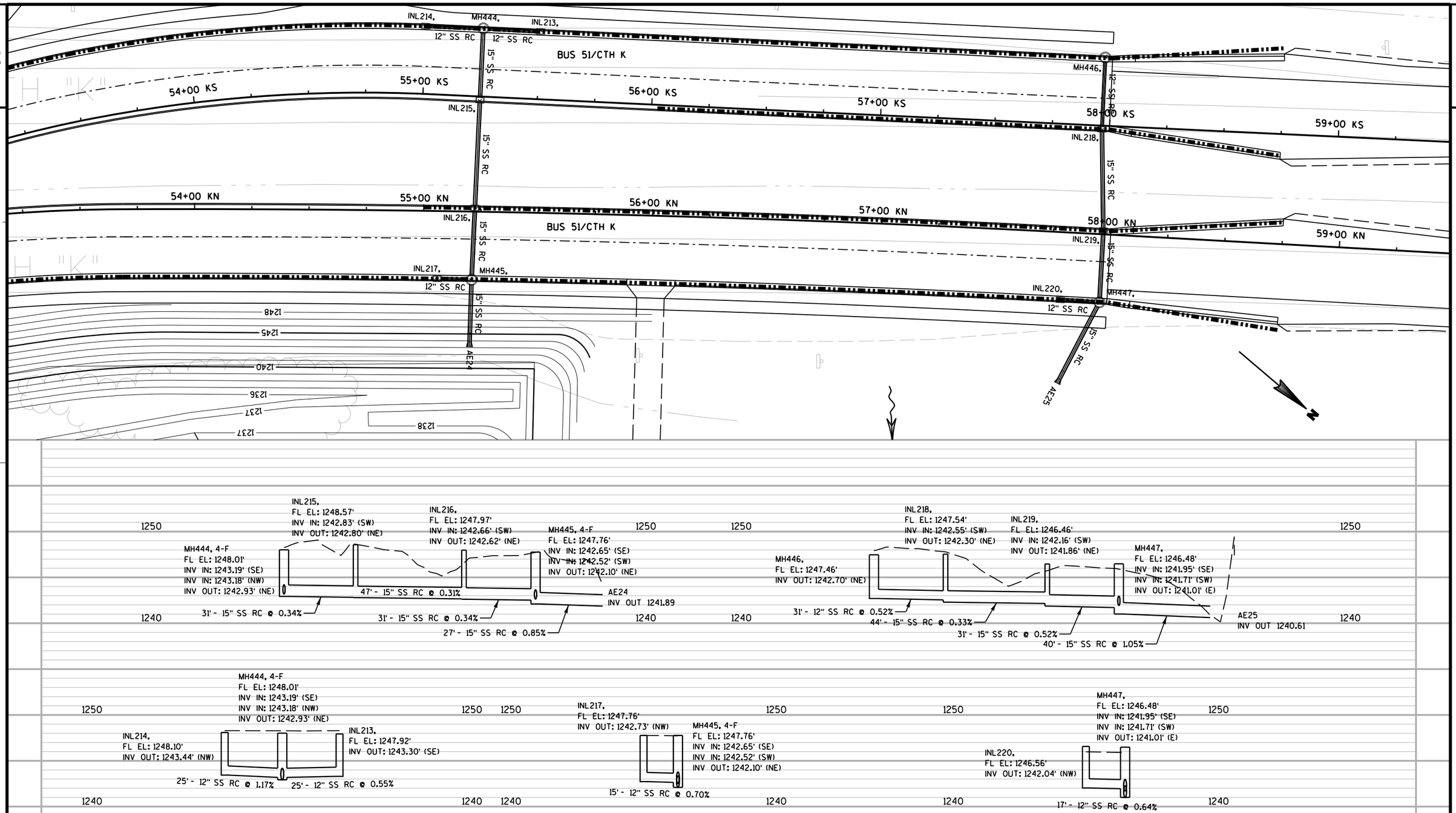
AE
INV IN 1242.50

CV1

179' - 36" C76-A RC @ 4.18%

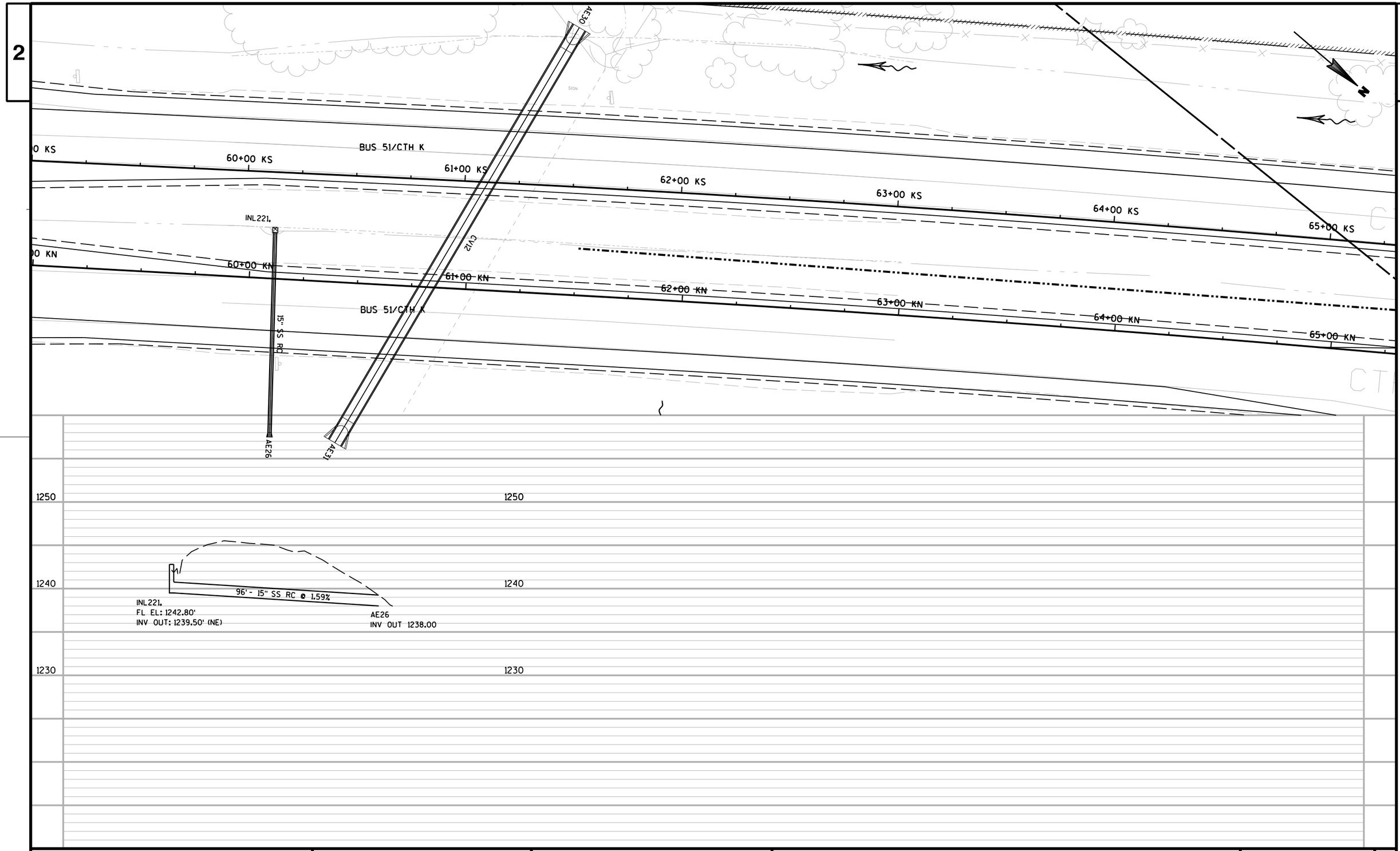
AE
INV OUT 1235.00

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	STORM SEWER - CTH K	SHEET 180	E

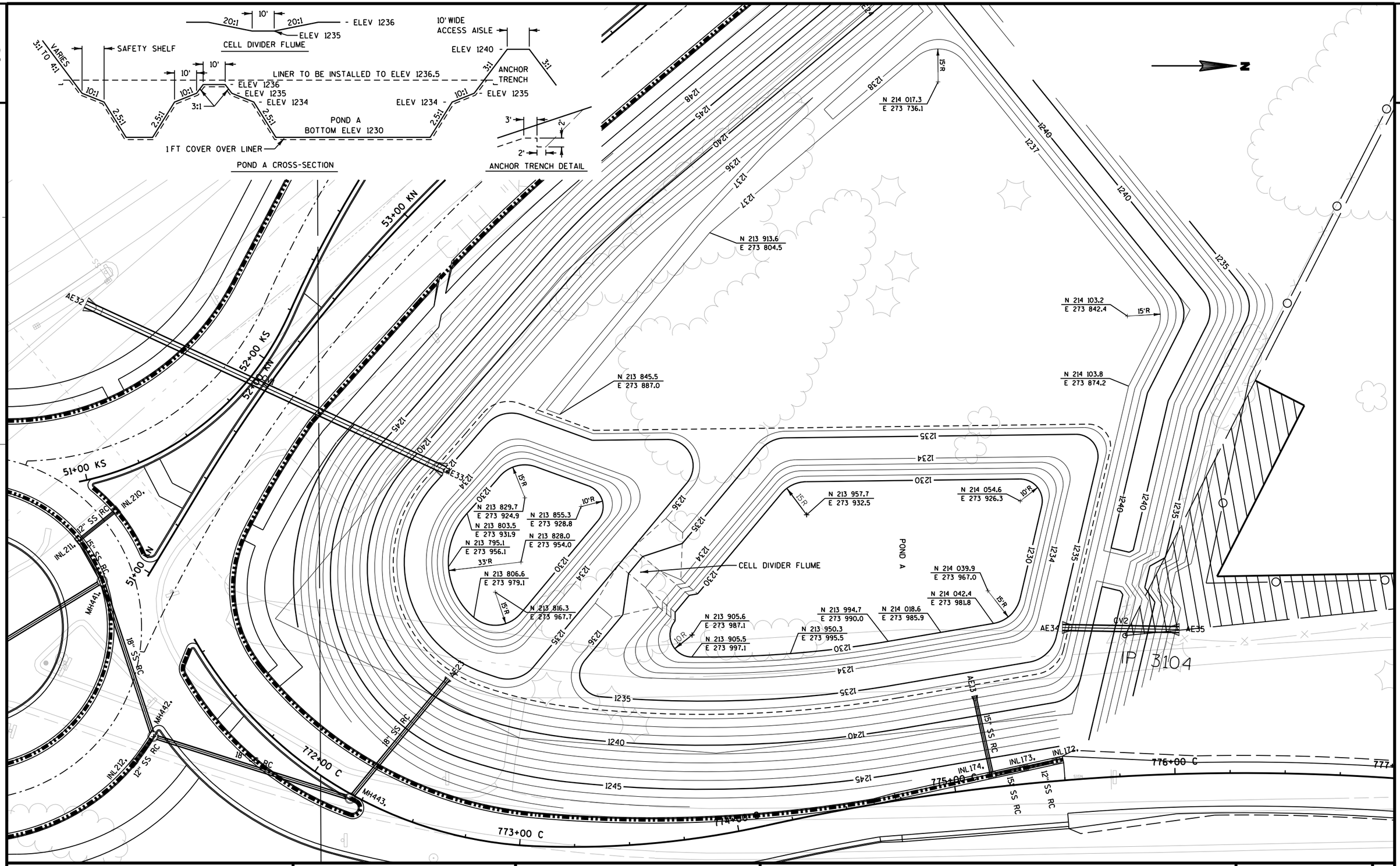


PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	STORM SEWER - CTH K	SHEET	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\022529_ss_k.dgn PLOT DATE : 8/1/2012 PLOT BY : cb685 PLOT NAME : PLOT SCALE : 1:40
WISDOT/CADDS SHEET 41



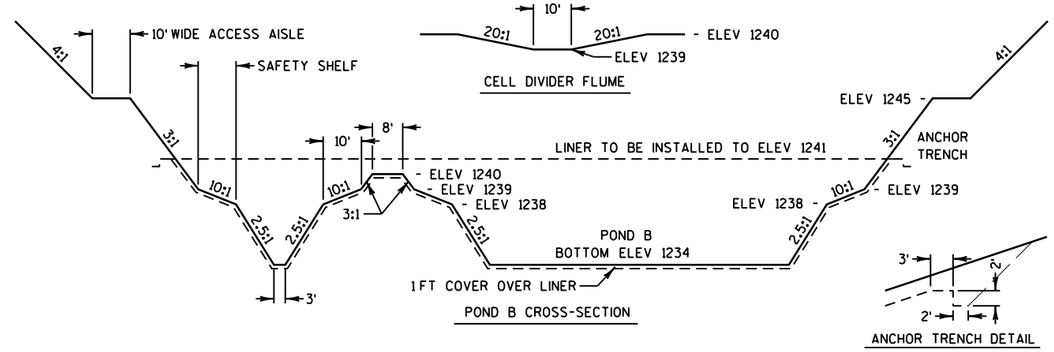
PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	STORM SEWER - CTH K	SHEET 182	E



PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	STORM SEWER - POND A	SHEET 183 E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\022531_ss_pond a.dgn PLOT DATE : 8/1/2012 PLOT BY : cb685 PLOT NAME : PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42



PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	STORM SEWER - POND B	SHEET	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\022532_ss_pond b.dgn PLOT DATE : 8/1/2012 PLOT BY : cb685 PLOT NAME : PLOT SCALE : 1:40

2

STORM SEWER SCHEDULE

STRUCTURE NUMBER	**** STATION	**** OFFSET	INLETS 2x2-FT 611.3220 EACH	2x2.5-FT 611.3225 EACH	2x3-FT 611.3230 EACH	MEDIAN 1 GRATE 611.3901 EACH	MEDIAN 2 GRATE 611.3902 EACH	INLET COVERS TYPE BW 611.0610 EACH	TYPE H 611.0624 EACH	TYPE HM 611.0627 EACH	TYPE MS 611.0642 EACH	TYPE T 611.0652 EACH	TYPE V 611.0654 EACH	MANHOLES 4-FT DIAMETER 611.2004 EACH	5-FT DIAMETER 611.2005 EACH	MANHOLE COVERS TYPE J 611.0530 EACH	* FLOWLINE ELEV	** BOX ELEV	DEPTH	INVERT ELEV	DISCHARGE FROM	DISCHARGE ELEV	DISCHARGE TO	SLOPE %
INL110	749+00 F	9.4 LT	---	---	1	---	---	---	---	1	---	---	---	---	---	---	1260.42	1259.59	3.85	---	---	1255.74	AE08	0.83%
AE08	749+00 F	46.3 RT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1255.25	INL110	---
			---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
INL111	746+00 F	9.4 LT	---	---	1	---	---	---	---	1	---	---	---	---	---	---	1249.23	1248.40	3.52	---	---	1244.88	AE09	0.50%
AE09	746+00 F	44 RT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1244.56	INL111	---	---	---
INL114	759+00 D	27.9 RT	---	---	---	1	---	---	---	---	1	---	---	---	---	---	1257.34	1256.67	4.42	---	---	1252.25	AE10	1.08%
AE10	759+00 D	43 LT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1251.50	INL114	---
			---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
INL115	767+34.6 D	9.5 LT	---	---	1	---	---	---	---	1	---	---	---	---	---	---	1256.09	1255.26	3.85	---	---	1251.41	INL116	3.33%
INL116	767+50 D	9.5 LT	---	---	1	---	---	---	---	1	---	---	---	---	---	---	1255.69	1254.86	4.10	1251.01	INL115	1250.76	AE11	0.33%
AE11	767+50 D	50 RT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1250.57	INL116	---	---	---
INL222	783+00 C	31.2 RT	---	---	---	1	---	---	---	---	1	---	---	---	---	---	1233.69	1233.69	1.77	---	---	1231.92	INL117	0.50%
INL117	781+00.8 C	36 RT	---	---	---	---	1	---	---	---	1	---	---	---	---	---	1236.00	1235.33	4.66	1230.92	INL222	1230.67	AE12	0.32%
AE12	780+99.5 C	45 LT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1230.39	INL117	---	---	---
			---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
INL172	775+46.7 C	9 LT	---	---	1	---	---	---	---	1	---	---	---	---	---	---	1244.52	1243.69	3.87	---	---	1239.82	INL173	0.58%
INL173	775+32 C	7.1 LT	---	---	1	---	---	---	---	1	---	---	---	---	---	---	1244.72	1243.89	4.39	1239.75	INL172	1239.50	INL174	0.42%
INL174	775+17.2 C	5.5 LT	---	---	1	---	---	---	---	1	---	---	---	---	---	---	1244.93	1244.10	4.80	1239.45	INL173	1239.30	AE13	6.42%
AE13	775+13.5 C	42.2 LT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1237.00	INL174	---	---	---
INL175	30+77.8 KS	32.7 LT	---	---	1	---	---	---	1	---	---	---	---	---	---	---	1232.09	1231.26	3.34	---	---	1227.92	AE14	0.50%
AE14	30+78.8 KS	62 LT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1227.78	INL175	---	---	---
INL176	31+74.6 KN	18.5 LT	---	---	1	---	---	---	1	---	---	---	---	---	---	---	1232.62	1231.79	3.88	---	---	1227.91	INL177	0.92%
INL177	31+59.7 KN	18.1 LT	---	---	1	---	---	---	1	---	---	---	---	---	---	---	1232.49	1231.66	3.96	1227.80	INL176	1227.70	MH429	1.38%
MH429	31+59.7 KN	14.2 LT	---	---	---	---	---	---	---	---	---	---	---	1	---	1	1233.10	1231.85	5.91	1227.68	INL177	1225.94	INL178	0.53%
INL178	31+61 KN	34.3 RT	---	---	1	---	---	---	1	---	---	---	---	---	---	---	1232.02	1231.19	5.54	1225.70	MH429	1225.65	AE15	0.52%
			---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1227.50	INL179	---	---	---
INL179	31+76.2 KN	33.2 RT	---	---	1	---	---	---	1	---	---	---	---	---	---	---	1232.14	1231.31	3.73	---	---	1227.58	INL178	0.67%
AE15	31+37.5 KN	70.3 RT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1225.43	INL178	---	---	---
INL180	35+00 KS	10.4 RT	---	---	1	---	---	---	1	---	---	---	---	---	---	---	1237.14	1236.31	3.99	---	---	1232.32	INL181	0.53%
INL181	35+00 KS	30 LT	---	---	1	---	---	---	1	---	---	---	---	---	---	---	1237.23	1236.40	4.33	1232.12	INL180	1232.07	AE16	0.52%
			---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1232.40	INL182	---	---	---
INL182	36+01.2 KS	30 LT	---	---	1	---	---	---	1	---	---	---	---	---	---	---	1237.59	1236.76	3.85	---	---	1232.91	INL181	0.52%
AE16	34+89.2	64.0 LT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1231.93	INL181	---	---	---
INL183	35+00 KN	1.4 LT	---	---	1	---	---	---	1	---	---	---	---	---	---	---	1235.68	1234.85	4.01	---	---	1230.84	MH430	0.97%
MH430	35+00 KN	29.5 RT	---	---	---	---	---	---	1	---	---	---	---	1	---	---	1235.12	1234.29	8.72	1230.57	INL183	1225.57	AE17	0.51%
			---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1230.43	INL184	---	---	---
			---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1225.82	AE18	---	---	---
INL184	35+14.5 KN	29.5 RT	---	---	1	---	---	---	1	---	---	---	---	---	---	---	1235.31	1234.48	3.84	---	---	1230.64	MH430	1.83%
AE17	34+01 KN	65 RT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1225.06	MH430	---	---	---
AE18	35+11.2 KN	73.2 RT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1226.00	MH430	0.41%
INL185	762+65 B	1.5 RT	---	---	1	---	---	---	1	---	---	---	---	---	---	---	1240.68	1239.85	3.82	---	---	1236.03	INL186	0.58%
INL186	762+50 B	1.5 RT	---	---	1	---	---	---	1	---	---	---	---	---	---	---	1240.65	1239.82	3.97	1235.96	INL185	1235.85	INL187	0.64%
INL187	762+50 B	16 LT	---	---	1	---	---	---	1	---	---	---	---	---	---	---	1240.95	1240.12	4.62	1235.75	INL186	1235.50	AE19	0.41%
			---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1236.25	INL188	---	---	---
INL188	101+46.5 KE	31 RT	---	---	1	---	---	---	1	---	---	---	---	---	---	---	1241.80	1240.97	4.00	---	---	1236.97	INL187	1.28%
AE19	762+84.4 B	45.9 LT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1235.33	INL187	---	---	---
INL189	760+58.3 A	17.5 RT	---	---	1	---	---	---	1	---	---	---	---	---	---	---	1240.09	1239.26	3.70	---	---	1235.56	INL190	0.58%
INL190	760+74.9 A	17.5 RT	---	---	1	---	---	---	1	---	---	---	---	---	---	---	1240.05	1239.22	3.98	1235.49	INL189	1235.24	INL191	0.41%
INL191	760+74.9 A	1.5 LT	---	---	1	---	---	---	1	---	---	---	---	---	---	---	1240.37	1239.54	4.42	1235.17	INL190	1235.12	INL192	0.37%
INL192	760+74.9 A	11.6 LT	---	---	1	---	---	---	1	---	---	---	---	---	---	---	1240.52	1239.69	4.85	1235.09	INL191	1234.84	MH431	0.38%
			---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1235.85	INL193	---	---	---
INL193	760+89 A	12.6 LT	---	---	1	---	---	---	1	---	---	---	---	---	---	---	1240.58	1239.75	3.83	---	---	1235.92	INL192	0.58%
MH431	760+74.9 A	35.3 LT	---	---	---	---	---	---	1	---	---	---	---	1	---	---	1240.93	1240.10	5.66	1234.76	INL192	1234.44	MH432	0.36%
MH432	103+77.2 KE	31 RT	---	---	---	---	---	---	1	---	---	---	---	1	---	---	1241.28	1240.45	6.17	1234.30	MH431	1234.28	MH433	0.74%
MH433	100+28.5 KE	1.7 LT	---	---	---	---	---	---	---	---	---	1	---	1	---	---	1240.59	1239.51	5.81	1233.72	MH432	1233.70	MH434	0.33%

2

STORM SEWER SCHEDULE

STRUCTURE NUMBER	**** STATION	**** OFFSET	INLETS 2x2-FT 611.3220 EACH	2x2.5-FT 611.3225 EACH	2x3-FT 611.3230 EACH	MEDIAN 1 GRATE 611.3901 EACH	MEDIAN 2 GRATE 611.3902 EACH	INLET COVERS TYPE BW 611.0610 EACH	TYPE H 611.0624 EACH	TYPE HM 611.0627 EACH	TYPE MS 611.0642 EACH	TYPE T 611.0652 EACH	TYPE V 611.0654 EACH	MANHOLES 4-FT DIAMETER 611.2004 EACH	5-FT DIAMETER 611.2005 EACH	MANHOLE COVERS TYPE J 611.0530 EACH	* FLOWLINE ELEV	** BOX ELEV	DEPTH	INVERT ELEV	DISCHARGE FROM	DISCHARGE ELEV	DISCHARGE TO	SLOPE %
			---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1235.60	INL195	---	---	---
INL194	100+49.3 KE	19.3 RT	---	---	1	---	---	---	1	---	---	---	---	---	---	---	1240.54	1239.71	3.89	---	---	1235.82	INL195	0.54%
INL195	100+50 KE	1.7LT	1	---	---	---	---	---	---	---	---	1	---	---	---	---	1240.40	1239.32	3.62	1235.72	INL194	1235.70	MH433	0.57%
MH434	102+25 KE	29 RT	---	---	---	---	---	---	1	---	---	---	---	1	---	---	1243.24	1242.41	9.21	1233.22	MH433	1233.20	MH435	0.32%
			---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1237.85	INL198	---	---	---
INL196	40+64.5 KS	30.3 LT	---	---	1	---	---	---	1	---	---	---	---	---	---	---	1243.56	1242.73	3.87	---	---	1238.86	INL197	1.76%
INL197	40+23.8 KS	31.1 LT	---	---	1	---	---	---	1	---	---	---	---	---	---	---	1242.94	1242.11	4.00	1238.36	INL196	1238.11	INL198	0.33%
INL198	40+23.4 KS	1.5 RT	---	---	1	---	---	---	1	---	---	---	---	---	---	---	1243.52	1242.69	4.72	1238.01	INL197	1237.97	MH434	0.34%
MH435	40+21 KN	29.3 RT	---	---	---	---	---	---	1	---	---	---	---	1	---	---	1242.88	1242.05	9.01	1233.08	MH434	1233.04	MH436	0.49%
MH436	41+00 KN	27.5 RT	---	---	---	---	---	---	1	---	---	---	---	1	---	---	1244.03	1243.20	10.77	1232.68	MH435	1232.43	AE20	0.62%
			---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1238.61	MH438	---	---	---
INL199	44+00 KS	29.5 LT	---	---	1	---	---	---	1	---	---	---	---	---	---	---	1248.52	1247.69	3.87	---	---	1243.82	INL200	0.58%
INL200	43+86 KS	29.5 LT	---	---	1	---	---	---	1	---	---	---	---	---	---	---	1248.32	1247.49	3.79	1243.75	INL199	1243.70	INL201	0.52%
INL201	43+86 KS	1.5 RT	---	---	1	---	---	---	1	---	---	---	---	---	---	---	1248.88	1248.05	4.55	1243.55	INL200	1243.50	INL202	0.54%
INL202	43+85 KN	1.5 LT	---	---	1	---	---	---	1	---	---	---	---	---	---	---	1248.53	1247.70	4.45	1243.31	INL201	1243.25	MH437	1.11%
MH437	43+85 KN	6 RT	---	---	---	---	---	---	---	---	---	---	---	1	---	1	1248.53	1247.28	4.29	1243.20	INL202	1242.99	MH438	1.42%
			---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1243.35	INL204	---	---	---
INL203	44+00 KN	29.5 RT	---	---	1	---	---	---	1	---	---	---	---	---	---	---	1248.18	1247.35	3.56	---	---	1243.79	INL204	0.58%
INL204	43+85 KN	29.5 RT	---	---	1	---	---	---	1	---	---	---	---	---	---	---	1247.97	1247.14	3.67	1243.72	INL203	1243.47	MH437	0.59%
MH438	41+00 KN	6 RT	---	---	---	---	---	---	---	---	---	---	---	1	---	1	1244.55	1243.30	4.48	1239.02	MH437	1238.82	MH436	1.21%
			---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1239.26	INL205	---	---	---
INL205	41+00 KN	1.5 LT	---	---	1	---	---	---	1	---	---	---	---	---	---	---	1244.55	1243.72	4.42	---	---	1239.30	MH438	0.89%
AE20	41+00 KN	79 RT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1232.10	MH436	---	---	---
INL206	770+12.7 D	1.5 LT	---	---	1	---	---	---	1	---	---	---	---	---	---	---	1249.66	1248.83	3.83	---	---	1245.00	INL207	0.42%
INL207	770+34.7 D	1.5 LT	---	---	1	---	---	---	1	---	---	---	---	---	---	---	1249.55	1248.72	3.81	1244.92	INL206	1244.91	INL208	0.75%
INL208	770+49.7 D	1.5 LT	---	---	1	---	---	---	1	---	---	---	---	---	---	---	1249.51	1248.68	4.10	1244.82	INL207	1244.58	AE21	0.64%
			---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1244.83	INL209	---	---	---
INL209	770+44.6 D	21.1 RT	---	---	1	---	---	---	1	---	---	---	---	---	---	---	1249.92	1249.09	4.09	---	---	1245.00	INL208	0.80%
AE21	770+49.2 D	40.2 LT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1244.34	IN208	---	---	---
AE22	48+76.7 KS	80.4 LT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1244.50	MH439	0.46%
MH439	49+30.2 KS	1.5 RT	---	---	---	---	---	---	1	---	---	---	---	1	---	---	1250.94	1250.11	6.12	1244.06	AE22	1243.99	MH440	0.55%
MH440	200+46 KW	19.5 RT	---	---	---	---	---	---	1	---	---	---	---	1	---	---	1250.69	1249.86	6.11	1243.77	MH439	1243.75	MH441	0.50%
MH441	202+28.1 KW	1.7 LT	---	---	---	---	---	---	---	---	---	1	---	1	---	---	1249.68	1248.60	5.56	1243.04	MH440	1243.04	MH442	0.71%
			---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1244.63	INL211	---	---	---
INL210	202+50 KW	20 RT	---	---	1	---	---	---	1	---	---	---	---	---	---	---	1249.75	1248.92	3.62	---	---	1245.30	INL211	1.52%
INL211	202+50 KW	1.7 LT	---	---	1	---	---	---	---	---	---	1	---	---	---	---	1249.61	1248.78	4.08	1245.00	INL210	1244.70	MH441	0.39%
MH442	201+70.7 KW	31 RT	---	---	---	---	---	---	1	---	---	---	---	1	---	---	1249.86	1249.03	6.51	1242.54	MH441	1242.52	MH443	0.86%
			---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1245.09	INL212	---	---	---
INL212	201+60.6 KW	31 RT	---	---	1	---	---	---	1	---	---	---	---	---	---	---	1249.91	1249.08	3.91	---	---	1245.17	MH442	0.67%
MH443	772+20 C	1.5 RT	---	---	---	---	---	---	1	---	---	---	---	1	---	---	1248.43	1247.60	6.01	1241.74	MH442	1241.59	AE23	6.79%
AE23	772+39.7 C	66.5 LT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1236.52	MH443	---	---	---
INL213	55+50 KS	29.5 LT	---	---	1	---	---	---	1	---	---	---	---	---	---	---	1247.92	1247.09	3.79	---	---	1243.30	MH444	0.55%
MH444	55+25 KS	29.5 LT	---	---	---	---	---	---	1	---	---	---	---	1	---	---	1248.01	1247.18	4.25	1243.18	INL213	1242.93	INL215	0.34%
			---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1243.19	INL214	---	---	---
INL214	55+00 KS	29.5 LT	---	---	1	---	---	---	1	---	---	---	---	---	---	---	1248.10	1247.27	3.83	---	---	1243.44	MH444	1.17%
INL215	55+25 KS	1.5 RT	---	---	1	---	---	---	1	---	---	---	---	---	---	---	1248.57	1247.74	4.94	1242.83	MH444	1242.80	INL216	0.31%
INL216	55+22.3 KN	1.8 LT	---	---	1	---	---	---	1	---	---	---	---	---	---	---	1247.97	1247.14	4.52	1242.66	INL215	1242.62	MH445	0.34%
MH445	55+21.4 KN	29.5 RT	---	---	---	---	---	---	1	---	---	---	---	1	---	---	1247.76	1246.93	4.83	1242.52	INL216	1242.10	AE24	0.85%
			---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1242.65	INL217	---	---	---
INL217	55+06.3 KN	29.3 RT	---	---	1	---	---	---	1	---	---	---	---	---	---	---	1247.76	1246.93	4.20	---	---	1242.73	MH445	0.70%
AE24	55+21.2 KN	59 RT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1241.89	MH445	---	---	---
MH446	57+96.8 KS	29.5 LT	---	---	---	---	---	---	1	---	---	---	---	1	---	---	1247.46	1246.63	3.93	---	---	1242.70	INL218	0.52%
INL218	57.96.8 KS	1.5 RT	---	---	1	---	---	---	1	---	---	---	---	---	---	---	1247.54	1246.71	4.41	1242.55	MH446	1242.30	INL219	0.33%
INL219	57+96.7 KN	1.5 LT	---	---	1	---	---	---	1	---	---	---	---	---	---	---	1246.46	1245.63	3.77	1242.16	INL218	1241.86	MH447	0.52%
MH447	57+96.7 KN	29.5 RT	---	---	---	---	---	---	1	---	---	---	---	1	---	---	1246.48	1245.65	4.64	1241.71	INL219	1241.01	AE25	1.05%

2

STORM SEWER SCHEDULE

			INLETS						INLET COVERS						MANHOLES		MANHOLE COVERS									
			2x2-FT	2x2.5-FT	2x3-FT	MEDIAN 1 GRATE	MEDIAN 2 GRATE	TYPE BW	TYPE H	TYPE HM	TYPE MS	TYPE T	TYPE V	4-FT DIAMETER	5-FT DIAMETER	TYPE J	*	**							
STRUCTURE NUMBER	**** STATION	**** OFFSET	611.3220 EACH	611.3225 EACH	611.3230 EACH	611.3901 EACH	611.3902 EACH	611.0610 EACH	611.0624 EACH	611.0627 EACH	611.0642 EACH	611.0652 EACH	611.0654 EACH	611.2004 EACH	611.2005 EACH	611.0530 EACH	FLOWLINE ELEV	BOX ELEV	DEPTH	INVERT ELEV	FROM	DISCHARGE ELEV	TO	SLOPE %
			---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1241.95	INL220	---	---	---
INL220	57+79.5 KN	29.5 RT	---	---	1	---	---	---	1	---	---	---	---	---	---	---	1246.56	1245.73	3.69	---	---	1242.04	MH447	0.64%
AE25	57+80.1 KN	66 RT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1240.61	MH447	---	---	---
INL221	60+13.6 KN	22.4 LT	---	---	---	---	1	---	---	---	1	---	---	---	---	---	1242.80	1242.80	3.30	---	---	1239.50	AE26	1.59%
AE26	60+13.3 KN	73.1 RT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1238.00	INL221	---	---	---
INL101	748+52.9 NB	87.9 RT	---	---	---	1	---	---	---	---	1	---	---	---	---	---	1242.00	1242.00	1.95	---	---	1240.05	INL102	0.62%
INL102	747+99 NB	33 RT	---	1	---	---	---	---	---	---	---	---	1	---	---	---	1247.01	1245.76	6.41	1239.60	INL101	1239.35	MH400	0.51%
MH400	745+39.7 NB	33 RT	---	---	---	---	---	---	---	---	---	---	1	---	1	---	1245.50	1244.25	7.01	1238.05	INL102	1237.25	MH401	0.20%
			---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1237.97	INL108	---	---	---
INL103	748+04.6 E	20.5 LT	---	---	1	---	---	---	---	1	---	---	---	---	---	---	1256.50	1255.63	3.56	---	---	1252.07	INL104	2.65%
INL104	748+04.9 E	9 RT	---	1	---	---	---	1	---	---	---	---	---	---	---	---	1256.04	1254.79	3.55	1251.34	INL103	1251.24	INL105	3.85%
INL105	745+23.8 E	9 RT	---	1	---	---	---	1	---	---	---	---	---	---	---	---	1245.23	1243.98	5.41	1240.53	INL104	1238.57	INL107	0.52%
			---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1238.82	INL106	---	---	---
INL106	743+78.9 E	9 RT	---	1	---	---	---	1	---	---	---	---	---	---	---	---	1244.24	1242.99	3.45	---	---	1239.54	INL105	0.51%
			---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1239.52	MH500	---	---	---
MH500	743+78.9 E	27 RT	---	---	---	---	---	---	---	---	---	---	---	1	---	1	1244.00	1242.75	3.25			1239.50	INL106	---
INL107	745+23.8 E	20 LT	---	1	---	---	---	1	---	---	---	---	---	---	---	---	1245.99	1244.74	6.41	1238.43	INL105	1238.33	INL108	0.73%
INL108	745+26.5 A	9 RT	---	1	---	---	---	1	---	---	---	---	---	---	---	---	1245.22	1243.97	5.78	1238.29	INL107	1238.19	MH400	0.76%
MH401	742+49.3 NB	33 RT	---	---	---	---	---	---	---	---	---	---	1	1	---	---	1245.34	1244.09	7.62	1236.67	MH400	1236.47	MH402	0.25%
MH402	740+05.1 NB	33 RT	---	---	---	---	---	---	---	---	---	---	1	---	1	---	1244.94	1243.69	8.33	1235.86	MH401	1235.36	AE28	0.55%
			---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1235.86	INL109	---	---	---
INL109	740+06.2 NB	26.8 LT	---	---	---	---	1	---	---	---	1	---	---	---	---	---	1241.42	1241.42	4.17	---	---	1237.25	MH402	2.56%
AE28	740+05.2 NB	101.4 RT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1235.00	MH402	---	---	---

NOTES:

* FLOWLINE ELEVATIONS FOR INLETS IN CURB AND GUTTER AREAS ARE AT THE FLOWLINE OF THE GUTTER.

** FOR NEW STRUCTURES, TOP OF BOX ELEVATIONS ARE TYPICALLY FLOWLINE/RIM ELEVATIONS MINUS CASTING DEPTH AND 6" FOR ADJUSTING RINGS. DEPTH FOR ADJUSTMENT MAY VARY.

*** FOR INFORMATION ONLY. JOINT TIES ARE INCIDENTAL TO SSPRC.

**** STRUCTURE STATION AND OFFSET MEASURED TO CENTER OF STRUCTURE.

***** SPECIAL MH LID REQUIRED FOR TYPE V INLET COVERS

1.) ALL SUBSURFACE ELEVATIONS ARE PIPE FLOWLINES.
2.) CALCULATED DEPTH = DISTANCE FROM TOP OF BOX TO DISCHARGE ELEVATION.
3.) PIPE LENGTHS MEASURED FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE.
4.) STORM SEWER PIPE IS REINFORCED, CLASS III, UNLESS NOTED OTHERWISE.
5.) ALL STRUCTURES HAVE THE STATUS "NEW".
6.) SLOPE IS CALCULATED BETWEEN INSIDE WALLS OF STRUCTURES. LENGTH LISTED IS BETWEEN CENTER OF STRUCTURES.

2

STORM SEWER SCHEDULE

STRUCTURE NUMBER	STATION	OFFSET	611.3225 INLETS 2x2.5-FT EACH	611.3230 INLETS 2x3-FT EACH	611.3901 INLETS Median 1 Grate EACH	611.3902 INLETS Median 2 Grate EACH	611.061 INLET COVERS TYPE BW EACH	611.0627 INLET COVERS TYPE HM EACH	611.0642 INLET COVERS TYPE MS EACH	611.0654 INLET COVERS TYPE V EACH	611.2004 MANHOLES 4-FT Diameter EACH	611.2005 MANHOLES 5-FT Diameter EACH	611.0530 MANHOLE COVERS TYPE J EACH	FLOWLINE ELEV	BOX ELEV	DEPTH	INVERT ELEV	FROM	DISCHARGE ELEV	TO	SLOPE %
INL100	725+49.2 NB	27.7 LT	---	---	1	---	---	---	1	---	---	---	---	1249.28	1249.28	4.78	---	---	1244.50	AE27	0.72%
AE27	725+49.2 NB	82 RT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1243.70	INL100	---	---	---
INL112	753+00.6 NB	26.5 LT	---	---	1	---	---	---	1	---	---	---	---	1245.70	1245.70	3.70	---	---	1242.00	INL113	0.60%
INL113	753+00.6 NB	33 RT	1	---	---	---	---	---	---	1	---	---	---	1249.18	1247.93	6.93	1241.65	INL112	1241.00	AE29	1.27%
AE29	753+19.5 NB	110.6 RT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1240.00	INL113	---	---	---
INL223	801+29 SB	34 RT	---	---	1	---	---	---	1	---	---	---	---	1265.30	1265.30	3.00	---	---	1262.30	AE95	---
AE95	801+29 SB	76.2 LT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1260.50	INL223	---	---	1.65%
AE600	750+47.4 SB	84 LT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1241.00	MH448	0.33%
MH448	753+00.5 D	25.2 LT	---	---	---	---	---	---	---	---	1	---	1	1245.80	1244.55	4.39	1240.18	AE600	1240.16	AE601	0.33%
AE601	753+44 D	48.9 LT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1240.00	MH448	---	---	---

1.) ALL SUBSURFACE ELEVATIONS ARE PIPE FLOWLINES.
2.) CALCULATED DEPTH = DISTANCE FROM TOP OF BOX TO DISCHARGE ELEVATION.
3.) PIPE LENGTHS MEASURED FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE.
4.) STORM SEWER PIPE IS REINFORCED, CLASS III, UNLESS NOTED OTHERWISE.
5.) ALL STRUCTURES HAVE THE STATUS "NEW".
6.) SLOPE IS CALCULATED BETWEEN INSIDE WALLS OF STRUCTURES. LENGTH LISTED IS BETWEEN CENTER OF STRUCTURES.

2

STORM SEWER SCHEDULE

STRUCTURE NUMBER	STATION	OFFSET	611.3220 INLETS 2x2-FT EACH	611.3230 INLETS 2x3-FT EACH	611.0612 INLET COVERS TYPE C EACH	611.0624 INLET COVERS TYPE H EACH	611.2004 MANHOLES 4-FT Diameter EACH	611.2006 MANHOLES 6-FT Diameter EACH	611.2005 MANHOLES 5-FT Diameter EACH	611.0530 MANHOLE COVERS TYPE J EACH	FLOWLINE ELEV	BOX ELEV	DEPTH	INVERT ELEV	FROM	DISCHARGE ELEV	TO	SLOPE %
AE01	23+59.3 U	45 RT	---	---	---	---	---	---	---	---	---	---	---	---	---	1328.02	INL118	2.65%
INL118	25+15.7 U	37.8 RT	---	1	---	1	---	---	---	---	1327.70	1326.87	3.42	1324.09	AE01	1323.45	MH403	1.66%
MH403	25+18.6 U	6 RT	---	---	---	---	1	---	---	1	1328.41	1327.16	4.26	1322.97	INL118	1322.90	MH404	2.47%
MH404	29+81.6 U	6 RT	---	---	---	---	1	---	---	1	1315.69	1314.44	4.98	1311.55	MH403	1309.46	MH405	3.20%
			---	---	---	---	---	---	---	---	---	---	---	1309.96	INL122	---	---	---
			---	---	---	---	---	---	---	---	---	---	---	1311.35	INL124	---	---	---
INL119	29+66.5 U	49.5 LT	---	1	---	1	---	---	---	---	1314.91	1314.08	3.03	---	---	1311.05	INL120	3.92%
INL120	29+81.5 U	49.5 LT	---	1	---	1	---	---	---	---	1314.44	1313.61	3.28	1310.58	INL119	1310.33	INL121	0.34%
INL121	29+81.5 U	18.5 LT	---	1	---	1	---	---	---	---	1315.04	1314.21	4.08	1310.23	INL120	1310.13	INL122	0.33%
INL122	29+81.5 U	1.5 LT	---	1	---	1	---	---	---	---	1315.46	1314.63	4.65	1310.08	INL121	1309.98	MH404	0.45%
			---		---	---	---	---	---	---	---	---		1311.63	INL123	---	---	---
INL123	29+66.7 U	1.5 LT	---	1	---	1	---	---	---	---	1315.93	1315.10	3.00	---	---	1312.10	INL122	3.92%
INL124	29+81.5 U	29.5 RT	---	1	---	1	---	---	---	---	1316.02	1315.19	3.37	---	---	1311.82	MH404	2.29%
MH405	33+00 U	6 RT	---	---	---	---	1	---	---	1	1305.46	1304.21	6.75	1299.39	MH404	1297.46	MH406	3.16%
			---	---	---	---	---	---	---	---	---	---	---	1299.53	INL127	---	---	---
			---	---	---	---	---	---	---	---	---	---	---	1301.11	INL129	---	---	---
INL125	32+85 U	49.5 LT	---	1	---	1	---	---	---	---	1304.69	1303.86	3.37	---	---	1300.49	INL126	4.17%
INL126	33+00 U	49.5 LT	---	1	---	1	---	---	---	---	1304.20	1303.37	3.63	1299.99	INL125	1299.74	INL127	0.33%
INL127	33+00 U	1.5 LT	---	1	---	1	---	---	---	---	1305.22	1304.39	4.82	1299.59	INL126	1299.57	MH405	0.89%
			---	---	---	---	---	---	---	---	---	---	---	1301.01	INL128	---	---	---
INL128	32+85 U	1.5 LT	---	1	---	1	---	---	---	---	1305.71	1304.88	3.37	---	---	1301.51	INL127	4.17%
INL129	33+00 U	29.5 RT	---	1	---	1	---	---	---	---	1305.78	1304.95	3.37	---	---	1301.58	MH405	2.29%
MH406	36+88.2 U	6 RT	---	---	---	---	1	---	---	1	1291.64	1290.39	5.19	1285.31	MH405	1285.20	MH407	3.31%
			---	---	---	---	---	---	---	---	---	---	---	1285.81	INL132	---	---	---
INL130	37+07.2 U	16.8 LT	---	1	---	1	---	---	---	---	1290.20	1289.37	3.08	---	---	1286.29	INL131	0.56%
INL131	37+07.5 U	4.1 LT	---	1	---	1	---	---	---	---	1290.55	1289.72	3.55	1286.23	INL130	1286.17	INL132	0.54%
INL132	36+88 U	1.5 LT	---	1	---	1	---	---	---	---	1291.36	1290.53	4.70	1286.08	INL131	1285.83	MH406	0.44%
MH407	38+44.8 U	6 RT	---	---	---	---	---	1	---	1	1285.58	1284.33	4.41	1280.17	MH406	1279.92	MH409	3.83%
			---	---	---	---	---	---	---	---	---	---	---	1280.67	INL136	---	---	---
			---	---	---	---	---	---	---	---	---	---	---	1281.53	MH408	---	---	---
INL133	38+05.1 U	49.5 LT	---	1	---	1	---	---	---	---	1285.57	1284.74	2.91	---	---	1281.83	INL134	5.00%
INL134	38+20.5 U	49.5 LT	---	1	---	1	---	---	---	---	1285.97	1285.14	4.16	1281.23	INL133	1280.98	INL135	0.34%
INL135	38+44.8 U	16.5 LT	---	1	---	1	---	---	---	---	1284.85	1284.02	3.22	1280.85	INL134	1280.80	INL136	0.45%
INL136	38+44.8 U	5.5 LT	---	1	---	1	---	---	---	---	1285.19	1284.36	3.65	1280.76	INL135	1280.71	MH407	0.56%
AE02	38+57.1 U	56.7 RT	---	---	---	---	---	---	---	---	---	---	---	---	---	1281.80	MH408	0.34%
MH408	38+25.4 U	29.8 RT	---	---	---	1	1	---	---	---	1285.86	1285.03	3.39	1281.66	AE02	1281.64	MH407	0.40%
MH409	40+75 U	6 RT	---	---	---	---	1	---	---	1	1276.33	1275.08	4.30	1271.28	MH407	1270.78	MH410	2.60%
			---	---	---	---	---	---	---	---	---	---	---	1270.80	INL139	---	---	---
INL137	40+60 U	49.5 LT	---	1	---	1	---	---	---	---	1275.59	1274.76	3.58	---	---	1271.18	INL138	5.00%
INL138	40+75 U	49.5 LT	---	1	---	1	---	---	---	---	1275.38	1274.55	3.49	1271.08	INL137	1271.06	INL139	0.44%
INL139	40+75 U	1.5 LT	---	1	---	1	---	---	---	---	1276.13	1275.30	4.47	1270.85	INL138	1270.83	MH409	0.44%
			---	---	---	---	---	---	---	---	---	---	---	1272.40	INL140	---	---	---
INL140	40+60 U	1.5 LT	---	1	---	1	---	---	---	---	1276.73	1275.90	2.90	---	---	1273.00	INL139	0.67%
MH410	44+42 U	12 RT	---	---	---	---	---	---	1	1	1266.55	1265.30	4.38	1261.42	MH409	1260.92	MH411	1.26%
			---	---	---	---	---	---	---	---	---	---	---	1261.84	INL142	---	---	---
INL141	44+26.5 U	29.5 RT	---	1	---	1	---	---	---	---	1266.14	1265.31	3.03			1262.28	INL142	0.58%
INL142	44+42.2 U	31 RT	---	1	---	1	---	---	---	---	1266.06	1265.23	3.33	1262.21	INL141	1261.90	MH410	0.38%
MH411	44+42 U	1.8 LT	---	---	---	1	---	---	1	---	1266.68	1265.85	5.15	1260.81	MH410	1260.70	MH412	1.22%
MH412	44+42 U	18.2 LT	---	---	---	1	---	---	1	---	1267.18	1266.35	5.89	1260.56	MH411	1260.46	MH413	0.94%
			---	---	---	---	---	---	---	---	---	---	---	1263.20	INL143	---	---	---
INL143	44+27.3 U	18.2 LT	---	1	---	1	---	---	---	---	1267.22	1266.39	3.04	---	---	1263.35	MH412	1.36%
MH413	44+42 U	49.7 LT	---	---	---	1	---	---	1	---	1267.74	1266.91	7.20	1260.21	MH412	1259.71	AE03	1.03%
AE03	44+64.3 U	90 LT	---	---	---	---	---	---	---	---	---	---	---	1259.26	MH413	---	---	---
AE04	46+86.6 U	93.8 RT	---	---	---	---	---	---	---	---	---	---	---	---	---	1258.00	MH414	1.22%
MH414	47+25 U	0	---	---	---	---	---	---	1	1	1271.36	1270.11	13.43	1256.80	AE04	1256.68	AE05	1.33%

2

STORM SEWER SCHEDULE

STRUCTURE NUMBER	STATION	OFFSET	611.3220 INLETS 2x2-FT EACH	611.3230 INLETS 2x3-FT EACH	611.0612 INLET COVERS TYPE C EACH	611.0624 INLET COVERS TYPE H EACH	611.2004 MANHOLES 4-FT Diameter EACH	611.2006 MANHOLES 6-FT Diameter EACH	611.2005 MANHOLES 5-FT Diameter EACH	611.0530 MANHOLE COVERS TYPE J EACH	FLOWLINE ELEV	BOX ELEV	DEPTH	INVERT ELEV	FROM	DISCHARGE ELEV	TO	SLOPE %
			---	---	---	---	---	---	---	---	---	---		1265.87	INL145	---	---	---
INL144	47+81.6 U	40 RT	---	1	---	1	---	---	---	---	1271.07	1270.24	3.84	---	---	1266.40	INL145	0.53%
INL145	47+67.5 U	1.5 LT	---	1	---	1	---	---	---	---	1271.74	1270.91	4.83	1266.18	INL144	1266.08	MH414	0.54%
			---	---	---	---	---	---	---	---	---	---	---	1267.68	INL146	---	---	---
INL146	47+67.8 U	7.8 LT	---	1	---	1	---	---	---	---	1271.92	1271.09	3.37	---	---	1267.72	INL145	0.93%
AE05	47+79.5 U	112 LT	---	---	---	---	---	---	---	---	---	---	---	1255.06	MH414	---	---	---
INL147	52+07.2 U	29.5 RT	---	1	---	1	---	---	---	---	1269.05	1268.22	3.13	---	---	1265.09	INL148	0.58%
INL148	51+91.7	29.5 RT	---	1	---	1	---	---	---	---	1269.31	1268.48	3.71	1265.02	INL147	1264.77	INL149	0.56%
INL149	51+82.2 U	1.5 LT	---	1	---	1	---	---	---	---	1270.03	1269.20	4.70	1264.60	INL148	1264.50	INL150	0.58%
INL150	51+59.1 U	18.5 LT	---	1	---	1	---	---	---	---	1270.76	1269.93	5.68	1264.35	INL149	1264.25	AE06	0.71%
AE06	51+54.1 U	92.7 LT	---	---	---	---	---	---	---	---	---	---	---	1263.73	INL150	---	---	---
INL151	54+28.4 U	6.9 LT	---	1	---	1	---	---	---	---	1263.05	1262.22	3.37	---	---	1258.85	INL152	0.87%
INL152	54+28.4 U	1.5 LT	---	1	---	1	---	---	---	---	1263.16	1262.33	3.54	1258.81	INL151	1258.79	MH415	7.58%
MH415	55+00 U	18 RT	---	---	---	---	1	---	---	1	1259.63	1258.38	3.38	1255.29	INL152	1255.00	MH416	5.25%
			---	---	---	---	---	---	---	---	---	---	---	1255.41	INL153	---	---	---
INL153	55+00 U	29.5 RT	---	1	---	1	---	---	---	---	1259.31	1258.48	3.01	---	---	1255.47	MH415	0.71%
MH416	56+48 U	18 RT	---	---	---	---	---	---	1	1	1252.09	1250.84	5.21	1247.47	MH415	1245.63	MH418	0.64%
			---	---	---	---	---	---	---	---	---	---	---	1245.65	MH417	---	---	---
STUB			---	---	---	---	---	---	---	---	---	---	---	---	---	1246.50	MH417	1.46%
MH417	56+47.6 U	29.8 RT	---	---	---	1	---	---	1	---	1251.77	1250.94	5.24	1246.27	STUB	1245.70	MH416	0.74%
			---	---	---	---	---	---	---	---	---	---	---	1247.65	INL154	---	---	---
INL154	56+33.5 U	29.5 RT	---	1	---	1	---	---	---	---	1252.41	1251.58	3.32	---	---	1248.26	MH417	5.54%
MH418	56+47.6 U	32 LT	---	---	---	1	---	---	1	---	1251.76	1250.93	5.64	1245.34	MH416	1245.29	MH419	0.59%
MH419	54+00	0	---	---	---	---	---	1	---	1	1249.75	1248.50	5.14	1244.04	MH418	1243.36	MH420	0.67%
MH420	50+88.4	0	---	---	---	---	---	---	1	1	1248.79	1247.54	6.37	1241.30	MH419	1241.17	MH421	0.68%
MH421	49+33	0	---	---	---	---	---	1	---	1	1246.50	1245.25	5.61	1240.14	MH420	1239.64	AE07	1.07%
AE07	48+71	0	---	---	---	---	---	---	---	---	---	---	---	1239.00	MH421	---	---	---
INL155	57+36.5 U	29.5 RT	---	1	---	1	---	---	---	---	1248.71	1247.88	3.49	---	---	1244.39	MH422	2.48%
MH422	58+00.5 U	19 LT	---	---	---	---	1	---	---	1	1247.50	1246.25	4.25	1242.50	INL155	1242.00	MH423	0.63%
MH423	60+25 U	18 LT	---	---	---	---	1	---	---	1	1245.01	1243.76	3.16	1240.60	MH422	1240.60	MH424	0.92%
			---	---	---	---	---	---	---	---	---	---	---	1241.10	INL160	---	---	---
			---	---	---	---	---	---	---	---	---	---	---	1241.10	INL158	---	---	---
INL156	60+84.7 U	44.6 RT	---	1	---	1	---	---	---	---	1245.36	1244.53	3.05	---	---	1241.48	INL157	0.08%
INL157	60+33.3 U	45.9 RT	---	1	---	1	---	---	---	---	1246.22	1245.39	3.97	1241.44	INL156	1241.42	INL158	0.57%
INL158	60+26.5 U	29.5 RT	---	1	---	1	---	---	---	---	1245.79	1244.96	3.65	1241.33	INL157	1241.31	MH423	0.47%
INL159	60+10 U	29.5 LT	---	1	---	1	---	---	---	---	1244.84	1244.01	2.66	---	---	1241.35	INL160	0.67%
INL160	60+25 U	29.5 LT	---	1	---	1	---	---	---	---	1244.69	1243.86	2.61	1241.27	INL159	1241.25	MH423	1.77%
MH424	62+00 U	18.2 LT	---	---	---	---	1	---	---	1	1243.43	1242.18	3.18	1239.03	MH423	1239.00	MH425	0.92%
			---	---	---	---	---	---	---	---	---	---	---	1238.96	INL162	---	---	---
INL161	61+70 U	29.5 LT	---	1	---	1	---	---	---	---	1243.28	1242.45	3.05	---	---	1239.40	INL162	0.56%
INL162	62+00 U	29.5 LT	---	1	---	1	---	---	---	---	1243.05	1242.22	3.22	1239.25	INL161	1239.00	MH424	0.48%
MH425	62+99.9 U	18 LT	---	---	---	---	1	---	---	1	1243.83	1242.58	4.48	1238.12	MH424	1238.10	MH426	2.17%
			---	---	---	---	---	---	---	---	---	---	---	1239.25	INL163	---	---	---
INL163	63+08 U	49 LT	1	---	1	---	---	---	---	---	1243.48	1242.23	2.82	---	---	1239.41	MH425	0.50%
MH426	63+25.5 U	35 RT	---	---	---	---	---	---	1	1	1241.77	1240.52	3.64	1236.92	MH425	1236.88	EX MH	3.65%

2

STORM SEWER SCHEDULE

STRUCTURE NUMBER	STATION	OFFSET	611.3220 INLETS 2x2-FT EACH	611.3230 INLETS 2x3-FT EACH	611.0612 INLET COVERS TYPE C EACH	611.0624 INLET COVERS TYPE H EACH	611.2004 MANHOLES 4-FT Diameter EACH	611.2006 MANHOLES 6-FT Diameter EACH	611.2005 MANHOLES 5-FT Diameter EACH	611.0530 MANHOLE COVERS TYPE J EACH	FLOWLINE ELEV	BOX ELEV	DEPTH	INVERT ELEV	FROM	DISCHARGE ELEV	TO	SLOPE %
			---	---	---	---	---	---	---	---	---	---	---	1237.40	INL165	---	---	---
			---	---	---	---	---	---	---	---	---	---	---	1237.41	INL167	---	---	---
INL165	62+83.2 U	29.5 RT	---	1	---	1	---	---	---	---	1242.59	1241.76	4.13	---	---	1237.63	MH426	0.57%
INL166	63+94.5 U	29.5 RT	---	1	---	1	---	---	---	---	1242.69	1241.86	3.55	---	---	1238.31	INL167	1.42%
INL167	63+79.8 U	29.5 RT	---	1	---	1	---	---	---	---	1242.59	1241.76	3.87	1238.14	INL166	1237.89	MH426	0.93%
INL168	66+99.9 U	29.5 LT	---	1	---	1	---	---	---	---	1246.70	1245.87	3.54	---	---	1242.33	EX MH	0.77%
EX MH	67+35 U	1.6 LT	---	---	---	---	---	---	---	---	---	---	---	1242.00	INL168	1241.72	MH427	3.83%
MH427	67+32.2 U	29.5 RT	---	---	---	---	1	---	---	1	1245.95	1244.70	4.20	1240.60	EX MH	1240.50	EX MH	3.86%
			---	---	---	---	---	---	---	---	---	---	---	1241.31	INL169	---	---	---
INL169	67+54 U	29.5 RT	---	1	---	1	---	---	---	---	1246.62	1245.79	4.37	---	---	1241.42	MH427	0.59%
INL170	69+03.3 U	40.1 LT	---	1	---	1	---	---	---	---	1250.59	1249.76	3.49	---	---	1246.27	EX PIPE	2.63%
			---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
INL171	69+15.5 U	29.5 RT	---	1	---	1	---	---	---	---	1250.96	1250.13	4.07	---	---	1246.06	EX PIPE	1.01%

1.) ALL SUBSURFACE ELEVATIONS ARE PIPE FLOWLINES.
2.) CALCULATED DEPTH = DISTANCE FROM TOP OF BOX TO DISCHARGE ELEVATION.
3.) PIPE LENGTHS MEASURED FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE.
4.) STORM SEWER PIPE IS REINFORCED, CLASS III, UNLESS NOTED OTHERWISE.
5.) ALL STRUCTURES HAVE THE STATUS "NEW".
6.) SLOPE IS CALCULATED BETWEEN INSIDE WALLS OF STRUCTURES. LENGTH LISTED IS BETWEEN CENTER OF STRUCTUR

2

2

N

CAUTION

37+00 U

38+00 U

39+00 U

40+00 U

41+00 U

42+00 U

43+00 U

CTH U

MH406.

MH407.

MH408.

MH409.

INSULATION 2-INCH

VERTICAL OFFSET - FORCE MAIN

VERTICAL OFFSET - WATER MAIN

VERTICAL OFFSET - WATER MAIN

ADJUST VALVE BOX

ADJUST VALVE BOX

INSULATION 2-INCH

ARTHUR AVE

1295

1290

1285

1280

1275

1270

1265

1260

MH407

18" SS RC

VERTICAL OFFSET FORCE MAIN

VERTICAL OFFSET WATER MAIN

18" SEPARATION

24" SS RC

MH409

MH407

MH408

15" SS RC

15" SS RC

18" SEPARATION

VERTICAL OFFSET WATER MAIN

PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	SANITARY SEWER AND WATER MAIN - CTH U	SHEET	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\022533_sa_u.dgn PLOT DATE : 8/1/2012 PLOT BY : cb685 PLOT NAME : PLOT SCALE : 1:40

WISDOT/CADDS SHEET 41

2

2

RECONSTRUCT MANHOLE

MH34.

CAUTION

CTH U

MH412.

CAUTION

8" SS

44+00 U

MH411.

45+00 U

46+00 U

47+00 U

48+00 U

49+00

MH414.

43+00 U

MH410.

24" SS RC

MH33.

RECONSTRUCT MANHOLE

CAUTION

18TH AVE

N

1270

1260

MH410

24" SS RC

8" SANITARY SEWER

PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	SANITARY SEWER AND WATER MAIN - CTH U	SHEET 193	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\022534_sa_u.dgn PLOT DATE : 8/1/2012 PLOT BY : cb685 PLOT NAME : PLOT SCALE : 1:40

WISDOT/CADDS SHEET 41

EXCAVATE AND BACKFILL UTILITY TRENCH

EXCAVATE AND BACKFILL UTILITY TRENCH

EXCAVATE AND BACKFILL UTILITY TRENCH

RECONSTRUCT MANHOLE

MH418.

ADJUST VALVE BOX

ADJUST MANHOLE COVER

MH422.

MH23.

MH22.

53+00 U

54+00 U

55+00 U

CTH U

56+00 U

57+00 U

EX 8" SAN

58+00 U

59+00 U

INL152.

MH21.

MH415.

MH416.

INL155.

ADJUST VALVE BOX

RELOCATE HYDRANT (BY CITY)

EXCAVATE AND BACKFILL UTILITY TRENCH

CAP SANITARY SEWER (TYP)

PLUG WATER MAIN (TYP)

EXCAVATE AND BACKFILL UTILITY TRENCH

N

INL152

EX SAN MH21

12" SS RC

MH415

15" SS RC

MH416

EX SAN MH22

INL155

MH422

12" SS RC

EXISTING 8" SAN

PROPOSED WATER MAIN MAINTAIN 8' COVER FROM FINISHED GRADE

PROPOSED SANITARY MANHOLE

EXISTING 8" SAN

SAN MH1
RIM=1253.50
INV N=1241.86
INV S=1241.86
INV E=1241.86
INV W=1241.76

EX 8" WATER MAIN

54'-8" SAN @ 0.40% SL

50'-8" SAN @ 0.40% SL

CAP

CAP

EX 8" SAN

1260

1250

1240

1230

1220

PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	SANITARY SEWER AND WATER MAIN - CTH U	SHEET 194	E

EXCAVATE AND BACKFILL UTILITY TRENCH

MH23, ADJUST MANHOLE COVER

59+00 U

60+00 U

MH423,

EX 8" SAN

61+00 U

MH24R, ADJUST MANHOLE COVER

EX 8" SAN

MH424,

62+00 U

CTH U

RECONSTRUCT MANHOLE

MH25,

63+00 U

MH425,

64+00 U

EX 8" SAN

65+00 U

EXCAVATE AND BACKFILL UTILITY TRENCH

INL158,

RELOCATE HYDRANT (BY CITY)

ADJUST VALVE BOX

INL165,

ADJUST VALVE BOX

MH426,

ARLINGTON LANE

13TH AVE

EX 8" SAN

N

MH31,

1250

1240

1230

EX SAN MH23

15" SS RC

MH423

18" SS RC

EXISTING 8" SAN

EX SAN MH24

MH424

EX SAN MH25

18" SS RC

EXISTING 8" SAN

MH425

EX SAN MH25

12" SS RC

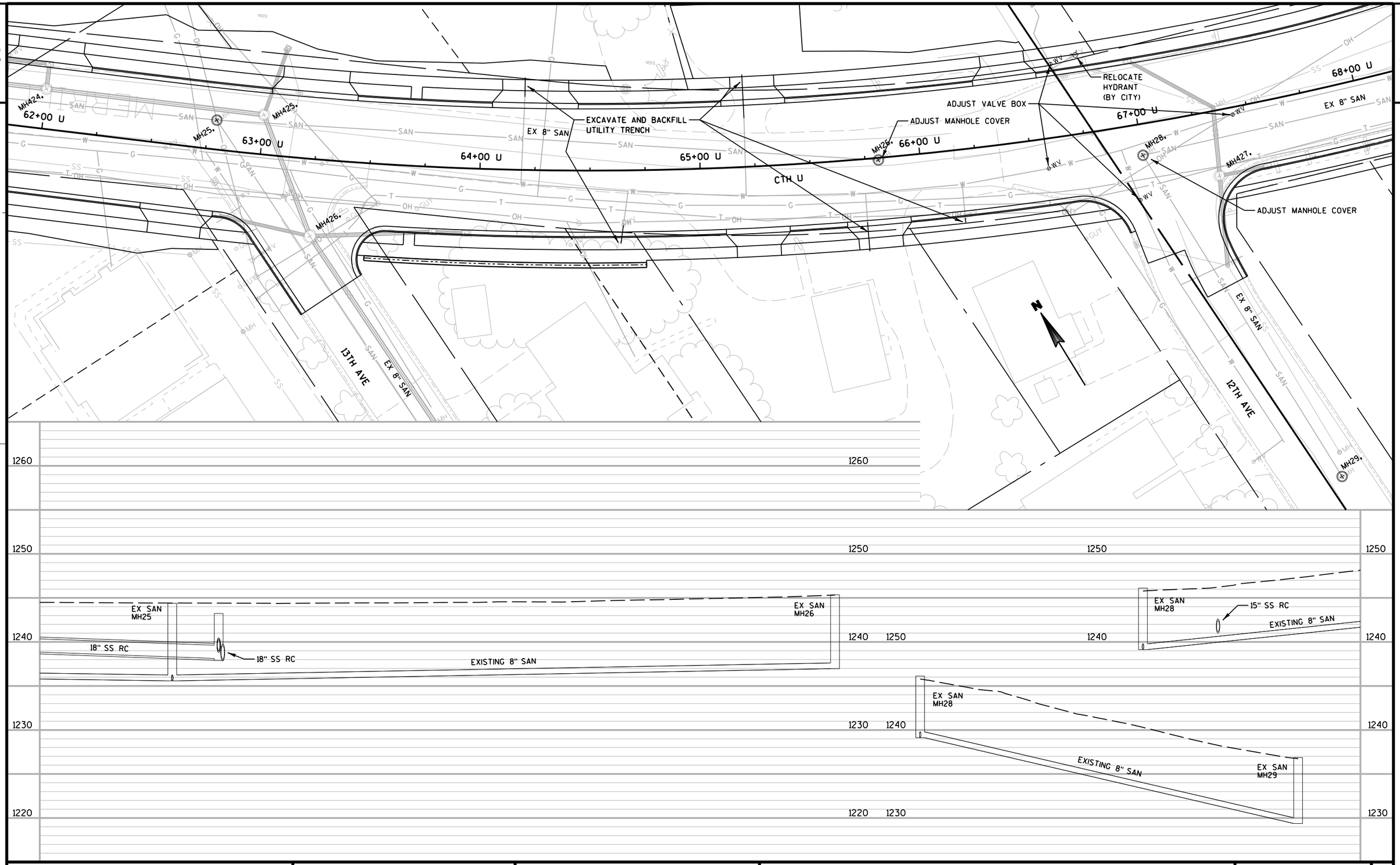
EXISTING 8" SAN

EX SAN MH31

PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	SANITARY SEWER AND WATER MAIN - CTH U	SHEET 195 E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\022536_sa_u.dgn PLOT DATE : 8/1/2012 PLOT BY : cb685 PLOT NAME : PLOT SCALE : 1:40

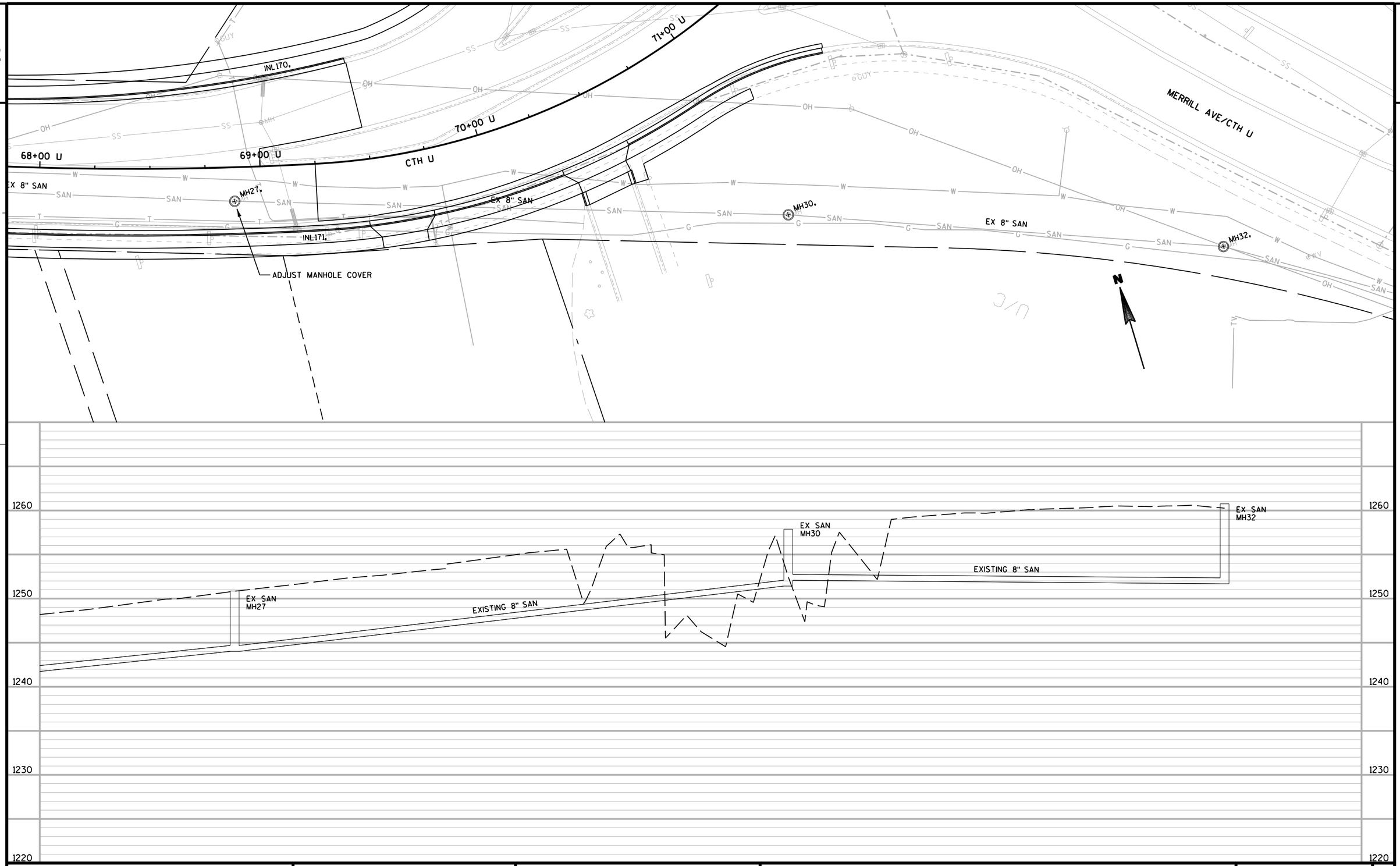
WISDOT/CADDS SHEET 41



PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	SANITARY SEWER AND WATER MAIN - CTH U	SHEET	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\022537_sa_u.dgn PLOT DATE : 8/1/2012 PLOT BY : cb685 PLOT NAME : PLOT SCALE : 1:40

WISDOT/CADDS SHEET 41



PROJECT NO:6999-18-70	HWY: USH 51	COUNTY:MARATHON	SANITARY SEWER AND WATER MAIN - CTH U	SHEET 197	E

2

DI CROSS, 8"x8"
2 - DI PLUGS, 8"

GATE VALVE AND BOX, 8"

DI WATER MAIN, 8"

223+00 V

224+00 V

225+00 V

226+00 V

227+00 V

222+00 V

221+00 V

PT 222+97.46 V

SAN MH 3

OVERLOOK DR

PVC SANITARY
SEWER MAIN, 8"

NOTE:
EXISTING SEPTIC SYSTEM DRAIN
PIPE CROSSING AT APPROXIMATE
STA 226+00V

PVC SANITARY
SEWER, 8"

GATE VALVE AND BOX, 8"

GATE VALVE AND BOX, 6"
AND HYDRANT

DI TEE, 8"x6"

GATE VALVE AND BOX, 8"

MERRILL AVE

DI PLUG, 8"

SAN MH 2

PVC SANITARY LATERAL, 6"

N

EXISTING PROFILE
OVERLOOK DR

EXISTING PROFILE
MERRILL AVE

SAN MH 2
RIM 1274.37
INV 1265.63 (S)
INV 1265.53 (N)

SAN MH 3
RIM 1271.41
INV 1262.53 (S)
INV 1262.53 (W)
INV 1262.43 (E)

FINISHED PROFILE

EXISTING PROFILE

CAP
INV 1265.66

116'-8" SAN @ 2.59% SL

5'-8" SAN @ 0.67% SL

PROPOSED WATER MAIN PROFILE
7'-6" COVER BELOW FINISHED GRADE

570'-8" SAN @ 5.02% SL

1285
1280
1275
1270
1265
1260
1255
1250
1245
1240

PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	SANITARY SEWER AND WATER MAIN - OVERLOOK DR	SHEET E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\022539_sa_u.dgn PLOT DATE : 9/24/2012 PLOT BY : cb685 PLOT NAME : PLOT SCALE : 1:40
WISDOT/CADDS SHEET 41

2

OVERLOOK DR

CTH K

20TH AVE

N

2

DI WATER MAIN, 8"

DI
45° BENDS

227+00 V

228+00 V

229+00 V

230+00 V

231+00 V

8'

SAN

W

DI TEE, 8"x8"

SALVAGE AND REINSTALL GATE VALVE & BOX

GATE VALVE AND BOX, 8"

CONNECT TO EXG WATER MAIN, 8"

RECONSTRUCT MANHOLE

PVC SANITARY
SEWER MAIN, 8"

SAN MH 4

PVC SANITARY SEWER MAIN, 8"

SALVAGE AND REINSTALL HYDRANT

SALVAGE AND REINSTALL
GATE VALVE & BOX

SALVAGE AND REINSTALL
GATE VALVE & BOX

DI PLUG, 8"

CONNECT TO
EXG SAN MH 5
(CORE)

PI 231+59.34 V

FLAG

1265
1260
1255
1250
1245
1240
1235
1230
1225
1220

STA 227+20
APPROXIMATE DEPTH
TO BEDROCK 7'-6"

FINISHED PROFILE

EXISTING PROFILE

PROPOSED WATER MAIN PROFILE
7'-6" COVER BELOW FINISHED GRADE

570'-8" SAN @ 5.02% SL

150'-8" SAN @ 2.53% SL

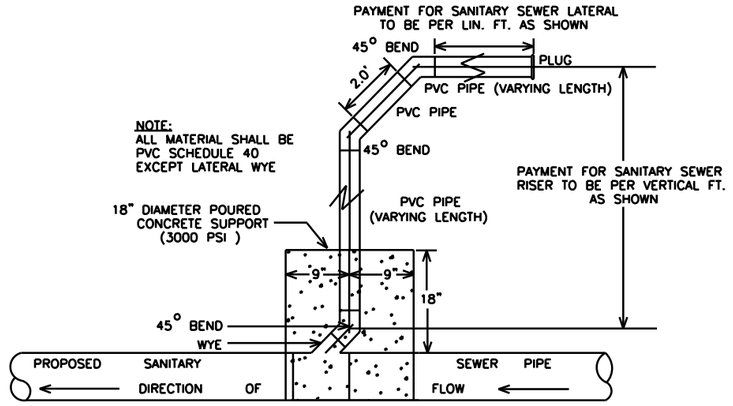
SAN MH 4
RIM 1249.73
INV 1234.00 (W)
INV 1233.90 (E)

SAN MH 5
RIM 1243.40
INV 1230.21 (W)
INV 1230.21

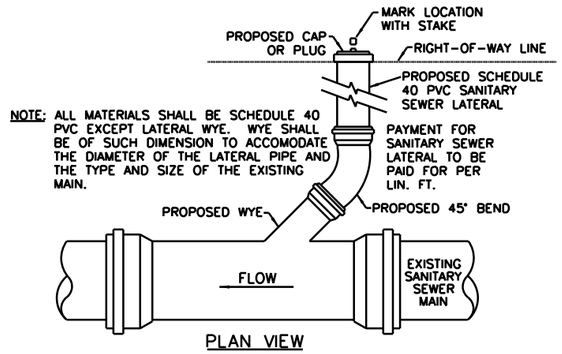
PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	SANITARY SEWER AND WATER MAIN - OVERLOOK DR	SHEET E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\022540_sa_u.dgn PLOT DATE : 9/24/2012 PLOT BY : cb685 PLOT NAME : PLOT SCALE : 1:40

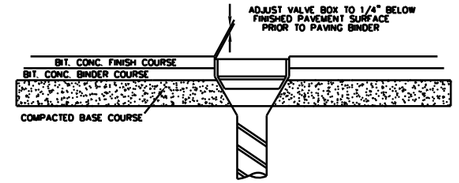
WISDOT/CADDS SHEET 41



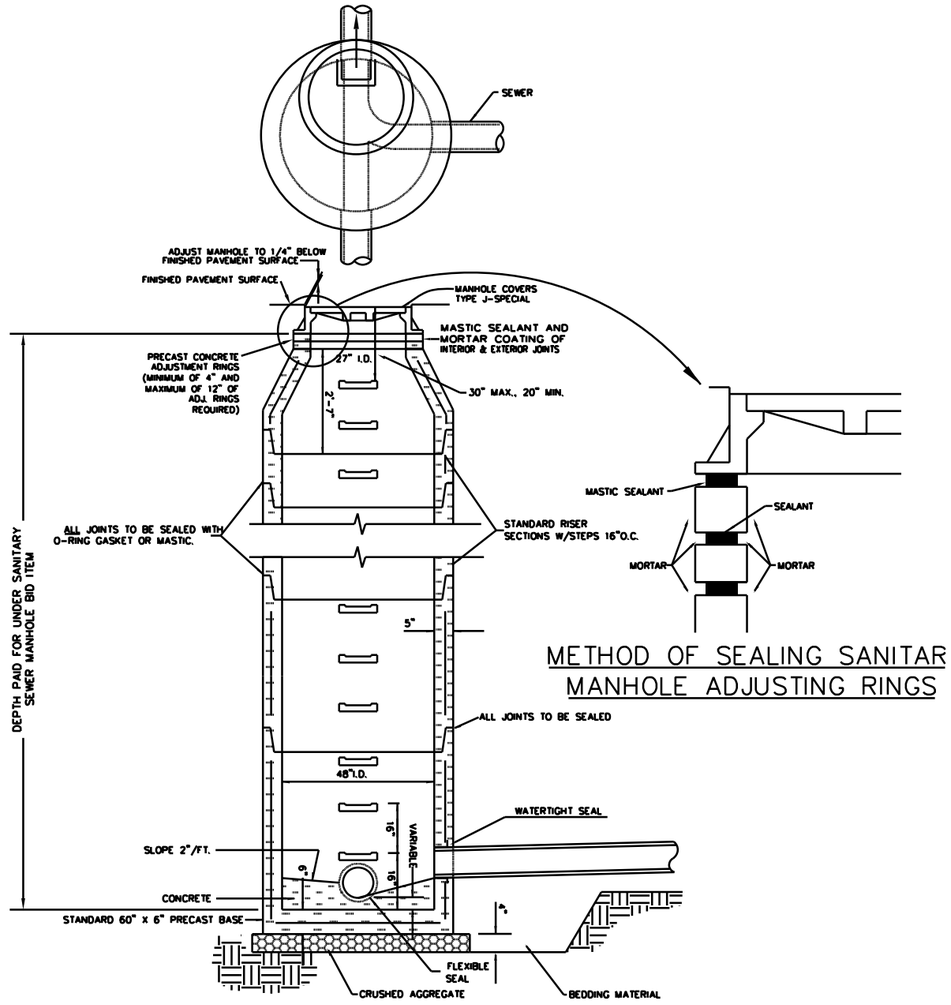
TYPICAL 4" & 6" SANITARY SEWER RISER



TYPICAL SANITARY SEWER LATERAL DETAIL



WATER VALVE BOX ADJUSTMENT DETAIL

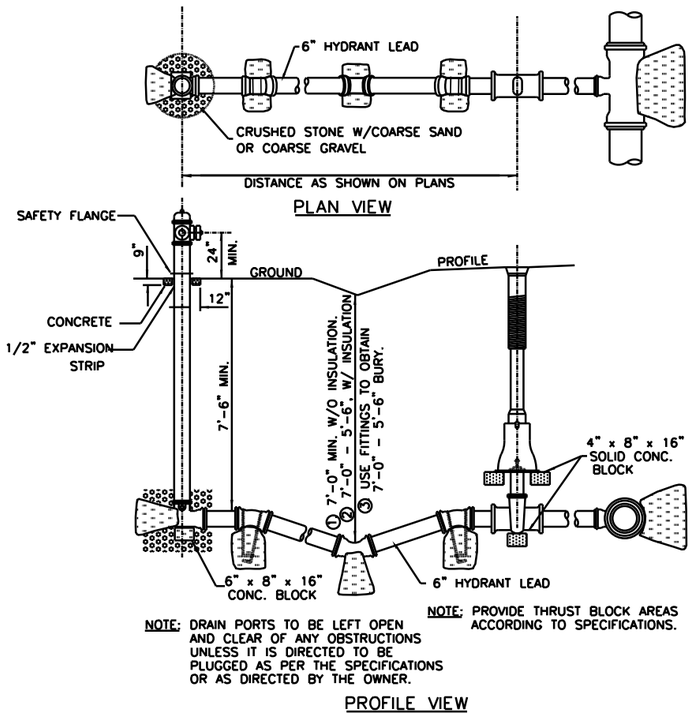


METHOD OF SEALING SANITAR MANHOLE ADJUSTING RINGS

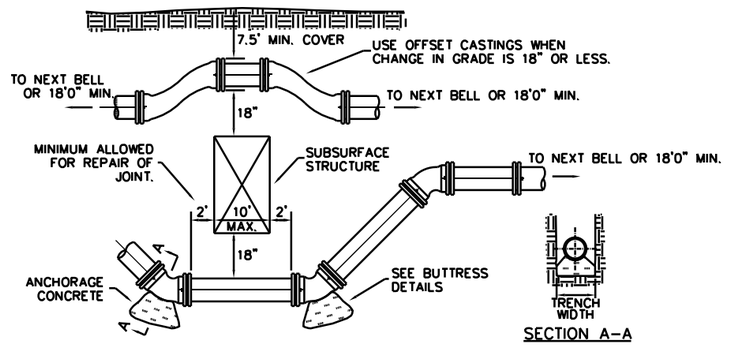
PRE-CAST CONCRETE SANITARY MANHOLE

PROJECT NO:6999-18-70	HWY:USH 51	COUNTY:MARATHON	SANITARY SEWER AND WATER MAIN DETAILS - CTH U	SHEET 200	E

2



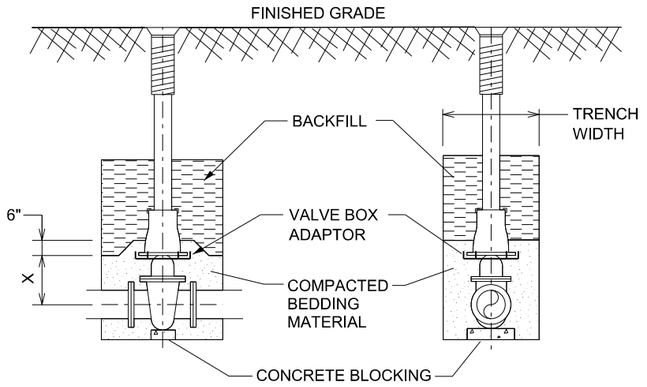
TYPICAL HYDRANT INSTALLATION DETAIL



RODS AND WASHERS TO BE A.S.T.M. A-575 MERCHANT QUALITY .17-.24 CARBON. NUTS TO BE AM. STD. HEAVY HOT PRESSED. TIE RODS, BOLTS, NUTS, BANDS, AND WASHERS TO BE FURNISHED AND APPLIED BY CONTRACTOR. ALL STEEL MATERIAL TO BE THOROUGHLY COATED WITH BITUMASTIC EQUAL TO KOPPERS NO. 505.

STRAPPING MATERIAL						
PIPE SIZE	D	RODS NO.	RODS DIA.	STRAP	BOLT DIA.	WASHER
6	7.10	2	1	1/2x2	3/4	1/2x3x5
8	9.30	2	1	1/2x2	3/4	1/2x3x5
10	11.40	2	1 1/4	1/2x2 1/2	1	1/2x3x5
12	13.50	2	1 1/4	1/2x2 1/2	1	1/2x3x5
16	17.80	2	1 1/4	1/2x3	1	1/2x3x5

VERTICAL OFFSET DETAIL-WATERMAIN, FORCEMAIN



SIDE VIEW

PIPE DIA (INCHES)	X=SETTING (INCHES)
2	6
3	7
4	8
6	12
8	13

FRONT VIEW

PIPE DIA (INCHES)	X=SETTING (INCHES)
10	17
12	21
14	25
16	30

STANDARD VALVE BOX SETTING

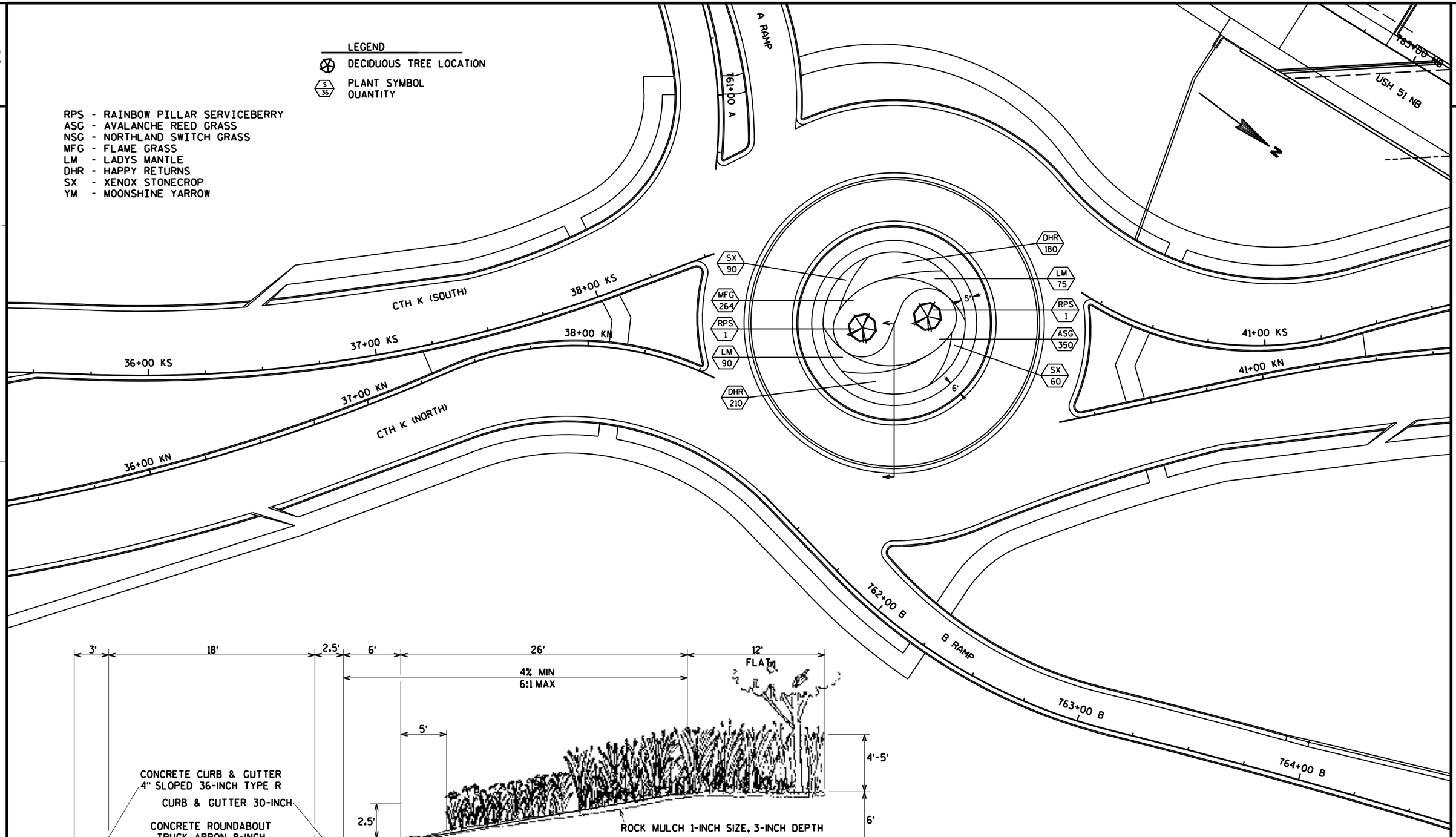
2

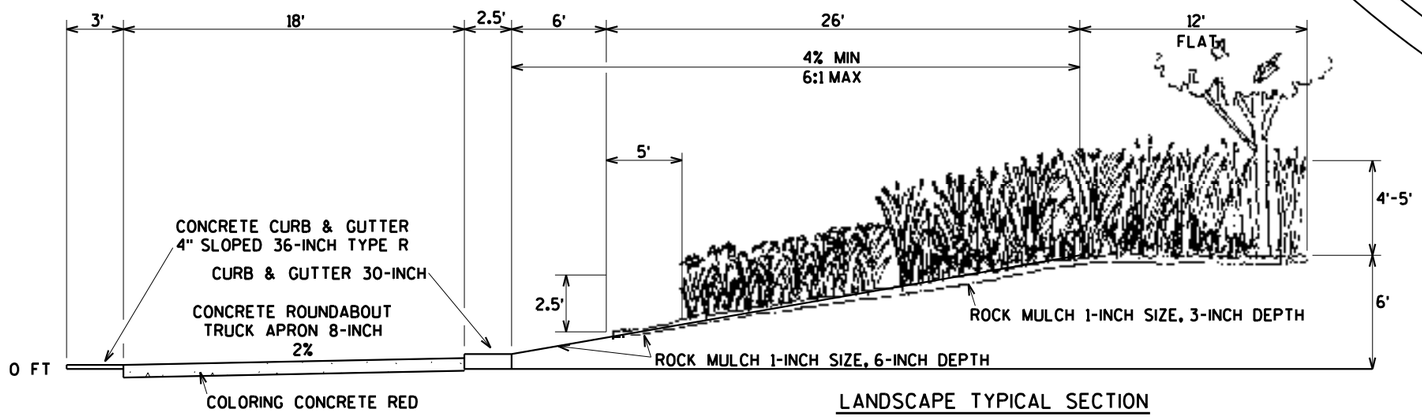
LEGEND

DECIDUOUS TREE LOCATION

PLANT SYMBOL
QUANTITY

RPS - RAINBOW PILLAR SERVICEBERRY
ASG - AVALANCHE REED GRASS
NSG - NORTHLAND SWITCH GRASS
MFG - FLAME GRASS
LM - LADYS MANTLE
DHR - HAPPY RETURNS
SX - XENOX STONECROP
YM - MOONSHINE YARROW





LANDSCAPE TYPICAL SECTION

PROJECT NO: 1170-01-70/6999-18-70	HWY: USH 51	COUNTY: MARATHON	PLANTING DETAIL	SHEET 202	E

2

D RAMP

770D

LEGEND

DECIDUOUS TREE LOCATION

PLANT SYMBOL
QUANTITY

N

CTH K (NORTH)

CTH K (SOUTH)

49+00 KS

49+00 KN

51+00 KS

51+00 KN

52+00 KS

52+00 KN

53+00 KS

53+00 KN

54+00 KS

54+00 KN

55+00 KS

55+00 KN

RPS 1

NSG 140

YM 140

SX 135

SX 140

RPS 1

YM 110

ARG 220

YM 140

RPS 1

MFG 200

SX 150

5'

6'

C RAMP

772+00 C

RPS - RAINBOW PILLAR SERVICEBERRY
ASG - AVALANCHE REED GRASS
NSG - NORTHLAND SWITCH GRASS
MFG - FLAME GRASS
LM - LADYS MANTLE
DHR - HAPPY RETURNS
SX - XENOX STONECROP
YM - MOONSHINE YARROW

PROJECT NO: 1170-01-70/6999-18-70	HWY: USH 51	COUNTY: MARATHON	PLANTING DETAIL	SHEET 203	E

2

2

LEGEND

EXISTING SIGN

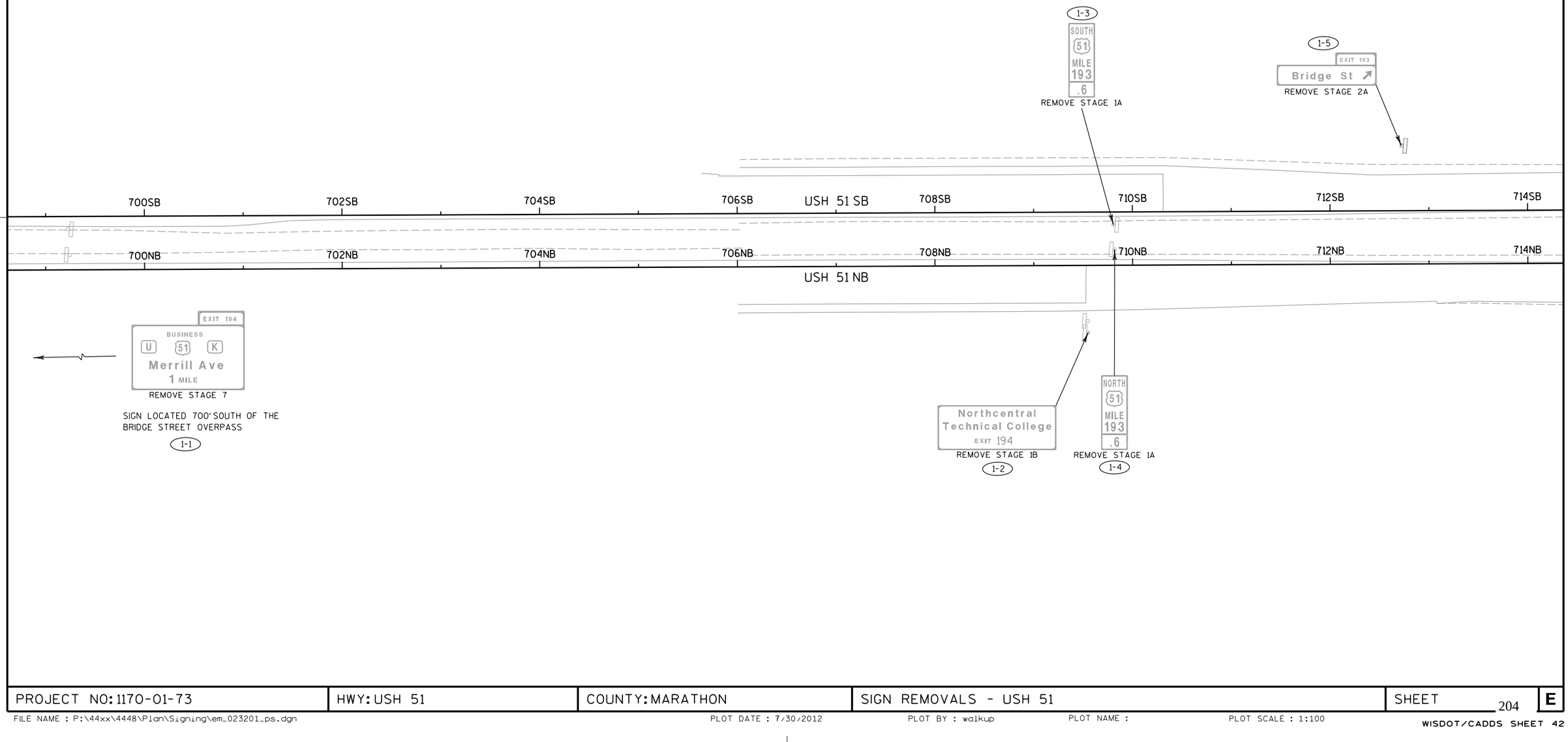
EXISTING CANTILEVER SIGN BRIDGE

(X-X) SIGN - REMOVAL

N

NOTES:
SIS SIGNS ARE TO BE REMOVED, MOVED, OR PLACED BY OTHERS. PROPER SIGN SPACING SHALL BE FOLLOWED.

EXISTING SIGNS TO BE MOVED ARE SHOWN AT THEIR NEW LOCATION ON THE PERMANENT SIGNING PLANS.



PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	SIGN REMOVALS - USH 51	SHEET 204	E

2

2

LEGEND

EXISTING SIGN

EXISTING CANTILEVER SIGN BRIDGE

X-X SIGN - REMOVAL

N

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THE PERMANENT SIGNING PLANS.

2-2
SOUTH 51 MILE 193 .8
MOVE STAGE 1A (722+50 SB)
REMOVE STAGE 7

Bridge St 1/4
52 Stewart Ave 1
29 West 1 1/4
MOVE STAGE 5A
REINSTALL STAGE 7
REINSTALL STRUCTURE
S-37-64 ON NEW BASE

2-5
SPEED LIMIT 65
REMOVE STAGE 5A

714SB 716SB 718SB 720SB USH 51 SB 722SB 724SB 726SB 728SB

714NB 716NB 718NB 720NB 722NB 724NB 726NB 728NB

USH 51 NB

NORTH 51
REMOVE STAGE 1B
2-1

FOOD - EXIT 194
SIS
REMOVE BY OTHERS

NORTH 51 MILE 193 .8
MOVE STAGE 1A (722+50 NB)
REMOVE STAGE 7
2-3

SPEED LIMIT 65
REMOVE STAGE 5A
2-4

GAS - EXIT 194
SIS
REMOVE BY OTHERS

PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	SIGN REMOVALS - USH 51	SHEET 205	E

FILE NAME : P:\44xx\4448\Plan\Signing\em_023202_ps.dgn PLOT DATE : 7/30/2012 PLOT BY : walkup PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2

2

LEGEND

EXISTING SIGN

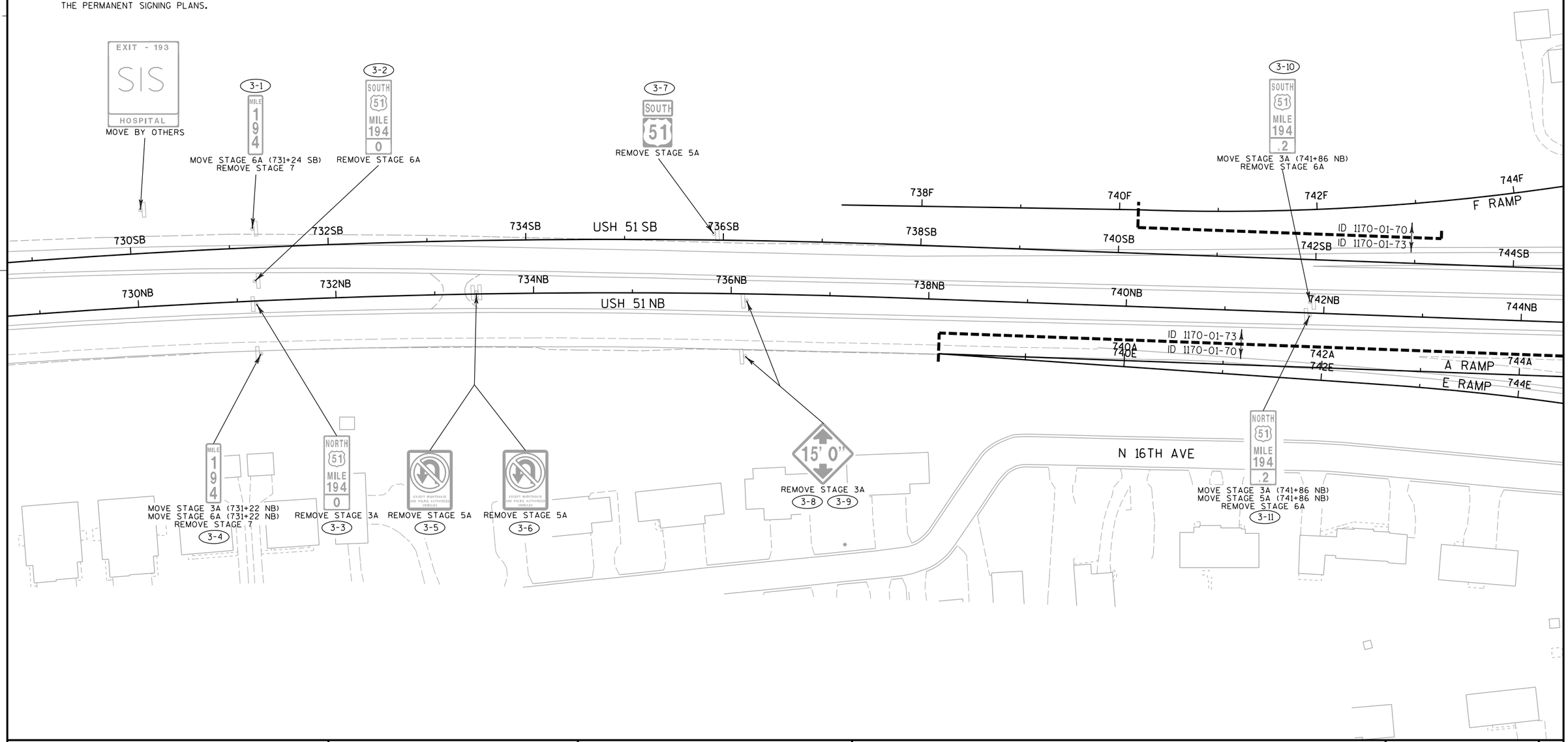
EXISTING CANTILEVER SIGN BRIDGE

X-X SIGN - REMOVAL

N

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OR PLACED BY OTHERS. PROPER SIGN
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THE PERMANENT SIGNING PLANS.



PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	SIGN REMOVALS - USH 51	SHEET 206	E

2

LEGEND

EXISTING SIGN

EXISTING CANTILEVER SIGN BRIDGE

X-X SIGN - REMOVAL

NOTES:
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EXISTING SIGNS TO BE MOVED ARE SHOWN AT THEIR NEW LOCATION ON THE PERMANENT SIGNING PLANS.

N

N 18TH AVE

ARTHUR AVE

CTH U

46U

48U

50U

52U

54U

EXISTING SB CONNECTOR RAMP

EXISTING NB CONNECTOR RAMP

F RAMP

E RAMP

D RAMP

A RAMP

744F 746F 748F 750F 752F

744SB 746SB 748SB 750SB 752SB 754SB 756SB 758SB

744NB 746NB 748NB 750NB 752NB 754NB 756NB 758NB

744A 746A 748A 750A 752A 754A 756A 758A

744E 746E 748E 750E

752D 754D 756D 758D

USH 51 SB

USH 51 NB

ID 1170-01-73
ID 1170-01-70

4-1
MOVE STAGE 3A (750+23 SB)
MOVE STAGE 5A (750+23 SB)
REMOVE STAGE 6A

4-4
CLEARANCE
14'-9"
REMOVE STAGE 2A

4-5
SOUTH 51
MILE 194
.4
MOVE STAGE 6A (752+54 SB)
REMOVE STAGE 7

NORTH 51
MILE 194
.4
MOVE STAGE 3A (752+41 NB)
MOVE STAGE 5A (752+41 NB)
MOVE STAGE 6A (752+41 NB)
REMOVE STAGE 7
4-6

CLEARANCE
15'-0"
FASTEN SAFETY BELTS
REMOVE STAGE 2A
4-2 4-3

PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	SIGN REMOVALS - USH 51	SHEET 207	E

FILE NAME : P:\44xx\4448\Plan\Signing\em_023204_ps.dgn PLOT DATE : 7/30/2012 PLOT BY : walkup PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2

LEGEND

EXISTING SIGN

EXISTING CANTILEVER SIGN BRIDGE

X-X SIGN - REMOVAL

N

NOTES:
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EXISTING SIGNS TO BE MOVED ARE SHOWN AT THEIR NEW LOCATION ON THE PERMANENT SIGNING PLANS.

5-1 5-2 14' 9"
REMOVE STAGE 2A

5-3 SOUTH 51 MILE 194 .6
MOVE STAGE 5A (361+00 NR)
REMOVE STAGE 6A

5-10 NORTH 51 MILE 194 .8
MOVE STAGE 5A (373+00 NR)
REMOVE STAGE 6A

REMOVE STAGE 5A
5-7 5-8

NORTH 51 MILE 194 .6
MOVE STAGE 5A (361+00 NR)
REMOVE STAGE 6A
5-4

REMOVE STAGE 6A
5-5 5-6

MOVE STAGE 5A (362+50 NR)
REMOVE STAGE 6A
5-9

NORTH 51 MILE 194 .8
MOVE STAGE 5A (373+00 NR)
MOVE STAGE 6A (373+00 SR)
REMOVE STAGE 7
5-11

760D D RAMP 762D 764D 766D 768D 770D
760SB USH 51 SB 762SB 764SB 766SB 768SB 770SB 772SB 774SB
760NB USH 51 NB 762NB 764NB 766NB 768NB 770NB 772NB 774NB
760A A RAMP
768B B RAMP 770B 772B 774B
762B 764B 766B
772C C RAMP 774C

CTH K SB
CTH K NB
52KS 52KN
48KS 48KN
46KS 46KN
BUS 51 SB 44KS
BUS 51 NB 44KN
42KS 42KN
38KS 38KN
100KW 202KW
100KE 102KE

PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	SIGN REMOVALS - USH 51	SHEET 208	E

FILE NAME : P:\44xx\4448\Plan\Signing\em_023205_ps.dgn PLOT DATE : 7/30/2012 PLOT BY : walkup PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2

2

LEGEND

EXISTING SIGN

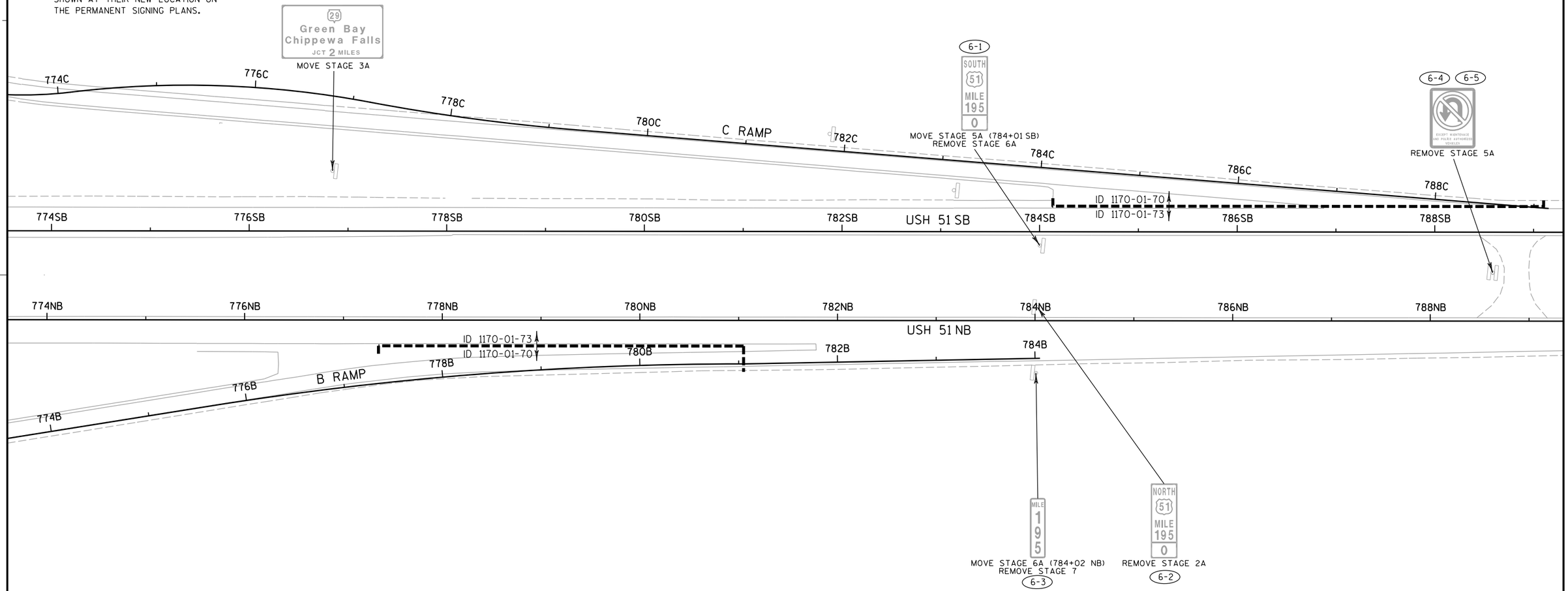
EXISTING CANTILEVER SIGN BRIDGE

(X-X) SIGN - REMOVAL

N

NOTES:
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PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	SIGN REMOVALS - USH 51	SHEET 209	E

2

LEGEND

EXISTING SIGN

EXISTING CANTILEVER SIGN BRIDGE

X-X SIGN - REMOVAL

NOTES:
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EXISTING SIGNS TO BE MOVED ARE SHOWN AT THEIR NEW LOCATION ON THE PERMANENT SIGNING PLANS.

N

7-1

EXIT 194
BUSINESS
U 51 K
Wausau

REMOVE STAGE 5A

GAS - EXIT 194
SIS

MOVE BY OTHERS

790SB 792SB 794SB 796SB USH 51 SB 798SB 800SB 802SB 804SB

790NB 792NB 794NB 796NB 798NB 800NB 802NB 804NB

USH 51 NB

SPEED LIMIT 65

REMOVE STAGE 5A

7-2

NORTH 51

REMOVE STAGE 6A

7-3

SLOWER TRAFFIC KEEP RIGHT

REMOVE STAGE 3A

7-4

PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	SIGN REMOVALS - USH 51	SHEET 210	E

2

2

LEGEND

EXISTING SIGN

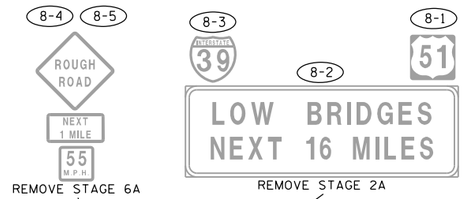
EXISTING CANTILEVER SIGN BRIDGE

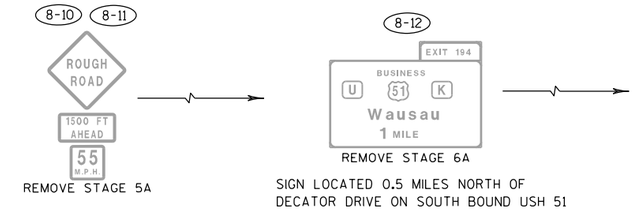
(X-X) SIGN - REMOVAL

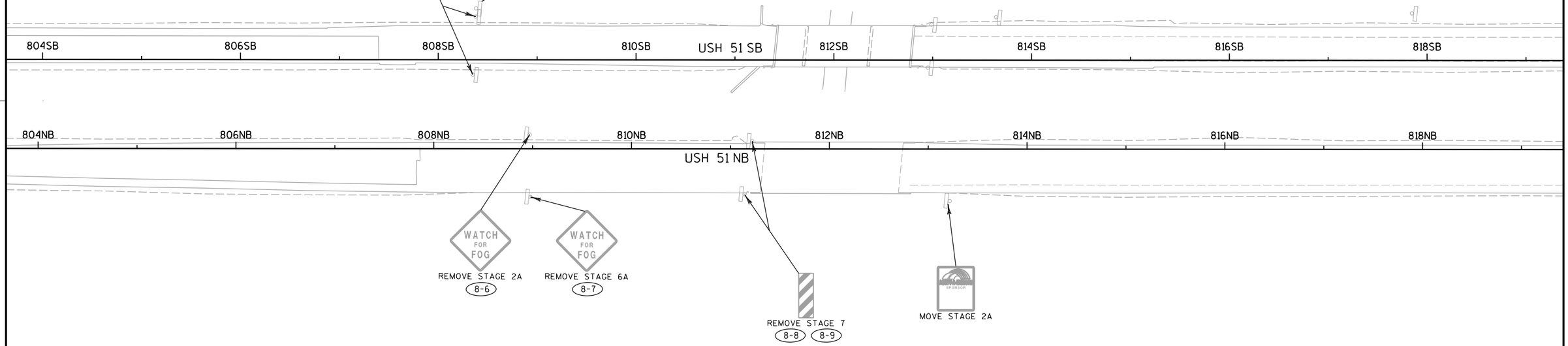
N

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PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	SIGN REMOVALS - USH 51	SHEET 211	E

2

LEGEND

EXISTING SIGN

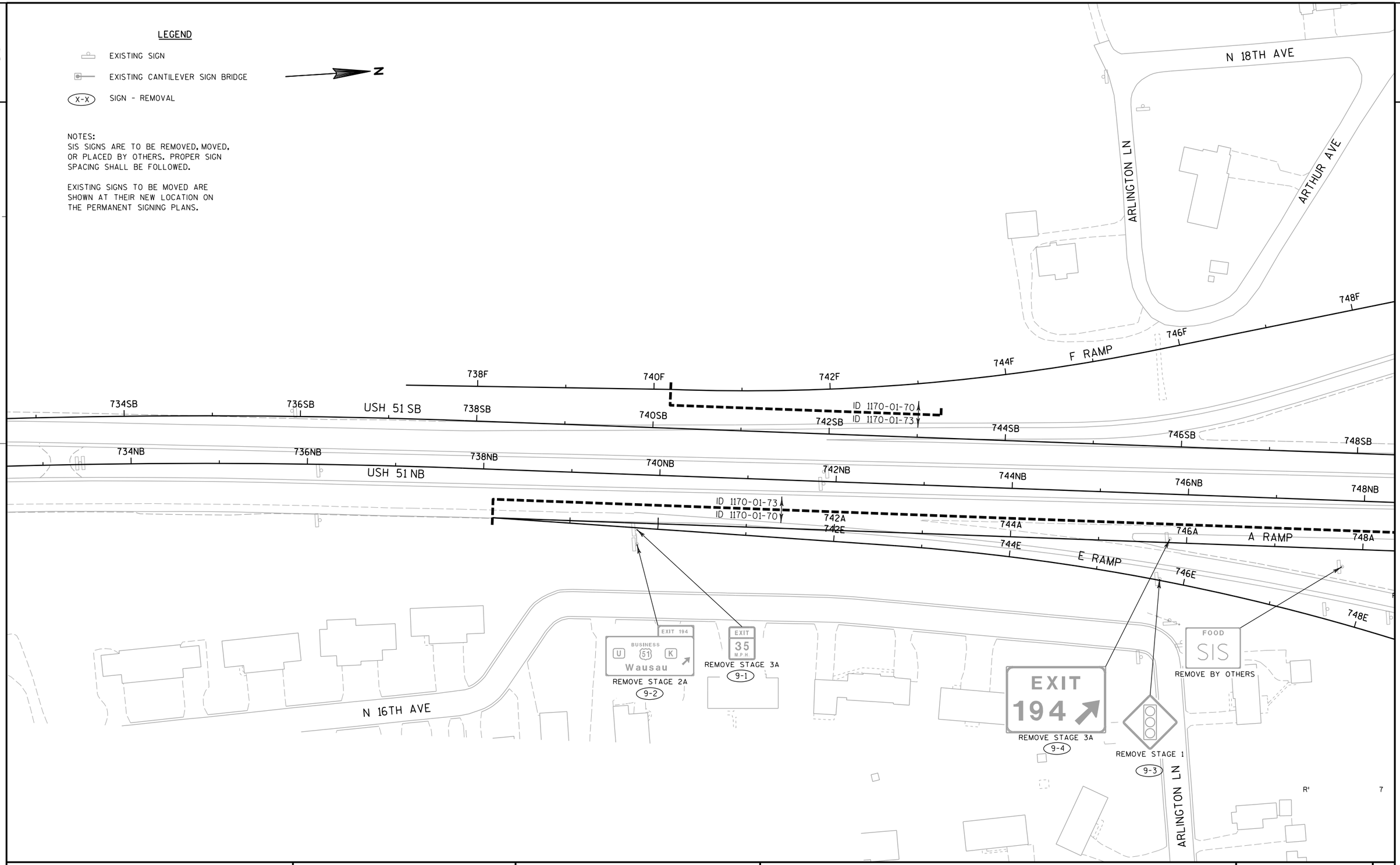
EXISTING CANTILEVER SIGN BRIDGE

X-X SIGN - REMOVAL

N

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PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	SIGN REMOVALS - A RAMP/E RAMP	SHEET 212	E

2

LEGEND

EXISTING SIGN

EXISTING CANTILEVER SIGN BRIDGE

(X-X) SIGN - REMOVAL

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EXISTING SIGNS TO BE MOVED ARE SHOWN AT THEIR NEW LOCATION ON THE PERMANENT SIGNING PLANS.

N

N 18TH AVE

MERRILL AVE

44U

CTH U

46U

48U

50U

52U

REMOVE

ARTHUR AVE

746F

748F

750F

F RAMP

ID 1170-01-70A
ID 6999-18-70Y

(10-5) PEDESTRIANS BICYCLES NON MOTORIZED TRAFFIC MOTOR BICYCLES PROHIBITED
REMOVE STAGE 2A

(10-9) SOUTH 51
REMOVE STAGE 2A

(10-12) SOUTH 51 / COUNTY U
REMOVE STAGE 2A

(10-16) (10-17) (10-18) Stevens Point H
REMOVE STAGE 2A

(10-14) WRONG WAY
REMOVE STAGE 2A

(10-15) WRONG WAY
REMOVE STAGE 2A

EXISTING SB CONNECTOR RAMP

(10-13) EXIT 193 Bridge St 1 MILE
REMOVE STAGE 1

746SB 748SB USH 51 SB 750SB 752SB 754SB 756SB 758SB USH 51 SB 760SB

746NB 748NB USH 51 NB 750NB 752NB 754NB 756NB 758NB USH 51 NB 760NB

746A 748A A RAMP 750A 752A 754A 756A 758A A RAMP 760A

752D 754D 756D 758D D RAMP 760D

ID 1170-01-70A
ID 1170-01-73Y

ID 1170-01-73A
ID 1170-01-70Y

746E E RAMP 748E

GAS SIS
REMOVE BY OTHERS

(10-2) WRONG WAY
REMOVE STAGE 2A

(10-6)
REMOVE STAGE 2A

(10-4) WRONG WAY
REMOVE STAGE 2A

(10-7) YIELD
REMOVE STAGE 2A

(10-3) TO WEST COUNTY U / TO COUNTY K / TO BUSINESS 51 / TO EAST COUNTY U
REMOVE STAGE 2A

(10-8) DO NOT ENTER
REMOVE STAGE 2A

(10-1) Northcentral Technical College
REMOVE STAGE 2A

NO OVERNIGHT PARKING ON ALL CITY STREETS 3:00AM - 5:00PM DEC 1 - MAY 31 ... COMPRESSION BRAKES ARE PROHIBITED IN THE CITY OF WAUSAU
MOVE STAGE 2A
REINSTALL STAGE 7

EXISTING NB CONNECTOR RAMP

(10-10) STOP AHEAD
REMOVE STAGE 2A

(10-11) NORTH COUNTY K 51
REMOVE STAGE 2A

38KS 38KN

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	SIGN REMOVALS - A RAMP/E RAMP/F RAMP	SHEET 213	E

FILE NAME : P:\44xx\4448\Plan\Signing\em_023210_ps.dgn PLOT DATE : 7/30/2012 PLOT BY : walkup PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2

LEGEND

EXISTING SIGN

EXISTING CANTILEVER SIGN BRIDGE

X-X SIGN - REMOVAL

NOTES:
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EXISTING SIGNS TO BE MOVED ARE SHOWN AT THEIR NEW LOCATION ON THE PERMANENT SIGNING PLANS.

11-9 11-12 WRONG WAY — REMOVE STAGE 2A

11-10 11-11 Merrill / Wausau / Northcentral Technical College — REMOVE STAGE 2A

GAS SIS / FOOD SIS — REMOVE BY OTHERS

11-17 NORTH 51 / COUNTY K — REMOVE STAGE 2A

11-40 JCT COUNTY U / SOUTH 51 — REMOVE STAGE 2A

11-5 Wausau POPULATION XX,XXX — REMOVE STAGE 4

11-4 WRONG WAY — REMOVE STAGE 4

11-6 ONLY ONLY — REMOVE STAGE 4

NO OVERNIGHT PARKING ON ALL CITY STREETS 2:30AM - 6:00PM DEC. 1 - MAR. 31 ULTIMATE ENFORCEMENT APRIL 1 - NOV. 30 PROHIBITED ALL YEAR DOWNTOWN
COMPRESSION BRAKES ARE PROHIBITED IN THE CITY OF WAUSAU — MOVE STAGE 4 REINSTALL STAGE 7

11-8 Northcentral Technical College — REMOVE STAGE 4

11-15 11-16 — REMOVE STAGE 4

11-19 — REMOVE STAGE 2A

11-18 STOP — REMOVE STAGE 2A

11-23 STOP — REMOVE STAGE 1

11-24 DO NOT ENTER — REMOVE STAGE 2A

11-33 11-34 NORTH 51 — REMOVE STAGE 4

11-35 DO NOT ENTER — REMOVE STAGE 4

11-37 WRONG WAY — REMOVE STAGE 4

11-41 Merrill — REMOVE STAGE 4

11-2 NO TURN ON RED — REMOVE STAGE 4

11-3 Stevens Point / Merrill — REMOVE STAGE 6C

11-1 SOUTH 51 / NORTH COUNTY K / NORTH 51 — REMOVE STAGE 4 / REMOVE STAGE 6C

SIGNS LOCATED 430' SOUTHEAST OF INTERSECTION OF BUSINESS 51 AND CAMPUS DRIVE.

TRUCK ROUTE — MOVE STAGE 6C

11-7 RAMP 50 M.P.H. — REMOVE STAGE 6C

11-13 NORTH 51 — REMOVE STAGE 6C

11-14 NORTH 51 — REMOVE STAGE 6C

11-20 11-21 STOP / ONE WAY — REMOVE STAGE 1

11-22 DO NOT ENTER — REMOVE STAGE 2A

11-26 DO NOT ENTER — REMOVE STAGE 4

11-25 — REMOVE STAGE 4

11-27 11-28 YIELD / ONE WAY — REMOVE STAGE 4

11-29 WRONG WAY — REMOVE STAGE 4

11-30 YIELD — REMOVE STAGE 4

11-31 11-32 COUNTY K / ONE WAY — REMOVE STAGE 4

11-38 PEDESTRIANS BICYCLES NON MOTORIZED TRAFFIC MOTOR BICYCLES PROHIBITED — REMOVE STAGE 6C

11-36 SPEED LIMIT 45 — REMOVE STAGE 4

11-39 Stevens Point — REMOVE STAGE 4

758SB 758NB 758A A RAMP 760A 760D D RAMP 760SB 760NB 762D 762SB 764D 766D USH 51 SB 764SB USH 51 NB 762NB 764NB 766SB 766NB 768NB 762B 764B 766B B RAMP 768B

32KS 34KS 36KS 38KS 38KN 36KN 34KN 32KN BUS 51 SB BUS 51 NB

102KE 102KW

42KS 44KS 46KS 42KN 44KN 46KN BUS 51 SB BUS 51 NB

N

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	SIGN REMOVALS - A RAMP/B RAMP/BUS 51	SHEET 214	E

2

LEGEND

EXISTING SIGN

EXISTING CANTILEVER SIGN BRIDGE

X-X SIGN - REMOVAL

NOTES:
SIS SIGNS ARE TO BE REMOVED, MOVED, OR PLACED BY OTHERS. PROPER SIGN SPACING SHALL BE FOLLOWED.

EXISTING SIGNS TO BE MOVED ARE SHOWN AT THEIR NEW LOCATION ON THE PERMANENT SIGNING PLANS.

N

12-1 STOP AHEAD — REMOVE STAGE 2A

12-2 WRONG WAY — REMOVE STAGE 4

12-3 SPEED LIMIT 45 — REMOVE STAGE 4

12-4 NORTH 51 — REMOVE STAGE 4

12-5 SOUTH 51 — REMOVE STAGE 4

12-6 COUNTY K — REMOVE STAGE 4

12-7 — REMOVE STAGE 4

12-8 DO NOT ENTER — REMOVE STAGE 4

12-9 ONE WAY — REMOVE STAGE 4

12-10 — REMOVE STAGE 4

12-11 YIELD

12-12 TRAFFIC FROM RIGHT DOES NOT STOP — REMOVE STAGE 4

12-13 COUNTY U — REMOVE STAGE 2A

12-14 DO NOT ENTER — REMOVE STAGE 4

12-15 — REMOVE STAGE 4

12-16 YIELD — REMOVE STAGE 4

12-17 DO NOT ENTER — REMOVE STAGE 5A

12-18 STOP — REMOVE STAGE 4

12-19 WRONG WAY — REMOVE STAGE 4

12-20 ONE WAY — REMOVE STAGE 4

12-21 12-22 STOP / ONE WAY — REMOVE STAGE 5A

12-23 DO NOT ENTER — REMOVE STAGE 5A

12-24 — REMOVE STAGE 4

12-25 STOP — REMOVE STAGE 4

12-26 BUSINESS 51 / TO COUNTY U / NORTH COUNTY K — REMOVE STAGE 4 / REMOVE STAGE 2A / REMOVE STAGE 5A

12-27 SOUTH 51 — REMOVE STAGE 2A

12-28 WRONG WAY — REMOVE STAGE 4

12-29 SPEED LIMIT 45 — REMOVE STAGE 5A

12-30 WRONG WAY — MOVE STAGE 3B (374+75 CT) REMOVE STAGE 5B

12-31 Northcentral Technical College / Wausau — REMOVE STAGE 4

12-32 RAMP 50 M.P.H. — REMOVE STAGE 4

12-33 NO PARKING EXCEPT CRASH INVESTIGATION VEHICLES — REMOVE STAGE 5A

12-34 Wausau / Merrill / Stevens Point — REMOVE STAGE 4

12-35 NO PARKING EXCEPT CRASH INVESTIGATION VEHICLES — REMOVE STAGE 5A

12-36 SPEED LIMIT 45 — REMOVE STAGE 4

12-37 NORTH COUNTY K — REMOVE STAGE 5A

NO OVERNIGHT PARKING ON ALL CITY STREETS — MOVE STAGE 4

COMPRESSION BRAKES ARE PROHIBITED IN THE CITY OF WAUSAU

GAS SIS — MOVE BY OTHERS

766D D RAMP

770D

768SB

768NB

770SB USH 51 SB

770NB

772SB

772NB USH 51 NB

774SB

774NB

770B B RAMP

772C

774C C RAMP

776C

202KW

46KS BUS 51 SB 48KS

46KN BUS 51 NB 48KN

52KS 52KN

54KS 54KN

56KS 56KN CTH K SB / CTH K NB

58KS 58KN

60KS 60KN

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	SIGN REMOVALS - C RAMP/D RAMP/BUS 51/CTH K	SHEET 215	E

2

LEGEND

EXISTING SIGN

EXISTING CANTILEVER SIGN BRIDGE

(X-X) SIGN - REMOVAL

N

NOTES:
SIS SIGNS ARE TO BE REMOVED, MOVED, OR PLACED BY OTHERS. PROPER SIGN SPACING SHALL BE FOLLOWED.

EXISTING SIGNS TO BE MOVED ARE SHOWN AT THEIR NEW LOCATION ON THE PERMANENT SIGNING PLANS.

(13-1)
STOP AHEAD
REMOVE STAGE 4

(13-2) (13-3)
EXIT 194
REMOVE STAGE 3A

MILE 195
REMOVE STAGE 3A

FOOD SIS
MOVE BY OTHERS

778C 780C C RAMP 782C 784C 786C 788C

ID 1170-01-70
ID 1170-01-73

778SB 780SB 782SB USH 51 SB 784SB 786SB 788SB 790SB 792SB

778NB 780NB 782NB 784NB 786NB 788NB 790NB 792NB

USH 51 NB

ID 1170-01-73
ID 1170-01-70
B RAMP

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	SIGN REMOVALS - C RAMP	SHEET 216	E

FILE NAME : P:\44xx\4448\Plan\Signing\em_023213_ps.dgn PLOT DATE : 7/30/2012 PLOT BY : walkup PLOT NAME : PLOT SCALE : 1:100

2

2

LEGEND

EXISTING SIGN

EXISTING CANTILEVER SIGN BRIDGE

X-X SIGN - REMOVAL

NOTES:
SIS SIGNS ARE TO BE REMOVED, MOVED, OR PLACED BY OTHERS. PROPER SIGN SPACING SHALL BE FOLLOWED.

EXISTING SIGNS TO BE MOVED ARE SHOWN AT THEIR NEW LOCATION ON THE PERMANENT SIGNING PLANS.

N

OVERLOOK DR

204V

202V

200V

CTH U

18U

20U

22U

24U

26U

28U

30U

14-1
OVERLOOK DR
STOCKPILE FOR MUNICIPALITY
STAGE 2B

14-2
STOP
REMOVE STAGE 2B

ID 1170-01-70
ID 6999-18-70

14-6
SPEED LIMIT 35
REMOVE STAGE 2A

14-7
REMOVE STAGE 2A

NO OVERNIGHT PARKING
ON ALL CITY STREETS
3:30AM - 6:00PM
DEC. 1 - MAR. 31
A TOWAYS ITEM 100 PARKING
APRIL 1 - NOV. 30
PROHIBITED ALL YEAR DOWNTOWN
COMPRESSION BRAKES ARE PROHIBITED IN THE CITY OF WAUSAU
MOVE STAGE 2B

SPEED LIMIT 30
REMOVE STAGE 2B
14-3

WESTWOOD DR
CTH. U
STOCKPILE FOR MUNICIPALITY

STOP
REMOVE STAGE 2B
14-4 14-5

SPEED LIMIT 35
REMOVE STAGE 2A
14-8

WESTWOOD DR

PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	SIGN REMOVALS - CTH U	SHEET 217	E

FILE NAME : P:\44xx\4448\Plan\Signing\em_023214_ps.dgn PLOT DATE : 7/30/2012 PLOT BY : walkup PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2

2

LEGEND

EXISTING SIGN

EXISTING CANTILEVER SIGN BRIDGE

(X-X) SIGN - REMOVAL

NOTES:
SIS SIGNS ARE TO BE REMOVED, MOVED, OR PLACED BY OTHERS. PROPER SIGN SPACING SHALL BE FOLLOWED.

EXISTING SIGNS TO BE MOVED ARE SHOWN AT THEIR NEW LOCATION ON THE PERMANENT SIGNING PLANS.

N

MERRILL AVE

25.4M

15-8 SPEED LIMIT 35 REMOVE STAGE 2A

15-7 STOP REMOVE STAGE 2A

15-4 H REMOVE STAGE 2A

15-6 SPEED LIMIT 35 REMOVE STAGE 2A

MARATHON COUNTY ADOPT-A-HIGHWAY LITTER CONTROL NEXT MILE SPONSORED BY WAUSAU LIONS CLUB

MOVE STAGE 2A REINSTALL STAGE 3A

15-9 MERRILL AV STOCKPILE FOR MUNICIPALITY STAGE 2A

32U 34U 36U 38U CTH U 40U 42U 44U 46U

JCT 51 REMOVE STAGE 2A 15-1

ARTHUR AV STOCKPILE FOR MUNICIPALITY STAGE 2A 15-2

STOP REMOVE STAGE 3A 15-3

Wausau Merrill Stevens Point REMOVE STAGE 2A 15-5

STOP REMOVE STAGE 3A 15-10

N 18TH AVE

14R

12R

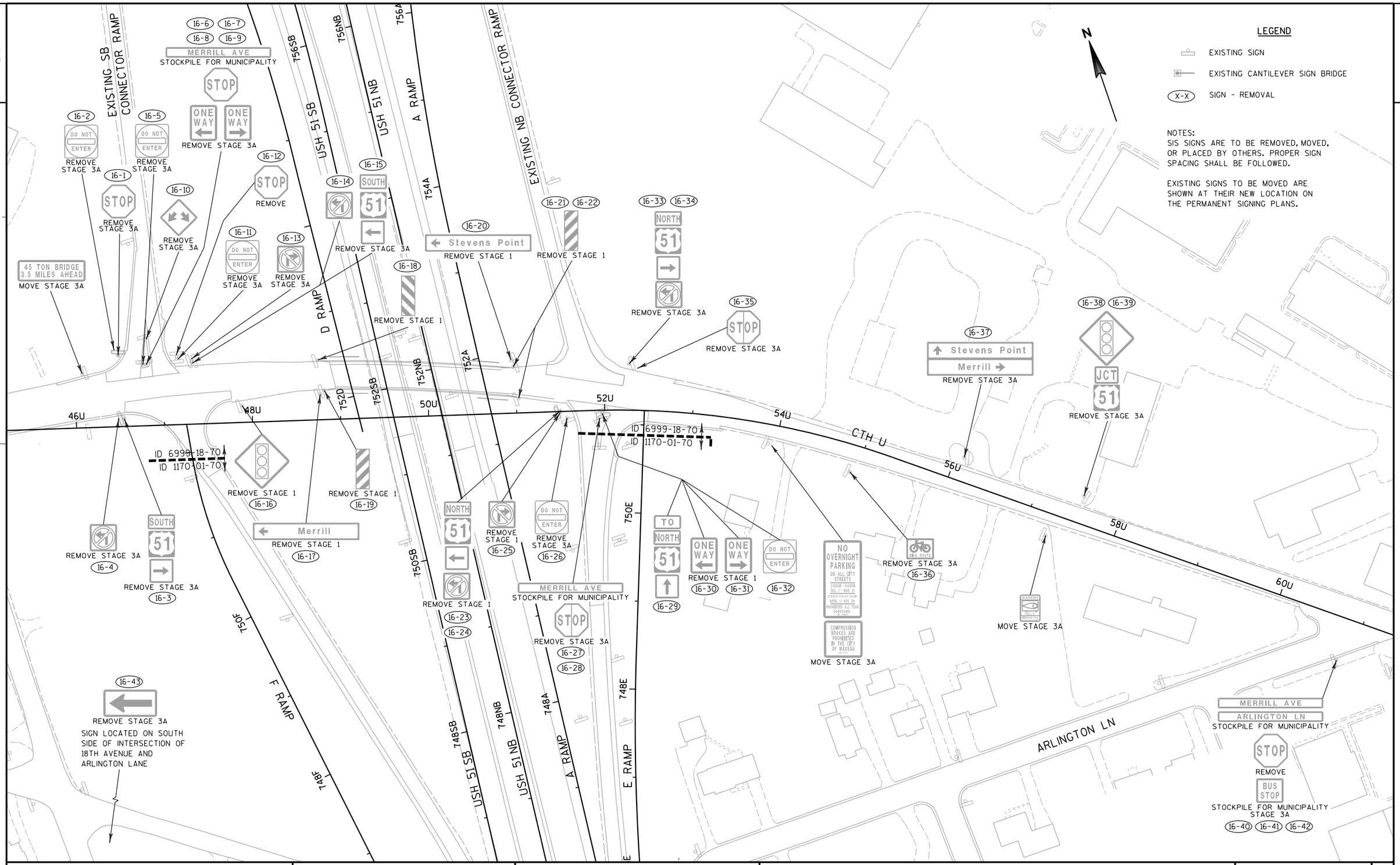
10R

ARTHUR AVE

PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	SIGN REMOVALS - CTH U	SHEET 218	E

FILE NAME : P:\44xx\4448\Plan\Signing\em_023215_ps.dgn PLOT DATE : 7/30/2012 PLOT BY : walkup PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42



PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	SIGN REMOVALS - CTH U	SHEET 219	E

2

2

LEGEND

EXISTING SIGN

EXISTING CANTILEVER SIGN BRIDGE

(X-X) SIGN - REMOVAL

NOTES:
SIS SIGNS ARE TO BE REMOVED, MOVED, OR PLACED BY OTHERS. PROPER SIGN SPACING SHALL BE FOLLOWED.

EXISTING SIGNS TO BE MOVED ARE SHOWN AT THEIR NEW LOCATION ON THE PERMANENT SIGNING PLANS.

N

BUS 51 NB

BUS 51 SB

NTC TRAIL

COLLEGE DR

CTH U

ID 6999-18-70

ID 1170-01-70

22K

20K

18K

16K

14K

12K

28TR

26TR

72U

70U

68U

66U

64U

62U

17-3 SPEED LIMIT 35 REMOVE STAGE 3A

17-6 COUNTY U REMOVE STAGE 3A

MERRILL AVE
N 13TH AVE
STOCKPILE FOR MUNICIPALITY
STOP
REMOVE STAGE 3A
17-1 17-2

N 13TH AVE

MERRILL AVE
N 12TH AVE
STOCKPILE FOR MUNICIPALITY
STOP
REMOVE STAGE 3A
17-4 17-5

AHEAD
REMOVE STAGE 3A
17-7

RIGHT LANE MUST TURN RIGHT
REMOVE STAGE 3A
17-8

JCT BUSINESS 51
REMOVE STAGE 3A
17-9

END COUNTY U
REMOVE STAGE 3A
17-10

SPEED LIMIT 25
REMOVE STAGE 3A
17-11

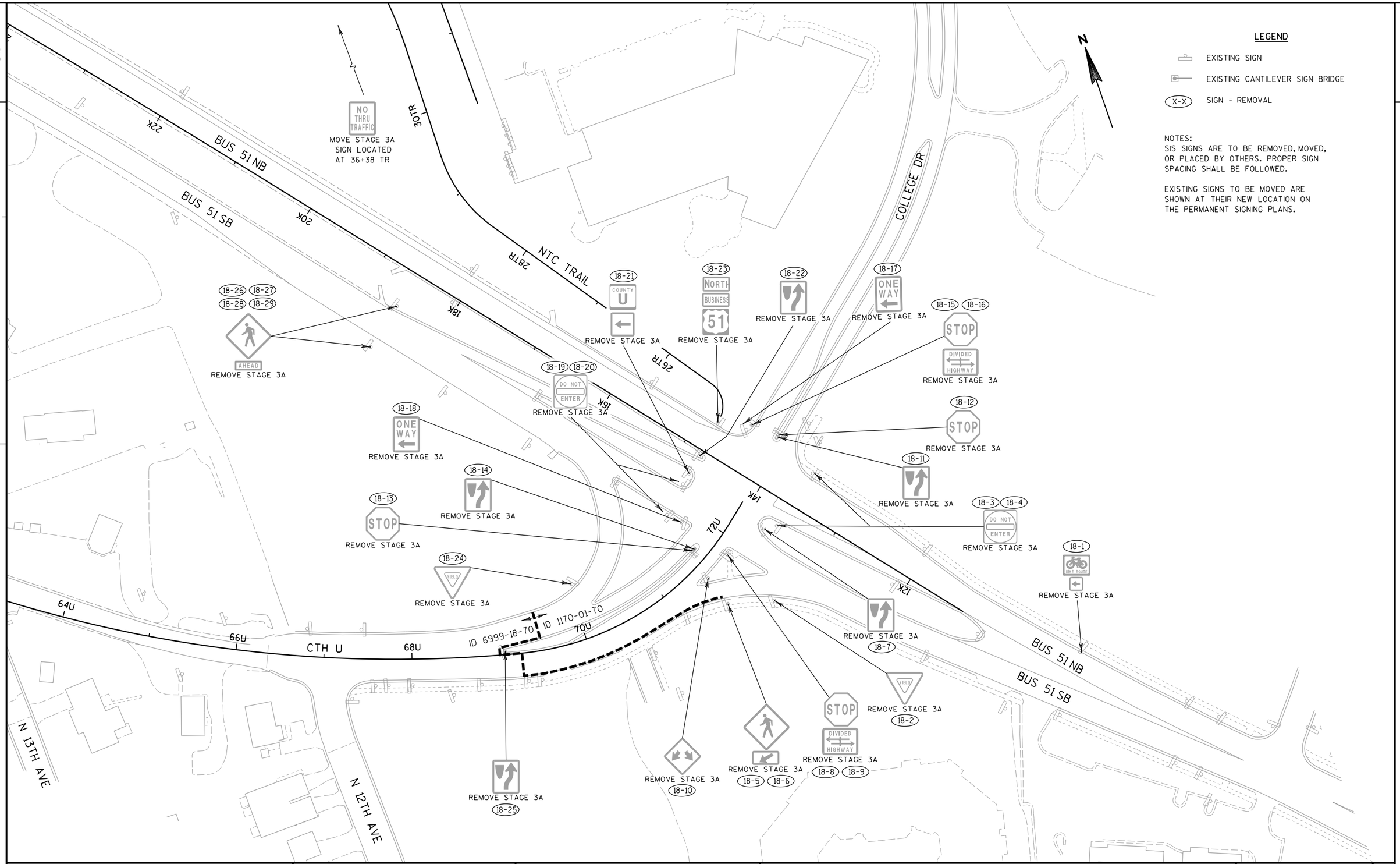
BIKE ROUTE
REMOVE STAGE 3A
17-12

NORTH SOUTH BUSINESS 51
REMOVE STAGE 3A
17-13

NORTH SOUTH BUSINESS 51
REMOVE STAGE 3A
17-14

N 12TH AVE

PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	SIGN REMOVALS - CTH U	SHEET 220	E

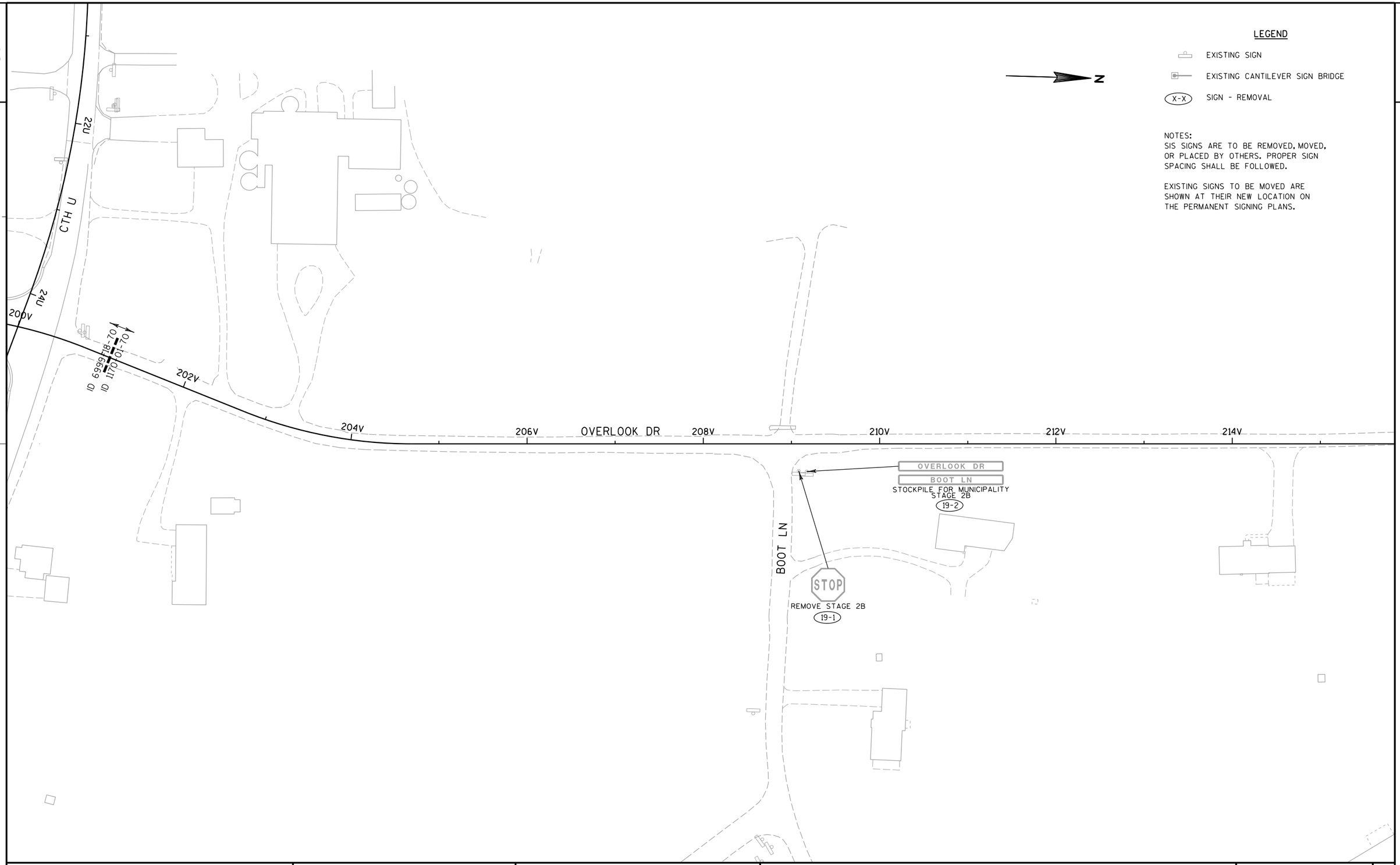


PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	SIGN REMOVALS - CTH U/BUS 51	SHEET 221	E

FILE NAME : P:\44xx\4448\Plan\Signing\em_023218_ps.dgn PLOT DATE : 7/30/2012 PLOT BY : walkup PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2



PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	SIGN REMOVALS - OVERLOOK DRIVE	SHEET 222	E

2

LEGEND

EXISTING SIGN

EXISTING CANTILEVER SIGN BRIDGE

(X-X) SIGN - REMOVAL

NOTES:
SIS SIGNS ARE TO BE REMOVED, MOVED, OR PLACED BY OTHERS. PROPER SIGN SPACING SHALL BE FOLLOWED.

EXISTING SIGNS TO BE MOVED ARE SHOWN AT THEIR NEW LOCATION ON THE PERMANENT SIGNING PLANS.

N

MERRILL AVE

CASSIDY DR

(20-3) (20-4)
STOP AHEAD
REMOVE STAGE 2A

4N

6N

(20-5)
W. CASSIDY DR
STOCKPILE FOR MUNICIPALITY
STAGE 2A

(20-2)
MERRILL AV
OVERLOOK DR
STOCKPILE FOR MUNICIPALITY
STAGE 2A

OVERLOOK DR

222V

224V

226V

228V

230V

220V

218V

216V

STOP
REMOVE STAGE 2A
(20-1)

72KS

70KS

SB CTH K

68KS

66KS

64KS

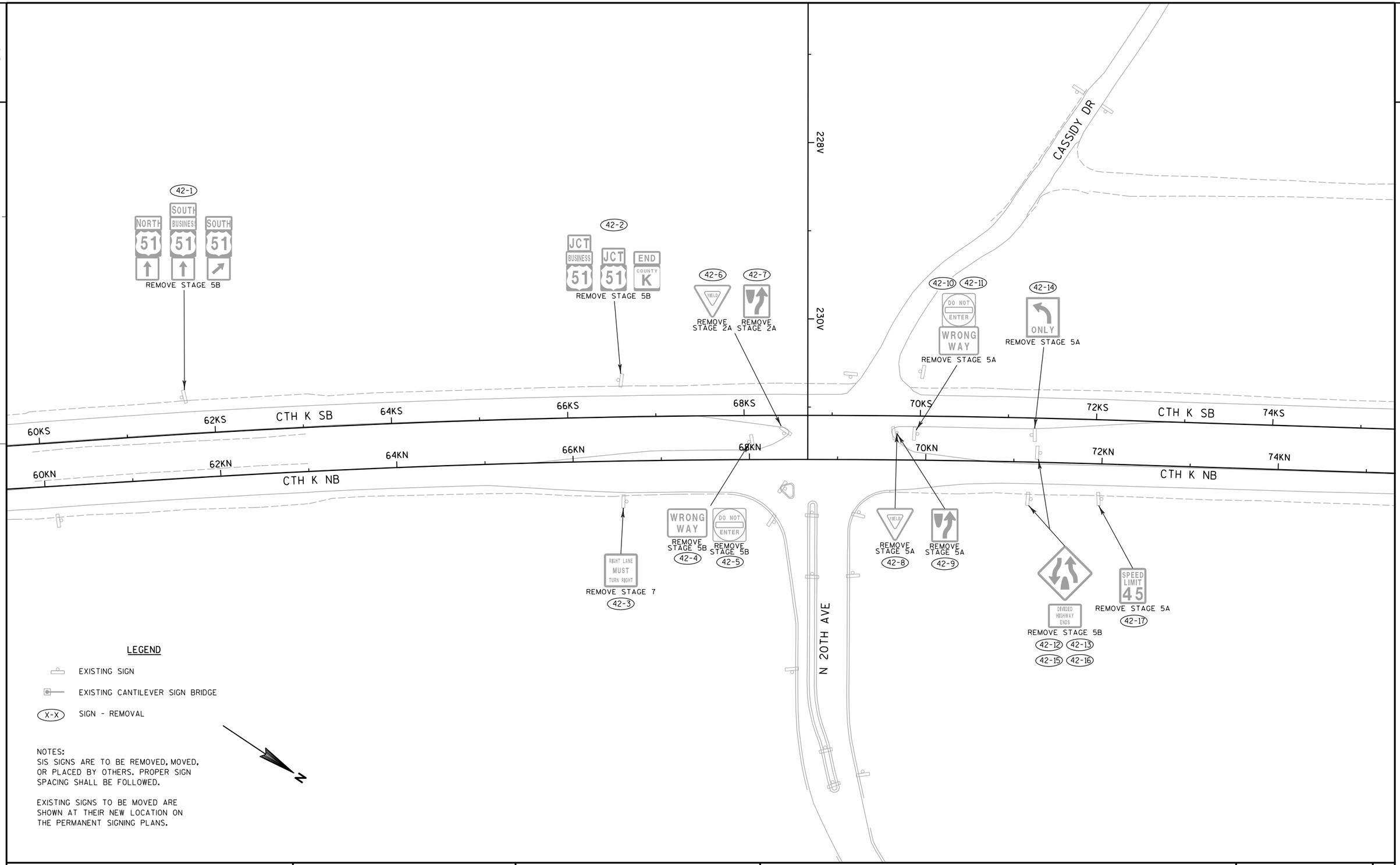
STOP
DIVIDED HIGHWAY
REMOVE STAGE 2A
(20-6) (20-7)

MERRILL AVE

2

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	SIGN REMOVALS - OVERLOOK DRIVE	SHEET 223	E

2



LEGEND

- EXISTING SIGN
- EXISTING CANTILEVER SIGN BRIDGE
- (X-X) SIGN - REMOVAL

NOTES:
SIS SIGNS ARE TO BE REMOVED, MOVED, OR PLACED BY OTHERS. PROPER SIGN SPACING SHALL BE FOLLOWED.

EXISTING SIGNS TO BE MOVED ARE SHOWN AT THEIR NEW LOCATION ON THE PERMANENT SIGNING PLANS.

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	SIGN REMOVALS - CTH K	SHEET 224	E

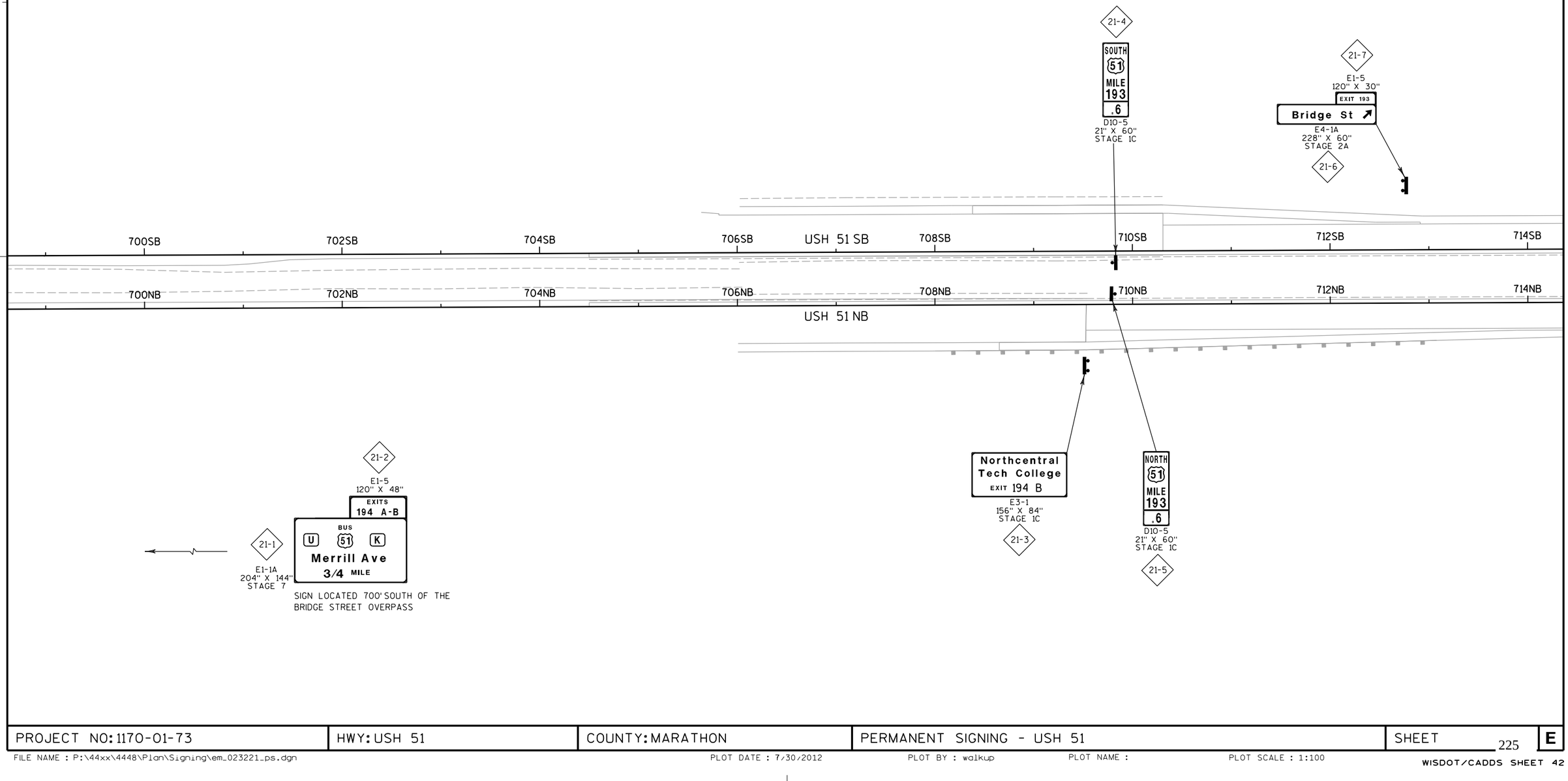
2

2

LEGEND

- PROPOSED SIGN MOUNTED ON SINGLE POST
- PROPOSED SIGN MOUNTED ON DOUBLE POSTS
- PROPOSED SIGN MOUNTED ON SIGNAL OR LIGHT POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- 18" X 18" TEMPORARY ORANGE FLAGS
- X-X SIGN - PROPOSED

N



PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	PERMANENT SIGNING - USH 51	SHEET 225	E

2

2

LEGEND

- PROPOSED SIGN MOUNTED ON SINGLE POST
- PROPOSED SIGN MOUNTED ON DOUBLE POSTS
- PROPOSED SIGN MOUNTED ON SIGNAL OR LIGHT POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- 18" X 18" TEMPORARY ORANGE FLAGS
- X-X SIGN - PROPOSED

N

22-2
SPEED LIMIT 65
R2-1
48" X 60"
STAGE 7

22-3
SOUTH 51 MILE 193 .8
D10-5
21" X 60"
STAGE 7

22-7
EXCEPT MAINTENANCE AND POLICE AUTHORIZED VEHICLES
R3-4B
36" X 48"
STAGE 7

22-5
Bridge St 1/4
52 Stewart Ave 1
29 West 1 1/4
MOVE STAGE 5A
REINSTALL STAGE 7
REINSTALL STRUCTURE
S-37-64 ON NEW BASE

22-9
SOUTH 51
J4-1
36" X 54"
STAGE 5B

714SB 716SB 718SB 720SB USH 51 SB 722SB 724SB 726SB 728SB

714NB 716NB 718NB 720NB 722NB 724NB 726NB 728NB

USH 51 NB

NORTH 51
J4-1
36" X 54"
STAGE 2A
22-1

FOOD - EXIT 194B
SIS
PLACE BY OTHERS

NORTH 51 MILE 193 .8
D10-5
21" X 60"
STAGE 7
22-4

EXCEPT MAINTENANCE AND POLICE AUTHORIZED VEHICLES
R3-4B
36" X 48"
STAGE 7
22-6

SPEED LIMIT 65
R2-1
48" X 60"
STAGE 7
22-8

22-11
E1-5
120" X 48"
EXITS 194 A-B
BUS U 51 K
Merrill Ave
22-10
E4-1A
252" X 108"
STAGE 7

PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	PERMANENT SIGNING - USH 51	SHEET 226	E

LEGEND

- PROPOSED SIGN MOUNTED ON SINGLE POST
- PROPOSED SIGN MOUNTED ON DOUBLE POSTS
- PROPOSED SIGN MOUNTED ON SIGNAL OR LIGHT POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- 18" X 18" TEMPORARY ORANGE FLAGS
- X-X SIGN - PROPOSED

N

EXIT - 193
SIS
HOSPITAL
MOVE BY OTHERS

23-1
SOUTH 51 MILE 194 0
D10-5
21" X 60"
STAGE 7

23-4
NORTH 51 MILE 194 .2
D10-5
21" X 60"
STAGE 7

23-3
SOUTH 51 MILE 194 .2
D10-5
21" X 60"
STAGE 7

730SB 732SB 734SB USH 51 SB 736SB 738SB 740SB 742SB 744SB

738F 740F 742F F RAMP 744F

ID 1170-01-70
ID 1170-01-73

730NB 732NB 734NB 736NB 738NB 740NB 742NB 744NB

USH 51 NB

ID 1170-01-73
ID 1170-01-70
740A 740E 742A 742E A RAMP 744A E RAMP 744E

NORTH 51 MILE 194 0
D10-5
21" X 60"
STAGE 7
23-2

GAS - EXIT 194B
SIS
PLACE BY OTHERS

N 16TH AVE

PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	PERMANENT SIGNING - USH 51	SHEET 227	E

FILE NAME : P:\44xx\4448\Plan\Signing\em_023223_ps.dgn PLOT DATE : 7/30/2012 PLOT BY : walkup PLOT NAME : PLOT SCALE : 1:100

2

N 18TH AVE

ARLINGTON LN

ARTHUR AVE

CTH U

46U

48U

50U

52U

752F

750F

748F

746F

744F

F RAMP

24-1

W4-1
48" X 48"
STAGE 6A

24-2

SOUTH
51
MILE
194
.4

D10-5
21" X 60"
STAGE 7

752D

754D

756D

D RAMP

758D

744SB

746SB

748SB

750SB

USH 51 SB

752SB

754SB

756SB

ID 1170-01-70A
ID 1170-01-73

758SB

744NB

746NB

748NB

750NB

USH 51 NB

752NB

754NB

756NB

758NB

744A

746A

A RAMP

748A

ID 1170-01-73A
ID 1170-01-70

750A

752A

754A

756A

A RAMP

758A

744E

746E

E RAMP

748E

750E

NORTH
51
MILE
194
.4

D10-5
21" X 60"
STAGE 7

24-3

LEGEND

- PROPOSED SIGN MOUNTED ON SINGLE POST
- PROPOSED SIGN MOUNTED ON DOUBLE POSTS
- PROPOSED SIGN MOUNTED ON SIGNAL OR LIGHT POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- 18" X 18" TEMPORARY ORANGE FLAGS
- X-X SIGN - PROPOSED

N

PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	PERMANENT SIGNING - USH 51	SHEET 228	E

FILE NAME : P:\44xx\4448\Plan\Signing\em_023224_ps.dgn PLOT DATE : 7/30/2012 PLOT BY : walkup PLOT NAME : PLOT SCALE : 1:100

LEGEND

- PROPOSED SIGN MOUNTED ON SINGLE POST
- PROPOSED SIGN MOUNTED ON DOUBLE POSTS
- PROPOSED SIGN MOUNTED ON SIGNAL OR LIGHT POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- 18" X 18" TEMPORARY ORANGE FLAGS
- X-X SIGN - PROPOSED

N

25-2
NORTH 51 MILE 194 .6
D10-5
21" X 60"
STAGE 6A

25-1
SOUTH 51 MILE 194 .6
D10-5
21" X 60"
STAGE 6A

25-3
W4-1
48" X 48"
STAGE 7

25-4
E1-1A
192" X 84"
STAGE 6A

25-5
E1-5
120" X 30"
EXIT 193
Bridge St
1 1/4 MILE

25-7
SOUTH 51 MILE 194 .8
D10-5
21" X 60"
STAGE 6A

25-6
W4-1
48" X 48"
STAGE 7

25-8
NORTH 51 MILE 194 .8
D10-5
21" X 60"
STAGE 7

770D
768D
766D
764D
762D
760D
D RAMP
772C
C RAMP
774C
52KS
52KN
CTH K SB
CTH K NB
200KW
202KW
48KS
48KN
46KS
46KN
760SB
USH 51 SB
762SB
764SB
766SB
768SB
770SB
772SB
774SB
44KS
44KN
760NB
USH 51 NB
762NB
764NB
766NB
768NB
770NB
772NB
774NB
42KS
42KN
BUS 51 SB
BUS 51 NB
A RAMP
760A
100KE
102KE
38KS
38KN
762B
764B
766B
768B
B RAMP
770B
772B
774B

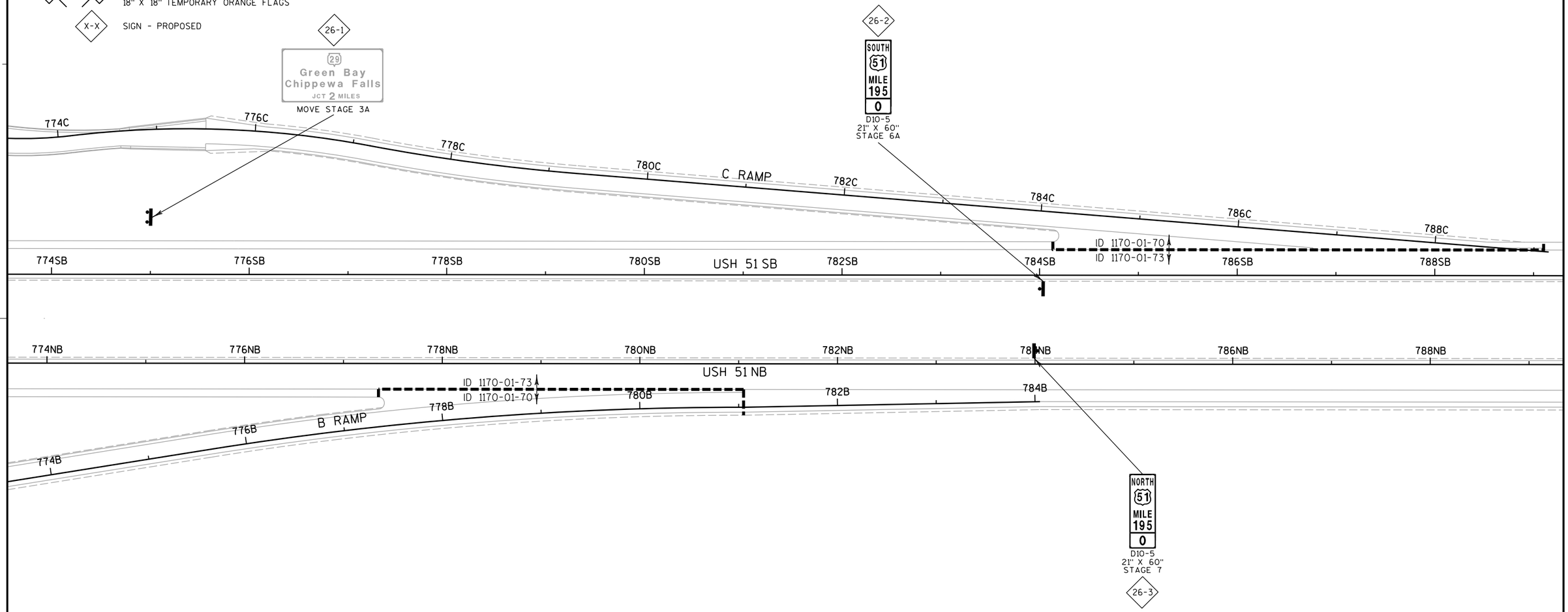
PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	PERMANENT SIGNING - USH 51	SHEET 229	E

FILE NAME : P:\44xx\4448\Plan\Signing\em_023225_ps.dgn PLOT DATE : 7/30/2012 PLOT BY : walkup PLOT NAME : PLOT SCALE : 1:100

LEGEND

- PROPOSED SIGN MOUNTED ON SINGLE POST
- PROPOSED SIGN MOUNTED ON DOUBLE POSTS
- PROPOSED SIGN MOUNTED ON SIGNAL OR LIGHT POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- 18" X 18" TEMPORARY ORANGE FLAGS
- X-X SIGN - PROPOSED

N

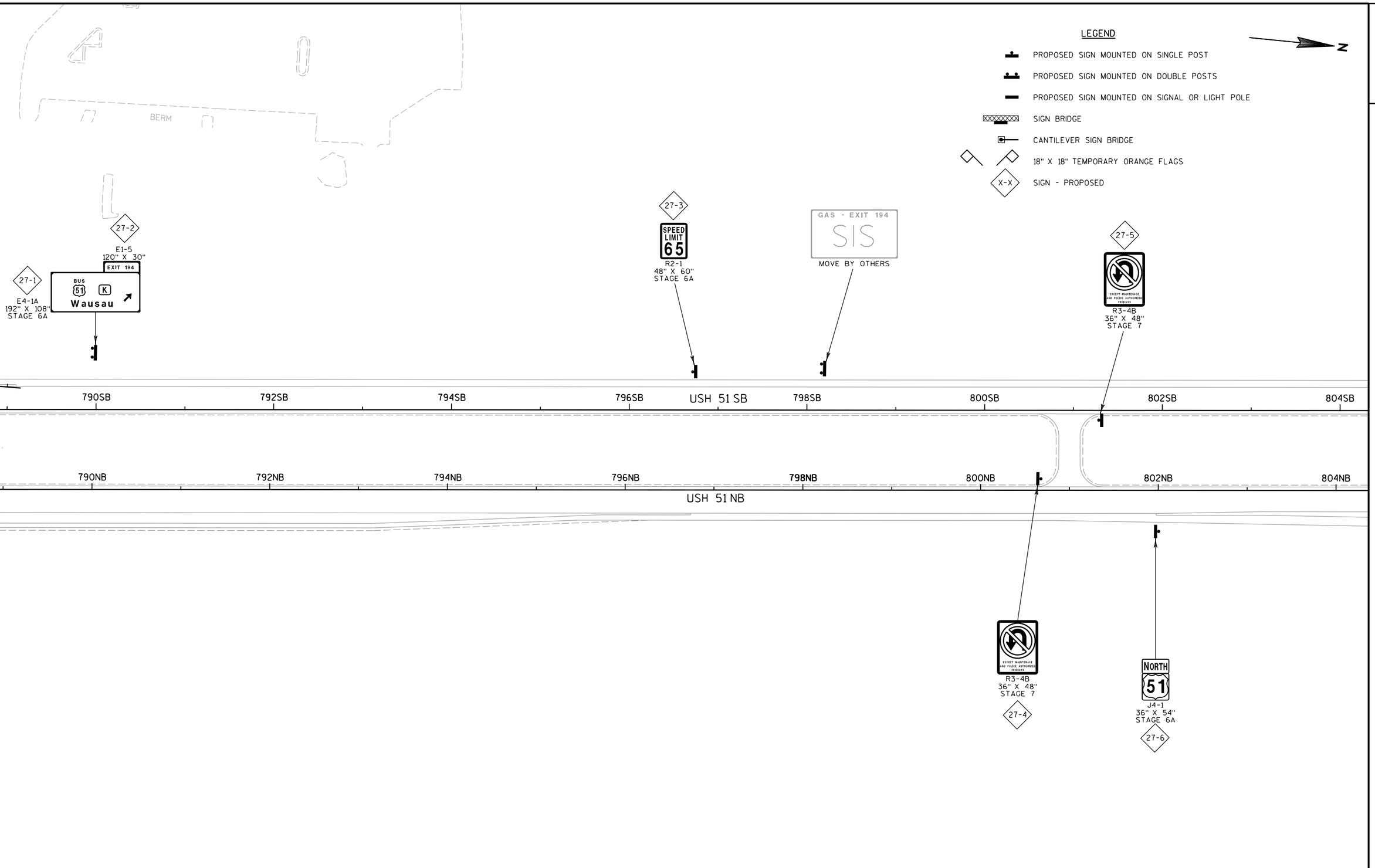


PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	PERMANENT SIGNING - USH 51	SHEET 230	E

FILE NAME : P:\44xx\4448\Plan\Signing\em_023226_ps.dgn PLOT DATE : 7/30/2012 PLOT BY : walkup PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2



2

PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	PERMANENT SIGNING - USH 51	SHEET 231	E

FILE NAME : P:\44xx\4448\Plan\Signing\em_023227_ps.dgn PLOT DATE : 7/30/2012 PLOT BY : walkup PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2

2

LEGEND

- PROPOSED SIGN MOUNTED ON SINGLE POST
- PROPOSED SIGN MOUNTED ON DOUBLE POSTS
- PROPOSED SIGN MOUNTED ON SIGNAL OR LIGHT POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- 18" X 18" TEMPORARY ORANGE FLAGS
- X-X SIGN - PROPOSED

N

28-7
E1-5
120" X 30"

28-6
E1-1A
156" X 144"
STAGE 6A

EXIT 194
BUS 51 K
Wausau
1 MILE

SIGN LOCATED 0.5 MILES NORTH OF
DECATOR DRIVE ON SOUTH BOUND USH 51

804SB 806SB 808SB 810SB USH 51 SB 812SB 814SB 816SB 818SB

804NB 806NB 808NB 810NB 812NB 814NB 816NB 818NB

USH 51 NB

WATCH FOR FOG
W8-69
48" X 48"
STAGE 7
28-1 28-2

SPEED LIMIT 65
R2-1
48" X 60"
STAGE 7
28-3

MOVE STAGE 2A
28-4

SLOWER TRAFFIC KEEP RIGHT
R4-3
48" X 60"
STAGE 3A
28-5

PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	PERMANENT SIGNING - USH 51	SHEET 232	E

2

LEGEND

- PROPOSED SIGN MOUNTED ON SINGLE POST
- PROPOSED SIGN MOUNTED ON DOUBLE POSTS
- PROPOSED SIGN MOUNTED ON SIGNAL OR LIGHT POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- 18" X 18" TEMPORARY ORANGE FLAGS
- X-X SIGN - PROPOSED

N

18TH AVE

ARTHUR AVE

ARLINGTON LN

734SB USH 51 SB 736SB 738SB 740SB 742SB 744SB 746SB USH 51 SB 748SB

738F 740F 742F 744F 746F F RAMP 748F

ID 1170-01-70
ID 1170-01-73

734NB 736NB 738NB 740NB 742NB 744NB 746NB 748NB

USH 51 NB USH 51 NB

ID 1170-01-73
ID 1170-01-70

742A 742E 744A 744E 746A A RAMP 748A

746E E RAMP 748E

29-4 E1-5 132" X 30"

29-6 E1-5 132" X 30"

EXIT 194 A-B

E5-1 MOD 36" X 84" STAGE 7

29-1

NO OVERNIGHT PARKING ON ALL CITY STREETS

COMPRESSION BRAKES ARE PROHIBITED IN THE CITY OF WAUSAU

MOVE STAGE 2A REINSTALL STAGE 7

29-2

29-3 E6-51 132" X 114" STAGE 7

EXIT 194 B

BUS 51 K

EXIT 194 A

U Merrill Ave

MOUNT ON OVERHEAD SIGN BRIDGE

29-5 E6-1 216" X 90" STAGE 7

N 16TH AVE

NOTE: SEE CONSTRUCTION DETAIL FOR MOUNTING ON CONCRETE BARRIER

EXIT 194 A

E5-1B 114" X 60" STAGE 7

29-7

W3-1 48" X 48" STAGE 3A

29-8

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	PERMANENT SIGNING - A RAMP/E RAMP	SHEET 233	E

FILE NAME : P:\44xx\4448\Plan\Signing\em_023229_ps.dgn PLOT DATE : 7/30/2012 PLOT BY : walkup PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2

LEGEND

- PROPOSED SIGN MOUNTED ON SINGLE POST
- PROPOSED SIGN MOUNTED ON DOUBLE POSTS
- PROPOSED SIGN MOUNTED ON SIGNAL OR LIGHT POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- 18" X 18" TEMPORARY ORANGE FLAGS
- X-X SIGN - PROPOSED

18TH AVE

ARTHUR AVE

CTH U

44U

46U

48U

50U

52U

30-3

PEDESTRIANS
BICYCLES
NON MOTORIZED TRAFFIC
MOTOR BICYCLES
PROHIBITED

R5-57
36" X 36"
STAGE 3A

750F

748F

F RAMP

746F

ID 1170-01-70
ID 6999-18-70

RAMP CLOSED
~~USE~~
ALT ROUTE

R11-54F
48" X 30"
STAGE 3A

30-11 30-12

30-20

EXIT
194 B

E5-1B
114" X 60"
STAGE 7

N

760D

758D

D RAMP

752D 754D 756D

746SB USH 51 SB 748SB 750SB 752SB 754SB 756SB 758SB 760SB USH 51 SB

ID 1170-01-70
ID 1170-01-73

746NB USH 51 NB 748NB 750NB 752NB 754NB 756NB 758NB 760NB USH 51 NB

746A 748A A RAMP 750A 752A 754A 756A 758A A RAMP 760A

ID 1170-01-73
ID 1170-01-70

746E E RAMP 748E 750E

30-1 30-2

WRONG WAY

R5-1A
36" X 24"
STAGE 3A

30-7

STOP

R1-1
36" X 36"
STAGE 3A

TO
NORTH
51

COUNTY U

J13-1
24" X 45"
STAGE 3A

J32-1
24" X 69"
STAGE 3A

30-4 30-5

STOP

R1-1
36" X 36"
STAGE 3A

30-6

ID 1170-01-70
ID 6999-18-70

C.T.H. U

DO NOT ENTER

R5-1
30" X 30"
STAGE 3A

30-10

STOP

R1-1
36" X 36"

W12-1D
24" X 24"
STAGE 3A
(2'-3" MOUNTING HT)

30-8 30-9

W2-6
30" X 30"

ROUNDABOUT AHEAD

W2-6P
30" X 15"

20 M.P.H.

W13-1
18" X 18"
STAGE 7

30-13 30-15 30-14

W11-2
36" X 36"

AHEAD

W16-9P
30" X 18"
STAGE 7

30-16 30-17

W3-2
48" X 48"
STAGE 7

30-18

Northcentral Tech College

D1-2
84" X 24"
STAGE 7

30-19

38KS 38KN

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	PERMANENT SIGNING - A RAMP/E RAMP/F RAMP	SHEET 234	E

FILE NAME : P:\44xx\4448\Plan\Signing\em_023230_ps.dgn PLOT DATE : 7/30/2012 PLOT BY : walkup PLOT NAME : PLOT SCALE : 1:100

LEGEND

- PROPOSED SIGN MOUNTED ON SINGLE POST
- PROPOSED SIGN MOUNTED ON DOUBLE POSTS
- PROPOSED SIGN MOUNTED ON SIGNAL OR LIGHT POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- 18" X 18" TEMPORARY ORANGE FLAGS
- X-X SIGN - PROPOSED
- SIGN BOX OUT

FOOD SIS — INSTALL BY OTHERS

GAS SIS — INSTALL BY OTHERS

31-25 / 31-26: E6-54L 72" X 90" STAGE 7; E6-54R 96" X 102" STAGE 7 — MOUNT ON OVERHEAD SIGN SUPPORT

31-24: R3-8HH 36" X 30" STAGE 7

31-27 / 31-28: R5-1A 36" X 24" STAGE 7

31-53 / 31-54: W11-2 30" X 30"; W16-7R 24" X 12" STAGE 7

31-47 / 31-48: R1-2 48" X 42"; R1-54 24" X 15" STAGE 7

31-51 / 31-52: R1-2 48" X 42"

31-55: R6-2R 36" X 48" STAGE 7

31-49 / 31-50: R3-1 24" X 24" STAGE 7

31-66 / 31-67: R1-2 36" X 31"; R1-54 24" X 15" STAGE 7

31-68 / 31-69: W11-2 30" X 30"; W16-7L 24" X 12" STAGE 7

31-38 / 31-39: W11-2 36" X 36"; W16-7L 30" X 18" STAGE 7

31-46: W12-1D 24" X 24" STAGE 7 (2'-3" MOUNTING HT)

31-33: D1-1 42" X 30" STAGE 7

31-29 / 31-30: W11-2 30" X 30"; W16-7L 24" X 12" STAGE 7

31-31 / 31-32: R1-2 48" X 42"; R1-54 24" X 15" STAGE 7

31-10: R5-1A 36" X 24" STAGE 7

31-11: I2-3 60" X 24" STAGE 7

31-14: MOVE STAGE 4 REINSTALL STAGE 7

31-16: D1-2 84" X 24" STAGE 7

31-18: R3-20L 36" X 54" STAGE 7

31-21: D11-1 30" X 24" STAGE 7

31-73: E6-52 144" X 114" STAGE 7 — MOUNT ON OVERHEAD SIGN SUPPORT

31-74: E6-54A 84" X 102" STAGE 7

31-75: R3-8GG 36" X 30" STAGE 7

758A A RAMP; 760A; 764NB; 766SB; 102KE; BUS 51 SB 32KS 34KS 36KS 38KS 38KN 36KN 34KN 32KN; BUS 51 NB 42KS 42KN 44KN 46KN; USH 51 NB; USH 51 SB 768; 762B; 764B; 766B; B RAMP; 768B; 766NB; 768NB

31-1: TRUCK ROUTE — MOVE STAGE 7 — SIGN LOCATED 430' SOUTHEAST OF INTERSECTION OF BUSINESS 51 AND CAMPUS DRIVE.

31-2: R10-11B 24" X 24" STAGE 7

31-3: J1-1 36" X 57" STAGE 7

31-4 / 31-5 / 31-6: W2-6 36" X 36"; W2-6P 36" X 18"; W13-1 24" X 24" STAGE 7

31-7 / 31-8 / 31-9: W2-6 36" X 36"; W2-6P 36" X 18"; W13-1 24" X 24" STAGE 7

31-12 / 31-13: W11-2 36" X 36"; W16-9P 30" X 18" STAGE 7

31-15: W3-2 36" X 36" STAGE 7

31-17: R3-8G 36" X 30" STAGE 7

31-19: E6-54R 132" X 126" STAGE 7 — MOUNT ON OVERHEAD SIGN SUPPORT

31-20: E6-52 144" X 114" STAGE 7 — MOUNT ON OVERHEAD SIGN SUPPORT

31-22 / 31-23: W11-2 30" X 30"; W16-7L 24" X 12" STAGE 7

31-34 / 31-35: R1-2 36" X 31"; R6-2R 24" X 30" STAGE 7

31-36 / 31-37: R1-2 36" X 31"; R1-54 24" X 15" STAGE 7

31-40 / 31-41 / 31-42 / 31-43 / 31-44 / 31-45: R6-4B 60" X 24" STAGE 7; R6-1R 54" X 18"

31-56 / 31-57: D1-1 42" X 30"; R11-54F 48" X 30" STAGE 7

31-58 / 31-59: W11-2 30" X 30"; W16-7L 24" X 12" STAGE 7

31-60: R5-57 36" X 36" STAGE 7

31-61: D1-2 72" X 30" STAGE 7

31-62 / 31-63: W11-2 30" X 30"; W16-7L 24" X 12" STAGE 7

31-64 / 31-65: R1-2 36" X 31"; R6-2R 24" X 30" STAGE 7

31-70: R3-8GG 36" X 30" STAGE 7

31-71: E6-52 144" X 114" STAGE 7 — MOUNT ON OVERHEAD SIGN SUPPORT

31-72: E6-54A 72" X 90" STAGE 7 — MOUNT ON OVERHEAD SIGN SUPPORT

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	PERMANENT SIGNING - A RAMP/B RAMP/BUS 51	SHEET 235	E

2

2

766D

D RAMP

768D

770D

772C

774C

C RAMP

776C

770B

B RAMP

USH 51 NB

BUS 51 SB

BUS 51 NB

CTH K SB

CTH K NB

46KS

48KS

46KN

48KN

200KW

202KW

52KS

52KN

54KS

54KN

56KS

56KN

58KS

58KN

60KS

60KN

32-7 D1-2 72" X 30" STAGE 7 — NORTH 51 BUS 51

32-10 R5-57 36" X 36" STAGE 7 — PEDESTRIANS BICYCLES (ON MOTORIZED TRAFFIC) MOTOR BICYCLES PROHIBITED

32-13 32-14 D1-1 42" X 30" — SOUTH 51

R11-54F 48" X 30" STAGE 7 — RAMP CLOSED USE ALT ROUTE

32-11 32-12 W11-2 30" X 30" W16-7L 24" X 12" STAGE 7

32-45 32-46 R1-2 36" X 31" YIELD — R1-54 24" X 15" STAGE 7 TO TRAFFIC FROM LEFT

32-50 32-51 R1-2 36" X 31" YIELD — R6-2R 24" X 30" STAGE 7 ONE WAY

32-52 32-53 W11-2 36" X 36" W16-7L 30" X 18" STAGE 7

32-15 32-16 32-17 32-18 32-19 32-20 R6-1R 54" X 18" ONE WAY — R6-4B 60" X 24" STAGE 7

32-55 E6-54A 84" X 126" STAGE 7 — NORTH 51 BUS 51 Merrill Wausau

32-56 E6-52 144" X 114" STAGE 7 — 51 BUS Wausau SOUTH 51 Stevens Point

MOUNT ON OVERHEAD SIGN SUPPORT

32-57 R3-8G 36" X 30" STAGE 7 — ONLY

32-58 W3-2 36" X 36" STAGE 7

32-59 32-60 W11-2 30" X 30" W16-9P 24" X 12" STAGE 7 — AHEAD

32-62 32-61 32-63 W2-6 36" X 36" W2-6P 36" X 18" W13-1 24" X 24" STAGE 7 — ROUNDABOUT AHEAD 20 M.P.H.

32-65 32-64 32-66 W2-6 36" X 36" W2-6P 36" X 18" W13-1 24" X 24" STAGE 7 — ROUNDABOUT AHEAD 20 M.P.H.

32-1 32-2 W11-2 30" X 30" W16-7L 24" X 12" STAGE 7

32-5 32-6 R1-2 36" X 31" R6-2R 30" X 36" STAGE 7 — YIELD ONE WAY

32-8 32-9 R1-2 36" X 31" R1-54 24" X 15" STAGE 7 — YIELD TO TRAFFIC FROM LEFT

32-21 32-22 R5-1 24" X 24" STAGE 7 — DO NOT ENTER

32-23 R3-1 24" X 24" STAGE 7

32-28 32-29 R1-2 48" X 42" R6-2R 36" X 48" STAGE 7 — YIELD ONE WAY

32-30 32-31 W11-2 36" X 36" W16-7R 30" X 18" STAGE 7

32-26 32-27 R1-2 48" X 42" R1-54 24" X 15" STAGE 7 — YIELD TO TRAFFIC FROM LEFT

NO OVERNIGHT PARKING ON ALL CITY STREETS DECEMBER 1 - MAY 31 APRIL 1 - MAY 31 PROHIBITED ALL YEAR DOWNTOWN

COMPRESSION BRAKES ARE PROHIBITED IN THE CITY OF WAUSAU

MOVE STAGE 7

32-35

32-36 32-37 W12-1D 24" X 24" STAGE 7 (2'-3" MOUNTING HT) — R5-1A 36" X 24" STAGE 7 WRONG WAY

GAS SIS MOVE BY OTHERS

32-32 32-33 W11-2 36" X 36" W16-7L 30" X 18" STAGE 7

32-34 R3-8HH 36" X 30" STAGE 7 — ONLY ONLY

32-40

32-24 32-25 R1-2 48" X 42" R1-54 24" X 15" STAGE 7 — YIELD TO TRAFFIC FROM LEFT

32-48 32-49 W11-2 36" X 36" W16-7L 30" X 18" STAGE 7

32-38 32-39 E6-54A 84" X 102" STAGE 7 — BUS 51 Wausau

E6-54R 96" X 84" STAGE 7 — K Merrill ONLY

MOUNT ON OVERHEAD SIGN SUPPORT

Northcentral Tech College D1-2 84" X 24" STAGE 7

32-41

32-42 W3-2 48" X 48" STAGE 7

32-43 W11-2 36" X 36"

32-44 AHEAD W16-9P 30" X 18" STAGE 7

32-47 NORTH K D1-1 42" X 30" STAGE 7

32-54 BIKE ROUTE D11-1 30" X 24" STAGE 7

32-67 NORTH COUNTY K J4-1 36" X 54" STAGE 7

LEGEND

- PROPOSED SIGN MOUNTED ON SINGLE POST
- PROPOSED SIGN MOUNTED ON DOUBLE POSTS
- PROPOSED SIGN MOUNTED ON SIGNAL OR LIGHT POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- 18" X 18" TEMPORARY ORANGE FLAGS
- X-X SIGN - PROPOSED
- SIGN BOX OUT

N

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	PERMANENT SIGNING - C RAMP/D RAMP/BUS 51/CTH K	SHEET 236	E

FILE NAME : P:\44xx\4448\Plan\Signing\em_023232_ps.dgn PLOT DATE : 7/30/2012 PLOT BY : walkup PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2

LEGEND

N

PROPOSED SIGN MOUNTED ON SINGLE POST

PROPOSED SIGN MOUNTED ON DOUBLE POSTS

PROPOSED SIGN MOUNTED ON SIGNAL OR LIGHT POLE

SIGN BRIDGE

CANTILEVER SIGN BRIDGE

18" X 18" TEMPORARY ORANGE FLAGS

X-X SIGN - PROPOSED

33-1

W2-6
30" X 30"

33-2

ROUNDABOUT AHEAD
W2-6P
30" X 15"

33-3

20 M.P.H.
W13-1
18" X 18"
STAGE 7

FOOD
SIS
MOVE BY OTHERS

33-4

EXIT
194

E5-1A
90" X 60"
STAGE 6A

778C 780C C RAMP 782C 784C 786C 788C

ID 1170-01-70
ID 1170-01-73

778SB 780SB 782SB USH 51 SB 784SB 786SB 788SB 790SB 792SB

778NB 780NB 782NB 784NB 786NB 788NB 790NB 792NB

USH 51 NB

ID 1170-01-73
ID 1170-01-70

B RAMP

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	PERMANENT SIGNING - C RAMP	SHEET 237	E

FILE NAME : P:\44xx\4448\Plan\Signing\em_023233_ps.dgn PLOT DATE : 7/30/2012 PLOT BY : walkup PLOT NAME : PLOT SCALE : 1:100

2

LEGEND

- PROPOSED SIGN MOUNTED ON SINGLE POST
- PROPOSED SIGN MOUNTED ON DOUBLE POSTS
- PROPOSED SIGN MOUNTED ON SIGNAL OR LIGHT POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- 18" X 18" TEMPORARY ORANGE FLAGS
- X-X SIGN - PROPOSED

N

OVERLOOK DR

204V

202V

200V

ID 1170-01-70
ID 6999-18-70

CTH U

18U

20U

22U

24U

26U

28U

WESTWOOD DR

34-1 W6-1 36" X 36" STAGE 2B

34-2 34-3 W11-2 30" X 30" AHEAD W16-9P 24" X 12" STAGE 2B

34-4 W6-3 36" X 36" STAGE 2B

34-5 MOVE STAGE 2B
NO OVERNIGHT PARKING ON ALL CITY STREETS 3:00AM - 6:00AM DEC. 1 - MAR. 31 ALTERNATE SIDES TAKING APRIL 1- NOV. 30 PROHIBITED ALL YEAR DOWNTOWN
COMPRESSION BRAKES ARE PROHIBITED IN THE CITY OF WAUSAU

34-6 R2-1 SPEED LIMIT 35 24" X 30" STAGE 2B

34-7 R3-8W ONLY ONLY ONLY 54" X 30" STAGE 2B

34-8 R5-1 DO NOT ENTER 36" X 36" STAGE 2B

34-9 R4-7 24" X 30" STAGE 2B

34-10 R5-1A WRONG WAY 36" X 24" STAGE 2B

34-11 W6-2 36" X 36" STAGE 2B

34-12 34-13 D11-1 BIKE ROUTE 24" X 18" M7-5 12" X 9" STAGE 2B

34-14 34-15 D11-1 BIKE ROUTE 24" X 18" M7-2 12" X 9" STAGE 2B

34-16 D11-1 BIKE ROUTE 24" X 18" STAGE 2B

34-17 R4-7 24" X 30" STAGE 2B

34-18 R1-1 STOP 30" X 30" STAGE 2B

34-19 34-20 R2-1 SPEED LIMIT 35 24" X 30" D11-1 BIKE ROUTE 24" X 18" STAGE 2B

34-21 34-22 D11-1 BIKE ROUTE 24" X 18" M7-2 12" X 9" STAGE 2B

34-23 34-24 D11-1 BIKE ROUTE 24" X 18" M7-5 12" X 9" STAGE 2B

34-25 R1-1 STOP 30" X 30" STAGE 2B

34-26 R3-7R RIGHT LANE MUST TURN RIGHT 30" X 30" STAGE 2B

34-27 R4-7 24" X 30" STAGE 3A

34-28 34-29 W11-2 30" X 30" W16-7L 24" X 12" STAGE 3A

34-30 34-31 W11-2 30" X 30" W16-7L 24" X 12" STAGE 3A

34-32 R3-7R RIGHT LANE MUST TURN RIGHT 30" X 30" STAGE 2B

SIGN LOCATED 300'
PRIOR TO INTERSECTION

34-33 D11-1 BIKE ROUTE 24" X 18" STAGE 3A

34-34 34-35 D9-2 H 24" X 24" MB6-1 21" X 21" STAGE 3A

34-36 R2-1 SPEED LIMIT 35 24" X 30" STAGE 3A

34-37 34-38 D11-1 BIKE ROUTE 24" X 18" M7-5 12" X 9" STAGE 3A

34-39 34-40 D11-1 BIKE ROUTE 24" X 18" M7-2 12" X 9" STAGE 3A

34-41 R7-1D NO PARKING ANY TIME 18" X 24" STAGE 3A

34-42 R3-8W ONLY ONLY ONLY 54" X 30" STAGE 3A

34-43 R7-1D NO PARKING ANY TIME 18" X 24" STAGE 3A

34-44 R4-7 24" X 30" STAGE 3A

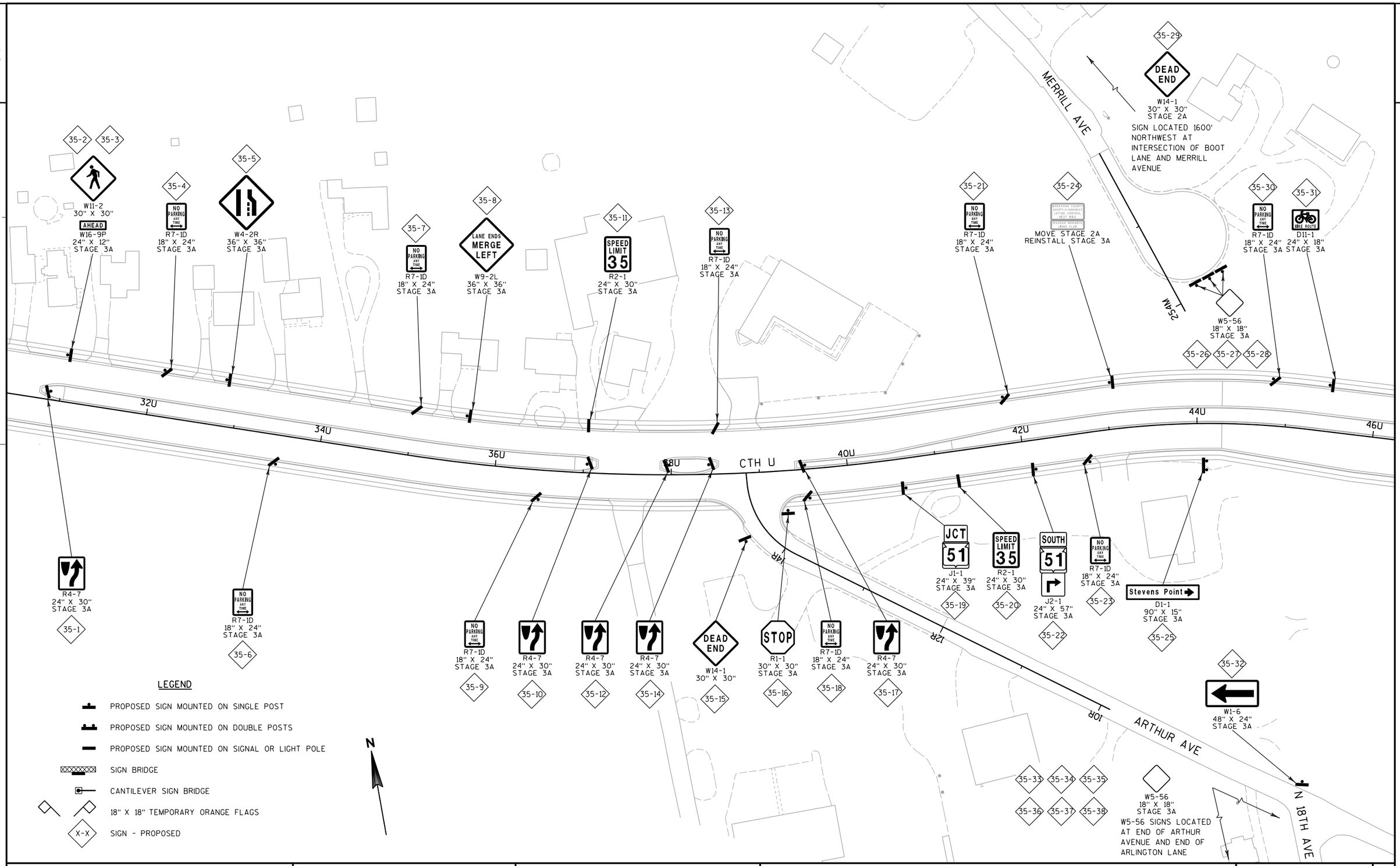
34-45 R7-1D NO PARKING ANY TIME 18" X 24" STAGE 3A

PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	PERMANENT SIGNING - CTH U	SHEET 238	E

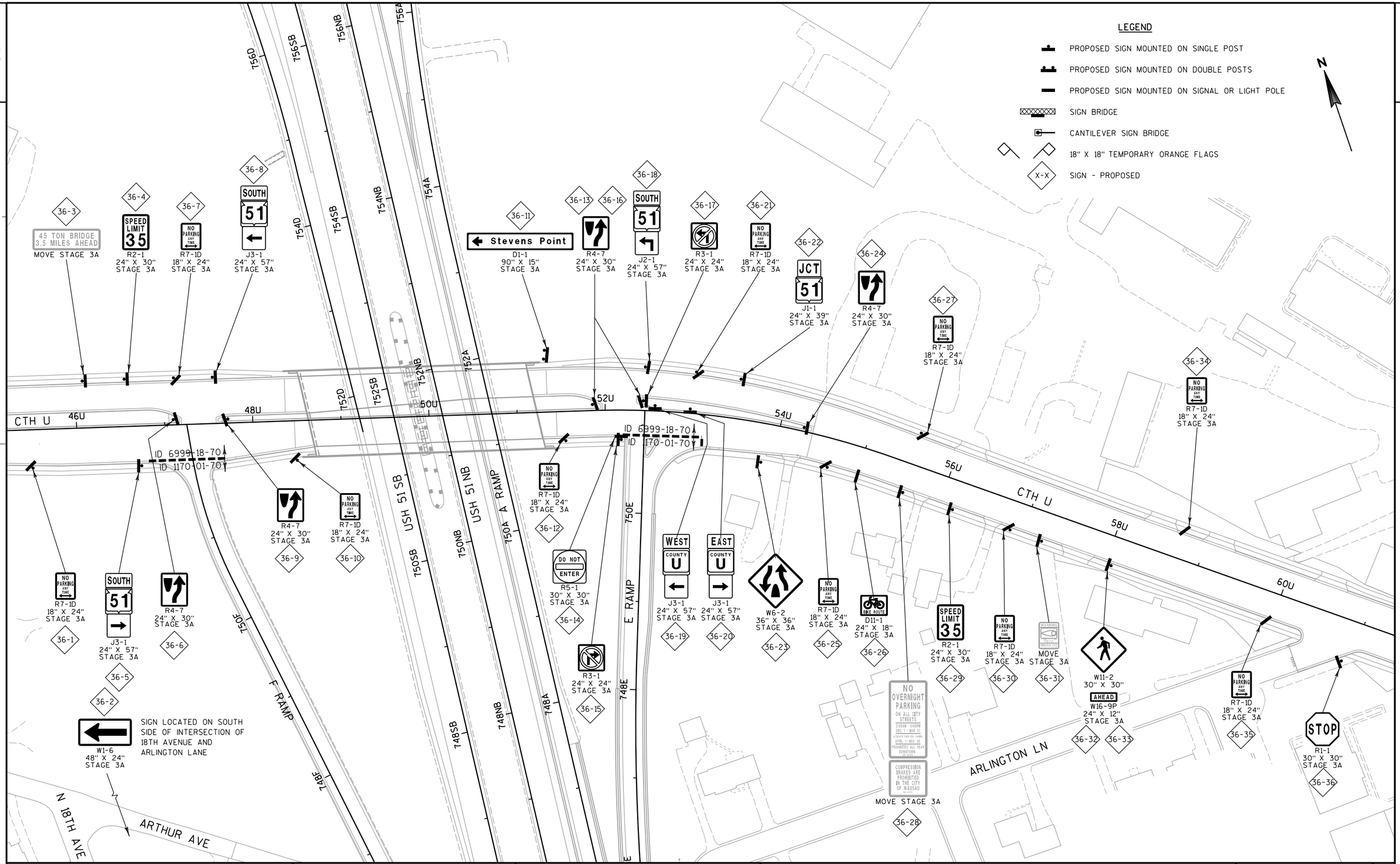
FILE NAME : P:\44xx\4448\Plan\Signing\em_023234_ps.dgn PLOT DATE : 7/30/2012 PLOT BY : walkup PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2



PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	PERMANENT SIGNING - CTH U	SHEET 239	E



PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	PERMANENT SIGNING - CTH U	SHEET 240	E

FILE NAME : P:\44xx\4448\Plan\Signing\em_023236_ps.dgn PLOT DATE : 7/30/2012 PLOT BY : walkup PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2

2

LEGEND

- PROPOSED SIGN MOUNTED ON SINGLE POST
- PROPOSED SIGN MOUNTED ON DOUBLE POSTS
- PROPOSED SIGN MOUNTED ON SIGNAL OR LIGHT POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- 18" X 18" TEMPORARY ORANGE FLAGS
- X-X SIGN - PROPOSED

N

BUS 51 NB

BUS 51 SB

NTC TRAIL

COLLEGE DR

CTH U

N 13TH AVE

N 12TH AVE

ID 6999-18-70

ID 1170-01-70

22K

20K

18K

16K

14K

12K

28TR

26TR

72U

70U

68U

66U

64U

62U

37-1 R7-1D 18" X 24" STAGE 3A

37-2 R7-1D 18" X 24" STAGE 3A

37-3 R1-1 30" X 30" STAGE 3A

37-4 37-5 W16-7L 24" X 12" STAGE 3A

37-6 37-7 W11-2 30" X 30"

37-8 R7-1D 18" X 24" STAGE 3A

37-9 R7-1D 18" X 24" STAGE 3A

37-10 R2-1 24" X 30" STAGE 3A

37-11 R1-1 30" X 30" STAGE 3A

37-12 J4-1 24" X 36" STAGE 3A

37-13 R3-7R 30" X 30" STAGE 3A

37-14 J1-2 48" X 54" STAGE 3A

37-15 R7-1D 18" X 24" STAGE 3A

37-16 D11-1 24" X 18" STAGE 3A

37-17 R2-1 24" X 30" STAGE 3A

37-18 37-19 M7-5 12" X 9" STAGE 3A

37-20 37-21 W11-2 30" X 30"

W16-9P 24" X 12" STAGE 3A

37-22 J2-2 48" X 69" STAGE 3A

37-23 W3-3 36" X 36" STAGE 3A

37-24 J32-1 24" X 69" STAGE 3A

37-25 J3-2 48" X 69" STAGE 3A

37-26 37-27 W11-2 30" X 30"

W16-7L 24" X 12" STAGE 3A

PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	PERMANENT SIGNING - CTH U	SHEET 241	E

FILE NAME : P:\44xx\4448\Plan\Signing\em_023237_ps.dgn PLOT DATE : 8/31/2012 PLOT BY : walkup PLOT NAME : PLOT SCALE : 1:100

2

LEGEND

- PROPOSED SIGN MOUNTED ON SINGLE POST
- PROPOSED SIGN MOUNTED ON DOUBLE POSTS
- PROPOSED SIGN MOUNTED ON SIGNAL OR LIGHT POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- 18" X 18" TEMPORARY ORANGE FLAGS
- X-X SIGN - PROPOSED

N

BUS 51 NB

BUS 51 SB

NTC TRAIL

COLLEGE DR

CTH U

N 13TH AVE

N 12TH AVE

22K

20K

18K

16K

14K

12K

30TR

28TR

26TR

72U

70U

68U

66U

64U

ID 6999-18-70

ID 1170-01-70

38-1 D11-1 24" X 18" BIKE ROUTE
38-1 M7-6 12" X 9" STAGE 3A
38-1 W3-3 36" X 36" STAGE 3A

38-2 38-3 W16-9P 24" X 12" STAGE 3A AHEAD

38-4 38-5 W11-2 30" X 30"

38-7 J13-1 24" X 45" STAGE 3A COUNTY U

38-8 38-11 R1-1F 30" X 30" STAGE 3A MOUNT ON SIGNAL STOP

38-9 38-17 R1-1F 30" X 30" STAGE 3A MOUNT ON SIGNAL STOP

38-10 38-14 38-20 38-24 38-27

38-12 R4-7 24" X 30" STAGE 3A MOUNT ON SIGNAL

38-13 38-18 R1-1F 30" X 30" STAGE 3A MOUNT ON SIGNAL STOP

38-15 W12-1D 24" X 24" STAGE 3A (2'-3" MOUNTING HT)

38-16 R4-7 24" X 30" STAGE 3A MOUNT ON SIGNAL

38-19 R4-7 24" X 30" STAGE 3A MOUNT ON SIGNAL

38-21 38-23 38-26 38-28 38-30 38-34

38-21 R1-1F 30" X 30" STAGE 3A MOUNT ON SIGNAL STOP

38-22 R4-7 24" X 30" STAGE 3A MOUNT ON SIGNAL

38-23 D11-1 24" X 18" STAGE 3A MOUNT ON SIGNAL BIKE ROUTE

38-26 R3-4 24" X 24"

38-28 R1-1F 30" X 30" STAGE 3A MOUNT ON SIGNAL STOP

38-30 J4-1 24" X 48" STAGE 3A NORTH BUSINESS 51

38-31 R4-7 24" X 30" STAGE 3A MOUNT ON SIGNAL

38-32 38-33 W16-7L 24" X 12" STAGE 3A

38-34 R3-20L 24" X 36" BEGIN LEFT TURN LANE

38-35 38-36 38-37 38-38 W11-2 30" X 30" W16-9P 24" X 12" STAGE 3A AHEAD

38-39 W3-3 36" X 36" STAGE 3A

38-40 R3-20R 24" X 36" BEGIN RIGHT TURN LANE

38-41 38-42 R10-50 30" X 36" STAGE 3A MOUNT ON SIGNAL LEFT TURN YIELD ON FLASHING YELLOW ARROW

38-43 38-44 R10-50 30" X 36" STAGE 3A MOUNT ON SIGNAL LEFT TURN YIELD ON FLASHING YELLOW ARROW

38-45 38-46 R10-50 30" X 36" STAGE 3A MOUNT ON SIGNAL LEFT TURN YIELD ON FLASHING YELLOW ARROW

38-47 R10-50 30" X 36" STAGE 3A MOUNT ON SIGNAL LEFT TURN YIELD ON FLASHING YELLOW ARROW

38-48 R10-50 30" X 36" STAGE 3A MOUNT ON SIGNAL LEFT TURN YIELD ON FLASHING YELLOW ARROW

38-6 R3-20L 24" X 36" BEGIN LEFT TURN LANE

38-25 R1-1F 30" X 30" STAGE 3A MOUNT ON SIGNAL STOP

38-29 R1-2 36" X 31" STAGE 3A YIELD

TO REMAIN

TO REMAIN

DO NOT ENTER R5-1 30" X 30" STAGE 3A MOUNT ON SIGNAL

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	PERMANENT SIGNING - BUSINESS 51/CTH U	SHEET 242	E

FILE NAME : P:\44xx\4448\Plan\Signing\em_023238_ps.dgn PLOT DATE : 8/31/2012 PLOT BY : walkup PLOT NAME : PLOT SCALE : 1:100

2

2

N 14TH AVE

40SW

36TR

34TR

32TR

30TR

28TR

26TR

W11-15
30" X 30"
AHEAD
W16-9P
24" X 12"
STAGE 3A

39-8 39-9

W11-15
30" X 30"
W16-7L
24" X 12"
STAGE 3A

39-3 39-4

39-5 39-6

NO THRU TRAFFIC
MOVE STAGE 3A

39-7

W11-15
30" X 30"
AHEAD
W16-9P
24" X 12"
STAGE 3A

39-1 39-2

28K

26K

24K

22K

20K

18K

16K

BUS 51 NB

BUS 51 SB

8TL

NTC TRAIL

COLLEGE DR

LEGEND

PROPOSED SIGN MOUNTED ON SINGLE POST

PROPOSED SIGN MOUNTED ON DOUBLE POSTS

PROPOSED SIGN MOUNTED ON SIGNAL OR LIGHT POLE

SIGN BRIDGE

CANTILEVER SIGN BRIDGE

18" X 18" TEMPORARY ORANGE FLAGS

X-X SIGN - PROPOSED

N

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	PERMANENT SIGNING - BUSINESS 51/CTH U	SHEET 243	E

2

2

LEGEND

- PROPOSED SIGN MOUNTED ON SINGLE POST
- PROPOSED SIGN MOUNTED ON DOUBLE POSTS
- PROPOSED SIGN MOUNTED ON SIGNAL OR LIGHT POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- 18" X 18" TEMPORARY ORANGE FLAGS
- X-X SIGN - PROPOSED

N

CTH U

22U

24U

200V

202V

204V

206V

208V

210V

212V

214V

OVERLOOK DR

BOOT LN

ID 6999 18-70

ID 1170 01-70

40-1 40-2 40-3 40-4

D11-1
24" X 18"
M7-6
12" X 9"
STAGE 2B

D11-1
24" X 18"
M7-2
12" X 9"
STAGE 2B

40-6

R3-8
36" X 30"
STAGE 2B

40-9

R2-1
24" X 30"
STAGE 2B

D11-1
24" X 18"
STAGE 2B

40-5

R2-1
24" X 30"
STAGE 2B

40-7

R1-1
30" X 30"
STAGE 2B

40-8

R2-1
24" X 30"
STAGE 2B

40-10

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	PERMANENT SIGNING - OVERLOOK DRIVE	SHEET 244	E

FILE NAME : P:\44xx\4448\Plan\Signing\em_023240_ps.dgn PLOT DATE : 7/30/2012 PLOT BY : walkup PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2

LEGEND

- PROPOSED SIGN MOUNTED ON SINGLE POST
- PROPOSED SIGN MOUNTED ON DOUBLE POSTS
- PROPOSED SIGN MOUNTED ON SIGNAL OR LIGHT POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- 18" X 18" TEMPORARY ORANGE FLAGS
- X-X SIGN - PROPOSED

N

MERRILL AVE

CASSIDY DR

4N

6N

OVERLOOK DR

SB CTH K

72KS

70KS

68KS

66KS

64KS

222V

224V

226V

228V

230V

220V

218V

216V

41-1 SPEED LIMIT 30 R2-1 24" X 30" STAGE 2B

41-2 STOP R1-1 30" X 30" STAGE 2A

41-4 DEAD END W14-1 30" X 30" STAGE 2A

41-6 SPEED LIMIT 30 R2-1 24" X 30" STAGE 2A

41-7 BIKE ROUTE D11-1 24" X 18" STAGE 2A

41-8 R4-7 24" X 30" STAGE 2A

41-15 41-16 STOP R1-1 30" X 30"

DIVIDED HIGHWAY R6-3 30" X 24" STAGE 2A

41-17 R4-7 24" X 30" STAGE 2A

41-10 41-11 41-12 W5-56 18" X 18" STAGE 2A

41-3 STOP R1-1 30" X 30" STAGE 2A

41-5 SPEED LIMIT 30 R2-1 24" X 30" STAGE 2A

41-9 ONLY R3-8A 36" X 30" STAGE 2A

41-13 41-14 BIKE ROUTE D11-1 24" X 18" M7-5 12" X 9" STAGE 2A

STOP R1-1 30" X 30" DIVIDED HIGHWAY R6-3 30" X 24" STAGE 2A 41-18 41-19

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	PERMANENT SIGNING - OVERLOOK DRIVE	SHEET 245 E

FILE NAME : P:\44xx\4448\Plan\Signing\em_023241_ps.dgn PLOT DATE : 7/30/2012 PLOT BY : walkup PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2

LEGEND

- PROPOSED SIGN MOUNTED ON SINGLE POST
- PROPOSED SIGN MOUNTED ON DOUBLE POSTS
- PROPOSED SIGN MOUNTED ON SIGNAL OR LIGHT POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- 18" X 18" TEMPORARY ORANGE FLAGS
- X-X SIGN - PROPOSED

N

OVERLOOK DR

CASSIDY DR

22ØV

23ØV

43-4 R2-1 30" X 36" STAGE 7 (SPEED LIMIT 45)

43-5 J1-3 108" X 75" STAGE 7 (JCT BUSINESS 51 JCT 51 END COUNTY K)

43-8 D11-1 30" X 24" STAGE 7 (BIKE ROUTE)

43-11 43-12 R4-7 36" X 48" STAGE 7

43-13 43-14 R5-1 36" X 36" STAGE 5B (DO NOT ENTER)

43-15 43-16 D11-1 30" X 24" (BIKE ROUTE) M7-6 12" X 9" STAGE 7

43-20 43-21 R5-1A 42" X 30" STAGE 5B (WRONG WAY)

43-23 R3-20R 36" X 54" STAGE 7 (BEGIN RIGHT TURN LANE)

60KS 62KS CTH K SB 64KS 66KS 68KS 70KS 72KS CTH K SB 74KS

60KN 62KN 64KN 66KN 68KN 70KN 72KN CTH K NB 74KN

43-1 R3-20R 36" X 54" STAGE 7 (BEGIN RIGHT TURN LANE)

43-2 43-3 R5-1A 42" X 30" STAGE 5B (WRONG WAY)

43-6 43-7 D11-1 30" X 24" (BIKE ROUTE) M7-6 12" X 9" STAGE 7

43-9 43-10 R5-1 36" X 36" STAGE 5B (DO NOT ENTER)

N 20TH AVE

43-17 D11-1 30" X 24" STAGE 7 (BIKE ROUTE)

43-18 43-19 W6-2 36" X 36" STAGE 7

43-22 R2-1 30" X 36" STAGE 5A (SPEED LIMIT 45)

2

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	PERMANENT SIGNING - CTH K	SHEET 246	E

SALVAGE & REINSTALL LIGHTING UNIT CONCRETE BASE TYPE 7

ADJUSTING PULL BOXES

ADJUSTING PULL BOXES

CTH U

72+00 U

BUS 51/CTH K

LCC-E

LPB-E1

LPB-E2

LPB-E3

STA 18+05 K, 22' LT
III-250-15-7-1-(L-E1)

14+00 K

15+00 K

16+00 K

17+00 K

18+00 K

19+00 K

EMPTY SIGNAL CONDUIT

EMPTY SIGNAL CONDUIT

BUS 51/CTH K

25+00 TR

STA 26+45 TR, 8' LT
III-100-11-2-(L-F10)

26+00 TR

27+00 TR

28+00 TR

STA 28+30 TR, 8' LT
III-100-11-2-(L-F12)

29+00 TR

STA 29+21 TR, 8' RT
III-100-11-2-(L-F13)

COLLEGE DR

STA 25+55 TR, 8' RT
III-100-11-2-(L-F9)

LCC-F

LPB-F1

STA 27+40 TR, 8' RT
III-100-11-2-(L-F11)

WALKWAY LIGHTING UNIT

CONDUIT RIGID NONMETALLIC, 2" UNLESS NOTED

LIGHTING UNIT HPS

LIGHTING CONTROL CABINET (LCC)

PULL BOXES STEEL, 24" X 42" (LPB)

CONDUIT STUB FOR FUTURE USE

WALKWAY LIGHTING UNIT NOTATION

STATION, OFFSET
III-100-11-2-(L-A3)
- CABINET LETTER
- POLE NUMBER
- CIRCUIT NUMBER
- BASE TYPE
- LAMP WATTAGE
- DISTRIBUTION TYPE

ROADWAY LIGHTING UNIT NOTATION

STATION, OFFSET
III-250-12-7-2-(L-A3)
- CABINET LETTER
- POLE NUMBER
- CIRCUIT NUMBER
- BASE TYPE
- ARM LENGTH IN FEET
- LAMP WATTAGE
- DISTRIBUTION TYPE

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	LIGHTING PLAN - CTH K	SHEET 247	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\023497_lp_k.dgn PLOT DATE : 9/5/2012 PLOT BY : stoffelm PLOT NAME : PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42

2

2

BUS 51/CTH K

STA 19+38 K, 35'LT
III-250-15-7-1-(L-E2)

STA 20+80 K, 35'LT
III-250-15-7-1-(L-E3)

STA 22+20 K, 35'LT
III-250-15-7-1-(L-E4)

STA 23+60 K, 15'LT
III-250-15-7-1-(L-E5)

19+00 K

20+00 K

21+00 K

22+00 K

23+00 K

24+00 K

BUS 51/CTH K

29+00 TR

30+00 TR

STA 29+21 TR, 8'RT
III-100-11-2-(L-F13)

STA 30+13 TR, 8'LT
III-100-11-2-(L-F14)

WALKWAY LIGHTING UNIT

CONDUIT RIGID NONMETALLIC, 2" UNLESS NOTED

LIGHTING UNIT HPS

LIGHTING CONTROL CABINET (LCC)

PULL BOXES STEEL, 24" X 42" (LPB)

CONDUIT STUB FOR FUTURE USE

WALKWAY LIGHTING UNIT NOTATION

STATION, OFFSET
III-100-11-2-(L-A3)
- CABINET LETTER
- POLE NUMBER
- CIRCUIT NUMBER
- BASE TYPE
- LAMP WATTAGE
- DISTRIBUTION TYPE

ROADWAY LIGHTING UNIT NOTATION

STATION, OFFSET — CABINET LETTER
III-250-12-7-2-(L-A3)
- POLE NUMBER
- CIRCUIT NUMBER
- BASE TYPE
- ARM LENGTH IN FEET
- LAMP WATTAGE
- DISTRIBUTION TYPE

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	LIGHTING PLAN - CTH K	SHEET	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\023498_lp_k.dgn PLOT DATE : 9/5/2012 PLOT BY : stoffelm PLOT NAME : PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42

2

2

BUS 51/CTH K

STA 23+60 K, 15'LT
III-250-15-7-1-(L-E5)

STA 24+95 K, 15'LT
III-250-15-7-1-(L-E6)

STA 26+35 K, 20'LT
III-250-15-7-1-(L-E7)

STA 27+75 K, 25'LT
III-250-15-7-1-(L-E8)

CAUTION

24+00 K | 25+00 K | 26+00 K | 27+00 K | 28+00 K | 29+00 K

BUS 51/CTH K

WALKWAY LIGHTING UNIT

CONDUIT RIGID NONMETALLIC, 2" UNLESS NOTED

LIGHTING UNIT HPS

LIGHTING CONTROL CABINET (LCC)

PULL BOXES STEEL, 24" X 42" (LPB)

CONDUIT STUB FOR FUTURE USE

WALKWAY LIGHTING UNIT NOTATION

STATION, OFFSET
III-100-11-2-(L-A3)
- CABINET LETTER
- POLE NUMBER
- CIRCUIT NUMBER
- BASE TYPE
- LAMP WATTAGE
- DISTRIBUTION TYPE

ROADWAY LIGHTING UNIT NOTATION

STATION, OFFSET
III-250-12-7-2-(L-A3)
- CABINET LETTER
- POLE NUMBER
- CIRCUIT NUMBER
- BASE TYPE
- ARM LENGTH IN FEET
- LAMP WATTAGE
- DISTRIBUTION TYPE

CAMPUS DR

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	LIGHTING PLAN - CTH K	SHEET 249	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\023499_lp_k.dgn | PLOT DATE : 9/5/2012 | PLOT BY : stoffelm | PLOT NAME : | PLOT SCALE : 1:40

WALKWAY LIGHTING UNIT

CONDUIT RIGID NONMETALLIC, 2" UNLESS NOTED

LIGHTING UNIT HPS

LIGHTING CONTROL CABINET (LCC)

PULL BOXES STEEL, 24" X 42" (LPB)

CONDUIT STUB FOR FUTURE USE

WALKWAY LIGHTING UNIT NOTATION

STATION, OFFSET
III-100-11-2-(L-A3)
- CABINET LETTER
- POLE NUMBER
- CIRCUIT NUMBER
- BASE TYPE
- LAMP WATTAGE
- DISTRIBUTION TYPE

ROADWAY LIGHTING UNIT NOTATION

STATION, OFFSET
III-250-12-7-2-(L-A3)
- CABINET LETTER
- POLE NUMBER
- CIRCUIT NUMBER
- BASE TYPE
- ARM LENGTH IN FEET
- LAMP WATTAGE
- DISTRIBUTION TYPE

STA 30+13 TR, 8'LT
III-100-11-2-(L-F14)

30+00 TR

31+00 TR

STA 31+09 TR, 8'RT
III-100-11-2-(L-F15)

7+00 TL

STA 31+98 TR, 8'LT
III-100-11-2-(L-F16)

32+00 TR

8+00 TL

33+00 TR

STA 33+75 TR, 8'LT
III-100-11-2-(L-F19)

34+00 TR

35+00 TR

STA 35+65 TR, 8'LT
III-100-11-2-(L-F21)

36+00 TR

STA 32+89 TR, 8'RT
III-100-11-2-(L-F17)

9+00 TL

STA 34+62 TR, 8'RT
III-100-11-2-(L-F20)

STA 9+32 TL, 8'RT
III-100-11-2-(L-F18)

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	LIGHTING PLAN - CTH K	SHEET 250	E

CONDUIT RIGID NONMETALLIC, 2" UNLESS NOTED

LIGHTING UNIT HPS

LIGHTING CONTROL CABINET (LCC)

PULL BOXES STEEL, 24" X 42" (LPB)

CONDUIT STUB FOR FUTURE USE

WALKWAY LIGHTING UNIT NOTATION

STATION, OFFSET
III-100-11-2-(L-A3)
- CABINET LETTER
- POLE NUMBER
- CIRCUIT NUMBER
- BASE TYPE
- LAMP WATTAGE
- DISTRIBUTION TYPE

ROADWAY LIGHTING UNIT NOTATION

STATION, OFFSET
III-250-12-7-2-(L-A3)
- CABINET LETTER
- POLE NUMBER
- CIRCUIT NUMBER
- BASE TYPE
- ARM LENGTH IN FEET
- LAMP WATTAGE
- DISTRIBUTION TYPE

STA 30+96 KS, 34.9'LT
III-150-12-5-3-(L-A1)

STA 31+64 KS, 34'LT
III-150-12-5-3-(L-A3)

STA 32+35 KS, 34'LT
III-150-12-5-3-(L-A5)

STA 33+06 KS, 34'LT
III-150-12-5-3-(L-A6)

STA 33+77 KS, 34'LT
III-150-12-5-3-(L-A8)

STA 34+48 KS, 34'LT
III-150-12-5-3-(L-A10)

BUS 51/CTH K

30+00 KS 31+00 KS 32+00 KS 33+00 KS 34+00 KS 35+00 KS

30+00 KN 31+00 KN 32+00 KN 33+00 KN 34+00 KN 35+00 KN

BUS 51/CTH K

STA 31+51 KN, 38.9'RT
III-150-12-5-4-(L-A2)

STA 32+31 KN, 34'RT
III-150-12-5-4-(L-A4)

STA 33+12 KN, 34'RT
III-150-12-5-4-(L-A7)

STA 33+90 KN, 34'RT
III-150-12-5-4-(L-A9)

STA 34+63 KN, 34'RT
III-150-12-5-4-(L-A11)

CAMPUS DR

CAUTION

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	LIGHTING PLAN - CTH K	SHEET 251	E

2

2

CONDUIT RIGID NONMETALLIC, 2" UNLESS NOTED
LIGHTING UNIT HPS
LIGHTING CONTROL CABINET (LCC)
PULL BOXES STEEL, 24" X 42" (LPB)
CONDUIT STUB FOR FUTURE USE
RAMP CLOSURE GATE - 28'(RCG)

ROADWAY LIGHTING UNIT NOTATION

STATION, OFFSET — CABINET LETTER
III-250-12-7-2-(L-A3)
POLE NUMBER
CIRCUIT NUMBER
BASE TYPE
ARM LENGTH IN FEET
LAMP WATTAGE
DISTRIBUTION TYPE

STA 760+61 A, 22' RT
III-150-12-5-3-(L-A30)
LPB-A3
LCC-A
LPB-A2
LPB-A1
STA 103+71 KE, 35.5' RT
III-250-12-5-1-(L-A22)
761+00 A
STA 102+92 KE, 35.5' RT
III-250-12-5-1-(L-A24)
STA 38+36 KS, 42.9' LT
III-150-12-5-3-(L-A20)
STA 35+15 KS, 34' LT
III-150-12-5-3-(L-A12)
STA 35+87 KS, 34' LT
III-150-12-5-3-(L-A14)
STA 36+66 KS, 34' LT
III-150-12-5-3-(L-A16)
STA 37+61 KS, 34' LT
III-150-12-5-3-(L-A18)
LPB-A4
100+00 KE
103+00 KE
STA 40+87 KS, 33.8' LT
III-150-12-5-1-(L-A26)
LPB-A12
38+00 KS
BUS 51/CTH K
35+00 KS
36+00 KS
37+00 KS
38+00 KN
LPB-A5
LPB-A6
41+00 KS
LPB-A11
41+00 KN
37+00 KN
36+00 KN
35+00 KN
BUS 51/CTH K
LPB-A7
STA 37+75 KN, 35.8' RT
III-150-12-5-4-(L-A19)
101+00 KE
102+00 KE
STA 100+82 KE, 41.1' RT
III-250-12-5-2-(L-A21)
STA 36+84 KN, 33.1' RT
III-150-12-5-4-(L-A17)
LPB-A10
STA 36+09 KN, 34' RT
III-150-12-5-4-(L-A15)
STA 40+28 KN, 33.1' RT
III-250-12-5-2-(L-A25)
762+00 B
LPB-A9
RCG-1
STA 35+41 KN, 34' RT
III-150-12-5-4-(L-A13)
STA 762+05 B, 6' RT
III-250-12-5-2-(L-A23)
LPB-A8
STA 763+62 B, 6.0' RT
III-250-12-5-1-(L-A22)
763+00 B
STA 762+76 B, 6' RT
III-150-12-5-2-(L-A34)
764+00

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	LIGHTING PLAN - CTH K	SHEET 252	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\023502_lp_k.dgn PLOT DATE : 9/5/2012 PLOT BY : stoffelm PLOT NAME : PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42

2

2

CONDUIT RIGID NONMETALLIC, 2" UNLESS NOTED

LIGHTING UNIT HPS

LIGHTING CONTROL CABINET (LCC)

PULL BOXES STEEL, 24" X 42" (LPB)

CONDUIT STUB FOR FUTURE USE

ROADWAY LIGHTING UNIT NOTATION

STATION, OFFSET — CABINET LETTER

III-250-12-7-2-(L-A3)

- POLE NUMBER
- CIRCUIT NUMBER
- BASE TYPE
- ARM LENGTH IN FEET
- LAMP WATTAGE
- DISTRIBUTION TYPE

STA 758+83 A, 6.3' RT
III-150-12-5-3-(L-A33)

STA 759+42 A, 13.1' RT
III-150-12-5-3-(L-A32)

STA 759+98 A, 21.6' RT
III-150-12-5-3-(L-A31)

STA 760+61 A, 22' RT
III-150-12-5-3-(L-A30)

759+00 A

760+00 A

761+00 A

USH 51 NB

LPB-A1

LPB-A2

LPB-A3

LCC-A

STA 103+71 KE, 35.5' RT
III-250-12-5-1-(L-A22)

STA 102+92 KE, 35.5' RT
III-250-12-5-1-(L-A24)

STA 38+36 KS, 42.9' LT
III-150-12-5-3-(L-A20)

STA 35+15 KS, 34' LT
III-150-12-5-3-(L-A12)

STA 35+87 KS, 34' LT
III-150-12-5-3-(L-A14)

STA 36+66 KS, 34' LT
III-150-12-5-3-(L-A16)

STA 37+61 KS, 34' LT
III-150-12-5-3-(L-A18)

LPB-A4

STA 40+87 KS, 33.8' LT
III-150-12-5-1-(L-A26)

LPB-A12

100+00 KE

103+00 KE

LPB-A6

35+00 KS

36+00 KS

37+00 KS

38+00 KS

BUS 51/CTH K

LPB-A5

38+00 KN

37+00 KN

36+00 KN

41+00 KS

41+00 KN

LPB-A11

101+00 KE

102+00 KE

STA 37+75 KN, 35.8' RT
III-150-12-5-4-(L-A19)

LPB-A7

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	LIGHTING PLAN - CTH K	SHEET 253	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\023503_lp_k.dgn PLOT DATE : 9/5/2012 PLOT BY : stoffelm PLOT NAME : PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42

2

2

STA 38+36 KS, 42.9' LT
III-150-12-5-3-(L-A20)

STA 37+61 KS, 34' LT
III-150-12-5-3-(L-A18)

LPB-A4

38+00 KS

LPB-A5

38+00 KN

100+00 KE

103+00 KE

LPB-A6

101+00 KE

102+00 KE

STA 102+92 KE, 35.5' RT
III-250-12-5-1-(L-A24)

STA 41+97 KS, 31.8' LT
III-150-12-5-1-(L-A28)

LPB-A12

STA 40+87 KS, 33.8' LT
III-150-12-5-1-(L-A26)

USH 51/NB

43+00 KS

42+00 KS

41+00 KS

LPB-A11

42+00 KN

41+00 KN

43+00 KN

BUS 51/CTH K

STA 37+75 KN, 35.8' RT
III-150-12-5-4-(L-A19)

LPB-A7

STA 100+82 KE, 41.1' RT
III-250-12-5-2-(L-A21)

LPB-A10

STA 40+28 KN, 33.1' RT
III-250-12-5-2-(L-A25)

STA 41+43 KN, 33.9' RT
III-150-12-5-2-(L-A27)

STA 42+31 KN, 34' RT
III-150-12-5-2-(L-A29)

LPB-A9

RCG-1

762+00 B

STA 762+05 B, 6' RT
III-250-12-5-2-(L-A23)

LPB-A8

763+00 B

STA 762+76 B, 6' RT
III-150-12-5-2-(L-A34)

764+00 B

STA 763+62 B, 6' RT
III-150-12-5-2-(L-A35)

765+00 B

STA 764+45 B, 6' RT
III-150-12-5-2-(L-A36)

766+00 B

N

CONDUIT RIGID NONMETALLIC, 2" UNLESS NOTED

LIGHTING UNIT HPS

LIGHTING CONTROL CABINET (LCC)

PULL BOXES STEEL, 24" X 42" (LPB)

CONDUIT STUB FOR FUTURE USE

RAMP CLOSURE GATE - 28' (RCG)

ROADWAY LIGHTING UNIT NOTATION

STATION, OFFSET — CABINET LETTER

III-250-12-7-2-(L-A3)

- POLE NUMBER
- CIRCUIT NUMBER
- BASE TYPE
- ARM LENGTH IN FEET
- LAMP WATTAGE
- DISTRIBUTION TYPE

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	LIGHTING PLAN - CTH K	SHEET 254	E

2

2

CONDUIT RIGID NONMETALLIC, 2" UNLESS NOTED

LIGHTING UNIT HPS

LIGHTING CONTROL CABINET (LCC)

PULL BOXES STEEL, 24" X 42" (LPB)

CONDUIT STUB FOR FUTURE USE

NOTE: POSSIBLE UNDER DECK LIGHTING

ROADWAY LIGHTING UNIT NOTATION

STATION, OFFSET — CABINET LETTER

III-250-12-7-2-(L-A3)

- POLE NUMBER
- CIRCUIT NUMBER
- BASE TYPE
- ARM LENGTH IN FEET
- LAMP WATTAGE
- DISTRIBUTION TYPE

STA 41+97 KS, 31.8'LT
III-150-12-5-1-(L-A28)

STA 40+87 KS, 33.8'LT
III-150-12-5-1-(L-A26)

STA 46+50 KS, 34'LT
III-150-12-5-3-(L-B37)

USH 51 NB

USH 51 SB

BUS 51/CTH K

41+00 KS

42+00 KS

43+00 KS

44+00 KS

45+00 KS

46+00 KS

47+00 KS

1+00 KN

42+00 KN

43+00 KN

44+00 KN

45+00 KN

46+00 KN

47+00 KN

BUS 51/CTH K

STA 41+43 KN, 33.9'RT
III-150-12-5-2-(L-A27)

STA 42+31 KN, 34'RT
III-150-12-5-2-(L-A29)

STA 46+81 KN, 34'RT
III-150-12-5-4-(L-B38)

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	LIGHTING PLAN - CTH K	SHEET E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\023505_lp_k.dgn PLOT DATE : 9/5/2012 PLOT BY : stoffelm PLOT NAME : PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42

2

CONDUIT RIGID NONMETALLIC, 2" UNLESS NOTED
LIGHTING UNIT HPS
LIGHTING CONTROL CABINET (LCC)
PULL BOXES STEEL, 24" X 42" (LPB)
CONDUIT STUB FOR FUTURE USE
RAMP CLOSURE GATE - 28'(RCG)

ROADWAY LIGHTING UNIT NOTATION
STATION, OFFSET — CABINET LETTER
III-250-12-7-2-(L-A3)
POLE NUMBER
CIRCUIT NUMBER
BASE TYPE
ARM LENGTH IN FEET
LAMP WATTAGE
DISTRIBUTION TYPE

768+00 D
769+00 D
770+00 D
STA 768+15 D, 13.1'LT
III-150-12-5-3-(L-B77)
STA 768+83 D, 6.8'LT
III-150-12-5-3-(L-B76)
STA 769+53 D, 6'LT
III-150-12-5-3-(L-B75)
STA 770+40 D, 6'LT
III-250-12-5-3-(L-B45)
RCG-2
LCC-B
LPB-B23
LPB-B24
STA 48+25 KS, 34'LT
III-150-12-5-3-(L-B41)
STA 49+30 KS, 36'LT
III-250-12-5-3-(L-B43)
STA 47+30 KS, 34'LT
III-150-12-5-3-(L-B39)
LPB-B13
STA 52+85 KS, 32.9'LT
III-150-12-5-1-(L-B51)
STA 202+93 KW, 36'RT
III-250-12-5-1-(L-B47)
STA 51+69 KS, 35.8'LT
III-150-12-5-1-(L-B49)
LPB-B22
47+00 KS
48+00 KS
49+00 KS
51+00 KS
52+00 KS
53+00 KS
48+00 KN
49+00 KN
51+00 KN
52+00 KN
53+00 KN
BUS 51/CTH K
CTH
200+00 KW
203+00 KW
201+00 KW
202+00 KW
LPB-B14
LPB-B15
LPB-B21
STA 48+58 KN, 34.9'RT
III-150-12-5-4-(L-B42)
LPB-B16
STA 47+64 KN, 33'RT
III-150-12-5-4-(L-B40)
STA 200+86 KW, 35.7'RT
III-250-12-5-4-(L-B44)
STA 51+98 KN, 30'RT
III-150-12-5-2-(L-B50)
LPB-B20
STA 51+14 KN, 41'RT
III-150-12-5-2-(L-B48)
STA 52+98 KN, 34'RT
III-150-12-5-2-(L-B52)
LPB-B18
LPB-B19
STA 201+63 KW, 35.5'RT
III-250-12-5-4-(L-B46)
LPB-B17
STA 771+95 C, 22'LT
III-150-12-5-4-(L-B78)
712+0

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	LIGHTING PLAN - CTH K	SHEET	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\023506_lp_k.dgn PLOT DATE : 9/5/2012 PLOT BY : stoffelm PLOT NAME : PLOT SCALE : 1:40

2

BUS 51/CTH K

CTH "K"

52+00 KW

52+00

51+00 KW

201+00 KW

202+00 KW

LPB-B16

LPB-B21

LPB-B20

LPB-B18

LPB-B19

LPB-B17

STA 48+58 KN, 34.9' RT
III-150-12-5-4-(L-B42)

STA 200+86 KW, 35.7' RT
III-250-12-5-4-(L-B44)

STA 201+63 KW, 35.5' RT
III-250-12-5-4-(L-B46)

STA 51+98 KN, 30' RT
III-150-12-5-2-(L-B50)

STA 52+98 KN, 34' RT
III-150-12-5-2-(L-B52)

STA 53+83 KN, 34' RT
III-150-12-5-2-(L-B54)

STA 54+60 KN, 34' RT
III-150-12-5-2-(L-B56)

STA 51+14 KN, 41' RT
III-150-12-5-2-(L-B48)

STA 771+95 C, 22' LT
III-150-12-5-4-(L-B78)

772+00 C

STA 772+23 C, 20.6' LT
III-150-12-5-4-(L-B79)

773+00 C

STA 773+19 C, 18.2' LT
III-150-12-5-4-(L-B80)

STA 773+83 C, 13' LT
III-150-12-5-4-(L-B81)

774+00 C

STA 774+48 C, 6.3' LT
III-150-12-5-4-(L-B82)

775+00 C

STA 775+12 C, 10.1' LT
III-150-12-5-4-(L-B83)

USH 51 SB

IP 3104

CONDUIT RIGID NONMETALLIC, 2" UNLESS NOTED

LIGHTING UNIT HPS

LIGHTING CONTROL CABINET (LCC)

PULL BOXES STEEL, 24" X 42" (LPB)

CONDUIT STUB FOR FUTURE USE

ROADWAY LIGHTING UNIT NOTATION

STATION, OFFSET — CABINET LETTER

III-250-12-7-2-(L-A3)

- POLE NUMBER
- CIRCUIT NUMBER
- BASE TYPE
- ARM LENGTH IN FEET
- LAMP WATTAGE
- DISTRIBUTION TYPE

N

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	LIGHTING PLAN - CTH K	SHEET 257	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\023507_lp_k.dgn PLOT DATE : 9/5/2012 PLOT BY : stoffelm PLOT NAME : PLOT SCALE : 1:40

2

2

CONDUIT RIGID NONMETALLIC, 2" UNLESS NOTED

LIGHTING UNIT HPS

LIGHTING CONTROL CABINET (LCC)

PULL BOXES STEEL, 24" X 42" (LPB)

CONDUIT STUB FOR FUTURE USE

ROADWAY LIGHTING UNIT NOTATION

STATION, OFFSET — CABINET LETTER

III-250-12-7-2-(L-A3)

- POLE NUMBER
- CIRCUIT NUMBER
- BASE TYPE
- ARM LENGTH IN FEET
- LAMP WATTAGE
- DISTRIBUTION TYPE

BILLBOARD POLE

SIGN

BILLBOARD POLE

STA 53+67 KS, 34'LT
III-150-12-5-1-(L-B53)

STA 54+43 KS, 34'LT
III-150-12-5-1-(L-B55)

STA 55+14 KS, 34'LT
III-150-12-5-1-(L-B57)

STA 55+91 KS, 34'LT
III-150-12-5-1-(L-B59)

STA 56+68 KS, 34'LT
III-150-12-5-1-(L-B61)

STA 57+47 KS, 34'LT
III-150-12-5-1-(L-B63)

STA 58+22 KS, 35.7'LT
III-150-12-5-1-(L-B65)

STA 58+98 KS, 40.7'LT
III-150-12-5-1-(L-B67)

CTH "K"

BUS 51/CTH K

54+00 KS

55+00 KS

56+00 KS

57+00 KS

58+00 KS

59+00 KS

54+00 KN

55+00 KN

56+00 KN

57+00 KN

58+00 KN

59+00 KN

CTH "K"

BUS 51/CTH K

STA 52+98 KN, 34'RT
III-150-12-5-2-(L-B52)

STA 53+83 KN, 34'RT
III-150-12-5-2-(L-B54)

STA 54+60 KN, 34'RT
III-150-12-5-2-(L-B56)

STA 55+38 KN, 34'RT
III-150-12-5-2-(L-B58)

STA 56+10 KN, 34'RT
III-150-12-5-2-(L-B60)

STA 56+85 KN, 34'RT
III-150-12-5-2-(L-B62)

STA 57+63 KN, 34'RT
III-150-12-5-2-(L-B64)

STA 58+40 KN, 36.7'RT
III-150-12-5-2-(L-B66)

STA 59+18 KN, 39.4'RT
III-150-12-5-2-(L-B68)

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	LIGHTING PLAN - CTH K	SHEET 258	E

2

2

CONDUIT RIGID NONMETALLIC, 2" UNLESS NOTED
LIGHTING UNIT HPS
LIGHTING CONTROL CABINET (LCC)
PULL BOXES STEEL, 24" X 42" (LPB)
CONDUIT STUB FOR FUTURE USE

ROADWAY LIGHTING UNIT NOTATION
STATION, OFFSET — CABINET LETTER
III-250-12-7-2-(L-A3)
POLE NUMBER
CIRCUIT NUMBER
BASE TYPE
ARM LENGTH IN FEET
LAMP WATTAGE
DISTRIBUTION TYPE

STA 59+79 KS, 38'LT
III-150-12-5-1-(L-B69)

STA 60+62 KS, 38'LT
III-150-12-5-1-(L-B71)

STA 61+42 KS, 38'LT
III-150-12-5-1-(L-B73)

BUS 51/CTH K

0 KS
60+00 KS
61+00 KS
62+00 KS
63+00 KS
64+00 KS
65+00 KS

0 KN
60+00 KN
61+00 KN
62+00 KN
63+00 KN
64+00 KN
65+00 KN

BUS 51/CTH K

STA 59+18 KN, 39.4' RT
III-150-12-5-2-(L-B68)

STA 59+96 KN, 38' RT
III-150-12-5-2-(L-B70)

STA 60+74 KN, 38' RT
III-150-12-5-2-(L-B72)

STA 61+41 KN, 38' RT
III-150-12-5-2-(L-B74)

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	LIGHTING PLAN - CTH K	SHEET 259	E

CONDUIT RIGID NONMETALLIC, 2" UNLESS NOTED

LIGHTING UNIT HPS

LIGHTING CONTROL CABINET (LCC)

PULL BOXES STEEL, 24" X 42" (LPB)

CONDUIT STUB FOR FUTURE USE

ROADWAY LIGHTING UNIT NOTATION

STATION, OFFSET — CABINET LETTER

III-250-12-7-2-(L-A3)

- POLE NUMBER
- CIRCUIT NUMBER
- BASE TYPE
- ARM LENGTH IN FEET
- LAMP WATTAGE
- DISTRIBUTION TYPE

N

WESTWOOD DRIVE

CTH U

LPB-C1

STA 22+74 U, 37.0' LT
III-250-6-5-2-(L-C3)

LPB-C3

STA 24+96 U, 56.9' LT
III-250-6-5-2-(L-C5)

STA 27+00 U, 54.0' LT
III-250-6-5-2-(L-C7)

22+00 U

23+00 U

24+00 U

25+00 U

26+00 U

27+00 U

28+00 U

STA 23+86 U, 38.3' RT
III-250-6-5-1-(L-C4)

LPB-C2

STA 25+98 U, 35.7' RT
III-250-6-5-1-(L-C6)

LPB-C4

STA 27+88 U, 34.0' RT
III-250-6-5-1-(L-C8)

PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	LIGHTING PLAN - CTH U	SHEET 260	E

2

2

STA 29+01 U, 54.0' LT
III-250-6-5-2-(L-C9)

STA 30+99 U, 54.0' LT
III-250-6-5-2-(L-C11)

STA 33+02 U, 54.0' LT
III-250-6-5-2-(L-C13)

CTH U

28+00 U

29+00 U

30+00 U

31+00 U

32+00 U

33+00 U

34+00 U

STA 27+88 U, 34.0' RT
III-250-6-5-1-(L-C8)

STA 30+00 U, 34.0' RT
III-250-6-5-1-(L-C10)

STA 31+99 U, 34.0' RT
III-250-6-5-1-(L-C12)

STA 34+00 U, 34.0' RT
III-250-6-5-1-(L-C14)

CONDUIT RIGID NONMETALLIC, 2" UNLESS NOTED

LIGHTING UNIT HPS

LIGHTING CONTROL CABINET (LCC)

PULL BOXES STEEL, 24" X 42" (LPB)

CONDUIT STUB FOR FUTURE USE

ROADWAY LIGHTING UNIT NOTATION

STATION, OFFSET — CABINET LETTER

III-250-12-7-2-(L-A3)

- POLE NUMBER
- CIRCUIT NUMBER
- BASE TYPE
- ARM LENGTH IN FEET
- LAMP WATTAGE
- DISTRIBUTION TYPE

PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	LIGHTING PLAN - CTH U	SHEET 261	E

CONDUIT RIGID NONMETALLIC, 2" UNLESS NOTED

LIGHTING UNIT HPS

LIGHTING CONTROL CABINET (LCC)

PULL BOXES STEEL, 24" X 42" (LPB)

CONDUIT STUB FOR FUTURE USE

ROADWAY LIGHTING UNIT NOTATION

STATION, OFFSET — CABINET LETTER

III-250-12-7-2-(L-A3)

- POLE NUMBER
- CIRCUIT NUMBER
- BASE TYPE
- ARM LENGTH IN FEET
- LAMP WATTAGE
- DISTRIBUTION TYPE

N

STA 19+51 U, 21.8' LT
III-250-6-5-2-(L-C1)

STA 21+27 U, 22.1' RT
III-250-6-5-1-(L-C2)

17+00 U

18+00 U

19+00 U

20+00 U

21+00 U

22+00 U

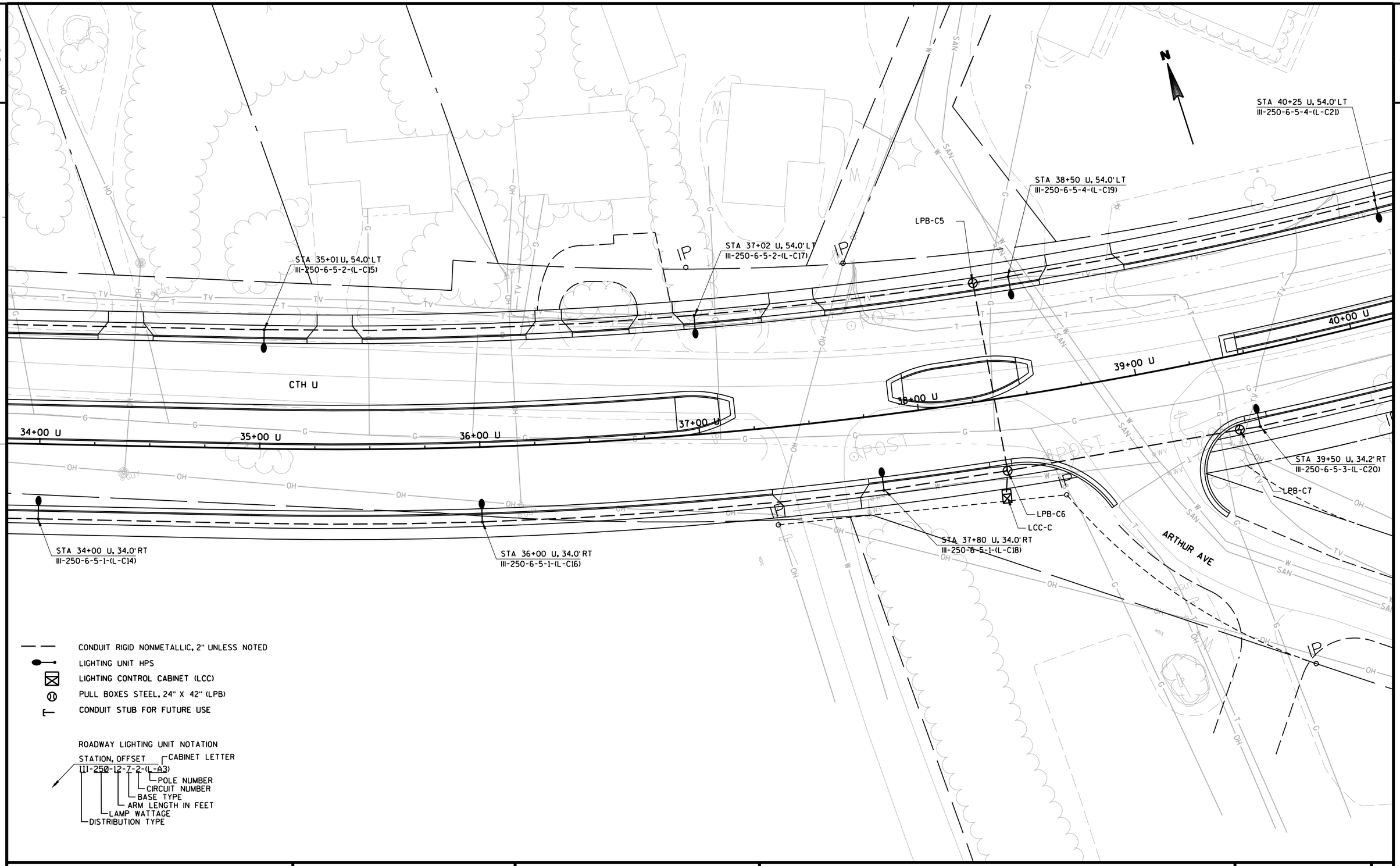
CTH U

PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	LIGHTING PLAN - CTH U	SHEET	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\023510_lp_u.dgn PLOT DATE : 9/5/2012 PLOT BY : stoffelm PLOT NAME : PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42

2



PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	LIGHTING PLAN - CTH U	SHEET 263	E

2

2

CONDUIT RIGID NONMETALLIC, 2" UNLESS NOTED

LIGHTING UNIT HPS

LIGHTING CONTROL CABINET (LCC)

PULL BOXES STEEL, 24" X 42" (LPB)

CONDUIT STUB FOR FUTURE USE

ROADWAY LIGHTING UNIT NOTATION

STATION, OFFSET — CABINET LETTER

III-250-12-7-2-(L-A3)

- POLE NUMBER
- CIRCUIT NUMBER
- BASE TYPE
- ARM LENGTH IN FEET
- LAMP WATTAGE
- DISTRIBUTION TYPE

N

STA 45+99 U, 54.0' LT
III-250-6-5-4-(L-C27)

STA 44+01 U, 54.0' LT
III-250-6-5-4-(L-C25)

STA 42+25 U, 54.0' LT
III-250-6-5-4-(L-C23)

STA 40+25 U, 54.0' LT
III-250-6-5-4-(L-C21)

CTH U

45+00 U

46+00 U

44+00 U

43+00 U

42+00 U

41+00 U

40+00 U

STA 44+98 U, 41.7' RT
III-250-6-5-3-(L-C26)

STA 43+30 U, 34.0' RT
III-250-6-5-3-(L-C24)

STA 41+25 U, 34.0' RT
III-250-6-5-3-(L-C22)

IP

PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	LIGHTING PLAN - CTH U	SHEET 264	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\023514_lp_u.dgn PLOT DATE : 9/5/2012 PLOT BY : stoffelm PLOT NAME : PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42

2

2

CONDUIT RIGID NONMETALLIC, 2" UNLESS NOTED

LIGHTING UNIT HPS

LIGHTING CONTROL CABINET (LCC)

RAMP CONTROL GATE CABINET (RCGC)

PULL BOXES STEEL, 24" X 42" (LPB)

CONDUIT STUB FOR FUTURE USE

RAMP CLOSURE GATE - 40' (RCG)

ROADWAY LIGHTING UNIT NOTATION

STATION, OFFSET — CABINET LETTER

III-250-12-7-2-(L-A3)

- POLE NUMBER
- CIRCUIT NUMBER
- BASE TYPE
- ARM LENGTH IN FEET
- LAMP WATTAGE
- DISTRIBUTION TYPE

N

STA 45+99 U, 54.0' LT
III-250-6-5-4-(L-C29)

LPB-C9

STA 47+75 U, 54.0' LT
III-250-6-5-4-(L-C29)

LPB-C11

STA 49+77 U, 57.7' LT
III-250-6-5-2-(L-D31)

STA 51+81 U, 51.8' LT
III-250-6-5-2-(L-D33)

LPB-D13

CTH P

CTH U

46+00 U

47+00 U

48+00 U

49+00 U

50+00 U

51+00 U

52+00 U

LPB-C10

RCGC-A

RCGPB-1

RCG-3

LPB-C8

STA 46+75 U, 46.2' RT
III-250-6-5-3-(L-C28)

F RAMP

STA 48+69 U, 42.8' RT
III-250-8-5-3-(L-C30)

LPB-C12

STA 50+75 U, 42.8' RT
III-250-8-5-1-(L-D32)

LPB-D14

PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	LIGHTING PLAN - CTH U	SHEET	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\023515_lp_u.dgn PLOT DATE : 9/5/2012 PLOT BY : stoffelm PLOT NAME : PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42

2

2

CONDUIT RIGID NONMETALLIC, 2" UNLESS NOTED

LIGHTING UNIT HPS

LIGHTING CONTROL CABINET (LCC)

PULL BOXES STEEL, 24" X 42" (LPB)

CONDUIT STUB FOR FUTURE USE

ROADWAY LIGHTING UNIT NOTATION

STATION, OFFSET — CABINET LETTER

III-250-12-7-2-(L-A3)

- POLE NUMBER
- CIRCUIT NUMBER
- BASE TYPE
- ARM LENGTH IN FEET
- LAMP WATTAGE
- DISTRIBUTION TYPE

STA 53+90 U, 44.2' LT
III-250-6-5-2-(L-D35)

LPB-D15

CTH U/MERRILL AVE

STA 55+90 U, 37.2' LT
III-250-6-5-2-(L-D37)

53+00 U

54+00 U

55+00 U

56+00 U

57+00 U

58+00 U

52+00 U

STA 55+03 U, 34.0' RT
III-250-6-5-1-(L-D36)

STA 53+05 U, 43.0' RT
III-250-6-5-1-(L-D34)

LPB-D17

LPB-D16

STA 57+27 U, 34.0' RT
III-250-6-5-1-(L-D38)

E RAMP

PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	LIGHTING PLAN - CTH U	SHEET	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\023516_lp_u.dgn PLOT DATE : 9/5/2012 PLOT BY : stoffelm PLOT NAME : PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42

2

2

CONDUIT RIGID NONMETALLIC, 2" UNLESS NOTED
LIGHTING UNIT HPS
LIGHTING CONTROL CABINET (LCC)
PULL BOXES STEEL, 24" X 42" (LPB)
CONDUIT STUB FOR FUTURE USE

ROADWAY LIGHTING UNIT NOTATION
STATION, OFFSET — CABINET LETTER
III-250-12-7-2-(L-A3)
POLE NUMBER
CIRCUIT NUMBER
BASE TYPE
ARM LENGTH IN FEET
LAMP WATTAGE
DISTRIBUTION TYPE

STA 58+70 U, 34.0' LT
III-250-6-5-2-(L-D39)

LPB-D19

STA 61+27 U, 33.5' LT
III-250-6-5-4-(L-D41)

STA 63+61 U, 34.0' LT
III-250-6-5-4-(L-D43)

58+00 U
59+00 U
60+00 U
61+00 U
62+00 U
63+00 U
64+00 U

CTH U/MERRILL AVE

STA 59+96 U, 34.0' RT
III-250-6-5-1-(L-D40)

LPB-D18

LPB-D20

STA 62+43 U, 34.0' RT
III-250-6-5-3-(L-D42)

LPB-D21

LPB-D22

ARLINGTON LANE

13TH AVE

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	LIGHTING PLAN - CTH U	SHEET 267	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\023517_lp_u.dgn PLOT DATE : 9/5/2012 PLOT BY : stoffelm PLOT NAME : PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42

CONDUIT RIGID NONMETALLIC, 2" UNLESS NOTED

LIGHTING UNIT HPS

LIGHTING CONTROL CABINET (LCC)

PULL BOXES STEEL, 24" X 42" (LPB)

CONDUIT STUB FOR FUTURE USE

ROADWAY LIGHTING UNIT NOTATION

STATION, OFFSET — CABINET LETTER

III-250-12-7-2-(L-A3)

- POLE NUMBER
- CIRCUIT NUMBER
- BASE TYPE
- ARM LENGTH IN FEET
- LAMP WATTAGE
- DISTRIBUTION TYPE

STA 66+21 U, 34.0' LT
III-250-6-5-4-(L-D45)

STA 68+81 U, 41.8' LT
III-250-6-5-4-(L-D47)

STA 69+84 U, 34.0' RT
III-250-6-5-3-(L-D48)

STA 67+54 U, 34.0' RT
III-250-6-5-3-(L-D46)

STA 65+03 U, 34.0' RT
III-250-6-5-3-(L-D44)

LPB-D23

LPB-D24

64+00 U
65+00 U
66+00 U
67+00 U
68+00 U
69+00 U
70+00 U

CTH U/MERRILL AVE

12TH AVE

PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	LIGHTING PLAN - CTH U	SHEET 268	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\023518_lp_u.dgn PLOT DATE : 9/5/2012 PLOT BY : stoffelm PLOT NAME : PLOT SCALE : 1:40

LEGEND

- SERVICE POLE
- CONTROL CABINET
- NONMETALLIC CONDUIT 2-3", UNLESS OTHERWISE NOTED
- CABLE-OVERHEAD
- CABLE-DIRECT BURIED
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) SIGNAL HEAD, TRAFFIC SIGNAL POLE, TRANSFORMER BASE
- PEDESTRIAN HEAD WITH PUSH BUTTON
- PUSH BUTTON
- LUMINAIRE UNDER PERMIT TO LOCAL MUNICIPALITY
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- LOOP DETECTOR IN 1" NON-METALLIC CONDUIT

PHASING

8 3
6
1
5
2
7 4 OLE

BUSINESS 51 (NB)

23+00 K | 22+00 K | 21+00 K | 20+00 K | 19+00 K | 18+00 K | 0 K

MATCH LINE

BUSINESS 51 (SB)
(35 MPH)

21
22
PB25F
1-3"

- PULL BOX, 24" X 36"
- PULL BOX, 24" X 42"
- SIGNAL HEAD NUMBER
- (R) RED CIRCULAR INDICATOR
- (Y) YELLOW CIRCULAR INDICATOR
- (G) GREEN CIRCULAR INDICATOR
- YELLOW ARROW
- GREEN ARROW
- LED PEDESTRIAN COUNTDOWN SIGNALS
- (X) EVP DESIGNATOR
- EVP DETECTOR HEAD
- YIELD SIGN
- LANE DESIGNATION FOR INFO ONLY

NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING

GENERAL NOTES

1. CONTRACTOR SHALL HAVE PULL BOXES AND CONDUIT RUN INSPECTED PRIOR TO PLACING SIGNAL CABLE INTO THE SYSTEM.
2. THE ENGINEER SHALL ADJUST THE LOCATIONS OF ITEMS UNDER THIS CONTRACT TO AVOID ANY CONFLICTS WITH EXISTING UTILITIES.
3. CONTRACTOR SHALL HAVE BASE AND PULL BOX LOCATIONS VERIFIED BY ENGINEER PRIOR TO INSTALLATION.
4. PAVEMENT MARKINGS ARE SHOWN GRAY SCALE FOR REFERENCE ONLY.

TRAFFIC CONTROL SIGNAL
BUSINESS 51 & CTH U/COLLEGE DRIVE
CITY OF WAUSAU
MARATHON COUNTY

SIGNAL NO.

CITY CONTACT: ALLEN WESOLOWSKI
DESIGNED BY: AYRES ASSOCIATES INC.
REVISED BY:

PAGE OF

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	SIGNAL PLAN - BUSINESS 51/CTH U	SHEET 269	E

LEGEND

- SERVICE POLE
- CONTROL CABINET
- NONMETALLIC CONDUIT 2-3", UNLESS OTHERWISE NOTED
- CABLE-OVERHEAD
- CABLE-DIRECT BURIED
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- SIGNAL HEAD, TRAFFIC SIGNAL POLE, TRANSFORMER BASE
- PEDESTRIAN HEAD WITH PUSH BUTTON
- PUSH BUTTON
- LUMINAIRE UNDER PERMIT TO LOCAL MUNICIPALITY
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- LOOP DETECTOR IN 1" NON-METALLIC CONDUIT

- PULL BOX, 24" X 36"
- PULL BOX, 24" X 42"
- SIGNAL HEAD NUMBER
- RED CIRCULAR INDICATOR
- YELLOW CIRCULAR INDICATOR
- GREEN CIRCULAR INDICATOR
- YELLOW ARROW
- GREEN ARROW
- LED PEDESTRIAN COUNTDOWN SIGNALS
- EVP DESIGNATOR
- EVP DETECTOR HEAD
- YIELD SIGN
- LANE DESIGNATION FOR INFO ONLY

NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING

PHASING

8 3
6 1
5 2
7 4 OLE

COLLEGE DR (25 MPH)
BUSINESS 51 (NB)
BUSINESS 51 (SB) (35 MPH)
MERRILL/BUS 51 (NB) (35 MPH)
MERRILL/CTH U (25 MPH)
MATCH LINE
SIGNAL CONDUIT
EMPTY SIGNAL CONDUIT
SB1 SB2 SB3 SB4 SB5 SB6 SB7 SB8 SB9 SB10 SB11 SB12 SB13 SB14 SB15 SB16 SB17
PB22B PB22C PB22D PB23B PB25B PB25C PB25D PB25E PB26B PB26C PB27B
EXPB22 EXPB23 EXPB24 EXPB25 EXPB26 EXPB27
EXLPB23 EXLPB24 EXLPB25 EXLPB26 EXLPB27 EXLPB28 EXLPB29 EXLPB30 EXLPB31
EXLP30 EXLP31 EXLP32 EXLP35 EXLP36 EXLP37 EXLP38 EXLP39
CB1
2-3" 3-2" 2-1" STUBBED
16+00 K 15+00 K 14+00 K 13+00 K 12+00 K 12+00 U 71+00 U

GENERAL NOTES

1. CONTRACTOR SHALL HAVE PULL BOXES AND CONDUIT RUN INSPECTED PRIOR TO PLACING SIGNAL CABLE INTO THE SYSTEM.
2. THE ENGINEER SHALL ADJUST THE LOCATIONS OF ITEMS UNDER THIS CONTRACT TO AVOID ANY CONFLICTS WITH EXISTING UTILITIES.
3. CONTRACTOR SHALL HAVE BASE AND PULL BOX LOCATIONS VERIFIED BY ENGINEER PRIOR TO INSTALLATION.
4. PAVEMENT MARKINGS ARE SHOWN GRAY SCALE FOR REFERENCE ONLY.

TRAFFIC CONTROL SIGNAL
BUSINESS 51 & CTH U/COLLEGE DRIVE
CITY OF WAUSAU
MARATHON COUNTY

SIGNAL NO.

CITY CONTACT: ALLEN WESOLOWSKI
DESIGNED BY: AYRES ASSOCIATES INC.
REVISED BY:

PAGE OF

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	SIGNAL PLAN - BUSINESS 51/CTH U	SHEET 270	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\024001_sp.dgn PLOT DATE : 9/5/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42

2

SEQUENCE OF OPERATION



	HEAD NUMBERS	01 R/W	01 CLEAR TO **	02 R/W	02 CLEAR TO **	03 R/W	03 CLEAR TO **	04 R/W	04 CLEAR TO **	FLASH
01	1A,1B	G	- -	-	- -	-	- -	-	- -	-
02	2A,2B,2C	R	R R	G	Y R	R	R R	R	R R	R
03	3A,3B	-	- -	-	- -	G	- -	-	- -	-
04	4A,4B,4C	R	R R	R	R R	R	R R	G	Y R	R
05	5A,5B	-	- -	-	- -	-	- -	-	- -	-
06	6A,6B,6C	R	R R	R	R R	R	R R	R	R R	R
07	7A,7B	-	- -	-	- -	-	- -	-	- -	-
08	8A,8B,8C	R	R R	R	R R	R	R R	R	R R	R
RING 1 OLA	1A,1B	-	Y R	FY	Y R	R	R R	R	R R	R
OLB	3A,3B	R	R R	R	R R	-	Y R	FY	Y R	R
OLC	5A,5B	R	R R	R	R R	R	R R	R	R R	R
OLD	7A,7B	R	R R	R	R R	R	R R	R	R R	R
OLE	4D,4E	R	R R	R	R R	R	R R	R	R R	R
02P	21, 22	DW	DW DW	*	DW DW	DW	DW DW	DW	DW DW	
04P	41,42	DW	DW DW	DW	DW DW	DW	DW DW	*	DW DW	
06P	61, 62	DW	DW DW	DW	DW DW	DW	DW DW	DW	DW DW	
08P	81,82	DW	DW DW	DW	DW DW	DW	DW DW	DW	DW DW	



	HEAD NUMBERS	05 R/W	05 CLEAR TO **	06 R/W	06 CLEAR TO **	07 R/W	07 CLEAR TO **	08 R/W	08 CLEAR TO **
01	1A,1B	-	- -	-	- -	-	- -	-	- -
02	2A,2B,2C	R	R R	R	R R	R	R R	R	R R
03	3A,3B	-	- -	-	- -	-	- -	-	- -
04	4A,4B,4C	R	R R	R	R R	R	R R	R	R R
05	5A,5B	G	- -	-	- -	-	- -	-	- -
06	6A,6B,6C	R	R R	G	Y R	R	R R	R	R R
07	7A,7B	-	- -	-	- -	G	- -	-	- -
08	8A,8B,8C	R	R R	R	R R	R	R R	G	Y R
RING 2 OLA	1A,1B	R	R R	R	R R	R	R R	R	R R
OLB	3A,3B	R	R R	R	R R	R	R R	R	R R
OLC	5A,5B	-	Y R	FY	Y R	R	R R	R	R R
OLD	7A,7B	R	R R	R	R R	-	Y R	FY	Y R
OLE	4D,4E								
02P	21, 22	DW	DW DW	DW	DW DW	DW	DW DW	DW	DW DW
04P	41,42	DW	DW DW	*	DW DW	DW	DW DW	DW	DW DW
06P	61, 62	DW	DW DW	DW	DW DW	DW	DW DW	DW	DW DW
08P	81,82	DW	DW DW	DW	DW DW	DW	DW DW	*	DW DW

BARRIER

* WHEN CALLED, TIMED STEADY WALK, FOLLOWED BY FLASHING DON'T WALK WITH PED COUNTDOWN TIMER ACTIVATED, THEN STEADY DON'T WALK.

** CLEARANCE TO A PHASE IN CONFLICT WITH THIS PHASE ON (SEE CHART 1 BELOW)

FY = FLASHING YELLOW

CHART 1

PHASE ON	NONCONFLICTING PHASE ALLOWED TO TIME CONCURRENTLY	PHASES IN CONFLICT WITH PHASE ON
1	5 OR 6, OLC, OLE	2,3,4,7,8,OLB,OLD
2	5 OR 6, OLA, OLC	1,3,4,7,8,OLB,OLD,OLE
3	7 OR 8, OLD	1,2,4,5,6,OLA,OLC,OLE
4	7 OR 8, OLB, OLD, OLE	1,2,3,5,6,OLA,OLC
5	1 OR 2, OLA, OLE	3,4,6,7,8,OLB,OLD
6	1 OR 2, OLA, OLC, OLE	3,4,5,7,8,OLB,OLD
7	3 OR 4, OLB, OLE	1,2,5,6,8,OLA,OLC
8	3 OR 4, OLB, OLD, OLE	1,2,5,6,7,OLA,OLC

DETECTOR LOGIC

DETECTOR NUMBER	AMPLIFIER CHANNEL NUMBER	DETECTOR OPERATION: CALLS AND EXTENDS	DETECTOR OPERATION: CALLS ONLY	DETECTOR OPERATION: EXTENDS ONLY	PHASE CALLED	PHASE EXTENDED	DETECTOR DISCONNECT PHASE	CALLING DELAY	EXTENSION STRETCH	LOOP SIZE	NUMBER OF TURNS
11	1	X			1	1				6'x20'	4
12	1	X		X	1	1				6'x20'	4
21	2	X			2	2				6'x6'	3
22	2	X			2	2				6'x6'	3
31	3	X			3	3				6'x20'	2
32	3	X		X	3	3				6'x20'	3
41	4	X			4	4				6'x20'	2
42	4	X			4	4				6'x20'	2
43	5	X			4	4				6'x20'	2
44	5	X			4	4		X		6'x20'	2
51	6	X			5	5				6'x20'	2
52	6	X			5	5				6'x20'	3
61	7	X			6	6				6'x6'	4
62	7	X			6	6				6'x6'	4
71	8	X			7	7				6'x20'	2
72	8	X			7	7				6'x20'	3
81	9	X			8	8		X		6'x20'	2

CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY W / 0	PHASE RECALL
1		6	
2	x	6	MIN.
3		8	
4		8	
5		2	
6	x	2	MIN.
7		4	
8		4	

OVERLAPS

OLA =
OLB =
OLC =
OLD =
OLE = 01, 04

SPECIAL OVERLAPS

	PROTECTED	PERMISSIVE
OLA	1	2
OLB	3	4
OLC	5	6
OLD	7	8

TYPE OF INTERCONNECT COMMUNICATION	
NONE	
CLOSED LOOP TWISTED PAIR*	
CLOSED LOOP FIBER OPTIC*	
GPS- TIME BASE SYSTEM	X
*LOCATION OF MASTER CONTROLLER NO: S-	
SIGNAL SYSTEM *: SS- -	

TYPE OF LIGHTING	
BY OTHER AGENCY	
IN TRAFFIC SIGNAL CABINET	
IN SEPARATE LIGHTING CABINET	X

TYPE OF PRE-EMPT	
NONE	
RAILROAD	
EMERGENCY VEHICLE	
3M	
TOMAR	
HARDWIRE	
OTHER	X
LIFT BRIDGE	
QUEUE DETECTOR	

EMERGENCY VEHICLE PRE-EMPTION

VEHICLE ACTUATION	PRE-EMPTED PHASES ON	PRE-EMPTION CHANNEL
WESTBOUND	3, 8	2
EASTBOUND	4, 7	4
SOUTHBOUND	2, 5	3
NORTHBOUND	1, 6	1

NOTE: FULL CLEARANCE AND MINIMUM GREEN INTERVALS SHALL ALWAYS BE PROVIDED.

GENERAL NOTES:

1. ANY ACTUATED PHASE WHICH THERE IS NO CALL SHALL BE SKIPPED.
2. WHEN ONE PHASE IS ON ALONE, ANY NONCONFLICTING PHASE MAY START TIMING CONCURRENTLY WITHOUT A CLEARANCE INTERVAL (SEE CHART 1 AT LEFT).
3. IF ANY OPPOSING THRU PHASES ARE TIMING CONCURRENTLY, THEY SHALL TERMINATE TOGETHER DUE TO PERMISSIVE LEFT TURN CONFLICT.
4. PROVIDE HAND CONTROL.

CONTROLLER TYPE:

BUS 51 & CTH U/COLLEGE DR
CITY OF WAUSAU
MARATHON COUNTY

BASE PLAN NO: REVISION NO:

REVISION DATE:

PROJECT NO: 1170-01-70 | HWY: USH 51 | COUNTY: MARATHON | SEQUENCE OF OPERATIONS | SHEET 271 | E

PROJECT ID:	1170-01-70
INTERSECTION:	BUS 51 AND CTH U/COLLEGE DRIVE

SIGNAL WIRE COLOR CODING	BLK-BLACK	RED-RED	GRN-GREEN
	WHT-WHITE	BLU-BLUE	ORG-ORANGE

CB __ TO	JUMPER	# OF COND.	HEAD NO.	PHASE	SIGNAL INDICATION WIRE COLOR									PED BUTTON	NEUTRAL
					RED	YELLOW	GREEN	<RED	<YELLOW>	<FLSH YLLW	<GREEN>	D/WALK	WALK		
CB1 SB1		5	4D	OLE	RED				ORG		GRN				WHT
CB1 SB2		5	2B	2	RED	ORG	GRN								WHT
CB1 SB3		12	4A	4	RED	ORG	GRN								WHT
			22	2P								BLACK	BLUE	WHT/BLK	
			41	4P								RED/BLK	ORG/BLK	GRN/BLK	
CB1 SB4		12	7A	4,7				RED	ORG	BLUE	GRN				WHT
			3B	3,8				RED/BLK	ORG/BLK	BLU/BLK	GRN/BLK				
CB1 SB5		9	8B	8	RED	ORG	GRN								WHT
			8C	8	BLACK	BLUE	WHT/BLK								
CB1 SB6		5	21	2P								RED	ORG	GRN	WHT
CB1 SB7		9	2A	2	RED	ORG	GRN								WHT
			82	8P								BLACK	BLUE	WHT/BLK	
CB1 SB8		7	1B	1				RED	ORG	BLUE	GRN			WHT/BLK	WHT
CB1 SB9		9	5A	5				RED	ORG	BLUE	GRN				WHT
			6C	6	RED/BLK	ORG/BLK					GRN/BLK				
CB1 SB10		9	6B	6	RED	ORG	GRN								WHT
			81	8P								BLACK	BLUE	WHT/BLK	
CB1 SB11		9	8A	8	RED	ORG	GRN								WHT
			62	6P								BLACK	BLUE	WHT/BLK	
CB1 SB12		12	7B	7				RED	ORG	BLUE	GRN				WHT
			3A	3				RED/BLK	ORG/BLK	BLU/BLK	GRN/BLK				
CB1 SB13		12	4B	4	RED	ORG	GRN								WHT
			4C	4	BLK	BLUE	WHT/BLK								
			42	4P								RED/BLK	ORG/BLK	GRN/BLK	
CB1 SB 14		12	6A	6	RED	ORG	GRN								WHT
			5C	5				RED/BLK	ORG/BLK	BLU/BLK	GRN/BLK				
			61	61P								BLACK	BLUE	WHT/BLK	
CB1 SB15		12	5B	5				RED	ORG	BLUE	GRN			WHT/BLK	WHT
			1A	1				RED/BLK	ORG/BLK	BLU/BLK	GRN/BLK				
CB1 SB16		5	2C	2	RED	ORG					GRN				WHT
CB1 SB17		5	4E	OLE	RED				ORG		GRN				WHT

EQUIPMENT GROUNDING CONDUCTOR 10 AWG GRN XLP	
FROM	TO
CB1	SB1
SB1	SB2
SB2	SB3
SB3	SB4
SB4	SB5
SB5	SB6
SB6	SB7
SB7	SB8
SB8	SB9
SB9	SB10
SB10	SB11
SB11	SB12
SB12	SB13
SB13	SB14
SB14	SB15
SB15	SB16
SB16	SB17
SB17	CB1

PULL BOX BONDING JUMPER 10 AWG GRN XLP	
FROM	TO
SB1	PB26B
SB2	EXPB26
SB3	EXPB26
SB4	PB25B
SB5	EXPB25
SB6	EXPB25
SB7	EXPB25
SB8	EXPB24
SB9	EXPB24
SB10	EXPB23
SB11	PB23B
SB12	PB22B
SB13	EXPB22
SB14	EXPB22
SB15	EXPB27
SB16	EXPB27
SB17	PB27B

NOTES:
1. ENSURE THE GROUNDED CONDUCTORS, GROUNDING CONDUCTORS, AND THE POLE CABLES ARE BOTH 12" LONGER THAN THE UNGROUNDED CONDUCTORS.
2. AT THE SIGNAL BASES, CONNECT ONE TERMINAL FROM THE PEDESTRIAN PUSH BUTTONS TO THE COLOR INDICATED IN THE CHART. CONNECT THE OTHER TERMINAL TO THE GROUNDED CONDUCTOR (NEUTRAL).
3. GROUNDED CONDUCTOR (NEUTRAL) TO BE THE WHITE CONDUCTOR IN THE TRAFFIC SIGNAL CABLES OF THE RESPECTIVE SIGNAL BASE.

REVISION:
DATE:

LEGEND

- OH — CABLE-OVERHEAD
- DB — CABLE-DIRECT BURIED
- SIGNAL HEAD, OVERHEAD
- LUMINAIRE (250W)
- WOOD POLE, TYPE 4
- WOOD POST, 4"x4"
- VIDEO DETECTION (VDC-X)
- SIGNAL HEAD NUMBER
- (R) RED CIRCULAR INDICATOR
- (Y) YELLOW CIRCULAR INDICATOR
- (G) GREEN CIRCULAR INDICATOR
- (Y) (Y) YELLOW ARROW
- (G) (G) GREEN ARROW
- S STOP SIGN

NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING

VIDEO DETECTION ZONE

LANE DESIGNATION FOR INFO ONLY

GENERAL NOTES

1. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL UTILITIES PRIOR TO CONSTRUCTION.
2. LOCATIONS OF ALL TEMPORARY SIGNAL POLES, SIGNAL CABINET, AND HEADS SHALL BE APPROVED BY THE ENGINEER.
3. GUYING OF POLES IS REQUIRED AND LOCATIONS SHALL BE APPROVED BY THE ENGINEER IN THE FIELD.
4. CONTRACTOR WILL SET VIDEO DETECTION ZONES IN FIELD.
5. POSITIONS OF TEMPORARY SIGNAL HEADS SHALL BE ADJUSTED FOR EACH STAGE OF CONSTRUCTION AS APPROPRIATE. SHARED HEADS SHALL BE PLACED ON EXTENDED LANE LINE BETWEEN CONTROLLED LANES.
6. TEMPORARY SIGNAL POLES MAY NEED TO BE ADJUSTED BASED ON STAGING OF INTERSECTIONS. ADJUSTMENTS ARE CONSIDERED INCIDENTAL TO TEMPORARY TRAFFIC SIGNALS FOR INTERSECTION.
7. ALL ITEMS ARE INCIDENTAL TO TEMPORARY TRAFFIC SIGNALS FOR INTERSECTIONS.

USH 51 SB ON-RAMP

CTH K (SOUTH)

CTH K (NORTH)

USH 51 SB OFF-RAMP

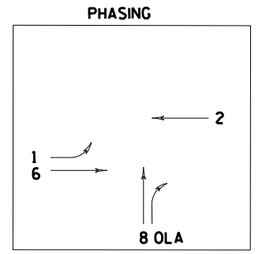
USH 51 SB

769+00 SB

VDC-1
VDC-2
VDC-6
VDC-8
VDC-OLA

VDZ 11 — 330' TO STOP BAR
VDZ 61 — 330' TO STOP BAR
VDZ 82
VDZ 10
VDZ 81 — 205' TO STOP BAR
VDZ 21 — 330' TO STOP BAR

PHASING



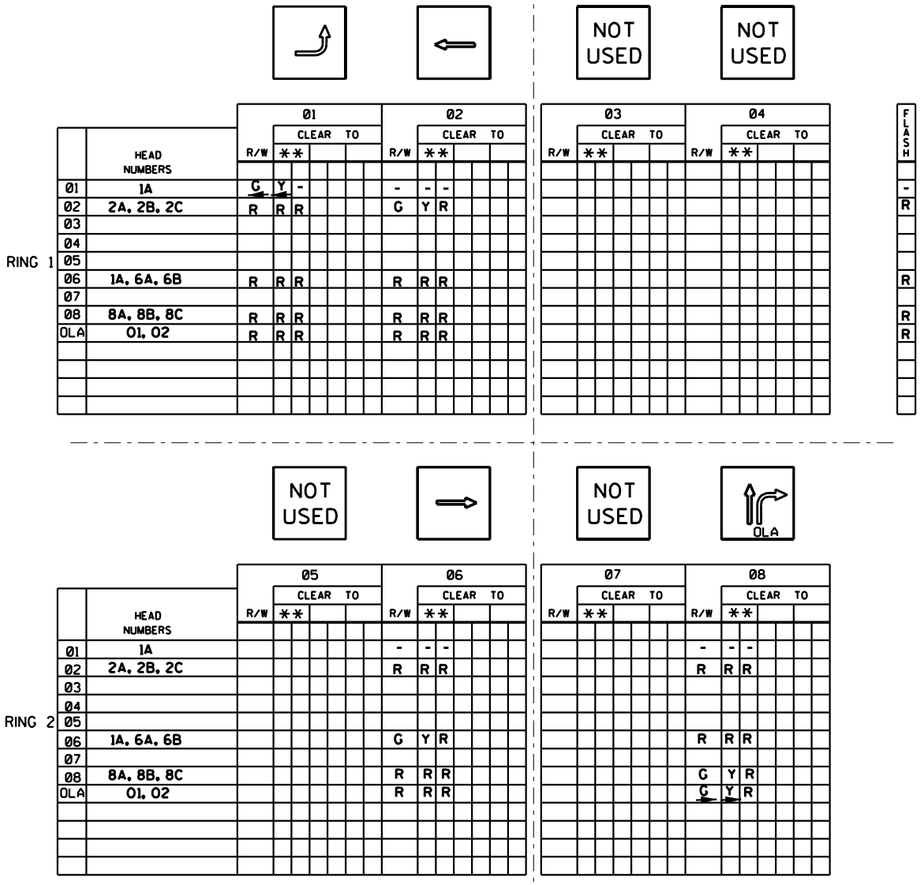
PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	TEMPORARY SIGNALS - CTH K/SB RAMP TERMINAL (STAGES 1-2B)	SHEET	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\024004_sp1.dgn PLOT DATE : 8/1/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42

2

SEQUENCE OF OPERATION



** CLEARANCE TO A PHASE IN CONFLICT WITH THIS PHASE ON (SEE CHART 1 BELOW)

* WHEN CALLED, TIMED STEADY WALK, FOLLOWED BY FLASHING DON'T WALK WITH PED COUNTDOWN TIMER ACTIVATED, THEN STEADY DON'T WALK.

CHART 1

PHASE ON	NONCONFLICTING PHASE ALLOWED TO TIME CONCURRENTLY	PHASES IN CONFLICT WITH PHASE ON
1	6	2,8
2	6	1,8
3		
4		
5		
6	1 OR 2	8
7		
8		1,2,6

DETECTOR LOGIC

VIDEO DETECTION ZONE	AMPLIFIER CHANNEL NUMBER	DETECTOR OPERATION			PHASE CALLED	PHASE EXTENDED	DETECTOR DISCONNECT PHASE	CALLING DELAY	EXTENSION STRETCH
		CALLS AND EXTENDS	CALLS ONLY	EXTENDS ONLY					
11	1	X			1	1			
21	2	X			2	2			
61	3	X			6	6			
81	4			X	8	8			X
82	4	X			8	8			
01	5	X			OLA	OLA		X	

CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY W / 0	PHASE RECALL	PHASE ACTIVE
1				X
2	X	6	MIN.	X
3				
4				
5				
6	X	2	MIN.	X
7				
8				X

OVERLAPS

O.L. "A" = 08
O.L. "B" =
O.L. "C" =
O.L. "D" =

TYPE OF PRE-EMPT	
NONE	X
RAILROAD	
EMERGENCY VEHICLE	
3M	
TOMAR	
HARDWIRE	
OTHER (FUTURE)	
LIFT BRIDGE	
QUEUE DETECTOR	

TYPE OF INTERCONNECT COMMUNICATION	
NONE	X
CLOSED LOOP TWISTED PAIR*	
CLOSED LOOP FIBER OPTIC*	
GPS- TIME BASE SYSTEM	
*LOCATION OF MASTER CONTROLLER NO:	S-
SIGNAL SYSTEM *:	SS- -

TYPE OF LIGHTING	
BY OTHER AGENCY	
IN TRAFFIC SIGNAL CABINET	X
IN SEPARATE LIGHTING CABINET	

GENERAL NOTES:

1. ANY ACTUATED PHASE WHICH THERE IS NO CALL SHALL BE SKIPPED.
2. WHEN ONE PHASE IS ON ALONE, ANY NONCONFLICTING PHASE MAY START TIMING CONCURRENTLY WITHOUT A CLEARANCE INTERVAL (SEE CHART 1 AT LEFT).
3. IF ANY OPPOSING THRU PHASES ARE TIMING CONCURRENTLY, THEY SHALL TERMINATE TOGETHER DUE TO PERMISSIVE LEFT TURN CONFLICT.
4. PROVIDE HAND CONTROL.

2

CTH K - SB USH 51 RAMP

Parameter	Phases							
	1	2	3	4	5	6	7	8
Min Green	0	8	0	0	0	8	0	5
Yellow	3.5	4.5	0	0	0	4.5	0	4.5
All Red	0.5	2.5	0	0	0	2.5	0	2.5
Max 1	15	46	15	0	0	46	0	45
Max 2	10	45	10	0	0	45	0	45
TBR	0	25	0	0	0	25	0	20
TTR	0	10	0	0	0	10	0	10
Min Gap	0	2	0	0	0	2	0	2
Passage	5	5	0	0	0	5	0	2
Ext Stretch	0	0	0	0	0	0	0	2
Coord Phases	---	X	---	---	---	X	---	---
Cycle 1 - Stage 1 (6:30 AM - 11:30 AM); M-F (5 Days)								
Cycle length	70 seconds							
Split 1	8	31	0	31	0	39	0	31
Offset 1	59 seconds							
Cycle 2 - Stage 1, 2A, 2B (11:30 AM - 6:30 PM); M-F (5 Days)								
Cycle length	70 seconds							
Split 1	21	28	0	21	0	49	0	21
Offset 1	37 seconds (1)							
Offset 2	34 seconds (2A)							
Offset 3	64 seconds (2B)							
Cycle 3 - Stage 2A, 2B (6:30 AM - 11:30 AM); M-F (5 Days)								
Cycle length	70 seconds							
Split 1	15	32	0	23	0	47	0	23
Offset 1	30 seconds (2A)							
Offset 2	67 seconds (2B)							
FREE OPERATION: 6:30 PM to 6:30 AM, M-F (5 Days); All Day Saturday & Sunday								

TIMINGS PROVIDED MAY NEED ADJUSTMENT IN FIELD BASED ON TRAFFIC.

REVISION:	
DATE:	

LEGEND

- CABLE-OVERHEAD (OH)
- CABLE-DIRECT BURIED (DB)
- SIGNAL HEAD, OVERHEAD
- LUMINAIRE (250W)
- WOOD POLE, TYPE 4
- WOOD POST, 4"x4"
- VIDEO DETECTION (VDC-X)
- SIGNAL HEAD NUMBER
- RED CIRCULAR INDICATOR
- YELLOW CIRCULAR INDICATOR
- GREEN CIRCULAR INDICATOR
- YELLOW ARROW
- GREEN ARROW
- STOP SIGN
- LANE DESIGNATION FOR INFO ONLY
- VIDEO DETECTION ZONE

NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING

VDZ 20 — 205' TO STOP BAR

USH 51NB OFF-RAMP

VDZ 01

VDZ 42

VDC-OLA

VDC-2

VDC-5

VDC-6

USH 51 NB

162+00 NB

163+00 NB

N

CTH K (SOUTH)

VDZ 51

330' TO STOP BAR — VDZ 21

VDZ 61 — 330' TO STOP BAR

CTH K (NORTH)

USH 51 NB ON-RAMP

PHASING

OLA 4

2
5

6

GENERAL NOTES

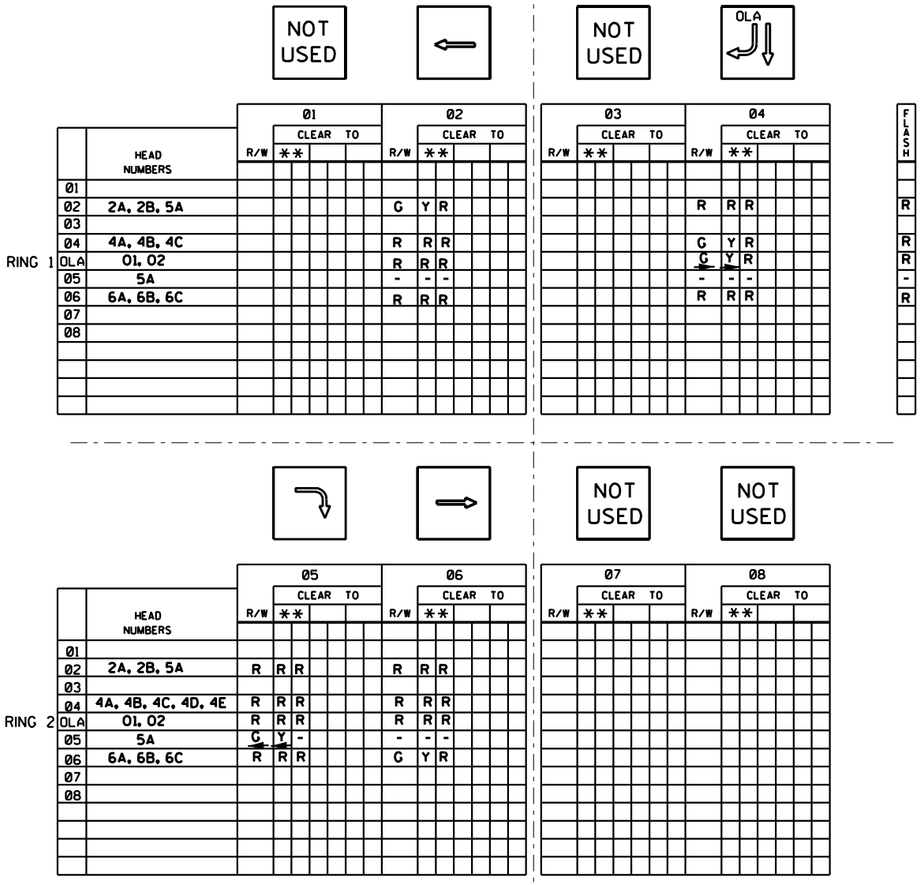
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2. LOCATIONS OF ALL TEMPORARY SIGNAL POLES, SIGNAL CABINET, AND HEADS SHALL BE APPROVED BY THE ENGINEER.
3. GUYING OF POLES IS REQUIRED AND LOCATIONS SHALL BE APPROVED BY THE ENGINEER IN THE FIELD.
4. CONTRACTOR WILL SET VIDEO DETECTION ZONES IN FIELD.
5. POSITIONS OF TEMPORARY SIGNAL HEADS SHALL BE ADJUSTED FOR EACH STAGE OF CONSTRUCTION AS APPROPRIATE. SHARED HEADS SHALL BE PLACED ON EXTENDED LANE LINE BETWEEN CONTROLLED LANES.
6. TEMPORARY SIGNAL POLES MAY NEED TO BE ADJUSTED BASED ON STAGING OF INTERSECTIONS. ADJUSTMENTS ARE CONSIDERED INCIDENTAL TO TEMPORARY TRAFFIC SIGNALS FOR INTERSECTION.
7. ALL ITEMS ARE INCIDENTAL TO TEMPORARY TRAFFIC SIGNALS FOR INTERSECTIONS.

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	TEMPORARY SIGNALS - CTH K/NB RAMP TERMINAL (STAGES 1-2B)	SHEET	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\024007_sp1.dgn PLOT DATE : 8/1/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:40
WISDOT/CADDS SHEET 42

2

SEQUENCE OF OPERATION



** CLEARANCE TO A PHASE IN CONFLICT WITH THIS PHASE ON (SEE CHART 1 BELOW)

* WHEN CALLED, TIMED STEADY WALK, FOLLOWED BY FLASHING DON'T WALK WITH PED COUNTDOWN TIMER ACTIVATED, THEN STEADY DON'T WALK.

CHART 1

PHASE ON	NONCONFLICTING PHASE ALLOWED TO TIME CONCURRENTLY	PHASES IN CONFLICT WITH PHASE ON
1		
2	5 OR 6	4
3		
4		2,5,6
5	2	4,6
6	2	4,5
7		
8		

DETECTOR LOGIC

VIDEO DETECTION ZONE	AMPLIFIER CHANNEL NUMBER	DETECTOR OPERATION			PHASE CALLED	PHASE EXTENDED	DETECTOR DISCONNECT PHASE	CALLING DELAY	EXTENSION STRETCH
		CALLS AND EXTENDS	CALLS ONLY	EXTENDS ONLY					
21	1	X			2	2			
41	2			X	4	4			X
42	3	X			4	4			
51	4	X			5	5			
61	5	X			6	6			
01	6	X			OLA	OLA		X	

CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY W / Ø	PHASE RECALL	PHASE ACTIVE
1				
2	x	6	MIN.	x
3				
4				x
5		2		x
6	x	2	MIN.	x
7				
8				

OVERLAPS

O.L. "A" = Ø4
O.L. "B" =
O.L. "C" =
O.L. "D" =

TYPE OF PRE-EMPT	
NONE	X
RAILROAD	
EMERGENCY VEHICLE	
3M	
TOMAR	
HARDWIRE	
OTHER (FUTURE)	
LIFT BRIDGE	
QUEUE DETECTOR	

TYPE OF INTERCONNECT COMMUNICATION	
NONE	X
CLOSED LOOP TWISTED PAIR*	
CLOSED LOOP FIBER OPTIC*	
GPS- TIME BASE SYSTEM	
*LOCATION OF MASTER CONTROLLER NO:	S-
SIGNAL SYSTEM *:	SS- -

TYPE OF LIGHTING	
BY OTHER AGENCY	
IN TRAFFIC SIGNAL CABINET	X
IN SEPARATE LIGHTING CABINET	

GENERAL NOTES:

1. ANY ACTUATED PHASE WHICH THERE IS NO CALL SHALL BE SKIPPED.
2. WHEN ONE PHASE IS ON ALONE, ANY NONCONFLICTING PHASE MAY START TIMING CONCURRENTLY WITHOUT A CLEARANCE INTERVAL (SEE CHART 1 AT LEFT).
3. IF ANY OPPOSING THRU PHASES ARE TIMING CONCURRENTLY, THEY SHALL TERMINATE TOGETHER DUE TO PERMISSIVE LEFT TURN CONFLICT.
4. PROVIDE HAND CONTROL.

2

CTH K - NB USH 51 RAMP

Parameter	Phases							
	1	2	3	4	5	6	7	8
Min Green	0	8	0	5	5	8	0	0
Yellow	0	4.5	0	3.0	3.5	4.5	0	0
All Red	0	1.5	0	4.0	0.5	1.0	0	0
Max 1	0	46	15	45	15	46	0	0
Max 2	0	45	10	45	10	45	0	0
TBR	0	25	0	20	10	25	0	0
TTR	0	10	0	10	5	10	0	0
Min Gap	0	2	0	2	2	2	0	0
Passage	0	5	0	2	5	5	0	0
Ext Stretch	0	0	0	2	0	0	0	0
Coord Phases	---	X	---	---	---	X	---	---
Cycle 1 - Stage 1 (6:30 AM - 11:30 AM); M-F (5 Days)								
Cycle length	70 seconds							
Split 1	0	43	0	27	8	35	0	27
Offset 1	0 seconds							
Cycle 2 - Stage 1, 2A, 2B (11:30 AM - 6:30 PM); M-F (5 Days)								
Cycle length	70 seconds							
Split 1	0	37	0	33	8	28	0	33
Offset 1	0 seconds (1, 2A)							
Offset 2	61 seconds (2B)							
Cycle 3 - Stage 2A, 2B (6:30 AM - 11:30 AM); M-F (5 Days)								
Cycle length	70 seconds							
Split 1	0	33	0	37	8	25	0	37
Offset 1	66 seconds (2A)							
Offset 1	0 seconds (2B)							
FREE OPERATION: 6:30 PM to 6:30 AM, M-F (5 Days); All Day Saturday & Sunday								

TIMINGS PROVIDED MAY NEED ADJUSTMENT IN FIELD BASED ON TRAFFIC.

REVISION:
DATE:

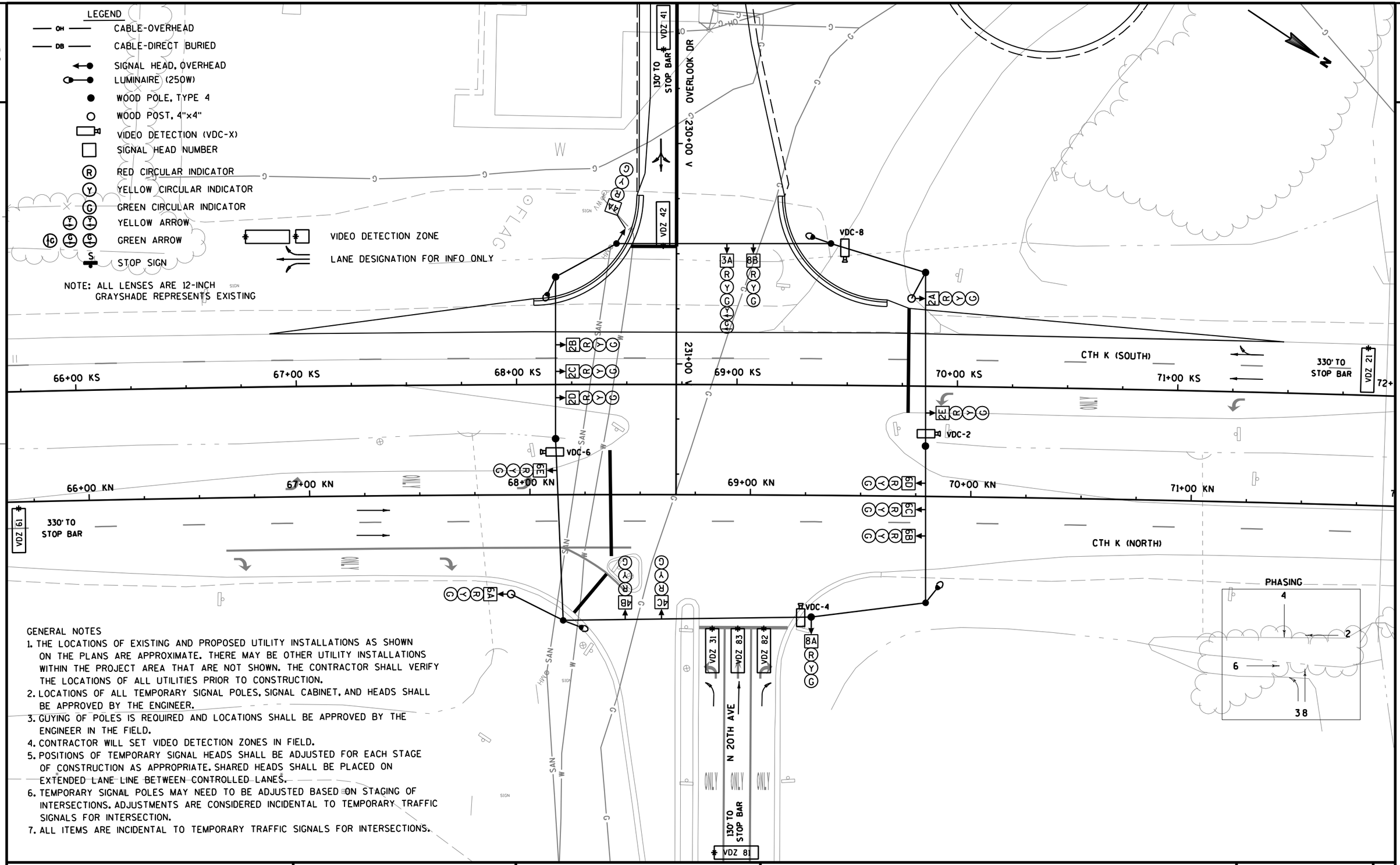
LEGEND

- CABLE-OVERHEAD
- CABLE-DIRECT BURIED
- SIGNAL HEAD, OVERHEAD
- LUMINAIRE (250W)
- WOOD POLE, TYPE 4
- WOOD POST, 4"x4"
- VIDEO DETECTION (VDC-X)
- SIGNAL HEAD NUMBER
- RED CIRCULAR INDICATOR
- YELLOW CIRCULAR INDICATOR
- GREEN CIRCULAR INDICATOR
- YELLOW ARROW
- GREEN ARROW
- STOP SIGN

VIDEO DETECTION ZONE

LANE DESIGNATION FOR INFO ONLY

NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING



GENERAL NOTES

1. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL UTILITIES PRIOR TO CONSTRUCTION.
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7. ALL ITEMS ARE INCIDENTAL TO TEMPORARY TRAFFIC SIGNALS FOR INTERSECTIONS.

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	TEMPORARY SIGNAL - CTH K/OVERLOOK DR (STAGES 2A & 2B)	SHEET	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\024010_sp2a.dgn PLOT DATE : 8/1/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:40
WISDOT/CADDS SHEET 42

LEGEND

- CABLE-OVERHEAD
- CABLE-DIRECT BURIED
- SIGNAL HEAD, OVERHEAD
- LUMINAIRE (250W)
- WOOD POLE, TYPE 4
- WOOD POST, 4"x4"
- VIDEO DETECTION (VDC-X)
- SIGNAL HEAD NUMBER
- RED CIRCULAR INDICATOR
- YELLOW CIRCULAR INDICATOR
- GREEN CIRCULAR INDICATOR
- YELLOW ARROW
- GREEN ARROW
- STOP SIGN

VIDEO DETECTION ZONE

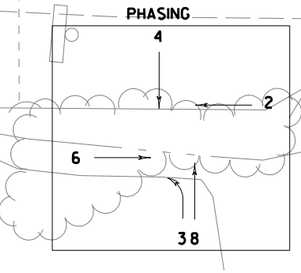
LANE DESIGNATION FOR INFO ONLY

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GRAYSHADE REPRESENTS EXISTING

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7. ALL ITEMS ARE INCIDENTAL TO TEMPORARY TRAFFIC SIGNALS FOR INTERSECTIONS.
8. COVER HEADS 6D AND 6E.

PHASING



PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	TEMPORARY SIGNAL - CTH K/OVERLOOK DR (STAGE 4)	SHEET 280	E

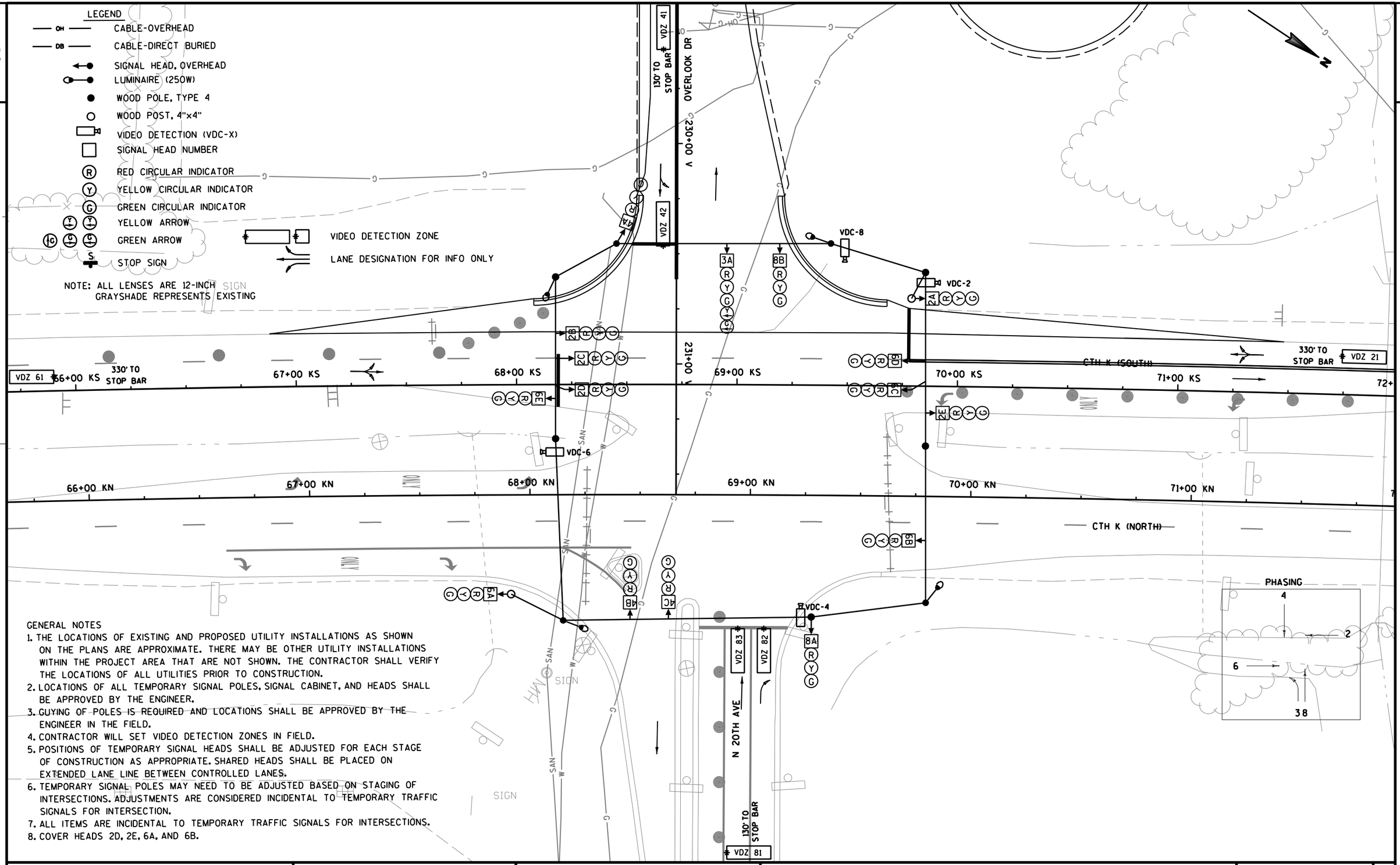
LEGEND

- CABLE-OVERHEAD
- CABLE-DIRECT BURIED
- SIGNAL HEAD, OVERHEAD
- LUMINAIRE (250W)
- WOOD POLE, TYPE 4
- WOOD POST, 4"x4"
- VIDEO DETECTION (VDC-X)
- SIGNAL HEAD NUMBER
- RED CIRCULAR INDICATOR
- YELLOW CIRCULAR INDICATOR
- GREEN CIRCULAR INDICATOR
- YELLOW ARROW
- GREEN ARROW
- STOP SIGN

VIDEO DETECTION ZONE

LANE DESIGNATION FOR INFO ONLY

NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING



PHASING

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7. ALL ITEMS ARE INCIDENTAL TO TEMPORARY TRAFFIC SIGNALS FOR INTERSECTIONS.
8. COVER HEADS 2D, 2E, 6A, AND 6B.

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	TEMPORARY SIGNAL - CTH K/OVERLOOK DR (STAGE 5A)	SHEET 281	E

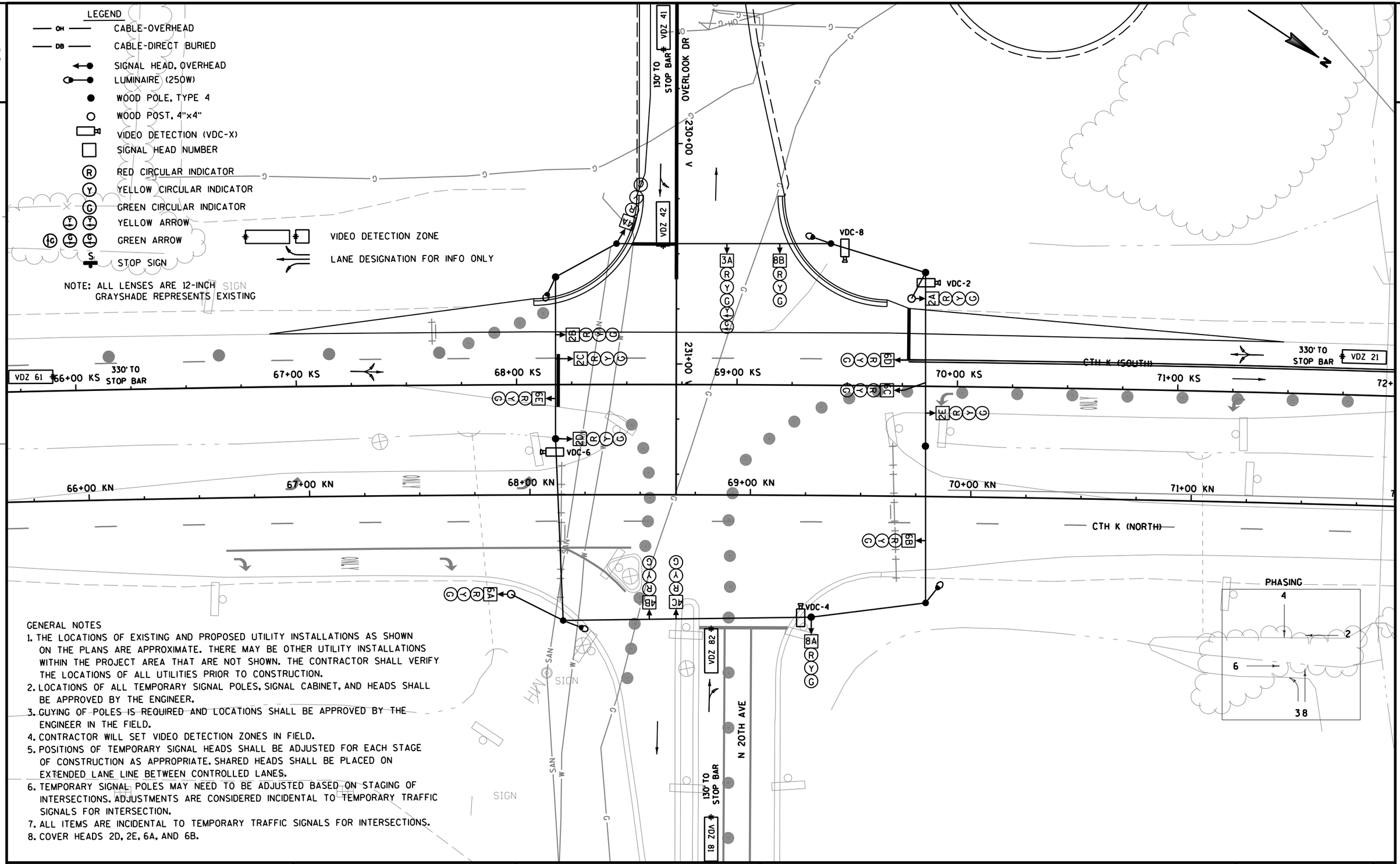
LEGEND

- CABLE-OVERHEAD
- CABLE-DIRECT BURIED
- SIGNAL HEAD, OVERHEAD
- LUMINAIRE (250W)
- WOOD POLE, TYPE 4
- WOOD POST, 4"x4"
- VIDEO DETECTION (VDC-X)
- SIGNAL HEAD NUMBER
- RED CIRCULAR INDICATOR
- YELLOW CIRCULAR INDICATOR
- GREEN CIRCULAR INDICATOR
- YELLOW ARROW
- GREEN ARROW
- STOP SIGN

VIDEO DETECTION ZONE

LANE DESIGNATION FOR INFO ONLY

NOTE: ALL LENSES ARE 12-INCH SIGN
GRAYSHADE REPRESENTS EXISTING



GENERAL NOTES

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7. ALL ITEMS ARE INCIDENTAL TO TEMPORARY TRAFFIC SIGNALS FOR INTERSECTIONS.
8. COVER HEADS 2D, 2E, 6A, AND 6B.

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	TEMPORARY SIGNAL - CTH K/OVERLOOK DR (STAGE 5A PHASE 1)	SHEET	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\024010_sp5aP1.dgn
PLOT DATE : 8/1/2012
PLOT BY : AYRES-EC
PLOT NAME :
PLOT SCALE : 1:40
WISDOT/CADDS SHEET 42

LEGEND

- CABLE-OVERHEAD
- CABLE-DIRECT BURIED
- SIGNAL HEAD, OVERHEAD
- LUMINAIRE (250W)
- WOOD POLE, TYPE 4
- WOOD POST, 4"x4"
- VIDEO DETECTION (VDC-X)
- SIGNAL HEAD NUMBER
- RED CIRCULAR INDICATOR
- YELLOW CIRCULAR INDICATOR
- GREEN CIRCULAR INDICATOR
- YELLOW ARROW
- GREEN ARROW
- STOP SIGN

VIDEO DETECTION ZONE

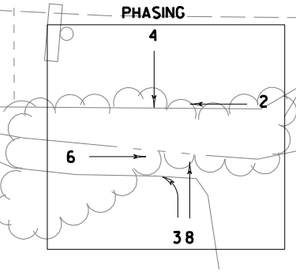
LANE DESIGNATION FOR INFO ONLY

NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING

GENERAL NOTES

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7. ALL ITEMS ARE INCIDENTAL TO TEMPORARY TRAFFIC SIGNALS FOR INTERSECTIONS.
8. COVER HEADS 2D, 2E, 6A, AND 6B.

PHASING



PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	TEMPORARY SIGNAL - CTH K/OVERLOOK DR (STAGE 5A PHASE 2)	SHEET 283	E

LEGEND

- CABLE-OVERHEAD (OH)
- CABLE-DIRECT BURIED (DB)
- SIGNAL HEAD, OVERHEAD
- LUMINAIRE (250W)
- WOOD POLE, TYPE 4
- WOOD POST, 4"x4"
- VIDEO DETECTION (VDC-X)
- SIGNAL HEAD NUMBER
- RED CIRCULAR INDICATOR
- YELLOW CIRCULAR INDICATOR
- GREEN CIRCULAR INDICATOR
- YELLOW ARROW
- GREEN ARROW
- STOP SIGN

VIDEO DETECTION ZONE

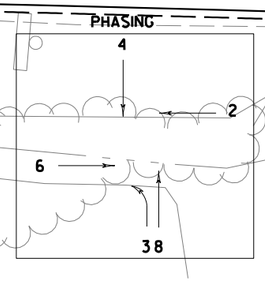
LANE DESIGNATION FOR INFO ONLY

NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING

GENERAL NOTES

1. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL UTILITIES PRIOR TO CONSTRUCTION.
2. LOCATIONS OF ALL TEMPORARY SIGNAL POLES, SIGNAL CABINET, AND HEADS SHALL BE APPROVED BY THE ENGINEER.
3. GUYING OF POLES IS REQUIRED AND LOCATIONS SHALL BE APPROVED BY THE ENGINEER IN THE FIELD.
4. CONTRACTOR WILL SET VIDEO DETECTION ZONES IN FIELD.
5. POSITIONS OF TEMPORARY SIGNAL HEADS SHALL BE ADJUSTED FOR EACH STAGE OF CONSTRUCTION AS APPROPRIATE. SHARED HEADS SHALL BE PLACED ON EXTENDED LANE LINE BETWEEN CONTROLLED LANES.
6. TEMPORARY SIGNAL POLES MAY NEED TO BE ADJUSTED BASED ON STAGING OF INTERSECTIONS. ADJUSTMENTS ARE CONSIDERED INCIDENTAL TO TEMPORARY TRAFFIC SIGNALS FOR INTERSECTION.
7. ALL ITEMS ARE INCIDENTAL TO TEMPORARY TRAFFIC SIGNALS FOR INTERSECTIONS.
8. COVER HEADS 2A, 2B, 6D, AND 6E.

PHASING



PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	TEMPORARY SIGNAL - CTH K/OVERLOOK DR (STAGES 5B-6C)	SHEET 284 E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\024010_sp5b.dgn PLOT DATE : 8/1/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42

LEGEND

- CABLE-OVERHEAD
- CABLE-DIRECT BURIED
- SIGNAL HEAD, OVERHEAD
- LUMINAIRE (250W)
- WOOD POLE, TYPE 4
- WOOD POST, 4"x4"
- VIDEO DETECTION (VDC-X)
- SIGNAL HEAD NUMBER
- RED CIRCULAR INDICATOR
- YELLOW CIRCULAR INDICATOR
- GREEN CIRCULAR INDICATOR
- YELLOW ARROW
- GREEN ARROW
- STOP SIGN

VIDEO DETECTION ZONE

LANE DESIGNATION FOR INFO ONLY

NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING

OVERLOOK DR

CTH K (SOUTH)

CTH K (NORTH)

N 20TH AVE

66+00 KS | 67+00 KS | 68+00 KS | 69+00 KS | 70+00 KS | 71+00 KS | 72+

66+00 KN | 67+00 KN | 68+00 KN | 69+00 KN | 70+00 KN | 71+00 KN

230+00 V

231+00 V

VDZ 41 — 130' TO STOP BAR

VDZ 42

VDZ 61 — 330' TO STOP BAR

VDZ 21 — 330' TO STOP BAR

VDZ 82

VDZ 81 — 130' TO STOP BAR

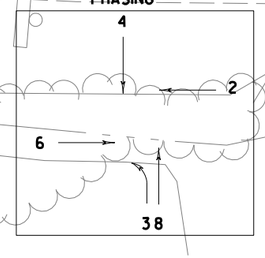
VDC-8

VDC-6

VDC-2

VDC-4

PHASING



GENERAL NOTES

1. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL UTILITIES PRIOR TO CONSTRUCTION.
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6. TEMPORARY SIGNAL POLES MAY NEED TO BE ADJUSTED BASED ON STAGING OF INTERSECTIONS. ADJUSTMENTS ARE CONSIDERED INCIDENTAL TO TEMPORARY TRAFFIC SIGNALS FOR INTERSECTION.
7. ALL ITEMS ARE INCIDENTAL TO TEMPORARY TRAFFIC SIGNALS FOR INTERSECTIONS.
8. COVER HEADS 2A, 2B, 6D, AND 6E.

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	TEMPORARY SIGNAL - CTH K/OVERLOOK DR (STAGE 5B PHASE 1)	SHEET 285	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\024010_sp5bP1.dgn | PLOT DATE : 8/1/2012 | PLOT BY : AYRES-EC | PLOT NAME : | PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42

LEGEND

- CABLE-OVERHEAD (OH)
- CABLE-DIRECT BURIED (DB)
- SIGNAL HEAD, OVERHEAD
- LUMINAIRE (250W)
- WOOD POLE, TYPE 4
- WOOD POST, 4"x4"
- VIDEO DETECTION (VDC-X)
- SIGNAL HEAD NUMBER
- RED CIRCULAR INDICATOR
- YELLOW CIRCULAR INDICATOR
- GREEN CIRCULAR INDICATOR
- YELLOW ARROW
- GREEN ARROW
- STOP SIGN

VIDEO DETECTION ZONE

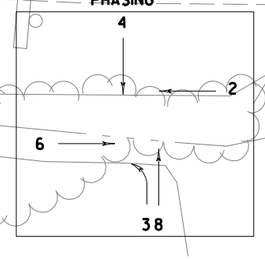
LANE DESIGNATION FOR INFO ONLY

NOTE: ALL LENSES ARE 12-INCH SIGN
GRAYSHADE REPRESENTS EXISTING

GENERAL NOTES

1. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL UTILITIES PRIOR TO CONSTRUCTION.
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7. ALL ITEMS ARE INCIDENTAL TO TEMPORARY TRAFFIC SIGNALS FOR INTERSECTIONS.
8. COVER HEADS 2A, 2B, 6D, AND 6E.

PHASING



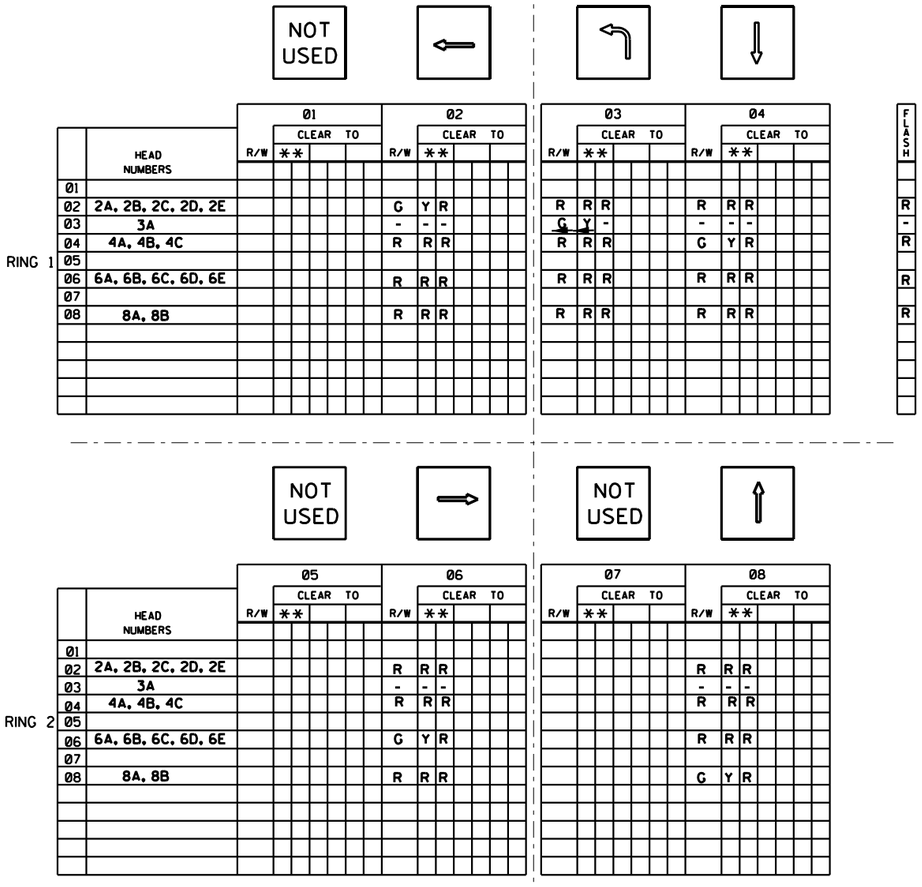
PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	TEMPORARY SIGNAL - CTH K/OVERLOOK DR (STAGE 5B PHASE 2)	SHEET	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\024010_sp5bP2.dgn PLOT DATE : 8/1/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42

2

SEQUENCE OF OPERATION



** CLEARANCE TO A PHASE IN CONFLICT WITH THIS PHASE ON (SEE CHART 1 BELOW)

* WHEN CALLED, TIMED STEADY WALK, FOLLOWED BY FLASHING DON'T WALK WITH PED COUNTDOWN TIMER ACTIVATED, THEN STEADY DON'T WALK.

CHART 1

PHASE ON	NONCONFLICTING PHASE ALLOWED TO TIME CONCURRENTLY	PHASES IN CONFLICT WITH PHASE ON
1		
2	6	3,4,8
3	8	2,4,6
4	8	2,3,6
5		
6	2	3,4,8
7		
8	3 OR 4	2,6

DETECTOR LOGIC

VIDEO DETECTION ZONE	AMPLIFIER CHANNEL NUMBER	DETECTOR OPERATION: CALLS AND EXTENDS	DETECTOR OPERATION: CALLS ONLY	DETECTOR OPERATION: EXTENDS ONLY	PHASE CALLED	PHASE EXTENDED	DETECTOR DISCONNECT PHASE	CALLING DELAY	EXTENSION STRETCH
21	1			X	2	2			
31	2	X			3	3			
41	3	X			4	4			
42	4			X	4	4			
61	5	X			6	6			
81	6	X			8	8			
82	7	X			8	8		X	
83	7	X			8	8			

TYPE OF INTERCONNECT COMMUNICATION	
NONE	X
CLOSED LOOP TWISTED PAIR*	
CLOSED LOOP FIBER OPTIC*	
GPS- TIME BASE SYSTEM	
*LOCATION OF MASTER CONTROLLER NO:	S-
SIGNAL SYSTEM *:	SS- -

TYPE OF LIGHTING	
BY OTHER AGENCY	
IN TRAFFIC SIGNAL CABINET	X
IN SEPARATE LIGHTING CABINET	

CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY W / Ø	PHASE RECALL	PHASE ACTIVE
1				
2	x	6	MIN.	x
3		8		x
4		8		x
5				
6	x	2	MIN.	x
7				
8		4		x

OVERLAPS

O.L. "A" =
O.L. "B" =
O.L. "C" =
O.L. "D" =

TYPE OF PRE-EMPT	
NONE	X
RAILROAD	
EMERGENCY VEHICLE	
3M	
TOMAR	
HARDWIRE	
OTHER (FUTURE)	
LIFT BRIDGE	
QUEUE DETECTOR	

GENERAL NOTES:

1. ANY ACTUATED PHASE WHICH THERE IS NO CALL SHALL BE SKIPPED.
2. WHEN ONE PHASE IS ON ALONE, ANY NONCONFLICTING PHASE MAY START TIMING CONCURRENTLY WITHOUT A CLEARANCE INTERVAL (SEE CHART 1 AT LEFT).
3. IF ANY OPPOSING THRU PHASES ARE TIMING CONCURRENTLY, THEY SHALL TERMINATE TOGETHER DUE TO PERMISSIVE LEFT TURN CONFLICT.
4. PROVIDE HAND CONTROL.

2

CTH K - Overlook Dr

Parameter	Phases							
	1	2	3	4	5	6	7	8
Min Green	0	10	2	8	0	10	0	12
Yellow	0	4.5	3.5	3.5	0	4.5	0	3.5
All Red	0	2	0.5	3.5	0	1.5	0	3.5
Max 1	0	46	15	45	0	46	0	45
Max 2	0	45	10	45	0	45	0	45
TBR	0	25	0	20	0	25	0	20
TTR	0	10	0	10	0	10	0	10
Min Gap	0	2	0	2	0	2	0	2
Coord Phases	---	X	---	---	---	X	---	---
Cycle 1 - Stage 2A, 2B (6:30 AM - 11:30 AM); M-F (5 Days)								
Cycle length	70 seconds							
Split 1	0	39	8	23	0	39	0	31
Offset 1	42 seconds (2A)							
Offset 2	2 seconds (2B)							
Cycle 2 - Stage 2A, 2B (11:30 AM - 6:30 PM); M-F (5 Days)								
Cycle length	70 seconds							
Split 1	0	37	10	23	0	37	0	33
Offset 1	48 seconds (2A)							
Offset 2	69 seconds (2B)							
Cycle 3 - Stage 4-6C (6:30 AM - 11:30 AM); M-F (5 Days)								
Cycle length	60 seconds							
Split 1	0	38	0	22	0	38	0	22
Offset 1	---							
Cycle 4 - Stage 4-6B (11:30 AM - 6:30 PM); M-F (5 Days)								
Cycle length	60 seconds							
Split 1	0	20	0	40	0	20	0	40
Offset 1	---							
Cycle 5 - Stage 6C (11:30 AM - 6:30 PM); M-F (5 Days)								
Cycle length	90 seconds							
Split 1	0	26	0	64	0	26	0	64
Offset 1	---							
FREE OPERATION: 6:30 PM to 6:30 AM, M-F (5 Days); All Day Saturday & Sunday								

TIMINGS PROVIDED MAY NEED ADJUSTMENT IN FIELD BASED ON TRAFFIC.

REVISION:
DATE:

LEGEND

- CABLE-OVERHEAD
- CABLE-DIRECT BURIED
- SIGNAL HEAD, OVERHEAD
- LUMINAIRE (250W)
- WOOD POLE, TYPE 4
- WOOD POST, 4"x4"
- VIDEO DETECTION (VDC-X)
- SIGNAL HEAD NUMBER
- RED CIRCULAR INDICATOR
- YELLOW CIRCULAR INDICATOR
- GREEN CIRCULAR INDICATOR
- YELLOW ARROW
- GREEN ARROW
- STOP SIGN
- LANE DESIGNATION FOR INFO ONLY
- VIDEO DETECTION ZONE

NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING

N

OVERLOOK DR

130' TO STOP BAR VDZ 81

VDZ 82

VDZ 83

201+00 V

200+00 V

VDC-4

VDC-6

VDC-2

VDC-8

22+00 U

23+00 U

24+00 U

25+00

26+00 U

27+00 U

CTH U

255' TO STOP BAR VDZ 21

255' TO STOP BAR VDZ 61

205' TO STOP BAR VDZ 41

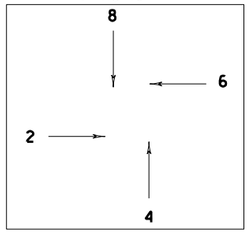
VDZ 42

VDZ 43

WESTWOOD DR

ONLY

PHASING



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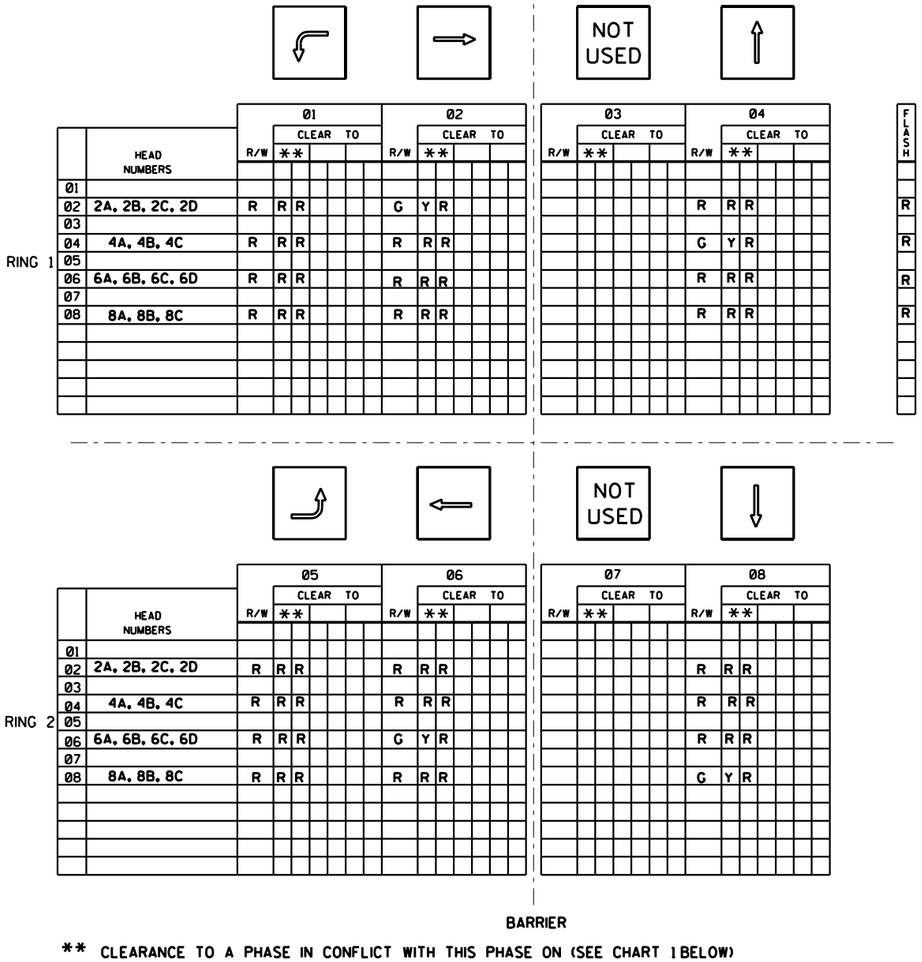
PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	TEMPORARY SIGNALS - CTH U/OVERLOOK DR (STAGES 4 - 6C)	SHEET	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\024013_sp4.dgn PLOT DATE : 8/1/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42

2

SEQUENCE OF OPERATION



** CLEARANCE TO A PHASE IN CONFLICT WITH THIS PHASE ON (SEE CHART 1 BELOW)

* WHEN CALLED, TIMED STEADY WALK, FOLLOWED BY FLASHING DON'T WALK WITH PED COUNTDOWN TIMER ACTIVATED, THEN STEADY DON'T WALK.

CHART 1

PHASE ON	NONCONFLICTING PHASE ALLOWED TO TIME CONCURRENTLY	PHASES IN CONFLICT WITH PHASE ON
1		
2	6	4,8
3		
4	8	2,6
5		
6	2	4,8
7		
8	4	2,6

DETECTOR LOGIC

VIDEO DETECTION ZONE	AMPLIFIER CHANNEL NUMBER	DETECTOR OPERATION			PHASE CALLED	PHASE EXTENDED	DETECTOR DISCONNECT PHASE	CALLING DELAY	EXTENSION STRETCH
		CALLS AND EXTENDS	CALLS ONLY	EXTENDS ONLY					
21	1	X			2	2			
41	2			X	4	4			X
42	3	X			4	4			
43	3	X			4	4		X	
61	4	X			6	6			
81	5			X	8	8			X
82	6	X			8	8			
83	6	X			8	8		X	

CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY W / Ø	PHASE RECALL	PHASE ACTIVE
1				
2	x	6	MIN.	x
3				
4		8		x
5				
6	x	2	MIN.	x
7				
8		4		x

OVERLAPS

O.L. "A" =
O.L. "B" =
O.L. "C" =
O.L. "D" =

TYPE OF PRE-EMPT	
NONE	X
RAILROAD	
EMERGENCY VEHICLE	
3M	
TOMAR	
HARDWIRE	
OTHER (FUTURE)	
LIFT BRIDGE	
QUEUE DETECTOR	

TYPE OF INTERCONNECT COMMUNICATION	
NONE	X
CLOSED LOOP TWISTED PAIR*	
CLOSED LOOP FIBER OPTIC*	
GPS- TIME BASE SYSTEM	
*LOCATION OF MASTER CONTROLLER NO: S-	
SIGNAL SYSTEM *: SS- -	

TYPE OF LIGHTING	
BY OTHER AGENCY	
IN TRAFFIC SIGNAL CABINET	X
IN SEPARATE LIGHTING CABINET	

GENERAL NOTES:

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4. PROVIDE HAND CONTROL.

2

CTH U & WESTWOOD/OVERLOOK

Parameter	Phases							
	1	2	3	4	5	6	7	8
Min Green	4	8	2	6	2	8	0	6
Yellow	3.6	4.5	3.2	4.0	3.6	4.0	3.6	3.5
All Red	3.5	1.5	3.2	2.5	2.6	2.5	3.5	2.5
Max 1	0	46	0	45	0	46	0	45
Max 2	0	45	0	45	0	45	0	45
TBR	0	25	0	20	0	25	0	20
TTR	0	10	0	10	0	10	0	10
Min Gap	0	3	0	2	0	3	0	2
Passage	0	5	0	2	0	5	0	2
Ext Stretch	0	0	0	2	0	0	0	1
Coord Phases	---	X	---	---	---	X	---	---
Cycle 1 - Stage 4-6C (6:30 AM - 11:30 AM); M-F (5 Days)								
Cycle length	120 seconds							
Split 1	0	34	0	20	0	34	0	66
Offset 1	0 seconds							
Cycle 2 - Stage 4-6C (11:30 AM - 6:30 PM); M-F (5 Days)								
Cycle length	70 seconds							
Split 1	0	20	0	20	0	40	0	30
Offset 1	0 seconds							
FREE OPERATION: 6:30 PM to 6:30 AM, M-F (5 Days); All Day Saturday & Sunday								

TIMINGS PROVIDED MAY NEED ADJUSTMENT IN FIELD BASED ON TRAFFIC.

REVISION:
DATE:

GENERAL NOTES

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PHASING

2
6
8 OLA

LEGEND

- CABLE-OVERHEAD
- CABLE-DIRECT BURIED
- SIGNAL HEAD, OVERHEAD
- LUMINAIRE (250W)
- WOOD POLE, TYPE 4
- WOOD POST, 4"x4"
- VIDEO DETECTION (VDC-X)
- SIGNAL HEAD NUMBER
- RED CIRCULAR INDICATOR
- YELLOW CIRCULAR INDICATOR
- GREEN CIRCULAR INDICATOR
- YELLOW ARROW
- GREEN ARROW
- STOP SIGN
- LANE DESIGNATION FOR INFO ONLY
- VIDEO DETECTION ZONE

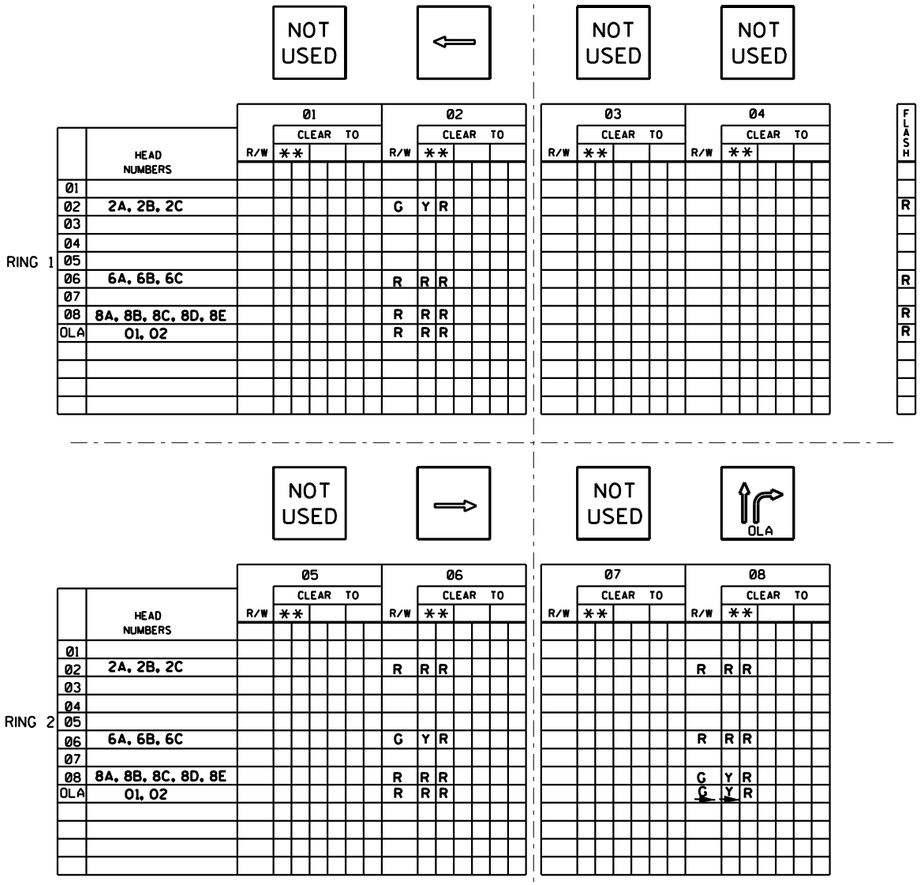
NOTE: ALL LENSES ARE 12-INCH
GRAYSHADE REPRESENTS EXISTING

PROJECT NO: 1170-01-70/6999-18-70	HWY: USH 51	COUNTY: MARATHON	TEMPORARY SIGNALS - CTH U/E RAMP TERMINAL (STAGE 4-6C)	SHEET E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\024016_sp4.dgn PLOT DATE : 8/1/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:40
WISDOT/CADDS SHEET 42

2

SEQUENCE OF OPERATION



** CLEARANCE TO A PHASE IN CONFLICT WITH THIS PHASE ON (SEE CHART 1 BELOW)

* WHEN CALLED, TIMED STEADY WALK, FOLLOWED BY FLASHING DON'T WALK WITH PED COUNTDOWN TIMER ACTIVATED, THEN STEADY DON'T WALK.

CHART 1

PHASE ON	NONCONFLICTING PHASE ALLOWED TO TIME CONCURRENTLY	PHASES IN CONFLICT WITH PHASE ON
1		
2	6	8
3		
4		
5		
6	2	8
7		
8		1,2

DETECTOR LOGIC

VIDEO DETECTION ZONE	AMPLIFIER CHANNEL NUMBER	DETECTOR OPERATION			PHASE CALLED	PHASE EXTENDED	DETECTOR DISCONNECT PHASE	CALLING DELAY	EXTENSION STRETCH
		CALLS AND EXTENDS	CALLS ONLY	EXTENDS ONLY					
21	1	X			2	2			
61	2	X			6	6			
81	3			X	8	8			X
82	4	X			8	8			
01	5	X			OLA	OLA		X	

CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY W / Ø	PHASE RECALL	PHASE ACTIVE
1				
2	x	6	MIN.	x
3				
4				
5				
6	x	2	MIN.	x
7				
8				x

OVERLAPS

O.L. "A" = Ø8
O.L. "B" =
O.L. "C" =
O.L. "D" =

TYPE OF PRE-EMPT	
NONE	X
RAILROAD	
EMERGENCY VEHICLE	
3M	
TOMAR	
HARDWIRE	
OTHER (FUTURE)	
LIFT BRIDGE	
QUEUE DETECTOR	

TYPE OF INTERCONNECT COMMUNICATION	
NONE	X
CLOSED LOOP TWISTED PAIR*	
CLOSED LOOP FIBER OPTIC*	
GPS- TIME BASE SYSTEM	
*LOCATION OF MASTER CONTROLLER NO:	S-
SIGNAL SYSTEM *:	SS- -

TYPE OF LIGHTING	
BY OTHER AGENCY	
IN TRAFFIC SIGNAL CABINET	X
IN SEPARATE LIGHTING CABINET	

GENERAL NOTES:

1. ANY ACTUATED PHASE WHICH THERE IS NO CALL SHALL BE SKIPPED.
2. WHEN ONE PHASE IS ON ALONE, ANY NONCONFLICTING PHASE MAY START TIMING CONCURRENTLY WITHOUT A CLEARANCE INTERVAL (SEE CHART 1 AT LEFT).
3. IF ANY OPPOSING THRU PHASES ARE TIMING CONCURRENTLY, THEY SHALL TERMINATE TOGETHER DUE TO PERMISSIVE LEFT TURN CONFLICT.
4. PROVIDE HAND CONTROL.

2

CTH U & NB USH 51

Parameter	Phases							
	1	2	3	4	5	6	7	8
Min Green	0	15	0	15	0	21	0	8
Yellow	0	4.0	0	4.0	0	4.0	0	4.0
All Red	0	2.0	0	2.0	0	1.5	0	2.0
Max 1	0	46	0	45	0	46	0	45
Max 2	0	45	0	45	0	45	0	45
TBR	0	25	0	20	0	25	0	20
TTR	0	10	0	10	0	10	0	10
Min Gap	0	3	0	2	0	3	0	2
Passage	0	5	0	2	0	5	0	2
Ext Stretch	0	0	0	2	0	0	0	2
Coord Phases	---	X	---	---	---	X	---	---
Cycle 1 - Stage 4-6C (6:30 AM - 11:30 AM); M-F (5 Days)								
Cycle length	60 seconds							
Split 1	0	28	0	32	0	28	0	32
Offset 1	0 seconds							
Cycle 2 - Stage 4-6C (11:30 AM - 6:30 PM); M-F (5 Days)								
Cycle length	60 seconds							
Split 1	0	35	0	25	0	35	0	25
Offset 1	0 seconds							
FREE OPERATION: 6:30 PM to 6:30 AM, M-F (5 Days); All Day Saturday & Sunday								

TIMINGS PROVIDED MAY NEED ADJUSTMENT IN FIELD BASED ON TRAFFIC.

REVISION:	
DATE:	

2

BUS 51/CTH K & CAMPUS DR

Parameter	Phases							
	1	2	3	4	5	6	7	8
Min Green	6	12	4	8	4	12	0	8
Yellow	3	4.5	3.2	3	3	4.5	0	3
All Red	2.5	1.5	2.8	3	2.5	1.5	0	3
Max 1	15	35	35	20	40	35	0	20
Max 2	15	35	35	20	40	35	0	20
TBR	99	99	99	99	99	99	99	99
TTR	99	99	99	99	99	99	99	99
Min Gap	1.5	2.5	2	2	2	2.5	0	2
Coord Phases	---	X	---	---	---	X	---	---
Cycle 1 - Stage 1, 2A, 2B (6:30 AM - 11:30 AM); M-F (5 Days)								
Cycle length	70 seconds							
Split 1	17	21	11	21	11	27	0	32
Offset 1	17 seconds (1)							
Offset 2	12 seconds (2A)							
Offset 3	18 seconds (2B)							
Cycle 2 - Stage 1, 2A, 2B, 4-6C (11:30 AM - 6:30 PM); M-F (5 Days)								
Cycle length	70 seconds							
Split 1	17	21	11	21	11	27	0	32
Offset 1	16 seconds (1, 2B, 4-6C)							
Offset 1	4 seconds (2A)							
Cycle 3 - Stage 4-6C (6:30 AM - 11:30 AM); M-F (5 Days)								
Cycle length	70 seconds							
Split 1	18	20	11	21	14	24	0	32
Offset 1	18 seconds (4-6C)							
FREE OPERATION: 6:30 PM to 6:30 AM, M-F (5 Days); All Day Saturday & Sunday								

WEST CAMPUS DRIVE/14TH AVENUE

Parameter	Phases							
	1	2	3	4	5	6	7	8
Min Green	8	12	8	10	8	12	8	10
Yellow	3	3.2	3	3	3	3.2	3	3
All Red	2	2.8	3	3	2	2.8	1.5	3
Max 1	25	30	30	20	15	30	15	20
Max 2	25	30	30	20	15	30	15	20
TBR	99	99	99	99	99	99	99	99
TTR	99	99	99	99	99	99	99	99
Min Gap	2.5	2.5	2.5	2	1.5	2.5	1.5	2
Coord Phases	---	X	---	---	---	X	---	---
Cycle 1 - Stage 1, 2A, 2B, 4-6C (6:30 AM - 11:30 AM); M-F (5 Days)								
Cycle length	70 seconds							
Split 1	0	29	0	41	0	29	0	41
Offset 1	14 seconds (1)							
Offset 2	47 seconds (2A)							
Offset 3	40 seconds (2B)							
Offset 4	0 seconds (4-6C)							
Cycle 2 - Stage 1, 2A, 2B, 4-6C (11:30 AM - 6:30 PM); M-F (5 Days)								
Cycle length	70 seconds							
Split 1	0	26	0	44	0	26	0	44
Offset 1	49 seconds (1)							
Offset 2	68 seconds (2A)							
Offset 3	54 seconds (2B)							
Offset 4	0 seconds (4-6C)							
FREE OPERATION: 6:30 PM to 6:30 AM, M-F (5 Days); All Day Saturday & Sunday								

2

TIMINGS PROVIDED MAY NEED ADJUSTMENT IN FIELD BASED ON TRAFFIC.

REVISION:

DATE:

BUS 51 & CTH U-MERRILL/COLLEGE

Parameter	Phases							
	1	2	3	4	5	6	7	8
Min Green	2	8	1	6	1	8	5	6
Yellow	3.6	3.6	3	3	3.6	3.6	3	3
All Red	2.3	3.5	2.9	3.9	3	2.3	3.9	3.9
Max 1	0	46	15	45	0	46	0	45
Max 2	0	45	10	45	0	45	0	45
TBR	0	25	0	20	0	25	0	20
TTR	0	10	0	10	0	10	0	10
Min Gap	0	2	0	2	0	2	0	2
Coord Phases	---	X	---	---	---	X	---	---
Cycle 1 - Stage 3 (6:30 AM - 11:30 AM); M-F (5 Days)								
Cycle length	70 seconds							
Split 1	14	25	0	31	0	39	0	31
Offset 1	5 seconds							
Cycle 2 - Stage 3 (11:30 AM - 6:30 PM); M-F (5 Days)								
Cycle length	70 seconds							
Split 1	13	22	0	35	0	35	0	35
Offset 1	2 seconds							
Cycle 3 - Stage 4-6C (6:30 AM - 11:30 AM); M-F (5 Days)								
Cycle length	70 seconds							
Split 1	9	21	8	32	8	22	20	20
Offset 1	23 seconds (4-6B)							
Offset 2	20 seconds (6C)							
Cycle 4 - Stage 4-6C (11:30 AM - 6:30 PM); M-F (5 Days)								
Cycle length	70 seconds							
Split 1	10	21	11	28	8	25	22	15
Offset 1	23 seconds (4-6C)							
FREE OPERATION: 6:30 PM to 6:30 AM, M-F (5 Days); All Day Saturday & Sunday								

BUS 51/MERRILL AVE & RANDOLPH

Parameter	Phases							
	1	2	3	4	5	6	7	8
Min Green	10	10	10	10	10	10	10	10
Passage	4.0	2.5	4.0	2.5	4.0	2.5	4.0	2.5
Yellow	4	4	4	4	4	4	4	4
All Red	1	2	1	2	1	2.0	1	2
Max 1	0	20	0	0	0	20	0	0
Max 2	0	45	10	45	0	45	0	45
TBR	0	0	0	0	0	0	0	0
TTR	0	0	0	0	0	0	0	0
Min Gap	0	0	0	0	0	0	0	0
Coord Phases	---	X	---	---	---	X	---	---
Cycle 1 - Stage 3, 4-6C (6:30 AM - 11:30 AM); M-F (5 Days)								
Cycle length	70 seconds							
Split 1	0	43	0	27	0	43	0	27
Offset 1	39 seconds (3)							
Offset 2	10 seconds (4-6C)							
Cycle 2 - Stage 3, 4-6C (11:30 AM - 6:30 PM); M-F (5 Days)								
Cycle length	70 seconds							
Split 1	0	25	0	45	0	25	0	45
Offset 1	35 seconds (3)							
Offset 2	56 seconds (4-6C)							
FREE OPERATION: 6:30 PM to 6:30 AM, M-F (5 Days); All Day Saturday & Sunday								

2

TIMINGS PROVIDED MAY NEED ADJUSTMENT IN FIELD BASED ON TRAFFIC.

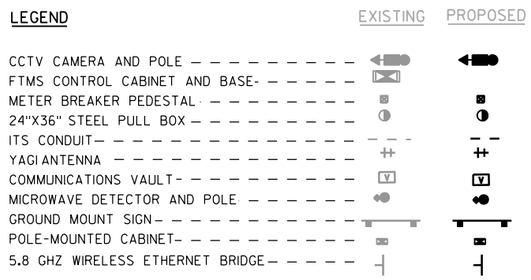
REVISION:
DATE:

2

FTMS STANDARD ABBREVIATIONS

CCTV	CLOSED CIRCUIT TELEVISION SITE
CB	CONTROLLER CABINET
PB	PULL BOX
MH	MANHOLE
V	COMMUNICATIONS VAULT
MD	MICROWAVE DETECTOR
F.O.C.	FIBER OPTIC CABLE
S-F	STATE-FURNISHED
DMS	DYNAMIC MESSAGE SIGN
MB	METER BREAKER
EX	EXISTING
CT	COMMUNICATIONS TOWER

LEGEND



FTMS GENERAL NOTES

THESE PLANS AND THE ASSOCIATED SPECIAL PROVISIONS REFLECT CONDITIONS KNOWN DURING THE DEVELOPMENT OF THE PLANS AND TECHNICAL SPECIAL PROVISIONS. ALL SCALES, DIMENSIONS AND LOCATIONS SHOWN IN THESE PLANS ARE APPROXIMATE. ACTUAL PHYSICAL FIELD CONDITIONS SHALL PROVIDE THE BASIS FOR THE APPLICATION OF WORK SHOWN IN THE PLANS. THE CONTRACTOR IS FULLY RESPONSIBLE FOR THE APPLICATION OF ALL WORK SHOWN IN THE PLANS TO THE ACTUAL PHYSICAL FIELD CONDITIONS TO PROVIDE A COMPLETE AND ACCEPTED PROJECT. IN THE EVENT THAT ACTUAL PHYSICAL FIELD CONDITIONS AFFECT OR PREVENT THE APPLICATION OR PROGRESSION OF ANY WORK SHOWN IN THE PLANS OR TECHNICAL SPECIAL PROVISIONS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY, AND PRIOR TO ANY FURTHER WORK ACTIVITY. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER OF ANY LOCATION CHANGES OTHER THAN MINOR ADJUSTMENTS.

BE AWARE THAT ALL EXISTING UNDERGROUND AND ABOVE GROUND STRUCTURES AND FACILITIES WITHIN THE SCOPE OF THIS PROJECT MAY NOT BE LOCATED IN THE PLANS. THE CONTRACTOR IS FULLY RESPONSIBLE FOR LOCATING AND AVOIDING ALL UNDERGROUND AND ABOVE GROUND STRUCTURES AND FACILITIES.

BE AWARE THAT NO TEST BORINGS WERE MADE WHERE CONDUITS, PULLBOXES, POLES, CABINET FOUNDATIONS, OR OTHER EQUIPMENT IS TO BE INSTALLED. THE CONTRACTOR IS FULLY RESPONSIBLE FOR EXAMINING THE JOB SITE CONDITIONS BEFORE SUBMITTING BID PROPOSALS.

NO TREES (AND/OR SHRUBS) ARE TO BE REMOVED WITHOUT APPROVAL OF THE ENGINEER.

AREAS WITHIN THE RIGHT-OF-WAY DISTURBED SPECIFICALLY FOR FTMS CONSTRUCTION ARE TO BE RESTORED TO THE ORIGINAL CONDITION WITH TOPSOIL, FERTILIZER AND SEED, AND MULCH. RESTORATION FOR AREAS DISTURBED FOR OTHER CONSTRUCTION OPERATIONS BUT ALSO CONTAINING FTMS CONSTRUCTION WILL BE DONE ACCORDING TO REQUIREMENTS AND PAYMENT PROVISIONS FOR THE OTHER CONSTRUCTION OPERATIONS. NO PAYMENT WILL BE MADE FOR RESTORING AREAS DISTURBED FOR FTMS CONSTRUCTION OPERATIONS.

THE LOCATION OF EXISTING AND PROPOSED UTILITY INSTALLATIONS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.

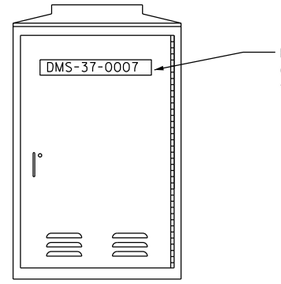
BE ADVISED THAT DUE TO RAMP, LANE, AND SHOULDER CLOSURE RESTRICTIONS, AND WORK UNDER OTHER CONTRACTS, SOME WORK MAY BE REQUIRED TO BE PERFORMED AT NIGHT.

THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING RAMP, LANE, SHOULDER, AND ROADWAY CLOSURES WITH OTHER CONTRACTS IN THE AREA.

CONTACT THE WISDOT STATEWIDE TRAFFIC OPERATIONS CENTER AT (414) 227-2166 FIVE (5) WORKING DAYS PRIOR TO ENTERING ANY EXISTING WISDOT FTMS OR ITS CABINET.

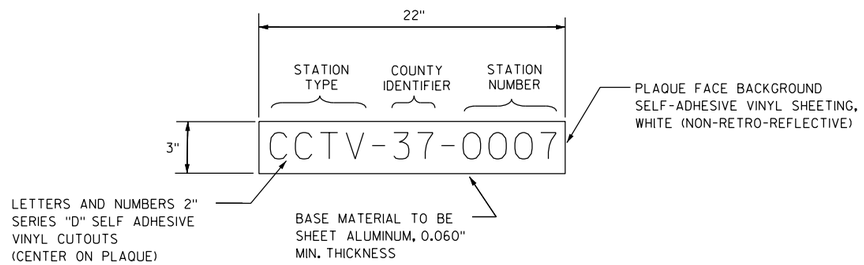
HAND DIG TRENCHES CROSSING EXISTING CONDUIT CONTAINING FIBER OPTIC CABLE.

VISUALLY VERIFY DEPTHS OF EXISTING CONDUITS CONTAINING FIBER OPTIC CABLE PRIOR TO CROSSING BY DIRECTIONAL BORE OR SPECIAL METHOD.



CONTROL CABINET IDENTIFICATION PLAQUE REQUIREMENTS AND PLACEMENTS

(TYPICAL ALL CONTROL CABINETS)



CONTROL CABINET IDENTIFICATION PLAQUE DETAIL

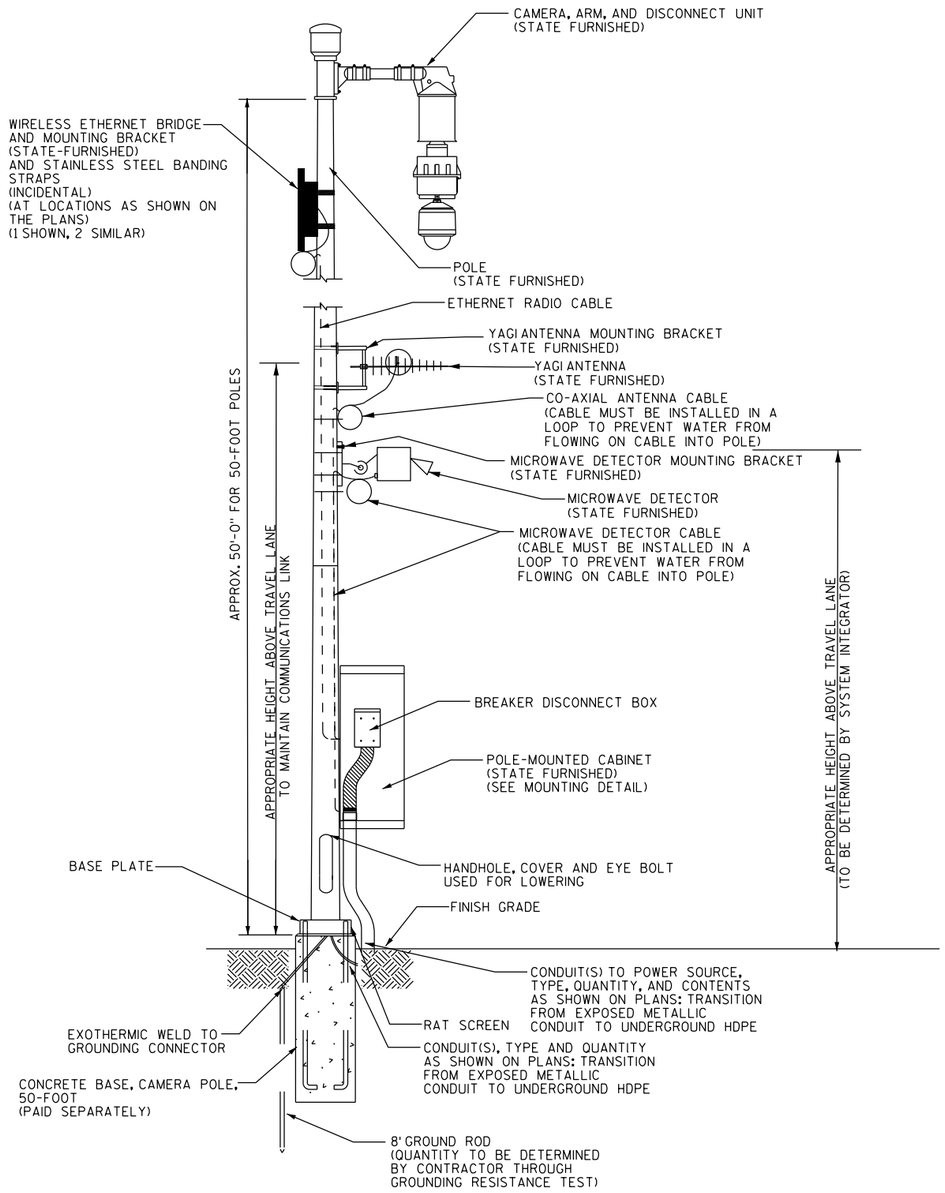
POLE IDENTIFICATION PLAQUE DETAIL

LEGEND STATION TYPE

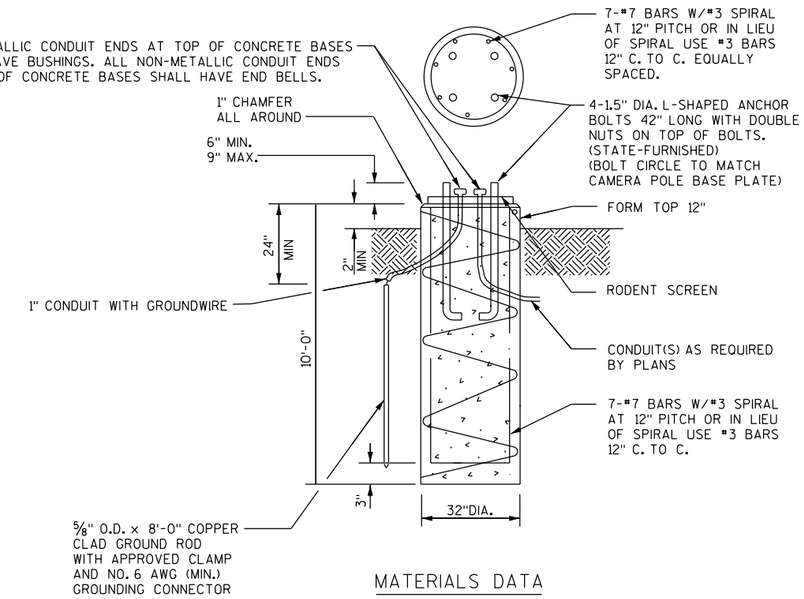
RM - RAMP METER
CCTV - CLOSED CIRCUIT TELEVISION
ATR - AUTOMATIC TRAFFIC RECORDER
SDS - SYSTEM DETECTOR STATION
MD - MICROWAVE DETECTOR

NOTES

1) TWO PLAQUES PER CABINET REQUIRED ON CONTROL CABINET.
2) FASTEN ONE PLAQUE ON FRONT DOOR, UPPER HALF.
3) FASTEN ONE PLAQUE ON SIDE FACING LOCAL STREET. IF NO LOCAL STREET NEARBY, OR IF SUCH LOCATION COINCIDES WITH LOCATION OF PLAQUE IN NOTE 2, FASTEN PLAQUE ON REAR OF CABINET, UPPER HALF.
4) COUNTY NUMBER NOT REQUIRED ON RAMP METER CABINETS.



CAMERA POLE WITH CAMERA LOWERING HARDWARE

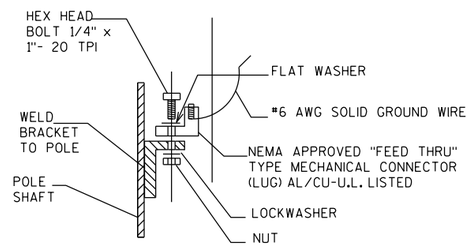


MATERIALS DATA

CONCRETE	f'c=3,500 psi
HIGH STRENGTH BAR STEEL REINFORCEMENT	fy = 60,000 psi

CONCRETE BASE, 50' CAMERA POLE

NOT TO SCALE



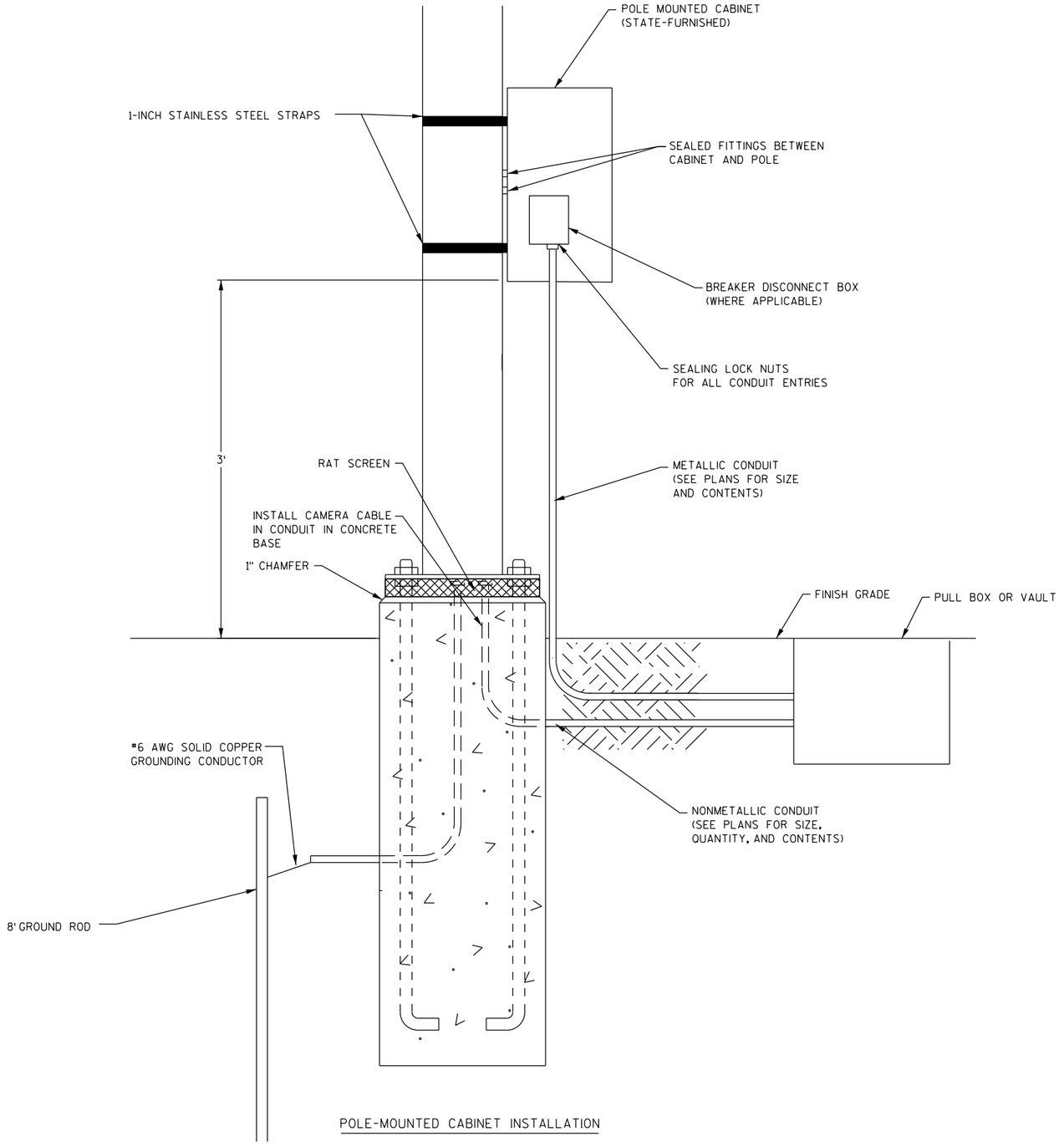
FIELD INSTALLED GROUNDING LUG

NOTES

1) ALL HARDWARE AND FASTENERS SHALL BE STAINLESS STEEL
2) POLE DRAWINGS SHOWN FOR BIDDING INFORMATION PURPOSES ONLY. POLES WILL BE STATE FURNISHED. BASE TO BE CONTRACTOR DESIGNED.
3) CONTRACTOR SHALL CONFIRM BOLT PATTERN OF CAMERA POLE PRIOR TO CONSTRUCTION OF CONCRETE BASE.
4) CONTRACTOR SHALL INSTALL GROUNDING LUG AS SHOWN

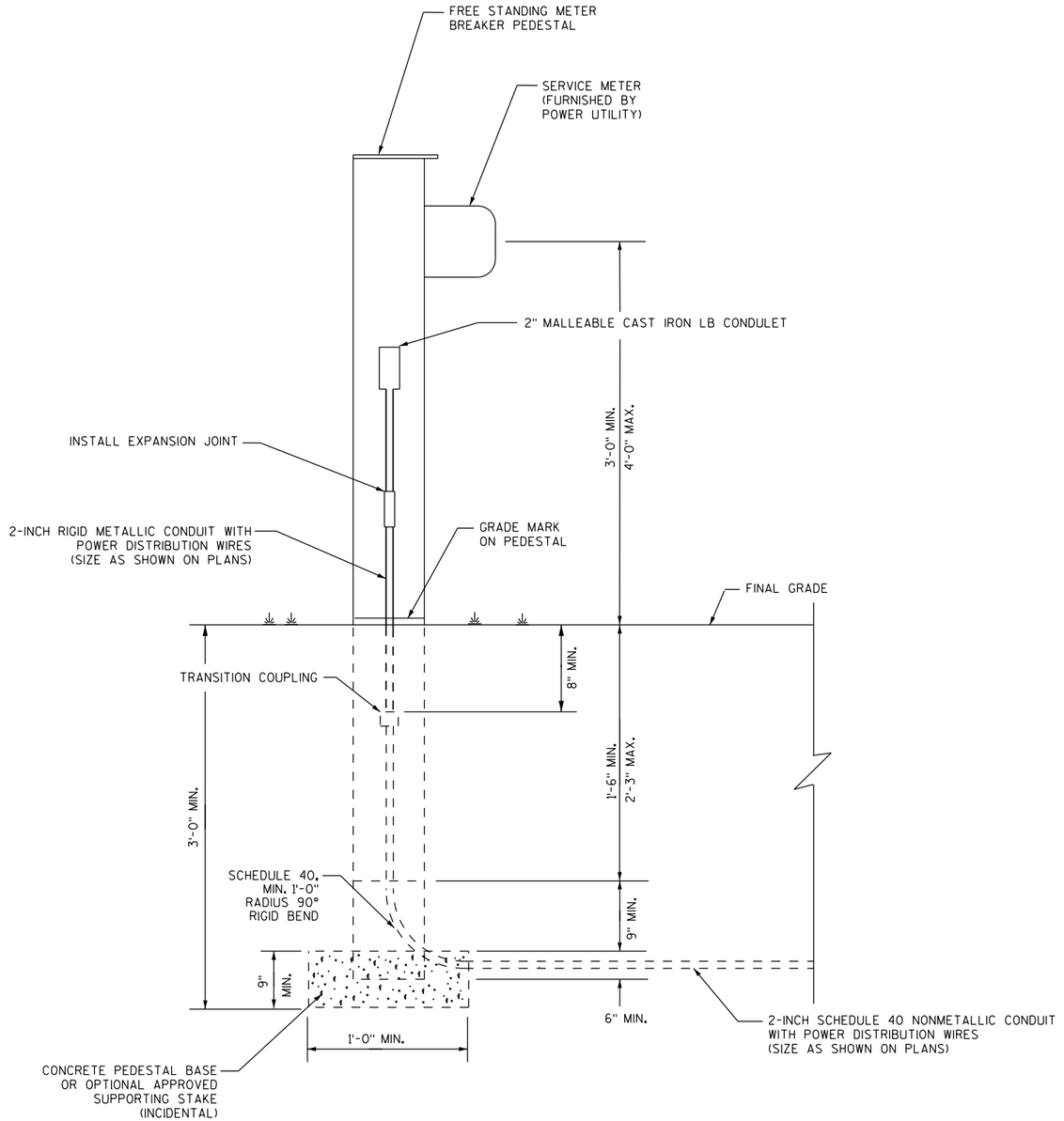
CAMERA POLES & FOUNDATIONS

2



POLE-MOUNTED CABINET INSTALLATION

2

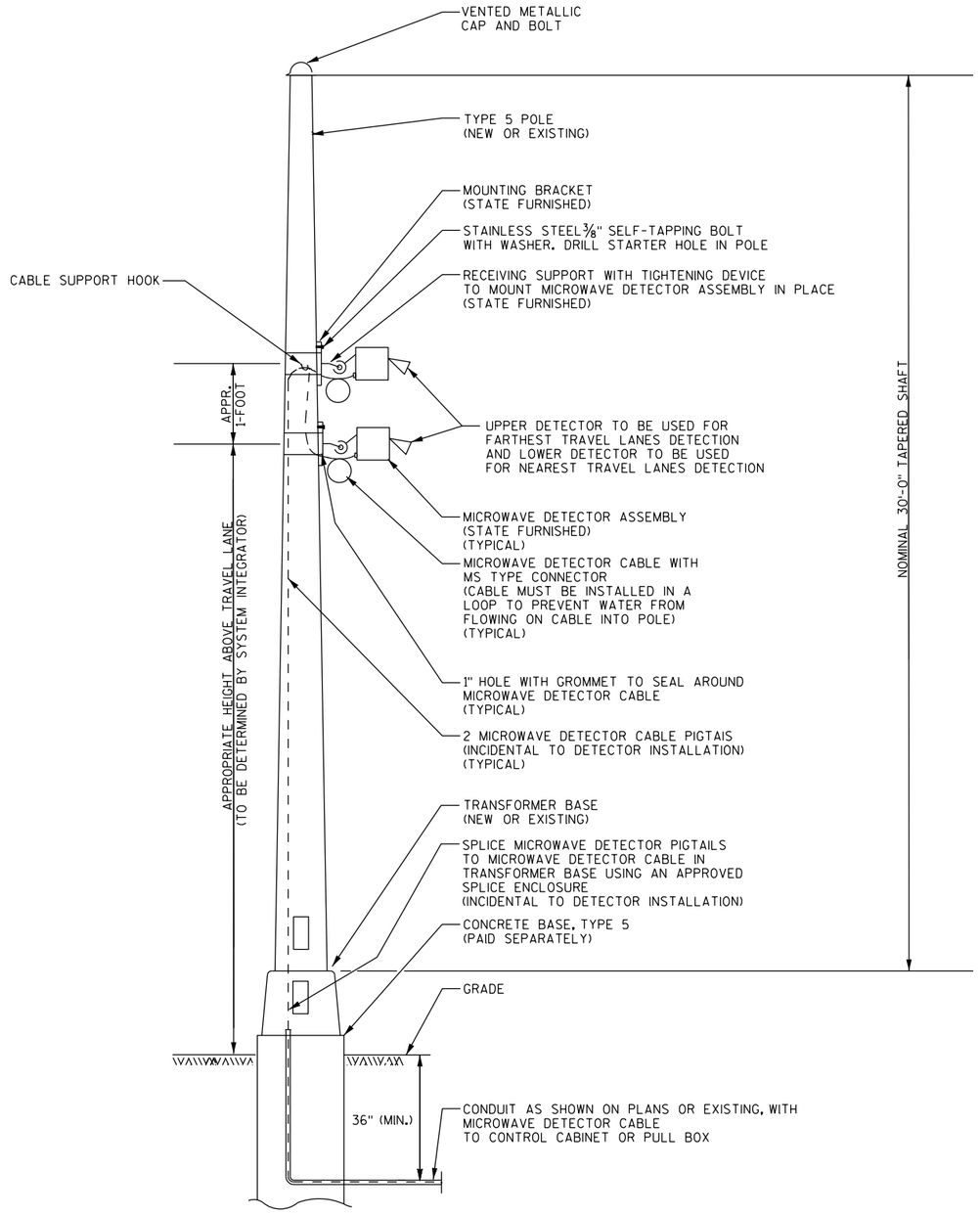


ELECTRICAL SERVICE METER BREAKER PEDESTAL

NOTES

1) MINIMUM REQUIREMENT SHOWN. ADDITIONAL BREAKERS MAY BE REQUIRED.

2



MICROWAVE DETECTOR INSTALLATION
ON TYPE 5 POLE

2

2

WESTWOOD DR.

USH 51

USH 51

SIGN

SIGN

SIGN

SIGN

APPR. 1900' TO BRIDGE STREET

N

EX-CCTV-37-0005
ON EXISTING CAMERA POLE
(1) 5.8 GHZ WIRELESS ETHERNET BRIDGE (S-F)
(1) MICROWAVE DETECTOR (SALVAGED)

EX-SDS-37-0040
(1) REMOVE POLE (TYPE 5)
(1) SALVAGE SOLAR POWER SYSTEM
(1) SALVAGE MICROWAVE DETECTOR

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	ITS PLAN	SHEET 303	E

FILE NAME : \\milw00\ingrproj\59271\11700170_wausau\cds\fm_05_wausau.dgn PLOT DATE : 10/4/2012 PLOT BY : pkutz PLOT NAME : PLOT SCALE : 100:1

2

2

N

USH 51

710SB 712SB 714SB 716SB 718SB 720SB 722SB 724SB

710NB 712NB 714NB 716NB 718NB 720NB 722NB 724NB

USH 51

SIGN

EX-SDS-37-0042
(1) REMOVE MICROWAVE DETECTOR (EXISTING)
(1) INSTALL MICROWAVE DETECTOR (S-F)

APPR. 2500' TO BRIDGE STREET

APPR. 3500' TO CTH U

FOUND

N. 16TH AVE.

KNOX ST.

GRAHAM ST.

BRADY ST.

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	ITS PLAN	SHEET 304	E

FILE NAME : \\milw00\ingrproj\59271\11700170_wausau\cds\fm_10_wausau.dgn PLOT DATE : 10/4/2012 PLOT BY : pkutz PLOT NAME : PLOT SCALE : 100:1

WISDOT/CADDS SHEET 42

2

2

OH

W

A/C

CTH "K"

N

EX-SDS-37-0044
(1) REMOVE POLE (TYPE 5)
(1) SALVAGE SOLAR POWER SYSTEM
(1) REMOVE MICROWAVE DETECTOR

CCTV-37-0007
(1) 50-FOOT CAMERA POLE CONCRETE BASE
(1) 50-FOOT CAMERA POLE (S-F)
(1) CAMERA ASSEMBLY (S-F)
(1) POLE MOUNT CABINET (S-F)
(1) BREAKER DISCONNECT BOX
(2) MICROWAVE DETECTORS (S-F)
(1) 5.8 GHZ WIRELESS ETHERNET BRIDGE (S-F)
(1) ETHERNET SWITCH (S-F)
(1) ETHERNET VIDEO ENCODER (S-F)
(1) 900 MHZ WIRELESS ETHERNET BRIDGE (S-F)
(1) YAGI ANTENNA (S-F)

760SB 762SB 764SB 766SB 768SB 772SB 774SB

760NB 762NB 764NB 766NB 768NB 772NB 774NB

USH 51

BUS 51

SIGN

(2) 2-INCH NONMETALLIC CONDUITS
(FOR FUTURE USE)

PB5115

(1) 2-INCH METALLIC CONDUIT WITH
(3) NO. 6 AWG AND (1) NO. 10 AWG
LIGHTING WIRES

(2) 2-INCH NONMETALLIC CONDUIT WITH
(3) NO. 6 AWG AND (1) NO. 10 AWG
LIGHTING WIRES

PB5110

MB5105

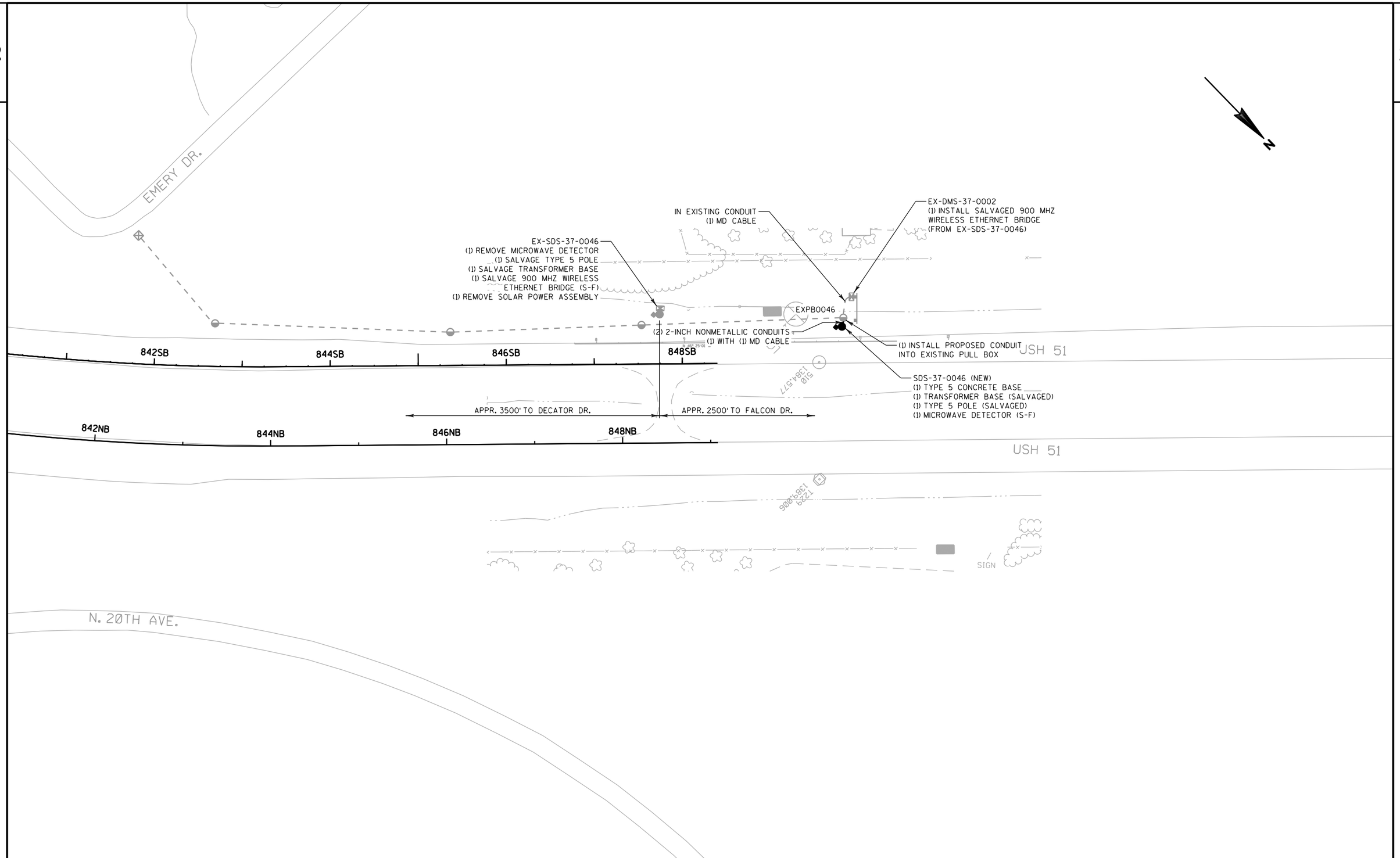
PB5105

(2) 2-INCH NONMETALLIC CONDUIT WITH
(3) NO. 6 AWG AND (1) NO. 10 AWG
LIGHTING WIRES

456
1255.509

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	ITS PLAN	SHEET 305	E

2



PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	ITS PLAN	SHEET 306	E

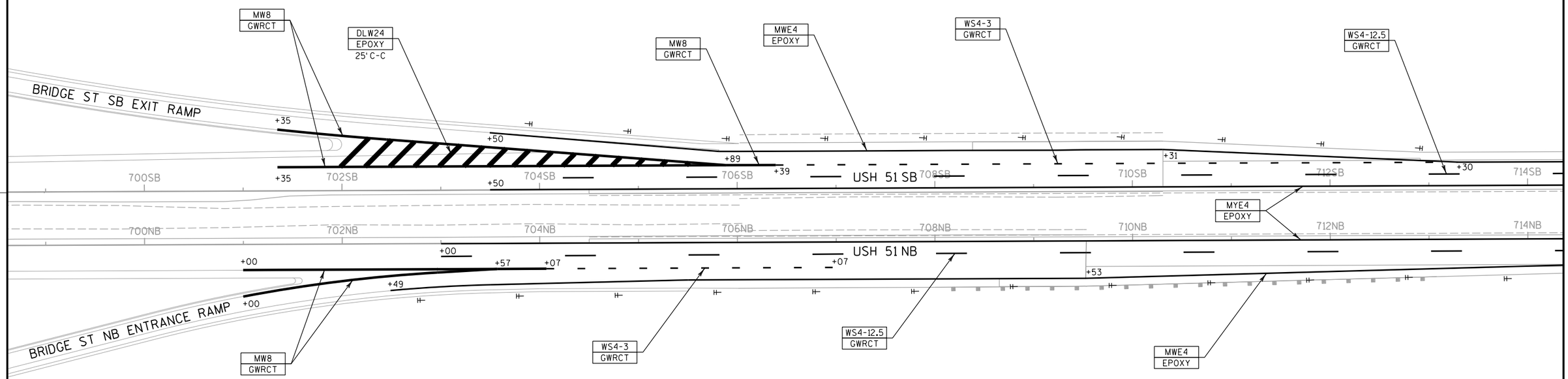
2

2

LEGEND

DLW24	PAVEMENT MARKING DIAGONAL 24-INCH (WHITE)
EPOXY	EPOXY
GWRCT	GROOVED WET REFLECTIVE CONTRAST TAPE
MW8	PAVEMENT MARKING 8-INCH (WHITE CHANNELIZING)
MWE4	PAVEMENT MARKING 4-INCH (WHITE EDGE LINE)
MYE4	PAVEMENT MARKING 4-INCH (YELLOW EDGE LINE)
WS4-3	PAVEMENT MARKING 4-INCH (WHITE SKIP)(3' SEG., 9' GAP)
WS4-12.5	PAVEMENT MARKING 4-INCH (WHITE SKIP)(12.5' SEG., 37.5' GAP)
⊢	DOUBLE DELINEATOR

N



PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	PAVEMENT MARKING - USH 51	SHEET 307	E

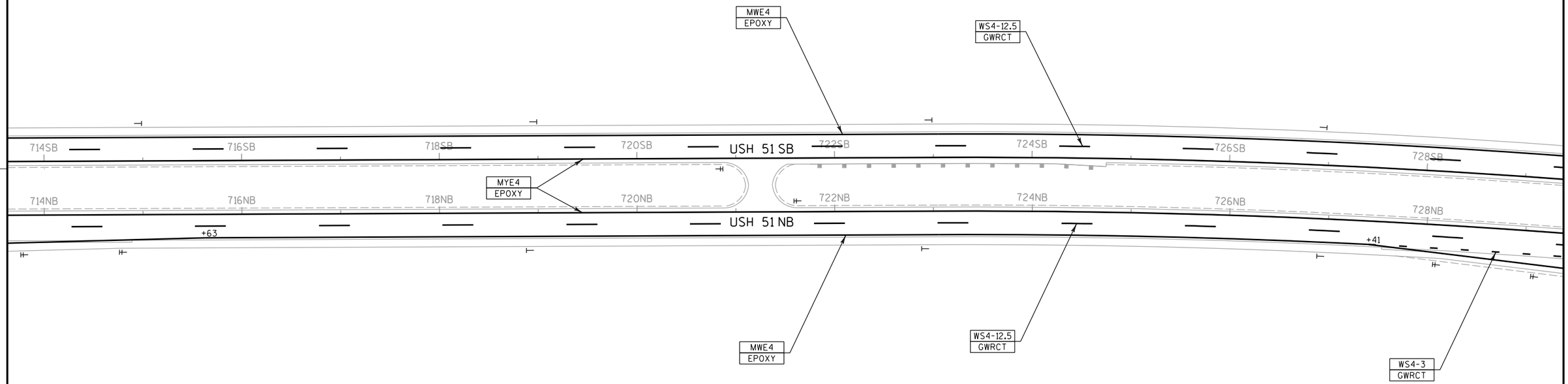
2

2

LEGEND

EPOXY	EPOXY
GWRCT	GROOVED WET REFLECTIVE CONTRAST TAPE
MWE4	PAVEMENT MARKING 4-INCH (WHITE EDGE LINE)
MYE4	PAVEMENT MARKING 4-INCH (YELLOW EDGE LINE)
WS4-3	PAVEMENT MARKING 4-INCH (WHITE SKIP)(3' SEG., 9' GAP)
WS4-12.5	PAVEMENT MARKING 4-INCH (WHITE SKIP)(12.5' SEG., 37.5' GAP)
⊢	SINGLE DELINEATOR
⊢⊢	DOUBLE DELINEATOR

N



PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	PAVEMENT MARKING - USH 51	SHEET 308	E

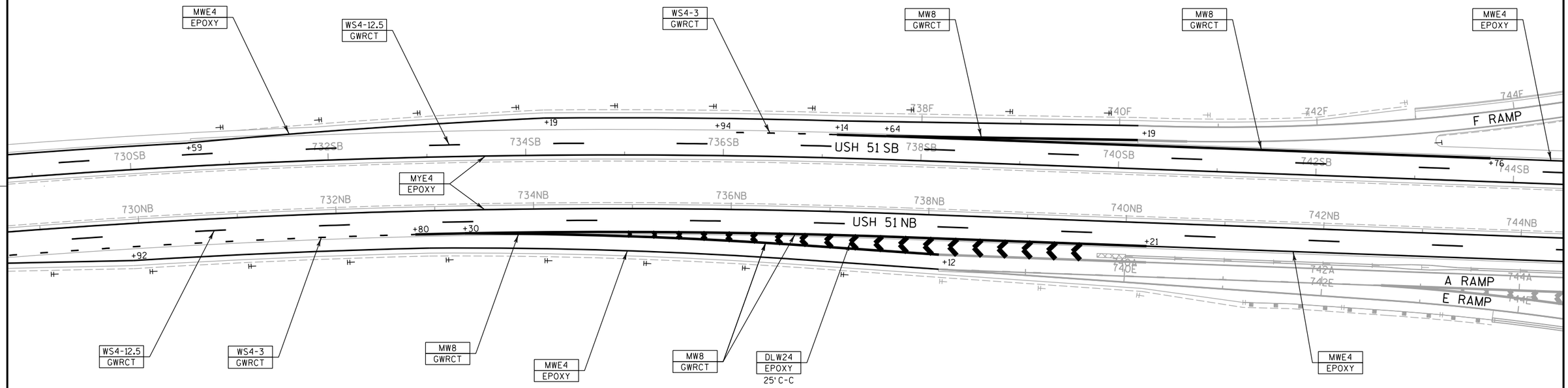
2

2

LEGEND

DLW24	PAVEMENT MARKING DIAGONAL 24-INCH (WHITE)
EPOXY	EPOXY
GWRCT	GROOVED WET REFLECTIVE CONTRAST TAPE
MW8	PAVEMENT MARKING 8-INCH (WHITE CHANNELIZING)
MWE4	PAVEMENT MARKING 4-INCH (WHITE EDGE LINE)
MYE4	PAVEMENT MARKING 4-INCH (YELLOW EDGE LINE)
WS4-3	PAVEMENT MARKING 4-INCH (WHITE SKIP)(3' SEG., 9' GAP)
WS4-12.5	PAVEMENT MARKING 4-INCH (WHITE SKIP)(12.5' SEG., 37.5' GAP)
⊢	DOUBLE DELINEATOR

N



PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	PAVEMENT MARKING - USH 51	SHEET 309 E

FILE NAME : P:\44xx\4448\Plan\Pavement Marking\em_024503_pm.dgn PLOT DATE : 7/30/2012 PLOT BY : walkup PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2

N 18TH AVE

ARLINGTON LN

ARTHUR AVE

CTH U

460

480

F RAMP

744F 746F 748F 750F 752F

A RAMP

744A 746A 748A 750A 752A 754A 756A 758A

E RAMP

744E 746E 748E 750E 752E

D RAMP

752D 754D 756D 758D

USH 51 SB

744SB +76 746SB +98 748SB +58 750SB +11 752SB +42 754SB +58 756SB 758SB +67

USH 51 NB

744NB 746NB 748NB 750NB 752NB 754NB 756NB 758NB

WS4-12.5 GWRCT

WS4-3 GWRCT

MW8 GWRCT

MWE4 EPOXY

MYE4 EPOXY

WS4-12.5 GWRCT

MWE4 EPOXY

MWE4 EPOXY

MWE4 EPOXY

LEGEND

EPOXY	EPOXY
GWRCT	GROOVED WET REFLECTIVE CONTRAST TAPE
MW8	PAVEMENT MARKING 8-INCH (WHITE CHANNELIZING)
MWE4	PAVEMENT MARKING 4-INCH (WHITE EDGE LINE)
MYE4	PAVEMENT MARKING 4-INCH (YELLOW EDGE LINE)
WS4-3	PAVEMENT MARKING 4-INCH (WHITE SKIP)(3' SEG., 9' GAP)
WS4-12.5	PAVEMENT MARKING 4-INCH (WHITE SKIP)(12.5' SEG., 37.5' GAP)
⊢	SINGLE DELINEATOR
⊢⊢	DOUBLE DELINEATOR

N

PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	PAVEMENT MARKING - USH 51	SHEET 310	E

FILE NAME : P:\44xx\4448\Plan\Pavement Marking\em_024504_pm.dgn PLOT DATE : 7/30/2012 PLOT BY : walkup PLOT NAME : PLOT SCALE : 1:100

2

LEGEND

EPOXY	EPOXY
GWRCT	GROOVED WET REFLECTIVE CONTRAST TAPE
MWE4	PAVEMENT MARKING 4-INCH (WHITE EDGE LINE)
MYE4	PAVEMENT MARKING 4-INCH (YELLOW EDGE LINE)
WS4-12.5	PAVEMENT MARKING 4-INCH (WHITE SKIP)(12.5' SEG., 37.5' GAP)
⊢	SINGLE DELINEATOR

N

MWE4 EPOXY

WS4-12.5 GWRCT

MYE4 EPOXY

WS4-12.5 GWRCT

MWE4 EPOXY

+67

USH 51 SB

USH 51 NB

BUS 51 SB

BUS 51 NB

D RAMP

C RAMP

A RAMP

B RAMP

CTH K SB

CTH K NB

760D 762D 764D 766D 768D 770D

772C 774C

760SB 762SB 764SB 766SB 768SB 770SB 772SB 774SB

760NB 762NB 764NB 766NB 768NB 770NB 772NB 774NB

760A 762A 764A 766A 768A 770A 772A 774A

760B 762B 764B 766B 768B 770B 772B 774B

200KW 202KW

100KE 102KE

52KN

48KS 48KN

46KS 46KN

44KS 44KN

42KS 42KN

38KN

PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	PAVEMENT MARKING - USH 51	SHEET 311	E

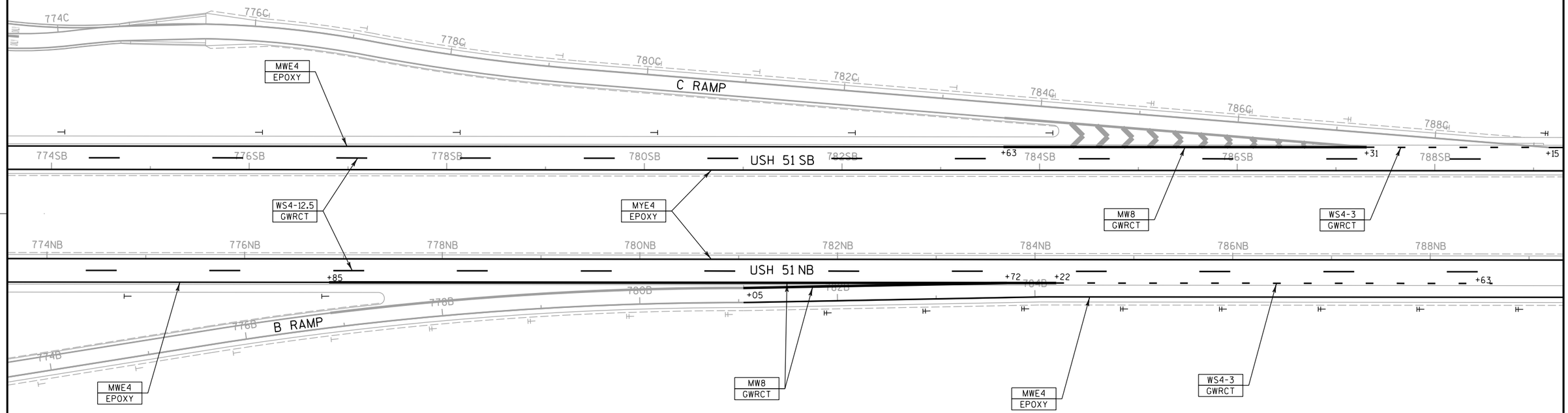
FILE NAME : P:\44xx\4448\Plan\Pavement Marking\em_024505_pm.dgn PLOT DATE : 7/30/2012 PLOT BY : walkup PLOT NAME : PLOT SCALE : 1:100

2

LEGEND

EPOXY	EPOXY
GWRCT	GROOVED WET REFLECTIVE CONTRAST TAPE
MW8	PAVEMENT MARKING 8-INCH (WHITE CHANNELIZING)
MWE4	PAVEMENT MARKING 4-INCH (WHITE EDGE LINE)
MYE4	PAVEMENT MARKING 4-INCH (YELLOW EDGE LINE)
WS4-3	PAVEMENT MARKING 4-INCH (WHITE SKIP)(3' SEG., 9' GAP)
WS4-12.5	PAVEMENT MARKING 4-INCH (WHITE SKIP)(12.5' SEG., 37.5' GAP)
⊢	SINGLE DELINEATOR
⊢⊢	DOUBLE DELINEATOR

N



PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	PAVEMENT MARKING - USH 51	SHEET 312 E

FILE NAME : P:\44xx\4448\Plan\Pavement Marking\em_024506_pm.dgn PLOT DATE : 7/30/2012 PLOT BY : walkup PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

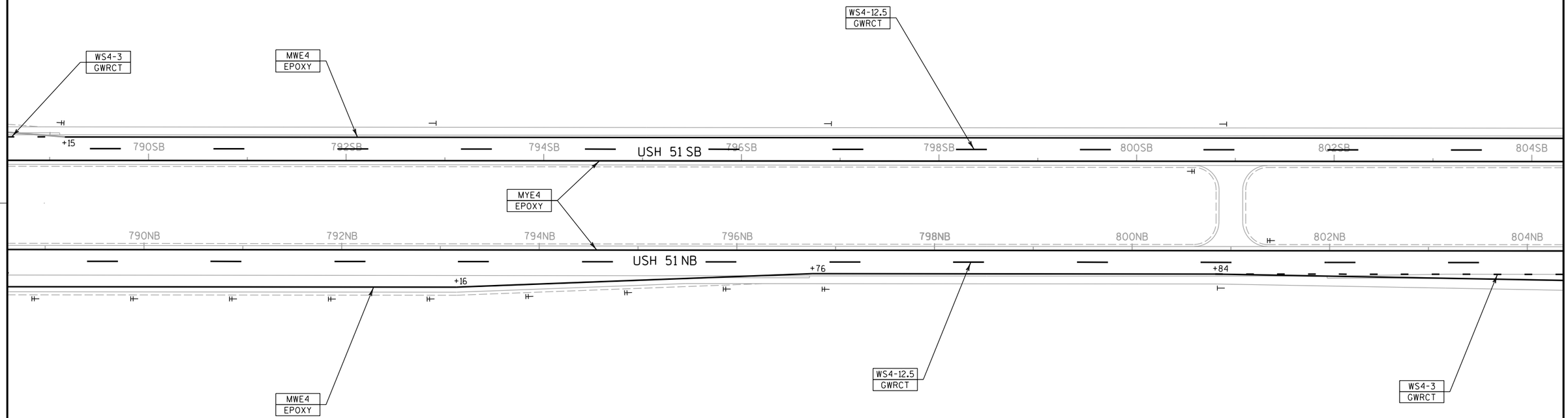
2

2

LEGEND

EPOXY	EPOXY
GWRCT	GROOVED WET REFLECTIVE CONTRAST TAPE
MWE4	PAVEMENT MARKING 4-INCH (WHITE EDGE LINE)
MYE4	PAVEMENT MARKING 4-INCH (YELLOW EDGE LINE)
WS4-3	PAVEMENT MARKING 4-INCH (WHITE SKIP)(3' SEG., 9' GAP)
WS4-12.5	PAVEMENT MARKING 4-INCH (WHITE SKIP)(12.5' SEG., 37.5' GAP)
⊢	SINGLE DELINEATOR
⊩	DOUBLE DELINEATOR

N



PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	PAVEMENT MARKING - USH 51	SHEET 313 E

FILE NAME : P:\44xx\4448\Plan\Pavement Marking\em_024507_pm.dgn PLOT DATE : 7/30/2012 PLOT BY : walkup PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

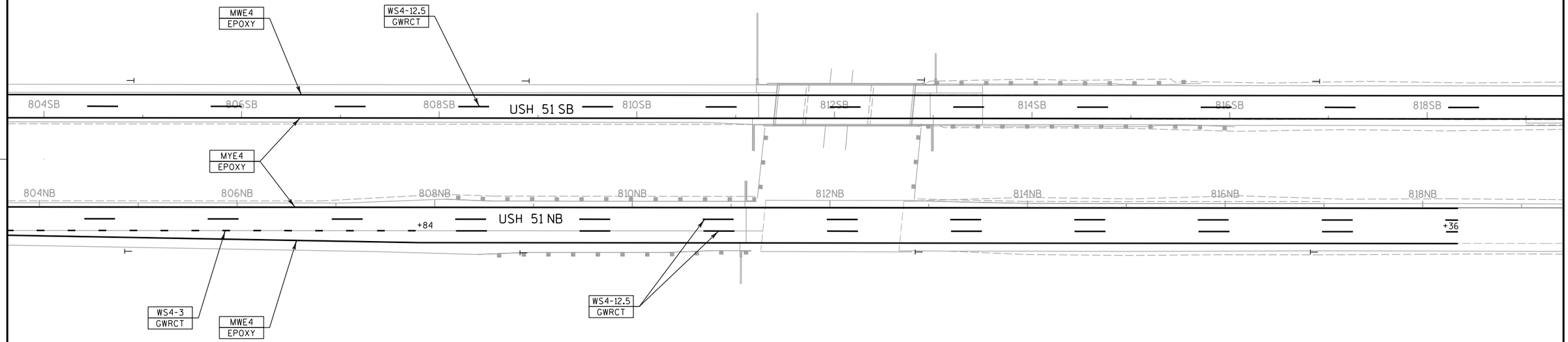
2

2

LEGEND

EPOXY	EPOXY
GWRCT	GROOVED WET REFLECTIVE CONTRAST TAPE
MWE4	PAVEMENT MARKING 4-INCH (WHITE EDGE LINE)
MYE4	PAVEMENT MARKING 4-INCH (YELLOW EDGE LINE)
WS4-3	PAVEMENT MARKING 4-INCH (WHITE SKIP)(3' SEG., 9' GAP)
WS4-12.5	PAVEMENT MARKING 4-INCH (WHITE SKIP)(12.5' SEG., 37.5' GAP)
⊢	SINGLE DELINEATOR

N



PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	PAVEMENT MARKING - USH 51	SHEET 314 E

FILE NAME : P:\44xx\4448\Plan\Pavement Marking\em_024508_pm.dgn PLOT DATE : 7/30/2012 PLOT BY : walkup PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

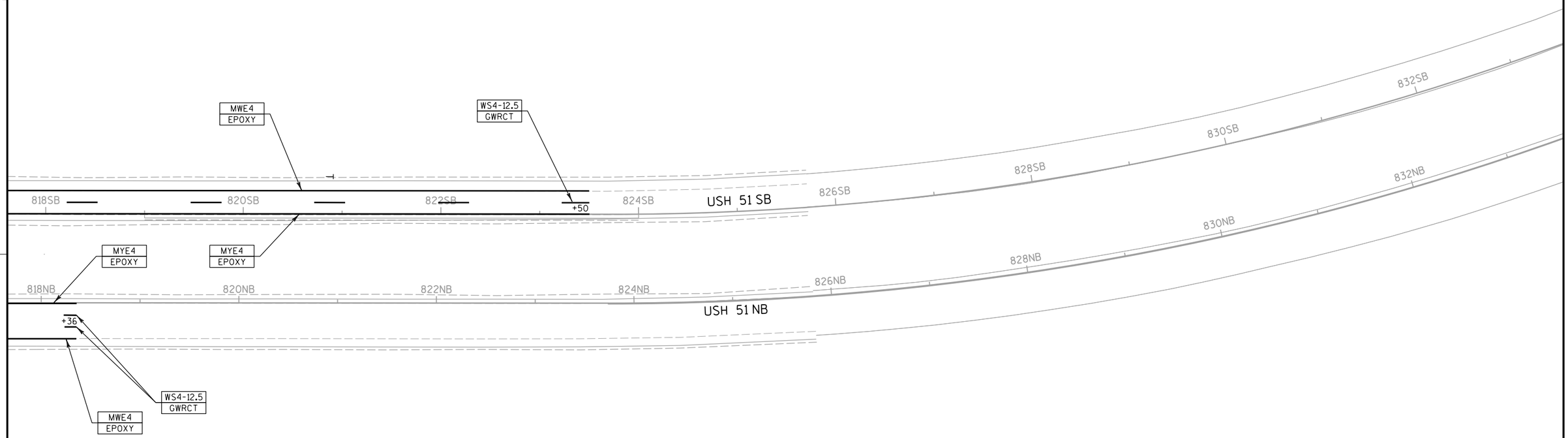
2

2

LEGEND

EPOXY	EPOXY
GWRCT	GROOVED WET REFLECTIVE CONTRAST TAPE
MWE4	PAVEMENT MARKING 4-INCH (WHITE EDGE LINE)
MYE4	PAVEMENT MARKING 4-INCH (YELLOW EDGE LINE)
WS4-12.5	PAVEMENT MARKING 4-INCH (WHITE SKIP)(12.5' SEG., 37.5' GAP)
⊢	SINGLE DELINEATOR

N



PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	PAVEMENT MARKING - USH 51	SHEET 315 E

2

738+00 F
739+00 F
740+00 F
741+00 F
742+00 F
743+00 F
744+00 F
F RAMP

738+00 SB
739+00 SB
740+00 SB
741+00 SB
USH 51 SB
742+00 SB
743+00 SB
744+00 SB

738+00 NB
739+00 NB
740+00 NB
741+00 NB
742+00 NB
743+00 NB
744+00 NB
USH 51 NB

+12
+22
+12
739+00 A
739+00 E
740+00 A
740+00 E
741+00 A
741+00 E
742+00 A
742+00 E
+60
743+00 A
743+00 E
A RAMP
E RAMP
744+00 A
744+00 E

MW8
GWRCT

WS4-3
GWRCT

MWE4
EPOXY

MYE4
EPOXY

MW8
GWRCT

DLW24
EPOXY
25'C-C

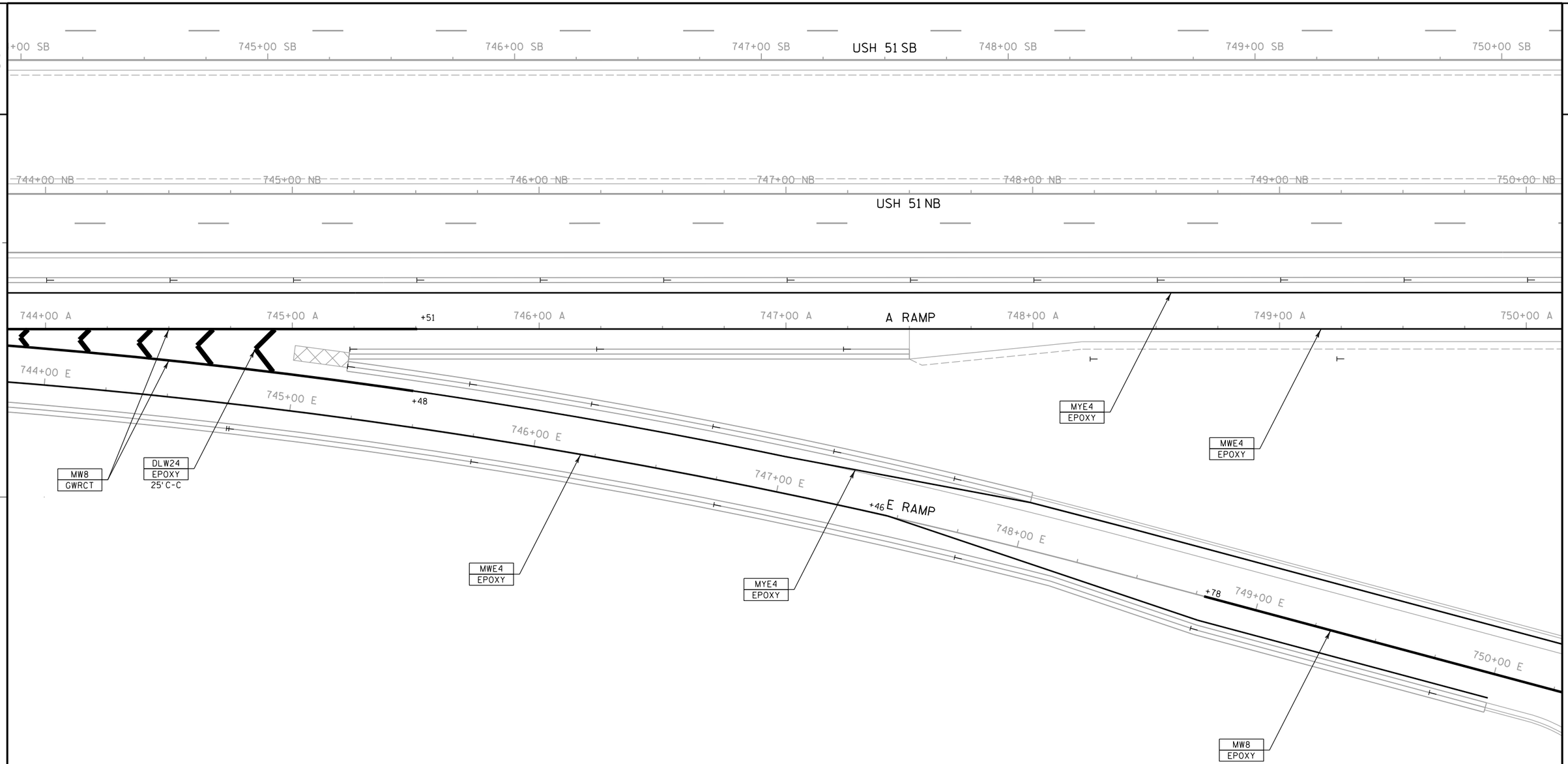
LEGEND

DLW24	PAVEMENT MARKING DIAGONAL 24-INCH (WHITE)
EPOXY	EPOXY
GWRCT	GROOVED WET REFLECTIVE CONTRAST TAPE
MW8	PAVEMENT MARKING 8-INCH (WHITE CHANNELIZING)
MWE4	PAVEMENT MARKING 4-INCH (WHITE EDGE LINE)
MYE4	PAVEMENT MARKING 4-INCH (YELLOW EDGE LINE)
WS4-3	PAVEMENT MARKING 4-INCH (WHITE SKIP)(3'SEG., 9'GAP)
⊢⊣	DOUBLE DELINEATOR
⊢	SINGLE DELINEATOR

N

NOTE: DELINEATORS ON BARRIER ARE TO BE MOUNTED WITH DELINEATOR BRACKETS.

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	PAVEMENT MARKING - A RAMP/E RAMP	SHEET 316	E



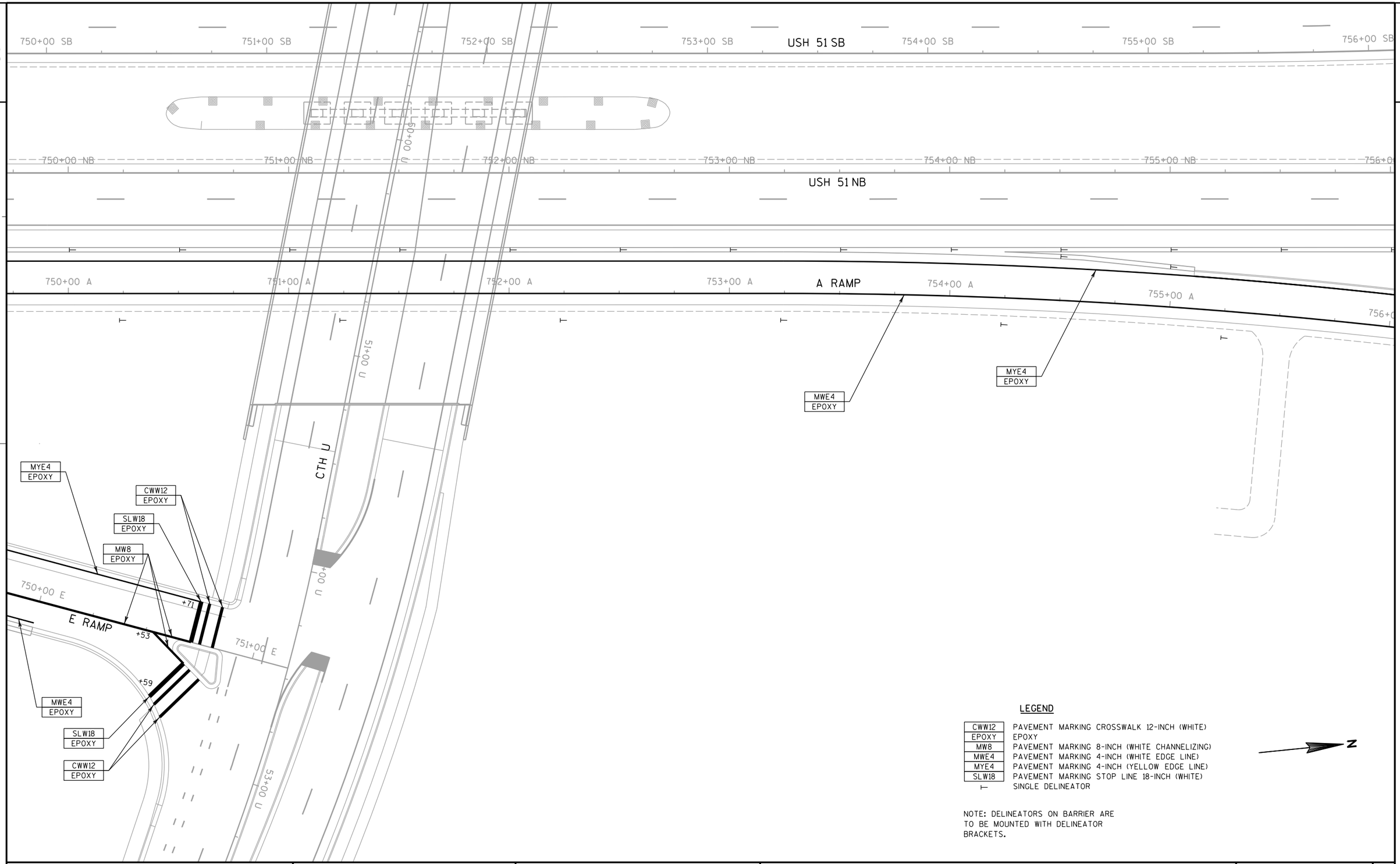
LEGEND

DLW24	PAVEMENT MARKING DIAGONAL 24-INCH (WHITE)
EPOXY	EPOXY
GWRCT	GROOVED WET REFLECTIVE CONTRAST TAPE
MW8	PAVEMENT MARKING 8-INCH (WHITE CHANNELIZING)
MWE4	PAVEMENT MARKING 4-INCH (WHITE EDGE LINE)
MYE4	PAVEMENT MARKING 4-INCH (YELLOW EDGE LINE)
⊢⊢	DOUBLE DELINEATOR
⊢	SINGLE DELINEATOR

N

NOTE: DELINEATORS ON BARRIER ARE TO BE MOUNTED WITH DELINEATOR BRACKETS.

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	PAVEMENT MARKING - A RAMP/E RAMP	SHEET 317	E



LEGEND

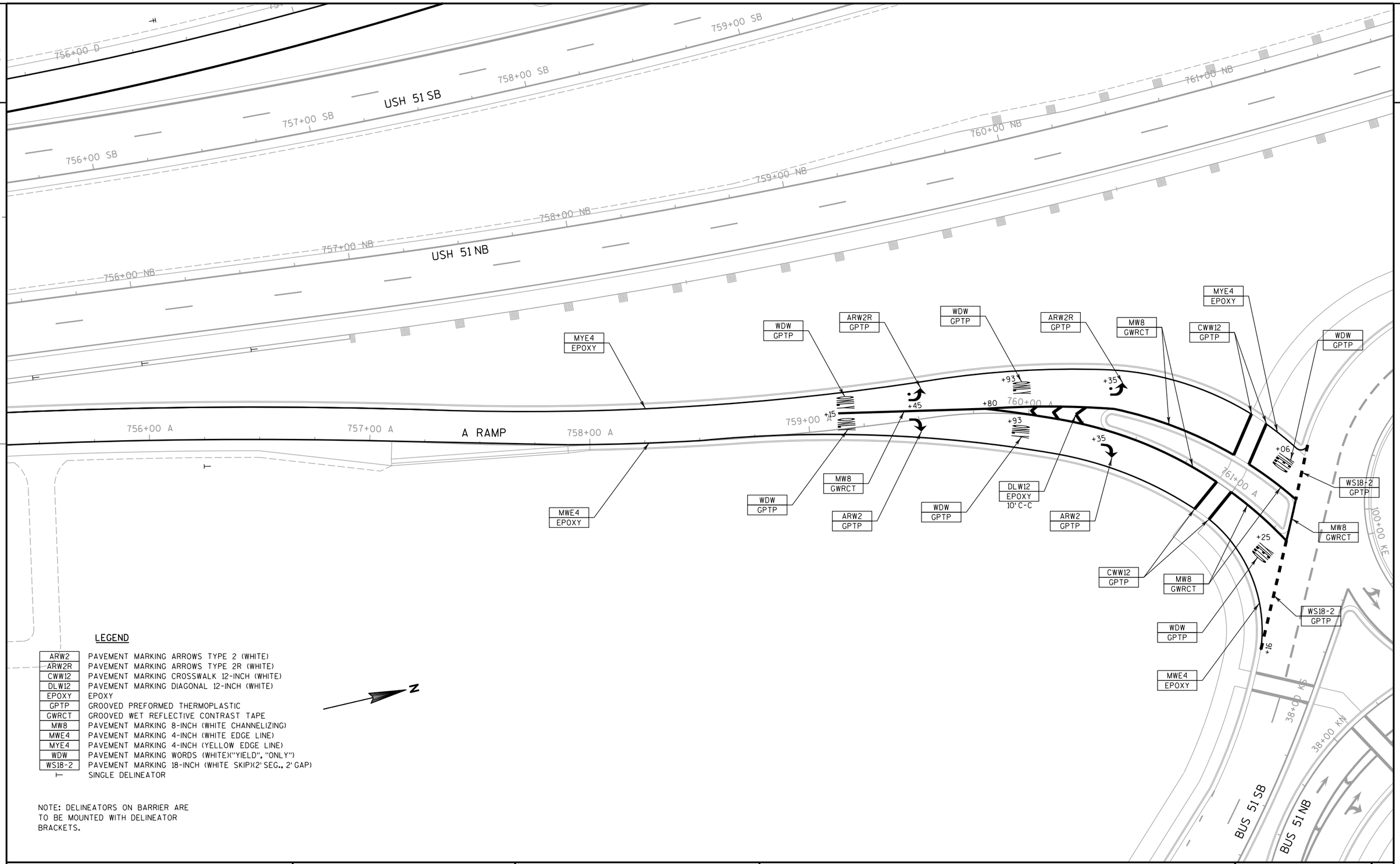
CWW12	PAVEMENT MARKING CROSSWALK 12-INCH (WHITE)
EPOXY	EPOXY
MW8	PAVEMENT MARKING 8-INCH (WHITE CHANNELIZING)
MWE4	PAVEMENT MARKING 4-INCH (WHITE EDGE LINE)
MYE4	PAVEMENT MARKING 4-INCH (YELLOW EDGE LINE)
SLW18	PAVEMENT MARKING STOP LINE 18-INCH (WHITE)
⊢	SINGLE DELINEATOR

NOTE: DELINEATORS ON BARRIER ARE TO BE MOUNTED WITH DELINEATOR BRACKETS.

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	PAVEMENT MARKING - A RAMP/E RAMP	SHEET 318	E

FILE NAME : P:\44xx\4448\Plan\Pavement Marking\em_024511_pm.dgn PLOT DATE : 7/30/2012 PLOT BY : walkup PLOT NAME : PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42



LEGEND

ARW2	PAVEMENT MARKING ARROWS TYPE 2 (WHITE)
ARW2R	PAVEMENT MARKING ARROWS TYPE 2R (WHITE)
CWW12	PAVEMENT MARKING CROSSWALK 12-INCH (WHITE)
DLW12	PAVEMENT MARKING DIAGONAL 12-INCH (WHITE)
EPOXY	EPOXY
GPTP	GROOVED PREFORMED THERMOPLASTIC
GWRCT	GROOVED WET REFLECTIVE CONTRAST TAPE
MW8	PAVEMENT MARKING 8-INCH (WHITE CHANNELIZING)
MWE4	PAVEMENT MARKING 4-INCH (WHITE EDGE LINE)
MYE4	PAVEMENT MARKING 4-INCH (YELLOW EDGE LINE)
WDW	PAVEMENT MARKING WORDS (WHITE)("YIELD","ONLY")
WS18-2	PAVEMENT MARKING 18-INCH (WHITE SKIP)(2' SEG., 2' GAP)
⊢	SINGLE DELINEATOR

NOTE: DELINEATORS ON BARRIER ARE TO BE MOUNTED WITH DELINEATOR BRACKETS.

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	PAVEMENT MARKING - A RAMP	SHEET 319	E

2

LEGEND

CWW12	PAVEMENT MARKING CROSSWALK 12-INCH (WHITE)
EPOXY	EPOXY
GPTP	GROOVED PREFORMED THERMOPLASTIC
MWE4	PAVEMENT MARKING 4-INCH (WHITE EDGE LINE)
MYE4	PAVEMENT MARKING 4-INCH (YELLOW EDGE LINE)
⊢	SINGLE DELINEATOR

N

BUS 51 SB

BUS 51 NB

42+00 KS

41+00 KS

41+00 KN

103+00 KE

100+00 KE

102+00 KE

101+00 KE

MYE4
EPOXY

MYE4
EPOXY

+87

+76

762+00 B

763+00 B

764+00 B

B RAMP

765+00 B

766+00 B

767+00 B

MWE4
EPOXY

CWW12
GPTP

MWE4
EPOXY

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	PAVEMENT MARKING - B RAMP	SHEET 320 E

2

2

769+00 NB

770+00 NB

771+00 NB

772+00 NB

773+

USH 51 NB

MYE4
EPOXY

767+00 B

768+00 B

769+00 B

770+00 B

B RAMP

771+00 B

772+00 B

773+00 B

MWE4
EPOXY

LEGEND

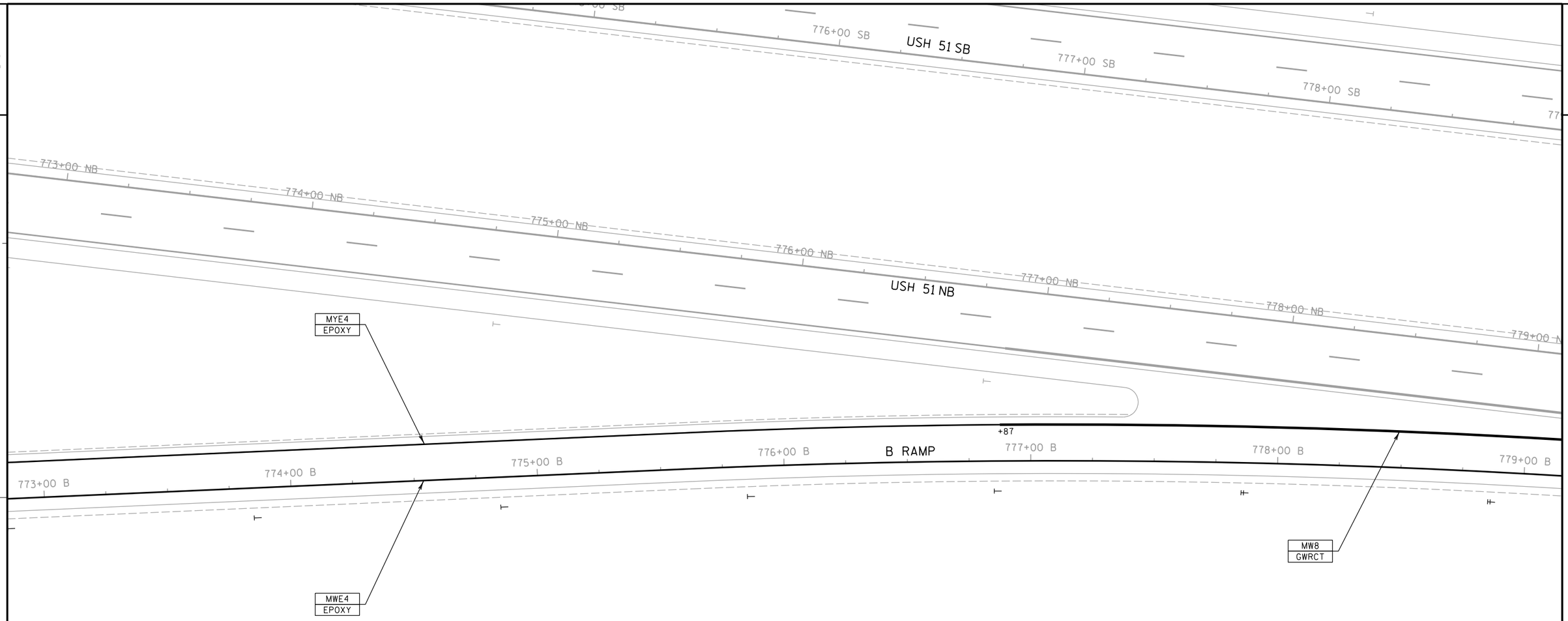
EPOXY	EPOXY
MWE4	PAVEMENT MARKING 4-INCH (WHITE EDGE LINE)
MYE4	PAVEMENT MARKING 4-INCH (YELLOW EDGE LINE)
⊢	SINGLE DELINEATOR

N

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	PAVEMENT MARKING - B RAMP	SHEET 321	E

FILE NAME : P:\44xx\4448\Plan\Pavement Marking\em_024514_pm.dgn PLOT DATE : 7/30/2012 PLOT BY : walkup PLOT NAME : PLOT SCALE : 1:40

2



LEGEND

EPOXY	EPOXY
GWRCT	GROOVED WET REFLECTIVE CONTRAST TAPE
MW8	PAVEMENT MARKING 8-INCH (WHITE CHANNELIZING)
MWE4	PAVEMENT MARKING 4-INCH (WHITE EDGE LINE)
MYE4	PAVEMENT MARKING 4-INCH (YELLOW EDGE LINE)
⊢	DOUBLE DELINEATOR
⊢	SINGLE DELINEATOR

N

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	PAVEMENT MARKING - B RAMP	SHEET 322	E

2

C RAMP

779+00 SB
780+00 SB
781+00 SB
USH 51 SB
782+00 SB
783+00 SB
784+00 SB
785+00 SB

779+00 NB
780+00 NB
781+00 NB
782+00 NB
783+00 NB
784+00 NB
785+00 NB
USH 51 NB

+05
779+00 B
780+00 B
781+00 B
B RAMP
782+00 B
783+00 B
784+00 B
+05

MW8
GWRCT

MWE4
EPOXY

2

LEGEND

EPOXY	EPOXY
GWRCT	GROOVED WET REFLECTIVE CONTRAST TAPE
MW8	PAVEMENT MARKING 8-INCH (WHITE CHANNELIZING)
MWE4	PAVEMENT MARKING 4-INCH (WHITE EDGE LINE)
⊢	DOUBLE DELINEATOR

N

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	PAVEMENT MARKING - B RAMP	SHEET 323 E

FILE NAME : P:\44xx\4448\Plan\Pavement Marking\em_024516_pm.dgn PLOT DATE : 7/30/2012 PLOT BY : walkup PLOT NAME : PLOT SCALE : 1:40

2

LEGEND

ARW2	PAVEMENT MARKING ARROWS TYPE 2 (WHITE)
ARW2R	PAVEMENT MARKING ARROWS TYPE 2R (WHITE)
CWW12	PAVEMENT MARKING CROSSWALK 12-INCH (WHITE)
DLW12	PAVEMENT MARKING DIAGONAL 12-INCH (WHITE)
EPOXY	EPOXY
GPTP	GROOVED PREFORMED THERMOPLASTIC
GWRCT	GROOVED WET REFLECTIVE CONTRAST TAPE
MW8	PAVEMENT MARKING 8-INCH (WHITE CHANNELIZING)
MWE4	PAVEMENT MARKING 4-INCH (WHITE EDGE LINE)
MYE4	PAVEMENT MARKING 4-INCH (YELLOW EDGE LINE)
WDW	PAVEMENT MARKING WORDS (WHITE)("YIELD","ONLY")
WS18-2	PAVEMENT MARKING 18-INCH (WHITE SKIP)(2' SEG., 2' GAP)
⊢	SINGLE DELINEATOR

N

CTH K SB

CTH K NB

52+00 KS

52+00 KN

51+00 KS

51+00 KN

202+00 KW

WS18-2 GPTP

WDW GPTP

MWE4 EPOXY

MW8 GWRCT

CWW12 GPTP

ARW2 GPTP

DLW12 EPOXY 10' C-C

ARW2R GPTP

MYE4 EPOXY

+30

+23

+45

+25

+28

+68

+81

+60

+27

772+00 C

773+00 C

774+00 C

775+00 C

776+00 C

777+00 C

C RAMP

USH 51 SB

774+00 SB

775+00 SB

776+00 SB

777+00

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	PAVEMENT MARKING - C RAMP	SHEET 324	E

FILE NAME : P:\44xx\4448\Plan\Pavement Marking\em_024517_pm.dgn PLOT DATE : 7/30/2012 PLOT BY : walkup PLOT NAME : PLOT SCALE : 1:40

2

2

LEGEND

EPOXY	EPOXY
MWE4	PAVEMENT MARKING 4-INCH (WHITE EDGE LINE)
MYE4	PAVEMENT MARKING 4-INCH (YELLOW EDGE LINE)
⊢	SINGLE DELINEATOR

N

MWE4
EPOXY

777+00 C
778+00 C
779+00 C
780+00 C
781+00 C
782+00 C
783+00 C

C RAMP

MYE4
EPOXY

777+00 SB
778+00 SB
779+00 SB
780+00 SB
781+00 SB
782+00 SB
783+00 SB

USH 51 SB

780+00 NB
781+00 NB
782+00 NB
783+00

USH 51 NB

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	PAVEMENT MARKING - C RAMP	SHEET 325 E

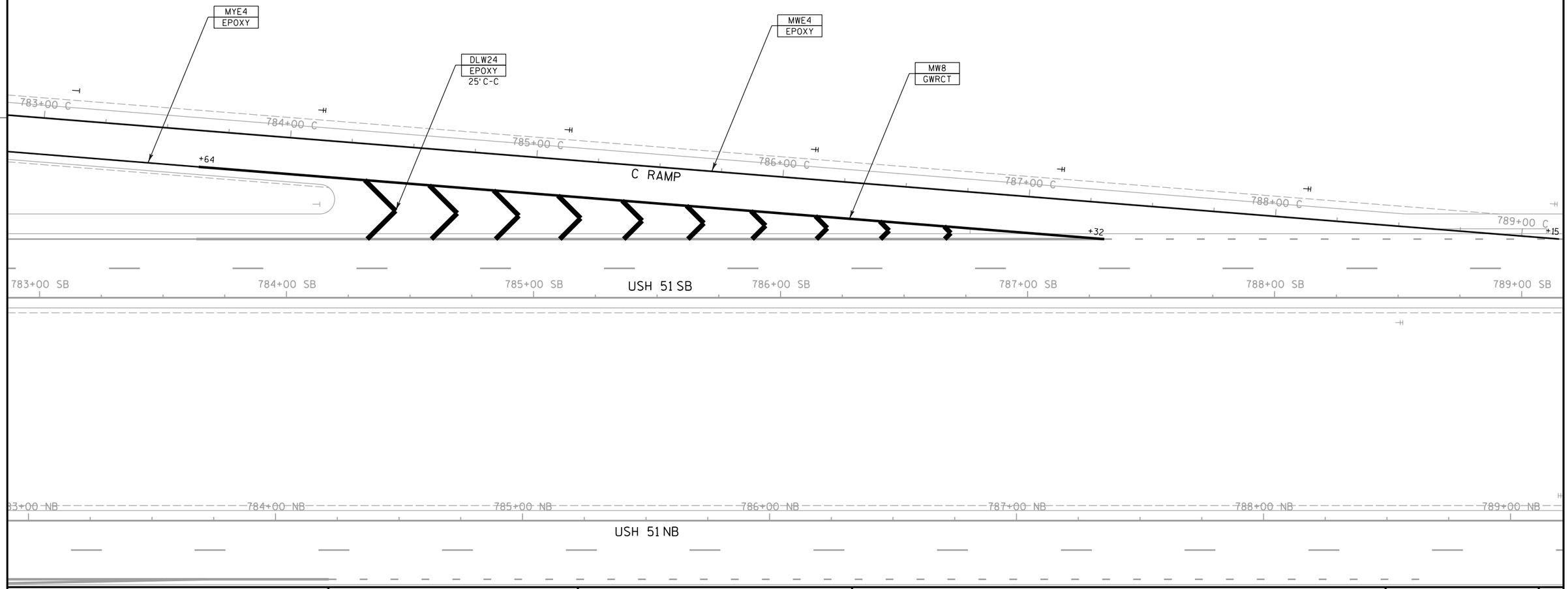
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WISDOT/CADDS SHEET 42

LEGEND

DLW24	PAVEMENT MARKING DIAGONAL 24-INCH (WHITE)
EPOXY	EPOXY
GWRCT	GROOVED WET REFLECTIVE CONTRAST TAPE
MW8	PAVEMENT MARKING 8-INCH (WHITE CHANNELIZING)
MWE4	PAVEMENT MARKING 4-INCH (WHITE EDGE LINE)
MYE4	PAVEMENT MARKING 4-INCH (YELLOW EDGE LINE)
⊢⊢	DOUBLE DELINEATOR
⊢	SINGLE DELINEATOR

N



PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	PAVEMENT MARKING - C RAMP	SHEET 326 E

FILE NAME : P:\44xx\4448\Plan\Pavement Marking\em_024519_pm.dgn PLOT DATE : 7/30/2012 PLOT BY : walkup PLOT NAME : PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42

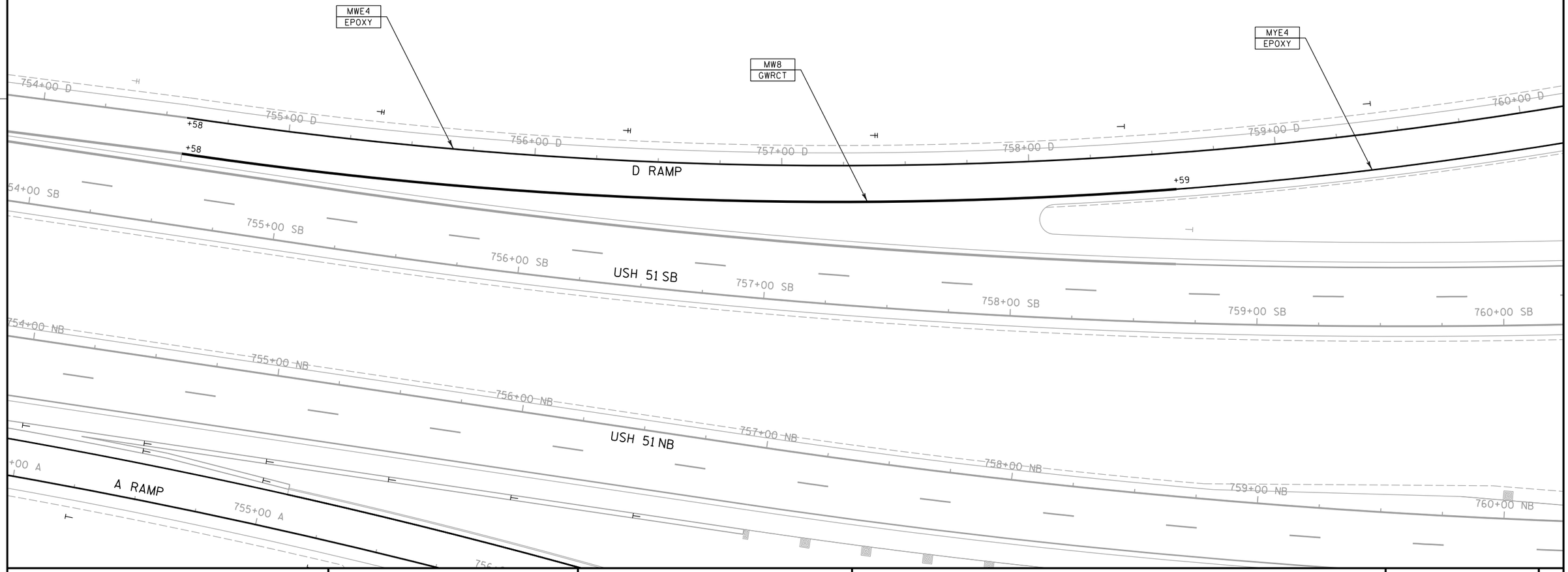
2

2

LEGEND

EPOXY	EPOXY
GWRCT	GROOVED WET REFLECTIVE CONTRAST TAPE
MW8	PAVEMENT MARKING 8-INCH (WHITE CHANNELIZING)
MWE4	PAVEMENT MARKING 4-INCH (WHITE EDGE LINE)
MYE4	PAVEMENT MARKING 4-INCH (YELLOW EDGE LINE)
⊢⊢	DOUBLE DELINEATOR
⊢	SINGLE DELINEATOR

N



PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	PAVEMENT MARKING - D RAMP	SHEET 327 E

FILE NAME : P:\44xx\4448\Plan\Pavement Marking\em_024520_pm.dgn PLOT DATE : 7/30/2012 PLOT BY : walkup PLOT NAME : PLOT SCALE : 1:40

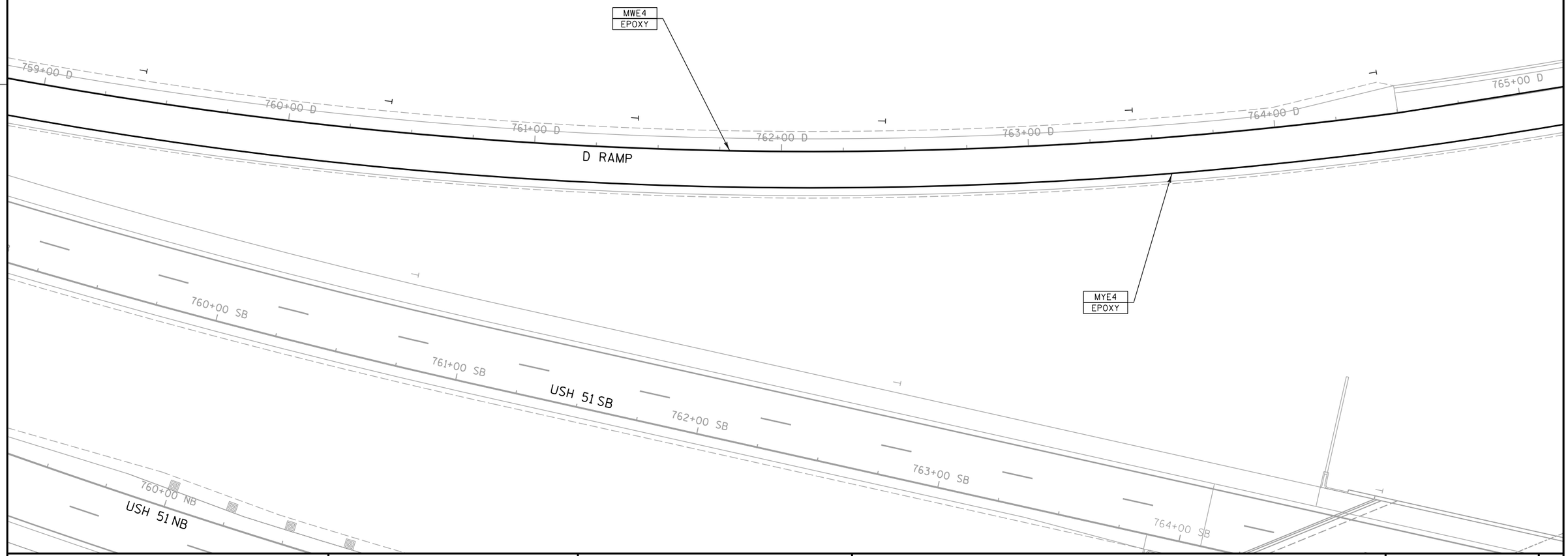
WISDOT/CADDS SHEET 42

2

2

LEGEND

EPOXY	EPOXY
MWE4	PAVEMENT MARKING 4-INCH (WHITE EDGE LINE)
MYE4	PAVEMENT MARKING 4-INCH (YELLOW EDGE LINE)
⊢	SINGLE DELINEATOR



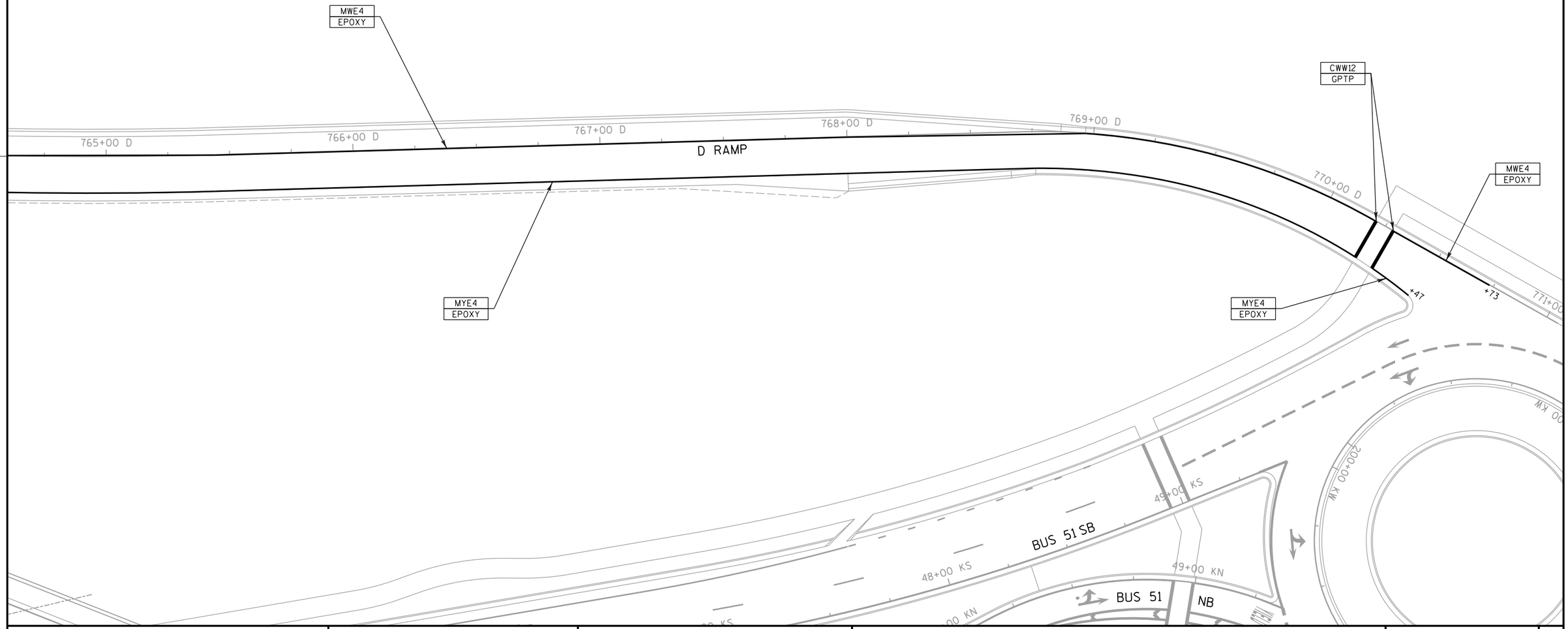
PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	PAVEMENT MARKING - D RAMP	SHEET 328	E

2

LEGEND

CWW12	PAVEMENT MARKING CROSSWALK 12-INCH (WHITE)
EPOXY	EPOXY
GPTP	GROOVED PREFORMED THERMOPLASTIC
MWE4	PAVEMENT MARKING 4-INCH (WHITE EDGE LINE)
MYE4	PAVEMENT MARKING 4-INCH (YELLOW EDGE LINE)

N



2

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	PAVEMENT MARKING - D RAMP	SHEET 329	E

2

2

LEGEND

EPOXY	EPOXY
GWRCT	GROOVED WET REFLECTIVE CONTRAST TAPE
MW8	PAVEMENT MARKING 8-INCH (WHITE CHANNELIZING)
MWE4	PAVEMENT MARKING 4-INCH (WHITE EDGE LINE)
MYE4	PAVEMENT MARKING 4-INCH (YELLOW EDGE LINE)
⊢⊣	DOUBLE DELINEATOR

N

ARLINGTON LN

MW8
GWRCT

MWE4
EPOXY

740+00 F
741+00 F
742+00 F
743+00 F
744+00 F
745+00 F
746+00 F
+19
+19
+69
F RAMP

MYE4
EPOXY

740+00 SB
741+00 SB
742+00 SB
743+00 SB
744+00 SB
745+00 SB
746+00 SB
USH 51 SB

740+00 NB
741+00 NB
742+00 NB
743+00 NB
744+00 NB
745+00 NB
746+00 NB
USH 51 NB

A RAMP
E RAMP
741+00 A
741+00 E
742+00 A
742+00 E
743+00 A

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	PAVEMENT MARKING - F RAMP	SHEET 330 E

FILE NAME : P:\44xx\4448\Plan\Pavement Marking\em_024523_pm.dgn PLOT DATE : 7/30/2012 PLOT BY : walkup PLOT NAME : PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42

2

2

LEGEND

CWW12	PAVEMENT MARKING CROSSWALK 12-INCH (WHITE)
EPOXY	EPOXY
MWE4	PAVEMENT MARKING 4-INCH (WHITE EDGE LINE)
MYE4	PAVEMENT MARKING 4-INCH (YELLOW EDGE LINE)

N

ARTHUR AVE

MWE4
EPOXY

CWW12
EPOXY

746+00 F
747+00 F
748+00 F
749+00 F
750+00 F
751+00 F
+65
752+00 F

F RAMP

MYE4
EPOXY

CTH U

48+00 U

49+00 U

SB
747+00 SB
USH 51 SB
748+00 SB
749+00 SB

NB
USH 51 NB
747+00 NB

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	PAVEMENT MARKING - F RAMP	SHEET 331	E

FILE NAME : P:\44xx\4448\Plan\Pavement Marking\em_024524_pm.dgn PLOT DATE : 7/30/2012 PLOT BY : walkup PLOT NAME : PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42

2

LEGEND

ARW2	PAVEMENT MARKING ARROWS TYPE 2 (WHITE)
CBY	PAVEMENT MARKING CURB (YELLOW)
DLY12	PAVEMENT MARKING DIAGONAL 12-INCH (YELLOW)
EPOXY	EPOXY
INY	PAVEMENT MARKING ISLAND NOSE (YELLOW)
MDY4	PAVEMENT MARKING 4-INCH DOUBLE YELLOW
MW8	PAVEMENT MARKING 8-INCH (WHITE CHANNELIZING)
MWE4	PAVEMENT MARKING 4-INCH (WHITE EDGE LINE)
MYE4	PAVEMENT MARKING 4-INCH (YELLOW EDGE LINE)
SLW18	PAVEMENT MARKING STOP LINE 18-INCH (WHITE)
WDW	PAVEMENT MARKING WORDS (WHITE)("ONLY")
WS4-12.5	PAVEMENT MARKING 4-INCH (WHITE SKIP)(12.5' SEG., 37.5' GAP)
WS4-3	PAVEMENT MARKING 4-INCH (WHITE SKIP)(3' SEG., 9' GAP)

N

CTH U

OVERLOOK DR

WESTWOOD DR

ONLY

19+00 U
20+00 U
21+00 U
22+00 U
23+00 U
24+00 U
25+00
200+00 V
201+00 V

+50 +98 +85 +33 +50 +72 +92 +36 +95 +59 +95 +15 +95 +95 +69 +09 +10 +56

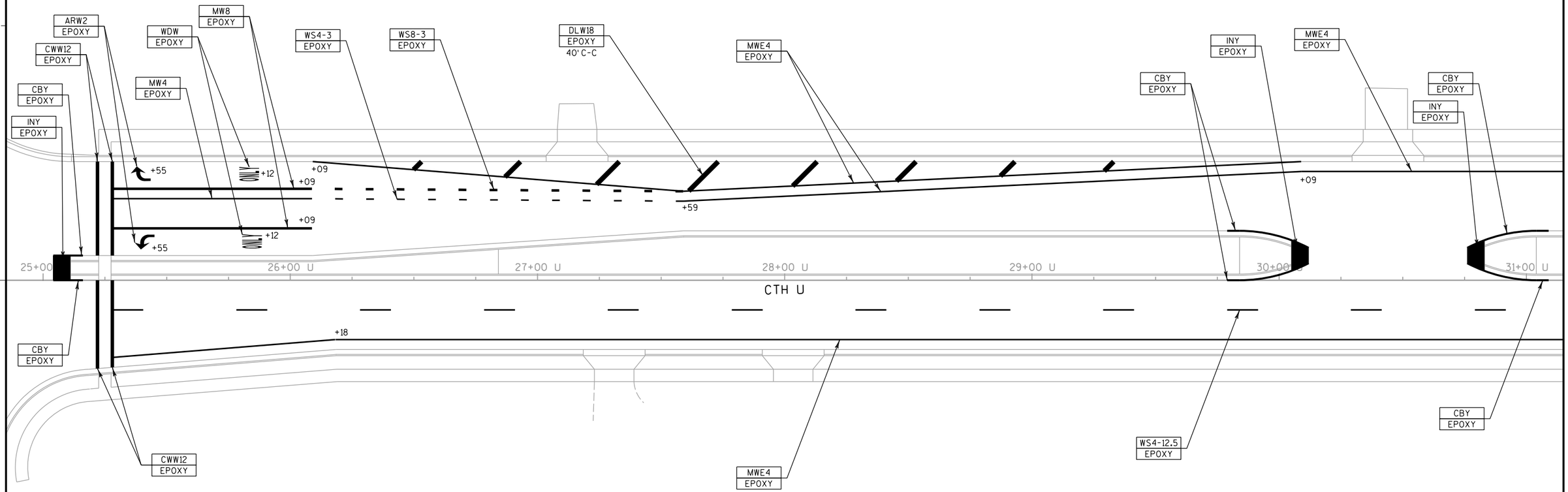
MWE4 EPOXY
MDY4 EPOXY
DLY12 EPOXY 25' C-C
WDW EPOXY
ARW2 EPOXY
MW8 EPOXY
SLW18 EPOXY
INY EPOXY
CBY EPOXY
MW4 EPOXY
WS4-3 EPOXY
WS4-12.5 EPOXY

2

PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	PAVEMENT MARKING - CTH U	SHEET 332 E

FILE NAME : P:\44xx\4448\Plan\Pavement Marking\em_024525_pm.dgn PLOT DATE : 7/30/2012 PLOT BY : walkup PLOT NAME : PLOT SCALE : 1:40

2



LEGEND

ARW2	PAVEMENT MARKING ARROWS TYPE 2 (WHITE)
CBY	PAVEMENT MARKING CURB (YELLOW)
CWW12	PAVEMENT MARKING CROSSWALK 12-INCH (WHITE)
DLW18	PAVEMENT MARKING DIAGONAL 18-INCH (WHITE)
EPOXY	EPOXY
INY	PAVEMENT MARKING ISLAND NOSE (YELLOW)
MW4	PAVEMENT MARKING 4-INCH (WHITE CHANNELIZING)
MW8	PAVEMENT MARKING 8-INCH (WHITE CHANNELIZING)
MWE4	PAVEMENT MARKING 4-INCH (WHITE EDGE LINE)
WDW	PAVEMENT MARKING WORDS (WHITE)("ONLY")
WS4-3	PAVEMENT MARKING 4-INCH (WHITE SKIP)(3' SEG., 9' GAP)
WS4-12.5	PAVEMENT MARKING 4-INCH (WHITE SKIP)(12.5' SEG., 37.5' GAP)
WS8-3	PAVEMENT MARKING 8-INCH (WHITE SKIP)(3' SEG., 9' GAP)



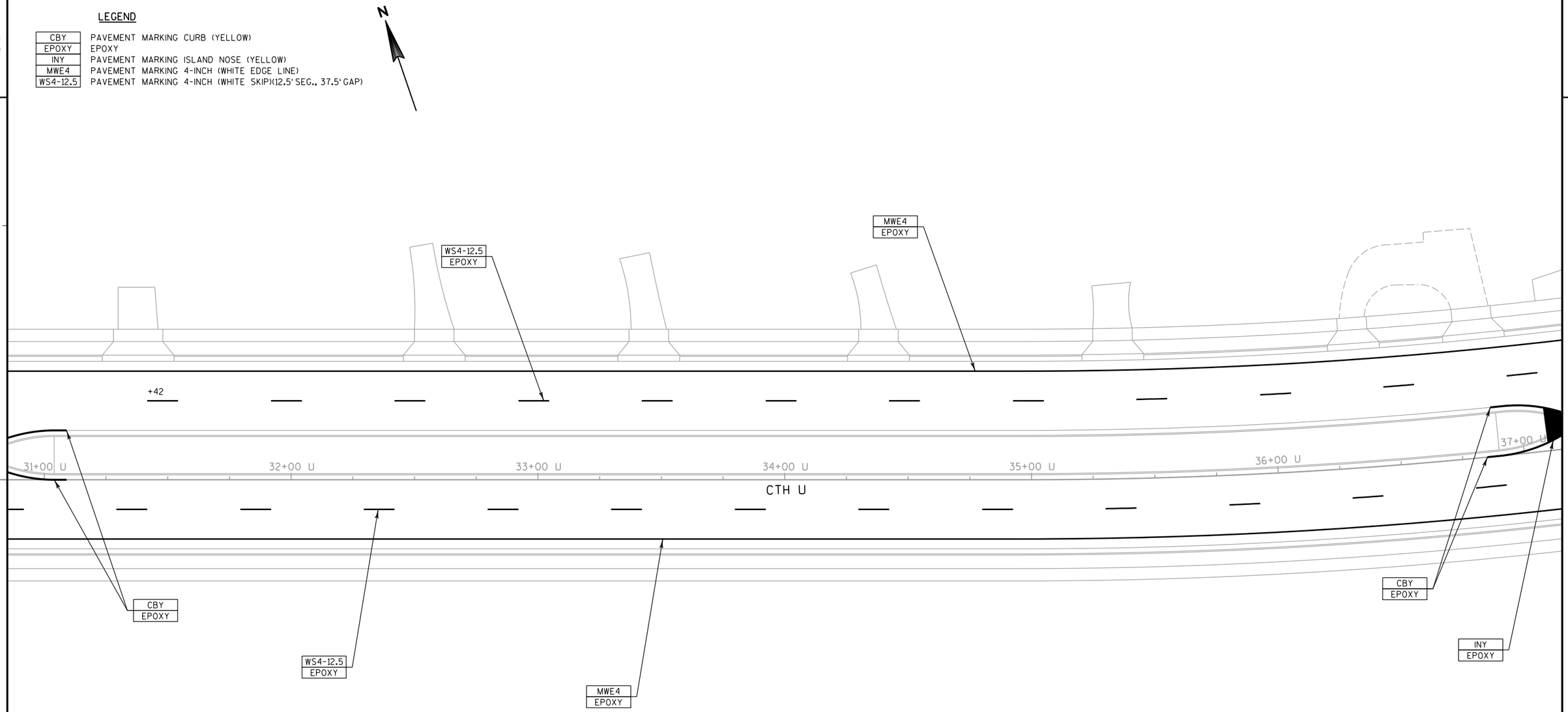
PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	PAVEMENT MARKING - CTH U	SHEET 333	E

2

2

LEGEND

CBY	PAVEMENT MARKING CURB (YELLOW)
EPOXY	EPOXY
INY	PAVEMENT MARKING ISLAND NOSE (YELLOW)
MWE4	PAVEMENT MARKING 4-INCH (WHITE EDGE LINE)
WS4-12.5	PAVEMENT MARKING 4-INCH (WHITE SKIP)(12.5' SEG., 37.5' GAP)



PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	PAVEMENT MARKING - CTH U	SHEET 334 E

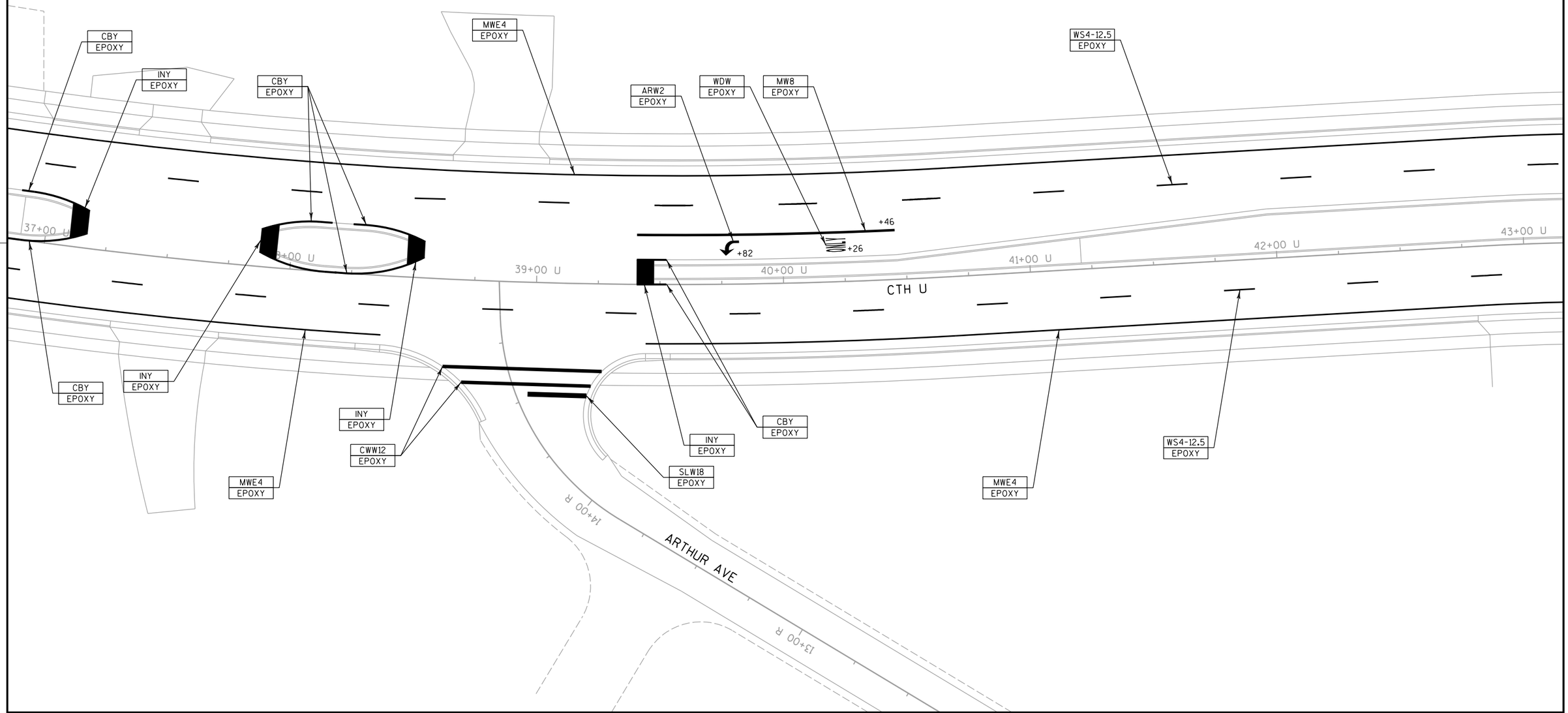
2

2

LEGEND

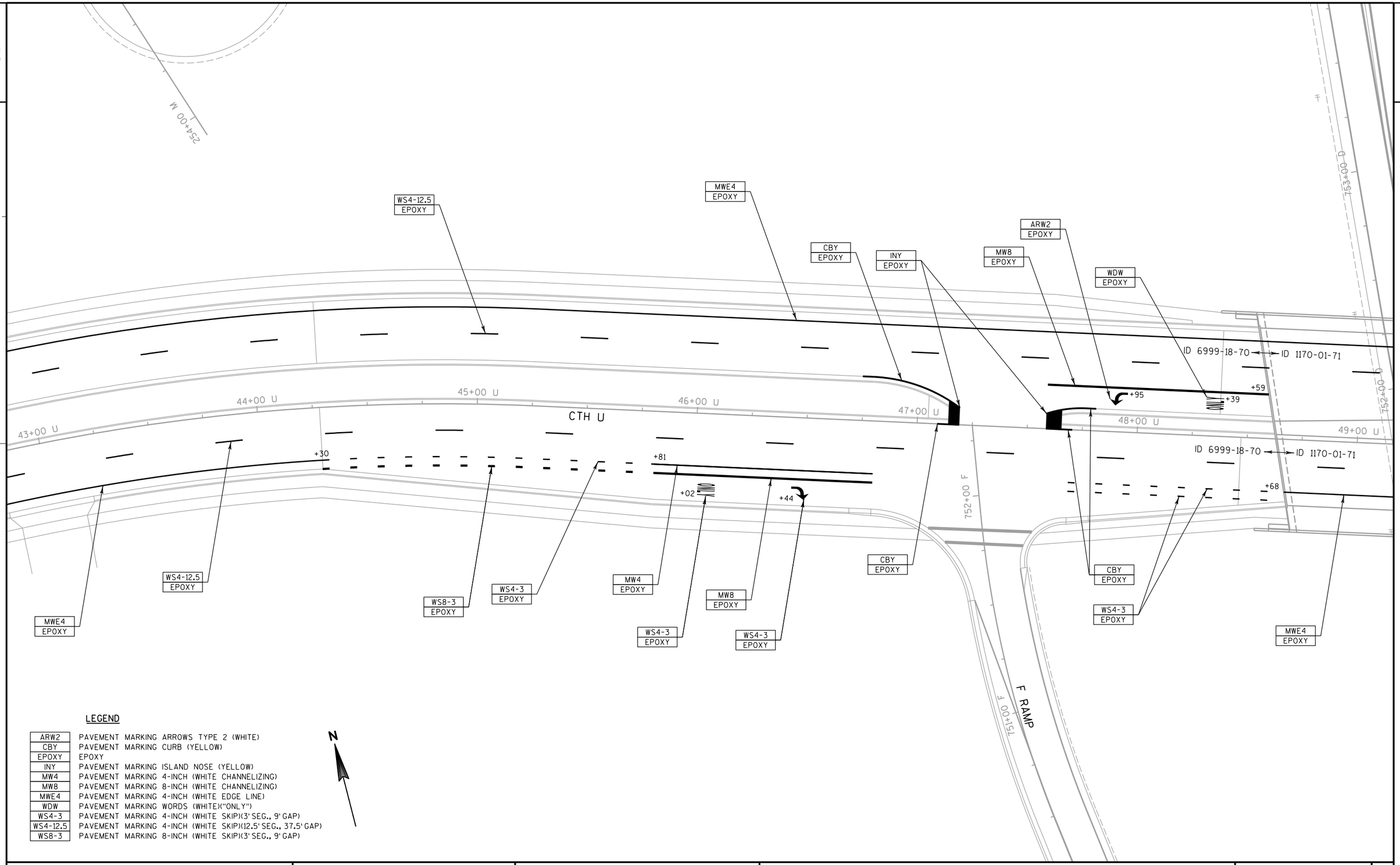
ARW2	PAVEMENT MARKING ARROWS TYPE 2 (WHITE)
CBY	PAVEMENT MARKING CURB (YELLOW)
CWW12	PAVEMENT MARKING CROSSWALK 12-INCH (WHITE)
EPOXY	EPOXY
INY	PAVEMENT MARKING ISLAND NOSE (YELLOW)
MW8	PAVEMENT MARKING 8-INCH (WHITE CHANNELIZING)
MWE4	PAVEMENT MARKING 4-INCH (WHITE EDGE LINE)
SLW18	PAVEMENT MARKING STOP LINE 18-INCH (WHITE)
WDW	PAVEMENT MARKING WORDS (WHITE)("ONLY")
WS4-12.5	PAVEMENT MARKING 4-INCH (WHITE SKIP)(12.5' SEG., 37.5' GAP)

N



PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	PAVEMENT MARKING - CTH U	SHEET 335	E

2



LEGEND

ARW2	PAVEMENT MARKING ARROWS TYPE 2 (WHITE)
CBY	PAVEMENT MARKING CURB (YELLOW)
EPOXY	EPOXY
INY	PAVEMENT MARKING ISLAND NOSE (YELLOW)
MW4	PAVEMENT MARKING 4-INCH (WHITE CHANNELIZING)
MW8	PAVEMENT MARKING 8-INCH (WHITE CHANNELIZING)
MWE4	PAVEMENT MARKING 4-INCH (WHITE EDGE LINE)
WDW	PAVEMENT MARKING WORDS (WHITE)("ONLY")
WS4-3	PAVEMENT MARKING 4-INCH (WHITE SKIP)(3' SEG., 9' GAP)
WS4-12.5	PAVEMENT MARKING 4-INCH (WHITE SKIP)(12.5' SEG., 37.5' GAP)
WS8-3	PAVEMENT MARKING 8-INCH (WHITE SKIP)(3' SEG., 9' GAP)

PROJECT NO: 6999-18-70/1170-01-71	HWY: USH 51	COUNTY: MARATHON	PAVEMENT MARKING - CTH U	SHEET 336 E

2

2

LEGEND

CBY	PAVEMENT MARKING CURB (YELLOW)
DLY12	PAVEMENT MARKING DIAGONAL 12-INCH (YELLOW)
EPOXY	EPOXY
INY	PAVEMENT MARKING ISLAND NOSE (YELLOW)
MDY4	PAVEMENT MARKING 4-INCH DOUBLE YELLOW
MWE4	PAVEMENT MARKING 4-INCH (WHITE EDGE LINE)
WDW	PAVEMENT MARKING WORDS (WHITE)("ONLY")
WS4-3	PAVEMENT MARKING 4-INCH (WHITE SKIP)(3' SEG., 9' GAP)
WS4-12.5	PAVEMENT MARKING 4-INCH (WHITE SKIP)(12.5' SEG., 37.5' GAP)

N

CBY EPOXY

INY EPOXY

CBY EPOXY

WS4-12.5 EPOXY

MWE4 EPOXY

CBY EPOXY

MDY4 EPOXY

ID 1170-01-71 ↔ ID 6999-18-70

ID 1170-01-71 ↔ ID 6999-18-70

CTH U

753+00 SB

753+00 NB

753+00 A

752+00 A

752+00 NB

752+00 SB

752+00 U

751+00 SB

751+00 NB

751+00 A

750+00 SB

750+00 NB

750+00 A

750+00 E

749+00 E

USH 51 SB

USH 51 NB

E RAMP

49+00 U

50+00 U

51+00 U

53+00 U

54+00 U

+46

+61

+20

WS4-12.5 EPOXY

MWE4 EPOXY

WS4-12.5 EPOXY

MWE4 EPOXY

WS4-3 EPOXY

INY EPOXY

DLY12 EPOXY 25'C-C

MWE4 EPOXY

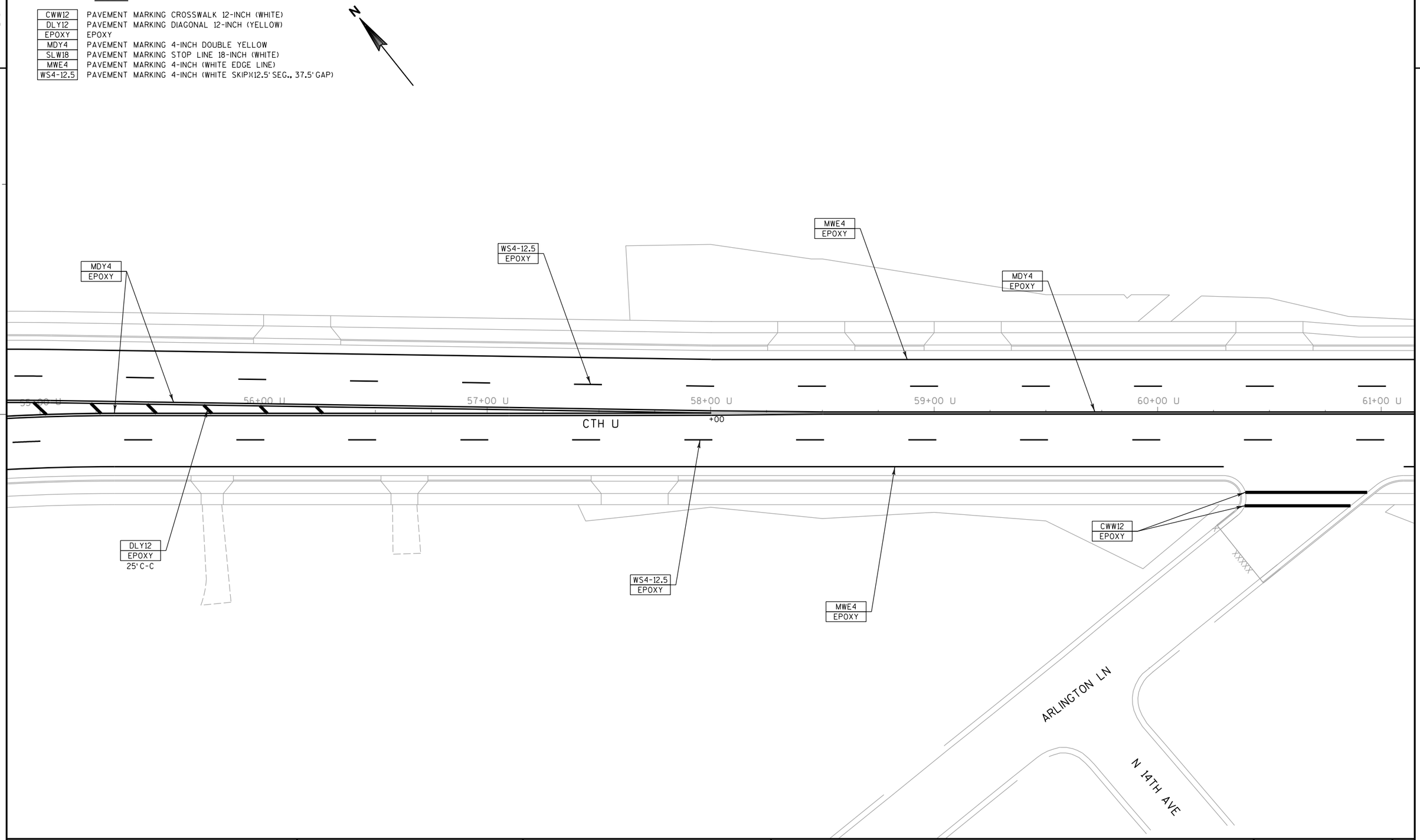
PROJECT NO: 6999-18-70/1170-01-71	HWY: USH 51	COUNTY: MARATHON	PAVEMENT MARKING - CTH U	SHEET 337	E

2

2

LEGEND

CWW12	PAVEMENT MARKING CROSSWALK 12-INCH (WHITE)
DLY12	PAVEMENT MARKING DIAGONAL 12-INCH (YELLOW)
EPOXY	EPOXY
MDY4	PAVEMENT MARKING 4-INCH DOUBLE YELLOW
SLW18	PAVEMENT MARKING STOP LINE 18-INCH (WHITE)
MWE4	PAVEMENT MARKING 4-INCH (WHITE EDGE LINE)
WS4-12.5	PAVEMENT MARKING 4-INCH (WHITE SKIP)(12.5' SEG., 37.5' GAP)



PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	PAVEMENT MARKING - CTH U	SHEET 338 E

FILE NAME : P:\44xx\4448\Plan\Pavement Marking\em_024531_pm.dgn PLOT DATE : 7/30/2012 PLOT BY : walkup PLOT NAME : PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42

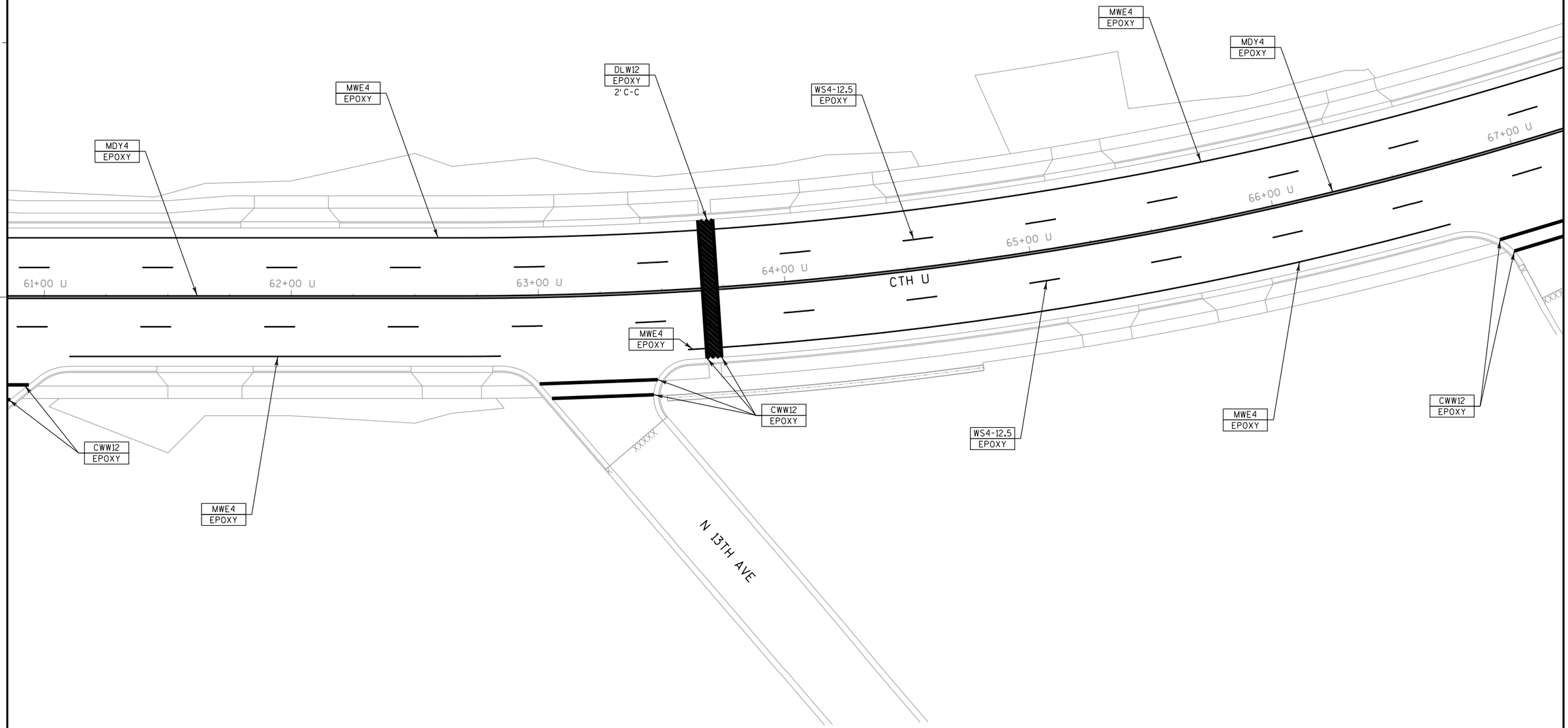
2

2

LEGEND

CWW12	PAVEMENT MARKING CROSSWALK 12-INCH (WHITE)
DLW12	PAVEMENT MARKING DIAGONAL 12-INCH (WHITE)
EPOXY	EPOXY
MDY4	PAVEMENT MARKING 4-INCH DOUBLE YELLOW
MWE4	PAVEMENT MARKING 4-INCH (WHITE EDGE LINE)
SLW18	PAVEMENT MARKING STOP LINE 18-INCH (WHITE)
WS4-12.5	PAVEMENT MARKING 4-INCH (WHITE SKIP)(12.5' SEG., 37.5' GAP)

N



PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	PAVEMENT MARKING - CTH U	SHEET 339	E

FILE NAME : P:\44xx\4448\Plan\Pavement Marking\em_024532_pm.dgn PLOT DATE : 7/30/2012 PLOT BY : walkup PLOT NAME : PLOT SCALE : 1:40

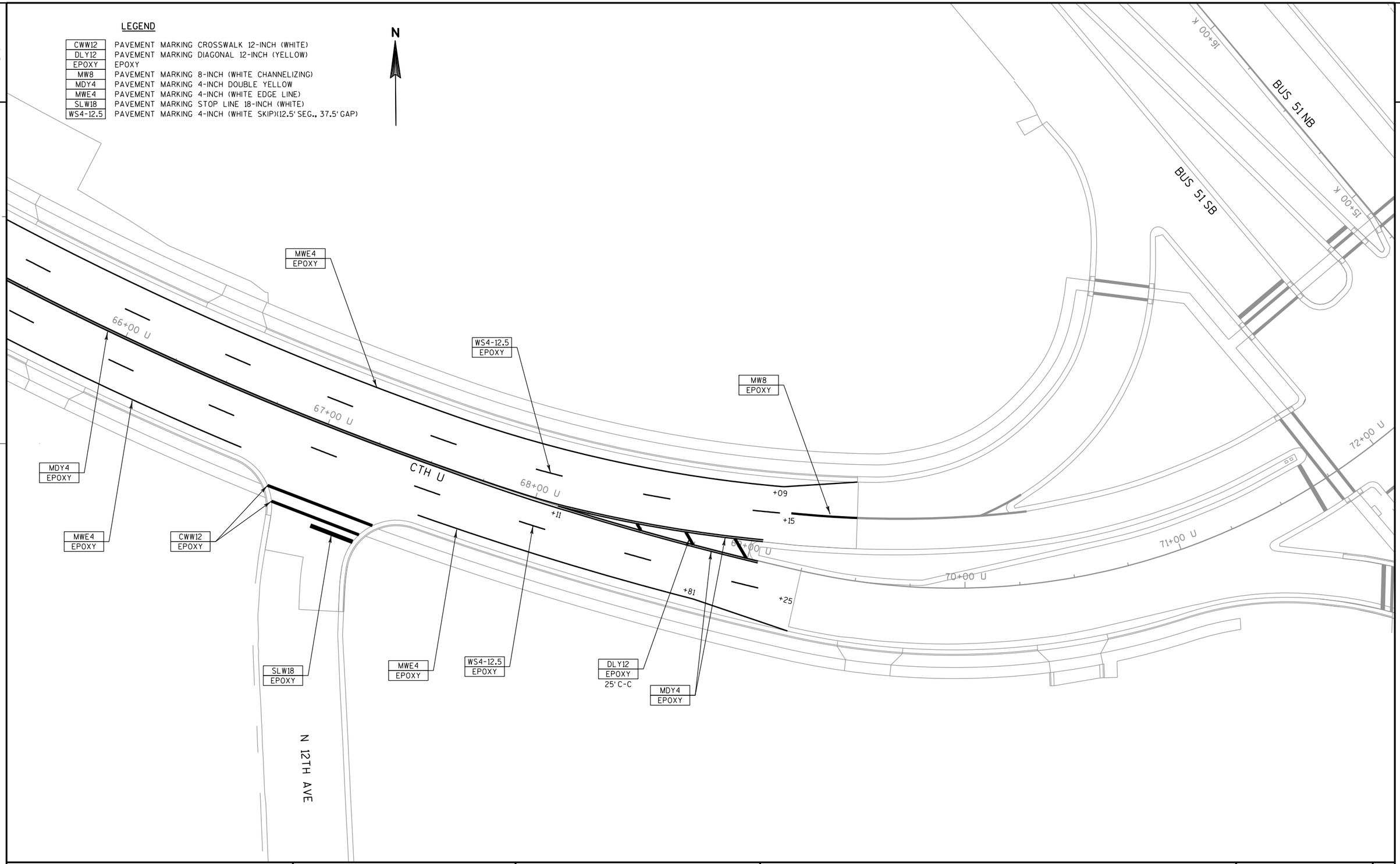
WISDOT/CADDS SHEET 42

2

LEGEND

CWW12	PAVEMENT MARKING CROSSWALK 12-INCH (WHITE)
DLY12	PAVEMENT MARKING DIAGONAL 12-INCH (YELLOW)
EPOXY	EPOXY
MW8	PAVEMENT MARKING 8-INCH (WHITE CHANNELIZING)
MDY4	PAVEMENT MARKING 4-INCH DOUBLE YELLOW
MWE4	PAVEMENT MARKING 4-INCH (WHITE EDGE LINE)
SLW18	PAVEMENT MARKING STOP LINE 18-INCH (WHITE)
WS4-12.5	PAVEMENT MARKING 4-INCH (WHITE SKIP)(12.5' SEG., 37.5' GAP)

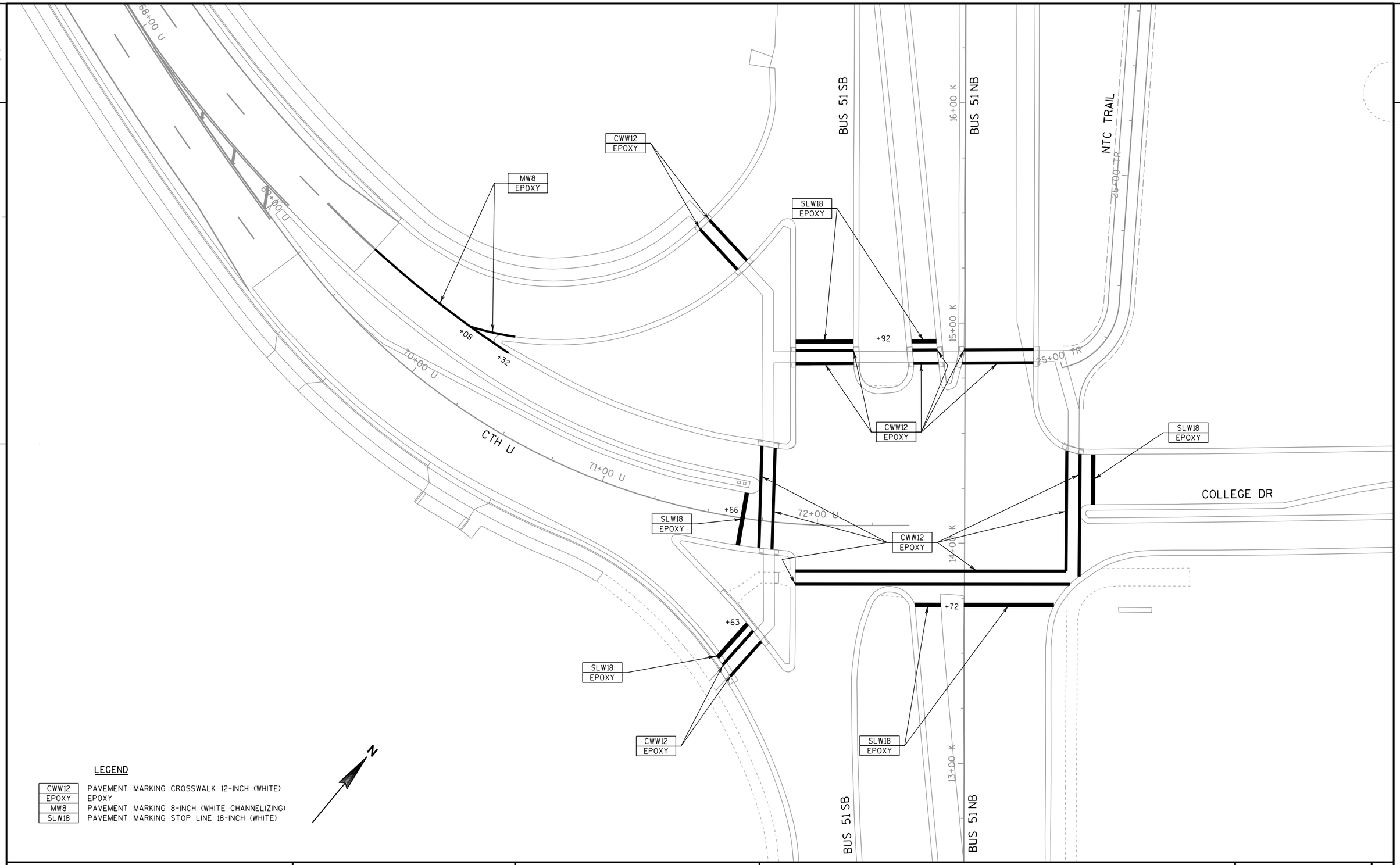
N



2

PROJECT NO:6999-18-70	HWY:USH 51	COUNTY:MARATHON	PAVEMENT MARKING - CTH U	SHEET 340	E

2



LEGEND

CWW12	PAVEMENT MARKING CROSSWALK 12-INCH (WHITE)
EPOXY	EPOXY
MW8	PAVEMENT MARKING 8-INCH (WHITE CHANNELIZING)
SLW18	PAVEMENT MARKING STOP LINE 18-INCH (WHITE)

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	PAVEMENT MARKING - BUSINESS 51/CTH U	SHEET E

FILE NAME : P:\44xx\4448\Plan\Pavement Marking\em_024534_pm.dgn PLOT DATE : 8/31/2012 PLOT BY : walkup PLOT NAME : PLOT SCALE : 1:40

2

BUS 51 SB

BUS 51 NB

26+00

25+00 K

24+00 K

23+00 K

+00

+50

WS4-12.5
EPOXY

N 14TH AVE

DLW12
EPOXY
2' C-C

CWW12
EPOXY

35+00 TR

34+00 TR

NTC TRAIL

LEGEND

CWW12	PAVEMENT MARKING CROSSWALK 12-INCH (WHITE)
DLW12	PAVEMENT MARKING DIAGONAL 12-INCH (WHITE)
EPOXY	EPOXY
WS4-12.5	PAVEMENT MARKING 4-INCH (WHITE SKIP)(12.5' SEG., 37.5' GAP)

N

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	PAVEMENT MARKING - BUSINESS 51/NTC TRAIL	SHEET 342	E

FILE NAME : P:\44xx\4448\Plan\Pavement Marking\em_024534A_pm.dgn PLOT DATE : 7/30/2012 PLOT BY : walkup PLOT NAME : PLOT SCALE : 1:40

2

2

LEGEND

ARW1	PAVEMENT MARKING ARROWS TYPE 1 (WHITE)
ARW3	PAVEMENT MARKING ARROWS TYPE 3 (WHITE)
EPOXY	EPOXY
GPTP	GROOVED PREFORMED THERMOPLASTIC
MWE4	PAVEMENT MARKING 4-INCH (WHITE EDGE LINE)
MYE4	PAVEMENT MARKING 4-INCH (YELLOW EDGE LINE)
MW8	PAVEMENT MARKING 8-INCH (WHITE CHANNELIZING)
WS4-12.5	PAVEMENT MARKING 4-INCH (WHITE SKIP)(12.5' SEG., 37.5' GAP)

N

MWE4 EPOXY

WS4-12.5 EPOXY

+64

+24

MW8 EPOXY

+93

30+00 KS

31+00 KS

BUS 51 SB

32+00 KS

33+00 KS

34+00 KS

+60

35+00 KS

+65

+84

+93

MYE4 EPOXY

ARW1 GPTP

29+00 K

30+00 KN

31+00 KN

32+00 KN

33+00 KN

34+00 KN

35+00 KN

+80

BUS 51 NB

+93

+35

+16

+93

WS4-12.5 EPOXY

MWE4 EPOXY

ARW3 GPTP

CAMPUS DR

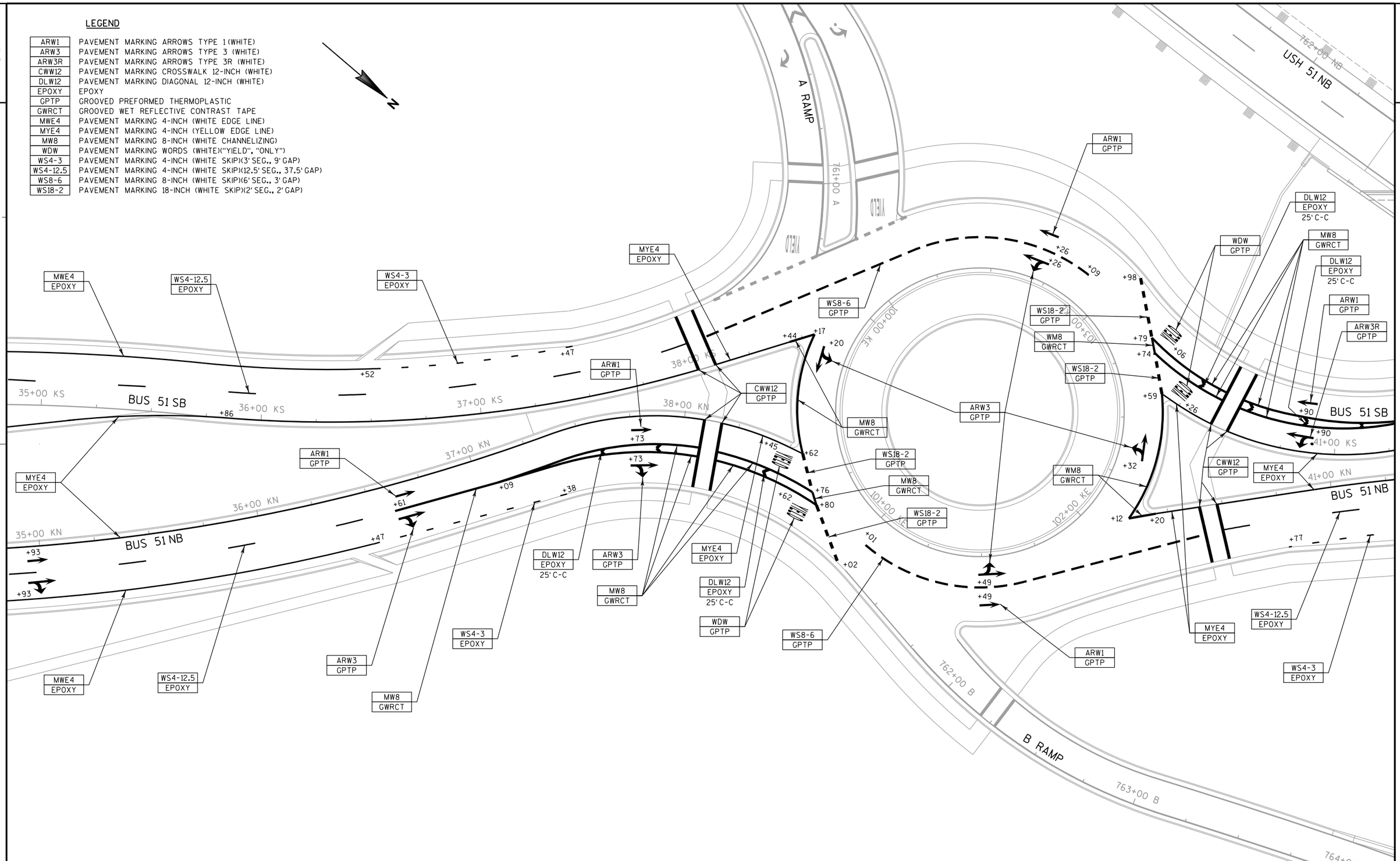
14TH AVE

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	PAVEMENT MARKING - BUS 51	SHEET 343	E

2

LEGEND

ARW1	PAVEMENT MARKING ARROWS TYPE 1 (WHITE)
ARW3	PAVEMENT MARKING ARROWS TYPE 3 (WHITE)
ARW3R	PAVEMENT MARKING ARROWS TYPE 3R (WHITE)
CWW12	PAVEMENT MARKING CROSSWALK 12-INCH (WHITE)
DLW12	PAVEMENT MARKING DIAGONAL 12-INCH (WHITE)
EPOXY	EPOXY
GPTP	GROOVED PREFORMED THERMOPLASTIC
GWRCT	GROOVED WET REFLECTIVE CONTRAST TAPE
MWE4	PAVEMENT MARKING 4-INCH (WHITE EDGE LINE)
MYE4	PAVEMENT MARKING 4-INCH (YELLOW EDGE LINE)
MW8	PAVEMENT MARKING 8-INCH (WHITE CHANNELIZING)
WDW	PAVEMENT MARKING WORDS (WHITE)("YIELD", "ONLY")
WS4-3	PAVEMENT MARKING 4-INCH (WHITE SKIP)(3' SEG., 9' GAP)
WS4-12.5	PAVEMENT MARKING 4-INCH (WHITE SKIP)(12.5' SEG., 37.5' GAP)
WS8-6	PAVEMENT MARKING 8-INCH (WHITE SKIP)(6' SEG., 3' GAP)
WS18-2	PAVEMENT MARKING 18-INCH (WHITE SKIP)(2' SEG., 2' GAP)



PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	PAVEMENT MARKING - BUS 51	SHEET 344 E

FILE NAME : P:\44xx\4448\Plan\Pavement Marking\em_024536_pm.dgn PLOT DATE : 7/30/2012 PLOT BY : walkup PLOT NAME : PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42

2

2

LEGEND

ARW1	PAVEMENT MARKING ARROWS TYPE 1 (WHITE)
ARW3R	PAVEMENT MARKING ARROWS TYPE 3R (WHITE)
EPOXY	EPOXY
GPTP	GROOVED PREFORMED THERMOPLASTIC
GWRCT	GROOVED WET REFLECTIVE CONTRAST TAPE
MWE4	PAVEMENT MARKING 4-INCH (WHITE EDGE LINE)
MYE4	PAVEMENT MARKING 4-INCH (YELLOW EDGE LINE)
MW8	PAVEMENT MARKING 8-INCH (WHITE CHANNELIZING)
WS4-3	PAVEMENT MARKING 4-INCH (WHITE SKIP)(3' SEG., 9' GAP)
WS4-12.5	PAVEMENT MARKING 4-INCH (WHITE SKIP)(12.5' SEG., 37.5' GAP)

N

762+00 NB
763+00 SB
USH 51 SB
764+00 SB
763+00 NB
USH 51 NB
764+00 NB
765+00 SB
765+00 NB
766+00 SB
767+00 SB
767+00 NB
768+00 SB
768+00 NB
USH 51 SB
USH 51 NB

MW8 GWRCT
ARW1 GPTP
WS4-3 EPOXY
MWE4 EPOXY
WS4-12.5 EPOXY
ARW1 GPTP
ARW3R GPTP
MYE4 EPOXY
ARW3R GPTP
ARW1 GPTP
WS4-12.5 EPOXY
WS4-3 EPOXY
MWE4 EPOXY

+90
+90
+46
+41
+24
+90
+90
+70
+70
+32
+56

41+00 KS
42+00 KS
43+00 KS
44+00 KS
45+00 KS
46+00 KS
47+00 KS
41+00 KN
42+00 KN
43+00 KN
44+00 KN
45+00 KN
46+00 KN
47+00 KN

BUS 51 SB
BUS 51 NB

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	PAVEMENT MARKING - BUS 51	SHEET 345 E

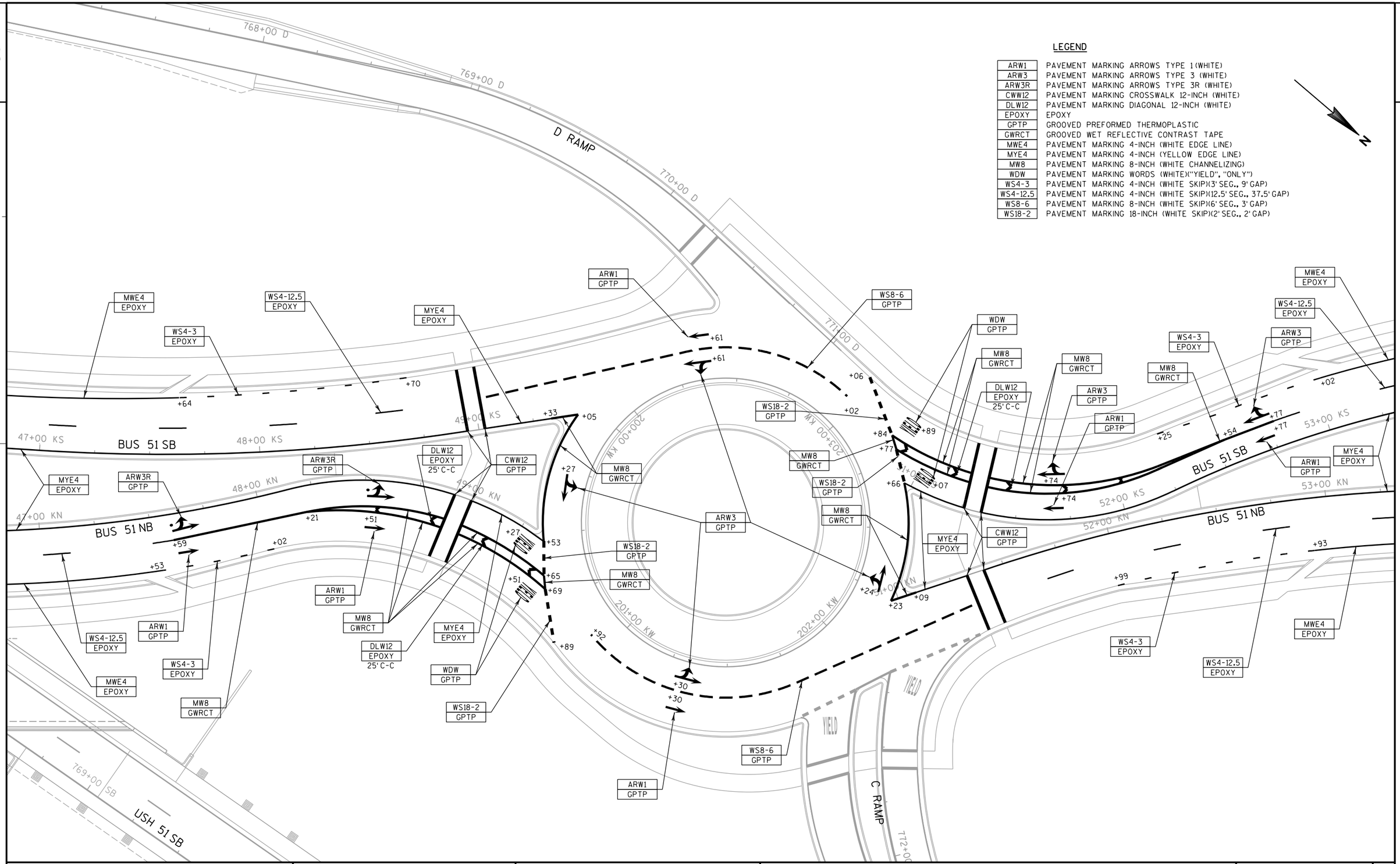
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WISDOT/CADDS SHEET 42

2

LEGEND

ARW1	PAVEMENT MARKING ARROWS TYPE 1 (WHITE)
ARW3	PAVEMENT MARKING ARROWS TYPE 3 (WHITE)
ARW3R	PAVEMENT MARKING ARROWS TYPE 3R (WHITE)
CWW12	PAVEMENT MARKING CROSSWALK 12-INCH (WHITE)
DLW12	PAVEMENT MARKING DIAGONAL 12-INCH (WHITE)
EPOXY	EPOXY
GPTP	GROOVED PREFORMED THERMOPLASTIC
GWRCT	GROOVED WET REFLECTIVE CONTRAST TAPE
MWE4	PAVEMENT MARKING 4-INCH (WHITE EDGE LINE)
MYE4	PAVEMENT MARKING 4-INCH (YELLOW EDGE LINE)
MW8	PAVEMENT MARKING 8-INCH (WHITE CHANNELIZING)
WDW	PAVEMENT MARKING WORDS (WHITE)("YIELD", "ONLY")
WS4-3	PAVEMENT MARKING 4-INCH (WHITE SKIP)(3' SEG., 9' GAP)
WS4-12.5	PAVEMENT MARKING 4-INCH (WHITE SKIP)(12.5' SEG., 37.5' GAP)
WS8-6	PAVEMENT MARKING 8-INCH (WHITE SKIP)(6' SEG., 3' GAP)
WS18-2	PAVEMENT MARKING 18-INCH (WHITE SKIP)(2' SEG., 2' GAP)



PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	PAVEMENT MARKING - BUS 51/CTH K	SHEET 346 E

FILE NAME : P:\44xx\4448\Plan\Pavement Marking\em_024538_pm.dgn PLOT DATE : 7/30/2012 PLOT BY : walkup PLOT NAME : PLOT SCALE : 1:40

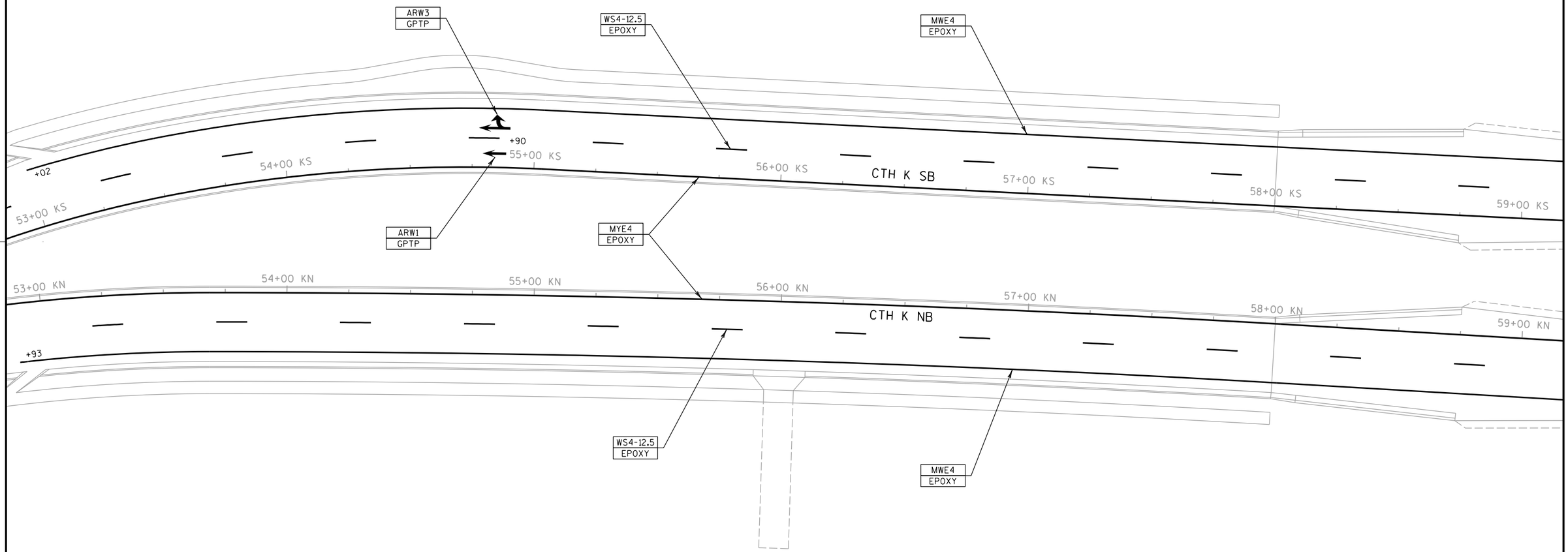
2

2

LEGEND

ARW1	PAVEMENT MARKING ARROWS TYPE 1 (WHITE)
ARW3	PAVEMENT MARKING ARROWS TYPE 3 (WHITE)
EPOXY	EPOXY
GPTP	GROOVED PREFORMED THERMOPLASTIC
MWE4	PAVEMENT MARKING 4-INCH (WHITE EDGE LINE)
MYE4	PAVEMENT MARKING 4-INCH (YELLOW EDGE LINE)
WS4-12.5	PAVEMENT MARKING 4-INCH (WHITE SKIP)(12.5' SEG., 37.5' GAP)

N



PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	PAVEMENT MARKING - CTH K	SHEET 347	E

FILE NAME : P:\44xx\4448\Plan\Pavement Marking\em_024539_pm.dgn PLOT DATE : 7/30/2012 PLOT BY : walkup PLOT NAME : PLOT SCALE : 1:40

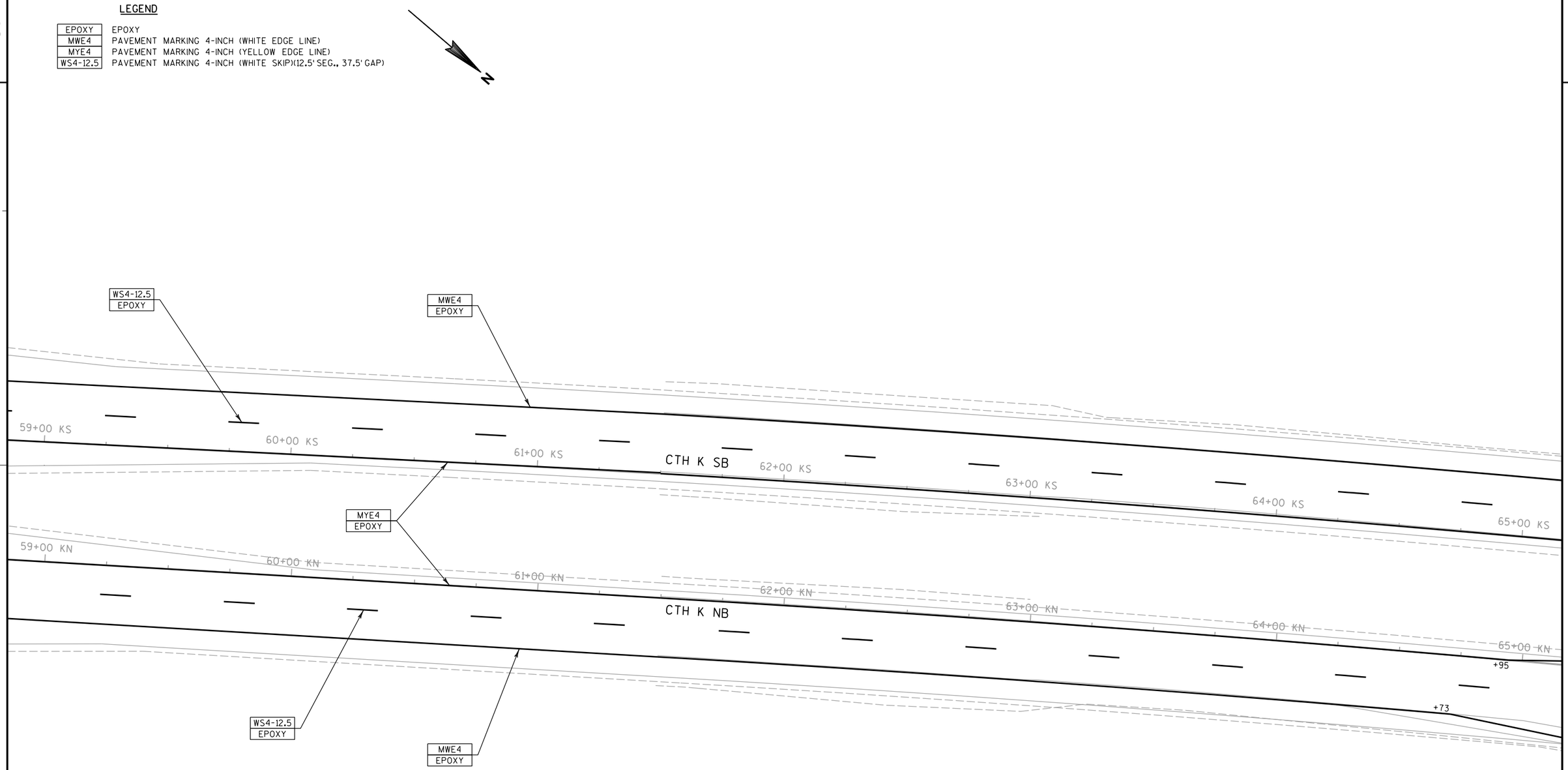
WISDOT/CADDS SHEET 42

2

2

LEGEND

EPOXY	EPOXY
MWE4	PAVEMENT MARKING 4-INCH (WHITE EDGE LINE)
MYE4	PAVEMENT MARKING 4-INCH (YELLOW EDGE LINE)
WS4-12.5	PAVEMENT MARKING 4-INCH (WHITE SKIP)(12.5' SEG., 37.5' GAP)



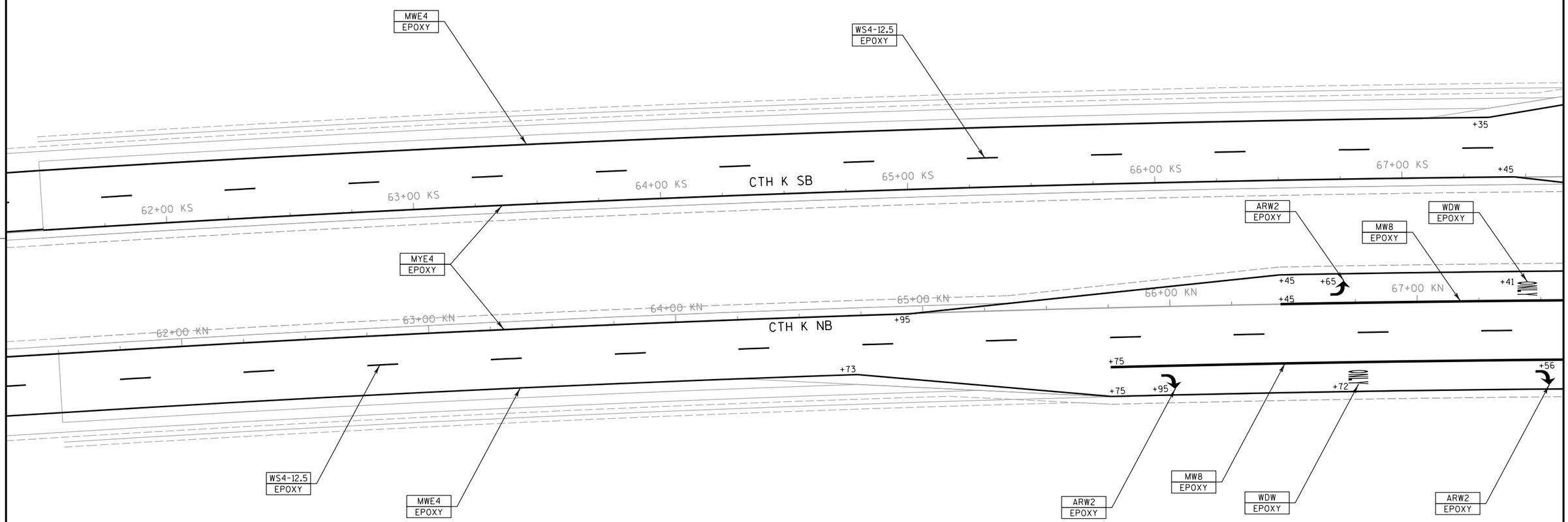
PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	PAVEMENT MARKING - CTH K	SHEET 348 E

2

2

LEGEND

ARW2	PAVEMENT MARKING ARROWS TYPE 2 (WHITE)
EPOXY	EPOXY
MW8	PAVEMENT MARKING 8-INCH (WHITE CHANNELIZING)
MWE4	PAVEMENT MARKING 4-INCH (WHITE EDGE LINE)
MYE4	PAVEMENT MARKING 4-INCH (YELLOW EDGE LINE)
WDW	PAVEMENT MARKING WORDS (WHITE)("ONLY")
WS4-12.5	PAVEMENT MARKING 4-INCH (WHITE SKIP)(12.5' SEG., 37.5' GAP)



PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	PAVEMENT MARKING - CTH K	SHEET 349 E

2

2

CASSIDY DR

OVERLOOK DR

230+00 V

231+00 V

CTH K SB

CTH K NB

68+00 KS

69+00 KS

70+00 KS

71+00 KS

72+00 KS

73+00 KS

68+00 KN

69+00 KN

70+00 KN

71+00 KN

72+00 KN

73+00 KN

N 20TH AVE

ONLY ONLY ONLY

A SECOND SET OF ARROWS
AND A SECOND SET OF
ONLYS LOCATED 75'EAST

LEGEND

ARW2	PAVEMENT MARKING ARROWS TYPE 2 (WHITE)
EPOXY	EPOXY
MW8	PAVEMENT MARKING 8-INCH (WHITE CHANNELIZING)
MWE4	PAVEMENT MARKING 4-INCH (WHITE EDGE LINE)
MYE4	PAVEMENT MARKING 4-INCH (YELLOW EDGE LINE)
WDW	PAVEMENT MARKING WORDS (WHITE)("ONLY")
WS4-12.5	PAVEMENT MARKING 4-INCH (WHITE SKIP)(12.5' SEG., 37.5' GAP)

N

MWE4 EPOXY
WS4-12.5 EPOXY
MYE4 EPOXY
ARW2 EPOXY
WDW EPOXY
MW8 EPOXY

+45 +41 +25 +45 +56 +17 +37 +21 +97 +15 +68 +88 +71 +47 +67 +60

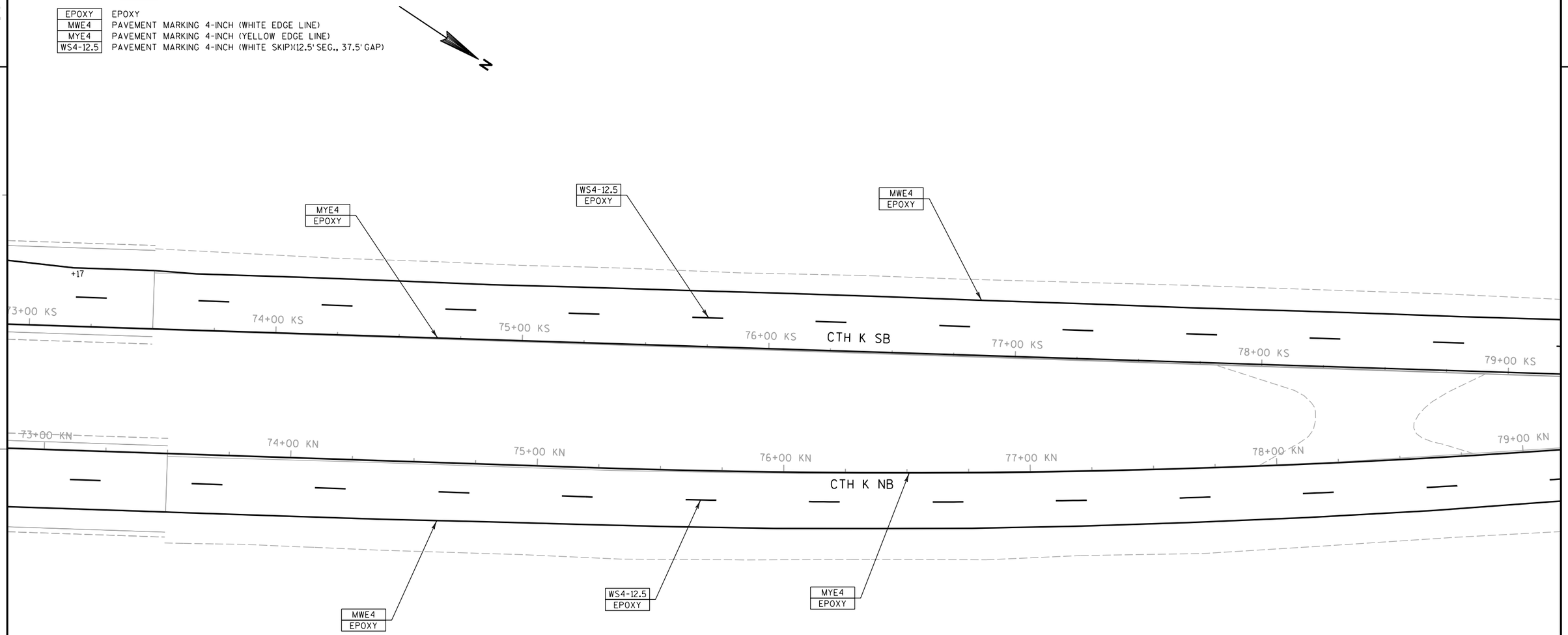
PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	PAVEMENT MARKING - CTH K	SHEET 350	E

2

2

LEGEND

EPOXY	EPOXY
MWE4	PAVEMENT MARKING 4-INCH (WHITE EDGE LINE)
MYE4	PAVEMENT MARKING 4-INCH (YELLOW EDGE LINE)
WS4-12.5	PAVEMENT MARKING 4-INCH (WHITE SKIP)(12.5' SEG., 37.5' GAP)



PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	PAVEMENT MARKING - CTH K	SHEET 351 E

FILE NAME : P:\44xx\4448\Plan\Pavement Marking\em_024540C_pm.dgn PLOT DATE : 7/30/2012 PLOT BY : walkup PLOT NAME : PLOT SCALE : 1:40

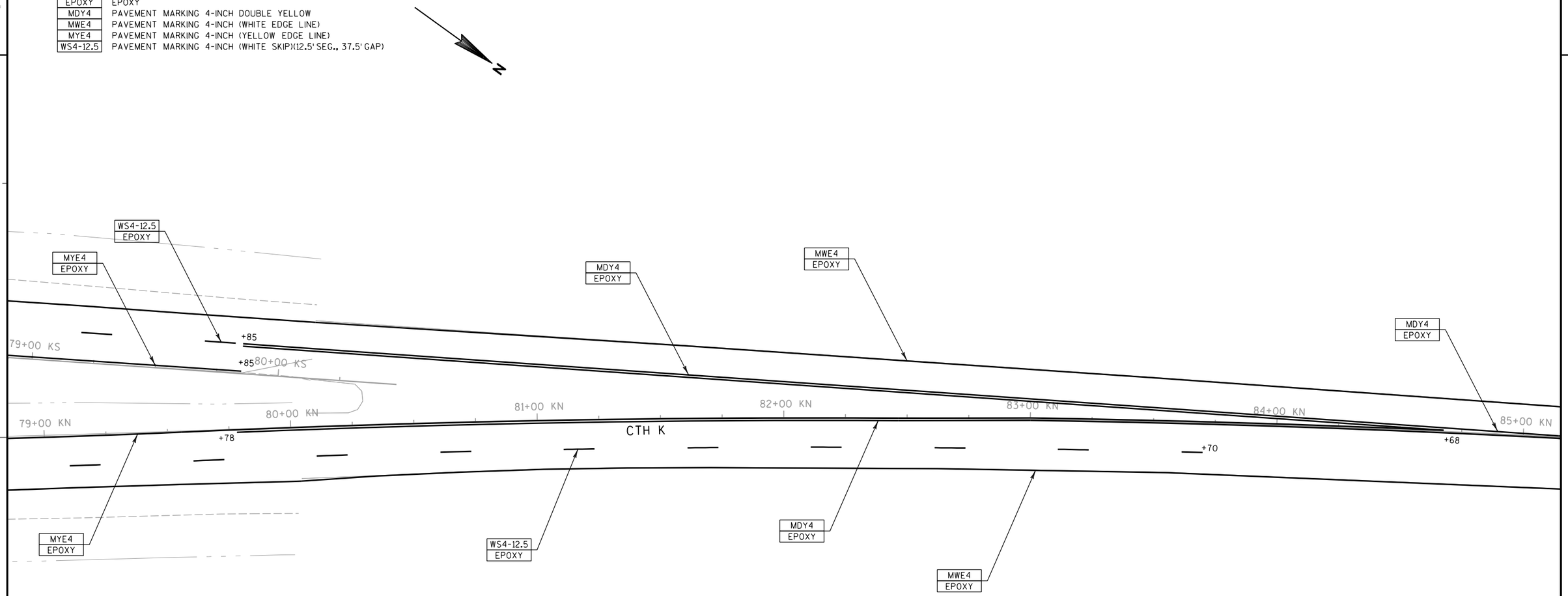
WISDOT/CADDS SHEET 42

2

2

LEGEND

EPOXY	EPOXY
MDY4	PAVEMENT MARKING 4-INCH DOUBLE YELLOW
MWE4	PAVEMENT MARKING 4-INCH (WHITE EDGE LINE)
MYE4	PAVEMENT MARKING 4-INCH (YELLOW EDGE LINE)
WS4-12.5	PAVEMENT MARKING 4-INCH (WHITE SKIP)(12.5' SEG., 37.5' GAP)



PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	PAVEMENT MARKING - CTH K	SHEET 352 E

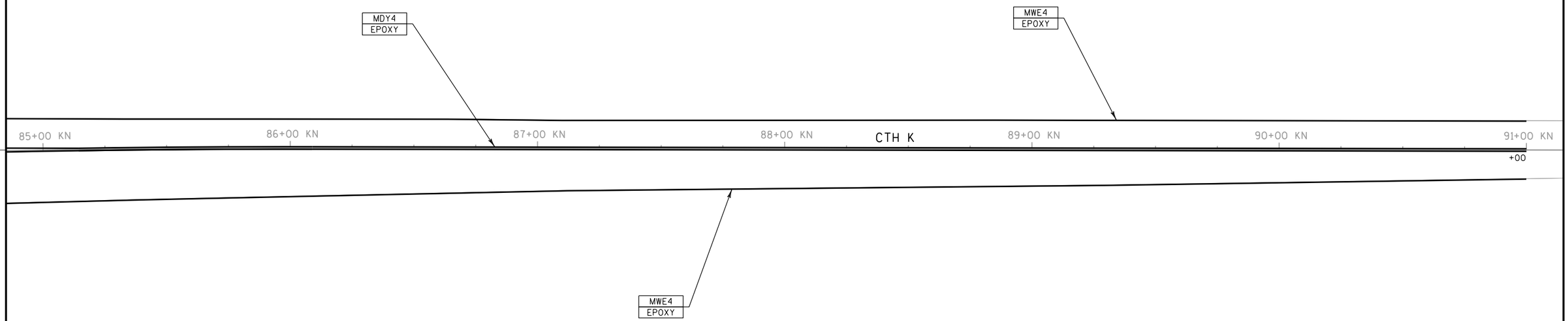
2

2

LEGEND

EPOXY	EPOXY
MDY4	PAVEMENT MARKING 4-INCH DOUBLE YELLOW
MWE4	PAVEMENT MARKING 4-INCH (WHITE EDGE LINE)
MYE4	PAVEMENT MARKING 4-INCH (YELLOW EDGE LINE)

N



PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	PAVEMENT MARKING - CTH K	SHEET 353 E

2

2

LEGEND

EPOXY	EPOXY
MDY4	PAVEMENT MARKING 4-INCH DOUBLE YELLOW
MW8	PAVEMENT MARKING 8-INCH (WHITE CHANNELIZING)
MWE4	PAVEMENT MARKING 4-INCH (WHITE EDGE LINE)

N

CTH U

ONLY

23+00 U

24+00 U

25+00 U

26+00 U

200+00 V

201+00 V

202+00 V

203+00 V

204+00 V

205+00 V

206+00 V

OVERLOOK DR

MW8
EPOXY

MDY4
EPOXY

MWE4
EPOXY

MWE4
EPOXY

+10

+30

+10

+30

+67

+10

+30

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	PAVEMENT MARKING - OVERLOOK DRIVE	SHEET 354	E

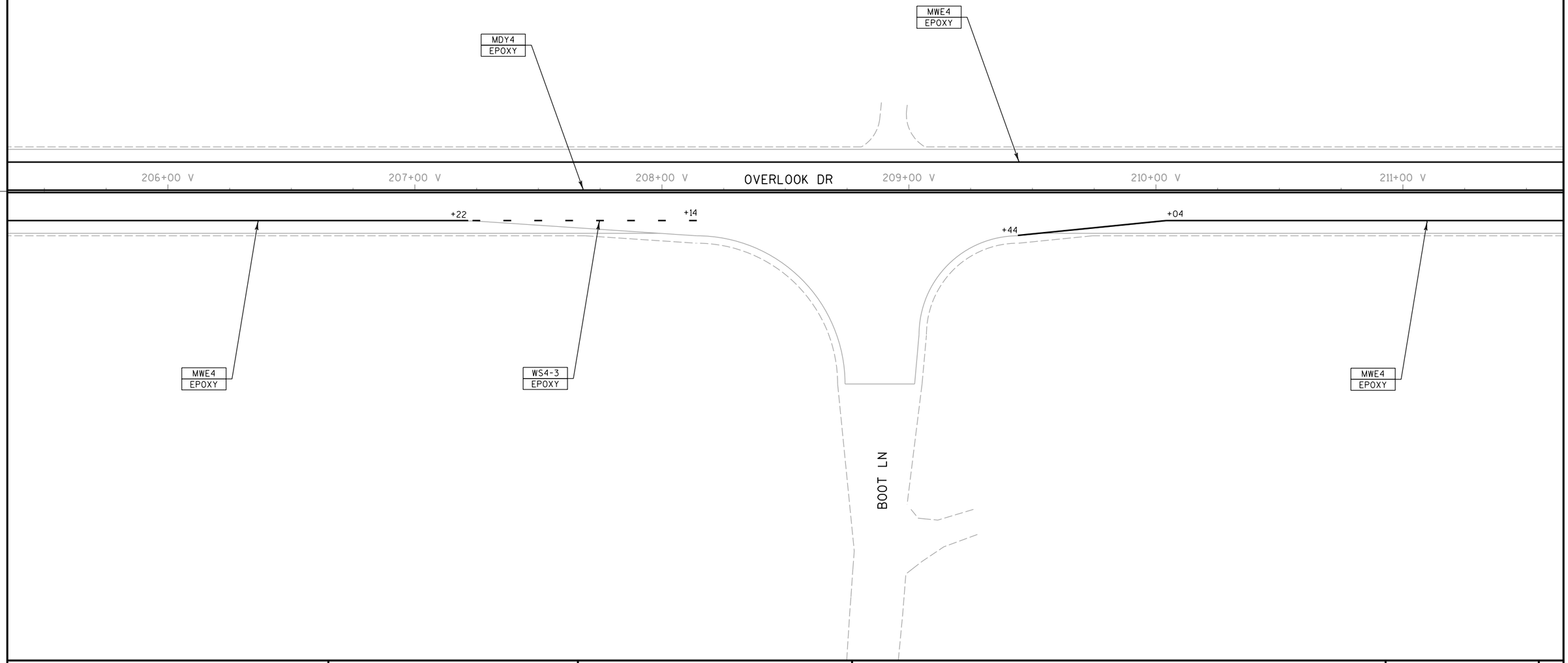
2

2

LEGEND

EPOXY	EPOXY
MDY4	PAVEMENT MARKING 4-INCH DOUBLE YELLOW
MWE4	PAVEMENT MARKING 4-INCH (WHITE EDGE LINE)
SLW18	PAVEMENT MARKING STOP LINE 18-INCH (WHITE)
WS4-3	PAVEMENT MARKING 4-INCH (WHITE SKIP)(3' SEG., 9' GAP)

N



PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	PAVEMENT MARKING - OVERLOOK DRIVE	SHEET 355 E

FILE NAME : P:\44xx\4448\Plan\Pavement Marking\em_024542_pm.dgn PLOT DATE : 7/30/2012 PLOT BY : walkup PLOT NAME : PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42

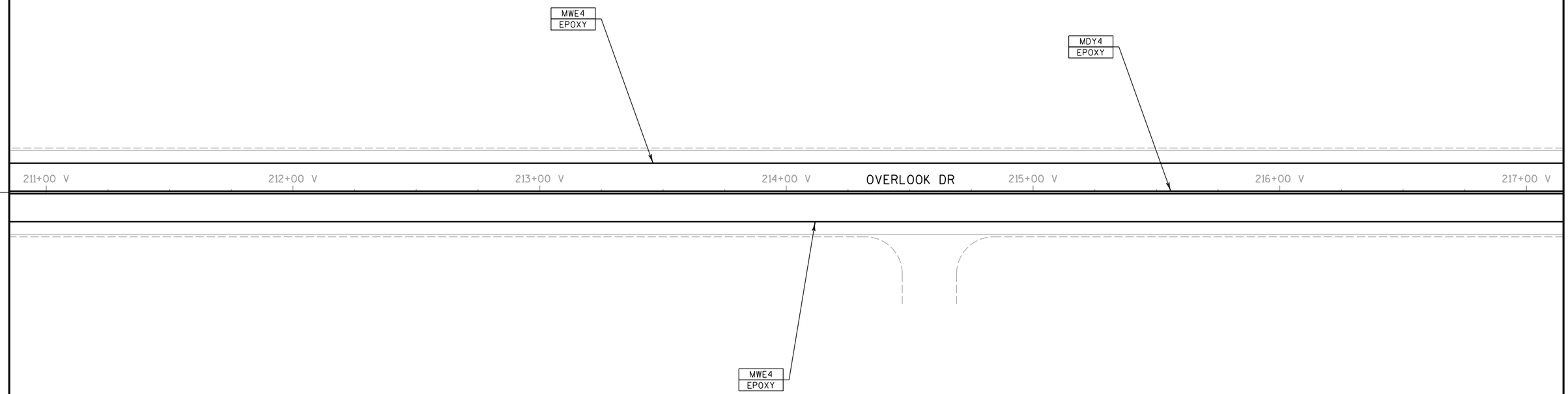
2

2

LEGEND

EPOXY	EPOXY
MDY4	PAVEMENT MARKING 4-INCH DOUBLE YELLOW
MWE4	PAVEMENT MARKING 4-INCH (WHITE EDGE LINE)

N



PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	PAVEMENT MARKING - OVERLOOK DRIVE	SHEET 356 E

FILE NAME : P:\44xx\4448\Plan\Pavement Marking\em_024543_pm.dgn PLOT DATE : 7/30/2012 PLOT BY : walkup PLOT NAME : PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42

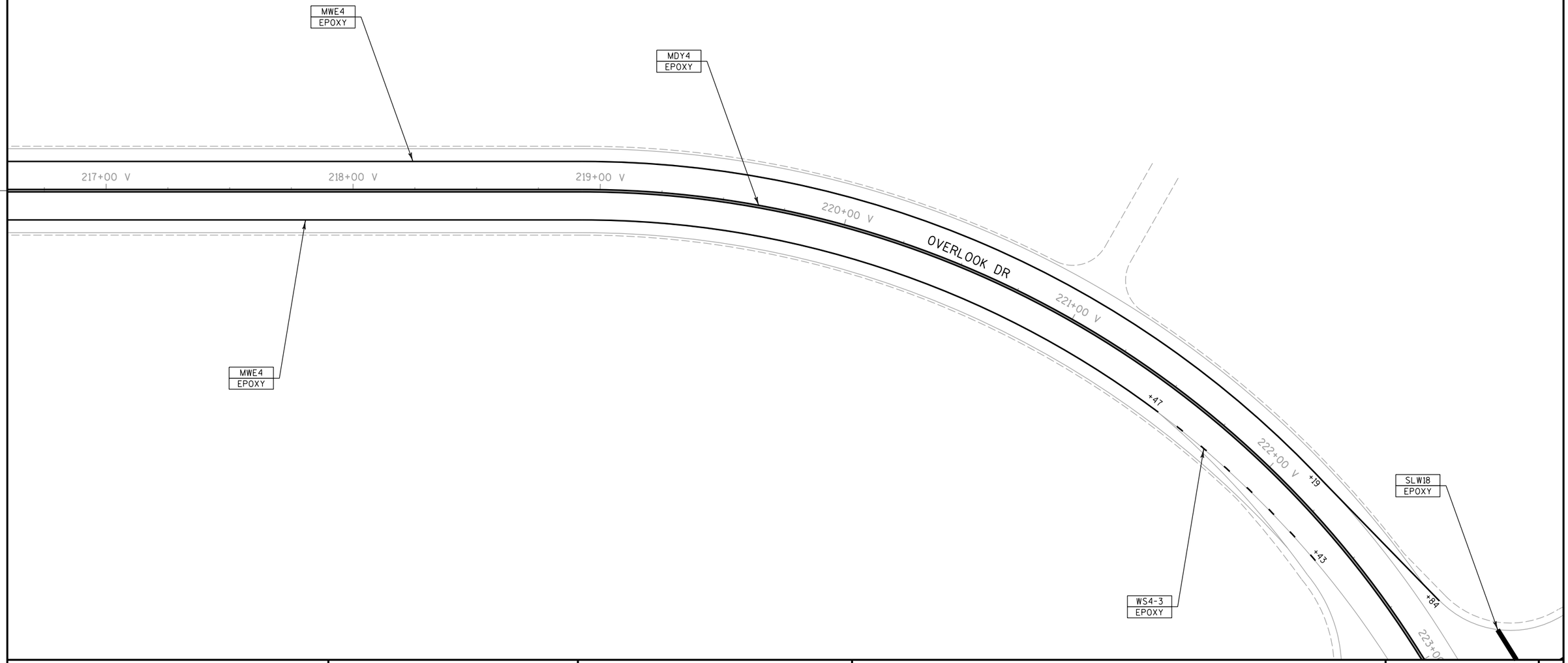
2

2

LEGEND

EPOXY	EPOXY
MDY4	PAVEMENT MARKING 4-INCH DOUBLE YELLOW
MWE4	PAVEMENT MARKING 4-INCH (WHITE EDGE LINE)
SLW18	PAVEMENT MARKING STOP LINE 18-INCH (WHITE)
WS4-3	PAVEMENT MARKING 4-INCH (WHITE SKIP)(3' SEG., 9' GAP)

N



PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	PAVEMENT MARKING - OVERLOOK DRIVE	SHEET 357 E

FILE NAME : P:\44xx\4448\Plan\Pavement Marking\em_024544_pm.dgn PLOT DATE : 7/30/2012 PLOT BY : walkup PLOT NAME : PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42

2

LEGEND

EPOXY	EPOXY
MDY4	PAVEMENT MARKING 4-INCH DOUBLE YELLOW
MWE4	PAVEMENT MARKING 4-INCH (WHITE EDGE LINE)
SLW18	PAVEMENT MARKING STOP LINE 18-INCH (WHITE)
WS4-3	PAVEMENT MARKING 4-INCH (WHITE SKIP)(3' SEG., 9' GAP)

NOTE: DOUBLE YELLOW PAVEMENT MARKING EXTENDS 500' FROM INTERSECTION.

MERRILL AVE

MDY4 EPOXY

SLW18 EPOXY

WS4-3 EPOXY

MWE4 EPOXY

MWE4 EPOXY

OVERLOOK DR

220+00 V

221+00 V

222+00 V

223+00 V

224+00 V

225+00 V

226+00 V

+19

+47

+43

+84

+05

+97

MDY4 EPOXY

WS4-3 EPOXY

MWE4 EPOXY

SLW18 EPOXY

MWE4 EPOXY

MDY4 EPOXY

MDY4 EPOXY

MERRILL AVE

NOTE: DOUBLE YELLOW PAVEMENT MARKING EXTENDS 500' FROM INTERSECTION.

2

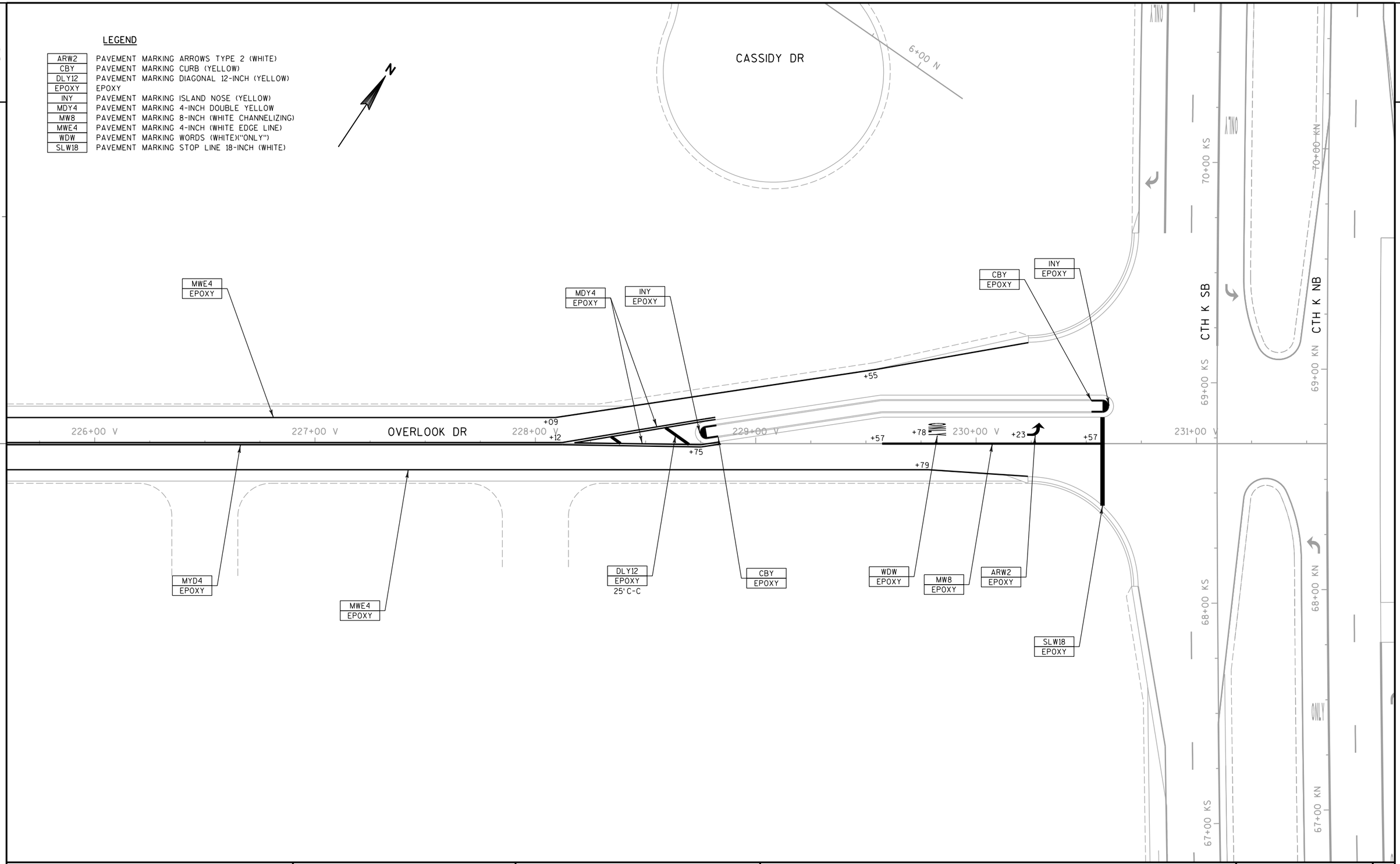
PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	PAVEMENT MARKING - OVERLOOK DRIVE	SHEET 358 E

FILE NAME : P:\44xx\4448\Plan\Pavement Marking\em_024545_pm.dgn PLOT DATE : 7/30/2012 PLOT BY : walkup PLOT NAME : PLOT SCALE : 1:40

2

LEGEND

ARW2	PAVEMENT MARKING ARROWS TYPE 2 (WHITE)
CBY	PAVEMENT MARKING CURB (YELLOW)
DLY12	PAVEMENT MARKING DIAGONAL 12-INCH (YELLOW)
EPOXY	EPOXY
INY	PAVEMENT MARKING ISLAND NOSE (YELLOW)
MDY4	PAVEMENT MARKING 4-INCH DOUBLE YELLOW
MW8	PAVEMENT MARKING 8-INCH (WHITE CHANNELIZING)
MWE4	PAVEMENT MARKING 4-INCH (WHITE EDGE LINE)
WDW	PAVEMENT MARKING WORDS (WHITE)("ONLY")
SLW18	PAVEMENT MARKING STOP LINE 18-INCH (WHITE)



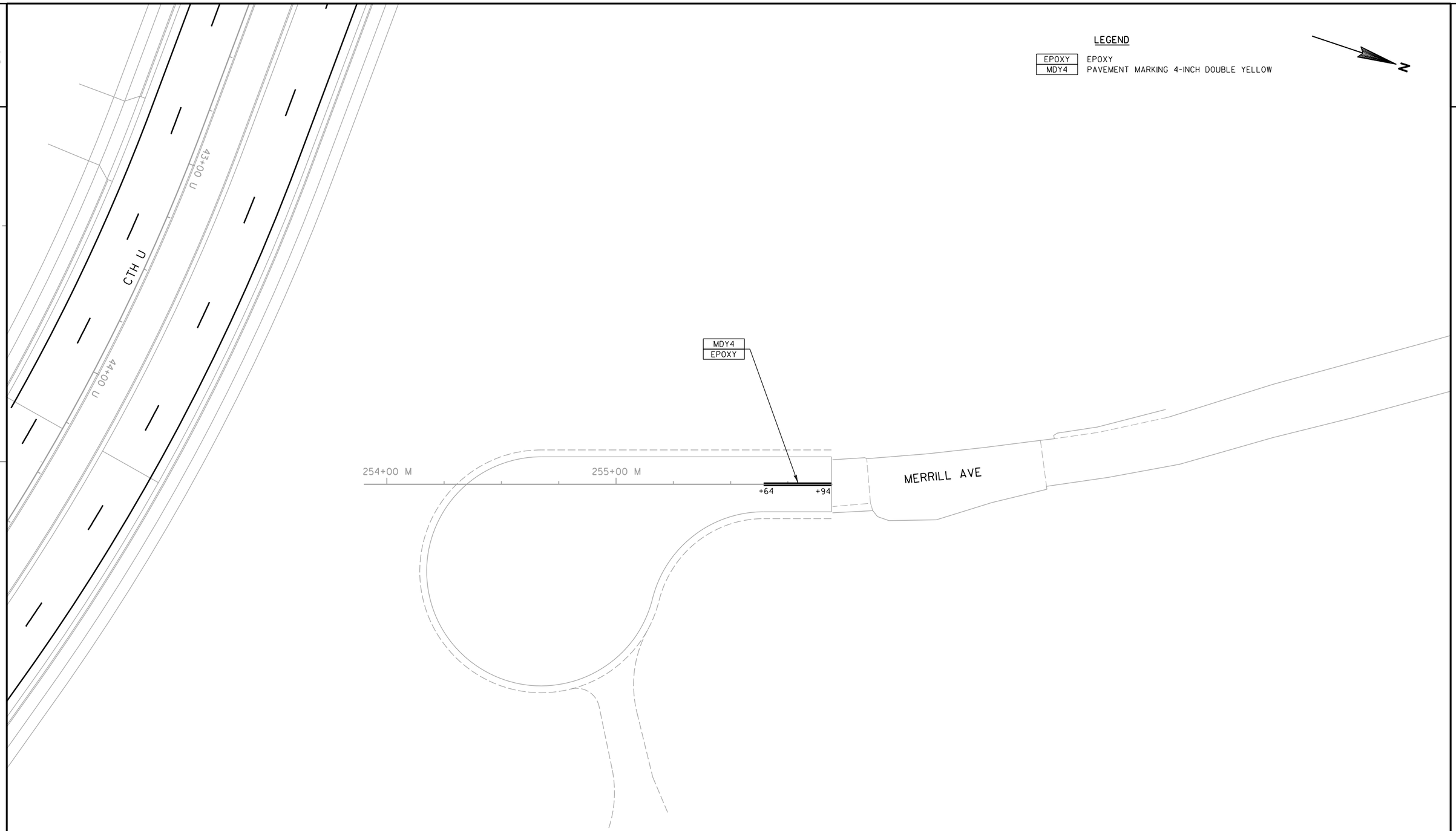
PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	PAVEMENT MARKING - OVERLOOK DRIVE	SHEET 359	E

2

2

LEGEND

EPOXY	EPOXY
MDY4	PAVEMENT MARKING 4-INCH DOUBLE YELLOW



PROJECT NO: 6999-18-70	HWY: MERRILL AVE	COUNTY: MARATHON	PAVEMENT MARKING - MERRILL AVENUE CUL-DE-SAC	SHEET 360 E

FILE NAME : P:\44xx\4448\Plan\Pavement Marking\em_024547_pm.dgn PLOT DATE : 7/30/2012 PLOT BY : walkup PLOT NAME : PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42

GENERAL NOTES FOR TRAFFIC CONTROL

DRAWINGS SHOW TRAFFIC CONTROL FOR A TYPICAL SITUATION. ADDITIONAL TRAFFIC CONTROL DEVICES MAY BE REQUIRED AND/OR LAYOUT DETAILS MODIFIED DEPENDING ON CONTRACTOR METHODS OR SEQUENCE OF OPERATION.

ADJUST SIGN SPACING TO AVOID CONFLICT WITH AND TO PROVIDE A MINIMUM SPACING OF 200 FEET (500 FEET DESIRABLE) TO EXISTING SIGNS.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

"WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

REMOVE OR COVER ANY TEMPORARY OR EXISTING SIGNS THAT CONFLICT WITH "IN USE" TRAFFIC CONTROL.

ALL TRAFFIC CONTROL SIGNING WILL CONFORM TO PART VI OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, 2009 EDITION, & THE WISCONSIN SUPPLEMENT, DATED MAY 25, 2011.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARDS SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS FOR A MINUMUM OF 1500 FEET IN FRONT OF DRUMS.

IF LANE CLOSURES ARE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.

INSTALL THE LANE CLOSURE SERIES AS A COMPLETE UNIT THAT INCLUDES ALL ADVANCE WARNING SIGNING, DRUMS, AND ARROW BOARDS.

WARNING LIGHTS SHALL NOT BE WORKING ON "COVERED" OR "DOWNED" SIGNS OR BARRICADES.

DURING HOURS OF DARKNESS, ALL BARRICADES USED TO SHIELD A HAZARD SHALL BE EQUIPPED WITH TYPE "A" LIGHTS.

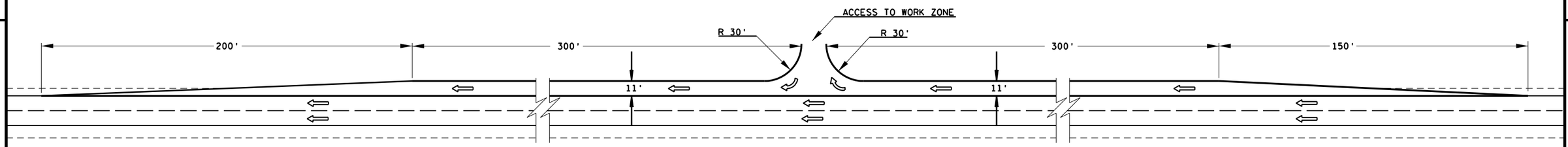
ALL TYPE III BARRICADES SHALL HAVE AN EQUIVALENT WIDTH OF 8 FEET.

REMOVE ALL EXISTING PAVEMENT MARKINGS CONFLICTING WITH THE TRAFFIC CONTROL OR NOT APPROPRIATE TO THE TRAVEL PATH.

TEMPORARY ALIGNMENT DESIGNATION	ROADWAY SEGMENT	PROJECT ID
AT	TEMPORARY 'AT' RAMP	1170-01-70
BT	TEMPORARY 'BT' RAMP	1170-01-70
CT	TEMPORARY 'CT' RAMP	1170-01-70
CU	TEMPORARY 'CU' RAMP	1170-01-70
DT	TEMPORARY 'DT' RAMP	1170-01-70
ET	TEMPORARY 'ET' RAMP	1170-01-70
EU	TEMPORARY 'EU' RAMP (ALIGNMENT ONLY)	1170-01-70
EV	TEMPORARY 'EV' RAMP (ALIGNMENT ONLY)	1170-01-70
FT	TEMPORARY 'FT' RAMP	1170-01-70
FU	TEMPORARY 'FU' RAMP (ALIGNMENT ONLY)	1170-01-70
FV	TEMPORARY 'FV' RAMP (ALIGNMENT ONLY)	1170-01-70
NR	RUNAROUND/WIDENING ON EXISTING NB LANES	1170-01-73
SR	WIDENING ON NEW SB LANES/X-OVER TO NB WIDENING	1170-01-73
ST	WIDENING SB LANES - STAGE 1	1170-01-73
SP	WIDENING SB LANES - STAGE 1 (ALIGNMENT ONLY)	1170-01-73
NS	WIDENING (MEDIAN & OUTSIDE) FOR CONSTRUCTION OF USH 51 LANES UP TO STA 720+00 NS	1170-01-73
SM & SW NM & NW	WIDENING (MEDIAN & OUTSIDE) FOR CONSTRUCTION OF USH 51 LANES UP TO STA 720+00 NS (ALIGNMENT ONLY)	1170-01-73

2

WORK ZONE



THE CONTRACTOR SHALL AT ALL TIMES CONSIDER THE SAFETY AND CONVENIENCE OF THE TRAVELING PUBLIC. DRIVERS SHALL USE EXTREME CAUTION WHEN ENTERING/EXITING TO MINIMIZE THE DISRUPTION OF TRAFFIC.

IF AT ANY TIME, AT THE DISCRETION OF THE ENGINEER, THE USE OF ANY RIGHT TURN MOVEMENT AND/OR SPEED CHANGE LANE IS CAUSING EXCESSIVE DELAY, DISRUPTION, OR UNSAFE CONDITION TO THE TRAVELING PUBLIC, THE ENGINEER WILL HAVE THE AUTHORITY TO HALT THE USE OF THE RIGHT TURN MOVEMENT AND/OR SPEED CHANGE LANE FOR ANY PERIOD OR DURATION AS DETERMINED BY THE ENGINEER. LANE RENTAL CHARGES MAY ALSO APPLY.

RIGHT TURN MOVEMENTS MAY BE USED IN THIS CONTRACT FOR HAULING OPERATIONS AS AN OPTION TO THE CONTRACTOR TO GAIN ACCESS TO THE CONSTRUCTION AREA. SPEED CHANGE LANES WILL BE REQUIRED FOR RIGHT TURN MOVEMENTS FOR CONTINUOUS HAULING OPERATIONS. THE CONSTRUCTION OF THE SPEED CHANGE LANES AND ALL NECESSARY MATERIALS, SHALL BE AT THE CONTRACTOR'S EXPENSE.

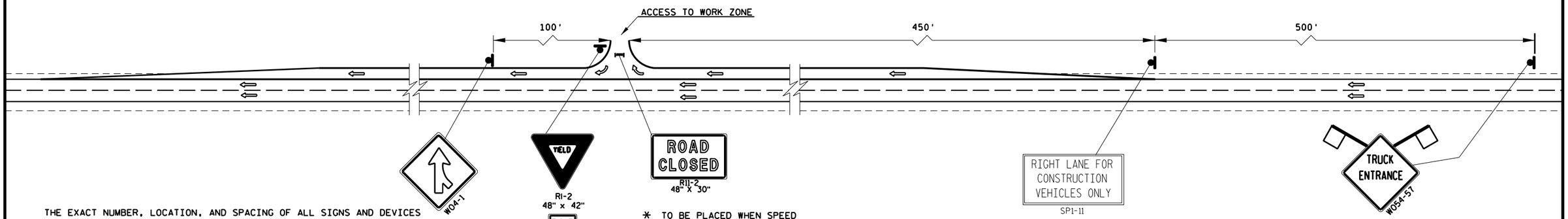
THIS SPEED CHANGE LANE IS FOR RIGHT TURNS - REVERSE FOR LEFT TURNS.

THIS DETAIL GIVES MINIMUM VALUES FOR THE GEOMETRIC DESIGN OF THE OPTIONAL SPEED CHANGE LANES. ANY CHANGES TO THE DESIGN MUST BE APPROVED BY THE ENGINEER.

THE SPEED CHANGE LANES MUST BE PAVED TO ADEQUATELY SUPPORT CONSTRUCTION VEHICLES THROUGHOUT THE DURATION OF THE PROJECT. THE PAVEMENT DESIGN, INCLUDING THE MIX FORMULA AND PAVEMENT THICKNESS, SHALL BE DETERMINED BY THE CONTRACTOR.

OPTIONAL SPEED CHANGE LANES FOR RIGHT TURNS

WORK ZONE



THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ITEMS OF ADDITIONAL TRAFFIC CONTROL REQUIRED FOR THE CONSTRUCTION, USE, AND REMOVAL OF THE OPTIONAL SPEED CHANGE LANES SHALL BE PLACED AT THE CONTRACTOR'S EXPENSE.

* TO BE PLACED WHEN SPEED CHANGE LANES ARE NOT IN USE.

LEGEND

POST MOUNTED SIGN

TYPE III BARICADE WITH SIGN

TRAFFIC CONTROL FOR OPTIONAL SPEED CHANGE LANES FOR RIGHT TURNS

PROJECT NO: 1170-01-70/73	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL DETAIL	SHEET	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\025001_tc.dgn PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42

☆ REMOVE OR COVER SIGNS WHEN SIGNS ARE NOT IN USE. RIGHT LANE CLOSURE SHOWN ON OVERVIEW. USE LEFT LANE CLOSURE SIGNS FOR LEFT LANE CLOSURE. REFER TO S.D.D. "TRAFFIC CONTROL, LANE CLOSURE, SPEEDS GREATER THAN 40 M.P.H." AND SPECIAL PROVISIONS FOR MORE INFORMATION.

TRAFFIC CONTROL LEGEND

- SIGN ON WOOD POST(S) (NEW)
- CONSTRUCTION ZONE
- ALTERNATE ROUTE
- 16"X16" ORANGE FLAGS (INCIDENTAL)

FINES DOUBLE IN WORK ZONES (Give 'em a BRAKE SLOW DOWN) W21-62 96" X 48" (2 EACH)

SPEED LIMIT 55 R2-1 48" X 60" (2 EACH)☆

ROAD WORK 1 MILE W20-1 (2 EACH)

SPEED LIMIT 55 W3-5 48" X 48" (2 EACH)☆

ROAD WORK 5 MILES W20-1 (2 EACH)

ROAD WORK 4 MILES W20-1 (2 EACH)

RIGHT LANE CLOSED 3 MILES W20-5 (2 EACH)☆

ROAD WORK 2 MILES W20-1 (2 EACH)

SPEED LIMIT 65 R2-1 48" X 60"

ROAD WORK 1/2 MILE W20-1 (2 EACH)

RIGHT LANE CLOSED 1/2 MILE W20-5 (2 EACH)☆

ROAD WORK 1500 FT W20-1 (2 EACH)

RIGHT LANE CLOSED 1500 FT W20-5 ☆(2 EACH)

ROAD WORK AHEAD W20-1

ROAD WORK 1000 FT W20-1

ROAD WORK 500 FT W20-1

END ROAD WORK G20-2A 48" X 24"

END ROAD WORK G20-2A 48" X 24" (2 EACH)

WAUSAU

FALCON DR · DECATOR DR · W BRIDGE ST · WESTWOOD DR · N 28TH AVE · N 14TH AVE · N 3RD AVE · Wisconsin R.

A · K · WW · WN · U · BUS · 51 · 29

N

0 1/2 1 mi.

SCALE

PROJECT NO: 1170-01-70/71/73 & 6999-18-70	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - ADVANCED WARNING SIGNING STAGES 1, 2, & 3	SHEET 363	E

☆ REMOVE OR COVER SIGNS WHEN SIGNS ARE NOT IN USE. RIGHT LANE CLOSURE SHOWN ON OVERVIEW. USE LEFT LANE CLOSURE SIGNS FOR LEFT LANE CLOSURE. REFER TO S.D.D. "TRAFFIC CONTROL, LANE CLOSURE, SPEEDS GREATER THAN 40 M.P.H." AND SPECIAL PROVISIONS FOR MORE INFORMATION.

TRAFFIC CONTROL LEGEND

- SIGN ON WOOD POST(S) (NEW)
- CONSTRUCTION ZONE
- ALTERNATE ROUTE
- 16"X16" ORANGE FLAGS (INCIDENTAL)

FINES DOUBLE IN WORK ZONES (Give 'em a BRAKE SLOW DOWN) W21-62 96" X 48" (2 EACH)

SPEED LIMIT 55 R2-1 48" X 60" (2 EACH)☆

ROAD WORK 1 MILE W20-1 (2 EACH)

SPEED LIMIT 55 W3-5 48" X 48" (2 EACH)☆

ROAD WORK 1/2 MILE W20-1 (2 EACH)

ROAD WORK 1500 FT W20-1 (2 EACH)

RIGHT LANE CLOSED 1/2 MILE W20-5 (2 EACH)☆

RIGHT LANE CLOSED 1500 FT W20-5 (2 EACH)☆

END ROAD WORK G20-2A 48" X 24"

ROAD WORK AHEAD W20-1

ROAD WORK 1000 FT W20-1

ROAD WORK 500 FT W20-1

ROAD WORK AHEAD W20-1

ROAD WORK 5 MILES W20-1 (2 EACH)

ROAD WORK 4 MILES W20-1 (2 EACH)

RIGHT LANE CLOSED 3 MILES W20-5 (2 EACH)☆

ROAD WORK 2 MILES W20-1 (2 EACH)

END ROAD WORK G20-2A 48" X 24" (2 EACH)

SPEED LIMIT 65 R2-1 48" X 60"

ROAD WORK AHEAD W20-1

ROAD WORK 500 FT W20-1

ROAD WORK 1000 FT W20-1

ROAD WORK AHEAD W20-1

ROAD WORK 1500 FT W20-1 (2 EACH)

RIGHT LANE CLOSED 1500 FT W20-5 (2 EACH)☆

ROAD WORK 1/2 MILE W20-1 (2 EACH)

RIGHT LANE CLOSED 1/2 MILE W20-5 (2 EACH)☆

SPEED LIMIT 55 R2-1 48" X 60" ☆(2 EACH)

FINES DOUBLE IN WORK ZONES (Give 'em a BRAKE SLOW DOWN) W21-62 96" X 48" (2 EACH)

SPEED LIMIT 55 W3-5 48" X 48" (2 EACH)☆

END ROAD WORK G20-2A 48" X 24"

END ROAD WORK G20-2A 48" X 24" (2 EACH)

SPEED LIMIT 65 R2-1 48" X 60"

SPEED LIMIT 55 W3-5 48" X 48" (2 EACH)☆

ROAD WORK 5 MILES W20-1 (2 EACH)

ROAD WORK 4 MILES W20-1 (2 EACH)

RIGHT LANE CLOSED 3 MILES W20-5 (2 EACH)☆

ROAD WORK 2 MILES W20-1 (2 EACH)

ROAD WORK 1 MILE W20-1 (2 EACH)

WAUSAU

FALCON DR · DECATOR DR · N 28TH AVE · N 14TH AVE · WESTWOOD DR · W BRIDGE ST · N 3RD AVE · Wisconsin R.

A · K · WW · WN · U · B · S · 51 · 29

N

0 ½ 1 mi.

SCALE

PROJECT NO: 1170-01-70/71/73 & 6999-18-70	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - ADVANCED WARNING SIGNING STAGES 4, 5, 6, 7	SHEET 364	E

2

EXISTING DYNAMIC MESSAGE SIGNS AVAILABLE FOR INCIDENT MANAGEMENT (TO BE USED BY OTHERS) ARE AT THE FOLLOWING LOCATIONS:

- **USH 51 SB – ONE MILE NORTH OF BUS 51/CTH U/CTH K (✦ REPRESENTS APPROXIMATE LOCATION)**
- **I39/USH 51 NB – ONE MILE SOUTH OF STH 153 (LOCATION NOT SHOWN BELOW DUE TO SCALE OF EXHIBIT)**
- **STH 29 EB – ONE MILE WEST OF STH 107 (LOCATION NOT SHOWN BELOW DUE TO SCALE OF EXHIBIT)**
- **STH 29 WB – ONE MILE EAST OF CTH S (LOCATION NOT SHOWN BELOW DUE TO SCALE OF EXHIBIT)**

PCMS NOT REQUIRED DURING WINTER SHUTDOWN

THE FIELD ENGINEER WILL MAKE THE FINAL DETERMINATION TO THE PLACEMENT OF PCMS BOARDS BASED UPON EXISTING CONDITIONS AND STAGING

N

GENERAL NOTES FOR SIGNS PCMS

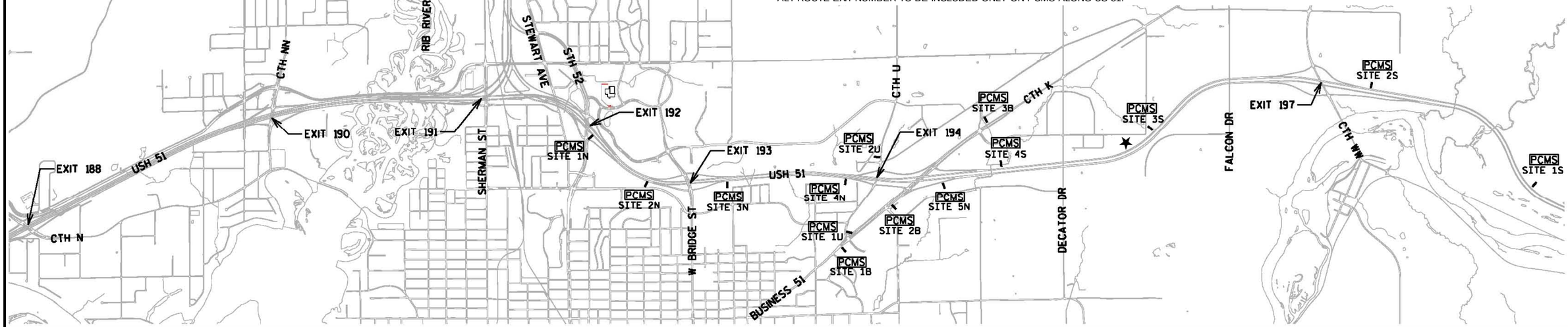
CONSIDER GEOMETRICS WHEN LOCATING PCMS SO THE DRIVER HAS A CLEAR VIEW OF THE BOARD FOR A MINIMUM OF 1000 FEET IN FRONT OF THE PCMS.

PCMS SHOULD BE PLACED AS FAR AWAY FROM LIVE TRAFFIC LANES AS POSSIBLE WITHOUT HAMPERING VISIBILITY. IN ADVANCE OF HIGHWAY CONSTRUCTION PROJECTS, THE SIGNS SHOULD BE PLACED ON THE BACKSLOPE BEYOND THE DITCH. THE LOCATION SELECTED SHOULD BE AT OR SLIGHTLY ABOVE THE ELEVATION OF THE ROADWAY. FOR INTERMITTENT WORK SUCH AS FREEWAY LANE CLOSURE, OR WHERE SITE CONDITIONS DO NOT ALLOW OTHERWISE, THE SIGNS MAY BE PLACED ON THE SHOULDER. THE SITE SHOULD BE VISITED TO ASSURE VISIBILITY, SAFETY AND MAINTENANCE CONSIDERATIONS. A TAPER OF REFLECTORIZED DRUMS OR BARRICADES SHOULD BE PLACED AHEAD OF PCMS PLACED ON THE SHOULDER IF IT IS NOT SHIELDED BY A BARRIER.

SITE NO.	APPROXIMATE LOCATION
1N	100' NORTH OF STH 52
2N	50' SOUTH OF BEAM GUARD FOR SIGN STRUCTURE
3N	NORTH END OF EXISTING BEAM GUARD
4N	LOCATE PRIOR TO LANE DROP FOR DETOUR
5N	STATION 762+00 B
1S	2 MILES NORTH OF CTH WW EXIT RAMP
2S	1500' NORTH OF CTH WW EXIT RAMP
3S	½ MILE NORTH OF DECATOR DRIVE
4S	LOCATED PRIOR TO LANE DROP FOR DETOUR
1B	300' SOUTH OF COLLEGE DRIVE
2B	STATION 31+50 KN
3B	STATION 75+00 KS
1U	STATION 68+50 U
2U	STATION 42+00 U

		PRIOR TO CONSTRUCTION 2013		STAGE 1		STAGE 2A		STAGE 2B		STAGE 3A	
SITE NO.	ROADWAY CONDITION/ CONSTRUCTION	PHASE 1 (2 SEC.)	PHASE 2 (2 SEC.)	PHASE 1 (2 SEC.)	PHASE 2 (2 SEC.)	PHASE 1 (2 SEC.)	PHASE 2 (2 SEC.)	PHASE 1 (2 SEC.)	PHASE 2 (2 SEC.)	PHASE 1 (2 SEC.)	PHASE 2 (2 SEC.)
SITES 1N , 2N, 1S & 2S	INCIDENT MANAGEMENT	NO MESSAGE BOARD USED		TRAFFIC STOPPED AHEAD	ALT ROUTE EXIT XXX	TRAFFIC STOPPED AHEAD	ALT ROUTE EXIT XXX	TRAFFIC STOPPED AHEAD	ALT ROUTE EXIT XXX	TRAFFIC STOPPED AHEAD	ALT ROUTE EXIT XXX
SITES 1N, 2N, 3N, 1S, 2S & 3S	LANE OR SHOULDER CLOSURE	NO MESSAGE BOARD USED		XXXXX LANE/ SHLDR CLOSED	XX MILES/ AHEAD	XXXXX LANE/ SHLDR CLOSED	XX MILES/ AHEAD	XXXXX LANE/ SHLDR CLOSED	XX MILES/ AHEAD	XXXXX LANE/ SHLDR	XX MILES/ AHEAD
SITES 3N & 3S	GENERAL	US 51 WORK STARTS	"DATE"	NO MESSAGE BOARD USED		NO MESSAGE BOARD USED		NO MESSAGE BOARD USED		NO MESSAGE BOARD USED	
** SITES 3N & 3S	PRIOR TO NIGHT TIME CLOSURE	NO MESSAGE BOARD USED		US 51 CLOSED "DATE"	FROM XX PM TO XX AM	NO MESSAGE BOARD USED		NO MESSAGE BOARD USED		NO MESSAGE BOARD USED	
* SITES 3N & 3S	NIGHT TIME CLOSURE	NO MESSAGE BOARD USED		US 51 CLOSED AHEAD	USE DETOUR ROUTE	NO MESSAGE BOARD USED		NO MESSAGE BOARD USED		NO MESSAGE BOARD USED	
* SITES 4N & 4S	NIGHT TIME CLOSURE	NO MESSAGE BOARD USED		ALL TRAFFIC	MUST EXIT	NO MESSAGE BOARD USED		NO MESSAGE BOARD USED		NO MESSAGE BOARD USED	
SITES 3N & 3S	PRIOR TO SHORT TERM CLOSURE	NO MESSAGE BOARD USED		NO MESSAGE BOARD USED		UP TO 15 MINUTE CLOSURES	TONIGHT XX PM TO XX AM	UP TO 15 MINUTE CLOSURES	TONIGHT XX PM TO XX AM	NO MESSAGE BOARD USED	
SITES 3N & 3S	SHORT TERM CLOSURE	NO MESSAGE BOARD USED		NO MESSAGE BOARD USED		TEMP CLOSURE AHEAD	EXPECT DELAYS	TEMP CLOSURE AHEAD	EXPECT DELAYS	NO MESSAGE BOARD USED	
SITES 1N, 2N, 1S & 2S	SHORT TERM CLOSURE	NO MESSAGE BOARD USED		NO MESSAGE BOARD USED		TEMP CLOSURE XX MILES	AHEAD EXPECT DELAYS	TEMP CLOSURE XX MILES	AHEAD EXPECT DELAYS	NO MESSAGE BOARD USED	
*** SITES 3N, 3S, 1B, 2B & 3B	PRIOR TO ROCK BLASTING	NO MESSAGE BOARD USED		NO MESSAGE BOARD USED		US 51 20 MIN CLOSURES	TO BEGIN "DATE" X AM/X PM	US 51 20 MIN CLOSURES	TO BEGIN "DATE" X AM/X	NO MESSAGE BOARD USED	
SITES 3N, 3S, 1B, 2B & 3B	DAY OF ROCK BLASTING	NO MESSAGE BOARD USED		NO MESSAGE BOARD USED		US 51 20 MIN CLOSURE	TODAY XX PM/ XX AM	US 51 20 MIN CLOSURE	TODAY XX PM/ XX AM	NO MESSAGE BOARD USED	
**** SITES 1N, 2N, 1S, 2S, 1B & 3B	DURING ROCK BLASTING	NO MESSAGE BOARD USED		NO MESSAGE BOARD USED		US 51 CLOSED AT CTH U	USE ALT ROUTE EXIT XXX	US 51 CLOSED AT CTH U	USE ALT ROUTE EXIT XXX	NO MESSAGE BOARD USED	
SITES 3N & 3S	GENERAL	NO MESSAGE BOARD USED		SLOW TRAFFIC AHEAD		SLOW TRAFFIC AHEAD		SLOW TRAFFIC AHEAD		SLOW TRAFFIC AHEAD	

* MESSAGE BOARD REQUIRED FOR STAGE 1 NIGHT TIME CLOSURE FOR REMOVAL OF CTH U STRUCTURE (TRAFFIC DETOURED ONTO RAMPS).
** MESSAGE BOARD IN OPERATION A MINIMUM OF 7 DAYS PRIOR TO CLOSURE.
*** MESSAGE BOARD IN OPERATION A MINIMUM OF 7 DAYS PRIOR TO BLASTING.
**** ALT ROUTE EXIT NUMBER TO BE INCLUDED ONLY ON PCMS ALONG US 51.



PROJECT NO: 1170-01-70/71/73 & 6999-18-70	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL SIGNS PCMS (CONSTRUCTION YEAR 2013)	SHEET NO: 365	E

2

EXISTING DYNAMIC MESSAGE SIGNS AVAILABLE FOR INCIDENT MANAGEMENT (TO BE USED BY OTHERS) ARE AT THE FOLLOWING LOCATIONS:

USH 51 SB – ONE MILE NORTH OF BUS 51/CTH U/CTH K (★ REPRESENTS APPROXIMATE LOCATION)
I39/USH 51 NB – ONE MILE SOUTH OF STH 153 (LOCATION NOT SHOWN BELOW DUE TO SCALE OF EXHIBIT)
STH 29 EB – ONE MILE WEST OF STH 107 (LOCATION NOT SHOWN BELOW DUE TO SCALE OF EXHIBIT)
STH 29 WB – ONE MILE EAST OF CTH S (LOCATION NOT SHOWN BELOW DUE TO SCALE OF EXHIBIT)

PCMS NOT REQUIRED DURING WINTER SHUTDOWN

THE FIELD ENGINEER WILL MAKE THE FINAL DETERMINATION TO THE PLACEMENT OF PCMS BOARDS BASED UPON EXISTING CONDITIONS AND STAGING

N

GENERAL NOTES FOR SIGNS PCMS

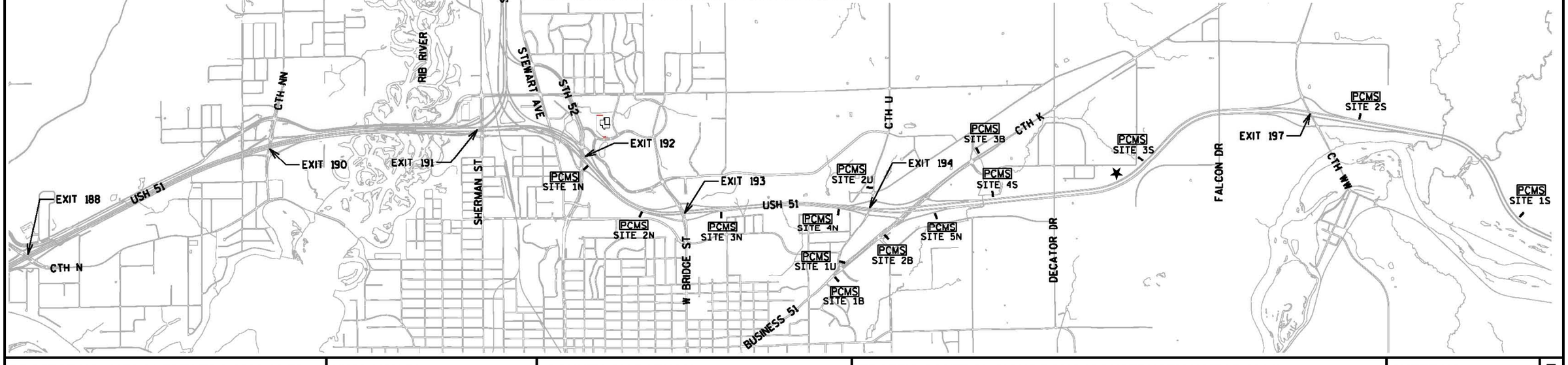
CONSIDER GEOMETRICS WHEN LOCATING PCMS SO THE DRIVER HAS A CLEAR VIEW OF THE BOARD FOR A MINIMUM OF 1000 FEET IN FRONT OF THE PCMS.

PCMS SHOULD BE PLACED AS FAR AWAY FROM LIVE TRAFFIC LANES AS POSSIBLE WITHOUT HAMPERING VISIBILITY. IN ADVANCE OF HIGHWAY CONSTRUCTION PROJECTS, THE SIGNS SHOULD BE PLACED ON THE BACKSLOPE BEYOND THE DITCH. THE LOCATION SELECTED SHOULD BE AT OR SLIGHTLY ABOVE THE ELEVATION OF THE ROADWAY. FOR INTERMITTENT WORK SUCH AS FREEWAY LANE CLOSURE, OR WHERE SITE CONDITIONS DO NOT ALLOW OTHERWISE, THE SIGNS MAY BE PLACED ON THE SHOULDER. THE SITE SHOULD BE VISITED TO ASSURE VISIBILITY, SAFETY AND MAINTENANCE CONSIDERATIONS. A TAPER OF REFLECTORIZED DRUMS OR BARRICADES SHOULD BE PLACED AHEAD OF PCMS PLACED ON THE SHOULDER IF IT IS NOT SHIELDED BY A BARRIER.

SITE NO.	APPROXIMATE LOCATION
1N	100' NORTH OF STH 52
2N	50' SOUTH OF BEAM GUARD FOR SIGN STRUCTURE
3N	NORTH END OF EXISTING BEAM GUARD
4N	LOCATE PRIOR TO LANE DROP FOR DETOUR
5N	STATION 762+00 B
1S	2 MILES NORTH OF CTH WW EXIT RAMP
2S	1500' NORTH OF CTH WW EXIT RAMP
3S	½ MILE NORTH OF DECATOR DRIVE
4S	LOCATED PRIOR TO LANE DROP FOR DETOUR
1B	300' SOUTH OF COLLEGE DRIVE
2B	STATION 31+50 KN
3B	STATION 75+00 KS
1U	STATION 68+50 U
2U	STATION 42+00 U

		2013 - 2014 WINTER SHUTDOWN		STAGE 4		STAGE 5A		STAGE 5B		STAGE 6A		STAGE 6B		STAGE 6C		STAGE 7	
SITE NO.	ROADWAY CONDITION/ CONSTRUCTION	PHASE 1 (2 SEC.)	PHASE 2 (2 SEC.)	PHASE 1 (2 SEC.)	PHASE 2 (2 SEC.)	PHASE 1 (2 SEC.)	PHASE 2 (2 SEC.)	PHASE 1 (2 SEC.)	PHASE 2 (2 SEC.)	PHASE 1 (2 SEC.)	PHASE 2 (2 SEC.)	PHASE 1 (2 SEC.)	PHASE 2 (2 SEC.)	PHASE 1 (2 SEC.)	PHASE 2 (2 SEC.)	PHASE 1 (2 SEC.)	PHASE 2 (2 SEC.)
SITE 4N	GENERAL	BUS 51 AND CTH K	EXIT 194A	NO MESSAGE BOARD USED		NO MESSAGE BOARD USED		NO MESSAGE BOARD USED		NO MESSAGE BOARD USED		NO MESSAGE BOARD USED		NO MESSAGE BOARD USED		NO MESSAGE BOARD USED	
SITES 1N, 2N, 1S & 2S	INCIDENT MANAGEMENT	NO MESSAGE BOARD USED		TRAFFIC STOPPED AHEAD	ALT ROUTE EXIT XXX	TRAFFIC STOPPED AHEAD	ALT ROUTE EXIT XXX	TRAFFIC STOPPED AHEAD	ALT ROUTE EXIT XXX	TRAFFIC STOPPED AHEAD	ALT ROUTE EXIT XXX	TRAFFIC STOPPED AHEAD	ALT ROUTE EXIT XXX	TRAFFIC STOPPED AHEAD	ALT ROUTE EXIT XXX	TRAFFIC STOPPED AHEAD	ALT ROUTE EXIT XXX
SITES 1N, 2N, 3N, 1S, 2S & 3S	LANE OR SHOULDER CLOSURE	NO MESSAGE BOARD USED		XXXXX LANE/ SHLDR CLOSED	XX MILES/ AHEAD	XXXXX LANE/ SHLDR CLOSED	XX MILES/ AHEAD	XXXXX LANE/ SHLDR CLOSED	XX MILES/ AHEAD	XXXXX LANE/ SHLDR	XX MILES/ AHEAD	XXXXX LANE/ SHLDR	XX MILES/ AHEAD	XXXXX LANE/ SHLDR CLOSED	XX MILES/ AHEAD	XXXXX LANE/ SHLDR CLOSED	XX MILES/ AHEAD
** SITES 1B & 2B	PRIOR TO CLOSURE OF CTH K/USH 51	BUS 51 CLOSED AT US 51	STARTING "DATE"	NO MESSAGE BOARD USED		NO MESSAGE BOARD USED		NO MESSAGE BOARD USED		NO MESSAGE BOARD USED		NO MESSAGE BOARD USED		NO MESSAGE BOARD USED		NO MESSAGE BOARD USED	
** SITE 3B	PRIOR TO CLOSURE OF CTH K/USH 51	CTH K CLOSED AT US 51	STARTING "DATE"	NO MESSAGE BOARD USED		NO MESSAGE BOARD USED		NO MESSAGE BOARD USED		NO MESSAGE BOARD USED		NO MESSAGE BOARD USED		NO MESSAGE BOARD USED		NO MESSAGE BOARD USED	
SITES 1B & 2B	CTH K/ BUS 51 CLOSED	NO MESSAGE BOARD USED		BUS 51 CLOSED AT US 51	NB US 51 ON RAMP OPEN	BUS 51 CLOSED AT US 51	NB US 51 ON RAMP OPEN	BUS 51 CLOSED AT US 51	NB US 51 ON RAMP OPEN	BUS 51 CLOSED AT US 51	NB US 51 ON RAMP OPEN	BUS 51 CLOSED AT US 51	NB US 51 ON RAMP OPEN	BUS 51 CLOSED AT US 51	NB US 51 ON RAMP OPEN	NO MESSAGE BOARD USED	
SITE 3B	CTH K/ BUS 51 CLOSED	NO MESSAGE BOARD USED		CTH K CLOSED AT US 51	USE DETOUR ROUTE	CTH K CLOSED AT US 51	USE DETOUR ROUTE	CTH K CLOSED AT US 51	USE DETOUR ROUTE	CTH K CLOSED AT US 51	USE DETOUR ROUTE	CTH K CLOSED AT US 51	USE DETOUR ROUTE	CTH K CLOSED AT US 51	USE DETOUR ROUTE	NO MESSAGE BOARD USED	
** SITES 2B & 5N	PRIOR TO RAMP CLOSURE	NO MESSAGE BOARD USED		NO MESSAGE BOARD USED		NO MESSAGE BOARD USED		NO MESSAGE BOARD USED		NO MESSAGE BOARD USED		NO MESSAGE BOARD USED		RAMP TO CLOSE	STARTING "DATE"	NO MESSAGE BOARD USED	
*** SITES 3N & 3S	PRIOR TO ROCK BLASTING	NO MESSAGE BOARD USED		US 51 20 MIN CLOSURES	TO BEGIN "DATE" X AM/X PM	US 51 20 MIN CLOSURES	TO BEGIN "DATE" X AM/X PM	US 51 20 MIN CLOSURES	TO BEGIN "DATE" X AM/X	US 51 20 MIN CLOSURES	TO BEGIN "DATE" X AM/X PM	US 51 20 MIN CLOSURES	TO BEGIN "DATE" X AM/X PM	US 51 20 MIN CLOSURES	TO BEGIN "DATE" X AM/X PM	NO MESSAGE BOARD USED	
*** SITES 1U & 2U	PRIOR TO ROCK BLASTING	NO MESSAGE BOARD USED		CTH U 20 MIN CLOSURES	TO BEGIN "DATE" X AM/X PM	CTH U 20 MIN CLOSURE	TO BEGIN "DATE" X AM/X PM	CTH U 20 MIN CLOSURE	TO BEGIN "DATE" X AM/X	CTH U 20 MIN CLOSURE	TO BEGIN "DATE" X AM/X PM	CTH U 20 MIN CLOSURE	TO BEGIN "DATE" X AM/X PM	CTH U 20 MIN CLOSURE	TO BEGIN "DATE" X AM/X PM	NO MESSAGE BOARD USED	
SITES 3N & 3S	DAY OF ROCK BLASTING	NO MESSAGE BOARD USED		US 51 20 MIN CLOSURE	TODAY XX PM TO XX AM	US 51 20 MIN CLOSURE	TODAY X AM/X PM	US 51 20 MIN CLOSURE	TODAY X AM/X PM	US 51 20 MIN CLOSURE	TODAY X AM/X PM	US 51 20 MIN CLOSURE	TODAY X AM/X PM	US 51 20 MIN CLOSURE	TODAY X AM/X PM	NO MESSAGE BOARD USED	
SITES 1U & 2U	DAY OF ROCK BLASTING	NO MESSAGE BOARD USED		CTH U 20 MIN CLOSURE	TODAY XX PM TO XX AM	CTH U 20 MIN CLOSURE	TODAY X AM/X PM	CTH U 20 MIN CLOSURE	TODAY X AM/X PM	CTH U 20 MIN CLOSURE	TODAY X AM/X PM	CTH U 20 MIN CLOSURE	TODAY X AM/X PM	CTH U 20 MIN CLOSURE	TODAY X AM/X PM	NO MESSAGE BOARD USED	
SITES 1N, 2N, 1S & 2S	DURING ROCK BLASTING	NO MESSAGE BOARD USED		US 51 CLOSED AT CTH U	USE ALT ROUTE EXIT XXX	US 51 CLOSED AT CTH U	USE ALT ROUTE EXIT XXX	US 51 CLOSED AT CTH U	USE ALT ROUTE EXIT XXX	US 51 CLOSED AT CTH U	USE ALT ROUTE EXIT XXX	US 51 CLOSED AT CTH U	USE ALT ROUTE EXIT XXX	US 51 CLOSED AT CTH U	USE ALT ROUTE EXIT XXX	NO MESSAGE BOARD USED	
SITE 2U	DURING ROCK BLASTING	NO MESSAGE BOARD USED		CTH U 20 MIN CLOSURE	USE US 51 ALT ROUTE	CTH U 20 MIN CLOSURE	USE US 51 ALT ROUTE	CTH U 20 MIN CLOSURE	USE US 51 ALT ROUTE	CTH U 20 MIN CLOSURE	USE US 51 ALT ROUTE	CTH U 20 MIN CLOSURE	USE US 51 ALT ROUTE	CTH U 20 MIN CLOSURE	USE US 51 ALT ROUTE	NO MESSAGE BOARD USED	
SITES 3N & 3S	GENERAL	NO MESSAGE BOARD USED		SLOW TRAFFIC AHEAD		SLOW TRAFFIC AHEAD		SLOW TRAFFIC AHEAD		SLOW TRAFFIC AHEAD		SLOW TRAFFIC AHEAD		SLOW TRAFFIC AHEAD		SLOW TRAFFIC AHEAD	

** MESSAGE BOARD IN OPERATION A MINIMUM OF 7 DAYS PRIOR TO CLOSURE.
*** MESSAGE BOARD IN OPERATION A MINIMUM OF 7 DAYS PRIOR TO BLASTING.

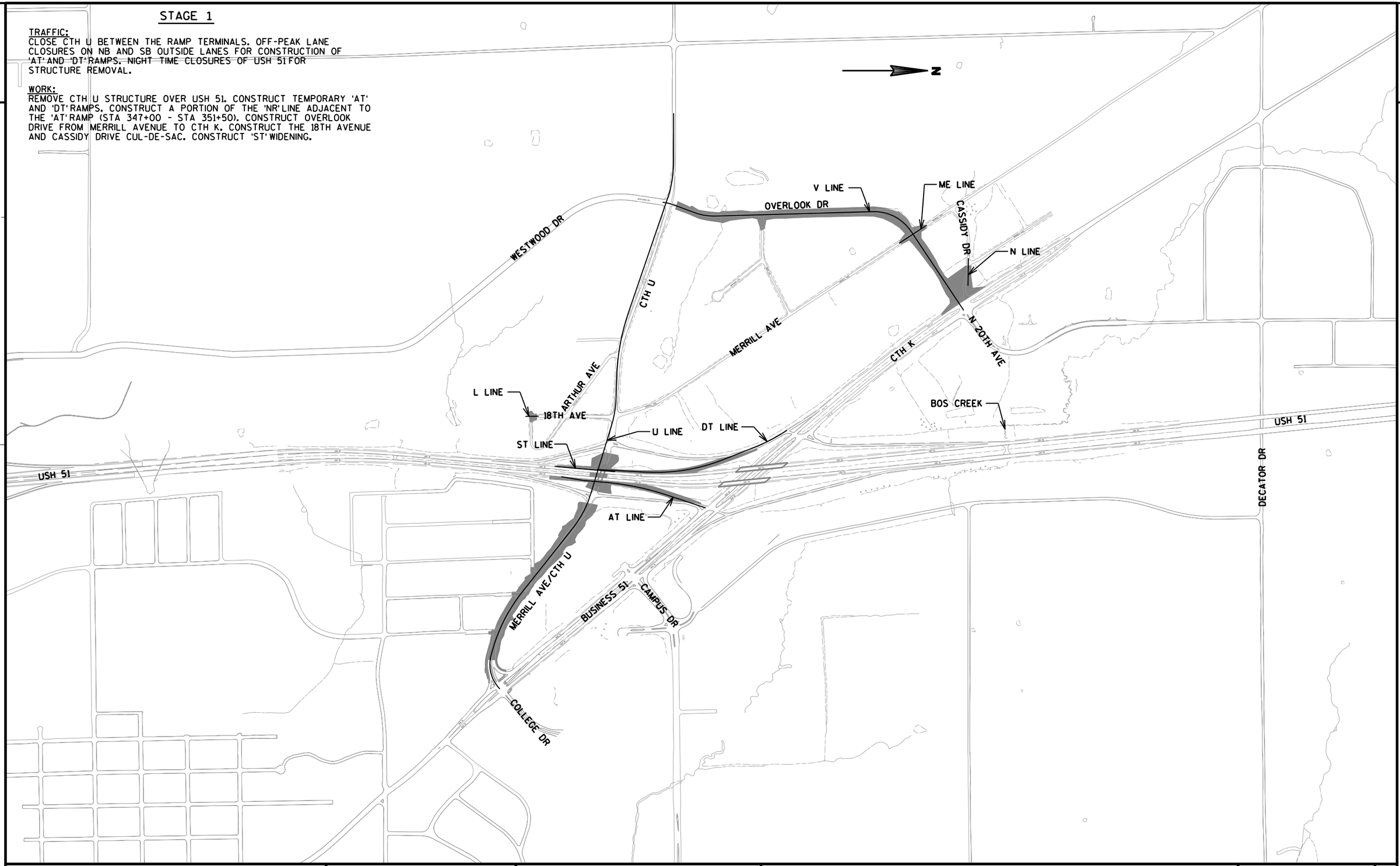


PROJECT NO: 1170-01-70/71/73 & 6999-18-70	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL SIGNS PCMS (CONSTRUCTION YEAR 2014)	SHEET NO: 366	E

STAGE 1

TRAFFIC:
CLOSE CTH U BETWEEN THE RAMP TERMINALS. OFF-PEAK LANE CLOSURES ON NB AND SB OUTSIDE LANES FOR CONSTRUCTION OF 'AT' AND 'DT' RAMPS. NIGHT TIME CLOSURES OF USH 51 FOR STRUCTURE REMOVAL.

WORK:
REMOVE CTH U STRUCTURE OVER USH 51. CONSTRUCT TEMPORARY 'AT' AND 'DT' RAMPS. CONSTRUCT A PORTION OF THE 'NR' LINE ADJACENT TO THE 'AT' RAMP (STA 347+00 - STA 351+50). CONSTRUCT OVERLOOK DRIVE FROM MERRILL AVENUE TO CTH K. CONSTRUCT THE 18TH AVENUE AND CASSIDY DRIVE CUL-DE-SAC. CONSTRUCT 'ST' WIDENING.



PROJECT NO: 1170-01-70/71/73 & 6999-18-70	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL OVERVIEW - STAGE 1	SHEET E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\026101_s1.dgn PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:800

WISDOT/CADDS SHEET 42

SEE S.D.D. "BARRICADES AND SIGNS FOR MAINLINE CLOSURES" FOR ADDITIONAL DETAILS.

SEE S.D.D. "BARRICADES AND SIGNS FOR SIDEROAD CLOSURES" FOR ADDITIONAL DETAILS.

SEE S.D.D. "TRAFFIC CONTROL, LANE CLOSURE, SPEEDS GREATER THAN 40 M.P.H." FOR ADDITIONAL DETAILS.

N

OVERLOOK DR

200V

205V

210V

215V

220V

225V

230V

CTH U

BOOT LN

MERRILL AVE

CASSIDY DR

N 20TH AVE

CTH K

ROAD CLOSED TO THRU TRAFFIC
R11-4
60" X 30"

ROAD CLOSED
500 FT
W20-3

ROAD CLOSED AHEAD
W20-3

ROAD CLOSED
R11-2
48" X 30"

25' SPACING (TYP)

W03-3

NOTE:
DO NOT CONSTRUCT MEDIAN CURB AND GUTTER ON OVERLOOK DRIVE INTERSECTION WITH CTH K.

LEGEND

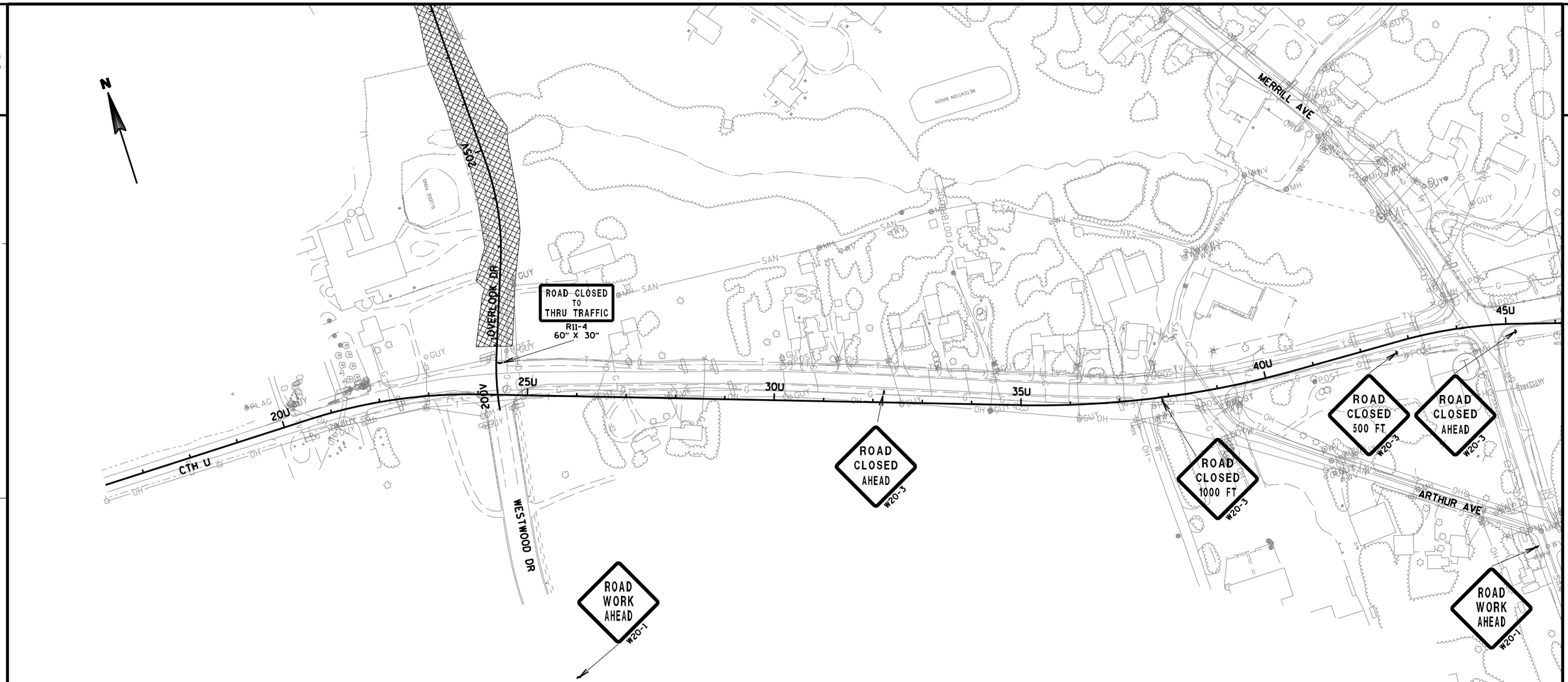
- TRAFFIC DIRECTION
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN
- WORK ZONE
- CONCRETE BARRIER TEMPORARY
- FLASHING ARROW BOARD
- POST WITH ATTACHED SIGN
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER POSTS AND BASES
- 16"x16" ORANGE FLAGS (INCIDENTAL)

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - OVERLOOK DR (STAGE 1)	SHEET 368	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\026110_s1.dgn PLOT DATE : 8/21/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:200

WISDOT/CADDS SHEET 42

2



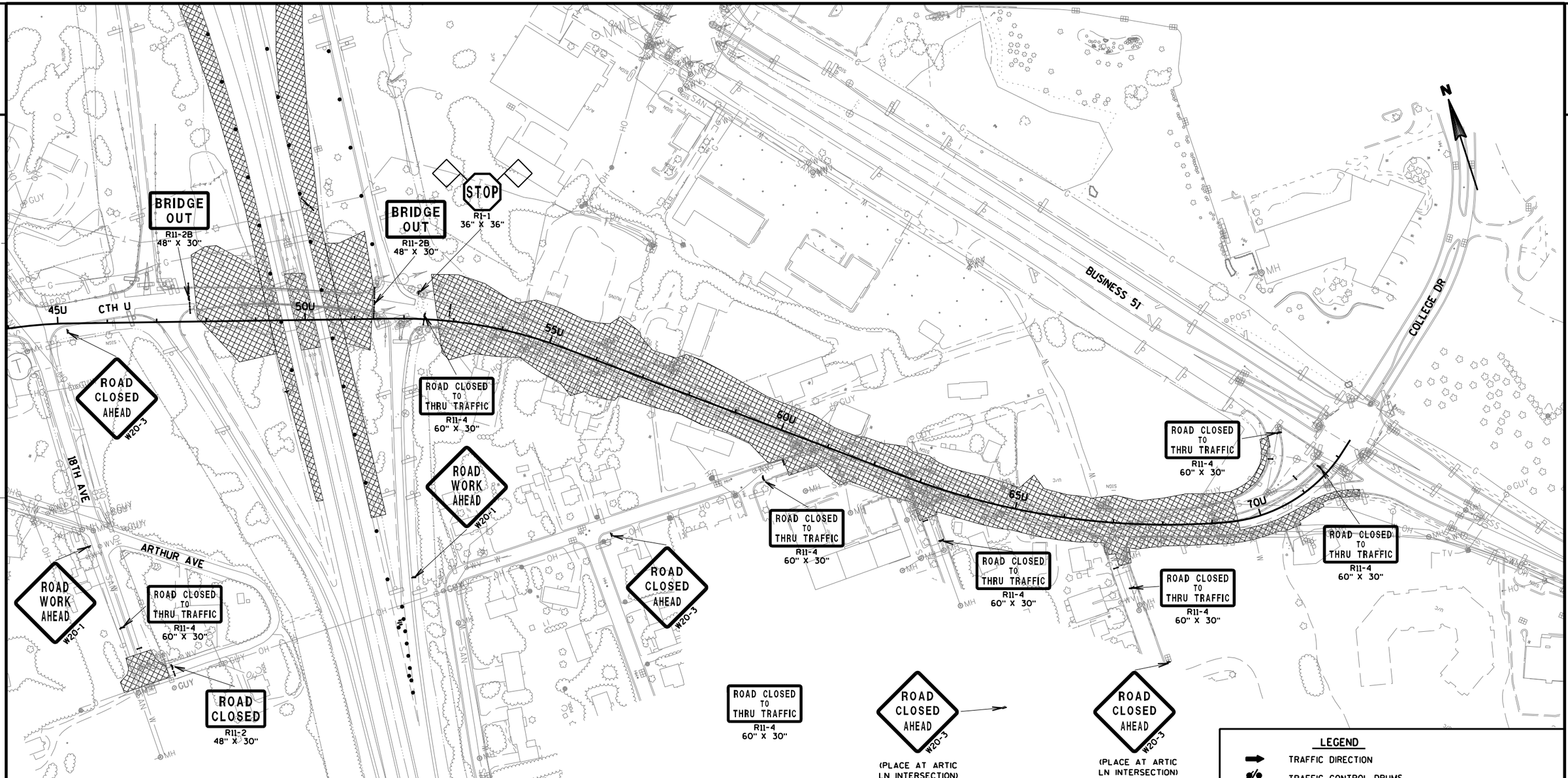
LEGEND

- TRAFFIC DIRECTION
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN
- WORK ZONE
- CONCRETE BARRIER TEMPORARY
- FLASHING ARROW BOARD
- POST WITH ATTACHED SIGN
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER POSTS AND BASES

PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - CTH U (STAGE 1)	SHEET 369	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\026111_s1.dgn PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:200

2



PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - CTH U (STAGE 1)	SHEET 370	E

SEE S.D.D. "TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 M.P.H." FOR ADDITIONAL DETAILS.

SEE S.D.D. "BARRICADES AND SIGNS FOR MAINLINE CLOSURES" FOR ADDITIONAL DETAILS.

2

2

MOVING SIGNS TYPE 2

100' TYP

USH 51 SB

USH 51 NB

338NR 340NR 342NR 344NR 346NR 348NR 350NR 352NR

25' TYP

CAUTION MODE

POOL

SIGN

LEGEND

- TRAFFIC DIRECTION
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN
- WORK ZONE
- CONCRETE BARRIER TEMPORARY
- FLASHING ARROW BOARD
- POST WITH ATTACHED SIGN
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER POSTS AND BASES

PROJECT NO: 1190-01-70/73	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 1	SHEET E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\026113_s1.dgn PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2

RAMP CLOSED
R11-2(MOD)
48" X 30"

100' TYP

CAUTION MODE

50' TYP

100' TYP

USH 51 SB

USH 51

USH 51

USH 51 NB

354NR

356NR

358NR

360NR

362NR

364NR

366NR

368NR

CTH K

BUS 51

CTH K

BUS 51

RAMP CLOSED
R11-2(MOD)
48" X 30"

TEMPORARY SIGNALS REQ'D.
SEE DETAIL.

W03-3

TEMPORARY PAVEMENT MARKING
STOP LINE 24-INCH

COVERING SIGNS
TYPE II

TEMPORARY PAVEMENT MARKING
STOP LINE 24-INCH

STOP
R1-1
48" X 48"
TRAFFIC FROM LEFT
DOES NOT STOP
W4-4AL
54" X 18"

RUINS

A/C

SIGN

POST

LEGEND

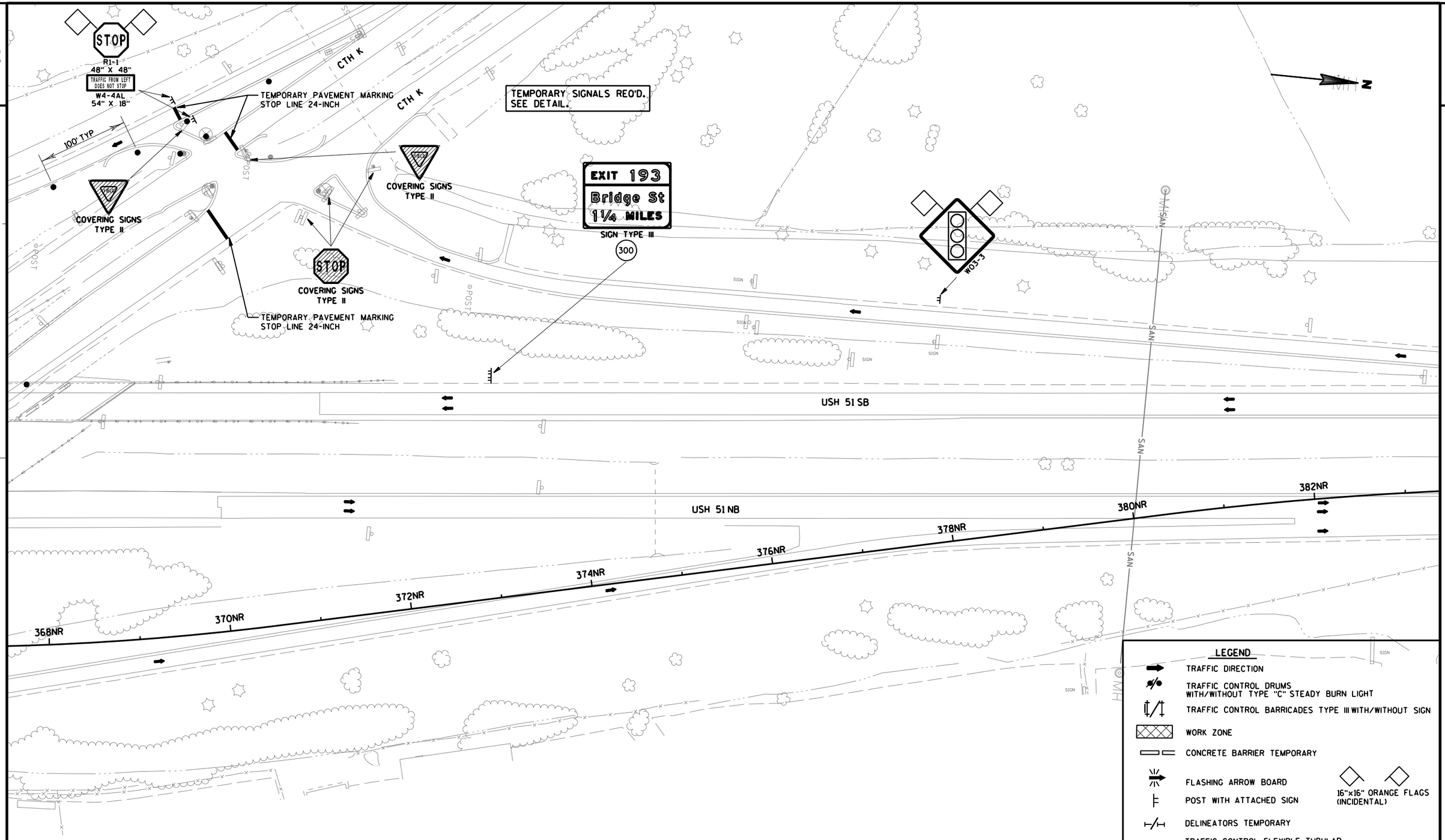
- TRAFFIC DIRECTION
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN
- WORK ZONE
- CONCRETE BARRIER TEMPORARY
- FLASHING ARROW BOARD
- POST WITH ATTACHED SIGN
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER POSTS AND BASES
- REMOVING PAVEMENT MARKINGS

16"x16" ORANGE FLAGS (INCIDENTAL)

PROJECT NO: 1170-01-70/73	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 1	SHEET	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\026114_s1.dgn PLOT DATE : 8/21/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:100

2



PROJECT NO: 1170-01-70/73	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 1	SHEET 373	E

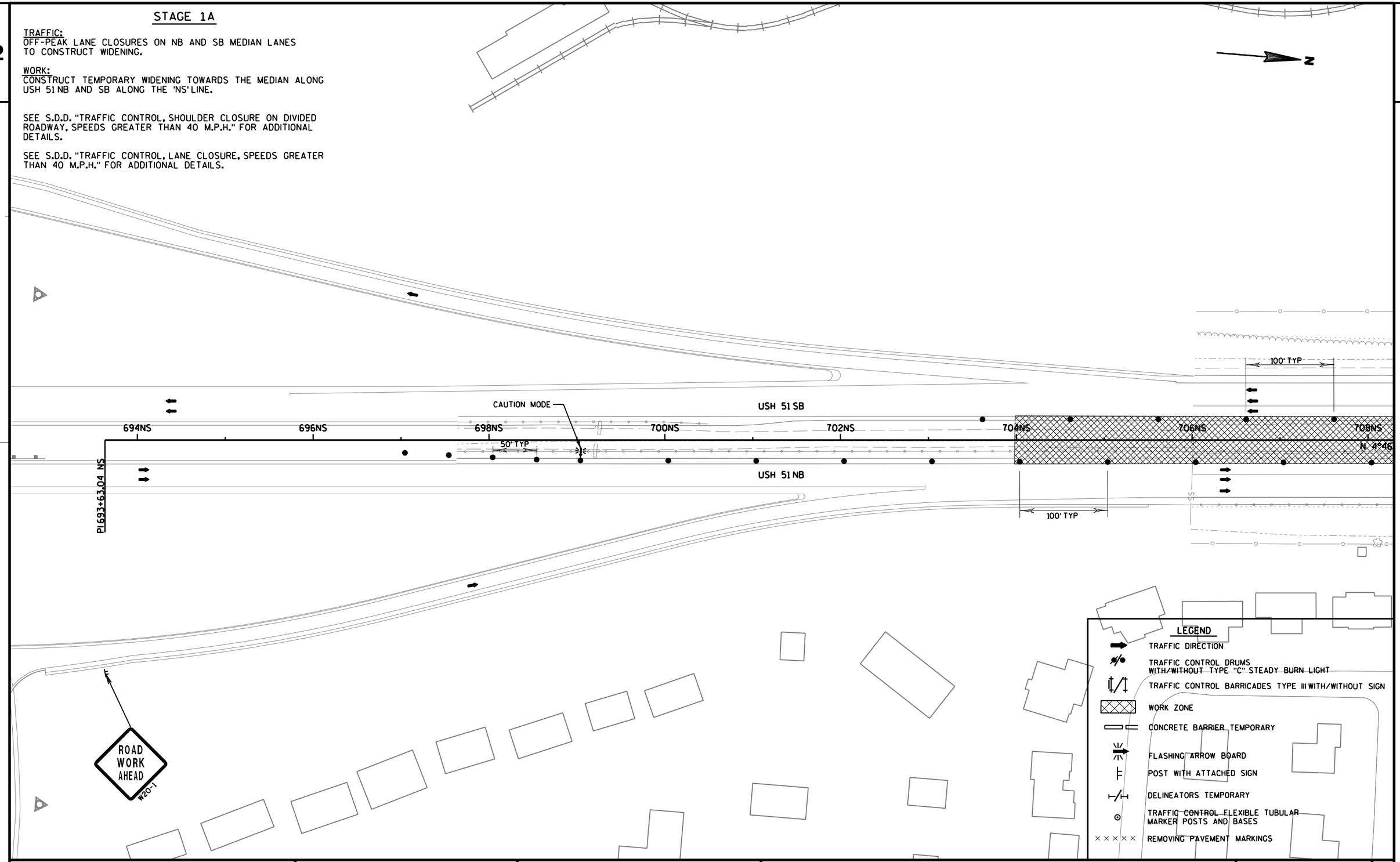
STAGE 1A

TRAFFIC:
OFF-PEAK LANE CLOSURES ON NB AND SB MEDIAN LANES TO CONSTRUCT WIDENING.

WORK:
CONSTRUCT TEMPORARY WIDENING TOWARDS THE MEDIAN ALONG USH 51 NB AND SB ALONG THE 'NS' LINE.

SEE S.D.D. "TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 M.P.H." FOR ADDITIONAL DETAILS.

SEE S.D.D. "TRAFFIC CONTROL, LANE CLOSURE, SPEEDS GREATER THAN 40 M.P.H." FOR ADDITIONAL DETAILS.



PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 1A	SHEET E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\026130_s1a.dgn PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:100

2

STA 712+00 NS
1-INLET 2x2-FT (907)
1-INLET COVER TYPE B
18" CP TEMPORARY

STA 717+00 NS
1-INLET 2x2-FT (908)
1-INLET COVER TYPE B

STA 717+00 NS - STA 722+50 NS
18" CP TEMPORARY

N

100' TYP

USH 51 SB

708NS 710NS 712NS 714NS 716NS 718NS 720NS 722NS

USH 51 NB

100' TYP

SAN

HWY

SPEED LIMIT 65

COVERING SIGNS TYPE II

FOUND

LEGEND

- TRAFFIC DIRECTION
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN
- WORK ZONE
- CONCRETE BARRIER TEMPORARY
- FLASHING ARROW BOARD
- POST WITH ATTACHED SIGN
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER POSTS AND BASES
- ××××× REMOVING PAVEMENT MARKINGS

PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 1A	SHEET 375	E

2

STA 723+59 NS
18" CP TEMPORARY EXTENSION

N

SPEED LIMIT 65
COVERING SIGNS TYPE II

MH
MH

USH 51
USH 51 NB
USH 51 SB
USH 51

724NS
726NS
728NS
730NS
732NS
734NS
736NS
738NS

100' TYP
100' TYP
50' TYP

CAUTION MODE

SIGN
SIGN
SIGN

W
W

FOUND

LEGEND

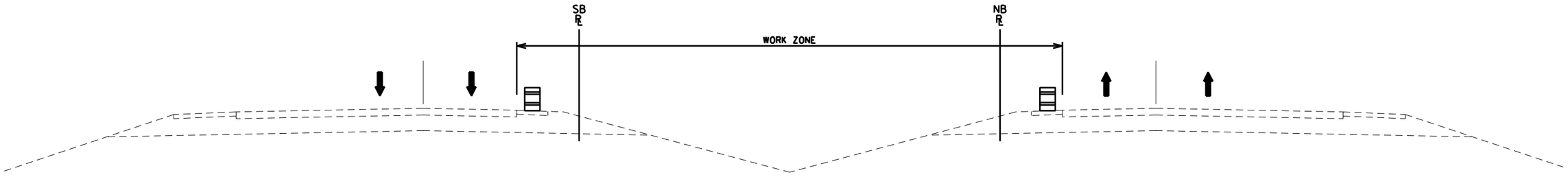
- TRAFFIC DIRECTION
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN
- WORK ZONE
- CONCRETE BARRIER TEMPORARY
- FLASHING ARROW BOARD
- POST WITH ATTACHED SIGN
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER POSTS AND BASES
- ××××× REMOVING PAVEMENT MARKINGS

PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 1A	SHEET 376	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\026132_s1a.dgn PLOT DATE : 8/21/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2



TRAFFIC LAYOUT - STAGE 1A

PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL TYPICAL TRAFFIC LAYOUT - STAGE 1A	SHEET 377	E

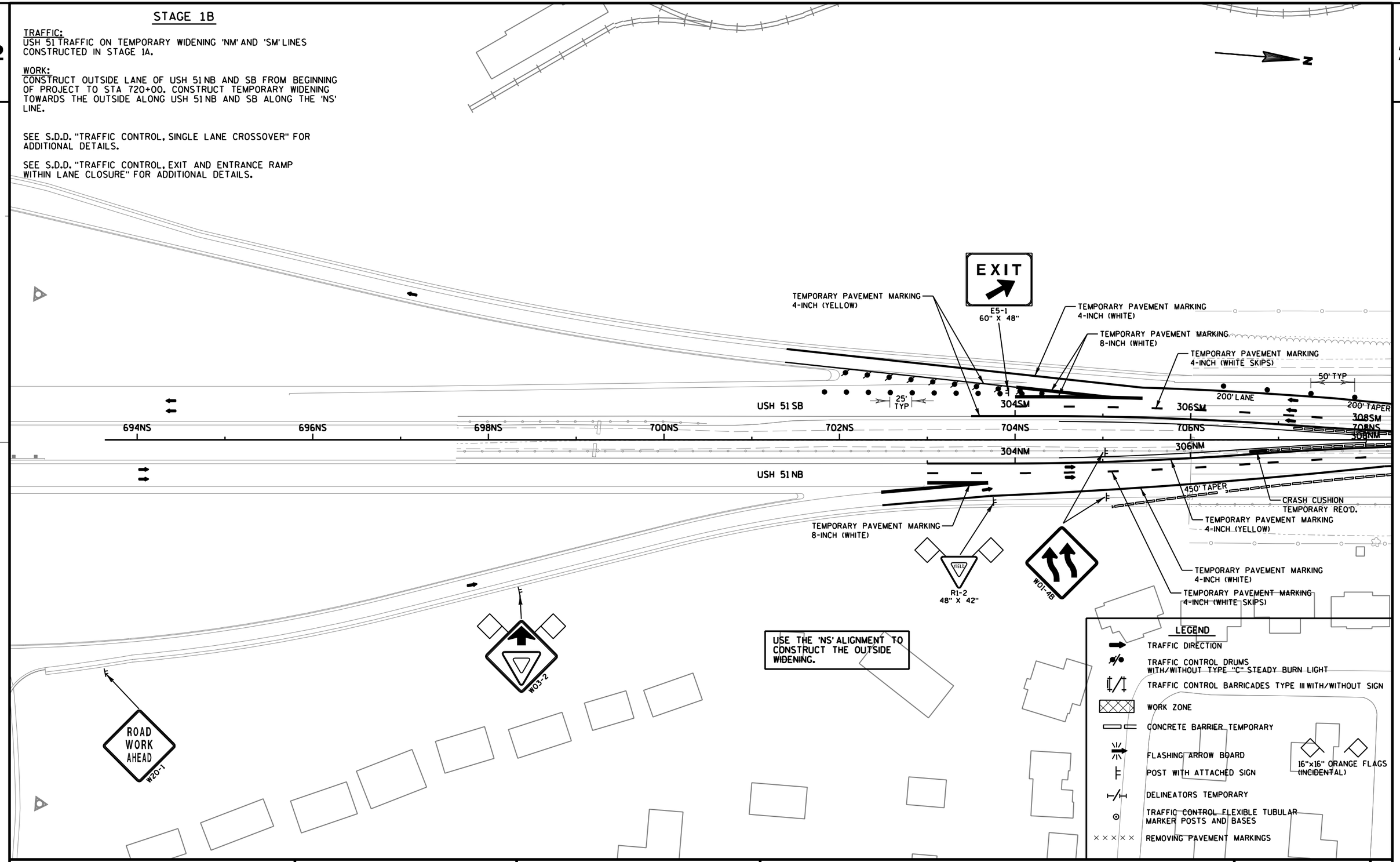
STAGE 1B

TRAFFIC:
USH 51 TRAFFIC ON TEMPORARY WIDENING 'NM' AND 'SM' LINES CONSTRUCTED IN STAGE 1A.

WORK:
CONSTRUCT OUTSIDE LANE OF USH 51 NB AND SB FROM BEGINNING OF PROJECT TO STA 720+00. CONSTRUCT TEMPORARY WIDENING TOWARDS THE OUTSIDE ALONG USH 51 NB AND SB ALONG THE 'NS' LINE.

SEE S.D.D. "TRAFFIC CONTROL, SINGLE LANE CROSSOVER" FOR ADDITIONAL DETAILS.

SEE S.D.D. "TRAFFIC CONTROL, EXIT AND ENTRANCE RAMP WITHIN LANE CLOSURE" FOR ADDITIONAL DETAILS.



PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 1B	SHEET E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\026140_s1b.dgn PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:100

2

N

PORTABLE CHANGEABLE MESSAGE SIGN REQUIRED TO PROVIDE SUPPLIMENTAL EXIT INFORMATION "BRIDGE STREET, EXIT RIGHT"

W01-4B

TEMPORARY PAVEMENT MARKING 4-INCH (WHITE SKIPS)

TEMPORARY PAVEMENT MARKING 4-INCH (WHITE)

TEMPORARY PAVEMENT MARKING 4-INCH (YELLOW)

MOVING SIGNS TYPE 2

NORTH 51 MILE 193 .8

SOUTH 51 MILE 193 .8

50' TYP

200' TAPER

308SM 308NM 310SM 310NM 312SM 312NM 314SM 314NM 316SM 316NM USH 51 SB 318SM 318NM 320SM 320NM 322SM 322NM

USH 51 NB

SAN

M/H

TEMPORARY PAVEMENT MARKING 4-INCH (WHITE)

TEMPORARY PAVEMENT MARKING 4-INCH (WHITE SKIPS)

W01-4B

SPEED LIMIT 55

R2-1 48" X 60"

SPEED LIMIT 65

COVERING SIGNS TYPE II

USE DURING TEMPORARY REGULATORY SPEED LIMIT REDUCTION.

USE THE 'NS' ALIGNMENT TO CONSTRUCT THE OUTSIDE WIDENING.

LEGEND

- TRAFFIC DIRECTION
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN
- WORK ZONE
- CONCRETE BARRIER TEMPORARY
- FLASHING ARROW BOARD
- POST WITH ATTACHED SIGN
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER POSTS AND BASES
- REMOVING PAVEMENT MARKINGS

PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 1B	SHEET	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\026141_s1b.dgn PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:100

2

N

SPEED LIMIT 55
R2-1
48" X 60"

SPEED LIMIT 65
COVERING SIGNS
TYPE II

USE DURING TEMPORARY REGULATORY SPEED LIMIT REDUCTION.

W01-4B

TEMPORARY PAVEMENT MARKING
4-INCH (YELLOW)

TEMPORARY PAVEMENT MARKING
4-INCH (WHITE SKIPS)

TEMPORARY PAVEMENT MARKING
4-INCH (WHITE)

CRASH CUSHION
TEMPORARY REQ'D.

USH 51

324SM
326SM
726NS
728NS
730NS
732NS
USH 51 SB
734NS
736NS
738NS
USH 51

324NM
326NM
USH 51 NB
USH 51

50' TYP

TEMPORARY PAVEMENT MARKING
4-INCH (WHITE SKIPS)

TEMPORARY PAVEMENT MARKING
4-INCH (WHITE)

TEMPORARY PAVEMENT MARKING
4-INCH (YELLOW)

USE THE 'NS' ALIGNMENT TO CONSTRUCT THE OUTSIDE WIDENING.

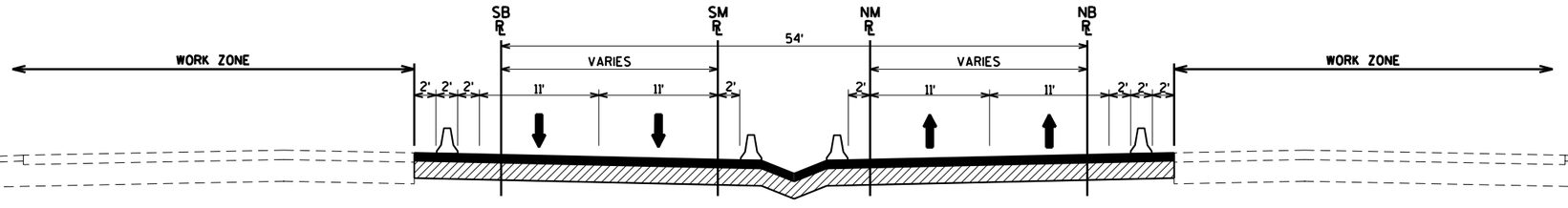
MH
MH
SIGN
SIGN
SIGN
W
W
FOUND

LEGEND

- TRAFFIC DIRECTION
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN
- WORK ZONE
- CONCRETE BARRIER TEMPORARY
- FLASHING ARROW BOARD
- POST WITH ATTACHED SIGN
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER POSTS AND BASES
- REMOVING PAVEMENT MARKINGS

PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 1B	SHEET 380	E

2



TRAFFIC LAYOUT - STAGE 1B

PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL TYPICAL TRAFFIC LAYOUT - STAGE 1B	SHEET 381	E

STAGE 1C

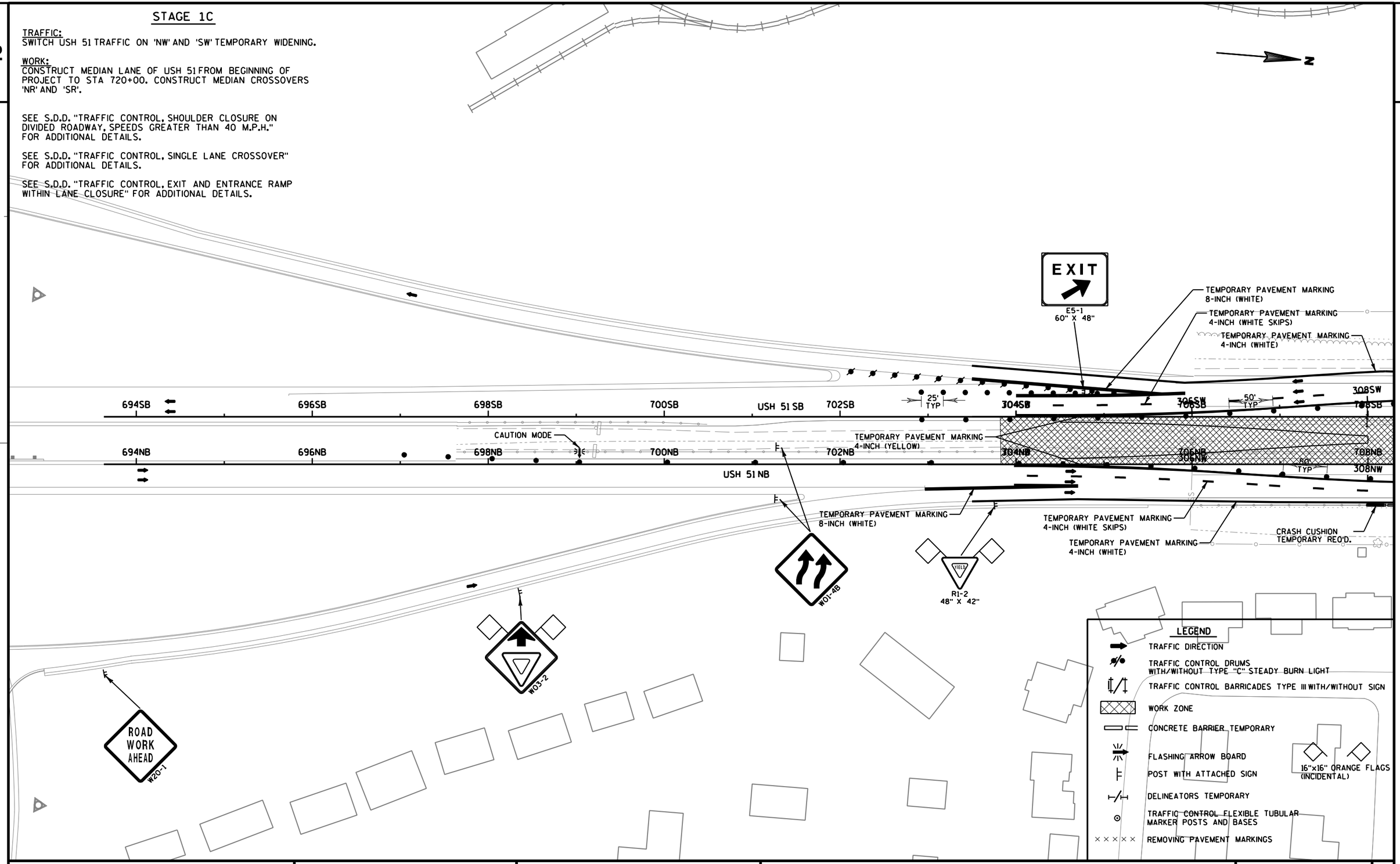
TRAFFIC:
SWITCH USH 51 TRAFFIC ON 'NW' AND 'SW' TEMPORARY WIDENING.

WORK:
CONSTRUCT MEDIAN LANE OF USH 51 FROM BEGINNING OF PROJECT TO STA 720+00. CONSTRUCT MEDIAN CROSSOVERS 'NR' AND 'SR'.

SEE S.D.D. "TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 M.P.H." FOR ADDITIONAL DETAILS.

SEE S.D.D. "TRAFFIC CONTROL, SINGLE LANE CROSSOVER" FOR ADDITIONAL DETAILS.

SEE S.D.D. "TRAFFIC CONTROL, EXIT AND ENTRANCE RAMP WITHIN LANE CLOSURE" FOR ADDITIONAL DETAILS.



PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 1C	SHEET E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\026150_s1c.dgn PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:100

2

2

N

EXIT 193
Bridge St

W01-4B

TEMPORARY PAVEMENT MARKING
4-INCH (YELLOW)

TEMPORARY PAVEMENT MARKING
4-INCH (WHITE)

TEMPORARY PAVEMENT MARKING
4-INCH (WHITE SKIPS)

308SW 310SW 312SW 314SW 316SW USH 51 SB 318SW 320SW 322SW

706SB 708SB 710SB 712SB 714SB 716SB 718SB 720SB 722SB

50' TYP

708NB 710NB 712NB 714NB 716NB 718NB 720NB 722NB

308NW 310NW 312NW 314NW 316NW 318NW 320NW 322NW

50' TYP

USH 51 NB

CRASH CUSHION
TEMPORARY REQ'D.

TEMPORARY PAVEMENT MARKING
4-INCH (YELLOW)

TEMPORARY PAVEMENT MARKING
4-INCH (WHITE SKIPS)

TEMPORARY PAVEMENT MARKING
4-INCH (WHITE)

W01-4B

SPEED LIMIT 55
R2-1
48" X 60"

SPEED LIMIT 65
COVERING SIGNS
TYPE II

USE DURING TEMPORARY REGULATORY
SPEED LIMIT REDUCTION.

FOUND

LEGEND

- TRAFFIC DIRECTION
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN
- WORK ZONE
- CONCRETE BARRIER TEMPORARY
- FLASHING ARROW BOARD
- POST WITH ATTACHED SIGN

PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 1C	SHEET E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\026151_s1c.dgn PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:100

2

N

2

SPEED LIMIT 55

R2-1
48" X 60"

SPEED LIMIT 65

COVERING SIGNS
TYPE II

USE DURING TEMPORARY REGULATORY SPEED LIMIT REDUCTION.

TEMPORARY PAVEMENT MARKING
4-INCH (WHITE)

TEMPORARY PAVEMENT MARKING
4-INCH (YELLOW)

TEMPORARY PAVEMENT MARKING
4-INCH (WHITE SKIPS)

CRASH CUSHION
TEMPORARY REQ'D.

W01-4B

726SB

728SB

730SB

732SB

734SB

736SB

738SB

USH 51

USH 51 SB

CAUTION MODE

728NB

730NB

732NB

734NB

736NB

738NB

USH 51 NB

50' TYP

724NB

726NB

TEMPORARY PAVEMENT MARKING
4-INCH (YELLOW)

TEMPORARY PAVEMENT MARKING
4-INCH (WHITE SKIPS)

TEMPORARY PAVEMENT MARKING
4-INCH (WHITE)

FOUND

SIGN

W

MH

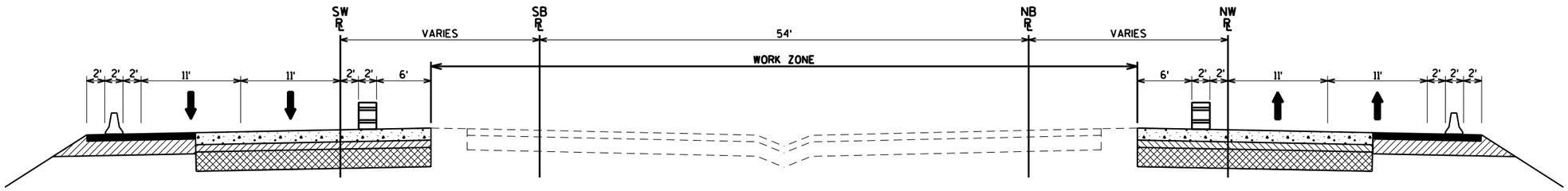
LEGEND

- TRAFFIC DIRECTION
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN
- WORK ZONE
- CONCRETE BARRIER TEMPORARY
- FLASHING ARROW BOARD
- POST WITH ATTACHED SIGN

PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 1C	SHEET 384	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\026152_s1c.dgn PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:100

2



TRAFFIC LAYOUT - STAGE 1C

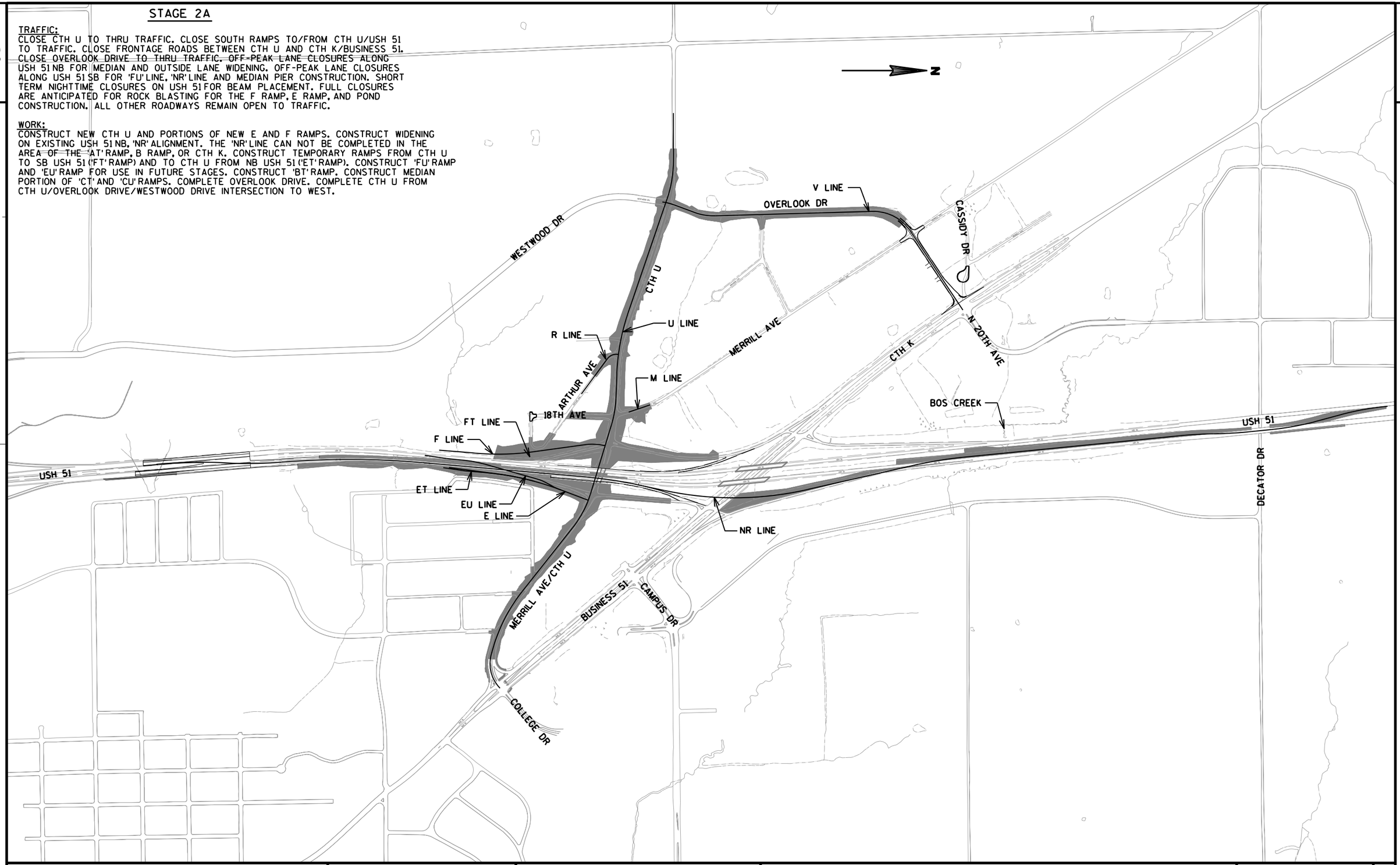
PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL TYPICAL TRAFFIC LAYOUT - STAGE 1C	SHEET	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\026153_s1c.dgn PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:200
WISDOT/CADDS SHEET 42

STAGE 2A

TRAFFIC:
CLOSE CTH U TO THRU TRAFFIC. CLOSE SOUTH RAMPS TO/FROM CTH U/USH 51 TO TRAFFIC. CLOSE FRONTAGE ROADS BETWEEN CTH U AND CTH K/BUSINESS 51. CLOSE OVERLOOK DRIVE TO THRU TRAFFIC. OFF-PEAK LANE CLOSURES ALONG USH 51 NB FOR MEDIAN AND OUTSIDE LANE WIDENING. OFF-PEAK LANE CLOSURES ALONG USH 51 SB FOR 'FU' LINE, 'NR' LINE AND MEDIAN PIER CONSTRUCTION. SHORT TERM NIGHTTIME CLOSURES ON USH 51 FOR BEAM PLACEMENT. FULL CLOSURES ARE ANTICIPATED FOR ROCK BLASTING FOR THE F RAMP, E RAMP, AND POND CONSTRUCTION. ALL OTHER ROADWAYS REMAIN OPEN TO TRAFFIC.

WORK:
CONSTRUCT NEW CTH U AND PORTIONS OF NEW E AND F RAMPS. CONSTRUCT WIDENING ON EXISTING USH 51 NB, 'NR' ALIGNMENT. THE 'NR' LINE CAN NOT BE COMPLETED IN THE AREA OF THE 'AT' RAMP, B RAMP, OR CTH K. CONSTRUCT TEMPORARY RAMPS FROM CTH U TO SB USH 51 ('FT' RAMP) AND TO CTH U FROM NB USH 51 ('ET' RAMP). CONSTRUCT 'FU' RAMP AND 'EU' RAMP FOR USE IN FUTURE STAGES. CONSTRUCT 'BT' RAMP. CONSTRUCT MEDIAN PORTION OF 'CT' AND 'CU' RAMPS. COMPLETE OVERLOOK DRIVE. COMPLETE CTH U FROM CTH U/OVERLOOK DRIVE/WESTWOOD DRIVE INTERSECTION TO WEST.



PROJECT NO: 1170-01-70/71/73 & 6999-18-70	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL OVERVIEW - STAGE 2A	SHEET 386 E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\026201_s2a.dgn PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:800

WISDOT/CADDS SHEET 42

SEE S.D.D. "BARRICADES AND SIGNS FOR MAINLINE CLOSURES" FOR ADDITIONAL DETAILS.

SEE S.D.D. "BARRICADES AND SIGNS FOR SIDEROAD CLOSURES" FOR ADDITIONAL DETAILS.

N

OVERLOOK DR

MERRILL AVE

CASSIDY DR

CTH U

CTH K

N 20TH AVE

BOOT LN

ROAD CLOSED TO THRU TRAFFIC
R11-4
60" X 30"

ROAD CLOSED 500 FT
W20-3

ROAD CLOSED AHEAD
W20-3

ROAD WORK AHEAD
W20-1

W03-3

500 FROM STOP BAR

TEMPORARY SIGNALS REQ'D.
SEE DETAIL.

200V

205V

210V

215V

220V

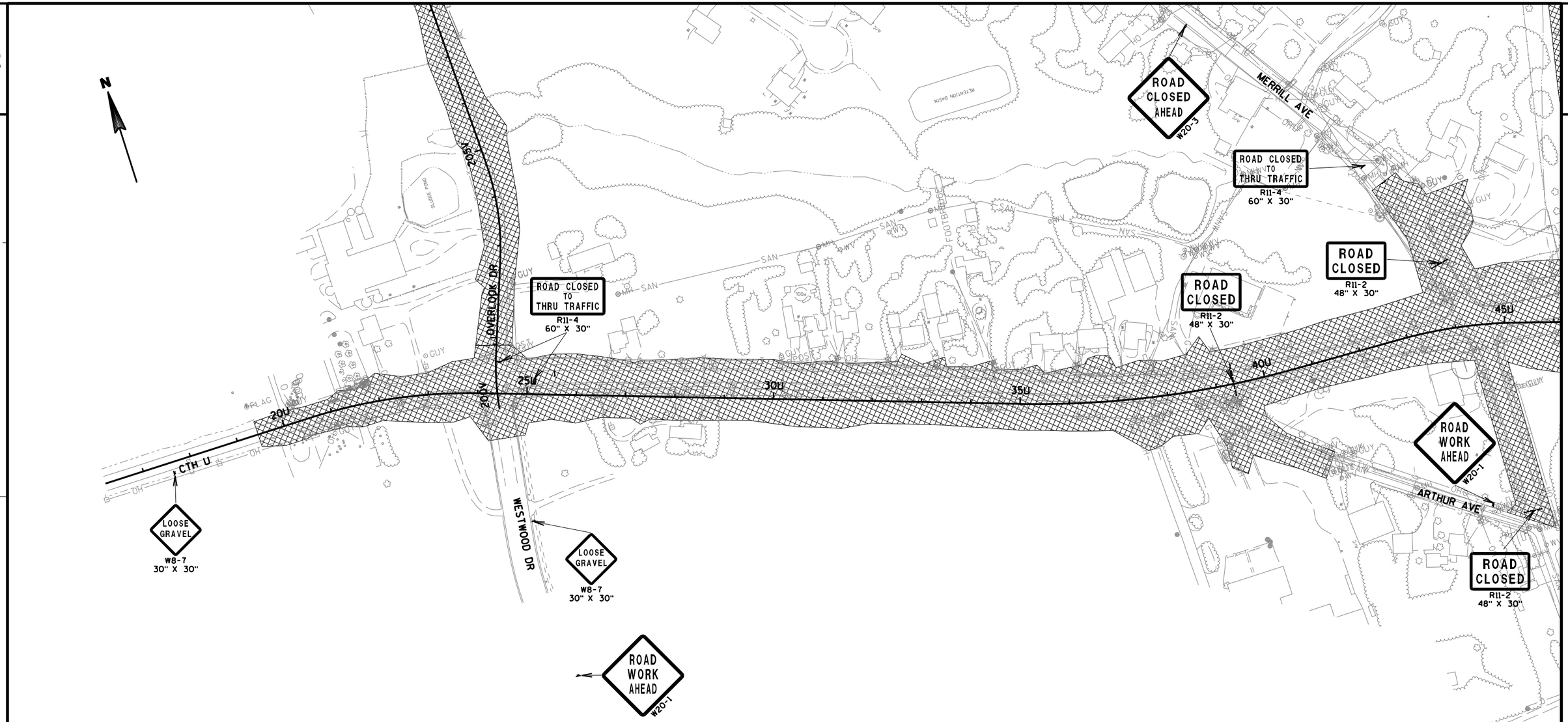
225V

230V

LEGEND

- TRAFFIC DIRECTION
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN
- WORK ZONE
- CONCRETE BARRIER TEMPORARY
- FLASHING ARROW BOARD
- POST WITH ATTACHED SIGN
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER POSTS AND BASES

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - OVERLOOK DR (STAGE 2A)	SHEET 387	E



LEGEND

- TRAFFIC DIRECTION
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN
- WORK ZONE
- CONCRETE BARRIER TEMPORARY
- FLASHING ARROW BOARD
- POST WITH ATTACHED SIGN
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER POSTS AND BASES

PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - CTH U (STAGE 2A)	SHEET 388	E

2

BRIDGE OUT
R11-2B
48" X 30"

BRIDGE OUT
R11-2B
48" X 30"

ROAD CLOSED
R11-2
48" X 30"

45U

CTH U

50U

55U

60U

65U

70U

BUSINESS 51

COLLEGE DR

ROAD CLOSED TO THRU TRAFFIC
R11-4
60" X 30"

ROAD CLOSED TO THRU TRAFFIC
R11-4
60" X 30"

ROAD CLOSED TO THRU TRAFFIC
R11-4
60" X 30"

ROAD CLOSED TO THRU TRAFFIC
R11-4
60" X 30"

ROAD CLOSED TO THRU TRAFFIC
R11-4
60" X 30"

ARTHUR AVE

18TH AVE

ROAD CLOSED AHEAD
W20-3

ROAD CLOSED AHEAD
W20-3

ROAD CLOSED AHEAD
W20-3
(PLACE AT ARTIC LN INTERSECTION)

ROAD CLOSED AHEAD
W20-3
(PLACE AT ARTIC LN INTERSECTION)

USH 51 NB

USH 51 SB

N

LEGEND

- TRAFFIC DIRECTION
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN
- WORK ZONE
- CONCRETE BARRIER TEMPORARY
- FLASHING ARROW BOARD
- POST WITH ATTACHED SIGN
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER POSTS AND BASES

PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - CTH U (STAGE 2A)	SHEET 389	E

SEE S.D.D. "TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 M.P.H." FOR ADDITIONAL DETAILS.

SEE S.D.D. "TRAFFIC CONTROL, EXIT RAMP CLOSURE" FOR ADDITIONAL DETAILS.

SEE S.D.D. "TRAFFIC CONTROL, SINGLE LANE CROSSOVER" FOR ADDITIONAL DETAILS.

SEE S.D.D. "BARRICADES AND SIGNS FOR MAINLINE CLOSURES" FOR ADDITIONAL DETAILS.

SEE S.D.D. "BARRICADES AND SIGNS FOR SIDEROAD CLOSURES" FOR ADDITIONAL DETAILS.

SEE S.D.D. "TRAFFIC CONTROL, LANE CLOSURE, SPEEDS GREATER THAN 40 M.P.H." FOR ADDITIONAL DETAILS.

N

PAVEMENT MARKING EPOXY 4-INCH (WHITE)

PAVEMENT MARKING EPOXY 4-INCH (WHITE SKIPS)

FLEXIBLE TUBULAR MARKER POSTS @ 5' SPACING (TYP)

CAUTION MODE

312NR

314NR

USH 51 SB

316NR

318NR

320NR

322NR

50' TYP

100' TYP

PAVEMENT MARKING EPOXY 4-INCH (YELLOW)

USH 51 NB

PAVEMENT MARKING EPOXY 4-INCH (WHITE)

PAVEMENT MARKING EPOXY 4-INCH (WHITE SKIPS)

STA 708+00 NB - STA 713+08 NB, RT
CONSTRUCT BEAM GUARD CLASS A

SPEED LIMIT 65

COVERING SIGNS TYPE II

FOUND

LEGEND

- TRAFFIC DIRECTION
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN
- WORK ZONE
- CONCRETE BARRIER TEMPORARY
- FLASHING ARROW BOARD
- POST WITH ATTACHED SIGN

PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 2A & 2B	SHEET 390	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\026213_s2a.dgn PLOT DATE : 8/21/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2

2

N

SPEED LIMIT 65

COVERING SIGNS TYPE II

MH

MH

PAVEMENT MARKING EPOXY 4-INCH (WHITE)

PAVEMENT MARKING EPOXY 4-INCH (WHITE SKIPS)

PAVEMENT MARKING EPOXY 4-INCH (YELLOW)

USH 51 SB

100' TYP

PAVEMENT MARKING EPOXY 4-INCH (YELLOW)

100' TYP

USH 51 NB

PAVEMENT MARKING EPOXY 4-INCH (WHITE SKIPS)

PAVEMENT MARKING EPOXY 4-INCH (WHITE)

FOUND

SIGN

W

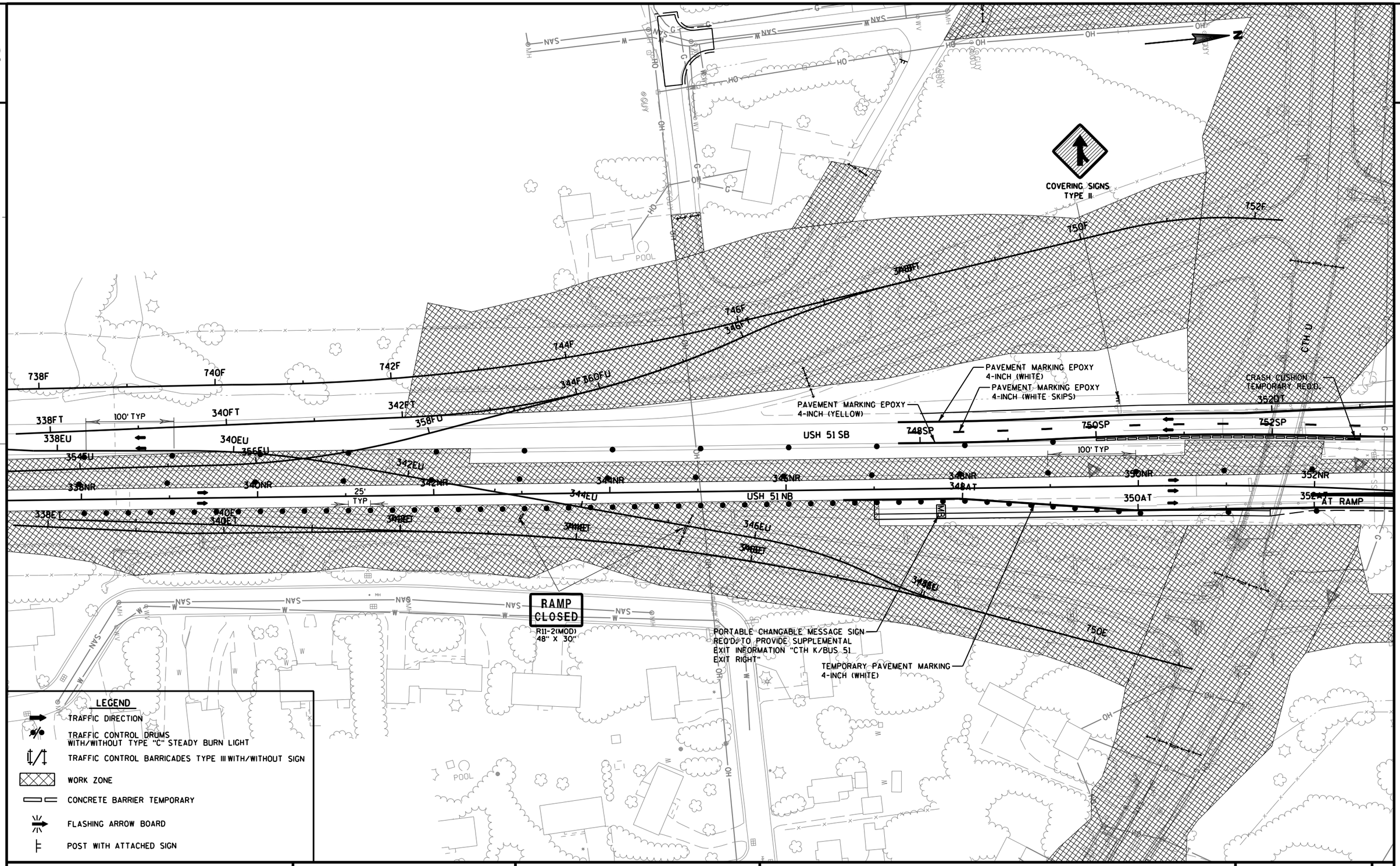
LEGEND

- TRAFFIC DIRECTION
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN
- WORK ZONE
- CONCRETE BARRIER TEMPORARY
- FLASHING ARROW BOARD
- POST WITH ATTACHED SIGN

PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 2A & 2B	SHEET	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\026214_s2a.dgn PLOT DATE : 8/21/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:100

2



PROJECT NO: 1170-01-70/73	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 2A & 2B	SHEET	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\026215_s2a.dgn PLOT DATE : 8/21/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:100

2

2

N

RUINS

ROAD CLOSED
R11-2
48" X 30"

W01-6
48" X 24"

25' TYP

W03-2

366DT

368DT

364DT

362DT

360DT

358DT

356DT

354DT

DT RAMP

USH 51 SB

CRASH CUSHION TEMPORARY REQ'D.

PAVEMENT MARKING EPOXY 4-INCH (WHITE SKIPS)

PAVEMENT MARKING EPOXY 4-INCH (WHITE)

PAVEMENT MARKING EPOXY 4-INCH (YELLOW)

PAVEMENT MARKING EPOXY 8-INCH (WHITE)

PAVEMENT MARKING EPOXY 4-INCH (YELLOW)

W4-1

R1-2
48" X 42"

754SP

TEMPORARY PAVEMENT MARKING 4-INCH (WHITE)

100' TYP

100' TYP

354NR

354AT

356NR

356AT

358NR

358AT

360NR

362NR

364NR

366NR

368BT

364BT

USH 51 NB

CTH K

CTH K

TEMPORARY PAVEMENT MARKING 8-INCH (WHITE)

25' TYP

EXIT
E5-1
60" X 48"

TEMPORARY PAVEMENT MARKING 4-INCH (YELLOW)

TEMPORARY PAVEMENT MARKING 4-INCH (WHITE)

AT RAMP

TEMPORARY PAVEMENT MARKING STOP LINE 24-INCH

W03-3

RAMP CLOSED
R11-2(MOD)
48" X 30"

50' TYP

100' TYP

M1-5A
24" X 24"

BUSINESS
COUNTY K 51

M4-3
24" X 12"

M1-4
24" X 24"

M6-1
21" X 21"

M6-1
21" X 21"

TEMPORARY SIGNALS REQ'D.
SEE DETAIL.

W03-3

W03-3

TEMPORARY PAVEMENT MARKING STOP LINE 24-INCH

STOP
R1-1
48" X 48"

TRAFFIC FROM LEFT DOES NOT STOP
W4-4AL
54" X 18"

LEGEND

- TRAFFIC DIRECTION
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN
- WORK ZONE
- CONCRETE BARRIER TEMPORARY
- FLASHING ARROW BOARD
- POST WITH ATTACHED SIGN
- 16"x16" ORANGE FLAGS (INCIDENTAL)

PROJECT NO: 1170-01-70/73	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 2A & 2B	SHEET	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\026216_s2a.dgn PLOT DATE : 8/21/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2

STOP
R1-1
48" X 48"
TRAFFIC FROM LEFT DOES NOT STOP
W4-4AL
54" X 18"

CTH K

CTH K

TEMPORARY SIGNALS REQ'D.
SEE DETAIL.

POST

POST

POST

STOP

W03-3

SAN

SAN

SAN

MH

SIGN

SIGN

SIGN

SIGN

SIGN

USH 51 SB

100' TYP

100' TYP

USH 51 NB

382NR

380NR

378NR

376NR

374NR

372NR

370NR

368NR

100' TYP

50' TYP

W03-2

LEGEND

- TRAFFIC DIRECTION
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN
- WORK ZONE
- CONCRETE BARRIER TEMPORARY
- FLASHING ARROW BOARD
- 16"x16" ORANGE FLAGS (INCIDENTAL)
- POST WITH ATTACHED SIGN

PROJECT NO: 1170-01-70/73	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 2A & 2B	SHEET 394	E

2

2

N

BERM

W

W

SIGN

384CT

386CT

388CT

USH 51 SB

100' TYP

384NR

386NR

388NR

390NR

392NR

394NR

396NR

398NR

USH 51 NB

50' TYP

100' TYP

YIELD

R1-2
48" X 42"

SIGN

SPEED LIMIT 65

COVERING SIGNS
TYPE II

LEGEND

- TRAFFIC DIRECTION
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN
- WORK ZONE
- CONCRETE BARRIER TEMPORARY
- FLASHING ARROW BOARD
- POST WITH ATTACHED SIGN
- 16"x16" ORANGE FLAGS (INCIDENTAL)

PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 2A & 2B	SHEET	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\026218_s2a.dgn PLOT DATE : 8/21/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2

N

DECATOR DR

TV

HO

HO

HO

USH 51

100' TYP

USH 51 SB

398NR

400NR

402NR

404NR

406NR

408NR

410NR

412NR

USH 51

100' TYP

USH 51 NB

LEGEND

- TRAFFIC DIRECTION
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN
- WORK ZONE
- CONCRETE BARRIER TEMPORARY
- FLASHING ARROW BOARD
- POST WITH ATTACHED SIGN

PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 2A & 2B	SHEET	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\026219_s2a.dgn PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:100

2

2

N

OH

USH 51 SB

422NR

420NR

418NR

416NR

414NR

100' TYP

CAUTION MODE

USH 51 NB

100' TYP

LEGEND

- TRAFFIC DIRECTION
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN
- WORK ZONE
- CONCRETE BARRIER TEMPORARY
- FLASHING ARROW BOARD
- POST WITH ATTACHED SIGN

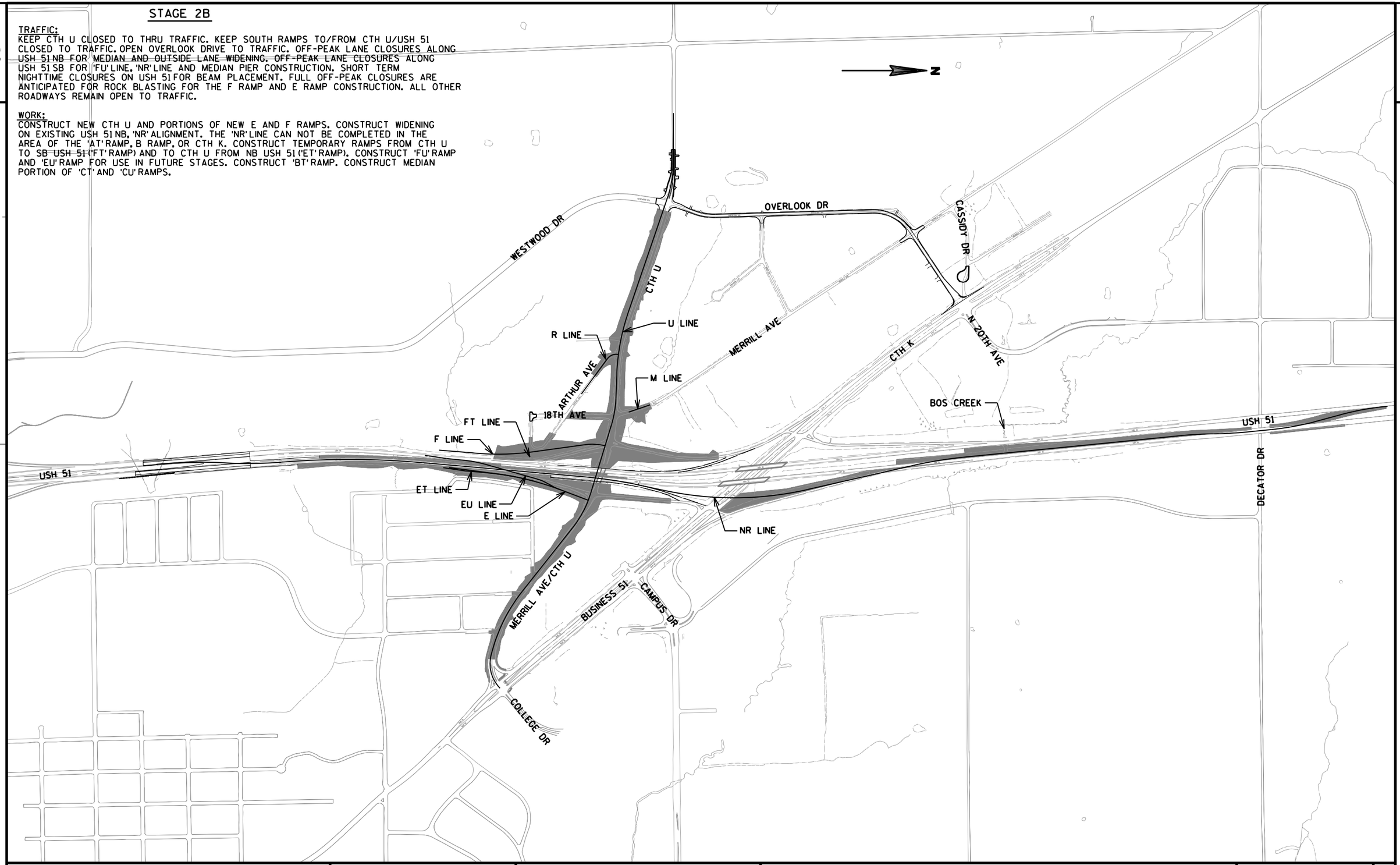
PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 2A & 2B	SHEET	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\026220_s2a.dgn PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:100

STAGE 2B

TRAFFIC:
KEEP CTH U CLOSED TO THRU TRAFFIC. KEEP SOUTH RAMPS TO/FROM CTH U/USH 51 CLOSED TO TRAFFIC. OPEN OVERLOOK DRIVE TO TRAFFIC. OFF-PEAK LANE CLOSURES ALONG USH 51 NB FOR MEDIAN AND OUTSIDE LANE WIDENING. OFF-PEAK LANE CLOSURES ALONG USH 51 SB FOR 'FU' LINE, 'NR' LINE AND MEDIAN PIER CONSTRUCTION. SHORT TERM NIGHTTIME CLOSURES ON USH 51 FOR BEAM PLACEMENT. FULL OFF-PEAK CLOSURES ARE ANTICIPATED FOR ROCK BLASTING FOR THE F RAMP AND E RAMP CONSTRUCTION. ALL OTHER ROADWAYS REMAIN OPEN TO TRAFFIC.

WORK:
CONSTRUCT NEW CTH U AND PORTIONS OF NEW E AND F RAMPS. CONSTRUCT WIDENING ON EXISTING USH 51 NB, 'NR' ALIGNMENT. THE 'NR' LINE CAN NOT BE COMPLETED IN THE AREA OF THE 'AT' RAMP, B RAMP, OR CTH K. CONSTRUCT TEMPORARY RAMPS FROM CTH U TO SB USH 51 ('FT' RAMP) AND TO CTH U FROM NB USH 51 ('ET' RAMP). CONSTRUCT 'FU' RAMP AND 'EU' RAMP FOR USE IN FUTURE STAGES. CONSTRUCT 'BT' RAMP. CONSTRUCT MEDIAN PORTION OF 'CT' AND 'CU' RAMPS.



PROJECT NO: 1170-01-70/71/73 & 6999-18-70	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL OVERVIEW - STAGE 2B	SHEET 398 E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\026230_s2b.dgn PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:800

WISDOT/CADDS SHEET 42

SEE S.D.D. "BARRICADES AND SIGNS FOR MAINLINE CLOSURES" FOR ADDITIONAL DETAILS.

SEE S.D.D. "BARRICADES AND SIGNS FOR SIDEROAD CLOSURES" FOR ADDITIONAL DETAILS.

ROAD WORK AHEAD W20-1

ROAD CLOSED AHEAD W20-3

ROAD CLOSED TO THRU TRAFFIC R11-4 60" X 30"

ROAD CLOSED R11-2 48" X 30"

STOP R1-1 30" X 30" R1-3P 18" X 6"

CTH U

OVERLOOK DR

WESTWOOD DR

MERRILL AVE

ARTHUR AVE

FOOTBRIDGE

20U 25U 30U 35U 40U 45U

LEGEND

- TRAFFIC DIRECTION
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN
- WORK ZONE
- CONCRETE BARRIER TEMPORARY
- FLASHING ARROW BOARD
- POST WITH ATTACHED SIGN
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER POSTS AND BASES
- 16"x16" ORANGE FLAGS (INCIDENTAL)

PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - CTH U (STAGE 2B)	SHEET 399	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\026232_s2b.dgn PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:200

WISDOT/CADDS SHEET 42

2

BRIDGE OUT
R11-2B
48" X 30"

BRIDGE OUT
R11-2B
48" X 30"

ROAD CLOSED
R11-2
48" X 30"

45U

CTH U

50U

55U

60U

65U

70U

BUSINESS 51

COLLEGE DR

ROAD CLOSED TO THRU TRAFFIC
R11-4
60" X 30"

ROAD CLOSED TO THRU TRAFFIC
R11-4
60" X 30"

ROAD CLOSED TO THRU TRAFFIC
R11-4
60" X 30"

ROAD CLOSED TO THRU TRAFFIC
R11-4
60" X 30"

ROAD CLOSED TO THRU TRAFFIC
R11-4
60" X 30"

ROAD CLOSED AHEAD
W20-3

ROAD CLOSED AHEAD
W20-3

ROAD CLOSED AHEAD
W20-3

(PLACE AT ARTIC LN INTERSECTION)

ROAD CLOSED AHEAD
W20-3

(PLACE AT ARTIC LN INTERSECTION)

ARTHUR AVE

18TH AVE

USH 51 NB

USH 51 SB

LEGEND

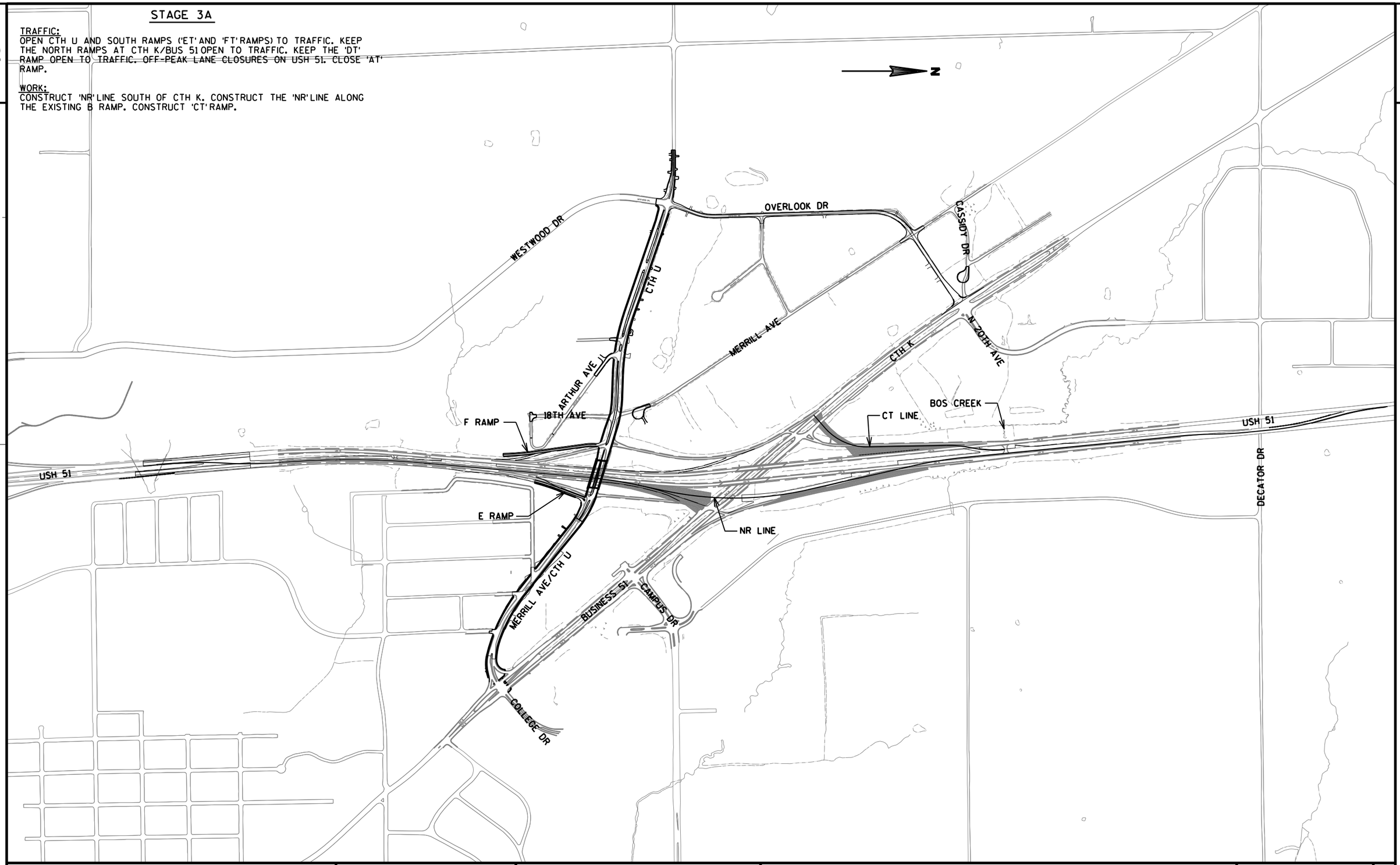
- TRAFFIC DIRECTION
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN
- WORK ZONE
- CONCRETE BARRIER TEMPORARY
- FLASHING ARROW BOARD
- POST WITH ATTACHED SIGN
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER POSTS AND BASES

PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - CTH U (STAGE 2B)	SHEET 400	E

STAGE 3A

TRAFFIC:
OPEN CTH U AND SOUTH RAMPS ('ET' AND 'FT' RAMPS) TO TRAFFIC. KEEP THE NORTH RAMPS AT CTH K/BUS 51 OPEN TO TRAFFIC. KEEP THE 'DT' RAMP OPEN TO TRAFFIC. OFF-PEAK LANE CLOSURES ON USH 51. CLOSE 'AT' RAMP.

WORK:
CONSTRUCT 'NR' LINE SOUTH OF CTH K. CONSTRUCT THE 'NR' LINE ALONG THE EXISTING B RAMP. CONSTRUCT 'CT' RAMP.



PROJECT NO: 1170-01-70/70/73 & 6999-18-70	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL OVERVIEW - STAGE 3A	SHEET 401	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\026301_s3a.dgn PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:800

WISDOT/CADDS SHEET 42

SEE S.D.D. "TRAFFIC CONTROL, SINGLE LANE CROSSOVER" FOR ADDITIONAL DETAILS.

SEE S.D.D. "TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 M.P.H." FOR ADDITIONAL DETAILS.

SEE S.D.D. "TRAFFIC CONTROL, EXIT RAMP CLOSURE" FOR ADDITIONAL DETAILS.

SEE S.D.D. "TRAFFIC CONTROL, LANE CLOSURE, SPEEDS GREATER THAN 40 M.P.H." FOR ADDITIONAL DETAILS.

N

2

2

312NR

314NR

316NR

318NR

320NR

322NR

USH 51 SB

USH 51 NB

OVERLAP CONCRETE BARRIER AND BEAM GUARD

SAN

SAN

SAN

FOUND

LEGEND

- TRAFFIC DIRECTION
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN
- WORK ZONE
- CONCRETE BARRIER TEMPORARY
- FLASHING ARROW BOARD
- POST WITH ATTACHED SIGN

PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 3A	SHEET 402	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\026311_s3a.dgn PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:100

2

N

2

SPEED LIMIT 65
COVERING SIGNS TYPE II

MH

MH

ROAD CLOSED
R11-2
48" X 30"

LANE CLOSED
R11-2(MOD)
48" X 30"

USH 51 SB

PAVEMENT MARKING EPOXY 4-INCH (YELLOW)

CRASH CUSHION TEMPORARY REQ'D.

CRASH CUSHION TEMPORARY REQ'D.

324NB

325NB

328NB

330NB

332NB

334NB

336NB

USH 51 NB

PAVEMENT MARKING EPOXY 4-INCH (WHITE)

OPEN MAINTENANCE CROSSOVER WITH BASE AGGREGATE DENSE SURFACE

PAVEMENT MARKING EPOXY 8-INCH (WHITE)

MILE 194

MOVING SIGNS TYPE II

EXIT 194

BUSINESS U 51 K
Wausau

SIGN TYPE III

301

FOUND

SPEED LIMIT 65
COVERING SIGNS TYPE II

LEGEND

- TRAFFIC DIRECTION
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN
- WORK ZONE
- CONCRETE BARRIER TEMPORARY
- FLASHING ARROW BOARD
- POST WITH ATTACHED SIGN

PROJECT NO: 1170-01-70/73	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 3A	SHEET 403	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\026312_s3a.dgn PLOT DATE : 8/21/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:100

2

N

RAMP CLOSED
R11-2(MOD)
48" X 30"

W01-6
48" X 24"

FLEXIBLE TUBULAR MARKER
POSTS @ 5' SPACING (TYP)

MOVING SIGNS
TYPE 2
NORTH 51 MILE 194 .2
SOUTH 51 MILE 194 .2

PAVEMENT MARKING EPOXY
4-INCH (WHITE)

PAVEMENT MARKING EPOXY
4-INCH (YELLOW)

UNCOVER SIGN

CTH U

CTH U

FLEXIBLE TUBULAR MARKER
POSTS @ 5' SPACING (TYP)

USH 51 SB

USH 51 NB

336NR 340NR 342NR 344NR 346NR 348NR 350NR 352NR

342ET 340ET 338ET 336ET

EXIT
E5-1
60" X 48"

CRASH CUSHION
TEMPORARY REQ'D.

PAVEMENT MARKING EPOXY
8-INCH (WHITE)

FLEXIBLE TUBULAR MARKER
POSTS @ 5' SPACING (TYP)

PAVEMENT MARKING EPOXY
4-INCH (WHITE)

CRASH CUSHION
TEMPORARY REQ'D.

ROAD CLOSED
R11-2
48" X 30"

PAVEMENT MARKING EPOXY
4-INCH (YELLOW)

OVERLAP CONCRETE BARRIER

PAVEMENT MARKING EPOXY
4-INCH (YELLOW)

PAVEMENT MARKING EPOXY
4-INCH (WHITE)

NORTH 51 MILE 194 .4
MOVING SIGNS
TYPE 2

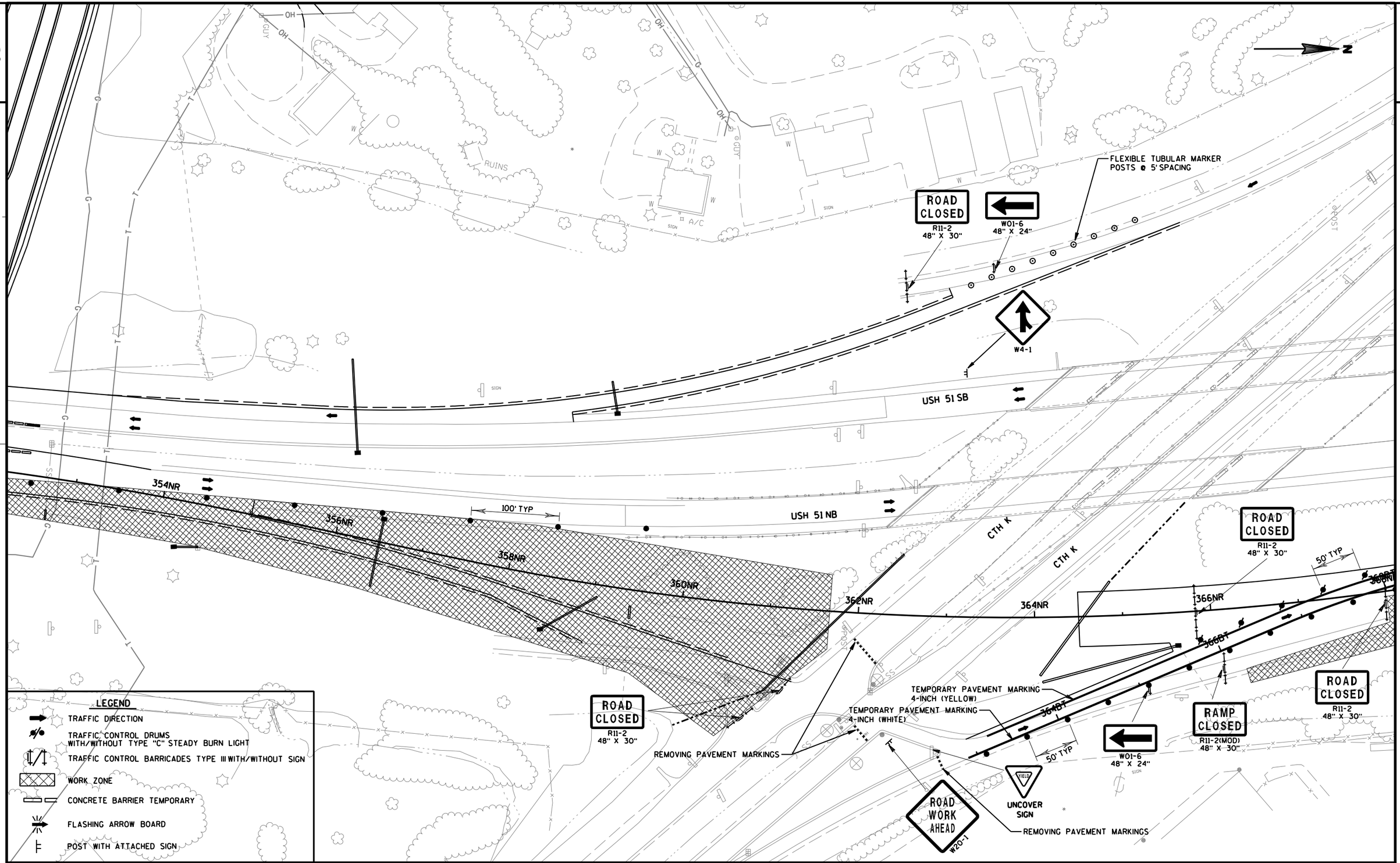
POOL

LEGEND

- TRAFFIC DIRECTION
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN
- WORK ZONE
- CONCRETE BARRIER TEMPORARY
- FLASHING ARROW BOARD
- POST WITH ATTACHED SIGN

PROJECT NO: 1170-01-70/73	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 3A	SHEET 404	E

2



PROJECT NO: 1170-01-70/73	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 3A	SHEET	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\026314_s3a.dgn PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:100

2

UNCOVER SIGNS

REMOVING PAVEMENT MARKINGS

RAMP CLOSED
R11-2(MOD)
48" X 30"

C/H K

372CT

374CT

STOP
UNCOVER SIGNS

REMOVING PAVEMENT MARKINGS

RAMP CLOSED
R11-2(MOD)
48" X 30"

STA 775+50 SB - STA 381+00 CT
MGS GUARDRAIL TEMPORARY AND
TERMINAL EAT (SB SHOULDER)

376CT

378CT

380CT

382CT

100' TYP

100' TYP

USH 51 SB

W5-52L
12" X 36"

15:1 TAPER

PAVEMENT MARKING EPOXY
4-INCH (YELLOW)

382NR

380NR

450' TAPER

378NR

376NR

374NR

372NR

370NR

368NR

TEMPORARY PAVEMENT MARKING
8-INCH (WHITE)

USH 51 NB

TEMPORARY PAVEMENT MARKING
4-INCH (YELLOW)

50' TYP

100' TYP

TEMPORARY PAVEMENT MARKING
4-INCH (WHITE)

ROAD CLOSED
R11-2
48" X 30"

LEGEND

- TRAFFIC DIRECTION
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN
- WORK ZONE
- CONCRETE BARRIER TEMPORARY
- FLASHING ARROW BOARD
- POST WITH ATTACHED SIGN

PROJECT NO: 1170-01-70/73	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 3A	SHEET 406	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\026315_s3a.dgn PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:100

2

2

N

BERM

W

W

SIGN

EXIT

E5-1
60" X 48"

FLEXIBLE TUBULAR MARKER
POSTS @ 5' SPACING (TYP)

ROAD
CLOSED

R11-2
48" X 30"

CAUTION MODE

100' TYP

50' TYP

100' TYP

384CT

386CT

388CT

USH 51 SB

384NR 386NR 388NR 390NR 392NR 394NR 396NR 398NR

USH 51 NB

TEMPORARY PAVEMENT MARKING
4-INCH (WHITE)

MAINTENANCE CROSSOVER WITH
BASE AGGREGATE DENSE SURFACE

CRASH CUSHION
TEMPORARY REO'D.

PAVEMENT MARKING EPOXY
4-INCH (WHITE)

PAVEMENT MARKING EPOXY
4-INCH (YELLOW)

SPEED
LIMIT
65

COVERING SIGNS
TYPE II

SIGN

LEGEND

- TRAFFIC DIRECTION
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN
- WORK ZONE
- CONCRETE BARRIER TEMPORARY
- FLASHING ARROW BOARD
- POST WITH ATTACHED SIGN

PROJECT NO: 1170-01-70/73	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 3A	SHEET 407	E

2

N

DECATOR DR

TV

HO

USH 51

USH 51 SB

PAVEMENT MARKING EPOXY
4-INCH (YELLOW)

398NR 400NR 402NR 404NR 406NR 408NR 410NR 412NR

USH 51

USH 51 NB

LEGEND

- TRAFFIC DIRECTION
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN
- WORK ZONE
- CONCRETE BARRIER TEMPORARY
- FLASHING ARROW BOARD
- POST WITH ATTACHED SIGN

PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 3A	SHEET 408	E

2

2

STA 412+87 NR - STA 418+66 NR
MGS GUARDRAIL TEMPORARY AND
TERMINAL EAT (NR CROSSOVER)

N

HO

USH 51 SB

422NR

420NR

418NR

416NR

414NR

FLEXIBLE TUBULAR MARKER
POSTS @ 5'SPACING (TYP)

USH 51 NB

LEGEND

- TRAFFIC DIRECTION
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN
- WORK ZONE
- CONCRETE BARRIER TEMPORARY
- FLASHING ARROW BOARD
- POST WITH ATTACHED SIGN

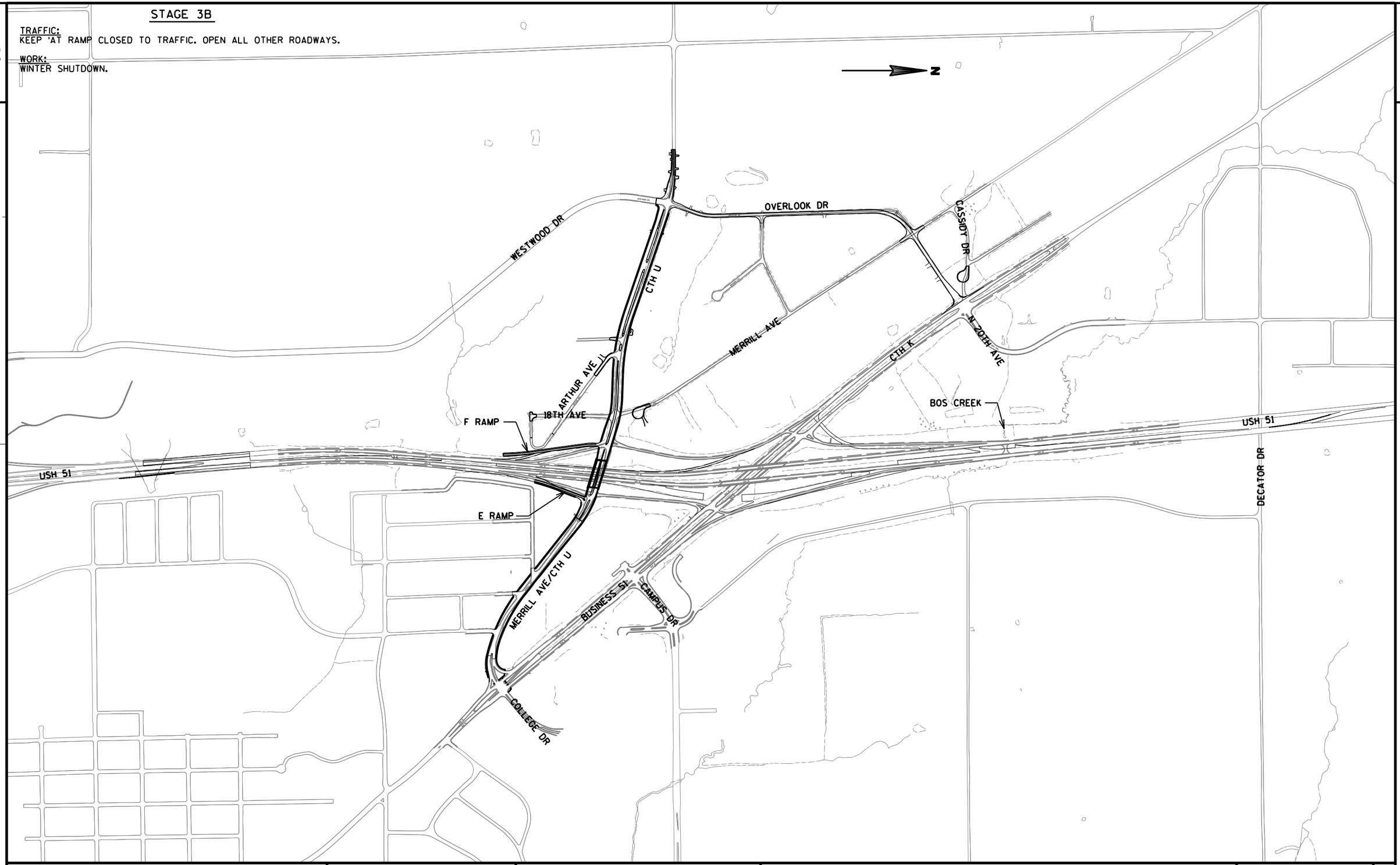
PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 3A	SHEET 409	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\026318_s3a.dgn PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:100

STAGE 3B

TRAFFIC:
KEEP 'AT RAMP CLOSED TO TRAFFIC. OPEN ALL OTHER ROADWAYS.

WORK:
WINTER SHUTDOWN.



PROJECT NO: 1170-01-70/71/73 & 6999-18-70	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL OVERVIEW - STAGE 3B	SHEET 410	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\026330_s3b.dgn PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:800

WISDOT/CADDS SHEET 42

2

2

N

USH 51 SB

USH 51 NB

SAN

SAN

HWY

FOUND

LEGEND

- TRAFFIC DIRECTION
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN
- WORK ZONE
- CONCRETE BARRIER TEMPORARY
- FLASHING ARROW BOARD
- POST WITH ATTACHED SIGN

PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 3B (WINTER SHUTDOWN)	SHEET 411	E

2

N

2

MH

MH

ROAD CLOSED
R11-2
48" X 30"

LANE CLOSED
R11-2(MOD)
48" X 30"

USH 51 SB

USH 51 NB

324NB

326NB

328NB

330NB

332NB

334NB

336NB

OPEN MAINTENANCE CROSSOVER WITH BASE AGGREGATE DENSE SURFACE

FOUND

SIGN

W

LEGEND

- TRAFFIC DIRECTION
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN
- WORK ZONE
- CONCRETE BARRIER TEMPORARY
- FLASHING ARROW BOARD
- POST WITH ATTACHED SIGN

PROJECT NO: 1170-01-70/73	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 3B (WINTER SHUTDOWN)	SHEET 412	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\026332_s3b.dgn PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2

RAMP CLOSED
R11-2(MOD)
48" X 30"

W01-6
48" X 24"

CTH U

CTH U

USH 51 SB

338NR 340NR 342NR 344NR 346NR 348NR 350NR 352NR

USH 51 NB

EXIT
E5-1
60" X 48"

ROAD CLOSED
R11-2
48" X 30"

POOL

POOL

LEGEND

- TRAFFIC DIRECTION
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN
- WORK ZONE
- CONCRETE BARRIER TEMPORARY
- FLASHING ARROW BOARD
- POST WITH ATTACHED SIGN

PROJECT NO: 1170-01-70/73	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 3B (WINTER SHUTDOWN)	SHEET 413	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\026333_s3b.dgn PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:100

2

ROAD CLOSED
R11-2
48" X 30"

W01-6
48" X 24"

W4-1

USH 51 SB

USH 51 NB

CTH K

CTH K

354NR

356NR

358NR

360NR

362NR

364NR

366NR

368NR

PAVEMENT MARKING EPOXY
4-INCH (WHITE)

PAVEMENT MARKING EPOXY
4-INCH (YELLOW)

FLEXIBLE TUBULAR MARKER
POSTS @ 5'SPACING (TYP)

RUINS

A/C

SIGN

POST

LEGEND

- TRAFFIC DIRECTION
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN
- WORK ZONE
- CONCRETE BARRIER TEMPORARY
- FLASHING ARROW BOARD
- POST WITH ATTACHED SIGN

PROJECT NO: 1170-01-70/73	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 3B (WINTER SHUTDOWN)	SHEET 414	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\026334_s3b.dgn PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:100

2

RAMP CLOSED
R11-2(MOD)
48" X 30"

CTH K

372CT

RAMP CLOSED
R11-2(MOD)
48" X 30"

374CT

FLEXIBLE TUBULAR MARKER
POSTS @ 5' SPACING (TYP)

WRONG WAY
MOVING SIGNS
TYPE 2

FLEXIBLE TUBULAR MARKER
POSTS @ 5' SPACING (TYP)

376CT

378CT

380CT

382CT

RAMP CLOSED
R11-2(MOD)
48" X 30"

FLEXIBLE TUBULAR MARKER
POSTS @ 5' SPACING (TYP)

USH 51 SB

W5-52L
12" X 36"

PAVEMENT MARKING EPOXY
4-INCH (WHITE)

USH 51 NB

382NR

380NR

378NR

376NR

374NR

372NR

370NR

368NR

PAVEMENT MARKING EPOXY
8-INCH (WHITE)

PAVEMENT MARKING EPOXY
4-INCH (YELLOW)

PAVEMENT MARKING EPOXY
4-INCH (WHITE)

SAN

POST

SIGN

N

LEGEND

- TRAFFIC DIRECTION
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN
- WORK ZONE
- CONCRETE BARRIER TEMPORARY
- FLASHING ARROW BOARD
- POST WITH ATTACHED SIGN

PROJECT NO: 1170-01-70/73	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 3B (WINTER SHUTDOWN)	SHEET 415	E

2

2

N

BERM

W

W

SIGN

CRASH CUSHION
TEMPORARY REQ'D.

EXIT

E5-1
60" X 48"

FLEXIBLE TUBULAR MARKER
POSTS @ 5' SPACING (TYP)

384CT

386CT

388CT

ROAD
CLOSED

R11-2
48" X 30"

USH 51 SB

384NR 386NR 388NR 390NR 392NR 394NR 396NR 398NR

USH 51 NB

PAVEMENT MARKING EPOXY
8-INCH (WHITE)

PAVEMENT MARKING EPOXY
4-INCH (WHITE)

MAINTENANCE CROSSOVER WITH
BASE AGGREGATE DENSE SURFACE

SIGN

LEGEND

- TRAFFIC DIRECTION
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN
- WORK ZONE
- CONCRETE BARRIER TEMPORARY
- FLASHING ARROW BOARD
- POST WITH ATTACHED SIGN

PROJECT NO: 1170-01-70/73	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 3B (WINTER SHUTDOWN)	SHEET 416	E

2

N

DECATOR DR

USH 51

USH 51 SB

USH 51

USH 51 NB

398NR

400NR

402NR

404NR

406NR

408NR

410NR

412NR

HO

HO

HO

TV

LEGEND

- TRAFFIC DIRECTION
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN
- WORK ZONE
- CONCRETE BARRIER TEMPORARY
- FLASHING ARROW BOARD
- POST WITH ATTACHED SIGN

PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 3B (WINTER SHUTDOWN)	SHEET 417	E

2

2

N

OH

USH 51 SB

422NR

420NR

418NR

416NR

414NR

USH 51 NB

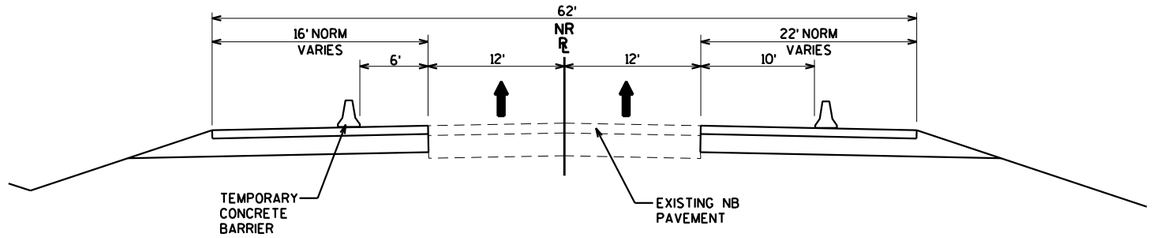
LEGEND

- TRAFFIC DIRECTION
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN
- WORK ZONE
- CONCRETE BARRIER TEMPORARY
- FLASHING ARROW BOARD
- POST WITH ATTACHED SIGN

PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 3B (WINTER SHUTDOWN)	SHEET 418	E

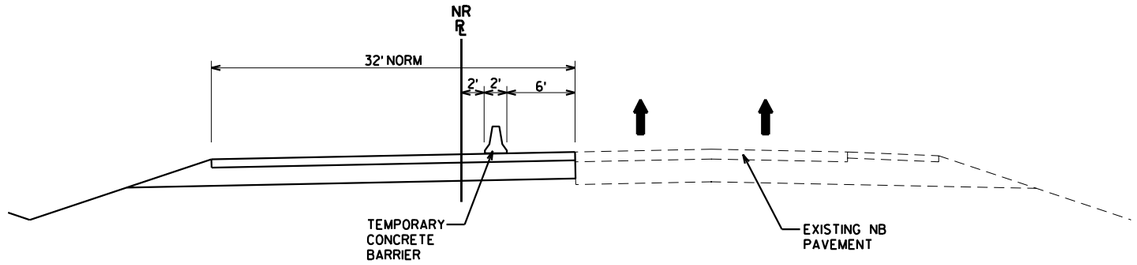
FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\026338_s3b.dgn PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42



TRAFFIC LAYOUT - STAGE 3B

STA 709+50 NB - STA 757+00 NB



TRAFFIC LAYOUT - STAGE 3B

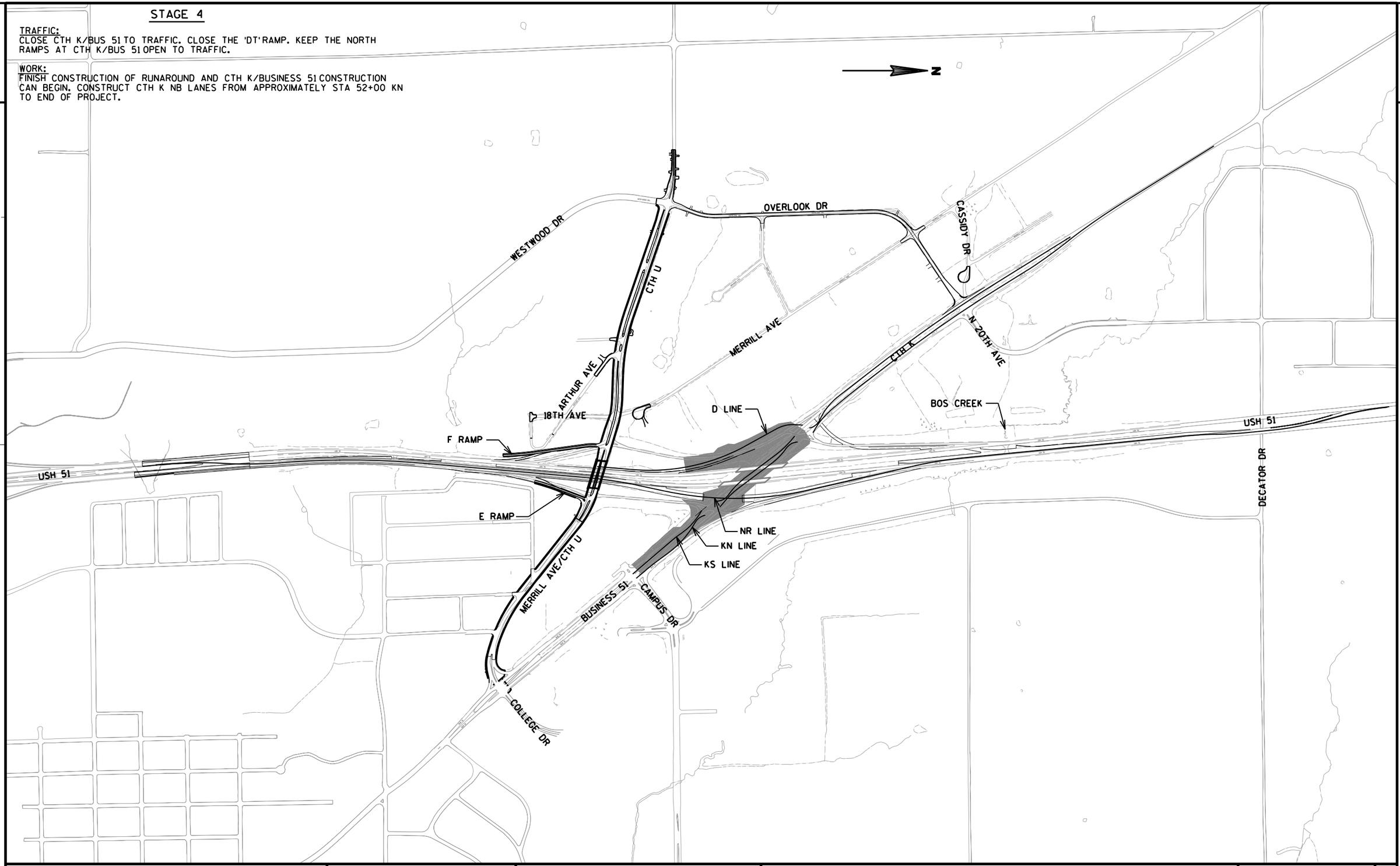
STA 779+00 NB - STA 811+00 NB

PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL TYPICAL TRAFFIC LAYOUT - STAGE 3B	SHEET 419	E

STAGE 4

TRAFFIC:
CLOSE CTH K/BUS 51 TO TRAFFIC. CLOSE THE 'DT' RAMP. KEEP THE NORTH RAMPS AT CTH K/BUS 51 OPEN TO TRAFFIC.

WORK:
FINISH CONSTRUCTION OF RUNAROUND AND CTH K/BUSINESS 51 CONSTRUCTION CAN BEGIN. CONSTRUCT CTH K NB LANES FROM APPROXIMATELY STA 52+00 KN TO END OF PROJECT.



PROJECT NO: 1170-01-70/71/73 & 6999-18-70	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL OVERVIEW - STAGE 4	SHEET 420	E

2

N

TEMPORARY PAVEMENT MARKING
STOP LINE REMOVABLE TAPE 24-INCH

TEMPORARY PAVEMENT MARKING
STOP LINE REMOVABLE TAPE 24-INCH

TEMPORARY SIGNALS REQ'D.
SEE DETAIL.

W03-3

W03-3

W03-3

W03-3

CTH U

20U

25U

30U

35U

40U

45U

20SU

20OU

WESTWOOD DR

OVERLOOK DR

MERRILL AVE

ARTHUR AVE

FOOTBRIDGE

RETENTION BASIN

RUINS

LEGEND

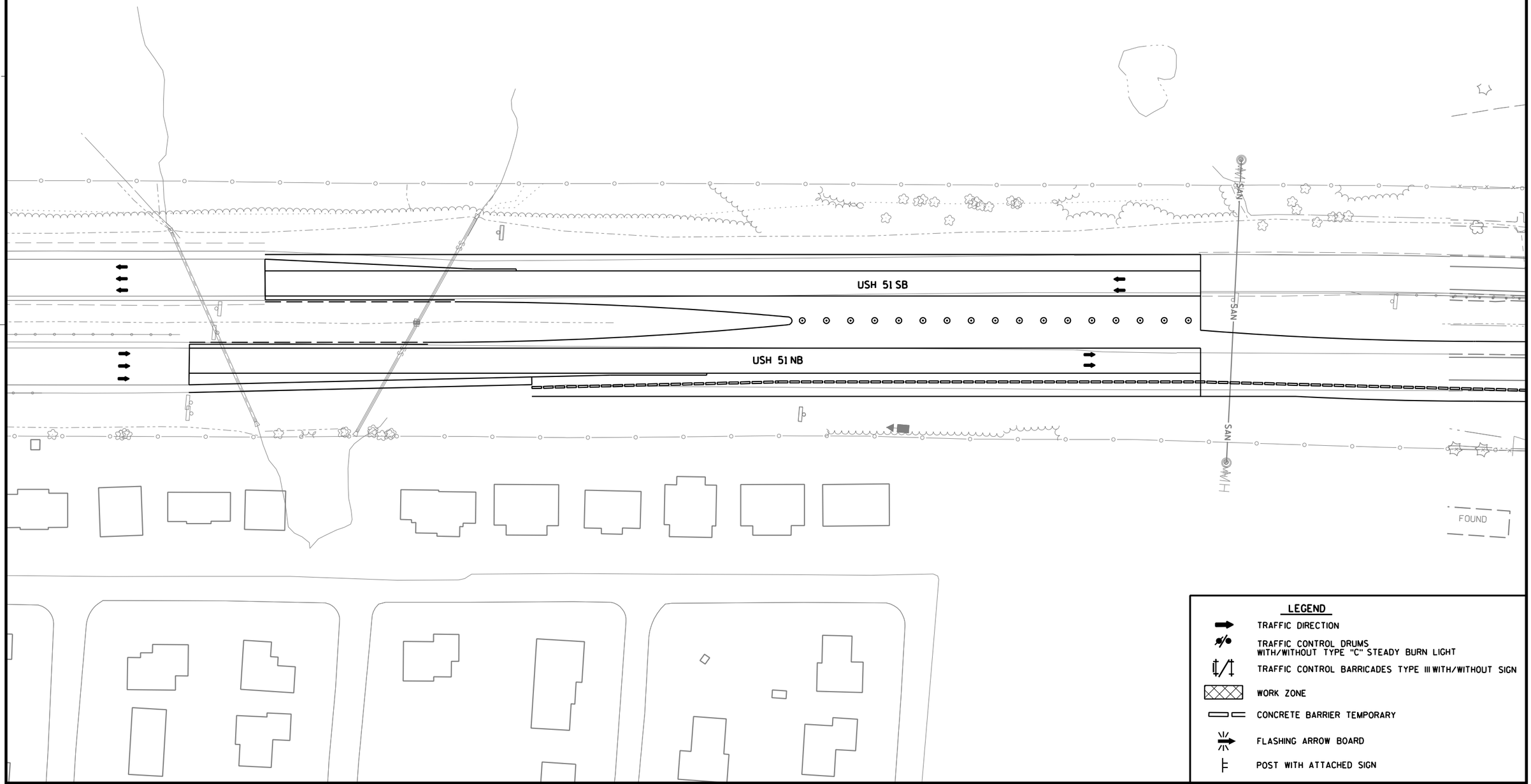
- TRAFFIC DIRECTION
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN
- WORK ZONE
- CONCRETE BARRIER TEMPORARY
- FLASHING ARROW BOARD
- POST WITH ATTACHED SIGN
- DELINEATORS TEMPORARY
- TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER POSTS AND BASES
- 16"x16" ORANGE FLAGS (INCIDENTAL)

PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 4, 5A, 5B, 6A, 6B, 6C	SHEET 421	E

SEE S.D.D. "TRAFFIC CONTROL, SINGLE LANE CROSSOVER" FOR ADDITIONAL DETAILS.

SEE S.D.D. "TRAFFIC CONTROL, EXIT RAMP CLOSURE" FOR ADDITIONAL DETAILS.

N



LEGEND

- TRAFFIC DIRECTION
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN
- WORK ZONE
- CONCRETE BARRIER TEMPORARY
- FLASHING ARROW BOARD
- POST WITH ATTACHED SIGN

PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 4	SHEET 422	E

2

N

2

MH

MH

SIGN

ROAD CLOSED
R11-2
48" X 30"

LANE CLOSED
R11-2(MOD)
48" X 30"

USH 51 SB

USH 51 NB

324NB

326NB

328NB

330NB

332NB

334NB

336NB

FOUND

SIGN

SIGN

W

W

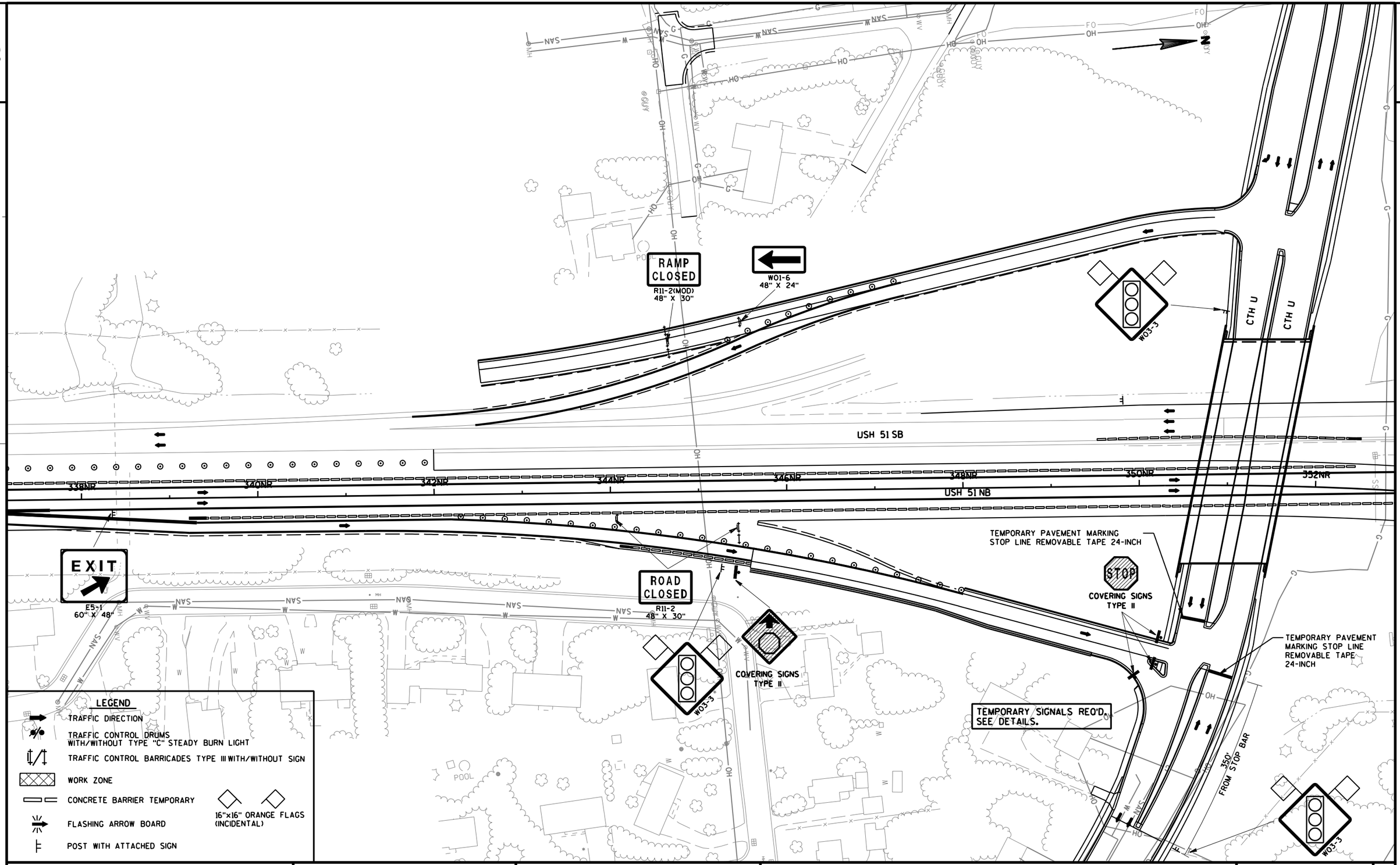
LEGEND

- TRAFFIC DIRECTION
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN
- WORK ZONE
- CONCRETE BARRIER TEMPORARY
- FLASHING ARROW BOARD
- POST WITH ATTACHED SIGN

PROJECT NO: 1170-01-70/73	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 4	SHEET 423	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\026412_s4.dgn PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42



PROJECT NO: 1170-01-70/73	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 4	SHEET E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\026413_s4.dgn PLOT DATE : 8/21/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:100
WISDOT/CADDS SHEET 42

2

2

N

USH 51 SB

USH 51 NB

354NR

356NR

358NR

360NR

362NR

364NR

366NR

368NR

CTH 'K'

CTH 'K'

50' TYP

RUINS

A/C

SIGN

SIGN

SIGN

SIGN

SIGN

OH

OH

OH

GUY

GUY

W

W

W

W

W

G

T

SS

LEGEND

TRAFFIC DIRECTION

TRAFFIC CONTROL DRUMS
WITH/WITHOUT TYPE "C" STEADY BURN LIGHT

TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN

WORK ZONE

CONCRETE BARRIER TEMPORARY

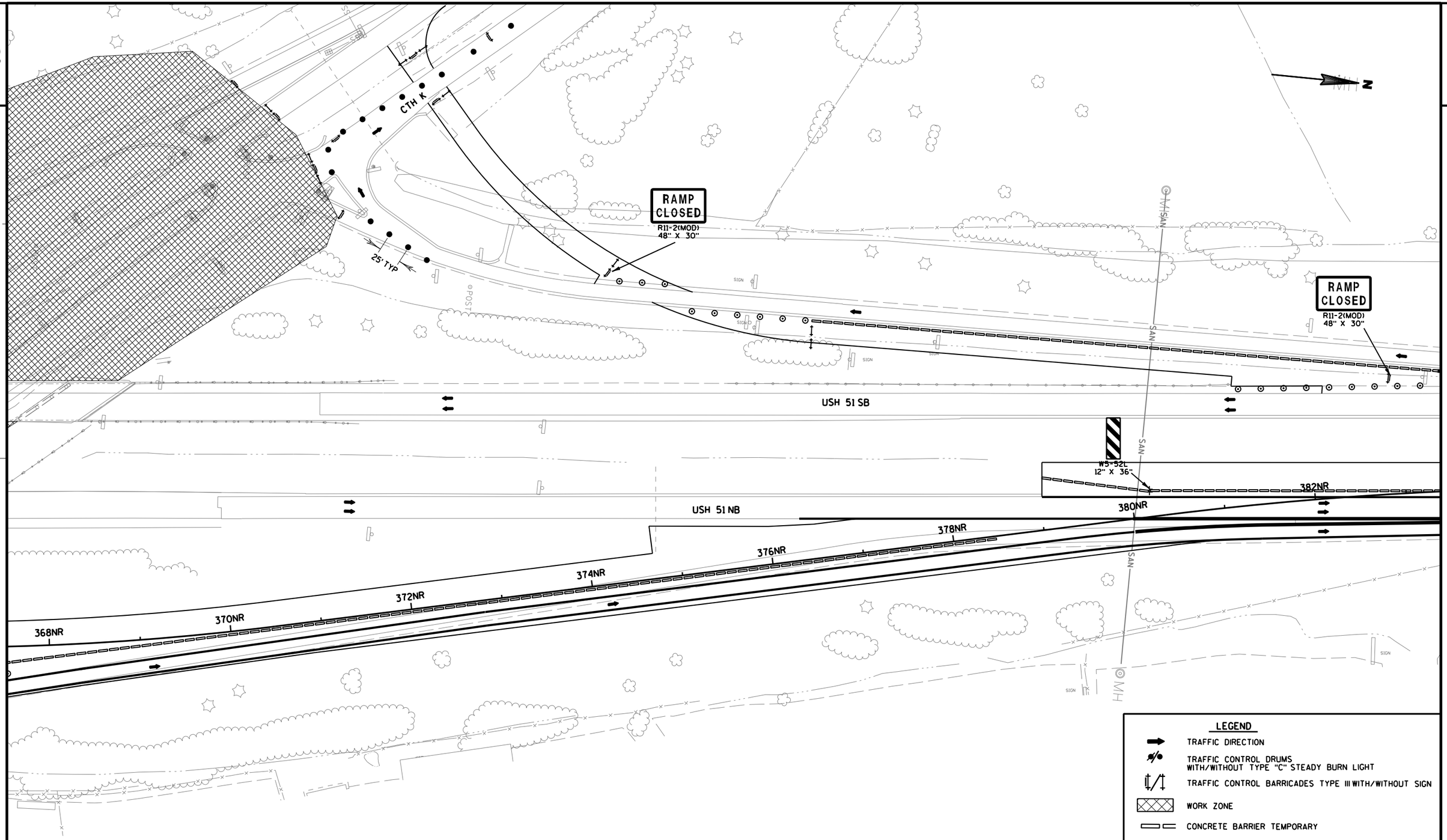
FLASHING ARROW BOARD

POST WITH ATTACHED SIGN

PROJECT NO: 1170-01-70/73	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 4	SHEET 425	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\026414_s4.dgn PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:100

2



PROJECT NO: 1170-01-70/73	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 4	SHEET	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\026415_s4.dgn PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:100

2

N

BERM

W

W

SIGN

RAMP CLOSED
R11-2(MOD)
48" X 30"

EXIT
E5-1
60" X 48"

ROAD CLOSED
R11-2
48" X 30"

USH 51 SB

384NR 386NR 388NR 390NR 392NR 394NR 396NR 398NR

USH 51 NB

SIGN

LEGEND

- TRAFFIC DIRECTION
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN
- WORK ZONE
- CONCRETE BARRIER TEMPORARY
- FLASHING ARROW BOARD
- POST WITH ATTACHED SIGN

PROJECT NO: 1170-01-70/73	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 4	SHEET 427	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\026416_s4.dgn PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:100

2

N

DECATOR DR

USH 51

USH 51 SB

USH 51

USH 51 NB

398NR

400NR

402NR

404NR

406NR

408NR

410NR

412NR

HO

HO

HO

TV

LEGEND

- TRAFFIC DIRECTION
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN
- WORK ZONE
- CONCRETE BARRIER TEMPORARY
- FLASHING ARROW BOARD
- POST WITH ATTACHED SIGN

PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 4	SHEET 428	E

2

N

OH

USH 51 SB

422NR

420NR

418NR

416NR

414NR

USH 51 NB

LEGEND

- TRAFFIC DIRECTION
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN
- WORK ZONE
- CONCRETE BARRIER TEMPORARY
- FLASHING ARROW BOARD
- POST WITH ATTACHED SIGN

PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 4	SHEET 429	E

TEMPORARY SIGNAL TIMINGS AT PERMANENT SIGNALS SEE DETAIL.

BUS 51 SB

BUS 51 NB

12K

14K

16K

18K

20K

22K

25' SPACING (TYP)

W04-2L

TEMPORARY PAVEMENT MARKING 4-INCH (YELLOW)

COLLEGE DR

U/C

LEGEND

- TRAFFIC DIRECTION
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN
- WORK ZONE
- CONCRETE BARRIER TEMPORARY
- FLASHING ARROW BOARD
- POST WITH ATTACHED SIGN

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 4	SHEET 430	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\026419_s4.dgn PLOT DATE : 8/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:100

2

ROAD CLOSED
R11-2
48" X 30"

BUS 51 SB

BUS 51 NB

25' SPACING (TYP)

24K

26K

28K

30KN

32KN

34KN

36KN

38KN

50' TYP

TEMPORARY PAVEMENT MARKING
4-INCH (YELLOW)

TEMPORARY PAVEMENT MARKING
4-INCH (WHITE)

TEMPORARY PAVEMENT MARKING
4-INCH (YELLOW)

ROAD CLOSED
R11-2
48" X 30"

CAMPUS DR

358NR

CANOPY

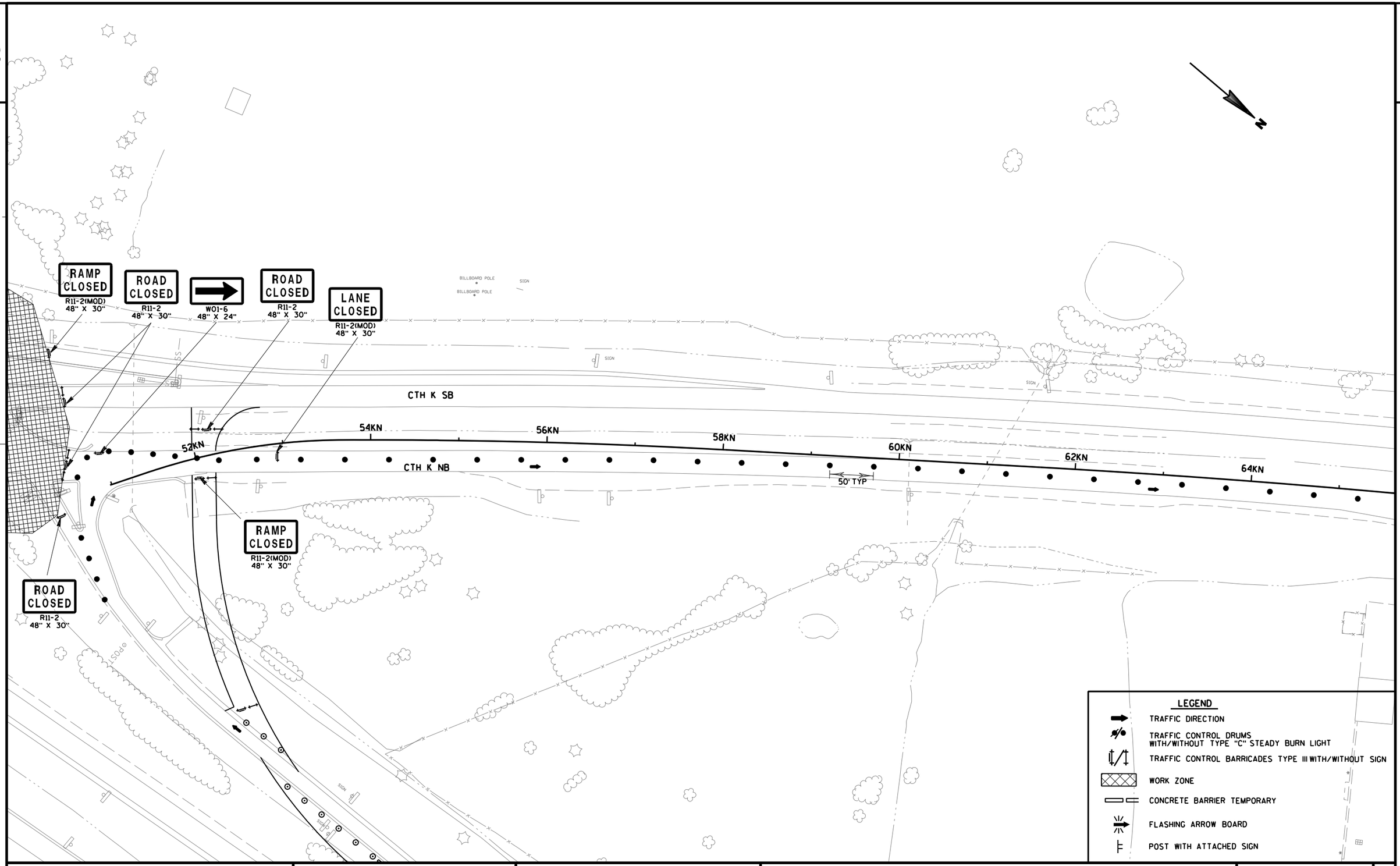
FILLER CAPS

LEGEND

- TRAFFIC DIRECTION
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN
- WORK ZONE
- CONCRETE BARRIER TEMPORARY
- FLASHING ARROW BOARD
- POST WITH ATTACHED SIGN

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 4	SHEET 431	E

2



PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 4	SHEET 432	E

2

OVERLOOK DR

CASSIDY DR

TEMPORARY PAVEMENT MARKING
4-INCH (DOUBLE YELLOW)

W03-3

ROAD CLOSED
R11-2
48" X 30"

TEMPORARY SIGNALS REQ'D.
SEE DETAIL.

TEMPORARY PAVEMENT MARKING
STOP LINE REMOVABLE TAPE 24-INCH

ONLY
R3-5OR
30" X 36"

R3-27
24" X 24"

W03-3

LANE CLOSED
R11-2(MOD)
48" X 30"

CTH K SB

25' TYP

50' TYP

66KN

68KN

70KN

72KN

74KN

50' TYP

50' TYP

76KN

78KN

80KN

CTH K NB

TEMPORARY PAVEMENT MARKING
STOP LINE REMOVABLE TAPE 24-INCH

W03-3

STOP
COVERING SIGNS
TYPE II

LEFT LANE MUST TURN LEFT
COVERING SIGNS
TYPE II

25' TYP

N 20TH AVE

LANE CLOSED
R11-2(MOD)
48" X 30"

ONLY
COVERING SIGNS
TYPE II

ONLY ONLY ONLY
COVERING SIGNS
TYPE II

W03-3

LEFT LANE ENDS
COVERING SIGNS
TYPE II

A/C

CANOPY

SAN

SIGN

W

OH

G

LEGEND

- TRAFFIC DIRECTION
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN
- WORK ZONE
- CONCRETE BARRIER TEMPORARY
- FLASHING ARROW BOARD
- POST WITH ATTACHED SIGN
- 16"x16" ORANGE FLAGS (INCIDENTAL)

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 4	SHEET 433	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\026422_s4.dgn PLOT DATE : 8/21/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2

2

N

50' TYP

80KN

82KN

84KN

86KN

88KN

90KN

92KN

94KN

CTH K

LEGEND

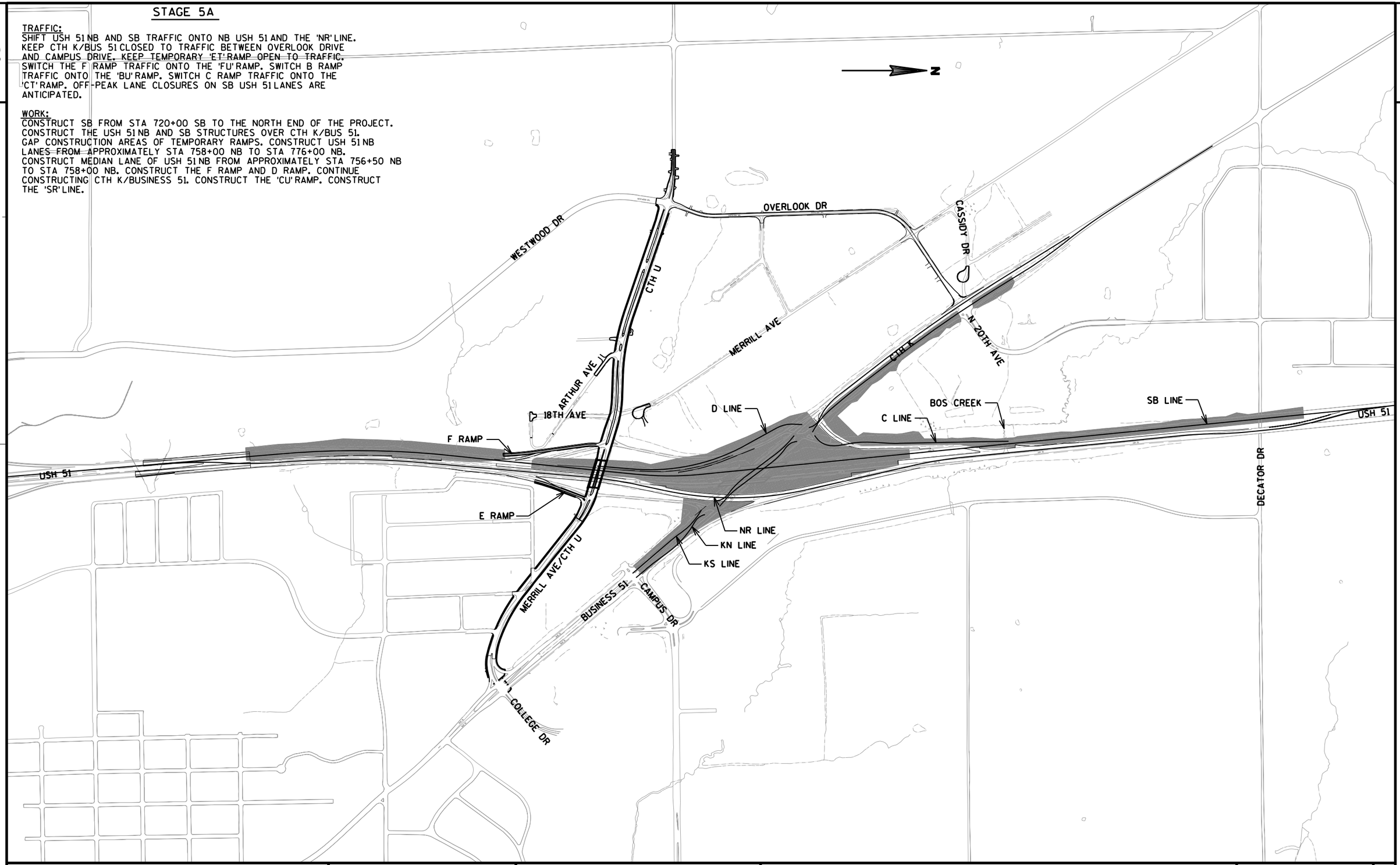
- TRAFFIC DIRECTION
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN
- WORK ZONE
- CONCRETE BARRIER TEMPORARY
- FLASHING ARROW BOARD
- POST WITH ATTACHED SIGN

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 4	SHEET 434	E

STAGE 5A

TRAFFIC:
SHIFT USH 51 NB AND SB TRAFFIC ONTO NB USH 51 AND THE 'NR' LINE. KEEP CTH K/BUS 51 CLOSED TO TRAFFIC BETWEEN OVERLOOK DRIVE AND CAMPUS DRIVE. KEEP TEMPORARY 'ET' RAMP OPEN TO TRAFFIC. SWITCH THE F RAMP TRAFFIC ONTO THE 'FU' RAMP. SWITCH B RAMP TRAFFIC ONTO THE 'BU' RAMP. SWITCH C RAMP TRAFFIC ONTO THE 'CT' RAMP. OFF-PEAK LANE CLOSURES ON SB USH 51 LANES ARE ANTICIPATED.

WORK:
CONSTRUCT SB FROM STA 720+00 SB TO THE NORTH END OF THE PROJECT. CONSTRUCT THE USH 51 NB AND SB STRUCTURES OVER CTH K/BUS 51. GAP CONSTRUCTION AREAS OF TEMPORARY RAMPS. CONSTRUCT USH 51 NB LANES FROM APPROXIMATELY STA 758+00 NB TO STA 776+00 NB. CONSTRUCT MEDIAN LANE OF USH 51 NB FROM APPROXIMATELY STA 756+50 NB TO STA 758+00 NB. CONSTRUCT THE F RAMP AND D RAMP. CONTINUE CONSTRUCTING CTH K/BUSINESS 51. CONSTRUCT THE 'CU' RAMP. CONSTRUCT THE 'SR' LINE.



PROJECT NO: 1170-01-70/71/73 & 6999-18-70	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL OVERVIEW - STAGE 5A	SHEET 435	E

SEE S.D.D. "TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 M.P.H." FOR ADDITIONAL DETAILS.

SEE S.D.D. "TRAFFIC CONTROL, TEMPORARY EXIT RAMP CROSSOVER" FOR ADDITIONAL DETAILS.

SEE S.D.D. "TRAFFIC CONTROL, TEMPORARY ENTRANCE RAMP CROSSOVER" FOR ADDITIONAL DETAILS.

SEE S.D.D. "TRAFFIC CONTROL, SINGLE LANE CROSSOVER" FOR ADDITIONAL DETAILS.

N

ROAD CLOSED
R11-2
48" X 30"

W01-4B

TEMPORARY PAVEMENT MARKING
4-INCH (WHITE SKIPS)

TEMPORARY PAVEMENT MARKING
4-INCH (WHITE)

TEMPORARY PAVEMENT MARKING
4-INCH (YELLOW)

708SB 710SB 712SB 312NR 714SB 314NR 716SB 316NR 718SB 318NR 720SB 320NR 722SB 322NR

50' TYP.

100' TYP.

USH 51 SB

USH 51 NB

HWY 51

TEMPORARY PAVEMENT MARKING
4-INCH (WHITE)

TEMPORARY PAVEMENT MARKING
4-INCH (YELLOW)

TEMPORARY PAVEMENT MARKING
4-INCH (WHITE SKIPS)

FOUND

LEGEND

- TRAFFIC DIRECTION
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN
- WORK ZONE
- CONCRETE BARRIER TEMPORARY
- FLASHING ARROW BOARD
- POST WITH ATTACHED SIGN

PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 5A	SHEET	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\026511_s5a.dgn PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:100
WISDOT/CADDS SHEET 42

2

N

2

TEMPORARY PAVEMENT MARKING
4-INCH (WHITE SKIPS)

TEMPORARY PAVEMENT MARKING
4-INCH (WHITE)

TEMPORARY PAVEMENT MARKING
4-INCH (YELLOW)

MH

MH

724SB

726SB

728SB

730SB

732SB

734SB

736SB

738SB

324NB

326NB

328NB

330NB

USH 51 SB

332NB

334NB

100' TYP.

336NR

USH 51 NB

TEMPORARY PAVEMENT MARKING
4-INCH (YELLOW)

TEMPORARY PAVEMENT MARKING
4-INCH (WHITE SKIPS)

TEMPORARY PAVEMENT MARKING
4-INCH (WHITE)

STA 725+50 NB
INSTALL INLET 100
AND 16' OF PIPE
TEMPORARY COVER
PLATES REQ'D.

FOUND

SIGN

W

W

SIGN

301

EXIT 194

BUSINESS
U 51 K
Wausau

MOVING SIGN
TYPE III

LEGEND

- TRAFFIC DIRECTION
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN
- WORK ZONE
- CONCRETE BARRIER TEMPORARY
- FLASHING ARROW BOARD
- POST WITH ATTACHED SIGN

PROJECT NO: 1170-01-70/73	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 5A	SHEET 437	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\026512_s5a.dgn PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2

TEMPORARY PAVEMENT MARKING
8-INCH (WHITE)

TEMPORARY PAVEMENT MARKING
4-INCH (WHITE)

TEMPORARY PAVEMENT MARKING
4-INCH (YELLOW)

R1-2
48" X 42"

ROAD CLOSED
R11-2
48" X 30"

W01-6
48" X 24"

W03-2

RAMP CLOSED
R11-2(MOD)
48" X 30"

W01-6
48" X 24"

W01-4L

ROAD WORK AHEAD
W20-1

ROAD CLOSED
R11-2
48" X 30"

MOVING SIGN
TYPE II

W03-3

CTH U

CTH U

360FU

25' TYP

358FU

50' TYP

100' TYP

354FU

356FU

738SB

740SB

742SB

744SB

746SB

748SB

750SB

752SB

338NR

340NR

342NR

344NR

346NR

348NR

350NR

352NR

USH 51 SB

USH 51 NB

338ET

340ET

342ET

344ET

346ET

25' TYP

100' TYP

RAMP CLOSED
R11-2(MOD)
48" X 30"

TEMPORARY PAVEMENT MARKING
4-INCH (WHITE)

TEMPORARY PAVEMENT MARKING
4-INCH (YELLOW)

TEMPORARY PAVEMENT MARKING
4-INCH (WHITE SKIPS)

TEMPORARY PAVEMENT MARKING
4-INCH (WHITE)

NORTH 51 MILE 194 .2

MOVING SIGN
TYPE II

EXIT

E5-1
60" X 48"

TEMPORARY PAVEMENT MARKING
8-INCH (WHITE)

STOP

NORTH 51 MILE 194 .4

MOVING SIGN
TYPE II

TEMPORARY SIGNALS REQ'D.
SEE DETAILS.

350' FROM STOP BAR

W03-3

W03-3

POOL

LEGEND

- TRAFFIC DIRECTION
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN
- WORK ZONE
- CONCRETE BARRIER TEMPORARY
- FLASHING ARROW BOARD
- 16"x16" ORANGE FLAGS (INCIDENTAL)
- POST WITH ATTACHED SIGN

PROJECT NO: 1170-01-70/73	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 5A	SHEET 438	E

2

2

N

RUINS

SOUTH 51 MILE 194 .6

MOVING SIGN TYPE II

754SB 756SB 758SB 760SB 762SB 764SB 766SB 768SB

754NB 756NB 758NB 760NB 762NB 764NB 766NB 768NB

354NR 356NR 358NR 360NR 362NR 364NR 366NR 368NR

100' TYP

100' TYP

USH 51 SB

USH 51 NB

C1H+

C1H-

TEMPORARY PAVEMENT MARKING
4-INCH (WHITE)

TEMPORARY PAVEMENT MARKING
4-INCH (YELLOW)

TEMPORARY PAVEMENT MARKING
4-INCH (WHITE SKIPS)

NORTH 51 MILE 194 .6

MOVING SIGN TYPE II

50' TYP

W1-6
48" X 24"

W03-2

MOVING SIGN TYPE II

TEMPORARY PAVEMENT MARKING
4-INCH (YELLOW)

TEMPORARY PAVEMENT MARKING
4-INCH (WHITE)

TEMPORARY PAVEMENT MARKING
8-INCH (WHITE)

LEGEND

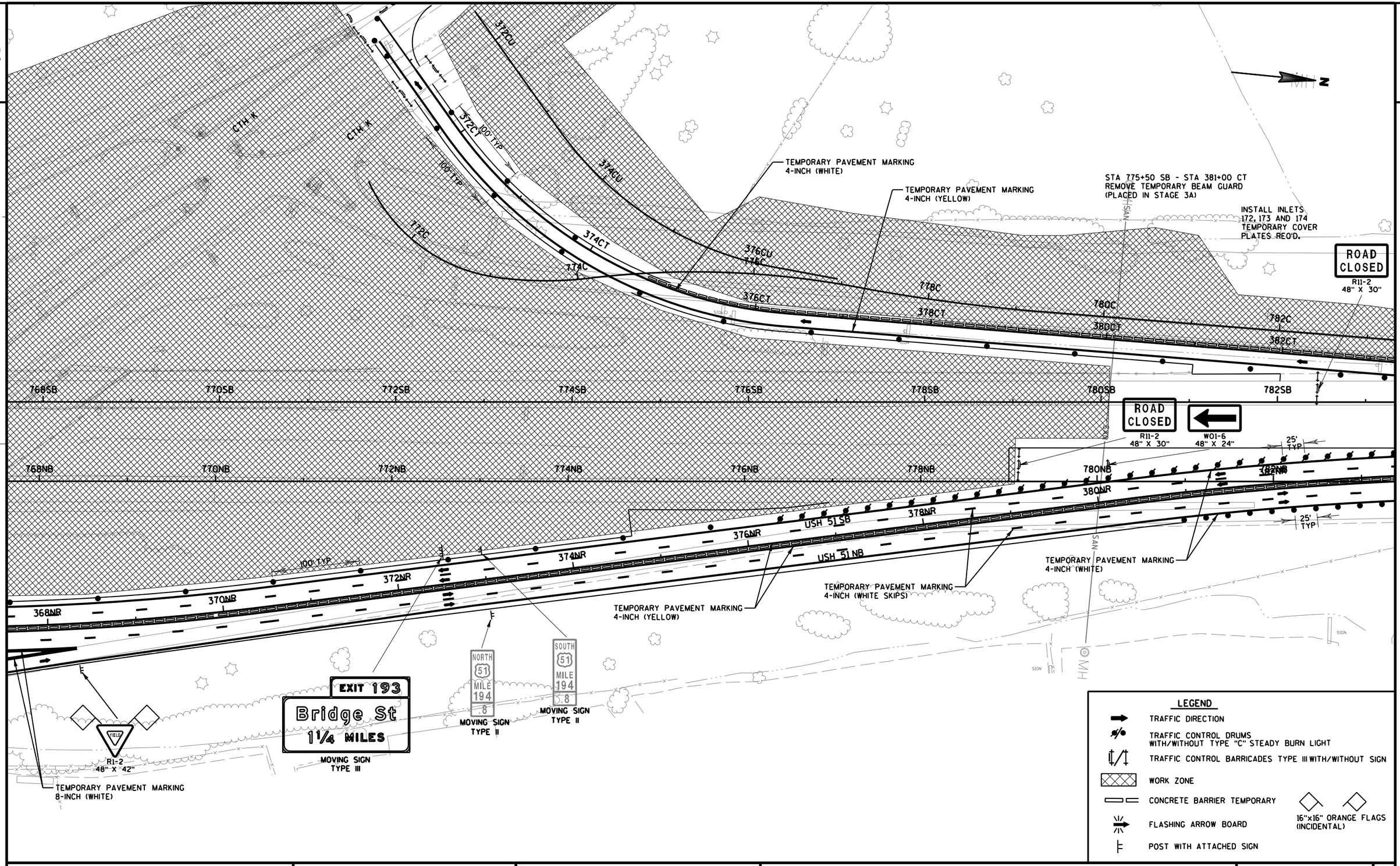
- TRAFFIC DIRECTION
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN
- WORK ZONE
- CONCRETE BARRIER TEMPORARY
- FLASHING ARROW BOARD
- POST WITH ATTACHED SIGN
- 16"x16" ORANGE FLAGS (INCIDENTAL)

PROJECT NO: 1170-01-70/73	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 5A	SHEET 439	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\026514_s5a.dgn PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2



PROJECT NO: 1170-01-70/73	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 5A	SHEET 440	E

2

N

BERM

SIGN

SOUTH 51 MILE 195 0

MOVING SIGNS TYPE II

TEMPORARY PAVEMENT MARKING 4-INCH (WHITE)

TEMPORARY PAVEMENT MARKING 4-INCH (YELLOW)

W01-6 48" X 24"

EXIT

E5-1 60" X 48"

EXIT 194 BUSINESS U 51 K Wausau

SIGN TYPE III

302

CRASH CUSHION TEMPORARY REQ'D.

TEMPORARY DELINEATORS @ 50' SPACING

784C 384CT 786C 386CT 788C 388CT

784SB 786SB 788SB 790SB 792SB 794SB 796SB 798SB

50' TYP

100' TYP

25' TYP

384NR 386NR 388NR 390NR 392NR 394NR 396NR 398NR

USH 51 SB

USH 51 NB

25' TYP

TEMPORARY PAVEMENT MARKING 8-INCH (WHITE)

TEMPORARY PAVEMENT MARKING 4-INCH (YELLOW)

TEMPORARY PAVEMENT MARKING 4-INCH (WHITE SKIPS)

TEMPORARY PAVEMENT MARKING 4-INCH (WHITE)

SPEED LIMIT 55

R2-1 48" X 60"

SIGN

LEGEND

- TRAFFIC DIRECTION
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN
- WORK ZONE
- CONCRETE BARRIER TEMPORARY
- FLASHING ARROW BOARD
- POST WITH ATTACHED SIGN

PROJECT NO: 1170-01-70/73	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 5A	SHEET 441	E

2

2

N

DECATOR DR

798SB 800SB 802SB 804SB 806SB 808SB 810SB 812SB

398NB 400NB 402NB 404NB USH 51 SB 406NB 408NB 410NB 412NB

USH 51

USH 51 NB

TEMPORARY PAVEMENT MARKING
4-INCH (YELLOW)

TEMPORARY PAVEMENT MARKING
4-INCH (WHITE)

TEMPORARY PAVEMENT MARKING
4-INCH (WHITE SKIPS)

W01-4B

LEGEND

- TRAFFIC DIRECTION
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN
- WORK ZONE
- CONCRETE BARRIER TEMPORARY
- FLASHING ARROW BOARD
- POST WITH ATTACHED SIGN

PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 5A	SHEET 442	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\026517_s5a.dgn PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:100

2

2

N

ROAD CLOSED
R11-2
48" X 30"

W01-6
48" X 24"

W01-4B

25' TYP

50' TYP

814SB
816SB
818SB
820SB
822SB
824SB
826SB
828SB
USH 51 SB
USH 51 NB

420NR
422NR
418NR
416NR
414NR

CRASH CUSHION
TEMPORARY REQ'D.

TEMPORARY PAVEMENT MARKING
4-INCH (WHITE SKIPS)

TEMPORARY PAVEMENT MARKING
4-INCH (WHITE)

TEMPORARY PAVEMENT MARKING
4-INCH (YELLOW)

LEGEND

- TRAFFIC DIRECTION
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN
- WORK ZONE
- CONCRETE BARRIER TEMPORARY
- FLASHING ARROW BOARD
- POST WITH ATTACHED SIGN

PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 5A	SHEET	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\026518_s5a.dgn PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2

RAMP CLOSED
R11-2(MOD)
48" X 30"

ROAD CLOSED
R11-2
48" X 30"

W01-6
48" X 24"

LANE CLOSED
R11-2(MOD)
48" X 30"

25' SPACING

50' TYP

CTH K

372CT

100' TYP

180' TYP

ROAD CLOSED
R11-2
48" X 30"

TEMPORARY PAVEMENT MARKING
4-INCH (WHITE)

TEMPORARY PAVEMENT MARKING
4-INCH (YELLOW)

374CT

316CT

BILLBOARD POLE

BILLBOARD POLE

SIGN

SIGN

SIGN

N

LEGEND

- TRAFFIC DIRECTION
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN
- WORK ZONE
- CONCRETE BARRIER TEMPORARY
- FLASHING ARROW BOARD
- POST WITH ATTACHED SIGN

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 5A	SHEET 444	E

2

OVERLOOK DR

CASSIDY DR

W03-3

WRONG WAY
R5-1A
42" X 30"

W06-3

DO NOT ENTER
R5-1
36" X 36"

ROAD CLOSED
R11-2
48" X 30"

50' TYP

R3-27
36" X 36"

W03-3

TEMPORARY PAVEMENT MARKING
4-INCH (DOUBLE YELLOW)

W06-3

CTH K

25' TYP

66KN

68KN

70KN

72KN

74KN

76KN

78KN

80KN

TEMPORARY PAVEMENT MARKING
STOP LINE REMOVABLE TAPE 24-INCH

ROAD CLOSED
R11-2
48" X 30"

TEMPORARY SIGNALS REQ'D.
SEE DETAIL.

25' TYP

N 20TH AVE

STOP

PHASED TRAFFIC CONTROL TO CONSTRUCT INTERSECTION SEE TRAFFIC CONTROL STAGE 5A (PHASE 1 & 2) FOR ADDITIONAL INFORMATION

LEFT LANE MUST TURN LEFT

LANE CLOSED
R11-2(MOD)
48" X 30"

ONLY

ONLY ONLY ONLY

W03-3

CANOPY

SAN

SIGN

2

N

LEGEND

- TRAFFIC DIRECTION
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN
- WORK ZONE
- CONCRETE BARRIER TEMPORARY
- FLASHING ARROW BOARD
- POST WITH ATTACHED SIGN
- 16"x16" ORANGE FLAGS (INCIDENTAL)

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 5A	SHEET 445	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\026522_s5a.dgn PLOT DATE : 8/21/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2

2

N

80KN

82KN

84KN

86KN

88KN

90KN

92KN

94KN

CTH K

TEMPORARY PAVEMENT MARKING
4-INCH (DOUBLE YELLOW)

TEMPORARY PAVEMENT MARKING
4-INCH (WHITE)

LEGEND

- TRAFFIC DIRECTION
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN
- WORK ZONE
- CONCRETE BARRIER TEMPORARY
- FLASHING ARROW BOARD
- POST WITH ATTACHED SIGN

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 5A	SHEET 446	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\026523_s5a.dgn PLOT DATE : 8/21/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2

OVERLOOK DR

CASSIDY DR

N 20TH AVE

CTH K

ROAD CLOSED
R11-2
48" X 30"

50' TYP

25' TYP

TEMPORARY PAVEMENT MARKING
4-INCH (DOUBLE YELLOW)

62KN
64KN
66KN
68KN
70KN
72KN
74KN
76KN

REMOVING PAVEMENT MARKINGS ARROWS

REMOVING PAVEMENT MARKINGS WORDS

REMOVING PAVEMENT MARKINGS ARROWS

REMOVING PAVEMENT MARKINGS WORDS

LANE CLOSED
R11-2(MOD)
48" X 30"

NOTE: ADJUST TEMPORARY SIGNAL HEAD LOCATIONS FOR TRAFFIC LAYOUT.

A/C

CANOPY

SIGN

LEGEND

- TRAFFIC DIRECTION
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN
- WORK ZONE
- CONCRETE BARRIER TEMPORARY
- FLASHING ARROW BOARD
- POST WITH ATTACHED SIGN

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 5A (PHASE 1)	SHEET 447	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\026524_s5a.dgn PLOT DATE : 8/21/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2

OVERLOOK DR

CASSIDY DR

N 20TH AVE

CTH K

ROAD CLOSED
R11-2
48" X 30"

TEMPORARY PAVEMENT MARKING
REMOVEABLE TAPE 4-INCH
(DOUBLE YELLOW)

TEMPORARY PAVEMENT MARKING
4-INCH (DOUBLE YELLOW)

50' TYP

25' TYP

62KN 64KN 66KN 68KN 70KN 72KN 74KN 76KN

ROAD CLOSED
R11-2
48" X 30"

ROAD CLOSED
R11-2
48" X 30"

LANE CLOSED
R11-2(MOD)
48" X 30"

ROAD CLOSED
R11-2
48" X 30"

W06-3

TEMPORARY PAVEMENT MARKING
REMOVEABLE TAPE 4-INCH
(DOUBLE YELLOW)

NOTE: ADJUST TEMPORARY SIGNAL
HEAD LOCATIONS FOR TRAFFIC LAYOUT.

A/C

CANOPY

SIGN

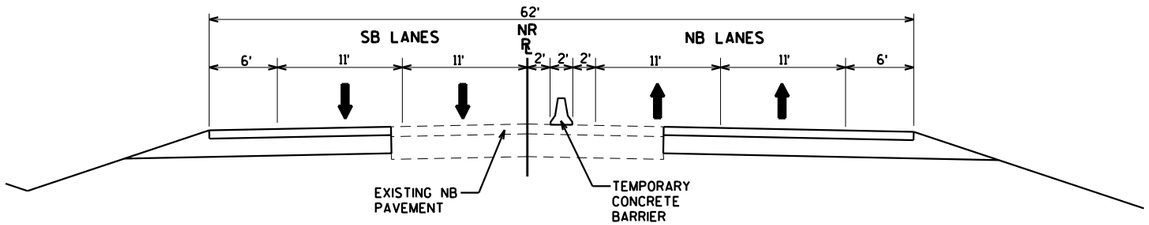
LEGEND

- TRAFFIC DIRECTION
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN
- WORK ZONE
- CONCRETE BARRIER TEMPORARY
- FLASHING ARROW BOARD
- POST WITH ATTACHED SIGN

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 5A (PHASE 2)	SHEET 448	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\026525_s5a.dgn PLOT DATE : 8/21/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:100

2



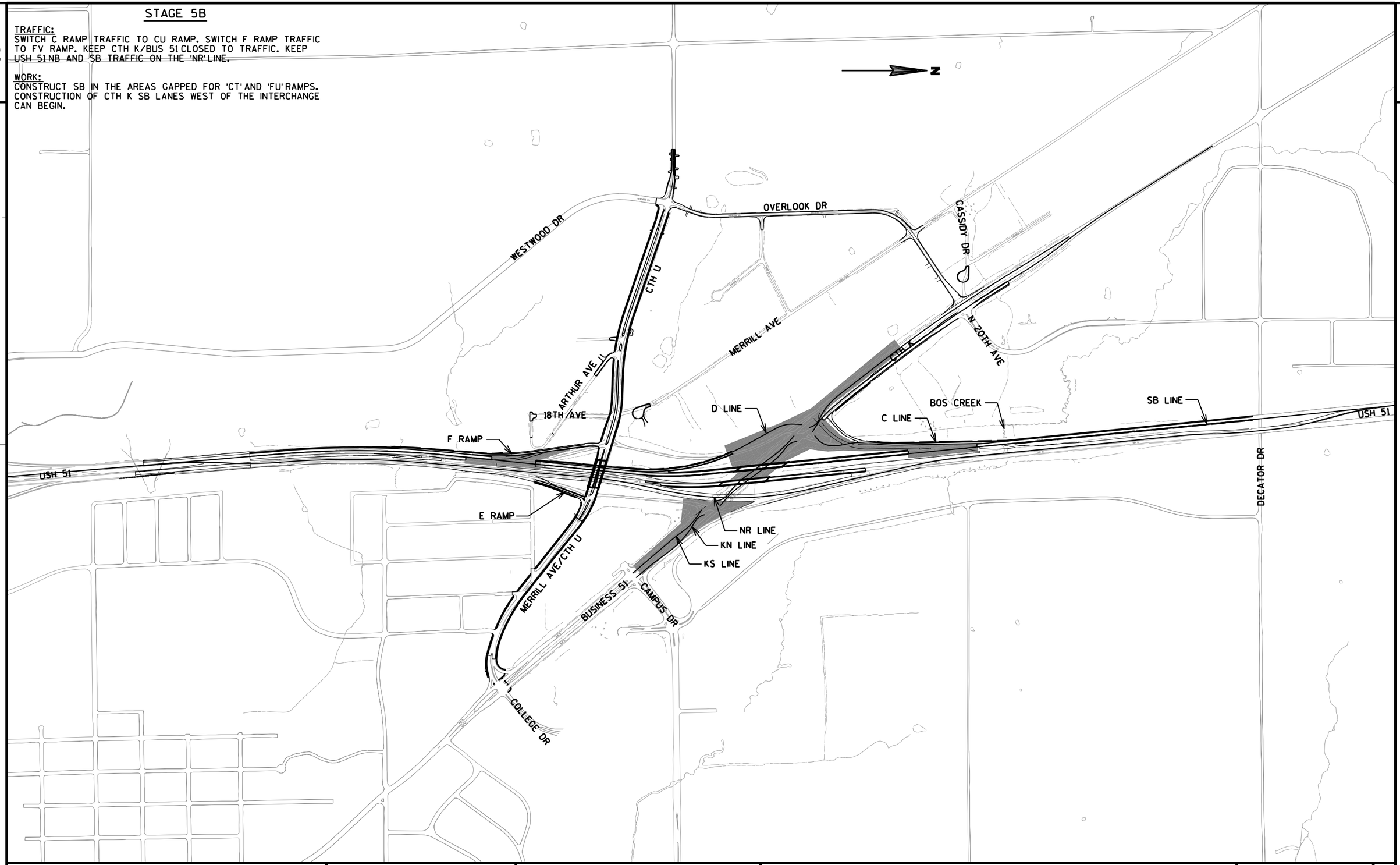
TRAFFIC LAYOUT - STAGE 5A

PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL TYPICAL TRAFFIC LAYOUT - STAGE 5A	SHEET 449	E

STAGE 5B

TRAFFIC:
SWITCH C RAMP TRAFFIC TO CU RAMP. SWITCH F RAMP TRAFFIC TO FV RAMP. KEEP CTH K/BUS 51 CLOSED TO TRAFFIC. KEEP USH 51 NB AND SB TRAFFIC ON THE 'NR' LINE.

WORK:
CONSTRUCT SB IN THE AREAS GAPPED FOR 'CT' AND 'FU' RAMPS. CONSTRUCTION OF CTH K SB LANES WEST OF THE INTERCHANGE CAN BEGIN.



PROJECT NO: 1170-01-70/71/73 & 6999-18-70	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL OVERVIEW - STAGE 5B	SHEET 450	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\026530_s5b.dgn PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:800

WISDOT/CADDS SHEET 42

SEE S.D.D. "TRAFFIC CONTROL, TEMPORARY ENTRANCE RAMP CROSSOVER" FOR ADDITIONAL DETAILS.

SEE S.D.D. "TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 M.P.H." FOR ADDITIONAL DETAILS.

SEE S.D.D. "TRAFFIC CONTROL, TEMPORARY EXIT RAMP CROSSOVER" FOR ADDITIONAL DETAILS.

N

MH
MH
TEMPORARY DELINEATORS @ 50' SPACING
R1-2 48" X 42"
R11-2 48" X 30" ROAD CLOSED
TEMPORARY PAVEMENT MARKING 4-INCH (WHITE)
TEMPORARY PAVEMENT MARKING 4-INCH (YELLOW)
W01-6 48" X 24"
W03-2
724SB
726SB
728SB
730SB
732SB
734SB
736SB
738SB
324FV
326FV
328FV
330FV
332FV
334FV
336FV
324NB
326NB
328NB
330NB
332NB
334NB
336NR
USH 51 SB
USH 51 NB
25' TYP
50' TYP
100' TYP
TEMPORARY PAVEMENT MARKING 8-INCH (WHITE)
TEMPORARY PAVEMENT MARKING 4-INCH (WHITE)
FOUND
SIGN

LEGEND

- TRAFFIC DIRECTION
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN
- WORK ZONE
- CONCRETE BARRIER TEMPORARY
- FLASHING ARROW BOARD
- 16"x16" ORANGE FLAGS (INCIDENTAL)
- POST WITH ATTACHED SIGN

PROJECT NO: 1170-01-70/73	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 5B	SHEET 451	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\026532_s5b.dgn PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:100

2

ROAD CLOSED
R11-2
48" X 30"

LANE CLOSED
R11-2(MOD)
48" X 30"

TEMPORARY PAVEMENT MARKING
4-INCH (YELLOW)

TEMPORARY PAVEMENT MARKING
4-INCH (WHITE)

RAMP CLOSED
R11-2(MOD)
48" X 30"

25' TYP

50' TYP

100' TYP

W03-3

CTH U

CTH U

EXIT
E5-1
60" X 48"

ROAD CLOSED
R11-2
48" X 30"

STOP

338FV

738SB 740SB 742SB 744SB 746SB 748SB 750SB 752SB

338NR 340NR 342NR 344NR 346NR 348NR 350NR 352NR

338ET 340ET 342ET 344ET 346ET

USH 51 SB

USH 51 NB

POOL

N

LEGEND

- TRAFFIC DIRECTION
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN
- WORK ZONE
- CONCRETE BARRIER TEMPORARY
- FLASHING ARROW BOARD
- POST WITH ATTACHED SIGN
- 16"x16" ORANGE FLAGS (INCIDENTAL)

PROJECT NO: 1170-01-70/73	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 5B	SHEET 452	E

2

2

ROAD CLOSED
R11-2
48" X 30"

754SB 756SB 758SB 760SB 762SB 764SB 766SB 768SB

754NB 756NB 758NB 760NB 762NB 764NB 766NB 768NB

354NR 356NR 358NR 360NR 362NR 364NR 366NR 368NR

USH 51 SB
USH 51 NB

CTH K
CTH K

100' TYP

50' TYP

W1-6
48" X 24"

W03-2

RUINS

A/C

GUY

SIGN

LEGEND

- TRAFFIC DIRECTION
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN
- WORK ZONE
- CONCRETE BARRIER TEMPORARY
- FLASHING ARROW BOARD
- POST WITH ATTACHED SIGN
- 16"x16" ORANGE FLAGS (INCIDENTAL)

PROJECT NO: 1170-01-70/73	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 5B	SHEET 453	E

2

2

CTH K

CTH K

372CU

374CU

376CU

772C

774C

778C

780C

782C

25' TYP

100' TYP

768SB 770SB 772SB 774SB 776SB 778SB 780SB 782SB

768NB 770NB 772NB 774NB 776NB 778NB 780NB 782NB

368NR 370NR 372NR 374NR 376NR 378NR 380NR 382NR

USH 51 SB

USH 51 NB

ROAD CLOSED
R11-2
48" X 30"

WO1-6
48" X 24"

LANE CLOSED
R11-2(MOD)
48" X 30"

SIGN

SIGN

YIELD
R1-2
36" X 31"

N

MH

SAN

LEGEND

- TRAFFIC DIRECTION
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN
- WORK ZONE
- CONCRETE BARRIER TEMPORARY
- FLASHING ARROW BOARD
- POST WITH ATTACHED SIGN
- 16"x16" ORANGE FLAGS (INCIDENTAL)

PROJECT NO: 1170-01-70/73	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 5B	SHEET 454	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\026535_s5b.dgn PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2

2

N

BERM

W

W

SIGN

TEMPORARY PAVEMENT MARKING
4-INCH (WHITE)

TEMPORARY PAVEMENT MARKING
4-INCH (YELLOW)

LANE CLOSED
R11-2(MOD)
48" X 30"

ROAD CLOSED
R11-2
48" X 30"

EXIT
E5-1
60" X 48"

TEMPORARY PAVEMENT MARKING
8-INCH (WHITE)

784C

786C

788C

50' TYP

784SB

786SB

788SB

790SB

792SB

794SB

796SB

798SB

100' TYP

25'
TYP

50' TYP

TEMPORARY DELINEATOR

384NR

386NR

388NR

390NR

392NR

394NR

396NR

398NR

USH 51 SB

USH 51 NB

25'
TYP

CRASH CUSHION
TEMPORARY REQ'D.

ROAD CLOSED
R11-2
48" X 30"

SIGN

SPEED LIMIT
55
R2-1
48" X 60"

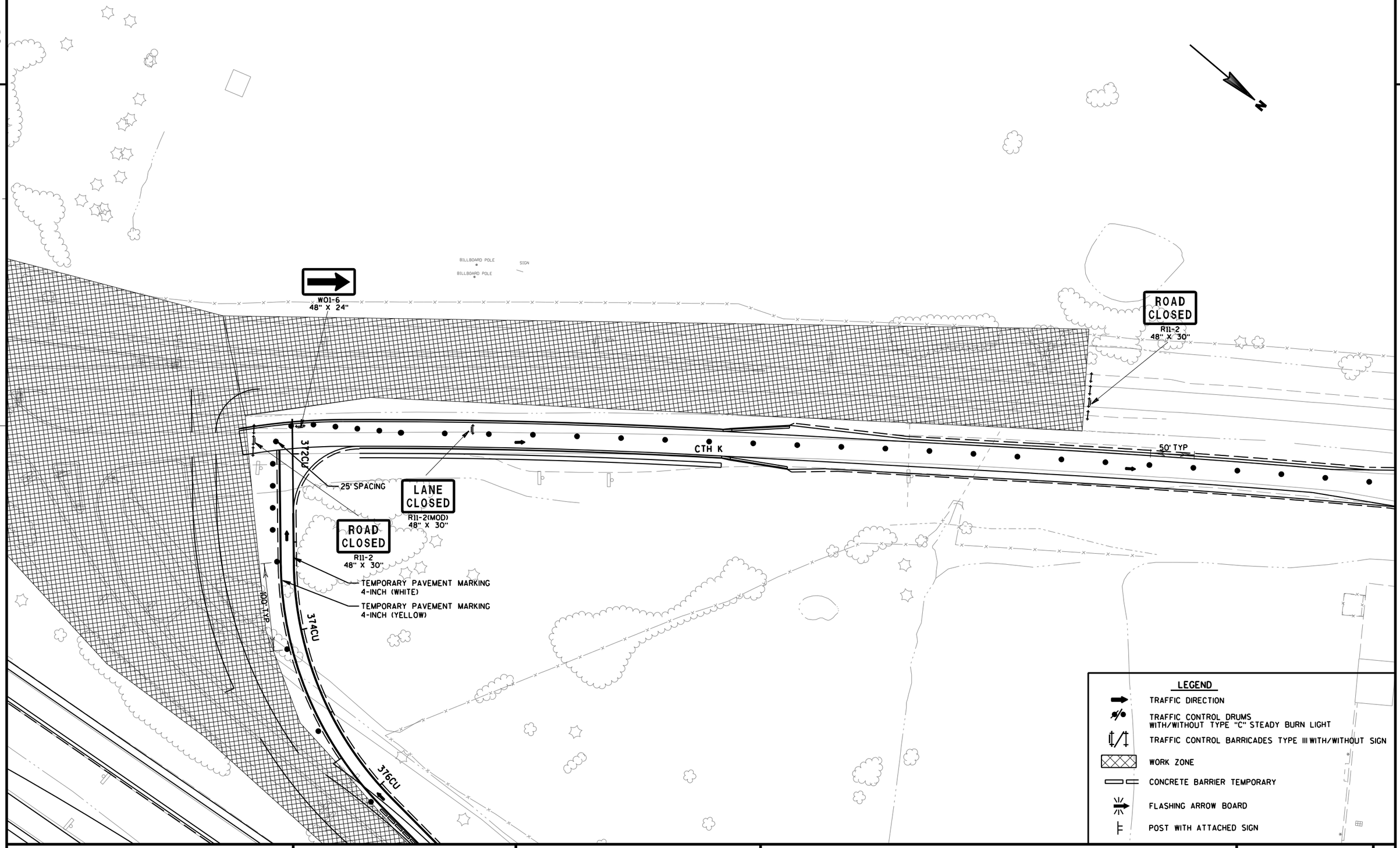
LEGEND

- TRAFFIC DIRECTION
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN
- WORK ZONE
- CONCRETE BARRIER TEMPORARY
- FLASHING ARROW BOARD
- POST WITH ATTACHED SIGN

PROJECT NO: 1170-01-70/73	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 5B	SHEET 455	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\026536_s5b.dgn PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:100

2



PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 5B	SHEET 456	E

2

2

OVERLOOK DR

CASSIDY DR

W03-3

W06-3

ROAD CLOSED
R11-2
48" X 30"

TEMPORARY PAVEMENT MARKING
STOP LINE REMOVABLE TAPE 24-INCH

TEMPORARY PAVEMENT MARKING
STOP LINE REMOVABLE TAPE 24-INCH

50' TYP

66KN

68KN

70KN

72KN

74KN

76KN

78KN

80KN

CTH K

R3-27
36" X 36"

TEMPORARY PAVEMENT MARKING
4-INCH (DOUBLE YELLOW)

ROAD CLOSED
R11-2
48" X 30"

STOP

LEFT LANE MUST TURN LEFT

25' TYP

N 20TH AVE

PHASED TRAFFIC CONTROL TO CONSTRUCT INTERSECTION SEE TRAFFIC CONTROL STAGE 5B (PHASE 1 & 2) FOR ADDITIONAL INFORMATION

TEMPORARY SIGNALS REQ'D.
SEE DETAIL.

LANE CLOSED
R11-2(MOD)
48" X 30"

ONLY

ONLY ONLY ONLY

W03-3

A/C

CANOPY

SIGN

LEGEND

- TRAFFIC DIRECTION
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN
- WORK ZONE
- CONCRETE BARRIER TEMPORARY
- FLASHING ARROW BOARD
- POST WITH ATTACHED SIGN
- 16"x16" ORANGE FLAGS (INCIDENTAL)

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 5B	SHEET 457	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\026542_s5b.dgn PLOT DATE : 8/21/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2

N

80KN 82KN 84KN 86KN 88KN 90KN 92KN 94KN

CTH K

TEMPORARY PAVEMENT MARKING
4-INCH (WHITE)

TEMPORARY PAVEMENT MARKING
4-INCH (DOUBLE YELLOW)

LEGEND

- TRAFFIC DIRECTION
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN
- WORK ZONE
- CONCRETE BARRIER TEMPORARY
- FLASHING ARROW BOARD
- POST WITH ATTACHED SIGN

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 5B	SHEET 458	E

2

OVERLOOK DR

CASSIDY DR

TEMPORARY PAVEMENT MARKING
REMOVEABLE TAPE 4-INCH
(DOUBLE YELLOW)

ROAD CLOSED
R11-2
48" X 30"

ROAD CLOSED
R11-2
48" X 30"

25' TYP

50' TYP

62KN

64KN

66KN

68KN

70KN

72KN

74KN

76KN

CTH K

TEMPORARY PAVEMENT MARKING
REMOVEABLE TAPE 4-INCH
(DOUBLE YELLOW)

ROAD CLOSED
R11-2
48" X 30"

N 20TH AVE

LANE CLOSED
R11-2(MOD)
48" X 30"

TEMPORARY PAVEMENT MARKING
REMOVEABLE TAPE 4-INCH
(DOUBLE YELLOW)

25' TYP

W06-3

ROAD CLOSED
R11-2
48" X 30"

A/C

CANOPY

NOTE: ADJUST TEMPORARY SIGNAL
HEAD LOCATIONS FOR TRAFFIC LAYOUT.

LEGEND

- TRAFFIC DIRECTION
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN
- WORK ZONE
- CONCRETE BARRIER TEMPORARY
- FLASHING ARROW BOARD
- POST WITH ATTACHED SIGN

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 5B (PHASE 1)	SHEET 459	E

2

2

OVERLOOK DR

CASSIDY DR

TEMPORARY PAVEMENT MARKING
REMOVEABLE TAPE 4-INCH
(DOUBLE YELLOW)

ROAD CLOSED
R11-2
48" X 30"

ROAD CLOSED
R11-2
48" X 30"

62KN

64KN

50' TYP

66KN

68KN

70KN

72KN

74KN

76KN

CTH K

ROAD CLOSED
R11-2
48" X 30"

TEMPORARY PAVEMENT MARKING
STOP LINE REMOVABLE TAPE 24-INCH

25' TYP

TEMPORARY PAVEMENT MARKING
REMOVEABLE TAPE 4-INCH
(DOUBLE YELLOW)

N 20TH AVE

A/C

CANOPY

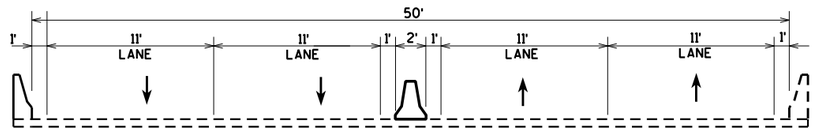
LANE CLOSED
R11-2(MOD)
48" X 30"

NOTE: ADJUST TEMPORARY SIGNAL HEAD LOCATIONS FOR TRAFFIC LAYOUT.

LEGEND

- TRAFFIC DIRECTION
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN
- WORK ZONE
- CONCRETE BARRIER TEMPORARY
- FLASHING ARROW BOARD
- POST WITH ATTACHED SIGN

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 5B (PHASE 2)	SHEET 460	E



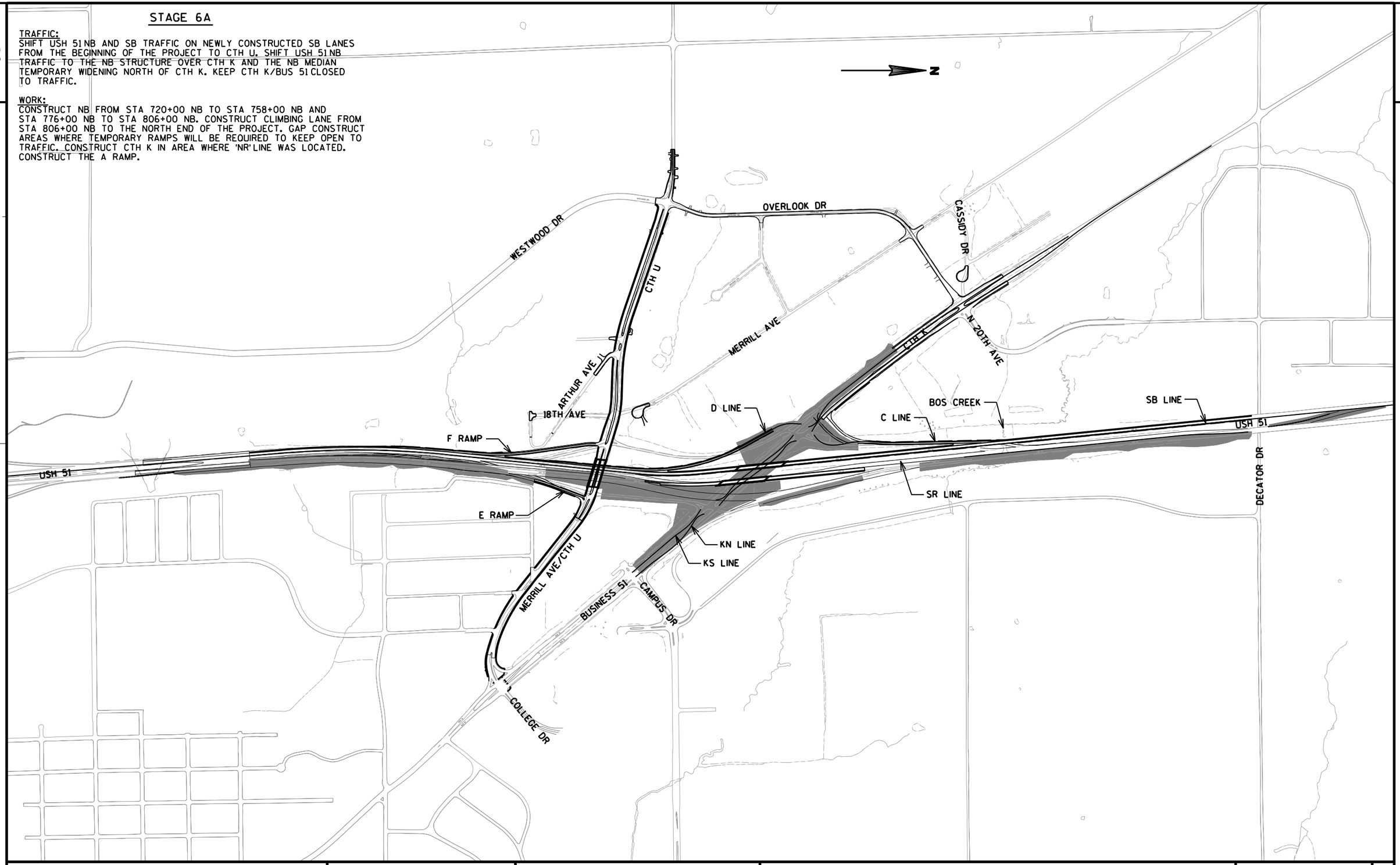
LANE CONFIGURATION ON NORTHBOUND DECATOR STRUCTURE

PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	TYPICAL SECTIONS - DECATOR OVERPASS (STAGES 5A & 5B)	SHEET 461	E

STAGE 6A

TRAFFIC:
SHIFT USH 51 NB AND SB TRAFFIC ON NEWLY CONSTRUCTED SB LANES FROM THE BEGINNING OF THE PROJECT TO CTH U. SHIFT USH 51 NB TRAFFIC TO THE NB STRUCTURE OVER CTH K AND THE NB MEDIAN TEMPORARY WIDENING NORTH OF CTH K. KEEP CTH K/BUS 51 CLOSED TO TRAFFIC.

WORK:
CONSTRUCT NB FROM STA 720+00 NB TO STA 758+00 NB AND STA 776+00 NB TO STA 806+00 NB. CONSTRUCT CLIMBING LANE FROM STA 806+00 NB TO THE NORTH END OF THE PROJECT. GAP CONSTRUCT AREAS WHERE TEMPORARY RAMPS WILL BE REQUIRED TO KEEP OPEN TO TRAFFIC. CONSTRUCT CTH K IN AREA WHERE 'NR' LINE WAS LOCATED. CONSTRUCT THE A RAMP.



PROJECT NO: 1170-01-70/71/73 & 6999-18-70	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL OVERVIEW - STAGE 6A	SHEET 462	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\026601_s6a.dgn PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:800

WISDOT/CADDS SHEET 42

SEE S.D.D. "TRAFFIC CONTROL, SINGLE LANE CROSSOVER" FOR ADDITIONAL DETAILS.

SEE S.D.D. "TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 M.P.H." FOR ADDITIONAL DETAILS.

SEE S.D.D. " TRAFFIC CONTROL, TEMPORARY EXIT RAMP CROSSOVER" FOR ADDITIONAL DETAILS.

N

TEMPORARY PAVEMENT MARKING 4-INCH (YELLOW)

TEMPORARY PAVEMENT MARKING 4-INCH (WHITE)

TEMPORARY PAVEMENT MARKING 4-INCH (WHITE SKIPS)

CRASH CUSHION TEMPORARY REQ'D.

USH 51 SB

USH 51 NB

708NB 710NB 712NB 714NB 716NB 718NB 720NB 722NB

312SR 314SR 316SR 318SR 320SR 322SR

50' TYP

100' TYP

25' TYP

SAN

W01-4B

W01-6
48" X 24"

ROAD CLOSED
R11-2
48" X 30"

FOUND

LEGEND

- TRAFFIC DIRECTION
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN
- WORK ZONE
- CONCRETE BARRIER TEMPORARY
- FLASHING ARROW BOARD
- POST WITH ATTACHED SIGN

PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 6A	SHEET 463 E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\026611_s6a.dgn PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2

N

2

STA 732+42 SB, RT
REMOVING INLET
(KEEP TEMPORARY PIPE IN PLACE)

STA 734+44 SB, RT
REMOVING INLET
(KEEP TEMPORARY PIPE IN PLACE)

MILE 194

MOVING SIGNS
TYPE II

TEMPORARY PAVEMENT MARKING
4-INCH (WHITE SKIPS)

TEMPORARY PAVEMENT MARKING
4-INCH (WHITE)

TEMPORARY PAVEMENT MARKING
4-INCH (YELLOW)

324SR 326SR 328SR 330SR USH 51 SB 332SR 334SR 336SR 338SR

USH 51 NB

336EU 338EU

724NB 726NB 728NB 730NB 732NB 734NB 736NB 738NB

100' TYP 25' TYP 90' TYP

TEMPORARY DELINEATOR

PORTABLE CHANGEABLE MESSAGE
SIGN REQUIRED TO PROVIDE
SUPPLEMENTAL EXIT INFORMATION
"CTH U BUS 51 CTH K EXIST RIGHT"

FOUND

SIGN

W

LEGEND

- TRAFFIC DIRECTION
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN
- WORK ZONE
- CONCRETE BARRIER TEMPORARY
- FLASHING ARROW BOARD
- POST WITH ATTACHED SIGN

PROJECT NO: 1170-01-70/73	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 6A	SHEET 464	E

2

STA 739+02 SB, RT
12" CP TEMPORARY

R1-2
48" X 42"

TEMPORARY PAVEMENT MARKING
4-INCH (WHITE)

TEMPORARY PAVEMENT MARKING
8-INCH (WHITE)

STA 743+47 SB, RT
REMOVING INLET

TEMPORARY PAVEMENT MARKING
4-INCH (YELLOW)

W03-2

W03-3

TEMPORARY PAVEMENT MARKING
4-INCH (WHITE)

TEMPORARY PAVEMENT MARKING
4-INCH (WHITE SKIPS)

TEMPORARY PAVEMENT MARKING
4-INCH (YELLOW)

MOVING SIGNS
TYPE II

SOUTH 51 MILE 194 .4

NORTH 51 MILE 194 .4

CTH U

CTH U

338SR 340SR 342SR 344SR 346SR USH 51 SB 348SR 350SR 352SR

USH 51 NB

338EU 50' TYP 340EU

738NB 740NB 742NB 744NB 100' TYP 746NB 748NB 750NB 752NB

340EU 342EU 344EU 346EU 348EU

25' TYP 25' TYP

740A 742A 744A 746A 748A 750A 752A

TEMPORARY DELINEATOR

TEMPORARY PAVEMENT MARKING
4-INCH (WHITE)

TEMPORARY PAVEMENT MARKING
8-INCH (WHITE)

EXIT

E5-1
60" X 48"

ROAD CLOSED

R11-2
48" X 30"

TEMPORARY PAVEMENT MARKING
4-INCH (YELLOW)

ROAD CLOSED

R11-2
48" X 30"

STOP

W03-3

POOL

POOL

LEGEND

- TRAFFIC DIRECTION
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN
- WORK ZONE
- CONCRETE BARRIER TEMPORARY
- FLASHING ARROW BOARD
- POST WITH ATTACHED SIGN
- 16"×16" ORANGE FLAGS (INCIDENTAL)

PROJECT NO: 1170-01-70/73	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 6A	SHEET 465	E

2

N

TEMPORARY PAVEMENT MARKING
4-INCH (WHITE SKIPS)

TEMPORARY PAVEMENT MARKING
4-INCH (WHITE)

TEMPORARY PAVEMENT MARKING
4-INCH (YELLOW)

CRASH CUSHION
TEMPORARY REQ'D.

W01-4B

754SB
356SR
756SB
358SR
758SB
760SB
762SB
764SB
USH 51 SB
766SB
768SB

754NB
756NB
358SR
25' TYP
758NB
360SR
760NB
762NB
USH 51 NB
25' TYP

754A
756A
758A
760A

RUINS
A/C
SIGN
OHU
GUY

C1H K
764SB
766SB
768SB
100' TYP
50' TYP
766B
768B
762B

TEMPORARY PAVEMENT MARKING
4-INCH (WHITE)

TEMPORARY PAVEMENT MARKING
4-INCH (YELLOW)

CRASH CUSHION
TEMPORARY REQ'D.

LEGEND

- TRAFFIC DIRECTION
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN
- WORK ZONE
- CONCRETE BARRIER TEMPORARY
- FLASHING ARROW BOARD
- POST WITH ATTACHED SIGN

PROJECT NO: 1170-01-70/73	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 6A	SHEET 466	E

2

2

TEMPORARY PAVEMENT MARKING
4-INCH (WHITE)

TEMPORARY PAVEMENT MARKING
4-INCH (YELLOW)

372CU

374CU

376CU

25' TYP

100' TYP

C.T.H. K

C.T.H. K

772C

774C

776C

778C

780C

782C

RAMP
CLOSED
R11-2(MOD)
48" X 30"

NORTH
51
MILE
194
.8
MOVING SIGNS
TYPE II

768SB 770SB 772SB 774SB 776SB USH 51 SB 778SB 780SB 782SB

TEMPORARY PAVEMENT MARKING
4-INCH (WHITE)

TEMPORARY PAVEMENT MARKING
4-INCH (YELLOW)

25' TYP

372SR 374SR 376SR 378SR 380SR 382SR

768NB 770NB 772NB 774NB 776NB USH 51 NB 778NB 780NB 782NB

TEMPORARY PAVEMENT MARKING
4-INCH (WHITE SKIPS)

50' TYP

TEMPORARY PAVEMENT MARKING
8-INCH (WHITE)

50' TYP

25' TYP

ROAD
CLOSED
R11-2
48" X 30"

W01-6
48" X 24"

W01-4B

768B

770B

772B

774B

776B

778B

780B

782B

TEMPORARY PAVEMENT MARKING
4-INCH (YELLOW)

TEMPORARY PAVEMENT MARKING
4-INCH (WHITE)

ROAD
CLOSED
R11-2
48" X 30"

YIELD
R1-2
48" X 42"

W03-2

SIGN

SIGN

SAN

SAN

HWY

LEGEND

- TRAFFIC DIRECTION
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN
- WORK ZONE
- CONCRETE BARRIER TEMPORARY
- FLASHING ARROW BOARD
- POST WITH ATTACHED SIGN
- 16"x16" ORANGE FLAGS (INCIDENTAL)

PROJECT NO: 1170-01-70/73	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 6A	SHEET	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\026615_s6a.dgn PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:100
WISDOT/CADDS SHEET 42

2

2

N

BERM

W

W

SIGN

784C

786C

788C

USH 51 SB

TEMPORARY PAVEMENT MARKING
4-INCH (WHITE)

384SR

100' TYP

TEMPORARY PAVEMENT MARKING
4-INCH (YELLOW)

USH 51 NB

784NB 786NB 788NB 790NB 792NB 794NB 796NB 798NB

MILE
1
9
5

MOVING SIGNS
TYPE II

SIGN

SPEED
LIMIT
55

R2-1
48" X 60"

LEGEND

- TRAFFIC DIRECTION
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN
- WORK ZONE
- CONCRETE BARRIER TEMPORARY
- FLASHING ARROW BOARD
- POST WITH ATTACHED SIGN

PROJECT NO: 1170-01-70/73	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 6A	SHEET	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\026616_s6a.dgn PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2

2

N

USH 51

USH 51 SB

DECATOR DR

TEMPORARY PAVEMENT MARKING
4-INCH (WHITE)

TEMPORARY PAVEMENT MARKING
4-INCH (YELLOW)

25'
TYP

798NB

800NB

802NB

804NB

USH 51 NB

806NB

808NB

810NB

812NB

W01-4B

HO

TV

LEGEND

- TRAFFIC DIRECTION
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN
- WORK ZONE
- CONCRETE BARRIER TEMPORARY
- FLASHING ARROW BOARD
- POST WITH ATTACHED SIGN

PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 6A	SHEET 469	E

2

2

N

OH

USH 51 SB

25' TYP

814NB

816NB

818NB

820NB

822NB

824NB

826NB

828NB

25' TYP

USH 51 NB

50' TYP

TEMPORARY PAVEMENT MARKING
4-INCH (WHITE)

TEMPORARY PAVEMENT MARKING
4-INCH (YELLOW)

TEMPORARY PAVEMENT MARKING
4-INCH (WHITE SKIPS)

LEGEND

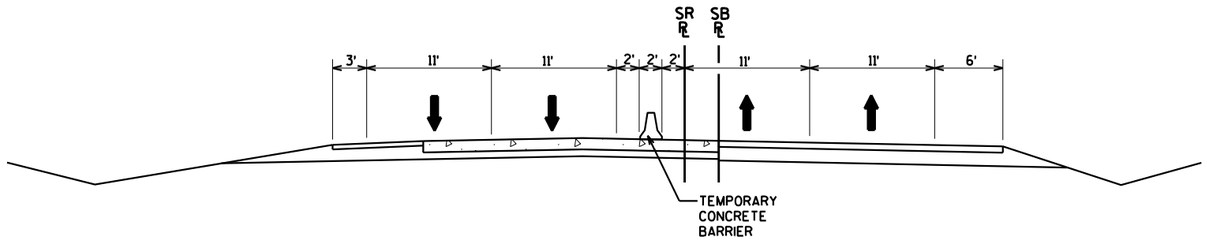
- TRAFFIC DIRECTION
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN
- WORK ZONE
- CONCRETE BARRIER TEMPORARY
- FLASHING ARROW BOARD
- POST WITH ATTACHED SIGN

PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 6A	SHEET 470	E

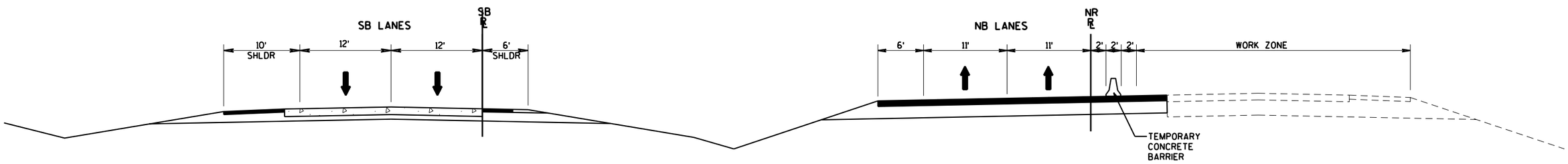
FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\026618_s6a.dgn PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2

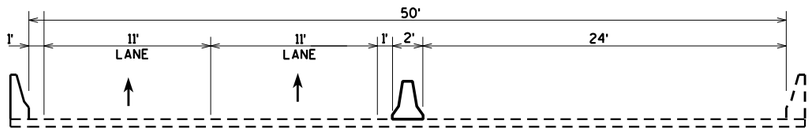


TRAFFIC LAYOUT - STAGE 6A



TRAFFIC LAYOUT - STAGE 6A

PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL TYPICAL TRAFFIC LAYOUT - STAGE 6A	SHEET 471	E



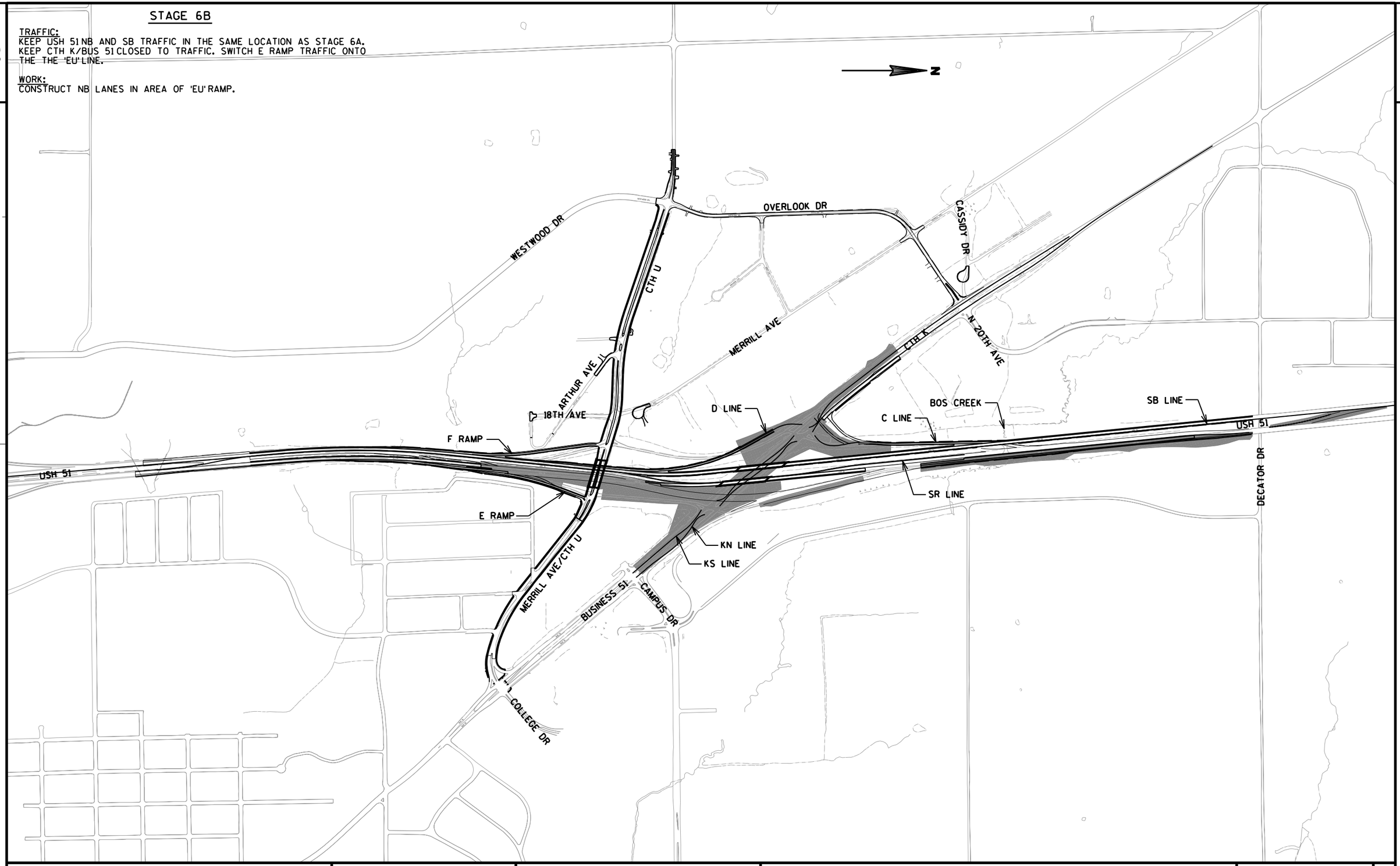
LANE CONFIGURATION ON NORTHBOUND DECATOR STRUCTURE

PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	TYPICAL SECTIONS - DECATOR OVERPASS (STAGES 6A & 6B)	SHEET 472	E

STAGE 6B

TRAFFIC:
KEEP USH 51 NB AND SB TRAFFIC IN THE SAME LOCATION AS STAGE 6A.
KEEP CTH K/BUS 51 CLOSED TO TRAFFIC. SWITCH E RAMP TRAFFIC ONTO THE THE 'EU' LINE.

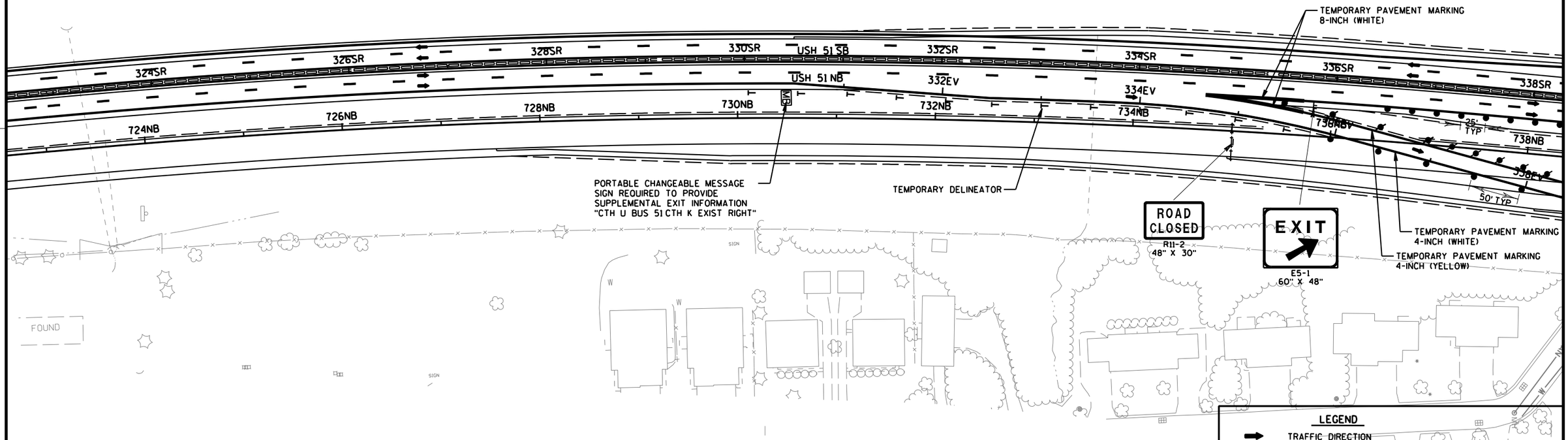
WORK:
CONSTRUCT NB LANES IN AREA OF 'EU' RAMP.



PROJECT NO: 1170-01-70/71/73 & 6999-18-70	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL OVERVIEW - STAGE 6B	SHEET 473	E

SEE S.D.D. "TRAFFIC CONTROL, TEMPORARY EXIT RAMP CROSSOVER" FOR ADDITIONAL DETAILS.

N



LEGEND

- TRAFFIC DIRECTION
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN
- WORK ZONE
- CONCRETE BARRIER TEMPORARY
- FLASHING ARROW BOARD
- POST WITH ATTACHED SIGN

PROJECT NO: 1170-01-70/73	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 6B	SHEET 474	E

2

2

N

CTH U

CTH U

W03-3

338SR 340SR 342SR 344SR 346SR USH 51 SB 348SR 350SR 352SR

USH 51 NB

100' TYP

738NB 740NB 742NB 744NB 746NB 748NB 750NB 752NB

358EV 340EV 342EV 344EV 346EV 348EV

738A 740A 742A 744A 746A 748A 750A 752A

25' TYP

50' TYP

ROAD CLOSED
R11-2
48" X 30"

TEMPORARY PAVEMENT MARKING
4-INCH (WHITE)

TEMPORARY PAVEMENT MARKING
4-INCH (YELLOW)

REMOVING PAVEMENT MARKINGS

STOP
UNCOVER SIGNS

REMOVING PAVEMENT MARKINGS

W03-3

POOL

POOL

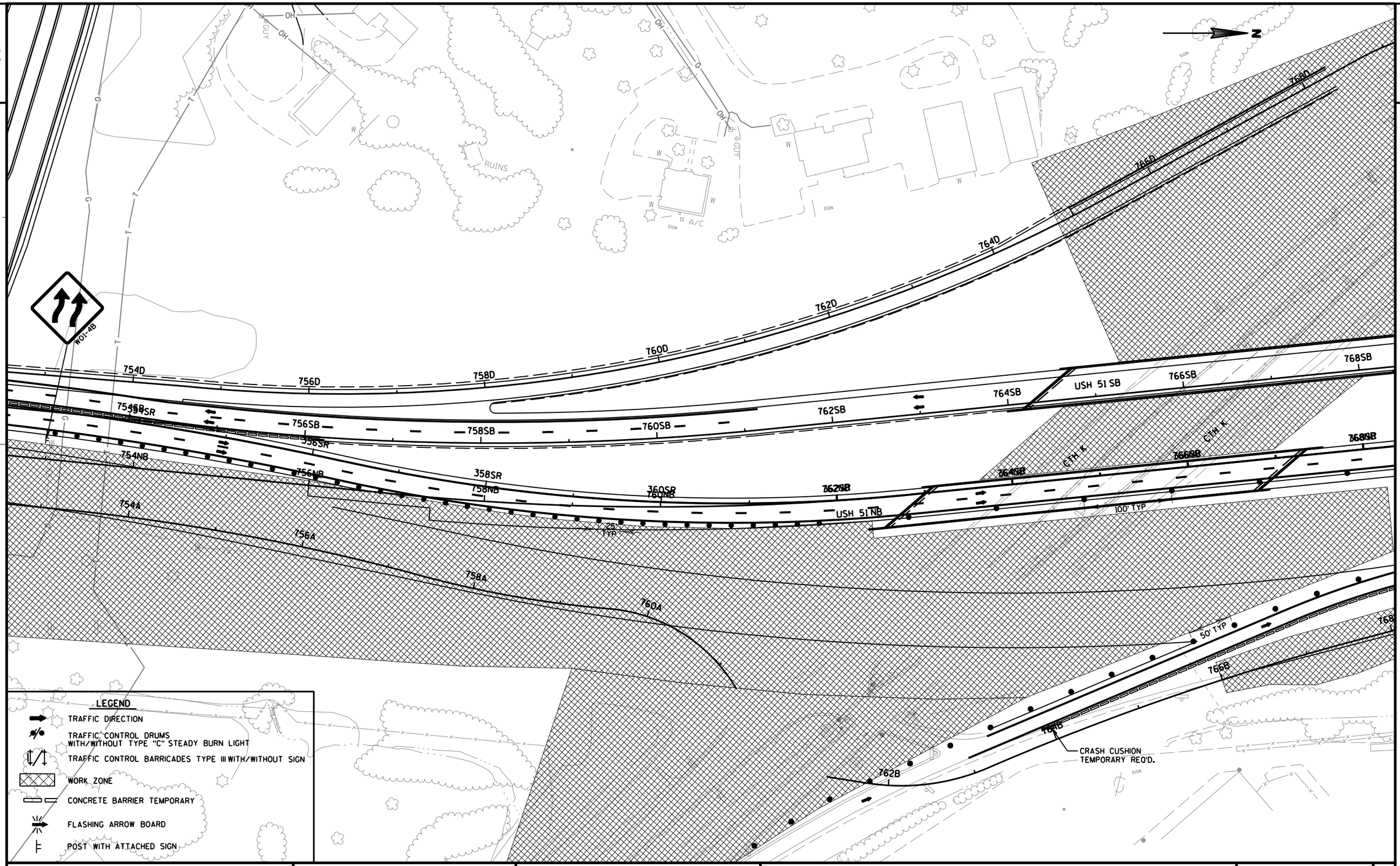
LEGEND

- TRAFFIC DIRECTION
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN
- WORK ZONE
- CONCRETE BARRIER TEMPORARY
- FLASHING ARROW BOARD
- POST WITH ATTACHED SIGN

PROJECT NO: 1170-01-70/73	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 6B	SHEET 475	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\026633_s6b.dgn PLOT DATE : 8/21/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:100

2



PROJECT NO: 1170-01-70/73	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 6B	SHEET 476	E

2

2

770D
CTH K
CTH K
772C
774C
372CU
25' TYP
374CU
100' TYP
RAMP CLOSED
R11-2(MOD)
48" X 30"
376CU
776C
778C
780C
782C
25' TYP
SAN
768SB
770SB
772SB
774SB
776SB
USH 51 SB
778SB
780SB
782SB
374SR
376SR
378SR
380SR
382SR
768NB
770NB
772NB
774NB
776NB
USH 51 NB
778NB
780NB
782NB
25' TYP
50' TYP
50' TYP
ROAD CLOSED
R11-2
48" X 30"
W01-6
48" X 24"
W01-4B
774B
772B
770B
768B
778B
780B
782B
W03-2
YIELD
R1-2
48" X 42"
SIGN
SIGN
MH

LEGEND

- TRAFFIC DIRECTION
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN
- WORK ZONE
- CONCRETE BARRIER TEMPORARY
- FLASHING ARROW BOARD
- POST WITH ATTACHED SIGN
- 16"x16" ORANGE FLAGS (INCIDENTAL)

PROJECT NO: 1170-01-70/73	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 6B	SHEET 477	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\026635_s6b.dgn PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:100

2

2

N

BERM

W

W

SIGN

784C

786C

788C

USH 51 SB

100' TYP

384SR

USH 51 NB

784NB

786NB

788NB

790NB

792NB

794NB

796NB

798NB

SIGN

SPEED LIMIT 55

R2-1
48" X 60"

LEGEND

- TRAFFIC DIRECTION
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN
- WORK ZONE
- CONCRETE BARRIER TEMPORARY
- FLASHING ARROW BOARD
- POST WITH ATTACHED SIGN

PROJECT NO: 1170-01-70/73	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 6B	SHEET 478	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\026636_s6b.dgn PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2

2

N

DECATOR DR

USH 51

USH 51 SB

798NB

800NB

802NB

804NB

USH 51 NB

806NB

808NB

25' TYP

810NB

812NB

W01-4B

LEGEND

- TRAFFIC DIRECTION
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN
- WORK ZONE
- CONCRETE BARRIER TEMPORARY
- FLASHING ARROW BOARD
- POST WITH ATTACHED SIGN

PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 6B	SHEET 479	E

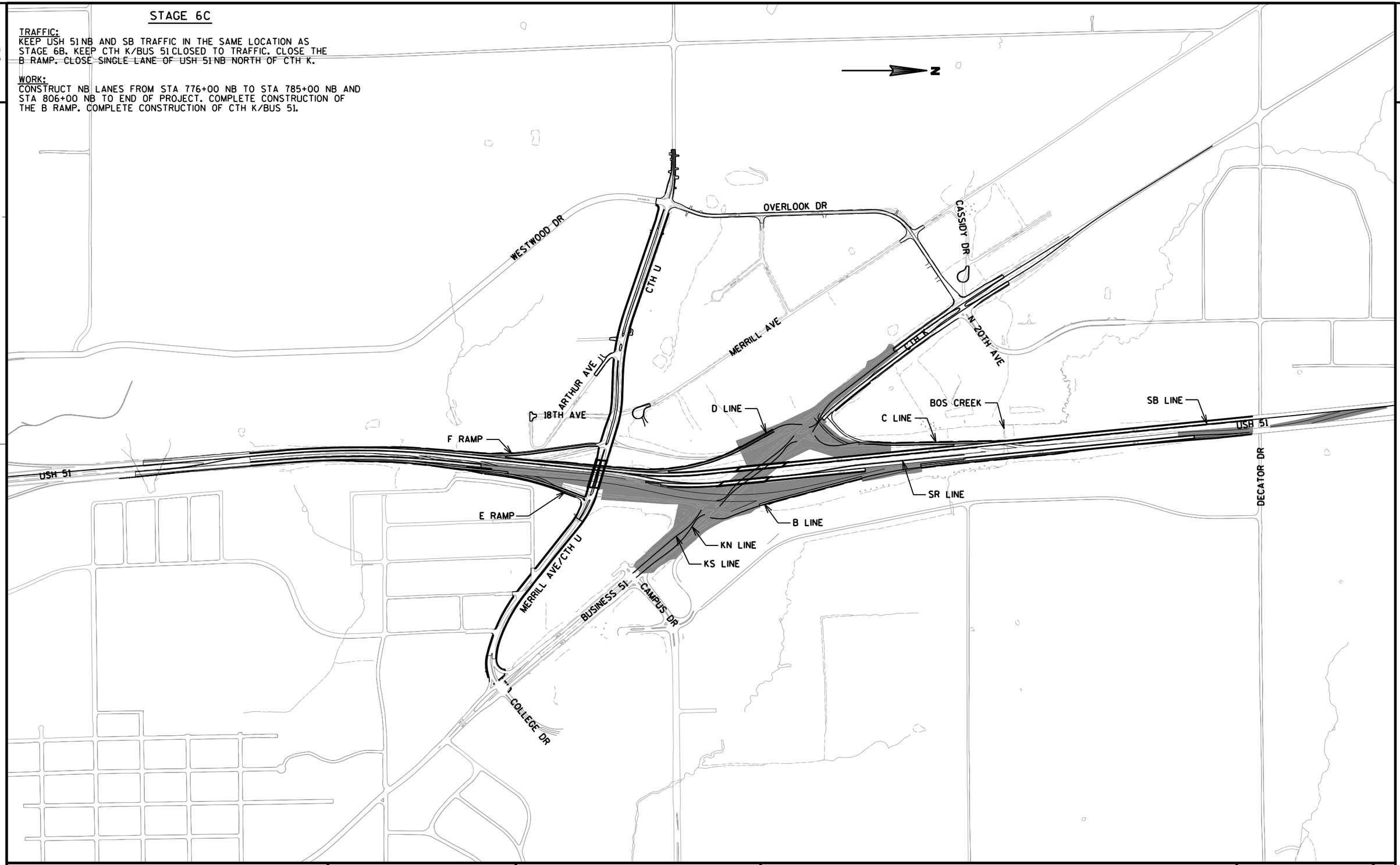
FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\026637_s6b.dgn PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

STAGE 6C

TRAFFIC:
KEEP USH 51 NB AND SB TRAFFIC IN THE SAME LOCATION AS STAGE 6B. KEEP CTH K/BUS 51 CLOSED TO TRAFFIC. CLOSE THE B RAMP. CLOSE SINGLE LANE OF USH 51 NB NORTH OF CTH K.

WORK:
CONSTRUCT NB LANES FROM STA 776+00 NB TO STA 785+00 NB AND STA 806+00 NB TO END OF PROJECT. COMPLETE CONSTRUCTION OF THE B RAMP. COMPLETE CONSTRUCTION OF CTH K/BUS 51.



PROJECT NO: 1170-01-70/71/73 & 6999-18-70	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL OVERVIEW - STAGE 6C	SHEET 480	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\026650_s6c.dgn PLOT DATE : 7/27/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:800

WISDOT/CADDS SHEET 42

SEE S.D.D. "TRAFFIC CONTROL, LANE CLOSURE, SPEEDS GREATER THAN 40 M.P.H." FOR ADDITIONAL INFORMATION.

W01-4B

W04-2L

754D 756D 758D 760D 762D 764D 766D 768SB

754SB 756SB 758SB 760SB 762SB 764SB USH 51 SB 766SB 768SB

754NB 756NB 758NB 760NB 762NB 764NB C.T.H. K 766NB 768NB

754A 756A 758A 760A 762A 764A 766A

USH 51 NB

100' TYP

RUINS

A/C

SIGN

LEGEND

- TRAFFIC DIRECTION
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN
- WORK ZONE
- CONCRETE BARRIER TEMPORARY
- FLASHING ARROW BOARD
- POST WITH ATTACHED SIGN

PROJECT NO: 1170-01-70/73	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 6C	SHEET 481	E

2

2

770D

CTH K

CTH K

372CU

25' TYP

100' TYP

374CU

RAMP CLOSED
R11-2(MOD)
48" X 30"

376CU

772C

774C

778C

780C

782C

768SB 770SB 772SB 774SB 776SB USH 51 SB 778SB 780SB 782SB

CRASH CUSHION TEMPORARY REQ'D.

25' TYP

372SR 374SR 376SR 378SR 50' TYP 380SR 382SR

768NB 770NB 772NB 774NB 776NB USH 51 NB 778NB 780NB 782NB

768B 770B 772B 774B 776B 778B 780B 782B

W01-6
48" X 24"

W01-4B

SAN

SIGN

SIGN

N

LEGEND

- TRAFFIC DIRECTION
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN
- WORK ZONE
- CONCRETE BARRIER TEMPORARY
- FLASHING ARROW BOARD
- POST WITH ATTACHED SIGN

PROJECT NO: 1170-01-70/73	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 6C	SHEET 482	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\026655_s6c.dgn PLOT DATE : 7/27/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:100

2

2

N

BERM

W

W

SIGN

784C

786C

788C

USH 51 SB

TEMPORARY PAVEMENT MARKING
4-INCH (YELLOW)

TEMPORARY PAVEMENT MARKING
4-INCH (YELLOW)

384SR

100' TYP

784NB

786NB

788NB

790NB

USH 51 NB

792NB

794NB

796NB

798NB

WO1-4R

SPEED
LIMIT
55

R2-1
48" X 60"

SIGN

LEGEND

- TRAFFIC DIRECTION
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN
- WORK ZONE
- CONCRETE BARRIER TEMPORARY
- FLASHING ARROW BOARD
- POST WITH ATTACHED SIGN

PROJECT NO: 1170-01-70/73	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 6C	SHEET 483	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\026656_s6c.dgn PLOT DATE : 7/27/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2

2

N

USH 51

USH 51 SB

DECATOR DR

CRASH CUSHION
TEMPORARY REQ'D.

798NB

800NB

802NB

804NB

806NB

808NB

810NB

812NB

USH 51

USH 51 NB

TEMPORARY PAVEMENT MARKING
4-INCH (WHITE)

TEMPORARY PAVEMENT MARKING
4-INCH (YELLOW)

TEMPORARY PAVEMENT MARKING
4-INCH REMOVABLE TAPE (WHITE)

TEMPORARY PAVEMENT MARKING
4-INCH REMOVABLE TAPE (YELLOW)

TEMPORARY PAVEMENT MARKING
4-INCH (WHITE)

TEMPORARY PAVEMENT MARKING
4-INCH (YELLOW)

LEGEND

- TRAFFIC DIRECTION
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN
- WORK ZONE
- CONCRETE BARRIER TEMPORARY
- FLASHING ARROW BOARD
- POST WITH ATTACHED SIGN

PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 6C	SHEET 484	E

2

2

N

OH

USH 51 SB

25' TYP

814NB 816NB 818NB 820NB 822NB 824NB 826NB 828NB

25' TYP

USH 51 NB

TEMPORARY PAVEMENT MARKING
4-INCH (WHITE)

LEGEND

- TRAFFIC DIRECTION
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN
- WORK ZONE
- CONCRETE BARRIER TEMPORARY
- FLASHING ARROW BOARD
- POST WITH ATTACHED SIGN

PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 6C	SHEET 485	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\026658_s6c.dgn PLOT DATE : 7/27/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:100

2

BUS 51 SB

BUS 51 NB

12K

14K

16K

18K

20K

22K

25' SPACING (TYP)

ROAD CLOSED AHEAD W20-3

W04-2L

ROAD CLOSED 1000 FT W20-3

COLLEGE DR

U/C

LEGEND

- TRAFFIC DIRECTION
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN
- WORK ZONE
- CONCRETE BARRIER TEMPORARY
- FLASHING ARROW BOARD
- POST WITH ATTACHED SIGN

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 6C	SHEET 486	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\026659_s6c.dgn PLOT DATE : 8/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:100

2

ROAD CLOSED
R11-2
48" X 30"

BUS 51 SB

BUS 51 NB

25' SPACING (TYP)

24K

26K

28K

30KN

32KN

34KN

36KN

38KN

TEMPORARY PAVEMENT MARKING
4-INCH (WHITE)

ROAD CLOSED 500 FT
W20-5

ROAD CLOSED
R11-2
48" X 30"

CAMPUS DR

ONLY

ONLY

COVERING SIGNS
TYPE II

25' SPACING (TYP)

CANOPY

CANOPY

FILLER CAPS

FILLER CAPS

LEGEND

- TRAFFIC DIRECTION
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN
- WORK ZONE
- CONCRETE BARRIER TEMPORARY
- FLASHING ARROW BOARD
- POST WITH ATTACHED SIGN

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 6C	SHEET 487	E

2

2

N

770D

CTH K

CTH K

372CU

25' TYP

100' TYP

374CU

RAMP CLOSED
R11-2(MOD)
48" X 30"

376CU

772C

774C

778C

780C

782C

768SB 770SB 772SB 774SB 776SB USH 51 SB 778SB 780SB 782SB

CRASH CUSHION TEMPORARY REQ'D.

25' TYP

374SR 376SR 378SR 380SR 382SR

768SB 770SB 772SB 774NB 776NB USH 51 NB 778NB 780NB 782NB

768B 770B 772B 774B 776B 778B 780B 782B

W01-6
48" X 24"

W01-4B

SAN

SIGN

SIGN

HWY

LEGEND

- TRAFFIC DIRECTION
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN
- WORK ZONE
- CONCRETE BARRIER TEMPORARY
- FLASHING ARROW BOARD
- POST WITH ATTACHED SIGN

PROJECT NO: 1170-01-70/73	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 6C (PHASE 2)	SHEET 488	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\026661_s6c.dgn PLOT DATE : 9/5/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2

2

N

BERM

W

W

SIGN

784C

786C

788C

USH 51 SB

384SR

784NB

786NB

788NB

790NB

USH 51 NB

792NB

794NB

796NB

398NT

798NB

W01-4B

SPEED
LIMIT
55

R2-1
48" X 60"

SIGN

LEGEND

- TRAFFIC DIRECTION
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN
- WORK ZONE
- CONCRETE BARRIER TEMPORARY
- FLASHING ARROW BOARD
- POST WITH ATTACHED SIGN

PROJECT NO: 1170-01-70/73	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 6C (PHASE 2)	SHEET 489	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\026662_s6c.dgn PLOT DATE : 9/5/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:100

2

2

N

DECATOR DR

USH 51

USH 51 SB

USH 51 NB

398NT
798NB

800NB

802NB

804NB

806NB

808NB

810NB

812NB

402NT

404NT

406NT

408NT

410NT

412NT

50' TYP

TEMPORARY PAVEMENT MARKING
4-INCH (YELLOW)

TEMPORARY PAVEMENT MARKING
4-INCH (WHITE SKIP)

TV

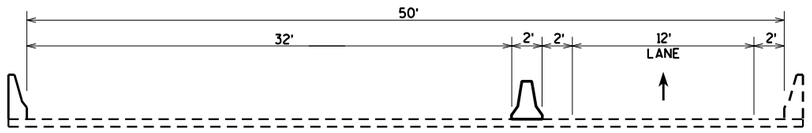
HO

LEGEND

- TRAFFIC DIRECTION
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN
- WORK ZONE
- CONCRETE BARRIER TEMPORARY
- FLASHING ARROW BOARD
- POST WITH ATTACHED SIGN

PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 6C (PHASE 2)	SHEET 490	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\026663_s6c.dgn PLOT DATE : 9/5/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:100



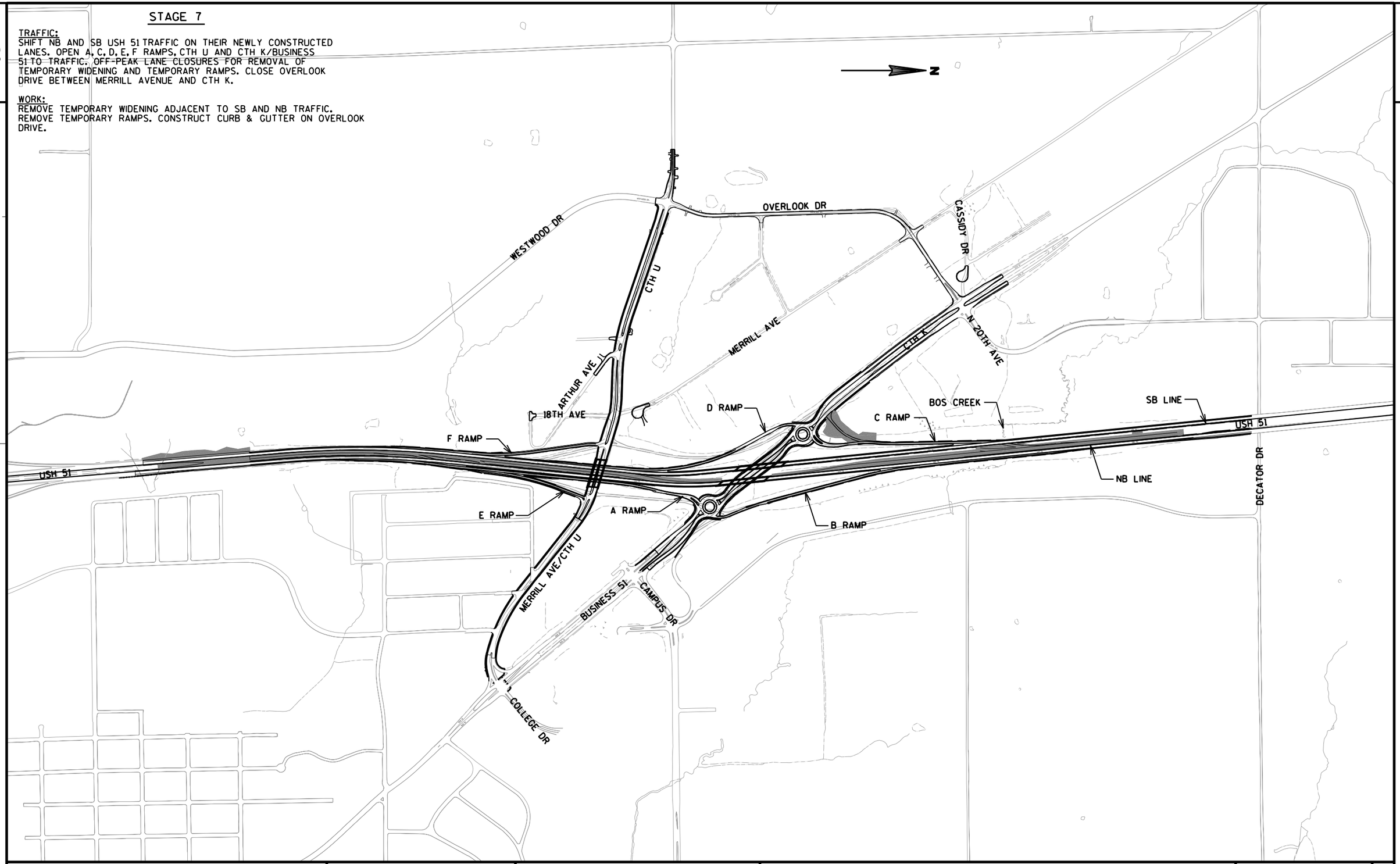
LANE CONFIGURATION ON NORTHBOUND DECATOR STRUCTURE

PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	TYPICAL SECTIONS - DECATOR OVERPASS (STAGE 6C)	SHEET 491	E

STAGE 7

TRAFFIC:
SHIFT NB AND SB USH 51 TRAFFIC ON THEIR NEWLY CONSTRUCTED LANES. OPEN A, C, D, E, F RAMPS, CTH U AND CTH K/BUSINESS 51 TO TRAFFIC. OFF-PEAK LANE CLOSURES FOR REMOVAL OF TEMPORARY WIDENING AND TEMPORARY RAMPS. CLOSE OVERLOOK DRIVE BETWEEN MERRILL AVENUE AND CTH K.

WORK:
REMOVE TEMPORARY WIDENING ADJACENT TO SB AND NB TRAFFIC. REMOVE TEMPORARY RAMPS. CONSTRUCT CURB & GUTTER ON OVERLOOK DRIVE.



PROJECT NO: 1170-01-70/71/73 & 6999-18-70	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL OVERVIEW - STAGE 7	SHEET 492	E

SEE S.D.D. "TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 M.P.H." FOR ADDITIONAL DETAILS.

SEE S.D.D. "TRAFFIC CONTROL, LANE CLOSURE, SPEEDS GREATER THAN 40 M.P.H." FOR ADDITIONAL DETAILS.

N

694SB 696SB 698SB 700SB 702SB 704SB USH 51 SB 706SB 708SB

CAUTION MODE

694NB 696NB 698NB 700NB 702NB 704NB 706NB 708NB

USH 51 NB

50' TYP

100' TYP

LEGEND

- TRAFFIC DIRECTION
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN
- WORK ZONE
- CONCRETE BARRIER TEMPORARY
- FLASHING ARROW BOARD
- POST WITH ATTACHED SIGN

PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 7	SHEET	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\026710_s7.dgn PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2

2

N

708SB
710SB
712SB
714SB
100' TYP
716SB
718SB
USH 51 SB
720SB
722SB

708NB
710NB
712NB
714NB
716NB
100' TYP
718NB
720NB
722NB

USH 51 NB

SAN

HWY

FOUND

LEGEND

- TRAFFIC DIRECTION
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN
- WORK ZONE
- CONCRETE BARRIER TEMPORARY
- FLASHING ARROW BOARD
- POST WITH ATTACHED SIGN

PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 7	SHEET 494	E

2

N

2

724SB
726SB
728SB
100' TYP
730SB
USH 51 SB
732SB
734SB
736SB
F RAMP
738SB
724NB
726NB
728NB
100' TYP
730NB
USH 51 NB
732NB
734NB
736NB
738NB
E RAMP
SIGN
W
W
FOUND
SIGN

LEGEND

- TRAFFIC DIRECTION
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN
- WORK ZONE
- CONCRETE BARRIER TEMPORARY
- FLASHING ARROW BOARD
- POST WITH ATTACHED SIGN

PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 7	SHEET 495	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\026712_s7.dgn PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:100

2

STA 743+00 SB
ABANDONING CULVERT PIPE
REMOVING INLET

F RAMP

D RAMP

CTH U

CTH U

738SB 740SB 742SB 744SB 746SB USH 51 SB 748SB 750SB 752SB

100' TYP

738NB 740NB 742NB 744NB 746NB 748NB 750NB 752NB

100' TYP

USH 51 NB

A RAMP

E RAMP

POOL

POOL

LEGEND

- TRAFFIC DIRECTION
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN
- WORK ZONE
- CONCRETE BARRIER TEMPORARY
- FLASHING ARROW BOARD
- POST WITH ATTACHED SIGN

PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 7	SHEET 496	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\026713_s7.dgn PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2

2

2

STA 356+50 SR
ABANDONING CULVERT PIPE
REMOVING INLET

RUINS

D RAMP

TEMPORARY PAVEMENT MARKING
REMOVABLE TAPE 4-INCH (WHITE)

754SB
756SB
758SB
100' TYP
760SB
762SB
764SB
USH 51 SB
766SB
768SB

754NB
756NB
758NB
760NB
762NB
764NB
USH 51 NB
766NB
768NB

CTH K

A RAMP

B RAMP

W04-2R

RIGHT LANE
CLOSED
AHEAD
W20-5

LEGEND

- TRAFFIC DIRECTION
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN
- WORK ZONE
- CONCRETE BARRIER TEMPORARY
- FLASHING ARROW BOARD
- POST WITH ATTACHED SIGN

PROJECT NO: 1170-01-70/73	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 7	SHEET 497	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\026714_s7.dgn PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2

2

25' SPACING (TYP)

RAMP CLOSED
R11-2(MOD)
48" X 30"

LANE CLOSED
R11-2(MOD)
48" X 30"

LANE CLOSED
R11-2(MOD)
48" X 30"

D RAMP

52KN

CTH K

48KN

CTH K

772C

774C

776C

25' SPACING (TYP)

778C

780C

C RAMP

782C

768SB 770SB 772SB 774SB 100' TYP 776SB USH 51 SB 778SB 780SB 782SB

768NB 770NB 772NB 774NB 776NB 778NB 780NB 782NB

100' TYP

USH 51 NB

B RAMP

SAN

SIGN

SIGN

HWY

N

LEGEND

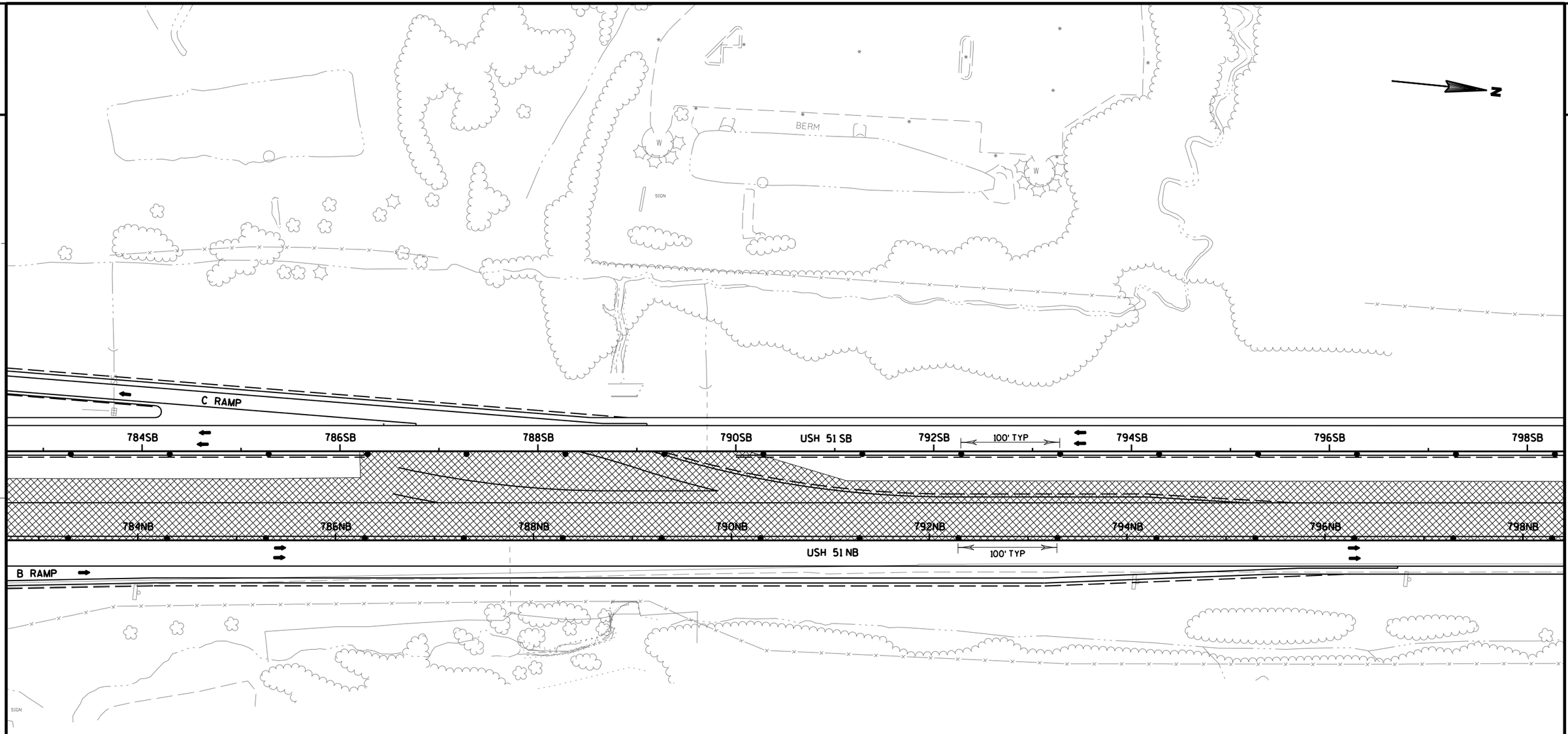
- TRAFFIC DIRECTION
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN
- WORK ZONE
- CONCRETE BARRIER TEMPORARY
- FLASHING ARROW BOARD
- POST WITH ATTACHED SIGN

PROJECT NO: 1170-01-70/73	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 7	SHEET 498	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\026715_s7.dgn PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2



2

LEGEND

- TRAFFIC DIRECTION
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN
- WORK ZONE
- CONCRETE BARRIER TEMPORARY
- FLASHING ARROW BOARD
- POST WITH ATTACHED SIGN

PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 7	SHEET 499	E

2

2

N

DECATOR DR

798SB 800SB USH 51 802SB 100' TYP 804SB USH 51 SB 806SB 808SB 810SB 812SB

N 5°40'41" W

798NB 800NB 802NB 804NB 806NB 808NB 810NB 812NB

USH 51 100' TYP USH 51 NB

LEGEND

- TRAFFIC DIRECTION
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN
- WORK ZONE
- CONCRETE BARRIER TEMPORARY
- FLASHING ARROW BOARD
- POST WITH ATTACHED SIGN

PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 7	SHEET 500	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\026717_s7.dgn PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:100

2

N

814SB

100' TYP

816SB

818SB

820SB

822SB

USH 51 SB

824SB

826SB

828SB

50' TYP

CAUTION MODE

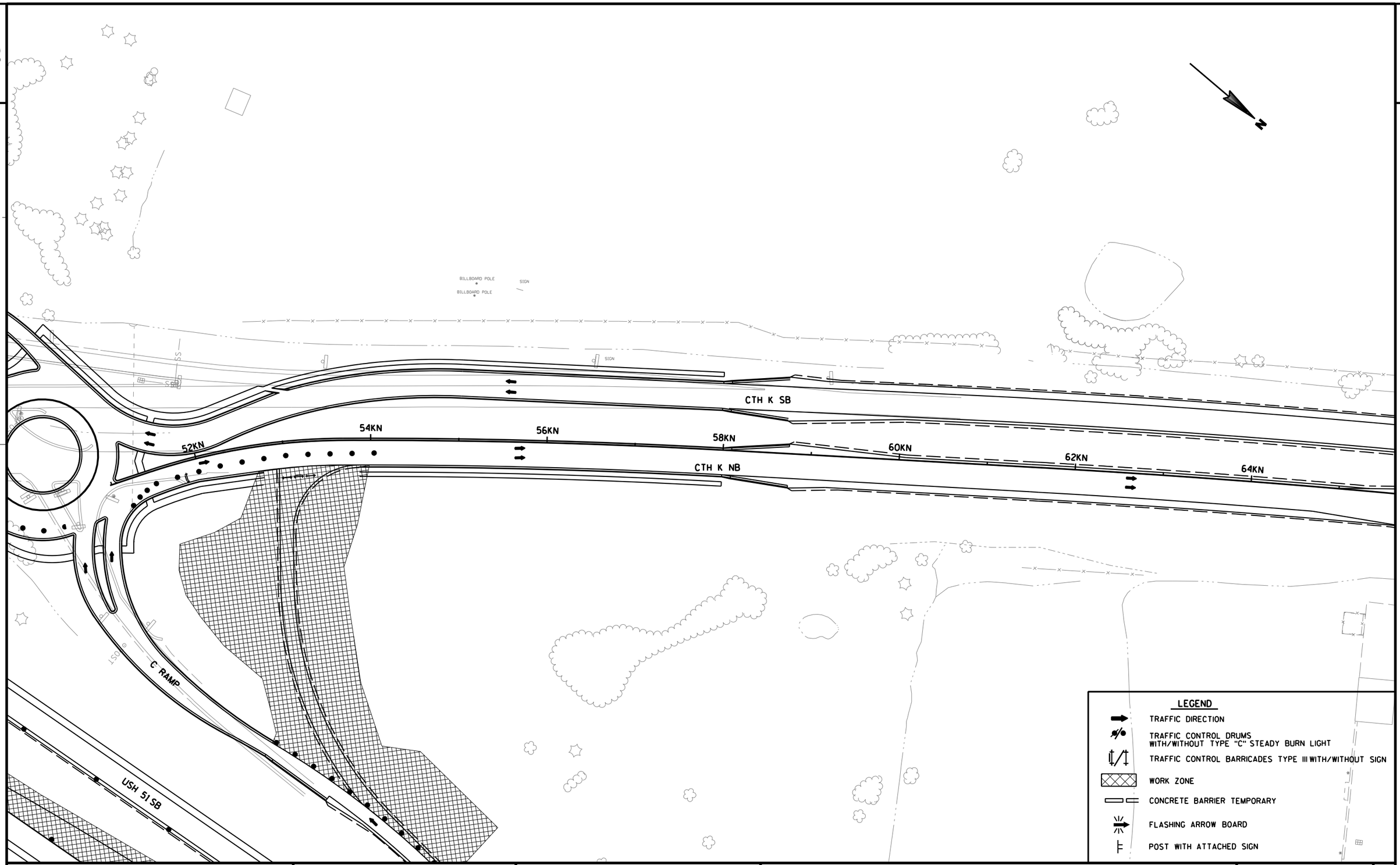
USH 51 NB

LEGEND

- TRAFFIC DIRECTION
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN
- WORK ZONE
- CONCRETE BARRIER TEMPORARY
- FLASHING ARROW BOARD
- POST WITH ATTACHED SIGN

PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 7	SHEET 501	E

2



PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 7	SHEET	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\026721_s7.dgn PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:100

2

2

OVERLOOK DR

ROAD CLOSED
R11-2
48" X 30"

CASSIDY DR

ROAD CLOSED
R11-2
48" X 30"

CTH K SB

CTH K NB

66KN

68KN

70KN

72KN

74KN

76KN

78KN

80KN

N 20TH AVE

A/C

CANOPY

SIGN

LEGEND

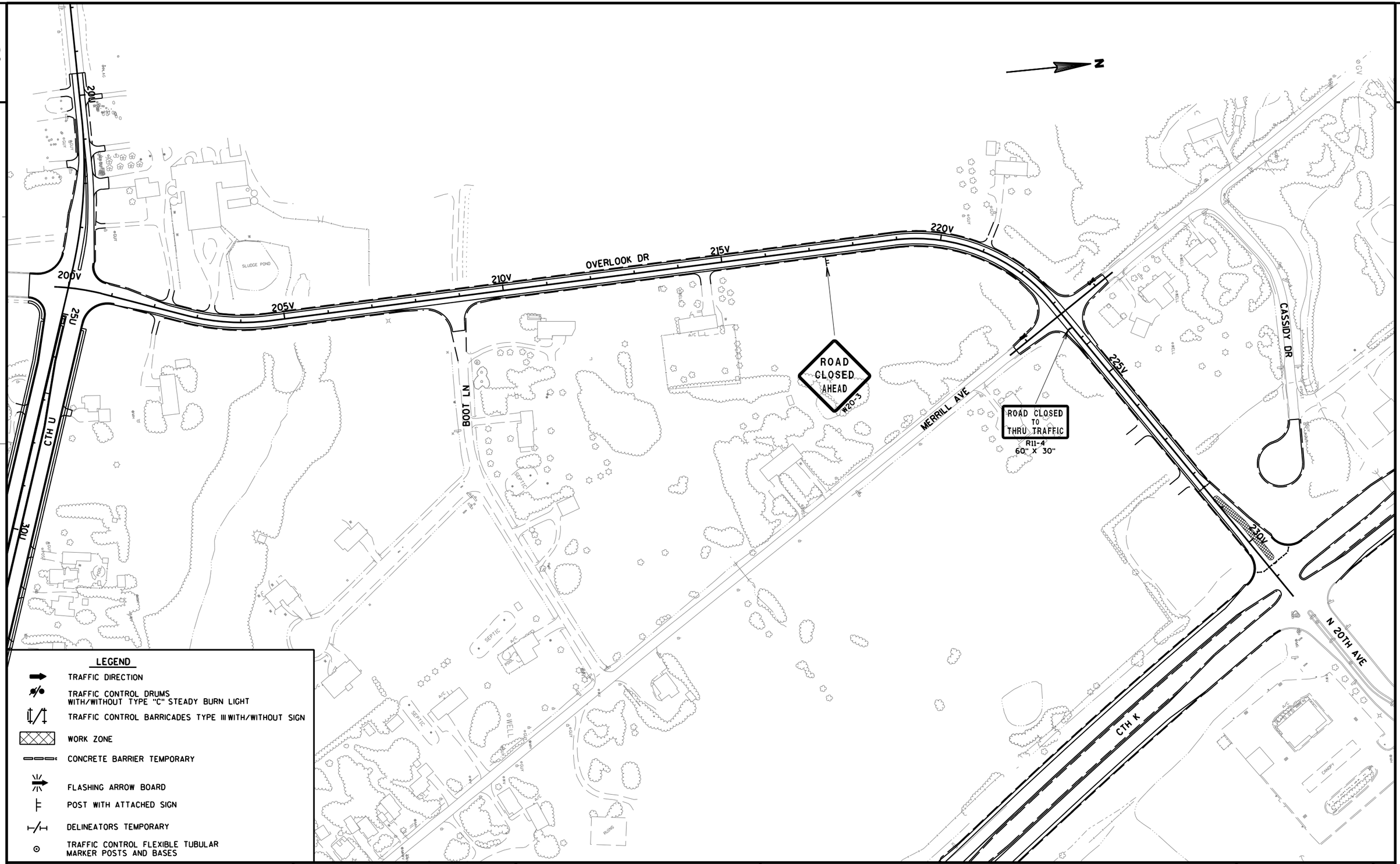
- TRAFFIC DIRECTION
- TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN
- WORK ZONE
- CONCRETE BARRIER TEMPORARY
- FLASHING ARROW BOARD
- POST WITH ATTACHED SIGN

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 7	SHEET 503	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\026722_s7.dgn PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2



PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 7	SHEET	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\026723_s7.dgn PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:200

WISDOT/CADDS SHEET 42

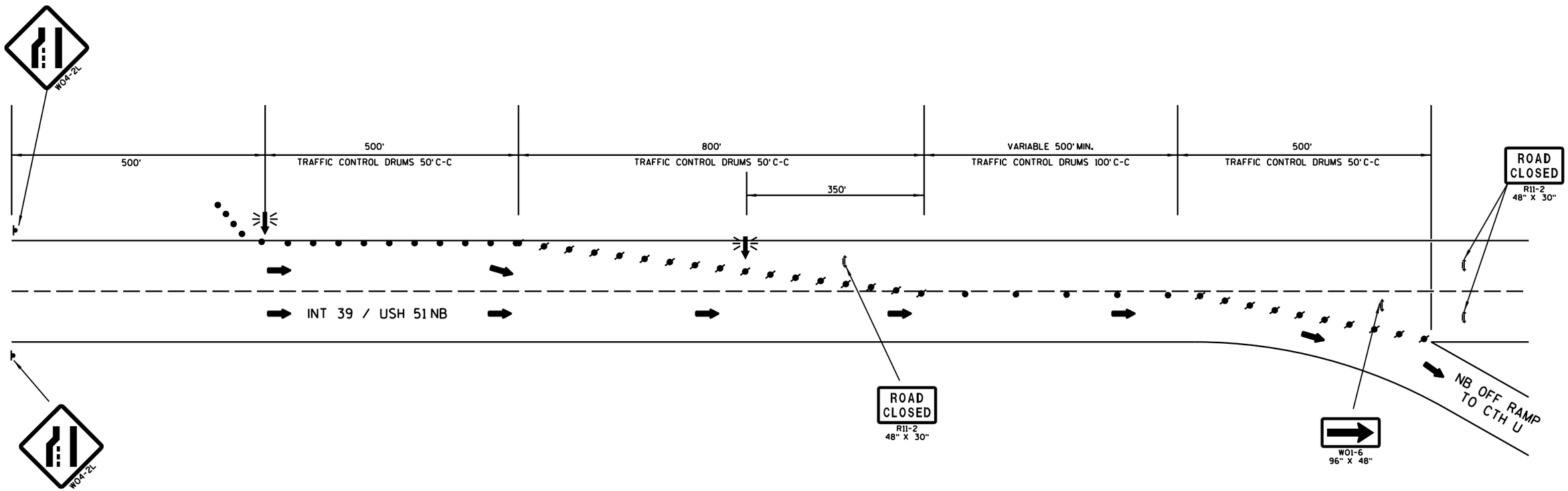
2

2

N

NORTHBOUND DETOUR PLAN

LANE DROP TO NB OFF RAMP AT CTH U

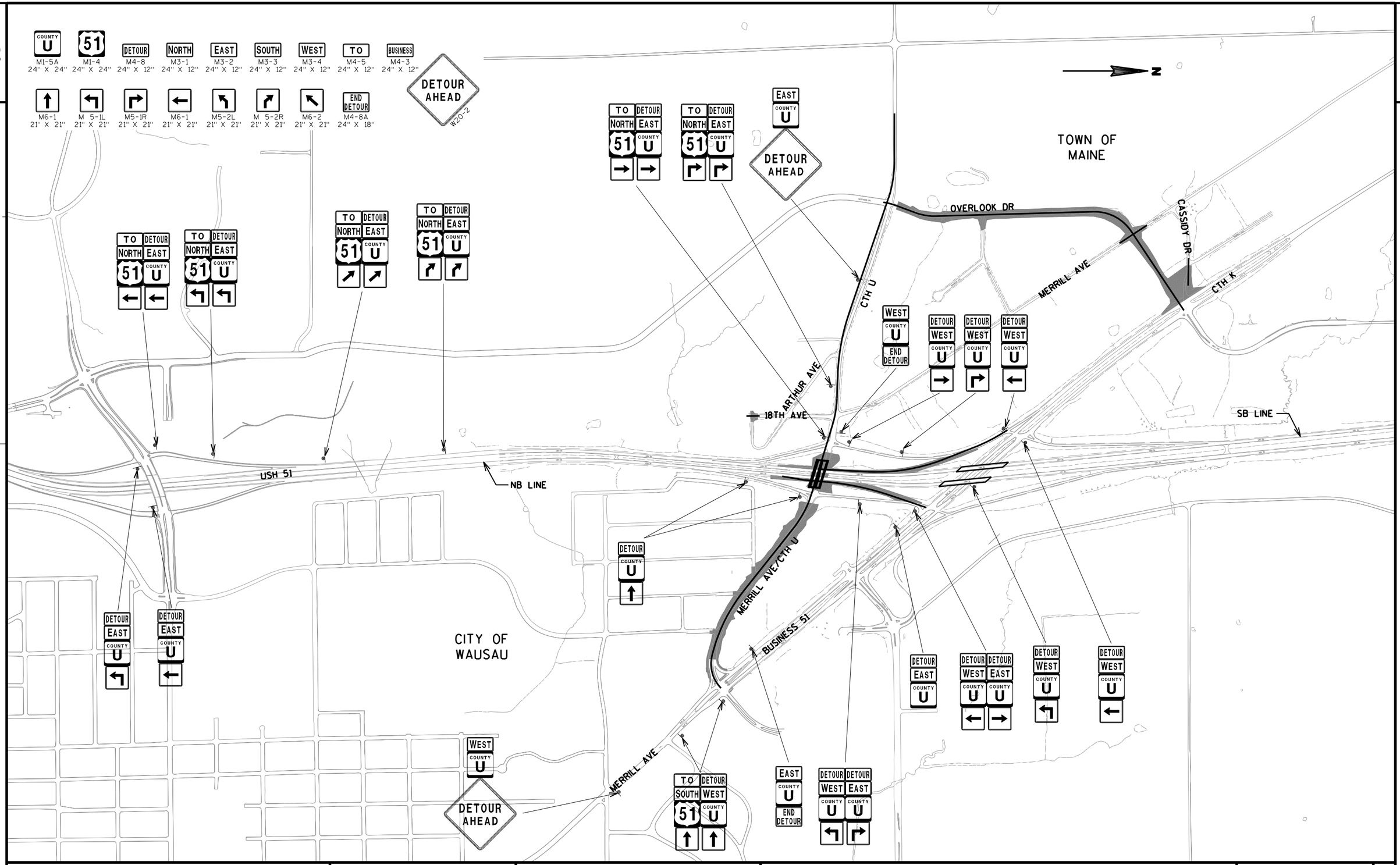


- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C WARNING LIGHT
- TYPE III BARACADE WITH SIGN
- POST MOUNTED SIGN OR TEMPORARY SIGN SUPPORT
- FLASHING ARROW BOARD
- TRAFFIC FLOW ARROW

NOTES:
FOR ADDITIONAL DETAIL SEE S.D.D. "TRAFFIC CONTROL, LANE CLOSURE, SPEEDS GREATER THAN 40 M.P.H."

REMOVAL OF PAVEMENT MARKINGS AND TEMPORARY PAVEMENT MARKINGS SHALL NOT BE USED BECAUSE DETOUR IS TO BE IN PLACE FOR LESS THAN 10 HOURS AT ANY TIME.

PROJECT NO: 1170-01-71	HWY: USH 51	COUNTY: MARATHON	DETOUR PLAN - STAGE 1 (NIGHTTIME CLOSURE OF USH 51)	SHEET 505	E



PROJECT NO: 1170-01-70/71/73 & 6999-18-70	HWY: USH 51	COUNTY: MARATHON	DETOUR - STAGE 1	SHEET	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\027011_dt.dgn PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:800

WISDOT/CADDS SHEET 42

2

COUNTY U M1-5A 24" X 24"
51 M1-4 24" X 24"
DETOUR M4-8 24" X 12"
NORTH M3-1 24" X 12"
EAST M3-2 24" X 12"
SOUTH M3-3 24" X 12"
WEST M3-4 24" X 12"
TO M4-5 24" X 12"
BUSINESS M4-3 24" X 12"

M6-1 21" X 21"
M 5-1L 21" X 21"
M5-1R 21" X 21"
M6-1 21" X 21"
M5-2L 21" X 21"
M 5-2R 21" X 21"
M6-2 21" X 21"
END DETOUR M4-8A 24" X 18"

DETOUR AHEAD W20-2
ROAD CLOSED AHEAD W20-3

SEE S.D.D. "TRAFFIC CONTROL, LANE CLOSURE, SPEEDS GREATER THAN 40 M.P.H." FOR ADDITIONAL DETAILS.

TOWN OF MAINE

OVERLOOK DR
CASSIDY DR
MERRILL AVE
CTH K
CTH U
ARTHUR AVE
18TH AVE
SB LINE
NB LINE
USH 51
MERRILL AVE/CTH U
BUSINESS 51
MERRILL AVE

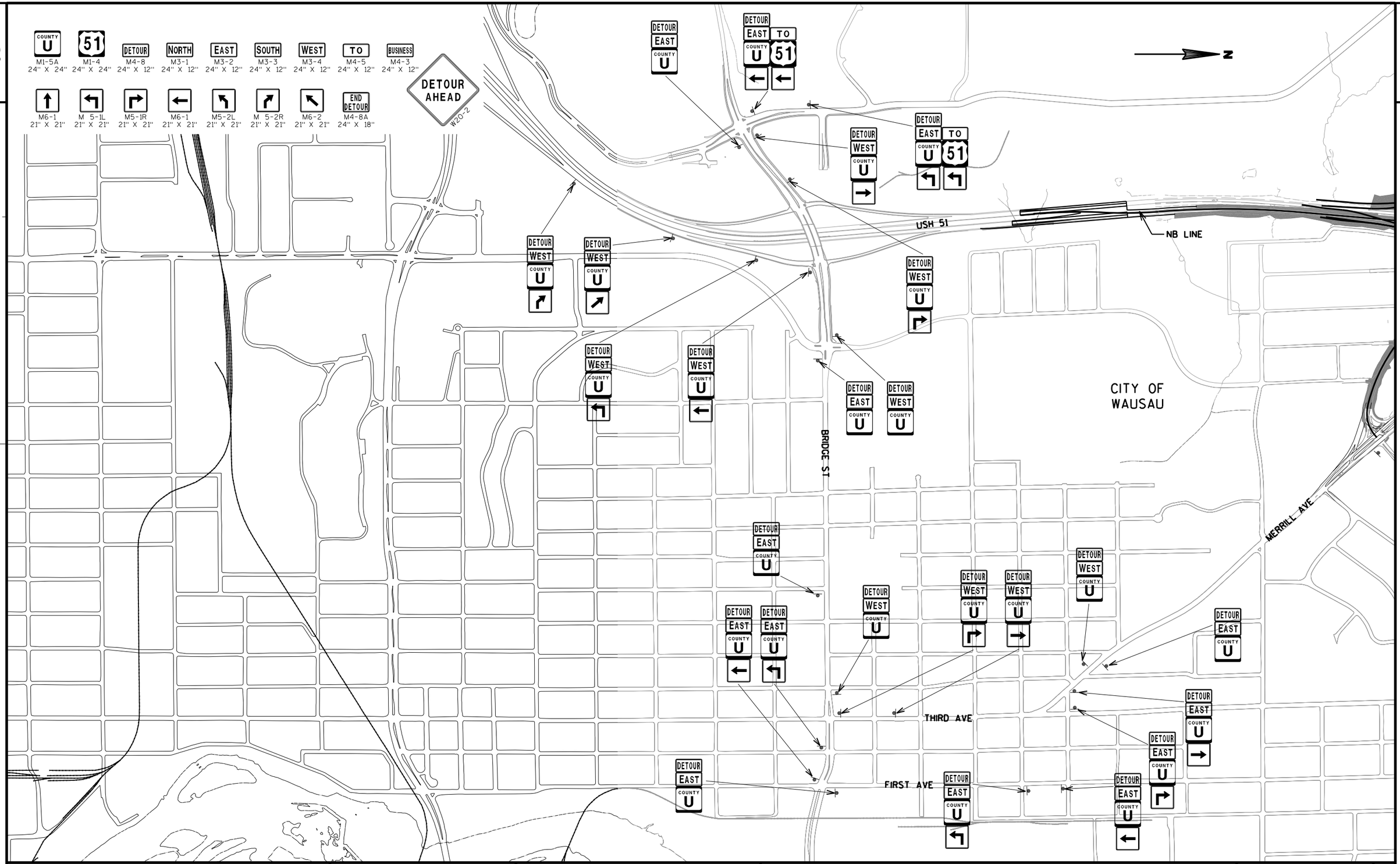
CITY OF WAUSAU

SOUTH 51 END DETOUR

51 ROAD CLOSED AHEAD
51 DETOUR AHEAD
EAST COUNTY U DETOUR AHEAD
WEST COUNTY U END DETOUR
NORTH 51 END DETOUR
WEST COUNTY U DETOUR AHEAD
EAST COUNTY U END DETOUR

PROJECT NO: 1170-01-70/71/73 & 6999-18-70	HWY: USH 51	COUNTY: MARATHON	DETOUR - STAGE 1 (NIGHTTIME CLOSURE OF USH 51)	SHEET	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\027012_dt.dgn PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:800
WISDOT/CADDS SHEET 42



PROJECT NO: 1170-01-70/71/73 & 6999-18-70	HWY: USH 51	COUNTY: MARATHON	DETOUR - STAGE 2A	SHEET	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\027021_dt.dgn PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:800

2

2

M1-5A 24" X 24"
M1-4 24" X 24"
M4-8 24" X 12"
M3-1 24" X 12"
M3-2 24" X 12"
M3-3 24" X 12"
M3-4 24" X 12"
M4-5 24" X 12"
M4-3 24" X 12"
M6-1 21" X 21"
M 5-1L 21" X 21"
M5-1R 21" X 21"
M6-1 21" X 21"
M5-2L 21" X 21"
M 5-2R 21" X 21"
M6-2 21" X 21"
M4-8A 24" X 18"
W20-2

TOWN OF MAINE

CITY OF WAUSAU

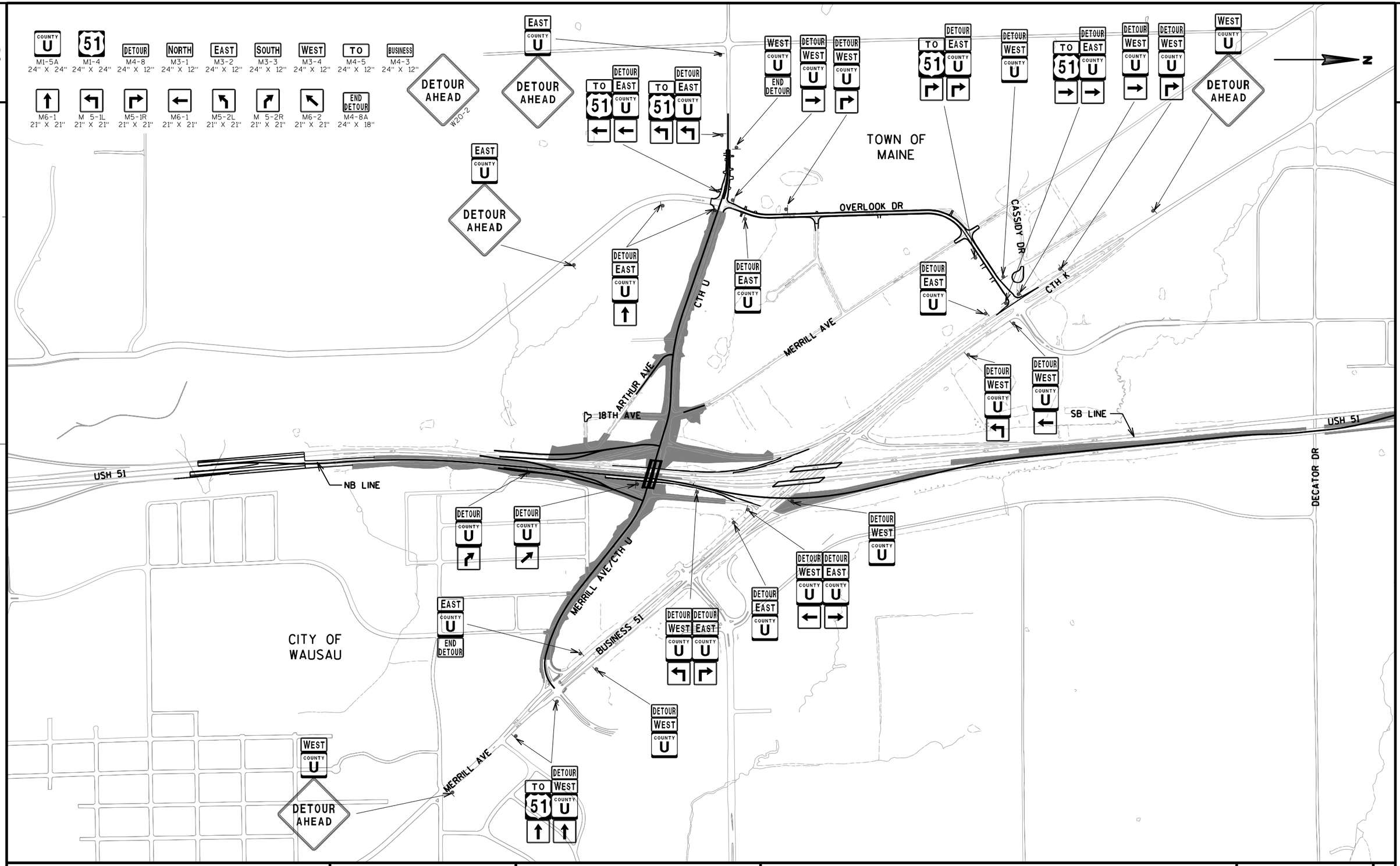
OVERLOOK DR
CASSIDY DR
CTH K
CTH U
MERRILL AVE
ARTHUR AVE
18TH AVE
USH 51
NB LINE
SB LINE
MERRILL AVE/CTH U
BUSINESS 51
DECATOR DR

N

PROJECT NO: 1170-01-70/71/73 & 6999-18-70	HWY: USH 51	COUNTY: MARATHON	DETOUR - STAGE 2A	SHEET 509	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\027022_dt.dgn PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:800

WISDOT/CADDS SHEET 42



PROJECT NO: 1170-01-70/71/73 & 6999-18-70	HWY: USH 51	COUNTY: MARATHON	DETOUR - STAGE 2B	SHEET 510	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\027023_dt.dgn PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:800

2

COUNTY U M1-5A 24" X 24"
51 M1-4 24" X 24"
DETOUR M4-8 24" X 12"
NORTH M3-1 24" X 12"
EAST M3-2 24" X 12"
SOUTH M3-3 24" X 12"
WEST M3-4 24" X 12"
TO M4-5 24" X 12"
BUSINESS M4-3 24" X 12"

M6-1 21" X 21"
M 5-1L 21" X 21"
M5-1R 21" X 21"
M6-1 21" X 21"
M5-2L 21" X 21"
M 5-2R 21" X 21"
M6-2 21" X 21"
END DETOUR M4-8A 24" X 18"

DETOUR AHEAD W20-2

N

TOWN OF MAINE

OVERLOOK DR

CASSIDY DR

C/TH K

C/TH U

MERRILL AVE

ARTHUR AVE

18TH AVE

COUNTY K END DETOUR

SB LINE

USH 51

DECATOR DR

NB LINE

USH 51

BUSINESS 51 COUNTY K

DETOUR AHEAD

DETOUR BUSINESS 51 COUNTY K

CITY OF WAUSAU

MERRILL AVE/C/TH U

BUSINESS 51

DETOUR COUNTY K

MERRILL AVE

BUSINESS 51 COUNTY K END DETOUR

2

PROJECT NO: 1170-01-70/71/73 & 6999-18-70	HWY: USH 51	COUNTY: MARATHON	DETOUR - STAGES 3A & 3B (WINTER SHUTDOWN)	SHEET 511	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\027031_dt.dgn PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:800

WISDOT/CADDS SHEET 42

2

COUNTY U M1-5A 24" X 24"
51 M1-4 24" X 24"
DETOUR M4-8 24" X 12"
NORTH M3-1 24" X 12"
EAST M3-2 24" X 12"
SOUTH M3-3 24" X 12"
WEST M3-4 24" X 12"
TO M4-5 24" X 12"
BUSINESS M4-3 24" X 12"

M6-1 21" X 21"
M 5-1L 21" X 21"
M5-1R 21" X 21"
M6-1 21" X 21"
M5-2L 21" X 21"
M 5-2R 21" X 21"
M6-2 21" X 21"
END DETOUR M4-8A 24" X 18"

DETOUR AHEAD W20-2
ROAD CLOSED AHEAD W20-3

TOWN OF MAINE
CITY OF WAUSAU

OVERLOOK DR
CASSIDY DR
CTH U
MERRILL AVE
ARTHUR AVE
18TH AVE
MERRILL AVE/CTH U
BUSINESS 51
USH 51
DECATOR DR
CTH K

2

M1-5A 24" X 24" · M1-4 24" X 24" · M4-8 24" X 12" · M3-1 24" X 12" · M3-2 24" X 12" · M3-3 24" X 12" · M3-4 24" X 12" · M4-5 24" X 12" · M4-3 24" X 12"

M6-1 21" X 21" · M 5-1L 21" X 21" · M5-1R 21" X 21" · M6-1 21" X 21" · M5-2L 21" X 21" · M 5-2R 21" X 21" · M6-2 21" X 21" · M4-8A 24" X 18"

DETOUR AHEAD W20-2

EXISTING SIGNS AT CTH WW DIRECT TRAFFIC TO USH 51.

TOWN OF MAINE

CITY OF WAUSAU

OVERLOOK DR

CASSIDY DR

CTH U

MERRILL AVE

18TH ARTHUR AVE

MERRILL AVE/CTH U

BUSINESS 51

USH 51

DECATOR DR

PROJECT NO: 1170-01-70/71/73 & 6999-18-70	HWY: USH 51	COUNTY: MARATHON	DETOUR - STAGE 6C	SHEET 513	E

2

2

N

NORTHBOUND & SOUTHBOUND STAGE 1, 2, 3, & 4
SEE ALTERNATE ROUTE SHEET 4

CTH WW

CTH K

N 32ND AVE

US 51

FALCON DR

EMERY DR

MERRILL AVE

DECATOR DR

WAUSAU

N 28TH AVE

OVERLOOK DR

CTH U

N 20TH AVE

NORTHBOUND & SOUTHBOUND STAGE 3 & 4
SEE ALTERNATE ROUTE SHEET 3

WEST WAUSAU AVE

W CAMPUS DR

BUS 51

MERRILL AVE

W RANDOLPH ST

NORTHBOUND & SOUTHBOUND STAGE 1& 2
SEE ALTERNATE ROUTE SHEETS 1& 2

W UNION AVE

N 3RD AVE

N 1ST AVE

BRIDGE ST

N 17TH AVE

PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	ALTERNATE ROUTE LAYOUT	SHEET 514	E

FILE NAME : P:\44xx\4448\Plan\Traffic Control\em_027001_dt.dgn PLOT DATE : 7/30/2012 PLOT BY : walkup PLOT NAME : PLOT SCALE : 1:200

WISDOT/CADDS SHEET 42

101

JCT
M2-1
30" X 21"
ALTERNATE
M4-1
36" X 18"
51
M1-4
36" X 36"

EXIT 193
Bridge St
3/4 MILE

102

ALTERNATE
M4-1
36" X 18"
NORTH
M3-1
36" X 18"
51
M1-4
36" X 36"
M5-2R
30" X 30"

NORTH
51

103

ALTERNATE
M4-1
36" X 18"
NORTH
M3-1
36" X 18"
51
M1-4
36" X 36"
M5-2R
30" X 30"

EXIT 193
Bridge St
EXIT ONLY

104

ALTERNATE
M4-1
36" X 18"
NORTH
M3-1
36" X 18"
51
M1-4
36" X 36"
M6-2
30" X 30"

EXIT 193
Bridge St
EXIT ONLY

105

ALTERNATE
M4-1
24" X 12"
NORTH
M3-1
24" X 12"
51
M1-4
24" X 24"
M5-1R
21" X 21"

106

ALTERNATE
M4-1
24" X 12"
NORTH
M3-1
24" X 12"
51
M1-4
24" X 24"
M6-1
21" X 21"

107

ALTERNATE
M4-1
24" X 12"
NORTH
M3-1
24" X 12"
51
M1-4
24" X 24"

108

ALTERNATE
M4-1
24" X 12"
NORTH
M3-1
24" X 12"
51
M1-4
24" X 24"
M5-1L
21" X 21"

109

ALTERNATE
M4-1
24" X 12"
NORTH
M3-1
24" X 12"
51
M1-4
24" X 24"
M6-1
21" X 21"

110

ALTERNATE
M4-1
24" X 12"
NORTH
M3-1
24" X 12"
51
M1-4
24" X 24"

NORTH
BUSINESS
51

111

ALTERNATE
M4-1
24" X 12"
NORTH
M3-1
24" X 12"
51
M1-4
24" X 24"
M5-1L
21" X 21"

NORTH
BUSINESS
51

112

ALTERNATE
M4-1
24" X 12"
NORTH
M3-1
24" X 12"
51
M1-4
24" X 24"
M6-1
21" X 21"

NORTH
BUSINESS
51

113

ALTERNATE
M4-1
24" X 12"
NORTH
M3-1
24" X 12"
51
M1-4
24" X 24"
M5-1R
21" X 21"

NORTH
BUSINESS
51

114

ALTERNATE
M4-1
24" X 12"
NORTH
M3-1
24" X 12"
51
M1-4
24" X 24"
M6-1
21" X 21"

NORTH
BUSINESS
51

115

ALTERNATE
M4-1
24" X 12"
NORTH
M3-1
24" X 12"
51
M1-4
24" X 24"

NORTH
BUSINESS
51

116

ALTERNATE
M4-1
24" X 12"
NORTH
M3-1
24" X 12"
51
M1-4
24" X 24"

NORTH
BUSINESS
51

117

ALTERNATE
M4-1
24" X 12"
NORTH
M3-1
24" X 12"
51
M1-4
24" X 24"

NORTH
BUSINESS
51

118

ALTERNATE
M4-1
36" X 18"
NORTH
M3-1
36" X 18"
51
M1-4
36" X 36"
M6-1
30" X 30"

SOUTH
51
TRUCK ROUTE

NORTH
COUNTY
K

NORTH
51

119

ALTERNATE
M4-1
36" X 18"
NORTH
M3-1
36" X 18"
51
M1-4
36" X 36"
M6-7R
30" X 30"

NORTH
51

120

ALTERNATE
M4-1
36" X 18"
NORTH
M3-1
36" X 18"
51
M1-4
36" X 36"
M6-1
30" X 30"

SOUTH
51

COUNTY
K

121

ALTERNATE
M4-1
36" X 18"
NORTH
M3-1
36" X 18"
51
M1-4
36" X 36"

NORTH
COUNTY
K

122

ALTERNATE
M4-1
24" X 12"
SOUTH
M3-3
24" X 12"
51
M1-4
24" X 24"
M6-1
21" X 21"

ALTERNATE
M4-1
24" X 12"
NORTH
M3-1
24" X 12"
51
M1-4
24" X 24"
M5-1R
21" X 21"

123

ALTERNATE
M4-1
24" X 12"
SOUTH
M3-3
24" X 12"
51
M1-4
24" X 24"
M6-1
21" X 21"

ALTERNATE
M4-1
24" X 12"
NORTH
M3-1
24" X 12"
51
M1-4
24" X 24"
M6-1
21" X 21"

124

ALTERNATE
M4-1
24" X 12"
SOUTH
M3-3
24" X 12"
51
M1-4
24" X 24"
M5-1L
21" X 21"

ALTERNATE
M4-1
24" X 12"
NORTH
M3-1
24" X 12"
51
M1-4
24" X 24"
M6-1
21" X 21"

125

ALTERNATE
M4-1
24" X 12"
SOUTH
M3-3
24" X 12"
51
M1-4
24" X 24"
M6-1
21" X 21"

ALTERNATE
M4-1
24" X 12"
NORTH
M3-1
24" X 12"
51
M1-4
24" X 24"
M6-1
21" X 21"

126

JCT
M2-1
21" X 15"
ALTERNATE
M4-1
24" X 12"
51
M1-4
24" X 24"

JCT
51

127

ALTERNATE
M4-1
24" X 12"
NORTH
M3-1
24" X 12"
51
M1-4
24" X 24"
M6-1
21" X 21"

ALTERNATE
M4-1
24" X 12"
SOUTH
M3-3
24" X 12"
51
M1-4
24" X 24"
M5-1R
21" X 21"

NORTH
51

SOUTH
51

128

ALTERNATE
M4-1
24" X 12"
NORTH
M3-1
24" X 12"
51
M1-4
24" X 24"
M6-1
21" X 21"

ALTERNATE
M4-1
24" X 12"
SOUTH
M3-3
24" X 12"
51
M1-4
24" X 24"
M5-1R
21" X 21"

NORTH
51

129

ALTERNATE
M4-1
24" X 12"
NORTH
M3-1
24" X 12"
51
M1-4
24" X 24"
M6-1
21" X 21"

ALTERNATE
M4-1
24" X 12"
SOUTH
M3-3
24" X 12"
51
M1-4
24" X 24"
M6-1
21" X 21"

SOUTH
51

130

ALTERNATE
M4-1
24" X 12"
NORTH
M3-1
24" X 12"
51
M1-4
24" X 24"
M6-1
21" X 21"

NORTH
51

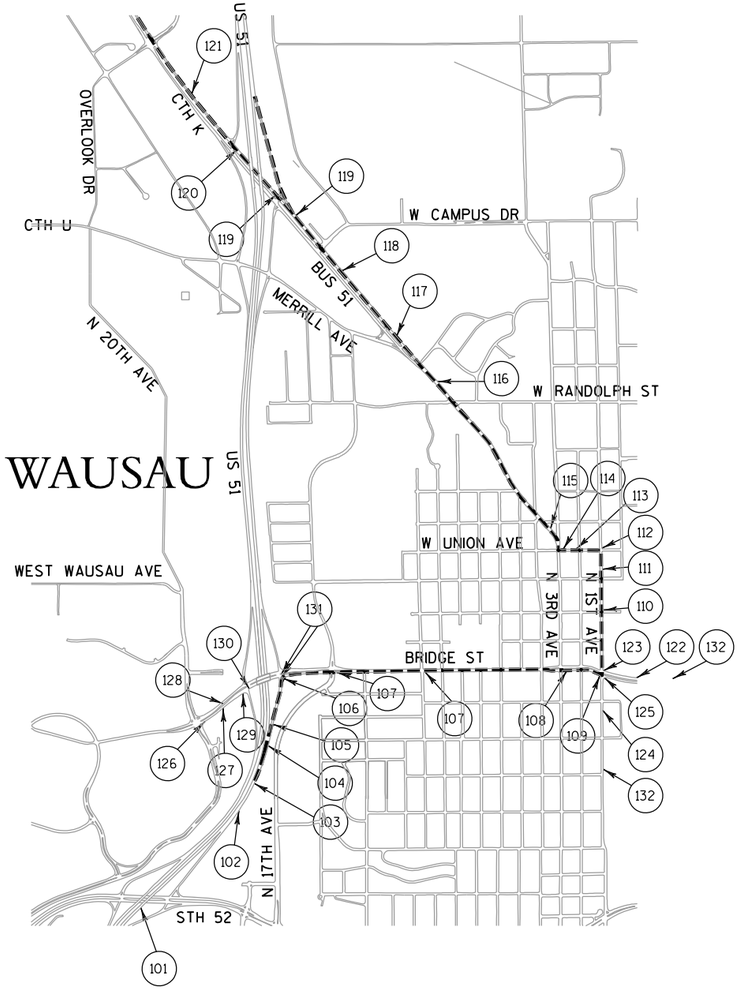
131

ALTERNATE
M4-1
24" X 12"
NORTH
M3-1
24" X 12"
51
M1-4
24" X 24"
M6-1
21" X 21"

NORTH
51

132

JCT
M2-1
21" X 15"
ALTERNATE
M4-1
24" X 12"
51
M1-4
24" X 24"



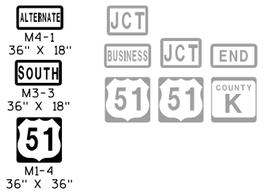
SHEET 1 OF 4

PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	ALTERNATE ROUTE - NORTHBOUND STAGE 1 & 2	SHEET 515	E

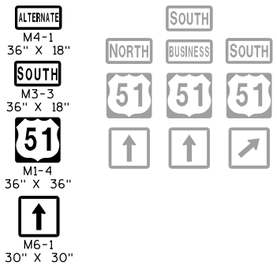
FILE NAME : P:\44xx\4448\Plan\Traffic Control\em_027002_dt.dgn PLOT DATE : 7/30/2012 PLOT BY : walkup PLOT NAME : PLOT SCALE : 1:200

WISDOT/CADDS SHEET 42

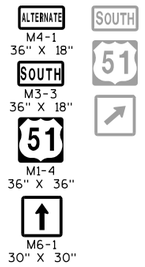
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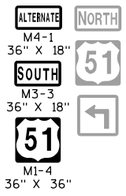
202



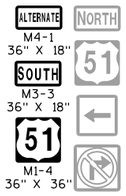
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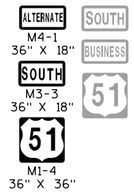
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205



206



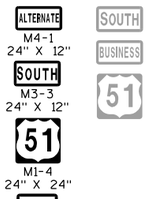
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208



209



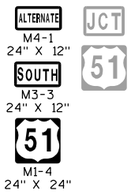
210



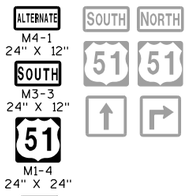
211



212



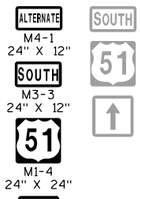
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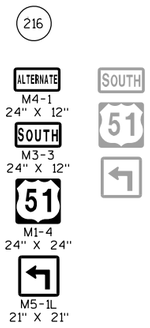
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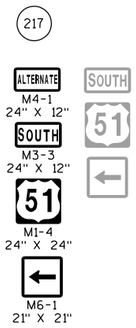
215



216

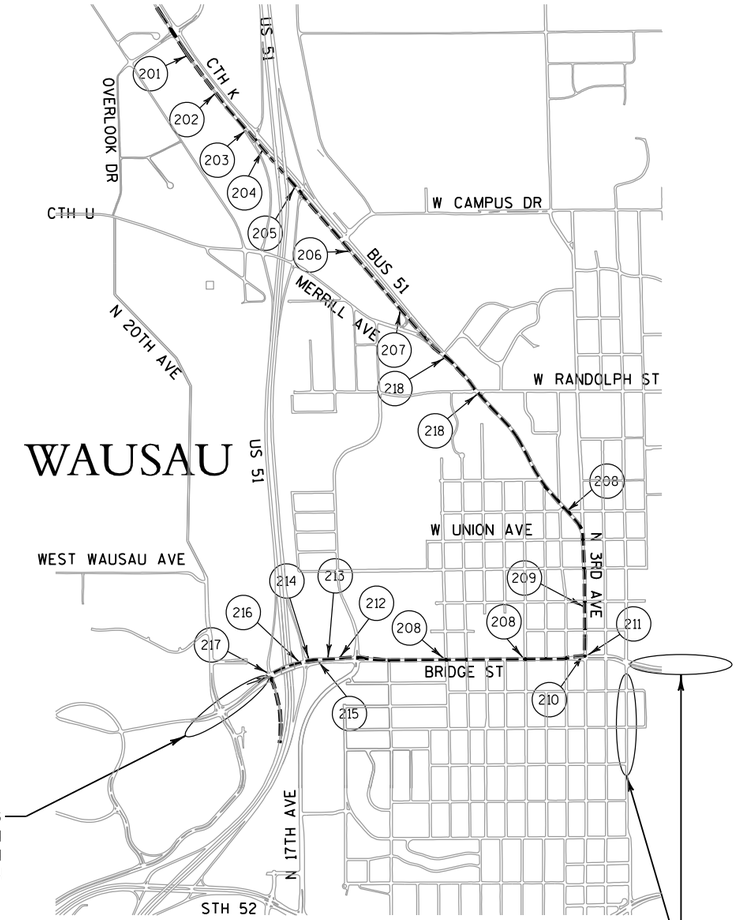


217



218





SOUTHBOUND ALTERNATE ROUTE SIGNING EAST OF N 20TH AVENUE IS SHOWN ON NORTHBOUND STAGE 1 & 2 PLAN SEE SHEET 1 OF 4

SOUTHBOUND ALTERNATE ROUTE SIGNING SOUTH OF BRIDGE STREET AND EAST OF N 1ST AVENUE IS SHOWN ON NORTHBOUND STAGE 1 & 2 PLAN. SEE SHEET 1 OF 4

PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	ALTERNATE ROUTE - SOUTHBOUND STAGE 1 & 2	SHEET 516	E

FILE NAME : P:\44xx\4448\Plan\Traffic Control\em_027003_dt.dgn
PLOT DATE : 7/30/2012
PLOT BY : walkup
PLOT NAME :
PLOT SCALE : 1:200
WISDOT/CADDS SHEET 42

2

301

JCT
M2-1
30" X 21"
ALTERNATE
M4-1
36" X 18"
51
M1-4
36" X 36"

EXIT 193
Bridge St
3/4 MILE

302

ALTERNATE
M4-1
36" X 18"
NORTH
M3-1
36" X 18"
51
M1-4
36" X 36"
M5-2R
30" X 30"

NORTH
51

303

ALTERNATE
M4-1
36" X 18"
NORTH
M3-1
36" X 18"
51
M1-4
36" X 36"
M5-2R
30" X 30"

EXIT 193
Bridge St
EXIT ONLY

304

ALTERNATE
M4-1
36" X 18"
NORTH
M3-1
36" X 18"
51
M1-4
36" X 36"
M6-2
30" X 30"

EXIT 193
Bridge St
EXIT ONLY

305

ALTERNATE
M4-1
24" X 12"
NORTH
M3-1
24" X 12"
51
M1-4
24" X 24"
M5-1L
21" X 21"

306

ALTERNATE
M4-1
24" X 12"
NORTH
M3-1
24" X 12"
51
M1-4
24" X 24"
M6-1
21" X 21"

307

JCT
M2-1
21" X 15"
ALTERNATE
M4-1
24" X 12"
51
M1-4
24" X 24"

JCT
51

308

ALTERNATE
M4-1
24" X 12"
NORTH
M3-1
24" X 12"
51
M1-4
24" X 24"
M6-1
21" X 21"

ALTERNATE
M4-1
24" X 12"
SOUTH
M3-3
24" X 12"
51
M1-4
24" X 24"
M6-1
21" X 21"

SOUTH
51

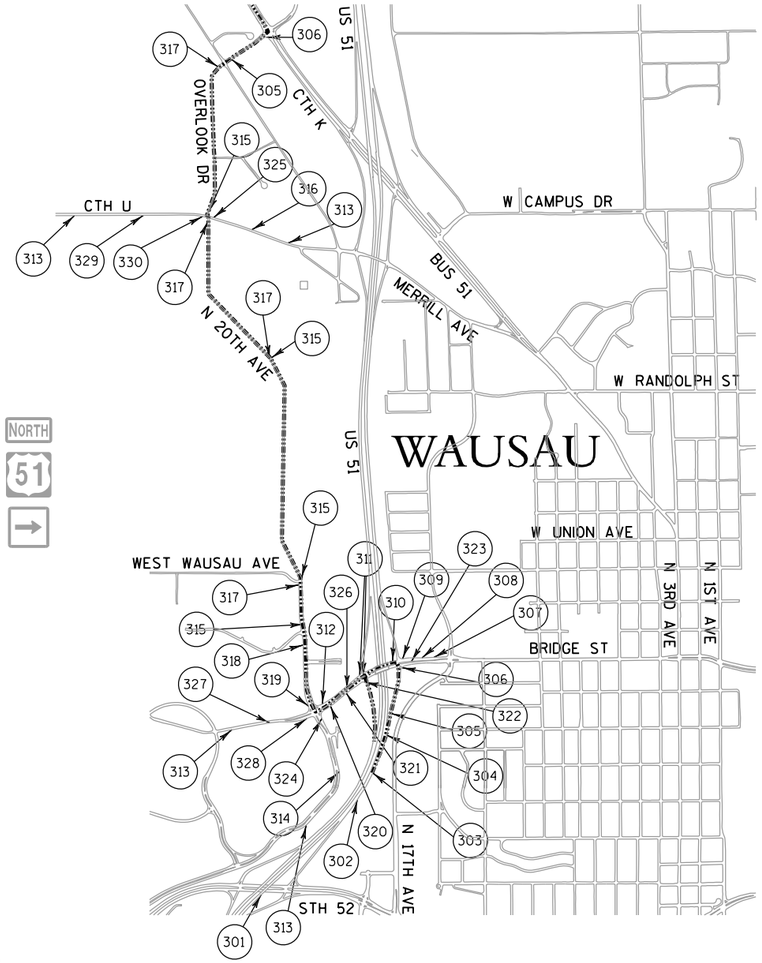
NORTH
51

309

ALTERNATE
M4-1
24" X 12"
NORTH
M3-1
24" X 12"
51
M1-4
24" X 24"
M6-1
21" X 21"

ALTERNATE
M4-1
24" X 12"
SOUTH
M3-3
24" X 12"
51
M1-4
24" X 24"
M6-1
21" X 21"

NORTH
51



310

ALTERNATE
M4-1
24" X 12"
SOUTH
M3-3
24" X 12"
51
M1-4
24" X 24"
M5-1L
21" X 21"

ALTERNATE
M4-1
24" X 12"
NORTH
M3-1
24" X 12"
51
M1-4
24" X 24"
M6-1
21" X 21"

311

ALTERNATE
M4-1
24" X 12"
SOUTH
M3-3
24" X 12"
51
M1-4
24" X 24"
M6-1
21" X 21"

ALTERNATE
M4-1
24" X 12"
NORTH
M3-1
24" X 12"
51
M1-4
24" X 24"
M5-1R
21" X 21"

SOUTH
51

312

ALTERNATE
M4-1
24" X 12"
NORTH
M3-1
24" X 12"
51
M1-4
24" X 24"
M6-1
21" X 21"

313

JCT
M2-1
21" X 15"
ALTERNATE
M4-1
24" X 12"
51
M1-4
24" X 24"

314

ALTERNATE
M4-1
24" X 12"
NORTH
M3-1
24" X 12"
51
M1-4
24" X 24"
M6-1
21" X 21"

ALTERNATE
M4-1
24" X 12"
SOUTH
M3-3
24" X 12"
51
M1-4
24" X 24"
M5-1R
21" X 21"

315

ALTERNATE
M4-1
24" X 12"
NORTH
M3-1
24" X 12"
51
M1-4
24" X 24"

316

ALTERNATE
M4-1
24" X 12"
SOUTH
M3-3
24" X 12"
51
M1-4
24" X 24"
M5-1L
21" X 21"

ALTERNATE
M4-1
24" X 12"
NORTH
M3-1
24" X 12"
51
M1-4
24" X 24"
M5-1R
21" X 21"

317

ALTERNATE
M4-1
24" X 12"
SOUTH
M3-3
24" X 12"
51
M1-4
24" X 24"

318

ALTERNATE
M4-1
24" X 12"
SOUTH
M3-3
24" X 12"
51
M1-4
24" X 24"
M5-1L
21" X 21"

319

ALTERNATE
M4-1
24" X 12"
SOUTH
M3-3
24" X 12"
51
M1-4
24" X 24"
M6-1
21" X 21"

320

ALTERNATE
M4-1
24" X 12"
SOUTH
M3-3
24" X 12"
51
M1-4
24" X 24"
M6-1
21" X 21"

JCT
51

321

ALTERNATE
M4-1
24" X 12"
SOUTH
M3-3
24" X 12"
51
M1-4
24" X 24"
M5-1R
21" X 21"

NORTH
51

SOUTH
51

322

ALTERNATE
M4-1
24" X 12"
SOUTH
M3-3
24" X 12"
51
M1-4
24" X 24"
M6-1
21" X 21"

SOUTH
51

323

ALTERNATE
M4-1
24" X 12"
SOUTH
M3-3
24" X 12"
51
M1-4
24" X 24"
M6-1
21" X 21"

SOUTH
51

324

ALTERNATE
M4-1
24" X 12"
NORTH
M3-1
24" X 12"
51
M1-4
24" X 24"
M6-1
21" X 21"

ALTERNATE
M4-1
24" X 12"
SOUTH
M3-3
24" X 12"
51
M1-4
24" X 24"
M6-1
21" X 21"

325

ALTERNATE
M4-1
24" X 12"
SOUTH
M3-3
24" X 12"
51
M1-4
24" X 24"
M6-1
21" X 21"

ALTERNATE
M4-1
24" X 12"
NORTH
M3-1
24" X 12"
51
M1-4
24" X 24"
M6-1
21" X 21"

326

ALTERNATE
M4-1
24" X 12"
SOUTH
M3-3
24" X 12"
51
M1-4
24" X 24"
M5-1R
21" X 21"

NORTH
51

327

ALTERNATE
M4-1
24" X 12"
NORTH
M3-1
24" X 12"
51
M1-4
24" X 24"
M5-1L
21" X 21"

ALTERNATE
M4-1
24" X 12"
SOUTH
M3-3
24" X 12"
51
M1-4
24" X 24"
M6-1
21" X 21"

328

ALTERNATE
M4-1
24" X 12"
NORTH
M3-1
24" X 12"
51
M1-4
24" X 24"
M6-1
21" X 21"

ALTERNATE
M4-1
24" X 12"
SOUTH
M3-3
24" X 12"
51
M1-4
24" X 24"
M6-1
21" X 21"

329

ALTERNATE
M4-1
24" X 12"
NORTH
M3-1
24" X 12"
51
M1-4
24" X 24"
M5-1L
21" X 21"

ALTERNATE
M4-1
24" X 12"
SOUTH
M3-3
24" X 12"
51
M1-4
24" X 24"
M5-1R
21" X 21"

330

ALTERNATE
M4-1
24" X 12"
NORTH
M3-1
24" X 12"
51
M1-4
24" X 24"
M6-1
21" X 21"

ALTERNATE
M4-1
24" X 12"
SOUTH
M3-3
24" X 12"
51
M1-4
24" X 24"
M6-1
21" X 21"

SHEET 3 OF 4

PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	ALTERNATE ROUTE - NORTHBOUND & SOUTHBOUND STAGE 3 & 4	SHEET 517	E

FILE NAME : P:\44xx\4448\Plan\Traffic Control\em_027004_dt.dgn
PLOT DATE : 7/30/2012
PLOT BY : walkup
PLOT NAME :
PLOT SCALE : 1:200
WISDOT/CADDS SHEET 42

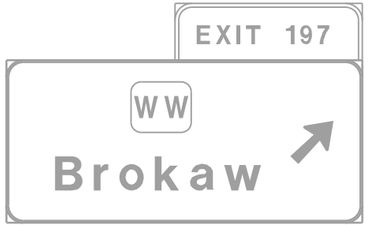
401

JCT
M2-1
30" X 21"
ALTERNATE
M4-1
36" X 18"
51
M1-4
36" X 36"



402

ALTERNATE
M4-1
36" X 18"
SOUTH
M3-3
36" X 18"
51
M1-4
36" X 36"
M6-2
30" X 30"



403

ALTERNATE
M4-1
24" X 12"
SOUTH
M3-3
24" X 12"
51
M1-4
24" X 24"
M5-1R
21" X 21"

EAST
COUNTY
WW

WEST
COUNTY
WW

404

ALTERNATE
M4-1
24" X 12"
SOUTH
M3-3
24" X 12"
51
M1-4
24" X 24"
M6-1
21" X 21"

405

JCT
M2-1
21" X 15"
ALTERNATE
M4-1
24" X 12"
51
M1-4
24" X 24"

JCT
51

406

ALTERNATE
M4-1
24" X 12"
SOUTH
M3-3
24" X 12"
51
M1-4
24" X 24"
M6-1
21" X 21"

ALTERNATE
M4-1
24" X 12"
NORTH
M3-1
24" X 12"
51
M1-4
24" X 24"
M6-1
21" X 21"

SOUTH
51

NORTH
51

407

ALTERNATE
M4-1
24" X 12"
SOUTH
M3-3
24" X 12"
51
M1-4
24" X 24"
M6-1
21" X 21"

SOUTH
51

408

ALTERNATE
M4-1
24" X 12"
SOUTH
M3-3
24" X 12"
51
M1-4
24" X 24"
M6-1
21" X 21"

SOUTH
51

409

ALTERNATE
M4-1
24" X 12"
SOUTH
M3-3
24" X 12"
51
M1-4
24" X 24"

COUNTY
WW

410

ALTERNATE
M4-1
24" X 12"
SOUTH
M3-3
24" X 12"
51
M1-4
24" X 24"

JCT

COUNTY
K

411

ALTERNATE
M4-1
24" X 12"
SOUTH
M3-3
24" X 12"
51
M1-4
24" X 24"
M5-1L
21" X 21"

412

ALTERNATE
M4-1
24" X 12"
SOUTH
M3-3
24" X 12"
51
M1-4
24" X 24"
M6-1
21" X 21"

TO
SOUTH
51

COUNTY
K

COUNTY
WW

END

413

JCT
M2-1
21" X 15"
ALTERNATE
M4-1
24" X 12"
51
M1-4
24" X 24"

JCT

COUNTY
WW

414

ALTERNATE
M4-1
24" X 12"
NORTH
M3-1
24" X 12"
51
M1-4
24" X 24"
M6-1
21" X 21"

415

ALTERNATE
M4-1
24" X 12"
SOUTH
M3-3
24" X 12"
51
M1-4
24" X 24"
M6-1
21" X 21"

ALTERNATE
M4-1
24" X 12"
SOUTH
M3-3
24" X 12"
51
M1-4
24" X 24"

51

416

JCT
M2-1
21" X 15"
ALTERNATE
M4-1
24" X 12"
51
M1-4
24" X 24"

417

ALTERNATE
M4-1
36" X 18"
SOUTH
M3-3
36" X 18"
51
M1-4
36" X 36"
M5-1R
30" X 30"

418

ALTERNATE
M4-1
24" X 12"
SOUTH
M3-3
24" X 12"
51
M1-4
24" X 24"
M6-1
21" X 21"

ALTERNATE
M4-1
24" X 12"
NORTH
M3-1
24" X 12"
51
M1-4
24" X 24"
M6-1
21" X 21"

419

ALTERNATE
M4-1
24" X 12"
SOUTH
M3-3
24" X 12"
51
M1-4
24" X 24"

420

ALTERNATE
M4-1
24" X 12"
SOUTH
M3-3
24" X 12"
51
M1-4
24" X 24"
M6-1
21" X 21"

ALTERNATE
M4-1
24" X 12"
NORTH
M3-1
24" X 12"
51
M1-4
24" X 24"
M5-1R
21" X 21"

421

ALTERNATE
M4-1
24" X 12"
NORTH
M3-1
24" X 12"
51
M1-4
24" X 24"
M5-1L
21" X 21"

ALTERNATE
M4-1
24" X 12"
SOUTH
M3-3
24" X 12"
51
M1-4
24" X 24"
M6-1
21" X 21"

422

ALTERNATE
M4-1
24" X 12"
NORTH
M3-1
24" X 12"
51
M1-4
24" X 24"

JCT

COUNTY
WW

423

ALTERNATE
M4-1
24" X 12"
NORTH
M3-1
24" X 12"
51
M1-4
24" X 24"
M5-1R
21" X 21"

TO
NORTH
51

424

ALTERNATE
M4-1
24" X 12"
NORTH
M3-1
24" X 12"
51
M1-4
24" X 24"
M6-1
21" X 21"

51

COUNTY
WW

425

ALTERNATE
M4-1
24" X 12"
NORTH
M3-1
24" X 12"
51
M1-4
24" X 24"

TO
51

426

ALTERNATE
M4-1
24" X 12"
NORTH
M3-1
24" X 12"
51
M1-4
24" X 24"

JCT
51

427

ALTERNATE
M4-1
24" X 12"
NORTH
M3-1
24" X 12"
51
M1-4
24" X 24"
M6-1
21" X 21"

NORTH
51

SOUTH
51

428

ALTERNATE
M4-1
24" X 12"
NORTH
M3-1
24" X 12"
51
M1-4
24" X 24"
M6-1
21" X 21"

COUNTY
WW

429

ALTERNATE
M4-1
24" X 12"
NORTH
M3-1
24" X 12"
51
M1-4
24" X 24"
M5-1L
21" X 21"

NORTH
51

430

ALTERNATE
M4-1
24" X 12"
NORTH
M3-1
24" X 12"
51
M1-4
24" X 24"
M6-1
21" X 21"

NORTH
51

431

ALTERNATE
M4-1
24" X 12"
NORTH
M3-1
24" X 12"
51
M1-4
24" X 24"

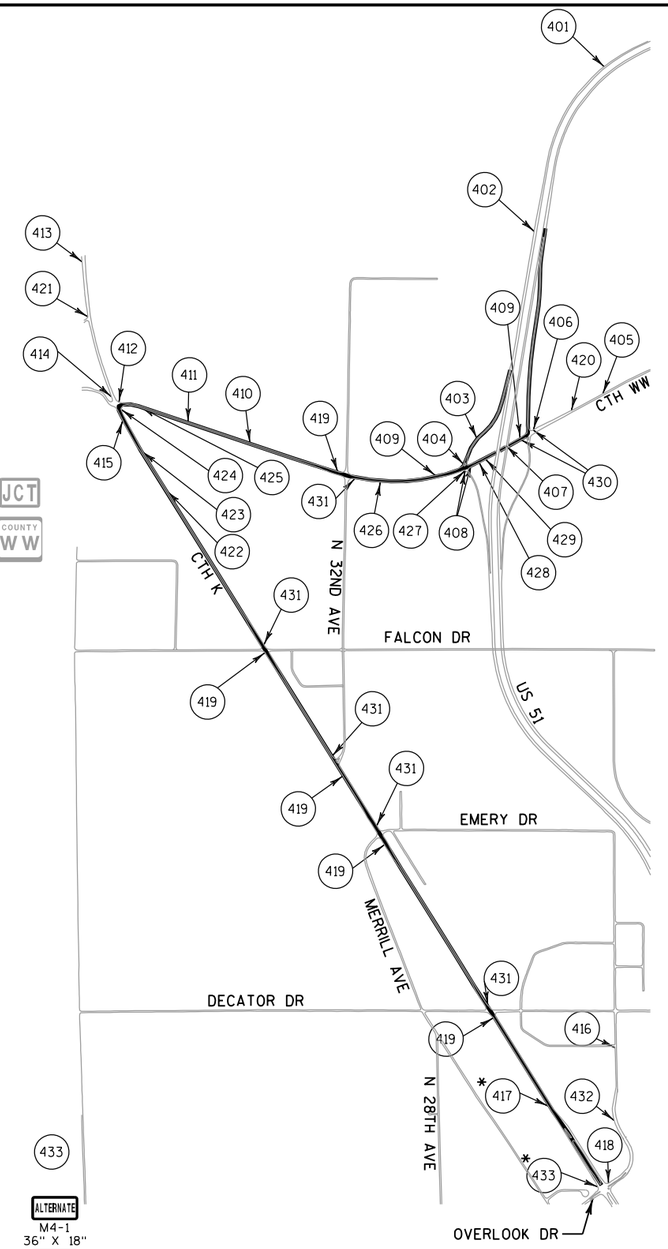
432

ALTERNATE
M4-1
24" X 12"
SOUTH
M3-3
24" X 12"
51
M1-4
24" X 24"
M5-1L
21" X 21"

ALTERNATE
M4-1
24" X 12"
NORTH
M3-1
24" X 12"
51
M1-4
24" X 24"
M5-1R
21" X 21"

433

ALTERNATE
M4-1
36" X 18"
SOUTH
M3-3
36" X 18"
51
M1-4
36" X 36"
M6-1
30" X 30"



NOTE

* SIGNS 417 AND 433 ARE FOR STAGES 3 AND 4 ONLY.

SHEET 4 OF 4

PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	ALTERNATE ROUTE - NORTHBOUND & SOUTHBOUND STAGE 1, 2, 3, 4	SHEET 518	E

2

USH 51 NORTHBOUND (NB)

Station	Type	Left	Right
721+39.57	End NC	-0.020000	-0.020000
722+29.97	Zero Super	0.000000	-0.020000
723+20.37	Rev. Crown	0.020000	-0.020000
723+42.97	Begin FS	0.025000	-0.025000
737+38.58	End FS	0.025000	-0.025000
737+61.18	Rev. Crown	0.020000	-0.020000
738+51.58	Zero Super	0.000000	-0.020000
739+41.98	Begin NC	-0.020000	-0.020000
754+43.70	End NC	-0.020000	-0.020000
755+33.70	Zero Super	-0.020000	0.000000
756+23.70	Rev. Crown	-0.020000	0.020000
757+76.70	Begin FS	-0.054000	0.054000
762+16.67	End FS	-0.054000	0.054000
763+69.67	Rev. Crown	-0.020000	0.020000
764+59.67	Zero Super	-0.020000	0.000000
765+49.67	Begin NC	-0.020000	-0.020000

USH 51 SOUTHBOUND (SB)

Station	Type	Left	Right
721+39.57	End NC	-0.020000	-0.020000
722+29.97	Zero Super	0.000000	-0.020000
723+20.37	Rev. Crown	0.020000	-0.020000
723+42.97	Begin FS	0.025000	-0.025000
737+48.51	End FS	0.025000	-0.025000
737+71.11	Rev. Crown	0.020000	-0.020000
738+61.51	Zero Super	0.000000	-0.020000
739+51.91	Begin NC	-0.020000	-0.020000
752+66.50	End NC	-0.020000	-0.020000
753+56.50	Zero Super	-0.020000	0.000000
754+46.50	Rev. Crown	-0.020000	0.020000
755+99.50	Begin FS	-0.054000	0.054000
760+35.70	End FS	-0.054000	0.054000
761+88.70	Rev. Crown	-0.020000	0.020000
762+78.70	Zero Super	-0.020000	0.000000
763+68.70	Begin NC	-0.020000	-0.020000

A RAMP (A)

Station	Type	Left	Right
753+27.31	Rev. Crown	0.020000	-0.020000
753+43.88	Begin FS	0.028000	-0.028000
757+18.88	End FS	0.028000	-0.028000
761+74.09	Rev. Crown	0.020000	-0.020000

B RAMP (B)

Station	Type	Left	Right
761+70.34	Rev. Crown	-0.020000	0.020000
775+09.52	Zero Super	0.000000	-0.020000
775+63.02	Rev. Crown	0.020000	-0.020000
776+16.52	Begin FS	0.040000	-0.040000
780+80.69	End FS	0.040000	-0.040000
781+34.19	Rev. Crown	0.020000	-0.020000
781+87.69	Zero Super	0.000000	-0.020000
782+41.19	Begin NC	-0.020000	-0.020000

D RAMP (D)

Station	Type	Left	Right
753+03.71	End NC	-0.020000	-0.020000
753+57.05	Zero Super	-0.020000	0.000000
754+10.38	Rev. Crown	-0.020000	0.020000
755+09.05	Begin FS	-0.057000	0.057000
764+93.25	End FS	-0.057000	0.057000
770+92.80	Rev. Crown	-0.020000	0.020000

E RAMP (E)

Station	Type	Left	Right
741+88.84	End NC	-0.020000	-0.020000
742+30.26	Zero Super	0.000000	-0.020000
742+71.69	Rev. Crown	0.020000	-0.020000
742+88.26	Begin FS	0.028000	-0.028000
748+22.31	End FS	0.028000	-0.028000
748+38.88	Rev. Crown	0.020000	-0.020000

F RAMP (F)

Station	Type	Left	Right
738+77.25	End NC	-0.020000	-0.020000
739+30.45	Zero Super	-0.020000	0.000000
739+83.65	Rev. Crown	-0.020000	0.020000
740+63.45	Begin FS	-0.050000	0.050000
745+31.11	End FS	-0.050000	0.050000
746+10.91	Rev. Crown	-0.020000	0.020000

CTH U (U)

Station	Type	Left	Right
19+64.27	End NC	-0.020000	-0.020000
20+05.45	Zero Super	0.000000	-0.020000
20+46.62	Rev. Crown	0.020000	-0.020000
20+75.45	Begin FS	0.034000	-0.034000
23+81.09	End FS	0.034000	-0.034000
24+09.91	Rev. Crown	0.020000	-0.020000
24+50.91	Zero Super	0.000000	-0.020000
24+91.91	Begin NC	-0.020000	-0.020000
25+18.00	End NC	-0.020000	-0.020000
25+59.00	Zero Super	-0.020000	0.000000
26+00.00	Rev. Crown	-0.020000	0.020000
35+01.50	Rev. Crown	-0.020000	0.020000
35+13.96	Begin FS	-0.026000	0.026000
40+50.33	End FS	-0.026000	0.026000
41+45.33	Rev. Crown	0.020000	-0.020000
53+68.00	Rev. Crown	0.020000	-0.020000
54+09.00	Zero Super	0.000000	-0.020000
54+50.00	Begin NC	-0.020000	-0.020000
57+68.00	End NC	-0.020000	-0.020000
58+09.00	Zero Super	-0.020000	0.000000
58+50.00	Rev. Crown	-0.020000	0.020000
62+00.00	Rev. Crown	-0.020000	0.020000
62+41.00	Zero Super	-0.020000	0.000000
62+82.00	Zero Super	0.000000	-0.020000
63+23.00	Rev. Crown	0.020000	-0.020000
67+68.00	Rev. Crown	0.020000	-0.020000
68+09.00	Zero Super	0.000000	-0.020000
68+50.00	Begin NC	-0.020000	-0.020000

OVERLOOK DR (V)

Station	Type	Left	Right
200+09.67	Begin FS	0.056000	-0.056000
200+45.08	End FS	0.056000	-0.056000
203+08.25	Begin FS	-0.056000	0.056000
204+34.80	End FS	-0.056000	0.056000
205+00.37	Rev. Crown	-0.020000	0.020000
205+36.80	Zero Super	-0.020000	0.000000
205+73.22	Begin NC	-0.020000	-0.020000
217+85.18	End NC	-0.020000	-0.020000
218+21.45	Zero Super	0.000000	-0.020000
218+57.73	Rev. Crown	0.020000	-0.020000
219+28.45	Begin FS	0.059000	-0.059000
222+61.79	End FS	0.059000	-0.059000
223+32.51	Rev. Crown	0.020000	-0.020000
223+68.79	Zero Super	0.000000	-0.020000
224+05.06	Begin NC	-0.020000	-0.020000

'NR' LINE (NR)

Station	Type	Left	Right
311+35.18	Zero Super	0.000000	-0.020000
311+86.09	Rev. Crown	0.020000	-0.020000
312+19.18	Begin FS	0.033000	-0.033000
316+98.99	End FS	0.033000	-0.033000
317+55.00	Begin FS	-0.033000	0.033000
322+21.99	End FS	-0.033000	0.033000
322+69.02	Begin FS	0.020000	-0.020000
335+14.16	End FS	0.020000	-0.020000
335+65.16	Zero Super	0.000000	-0.020000
336+16.16	Begin NC	-0.020000	-0.020000
349+22.18	End NC	-0.020000	-0.020000
349+73.09	Zero Super	0.000000	-0.020000
350+24.00	Rev. Crown	0.020000	-0.020000
350+57.09	Begin FS	0.033000	-0.033000
354+69.69	End FS	0.033000	-0.033000
357+80.27	Begin FS	-0.039000	0.039000
370+15.31	End FS	-0.039000	0.039000
370+64.03	Rev. Crown	-0.020000	0.020000
371+15.31	Zero Super	-0.020000	0.000000
371+66.60	Zero Super	0.000000	-0.020000
372+17.88	Rev. Crown	0.020000	-0.020000

'AT' RAMP (AT)

Station	Type	Left	Right
351+16.15	End NC	-0.020000	-0.020000
351+57.58	Zero Super	0.000000	-0.020000
351+99.01	Rev. Crown	0.020000	-0.020000
352+15.58	Begin FS	0.028000	-0.028000
357+66.04	End FS	0.028000	-0.028000
357+82.61	Rev. Crown	0.020000	-0.020000

'DT' RAMP (DT)

Station	Type	Left	Right
355+44.74	End NC	-0.020000	-0.020000
355+98.19	Zero Super	-0.020000	0.000000
356+51.64	Rev. Crown	-0.020000	0.020000
357+53.19	Begin FS	-0.058000	0.058000
362+65.01	End FS	-0.058000	0.058000
366+73.98	Begin FS	-0.060000	0.060000
368+58.26	End FS	-0.060000	0.060000
369+64.92	Rev. Crown	-0.020000	0.020000

P.I. DATA

P.I. 693+63.04 SB
N 205925.55
E 274400.02

CURVE DATA

P.I. 730+47.83 SB
N 209597.54
E 274093.13
△ = 10°32'06"
D = 0°42'41"
T = 742.53'
L = 1480.88'
E = 34.16'
R = 8054.00'
P.C. 723+05.30 SB
P.T. 737+86.18 SB
S.E. 2.5%
L.R. 113.00'
D.S. 70 MPH

CURVE DATA

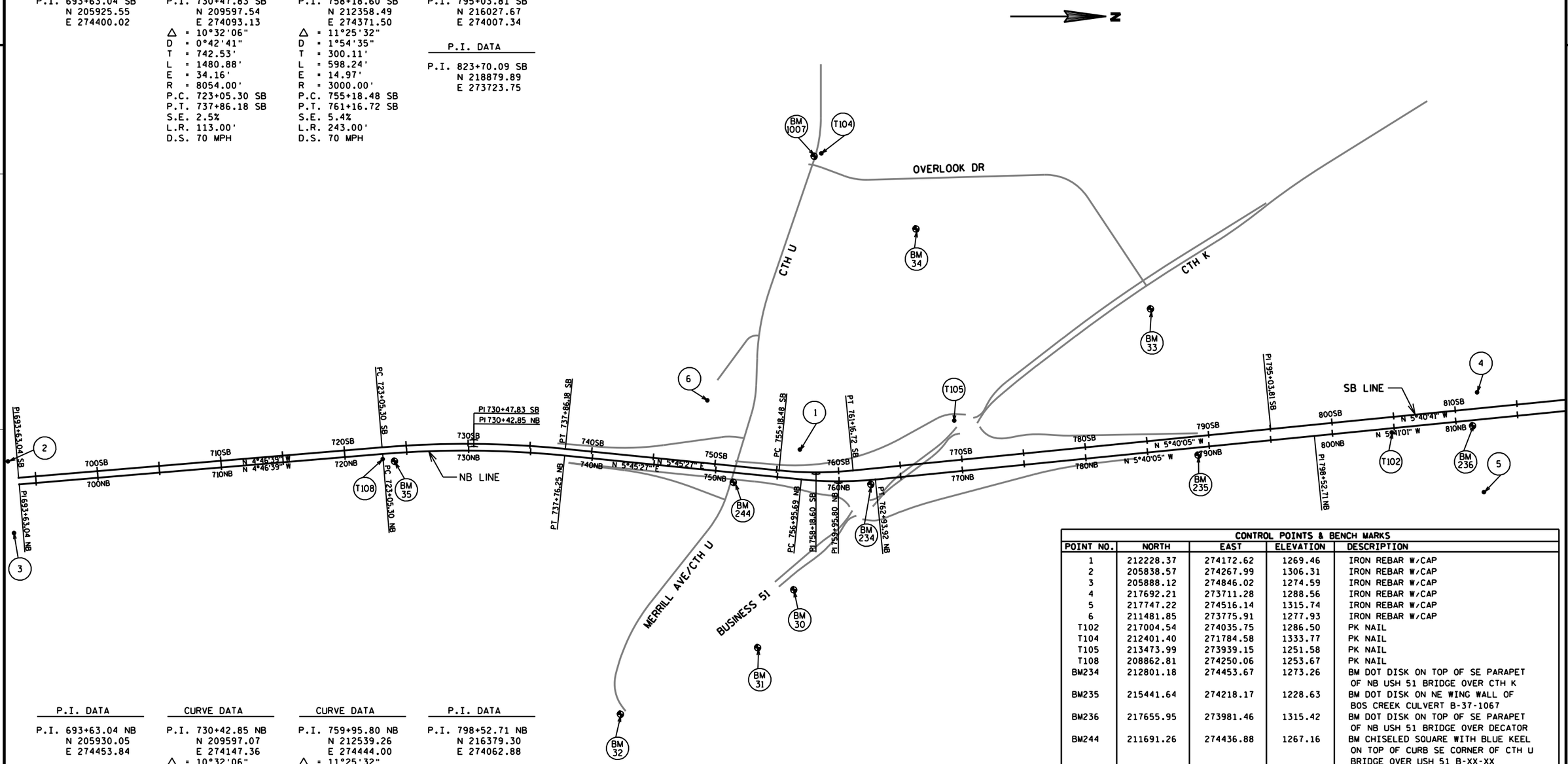
P.I. 758+18.60 SB
N 212358.49
E 274371.50
△ = 11°25'32"
D = 1°54'35"
T = 300.11'
L = 598.24'
E = 14.97'
R = 3000.00'
P.C. 755+18.48 SB
P.T. 761+16.72 SB
S.E. 5.4%
L.R. 243.00'
D.S. 70 MPH

P.I. DATA

P.I. 795+03.81 SB
N 216027.67
E 274007.34

P.I. DATA

P.I. 823+70.09 SB
N 218879.89
E 273723.75



P.I. DATA

P.I. 693+63.04 NB
N 205930.05
E 274453.84

CURVE DATA

P.I. 730+42.85 NB
N 209597.07
E 274147.36
△ = 10°32'06"
D = 0°42'58"
T = 737.56'
L = 1470.95'
E = 33.93'
R = 8000.00'
P.C. 723+05.30 NB
P.T. 737+76.25 NB
S.E. 2.5%
L.R. 113.00'
D.S. 70 MPH

CURVE DATA

P.I. 759+95.80 NB
N 212539.26
E 274444.00
△ = 11°25'32"
D = 1°54'35"
T = 300.11'
L = 598.24'
E = 14.97'
R = 3000.00'
P.C. 756+95.69 NB
P.T. 762+93.92 NB
S.E. 5.4%
L.R. 243.00'
D.S. 70 MPH

P.I. DATA

P.I. 798+52.71 NB
N 216379.30
E 274062.88

P.I. DATA

P.I. 823+75.09 NB
N 218889.28
E 273813.07

CONTROL POINTS & BENCH MARKS

POINT NO.	NORTH	EAST	ELEVATION	DESCRIPTION
1	212228.37	274172.62	1269.46	IRON REBAR W/CAP
2	205838.57	274267.99	1306.31	IRON REBAR W/CAP
3	205888.12	274846.02	1274.59	IRON REBAR W/CAP
4	217692.21	273711.28	1288.56	IRON REBAR W/CAP
5	217747.22	274516.14	1315.74	IRON REBAR W/CAP
6	211481.85	273775.91	1277.93	IRON REBAR W/CAP
T102	217004.54	274035.75	1286.50	PK NAIL
T104	212401.40	271784.58	1333.77	PK NAIL
T105	213473.99	273939.15	1251.58	PK NAIL
T108	208862.81	274250.06	1253.67	PK NAIL
BM234	212801.18	274453.67	1273.26	BM DOT DISK ON TOP OF SE PARAPET OF NB USH 51 BRIDGE OVER CTH K
BM235	215441.64	274218.17	1228.63	BM DOT DISK ON NE WING WALL OF BOS CREEK CULVERT B-37-1067
BM236	217655.95	273981.46	1315.42	BM DOT DISK ON TOP OF SE PARAPET OF NB USH 51 BRIDGE OVER DECATOR
BM244	211691.26	274436.88	1267.16	BM CHISELED SQUARE WITH BLUE KEEL ON TOP OF CURB SE CORNER OF CTH U BRIDGE OVER USH 51 B-XX-XX
BM1007	212343.92	271807.72	1328.54	BM CHISELED SQUARE WITH BLUE KEEL ON TOP OF RCCP
BM30	212178.91	275304.52	1228.59	CHISELED X SET IN CONCRETE WISDOT CONTROL CABINET BASE
BM31	211887.38	275770.94	1222.79	CHISELED X SET IN CONCRETE LIGHT BASE
BM32	210780.61	276307.44	1256.55	CHISELED X SET IN CONCRETE LIGHT BASE
BM33	215057.32	273038.80	1238.53	CHISELED X SET IN CONCRETE LIGHT BASE
BM34	213164.93	272393.88	1316.82	SW BOLT WITH ALUMINUM "BURRY" TAG ON FLANGE OF HYDRANT
BM35	208957.67	274267.36	1249.22	TOP OF NW BOLT ON WEST POST SIS SIGN (GAS EXIT 194)

PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	ALIGNMENT DIAGRAM - USH 51	SHEET 520	E

P.I. DATA

P.I. 737+18.72 F
N 210272.67
E 274123.29

CURVE DATA

P.I. 742+98.58 F
N 210850.18
E 274175.20
△ = 13°33'52"
D = 2°26'17"
T = 279.48'
L = 556.35'
E = 16.56'
R = 2350.00'
P.C. 740+19.10 F
P.T. 745+75.45 F
S.E. 5.0%
L.R. 133.00'
D.S. 60 MPH

CURVE DATA

P.I. 751+19.31 F
N 211665.88
E 274063.36
△ = 16°41'23"
D = 11°27'33"
T = 73.34'
L = 145.65'
E = 5.35'
R = 500.00'
P.C. 750+45.97 F
P.T. 751+91.61 F
S.E. 6.0%
L.R. 124.00'
D.S. 40 MPH

P.I. DATA

P.I. 752+32.02 F
N 211778.27
E 274080.93

P.I. DATA

P.I. 751+58.31 D
N 211705.35
E 274267.46

CURVE DATA

P.I. 760+18.22 D
N 212561.46
E 274347.74
△ = 34°33'16"
D = 3°10'59"
T = 559.85'
L = 1085.56'
E = 85.06'
R = 1800.00'
P.C. 754+58.37 D
P.T. 765+43.93 D
S.E. 5.7%
L.R. 152.00'
D.S. 60 MPH

CURVE DATA

P.I. 769+46.38 D
N 213404.76
E 273884.20
△ = 31°00'05"
D = 20°59'15"
T = 75.71'
L = 147.71'
E = 10.30'
R = 273.00'
P.C. 768+70.67 D
P.T. 770+18.38 D
S.E. 6.0%
L.R. 109.00'
D.S. 30 MPH

P.I. DATA

P.I. 771+05.00 D
N 213566.97
E 273890.45

N

CURVE DATA

P.I. 772+21.24 C
N 213730.87
E 274078.46
△ = 57°47'12"
D = 30°38'22"
T = 103.20'
L = 188.60'
E = 26.59'
R = 187.00'
P.C. 771+18.04 C
N 213679.66
E 273988.86
P.C.C773+06.64 C
S.E. %
L.R.
D.S. MPH

CURVE DATA

P.I. 773+59.82 C
N 213887.10
E 274085.18
△ = 15°02'00"
D = 14°13'02"
T = 53.18'
L = 105.74'
E = 3.49'
R = 403.00'
P.C.C773+06.64 C
P.R.C774+12.38 C
S.E. %
L.R.
D.S. MPH

CURVE DATA

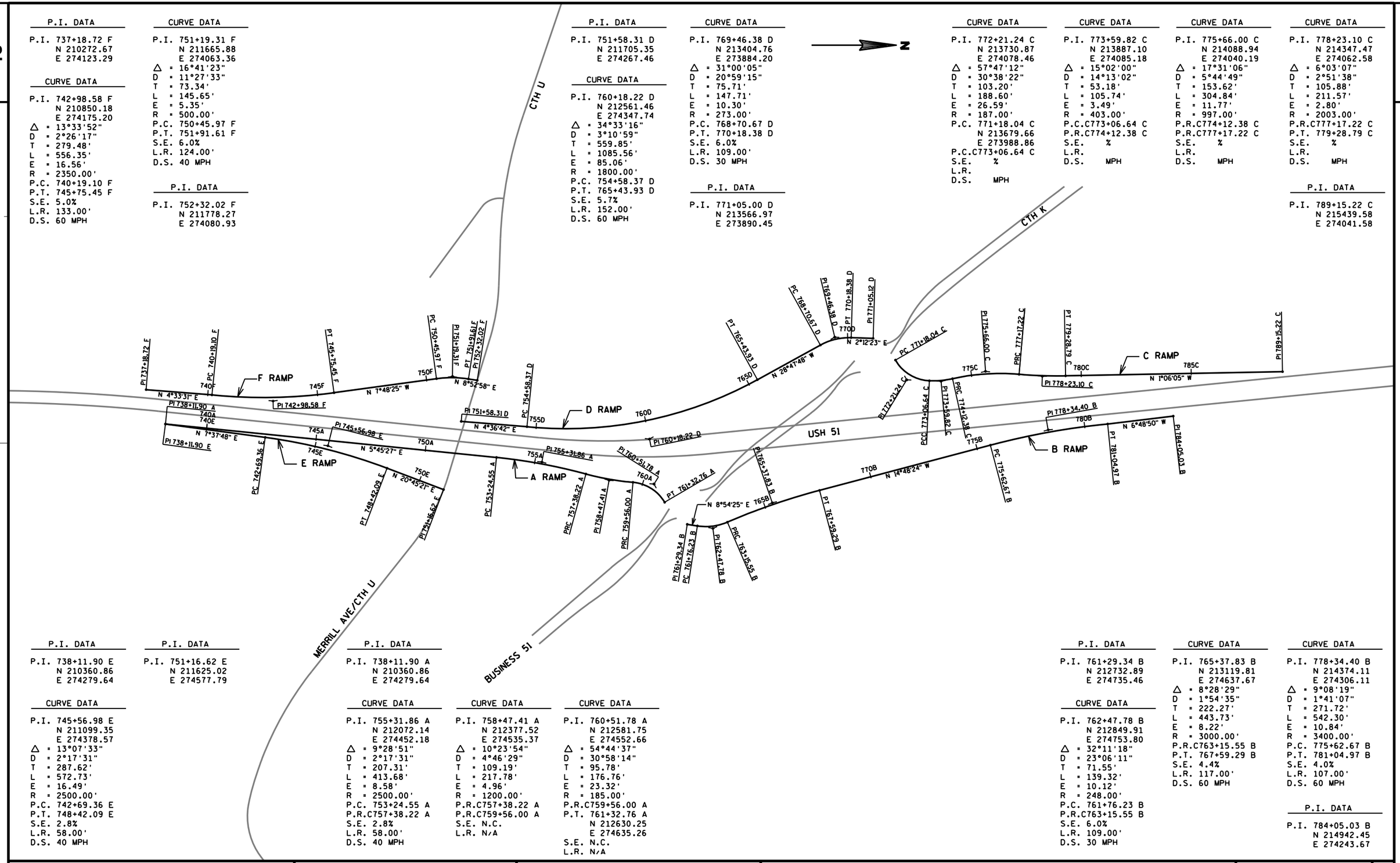
P.I. 775+66.00 C
N 214088.94
E 274040.19
△ = 17°31'06"
D = 5°44'49"
T = 153.62'
L = 304.84'
E = 11.77'
R = 997.00'
P.R.C774+12.38 C
P.R.C777+17.22 C
S.E. %
L.R.
D.S. MPH

CURVE DATA

P.I. 778+23.10 C
N 214347.47
E 274062.58
△ = 6°03'07"
D = 2°51'38"
T = 105.88'
L = 211.57'
E = 2.80'
R = 2003.00'
P.R.C777+17.22 C
P.T. 779+28.79 C
S.E. %
L.R.
D.S. MPH

P.I. DATA

P.I. 789+15.22 C
N 215439.58
E 274041.58



P.I. DATA

P.I. 738+11.90 E
N 210360.86
E 274279.64

CURVE DATA

P.I. 745+56.98 E
N 211099.35
E 274378.57
△ = 13°07'33"
D = 2°17'31"
T = 287.62'
L = 572.73'
E = 16.49'
R = 2500.00'
P.C. 742+69.36 E
P.T. 748+42.09 E
S.E. 2.8%
L.R. 58.00'
D.S. 40 MPH

P.I. DATA

P.I. 751+16.62 E
N 211625.02
E 274577.79

P.I. DATA

P.I. 738+11.90 A
N 210360.86
E 274279.64

CURVE DATA

P.I. 755+31.86 A
N 212072.14
E 274452.18
△ = 9°28'51"
D = 2°17'31"
T = 207.31'
L = 413.68'
E = 8.58'
R = 2500.00'
P.C. 753+24.55 A
P.R.C757+38.22 A
S.E. 2.8%
L.R. 58.00'
D.S. 40 MPH

CURVE DATA

P.I. 758+47.41 A
N 212377.52
E 274535.37
△ = 10°23'54"
D = 4°46'29"
T = 109.19'
L = 217.78'
E = 4.96'
R = 1200.00'
P.R.C757+38.22 A
P.R.C759+56.00 A
S.E. N.C.
L.R. N/A

CURVE DATA

P.I. 760+51.78 A
N 212581.75
E 274552.66
△ = 54°44'37"
D = 30°58'14"
T = 95.78'
L = 176.76'
E = 23.32'
R = 185.00'
P.R.C759+56.00 A
P.T. 761+32.76 A
N 212630.25
E 274635.26
S.E. N.C.
L.R. N/A

P.I. DATA

P.I. 761+29.34 B
N 212732.89
E 274735.46

CURVE DATA

P.I. 762+47.78 B
N 212849.91
E 274753.80
△ = 32°11'18"
D = 23°06'11"
T = 71.55'
L = 139.32'
E = 10.12'
R = 248.00'
P.C. 761+76.23 B
P.R.C763+15.55 B
S.E. 6.0%
L.R. 109.00'
D.S. 30 MPH

CURVE DATA

P.I. 765+37.83 B
N 213119.81
E 274637.67
△ = 8°28'29"
D = 1°54'35"
T = 222.27'
L = 443.73'
E = 8.22'
R = 3000.00'
P.R.C763+15.55 B
P.T. 767+59.29 B
S.E. 4.4%
L.R. 117.00'
D.S. 60 MPH

CURVE DATA

P.I. 778+34.40 B
N 214374.11
E 274306.11
△ = 9°08'19"
D = 1°41'07"
T = 271.72'
L = 542.30'
E = 10.84'
R = 3400.00'
P.C. 775+62.67 B
P.T. 781+04.97 B
S.E. 4.0%
L.R. 107.00'
D.S. 60 MPH

P.I. DATA

P.I. 784+05.03 B
N 214942.45
E 274243.67

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	ALIGNMENT DIAGRAM - RAMPS	SHEET 521	E

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P.I. DATA
P.I. 3+75.00 N
N 215067.82
E 272378.21

P.I. DATA
P.I. 6+25.00 N
N 215062.98
E 272628.17

P.I. DATA
P.I. 3+50.00 ME
N 214439.15
E 272244.28

P.I. DATA
P.I. 6+50.00 ME
N 214689.75
E 272079.36

N LINE
N 61°25'00" E
PI 6+25.00 N
PI 3+75.00 N
S 88°55'25" W
S LINE
CASSIDY DR
PI 2+59.34 V
225V
N 56°20'39" E
PI 6+50.00 ME
225V
PI 3+50.00 ME
N 33°20'56" W
PT 222+97.46 V
MERRILL AVE
PI 221+14.35 V
220V
PC 218+92.78 V
OVERLOOK DR
25V
N 89°55'26" E
20V
V LINE
PT 204+68.80 V
25V
PI 203+72.72 V
PC 202+74.24 V
N 20°14'10" E
PI 22+29.89 U
PI 200+27.55 V
N PT 200+79.08 V
25U
PC 199+75.66 V
N 8°37'01" E
PI 199+68.07 V
20U
N 89°55'26" E
PC 20+52.11 U
PT 24+04.43 U
PI 16+19.37 U
30U
S 71°07'19" E
CTH U
35U
PC 34+95.95 U
N 3°43'56" E
PI 37+84.22 U
PI 14+41.03 R
PC 13+86.35 R
N 53°36'27" W
ARTHUR AVE
R LINE
PI 9+88.61 R
40U
PI 14+68.41 U
S 87°56'24" E
PI 15+00.00 R
PT 14+86.42 R
PC 42+83.30 U
PT 45+25.61 U
45U
PI 44+05.14 U
S 73°05'29" E
50U
PC 51+82.22 U
PI 53+59.81 U
55U
PT 55+33.23 U
U LINE
S 51°34'55" E MERRILL AVE/CTH U
60U
PC 62+68.83 U
65U
PI 66+02.74 U
70U
PI 70+80.41 U
PCC 69+25.94 U
PT 72+12.56 U
PI 74+29.72 K
K LINE
PC 20+88.49 K
20K
PT 22+94.98 K
PI 22+94.98 K
PT 25+01.44 K
25K
M 25°35'40" N
BUSINESS 51
PI 30+00.00 K
30K
SW LINE
TL LINE
TR LINE
M 39°24'35" N
PT 72+43.00 U
30U
S 40°20'37" E
SEE PLAN & PROFILE SHEETS FOR 'SW', 'TR' AND 'TL' LINES FOR INFO

P.I. DATA
P.I. 199+68.07 V
N 212297.61
E 271871.71

CURVE DATA
P.I. 200+27.55 V
N 212356.42
E 271880.62
△ = 11°37'09"
D = 11°14'04"
T = 51.89'
L = 103.42'
E = 2.63'
R = 510.00'
P.C. 199+75.66 V
P.T. 200+79.08 V
S.E.
L.R.
D.S.

CURVE DATA
P.I. 203+72.72 V
N 212680.61
E 272000.13
△ = 21°51'28"
D = 11°14'04"
T = 98.48'
L = 194.56'
E = 9.42'
R = 510.00'
P.C. 202+74.24 V
P.T. 204+68.80 V
S.E.
L.R.
D.S.

CURVE DATA
P.I. 221+14.35 V
N 214423.94
E 271950.78
△ = 57°57'57"
D = 14°19'26"
T = 221.57'
L = 404.68'
E = 57.27'
R = 400.00'
P.C. 218+92.78 V
P.T. 222+97.46 V
S.E.
L.R.
D.S.

P.I. DATA
P.I. 231+59.34 V
N 215024.39
E 272852.62

P.I. DATA
P.I. 9+88.61 R
N 211562.47
E 273613.98

CURVE DATA
P.I. 14+41.03 R
N 211830.90
E 273249.80
△ = 57°20'24"
D = 57°17'45"
T = 54.68'
L = 100.08'
E = 13.97'
R = 100.00'
P.C. 13+86.35 R
P.T. 14+86.42 R
S.E. 4.0%
L.R. N/A
D.S. 25 MPH

P.I. DATA
P.I. 15+00.00 R
N 211899.00
E 273254.24

P.I. DATA
P.I. 253+90.00 M
N 211992.10
E 273777.06

P.I. DATA
P.I. 255+94.42 M
N 212185.98
E 273712.28

M LINE
PI 255+94.42 M
18°28'23" W
25M
PI 253+90.00 M

P.I. DATA
P.I. 4+50.00 L
N 211054.97
E 273811.86

P.I. DATA
P.I. 5+70.00 L
N 211174.97
E 273811.00

L LINE
PI 5+70.00 L
N 35°24'20" W
5L
PI 4+50.00 L

P.I. DATA
P.I. 16+19.37 U
N 212397.31
E 271064.62

CURVE DATA
P.I. 22+29.89 U
N 212398.12
E 271675.14
△ = 18°57'15"
D = 5°22'48"
T = 177.78'
L = 352.32'
E = 14.74'
R = 1065.00'
P.C. 20+52.11 U
P.T. 24+04.43 U
S.E. 3.4%
L.R. 94.00'
D.S. 45 MPH

CURVE DATA
P.I. 37+84.22 U
N 211894.16
E 273148.93
△ = 16°49'05"
D = 2°56'18"
T = 288.26'
L = 572.38'
E = 21.19'
R = 1950.00'
P.C. 34+95.95 U
P.T. 40+68.34 U
S.E. 2.6%
L.R. N/A
D.S. 45 MPH

CURVE DATA
P.I. 44+05.14 U
N 211871.69
E 273773.59
△ = 14°50'55"
D = 6°07'40"
T = 121.84'
L = 242.31'
E = 7.90'
R = 935.00'
P.C. 42+83.30 U
P.T. 45+25.61 U
S.E. R.C.
L.R. N/A
D.S. 45 MPH

CURVE DATA
P.I. 53+59.81 U
N 211593.63
E 274688.30
△ = 21°30'33"
D = 6°07'40"
T = 177.59'
L = 351.01'
E = 16.72'
R = 935.00'
P.C. 51+82.22 U
P.T. 55+33.23 U
S.E. R.C.
L.R. 41.00'
D.S. 45 MPH

CURVE DATA
P.I. 66+02.74 U
N 210818.69
E 275665.41
△ = 25°05'59"
D = 3°49'11"
T = 333.91'
L = 657.11'
E = 36.72'
R = 1500.00'
P.C. 62+68.83 U
P.C.C69+25.94 U
S.E. R.C.
L.R. 41.00'
D.S. 45 MPH

CURVE DATA
P.I. 70+80.41 U
N 210706.18
E 276140.66
△ = 52°58'29"
D = 18°28'57"
T = 154.47'
L = 286.62'
E = 36.36'
R = 310.00'
P.C.C69+25.94 U
P.T. 72+12.56 U
S.E. N/A
L.R. N/A

P.I. DATA
P.I. 72+42.00 U
N 210823.55
E 276282.25

P.I. DATA
P.I. 11+29.72 K
N 210624.45
E 276478.28

CURVE DATA
P.I. 22+94.98 K
N 211524.69
E 275738.42
△ = 1°10'59"
D = 0°17'11"
T = 206.48'
L = 412.95'
E = 1.07'
R = 20000.00'
P.C. 20+88.49 K
P.T. 25+01.44 K
S.E. N/A
L.R. N/A

P.I. DATA
P.I. 30+00.00 K
N 212060.02
E 275279.62

PROJECT NO: 6999-18-70/1170-01-71	HWY: USH 51	COUNTY: MARATHON	ALIGNMENT DIAGRAM - CTH U	SHEET 522	E

P.I. DATA
P.I. 30+00.00 KS
N 212026.99
E 275240.78

CURVE DATA
P.I. 35+20.11 KS
N 212422.04
E 274902.48
△ = 5°49'23"
D = 5°43'46"
T = 50.86'
L = 101.63'
E = 1.29'
R = 1000.00'
P.C. 34+69.25 KS
P.R.C 35+70.88 KS
S.E.
L.R.
D.S.

CURVE DATA
P.I. 36+91.71 KS
N 212563.10
E 274804.61
△ = 22°50'47"
D = 9°34'52"
T = 120.83'
L = 238.45'
E = 12.09'
R = 598.00'
P.R.C 35+70.88 KS
P.T. 38+09.33 KS
S.E.
L.R.
D.S.

P.I. DATA
P.I. 38+54.27 KS
N 212651.93
E 274664.64

CURVE DATA
P.I. 40+79.53 KS
N 212853.78
E 274577.69
△ = 50°38'47"
D = 42°07'45"
T = 64.35'
L = 120.22'
E = 14.46'
R = 136.00'
P.C. 40+15.18 KS
P.R.C 41+35.39 KS
S.E.
L.R.
D.S.

CURVE DATA
P.I. 42+53.17 KS
N 212961.37
E 274430.74
△ = 16°42'31"
D = 7°08'39"
T = 117.78'
L = 233.88'
E = 8.60'
R = 802.00'
P.R.C 41+35.39 KS
P.T. 43+69.27 KS
S.E.
L.R.
D.S.

CURVE DATA
P.I. 47+94.76 KS
N 213395.94
E 274104.73
△ = 12°17'19"
D = 6°22'49"
T = 96.67'
L = 192.60'
E = 5.19'
R = 898.00'
P.C. 46+98.09 KS
P.T. 48+90.69 KS
S.E.
L.R.
D.S.

P.I. DATA
P.I. 49+44.00 KS
N 213494.12
E 273991.34

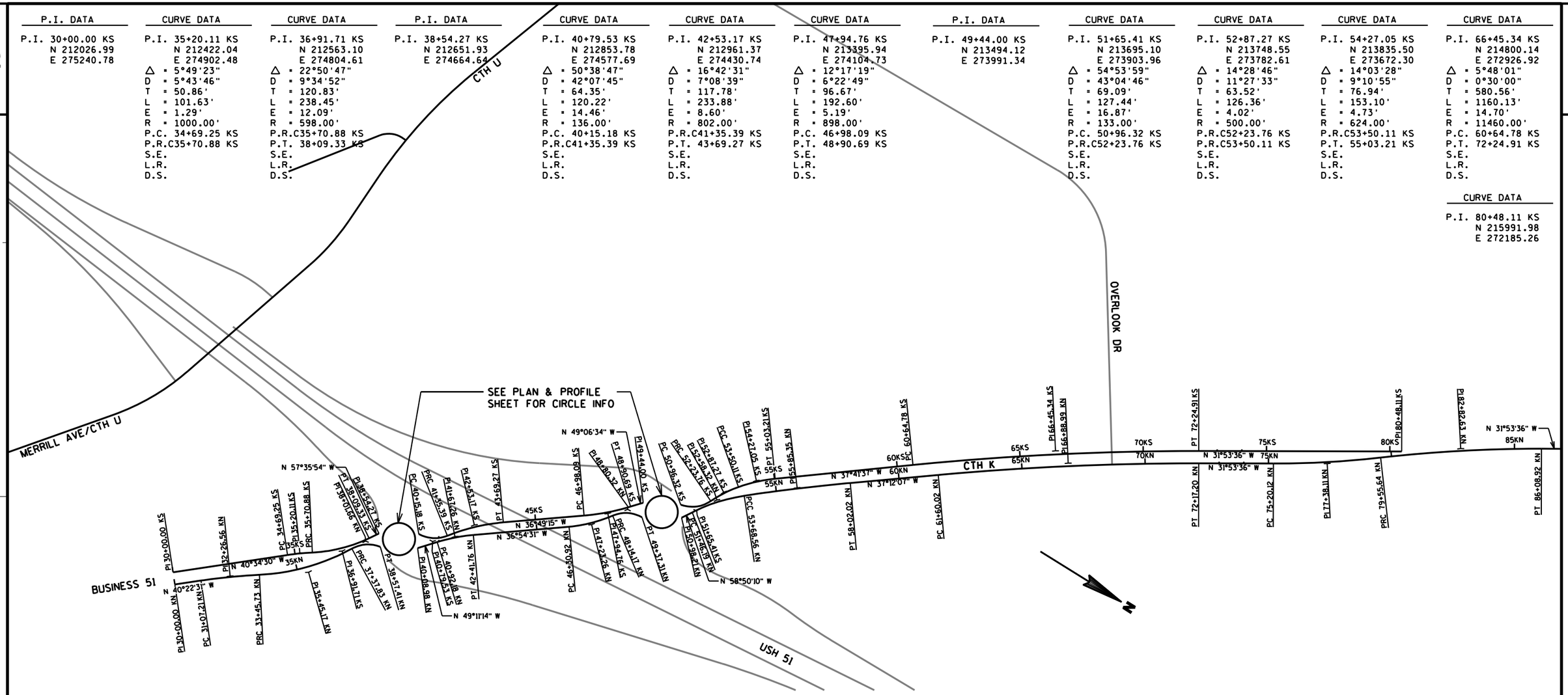
CURVE DATA
P.I. 51+65.41 KS
N 213695.10
E 273903.96
△ = 54°53'59"
D = 43°04'46"
T = 69.09'
L = 127.44'
E = 16.87'
R = 133.00'
P.C. 50+96.32 KS
P.R.C 52+23.76 KS
S.E.
L.R.
D.S.

CURVE DATA
P.I. 52+87.27 KS
N 213748.55
E 273782.61
△ = 14°28'46"
D = 11°27'33"
T = 63.52'
L = 126.36'
E = 4.02'
R = 500.00'
P.R.C 52+23.76 KS
P.R.C 53+50.11 KS
S.E.
L.R.
D.S.

CURVE DATA
P.I. 54+27.05 KS
N 213835.50
E 273672.30
△ = 14°03'28"
D = 9°10'55"
T = 76.94'
L = 153.10'
E = 4.73'
R = 624.00'
P.R.C 53+50.11 KS
P.T. 55+03.21 KS
S.E.
L.R.
D.S.

CURVE DATA
P.I. 66+45.34 KS
N 214800.14
E 272926.92
△ = 5°48'01"
D = 0°30'00"
T = 580.56'
L = 1160.13'
E = 14.70'
R = 11460.00'
P.C. 60+64.78 KS
P.T. 72+24.91 KS
S.E.
L.R.
D.S.

CURVE DATA
P.I. 80+48.11 KS
N 215991.98
E 272185.26



P.I. DATA
P.I. 30+00.00 KN
N 212059.38
E 275278.87

CURVE DATA
P.I. 32+26.56 KN
N 212231.98
E 275132.10
△ = 5°27'59"
D = 2°17'31"
T = 119.35'
L = 238.52'
E = 2.85'
R = 2500.00'
P.C. 31+07.21 KN
P.R.C 33+45.73 KN
S.E.
L.R.
D.S.

CURVE DATA
P.I. 35+45.17 KN
N 212493.40
E 274949.67
△ = 25°49'21"
D = 6°35'09"
T = 199.44'
L = 392.10'
E = 22.57'
R = 870.00'
P.R.C 33+45.73 KN
P.R.C 37+37.83 KN
S.E.
L.R.
D.S.

CURVE DATA
P.I. 38+01.66 KN
N 212622.11
E 274720.01
△ = 49°38'53"
D = 41°31'07"
T = 63.84'
L = 119.58'
E = 14.05'
R = 138.00'
P.R.C 37+37.83 KN
P.T. 38+57.41 KN
S.E.
L.R.
D.S.

P.I. DATA
P.I. 40+08.98 KN
N 212816.18
E 274632.21

CURVE DATA
P.I. 41+67.26 KN
N 212919.63
E 274512.42
△ = 12°16'44"
D = 8°12'31"
T = 75.08'
L = 149.59'
E = 4.03'
R = 698.00'
P.C. 40+92.18 KN
P.T. 42+41.76 KN
S.E.
L.R.
D.S.

CURVE DATA
P.I. 47+23.26 KN
N 213364.00
E 274177.31
△ = 17°26'27"
D = 9°31'03"
T = 92.34'
L = 183.25'
E = 7.04'
R = 602.00'
P.C. 46+30.92 KN
P.R.C 48+14.17 KN
S.E.
L.R.
D.S.

CURVE DATA
P.I. 48+80.32 KN
N 213454.85
E 274047.44
△ = 51°52'48"
D = 42°07'45"
T = 66.16'
L = 123.14'
E = 15.24'
R = 136.00'
P.R.C 48+14.17 KN
P.T. 49+37.31 KN
S.E.
L.R.
D.S.

P.I. DATA
P.I. 50+98.21 KN
N 213658.54
E 273960.47

CURVE DATA
P.I. 52+58.32 KN
N 213741.39
E 273823.46
△ = 18°15'12"
D = 8°12'31"
T = 112.13'
L = 222.37'
E = 8.95'
R = 698.00'
P.C. 51+46.19 KN
P.C.C 53+68.56 KN
S.E.
L.R.
D.S.

CURVE DATA
P.I. 55+85.35 KN
N 213991.20
E 273609.48
△ = 3°22'51"
D = 0°46'48"
T = 216.80'
L = 433.46'
E = 3.20'
R = 7345.85'
P.C. 53+68.56 KN
P.T. 58+02.02 KN
S.E.
L.R.
D.S.

CURVE DATA
P.I. 66+88.99 KN
N 214870.36
E 272942.12
△ = 5°18'31"
D = 0°30'08"
T = 528.97'
L = 1057.18'
E = 12.25'
R = 11410.00'
P.C. 61+60.02 KN
P.T. 72+17.20 KN
S.E.
L.R.
D.S.

CURVE DATA
P.I. 77+38.11 KN
N 215761.75
E 272387.42
△ = 6°31'56"
D = 1°30'00"
T = 218.00'
L = 435.52'
E = 6.22'
R = 3820.00'
P.C. 75+20.12 KN
P.R.C 79+55.64 KN
S.E.
L.R.
D.S.

CURVE DATA
P.I. 82+82.63 KN
N 216188.70
E 272048.71
△ = 6°31'56"
D = 1°00'00"
T = 326.99'
L = 653.28'
E = 9.32'
R = 5730.00'
P.R.C 79+55.64 KN
P.T. 86+08.92 KN
S.E.
L.R.
D.S.

CURVE DATA
P.I. 95+79.65 KN
N 217290.51
E 271363.07

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	ALIGNMENT DIAGRAM - CTH K	SHEET 523	E

2

2

N

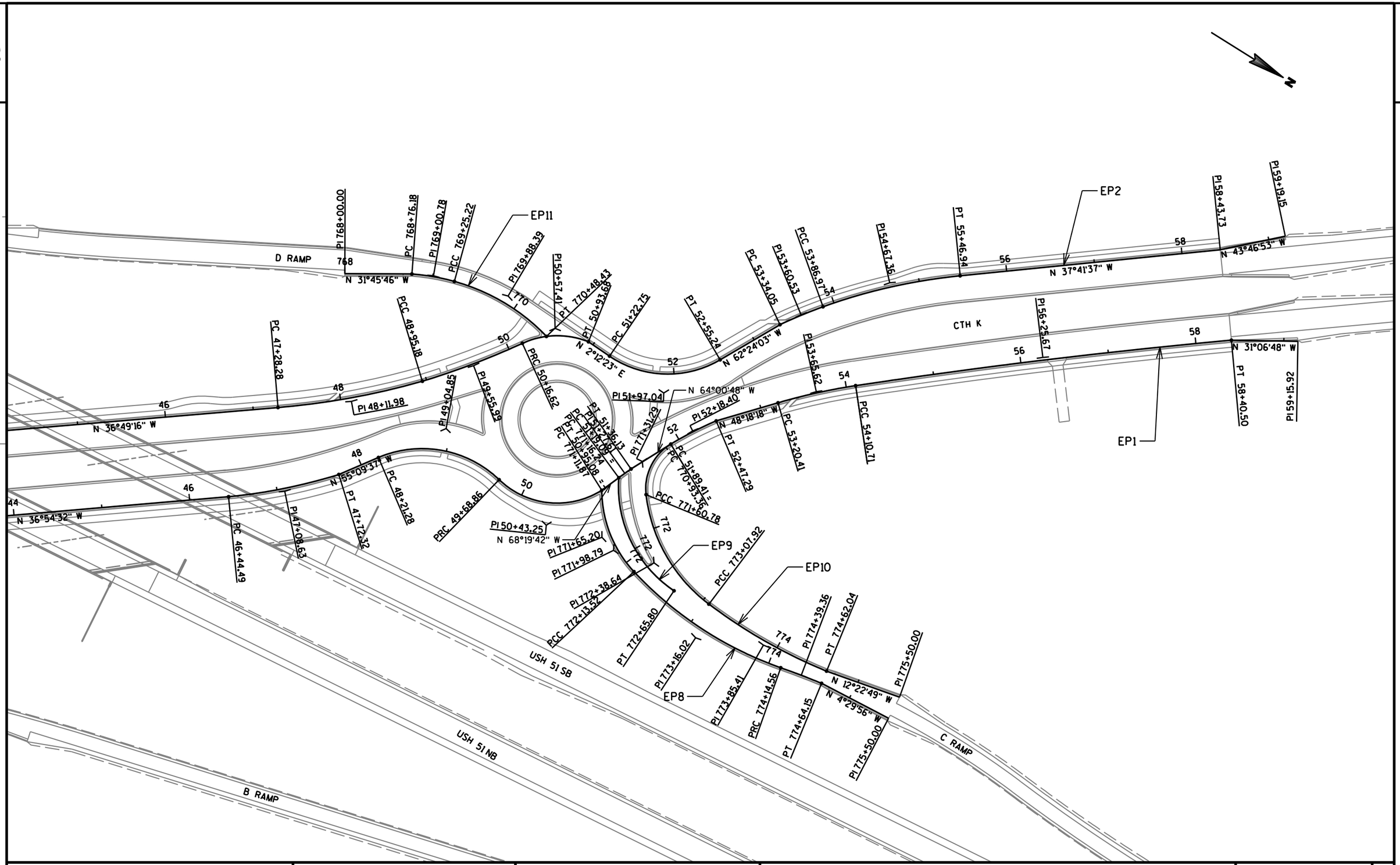
PI 754+50.00
N 13°44'55" E
PC 755+00.50
PI 756+16.37
756
A RAMP
PRC 757+32.09
PI 757+10.00
N 9°02'53" E
758
PC 758+00.41
PI 758+34.20
PI 758+45.20
PRC 758+67.97
EP4
EP6
USH 51 NB
USH 51 SB
D RAMP
PI 759+39.38
PRC 759+57.65
PI 759+96.81
EP5
PC 759+71.39
PC 760+11.30
PCC 760+83.06
PCC 760+35.74
PI 760+57.60
PI 760+47.73
PI 760+89.07
PI 39+75.38
N 65°07'36" W
PRC 40+27.52
PI 41+68.02
PC 42+48.36
PI 43+24.06
PT 43+99.33
CTH K
EP2
PC 34+69.45
PI 35+21.74
PRC 35+73.93
PT 36+74.52
PC 37+41.93
N 44°51'47" W
PI 37+73.65
PI 38+26.34
PI 38+99.98
PI 39+23.25
PI 39+32.41
N 63°57'32" W
PI 40+40.00
PI 41+06.72
PRC 39+83.68
PI 42+12.25
N 44°13'52" W
PT 40+96.06
PC 41+69.38
PT 42+55.00
N 36°54'32" W
PI 30+64.58
PI 31+04.59
N 34°51'42" W
N 40°34'30" W
PI 35+49.85
N 46°41'39" W
PC 35+12.82
PT 35+89.35
PI 36+24.35
EP3
PI 32+93.08
N 40°34'30" W
N 57°40'15" W
PC 37+45.20
PRC 38+88.91
PC 761+74.54
PI 39+40.66
PI 762+38.66
PI 763+49.50
EP7
N 23°15'45" W
N 23°45'03" W
B RAMP
BUSINESS 51
N 45°53'08" W
PI 32+79.54
S 34°54'37" E
PI 30+84.10
PI 30+64.50
N 42°57'18" W
PI 31+35.49
PC 32+15.68
PC 33+43.58
PT 33+43.38
PI 35+03.28
EP1
PT 36+59.67
PT 762+97.84
PC 763+07.06
PT 763+91.93
PI 764+72.48

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	ALIGNMENT DIAGRAM	SHEET 524	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\027205_ad.dgn PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

2



PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	ALIGNMENT DIAGRAM	SHEET 525	E

2

P.I. DATA - EP1

P.I. 31+35.49
N 212184.31
E 275217.23

CURVE DATA - EP1

P.I. 32+79.54
N 212293.41
E 275123.38
△ = 2°57'36"
D = 2°19'04"
T = 63.87'
L = 127.71'
E = 0.82'
R = 2472.00'
P.C. 32+15.68
P.T. 33+43.38

CURVE DATA - EP1

P.I. 35+03.28
N 212476.61
E 274995.59
△ = 20°10'04"
D = 6°22'49"
T = 159.70'
L = 316.09'
E = 14.09'
R = 898.00'
P.C. 33+43.58
P.T. 36+59.67

CURVE DATA - EP1

P.I. 38+26.34
N 212657.21
E 274723.85
△ = 66°24'11"
D = 46°12'23"
T = 81.15'
L = 143.71'
E = 24.19'
R = 124.00'
P.C. 37+45.20
P.R.C38+88.91

CURVE DATA - EP1

P.I. 39+40.66
N 212789.11
E 274733.58
△ = 57°09'31"
D = 60°18'41"
T = 51.75'
L = 94.77'
E = 13.18'
R = 95.00'
P.R.C38+88.91
P.R.C39+83.68

CURVE DATA - EP1

P.I. 40+40.00
N 212843.10
E 274639.96
△ = 9°33'10"
D = 8°30'03"
T = 56.32'
L = 112.37'
E = 2.35'
R = 674.00'
P.R.C39+83.68
P.T. 40+96.06

CURVE DATA - EP1

P.I. 42+12.25
N 212962.19
E 274515.47
△ = 7°19'21"
D = 8°33'06"
T = 42.87'
L = 85.63'
E = 1.37'
R = 670.00'
P.C. 41+69.38
P.T. 42+55.00

CURVE DATA - EP1

P.I. 47+08.63
N 213358.73
E 274216.70
△ = 11°37'31"
D = 9°05'40"
T = 64.13'
L = 127.83'
E = 3.26'
R = 630.00'
P.C. 46+44.49
P.T. 47+72.32

CURVE DATA - EP1

P.I. 49+04.85
N 213476.34
E 274059.37
△ = 67°06'35"
D = 45°28'22"
T = 83.57'
L = 147.58'
E = 25.20'
R = 126.00'
P.C. 48+21.28
P.R.C49+68.86

CURVE DATA - EP1

P.I. 50+43.25
N 213630.87
E 274092.08
△ = 76°07'26"
D = 60°18'41"
T = 74.39'
L = 126.22'
E = 25.66'
R = 95.00'
P.R.C49+68.86
P.T. 50+95.08

CURVE DATA - EP1

P.I. 51+27.61
N 213675.28
E 273994.88
△ = 1°42'46"
D = 10°03'07"
T = 8.52'
L = 17.04'
E = 0.06'
R = 570.00'
P.C. 51+19.09
P.T. 51+36.13

CURVE DATA - EP1

P.I. 52+18.40
N 213715.06
E 273913.28
△ = 8°17'24"
D = 14°19'26"
T = 28.99'
L = 57.88'
E = 1.05'
R = 400.00'
P.C. 51+89.41
P.T. 52+47.29

CURVE DATA - EP1

P.I. 53+65.62
N 213810.43
E 273801.20
△ = 7°43'20"
D = 8°33'06"
T = 45.22'
L = 90.30'
E = 1.52'
R = 670.00'
P.C. 53+20.41
P.C.C54+10.71

CURVE DATA - EP1

P.I. 56+25.67
N 214008.03
E 273631.94
△ = 3°21'54"
D = 0°46'59"
T = 214.96'
L = 429.80'
E = 3.16'
R = 7318.02'
P.C.C54+10.71
P.T. 58+40.50

P.I. DATA - EP1

P.I. 59+15.92
N 214243.78
E 273462.95

P.I. DATA - EP2

P.I. 30+64.58
N 212055.23
E 275174.48

P.I. DATA - EP2

P.I. 31+04.59
N 212088.06
E 275151.61

CURVE DATA - EP2

P.I. 35+21.74
N 212404.91
E 274880.28
△ = 5°49'23"
D = 5°34'25"
T = 52.28'
L = 104.48'
E = 1.33'
R = 1028.00'
P.C. 34+69.45
P.R.C35+73.93

CURVE DATA - EP2

P.I. 36+24.35
N 212489.30
E 274821.74
△ = 10°06'40"
D = 10°03'07"
T = 50.43'
L = 100.59'
E = 2.23'
R = 570.00'
P.R.C35+73.93
P.T. 36+74.52

CURVE DATA - EP2

P.I. 37+73.65
N 212592.79
E 274713.97
△ = 14°27'41"
D = 22°55'06"
T = 31.72'
L = 63.10'
E = 2.00'
R = 250.00'
P.C. 37+41.93
P.T. 38+05.03

P.I. DATA - EP2

P.I. 38+79.25
N 212638.56
E 274618.44

CURVE DATA - EP2

P.I. 39+75.38
N 212680.13
E 274531.76
△ = 77°06'05"
D = 60°18'41"
T = 75.70'
L = 127.84'
E = 26.47'
R = 95.00'
P.C. 38+99.68
P.R.C40+27.52

CURVE DATA - EP2

P.I. 41+06.72
N 212831.12
E 274566.42
△ = 65°59'03"
D = 46°57'50"
T = 79.20'
L = 140.50'
E = 23.46'
R = 122.00'
P.R.C40+27.52
P.T. 41+68.02

CURVE DATA - EP2

P.I. 43+24.06
N 212978.06
E 274383.03
△ = 10°25'18"
D = 6°54'11"
T = 75.69'
L = 150.97'
E = 3.44'
R = 830.00'
P.C. 42+48.36
P.T. 43+99.33

CURVE DATA - EP2

P.I. 48+11.98
N 213368.78
E 274090.08
△ = 10°59'29"
D = 6°35'09"
T = 83.71'
L = 166.90'
E = 4.02'
R = 870.00'
P.C. 47+28.28
P.C.C48+95.18

CURVE DATA - EP2

P.I. 49+55.99
N 213464.98
E 273982.23
△ = 7°42'52"
D = 6°21'07"
T = 60.82'
L = 121.45'
E = 2.05'
R = 902.00'
P.C.C48+95.18
P.R.C50+16.62

CURVE DATA - EP2

P.I. 50+57.41
N 213520.89
E 273897.40
△ = 46°28'20"
D = 60°18'41"
T = 40.79'
L = 77.05'
E = 8.39'
R = 95.00'
P.R.C50+16.62
P.T. 50+93.68

CURVE DATA - EP2

P.I. 51+97.04
N 213664.33
E 273894.20
△ = 64°36'26"
D = 48°45'45"
T = 74.29'
L = 132.49'
E = 21.52'
R = 117.50'
P.C. 51+22.75
P.T. 52+55.24

CURVE DATA - EP2

P.I. 53+60.53
N 213749.49
E 273736.19
△ = 5°44'33"
D = 10°51'05"
T = 26.48'
L = 52.92'
E = 0.66'
R = 528.01'
P.C. 53+34.05
P.C.C53+86.97

CURVE DATA - EP2

P.I. 54+67.36
N 213815.65
E 273652.26
△ = 14°03'28"
D = 8°47'16"
T = 80.39'
L = 159.97'
E = 4.94'
R = 652.00'
P.C.C53+86.97
P.T. 55+46.94

P.I. DATA - EP2

P.I. 58+43.73
N 214114.11
E 273421.64

P.I. DATA - EP2

P.I. 59+59.15
N 214168.56
E 273369.45

P.I. DATA - EP3

P.I. 30+64.50
N 212097.46
E 275223.63

P.I. DATA - EP3

P.I. 30+84.10
N 212111.10
E 275209.56

P.I. DATA - EP3

P.I. 32+93.08
N 212269.84
E 275073.62

CURVE DATA - EP3

P.I. 35+49.85
N 212445.95
E 274886.78
△ = 10°31'38"
D = 14°15'10"
T = 37.03'
L = 73.86'
E = 1.70'
R = 402.00'
P.C. 35+12.82
P.T. 35+86.68
N 212475.85
E 274864.92

P.I. DATA - EP4

P.I. 757+10.00
N 212242.88
E 274507.15

CURVE DATA - EP4

P.I. 758+34.20
N 212365.18
E 274528.56
△ = 3°13'32"
D = 4°46'29"
T = 33.79'
L = 67.56'
E = 0.48'
R = 1200.00'
P.C. 758+00.41
P.R.C758+67.97

CURVE DATA - EP4

P.I. 759+39.98
N 212469.65
E 274545.22
△ = 13°41'15"
D = 9°32'57"
T = 72.01'
L = 143.33'
E = 4.31'
R = 600.00'
P.R.C758+67.97
P.C.C760+11.30

CURVE DATA - EP4

P.I. 760+47.73
N 212569.65
E 274587.16
△ = 24°19'37"
D = 33°54'10"
T = 36.43'
L = 71.75'
E = 3.88'
R = 169.00'
P.C.C760+11.30
P.C.C760+83.06

CURVE DATA - EP4

P.I. 761+26.48
N 212624.03
E 274645.63
△ = 67°29'19"
D = 88°08'50"
T = 43.42'
L = 76.56'
E = 13.17'
R = 65.00'
P.C.C760+83.06
P.T. 761+59.62
N 212605.98
E 274685.12

2

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	ALIGNMENT DIAGRAM	SHEET 526	E

2

CURVE DATA - EP5

P.I. 760+57.60
N 212588.19
E 274548.47
△ = 50°41'28"
D = 31°28'52"
T = 86.21'
L = 161.02'
E = 19.38'
R = 182.00'
P.C. 759+71.39
N 212502.15
E 274543.12
P.T. 761+32.41
N 212638.56
E 274618.43

P.I. DATA - EP6

P.I. 754+50.00
N 211993.18
E 274428.31

CURVE DATA - EP6

P.I. 756+16.37
N 212156.43
E 274460.00
△ = 5°16'34"
D = 2°16'41"
T = 115.88'
L = 231.59'
E = 2.67'
R = 2515.01'
P.C. 755+00.50
P.R.C757+32.09

CURVE DATA - EP6

P.I. 758+45.20
N 212377.56
E 274519.47
△ = 10°46'11"
D = 4°46'29"
T = 113.11'
L = 225.56'
E = 5.32'
R = 1200.00'
P.R.C757+32.09
P.R.C759+57.65

CURVE DATA - EP6

P.I. 759+96.81
N 212529.40
E 274530.85
△ = 10°42'16"
D = 13°42'26"
T = 39.16'
L = 78.09'
E = 1.83'
R = 418.00'
P.R.C759+57.65
P.C.C760+35.74

CURVE DATA - EP6

P.I. 760+89.07
N 212618.75
E 274554.77
△ = 42°49'24"
D = 42°07'45"
T = 53.33'
L = 101.65'
E = 10.08'
R = 136.00'
P.C.C760+35.74
P.T. 761+37.39
N 212647.16
E 274599.90

CURVE DATA - EP7

P.I. 762+38.66
N 212842.29
E 274740.62
△ = 38°48'56"
D = 31°28'52"
T = 64.12'
L = 123.30'
E = 10.96'
R = 182.00'
P.C. 761+74.54
N 212780.54
E 274723.34
P.T. 762+97.84

CURVE DATA - EP7

P.I. 763+49.50
N 212948.69
E 274694.97
△ = 1°36'46"
D = 1°54'01"
T = 42.44'
L = 84.87'
E = 0.30'
R = 3014.96'
P.C. 763+07.06
P.T. 763+91.93

P.I. DATA - EP7

P.I. 764+72.48
N 213061.86
E 274646.86

2

CURVE DATA - EP8

P.I. 771+65.20
N 213691.69
E 274070.25
△ = 42°49'24"
D = 42°07'45"
T = 53.33'
L = 101.65'
E = 10.08'
R = 136.00'
P.C. 771+11.87
N 213663.28
E 274025.12
P.C.C772+13.52

CURVE DATA - EP8

P.I. 773+16.02
N 213842.22
E 274110.56
△ = 27°33'25"
D = 13°42'26"
T = 102.50'
L = 201.04'
E = 12.38'
R = 418.00'
P.C.C772+13.52
P.R.C774+14.56

CURVE DATA - EP8

P.I. 774+39.36
N 213966.47
E 274082.86
△ = 2°53'36"
D = 5°50'05"
T = 24.80'
L = 49.59'
E = 0.31'
R = 982.00'
P.R.C774+14.56
P.T. 774+64.15

P.I. DATA - EP8

P.I. 775+50.00
N 214076.50
E 274071.96

CURVE DATA - EP9

P.I. 771+98.79
N 213710.73
E 274075.78
△ = 60°20'41"
D = 40°20'57"
T = 82.55'
L = 149.56'
E = 22.25'
R = 142.00'
P.C. 771+16.24
N 213672.15
E 274002.80
P.T. 772+65.80
N 213793.25
E 274078.36

CURVE DATA - EP10

P.I. 771+31.29
N 213684.89
E 273973.01
△ = 65°28'27"
D = 97°06'41"
T = 37.93'
L = 67.42'
E = 11.14'
R = 59.00'
P.C. 770+96.36
N 213701.99
E 273939.15
P.C.C771+60.78

CURVE DATA - EP10

P.I. 772+38.64
N 213757.27
E 274063.40
△ = 46°19'22"
D = 31°28'52"
T = 77.86'
L = 147.14'
E = 15.95'
R = 182.00'
P.C.C771+60.78
P.C.C773+07.92

CURVE DATA - EP10

P.I. 773+85.41
N 213912.02
E 274076.92
△ = 14°40'06"
D = 9°31'03"
T = 77.48'
L = 154.12'
E = 4.97'
R = 602.00'
P.C.C773+07.92
P.T. 774+62.04

P.I. DATA - EP10

P.I. 775+50.00
N 214074.31
E 274045.05

P.I. DATA - EP11

P.I. 768+00.00
N 213285.64
E 273971.36

CURVE DATA - EP11

P.I. 769+00.78
N 213372.21
E 273919.86
△ = 10°53'26"
D = 22°12'28"
T = 24.59'
L = 49.04'
E = 1.17'
R = 258.00'
P.C. 768+76.18
P.C.C769+25.22

CURVE DATA - EP11

P.I. 769+88.39
N 213456.26
E 273894.64
△ = 31°05'55"
D = 25°14'26"
T = 63.16'
L = 123.21'
E = 8.62'
R = 227.00'
P.C.C769+25.22
P.T. 770+48.43
N 213517.44
E 273910.35

P.I. DATA

P.I. 303+50.00 SM
N 206909.08
E 274317.82

CURVE DATA

P.I. 305+75.64 SM
N 207133.93
E 274299.03
△ = 4°14'57"
D = 1°30'00"
T = 141.71'
L = 283.30'
E = 2.63'
R = 3820.00'
P.C. 304+33.92 SM
P.R.C307+17.22 SM

P.I. DATA

P.I. 303+00.00 NM
N 206863.75
E 274375.80

CURVE DATA

P.I. 305+25.64 NM
N 207088.61
E 274357.01
△ = 4°14'57"
D = 1°30'00"
T = 141.71'
L = 283.30'
E = 2.63'
R = 3820.00'
P.C. 303+83.93 NM
P.R.C306+67.22 NM

CURVE DATA

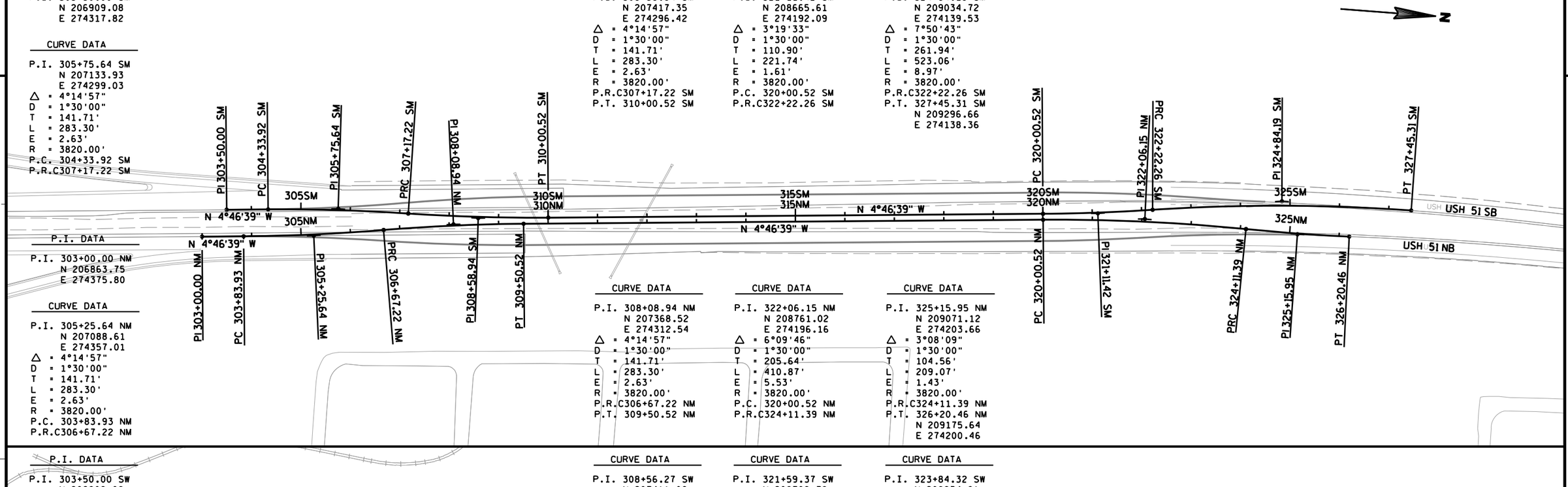
P.I. 308+58.94 SM
N 207417.35
E 274296.42
△ = 4°14'57"
D = 1°30'00"
T = 141.71'
L = 283.30'
E = 2.63'
R = 3820.00'
P.R.C307+17.22 SM
P.T. 310+00.52 SM

CURVE DATA

P.I. 321+11.42 SM
N 208665.61
E 274192.09
△ = 3°19'33"
D = 1°30'00"
T = 110.90'
L = 221.74'
E = 1.61'
R = 3820.00'
P.C. 320+00.52 SM
P.R.C322+22.26 SM

CURVE DATA

P.I. 324+84.19 SM
N 209034.72
E 274139.53
△ = 7°50'43"
D = 1°30'00"
T = 261.94'
L = 523.06'
E = 8.97'
R = 3820.00'
P.R.C322+22.26 SM
P.T. 327+45.31 SM
N 209296.66
E 274138.36



P.I. DATA

P.I. 303+50.00 SW
N 206909.08
E 274317.82

CURVE DATA

P.I. 305+66.72 SW
N 207125.05
E 274299.77
△ = 4°21'20"
D = 1°30'00"
T = 145.26'
L = 290.38'
E = 2.76'
R = 3820.00'
P.C. 304+21.46 SW
P.R.C307+11.85 SW

P.I. DATA

P.I. 303+00.00 NW
N 206863.75
E 274375.80

CURVE DATA

P.I. 305+16.72 NW
N 207079.72
E 274357.75
△ = 4°21'20"
D = 1°30'00"
T = 145.26'
L = 290.38'
E = 2.76'
R = 3820.00'
P.C. 303+71.46 NW
P.R.C306+61.85 NW

CURVE DATA

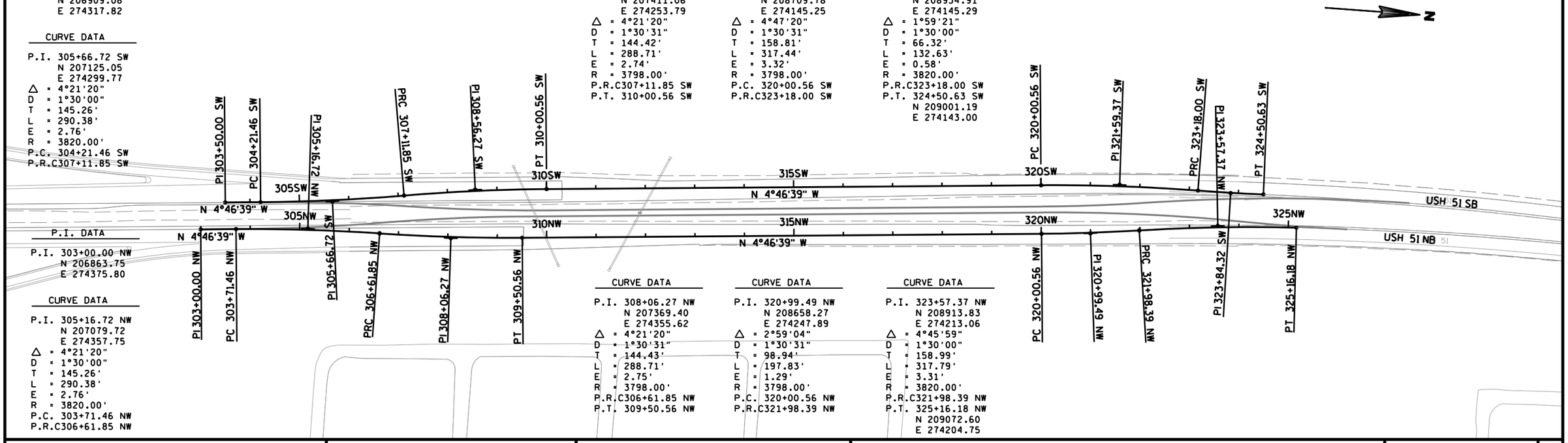
P.I. 308+56.27 SW
N 207411.06
E 274253.79
△ = 4°21'20"
D = 1°30'31"
T = 144.42'
L = 288.71'
E = 2.74'
R = 3798.00'
P.R.C307+11.85 SW
P.T. 310+00.56 SW

CURVE DATA

P.I. 321+59.37 SW
N 208709.78
E 274145.25
△ = 4°47'20"
D = 1°30'31"
T = 158.81'
L = 317.44'
E = 3.32'
R = 3798.00'
P.C. 320+00.56 SW
P.R.C323+18.00 SW

CURVE DATA

P.I. 323+84.32 SW
N 208934.91
E 274145.29
△ = 1°59'21"
D = 1°30'00"
T = 66.32'
L = 132.63'
E = 0.58'
R = 3820.00'
P.R.C323+18.00 SW
P.T. 324+50.63 SW
N 209001.19
E 274143.00



PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	ALIGNMENT DIAGRAM - TEMPORARY	SHEET 528	E

P.I. DATA
P.I. 311+13.45 NR
N 207706.30
E 274251.19

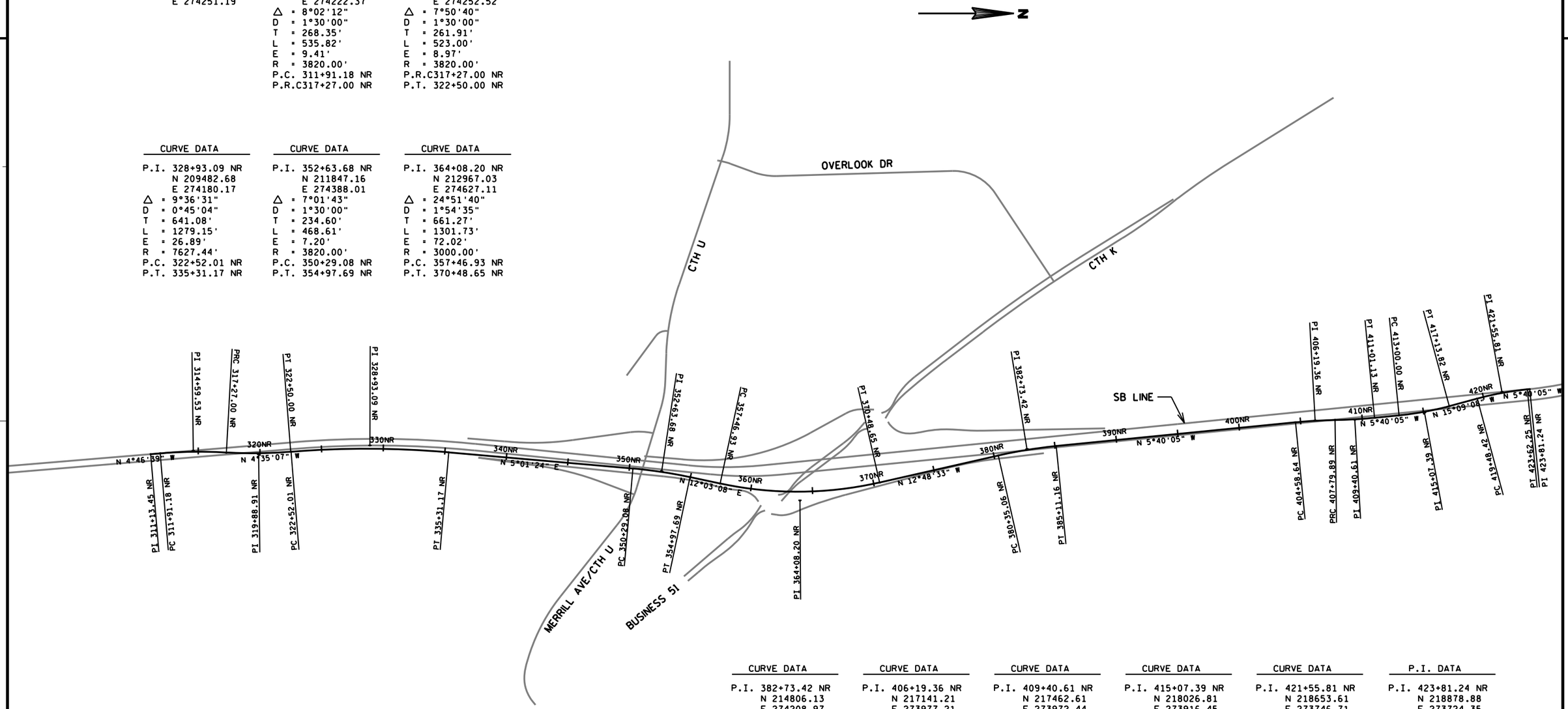
CURVE DATA
P.I. 314+59.53 NR
N 208051.17
E 274222.37
△ = 8°02'12"
D = 1°30'00"
T = 268.35'
L = 535.82'
E = 9.41'
R = 3820.00'
P.C. 311+91.18 NR
P.R.C317+27.00 NR

CURVE DATA
P.I. 319+88.91 NR
N 208580.58
E 274252.52
△ = 7°50'40"
D = 1°30'00"
T = 261.91'
L = 523.00'
E = 8.97'
R = 3820.00'
P.R.C317+27.00 NR
P.T. 322+50.00 NR

CURVE DATA
P.I. 328+93.09 NR
N 209482.68
E 274180.17
△ = 9°36'31"
D = 0°45'04"
T = 641.08'
L = 1279.15'
E = 26.89'
R = 7627.44'
P.C. 322+52.01 NR
P.T. 335+31.17 NR

CURVE DATA
P.I. 352+63.68 NR
N 211847.16
E 274388.01
△ = 7°01'43"
D = 1°30'00"
T = 234.60'
L = 468.61'
E = 7.20'
R = 3820.00'
P.C. 350+29.08 NR
P.T. 354+97.69 NR

CURVE DATA
P.I. 364+08.20 NR
N 212967.03
E 274627.11
△ = 24°51'40"
D = 1°54'35"
T = 661.27'
L = 1301.73'
E = 72.02'
R = 3000.00'
P.C. 357+46.93 NR
P.T. 370+48.65 NR



CURVE DATA
P.I. 382+73.42 NR
N 214806.13
E 274208.97
△ = 7°08'28"
D = 1°30'00"
T = 238.36'
L = 476.10'
E = 7.43'
R = 3820.00'
P.C. 380+35.06 NR
P.T. 385+11.16 NR

CURVE DATA
P.I. 406+19.36 NR
N 217141.21
E 273977.21
△ = 4°49'06"
D = 1°30'00"
T = 160.72'
L = 321.25'
E = 3.38'
R = 3820.00'
P.C. 404+58.64 NR
P.R.C407+79.89 NR

CURVE DATA
P.I. 409+40.61 NR
N 217462.61
E 273972.44
△ = 4°49'06"
D = 1°30'00"
T = 160.72'
L = 321.25'
E = 3.38'
R = 3820.00'
P.R.C407+79.89 NR
P.T. 411+01.13 NR

CURVE DATA
P.I. 415+07.39 NR
N 218026.81
E 273916.45
△ = 9°29'03"
D = 2°17'31"
T = 207.39'
L = 413.82'
E = 8.59'
R = 2500.00'
P.C. 413+00.00 NR
P.T. 417+13.82 NR

CURVE DATA
P.I. 421+55.81 NR
N 218653.61
E 273746.71
△ = 9°29'03"
D = 2°17'31"
T = 207.39'
L = 413.83'
E = 8.59'
R = 2500.00'
P.C. 419+48.42 NR
P.T. 423+62.25 NR

P.I. DATA
P.I. 423+81.24 NR
N 218878.88
E 273724.35

PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	ALIGNMENT DIAGRAM - TEMPORARY	SHEET 529	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\027208_adt.dgn PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:800

WISDOT/CADDS SHEET 42

2

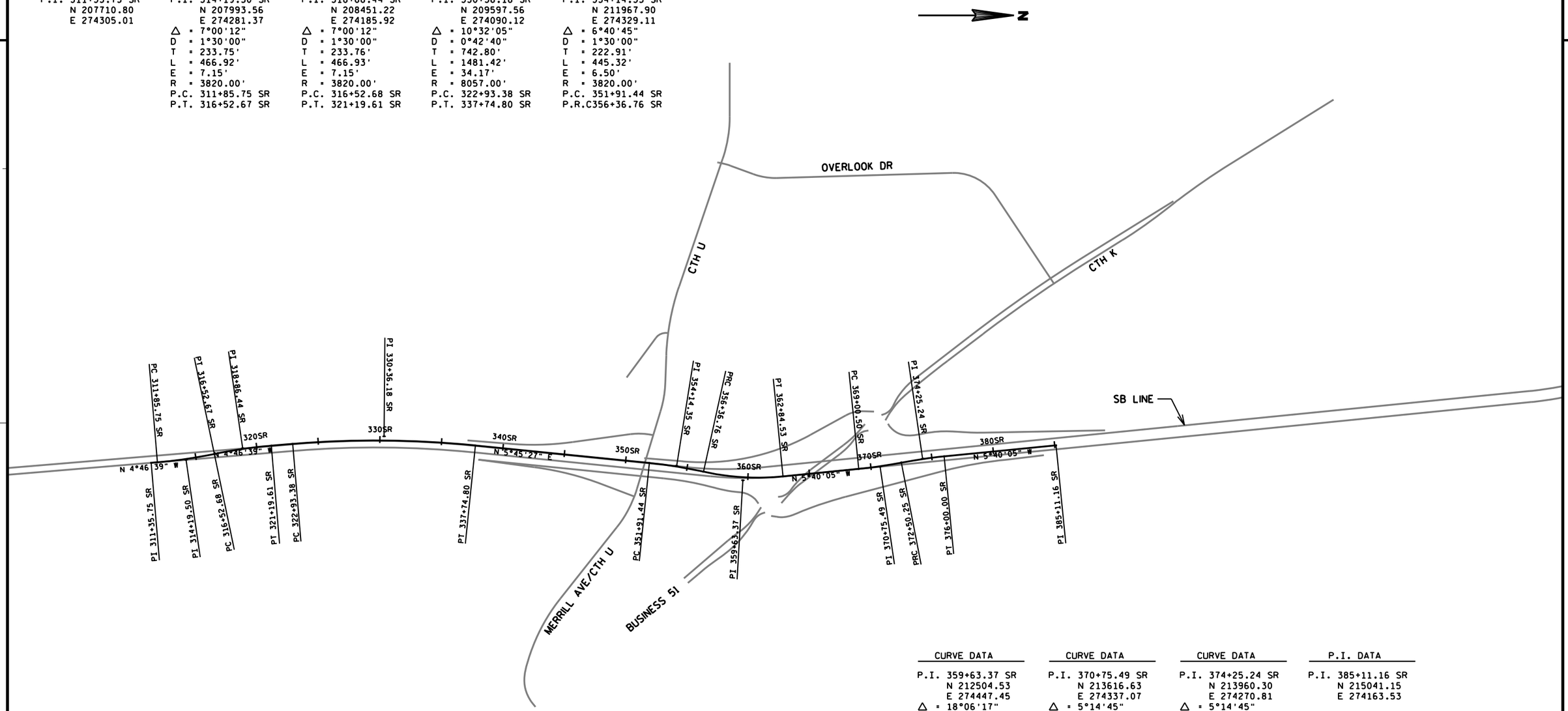
P.I. DATA
P.I. 311+35.75 SR
N 207710.80
E 274305.01

CURVE DATA
P.I. 314+19.50 SR
N 207993.56
E 274281.37
△ = 7°00'12"
D = 1°30'00"
T = 233.75'
L = 466.92'
E = 7.15'
R = 3820.00'
P.C. 311+85.75 SR
P.T. 316+52.67 SR

CURVE DATA
P.I. 318+86.44 SR
N 208451.22
E 274185.92
△ = 7°00'12"
D = 1°30'00"
T = 233.76'
L = 466.93'
E = 7.15'
R = 3820.00'
P.C. 316+52.68 SR
P.T. 321+19.61 SR

CURVE DATA
P.I. 330+36.18 SR
N 209597.56
E 274090.12
△ = 10°32'05"
D = 0°42'40"
T = 742.80'
L = 1481.42'
E = 34.17'
R = 8057.00'
P.C. 322+93.38 SR
P.T. 337+74.80 SR

CURVE DATA
P.I. 354+14.35 SR
N 211967.90
E 274329.11
△ = 6°40'45"
D = 1°30'00"
T = 222.91'
L = 445.32'
E = 6.50'
R = 3820.00'
P.C. 351+91.44 SR
P.R.C356+36.76 SR



CURVE DATA
P.I. 359+63.37 SR
N 212504.53
E 274447.45
△ = 18°06'17"
D = 2°47'42"
T = 326.61'
L = 647.77'
E = 25.85'
R = 2050.00'
P.R.C356+36.76 SR
P.T. 362+84.53 SR

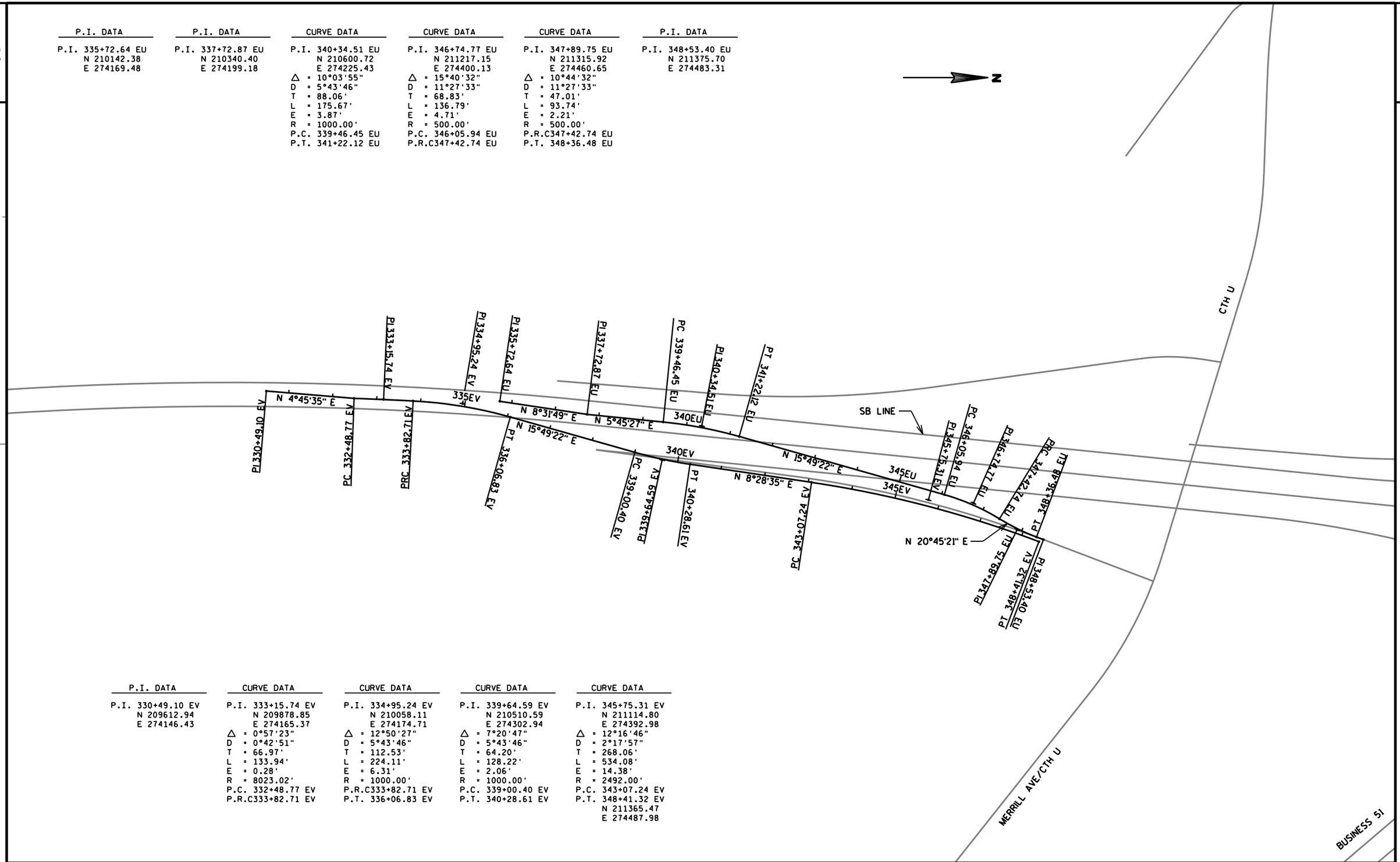
CURVE DATA
P.I. 370+75.49 SR
N 213616.63
E 274337.07
△ = 5°14'45"
D = 1°30'00"
T = 175.00'
L = 349.75'
E = 4.01'
R = 3820.00'
P.C. 369+00.50 SR
P.R.C372+50.25 SR

CURVE DATA
P.I. 374+25.24 SR
N 213960.30
E 274270.81
△ = 5°14'45"
D = 1°30'00"
T = 175.00'
L = 349.75'
E = 4.01'
R = 3820.00'
P.R.C372+50.25 SR
P.T. 376+00.00 SR

P.I. DATA
P.I. 385+11.16 SR
N 215041.15
E 274163.53

PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	ALIGNMENT DIAGRAM - TEMPORARY	SHEET 530	E

P.I. DATA	P.I. DATA	CURVE DATA	CURVE DATA	CURVE DATA	P.I. DATA
P.I. 335+72.64 EU N 210142.38 E 274169.48	P.I. 337+72.87 EU N 210340.40 E 274199.18	P.I. 340+34.51 EU N 210600.72 E 274225.43 △ = 10°03'55" D = 5°43'46" T = 88.06' L = 175.67' E = 3.87' R = 1000.00' P.C. 339+46.45 EU P.T. 341+22.12 EU	P.I. 346+74.77 EU N 211217.15 E 274400.13 △ = 15°40'32" D = 11°27'33" T = 68.83' L = 136.79' E = 4.71' R = 500.00' P.C. 346+05.94 EU P.R.C347+42.74 EU	P.I. 347+89.75 EU N 211315.92 E 274460.65 △ = 10°44'32" D = 11°27'33" T = 47.01' L = 93.74' E = 2.21' R = 500.00' P.R.C347+42.74 EU P.T. 348+36.48 EU	P.I. 348+53.40 EU N 211375.70 E 274483.31



P.I. DATA	CURVE DATA	CURVE DATA	CURVE DATA	CURVE DATA
P.I. 330+49.10 EV N 209612.94 E 274146.43	P.I. 333+15.74 EV N 209878.85 E 274165.37 △ = 0°57'23" D = 0°42'51" T = 66.97' L = 133.94' E = 0.28' R = 8023.02' P.C. 332+48.77 EV P.R.C333+82.71 EV	P.I. 334+95.24 EV N 210058.11 E 274174.71 △ = 12°50'27" D = 5°43'46" T = 112.53' L = 224.11' E = 6.31' R = 1000.00' P.R.C333+82.71 EV P.T. 336+06.83 EV	P.I. 339+64.59 EV N 210510.59 E 274302.94 △ = 7°20'47" D = 5°43'46" T = 64.20' L = 128.22' E = 2.06' R = 1000.00' P.C. 339+00.40 EV P.T. 340+28.61 EV	P.I. 345+75.31 EV N 211114.80 E 274392.98 △ = 12°16'46" D = 2°17'57" T = 268.06' L = 534.08' E = 14.38' R = 2492.00' P.C. 343+07.24 EV P.T. 348+41.32 EV N 211365.47 E 274487.98

PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	ALIGNMENT DIAGRAM - TEMPORARY	SHEET 531	E

CURVE DATA
P.I. 351+75.58 FU
N 210167.15
E 274207.18
△ = 2°09'28"
D = 0°17'14"
T = 375.58'
L = 751.07'
E = 3.54'
R = 19943.09'
P.C. 348+00.00 FU
N 209791.86
E 274192.38
P.R.C355+51.07 FU

CURVE DATA
P.I. 356+68.45 FU
N 210658.65
E 274245.15
△ = 13°23'25"
D = 5°43'46"
T = 117.39'
L = 233.70'
E = 6.87'
R = 1000.00'
P.R.C355+51.07 FU
P.T. 357+84.77 FU

CURVE DATA
P.I. 360+84.33 FU
N 211070.49
E 274180.13
△ = 9°50'10"
D = 5°43'46"
T = 86.05'
L = 171.67'
E = 3.70'
R = 1000.00'
P.C. 359+98.28 FU
P.R.C361+69.96 FU

CURVE DATA
P.I. 362+66.63 FU
N 211243.46
E 274121.22
△ = 11°02'37"
D = 5°43'46"
T = 96.67'
L = 192.75'
E = 4.66'
R = 1000.00'
P.R.C361+69.96 FU
P.T. 363+62.70 FU

P.I. DATA
P.I. 363+73.09 FU
N 211349.54
E 274106.75

N

PI 327+76.83 FV
325FV
330FV
PT 333+30.52 FV
PC 335+48.85 FV
335FV
PI 336+58.63 FV
PT 337+67.54 FV
PI 339+86.64 FV
PT 341+64.59 FU
PC 344+35.19 FU
345FU
PRC 346+80.39 FU
PI 347+90.63 FU
N 7°48'27" W
PT 349+00.00 FU
PI 349+25.00 FU
CTH U
PC 324+00.00 FV
PRC 331+53.05 FV
PC 332+25.70 FU
PI 332+42.02 FV
N 7°58'16" W
335FU
N 4°33'31" E
340FU
N 6°20'27" W
SB LINE
PT 339+76.81 FU
PI 340+71.03 FU
PI 345+58.40 FU
MERRILL AVE/CTH U

CURVE DATA
P.I. 327+76.83 FV
N 209365.55
E 274168.74
△ = 5°38'10"
D = 0°44'54"
T = 376.83'
L = 753.05'
E = 9.27'
R = 7655.42'
P.C. 324+00.00 FV
N 208989.94
E 274199.06
P.R.C331+53.05 FV

CURVE DATA
P.I. 332+42.02 FV
N 209831.22
E 274178.86
△ = 10°10'06"
D = 5°43'46"
T = 88.97'
L = 177.47'
E = 3.95'
R = 1000.00'
P.R.C331+53.05 FV
P.T. 333+30.52 FV

CURVE DATA
P.I. 336+58.63 FV
N 210244.26
E 274121.03
△ = 12°31'48"
D = 5°43'46"
T = 109.78'
L = 218.69'
E = 6.01'
R = 1000.00'
P.C. 335+48.85 FV
P.T. 337+67.54 FV

P.I. DATA
P.I. 339+86.64 FV
N 210572.11
E 274147.17

PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	ALIGNMENT DIAGRAM - TEMPORARY	SHEET	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\027211_adt.dgn PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:200
WISDOT/CADDS SHEET 42

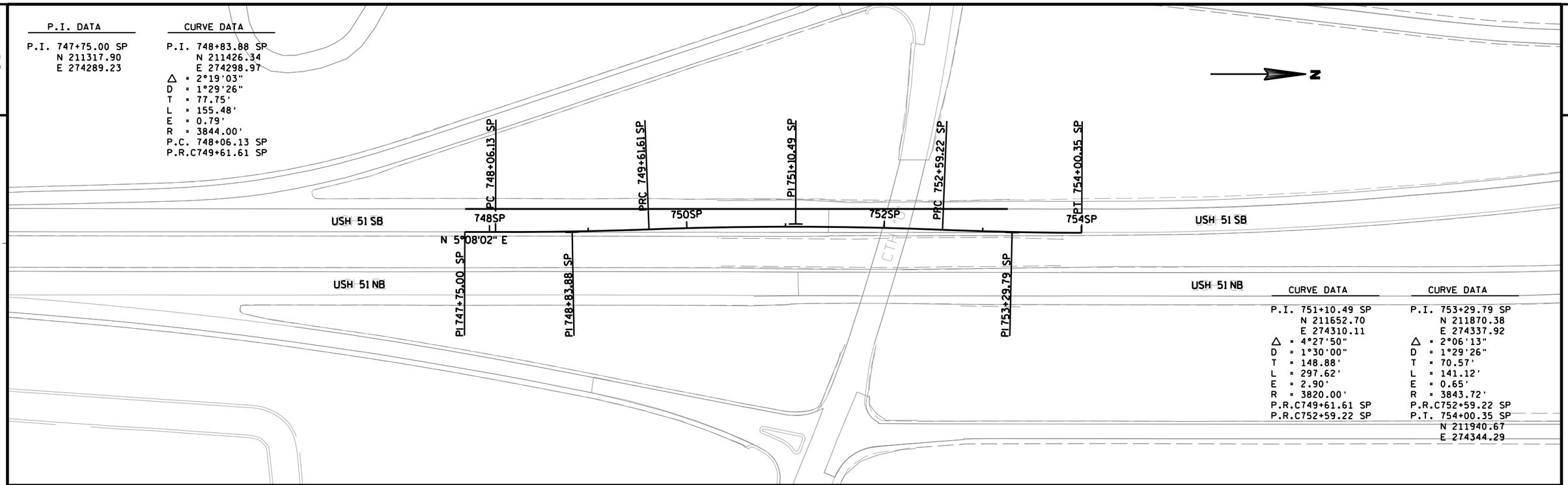
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P.I. DATA

P.I. 747+75.00 SP
N 211317.90
E 274289.23

CURVE DATA

P.I. 748+83.88 SP
N 211426.34
E 274298.97
△ = 2°19'03"
D = 1°29'26"
T = 77.75'
L = 155.48'
E = 0.79'
R = 3844.00'
P.C. 748+06.13 SP
P.R.C749+61.61 SP



CURVE DATA

P.I. 751+10.49 SP
N 211652.70
E 274310.11
△ = 4°27'50"
D = 1°30'00"
T = 148.88'
L = 297.62'
E = 2.90'
R = 3820.00'
P.R.C749+61.61 SP
P.R.C752+59.22 SP

CURVE DATA

P.I. 753+29.79 SP
N 211870.38
E 274337.92
△ = 2°06'13"
D = 1°29'26"
T = 70.57'
L = 141.12'
E = 0.65'
R = 3843.72'
P.R.C752+59.22 SP
P.T. 754+00.35 SP
N 211940.67
E 274344.29

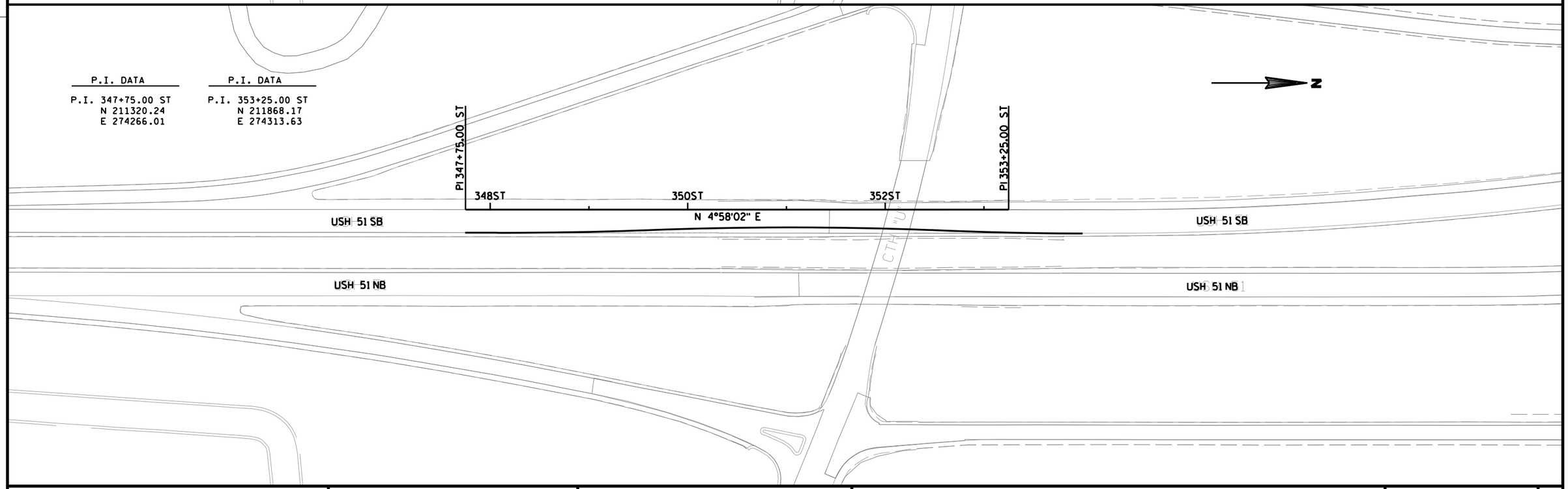
2

P.I. DATA

P.I. 347+75.00 ST
N 211320.24
E 274266.01

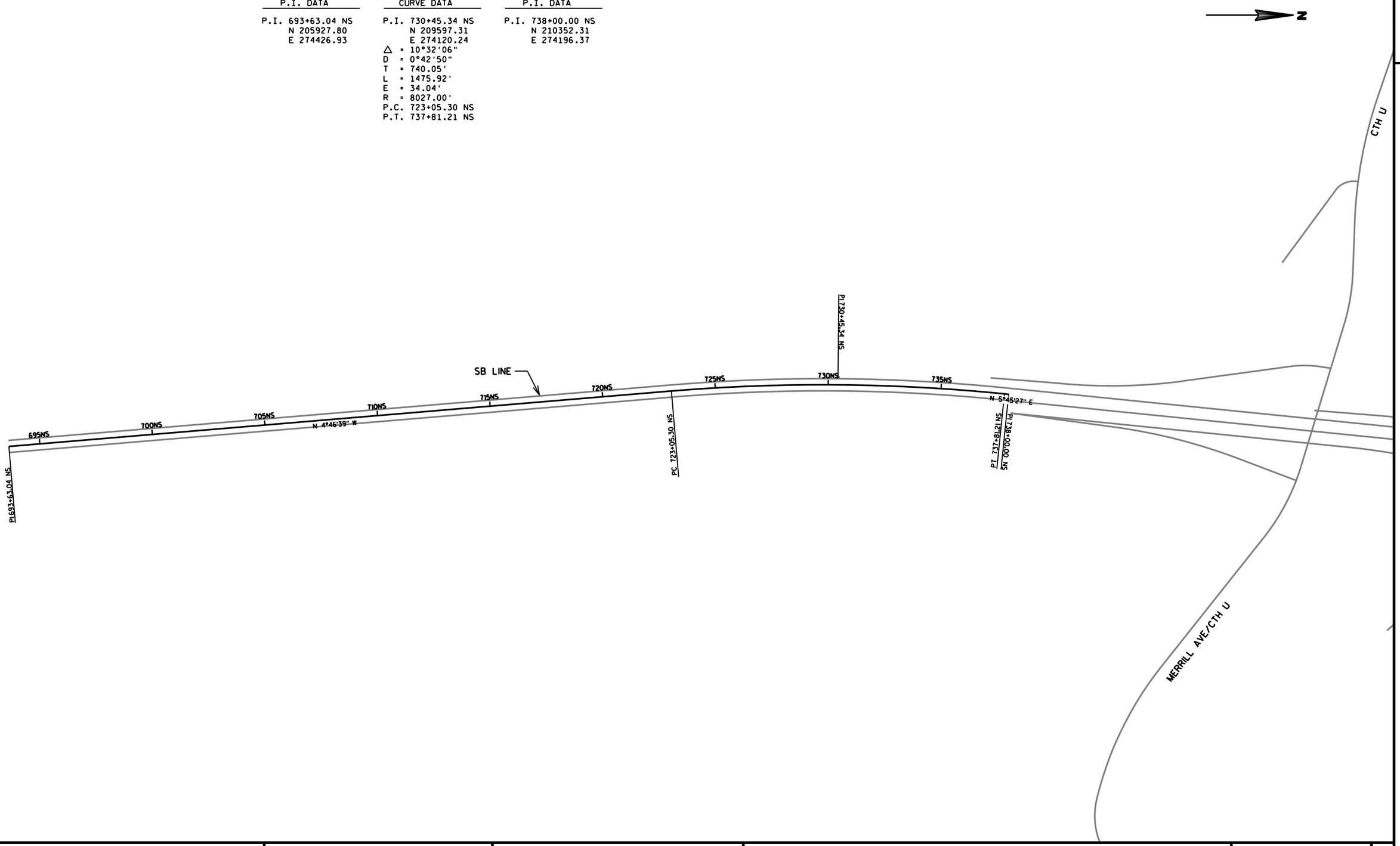
P.I. DATA

P.I. 353+25.00 ST
N 211868.17
E 274313.63



PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	ALIGNMENT DIAGRAM - TEMPORARY	SHEET 533	E

P.I. DATA	CURVE DATA	P.I. DATA
P.I. 693+63.04 NS N 205927.80 E 274426.93	P.I. 730+45.34 NS N 209597.31 E 274120.24 △ = 10°32'06" D = 0°42'50" T = 740.05' L = 1475.92' E = 34.04' R = 8027.00' P.C. 723+05.30 NS P.T. 737+81.21 NS	P.I. 738+00.00 NS N 210352.31 E 274196.37



PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	ALIGNMENT DIAGRAM - TEMPORARY	SHEET 534	E

DATE 08OCT12 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1170-01-70 QUANTITY	1170-01-71 QUANTITY	1170-01-73 QUANTITY	6999-18-70 QUANTITY
0010	201.0105	CLEARING	STA	137.000	80.000		35.000	22.000
0020	201.0205	GRUBBING	STA	137.000	80.000		35.000	22.000
0030	203.0100	REMOVING SMALL PIPE CULVERTS	EACH	44.000	17.000		5.000	22.000
0040	203.0200	REMOVING OLD STRUCTURE (STATION) 01. 765+14.11 NB	LS	1.000	1.000			
0050	203.0200	REMOVING OLD STRUCTURE (STATION) 02. 766+38.72 SB	LS	1.000	1.000			
0060	203.0200	REMOVING OLD STRUCTURE (STATION) 03. 49+90 U	LS	1.000		1.000		
0070	203.0200	REMOVING OLD STRUCTURE (STATION) 04. 812+08.84 SB	LS	1.000			1.000	
0080	203.0200	REMOVING OLD STRUCTURE (STATION) 20. 61+07 KN	LS	1.000	1.000			
0090	203.0500.S	REMOVING OLD STRUCTURE OVER WATERWAY (STATION) 01. 755+02.50 SB	LS	1.000			1.000	
0100	203.0500.S	REMOVING OLD STRUCTURE OVER WATERWAY (STATION) 02. 788+91.88 NB	LS	1.000			1.000	
0110	203.0500.S	REMOVING OLD STRUCTURE OVER WATERWAY (STATION) 03. 32+81.96 KS	LS	1.000	1.000			
0120	204.0100	REMOVING PAVEMENT	SY	91,280.000	43,900.000		47,380.000	
0130	204.0110	REMOVING ASPHALTIC SURFACE	SY	4,912.000				4,912.000
0140	204.0150	REMOVING CURB & GUTTER	LF	1,955.000	79.000			1,876.000
0150	204.0155	REMOVING CONCRETE SIDEWALK	SY	274.000	19.000			255.000
0160	204.0165	REMOVING GUARDRAIL	LF	5,970.000	1,866.000		3,356.000	748.000
0170	204.0170	REMOVING FENCE	LF	20,866.000	9,858.000		10,525.000	483.000
0180	204.0180	REMOVING DELINEATORS AND MARKERS	EACH	196.000	118.000		78.000	
0190	204.0195	REMOVING CONCRETE BASES	EACH	9.000				9.000
0200	204.0210	REMOVING MANHOLES	EACH	3.000	1.000			2.000
0210	204.0220	REMOVING INLETS	EACH	41.000	8.000		24.000	9.000
0220	204.0245	REMOVING STORM SEWER (SIZE) 01. 12-INCH	LF	435.000				435.000
0230	204.0245	REMOVING STORM SEWER (SIZE) 02. 15-INCH	LF	72.000				72.000
0240	204.0245	REMOVING STORM SEWER (SIZE) 03. 18-INCH	LF	72.000			50.000	22.000
0250	204.0270	ABANDONING CULVERT PIPES	EACH	11.000	1.000		10.000	
0260	204.9060.S	REMOVING (ITEM DESCRIPTION) 03. PARTIAL PIPE	EACH	11.000	2.000		9.000	
0270	204.9090.S	REMOVING (ITEM DESCRIPTION) 01. MODULAR BLOCK RETAINING WALL	LF	23.000				23.000
0280	204.9090.S	REMOVING (ITEM DESCRIPTION) 02. CABLE GUARD	LF	650.000			650.000	
0290	205.0100	EXCAVATION COMMON	CY	450,304.000	227,233.000		193,509.000	29,562.000
0300	205.0200	EXCAVATION ROCK	CY	11,529.000	11,529.000			
0310	205.0400	EXCAVATION MARSH	CY	2,234.000			2,234.000	
0320	206.1000	EXCAVATION FOR STRUCTURES BRIDGES (STRUCTURE) 01. B-37-153	LS	1.000	1.000			
0330	206.1000	EXCAVATION FOR STRUCTURES BRIDGES (STRUCTURE) 02. B-37-154	LS	1.000	1.000			
0340	206.1000	EXCAVATION FOR STRUCTURES BRIDGES (STRUCTURE) 03. B-37-436	LS	1.000		1.000		
0350	206.1000	EXCAVATION FOR STRUCTURES BRIDGES (STRUCTURE) 04. B-37-156	LS	1.000			1.000	
0360	206.2000	EXCAVATION FOR STRUCTURES CULVERTS (STRUCTURE) 01. C-37-27	LS	1.000			1.000	
0370	206.2000	EXCAVATION FOR STRUCTURES CULVERTS (STRUCTURE) 02. B-37-167	LS	1.000			1.000	
0380	206.2000	EXCAVATION FOR STRUCTURES CULVERTS (STRUCTURE) 03. C-37-4	LS	1.000	1.000			
0390	206.6000.S	TEMPORARY SHORING	SF	1,728.000		750.000	978.000	

DATE 08OCT12 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1170-01-70 QUANTITY	1170-01-71 QUANTITY	1170-01-73 QUANTITY	6999-18-70 QUANTITY
0400	208.0100	BORROW	CY	5,000.000			5,000.000	
0410	210.0100	BACKFILL STRUCTURE	CY	1,960.000	390.000	1,070.000	500.000	
0420	213.0100	FINISHING ROADWAY (PROJECT) 01. 1170-01-70	EACH	1.000	1.000			
0430	213.0100	FINISHING ROADWAY (PROJECT) 02. 1170-01-73	EACH	1.000			1.000	
0440	213.0100	FINISHING ROADWAY (PROJECT) 03. 6999-18-70	EACH	1.000				1.000
0450	214.0100	OBLITERATING OLD ROAD	STA	16.000	11.000			5.000
0460	305.0110	BASE AGGREGATE DENSE 3/4-INCH	TON	11,700.000	4,010.000		6,610.000	1,080.000
0470	305.0120	BASE AGGREGATE DENSE 1 1/4-INCH	TON	130,506.000	36,526.000		79,380.000	14,600.000
0480	310.0110	BASE AGGREGATE OPEN GRADED	TON	26,862.000	9,062.000			17,800.000
0490	312.0110	SELECT CRUSHED MATERIAL	TON	149,333.000	68,723.000		80,610.000	
0500	405.0100	COLORING CONCRETE RED	CY	422.000	422.000			
0510	415.0070	CONCRETE PAVEMENT 7-INCH	SY	5,241.000				5,241.000
0520	415.0080	CONCRETE PAVEMENT 8-INCH	SY	15,021.000	15,021.000			
0530	415.0085	CONCRETE PAVEMENT 8 1/2-INCH	SY	11,741.000	11,741.000			
0540	415.0100	CONCRETE PAVEMENT 10-INCH	SY	68,540.000	5,145.000		63,395.000	
0550	415.0410	CONCRETE PAVEMENT APPROACH SLAB	SY	820.000			563.000	257.000
0560	415.1080	CONCRETE PAVEMENT HES 8-INCH	SY	2,400.000			2,400.000	
0570	415.1100	CONCRETE PAVEMENT HES 10-INCH	SY	1,375.000			1,375.000	
0580	415.6000.S	ROUTE AND SEAL	LF	36,602.000			36,602.000	
0590	416.0160	CONCRETE DRIVEWAY 6-INCH	SY	971.000	17.000			954.000
0600	416.0508	CONCRETE ROUNDABOUT TRUCK APRON 8-INCH	SY	1,344.000	1,344.000			
0610	416.0620	DRILLED DOWEL BARS	EACH	106.000	27.000		79.000	
0620	416.1010	CONCRETE SURFACE DRAINS	CY	71.200			71.200	
0630	440.4410.S	INCENTIVE IRI RIDE	DOL	15,752.000			15,752.000	
0640	455.0115	ASPHALTIC MATERIAL PG64-22	TON	709.000	338.000		108.000	263.000
0650	455.0120	ASPHALTIC MATERIAL PG64-28	TON	154.000	154.000			
0660	455.0122	ASPHALTIC MATERIAL PG64-34	TON	370.000	65.000		115.000	190.000
0670	455.0605	TACK COAT	GAL	4,521.000	1,599.000		2,185.000	737.000
0680	460.1100	HMA PAVEMENT TYPE E-0.3	TON	9,854.000	5,970.000		3,622.000	262.000
0690	460.1101	HMA PAVEMENT TYPE E-1	TON	7,968.000				7,968.000
0700	460.1103	HMA PAVEMENT TYPE E-3	TON	4,633.000	4,188.000		445.000	
0710	460.2000	INCENTIVE DENSITY HMA PAVEMENT	DOL	14,370.000	6,490.000		2,610.000	5,270.000
0720	465.0105	ASPHALTIC SURFACE	TON	312.000	206.000		106.000	
0730	465.0110	ASPHALTIC SURFACE PATCHING	TON	10.000			10.000	
0740	465.0120	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES	TON	454.000				454.000
0750	465.0125	ASPHALTIC SURFACE TEMPORARY	TON	27,785.000	5,940.000		21,845.000	
0760	465.0315	ASPHALTIC FLUMES	SY	24.000	14.000			10.000
0770	465.0400	ASPHALTIC SHOULDER RUMBLE STRIP	LF	29,649.000			29,649.000	
0780	502.0100	CONCRETE MASONRY BRIDGES	CY	3,217.000	1,375.000	1,632.000	210.000	
0790	502.3100	EXPANSION DEVICE (STRUCTURE) 01. B-37-153	LS	1.000	1.000			
0800	502.3100	EXPANSION DEVICE (STRUCTURE) 02. B-37-154	LS	1.000	1.000			
0810	502.3200	PROTECTIVE SURFACE TREATMENT	SY	8,080.000	4,490.000	2,840.000	750.000	
0820	502.5005	MASONRY ANCHORS TYPE L NO. 5 BARS	EACH	1,046.000	762.000		284.000	
0830	502.6110	MASONRY ANCHORS TYPE S 3/4-INCH	EACH	10.000	10.000			
0840	503.0155	PRESTRESSED GIRDER TYPE I 54W-INCH	LF	3,567.000		3,567.000		
0850	504.0100	CONCRETE MASONRY CULVERTS	CY	126.000	18.000		108.000	
0860	505.0405	BAR STEEL REINFORCEMENT HS BRIDGES	LB	41,520.000		41,520.000		
0870	505.0410	BAR STEEL REINFORCEMENT HS CULVERTS	LB	12,920.000	1,830.000		11,090.000	

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LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1170-01-70 QUANTITY	1170-01-71 QUANTITY	1170-01-73 QUANTITY	6999-18-70 QUANTITY
0880	505.0605	BAR STEEL REINFORCEMENT HS COATED BRIDGES	LB	622,380.000	297,280.000	275,860.000	49,240.000	
0890	506.2605	BEARING PADS ELASTOMERIC NON-LAMINATED	EACH	56.000		56.000		
0900	506.3015	WELDED STUD SHEAR CONNECTORS 7/8X6-INCH	EACH	9,240.000	9,240.000			
0910	506.4000	STEEL DIAPHRAGMS (STRUCTURE) 01. B-37-436	EACH	52.000		52.000		
0920	506.4000	STEEL DIAPHRAGMS (STRUCTURE) 02. B-37-156	EACH	15.000			15.000	
0930	509.1500	CONCRETE SURFACE REPAIR	SF	130.000	100.000		30.000	
0940	509.5100.S	POLYMER OVERLAY	SY	3,790.000	3,790.000			
0950	513.2000	RAILING PIPE (STRUCTURE) 01. CTH U RETAINING WALL	LS	1.000				1.000
0960	516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	215.000	84.000	47.000	84.000	
0970	517.0900.S	PREPARATION AND COATING OF TOP FLANGES (STRUCTURE) 01. B-37-153	LS	1.000	1.000			
0980	517.0900.S	PREPARATION AND COATING OF TOP FLANGES (STRUCTURE) 02. B-37-154	LS	1.000	1.000			
0990	517.1010.S	CONCRETE STAINING (STRUCTURE) 01. B-37-153	SF	5,380.000	5,380.000			
1000	517.1010.S	CONCRETE STAINING (STRUCTURE) 02. B-37-154	SF	5,380.000	5,380.000			
1010	517.1010.S	CONCRETE STAINING (STRUCTURE) 03. B-37-436	SF	14,240.000		14,240.000		
1020	517.1800.S	STRUCTURE REPAINTING RECYCLED ABRASIVE (STRUCTURE) 01. B-37-153	LS	1.000	1.000			
1030	517.1800.S	STRUCTURE REPAINTING RECYCLED ABRASIVE (STRUCTURE) 02. B-37-154	LS	1.000	1.000			
1040	517.4500.S	NEGATIVE PRESSURE CONTAINMENT AND COLLECTION OF WASTE MATERIALS (STRUCTURE) 01. B-37-153	LS	1.000	1.000			
1050	517.4500.S	NEGATIVE PRESSURE CONTAINMENT AND COLLECTION OF WASTE MATERIALS (STRUCTURE) 02. B-37-154	LS	1.000	1.000			
1060	517.6001.S	PORTABLE DECONTAMINATION FACILITY	EACH	1.000	1.000			
1070	520.4012	CULVERT PIPE TEMPORARY 12-INCH	LF	1,344.000	249.000		1,095.000	
1080	520.4018	CULVERT PIPE TEMPORARY 18-INCH	LF	2,393.000	485.000		1,908.000	
1090	520.4024	CULVERT PIPE TEMPORARY 24-INCH	LF	602.000	470.000		132.000	
1100	520.4036	CULVERT PIPE TEMPORARY 36-INCH	LF	6.000			6.000	
1110	520.4042	CULVERT PIPE TEMPORARY 42-INCH	LF	130.000			130.000	
1120	520.8000	CONCRETE COLLARS FOR PIPE	EACH	1.000				1.000
1130	521.0112	CULVERT PIPE CORRUGATED STEEL 12-INCH	LF	329.000	202.000			127.000
1140	521.0115	CULVERT PIPE CORRUGATED STEEL 15-INCH	LF	133.000	133.000			
1150	521.0118	CULVERT PIPE CORRUGATED STEEL 18-INCH	LF	551.000	242.000		60.000	249.000
1160	521.0124	CULVERT PIPE CORRUGATED STEEL 24-INCH	LF	131.000	131.000			
1170	521.0130	CULVERT PIPE CORRUGATED STEEL 30-INCH	LF	188.000	188.000			
1180	521.0136	CULVERT PIPE CORRUGATED STEEL 36-INCH	LF	77.000				77.000
1190	521.1012	APRON ENDWALLS FOR CULVERT PIPE STEEL 12-INCH	EACH	22.000	8.000		6.000	8.000
1200	521.1015	APRON ENDWALLS FOR CULVERT PIPE STEEL 15-INCH	EACH	6.000	6.000			
1210	521.1018	APRON ENDWALLS FOR CULVERT PIPE STEEL 18-INCH	EACH	14.000	8.000			6.000
1220	521.1024	APRON ENDWALLS FOR CULVERT PIPE STEEL 24-INCH	EACH	2.000	2.000			
1230	521.1030	APRON ENDWALLS FOR CULVERT PIPE STEEL 30-INCH	EACH	4.000	4.000			

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LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1170-01-70 QUANTITY	1170-01-71 QUANTITY	1170-01-73 QUANTITY	6999-18-70 QUANTITY
1240	521.1036	APRON ENDWALLS FOR CULVERT PIPE STEEL 36-INCH	EACH	1.000				1.000
1250	521.1518	APRON ENDWALLS FOR CULVERT PIPE SLOPED SIDE DRAINS STEEL 18-INCH 6 TO 1	EACH	1.000			1.000	
1260	521.1618	APRON ENDWALLS FOR CULVERT PIPE SLOPED SIDE DRAINS STEEL 18-INCH 10 TO 1	EACH	2.000			2.000	
1270	522.0118	CULVERT PIPE REINFORCED CONCRETE CLASS III 18-INCH	LF	769.000	10.000		759.000	
1280	522.0121	CULVERT PIPE REINFORCED CONCRETE CLASS III 21-INCH	LF	250.000			250.000	
1290	522.0124	CULVERT PIPE REINFORCED CONCRETE CLASS III 24-INCH	LF	364.000	364.000			
1300	522.0130	CULVERT PIPE REINFORCED CONCRETE CLASS III 30-INCH	LF	101.000	101.000			
1310	522.0136	CULVERT PIPE REINFORCED CONCRETE CLASS III 36-INCH	LF	481.000	267.000		214.000	
1320	522.0142	CULVERT PIPE REINFORCED CONCRETE CLASS III 42-INCH	LF	243.000			243.000	
1330	522.0148	CULVERT PIPE REINFORCED CONCRETE CLASS III 48-INCH	LF	254.000			254.000	
1340	522.0172	CULVERT PIPE REINFORCED CONCRETE CLASS III 72-INCH	LF	222.000	222.000			
1350	522.1012	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 12-INCH	EACH	6.000	6.000			
1360	522.1015	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 15-INCH	EACH	13.000	10.000			3.000
1370	522.1018	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 18-INCH	EACH	8.000	2.000		6.000	
1380	522.1021	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 21-INCH	EACH	4.000			4.000	
1390	522.1024	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 24-INCH	EACH	9.000	5.000		2.000	2.000
1400	522.1030	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 30-INCH	EACH	4.000	3.000			1.000
1410	522.1036	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 36-INCH	EACH	7.000	4.000		2.000	1.000
1420	522.1042	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 42-INCH	EACH	2.000			2.000	
1430	522.1048	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 48-INCH	EACH	2.000			2.000	
1440	522.1072	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 72-INCH	EACH	2.000	2.000			
1450	524.0618	APRON ENDWALLS FOR CULVERT PIPE SALVAGED 18-INCH	EACH	1.000	1.000			
1460	524.0630	APRON ENDWALLS FOR CULVERT PIPE SALVAGED 30-INCH	EACH	1.000	1.000			
1470	532.0200.S	WALL MODULAR BLOCK GRAVITY	SF	322.000				322.000
1480	550.0020	PRE-BORING ROCK OR CONSOLIDATED MATERIALS	LF	319.000		319.000		
1490	550.1100	PILING STEEL HP 10-INCH X 42 LB	LF	1,052.000		1,052.000		
1500	601.0409	CONCRETE CURB & GUTTER 30-INCH TYPE A	LF	15,918.000	13,354.000			2,564.000
1510	601.0411	CONCRETE CURB & GUTTER 30-INCH TYPE D	LF	11,019.000	682.000			10,337.000
1520	601.0553	CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE D	LF	14.000	14.000			
1530	601.0555	CONCRETE CURB AND GUTTER 6-INCH SLOPED 36-INCH TYPE A	LF	2,403.000	2,363.000			40.000
1540	601.0557	CONCRETE CURB AND GUTTER 6-INCH SLOPED 36-INCH TYPE D	LF	701.000	315.000			386.000

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LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1170-01-70 QUANTITY	1170-01-71 QUANTITY	1170-01-73 QUANTITY	6999-18-70 QUANTITY
1550	601.0574	CONCRETE CURB & GUTTER 4-INCH SLOPED 30-INCH TYPE G	LF	534.000	534.000			
1560	601.0580	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE R	LF	800.000	800.000			
1570	601.0600	CONCRETE CURB PEDESTRIAN	LF	240.000	51.000			189.000
1580	602.0405	CONCRETE SIDEWALK 4-INCH	SF	91,050.000	46,640.000			44,410.000
1590	602.0420	CONCRETE SIDEWALK 7-INCH	SF	1,672.000	1,672.000			
1600	602.0505	CURB RAMP DETECTABLE WARNING FIELD YELLOW	SF	736.000	576.000			160.000
1610	603.1142	CONCRETE BARRIER TYPE S42	LF	1,696.000	1,696.000			
1620	603.1442	CONCRETE BARRIER TYPE S42C	LF	1,132.000	1,132.000			
1630	603.8000	CONCRETE BARRIER TEMPORARY PRECAST DELIVERED	LF	13,855.000	870.000		12,985.000	
1640	603.8125	CONCRETE BARRIER TEMPORARY PRECAST INSTALLED	LF	52,475.000	5,375.000		47,100.000	
1650	604.0400	SLOPE PAVING CONCRETE	SY	1,010.000		1,010.000		
1660	606.0200	RIPRAP MEDIUM	CY	2,211.000	1,836.000		246.000	129.000
1670	606.0300	RIPRAP HEAVY	CY	970.000	46.000		127.000	797.000
1680	606.0700	GROUTED RIPRAP HEAVY	CY	202.000				202.000
1690	607.5000	STORM SEWER ROCK EXCAVATION	CY	2,627.000	1,650.000			977.000
1700	608.0312	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 12-INCH	LF	2,638.000	1,792.000			846.000
1710	608.0315	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 15-INCH	LF	2,881.000	1,264.000			1,617.000
1720	608.0318	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 18-INCH	LF	2,125.000	991.000		362.000	772.000
1730	608.0321	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 21-INCH	LF	895.000	349.000			546.000
1740	608.0324	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 24-INCH	LF	1,729.000	586.000		303.000	840.000
1750	608.0330	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 30-INCH	LF	454.000	68.000			386.000
1760	608.0336	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 36-INCH	LF	530.000				530.000
1770	611.0420	RECONSTRUCTING MANHOLES	EACH	7.000	1.000			6.000
1780	611.0530	MANHOLE COVERS TYPE J	EACH	24.000	4.000		1.000	19.000
1790	611.0606	INLET COVERS TYPE B	EACH	3.000			3.000	
1800	611.0610	INLET COVERS TYPE BW	EACH	5.000	5.000			
1810	611.0612	INLET COVERS TYPE C	EACH	5.000	2.000		2.000	1.000
1820	611.0624	INLET COVERS TYPE H	EACH	116.000	58.000			58.000
1830	611.0627	INLET COVERS TYPE HM	EACH	8.000	8.000			
1840	611.0642	INLET COVERS TYPE MS	EACH	41.000	16.000		25.000	
1850	611.0652	INLET COVERS TYPE T	EACH	4.000	4.000			
1860	611.0654	INLET COVERS TYPE V	EACH	5.000	4.000		1.000	
1870	611.2004	MANHOLES 4-FT DIAMETER	EACH	35.000	22.000		1.000	12.000
1880	611.2005	MANHOLES 5-FT DIAMETER	EACH	12.000	2.000			10.000
1890	611.2006	MANHOLES 6-FT DIAMETER	EACH	3.000				3.000
1900	611.3220	INLETS 2X2-FT	EACH	8.000	2.000		5.000	1.000
1910	611.3225	INLETS 2X2.5-FT	EACH	7.000	6.000		1.000	
1920	611.3230	INLETS 2X3-FT	EACH	105.000	53.000			52.000
1930	611.3901	INLETS MEDIAN 1 GRATE	EACH	6.000	3.000		3.000	
1940	611.3902	INLETS MEDIAN 2 GRATE	EACH	22.000	8.000		14.000	
1950	611.8110	ADJUSTING MANHOLE COVERS	EACH	8.000				8.000
1960	611.8115	ADJUSTING INLET COVERS	EACH	1.000	1.000			
1970	611.8120.S	COVER PLATES TEMPORARY	EACH	8.000	5.000		3.000	

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LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1170-01-70 QUANTITY	1170-01-71 QUANTITY	1170-01-73 QUANTITY	6999-18-70 QUANTITY
1980	611.9800.S	PIPE GRATES	EACH	31.000	19.000		4.000	8.000
1990	612.0106	PIPE UNDERDRAIN 6-INCH	LF	24,218.000	16,042.000			8,176.000
2000	612.0206	PIPE UNDERDRAIN UNPERFORATED 6-INCH	LF	264.000	264.000			
2010	612.0212	PIPE UNDERDRAIN UNPERFORATED 12-INCH	LF	355.000			355.000	
2020	612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	480.000		355.000		125.000
2030	612.0806	APRON ENDWALLS FOR UNDERDRAIN REINFORCED CONCRETE 6-INCH	EACH	24.000	24.000			
2040	614.0150	ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD	EACH	16.000	8.000	4.000	4.000	
2050	614.0220	STEEL THRIE BEAM BULLNOSE TERMINAL	EACH	2.000			2.000	
2060	614.0230	STEEL THRIE BEAM	LF	275.000			275.000	
2070	614.0250	STEEL THRIE BEAM STRUCTURE APPROACH TEMPORARY	LF	21.000			21.000	
2080	614.0305	STEEL PLATE BEAM GUARD CLASS A	LF	508.000			508.000	
2090	614.0360	STEEL PLATE BEAM GUARD TEMPORARY	LF	500.000			500.000	
2100	614.0380	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL TEMPORARY	EACH	1.000			1.000	
2110	614.0805	CRASH CUSHIONS PERMANENT LOW MAINTENANCE	EACH	2.000	2.000			
2120	614.0905	CRASH CUSHIONS TEMPORARY	EACH	19.000	5.000		14.000	
2130	614.2300	MGS GUARDRAIL 3	LF	2,763.000	162.000		2,601.000	
2140	614.2500	MGS THRIE BEAM TRANSITION	LF	359.000	39.000		320.000	
2150	614.2610	MGS GUARDRAIL TERMINAL EAT	EACH	9.000	1.000		8.000	
2160	614.2620	MGS GUARDRAIL TERMINAL TYPE 2	EACH	1.000			1.000	
2170	616.0206	FENCE CHAIN LINK 6-FT	LF	20,286.000	10,250.000		10,036.000	
2180	616.0700.S	FENCE SAFETY	LF	200.000				200.000
2190	618.0100	MAINTENANCE AND REPAIR OF HAUL ROADS (PROJECT) 01. 1170-01-70	EACH	1.000	1.000			
2200	618.0100	MAINTENANCE AND REPAIR OF HAUL ROADS (PROJECT) 02. 1170-01-73	EACH	1.000			1.000	
2210	618.0100	MAINTENANCE AND REPAIR OF HAUL ROADS (PROJECT) 03. 6999-18-70	EACH	1.000				1.000
2220	619.1000	MOBILIZATION	EACH	1.000	0.450	0.130	0.340	0.080
2230	620.0300	CONCRETE MEDIAN SLOPED NOSE	SF	1,297.000	484.000			813.000
2240	624.0100	WATER	MGAL	5,048.000	2,230.000		2,300.000	518.000
2250	625.0100	TOPSOIL	SY	448,950.000	227,600.000		183,150.000	38,200.000
2260	627.0200	MULCHING	SY	264,650.000	118,000.000		141,650.000	5,000.000
2270	628.1504	SILT FENCE	LF	20,575.000	8,225.000		9,100.000	3,250.000
2280	628.1520	SILT FENCE MAINTENANCE	LF	20,575.000	8,225.000		9,100.000	3,250.000
2290	628.1905	MOBILIZATIONS EROSION CONTROL	EACH	32.000	15.000		12.000	5.000
2300	628.1910	MOBILIZATIONS EMERGENCY EROSION CONTROL	EACH	32.000	15.000		12.000	5.000
2310	628.2004	EROSION MAT CLASS I TYPE B	SY	117,300.000	72,550.000		32,000.000	12,750.000
2320	628.2006	EROSION MAT URBAN CLASS I TYPE A	SY	39,850.000	17,850.000		2,200.000	19,800.000
2330	628.2023	EROSION MAT CLASS II TYPE B	SY	9,650.000	2,050.000		7,600.000	
2340	628.6510	SOIL STABILIZER TYPE B	ACRE	6.000	3.000		3.000	
2350	628.7005	INLET PROTECTION TYPE A	EACH	178.000	92.000		21.000	65.000
2360	628.7010	INLET PROTECTION TYPE B	EACH	45.000	21.000		22.000	2.000
2370	628.7015	INLET PROTECTION TYPE C	EACH	176.000	109.000			67.000
2380	628.7020	INLET PROTECTION TYPE D	EACH	12.000			2.000	10.000
2390	628.7504	TEMPORARY DITCH CHECKS	LF	2,560.000	1,820.000		600.000	140.000
2400	628.7555	CULVERT PIPE CHECKS	EACH	325.000	185.000		110.000	30.000
2410	628.7560	TRACKING PADS	EACH	6.000	2.000		2.000	2.000
2420	628.7570	ROCK BAGS	EACH	895.000	390.000		460.000	45.000
2430	629.0210	FERTILIZER TYPE B	CWT	272.000	139.000		120.000	13.000
2440	630.0120	SEEDING MIXTURE NO. 20	LB	6,065.000	3,675.000		1,900.000	490.000
2450	630.0130	SEEDING MIXTURE NO. 30	LB	3,360.000	1,285.000		2,050.000	25.000

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LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1170-01-70 QUANTITY	1170-01-71 QUANTITY	1170-01-73 QUANTITY	6999-18-70 QUANTITY
2460	630.0140	SEEDING MIXTURE NO. 40	LB	710.000	320.000			390.000
2470	630.0160	SEEDING MIXTURE NO. 60	LB	150.000	75.000		75.000	
2480	630.0200	SEEDING TEMPORARY	LB	390.000	150.000		200.000	40.000
2490	632.0101	TREES (SPECIES, ROOT, SIZE) 01. RAINBOW PILLAR SERVICEBERRY	EACH	5.000	5.000			
2500	633.0100	DELINEATOR POSTS STEEL	EACH	171.000	56.000		115.000	
2510	633.0500	DELINEATOR REFLECTORS	EACH	311.000	132.000		179.000	
2520	633.1000	DELINEATOR BRACKETS	EACH	53.000	53.000			
2530	633.1100	DELINEATORS TEMPORARY	EACH	124.000	38.000		86.000	
2540	633.5200	MARKERS CULVERT END	EACH	2.000	2.000			
2550	634.0612	POSTS WOOD 4X6-INCH X 12-FT	EACH	5.000	5.000			
2560	634.0614	POSTS WOOD 4X6-INCH X 14-FT	EACH	53.000	53.000			
2570	634.0616	POSTS WOOD 4X6-INCH X 16-FT	EACH	81.000	65.000		16.000	
2580	634.0618	POSTS WOOD 4X6-INCH X 18-FT	EACH	38.000	31.000		7.000	
2590	634.0620	POSTS WOOD 4X6-INCH X 20-FT	EACH	34.000	9.000		25.000	
2600	634.0622	POSTS WOOD 4X6-INCH X 22-FT	EACH	4.000	4.000			
2610	634.0808	POSTS TUBULAR STEEL 2X2-INCH X 8-FT	EACH	10.000	1.000			9.000
2620	634.0809	POSTS TUBULAR STEEL 2X2-INCH X 9.5-FT	EACH	10.000	1.000			9.000
2630	634.0810	POSTS TUBULAR STEEL 2X2-INCH X 10-FT	EACH	7.000				7.000
2640	634.0811	POSTS TUBULAR STEEL 2X2-INCH X 11-FT	EACH	71.000	12.000			59.000
2650	634.0812	POSTS TUBULAR STEEL 2X2-INCH X 12-FT	EACH	17.000	5.000			12.000
2660	634.0814	POSTS TUBULAR STEEL 2X2-INCH X 14-FT	EACH	21.000	3.000			18.000
2670	634.0816	POSTS TUBULAR STEEL 2X2-INCH X 16-FT	EACH	9.000				9.000
2680	635.0200	SIGN SUPPORTS STRUCTURAL STEEL HS	LB	6,370.000			6,370.000	
2690	636.0100	SIGN SUPPORTS CONCRETE MASONRY	CY	57.000	30.000		27.000	
2700	636.0500	SIGN SUPPORTS STEEL REINFORCEMENT	LB	724.000			724.000	
2710	636.1500	SIGN SUPPORTS STEEL COATED REINFORCEMENT HS	LB	2,950.000	1,920.000		1,030.000	
2720	637.0101	SIGNS TYPE I	SF	2,443.500	1,272.500		1,171.000	
2730	637.0103	SIGNS TYPE III	SF	240.000			240.000	
2740	637.0202	SIGNS REFLECTIVE TYPE II	SF	2,769.720	1,656.080		408.500	705.140
2750	637.0402	SIGNS REFLECTIVE FOLDING TYPE II	SF	86.620	86.620			
2760	638.2101	MOVING SIGNS TYPE I	EACH	2.000			2.000	
2770	638.2102	MOVING SIGNS TYPE II	EACH	39.000	8.000		23.000	8.000
2780	638.2103	MOVING SIGNS TYPE III	EACH	2.000			2.000	
2790	638.2601	REMOVING SIGNS TYPE I	EACH	16.000	4.000		12.000	
2800	638.2602	REMOVING SIGNS TYPE II	EACH	411.000	238.000		61.000	112.000
2810	638.3000	REMOVING SMALL SIGN SUPPORTS	EACH	254.000	136.000		57.000	61.000
2820	638.3100	REMOVING STRUCTURAL STEEL SIGN SUPPORTS	EACH	14.000	4.000		10.000	
2830	638.4000	MOVING SMALL SIGN SUPPORTS	EACH	28.000			28.000	
2840	641.6600	SIGN BRIDGE (STRUCTURE) 01. S-37-91	LS	1.000	1.000			
2850	641.8100	OVERHEAD SIGN SUPPORT (STRUCTURE) 01. S-37-105	LS	1.000	1.000			
2860	641.8100	OVERHEAD SIGN SUPPORT (STRUCTURE) 02. S-37-106	LS	1.000	1.000			
2870	641.8100	OVERHEAD SIGN SUPPORT (STRUCTURE) 03. S-37-107	LS	1.000	1.000			
2880	641.8100	OVERHEAD SIGN SUPPORT (STRUCTURE) 04. S-37-108	LS	1.000	1.000			
2890	641.8100	OVERHEAD SIGN SUPPORT (STRUCTURE) 05. S-37-109	LS	1.000	1.000			
2900	641.8100	OVERHEAD SIGN SUPPORT (STRUCTURE) 06. S-37-110	LS	1.000	1.000			
2910	642.5201	FIELD OFFICE TYPE C	EACH	1.000			1.000	

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LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1170-01-70 QUANTITY	1170-01-71 QUANTITY	1170-01-73 QUANTITY	6999-18-70 QUANTITY
2920	643.0200	TRAFFIC CONTROL SURVEILLANCE AND MAINTENANCE (PROJECT) 01. 1170-01-70	DAY	579.000	579.000			
2930	643.0200	TRAFFIC CONTROL SURVEILLANCE AND MAINTENANCE (PROJECT) 02. 1170-01-73	DAY	579.000			579.000	
2940	643.0200	TRAFFIC CONTROL SURVEILLANCE AND MAINTENANCE (PROJECT) 03. 6999-18-70	DAY	579.000				579.000
2950	643.0300	TRAFFIC CONTROL DRUMS	DAY	145,800.000	44,000.000		101,800.000	
2960	643.0420	TRAFFIC CONTROL BARRICADES TYPE III	DAY	27,900.000	14,500.000		6,500.000	6,900.000
2970	643.0500	TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER POSTS	EACH	675.000	355.000		320.000	
2980	643.0600	TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER BASES	EACH	675.000	355.000		320.000	
2990	643.0705	TRAFFIC CONTROL WARNING LIGHTS TYPE A	DAY	40,850.000	21,000.000		9,250.000	10,600.000
3000	643.0715	TRAFFIC CONTROL WARNING LIGHTS TYPE C	DAY	16,800.000	9,100.000		7,700.000	
3010	643.0800	TRAFFIC CONTROL ARROW BOARDS	DAY	670.000	100.000		570.000	
3020	643.0900	TRAFFIC CONTROL SIGNS	DAY	66,970.000	21,400.000		38,000.000	7,570.000
3030	643.0920	TRAFFIC CONTROL COVERING SIGNS TYPE II	EACH	219.000	19.000		200.000	
3040	643.1050	TRAFFIC CONTROL SIGNS PCMS	DAY	4,290.000	1,450.000		2,840.000	
3050	643.2000	TRAFFIC CONTROL DETOUR (PROJECT) 01. 1170-01-70	EACH	1.000	1.000			
3060	643.2000	TRAFFIC CONTROL DETOUR (PROJECT) 02. 1170-01-73	EACH	1.000			1.000	
3070	643.2000	TRAFFIC CONTROL DETOUR (PROJECT) 03. 6999-18-70	EACH	1.000				1.000
3080	643.3000	TRAFFIC CONTROL DETOUR SIGNS	DAY	180,422.000	44,100.000		116,922.000	19,400.000
3090	645.0105	GEOTEXTILE FABRIC TYPE C	SY	285.000	40.000		245.000	
3100	645.0111	GEOTEXTILE FABRIC TYPE DF SCHEDULE A	SY	14,024.000	8,346.000			5,678.000
3110	645.0120	GEOTEXTILE FABRIC TYPE HR	SY	7,361.000	4,335.000		888.000	2,138.000
3120	645.0135	GEOTEXTILE FABRIC TYPE SR	SY	2,481.000	801.000		1,680.000	
3130	646.0106	PAVEMENT MARKING EPOXY 4-INCH	LF	143,288.000	62,435.000		63,143.000	17,710.000
3140	646.0126	PAVEMENT MARKING EPOXY 8-INCH	LF	4,293.000	1,978.000		1,490.000	825.000
3150	646.0600	REMOVING PAVEMENT MARKINGS	LF	60,779.000	9,399.000		51,380.000	
3160	646.0841.S	PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH	LF	7,090.000	115.000		6,975.000	
3170	646.0843.S	PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 8-INCH	LF	10,410.000	4,355.000		6,055.000	
3180	647.0156	PAVEMENT MARKING ARROWS EPOXY TYPE 1	EACH	2.000	2.000			
3190	647.0166	PAVEMENT MARKING ARROWS EPOXY TYPE 2	EACH	22.000	13.000			9.000
3200	647.0356	PAVEMENT MARKING WORDS EPOXY	EACH	20.000	11.000			9.000
3210	647.0456	PAVEMENT MARKING CURB EPOXY	LF	625.000	20.000			605.000
3220	647.0566	PAVEMENT MARKING STOP LINE EPOXY 18-INCH	LF	402.000	290.000			112.000
3230	647.0606	PAVEMENT MARKING ISLAND NOSE EPOXY	EACH	15.000	2.000			13.000
3240	647.0726	PAVEMENT MARKING DIAGONAL EPOXY 12-INCH	LF	882.000	490.000			392.000
3250	647.0736	PAVEMENT MARKING DIAGONAL EPOXY 18-INCH	LF	85.000				85.000
3260	647.0746	PAVEMENT MARKING DIAGONAL EPOXY 24-INCH	LF	965.000	295.000		670.000	
3270	647.0776	PAVEMENT MARKING CROSSWALK EPOXY 12-INCH	LF	1,604.000	944.000			660.000
3280	647.0955	REMOVING PAVEMENT MARKINGS ARROWS	EACH	6.000	6.000			
3290	647.0965	REMOVING PAVEMENT MARKINGS WORDS	EACH	6.000	6.000			
3300	649.0100	TEMPORARY PAVEMENT MARKING 4-INCH	LF	127,937.000	24,550.000		103,387.000	
3310	649.0400	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH	LF	180.000	180.000			
3320	649.0701	TEMPORARY PAVEMENT MARKING 8-INCH	LF	4,050.000	1,290.000		2,760.000	
3330	649.1300	TEMPORARY PAVEMENT MARKING STOP LINE 24-INCH	LF	154.000	154.000			
3340	649.1400	TEMPORARY PAVEMENT MARKING STOP LINE REMOVABLE TAPE 24-INCH	LF	369.000	228.000			141.000

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LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1170-01-70 QUANTITY	1170-01-71 QUANTITY	1170-01-73 QUANTITY	6999-18-70 QUANTITY
3350	650.4000	CONSTRUCTION STAKING STORM SEWER	EACH	225.000	114.000		26.000	85.000
3360	650.4500	CONSTRUCTION STAKING SUBGRADE	LF	67,659.000	23,969.000		38,982.000	4,708.000
3370	650.5000	CONSTRUCTION STAKING BASE	LF	31,963.000	8,498.000		19,478.000	3,987.000
3380	650.5500	CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER	LF	22,090.000	11,367.000			10,723.000
3390	650.6000	CONSTRUCTION STAKING PIPE CULVERTS	EACH	20.000	12.000		6.000	2.000
3400	650.6500	CONSTRUCTION STAKING STRUCTURE LAYOUT (STRUCTURE) 01. B-37-153	LS	1.000	1.000			
3410	650.6500	CONSTRUCTION STAKING STRUCTURE LAYOUT (STRUCTURE) 02. B-37-154	LS	1.000	1.000			
3420	650.6500	CONSTRUCTION STAKING STRUCTURE LAYOUT (STRUCTURE) 03. S-37-91	LS	1.000	1.000			
3430	650.6500	CONSTRUCTION STAKING STRUCTURE LAYOUT (STRUCTURE) 04. B-37-436	LS	1.000		1.000		
3440	650.6500	CONSTRUCTION STAKING STRUCTURE LAYOUT (STRUCTURE) 05. C-37-27	LS	1.000			1.000	
3450	650.6500	CONSTRUCTION STAKING STRUCTURE LAYOUT (STRUCTURE) 06. B-37-167	LS	1.000			1.000	
3460	650.6500	CONSTRUCTION STAKING STRUCTURE LAYOUT (STRUCTURE) 07. S-37-64	LS	1.000			1.000	
3470	650.6500	CONSTRUCTION STAKING STRUCTURE LAYOUT (STRUCTURE) 08. B-37-156	LS	1.000			1.000	
3480	650.6500	CONSTRUCTION STAKING STRUCTURE LAYOUT (STRUCTURE) 09. C-37-4	LS	1.000	1.000			
3490	650.7000	CONSTRUCTION STAKING CONCRETE PAVEMENT	LF	35,696.000	15,471.000		19,504.000	721.000
3500	650.8500	CONSTRUCTION STAKING ELECTRICAL INSTALLATIONS (PROJECT) 01. 1170-01-70	LS	1.000	1.000			
3510	650.8500	CONSTRUCTION STAKING ELECTRICAL INSTALLATIONS (PROJECT) 03. 6999-18-70	LS	1.000				1.000
3520	650.9910	CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (PROJECT) 01. 1170-01-70	LS	1.000	1.000			
3530	650.9910	CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (PROJECT) 02. 1170-01-73	LS	1.000			1.000	
3540	650.9910	CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (PROJECT) 03. 6999-18-70	LS	1.000				1.000
3550	650.9920	CONSTRUCTION STAKING SLOPE STAKES	LF	67,659.000	23,969.000		38,982.000	4,708.000
3560	652.0125	CONDUIT RIGID METALLIC 2-INCH	LF	250.000	10.000	240.000		
3570	652.0210	CONDUIT RIGID NONMETALLIC SCHEDULE 40 1-INCH	LF	50.000	50.000			
3580	652.0225	CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH	LF	21,770.000	11,040.000	1,000.000		9,730.000
3590	652.0235	CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH	LF	1,034.000	1,034.000			
3600	652.0615	CONDUIT SPECIAL 3-INCH	LF	447.000	447.000			
3610	652.0700.S	INSTALL CONDUIT INTO EXISTING ITEM	EACH	1.000	1.000			
3620	652.0800	CONDUIT LOOP DETECTOR	LF	1,048.000	1,048.000			
3630	652.0900	LOOP DETECTOR SLOTS	LF	1,048.000	1,048.000			
3640	653.0135	PULL BOXES STEEL 24X36-INCH	EACH	9.000	9.000			
3650	653.0140	PULL BOXES STEEL 24X42-INCH	EACH	59.000	35.000			24.000
3660	653.0222	JUNCTION BOXES 18X12X6-INCH	EACH	3.000		3.000		
3670	653.0900	ADJUSTING PULL BOXES	EACH	4.000	4.000			
3680	653.0905	REMOVING PULL BOXES	EACH	6.000				6.000
3690	654.0101	CONCRETE BASES TYPE 1	EACH	13.000	13.000			
3700	654.0102	CONCRETE BASES TYPE 2	EACH	4.000	4.000			
3710	654.0105	CONCRETE BASES TYPE 5	EACH	135.000	87.000			48.000
3720	654.0107	CONCRETE BASES TYPE 7	EACH	9.000	9.000			

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LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1170-01-70 QUANTITY	1170-01-71 QUANTITY	1170-01-73 QUANTITY	6999-18-70 QUANTITY
3730	654.0111	CONCRETE BASES TYPE 11	EACH	13.000	13.000			
3740	654.0217	CONCRETE CONTROL CABINET BASES TYPE 9 SPECIAL	EACH	7.000	5.000			2.000
3750	654.0220	CONCRETE CONTROL CABINET BASES TYPE 10	EACH	1.000	1.000			
3760	655.0230	CABLE TRAFFIC SIGNAL 5-14 AWG	LF	911.000	911.000			
3770	655.0240	CABLE TRAFFIC SIGNAL 7-14 AWG	LF	263.000	263.000			
3780	655.0250	CABLE TRAFFIC SIGNAL 9-14 AWG	LF	1,495.000	1,495.000			
3790	655.0260	CABLE TRAFFIC SIGNAL 12-14 AWG	LF	1,529.000	1,529.000			
3800	655.0510	ELECTRICAL WIRE TRAFFIC SIGNALS 12 AWG	LF	612.000	612.000			
3810	655.0515	ELECTRICAL WIRE TRAFFIC SIGNALS 10 AWG	LF	1,793.000	1,793.000			
3820	655.0610	ELECTRICAL WIRE LIGHTING 12 AWG	LF	21,894.000	15,258.000			6,636.000
3830	655.0615	ELECTRICAL WIRE LIGHTING 10 AWG	LF	475.000	475.000			
3840	655.0620	ELECTRICAL WIRE LIGHTING 8 AWG	LF	49,737.000	26,683.000			23,054.000
3850	655.0625	ELECTRICAL WIRE LIGHTING 6 AWG	LF	3,167.000	3,167.000			
3860	655.0630	ELECTRICAL WIRE LIGHTING 4 AWG	LF	11,100.000	4,268.000			6,832.000
3870	655.0635	ELECTRICAL WIRE LIGHTING 2 AWG	LF	2,646.000	1,756.000			890.000
3880	655.0700	LOOP DETECTOR LEAD IN CABLE	LF	4,257.000	4,257.000			
3890	655.0800	LOOP DETECTOR WIRE	LF	2,328.000	2,328.000			
3900	656.0200	ELECTRICAL SERVICE METER BREAKER PEDESTAL (LOCATION) 01. 38+34 U	LS	1.000				1.000
3910	656.0200	ELECTRICAL SERVICE METER BREAKER PEDESTAL (LOCATION) 02. 60+24 U	LS	1.000				1.000
3920	656.0200	ELECTRICAL SERVICE METER BREAKER PEDESTAL (LOCATION) 04. 25+45 TR	LS	1.000	1.000			
3930	656.0200	ELECTRICAL SERVICE METER BREAKER PEDESTAL (LOCATION) 05. 16+00 K	LS	1.000	1.000			
3940	656.0200	ELECTRICAL SERVICE METER BREAKER PEDESTAL (LOCATION) 06. 13+10	LS	1.000	1.000			
3950	656.0200	ELECTRICAL SERVICE METER BREAKER PEDESTAL (LOCATION) 07. 764'NB'+20	LS	1.000	1.000			
3960	656.0500	ELECTRICAL SERVICE BREAKER DISCONNECT BOX (LOCATION) 01. 766'NB'+85	LS	1.000	1.000			
3970	657.0100	PEDESTAL BASES	EACH	16.000	16.000			
3980	657.0210	TRANSFORMER BASES BREAKAWAY 15-17 INCH BOLT CIRCLE	EACH	8.000	8.000			
3990	657.0255	TRANSFORMER BASES BREAKAWAY 11 1/2-INCH BOLT CIRCLE	EACH	138.000	90.000			48.000
4000	657.0305	POLES TYPE 2	EACH	4.000	4.000			
4010	657.0322	POLES TYPE 5-ALUMINUM	EACH	131.000	83.000			48.000
4020	657.0337	POLES TYPE 17-ALUMINUM	EACH	8.000	8.000			
4030	657.0420	TRAFFIC SIGNAL STANDARDS ALUMINUM 13-FT	EACH	6.000	6.000			
4040	657.0425	TRAFFIC SIGNAL STANDARDS ALUMINUM 15-FT	EACH	7.000	7.000			
4050	657.0430	TRAFFIC SIGNAL STANDARDS ALUMINUM 10-FT	EACH	1.000	1.000			
4060	657.0585	TROMBONE ARMS 15-FT	EACH	1.000	1.000			
4070	657.0590	TROMBONE ARMS 20-FT	EACH	1.000	1.000			
4080	657.0595	TROMBONE ARMS 25-FT	EACH	2.000	2.000			
4090	657.0610	LUMINAIRE ARMS SINGLE MEMBER 4 1/2-INCH CLAMP 6-FT	EACH	46.000				46.000
4100	657.0615	LUMINAIRE ARMS SINGLE MEMBER 4 1/2-INCH CLAMP 8-FT	EACH	2.000				2.000
4110	657.0710	LUMINAIRE ARMS TRUSS TYPE 4 1/2-INCH CLAMP 12-FT	EACH	83.000	83.000			
4120	657.0725	LUMINAIRE ARMS TRUSS TYPE 6-INCH CLAMP 15-FT	EACH	16.000	16.000			
4130	658.0110	TRAFFIC SIGNAL FACE 3-12 INCH VERTICAL	EACH	10.000	10.000			
4140	658.0115	TRAFFIC SIGNAL FACE 4-12 INCH VERTICAL	EACH	9.000	9.000			

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LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1170-01-70 QUANTITY	1170-01-71 QUANTITY	1170-01-73 QUANTITY	6999-18-70 QUANTITY
4150	658.0155	TRAFFIC SIGNAL FACE 3-12 INCH HORIZONTAL	EACH	4.000	4.000			
4160	658.0215	BACKPLATES SIGNAL FACE 3 SECTION 12-INCH	EACH	14.000	14.000			
4170	658.0220	BACKPLATES SIGNAL FACE 4 SECTION 12-INCH	EACH	9.000	9.000			
4180	658.0416	PEDESTRIAN SIGNAL FACE 16-INCH	EACH	8.000	8.000			
4190	658.0500	PEDESTRIAN PUSH BUTTONS	EACH	8.000	8.000			
4200	658.0600	LED MODULES 12-INCH RED BALL	EACH	14.000	14.000			
4210	658.0605	LED MODULES 12-INCH YELLOW BALL	EACH	12.000	12.000			
4220	658.0610	LED MODULES 12-INCH GREEN BALL	EACH	10.000	10.000			
4230	658.0615	LED MODULES 12-INCH RED ARROW	EACH	9.000	9.000			
4240	658.0620	LED MODULES 12-INCH YELLOW ARROW	EACH	20.000	20.000			
4250	658.0625	LED MODULES 12-INCH GREEN ARROW	EACH	13.000	13.000			
4260	658.0635	LED MODULES PEDESTRIAN COUNTDOWN TIMER 16-INCH	EACH	8.000	8.000			
4270	658.5069	SIGNAL MOUNTING HARDWARE (LOCATION) 01. BUS 51 AND CTH U	LS	1.000	1.000			
4280	659.0115	LUMINAIRES UTILITY HPS 150 WATTS	EACH	73.000	73.000			
4290	659.0125	LUMINAIRES UTILITY HPS 250 WATTS	EACH	74.000	26.000			48.000
4300	659.0700	LIGHTING UNITS WALKWAY	EACH	13.000	13.000			
4310	659.0802	PLAQUES SEQUENCE IDENTIFICATION	EACH	2.000	2.000			
4320	661.0400.S	LIGHTING CONTROL CABINET (TYPE) 01. 3060	EACH	4.000	2.000			2.000
4330	670.0100	FIELD SYSTEM INTEGRATOR	LS	1.000	1.000			
4340	670.0200	ITS DOCUMENTATION	LS	1.000	1.000			
4350	672.0250	BASE CAMERA POLE 50-FT	EACH	1.000	1.000			
4360	673.0225.S	INSTALL POLE MOUNTED CABINET	EACH	1.000	1.000			
4370	674.0200	CABLE MICROWAVE DETECTOR	LF	50.000	50.000			
4380	675.0300	INSTALL MOUNTED CONTROLLER MICROWAVE DETECTOR ASSEMBLY	EACH	5.000	5.000			
4390	675.0400.S	INSTALL ETHERNET SWITCH	EACH	1.000	1.000			
4400	677.0100	INSTALL CAMERA POLE	EACH	1.000	1.000			
4410	677.0200	INSTALL CAMERA ASSEMBLY	EACH	1.000	1.000			
4420	677.0300.S	INSTALL VIDEO ENCODER	EACH	1.000	1.000			
4430	690.0150	SAWING ASPHALT	LF	21,342.000	91.000		18,942.000	2,309.000
4440	690.0250	SAWING CONCRETE	LF	2,161.000	1,294.000		837.000	30.000
4450	715.0415	INCENTIVE STRENGTH CONCRETE PAVEMENT	DOL	21,081.000			19,431.000	1,650.000
4460	715.0502	INCENTIVE STRENGTH CONCRETE STRUCTURES	DOL	20,058.000	8,358.000	9,792.000	1,908.000	
4470	999.1500.S	CRACK AND DAMAGE SURVEY	LS	1.000	0.400		0.300	0.300
4480	ASP.1T0A	ON-THE-JOB TRAINING APPRENTICE AT $5.00/HR	HRS	2,100.000	2,100.000			
4490	ASP.1T0G	ON-THE-JOB TRAINING GRADUATE AT $5.00/HR	HRS	4,800.000	4,800.000			
4500	SPV.0030	SPECIAL 01. FERTILIZER FOR LAWN TYPE TURF	CWT	29.000	13.000			16.000
4510	SPV.0035	SPECIAL 01. MISCELLANOUS ROCK EXCAVATION	CY	200.000	100.000		100.000	
4520	SPV.0035	SPECIAL 02. COARSE AGGREGATE, SIZE NO. 2	CY	10.000			10.000	
4530	SPV.0045	SPECIAL 01. PCMS CELLULAR COMMUNICATIONS	DAY	950.000	475.000		475.000	
4540	SPV.0055	SPECIAL 01. LANE RENTAL ASSESSMENT	DOL	1.000			1.000	
4550	SPV.0060	SPECIAL 02. CLEANING AND PAINTING BEARINGS	EACH	50.000	50.000			
4560	SPV.0060	SPECIAL 03. CONNECTION TO EXISTING INLETS	EACH	3.000	2.000		1.000	
4570	SPV.0060	SPECIAL 04. REFOCUS VEHICLE DETECTOR ASSEMBLY	EACH	8.000			8.000	
4580	SPV.0060	SPECIAL 05. ADJUST VALVE BOX	EACH	18.000				18.000
4590	SPV.0060	SPECIAL 06. VERTICAL OFFSET WATERMAIN	EACH	2.000				2.000
4600	SPV.0060	SPECIAL 07. VERTICAL OFFSET FORCE MAIN	EACH	1.000				1.000

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DATE 08OCT12 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1170-01-70 QUANTITY	1170-01-71 QUANTITY	1170-01-73 QUANTITY	6999-18-70 QUANTITY
4610	SPV.0060	SPECIAL 08. RAMP CLOSURE GATES HARDWIRED 28-FT	EACH	2.000	2.000			
4620	SPV.0060	SPECIAL 09. RAMP CLOSURE GATES SOLAR POWERED 40-FT	EACH	1.000	1.000			
4630	SPV.0060	SPECIAL 10. LANDSCAPE PLANTING SURVELILLANCE AND CARE CYCLE	EACH	24.000	24.000			
4640	SPV.0060	SPECIAL 11. AVALANCHE REED GRASS #1 CG	EACH	570.000	570.000			
4650	SPV.0060	SPECIAL 12. NORTHWIND SWITCH GRASS #1 CG	EACH	140.000	140.000			
4660	SPV.0060	SPECIAL 13. FLAME GRASS #1 CG	EACH	464.000	464.000			
4670	SPV.0060	SPECIAL 14. LADYS MANTLE #1 CG	EACH	152.000	152.000			
4680	SPV.0060	SPECIAL 15. HAPPY RETURNS DAYLILY #1 CG	EACH	210.000	210.000			
4690	SPV.0060	SPECIAL 16. XENOX STONECROP #1 CG	EACH	695.000	695.000			
4700	SPV.0060	SPECIAL 17. MOONSHINE YARROW #1 CG	EACH	374.000	374.000			
4710	SPV.0060	SPECIAL 19. GATE VALVE AND BOX, 8-INCH	EACH	6.000				6.000
4720	SPV.0060	SPECIAL 20. DUCTILE IRON CROSS 8-INCH X 8-INCH	EACH	2.000				2.000
4730	SPV.0060	SPECIAL 21. DUCTILE IRON PLUG 8-INCH	EACH	6.000				6.000
4740	SPV.0060	SPECIAL 22. SANITARY MANHOLE CASTING	EACH	4.000				4.000
4750	SPV.0060	SPECIAL 23. HIGH TENSION CABLE GUARD TL-3 TERMINAL	EACH	6.000			6.000	
4760	SPV.0060	SPECIAL 25. REMOVING AND SALVAGING STREET LIGHT	EACH	1.000				1.000
4770	SPV.0060	SPECIAL 26. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 1	EACH	16.000	16.000			
4780	SPV.0060	SPECIAL 27. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 2	EACH	4.000	4.000			
4790	SPV.0060	SPECIAL 28. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 2R	EACH	4.000	4.000			
4800	SPV.0060	SPECIAL 29. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 3	EACH	14.000	14.000			
4810	SPV.0060	SPECIAL 30. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 3R	EACH	6.000	6.000			
4820	SPV.0060	SPECIAL 31. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC WORDS	EACH	20.000	20.000			
4830	SPV.0060	SPECIAL 32. SALVAGE AND REINSTALL LIGHTING UNIT	EACH	1.000	1.000			
4840	SPV.0060	SPECIAL 35. HIGH TENSION CABLE GUARD TL-3 TERMINAL SAFENCE	EACH	1.000			1.000	
4850	SPV.0060	SPECIAL 40. TRAFFIC SIGNAL CONTROLLER FULLY ACTUATED 8 PHASE AND CABINET	EACH	1.000	1.000			
4860	SPV.0060	SPECIAL 41. SALVAGE AND REINSTALL GATE VALVE AND BOX	EACH	3.000				3.000
4870	SPV.0060	SPECIAL 42. DUCTILE IRON TEE, 8-INCH X 8-INCH	EACH	1.000				1.000
4880	SPV.0060	SPECIAL 43. DUCTILE IRON TEE, 8-INCH X 6-INCH	EACH	2.000				2.000
4890	SPV.0060	SPECIAL 44. DUCTILE IRON 45-DEGREE BEND	EACH	2.000				2.000
4900	SPV.0060	SPECIAL 45. INSTALL HYDRANT	EACH	1.000				1.000
4910	SPV.0060	SPECIAL 46. SALVAGE AND REINSTALL HYDRANT	EACH	1.000				1.000
4920	SPV.0060	SPECIAL 47. TRACER WIRE BOX	EACH	1.000				1.000
4930	SPV.0060	SPECIAL 48. GATE VALVE AND BOX, 6-INCH	EACH	1.000				1.000
4940	SPV.0060	SPECIAL 49. REMOVE MICROWAVE DETECTOR	EACH	4.000	4.000			
4950	SPV.0060	SPECIAL 50. SALVAGE SOLAR POWER SYSTEM	EACH	4.000	4.000			
4960	SPV.0060	SPECIAL 51. REMOVE POLE TYPE 5	EACH	3.000	3.000			
4970	SPV.0060	SPECIAL 52. INSTALL WIRELESS ETHERNET BRIDGE	EACH	4.000	4.000			

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DATE 08OCT12 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1170-01-70 QUANTITY	1170-01-71 QUANTITY	1170-01-73 QUANTITY	6999-18-70 QUANTITY
4980	SPV.0060	SPECIAL 53. INSTALL ANTENNA	EACH	1.000	1.000			
4990	SPV.0060	SPECIAL 54. INSTALL SALVAGED TYPE 5 POLE	EACH	1.000	1.000			
5000	SPV.0090	SPECIAL 04. EXCAVATE AND BACKFILL UTILITY TRENCH	LF	155.000				155.000
5010	SPV.0090	SPECIAL 05. HIGH TENSION CABLE GUARD TL-3 SOCKETED	LF	5,051.000			5,051.000	
5020	SPV.0090	SPECIAL 08. DUCTILE IRON WATERMAIN 8-INCH	LF	966.000				966.000
5030	SPV.0090	SPECIAL 09. PVC SANITARY SEWER MAIN 8-INCH	LF	942.000				942.000
5040	SPV.0090	SPECIAL 10. SALVAGE FENCE	LF	800.000			800.000	
5050	SPV.0090	SPECIAL 11. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC CROSSWALK 12-INCH	LF	675.000	675.000			
5060	SPV.0090	SPECIAL 12. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC 8-INCH	LF	482.000	482.000			
5070	SPV.0090	SPECIAL 13. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC 18-INCH	LF	165.000	165.000			
5080	SPV.0090	SPECIAL 14. PVC SANITARY LATERAL, 6-INCH	LF	53.000				53.000
5090	SPV.0090	SPECIAL 15. DUCTILE IRON WATERMAIN, 6-INCH	LF	10.000				10.000
5100	SPV.0105	SPECIAL 01. RESEARCH AND LOCATE EXISTING PROPERTY MONUMENTS PROJECT 1170-01-70	LS	1.000	1.000			
5110	SPV.0105	SPECIAL 02. RESEARCH AND LOCATE EXISTING PROPERTY MONUMENTS PROJECT 6999-18-70	LS	1.000				1.000
5120	SPV.0105	SPECIAL 03. VERIFY AND REPLACE EXISTING PROPERTY MONUMENTS PROJECT 1170-01-70	LS	1.000	1.000			
5130	SPV.0105	SPECIAL 04. VERIFY AND REPLACE EXISTING PROPERTY MONUMENTS PROJECT 6999-18-70	LS	1.000				1.000
5140	SPV.0105	SPECIAL 05. RAILING TUBULAR SCREENING GALVANIZED B-37-436	LS	1.000		1.000		
5150	SPV.0105	SPECIAL 07. CONCRETE PAVEMENT JOINT LAYOUT 1170-01-70	LS	1.000	1.000			
5160	SPV.0105	SPECIAL 08. REMOVE AND REINSTALL SIGN BRIDGE CANTILEVERED S-37-64	LS	1.000			1.000	
5170	SPV.0105	SPECIAL 09. REMOVE AND SALVAGE TRAFFIC SIGNALS USH 51 NB RAMP AND CTH U	LS	1.000				1.000
5180	SPV.0105	SPECIAL 10. TEMPORARY TRAFFIC SIGNALS FOR INTERSECTION USH 51 NB AT CTH U	LS	1.000	1.000			
5190	SPV.0105	SPECIAL 11. TEMPORARY TRAFFIC SIGNALS FOR INTERSECTION USH 51 NB AT BUS 51	LS	1.000	1.000			
5200	SPV.0105	SPECIAL 12. TEMPORARY TRAFFIC SIGNALS FOR INTER- SECTION CTH U AT OVERLOOK/WESTWOOD DR	LS	1.000	1.000			
5210	SPV.0105	SPECIAL 13. TEMPORARY TRAFFIC SIGNALS FOR INTERSECTION CTH K AT OVERLOOK DR	LS	1.000	1.000			
5220	SPV.0105	SPECIAL 14. REMOVING AND RAZING PARCEL 17	LS	1.000	1.000			
5230	SPV.0105	SPECIAL 15. REMOVING AND RAZING PARCEL 18	LS	1.000	1.000			
5240	SPV.0105	SPECIAL 16. CRASH CUSHION TEMPORARY ONSITE	LS	1.000	1.000			
5250	SPV.0105	SPECIAL 17. GPS BASED TRAFFIC SIGNAL PREEMPTION BUS 51 AND COLLEGE DRIVE	LS	1.000	1.000			
5260	SPV.0105	SPECIAL 18. GPS BASED TRAFFIC SIGNAL PREEMPTION BUS 51 AND CAMPUS DRIVE	LS	1.000	1.000			

DATE 08OCT12 E S T I M A T E O F Q U A N T I T I E S

LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	1170-01-70 QUANTITY	1170-01-71 QUANTITY	1170-01-73 QUANTITY	6999-18-70 QUANTITY
5270	SPV.0105	SPECIAL 19. GPS BASED TRAFFIC SIGNAL PREEMPTION BUS 51 AND RANDOLPH STREET	LS	1.000	1.000			
5280	SPV.0105	SPECIAL 20. TEMPORARY TRAFFIC SIGNALS FOR INTERSECTION USH 51 SB AT BUS 51	LS	1.000	1.000			
5290	SPV.0105	SPECIAL 21. TEMPORARY SAND BAG DIKE	LS	1.000			1.000	
5300	SPV.0105	SPECIAL 30. CONCRETE PAVEMENT JOINT LAYOUT 6999-18-70	LS	1.000				1.000
5310	SPV.0120	SPECIAL 01. WATER FOR SEEDED AREAS	MGAL	9,980.000	4,980.000		4,100.000	900.000
5320	SPV.0165	SPECIAL 01. WEED BARRIER	SF	8,200.000	8,200.000			
5330	SPV.0165	SPECIAL 02. ROCK MULCH 1-INCH SIZE 3-INCH DEEP	SF	6,080.000	6,080.000			
5340	SPV.0165	SPECIAL 03. ROCK MULCH 1-INCH SIZE 6-INCH DEEP	SF	2,120.000	2,120.000			
5350	SPV.0180	SPECIAL 01. PREPARING TOPSOIL FOR LAWN TYPE TURF	SY	37,050.000	17,550.000			19,500.000
5360	SPV.0180	SPECIAL 02. INSULATION 2-INCH	SY	380.000				380.000
5370	SPV.0180	SPECIAL 04. WET DETENTION POND LINER	SY	7,700.000	7,700.000			
5380	SPV.0180	SPECIAL 05. TOPSOIL SPECIAL	SY	910.000	910.000			
5390	SPV.0195	SPECIAL 01. 3-INCH CLEAN ROADSTONE	TON	1,447.000	467.000		980.000	
5400	SPV.0200	SPECIAL 01. SANITARY MANHOLE	VF	42.400				42.400

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CLEARING AND GRUBBING

STATION TO STATION	LOCATION	201.0105 CLEARING STA	201.0205 GRUBBING STA
34+00 KN - 36+00 KN	RT, CTH K NB	2	2
39+00 KN - 43+00 KN	LT, CTH K NB	4	4
49+00 KN - 50+00 KN	RT, CTH K NB	1	1
51+00 KN - 56+00 KN	RT, CTH K NB	5	5
34+00 KS - 35+00 KS	LT, CTH K SB	1	1
39+00 KS - 43+00 KS	LT, CTH K SB	4	4
59+00 KS - 62+00 KS	LT, CTH K SB	3	3
205+00 V - 206+00 V	RT, OVERLOOK DR	1	1
220+00 V - 226+00 V	RT, OVERLOOK DR	6	6
227+00 V - 228+00 V	LT, OVERLOOK DR	1	1
5+00 N - 6+00 N	LT, CASSIDY DR	1	1
748+00 A - 756+00 A	RT, A RAMP	8	8
759+00 A - 761+00 A	LT, A RAMP	2	2
772+00 C - 774+00 C	RT, C RAMP	2	2
777+00 C - 781+00 C	LT, C RAMP	4	4
755+00 D - 759+00 D	LT, D RAMP	4	4
738+00 E - 751+00 E	RT, E RAMP	13	13
740+00 F - 752+00 F	LT, F RAMP	12	12
CATEGORY TOTALS		**74**	**74**
***PROJECT ID TOTALS**		**80**	**80**

REMOVING SMALL PIPE CULVERTS & PARTIAL PIPES

STATION TO STATION	LOCATION	TYPE	DIAMETER	LENGTH	203.0100 EACH	204.9060.S.03 PARTIAL EACH	COMMENTS
765+80 B		CPRC	24"	110'	1	---	
783+70 C		CPRC	18"	62'	1	---	
754+60 D	RT	CPRC	48"	210'	1	---	
36+95 KN	RT	CPRC	18"	58'	1	---	
36+95 KN - 37+27 KN	RT	CPRC	18"	38'	1	---	
51+25 KN		CMCP	24"	212'	1	---	
60+11 KN		CMCP	18"	100'	1	---	
51+00 KS - 51+92 KS	LT	CPRC	15"	38'	1	---	
51+92 KS	LT	CPRC	18"	54'	1	---	
202+10 V	RT	CMCP	12"	26'	1	---	
203+25 V	LT	CMCP	18"	24'	1	---	
205+25 V		CPRC	24"	48'	1	---	
208+90 V	LT	PCP	12"	26'	1	---	
221+00 V	LT	CMCP	18"	28'	1	---	
223+10 V		CMCP	18"	30'	1	---	
359+40 AT	LT	CPRC	25"	ENDWALL	---	1	ENDWALL ONLY
365+63 BT	RT	CPRC	24"	8'	---	1	
CATEGORY TOTALS					**15**	**2**	
***PROJECT ID TOTALS**					**17**	**2**	

REMOVING OLD STRUCTURE

STATION	TYPE	DIAMETER	LENGTH	203.0200 LS
.20 61+07 KN	CPRC	72"	192'	1
CATEGORY TOTAL				**1**

REMOVING PAVEMENT

STATION TO STATION	LOCATION	204.0100 SY
30+80 KN - 61+50 KN	CTH K/BUS 51	9800
30+64 KS - 61+50 KS	CTH K/BUS 51	10200
751+33 A - 761+33 A	FRONTAGE ROAD	2350
761+29 B - 781+79 B	B RAMP	4050
772+13 C - 789+12 C	C RAMP	2600
752+75 D - 769+82 D	FRONTAGE ROAD	3300
49+44 KS - 58+47 KS	FRONTAGE ROAD	1250
741+95 F - 752+32 F	F RAMP	2100
742+97 E - 751+17 E	E RAMP	1850
CATEGORY TOTAL		**37500**
***PROJECT ID TOTAL**		**43900**

REMOVING CURB & GUTTER

STATION TO STATION	LOCATION	204.0150 LF
71+47 U - 71+73 U	RT, CTH U RIGHT-TURN LANE	42
71+61 U - 71+83 U	RT, CTH U RIGHT-TURN ISLAND	22
CATEGORY TOTAL		**64**
***PROJECT ID TOTAL**		**79**

REMOVING GUARDRAIL

STATION TO STATION	LOCATION	STAGE	204.0165 LF
41+12 KN - 46+12 KN	LT, CTH K NB	4	500
42+43 KS - 47+43 KS	RT, CTH K SB	4	500
751+92 A - 752+42 A	RT, A RAMP	2A	50
752+83 D - 756+21 D	LT, D RAMP	2A	338
753+00 D - 757+19 D	LT, D RAMP	2A	418
750+55 E - 751+14 E	LT, E RAMP	2A	60
CATEGORY TOTAL			**1866**

REMOVING FENCE

STATION TO STATION	LOCATION	204.0170 LF
54+18 KN - 62+85 KN	RT, CTH K NB	964
35+78 KS - 36+54 KS	LT, CTH K SB	97
48+21 KS - 66+26 KS	LT, CTH K SB	1853
752+87 A - 759+06 A	RT, A RAMP	633
765+90 B - 775+01 B	RT, B RAMP	814
779+15 B - 783+79 B	RT, B RAMP	467
775+72 C - 781+86 C	LT, C RAMP	618
783+55 C - 786+86 C	LT, C RAMP	333
753+82 D - 768+00 D	LT, D RAMP	1358
738+19 E - 750+16 E	RT, E RAMP	1191
737+23 F - 752+27 F	LT, F RAMP	1530
CATEGORY TOTAL		**9858**

REMOVING DELINEATORS AND MARKERS

LOCATION	204.0180 EACH
NORTHBOUND RAMPS	54
SOUTHBOUND RAMPS	64
CATEGORY TOTAL	**118**

OBLITERATING OLD ROAD

LOCATION	214.0100 STA
FRONTAGE ROAD - A RAMP	4
FRONTAGE ROAD - D RAMP	4
ARTHUR AVE	1
CASSIDY DR	1
ARLINGTON LANE	1
CATEGORY TOTAL	**11**

REMOVING MANHOLES

STATION	LOCATION	STAGE	204.0210 EACH	COMMENTS
743+79 E	RT		1	MANHOLE 500
CATEGORY TOTAL			**1**	

REMOVING CONCRETE SIDEWALK

STATION TO STATION	LOCATION	204.0155 SY
71+49 U - 71+57 U	RT, BUS 51 RIGHT-TURN LANE	5
71+64 U - 71+85 U	RT, BUS 51 RIGHT-TURN ISLAND	14
CATEGORY TOTAL		**19**

REMOVING INLETS

STATION	LOCATION	STAGE	204.0220 EACH	COMMENTS
359+50 DT		5A	1	INLET 904
380+25 CT		5B	1	INLET 903
51+00 KS	LT	5B	1	EXISTING
51+92 KS	LT	5B	1	EXISTING
783+70 C		5B	1	EXISTING
36+95 KN	RT	6C	1	EXISTING
37+27 KN	RT	6C	1	EXISTING
365+58 BT		6C	1	INLET 902
CATEGORY TOTAL			**8**	

ABANDONING CULVERT PIPES

STATION	TYPE	DIAMETER	LENGTH	204.0270 EACH
783+70 C	CPRC	18"	62'	1
CATEGORY TOTAL				**1**

*** OTHER QUANTITIES LOCATED ELSEWHERE IN PLAN**

ALL ITEMS ON THIS SHEET ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

EARTHWORK SUMMARY

DIVISION	STATION TO STATION	LOCATION	CUT CY	205.0100 EXCAVATION COMMON CY	SALVAGED/ UNUSABLE PAVEMENT MATERIAL CY	(9) AVAILABLE MATERIAL CY	(8) EBS CY	205.0400 EXCAVATION MARSH CY	205.0200 EXCAVATION ROCK CY	FILL CY	(6) UNEXPANDED FILL CY	(2) (4) EXPANDED FILL CY	(5) MASS ORDINATE +/- CY	(1) WASTE CY	(3) 208.0100 BORROW CY	COMMENTS
	4+50 N - 5+75 N	N LINE	589	589	---	589	---	---	---	10	10	13	-577			
	40+00 SW - 43+74 SW	SW LINE	72	72	---	72	---	---	---	80	80	100	28			CATEGORY 0090
	25+00 TL - 36+25 TL	TL LINE	2211	2211	---	2211	---	---	---	2199	2199	2749	538			CATEGORY 0090
	6+25 TR - 9+76 TR	TR LINE	261	261	---	261	---	---	---	67	67	84	-177			CATEGORY 0090
	WASTE TO THE 1170-01-73 PROJECT		---	---	---	---	---	---	---	---	---	188	188			
DIVISION 1 SUBTOTAL				589	---	3133	---	---	---	2356	2356	3133	---	---	---	
	363+50 BT - 365+63 BT	BT RAMP	53	53	---	53	---	---	---	53	53	66	13			
	342+00 ET - 345+50 ET	ET RAMP	352	352	---	352	---	---	---	82	82	103	-250			
	342+00 FT - 346+00 FT	FT RAMP	108	108	---	108	---	---	---	286	286	358	250			
	746+00 E - 750+50 E	E RAMP	6091	6091	470	5621	---	---	---	965	965	1206	-4415			
	743+00 F - 751+50 F	F RAMP	27347	18298	530	17768	---	---	9049	5496	-4458	-5572	-23340			
	223+00 V - 230+50 V	V LINE	1956	1956	---	1956	---	---	---	4686	4686	5858	3902			
	201+00 V - 223+00 V	V LINE	9513	9513	---	9513	---	---	---	4308	4308	5385	-4128			
	POND B	POND B	28136	28136	590	27546	---	---	---	252	252	315	-27231			
	WASTE TO THE 1170-01-73 PROJECT		---	---	---	---	---	---	---	---	---	20270	20270			
	WASTE TO THE 6999-18-70 PROJECT		---	---	---	---	---	---	---	---	---	12369	12369			
DIVISION 2 SUBTOTAL				64507	1590	62917	---	---	9049	16128	6174	40357	-22560	-22560	---	
	370+90 CT - 384+50 CT	CT RAMP	1260	1260	---	1260	---	---	---	4370	4370	5463	4203			
	WASTE TO THE 1170-01-73 PROJECT		---	---	---	---	---	---	---	---	---	13042	13042			
	WASTE FROM PREVIOUS STAGES (7)		---	---	---	---	---	---	---	---	---	-22560	-22560			
DIVISION 3A SUBTOTAL				1260	---	1260	---	---	---	4370	4370	-4056	-5316	-5316	---	
	40+50 KN - 49+00 KN	KN LINE	5007	5007	1950	3057	---	---	---	2442	2442	3053	-5			
	31+00 KS - 38+50 KS	KS LINE	3148	3148	2550	598	---	---	---	1734	1734	2168	1570			
	40+50 KS - 49+00 KS	KS LINE	5178	5178	---	5178	---	---	---	1491	1491	1864	-3314			
	WASTE TO THE 1170-01-73 PROJECT		---	---	---	---	---	---	---	---	---	8191	8191			
	WASTE FROM PREVIOUS STAGES (7)		---	---	---	---	---	---	---	---	---	-5316	-5316			
DIVISION 4 SUBTOTAL				13333	4500	8833	---	---	---	5667	5667	9959	1126	1126	---	
	372+00 CU - 376+50 CU	CU RAMP	207	207	---	207	---	---	---	4319	4319	5399	5192			
	771+50 C - 784+50 C	C RAMP	4688	4688	650	4038	---	---	---	3379	3379	4224	186			
	754+50 D - 770+50 D	D RAMP	40512	40512	1140	39372	504	---	---	1959	2186	2732	-36640			
	740+50 F - 743+00 F	F RAMP	6693	4213	---	4213	---	---	2480	54	-2674	-3343	-7556			
	200+00 KW - 204+00 KW	KW LINE	700	700	---	700	---	---	---	1500	1500	1875	1175			
	51+00 KN - 61+50 KN	KN LINE	3599	3599	---	3599	---	---	---	2871	2871	3589	-10			
	61+50 KN - 73+50 KN	KN LINE/KS LINE	10704	10704	---	10704	---	---	---	1119	1119	1399	-9305			CATEGORY 0100
	51+00 KS - 61+50 KS	KS LINE	6660	6660	---	6660	---	---	---	750	750	938	-5723			
DIVISION 5 SUBTOTAL				71283	1790	69493	504	---	2480	15951	13450	16812	-52681	-52681	---	
	753+50 A - 761+00 A	A RAMP	20979	20979	---	20979	---	---	---	307	307	384	-20595			
	766+00 B - 775+00 B	B RAMP	5383	5383	---	5383	---	---	---	26	26	33	-5351			
	100+00 KE - 104+00 KE	KE LINE	5559	5559	---	5559	---	---	---	9	9	11	-5548			
	REMOVAL OF CT LINE	CU RAMP	4370	4370	---	4370	---	---	---	---	---	---	-4370			
	REMOVAL OF CU LINE	CU RAMP	4319	4319	---	4319	---	---	---	---	---	---	-4319			
	POND A	POND A	11223	11223	---	11223	---	---	---	4185	4185	5231	-5992			
DIVISION 6A SUBTOTAL				51833	---	51833	---	---	---	4527	4527	5659	-46174	-46174	---	
	738+50 E - 746+00 E	E RAMP	4352	4352	---	4352	---	---	---	431	431	539	-3813			
DIVISION 6B SUBTOTAL				4352	---	4352	---	---	---	431	431	539	-3813	-3813	---	
	761+50 B - 766+00 B	B RAMP	10297	10297	1020	9277	---	---	---	222	222	278	-9000			
	775+00 B - 781+00 B	B RAMP	5570	5570	---	5570	---	---	---	11	11	14	-5556			
	31+00 KN - 38+50 KN	KN LINE	3695	3695	500	3195	---	---	---	1190	1190	1488	-1708			
DIVISION 6C SUBTOTAL				19562	1520	18042	---	---	---	1423	1423	1779	-16263	-16263	---	
CATEGORY 0010 TOTALS				213975				---	11529						---	
CATEGORY 0090 TOTALS				2544				---	---						---	
CATEGORY 0100 TOTALS				10704				---	---						---	
PROJECT ID TOTALS				**227223**				---	**11529**						---	

(1) WASTE = EXPANDED FILL - EXCAVATION COMMON (FOR INFORMATION ONLY - NOT A BID ITEM)
(2) EXPANSION FACTOR = 1.25
(3) BORROW = EXPANDED FILL -AVAILABLE MATERIAL
(4) EXPANDED FILL = UNEXPANDED FILL * EXPANSION FACTOR
(5) THE MASS ORDINATE + OR - QTY CALCULATED FOR THE DIVISION. PLUS QUANTITY INDICATES AN EXCESS OF MATERIAL WITHIN THE DIVISION. MINUS INDICATES A SHORTAGE OF MATERIAL WITHIN THE DIVISION.
(6) UNEXPANDED FILL = FILL - (ROCK * 1.1) + (MARSH EXCAVATION * 1.5) - (MARSH EXCAVTION * 0.6) + (EBS * 1.25) - (EBS * 0.8) - ASSUMES THAT ALL MARSH AND EBS CAN BE USED IN FILL AREAS
(7) EARTHWORK FROM PREVIOUS STAGES TO BE USED INTO THIS STAGE
(8) EBS PAID AS EXCAVATION COMMON
(9) AVAILABLE MATERIAL = COMMON EXCAVATION - SALVAGED/UNUSABLE MATERIAL.

ALL ITEMS ON THIS SHEET ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

3

BASE AGGREGATE DENSE

CATEGORY	STATION TO STATION	LOCATION	305.0110 3/4-INCH TON	305.0120 1 1/4-INCH TON	310.0110 OPEN GRADED TON
0010	30+80 KN - 61+50 KN	CTH K NB	145	4582	---
	30+64 KS - 61+50 KS	CTH K SB	145	4538	---
	100+00 KE - 104+12 KE	KE ROUNDABOUT	---	835	---
	200+00 KW - 204+12 KW	KW ROUNDABOUT	---	833	---
	69+50 U - 72+42 U	SIDEWALK	---	53	---
	738+12 A - 761+33 A	A RAMP	134	2592	---
	761+34 B - 780+05 B	B RAMP	560	2109	---
	771+18 C - 789+10 C	C RAMP	423	2678	---
	754+58 D - 770+99 D	D RAMP	424	2340	---
	738+12 E - 750+88 E	E RAMP	67	1483	---
	740+19 F - 751+96 F	F RAMP	226	1826	---
	347+96 AT - 361+40 AT	TEMP A RAMP	181	768	---
	363+26 BT - 366+43 BT	TEMP B RAMP	7	177	---
	385+75 CT - 388+78 CT	TEMP C RAMP	15	252	---
	370+62 CT - 371+12 CT	TEMP C RAMP	4	55	---
	371+36 CT - 374+61 CT	TEMP C RAMP	19	257	---
	375+38 CT - 384+81 CT	TEMP C RAMP	19	819	---
	389+19 CU - 392+24 CU	TEMP C RAMP	89	426	---
	371+94 CU - 377+17 CU	TEMP C RAMP	123	334	---
	351+59 DT - 366+21 DT	TEMP D RAMP	229	902	---
	338+60 ET - 346+00 ET	TEMP E RAMP	88	297	---
	336+63 EU - 341+66 EU	TEMP E RAMP	91	206	---
	343+61 EU - 348+36 EU	TEMP E RAMP	31	198	---
	331+39 EV - 335+50 EV	TEMP E RAMP	85	196	---
	342+11 FT - 347+89 FT	TEMP F RAMP	92	225	---
	351+27 FU - 358+00 FU	TEMP F RAMP	40	348	---
	327+01 FV - 333+25 FV	TEMP F RAMP	112	236	---
	201+10 V - 230+86 V	OVERLOOK DR	---	---	7390
	3+69 ME - 6+28 ME	MERRILL AVE	---	---	814
	4+50 N - 5+98 N	CASSIDY DR	---	---	666
	202+14 V	RT, OVERLOOK DR	21	---	---
	202+29 V	LT, OVERLOOK DR	19	---	---
	203+30 V	LT, OVERLOOK DR	13	---	---
	208+89 V	LT, OVERLOOK DR	10	---	---
	214+00 V	RT, OVERLOOK DR	28	---	---
	221+03 V	LT, OVERLOOK DR	29	---	---
	226+50 V	RT, OVERLOOK DR	53	---	---
	228+00 V	RT, OVERLOOK DR	48	---	---
	71+47 U - 71+73 U	RT, CTH U	---	11	12
0070	33+88 KN - 36+53 KN	RT, CTH K NB	---	35	---
	52+86 KN - 58+00 KN	RT, CTH K NB	---	62	---
	52+96 KS - 58+00 KS	LT, CTH K SB	---	65	---
0080	36+53 KN - 52+86 KN	RT, CTH K NB	---	340	---
	36+45 KS - 52+96 KS	LT, CTH K SB	---	335	---
CATEGORY 0010 TOTALS			**3570**	**29576**	**8882**
CATEGORY 0070 TOTALS			**---**	**162**	**---**
CATEGORY 0080 TOTALS			**---**	**675**	**---**
***PROJECT ID TOTALS**			**4010**	**36526**	**9062**

SELECT CRUSHED MATERIAL

STATION TO STATION	LOCATION	312.0110 TON
30+80 KN - 61+50 KN	CTH K NB	8896
30+64 KS - 61+50 KS	CTH K SB	8888
100+00 KE - 104+12 KE	KE ROUNDABOUT	1935
200+00 KW - 204+12 KW	KW ROUNDABOUT	1931
738+12 A - 761+33 A	A RAMP	5554
761+34 B - 780+05 B	B RAMP	4796
771+18 C - 789+10 C	C RAMP	4922
754+58 D - 770+99 D	D RAMP	4133
738+12 E - 750+88 E	E RAMP	3352
740+19 F - 751+96 F	F RAMP	3552
347+96 AT - 361+40 AT	TEMP A RAMP	1522
363+26 BT - 366+43 BT	TEMP B RAMP	355
385+75 CT - 388+78 CT	TEMP C RAMP	540
370+62 CT - 371+12 CT	TEMP C RAMP	121
371+36 CT - 374+61 CT	TEMP C RAMP	576
375+38 CT - 384+81 CT	TEMP C RAMP	1559
389+19 CU - 392+24 CU	TEMP C RAMP	625
371+94 CU - 377+17 CU	TEMP C RAMP	707
351+59 DT - 366+21 DT	TEMP D RAMP	1806
338+60 ET - 346+00 ET	TEMP E RAMP	635
336+63 EU - 341+66 EU	TEMP E RAMP	451
343+61 EU - 348+36 EU	TEMP E RAMP	376
331+39 EV - 335+50 EV	TEMP E RAMP	427
342+11 FT - 347+89 FT	TEMP F RAMP	484
351+27 FU - 358+00 FU	TEMP F RAMP	654
327+01 FV - 333+25 FV	TEMP F RAMP	526
CATEGORY TOTAL		**59323**
***PROJECT ID TOTAL**		**68723**

COLORING CONCRETE RED

STATION TO STATION	LOCATION	405.0100 CY
100+00 KE - 104+12 KE	TRUCK APRON	149
200+00 KW - 204+12 KW	TRUCK APRON	149
760+32 A - 761+30 A	SAFETY ISLAND	15
771+19 C - 772+28 C	SAFETY ISLAND	18
37+31 KN - 38+52 KN	MEDIAN ISLAND	22
40+15 KN - 41+46 KN	MEDIAN ISLAND	25
48+37 KN - 49+34 KN	MEDIAN ISLAND	24
51+04 KN - 52+34 KN	MEDIAN ISLAND	20
CATEGORY TOTAL		**422**

*** OTHER QUANTITIES LOCATED ELSEWHERE IN PLAN**

ALL ITEMS ON THIS SHEET
ARE CATEGORY 0010
UNLESS OTHERWISE NOTED

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CONCRETE PAVEMENT

STATION TO STATION	LOCATION	415.0080 8-INCH SY	415.0085 8 1/2-INCH SY	415.0100 10-INCH SY
31+35 KN - 38+41 KN	BUS 51/CTH K NB	2269	---	---
40+23 KN - 49+22 KN	BUS 51/CTH K NB	2835	---	---
51+12 KN - 58+00 KN	BUS 51/CTH K NB	2146	---	---
32+93 KS - 38+40 KS	BUS 51/CTH K SB	2216	---	672
40+31 KS - 49+29 KS	BUS 51/CTH K SB	2848	---	---
51+11 KS - 58+00 KS	BUS 51/CTH K SB	2170	---	---
100+00 KE - 104+12 KE	KE ROUNDABOUT	1530	---	---
200+00 KW - 204+12 KW	KW ROUNDABOUT	1525	---	---
738+12 A - 753+25 A	A RAMP	---	---	3430
753+25 A - 761+33 A	A RAMP	---	1951	---
761+34 B - 780+05 B	B RAMP	---	3310	---
771+18 C - 789+10 C	C RAMP	---	3386	---
754+58 D - 770+99 D	D RAMP	---	3094	---
738+12 E - 745+21 E	E RAMP	---	---	1043
745+21 E - 750+88 E	E RAMP	1933	---	---
740+19 F - 751+96 F	F RAMP	2799	---	---
CATEGORY TOTALS		**15021**	**11741**	**5145**

CONCRETE DRIVEWAY 6-INCH

STATION TO STATION	LOCATION	416.0160 SY
55+94 KN - 56+06 KN	RT	17
CATEGORY TOTAL		**17**

CONCRETE ROUNDABOUT TRUCK APRON 8-INCH

STATION TO STATION	LOCATION	416.0508 SY
100+00 KE - 104+12 KE	LT	672
200+00 KW - 204+12 KW	LT	672
CATEGORY TOTAL		**1344**

DRILLED DOWEL BARS

LOCATION	416.0620 EACH
31+35 KN	27
CATEGORY TOTAL	**27**

HMA PAVEMENT ITEMS

STATION TO STATION	LOCATION	460.1100 HMA PAVEMENT TYPE E-0.3 TON	460.1103 HMA PAVEMENT TYPE E-3 TON	465.0125 ASPHALTIC SURFACE TEMPORARY TON	455.0115 ASPHALTIC PG64-22 TON	455.0122 MATERIAL PG64-34 TON	455.0605 TACK COAT GAL
30+80 KN - 61+50 KN	CTH K NB	108	406	---	18.4	9.9	64
30+64 KS - 61+50 KS	CTH K SB	108	453	---	20.2	10.7	68
738+12 A - 761+33 A	A RAMP	134	---	---	3.7	3.7	15
761+34 B - 780+05 B	B RAMP	376	---	---	10.3	10.3	41
771+18 C - 789+10 C	C RAMP	331	---	---	9.1	9.1	36
754+58 D - 770+99 D	D RAMP	304	---	---	8.4	8.4	26
738+12 E - 750+88 E	E RAMP	115	---	---	3.2	3.2	13
740+19 F - 751+96 F	F RAMP	107	101	---	6.5	5.0	20
201+10 V - 230+86 V	OVERLOOK DR	3454	---	---	114.0	75.9	303
3+69 ME - 6+28 ME	MERRILL AVE	345	---	---	11.2	7.6	30
4+50 N - 5+98 N	CASSIDY DR	193	---	---	---	10.2	27
71+47 U - 71+73 U	RT	---	3	---	0.1	0.1	1
347+96 AT - 361+40 AT	TEMP A RAMP	---	---	823	---	---	65
363+26 BT - 366+43 BT	TEMP B RAMP	---	---	231	---	---	19
385+75 CT - 388+78 CT	TEMP C RAMP	---	---	311	---	---	25
370+62 CT - 371+12 CT	TEMP C RAMP	---	---	66	---	---	5
371+36 CT - 374+61 CT	TEMP C RAMP	---	---	308	---	---	25
375+38 CT - 384+81 CT	TEMP C RAMP	---	---	1099	---	---	88
389+19 CU - 392+24 CU	TEMP C RAMP	---	---	274	---	---	22
371+94 CU - 377+17 CU	TEMP C RAMP	---	---	292	---	---	23
351+59 DT - 366+21 DT	TEMP D RAMP	---	---	936	---	---	75
338+60 ET - 346+00 ET	TEMP E RAMP	---	---	280	---	---	22
336+63 EU - 341+66 EU	TEMP E RAMP	---	---	156	---	---	13
343+61 EU - 348+36 EU	TEMP E RAMP	---	---	234	---	---	19
331+39 EV - 336+12 EV	TEMP E RAMP	---	---	151	---	---	12
342+11 FT - 347+89 FT	TEMP F RAMP	---	---	183	---	---	15
351+27 FU - 358+00 FU	TEMP F RAMP	---	---	429	---	---	34
327+01 FV - 333+25 FV	TEMP F RAMP	---	---	167	---	---	13
CATEGORY TOTALS		**5575**	**963**	**5940**	**205**	**154**	**1119**
***PROJECT ID TOTALS**		**5970**	**4188**	**5940**	**338**	**219**	**1599**

ASPHALTIC FLUME

STATION	LOCATION	465.0315 SY
742+98 F	LT	14
CATEGORY TOTAL		**14**

*** OTHER QUANTITIES LOCATED ELSEWHERE IN PLAN**

ALL ITEMS ON THIS SHEET
ARE CATEGORY 0010
UNLESS OTHERWISE NOTED

3

ENDWALLS AND CULVERT PIPES REINFORCED CONCRETE

STATION TO STATION	LOCATION	522.1012 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 12-INCH EACH	522.1015 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 15-INCH EACH	522.1018 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 18-INCH EACH	522.1024 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 24-INCH EACH	522.1030 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 30-INCH EACH	522.1036 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 36-INCH EACH	522.1072 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 72-INCH EACH	522.0124 CULVERT PIPE REINFORCED CONCRETE CLASS 24-INCH LF	522.0130 CULVERT PIPE REINFORCED CONCRETE CLASS 30-INCH LF	522.0136 CULVERT PIPE REINFORCED CONCRETE CLASS 36-INCH LF	522.0172 CULVERT PIPE REINFORCED CONCRETE CLASS 72-INCH LF	611.9800.S PIPE GRATES EACH	(1) JOINT TIES EACH
60+82 KN	LT & RT	---	---	---	---	---	---	2	---	---	---	222	---	12
52+00 KN	LT & RT	---	---	---	---	---	2	---	---	---	179	---	---	12
775+79 C	LT	---	---	---	---	2	---	---	---	53	---	---	---	12
766+53 B	LT & RT	---	---	---	2	---	---	---	192	---	---	---	---	12
755+20 NB	RT	---	---	---	---	---	2	---	---	---	88	---	---	12
740+05 NB - 748+53 NB	LT & RT	---	---	---	---	1	---	---	---	---	---	---	1	6
746+00 F - 749+00 F	LT & RT	2	---	---	---	---	---	---	---	---	---	---	2	12
759+00 D - 767+50 D	LT & RT	1	1	---	---	---	---	---	---	---	---	---	2	12
775+12 C - 783+00 C	LT & RT	---	2	---	---	---	---	---	---	---	---	---	2	12
30+76 KS - 30+79 KS	LT & RT	1	---	---	---	---	---	---	---	---	---	---	1	6
31+35 KN - 31+78 KN	LT & RT	---	1	---	---	---	---	---	---	---	---	---	1	6
34+90 KS - 36+02 KS	LT & RT	1	---	---	---	---	---	---	---	---	---	---	---	6
34+00 KN - 35+15 KN	LT & RT	1	1	---	---	---	---	---	---	---	---	---	2	12
761+85 B - 763+85 B	LT & RT	---	1	---	---	---	---	---	---	---	---	---	1	6
38+00 KN - 44+00 KN	LT & RT	---	---	---	1	---	---	---	---	---	---	---	1	6
770+10 D - 770+50 D	LT & RT	---	1	---	---	---	---	---	---	---	---	---	1	6
48+75 KN - 51+00 KN	LT & RT	---	---	2	---	---	---	---	---	---	---	---	2	12
54+95 KN - 55+50 KN	LT & RT	---	1	---	---	---	---	---	---	---	---	---	1	6
57+80 KN - 57+98 KN	LT & RT	---	1	---	---	---	---	---	---	---	---	---	1	6
60+12 KS - 60+12 KS	LT & RT	---	1	---	---	---	---	---	---	---	---	---	1	6
TOTALS		**6**	**10**	**2**	**3**	**3**	**4**	**2**	**192**	**53**	**267**	**222**	**19**	
***CATEGORY TOTALS**		**6**	**10**	**2**	**3**	**3**	**4**	**2**	**208**	**53**	**267**	**222**	**19**	
***PROJECT ID TOTALS**		**6**	**10**	**2**	**5**	**3**	**4**	**2**	**364**	**101**	**267**	**222**	**19**	

(1) FOR INFORMATION ONLY. NOT A BID ITEM.

ENDWALLS AND CULVERT PIPES CORRUGATED STEEL

STATION	LOCATION	521.1012 APRON ENDWALLS FOR CULVERT PIPE CORRUGATED 12-INCH EACH	521.1015 APRON ENDWALLS FOR CULVERT PIPE CORRUGATED 15-INCH EACH	521.1018 APRON ENDWALLS FOR CULVERT PIPE CORRUGATED 18-INCH EACH	521.1024 APRON ENDWALLS FOR CULVERT PIPE CORRUGATED 24-INCH EACH	521.1030 APRON ENDWALLS FOR CULVERT PIPE CORRUGATED 30-INCH EACH	521.0112 CULVERT PIPE CORRUGATED STEEL 12-INCH LF	521.0115 CULVERT PIPE CORRUGATED STEEL 15-INCH LF	521.0118 CULVERT PIPE CORRUGATED STEEL 18-INCH LF	521.0124 CULVERT PIPE CORRUGATED STEEL 24-INCH LF	521.0130 CULVERT PIPE CORRUGATED STEEL 30-INCH LF	THICKNESS INCHES
230+38 V	LT & RT	---	---	---	2	---	---	---	---	131	---	0.064
228+00 V	RT	---	---	2	---	---	---	---	52	---	---	0.064
226+50 V	RT	---	2	---	---	---	---	48	---	---	---	0.064
222+75 V	LT & RT	---	---	2	---	---	---	---	84	---	---	0.064
222+67 V	LT & RT	---	---	2	---	---	---	---	78	---	---	0.064
221+03 V	LT	---	---	2	---	---	---	---	28	---	---	0.064
214+00 V	RT	2	---	---	---	---	42	---	---	---	---	0.064
208+94 V	LT	2	---	---	---	---	29	---	---	---	---	0.064
208+94 V	RT	2	---	---	---	---	104	---	---	---	---	0.064
205+31 V	LT & RT	---	---	---	---	2	---	---	---	---	94	0.079
205+24 V	LT & RT	---	---	---	---	2	---	---	---	---	94	0.079
203+30 V	LT	---	2	---	---	---	---	25	---	---	---	0.064
202+29 V	LT	2	---	---	---	---	27	---	---	---	---	0.064
56+01 KN	RT	---	2	---	---	---	---	60	---	---	---	0.064
CATEGORY TOTALS		**8**	**6**	**8**	**2**	**4**	**202**	**133**	**242**	**131**	**188**	

*** OTHER QUANTITIES LOCATED ELSEWHERE IN PLAN**

ALL ITEMS ON THIS SHEET
ARE CATEGORY 0010
UNLESS OTHERWISE NOTED

3

CULVERT PIPE TEMPORARY

STATION TO STATION	LOCATION	520.4012 12-INCH LF	520.4024 24-INCH LF
350+50 AT - 352+00 AT	AT RAMP RT	---	150
370+90 CT	CT RAMP	54	---
372+25 CT	CT RAMP	---	88
373+00 CU	CU RAMP	---	74
TOTALS		**54**	**312**
CATEGORY TOTALS		**249**	**470**

CULVERT PIPE REINFORCED CONCRETE TYPE III 24-INCH

STATION	LOCATION	522.0124 LF	REMARKS
359+40 AT	AT RAMP LT	16	EXTEND EXISTING PIPE
TOTAL		**16**	
CATEGORY TOTAL		**208**	
***PROJECT ID TOTAL**		**364**	

STORM SEWER PIPE REINFORCED CONCRETE

STATION TO STATION	LOCATION	608.0312 STORM SEWER PIPE REINFORCED CONCRETE, CLASS III 12-INCH LF	608.0315 15-INCH LF	608.0318 18-INCH LF	608.0321 21-INCH LF	608.0324 24-INCH LF	608.0330 30-INCH LF
746+00 F - 749+00 F	LT & RT	109	---	---	---	---	---
759+00 D - 767+50 D	LT & RT	86	60	---	---	---	---
775+12 C - 783+00 C	LT & RT	215	133	---	---	---	---
740+05 NB - 748+53 NB	LT & RT	529	296	92	---	535	68
30+76 KS - 30+79 KS	LT & RT	30	---	---	---	---	---
31+35 KN - 31+78 KN	LT & RT	34	91	---	---	---	---
34+90 KS - 36+02 KS	LT & RT	177	---	---	---	---	---
34+00 KN - 35+15 KN	LT & RT	91	111	---	---	---	---
761+85 B - 763+85 B	LT & RT	92	42	---	---	---	---
38+00 KN - 44+00 KN	LT & RT	218	125	372	349	51	---
770+10 D - 770+50 D	LT & RT	60	39	---	---	---	---
48+75 KN - 51+00 KN	LT & RT	37	21	527	---	---	---
54+95 KN - 55+50 KN	LT & RT	65	136	---	---	---	---
57+80 KN - 57+98 KN	LT & RT	48	115	---	---	---	---
60+12 KN - 60+12 KN	LT & RT	---	96	---	---	---	---
CATEGORY TOTALS		**1792**	**1264**	**991**	**349**	**586**	**68**

STORM SEWER SCHEDULE TEMPORARY DRAINAGE

STRUCTURE NUMBER	STATION	OFFSET	611.2004 MANHOLES 4-FT DIAMETER EACH	611.3220 611.3902 INLETS 2x2-FT EACH	MEDIAN 2 GRATE EACH	611.0642 INLET COVERS TYPE MS EACH	611.0612 TYPE C EACH	FLOWLINE ELEV	BOX ELEV	DEPTH	INVERT ELEV	FROM	DISCHARGE ELEV	TO	520.4012 CULVERT PIPE TEMPORARY 12-INCH LF	520.4018 18-INCH LF	520.4024 24-INCH LF	SLOPE %	SPV.0060.03 CONNECTION TO EXISTING INLETS EACH
	743+78 E	10' RT	---	---	---	---	---	---	---	---	1239.52	INLET	1239.50	MANHOLE	18	---	---	0.1	---
	742+00 E	26.9' RT	---	---	---	---	---	---	---	---	1239.50	MANHOLE	1239.50	DITCH	177	---	---	0.0	---
900	354+20 AT	37' RT	---	---	1	2	---	1242.46	1242.46	4.00	1238.46	INLET	1238.00	EX. INLET	---	28	---	1.6	1
901	358+50 AT	19' RT	---	---	1	2	---	1244.64	1244.64	3.00	1241.64	INLET	1241.00	DITCH	---	76	---	0.8	---
	364+00 BT	46' LT	---	---	---	---	---	---	---	---	1241.00	PIPE END	1239.44	902	---	---	158	1.0	---
902	365+58 BT	24' LT	1	---	---	---	1	1248.46	1247.71	8.27	1239.44	INLET	---	EX. ENDWALL	---	---	---	---	---
903	380+25 CT	26.4' RT	---	---	1	2	---	1238.85	1238.85	2.50	1236.35	INLET	1230.72	EX. INLET	---	347	---	1.6	1
904	359+50 DT	23.4' RT	---	1	---	---	1	1261.06	1260.31	2.50	1257.81	INLET	1256.35	DITCH	---	34	---	4.3	---
TOTALS			**1**	**1**	**3**	**6**	**2**								**195**	**485**	**158**		**2**
***CATEGORY TOTALS**			**22**	**2**	**6**	**12**	**2**								**249**	**485**	**470**		**2**
***PROJECT ID TOTALS**			**22**	**2**	**8**	**16**	**2**								**249**	**485**	**470**		**2**

1.) ALL SUBSURFACE ELEVATIONS ARE PIPE FLOWLINES.
2.) CALCULATED DEPTH = DISTANCE FROM TOP OF BOX TO DISCHARGE ELEVATION.
3.) PIPE LENGTHS MEASURED FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE.
4.) ALL STRUCTURES HAVE THE STATUS "NEW".

*** OTHER QUANTITIES LOCATED ELSEWHERE IN PLAN**

ALL ITEMS ON THIS SHEET
ARE CATEGORY 0010
UNLESS OTHERWISE NOTED

3

STORM SEWER MANHOLES, INLETS, AND COVERS

STATION - STATION	LOCATION	611.3220 INLETS 2x2-FT EACH	611.3225 INLETS 2x2.5-FT EACH	611.3230 INLETS 2x3-FT EACH	611.3901 MEDIAN 1 GRATE EACH	611.3902 MEDIAN 2 GRATE EACH	611.0610 INLET COVERS TYPE BW EACH	611.0624 INLET COVERS TYPE H EACH	611.0627 INLET COVERS TYPE HM EACH	611.0642 INLET COVERS TYPE MS EACH	611.0652 INLET COVERS TYPE T EACH	611.0654 INLET COVERS TYPE V EACH	611.2004 MANHOLES 4-FT EACH	611.2005 MANHOLES 5-FT EACH	611.0530 MANHOLE COVERS TYPE J EACH	611.8120.S COVER PLATES TEMPORARY EACH
746+00 F - 749+00 F	LT & RT	---	---	2	---	---	---	---	2	---	---	---	---	---	---	---
759+00 D - 767+50 D	LT & RT	---	---	2	1	---	---	---	2	1	---	---	---	---	---	---
775+12 C - 783+00 C	LT & RT	---	---	3	1	1	---	---	3	2	---	---	---	---	---	3
740+05 NB - 748+53 NB	LT & RT	---	6	1	1	1	5	---	1	2	---	4	2	2	1	2
30+76 KS - 30+79 KS	LT & RT	---	---	1	---	---	---	1	---	---	---	---	---	---	---	---
31+35 KN - 31+78 KN	LT & RT	---	---	4	---	---	---	4	---	---	---	---	1	---	1	---
34+90 KS - 36+02 KS	LT & RT	---	---	3	---	---	---	3	---	---	---	---	---	---	---	---
34+00 KN - 35+15 KN	LT & RT	---	---	2	---	---	---	3	---	---	---	---	1	---	---	---
761+85 B - 763+85 B	LT & RT	---	---	4	---	---	---	4	---	---	---	---	---	---	---	---
38+00 KN - 44+00 KN	LT & RT	1	---	16	---	---	---	21	---	---	2	---	8	---	2	---
770+10 D - 770+50 D	LT & RT	---	---	4	---	---	---	4	---	---	---	---	---	---	---	---
48+75 KN - 51+00 KN	LT & RT	---	---	3	---	---	---	6	---	---	2	---	5	---	---	---
54+95 KN - 55+50 KN	LT & RT	---	---	5	---	---	---	7	---	---	---	---	2	---	---	---
57+80 KN - 57+98 KN	LT & RT	---	---	3	---	---	---	5	---	---	---	---	2	---	---	---
60+12 KS - 60+12 KS	LT & RT	---	---	---	---	1	---	---	---	1	---	---	---	---	---	---
TOTALS		**1**	**6**	**53**	**3**	**3**	**5**	**58**	**8**	**6**	**4**	**4**	**21**	**2**	**4**	**5**
***CATEGORY TOTALS**		**2**	**6**	**53**	**3**	**6**	**5**	**58**	**8**	**12**	**4**	**4**	**22**	**2**	**4**	**5**
***PROJECT ID TOTALS**		**2**	**6**	**53**	**3**	**8**	**5**	**58**	**8**	**16**	**4**	**4**	22	2	4	5

PIPE UNDERDRAIN 6-INCH ITEMS

STATION TO STATION	LOCATION	612.0106 6-INCH LF	612.0206 UNPERFORATED 6-INCH LF	612.0806 APRON ENDWALLS FOR UNDERDRAIN REINFORED CONCRETE 6-INCH EACH	645.0111 GEOTEXTILE FABRIC TYPE DF SCHEDULE A SY
31+61 KN - 58+00 KN	RT	2600	---	---	1806
55+00 KN - 58+75 KN	LT	375	---	---	260
32+93 KS - 35+75 KS	RT	283	---	---	197
32+93 KS - 58+75 KS	LT	2554	---	---	1774
56+00 KS - 58+75 KS	RT	275	---	---	191
100+00 KE - 104+14 KE	LT	414	---	---	288
200+00 KW - 204+14 KW	LT	414	---	---	288
757+10 A - 761+33 A	RT	423	---	---	294
760+37 A - 761+29 A	LT	104	---	---	72
761+29 B - 766+80 B	RT	551	---	---	383
771+18 C - 775+47 C	LT	414	---	---	288
771+21 C - 772+26 C	RT	127	---	---	88
764+50 D - 771+05 D	LT	655	---	---	455
768+00 D - 770+47 D	RT	247	---	---	172
743+79 E - 750+78 E	RT	699	---	---	485
743+00 F - 751+96 F	LT	896	---	---	622
751+64 F - 751+84 F	RT	33	---	---	23
201+10 V - 230+24 V	LT/RT, OVERLOOK DR	4028	264	24	---
CATEGORY TOTALS		**15092**	**264**	**24**	**7686**
***PROJECT ID TOTALS**		**16042**	**264**	**24**	**8346**

STORM SEWER ROCK EXCAVATION

STATION TO STATION	607.5000 CY	REMARKS
762+00 B - 766+50 B	290	RAMP B AT USH 51-CTH K STM SEWER
738+00 - 748+50 NB	530	USH 51 MAINLINE STM SEWER
746+00 F - 749+00 F	50	RAMP F AT USH 51-CTH U STM SEWER
31+00 K - 44+00 K	740	CTH K, EAST OF USH 51, STM SEWER
44+00 K - 58+00 K	40	CTH K, WEST OF USH 51, STM SEWER
CATEGORY TOTAL	**1650**	

*** OTHER QUANTITIES LOCATED ELSEWHERE IN PLAN**

ALL ITEMS ON THIS SHEET
ARE CATEGORY 0010
UNLESS OTHERWISE NOTED

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CONCRETE CURB AND GUTTER

STATION TO STATION	LOCATION	601.0409 30-INCH TYPE A LF	601.0411 30-INCH TYPE D LF	601.0555 6-INCH SLOPED 36-INCH TYPE A LF	601.0557 6-INCH SLOPED 36-INCH TYPE D LF	601.0574 4-INCH SLOPED 30-INCH TYPE G LF	601.0580 4-INCH SLOPED 36-INCH TYPE R LF
30+80 KN - 58+75 KN	LT, CTH K NB	2372	---	---	75	---	---
31+35 KN - 58+75 KN	RT, CTH K NB	2648	---	---	75	---	---
30+65 KS - 58+75 KS	LT, CTH K SB	2716	---	---	75	---	---
30+65 KS - 58+75 KS	RT, CTH K SB	2387	---	---	75	---	---
230+24 V - 230+74 V	LT, OVERLOOK DR	---	75	---	---	---	---
230+24 V - 230+74 V	RT, OVERLOOK DR	---	75	---	---	---	---
228+73 V - 230+62 V	LT, MEDIAN	---	353	---	---	---	---
754+50 A - 761+10 A	LT, A RAMP	600	---	60	---	---	---
757+10 A - 761+33 A	RT, A RAMP	333	---	90	---	---	---
760+32 A - 761+30 A	RT, MEDIAN	196	---	---	---	---	---
761+87 B - 764+80 B	LT, B RAMP	203	---	90	---	---	---
761+29 B - 766+80 B	RT, B RAMP	471	---	80	---	---	---
771+18 C - 775+50 C	LT, C RAMP	345	---	88	---	---	---
771+42 C - 775+50 C	RT, C RAMP	321	---	86	---	---	---
771+21 C - 772+28 C	RT, MEDIAN	217	---	---	---	---	---
764+50 D - 771+05 D	LT, D RAMP	208	---	447	---	---	---
768+00 D - 770+47 D	RT, D RAMP	171	---	76	---	---	---
748+00 E - 750+88 E	LT, E RAMP	---	---	288	---	---	---
750+00 E - 750+78 E	RT, E RAMP	---	---	107	---	---	---
743+00 F - 751+99 F	LT, F RAMP	---	---	919	---	---	---
751+64 F - 751+86 F	RT, F RAMP	---	---	32	---	---	---
100+00 KE - 104+12 KE	LT, KE ROUNDABOUT	---	---	---	---	267	400
100+00 KE - 104+12 KE	RT, KE ROUNDABOUT	83	---	---	---	---	---
200+00 KW - 204+12 KW	LT, KW ROUNDABOUT	---	---	---	---	267	400
200+00 KW - 204+12 KW	RT, KW ROUNDABOUT	83	---	---	---	---	---
71+01 U - 71+07 U	LT, BUS 51 RIGHT-TURN ISLAND	---	9	---	---	---	---
71+35 U - 71+43 U	LT, BUS 51 RIGHT-TURN ISLAND	---	9	---	---	---	---
71+47 U - 71+73 U	RT, CTH U RIGHT-TURN LANE	---	42	---	---	---	---
71+61 U - 71+83 U	RT, CTH U RIGHT-TURN ISLAND	---	22	---	---	---	---
71+68 U - 71+79 U	LT, BUS 51 RIGHT-TURN ISLAND	---	10	---	---	---	---
71+74 U - 71+82 U	RT, CTH U MEDIAN ISLAND	---	9	---	---	---	---
14+40 K - 14+46 K	RT	---	10	---	---	---	---
14+80 K - 14+89 K	RT	---	9	---	---	---	---
14+80 K - 14+89 K	LT, MEDIAN ISLAND	---	18	---	---	---	---
14+80 K - 14+89 K	LT, LEFT-TURN ISLAND	---	18	---	---	---	---
14+80 K - 14+89 K	LT, CTH U RIGHT-TURN ISLAND	---	9	---	---	---	---
CATEGORY TOTALS		**13354**	**668**	**2363**	**300**	**534**	**800**
***PROJECT ID TOTALS**		**13354**	**682**	**2363**	**315**	**534**	**800**

CONCRETE BARRIER

STATION TO STATION	LOCATION	603.1142 TYPE S42 LF	603.1442 TYPE S42C LF	614.0805 CRASH CUSHIONS PERMANENET LOW MAINTENANCE EACH	OBJECT MARKING	CRASH TEST CONDITION	WIDTH
740+00 NB - 756+96 NB	RT, USH 51 NB	1696	---	1	OM-3C	TL-3	2'
745+23 A - 747+50 A	RT, A RAMP	---	227	1	OM-3C	TL-3	6'
745+20 E - 748+00 E	LT, E RAMP	---	280	---	---	---	---
743+75 E - 750+00 E	RT, E RAMP	---	625	---	---	---	---
CATEGORY TOTALS		**1696**	**1132**	**2**			

CONCRETE SIDEWALK

CATEGORY	STATION TO STATION	LOCATION	602.0405 4-INCH SF	602.0420 7-INCH SF
0010	760+32 A - 761+30 A	SAFETY ISLAND	---	769
	771+19 C - 772+28 C	SAFETY ISLAND	---	903
	228+73 V - 230+62 V	MEDIAN ISLAND	923	---
	37+31 KN - 38+52 KN	MEDIAN, CTH K	1937	---
	40+15 KN - 41+46 KN	MEDIAN, CTH K	2251	---
	48+37 KN - 49+34 KN	MEDIAN, CTH K	2170	---
	51+04 KN - 52+43 KN	MEDIAN, CTH K	1783	---
	13+86 K - 13+95 K	LT	41	---
	14+43 K - 14+87 K	RT	256	---
	14+82 K - 14+87 K	LT, MEDIAN	32	---
	14+82 K - 14+87 K	LEFT TURN ISLAND	110	---
	14+46 K - 15+26 K	CTH U RIGHT-TURN ISLAND	449	---
	69+50 U - 71+06 U	LT, CTH U	733	---
	71+63 U - 71+69 U	RT, CTH U RIGHT-TURN LANE	34	---
	71+78 U - 71+85 U	RT, CTH U RIGHT-TURN ISLAND	153	
CATEGORY 0010 TOTALS			**10872**	**1672**
0070	33+88 KN - 36+53 KN	RT, CTH K NB	1425	---
	52+86 KN - 58+00 KN	RT, CTH K NB	2475	---
	52+96 KS - 58+00 KS	LT, CTH K SB	2590	---
CATEGORY 0070 TOTALS			**6490**	**---**
0080	36+53 KN - 52+86 KN	RT, CTH K NB	13720	---
	36+45 KS - 52+96 KS	LT, CTH K SB	13590	---
CATEGORY 0080 TOTALS			**27310**	**---**
***PROJECT ID TOTALS**			**44672**	**1672**

CONCRETE BARRIER TEMPORARY PRECAST

STATION TO STATION	LOCATION	STAGE	603.8000 DELIVERED LF	603.8125 INSTALLED LF	614.0905 CRASH CUSHION TEMPORARY EACH	OBJECT MARKING	CRASH TEST CONDITION	WIDTH
344+50 ET - 346+00 ET	ET LINE RT	3A	150	150	1	OM-3R	TL-3	2'
376+40 CT - 383+60 CT	CT LINE LT	3B	720	720	1	OM-3C	TL-3	2'
374+75 CT - 391+00 CT	CT LINE RT	5A	---	1625	1	OM-3R	TL-3	2'
376+20 CU - 389+00 CU	CU LINE RT	5B	---	1280	1	OM-3C	TL-3	2'
764+00 B - 780+00 B	B RAMP	6A	---	1600	1	OM-3R	TL-3	2'
CATEGORY TOTALS			**870**	**5375**	**5**			

*** OTHER QUANTITIES LOCATED ELSEWHERE IN PLAN**

ALL ITEMS ON THIS SHEET ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

CURB RAMP DETECTABLE WARNING FIELD YELLOW

STATION	LOCATION	602.0505 SF
38+13 KN	LT	16
38+14 KN	RT	16
40+43 KN	LT	16
40+46 KN	RT	16
48+93 KN	RT	16
48+95 KN	LT	16
51+37 KN	LT	16
51+39 KN	RT	16
38+02 KS	LT	16
38+05 KS	RT	16
40+46 KS	RT	16
40+48 KS	LT	16
48+98 KS	LT	16
48+99 KS	RT	16
51+29 KS	LT	16
51+30 KS	RT	16
760+91 A	LT	16
760+94 A	RT	16
760+96 A	LT	16
760+96 A	LT	16
762+23 B	LT	16
762+24 B	RT	16
771+62 C	RT	16
771+57 C	RT	16
771+56 C	RT	16
771+56 C	LT	16
770+25 D	RT	16
770+25 D	LT	16
14+43 K	RT	8
14+85 K	RT	8
14+85 K	LT	8
14+85 K	LT	8
14+85 K	LT	8
14+85 K	LT	8
14+85 K	LT	8
71+04 U	LT	8
71+39 U	LT	8
71+73 U	LT	8
72+78 U	RT	8
CATEGORY TOTAL		**536**
***PROJECT ID TOTAL**		**576**

CONCRETE CURB PEDESTRIAN

STATION	LOCATION	601.0600 LF
14+43 K	RT	14
14+85 K	RT	12
71+39 U	LT	12
71+73 U	LT	13
CATEGORY TOTAL		**51**

RECONSTRUCTING MANHOLES

STATION	LOCATION	611.0420 EACH	EXIST RIM EL	NEW RIM EL	REMARKS
230+47 V	RT	1	1240.86	1243.50	SANITARY
CATEGORY TOTAL		**1**			

ADJUSTING INLET COVERS

STATION	LOCATION	611.8115 EACH
71+52 U	RT, BUS 51 RIGHT-TURN ISLAND	1
CATEGORY TOTAL		**1**

MGS GUARDRAIL ITEMS

STATION TO STATION	LOCATION	614.2500 MGS THRIE BEAM TRANSITION LF	614.2300 MGS GUARDRAIL 3 LF	614.2610 MGS GUARDRAIL TERMINAL EAT EACH
743+77 E - 743+38 E	RT, E RAMP	39	---	---
743+38 E - 741+76 E	RT, E RAMP	---	162	---
741+76 E - 741+23 E	RT, E RAMP	---	---	1
CATEGORY 0060 TOTALS		**39**	**162**	**1**

FENCE CHAIN LINK 6-FT

STATION TO STATION	LOCATION	616.0206 LF
54+72 KN - 61+50 KN	RT, CTH K NB	762
52+12 KS - 61+50 KS	LT, CTH K SB	1007
751+81 A - 760+65 A	RT, A RAMP	970
763+25 B - 781+05 B	RT, B RAMP	1769
776+15 C - 789+10 C	LT, C RAMP	1296
752+48 D - 771+05 D	LT, D RAMP	1936
738+12 E - 750+31 E	RT, E RAMP	1230
740+19 F - 751+70 F	LT, F RAMP	1280
CATEGORY TOTAL		**10250**

MAINTENANCE AND REPAIR OF HAUL ROAD

LOCATION	618.0100 EACH
.01 1170-01-70	1
CATEGORY TOTAL	**1**

MOBILIZATION

LOCATION	619.1000 EACH
1170-01-70	0.33
CATEGORY TOTAL	**0.33**

CONCRETE MEDIAN SLOPED NOSE

STATION	LOCATION	TYPE	620.0300 SF
38+52 KN	LT, CTH K NB	2	13
40+15 KN	LT, CTH K NB	2	17
49+33 KN	LT, CTH K NB	2	13
51+04 KN	LT, CTH K NB	2	17
38+48 KS	RT, CTH K SB	2	17
40+19 KS	RT, CTH K SB	2	13
49+38 KS	RT, CTH K SB	2	17
51+00 KS	RT, CTH K SB	2	13
760+32 A	LT, A RAMP	1	60
761+10 A	LT, A RAMP	2	13
761+21 A	LT, A RAMP	2	20
761+27 A	LT, A RAMP	2	13
761+87 B	LT, B RAMP	2	17
771+21 C	RT, C RAMP	2	11
771+42 C	RT, C RAMP	2	13
771+42 C	RT, C RAMP	2	20
772+21 C	RT, C RAMP	1	60
770+47 D	RT, D RAMP	2	17
228+80 V	LT, OVERLOOK DR	1	60
230+55 V	LT, OVERLOOK DR	1	60
CATEGORY TOTAL			**484**

*** OTHER QUANTITIES LOCATED ELSEWHERE IN PLAN**

ALL ITEMS ON THIS SHEET ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

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RIPRAP MEDIUM, RIPRAP HEAVY, AND GEOTEXTILE FABRIC TYPE HR

STATION	LOCATION	STAGE	606.0200 RIPRAP MEDIUM CY	606.0300 RIPRAP HEAVY CY	645.0120 FABRIC TYPE HR SY
222+67 V	LT	1	23	---	60
230+38 V	LT	1	23	---	60
STAGE 1 TOTALS			**46**	**0**	**120**
753+10 NB	RT	2	26	---	69
753+77 NB	RT	2	71	---	167
740+05 E	RT	2	19	---	49
744+00 - 748+00 F	LT	2	1076	---	2299
746+00 F	RT	2	11	---	32
749+00 F	RT	2	35	---	94
STAGE 2 TOTALS			**1238**	**0**	**2710**
781+00 C	LT	5	38	---	102
759+00 D	LT	5	6	---	19
767+50 D	RT	5	28	---	76
55+25 KN	RT	5	---	26	57
55+70 KN	RT	5	9	---	26
57+75 KN	RT	5	9	---	26
60+50 KN	RT	5	125	---	285
STAGE 5 TOTALS			**215**	**26**	**591**
763+00 B	LT	6	9	---	26
767+00 B	RT	6	26	---	66
772+20 C	LT	6	13	---	37
770+50 D	LT	6	9	---	26
31+25 KN	RT	6	9	---	26
34+00 KN	RT	6	9	---	26
41+00 KN	RT	6	25	---	64
52+10 KN	RT	6	60	---	142
30+75 KS	LT	6	6	---	18
35+00 KS	LT	6	11	---	32
STAGE 6 TOTALS			**177**	**0**	**463**
772+25 C	LT	7	20	---	54
773+75 C	LT	7	76	---	179
775+20 C	LT	7	8	---	25
52+00 KN	RT	7	26	---	66
STAGE 7 TOTALS			**130**	**0**	**324**
CATEGORY TOTALS			**1806**	**26**	**4208**
***PROJECT ID TOTALS**			**1836**	**26**	**4290**

MOBILIZATIONS EROSION CONTROL AND EMERGENCY EROSION CONTROL

PROJECT	628.1905 EACH	628.1910 EMERGENCY EACH
1170-01-70	12	12
CATEGORY TOTALS	**12**	**12**
***PROJECT ID TOTALS**	**15**	**15**

SILT FENCE

STATION TO STATION	LOCATION	STAGE	628.1504 LF	628.1520 MAINTENANCE LF
223+45 V - 230+80 V	LT&RT	1	1320	1320
STAGE 1 TOTALS			**1320**	**1320**
201+00 V - 208+75 V	RT	2	910	910
STAGE 2 TOTALS			**910**	**910**
371+95 CU - 389+30 CU	LT&RT	5	1110	1110
738+10 F - 739+40 F	LT	5	150	150
STAGE 5 TOTALS			**1260**	**1260**
30+60 KS - 38+20 KS	LT	6	800	800
STAGE 6 TOTALS			**800**	**800**
56+00 KN - 776+75 C	LT	7	370	370
STAGE 7 TOTALS			**370**	**370**
UNDISTRIBUTED			1190	1190
CATEGORY TOTALS			**5850**	**5850**
***PROJECT ID TOTALS**			**8225**	**8225**

WATER

LOCATION	624.0100 MGAL
BASE COMPACTION	1360
DUST CONTROL	640
CATEGORY TOTAL	**2000**
***PROJECT ID TOTAL**	**2230**

EROSION MAT

STATION TO STATION	LOCATION	STAGE	628.2004 CLASS I TYPE B SY	628.2006 URBAN CLASS I TYPE A SY	628.2023 CLASS II TYPE B SY
221+08 V - 230+87 V	LT&RT	1	5764	---	339
4+50 N - 6+25 N	LT&RT	1	952	---	---
4+55 L - 5+48 L	LT&RT	1	---	134	---
STAGE 1 TOTALS			**6716**	**134**	**339**
749+90 A - 756+00 A	RT	2	5484	---	---
738+10 E - 750+75 E	LT&RT	2	2316	---	---
742+54 F - 751+82 F	LT&RT	2	4809	---	---
13+87 K - 15+28 K	RT	2	---	55	---
201+00 V - 221+50 V	LT&RT	2	6941	762	763
STAGE 2 TOTALS			**19550**	**817**	**763**
371+38 CT - 381+00 CT	LT&RT	3	1395	---	---
STAGE 3 TOTALS			**1395**	**0**	**0**
737+00 F - 743+00 F	LT	5	1966	---	---
752+35 D - 768+53 D	LT&RT	5	3473	---	---
371+95 CU - 385+30 CU	LT&RT	5	3237	---	463
STAGE 5 TOTALS			**8675**	**0**	**463**
745+23 A - 760+90 A	LT&RT	6	3539	---	---
762+26 B - 784+05 B	LT&RT	6	734	---	---
771+68 C - 775+50 C	RT	6	365	---	---
786+30 D - 770+21 D	LT&RT	6	1583	---	---
738+12 E - 744+00 E	RT	6	541	---	---
30+65 KN - 61+50 KN	LT&RT	6	944	8218	---
STAGE 6 TOTALS			**7706**	**8218**	**0**
50+80 KN - 55+85 KN	RT	7	10938	56	---
STAGE 7 TOTALS			**10938**	**56**	**0**
UNDISTRIBUTED			16520	2775	485
CATEGORY TOTALS			**71500**	**12000**	**2050**
***PROJECT ID TOTALS**			**72550**	**17850**	**2050**

*** OTHER QUANTITIES LOCATED ELSEWHERE IN PLAN**

ALL ITEMS ON THIS SHEET ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

3

INLET PROTECTION

STATION TO STATION	LOCATION	STAGE	628.7005 TYPE A EACH	628.7010 TYPE B EACH	628.7015 TYPE C EACH
345+20 AT - 358+50 AT	LT&RT	1	3	2	---
359+50 DT	RT	1	1	1	---
13+40 K - 29+54 K	LT&RT	1	1	---	18
30+19 KN - 69+16 KN	LT&RT	1	---	2	10
42+20 SW - 43+77 SW	RT	1	---	---	2
STAGE 1 TOTALS			**5**	**5**	**30**
743+79 E - 745+25 E	LT&RT	2	6	6	---
746+00 F - 749+00 F	LT	2	2	---	2
STAGE 2 TOTALS			**8**	**6**	**2**
380+25 CT	RT	3	1	1	---
STAGE 3 TOTALS			**1**	**1**	**0**
373+50 CU - 383+00 CU	RT	5	3	2	1
768+50 D - 767+50 D	LT&RT	5	3	1	2
55+06 KN - 60+11 KN	LT&RT	5	7	1	6
STAGE 5 TOTALS			**13**	**4**	**9**
760+58 A - 760+89 A	LT&RT	6	6	---	6
762+50 B - 762+65 B	LT&RT	6	3	---	3
772+20 C - 775+47 C	LT&RT	6	4	---	4
770+13 D - 770+50 D	LT&RT	6	4	---	4
30+78 KN - 58+97 KN	LT&RT	6	40	---	40
STAGE 6 TOTALS			**57**	**0**	**57**
UNDISTRIBUTED			5	2	5
CATEGORY TOTALS			**89**	**18**	**103**
***PROJECT ID TOTALS**			**92**	**21**	**109**

SOIL STABILIZER TYPE B

PROJECT	628.6510 ACRE
1170-01-70	3
CATEGORY TOTAL	**3**

TRACKING PADS

PROJECT	628.7560 EACH
1170-01-70	2
CATEGORY TOTAL	**2**

TEMPORARY DITCH CHECKS

STATION TO STATION	LOCATION	STAGE	628.7504 LF
355+00 AT - 359+10 AT	LT&RT	1	80
358+00 DT - 364+00 DT	LT&RT	1	120
221+20 V - 230+15 V	LT&RT	1	160
STAGE 1 TOTAL			**360**
742+00 F - 750+00 F	LT	2	130
201+00 V - 221+35 V	LT&RT	2	540
STAGE 2 TOTAL			**670**
372+10 CT - 373+50 CT	LT&RT	3	50
STAGE 3 TOTAL			**50**
379+75 CU	RT	5	10
757+50 D - 761+50 D	LT	5	100
737+00 F - 742+50 F	LT	5	30
STAGE 5 TOTAL			**140**
747+50 A - 760+00 A	RT	6	60
739+50 E - 743+00 E	RT	6	50
STAGE 6 TOTAL			**110**
UNDISTRIBUTED			340
CATEGORY TOTAL			**1670**
***PROJECT ID TOTAL**			**1820**

ROCK BAGS

STATION TO STATION	LOCATION	STAGE	628.7570 EACH
230+47 V	LT	1	15
STAGE 1 TOTAL			**15**
203+25 V - 208+20 V	RT	2	90
STAGE 2 TOTAL			**90**
738+50 F - 738+90 F	LT	5	30
58+50 KN	RT	5	15
STAGE 5 TOTAL			**45**
33+00 KS - 38+10 KS	LT	6	45
STAGE 6 TOTAL			**45**
776+75 C	LT	7	15
STAGE 7 TOTAL			**15**
UNDISTRIBUTED			55
CATEGORY TOTAL			**250**
***PROJECT ID TOTAL**			**405**

CULVERT PIPE CHECKS

STATION TO STATION	LOCATION	STAGE	628.7555 EACH
350+50 AT	RT	1	3
350+50 AT - 359+58 AT	LT&RT	1	6
765+60 B	LT	1	3
353+50 DT	LT	1	3
753+50 D - 770+95 D	LT	1	6
31+00 KN - 61+60 KN	LT&RT	1	25
222+67 V - 230+36 V	LT&RT	1	10
STAGE 1 TOTAL			**56**
202+15 V - 220+90 V	LT&RT	2	16
STAGE 2 TOTAL			**16**
372+25 CT	LT	3	3
STAGE 3 TOTAL			**3**
373+00 CU	RT	5	3
738+75 F	LT	5	8
STAGE 5 TOTAL			**11**
766+00 B	LT	6	3
48+77 KS - 61+50 KS	LT	6	25
STAGE 6 TOTAL			**28**
775+80 C	LT	7	5
STAGE 7 TOTAL			**5**
UNDISTRIBUTED			41
CATEGORY TOTAL			**160**
***PROJECT ID TOTAL**			**185**

GEOTEXTILE FABRIC TYPE SR

STATION TO STATION	LOCATION	645.0135 SY
358+00 AT - 360+00 AT	TEMP A RAMP	801
CATEGORY TOTAL		**801**

*** OTHER QUANTITIES LOCATED ELSEWHERE IN PLAN**

ALL ITEMS ON THIS SHEET ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

3

TOPSOIL, MULCHING, FERTILIZER, & SEEDING

STATION TO STATION	LOCATION	STAGE	625.0100 TOPSOIL SY	TOPSOIL DEPTH INCHES	627.0200 MULCHING SY	629.0210 FERTILIZER TYPE B CWT	630.0120 SEEDING MIXTURE NO. 20 LB	630.0130 SEEDING MIXTURE NO. 30 LB	630.0140 SEEDING MIXTURE NO. 40 LB	630.0160 SEEDING MIXTURE NO. 60 LB	630.0200 SEEDING TEMPORARY LB	SPV.0030.01 FERTILIZER FOR LAWN TYPE TURF CWT	SPV.0120.01 WATER FOR SEEDED AREAS MGAL	SPV.0180.01 PREPARING TOPSOIL FOR LAWN TYPE TURF SY
348+00 AT - 360+62 AT	LT&RT	1	5696	4	4669	3.0	45	55	---	---	---	---	105	---
351+60 DT - 366+20 DT	LT&RT	1	5622	4	5622	3.6	65	59	---	---	---	---	126	---
221+08 V - 230+24 V	LT&RT	1	6164	4	129	4.1	69	70	---	---	---	---	138	---
4+50 N - 6+25 N	LT&RT	1	479	4	---	0.4	9	3	---	---	---	---	11	---
STAGE 1 TOTALS			**17961**		**10420**	**11.1**	**188**	**187**	**0**	**0**	**0**	**0.0**	**380**	**0**
738+10 E - 750+75 E	LT&RT	2	5962	4	2216	3.9	101	42	---	---	---	---	134	---
742+54 F - 751+82 F	LT&RT	2	10419	4	4378	6.8	206	52	---	---	---	---	234	---
13+87 K - 15+28 K	RT	2	55	6	---	0.1	---	---	1	---	---	0.1	1	55
201+00 V - 221+50 V	LT&RT	2	9871	6	1385	6.8	88	113	16	---	---	1.7	221	763
STAGE 2 TOTALS			**26307**		**7979**	**17.6**	**395**	**207**	**17**	**0**	**0**	**1.8**	**590**	**818**
371+38 CT - 381+00 CT	LT&RT	3	3434	4	2038	2.3	33	42	---	---	---	---	77	---
STAGE 3 TOTALS			**3434**		**2038**	**2.3**	**33**	**42**	**0**	**0**	**0**	**0.0**	**77**	**0**
737+00 F - 743+00 F	LT	5	26780	4	1513	16.9	700	17	---	---	---	---	601	---
752+35 D - 768+53 D	LT&RT	5	16187	4	11305	10.2	321	78	---	---	---	---	363	---
371+95 CU - 385+30 CU	LT&RT	5	15469	6	11896	9.8	215	131	5	---	---	0.2	347	251
STAGE 5 TOTALS			**58436**		**24714**	**36.9**	**1236**	**226**	**5**	**0**	**0**	**0.2**	**1311**	**251**
745+23 A - 760+90 A	LT&RT	6	5444	4	1905	3.5	78	47	---	---	---	---	122	---
762+26 B - 784+05 B	LT&RT	6	16706	4	15972	10.6	275	118	---	---	---	---	375	---
771+68 C - 775+50 C	RT	6	1472	4	1108	1.0	22	13	---	---	---	---	33	---
786+30 D - 770+21 D	LT&RT	6	1034	4	862	0.7	14	10	---	---	---	---	23	---
738+12 E - 744+00 E	RT	6	2357	4	1202	1.5	38	18	---	---	---	---	53	---
30+65 KN - 61+50 KN	LT&RT	6	21163	6	12001	13.4	326	17	148	---	---	5.2	475	8219
STAGE 6 TOTALS			**48176**		**33050**	**30.7**	**753**	**223**	**148**	**0**	**0**	**5.2**	**1081**	**8219**
50+80 KN - 55+85 KN	RT	7	14024	6	---	6.5	261	12	2	---	---	0.1	232	57
STAGE 7 TOTALS			**14024**		**0**	**6.5**	**261**	**12**	**2**	**0**	**0**	**0.1**	**232**	**57**
UNDISTRIBUTED			42112		29549	26.9	734	228	43	75	150	1.7	929	2355
CATEGORY TOTALS			**210450**		**107750**	**132.0**	**3600**	**1125**	**215**	**75**	**150**	**9.0**	**4600**	**11700**
***PROJECT ID TOTALS**			**227600**		**118000**	**139.0**	**3675**	**1285**	**320**	**75**	**150**	**13.0**	**4980**	**17550**

*** OTHER QUANTITIES LOCATED ELSEWHERE IN PLAN**

ALL ITEMS ON THIS SHEET
ARE CATEGORY 0010
UNLESS OTHERWISE NOTED

ERECTION OF TYPE II SIGNS AND SUPPORTS

ALL ITEMS ON THIS SHEET ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

SIGN NO.	STATION	LOCATION	SIGN CODE	W X H	637.0202 SIGNS REFLECTIVE TYPE II SF	637.0402 SIGNS REFLECTIVE FOLDING TYPE II SF	634.0612 POSTS WOOD 4x6x12 EACH	634.0614 POSTS WOOD 4x6x14 EACH	634.0616 POSTS WOOD 4x6x16 EACH	634.0618 POSTS WOOD 4x6x18 EACH	634.0620 POSTS WOOD 4x6x20 EACH	634.0622 POSTS WOOD 4x6x22 EACH	634.0808 POST TUBULAR STEEL 2X2X8 EACH	634.0809 POST TUBULAR STEEL 2X2X9.5 EACH	634.0811 POST TUBULAR STEEL 2X2X11 EACH	634.0812 POST TUBULAR STEEL 2X2X12 EACH	634.0814 POST TUBULAR STEEL 2X2X14 EACH	REMARKS
29-1	740+07 A	LT	E5-1 MOD	36" X 84"	21.00	---	---	---	---	---	---	---	---	---	---	---	---	MOUNTED ON CONCRETE BARRIER
29-7	745+85 A	RT	E5-1B	114" X 60"	47.50	---	---	---	---	---	---	2	---	---	---	---	---	
29-8	745+88 E	RT	W3-1	48" X 48"	16.00	---	---	---	1	---	---	---	---	---	---	---	---	
30-1	748+36 E	LT	R5-1A	36" X 24"	6.00	---	---	1	---	---	---	---	---	---	---	---	---	
30-2	748+36 E	RT	R5-1A	36" X 24"	6.00	---	---	1	---	---	---	---	---	---	---	---	---	
30-3	749+80 F	LT	R5-57	36" X 36"	9.00	---	---	---	1	---	---	---	---	---	---	---	---	
30-4	750+30 E	RT	J13-1	24" X 45"	7.50	---	---	---	1	---	---	---	---	---	---	---	---	
30-5	750+30 E	RT	J32-1	24" X 69"	11.50	---	---	---	---	1	---	---	---	---	---	---	---	
30-6	750+55 E	RT	R1-1	36" X 36"	7.46	---	---	---	1	---	---	---	---	---	---	---	---	
30-7	750+72 E	LT	R1-1	36" X 36"	7.46	---	---	---	1	---	---	---	---	---	---	---	---	
30-8	750+72 E	RT	R1-1	36" X 36"	7.46	---	---	---	1	---	---	---	---	---	---	---	---	
30-9	750+72 E	RT	W12-1D	24" X 24"	4.00	---	---	---	---	---	---	---	---	---	---	---	---	MOUNT WITH 30-8
30-10	750+83 E	RT	R5-1	30" X 30"	6.25	---	---	1	---	---	---	---	---	---	---	---	---	
30-11	751+67 F	RT	R11-54F	48" X 30"	---	10.00	---	1	---	---	---	---	---	---	---	---	---	
30-12	751+70 F	LT	R11-54F	48" X 30"	---	10.00	---	1	---	---	---	---	---	---	---	---	---	
30-13	754+33 A	RT	W2-6	30" X 30"	6.25	---	---	---	---	1	---	---	---	---	---	---	---	
30-14	754+33 A	RT	W2-6P	30" X 15"	3.13	---	---	---	---	---	---	---	---	---	---	---	---	MOUNT WITH 30-13
30-15	754+33 A	RT	W13-1	18" X 18"	2.25	---	---	---	---	---	---	---	---	---	---	---	---	MOUNT WITH 30-13
30-16	755+33 A	RT	W11-2	36" X 36"	9.00	---	---	---	1	---	---	---	---	---	---	---	---	
30-17	755+33 A	RT	W16-9P	30" X 18"	3.75	---	---	---	---	---	---	---	---	---	---	---	---	MOUNT WITH 30-16
30-18	756+33 A	RT	W3-2	48" X 48"	16.00	---	---	---	---	1	---	---	---	---	---	---	---	
30-19	757+33 A	RT	D1-2	84" X 24"	14.00	---	---	2	---	---	---	---	---	---	---	---	---	
30-20	755+21 A	LT	E5-1B	114" X 60"	47.50	---	---	---	---	---	---	2	---	---	---	---	---	
31-2	31+10 KN	RT	R10-11B	24" X 24"	4.00	---	---	1	---	---	---	---	---	---	---	---	---	
31-3	31+40 KN	RT	J1-1	36" X 57"	14.25	---	---	---	1	---	---	---	---	---	---	---	---	
31-4	32+07 KN	LT	W2-6	36" X 36"	9.00	---	---	---	---	1	---	---	---	---	---	---	---	
31-5	32+07 KN	LT	W2-6P	36" X 18"	4.50	---	---	---	---	---	---	---	---	---	---	---	---	MOUNT WITH 31-4
31-6	32+07 KN	LT	W13-1	24" X 24"	4.00	---	---	---	---	---	---	---	---	---	---	---	---	MOUNT WITH 31-4
31-7	32+07 KN	RT	W2-6	36" X 36"	9.00	---	---	---	---	1	---	---	---	---	---	---	---	
31-8	32+07 KN	RT	W2-6P	36" X 18"	4.50	---	---	---	---	---	---	---	---	---	---	---	---	MOUNT WITH 31-7
31-9	32+07 KN	RT	W13-1	24" X 24"	4.00	---	---	---	---	---	---	---	---	---	---	---	---	MOUNT WITH 31-7
31-10	32+38 KS	LT	R5-1A	36" X 24"	6.00	---	---	2	---	---	---	---	---	---	---	---	---	
31-11	32+38 KS	LT	I2-3	60" X 24"	10.00	---	---	---	---	---	---	---	---	---	---	---	---	MOUNT WITH 31-10
31-12	33+05 KN	RT	W11-2	36" X 36"	9.00	---	---	---	1	---	---	---	---	---	---	---	---	
31-13	33+05 KN	RT	W16-9P	30" X 18"	3.75	---	---	---	---	---	---	---	---	---	---	---	---	MOUNT WITH 31-12
31-15	34+05 KN	RT	W3-2	36" X 36"	9.00	---	---	---	1	---	---	---	---	---	---	---	---	
31-16	34+70 KS	LT	D1-2	84" X 24"	14.00	---	---	2	---	---	---	---	---	---	---	---	---	
31-17	35+05 KN	RT	R3-8G	36" X 30"	7.50	---	---	1	---	---	---	---	---	---	---	---	---	
31-18	35+13 KS	RT	R3-20L	36" X 54"	13.50	---	---	---	1	---	---	---	---	---	---	---	---	
31-21	35+92 KS	LT	D11-1	30" X 24"	5.00	---	---	1	---	---	---	---	---	---	---	---	---	
31-22	38+04 KN	RT	W11-2	30" X 30"	6.25	---	---	---	1	---	---	---	---	---	---	---	---	
31-23	38+04 KN	RT	W16-7L	24" X 12"	2.00	---	---	---	---	---	---	---	---	---	---	---	---	MOUNT WITH 31-22
31-24	758+86 A	RT	R3-8HH	36" X 30"	7.50	---	---	1	---	---	---	---	---	---	---	---	---	
31-27	759+21 A	LT	R5-1A	36" X 24"	6.00	---	---	1	---	---	---	---	---	---	---	---	---	
31-28	759+21 A	RT	R5-1A	36" X 24"	6.00	---	---	1	---	---	---	---	---	---	---	---	---	
31-29	38+16 KS	LT	W11-2	30" X 30"	6.25	---	---	---	1	---	---	---	---	---	---	---	---	
31-30	38+16 KS	LT	W16-7L	24" X 12"	2.00	---	---	---	---	---	---	---	---	---	---	---	---	MOUNT WITH 31-29
31-31	38+35 KS	LT	R1-2	48" X 42"	7.00	---	---	1	---	---	---	---	---	---	---	---	---	
31-32	38+35 KS	LT	R1-54	24" X 15"	2.50	---	---	---	---	---	---	---	---	---	---	---	---	MOUNT WITH 31-31
31-33	38+40 KS	RT	D1-1	42" X 30"	8.75	---	---	1	---	---	---	---	---	---	---	---	---	
31-34	38+42 KN	LT	R1-2	36" X 31"	3.88	---	---	---	---	1	---	---	---	---	---	---	---	
31-35	38+42 KN	LT	R6-2R	24" X 30"	5.00	---	---	---	---	---	---	---	---	---	---	---	---	MOUNT WITH 31-34
31-36	100+90 KE	RT	R1-2	36" X 31"	3.88	---	---	---	1	---	---	---	---	---	---	---	---	
31-37	100+90 KE	RT	R1-54	24" X 15"	2.50	---	---	---	---	---	---	---	---	---	---	---	---	MOUNT WITH 31-36
31-38	760+81 A	RT	W11-2	36" X 36"	9.00	---	---	---	1	---	---	---	---	---	---	---	---	
31-39	760+81 A	RT	W16-7L	30" X 18"	3.75	---	---	---	---	---	---	---	---	---	---	---	---	MOUNT WITH 31-38

-CONTINUED-

ERECTION OF TYPE II SIGNS AND SUPPORTS

ALL ITEMS ON THIS SHEET ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

SIGN NO.	STATION	LOCATION	SIGN CODE	W X H	637.0202 SIGNS REFLECTIVE TYPE II SF	637.0402 SIGNS REFLECTIVE FOLDING TYPE II SF	634.0612 POSTS WOOD 4x6x12 EACH	634.0614 POSTS WOOD 4x6x14 EACH	634.0616 POSTS WOOD 4x6x16 EACH	634.0618 POSTS WOOD 4x6x18 EACH	634.0620 POSTS WOOD 4x6x20 EACH	634.0622 POSTS WOOD 4x6x22 EACH	634.0808 POST TUBULAR STEEL 2X2X8 EACH	634.0809 POST TUBULAR STEEL 2X2X9.5 EACH	634.0811 POST TUBULAR STEEL 2X2X11 EACH	634.0812 POST TUBULAR STEEL 2X2X12 EACH	634.0814 POST TUBULAR STEEL 2X2X14 EACH	REMARKS
31-40	100+85 KE	LT	R6-1R	54" X 18"	6.75	---	---	2	---	---	---	---	---	---	---	---	---	
31-41	100+85 KE	LT	R6-4B	60" X 24"	10.00	---	---	---	---	---	---	---	---	---	---	---	---	MOUNT WITH 31-40
31-42	102+80 KE	LT	R6-1R	54" X 18"	6.75	---	---	2	---	---	---	---	---	---	---	---	---	
31-43	102+80 KE	LT	R6-4B	60" X 24"	10.00	---	---	---	---	---	---	---	---	---	---	---	---	MOUNT WITH 31-43
31-44	103+97 KE	LT	R6-1R	54" X 18"	6.75	---	---	2	---	---	---	---	---	---	---	---	---	
31-45	103+97 KE	LT	R6-4B	60" X 24"	10.00	---	---	---	---	---	---	---	---	---	---	---	---	MOUNT WITH 31-44
31-46	760+38 A	LT	W12-1D	24" X 24"	4.00	---	1	---	---	---	---	---	---	---	---	---	---	
31-47	761+15 A	LT	R1-2	48" X 42"	7.00	---	---	1	---	---	---	---	---	---	---	---	---	
31-48	761+15 A	LT	R1-54	24" X 15"	2.50	---	---	---	---	---	---	---	---	---	---	---	---	MOUNT WITH 31-47
31-49	761+08 A	LT	R5-1	24" X 24"	4.00	---	---	1	---	---	---	---	---	---	---	---	---	
31-50	761+22 A	LT	R5-1	24" X 24"	4.00	---	---	1	---	---	---	---	---	---	---	---	---	
31-51	761+04 A	LT	R1-2	48" X 42"	7.00	---	---	---	1	---	---	---	---	---	---	---	---	
31-52	761+04 A	LT	R6-2R	36" X 48"	12.00	---	---	---	---	---	---	---	---	---	---	---	---	MOUNT WITH 31-51
31-53	760+81 A	LT	W11-2	30" X 30"	6.25	---	---	1	---	---	---	---	---	---	---	---	---	
31-54	760+81 A	LT	W16-7R	24" X 12"	2.00	---	---	---	---	---	---	---	---	---	---	---	---	MOUNT WITH 31-53
31-55	761+04 A	LT	R3-1	24" X 24"	4.00	---	---	---	1	---	---	---	---	---	---	---	---	
31-56	761+95 B	LT	D1-1	42" X 30"	8.75	---	---	---	1	---	---	---	---	---	---	---	---	
31-57	761+95 B	LT	R11-54F	48" X 30"	---	10.00	---	---	---	---	---	---	---	---	---	---	---	MOUNT WITH 31-56
31-58	762+17 B	RT	W11-2	30" X 30"	6.25	---	---	---	1	---	---	---	---	---	---	---	---	
31-59	762+17 B	RT	W16-7L	24" X 12"	2.00	---	---	---	---	---	---	---	---	---	---	---	---	MOUNT WITH 31-58
31-60	762+65 B	RT	R5-57	36" X 36"	9.00	---	---	---	1	---	---	---	---	---	---	---	---	
31-61	72+30 KN	LT	D1-2	72" X 30"	15.00	---	---	2	---	---	---	---	---	---	---	---	---	
31-62	40+29 KN	RT	W11-2	30" X 30"	6.25	---	---	---	---	1	---	---	---	---	---	---	---	
31-63	40+29 KN	RT	W16-7L	24" X 12"	2.00	---	---	---	---	---	---	---	---	---	---	---	---	MOUNT WITH 31-62
31-64	40+31 KS	RT	R1-2	36" X 31"	3.88	---	---	---	---	1	---	---	---	---	---	---	---	
31-65	40+31 KS	RT	R6-2R	24" X 30"	5.00	---	---	---	---	---	---	---	---	---	---	---	---	MOUNT WITH 31-64
31-66	102+88 KE	RT	R1-2	36" X 31"	3.88	---	---	1	---	---	---	---	---	---	---	---	---	
31-67	102+88 KE	RT	R1-54	24" X 15"	2.50	---	---	---	---	---	---	---	---	---	---	---	---	MOUNT WITH 31-66
31-68	40+65 KS	LT	W11-2	30" X 30"	6.25	---	---	1	---	---	---	---	---	---	---	---	---	
31-69	40+65 KS	LT	W16-7L	24" X 12"	2.00	---	---	---	---	---	---	---	---	---	---	---	---	MOUNT WITH 31-68
31-70	42+42 KN	RT	R3-8GG	36" X 30"	7.50	---	---	1	---	---	---	---	---	---	---	---	---	
31-75	46+20 KS	LT	R3-8GG	36" X 30"	7.50	---	---	1	---	---	---	---	---	---	---	---	---	
32-1	48+78 KN	RT	W11-2	30" X 30"	6.25	---	---	---	1	---	---	---	---	---	---	---	---	
32-2	48+78 KN	RT	W16-7L	24" X 12"	2.00	---	---	---	---	---	---	---	---	---	---	---	---	MOUNT WITH 32-1
32-3	49+16 KS	LT	W11-2	30" X 30"	6.25	---	---	---	1	---	---	---	---	---	---	---	---	
32-4	49+16 KS	LT	W16-7L	24" X 12"	2.00	---	---	---	---	---	---	---	---	---	---	---	---	MOUNT WITH 32-3
32-5	49+24 KN	LT	R1-2	36" X 31"	3.88	---	---	---	---	1	---	---	---	---	---	---	---	
32-6	49+24 KN	LT	R6-2R	30" X 36"	7.50	---	---	---	---	---	---	---	---	---	---	---	---	MOUNT WITH 32-5
32-7	49+32 KS	RT	D1-2	72" X 30"	15.00	---	---	2	---	---	---	---	---	---	---	---	---	
32-8	200+83 KW	RT	R1-2	36" X 31"	3.88	---	---	---	1	---	---	---	---	---	---	---	---	
32-9	200+83 KW	RT	R1-54	24" X 15"	2.50	---	---	---	---	---	---	---	---	---	---	---	---	MOUNT WITH 32-8
32-10	769+61 D	LT	R5-57	36" X 36"	9.00	---	---	---	1	---	---	---	---	---	---	---	---	
32-11	770+32 D	LT	W11-2	30" X 30"	6.25	---	---	---	1	---	---	---	---	---	---	---	---	
32-12	770+32 D	LT	W16-7L	24" X 12"	2.00	---	---	---	---	---	---	---	---	---	---	---	---	MOUNT WITH 32-11
32-13	770+40 D	RT	D1-1	42" X 30"	8.75	---	---	---	1	---	---	---	---	---	---	---	---	
32-14	770+40 D	RT	R11-54F	48" X 30"	---	10.00	---	---	---	---	---	---	---	---	---	---	---	MOUNT WITH 32-13
32-15	200+83 KW	LT	R6-1R	54" X 18"	6.75	---	---	2	---	---	---	---	---	---	---	---	---	
32-16	200+83 KW	LT	R6-4B	60" X 24"	10.00	---	---	---	---	---	---	---	---	---	---	---	---	MOUNT WITH 32-15
32-17	201+95 KW	LT	R6-1R	54" X 18"	6.75	---	---	2	---	---	---	---	---	---	---	---	---	
32-18	201+95 KW	LT	R6-4B	60" X 24"	10.00	---	---	---	---	---	---	---	---	---	---	---	---	MOUNT WITH 32-17
32-19	202+85 KW	LT	R6-1R	54" X 18"	6.75	---	---	2	---	---	---	---	---	---	---	---	---	
32-20	202+85 KW	LT	R6-4B	60" X 24"	10.00	---	---	---	---	---	---	---	---	---	---	---	---	MOUNT WITH 32-19
32-21	771+26 C	RT	R5-1	24" X 24"	4.00	---	---	---	1	---	---	---	---	---	---	---	---	
32-22	771+44 C	RT	R5-1	24" X 24"	4.00	---	---	---	1	---	---	---	---	---	---	---	---	
32-23	771+48 C	RT	R3-1	24" X 24"	4.00	---	---	---	1	---	---	---	---	---	---	---	---	
32-24	771+14 C	LT	R1-2	48" X 42"	7.00	---	---	---	1	---	---	---	---	---	---	---	---	
32-25	771+14 C	LT	R1-54	24" X 15"	2.50	---	---	---	---	---	---	---	---	---	---	---	---	MOUNT WITH 32-24

-CONTINUED-

ERECTION OF TYPE II SIGNS AND SUPPORTS

ALL ITEMS ON THIS SHEET ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

SIGN NO.	STATION	LOCATION	SIGN CODE	W X H	637.0202 SIGNS REFLECTIVE TYPE II SF	637.0402 SIGNS REFLECTIVE FOLDING TYPE II SF	634.0612 POSTS WOOD 4x6x12 EACH	634.0614 4x6x14 EACH	634.0616 4x6x16 EACH	634.0618 4x6x18 EACH	634.0620 4x6x20 EACH	634.0622 4x6x22 EACH	634.0808 POST TUBULAR STEEL 2X2X8 EACH	634.0809 2X2X9.5 EACH	634.0811 2X2X11 EACH	634.0812 2X2X12 EACH	634.0814 2X2X14 EACH	REMARKS
32-26	771+33 C	RT	R1-2	48" X 42"	7.00	---	---	---	1	---	---	---	---	---	---	---	---	
32-27	771+33 C	RT	R1-54	24" X 15"	2.50	---	---	---	---	---	---	---	---	---	---	---	---	MOUNT WITH 32-26
32-28	771+49 C	RT	R1-2	48" X 42"	7.00	---	---	---	---	1	---	---	---	---	---	---	---	
32-29	771+49 C	RT	R6-2R	36" X 48"	12.00	---	---	---	---	---	---	---	---	---	---	---	---	MOUNT WITH 32-28
32-30	771+69 C	RT	W11-2	36" X 36"	9.00	---	---	---	---	1	---	---	---	---	---	---	---	
32-31	771+69 C	RT	W16-7R	30" X 18"	3.75	---	---	---	---	---	---	---	---	---	---	---	---	MOUNT WITH 32-30
32-32	771+69 C	LT	W11-2	36" X 36"	9.00	---	---	---	1	---	---	---	---	---	---	---	---	
32-33	771+69 C	LT	W16-7L	30" X 18"	3.75	---	---	---	---	---	---	---	---	---	---	---	---	MOUNT WITH 32-32
32-34	772+23 C	RT	W12-1D	24" X 24"	4.00	---	1	---	---	---	---	---	---	---	---	---	---	
32-36	773+52 C	LT	R5-1A	36" X 24"	6.00	---	---	1	---	---	---	---	---	---	---	---	---	
32-37	773+52 C	RT	R5-1A	36" X 24"	6.00	---	---	1	---	---	---	---	---	---	---	---	---	
32-40	773+60 C	LT	R3-8HH	36" X 30"	7.50	---	---	1	---	---	---	---	---	---	---	---	---	
32-41	774+92 C	LT	D1-2	84" X 24"	14.00	---	---	2	---	---	---	---	---	---	---	---	---	
32-42	775+87 C	LT	W3-2	48" X 48"	16.00	---	---	---	---	1	---	---	---	---	---	---	---	
32-43	776+87 C	LT	W11-2	36" X 36"	9.00	---	---	---	1	---	---	---	---	---	---	---	---	
32-44	776+87 C	LT	W16-9P	30" X 18"	3.75	---	---	---	---	---	---	---	---	---	---	---	---	MOUNT WITH 32-43
32-45	202+97 KW	RT	R1-2	36" X 31"	3.88	---	---	---	1	---	---	---	---	---	---	---	---	
32-46	202+97 KW	RT	R1-54	24" X 15"	2.50	---	---	---	---	---	---	---	---	---	---	---	---	MOUNT WITH 32-45
32-47	51+11 KN	LT	D1-1	42" X 30"	8.75	---	---	1	---	---	---	---	---	---	---	---	---	
32-48	51+28 KN	RT	W11-2	36" X 36"	9.00	---	---	---	1	---	---	---	---	---	---	---	---	
32-49	51+28 KN	RT	W16-7L	30" X 18"	3.75	---	---	---	---	---	---	---	---	---	---	---	---	MOUNT WITH 32-48
32-50	51+10 KS	RT	R1-2	36" X 31"	3.88	---	---	---	---	1	---	---	---	---	---	---	---	
32-51	51+10 KS	RT	R6-2R	24" X 30"	5.00	---	---	---	---	---	---	---	---	---	---	---	---	MOUNT WITH 32-50
32-52	51+45 KS	LT	W11-2	30" X 30"	6.25	---	---	---	1	---	---	---	---	---	---	---	---	
32-53	51+45 KS	LT	W16-7L	24" X 12"	2.00	---	---	---	---	---	---	---	---	---	---	---	---	MOUNT WITH 32-52
32-54	53+65 KN	RT	D11-1	30" X 24"	5.00	---	---	1	---	---	---	---	---	---	---	---	---	
32-57	54+80 KS	RT	R3-8G	36" X 30"	7.50	---	---	1	---	---	---	---	---	---	---	---	---	
32-58	55+86 KS	RT	W3-2	36" X 36"	9.00	---	---	---	1	---	---	---	---	---	---	---	---	
32-59	56+86 KS	RT	W11-2	30" X 30"	6.25	---	---	---	1	---	---	---	---	---	---	---	---	
32-60	56+86 KS	RT	W16-9P	24" X 12"	2.00	---	---	---	---	---	---	---	---	---	---	---	---	MOUNT WITH 32-59
32-61	57+86 KS	RT	W2-6	36" X 36"	9.00	---	---	---	---	1	---	---	---	---	---	---	---	
32-62	57+86 KS	RT	W2-6P	36" X 18"	4.50	---	---	---	---	---	---	---	---	---	---	---	---	MOUNT WITH 32-61
32-63	57+86 KS	RT	W13-1	24" X 24"	4.00	---	---	---	---	---	---	---	---	---	---	---	---	MOUNT WITH 63-61
32-64	57+86 KS	LT	W2-6	36" X 36"	9.00	---	---	---	---	1	---	---	---	---	---	---	---	
32-65	57+86 KS	LT	W2-6P	36" X 18"	4.50	---	---	---	---	---	---	---	---	---	---	---	---	MOUNT WITH 32-64
32-66	57+86 KS	LT	W13-1	24" X 24"	4.00	---	---	---	---	---	---	---	---	---	---	---	---	MOUNT WITH 32-64
32-67	60+15 KN	RT	J4-1	36" X 54"	13.50	---	---	---	---	1	---	---	---	---	---	---	---	
33-1	777+86 C	LT	W2-6	36" X 36"	9.00	---	---	---	---	---	1	---	---	---	---	---	---	
33-2	777+86 C	LT	W2-6P	36" X 18"	4.50	---	---	---	---	---	---	---	---	---	---	---	---	MOUNT WITH 33-1
33-3	777+86 C	LT	W13-1	24" X 24"	4.00	---	---	---	---	---	---	---	---	---	---	---	---	MOUNT WITH 33-1
33-4	783+12 C	RT	E5-1A	90" X 60"	37.50	---	---	---	---	2	---	---	---	---	---	---	---	
38-1	9+15 K	RT	W3-3	36" X 36"	9.00	---	---	---	---	---	---	---	---	---	---	---	1	
38-2	9+91 K	RT	D11-1	24" X 18"	3.00	---	---	---	---	---	---	---	---	1	---	---	---	
38-3	9+91 K	RT	M7-6	12" X 9"	0.75	---	---	---	---	---	---	---	---	---	---	---	---	MOUNT WITH 38-2
38-4	10+65 K	RT	W11-2	30" X 30"	6.25	---	---	---	---	---	---	---	---	---	1	---	---	
38-5	10+65 K	RT	W16-9P	24" X 12"	2.00	---	---	---	---	---	---	---	---	---	---	---	---	MOUNT WITH 38-4
38-6	11+37 K	LT	R3-20L	24" X 36"	6.00	---	---	---	---	---	---	---	---	---	---	1	---	
38-7	12+53 K	RT	J13-1	24" X 45"	7.50	---	---	---	---	---	---	---	---	---	---	1	---	
38-8	13+25 K	LT	R1-1F	30" X 30"	---	5.18	---	---	---	---	---	---	---	---	---	---	---	MOUNT ON SIGNAL POLE
38-9	13+70 K	RT	R1-1F	30" X 30"	---	5.18	---	---	---	---	---	---	---	---	---	---	---	MOUNT ON SIGNAL POLE
38-10	13+70 K	RT	R5-1	30" X 30"	6.25	---	---	---	---	---	---	---	---	---	---	---	---	MOUNT W/ 38-9 ON SIGNAL POLE
38-11	13+74 K	LT	R1-1F	30" X 30"	---	5.18	---	---	---	---	---	---	---	---	---	---	---	MOUNT ON SIGNAL POLE
38-12	13+74 K	LT	R4-7	24" X 30"	5.00	---	---	---	---	---	---	---	---	---	---	---	---	MOUNT W/ 38-11 ON SIGNAL POLE
38-13	13+91 K	LT	R1-1F	30" X 30"	---	5.18	---	---	---	---	---	---	---	---	---	---	---	MOUNT ON SIGNAL POLE
38-14	13+91 K	LT	R5-1	30" X 30"	6.25	---	---	---	---	---	---	---	---	---	---	---	---	MOUNT W/ 38-13 ON SIGNAL POLE
38-15	13+95 K	LT	W12-1D	24" X 24"	4.00	---	---	---	---	---	---	---	1	---	---	---	---	
38-16	14+14 K	RT	R4-7	24" X 30"	5.00	---	---	---	---	---	---	---	---	---	---	---	---	MOUNT ON SIGNAL POLE

-CONTINUED-

ERECTION OF TYPE II SIGNS AND SUPPORTS

ALL ITEMS ON THIS SHEET ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

SIGN NO.	STATION	LOCATION	SIGN CODE	W X H	637.0202 SIGNS REFLECTIVE TYPE II SF	637.0402 SIGNS REFLECTIVE FOLDING TYPE II SF	634.0612 POSTS WOOD 4x6x12 EACH	634.0614 4x6x14 EACH	634.0616 4x6x16 EACH	634.0618 4x6x18 EACH	634.0620 4x6x20 EACH	634.0622 4x6x22 EACH	634.0808 POST TUBULAR STEEL 2X2X8 EACH	634.0809 2X2X9.5 EACH	634.0811 2X2X11 EACH	634.0812 2X2X12 EACH	634.0814 2X2X14 EACH	REMARKS
38-17	14+14 K	RT	R1-1F	30" X 30"	---	5.18	---	---	---	---	---	---	---	---	---	---	---	MOUNT W/ 38-17 ON SIGNAL POLE
38-18	14+27 K	LT	R1-1F	30" X 30"	---	5.18	---	---	---	---	---	---	---	---	---	---	---	MOUNT ON SIGNAL POLE
38-19	14+27 K	LT	R4-7	24" X 30"	5.00	---	---	---	---	---	---	---	---	---	---	---	---	MOUNT W/ 38-18 ON SIGNAL POLE
38-20	14+46 K	RT	R5-1	30" X 30"	6.25	---	---	---	---	---	---	---	---	---	---	---	---	MOUNT ON SIGNAL POLE
38-21	14+46 K	RT	R1-1F	30" X 30"	---	5.18	---	---	---	---	---	---	---	---	---	---	---	MOUNT W/ 38-120 ON SIGNAL POLE
38-22	14+79 K	LT	R4-7	24" X 30"	5.00	---	---	---	---	---	---	---	---	---	1	---	---	
38-23	14+79 K	RT	D11-1	24" X 18"	3.00	---	---	---	---	---	---	---	---	---	---	---	---	MOUNT ON SIGNAL POLE
38-24	14+90 K	LT	R5-1	30" X 30"	6.25	---	---	---	---	---	---	---	---	---	---	---	---	MOUNT ON SIGNAL POLE
38-25	14+90 K	LT	R1-1F	30" X 30"	---	5.18	---	---	---	---	---	---	---	---	---	---	---	MOUNT W/ 38-24 ON SIGNAL POLE
38-26	14+90 K	LT	R3-4	24" X 24"	4.00	---	---	---	---	---	---	---	---	---	1	---	---	
38-27	14+90 K	LT	R5-1	30" X 30"	6.25	---	---	---	---	---	---	---	---	---	---	---	---	MOUNT ON SIGNAL POLE
38-28	14+90 K	LT	R1-1F	30" X 30"	---	5.18	---	---	---	---	---	---	---	---	---	---	---	MOUNT W/ 38-27 ON SIGNAL POLE
38-29	15+24 K	LT	R1-2	36" X 31"	3.88	---	---	---	---	---	---	---	---	---	1	---	---	
38-30	15+28 K	RT	J4-1	24" X 48"	8.00	---	---	---	---	---	---	---	---	---	---	---	1	
38-31	15+48 K	LT	R4-7	24" X 30"	5.00	---	---	---	---	---	---	---	---	---	1	---	---	
38-32	15+52 K	LT	W11-2	30" X 30"	6.25	---	---	---	---	---	---	---	---	---	---	1	---	
38-33	15+52 K	LT	W16-7L	24" X 12"	2.00	---	---	---	---	---	---	---	---	---	---	---	---	MOUNT WITH 38-32
38-34	18+50 K	LT	R3-20L	24" X 36"	6.00	---	---	---	---	---	---	---	---	---	---	1	---	
38-35	19+90 K	LT	W11-2	30" X 30"	6.25	---	---	---	---	---	---	---	---	---	1	---	---	
38-36	19+90 K	LT	W16-9P	24" X 12"	2.00	---	---	---	---	---	---	---	---	---	---	---	---	MOUNT WITH 38-35
38-37	19+90 K	LT	W11-2	30" X 30"	6.25	---	---	---	---	---	---	---	---	---	1	---	---	
38-38	19+90 K	LT	W16-9P	24" X 12"	2.00	---	---	---	---	---	---	---	---	---	---	---	---	MOUNT WITH 38-37
38-39	19+95 K	LT	W3-3	36" X 36"	9.00	---	---	---	---	---	---	---	---	---	---	---	1	
38-40	20+65 K	LT	R3-20R	24" X 36"	6.00	---	---	---	---	---	---	---	---	---	---	1	---	
40-1	201+78 V	LT	D11-1	24" X 18"	3.00	---	---	---	1	---	---	---	---	---	---	---	---	
40-2	201+78 V	LT	M7-6	12" X 9"	0.75	---	---	---	---	---	---	---	---	---	---	---	---	MOUNT WITH 40-1
40-3	201+78 V	LT	D11-1	24" X 18"	3.00	---	---	1	---	---	---	---	---	---	---	---	---	
40-4	201+78 V	LT	M7-2	12" X 9"	0.75	---	---	---	---	---	---	---	---	---	---	---	---	MOUNT WITH 40-3
40-5	202+38 V	RT	D11-1	24" X 18"	3.00	---	---	---	1	---	---	---	---	---	---	---	---	
40-6	202+53 V	LT	R3-8	36" X 30"	7.50	---	---	---	1	---	---	---	---	---	---	---	---	
40-7	203+49 V	RT	R2-1	24" X 30"	5.00	---	---	---	1	---	---	---	---	---	---	---	---	30 MPH
40-8	209+21 V	RT	R1-1	30" X 30"	5.18	---	---	---	1	---	---	---	---	---	---	---	---	
40-9	213+47 V	LT	R2-1	24" X 30"	5.00	---	---	---	1	---	---	---	---	---	---	---	---	30 MPH
40-10	213+47 V	RT	R2-1	24" X 30"	5.00	---	---	---	1	---	---	---	---	---	---	---	---	30 MPH
41-1	221+77 V	LT	R2-1	24" X 30"	5.00	---	---	---	1	---	---	---	---	---	---	---	---	30 MPH
41-2	223+00 V	LT	R1-1	30" X 30"	5.18	---	---	---	1	---	---	---	---	---	---	---	---	
41-3	223+60 V	RT	R1-1	30" X 30"	5.18	---	---	---	1	---	---	---	---	---	---	---	---	
41-4	223+80 V	LT	W14-1	30" X 30"	6.25	---	---	---	1	---	---	---	---	---	---	---	---	
41-5	224+50 V	RT	R2-1	24" X 30"	5.00	---	---	---	1	---	---	---	---	---	---	---	---	30 MPH
41-6	226+80 V	LT	R2-1	24" X 30"	5.00	---	---	---	1	---	---	---	---	---	---	---	---	30 MPH
41-7	227+80 V	LT	D11-1	24" X 18"	3.00	---	---	---	1	---	---	---	---	---	---	---	---	
41-8	228+80 V	LT	R4-7	24" X 30"	5.00	---	---	---	1	---	---	---	---	---	---	---	---	
41-9	228+80 V	RT	R3-8A	36" X 30"	7.50	---	---	---	1	---	---	---	---	---	---	---	---	
41-10	6+00 N	RT	W5-56	18" X 18"	2.25	---	1	---	---	---	---	---	---	---	---	---	---	
41-11	6+00 N	RT	W5-56	18" X 18"	2.25	---	1	---	---	---	---	---	---	---	---	---	---	
41-12	6+00 N	RT	W5-56	18" X 18"	2.25	---	1	---	---	---	---	---	---	---	---	---	---	
41-13	229+80 V	RT	D11-1	24" X 18"	3.00	---	---	1	---	---	---	---	---	---	---	---	---	
41-14	229+80 V	RT	M7-5	12" X 9"	0.75	---	---	---	---	---	---	---	---	---	---	---	---	MOUNT WITH 41-13
41-15	230+56 V	LT	R1-1	30" X 30"	5.18	---	---	---	1	---	---	---	---	---	---	---	---	
41-16	230+56 V	LT	R6-3	30" X 24"	5.00	---	---	---	---	---	---	---	---	---	---	---	---	MOUNT WITH 41-15
41-17	230+56 V	LT	R4-7	24" X 30"	5.00	---	---	---	---	---	---	---	---	---	---	---	---	MOUNT WITH 41-15
41-18	230+58 V	RT	R1-1	30" X 30"	6.25	---	---	---	1	---	---	---	---	---	---	---	---	
41-19	230+58 V	RT	R6-3	30" X 24"	5.18	---	---	---	---	---	---	---	---	---	---	---	---	MOUNT WITH 41-18
TOTALS					**1390.33**	**86.62**	**5**	**53**	**56**	**18**	**1**	**4**	**1**	**1**	**7**	**5**	**3**	
***CATEGORY TOTALS**					**1390.33**	**86.62**	**5**	**53**	**59**	**19**	**5**	**4**	**1**	**1**	**7**	**5**	**3**	
***PROJECT ID TOTALS**					**1656.08**	**86.62**	**5**	**53**	**65**	**31**	**5**	**4**	**1**	**1**	**12**	**5**	**3**	

•OTHER QUANTITIES LOCATED ELSEWHERE IN PLAN

REMOVAL OF TYPE II SIGNS AND SUPPORTS

SIGN NO.	STATION	LOCATION	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	REMARKS
9-1	739+76 E	RT	1	1	
9-3	745+72 E	LT	1	1	
9-4	745+81 A	LT	1	2	
10-1	747+65 E	LT	1	2	
10-2	749+55 E	LT	1	---	
10-3	749+69 E	LT	13	2	
10-4	749+69 E	LT	1	---	
10-5	749+82 F	RT	1	1	
10-6	750+76 E	LT	1	1	
10-7	750+80 E	LT	1	1	
10-8	750+80 E	LT	1	---	
10-9	751+68 F	LT	2	1	
10-10	753+25 A	RT	1	1	
10-11	753+83 A	RT	5	1	
10-12	754+30 D	LT	5	1	
10-14	758+35 D	LT	1	1	
10-15	758+47 D	LT	1	2	
10-16	758+47 D	LT	1	---	
10-17	758+47 D	LT	1	---	
10-18	758+47 D	LT	1	---	
11-1	---	RT	9	2	430' SE OF BUS 51/CAMPUS DR
11-2	31+09 KN	LT	1	---	
11-3	31+89 KN	RT	1	2	
11-4	32+40 KS	LT	1	--	
11-5	32+40 KS	LT	1	2	
11-6	32+92 KS	RT	1	1	
11-7	34+49 KN	RT	1	1	
11-8	34+93 KS	LT	1	2	
11-9	756+88 A	RT	1	1	
11-10	756+88 A	RT	1	2	
11-11	756+88 A	RT	1	---	
11-12	756+88 A	RT	1	---	
11-13	36+07 KN	RT	3	1	
11-14	37+00 KN	RT	3	1	
11-15	37+64 KS	LT	1	1	
11-16	37+64 KN	RT	1	1	
11-17	759+62 A	RT	5	1	
11-18	38+29 KS	LT	1	1	
11-19	761+20 A	RT	1	1	
11-20	100+00 KE	RT	1	1	
11-21	100+00 KE	RT	1	---	
11-22	100+00 KE	RT	1	1	
11-23	103+70 KE	LT	1	1	
11-24	103+70 KE	LT	1	1	
11-25	101+30 KE	LT	1	1	
11-26	101+30 KE	LT	1	---	
11-27	101+43 KE	LT	1	1	
11-28	101+43 KE	LT	1	---	
11-29	762+42 B	RT	1	1	
11-30	762+58 B	LT	1	1	
11-31	762+37 B	LT	2	1	

CONTINUE

REMOVAL OF TYPE II SIGNS AND SUPPORTS

SIGN NO.	STATION	LOCATION	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH
11-32	762+37 B	LT	1	---
11-33	102+90 KE	RT	3	1
11-34	102+90 KE	RT	1	---
11-35	102+37 KE	RT	1	1
11-36	40+65 KN	RT	1	1
11-37	41+59 KS	RT	1	1
11-38	765+50 B	RT	1	1
11-39	42+95 KN	RT	1	2
11-40	42+93 KS	LT	5	1
11-41	45+59 KS	RT	1	2
12-1	766+37 D	RT	1	1
12-2	46+95 KN	LT	1	1
12-3	47+92 KS	LT	1	1
12-4	47+92 KS	LT	3	1
12-5	49+22 KN	RT	3	1
12-6	49+22 KN	RT	2	1
12-7	49+22 KN	RT	1	---
12-8	48+55 KN	LT	1	1
12-9	49+21 KS	LT	1	1
12-10	49+23 KS	RT	1	1
12-11	769+90 D	RT	1	1
12-12	769+90 D	RT	1	---
12-13	770+26 D	RT	2	1
12-14	203+87 KW	LT	1	1
12-15	203+87 KW	LT	1	---
12-16	203+87 KW	LT	1	1
12-17	201+28 KW	LT	1	1
12-18	201+28 KW	LT	1	---
12-19	770+39 D	LT	1	1
12-20	201+82 KW	LT	1	1
12-21	201+82 KW	LT	1	--
12-22	201+82 KW	LT	1	---
12-23	201+82 KW	LT	1	---
12-24	771+30 C	RT	1	1
12-25	51+00 KN	RT	1	1
12-26	772+57 C	RT	9	2
12-27	51+80 KS	LT	3	1
12-28	52+14 KS	LT	1	1
12-29	52+68 KN	RT	1	1
12-30	775+71 C	RT	1	---
12-31	775+71 C	LT	1	2
12-32	53+57 KS	LT	1	1
12-33	55+97 KN	RT	1	1
12-34	56+55 KS	LT	1	2
12-35	56+70 KN	RT	1	1
12-36	59+17 KS	LT	1	1
12-37	60+16 KN	RT	2	1

CONTINUE

REMOVAL OF TYPE II SIGNS AND SUPPORTS

SIGN NO.	STATION	LOCATION	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH
13-1	781+84 C	LT	1	1
13-2	783+13 C	RT	1	2
13-3	783+13 C	RT	1	---
18-1	9+91 K	LT	2	1
18-2	13+18 K	LT	1	1
18-3	13+55 K	LT	1	1
18-4	13+55 K	RT	1	1
18-5	13+62 K	LT	1	1
18-6	13+62 K	LT	1	---
18-7	13+71 K	LT	1	1
18-8	13+91 K	LT	1	1
18-9	13+91 K	LT	1	---
18-10	13+95 K	LT	1	1
18-11	14+13 K	RT	1	1
18-12	14+13 K	RT	1	---
18-13	14+27 K	LT	1	1
18-14	14+27 K	LT	1	---
18-15	14+44 K	RT	1	1
18-16	14+44 K	RT	1	---
18-17	14+46 K	RT	1	1
18-18	14+54 K	LT	1	1
18-19	14+75 K	LT	1	1
18-20	14+75 K	LT	1	1
18-21	14+75 K	LT	2	1
18-22	14+75 K	LT	1	1
18-23	14+75 K	RT	3	1
18-24	15+24 K	LT	1	1
18-25	15+47 K	LT	1	1
18-26	18+58 K	LT	1	1
18-27	18+58 K	LT	1	---
18-28	18+58 K	LT	1	1
18-29	18+58 K	LT	1	---
19-1	209+08 V	RT	1	1
19-2	209+16 V	RT	2	1
20-1	223+00 V	LT	1	1
20-2	223+05 V	LT	2	1
20-3	3+33 N	LT	1	1
20-4	3+33 N	RT	1	1
20-5	230+60 V	LT	1	1
20-6	230+66 V	LT	1	1
20-7	230+66 V	LT	1	---
CATEGORY TOTALS			**206**	**123**
***PROJECT ID TOTALS**			**238**	**136**

*** OTHER QUANTITIES LOCATED ELSEWHERE IN PLAN**

ALL ITEMS ON THIS SHEET
ARE CATEGORY 0010
UNLESS OTHERWISE NOTED

3

DELINEATORS

STATION TO STATION	LOCATION	TYPE, COLOR	633.0100 POSTS STEEL EACH	633.0500 REFLECTORS EACH	633.1000 BRACKETS EACH
740+00 A - 756+46 A	LT	SINGLE, WHITE	---	35	35
745+20 A - 755+00 A	RT	SINGLE, WHITE	---	5	5
748+20 A - 756+20 A	RT	SINGLE, WHITE	9	9	---
738+12 E - 743+22 E	RT	DOUBLE, WHITE	6	12	---
743+75 E - 744+75 E	RT	DOUBLE, WHITE	---	4	2
745+20 E - 747+69 E	LT	SINGLE, WHITE	---	6	6
745+75 E - 749+75 E	RT	SINGLE, WHITE	---	5	5
766+84 B - 776+84 B	RT	SINGLE, WHITE	11	11	---
777+84 B - 780+84 B	RT	DOUBLE, WHITE	4	8	---
776+13 C - 783+13 C	LT	SINGLE, WHITE	8	8	---
784+13 C - 788+13 C	LT	DOUBLE, WHITE	5	10	---
755+40 D - 757+40 D	LT	DOUBLE, WHITE	3	6	---
758+40 D - 764+40 D	LT	SINGLE, WHITE	7	7	---
740+93 F - 742+93 F	LT	DOUBLE, WHITE	3	6	---
CATEGORY TOTALS			**56**	**132**	**53**

DELINEATORS TEMPORARY

STATION TO STATION	STAGE	633.1100 EACH
325+50 FV - 332+50 FV	5B	15
336+00 EU - 341+00 EU	6A	11
330+00 EV - 335+50 EV	6B	12
CATEGORY TOTAL		**38**

OVERHEAD SIGN SUPPORT (STRUCTURE)

STATION	LOCATION	OVERHEAD SIGN SUPPORT STRUCTURE NUMBER	OVERHEAD SIGN SUPPORT STRUCTURE BID ITEM NUMBER	OVERHEAD SIGN SUPPORT STRUCTURE LS
759+17 A	LT&RT	S-37-105	641.8100.01	1
35+17 KN	LT&RT	S-37-106	641.8100.02	1
42+55 KN	LT&RT	S-37-107	641.8100.03	1
46+05 KS	LT&RT	S-37-108	641.8100.04	1
773+55 C	LT&RT	S-37-109	641.8100.05	1
54+70 KS	LT&RT	S-37-110	641.8100.06	1

MOVING SIGNS TYPE II AND POSTS WOOD

SIGN NO.	STATION	LOCATION	634.0616 POSTS WOOD 4x6x16 EACH	634.0618 POSTS WOOD 4x6x18 EACH	638.2102 MOVING SIGNS TYPE II EACH	REMARKS
29-2	741+17 E	RT	---	1	2	MOVE FROM 748+37 E
31-1	---	RT	1	---	1	430' SE OF BUS 51 AND CAMPUS DR
31-14	34+00 KS	LT	1	---	2	MOVE FROM 34+00 KS
32-35	772+26 C	RT	1	---	2	MOVE FROM 772+26 C
TOTALS			**3**	**1**	**7**	
***CATEGORY ID TOTALS**			**59**	**19**	**7**	
***PROJECT ID TOTALS**			**65**	**31**	**8**	

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TYPE I SIGNS

SIGN NO.	STATION	LOCATION	SIGN CODE	W X H	637.0101 SF	REMARKS
29-3	743+08 A	LT&RT	E6-51	132" X 114"	104.50	
29-4	743+08 A	LT&RT	E1-5	132" X 30"	27.50	MOUNT WITH 29-3
29-5	743+08 A	LT&RT	E6-1	216" X 90"	135.00	
29-6	743+08 A	LT&RT	E1-5	132" X 30"	27.50	MOUNT WITH 29-5
31-19	35+17 KN	LT&RT	E6-54R	132" X 126"	115.50	
31-20	35+17 KN	LT&RT	E6-52	144" X 114"	114.00	MOUNT WITH 31-19
31-25	759+17 A	LT&RT	E6-54L	72" X 90"	45.00	
31-26	759+17 A	LT&RT	E6-54R	96" X 102"	68.00	MOUNT WITH 31-25
31-71	42+55 KN	LT&RT	E6-52	144" X 114"	114.00	
31-72	42+55 KN	LT&RT	E6-54A	72" X 90"	45.00	MOUNT WITH 31-71
31-73	46+05 KS	LT&RT	E6-52	144" X 114"	114.00	
31-74	46+05 KS	LT&RT	E6-54A	84" X 102"	59.50	MOUNT WITH 31-73
32-38	774+56 C	LT&RT	E6-54A	84" X 102"	59.50	
32-39	774+56 C	LT&RT	E6-54R	96" X 84"	56.00	MOUNT WITH 32-38
32-55	54+70 KS	LT&RT	E6-54A	84" X 126"	73.50	
32-56	54+70 KS	LT&RT	E6-52	144" X 114"	114.00	MOUNT WITH 32-55
CATEGORY TOTAL					**1272.50**	

REMOVAL OF TYPE I SIGNS AND SUPPORTS

SIGN NO.	STATION	LOCATION	638.2601 REMOVING SIGNS TYPE I EACH	638.3100 REMOVING STRUCTURAL STEEL SIGN SUPPORTS EACH
9-2	739+76 E	RT	2	2
10-13	757+93 D	RT	2	2
CATEGORY TOTALS			**4**	**4**

TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER POSTS & BASES

STATION TO STATION	STAGE	643.0500 POSTS EACH	643.0600 BASES EACH
742+50 E - 748+50 E	3A	120	120
345+75 FT - 348+00 FT	3A	45	45
363+75 DT - 365+50 DT	3A	45	45
363+50 BT - 367+50 BT	3B	80	80
374+00 CT - 375+00 CT	3B	15	15
375+00 CT - 376+50 CT	3B	30	30
383+50 CT - 384+50 CT	3B	20	20
CATEGORY TOTALS		**355**	**355**

*** OTHER QUANTITIES LOCATED ELSEWHERE IN PLAN**

ALL ITEMS ON THIS SHEET
ARE CATEGORY 0010
UNLESS OTHERWISE NOTED

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TRAFFIC CONTOL SIGNS, DRUMS, LIGHTS, AND BARRICADES

LOCATION	643.0300 DRUMS EACH	643.0300 DRUMS DAYS	643.0420 BARRICADES TYPE III EACH	643.0420 BARRICADES TYPE III DAYS	643.0705 WARNING LIGHTS TYPE A EACH	643.0705 WARNING LIGHTS TYPE A DAYS	643.0715 WARNING LIGHTS TYPE C EACH	643.0715 WARNING LIGHTS TYPE C DAYS	643.0800 ARROW BOARDS EACH	643.0800 ARROW BOARDS DAYS	643.0900 SIGNS EACH	643.0900 SIGNS DAYS	643.1050 SIGNS PCMS EACH	643.1050 SIGNS PCMS DAYS	643.3000 DETOUR SIGNS EACH	643.3000 DETOUR SIGNS DAYS
STAGE 1	53	1590	20	600	31	930	0	0	0	0	50	1500	0	0	0	0
STAGE 2A	38	1140	18	540	28	840	17	510	0	0	57	1710	3	90	0	0
STAGE 2B	38	3420	12	1080	0	0	17	1530	0	0	50	4500	3	270	0	0
STAGE 3A	70	2100	45	1350	68	2040	8	240	0	0	29	870	0	0	45	1350
STAGE 3B	0	0	21	3444	36	5904	0	0	0	0	20	3280	0	0	45	7380
STAGE 4	211	2954	56	784	98	1372	10	140	1	14	37	518	5	70	163	2282
STAGE 5A	165	7425	50	2250	74	3330	46	2070	0	0	45	2025	5	225	163	7335
STAGE 5B	169	7605	33	1485	50	2250	41	1845	0	0	39	1755	5	225	163	7335
STAGE 6A	140	5880	10	420	16	672	23	966	0	0	27	1134	5	210	163	6846
STAGE 6B	125	1875	4	60	6	90	23	345	0	0	24	360	5	75	163	2445
STAGE 6C	130	3900	14	420	22	660	10	300	1	30	28	840	5	150	171	5130
STAGE 7	48	2112	16	704	22	968	8	352	1	44	21	924	0	0	0	0
UNDISTRIBUTED		3999		1363		1944		802		12		1984		135		3997
CATEGORY TOTALS		**44000**		**14500**		**21000**		**9100**		**100**		**21400**		**1450**		**44100**

TRAFFIC CONTROL SURVEILLANCE AND MAINTENANCE

PROJECT	643.0200 DAYS
.01 1170-01-70	579
CATEGORY TOTAL	**579**

TRAFFIC CONTROL DETOUR

PROJECT	643.2000 EACH
.01 1170-01-70	1
CATEGORY TOTAL	**1**

TRAFFIC CONTROL COVERING SIGNS TYPE II

STAGE	NUMBER OF CYCLES	NUMBER OF SIGNS	643.0920 EACH
STAGE 1	1	3	3
STAGE 2A	1	4	4
STAGE 4	1	10	10
STAGE 6C	1	2	2
CATEGORY TOTAL			**19**

NOTE: THE COVERING OF SIGNS IS NOT ANTICIPATED TO BE REQUIRED FOR IDENTIFIED NIGHTTIME MAINLINE CLOSURES.

*** OTHER QUANTITIES LOCATED ELSEWHERE IN PLAN**

ALL ITEMS ON THIS SHEET ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

3

PAVEMENT MARKING EPOXY

STATION TO STATION	DESCRIPTION	646.0106 4-INCH WHITE LF	646.0106 4-INCH YELLOW LF	646.0126 8-INCH WHITE LF
738+12 A - 745+51 A	EDGELINE A RAMP/E RAMP	737	---	---
740+22 A - 745+51 A	EDGELINE A RAMP/E RAMP	---	529	---
745+51 A - 761+33 A	EDGELINE	1595	1578	---
745+48 E - 750+71 E	EDGELINE	481	525	---
748+78 E - 750+53 E	CHANNELIZING	---	---	175
750+53 E - 750+71 E	CHANNELIZING	---	---	40
761+76 B - 781+05 B	EDGELINE	1919	---	---
761+87 B - 776+87 B	EDGELINE	---	1486	---
771+16 C - 788+88 C	EDGELINE	1775	---	---
771+39 C - 783+64 C	EDGELINE	---	1241	---
754+58 D - 770+73 D	EDGELINE	1605	---	---
758+59 D - 770+47 D	EDGELINE	---	1176	---
740+19 F - 751+53 F	EDGELINE	1135	---	---
740+69 F - 751+65 F	EDGELINE	---	1095	---
22+50 K - 24+00 K	NB CENTERLINE SKIPS	35	---	---
30+64 KS - 36+52 KS	SB EDGELINE	587	---	---
30+65 KS - 37+99 KS	SB EDGELINE	---	739	---
30+80 KN - 38+09 KN	NB EDGELINE	---	729	---
31+35 KN - 36+61 KN	NB CENTERLINE SKIPS	133	---	---
31+35 KN - 36+47 KN	NB EDGELINE	519	---	---
32+93 KS - 37+99 KS	SB CENTERLINE SKIPS	100	---	---
32+93 KS - 34+60 KS	SB CHANNELIZING	---	---	335
36+47 KN - 37+38 KN	NB LANE LINE SKIPS	24	---	---
36+52 KS - 37+47 KS	SB LANE LINE SKIPS	24	---	---
38+09 KS - 38+44 KS	SB EDGELINE	---	35	---
38+19 KN - 38+50 KN	NB EDGELINE	---	31	---
40+20 KN - 40+38 KN	NB EDGELINE	---	18	---
40+22 KS - 40+41 KS	SB EDGELINE	---	19	---
40+48 KN - 48+91 KN	NB EDGELINE	---	843	---
40+48 KN - 47+59 KN	NB CENTERLINE SKIPS	178	---	---
40+51 KS - 48+93 KS	SB EDGELINE	---	842	---
40+77 KN - 41+56 KN	NB LANE LINE SKIPS	20	---	---
41+46 KS - 42+24 KS	SB LANE LINE SKIPS	20	---	---
41+56 KN - 47+53 KN	NB EDGELINE	601	---	---
41+90 KS - 48+93 KS	CENTERLINE SKIPS	176	---	---
42+24 KS - 47+64 KS	SB EDGELINE	542	---	---
47+53 KN - 48+02 KN	NB LANE LINE SKIPS	13	---	---
47+64 KS - 48+70 KS	SB LANE LINE SKIPS	27	---	---
49+01 KN - 49+27 KN	NB EDGELINE	---	26	---
49+03 KS - 49+33 KS	SB EDGELINE	---	30	---
51+03 KS - 51+25 KS	SB EDGELINE	---	22	---
51+09 KS - 51+32 KS	NB EDGELINE	---	23	---
51+35 KS - 61+50 KS	SB EDGELINE	---	1015	---
51+42 KN - 61+50 KN	NB EDGELINE	---	1008	---
51+42 KN - 61+50 KN	NB CENTERLINE SKIPS	252	---	---
51+99 KN - 52+93 KN	NB LANE LINE SKIPS	24	---	---
52+25 KS - 53+02 KS	SB LANE LINE SKIPS	19	---	---
52+77 KS - 61+50 KS	SB CENTERLINE SKIPS	218	---	---
52+93 KN - 61+50 KN	NB EDGELINE	857	---	---
53+02 KS - 61+50 KS	SB EDGELINE	848	---	---
73+50 KS - 91+00 KN	SB EDGELINE	1755	---	---
73+50 KS - 79+85 KS	SB CENTERLINE SKIPS	160	---	---
73+50 KS - 79+85 KS	SB EDGELINE	---	635	---
73+50 KN - 79+78 KN	NB EDGELINE	---	630	---
73+50 KN - 83+70 KN	NB CENTERLINE SKIPS	255	---	---
73+50 KN - 91+00 KN	NB EDGELINE	1750	---	---
79+78 KN - 91+00 KN	DOUBLE YELLOW CENTERLINE	---	3220	---

-CONTINUED-

PAVEMENT MARKING EPOXY

STATION TO STATION	DESCRIPTION	646.0106 4-INCH WHITE LF	646.0106 4-INCH YELLOW LF	646.0126 8-INCH WHITE LF
69+43 U - 70+32 U	EB CHANNELIZING	---	---	98
201+10 V - 222+84 V	SB EDGELINE	2182	---	---
201+10 V - 201+30 V	SB CHANNELIZING	---	---	20
201+10 V - 228+83 V	DOUBLE YELLOW CENTERLINE	---	5680	---
201+10 V - 207+22 V	NB EDGELINE	616	---	---
207+22 V - 208+14 V	NB LANE LINE SKIPS	24	---	---
209+44 V - 221+47 V	NB EDGELINE	1196	---	---
221+47 V - 222+43 V	NB LANE LINE SKIPS	24	---	---
223+30 V	LT, DOUBLE YELLOW CENTERLINE	---	1000	---
223+30 V	RT, DOUBLE YELLOW CENTERLINE	---	1000	---
223+84 V - 230+23 V	NB EDGELINE	640	---	---
224+05 V - 224+97 V	SB LANE LINE SKIPS	24	---	---
224+97 V - 230+23 V	SB EDGELINE	530	---	---
229+57 V - 230+57 V	NB CHANNELIZING	---	---	100
255+64 M - 255+94 M	DOUBLE YELLOW CENTERLINE	---	60	---
TOTALS		**23620**	**25235**	**768**
***CATEGORY TOTALS**		**57535**		**1178**
***PROJECT ID TOTALS**		**62435**		**1978**

PAVEMENT MARKING DIAGONAL EPOXY

STATION TO STATION	DESCRIPTION	647.0726 12-INCH YELLOW LF	647.0726 12-INCH WHITE LF	647.0746 24-INCH WHITE LF
743+41 A - 744+93 A	A RAMP/E RAMP GORE	---	---	90
784+33 C - 786+69 C	C RAMP GORE	---	---	205
760+00 A - 760+25 A	A RAMP GORE	---	25	---
772+26 C - 772+62 C	C RAMP GORE	---	35	---
37+60 KN - 37+45 KN	NB GORE	---	15	---
40+16 KS - 41+14 KS	SB GORE	---	20	---
48+55 KN - 49+55 KN	NB GORE	---	25	---
51+00 KS - 51+75 KS	SB GORE	---	25	---
228+35 V - 228+75 V	ISLAND GORE	20	---	---
TOTALS		**20**	**145**	**295**
CATEGORY TOTALS			**165**	**295**
***PROJECT ID TOTALS**			**490**	**295**

PAVEMENT MARKING ARROWS EPOXY TYPE 2

STATION	LOCATION	647.0166 WHITE EACH
230+23 V	LT	1
CATEGORY TOTAL		**1**
***PROJECT ID TOTAL**		**13**

PAVEMENT MARKING WORDS EPOXY

STATION	DESCRIPTION	647.0356 WHITE EACH
229+78 V	LT, "ONLY"	1
CATEGORY TOTAL		**1**
***PROJECT ID TOTAL**		**11**

PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC WORDS

STATION	DESCRIPTION	SPV.0060.31 WHITE EACH
759+15 A	LT, "ONLY"	1
759+15 A	RT, "ONLY"	1
759+93 A	LT, "ONLY"	1
759+93 A	RT, "ONLY"	1
761+06 A	LT, "YIELD"	1
761+25 A	RT, "YIELD"	1
771+23 C	LT, "YIELD"	1
771+45 C	RT, "YIELD"	1
772+68 C	LT, "ONLY"	1
772+68 C	RT, "ONLY"	1
773+60 C	LT, "ONLY"	1
773+60 C	RT, "ONLY"	1
38+45 KN	RT, "YIELD"	1
38+62 KN	RT, "YIELD"	1
40+06 KS	LT, "YIELD"	1
40+26 KS	LT, "YIELD"	1
49+27 KN	LT, "YIELD"	1
49+51 KN	LT, "YIELD"	1
50+89 KS	RT, "YIELD"	1
51+07 KS	RT, "YIELD"	1
CATEGORY TOTAL		**20**

PAVEMENT MARKING STOP LINE EPOXY 18-INCH

STATION	DESCRIPTION	647.0566 WHITE LF
750+65 E	RT, RT TURN LANE	21
750+71 E	LT&RT, LT TURN LANE	20
13+63 K	LT, EB CTH U RIGHT TURN LANE	22
13+72 K	LT, NB BUS 51 LEFT TURN LANE	12
13+72 K	RT, NB 51	41
14+11 K	LT, EB CTH U	24
14+29 K	RT, NTC EXIT	24
14+92 K	LT, SB BUS 51	26
14+92 K	LT, SB BUS 51 LEFT TURN LANE	12
223+18 V	LT, MERRILL AVE.	24
223+42 V	RT, MERRILL AVE.	24
230+57 V	LT&RT	40
CATEGORY TOTAL		**290**

*** OTHER QUANTITIES LOCATED ELSEWHERE IN PLAN**

ALL ITEMS ON THIS SHEET ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

3

PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS

STATION	LOCATION	SPV.0060.26 TYPE 1 WHITE EACH	SPV.0060.28 TYPE 2R WHITE EACH	SPV.0060.27 TYPE 2 WHITE EACH	SPV.0060.30 TYPE 3R WHITE EACH	SPV.0060.29 TYPE 3 WHITE EACH
759+45 A	LT	---	1	---	---	---
759+45 A	RT	---	---	1	---	---
760+35 A	LT	---	1	---	---	---
760+35 A	RT	---	---	1	---	---
772+25 C	LT	---	---	1	---	---
772+28 C	RT	---	1	---	---	---
773+27 C	LT	---	---	1	---	---
773+27 C	RT	---	1	---	---	---
34+93 KN	RT	1	---	---	---	---
34+93 KN	RT	---	---	---	---	1
36+61 KN	RT	1	---	---	---	---
36+61 KN	RT	---	---	---	---	1
37+73 KN	RT	1	---	---	---	---
37+73 KN	RT	---	---	---	---	1
100+20 KE	RT	---	---	---	---	1
101+49 KE	RT	---	---	---	---	1
101+49 KE	RT	1	---	---	---	---
102+32 KE	RT	---	---	---	---	1
103+26 KE	RT	---	---	---	---	1
103+26 KE	RT	1	---	---	---	---
40+90 KS	LT	1	---	---	---	---
40+90 KS	LT	---	---	---	1	---
41+90 KS	LT	1	---	---	---	---
41+90 KS	LT	---	---	---	1	---
42+32 KN	RT	---	---	---	1	---
42+32 KN	RT	1	---	---	---	---
46+70 KS	LT	1	---	---	---	---
46+70 KS	LT	---	---	---	1	---
47+59 KN	RT	---	---	---	1	---
47+59 KN	RT	1	---	---	---	---
48+51 KN	RT	---	---	---	1	---
48+51 KN	RT	1	---	---	---	---
200+27 KW	RT	---	---	---	---	1
201+30 KW	RT	---	---	---	---	1
201+30 KW	RT	1	---	---	---	---
202+24 KW	RT	---	---	---	---	1
203+61 KW	RT	---	---	---	---	1
203+61 KW	RT	1	---	---	---	---
51+74 KS	LT	---	---	---	---	1
51+74 KS	LT	1	---	---	---	---
52+77 KS	LT	---	---	---	---	1
52+77 KS	LT	1	---	---	---	---
54+90 KS	LT	---	---	---	---	1
54+90 KS	LT	1	---	---	---	---
CATEGORY TOTALS		**16**	**4**	**4**	**6**	**14**

PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC

STATION TO STATION	DESCRIPTION	SPV.0090.12 8-INCH WHITE LF	SPV.0090.13 18-INCH WHITE LF
761+33 A	LT, SKIPS	---	13
761+33 A	RT, SKIPS	---	27
771+16 C	LT, SKIPS	---	22
771+16 C	RT, SKIPS	---	15
100+62 KE - 100+76 KE	RT, SKIPS	---	9
100+80 KE - 101+02 KE	RT, SKIPS	---	14
101+01 KE - 40+38 KN	RT, ROUNDABOUT LANE LINE SKIPS	110	---
102+59 KE - 102+74 KE	RT, SKIPS	---	9
102+79 KE - 102+98 KE	RT, SKIPS	---	14
103+09 KE - 38+09 KS	RT, ROUNDABOUT LANE LINE SKIPS	126	---
200+53 KW - 200+65 KW	RT, SKIPS	---	8
200+69 KW - 200+89 KW	RT, SKIPS	---	12
200+92 KW - 51+32 KN	RT, ROUNDABOUT LANE LINE SKIPS	129	---
202+66 KW - 202+77 KW	RT, SKIPS	---	8
202+84 KW - 203+06 KW	RT, SKIPS	---	14
203+02 KW - 48+03 KS	RT, ROUNDABOUT LANE LINE SKIPS	117	---
CATEGORY TOTALS		**482**	**165**

PAVEMENT MARKING CROSSWALK EPOXY 12-INCH

STATION	DESCRIPTION	647.0776 WHITE LF
750+70 E	RT, RT TURN LANE	47
750+78 E	LT&RT, LT TURN LANE	38
751+81 F	LT&RT	83
13+63 K	LT, EB CTH U RT TURN LANE	42
13+84 K	LT&RT, BUS 51	249
14+13 K	RT, NTC ENTRANCE/EXIT	110
14+20 K	LT, CTH U	93
14+85 K	LT, SB BUS 51	52
14+85 K	LT, SB BUS 51 LT TURN LANE	22
14+85 K	RT, NB BUS 51	63
15+35 K	LT, SB BUS 51 RT TURN LANE	50
CATEGORY TOTAL		**849**
***PROJECT ID TOTAL**		**944**

REMOVING PAVEMENT MARKINGS

STATION TO STATION	DESCRIPTION	STAGE	646.0600 LF
362+90 BT - 369+00 BT	EDGELINE	3A	610
363+20 BT - 369+00 BT	EDGELINE	3A	580
339+70 ET - 346+00 ET	EDGELINE	3A	630
337+60 ET - 339+70 ET	CHANNELZING	3A	210
342+10 FT - 344+25 FT	EDGELINE	3A	215
342+80 FT - 344+25 FT	EDGELINE	3A	145
763+40 B - 784+05 B	EDGELINE	3B	2065
763+30 B - 780+00 B	EDGELINE	3B	1670
20+10 K - 23+80 K	EDGELINE	4	370
32+50 K - 36+35 K	EDGELINE	4	780
228+10 V - 230+60 V	DOUBLE CENTERLINE	4	500
334+00 FV - 339+85 FV	EDGELINE	5B	585
333+00 FV - 339+85 FV	EDGELINE	5B	685
376+00 CU - 377+00 CU	EDGELINE	5B	200
762+63 B	STOP LINE	2B	15
761+60 B	STOP LINE	2B	24
40+13 KN	STOP LINE	2B	38
49+20 KN	STOP LINE	2B	38
769+83 D	STOP LINE	2B	15
770+52 D	STOP LINE	2B	24
CATEGORY TOTAL			**9399**

PAVEMENT MARKING CURB EPOXY

STATION TO STATION	LOCATION	647.0456 YELLOW LF
228+78 V - 228+83 V	LT	10
230+52 V - 230+57 V	LT	10
CATEGORY TOTAL		**20**

PAVEMENT MARKING ISLAND NOSE EPOXY

STATION	LOCATION	647.0606 YELLOW EACH
228+75 V	LT	1
230+60 V	LT	1
CATEGORY TOTAL		**2**

*** OTHER QUANTITIES LOCATED ELSEWHERE IN PLAN**

ALL ITEMS ON THIS SHEET ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

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PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE

STATION TO STATION	DESCRIPTION	646.0841.S 4-INCH WHITE LF	646.0843.S 8-INCH WHITE LF
738+12 A - 740+22 A	CHANNELIZING A RAMP/E RAMP	---	210
738+12 A - 742+60 A	LANE LINE SKIPS A RAMP/E RAMP	115	---
742+60 A - 745+51 A	CHANNELIZING A RAMP/E RAMP	---	580
759+15 A - 761+33 A	CHANNELIZING	---	372
776+87 B - 781+05 B	CHANNELIZING	---	420
771+16 C - 773+60 C	CHANNELIZING	---	411
783+64 C - 787+02 C	CHANNELIZING	---	367
754+58 D - 758+59 D	CHANNELIZING	---	406
740+19 F - 740+69 F	CHANNELIZING	---	50
36+61 KN - 38+09 KN	NB CHANNELIZING	---	241
38+17 KN - 100+80 KE	NB CHANNELIZING	---	102
100+17 KE - 100+62 KE	RT, CHANNELIZING	---	67
102+12 KE - 102+59 KE	RT, CHANNELIZING	---	72
102+79 KE - 40+42 KS	SB CHANNELIZING	---	87
40+50 KS - 41+90 KS	SB CHANNELIZING	---	215
47+59 KN - 48+91 KN	NB CHANNELIZING	---	187
48+99 KN - 200+69 KW	NB CHANNELIZING	---	97
200+05 KW - 200+53 KW	RT, CHANNELIZING	---	73
202+23 KW - 202+66 KW	RT, CHANNELIZING	---	64
202+84 KW - 51+26 KS	SB CHANNELIZING	---	84
51+34 KS - 52+77 KS	SB CHANNELIZING	---	250
CATEGORY TOTALS		**115**	**4355**

PAVEMENT MARKING EPOXY

STATION TO STATION	DESCRIPTION	STAGE	646.0106 4-INCH WHITE LF	646.0106 4-INCH YELLOW LF	646.0126 8-INCH WHITE LF
352+00 DT - 366+20 DT	EDGELINE	2A	1420	---	---
358+00 DT - 366+20 DT	EDGELINE	2A	---	820	---
357+00 DT - 358+00 DT	CHANNELIZING	2A	---	---	200
358+00 DT - 359+45 DT	EDGELINE	2A	145	---	---
337+60 ET - 346+00 ET	EDGELINE	3A	840	---	---
339+70 ET - 346+00 ET	EDGELINE	3A	---	630	---
337+60 ET - 339+70 ET	CHANNELIZING	3A	---	---	210
342+10 FT - 347+90 FT	EDGELINE	3A	580	---	---
342+80 FT - 347+90 FT	EDGELINE	3A	---	510	---
763+40 B - 784+05 B	EDGELINE	3A	2065	---	---
763+30 B - 780+00 B	EDGELINE	3A	---	1670	---
SUB-TOTALS			**5050**	**3630**	**410**
***CATEGORY TOTALS**			**57535**		**1178**
***PROJECT ID TOTALS**			**62435**		**1978**

TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH

STATION TO STATION	DESCRIPTION	STAGE	649.0400 WHITE LF
45+35 KN - 47+15 KN	EDGELINE	7	180
CATEGORY TOTAL			**180**

PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC CROSSWALK 12-INCH

STATION	LOCATION	SPV.0090.11 WHITE LF
760+96 A	LT	41
760+96 A	RT	32
762+24 B	LT	31
771+55 C	LT	33
771+56 C	RT	40
770+24 D	RT	35
38+05 KS	LT	53
38+13 KN	RT	64
40+44 KN	RT	52
40+46 KS	LT	60
48+95 KN	RT	61
48+99 KS	LT	57
51+30 KS	LT	62
51+37 KN	RT	54
CATEGORY TOTAL		**675**

TEMPORARY PAVEMENT MARKING STOP LINE 24-INCH

STATION	LOCATION	STAGE	649.1300 LF
762+63 B	LT	1	15
761+60 B	LT	1	24
40+13 KN	LT	1	38
49+20 KN	LT/RT	1	38
769+83 D	RT	1	15
770+52 D	RT	1	24
CATEGORY TOTAL			**154**

TEMPORARY PAVEMENT MARKING STOP LINE REMOVABLE TAPE 24-INCH

STATION	LOCATION	STAGE	649.1400 LF
68+27 KN	RT	4	24
68+37 KN	RT	4	28
69+78 KS	LT/RT	4	48
68+42 KS	LT/RT	5A	24
68+02 KS	RT	5B	33
69+82 KN	LT/RT	5B	24
68+26 KN	RT	5B	23
68+37 KN	RT	5B	24
CATEGORY TOTAL			**228**

TEMPORARY PAVEMENT MARKING

STATION TO STATION	DESCRIPTION	STAGE	649.0100 4-INCH WHITE LF	649.0100 4-INCH YELLOW LF	649.0701 8-INCH WHITE LF
348+00 AT - 359+60 AT	EDGELINE	2A	1160	---	---
352+00 AT - 353+00 AT	CHANNELIZING	2A	---	---	200
353+00 AT - 361+40 AT	EDGELINE	2A	---	840	---
362+90 BT - 369+00 BT	EDGELINE	3A	610	---	---
363+20 BT - 369+00 BT	EDGELINE	3A	---	580	---
20+10 K - 23+80 K	EDGELINE	4	---	370	---
32+50 K - 36+35 K	EDGELINE	4	---	390	---
32+50 K - 36+35 K	EDGELINE	4	390	---	---
228+10 V - 230+60 V	DOUBLE CENTERLINE	4	---	500	---
342+60 ET - 344+90 ET	CHANNELIZING	5A	---	---	230
354+00 FU - 360+00 FU	EDGELINE	5A	600	---	---
355+50 FU - 357+00 FU	CHANNELIZING	5A	---	---	150
357+00 FU - 360+00 FU	CHANNELIZING	5A	---	300	---
766+35 B - 767+35 B	EDGELINE	5A	---	100	---
767+35 B - 768+38 B	CHANNELIZING	5A	---	---	100
766+35 B - 769+00 B	EDGELINE	5A	265	---	---
386+90 CT - 388+00 CT	CHANNELIZING	5A	---	---	110
370+65 CT - 386+90 CT	EDGELINE	5A	---	1625	---
371+15 CT - 388+00 CT	EDGELINE	5A	1685	---	---
324+00 FV - 339+85 FV	EDGELINE	5B	1585	---	---
331+55 FV - 332+55 FV	CHANNELIZING	5B	---	---	100
332+55 FV - 339+85 FV	EDGELINE	5B	---	730	---
390+50 CU - 391+50 CU	CHANNELIZING	5B	---	---	100
372+70 CU - 392+00 CU	EDGELINE	5B	1930	---	---
372+00 CU - 390+50 CU	EDGELINE	5B	---	1850	---
337+90 EU - 348+35 EU	EDGELINE	6A	1045	---	---
738+10 F - 745+75 F	EDGELINE	6A	765	---	---
741+00 F - 742+00 F	CHANNELIZING	6A	---	---	100
742+00 F - 745+75 F	EDGELINE	6A	---	375	---
362+90 BT - 369+00 BT	EDGELINE	6A	610	---	---
363+20 BT - 369+00 BT	EDGELINE	6A	---	580	---
376+00 CU - 377+15 CU	EDGELINE	6A	115	---	---
376+00 CU - 377+15 CU	EDGELINE	6A	---	115	---
769+05 B - 780+30 B	EDGELINE	6A	---	1125	---
769+05 B - 782+00 B	EDGELINE	6A	1295	---	---
780+30 B - 781+30 B	CHANNELIZING	6A	---	---	100
330+50 EV - 348+15 EV	EDGELINE	6B	1765	---	---
334+65 EV - 335+65 EV	CHANNELIZING	6B	---	---	100
335+65 EV - 348+15 EV	EDGELINE	6B	---	1250	---
SUB-TOTALS			**13820**	**10730**	**1290**
CATEGORY TOTALS			**24550**		**1290**

REMOVING PAVEMENT MARKINGS WORDS

STATION	LOCATION	647.0965 EACH
68+95 KN	RT, N 20TH AVE	6
CATEGORY TOTAL		**6**

REMOVING PAVEMENT MARKINGS ARROWS

STATION	LOCATION	647.0955 EACH
68+95 KN	RT, N 20TH AVE	6
CATEGORY TOTAL		**6**

*** OTHER QUANTITIES LOCATED ELSEWHERE IN PLAN**

ALL ITEMS ON THIS SHEET ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

CONSTRUCTION STAKING

STATION TO STATION	650.4500 SUBGRADE LF	650.5000 BASE LF	650.7000 CONCRETE PAVEMENT LF	650.9920 SLOPE STAKES LF
32+93 KS - 61+50 KS	2857	350	2507	2857
31+35 KN - 61+50 KN	3015	350	2665	3015
745+23 A - 761+33 A	1610	---	1610	1610
761+29 B - 781+05 B	1976	---	1976	1976
771+18 C - 789+10 C	1792	---	1792	1792
754+58 D - 771+05 D	1647	---	1647	1647
738+12 E - 750+89 E	1277	---	1277	1277
740+19 F - 751+92 F	1173	---	1173	1173
100+00 KE - 104+12 KE	412	---	412	412
200+00 KW - 204+12 KW	412	---	412	412
201+10 V - 230+86	2976	2976	---	2976
3+69 ME - 6+28 ME	259	259	---	259
CATEGORY TOTALS	**19406**	**3935**	**15471**	**19406**
***PROJECT ID TOTALS**	**23969**	**8498**	**15471**	**23969**

CONSTRUCTION STAKING

STATION TO STATION	LOCATION	650.4000 CONSTRUCTION STAKING STORM SEWER EACH	650.6000 STAKING CULVERTS EACH
201+00 V - 230+50 V	LT & RT	---	4
740+05 NB - 748+53 NB	LT & RT	14	---
30+75 KN - 32+00 KN	LT & RT	8	---
33+75 KN - 36+10 KN	LT & RT	9	---
38+00 KN - 44+00 KN	LT & RT	26	---
761+75 B - 767+25 B	LT & RT	5	1
48+50 KN - 52+25 KN	LT & RT	10	1
775+00 C - 783+00 C	LT & RT	7	1
759+00 D - 770+50 D	LT & RT	10	---
55+00 KN - 61+50 KN	LT & RT	16	2
754+80 NB - 755+60 NB	LT & RT	---	1
746+00 F - 749+00 F	LT & RT	4	---
TOTALS		**109**	**10**
***CATEGORY TOTALS**		**114**	**10**
***PROJECT ID TOTALS**		**114**	**12**

CONSTRUCTION STAKING STORM SEWER

STATION	STRUCTURE NUMBER	OFFSET	650.4000 EACH
354+20 AT	900	37' RT	1
358+50 AT	901	19' RT	1
365+58 BT	902	24' LT	1
380+25 CT	903	26.4' RT	1
359+50 DT	904	23.4' RT	1
TOTAL			**5**
***CATEGORY TOTAL**			**114**

CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER

STATION TO STATION	LOCATION	650.5500 LF
30+65 KN - 32+93 KN	LT & RT, CTH K NB	228
58+00 KN - 58+75 KN	LT, CTH K NB	2447
58+00 KN - 58+75 KN	RT, CTH K NB	2723
30+80 KS - 31+35 KS	LT, CTH K SB	55
58+00 KS - 58+75 KS	LT, CTH K SB	2791
58+00 KS - 58+75 KS	RT, CTH K SB	2462
230+24 V - 230+74 V	LT, OVERLOOK DR	75
230+24 V - 230+74 V	RT, OVERLOOK DR	75
228+73 V - 230+62 V	LT, MEDIAN	353
71+01 U - 71+07 U	LT	9
71+35 U - 71+43 U	LT	9
71+47 U - 71+73 U	RT	42
71+68 U - 71+79 U	LT	10
71+74 U - 71+82 U	RT	9
14+40 K - 14+46 K	RT	10
14+80 K - 14+89 K	RT	9
14+80 K - 14+89 K	LT	18
14+80 K - 14+89 K	LT	18
14+80 K - 14+89 K	LT	9
CATEGORY TOTAL		**11352**
***PROJECT ID TOTAL**		**11367**

CONSTRUCTION STAKING ELECTRICAL INSTALLATIONS

PROJECT	650.8500 LS
.01 1170-01-70	1

CONSTRUCTION STAKING SUPPLEMENTAL CONTROL

PROJECT	650.9910 LS
.01 1170-01-70	1

*** OTHER QUANTITIES LOCATED ELSEWHERE IN PLAN**

ALL ITEMS ON THIS SHEET ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

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CONDUIT

FROM	TO	652.0210 RIGID NON METALIC 1-INCH LF	652.0225 SCHEDULE 40 2-INCH LF	652.0235 3-INCH LF	652.0615 SPECIAL 3-INCH LF
CB1	PB26B	50	75	50	---
PB26B	SB1	---	---	20	---
PB26B	PB26C	---	---	---	110
PB26C	EXPB26	---	---	46	---
EXPB26	SB2	---	---	17	---
EXPB26	SB3	---	---	15	---
PB26C	PB25B	---	---	---	70
PB25B	SB4	---	---	8	---
PB25B	EXPB25	---	---	---	52
EXPB25	SB5	---	---	9	---
EXPB25	SB6	---	---	10	---
EXPB25	SB7	---	---	37	---
EXPB25	PB25D	---	---	75	---
PB25D	PB25E	---	---	---	40
PB25E	PB25F	---	---	265	---
EXPB24	SB8	---	---	10	---
EXPB24	SB9	---	---	---	27
EXPB23	SB10	---	---	36	---
EXPB23	PB23B	---	---	22	---
PB23B	SB11	---	---	13	---
PB23B	PB22B	---	---	---	66
PB22B	SB12	---	---	9	---
PB22B	EXPB22	---	---	---	82
EXPB22	SB13	---	---	13	---
EXPB22	SB14	---	---	18	---
EXPB22	PB22C	---	---	27	---
PB22C	PB22D	---	---	237	---
EXPB27	SB15	---	---	10	---
EXPB27	SB16	---	---	11	---
EXPB27	PB27B	---	---	63	---
PB27B	SB17	---	---	13	---
TOTALS		**50**	**75**	**1034**	**447**
***CATEGORY TOTALS**		**50**	**8544**	**1034**	**447**
***PROJECT ID TOTALS**		**50**	**11040**	**1034**	**447**

PULL BOXES STEEL

STATION	LOCATION	DESCRIPTION	653.0135 24X36-INCH EACH	653.0140 24x42-INCH EACH
13+34 K	123.5' LT	PB26B	---	1
13+90 K	110' LT	PB26C	---	1
14+28 K	110' LT	PB25B	---	1
70+56 K	16' LT	PB25C	1	---
15+25 K	92' LT	PB25D	1	---
15+54 K	118' LT	PB25E	1	
18+17 K	90' LT	PB25F	1	---
14+46 K	66.5' RT	PB23B	---	1
14+13 K	66.5' RT	PB22B	---	1
13+51 K	43' RT	PB22C	1	---
11+19 K	32' RT	PB22D	1	---
12+98 K	40' LT	PB27B	---	1
TOTALS			**6**	**6**
***CATEGORY TOTALS**			**9**	**31**

CONCRETE BASES

SB NO	STATION	OFFSET	654.0101 CONCRETE BASES TYPE 1 EACH	654.0102 CONCRETE BASES TYPE 2 EACH	654.0217 CONCRETE CONTROL BASES TYPE 9 SPECIAL EACH
CB1	13+10 K	110' LT	---	---	1
SB1	13+26 K	103' LT	1	---	---
SB2	13+60 K	82' LT	---	1	---
SB3	13+92 K	83' LT	1	---	---
SB4	14+27 K	100' LT	1	---	---
SB5	14+56 K	92' RT	---	1	---
SB6	14+49 K	83' LT	1	---	---
SB7	14+90 K	83' LT	1	---	---
SB8	14+90 K	29' LT	1	---	---
SB9	14+94 K	6' LT	1	---	---
SB10	14+90 K	42' RT	---	1	---
SB11	14+45 K	55' RT	1	---	---
SB12	14+13 K	58' RT	1	---	---
SB13	13+80 K	72' RT	---	1	---
SB14	13+71 K	45' RT	1	---	---
SB15	13+74 K	31' LT	1	---	---
SB16	13+59 K	43' LT	1	---	---
SB17	12+85 K	45' LT	1	---	---
TOTALS			**13**	**4**	**1**
***CATEGORY TOTALS**			**13**	**4**	**3**

CABLE TRAFFIC SIGNAL

FROM	TO	655.0230 5-14 AWG LF	655.0240 7-14 AWG LF	655.0250 9-14 AWG LF	655.0260 12-14 AWG LF
CB1	SB1	68	---	---	---
CB1	SB2	175	---	---	---
CB1	SB3	---	---	---	151
CB1	SB4	---	---	---	160
CB1	SB5	---	---	209	---
CB1	SB6	186	---	---	---
CB1	SB7	---	---	219	---
CB1	SB8	---	263	---	---
CB1	SB9	---	---	281	---
CB1	SB10	---	---	409	---
CB1	SB11	---	---	377	---
CB1	SB12	---	---	---	355
CB1	SB13	---	---	---	341
CB1	SB14	---	---	---	316
CB1	SB15	---	---	---	206
CB1	SB16	204	---	---	---
CB1	SB17	278	---	---	---
CATEGORY TOTALS		**911**	**263**	**1495**	**1529**

ELECTRICAL SERVICE METER BREAKER PEDESTAL 13+10

LOCATION	656.0200.06 LS
BUS 51/CTH U	1

PEDESTAL BASES

SB NO	STATION	OFFSET	657.0100 EACH
SB1	13+26 K	103' LT	1
SB3	13+92 K	83' LT	1
SB4	14+27 K	100' LT	1
SB6	14+49 K	83' LT	1
SB7	14+90 K	83' LT	1
SB8	14+90 K	29' LT	1
SB9	14+94 K	6' LT	1
SB11	14+45 K	55' RT	1
SB12	14+13 K	58' RT	1
SB14	13+71 K	45' RT	1
SB15	13+74 K	31' LT	1
SB16	13+59 K	43' LT	1
SB17	12+85 K	45' LT	1
TOTAL			**13**
***CATEGORY TOTAL**			**16**

*** OTHER QUANTITIES LOCATED ELSEWHERE IN PLAN**

ALL ITEMS ON THIS SHEET ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

3

ELECTRICAL WIRE
TRAFFIC SIGNALS 10 AWG

FROM	TO	655.0515 (GREEN) LF
SB1	PB26B	20
SB2	EXPB26	17
SB3	EXPB26	15
SB4	PB25B	7
SB5	EXPB25	3
SB6	EXPB25	10
SB7	EXPB25	40
SB8	EXPB24	10
SB9	EXPB24	28
SB10	EXPB23	37
SB11	PB23B	10
SB12	PB22B	8
SB13	EXPB22	12
SB14	EXPB22	17
SB15	EXPB27	10
SB16	EXPB27	10
SB17	PB27B	13
CB1	SB1	50
SB1	SB2	130
SB2	SB3	37
SB3	SB4	95
SB4	SB5	46
SB5	SB6	18
SB6	SB7	55
SB7	SB8	127
SB8	SB9	43
SB9	SB10	160
SB10	SB11	78
SB11	SB12	63
SB12	SB13	74
SB13	SB14	34
SB14	SB15	134
SB15	SB16	25
SB16	SB17	98
SB17	CB1	259
CATEGORY TOTAL		**1793**

TRANSFORMER BASES BREAKAWAY
11 1/2-INCH BOLT CIRCLE

SB NO	STATION	OFFSET	657.0255 EACH
SB2	13+60 K	82' LT	1
SB5	14+56 K	92' RT	1
SB10	14+90 K	42' RT	1
SB13	13+80 K	72' RT	1
TOTAL			**4**
***CATEGORY TOTAL**			**90**

LOOP DETECTOR ITEMS

LOOP NO	652.0800 CONDUIT LOOP DETECTOR LF	652.0900 LOOP DETECTOR SLOTS LF	655.0700 LOOP DETECTOR LEAD IN CABLE LF	655.0800 LOOP DETECTOR WIRE LF	REMARKS
11	73	73	156	229	4 TURNS
12	70	70	156	226	4 TURNS
21	32	32	521	80	3 TURNS
22	44	44	521	92	3 TURNS
31	66	66	295	118	2 TURNS
32	62	62	295	166	3 TURNS
41	68	68	210	120	2 TURNS
42	68	68	80	120	2 TURNS
43	75	75	25	127	2 TURNS
44	72	72	25	124	2 TURNS
51	76	76	208	128	2 TURNS
52	66	66	208	170	3 TURNS
61	32	32	517	104	4 TURNS
62	44	44	517	116	4 TURNS
71	61	61	115	113	2 TURNS
72	69	69	115	173	3 TURNS
81	70	70	293	122	2 TURNS
CATEGORY TOTALS	**1048**	**1048**	**4257**	**2328**	

POLES TYPE 2

SB NO	STATION	OFFSET	657.0305 EACH
SB2	13+60	82' LT	1
SB5	14+56	92' RT	1
SB10	14+90	42' RT	1
SB13	13+80	72' RT	1
CATEGORY TOTAL			**4**

TRAFFIC SIGNAL STANDARDS ALUMINUM

SB NO	STATION	OFFSET	657.0430 10-FT EACH	657.0420 13-FT EACH	657.0425 15-FT EACH
SB1	13+26	103' LT	---	1	---
SB3	13+92	83' LT	---	1	---
SB4	14+27	100' LT	---	---	1
SB6	14+49	83' LT	1	---	---
SB7	14+90	83' LT	---	1	---
SB8	14+90	29' LT	---	---	1
SB9	14+94	6' LT	---	---	1
SB11	14+45	55' RT	---	1	---
SB12	14+13	58' RT	---	---	1
SB14	13+71	45' RT	---	---	1
SB15	13+74	31' LT	---	---	1
SB16	13+59	43' LT	---	1	---
SB17	12+85	45' LT	---	1	---
TOTALS			**1**	**6**	**6**
***CATEGORY TOTALS**			**1**	**6**	**7**

TROMBONE ARMS

SB NO	STATION	OFFSET	657.0585 15-FT EACH	657.0590 20-FT EACH	657.0595 25-FT EACH
SB2	13+60	82' LT	1	---	---
SB5	14+56	92' RT	---	1	---
SB10	14+90	42' RT	---	---	1
SB13	13+80	72' RT	---	---	1
TOTALS			**1**	**1**	**2**
***CATEGORY TOTALS**			**1**	**1**	**2**

*** OTHER QUANTITIES LOCATED ELSEWHERE IN PLAN**

ALL ITEMS ON THIS SHEET
ARE CATEGORY 0010
UNLESS OTHERWISE NOTED

3

SIGNAL MOUNTING HARDWARE

PROJECT	658.5069 BUS 51 AND CTH U LS
.01 BUS 51 & CTH U	1

PEDESTRIAN SIGNAL EQUIPMENT

SB NO	HEAD NO	658.0635 LED MODULES PEDESTRIAN COUNTDOWN TIMER 16-INCH EACH	658.0416 PEDESTRIAN SIGNAL FACE 16-INCH EACH	658.0500 PEDESTRIAN PUSH BUTTONS EACH
SB3	22	1	1	1
SB3	41	1	1	1
SB6	21	1	1	1
SB7	82	1	1	1
SB10	81	1	1	1
SB11	62	1	1	1
SB13	42	1	1	1
SB14	61	1	1	1
CATEGORY TOTALS		**8**	**8**	**8**

TRAFFIC SIGNALS

SB NO	HEAD NO	FACE LAYOUT	658.0110 TRAFFIC SIGNAL FACE 3-12 INCH VERTICAL EACH	658.0155 TRAFFIC SIGNAL FACE 3-12 INCH HORIZONTAL EACH	658.0115 TRAFFIC SIGNAL FACE 4-12 INCH VERTICAL EACH	658.0600 LED MODULES 12-INCH RED BALL EACH	658.0605 LED MODULES 12-INCH YELLOW BALL EACH	658.0610 LED MODULES 12-INCH GREEN BALL EACH	658.0615 LED MODULES 12-INCH RED ARROW EACH	658.0620 LED MODULES 12-INCH YELLOW ARROW EACH	658.0625 LED MODULES 12-INCH GREEN ARROW EACH	658.0215 BACKPLATES SIGNAL FACE 3 SECTION EACH	658.0220 BACKPLATES SIGNAL FACE 4 SECTION EACH
SB1	4D	R-YA-GA	1	---	---	1	---	---	---	1	1	1	---
SB2	2B	R-Y-G	---	1	---	1	1	1	---	---	---	1	---
SB3	4A	R-Y-G	1	---	---	1	1	1	---	---	---	1	---
SB4	3B	RA-YA-FYA-GA	---	---	1	---	---	---	1	2	1	---	1
SB4	7A	RA-YA-FYA-GA	---	---	1	---	---	---	1	2	1	---	1
SB5	8B	R-Y-G	1	---	---	1	1	1	---	---	---	1	---
SB5	8C	R-Y-G	---	1	---	1	1	1	---	---	---	1	---
SB7	2A	R-Y-G	1	---	---	1	1	1	---	---	---	1	---
SB8	1B	RA-YA-FYA-GA	---	---	1	---	---	---	1	2	1	---	1
SB9	5A	RA-YA-FYA-GA	---	---	1	---	---	---	1	2	1	---	1
SB9	6C	R-Y-GA	1	---	---	1	1	---	---	---	1	1	---
SB10	6B	R-Y-G	---	1	---	1	1	1	---	---	---	1	---
SB11	8A	R-Y-G	1	---	---	1	1	1	---	---	---	1	---
SB12	3A	RA-YA-FYA-GA	---	---	1	---	---	---	1	2	1	---	1
SB12	7B	RA-YA-FYA-GA	---	---	1	---	---	---	1	2	1	---	1
SB13	4B	R-Y-G	1	---	---	1	1	1	---	---	---	1	---
SB13	4C	R-Y-G	---	1	---	1	1	1	---	---	---	1	---
SB14	6A	R-Y-G	1	---	---	1	1	1	---	---	---	1	---
SB14	5C	RA-YA-FYA-GA	---	---	1	---	---	---	1	2	1	---	1
SB15	1A	RA-YA-FYA-GA	---	---	1	---	---	---	1	2	1	---	1
SB15	5B	RA-YA-FYA-GA	---	---	1	---	---	---	1	2	1	---	1
SB16	2C	R-Y-GA	1	---	---	1	1	---	---	---	1	1	---
SB17	4E	R-YA-GA	1	---	---	1	---	---	---	1	1	1	---
CATEGORY TOTALS			**10**	**4**	**9**	**14**	**12**	**10**	**9**	**20**	**13**	**14**	**9**

RAMP CLOSURE GATES, POLES, BASES, AND WIRE

STATION	OFFSET	NUMBER	SPV.0060.08 RAMP CLOSURE GATES HARDWIRED 28-FT EACH	SPV.0060.09 RAMP CLOSURE GATES SOLAR POWERED 40-FT EACH	654.0105 CONCRETE BASES TYPE 5 EACH	654.0220 CONCRETE CONTROL CABINET BASES TYPE 10 EACH	657.0100 PEDESTAL BASES EACH	657.0255 TRANSFORMER BASE BREAKAWAY 11 1/2-INCH BOLT CIRCLE EACH	657.0425 TRAFFIC SIGNAL STANDARDS ALUMINUM 15-FT EACH	655.0510 ELECTRICAL WIRE TRAFFIC SIGNALS 12 AWG LF
762+05 B	27' LT	RCG-1	1	---	1	---	1	1	---	192
770+31 D	28' RT	RCG-2	1	---	1	---	1	1	---	192
751+68 F	28' RT	RCG-3	---	1	1	1	1	1	1	228
TOTALS			**2**	**1**	**3**	**1**	**3**	**3**	**1**	**612**
***CATEGORY TOTALS**			**2**	**1**	**87**	**1**	**16**	**90**	**7**	**612**

*** OTHER QUANTITIES LOCATED ELSEWHERE IN PLAN**

ALL ITEMS ON THIS SHEET ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

PULL BOXES STEEL 24x42-INCH

NUMBER	STATION	OFFSET	653.0140 EACH
LPB-A1	760+80 A	46.6' LT	1
LPB-A2	760+83 A	7.0' LT	1
LPB-A3	760+86 A	22.0' RT	1
LPB-A4	37+87 KS	30.4' LT	1
LPB-A5	37+82 KS	8.4' RT	1
LPB-A6	100+44 KE	28.5' LT	1
LPB-A7	38+01 KN	37.0' RT	1
LPB-A8	762+13 B	5.1' RT	1
LPB-A9	762+13 B	31.5' LT	1
LPB-A10	40+52 KN	31.7' RT	1
LPB-A11	40+19 KS	12.3' RT	1
LPB-A12	40+58 KS	34.2' LT	1
LPB-B13	48+87 KS	33.5' LT	1
LPB-B14	48+75 KS	11.0' RT	1
LPB-B15	200+33 KW	28.5' LT	1
LPB-B16	48+79 KN	35.1' RT	1
LPB-B17	771+51 C	41.4' RT	1
LPB-B18	771+50 C	7.2' RT	1
LPB-B19	771+47 C	21.2' LT	1
LPB-B20	51+46 KN	30.8' RT	1
LPB-B21	51+56 KS	7.2' RT	1
LPB-B22	51+61 KS	35.1' LT	1
LPB-B23	770+62 D	4.8' LT	1
LPB-B24	770+36 D	27.5' RT	1
RCGPB-1	47+70 U	60.0' RT	1
TOTALS			**25**
***CATEGORY 0010 TOTALS**			**31**
LPB-E1	16+05 K	100.0' LT	1
LPB-E2	17+95 K	100.0' LT	1
LPB-E3	17+95 K	20.0' LT	1
LPB-F1	28+25 TR	8.0' RT	1
CATEGORY 0090 TOTALS			**4**
***PROJECT ID TOTAL**			**35**

ADJUSTING PULL BOXES

STATION	OFFSET	653.0900 EACH
70+72 U	LT	1
71+66 U	RT	1
71+69 U	LT	1
71+85 U	RT	1
CATEGORY TOTAL		**4**

ELECTRICAL WIRE LIGHTING AND CONDUIT RIGID NONMETALLIC SCHEDULE 40

FROM - TO	NUMBER OF WIRES 8 AWG	6 AWG	4 AWG	2 AWG	655.0620 ELECTRICAL WIRE LIGHTING 8 AWG LF	655.0625 6 AWG LF	655.0630 4 AWG LF	655.0635 2 AWG LF	652.0225 CONDUIT 2-INCH LF
CABINET E									
CIRCUIT 1 LCC E - LPB-E1	1	2	---	2	13	26	---	26	7
LPB-E1 - LPB-E2	1	2	---	2	195	390	---	390	189
LPB-E2 - LPB-E3	1	2	---	2	76	152	---	152	70
LPB-E3 - L-E1	1	2	---	2	16	32	---	32	10
L-E1 - L-E2	1	2	---	2	139	278	---	278	133
L-E2 - L-E3	3	---	---	2	441	---	---	294	141
L-E3 - L-E4	3	---	---	2	435	---	---	290	139
L-E4 - L-E5	1	---	---	2	147	---	---	294	141
L-E5 - L-E6	1	2	---	---	140	280	---	---	134
L-E6 - L-E7	1	2	---	---	146	292	---	---	140
L-E7 - L-E8	1	2	---	---	146	292	---	---	140
L-E8 - STUB	---	---	---	---	---	---	---	---	5
CABINET F									
CIRCUIT 1 LCC F - LPB-F1	3	---	---	---	33	---	---	---	5
LPB-F1 - L-F9	3	---	---	---	33	---	---	---	5
L-F9 - L-F10	3	---	---	---	336	---	---	---	106
L-F10 - L-F11	3	---	---	---	348	---	---	---	110
L-F11 - L-F12	3	---	---	---	318	---	---	---	100
L-F12 - L-F13	3	---	---	---	336	---	---	---	106
L-F13 - L-F14	3	---	---	---	348	---	---	---	110
L-F14 - L-F15	3	---	---	---	348	---	---	---	110
L-F15 - L-F16	3	---	---	---	327	---	---	---	103
L-F16 - L-F17	3	---	---	---	336	---	---	---	106
L-F17 - L-F18	3	---	---	---	192	---	---	---	58
L-F18 - STUB	---	---	---	---	---	---	---	---	5
L-F17 - L-F19	3	---	---	---	324	---	---	---	102
L-F19 - L-F20	3	---	---	---	312	---	---	---	98
L-F20 - L-F21	3	---	---	---	372	---	---	---	118
L-F21 - STUB	---	---	---	---	---	---	---	---	5
CATEGORY 0090 TOTALS					**5857**	**1742**	**---**	**1756**	**2496**
PROJECT ID TOTALS					**26683**	**3167**	**4268**	**1756**	**10130**

ALL ITEMS ON THIS SHEET ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

ELECTRICAL WIRE LIGHTING AND CONDUIT RIGID NONMETALLIC SCHEDULE 40

FROM - TO	NUMBER OF WIRES 8 AWG	6 AWG	4 AWG	2 AWG	655.0620 ELECTRICAL WIRE LIGHTING 8 AWG LF	655.0625 6 AWG LF	655.0630 4 AWG LF	655.0635 2 AWG LF	652.0225 CONDUIT 2-INCH LF
CABINET A									
CIRCUIT 1 LCC A - LPB-A3	3	---	---	---	33	---	---	---	5
LPB-A3 - LPB-A2	3	---	---	---	105	---	---	---	29
LPB-A2 - LPB-A1	3	---	---	---	138	---	---	---	40
LPB-A1 - L-A22	3	---	---	---	111	---	---	---	31
L-A22 - L-A24	3	---	---	---	384	---	---	---	122
L-A24 - LPB-A12	3	---	---	---	204	---	---	---	62
LPB-A12 - LPB-A11	---	---	---	---	---	---	---	---	48
LPB-A12 - L-A26	3	---	---	---	84	---	---	---	22
L-A26 - L-A28	3	---	---	---	321	---	---	---	101
L-A28 - STUB	---	---	---	---	---	---	---	---	5
CIRCUIT 2 LCC A - LPB-A3	2	---	---	---	22	---	---	---	---
LPB-A3 - LPB-A4	3	---	---	---	312	---	---	---	98
LPB-A4 - LPB-A5	3	---	---	---	135	---	---	---	39
LPB-A5 - LPB-A6	---	---	---	---	---	---	---	---	107
LPB-A5 - LPB-A7	3	---	---	---	156	---	---	---	46
LPB-A7 - L-A21	3	---	---	---	162	---	---	---	48
L-A21 - L-A23	3	---	---	---	345	---	---	---	109
L-A23 - LPB-A8	3	---	---	---	45	---	---	---	9
LPB-A8 - L-A34	3	---	---	---	213	---	---	---	65
L-A34 - L-A35	3	---	---	---	276	---	---	---	86
L-A35 - L-A36	3	---	---	---	267	---	---	---	83
L-A36 - STUB	---	---	---	---	---	---	---	---	5
L-A23 - LPB-A8	2	---	---	---	30	---	---	---	---
LPB-A8 - LPB-A9	3	---	---	---	129	---	---	---	37
LPB-A9 - L-A25	3	---	---	---	276	---	---	---	86
L-A25 - LPB-A10	3	---	---	---	87	---	---	---	23
LPB-A10 - LPB-A11	---	---	---	---	---	---	---	---	47
LPB-A10 - L-A27	3	---	---	---	282	---	---	---	88
L-A27 - L-A29	3	---	---	---	270	---	---	---	84
L-A29 - STUB	---	---	---	---	---	---	---	---	5
CIRCUIT 3 LCC A - LPB-A3	2	---	---	---	22	---	---	---	---
LPB-A3 - L-A30	3	---	---	---	84	---	---	---	22
L-A30 - L-A31	3	---	---	---	183	---	---	---	55
L-A31 - L-A32	3	---	---	---	177	---	---	---	53
L-A32 - L-A33	3	---	---	---	198	---	---	---	60
L-A33 - STUB	---	---	---	---	---	---	---	---	5
LCC A - LPB-A3	2	---	---	---	22	---	---	---	---
LPB-A3 - L-A20	3	---	---	---	165	---	---	---	49
L-A20 - LPB-A4	3	---	---	---	168	---	---	---	50
LPB-A4 - L-A18	3	---	---	---	93	---	---	---	25
L-A18 - L-A16	3	---	---	---	288	---	---	---	90
L-A16 - L-A14	3	---	---	---	240	---	---	---	74
L-A14 - L-A12	3	---	---	---	234	---	---	---	72
L-A12 - L-A10	3	---	---	---	225	---	---	---	69
L-A10 - L-A8	3	---	---	---	231	---	---	---	71
L-A8 - L-A6	3	---	---	---	228	---	---	---	70
L-A6 - L-A5	3	---	---	---	234	---	---	---	72
L-A5 - L-A3	3	---	---	---	231	---	---	---	71
L-A3 - L-A1	3	---	---	---	222	---	---	---	68
L-A1 - STUB	---	---	---	---	---	---	---	---	5
CIRCUIT 4 LCC A - LPB-A3	2	---	---	---	22	---	---	---	---

-CONTINUED-

ELECTRICAL WIRE LIGHTING AND CONDUIT RIGID NONMETALLIC SCHEDULE 40

FROM - TO	NUMBER OF WIRES 8 AWG	6 AWG	4 AWG	2 AWG	655.0620 ELECTRICAL WIRE LIGHTING 8 AWG LF	655.0625 6 AWG LF	655.0630 4 AWG LF	655.0635 2 AWG LF	652.0225 CONDUIT 2-INCH LF
LPB-A3 - LPB-A4	2	---	---	---	208	---	---	---	---
LPB-A4 - LPB-A5	2	---	---	---	90	---	---	---	---
LPB-A5 - LPB-A7	2	---	---	---	104	---	---	---	---
LPB-A7 - L-A19	3	---	---	---	75	---	---	---	19
L-A19 - L-A17	3	---	---	---	270	---	---	---	84
L-A17 - L-A15	3	---	---	---	252	---	---	---	78
L-A15 - L-A13	3	---	---	---	231	---	---	---	71
L-A13 - L-A11	3	---	---	---	258	---	---	---	80
L-A11 - L-A9	3	---	---	---	246	---	---	---	76
L-A9 - L-A7	3	---	---	---	255	---	---	---	79
L-A7 - L-A4	3	---	---	---	255	---	---	---	79
L-A4 - L-A2	3	---	---	---	252	---	---	---	78
L-A2 - STUB	---	---	---	---	---	---	---	---	5
CIRCUIT 5 LCCA - LPB-A3	2	---	---	---	22	---	---	---	---
LPB-A3 - LPB-A4	2	---	---	---	208	---	---	---	---
LPB-A4 - LPB-A5	2	---	---	---	90	---	---	---	---
LPB-A5 - LPB-A7	2	---	---	---	104	---	---	---	---
LPB-A7 - LPB-A8	3	---	---	---	516	---	---	---	166
LPB-A8 - LPB-A9	2	---	---	---	86	---	---	---	---
LPB-A9 - RCG-1	3	---	---	---	48	---	---	---	10
CABINET B									
CIRCUIT 1 LCC B - LPB-B23	1	---	2	---	21	---	42	---	15
LPB-B23 - L-B47	1	---	2	---	84	---	168	---	78
L-B47 - LPB-B22	1	---	2	---	72	---	144	---	66
LPB-B22 - L-B49	1	---	2	---	12	---	24	---	6
L-B49 - L-B51	1	---	2	---	112	---	224	---	106
L-B51 - L-B53	1	---	2	---	94	---	188	---	88
L-B53 - L-B55	1	---	2	---	86	---	172	---	80
L-B55 - L-B57	1	---	2	---	80	---	160	---	74
L-B57 - L-B59	1	---	2	---	83	---	166	---	77
L-B59 - L-B61	3	---	---	---	249	---	---	---	77
L-B61 - L-B63	3	---	---	---	249	---	---	---	77
L-B63 - L-B65	3	---	---	---	255	---	---	---	79
L-B65 - L-B67	3	---	---	---	246	---	---	---	76
L-B67 - L-B69	3	---	---	---	246	---	---	---	76
L-B69 - L-B71	3	---	---	---	258	---	---	---	80
L-B71 - L-B73	3	---	---	---	258	---	---	---	80
L-B73 - STUB	---	---	---	---	---	---	---	---	5
CIRCUIT 2 LCC B - LPB-B23	---	---	2	---	---	---	42	---	---
LPB-B23 - LPB-B22	1	---	2	---	149	---	298	---	143
LPB-B22 - LPB-B21	1	---	2	---	48	---	96	---	42
LPB-B21 - LPB-B20	1	---	2	---	48	---	96	---	42
LPB-B20 - L-B48	1	---	2	---	43	---	86	---	37
L-B48 - LPB-B19	---	---	---	---	---	---	---	---	34
L-B48 - LPB-B20	---	---	2	---	---	---	86	---	---
LPB-B20 - L-B50	1	---	2	---	53	---	106	---	47
L-B50 - L-B52	1	---	2	---	102	---	204	---	96
L-B52 - L-B54	1	---	2	---	87	---	174	---	81
L-B54 - L-B56	1	---	2	---	83	---	166	---	77
L-B56 - L-B58	1	---	2	---	84	---	168	---	78

-CONTINUED-

ALL ITEMS ON THIS SHEET
ARE CATEGORY 0010
UNLESS OTHERWISE NOTED

ELECTRICAL WIRE LIGHTING AND CONDUIT RIGID NONMETALLIC SCHEDULE 40

FROM - TO	NUMBER OF WIRES 8 AWG	6 AWG	4 AWG	2 AWG	655.0620 ELECTRICAL WIRE LIGHTING 8 AWG LF	655.0625 6 AWG LF	655.0630 4 AWG LF	655.0635 2 AWG LF	652.0225 CONDUIT 2-INCH LF
L-B58 - L-B60	1	---	2	---	78	---	156	---	72
L-B60 - L-B62	1	---	2	---	81	---	162	---	75
L-B62 - L-B64	1	---	2	---	83	---	166	---	77
L-B64 - L-B66	1	---	2	---	84	---	168	---	78
L-B66 - L-B68	1	---	2	---	84	---	168	---	78
L-B68 - L-B70	3	---	---	---	252	---	---	---	78
L-B70 - L-B72	3	---	---	---	252	---	---	---	78
L-B72 - L-B74	3	---	---	---	219	---	---	---	67
L-B74 - STUB	---	---	---	---	---	---	---	---	5
CIRCUIT 3 LCC B - LPB-B23	2	---	---	---	42	---	---	---	---
LPB-B23 - L-B45	3	---	---	---	84	---	---	---	22
L-B45 - L-B75	3	---	---	---	282	---	---	---	88
L-B75 - L-B76	3	---	---	---	234	---	---	---	72
L-B76 - L-B77	3	---	---	---	225	---	---	---	69
L-B77 - STUB	---	---	---	---	---	---	---	---	5
LCC-B - LPB-B23	2	---	---	---	42	---	---	---	15
LPB-B23 - LPB-B24	3	---	---	---	144	---	---	---	42
LPB-B24 - L-B43	3	---	---	---	243	---	---	---	75
L-B43 - LPB-B13	3	---	---	---	147	---	---	---	43
LPB-B13 - L-B41	3	---	---	---	195	---	---	---	59
L-B41 - L-B39	3	---	---	---	294	---	---	---	92
L-B39 - L-B37	3	---	---	---	255	---	---	---	79
L-B37 - STUB	---	---	---	---	---	---	---	---	5
CIRCUIT 4 LCC B - LPB-B23	---	---	2	---	---	---	42	---	---
LPB-B23 - LPB-B24	1	---	2	---	48	---	96	---	---

-CONTINUED-

LIGHTING CONTROL CABINETS

STATION	OFFSET	DESCRIPTION	661.0400.S.01 CABINET TYPE 3060 EACH	654.0217 CONCRETE CABINET BASES TYPE 9 SPECIAL EACH	LOCATION
760+81 A	31' RT	LCC-A	---	1	NB EXIT RAMP
770+62 D	20' LT	LCC-B	---	1	SB ENTRANCE RAMP
TOTALS			**---**	**2**	
CATEGORY 0010 TOTALS			**---**	**3**	
16+00 K	100' LT	LCC-E	1	1	CTH U
25+45 TR	10' RT	LCC-F	1	1	NTC TRAIL
CATEGORY 0090 TOTALS			**2**	**2**	
***PROJECT ID TOTALS**			**2**	**5**	

ELECTRICAL WIRE LIGHTING AND CONDUIT RIGID NONMETALLIC SCHEDULE 40

FROM - TO	NUMBER OF WIRES 8 AWG	6 AWG	4 AWG	2 AWG	655.0620 ELECTRICAL WIRE LIGHTING 8 AWG LF	655.0625 6 AWG LF	655.0630 4 AWG LF	655.0635 2 AWG LF	652.0225 CONDUIT 2-INCH LF
LPB-B24 - LPB-B13	1	---	2	---	124	---	248	---	118
LPB-B13 - LPB-B14	1	---	2	---	52	---	104	---	46
LPB-B14 - LPB-B15	---	---	---	---	---	---	---	---	102
LPB-B14 - LPB-B16	1	---	2	---	52	---	104	---	46
LPB-B16 - L-B42	1	---	2	---	22	---	44	---	16
L-B42 - L-B40	3	---	---	---	279	---	---	---	87
L-B40 - L-B38	3	---	---	---	279	---	---	---	87
L-B38 - STUB	---	---	---	---	---	---	---	---	5
L-B42 - LPB-B16	2	---	---	---	44	---	---	---	---
LPB-B16 - L-B44	3	---	---	---	234	---	---	---	72
L-B44 - L-B46	3	---	---	---	375	---	---	---	119
L-B46 - LPB-B17	3	---	---	---	45	---	---	---	9
LPB-B17 - LPB-B18	3	---	---	---	120	---	---	---	34
LPB-B18 - LPB-B19	3	---	---	---	102	---	---	---	28
LPB-B19 - L-B78	3	---	---	---	144	---	---	---	42
L-B78 - L-B79	3	---	---	---	177	---	---	---	53
L-B79 - L-B80	3	---	---	---	192	---	---	---	58
L-B80 - L-B81	3	---	---	---	201	---	---	---	61
L-B81 - L-B82	3	---	---	---	213	---	---	---	65
L-B82 - L-B83	3	---	---	---	210	---	---	---	64
L-B83 - STUB	---	---	---	---	---	---	---	---	5
CIRCUIT 5 LCCB - LPB-B23	2	---	---	---	42	---	---	---	---
LPB-B23 - LPB-B24	2	---	---	---	96	---	---	---	---
LPB-B24 - RCG-2	3	---	---	---	48	---	---	---	---
CABINET RCGC-A									
RCGC-A - RCGPB-1	3	---	---	---	33	---	---	---	5
RCGPB-1 - RCG-3	3	---	---	---	48	---	---	---	10
TOTALS					**20826**	**---**	**4268**	**---**	**7559**
CATEGORY 0010 TOTALS					**20826**	**1425**	**4268**	**---**	**7634**
***PROJECT ID TOTALS**					**26683**	**3167**	**4268**	**1756**	**10130**

ELECTRICAL SERVICE METER BREAKER PEDESTAL

CATEGORY	STATION	OFFSET	DESCRIPTION	656.0200 LS	LOCATION
0090	.04 25+45 TR	10' RT	LCC-F	1	NTC TRAIL
0090	.05 16+00 K	100' LT	LCC-E	1	CTH U

ALL ITEMS ON THIS SHEET ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

LIGHTING UNIT AND LUMINAIRE ITEMS

STATION	OFFSET	LIGHTING UNIT NUMBER	657.0322 POLES TYPE 5 ALUMINUM EACH	657.0337 POLES TYPE 17 ALUMINUM EACH	657.0710 LUMINAIRE ARMS TRUSS TYPE 4 1/2-INCH CLAMP 12-FT EACH	657.0725 6-INCH CLAMP 15-FT EACH	657.0730 6-INCH CLAMP 12-FT EACH	659.0115 LUMINAIRES UTILITY HPS 150 WATTS EACH	659.0125 LUMINAIRES UTILITY HPS 250 WATTS EACH	659.0700 LIGHTING UNITS WALKWAY EACH	654.0105 CONCRETE BASES TYPE 5 EACH	654.0107 CONCRETE BASES TYPE 7 EACH	654.0111 CONCRETE BASES TYPE 11 EACH	657.0210 TRANSFORMER 15-17 INCH BOLT CIRCLE EACH	657.0255 BASE BREAKAWAY 11 1/2- INCH BOLT CIRCLE EACH	655.0610 ELECTRICAL WIRE LIGHTING 12 AWG LF
30+96 KS	34.9 LT	L-A1	1	---	1	---	---	1	---	---	1	---	---	---	1	156
31+51 KN	38.8 RT	L-A2	1	---	1	---	---	1	---	---	1	---	---	---	1	156
31+64 KS	34.0 LT	L-A3	1	---	1	---	---	1	---	---	1	---	---	---	1	156
32+31 KN	34.0 RT	L-A4	1	---	1	---	---	1	---	---	1	---	---	---	1	156
32+35 KS	34.0 LT	L-A5	1	---	1	---	---	1	---	---	1	---	---	---	1	156
33+06 KS	34.0 LT	L-A6	1	---	1	---	---	1	---	---	1	---	---	---	1	156
33+12 KN	34.0 RT	L-A7	1	---	1	---	---	1	---	---	1	---	---	---	1	156
33+77 KS	34.0 LT	L-A8	1	---	1	---	---	1	---	---	1	---	---	---	1	156
33+90 KN	34.0 RT	L-A9	1	---	1	---	---	1	---	---	1	---	---	---	1	156
34+48 KS	34.0 LT	L-A10	1	---	1	---	---	1	---	---	1	---	---	---	1	156
34+63 KN	34.0 RT	L-A11	1	---	1	---	---	1	---	---	1	---	---	---	1	156
35+15 KS	34.0 LT	L-A12	1	---	1	---	---	1	---	---	1	---	---	---	1	156
35+41 KN	34.0 RT	L-A13	1	---	1	---	---	1	---	---	1	---	---	---	1	156
35+87 KS	34.0 LT	L-A14	1	---	1	---	---	1	---	---	1	---	---	---	1	156
36+09 KN	34.0 RT	L-A15	1	---	1	---	---	1	---	---	1	---	---	---	1	156
36+66 KS	34.0 LT	L-A16	1	---	1	---	---	1	---	---	1	---	---	---	1	156
36+84 KN	33.1 RT	L-A17	1	---	1	---	---	1	---	---	1	---	---	---	1	156
37+61 KS	34.0 LT	L-A18	1	---	1	---	---	1	---	---	1	---	---	---	1	156
37+75 KN	35.8 RT	L-A19	1	---	1	---	---	1	---	---	1	---	---	---	1	156
38+36 KS	42.9 LT	L-A20	1	---	1	---	---	1	---	---	1	---	---	---	1	156
100+82 KE	41.1 RT	L-A21	1	---	1	---	---	---	1	---	1	---	---	---	1	156
103+71 KE	35.5 RT	L-A22	1	---	1	---	---	---	1	---	1	---	---	---	1	156
762+05 B	6.0 RT	L-A23	1	---	1	---	---	---	1	---	1	---	---	---	1	156
102+92 KE	35.5 RT	L-A24	1	---	1	---	---	---	1	---	1	---	---	---	1	156
40+28 KN	33.1 RT	L-A25	1	---	1	---	---	---	1	---	1	---	---	---	1	156
40+87 KS	33.8 LT	L-A26	1	---	1	---	---	1	---	---	1	---	---	---	1	156
41+43 KN	33.9 RT	L-A27	1	---	1	---	---	1	---	---	1	---	---	---	1	156
41+97 KS	31.8 LT	L-A28	1	---	1	---	---	1	---	---	1	---	---	---	1	156
42+31 KN	34.0 RT	L-A29	1	---	1	---	---	1	---	---	1	---	---	---	1	156
760+61 A	22.0 RT	L-A30	1	---	1	---	---	1	---	---	1	---	---	---	1	156
759+98 A	21.6 RT	L-A31	1	---	1	---	---	1	---	---	1	---	---	---	1	156
759+42 A	13.1 RT	L-A32	1	---	1	---	---	1	---	---	1	---	---	---	1	156
758+83 A	6.3 RT	L-A33	1	---	1	---	---	1	---	---	1	---	---	---	1	156
762+76 B	6.0 RT	L-A34	1	---	1	---	---	1	---	---	1	---	---	---	1	156
763+62 B	6.0 RT	L-A35	1	---	1	---	---	1	---	---	1	---	---	---	1	156
764+45 B	6.0 RT	L-A36	1	---	1	---	---	1	---	---	1	---	---	---	1	156
46+50 KS	34.0 LT	L-B37	1	---	1	---	---	1	---	---	1	---	---	---	1	156
46+81 KN	34.0 RT	L-B38	1	---	1	---	---	1	---	---	1	---	---	---	1	156
47+30 KS	34.0 LT	L-B39	1	---	1	---	---	1	---	---	1	---	---	---	1	156
47+64 KN	33.0 RT	L-B40	1	---	1	---	---	1	---	---	1	---	---	---	1	156
48+25 KS	34.0 LT	L-B41	1	---	1	---	---	1	---	---	1	---	---	---	1	156
48+58 KN	34.9 RT	L-B42	1	---	1	---	---	1	---	---	1	---	---	---	1	156
49+30 KS	36.0 LT	L-B43	1	---	1	---	---	---	1	---	1	---	---	---	1	156
200+86 KW	35.7 RT	L-B44	1	---	1	---	---	---	1	---	1	---	---	---	1	156
770+40 D	6.0 LT	L-B45	1	---	1	---	---	---	1	---	1	---	---	---	1	156
201+63 KW	35.5' RT	L-B46	1	---	1	---	---	---	1	---	1	---	---	---	1	156
202+93 KW	36.0' RT	L-B47	1	---	1	---	---	---	1	---	1	---	---	---	1	156
51+14 KN	41.0' RT	L-B48	1	---	1	---	---	1	---	---	1	---	---	---	1	156
51+77 KS	35.5' LT	L-B49	1	---	1	---	---	1	---	---	1	---	---	---	1	156
51+98 KN	30.0' RT	L-B50	1	---	1	---	---	1	---	---	1	---	---	---	1	156

-CONTINUED-

*** OTHER QUANTITIES LOCATED ELSEWHERE IN PLAN**

ALL ITEMS ON THIS SHEET
ARE CATEGORY 0010
UNLESS OTHERWISE NOTED

LIGHTING UNIT AND LUMINAIRE ITEMS

STATION	OFFSET	LIGHTING UNIT NUMBER	657.0322 POLES TYPE 5 ALUMINUM EACH	657.0337 POLES TYPE 17 ALUMINUM EACH	657.0710 LUMINAIRE ARMS 4 1/2-INCH CLAMP 12-FT EACH	657.0725 TRUSS TYPE 6-INCH CLAMP 15-FT EACH	657.0730 TRUSS TYPE 6-INCH CLAMP 12-FT EACH	659.0115 LUMINAIRES UTILITY HPS 150 WATTS EACH	659.0125 LUMINAIRES UTILITY HPS 250 WATTS EACH	659.0700 LIGHTING UNITS WALKWAY EACH	654.0105 CONCRETE BASES TYPE 5 EACH	654.0107 CONCRETE BASES TYPE 7 EACH	654.0111 CONCRETE BASES TYPE 11 EACH	657.0210 TRANSFORMER 15-17 INCH BOLT CIRCLE EACH	657.0255 BASE BREAKAWAY 11 1/2- INCH BOLT CIRCLE EACH	655.0610 ELECTRICAL WIRE LIGHTING 12 AWG LF
52+87 KS	33.0' LT	L-B51	1	---	1	---	---	1	---	---	1	---	---	---	1	156
52+98 KN	34.0' RT	L-B52	1	---	1	---	---	1	---	---	1	---	---	---	1	156
53+67 KS	34.0' LT	L-B53	1	---	1	---	---	1	---	---	1	---	---	---	1	156
53+83 KN	34.0' RT	L-B54	1	---	1	---	---	1	---	---	1	---	---	---	1	156
54+43 KS	34.0' LT	L-B55	1	---	1	---	---	1	---	---	1	---	---	---	1	156
64+60 KN	34.0' RT	L-B56	1	---	1	---	---	1	---	---	1	---	---	---	1	156
55+14 KS	34.0' LT	L-B57	1	---	1	---	---	1	---	---	1	---	---	---	1	156
55+38 KN	34.0' RT	L-B58	1	---	1	---	---	1	---	---	1	---	---	---	1	156
55+91 KS	34.0' LT	L-B59	1	---	1	---	---	1	---	---	1	---	---	---	1	156
56+10 KN	34.0' RT	L-B60	1	---	1	---	---	1	---	---	1	---	---	---	1	156
56+68 KS	34.0' LT	L-B61	1	---	1	---	---	1	---	---	1	---	---	---	1	156
56+85 KN	34.0' RT	L-B62	1	---	1	---	---	1	---	---	1	---	---	---	1	156
57+47 KS	34.0' LT	L-B63	1	---	1	---	---	1	---	---	1	---	---	---	1	156
57+63 KN	34.0' RT	L-B64	1	---	1	---	---	1	---	---	1	---	---	---	1	156
58+22 KS	35.7' LT	L-B65	1	---	1	---	---	1	---	---	1	---	---	---	1	156
58+40 KN	36.7' RT	L-B66	1	---	1	---	---	1	---	---	1	---	---	---	1	156
58+98 KS	40.7' LT	L-B67	1	---	1	---	---	1	---	---	1	---	---	---	1	156
59+18 KN	39.4' RT	L-B68	1	---	1	---	---	1	---	---	1	---	---	---	1	156
59+79 KS	38.0' LT	L-B69	1	---	1	---	---	1	---	---	1	---	---	---	1	156
59+96 KN	38.0' RT	L-B70	1	---	1	---	---	1	---	---	1	---	---	---	1	156
60+62 KS	38.0' LT	L-B71	1	---	1	---	---	1	---	---	1	---	---	---	1	156
60+74 KN	38.0' RT	L-B72	1	---	1	---	---	1	---	---	1	---	---	---	1	156
61+42 KS	38.0' LT	L-B73	1	---	1	---	---	1	---	---	1	---	---	---	1	156
61+41 KN	38.0' RT	L-B74	1	---	1	---	---	1	---	---	1	---	---	---	1	156
769+53 D	6.0' LT	L-B75	1	---	1	---	---	1	---	---	1	---	---	---	1	156
768+83 D	6.8' LT	L-B76	1	---	1	---	---	1	---	---	1	---	---	---	1	156
768+15 D	13.1' LT	L-B77	1	---	1	---	---	1	---	---	1	---	---	---	1	156
771+95 C	22.0' LT	L-B78	1	---	1	---	---	1	---	---	1	---	---	---	1	156
772+23 C	20.6' LT	L-B79	1	---	1	---	---	1	---	---	1	---	---	---	1	156
773+19 C	18.2' LT	L-B80	1	---	1	---	---	1	---	---	1	---	---	---	1	156
773+83 C	13.0' LT	L-B81	1	---	1	---	---	1	---	---	1	---	---	---	1	156
774+48 C	6.3' LT	L-B82	1	---	1	---	---	1	---	---	1	---	---	---	1	156
775+14 C	10.3' LT	L-B83	1	---	1	---	---	1	---	---	1	---	---	---	1	156
71+62.9 U	70.7' RT	REINSTALL	---	---	---	---	---	---	---	---	---	1	---	---	---	---
TOTALS			**83**	**---**	**83**	**---**	**---**	**73**	**10**	**---**	**83**	**1**	**---**	**---**	**83**	**12948**
***CATEGORY 0010 TOTALS**			**83**	**---**	**83**	**---**	**---**	**73**	**10**	**---**	**87**	**1**	**---**	**---**	**90**	**12948**
***PROJECT ID TOTALS**			**83**	**8**	**83**	**16**	**---**	**73**	**26**	**13**	**87**	**9**	**13**	**8**	**90**	**15258**

*** OTHER QUANTITIES LOCATED ELSEWHERE IN PLAN**

ALL ITEMS ON THIS SHEET ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

LIGHTING UNIT AND LUMINAIRE ITEMS

STATION	OFFSET	LIGHTING UNIT NUMBER	657.0322 POLES TYPE 5 ALUMINUM EACH	657.0337 POLES TYPE 17 ALUMINUM EACH	657.0710 LUMINAIRE ARMS TRUSS TYPE 4 1/2-INCH CLAMP 12-FT EACH	657.0725 6-INCH CLAMP 15-FT EACH	657.0730 6-INCH CLAMP 12-FT EACH	659.0115 LUMINAIRES UTILITY HPS 150 WATTS EACH	659.0125 LUMINAIRES UTILITY HPS 250 WATTS EACH	659.0700 LIGHTING UNITS WALKWAY EACH	654.0105 CONCRETE BASES TYPE 5 EACH	654.0107 CONCRETE BASES TYPE 7 EACH	654.0111 CONCRETE BASES TYPE 11 EACH	657.0210 TRANSFORMER 15-17 INCH BOLT CIRCLE EACH	657.0255 BASE BREAKAWAY 11 1/2- INCH BOLT CIRCLE EACH	655.0610 ELECTRICAL WIRE LIGHTING 12 AWG LF
18+05 K	22.0' LT	L-E1	---	1	---	2	---	---	2	---	---	1	---	1	---	240
19+38 K	35.0' LT	L-E2	---	1	---	2	---	---	2	---	---	1	---	1	---	240
20+80 K	35.0' LT	L-E3	---	1	---	2	---	---	2	---	---	1	---	1	---	240
22+20 K	35.0' LT	L-E4	---	1	---	2	---	---	2	---	---	1	---	1	---	240
23+60 K	15.0' LT	L-E5	---	1	---	2	---	---	2	---	---	1	---	1	---	240
24+95 K	15.0' LT	L-E6	---	1	---	2	---	---	2	---	---	1	---	1	---	240
26+35 K	20.0' LT	L-E7	---	1	---	2	---	---	2	---	---	1	---	1	---	240
27+75 K	25.0' LT	L-E8	---	1	---	2	---	---	2	---	---	1	---	1	---	240
25+55 TR	8.0' RT	L-F9	---	---	---	---	---	---	---	1	---	---	1	---	---	30
26+45 TR	8.0' LT	L-F10	---	---	---	---	---	---	---	1	---	---	1	---	---	30
27+40 TR	8.0' RT	L-F11	---	---	---	---	---	---	---	1	---	---	1	---	---	30
28+30 TR	8.0' LT	L-F12	---	---	---	---	---	---	---	1	---	---	1	---	---	30
29+21 TR	8.0' RT	L-F13	---	---	---	---	---	---	---	1	---	---	1	---	---	30
30+13 TR	8.0' LT	L-F14	---	---	---	---	---	---	---	1	---	---	1	---	---	30
31+09 TR	8.0' RT	L-F15	---	---	---	---	---	---	---	1	---	---	1	---	---	30
31+98 TR	8.0' LT	L-F16	---	---	---	---	---	---	---	1	---	---	1	---	---	30
32+89 TR	8.0' RT	L-F17	---	---	---	---	---	---	---	1	---	---	1	---	---	30
9+32 TL	8.0' RT	L-F18	---	---	---	---	---	---	---	1	---	---	1	---	---	30
33+75 TR	8.0' LT	L-F19	---	---	---	---	---	---	---	1	---	---	1	---	---	30
34+62 TR	8.0' RT	L-F20	---	---	---	---	---	---	---	1	---	---	1	---	---	30
35+65 TR	8.0' LT	L-F21	---	---	---	---	---	---	---	1	---	---	1	---	---	30
CATEGORY 0090 TOTALS			**---**	**8**	**---**	**16**	**---**	**---**	**16**	**13**	**---**	**8**	**13**	**8**	**---**	**2310**
***PROJECT ID TOTALS**			**83**	**8**	**83**	**16**	**---**	**73**	**26**	**13**	**87**	**9**	**13**	**8**	**90**	**15258**

SALVAGE AND REINSTALL LIGHTING UNIT

STATION	OFFSET	SPV.0060.32 EACH
71+62.9 U	RT	1
CATEGORY TOTAL		**1**

*** OTHER QUANTITIES LOCATED ELSEWHERE IN PLAN**

ALL ITEMS ON THIS SHEET
ARE CATEGORY 0010
UNLESS OTHERWISE NOTED

SAWING

STATION TO STATION	LOCATION	STAGE	690.0150 ASPHALT LF	690.0250 CONCRETE LF
30+80 KN - 31+35 KN	LT, CTH K NB	4	---	89
40+68 KN	LT & RT, CTH K NB	4	---	105
41+50 KN	LT & RT, CTH K NB	4	---	96
52+50 KN	RT, CTH K NB	5A	---	28
30+64 KS - 32+93 KS	RT, CTH K SB	4	---	231
30+64 KS - 32+93 KS	LT, CTH K SB	4	---	231
32+93 KS	CTH K SB	4	---	53
37+78 KS - 38+54 KS	LT, CTH K SB	4	---	136
14+41 K	RT		---	2.5
14+46 K	RT		---	2.5
14+80 K	RT		---	2.5
14+80 K	LT, MEDIAN ISLAND		---	2.5
14+80 K	LT, LEFT-TURN ISLAND		---	5
14+80 K	LT, CTH U RIGHT-TURN ISLAND		---	2.5
14+89 K	RT		---	2.5
14+89 K	LT, MEDIAN ISLAND		---	2.5
14+89 K	LT, LEFT-TURN ISLAND		---	5.5
14+89 K	LT, CTH U RIGHT-TURN ISLAND		---	2.5
70+53 U	RT		---	2.5
71+01 U	LT		---	2.5
71+07 U	LT		---	2.5
71+35 U	LT		---	2.5
71+43 U	LT		---	2.5
71+47 U - 71+73 U	RT, CTH U RIGHT-TURN ISLAND		42	---
71+61 U	RT, CTH U RIGHT-TURN ISLAND		---	2.5
71+68 U	LT		---	2.5
71+73 U	RT		---	2.5
71+74 U	RT		---	2.5
71+79 U	LT		---	2.5
71+82 U	RT		---	2.5
71+83 U	RT		---	2.5
71+85 U	RT		---	5
363+26 BT		2B	4	---
374+00 CT		3	6	---
375+00 CT		3	6	---
374+62 CT		3	3	---
382+00 CT		3	8	---
CATEGORY TOTALS			**69**	**1035**
***PROJECT ID TOTALS**			**91**	**1294**

CRACK AND DAMAGE SURVEY

PROJECT	999.1500.S LS
1170-01-70	0.4

MISCELLANEOUS ROCK EXCAVATION

LOCATION	SPV.0035.01 CY
UNDISTRIBUTED	100
CATEGORY TOTAL	**100**

PORTABLE CHANGEABLE MESSAGE SIGN

PROJECT	SPV.0045.01 (PCMS) CELLULAR COMMUNICATIONS DAY
1170-01-70	475
CATEGORY TOTAL	**475**

TRAFFIC SIGNAL CONTROLLER

STATION	SPV.0060.40 FULLY ACTUATED 8 PHASE AND CABINET EACH
13+10	1
CATEGORY TOTAL	**1**

CONCRETE PAVEMENT JOINT LAYOUT

PROJECT	SPV.0105.07 LS
1170-01-70	1

REMOVING AND RAZING

LOCATION	SPV.0105 LS
.14 PARCEL 17	1
.15 PARCEL 18	1

WET DETENTION POND LINER

STATION TO STATION	LOCATION	SPV.180.04 SY	REMARKS
771+00 C - 776+00 C	LT	4900	POND A
752+00 NB - 755+50 NB	RT	2800	POND B
CATEGORY TOTAL		**7700**	

RESEARCH AND LOCATE EXISTING PROPERTY MONUMENTS

PROJECT	SPV.0105.01 LS
1170-01-70	1

VERIFY AND REPLACE EXISTING PROPERTY MONUMENTS

PROJECT	SPV.0105.03 LS
1170-01-70	1

TEMPORARY TRAFFIC SIGNALS FOR INTERSECTION

LOCATION	SPV.0105 LS
.10 USH 51 NB AT CTH U	1
.11 USH 51 NB AT BUS 51	1
.12 CTH U AT OVERLOOK/WESTWOOD DRIVE	1
.13 CTH K AT OVERLOOK DRIVE	1
.20 USH 51 SB AT BUS 51	1

CRASH CUSHION TEMPORARY ONSITE

LOCATION	SPV.0105.16 LS
ENTIRE PROJECT	1

GPS BASED TRAFFIC SIGNAL PREEMPTION

LOCATION	SPV.0105 LS
.17 BUS 51 AND COLLEGE DRIVE	1
.18 BUS 51 AND CAMPUS DRIVE	1
.19 BUS 51 AND RANDOLPH STREET	1

3-INCH CLEAN ROADSTONE

STATION TO STATION	LOCATION	SPV.0195.01 TON
358+00 AT - 360+00 AT	TEMP A RAMP	467
CATEGORY TOTAL		**467**

*** OTHER QUANTITIES LOCATED ELSEWHERE IN PLAN**

ALL ITEMS ON THIS SHEET ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

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ROCK MULCH 1-INCH SIZE

STATION TO STATION	LOCATION	SPV.0165.02 3-INCH DEEP SF	SPV.0165.03 6-INCH DEEP SF
100+00 KE - 104+12 KE	KE ROUNDABOUT	3040	1060
200+00 KW - 204+12 KW	KW ROUNDABOUT	3040	1060
CATEGORY TOTALS		**6080**	**2120**

LANDSCAPE PLANTING SURVEILLANCE AND CARE CYCLE

TIME FRAME	SPV.0060.10 EACH	REMARKS
8/15/13 - 10/15/13	8	WEEKLY, 8/15/14 - 10/15/14
5/15/14 - 10/15/14	16	WEEKLY, 5/15/15 - 10/15/15
CATEGORY TOTAL	**24**	

RAINBOW PILLAR SERVICEBERRY

STATION TO STATION	LOCATION	632.0101 EACH	SIZE WHEN PLANTED/ ROOT ZONE MODE	REMARKS
100+00 KE - 104+12 KE	KE ROUNDABOUT	2	8', #25 CONTAINER	30' SPACING
200+00 KW - 204+12 KW	KW ROUNDABOUT	3	8', #25 CONTAINER	20' SPACING
CATEGORY TOTAL		**5**		

AVALANCHE REED GRASS #1 CG

STATION TO STATION	LOCATION	SPV.0060.11 EACH	SIZE WHEN PLANTED/ ROOT ZONE MODE	REMARKS
100+00 KE - 104+12 KE	KE ROUNDABOUT	350	#1/CG	SPACE 2'-0" O.C.
200+00 KW - 204+12 KW	KW ROUNDABOUT	220	#1/CG	SPACE 2'-0" O.C.
CATEGORY TOTAL		**570**		

NORTHWIND SWITCH GRASS #1 CG

STATION TO STATION	LOCATION	SPV.0060.12 EACH	SIZE WHEN PLANTED/ ROOT ZONE MODE	REMARKS
200+00 KW - 204+12 KW	KW ROUNDABOUT	140	#1/CG	SPACE 3'-0" O.C.
CATEGORY TOTAL		**140**		

FLAME GRASS #1 CG

STATION TO STATION	LOCATION	SPV.0060.13 EACH	SIZE WHEN PLANTED/ ROOT ZONE MODE	REMARKS
100+00 KE - 104+12 KE	KE ROUNDABOUT	264	#1/CG	SPACE 3'-0" O.C.
200+00 KW - 204+12 KW	KW ROUNDABOUT	200	#1/CG	SPACE 3'-0" O.C.
CATEGORY TOTAL		**464**		

WEED BARRIER

STATION TO STATION	LOCATION	SPV.0165.01 SF
100+00 KE - 104+12 KE	KE ROUNDABOUT	4100
200+00 KW - 204+12 KW	KW ROUNDABOUT	4100
CATEGORY TOTAL		**8200**

LADYS MANTLE #1 CG

STATION TO STATION	LOCATION	SPV.0060.14 EACH	SIZE WHEN PLANTED/ ROOT ZONE MODE	REMARKS
100+00 KE - 104+12 KE	KE ROUNDABOUT	152	#1/CG	SPACE 2'-0" O.C.
CATEGORY TOTAL		**152**		

HAPPY RETURNS DAYLILY #1 CG

STATION TO STATION	LOCATION	SPV.0060.15 EACH	SIZE WHEN PLANTED/ ROOT ZONE MODE	REMARKS
100+00 KE - 104+12 KE	KE ROUNDABOUT	210	#1/CG	SPACE 2'-0" O.C.
CATEGORY TOTAL		**210**		

XENOX STONECROP #1 CG

STATION TO STATION	LOCATION	SPV.0060.16 EACH	SIZE WHEN PLANTED/ ROOT ZONE MODE	REMARKS
100+00 KE - 104+12 KE	KE ROUNDABOUT	270	#1/CG	SPACE 2'-0" O.C.
200+00 KW - 204+12 KW	KW ROUNDABOUT	425	#1/CG	SPACE 2'-0" O.C.
CATEGORY TOTAL		**695**		

MOONSHINE YARROW #1 CG

STATION TO STATION	LOCATION	SPV.0060.17 EACH	SIZE WHEN PLANTED/ ROOT ZONE MODE	REMARKS
200+00 KW - 204+12 KW	KW ROUNDABOUT	374	#1/CG	SPACE 2'-0" O.C.
CATEGORY TOTAL		**374**		

TOPSOIL SPECIAL

STATION TO STATION	LOCATION	SPV.0180.05 SY
100+00 KE - 104+12 KE	KE ROUNDABOUT	455
200+00 KW - 204+12 KW	KW ROUNDABOUT	455
CATEGORY TOTAL		**910**

*** OTHER QUANTITIES LOCATED ELSEWHERE IN PLAN**

ALL ITEMS ON THIS SHEET ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

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CLEARING AND GRUBBING

STATION TO STATION	201.0105 CLEARING STA	201.0205 GRUBBING STA
35+00 TR - 36+00 TR	1	1
6+00 TL - 8+00 TL	2	2
28+00 TR - 29+00 TR	1	1
CATEGORY TOTALS	**4**	**4**
***PROJECT ID TOTALS**	**80**	**80**

BASE AGGREGATE DENSE 1 1/4-INCH

STATION TO STATION	305.0120 TON
40+00 SW - 43+75 SW	47
25+00 TR - 36+58 TR	572
9+95 TL - 16+25 TL	194
CATEGORY TOTAL	**813**
***PROJECT ID TOTAL**	**36526**

ASPHALTIC SURFACE

STATION TO STATION	465.0105 TON
25+00 TR - 36+58 TR	154
9+95 TL - 16+25 TL	52
CATEGORY TOTAL	**206**

CULVERT PIPE REINFORCED CONCRETE TYPE III

STATION	522.0118 18-INCH LF	522.0130 30-INCH LF
35+85 TR	---	48
42+25 SW	10	---
CATEGORY TOTALS	**10**	**48**
***PROJECT ID TOTALS**	**10**	**101**

APRON ENDWALLS FOR CULVERT PIPE SALVAGED

STATION	524.0618 18-INCH EACH	524.0630 30-INCH EACH
35+85 TR	---	1
42+25 SW	1	---
CATEGORY TOTALS	**1**	**1**

CONCRETE SIDEWALK 4-INCH

STATION TO STATION	602.0405 SF
40+00 SW - 43+75 SW	1890
36+46 TR - 36+58 TR	39
6+25 TL - 6+35 TL	39
CATEGORY TOTAL	**1968**
***PROJECT ID TOTAL**	**46453**

CONCRETE CURB AND GUTTER

STATION TO STATION	LOCATION	601.0411 30-INCH TYPE D LF	601.0553 4-INCH SLOPED 36-INCH TYPE D LF
36+50 TR		14	---
6+23 TL - 6+37 TL	RT	---	14
CATEGORY TOTALS		**14**	**14**
***PROJECT ID TOTALS**		**682**	**14**

CURB RAMP DETECTABLE WARNING FIELD YELLOW

STATION	602.0505 SF
36+50 TR	20
6+30 TL	20
CATEGORY TOTAL	**40**
***PROJECT ID TOTAL**	**576**

TOPSOIL, MULCHING, FERTILIZER, & SEEDING

STATION TO STATION	LOCATION	STAGE	625.0100 TOPSOIL SY	TOPSOIL DEPTH INCHES	630.0140 SEEDING MIXTURE NO. 40 LB	SPV.0030.01 FERTILIZER FOR LAWN TYPE TURF CWT	SPV.0120.01 WATER FOR SEEDED AREAS MGAL	SPV.0180.01 PREPARING TOPSOIL FOR LAWN TYPE TURF SY
25+00 TR - 36+60 TR	LT&RT	2	3937	6	71	2.5	88	3937
40+00 SW - 43+75 SW	LT&RT	2	719	6	13	0.5	16	719
STAGE 2 TOTALS			**4656**		**84**	**3.0**	**104**	**4656**
UNDISTRIBUTED			1194		21	1.0	26	1194
CATEGORY TOTALS			**5850**		**105**	**4.0**	**130**	**5850**
***PROJECT ID TOTALS**			**227600**		**320**	**13.0**	**4980**	**17550**

MOBILIZATIONS EROSION CONTROL AND EMERGENCY EROSION CONTROL

PROJECT	628.1905 EACH	628.1910 EMERGENCY EACH
1170-01-70	1	1
CATEGORY TOTALS	**1**	**1**
***PROJECT ID TOTALS**	**15**	**15**

SILT FENCE

STATION TO STATION	LOCATION	STAGE	628.1504 LF	628.1520 MAINTENANCE LF
25+10 TR - 30+00 TR	RT	2	500	500
42+70 SW - 43+80 SW	RT	2	120	120
STAGE 2 TOTALS			**620**	**620**
UNDISTRIBUTED			155	155
CATEGORY TOTALS			**775**	**775**
***PROJECT ID TOTALS**			**8225**	**8225**

*** OTHER QUANTITIES LOCATED ELSEWHERE IN PLAN**

ALL ITEMS ON THIS SHEET ARE CATEGORY 0090 UNLESS OTHERWISE NOTED

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EROSION MAT URBAN CLASS I TYPE A

STATION TO STATION	LOCATION	STAGE	628.2006 SY
25+00 TR - 36+60 TR	LT&RT	2	3937
40+00 SW - 43+75 SW	LT&RT	2	719
STAGE 2 TOTAL			**4656**
UNDISTRIBUTED			1194
CATEGORY TOTAL			**5850**
***PROJECT ID TOTALS**			**17850**

INLET PROTECTION TYPE C

STATION TO STATION	LOCATION	STAGE	628.7015 EACH
5+63 TL - 8+03 TL	RT	1	3
42+20 SW - 43+77 SW	RT	1	2
STAGE 1 TOTAL			**5**
UNDISTRIBUTED			1
CATEGORY TOTAL			**6**
***PROJECT ID TOTAL**			**109**

TEMPORARY DITCH CHECKS

STATION TO STATION	LOCATION	STAGE	628.7504 LF
26+00 TR - 32+00 TR	LT	2	120
STAGE 2 TOTAL			**120**
UNDISTRIBUTED			30
CATEGORY TOTAL			**150**
***PROJECT ID TOTAL**			**1820**

ROCK BAGS

STATION	LOCATION	STAGE	628.7570 EACH
43+00 SW	RT	2	15
STAGE 2 TOTAL			**15**
UNDISTRIBUTED			5
CATEGORY TOTAL			**20**
***PROJECT ID TOTAL**			**405**

ERECTION OF TYPE II SIGNS AND SUPPORTS

SIGN NO.	STATION	LOCATION	SIGN CODE	W X H	637.0202 SIGNS REFLECTIVE TYPE II SF	634.0811 POSTS TUBULAR STEEL 2X2X11 EACH	638.2102 MOVING SIGNS TYPE II EACH	REMARKS
39-1	34+95 TR	RT	W11-15	30" X 30"	6.25	1	---	
39-2	34+95 TR	RT	W16-9P	24" X 12"	2.00	---	---	MOUNT WITH 39-2
39-3	36+35 TR	RT	W11-15	30" X 30"	6.25	1	---	
39-4	36+35 TR	RT	W16-7L	24" X 12"	2.00	---	---	MOUNT WITH 39-3
39-5	36+45 TR	RT	W11-15	30" X 30"	6.25	1	---	
39-6	36+45 TR	RT	W16-7L	24" X 12"	2.00	---	---	MOUNT WITH 39-5
39-7	36+60 TR	LT	---	--- X ---	---	1	1	MOVE FROM 36+38 TR
39-8	40+90 SW	LT	W11-15	30" X 30"	6.25	1	---	
39-9	40+90 SW	LT	W16-9P	24" X 12"	2.00	---	---	MOUNT WITH 39-8
CATEGORY TOTALS					**33.00**	**5**	**1**	
***PROJECT ID TOTALS**					**1656.08**	**12**	**8**	

PAVEMENT MARKING DIAGONAL EPOXY 12-INCH

STATION	DESCRIPTION	647.0726 WHITE LF
36+30 TR	RT, CROSSWALK AT 14TH AVE & NTC ENTRANCE/EXIT	325
CATEGORY TOTAL		**325**
***PROJECT ID TOTAL**		**490**

CONSTRUCTION STAKING

STATION TO STATION	650.4500 SUBGRADE LF	650.5000 BASE LF	650.9920 SLOPE STAKES LF
25+00 TR - 36+58 TR	1158	1158	1158
9+95 TL - 16+25 TL	630	630	630
40+00 SW - 43+75 SW	375	375	375
CATEGORY TOTALS	**2163**	**2163**	**2163**
***PROJECT ID TOTALS**	**23969**	**8498**	**23969**

PAVEMENT MARKING CROSSWALK EPOXY 12-INCH

STATION	DESCRIPTION	647.0776 WHITE LF
36+30 TR	RT, 14TH AVE & NTC ENTRANCE/EXIT	95
CATEGORY TOTAL		**95**
***PROJECT ID TOTAL**		**944**

SAWING CONCRETE

STATION	LOCATION	690.0250 LF
6+23 TL	RT	3
6+37 TL	RT	3
36+50 TR	LT	2.5
36+50 TR	RT	2.5
CATEGORY TOTAL		**11**
***PROJECT ID TOTAL**		**1294**

*** OTHER QUANTITIES LOCATED ELSEWHERE IN PLAN**

ALL ITEMS ON THIS SHEET ARE CATEGORY 0090 UNLESS OTHERWISE NOTED

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CLEARING AND GRUBBING

STATION TO STATION	LOCATION	201.0105 CLEARING STA	201.0205 GRUBBING STA
71+00 KN - 73+00 KN	RT, CTH K NB	2	2
CATEGORY TOTALS		**2**	**2**
***PROJECT ID TOTALS**		**80**	**80**

REMOVING SMALL PIPE CULVERTS

STATION	LOCATION	TYPE	DIAMETER	LENGTH	203.0100 EACH
71+05 KN	CTH K	CMCP	18"	80'	1
67+76 KN	CTH K	CPRC	18"	98'	1
CATEGORY TOTAL					**2**
***PROJECT ID TOTAL**					**17**

REMOVING PAVEMENT

STATION TO STATION	LOCATION	204.0100 SY
61+50 KN - 73+50 KN	CTH K NB	3200
61+50 KS - 73+50 KS	CTH K SB	3200
CATEGORY TOTAL		**6400**
***PROJECT ID TOTAL**		**43900**

REMOVING CURB & GUTTER

STATION TO STATION	LOCATION	204.0150 LF
67+75 KN - 67+90 KN	RT	15
CATEGORY TOTAL		**15**
***PROJECT ID TOTAL**		**79**

BASE AGGREGATE DENSE

STATION TO STATION	LOCATION	305.0110 3/4-INCH TON	305.0120 1 1/4-INCH TON	310.0110 OPEN GRADED TON
61+50 KN - 73+50 KN	CTH K NB	220	2600	180
61+50 KS - 73+50 KS	CTH K SB	220	2700	---
CATEGORY TOTALS		**440**	**5300**	**180**
***PROJECT ID TOTALS**		**4010**	**36526**	**9062**

SELECT CRUSHED MATERIAL

STATION TO STATION	LOCATION	312.0110 TON
61+50 KN - 73+50 KN	CTH K NB	4600
61+50 KS - 73+50 KS	CTH K SB	4800
CATEGORY TOTAL		**9400**
***PROJECT ID TOTAL**		**68723**

HMA PAVEMENT ITEMS

STATION TO STATION	LOCATION	460.1100 HMA PAVEMENT TYPE E-0.3 TON	460.1103 HMA PAVEMENT TYPE E-3 TON	455.0115 ASPHALTIC MATERIAL PG64-22 TON	455.0122 ASPHALTIC MATERIAL PG64-34 TON	455.0605 TACK COAT GAL
61+50 KN - 73+50 KN	CTH K NB	195	1575	65	32	235
61+50 KS - 73+50 KS	CTH K SB	200	1650	68	33	245
CATEGORY TOTALS		**395**	**3225**	**133**	**65**	**480**
***PROJECT ID TOTALS**		**5970**	**4185**	**338**	**219**	**1599**

CULVERT PIPE REINFORCED CONCRETE TYPE III 24-INCH

STATION	LOCATION	522.0124 LF
67+50 KN	CTH K NB	84
70+00 KN	CTH K NB	72
CATEGORY TOTAL		**156**
***PROJECT ID TOTAL**		**364**

APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 24-INCH

STATION	LOCATION	522.1024 EACH
67+50 KN	CTH K NB	1
70+00 KN	CTH K NB	1
CATEGORY TOTAL		**2**
***PROJECT ID TOTAL**		**5**

*** OTHER QUANTITIES LOCATED ELSEWHERE IN PLAN**

ALL ITEMS ON THIS SHEET ARE CATEGORY 0100 UNLESS OTHERWISE NOTED

3

CONCRETE CURB AND GUTTER 6-INCH SLOPED 36-INCH TYPE D

STATION TO STATION	LOCATION	601.0557 LF
67+75 KN - 67+90 KN	RT, CTH K NB	15
CATEGORY TOTAL		**15**
***PROJECT ID TOTAL**		**315**

RIPRAP MEDIUM AND GEOTEXTILE FABRIC TYPE HR

STATION TO STATION	LOCATION	STAGE	606.0200 RIPRAP MEDIUM CY	645.0120 FABRIC TYPE HR SY
67+50 KN	RT	5	23	60
70+00 KN	RT	5	7	22
STAGE 5 TOTALS			**30**	**82**
CATEGORY TOTALS			**30**	**82**
***PROJECT ID TOTALS**			**1836**	**4290**

INLETS AND INLET COVERS

STATION	LOCATION	611.3902 INLETS MEDIAN 2 GRATE EACH	611.0642 INLET COVERS TYPE MS EACH	(1) TOP OF BOX ELEV.	(2) DEPTH	(3) INLET ELEV.
67+50 KN	24.43' LT	1	2	1240.64	3.00	1237.64
70+00 KN	21.03' LT	1	2	1240.42	3.00	1237.42
CATEGORY TOTALS		**2**	**4**			
***PROJECT ID TOTALS**		**8**	**16**			

(1) TOP OF BOX ELEVATION FOR STRUCTURES WITH TYPE MS COVERS EQUALS RIM OR FLOWLINE ELEVATION.
(2) DEPTH EQUALS TOP OF BOX ELEVATION MINUS INLET ELEVATION.
(3) ALL SUBSURFACE ELEVATIONS ARE PIPE FLOWLINES.

PIPE UNDERDRAIN 6-INCH ITEMS

STATION TO STATION	LOCATION	612.0106 6-INCH LF	645.0111 GEOTEXTILE FABRIC TYPE DF SCHEDULE A SY
61+50 KN - 67+50 KN	CTH K NB	600	420
70+00 KN - 73+50 KN	CTH K NB	350	240
CATEGORY TOTALS		**950**	**660**
***PROJECT ID TOTALS**		**16042**	**8346**

WATER

LOCATION	624.0100 MGAL
BASE COMPACTION	150
DUST CONTROL	80
CATEGORY TOTAL	**230**
***PROJECT ID TOTAL**	**2230**

TOPSOIL, MULCHING, FERTILIZER, & SEEDING

STATION TO STATION	LOCATION	STAGE	625.0100 TOPSOIL SY	TOPSOIL DEPTH INCHES	627.0200 MULCHING SY	629.0210 FERTILIZER TYPE B CWT	630.0120 SEEDING MIXTURE NO. 20 LB	630.0130 SEEDING MIXTURE NO. 30 LB	SPV.0120.01 WATER FOR SEEDED AREAS MGAL
61+50 KN - 73+50 KN	RT	5	2693	4	2693	1.7	29	30	61
STAGE 5 TOTALS			**2693**		**2693**	**1.7**	**29**	**30**	**61**
61+50 KS - 73+50 KS	LT&RT	6	6337	4	5498	4.0	32	93	142
STAGE 6 TOTALS			**6337**		**5498**	**4.0**	**32**	**93**	**142**
UNDISTRIBUTED			2270	4	2059	1.3	14	37	47
CATEGORY TOTALS			**11300**		**10250**	**7.0**	**75**	**160**	**250**
***PROJECT ID TOTALS**			**227600**		**118000**	**139.0**	**3675**	**1285**	**4980**

SILT FENCE

STATION TO STATION	LOCATION	STAGE	628.1504 LF	628.1520 MAINTENANCE LF
61+50 KN - 73+50 KN	RT	5	1050	1050
STAGE 5 TOTALS			**1050**	**1050**
71+40 KS - 73+70 KS	LT	6	220	220
STAGE 6 TOTALS			**220**	**220**
UNDISTRIBUTED			330	330
CATEGORY TOTALS			**1600**	**1600**
***PROJECT ID TOTALS**			**8225**	**8225**

MOBILIZATIONS EROSION CONTROL AND EMERGENCY EROSION CONTROL

PROJECT	628.1905 EACH	628.1910 EMERGENCY EACH
1170-01-70	2	2
CATEGORY TOTALS	**2**	**2**
***PROJECT ID TOTALS**	**15**	**15**

*** OTHER QUANTITIES LOCATED ELSEWHERE IN PLAN**

ALL ITEMS ON THIS SHEET ARE CATEGORY 0100 UNLESS OTHERWISE NOTED

EROSION MAT

STATION TO STATION	LOCATION	STAGE	628.2004 CLASS I TYPE B SY
61+50 KS - 73+50 KS	RT	6	839
STAGE 6 TOTAL			**839**
UNDISTRIBUTED			211
CATEGORY TOTAL			**1050**
***PROJECT ID TOTAL**			**72550**

INLET PROTECTION

STATION	LOCATION	STAGE	628.7005 TYPE A EACH	628.7010 TYPE B EACH
67+55 KS	RT	6	1	1
70+06 KS	RT	6	1	1
STAGE 6 TOTALS			**2**	**2**
UNDISTRIBUTED			1	1
CATEGORY TOTALS			**3**	**3**
***PROJECT ID TOTALS**			**92**	**21**

CULVERT PIPE CHECKS

STATION	LOCATION	STAGE	628.7555 EACH
67+72 KN	LT	5	2
71+03 KN	LT	5	2
STAGE 5 TOTAL			**4**
72+00 KS	LT	6	15
STAGE 6 TOTAL			**15**
UNDISTRIBUTED			6
CATEGORY TOTAL			**25**
***PROJECT ID TOTAL**			**185**

ROCK BAGS

STATION TO STATION	LOCATION	STAGE	628.7570 EACH
65+00 KN - 72+30 KN	RT	5	60
STAGE 5 TOTAL			**60**
71+75 KS - 72+20 KS	LT	6	30
STAGE 6 TOTAL			**30**
UNDISTRIBUTED			30
CATEGORY TOTAL			**120**
***PROJECT ID TOTAL**			**405**

MARKERS CULVERT ENDS

STATION	LOCATION	633.5200 EACH
67+50 KN	RT, CTH K NB	1
70+00 KN	RT, CTH K NB	1
CATEGORY TOTAL		**2**

REMOVAL OF TYPE II SIGNS AND SUPPORTS

SIGN NO.	STATION	LOCATION	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH
42-1	61+65 KS	LT	10	2
42-2	66+60 KS	LT	7	2
42-3	66+60 KN	RT	1	1
42-4	68+00 KN	LT	1	1
42-5	68+00 KN	LT	1	---
42-6	68+40 KN	LT	1	1
42-7	68+40 KN	LT	1	---
42-8	69+74 KS	RT	1	1
42-9	69+74 KS	RT	1	---
42-10	69+98 KS	RT	1	1
42-11	69+98 KS	RT	1	---
42-12	71+20 KN	RT	1	1
42-13	71+20 KN	RT	1	---
42-14	71+27 KS	RT	1	1
42-15	71+30 KN	LT	1	1
42-16	71+30 KN	LT	1	---
42-17	72+00 KN	LT	1	1
CATEGORY TOTALS			**32**	**13**
***PROJECT ID TOTALS**			**238**	**136**

ERECTION OF TYPE II SIGNS AND SUPPORTS

SIGN NO.	STATION	LOCATION	SIGN CODE	W X H	637.0202 SIGNS REFLECTIVE TYPE II SF	634.0616 4x6x16 EACH	634.0618 POSTS WOOD 4x6x18 EACH	634.0620 4x6x20 EACH	REMARKS
43-1	64+75 KN	RT	R3-20R	36" X 54"	13.50	---	---	1	
43-2	65+50 KN	LT	R5-1A	42" X 30"	8.75	---	1	---	
43-3	65+50 KN	RT	R5-1A	42" X 30"	8.75	---	1	---	
43-4	65+60 KS	LT	R2-1	30" X 36"	7.50	1	---	---	45 MPH
43-5	66+60 KS	LT	J1-3	108" X 75"	56.25	---	---	2	
43-6	67+20 KN	RT	D11-1	30" X 24"	5.00	1	---	---	
43-7	67+20 KN	RT	M7-6	12" X 9"	0.75	---	---	---	MOUNT WITH 43-7
43-8	67+37 KS	LT	D11-1	30" X 24"	5.00	1	---	---	
43-9	67+72 KN	RT	R5-1	36" X 36"	9.00	---	1	---	
43-10	68+00 KN	LT	R5-1	36" X 36"	9.00	---	1	---	
43-11	68+45 KS	RT	R4-7	36" X 48"	12.00	---	1	---	
43-12	69+15 KN	LT	R4-7	36" X 48"	12.00	---	1	---	
43-13	69+50 KS	RT	R5-1	36" X 36"	9.00	---	1	---	
43-14	69+75 KS	LT	R5-1	36" X 36"	9.00	---	1	---	
43-15	70+45 KS	LT	D11-1	30" X 24"	5.00	1	---	---	
43-16	70+45 KS	LT	M7-6	12" X 9"	0.75	---	---	---	MOUNT WITH 43-16
43-17	70+60 KN	RT	D11-1	30" X 24"	5.00	1	---	---	
43-18	71+20 KN	LT	W6-2	36" X 36"	9.00	---	1	---	
43-19	71+20 KN	RT	W6-2	36" X 36"	9.00	---	1	---	
43-20	72+00 KS	LT	R5-1A	42" X 30"	8.75	---	1	---	
43-21	72+00 KS	RT	R5-1A	42" X 30"	8.75	---	1	---	
43-22	72+20 KN	RT	R2-1	30" X 36"	7.50	1	---	---	45 MPH
43-23	72+25 KS	LT	R3-20R	36" X 54"	13.50	---	---	1	
CATEGORY TOTALS					**232.75**	**6**	**12**	**4**	
***PROJECT ID TOTALS**					**1656.08**	**65**	**31**	**5**	

*** OTHER QUANTITIES LOCATED ELSEWHERE IN PLAN**

ALL ITEMS ON THIS SHEET ARE CATEGORY 0100 UNLESS OTHERWISE NOTED

3

PAVEMENT MARKING EPOXY

STATION TO STATION	DESCRIPTION	646.0106 4-INCH WHITE LF	646.0106 4-INCH YELLOW LF	646.0126 8-INCH WHITE LF
61+50 KS - 68+08 KS	SB EDGELINE	660	---	---
61+50 KS - 68+08 KS	SB CENTERLINE SKIPS	165	---	---
61+50 KS - 68+56 KS	SB EDGELINE	---	710	---
61+50 KN - 68+51 KN	NB EDGELINE	---	710	---
61+50 KN - 67+76 KN	NB CENTERLINE SKIPS	155	---	---
61+50 KN - 67+76 KN	NB EDGELINE	625	---	---
65+75 KN - 67+76 KN	NB CHANNELIZING	---	---	200
66+45 KN - 68+45 KN	NB CHANNELIZING	---	---	200
69+04 KN - 73+50 KN	NB EDGELINE	---	450	---
69+11 KS - 73+50 KS	SB EDGELINE	---	450	---
69+17 KS - 71+17 KS	SB CHANNELIZING	---	---	200
69+60 KN - 73+50 KN	NB CENTERLINE SKIPS	100	---	---
69+60 KN - 73+50 KN	NB EDGELINE	390	---	---
69+68 KS - 73+50 KS	SB EDGELINE	385	---	---
69+68 KS - 71+67 KS	SB CHANNELIZING	---	---	200
69+68 KS - 73+50 KS	SB CENTERLINE SKIPS	100	---	---
TOTALS		**2580**	**2320**	**800**
CATEGORY TOTALS		**4900**		**800**
***PROJECT ID TOTALS**		**62435**		**1978**

PAVEMENT MARKING ARROWS EPOXY TYPE 1

STATION	LOCATION	647.0156 WHITE EACH
69+00 KN	RT	2
CATEGORY TOTAL		**2**

PAVEMENT MARKING ARROWS EPOXY TYPE 2

STATION	LOCATION	647.0166 WHITE EACH
65+95 KN	RT	1
66+65 KN	LT	1
67+56 KN	RT	1
68+25 KN	LT	1
69+00 KN	RT	4
69+37 KS	RT	1
69+88 KS	LT	1
70+97 KS	RT	1
71+47 KS	LT	1
CATEGORY TOTAL		**12**
***PROJECT ID TOTAL**		**13**

PAVEMENT MARKING WORDS EPOXY

STATION	DESCRIPTION	647.0356 WHITE EACH
66+72 KN	RT, "ONLY"	1
67+41 KN	LT, "ONLY"	1
68+85 KN	RT, "ONLY"	3
69+02 KN	RT, "ONLY"	3
70+21 KS	RT, "ONLY"	1
70+71 KS	LT, "ONLY"	1
CATEGORY TOTAL		**10**
***PROJECT ID TOTAL**		**11**

CONSTRUCTION STAKING

STATION TO STATION	650.4500 SUBGRADE LF	650.5000 BASE LF	650.9920 SLOPE STAKES LF
61+50 KN - 73+50 KN	1200	1200	1200
61+50 KS - 73+50 KS	1200	1200	1200
CATEGORY TOTALS	**2400**	**2400**	**2400**
***PROJECT ID TOTALS**	**23969**	**8498**	**23969**

CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER

STATION TO STATION	LOCATION	650.5500 LF
67+75 KN - 67+90 KN	RT, CTH K NB	15
CATEGORY TOTAL		**15**
***PROJECT ID TOTAL**		**11367**

CONSTRUCTION STAKING PIPE CULVERTS

STATION	650.6000 EACH
67+50 KN	1
70+00 KN	1
CATEGORY TOTAL	**2**
***PROJECT ID TOTAL**	**12**

SAWING

STATION TO STATION	LOCATION	690.0150 ASPHALT LF	690.0250 CONCRETE LF
67+90 KN - 69+60 KN	LT, CTH K NB	---	200
73+50 KN	LT, CTH K NB	3	---
73+50 KN	RT, CTH K NB	8	---
73+50 KS	LT, CTH K SB	8	---
73+50 KS	RT, CTH K SB	3	---
73+50 KN	CTH K NB	---	24
73+50 KS	CTH K SB	---	24
CATEGORY TOTALS		**22**	**248**
***PROJECT ID TOTALS**		**91**	**1294**

*** OTHER QUANTITIES LOCATED ELSEWHERE IN PLAN**

ALL ITEMS ON THIS SHEET ARE CATEGORY 0100 UNLESS OTHERWISE NOTED

ITS CABINET ITEMS

LOCATION	ITEM ID	659.0802 PLAQUES SEQUENCE IDENTIFICATION EACH	673.0225.S INSTALL POLE MOUNTED CABINET EACH	675.0400.S INSTALL EHTERNET SWITCH EACH	677.0300.S INSTALL VIDEO ENCODER EACH	SPV.0060.52 INSTALL WIRELESS ETHERNET BRIDGE EACH
US 53 SOUTH OF BRIDGE ST	EX-CCTV-37-0005	---	---	---	---	1
US 53 & CTH K	CCTV-37-0007	2	1	1	1	2
US 53 NORTH OF EMERY DR	EX-DMS-37-0002	---	---	---	---	1
TOTALS		**2**	**1**	**1**	**1**	**4**

ITS CONDUIT & CABLE

FROM	TO	LINEAR DISTANCE	652.0125 CONDUIT RIGID METALLIC 2-INCH LF	652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH LF	674.0200 CABLE MICROWAVE DETECTOR LF
MB5105	PB5105	70	---	140	---
PB5105	PB5110	70	---	140	---
PB5110	PB5115	280	---	560	---
PB5115	CCTV-37-0007	5	10	10	---
SDS-37-0046	EXPB0046	10	---	20	20
EXPB0046	EX-DMS-37-0002	20	---	40	30
TOTALS			**10**	**910**	**50**
***CATEGORY TOTALS**			**10**	**8544**	**50**
***PROJECT ID TOTALS**			**10**	**11040**	**50**

ITS ELECTRICAL ITEMS

LOCATION	ITEM ID	MB ID	NUMBER OF WIRES	WIRE LINEAR DISTANCE FROM CABINET TO METER BREAKER	655.0615 ELECTRICAL WIRE LIGHTING 10 AWG LF	655.0625 ELECTRICAL WIRE LIGHTING 6 AWG LF	656.0200.07 ELECTRICAL SERVICE METER BREAKER PEDESTAL (STA) LS	656.0500.01 ELECTRICAL SERVICE BREAKER DISCONNECT BOX (STA 766+85 NB) LS
US 53 & CTH K	CCTV-37-0007	MB5105	3	425	475	1425	1	1
***CATEGORY TOTALS**					**475**	**1425**	**1**	**1**
***PROJECT ID TOTALS**					**475**	**3167**	**1**	**1**

ITS CCTV

LOCATION	ITEM ID	672.0250 BASE CAMERA POLE 50-FT EACH	677.0100 INSTALL CAMERA POLE EACH	677.0200 INSTALL CAMERA ASSEMBLY EACH
US 53 & CTH K	CCTV-37-0007	1	1	1
TOTALS		**1**	**1**	**1**

ITS MICROWAVE DETECTORS

LOCATION	ITEM ID	654.0105 CONCRETE BASE TYPE 5 EACH	675.0300 INSTALL MOUNTED CONTROLLER MICROWAVE DETECTOR ASSEMBLY EACH	SPV.0060.49 REMOVE MICROWAVE DETECTOR EACH	SPV.0060.50 SALVAGE SOLAR POWER SYSTEM EACH	SPV.0060.51 REMOVE POLE TYPE 5 EACH	SPV.0060.53 INSTALL ANTENNA EACH	SPV.0060.54 INSTALL SALVAGED TYPE 5 POLE EACH
US 53 SOUTH OF BRIDGE ST	EX-SDS-37-0040	---	---	1	1	1	---	---
US 53 SOUTH OF BRIDGE ST	EX-CCTV-37-0005	---	1	---	1	---	---	---
US 53 NORTH OF BRIDGE ST	EX-SDS-37-0042	---	1	1	---	---	---	---
US 53 & CTH K	EX-SDS-37-0044	---	---	1	1	1	---	---
US 53 & CTH K	CCTV-37-0007	---	2	---	--	--	1	---
US 53 NORTH OF EMERY DR	EX-SDS-37-0046	---	---	1	1	1	---	---
US 53 NORTH OF EMERY DR	SDS-37-0046	1	1	---	---	---	---	1
TOTALS		**1**	**5**	**4**	**4**	**3**	**1**	**1**
***CATEGORY TOTALS**		**87**	**5**	**4**	**4**	**3**	**1**	**1**

ITS PULL BOXES

LOCATION	ITEM ID	652.0700.S INSTALL CONDUIT INTO EXISTING ITEM EACH	653.0135 PULL BOXES STEEL 24 X 36 EACH
US 51 & CTH K	PB5105	---	1
US 51 & CTH K	PB5110	---	1
US 51 & CTH K	PB5115	---	1
US 53 NORTH OF EMERY DR	EXPB0046	1	---
TOTALS		**1**	**3**
***CATEGORY TOTALS**		**1**	**9**

*** OTHER QUANTITIES LOCATED ELSEWHERE IN PLAN**

ALL ITEMS ON THIS SHEET ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

3

CLEARING AND GRUBBING

STATION TO STATION	LOCATION	201.0105 CLEARING STA	201.0205 GRUBBING STA
730+00 NB - 735+00 NB	RT, USH 51	5	5
737+00 NB - 738+00 NB	RT, USH 51	1	1
767+00 NB - 770+00 NB	RT, USH 51	3	3
787+00 NB - 789+00 NB	RT, USH 51	2	2
799+00 NB - 801+00 NB	RT, USH 51	2	2
713+00 SB - 716+00 SB	LT, USH 51	3	3
732+00 SB - 740+00 SB	LT, USH 51	8	8
749+00 SB - 752+00 SB	LT, USH 51	3	3
366+00 NR - 370+00 NR	LT, 'NR' ALIGNMENT	4	4
418+00 NR - 422+00 NR	RT, 'NR' ALIGNMENT	4	4
CATEGORY TOTALS		**35**	**35**

REMOVING SMALL PIPE CULVERTS & PARTIAL PIPE

STATION	LOCATION	TYPE	DIAMETER	LENGTH	203.0100 EACH	204.9060.S.03 PARTIAL PIPE EACH	COMMENTS
418+55 NR	RT	CPRC	18"	---	---	1	ENDWALL ONLY
332+39 NR	LT	PCP	12"	8'	---	1	
352+66 NR	RT	CPRC	18"	---	---	1	ENDWALL ONLY
374+74 NR	LT	CPRC	18"	---	---	1	ENDWALL ONLY
389+75 NR	LT	CPRC	18"	---	---	1	ENDWALL ONLY
402+76 NR	LT	CPRC	18"	8'	---	1	
723+40 NB	NB LANES	CMCP	36"	120'	---	1	
723+60 NB	NB LANES	CMCP	18"	120'	1	---	
733+59 NB	NB LANES	CMCP	42"	110'	---	1	
738+77 NB	NB LANES	CMCP	42"	110'	---	1	
738+93 NB	NB LANES	CPRC	12"	108'	1	---	
753+06 NB	NB LANES	CPRC	18"	86'	1	---	
774+76 NB	NB LANES	CPRC	18"	118'	1	---	
802+71 SB	SB LANES	CPRC	18"	94'	1	---	
CATEGORY TOTALS					**5**	**9**	

REMOVING PAVEMENT

STATION TO STATION	204.0100 SY
718+65 NB - 763+00 NB	11830
767+28 NB - 811+34 NB	11750
718+60 SB - 764+25 SB	12180
768+53 SB - 811+39 SB	11430
812+79 SB - 813+50 SB	190
CATEGORY TOTAL	**47380**

REMOVING FENCE

STATION TO STATION	LOCATION	204.0170 LF
705+98 NB - 738+17 NB	RT	3219
706+05 SB - 737+23 SB	LT	3118
788+55 SB - 794+02 SB	LT	547
796+36 SB - 811+52 SB	LT	812
783+79 NB - 811+29 NB	RT	2829
CATEGORY TOTAL		**10525**

REMOVING DELINEATORS AND MARKERS

STATION	LOCATION	204.0180 EACH
702+50 NB - 818+00 NB	RT	42
703+50 SB - 823+50 SB	LT	36
CATEGORY TOTAL		**78**

REMOVING GUARDRAIL

STATION TO STATION	LOCATION	204.0165 LF
750+21 NB - 753+76 NB	LT	355
750+31 SB - 753+86 SB	RT	355
750+94 NB - 752+30 NB	RT	136
751+69 SB - 753+12 SB	LT	143
759+60 NB - 762+38 NB	RT	278
760+07 NB - 762+95 NB	LT	288
763+48 NB	LT	129
768+50 SB - 771+46 SB	RT	296
768+02 SB	RT	121
808+32 NB - 811+30 NB	LT	298
808+52 NB - 811+23 NB	RT	271
812+86 SB - 815+82 SB	RT	296
812+91 SB - 815+36 SB	LT	245
811+30 NB	LT	72
812+84 NB	LT	73
CATEGORY TOTAL		**3356**

REMOVING INLETS

STATION	LOCATION	STAGE	204.0220 EACH	COMMENTS
354+21 NR	RT	3A	1	INLET 900
354+49 NR	RT	3A	1	EXISTING
358+47 NR	RT	3A	1	INLET 901
338+55 NR	LT	5A	1	INLET 912
732+42 SB	RT	6A	1	INLET 909
743+47 SB	RT	6A	1	INLET 913
418+55 NR	RT	6A	1	INLET 905
356+50 NR	LT	6A	1	INLET 914
811+18 NB	RT	6A	1	EXISTING
374+74 NR	LT	6C	1	INLET 915
387+75 NR	LT	7	1	INLET 906
712+00 NS		7	1	INLET 907
717+00 NS		7	1	INLET 908
332+00 NR	LT	7	1	INLET 910
334+00 NR	LT	7	1	INLET 911
387+75 NR	LT	7	1	INLET 916
389+75 NR	LT	7	1	INLET 917
402+76 NR	LT	7	1	INLET 918
356+50 SR	LT	7	1	INLET 919
743+00 SB	RT	7	1	INLET 920
723+00 SB	RT	7	1	INLET 921
732+00 SB	RT	7	1	INLET 922
738+00 SB	RT	7	1	INLET 923
753+06 NB	LT	7	1	EXISTING
CATEGORY TOTAL			**24**	

REMOVING STORM SEWER

STATION TO STATION	LOCATION	STAGE	204.0245.03 18-INCH LF
354+49 NR - 355+00 NR	RT	3A	50
CATEGORY TOTAL			**50**

ABANDONING CULVERT PIPES

STATION TO STATION	LOCATION	TYPE	DIAMETER	LENGTH	204.0270 EACH
723+00 SB	SB LANES	CPRC	18"	106'	1
723+40 SB	SB LANES	CMCP	36"	102'	1
732+00 SB	SB LANES	CPRC	18"	108'	1
733+67 SB	SB LANES	CMCP	42"	120'	1
738+00 SB	SB LANES	CPRC	18"	132'	1
738+86 SB	SB LANES	CMCP	42"	130'	1
743+00 SB	SB LANES	CPRC	18"	140'	1
789+71 SB	SB LANES	CMCP	24"	98'	1
356+50 SR	SB LANES	CPRC	18"	106'	1
350+50 AT - 352+00 AT		CMCP	24"	150'	1
CATEGORY TOTAL					**10**

REMOVING CABLE GUARD

STATION TO STATION	LOCATION	204.9090.S.02 LF
703+00 NB - 709+50 NB	LT	650
CATEGORY TOTAL		**650**

TEMPORARY SHORING

STATION	LOCATION	206.6000.S SF
723+30 SB	RT, PIPE END	152
733+58 SB	RT, PIPE END	264
738+76 SB	RT, PIPE END	312
787+66 NB	LT, PIPE END	250
CATEGORY TOTAL		**978**

*** OTHER QUANTITIES LOCATED ELSEWHERE IN PLAN**

ALL ITEMS ON THIS SHEET ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

EARTHWORK SUMMARY

DIVISION	STATION TO STATION	LOCATION	CUT CY	205.0100 EXCAVATION COMMON CY	SALVAGED/ UNUSABLE PAVEMENT MATERIAL CY	(9) AVAILABLE MATERIAL CY	(8) EBS CY	205.0400 EXCAVATION MARSH CY	205.0200 EXCAVATION ROCK CY	FILL CY	(6) UNEXPANDED FILL CY	(2) (4) EXPANDED FILL CY	(5) MASS ORDINATE +/- CY	(1) WASTE CY	(3) 208.0100 BORROW CY
	350+00 AT - 360+50 AT	AT RAMP	2144	2144	---	2144	---	1002	---	2214	3116	3895	1751		
	353+50 DT - 366+00 DT	DT RAMP	989	989	---	989	---	---	---	1942	1942	2428	1439		
	705+00 NS - 727+00 NS	NS LINE (STAGE 1A)	2812	2812	---	2812	---	---	---	838	838	1048	-1765		
	348+00 ST - 353+00 ST	ST LINE	1215	1215	---	1215	---	---	---	35	35	44	-1171		
	WASTE FROM THE 1170-01-70 PROJECT		---	---	---	---	---	---	---	---	---	-188	-188		
	WASTE FROM THE 6999-18-70 PROJECT		---	---	---	---	---	---	---	---	---	-117	-117		
	UNDISTRIBUTED BORROW (10)														5000
DIVISION 1 SUBTOTAL				7160	---	7160	---	1002	---	5029	5931	7109	-52	---	5000
	364+00 NR - 411+00 NR	NR LINE	4425	4425	---	4425	---	---	---	18943	18943	23679	19254		
	706+50 NS - 724+00 NS	NS LINE (STAGE 1B)	2380	2380	---	2380	---	---	---	633	633	791	-1589		
	413+00 NR - 423+00 NR	NR LINE	433	433	---	433	---	---	---	2430	2430	3038	2605		
	WASTE FROM 1170-01-70 PROJECT		---	---	---	---	---	---	---	---	---	-20270	-20270		
DIVISION 2 SUBTOTAL				7238	---	7238	---	---	---	22006	22006	7238	---	---	---
	324+00 NR - 361+00 NR	NR LINE	6894	6894	---	6894	---	885	---	20674	21471	26838	19944		
	711+00 SB - 720+00 SB	SB LANES	1257	1257	93	1164	---	---	---	---	---	---	-1164		
	710+00 NB - 720+00 NB	NB LANES	5847	5847	90	5757	---	---	---	15	15	19	-5738		
	WASTE FROM 1170-01-70 PROJECT		---	---	---	---	---	---	---	---	---	-13042	-13042		
DIVISION 3A SUBTOTAL				13998	183	13815	---	885	---	20689	21486	13815	-0	---	---
	361+00 NR - 364+00 NR	NR LINE	164	164	---	164	---	347	---	6372	6684	8355	8191		
	WASTE FROM 1170-01-70 PROJECT		---	---	---	---	---	---	---	---	---	-8191	-8191		
DIVISION 4 SUBTOTAL				164	---	164	---	347	---	6372	6684	164		---	---
	720+00 SB - 764+00 SB	SB LANES	46032	46032	2950	43082	---	---	---	8128	7970	9963	-33120		
	769+00 SB - 811+00 SB	SB LANES	25133	25133	2860	22273	---	---	---	2120	2120	2650	-19623		
	355+00 SR - 380+00 SR	SR LINE	2239	2239	---	2239	---	---	---	1657	1657	2071	-168		
DIVISION 5 SUBTOTAL				73404	5810	67594	---	---	---	11905	11747	14684	-52910	-52910	---
	720+00 NB - 740+00 NB	NB LANES	19550	19550	1340	18210	---	---	---	390	390	488	-17723		
	747+00 NB - 763+00 NB	NB LANES	20788	20788	1070	19718	---	---	---	981	981	1226	-18492		
	767+00 NB - 811+00 NB	NB LANES	21468	21468	2940	18528	---	---	---	33	33	41	-18487		
DIVISION 6A SUBTOTAL				61806	5350	56456	---	---	---	1404	1404	1755	-54701	-54701	---
	740+00 NB - 747+00 NB	NB LANES	6625	6625	470	6155	---	---	---	---	---	---	-6155		
DIVISION 6B SUBTOTAL				6625	470	6155	---	---	---	---	---	---	-6155	-6155	---
	713+00 NB - 763+00 NB	MEDIAN	4533	4533	---	4533	---	---	---	102	102	128	-4406		
	768+00 NB - 811+00 NB	MEDIAN	18581	18581	---	18581	---	---	---	225	225	281	-18300		
DIVISION 7 SUBTOTAL				23114	---	23114	---	---	---	327	327	409	-22705	-22705	---
CATEGORY TOTALS				**193509**				**2234**	**---**						**5000**

(1) WASTE = EXPANDED FILL - EXCAVATION COMMON (FOR INFORMATION ONLY - NOT A BID ITEM)
(2) EXPANSION FACTOR = 1.25
(3) BORROW = EXPANDED FILL -AVAILABLE MATERIAL
(4) EXPANDED FILL = UNEXPANDED FILL * EXPANSION FACTOR
(5) THE MASS ORDINATE + OR - QTY CALCULATED FOR THE DIVISION. PLUS QUANTITY INDICATES AN EXCESS OF MATERIAL WITHIN THE DIVISION. MINUS INDICATES A SHORTAGE OF MATERIAL WITHIN THE DIVISION.
(6) UNEXPANDED FILL = FILL - (ROCK * 1.1) + (MARSH EXCAVATION * 1.5) - (MARSH EXCAVTION * 0.6) + (EBS * 1.25) - (EBS * 0.8) - ASSUMES THAT ALL MARSH AND EBS CAN BE USED IN FILL AREAS
(7) EARTHWORK (SUCH AS POND B) FROM PREVIOUS STAGES MAY BE COMPLETED INTO THIS STAGE
(8) EBS PAID FOR AS EXCAVATION COMMON.
(9) AVAILABLE MATERIAL = COMMON EXCAVATION - SALVAGED/UNUSABLE MATERIAL.
(10) UNDISTRUBTED BORROW IS USED TO ACCOUNT FOR POTENTIAL UNUSABLE MATERIAL WITHIN THE PROJECT DURING THE EARLY STAGES OF CONSTRUCTION

ALL ITEMS ON THIS SHEET ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

3

BASE AGGREGATE DENSE

STATION TO STATION	LOCATION	305.0110 3/4-INCH TON	305.0120 1 1/4-INCH TON
709+53 NB - 762+36 NB		1575	10667
767+53 NB - 811+14 NB		1554	12019
710+31 SB - 764+00 SB		1837	8179
769+17 SB - 811+23 SB		1390	10796
812+98 SB - 813+50 SB		254	138
324+00 NR - 421+96 NR		---	20385
319+88 SR - 379+00 SR		---	8752
704+50 NS - 726+19 NS	RT, STAGES 1A & 1B	---	3612
704+50 NS - 722+11 NS	LT, STAGES 1A & 1B	---	4091
348+00 ST - 353+25 ST		---	741
CATEGORY TOTALS		**6610**	**79380**

SELECT CRUSHED MATERIAL

STATION TO STATION	LOCATION	312.0110 TON
709+53 NB - 762+36 NB		17797
767+53 NB - 811+14 NB		17065
710+31 SB - 764+00 SB		15672
769+17 SB - 811+23 SB		14663
812+98 SB - 813+50 SB		241
324+00 NR - 421+96 NR		7841
319+88 SR - 379+00 SR		2183
704+50 NS - 726+19 NS	RT, STAGES 1A & 1B	2576
704+50 NS - 722+11 NS	LT, STAGES 1A & 1B	2572
CATEGORY TOTAL		**80610**

CONCRETE PAVEMENT 10-INCH

STATION TO STATION	415.0100 SY
709+53 NB - 762+78 NB	15295
767+44 NB - 811+15 NB	11253
109+53 NB - 714+89 NB	362
727+55 NB - 738+13 NB	1411
734+97 NB - 756+96 NB	1947
781+05 NB - 796+74 NB	1937
801+97 NB - 811+15 NB	896
710+31 SB - 764+09 SB	15536
769+06 SB - 811+23 SB	12184
710+31 SB - 712+91 SB	181
730+62 SB - 740+19 SB	1121
745+01 SB - 754+58 SB	1122
812+98 SB - 813+50 SB	150
CATEGORY TOTAL	**63395**

CONCRETE PAVEMENT APPROACH SLAB

STATION TO STATION	415.0410 SY
762+48 NB - 763+00 NB	98
766+91 NB - 767+44 NB	99
764+09 SB - 764+62 SB	99
768+53 SB - 769+06 SB	99
811+15 NB - 811+34 NB	70
811+23 SB - 811+42 SB	49
812+79 SB - 812+97 SB	49
CATEGORY TOTAL	**563**

CONCRETE PAVEMENT HES

STATION TO STATION	8-INCH 415.1080 SY	10-INCH 415.1100 SY
806+00 NB - 811+15 NB	---	1375
361+00 NR - 364+50 NR	2400	---
CATEGORY TOTAL	**2400**	**1375**

ROUTE AND SEAL

STATION TO STATION	LOCATION	415.6000.S LF
709+53 NB - 738+12 NB	RT	2858
756+96 NB - 762+48 NB	RT	557
767+27 NB - 781+05 NB	RT	1378
781+05 NB - 811+15 NB	RT	3015
709+53 NB - 762+67 NB	LT	5314
767+44 NB - 811+15 NB	LT	4371
710+31 SB - 764+10 SB	RT	5379
710+31 SB - 740+19 SB	LT	2998
740+19 SB - 754+58 SB	LT	1442
754+58 SB - 764+26 SB	LT	963
769+06 SB - 786+77 SB	LT	1771
788+10 SB - 811+23 SB	LT	2213
812+97 SB - 813+50 SB	RT	53
812+97 SB - 813+50 SB	LT	53
768+86 SB - 811+23 SB	RT	4237
CATEGORY TOTAL		**36602**

DRILLED DOWEL BARS

STATION	416.0620 EACH
709+53 NB	30
710+31 SB	30
813+50 SB	19
CATEGORY TOTAL	**79**

CONCRETE SURFACE DRAINS

STATION TO STATION	LOCATION	TYPE	416.1010 CY
762+26 NB - 762+63 NB	RT	FLUME WITH PIPE	7.0
762+86 NB - 762+98 NB	LT	FLUME	4.4
763+87 SB - 764+25 SB	RT	FLUME	6.4
764+51 SB - 764+73 SB	LT	FLUME WITH PIPE	3.6
766+80 NB - 767+02 NB	RT	FLUME WITH PIPE	3.7
767+28 NB - 767+66 NB	LT	FLUME	6.4
768+44 SB - 768+66 SB	RT	FLUME	4.4
768+90 SB - 769+31 SB	LT	FLUME WITH PIPE	6.8
811+09 NB - 811+31 NB	RT	FLUME WITH PIPE	4.5
811+14 NB - 811+35 NB	LT	FLUME WITH PIPE	4.8
811+17 SB - 811+39 SB	RT	FLUME	4.9
811+21 SB - 811+42 SB	LT	FLUME WITH PIPE	4.4
812+78 SB - 813+02 SB	RT	FLUME	5.1
812+81 SB - 813+05 SB	LT	FLUME WITH PIPE	4.8
CATEGORY TOTAL			**71.2**

*** OTHER QUANTITIES LOCATED ELSEWHERE IN PLAN**

ALL ITEMS ON THIS SHEET ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

3

HMA PAVEMENT ITEMS

STATION TO STATION	LOCATION	460.1100 HMA PAVEMENT TYPE E-0.3 TON	460.1103 HMA PAVEMENT TYPE E-3 TON	465.0105 ASPHALTIC SURFACE TON	465.0125 ASPHALTIC SURFACE TEMPORARY TON	455.0115 ASPHALTIC MATERIAL PG64-22 TON	455.0122 PG64-34 TON	455.0605 TACK COAT GAL
710+30 SB - 711+04 SB	LT SHOULDER	15	---	---	---	0.4	0.4	2
720+00 SB - 733+00 SB	LT SHOULDER	---	341	---	---	6.8	12.0	27
733+00 SB - 740+19 SB	LT SHOULDER	92	---	---	---	2.5	2.5	10
743+26 SB - 748+00 SB	LT SHOULDER	---	104	---	---	2.1	3.6	8
748+00 SB - 754+58 SB	LT SHOULDER	84	---	---	---	2.3	2.3	9
758+16 SB - 764+00 SB	LT SHOULDER	129	---	---	---	3.5	3.5	20
769+17 SB - 784+13 SB	LT SHOULDER	307	---	---	---	8.4	8.4	33
789+10 SB - 811+23 SB	LT SHOULDER	452	---	---	---	12.3	12.4	49
812+98 SB - 813+50 SB	LT SHOULDER	11	---	---	---	0.3	0.3	1
754+65 SB - 763+87 SB	RT SHOULDER	96	---	---	---	2.6	2.6	10
769+17 SB - 811+23 SB	RT SHOULDER	457	---	---	---	12.5	12.6	50
812+98 SB - 813+50 SB	RT SHOULDER	5	---	---	---	0.1	0.1	1
720+00 NB - 756+64 NB	LT SHOULDER	375	---	---	---	10.3	10.3	41
781+05 NB - 811+14 NB	RT SHOULDER	545	---	---	---	15.0	15.0	59
767+02 NB - 777+35 NB	RT SHOULDER	211	---	---	---	5.8	5.8	23
756+96 NB - 762+23 NB	RT SHOULDER	109	---	---	---	3.0	3.0	12
720+00 NB - 738+12 NB	RT SHOULDER	290	---	---	---	8.0	8.0	32
767+66 NB - 811+14 NB	LT SHOULDER	444	---	---	---	12.1	12.2	48
720+88 NB - 722+62 NB	LT, MAINTENANCE CROSSOVER	---	---	42	---	---	---	---
800+63 NB - 801+37 NB	LT, MAINTENANCE CROSSOVER	---	---	64	---	---	---	---
704+50 NS - 726+19 NS	RT	---	---	---	1941	---	---	155
704+50 NS - 727+45 NS	LT	---	---	---	1919	---	---	154
708+65 NS - 720+00 NS	RT	---	---	---	842	---	---	67
708+38 NS - 722+11 NS	LT	---	---	---	1035	---	---	83
416+28 NR - 421+96 NR		---	---	---	697	---	---	56
379+02 NR - 411+01 NR		---	---	---	3888	---	---	311
364+50 NR - 381+76 NR		---	---	---	2116	---	---	169
351+50 NR - 361+00 NR		---	---	---	1722	---	---	138
323+70 NR - 353+81 NR		---	---	---	1571	---	---	126
324+00 NR - 347+00 NR		---	---	---	1260	---	---	101
367+51 SR - 379+00 SR		---	---	---	957	---	---	77
345+89 SR - 362+38 SR		---	---	---	1372	---	---	110
319+88 SR - 339+56 SR		---	---	---	1709	---	---	137
339+56 SR - 345+89 SR		---	---	---	549	---	---	44
348+00 ST - 353+25 ST		---	---	---	267	---	---	22
CATEGORY TOTALS		**3622**	**445**	**106**	**21845**	**108**	**115**	**2185**

ASPHALTIC SHOULDER RUMBLE STRIPS

STATION TO STATION	LOCATION	465.0400 LF
709+53 NB - 762+86 NB	LT	5333
767+66 NB - 811+14 NB	LT	4348
713+89 NB - 728+00 NB	RT	1411
756+96 NB - 762+23 NB	RT	527
767+02 NB - 777+35 NB	RT	1033
795+74 NB - 803+07 NB	RT	733
710+31 SB - 763+87 SB	RT	5356
768+66 SB - 811+17 SB	RT	4251
813+02 SB - 813+50 SB	RT	48
712+46 SB - 731+62 SB	LT	1916
743+26 SB - 746+01 SB	LT	275
758+16 SB - 764+51 SB	LT	635
769+31 SB - 784+13 SB	LT	1482
788+65 SB - 811+21 SB	LT	2256
813+05 SB - 813+50 SB	LT	45
CATEGORY TOTAL		**29649**

ASPHALTIC SURFACE PATCHING

LOCATION	465.0110 TONS
UNDISTRIBUTED	10
CATEGORY TOTAL	**10**

*** OTHER QUANTITIES LOCATED ELSEWHERE IN PLAN**

ALL ITEMS ON THIS SHEET
ARE CATEGORY 0010
UNLESS OTHERWISE NOTED

3

STORM SEWER ENDWALLS AND CULVERT PIPES - CORRUGATED STEEL

STATION	LOCATION	THICKNESS INCHES	521.0118 CULVERT PIPE CORRUGATED STEEL 18-INCH LF	521.1618 AE CULVERT PIPE SLOPED SIDE DRAIN 18-INCH 10 TO 1 EACH
721+25 NB	LT	0.064	60	2
CATEGORY TOTALS			**60**	**2**

CULVERT PIPE TEMPORARY

STATION	520.4012 12-INCH LF	520.4018 18-INCH LF	520.4024 24-INCH LF	520.4036 36-INCH LF	520.4042 42-INCH LF
723+59 NS	---	6	---	---	---
333+22 NR	---	---	---	---	12
338+55 NR	22	---	---	---	---
361+84 NR	---	223	---	---	---
364+56 NR	---	---	132	---	---
338+40 NR	---	---	---	---	18
723+40 SB	---	---	---	6	---
733+67 SB	---	---	---	---	50
738+85 SB	---	---	---	---	50
TOTALS	**22**	**229**	**132**	**6**	**130**
***CATEGORY TOTALS**	**1095**	**1908**	**132**	**6**	**130**

STORM SEWER ENDWALLS AND CULVERT PIPES - REINFORCED CONCRETE

STATION TO STATION	LOCATION	522.1018 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 18-INCH EACH	522.1021 21-INCH EACH	522.1024 24-INCH EACH	522.1036 36-INCH EACH	522.1042 42-INCH EACH	522.1048 48-INCH EACH	522.0118 CULVERT PIPE REINFORCED CONCRETE, CLASS III 18-INCH LF	522.0121 21-INCH LF	522.0136 36-INCH LF	522.0142 42-INCH LF	522.0148 48-INCH LF	611.9800.S PIPE GRATES EACH	(1) JOINT TIES EACH
723+36 NB	LT & RT	---	---	---	2	---	---	---	---	214	---	---	---	12
733+50 NB	LT & RT	---	---	---	---	2	---	---	---	---	243	---	---	12
738+67 NB	LT & RT	---	---	---	---	---	2	---	---	---	---	254	---	12
774+00 NB	LT & RT	2	---	---	---	---	---	107	---	---	---	---	---	12
787+66 NB	LT & RT	---	2	---	---	---	---	---	131	---	---	---	---	12
789+40 SB	LT & RT	---	2	---	---	---	---	---	119	---	---	---	---	12
725+48 NB - 725+49 NB	LT & RT	1	---	---	---	---	---	---	---	---	---	---	---	6
753+00 NB - 753+20 NB	LT & RT	1	---	---	---	---	---	---	---	---	---	---	1	6
801+29 SB - 801+29 SB	LT & RT	1	---	---	---	---	---	---	---	---	---	---	1	6
750+46 SB - 753+45 D	LT	---	---	2	---	---	---	---	---	---	---	---	2	12
TOTALS		**5**	**4**	**2**	**2**	**2**	**2**	**107**	**250**	**214**	**243**	**254**	**4**	
***CATEGORY TOTALS**		**6**	**4**	**2**	**2**	**2**	**2**	**759**	**250**	**214**	**243**	**254**	**4**	

(1) FOR INFORMATION ONLY. NOT A BID ITEM.

APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 18-INCH

STATION	LOCATION	522.1018 EACH
418+55 NR	RT	1
TOTAL		**1**
***CATEGORY TOTAL**		**6**

CULVERT PIPE REINFORCED CONCRETE TYPE III 18-INCH

STATION	522.0118 LF	REMARKS
352+66 NR	12	
387+75 NR	30	
374+76 SR	18	
743+00 SB	140	CONNECT TO INLET 920
356+50 SR	106	CONNECT TO INLET 919
723+00 SB	106	CONNECT TO INLET 921
732+00 SB	108	CONNECT TO INLET 922
738+00 SB	132	CONNECT TO INLET 923
TOTAL	**652**	
***CATEGORY TOTAL**	**759**	

STORM SEWER MANHOLES, INLETS, AND COVERS

STATION TO STATION	LOCATION	611.3225 611.3901 INLETS 2x2.5-FT EACH	MEDIAN 1 GRATE EACH	611.0642 611.0654 INLET COVERS TYPE MS EACH	TYPE V EACH	611.2004 MANHOLES 4-FT DIA EACH	611.0530 MANHOLE COVERS TYPE J EACH
725+48 NB - 725+49 NB	LT & RT	---	1	1	---	---	---
753+00 NB - 753+20 NB	LT & RT	1	1	1	1	---	---
801+29 SB - 801+29 SB	LT & RT	---	1	1	---	---	---
750+46 SB - 753+45 D	LT	---	---	---	---	1	1
TOTALS		**1**	**3**	**3**	**1**	**1**	**1**
***CATEGORY TOTALS**		**1**	**3**	**25**	**1**	**1**	**1**

*** OTHER QUANTITIES LOCATED ELSEWHERE IN PLAN**

ALL ITEMS ON THIS SHEET ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

STORM SEWER PIPE REINFORCED CONCRETE, CLASS III

STATION TO STATION	LOCATION	608.0318 18-INCH LF	608.0324 24-INCH LF
725+48 NB - 725+49 NB	LT & RT	112	---
753+00 NB - 753+20 NB	LT & RT	140	---
801+29 SB	LT & RT	110	---
750+46 SB - 753+45 D	LT	---	303
TOTALS		**362**	**303**

***CATEGORY TOTALS**

STORM SEWER SCHEDULE (TEMPORARY DRAINAGE)

STRUCTURE NUMBER	STATION	OFFSET	611.3220 611.3902 INLETS 2x2-FT EACH	MEDIAN 2 GRATE EACH	611.0606 611.0642 611.0612 INLET COVERS TYPE B EACH	TYPE MS EACH	TYPE C EACH	FLOWLINE ELEV	BOX ELEV	DEPTH	INVERT ELEV	FROM	DISCHARGE ELEV	TO	520.4012 520.4018 CULVERT PIPE TEMPORARY 12-INCH LF	18-INCH LF	SLOPE %	521.1012 APRON ENDWALL FOR CULVERT PIPE STEEL 12-INCH EACH	521.1518 APRON ENDWALL FOR CULVERT PIPE SLOPED SIDE DRAIN STEEL 6 TO 1 18-INCH EACH	SPV.0060.03 CONNECTION TO EXIST INLETS EACH	611.8120.S COVER PLATES TEMPORARY EACH
	419+00 NR		---	---	---	---	---	---	---	---	1337.90	DITCH	1334.13	905	---	60	6.3	---	---	---	---
905	418+55 NR	20' RT	---	1	---	---	---	1336.63	1336.63	5.00	1331.63	INLET	1331.63	EX EW	---	---	---	---	---	---	1
	385+00 NR	44.7' LT	---	---	---	---	---	---	---	---	1226.77	DITCH	1224.64	906	---	225	0.0	---	---	---	---
906	387+75 NR	57' LT	---	1	---	2	---	1227.94	1227.94	3.30	1224.64	INLET	---	EX PIPE	---	30	---	---	---	---	---
907	712+00 NS	0' RT	1	---	1	---	---	1260.08	1259.25	4.00	1255.25	INLET	1254.50	EX INLET	---	12	6.3	---	---	1	---
908	717+00 NS	0' RT	1	---	1	---	---	1256.38	1255.55	2.82	1252.73	INLET	1251.08	DITCH	---	550	0.3	---	---	---	---
909	332+39 NR	24.5' LT	---	1	---	---	---	1245.89	1245.89	2.00	1243.89	INLET	---	EX PIPE	---	---	---	---	---	---	1
910	331+00 NR	48' LT	---	1	---	2	---	1247.67	1247.67	3.00	1244.67	INLET	1243.89	909	142	---	0.5	---	---	---	---
911	334+00 NR	38.4' LT	---	1	---	2	---	1245.55	1245.55	2.00	1243.55	INLET	1243.20	912	455	---	0.1	---	---	---	---
912	338+55 NR	35.8' LT	1	---	1	---	---	1246.24	1245.42	2.00	1243.42	INLET	1243.11	EX PIPE	6	---	5.2	---	---	---	---
913	343+00 NR	34.3' LT	---	1	---	2	---	1245.64	1245.64	2.00	1243.64	INLET	1243.42	912	445	---	0.0	---	---	---	---
914	356+50 NR	27' LT	1	---	---	---	1	1255.19	1254.36	2.86	1251.50	INLET	1249.98	DITCH	---	78	1.9	---	---	---	---
915	374+74 NR	29' LT	1	---	---	---	1	1254.58	1253.75	3.00	1250.75	INLET	1250.17	DITCH	---	374	0.2	---	---	---	---
	385+50 NR	44.7' LT	---	---	---	---	---	---	---	---	1226.77	DITCH	1224.64	916	---	225	0.9	---	---	---	---
916	387+75 NR	56.7' LT	---	1	---	2	---	1227.94	1227.94	3.30	1224.64	INLET	1224.16	EX PIPE	---	---	---	---	---	---	---
	389+50 NR	53' LT	---	---	---	---	---	---	---	---	1229.28	DITCH	1226.33	917	25	---	11.8	1	---	---	---
917	389+75 NR	47' LT	---	1	---	---	---	1228.83	1228.83	2.50	1226.33	INLET	1226.33	EX PIPE	---	---	---	---	---	---	1
	391+00 NR	58.1' LT	---	---	---	---	---	---	---	---	1231.39	DITCH	1226.33	917	---	125	4.0	---	1	---	---
918	402+76 NR	53.8' LT	---	1	---	2	---	1271.48	1271.45	2.50	1268.95	INLET	1268.95	EX PIPE	---	---	---	---	---	---	---
919	356+50 SR	12.5' LT	---	1	---	2	---	1252.17	1252.17	2.50	1249.67	INLET	1246.95	DITCH	---	---	---	---	---	---	---
920	743+00 SB	35' RT	---	1	---	2	---	1242.40	1242.40	3.00	1239.40	INLET	1238.97	DITCH	---	---	---	---	---	---	---
921	723+00 SB	30.5' RT	---	1	---	2	---	1251.93	1251.93	3.00	1248.93	INLET	1246.83	DITCH	---	---	---	---	---	---	---
922	732+00 SB	32' RT	---	1	---	2	---	1246.91	1246.91	3.00	1243.91	INLET	1243.37	DITCH	---	---	---	---	---	---	---
923	738+00 SB	42.5' RT	---	1	---	2	---	1241.91	1241.91	3.00	1238.91	INLET	1237.00	DITCH	---	---	---	---	---	---	---
TOTALS			**5**	**14**	**3**	**22**	**2**								**1073**	**1679**		**1**	**1**	**1**	**3**
***CATEGORY TOTALS**			**5**	**14**	**3**	**25**	**2**								**1095**	**1908**		**6**	**1**	**1**	**3**

1.) ALL SUBSURFACE ELEVATIONS ARE PIPE FLOWLINES.
2.) CALCULATED DEPTH = DISTANCE FROM TOP OF BOX TO DISCHARGE ELEVATION.
3.) PIPE LENGTHS MEASURED FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE.
4.) ALL STRUCTURES HAVE THE STATUS "NEW".

*** OTHER QUANTITIES LOCATED ELSEWHERE IN PLAN**

ALL ITEMS ON THIS SHEET ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

CONCRETE BARRIER TEMPORARY PRECAST

STATION TO STATION	LOCATION	STAGE	603.8000 DELIVERED LF	603.8125 INSTALLED LF	614.0905 CRASH CUSHION TEMPORARY EACH	OBJECT MARKING	CRASH TEST CONDITION	WIDTH
305+50 NM - 324+00 NM	NM LINE RT	1B	1850	1850	---	---	TL-3	2'
307+00 NM - 326+25 NM	NM LINE LT	1B	1925	1925	1	OM-3L	TL-3	2'
307+25 NS - 325+75 NS	NS LINE RT	1B	1850	1850	1	OM-3R	TL-3	2'
310+00 NS - 327+50 NS	NS LINE LT	1B	1750	1750	1	OM-3L	TL-3	2'
308+00 NW - 324+25 NW	NW LINE RT	1C	---	1625	1	OM-3R	TL-3	2'
310+25 NS - 324+00 NS	NS LINE LT	1C	---	1375	1	OM-3R	TL-3	2'
750+00 SP - 753+00 SP	SP LINE RT	2A	300	300	1	OM-3L	TL-3	2'
313+00 NR - 334+60 NR	NR LINE RT	3A	---	2160	---	---	TL-3	2'
324+00 NR - 332+50 NR	NR LINE LT	3A	---	850	1	OM-3L	TL-3	2'
333+25 NR - 352+50 NR	NR LINE LT	3A	---	1925	1	OM-3L	TL-3	2'
339+50 NR - 350+25 NR	NR LINE RT	3A	---	1075	1	OM-3C	TL-3	2'
379+00 NR - 388+50 NR	NR LINE LT	3A	---	950	---	---	TL-3	2'
389+25 NR - 411+00 NR	NR LINE LT	3A	2110	2175	1	OM-3L	TL-3	2'
365+50 NR - 378+50 NR	NR LINE RT	3B	1300	1300	---	---	TL-3	2'
350+50 NR - 359+50 NR	NR LINE	3B	1900	1900	---	---	TL-3	2'
312+00 NR - 419+50 NR	NR LINE RT	5A	---	10750	1	OM-3L	TL-3	2'
316+50 SR - 356+00 SR	SR LINE RT	6A	---	3950	1	OM-3L	TL-3	2'
780+00 NB - 812+70 NB	NB LINE	6A	---	3270	---	---	TL-3	2'
340+60 EV - 348+40 EV	EV LINE LT	6B	---	780	---	---	TL-3	2'
369+00 SR - 408+20 SR	SR LINE	6C	---	3920	1	OM-3R	TL-3	2'
398+50 SR - 412+70 SR	SR LINE	6C	---	1420	1	OM-3L	TL-3	2'
CATEGORY TOTALS			**12985**	**47100**	**14**			

PIPE UNDERDRAIN

STATION	LOCATION	612.0212 UNPERFORATED 12-INCH LF	521.1012 APRON ENDWALLS FOR CULVERT PIPE STEEL 12-INCH EACH	606.0200 RIPRAP MEDIUM CY	645.0120 GEOTEXTILE FABRIC TYPE HR SY
762+23 NB	SURFACE DRAIN	80	1	2	8
764+51 SB	SURFACE DRAIN	50	1	2	8
811+09 NB	SURFACE DRAIN	45	1	2	8
811+21 SB	SURFACE DRAIN	90	1	2	8
813+05 SB	SURFACE DRAIN	90	1	2	8
TOTALS		**355**	**5**	**10**	**40**
***CATEGORY TOTALS**		**355**	**6**	**246**	**668**

STEEL THRIE BEAM

STATION TO STATION	LOCATION	614.0230 LF	614.0220 BULL NOSE TERMINAL EACH
750+40 NB - 752+78 NB	MEDIAN	**275**	**2**
CATEGORY 0060 TOTALS		**275**	**2**

MGS GUARDRAIL

STATION TO STATION	LOCATION	614.2500 MGS THRIE BEAM TRANSITION LF	614.2300 MGS GUARDRAIL 3 LF	614.2610 MGS GUARDRAIL EAT EACH	614.2620 TERMINAL TYPE 2 EACH
757+02 NB - 756+94 NB	RT	8	---	---	---
760+35 NB - 759+82 NB	LT	---	---	1	---
761+97 NB - 757+02 NB	RT	---	495	---	---
762+36 NB - 761+97 NB	RT	39	---	---	---
762+60 NB - 760+35 NB	LT	---	225	---	---
762+99 NB - 762+60 NB	LT	39	---	---	---
763+48 NB	LT (MEDIAN)	---	129	---	---
768+02 SB	RT (MEDIAN)	---	121	---	---
808+10 NB - 808+63 NB	LT	---	---	1	---
808+43 NB - 808+96 NB	RT	---	---	1	---
808+63 NB - 810+88 NB	LT	---	225	---	---
808+96 NB - 810+83 NB	RT	---	187	---	---
810+83 NB - 811+22 NB	RT	39	---	---	---
810+88 NB - 811+27 NB	LT	39	---	---	---
721+75 SB - 724+75 SB	RT	---	250	1	1
768+94 SB - 771+19 SB	RT	39	225	---	---
769+59 SB - 771+46 SB	LT	39	187	---	---
771+19 SB - 771+72 SB	RT	---	---	1	---
771+46 SB - 771+99 SB	LT	---	---	1	---
811+30 NB	LT (MEDIAN)	---	72	---	---
812+84 SB	RT (MEDIAN)	---	73	---	---
812+88 SB - 813+27 SB	RT	39	---	---	---
812+92 SB - 813+31 SB	LT	39	---	---	---
813+27 SB - 815+52 SB	RT	---	225	---	---
813+31 SB - 815+18 SB	LT	---	187	---	---
815+18 SB - 815+71 SB	LT	---	---	1	---
815+52 SB - 816+05 SB	RT	---	---	1	---
CATEGORY 0060 TOTALS		**320**	**2601**	**8**	**1**

FENCE CHAIN LINK 6-FT

STATION TO STATION	LOCATION	616.0206 LF
712+01 NB - 738+10 NB	RT, USH 51 NB	2588
718+00 SB - 740+19 NB	LT, USH 51 SB	2230
781+05 NB - 811+23 NB	RT, USH 51 NB	3033
789+23 SB - 811+52 SB	LT, USH 51 SB	2093
812+84 SB	LT, USH 51 SB	92
CATEGORY TOTAL		**10036**

STEEL PLATE BEAM GUARD CLASS A

STATION TO STATION	LOCATION	614.0305 LF
708+00 NB - 713+08 NB	RT	508
CATEGORY TOTAL		**508**

STEEL PLATE BEAM GUARD TEMPORARY

STATION TO STATION	LOCATION	614.0250 THRIE BEAM STRUCTURE APPROACH LF	614.0360 BEAMGUARD LF	614.0380 EAT EACH
412+88 NR - 418+65 NR	RT	**21**	500	**1**
CATEGORY TOTALS		**21**	**500**	**1**

*** OTHER QUANTITIES LOCATED ELSEWHERE IN PLAN**

ALL ITEMS ON THIS SHEET ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

RIPRAP MEDIUM, RIPRAP HEAVY, AND GEOTEXTILE FABRIC TYPE HR

STATION	LOCATION	STAGE	606.0200 RIPRAP MEDIUM CY	606.0300 RIPRAP HEAVY CY	645.0120 FABRIC TYPE HR SY
754+90 NB	RT	2	53	---	129
755+75 NB	RT	2	14	---	39
STAGE 2 TOTALS			**14**	**0**	**39**
774+00 NB	RT	5	13	---	37
789+40 SB	LT	5	65	---	163
801+29 SB	LT	5	14	---	38
STAGE 5 TOTALS			**92**	**0**	**238**
723+45 NB	RT	6	29	---	74
725+50 NB	RT	6	13	---	36
733+57 NB	RT	6	20	---	54
738+68 NB	RT	6	---	17	41
787+66 NB	RT	6	19	---	50
STAGE 6 TOTALS			**81**	**17**	**255**
775+50 C	LT	7	60	---	143
776+00 C	LT	7	39	---	96
STAGE 7 TOTALS			**39**	**0**	**96**
TOTALS			**236**	**17**	**628**
*CATEGORY TOTALS			246	17	668

SILT FENCE

STATION TO STATION	LOCATION	STAGE	628.1504 LF	628.1520 MAINTENANCE LF
720+70 NB - 724+15 NB	RT	1	340	340
STAGE 1 TOTALS			**340**	**340**
321+65 NR - 339+60 NR	RT	2	1360	1360
STAGE 2 TOTALS			**1360**	**1360**
357+90 NR - 360+10 NR	RT	3	415	415
373+90 NR - 381+10 NR	RT	3	720	720
STAGE 3 TOTALS			**1135**	**1135**
732+90 SB - 733+20 SB	LT	5	150	150
781+40 SB - 811+40 SB	LT	5	2950	2950
STAGE 5 TOTALS			**3100**	**3100**
732+25 NB - 739+05 NB	RT	6	680	680
783+65 NB - 790+15 NB	RT	6	650	650
STAGE 6 TOTALS			**1330**	**1330**
UNDISTRIBUTED			1835	1835
CATEGORY TOTALS			**9100**	**9100**

TOPSOIL, MULCHING, FERTILIZER, & SEEDING

STATION TO STATION	LOCATION	STAGE	625.0100 TOPSOIL SY	TOPSOIL DEPTH INCHES	627.0200 MULCHING SY	629.0210 FERTILIZER TYPE B CWT	630.0120 SEEDING MIXTURE NO. 20 LB	630.0130 SEEDING MIXTURE NO. 30 LB	630.0160 SEEDING MIXTURE NO. 60 LB	630.0200 SEEDING TEMPORARY LB	SPV.0120.01 WATER FOR SEEDED AREAS MGAL
706+50 NB - 353+25 NR	LT&RT	2	18244	4	13558	11.9	164	222	---	---	409
363+50 NR - 423+62 NR	LT&RT	2	12396	4	11737	8.1	---	226	---	---	278
STAGE 2 TOTALS			**30640**		**25295**	**20.0**	**164**	**448**	**0**	**0**	**687**
352+67 NR - 379+45 NR	LT&RT	3	9463	4	5128	6.1	129	88	---	---	212
STAGE 3 TOTALS			**9463**		**5128**	**6.1**	**129**	**88**	**0**	**0**	**212**
361+00 NR - 364+50 NR	LT&RT	4	2128	4	2128	1.5	30	20	---	---	48
STAGE 4 TOTALS			**2128**		**2128**	**1.5**	**30**	**20**	**0**	**0**	**48**
720+00 SB - 764+75 SB	LT&RT	5	14923	4	11598	9.5	186	147	---	---	335
766+80 SB - 811+40 SB	LT&RT	5	18591	4	10891	11.9	182	215	---	---	417
STAGE 5 TOTALS			**33514**		**22489**	**21.4**	**368**	**362**	**0**	**0**	**752**
720+00 NB - 738+12 NB	RT	6	9194	4	7699	5.8	168	55	---	---	206
784+05 NB - 822+92 NB	LT&RT	6	16692	4	12209	10.6	284	112	---	---	375
STAGE 6 TOTALS			**25886**		**19908**	**16.4**	**452**	**167**	**0**	**0**	**581**
709+53 NB - 762+75 NB	LT	7	21872	4	21872	13.8	202	260	---	---	491
767+37 NB - 811+33 NB	LT	7	22989	4	15493	14.5	175	298	---	---	516
STAGE 7 TOTALS			**44861**		**37365**	**28.3**	**377**	**558**	**0**	**0**	**1007**
UNDISTRIBUTED			36658		29337	26.3	380	407	75	200	814
CATEGORY TOTALS			**183150**		**141650**	**120.0**	**1900**	**2050**	**75**	**200**	**4100**

MAINTENANCE AND REPAIR OF HAUL ROAD

LOCATION	618.0100 EACH
.02 1170-01-73	1
CATEGORY TOTAL	**1**

MOBILIZATION

LOCATION	619.1000 EACH
1170-01-73	0.33
CATEGORY TOTAL	**0.33**

WATER

LOCATION	624.0100 MGAL
BASE COMPACTION	2000
DUST CONTROL	300
CATEGORY TOTAL	**2300**

SOIL STABILIZER TYPE B

PROJECT	628.6510 ACRE
1170-01-73	3
CATEGORY TOTAL	**3**

TRACKING PADS

PROJECT	628.7560 EACH
1170-01-73	2
CATEGORY TOTAL	**2**

MOBILIZATIONS EROSION CONTROL AND EMERGENCY EROSION CONTROL

PROJECT	628.1905 EACH	628.1910 EMERGENCY EACH
1170-01-73	12	12
CATEGORY TOTALS	**12**	**12**

*** OTHER QUANTITIES LOCATED ELSEWHERE IN PLAN**

ALL ITEMS ON THIS SHEET ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

3

EROSION MAT

STATION TO STATION	LOCATION	STAGE	628.2004 CLASS I TYPE B SY	628.2006 URBAN CLASS I TYPE A SY	628.2023 CLASS II TYPE B SY
710+30 SB - 333+67 NR	LT&RT	2	4667	---	---
370+50 NR - 374+70 NR	LT	2	1259	---	---
STAGE 2 TOTALS			**5926**	**0**	**0**
357+50 NR - 379+45 NR	LT&RT	3	4335	---	---
STAGE 3 TOTALS			**4335**	**0**	**0**
720+00 SB - 764+75 SB	LT&RT	5	3291	---	---
766+80 NB - 774+70 NB	RT	5	2071	---	3027
STAGE 5 TOTALS			**5362**	**0**	**3027**
720+00 NB - 738+12 NB	RT	6	1495	---	---
784+05 NB - 822+92 NB	LT&RT	6	---	1686	2796
STAGE 6 TOTALS			**1495**	**1686**	**2796**
767+37 NB - 811+33 NB	LT	7	7496	---	---
STAGE 7 TOTALS			**7496**	**0**	**0**
UNDISTRIBUTED			7386	514	1777
CATEGORY TOTALS			**32000**	**2200**	**7600**

INLET PROTECTION

STATION TO STATION	LOCATION	STAGE	628.7005 TYPE A EACH	628.7010 TYPE B EACH	628.7020 TYPE D EACH
712+00 NB - 753+05 NB	LT	1	2	4	---
STAGE 1 TOTALS			**2**	**4**	**0**
311+63 NR - 352+66 NR	LT&RT	2	8	8	---
374+74 NR - 787+71 SB	RT	2	3	3	---
STAGE 2 TOTALS			**11**	**11**	**0**
365+61 NR	RT	4	1	1	---
STAGE 3 TOTALS			**1**	**1**	**0**
810+30 SB	RT	5	1	1	---
STAGE 5 TOTALS			**1**	**1**	**0**
725+50 SB - 753+00 NB	RT	6	5	4	1
STAGE 6 TOTALS			**5**	**4**	**1**
UNDISTRIBUTED			1	1	1
CATEGORY TOTALS			**21**	**22**	**2**

TEMPORARY DITCH CHECKS

STATION TO STATION	LOCATION	STAGE	628.7504 LF
328+00 NR - 331+50 NR	RT	2	30
STAGE 2 TOTAL			**30**
353+50 NR - 360+30 NR	RT	3	40
STAGE 3 TOTAL			**40**
729+00 SB - 735+00 SB	LT	5	40
STAGE 5 TOTAL			**40**
800+00 NB - 821+00 NB	LT&RT	6	330
STAGE 6 TOTAL			**330**
754+75 NB - 757+75 NB	LT	7	40
STAGE 7 TOTAL			**40**
UNDISTRIBUTED			120
CATEGORY TOTAL			**600**

CULVERT PIPE CHECKS

STATION TO STATION	LOCATION	STAGE	628.7555 EACH
709+34 NB - 723+60 NB	LT	1	30
STAGE 1 TOTAL			**30**
802+00 NB - 819+00 NB	LT	2	6
374+76 SR - 419+00 NR	LT&RT	2	14
STAGE 2 TOTAL			**20**
362+49 NR - 364+86 NR	LT&RT	4	8
STAGE 4 TOTAL			**8**
723+23 SB - 750+47 SB	LT	5	16
774+00 SB - 789+40 SB	RT	5	5
STAGE 5 TOTAL			**21**
787+65 NB - 818+50 NB	LT	6	5
STAGE 6 TOTAL			**5**
UNDISTRIBUTED			26
CATEGORY TOTAL			**110**

ROCK BAGS

STATION TO STATION	LOCATION	STAGE	628.7570 EACH
723+35 NB - 723+50 NB	RT	1	30
STAGE 1 TOTAL			**30**
323+50 NR - 338+40 NR	RT	2	60
STAGE 2 TOTAL			**60**
359+90 NR - 378+00 NR	RT	3	45
STAGE 3 TOTAL			**45**
733+50 BS - 733+75 SB	LT	5	30
786+00 NB - 810+00 NB	RT	5	90
STAGE 5 TOTAL			**120**
733+00 NB - 738+85 NB	RT	6	60
787+00 NB - 790+00 NB	RT	6	45
STAGE 6 TOTAL			**105**
UNDISTRIBUTED			100
CATEGORY TOTAL			**460**

GEOTEXTILE FABRIC TYPE SR

STATION TO STATION	645.0135 SY
359+00 NR - 362+00 NR	1680
CATEGORY TOTAL	**1680**

*** OTHER QUANTITIES LOCATED ELSEWHERE IN PLAN**

ALL ITEMS ON THIS SHEET ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

3

TYPE I SIGNS

SIGN NO.	STATION	LOCATION	SIGN CODE	W X H	637.0101 SIGNS TYPE I SF	638.2101 MOVING SIGNS TYPE I EACH	REMARKS
21-1	---	RT	E1-1A	204" X 144"	204.00	---	LOCATED 700' SOUTH OF THE BRIDGE ST OVERPASS
21-2	---	RT	E1-5	120" X 48"	40.00	---	MOUNT WITH 21-1
21-3	709+55 NB	RT	E3-1	156" X 84"	91.00	---	
21-6	712+84 SB	LT	E1-1A	228" X 60"	95.00	---	
21-7	712+84 SB	LT	E1-5	120" X 30"	25.00	---	MOUNT WITH 21-6
22-5	722+00 NB	LT	---	--- X ---	---	1	MOVE FROM 722+00 NB
22-10	727+25 NB	RT	E4-1A	252" X 108"	189.00	---	
22-11	727+25 NB	RT	E1-5	120" X 48"	40.00	---	MOUNT WITH 22-10
25-4	771+57 SB	LT	E1-1A	192" X 84"	112.00	---	
25-5	771+57 SB	LT	E1-5	120" X 30"	25.00	---	MOUNT WITH 25-4
26-1	775+00 SB	LT	---	--- X ---	---	1	MOVE FROM 776+81 SB
27-1	790+00 SB	LT	E4-1A	192" X 108"	144.00	---	
27-2	790+00 SB	LT	E1-5	120" X 30"	25.00	---	MOUNT WITH 27-1
28-6	---	LT	E1-1A	156" X 144"	156.00	---	LOCATED 0.5 MILES NORTH OF DECATOR DR ON SB USH 51
28-7	---	LT	E1-5	120" X 30"	25.00	---	MOUNT WITH 28-6
CATEGORY TOTALS					**1171.00**	**2**	

TYPE I SIGN SUPPORTS

SIGN NO.	STATION	LOCATION	635.0200 STRUCTURAL STEEL HS LB	636.0100 CONCRETE MASONRY CY	636.0500 STEEL REINFORCEMENT LB	REMARKS
21-1	---	RT	745	1.6	98	LOCATED 700' SOUTH OF THE BRIDGE ST OVERPASS
21-3	709+55 NB	RT	660	1.2	68	
21-6	712+84 SB	LT	490	1.2	68	
22-10	727+25 NB	RT	850	1.6	98	
25-4	771+57 SB	LT	815	1.6	98	
26-1	775+00 SB	LT	1020	1.6	98	
27-1	790+00 SB	LT	830	1.6	98	
28-6	---	LT	960	1.6	98	LOCATED 0.5 MILES NORTH OF DECATOR DR ON SB USH 51
CATEGORY TOTALS			**6370**	**12.0**	**724**	

REMOVAL OF TYPE I SIGNS AND SUPPORTS

SIGN NO.	STATION	LOCATION	638.2601 REMOVING SIGNS TYPE I EACH	638.3100 REMOVING STRUCTURAL STEEL SIGN SUPPORTS EACH	REMARKS
1-1	---	RT	2	2	LOCATED 700' SOUTH OF THE BRIDGE ST OVERPASS
1-2	709+51 NB	RT	1	2	
1-5	712+84 SB	LT	2	2	
4-2	751+68 NB	RT	1	---	MOUNTED ON EXISTING CTH U BRIDGE
4-3	751+68 NB	RT	1	---	MOUNTED ON EXISTING CTH U BRIDGE
4-4	752+32 SB	RT	1	---	MOUNTED ON EXISTING CTH U BRIDGE
7-1	789+96 SB	LT	2	2	
8-12	---	LT	2	2	LOCATED 0.5 MILES NORTH OF DECATOR DR ON SB USH 51
CATEGORY TOTALS			**12**	**10**	

3

DELINEATORS

STATION TO STATION	LOCATION	TYPE, COLOR	633.0100 POSTS STEEL EACH	633.0500 REFLECTORS EACH
702+76 NB - 714+76 NB	RT	DOUBLE, WHITE	13	26
718+90 NB - 726+90 NB	RT	SINGLE, WHITE	3	3
721+61 NB	LT	DOUBLE, YELLOW	1	2
728+00 NB - 737+13 NB	RT	DOUBLE, WHITE	10	10
758+49 NB - 776+85 NB	RT	SINGLE, WHITE	8	8
781+86 NB - 796+86 NB	RT	DOUBLE, WHITE	16	32
800+84 NB - 816+84 NB	RT	SINGLE, WHITE	5	5
801+37 NB	LT	DOUBLE, YELLOW	1	2
703+97 SB - 712+97 SB	LT	DOUBLE, WHITE	10	20
714+95 SB - 726+95 SB	LT	SINGLE, WHITE	4	4
720+87 SB	RT	DOUBLE, YELLOW	1	2
730+95 SB - 739+95 SB	LT	DOUBLE, WHITE	10	20
743+26 SB	LT	SINGLE, WHITE	1	1
745+37 SB - 754+37 SB	LT	DOUBLE, WHITE	10	20
758+67 SB - 784+13 SB	LT	SINGLE, WHITE	12	12
789+15 SB	LT	DOUBLE, WHITE	1	2
792+77 SB - 820+91 SB	LT	SINGLE, WHITE	8	8
800+59 SB	RT	DOUBLE, YELLOW	1	2
CATEGORY TOTALS			**115**	**179**

DELINEATORS TEMPORARY

LOCATION	STAGE	633.1100 EACH
391+50 NR - 397+50 NR	5A	12
413+00 NR - 419+00 NR	5A	12
420+00 NR - 423+00 NR	5A	7
312+50 SR - 315+00 SR	6A	6
355+50 SR - 361+00 SR	6A	22
369+00 SR - 375+00 SR	6A	27
CATEGORY TOTAL		**86**

*** OTHER QUANTITIES LOCATED ELSEWHERE IN PLAN**

ALL ITEMS ON THIS SHEET
ARE CATEGORY 0010
UNLESS OTHERWISE NOTED

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ERECTION OF TYPE III SIGNS AND SUPPORTS

SIGN NO.	STATION	LOCATION	637.0103 SIGNS TYPE III SF	634.0620 POSTS WOOD 4x6x20 EACH
300	773+00 SB	LT	48	3
301	334+75 NR	RT	96	3
302	396+10 NR	LT	96	3
TOTALS			**240**	**9**
***CATEGORY TOTALS**			**240**	**25**

MOVING SIGNS TYPE III AND SUPPORTS

SIGN NO.	ORIGINAL LOCATION	NEW LOCATION	STAGE	638.2103 SIGN EACH	638.4000 SUPPORT EACH
300	773+00 SB, LT	372+50 NR, LT	5	1	3
301	334+75 NR, RT	337+30 NR, RT	5	1	3
TOTALS				**2**	**6**
***CATEGORY TOTALS**				**2**	**28**

ERECTION OF TYPE II SIGNS AND SUPPORTS

SIGN NO.	STATION	LOCATION	SIGN CODE	W X H	637.0202 SIGNS REFLECTIVE TYPE II SF	634.0616 POSTS WOOD 4x6x16 EACH	634.0618 POSTS WOOD 4x6x18 EACH	634.0620 POSTS WOOD 4x6x20 EACH	638.2102 MOVING SIGNS TYPE II EACH	REMARKS
21-4	709+80 SB	RT	D10-5	21" X 60"	8.75	1	---	---	---	SOUTH 51, MILE 193, .6
21-5	709+83 NB	LT	D10-5	21" X 60"	8.75	1	---	---	---	NORTH 51, MILE 193, .6
22-1	714+97 NB	RT	J4-1	36" X 54"	13.50	---	1	---	---	
22-2	715+60 SB	LT	R2-1	48" X 60"	20.00	---	---	1	---	65 MPH
22-3	715+60 SB	RT	D10-5	21" X 60"	8.75	1	---	---	---	SOUTH 51, MILE 193, .8
22-4	720+34 SB	LT	D10-5	21" X 60"	8.75	1	---	---	---	NORTH 51, MILE 193, .8
22-6	720+32 NB	LT	R3-4B	36" X 48"	12.00	---	1	---	---	
22-7	721+58 SB	RT	R3-4B	36" X 48"	12.00	---	1	---	---	
22-8	722+91 NB	RT	R2-1	48" X 60"	20.00	---	---	1	---	65 MPH
22-9	725+60 SB	LT	J4-1	36" X 54"	13.50	---	1	---	---	
23-1	731+24 SB	RT	D10-5	21" X 60"	8.75	1	---	---	---	SOUTH 51, MILE 194, 0
23-2	731+19 NB	LT	D10-5	21" X 60"	8.75	1	---	---	---	NORTH 51, MILE 194, 0
23-3	741+97 SB	RT	D10-5	21" X 60"	8.75	1	---	---	---	SOUTH 51, MILE 194, .2
23-4	741+86 NB	LT	D10-5	21" X 60"	8.75	1	---	---	---	NORTH 51, MILE 194, .2
24-1	749+64 SB	LT	W4-1	48" X 48"	16.00	---	---	2	---	
24-2	752+54 SB	RT	D10-5	21" X 60"	8.75	1	---	---	---	SOUTH 51, MILE 194, .4
24-3	752+41 NB	LT	D10-5	21" X 60"	8.75	1	---	---	---	NORTH 51, MILE 194, .4
25-1	762+30 SB	RT	D10-5	21" X 60"	8.75	1	---	---	---	SOUTH 51, MILE 194, .6
25-2	762+29 NB	LT	D10-5	21" X 60"	8.75	1	---	---	---	NORTH 51, MILE 194, .6
25-3	763+95 SB	LT	W4-1	48" X 48"	16.00	---	---	2	---	
25-6	771+64 NB	RT	W4-1	48" X 48"	16.00	---	---	2	---	
25-7	773+45 SB	RT	D10-5	21" X 60"	8.75	1	---	---	---	SOUTH 51, MILE 194, .8
25-8	773+51 NB	LT	D10-5	21" X 60"	8.75	1	---	---	---	NORTH 51, MILE 194, .8
26-2	784+00 SB	RT	D10-5	21" X 60"	8.75	1	---	---	---	SOUTH 51, MILE 195, 0
26-3	784+02 NB	LT	D10-5	21" X 60"	8.75	1	---	---	---	NORTH 51, MILE 195, 0
27-3	796+71 SB	LT	R2-1	48" X 60"	20.00	---	---	1	---	65 MPH
27-4	800+68 NB	LT	R3-4B	36" X 48"	12.00	---	1	---	---	
27-5	801+29 SB	RT	R3-4B	36" X 48"	12.00	---	1	---	---	
27-6	802+00 NB	RT	J4-1	36" X 54"	13.50	---	1	---	---	
28-1	809+00 NB	LT	W8-69	48" X 48"	16.00	---	---	2	---	
28-2	809+00 NB	RT	W8-69	48" X 48"	16.00	---	---	2	---	
28-3	814+00 NB	RT	R2-1	48" X 60"	20.00	---	---	1	---	
28-4	816+00 NB	RT	---	--- X ---	---	---	---	1	1	MOVE FROM 813+22 NB
28-5	819+00 NB	LT	R4-3	48" X 60"	20.00	---	---	1	---	
TOTALS					**408.50**	**16**	**7**	**16**	**1**	
***CATEGORY TOTALS**					**408.50**	**16**	**7**	**25**	**23**	

*** OTHER QUANTITIES LOCATED ELSEWHERE IN PLAN**

ALL ITEMS ON THIS SHEET
ARE CATEGORY 0010
UNLESS OTHERWISE NOTED

REMOVAL OF TYPE II SIGNS AND SUPPORTS

SIGN NO.	STATION	OFFSET	638.2102 MOVING SIGNS TYPE II EACH	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	638.4000 MOVING SMALL SIGN SUPPORTS EACH	REMARKS
1-3	709+81 SB	RT	---	1	1	---	
1-4	709+82 NB	LT	---	1	1	---	
2-1	714+98 NB	RT	---	1	1	---	
2-2	720+34 SB	RT	1	1	1	1	
2-3	720+33 NB	LT	1	1	1	1	
2-4	722+86 NB	RT	---	1	2	---	
2-5	728+56 SB	LT	---	1	2	---	
3-1	731+24 SB	LT	1	1	1	1	
3-2	731+24 SB	RT	---	1	1	---	
3-3	731+22 NB	RT	---	1	1	---	
3-4	731+22 NB	RT	2	1	1	2	
3-5	733+42 NB	LT	---	1	1	---	
3-6	733+42 NB	LT	---	1	---	---	
3-7	735+90 SB	LT	---	2	1	---	
3-8	736+16 NB	RT	---	1	1	---	
3-9	736+16 NB	RT	---	1	1	---	
3-10	741+86 NB	LT	1	1	1	1	
3-11	741+86 NB	RT	2	1	1	2	
4-1	750+23 SB	LT	2	1	1	2	
4-5	752+54 SB	RT	1	1	1	1	
4-6	752+41 NB	LT	3	1	1	3	
5-1	762+02 SB	LT	---	1	1	---	
5-2	762+02 SB	RT	---	1	1	---	
5-3	762+29 SB	RT	1	1	1	1	
5-4	762+29 NB	LT	1	1	1	1	
5-5	762+32 NB	RT	---	1	1	---	
5-6	762+94 NB	LT	---	1	1	---	
5-7	768+61 SB	RT	---	1	1	---	
5-8	769+24 SB	LT	---	1	1	---	
5-9	771+64 NB	RT	1	1	1	1	
5-10	773+45 SB	RT	1	1	1	1	
5-11	773+51 NB	LT	2	1	1	2	
6-1	784+01 SB	RT	1	1	1	1	
6-2	784+02 NB	LT	---	1	1	---	
6-3	784+02 NB	RT	1	1	1	1	
6-4	788+63 NB	LT	---	1	1	---	
6-5	788+63 NB	LT	---	1	---	---	
7-2	794+11 NB	RT	---	1	1	---	
7-3	796+85 NB	RT	---	2	1	---	
7-4	801+47 NB	RT	---	1	1	---	
8-1	808+38 SB	LT	---	1	---	---	
8-2	808+38 SB	LT	---	1	3	---	
8-3	808+38 SB	LT	---	1	---	---	
8-4	808+38 SB	LT	---	3	2	---	
8-5	808+38 SB	RT	---	3	2	---	
8-6	808+97 NB	LT	---	1	2	---	
8-7	808+97 NB	RT	---	1	2	---	
8-8	811+14 NB	RT	---	1	1	---	
8-9	811+22 NB	LT	---	1	1	---	
8-10	---	LT	---	3	2	---	LOCATED 0.5 MILES NORTH OF DECATOR DR ON SB USH 51
8-11	---	RT	---	3	2	---	LOCATED 0.5 MILES NORTH OF DECATOR DR ON SB USH 51
TOTALS			**22**	**61**	**57**	**22**	
***CATEGORY TOTALS**			**23**	**61**	**57**	**28**	

*** OTHER QUANTITIES LOCATED ELSEWHERE IN PLAN**

ALL ITEMS ON THIS SHEET
ARE CATEGORY 0010
UNLESS OTHERWISE NOTED

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FIELD OFFICE TYPE C

LOCATION	642.5201 EACH
1170-01-73	1
CATEGORY TOTAL	**1**

TRAFFIC CONTROL SURVEILLANCE AND MAINTENANCE

PROJECT	643.0200 DAYS
.02 1170-01-73	579
CATEGORY TOTAL	**579**

TRAFFIC CONTROL DETOUR

PROJECT	643.2000 EACH
.02 1170-01-73	1
CATEGORY TOTAL	**1**

TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER POSTS & BASES

LOCATION	STAGE	643.0500 POSTS EACH	643.0600 BASES EACH
315+50 NR - 319+50 NR	2A	85	85
337+00 NR - 342+00 NR	3A	100	100
386+50 NR - 387+50 NR	3A	25	25
417+00 NR - 419+00 NR	3A	35	35
781+00 SB - 785+00 SB	3B	75	75
CATEGORY TOTALS		**320**	**320**

TRAFFIC CONTROL COVERING SIGNS TYPE II

STAGE	NUMBER OF CYCLES	NUMBER OF SIGNS	643.0920 EACH
STAGE 1	20	1	20
STAGE 2A	20	3	60
STAGE 2B	20	3	60
STAGE 3A	20	3	60
CATEGORY TOTALS			**200**

TRAFFIC CONTOL SIGNS, DRUMS, LIGHTS, AND BARRICADES

LOCATION	643.0300 DRUMS EACH	643.0300 DRUMS DAYS	643.0420 BARRICADES TYPE III EACH	643.0420 BARRICADES TYPE III DAYS	643.0705 WARNING LIGHTS TYPE A EACH	643.0705 WARNING LIGHTS TYPE A DAYS	643.0715 WARNING LIGHTS TYPE C EACH	643.0715 WARNING LIGHTS TYPE C DAYS	643.0800 ARROW BOARDS EACH	643.0800 ARROW BOARDS DAYS	643.0900 SIGNS EACH	643.0900 SIGNS DAYS	643.1050 SIGNS PCMS EACH	643.1050 SIGNS PCMS DAYS
STAGE 1	37	1110	0	0	0	0	0	0	2	60	55	1650	8	240
STAGE 1A	68	1360	0	0	0	0	0	0	0	0	1	20	0	0
STAGE 1B	32	640	3	60	4	80	10	200	0	0	12	240	0	0
STAGE 1C	33	660	0	0	0	0	13	260	2	40	12	240	0	0
STAGE 2A	368	11040	4	120	6	180	9	270	2	60	58	1740	6	180
STAGE 2B	368	33120	4	360	6	540	9	810	2	180	58	5220	6	540
STAGE 3A	30	900	10	300	16	480	0	0	1	30	61	1830	6	180
STAGE 3B	0	0	9	1476	14	2296	0	0	0	0	56	9184	0	0
STAGE 4	0	0	9	126	14	196	0	0	0	0	57	798	6	84
STAGE 5A	194	8730	21	945	28	1260	49	2205	0	0	66	2970	6	270
STAGE 5B	164	7380	28	1260	40	1800	31	1395	0	0	65	2925	6	270
STAGE 6A	243	10206	21	882	26	1092	30	1260	0	0	66	2772	6	252
STAGE 6B	225	3375	12	180	16	240	12	180	0	0	60	900	6	90
STAGE 6C	150	4500	6	180	8	240	15	450	2	60	59	1770	7	210
STAGE 7	216	9504	0	0	0	0	0	0	2	88	52	2288	6	264
UNDISTRIBUTED		9275		611		846		670		52		3453		270
CATEGORY TOTALS		**101800**		**6500**		**9250**		**7700**		**570**		**38000**		**2850**

TRAFFIC CONTROL DETOUR SIGNS

STAGE	DAYS	NUMBER OF SIGNS	643.3000 DAYS
ALT ROUTE - STAGE 1	30	353	10590
ALT ROUTE - STAGE 2	120	353	42360
ALT ROUTE - STAGE 3	194	307	59558
ALT ROUTE - STAGE 4	14	307	4298
TOTAL			**116806**
***CATEGORY TOTAL**			**116922**

TRAFFIC CONTROL DETOUR SIGNS

STAGE	LOCATION	NUMBER OF SIGNS	643.3000 DAYS
STAGE 1 (NIGHTTIME CLOSURE)	USH 51 NB	27	54
STAGE 1 (NIGHTTIME CLOSURE)	USH 51 SB	31	62
TOTAL			**116**
***CATEGORY TOTAL**			**116922**

*** OTHER QUANTITIES LOCATED ELSEWHERE IN PLAN**

ALL ITEMS ON THIS SHEET ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

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PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE

STATION TO STATION	DESCRIPTION	646.0841.S 4-INCH WHITE LF	646.0843.S 8-INCH WHITE LF
701+00 NB - 704+07 NB	CHANNELIZING AT BRIDGE ST ENTRANCE RAMP	---	565
703+00 NB - 811+32 NB	CENTERLINE	3145	---
704+07 NB - 707+07 NB	LANE LINE SKIPS AT BRIDGE ST ENTRANCE RAMP	75	---
727+41 NB - 732+80 NB	LANE LINE SKIPS AT A RAMP/E RAMP	135	---
732+80 NB - 750+21 NB	CHANNELIZING AT A RAMP/E RAMP	---	1222
776+85 NB - 784+22 NB	CHANNELIZING AT B RAMP	---	1005
784+22 NB - 788+63 NB	LANE LINE SKIPS AT B RAMP	110	---
800+84 NB - 809+84 NB	LANE LINE SKIPS	225	---
701+35 SB - 706+39 SB	CHANNELIZING AT BRIDGE ST EXIT RAMP	---	960
703+50 SB - 823+50 SB	CENTERLINE	3000	---
706+39 SB - 713+30 SB	LANE LINE SKIPS AT BRIDGE ST EXIT RAMP	175	---
735+94 SB - 737+14 SB	LANE LINE SKIPS AT F RAMP	31	---
737+14 SB - 743+76 SB	CHANNELIZING AT F RAMP	---	917
750+11 SB - 751+42 SB	LANE LINE SKIPS AT D RAMP	33	---
751+42 SB - 758+67 SB	CHANNELIZING AT D RAMP	---	989
783+63 SB - 787+31 SB	CHANNELIZING AT C RAMP	---	397
787+31 SB - 788+88 SB	LANE LINE SKIPS AT C RAMP	46	---
CATEGORY TOTALS		**6975**	**6055**

PAVEMENT MARKING EPOXY

STATION TO STATION	DESCRIPTION	STAGE	646.0106 4-INCH WHITE LF	646.0106 4-INCH YELLOW LF	646.0126 8-INCH WHITE LF
709+50 NB - 720+00 NB	EDGELINE	2A	---	1050	---
709+50 NB - 720+00 NB	LANELINE	2A	263	---	---
709+50 NB - 720+00 NB	EDGELINE	2A	1050	---	---
710+30 SB - 720+00 SB	EDGELINE	2A	---	970	---
710+30 SB - 720+00 SB	LANELINE	2A	243	---	---
710+30 SB - 720+00 SB	LANELINE	2A	970	---	---
319+70 NR - 326+00 NR	EDGELINE	2A	---	630	---
319+70 NR - 324+00 NR	LANELINE	2A	108	---	---
319+70 NR - 324+00 NR	EDGELINE	2A	430	---	---
720+00 SB - 724+00 SB	EDGELINE	2A	---	400	---
720+00 SB - 724+00 SB	LANELINE	2A	100	---	---
720+00 SB - 724+00 SB	EDGELINE	2A	400	---	---
747+75 SP - 754+00 SP	EDGELINE	2A	---	625	---
747+75 SP - 754+00 SP	LANELINE	2A	156	---	---
747+75 SP - 752+00 SP	EDGELINE	2A	425	---	---
326+00 NR - 350+30 NR	EDGELINE	3A	---	2430	---
324+00 NR - 350+30 NR	LANELINE	3A	658	---	---
324+00 NR - 337+20 NR	EDGELINE	3A	1320	---	---
336+65 NR - 337+65 NR	CHANNELIZING	3A	---	---	160
337+65 NR - 350+30 NR	EDGELINE	3A	1265	---	---
379+00 NR - 411+35 NR	EDGELINE	3A	---	3235	---
391+90 NR - 392+40 NR	EDGELINE	3A	50	---	---
376+35 NR - 380+00 NR	EDGELINE	3B	365	---	---
380+00 NR - 386+65 NR	CHANNELIZING	3B	---	---	1330
384+05 NR - 391+90 NR	EDGELINE	3B	785	---	---
SUB-TOTALS			**8588**	**9340**	**1490**
TOTALS			**17928**		**1490**
***CATEGORY TOTALS**			**63143**		**1490**

PAVEMENT MARKING EPOXY 4-INCH

STATION TO STATION	DESCRIPTION	646.0106 WHITE LF	646.0106 YELLOW LF
702+49 NB - 715+63 NB	EDGELINE AT BRIDGE ST ENTRANCE RAMP	1315	---
703+00 NB - 818+36 NB	EDGELINE	---	11535
715+63 NB - 727+41 NB	EDGELINE	1178	---
727+41 NB - 738+12 NB	EDGELINE AT A RAMP/E RAMP	1066	---
740+21 NB - 776+85 NB	EDGELINE	3672	---
781+05 NB - 796+76 NB	EDGELINE AT B RAMP	1572	---
796+76 NB - 818+36 NB	EDGELINE	2160	---
703+50 SB - 713+30 SB	EDGELINE AT BRIDGE ST EXIT RAMP	982	---
703+50 SB - 823+50 SB	EDGELINE	---	12000
713+30 SB - 730+59 SB	EDGELINE	1732	---
730+59 SB - 740+19 SB	EDGELINE AT F RAMP	963	---
743+76 SB - 744+98 SB	EDGELINE	122	---
744+98 SB - 754+58 SB	EDGELINE AT D RAMP	960	---
758+67 SB - 783+63 SB	EDGELINE	2496	---
788+88 SB - 789+15 SB	EDGELINE AT C RAMP	27	---
789+15 SB - 823+50 SB	EDGELINE	3435	---
SUB-TOTALS		**21680**	**23535**
TOTAL		**45215**	
***CATEGORY TOTALS**		**63143**	

TEMPORARY PAVEMENT MARKING 8-INCH

STATION TO STATION	DESCRIPTION	STAGE	649.0701 WHITE LF
303+00 NM - 303+70 NM	CHANNELIZING	1B	190
304+00 SM - 305+45 SM	CHANNELIZING	1B	255
303+00 NW - 304+70 NW	CHANNELIZING	1C	250
303+50 SW - 305+95 SW	CHANNELIZING	1C	410
376+95 NR - 377+95 NR	CHANNELIZING	3A	200
342+20 NR - 344+10 NR	CHANNELIZING	5A	190
339+50 NR - 341+05 NR	CHANNELIZING	5A	155
367+30 NR - 368+30 NR	CHANNELIZING	5A	100
386+90 NR - 391+00 NR	CHANNELIZING	5A	410
331+50 NR - 332+50 NR	CHANNELIZING	5B	100
390+40 NR - 391+40 NR	CHANNELIZING	5B	100
340+25 SR - 341+25 SR	CHANNELIZING	6A	100
340+90 SR - 341+90 SR	CHANNELIZING	6A	100
380+25 SR - 381+25 SR	CHANNELIZING	6A	100
334+70 SR - 335+70 SR	CHANNELIZING	6B	100
CATEGORY TOTAL			**2760**

PAVEMENT MARKING DIAGONAL EPOXY 24-INCH

STATION TO STATION	DESCRIPTION	647.0746 WHITE LF
702+00 SB - 705+50 SB	CHANNELIZING AT BRIDGE ST EXIT RAMP	340
734+95 NB - 739+55 NB	A RAMP/E RAMP GORE	330
CATEGORY TOTAL		**670**

*** OTHER QUANTITIES LOCATED ELSEWHERE IN PLAN**

ALL ITEMS ON THIS SHEET ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

3

REMOVING PAVEMENT MARKINGS

STATION TO STATION	DESCRIPTION	STAGE	646.0600 LF
303+00 NM - 326+20 NM	EDGE LINE	1B	2320
303+00 NM - 326+20 NM	LANE LINE	1B	580
303+00 NM - 326+20 NM	EDGE LINE	1B	2370
303+00 NM - 303+70 NM	CHANNELIZING	1B	190
303+50 SM - 327+45 SM	EDGE LINE	1B	2395
303+50 SM - 327+45 SM	LANE LINE	1B	600
303+50 SM - 327+45 SM	EDGE LINE	1B	2610
303+50 SM - 304+00 SM	EDGE LINE	1B	265
304+00 SM - 305+45 SM	CHANNELIZING	1B	255
304+00 NW - 324+20 NW	EDGE LINE	1C	2020
304+00 NW - 324+20 NW	LANE LINE	1C	505
304+00 NW - 324+20 NW	EDGE LINE	1C	2070
303+00 NW - 304+70 NW	CHANNELIZING	1C	250
304+00 SW - 324+50 SW	EDGE LINE	1C	2050
304+00 SW - 324+50 SW	LANE LINE	1C	510
303+50 SW - 324+50 SW	EDGE LINE	1C	2065
303+50 SW - 305+95 SW	CHANNELIZING	1C	410
346+65 NR - 348+00 NR	EDGE LINE	2A	135
353+00 NR - 355+10 NR	EDGE LINE	2A	215
712+00 NB - 720+00 NB	EDGE LINE	2A	800
712+00 NB - 720+00 NB	EDGE LINE	2A	800
712+00 NB - 720+00 NB	LANE LINE	2A	200
715+25 SB - 720+00 SB	EDGE LINE	2A	775
715+25 SB - 720+00 SB	EDGE LINE	2A	775
715+25 SB - 720+00 SB	LANE LINE	2A	194
319+70 NR - 326+00 NR	EDGE LINE	2A	630
319+70 NR - 324+00 NR	EDGE LINE	2A	430
319+70 NR - 324+00 NR	LANE LINE	2A	108
376+95 NR - 377+95 NR	CHANNELIZING	3A	200
369+00 NR - 376+95 NR	EDGE LINE	3A	795
369+00 NR - 391+90 NR	EDGE LINE	3A	2290
326+00 NR - 350+30 NR	EDGE LINE	3A	2430
324+00 NR - 350+30 NR	LANE LINE	3A	658
324+00 NR - 337+20 NR	EDGE LINE	3A	1320
336+65 NR - 337+65 NR	CHANNELIZING	3A	160
337+65 NR - 350+30 NR	EDGE LINE	3A	1265
379+00 NR - 411+35 NR	EDGE LINE	3A	3235
391+90 NR - 392+40 NR	EDGE LINE	3A	50
376+35 NR - 380+00 NR	EDGE LINE	3B	365
380+00 NR - 386+65 NR	CHANNELIZING	3B	1330
384+05 NR - 391+90 NR	EDGE LINE	3B	785
311+90 NR - 318+90 NR	EDGE LINE	5A	700
311+90 NR - 318+90 NR	LANE LINE	5A	175
324+00 NR - 340+00 NR	EDGE LINE	5A	1600
366+00 NR - 385+00 NR	EDGE LINE	5A	1900
366+00 NR - 385+00 NR	LANE LINE	5A	475
366+00 NR - 385+00 NR	EDGE LINE	5A	1900
339+50 NR - 341+05 NR	CHANNELIZING	5A	155
386+90 NR - 391+00 NR	CHANNELIZING	5A	410
390+00 NR - 392+00 NR	EDGE LINE	5A	200
413+00 NR - 416+00 NR	EDGE LINE	5A	300
413+00 NR - 416+00 NR	EDGE LINE	5A	300
413+00 NR - 416+00 NR	LANE LINE	5A	75
414+00 NR - 418+00 NR	EDGE LINE	5A	400
414+00 NR - 418+00 NR	LANE LINE	5A	100
390+40 NR - 391+40 NR	CHANNELIZING	5B	100
330+50 SR - 334+70 SR	EDGE LINE	6A	420
340+25 SR - 341+25 SR	CHANNELIZING	6A	100
382+40 SR - 385+00 SR	EDGE LINE	6C	260
785+00 NB - 789+00 NB	EDGE LINE	6C	400
CATEGORY TOTAL			**51380**

TEMPORARY PAVEMENT MARKING 4-INCH

STATION TO STATION	DESCRIPTION	STAGE	649.0100 WHITE LF	YELLOW LF
303+00 NM - 326+20 NM	EDGE LINE	1B	---	2320
303+00 NM - 326+20 NM	LANE LINE	1B	580	---
303+00 NM - 326+20 NM	EDGE LINE	1B	2370	---
303+50 SM - 327+45 SM	EDGE LINE	1B	---	2395
303+50 SM - 327+45 SM	LANE LINE	1B	600	---
303+50 SM - 327+45 SM	EDGE LINE	1B	2610	---
303+50 SM - 304+00 SM	EDGE LINE	1B	---	265
304+00 NW - 324+20 NW	EDGE LINE	1C	---	2020
304+00 NW - 324+20 NW	LANE LINE	1C	505	---
304+00 NW - 324+20 NW	EDGE LINE	1C	2070	---
304+00 SW - 324+50 SW	EDGE LINE	1C	---	2050
304+00 SW - 324+50 SW	LANE LINE	1C	510	---
303+50 SW - 324+50 SW	EDGE LINE	1C	2065	---
346+65 NR - 348+00 NR	EDGE LINE	2A	135	---
353+00 NR - 355+10 NR	EDGE LINE	2A	215	---
369+00 NR - 376+95 NR	EDGE LINE	3A	---	795
369+00 NR - 391+90 NR	EDGE LINE	3A	2290	---
311+90 NR - 423+60 NR	EDGE LINE	5A	---	11170
311+90 NR - 423+60 NR	LANE LINE	5A	2793	---
311+90 NR - 338+00 NR	EDGE LINE	5A	2610	---
316+45 NR - 383+35 NR	EDGE LINE	5A	---	6690
316+45 NR - 383+35 NR	LANE LINE	5A	1673	---
316+45 NR - 337+30 NR	EDGE LINE	5A	2085	---
344+10 NR - 367+30 NR	EDGE LINE	5A	2320	---
341+05 NR - 386+90 NR	EDGE LINE	5A	4585	---
368+95 NR - 392+00 NR	EDGE LINE	5A	2305	---
388+00 NR - 423+60 NR	EDGE LINE	5A	3560	---
401+50 NR - 415+60 NR	EDGE LINE	5A	1410	---
406+30 NR - 418+35 NR	EDGE LINE	5A	---	1205
406+30 NR - 418+35 NR	LANE LINE	5A	301	---
332+50 NR - 341+05 NR	EDGE LINE	5B	855	---
311+85 SR - 385+00 SR	EDGE LINE	6A	---	7315
311+85 SR - 385+00 SR	LANE LINE	6A	1829	---
311+85 SR - 338+00 SR	EDGE LINE	6A	2615	---
315+80 SR - 356+05 SR	EDGE LINE	6A	---	4025
316+45 SR - 361+10 SR	LANE LINE	6A	1116	---
316+45 SR - 338+00 SR	EDGE LINE	6A	2155	---
341+25 SR - 380+25 SR	EDGE LINE	6A	3900	---
341+90 SR - 361+10 SR	EDGE LINE	6A	1920	---
382+00 SR - 385+00 SR	EDGE LINE	6A	300	---
785+00 NB - 816+75 NB	EDGE LINE	6A	3175	---
785+00 NB - 816+75 NB	EDGE LINE	6A	---	3175
813+00 NB - 816+75 NB	LANE LINE	6A	375	---
382+40 SR - 385+00 SR	EDGE LINE	6C	---	260
785+00 NB - 789+00 NB	EDGE LINE	6C	---	400
397+00 NT - 412+90 NT	EDGE LINE	6C	---	1590
397+00 NT - 415+80 NT	EDGE LINE	6C	1880	---
TOTALS			**57712**	**45675**
CATEGORY TOTAL			**103387**	

*** OTHER QUANTITIES LOCATED ELSEWHERE IN PLAN**

ALL ITEMS ON THIS SHEET
ARE CATEGORY 0010
UNLESS OTHERWISE NOTED

3

CONSTRUCTION STAKING

STATION TO STATION	650.4500 SUBGRADE LF	650.5000 BASE LF	650.7000 CONCRETE PAVEMENT LF	650.9920 SLOPE STAKES LF
709+53 NB - 763+00 NB	5347	---	5347	5347
767+28 NB - 811+34 NB	4406	---	4406	4406
710+31 SB - 764+25 SB	5394	---	5394	5394
768+53 SB - 811+39 SB	4286	---	4286	4286
812+79 SB - 813+50 SB	71	---	71	71
324+00 NR - 421+96 NR	9228	9228	---	9228
319+88 SR - 379+00 SR	5912	5912	---	5912
704+50 NS - 726+19 NS - STAGE 1A	2169	2169	---	2169
704+50 NS - 726+19 NS - STAGE 1B	2169	2169	---	2169
CATEGORY TOTALS	**38982**	**19478**	**19504**	**38982**

CONSTRUCTION STAKING

STATION TO STATION	LOCATION	650.4000 STORM SEWER EACH	650.6000 CULVERTS EACH
721+00 NB - 739+00 NB	LT & RT	2	3
750+00 NB - 753+50 NB	LT & RT	6	---
774+00 NB - 803+40 NB	LT & RT	2	3
TOTALS		**10**	**6**
***CATEGORY TOTALS**		**26**	**6**

CONSTRUCTION STAKING STORM SEWER

STATION	STRUCTURE NUMBER	650.4000 EACH
418+55 NR	905	1
387+75 NR	906	1
712+00 NS	907	1
717+00 NS	908	1
332+39 NR	909	1
332+00 NR	910	1
334+00 NR	911	1
338+55 NR	912	1
343+00 NR	913	1
356+50 NR	914	1
374+74 NR	915	1
387+75 NR	916	1
389+75 NR	917	1
402+76 NR	918	1
356+50 SR	919	1
743+00 SB	920	1
TOTAL		**16**
***CATEGORY TOTAL**		**26**

CONSTRUCTION STAKING SUPPLEMENTAL CONTROL

PROJECT	650.9910 LS
.02 1170-01-73	1

SAWING ASPHALT

STATION TO STATION	LOCATION	690.0150 ASPHALT LF
813+50 SB	LT/RT	16
709+53 NB	LT/RT	12
710+30 SB	LT/RT	12
711+04 SB	LT	8
711+04 SB - 720+00 SB	LT	896
744+13 SB	LT	8
744+13 SB - 744+43 SB	LT	30
744+43 SB	LT	8
759+05 SB	LT	8
758+10 SB - 759+05 SB	LT	93
754+58 SB - 759+05 SB	LT	443
781+03 SB - 782+04 SB	LT	100
782+04 SB	LT	8
712+28 SB - 715+77 SB	RT	352
712+28 SB - 754+65 SB	RT	4237
754+65 SB	RT	4
785+12 SB	RT	4
785+12 SB - 786+46 SB	RT	113
788+56 SB	RT	4
788+56 SB - 789+71 SB	RT	115
720+00 SB	RT	40
712+00 NB - 715+77 NB	LT	380
712+00 NB	LT	6
720+00 NB - 724+03 NB	LT	403
732+90 NB	LT	4
736+16 NB	LT	4
742+38 NB	LT	4
736+74 NB	LT	4
736+16 NB - 736+74 NB	LT	58
738+93 NB	LT	4
738+93 NB - 742+38 NB	LT	345
744+99 NB	LT	4
753+58 NB	LT	4
744+99 NB - 753+58 NB	LT	859
756+64 NB	LT	4
756+64 NB - 762+45 NB	LT	581
776+96 NB - 777+41 NB	RT	48
709+53 NB	LT	4
709+53 NB - 726+00 NB	LT	1647
726+00 NB	LT	8
726+00 NB - 751+03 NB	LT	2503
807+86 NB	LT	4
807+86 NB - 811+34 NB	LT	348
812+74 NB - 816+70 NB	LT	396
816+70 NB	LT	4
709+53 NB	RT	8
709+53 NB - 724+00 NB	RT	1447
724+00 NB	RT	16
724+00 NB - 747+38 NB	RT	2338
747+38 NB	RT	16
747+38 NB - 751+03 NB	RT	365
767+28 NB - 769+95 NB	LT	267
769+95 NB	LT	4
759+60 NB - 763+00 NB	LT	340
759+60 NB	LT	4
CATEGORY TOTALS		**18942**

SAWING CONCRETE

STATION TO STATION	LOCATION	690.0250 CONCRETE LF
813+50 SB	LT	24
781+78 NB	RT	15
780+00 SB	RT	24
746+00 SB	RT	24
786+25 SB	RT	24
781+05 NB - 785+00 NB	RT	419
776+00 NB	LT	24
756+00 NB - 758+00 NB	LT	160
741+00 NB - 742+00 NB	LT	123
CATEGORY TOTALS		**837**

3

*** OTHER QUANTITIES LOCATED ELSEWHERE IN PLAN**

ALL ITEMS ON THIS SHEET
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3

CRACK AND DAMAGE SURVEY

PROJECT	999.1500.S LS
1170-01-73	0.3

MISCELLANEOUS ROCK EXCAVATION

LOCATION	SPV.0035.01 CY
UNDISTRIBUTED	100
CATEGORY TOTAL	**100**

COARSE AGGREGATE SIZE NO. 2

LOCATION	SPV.0035.02 CY
B-37-167	10
CATEGORY TOTAL	**10**

PORTABLE CHANGEABLE MESSAGE SIGN

LOCATION	SPV.0045.01 (PCMS) CELLULAR COMMUNICATIONS DAY
1170-01-73	475
CATEGORY TOTAL	**475**

REFOCUSING VEHICLE DETECTOR ASSEMBLY

STATION	LOCATION	STAGE	SPV.0060.04 EACH
716+80 NB	RT	1B	1
716+80 NB	RT	1C	1
716+80 NB	RT	3B	1
716+80 NB	RT	5A	1
716+80 NB	RT	6A	1
716+80 NB	RT	7	1
769+20 SB	LT	5A	1
769+20 SB	LT	6A	1
CATEGORY TOTAL			**8**

HIGH TENSION CABLE GUARD TL-3

STATION TO STATION	LOCATION	SPV.0090.05 SOCKETED LF	SPV.0060.23 TERMINAL EACH	SPV.0060.35 SAFENCE TERMINAL EACH
703+75 NB - 720+88 NB	LT	1713	2	---
721+62 NB - 750+50 NB	LT	2888	2	---
752+50 NB - 757+00 NB	LT	450	2	---
703+75 NB	LT	---	---	1
CATEGORY TOTAL		**5051**	**6**	**1**

SALVAGED FENCE

STATION TO STATION	SPV.0090.10 LF
803+52 - 811+52	800
CATEGORY TOTAL	**800**

TEMPORARY SAND BAG DIKE

LOCATION	SPV.0105.21 LS
B-37-167	1

3-INCH CLEAN ROADSTONE

STATION TO STATION	SPV.0195.01 TON
359+00 NR - 362+00 NR	980
CATEGORY TOTAL	**980**

*** OTHER QUANTITIES LOCATED ELSEWHERE IN PLAN**

ALL ITEMS ON THIS SHEET
ARE CATEGORY 0010
UNLESS OTHERWISE NOTED

3

CLEARING AND GRUBBING

STATION TO STATION	LOCATION	201.0105 CLEARING STA	201.0205 GRUBBING STA
26+00 U - 29+00 U	RT	3	3
36+00 U - 37+00 U	LT	1	1
39+00 U - 41+00 U	RT	2	2
44+00 U - 58+00 U	LT/RT	14	14
63+00 U - 65+00 U	RT	2	2
CATEGORY TOTALS		**22**	**22**

REMOVING SMALL PIPE CULVERTS

STATION	LOCATION	TYPE	DIAMETER	LENGTH	203.0100 EACH
21+55 U	RT	CPRC	18"	36'	1
23+25 U	RT	CPRC	18"	46'	1
24+40 U	RT	CPRC	24"	126'	1
27+00 U	LT	CMCP	18"	28'	1
27+15 U	LT	CMCP	18"	28'	1
28+10 U	LT	CPRC	24"	30'	1
30+40 U	LT	CMCP	18"	28'	1
31+35 U	LT	CMCP	18"	28'	1
32+60 U	LT	CMCP	18"	28'	1
33+40 U	LT	CMCP	18"	28'	1
34+35 U	LT	CMCP	18"	26'	1
35+30 U	LT	CMCP	18"	28'	1
36+30 U	LT	CPRC	18"	18'	1
36+90 U	LT	CMCP	18"	28'	1
37+50 U	LT	CMCP	18"	28'	1
37+50 U	RT	CPRC	24"	42'	1
38+80 U	LT	CMCP	18"	38'	1
38+88 U	RT	CMCP	18"	52'	1
43+00 U	RT	CPRC	18"	38'	1
44+50 U	RT	CMCP	18"	50'	1
44+50 U	RT	CMCP	24"	66'	1
46+15 U		CMCP	30"	108'	1
CATEGORY TOTAL					**22**

REMOVING ASPHALTIC SURFACE

STATION TO STATION	204.0110 SY
24+90 U - 25+50 U	273
31+20 U - 31+70 U	172
43+80 U - 55+00 U	4467
CATEGORY TOTAL	**4912**

REMOVING FENCE

STATION TO STATION	204.0170 LF
44+61 U - 46+10 U	161
45+04 U - 46+24 U	120
52+44 U - 54+05 U	202
CATEGORY TOTAL	**483**

REMOVING CURB & GUTTER

STATION TO STATION	LOCATION	204.0150 LF
23+67 U - 24+29 U	RT, OVERLOOK DR	130
24+81 U - 25+12 U	LT/RT, OVERLOOK DR	122
43+77 U - 44+03 U	LT, MERRILL AVE	95
44+01 U - 44+43 U	RT, 18TH AVE	57
44+81 U - 46+55 U	RT, 18TH AVE	204
45+80 U - 46+35 U	LT, FRONTAGE ROAD	57
52+49 U - 53+37 U	RT, RAMP	85
60+38 U - 60+56 U	RT, ARLINGTON LN	61
60+46 U - 61+22 U	RT, ARLINGTON LN	98
62+81 U - 63+26 U	RT, 13TH AVE	71
63+32 U - 63+49 U	RT, 13TH AVE	55
66+41 U - 66+91 U	RT, 12TH AVE	61
66+42 U - 69+44 U	LT, BUSINESS 51	295
67+28 U - 71+47 U	RT, BUSINESS 51	485
CATEGORY TOTAL		**1876**

REMOVING CONCRETE SIDEWALK

STATION TO STATION	LOCATION	204.0155 SY
24+74 U - 24+94 U	RT, WESTWOOD DR	39
67+34 U - 71+13 U	RT, BUSINESS 51	216
CATEGORY TOTAL		**255**

REMOVING GUARDRAIL

STATION TO STATION	LOCATION	204.0165 LF
43+78 U - 44+80 U	LT	200
44+80 U - 46+35 U	LT	160
47+24 U - 48+80 U	LT	156
47+80 U - 48+86 U	LT	106
50+92 U - 51+49 U	LT	65
50+99 U - 51+58 U	LT	61
CATEGORY TOTAL		**748**

REMOVING CONCRETE BASES

STATION	LOCATION	204.0195 EACH
51+28 U	LT, CTH U	1
51+34 U	LT, CTH U	1
51+48 U	LT, CTH U	1
51+94 U	RT, CTH U	1
51+98 U	LT, CTH U	1
52+32 U	LT, CTH U	1
52+34 U	RT, CTH U	1
52+49 U	RT, CTH U	1
67+75 U	RT, CTH U	1
CATEGORY TOTAL		**9**

REMOVING AND SALVAGING STREET LIGHT

STATION	LOCATION	SPV.0060.25 EACH
67+75 U	RT, CTH U	1
CATEGORY TOTAL		**1**

REMOVING MANHOLES

STATION	LOCATION	204.0210 EACH
60+74 U	RT	1
63+15 U	RT	1
CATEGORY TOTAL		**2**

REMOVING INLETS

STATION	LOCATION	204.0220 EACH
60+40 U	RT	1
60+50 U	RT	1
61+20 U	RT	1
62+80 U	RT	1
63+15 U	LT	1
66+70 U	LT	1
66+85 U	LT	1
69+03 U	LT	1
69+16 U	RT	1
CATEGORY TOTAL		**9**

REMOVING STORM SEWER

STATION TO STATION	LOCATION	204.0245.01 12-INCH LF	204.0245.02 15-INCH LF	204.0245.03 18-INCH LF
60+40 U - 60+74 U	RT	32	---	---
60+50 U - 60+74 U	RT	30	---	---
60+74 U - 61+20 U	RT	48	---	---
61+20 U - 62+80 U	RT	160	---	---
62+80 U - 63+15 U	RT	32	---	---
63+15 U		48	---	---
63+15 U - 63+26 U	RT	---	---	22
66+85 U - 66+70 U	LT	15	---	---
66+85 U - 67+34 U	LT	55	---	---
67+34 U	RT	---	72	---
69+03 U	LT	6	---	---
69+16 U	RT	9	---	---
CATEGORY TOTAL		**435**	**72**	**22**

REMOVING MODULAR BLOCK RETAINING WALL

STATION	LOCATION	STAGE	204.9090.S LF
57+35 U	RT, CTH U	1	23
CATEGORY TOTAL			**23**

*** OTHER QUANTITIES LOCATED ELSEWHERE IN PLAN**

ALL ITEMS ON THIS SHEET ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

EARTHWORK SUMMARY

DIVISION	STATION TO STATION	LOCATION	CUT CY	205.0100 EXCAVATION COMMON CY	(8) EBS CY	205.0400 EXCAVATION MARSH CY	205.0200 EXCAVATION ROCK CY	FILL CY	(6) UNEXPANDED FILL CY	(2) (4) EXPANDED FILL CY	(5) MASS ORDINATE +/- CY	(1) WASTE CY	(3) 208.0100 BORROW CY
	4+90 L - 5+50 L	L LINE	117	117	---	---	---	---	---	---	-117		---
	WASTE TO THE 1170-01-73 PROJECT		---	---	---	---	---	---	---	117	117		
DIVISION 1 SUBTOTAL				117	---	---	---	---	---	117	---	---	---
	254+25 M - 255+75 M	M LINE	192	192	---	---	---	1107	1107	1384	1192		
	12+00 R - 14+50 R	R LINE	1363	1363	---	---	---	1	1	1	-1362		
	19+50 U - 22+00 U	U LINE	735	735	---	---	---	8	8	10	-725		
	22+00 U - 49+00 U	U LINE	18854	18854	---	---	---	25280	25280	31600	12746		
	51+00 U - 71+00 U	U LINE	8301	8301	---	---	---	7055	7055	8819	518		
	WASTE FROM 1170-01-70 PROJECT		---	---	---	---	---	---	---	-12706	-12369		
DIVISION 2 SUBTOTAL				29445	---	---	---	33451	33451	29108	---	---	---
CATEGORY TOTALS				**29562**		**---**	**---**						**---**

(1) WASTE = EXPANDED FILL - EXCAVATION COMMON (FOR INFORMATION ONLY - NOT A BID ITEM)
(2) EXPANSION FACTOR = 1.25
(3) BORROW = EXPANDED FILL - EXCAVATION COMMON
(4) EXPANDED FILL = UNEXPANDED FILL * EXPANSION FACTOR
(5) THE MASS ORDINATE + OR - QTY CALCULATED FOR THE DIVISION. PLUS QUANTITY INDICATES AN EXCESS OF MATERIAL WITHIN THE DIVISION. MINUS INDICATES A SHORTAGE OF MATERIAL WITHIN THE
(6) UNEXPANDED FILL = FILL - (ROCK * 1.1) + (MARSH EXCAVATION * 1.5) - (MARSH EXCAVTION * 0.6) + (EBS * 1.25) - (EBS * 0.8) - ASSUMES THAT ALL MARSH AND EBS CAN BE USED IN FILL AREAS
(7) EARTHWORK (SUCH AS POND B) FROM PREVIOUS STAGES MAY BE COMPLETED INTO THIS STAGE
(8) EBS PAID FOR AS EXCAVATION COMMON

FINISHING ROADWAY

PROJECT	213.0100 EACH
.03 6999-18-70	1
CATEGORY TOTAL	**1**

OBLITERATING OLD ROAD

LOCATION	214.0100 STA
18TH AVE	4
MERRILL AVE	1
CATEGORY TOTAL	**5**

BASE AGGREGATE DENSE

STATION TO STATION	LOCATION	305.0110 3/4-INCH TON	305.0120 1 1/4-INCH TON	310.0110 OPEN GRADED TON
19+50 U - 48+68 U	CTH U	81	8201	9902
51+13 U - 71+47 U	CTH U	---	4534	5623
200+80 V - 201+10 V	OVERLOOK DR	4	68	71
12+00 R - 14+72 R	ARTHUR AVE	55	467	517
4+90 L - 5+50 L	18TH AVE	30	---	200
254+17 M - 255+94 M	MERRILL CUL-DE-SAC	50	---	550
PROJECT WIDE	P.E. DRIVEWAYS	260	100	---
PROJECT WIDE	C.E. DRIVEWAYS	600	120	---
24+89 U - 71+13 U	SIDEWALK	---	1110	---
23+64 U - 69+50 U	PIPE UNDERDRAIN	---	---	937
CATEGORY TOTALS		**1080**	**14600**	**17800**

*** OTHER QUANTITIES LOCATED ELSEWHERE IN PLAN**

ALL ITEMS ON THIS SHEET ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

3

CONCRETE PAVEMENT 7-INCH

STATION TO STATION	415.0070 SY
44+28 U - 48+47 U	3218
51+35 U - 54+37 U	2023
CATEGORY TOTAL	**5241**

CONCRETE PAVEMENT APPROACH SLAB

STATION TO STATION	LOCATION	415.0410 SY
48+38 U - 48+61 U	LT	82
48+47 U - 48+68 U	RT	61
51+13 U - 51+35 U	LT	57
51+23 U - 51+44 U	RT	57
CATEGORY TOTAL		**257**

CONCRETE DRIVEWAY 6-INCH

STATION	LOCATION	416.0160 SY
27+16 U	LT	22
30+44 U	LT	26
31+38 U	LT	26
32+58 U	LT	22
33+44 U	LT	22
34+38 U	LT	22
35+34 U	LT	22
36+34 U	LT	17
36+84 U	LT	22
37+50 U	LT	26
38+84 U	LT	38
56+15 U	LT	38
58+45 U	LT	38
59+15 U	LT	38
60+50 U	LT	38
62+00 U	LT	38
63+22 U	LT	38
64+22 U	LT	38
65+24 U	LT	26
66+42 U	LT	26
27+31 U	RT	22
37+50 U	RT	43
43+00 U	RT	38
54+19 U	RT	15
55+77 U	RT	15
56+63 U	RT	17
57+66 U	RT	38
61+65 U	RT	38
62+65 U	RT	30
65+25 U	RT	26
65+78 U	RT	26
69+60 U	RT	29
70+44 U	RT	34
CATEGORY TOTAL		**954**

HMA PAVEMENT ITEMS

STATION TO STATION	LOCATION	460.1100 HMA PAVEMENT TYPE E-0.3 TON	460.1101 HMA PAVEMENT TYPE E-1 TON	465.0120 ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES TON	455.0115 ASPHALTIC PG64-22 TON	455.0122 MATERIAL PG64-34 TON	455.0605 TACK COAT GAL
19+50 U - 44+28 U		---	5080	---	167.7	111.8	446
54+37 U - 71+47 U		---	2888	---	95.3	63.6	253
4+90 L - 5+50 L	18TH AVE	55	---	---	---	3.2	8
254+17 M - 255+94 M	MERRILL CUL-DE-SAC	207	---	---	---	11.4	30
20+06 U	LT	---	---	9	---	---	---
21+24 U	LT	---	---	7	---	---	---
21+56 U	RT	---	---	12	---	---	---
22+00 U	LT	---	---	17	---	---	---
27+16 U	LT	---	---	3	---	---	---
30+44 U	LT	---	---	6	---	---	---
31+38 U	LT	---	---	5	---	---	---
32+58 U	LT	---	---	8	---	---	---
33+44 U	LT	---	---	5	---	---	---
34+38 U	LT	---	---	4	---	---	---
35+34 U	LT	---	---	4	---	---	---
37+50 U	LT	---	---	10	---	---	---
37+50 U	RT	---	---	22	---	---	---
38+84 U	LT	---	---	22	---	---	---
43+00 U	RT	---	---	3	---	---	---
57+62 U - 64+57 U	LT	---	---	120	---	---	---
61+02 U - 62+86 U	RT	---	---	195	---	---	---
70+44 U	RT	---	---	2	---	---	---
CATEGORY TOTALS		**262**	**7968**	**454**	**263**	**190**	**737**

ASPHALTIC FLUME

STATION	LOCATION	465.0315 SY
200+86 V	LT	10
CATEGORY TOTAL		**10**

RETAINING WALL ITEMS

STATION TO STATION	LOCATION	513.2000 RAILING PIPE LS	532.0200.S WALL MODULAR BLOCK GRAVITY SF	612.0406 PIPE UNDERDRAIN WRAPPED 6-INCH LF
63+50 U - 64+75 U	RT	1	322	125
CATEGORY TOTALS		**1**	**322**	**125**

*** OTHER QUANTITIES LOCATED ELSEWHERE IN PLAN**

ALL ITEMS ON THIS SHEET ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

3

STORM SEWER ENDWALLS AND CULVERT PIPES - CORRUGATED STEEL

STATION	LOCATION	THICKNESS INCHES	521.1012 APRON ENDWALLS FOR CULVERT PIPE CORRUGATED STEEL 12-INCH EACH	521.1018 18-INCH EACH	521.1036 36-INCH EACH	521.0112 CULVERT PIPE CORRUGATED STEEL 12-INCH LF	521.0118 18-INCH LF	521.0136 36-INCH LF	611.9800.S PIPE GRATES EACH	520.8000 CONCRETE COLLARS FOR PIPES EACH
19+92 U	RT	0.064	2	---	---	29	---	---	---	---
20+06 U	LT	0.064	2	---	---	26	---	---	---	---
20+39 U	RT	0.064	2	---	---	25	---	---	---	---
21+56 U	RT	0.064	---	2	---	---	29	---	---	---
23+31 U	RT	0.064	---	2	---	---	40	---	---	---
43+00 U	RT	0.064	2	---	---	48	---	---	---	---
254+04 M	RT	0.079	---	---	1	---	---	77	1	1
254+68 M	RT	0.064	---	2	---	---	180	---	---	---
TOTALS			**8**	**6**	**1**	**127**	**249**	**77**	**1**	**1**
***CATEGORY TOTALS**			**8**	**6**	**1**	**127**	**249**	**77**	**8**	**1**

STORM SEWER ROCK EXCAVATION

STATION TO STATION	607.5000 CY	REMARKS
23+50 U - 50+00 U	830	CTH U, WEST OF USH 51, STM SEWER
CATEGORY TOTAL	**830**	
***PROJECT ID TOTAL**	**977**	

3

STORM SEWER ENDWALLS AND CULVERT PIPES - REINFORCED CONCRETE

STATION TO STATION	LOCATION	522.1015 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 15-INCH EACH	522.1024 24-INCH EACH	522.1030 30-INCH EACH	522.1036 36-INCH EACH	611.9800.S PIPE GRATES EACH	(1) JOINT TIES EACH
23+50 U - 45+00 U	LT & RT	2	---	1	---	3	18
46+85 U - 47+80 U	LT & RT	---	2	---	---	2	12
51+50 U - 52+10 U	LT & RT	1	---	---	---	1	6
48+70 U - 56+50 U	LT & RT	---	---	---	1	1	6
TOTALS		**3**	**2**	**1**	**1**	**7**	
***CATEGORY TOTALS**		**3**	**2**	**1**	**1**	**8**	

(1) FOR INFORMATION ONLY. NOT A BID ITEM.

STORM SEWER PIPE REINFORCED CONCRETE ITEMS

STATION TO STATION	LOCATION	608.0312 STORM SEWER PIPE REINFORCED CONCRETE, CLASS III 12-INCH LF	608.0315 15-INCH LF	608.0318 18-INCH LF	608.0321 21-INCH LF	608.0324 24-INCH LF	608.0330 30-INCH LF	608.0336 36-INCH LF
23+50 U - 45+00 U	LT & RT	216	955	337	546	596	108	---
46+85 U - 47+80 U	LT & RT	93	---	---	---	226	---	---
51+50 U - 52+10 U	LT & RT	15	135	---	---	---	---	---
48+70 U - 56+50 U	LT & RT	91	163	---	---	18	278	530
57+35 U - 63+95 U	LT & RT	345	292	435	---	---	---	---
66+95 U - 67+54 U	LT & RT	67	72	---	---	---	---	---
69+00 U - 69+16 U	LT & RT	19	---	---	---	---	---	---
CATEGORY TOTALS		**846**	**1617**	**772**	**546**	**840**	**386**	**530**

STORM SEWER MANHOLES, INLETS, AND COVERS

STATION TO STATION	LOCATION	611.3220 INLETS 2x2-FT EACH	611.3230 2x3-FT EACH	611.0612 INLET COVERS TYPE C EACH	611.0624 TYPE H EACH	611.2004 MANHOLES 4-FT DIAMETER EACH	611.2005 5-FT DIAMETER EACH	611.2006 6-FT DIAMETER EACH	611.0530 MANHOLE COVERS TYPE J EACH
23+50 U - 45+00 U	LT & RT	---	26	---	30	6	4	1	7
46+85 U - 47+80 U	LT & RT	---	3	---	3	---	1	---	1
51+50 U - 52+10 U	LT & RT	---	4	---	4	---	---	---	---
48+70 U - 56+50 U	LT & RT	---	4	---	6	1	4	2	5
57+35 U - 63+95 U	LT & RT	1	11	1	11	4	1	---	5
66+95 U - 67+54 U	LT & RT	---	2	---	2	1	---	---	1
69+00 U - 69+16 U	LT & RT	---	2	---	2	---	---	---	---
CATEGORY TOTALS		**1**	**52**	**1**	**58**	**12**	**10**	**3**	**19**

*** OTHER QUANTITIES LOCATED ELSEWHERE IN PLAN**

ALL ITEMS ON THIS SHEET
ARE CATEGORY 0010
UNLESS OTHERWISE NOTED

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CONCRETE CURB AND GUTTER

STATION TO STATION	LOCATION	601.0409 30-INCH TYPE A LF	601.0411 30-INCH TYPE D LF	601.0555 6-INCH SLOPED TYPE A LF	601.0557 36-INCH TYPE D LF
23+74 U - 24+12 U	LT	---	---	---	58
24+52 U - 25+22 U	LT	---	---	---	102
25+22 U - 44+28 U	LT	---	1896	---	---
44+28 U - 48+53 U	LT	430	---	---	---
51+13 U - 54+37 U	LT	337	---	---	---
54+37 U - 69+44 U	LT	---	1494	---	---
23+64 U - 24+29 U	RT	---	---	---	98
24+81 U - 38+28 U	RT	---	1381	---	---
38+28 U - 38+82 U	RT	---	---	---	63
39+20 U - 39+54 U	RT	---	---	---	65
39+54 U - 44+28 U	RT	---	471	---	---
44+28 U - 46+71 U	RT	240	---	---	---
46+71 U - 46+81 U	RT	---	---	10	---
47+69 U - 47+79 U	RT	---	---	10	---
47+79 U - 48+63 U	RT	90	---	---	---
51+28 U - 52+10 U	RT	80	---	---	---
52+10 U - 52+20 U	RT	---	---	10	---
53+23 U - 53+34 U	RT	---	---	10	---
53+34 U - 54+37 U	RT	100	---	---	---
54+37 U - 60+40 U	RT	---	619	---	---
60+46 U - 63+26 U	RT	---	313	---	---
63+45 U - 66+91 U	RT	---	369	---	---
67+28 U - 71+47 U	RT	---	481	---	---
25+11 U - 30+05 U	LT (MEDIAN)	---	989	---	---
30+83 U - 37+10 U	LT (MEDIAN)	---	1253	---	---
37+94 U - 38+47 U	LT (MEDIAN)	---	107	---	---
39+48 U - 44+28 U	LT (MEDIAN)	---	964	---	---
44+28 U - 47+14 U	LT (MEDIAN)	575	---	---	---
47+65 U - 48+62 U	LT (MEDIAN)	193	---	---	---
51+19 U - 51+90 U	LT (MEDIAN)	139	---	---	---
52+42 U - 54+30 U	LT (MEDIAN)	380	---	---	---
CATEGORY TOTALS		**2564**	**10337**	**40**	**386**

CONCRETE CURB PEDESTRIAN

STATION	LOCATION	601.0600 LF
38+62 U	RT	20
39+28 U	RT	16
47+05 U	RT	20
47+56 U	RT	17
52+22 U	RT	12
52+84 U	RT	17
60+37 U	RT	12
60+95 U	RT	18
62+99 U	RT	16
63+48 U	RT	9
66+84 U	RT	16
67+36 U	RT	16
CATEGORY TOTAL		**189**

CONCRETE SIDEWALK 4-INCH

STATION TO STATION	LOCATION	602.0405 SF
25+23 U - 27+08 U	LT	953
27+24 U - 30+34 U	LT	1550
30+54 U - 31+28 U	LT	370
31+48 U - 32+50 U	LT	510
32+66 U - 33+37 U	LT	355
33+53 U - 34+30 U	LT	385
34+46 U - 35+26 U	LT	400
35+42 U - 36+28 U	LT	415
36+40 U - 36+76 U	LT	173
36+92 U - 37+38 U	LT	220
37+58 U - 38+69 U	LT	534
38+99 U - 48+53 U	LT	4817
51+13 U - 56+00 U	LT	2545
56+30 U - 58+30 U	LT	1000
58+60 U - 59+00 U	LT	200
59+30 U - 60+35 U	LT	525
60+65 U - 61+85 U	LT	600
62+15 U - 63+07 U	LT	460
63+38 U - 64+05 U	LT	355
64+36 U - 65+15 U	LT	386
65+36 U - 66+32 U	LT	470
66+53 U - 69+50 U	LT	1401
24+89 U - 27+23 U	RT	1299
27+39 U - 37+35 U	RT	4980
37+69 U - 38+66 U	RT	485
39+26 U - 42+88 U	RT	1810
43+20 U - 47+10 U	RT	1889
47+54 U - 48+70 U	RT	557
51+30 U - 52+22 U	RT	460
52+48 U - 52+61 U	RT, MEDIAN	151
52+82 U - 54+13 U	RT	764
54+25 U - 55+72 U	RT	712
55+82 U - 56+57 U	RT	375
56+69 U - 57+51 U	RT	410
57+81 U - 60+37 U	RT	1280
60+91 U - 61+50 U	RT	280
61+80 U - 62+53 U	RT	365
62+77 U - 63+01 U	RT	120
63+47 U - 65+15 U	RT	893
65+35 U - 65+69 U	RT	170
65+89 U - 66+86 U	RT	485
67+34 U - 69+51 U	RT	1117
69+69 U - 70+34 U	RT	363
70+55 U - 71+13 U	RT	365
25+11 U - 26+84 U	MEDIAN	1053
29+84 U - 30+05 U	MEDIAN	260
30+83 U - 31+04 U	MEDIAN	260
36+90 U - 37+10 U	MEDIAN	259
37+94 U - 38+47 U	MEDIAN	699
39+48 U - 41+21 U	MEDIAN	1054
47+05 U - 47+14 U	MEDIAN	72
47+65 U - 48+62 U	MEDIAN	478
51+19 U - 51+90 U	MEDIAN	940
52+42 U - 54+30 U	MEDIAN	1381
CATEGORY TOTAL		**44410**

CURB RAMP DETECTABLE WARNING FIELD YELLOW

STATION	LOCATION	602.0505 SF
24+25 U	RT	8
24+25 U	LT	8
24+25 U	LT	8
24+25 U	LT	8
38+62 U	RT	8
39+28 U	RT	8
47+05 U	RT	8
47+56 U	RT	8
52+22 U	RT	8
52+48 U	RT	8
52+57 U	RT	8
52+84 U	RT	8
60+37 U	RT	8
60+95 U	RT	8
62+99 U	RT	8
63+48 U	RT	8
63+69 U	RT	8
63+70 U	LT	8
66+84 U	RT	8
67+36 U	RT	8
CATEGORY TOTAL		**160**

*** OTHER QUANTITIES LOCATED ELSEWHERE IN PLAN**

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ADJUSTING MANHOLE COVERS

STATION	LOCATION	611.8110 EACH	EXIST RIM EL	NEW RIM EL	REMARKS
67+35 U	LT	1	1246.92	1246.90	STORM
69+01 U	LT	1	1251.41	1250.78	STORM
CATEGORY TOTAL		**2**			
***PROJECT ID TOTAL**		**8**			

PIPE UNDERDRAIN 6-INCH ITEMS

STATION TO STATION	LOCATION	612.0106 6-INCH LF	645.0111 GEOTEXTILE FABRIC TYPE DF SCHEDULE A SY
24+52 U - 40+50 U	LT	1620	1125
54+37 U - 69+44 U	LT	1494	1038
40+50 U - 46+81 U	RT	625	434
47+69 U - 48+63 U	RT	100	69
51+28 U - 52+20 U	RT	90	63
53+23 U - 60+40 U	RT	729	506
60+46 U - 63+26 U	RT	313	217
63+45 U - 66+91 U	RT	369	256
67+28 U - 71+46 U	RT	481	334
25+59 U - 30+05 U	LT (MEDIAN)	446	310
30+83 U - 37+10 U	LT (MEDIAN)	627	435
37+94 U - 38+47 U	LT (MEDIAN)	54	38
39+48 U - 40+50 U	LT (MEDIAN)	102	71
40+50 U - 47+14 U	LT (MEDIAN)	671	466
47+65 U - 48+62 U	LT (MEDIAN)	193	134
51+19 U - 51+90 U	LT (MEDIAN)	72	50
52+42 U - 54+30 U	LT (MEDIAN)	190	132
CATEGORY TOTALS		**8176**	**5678**

MAINTENANCE AND REPAIR OF HAUL ROAD

LOCATION	618.0100 EACH
.03 6999-18-70	1
CATEGORY TOTAL	**1**

MOBILIZATION

LOCATION	619.1000 EACH
6999-18-70	0.08
CATEGORY TOTAL	**0.08**

CONCRETE MEDIAN SLOPED NOSE

STATION	LOCATION	TYPE	620.0300 SF
25+04 U	LT	1	70
30+12 U	LT	1	65
30+76 U	LT	1	65
37+17 U	LT	1	82
37+87 U	LT	1	82
37+54 U	LT	1	66
39+41 U	LT	1	70
47+19 U	LT	1	65
47+58 U	LT	1	55
51+97 U	LT	1	68
52+35 U	LT	1	68
54+37 U	LT	1	57
CATEGORY TOTAL			**813**

WATER

LOCATION	624.0100 MGAL
BASE COMPACTION	440
DUST CONTROL	78
CATEGORY TOTAL	**518**

CULVERT PIPE CHECKS

STATION TO STATION	LOCATION	STAGE	628.7555 EACH
19+75 U - 46+85 U	LT&RT	2	22
255+55 M	RT	2	2
STAGE 2 TOTAL			**24**
UNDISTRIBUTED			6
CATEGORY TOTAL			**30**

INLET PROTECTION

STATION TO STATION	LOCATION	STAGE	628.7005 TYPE A EACH	628.7010 TYPE B EACH	628.7015 TYPE C EACH	628.7020 TYPE D EACH
60+41 U - 69+16 U	LT&RT	1	---	---	12	---
255+43 M	LT	1	1	---	---	---
STAGE 1 TOTALS			**1**	**0**	**12**	**0**
22+67 U - 47+82 U	LT&RT	2	32	---	26	6
51+58 U - 69+16 U	LT&RT	2	27	1	24	2
STAGE 2 TOTALS			**59**	**1**	**50**	**8**
UNDISTRIBUTED			5	1	5	2
CATEGORY TOTALS			**65**	**2**	**67**	**10**

MOBILIZATIONS EROSION CONTROL AND EMERGENCY EROSION CONTROL

PROJECT	628.1905 EACH	628.1910 EMERGENCY EACH
6999-18-70	5	5
CATEGORY TOTALS	**5**	**5**

ROCK BAGS

STATION	LOCATION	STAGE	628.7570 EACH
25+50 U	LT	2	15
12+00 R	LT	2	21
STAGE 2 TOTAL			**36**
UNDISTRIBUTED			9
CATEGORY TOTAL			**45**

FENCE SAFETY

LOCATION	616.0700.S LF
CTH U (UNDISTRIBUTED)	200
CATEGORY TOTAL	**200**

*** OTHER QUANTITIES LOCATED ELSEWHERE IN PLAN**

ALL ITEMS ON THIS SHEET ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

3

EROSION MAT

STATION TO STATION	LOCATION	STAGE	628.2004 CLASS I TYPE B SY	628.2006 URBAN CLASS I TYPE A SY
19+50 U - 48+70 U	LT&RT	2	8764	10502
51+11 U - 71+45 U	LT&RT	2	994	3654
254+00 M - 255+94 M	LT&RT	2	---	788
12+00 R - 14+49 R	LT&RT	2	260	571
STAGE 2 TOTALS			**10018**	**15515**
UNDISTRIBUTED			2732	4285
CATEGORY TOTALS			**12750**	**19800**

RIPRAP MEDIUM, RIPRAP HEAVY, AND GEOTEXTILE FABRIC TYPE HR

STATION	LOCATION	STAGE	606.0200 RIPRAP MEDIUM CY	606.0300 RIPRAP HEAVY CY	606.0700 GROUTED RIPRAP HEAVY CY	645.0120 FABRIC TYPE HR SY
44+63 U	LT	**2**	**---**	**---**	100	190
47+80 U	LT	2	---	---	102	200
48+50 U	LT	2	---	143	---	276
51+50 U	LT	2	64	---	---	169
52+00 U	LT	2	65	---	---	152
254+00 M	RT	2	---	654	---	1151
CATEGORY TOTALS			**129**	**797**	**202**	**2138**

SILT FENCE

STATION TO STATION	LOCATION	STAGE	628.1504 LF	628.1520 MAINTENANCE LF
20+10 U - 44+00 U	LT&RT	2	2225	2225
56+95 U - 57+60 U	LT	2	75	75
255+15 M - 255+95 M	RT	2	180	180
11+95 R - 13+55 R	RT	2	120	120
STAGE 2 TOTALS			**2600**	**2600**
UNDISTRIBUTED			650	650
CATEGORY TOTALS			**3250**	**3250**

TRACKING PADS

PROJECT	628.7560 EACH
6999-18-70	2
CATEGORY TOTAL	**2**

TEMPORARY DITCH CHECKS

STATION TO STATION	LOCATION	STAGE	628.7504 LF
38+00 U - 46+00 U	RT	2	110
STAGE 2 TOTAL			**110**
UNDISTRIBUTED			30
CATEGORY TOTAL			**140**

TOPSOIL, MULCHING, FERTILIZER, & SEEDING

STATION TO STATION	LOCATION	STAGE	625.0100 TOPSOIL SY	TOPSOIL DEPTH INCHES	627.0200 MULCHING SY	629.0210 FERTILIZER TYPE B CWT	630.0120 SEEDING MIXTURE NO. 20 LB	630.0130 SEEDING MIXTURE NO. 30 LB	630.0140 SEEDING MIXTURE NO. 40 LB	630.0200 SEEDING TEMPORARY LB	SPV.0030.01 FERTILIZER FOR LAWN TYPE TURF CWT	SPV.0120.01 WATER FOR SEEDED AREAS MGAL	SPV.0180.01 PREPARING TOPSOIL FOR LAWN TYPE TURF SY
4+55 L - 5+48 L	LT&RT	1	641	4	---	0.5	---	12	---	---	---	14	---
STAGE 1 TOTALS			**641**		**0**	**0.5**	**0**	**12**	**0**	**0**	**0.0**	**14**	**0**
19+50 U - 48+70 U	LT&RT	2	22884	6	2610	8.1	337	---	205	---	8.2	513	10516
51+11 U - 71+45 U	LT&RT	2	5412	6	756.0	1.2	48	---	76	---	3.6	121	3663
254+00 M - 255+94 M	LT&RT	2	788	6	---	---	---	---	15	---	0.5	18	788
12+00 R - 14+49 R	LT&RT	2	832	6	---	0.2	---	5	12	---	0.5	19	572
STAGE 2 TOTALS			**29916**		**3366**	**9.5**	**385**	**5**	**308**	**0**	**12.8**	**671**	**15539**
UNDISTRIBUTED			7643		1634	3.0	105	8	82	40	3.2	214	3961
CATEGORY TOTALS			**38200**		**5000**	**13.0**	**490**	**25**	**390**	**40**	**16.0**	**900**	**19500**

*** OTHER QUANTITIES LOCATED ELSEWHERE IN PLAN**

ALL ITEMS ON THIS SHEET ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

ERECTION OF TYPE II SIGNS AND SUPPORTS

SIGN NO.	STATION	LOCATION	SIGN CODE	W X H	637.0202 SIGNS REFLECTIVE TYPE II SF	634.0808 POST TUBULAR STEEL 2X2X8 EACH	634.0809 2X2X9.5 EACH	634.0810 2X2X10 EACH	634.0811 2X2X11 EACH	634.0812 2X2X12 EACH	634.0814 2X2X14 EACH	634.0816 2X2X16 EACH	638.2102 MOVING SIGNS TYPE II EACH	REMARKS
34-1	16+25 U	RT	W6-1	36" X 36"	9.00	---	---	---	---	---	---	1	---	
34-2	19+48 U	RT	W11-2	30" X 30"	6.25	---	---	---	---	---	---	1	---	
34-3	19+48 U	RT	W16-9P	24" X 12"	2.00	---	---	---	---	---	---	---	---	MOUNT WITH 34-2
34-4	19+65 U	LT	W6-3	36" X 36"	9.00	---	---	---	---	---	---	1	---	
34-5	20+25 U	RT	---	--- X ---	---	---	---	---	---	---	---	1	2	MOVE FROM 22+46 U
34-6	20+52 U	LT	R2-1	24" X 30"	5.00	---	---	---	---	---	1	---	---	35 MPH
34-7	21+18 U	RT	R3-8W	54" X 30"	11.25	---	---	---	---	---	---	2	---	
34-8	21+80 U	LT	R5-1	36" X 36"	9.00	---	---	---	---	---	---	1	---	
34-9	21+88 U	RT	R4-7	24" X 30"	5.00	---	---	---	1	---	---	---	---	
34-10	23+27 U	LT	R5-1A	36" X 24"	6.00	---	---	---	---	---	---	1	---	
34-11	23+27 U	LT	W6-2	36" X 36"	9.00	---	---	---	---	---	---	---	---	MOUNT WITH 34-10
34-12	23+58 U	RT	D11-1	24" X 18"	3.00	---	1	---	---	---	---	---	---	
34-13	23+58 U	RT	M7-5	12" X 9"	0.75	---	---	---	---	---	---	---	---	MOUNT WITH 34-12
34-14	23+58 U	RT	D11-1	24" X 18"	3.00	---	1	---	---	---	---	---	---	
34-15	23+58 U	RT	M7-2	12" X 9"	0.75	---	---	---	---	---	---	---	---	MOUNT WITH 34-14
34-16	23+64 U	LT	D11-1	24" X 18"	3.00	---	---	1	---	---	---	---	---	
34-17	23+87 U	LT	R4-7	24" X 30"	5.00	---	---	---	1	---	---	---	---	
34-18	200+60 V	LT	R1-1	30" X 30"	5.18	---	---	---	1	---	---	---	---	
34-19	24+23 U	RT	R2-1	24" X 30"	5.00	---	---	---	---	1	---	---	---	35 MPH
34-20	24+23 U	RT	D11-1	24" X 18"	3.00	---	---	---	---	---	---	---	---	MOUNT WITH 34-19
34-21	24+88 U	RT	D11-1	24" X 18"	3.00	---	1	---	---	---	---	---	---	
34-22	24+88 U	RT	M7-2	12" X 9"	0.75	---	---	---	---	---	---	---	---	MOUNT WTIH 34-21
34-23	24+88 U	RT	D11-1	24" X 18"	3.00	---	1	---	---	---	---	---	---	
34-24	24+88 U	RT	M7-5	12" X 9"	0.75	---	---	---	---	---	---	---	---	MOUNT WTIH 34-23
34-25	24+91 U	RT	R1-1	30" X 30"	5.18	---	---	---	1	---	---	---	---	
34-26	24+96 U	RT	R3-7R	30" X 30"	6.25	---	---	---	1	---	---	---	---	
34-27	25+15 U	LT	R4-7	24" X 30"	5.00	---	---	---	1	---	---	---	---	
34-28	27+17 U	RT	W11-2	30" X 30"	6.25	---	---	---	---	1	---	---	---	
34-29	27+17 U	RT	W16-7L	24" X 12"	2.00	---	---	---	---	---	---	---	---	MOUNT WTIH 34-28
34-30	25+31 U	LT	W11-2	30" X 30"	6.25	---	---	---	---	1	---	---	---	
34-31	25+31 U	LT	W16-7L	24" X 12"	2.00	---	---	---	---	---	---	---	---	MOUNT WITH 34-30
34-32	25+66 U	RT	R3-7R	30" X 30"	6.25	---	---	---	1	---	---	---	---	
34-33	25+68 U	RT	D11-1	24" X 18"	3.00	---	---	1	---	---	---	---	---	
34-34	26+10 U	LT	D9-2	24" X 24"	4.00	---	---	---	1	---	---	---	---	
34-35	26+10 U	LT	MB6-1	21" X 21"	3.06	---	---	---	---	---	---	---	---	MOUNT WITH 34-34
34-36	26+42 U	RT	R2-1	24" X 30"	5.00	---	---	---	1	---	---	---	---	35 MPH
34-37	26+87 U	LT	D11-1	24" X 18"	3.00	---	1	---	---	---	---	---	---	
34-38	26+87 U	LT	M7-5	12" X 9"	0.75	---	---	---	---	---	---	---	---	MOUNT WITH 34-37
34-39	26+87 U	LT	D11-1	24" X 18"	3.00	---	1	---	---	---	---	---	---	
34-40	26+87 U	LT	M7-2	12" X 9"	0.75	---	---	---	---	---	---	---	---	MOUNT WTIH 34-39
34-41	27+53 U	RT	R7-1D	18" X 24"	3.00	---	---	---	1	---	---	---	---	
34-42	27+60 U	LT	R3-8W	54" X 30"	11.25	---	---	---	2	---	---	---	---	
34-43	29+37 U	LT	R7-1D	18" X 24"	3.00	---	---	---	1	---	---	---	---	
34-44	30+00 U	LT	R4-7	24" X 30"	5.00	---	---	---	1	---	---	---	---	
34-45	30+53 U	RT	R7-1D	18" X 24"	3.00	---	---	---	1	---	---	---	---	
35-1	30+90 U	LT	R4-7	24" X 30"	5.00	---	---	---	1	---	---	---	---	
35-2	30+92 U	LT	W11-2	30" X 30"	6.25	---	---	---	---	1	---	---	---	
35-3	30+92 U	LT	W16-9P	24" X 12"	2.00	---	---	---	---	---	---	---	---	MOUNT WTIH 35-2
35-4	32+13 U	LT	R7-1D	18" X 24"	3.00	---	---	---	1	---	---	---	---	

CONTINUE

ALL ITEMS ON THIS SHEET ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

ERECTION OF TYPE II SIGNS AND SUPPORTS

SIGN NO.	STATION	LOCATION	SIGN CODE	W X H	637.0202 SIGNS REFLECTIVE TYPE II SF	634.0808 POST TUBULAR STEEL 2X2X8 EACH	634.0809 2X2X9.5 EACH	634.0810 2X2X10 EACH	634.0811 2X2X11 EACH	634.0812 2X2X12 EACH	634.0814 2X2X14 EACH	634.0816 2X2X16 EACH	638.2102 MOVING SIGNS TYPE II EACH	REMARKS
35-5	32+84 U	LT	W4-2R	36" X 36"	9.00	---	---	---	---	---	1	---	---	
35-6	33+53 U	RT	R7-1D	18" X 24"	3.00	---	---	---	1	---	---	---	---	
35-7	35+00 U	LT	R7-1D	18" X 24"	3.00	---	---	---	---	---	---	---	---	MOUNT ON LIGHT POLE
35-8	35+61 U	LT	W9-2L	36" X 36"	9.00	---	---	---	---	---	1	---	---	
35-9	36+52 U	RT	R7-1D	18" X 24"	3.00	---	---	---	1	---	---	---	---	
35-10	37+04 U	RT	R4-7	24" X 30"	5.00	---	---	---	1	---	---	---	---	
35-11	37+15 U	LT	R2-1	24" X 30"	5.00	---	---	---	---	---	---	---	---	35 MPH, MOUNT ON LIGHT POLE
35-12	37+98 U	LT	R4-7	24" X 30"	5.00	---	---	---	1	---	---	---	---	
35-13	38+40 U	LT	R7-1D	18" X 24"	3.00	---	---	---	---	---	---	---	---	MOUNT ON LIGHT POLE
35-14	38+42 U	LT	R4-7	24" X 30"	5.00	---	---	---	1	---	---	---	---	
35-15	14+33 R	LT	W14-1	30" X 30"	6.25	---	---	---	---	1	---	---	---	
35-16	14+33 R	RT	R1-1	30" X 30"	5.18	---	---	---	1	---	---	---	---	
35-17	39+53 U	LT	R4-7	24" X 30"	5.00	---	---	---	1	---	---	---	---	
35-18	39+55 U	RT	R7-1D	18" X 24"	3.00	---	---	---	1	---	---	---	---	
35-19	40+63 U	RT	J1-1	24" X 39"	6.50	---	---	---	---	1	---	---	---	
35-20	41+41 U	RT	R2-1	24" X 30"	5.00	---	---	---	---	---	---	---	---	MOUNT ON LIGHT POLE
35-21	41+85 U	LT	R7-1D	18" X 24"	3.00	---	---	---	1	---	---	---	---	
35-22	42+12 U	RT	J2-1	24" X 57"	9.50	---	---	---	---	---	1	---	---	
35-23	42+73 U	RT	R7-1D	18" X 24"	3.00	---	---	---	1	---	---	---	---	
35-24	43+06 U	LT	---	--- X ---	---	---	---	---	1	---	---	---	2	MOVE FROM 43+06 U
35-25	44+05 U	RT	D1-1	90" X 15"	9.38	---	2	---	---	---	---	---	---	
35-26	254+10 M	RT	W5-56	18" X 18"	2.25	1	---	---	---	---	---	---	---	
35-27	254+10 M	RT	W5-56	18" X 18"	2.25	1	---	---	---	---	---	---	---	
35-28	254+10 M	RT	W5-56	18" X 18"	2.25	1	---	---	---	---	---	---	---	
35-29	---	LT	W14-1	30" X 30"	6.25	---	---	---	---	---	---	1	---	LOCATED AT INTERSECTION OF BOOT LN AND MERRILL AVE
35-30	44+83 U	LT	R7-1D	18" X 24"	3.00	---	---	---	1	---	---	---	---	
35-31	45+45 U	LT	D11-1	24" X 18"	3.00	---	---	1	---	---	---	---	---	
35-32	45+67 U	RT	W1-6	48" X 24"	8.00	---	---	---	1	---	---	---	---	
35-33	---	---	W5-56	18" X 18"	2.25	1	---	---	---	---	---	---	---	LOCATED AT THE END OF ARTHUR AVE
35-34	---	---	W5-56	18" X 18"	2.25	1	---	---	---	---	---	---	---	LOCATED AT THE END OF ARTHUR AVE
35-35	---	---	W5-56	18" X 18"	2.25	1	---	---	---	---	---	---	---	LOCATED AT THE END OF ARTHUR AVE
35-36	---	---	W5-56	18" X 18"	2.25	1	---	---	---	---	---	---	---	LOCATED AT THE END OF ARLINGTON LANE
35-37	---	---	W5-56	18" X 18"	2.25	1	---	---	---	---	---	---	---	LOCATED AT THE END OF ARLINGTON LANE
35-38	---	---	W5-56	18" X 18"	2.25	1	---	---	---	---	---	---	---	LOCATED AT THE END OF ARLINGTON LANE
36-1	45+49 U	RT	R7-1D	18" X 24"	3.00	---	---	---	1	---	---	---	---	
36-2	5+13 L	RT	W1-6	48" X 24"	8.00	---	---	---	1	---	---	---	---	
36-3	46+08 U	LT	---	--- X ---	---	---	---	---	1	---	---	---	1	MOVE FROM 46+08 U
36-4	46+56 U	LT	R2-1	24" X 30"	5.00	---	---	---	1	---	---	---	---	35 MPH
36-5	46+80 U	RT	J3-1	24" X 57"	9.50	---	---	---	---	---	1	---	---	
36-6	47+10 U	LT	R4-7	24" X 30"	5.00	---	---	---	1	---	---	---	---	
36-7	47+12 U	LT	R7-1D	18" X 24"	3.00	---	---	---	1	---	---	---	---	
36-8	47+59 U	LT	J3-1	24" X 57"	9.50	---	---	---	---	---	1	---	---	
36-9	47+72 U	LT	R4-7	24" X 30"	5.00	---	---	---	1	---	---	---	---	
36-10	48+49 U	RT	R7-1D	18" X 24"	3.00	---	---	---	1	---	---	---	---	
36-11	51+41 U	LT	D1-1	90" X 15"	9.38	---	---	2	---	---	---	---	---	
36-12	51+55 U	RT	R7-1D	18" X 24"	3.00	---	---	---	1	---	---	---	---	
36-13	51+86 U	LT	R4-7	24" X 30"	5.00	---	---	---	1	---	---	---	---	
36-14	52+18 U	RT	R5-1	30" X 30"	6.25	---	---	---	1	---	---	---	---	
36-15	52+18 U	RT	R3-1	24" X 24"	4.00	---	---	---	---	---	---	---	---	MOUNT WTIH 36-14

CONTINUE

ALL ITEMS ON THIS SHEET ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

ERECTION OF TYPE II SIGNS AND SUPPORTS

SIGN NO.	STATION	LOCATION	SIGN CODE	W X H	637.0202 SIGNS REFLECTIVE TYPE II SF	634.0808 2X2X8 EACH	634.0809 2X2X9.5 EACH	634.0810 2X2X10 EACH	634.0811 2X2X11 EACH	634.0812 2X2X12 EACH	634.0814 2X2X14 EACH	634.0816 2X2X16 EACH	638.2102 MOVING SIGNS TYPE II EACH	REMARKS
						POST TUBULAR STEEL								
36-16	52+43 U	LT	R4-7	24" X 30"	5.00	---	---	---	1	---	---	---	---	
36-17	52+43 U	LT	R3-1	24" X 24"	4.00	---	---	---	---	---	---	---	---	MOUNT WTIH 36-16
36-18	52+44 U	LT	J2-1	24" X 57"	9.50	---	---	---	---	---	1	---	---	
36-19	52+56 U	LT	J3-1	24" X 57"	9.50	---	---	---	---	---	1	---	---	
36-20	52+96 U	LT	J3-1	24" X 57"	9.50	---	---	---	---	---	1	---	---	
36-21	53+00 U	LT	R7-1D	18" X 24"	3.00	---	---	---	1	---	---	---	---	
36-22	53+50 U	LT	J1-1	24" X 39"	6.50	---	---	---	---	1	---	---	---	
36-23	53+86 U	RT	W6-2	36" X 36"	9.00	---	---	---	---	---	1	---	---	
36-24	54+27 U	LT	R4-7	24" X 30"	5.00	---	---	---	1	---	---	---	---	
36-25	54+64 U	RT	R7-1D	18" X 24"	3.00	---	---	---	1	---	---	---	---	
36-26	54+98 U	RT	D11-1	24" X 18"	3.00	---	---	---	---	---	---	---	---	MOUNT ON LIGHT POLE
36-27	55+54 U	LT	R7-1D	18" X 24"	3.00	---	---	---	1	---	---	---	---	
36-28	55+56 U	RT	---	--- X ---	---	---	---	---	---	---	1	---	2	MOVE FROM 53+90 U
36-29	56+16 U	RT	R2-1	24" X 30"	5.00	---	---	---	1	---	---	---	---	35 MPH
36-30	56+85 U	RT	R7-1D	18" X 24"	3.00	---	---	---	1	---	---	---	---	
36-31	57+28 U	RT	---	--- X ---	---	---	---	---	1	---	---	---	1	MOVE FROM 57+28 U
36-32	58+08 U	RT	W11-2	30" X 30"	6.25	---	---	---	1	---	---	---	---	
36-33	58+08 U	RT	W16-9P	24" X 12"	2.00	---	---	---	---	---	---	---	---	MOUNT WITH 36-32
36-34	58+78 U	LT	R7-1D	18" X 24"	3.00	---	---	---	---	---	---	---	---	MOUNT ON LIGHT POLE
36-35	59+87 U	RT	R7-1D	18" X 24"	3.00	---	---	---	---	---	---	---	---	MOUNT ON LIGHT POLE
36-36	60+75 U	RT	R1-1	30" X 30"	5.18	---	---	---	1	---	---	---	---	
37-1	61+68 U	LT	R7-1D	18" X 24"	3.00	---	---	---	1	---	---	---	---	
37-2	62+24 U	RT	R7-1D	18" X 24"	3.00	---	---	---	1	---	---	---	---	
37-3	63+49 U	RT	R1-1	30" X 30"	5.18	---	---	---	1	---	---	---	---	
37-4	63+64 U	RT	W11-2	30" X 30"	6.25	---	---	---	---	1	---	---	---	
37-5	63+64 U	RT	W16-7L	24" X 12"	2.00	---	---	---	---	---	---	---	---	MOUNT WITH 37-4
37-6	63+76 U	LT	W11-2	30" X 30"	6.25	---	---	---	---	1	---	---	---	
37-7	63+76 U	LT	W16-7L	24" X 12"	2.00	---	---	---	---	---	---	---	---	MOUNT WTIH 37-6
37-8	64+76 U	LT	R7-1D	18" X 24"	3.00	---	---	---	1	---	---	---	---	
37-9	65+18 U	RT	R7-1D	18" X 24"	3.00	---	---	---	---	---	---	---	---	MOUNT ON LIGHT POLE
37-10	66+20 U	LT	R2-1	24" X 30"	5.00	---	---	---	---	---	---	---	---	35 MPH, MOUNT ON LIGHT POLE
37-11	67+37 U	RT	R1-1	30" X 30"	5.18	---	---	---	1	---	---	---	---	
37-12	67+48 U	LT	J4-1	24" X 36"	6.00	---	---	---	---	1	---	---	---	
37-13	67+75 U	RT	R3-7R	30" X 30"	6.25	---	---	---	1	---	---	---	---	
37-14	68+19 U	RT	J1-2	48" X 54"	18.00	---	---	---	---	---	1	---	---	
37-15	68+46 U	RT	R7-1D	18" X 24"	3.00	---	---	---	1	---	---	---	---	
37-16	68+47 U	LT	D11-1	24" X 18"	3.00	---	---	1	---	---	---	---	---	
37-17	68+80 U	RT	R2-1	24" X 30"	5.00	---	---	---	1	---	---	---	---	25 MPH
37-18	69+10 U	RT	D11-1	24" X 18"	3.00	---	---	1	---	---	---	---	---	
37-19	69+10 U	RT	M7-5	12" X 9"	0.75	---	1	---	---	---	---	---	---	
37-20	69+33 U	LT	W11-2	30" X 30"	6.25	---	---	---	---	---	1	---	---	
37-21	69+33 U	LT	W16-9P	24" X 12"	2.00	---	---	---	---	---	---	---	---	MOUNT WITH 37-20
37-22	69+43 U	RT	J2-2	48" X 69"	23.00	---	---	---	---	---	2	---	---	
37-23	70+00 U	RT	W3-3	36" X 36"	9.00	---	---	---	---	1	---	---	---	
37-24	71+10 U	RT	J32-1	24" X 69"	11.50	---	---	---	---	---	1	---	---	
37-25	71+10 U	RT	J3-2	48" X 69"	23.00	---	---	---	---	---	2	---	---	
37-26	71+47 U	RT	W11-2	30" X 30"	6.25	---	---	---	---	1	---	---	---	
37-27	71+47 U	RT	W16-7L	24" X 12"	2.00	---	---	---	---	---	---	---	---	MOUNT WITH 37-26
CATEGORY TOTALS					**705.14**	**9**	**9**	**7**	**59**	**12**	**18**	**9**	**8**	

*** OTHER QUANTITIES LOCATED ELSEWHERE IN PLAN**

ALL ITEMS ON THIS SHEET
ARE CATEGORY 0010
UNLESS OTHERWISE NOTED

3

REMOVAL OF TYPE II SIGNS AND SUPPORTS

SIGN NO.	STATION	LOCATION	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH
14-1	200+68 V	LT	1	1
14-2	200+73 V	LT	1	1
14-3	24+20 U	RT	1	1
14-4	24+77 U	RT	2	---
14-5	24+77 U	RT	1	1
14-6	28+09 U	LT	1	1
14-7	28+72 U	LT	1	1
14-8	29+20 U	LT	1	1
15-1	37+08 U	RT	2	1
15-2	14+85 R	LT	1	1
15-3	14+75 R	RT	1	1
15-4	41+85 U	LT	2	1
15-5	42+10 U	RT	1	2
15-6	42+62 U	LT	1	1
15-7	44+00 U	LT	1	1
15-8	253+88 M	RT	1	1
15-9	44+71 U	LT	1	1
15-10	44+87 U	RT	1	1
16-1	46+50 U	LT	1	1
16-2	46+50 U	LT	1	1
16-3	46+54 U	LT	3	1
16-4	46+54 U	LT	1	1
16-5	46+80 U	LT	1	1
16-6	46+80 U	LT	1	---
16-7	46+80 U	LT	1	---
16-8	46+80 U	LT	1	---
16-9	46+80 U	LT	1	---
16-10	46+83 U	LT	1	1
16-11	47+17 U	LT	1	1
16-12	47+17 U	LT	1	1
16-13	47+32 U	LT	1	1
16-14	47+32 U	LT	1	---
16-15	47+32 U	LT	3	1
16-16	47+88 U	LT	1	1
16-17	48+74 U	LT	1	2
16-18	48+75 U	LT	1	1
16-19	48+78 U	LT	1	1

CONTINUE

REMOVAL OF TYPE II SIGNS AND SUPPORTS

SIGN NO.	STATION	LOCATION	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH
16-20	50+97 U	LT	1	2
16-21	50+97 U	LT	1	1
16-22	51+03 U	LT	1	1
16-23	51+49 U	RT	3	1
16-24	51+49 U	RT	1	---
16-25	51+49 U	RT	1	1
16-26	50+57 U	RT	1	1
16-27	51+95 U	RT	1	---
16-28	51+95 U	RT	1	---
16-29	51+95 U	RT	4	1
16-30	51+95 U	RT	1	---
16-31	51+95 U	RT	1	---
16-32	51+95 U	RT	1	---
16-33	52+28 U	LT	3	1
16-34	52+28 U	LT	1	---
16-35	52+28 U	LT	1	---
16-36	54+92 U	RT	1	1
16-37	56+10 U	LT	1	2
16-38	57+52 U	LT	1	1
16-39	57+52 U	LT	2	---
16-40	60+85 U	RT	2	---
16-41	60+85 U	RT	1	1
16-42	60+85 U	RT	1	---
16-43	5+13 L	RT	1	1
17-1	63+38 U	RT	2	---
17-2	63+38 U	RT	1	1
17-3	66+80 U	LT	1	1
17-4	67+34 U	RT	2	---
17-5	67+34 U	RT	1	1
17-6	67+42 U	LT	1	1
17-7	67+60 U	RT	2	1
17-8	67+73 U	RT	1	---
17-9	68+00 U	RT	3	1
17-10	68+00 U	RT	2	1
17-11	68+78 U	RT	1	1
17-12	69+30 U	RT	2	1
17-13	69+44 U	RT	8	2
17-14	71+08 U	RT	8	2
CATEGORY TOTALS			**112**	**61**

TRAFFIC CONTOL SIGNS, LIGHTS, AND BARRICADES

LOCATION	643.0420 BARRICADES TYPE III EACH	643.0420 BARRICADES TYPE III DAYS	643.0705 WARNING LIGHTS TYPE A EACH	643.0705 WARNING LIGHTS TYPE A DAYS	643.0900 SIGNS EACH	643.0900 SIGNS DAYS	643.3000 DETOUR SIGNS EACH	643.3000 DETOUR SIGNS DAYS
STAGE 1	28	840	45	1350	29	870	97	2910
STAGE 2A	44	1320	66	1980	28	840	143	4290
STAGE 2B	46	4140	70	6300	36	3240	114	10260
STAGE 3A	0	0	0	0	0	0	0	0
STAGE 3B	0	0	0	0	0	0	0	0
STAGE 4	0	0	0	0	10	140	0	0
STAGE 5A	0	0	0	0	10	450	0	0
STAGE 5B	0	0	0	0	10	450	0	0
STAGE 6A	0	0	0	0	10	420	0	0
STAGE 6B	0	0	0	0	10	150	0	0
STAGE 6C	0	0	0	0	10	300	0	0
STAGE 7	0	0	0	0	0	0	0	0
UNDISTRIBUTED		600		970		710		1940
CATEGORY TOTALS		**6900**		**10600**		**7570**		**19400**

TRAFFIC CONTROL SURVEILLANCE AND MAINTENANCE

PROJECT	643.0200 DAYS
.03 6999-18-70	579
CATEGORY TOTAL	**579**

TRAFFIC CONTROL DETOUR

PROJECT	643.2000 EACH
.03 6999-18-70	1
CATEGORY TOTAL	**1**

*** OTHER QUANTITIES LOCATED ELSEWHERE IN PLAN**

ALL ITEMS ON THIS SHEET ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

3

PAVEMENT MARKING DIAGONAL EPOXY

STATION TO STATION	LOCATION	647.0726 12-INCH YELLOW LF	647.0726 12-INCH WHITE LF	647.0736 18-INCH WHITE LF
21+50 U - 23+95 U	LT	75	---	---
26+50 U - 29+34 U	LT	---	---	85
54+46 U - 56+27 U	LT	57	---	---
63+70 U	CROSSWALK	---	237	---
68+47 U - 69+00 U	LT	23	---	---
SUB-TOTALS		**155**	**237**	**85**
CATEGORY TOTALS		392		85

PAVEMENT MARKING ARROWS EPOXY TYPE 2

STATION	LOCATION	647.0166 WHITE EACH
23+36 U	RT	1
23+59 U	LT	1
200+69 V	LT	1
24+74 U	RT	1
25+55 U	LT	1
25+55 U	LT	1
39+82 U	LT	1
46+44 U	RT	1
47+95 U	LT	1
CATEGORY TOTAL		**9**

PAVEMENT MARKING CROSSWALK EPOXY 12-INCH

STATION	DESCRIPTION	647.0776 WHITE LF
25+25 U	LT	76
25+25 U	RT	71
38+95 U	RT, ARTHUR AVE	116
60+66 U	RT, ARLINGTON LN	102
63+23 U	RT, N 13TH AVE	89
63+70 U	LT&RT	112
67+10 U	RT, N 12TH AVE	94
CATEGORY TOTAL		**660**

TEMPORARY PAVEMENT MARKING STOP LINE REMOVABLE TAPE 24-INCH

STATION TO STATION	LOCATION	649.1400 LF
23+95 U	EB TRAFFIC LANES	47
25+04 U	WB TRAFFIC LANES	38
51+97 U	EB TRAFFIC LANES	28
52+36 U	WB TRAFFIC LANES	28
CATEGORY TOTAL		**141**

PAVEMENT MARKING ISLAND NOSE EPOXY

STATION	LOCATION	647.0606 YELLOW EACH
23+95 U	LT	1
25+04 U	LT	1
30+12 U	LT	1
30+76 U	LT	1
37+17 U	LT	1
37+87 U	LT	1
38+54 U	LT	1
39+40 U	LT	1
47+19 U	LT	1
47+58 U	LT	1
51+97 U	LT	1
52+35 U	LT	1
54+38 U	LT	1
CATEGORY TOTAL		**13**

PAVEMENT MARKING WORDS EPOXY

STATION	DESCRIPTION	647.0356 WHITE EACH
22+92 U	RT, "ONLY"	1
23+15 U	LT, "ONLY"	1
201+09 V	LT, "ONLY"	1
24+79 U	RT, "ONLY"	1
25+89 U	LT, "ONLY"	1
25+89 U	LT, "ONLY"	1
40+26 U	LT, "ONLY"	1
46+02 U	RT, "ONLY"	1
48+39 U	LT, "ONLY"	1
CATEGORY TOTAL		**9**

PAVEMENT MARKING STOP LINE EPOXY 18-INCH

STATION	DESCRIPTION	647.0566 WHITE LF
200+56 V	LT, OVERLOOK DR	33
24+67 U	RT, WESTWOOD DR	33
39+10 U	RT, ARTHUR AVE	24
67+19 U	RT, N 12TH AVE	22
CATEGORY TOTAL		**112**

PAVEMENT MARKING CURB EPOXY

STATION TO STATION	LOCATION	647.0456 YELLOW LF
25+11 U - 25+16 U	LT	24
29+79 U - 30+05 U	LT	69
30+83 U - 31+09 U	LT	69
36+85 U - 37+17 U	LT	62
37+87 U - 38+54 U	LT	132
39+40 U - 39+53 U	LT	24
46+75 U - 47+19 U	LT	57
47+58 U - 47+81 U	LT	35
51+53 U - 51+97 U	LT	58
52+35 U - 52+73 U	LT	51
54+25 U - 54+38 U	LT	24
CATEGORY TOTAL		**605**

PAVEMENT MARKING EPOXY

STATION TO STATION	DESCRIPTION	646.0106 4-INCH WHITE LF	646.0106 4-INCH YELLOW LF	646.0126 8-INCH WHITE LF
19+50 U - 23+74 U	WB EDGELINE	435	---	---
19+50 U - 23+95 U	DOUBLE YELLOW CENTERLINE	---	1500	---
19+50 U - 23+65 U	EB EDGELINE	410	---	---
21+50 U - 22+72 U	EB LANE LINE SKIPS	30	---	---
22+72 U - 23+95 U	EB LANE LINE	121	---	---
22+72 U - 23+95 U	EB RT TURN CHANNELIZING	---	---	121
22+95 U - 23+95 U	EB LT TURN CHANNELIZING	---	---	100
200+56 V - 201+10 V	DOUBLE YELLOW CENTERLINE	---	108	---
200+56 V - 201+10 V	SB CHANNELIZING	---	---	54
200+80 V - 201+10 V	SB EDGE LINE	30	---	---
24+40 U	RT,LANE LINE	13	---	---
24+50 U	RT, DOUBLE YELLOW CENTERLINE	---	48	---
24+63 U	RT, CHANNELIZING	---	---	75
25+28 U - 26+09 U	WB RT TURN CHANNELIZING	---	---	81
25+28 U - 26+09 U	WB, LANE LINE	81	---	---
25+28 U - 26+09 U	WB LT TURN CHANNELIZING	---	---	81
25+28 U - 48+65 U	EB CENTERLINE SKIPS	585	---	---
25+28 U - 38+38 U	EB EDGELINE	1315	---	---
26+09 U - 48+53 U	WB EDGELINE	2496	---	---
26+09 U - 27+59 U	WB LANE LINE SKIPS	---	---	38
26+09 U - 27+59 U	WB LANE LINE SKIPS	38	---	---
31+42 U - 48+46 U	WB CENTERLINE SKIPS	426	---	---
39+40 U - 40+46 U	WB LT TURN CHANNELIZING	---	---	106
39+44 U - 44+30 U	EB EDGELINE	482	---	---
44+30 U - 45+81 U	EB LANE LINE SKIPS	39	---	---
44+30 U - 45+81 U	EB LANE LINE SKIPS	---	---	39
45+81 U - 46+81 U	EB LANE LINE	100	---	---
45+81 U - 46+81 U	EB CHANNELIZING	---	---	100
47+68 U - 48+68 U	EB LANE LINE SKIPS	50	---	---
51+14 U - 69+46 U	WB EDGELINE	1825	---	---
51+17 U - 69+15 U	WB CENTERLINE SKIPS	458	---	---
51+25 U - 69+25 U	EB CENTERLINE SKIPS	450	---	---
51+28 U - 52+20 U	EB EDGELINE	90	---	---
52+46 U - 52+61 U	EB EDGELINE	15	---	---
52+61 U - 54+20 U	EB LANE LINE SKIPS	80	---	---
54+20 U - 60+30 U	EB EDGELINE	607	---	---
54+32 U - 69+05 U	DOUBLE YELLOW CENTERLINE	---	3860	---
61+10 U - 62+85 U	EB EDGELINE	175	---	---
63+59 U - 66+68 U	EB EDGELINE	307	---	---
67+52 U - 69+25 U	EB EDGELINE	176	---	---
69+15 U - 69+43 U	WB CHANNELIZING	---	---	30
48+53 U - 51+14 U	WB EDGELINE	260	---	---
48+56 U - 51+17 U	WB CENTERLINE SKIPS	65	---	---
48+65 U - 51+25 U	ED CENTERLINE SKIPS	65	---	---
48+68 U - 51+28 U	EB EDGELINE	260	---	---
48+53 U - 51+14 U	WB EDGELINE	260	---	---
48+56 U - 51+17 U	WB CENTERLINE SKIPS	65	---	---
48+65 U - 51+25 U	ED CENTERLINE SKIPS	65	---	---
48+68 U - 51+28 U	EB EDGELINE	260	---	---
255+64 M - 255+94 M	DOUBLE YELLOW CENTERLINE	---	60	---
SUB-TOTALS		**12134**	**5576**	**825**
CATEGORY TOTALS		**17710**		**825**

*** OTHER QUANTITIES LOCATED ELSEWHERE IN PLAN**

ALL ITEMS ON THIS SHEET ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

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PULL BOXES STEEL 24x42-INCH

NUMBER	STATION	OFFSET	653.0140 EACH
LPB-C1	23+84 U	52' LT	1
LPB-C2	23+92 U	40' RT	1
LPB-C3	24+89 U	59' LT	1
LPB-C4	25+14 U	41.8' RT	1
LPB-C5	38+33 U	53.3' LT	1
LPB-C6	38+36 U	33.5' RT	1
LPB-C7	39+41 U	33.5' RT	1
LPB-C8	46+88 U	45.2' RT	1
LPB-C9	46+84 U	53.5' LT	1
LPB-C10	47+69 U	44.5' RT	1
LPB-C11	48+26 U	53.5' LT	1
LPB-C12	48+53 U	44.5' RT	1
LPB-D13	51+43 U	54' LT	1
LPB-D14	51+66 U	33.5' RT	1
LPB-D15	52+14 U	51' LT	1
LPB-D16	52+17 U	33' RT	1
LPB-D17	53+00 U	47' RT	1
LPB-D18	60+34 U	33.3' RT	1
LPB-D19	60+23 U	33.3' LT	1
LPB-D20	61+09 U	33.3' RT	1
LPB-D21	62+86 U	33.3' RT	1
LPB-D22	63+62 U	33.3' RT	1
LPB-D23	66+71 U	33.5' RT	1
LPB-D24	67+49 U	33.5' RT	1
CATEGORY TOTAL			**24**

REMOVING PULL BOXES

STATION	LOCATION	653.0905 EACH
51+43 U	LT, CTH U	1
51+44 U	LT, CTH U	1
51+94 U	RT, CTH U	1
52+14 U	LT, CTH U	1
52+31 U	RT, CTH U	1
52+37 U	LT, CTH U	1
CATEGORY TOTAL		**6**

LIGHTING UNIT AND LUMINAIRE ITEMS

STATION	OFFSET	LIGHTING UNIT NUMBER	657.0322 POLES TYPE 5 - ALUMINUM EACH	657.0610 657.0615 LUMINAIRE ARMS SINGLE MEMBER 4 1/2-INCH CLAMP 6-FT EACH	8-FT EACH	659.0125 LUMINAIRES UTILITY HPS 250 WATTS EACH	654.0105 CONCRETE BASES TYPE 5 EACH	657.0255 TRANSFORMER BASE BREAKAWAY 11 1/2-INCH BOLT CIRCLE EACH	655.0610 ELECTRICAL WIRE LIGHTING 12 AWG LF
19+51 U	21.8' LT	L-C1	1	1	0	1	1	1	138
21+27 U	22.1' RT	L-C2	1	1	0	1	1	1	138
22+74 U	37.0' LT	L-C3	1	1	0	1	1	1	138
23+86 U	38.3' RT	L-C4	1	1	0	1	1	1	138
24+96 U	56.9' LT	L-C5	1	1	0	1	1	1	138
25+98 U	35.7' RT	L-C6	1	1	0	1	1	1	138
27+00 U	54.0' LT	L-C7	1	1	0	1	1	1	138
27+88 U	34.0' RT	L-C8	1	1	0	1	1	1	138
29+01 U	54.0' LT	L-C9	1	1	0	1	1	1	138
30+00 U	34.0' RT	L-C10	1	1	0	1	1	1	138
30+99 U	54.0' LT	L-C11	1	1	0	1	1	1	138
31+99 U	34.0' RT	L-C12	1	1	0	1	1	1	138
33+02 U	54.0' LT	L-C13	1	1	0	1	1	1	138
34+00 U	34.0' RT	L-C14	1	1	0	1	1	1	138
35+01 U	54.0' LT	L-C15	1	1	0	1	1	1	138
36+00 U	34.0' RT	L-C16	1	1	0	1	1	1	138
37+02 U	54.0' LT	L-C17	1	1	0	1	1	1	138
37+80 U	34.0' RT	L-C18	1	1	0	1	1	1	138
38+50 U	54.0' LT	L-C19	1	1	0	1	1	1	138
39+50 U	34.2' RT	L-C20	1	1	0	1	1	1	138
40+25 U	54.0' LT	L-C21	1	1	0	1	1	1	138
41+25 U	34.0' RT	L-C22	1	1	0	1	1	1	138
42+25 U	54.0' LT	L-C23	1	1	0	1	1	1	138
43+30 U	34.0' RT	L-C24	1	1	0	1	1	1	138
44+01 U	54.0' LT	L-C25	1	1	0	1	1	1	138
44+98 U	41.7' RT	L-C26	1	1	0	1	1	1	138
45+99 U	54.0' LT	L-C27	1	1	0	1	1	1	138
46+75 U	46.2' RT	L-C28	1	1	0	1	1	1	138
47+75 U	54.0' LT	L-C29	1	1	0	1	1	1	138
48+69 U	42.8' RT	L-C30	1	0	1	1	1	1	144
49+77 U	57.7' LT	L-D31	1	1	0	1	1	1	138
50+75 U	42.8' RT	L-D32	1	0	1	1	1	1	144
51+81 U	51.8' LT	L-D33	1	1	0	1	1	1	138
53+05 U	43.0' RT	L-D34	1	1	0	1	1	1	138
53+90 U	44.2' LT	L-D35	1	1	0	1	1	1	138
55+03 U	34.0' RT	L-D36	1	1	0	1	1	1	138
55+90 U	37.2' LT	L-D37	1	1	0	1	1	1	138
57+27 U	34.0' RT	L-D38	1	1	0	1	1	1	138
58+70 U	34.0' LT	L-D39	1	1	0	1	1	1	138
59+96 U	34.0' RT	L-D40	1	1	0	1	1	1	138
61+27 U	33.5' LT	L-D41	1	1	0	1	1	1	138
62+43 U	34.0' RT	L-D42	1	1	0	1	1	1	138
63+61 U	34.0' LT	L-D43	1	1	0	1	1	1	138
65+03 U	34.0' RT	L-D44	1	1	0	1	1	1	138
66+21 U	34.0' LT	L-D45	1	1	0	1	1	1	138
67+54 U	34.0' RT	L-D46	1	1	0	1	1	1	138
68+81 U	41.8' LT	L-D47	1	1	0	1	1	1	138
69+84 U	34.0' RT	L-D48	1	1	0	1	1	1	138
CATEGORY TOTALS			**48**	**46**	**2**	**48**	**48**	**48**	**6636**

*** OTHER QUANTITIES LOCATED ELSEWHERE IN PLAN**

ALL ITEMS ON THIS SHEET ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

ELECTRICAL WIRE LIGHTING AND CONDUIT RIGID NONMETALLIC SCHEDULE 40

FROM - TO	655.0620 ELECTRICAL WIRE LIGHTING NUMBER OF WIRES 8 AWG	4 AWG	2 AWG	655.0630 8 AWG LF	655.0635 4 AWG LF	652.0225 2 AWG LF	CONDUIT 2-INCH LF
CABINET C							
CIRCUIT 1 LCC-C - LPB-C6	1	2	0	16	32	0	10
LPB-C6 - L-C18	1	2	0	59	118	0	53
L-C18 - L-C16	1	2	0	189	378	0	183
L-C16 - L-C14	1	2	0	208	416	0	202
L-C14 - L-C12	1	2	0	207	414	0	201
L-C12 - L-C10	1	2	0	205	410	0	199
L-C10 - L-C8	1	2	0	218	436	0	212
L-C8 - L-C6	1	2	0	195	390	0	189
L-C6 - LPB-C4	1	2	0	91	182	0	85
LPB-C4 - LPB-C2	1	2	0	128	256	0	122
LPB-C2 - LPB-C1	0	0	0	0	0	0	93
LPB-C2 - L-C4	1	2	0	12	24	0	6
L-C4 - L-C2	1	2	0	262	524	0	256
L-C2 - STUB	0	0	0	0	0	0	5
CIRCUIT 2 LCC-C - LPB-C6	0	0	2	0	0	32	0
LPB-C6 - LPB-C5	1	0	2	93	0	186	87
LPB-C5 - L-C17	1	0	2	134	0	268	128
L-C17 - L-C15	1	0	2	202	0	404	196
L-C15 - L-C13	1	2	0	205	410	0	199
L-C13 - L-C11	1	2	0	209	418	0	203
L-C11 - L-C9	1	2	0	203	406	0	197
L-C9 - L-C7	1	2	0	208	416	0	202
L-C7 - L-C5	1	2	0	210	420	0	204
L-C5 - LPB-C3	1	2	0	13	26	0	7
LPB-C3 - LPB-C1	1	2	0	112	224	0	106
LPB-C1 - L-C3	1	2	0	122	244	0	116
L-C3 - L-C1	1	2	0	344	688	0	338
L-C1 - STUB	0	0	0	0	0	0	5
CIRCUIT 3 LCC-C - LPB-C6	2	0	0	32	0	0	0
LPB-C6 - LPB-C7	3	0	0	339	0	0	107
LPB-C7 - L-C20	3	0	0	45	0	0	9
L-C20 - L-C22	3	0	0	549	0	0	177
L-C22 - L-C24	3	0	0	627	0	0	203
L-C24 - L-C26	3	0	0	504	0	0	162
L-C26 - L-C28	3	0	0	546	0	0	176
L-C28 - LPB-C8	3	0	0	57	0	0	13
LPB-C8 - LPB-C9	0	0	0	0	0	0	100
LPB-C8 - LPB-C10	3	0	0	261	0	0	81
LPB-C10 - LPB-C12	3	0	0	237	0	0	73
LPB-C12 - L-C30	3	0	0	99	0	0	14
CIRCUIT 4 LCC-C - LPB-C6	2	0	0	32	0	0	0
LPB-C6 - LPB-C5	2	0	0	186	0	0	0
LPB-C5 - L-C19	3	0	0	66	0	0	16
L-C19 - L-C21	3	0	0	531	0	0	171
L-C21 - L-C23	3	0	0	612	0	0	198
L-C23 - L-C25	3	0	0	567	0	0	183
L-C25 - L-C27	3	0	0	633	0	0	205
L-C27 - LPB-C9	3	0	0	273	0	0	85
LPB-C9 - L-C29	3	0	0	291	0	0	91
L-C29 - LPB-C11	3	0	0	171	0	0	51
LPB-C11 - BRIDGE	0	0	0	0	0	0	10
CABINET D	0	0	0	0	0	0	0
CIRCUIT 1 LCC-D - LPB-D18	3	0	0	66	0	0	16
LPB-D18 - L-D40	3	0	0	132	0	0	38
L-D40 - L-D38	3	0	0	825	0	0	269
L-D38 - L-D36	3	0	0	687	0	0	223
L-D36 - L-D34	3	0	0	588	0	0	190
L-D34 - LPB-D17	3	0	0	33	0	0	5
LPB-D17 - LPB-D16	3	0	0	255	0	0	79
LPB-D16 - LPB-D15	0	0	0	0	0	0	85
LPB-D16 - LPB-D14	3	0	0	171	0	0	51
LPB-D14 - L-D32	3	0	0	267	0	0	20
CIRCUIT 2 LCC-D - LPB-D18	2	0	0	44	0	0	0
LPB-D18 - LPB-D19	3	0	0	219	0	0	67
LPB-D19 - L-D39	3	0	0	474	0	0	152
L-D39 - L-D37	3	0	0	858	0	0	280
L-D37 - L-D35	3	0	0	639	0	0	207
L-D35 - LPB-D15	3	0	0	576	0	0	186
LPB-D15 - L-D33	3	0	0	123	0	0	35
L-D33 - LPB-D13	3	0	0	132	0	0	38
LPB-D13 - L-D31	3	0	0	489	0	0	15
CIRCUIT 3 LCC-D - LPB-D18	2	0	0	44	0	0	0
LPB-D18 - LPB-D20	3	0	0	243	0	0	75
LPB-D20 - L-D42	3	0	0	423	0	0	135
L-D42 - LPB-D21	3	0	0	150	0	0	44
LPB-D21 - LPB-D22	3	0	0	255	0	0	79
LPB-D22 - L-D44	3	0	0	450	0	0	144
L-D44 - LPB-D23	3	0	0	534	0	0	172
LPB-D23 - LPB-D24	3	0	0	252	0	0	78
LPB-D24 - L-D46	3	0	0	33	0	0	5
L-D46 - L-D48	3	0	0	762	0	0	248
L-D48 - STUB	0	0	0	0	0	0	5
CIRCUIT 4 LCC-D - LPB-D18	2	0	0	44	0	0	0
LPB-D18 - LPB-D19	2	0	0	146	0	0	0
LPB-D19 - L-D41	3	0	0	333	0	0	105
L-D41 - L-D43	3	0	0	714	0	0	232
L-D43 - L-D45	3	0	0	783	0	0	255
L-D45 - L-D47	3	0	0	807	0	0	263
L-D47 - STUB	0	0	0	0	0	0	5
CATEGORY TOTALS				**23054**	**6832**	**890**	**9730**

CONTINUE

ELECTRICAL SERVICE METER BREAKER PEDESTAL

	STATION	OFFSET	DESCRIPTION	656.0200 LS	LOCATION
.01	38+34 U	43' RT	LCC-C	1	ARTHUR
.02	60+24 U	47' RT	LCC-D	1	ARLINGTON

LIGHTING CONTROL CABINETS

STATION	OFFSET	DESCRIPTION	661.0400.S CABINET TYPE 3061 EACH	654.0217 CONCRETE CONTROL CABINET BASES TYPE 9 SPECIAL EACH	LOCATION
38+34 U	43' RT	LCC-C	1	1	ARTHUR
60+24 U	47' RT	LCC-D	1	1	ARLINGTON
CATEGORY TOTALS			**2**	**2**	

*** OTHER QUANTITIES LOCATED ELSEWHERE IN PLAN**

ALL ITEMS ON THIS SHEET ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

3

CONSTRUCTION STAKING
CURB GUTTER AND CURB & GUTTER

STATION TO STATION	LOCATION	650.5500 LF
23+74 U - 24+12 U	LT	58
24+52 U - 25+22 U	LT	102
25+22 U - 44+28 U	LT	1896
54+37 U - 69+44 U	LT	1494
23+64 U - 24+29 U	RT	98
24+81 U - 38+28 U	RT	1381
38+28 U - 38+82 U	RT	63
39+20 U - 39+54 U	RT	65
39+54 U - 44+28 U	RT	471
54+37 U - 60+40 U	RT	619
60+46 U - 63+26 U	RT	313
63+45 U - 66+91 U	RT	369
67+28 U - 71+46 U	RT	481
25+11 U - 30+05 U	LT (MEDIAN)	989
30+83 U - 37+10 U	LT (MEDIAN)	1253
37+94 U - 38+47 U	LT (MEDIAN)	107
39+48 U - 44+28 U	LT (MEDIAN)	964
CATEGORY TOTAL		**10723**

CONSTRUCTION STAKING

STATION TO STATION	650.4500 SUBGRADE LF	650.5000 BASE LF	650.7000 CONCRETE PAVEMENT LF	650.9920 SLOPE STAKES LF
19+50 U - 44+28 U	2478	2478	---	2478
44+28 U - 48+47 U	419	---	419	419
51+35 U - 54+37 U	302	---	302	302
54+37 U - 69+46 U	1509	1509	---	1509
CATEGORY TOTALS	**4708**	**3987**	**721**	**4708**

CONSTRUCTION STAKING

STATION - STATION	LOCATION	650.4000 CONSTRUCTION STAKING STORM SEWER EACH	650.6000 CONSTRUCTION STAKING CULVERTS EACH
19+00 U - 45+00 U	LT & RT	40	2
46+50 U - 48+00 U	LT & RT	6	---
51+50 U - 52+25 U	LT & RT	5	---
52+00 U - 56+75 U	LT & RT	12	---
57+25 U - 64+00 U	LT & RT	17	---
67+00 U - 67+75 U	LT & RT	3	---
69+00 U - 69+15 U	LT & RT	2	---
CATEGORY TOTAL		**85**	**2**

SAWING

STATION TO STATION	LOCATION	690.0150 ASPHALT LF	690.0250 CONCRETE LF
19+50 U		30	---
20+06 U	LT	11	---
21+24 U	LT	13	---
21+56 U	RT	16	---
22+00 U	LT	27	---
24+29 U - 24+81 U	RT	52	5
27+16 U	LT	14	---
30+44 U	LT	17	---
31+38 U	LT	15	---
32+58 U	LT	10	---
33+44 U	LT	12	---
34+38 U	LT	11	---
35+34 U	LT	16	---
37+50 U	RT	20	---
38+84 U	LT	75	---
40+96 U - 43+53 U	RT	255	---
54+19 U	RT	---	10
57+62 U - 64+57 U	LT	685	---
57+81 U - 59+46 U	RT	165	---
60+28 U - 60+46 U	RT (ARLINGTON LN)	28	5
61+02 U - 62+86 U	RT	195	---
63+26 U - 63+48 U	RT (13TH AVE)	28	5
66+91 U - 67+34 U	RT (12TH AVE)	60	5
69+25 U - 71+47 U	RT	273	---
69+44 U	LT	30	---
70+44 U	RT	21	---
5+00 L	18TH AVE	20	---
5+50 L	18TH AVE	24	---
255+94 M	MERRILL CUL-DE-SAC	24	---
12+00 R	ARTHUR AVE	24	---
	ARLINGTON LN	18	---
	ARTHUR AVE	20	---
	18TH AVE	100	---
CATEGORY TOTALS		**2309**	**30**

CONSTRUCTION STAKING
SUPPLEMENTAL CONTROL

PROJECT	650.9910 LS
.03 6999-18-70	1

CONSTRUCTION STAKING
ELECTRICAL INSTALLATIONS

PROJECT	650.8500 LS
.03 6999-18-70	1

RESEARCH AND LOCATE EXISTING
PROPERTY MONUMENTS

PROJECT	SPV.0105.02 LS
6999-18-70	1

CRACK AND DAMAGE SURVEY

PROJECT	999.1500.S LS
6999-18-70	0.3

VERIFY AND REPLACE EXISTING
PROPERTY MONUMENTS

PROJECT	SPV.0105.04 LS
6999-18-70	1

CONCRETE PAVEMENT JOINT LAYOUT

PROJECT	SPV.0105.30 LS
6999-18-70	1

REMOVE AND SALVAGE TRAFFIC SIGNALS

LOCATION	SPV.0105.09 LS
USH 51 NB RAMP AND CTH U	1

*** OTHER QUANTITIES LOCATED ELSEWHERE IN PLAN**

ALL ITEMS ON THIS SHEET
ARE CATEGORY 0010
UNLESS OTHERWISE NOTED

3

GATE VALVE AND BOX, SALVAGE GATE VALVE AND BOX, HYDRANT, SALVAGE HYDRANT

STATION	OFFSET	SPV.0060.19 VALVE 8-INCH EACH	SPV.0060.41 SALVAGE VALVE EACH	SPV.0060.48 VALVE 6-INCH EACH	SPV.0060.45 HYDRANT EACH	SPV.0060.46 SALVAGE HYDRANT EACH
56+10 U	10' RT	1	---	---	---	---
56+10 U	10' LT	1	---	---	---	---
223+45 V	40' RT	1	---	---	---	---
223+45 V	66' RT	1	---	---	---	---
223+50 V	58' RT	---	---	1	---	---
223+55 V	58' RT	---	---	---	1	---
224+00 V	8' LT	1	---	---	---	---
230+25 V	31' RT	---	1	---	---	---
230+30 V	11' RT	---	1	---	---	---
230+30 V	39' RT	---	1	---	---	---
230+42 V	24.4' RT	1	---	---	---	---
230+20 V	31' RT	---	---	---	---	1
CATEGORY TOTALS		**6**	**3**	**1**	**1**	**1**

DUCTILE IRON WATERMAIN AND FITTINGS

STATION TO STATION	LOCATION	SPV.0090.08 WATERMAIN 8-INCH LF	SPV.0090.15 WATERMAIN 6-INCH LF	SPV.0060.42 TEE 8-INCH X 8-INCH EACH	SPV.0060.43 TEE 8-INCH X 6-INCH EACH	SPV.0060.44 BEND 45-DEGREE EACH	SPV.0060.20 CROSS 8-INCH X 8-INCH EACH	SPV.0060.21 PLUG 8-INCH EACH
56+10 U	54' LT	106	---	---	---	---	---	1
56+10 U	4' RT	---	---	---	---	---	1	---
56+10 U	52' RT	---	---	---	---	---	---	1
223+45 V - 230+50 V	LT & RT	860	10	---	---	---	---	---
223+45 V	8' LT	---	---	---	---	---	1	2
223+45 V	58' RT	---	---	---	1	---	---	---
223+45 V	121' RT	---	---	---	---	---	---	1
230+16 V	8' LT	---	---	---	---	1	---	---
230+30 V	6' RT	---	---	---	---	1	---	---
230+30 V	31' RT	---	---	---	1	---	---	---
230+30 V	56' RT	---	---	---	---	---	---	1
230+30 V	24' RT	---	---	1	---	---	---	---
CATEGORY TOTALS		**966**	**10**	**1**	**2**	**2**	**2**	**6**

RECONSTRUCTING MANHOLES, ADJUSTING MANHOLE COVERS

STATION	LOCATION	611.0420 RECONSTRUCT EACH	611.8110 ADJUST EACH	EXIST RIM EL	NEW RIM EL	REMARKS
43+85 U	LT	1	---	1263.30	1266.28	SANITARY
44+30 U	RT	1	---	1262.98	1264.85	SANITARY
53+82 U	RT	1	---	1261.77	1264.98	SANITARY
56+75 U	LT	---	1	1251.29	1251.37	SANITARY
59+00 U	LT	---	1	1246.68	1246.49	SANITARY
61+30 U	LT	---	1	1245.06	1244.09	SANITARY
62+80 U	LT	1	---	1244.38	1243.27	SANITARY
65+80 U	RT	---	1	1245.35	1244.87	SANITARY
67+00 U	RT	---	1	1246.12	1245.96	SANITARY
68+85 U	RT	---	1	1250.87	1250.68	SANITARY
230+47 V	RT	1	---	1240.86	1243.5	SANITARY
230+50 V	RT	1	---	1240.86	1243.48	SANITARY
CATEGORY TOTALS		**6**	**6**			
***PROJECT ID TOTALS**		**6**	**8**			

ADJUST VALVE BOX

STATION	LOCATION	SPV.0060.05 EACH	REMARKS
37+72 U	RT	1	HYDRANT
37+74 U	RT	1	MAINLINE
39+01 U	RT	1	MAINLINE
39+07 U	RT	1	MAINLINE
54+58 U	RT	1	HYDRANT
56+25 U	RT	1	MAINLINE
60+65 U	RT	1	MAINLINE
60+70 U	RT	1	MAINLINE
61+55 U	RT	1	MAINLINE
62+55 U	RT	1	MAINLINE
62+90 U	RT	1	MAINLINE
63+05 U	RT	1	HYDRANT
63+28 U	RT	1	MAINLINE
66+55 U	RT	1	MAINLINE
66+65 U	LT	1	MAINLINE
66+95 U	RT	1	MAINLINE
67+40 U	RT	1	MAINLINE
230+25 V	RT	1	HYDRANT
CATEGORY TOTAL		**18**	

*** OTHER QUANTITIES LOCATED ELSEWHERE IN PLAN**

ALL ITEMS ON THIS SHEET ARE CATEGORY 0020 UNLESS OTHERWISE NOTED

3

STORM SEWER ROCK EXCAVATION

STATION TO STATION	607.5000 CY	REMARKS
223+00 V - 230+50 V	117	OVERLOOK DRIVE SANITARY SEWER
228+50 V - 230+50 V	30	OVERLOOK DRIVE WATER MAIN
CATEGORY TOTAL	**147**	
***PROJECT ID TOTAL**	**977**	

EXCAVATE AND BACKFILL UTILITY TRENCH

STATION	LOCATION	SPV.0090.04 LF	REMARKS
53+80 U	RT	25	WATER SERVICE
55+50 U	RT	10	WATER SERVICE
55+80 U	LT	5	WATER SERVICE
56+10 U	RT	10	WATER SERVICE
57+00 U	LT	5	WATER SERVICE
58+20 U	LT	15	WATER SERVICE
59+90 U	LT	10	WATER SERVICE
61+80 U	LT	10	WATER SERVICE
64+20 U	LT	15	WATER SERVICE
64+60 U	RT	10	WATER SERVICE
65+20 U	LT	20	WATER SERVICE
65+75 U	RT	15	WATER SERVICE
66+15 U	RT	5	WATER SERVICE
CATEGORY TOTAL	**155**	

INSULATION 2-INCH

STATION - STATION	LOCATION	SPV.0180.02 SY
37+35 U - 38+85 U	RT	130
37+50 U	RT	30
38+50 U - 39+15 U	LT & RT	210
230+38 V	RT	10
CATEGORY TOTAL		**380**

SANITARY SEWER, LATERALS, TRACER WIRE ACCESS BOXES, MANHOLES, AND CASTINGS

STATION TO STATION	OFFSET	SPV.0090.09 PVC SANITARY SEWER MAIN 8-INCH LF	SPV.0060.22 SANITARY MANHOLE CASTING EACH	SPV.0200.01 SANITARY MANHOLE VF	SPV.0090.14 PVC SANITARY LATERAL 6-INCH LF	SPV.0060.47 ACCESS BOX EACH
56+20 U	54' LT	106	---	---	---	---
56+20 U	0.5' RT	---	1	11.0	---	---
56+20 U	52' RT	---	---	---	---	---
223+25 V - 230+50 V	RT	836	---	---	---	---
223+30 V		---	1	8.2	---	---
223+30 V	116' RT	---	1	8.1	---	---
223+30 V	108' RT	---	---	---	53	---
223+61 V	150' RT	---	---	---	---	1
229+00 V		---	1	15.1	---	---
CATEGORY TOTALS		**942**	**4**	**42.4**	**53**	**1**

VERTICAL OFFSET

STATION	LOCATION	SPV.0060.06 WATERMAIN EACH	SPV.0060.07 FORCEMAIN EACH	REMARKS
38+30 U	RT	1	---	12-INCH
38+80 U	RT	---	1	4-INCH
38+85 U	RT	1	---	12-INCH
CATEGORY TOTALS		**2**	**1**	

*** OTHER QUANTITIES LOCATED ELSEWHERE IN PLAN**

ALL ITEMS ON THIS SHEET ARE CATEGORY 0020 UNLESS OTHERWISE NOTED

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

TRANSPORTATION PROJECT PLAT TITLE SHEET

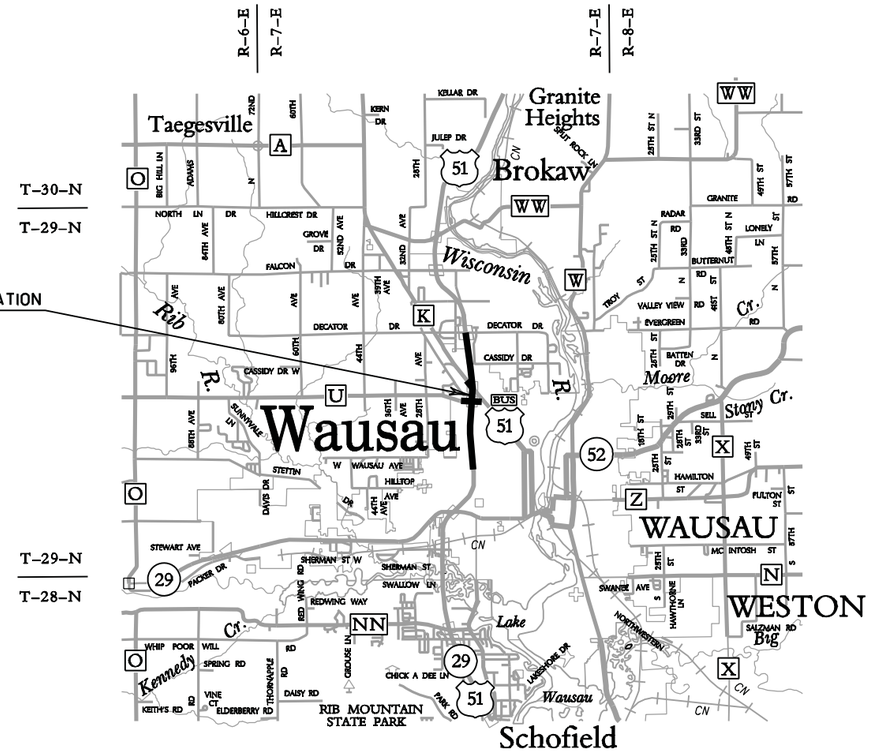
PROJECT NO. 1170-01-20

WAUSAU - MERRILL
CTH K/B51 INTERCHANGE

USH 51

MARATHON COUNTY





NOTES:

COORDINATES AND BEARINGS SHOWN ON THIS PLAT ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM, MARATHON COUNTY ZONE, NAD83 (1991) ADJUSTMENT. THE COORDINATES SHOWN ARE GRID COORDINATES AND ARE TO BE USED AS GRID OR GROUND VALUES ON THIS PLAT.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

RIGHT-OF-WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE U.S. PUBLIC LAND SURVEY SYSTEM OR OTHER "SURVEYS OF PUBLIC RECORD".

PROPERTY LINES SHOWN ON THIS PLAT ARE DRAWN FROM DATA DERIVED FROM MAPS AND DOCUMENTS OF PUBLIC RECORD AND/OR EXISTING OCCUPATIONAL LINES. THIS PLAT MAY NOT BE A TRUE REPRESENTATION OF EXISTING PROPERTY LINES, EXCLUDING RIGHT-OF-WAY LINES, AND SHOULD NOT BE USED AS A SUBSTITUTE FOR AN ACCURATE FIELD SURVEY.

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE: EXISTING HIGHWAY RIGHT-OF-WAY FOR USH 51 ESTABLISHED FROM PREVIOUS PROJECTS 1175-1-22, 1175-1-66,1175-1-77, 1175-1-76, T05-3(14), S05-3(17), CSM 10345, CSM 5184, CSM 2794, CSM 8905, CSM 9890, CSM 9054 AND ASSESSOR'S PLAT NO. 4 AND EXISTING HIGHWAY RIGHT-OF-WAY FOR SIDE ROADS ESTABLISHED FROM CENTERLINE OF EXISTING PAVEMENTS. EXISTING ACCESS CONTROL ALONG USH 51 ESTABLISHED FROM PREVIOUS PROJECTS 1175-1-22, 1175-1-66, T05-3(14)

A **TEMPORARY LIMITED EASEMENT** (TLE) IS A RIGHT FOR CONSTRUCTION PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON AND THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM NECESSARY OR DESIRABLE. ALL TLES EXPIRE AT THE COMPLETION OF THE CONSTRUCTION PROJECT FOR WHICH THIS INSTRUMENT IS GIVEN.

A **PERMANENT LIMITED EASEMENT** (PLE) IS A RIGHT FOR CONSTRUCTION AND MAINTENANCE PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON AND THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM NECESSARY OR DESIRABLE. BUT WITHOUT PREJUDICE TO THE OWNER'S RIGHT TO MAKE OR CONSTRUCT IMPROVEMENT ON SAID LANDS OR TO FLATTEN THE SLOPES, PROVIDING SAID ACTIVITIES WILL NOT IMPAIR OR OTHERWISE ADVERSELY AFFECT THE HIGHWAY FACILITIES.

A **HIGHWAY EASEMENT** (HE) IS AN EASEMENT FOR HIGHWAY PURPOSES, AS LONG AS SO USED, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM NECESSARY OR DESIRABLE.

DIMENSIONING FOR THE NEW RIGHT-OF-WAY IS MEASURED ALONG AND PERPENDICULAR TO NEW REFERENCE LINES.

CONVENTIONAL ABBREVIATIONS

ACCESS POINT/ DRIVEWAY CONNECTION	AP	REFERENCE LINE	R/L
ACCESS RIGHTS	AR	RELEASE OF RIGHTS	ROR
ACRES	AC.	REMAINING	REM.
AND OTHERS	ET.AL.	RIGHT-OF-WAY	R/W
CENTERLINE	C/L	SECTION	SEC.
CERTIFIED SURVEY MAP	CSM	STATION	STA.
CORNER	COR.	TEMPORARY LIMITED EASEMENT	TLE
DOCUMENT	DOC.	VOLUME	V.
EASEMENT	EASE.		
HIGHWAY EASEMENT	H.E.		
LAND CONTRACT	LC		
MONUMENT	MON.		
PAGE	P.		
PERMANENT LIMITED EASEMENT	PLE		
PROPERTY LINE	PL		
RECORDED AS	(100')		

CURVE DATA

LONG CHORD	LCH
LONG CHORD BEARING	LCB
RADIUS	R
DEGREE OF CURVE	D
CENTRAL ANGLE OR DELTA	DELTA
LENGTH OF CURVE	L
TANGENT	TAN

CONVENTIONAL SYMBOLS

FOUND IRON PIPE/PIN	⌀ (1" UNLESS NOTED)	PROPOSED R/W LINE	
		EXISTING H.E. LINE	
R/W MONUMENT	○ ●(SET)	PROPERTY LINE	
R/W STANDARD	△ ▲(SET)	LOT & TIE LINES	
SIGN	SIGN	SLOPE INTERCEPTS	
SECTION CORNER MONUMENT	●	CORPORATE LIMITS	
SECTION CORNER SYMBOL		NO ACCESS (BY PREVIOUS ACQUISITION/CONTROL)	
FEE (HATCH VARIES)		NO ACCESS (BY ACQUISITION)	
TEMPORARY LIMITED EASEMENT		NO ACCESS (BY STATUTORY AUTHORITY)	
PERMANENT LIMITED EASEMENT		SECTION LINE	
R/W BOUNDARY POINT	RWB20	QUARTER LINE	
PARCEL NUMBER	103	SIXTEENTH LINE	
UTILITY PARCEL NUMBER	92	EXISTING CENTERLINE	
SIGN NUMBER (OFF PREMISE)	21	PROPOSED REFERENCE LINE	
BUILDING		PARALLEL OFFSET	

CONVENTIONAL UTILITY SYMBOLS

WATER	W	
GAS	G	
TELEPHONE	T	
OVERHEAD TRANSMISSION LINES	OH	
ELECTRIC	E	
CABLE TELEVISION	TV	
FIBER OPTIC	FO	
SANITARY SEWER	SAN	
STORM SEWER	SS	
	NON COMPENSABLE	COMPENSABLE
POWER POLE		
TELEPHONE POLE		
TELEPHONE PEDESTAL		
ELECTRIC TOWER		

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1170-01-20 - 4.01
SHEET 2 OF 2
AMENDMENT NO:

624

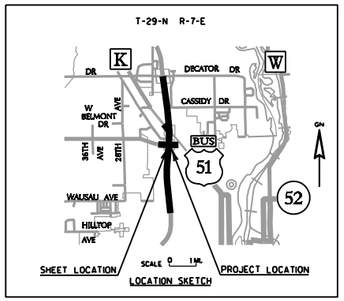
TRANSPORTATION PROJECT PLAT NO: 1170-01-20 - 4.01

THAT PART OF PARCEL 1 OF CSM 10345, LOCATED IN AND PART OF THE SW1/4 OF THE NE1/4 AND PART OF PARCEL 3 OF CSM 5184, LOCATED IN AND PART OF THE NW1/4 OF THE NE1/4, SECTION 22, TOWNSHIP 29 NORTH, RANGE 7 EAST, CITY OF WAUSAU, MARATHON COUNTY, WISCONSIN

RELOCATION ORDER USH 51, MARATHON COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3) AND 84.09, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.



SCHEDULE OF LANDS & INTERESTS REQUIRED

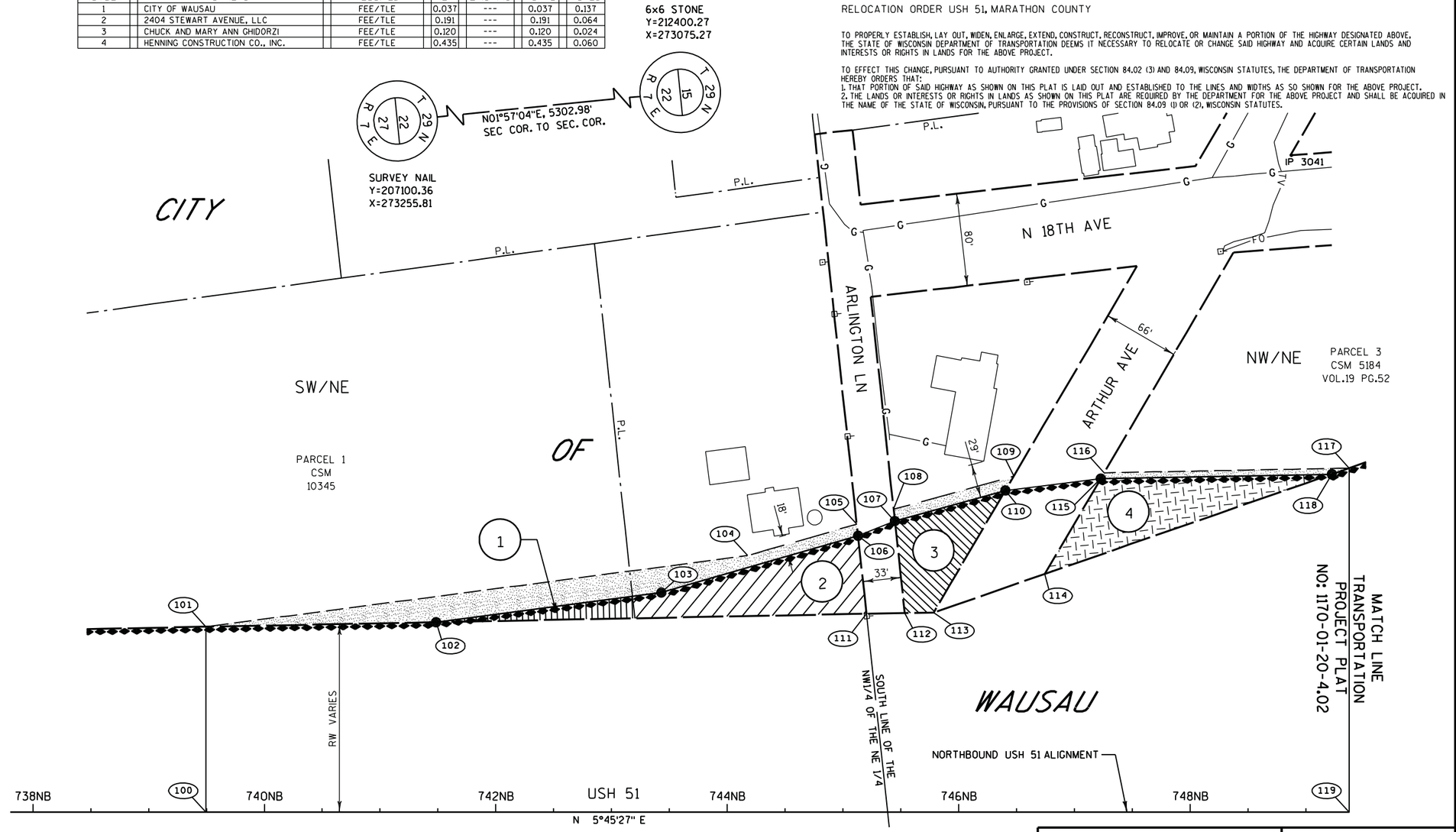
OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERSTS TO THE DEPARTMENT.

PARCEL NUMBER	OWNERS	INTEREST REQUIRED	R/W ACRES REQUIRED NEW	EXISTING	TOTAL	TLE ACRES
1	CITY OF WAUSAU	FEE/TLE	0.037	---	0.037	0.137
2	2404 STEWART AVENUE, LLC	FEE/TLE	0.191	---	0.191	0.064
3	CHUCK AND MARY ANN GHIDORZI	FEE/TLE	0.120	---	0.120	0.024
4	HENNING CONSTRUCTION CO., INC.	FEE/TLE	0.435	---	0.435	0.060

EXISTING MONUMENTS			
POINT	Y (NORTHING)	X (EASTING)	DESCRIPTION
IP 3041	211493.286	273768.190	0.75" IRON ROD

COURSE TABLE		
COURSE	BEARING	DISTANCE
N1/4 SEC. 22-100	S 31°31'19" E	2225.32'
100-101	N 84°14'33" W	160.27'
101-102	N 4°37'51" E	198.93'
102-103	N 1°43'06" W	196.15'
103-106	N 10°21'44" W	176.87'
106-107	N 16°09'43" W	34.29'
107-110	N 9°41'21" W	99.03'
110-115	N 1°15'52" W	83.11'
115-118	N 4°39'01" E	199.59'
118-117	N 13°25'26" W	16.12
117-119	S 84°14'33" E	297.30'
119-100	S 5°45'27" W	987.83'

STATION-OFFSET TABLE		
POINT NO.	STATION	OFFSET
100	739+49.53	0.00
101	739+49.53	-160.27
102	741+48.43	-164.18
103	743+42.91	-189.70
104	744+17.57	-221.68
105	745+11.74	-248.90
106	745+12.83	-238.81
107	745+44.64	-251.61
108	745+43.55	-261.68
109	746+47.37	-290.37
110	746+40.10	-277.98
111	745+20.11	-171.49
112	745+53.23	-172.14
113	745+78.28	-172.63
114	746+74.24	-205.76
115	747+22.59	-288.14
116	747+25.55	-293.20
117	749+37.36	-297.30
118	749+22.14	-292.00
119	749+37.36	0.00



GN

SCALE, FEET
0 50 100

PREVIOUS ACCESS CONTROL BY PROJECT NUMBER TO5-3-(14)

ALL TLES SHOWN ON THIS SHEET ARE FOR SLOPE GRADING

EMCS

I, KEVIN C. BOYER, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT, I HAVE SURVEYED TRANSPORTATION PROJECT PLAT 1170-01-20-4.01 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN KEVIN C BOYER S-2675 HEWITT WI LAND SURVEYOR

Kevin C. Boyer DATE: 10/31/2011

KEVIN C. BOYER
REGISTERED LAND SURVEYOR NUMBER 2675
THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

(SIGNATURE) DATE: 11-1-11
(PRINTED NAME) Brent J Stella

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1170-01-20-4.01
AMENDMENT NO:
SHEET 1 OF 2

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN MARATHON COUNTY, WISCONSIN AT 9:12 AM ON November 2, 2011 AS DOCUMENT #1607461 AND FILED IN Plat Cabinet 3 Page 525A

SIGNATURE OF REGISTER OF DEEDS

FILE NAME : P:\44xx\4448\RW Plat_UK TPP\040101_rp.dgn
APPRAISAL PLAT DATE :
PLOT DATE : 10/31/2011 PLOT BY : sgc PLOT NAME : PLOT SCALE : 1:50

1170-01-20 4.01

TRANSPORTATION PROJECT PLAT NO: 1170-01-20 - 4.01
AMENDMENT NO: 1

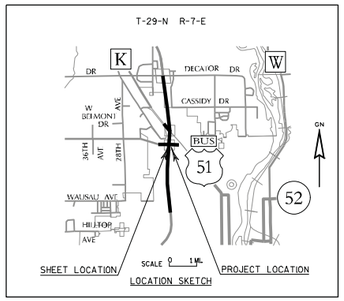
AMENDS THE AREA OF PARCEL 4 OF TPP 1170-01-20-4.01, RECORDED IN CABINET 3 OF PLATS, PAGE 525-A AS DOCUMENT 1607461.

THAT PART OF PARCEL 1 OF CSM 10345, LOCATED IN AND PART OF THE SW1/4 OF THE NE1/4 AND PART OF PARCEL 3 OF CSM 5184, LOCATED IN AND PART OF THE NW1/4 OF THE NE1/4, SECTION 22, TOWNSHIP 29 NORTH, RANGE 7 EAST, CITY OF WAUSAU, MARATHON COUNTY, WISCONSIN

RELOCATION ORDER USH 51, MARATHON COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3) AND 84.09, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.



EXISTING MONUMENTS			
POINT	Y (NORTHING)	X (EASTING)	DESCRIPTION
IP 3041	211493.286	273768.190	0.75" IRON ROD

COURSE TABLE		
COURSE	BEARING	DISTANCE
N1/4 SEC. 22-100	S 31°31'19" E	2225.32'
100-101	N 84°14'33" W	160.27'
101-102	N 4°37'51" E	198.93'
102-103	N 1°43'06" W	196.15'
103-106	N 10°21'44" W	176.87'
106-107	N 16°09'43" W	34.29'
107-110	N 9°41'21" W	99.03'
110-115	N 1°15'52" W	83.11'
115-118	N 4°39'01" E	199.59'
118-117	N 13°25'26" W	16.12
117-119	S 84°14'33" E	297.30'
119-100	S 5°45'27" W	987.83'

STATION-OFFSET TABLE		
POINT NO.	STATION	OFFSET
100	739+49.53	0.00
101	739+49.53	-160.27
102	741+48.43	-164.18
103	743+42.91	-189.70
104	744+17.57	-221.68
105	745+11.74	-248.90
106	745+12.83	-238.81
107	745+44.64	-251.61
108	745+43.55	-261.68
109	746+47.37	-290.37
110	746+40.10	-277.98
111	745+20.11	-171.49
112	745+53.23	-172.14
113	745+78.28	-172.63
114	746+74.24	-205.76
115	747+22.59	-288.14
116	747+25.55	-293.20
117	749+37.36	-297.30
118	749+22.14	-292.00
119	749+37.36	0.00

6x6 STONE
Y=212400.27
X=273075.27

T 29 N R 7 E 22 15

NO1°57'04"E, 5302.98'
SEC COR. TO SEC. COR.

T 29 N R 7 E 22 27

SURVEY NAIL
Y=207100.36
X=273255.81

CITY

SW/NE

OF

WAUSAU

PARCEL 1
CSM
10345

NW/NE

PARCEL 3
CSM 5184
VOL.19 PG.52

P.L.

IP 3041

N 18TH AVE

80'

ARLINGTON LN

ARTHUR AVE

66'

29'

18'

33'

RW VARIES

SOUTH LINE OF THE NW1/4 OF THE NE 1/4

NORTHBOUND USH 51 ALIGNMENT

738NB 740NB 742NB USH 51 744NB 746NB 748NB

N 5°45'27" E

MATCH LINE TRANSPORTATION PROJECT PLAT NO: 1170-01-20-4.02

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERSTS TO THE DEPARTMENT.

SEE ALSO SHEET ...-4.??	PARCEL NUMBER	OWNERS	INTEREST REQUIRED	R/W ACRES REQUIRED NEW	EXISTING	TOTAL	TLE ACRES
	1	CITY OF WAUSAU	FEE/TLE	0.037	---	0.037	0.137
	2	2404 STEWART AVENUE, LLC	FEE/TLE	0.191	---	0.191	0.064
	3	CHUCK AND MARY ANN GHIDORZI	FEE/TLE	0.120	---	0.120	0.024
4.02	4	HENNING CONSTRUCTION CO., INC.	FEE/TLE	0.187	---	0.187	0.024

THE AREA SHOWN IN THE SCHEDULE OF LANDS AND INTERESTS IS ONLY THE AREA OF PARCEL SHOWN ON THIS SHEET. IF THE PARCEL IS ON MULTIPLE SHEETS, REFERENCE THE OTHER SHEET(S) FOR ADDITIONAL PARCEL AREAS.

GN

SCALE, FEET
0 50 100

PREVIOUS ACCESS CONTROL BY PROJECT NUMBER T05-3-(14)

ALL TLES SHOWN ON THIS SHEET ARE FOR SLOPE GRADING

EMCS

I, KEVIN C. BOYER, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT, I HAVE SURVEYED TRANSPORTATION PROJECT PLAT 1170-01-20-4.01 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN KEVIN C BOYER S-2675 HEWITT WI LAND SURVEYOR

Kevin C. Boyer DATE: 12/07/2011

KEVIN C. BOYER
REGISTERED LAND SURVEYOR NUMBER 2675
THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

Brent L Stella DATE: 12-07-11
(SIGNATURE)
(PRINTED NAME) Brent L Stella

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1170-01-20-4.01
AMENDMENT NO: 1
SHEET 1 OF 2

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN MARATHON COUNTY, WISCONSIN AT 1:58 PM ON Dec. 9, 2011 AS DOCUMENT # 1609753 AND FILED IN Plat Cabinet 3, pg. 527B

SIGNATURE OF REGISTER OF DEEDS

FILE NAME : P:\44xx\4448\RW Plat_UK TPP\040101_rp_Amendent No 1.dgn
APPRAISAL PLAT DATE :
PLOT DATE : 12/6/2011
PLOT BY : walkup
PLOT NAME :
PLOT SCALE : 1:50

1170-01-20 4.01

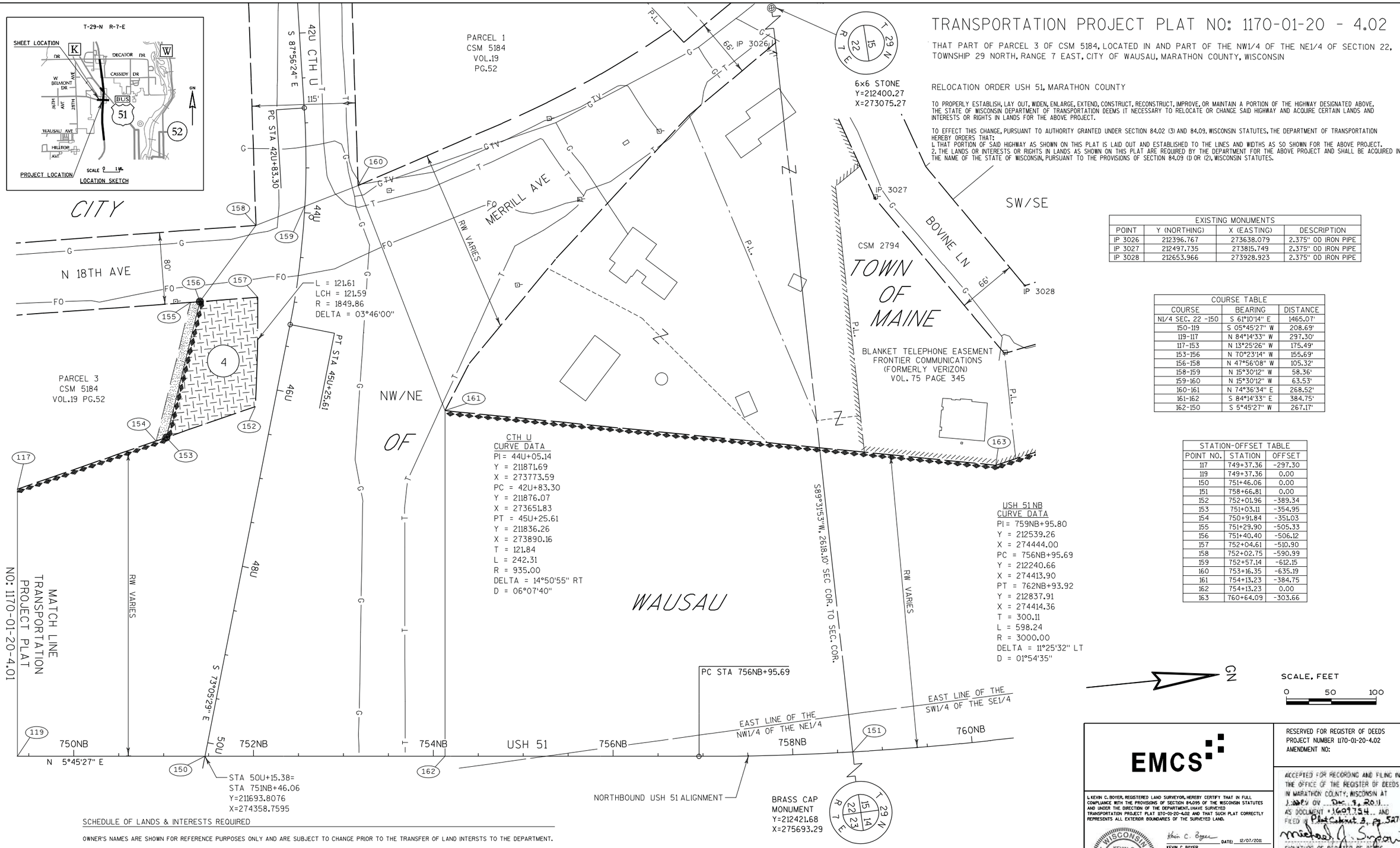
TRANSPORTATION PROJECT PLAT NO: 1170-01-20 - 4.02

THAT PART OF PARCEL 3 OF CSM 5184, LOCATED IN AND PART OF THE NW1/4 OF THE NE1/4 OF SECTION 22, TOWNSHIP 29 NORTH, RANGE 7 EAST, CITY OF WAUSAU, MARATHON COUNTY, WISCONSIN

RELOCATION ORDER USH 51, MARATHON COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3) AND 84.09, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.



EXISTING MONUMENTS			
POINT	Y (NORTHING)	X (EASTING)	DESCRIPTION
IP 3026	212396.767	273638.079	2.375" OD IRON PIPE
IP 3027	212497.735	273815.749	2.375" OD IRON PIPE
IP 3028	212653.966	273928.923	2.375" OD IRON PIPE

COURSE TABLE		
COURSE	BEARING	DISTANCE
N1/4 SEC. 22 -150	S 61°10'14" E	1465.07'
150-119	S 05°45'27" W	208.69'
119-117	N 84°14'33" W	297.30'
117-153	N 13°25'26" W	175.49'
153-156	N 70°23'14" W	155.69'
156-158	N 47°56'08" W	105.32'
158-159	N 15°30'12" W	58.36'
159-160	N 15°30'12" W	63.53'
160-161	N 74°36'34" E	268.52'
161-162	S 84°14'33" E	384.75'
162-150	S 5°45'27" W	267.17'

STATION-OFFSET TABLE		
POINT NO.	STATION	OFFSET
117	749+37.36	-297.30
119	749+37.36	0.00
150	751+46.06	0.00
151	758+66.81	0.00
152	752+01.96	-389.34
153	751+03.11	-354.95
154	750+91.84	-351.03
155	751+29.90	-505.33
156	751+40.40	-506.12
157	752+04.61	-510.90
158	752+02.75	-590.99
159	752+57.14	-612.15
160	753+16.35	-635.19
161	754+13.23	-384.75
162	754+13.23	0.00
163	760+64.09	-303.66

GN

SCALE, FEET
0 50 100

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERSTS TO THE DEPARTMENT.

SEE ALSO	PARCEL		INTEREST	R/W ACRES REQUIRED			TLE
SHEET ...-4.??	NUMBER	OWNERS	REQUIRED	NEW	EXISTING	TOTAL	ACRES
4.01	4	HENNING CONSTRUCTION CO., INC.	FEE/TLE	0.248	---	0.248	0.036

THE AREA SHOWN IN THE SCHEDULE OF LANDS AND INTERESTS IS ONLY THE AREA OF PARCEL SHOWN ON THIS SHEET. IF THE PARCEL IS ON MULTIPLE SHEETS, REFERENCE THE OTHER SHEET(S) FOR ADDITIONAL PARCEL AREAS.

Refer to the Title Sheet, recorded as Sheet 2 of 2, in Cabinet 3 of Plats, Page 525A, as Document No. 1607461 for additional information

ALL TLES SHOWN ON THIS SHEET ARE FOR SLOPE GRADING

PREVIOUS ACCESS CONTROL BY PROJECT NUMBER 105-3-(14)

EMCS

I, KEVIN C. BOYER, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT, I HAVE SURVEYED TRANSPORTATION PROJECT PLAT 1170-01-20-4.02 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN KEVIN C BOYER S-2675 HEWITT WI LAND SURVEYOR

Kevin C. Boyer DATE: 12/07/2011
KEVIN C. BOYER
REGISTERED LAND SURVEYOR NUMBER 2675
THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.
Brent L Stella DATE: 12-07-11
(SIGNATURE)
(PRINTED NAME) Brent L Stella

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1170-01-20-4.02
AMENDMENT NO:

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN MARATHON COUNTY, WISCONSIN AT 1:30 PM ON Dec. 9, 2011 AS DOCUMENT 1609754 AND FILED IN Plat Cabinet 3, Pg 527C

Michael A. Simon
SIGNATURE OF REGISTER OF DEEDS

FILE NAME : P:\44xx\4448\RW Plat_UK TPP\040102_rp.dgn
APPRAISAL PLAT DATE :
PLOT DATE : 12/6/2011
PLOT BY : walkup
PLOT NAME :
PLOT SCALE : 1:50

1170-01-20 4.02

TRANSPORTATION PROJECT PLAT NO: 1170-01-20 - 4.03

THAT PART OF LOT 3 OF CSM 8905, LOCATED IN AND PART OF THE SW1/4 OF THE SE1/4 OF SECTION 15, TOWNSHIP 29 NORTH, RANGE 7 EAST, TOWN OF MAINE, MARATHON COUNTY, WISCONSIN

RELOCATION ORDER USH 51, MARATHON COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

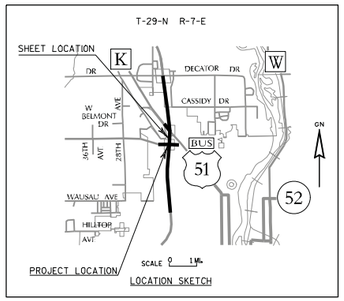
TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3) AND 84.09, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

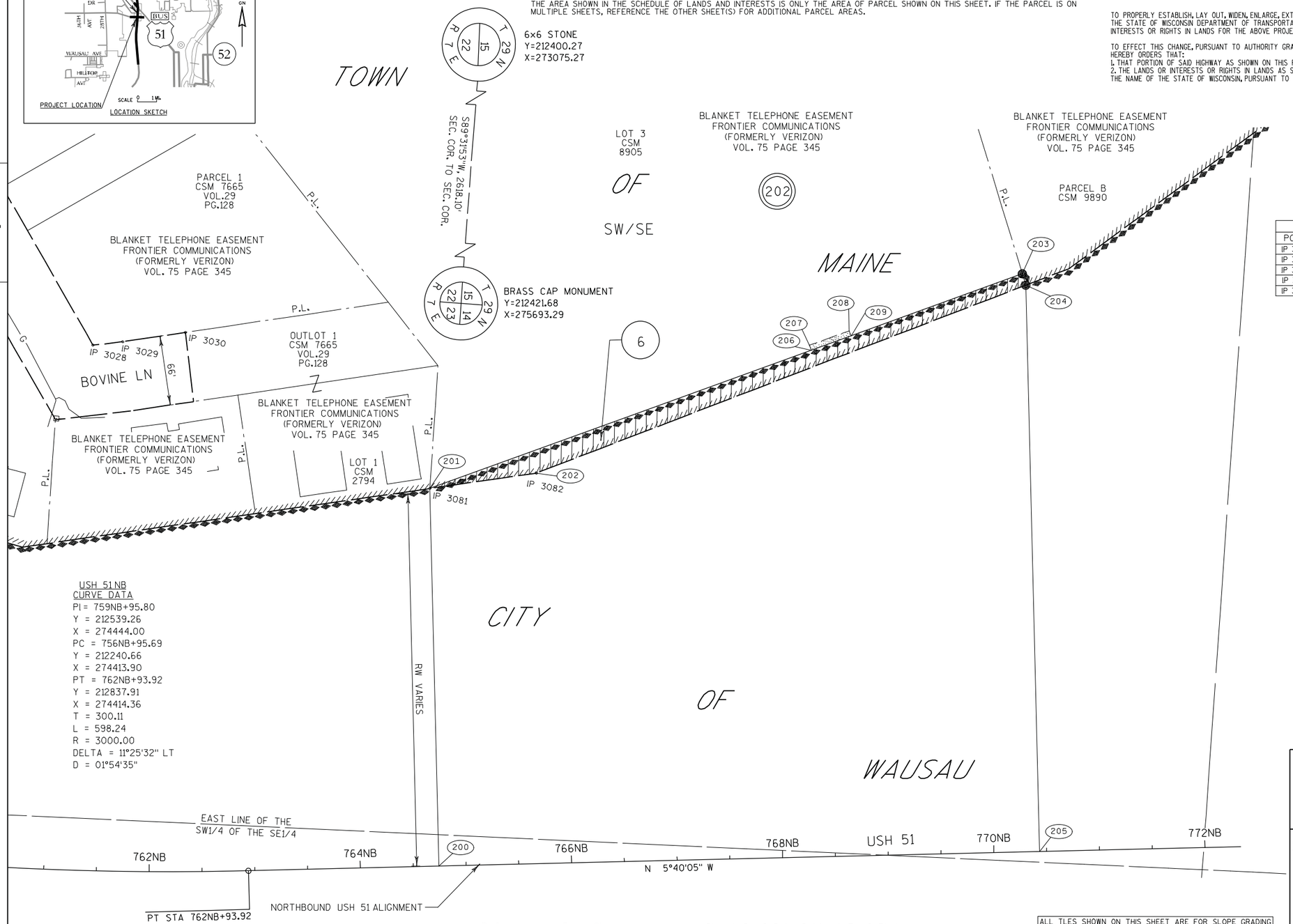
SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERSTS TO THE DEPARTMENT.

SEE ALSO	PARCEL		INTEREST	R/W ACRES REQUIRED			TLE
SHEET ...-4.22	NUMBER	OWNERS	REQUIRED	NEW	EXISTING	TOTAL	ACRES
---	6	NORTHRIDGE INVESTMENTS, LLC	FEE/TLE	0.206	---	0.206	0.005
---	202	FRONTIER COMMUNICATIONS	RELEASE OF RIGHTS	---	---	---	---

THE AREA SHOWN IN THE SCHEDULE OF LANDS AND INTERESTS IS ONLY THE AREA OF PARCEL SHOWN ON THIS SHEET. IF THE PARCEL IS ON MULTIPLE SHEETS, REFERENCE THE OTHER SHEET(S) FOR ADDITIONAL PARCEL AREAS.





EXISTING MONUMENTS			
POINT	Y (NORTHING)	X (EASTING)	DESCRIPTION
IP 3028	212653.966	273928.923	2.375" OD IRON PIPE
IP 3029	212681.793	273923.594	2.375" OD IRON PIPE
IP 3030	212740.347	273910.343	0.75" IRON ROD
IP 3081	212982.270	274040.428	0.75" IRON ROD
IP 3082	213081.731	274018.400	0.75" IRON ROD

COURSE TABLE		
COURSE	BEARING	DISTANCE
N1/4 SEC. 22-200	N 64°57'22" E	1458.37'
200-201	S 84°19'55" W	357.85'
201-203	N 24°12'29" W	596.65'
203-204	N 68°47'52" E	11.36'
204-205	N 84°19'55" E	536.62'
205-200	S 5°40'05" E	568.73'

STATION-OFFSET TABLE		
POINT NO.	STATION	OFFSET
200	764+74.51	0.00
201	764+74.51	-357.85
202	765+75.66	-369.95
203	770+40.20	-547.56
204	770+43.24	-536.62
205	770+43.24	0.00
206	768+38.72	-479.99
207	768+37.04	-484.70
208	768+74.97	-497.42
209	768+76.65	-492.71

SCALE, FEET
0 50 100
GN

Refer to the Title Sheet, recorded as Sheet 2 of 2, in Cabinet 3 of Plats, Page 525A, as Document No. 1607461 for additional information

ALL TLES SHOWN ON THIS SHEET ARE FOR SLOPE GRADING

PREVIOUS ACCESS CONTROL BY PROJECT NUMBER T05-3-(14)

EMCS

I, KEVIN C. BOYER, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT, I HAVE SURVEYED TRANSPORTATION PROJECT PLAT 1170-01-20-4.03 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN KEVIN C BOYER S-2675 HEWITT WI LAND SURVEYOR

Kevin C. Boyer DATE: 12/07/2011

KEVIN C. BOYER
REGISTERED LAND SURVEYOR NUMBER 2675
THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

Brent L Stella DATE: 12-07-11
(SIGNATURE)
(PRINTED NAME) Brent L Stella

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1170-01-20-4.03
AMENDMENT NO:

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN MARATHON COUNTY, WISCONSIN AT 1:02 PM ON Dec. 9, 2011 AS DOCUMENT # 1609755, AND FILED IN Plat Cabinet 3, Pg. 527D

Michael J. Sykora
SIGNATURE OF REGISTER OF DEEDS

FILE NAME : P:\44xx\4448\RW Plat_UK TPP\040103_rp.dgn
APPRAISAL PLAT DATE :
PLOT DATE : 12/6/2011
PLOT BY : walkup
PLOT NAME :
PLOT SCALE : 1:50

1170-01-20 4.03

TRANSPORTATION PROJECT PLAT NO: 1170-01-20 - 4.03 AMENDMENT NO: 1

AMENDMENT REMOVES THE TLE INTEREST FOR PARCEL 6 OF TPP 1170-01-20-4.01, RECORDED IN CABINET 3 OF PLATS, PAGE 527-D AS DOCUMENT 1609755 BEING THAT PART OF LOT 3 OF CSM 8905, LOCATED IN AND PART OF THE SW1/4 OF THE SE1/4 OF SECTION 15, TOWNSHIP 29 NORTH, RANGE 7 EAST, TOWN OF MAINE, MARATHON COUNTY, WISCONSIN

RELOCATION ORDER USH 51, MARATHON COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

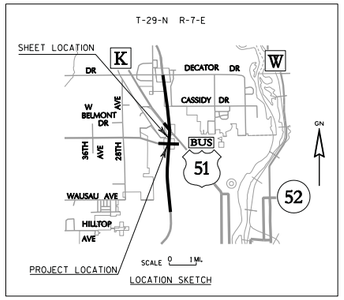
TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3) AND 84.09, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

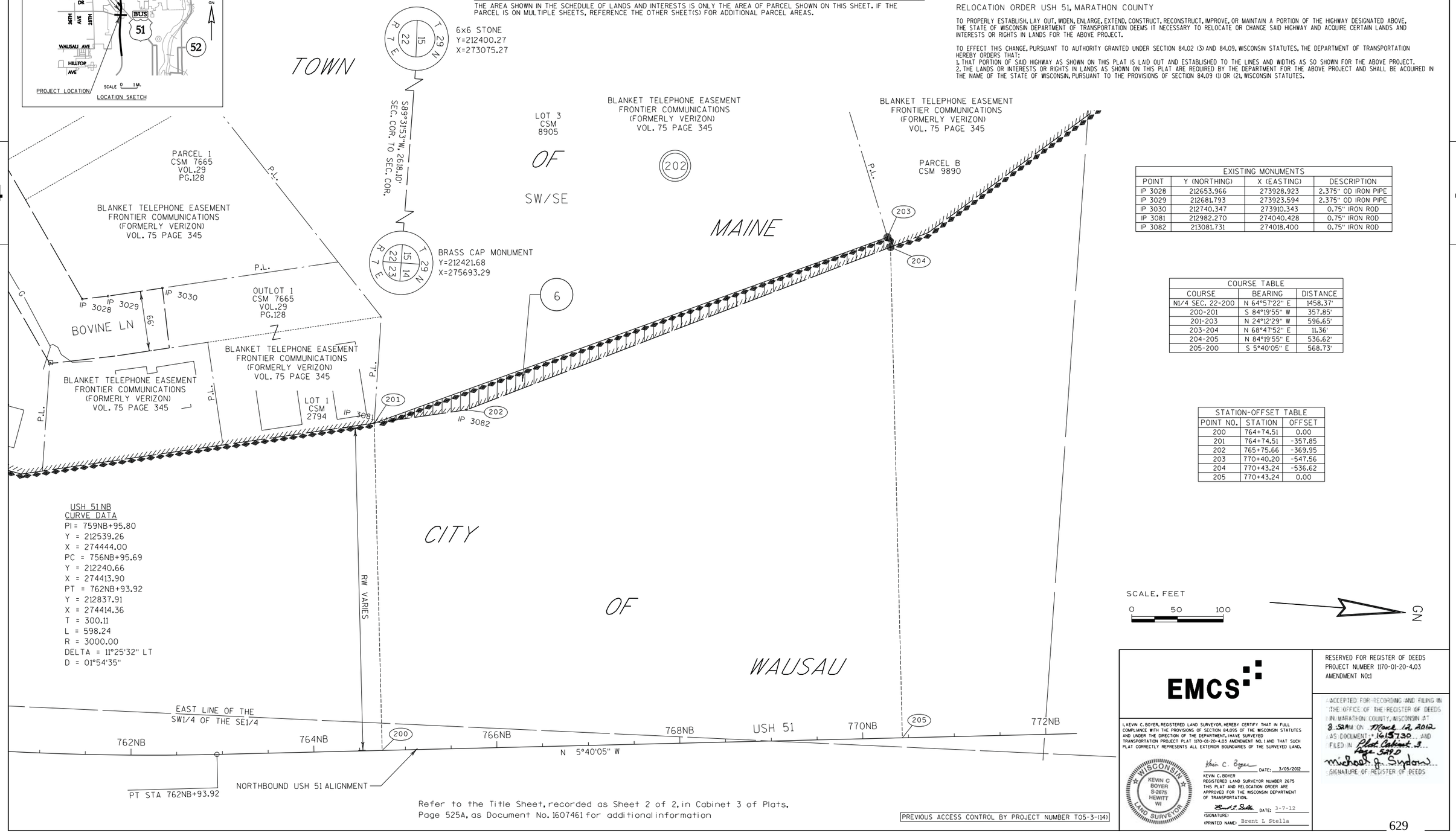
SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERSTS TO THE DEPARTMENT.

SEE ALSO	PARCEL		INTEREST	R/W ACRES REQUIRED		
SHEET ...-4.??	NUMBER	OWNERS	REQUIRED	NEW	EXISTING	TOTAL
---	6	NORTHRIDGE INVESTMENTS, LLC	FEE/TLE	0.206	---	0.206
---	202	FRONTIER COMMUNICATIONS	RELEASE OF RIGHTS	---	---	---

THE AREA SHOWN IN THE SCHEDULE OF LANDS AND INTERESTS IS ONLY THE AREA OF PARCEL SHOWN ON THIS SHEET. IF THE PARCEL IS ON MULTIPLE SHEETS, REFERENCE THE OTHER SHEETS) FOR ADDITIONAL PARCEL AREAS.





EXISTING MONUMENTS			
POINT	Y (NORTHING)	X (EASTING)	DESCRIPTION
IP 3028	212653.966	273928.923	2.375" OD IRON PIPE
IP 3029	212681.793	273923.594	2.375" OD IRON PIPE
IP 3030	212740.347	273910.343	0.75" IRON ROD
IP 3081	212982.270	274040.428	0.75" IRON ROD
IP 3082	213081.731	274018.400	0.75" IRON ROD

COURSE TABLE		
COURSE	BEARING	DISTANCE
N1/4 SEC. 22-200	N 64°57'22" E	1458.37'
200-201	S 84°19'55" W	357.85'
201-203	N 24°12'29" W	596.65'
203-204	N 68°47'52" E	11.36'
204-205	N 84°19'55" E	536.62'
205-200	S 5°40'05" E	568.73'

STATION-OFFSET TABLE		
POINT NO.	STATION	OFFSET
200	764+74.51	0.00
201	764+74.51	-357.85
202	765+75.66	-369.95
203	770+40.20	-547.56
204	770+43.24	-536.62
205	770+43.24	0.00

SCALE, FEET
0 50 100
GN

Refer to the Title Sheet, recorded as Sheet 2 of 2, in Cabinet 3 of Plats, Page 525A, as Document No. 1607461 for additional information

PREVIOUS ACCESS CONTROL BY PROJECT NUMBER T05-3-(14)

EMCS

I, KEVIN C. BOYER, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT, I HAVE SURVEYED TRANSPORTATION PROJECT PLAT 1170-01-20-4.03 AMENDMENT NO. 1 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN KEVIN C BOYER S-2675 HEWITT WI LAND SURVEYOR

Kevin C. Boyer DATE: 3/05/2012
KEVIN C. BOYER
REGISTERED LAND SURVEYOR NUMBER 2675
THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.
Brent L Stella DATE: 3-7-12
(SIGNATURE)
(PRINTED NAME) Brent L Stella

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1170-01-20-4.03
AMENDMENT NO:1

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN MARATHON COUNTY, WISCONSIN AT 8:52AM ON March 12, 2012 AS DOCUMENT # 1613730 AND FILED IN Plat Cabinet 3 Page 529D
Michael J. Sydow
SIGNATURE OF REGISTER OF DEEDS

FILE NAME : P:\44xx\4448\RW Plat_UK TPP\040103__Amendment 1.dgn
APPRAISAL PLAT DATE :
PLOT DATE : 3/5/2012
PLOT BY : kcb
PLOT NAME :
PLOT SCALE : 1:50

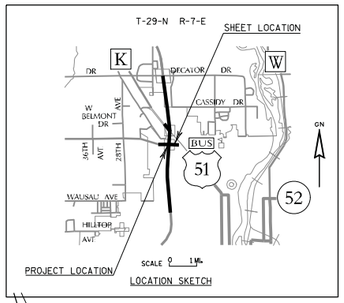
TRANSPORTATION PROJECT PLAT NO: 1170-01-20 - 4.04

THAT PART OF PARCEL 1 OF CSM 9054, PART OF LOTS 3, 4, & 5 OF BLOCK 7 OF ASSESSORS PLAT NO. 4, PART OF LOTS 1, 4, 5, 8, 9 AND 11 OF BLOCK 8 OF ASSESSORS PLAT NO. 4, ALL BEING LOCATED IN PART OF THE NE1/4 OF THE NE1/4 OF SECTION 22, TOWNSHIP 29 NORTH, RANGE 7 EAST, CITY OF WAUSAU, MARATHON COUNTY, WISCONSIN

RELOCATION ORDER USH 51, MARATHON COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3) AND 84.09, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

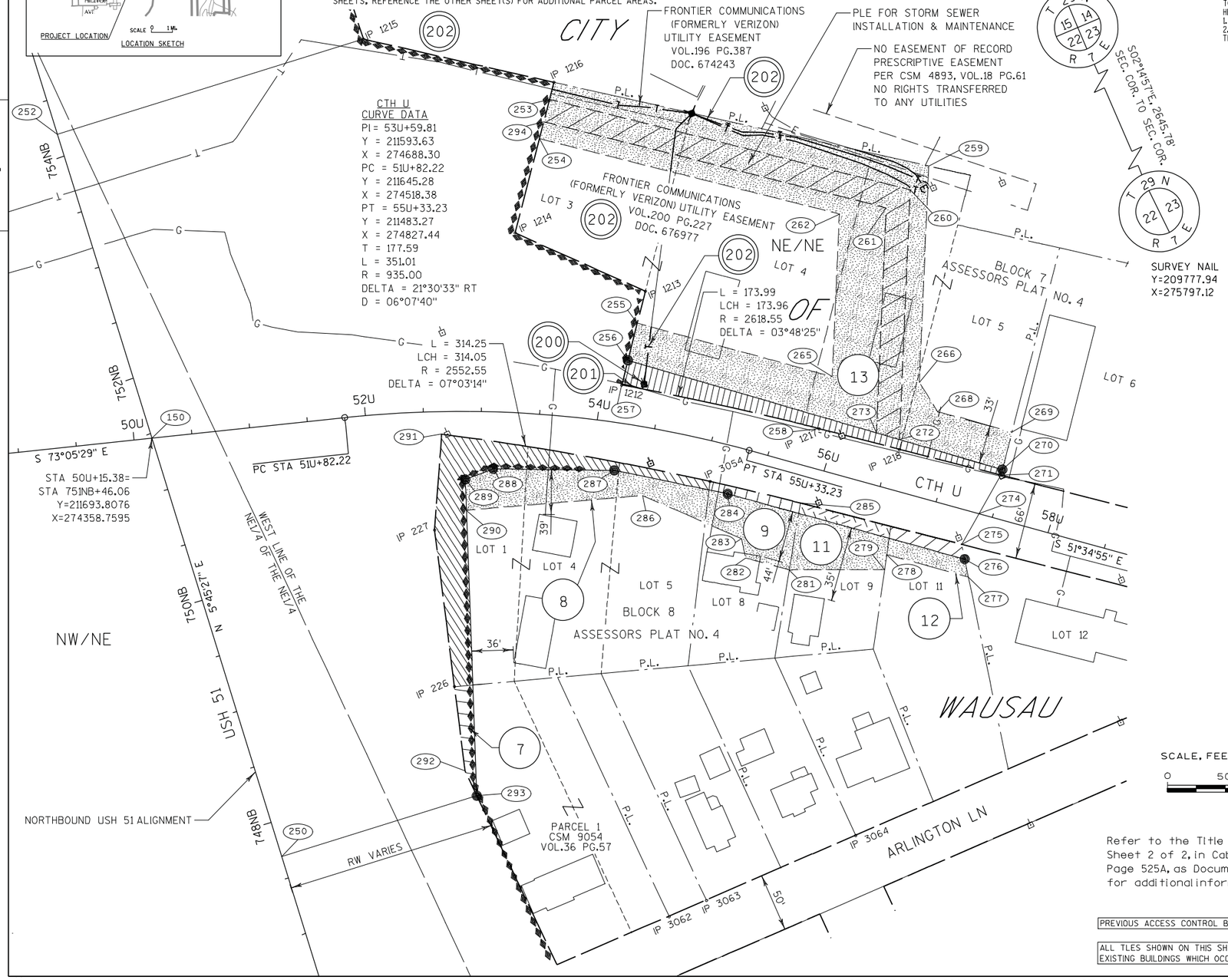


SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERSTS TO THE DEPARTMENT.

SEE ALSO SHEET ...-4.??	PARCEL NUMBER	OWNERS	INTEREST REQUIRED	R/W ACRES REQUIRED NEW	EXISTING	TOTAL	PLE ACRES	TLE ACRES
---	7	JACK G. NELSON AND MABEL L. NELSON	FEE	0.024	---	0.024	---	---
---	8	BACK FORTY PROPERTIES LLC	FEE/TLE	0.181	---	0.181	---	0.125
---	9	BACK FORTY PROPERTIES LLC	FEE/TLE	0.015	---	0.015	---	0.074
---	11	BACK FORTY PROPERTIES LLC	FEE/TLE	0.018	---	0.018	---	0.071
---	12	BACK FORTY PROPERTIES LLC	FEE/TLE	0.017	---	0.017	---	0.023
---	13	T. BIRD ENTERPRISES, LLP	FEE/PLE/TLE	0.088	---	0.088	0.237	0.695
---	200	WISCONSIN PUBLIC SERVICE (ELECTRIC)	RELEASE OF RIGHTS	---	---	---	---	---
---	201	WISCONSIN PUBLIC SERVICE (GAS)	RELEASE OF RIGHTS	---	---	---	---	---
---	202	FRONTIER COMMUNICATIONS	RELEASE OF RIGHTS	---	---	---	---	---

THE AREA SHOWN IN THE SCHEDULE OF LANDS AND INTERESTS IS ONLY THE AREA OF PARCEL SHOWN ON THIS SHEET. IF THE PARCEL IS ON MULTIPLE SHEETS, REFERENCE THE OTHER SHEET(S) FOR ADDITIONAL PARCEL AREAS.



STATION-OFFSET TABLE		
POINT NO.	STATION	OFFSET
IP 1213	751+40.68	442.76
IP 1214	752+21.82	350.69
IP 1215	754+19.81	275.56
IP 1216	753+35.68	420.95
150	751+46.06	0.00
250	747+69.42	0.00
252	754+19.80	0.00
253	753+22.90	413.06
254	752+93.12	394.68
255	751+16.66	428.12
256	750+88.37	410.88
257	750+69.79	399.56
258	749+83.45	550.58
259	751+71.28	707.49
260	751+56.40	686.21
261	751+47.81	661.87
262	751+54.65	621.83
265	750+22.83	574.50
266	749+95.99	644.55
268	749+67.22	651.98
269	749+31.39	707.88
270	749+03.16	690.39
271	748+98.94	687.77
272	749+54.07	613.56
273	749+65.44	596.39
274	748+72.95	660.06
275	748+52.15	637.89
276	748+39.27	636.63
277	748+23.62	635.10
278	748+62.95	573.75
279	748+51.10	568.14
281	748+75.15	489.85
282	748+96.08	457.21
283	749+13.03	458.56
284	749+53.33	458.69
285	749+27.27	515.95
286	749+73.66	388.50
287	750+01.57	371.46
288	750+33.74	272.46
289	750+32.13	246.91
290	750+06.61	239.98
291	750+75.36	239.01
292	747+92.76	172.33
293	747+69.42	175.64
294	753+05.88	402.56

EXISTING MONUMENTS			
POINT	Y (NORTHING)	X (EASTING)	DESCRIPTION
IP 226	211395.399	274514.686	1.25" IRON ROD
IP 227	211525.963	274551.646	1.25" IRON ROD
IP 1212	211577.639	274748.497	1.25" IRON ROD
IP 1213	211644.040	274798.749	1.25" IRON ROD
IP 1214	211734.010	274715.278	1.25" IRON ROD
IP 1215	211938.526	274660.388	1.25" IRON ROD
IP 1216	211840.243	274796.607	0.50" IRON ROD
IP 1217	211476.717	274890.002	1.25" IRON ROD
IP 1218	211433.441	274946.561	1.25" IRON ROD
IP 3054	211471.761	274785.986	0.75" IRON ROD
IP 3062	211141.011	274607.231	IP 1.250D
IP 3063	211141.332	274642.244	IP 0.75IROD
IP 3064	211142.569	274782.148	IP 1.500D

COURSE TABLE		
COURSE	BEARING	DISTANCE
NE SEC. 22-150	S 61°23'28" W	1520.11'
150-252	N 5°45'27" E	273.74'
252-IP1215	S 84°14'33" E	275.56'
IP1215-IP1216	S 54°11'21" E	167.97'
IP1216-IP1214	S 37°26'12" W	133.79'
IP1214-IP1213	S 42°51'15" E	122.73'
IP1213-256	S 37°07'06" W	61.27'
256-270	S 50°42'51" E	335.30'
270-271	S 37°32'44" W	4.96'
271-274	S 52°35'19" W	37.99'
274-275	S 52°35'19" W	30.40'
275-276	S 11°20'16" W	12.94'
276-284	N 51°34'55" W	211.36'
284-287	N 55°18'07" W	99.68'
287-288	N 66°14'25" W	104.10'
288-289	N 87°51'33" W	25.60'
289-293	S 20°56'10" W	272.20'
293-250	N 84°14'33" W	175.64'
250-150	N 5°45'27" E	376.63'

Refer to the Title Sheet, recorded as Sheet 2 of 2, in Cabinet 3 of Plats, Page 525A, as Document No. 1607461 for additional information

PREVIOUS ACCESS CONTROL BY PROJECT NUMBER 105-3-(14)

ALL TLES SHOWN ON THIS SHEET ARE FOR SLOPE GRADING EXISTING BUILDINGS WHICH OCCUPY TLE AREAS WILL NOT BE AFFECTED

EMCS

I, KEVIN C. BOYER, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT, I HAVE SURVEYED TRANSPORTATION PROJECT PLAT 1170-01-20-4.04 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN KEVIN C BOYER S-2675 HEWITT WI LAND SURVEYOR

Kevin C. Boyer DATE: 12/07/2011

KEVIN C. BOYER
REGISTERED LAND SURVEYOR NUMBER 2675
THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

Brent L Stella DATE: 12-07-11
(SIGNATURE)
(PRINTED NAME) Brent L Stella

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1170-01-20-4.04
AMENDMENT NO:

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN MARATHON COUNTY, WISCONSIN AT 1:22 PM ON Dec. 9, 2011 AS DOCUMENT 1609752 AND FILED IN Plat Cabinet 3 Pg 527E

Michael J. Sydow
SIGNATURE OF REGISTER OF DEEDS

630

1170-01-20 4.04

FILE NAME : P:\44xx\4448\RW Plat_UK TPP\040104_rp.dgn
APPRAISAL PLAT DATE :
PLOT DATE : 12/6/2011
PLOT BY : walkup
PLOT NAME :
PLOT SCALE : 1:50

TRANSPORTATION PROJECT PLAT NO: 1170-01-20 - 4.05

THAT PART OF THE SE1/4 OF THE SE1/4 OF SECTION 15, TOWNSHIP 29 NORTH, RANGE 7 EAST, CITY OF WAUSAU, MARATHON COUNTY, WISCONSIN

RELOCATION ORDER USH 51, MARATHON COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

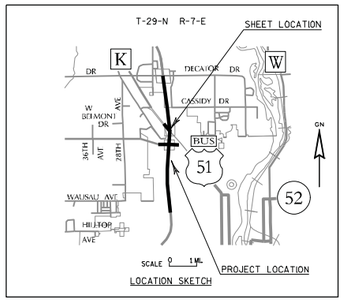
TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3) AND 84.09, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

SCHEDULE OF LANDS & INTERESTS REQUIRED

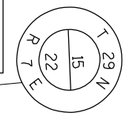
OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERSTS TO THE DEPARTMENT.

SEE ALSO	PARCEL		INTEREST	TLE
SHEET ...-4.???	NUMBER	OWNERS	REQUIRED	ACRES
---	14	MILLS PROPERTIES, INC	TLE	0.042

THE AREA SHOWN IN THE SCHEDULE OF LANDS AND INTERESTS IS ONLY THE AREA OF PARCEL SHOWN ON THIS SHEET. IF THE PARCEL IS ON MULTIPLE SHEETS, REFERENCE THE OTHER SHEET(S) FOR ADDITIONAL PARCEL



LOCATION SKETCH



6x6 STONE
Y=212400.27
X=273075.27

SW/SE

WEST LINE OF THE SE1/4 OF THE SE1/4

760NB 762NB 764NB 766NB 768NB 770NB

USH 51

N 5°40'05" W

151 300 301

PT STA 762NB+93.92

NORTHBOUND USH 51 ALIGNMENT

CITY OF WAUSAU

RW VARIES

NE/NE

SE/SE

S89°31'53"W, 2618.10' SEC. COR. TO SEC. COR.

IP 229

USH 51 NB
CURVE DATA
PI = 759NB+95.80
Y = 212539.26
X = 274444.00
PC = 756NB+95.69
Y = 212240.66
X = 274413.90
PT = 762NB+93.92
Y = 212837.91
X = 274414.36
T = 300.11
L = 598.24
R = 3000.00
DELTA = 11°25'32" LT
D = 01°54'35"

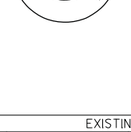
304 303 302 305

14

LOT 1
CSM 4521

N 14TH AVE

Refer to the Title Sheet, recorded as Sheet 2 of 2, in Cabinet 3 of Plats, Page 525A, as Document No. 1607461 for additional information



BRASS CAP MONUMENT
Y=212421.68
X=275693.29

EXISTING MONUMENTS			
POINT	Y (NORTHING)	X (EASTING)	DESCRIPTION
IP 229	212414.169	274796.073	1.25" IRON ROD

COURSE TABLE		
COURSE	BEARING	DISTANCE
NE SEC. 22-300	N 71°45'29" W	1347.17'
300-301	N 5°40'05" W	575.17'
301-302	N 84°19'55" E	324.40'
302-304	S 5°42'01" E	522.27'
304-305	S 40°31'59" E	63.66'
305-300	S 84°13'37" W	361.08'

STATION-OFFSET TABLE		
POINT NO.	STATION	OFFSET
151	758+66.81	0.00
300	762+99.43	0.00
301	768+74.60	0.00
302	768+74.60	324.40
303	764+52.08	324.64
304	763+52.32	324.69
305	763+00.09	361.08

GN

SCALE, FEET
0 50 100

ALL TLES SHOWN ON THIS SHEET ARE FOR SLOPE GRADING

PREVIOUS ACCESS CONTROL BY PROJECT NUMBER T05-3-(14)

EMCS

I, KEVIN C. BOYER, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT, I HAVE SURVEYED TRANSPORTATION PROJECT PLAT 1170-01-20-4.05 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN KEVIN C BOYER S-2675 HEWITT WI LAND SURVEYOR

Kevin C. Boyer DATE: 12/07/2011
KEVIN C. BOYER
REGISTERED LAND SURVEYOR NUMBER 2675
THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

Brent L Stella DATE: 12-07-11
(SIGNATURE)
(PRINTED NAME) Brent L Stella

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1170-01-20-4.05
AMENDMENT NO:

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN MARATHON COUNTY, WISCONSIN AT 1:09 PM ON Dec. 9, 2011 AS DOCUMENT # 1609757 AND FILED IN Plat Cabinet 3, Pg. 587 F

Michael A. Sydow
SIGNATURE OF REGISTER OF DEEDS

FILE NAME : P:\44xx\4448\RW Plat_UK TPP\040105_rp.dgn
APPRAISAL PLAT DATE :
PLOT DATE : 12/6/2011
PLOT BY : walkup
PLOT NAME :
PLOT SCALE : 1:50

1170-01-20 4.05

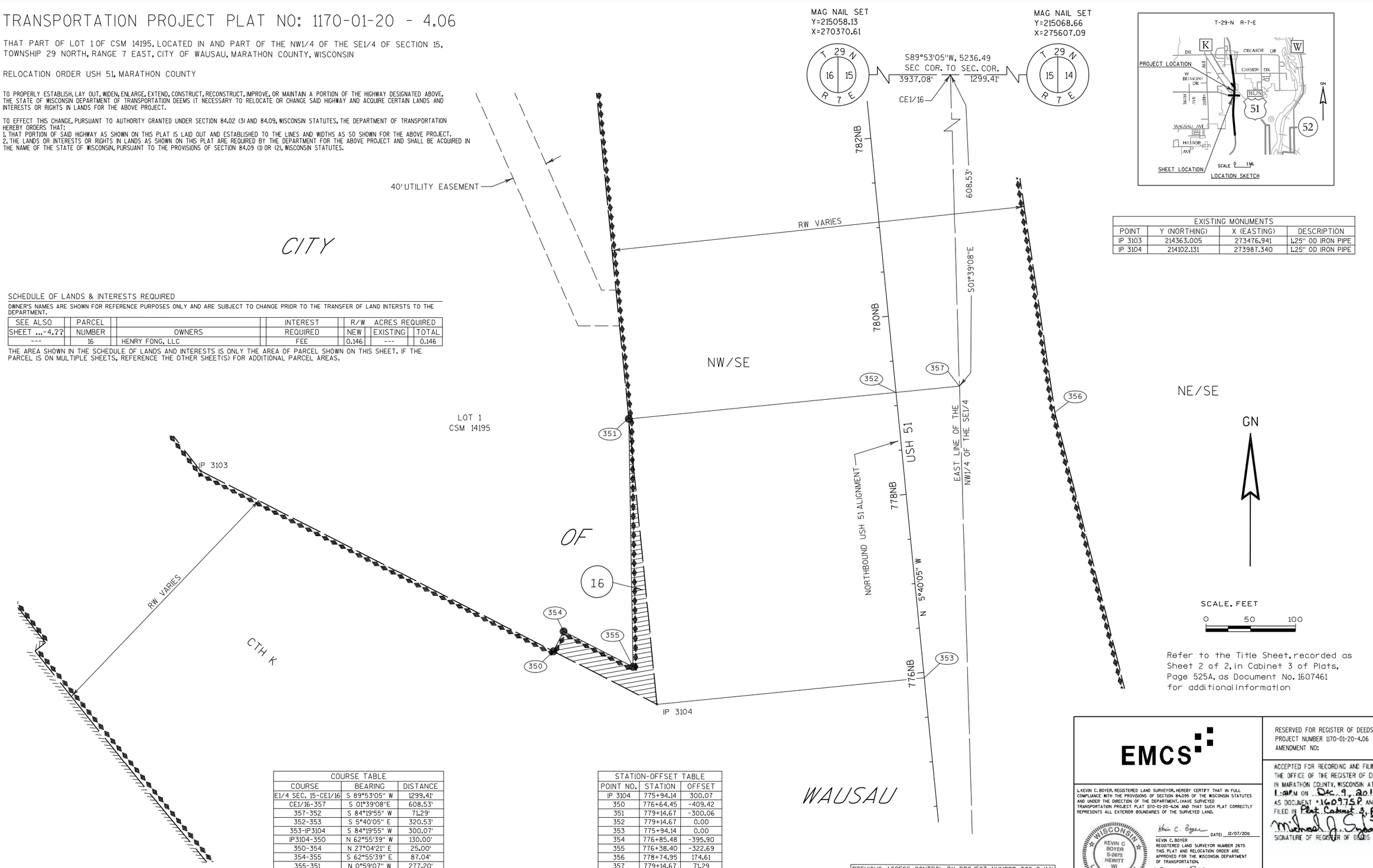
TRANSPORTATION PROJECT PLAT NO: 1170-01-20 - 4.06

THAT PART OF LOT 1 OF CSM 14195, LOCATED IN AND PART OF THE NW1/4 OF THE SE1/4 OF SECTION 15, TOWNSHIP 29 NORTH, RANGE 7 EAST, CITY OF WAUSAU, MARATHON COUNTY, WISCONSIN

RELOCATION ORDER USH 51, MARATHON COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3) AND 84.09, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.



EXISTING MONUMENTS			
POINT	Y (NORTHING)	X (EASTING)	DESCRIPTION
IP 3103	214363.005	273476.941	1.25" OD IRON PIPE
IP 3104	214102.131	273987.340	1.25" OD IRON PIPE

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERSTS TO THE DEPARTMENT.

SEE ALSO	PARCEL		INTEREST	R/W ACRES REQUIRED		
SHEET ...-4.??	NUMBER	OWNERS	REQUIRED	NEW	EXISTING	TOTAL
---	16	HENRY FONG, LLC	FEE	0.146	---	0.146

THE AREA SHOWN IN THE SCHEDULE OF LANDS AND INTERESTS IS ONLY THE AREA OF PARCEL SHOWN ON THIS SHEET. IF THE PARCEL IS ON MULTIPLE SHEETS, REFERENCE THE OTHER SHEET(S) FOR ADDITIONAL PARCEL AREAS.

COURSE TABLE		
COURSE	BEARING	DISTANCE
E1/4 SEC. 15-CE1/16	S 89°53'05" W	1299.41'
CE1/16-357	S 01°39'08"E	608.53'
357-352	S 84°19'55" W	71.29'
352-353	S 5°40'05" E	320.53'
353-IP3104	S 84°19'55" W	300.07'
IP3104-350	N 62°55'39" W	130.00'
350-354	N 27°04'21" E	25.00'
354-355	S 62°55'39" E	87.04'
355-351	N 0°59'07" W	277.20'
351-352	N 84°19'55" E	300.06'

STATION-OFFSET TABLE		
POINT NO.	STATION	OFFSET
IP 3104	775+94.14	300.07
350	776+64.45	-409.42
351	779+14.67	-300.06
352	779+14.67	0.00
353	775+94.14	0.00
354	776+85.48	-395.90
355	776+38.40	-322.69
356	778+74.95	174.61
357	779+14.67	71.29

Refer to the Title Sheet, recorded as Sheet 2 of 2, in Cabinet 3 of Plats, Page 525A, as Document No. 1607461 for additional information

PREVIOUS ACCESS CONTROL BY PROJECT NUMBER T05-3-(14)

EMCS

I, KEVIN C. BOYER, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT, I HAVE SURVEYED TRANSPORTATION PROJECT PLAT 1170-01-20-4.06 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN KEVIN C BOYER S-2675 HEWITT WI LAND SURVEYOR

Kevin C. Boyer DATE: 12/07/2011

KEVIN C. BOYER
REGISTERED LAND SURVEYOR NUMBER 2675
THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

Brent L Stella DATE: 12-07-11
(SIGNATURE)
(PRINTED NAME) Brent L Stella

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1170-01-20-4.06
AMENDMENT NO:

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN MARATHON COUNTY, WISCONSIN AT 1:22 P.M. ON Dec. 9, 2011 AS DOCUMENT 1607525 AND FILED IN Plat Cabinet 3, Pg 525A & 525B

Michael J. Saboor
SIGNATURE OF REGISTER OF DEEDS

FILE NAME : P:\44xx\4448\RW Plat_UK TPP\040106_rp.dgn
APPRAISAL PLAT DATE :
PLOT DATE : 12/6/2011
PLOT BY : walkup
PLOT NAME :
PLOT SCALE : 1:50

TRANSPORTATION PROJECT PLAT NO: 1170-01-20 - 4.07

THAT PART OF LOT 2 OF CSM 13247, LOCATED IN AND PART OF THE SE1/4 OF THE NW1/4 OF SECTION 15, TOWNSHIP 29 NORTH, RANGE 7 EAST, CITY OF WAUSAU, MARATHON COUNTY, WISCONSIN

RELOCATION ORDER USH 51, MARATHON COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

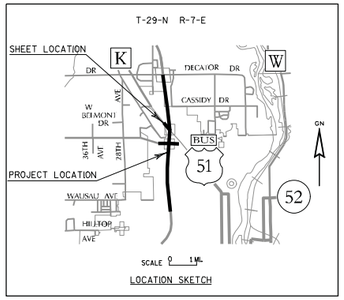
TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3) AND 84.09, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

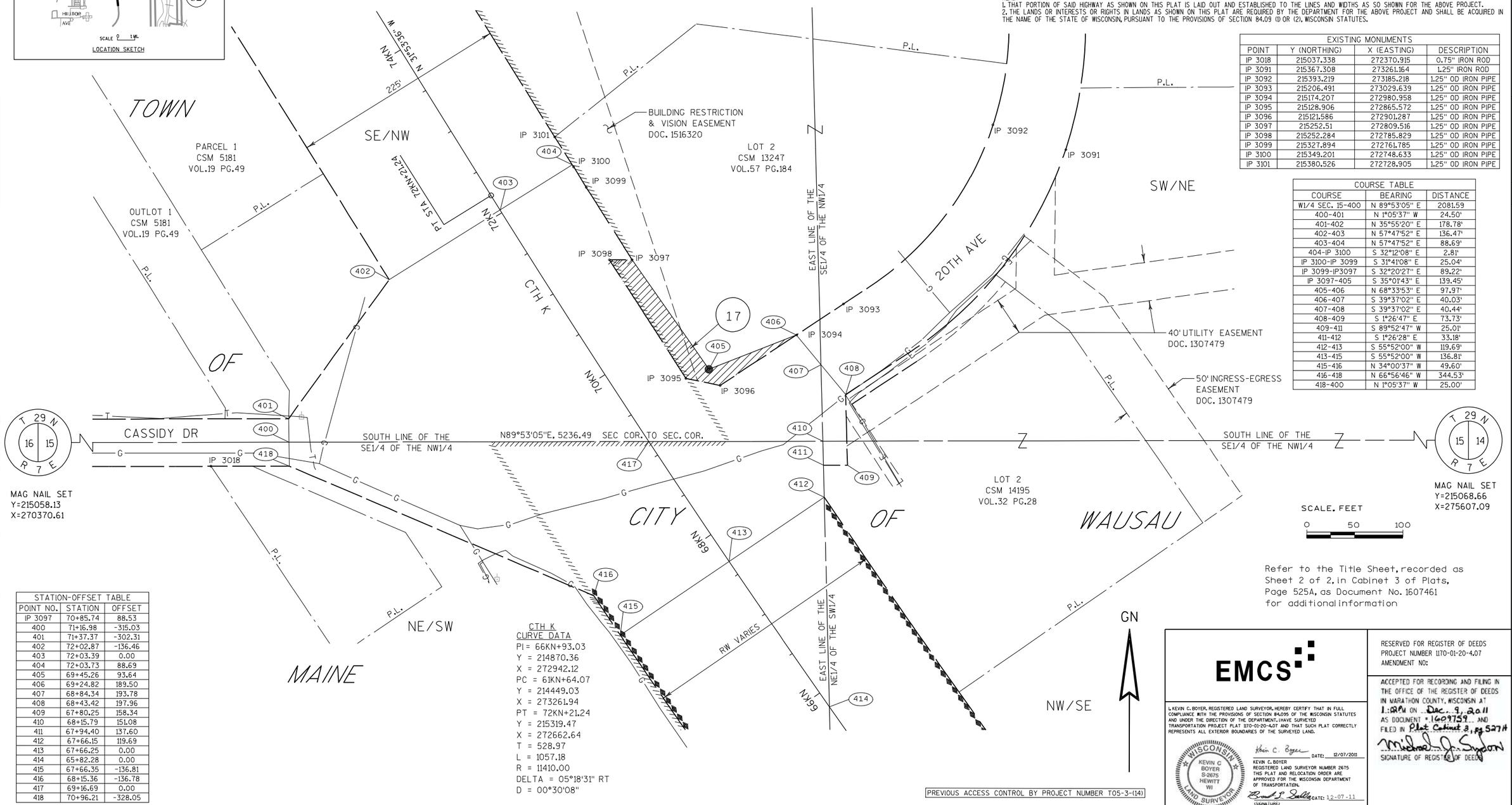
SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERSTS TO THE DEPARTMENT.

SEE ALSO	PARCEL		INTEREST	R/W ACRES REQUIRED		
SHEET ...-4.??	NUMBER	OWNERS	REQUIRED	NEW	EXISTING	TOTAL
---	17	BALLWEG - WAUSAU FACILITIES, LLC.	FEE	0.102	---	0.102

THE AREA SHOWN IN THE SCHEDULE OF LANDS AND INTERESTS IS ONLY THE AREA OF PARCEL SHOWN ON THIS SHEET. IF THE PARCEL IS ON MULTIPLE SHEETS, REFERENCE THE OTHER SHEETS(S) FOR ADDITIONAL PARCEL AREAS.





EXISTING MONUMENTS			
POINT	Y (NORTHING)	X (EASTING)	DESCRIPTION
IP 3018	215037.338	272370.915	0.75" IRON ROD
IP 3091	215367.308	273261.164	1.25" IRON ROD
IP 3092	215393.219	273185.218	1.25" OD IRON PIPE
IP 3093	215206.491	273029.639	1.25" OD IRON PIPE
IP 3094	215174.207	272980.958	1.25" OD IRON PIPE
IP 3095	215128.906	272865.572	1.25" OD IRON PIPE
IP 3096	215121.586	272901.287	1.25" OD IRON PIPE
IP 3097	215252.51	272809.516	1.25" OD IRON PIPE
IP 3098	215252.284	272785.829	1.25" OD IRON PIPE
IP 3099	215327.894	272761.785	1.25" OD IRON PIPE
IP 3100	215349.201	272748.633	1.25" OD IRON PIPE
IP 3101	215380.526	272728.905	1.25" OD IRON PIPE

COURSE TABLE		
COURSE	BEARING	DISTANCE
W1/4 SEC. 15-400	N 89°53'05" E	2081.59
400-401	N 1°05'37" W	24.50'
401-402	N 35°55'20" E	178.78'
402-403	N 57°47'52" E	136.47'
403-404	N 57°47'52" E	88.69'
404-IP 3100	S 32°12'08" E	2.81'
IP 3100-IP 3099	S 31°41'08" E	25.04'
IP 3099-IP3097	S 32°20'27" E	89.22'
IP 3097-405	S 35°01'43" E	139.45'
405-406	N 68°33'53" E	97.97'
406-407	S 39°37'02" E	40.03'
407-408	S 39°37'02" E	40.44'
408-409	S 1°26'47" E	73.73'
409-411	S 89°52'47" W	25.01'
411-412	S 1°26'28" E	33.18'
412-413	S 55°52'00" W	119.69'
413-415	S 55°52'00" W	136.81'
415-416	N 34°00'37" W	49.60'
416-418	N 66°56'46" W	344.53'
418-400	N 1°05'37" W	25.00'

STATION-OFFSET TABLE		
POINT NO.	STATION	OFFSET
IP 3097	70+85.74	88.53
400	71+16.98	-315.03
401	71+37.37	-302.31
402	72+02.87	-136.46
403	72+03.39	0.00
404	72+03.73	88.69
405	69+45.26	93.64
406	69+24.82	189.50
407	68+84.34	193.78
408	68+43.42	197.96
409	67+80.25	158.34
410	68+15.79	151.08
411	67+94.40	137.60
412	67+66.15	119.69
413	67+66.25	0.00
414	65+82.28	0.00
415	67+66.35	-136.81
416	68+15.36	-136.78
417	69+16.69	0.00
418	70+96.21	-328.05

CTH K
CURVE DATA
PI= 66KN+93.03
Y = 214870.36
X = 272942.12
PC = 61KN+64.07
Y = 214449.03
X = 273261.94
PT = 72KN+21.24
Y = 215319.47
X = 272662.64
T = 528.97
L = 1057.18
R = 11410.00
DELTA = 05°18'31" RT
D = 00°30'08"

Refer to the Title Sheet, recorded as Sheet 2 of 2, in Cabinet 3 of Plats, Page 525A, as Document No. 1607461 for additional information

PREVIOUS ACCESS CONTROL BY PROJECT NUMBER T05-3-(14)

EMCS

I, KEVIN C. BOYER, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT, I HAVE SURVEYED TRANSPORTATION PROJECT PLAT 1170-01-20-4.07 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN KEVIN C BOYER S-2675 HEWITT WI LAND SURVEYOR

Kevin C. Boyer DATE: 12/07/2011
KEVIN C. BOYER
REGISTERED LAND SURVEYOR NUMBER 2675
THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.
Brent L Stella DATE: 12-07-11
(SIGNATURE)
(PRINTED NAME) Brent L Stella

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1170-01-20-4.07
AMENDMENT NO:

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN MARATHON COUNTY, WISCONSIN AT 1:09PM ON Dec. 9, 2011 AS DOCUMENT # 1609759 AND FILED IN Plat Cabinet 3, Pg 527A
Michael J. Sydow
SIGNATURE OF REGISTER OF DEEDS

FILE NAME : P:\44xx\4448\RW Plat_UK TPP\040107_rp.dgn
APPRAISAL PLAT DATE :
PLOT DATE : 12/6/2011
PLOT BY : walkup
PLOT NAME :
PLOT SCALE : 1:50
1170-01-20 4.07

TRANSPORTATION PROJECT PLAT NO: 1170-01-20 - 4.07 AMENDMENT NO: 1

AMENDMENT MODIFIES THE FEE INTEREST FOR PARCEL 17 OF TPP 1170-01-20-4.07 RECORED IN CABINET 3 OF PLATS, PAGE 527H, BEING THAT PART OF LOT 2 OF CSM 13247, LOCATED IN AND PART OF THE SE1/4 OF THE NW1/4 OF SECTION 15, TOWNSHIP 29 NORTH, RANGE 7 EAST, CITY OF WAUSAU, MARATHON COUNTY, WISCONSIN

RELOCATION ORDER USH 51, MARATHON COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

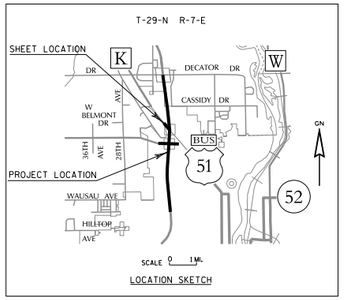
TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3) AND 84.09, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

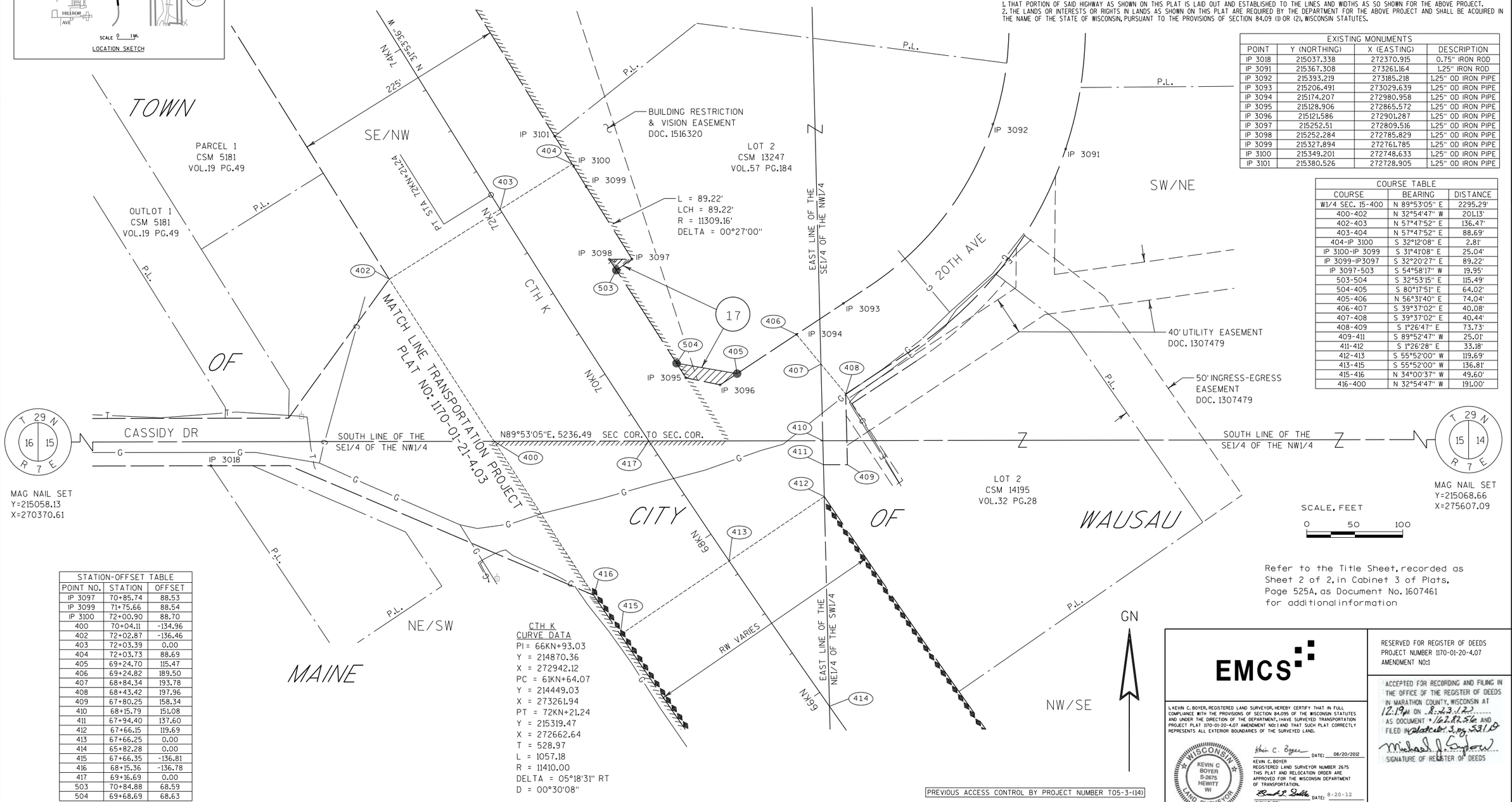
SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERSTS TO THE DEPARTMENT.

SEE ALSO	PARCEL		INTEREST	R/W ACRES REQUIRED		
SHEET ...-4.??	NUMBER	OWNERS	REQUIRED	NEW	EXISTING	TOTAL
---	17	BALLWEG - WAUSAU FACILITIES, LLC.	FEE	0.019	---	0.019

THE AREA SHOWN IN THE SCHEDULE OF LANDS AND INTERESTS IS ONLY THE AREA OF PARCEL SHOWN ON THIS SHEET. IF THE PARCEL IS ON MULTIPLE SHEETS, REFERENCE THE OTHER SHEET(S) FOR ADDITIONAL PARCEL AREAS.





EXISTING MONUMENTS			
POINT	Y (NORTHING)	X (EASTING)	DESCRIPTION
IP 3018	215037.338	272370.915	0.75" IRON ROD
IP 3091	215367.308	273261.164	1.25" IRON ROD
IP 3092	215393.219	273185.218	1.25" OD IRON PIPE
IP 3093	215206.491	273029.639	1.25" OD IRON PIPE
IP 3094	215174.207	272980.958	1.25" OD IRON PIPE
IP 3095	215128.906	272865.572	1.25" OD IRON PIPE
IP 3096	215121.586	272901.287	1.25" OD IRON PIPE
IP 3097	215252.51	272809.516	1.25" OD IRON PIPE
IP 3098	215252.284	272785.829	1.25" OD IRON PIPE
IP 3099	215327.894	272761.785	1.25" OD IRON PIPE
IP 3100	215349.201	272748.633	1.25" OD IRON PIPE
IP 3101	215380.526	272728.905	1.25" OD IRON PIPE

COURSE TABLE		
COURSE	BEARING	DISTANCE
W1/4 SEC. 15-400	N 89°53'05" E	2295.29'
400-402	N 32°54'47" W	201.13'
402-403	N 57°47'52" E	136.47'
403-404	N 57°47'52" E	88.69'
404-IP 3100	S 32°12'08" E	2.81'
IP 3100-IP 3099	S 31°41'08" E	25.04'
IP 3099-IP3097	S 32°20'27" E	89.22'
IP 3097-503	S 54°58'17" W	19.95'
503-504	S 32°53'15" E	115.49'
504-405	S 80°17'51" E	64.02'
405-406	N 56°31'40" E	74.04'
406-407	S 39°37'02" E	40.08'
407-408	S 39°37'02" E	40.44'
408-409	S 1°26'47" E	73.73'
409-411	S 89°52'47" W	25.01'
411-412	S 1°26'28" E	33.18'
412-413	S 55°52'00" W	119.69'
413-415	S 55°52'00" W	136.81'
415-416	N 34°00'37" W	49.60'
416-400	N 32°54'47" W	191.00'

STATION-OFFSET TABLE		
POINT NO.	STATION	OFFSET
IP 3097	70+85.74	88.53
IP 3099	71+75.66	88.54
IP 3100	72+00.90	88.70
400	70+04.11	-134.96
402	72+02.87	-136.46
403	72+03.39	0.00
404	72+03.73	88.69
405	69+24.70	115.47
406	69+24.82	189.50
407	68+84.34	193.78
408	68+43.42	197.96
409	67+80.25	158.34
410	68+15.79	151.08
411	67+94.40	137.60
412	67+66.15	119.69
413	67+66.25	0.00
414	65+82.28	0.00
415	67+66.35	-136.81
416	68+15.36	-136.78
417	69+16.69	0.00
503	70+84.88	68.59
504	69+68.69	68.63

CTH K
CURVE DATA
PI= 66KN+93.03
Y = 214870.36
X = 272942.12
PC = 61KN+64.07
Y = 214449.03
X = 273261.94
PT = 72KN+21.24
Y = 215319.47
X = 272662.64
T = 528.97
L = 1057.18
R = 11410.00
DELTA = 05°18'31" RT
D = 00°30'08"

Refer to the Title Sheet, recorded as Sheet 2 of 2, in Cabinet 3 of Plats, Page 525A, as Document No. 1607461 for additional information

PREVIOUS ACCESS CONTROL BY PROJECT NUMBER TO5-3-(14)

EMCS

I, KEVIN C. BOYER, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT, I HAVE SURVEYED TRANSPORTATION PROJECT PLAT 1170-01-20-4.07 AMENDMENT NO: 1 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN KEVIN C BOYER S-2675 HEWITT WI LAND SURVEYOR

Kevin C. Boyer DATE: 08/20/2012
KEVIN C. BOYER
REGISTERED LAND SURVEYOR NUMBER 2675
THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.
Brent P. Stella DATE: 8-20-12
(SIGNATURE)
(PRINTED NAME) Brent Stella

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1170-01-20-4.07
AMENDMENT NO:1

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN MARATHON COUNTY, WISCONSIN AT 12:19 PM ON 8-23-12 AS DOCUMENT 1621256 AND FILED IN plat cab 3 pg 531A
Michael J. Eyden
SIGNATURE OF REGISTER OF DEEDS

FILE NAME : P:\44xx\4448\RW Plat_UK TPP\040107_rp_Amendent No 1.dgn
APPRAISAL PLAT DATE :
PLOT DATE : 8/20/2012
PLOT BY : walkup
PLOT NAME :
PLOT SCALE : 1:50
1170-01-20 4.07 AMENDMENT NO: 1

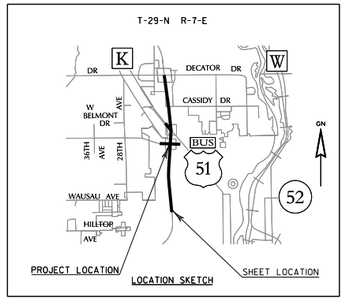
TRANSPORTATION PROJECT PLAT NO: 1170-01-20 - 4.08

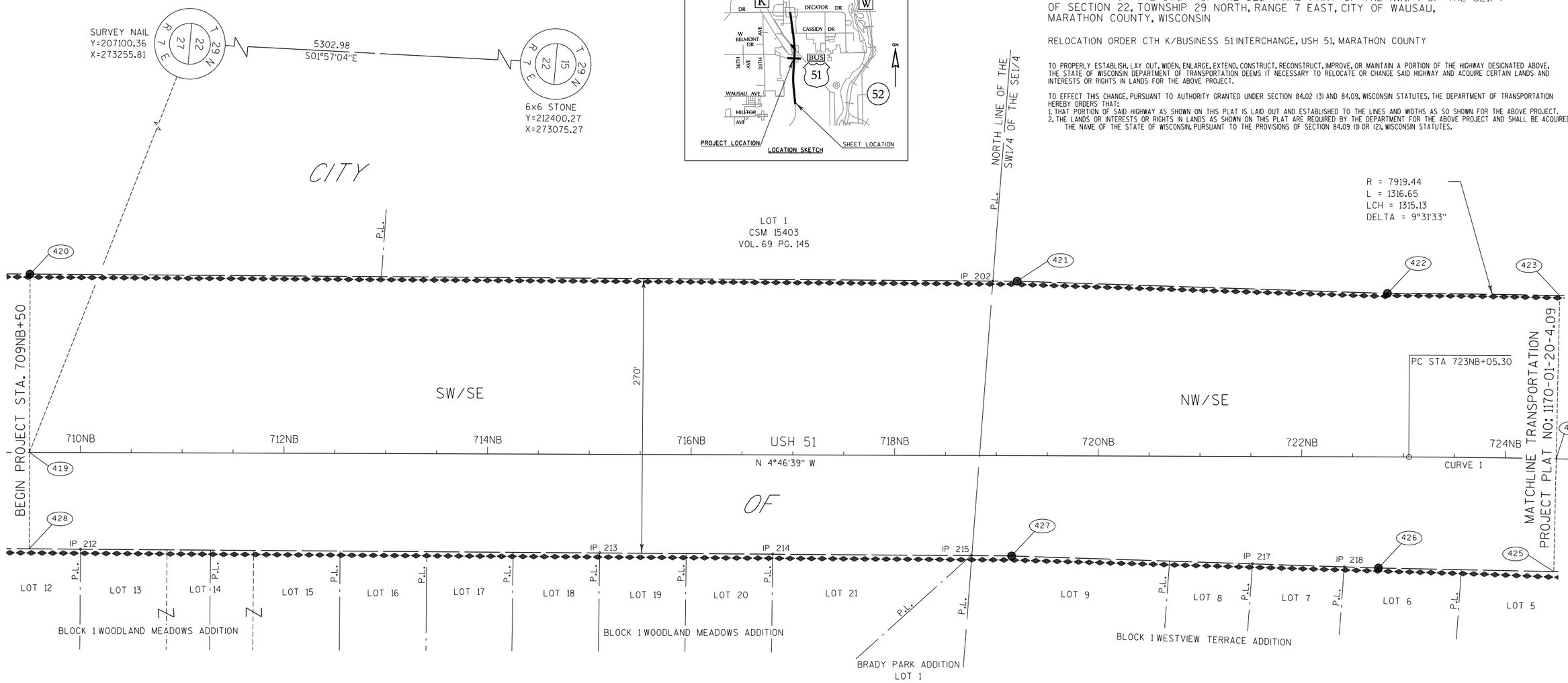
THAT PART OF THE SW1/4 OF THE SE1/4 AND PART OF THE NW1/4 OF THE SE1/4 OF SECTION 22, TOWNSHIP 29 NORTH, RANGE 7 EAST, CITY OF WAUSAU, MARATHON COUNTY, WISCONSIN

RELOCATION ORDER CTH K/BUSINESS 51 INTERCHANGE, USH 51, MARATHON COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3) AND 84.09, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.





SCALE, FEET
0 50 100
GN

EXISTING MONUMENTS			
POINT	Y (NORTHING)	X (EASTING)	DESCRIPTION
IP 202	208439.697	274072.087	2.375" OD IRON PIPE
IP 212	207569.735	274412.017	1.25" OD IRON PIPE
IP 213	208078.121	274371.289	1.25" OD IRON PIPE
IP 214	208247.612	274357.703	1.25" OD IRON PIPE
IP 215	208442.258	274342.094	2.375" OD IRON PIPE
IP 217	208718.082	274326.474	1.25" OD IRON PIPE
IP 218	208808.090	274321.627	1.25" OD IRON PIPE

COURSE TABLE		
COURSE	BEARING	DISTANCE
N1/4 SEC. 27-419	N 68°54'25" E	1142.40'
419-420	S 85°13'21" W	175.26'
420-421	N 4°33'11" W	969.79'
421-422	N 3°04'57" W	364.10'
422-423	N 4°13'33" W	169.18'
423-424	N 86°15'32" E	160.40'
424-425	N 86°15'32" E	110.84'
425-426	S 3°47'57" E	172.28'
426-427	S 3°04'57" E	360.63'
427-428	S 4°33'11" E	965.27'
428-419	S 85°13'21" W	94.74'

STATION-OFFSET TABLE		
POINT NO.	STATION	OFFSET
419	709+50.00	0.00
420	709+50.00	-175.26
421	719+19.78	-171.46
422	722+83.72	-160.69
423	724+50.00	-160.40
424	724+50.00	0.00
425	724+50.00	110.84
426	722+75.73	109.19
427	719+15.26	98.52
428	709+50.00	94.74

CURVE 1
USH 51 NB
CURVE DATA
PI = 730NB+42.85
Y = 209597.07
X = 274147.36
PC = 723NB+05.30
Y = 208862.08
X = 274208.78
PT = 737NB+76.25
Y = 210330.91
X = 274221.34
T = 737.56
L = 1470.95
R = 8000.00
DELTA = 10°32'06" RT
D = 00°42'58"

Refer to the Title Sheet, recorded as Sheet 2 of 2, in Cabinet 3 of Plats, Page 525A, as Document No. 1607461 for additional information

PREVIOUS ACCESS CONTROL BY PROJECT NUMBER T05-3-(14)

EMCS

I, KEVIN C. BOYER, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT, I HAVE SURVEYED TRANSPORTATION PROJECT PLAT 1170-01-20-4.08 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN KEVIN C BOYER S-2675 HEWITT WI LAND SURVEYOR

Kevin C. Boyer DATE: 4/30/2012

KEVIN C. BOYER
REGISTERED LAND SURVEYOR NUMBER 2675
THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

Brent L Stella DATE: 05-08-12
(SIGNATURE)
(PRINTED NAME) Brent L Stella

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1170-01-20-4.08
AMENDMENT NO:

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN MARATHON COUNTY, WISCONSIN AT 8:46 AM ON May 18, 2012 AS DOCUMENT # 1621017 AND FILED IN Plat Cabinet 3, Page 530 A

SIGNATURE OF REGISTER OF DEEDS

FILE NAME : P:\44xx\4448\RW Plat_UK TPP\040108_rp.dgn
APPRAISAL PLAT DATE :
PLOT DATE : 4/30/2012
PLOT BY : kcb
PLOT NAME :
PLOT SCALE : 1:50

1170-01-20 4.08

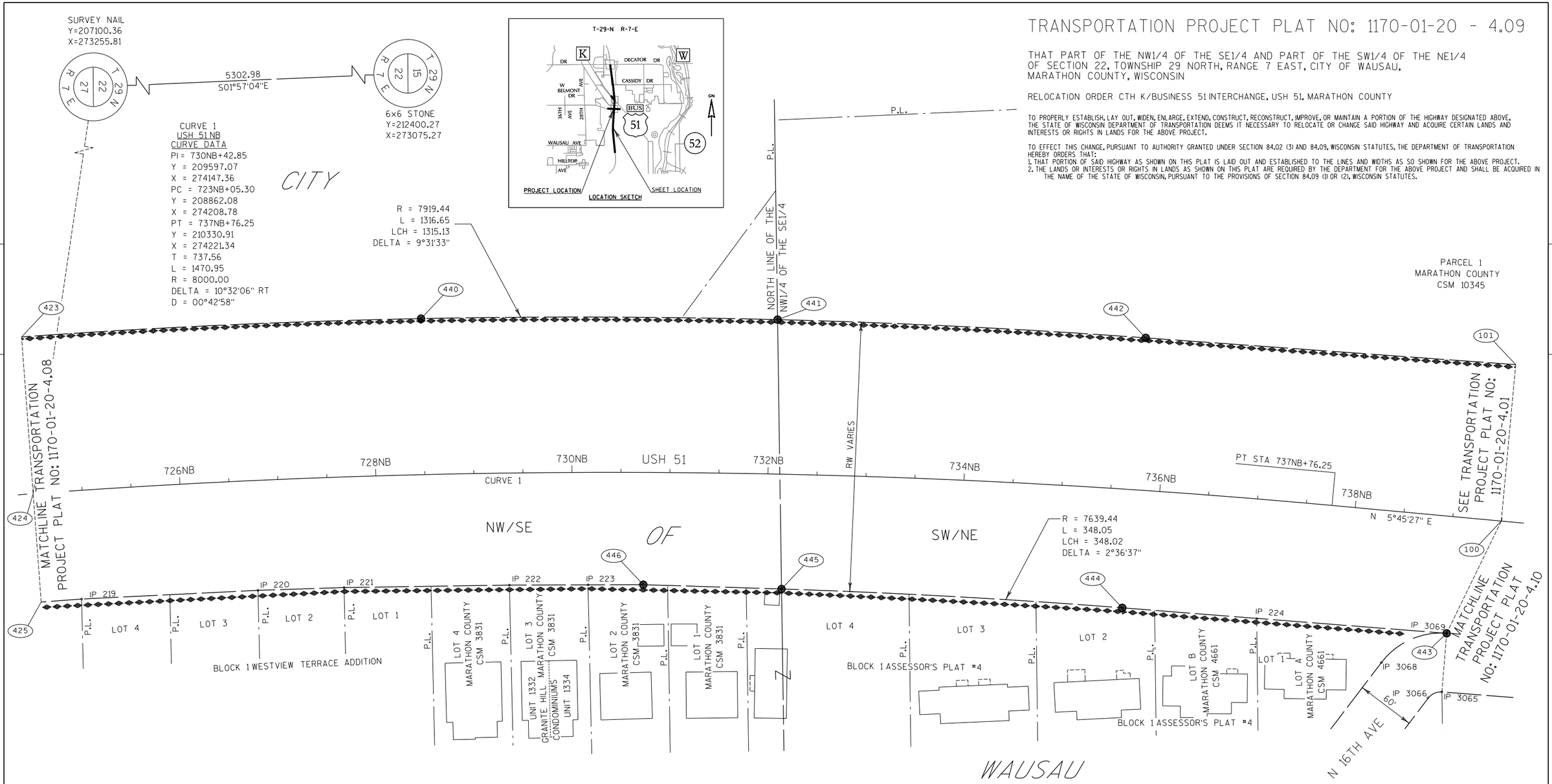
TRANSPORTATION PROJECT PLAT NO: 1170-01-20 - 4.09

THAT PART OF THE NW1/4 OF THE SE1/4 AND PART OF THE SW1/4 OF THE NE1/4 OF SECTION 22, TOWNSHIP 29 NORTH, RANGE 7 EAST, CITY OF WAUSAU, MARATHON COUNTY, WISCONSIN

RELOCATION ORDER CTH K/BUSINESS 51 INTERCHANGE, USH 51, MARATHON COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3) AND 84.09, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
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EXISTING MONUMENTS			
POINT	Y (NORTHING)	X (EASTING)	DESCRIPTION
IP 219	209054.933	274305.899	1.25" OD IRON PIPE
IP 220	209234.854	274298.582	1.25" OD IRON PIPE
IP 221	209322.623	274296.514	1.25" OD IRON PIPE
IP 222	209491.286	274295.424	1.25" OD IRON PIPE
IP 223	209571.470	274295.862	1.25" OD IRON PIPE
IP 224	210253.140	274336.311	1.25" OD IRON PIPE
IP 3065	210441.250	274412.548	2.375" OD IRON PIPE
IP 3066	210426.990	274418.434	2.375" OD IRON PIPE
IP 3068	210379.814	274382.125	1.00" OD IRON PIPE
IP 3069	210446.646	274353.006	1.00" OD IRON PIPE

COURSE TABLE		
COURSE	BEARING	DISTANCE
N1/4 SEC. 27-424	N 26°18'18" E	2126.20'
424-423	N 86°15'32" E	160.40'
423-442	N 0°32'13" E	1146.45'
442-101	N 4°37'51" E	378.31'
101-100	S 84°14'33" E	160.27'
100-443	S 63°35'13" E	127.36'
443-444	S 4°59'07" W	331.85'
444-445	S 3°39'16" W	348.02'
445-446	S 2°16'35" W	141.06'
446-IP 222	S 0°18'47" W	136.53'
IP 222-IP 221	S 0°22'13" E	168.67'
IP 221-IP 220	S 1°20'59" E	87.79'
IP 220-IP 219	S 2°19'44" E	180.07'
IP 219-425	S 3°47'57" E	41.41'
425-424	N 86°15'32" E	110.84'

STATION-OFFSET TABLE		
POINT NO.	STATION	OFFSET
100	739+49.53	0.00
101	739+49.53	-160.27
423	724+50.00	-160.40
424	724+50.00	0.00
425	724+50.00	110.84
440	728+49.91	-159.18
441	732+06.48	-157.58
442	735+75.18	-155.41
443	739+04.61	119.17
444	735+69.64	121.02
445	732+16.35	117.12
446	730+73.25	114.55
IP 219	724+91.99	110.69
IP 220	726+74.60	112.13
IP 221	727+63.64	112.84
IP 222	729+34.74	114.35

Refer to the Title Sheet, recorded as Sheet 2 of 2, in Cabinet 3 of Plats, Page 525A, as Document No. 1607461 for additional information

PREVIOUS ACCESS CONTROL BY PROJECT NUMBER T05-3-(14)

EMCS

I, KEVIN C. BOYER, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT, I HAVE SURVEYED TRANSPORTATION PROJECT PLAT 1170-01-20-4.09 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN KEVIN C BOYER S-2675 HEWITT WI LAND SURVEYOR

Kevin C. Boyer DATE: 4/30/2012

KEVIN C. BOYER
REGISTERED LAND SURVEYOR NUMBER 2675
THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

(SIGNATURE) DATE: 05-08-12

(PRINTED NAME) Brent L Stella

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1170-01-20-4.09
AMENDMENT NO:

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN MARATHON COUNTY, WISCONSIN AT 8:46 AM ON May 18, 2012 AS DOCUMENT # 1621212 AND FILED IN Plat Cab 3, pg 530B

Michael J. Spadow
SIGNATURE OF REGISTER OF DEEDS

FILE NAME : P:\44xx\4448\RW Plat_UK TPP\040109_rp.dgn
APPRAISAL PLAT DATE :
PLOT DATE : 4/30/2012
PLOT BY : kcb
PLOT NAME :
PLOT SCALE : 1:50

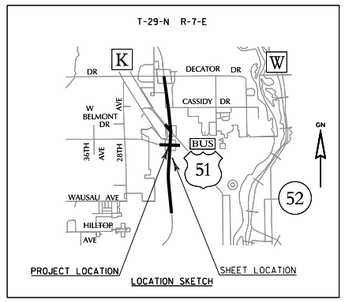
TRANSPORTATION PROJECT PLAT NO: 1170-01-20 - 4.10

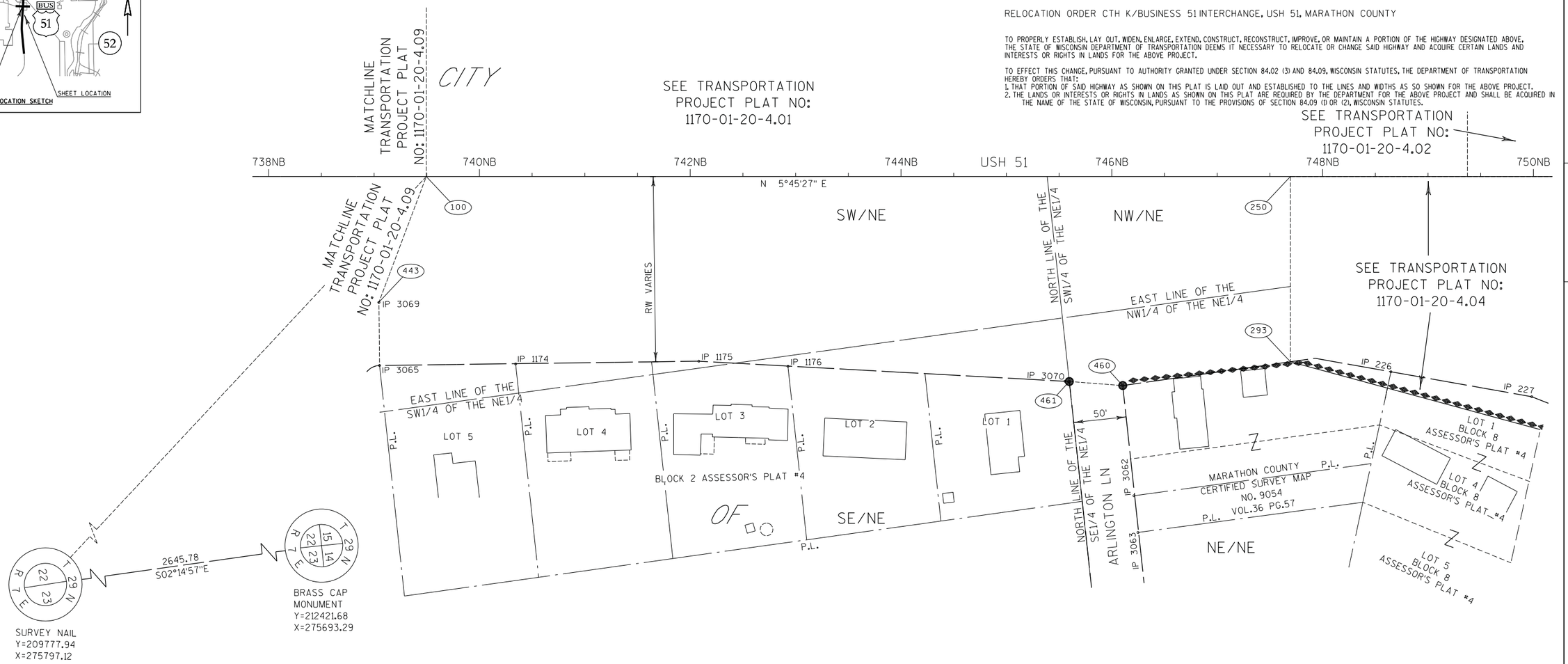
THAT PART OF THE SW1/4 OF THE NE1/4, PART OF THE SE1/4 OF THE NE1/4, PART OF THE NW1/4 OF THE NE1/4 AND PART OF THE NE1/4 OF THE NE1/4 OF SECTION 22, TOWNSHIP 29 NORTH, RANGE 7 EAST, CITY OF WAUSAU, MARATHON COUNTY, WISCONSIN

RELOCATION ORDER CTH K/BUSINESS 51 INTERCHANGE, USH 51, MARATHON COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3) AND 84.09, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.





EXISTING MONUMENTS			
POINT	Y (NORTHING)	X (EASTING)	DESCRIPTION
226	211395.399	274514.686	IP 1.25IROD
227	211525.963	274551.646	IP 1.25IROD
1174	210569.841	274424.057	IP 0.5IROD
1175	210743.028	274438.872	IP 1.25IROD
1176	210826.724	274452.176	IP 0.5IROD
3062	211141.011	274607.231	IP 1.250D
3063	211141.332	274642.244	IP 0.75IROD
3065	210441.250	274412.548	IP 2.3750D
3069	210446.646	274353.006	IP1.000D
3070	211086.780	274492.655	IP 1.500DIP

COURSE TABLE		
COURSE	BEARING	DISTANCE
E1/4 SEC. 22-100	N 65°02'22" W	1718.93'
100-250	N 5°45'27" E	819.89'
250-293	S 84°14'30" E	175.64'
293-460	S 2°18'34" E	160.67'
460-461	S 10°05'26" W	50.85'
461-IP 1175	S 8°53'32" W	352.05'
IP 1175-IP 3065	S 4°59'07" W	302.92'
IP 3065-443	N 84°49'21" W	60.00'
443-100	N 63°35'13" W	127.36'

STATION-OFFSET TABLE		
POINT NO.	STATION	OFFSET
100	739+49.53	0.00
250	747+69.42	0.00
293	747+69.42	175.64
443	739+04.61	119.17
460	746+10.35	198.18
461	745+59.64	194.34
IP 1175	742+08.11	175.09
IP 3065	739+05.22	179.17

SCALE, FEET
0 50 100

GN

WAUSAU

Refer to the Title Sheet, recorded as Sheet 2 of 2, in Cabinet 3 of Plats, Page 525A, as Document No. 1607461 for additional information

PREVIOUS ACCESS CONTROL BY PROJECT NUMBER T05-3-(14)

EMCS

I, KEVIN C. BOYER, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT, I HAVE SURVEYED TRANSPORTATION PROJECT PLAT 1170-01-20-4.10 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN KEVIN C BOYER S-2675 HEWITT WI LAND SURVEYOR

Kevin C. Boyer DATE: 4/30/2012
KEVIN C. BOYER
REGISTERED LAND SURVEYOR NUMBER 2675
THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.
Brent L Stella DATE: 05-08-12
(SIGNATURE)
(PRINTED NAME) Brent L Stella

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1170-01-20-4.10
AMENDMENT NO:

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN MARATHON COUNTY, WISCONSIN AT 2:45 AM ON May 18, 2012 AS DOCUMENT # 1608019 AND FILED IN Plat Cab. 3, Pg. 530C

SIGNATURE OF REGISTER OF DEEDS

FILE NAME : P:\44xx\4448\RW Plat_UK TPP\040110_rp.dgn
APPRAISAL PLAT DATE :
PLOT DATE : 4/30/2012
PLOT BY : kcb
PLOT NAME :
PLOT SCALE : 1:50
1170-01-20 4.10

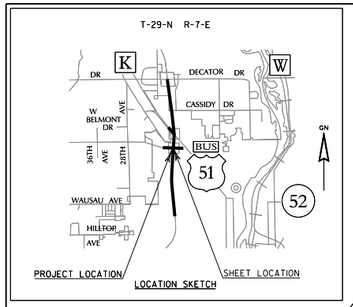
TRANSPORTATION PROJECT PLAT NO: 1170-01-20 - 4.11

THAT PART OF THE NW1/4 OF THE NE1/4 AND PART OF THE NE1/4 OF THE NE1/4 OF SECTION 22, PART OF THE SW1/4 OF THE SE1/4 AND PART OF THE SE1/4 OF THE SE1/4 OF SECTION 15, ALL LOCATED IN TOWNSHIP 29 NORTH, RANGE 7 EAST, CITY OF WAUSAU, MARATHON COUNTY, WISCONSIN

RELOCATION ORDER CTH K/BUSINESS 51 INTERCHANGE, USH 51, MARATHON COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3) AND 84.09, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

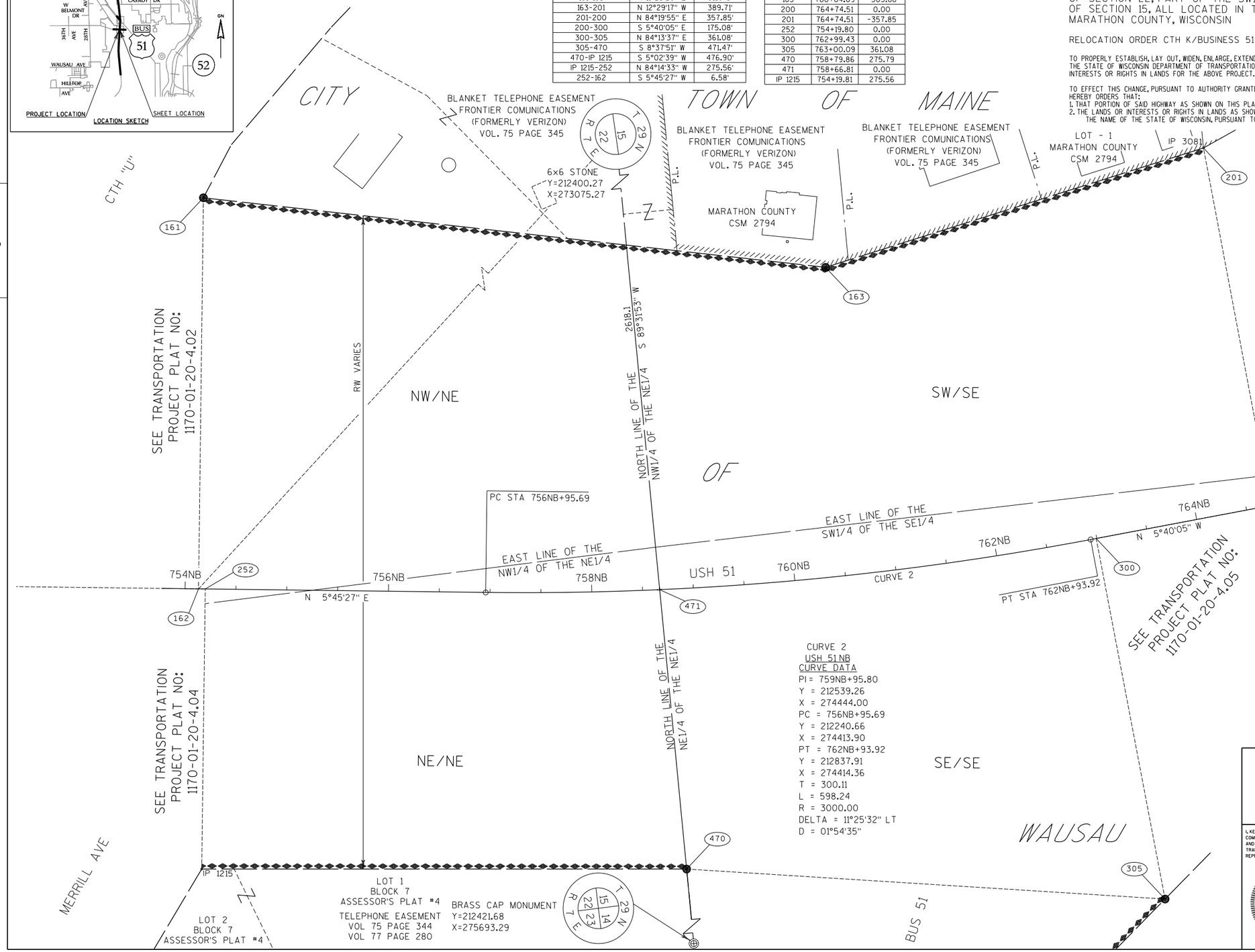


LOCATION SKETCH

EXISTING MONUMENTS			
POINT	Y (NORTHING)	X (EASTING)	DESCRIPTION
IP 1215	211938.526	274660.388	1.25" IRON ROD
IP 3081	212982.270	274040.428	0.75" IRON ROD

COURSE TABLE		
COURSE	BEARING	DISTANCE
N1/4 SEC. 22-162	S 71°24'45" E	1382.40'
162-161	N 84°14'33" W	384.75'
161-163	N 11°25'20" E	615.75'
163-201	N 12°29'17" W	389.71'
201-200	N 84°19'55" E	357.85'
200-300	S 5°40'05" E	175.08'
300-305	N 84°13'37" E	361.08'
305-470	S 8°37'51" W	471.47'
470-IP 1215	S 5°02'39" W	476.90'
IP 1215-252	N 84°14'33" W	275.56'
252-162	S 5°45'27" W	6.58'

STATION-OFFSET TABLE		
POINT NO.	STATION	OFFSET
161	754+13.23	-384.75
162	754+13.23	0.00
163	760+64.09	-303.66
200	764+74.51	0.00
201	764+74.51	-357.85
252	754+19.80	0.00
300	762+99.43	0.00
305	763+00.09	361.08
470	758+79.86	275.79
471	758+66.81	0.00
IP 1215	754+19.81	275.56



Refer to the Title Sheet, recorded as Sheet 2 of 2, in Cabinet 3 of Plats, Page 525A, as Document No. 1607461 for additional information

PREVIOUS ACCESS CONTROL BY PROJECT NUMBER TO5-3-(14)

SCALE, FEET
0 50 100

GN

EMCS

I, KEVIN C. BOYER, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT, I HAVE SURVEYED TRANSPORTATION PROJECT PLAT 1170-01-20-4.11 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN KEVIN C BOYER S-2675 HEWITT WI LAND SURVEYOR

Kevin C. Boyer DATE: 4/30/2012
KEVIN C. BOYER
REGISTERED LAND SURVEYOR NUMBER 2675
THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.
Brent L Stella DATE: 05-08-12
(SIGNATURE)
(PRINTED NAME) Brent L Stella

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1170-01-20-4.11
AMENDMENT NO:

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN MARATHON COUNTY, WISCONSIN AT 8:14 AM ON May 12, 2012 AS DOCUMENT # 1621020 AND FILED IN Plat Cab. 3, pg. 530D
Michael J. Simpson
SIGNATURE OF REGISTER OF DEEDS

638

FILE NAME : P:\44xx\4448\RW Plat_UK TPP\040111_rp.dgn
APPRAISAL PLAT DATE :
PLOT DATE : 4/30/2012
PLOT BY : kcb
PLOT NAME :
PLOT SCALE : 1:50

1170-01-20 4.11

TRANSPORTATION PROJECT PLAT NO: 1170-01-20 - 4.12

THAT PART OF THE SW1/4 OF THE SE1/4, PART OF THE SE1/4 OF THE SE1/4, PART OF THE NW1/4 OF THE SE1/4 AND PART OF THE NE1/4 OF THE SE1/4 OF SECTION 15, TOWNSHIP 29 NORTH, RANGE 7 EAST, CITY OF WAUSAU, MARATHON COUNTY, WISCONSIN

RELOCATION ORDER CTH K/BUSINESS 51 INTERCHANGE, USH 51, MARATHON COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3) AND 84.09, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

T-29-N R-7-E
SHEET LOCATION
PROJECT LOCATION
LOCATION SKETCH

STATION-OFFSET TABLE		
POINT NO.	STATION	OFFSET
204	770+43.24	-536.62
205	770+43.24	0.00
301	768+74.60	0.00
302	768+74.60	324.40
350	776+64.45	-409.42
351	779+14.67	-300.06
352	779+14.67	0.00
353	775+94.14	0.00
356	778+74.95	174.61
480	784+00.02	-300.03
481	784+00.00	0.00
482	783+99.99	148.45
IP 3104	775+94.14	-300.07

EXISTING MONUMENTS			
POINT	Y (NORTHING)	X (EASTING)	DESCRIPTION
IP 3104	214102.131	273987.340	1.25" OD IRON PIPE

COURSE TABLE		
COURSE	BEARING	DISTANCE
N1/4 SEC. 22-205	N 46°54'48" E	1732.23'
205-204	S 84°19'55" W	536.62'
204-350	N 5°54'14" E	634.10'
350-IP 3104	S 62°55'39" E	130.00'
IP 3104-353	N 84°19'55" E	300.07'
353-352	N 5°40'05" W	320.53'
352-351	S 84°19'55" W	300.06'
351-480	N 5°39'54" W	485.34'
480-481	N 84°20'06" E	300.03'
481-482	N 84°20'06" E	148.45'
482-356	S 8°31'14" E	525.70'
356-302	S 14°11'01" E	1011.50'
302-301	S 84°19'55" W	324.40'
301-205	N 5°40'05" W	168.64'

6x6 STONE
Y=212400.27
X=273075.27

BRASS CAP MONUMENT
Y=212421.68
X=275693.29

2618.1'
S89°31'53"W

SEE TRANSPORTATION PROJECT PLAT NO: 1170-01-20-4.03

SEE TRANSPORTATION PROJECT PLAT NO: 1170-01-20-4.05

SEE TRANSPORTATION PROJECT PLAT NO: 1170-01-20-4.06

MATCHLINE TRANSPORTATION PROJECT PLAT NO: 1170-01-20-4.13

CTH "K"

CITY OF WAUSAU

NORTH LINE OF THE SW1/4 OF THE SE1/4

NORTH LINE OF THE SE1/4 OF THE SE1/4

EAST LINE OF THE SW1/4 OF THE SE1/4

EAST LINE OF THE NW1/4 OF THE SE1/4

SW/SE | NW/SE | SE/SE | NE/SE

IP 3104

UTILITY EASEMENT 40' DOC. 1307479

USH 51

N 5°40'05" W

RW VARIES

770NB | 772NB | 774NB | 776NB | 778NB | 780NB | 782NB | 784NB

204 | 205 | 301 | 302 | 350 | 351 | 352 | 353 | 356 | 480 | 481 | 482

LOT-1 MARATHON COUNTY CERTIFIED SURVEY MAP 4521

LOT-5 MARATHON COUNTY CERTIFIED SURVEY MAP 3700

LOT-3 MARATHON COUNTY CERTIFIED SURVEY MAP 3700

30' EASEMENT INGRESS/EGRESS/UTILITY

LOT-1 MARATHON COUNTY CERTIFIED SURVEY MAP 3700

OUTLOT-1 MARATHON COUNTY CERTIFIED SURVEY MAP 10382

OUTLOT-1 EASEMENT DOC # 1165617

LOT-1 MARATHON COUNTY CERTIFIED SURVEY MAP 13629

SCALE, FEET
0 50 100

Refer to the Title Sheet, recorded as Sheet 2 of 2, in Cabinet 3 of Plats, Page 525A, as Document No. 1607461 for additional information

PREVIOUS ACCESS CONTROL BY PROJECT NUMBER T05-3-(14)

EMCS

I, KEVIN C. BOYER, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT, I HAVE SURVEYED TRANSPORTATION PROJECT PLAT 1170-01-20-4.12 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

KEVIN C BOYER S-2675 HEWITT WI — WISCONSIN — LAND SURVEYOR

Kevin C. Boyer DATE: 4/30/2012
KEVIN C. BOYER
REGISTERED LAND SURVEYOR NUMBER 2675
THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

Brent L Stella DATE: 05-08-12
(SIGNATURE)
(PRINTED NAME) Brent L Stella

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1170-01-20-4.12
AMENDMENT NO:

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN MARATHON COUNTY, WISCONSIN AT 2:40 PM ON May 18, 2012 AS DOCUMENT # 1691021 AND FILED IN Plat Cab 3 pg 530E
Michael A. Sydow
SIGNATURE OF REGISTER OF DEEDS

639

FILE NAME : P:\44xx\4448\RW Plat_UK TPP\040112_rp.dgn
APPRAISAL PLAT DATE :
PLOT DATE : 4/30/2012
PLOT BY : kcb
PLOT NAME :
PLOT SCALE : 1:50

1170-01-20 4.12

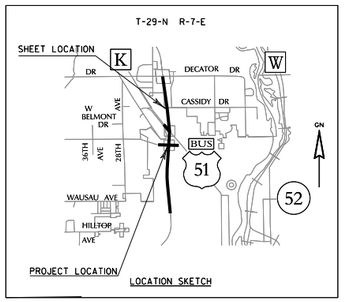
TRANSPORTATION PROJECT PLAT NO: 1170-01-20 - 4.13

THAT PART OF THE NW1/4 OF THE SE1/4 AND PART OF THE NE1/4 OF THE SE1/4 OF SECTION 15, TOWNSHIP 29 NORTH, RANGE 7 EAST, CITY OF WAUSAU, ALSO THE SW1/4 OF THE NE1/4 AND PART OF THE SE1/4 OF THE NE1/4, OF SECTION 15, TOWNSHIP 29 NORTH, RANGE 7 EAST, TOWN OF MAINE, ALL IN MARATHON COUNTY, WISCONSIN

RELOCATION ORDER CTH K/BUSINESS 51 INTERCHANGE, USH 51, MARATHON COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3) AND 84.09, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.



MAG NAIL SET
Y=215058.13
X=270370.61

T 29 N R 7 E 15

CITY OF WAUSAU

TOWN OF MAINE

480 — 490 — IP 3074 — IP 3073 — 491 — IP 3072

OUTLOT-1
MARATHON COUNTY
CERTIFIED SURVEY MAP NO. 12803

MATCHLINE TRANSPORTATION PROJECT PLAT NO: 1170-01-20-4.12

NW/SE

SW/NE

NORTH LINE OF THE NW1/4 OF THE SE1/4

5236.49
N89°53'05"E

784NB | 786NB | 788NB | 790NB | USH 51 | 792NB | RW VARIES | 794NB | 796NB | 798NB

N 5°40'05" W

481 — 492 — 493 — 494

NORTH LINE OF THE SW1/4 OF THE NE1/4

MATCHLINE TRANSPORTATION PROJECT PLAT NO: 1170-01-20-4.14

EAST LINE OF THE NW1/4 OF THE SE1/4

482 — 495

EAST LINE OF THE SW1/4 OF THE NE1/4

NORTH LINE OF THE NE1/4 OF THE SE1/4

NE/SE

SE/NE

LOT-1
MARATHON COUNTY
CERTIFIED SURVEY
MAP 13629

MAG NAIL SET
Y=215068.66
X=275607.09

T 29 N R 7 E 15

EXISTING MONUMENTS			
POINT	Y (NORTHING)	X (EASTING)	DESCRIPTION
IP 3072	216391.714	273835.721	1.25" OD IRON PIPE
IP 3073	215886.602	273856.901	1.25" OD IRON PIPE
IP 3074	215348.544	273879.518	1.25" OD IRON PIPE

COURSE TABLE		
COURSE	BEARING	DISTANCE
E1/4 SEC. 15-481	S 84°29'46" W	1407.22'
481-480	S 84°20'06" W	300.03'
480-490	N 5°39'54" W	171.78'
490-491	N 2°23'48" W	1274.27'
491-492	N 82°49'05" E	227.39'
492-493	N 82°49'05" E	124.82'
493-494	N 89°55'20" E	93.24'
494-495	S 1°11'08" E	1103.74'
495-482	S 8°31'14" E	344.29'
482-481	S 84°20'06" W	148.45'

STATION-OFFSET TABLE		
POINT NO.	STATION	OFFSET
480	784+00.02	-300.03
481	784+00.00	0.00
482	783+99.99	148.45
490	785+71.80	-300.02
491	798+43.99	-227.31
492	798+50.00	0.00
493	798+53.26	124.78
494	798+44.21	217.58
495	787+43.85	131.32

SCALE, FEET
0 50 100

GN

Refer to the Title Sheet, recorded as Sheet 2 of 2, in Cabinet 3 of Plats, Page 525A, as Document No. 1607461 for additional information

PREVIOUS ACCESS CONTROL BY PROJECT NUMBER T05-3-(14)

EMCS

I, KEVIN C. BOYER, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT, I HAVE SURVEYED TRANSPORTATION PROJECT PLAT 1170-01-20-4.13 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN KEVIN C BOYER S-2675 HEWITT WI LAND SURVEYOR

Kevin C. Boyer DATE: 4/30/2012

KEVIN C. BOYER
REGISTERED LAND SURVEYOR NUMBER 2675
THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

Brent L Stella DATE: 05-08-12
(SIGNATURE)
(PRINTED NAME) Brent L Stella

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1170-01-20-4.13
AMENDMENT NO:

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN MARATHON COUNTY, WISCONSIN AT 2:44 AM ON May 18, 2012 AS DOCUMENT # 1622022 AND FILED IN Plat Cab 3, Pg. 530F

Michael A. Nida
SIGNATURE OF REGISTER OF DEEDS

640

FILE NAME : P:\44xx\4448\RW Plat_UK TPP\040113_rp.dgn
APPRAISAL PLAT DATE :
PLOT DATE : 4/30/2012
PLOT BY : kcb
PLOT NAME :
PLOT SCALE : 1:50

1170-01-20 4.13

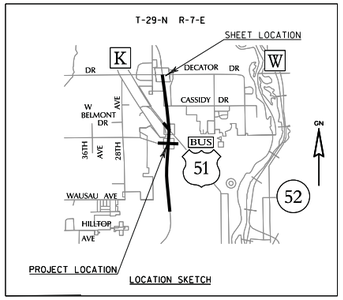
TRANSPORTATION PROJECT PLAT NO: 1170-01-20 - 4.14

THAT PART OF THE NW1/4 OF THE NE1/4 OF SECTION 15, TOWNSHIP 29 NORTH, RANGE 7 EAST, TOWN OF MAINE, MARATHON COUNTY, WISCONSIN

RELOCATION ORDER CTH K/BUSINESS 51 INTERCHANGE, USH 51, MARATHON COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3) AND 84.09, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.



TOWN

OF

MAINE

MAG NAIL SET
Y=217717.68
X=272941.51

T 29 N R 7 E, 10, 15

OUTLOT-1
MARATHON COUNTY
CERTIFIED SURVEY
MAP 12803

IP 3072

P.L.

491

NORTH LINE OF THE SW1/4 OF THE NE1/4

Y=216379.296
X=274062.879
PI STA798NB+52.71

492

MATCHLINE TRANSPORTATION PROJECT PLAT NO: 1170-01-20-4.13

798NB 800NB 802NB 804NB USH 51 806NB 808NB 810NB 812NB

N 5°41'01" W

350'

NW/NE

SW/SE

500

60'

DECATOR DR

501

END PROJECT STA. 811NB+38.09

NORTH LINE OF THE NW1/4 OF THE NE1/4

2622.55
N89°57'33"E

502

493

60'

MAG NAIL SET
Y=217719.55
X=275564.06

T 29 N R 7 E, 10, 11, 14, 15

EXISTING MONUMENTS			
POINT	Y (NORTHING)	X (EASTING)	DESCRIPTION
IP 3072	216391.714	273835.721	1.25" OD IRON PIPE

COURSE TABLE		
COURSE	BEARING	DISTANCE
N1/4 SEC. 15-492	S 39°54'29" E	1748.30'
492-491	S 82°49'05" W	227.39'
491-IP 3072	N 2°23'48" W	43.59'
IP 3072-500	N 5°40'40" W	1272.75'
500-501	N 89°57'33" E	225.77'
501-502	N 89°57'33" E	125.83'
502-493	S 5°39'50" E	1272.49'
493-492	S 82°49'05" W	124.82'

STATION-OFFSET TABLE		
POINT NO.	STATION	OFFSET
491	798+43.99	-227.31
492	798+50.00	0.00
493	798+53.26	124.78
500	811+60.32	-224.68
501	811+38.12	0.00
502	811+25.75	125.22
IP 3072	798+87.56	-224.81

SCALE, FEET
0 50 100

GN

Refer to the Title Sheet, recorded as Sheet 2 of 2, in Cabinet 3 of Plats, Page 525A, as Document No. 1607461 for additional information

PREVIOUS ACCESS CONTROL BY PROJECT NUMBER T05-3-(14)

EMCS

I, KEVIN C. BOYER, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT, I HAVE SURVEYED TRANSPORTATION PROJECT PLAT 1170-01-20-4.14 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN KEVIN C BOYER S-2675 HEWITT WI LAND SURVEYOR

Kevin C. Boyer DATE: 4/30/2012
KEVIN C. BOYER
REGISTERED LAND SURVEYOR NUMBER 2675
THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

Brent L Stella DATE: 05-08-12
(SIGNATURE)
(PRINTED NAME) Brent L Stella

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1170-01-20-4.14
AMENDMENT NO:

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN MARATHON COUNTY, WISCONSIN AT 9:54AM ON May 11, 2012 AS DOCUMENT # 1621023. AND FILED IN Plat Cab. 3, Pg. 530G

Michael A. Symdon
SIGNATURE OF REGISTER OF DEEDS

641

FILE NAME : P:\44xx\4448\RW Plat_UK TPP\040114_rp.dgn
APPRAISAL PLAT DATE :
PLOT DATE : 4/30/2012
PLOT BY : kcb
PLOT NAME :
PLOT SCALE : 1:50

1170-01-20 4.14

TRANSPORTATION PROJECT PLAT NO: 1170-01-20 COORDINATES

WAUSAU - MERRILL
CTH K/B51 INTERCHANGE
MARATHON COUNTY

WISCONSIN COUNTY COORDINATES (MARATHON)		
Point	Northing (Y)	Easting (X)
100	210503.32	274238.73
101	210519.40	274079.27
102	210717.68	274095.33
103	210913.74	274089.45
104	210991.23	274065.11
105	211087.66	274047.48
106	211087.73	274057.63
107	211120.66	274048.09
108	211120.59	274037.96
109	211226.76	274019.83
110	211218.29	274031.42
111	211088.22	274125.35
112	211121.24	274128.02
113	211146.21	274130.04
114	211245.01	274106.70
115	211301.38	274029.59
116	211304.84	274024.85
117	211515.99	274042.03
118	211500.31	274045.77
119	211486.17	274337.82
150	211693.81	274358.76
151	212411.32	274426.20
152	211788.49	273976.99
153	211686.68	274001.29
154	211675.08	274004.06
155	211728.43	273854.35
156	211738.95	273854.63
157	211803.31	273856.31
158	211809.50	273776.44
159	211865.74	273760.84
160	211926.96	273743.86
161	211998.22	274002.76
162	211959.63	274385.56
163	212601.78	274124.7
200	213017.61	274396.53
201	212982.27	274040.43
202	213081.73	274018.40

WISCONSIN COUNTY COORDINATES (MARATHON)		
Point	Northing (Y)	Easting (X)
203	213526.45	273795.77
204	213530.56	273806.36
205	213583.56	274340.36
250	211319.07	274320.98
252	211966.17	274386.22
253	211828.32	274787.48
254	211800.53	274766.20
255	211621.61	274781.77
256	211595.19	274761.78
257	211577.84	274748.65
258	211476.79	274890.25
259	211647.93	275065.21
260	211635.26	275042.54
261	211629.15	275017.47
262	211639.98	274978.32
265	211513.56	274918.00
266	211479.83	274985.00
268	211450.47	274989.51
269	211409.21	275041.53
270	211382.88	275021.30
271	211378.94	275018.27
272	211441.24	274949.96
273	211454.28	274934.03
274	211355.86	274988.10
275	211337.39	274963.95
276	211324.70	274961.41
277	211309.28	274958.31
278	211354.57	274901.21
279	211343.34	274894.45
281	211375.13	274818.97
282	211399.23	274788.58
283	211415.96	274791.63
284	211456.04	274795.81
285	211424.36	274850.16
286	211483.31	274728.00
287	211512.78	274713.85
288	211554.72	274618.58

WISCONSIN COUNTY COORDINATES (MARATHON)		
Point	Northing (Y)	Easting (X)
289	211555.68	274592.99
290	211530.99	274583.54
291	211599.48	274589.47
292	211325.00	274494.78
293	211301.45	274495.73
294	211812.44	274775.32
300	212843.39	274413.82
301	213415.74	274357.01
302	213447.78	274679.82
303	213027.36	274721.79
304	212928.09	274731.70
305	212879.71	274773.07
350	214161.30	273871.58
351	214421.10	273955.70
352	214450.73	274254.29
353	214131.77	274285.95
354	214183.56	273882.96
355	214143.94	273960.47
356	214428.45	274431.97
357	214457.77	274325.23
400	215062.32	272452.19
401	215086.81	272451.73
402	215231.59	272556.61
403	215304.31	272672.08
404	215351.58	272747.14
405	215138.32	272889.56
406	215174.12	272980.75
407	215143.29	273006.27
408	215112.14	273032.05
409	215038.44	273033.91
410	215063.43	273008.28
411	215038.38	273008.91
412	215005.22	273009.74
413	214938.06	272910.67
414	214786.70	273015.24
415	214861.29	272797.43

WISCONSIN COUNTY COORDINATES (MARATHON)		
Point	Northing (Y)	Easting (X)
416	214902.40	272769.68
417	215063.07	272826.98
418	215037.32	272452.67
419	207511.49	274321.66
420	207496.9	274147.01
421	208463.63	274070.03
422	208827.19	274050.45
423	208995.92	274037.98
424	209006.38	274198.04
425	209013.61	274308.64
426	208841.71	274320.06
427	208481.6	274339.45
428	207519.38	274416.08
440	209403.49	274022.76
441	209767.07	274026.91
442	210142.32	274048.73
443	210446.66	274352.79
444	210116.07	274323.95
445	209768.76	274301.77
446	209627.81	274296.17
460	211140.92	274502.2
461	211090.85	274493.29
470	212413.58	274702.32
471	212411.32	274426.2
480	214904.07	273907.79
481	214933.69	274206.36
482	214948.34	274354.08
490	215075.02	273890.83
491	216348.17	273837.54
492	216376.6	274063.15
493	216392.2	274186.99
494	216392.33	274280.23
495	215288.83	274303.07
500	217658.23	273709.8
501	217658.39	273935.57
502	217658.48	274061.41

DATE : MAY 17, 2012
AMENDMENT NO. DATE :

EMCS

FILE NAME : P:\44xx\4448\RW Plat_UK TPP\040115_rp_coordinates.dgn PLOT DATE : 5/22/2012 PLOT BY : walkup PLOT NAME : PLOT SCALE : 1:40

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

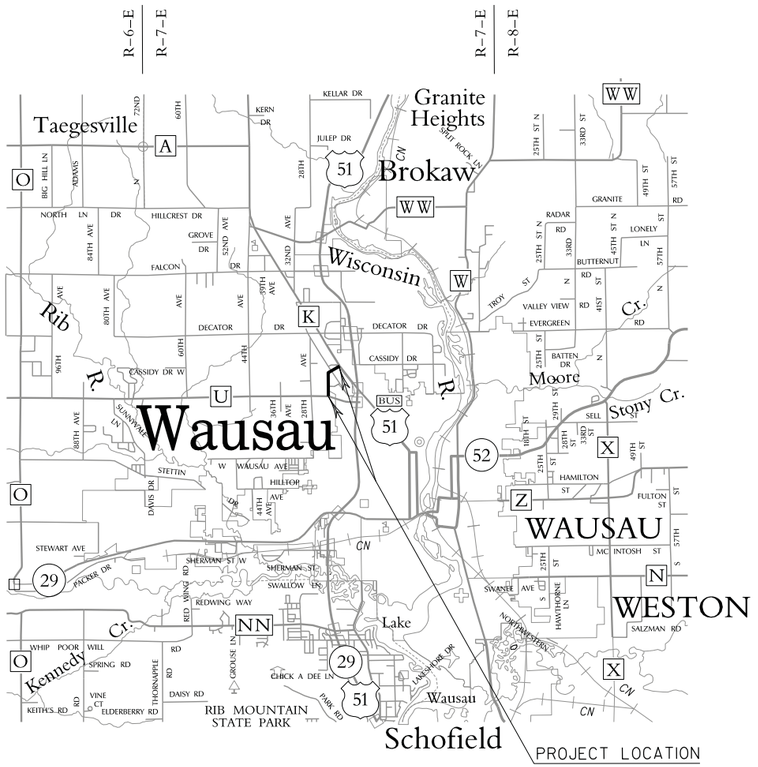
TRANSPORTATION PROJECT PLAT TITLE SHEET

PROJECT NO. 1170-01-21

WAUSAU - MERRILL
CTH U - CTH K

OVERLOOK DRIVE
MARATHON COUNTY





N

CONVENTIONAL ABBREVIATIONS

ACCESS POINT/ DRIVEWAY CONNECTION	AP	REFERENCE LINE	R/L
ACCESS RIGHTS	AR	RELEASE OF RIGHTS	ROR
ACRES	AC.	REMAINING	REM.
AND OTHERS	ET.AL.	RIGHT-OF-WAY	R/W
CENTERLINE	C/L	SECTION	SEC.
CERTIFIED SURVEY MAP	CSM	STATION	STA.
CORNER	COR.	TEMPORARY LIMITED EASEMENT	TLE
DOCUMENT	DOC.	VOLUME	V.
EASEMENT	EASE.		
HIGHWAY EASEMENT	H.E.		
LAND CONTRACT	LC		
MONUMENT	MON.		
PAGE	P.		
PERMANENT LIMITED EASEMENT	PLE		
PROPERTY LINE	PL		
RECORDED AS	(100')		

CURVE DATA

LONG CHORD	LCH
LONG CHORD BEARING	LCB
RADIUS	R
DEGREE OF CURVE	D
CENTRAL ANGLE OR DELTA	DELTA
LENGTH OF CURVE	L
TANGENT	TAN

CONVENTIONAL SYMBOLS

FOUND IRON PIPE/PIN	LP (1" UNLESS NOTED)	PROPOSED R/W LINE
		EXISTING H.E. LINE
R/W MONUMENT	●(SET)	PROPERTY LINE
R/W STANDARD	▲(SET)	LOT & TIE LINES
SIGN	SIGN	SLOPE INTERCEPTS
SECTION CORNER MONUMENT		CORPORATE LIMITS
SECTION CORNER SYMBOL		NO ACCESS (BY PREVIOUS ACQUISITION/CONTROL)
FEE (HATCH VARIES)		NO ACCESS (BY ACQUISITION)
TEMPORARY LIMITED EASEMENT		NO ACCESS (BY STATUTORY AUTHORITY)
PERMANENT LIMITED EASEMENT		SECTION LINE
R/W BOUNDARY POINT	RWB20	QUARTER LINE
PARCEL NUMBER	102	SIXTEENTH LINE
UTILITY PARCEL NUMBER	92	EXISTING CENTERLINE
SIGN NUMBER (OFF PREMISE)	21-1	PROPOSED REFERENCE LINE
BUILDING		PARALLEL OFFSET

CONVENTIONAL UTILITY SYMBOLS

		NON COMPENSABLE	COMPENSABLE
WATER	W		
GAS	G		
TELEPHONE	T		
OVERHEAD TRANSMISSION LINES	OH		
ELECTRIC	E		
CABLE TELEVISION	TV		
FIBER OPTIC	FO		
SANITARY SEWER	SAN		
STORM SEWER	SS		
POWER POLE		○	●
TELEPHONE POLE		⌀	⌀
TELEPHONE PEDESTAL		⌑	⌑
ELECTRIC TOWER		⊠	

NOTES:

COORDINATES AND BEARINGS SHOWN ON THIS PLAT ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM, MARATHON COUNTY ZONE, NAD83 (1991) ADJUSTMENT. THE COORDINATES SHOWN ARE GRID COORDINATES AND ARE TO BE USED AS GRID OR GROUND VALUES ON THIS PLAT.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

RIGHT-OF-WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE U.S. PUBLIC LAND SURVEY SYSTEM OR OTHER "SURVEYS OF PUBLIC RECORD".

PROPERTY LINES SHOWN ON THIS PLAT ARE DRAWN FROM DATA DERIVED FROM MAPS AND DOCUMENTS OF PUBLIC RECORD AND/OR EXISTING OCCUPATIONAL LINES. THIS PLAT MAY NOT BE A TRUE REPRESENTATION OF EXISTING PROPERTY LINES, EXCLUDING RIGHT-OF-WAY LINES, AND SHOULD NOT BE USED AS A SUBSTITUTE FOR AN ACCURATE FIELD SURVEY.

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE: EXISTING HIGHWAY RIGHT-OF-WAY FOR OVERLOOK DRIVE ESTABLISHED FROM PREVIOUS PROJECTS OVERLOOK HEIGHTS SUBDIVISION AND EXISTING HIGHWAY RIGHT-OF-WAY FOR SIDE ROADS ESTABLISHED FROM CENTERLINE OF EXISTING PAVEMENTS.EXISTING ACCESS CONTROL ALONG OVERLOOK DRIVE ESTABLISHED FROM PREVIOUS PROJECTS

A **TEMPORARY LIMITED EASEMENT** (TLE) IS A RIGHT FOR CONSTRUCTION PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON AND THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM NECESSARY OR DESIRABLE. ALL TLES EXPIRE AT THE COMPLETION OF THE CONSTRUCTION PROJECT FOR WHICH THIS INSTRUMENT IS GIVEN.

A **PERMANENT LIMITED EASEMENT** (PLE) IS A RIGHT FOR CONSTRUCTION AND MAINTENANCE PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON AND THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM NECESSARY OR DESIRABLE. BUT WITHOUT PREJUDICE TO THE OWNER'S RIGHT TO MAKE OR CONSTRUCT IMPROVEMENT ON SAID LANDS OR TO FLATTEN THE SLOPES, PROVIDING SAID ACTIVITIES WILL NOT IMPAIR OR OTHERWISE ADVERSELY AFFECT THE HIGHWAY FACILITIES.

A **HIGHWAY EASEMENT** (HE) IS AN EASEMENT FOR HIGHWAY PURPOSES, AS LONG AS SO USED, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM NECESSARY OR DESIRABLE.

DIMENSIONING FOR THE NEW RIGHT-OF-WAY IS MEASURED ALONG AND PERPENDICULAR TO NEW REFERENCE LINES.

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1170-01-21 - 4.01
SHEET 2 OF 2
AMENDMENT NO: 643

TRANSPORTATION PROJECT PLAT NO: 1170-01-21 - 4.01

THAT PART OF CSM 5455, LOCATED IN AND PART OF THE SW1/4 OF THE SW1/4 AND PART OF LOTS 13, 14, 15, 16 & 23 OF OVERLOOK HEIGHTS SUBDIVISION LOCATED IN AND PART OF THE SE1/4 OF THE SW1/4 OF SECTION 15 AND PART OF THE NE1/4 OF THE NW1/4 OF SECTION 22, ALL BEING LOCATED IN TOWNSHIP 29 NORTH, RANGE 7 EAST, TOWN OF MAINE; ALSO THAT PART OF LOTS 1 & 5 OF REPLAT OF LOTS 3 THROUGH 10 OF OVERLOOK HEIGHTS SUBDIVISION, LOCATED IN AND PART OF THE SE1/4 OF THE SW1/4 OF SECTION 15, TOWNSHIP 29 NORTH, RANGE 7 EAST, CITY OF WAUSAU, ALL BEING LOCATED IN MARATHON COUNTY, WISCONSIN

RELOCATION ORDER OVERLOOK DRIVE, MARATHON COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE TOWN OF MAINE DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 60.50, WISCONSIN STATUTES, THE TOWN OF MAINE.

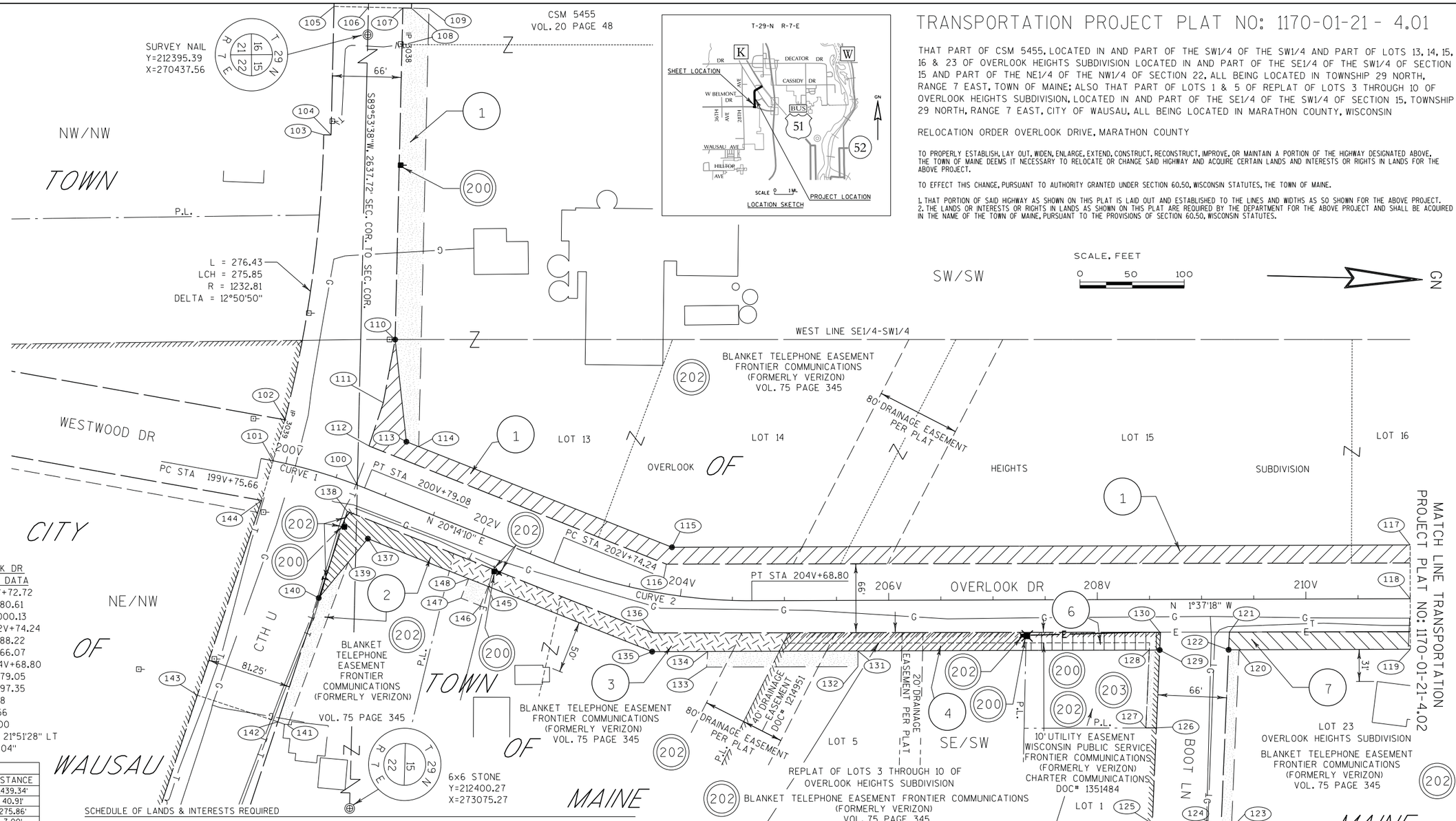
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE TOWN OF MAINE, PURSUANT TO THE PROVISIONS OF SECTION 60.50, WISCONSIN STATUTES.

STATION-OFFSET TABLE		
POINT NO.	STATION	OFFSET
100	200+71.63	0.00
101	199+87.50	0.00
102	199+90.58	-40.79
103	199+78.77	-316.20
104	199+83.03	-317.33
105	199+68.91	-439.18
106	199+89.48	-444.54
107	200+06.72	-450.97
108	200+10.99	-452.75
109	200+19.61	-456.57
110	200+59.32	-143.55
111	200+67.45	-82.75
112	200+68.93	-39.11
113	201+00.00	-56.00
114	201+12.70	-56.00
115	203+84.55	-45.17
116	203+81.70	-28.35
117	211+00.00	-51.50
118	211+00.00	0.00
119	211+00.00	48.50
120	209+35.75	48.50
121	209+26.52	31.51
122	209+25.74	48.50
123	209+27.92	219.31
124	209+17.97	218.05
125	208+52.04	215.03
126	208+56.25	123.15
127	208+46.24	123.15
128	208+49.66	48.50
129	208+59.67	48.50
130	208+60.45	31.41
131	205+70.28	48.50
132	205+70.28	63.50
133	204+30.11	65.15
134	204+30.11	50.11
135	203+82.21	56.65
136	203+80.40	38.85
137	201+00.00	44.00
138	200+71.67	26.95
139	200+90.90	72.09
140	200+76.70	114.28
141	200+94.86	238.90
142	200+84.64	239.14
143	199+55.17	234.18
144	199+84.01	39.38
145	202+24.00	44.00
146	202+24.00	64.00
147	202+04.00	64.00
148	202+04.00	44.00

OVERLOOK DR
CURVE 1 DATA
PI = 200V+27.55
Y = 212356.42
X = 271880.62
PC = 199V+75.66
Y = 212305.11
X = 271872.84
PT = 200V+79.08
Y = 212405.10
X = 271898.57
T = 51.89
L = 103.42
R = 510.00
DELTA = 11°37'09" RT
D = 11°14'04"

OVERLOOK DR
CURVE 2 DATA
PI = 203V+72.72
Y = 212680.61
X = 272000.13
PC = 202V+74.24
Y = 212588.22
X = 271966.07
PT = 204V+68.80
Y = 212779.05
X = 271997.35
T = 98.48
L = 194.56
R = 510.00
DELTA = 21°51'28" LT
D = 11°14'04"

COURSE TABLE		
COURSE	BEARING	DISTANCE
SW SEC. 15 - 101	S 86°52'13" E	1439.34'
101-102	N 75°23'21" W	40.91'
102-103	N 83°40'56" W	275.86'
103-104	N 0°06'22" W	7.00'
104-105	S 89°53'38" W	123.36'
105-106	N 0°06'22" W	33.00'
106-107	N 0°06'22" W	33.00'
107-110	N 89°53'38" E	318.09'
110-113	N 82°15'50" E	98.57'
113-115	N 20°14'10" E	273.99'
115-117	N 1°37'18" W	707.64'
117-118	N 88°22'42" E	51.50'
118-119	N 88°22'42" E	48.50'
119-122	S 1°37'18" E	174.26'
122-124	S 88°59'56" E	169.73'
124-125	S 1°00'04" W	66.00'
125-129	N 88°59'56" W	166.70'
129-135	S 1°37'18" E	486.62'
135-137	S 20°14'10" W	293.30'
137-140	S 51°48'58" E	73.88'
140-142	S 73°09'21" E	125.08'
142-143	S 16°50'39" W	81.25'
143-144	N 73°09'47" W	196.76'
144-101	N 75°23'21" W	39.52'



SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERSTS TO THE TOWN.

SEE ALSO	PARCEL		INTEREST	R/W ACRES REQUIRED			TLE
SHEET ...-4.??	NUMBER	OWNERS	REQUIRED	NEW	EXISTING	TOTAL	ACRES
4.02	1	EUGENE E. WITTER AND WILMA L. WITTER, AS CO-TRUSTEES OF THE WITTER REVOCABLE TRUST DATED JANUARY 18, 1991	FEE/TLE	0.423	---	0.423	0.225
---	2	EUGENE E. WITTER AND WILMA L. WITTER TRUST	FEE/TLE	0.065	---	0.065	0.043
---	3	EUGENE E. AND WILMA L. WITTER, AS CO-TRUSTEES OF THE WITTER REVOCABLE TRUST, DATED JANUARY 18, 1992	FEE/TLE	0.133	---	0.133	0.023
---	4	GEORGE J. AND DELORES LONSDORF	FEE/TLE	0.093	---	0.093	0.027
---	6	GEORGE J. AND DELORES LONSDORF	FEE/TLE	0.051	---	0.051	0.017
4.02	7	GEORGE J. AND DELORES LONSDORF	FEE/TLE	0.067	---	0.067	0.039
---	200	WISCONSIN PUBLIC SERVICE (ELECTRIC)	RELEASE OF RIGHTS	---	---	---	---
---	202	FRONTIER COMMUNICATIONS	RELEASE OF RIGHTS	---	---	---	---
---	203	CHARTER COMMUNICATIONS	RELEASE OF RIGHTS	---	---	---	---

THE AREA SHOWN IN THE SCHEDULE OF LANDS AND INTERESTS IS ONLY THE AREA OF PARCEL SHOWN ON THIS SHEET. IF THE PARCEL IS ON MULTIPLE SHEETS, REFERENCE THE OTHER SHEET(S) FOR ADDITIONAL PARCEL AREAS.

10' UTILITY EASEMENT
WISCONSIN PUBLIC SERVICE
FRONTIER COMMUNICATIONS
(FORMERLY VERIZON)
CHARTER COMMUNICATIONS
DOC# 1351484

BLANKET TELEPHONE EASEMENT
FRONTIER COMMUNICATIONS
(FORMERLY VERIZON)
VOL. 75 PAGE 345

EXISTING MONUMENTS			
POINT	Y (NORTHING)	X (EASTING)	DESCRIPTION
IP 3038	212430.449	271472.985	1.25" OD IRON PIPE
IP 3039	212327.192	271835.174	1.00" IRON ROD

ALL TLES SHOWN ON THIS SHEET ARE FOR SLOPE GRADING
EXISTING BUILDINGS WHICH OCCUPY TLE AREAS WILL NOT BE AFFECTED

EMCS

I, KEVIN C. BOYER, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 60.50 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE TOWN OF MAINE, I HAVE SURVEYED TRANSPORTATION PROJECT PLAT 1170-01-21-4.01 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

KEVIN C BOYER S-2675 HEWITT WI — WISCONSIN — LAND SURVEYOR

Kevin C. Boyer DATE: 12/15/2011
KEVIN C. BOYER
REGISTERED LAND SURVEYOR NUMBER 2675
THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE TOWN OF MAINE.
(SIGNATURE) DATE: 12/14/11
(PRINTED NAME) TED SCHULT

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1170-01-21-4.01
AMENDMENT NO:
SHEET 1 OF 2

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN MARATHON COUNTY, WISCONSIN AT 2:11 M ON Dec. 19, 2011 AS DOCUMENT # 1610309 AND FILED IN Plat cabinet 3, pg 528 A

Michael J. Saxbury
SIGNATURE OF REGISTER OF DEEDS

FILE NAME : P:\44xx\4448\RW Plat_OVERLOOK TPP\040101_rp.dgn
APPRAISAL PLAT DATE :
PLOT DATE : 12/15/2011
PLOT BY : kcb
PLOT NAME :
PLOT SCALE : 1:50

1170-01-21 4.01

TRANSPORTATION PROJECT PLAT NO: 1170-01-21 - 4.02

THAT PART OF LOTS 16,17, 21, 22 & 23 OF OVERLOOK HEIGHTS SUBDIVISION, PART OF OUTLOTS 1 & 2 OF CSM 9532, LOCATED IN PART OF THE SE1/4 OF THE SW1/4; ALSO PART OF LOTS 18,19, 20, & 21 OF OVERLOOK HEIGHTS SUBDIVISION, PART OF LOT 1 OF CSM 11023, LOCATED IN PART OF THE NE1/4 OF THE SW1/4, ALL BEING LOCATED IN SECTION 15, TOWNSHIP 29 NORTH, RANGE 7 EAST, TOWN OF MAINE, MARATHON COUNTY, WISCONSIN

RELOCATION ORDER OVERLOOK DRIVE, MARATHON COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE TOWN OF MAINE DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 60.50, WISCONSIN STATUTES, THE TOWN OF MAINE.

1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE TOWN OF MAINE, PURSUANT TO THE PROVISIONS OF SECTION 60.50, WISCONSIN STATUTES.

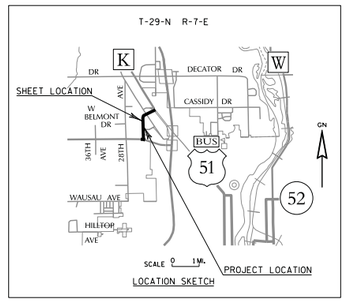
SCHEDULE OF LANDS & INTERESTS REQUIRED

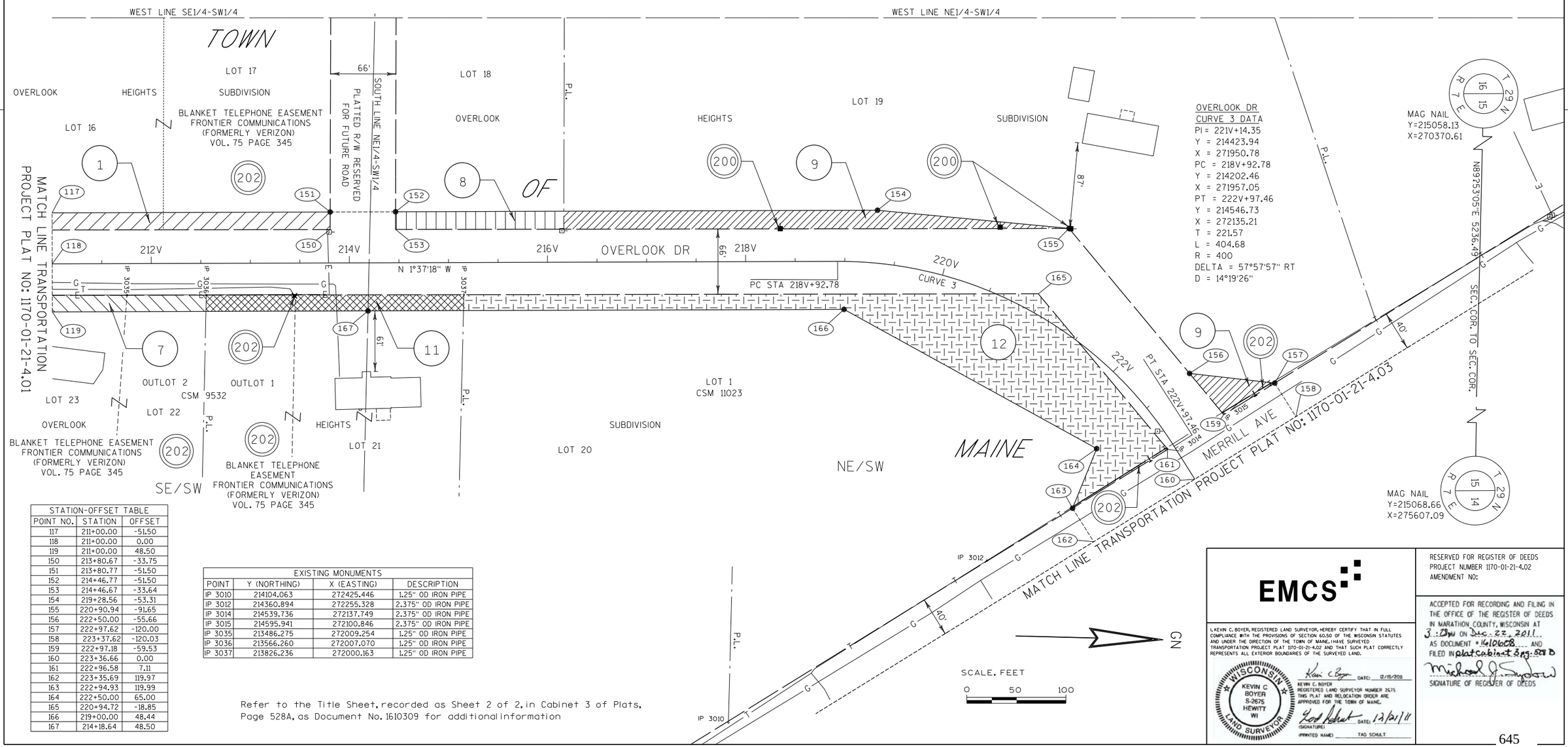
OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERSTS TO THE TOWN.

SEE ALSO	PARCEL		INTEREST	R/W	ACRES REQUIRED	
SHEET ...-4.??	NUMBER	OWNERS	REQUIRED	NEW	EXISTING	TOTAL
4.01	1	EUGENE E. WITTER AND WILMA L. WITTER, AS CO-TRUSTEES OF THE WITTER REVOCABLE TRUST DATED JANUARY 18, 1991	FEE/TLE	0.113	---	0.113
4.01	7	GEORGE J. AND DELORES LONSDORF	FEE/TLE	0.059	---	0.059
---	8	CWTW LLC	FEE	0.070	---	0.070
---	9	JOSEPH M. WALDVOGEL	FEE	0.212	---	0.212
---	11	EDWIN P. AND CATHERINE M. NANCE	FEE	0.097	---	0.097
---	12	WAUSAU HEBREW CEMETERY ASSOCIATION	FEE	0.714	---	0.714
---	200	WISCONSIN PUBLIC SERVICE (ELECTRIC)	RELEASE OF RIGHTS	---	---	---
---	202	FRONTIER COMMUNICATIONS	RELEASE OF RIGHTS	---	---	---

THE AREA SHOWN IN THE SCHEDULE OF LANDS AND INTERESTS IS ONLY THE AREA OF PARCEL SHOWN ON THIS SHEET. IF THE PARCEL IS ON MULTIPLE SHEETS, REFERENCE THE OTHER SHEET(S) FOR ADDITIONAL PARCEL AREAS.

COURSE TABLE		
COURSE	BEARING	DISTANCE
W1/4 SEC. 15 - 118	S 44°18'34" E	2303.22'
118-117	S 88°22'42" W	51.50'
117-151	N 1°37'18" W	280.77'
151-152	N 1°37'18" W	66.00'
152-154	N 1°37'18" W	486.50'
154-155	N 3°58'50" E	194.16'
155-156	N 48°49'58" E	190.41'
156-157	N 5°02'17" E	86.53'
157-158	N 56°17'50" E	40.00'
158-160	S 33°11'41" E	120.03
160-162	S 33°11'41" E	119.97'
162-163	S 56°17'50" W	40.00'
163-164	N 69°23'39" W	64.86'
164-166	S 27°25'51" W	291.26'
166-119	S 1°37'18" E	799.13'
119-118	S 88°22'42" W	48.50'





OVERLOOK DR
CURVE 3 DATA
PI = 221V+14.35
Y = 214423.94
X = 271950.78
PC = 218V+92.78
Y = 214202.46
X = 271957.05
PT = 222V+97.46
Y = 214546.73
X = 272135.21
T = 221.57
L = 404.68
R = 400
DELTA = 57°57'57" RT
D = 14°19'26"

STATION-OFFSET TABLE		
POINT NO.	STATION	OFFSET
117	211+00.00	-51.50
118	211+00.00	0.00
119	211+00.00	48.50
150	213+80.67	-33.75
151	213+80.77	-51.50
152	214+46.77	-51.50
153	214+46.67	-33.64
154	219+28.56	-53.31
155	220+90.94	-91.65
156	222+50.00	-55.66
157	222+97.62	-120.00
158	223+37.62	-120.03
159	222+97.18	-59.53
160	223+36.66	0.00
161	222+96.58	7.11
162	223+35.69	119.97
163	222+94.93	119.99
164	222+50.00	65.00
165	220+94.72	-18.85
166	219+00.00	48.44
167	214+18.64	48.50

EXISTING MONUMENTS			
POINT	Y (NORTHING)	X (EASTING)	DESCRIPTION
IP 3010	214104.063	272425.446	1.25" OD IRON PIPE
IP 3012	214360.894	272255.328	2.375" OD IRON PIPE
IP 3014	214539.736	272137.749	2.375" OD IRON PIPE
IP 3015	214595.941	272100.846	2.375" OD IRON PIPE
IP 3035	213486.275	272009.254	1.25" OD IRON PIPE
IP 3036	213566.260	272007.070	1.25" OD IRON PIPE
IP 3037	213826.236	272000.163	1.25" OD IRON PIPE

Refer to the Title Sheet, recorded as Sheet 2 of 2, in Cabinet 3 of Plats, Page 528A, as Document No. 1610309 for additional information

EMCS

I, KEVIN C. BOYER, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 60.50 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE TOWN OF MAINE, I HAVE SURVEYED TRANSPORTATION PROJECT PLAT 1170-01-21-4.02 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN KEVIN C BOYER S-2675 HEWITT WI LAND SURVEYOR

Kevin C Boyer DATE: 12/15/2011
KEVIN C. BOYER
REGISTERED LAND SURVEYOR NUMBER 2675

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE TOWN OF MAINE.

(SIGNATURE) DATE: 12/21/11
(PRINTED NAME) TAD SCHULT

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1170-01-21-4.02
AMENDMENT NO:

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN MARATHON COUNTY, WISCONSIN AT 3:23PM ON Dec. 22, 2011. AS DOCUMENT # 1610608 AND FILED IN plat cabinet 3 pg. 528 B

SIGNATURE OF REGISTER OF DEEDS

FILE NAME : P:\44xx\4448\RW Plat_OVERLOOK TPP\040102_rp.dgn
APPRAISAL PLAT DATE :
PLOT DATE : 12/19/2011 PLOT BY : kcb PLOT NAME : PLOT SCALE : 1:50
1170-01-21 4.02

TRANSPORTATION PROJECT PLAT NO: 1170-01-21 - 4.03

THAT PART OF PARCEL 1 OF CSM 9890, LOCATED IN AND PART OF THE NE1/4 OF THE SW1/4, OF SECTION 15, TOWNSHIP 29 NORTH, RANGE 7 EAST, TOWN OF MAINE, MARATHON COUNTY, WISCONSIN

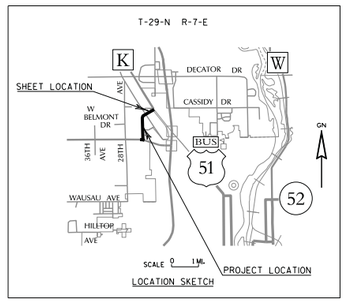
RELOCATION ORDER OVERLOOK DRIVE, MARATHON COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE TOWN OF MAINE DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 60.50, WISCONSIN STATUTES, THE TOWN OF MAINE.

1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE TOWN OF MAINE, PURSUANT TO THE PROVISIONS OF SECTION 60.50, WISCONSIN STATUTES.

STATION-OFFSET TABLE		
POINT NO.	STATION	OFFSET
158	223+37.62	-120.03
160	223+36.66	0.00
162	223+35.69	119.97
200	223+63.62	-120.00
202	224+00.00	-50.00
205	227+66.18	-50.00
206	227+65.55	-277.52
207	227+79.36	-298.36
208	227+92.90	-318.78
209	228+60.24	-274.14
210	228+33.59	-232.42
211	230+27.78	-336.52
212	230+25.17	-135.41
213	230+23.42	0.00
214	229+86.21	0.00
215	230+22.70	55.57
216	230+23.47	150.00
217	228+50.00	50.00
218	224+00.00	50.00
219	223+61.69	120.00
220	228+20.00	50.00
221	228+20.00	60.00
222	227+66.48	60.00
223	227+66.45	50.00
224	226+69.94	50.00
225	226+69.94	65.00
226	226+29.94	65.00
227	226+29.94	50.00



COURSE TABLE		
COURSE	BEARING	DISTANCE
W1/4 SEC. 15 - 160	S 74°45'33" E	1862.74'
160-158	N 33°11'41" W	120.04'
158-200	N 56°25'01" E	26.00'
200-202	S 61°06'58" E	78.89'
202-205	N 56°20'39" E	366.18'
205-206	N 33°48'46" W	227.52'
206-207	N 0°06'55" W	25.00'
207-208	N 0°06'55" W	24.50'
208-209	N 89°53'05" E	80.79'
209-211	N 35°55'20" E	178.78'
211-212	S 32°54'47" E	201.13'
212-213	S 32°54'47" E	135.42'
213-215	S 32°54'47" E	55.58'
215-216	S 34°07'18" E	94.43'
216-217	S 86°18'25" W	200.23'
217-218	S 56°20'39" W	450.00'
218-219	S 4°57'53" E	79.80'
219-162	S 56°25'01" W	26.00'
162-160	N 33°11'41" W	119.97'

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERSTS TO THE TOWN.

SEE ALSO SHEET ...-4.??	PARCEL NUMBER	OWNERS	INTEREST REQUIRED	R/W ACRES REQUIRED NEW	EXISTING	TOTAL	TLE ACRES
---	13	BRIAN L. AND JESSICA R. SCHADE	FEE	0.267	---	0.267	---
---	14	ARCHIE G. SCHNELLE AND REGINA C. SCHNELLE, TRUSTEES OR SUCCESSOR TRUSTEES OF THE ARCHIE G. SCHNELLE AND REGINA C. SCHNELLE REVOCABLE TRUST DATED APRIL 7, 1998	FEE	0.199	---	0.199	---
---	16	ARCHIE G. SCHNELLE AND REGINA C. SCHNELLE REV. TRUST, JOANN OTTO, JACQUELINE SCHNELLE, DAVID ZUNKER AND WAYNE ZUNKER	FEE/TLE	0.521	---	0.521	0.013
---	17	CORNERSTONE INVESTMENTS, INC	FEE	0.491	---	0.491	---
---	18	URBAN CONSTRUCTION CO.	FEE/TLE	0.781	---	0.781	0.012
---	200	WISCONSIN PUBLIC SERVICE (ELECTRIC)	RELEASE OF RIGHTS	---	---	---	---
---	202	FRONTIER COMMUNICATIONS	RELEASE OF RIGHTS	---	---	---	---

THE AREA SHOWN IN THE SCHEDULE OF LANDS AND INTERESTS IS ONLY THE AREA OF PARCEL SHOWN ON THIS SHEET. IF THE PARCEL IS ON MULTIPLE SHEETS, REFERENCE THE OTHER SHEET(S) FOR ADDITIONAL PARCEL AREAS.

EXISTING MONUMENTS			
POINT	Y (NORTHING)	X (EASTING)	DESCRIPTION
IP 3011	214325.690	272357.706	0.75" IRON ROD
IP 3013	214575.902	272193.044	1.25" OD IRON PIPE
IP 3016	214822.155	272029.697	1.00" OD IRON PIPE
IP 3017	215036.937	272187.406	0.75" IRON ROD
IP 3018	215037.338	272370.915	0.75" IRON ROD
IP 3019	214961.565	271941.714	1.00" OD IRON PIPE
IP 3020	215032.608	272031.501	1.25" OD IRON PIPE
IP 3025	215022.333	272112.965	0.75" IRON ROD
IP 3087	214743.709	272877.827	0.75" IRON ROD
IP 3095	215128.906	272865.572	1.25" OD IRON PIPE
IP 3097	215252.510	272809.516	1.25" OD IRON PIPE
IP 3098	215252.284	272785.829	1.25" OD IRON PIPE
IP 3099	215327.894	272761.785	1.25" OD IRON PIPE
IP 3100	215349.201	272748.633	1.25" OD IRON PIPE
IP 3101	215380.526	272728.905	1.25" OD IRON PIPE

Refer to the Title Sheet, recorded as Sheet 2 of 2, in Cabinet 3 of Plats, Page 528A, as Document No. 1610309 for additional information

SCALE, FEET
0 50 100

ALL TLES SHOWN ON THIS SHEET ARE FOR SLOPE GRADING

PREVIOUS ACCESS CONTROL BY PROJECT NUMBER C05-3-(1)

EMCS

I, KEVIN C. BOYER, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 60.50 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE TOWN OF MAINE, I HAVE SURVEYED TRANSPORTATION PROJECT PLAT 1170-01-21-4.03 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN KEVIN C BOYER S-2675 HEWITT WI LAND SURVEYOR

Kevin C Boyer DATE: 12/19/2011
KEVIN C. BOYER
REGISTERED LAND SURVEYOR NUMBER 2675
THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE TOWN OF MAINE.
(SIGNATURE)
TAD SCHULT DATE: 12/21/11
(PRINTED NAME)

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1170-01-21-4.03
AMENDMENT NO:

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN MARATHON COUNTY, WISCONSIN AT 3:38PM ON Dec. 22, 2011 AS DOCUMENT # 1610609 AND FILED IN Cabinet 3 pg. 528 C

SIGNATURE OF REGISTER OF DEEDS

FILE NAME : P:\44xx\4448\RW Plat_OVERLOOK TPP\040103_rp.dgn
APPRAISAL PLAT DATE :
PLOT DATE : 12/19/2011 PLOT BY : kcb PLOT NAME : PLOT SCALE : 1:50

1170-01-21 4.03

TRANSPORTATION PROJECT PLAT NO: 1170-01-21 COORDINATES

WAUSAU - MERRILL
CTH U - CTH K
OVERLOOK DRIVE
MARATHON COUNTY

WISCONSIN COUNTY COORDINATES (MARATHON)		
Point	Northing (Y)	Easting (X)
100	212398.09	271896.04
101	212316.79	271874.75
102	212327.11	271835.16
103	212357.47	271560.98
104	212364.47	271560.97
105	212364.24	271437.61
106	212397.24	271437.55
107	212430.24	271437.49
108	212438.49	271437.47
109	212455.24	271437.44
110	212430.83	271755.58
111	212420.99	271816.40
112	212408.33	271858.19
113	212444.10	271853.26
114	212456.02	271857.65
115	212701.18	271948.03
116	212696.22	271964.32
117	213408.54	271928.00
118	213410.00	271979.48
119	213411.37	272027.96
120	213247.18	272032.61
121	213237.47	272015.90
122	213237.18	272032.90
123	213244.20	272203.58
124	213234.21	272202.60
125	213168.22	272201.44
126	213169.83	272109.48
127	213159.82	272109.77
128	213161.13	272035.05
129	213171.13	272034.76
130	213171.43	272017.66
131	212881.86	272042.95
132	212882.28	272057.95
133	212737.28	272062.05
134	212737.99	272047.03
135	212684.71	272048.54
136	212685.30	272030.63
137	212409.51	271947.08
138	212389.18	271921.47
139	212391.26	271970.29
140	212363.84	272005.15
141	212337.27	272128.17
142	212327.60	272124.87
143	212249.83	272101.32
144	212306.82	271912.99
145	212525.85	271989.97

WISCONSIN COUNTY COORDINATES (MARATHON)		
Point	Northing (Y)	Easting (X)
146	212518.94	272008.74
147	212500.17	272001.82
148	212507.09	271983.06
150	213689.59	271937.80
151	213689.20	271920.06
152	213755.17	271918.19
153	213755.57	271936.04
154	214241.48	271904.42
155	214435.17	271917.90
156	214560.51	272061.24
157	214646.71	272068.84
158	214668.90	272102.12
159	214596.10	272101.95
160	214568.45	272167.84
161	214540.33	272138.43
162	214468.06	272233.52
163	214445.86	272200.24
164	214468.69	272139.53
165	214405.91	271984.71
166	214210.17	272005.35
167	213729.88	272018.95
200	214683.29	272123.78
202	214645.18	272192.85
205	214848.11	272497.65
206	215037.15	272371.04
207	215062.15	272370.99
208	215086.65	272370.94
209	215086.81	272451.73
210	215037.32	272452.67
211	215231.59	272556.61
212	215062.75	272665.90
213	214949.06	272739.48
214	214928.44	272708.51
215	214902.40	272769.68
216	214824.23	272822.65
217	214811.33	272622.84
218	214561.94	272248.27
219	214482.44	272255.18
220	214794.71	272597.87
221	214786.38	272603.42
222	214756.72	272558.86
223	214765.03	272553.30
224	214711.54	272472.97
225	214699.06	272481.28
226	214676.89	272447.98
227	214689.37	272439.67

DATE : MAY 17, 2012
AMENDMENT NO. DATE :

EMCS

FILE NAME : P:\44xx\4448\RW Plat_OVERLOOK TPP\040104_rp_coordinates.dgn PLOT DATE : 5/22/2012 PLOT BY : walkup PLOT NAME : PLOT SCALE : 1:40

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

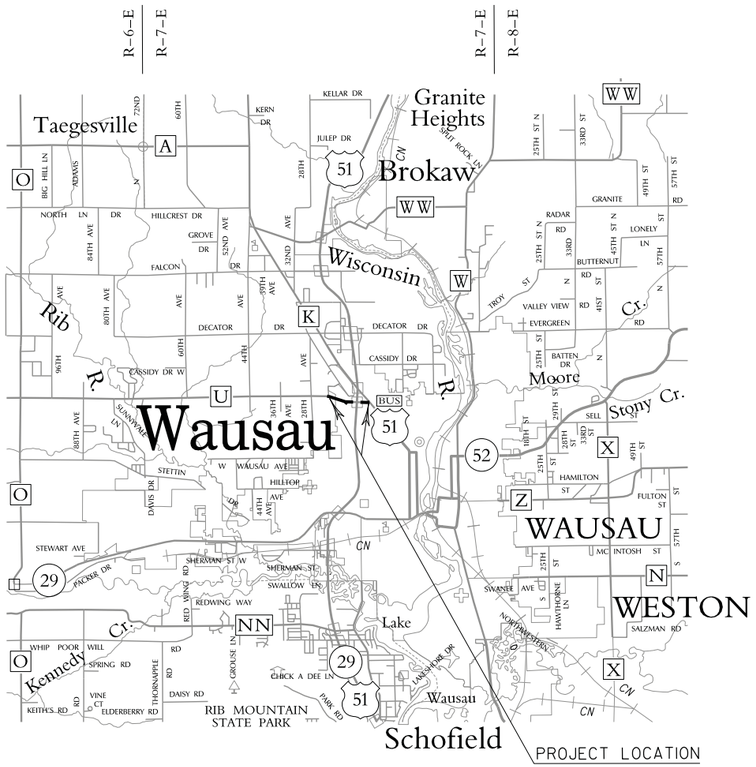
TRANSPORTATION PROJECT PLAT TITLE SHEET

PROJECT NO. 6999-18-20

C WAUSAU, MERRILL AVE/COUNTY RD U
BUSINESS 51 - WESTWOOD DRIVE

CTH U
MARATHON COUNTY







CONVENTIONAL ABBREVIATIONS

ACCESS POINT/ DRIVEWAY CONNECTION	AP	REFERENCE LINE	R/L
ACCESS RIGHTS		RELEASE OF RIGHTS	ROR
ACRES	AR	REMAINING	REM.
AND OTHERS	AC.	RIGHT-OF-WAY	R/W
CENTERLINE	ET.AL.	SECTION	SEC.
CERTIFIED SURVEY MAP	C/L	STATION	STA.
CORNER	CSM	TEMPORARY LIMITED EASEMENT	TLE
DOCUMENT	COR.	VOLUME	V.
EASEMENT	DOC.		
HIGHWAY EASEMENT	EASE.	CURVE DATA	
LAND CONTRACT	H.E.	LONG CHORD	LCH
MONUMENT	LC	LONG CHORD BEARING	LCB
PAGE	MON.	RADIUS	R
PERMANENT LIMITED EASEMENT	P.	DEGREE OF CURVE	D
PROPERTY LINE	PLE	CENTRAL ANGLE OR DELTA	DELTA
RECORDED AS	PL	LENGTH OF CURVE	L
	(100')	TANGENT	TAN

CONVENTIONAL SYMBOLS

FOUND IRON PIPE/PIN	LP (1" UNLESS NOTED)	PROPOSED R/W LINE
		EXISTING H.E. LINE
R/W MONUMENT	●(SET)	PROPERTY LINE
R/W STANDARD	▲(SET)	LOT & TIE LINES
SIGN	SIGN	SLOPE INTERCEPTS
SECTION CORNER MONUMENT		CORPORATE LIMITS
SECTION CORNER SYMBOL		NO ACCESS (BY PREVIOUS ACQUISITION/CONTROL)
FEE (HATCH VARIES)		NO ACCESS (BY ACQUISITION)
TEMPORARY LIMITED EASEMENT		NO ACCESS (BY STATUTORY AUTHORITY)
PERMANENT LIMITED EASEMENT		SECTION LINE
R/W BOUNDARY POINT	RWB20	QUARTER LINE
PARCEL NUMBER	102	SIXTEENTH LINE
UTILITY PARCEL NUMBER	92	EXISTING CENTERLINE
SIGN NUMBER (OFF PREMISE)	21-1	PROPOSED REFERENCE LINE
BUILDING		PARALLEL OFFSET

CONVENTIONAL UTILITY SYMBOLS

WATER	W	
GAS	G	
TELEPHONE	T	
OVERHEAD TRANSMISSION LINES	OH	
ELECTRIC	E	
CABLE TELEVISION	TV	
FIBER OPTIC	FO	
SANITARY SEWER	SAN	
STORM SEWER	SS	
	NON COMPENSABLE	COMPENSABLE
POWER POLE		
TELEPHONE POLE		
TELEPHONE PEDESTAL		
ELECTRIC TOWER		
HYDRANT		

NOTES:

COORDINATES AND BEARINGS SHOWN ON THIS PLAT ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM, MARATHON COUNTY ZONE, NAD83 (1991) ADJUSTMENT. THE COORDINATES SHOWN ARE GRID COORDINATES AND ARE TO BE USED AS GRID OR GROUND VALUES ON THIS PLAT.

RIGHT-OF-WAY MONUMENTS ARE TYPE 2 AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

RIGHT-OF-WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE U.S. PUBLIC LAND SURVEY SYSTEM OR OTHER "SURVEYS OF PUBLIC RECORD".

PROPERTY LINES SHOWN ON THIS PLAT ARE DRAWN FROM DATA DERIVED FROM MAPS AND DOCUMENTS OF PUBLIC RECORD AND/OR EXISTING OCCUPATIONAL LINES. THIS PLAT MAY NOT BE A TRUE REPRESENTATION OF EXISTING PROPERTY LINES, EXCLUDING RIGHT-OF-WAY LINES, AND SHOULD NOT BE USED AS A SUBSTITUTE FOR AN ACCURATE FIELD SURVEY.

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE: EXISTING HIGHWAY RIGHT-OF-WAY FOR CTH U ESTABLISHED FROM PREVIOUS PROJECTS 1175-1-22, 1175-1-66, TO5-3(14), OVERLOOK HEIGHTS SUBDIVISION, ASSESSORS PLAT NO.4., CSM 5455, CSM 6530, CSM 3063, CSM 5184, CSM 4676, CSM 14407, CSM 9054 AND ASSESSOR'S PLAT NO. 4 AND EXISTING HIGHWAY RIGHT-OF-WAY FOR SIDE ROADS ESTABLISHED FROM CENTERLINE OF EXISTING PAVEMENTS. EXISTING ACCESS CONTROL ALONG CTH U ESTABLISHED FROM PREVIOUS PROJECTS 1175-1-22, 1175-1-66, TO5-3(14)

A **TEMPORARY LIMITED EASEMENT** (TLE) IS A RIGHT FOR CONSTRUCTION PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON AND THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM NECESSARY OR DESIRABLE. ALL TLES EXPIRE AT THE COMPLETION OF THE CONSTRUCTION PROJECT FOR WHICH THIS INSTRUMENT IS GIVEN.

A **PERMANENT LIMITED EASEMENT** (PLE) IS A RIGHT FOR CONSTRUCTION AND MAINTENANCE PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON AND THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM NECESSARY OR DESIRABLE. BUT WITHOUT PREJUDICE TO THE OWNER'S RIGHT TO MAKE OR CONSTRUCT IMPROVEMENT ON SAID LANDS OR TO FLATTEN THE SLOPES, PROVIDING SAID ACTIVITIES WILL NOT IMPAIR OR OTHERWISE ADVERSELY AFFECT THE HIGHWAY FACILITIES.

A **HIGHWAY EASEMENT** (HE) IS AN EASEMENT FOR HIGHWAY PURPOSES, AS LONG AS SO USED, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM NECESSARY OR DESIRABLE.

DIMENSIONING FOR THE NEW RIGHT-OF-WAY IS MEASURED ALONG AND PERPENDICULAR TO NEW REFERENCE LINES.

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 6999-18-20 - 4.01
SHEET 2 OF 2
AMENDMENT NO: 648

TRANSPORTATION PROJECT PLAT NO: 6999-18-20 - 4.01

THAT PART OF THE NW1/4 OF THE NW1/4 OF SECTION 22, TOWNSHIP 29 NORTH, RANGE 7 EAST, TOWN OF MAINE; ALSO BEING PART OF THE NE1/4 OF THE NW1/4 OF SECTION 22, TOWNSHIP 29 NORTH, RANGE 7 EAST, CITY OF WAUSAU; ALL IN MARATHON COUNTY, WISCONSIN

RELOCATION ORDER CTH U, MARATHON COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE CITY OF WAUSAU DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

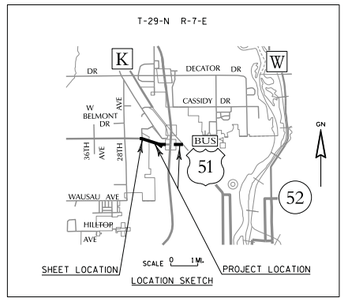
TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 62.22, WISCONSIN STATUTES, THE CITY OF WAUSAU

1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE CITY OF WAUSAU, PURSUANT TO THE PROVISIONS OF SECTION 62.22 (1) OR (1M), WISCONSIN STATUTES.

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERSTS TO THE CITY.

SHEET NUMBER	PARCEL NUMBER	OWNERS	INTEREST REQUIRED	R/W ACRES REQUIRED NEW	EXISTING	TOTAL	TLE ACRES
4.01	1	EUGENE E. WITTER & WILMA L. WITTER, CO-TRUSTEES OF THE WITTER REVOCABLE TRUST UA 1-18-1991	FEE/TLE	0.022	---	0.022	0.045
4.01	2	EUGENE E. WITTER & WILMA L. WITTER, CO-TRUSTEES OF THE WITTER REVOCABLE TRUST DATED JANUARY 18, 2011	FEE	0.105	---	0.105	---
4.01	3	WITTER LAND PROPERTIES, LLC	FEE	0.091	---	0.091	---



CTH U
CURVE 1 DATA
PI = 22U+29.89
Y = 212398.12
X = 271675.14
PC = 20U+52.11
Y = 212397.89
X = 271497.36
PT = 24U+04.43
Y = 212340.60
X = 271843.36
T = 177.78
L = 352.32
R = 1065.00
DELTA = 18°57'15" RT
D = 05°22'48"

BLANKET TELEPHONE EASEMENT
FRONTIER COMMUNICATIONS
(FORMERLY VERIZON)
VOL. 75 PAGE 345

CSM 5455
VOL.20 PG.48

STATION-OFFSET TABLE		
POINT NO.	STATION	OFFSET
100	19+00.00	0.62
101	19+00.00	0.00
102	19+00.00	-40.63
103	19+92.28	-40.68
104	19+92.28	-32.43
105	22+98.23	-62.57
106	23+56.00	-68.51
107	23+97.03	-68.91
108	24+62.62	-71.23
109	25+00.00	-72.56
110	25+00.00	0.00
111	25+00.00	8.74
112	24+81.25	9.43
113	24+94.88	85.00
114	24+11.42	73.00
115	24+00.99	15.41
116	22+01.93	56.53
117	22+02.93	61.78
118	21+01.75	39.39
119	21+18.11	38.55
120	21+17.66	31.55
121	20+25.00	40.50
122	20+25.00	50.00
123	19+72.76	50.00
124	19+72.15	33.58
125	19+00.00	33.62
126	20+85.40	0.00

COURSE TABLE		
COURSE	BEARING	DISTANCE
NW SEC. 22-101	N 89°51'18" E	907.70'
101-102	N 0°04'34" W	40.63'
102-103	N 89°53'38" E	92.28'
103-104	S 0°06'22" E	8.25'
104-105	N 89°53'38" E	318.09'
105-106	S 80°48'28" E	61.61'
106-107	S 73°09'21" E	43.67'
107-108	S 73°09'21" E	66.12'
108-109	S 73°09'21" E	37.40'
109-110	S 18°52'41" W	72.56'
110-111	S 18°52'41" W	8.74'
111-112	N 73°13'54" W	18.77'
112-113	S 8°39'17" W	76.79'
113-114	N 62°56'22" W	84.31'
114-119	N 71°36'53" W	279.65'
119-120	N 0°06'22" W	7.00'
120-125	S 89°53'38" W	215.68'
125-101	N 0°04'34" W	33.62'

EXISTING MONUMENTS			
POINT	Y (NORTHING)	X (EASTING)	DESCRIPTION
IP 3038	212430.449	271472.985	1.25" OD IRON PIPE
IP 3039	212327.192	271835.174	1.00" OD IRON PIPE

SURVEY NAIL
Y=212395.39
X=270437.56

BLANKET TELEPHONE EASEMENT
FRONTIER COMMUNICATIONS
(FORMERLY VERIZON)
VOL. 75 PAGE 345

SE/SW

TOWN

LOT 13
OVERLOOK HEIGHTS SUBDIVISION

P.L.

66'

OVERLOOK DR

6x6 STONE
Y=212400.27
X=273075.27

T 29 N
R 7 E
15
22

MATCH LINE
TRANSPORTATION PROJECT PLAT NO: 6999-18-20-4.02

S89°53'38"W, 2637.72' SEC. COR. TO SEC. COR.

CTH U

PT STA 24U+04.43

SW/SW

OF

RW VARIES

22U

CURVE 1
L = 276.43
LCH = 275.85
R = 1232.81
DELTA = 12°50'50"

23U

24U

25U

S 71°07'19" E

IP 3039

IP 3038

PC STA 20U+52.11

21U

20U

19U

N 89°55'26" E

74.25'

39'

WESTWOOD DR

NE/NW

CITY

OF

WAUSAU

80'

MAINE

NW/NW

GN

SCALE, FEET
0 20 40

ALL TLES SHOWN ON THIS SHEET ARE FOR SLOPE GRADING

EMCS

I, KEVIN C. BOYER, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 62.22 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE CITY, I HAVE SURVEYED TRANSPORTATION PROJECT PLAT 6999-18-20-4.01 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN KEVIN C BOYER S-2675 HEWITT WI LAND SURVEYOR

Kevin C Boyer DATED: 11/28/2011
KEVIN C. BOYER
REGISTERED LAND SURVEYOR NUMBER 2675
THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE CITY OF WAUSAU.
James E. Tipple DATED: 11/18/11
(SIGNATURE)
(PRINTED NAME) JAMES E. TIPPLE

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 6999-18-20-4.01
AMENDMENT NO:
SHEET 1 OF 2 Doc. # 1608825

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN MARATHON COUNTY, WISCONSIN AT 2:11 PM ON NOV. 28, 2011 AS DOCUMENT # 1608825 AND FILED IN Plat Cabinet 3, page 525B

Michael A. Sydow
SIGNATURE OF REGISTER OF DEEDS

FILE NAME : P:\44xx\4448\RW Plat_CTH U TPP\040101_rp_.dgn
APPRAISAL PLAT DATE :
PLOT DATE : 11/28/2011
PLOT BY : kcb
PLOT NAME :
PLOT SCALE : 1:20

6999-18-20 4.01

TRANSPORTATION PROJECT PLAT NO: 6999-18-20 - 4.02

THAT PART OF NE1/4 OF THE NW1/4 OF SECTION 22, TOWNSHIP 29 NORTH, RANGE 7 EAST, CITY OF WAUSAU, MARATHON COUNTY, WISCONSIN

RELOCATION ORDER CTH U, MARATHON COUNTY

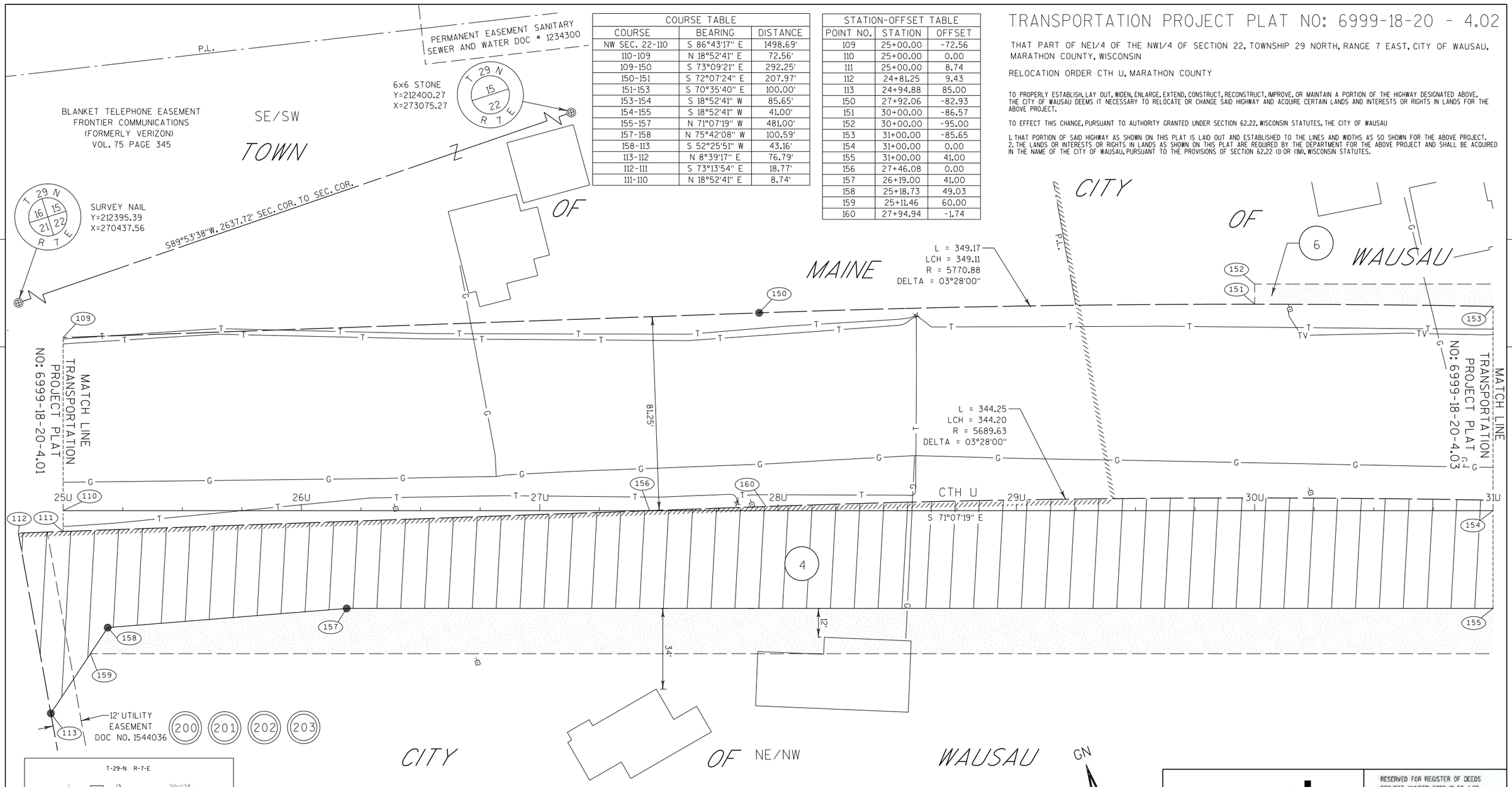
TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE CITY OF WAUSAU DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

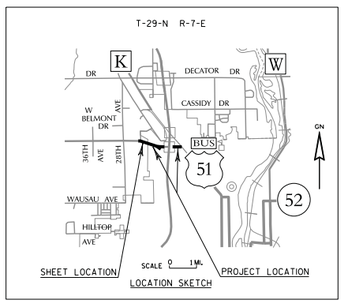
TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 62.22, WISCONSIN STATUTES, THE CITY OF WAUSAU

1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE CITY OF WAUSAU, PURSUANT TO THE PROVISIONS OF SECTION 62.22 (1) OR (1M), WISCONSIN STATUTES.

COURSE TABLE		
COURSE	BEARING	DISTANCE
NW SEC. 22-110	S 86°43'17" E	1498.69'
110-109	N 18°52'41" E	72.56'
109-150	S 73°09'21" E	292.25'
150-151	S 72°07'24" E	207.97'
151-153	S 70°35'40" E	100.00'
153-154	S 18°52'41" W	85.65'
154-155	S 18°52'41" W	41.00'
155-157	N 71°07'19" W	481.00'
157-158	N 75°42'08" W	100.59'
158-113	S 52°25'51" W	43.16'
113-112	N 8°39'17" E	76.79'
112-111	S 73°13'54" E	18.77'
111-110	N 18°52'41" E	8.74'

STATION-OFFSET TABLE		
POINT NO.	STATION	OFFSET
109	25+00.00	-72.56
110	25+00.00	0.00
111	25+00.00	8.74
112	24+81.25	9.43
113	24+94.88	85.00
150	27+92.06	-82.93
151	30+00.00	-86.57
152	30+00.00	-95.00
153	31+00.00	-85.65
154	31+00.00	0.00
155	31+00.00	41.00
156	27+46.08	0.00
157	26+19.00	41.00
158	25+18.73	49.03
159	25+11.46	60.00
160	27+94.94	-1.74





SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERSTS TO THE CITY.

SHEET NUMBER	PARCEL NUMBER	OWNERS	INTEREST REQUIRED	R/W ACRES REQUIRED NEW	EXISTING	TOTAL	TLE ACRES
4.02, 4.03, 4.04	4	WITTER LAND PROPERTIES, LLC	FEE/TLE	0.941	---	0.941	0.551
4.02, 4.03	6	RONALD W. & SUE SCHRAM	TLE	---	---	---	0.031
---	200	WISCONSIN PUBLIC SERVICE (ELECTRIC)	RELEASE OF RIGHTS	---	---	---	---
---	201	WISCONSIN PUBLIC SERVICE (GAS)	RELEASE OF RIGHTS	---	---	---	---
---	202	FRONTIER COMMUNICATIONS	RELEASE OF RIGHTS	---	---	---	---
---	203	CHARTER COMMUNICATIONS	RELEASE OF RIGHTS	---	---	---	---

Refer to the Title Sheet, recorded as Sheet 2 of 2, in Cabinet 3 of Plats, Page 525B, as Document No. 1608835 for additional information

ALL TLES SHOWN ON THIS SHEET ARE FOR SLOPE GRADING
EXISTING BUILDINGS WHICH OCCUPY TLE AREAS WILL NOT BE AFFECTED

EMCS

I, KEVIN C. BOYER, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 62.22 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE CITY, I HAVE SURVEYED TRANSPORTATION PROJECT PLAT 6999-18-20-4.02 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN KEVIN C BOYER S-2675 HEWITT WI LAND SURVEYOR

Kevin C. Boyer DATE: 11/29/2011
KEVIN C. BOYER
REGISTERED LAND SURVEYOR NUMBER 2675
THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE CITY OF WAUSAU.
DATE: 11/29/11
JAMES E. TYPPLE

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 6999-18-20-4.02
AMENDMENT NO:
Doc. # 1609058

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN MARATHON COUNTY, WISCONSIN AT 9:41AM ON NOV. 30, 2011 AS DOCUMENT # 1609058 AND FILED IN plat cabinet 3 pg. 526A

SIGNATURE OF REGISTER OF DEEDS

FILE NAME : P:\44xx\4448\RW Plat_CTH U TPP\040102_rp_.dgn
APPRAISAL PLAT DATE :
PLOT DATE : 11/28/2011
PLOT BY : kcb
PLOT NAME :
PLOT SCALE : 1:20

6999-18-20 4.02

TRANSPORTATION PROJECT PLAT NO: 6999-18-20 - 4.03

THAT PART OF THE NE1/4 OF THE NW1/4 OF SECTION 22, TOWNSHIP 29 NORTH, RANGE 7 EAST, CITY OF WAUSAU, MARATHON COUNTY, WISCONSIN

RELOCATION ORDER CTH U, MARATHON COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE CITY OF WAUSAU DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 62.22, WISCONSIN STATUTES, THE CITY OF WAUSAU

1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE CITY OF WAUSAU, PURSUANT TO THE PROVISIONS OF SECTION 62.22 (1) OR (1M), WISCONSIN STATUTES.

EXISTING MONUMENTS			
POINT	Y (NORTHING)	X (EASTING)	DESCRIPTION
IP 3033	212005.750	273089.401	1.25" OD IRON PIPE
IP 3034	212114.117	272743.397	1.25" OD IRON PIPE

COURSE TABLE		
COURSE	BEARING	DISTANCE
N1/4 SEC. 22-154	S 63°36'26" W	640.52'
154-153	N 18°52'41" E	85.65'
153-200	S 69°53'37" E	41.18'
200-207	S 69°41'21" E	444.61'
207-208	N 20°18'39" E	13.75'
208-209	S 68°06'15" E	20.62'
209-211	S 70°35'34" E	85.20'
211-212	S 12°52'58" W	75.27'
212-213	S 12°52'58" W	51.95'
213-155	N 71°07'19" W	605.05'
155-154	N 18°52'41" E	41.00'

STATION-OFFSET TABLE		
POINT NO.	STATION	OFFSET
153	31+00.00	-85.65
154	31+00.00	0.00
155	31+00.00	41.00
200	31+41.17	-84.77
201	32+25.38	-95.00
202	32+25.88	-115.00
203	33+60.18	-115.00
204	33+60.18	-100.00
205	34+60.00	-100.00
206	34+60.00	-87.40
207	35+89.09	-71.51

STATION-OFFSET TABLE CON'T		
POINT NO.	STATION	OFFSET
208	35+90.14	-85.22
209	36+11.56	-83.03
210	36+04.42	-104.54
211	37+00.00	-75.27
212	37+00.00	0.00
213	37+00.00	51.95
214	36+75.00	68.50
215	35+81.84	29.49
216	32+54.42	19.35
217	32+54.91	0.00
218	32+54.92	-0.65

CITY

OF

WAUSAU

L = 349.17
LCH = 349.11
R = 5770.88
DELTA = 03°28'00"

6x6 STONE
Y=212400.27
X=273075.27

T 29 N
15 22
R 7 E

NO°57'04"E, 5302.98' SEC. COR. TO SEC. COR.

MATCH LINE TRANSPORTATION PROJECT PLAT NO: 6999-18-20-4.02

MATCH LINE TRANSPORTATION PROJECT PLAT NO: 6999-18-20-4.04

L = 344.25
LCH = 344.20
R = 5689.63
DELTA = 03°28'00"

81.25'

101.25'

114.85'

L = 403.41
LCH = 401.57
R = 1218.24
DELTA = 18°58'23"

L = 195.58
LCH = 195.40
R = 1333.24
DELTA = 08°24'18"

CURVE 2

CTH U
S 71°07'19" E

PC STA 34U+95.95

NE/NW

SURVEY NAIL
Y=207100.36
X=273255.81

T 29 N
22 27
R 7 E

IP 3033

IP 3034

31U 32U 33U 34U 35U 36U 37U

153 154 155 200 201 202 203 204 205 206 207 208 209 210 211 212 213 214 215 216 217 218

4 6 7 8 9 11 12 13

202 203

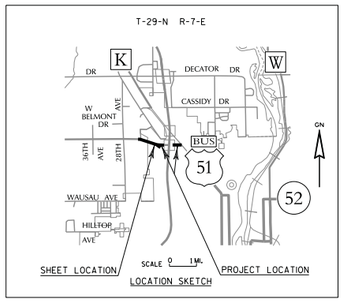
GN

SCALE, FEET
0 20 40

CTH U
CURVE 2 DATA
PI = 37U+84.22
Y = 211894.16
X = 273148.93
PC = 34U+95.95
Y = 211987.43
X = 272876.17
PT = 40U+68.34
Y = 211883.80
X = 273437.01
T = 288.26
L = 572.38
R = 1950.00
DELTA = 16°49'05" LT
D = 02°56'18"

Refer to the Title Sheet, recorded as Sheet 2 of 2, in Cabinet 3 of Plats, Page 525B, as Document No. 1608835 for additional information

ALL TLES SHOWN ON THIS SHEET ARE FOR SLOPE GRADING EXISTING BUILDINGS WHICH OCCUPY TLE AREAS WILL NOT BE AFFECTED



SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERSTS TO THE CITY.

SHEET NUMBER	PARCEL NUMBER	OWNERS	INTEREST REQUIRED	R/W ACRES REQUIRED NEW	EXISTING	TOTAL	TLE ACRES
4.02, 4.03, 4.04	4	WITTER LAND PROPERTIES, LLC	FEE/TLE	0.941	---	0.941	0.551
4.02, 4.03	6	RONALD W. & SUE SCHRAM	TLE	---	---	---	0.031
4.03	7	ELMER AND RUBYE LAWRENCE IRREVOCABLE TRUST	TLE	---	---	---	0.036
4.03	8	GERALD & KATHY SNOW	TLE	---	---	---	0.070
4.03	9	JAMES & KARIN TURNBULL	TLE	---	---	---	0.053
4.03	11	GARY & CHERYL FILBER	TLE	---	---	---	0.032
4.03	12	MARILYNN J. NICHOLS	TLE	---	---	---	0.020
4.03	13	RM STEPHENS, LLC	TLE	---	---	---	0.042
---	202	FRONTIER COMMUNICATIONS	RELEASE OF RIGHTS	---	---	---	---
---	203	CHARTER COMMUNICATIONS	RELEASE OF RIGHTS	---	---	---	---

EMCS

I, KEVIN C. BOYER, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 62.22 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE CITY, I HAVE SURVEYED TRANSPORTATION PROJECT PLAT 6999-18-20-4.03 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

KEVIN C BOYER S-2675 HEWITT WI — LAND SURVEYOR

Kevin C Boyer DATE: 11/29/2011
KEVIN C. BOYER
REGISTERED LAND SURVEYOR NUMBER 2675
THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE CITY OF WAUSAU.
(SIGNATURE)
DATE: 11/29/11
(PRINTED NAME) JAMES E. TIPPLE

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 6999-18-20-4.03
AMENDMENT NO:

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN MARATHON COUNTY, WISCONSIN AT 9:01 AM ON Nov. 30, 2011 AS DOCUMENT # 1609959 AND FILED IN plat cabinet 3, pg 526 B

Michael J. Nydam
SIGNATURE OF REGISTER OF DEEDS

FILE NAME : P:\44xx\4448\RW Plat_CTH U TPP\040103_rp_.dgn
APPRAISAL PLAT DATE :
PLOT DATE : 11/28/2011
PLOT BY : kcb
PLOT NAME :
PLOT SCALE : 1:20

6999-18-20 4.03

TRANSPORTATION PROJECT PLAT NO: 6999-18-20 - 4.03 AMENDMENT NO: 1

AMENDMENT ADDS UTILITY PARCEL 200 TO TPP 6999-18-20-4.03 RECORDED IN CABINET 3 OF PLATS, PAGE 526B AS DOCUMENT 1609059, BEING THAT PART OF THE NE1/4 OF THE NW1/4 OF SECTION 22, TOWNSHIP 29 NORTH, RANGE 7 EAST, CITY OF WAUSAU, MARATHON COUNTY, WISCONSIN

RELOCATION ORDER CTH U, MARATHON COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE CITY OF WAUSAU DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 62.22, WISCONSIN STATUTES, THE CITY OF WAUSAU

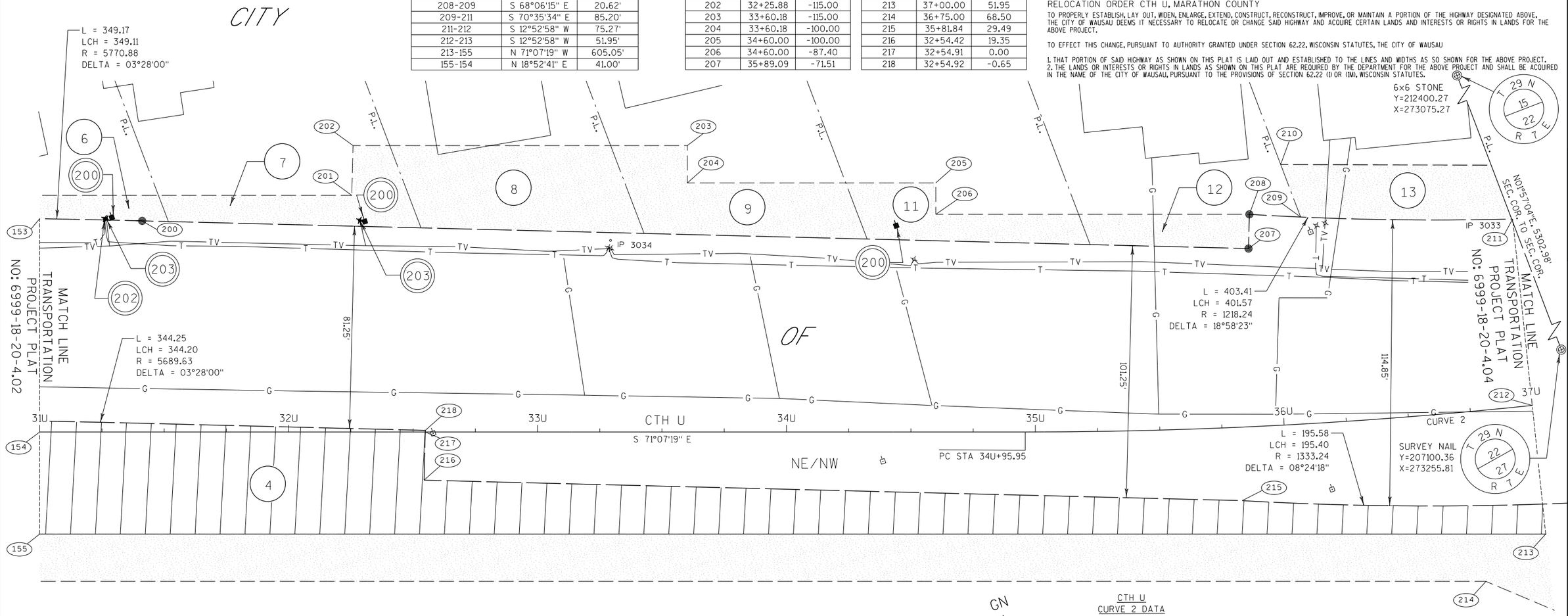
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE CITY OF WAUSAU, PURSUANT TO THE PROVISIONS OF SECTION 62.22 (1) OR (1M), WISCONSIN STATUTES.

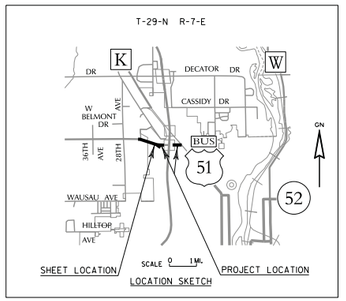
EXISTING MONUMENTS			
POINT	Y (NORTHING)	X (EASTING)	DESCRIPTION
IP 3033	212005.750	273089.401	1.25" OD IRON PIPE
IP 3034	212114.117	272743.397	1.25" OD IRON PIPE

COURSE TABLE		
COURSE	BEARING	DISTANCE
N1/4 SEC. 22-154	S 63°36'26" W	640.52'
154-153	N 18°52'41" E	85.65'
153-200	S 69°53'37" E	41.18'
200-207	S 69°41'21" E	444.61'
207-208	N 20°18'39" E	13.75'
208-209	S 68°06'15" E	20.62'
209-211	S 70°35'34" E	85.20'
211-212	S 12°52'58" W	75.27'
212-213	S 12°52'58" W	51.95'
213-155	N 71°07'19" W	605.05'
155-154	N 18°52'41" E	41.00'

STATION-OFFSET TABLE		
POINT NO.	STATION	OFFSET
153	31+00.00	-85.65
154	31+00.00	0.00
155	31+00.00	41.00
200	31+41.17	-84.77
201	32+25.38	-95.00
202	32+25.88	-115.00
203	33+60.18	-115.00
204	33+60.18	-100.00
205	34+60.00	-100.00
206	34+60.00	-87.40
207	35+89.09	-71.51

STATION-OFFSET TABLE CON'T		
POINT NO.	STATION	OFFSET
208	35+90.14	-85.22
209	36+11.56	-83.03
210	36+04.42	-104.54
211	37+00.00	-75.27
212	37+00.00	0.00
213	37+00.00	51.95
214	36+75.00	68.50
215	35+81.84	29.49
216	32+54.42	19.35
217	32+54.91	0.00
218	32+54.92	-0.65





SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERSTS TO THE CITY.

SHEET NUMBER	PARCEL NUMBER	OWNERS	INTEREST REQUIRED	R/W ACRES REQUIRED NEW	EXISTING	TOTAL	TLE ACRES
4.02, 4.03, 4.04	4	WITTER LAND PROPERTIES, LLC	FEE/TLE	0.941	---	0.941	0.551
4.02, 4.03	6	RONALD W. & SUE SCHRAM	TLE	---	---	---	0.031
4.03	7	ELMER AND RUBYE LAWRENCE IRREVOCABLE TRUST	TLE	---	---	---	0.036
4.03	8	GERALD & KATHY SNOW	TLE	---	---	---	0.070
4.03	9	JAMES & KARIN TURNBULL	TLE	---	---	---	0.053
4.03	11	GARY & CHERYL FILBER	TLE	---	---	---	0.032
4.03	12	MARILYNN J. NICHOLS	TLE	---	---	---	0.020
4.03	13	RM STEPHENS, LLC	TLE	---	---	---	0.042
---	200	WISCONSIN PUBLIC SERVICE (ELECTRIC)	RELEASE OF RIGHTS	---	---	---	---
---	202	FRONTIER COMMUNICATIONS	RELEASE OF RIGHTS	---	---	---	---
---	203	CHARTER COMMUNICATIONS	RELEASE OF RIGHTS	---	---	---	---

GN

SCALE, FEET
0 20 40

CTH U
CURVE 2 DATA
PI = 37U+84.22
Y = 211894.16
X = 273148.93
PC = 34U+95.95
Y = 211987.43
X = 272876.17
PT = 40U+68.34
Y = 211883.80
X = 273437.01
T = 288.26
L = 572.38
R = 1950.00
DELTA = 16°49'05" LT
D = 02°56'18"

Refer to the Title Sheet, recorded as Sheet 2 of 2, in Cabinet 3 of Plats, Page 525B, as Document No. 1608835 for additional information

ALL TLES SHOWN ON THIS SHEET ARE FOR SLOPE GRADING EXISTING BUILDINGS WHICH OCCUPY TLE AREAS WILL NOT BE AFFECTED

EMCS

I, KEVIN C. BOYER, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 62.22 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE CITY, I HAVE SURVEYED TRANSPORTATION PROJECT PLAT 6999-18-20-4.03 AMENDMENT 1 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN KEVIN C BOYER S-2675 HEWITT WI LAND SURVEYOR

Kevin C Boyer DATE: 07/23/2012
KEVIN C. BOYER
REGISTERED LAND SURVEYOR NUMBER 2675
THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE CITY OF WAUSAU.
(SIGNATURE) DATE: 7/23/12
(PRINTED NAME) LISA RASMUSSEN

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 6999-18-20-4.03
AMENDMENT NO: 1

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN MARATHON COUNTY, WISCONSIN AT 1:35 PM ON July 24, 2012 AS DOCUMENT # 1625137 AND FILED IN Plat Cabinet 3 Pg 531B

Dean Strut
SIGNATURE OF REGISTER OF DEEDS

FILE NAME : P:\44xx\4448\RW Plat_CTH U TPP\040103_rp_.Amendment 1.dgn
APPRAISAL PLAT DATE :
PLOT DATE : 7/23/2012
PLOT BY : kcb
PLOT NAME :
PLOT SCALE : 1:20

TRANSPORTATION PROJECT PLAT NO: 6999-18-20 - 4.04

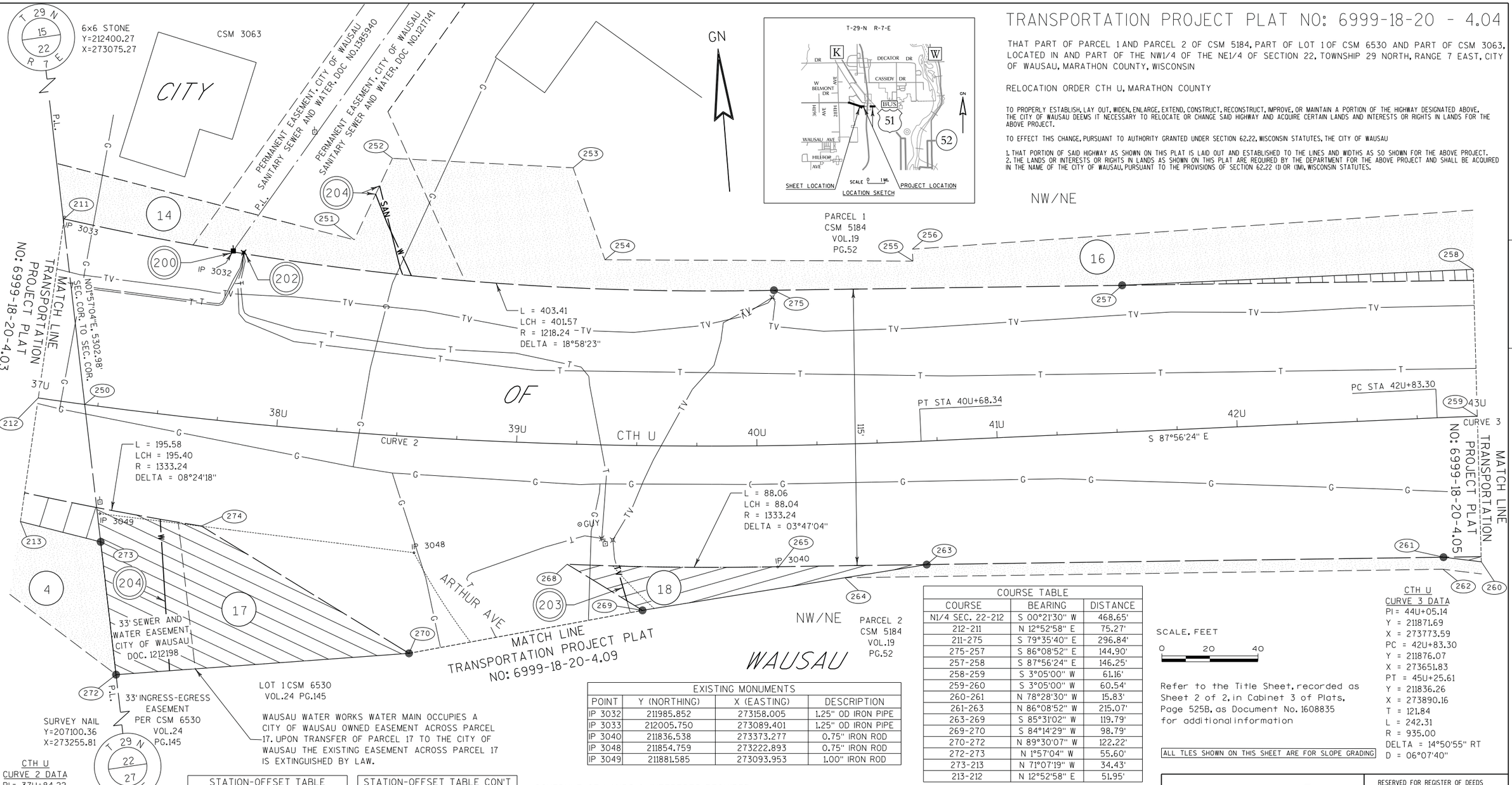
THAT PART OF PARCEL 1 AND PARCEL 2 OF CSM 5184, PART OF LOT 1 OF CSM 6530 AND PART OF CSM 3063, LOCATED IN AND PART OF THE NW1/4 OF THE NE1/4 OF SECTION 22, TOWNSHIP 29 NORTH, RANGE 7 EAST, CITY OF WAUSAU, MARATHON COUNTY, WISCONSIN

RELOCATION ORDER CTH U, MARATHON COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE CITY OF WAUSAU DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 62.22, WISCONSIN STATUTES, THE CITY OF WAUSAU

1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE CITY OF WAUSAU, PURSUANT TO THE PROVISIONS OF SECTION 62.22 (1) OR (1M), WISCONSIN STATUTES.



COURSE TABLE		
COURSE	BEARING	DISTANCE
N1/4 SEC. 22-212	S 00°21'30" W	468.65'
212-211	N 12°52'58" E	75.27'
211-275	S 79°35'40" E	296.84'
275-257	S 86°08'52" E	144.90'
257-258	S 87°56'24" E	146.25'
258-259	S 3°05'00" W	61.16'
259-260	S 3°05'00" W	60.54'
260-261	N 78°28'30" W	15.83'
261-263	N 86°08'52" W	215.07'
263-269	S 85°31'02" W	119.79'
269-270	S 84°14'29" W	98.79'
270-272	N 89°30'07" W	122.22'
272-273	N 1°57'04" W	55.60'
273-213	N 71°07'19" W	34.43'
213-212	N 12°52'58" E	51.95'

CTH U
CURVE 2 DATA
PI = 37U+84.22
Y = 211894.16
X = 273148.93
PC = 34U+95.95
Y = 211987.43
X = 272876.17
PT = 40U+68.34
Y = 211883.80
X = 273437.01
T = 288.26
L = 572.38
R = 1950.00
DELTA = 16°49'05" LT
D = 02°56'18"

CTH U
CURVE 3 DATA
PI = 44U+05.14
Y = 211871.69
X = 273773.59
PC = 42U+83.30
Y = 211876.07
X = 273651.83
PT = 45U+25.61
Y = 211836.26
X = 273890.16
T = 121.84
L = 242.31
R = 935.00
DELTA = 14°50'55" RT
D = 06°07'40"

STATION-OFFSET TABLE		
POINT NO.	STATION	OFFSET
211	37+00.00	-75.27
212	37+00.00	0.00
213	37+00.00	51.95
250	37+19.51	0.00
251	38+26.00	-80.00
252	38+40.00	-115.00
253	39+20.00	-114.90
254	39+35.00	-77.00
255	40+68.34	-75.01
256	40+68.34	-80.00
257	41+54.85	-61.00
258	43+00.00	-61.16
259	43+00.00	0.00

STATION-OFFSET TABLE CON'T		
POINT NO.	STATION	OFFSET
260	43+00.00	60.54
261	42+83.30	58.08
262	42+82.81	63.06
263	40+68.34	51.35
264	40+35.02	55.57
265	40+08.34	50.37
268	39+22.50	49.99
269	39+53.30	68.51
270	38+60.63	90.00
272	37+45.90	109.87
273	37+33.29	55.84
274	37+73.13	44.44
275	40+08.01	-64.63

EXISTING MONUMENTS			
POINT	Y (NORTHING)	X (EASTING)	DESCRIPTION
IP 3032	211985.852	273158.005	1.25" OD IRON PIPE
IP 3033	212005.750	273089.401	1.25" OD IRON PIPE
IP 3040	211836.538	273373.277	0.75" IRON ROD
IP 3048	211854.759	273222.893	0.75" IRON ROD
IP 3049	211881.585	273093.953	1.00" IRON ROD

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERSTS TO THE CITY.

SHEET NUMBER	PARCEL NUMBER	OWNERS	INTEREST REQUIRED	R/W ACRES REQUIRED NEW	EXISTING	TOTAL	TLE ACRES
4.02, 4.03, 4.04	4	WITTER LAND PROPERTIES, LLC	FEE/TLE	0.941	---	0.941	0.551
4.04	14	RM STEPHENS, LLC	TLE	---	---	---	0.036
4.04, 4.05	16	GARY R STEIN & DAWN M STEIN	FEE/TLE	0.017	---	0.017	0.309
4.04, 4.09	17	MID STATE CONTRACTING, INC	FEE/TLE	0.117	---	0.117	0.193
4.04, 4.05, 4.09	18	HENNING CONSTRUCTION CO, INC	FEE/TLE	0.055	---	0.055	0.111
---	200	WISCONSIN PUBLIC SERVICE (ELECTRIC)	RELEASE OF RIGHTS	---	---	---	---
---	202	FRONTIER COMMUNICATIONS	RELEASE OF RIGHTS	---	---	---	---
---	203	CHARTER COMMUNICATIONS	RELEASE OF RIGHTS	---	---	---	---
---	204	WAUSAU WATER WORKS	RELEASE OF RIGHTS	---	---	---	---

EMCS

I, KEVIN C. BOYER, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 62.22 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE CITY, I HAVE SURVEYED TRANSPORTATION PROJECT PLAT 6999-18-20-4.04 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

KEVIN C BOYER S-2675 HEWITT WI LAND SURVEYOR WISCONSIN

Kevin C Boyer DATE: 11/29/2011
KEVIN C. BOYER
REGISTERED LAND SURVEYOR NUMBER 2675
THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE CITY OF WAUSAU.
James E Tipple DATE: 11/29/11
SIGNATURE
PRINTED NAME: JAMES E. TIPPLE

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 6999-18-20-4.04
AMENDMENT NO:

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN MARATHON COUNTY, WISCONSIN AT 9:01 AM ON NOV. 30, 2011 AS DOCUMENT # 1609060 AND FILED IN plat cabinet 3, pg 526 C
Michael A. Sydow
SIGNATURE OF REGISTER OF DEEDS

FILE NAME : P:\44xx\4448\RW Plat_CTH U TPP\040104_rp_.dgn
APPRAISAL PLAT DATE :
PLOT DATE : 11/28/2011
PLOT BY : kcb
PLOT NAME :
PLOT SCALE : 1:20

6999-18-20 4.04

TRANSPORTATION PROJECT PLAT NO: 6999-18-20 - 4.05

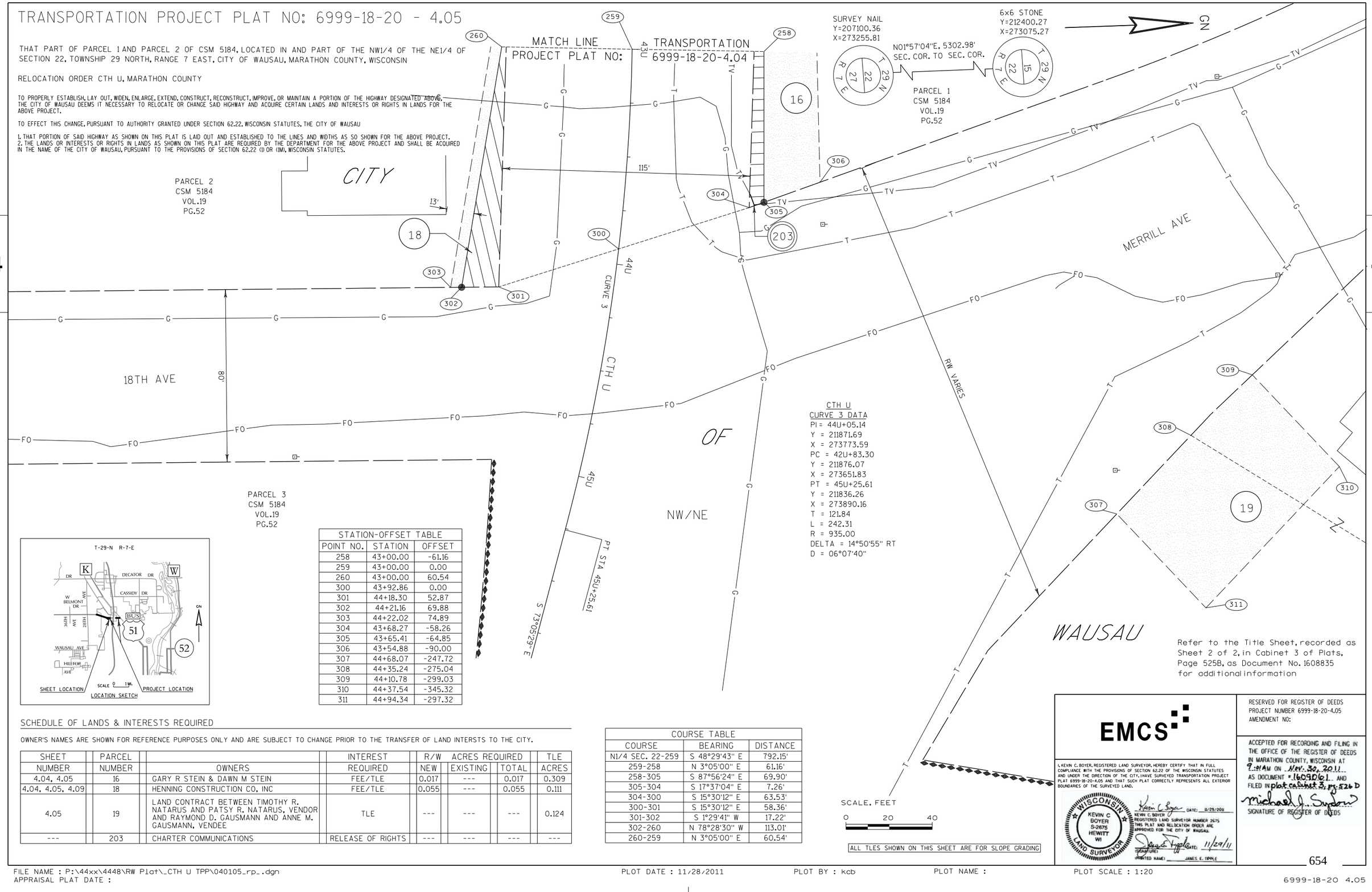
THAT PART OF PARCEL 1 AND PARCEL 2 OF CSM 5184, LOCATED IN AND PART OF THE NW1/4 OF THE NE1/4 OF SECTION 22, TOWNSHIP 29 NORTH, RANGE 7 EAST, CITY OF WAUSAU, MARATHON COUNTY, WISCONSIN

RELOCATION ORDER CTH U, MARATHON COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE CITY OF WAUSAU DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 62.22, WISCONSIN STATUTES, THE CITY OF WAUSAU

1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE CITY OF WAUSAU, PURSUANT TO THE PROVISIONS OF SECTION 62.22 (1) OR (1M), WISCONSIN STATUTES.



CTH U
CURVE 3 DATA
PI = 44U+05.14
Y = 211871.69
X = 273773.59
PC = 42U+83.30
Y = 211876.07
X = 273651.83
PT = 45U+25.61
Y = 211836.26
X = 273890.16
T = 121.84
L = 242.31
R = 935.00
DELTA = 14°50'55" RT
D = 06°07'40"

STATION-OFFSET TABLE		
POINT NO.	STATION	OFFSET
258	43+00.00	-61.16
259	43+00.00	0.00
260	43+00.00	60.54
300	43+92.86	0.00
301	44+18.30	52.87
302	44+21.16	69.88
303	44+22.02	74.89
304	43+68.27	-58.26
305	43+65.41	-64.85
306	43+54.88	-90.00
307	44+68.07	-247.72
308	44+35.24	-275.04
309	44+10.78	-299.03
310	44+37.54	-345.32
311	44+94.34	-297.32

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERSTS TO THE CITY.

SHEET	PARCEL		INTEREST	R/W ACRES REQUIRED			TLE
NUMBER	NUMBER	OWNERS	REQUIRED	NEW	EXISTING	TOTAL	ACRES
4.04, 4.05	16	GARY R STEIN & DAWN M STEIN	FEE/TLE	0.017	---	0.017	0.309
4.04, 4.05, 4.09	18	HENNING CONSTRUCTION CO, INC	FEE/TLE	0.055	---	0.055	0.111
4.05	19	LAND CONTRACT BETWEEN TIMOTHY R. NATARUS AND PATSY R. NATARUS, VENDOR AND RAYMOND D. GAUSMANN AND ANNE M. GAUSMANN, VENDEE	TLE	---	---	---	0.124
---	203	CHARTER COMMUNICATIONS	RELEASE OF RIGHTS	---	---	---	---

COURSE TABLE		
COURSE	BEARING	DISTANCE
N1/4 SEC. 22-259	S 48°29'43" E	792.15'
259-258	N 3°05'00" E	61.16'
258-305	S 87°56'24" E	69.90'
305-304	S 17°37'04" E	7.26'
304-300	S 15°30'12" E	63.53'
300-301	S 15°30'12" E	58.36'
301-302	S 1°29'41" W	17.22'
302-260	N 78°28'30" W	113.01'
260-259	N 3°05'00" E	60.54'

SCALE, FEET
0 20 40

ALL TLES SHOWN ON THIS SHEET ARE FOR SLOPE GRADING

Refer to the Title Sheet, recorded as Sheet 2 of 2, in Cabinet 3 of Plats, Page 525B, as Document No. 1608835 for additional information

EMCS

I, KEVIN C. BOYER, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 62.22 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE CITY, I HAVE SURVEYED TRANSPORTATION PROJECT PLAT 6999-18-20-4.05 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN KEVIN C BOYER S-2675 HEWITT WI LAND SURVEYOR

Kevin C Boyer DATE: 11/29/2011
KEVIN C. BOYER
REGISTERED LAND SURVEYOR NUMBER 2675
THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE CITY OF WAUSAU.

SIGNATURE DATE: 11/29/11
(PRINTED NAME) JAMES E. TOPPLE

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 6999-18-20-4.05
AMENDMENT NO:

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN MARATHON COUNTY, WISCONSIN AT 9:01 AM ON Nov. 30, 2011 AS DOCUMENT # 1609061 AND FILED IN plat cabinet 3, pg 526 D

Michael J. Sydow
SIGNATURE OF REGISTER OF DEEDS

FILE NAME : P:\44xx\4448\RW Plat_CTH U TPP\040105_rp_.dgn
APPRAISAL PLAT DATE :
PLOT DATE : 11/28/2011
PLOT BY : kcb
PLOT NAME :
PLOT SCALE : 1:20

6999-18-20 4.05

TRANSPORTATION PROJECT PLAT NO: 6999-18-20 - 4.06

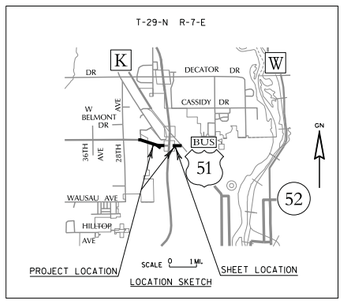
THAT PART OF LOTS 6, 7 AND 9 OF BLOCK 7 AND PART OF LOT 12 OF BLOCK 8 OF ASSESSORS PLAT NO.4, LOCATED IN AND PART OF THE NE1/4 OF THE NE1/4, ALSO PART OF LOT 1 OF BLOCK 4 OF ASSESSORS PLAT NO.4 AND NORTHVIEW PLAZA CONDOMINIUM PLAT, LOCATED IN AND PART OF THE SE1/4 OF THE NE1/4 , ALL BEING LOCATED IN SECTION 22, TOWNSHIP 29 NORTH, RANGE 7 EAST, CITY OF WAUSAU, MARATHON COUNTY, WISCONSIN

RELOCATION ORDER CTH U, MARATHON COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE CITY OF WAUSAU DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 62.22, WISCONSIN STATUTES, THE CITY OF WAUSAU

1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE CITY OF WAUSAU, PURSUANT TO THE PROVISIONS OF SECTION 62.22 (1) OR (1M), WISCONSIN STATUTES.



SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERSTS TO THE CITY.

SHEET NUMBER	PARCEL NUMBER	OWNERS	INTEREST REQUIRED	R/W ACRES REQUIRED NEW	EXISTING	TOTAL	TLE ACRES
4.06	21	DARRELL D SMAZAL & BARBARA R	FEE/TLE	0.009	---	0.009	0.126
4.06	22	YOUTSOS REAL ESTATE, LLC	FEE/TLE	0.003	---	0.003	0.081
4.06, 4.07	23	YOUTSOS REAL ESTATE, LLC	TLE	---	---	---	0.079
4.06	24	MERRILL AVENUE TAVERN, LLC	FEE/TLE	0.099	---	0.099	0.100
4.06, 4.07	26	ANTHONY A. DeCAMPOS AND GAIL DeCAMPOS, TRUSTEES OF THE ANTHONY A. DeCAMPOS FAMILY TRUST u/d/t NOVEMBER 11, 2009	FEE/TLE	0.073	---	0.073	0.109
---	200	WISCONSIN PUBLIC SERVICE (ELECTRIC)	RELEASE OF RIGHTS	---	---	---	---
---	201	WISCONSIN PUBLIC SERVICE (GAS)	RELEASE OF RIGHTS	---	---	---	---
---	202	FRONTIER COMMUNICATIONS	RELEASE OF RIGHTS	---	---	---	---

BRASS CAP MONUMENT
Y=212421.68
X=275693.29

T 29 N R 7 E
14 23 22 15

S02°14'57"E 2645.78' SEC. COR. TO SEC. COR.

BLOCK 7
ASSESSOR'S PLAT NO.4

SURVEY NAIL
Y=209777.94
X=275797.12

SCALE, FEET
0 20 40

GN

CITY NE/NE

LOT 5 LOT 6 LOT 7 LOT 9

P.L.

21 22 23 24 26

200 201 202

EASEMENT FOR POWER POLE MAINTENANCE VOL.181 PG.552

EASEMENT FOR FRONTIER COMMUNICATIONS (FOMERLY VERIZON) UNDERGROUND CABLES DOC NO. 1204789 10' WIDE, LOCATION CENTERED ON 1ST CABLE BURIED

SE/NE
LOT 1
BLOCK 4
ASSESSOR'S PLAT NO.4

UNIT 5 NORTHVIEW PLAZA CONDOMINIUM

UNIT 1 NORTHVIEW PLAZA CONDOMINIUM

PERMANENT UTILITY EASEMENT, FRONTIER COMMUNICATIONS (FORMERLY VERIZON) WISCONSIN PUBLIC SERVICE DOC#1352682

LOT 11 LOT 12

BLOCK 8
ASSESSOR'S PLAT NO.4

IP 1218 IP 1219 IP 3051 IP 1191

CTH U
S 51°34'55" E

57U 58U 59U 60U 61U 62U

ARLINGTON AVE

15TH AVE

MATCH LINE TRANSPORTATION PROJECT PLAT NO: 6999-18-20-4.07

Refer to the Title Sheet, recorded as Sheet 2 of 2, in Cabinet 3 of Plats, Page 525B, as Document No. 1608835 for additional information

ALL TLES SHOWN ON THIS SHEET ARE FOR SLOPE GRADING EXISTING BUILDINGS WHICH OCCUPY TLE AREAS WILL NOT BE AFFECTED

STATION-OFFSET TABLE		
POINT NO.	STATION	OFFSET
350	57+38.27	0.00
351	57+47.57	-36.84
352	57+47.50	-41.80
353	57+46.91	-80.00
354	58+62.07	-80.00
355	58+00.33	-41.00
356	59+79.37	-41.00
357	60+95.00	-55.53
358	60+95.00	-43.08
359	61+45.00	-43.98
360	61+45.00	-58.00
361	62+50.00	-45.86
362	62+50.00	0.00
363	62+50.00	41.00
364	62+49.47	51.61
365	62+33.80	65.00
366	61+27.52	22.35
367	61+04.34	41.00
368	60+74.52	65.00
369	60+45.95	23.81
370	60+24.60	41.00
371	59+86.08	72.00
372	59+50.00	55.00
373	59+14.79	26.17
374	57+43.88	55.00
375	57+36.72	41.00
376	57+30.83	29.47
377	62+27.35	-58.00

COURSE TABLE		
COURSE	BEARING	DISTANCE
NE SEC. 22-350	S 33°29'24" W	1277.99'
350-351	N 52°35'19" E	37.99'
351-352	N 37°32'44" E	4.96'
352-355	S 50°42'51" E	52.84'
355-356	S 51°34'55" E	179.04'
356-361	S 52°36'40" E	270.68'
361-362	S 38°25'05" W	45.86'
362-363	S 38°25'05" W	41.00'
363-367	N 51°34'55" W	145.66'
367-370	N 51°34'55" W	79.75'
370-375	N 51°34'55" W	287.88'
375-376	N 11°20'16" E	12.94'
376-350	N 52°35'19" E	30.40'

EXISTING MONUMENTS			
POINT	Y (NORTHING)	X (EASTING)	DESCRIPTION
IP 1218	211433.441	274946.561	0.75" IRON ROD
IP 1219	211307.558	275111.432	MAG NAIL
IP 3051	211230.314	275212.211	0.75" IRON ROD
IP 1191	211095.353	275116.669	IP 1.25IROD

EMCS

I, KEVIN C. BOYER, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 62.22 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE CITY, I HAVE SURVEYED TRANSPORTATION PROJECT PLAT 6999-18-20-4.06 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN KEVIN C BOYER S-2675 HEWITT WI LAND SURVEYOR

Kevin C Boyer DATE: 11/29/2011
KEVIN C. BOYER
REGISTERED LAND SURVEYOR NUMBER 2675
THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE CITY OF WAUSAU.
(SIGNATURE) DATE: 11/29/11
PRINTED NAME: JAMES E. TIPPLE

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 6999-18-20-4.06
AMENDMENT NO:

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN MARATHON COUNTY, WISCONSIN AT 9:01 AM ON Nov. 30, 2011 AS DOCUMENT # 1609062 AND FILED IN plat cabinet 3, pg. 526B

SIGNATURE OF REGISTER OF DEEDS

FILE NAME : P:\44xx\4448\RW Plat_CTH U TPP\040106_rp_.dgn
APPRAISAL PLAT DATE :
PLOT DATE : 11/28/2011 PLOT BY : kcb PLOT NAME : PLOT SCALE : 1:20

6999-18-20 4.06

TRANSPORTATION PROJECT PLAT NO: 6999-18-20 - 4.07

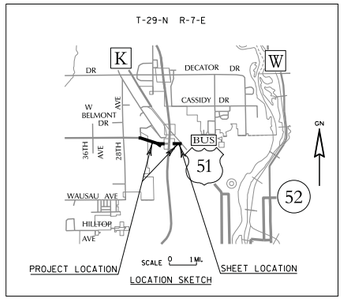
THAT PART OF LOT 10 AND LOT 11 OF BLOCK 7 AND LOT 1 OF BLOCK 4 OF ASSESSORS PLAT NO.4, LOCATED IN AND PART OF THE SE1/4 OF THE NE1/4 OF SECTION 22, TOWNSHIP 29 NORTH, RANGE 7 EAST, CITY OF WAUSAU, MARATHON COUNTY, WISCONSIN

RELOCATION ORDER CTH U, MARATHON COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE CITY OF WAUSAU DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 62.22, WISCONSIN STATUTES, THE CITY OF WAUSAU

1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE CITY OF WAUSAU, PURSUANT TO THE PROVISIONS OF SECTION 62.22 (1) OR (1M), WISCONSIN STATUTES.



SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERSTS TO THE CITY.

SHEET NUMBER	PARCEL NUMBER	OWNERS	INTEREST REQUIRED	R/W ACRES REQUIRED NEW	EXISTING	TOTAL	PLE ACRES	TLE ACRES
4.06, 4.07	23	YOUTSOS REAL ESTATE, LLC	TLE	---	---	---	---	0.079
4.06, 4.07	26	ANTHONY A. DeCAMPOS AND GAIL DeCAMPOS, TRUSTEES OF THE ANTHONY A. DeCAMPOS FAMILY TRUST u/d/t NOVEMBER 11, 2009	FEE/TLE	0.073	---	0.073	---	0.109
4.07	27	SPDW PROPERTIES, LLC	FEE/TLE	0.004	---	0.004	---	0.056
4.07	28	YOUTSOS REAL ESTATE, LLC	FEE/TLE	0.029	---	0.029	---	0.134
4.07	29	DARWIN A. ZUELSDORFF & THEODORA L. ZUELSDORFF	FEE/PLE/TLE	0.047	---	0.047	0.014	0.039
4.07	31	TIMOTHY & KAY D. TREU	FEE/TLE	0.027	---	0.027	---	0.053
4.07	32	DARWIN A. ZUELSDORFF & THEODORA L. ZUELSDORFF	FEE/TLE	0.012	---	0.012	---	0.021
---	200	WISCONSIN PUBLIC SERVICE (ELECTRIC)	RELEASE OF RIGHTS	---	---	---	---	---

CTH U
CURVE 4 DATA
PI= 66U+02.74
Y = 210818.69
X = 275665.41
PC = 62U+68.83
Y = 211026.18
X = 275403.79
PCC = 69U+25.94
Y = 210741.77
X = 275990.34
T = 333.91
L = 657.11
R = 1500.00
DELTA = 25°05'59" LT
D = 03°49'11"

BRASS CAP MONUMENT
Y=212421.68
X=275693.29

T 29 N, R 7 E, SECTIONS 14, 15, 22, 23

COURSE TABLE		
COURSE	BEARING	DISTANCE
NE SEC. 22-362	S 12°23'59" W	1416.86'
362-361	N 38°25'05" E	45.86'
361-400	S 52°36'40" E	166.11'
400-426	S 52°27'57" E	4.51'
426-406	S 62°02'04" E	228.03'
406-409	S 2°14'57" E	45.37'
409-410	S 2°14'57" E	31.18'
410-411	S 87°45'03" W	30.00'
411-419	N 60°53'51" W	314.93'
419-424	N 53°41'13" W	76.72'
424-363	N 51°34'55" W	35.31'
363-362	N 38°25'05" E	41.00'

STATION-OFFSET TABLE		
POINT NO.	STATION	OFFSET
361	62+50.00	-45.86
362	62+50.00	0.00
363	62+50.00	41.00
364	62+49.47	51.61
400	64+20.52	-41.39
401	63+85.03	-53.66
403	64+91.39	-53.00
404	64+84.49	-79.54
405	66+42.19	-75.61
406	66+59.81	-41.00
407	66+63.52	-32.72
408	66+63.87	-32.75
409	66+79.51	0.00
410	66+92.43	28.32
411	66+65.85	41.00
412	66+62.26	33.31
413	66+71.38	53.00
414	64+93.07	66.18
415	64+80.70	46.00
416	64+77.58	41.00
417	64+14.96	24.38
418	63+44.04	20.35
419	63+59.55	41.00
420	63+63.23	46.00
421	63+70.50	56.00
422	62+94.87	53.44
423	62+69.47	75.12
424	62+84.87	41.09
425	62+67.14	19.84
426	64+25.13	-41.00
427	62+62.14	-66.10
428	62+70.09	-58.00

EXISTING MONUMENTS			
POINT	Y (NORTHING)	X (EASTING)	DESCRIPTION
IP 3050	210919.381	275604.444	1.00" OD IRON PIPE
IP 3057	210967.032	275452.354	0.75" IRON ROD
IP 3058	210919.763	275508.852	1.00" OD IRON PIPE
IP 3059	210904.851	275528.709	0.75" IRON ROD

Refer to the Title Sheet, recorded as Sheet 2 of 2, in Cabinet 3 of Plats, Page 525B, as Document No. 1608835 for additional information

ALL TLES SHOWN ON THIS SHEET ARE FOR SLOPE GRADING
EXISTING BUILDINGS WHICH OCCUPY TLE AREAS WILL NOT BE AFFECTED

EMCS

I, KEVIN C. BOYER, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 62.22 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE CITY, I HAVE SURVEYED TRANSPORTATION PROJECT PLAT 6999-18-20-4.07 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN KEVIN C BOYER S-2675 HEWITT WI LAND SURVEYOR

Kevin C Boyer DATE: 11/25/2011
KEVIN C. BOYER
REGISTERED LAND SURVEYOR NUMBER 2675
THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE CITY OF WAUSAU.
(SIGNATURE) DATE: 11/29/11
(PRINTED NAME) JAMES E. TIPPLE

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 6999-18-20-4.07
AMENDMENT NO:

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN MARATHON COUNTY, WISCONSIN AT 9:01 AM ON Nov. 30, 2011 AS DOCUMENT # 1609063. AND FILED IN Plat Cabinet 3, pg. 526 F
Michael J. Saxbow
SIGNATURE OF REGISTER OF DEEDS

SCALE, FEET
0 20 40

FILE NAME : P:\44xx\4448\RW Plat_CTH U TPP\040107_rp_.dgn
APPRAISAL PLAT DATE :
PLOT DATE : 11/28/2011
PLOT BY : kcb
PLOT NAME :
PLOT SCALE : 1:20

TRANSPORTATION PROJECT PLAT NO: 6999-18-20 - 4.08

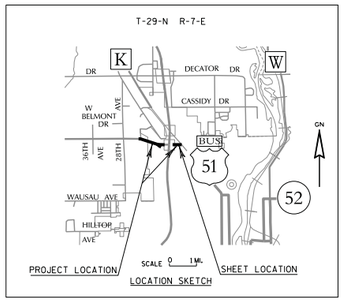
THAT PART OF CSM 4676 AND CSM 14407, LOCATED IN AND PART OF THE SW1/4 OF THE NW1/4 OF SECTION 23, TOWNSHIP 29 NORTH, RANGE 7 EAST, CITY OF WAUSAU, MARATHON COUNTY, WISCONSIN

RELOCATION ORDER CTH U, MARATHON COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE CITY OF WAUSAU DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 62.22, WISCONSIN STATUTES, THE CITY OF WAUSAU

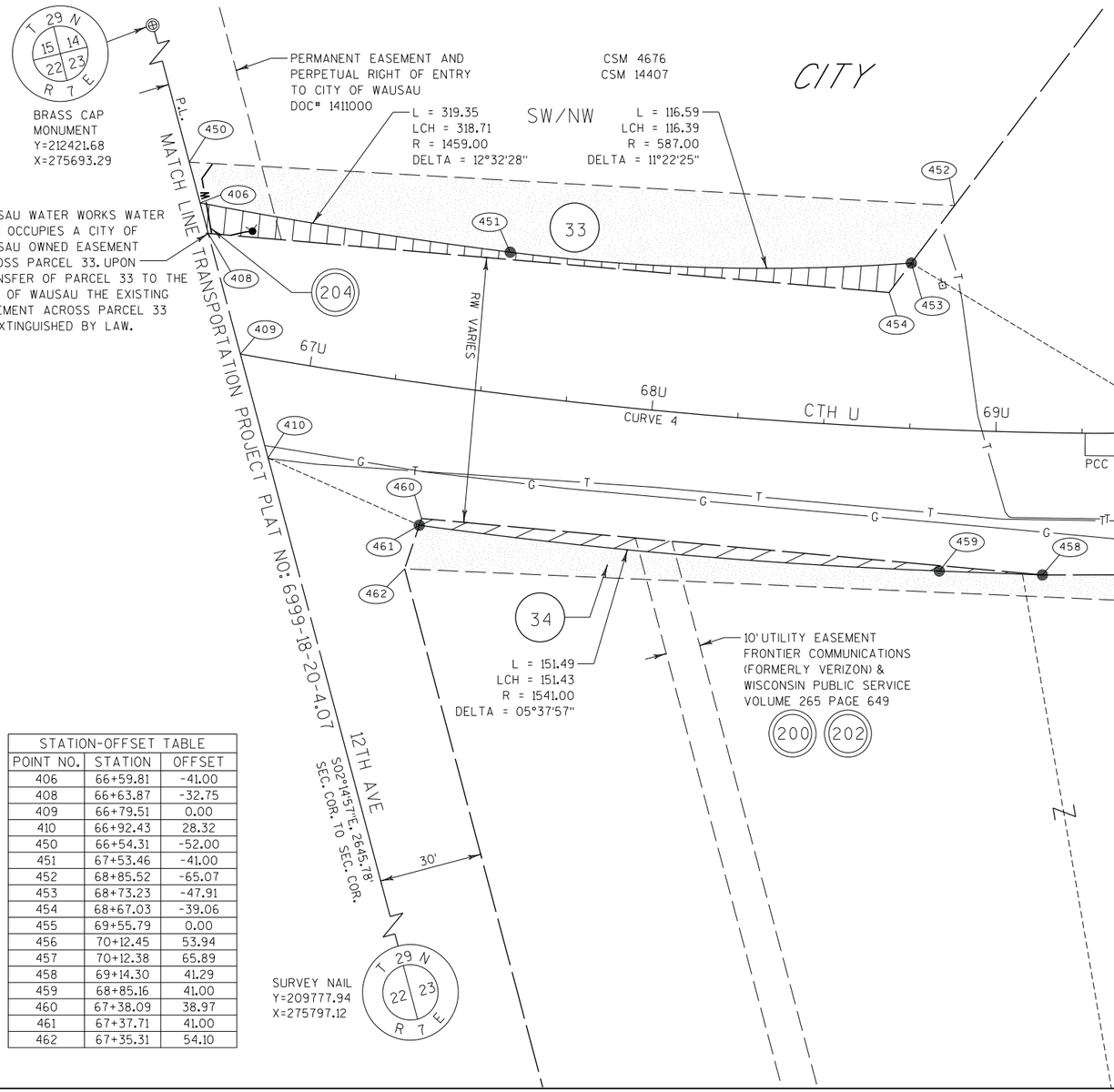
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE CITY OF WAUSAU, PURSUANT TO THE PROVISIONS OF SECTION 62.22 (1) OR (1M), WISCONSIN STATUTES.



SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERSTS TO THE CITY.

SHEET NUMBER	PARCEL NUMBER	OWNERS	INTEREST REQUIRED	R/W ACRES REQUIRED NEW	EXISTING	TOTAL	TLE ACRES
4.08	33	RIVER VALLEY BANK F/K/A/ RIVER VALLEY STATE BANK	FEE/TLE	0.019	---	0.019	0.094
4.08	34	EUGENE S. & JEANETTE ROETS	FEE/TLE	0.011	---	0.011	0.057
---	200	WISCONSIN PUBLIC SERVICE (ELECTRIC)	RELEASE OF RIGHTS	---	---	---	---
---	202	FRONTIER COMMUNICATIONS	RELEASE OF RIGHTS	---	---	---	---
---	204	WAUSAU WATER WORKS	RELEASE OF RIGHTS	---	---	---	---



CTH U
CURVE 4 DATA
PI = 66U+02.74
Y = 210818.69
X = 275665.41
PC = 62U+68.83
Y = 211026.18
X = 275403.79
PCC = 69U+25.94
Y = 210741.77
X = 275990.34
T = 333.91
L = 657.11
R = 1500.00
DELTA = 25°05'59" LT
D = 03°49'11"

CTH U
CURVE 5 DATA
PI = 70U+80.41
Y = 210706.18
X = 276140.66
PCC = 69U+25.94
Y = 210741.77
X = 275990.34
PT = 72U+12.56
Y = 210804.76
X = 276259.59
T = 154.47
L = 286.62
R = 310.00
DELTA = 52°58'29" LT
D = 18°28'57"

EXISTING MONUMENTS			
POINT	Y (NORTHING)	X (EASTING)	DESCRIPTION
IP 232	210680.007	276078.330	0.75" IRON ROD

COURSE TABLE		
COURSE	BEARING	DISTANCE
NE SEC. 22-409	S 02°14'57" E	1604.98'
409-406	N 2°14'57" W	45.37'
406-451	S 68°18'18" E	91.08'
451-453	S 75°47'01" E	116.40'
453-455	S 46°18'14" E	93.68'
455-456	S 46°19'21" E	81.63'
456-458	N 77°24'27" W	112.21'
458-459	N 75°07'27" W	29.94'
459-461	N 72°18'29" W	151.42'
461-410	N 53°19'27" W	48.02'
410-409	N 2°14'57" W	31.18'

STATION-OFFSET TABLE		
POINT NO.	STATION	OFFSET
406	66+59.81	-41.00
408	66+63.87	-32.75
409	66+79.51	0.00
410	66+92.43	28.32
450	66+54.31	-52.00
451	67+53.46	-41.00
452	68+85.52	-65.07
453	68+73.23	-47.91
454	68+67.03	-39.06
455	69+55.79	0.00
456	70+12.45	53.94
457	70+12.38	65.89
458	69+14.30	41.29
459	68+85.16	41.00
460	67+38.09	38.97
461	67+37.71	41.00
462	67+35.31	54.10

EMCS

I, KEVIN C. BOYER, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 62.22 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE CITY, I HAVE SURVEYED TRANSPORTATION PROJECT PLAT 6999-18-20-4.08 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN KEVIN C BOYER S-2675 HEWITT WI LAND SURVEYOR

Kevin C Boyer DATE: 11/29/2011
KEVIN C. BOYER
REGISTERED LAND SURVEYOR NUMBER 2675

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE CITY OF WAUSAU.

James E. Tipple DATE: 11/29/11
(SIGNATURE)
(PRINTED NAME) JAMES E. TIPPLE

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 6999-18-20-4.08
AMENDMENT NO:

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN MARATHON COUNTY, WISCONSIN AT 9:01 AM ON NOV. 30, 2011 AS DOCUMENT # 1609064 AND FILED IN plat cabinet 3, pg. 526 G

Michael J. Sydow
SIGNATURE OF REGISTER OF DEEDS

FILE NAME : P:\44xx\4448\RW Plat_CTH U TPP\040108_rp_.dgn
APPRAISAL PLAT DATE :
PLOT DATE : 11/28/2011
PLOT BY : kcb
PLOT NAME :
PLOT SCALE : 1:20

TRANSPORTATION PROJECT PLAT NO: 6999-18-20 - 4.08 AMENDMENT NO:1

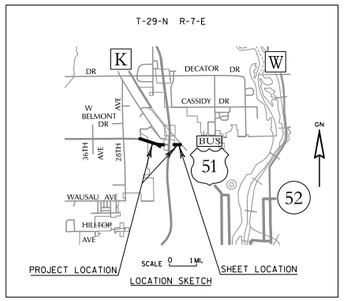
AMENDMENT REVISES PARCEL 34 OF TPP 6999-18-20-4.08, RECORDED IN CABINET 3 OF PLATS, PAGE 526G, AS DOCUMENT 1609064 AND ADDS PARCEL 35 BEING THAT PART OF CSM 4676 AND CSM 14407, LOCATED IN AND PART OF THE SW1/4 OF THE NW1/4 OF SECTION 23, TOWNSHIP 29 NORTH, RANGE 7 EAST, CITY OF WAUSAU, MARATHON COUNTY, WISCONSIN

RELOCATION ORDER CTH U, MARATHON COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE CITY OF WAUSAU DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 62.22, WISCONSIN STATUTES, THE CITY OF WAUSAU

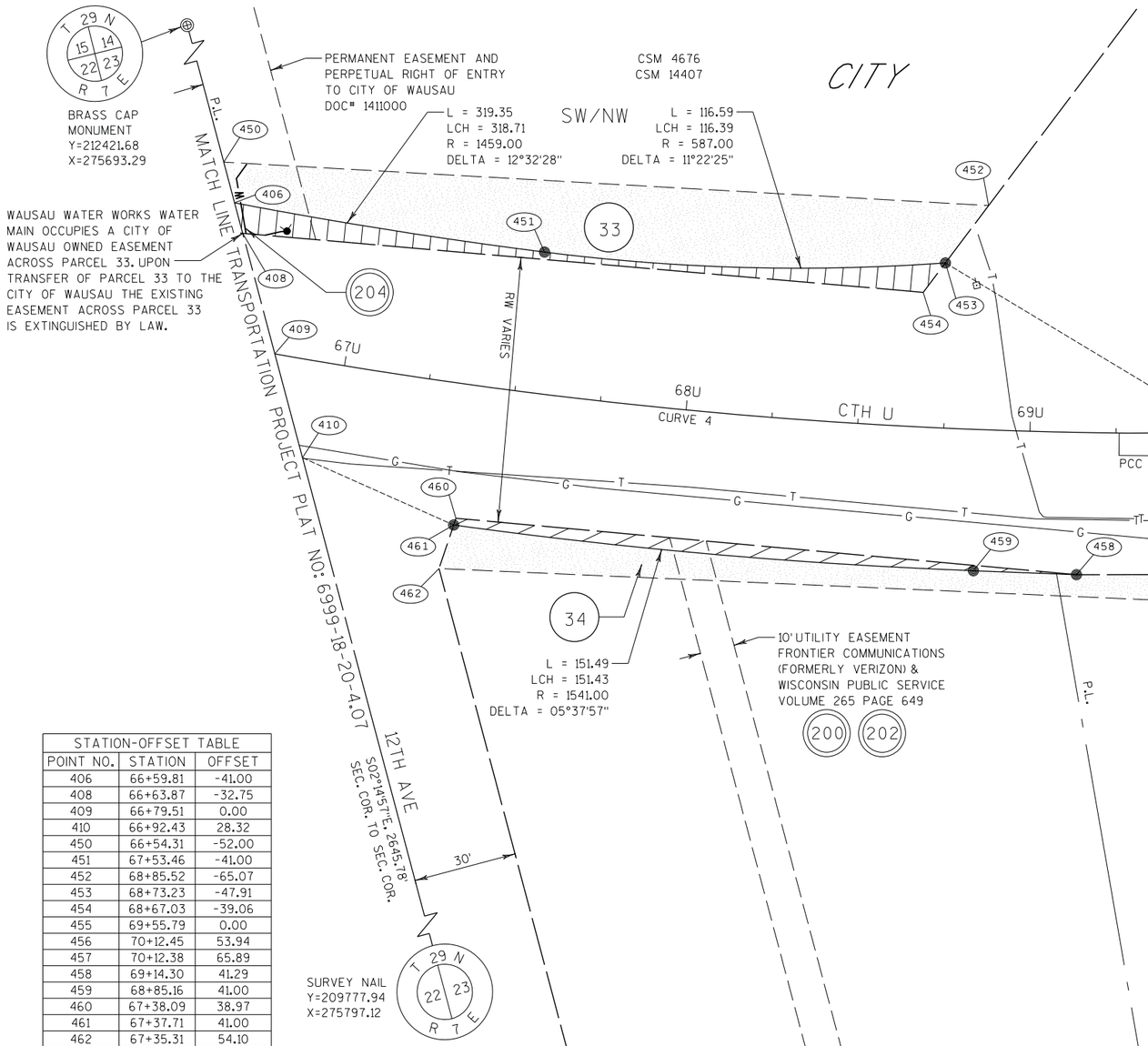
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE CITY OF WAUSAU, PURSUANT TO THE PROVISIONS OF SECTION 62.22 (1) OR (1M), WISCONSIN STATUTES.



SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERSTS TO THE CITY.

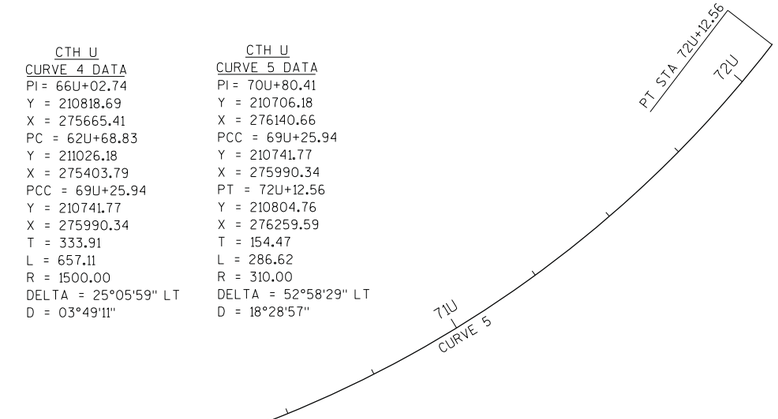
SHEET NUMBER	PARCEL NUMBER	OWNERS	INTEREST REQUIRED	R/W ACRES REQUIRED NEW	EXISTING	TOTAL	TLE ACRES
4.08	33	RIVER VALLEY BANK F/K/A/ RIVER VALLEY STATE BANK	FEE/TLE	0.019	---	0.019	0.094
4.08	34	COUNTY OF MARATHON	FEE/TLE	0.010	---	0.010	0.033
4.08	35	EUGENE S. & JEANETTE ROETS	FEE/TLE	0.001	---	0.001	0.024
---	200	WISCONSIN PUBLIC SERVICE (ELECTRIC)	RELEASE OF RIGHTS	---	---	---	---
---	202	FRONTIER COMMUNICATIONS	RELEASE OF RIGHTS	---	---	---	---
---	204	WAUSAU WATER WORKS	RELEASE OF RIGHTS	---	---	---	---



STATION-OFFSET TABLE		
POINT NO.	STATION	OFFSET
406	66+59.81	-41.00
408	66+63.87	-32.75
409	66+79.51	0.00
410	66+92.43	28.32
450	66+54.31	-52.00
451	67+53.46	-41.00
452	68+85.52	-65.07
453	68+73.23	-47.91
454	68+67.03	-39.06
455	69+55.79	0.00
456	70+12.45	53.94
457	70+12.38	65.89
458	69+14.30	41.29
459	68+85.16	41.00
460	67+38.09	38.97
461	67+37.71	41.00
462	67+35.31	54.10

CTH U
CURVE 4 DATA
PI = 66U+02.74
Y = 210818.69
X = 275665.41
PC = 62U+68.83
Y = 211026.18
X = 275403.79
PCC = 69U+25.94
Y = 210741.77
X = 275990.34
T = 333.91
L = 657.11
R = 1500.00
DELTA = 25°05'59" LT
D = 03°49'11"

CTH U
CURVE 5 DATA
PI = 70U+80.41
Y = 210706.18
X = 276140.66
PCC = 69U+25.94
Y = 210741.77
X = 275990.34
PT = 72U+12.56
Y = 210804.76
X = 276259.59
T = 154.47
L = 286.62
R = 310.00
DELTA = 52°58'29" LT
D = 18°28'57"



EXISTING MONUMENTS			
POINT	Y (NORTHING)	X (EASTING)	DESCRIPTION
IP 232	210680.007	276078.330	0.75" IRON ROD

COURSE TABLE		
COURSE	BEARING	DISTANCE
NE SEC. 22-409	S 02°14'57" E	1604.98'
409-406	N 2°14'57" W	45.37'
406-451	S 68°18'18" E	91.08'
451-453	S 75°47'01" E	116.40'
453-455	S 46°18'14" E	93.68'
455-456	S 46°19'21" E	81.63'
456-458	N 77°24'27" W	112.21'
458-459	N 75°07'27" W	29.94'
459-461	N 72°18'29" W	151.42'
461-410	N 53°19'27" W	48.02'
410-409	N 2°14'57" W	31.18'

EMCS

I, KEVIN C. BOYER, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 62.22 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE CITY, I HAVE SURVEYED TRANSPORTATION PROJECT PLAT 6999-18-20-4.08 AMENDMENT NO:1 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN KEVIN C BOYER S-2675 HEWITT WI LAND SURVEYOR

Kevin C. Boyer DATE: 02/23/2012
KEVIN C. BOYER
REGISTERED LAND SURVEYOR NUMBER 2675
THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE CITY OF WAUSAU.
SIGNATURE: DATE: 2/23/12
PRINTED NAME: JAMES E. TIPPLE

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 6999-18-20-4.08
AMENDMENT NO:1

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN MARATHON COUNTY, WISCONSIN, AT 8:41 AM ON Feb. 24, 2012 AS DOCUMENT #1614597 AND FILED IN plat cab. 3 pg. 529A

SIGNATURE OF REGISTER OF DEEDS

TRANSPORTATION PROJECT PLAT NO: 6999-18-20 - 4.09

THAT PART OF PARCEL 2 OF CSM 5184 AND PART OF LOT 1 OF CSM 6530, LOCATED IN AND PART OF THE NW1/4 OF THE NE1/4 OF SECTION 22, TOWNSHIP 29 NORTH, RANGE 7 EAST, CITY OF WAUSAU, MARATHON COUNTY, WISCONSIN

RELOCATION ORDER CTH U, MARATHON COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE CITY OF WAUSAU DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

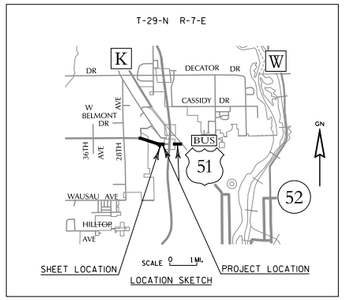
TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 62.22, WISCONSIN STATUTES, THE CITY OF WAUSAU

1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE CITY OF WAUSAU, PURSUANT TO THE PROVISIONS OF SECTION 62.22 (1) OR (1M), WISCONSIN STATUTES.

EXISTING MONUMENTS			
POINT	Y (NORTHING)	X (EASTING)	DESCRIPTION
IP 3046	211659.334	273428.187	0.75" IRON ROD
IP 3047	211747.313	273307.606	0.75" IRON ROD

6x6 STONE
Y=212400.27
X=273075.27

T 29 N
15
22
R 7 E



37U 38U 39U CTH U 40U 41U 42U 43U

PT STA 40U+68.34

PC STA 42U+83.30

CURVE 2

CURVE 3

S 87°56'24" E

CURVE 2
CURVE DATA
PI = 37U+84.22
Y = 211894.16
X = 273148.93
PC = 34U+95.95
Y = 211987.43
X = 272876.17
PT = 40U+68.34
Y = 211883.80
X = 273437.01
T = 288.26
L = 572.38
R = 1950.00
DELTA = 16°49'05" LT
D = 02°56'18"

COURSE TABLE		
COURSE	BEARING	DISTANCE
N1/4 SEC. 22-270	S 13°36'51" E	604.03'
270-269	N 84°14'29" E	98.79'
269-501	S 53°50'15" E	193.34'
501-502	S 41°01'32" W	66.24'
502-270	N 53°50'15" W	261.23'

CITY

MATCH LINE
TRANSPORTATION PROJECT PLAT
NO: 6999-18-20-4.04

N01°57'04"E, 5302.98 SEC. COR. TO SEC. COR.

P.I.

269 266 267 271 270 507 506 505 504 500 501 502 503

18 17

PARCEL 2
CSM 5184
VOL.19
PG.52

LOT 1
CSM 6530
VOL.24
PG.145

ARTHUR AVE

66'

IP 3047

IP 3046

NW/NE

OF

WAUSAU

STATION-OFFSET TABLE		
POINT NO.	STATION	OFFSET
250	37+19.51	0.00
266	40+00.00	60.66
267	40+00.00	80.54
269	39+53.30	68.51
270	38+60.63	90.00
271	38+12.00	97.51
500	41+17.88	161.01
501	41+09.42	173.40
502	40+67.82	224.90
503	40+68.84	240.12
504	39+71.67	171.22
505	39+53.80	203.82
506	38+74.13	154.47
507	38+83.02	136.90

CTH U
CURVE 3 DATA
PI = 44U+05.14
Y = 211871.69
X = 273773.59
PC = 42U+83.30
Y = 211876.07
X = 273651.83
PT = 45U+25.61
Y = 211836.26
X = 273890.16
T = 121.84
L = 242.31
R = 935.00
DELTA = 14°50'55" RT
D = 06°07'40"

GN

SCALE, FEET
0 20 40

Refer to the Title Sheet, recorded as Sheet 2 of 2, in Cabinet 3 of Plats, Page 525B, as Document No. 1608835 for additional information

ALL TLES SHOWN ON THIS SHEET ARE FOR SLOPE GRADING

SURVEY NAIL
Y=207100.36
X=273255.81

T 29 N
22
27
R 7 E

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERSTS TO THE CITY.

SHEET	PARCEL		INTEREST	R/W	ACRES REQUIRED		TLE
NUMBER	NUMBER	OWNERS	REQUIRED	NEW	EXISTING	TOTAL	ACRES
4.04, 4.09	17	MID STATE CONTRACTING, INC	FEE/TLE	0.117	---	0.117	0.193
4.04, 4.05, 4.09	18	HENNING CONSTRUCTION CO, INC	FEE/TLE	0.055	---	0.055	0.111

EMCS

I, KEVIN C. BOYER, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 62.22 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE CITY, I HAVE SURVEYED TRANSPORTATION PROJECT PLAT 6999-18-20-4.09 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN KEVIN C BOYER S-2675 HEWITT WI LAND SURVEYOR

Kevin C. Boyer DATE: 11/29/2011
KEVIN C. BOYER
REGISTERED LAND SURVEYOR NUMBER 2675
THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE CITY OF WAUSAU

(SIGNATURE) DATE: 11/29/11
(PRINTED NAME) JAMES E. TIPPLE

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 6999-18-20-4.09
AMENDMENT NO:

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN MARATHON COUNTY, WISCONSIN AT 9:21 AM ON Nov. 30, 2011 AS DOCUMENT # 1609065 AND FILED IN plat cabinet 3, pg. 526 H

SIGNATURE OF REGISTER OF DEEDS

6999-18-20 4.09

FILE NAME : P:\44xx\4448\RW Plat_CTH U TPP\040109_rp_.dgn
APPRAISAL PLAT DATE :
PLOT DATE : 11/28/2011 PLOT BY : kcb PLOT NAME : PLOT SCALE : 1:20

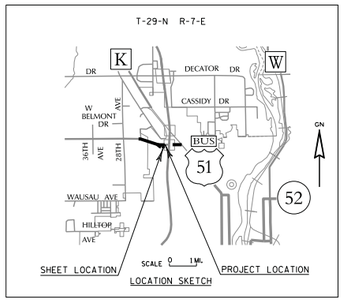
TRANSPORTATION PROJECT PLAT NO: 6999-18-20 - 4.10

THAT PART THE NW1/4 OF THE NE1/4 SECTION 22, TOWNSHIP 29 NORTH, RANGE 7 EAST, CITY OF WAUSAU, MARATHON COUNTY, WISCONSIN

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE CITY OF WAUSAU DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 62.22, WISCONSIN STATUTES, THE CITY OF WAUSAU

1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE CITY OF WAUSAU, PURSUANT TO THE PROVISIONS OF SECTION 62.22 (1) OR (1M), WISCONSIN STATUTES.



SURVEY NAIL
Y=207100.36
X=273255.81

N01°57'04"E, 5302.98'
SEC. COR. TO SEC. COR.

6x6 STONE
Y=212400.27
X=273075.27

T 29 N R 7 E, 27, 22

T 29 N R 7 E, 22, 15

CITY

LOT 2
CSM
9820
VOL. 40
PG. 43

P.L.

30' INGRESS/EGRESS EASEMENT
DOCUMENT NO. 546640 VOL. 488 PG. 409

NW/NE

SW/NE

4L+50 5L+00 5L+70

N 0°24'36" W

PI STA4L+50.00
Y=211054.9724
X=273811.8585

PI STA5L+70.00
Y=211174.9694
X=273810.9996

18TH AVE

80'

OF

33'

ARLINGTON LN

66'

ARTHUR AVE

PARCEL 2
CSM 5184
VOL.19
PG.52

PARCEL 3
CSM 5184
VOL.19
PG.52

IP 3041

STATION-OFFSET TABLE		
POINT NO.	STATION	OFFSET
550	5+33.94	0.00
551	5+43.79	41.84
552	5+14.00	55.00
553	5+14.00	42.07
554	5+14.00	0.00
555	5+14.00	-37.93
556	5+14.00	-50.00
557	5+25.00	-38.02

COURSE TABLE		
COURSE	BEARING	DISTANCE
N1/4 SEC. 22-550	S 30°15'47" E	1460.38'
550-551	N 76°21'07" E	42.98'
551-552	S 24°14'56" E	32.56'
552-553	S 89°35'24" W	12.93'
553-554	S 89°35'24" W	42.07'
554-555	S 89°35'24" W	37.93'
555-556	S 89°35'24" W	12.07'
556-557	N 47°02'29" E	16.27'
557-550	N 76°21'07" E	39.05'

EXISTING MONUMENTS			
POINT	Y (NORTHING)	X (EASTING)	DESCRIPTION
IP 3041	211493.286	273768.190	0.75" IRON ROD

GN

WAUSAU

SCALE, FEET
0 20 40

Refer to the Title Sheet, recorded as Sheet 2 of 2, in Cabinet 3 of Plats, Page 525B, as Document No. 1608835 for additional information

ALL TLES SHOWN ON THIS SHEET ARE FOR SLOPE GRADING

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERSTS TO THE CITY.

SHEET NUMBER	PARCEL NUMBER	OWNERS	INTEREST REQUIRED	TLE ACRES
4.10	36	JOSEPH A KARLEN	TLE	0.002
4.10	37	CHUCK & MARY ANN GHIDORZI	TLE	0.004
---	201	WISCONSIN PUBLIC SERVICE (GAS)	RELEASE OF RIGHTS	---

EMCS

I, KEVIN C. BOYER, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 62.22 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE CITY, I HAVE SURVEYED TRANSPORTATION PROJECT PLAT 6999-18-20-4.10 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN KEVIN C BOYER S-2675 HEWITT WI LAND SURVEYOR

Kevin C. Boyer DATE: 11/29/2011
KEVIN C. BOYER
REGISTERED LAND SURVEYOR NUMBER 2675
THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE CITY OF WAUSAU.

James E. Tipple DATE: 11/29/11
(SIGNATURE)
(PRINTED NAME) JAMES E. TIPPLE

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 6999-18-20-4.10
AMENDMENT NO:

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN MARATHON COUNTY, WISCONSIN AT 9:01 AM ON Nov. 30, 2011 AS DOCUMENT # 1609866 AND FILED IN plat cabinet 3, pg. 526 I

Michael J. Snyder
SIGNATURE OF REGISTER OF DEEDS

FILE NAME : P:\44xx\4448\RW Plat_CTH U TPP\040110_rp_.dgn
APPRAISAL PLAT DATE :
PLOT DATE : 11/28/2011 PLOT BY : kcb PLOT NAME : PLOT SCALE : 1:20

6999-18-20 4.10

TRANSPORTATION PROJECT PLAT NO: 6999-18-20 COORDINATES

CITY OF WAUSAU
MERRILL AVE
COUNTY RD U
BUSINESS 51 - WESTWOOD DRIVE
MARATHON COUNTY

WISCONSIN COUNTY COORDINATES (MARATHON)		
Point	Northing (Y)	Easting (X)
100	212397.07	271345.25
101	212397.69	271345.25
102	212438.32	271345.19
103	212438.49	271437.47
104	212430.24	271437.49
105	212430.83	271755.58
106	212420.99	271816.40
107	212408.33	271858.19
108	212389.18	271921.47
109	212378.34	271957.27
110	212309.68	271933.79
111	212301.41	271930.96
112	212306.82	271912.99
113	212230.91	271901.44
114	212269.27	271826.36
115	212327.11	271835.16
116	212331.59	271638.85
117	212326.25	271639.05
118	212357.45	271545.19
119	212357.45	271560.98
120	212364.47	271560.97
121	212357.35	271470.30
122	212347.85	271470.31
123	212347.78	271418.07
124	212364.20	271417.44
125	212364.07	271345.29
126	212397.41	271530.64
150	212293.65	272236.97
151	212229.81	272434.90
152	212237.79	272437.63
153	212196.59	272529.23
154	212115.55	272501.52
155	212076.75	272488.25
156	212230.06	272166.64
157	212232.38	272033.12
158	212257.22	271935.65
159	212249.20	271925.22
160	212215.89	272213.43
200	212182.43	272567.90
201	212164.87	272650.89
202	212183.63	272657.83
203	212140.18	272784.91
204	212125.98	272780.06
205	212093.69	272874.51
206	212081.76	272870.43
207	212028.10	272984.86
208	212041.00	272989.64
209	212033.31	273008.77
210	212055.85	273008.00
211	212005.00	273089.12
212	211931.62	273072.34
213	211880.98	273060.76
214	211870.78	273031.88
215	211933.15	272949.72
216	212047.27	272641.37
217	212065.42	272648.09
218	212066.03	272648.31
250	211927.37	273091.38
251	211986.49	273208.75
252	212018.99	273227.35

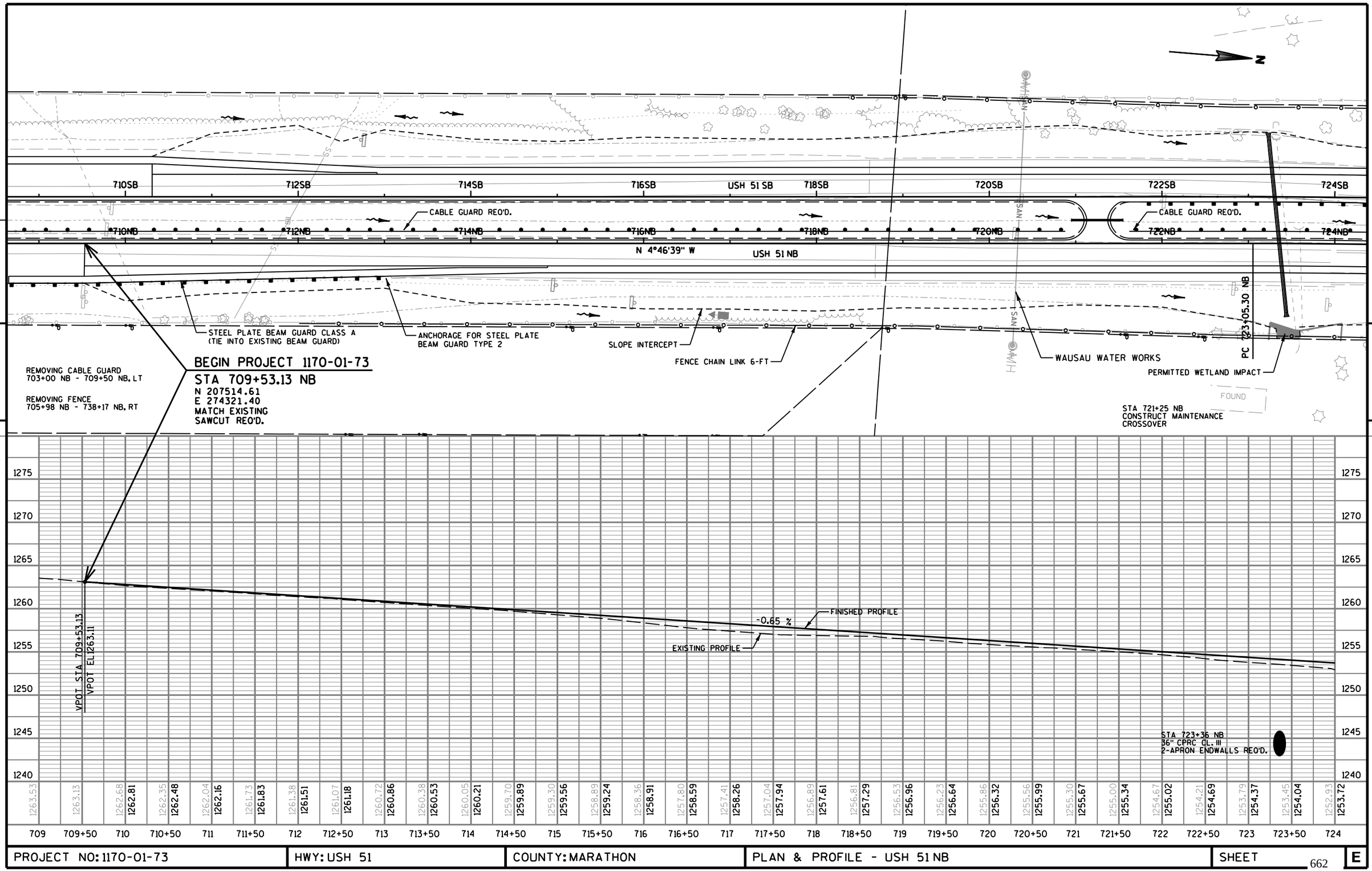
WISCONSIN COUNTY COORDINATES (MARATHON)		
Point	Northing (Y)	Easting (X)
253	212008.95	273301.96
254	211969.72	273312.04
255	211958.77	273439.70
256	211963.75	273439.88
257	211941.65	273525.65
258	211936.39	273671.80
259	211875.32	273668.51
260	211814.87	273665.26
261	211818.03	273649.74
262	211813.07	273649.07
263	211832.48	273435.16
264	211829.79	273400.77
265	211836.62	273373.73
266	211826.94	273364.47
267	211807.11	273363.06
268	211844.80	273286.07
269	211823.12	273315.74
270	211813.21	273217.45
271	211813.66	273165.93
272	211814.27	273095.23
273	211869.84	273093.34
274	211873.00	273135.64
275	211951.39	273381.08
300	211865.74	273760.84
301	211809.50	273776.44
302	211792.29	273775.99
303	211787.22	273775.86
304	211926.96	273743.86
305	211933.88	273741.66
306	211960.20	273733.31
307	212092.28	273891.96
308	212127.96	273856.79
309	212157.44	273829.79
310	212196.24	273873.74
311	212132.05	273937.01
350	211355.86	274988.10
351	211378.94	275018.27
352	211382.88	275021.30
353	211413.17	275044.58
354	211341.62	275134.80
355	211349.42	275062.19
356	211238.17	275202.47
357	211177.70	275302.10
358	211167.94	275294.36
359	211137.58	275334.09
360	211148.57	275342.81
361	211073.81	275417.53
362	211037.88	275389.04
363	211005.75	275363.56
364	210997.77	275356.55
365	210997.01	275335.95
366	211096.47	275279.18
367	211096.26	275249.44
368	211095.99	275211.16
369	211146.01	275214.37
370	211145.82	275186.96
371	211145.46	275137.51
372	211181.20	275119.81
373	211225.67	275110.14
374	211309.28	274958.31

WISCONSIN COUNTY COORDINATES (MARATHON)		
Point	Northing (Y)	Easting (X)
375	211324.70	274961.41
376	211337.39	274963.95
377	211097.39	275407.33
400	210972.94	275549.51
401	211002.06	275527.53
403	210947.23	275614.20
404	210973.51	275621.78
405	210901.77	275752.97
406	210863.27	275754.48
407	210854.23	275754.52
408	210854.12	275754.84
409	210817.93	275756.27
410	210786.77	275757.49
411	210785.60	275727.51
412	210794.12	275727.18
413	210772.32	275728.03
414	210843.06	275556.28
415	210866.96	275555.30
416	210872.90	275555.05
417	210920.61	275509.30
418	210964.38	275452.03
419	210938.38	275453.04
420	210932.11	275453.29
421	210919.61	275453.78
422	210967.73	275391.85
423	210966.90	275357.63
424	210983.81	275391.22
425	211011.68	275390.13
426	210970.20	275553.08
427	211082.12	275439.63
428	211070.86	275440.78
450	210875.48	275754.01
451	210829.60	275839.11
452	210814.50	275967.83
453	210801.01	275951.95
454	210794.08	275943.78
455	210736.30	276019.68
456	210679.88	276078.72
457	210667.95	276079.19
458	210704.38	275969.20
459	210712.07	275940.26
460	210759.86	275797.08
461	210758.09	275796.01
462	210746.69	275789.09
500	211721.11	273480.72
501	211709.04	273471.83
502	211659.07	273428.35
503	211643.82	273428.88
504	211719.08	273325.90
505	211688.37	273303.46
506	211747.37	273222.72
507	211763.52	273234.53
550	211138.91	273811.26
551	211149.06	273853.02
552	211119.36	273866.40
553	211119.27	273853.47
554	211118.97	273811.40
555	211118.70	273773.47
556	211118.61	273761.40
557	211129.70	273773.31

DATE : MAY 17, 2012
AMENDMENT NO. DATE :

EMCS

FILE NAME : P:\44xx\4448\RW Plat_CTH U TPP\040111_rp_coordinates.dgn
PLOT DATE : 5/22/2012
PLOT BY : walkup
PLOT NAME :
PLOT SCALE : 1:40



PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	PLAN & PROFILE - USH 51 NB	SHEET 662	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\050101_ppnb.dgn PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 40

MH

MH

N

PERMITTED WETLAND IMPACT

PERMITTED WETLAND IMPACT

PI 730+42.85 NB

724SB 726SB 728SB 730SB 732SB USH 51 SB 734SB 736SB 738F F RAMP 738SB

CABLE GUARD REQ'D.

724NB 726NB 728NB 730NB 732NB 734NB 736NB 738NB

USH 51 NB

N 5°45'27" E

E RAMP

PERMITTED WETLAND IMPACT

REMOVING FENCE
705+98 NB - 738+17 NB, RT

FENCE CHAIN LINK 6-FT

SLOPE INTERCEPT

PERMITTED WETLAND IMPACT

PT 737+76.25 NB

PERMITTED WETLAND IMPACT

WAUSAU WATER WORKS

5

5

1260 1255 1250 1245 1240 1235 1230 1225

-0.65 %

FINISHED PROFILE

EXISTING PROFILE

APPROX. ROCK ELEVATION

VCL 800.00
K = 838.32

VPC STA 734+50.00
VPC EL 1246.90

+0.51 %

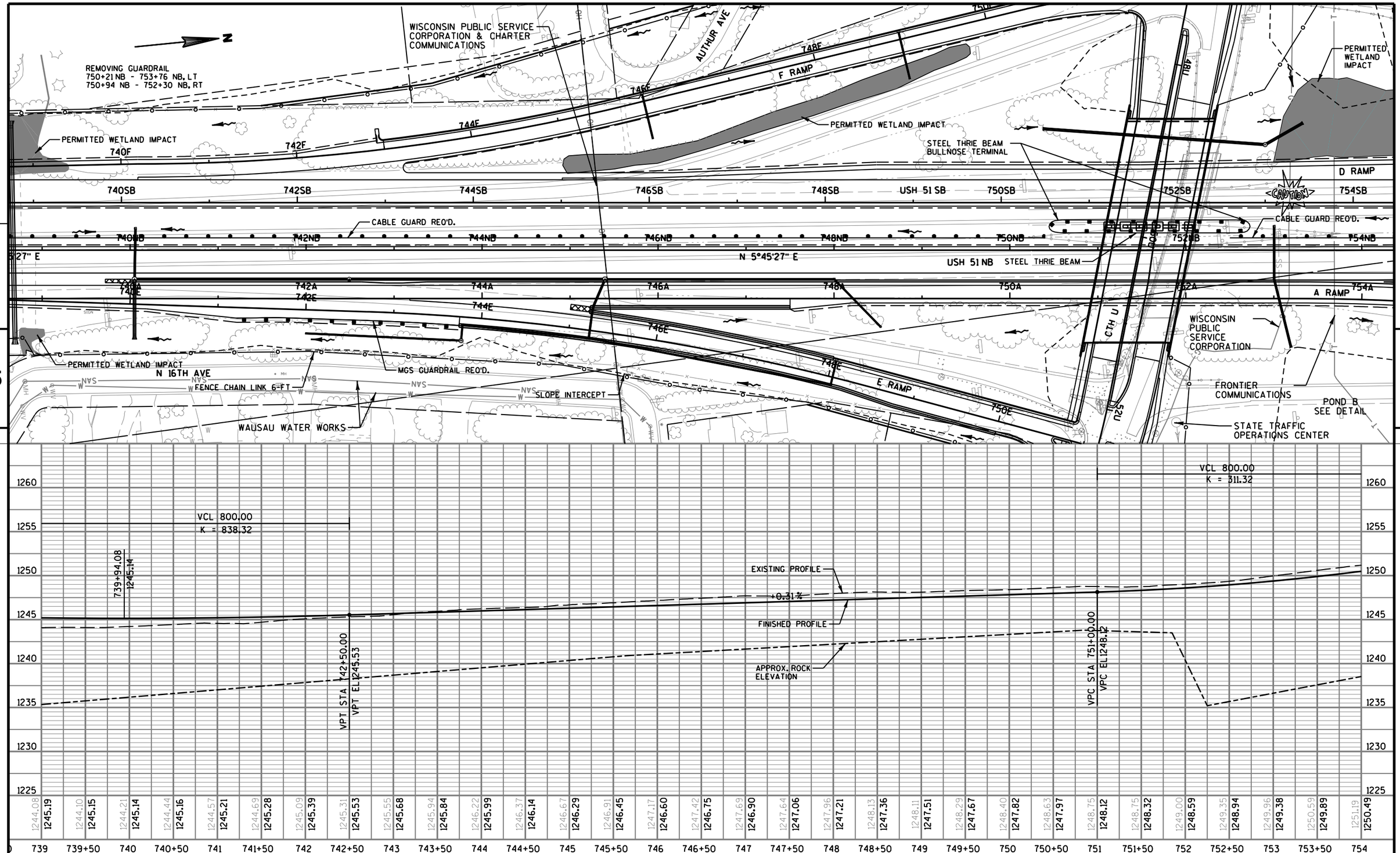
VPI STA 738+50.00
VPI EL 1244.31

STA 725+49 NB
1-INLET MEDIAN 1 GRATE, 30' LT (100)
1-INLET COVER TYPE MS
18" SSPRC CL. III
1-APRON ENDWALL REQ'D.

STA 733+50 NB
42" CPRC CL. III
2-APRON ENDWALL REQ'D.

STA 738+67 NB
48" CPRC CL. III
2-APRON ENDWALL REQ'D.

| | | |



PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	PLAN & PROFILE - USH 51 NB	SHEET 664 E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\050103_ppnb.dgn PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 40

REMOVING GUARDRAIL
759+60 NB - 762+38 NB, RT
760+07 NB - 762+95 NB, LT
763+48 NB, LT

FRONTIER COMMUNICATIONS

PERMITTED WETLAND IMPACT

754D 756D 758D 760D D RAMP 762D 764D

754SB 756SB 758SB 760SB USH 51 SB 762SB 764SB

PT 762+93.92 NB

766SB

BUS 51/CTH K

BUS 51/CTH K

768SB

CABLE GUARD REQ'D.

754NB 756NB N 5°45'27" E 758NB USH 51 NB 760NB 762NB 764NB 766NB 768NB N 5°40'05" W

SLOPE INTERCEPT MGS GUARDRAIL REQ'D.

754A 756A A RAMP 758A 760A

SLOPE INTERCEPT
MGS GUARDRAIL REQ'D.

POND B
SEE DETAIL

VPI STA 767+56.00
VPI EL 1285.46
-3.50 %

VPC STA 759+56.00
VPC EL 1262.46

FINISHED PROFILE

EXISTING PROFILE

766+77.57
1272.83

VCL 800.00
K = 311.32

+2.87 %

VPT STA 759+00.00
VPT EL 1260.85

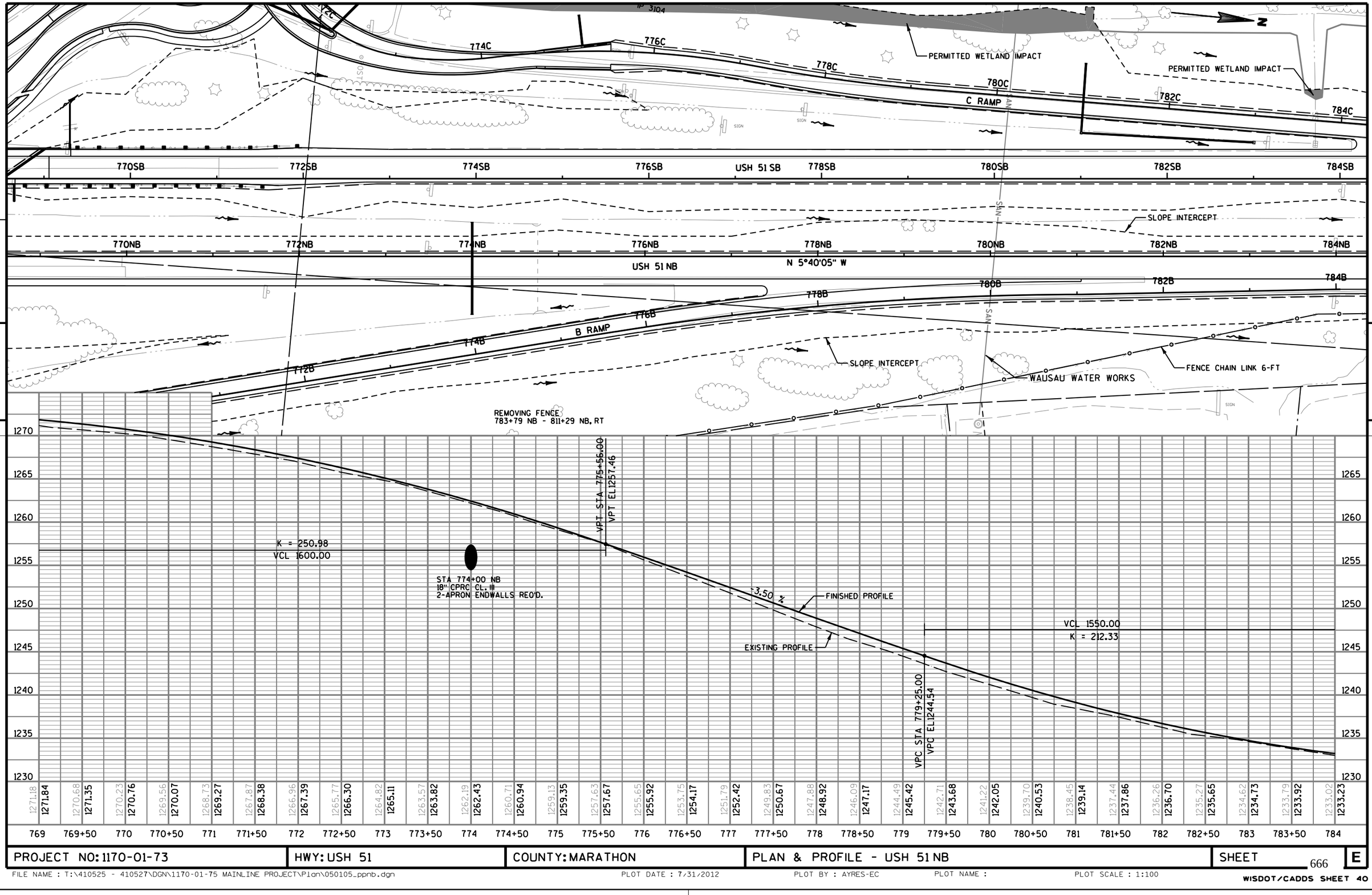
K = 250.98
VCL 1600.00

+0.31 %

VPI STA 755+00.00
VPI EL 1249.35

STA 765+14.11 NB
STRUCTURE B-37-153 REQ'D.
4-SPAN HAUNCHED STEEL GIRDER BRIDGE RE-DECK
40'-0" CLEAR ROADWAY
428'-2¼" OVERALL LENGTH
55°06'00" SKEW

| | | |



5

5

PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	PLAN & PROFILE - USH 51 NB	SHEET 666 E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\050105_ppnb.dgn PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:100

PERMITTED WETLAND IMPACT

BOS CREEK

PERMITTED WETLAND IMPACT

N

784C

786C

788C

C RAMP

784SB 786SB 788SB 790SB 792SB USH 51 SB 794SB 796SB 798SB

SLOPE INTERCEPT

784NB 786NB 788NB 790NB 792NB 794NB 796NB 798NB

USH 51 NB

N 5°40'05" W

B RAMP

PI 798+52.71 NB

5

PERMITTED WETLAND IMPACT

FENCE CHAIN LINK 6-FT

SLOPE INTERCEPT

REMOVING FENCE
783+79 NB - 811+29 NB, RT

STA 788+92 NB
CONSTRUCT B-37-167

VCL 1550.00
K = 212.33

786+68.15
231.54

FINISHED PROFILE

EXISTING PROFILE

VPT STA 794+75.00
VPT EL1246.87

VCL 200.00
K = 909.42

+3.80 %

+4.02 %

VPC STA 795+00.00
VPC EL1247.82

VPI STA 796+00.00
VPI EL1251.62

VPT STA 797+00.00
VPT EL1255.64

STA 787+66 NB
21" CPRC CL. III
2-APRON ENDWALLS REQ'D.

-3.50 %

VPI STA 787+00.00
VPI EL1217.42

1250 1245 1240 1235 1230 1225 1220 1215

1265 1260 1255 1250 1245 1240 1235 1230

| | | |

REMOVING GUARDRAIL
808+32 NB - 811+30 NB, LT
808+52 NB - 811+23 NB, RT
811+30 NB, LT
812+84 NB, LT

REMOVING FENCE
783+79 NB - 811+29 NB, RT

N

DECATOR DR

WISCONSIN PUBLIC SERVICE CORPORATION

800SB 802SB 804SB USH 51 SB 806SB 808SB 810SB 812SB 814SB

800NB 802NB 804NB 806NB 808NB 810NB 812NB 814NB

SLOPE INTERCEPT

MGS GUARDRAIL REO'D.

N 5°41'01" W

USH 51 NB

MGS GUARDRAIL REO'D.

CHARTER COMMUNICATIONS

5

STA 801+00 NB
CONSTRUCT MAINTENANCE
CROSSOVER

FENCE CHAIN LINK 6-FT

SLOPE INTERCEPT

END PROJECT 1170-01-73
STA 811+34.42 NB
MATCH EXISTING

5

1285 1280 1275 1270 1265 1260 1255 1250

+4.02 %

+4.02 %

+4.08 %

FINISHED PROFILE

EXISTING PROFILE

VP STA 811+34.42
VPIEL 1313.30

VPOT STA 813+00.00
VPOT EL 1320.05

1320 1315 1310 1305 1300 1295 1290 1285

| | | |

REMOVING FENCE
706+05 SB - 737+23 SB, LT

ABANDONING CULVERT PIPES
723+00 SB
723+40 SB

FENCE CHAIN LINK 6-FT

STA 722+00 SB
REMOVE AND REINSTALL
SIGN BRIDGE CANTILEVERED
S-37-64

SLOPE INTERCEPT

MGS GUARDRAIL REQ'D.

710SB 712SB 714SB 716SB USH 51 SB 718SB 720SB 722SB 724SB

N 4°46'39" W

710NB 712NB 714NB 716NB 718NB 720NB 722NB 724NB

USH 51 NB

PC 723+05.30 SB

WAUSAU WATER WORKS

PERMITTED WETLAND IMPACT

FOUND

5

5

BEGIN CONSTRUCTION 1170-01-73
STA 710+30.98 SB
N 207587.69
E 274261.11
MATCH EXISTING
SAWCUT REQ'D.

VPOT STA 710+30.98
VPOT EL 1262.89

-0.66 %

FINISHED PROFILE

EXISTING PROFILE

| | | |

REMOVING FENCE
706+05 SB - 737+23 SB, LT

FENCE CHAIN LINK 6-FT

SLOPE INTERCEPT

ABANDONING CULVERT PIPES
732+00 SB
733+67 SB
738+00 SB
738+86 SB

PI 730+43.83 SB

MGS GUARDRAIL REQ'D.

PERMITTED WETLAND IMPACT

PERMITTED WETLAND IMPACT

PERMITTED WETLAND IMPACT

PERMITTED WETLAND IMPACT

PERMITTED WETLAND IMPACT

PERMITTED WETLAND IMPACT

WAUSAU WATER WORKS

F RAMP

E RAMP

PT 737+88.03 SB

N 5°45'27" E

USH 51 NB

USH 51 SB

724SB 726SB 728SB 730SB 732SB 734SB 736SB 738SB 738F

724NB 726NB 728NB 730NB 732NB 734NB 736NB 738NB

5

5

VCL 800.00
K = 831.36

EXISTING PROFILE

-0.66 %

FINISHED PROFILE

+0.31 %

APPROX. ROCK ELEVATION

VPC STA 734+50.00
VPC EL 1247.00

VPI STA 738+50.00
VPI EL 1244.37

1254.04	1253.29	1253.07	1252.95	1252.66	1252.26	1252.02	1251.85	1251.36	1251.26	1251.04	1250.81	1250.49	1250.33	1249.88	1249.50	1249.29	1249.19	1248.80	1248.21	1247.80	1247.39	1246.99	1246.71	1246.56	1246.36	1246.17	1245.98	1245.90	1245.93	1245.88
1253.90	1253.57	1253.24	1252.91	1252.58	1252.25	1251.92	1251.60	1251.27	1250.94	1250.61	1250.28	1249.95	1249.62	1249.30	1248.97	1248.64	1248.31	1247.98	1247.65	1247.33	1247.00	1246.68	1246.40	1246.15	1245.92	1245.73	1245.57	1245.43	1245.33	1245.26

724 724+50 725 725+50 726 726+50 727 727+50 728 728+50 729 729+50 730 730+50 731 731+50 732 732+50 733 733+50 734 734+50 735 735+50 736 736+50 737 737+50 738 738+50 739

PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	PLAN & PROFILE - USH 51 SB	SHEET 670	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\050109_ppsb.dgn PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 40

REMOVING GUARDRAIL
750+31 SB - 753+86 SB, RT
751+69 SB - 753+12 SB, LT

ABANDONING CULVERT PIPES
743+00 SB

WISCONSIN PUBLIC SERVICE CORPORATION & CHARTER COMMUNICATIONS

SLOPE INTERCEPT

FENCE CHAIN LINK 6-FT

PERMITTED WETLAND IMPACT

AUTHUR AVE

F RAMP

PERMITTED WETLAND IMPACT

MGS GUARDRAIL REO'D.

PERMITTED WETLAND IMPACT

D RAMP

740SB 742SB 744SB 746SB 748SB USH 51 SB 750SB 752SB 754SB

N 5°45'27" E

740NB 742NB 744NB 746NB 748NB 750NB 752NB 754NB

USH 51 NB

740A 740E 742A 742E 744A 744E 746A 746E 748A 748E 750A 750E 752A 754A

A RAMP

E RAMP

PERMITTED WETLAND IMPACT

N 16TH AVE

WAUSAU WATER WORKS

WISCONSIN PUBLIC SERVICE CORPORATION

FRONTIER COMMUNICATIONS

POND B
SEE DETAIL

STATE TRAFFIC OPERATIONS CENTER

CTH U

CAUTION

VCL 800.00
K = 831.36

739+96.21
1245.20

VPT STA 742+50.00
VPT EL 1245.59

+0.31%

EXISTING PROFILE

FINISHED PROFILE

APPROX. ROCK ELEVATION

VCL 800.00
K = 304.79

VPC STA 751+00.00
VPC EL 1248.18

1260 1255 1250 1245 1240 1235 1230 1225

1245.88	1246.28	1246.50	1246.61	1246.57	1246.65	1246.74	1246.96	1246.98	1247.22	1247.39	1247.53	1247.66	1247.64	1247.83	1247.77	1248.10	1248.25	1248.30	1248.36	1248.46	1248.59	1248.71	1248.75	1248.96	1249.22	1249.32	1249.56	1249.85	1250.31	1250.64
1245.26	1245.22	1245.20	1245.22	1245.27	1245.34	1245.45	1245.59	1245.74	1245.90	1246.05	1246.20	1246.35	1246.51	1246.66	1246.81	1246.96	1247.12	1247.27	1247.42	1247.57	1247.73	1247.88	1248.03	1248.18	1248.38	1248.65	1249.01	1249.45	1249.97	1250.58

739 739+50 740 740+50 741 741+50 742 742+50 743 743+50 744 744+50 745 745+50 746 746+50 747 747+50 748 748+50 749 749+50 750 750+50 751 751+50 752 752+50 753 753+50 754

PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	PLAN & PROFILE - USH 51 SB	SHEET 671	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\050110_ppsb.dgn PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 40

FRONTIER COMMUNICATIONS

REMOVING GUARDRAIL
768+02 SB, RT
768+50 SB - 771+46 SB, RT

FENCE CHAIN LINK 6-FT

SLOPE INTERCEPT

STA 755+02 SB
CONSTRUCT C-37-0027

PERMITTED WETLAND IMPACT

PC 755+18.48 SB

PT 761+16.72 SB

754D 756D 758D 760D D RAMP 762D 764D

754SB 756SB 758SB 760SB USH 51 SB 762SB 764SB 766SB 768SB

N 5°45'27" E

N 5°40'05" W

754NB 756NB 758NB 760NB USH 51 NB 762NB 764NB 766NB 768NB

PI 758+18.60 NB

754A 756A A RAMP 758A 760A

SLOPE INTERCEPT

BUS 51/CTH K

BUS 51/CTH K

MGS GUARDRAIL REO'D.

POND B
SEE DETAIL

5

5

N

VPI STA 767+44.00
VPI EL 1285.85
-3.48 %

1285
1280
1275
1270
1265
1260
1255
1250
1245

FINISHED PROFILE

EXISTING PROFILE

VPC STA 759+44.00
VPC EL 1262.41

VPT STA 759+00.00
VPT EL 1261.13

VCL 800.00
K = 304.79

+2.93 %

+0.31 %

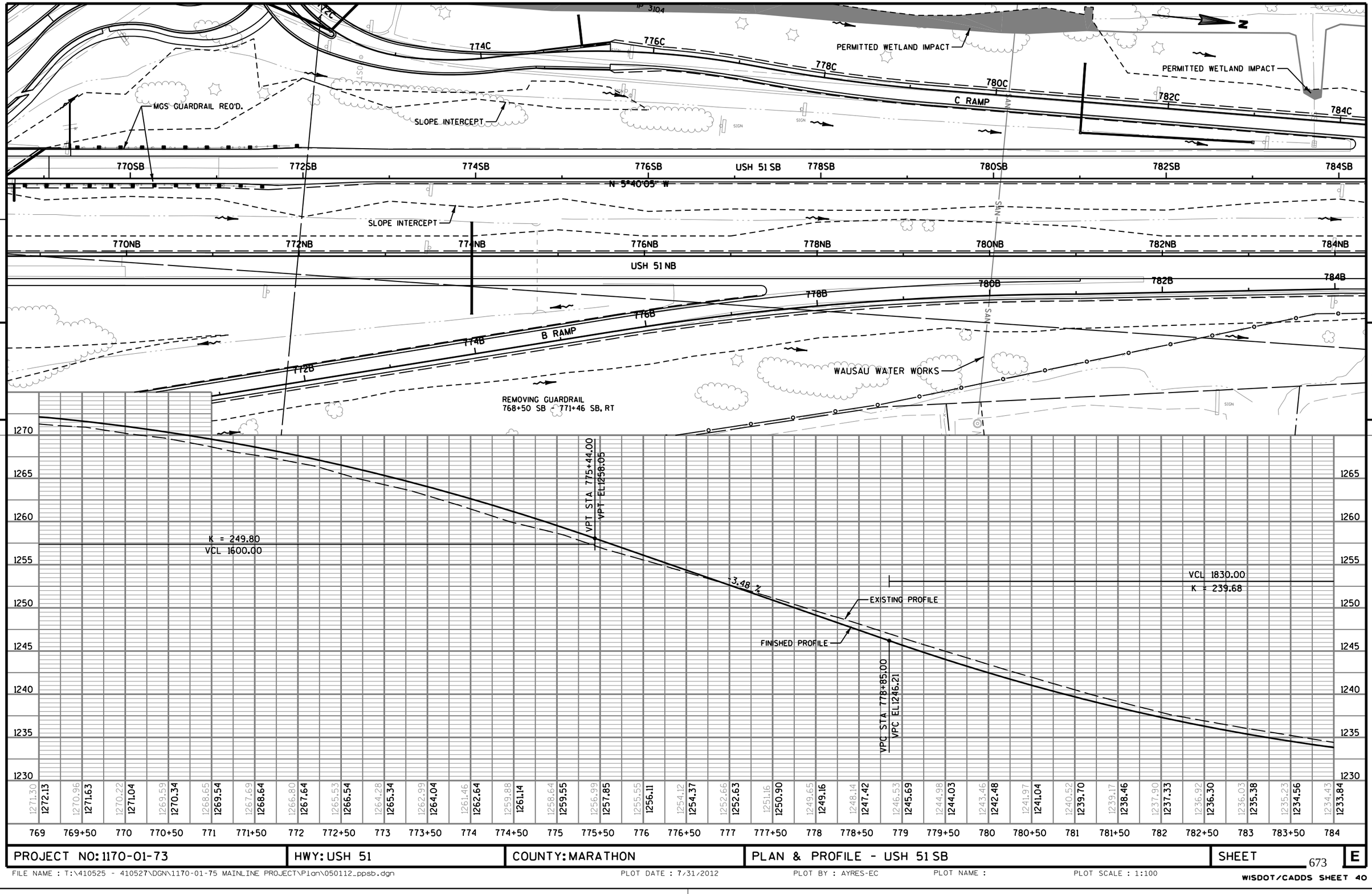
VPI STA 755+00.00
VPI EL 1249.41

766+75.93
1273.14

K = 249.80
VCL 1600.00

STA 766+38.72 SB
STRUCTURE B-37-154 REO'D.
4-SPAN HAUNCHED STEEL GIRDER BRIDGE RE-DECK
40'-0" CLEAR ROADWAY
428'-2¼" OVERALL LENGTH
55°06'00" SKEW

| | | |



PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	PLAN & PROFILE - USH 51 SB	SHEET 673 E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\050112_ppsb.dgn PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 40

ABANDONING CULVERT PIPES
789+71 SB

REMOVING FENCE
788+55 SB - 794+02 SB, LT
796+36 SB - 811+52 SB, LT

N

FENCE CHAIN LINK 6-FT

PERMITTED WETLAND IMPACT

STA 788+87 SB
CONSTRUCT B-37-167

BOS CREEK

PERMITTED WETLAND IMPACT

FENCE CHAIN LINK 6-FT

SLOPE INTERCEPT

784C
786C
788C
C RAMP

784SB 786SB 788SB 790SB 792SB 794SB USH 51 SB 796SB 798SB

N 5°40'05" W

SLOPE INTERCEPT

PI 795+03.81 SB

784NB 786NB 788NB 790NB 792NB 794NB 796NB 798NB

USH 51 NB

B RAMP

PERMITTED WETLAND IMPACT

5 5

VCL 1830.00
K = 239.68

VPC STA 798+00.00
VPC EL1256.01

K = 1248.49
VCL 200.00

+4.16 %

FINISHED PROFILE

EXISTING PROFILE

787+17.90
1231.73

STA 789+40 SB
21" CPRC CL. III
2-APRON ENDWALLS REO'D.

-3.48 %

VPI STA 788+00.00
VPI EL1214.41

VPT STA 797+15.00
VPT EL1252.47

1250	1245	1240	1235	1230	1225	1220	1215

784	784+50	785	785+50	786	786+50	787	787+50	788	788+50	789	789+50	790	790+50	791	791+50	792	792+50	793	793+50	794	794+50	795	795+50	796	796+50	797	797+50	798	798+50	799
1234.43	1233.70	1233.04	1232.50	1232.11	1231.79	1231.72	1231.57	1231.55	1231.86	1232.10	1232.43	1232.86	1233.13	1233.84	1234.61	1235.53	1236.23	1237.40	1238.68	1239.98	1241.27	1242.77	1244.44	1246.18	1247.99	1249.64	1251.74	1253.82	1255.84	1257.87	1259.86
1233.84	1233.23	1232.72	1232.32	1232.02	1231.83	1231.74	1231.76	1231.87	1232.10	1232.43	1232.86	1233.39	1234.03	1234.78	1235.63	1236.58	1237.64	1238.80	1240.07	1241.44	1242.91	1244.49	1246.18	1247.97	1249.86	1251.85	1253.93	1256.01	1258.08	1260.13

PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	PLAN & PROFILE - USH 51 SB	SHEET E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\050113_ppsb.dgn PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:100
WISDOT/CADDS SHEET 40

REMOVING FENCE
796+36 SB - 811+52 SB, LT

REMOVING GUARDRAIL
812+86 SB - 815+82 SB, RT
812+91 SB - 815+36 SB, LT

N

FENCE CHAIN LINK 6-FT

SLOPE INTERCEPT

DECATOR DR

WISCONSIN PUBLIC SERVICE CORPORATION

CHARTER COMMUNICATIONS

800SB 802SB 804SB USH 51 SB 806SB 808SB 810SB 812SB 814SB

N 5°40'41" W

SLOPE INTERCEPT

800NB 802NB 804NB 806NB 808NB 810NB 812NB 814NB

USH 51 NB

5

5

END CONSTRUCTION 1170-01-73
STA 813+50.00 SB
MATCH EXISTING
SAWCUT REQ'D.

1285 1280 1275 1270 1265 1260 1255 1250

1320 1315 1310 1305 1300 1295 1290 1285

K = 1248.49
VCL 200.00

VPI STA 799+00.00
VPI EL 1260.17

VPT STA 800+00.00
VPT EL 1264.17

+4.00 %

STA 801+29 SB
1-INLET MEDIAN 1 GRATE
1-INLET COVER TYPE MS
18" SSPRC CL. III
1-APRON ENDWALL REQ'D.

FINISHED PROFILE

EXISTING PROFILE

STA 812+02.59 SB
STRUCTURE B-37-156 REQ'D.
3-SPAN 36" PRESTRESSED CONCRETE
GIRDER BRIDGE DECK REPLACEMENT
40'-0" CLEAR ROADWAY
139'-10" OVERALL LENGTH
5°38'00" SKEW

+4.00 %

VPI STA 811+39.03
VPI EL 1309.73

+4.00 %

VPOT STA 813+50.00
VPOT EL 1318.23

1259.86 1260.13 1261.83 1262.16 1263.82 1264.17 1265.77 1266.17 1267.75 1268.17 1269.98 1270.17 1271.99 1272.17 1273.96 1274.17 1275.96 1276.17 1277.64 1278.17 1279.77 1280.17 1281.76 1282.17 1283.84 1284.17 1285.94 1286.17 1287.90 1288.17 1289.83 1290.17 1291.82 1292.17 1293.80 1294.17 1295.89 1296.17 1297.87 1298.17 1299.90 1300.17 1301.94 1302.17 1303.92 1304.17 1305.89 1306.17 1307.94 1308.17 1310.08 1310.17 1312.07 1312.17 1313.98 1314.17 1316.21 1316.17 1318.23 1318.23 1320.24

799 799+50 800 800+50 801 801+50 802 802+50 803 803+50 804 804+50 805 805+50 806 806+50 807 807+50 808 808+50 809 809+50 810 810+50 811 811+50 812 812+50 813 813+50 814

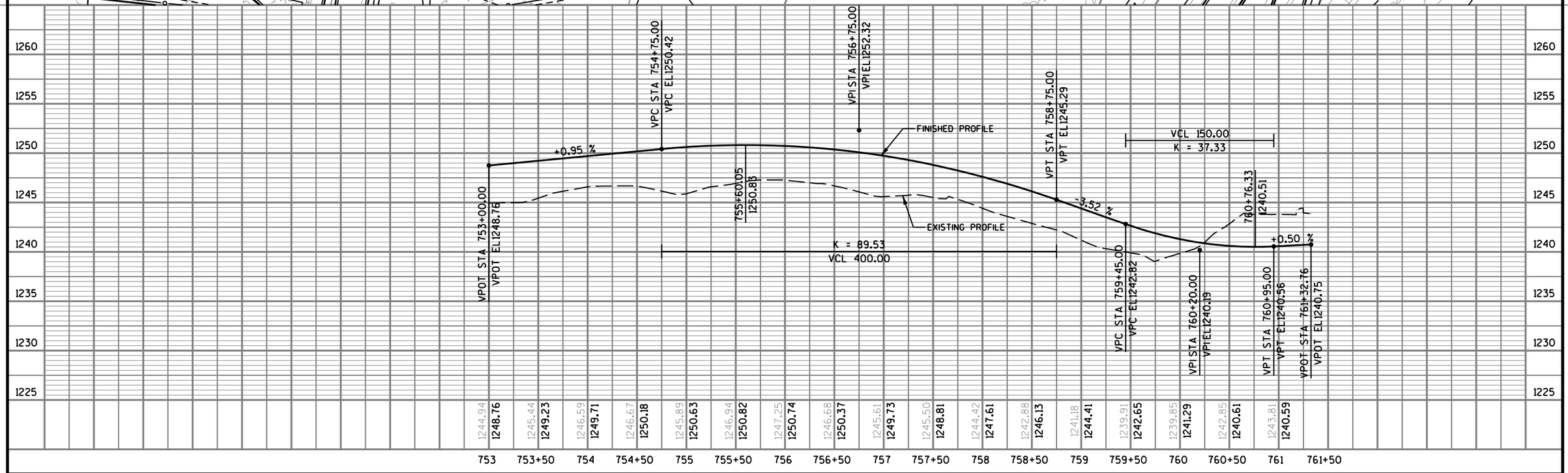
PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	PLAN & PROFILE - USH 51 SB	SHEET E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\050114_ppsb.dgn
PLOT DATE : 7/31/2012
PLOT BY : AYRES-EC
PLOT NAME :
PLOT SCALE : 1:100
WISDOT/CADDS SHEET 40

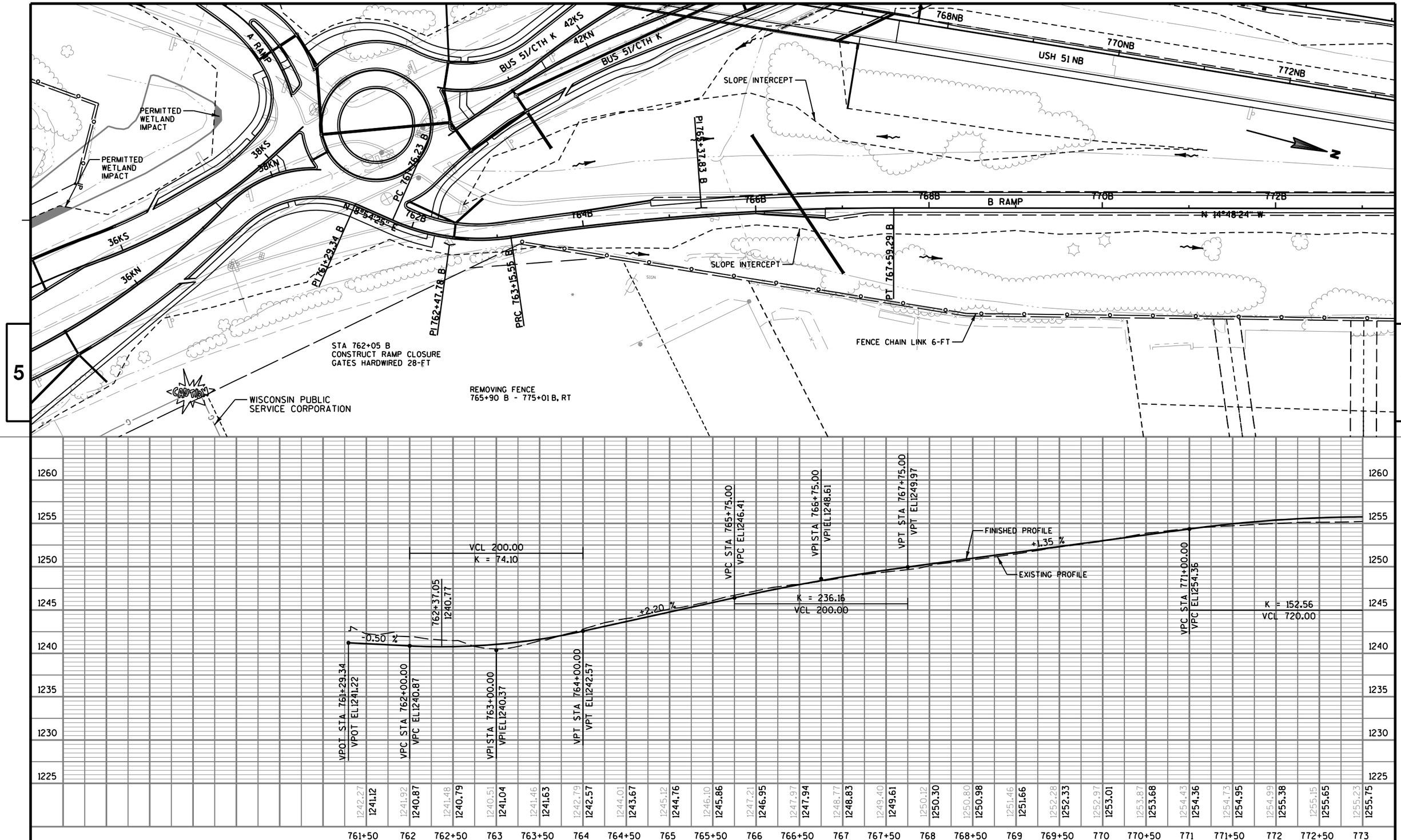
PERMITTED WETLAND IMPACT
F RAMP
CTH U
D RAMP
760SB
762NB
758SB
760NB
BUS 51/CTH K 42KS
42KN
PERMITTED WETLAND IMPACT
N
756SB
754SB USH 51 SB
PI 755+33.86 A
758NB
752SB
756NB
USH 51 NB
PI 760+51.18
750SB
754NB
CAUTION
760A
752NB
756A
A RAMP
758A
754A
PRC 759+56.00 A
750NB
752A
PC 753+24.55 A
FRONTIER COMMUNICATIONS
PRC 757+38.22 A
PI 758+47.41 A
PI 761+32.76 A
762B B RAMP
750A
38KS
38KN
POND B SEE DETAIL
SLOPE INTERCEPT
OBLITERATING OLD ROAD FRONTAGE ROAD - A RAMP
PERMITTED WETLAND IMPACT
FENCE CHAIN LINK 6-FT
WISCONSIN PUBLIC SERVICE CORPORATION
PERMITTED WETLAND IMPACT
REMOVING FENCE 752+87 A - 759+06 A, RT
E RAMP
STATE TRAFFIC OPERATIONS CENTER
STA 759+17 A CONSTRUCT S-37-105
REMOVING GUARDRAIL 751+92 A - 752+42 A, RT

5

5



PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	PLAN & PROFILE - A RAMP	SHEET 676	E



PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	PLAN & PROFILE - B RAMP	SHEET 677	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\050116_ppb.dgn PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 40

774SB
776SB
778SB
780SB
782SB
USH 51 SB
784SB
786SB
788SB
774NB
776NB
778NB
780NB
782NB
USH 51 NB
784NB
786NB
788NB
780C
C RAMP
782C
784C
786C
788C
774B
776B
778B
780B
782B
784B
B RAMP
N 14°48'24" W
N 6°48'50" W
PC 775+62.67 B
PI 778+34.90 B
PT 781+04.97 B
PI 784+05.03 B
PERMITTED WETLAND IMPACT
SLOPE INTERCEPT
WAUSAU WATER WORKS
FENCE CHAIN LINK 6-FT
REMOVING FENCE
765+90 B - 775+01 B, RT
779+15 B - 783+79 B, RT
SAN
SIGN
5

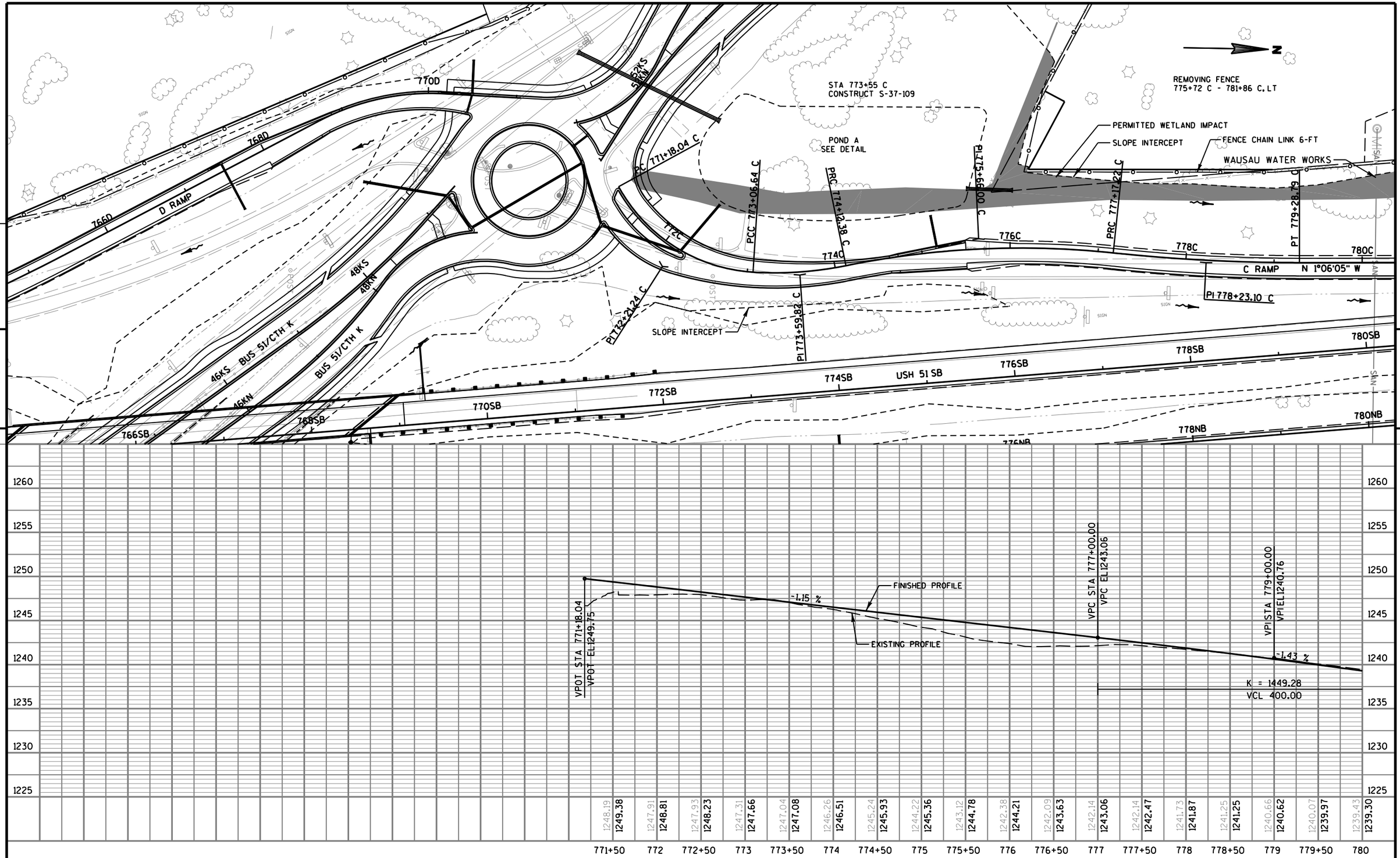
+1.35 %
VPI STA 774+60.00
VPI EL 1259.23
773+06.28
1255.75
K = 152.56
VCL 720.00
VPT STA 778+20.00
VPT EL 1247.10
FINISHED PROFILE
EXISTING PROFILE
-3.37 %
-3.26 %
-2.76 %
-2.06 %
VPI STA 779+00.00
VPI EL 1244.41
VPI STA 780+00.00
VPI EL 1241.15
VPI STA 781+00.00
VPI EL 1238.39
VPOT STA 782+00.00
VPOT EL 1236.33

1255 1250 1245 1240 1235 1230 1225 1220

1255.23	1255.75	1254.85	1255.69	1254.65	1255.47	1254.08	1255.08	1253.45	1254.52	1252.59	1253.81	1251.67	1252.93	1250.56	1251.88	1249.23	1250.67	1247.67	1249.30	1246.23	1247.77	1245.02	1246.09	1243.78	1244.41	1242.40	1242.78	1240.90	1241.15	1239.41	1239.77	1238.13	1238.39	1236.90	1237.36	1235.71	1236.33
773	773+50	774	774+50	775	775+50	776	776+50	777	777+50	778	778+50	779	779+50	780	780+50	781	781+50	782																			

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	PLAN & PROFILE - B RAMP	SHEET	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\050117_ppb.dgn PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:100
WISDOT/CADDS SHEET 40



PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	PLAN & PROFILE - C RAMP	SHEET 679	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\050118_ppc.dgn PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 40

ABANDONING CULVERT PIPES
783+70 C

REMOVING FENCE
775+72 C - 781+86 C, LT
783+55 C - 786+86 C, LT

FENCE CHAIN LINK 6-FT

PERMITTED WETLAND IMPACT

PERMITTED WETLAND IMPACT

SLOPE INTERCEPT

PERMITTED WETLAND IMPACT

WAUSAU WATER WORKS

BOS CREEK

PI 789+15.22 C

780C 782C 784C 786C 788C

'05" W C RAMP N 1°06'05" W

790SB USH 51 SB 792SB 794SB

788SB 786SB 784SB 782SB 780SB

794NB 792NB 790NB 788NB 786NB 784NB 782NB 780NB

USH 51 NB

784B 782B B RAMP

PERMITTED WETLAND IMPACT

5 5

VPT STA 781+00.00
VPT EL1237.91

VPC STA 783+00.00
VPC EL1235.05

VPI STA 784+00.00
VPI EL1233.63

VPT STA 785+00.00
VPT EL1232.06

EXISTING PROFILE

K = 1449.28
VCL 400.00

-1.43 %

FINISHED PROFILE

-1.57 %

K = 1413.83
VCL 200.00

1250 1245 1240 1235 1230 1225 1220 1215

1239.43 1239.30 1238.79 1238.61 1238.15 1237.91 1237.46 1237.19 1236.77 1236.48 1236.08 1235.77 1235.21 1235.05 1234.48 1234.33 1233.81 1233.59 1233.02 1232.83 1232.53 1232.06 1232.23 1231.80 1231.44 1231.26 1231.25 1231.39 1231.73 1232.07

780 780+50 781 781+50 782 782+50 783 783+50 784 784+50 785 785+50 786 786+50 787 787+50 788 788+50 789

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	PLAN & PROFILE - C RAMP	SHEET 680	E

PERMITTED WETLAND IMPACT

748SB

748NB

750SB

750NB

748A

750A

752D

752SB

752NB

CTH U

PI 754+58.31 D

SEE DITCH THRU EXISTING FRONTAGE ROAD DETAIL

WISCONSIN PUBLIC SERVICE CORPORATION

FRONTIER COMMUNICATIONS

CAUTION

N 4°36'42" E

754D

PC 754+58.31 D

PERMITTED WETLAND IMPACT

FENCE CHAIN LINK 6-FT

OBLITERATING OLD ROAD FRONTAGE ROAD - D RAMP

SLOPE INTERCEPT

REMOVING GUARDRAIL
752+83 D - 756+21 D, LT
753+00 D - 757+19 D, LT

REMOVING FENCE
753+82 D - 768+00 D, LT

RUINS

A/C

SIGN

754SB

754NB

752A

STATE TRAFFIC OPERATIONS CENTER

E RAMP

754A

USH 51 NB

USH 51 SB

756SB

756NB

D RAMP

756D

758D

760D

762D

758SB

760SB

762SB

758NB

PI 760+18.22 D

A RAMP

756A

POND B
SEE DETAIL

5

5

1270
1265
1260
1255
1250
1245
1240
1235

VCL 500.00
K = 205.18

VPRC STA 759+50.00
VPRC EL1259.85

K = 103.22
VCL 600.00

FINISHED PROFILE

EXISTING PROFILE

+0.71 %

-3.15 %

VPOT STA 754+00.00
VPOT EL1249.84

VPC STA 754+50.00
VPC EL1250.20

VPI STA 757+00.00
VPI EL1251.98

752	752+50	753	753+50	754	754+50	755	755+50	756	756+50	757	757+50	758	758+50	759	759+50	760	760+50	761	761+50	762
1256.46	1258.13	1246.33	1243.58	1243.59	1244.42	1246.32	1248.11	1248.87	1249.99	1251.06	1253.16	1254.53	1255.10	1257.19	1259.73	1261.57	1263.84	1267.14	1269.61	1272.30
1249.84	1250.20	1250.61	1251.15	1251.81	1252.60	1253.50	1255.68	1256.95	1258.34	1259.85	1261.31	1262.52	1263.49	1264.22	1264.70

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	PLAN & PROFILE - D RAMP	SHEET 681 E

REMOVING FENCE
753+82 D - 768+00 D, LT

STA 770+31 D
CONSTRUCT RAMP CLOSURE
GATES HARDWIRED 28-FT

FENCE CHAIN LINK 6-FT

SLOPE INTERCEPT

SLOPE INTERCEPT

PC 768+10.63 D

PI 769+46.38 D

PT 770+18.38 D

PI 771+05.00 D

PT 765+43.93 D

766D

768D

770D

N 28°47'48" W

N 2°12'23" E

764D

D RAMP

762D

762SB

USH 51 SB 764SB

766SB

46KS BUS 51/CTH K

46KN

48KS

48KN

BUS 51/CTH K

CTH K 54KS

54KN CTH K

52KS

52KN

PERMITTED WETLAND IMPACT

POND A
SEE DETAIL

772C

C RAMP

774C

776C

N

5

5

VPI STA 762+50.00
VPI EL1269.30

+3.15 %

762+75.16
1264.98

K = 103.22
VCL 600.00

VPT STA 765+50.00
VPT EL1261.32

EXISTING PROFILE

FINISHED PROFILE

-2.66 %

VCL 150.00
K = 47.43

VPC STA 769+25.00
VPC EL1251.33

VPI STA 770+00.00
VPI EL1249.33

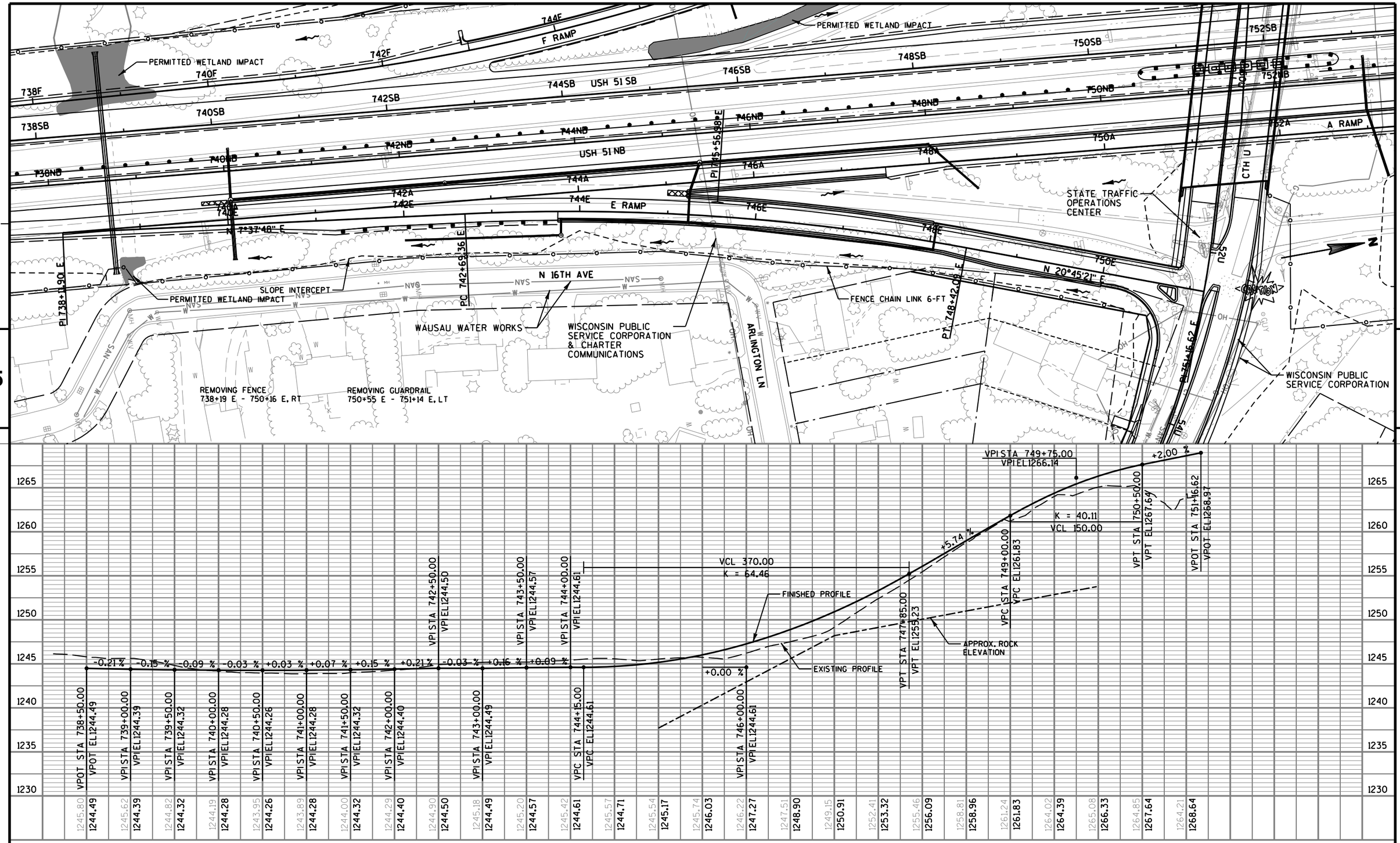
770+51.29
1249.65

-0.50 %

VPT STA 770+75.00
VPT EL1249.71

VPOT STA 771+05.00
VPOT EL1249.86

| | | |



PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	PLAN & PROFILE - E RAMP	SHEET 683	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\050122_ppe.dgn PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:100

REMOVING FENCE
737+23 F - 752+27 F, LT

PERMITTED WETLAND IMPACT

PERMITTED WETLAND IMPACT

PERMITTED WETLAND IMPACT

PERMITTED WETLAND IMPACT

PERMITTED WETLAND IMPACT

732SB
734SB
736SB
738F
738SB
740F
740SB
742F
742SB
744F
744SB
746F
746SB
732NB
734NB
736NB
738NB
740NB
742NB
744NB
746NB

PC 737+18.72 F

PC 740+19.10 F

PC 742+98.68 F

PC 745+75.45 F

N 4°33'31" E

FENCE CHAIN LINK 6-FT

SLOPE INTERCEPT

WISCONSIN PUBLIC SERVICE CORPORATION & CHARTER COMMUNICATIONS

ASPHALTIC FLUME

ARLINGTON LN

F RAMP

E RAMP

USH 51 SB

USH 51 NB

N 16TH AVE

5

5

1265
1260
1255
1250
1245
1240
1235
1230

VCL 550.00
K = 144.58

EXISTING PROFILE

APPROX. ROCK ELEVATION

FINISHED PROFILE

-0.16 %
-0.04 %
-0.04 %
-0.20 %
+0.50 %
4.30 %

VPI STA 740+50.00
VPI EL 1244.38

VPI STA 741+00.00
VPI EL 1244.30

VPI STA 741+50.00
VPI EL 1244.28

VPI STA 742+00.00
VPI EL 1244.26

VPI STA 742+50.00
VPI EL 1244.16

VPC STA 742+75.00
VPC EL 1244.29

VPI STA 745+50.00
VPI EL 1245.66

| | | |

ARLINGTON LN
AUTHUR AVE
CHARTER COMMUNICATIONS
WISCONSIN PUBLIC SERVICE CORPORATION
STA 751+68 F
CONSTRUCT RAMP GATES
SOLAR POWERED 40-FT
FENCE CHAIN LINK 6-FT
SLOPE INTERCEPT
PI 745+75.45 F
PI 751+19.31 F
CTH U
746F
748F
750F
752F
F RAMP
N 7°48'25" W
N 8°52'58" E
PC 750+45.97 F
PT 751+93.81 F
PERMITTED WETLAND IMPACT
FRONTIER COMMUNICATIONS
WISCONSIN PUBLIC SERVICE I CORPORATION
PERMITTED WETLAND IMPACT
REMOVING FENCE
737+23 F - 752+27 F, LT
RUINS
A/C
746SB
USH 51 SB
748SB
750SB
752SB
746NB
USH 51 NB
748NB
750NB
5
5

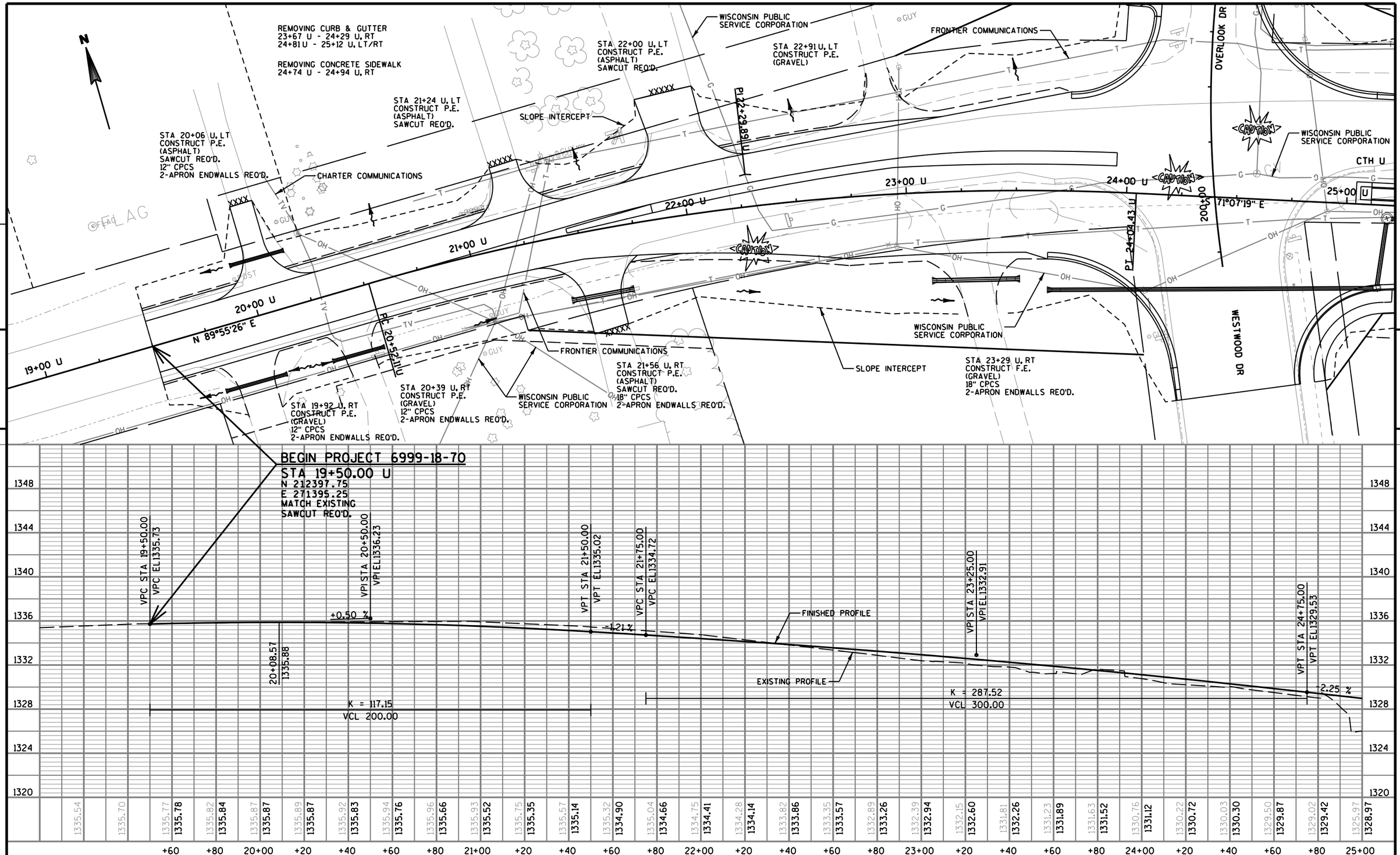
VPC STA 749+75.00
VPC EL1263.95
VPI STA 750+75.00
VPI EL1268.26
+2.00 %
+4.30 %
K = 86.80
VCL 200.00
VCL 550.00
K = 144.58
VPT STA 751+75.00
VPT EL1270.26
VPOT STA 752+32.16
VPOT EL1271.40
VPT STA 748+25.00
VPT EL1257.50
FINISHED PROFILE
EXISTING PROFILE
APPROX. ROCK ELEVATION

1275 1270 1265 1260 1255 1250 1245 1240

1271.56	1271.20	1267.22	1267.53	1265.74	1264.30	1262.03	1260.31	1259.12	1258.55	1257.82	1258.55	1262.16
1249.56	1251.02	1252.66	1254.46	1256.44	1258.57	1260.72	1262.88	1264.99	1266.86	1268.43	1269.72	1270.76

746 746+50 747 747+50 748 748+50 749 749+50 750 750+50 751 751+50 752

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	PLAN & PROFILE - F RAMP	SHEET 685	E



PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	PLAN & PROFILE - CTH U	SHEET 686 E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\050125_ppu.dgn PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:40

WISDOT/CADDS SHEET 40

REMOVING CURB & GUTTER
24+81 U - 25+12 U, LT/RT

STA 27+16 U, LT
CONSTRUCT P.E.
(ASPHALT)
SAWCUT REQ'D.

FRONTIER COMMUNICATIONS

SLOPE INTERCEPT

CHARTER COMMUNICATIONS

STA 30+44 U, LT
CONSTRUCT P.E.
(ASPHALT)
SAWCUT REQ'D.

WISCONSIN PUBLIC
SERVICE CORPORATION

CAUTION

CAUTION

CAUTION

25+00 U

26+00 U

27+00 U

28+00 U

CTH U

29+00 U

30+00 U

31+00 U

S 71°07'19" E

WISCONSIN PUBLIC
SERVICE CORPORATION

FRONTIER COMMUNICATIONS

WISCONSIN PUBLIC
SERVICE CORPORATION

WISCONSIN PUBLIC
SERVICE CORPORATION

STA 27+31 U, LT
CONSTRUCT P.E.
(GRAVEL)

STA 28+01 U, LT
CONSTRUCT P.E.
(GRAVEL)

SLOPE INTERCEPT

5

5

-2.25 %

VPC STA 25+50.00
VPC EL 1327.85

VPI STA 27+00.00
VPI EL 1324.47

K = 333.58
VCL 300.00

VPT STA 28+50.00
VPT EL 1319.75

EXISTING PROFILE

FINISHED PROFILE

-3.15 %

VPC STA 31+00.00
VPC EL 1311.87

APPROX. ROCK
ELEVATION

1332
1328
1324
1320
1316
1312
1308
1304

25+00	+20	+40	+60	+80	26+00	+20	+40	+60	+80	27+00	+20	+40	+60	+80	28+00	+20	+40	+60	+80	29+00	+20	+40	+60	+80	30+00	+20	+40	+60	+80	31+00
1325.97	1326.09	1326.44	1326.80	1327.19	1327.02	1326.48	1326.49	1326.24	1325.58	1324.79	1324.86	1324.52	1324.10	1323.45	1322.85	1322.32	1321.90	1321.36	1320.40	1319.20	1318.56	1317.82	1317.11	1316.45	1315.68	1314.98	1313.76	1312.41	1311.76	1310.51
1328.97	1328.52	1328.07	1327.62	1327.16	1326.68	1326.20	1325.70	1325.19	1324.67	1324.13	1323.59	1323.03	1322.46	1321.88	1321.28	1320.68	1320.06	1319.43	1318.80	1318.17	1317.54	1316.91	1316.28	1315.65	1315.02	1314.39	1313.76	1313.13	1312.50	1311.87

PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	PLAN & PROFILE - CTH U	SHEET E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\050126_ppu.dgn
PLOT DATE : 7/31/2012
PLOT BY : AYRES-EC
PLOT NAME :
PLOT SCALE : 1:40
WISDOT/CADDS SHEET 40

STA 31+38 U, LT
CONSTRUCT P.E.
(ASPHALT)
SAWCUT REQ'D.

STA 32+58 U, LT
CONSTRUCT P.E.
(ASPHALT)
SAWCUT REQ'D.

STA 33+44 U, LT
CONSTRUCT P.E.
(ASPHALT)
SAWCUT REQ'D.

STA 34+38 U, LT
CONSTRUCT P.E.
(ASPHALT)
SAWCUT REQ'D.

STA 35+34 U, LT
CONSTRUCT P.E.
(ASPHALT)
SAWCUT REQ'D.

STA 36+34 U, LT
CONSTRUCT P.E.
(GRAVEL)

STA 36+84 U, LT
CONSTRUCT P.E.
(GRAVEL)

CHARTER COMMUNICATIONS

FRONTIER COMMUNICATIONS

SLOPE INTERCEPT

FRONTIER COMMUNICATIONS

CHARTER COMMUNICATIONS

WISCONSIN PUBLIC
SERVICE CORPORATION

WISCONSIN PUBLIC
SERVICE CORPORATION

CAUTION

CAUTION

CAUTION

CAUTION

CAUTION

PC 34+93.95 U

WISCONSIN PUBLIC
SERVICE CORPORATION

CTH U

31+00 U

32+00 U

33+00 U

34+00 U

35+00 U

36+00 U

37+00

S 71°07'19" E

5

5

N

WISCONSIN PUBLIC
SERVICE CORPORATION

SLOPE INTERCEPT

VPC STA 31+00.00
VPC EL.1311.87

EXISTING PROFILE

FINISHED PROFILE

APPROX. ROCK
ELEVATION

VPI STA 35+00.00
VPI EL.1299.27

-3.15 %

-4.00 %

K = 941.18
VCL 800.00

1312
1308
1304
1300
1296
1292
1288
1284

31+00	+20	+40	+60	+80	32+00	+20	+40	+60	+80	33+00	+20	+40	+60	+80	34+00	+20	+40	+60	+80	35+00	+20	+40	+60	+80	36+00	+20	+40	+60	+80	37+00
1310.51	1309.43	1308.16	1308.00	1308.06	1308.22	1308.16	1308.04	1307.64	1306.97	1306.50	1305.96	1305.22	1304.81	1304.40	1303.51	1302.62	1301.63	1300.87	1299.91	1299.18	1298.48	1297.77	1297.05	1296.32	1295.49	1294.60	1293.48	1292.78	1292.44	1292.07
1311.87	1311.24	1310.60	1309.96	1309.32	1308.67	1308.01	1307.36	1306.69	1306.03	1305.36	1304.68	1304.00	1303.32	1302.63	1301.94	1301.25	1300.55	1299.84	1299.13	1298.42	1297.70	1296.98	1296.26	1295.53	1294.79	1294.05	1293.31	1292.56	1291.81	1291.06

PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	PLAN & PROFILE - CTH U	SHEET 688	E

STA 37+50 U, LT
CONSTRUCT C.E.
(ASPHALT)
SAWCUT REQ'D.

STA 38+84 U, LT
CONSTRUCT C.E.
(ASPHALT)
SAWCUT REQ'D.

CHARTER COMMUNICATIONS

SLOPE INTERCEPT

WISCONSIN PUBLIC SERVICE CORPORATION

WAUSAU WATER WORKS

FRONTIER COMMUNICATIONS

PT 40+68.34 U

37+00

38+00 U

39+00 U

40+00 U

41+00 U

42+00 U

43+00 U

CTH U

S 87°56'24" E

PC 42+83.30 U

PI 37+84.22 U

STA 37+50 U, RT
CONSTRUCT C.E.
35' WIDTH (ASPHALT)
SAWCUT REQ'D.

ARTHUR AVE

SLOPE INTERCEPT

N

5

5

VPT STA 39+00.00
VPT EL1283.27

K = 941.18
VCL 800.00

EXISTING PROFILE

-4.00 %

FINISHED PROFILE

APPROX. ROCK ELEVATION

VPC STA 41+80.00
VPC EL1272.07

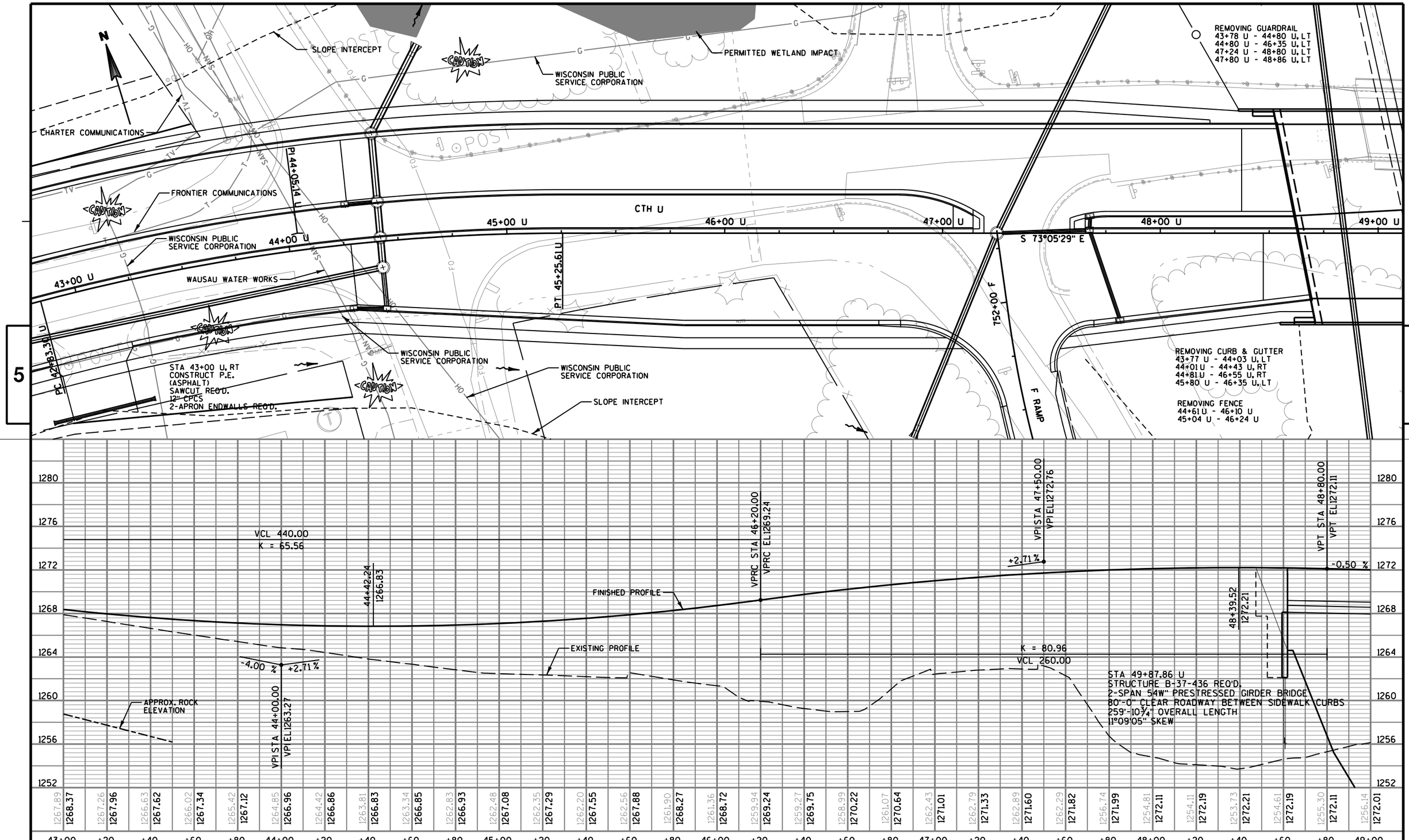
VCL 440.00
K = 65.56

1292	1288	1284	1280	1276	1272	1268	1264

37+00	+20	+40	+60	+80	38+00	+20	+40	+60	+80	39+00	+20	+40	+60	+80	40+00	+20	+40	+60	+80	41+00	+20	+40	+60	+80	42+00	+20	+40	+60	+80	43+00
1292.07	1291.80	1291.70	1290.92	1289.98	1289.46	1288.64	1287.79	1286.81	1286.31	1285.59	1284.53	1283.73	1282.89	1282.07	1281.22	1280.34	1279.45	1278.55	1277.64	1276.71	1275.75	1274.82	1273.90	1272.96	1272.06	1271.14	1270.31	1269.46	1268.62	1267.89
1291.06	1290.30	1289.53	1288.77	1287.99	1287.22	1286.44	1285.65	1284.86	1284.07	1283.27	1282.47	1281.67	1280.87	1280.07	1279.27	1278.47	1277.67	1276.87	1276.07	1275.27	1274.47	1273.67	1272.87	1272.07	1271.30	1270.59	1269.94	1269.36	1268.83	1268.37

PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	PLAN & PROFILE - CTH U	SHEET E

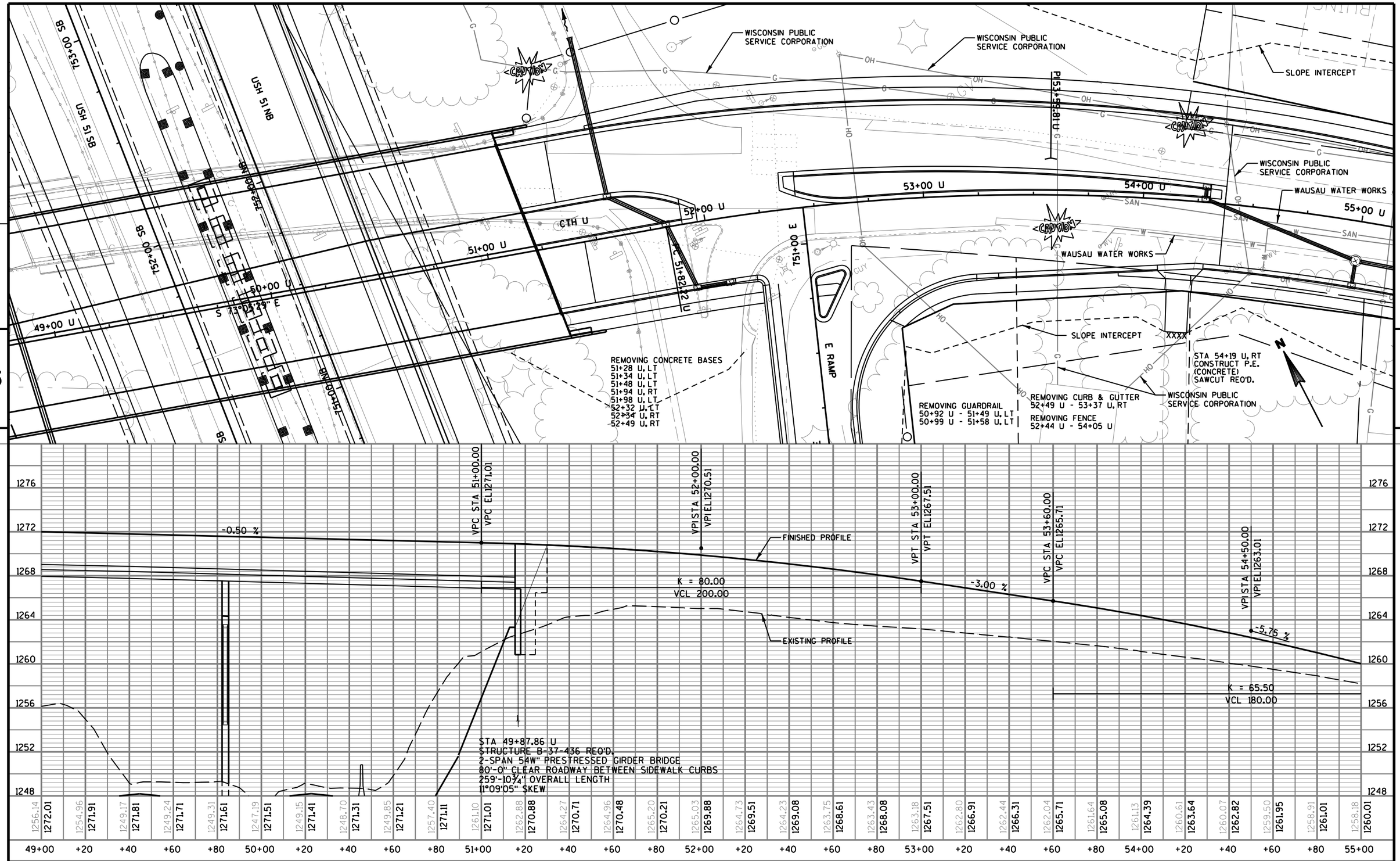
FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\050128_ppu.dgn
PLOT DATE : 7/31/2012
PLOT BY : AYRES-EC
PLOT NAME :
PLOT SCALE : 1:40
WISDOT/CADDS SHEET 40



PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	PLAN & PROFILE - CTH U	SHEET 690 E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\050129_ppu.dgn PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:40

WISDOT/CADDS SHEET 40



PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	PLAN & PROFILE - CTH U	SHEET 691 E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\050130_ppu.dgn PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:40

WISDOT/CADDS SHEET 40

STA 56+15 U, LT
CONSTRUCT C.E.
(GRAVEL)

WISCONSIN PUBLIC
SERVICE CORPORATION

SLOPE INTERCEPT

STA 58+45 U, LT
CONSTRUCT C.E.
(ASPHALT)
SAWCUT REQ'D.

STA 59+15 U, LT
CONSTRUCT C.E.
(ASPHALT)
SAWCUT REQ'D.

STA 60+50 U, LT
CONSTRUCT C.E.
(ASPHALT)
SAWCUT REQ'D.

CAUTION

55+00 U

56+00 U

WAUSAU WATER WORKS

57+00 U

58+00 U

59+00 U

60+00 U

61+00 U

CTH U

S 51°34'55" E

PT 55+33.23 U

WISCONSIN PUBLIC
SERVICE CORPORATION

WISCONSIN PUBLIC
SERVICE CORPORATION

FRONTIER
COMMUNICATIONS

STA 55+77 U, RT
CONSTRUCT P.E.
(GRAVEL)

STA 56+63 U, RT
CONSTRUCT P.E.
(GRAVEL)

SLOPE INTERCEPT

STA 57+66 U, RT
CONSTRUCT C.E.
(GRAVEL)

STA 57+35 U, RT
REMOVING MODULAR BLOCK
RETAINING WALL

REMOVING CURB & GUTTER
60+38 U - 60+56 U, RT
60+46 U - 61+22 U, RT

WAUSAU WATER WORKS

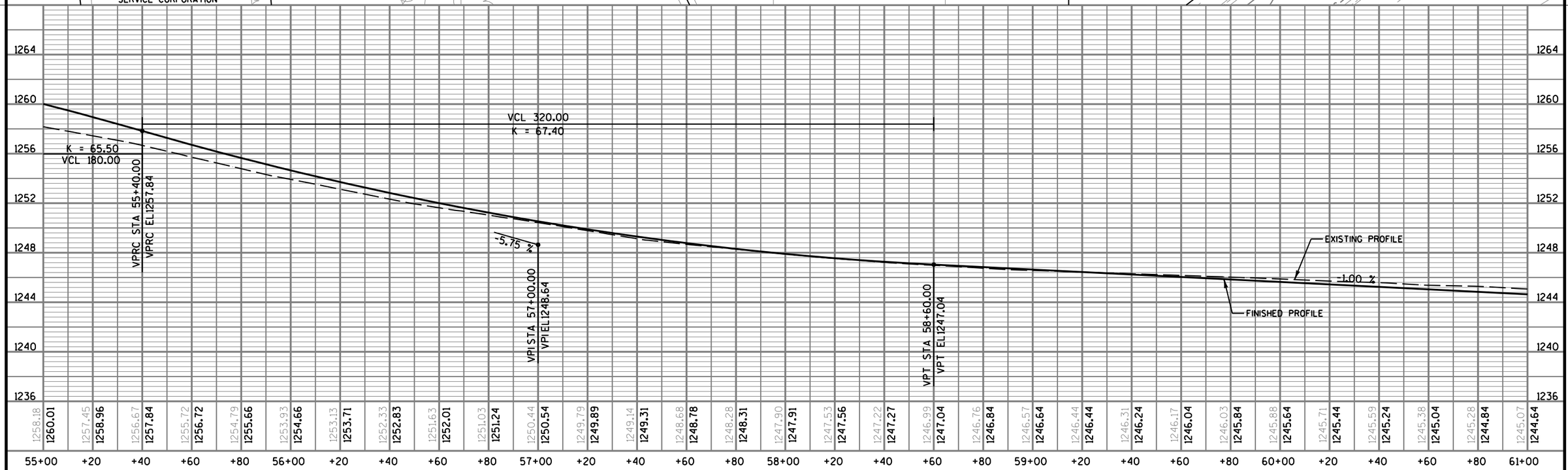
SAWCUT REQ'D.

ARLINGTON LN

WISCONSIN PUBLIC
SERVICE CORPORATION

5

5



PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	PLAN & PROFILE - CTH U	SHEET 692 E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\050131_ppu.dgn PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:40

WISDOT/CADDS SHEET 40

REMOVING CURB & GUTTER
60+46 U - 61+22 U, RT
62+81 U - 63+26 U, RT
63+32 U - 63+49 U, RT
66+41 U - 66+91 U, RT
66+42 U - 69+44 U, LT

WAUSAU WATER WORKS

STA 66+42 U, LT
CONSTRUCT C.E.
(GRAVEL)

WISCONSIN PUBLIC
SERVICE CORPORATION

STA 62+00 U, LT
CONSTRUCT C.E.
(ASPHALT)
SAWCUT REQ'D.

STA 63+22 U, LT
CONSTRUCT C.E.
(ASPHALT)
SAWCUT REQ'D.

STA 64+25 U, LT
CONSTRUCT C.E.
(ASPHALT)
SAWCUT REQ'D.

SLOPE INTERCEPT

STA 65+24 U, LT
CONSTRUCT C.E.
(GRAVEL)

67+00 U

66+00 U

65+00 U

61+00 U

62+00 U

63+00 U

CTH U

64+00 U

PC 62+68.13 U

S 51°34'55" E

WAUSAU WATER WORKS

N 12TH AVE

PI 66+02.74 U

WISCONSIN PUBLIC
SERVICE CORPORATION

FRONTIER
COMMUNICATIONS

STA 65+78 U, RT
CONSTRUCT C.E.
(GRAVEL)

SLOPE INTERCEPT

STA 61+65 U, RT
CONSTRUCT C.E.
(ASPHALT)
SAWCUT REQ'D.

STA 62+65 U, RT
CONSTRUCT C.E.
(ASPHALT)
SAWCUT REQ'D.

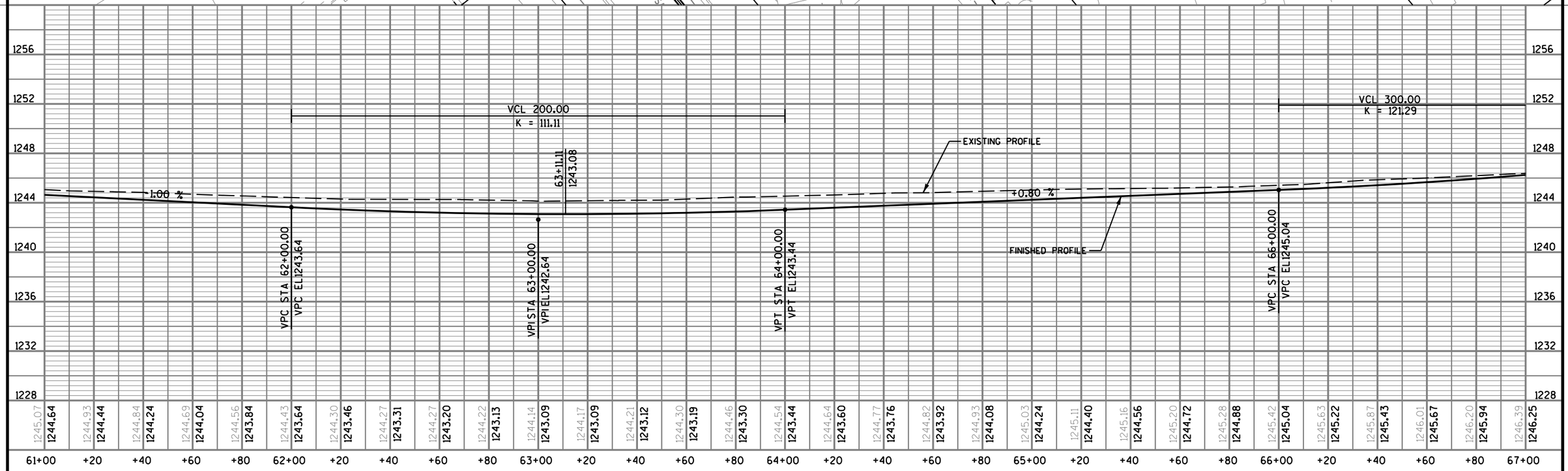
SLOPE INTERCEPT

N 13TH AVE

SAWCUT REQ'D.

WALL MODULAR BLOCK GRAVITY REQ'D.
SEE DETAIL

CAUTION



PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	PLAN & PROFILE - CTH U	SHEET 693 E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\050132_ppu.dgn PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:40

WISDOT/CADDS SHEET 40

REMOVING UTILITY POLES
67+75 U, RT

REMOVING CONCRETE BASES
67+75 U, RT

REMOVING CONCRETE SIDEWALK
67+34 U - 71+13 U, RT

REMOVING CURB & GUTTER
66+42 U - 69+44 U, LT
67+28 U - 71+47 U, RT

SLOPE INTERCEPT

FRONTIER COMMUNICATIONS

STA 69+45.91 U, LT
END HMA PAVEMENT
MATCH EXISTING
SAWCUT REQ'D.

WISCONSIN PUBLIC SERVICE CORPORATION

WAUSAU WATER WORKS

67+00 U

68+00 U

69+00 U

70+00 U

71+00 U

72+00 U

N 50°20'37" E 172.56 U

PI 72+42.00 U

BUSINESS 51

PCC 69+25.94 U

CTH U

WISCONSIN PUBLIC SERVICE CORPORATION

FRONTIER COMMUNICATIONS

CAUTION

PI 70+80.41 U

STA 71+71 U, RT
END CONCRETE CURB & GUTTER
MATCH EXISTING
SAWCUT REQ'D.

STA 71+13 U, RT
END CONCRETE SIDEWALK
MATCH EXISTING
SAWCUT REQ'D.

WAUSAU WATER WORKS

WISCONSIN PUBLIC SERVICE CORPORATION

N 12TH AVE

STA 67+75 U
REMOVING AND
SALVAGE STREET
LIGHT

SLOPE INTERCEPT

SAWCUT REQ'D.

END PROJECT 6999-18-70
STA 69+25.00 U
MATCH EXISTING
SAWCUT REQ'D.

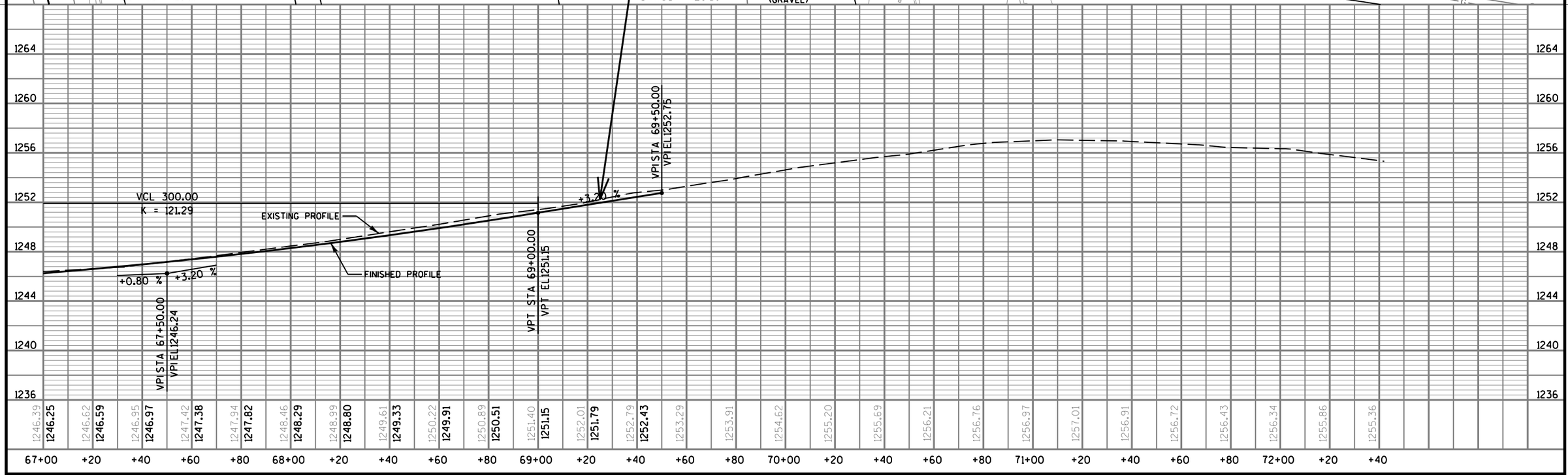
STA 69+60 U, RT
CONSTRUCT C.E.
(GRAVEL)

STA 70+44 U, RT
CONSTRUCT C.E. (ASPHALT)
CONCRETE CURB & GUTTER
CONCRETE SIDEWALK
MATCH EXISTING
SAWCUTS REQ'D.

N

5

5



PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	PLAN & PROFILE - CTH U	SHEET 694	E

WISCONSIN PUBLIC SERVICE CORPORATION

FRONTIER COMMUNICATIONS

PERMITTED WETLAND IMPACT

SLOPE INTERCEPT

PRC 31+45.73 KN

PI 32+26.55 KN

30KS

32KS

34KS BUS 51/CTH K

36KS

30KN

32KN

34KN

36KN

BUS 51/CTH K

N 40°22'31" W XXXX

XXXXX

PI 30+00.00 KN

PC 31+07.21 KN

PI 35+45.17 KN

SLOPE INTERCEPT

CAUTION

WISCONSIN PUBLIC SERVICE CORPORATION

STATE TRAFFIC OPERATIONS CENTER

CAMPUS DR

WAUSAU WATER WORKS

STA 30+80 KN, LT
END CONCRETE CURB & GUTTER
MATCH EXISTING
SAWCUT REQ'D.

STA 33+88 KN
MATCH EXISTING
SIDEWALK

STA 35+17 KN
CONSTRUCT S-37-106

BEGIN PROJECT 1170-01-70

STA 31+35.49 KN
N 212162.70
E 275191.22
MATCH EXISTING
SAWCUT REQ'D.

5

5

1250
1245
1240
1235
1230
1225
1220
1215

EXISTING PROFILE

+1.50 %

VCL 300.00
K = 340.18

+0.62 %

FINISHED PROFILE

VPOT STA 31+35.49
VPOT EL1232.65

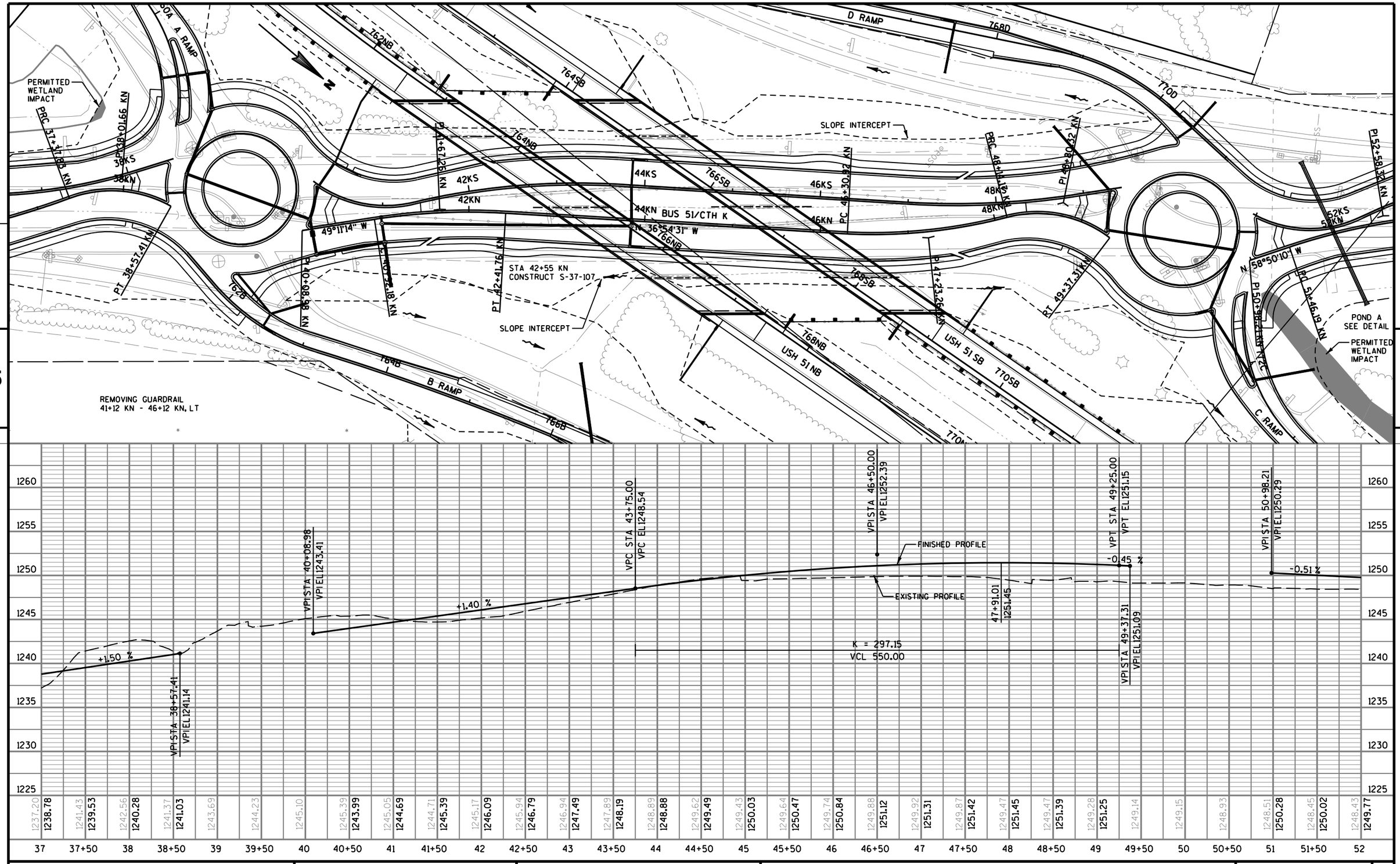
VPC STA 32+50.00
VPC EL1233.35

VPI STA 34+00.00
VPI EL1234.28

VPT STA 35+50.00
VPT EL1236.53

1231.94	1231.93	1232.35	1232.75	1232.73	1233.00	1233.04	1233.28	1233.35	1233.53	1233.70	1233.90	1234.12	1234.44	1234.61	1235.14	1235.18	1235.92	1235.82	1236.84	1236.53	1237.78	1237.28	1238.29	1238.03	1237.20	1238.78
30	30+50	31	31+50		32		32+50		33		33+50		34		34+50		35		35+50		36		36+50		37	

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	PLAN & PROFILE - CTH K (NORTHBOUND)	SHEET 695	E



PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	PLAN & PROFILE - CTH K (NORTHBOUND)	SHEET 696 E

REMOVING FENCE
54+18 KN - 62+85 KN, RT

BILLBOARD POLE
BILLBOARD POLE
SIGN

SLOPE INTERCEPT

PI 52+58.32 KN
PCC 53+64.56 KN
PI 55+85.35 KN
PC 58+02 KN
PI 66+88.99 KN

52KS
54KS
56KS
58KS
60KS
62KS
64KS
66KS

52KN
54KN
56KN
58KN
60KN
62KN
64KN
66KN

CTH K

N 37°12'07" W

SLOPE INTERCEPT

PC 61+60.02 KN

16.18 KN

PERMITTED WETLAND IMPACT

POND A
SEE DETAIL

STA 56+01 KN
CONSTRUCT C.E.
15" CPCS
2-APRON ENDWALLS REQ'D.

REMOVING OLD STRUCTURE
61+07 KN

5

5

1260
1255
1250
1245
1240
1235
1230
1225

FINISHED PROFILE

-0.51 %

EXISTING PROFILE

VPI STA 61+50.00
VPI EL 1244.89

STA 60+82 KN
72" CPRC CL. III
2-APRON ENDWALLS REQ'D.

1248.43	1248.42	1247.82	1247.08	1247.08	1246.99	1246.98	1246.89	1245.85	1245.77	1245.83	1245.88	1245.84	1245.85	1245.75	1245.54	1245.51	1245.33	1245.04	1244.89
1249.77	1249.51	1249.25	1249.00	1248.74	1248.48	1248.23	1247.97	1247.71	1247.46	1247.20	1246.94	1246.69	1246.43	1246.17	1245.92	1245.66	1245.40	1245.15	1244.89

52 | 52+50 | 53 | 53+50 | 54 | 54+50 | 55 | 55+50 | 56 | 56+50 | 57 | 57+50 | 58 | 58+50 | 59 | 59+50 | 60 | 60+50 | 61 | 61+50

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	PLAN & PROFILE - CTH K (NORTHBOUND)	SHEET 697	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\050136_ppkn.dgn
PLOT DATE : 8/1/2012
PLOT BY : AYRES-EC
PLOT NAME :
PLOT SCALE : 1:100

WISDOT/CADDS SHEET 40

CURVE DATA

P.T. 58+02.02 KN
N 214163.88
E 273478.40

CURVE DATA

P.I. 66+88.99 KN
N 214870.36
E 272942.12
△ = 5°18'31"
D = 0°30'08"
T = 528.97'
L = 1057.18'
E = 12.25'
R = 11410.00'
P.C. 61+60.02 KN
P.T. 72+17.20 KN

NOTE: TIE PIPE UNDERDRAIN INTO INLETS.

CURVE DATA

P.C. 75+20.12 KN
N 215576.66
E 272502.60

OVERLOOK DR

WISCONSIN PUBLIC SERVICE CORPORATION

WISCONSIN PUBLIC SERVICE CORPORATION

PERMITTED WETLAND IMPACT

60KS 62KS 64KS 66KS PI 66+88.99 KN 68KS 70KS CTH K SOUTHBOUND 72KS 74KS

PIPE UNDERDRAIN 6-INCH (TYP)

60KN 62KN 64KN 66KN 68KN 70KN 72KN 74KN

CTH K NORTHBOUND

N 37°12'07" W

N 31°53'36" W

PC 61+60.02 KN

PT 72+17.20 KN

PC 75+20.12 KN

SLOPE INTERCEPT

WAUSAU WATER WORKS

N 20TH AVE

PERMITTED WETLAND IMPACT

BOX CULVERT EXTENSION COMPLETED BY OTHERS

SLOPE INTERCEPT

END PROJECT 1170-01-70
STA 73+50.00 KN

5

REMOVING FENCE
54+18 KN - 62+85 KN, RT

REMOVING CURB & GUTTER
67+75 KN - 67+90 KN, RT

STA 67+76 KN
REMOVING SMALL
PIPE CULVERTS

WISCONSIN PUBLIC SERVICE CORPORATION

STA 71+05 KN
REMOVING SMALL
PIPE CULVERTS

5

1260 1255 1250 1245 1240 1235 1230 1225

VCL 400.00
K = 268.65

69+17.16
1243.06

EXISTING PROFILE

FINISHED PROFILE

-0.25 %

+1.24 %

VPI STA 61+50.00
VPI EL1244.89

VPC STA 68+50.00
VPC EL1243.14

VPI STA 70+50.00
VPI EL1242.64

VPT STA 72+50.00
VPT EL1245.12

VPOT STA 73+50.00
VPOT EL1246.36

STA 67+50 KN
1-INLET MEDIAN 2 GRATE
2-INLET COVERS TYPE MS
24" CPRC CL. III
1-APRON ENDWALL REQ'D.

STA 70+00 KN
1-INLET MEDIAN 2 GRATE
2-INLET COVERS TYPE MS
24" CPRC CL. III
1-APRON ENDWALL REQ'D.

| | | |

REMOVING FENCE
35+78 KS - 36+54 KS, LT

STATE TRAFFIC
OPERATIONS
CENTER

CAUTION

WISCONSIN PUBLIC
SERVICE CORPORATION

STA 30+65 KS, LT/RT
END CONCRETE CURB & GUTTER

WISCONSIN PUBLIC
SERVICE CORPORATION

STA 32+81.96 KS
CONSTRUCT C-37-4

FRONTIER
COMMUNICATIONS

PERMITTED WETLAND IMPACT

SLOPE INTERCEPT

PI 30+00.00 KS

30KS

32KS

N 40°34'30" W

34KS BUS 51/CTH K

36KS

30KN

32KN

34KN

36KN

BUS 51/CTH K

PC 34+89.25 KS

PRC 35+70.88 KS

PI 35+20.11 KS

PI 36+51.71 KS

WAUSAU WATER WORKS

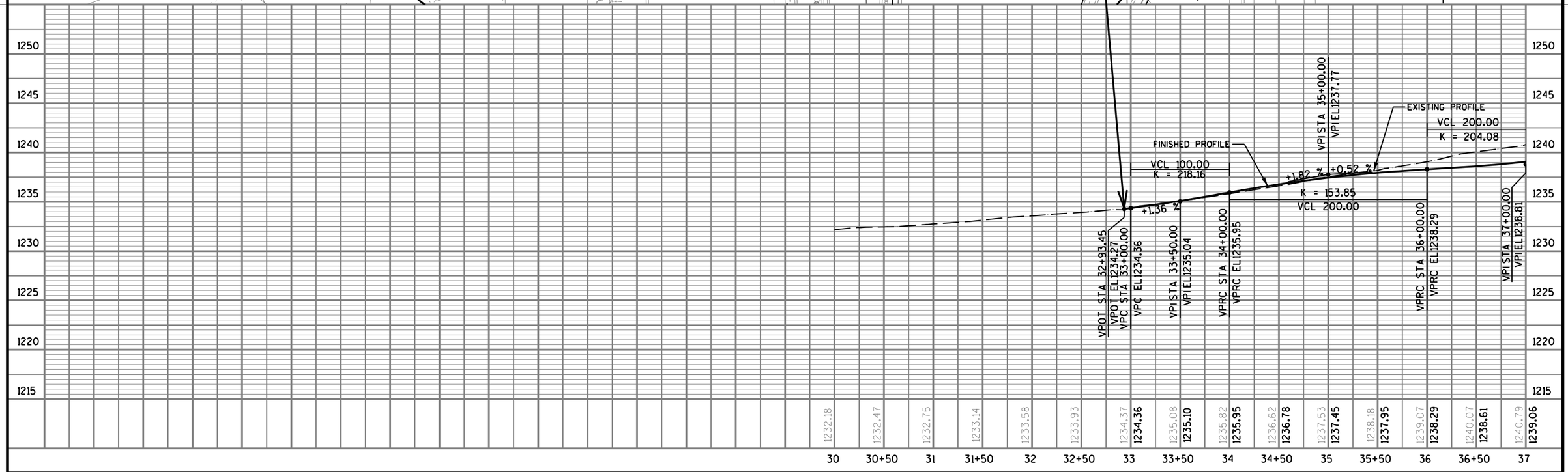
SLOPE INTERCEPT

CAMPUS DR

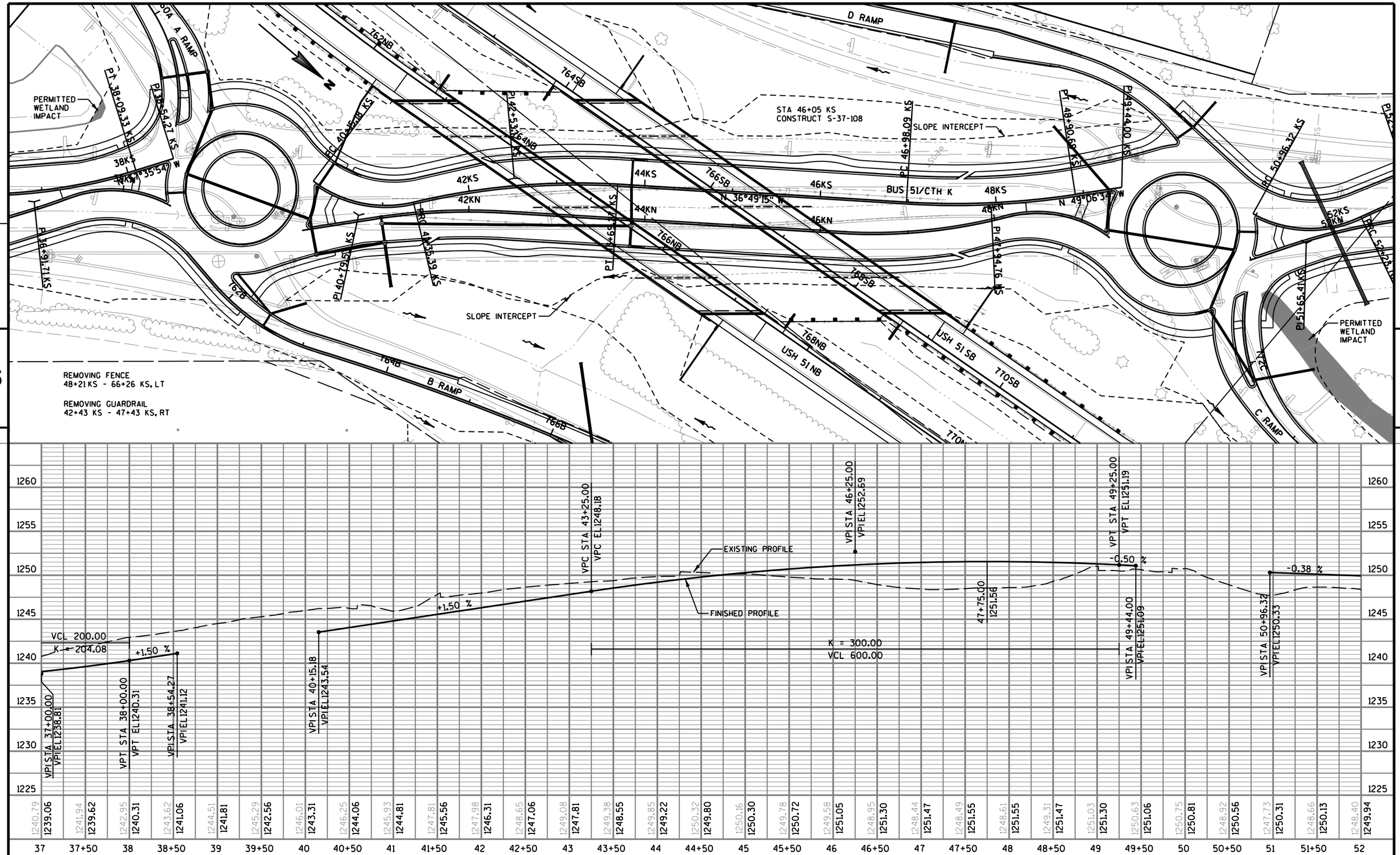
BEGIN CONSTRUCTION 1170-01-70
STA 32+93.45 KS
N 212249.86
E 275049.92
MATCH EXISTING
SAWCUT REQ'D.

5

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PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	PLAN & PROFILE - CTH K (SOUTHBOUND)	SHEET 699 E



PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	PLAN & PROFILE - CTH K (SOUTHBOUND)	SHEET 700 E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\050139_ppks.dgn PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 40

STA 54+70 KS
CONSTRUCT S-37-110

REMOVING FENCE
48+21 KS - 66+26 KS, LT

SLOPE INTERCEPT

PI 52+87.27 KS

PI 54+27.05 KS

54KS

54KN

52KS

52KN

PCC 53+50.41 KS

PRC 53+28.76 KS

56KS

56KN

PI 55+08.21 KS

CTH K

58KS

58KN

60KS

60KN

N 37°41'37" W

PC 60+64.78 KS

62KS

62KN

64KS

64KN

66KS

66KN

PI 66+45.34 KS

WISCONSIN PUBLIC
SERVICE CORPORATION

SLOPE INTERCEPT

PERMITTED WETLAND IMPACT

POND A
SEE DETAIL

5

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EXISTING PROFILE

FINISHED PROFILE

-0.38 %

VPI STA 61+50.00
VPI EL 1246.35

	52	52+50	53	53+50	54	54+50	55	55+50	56	56+50	57	57+50	58	58+50	59	59+50	60	60+50	61	61+50
	1248.40	1246.40	1248.86	1249.69	1249.49	1249.21	1248.77	1248.62	1248.46	1248.33	1248.14	1247.99	1247.81	1247.65	1247.42	1247.14	1246.83	1246.54	1246.51	1246.35
	1249.94	1249.75	1249.56	1249.37	1249.18	1248.99	1248.80	1248.62	1248.43	1248.24	1248.05	1247.86	1247.67	1247.48	1247.29	1247.11	1246.92	1246.73	1246.54	1246.35

1260 1255 1250 1245 1240 1235 1230 1225

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	PLAN & PROFILE - CTH K (SOUTHBOUND)	SHEET 701	E

WISCONSIN PUBLIC SERVICE CORPORATION

SLOPE INTERCEPT

P.I. 66+45.34 KS

OVERLOOK DR

WISCONSIN PUBLIC SERVICE CORPORATION

OBLITERATING OLD ROAD CASSIDY DRIVE

BOX CULVERT EXTENSION COMPLETED BY OTHERS

PERMITTED WETLAND IMPACT

SLOPE INTERCEPT

60KS 62KS 64KS 66KS 68KS 70KS CTH K SOUTHBOUND 72KS 74KS

N 37°41'37" W

N 31°53'36" W

60KN 62KN 64KN 66KN 68KN 70KN 72KN 74KN

P.C. 60+64.78 KS

CTH K NORTHBOUND

P.T. 72+24.91 KS

WAUSAU WATER WORKS

N 20TH AVE

PERMITTED WETLAND IMPACT

BEGIN CONSTRUCTION
STA 73+50.00 KS

CURVE DATA	CURVE DATA
P.T. 55+03.21 KS	P.I. 66+45.34 KS
N 213896.38	N 214800.14
E 273625.26	E 272926.92
	△ = 5°48'01"
	D = 0°29'60"
	T = 580.56'
	L = 1160.13'
	E = 14.70'
	R = 11460.00'
	P.C. 60+64.78 KS
	P.T. 72+24.91 KS

WISCONSIN PUBLIC SERVICE CORPORATION

P.I. DATA

P.I. 80+48.11 KS
N 215991.98
E 272185.26

VCL 400.00
K = 314.87

-0.36 %

+0.91 %

FINISHED PROFILE

EXISTING PROFILE

VPI STA 61+50.00
VPI EL1246.35

VPC STA 67+50.00
VPC EL1244.16

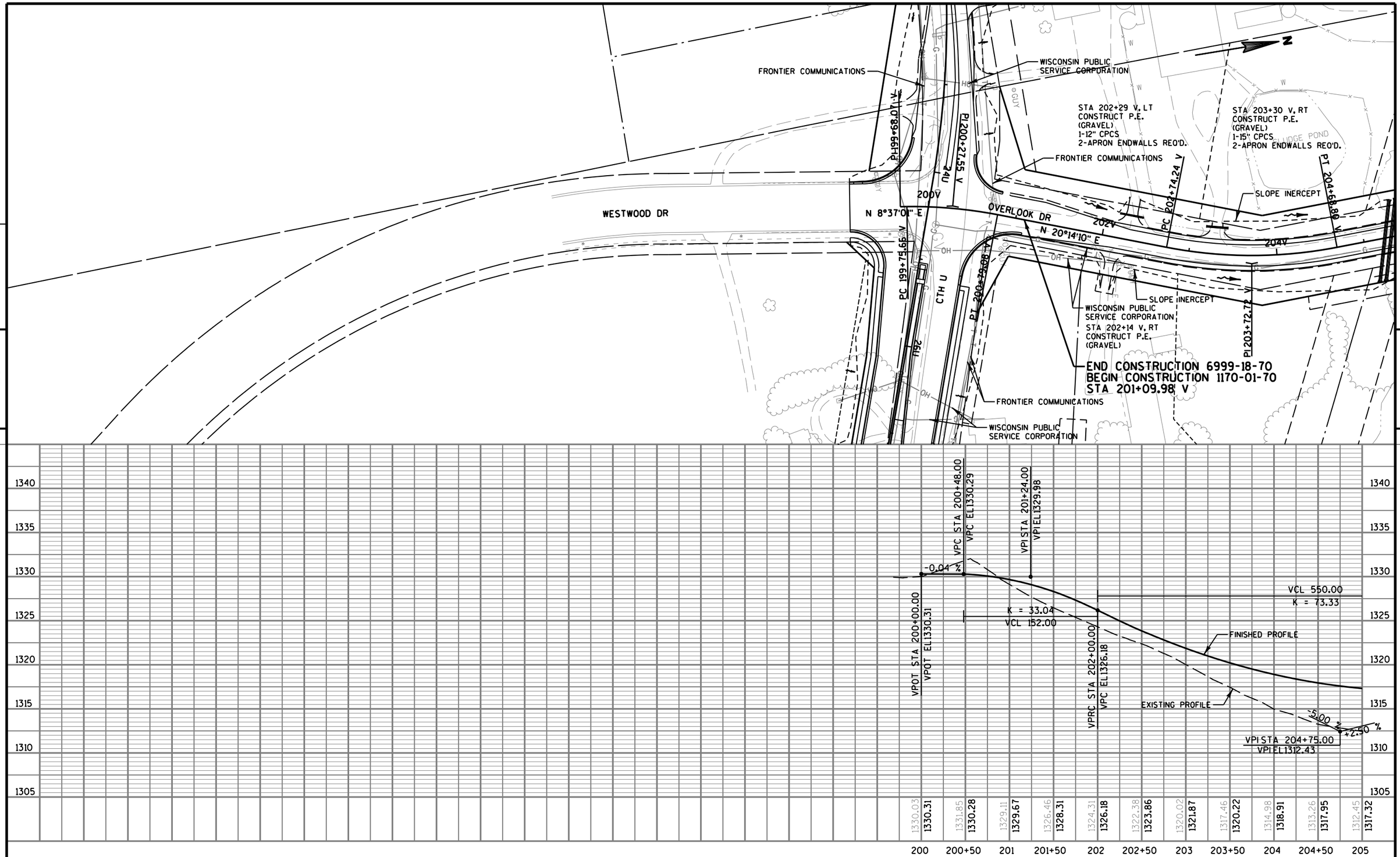
68+64.70
1243.96

VPI STA 69+50.00
VPI EL1243.44

VPT STA 71+50.00
VPT EL1245.25

VPOT STA 73+50.00
VPOT EL1247.06

| | | |



PROJECT NO: 1170-01-70/6999-18-70	HWY: USH 51	COUNTY: MARATHON	PLAN & PROFILE - OVERLOOK DR	SHEET 703 E

POND

PT 204+68.80 V

STA 208+94 V, LT
CONSTRUCT F.E.
(GRAVEL)
12" CPCS
2-APRON ENDWALLS REQ'D.

SLOPE INTERCEPT

WISCONSIN PUBLIC
SERVICE CORPORATION

206V 208V 210V OVERLOOK DR 212V 214V 216V 218V 220V

N 1°37'18" W

PC 218+92.78 V

R 60'
STA 208+14.13 V, 78' RT
N 213126.45
E 272065.54

R 40'
STA 209+44.13 V, 58' RT
N 213255.83
E 272041.87

SLOPE INTERCEPT

FRONTIER COMMUNICATIONS

WISCONSIN PUBLIC
SERVICE CORPORATION

WISCONSIN PUBLIC
SERVICE CORPORATION

STA 214+00 V, RT
CONSTRUCT P.E.
(GRAVEL)
12" CPCS
2-APRON ENDWALLS REQ'D.

FRONTIER COMMUNICATIONS

STA 208+94 V
12" CPCS
2-APRON ENDWALLS REQ'D.

BOOT LN

STA 208+89.13 V, RT
CONSTRUCT TYPE C
MODIFIED INTERSECTION
N 213199.21
E 271985.45

A/C

5

5

VPC STA 209+75.00
VPC EL1324.93

VPI STA 211+75.00
VPI EL1329.93

VPT STA 213+75.00
VPT EL1321.23

VPC STA 215+75.00
VPC EL1312.53

VPI STA 217+25.00
VPI EL1306.01

VPT STA 218+75.00
VPT EL1296.26

VCL 550.00
K = 73.33

FINISHED PROFILE

+2.50 %

205+66.67
1317.02

EXISTING PROFILE

211+20.99
1326.76

APPROX. ROCK
ELEVATION

K = 58.39
VCL 400.00

-4.35 %

-4.35 %

K = 139.54
VCL 300.00

-6.50 %

APPROX. ROCK
ELEVATION

VPT STA 207+50.00
VPT EL1319.31

STA 205+24 V
30" CPCS
2-APRON ENDWALLS REQ'D.

STA 205+31 V
30" CPCS
2-APRON ENDWALLS REQ'D.

1335 1330 1325 1320 1315 1310 1305 1300

1320 1315 1310 1305 1300 1295 1290 1285

| | | |

FRONTIER COMMUNICATIONS

WISCONSIN PUBLIC SERVICE CORPORATION

CONSTRUCTION LIMITS
STA 6+28.40 ME
MATCH EXISTING
SAWCUT REQ'D.

MERRILL AVE

STA 221+03 V, LT
CONSTRUCT P.E.
(GRAVEL)
18" CPCS
2-APRON ENDWALLS REQ'D.

STA 223+29.53 V =
STA 5+00 ME
CONSTRUCT TYPE C
INTERSECTION

STA 222+77.61 V, 58' LT
STA 5+57.14 ME, 55' LT
N 214581.95
E 272084.47

R 40'

PI 221+14.35 V

PI6+50.00 ME

APPROXIMATE LOCATION OF EXISTING DRAIN FIELD

R 60'
STA 224+04.85 V, 78' LT
STA 5+78.40 ME, 75' RT
N 214671.18
E 272181.37

SLOPE INTERCEPT

CASSIDY DR

WISCONSIN PUBLIC SERVICE CORPORATION

20TH AVE

224V

OVERLOOK DR

226V

228V

230V

N 56°20'39" E

N 33°39'56" W

R 40'
STA 223+84.12 V, 58' RT
STA 4+42.30 ME, 55' RT
N 214546.48
E 272239.49

SLOPE INTERCEPT

STA 226+50 V, RT
CONSTRUCT C.E.
(GRAVEL)
15" CPCS
2-APRON ENDWALLS REQ'D.

STA 228+00 V, RT
CONSTRUCT C.E.
(GRAVEL)
18" CPCS
2-APRON ENDWALLS REQ'D.

END CONSTRUCTION 1170-01-70
STA 230+85.60 V

PI 231+59.34 V

CTH K

R 60'
STA 222+43.30 V, 78' RT
STA 4+18.65 ME, 75' LT
N 214546.48
E 272239.49

PT 222+91.06 V

FRONTIER COMMUNICATIONS

PI3+50.00 ME

CONSTRUCTION LIMITS
STA 3+68.65 ME
MATCH EXISTING
SAWCUT REQ'D.

WISCONSIN PUBLIC SERVICE CORPORATION

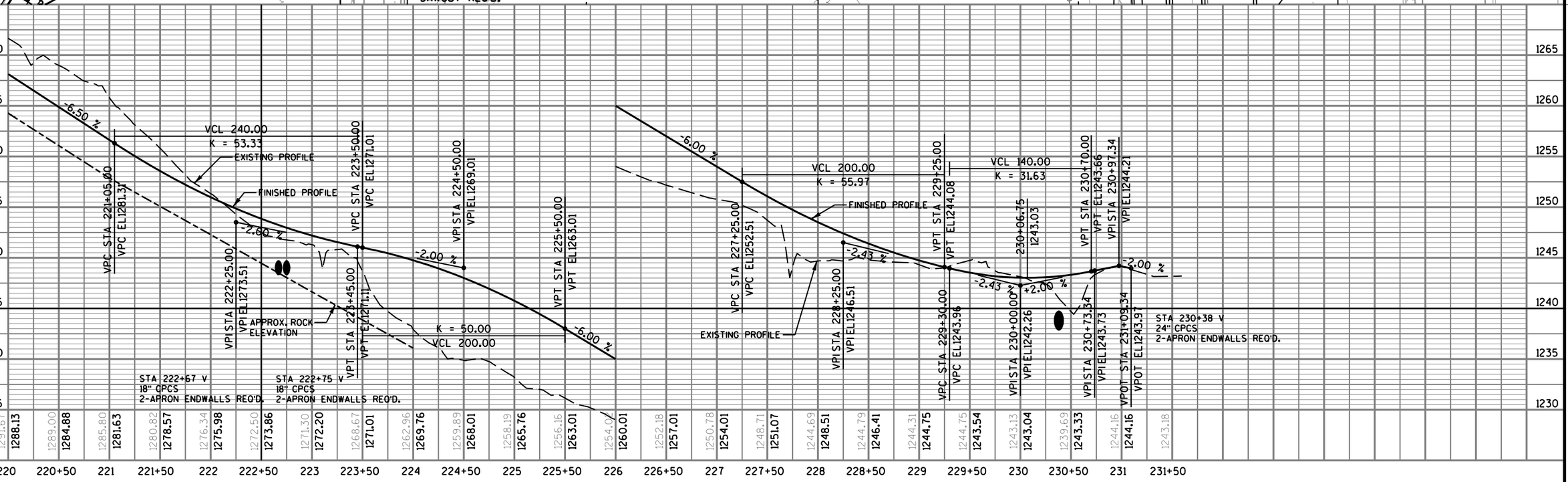
EXISTING SEPTIC SYSTEM
PIPE DRAIN CROSSING AT
APPROXIMATELY 226+00 V

WAUSAU WATER WORKS

ANODE BED

5

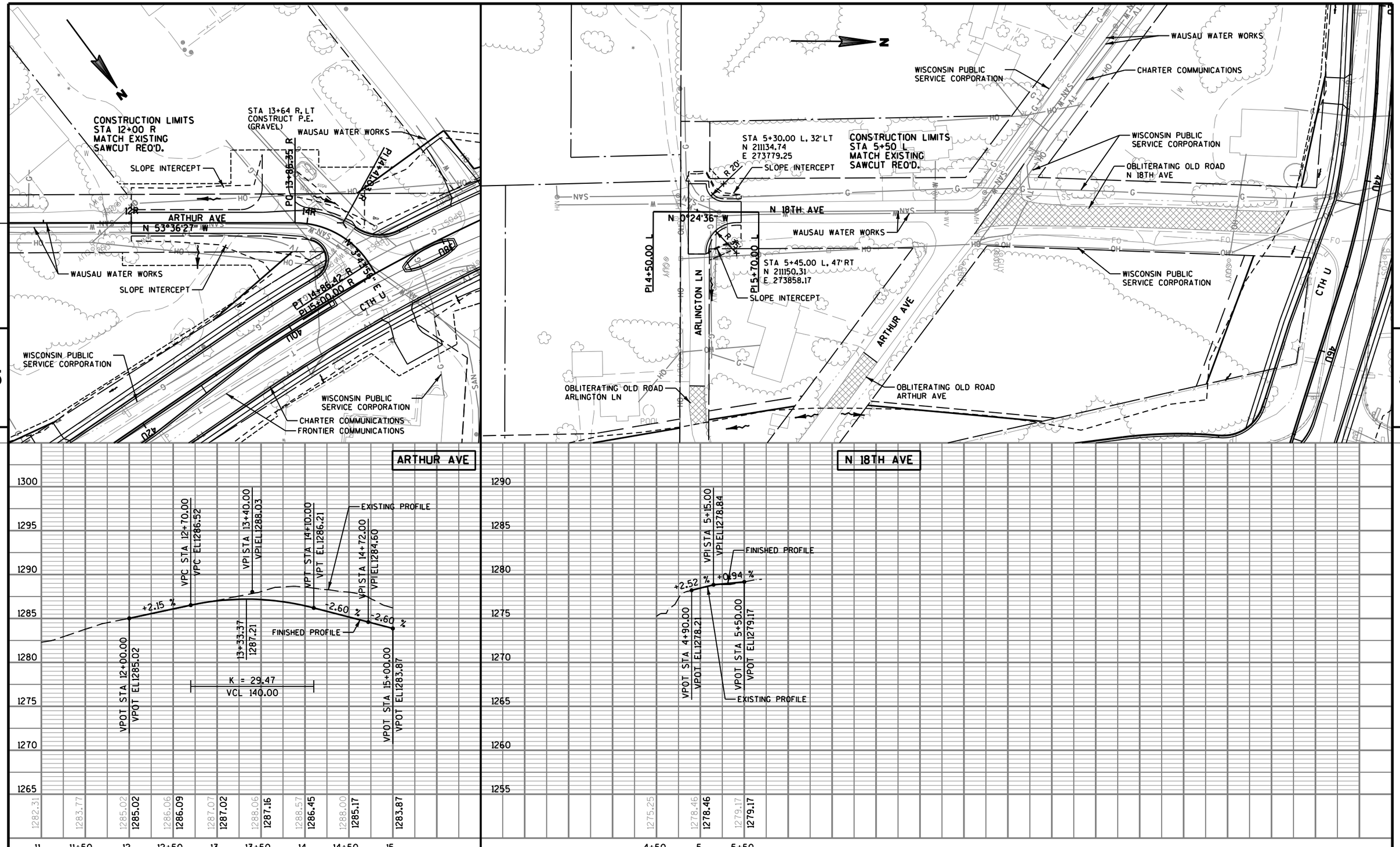
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PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	PLAN & PROFILE - OVERLOOK DR	SHEET 705	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\050144_ppv.dgn PLOT DATE : 9/25/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 40



PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	PLAN & PROFILE	SHEET 706	E

WAUSAU WATER WORKS
CHARTER COMMUNICATIONS
WISCONSIN PUBLIC SERVICE CORPORATION
SLOPE INTERCEPT
OBLITERATING OLD ROAD MERRILL AVE
254+00 M
255+00 M
N 18°28'23" W
STA 255+94.00 M MATCH EXISTING SAWCUT REQ'D.
MERRILL AVE
CHARTER COMMUNICATIONS
PI 253+90.00 M
PI 255+94.42 M
STA 254+67.37 M, 38' RT
N 212077.52
E 273788.58
R 50'
STA 255+54.10 M, 56.3' RT
EL 1249.00'
FRONTIER COMMUNICATIONS
WISCONSIN PUBLIC SERVICE CORPORATION & CHARTER COMMUNICATIONS
STA 44+73.97 U, 165.5' LT
EL 1244.03'
STA 255+64.45 M, 62' RT
N 212177.20
E 273780.59
SLOPE INTERCEPT
STA 44+76.73 U, 176.4' LT
EL 1244.87'
PERMITTED WETLAND IMPACT
STA 254+04 M
36" CPCS
2-APRON ENDWALLS REQ'D.
STA 254+68 M
18" CPCS
2-APRON ENDWALLS REQ'D.
STA 255+00 M, RT
CONSTRUCT P.E.
(GRAVEL)

MERRILL AVE

VCL 130.00
K = 30.65
-2.75 %
+1.49 %
FINISHED PROFILE
EXISTING PROFILE
VPOT STA 253+90.00
VPOT EL1261.81
VPC STA 254+60.00
VPC EL1259.88
VPI STA 255+25.00
VPI EL1258.10
VPT STA 255+90.00
VPT EL1259.07
VPOT STA 255+94.00
VPOT EL1259.13
255+44.28
1258.73

1270 1266 1262 1258 1254 1250 1246 1242

1261.55 1261.53 | 1261.02 1260.98 | 1260.45 1260.43 | 1259.89 1259.88 | 1259.39 1259.40 | 1259.01 1259.05 | 1258.67 1258.82 | 1258.75 1258.73 | 1258.84 1258.77 | 1258.97 1258.93

254+00 +20 +40 +60 +80 255+00 +20 +40 +60 +80

WISCONSIN PUBLIC SERVICE CORPORATION
FRONTIER COMMUNICATIONS
SLOPE INTERCEPT
PERMITTED WETLAND IMPACT
OBLITERATING OLD ROAD CASSIDY DRIVE
STA 4+50.00 N MATCH EXISTING SAWCUT REQ'D.
4+00 N
5+00 N
6+00 N
CASSIDY DR
S 88°53'25" E
PI 3+75.00 N
PI 6+25.00 N
STA 5+47.55 N, 39' RT
N 215025.49
E 272549.97
R 50'
PERMITTED WETLAND IMPACT
STA 4+50 N, 61' RT
N 215005.38
E 272452.02
SLOPE INTERCEPT
WISCONSIN PUBLIC SERVICE CORPORATION

CASSIDY DR

-1.00 %
EXISTING PROFILE
FINISHED PROFILE
VPOT STA 3+75.00
VPOT EL1242.96
VPOT STA 6+25.00
VPOT EL1240.46

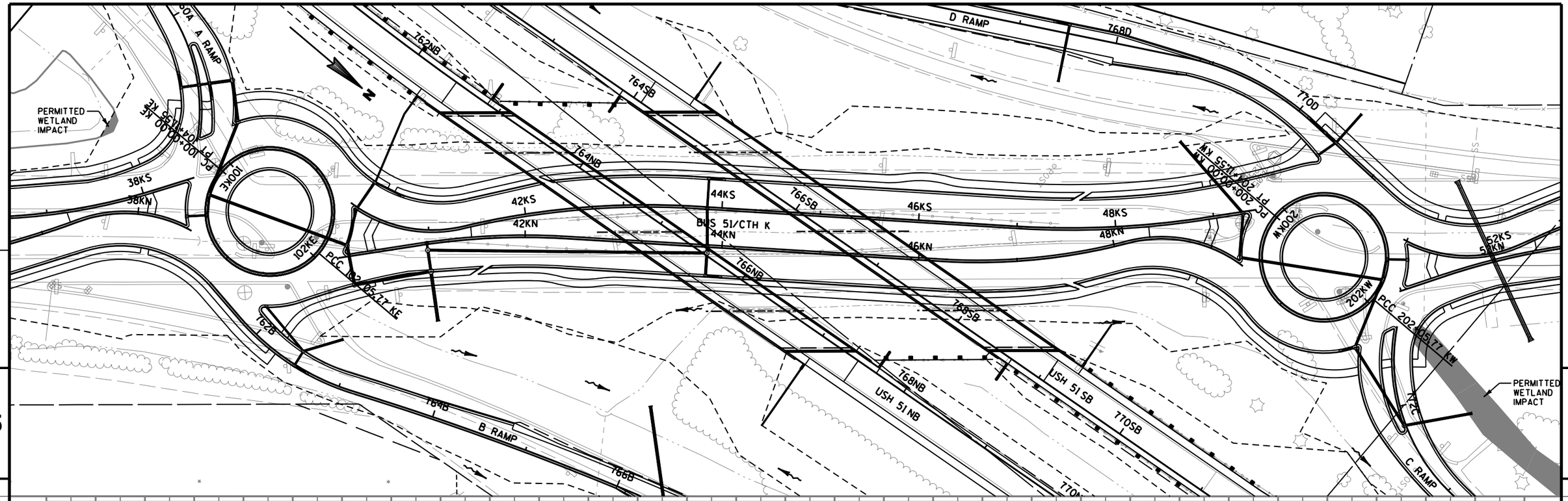
1252 1248 1244 1240 1236 1232 1228 1224

1242.91 1242.91 | 1242.71 1242.71 | 1242.51 1242.51 | 1242.31 1242.31 | 1242.16 1242.11 | 1242.06 1241.91 | 1242.09 1241.71 | 1242.04 1241.51 | 1241.79 1241.31 | 1241.48 1241.11 | 1241.03 1240.91 | 1240.92 1240.71 | 1240.82 1240.51

3+80 4 4+20 4+40 4+60 4+80 5 5+20 5+40 5+60 5+80 6 6+20

PROJECT NO: 1170-01-70/6999-18-70	HWY: USH 51	COUNTY: MARATHON	PLAN & PROFILE - MERRILL AVE/CASSIDY DR CUL-DE-SACS	SHEET 707 E

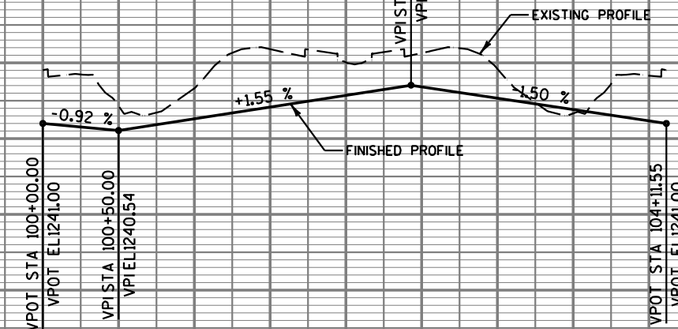
FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\050146_pp.dgn
PLOT DATE : 7/31/2012
PLOT BY : AYRES-EC
PLOT NAME :
PLOT SCALE : 1:40
WISDOT/CADDS SHEET 40



5

5

KE ROUNDABOUT



100	100+50	101	101+50	102	102+50	103	103+50	104
1244.51	1242.16	1243.32	1245.91	1245.04	1245.65	1244.60	1241.66	1244.16
1241.00	1240.54	1241.31	1242.09	1242.86	1243.42	1242.67	1241.92	1241.17

CURVE DATA

CIRCLE CENTER
N 212732.67
E 274641.29
△ = 180°00'00"
D = 87°28'28"
L = 205.77'
R = 65.50'
P.C. 100+00.00 KE
N 212667.17
E 274641.29
P.C.C102+05.77 KE
N 212798.17
E 274641.29

CURVE DATA

CIRCLE CENTER
N 212732.67
E 274641.29
△ = 180°00'00"
D = 87°28'28"
L = 205.77'
R = 65.50'
P.C.C102+05.77 KE
N 212798.17
E 274641.29
P.T. 104+11.55 KE
N 212667.17
E 274641.29

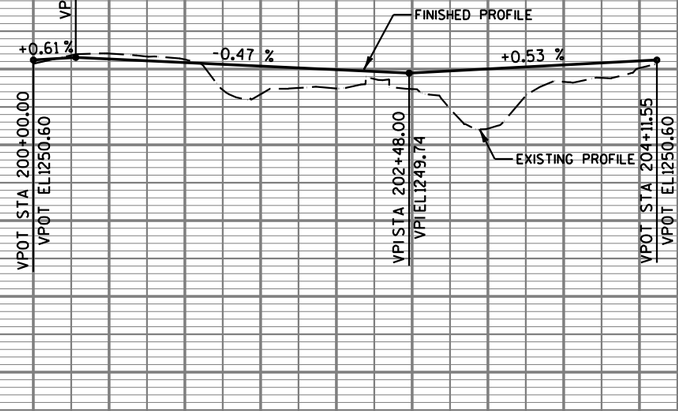
CURVE DATA

CIRCLE CENTER
N 213577.77
E 273983.73
△ = 180°00'00"
D = 87°28'28"
L = 205.77'
R = 65.50'
P.C. 200+00.00 KW
N 213512.27
E 273983.73
P.C.C202+05.77 KW
N 213643.27
E 273983.73

CURVE DATA

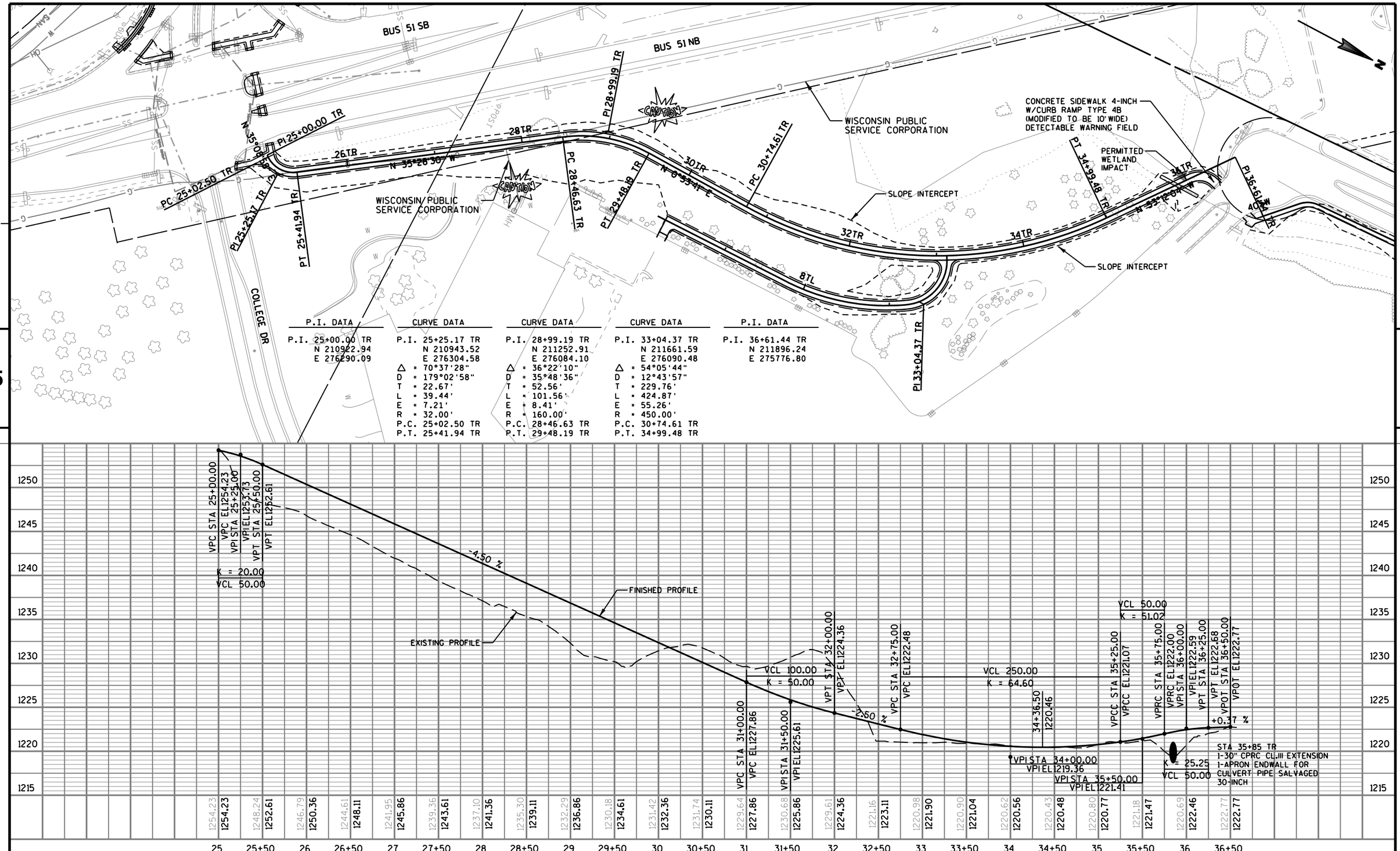
CIRCLE CENTER
N 213577.77
E 273983.73
△ = 180°00'00"
D = 87°28'28"
L = 205.77'
R = 65.50'
P.C.C202+05.77 KW
N 213643.27
E 273983.73
P.T. 204+11.55 KW
N 213512.27
E 273983.73

KW ROUNDABOUT



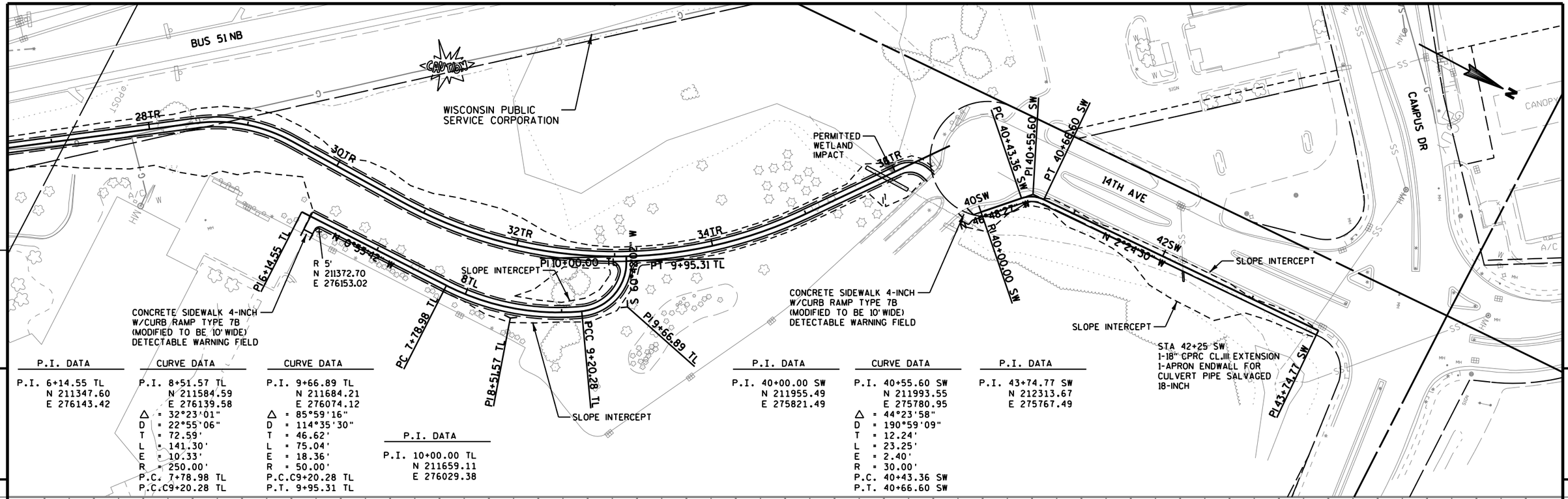
200	200+50	201	201+50	202	202+50	203	203+50	204
1250.36	1251.03	1250.63	1248.34	1248.72	1248.68	1246.07	1249.17	1250.07
1250.60	1250.67	1250.43	1250.20	1249.96	1249.75	1250.01	1250.27	1250.54

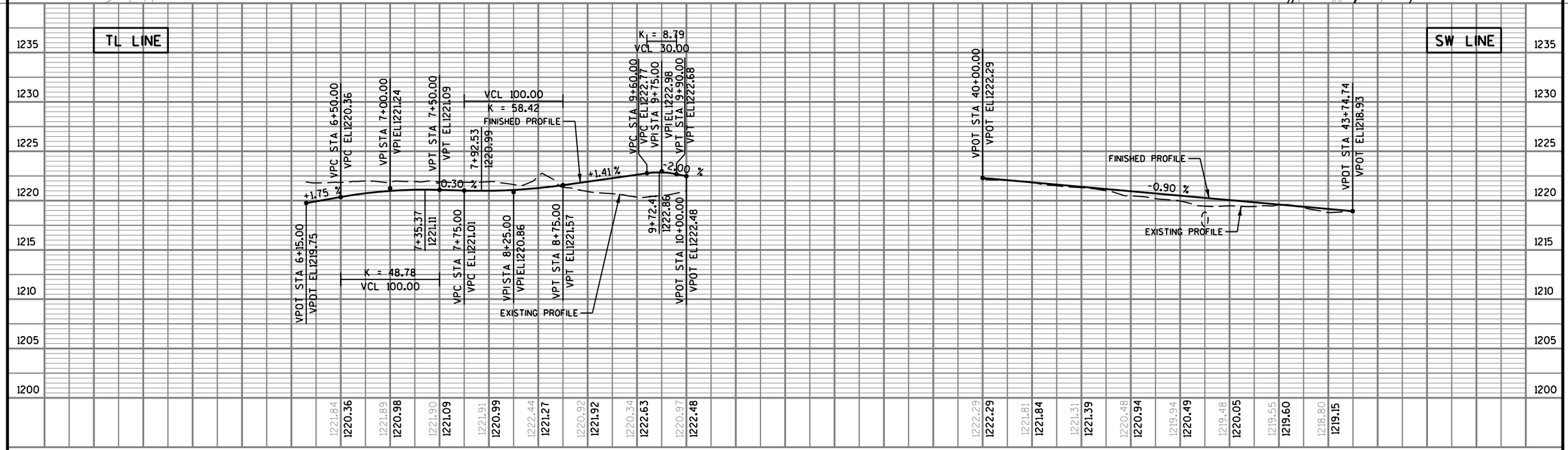
PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	PLAN & PROFILE - CTH K ROUNDABOUTS (KE & KW)	SHEET 708	E



P.I. DATA	CURVE DATA	CURVE DATA	CURVE DATA	P.I. DATA
P.I. 25+00.00 TR	P.I. 25+25.17 TR	P.I. 28+99.19 TR	P.I. 33+04.37 TR	P.I. 36+61.44 TR
N 210922.94	N 210943.52	N 211252.91	N 211661.59	N 211896.24
E 276290.09	E 276304.58	E 276084.10	E 276090.48	E 275776.80
	△ = 70°37'28"	△ = 36°22'10"	△ = 54°05'44"	
	D = 179°02'58"	D = 35°48'36"	D = 12°43'57"	
	T = 22.67'	T = 52.56'	T = 229.76'	
	L = 39.44'	L = 101.56'	L = 424.87'	
	E = 7.21'	E = 8.41'	E = 55.26'	
	R = 32.00'	R = 160.00'	R = 450.00'	
	P.C. 25+02.50 TR	P.C. 28+46.63 TR	P.C. 30+74.61 TR	
	P.T. 25+41.94 TR	P.T. 29+48.19 TR	P.T. 34+99.48 TR	

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	PLAN & PROFILE - NTC TRAIL	SHEET 709	E





PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	PLAN & PROFILE - NTC TRAIL	SHEET 710	E

ABANDONING CULVERT PIPES
350+50 AT - 352+00 AT

CTH U

USH 51 SB

USH 51 NB

DT RAMP

AT RAMP

PI 354+92.18 AT

STA 355+00.00 AT, 15' LT

SLOPE INTERCEPT

STA 359+40 AT
24" CPRC EXTENSION, LT
REMOVING PARTIAL PIPE
(ENDWALL, LT ONLY)

348NR
348AT
350NR
350AT
352NR
352AT
354NR
354AT
356NR
356AT
358NR
358AT
360NR
360AT
362NR

N 9°29'29" E

N 5°02'43" E

N 18°32'50" E

PI 347+95.64 AT

PI 349+96.24 AT

PC 351+96.24 AT

PT 357+85.37 AT

PI 361+39.61 AT

CAUTION

900

STA 354+20 AT
1-INLET MEDIAN 2 GRATE (900), RT
2-INLET COVERS TYPE MS
18" CP TEMPORARY

901

STA 359+00.00 AT, 17.2' RT

STA 350+50 AT - STA 352+00 AT
24" CP TEMPORARY

FRONTIER COMMUNICATIONS

WISCONSIN PUBLIC
SERVICE CORPORATION

BUS 51/CTH K

BUS 51/CTH K

P.I. DATA
P.I. 347+95.64 AT
N 211379.89
E 274358.63

P.I. DATA
P.I. 349+96.24 AT
N 211577.75
E 274391.71

CURVE DATA
P.I. 354+92.18 AT
N 212071.77
E 274435.33
△ = 13°30'07"
D = 2°17'31"
T = 295.94'
L = 589.13'
E = 17.45'
R = 2500.00'
P.C. 351+96.24 AT
P.T. 357+85.37 AT
S.E.
L.R.

P.I. DATA
P.I. 361+39.61 AT
N 212688.17
E 274642.14

VCL 400.00
K = 320.00

VPOT STA 348+00.00
VPOT EL1248.47

VPC STA 349+50.00
VPC EL1248.25

349+98.00
1248.21

VPI STA 351+50.00
VPI EL1247.94

VPT STA 353+50.00
VPT EL1250.15

VPC STA 355+00.00
VPC EL1251.80

VPI STA 356+50.00
VPI EL1253.44

355+70.57
1252.18

VPRC STA 358+00.00
VPRC EL1248.08

VCL 200.00
K = 67.09

VPI STA 359+00.00
VPI EL1244.50

VPT STA 360+00.00
VPT EL1243.91

-0.15 %

+1.10 %

-3.58 %

-0.60 %

FINISHED PROFILE

EXISTING PROFILE

K = 64.16
VCL 300.00

STA 358+50 AT
1-INLET MEDIAN 2 GRATE (901), RT
2-INLET COVERS TYPE MS
18" CP TEMPORARY

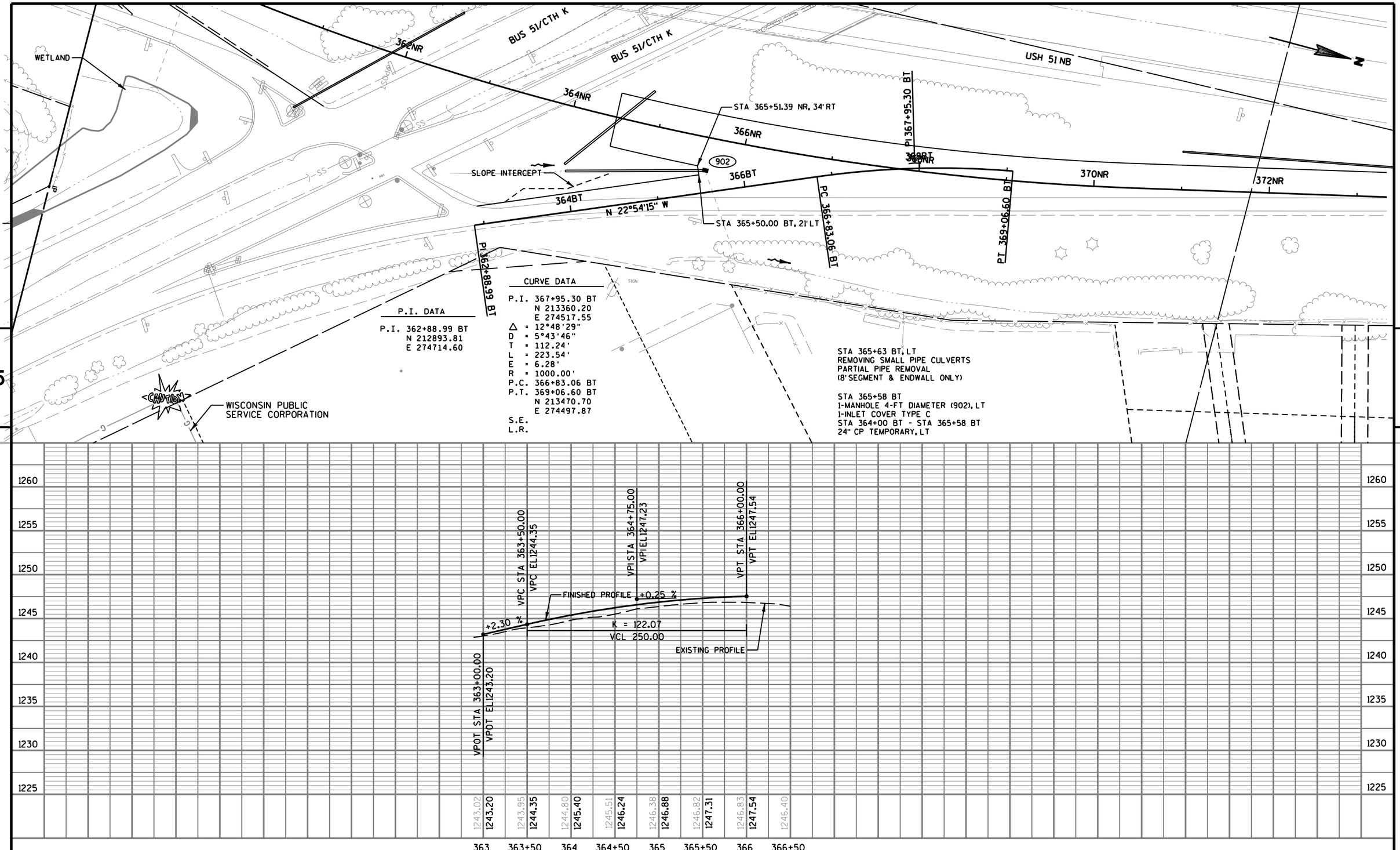
1260 1255 1250 1245 1240 1235 1230 1225

348	348+50	349	349+50	350	350+50	351	351+50	352	352+50	353	353+50	354	354+50	355	355+50	356	356+50	357	357+50	358	358+50	359	359+50	360	360+50	361
1248.48	1248.47	1248.52	1248.40	1248.26	1248.32	1247.75	1248.25	1247.49	1248.21	1247.61	1248.25	1249.66	1248.37	1249.97	1248.57	1248.60	1248.85	1248.62	1249.20	1248.91	1249.63	1249.38	1250.15	1249.41	1250.69	1248.39	1251.24	1248.56	1251.79	1248.38	1252.15	1247.74	1252.12	1246.09	1251.69	1245.63	1250.88	1244.94	1249.67	1243.72	1248.08	1243.17	1246.48	1244.03	1245.25	1244.02	1244.39	1243.91	1243.91	1243.80	1244.05

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	PLAN & PROFILE - TEMPORARY AT RAMP	SHEET 711 E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\050101_pp_tmp_at.dgn | PLOT DATE : 7/31/2012 | PLOT BY : AYRES-EC | PLOT NAME : | PLOT SCALE : 1:100

WISDOT/CADDS SHEET 40



PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	PLAN & PROFILE - TEMPORARY BT RAMP	SHEET 712	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\050101_pp_tmp_bt.dgn PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 40

P.I. DATA	CURVE DATA
P.I. 370+38.26 CT	P.I. 374+28.01 CT
N 213671.64	N 213927.69
E 273801.82	E 274095.66
	△ = 50°01'53"
	D = 11°14'04"
	T = 237.99'
	L = 445.34'
	E = 52.79'
	R = 510.00'
	P.C. 371+90.02 CT
	P.T. 376+35.36 CT
	S.E.
	L.R.

N

PI 370+38.26 CT

R 50'

N 213763.12
E 273821.56

N 4°55'48" E

PC 371+90.02 CT

372CT

STA 370+90 CT
12" CP TEMPORARY

SLOPE INTERCEPT

PERMITTED WETLAND IMPACT

WAUSAU WATER WORKS

SAN

STA 380+25 CT
1-INLET MEDIAN 2 GRATE (903), RT
2-INLET COVERS TYPE MS
STA 380+25 CT - STA 383+72 CT
18" CP TEMPORARY

STA 381+00.00 CT, 21' RT

D RAMP

BUS 51/CTH K

BUS 51/CTH K

POST

374CT

PT 376+35.36 CT

376CT

C RAMP

378CT

380CT

N 1°06'05" W

903

SLOPE INTERCEPT

STA 374+00.00 CT, 21' RT

PI 374+28.01 CT

772SB

774SB

776SB

USH 51 SB

778SB

780SB

SAN

5

5

K = 9.23
VCL 24.00

VPC STA 370+63.00
VPC EL1250.27
VPI STA 370+75.00
VPI EL1249.98
VPT STA 370+87.00
VPT EL1249.38
VPI STA 371+24.30
VPI EL1248.56

VPOT STA 370+62.45
VPOT EL1250.28
VPC STA 370+88.00
VPC EL1249.33
VPI STA 371+00.00
VPI EL1248.73
VPT STA 371+12.00
VPT EL1248.65

VCL 24.00
K = 5.57

-1.17 %

VCL 50.00
K = 154.85

VPC STA 372+50.00
VPC EL1247.09
VPI STA 372+75.00
VPI EL1246.80
VPT STA 373+00.00
VPT EL1246.59

STA 372+25 CT
24" CP TEMPORARY

-0.84 %

FINISHED PROFILE

EXISTING PROFILE

VPC STA 377+75.00
VPC EL1242.58
VPI STA 378+00.00
VPI EL1242.37
VPT STA 378+25.00
VPT EL1242.07

K = 144.42
VCL 50.00

-1.19 %

VPC STA 379+75.00
VPC EL1240.29
VPI STA 380+00.00
VPI EL1239.99
VPT STA 380+25.00
VPT EL1239.63

-1.44 %

K = 200.00
VCL 50.00

1265 1260 1255 1250 1245 1240 1235 1230

370+50	371	371+50	372	372+50	373	373+50	374	374+50	375	375+50	376	376+50	377	377+50	378	378+50	379	379+50	380	380+50	381
1250.23	1247.53	1248.86	1247.40	1248.26	1238.87	1247.68	1238.74	1247.09	1236.07	1246.59	1236.66	1246.17	1242.06	1245.75	1244.87	1245.33	1244.98	1244.90	1244.23	1244.48	1243.65	1244.06	1243.01	1243.64	1242.68	1243.22	1241.86	1242.79	1241.23	1242.35	1240.86	1241.78	1240.13	1241.18	1239.89	1240.59	1238.95	1239.98	1238.49	1239.27	1237.89	1238.55

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	PLAN & PROFILE - TEMPORARY CT RAMP	SHEET 713 E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\050101_pp_tmp_ct.dgn PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 40

CURVE DATA

P.I. 384+58.73 CT
N 214988.85
E 274075.25
Δ = 12°59'56"
D = 5°43'46"
T = 113.93'
L = 226.88'
E = 6.47'
R = 1000.00'
P.C. 383+44.80 CT
P.R.C385+71.68 CT
S.E.
L.R.

CURVE DATA

P.I. 387+26.18 CT
N 215251.52
E 274130.59
Δ = 17°33'56"
D = 5°43'46"
T = 154.50'
L = 306.58'
E = 11.86'
R = 1000.00'
P.R.C385+71.68 CT
P.T. 388+78.26 CT
N 215405.26
E 274115.34
S.E.
L.R.

NOTE:
'CT' RAMP & DRAINAGE STRUCTURES IN USH 51 MEDIAN IS CONSTRUCTED OFF OF THE 'NR' CROSS SECTIONS.

N

STA 381+00.00 CT, 21'RT
STA 382+00.00 CT, 23.6'RT
382CT
C RAMP
384CT
PI 384+58.73 CT
386CT
SLOPE INTERCEPT
906
388CT
PT 388+78.26 CT
396NR
394NR
392NR
390NR
388NR
386NR
384NR
382NR
USH 51 SB
USH 51 NB
PC 383+44.80 CT
PRC 385+71.68 CT
SLOPE INTERCEPT
STA 386+52.79 CT, 21'RT
PI 387+26.18 CT
B RAMP
STA 387+75 NR
1-INLET MEDIAN 2 GRATE (906), LT
2-INLET COVERS TYPE MS
STA 385+50 NR - STA 387+75 NR
18" CP TEMPORARY

5

5

FINISHED PROFILE
EXISTING PROFILE
-1.44 %
-1.05 %
VCL 50.00
K = 128.21
VPC STA 383+75.00
VPC EL1234.59
VPI STA 384+00.00
VPI EL1234.23
VPT STA 384+25.00
VPT EL1233.97
VPOT STA 385+00.00
VPOT EL1233.18

1250 1245 1240 1235 1230 1225 1220 1215

1265 1260 1255 1250 1245 1240 1235 1230

1237.89	1237.00	1236.07	1235.47	1234.77	1234.04	1233.82	1233.44	1233.09	1232.56	1231.59	1229.08	1226.90	1225.40	1225.58	1228.47
1238.55	1237.83	1237.11	1236.39	1235.67	1234.95	1234.26	1233.71	1233.18							
381	381+50	382	382+50	383	383+50	384	384+50	385	385+50	386	386+50	387	387+50	388	388+50

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	PLAN & PROFILE - TEMPORARY CT RAMP	SHEET 714	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\050101_pp_tmp_ct2.dgn
PLOT DATE : 7/31/2012
PLOT BY : AYRES-EC
PLOT NAME :
PLOT SCALE : 1:100

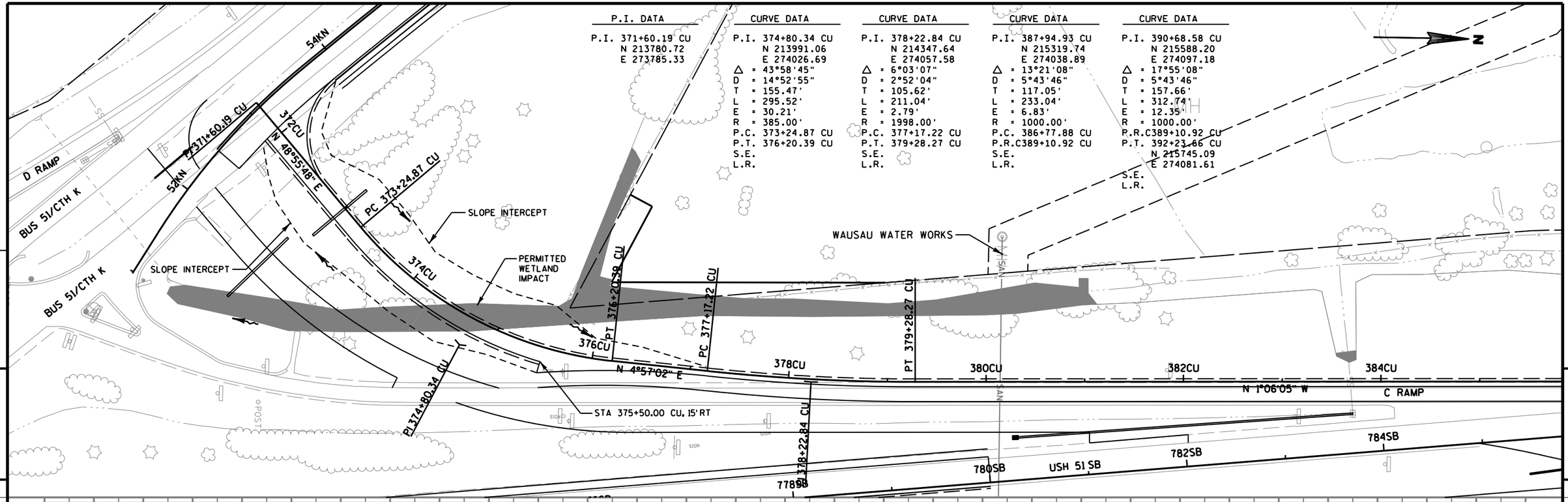
P.I. DATA
P.I. 371+60.19 CU
N 213780.72
E 273785.33

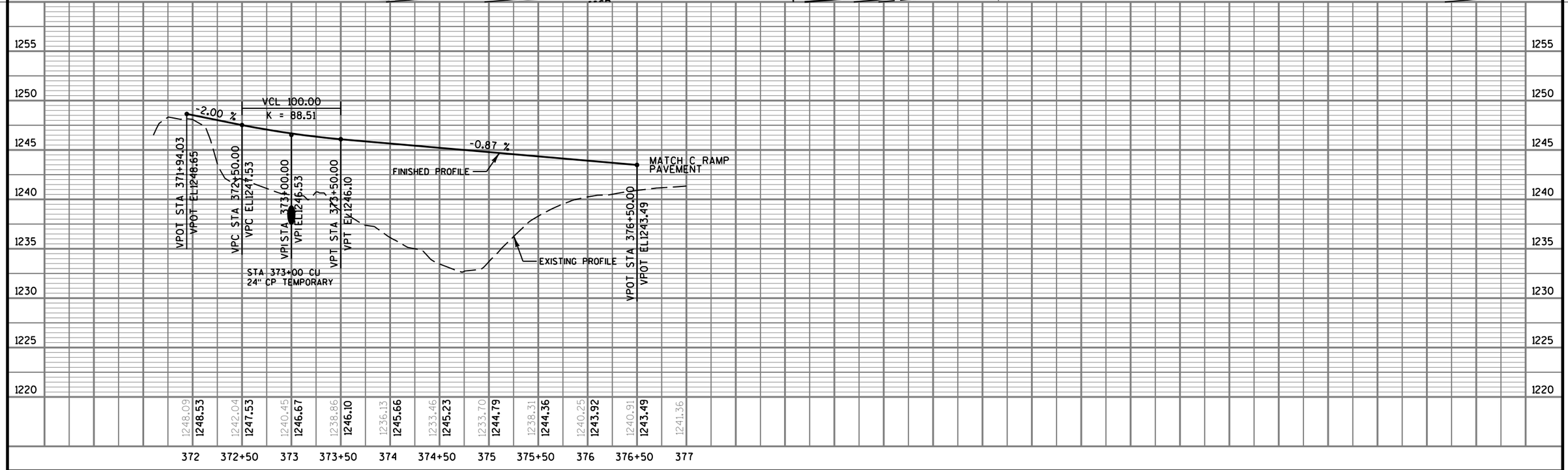
CURVE DATA
P.I. 374+80.34 CU
N 213991.06
E 274026.69
△ = 43°58'45"
D = 14°52'55"
T = 155.47'
L = 295.52'
E = 30.21'
R = 385.00'
P.C. 373+24.87 CU
P.T. 376+20.39 CU
S.E.
L.R.

CURVE DATA
P.I. 378+22.84 CU
N 214347.64
E 274057.58
△ = 6°03'07"
D = 2°52'04"
T = 105.62'
L = 211.04'
E = 2.79'
R = 1998.00'
P.C. 377+17.22 CU
P.T. 379+28.27 CU
S.E.
L.R.

CURVE DATA
P.I. 387+94.93 CU
N 215319.74
E 274038.89
△ = 13°21'08"
D = 5°43'46"
T = 117.05'
L = 233.04'
E = 6.83'
R = 1000.00'
P.C. 386+77.88 CU
P.R.C389+10.92 CU
S.E.
L.R.

CURVE DATA
P.I. 390+68.58 CU
N 215588.20
E 274097.18
△ = 17°55'08"
D = 5°43'46"
T = 157.66'
L = 312.74'
E = 12.35'
R = 1000.00'
P.R.C389+10.92 CU
P.T. 392+23.66 CU
N 215745.09
E 274081.61
S.E.
L.R.





PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	PLAN & PROFILE - TEMPORARY CU RAMP	SHEET 715	E

P.I. DATA	CURVE DATA	CURVE DATA	P.I. DATA
P.I. 351+58.50 DT	P.I. 359+68.06 DT	P.I. 367+66.57 DT	P.I. 369+53.67 DT
N 211702.48	N 212510.95	N 213264.32	N 213422.77
E 274293.63	E 274335.88	E 274039.85	E 273938.65
	△ = 24°26'36"	△ = 11°06'51"	
	D = 3°27'06"	D = 3°49'11"	
	T = 359.56'	T = 145.94'	
	L = 708.18'	L = 290.97'	
	E = 38.49'	E = 7.08'	
	R = 1660.00'	R = 1500.00'	
	P.C. 356+08.50 DT	P.C. 366+20.63 DT	
	P.T. 363+16.68 DT	P.T. 369+11.60 DT	
	S.E.	S.E.	
	L.R.	L.R.	

PI 351+58.50 DT
CTH U
CAUTION
PERMITTED WETLAND IMPACT
352DT
352ST
354DT
N 2°59'30" E
PC 356+08.50 DT
356DT
358DT
SLOPE INTERCEPT
STA 359+00.00 DT, 15' RT
360DT
362DT
DT RAMP
PT 363+16.68 DT
STA 363+50.00 DT
364DT
N 21°27'06" W
366DT
PC 366+20.63 DT
SLOPE INTERCEPT
904
USH 51 SB
PI 359+68.06 DT
AT RAMP
USH 51 NB
WISCONSIN PUBLIC SERVICE CORPORATION
FRONTIER COMMUNICATIONS
BUS 51/CTH K
BUS 51/CTH K

FINISHED PROFILE
VPI STA 363+15.00
VPI EL1273.94
EXISTING PROFILE
363+06.37
1270.90
+3.50 %
-3.89 %
VCL 500.00
K = 156.25
K = 44.68
VCL 330.00
VPOT STA 353+50.00
VPOT EL1249.76
+0.30 %
VPC STA 354+00.00
VPC EL1249.91
VPI STA 356+50.00
VPI EL1250.66
VPT STA 359+00.00
VPT EL1259.41
STA 359+50 DT
1-INLET 2x2-FT (904), RT
1-INLET COVER TYPE C
18" CP TEMPORARY
VPC STA 361+50.00
VPC EL1268.16
VPT STA 364+80.00
VPT EL1267.52
VPOT STA 365+75.00
VPOT EL1263.83

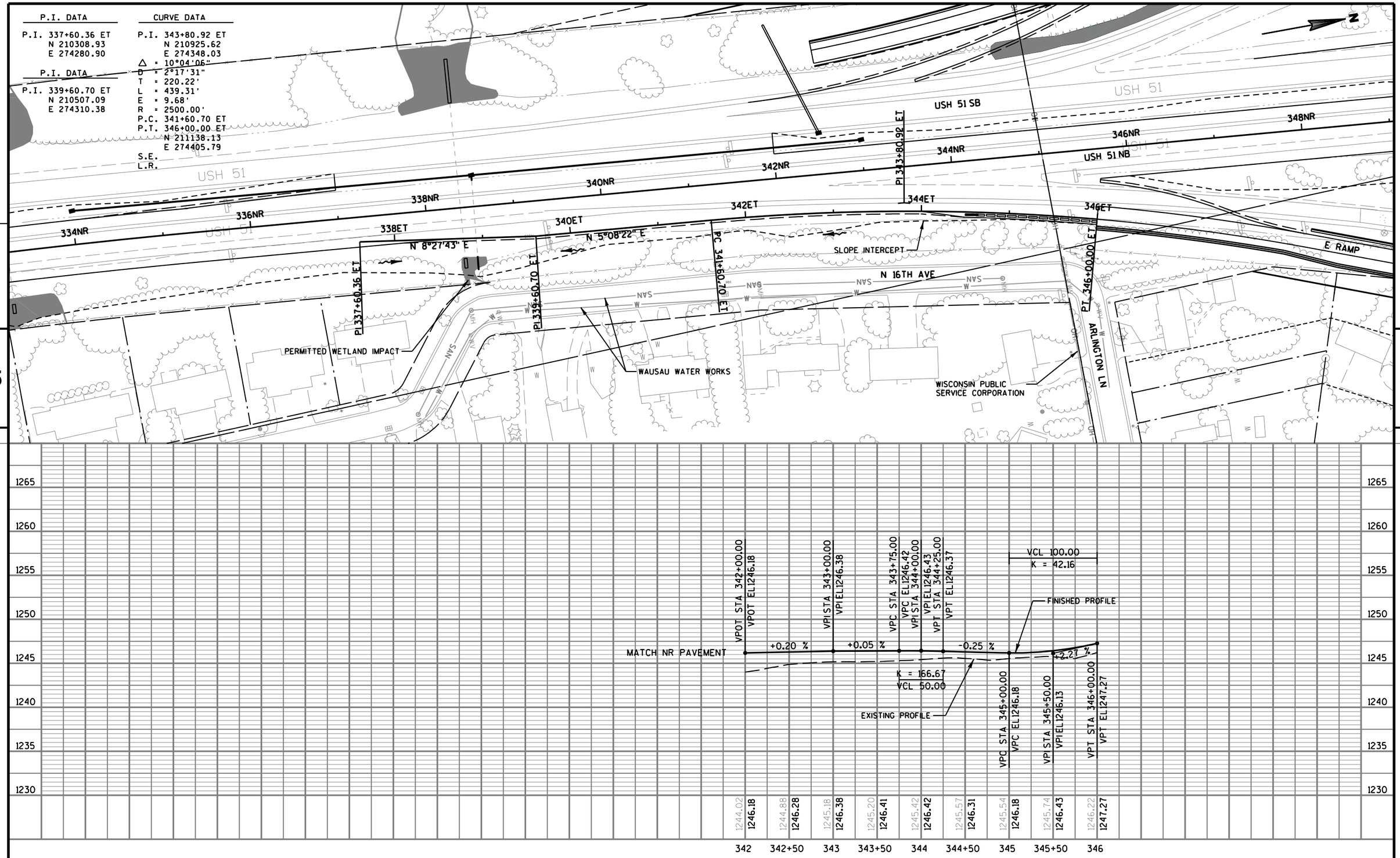
1270 1265 1260 1255 1250 1245 1240 1235

1249.15 1249.76 1249.29 1249.91 1249.61 1250.14 1249.86 1250.53 1250.62 1251.08 1251.35 1251.79 1252.26 1252.66 1253.26 1253.69 1254.31 1254.88 1255.09 1256.23 1256.16 1257.74 1257.23 1259.41 1258.05 1261.16 1259.19 1262.91 1261.29 1264.66 1264.25 1266.41 1266.23 1268.16 1268.09 1269.63 1268.92 1270.54 1269.99 1270.89 1270.79 1270.68 1269.56 1269.92 1268.36 1268.59 1266.41 1266.74 1264.66 1264.80 1262.89 1260.79 1258.87

353+50 354 354+50 355 355+50 356 356+50 357 357+50 358 358+50 359 359+50 360 360+50 361 361+50 362 362+50 363 363+50 364 364+50 365 365+50 366 366+50 367

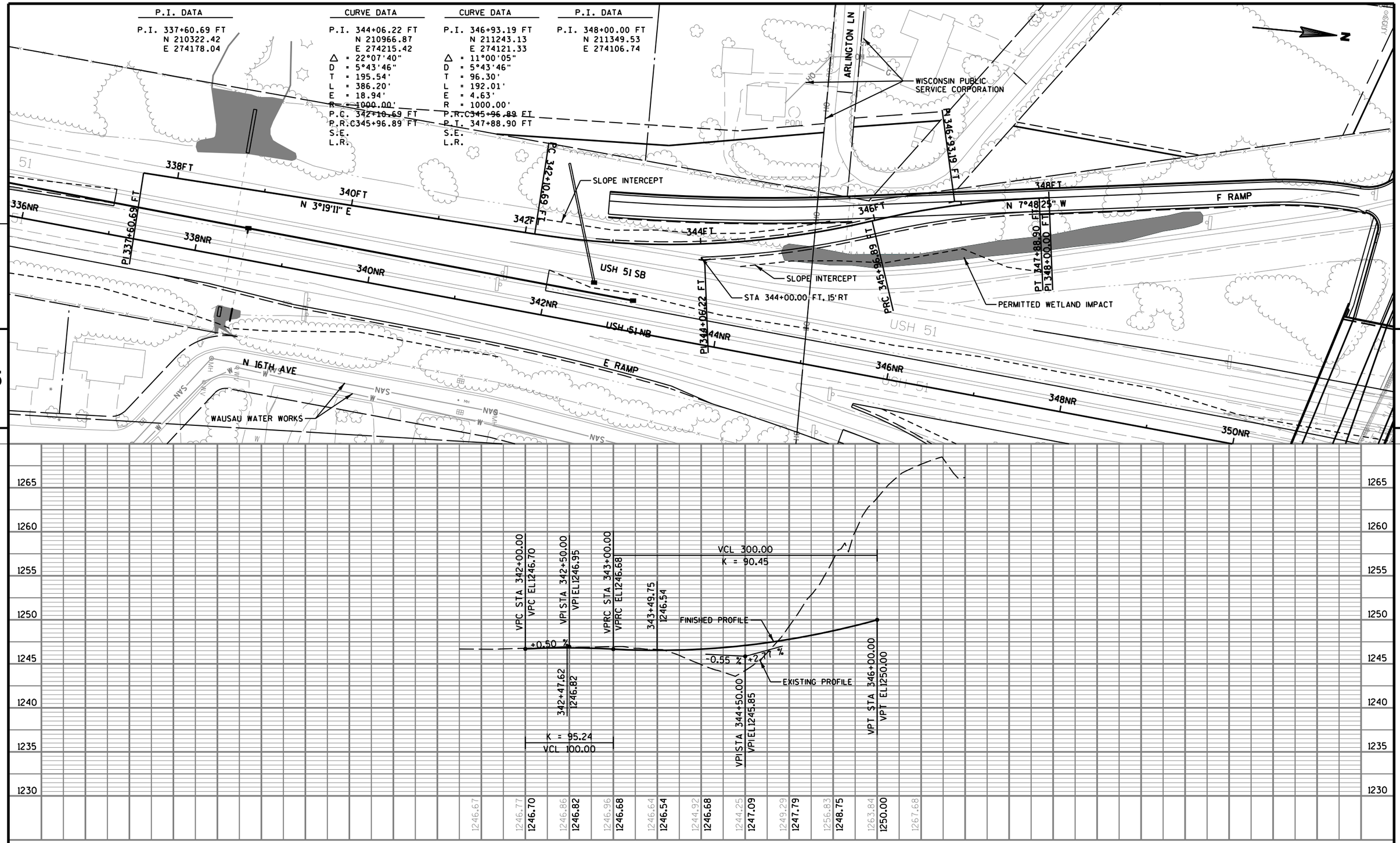
PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	PLAN & PROFILE - TEMPORARY DT RAMP	SHEET 716 E

P.I. DATA	CURVE DATA
P.I. 337+60.36 ET	P.I. 343+80.92 ET
N 210308.93	N 210925.62
E 274280.90	E 274348.03
	△ = 10°04'06"
P.I. DATA	D = 2°17'31"
P.I. 339+60.70 ET	T = 220.22'
N 210507.09	L = 439.31'
E 274310.38	E = 9.68'
	R = 2500.00'
	P.C. 341+60.70 ET
	P.T. 346+00.00 ET
	N 211138.13
	E 274405.79
	S.E.
	L.R.



PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	PLAN & PROFILE - TEMPORARY ET RAMP	SHEET 717	E

P.I. DATA	CURVE DATA	CURVE DATA	P.I. DATA
P.I. 337+60.69 FT N 210322.42 E 274178.04	P.I. 344+06.22 FT N 210966.87 E 274215.42 △ = 22°07'40" D = 5°43'46" T = 195.54' L = 386.20' E = 18.94' R = 1000.00' P.C. 342+10.69 FT P.R.C 345+96.89 FT S.E. L.R.	P.I. 346+93.19 FT N 211243.13 E 274121.33 △ = 11°00'05" D = 5°43'46" T = 96.30' L = 192.01' E = 4.63' R = 1000.00' P.R.C 345+96.89 FT P.T. 347+88.90 FT S.E. L.R.	P.I. 348+00.00 FT N 211349.53 E 274106.74



PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	PLAN & PROFILE - TEMPORARY FT RAMP	SHEET 718	E

PC 350+29.08 NR
350NR
N 5°01'24" E
352NR
PI 352+63.68 NR
354NR
PT 354+97.69 NR
USH 51 NB
356NR
914
N 12°03'08" E
PC 357+46.93 NR
358NR
USH 51 SB
360NR
362NR
364NR
SLOPE INTERCEPT
BUS 51/CTH K
BUS 51/CTH K
PI 364+08.20 NR
N

STA 352+66 NR
18" CPRC EXTENSION
REMOVING PARTIAL PIPE
(ENDWALL ONLY)

FRONTIER COMMUNICATIONS

STA 354+21 NR
STA 354+49 NR
STA 358+47 NR
REMOVING INLET

STA 354+49 NR - STA 355+00 NR
REMOVING STORM SEWER

WISCONSIN PUBLIC
SERVICE CORPORATION

SLOPE INTERCEPT

5

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VPI STA 355+00.00
VPI EL 1252.52

+1.94 %

VPC STA 356+45.00
VPC EL 1255.34

STA 356+50 NR
1-INLET 2x2-FT (914), LT
1-INLET TYPE C
18" CP TEMPORARY

K = 116.77
VCL 460.00

VPI STA 358+75.00
VPI EL 1259.80

358+71.46
1257.53

FINISHED PROFILE

EXISTING PROFILE

VPT STA 361+05.00
VPT EL 1255.20

-2.00 %

STA 361+84 NR
18" CP TEMPORARY
SKEW 47° LHF

VCL 500.00
K = 133.13

VPC STA 363+36.00
VPC EL 1250.60

STA 364+56 NR
24" CP TEMPORARY
SKEW 52° LHF

1265
1260
1255
1250
1245
1240
1235
1230

355	355+50	356	356+50	357	357+50	358	358+50	359	359+50	360	360+50	361	361+50	362	362+50	363	363+50	364	364+50	365
1251.80	1252.52	1251.78	1253.49	1251.76	1254.46	1251.30	1255.43	1250.27	1256.27	1249.09	1256.90	1247.41	1257.31	1246.02	1257.51	1244.80	1257.50	1244.21	1257.27	1243.47	1256.82	1243.44	1256.17	1243.88	1255.30	1242.85	1254.30	1244.48	1253.30	1246.97	1252.30	1245.19	1251.30	1246.81	1250.31	1245.80	1249.46	1243.29	1248.79	1242.41	1248.32

PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	PLAN & PROFILE - TEMPORARY NR LINE	SHEET 719	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\050101_pp_tmp_nrun1.dgn PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 40

USH 51 SB

BUS 51/CTH K

BUS 51/CTH K

USH 51 NB

N

380NR

378NR

376NR

374NR

372NR

370NR

368NR

366NR

915

PT 370+48.65 NR

N 12°48'33" W

SLOPE INTERCEPT

SLOPE INTERCEPT

WAUSAU WATER WORKS

SIGN

SAN MH

PC 380+35.06 NR

STA 374+74 NR
PARTIAL PIPE REMOVAL
(ENDWALL ONLY)

STA 374+74 NR
1-INLET 2x2-FT (915), LT
1-INLET COVER TYPE C
STA 371+00 NR - STA 374+74 NR
18" CP TEMPORARY

5

5

1265
1260
1255
1250
1245
1240
1235
1230

VCL 500.00
K = 133.13

366+01.27
1247.93

FINISHED PROFILE

+1.76 %

-2.00 %

VPI STA 365+85.00
VPI ELI245.60

EXISTING PROFILE

VPT STA 368+35.00
VPT ELI249.99

VPC STA 370+50.00
VPC ELI253.76

VPI STA 372+50.00
VPI ELI257.27

372+68.88
1255.68

K = 124.68
VCL 400.00

VPT STA 374+50.00
VPT ELI254.37

-1.45 %

VPI STA 375+00.00
VPI ELI253.64

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WISCONSIN PUBLIC SERVICE CORPORATION

USH 51 SB

USH 51 NB

DECATOR DR

SLOPE INTERCEPT

SLOPE INTERCEPT

PT 410+98.13 NR

PC 413+03.06 NR

PT 417+16.20 NR

PI 415+10.10 NR

PC 419+48.39 NR

PI 421+55.78 NR

PT 423+62.22 NR

PI 423+81.21 NR

412NR

414NR

416NR

418NR

420NR

422NR

N 5°41'01" W

N 15°09'08" W

N 5°40'05" W

905

5

5

VPOT STA 413+00.00
VPOT EL1320.28

VPI STA 414+00.00
VPI EL1324.10

VPI STA 415+00.00
VPI EL1328.50

VPI STA 416+00.00
VPI EL1332.28

VPC STA 417+25.00
VPC EL1336.48

VPI STA 418+00.00
VPI EL1339.00

VPT STA 418+75.00
VPT EL1340.63

VPC STA 419+00.00
VPC EL1341.18

VPI STA 420+00.00
VPI EL1343.35

VPT STA 421+00.00
VPT EL1347.08

VPC STA 421+50.00
VPC EL1348.94

VPT STA 422+50.00
VPT EL1352.25

VPOT STA 423+00.00
VPOT EL1353.70

VPI STA 422+00.00
VPI EL1350.80

+3.82 %
+4.40 %
+3.78 %
+3.36 %
+2.18 %
+3.72 %
+2.90 %

K = 126.58
VCL 150.00

VCL 200.00
K = 129.03

K = 121.21
VCL 100.00

STA 418+55 NR
1-INLET MEDIAN 2 GRATE (9D5), LT
1-COVER PLATE TEMPORARY
18" CP TEMPORARY
PARTIAL PIPE REMOVAL
(ENDWALL ONLY)

EXISTING PROFILE

FINISHED PROFILE

1350
1345
1340
1335
1330
1325
1320
1315

413	413+50	414	414+50	415	415+50	416	416+50	417	417+50	418	418+50	419	419+50	420	420+50	421	421+50	422	422+50	423	423+50
1320.28	1322.36	1324.45	1326.51	1328.47	1330.38	1332.25	1333.72	1334.43	1335.20	1335.06	1335.07	1337.08	1339.04	1340.99	1343.58	1346.10	1348.52	1350.94	1352.39	1353.77	1355.10
1320.28	1322.19	1324.10	1326.30	1328.50	1330.39	1332.28	1333.96	1335.64	1337.30	1338.78	1340.06	1341.18	1342.36	1343.74	1345.31	1347.08	1348.94	1350.70	1352.25	1353.70	

PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	PLAN & PROFILE - TEMPORARY NR LINE	SHEET 721	E

ABANDONING CULVERT PIPES
356+50 SR

FRONTIER
COMMUNICATIONS

STA 356+50 SR
1-INLET MEDIAN 2 GRATE (919), 12.5' LT
2-INLET COVERS TYPE MS
18" CPRC

PI 354+14.35 SR

352SR

354SR

PRC 351+91.44 SR

356SR

919

358SR

USH 51 NB

PRC 356+36.76 SR

D RAMP

USH 51 SB

PT 362+84.53 SR

SLOPE INTERCEPT

360SR

362SR

364SR

366SR

BUS 51/CTH K

BUS 51/CTH K

N 5°40'05" W

PI 359+63.37 SR

WISCONSIN PUBLIC
SERVICE CORPORATION

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FINISHED PROFILE

EXISTING PROFILE

VCL 350.00
K = 132.09

+0.50 %

+3.15 %

+3.09 %

+2.68 %

+2.19 %

VPOT STA 355+00.00
VPOT EL1252.33

VPI STA 356+75.00
VPI EL1253.20

VPT STA 358+50.00
VPT EL1258.72

VPI STA 359+00.00
VPI EL1260.29

VPI STA 360+00.00
VPI EL1263.39

VPI STA 361+00.00
VPI EL1266.07

VPI STA 362+00.00
VPI EL1268.26

1270
1265
1260
1255
1250
1245
1240
1235

| | | |

Standard Detail Drawing List

08A05-18A	INLET COVERS TYPE A, H, A-S, & H-S
08A05-18B	INLET COVERS TYPE B, B-A, C, MS, MS-A, & WM
08A05-18C	INLET COVERS TYPE F, HM, HM-S, S, T, V, HM-GJ, & HM-GJ-S
08A05-18D	INLET COVER, TYPE BW, Z MANHOLE COVERS, TYPE K, J, J-S, L & M
08B09-01	MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER
08C07-01	INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT
08C08-01	INLETS MEDIAN 1 AND 2 GRATE
08D01-17	CONCRETE CURB, CONCRETE CURB AND GUTTER AND TIES
08D02-06	CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES
08D04-05	CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES
08D05-14A	CURB RAMPS TYPES 1 AND 1-A
08D05-14B	CURB RAMPS TYPES 2 AND 3
08D05-14C	CURB RAMPS TYPE 4A
08D05-14D	CURB RAMPS TYPE 4B
08D05-14E	CURB RAMPS TYPES 5, 6, 7A, 7B & 8
08D15-04A	EDGEDRAIN OUTLET AND OUTFALL MARKERS
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
08E14-01	TRACKING PAD
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
08F04-07	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
08F07-04	STEEL APRON ENDWALLS FOR CULVERT PIPE AND PIPE ARCH SLOPED SIDE FRAINS
09A01-12A	AT-GRADE SIDE ROAD INTERSECTION, TYPES "B1", "B2", "C" AND D AND TEE INTERSECTION BYPASS LANE
09A01-12B	AT-GRADE SIDE ROAD INTERSECTION, TYPE "A1" & "A2"
09B02-07	CONDUIT
09B04-09	PULL BOX
09C02-06	CONCRETE BASES, TYPES 1, 2 & 5
09C03-03	TRANSFORMER/PEDESTAL BASES
09C05-07	CONCRETE CONTROL CABINET BASES
09C06-05	CONCRETE CONTROL CABINET BASE, TYPE 9, SPECIAL
09C08-04	CONCRETE BASE, TYPE 7
09C10-02	TRANSFORMER BASE FOR 15" BOLT CIRCLE
09D01-04	CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)
09D02-02	SIGNAL OR LIGHTING CONTROL CABINET
09E01-11A	POLE MOUNTINGS FOR TRAFFIC SIGNALS TYPE 2
09E01-11D	POLE MOUNTINGS FOR LIGHTING UNITS, TYPE 5 (30 FEET)
09E01-11F	POLE MOUNTINGS FOR LIGHTING UNITS, TYPE 17 (40 FEET)
09E01-11G	HARDWARE DETAILS FOR POLE MOUNTINGS
09E02-03	FREEWAY LIGHTING UNIT POLE WIRING
09E03-04	NON-FREEWAY LIGHTING UNIT POLE WIRING
09E04-05	WALKWAY LIGHTING UNIT AND CONCRETE BASE, TYPE 11
09E06-04	TRAFFIC SIGNAL STANDARD POLY BRACKET MOUNTINGS (TYPICAL) 13 FT. OR 15 FT.
09F13-03	LOOP DETECTOR INSTALLED IN EXISTING ASPHALTIC PAVEMENT
09G01-03A	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G01-03B	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G01-03C	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G01-03D	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G01-03E	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G01-03F	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
09G01-03G	SPAN WIRE TEMPORARY TRAFFIC SIGNAL
11A01-04	MAINTENANCE CROSSOVER FOR FREEWAYS
11B02-02	CONCRETE MEDIAN NOSE
12A03-10	NAME PLATE (STRUCTURES)
12A04-02	STRUCTURE IDENTIFICATION PLAQUES, RAMP GATES, SIGN BRIDGES & OVERHEAD SIGN SUPPORT
13A03-05	CONCRETE PAVEMENT SHOULDERS
13A05-04A	SHOULDER RUMBLE STRIP, MILLING
13A05-04B	SHOULDER RUMBLE STRIP, MILLING
13B02-06	CONCRETE PAVEMENT APPROACH SLAB
13C01-15	CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES
13C11-10A	RURAL DOWELED CONCRETE PAVEMENT
13C11-10B	RURAL DOWELED CONCRETE PAVEMENT
13C13-07	URBAN DOWELED CONCRETE PAVEMENT
13C16-01	CONCRETE JOINT DETAIL FOR TEE INTERSECTION BYPASS LANE AND RIGHT TURN LANE
13C17-01A	CONCRETE JOINT DETAIL FOR EXIT RAMP TERMINI
13C17-01B	CONCRETE JOINT DETAIL FOR ENTRANCE RAMP TERMINI
13C18-01A	CONCRETE PAVEMENT JOINTING
13C18-01B	CONCRETE PAVEMENT STEEL REINFORCEMENT

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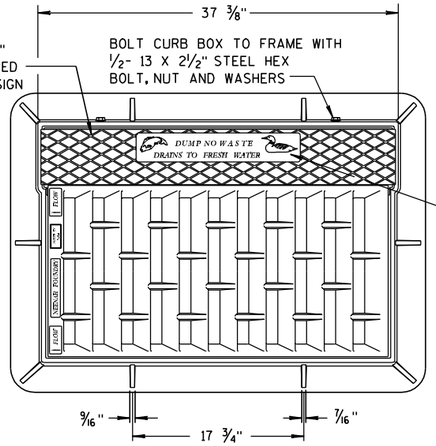
Standard Detail Drawing List

13C18-01C	CONCRETE PAVEMENT JOINT TIES
13C18-01D	CONCRETE PAVEMENT JOINTING AT UTILITY FIXTURES
13C18-01E	CONCRETE PAVEMENT JOINTING AND STEEL REINFORCEMENT IN ROUNDABOUTS
14A02-01	TREE PLANTING DETAIL
14B07-12A	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-12B	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-12C	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-12D	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B15-07A	STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATION & ELEMENTS
14B15-07B	STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATION & ELEMENTS
14B15-07C	STEEL PLATE BEAM GUARD, CLASS "A", INSTALLATION & ELEMENTS
14B20-10A	STEEL THRIE BEAM STRUCTURE APPROACH
14B20-10B	STEEL THRIE BEAM STRUCTURE APPROACH, CONNECTION TO SQUARE END PARAPETS
14B20-10C	STEEL THRIE BEAM STRUCTURE APPROACH, CONNECTION TO VERTICAL FACED PARAPETS
14B20-10D	STEEL THRIE BEAM STRUCTURE APPROACH, CONNECTION TO SLOPED END PARAPETS
14B20-10E	STEEL THRIE BEAM STRUCTURE APPROACH, CONNECTION TO BRIDGE RAILING TYPES "F" AND "W"
14B20-10F	STEEL THRIE BEAM STRUCTURE APPROACH, CONNECTION TO BRIDGE RAILING TYPE "M"
14B20-10G	STEEL THRIE BEAM STRUCTURE APPROACH, CONNECTOR PLATE DETAIL
14B20-10H	STEEL THRIE BEAM STRUCTURE APPROACH, SINGLE SLOPE ATTACHMENT
14B24-07A	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL
14B24-07B	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL
14B24-07C	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL
14B26-02A	STEEL THRIE BEAM BULLNOSE TERMINAL
14B26-02B	STEEL THRIE BEAM BULLNOSE TERMINAL
14B26-02C	STEEL THRIE BEAM BULLNOSE TERMINAL
14B26-02D	STEEL THRIE BEAM BULLNOSE TERMINAL
14B26-02E	STEEL THRIE BEAM BULLNOSE TERMINAL
14B32-01A	CONCRETE BARRIER SINGLE SLOPE (CBSS)
14B32-01B	CONCRETE BARRIER SINGLE SLOPE (CBSS)
14B32-01C	CONCRETE BARRIER SINGLE SLOPE (CBSS)
14B32-01D	CONCRETE BARRIER SINGLE SLOPE (CBSS)
14B33-01G	CONCRETE BARRIER SINGLE SLOPE 42" THRIE BEAM ANCHOR
14B33-01H	CONCRETE BARRIER SINGLE SLOPE 42" THRIE BEAM ANCHOR
14B41-01A	SINGLE SLOPE ROADSIDE RETAINING WALL
14B41-01B	SINGLE SLOPE ROADSIDE RETAINING WALL
14B42-02A	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-02B	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-02C	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B44-01A	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-01B	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-01C	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B45-02A	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-02B	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-02C	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-02D	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-02E	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-02F	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-02G	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-02H	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-02I	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-02J	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B47-01A	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B47-01B	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B47-01C	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
15A02-07	DELINEATOR POST, DELINEATOR BRACKET AND DELINEATOR
15A03-01	MARKER POSTS, FLEXIBLE, FOR CULVERT END
15A06-02	DELINEATOR LAYOUT
15B03-12A	CHAIN LINK FENCE
15B03-12B	CHAIN LINK FENCE
15C02-04A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-04B	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-04C	DETOUR SIGNING FOR MAINLINE CLOSURES
15C03-01	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C05-01	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS
15C06-05	SIGNING & MARKING FOR TWO LANE BRIDGES
15C07-12B	PAVEMENT MARKING WORDS
15C07-12C	PAVEMENT MARKING ARROWS
15C07-12D	ROUNDABOUT ARROWS

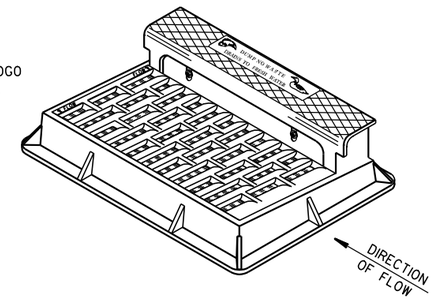
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Standard Detail Drawing List

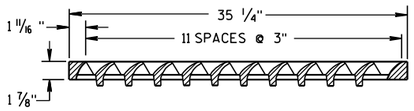
15C08-14A	PAVEMENT MARKING (MAINLINE)
15C08-14B	PAVEMENT MARKING (INTERSECTIONS)
15C08-14E	PAVEMENT MARKING (LEFT TURN LANE)
15C08-14F	PAVEMENT MARKING (ISLANDS, STOP LINE & CROSS WALK)
15C12-03	TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)
15C15-03	36" DIAMETER FULL SPAN OVERHEAD SIGN SUPPORT BASE
15C18-03	MEDIAN ISLAND MARKING
15C21-04	SIGNING AND MARKING FOR TWO LANE TO FOUR LANE DIVIDED TRANSITIONS
15C26-02	END-OF-ROADWAY SIGNING
15C27-01	DOUBLE ARROW WARNING SIGN PLACEMENT
15C29-02A	BICYCLE LANE MARKING
15C29-02B	BICYCLE LANE MARKING
15C29-02E	PAVEMENT MARKING FOR BIKE LANES
15C31-01A	PAVEMENT MARKING (RAMPS AND GORES)
15C31-01D	PAVEMENT MARKING FOR PARALLEL ON-RAMP AND PARALLEL OFF-RAMP
15D07-03	TRAFFIC CONTROL, TEMPORARY EXIT RAMP CROSSOVER
15D08-03	TRAFFIC CONTROL, TEMPORARY ENTRANCE RAMP CROSSOVER
15D11-03	TRAFFIC CONTROL, SINGLE LANE CROSSOVER
15D12-02	TRAFFIC CONTROL, LANE CLOSURE, SPEEDS GREATER THAN 40 M.P.H.
15D15-01	TRAFFIC CONTROL, EXIT AND ENTRANCE RAMP WITHIN LANE CLOSURE
15D16-01	TRAFFIC CONTROL, EXIT RAMP CLOSURE
15D20-01	TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY
15D21-01	TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE
15D27-01	TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH
15D29-02	TRAFFIC CONTROL, VEHICLE ENTRANCE/EXIT OR HAUL ROAD

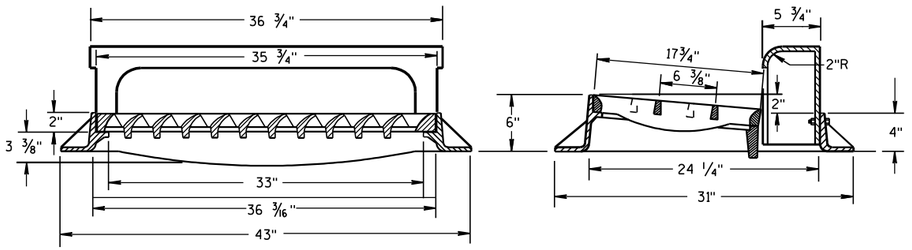


NOTE:
GRATE IS REVERSIBLE.



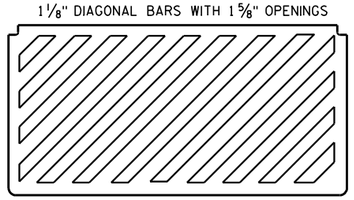
NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"





TYPE "H"

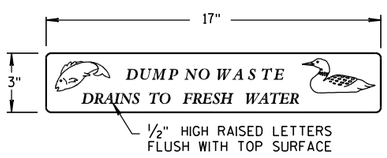
(APPROXIMATE WEIGHT 441 LBS.)
FRAME..... 181 LBS.
GRATE..... 146 LBS.
CURB BOX..... 114 LBS.



SPECIAL GRATE FOR TYPE "H" COVER

(MEASURES 35 1/4" X 17 3/4" X 2")
(APPROXIMATE WEIGHT 159 LBS.)
GRATE..... 159 LBS.

(NOTED AS TYPE H-S ON DRAINAGE TABLE)



LOGO DETAIL

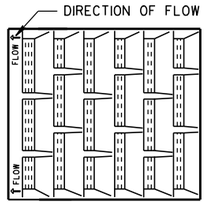
GENERAL NOTES

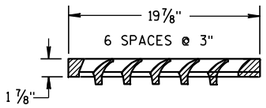
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

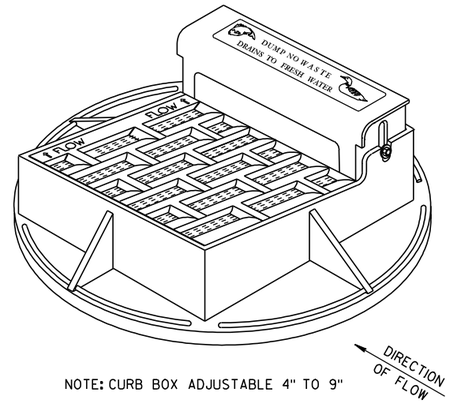
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.

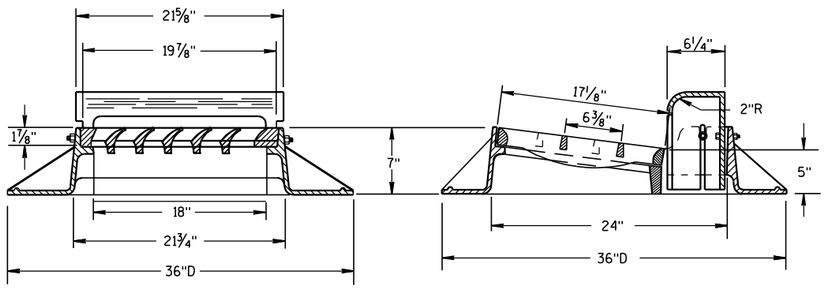
THE ACTUAL WEIGHT OF COVERS MAY VARY WITHIN 5 PERCENT, PLUS OR MINUS, OF THE APPROXIMATE WEIGHT.





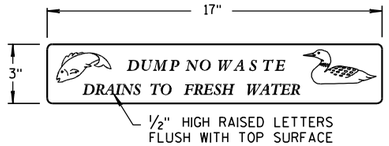


NOTE: CURB BOX ADJUSTABLE 4" TO 9"



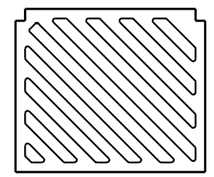
TYPE "A"

(APPROXIMATE WEIGHT 340 LBS.)
FRAME..... 185 LBS.
GRATE..... 71 LBS.
CURB BOX..... 84 LBS.



LOGO DETAIL

NOTE:
GRATE IS REVERSIBLE.



SPECIAL GRATE FOR TYPE "A" COVER

(MEASURES 19 3/4" X 17" X 1 7/8"
GRATE..... 84 LBS.

(NOTED AS TYPE A-S ON DRAINAGE TABLE)

INLET COVERS
TYPE A, H, A-S, & H-S

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

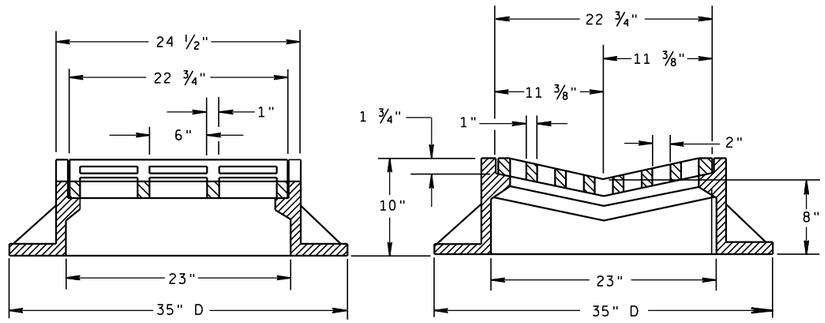
APPROVED
6/5/2012 DATE
/S/ Jerry H. [illegible] ROADWAY STANDARDS ENGINEER
726
FHWA

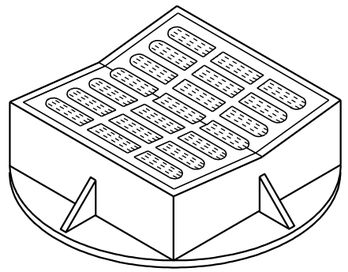
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S.D.D. 8 A 5-18a

6

S.D.D. 8 A 5-18a

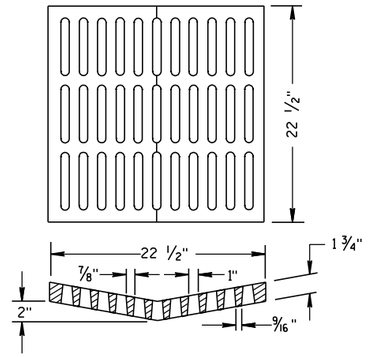




TYPE "B"

(APPROXIMATE WEIGHT 405 LBS.)

FRAME..... 294 LBS.
GRATE..... 111 LBS.

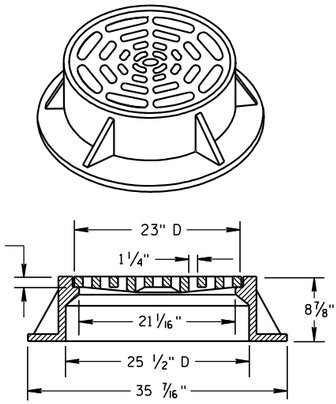


ALTERNATIVE GRATE FOR TYPE "B" COVER

(APPROXIMATE GRATE WEIGHT 134 LBS.)

USE WHERE PEDESTRIAN OR BICYCLE TRAFFIC IS POSSIBLE.

NOTED AS TYPE B-A ON THE DRAINAGE TABLE



TYPE "C"

(APPROXIMATE WEIGHT 259 LBS.)

FRAME..... 152 LBS.
GRATE..... 107 LBS.

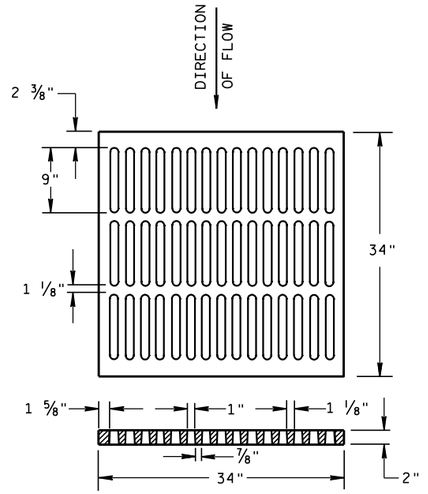
GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.

THE ACTUAL WEIGHT OF COVERS MAY VARY WITH 5 PERCENT, PLUS OR MINUS, OF THE APPROXIMATE WEIGHT.

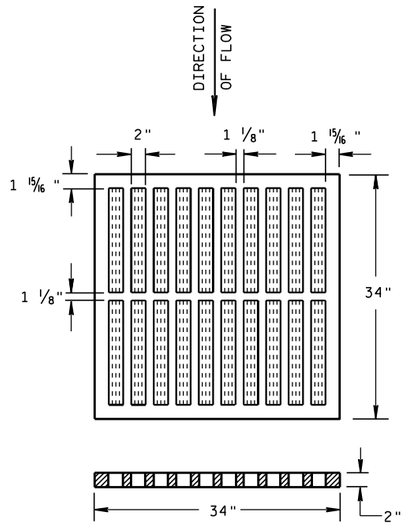


ALTERNATIVE TYPE "MS"

(APPROXIMATE GRATE WEIGHT 329 LBS.)

USE WHERE PEDESTRIAN OR BICYCLE TRAFFIC IS PERMITTED

NOTED AS TYPE MS-A ON THE DRAINAGE TABLE

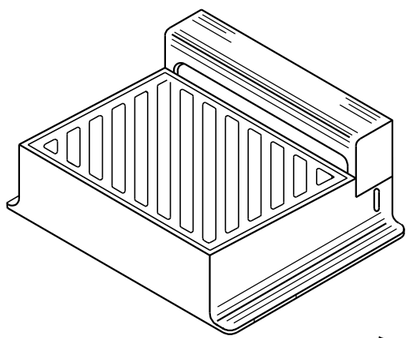


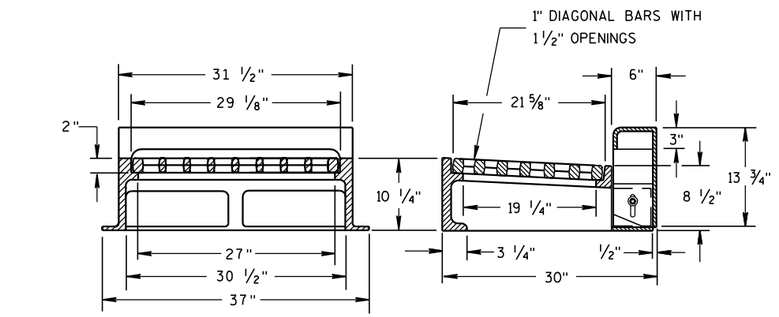
TYPE "MS"

(APPROXIMATE GRATE WEIGHT 268 LBS.)

USE ON FREEWAYS AND EXPRESSWAYS

NOTED AS TYPE MS ON DRAINAGE TABLE





NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

DIRECTION OF FLOW

DIAGONAL SLOTS, SHALL BE ORIENTED TO THE DIRECTION OF FLOW AS ILLUSTRATED. GRATES ARE MANUFACTURED TO BE REVERSIBLE.

TYPE "WM"

(APPROXIMATE WEIGHT 648 LBS.)

FRAME..... 355 LBS.
GRATE..... 156 LBS.
CURB BOX..... 137 LBS.

INLET COVERS
TYPE B, B-A, C, MS, MS-A, & WM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6/5/2012 DATE

/S/ Jerry H. Zaas
ROADWAY STANDARDS ENGINEER

727 ENT

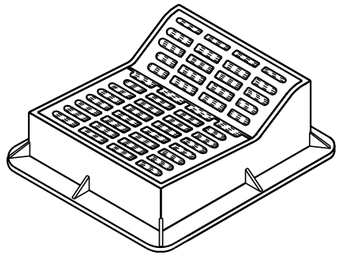
FHWA

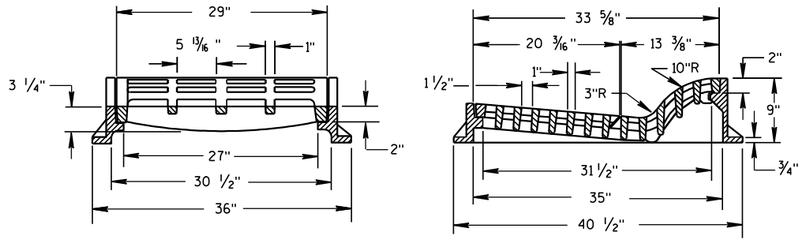
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S.D.D. 8 A 5-18b

6

S.D.D. 8 A 5-18b



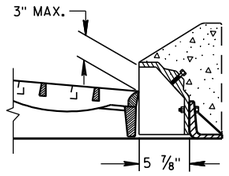


TYPE "F"

(APPROXIMATE WEIGHT 644 LBS.)

FRAME.....302 LBS.
GRATE.....160 LBS.
GRATE.....182 LBS.

USE WITH TYPES A & D CONCRETE CURB & GUTTER, 36 INCH.



ALTERNATIVE CURB BOX FOR TYPE "HM" COVER

(APPROXIMATE WEIGHT CURB BOX 68 LBS.)

USE WITH TYPES G & J CONCRETE CURB & GUTTER, 30 INCH
NOTED AS TYPE HM-GJ ON DRAINAGE TABLE

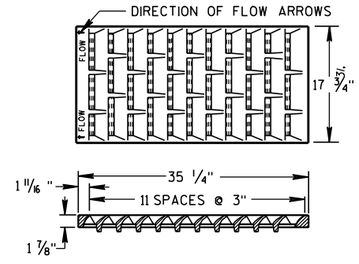
NOTE:
SPECIAL GRATE FOR THE
TYPE "H" COVER MAY ALSO BE
USED FOR THE TYPE "HM-GJ" COVER
NOTED AS TYPE HM-GJ-S ON DRAINAGE TABLE

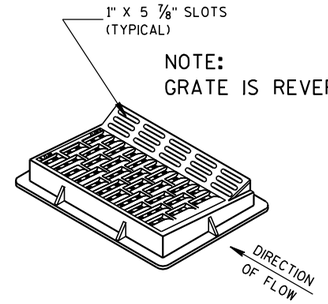
GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

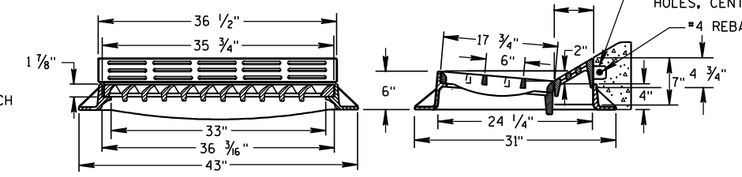
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

THE ACTUAL WEIGHT OF COVERS MAY VARY WITHIN 5 PERCENT, PLUS OR MINUS, OF THE APPROXIMATE WEIGHT.





NOTE:
GRATE IS REVERSIBLE.

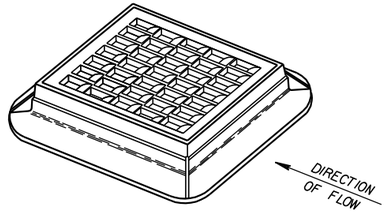


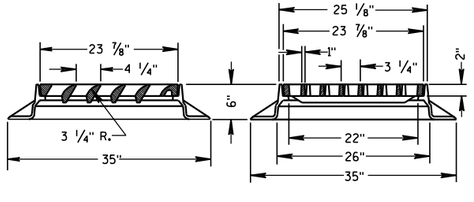
TYPE "HM"

(APPROXIMATE WEIGHT 414 LBS.)
FRAME..... 181 LBS.
GRATE..... 159 LBS.
CURB BOX..... 74 LBS.

USE WITH TYPES A & D CONCRETE CURB & GUTTER, 36 INCH.

NOTE:
SPECIAL GRATE FOR THE
TYPE "H" COVER MAY ALSO BE
USED FOR THE TYPE "HM" COVER
NOTED AS TYPE HM-S ON DRAINAGE TABLE

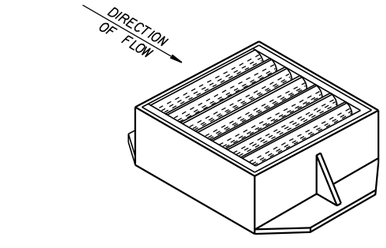


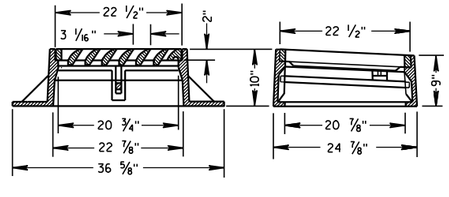


TYPE "S"

(APPROXIMATE WEIGHT 333 LBS.)

FRAME.....164 LBS.
GRATE..... 169 LBS.

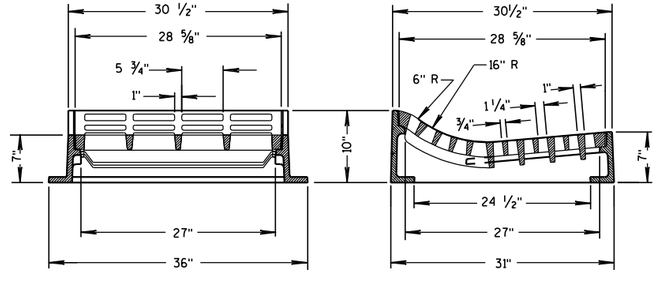




TYPE "V"

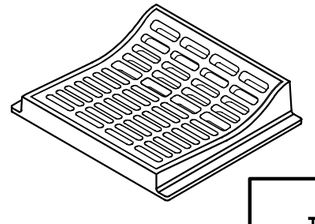
(APPROXIMATE WEIGHT 410 LBS.)

FRAME..... 269 LBS.
GRATE..... 136 LBS.
SAFETY BAR..... 5 LBS.



TYPE "T"

(APPROXIMATE WEIGHT 530 LBS.)
FRAME.....270 LBS.
GRATE.....260 LBS.
USE WITH TYPES R & T CONCRETE CURB & GUTTER, 36 INCH.



INLET COVERS TYPE F, HM, HM-S, S, T, V, HM-GJ, & HM-GJ-S

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

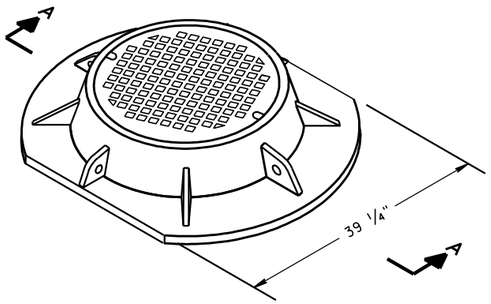
APPROVED
6/5/2012 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
728
FHWA

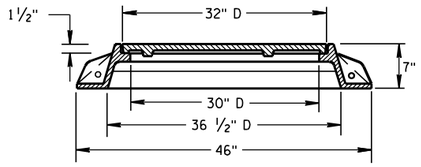
6

S.D.D. 8 A 5-18c

6

S.D.D. 8 A 5-18c



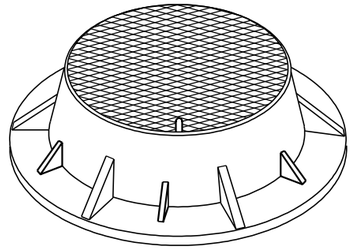


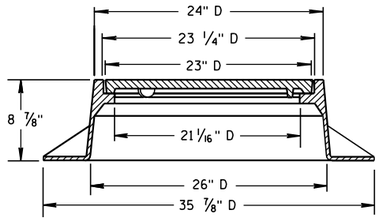
SECTION A-A

TYPE "K"

(APPROXIMATE WEIGHT 439 LBS.)

FRAME.....216 LBS.
LID.....223 LBS.

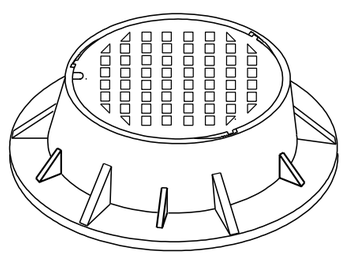


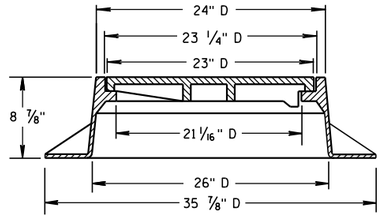


TYPE "J"

(APPROXIMATE WEIGHT 267 LBS.)

FRAME.....152 LBS.
LID.....115 LBS.





TYPE "J" SPECIAL

TYPE "B" NON-ROCKING SELF-SEAL LID

(APPROXIMATE WEIGHT 267 LBS.)

FRAME.....158 LBS.
LID.....109 LBS.

(NOTED AS TYPE J-S ON THE DRAINAGE TABLE)

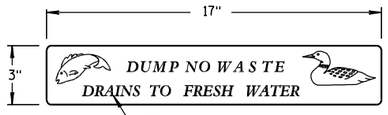
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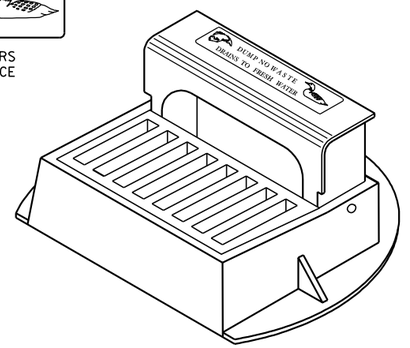
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR MANHOLE COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

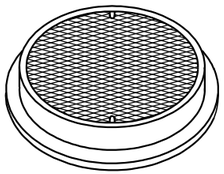
ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.

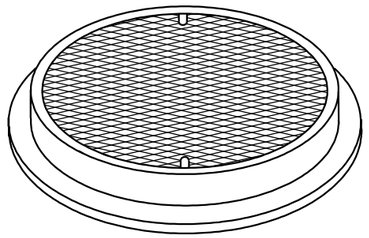
THE ACTUAL WEIGHT OF COVERS MAY VARY WITH 5 PERCENT, PLUS OR MINUS, OF THE APPROXIMATE WEIGHT.

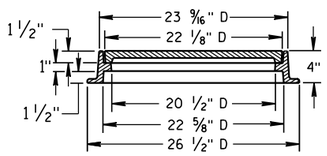


LOGO DETAIL





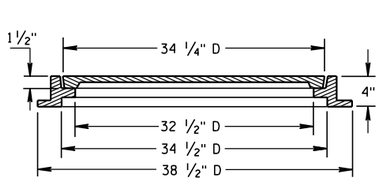




TYPE "L"

(APPROXIMATE WEIGHT 158 LBS.)

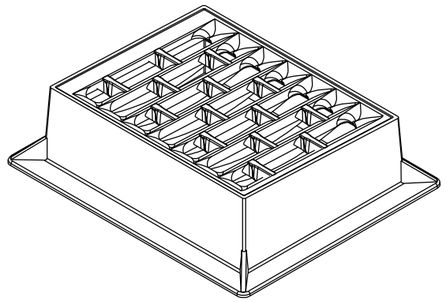
FRAME.....81 LBS.
LID.....77 LBS.

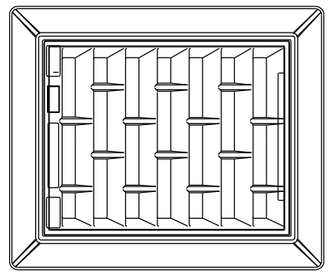


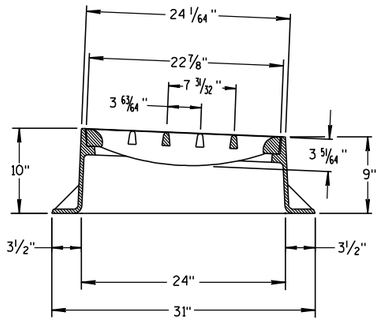
TYPE "M"

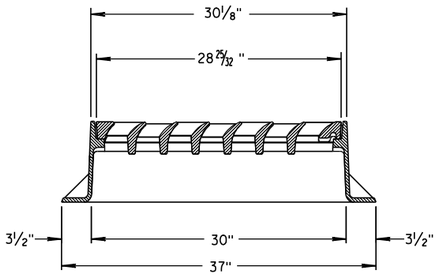
(APPROXIMATE WEIGHT 377 LBS.)

FRAME..... 125 LBS.
LID..... 252 LBS.

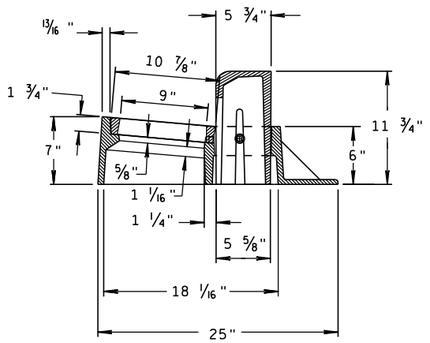


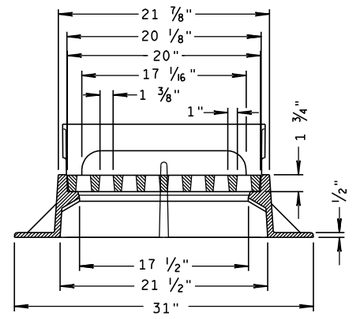






INLET COVER TYPE "BW"





INLET COVER TYPE "Z"

(APPROXIMATE WEIGHT 344 LBS.)

FRAME.....206 LBS.
GRATE..... 46 LBS.
CURB BOX..... 92 LBS.

INLET COVERS, TYPE BW, Z MANHOLE COVERS, TYPE K, J, J-S, L & M

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6/5/2012
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER

FHWA

729

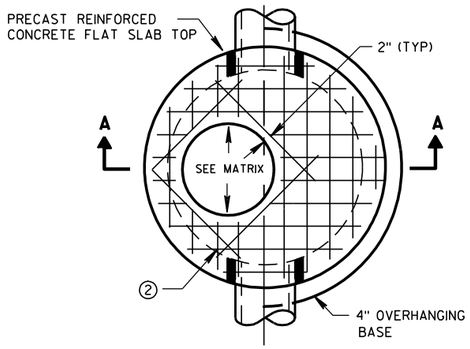
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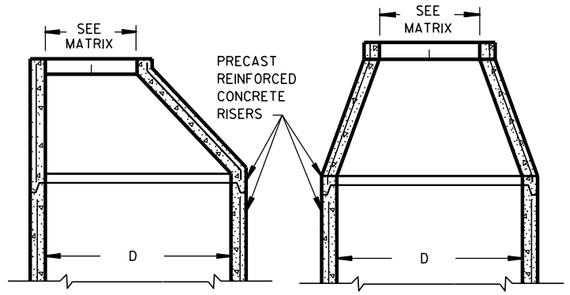
S.D.D. 8 A 5-18d

6

S.D.D. 8 A 5-18d

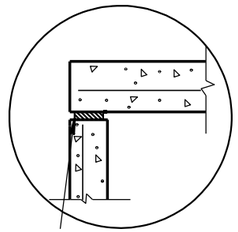


PLAN VIEW CIRCULAR OPENING



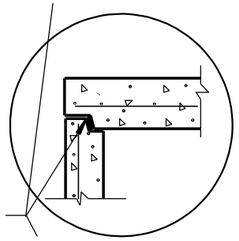
OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP

OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP

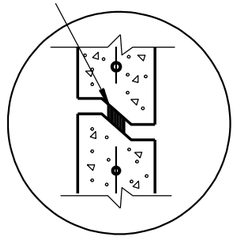


TOP WITH PLAIN END JOINT

JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C990 (TYP)

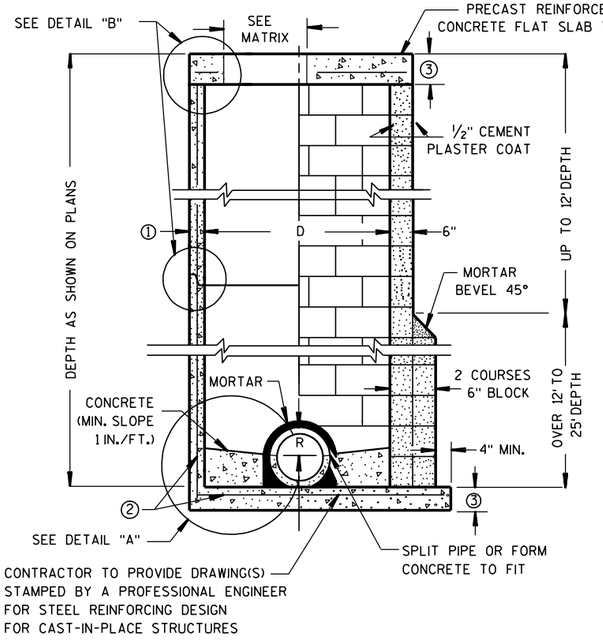


TOP WITH TONGUE AND GROOVE JOINT



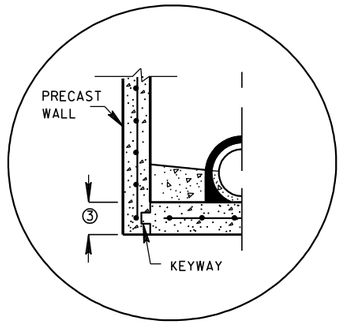
RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B"

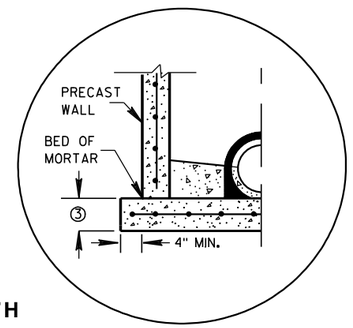


PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

CONCRETE BLOCK WITH CAST-IN-PLACE OR PRECAST REINFORCED CONCRETE BASE ②

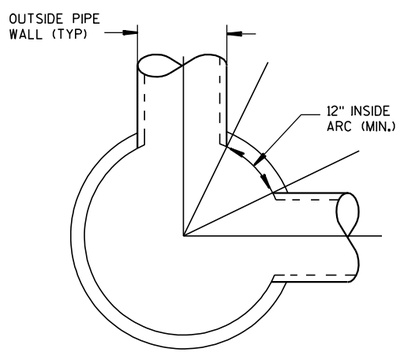


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION



SEPERATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"



DETAIL "C"

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST MANHOLE UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATE THE SIZE OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF GRANULAR BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

PRECAST REINFORCED CONE TOPS (ECCENTRIC OR CONCENTRIC) OR PRECAST REINFORCED FLAT SLAB TOPS MAY BE USED ON CONCRETE BLOCK STRUCTURES. THE CONE TOPS SHALL BE INSTALLED ON A BED OF MORTAR.

ECCENTRIC CONE TOPS MAY BE USED ON ALL STRUCTURES, AND CONCENTRIC CONE TOPS SHALL BE USED ONLY ON STRUCTURES 5 FEET OR LESS IN DEPTH, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

STEPS MEETING AASHTO M199 AND THE FOLLOWING REQUIREMENTS SHALL BE INSTALLED IN ALL STRUCTURES OVER 5 FEET IN DEPTH: 16 INCH C-C MAXIMUM SPACING; PROJECT A MINIMUM CLEAR DISTANCE OF 4 INCHES FROM THE WALL AT THE POINT OF EMBEDMENT; MINIMUM LENGTH OF 10 INCHES; MINIMUM WALL EMBEDMENT OF 3 INCHES. FERROUS METAL STEPS NOT PAINTED OR TREATED TO RESIST CORROSION SHALL HAVE A MINIMUM CROSS SECTIONAL DIMENSION OF 1 INCH.

STEPS OF APPROVED POLYPROPYLENE PLASTIC COATED REINFORCEMENT BAR ARE ACCEPTABLE. REINFORCING BAR MUST BE A MINIMUM OF ½" AND MEET THE REQUIREMENTS OF ASTM A615.

CERTIFICATION SHALL BE PROVIDED THAT INSTALLED STEPS WHEN TESTED IN ACCORDANCE WITH SECTION 10 OF AASHTO T280 CAN WITHSTAND A VERTICAL LOAD OF 800 LBS. AND A HORIZONTAL LOAD OF 400 LBS.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

CONCRETE BLOCK WILL NOT BE PERMITED FOR STRUCTURES GREATER THAN 4 FEET IN DIAMETER.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

ALL PRECAST MANHOLE UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M 199.

4" OVERHANGING BASES ARE REQUIRED FOR ALL CONCRETE BLOCK INSTALLATIONS. 4" OVERHANG IS REQUIRED WHEN SEPERATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

FOR ADDITIONAL CONFIGURATIONS, MAINTAIN A MINIMUM OF 12 INCHES AS MEASURED FROM THE INSIDE OF THE STRUCTURE WALL BETWEEN THE OUTSIDE PIPE WALLS OF ADJACENT PIPES. SEE DETAIL "C".

① MINIMUM WALL THICKNESS SHALL BE 4 INCHES FOR 3-FT, 5 INCHES FOR 4-FT, 6 INCHES FOR 5-FT, 7 INCHES FOR 6-FT, 8 INCHES FOR 7-FT AND 9 INCHES FOR 8-FT DIAMETER PRECAST MANHOLES.

② FOR PRECAST MANHOLES PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

③ PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER OF 48" AND LESS SHALL HAVE A MINIMUM THICKNESS OF 6". PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER LARGER THAN 48" SHALL HAVE A MINIMUM THICKNESS OF 8".

MANHOLE COVER OPENING MATRIX

MANHOLE COVER TYPE	C	ALL J'S	K	L	M
OPENING SIZE (FT)					
2 DIA.	X	X		X	
3 DIA.			X		X

PIPE MATRIX

MANHOLE SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	180° SEPARATION (IN)	90° SEPARATION (IN)
3-FT	15	12
4-FT	24	18
5-FT	36	24
6-FT	42	36
7-FT	48	36
8-FT	60	42

MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

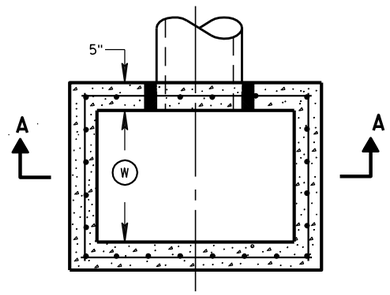
6/5/2012
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER

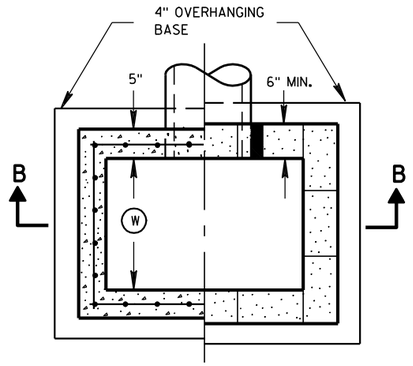
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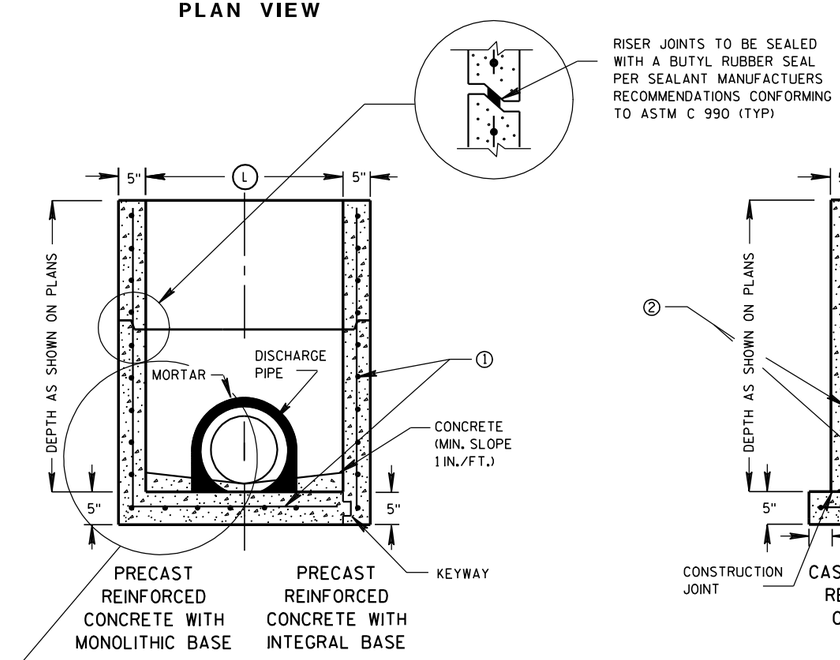
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S.D.D. 8 B 9-1



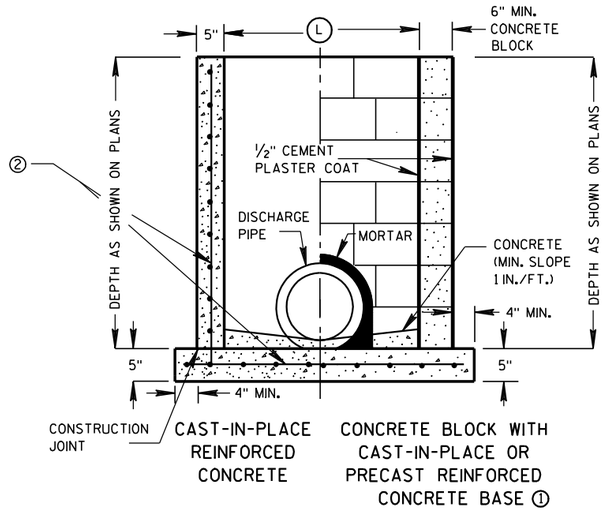
PLAN VIEW



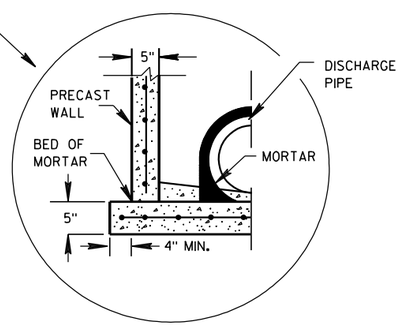
PLAN VIEW



SECTION A-A



SECTION B-B



SEPERATE PRECAST REINFORCED CONCRETE BASE OPTION

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST INLET UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF ASTM C 913.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATES THE SIZE OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF GRANULAR BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

4" OVERHANGING BASES ARE REQUIRED FOR CAST-IN-PLACE REINFORCED CONCRETE AND CONCRETE BLOCK INSTALLATIONS. 4" OVERHANG IS REQUIRED WHEN SEPERATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

MAXIMUM INSIDE PIPE DIAMETER DETERMINED BY 3 INCH CLEARANCE ON EACH SIDE OF THE OUTSIDE WALL OF THE PIPE. SEE DETAIL "A". ASSUMES PIPE ENTERS PERPENDICULAR TO THE STRUCTURE.

① FOR PRECAST INLETS PROVIDE REINFORCING STEEL IN ACCORDANCE TO ASTM C 913.

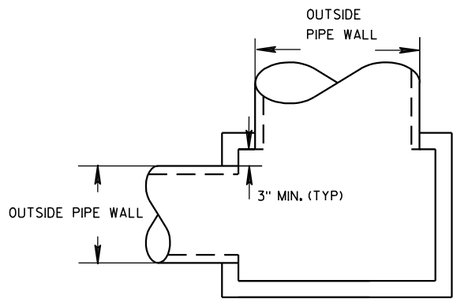
② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

INLET COVER MATRIX

INLET SIZE		INLET COVER TYPE	ALL A'S	ALL B'S	BW	F	ALL H'S	S	T	V	WM
	WIDTH (W) (FT)	LENGTH (L) (FT)									
2X2-FT	2	2	X	X				X		X	
2X2.5-FT	2	2.5			X			X	X	X	X
2X3-FT	2	3					X				
2.5X3-FT	2.5	3				X					

PIPE MATRIX

INLET SIZE	MAXIMUM INSIDE PIPE DIAMETER	
	WIDTH (IN)	LENGTH (IN)
2X2-FT	12	12
2X2.5-FT	12	18
2X3-FT	12	24
2.5X3-FT	18	24



DETAIL "A"

INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

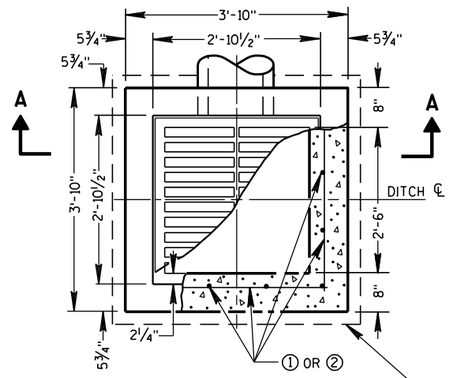
APPROVED
6/5/2012 — DATE
/S/ Jerry H. Zoda — ROADWAY STANDARDS D 731 IT ENGINEER
FHWA

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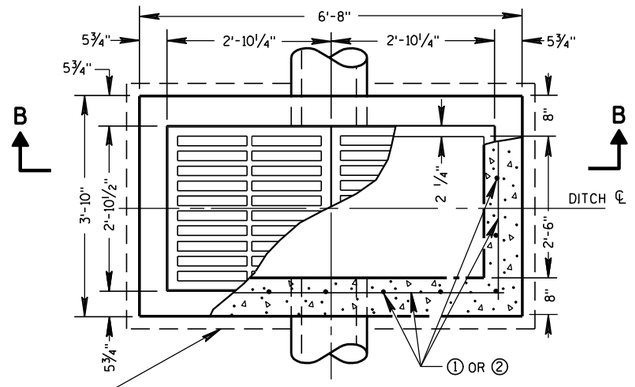
S.D.D. 8 C 7-1

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S.D.D. 8 C 7-1

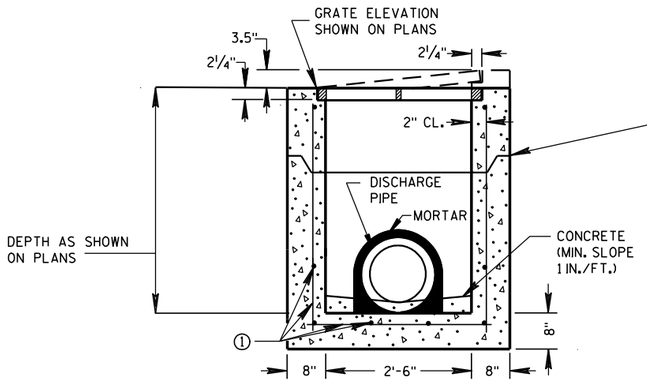


PLAN VIEW

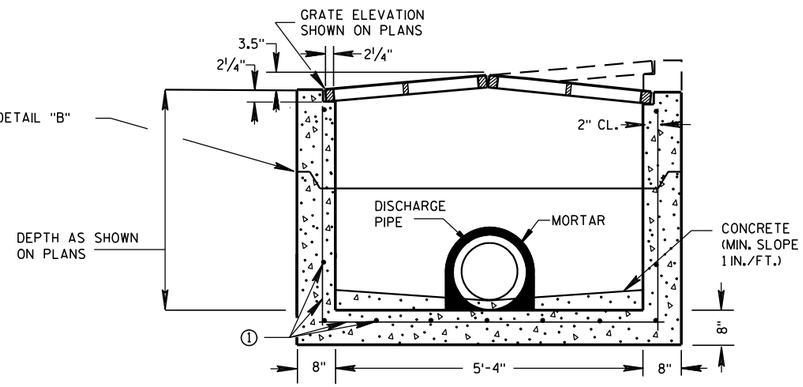


PLAN VIEW

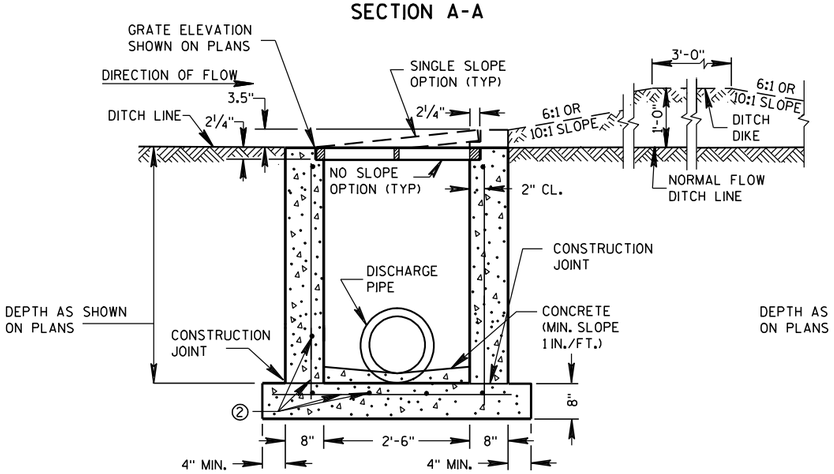
4" OVERHANGING BASE ON REINFORCED CAST-IN-PLACE CONCRETE INLETS



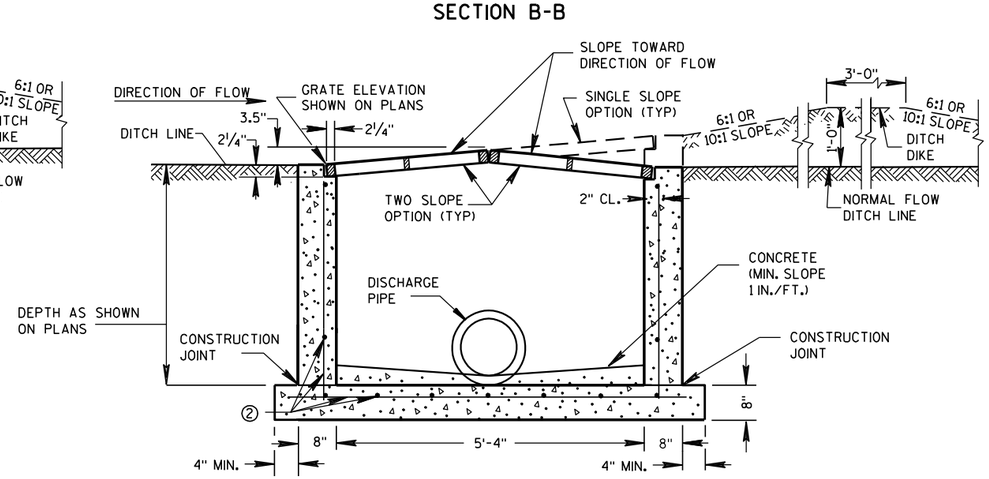
PRECAST REINFORCED CONCRETE SECTION A-A



PRECAST REINFORCED CONCRETE SECTION B-B



REINFORCED CAST-IN-PLACE CONCRETE SECTION A-A



REINFORCED CAST-IN-PLACE CONCRETE SECTION B-B

INLETS MEDIAN 1 GRATE

INLETS MEDIAN 2 GRATE

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST INLET UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR INLETS WHICH MAY INCLUDE PRECAST REINFORCED CONCRETE INLETS, SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL MEDIAN INLETS ARE DESIGNATED ON THE PLANS AS "INLETS, 1G-MS", ETC. THE FIRST NUMBER AND LETTER DESIGNATE THE TYPE OF STRUCTURE, AND THE FOLLOWING LETTERS DESIGNATE THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF ASTM C 913.

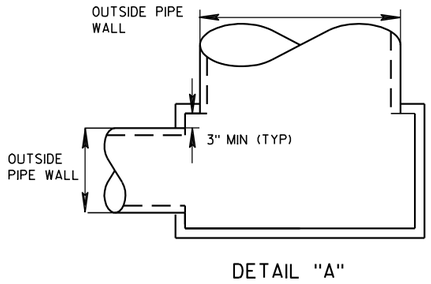
MAXIMUM INSIDE PIPE DIAMETER DETERMINED BY 3" CLEARANCE ON EACH SIDE OF THE OUTSIDE WALL OF THE PIPE. SEE DETAIL "A". ASSUMES PIPE ENTERS PERPENDICULAR TO THE STRUCTURE.

① FOR PRECAST INLETS PROVIDE REINFORCING STEEL IN ACCORDANCE TO ASTM C 913.

② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

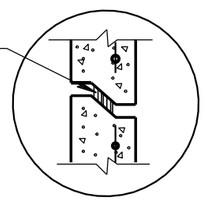
PIPE MATRIX

	MAXIMUM INSIDE PIPE DIAMETER	
INLET SIZE	WIDTH (IN)	LENGTH (IN)
1 GRATE	18	18
2 GRATE	18	42



DETAIL "A"

JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C 990 (TYP)



DETAIL "B"

INLETS MEDIAN 1 AND 2 GRATE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6/5/2012
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER

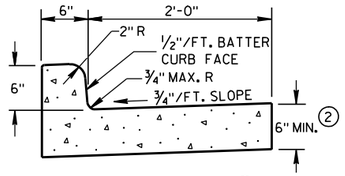
FHWA

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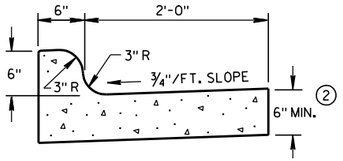
S.D.D. 8 C 8-1

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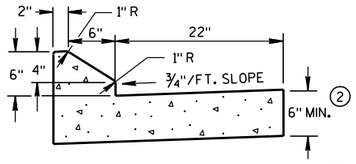
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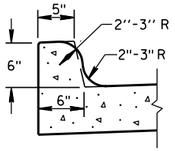
TYPES A & D (1)



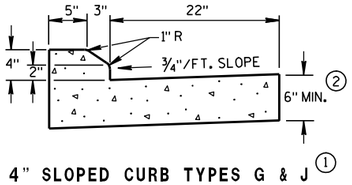
TYPES K & L (1)



6" SLOPED CURB TYPES G & J (1)

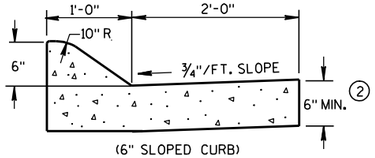


OPTIONAL CURB SHAPE FOR TYPES K & L (1)

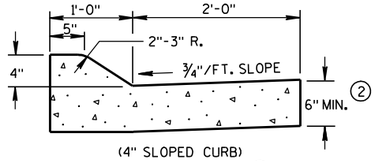


4" SLOPED CURB TYPES G & J (1)

CONCRETE CURB & GUTTER 30"

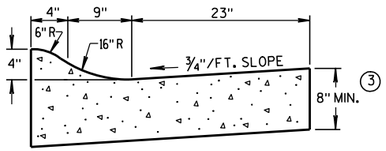


(6" SLOPED CURB)



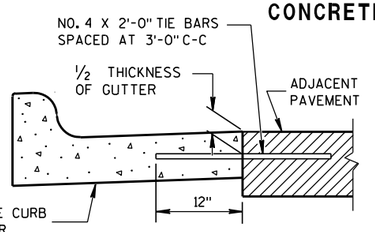
(4" SLOPED CURB)

TYPES A & D (1)

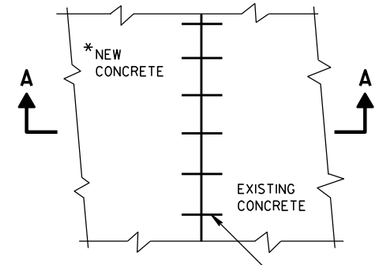


4" SLOPED CURB TYPES R & T (1) (4)

CONCRETE CURB & GUTTER 36"

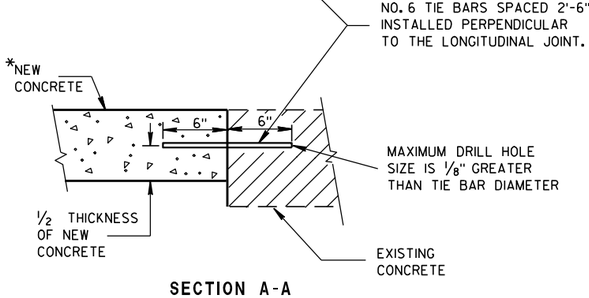


TYPICAL TIE BAR LOCATION (1)



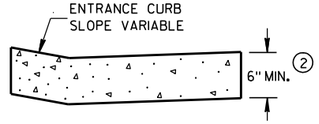
*NEW CURB & GUTTER, SURFACE DRAINS, CONCRETE PAVEMENT OR OTHER NEW CONCRETE.

PLAN VIEW



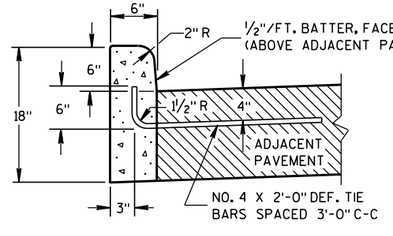
SECTION A-A

TIE BARS DRILLED INTO EXISTING PAVEMENT



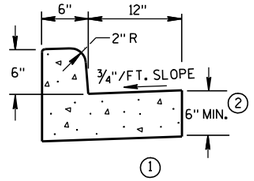
DRIVEWAY ENTRANCE CURB

(WHEN DIRECTED BY THE ENGINEER)



(1)

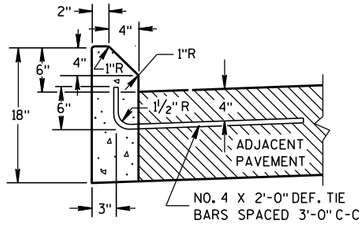
TYPES A & D



(1)

TYPES A & D

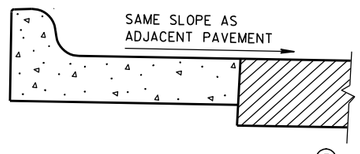
CONCRETE CURB & GUTTER 18"



(1)

TYPES G & J

CONCRETE CURB



(5)

REVERSE SLOPE GUTTER

(TYPICAL FOR ALL CURB & GUTTER TYPES)

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

INTEGRAL CURB & GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB & GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE. A LONGITUDINAL CONSTRUCTION JOINT IS NOT REQUIRED WITH INTEGRAL CURB AND GUTTER.

WHERE THE TRANSVERSE JOINTS IN THE PAVEMENT ARE REQUIRED TO BE SEALED, THE JOINTS IN THE INTEGRAL CURB AND GUTTER SHALL BE SEALED TO THE FACE OF CURB WITH THE SAME TYPE OF SEALANT. THE COST OF FURNISHING AND INSTALLING THIS SEALANT SHALL BE INCIDENTAL TO THE ITEM CONCRETE CURB AND GUTTER.

UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2'-0" BEHIND THE BACK OF CURBS.

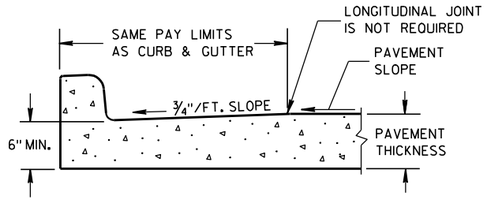
(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G, K AND R.

(2) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

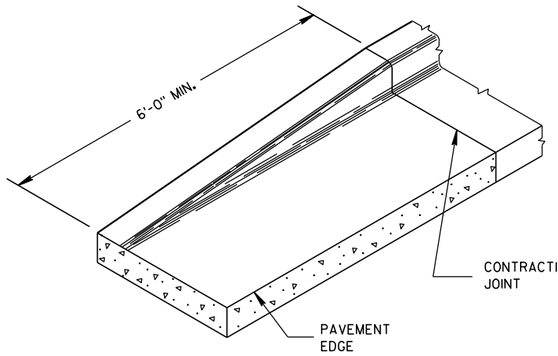
(3) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 8" MINIMUM GUTTER THICKNESS IS MAINTAINED.

(4) THE FACE OF CURB IS 6" FROM THE BACK OF CURB.

(5) WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.



PARTIAL SECTION OF PAVEMENT WITH INTEGRAL CURB & GUTTER



END SECTION CURB & GUTTER

CONCRETE CURB, CONCRETE CURB & GUTTER AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

9/4/08
DATE

/S/ Jerry H. [illegible]
ROADWAY STANDARDS ENGINEER

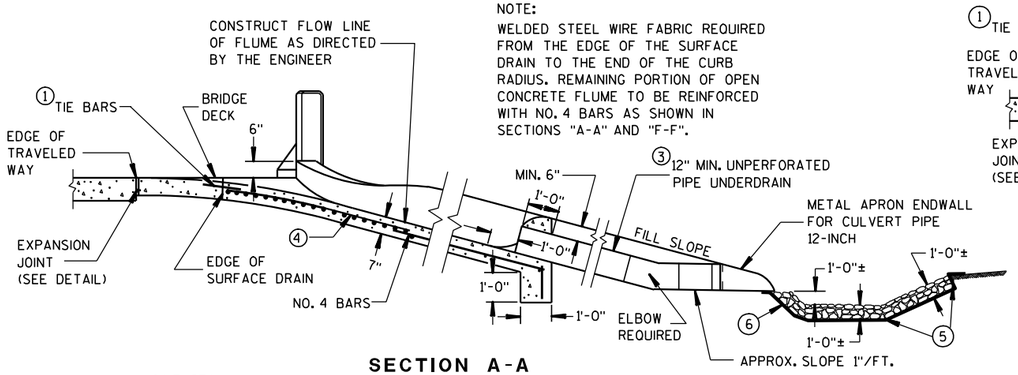
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FHWA

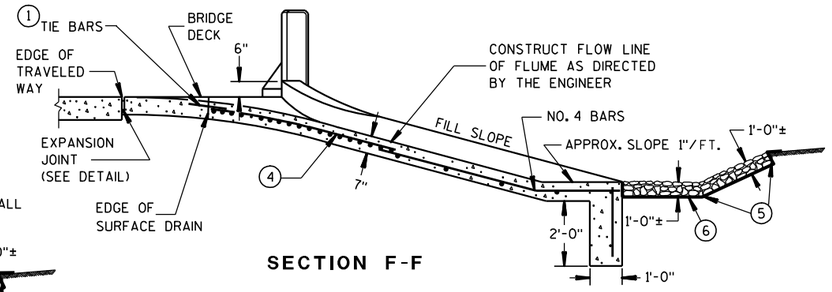
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SECTION A-A



SECTION F-F

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS, AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

ALL STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

(1) NO. 4 X 2'-0" TIE BARS SPACED AT 3'-0" CENTERS TO BE USED ONLY WHEN ADJACENT TO P.C. CONCRETE.

(2) NO. 4 X 2'-0" TIE BARS SPACED AT 12" CENTERS TO BE PLACED BY BRIDGE CONTRACTOR, OR DRILLED TIE BARS PLACED AS DIRECTED BY THE ENGINEER.

(3) PIPE UNDERDRAIN MAY BE ANY OF THE MATERIALS LISTED IN SECTION 612.2 OF THE STANDARD SPECIFICATIONS EXCEPT DRAIN TILE.

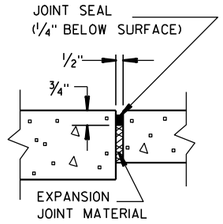
(4) MINIMUM REINFORCEMENT SHALL BE 6" X 6" - W4.0 X W4.0 OR NO. 3 BARS LONGITUDINAL AND TRANSVERSE SPACING 12" C-C.

(5) LIMITS OF ADDITIONAL RIPRAP WHEN SPECIAL DITCH IS REQUIRED.

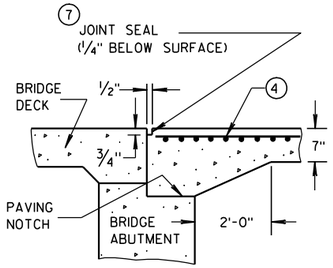
(6) GEOTEXTILE FABRIC, TYPE 'R"

(7) HOT POURED SEALANT UNLESS OTHERWISE SPECIFIED.

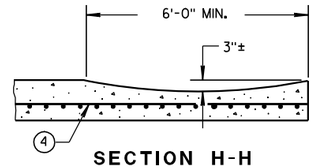
(8) THIS DIMENSION MAY VARY DEPENDING ON THE SPACING OF POSTS FOR THE STEEL PLATE BEAM GUARD. THE TYPICAL LOCATION FOR THE SURFACE DRAIN IS WHERE THE POST SPACING WIDENS TO 3'-1½".



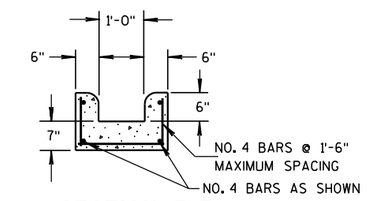
EXPANSION JOINT DETAIL



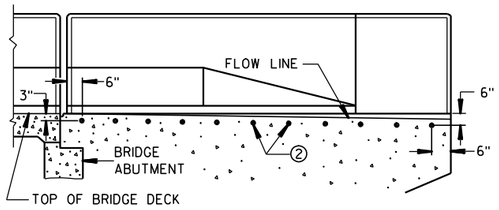
SECTION D-D



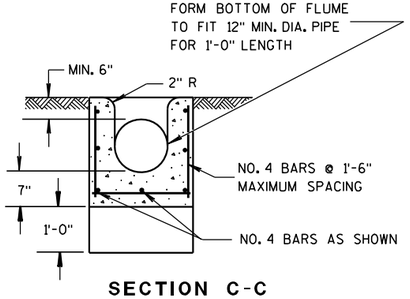
SECTION H-H



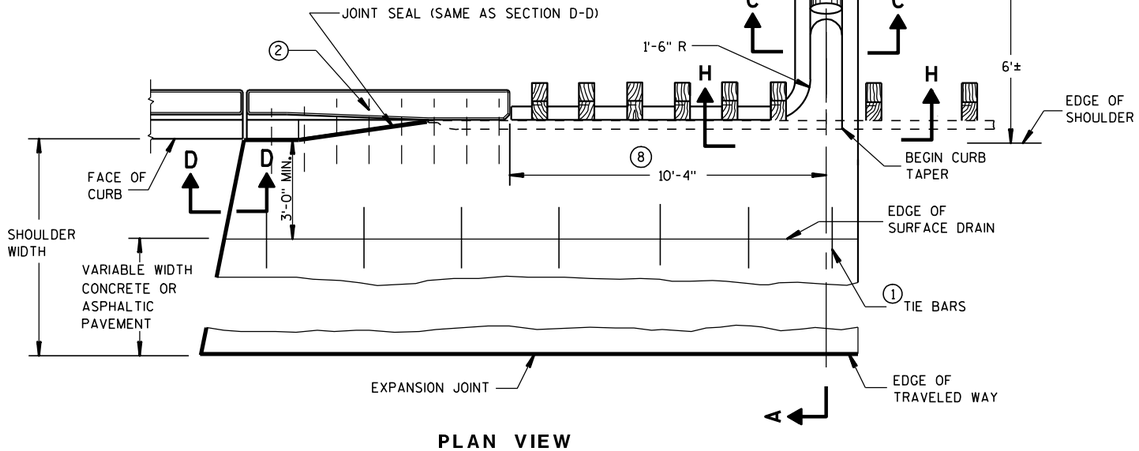
SECTION E-E



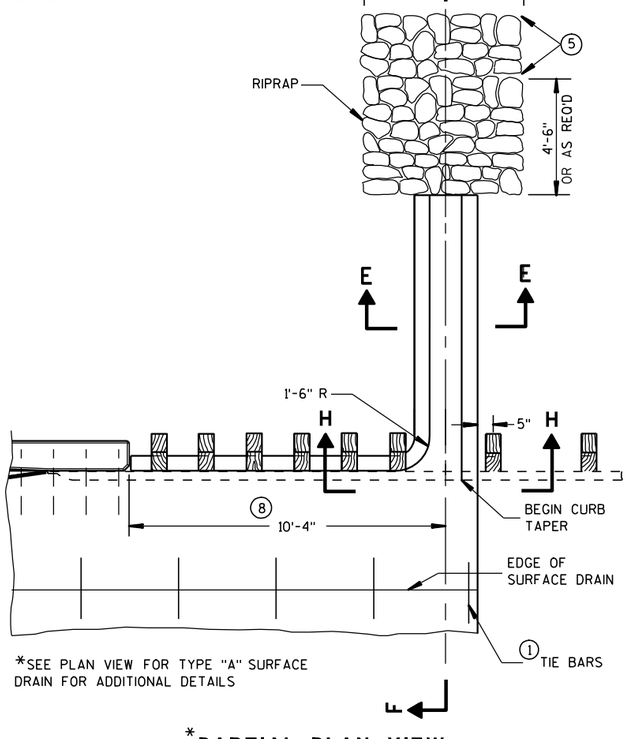
LOCATION OF TIE BARS IN WINGWALL



SECTION C-C



PLAN VIEW
SURFACE DRAIN WITH PIPE
TYPE "A"



*SEE PLAN VIEW FOR TYPE "A" SURFACE DRAIN FOR ADDITIONAL DETAILS

*PARTIAL PLAN VIEW
SURFACE DRAIN WITHOUT PIPE
TYPE "B"

CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
9/4/08 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
734
FHWA

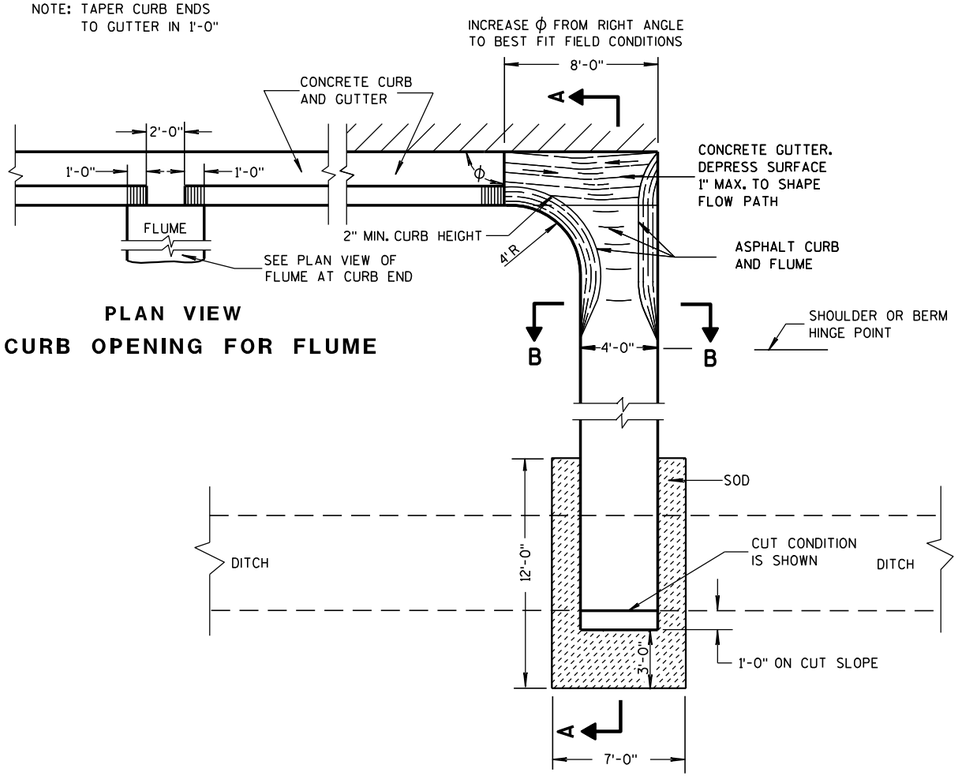
6

S.D.D. 8 D 2-6

6

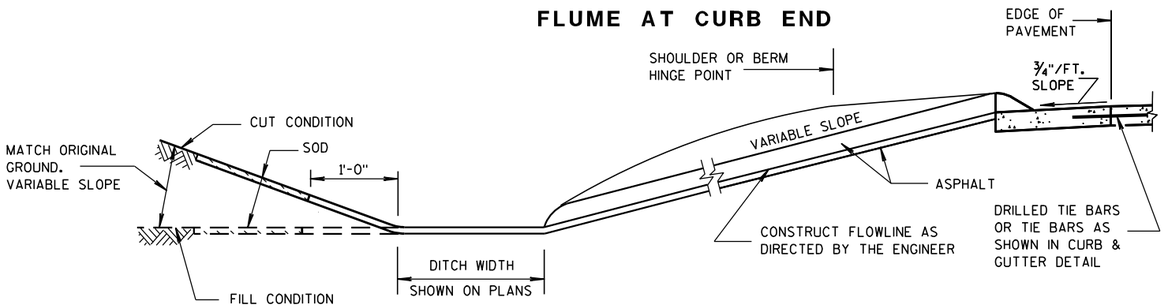
S.D.D. 8 D 2-6

ASPHALTIC FLUME

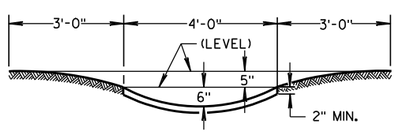


PLAN VIEW
CURB OPENING FOR FLUME

PLAN VIEW
FLUME AT CURB END



SECTION A-A



SECTION B-B

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

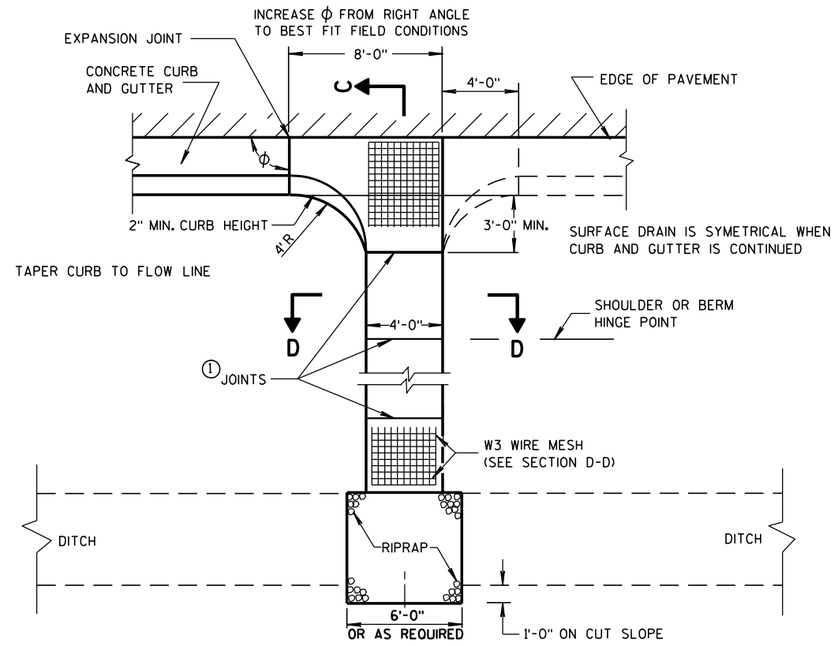
WELDED STEEL WIRE FABRIC SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

① JOINTS SHALL BE $\frac{1}{8}$ TO $\frac{1}{4}$ INCH WIDE BY $1\frac{1}{2}$ INCHES DEEP AND SPACED AT UNIFORM INTERVALS OF APPROXIMATELY 4 FEET.

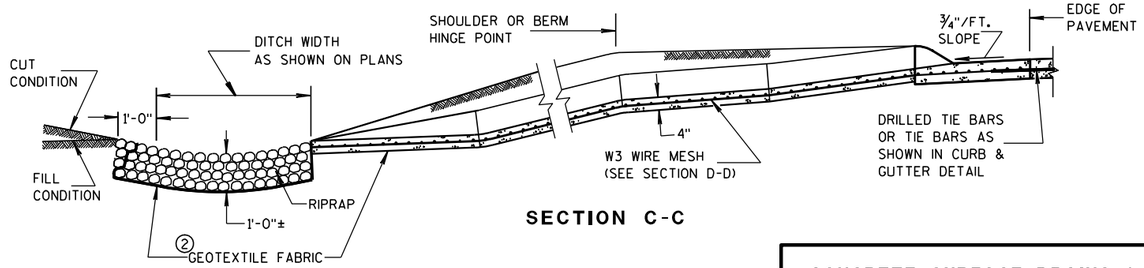
② GEOTEXTILE FABRIC TYPE "R" SHALL UNDERLAY THE FULL LENGTH AND WIDTH OF THE CONCRETE SURFACE DRAIN AND RIPRAP.

③ CONCRETE SURFACE DRAIN WITHOUT CURB AND GUTTER MAY BE USED ON BACKSLOPES WHEN SPECIFIED

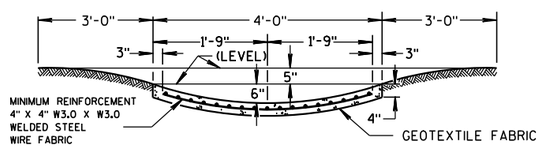
③ CONCRETE SURFACE DRAIN



PLAN VIEW



SECTION C-C



SECTION D-D

CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

9-4-08 DATE — /S/ Jerry H. Zogg ROADWAY STANDARDS ENGINEER — MENT

FHWA

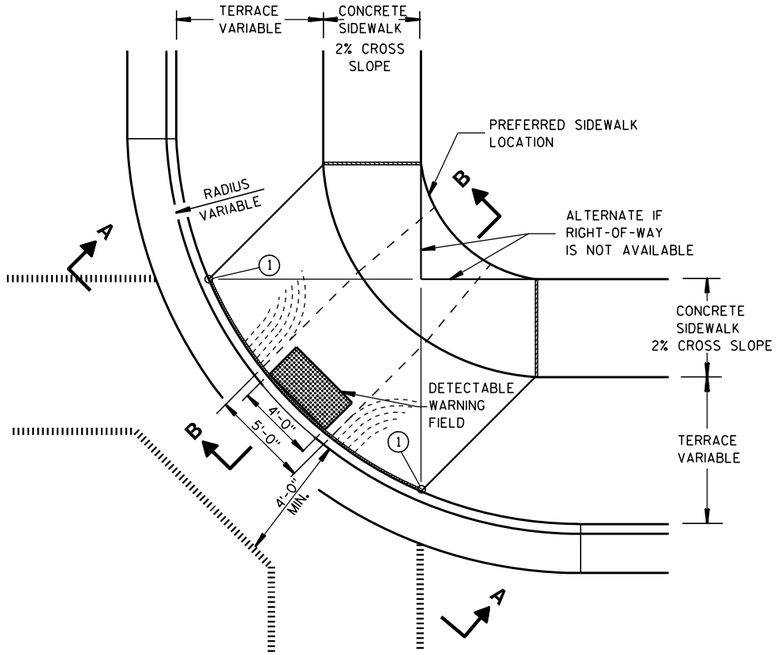
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6

S.D.D. 8 D 4-5

6

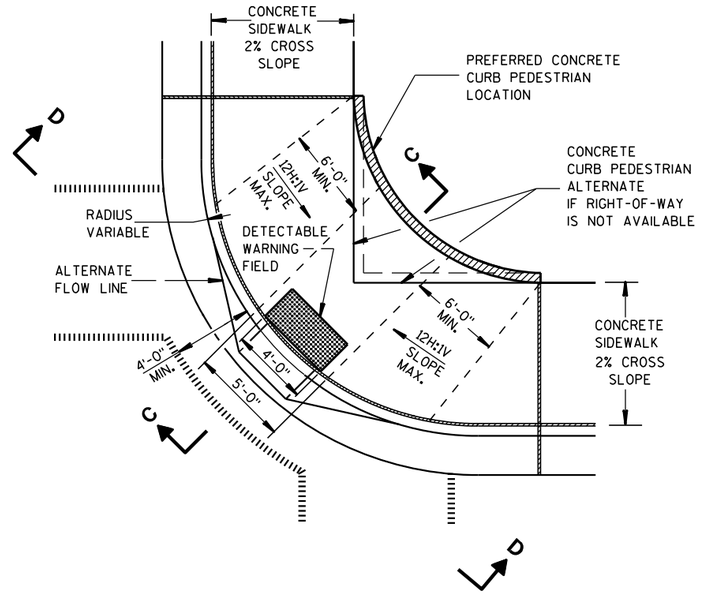
S.D.D. 8 D 4-5



PLAN VIEW

TYPE 1 RAMP

(CENTER OF CORNER RADIUS)



PLAN VIEW

TYPE 1-A RAMP

(NO TERRACE)

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

RAMPS SHALL BE BUILT AT 12H:1V OR FLATTER. WHEN NECESSARY, THE SIDEWALK ELEVATION MAY BE LOWERED TO MEET THE HIGH POINT ON THE RAMP.

TYPE 1 RAMPS SHALL HAVE A NORMAL SIDEWALK APRON AND CURB ON BOTH SIDES OF RAMP.

DETECTABLE WARNING FIELD SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS "CURB RAMP DETECTABLE WARNING FIELD". THE CONCRETE PEDESTRIAN CURB, IF NEEDED, SHALL BE MEASURED AND PAID BY THE LINEAL FOOT AS "CONCRETE CURB PEDESTRIAN". CONCRETE SIDEWALK IN THE CURB RAMP AREA SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS CONCRETE SIDEWALK, INCLUDING THE AREA UNDER THE DETECTABLE WARNING FIELD.

SELECT CURB RAMP DETECTABLE WARNING FIELD MATERIALS AND DEVICES FROM THE DEPARTMENT'S APPROVED MATERIALS LIST. THE COLOR OF THE DETECTABLE WARNING FIELD IS SPECIFIED ELSEWHERE AND IS INCIDENTAL TO THE BID ITEM OF "CURB RAMP DETECTABLE WARNING FIELD".

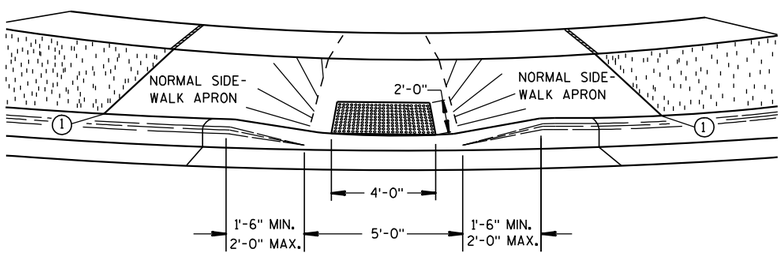
SURFACE TEXTURE OF THE RAMP SHALL BE OBTAINED BY COARSE BROOMING TRANSVERSE TO THE SLOPE OF THE RAMP.

(1) THIS POINT IS AN EXTENSION OF OUTSIDE EDGE OF APPROACHING SIDEWALK WHERE IT MEETS THE BACK OF CONCRETE CURB.

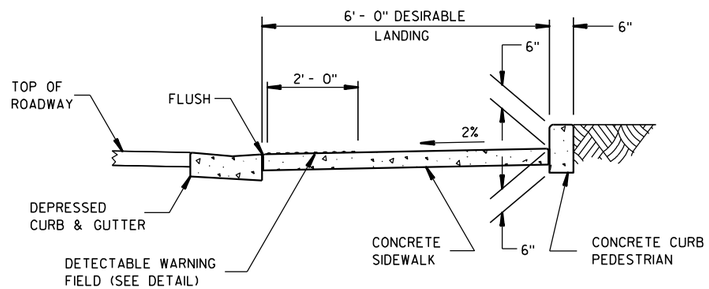
(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. PROVIDE DRAINAGE AWAY FROM CURB RAMP AT GUTTER FLAG INTERFACE.

LEGEND

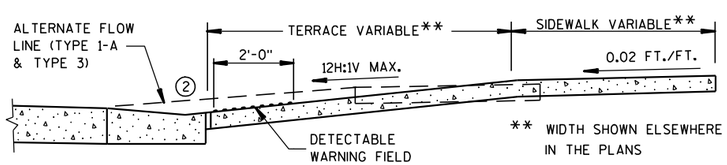
- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT



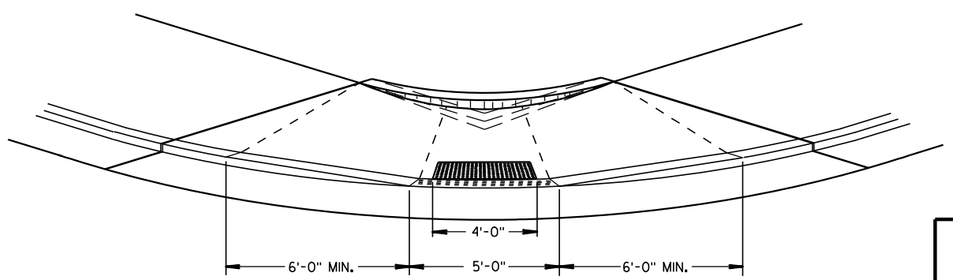
VIEW A-A



SECTION C-C



SECTION B-B



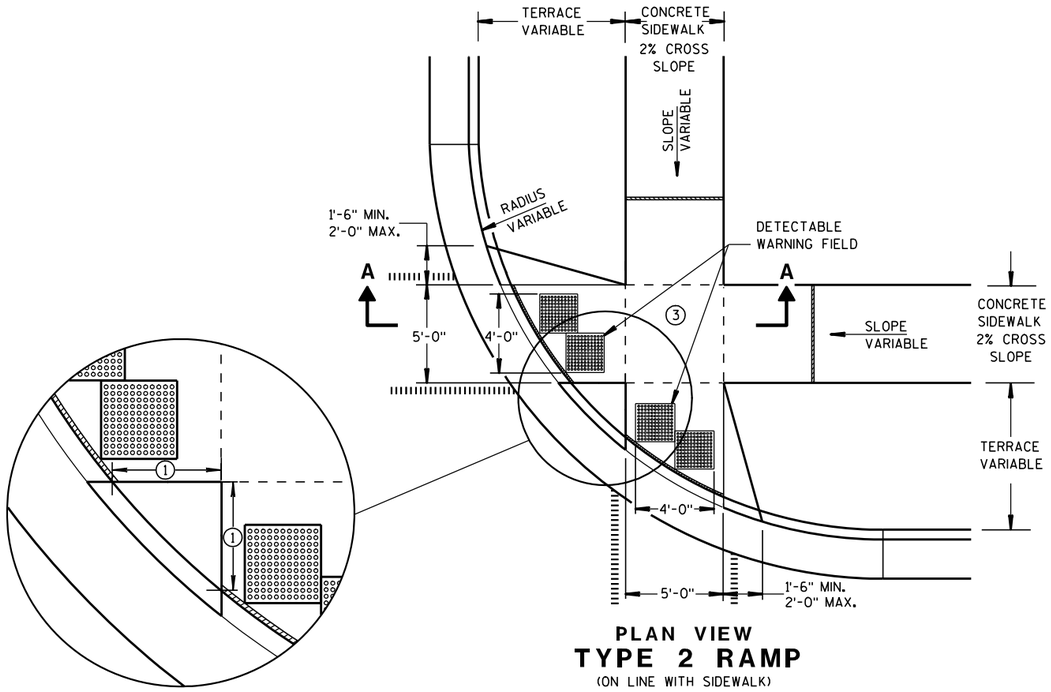
VIEW D-D

CURB RAMPS TYPES 1 AND 1-A

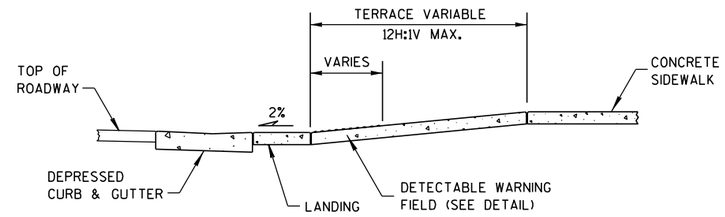
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

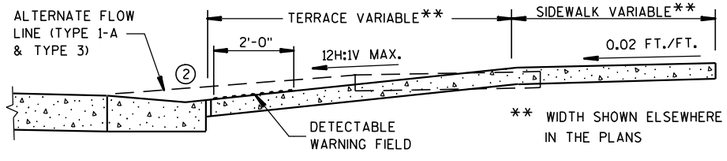
S.D.D. 8 D 5-14a



PLAN VIEW
TYPE 2 RAMP
(ON LINE WITH SIDEWALK)



SECTION A-A



SECTION B-B

GENERAL NOTES

USE THE TYPE 3 RAMP ONLY WHEN A TYPE 1 OR TYPE 2 CANNOT BE ACHIEVED BECAUSE OF FIELD CONDITIONS.

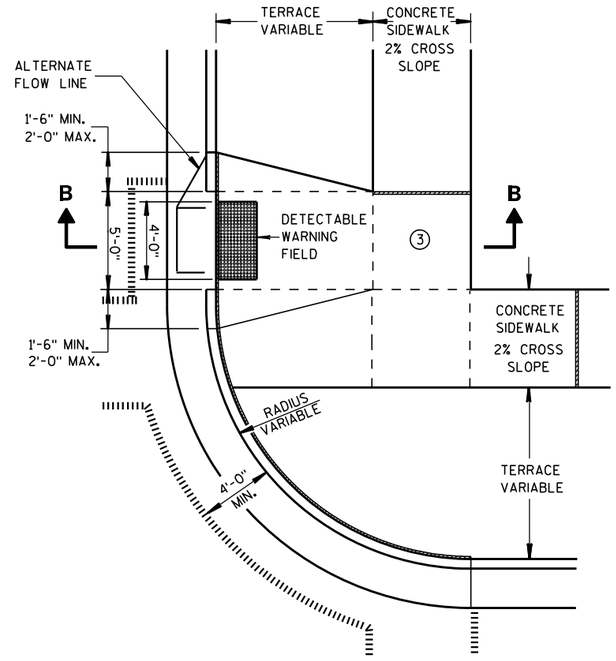
(1) WHEN THIS DISTANCE IS LESS THAN 6'-0" IT MAY BE DIFFICULT TO ACHIEVE A 12H:1V SLOPE, OR FLATTER, ON THE RAMP. REDUCE CURB HEIGHT IN TRIANGLE AREA TO ACHIEVE 12H:1V SLOPE, OR FLATTER, ON RAMP. 2" MINIMUM CURB HEIGHT.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. PROVIDE DRAINAGE AWAY FROM CURB RAMP AT GUTTER FLAG INTERFACE.

(3) PROVIDE LANDING AT TOP OF RAMP WITH NO MORE THAN 2% SLOPE IN ANY DIRECTION.

LEGEND

- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT

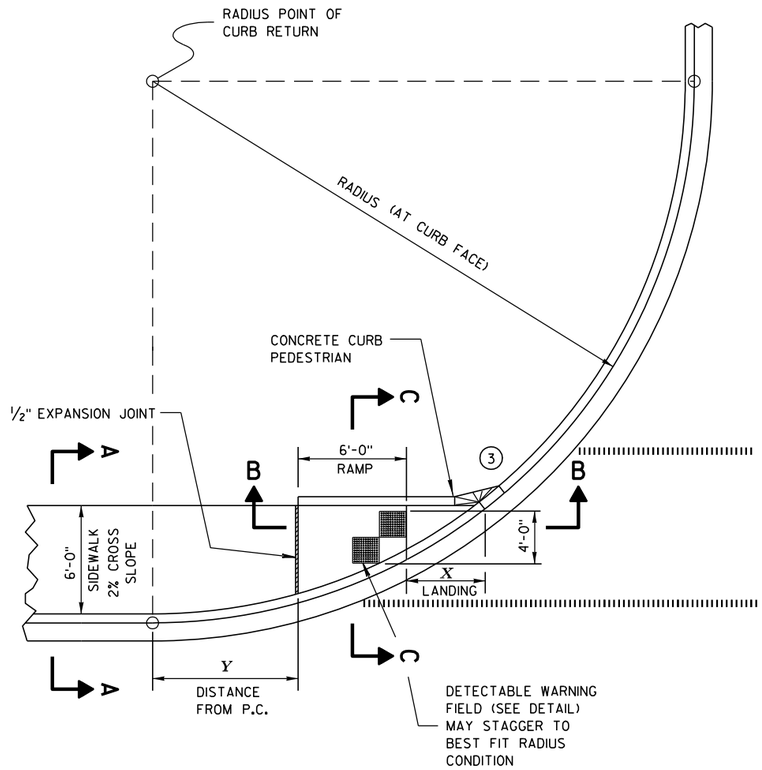


PLAN VIEW
TYPE 3 RAMP
(OUTSIDE OF CROSSWALK AREA)

CURB RAMPS TYPES 2 AND 3

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

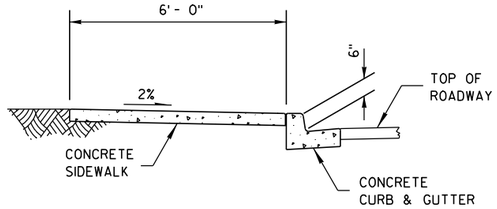
6
S.D.D. 8 D 5-14b



CURB RAMP TYPE 4A
PLAN VIEW

RADIUS (AT CURB FACE)	X	Y
20 FEET	6'-1 3/4"	2'-7 1/4"
30 FEET	7'-11 3/4"	4'-8 1/4"
40 FEET	9'-5 1/4"	6'-5"
50 FEET	10'-8 3/4"	7'-11 1/4"
60 FEET	11'-10 1/4"	9'-3 1/2"

INTERMEDIATE RADII CAN BE INTERPOLATED



SECTION A-A

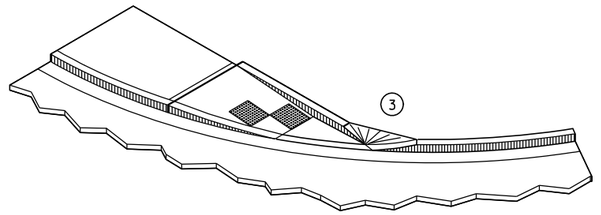
GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

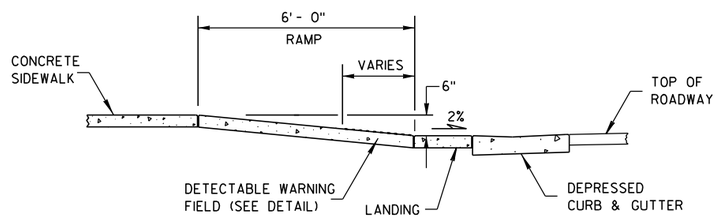
RAMP SLOPES SHALL NOT BE STEEPER THAN 12:1.

SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

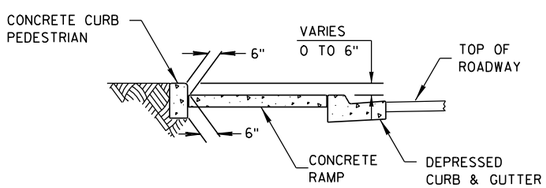
(3) INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS.) DO NOT MARK TRANSITION NOSE.



ISOMETRIC VIEW



SECTION B-B



SECTION C-C

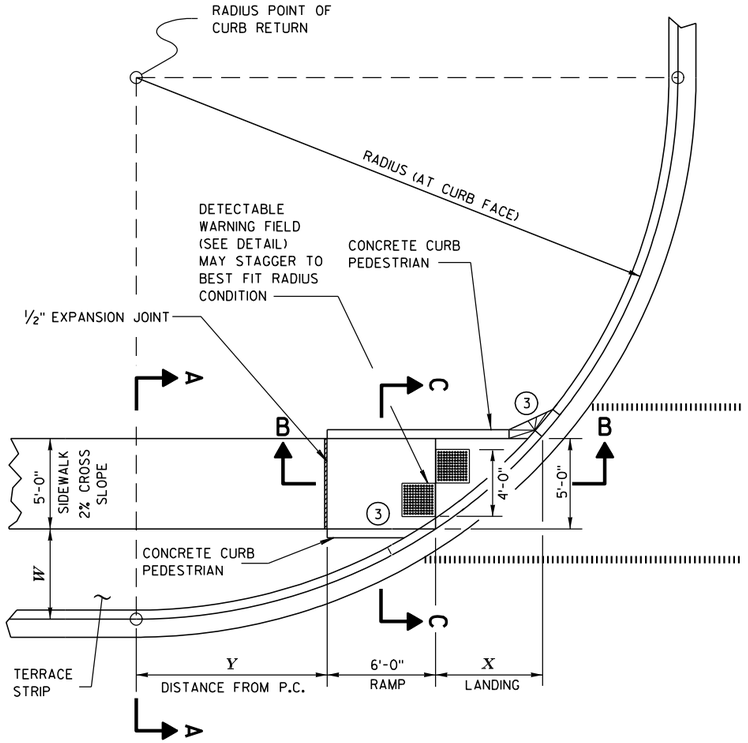
LEGEND

- 1/2" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS TYPE 4A

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
S.D.D. 8 D 5-14c



CURB RAMP TYPE 4B
PLAN VIEW

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

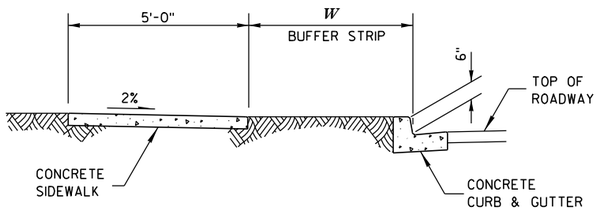
RAMP SLOPES SHALL NOT BE STEEPER THAN 12:1.

SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

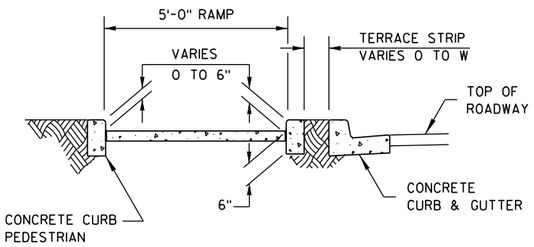
(3) INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS.) DO NOT MARK TRANSITION NOSE.

RADIUS (AT CURB FACE)	W = 3'- 0"		W = 4'- 0"		W = 5'- 0"		W = 6'- 0"		W = 7'- 0"	
	X	Y	X	Y	X	Y	X	Y	X	Y
20 FEET	5'-5½"	4'-6½"	4'-8½"	6'-0"	4'-1"	7'-2¾"	3'-7"	8'-3½"	3'-1½"	9'-2½"
30 FEET	7'-3¾"	7'-1"	6'-5½"	8'-11½"	5'-9¼"	10'-7"	5'-2½"	12'-0"	4'-8¾"	13'-3¼"
40 FEET	8'-9½"	9'-2½"	7'-10"	11'-5¼"	7'-1"	13'-4½"	6'-5¾"	15'-¾"	5'-11½"	16'-7¼"
50 FEET	10'-¾"	11'-¾"	9'-¼"	13'-7¼"	8'-2½"	15'-9½"	7'-6½"	17'-9"	6'-11¾"	19'-6¼"
60 FEET	11'-2½"	12'-8¾"	10'-¾"	15'-6½"	9'-2¼"	17'-11¾"	8'-5¾"	20'-1¾"	7'-10½"	22'-1½"
70 FEET	12'-2¾"	14'-3¼"	11'-¼"	17'-4"	10'-1"	19'-11¾"	9'-3¾"	22'-4¼"	8'-8¼"	24'-6¼"
80 FEET	13'-2"	15'-8½"	11'-10½"	18'-11¾"	10'-10¾"	21'-10"	10'-1"	24'-4¾"	9'-5"	26'-8¾"
90 FEET	14'- ½"	17'-½"	12'-8¼"	20'-6½"	11'-7¾"	23'-7"	10'-9¾"	26'-3¾"	10'-1¼"	28'-9½"
100 FEET	14'-10½"	18'-3¾"	13'-5½"	22'-0"	12'-4¼"	25'-2¾"	11'-5¾"	28'-1½"	10'-9"	30'-9"

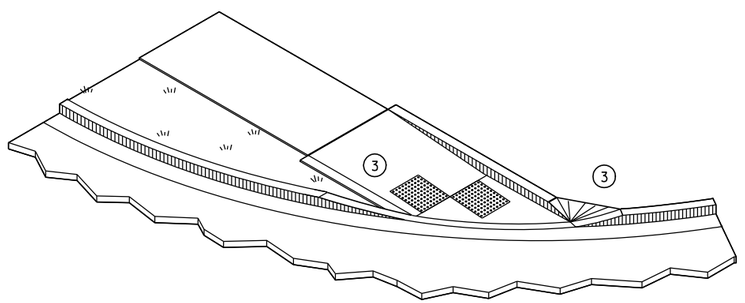
INTERMEDIATE RADII CAN BE INTERPOLATED



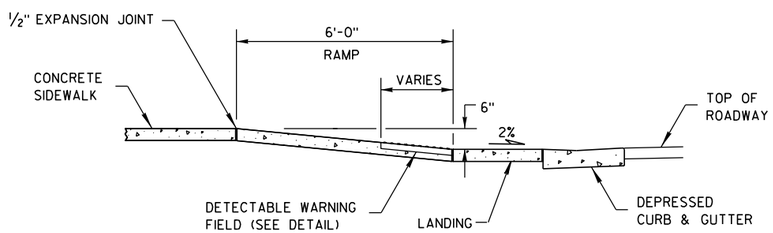
SECTION A-A



SECTION C-C



ISOMETRIC VIEW



SECTION B-B

LEGEND

½" EXPANSION JOINT-SIDEWALK

CONTRACTION JOINT FIELD LOCATED

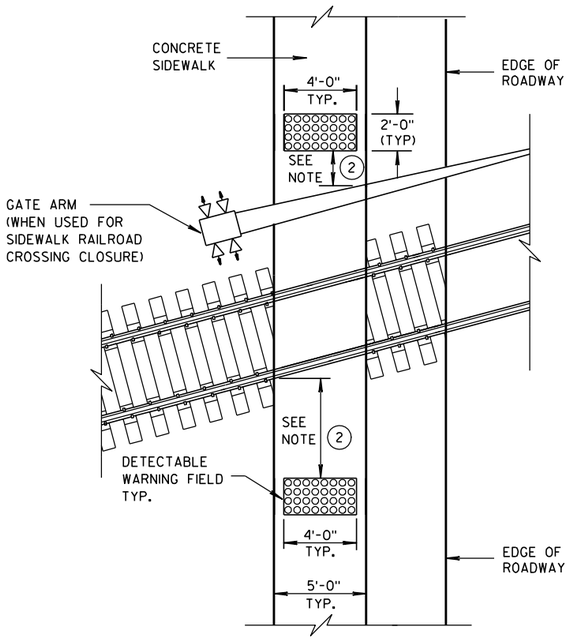
PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS TYPE 4B

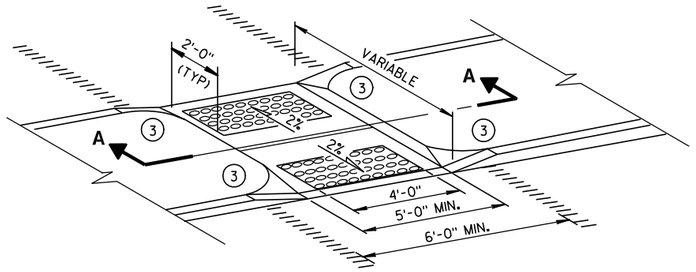
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

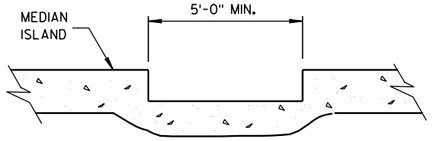
S.D.D. 8 D 5-14d



TYPE 8
DETECTABLE WARNINGS AT RAILROAD CROSSING



MEDIAN ISLAND
NON-ELEVATED CROSSING
TYPE 5



SECTION A-A

GENERAL NOTES

SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

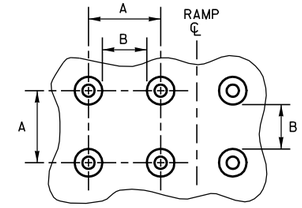
(1) SLOPE SIDEWALK TOWARD LANDING AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.

(2) THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO A RAILROAD CROSSING SHALL BE 1.5 FEET ± 0.1' FROM THE FACE OF THE GATE ARM IF THE GATE ARM EXTENDS ACROSS THE SIDEWALK. WHERE THERE IS NO PEDESTRIAN GATE, THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO THE RAILROAD CROSSING SHALL BE 15 FEET FROM THE NEAREST RAIL.

(3) INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS.) DO NOT MARK TRANSITION NOSE.

LEGEND

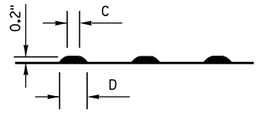
- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)



PLAN VIEW

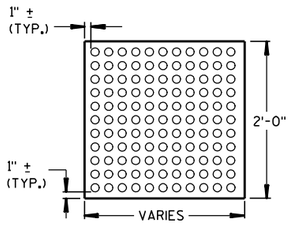
	MIN.	MAX.
A	1.6"	2.4"
B	0.65"	1.5"
C	*	*
D	0.9"	1.4"

* THE C DIMENSION IS 50% TO 65% OF THE D DIMENSION.



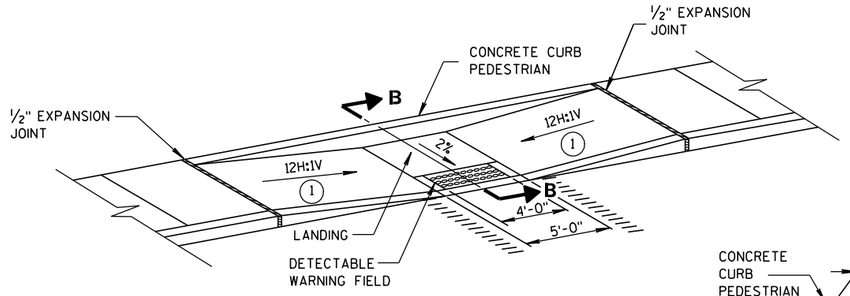
ELEVATION VIEW

TRUNCATED DOMES
DETECTABLE WARNING PATTERN DETAIL

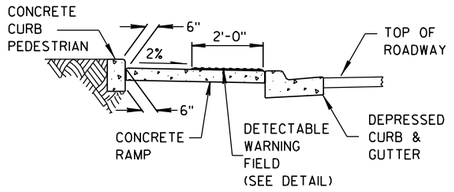


PLAN VIEW

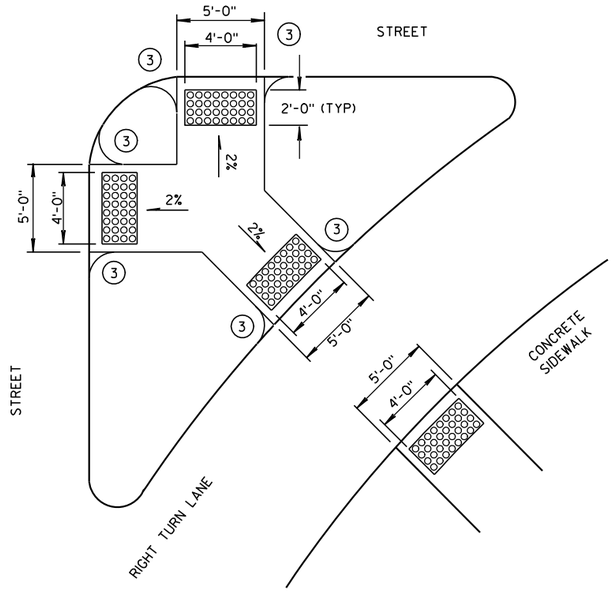
DETECTABLE WARNING FIELD (TYPICAL)



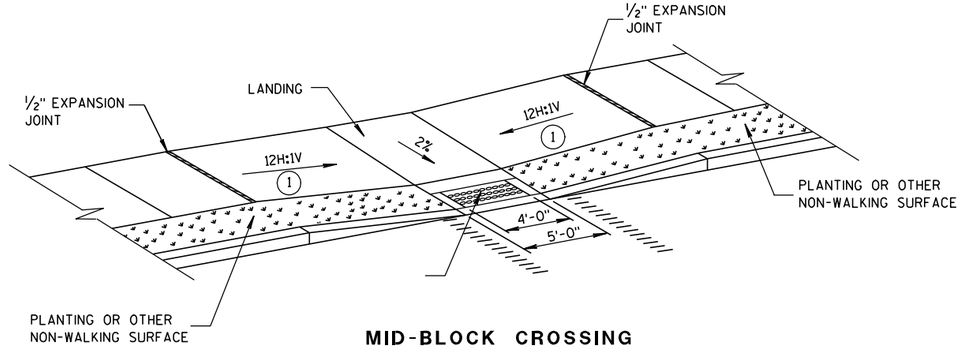
MID-BLOCK CROSSING
TYPE 7A



SECTION B-B



TYPE 6
DETECTABLE WARNING AT ISLANDS



MID-BLOCK CROSSING
TYPE 7B

NOTE: THESE PARALLEL AND PARALLEL/PERPENDICULAR CURB RAMPS MAY BE USED AT INTERSECTIONS AND MID BLOCK LOCATIONS.

CURB RAMPS
TYPES 5, 6, 7A, 7B & 8

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
2-9-10 DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER 740 ENT
FHWA

6

S.D.D. 8 D 5-14e

6

S.D.D. 8 D 5-14e

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

(1) UNPERFORATED PIPE UNDERDRAIN AND FITTINGS FURNISHED FOR OUTFALL PIPE SHALL MEET THE REQUIREMENTS OF ONE OF THE FOLLOWING SPECIFICATIONS:

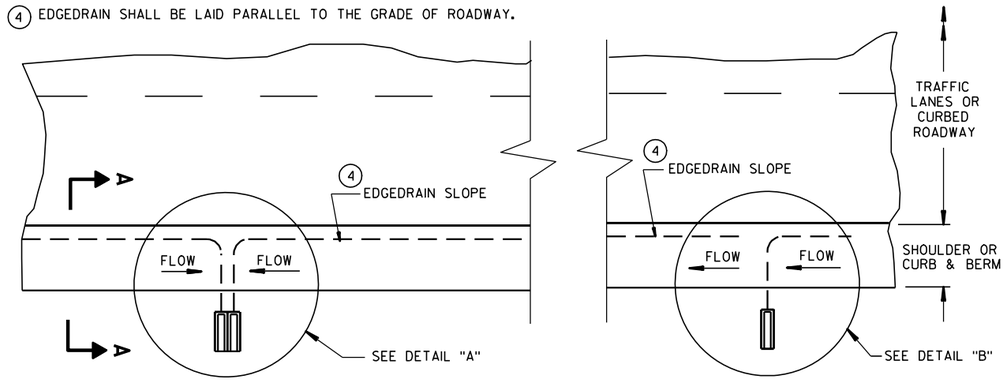
POLYVINYL CHLORIDE (PVC) PLASTIC DRAIN, WASTE, AND VENT PIPE AND FITTINGS, ASTM D 2665, SCHEDULE 40 PVC.

TYPE PSM POLYVINYL CHLORIDE (PVC) SEWER PIPE AND FITTINGS, ASTM D 3034, SDR 23.5 PVC SEWER PIPE.

(2) MAXIMUM SPACING OF EDGEDRAIN OUTLETS SHALL BE 250 FEET UNLESS OTHERWISE SPECIFIED IN THE CONTRACT OR DIRECTED BY THE ENGINEER.

(3) EDGEDRAIN SHALL BE CONNECTED TO INLETS REGARDLESS OF FLOW DIRECTION FOR DRAINAGE AND MAINTENANCE ACCESS.

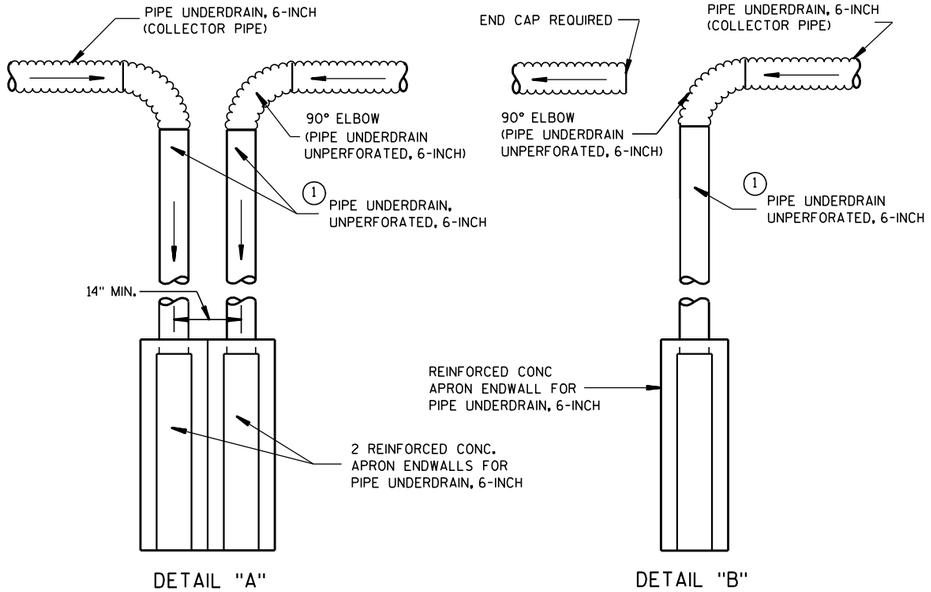
(4) EDGEDRAIN SHALL BE LAID PARALLEL TO THE GRADE OF ROADWAY.



PLAN VIEW

ROADWAY WITH SHOULDERS OR CURBS

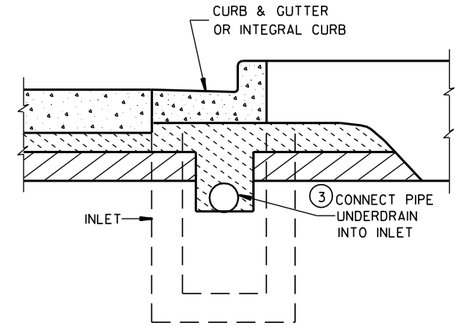
(EDGEDRAIN OUTLETS TO ROADSIDE) (2)



DETAIL "A"
TO BE USED AT LOW POINT LOCATIONS

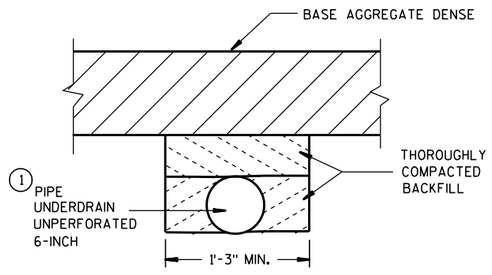
DETAIL "B"
TO BE USED AT INTERMEDIATE LOCATIONS

TYPICAL DRAIN OUT DETAILS



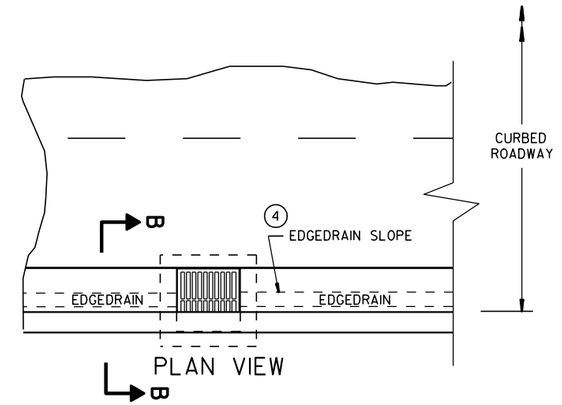
SECTION B-B

URBAN CROSS SECTION



SECTION C-C

(TRENCH FOR OUTFALL PIPE)



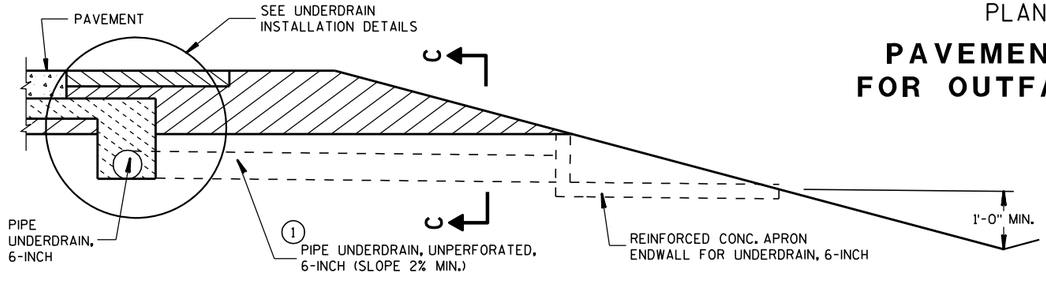
PLAN VIEW

ROADWAY WITH CURBS

(EDGEDRAIN CONNECTS INTO INLET STRUCTURE)

PLAN VIEW

PAVEMENT MARKING FOR OUTFALL MARKERS



SECTION A-A

RURAL CROSS SECTION

EDGEDRAIN OUTLET AND OUTFALL MARKERS

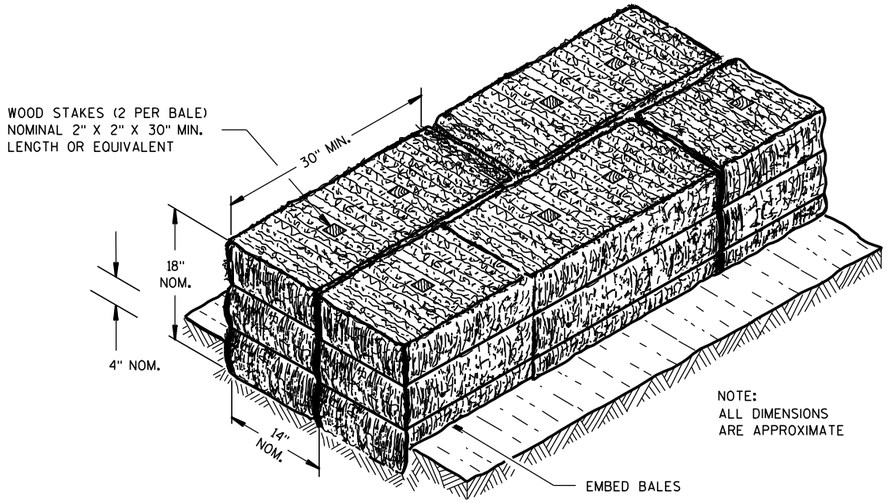
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

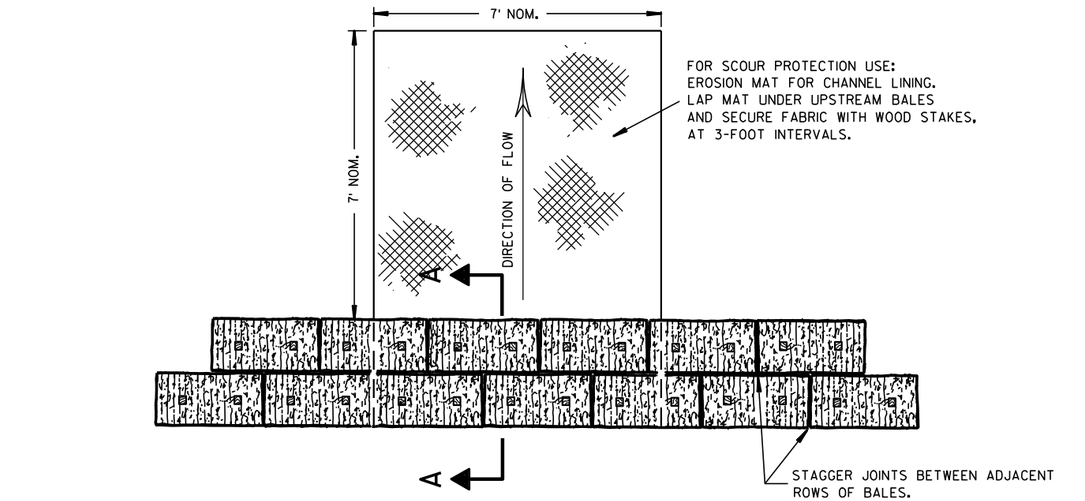
S.D.D. 8 D 15-4a

6

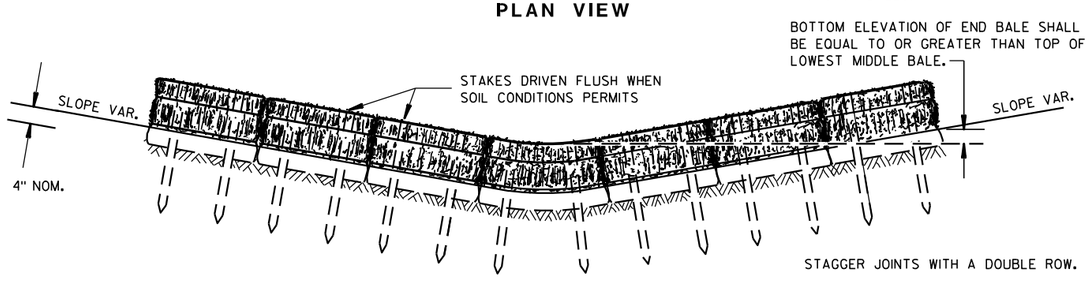
S.D.D. 8 D 15-4a



SECTION A-A



PLAN VIEW



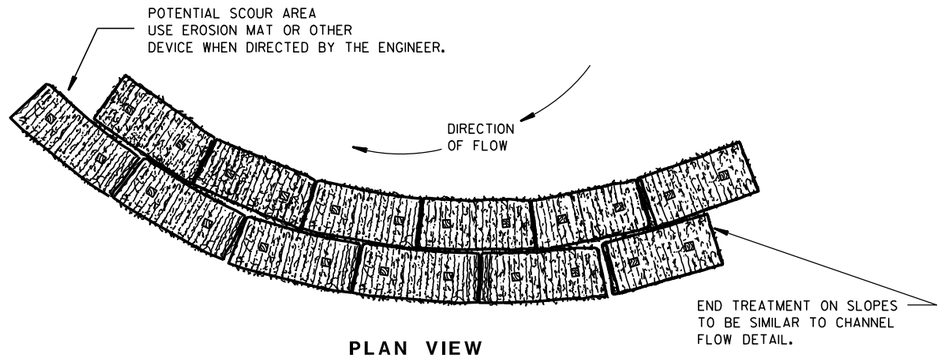
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES ①

GENERAL NOTES

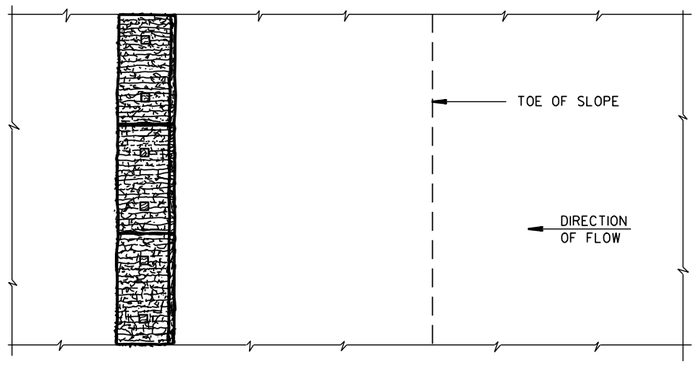
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

① TEMPORARY DITCH CHECKS EITHER EROSION BALES OR MANUFACTURED SHALL BE PAID FOR UNDER THE BID ITEM OF TEMPORARY DITCH CHECK. THE DEPARTMENT WILL NOT PAY FOR TEMPORARY DITCH CHECKS CONSTRUCTED OF A SINGLE ROW OF EROSION BALES.

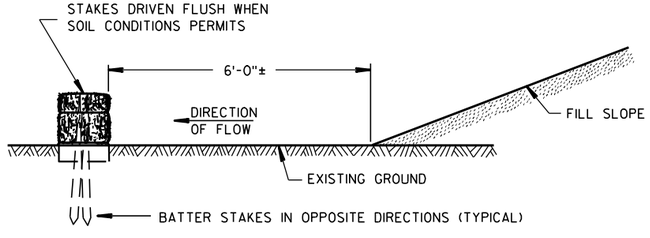


PLAN VIEW

WHEN ALTERING THE DIRECTION OF FLOW



PLAN VIEW



FRONT ELEVATION

WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

EROSION BALES FOR SHEET FLOW

TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS

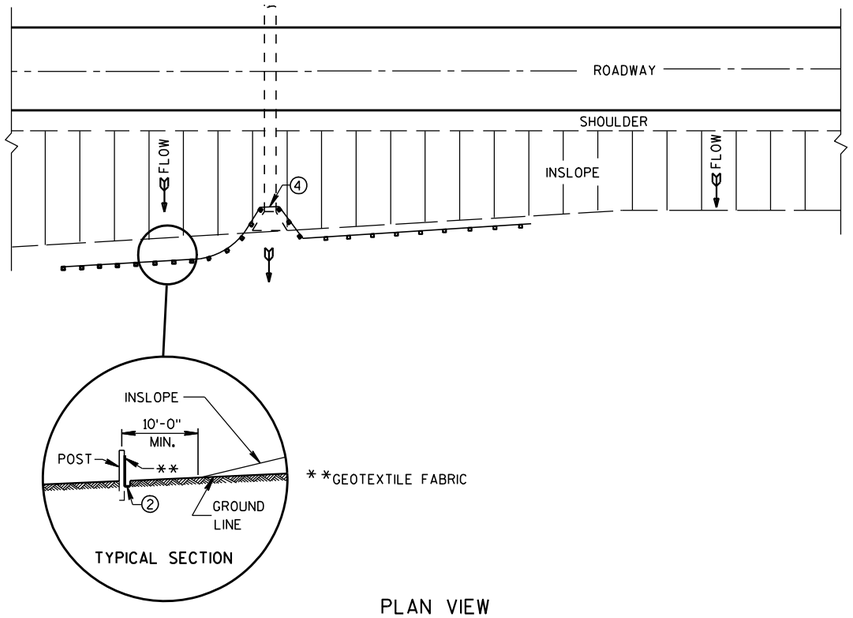
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6/04/02 DATE — /S/ Beth Cannestra — CHIEF ROADWAY DEVELOPMENT ENGINEER

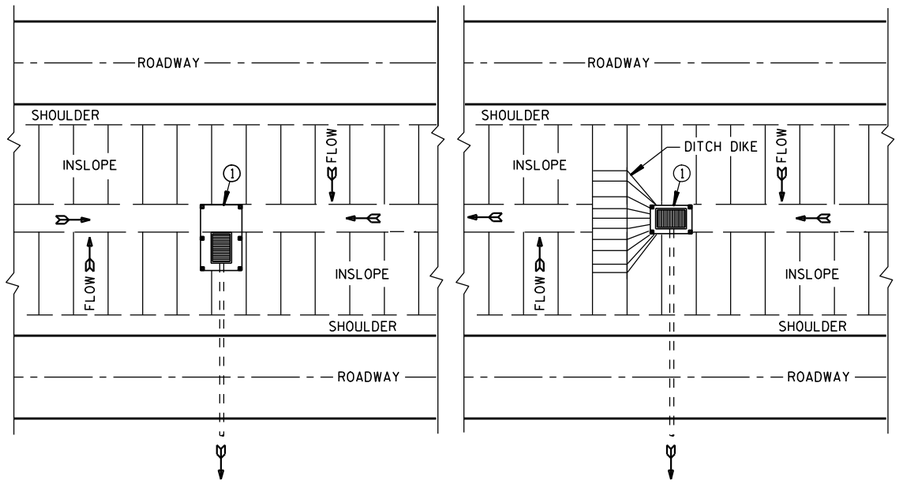
FHWA

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S.D.D. 8 E 8-3



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



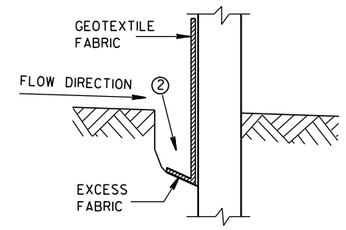
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

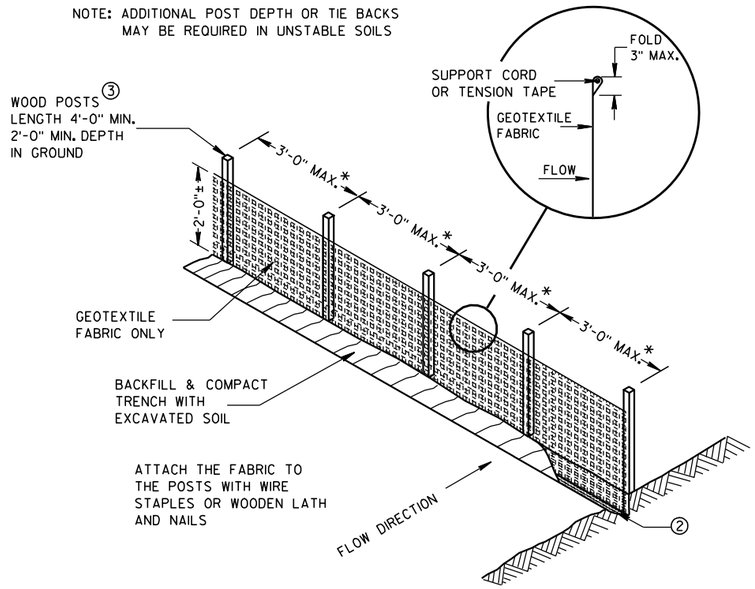
GENERAL NOTES

DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

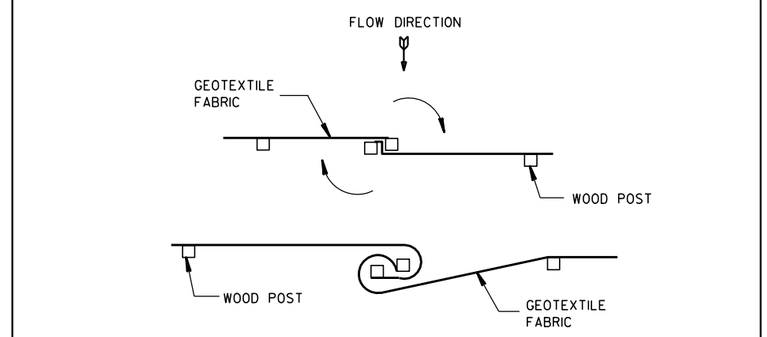
1. HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
2. FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
3. WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OF OAK OR HICKORY.
4. SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.
5. CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.



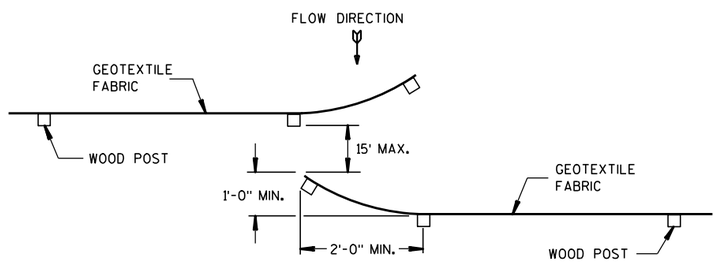
TRENCH DETAIL



SILT FENCE

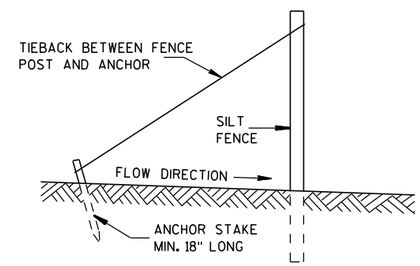


TWIST METHOD



HOOK METHOD

JOINING TWO LENGTHS OF SILT FENCE 5



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

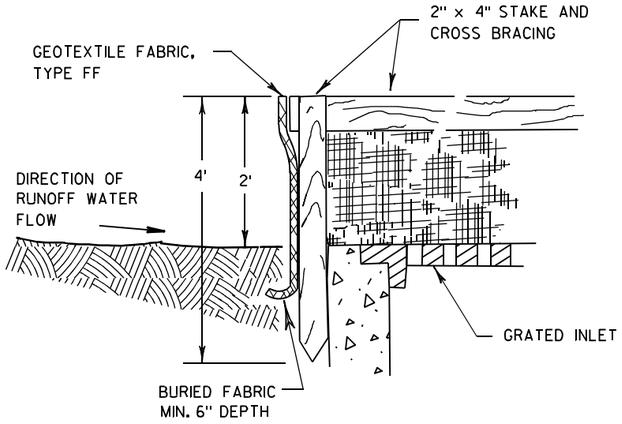
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

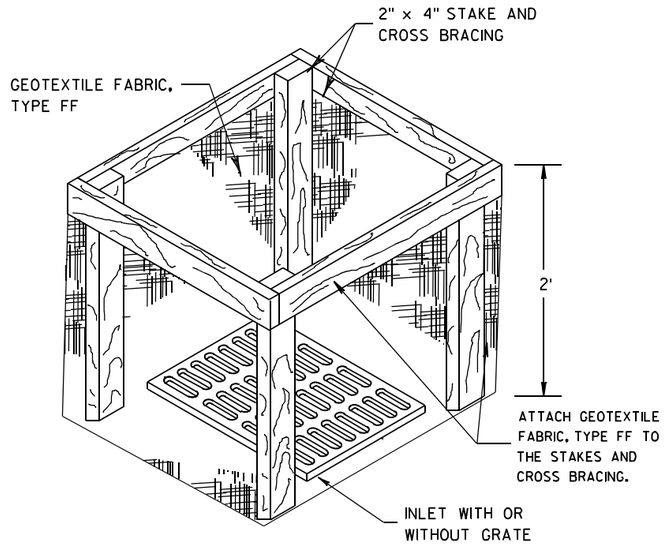
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S.D.D. 8 E 9-6

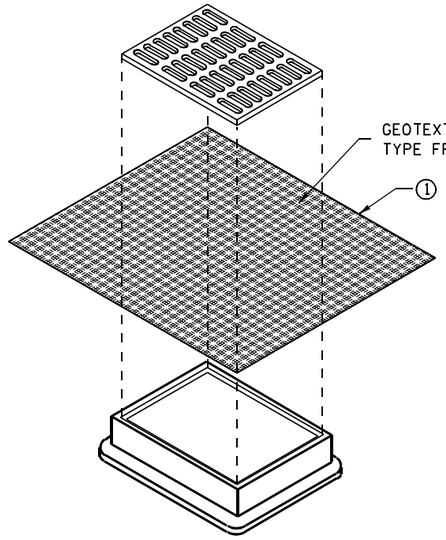
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S.D.D. 8 E 9-6



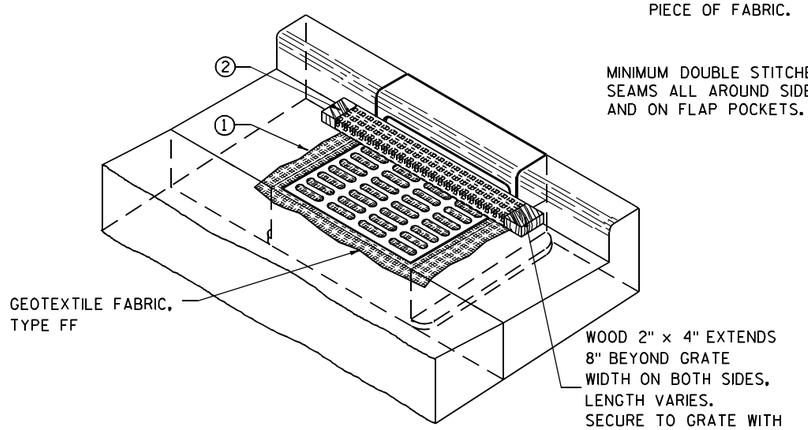


INLET PROTECTION, TYPE A

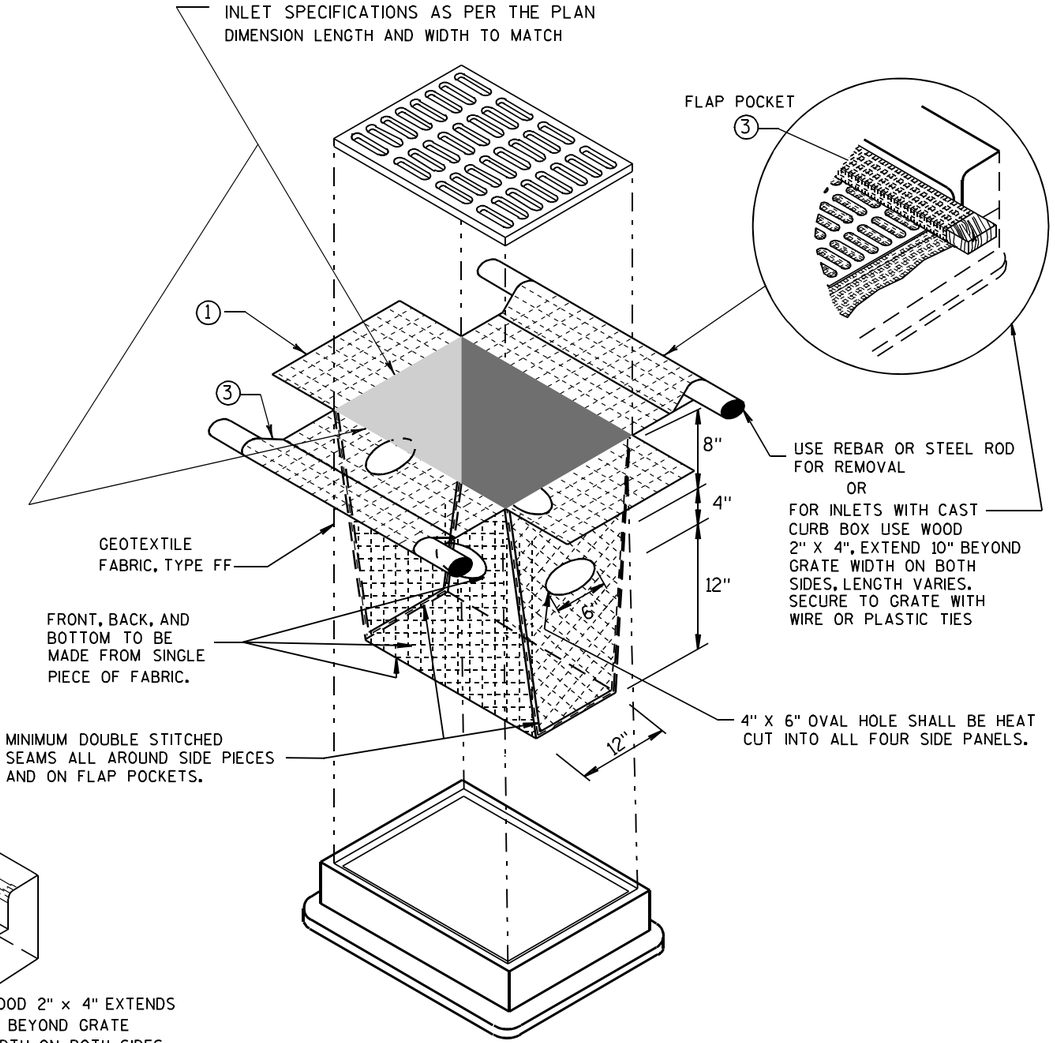


INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

(CAN BE INSTALLED IN ANY INLET WITHOUT A CURB BOX)



INLET PROTECTION, TYPE C (WITH CURB BOX)



INLET PROTECTION, TYPE D

(CAN BE INSTALLED IN ANY INLET TYPE WITH
OR WITHOUT A CURB BOX AS PER NOTE ②)

GENERAL NOTES

INLET PROTECTION DEVICES SHALL BE MAINTAINED OR REPLACED AT THE DIRECTION OF THE ENGINEER.

MANUFACTURED ALTERNATIVES APPROVED AND LISTED ON THE DEPARTMENT'S EROSION CONTROL PRODUCT ACCEPTABILITY LIST MAY BE SUBSTITUTED.

WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

① FINISHED SIZE, INCLUDING FLAP POCKETS WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10" AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.

② FOR INLET PROTECTION, TYPE C (WITH CURB BOX), AN ADDITIONAL 18" OF FABRIC IS WRAPPED AROUND THE WOOD AND SECURED WITH STAPLES. THE WOOD SHALL NOT BLOCK THE ENTIRE HEIGHT OF THE CURB BOX OPENING.

③ FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2X4.

INSTALLATION NOTES

TYPE B & C

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

TYPE D

DO NOT INSTALL INLET PROTECTION TYPE D IN INLETS SHALLOWER THAN 30", MEASURED FROM THE BOTTOM OF THE INLET TO THE TOP OF THE GRATE.

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE BOTTOM OF THE BAG.

INLET PROTECTION
TYPE A, B, C, AND D

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

10/16/02
DATE

/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER

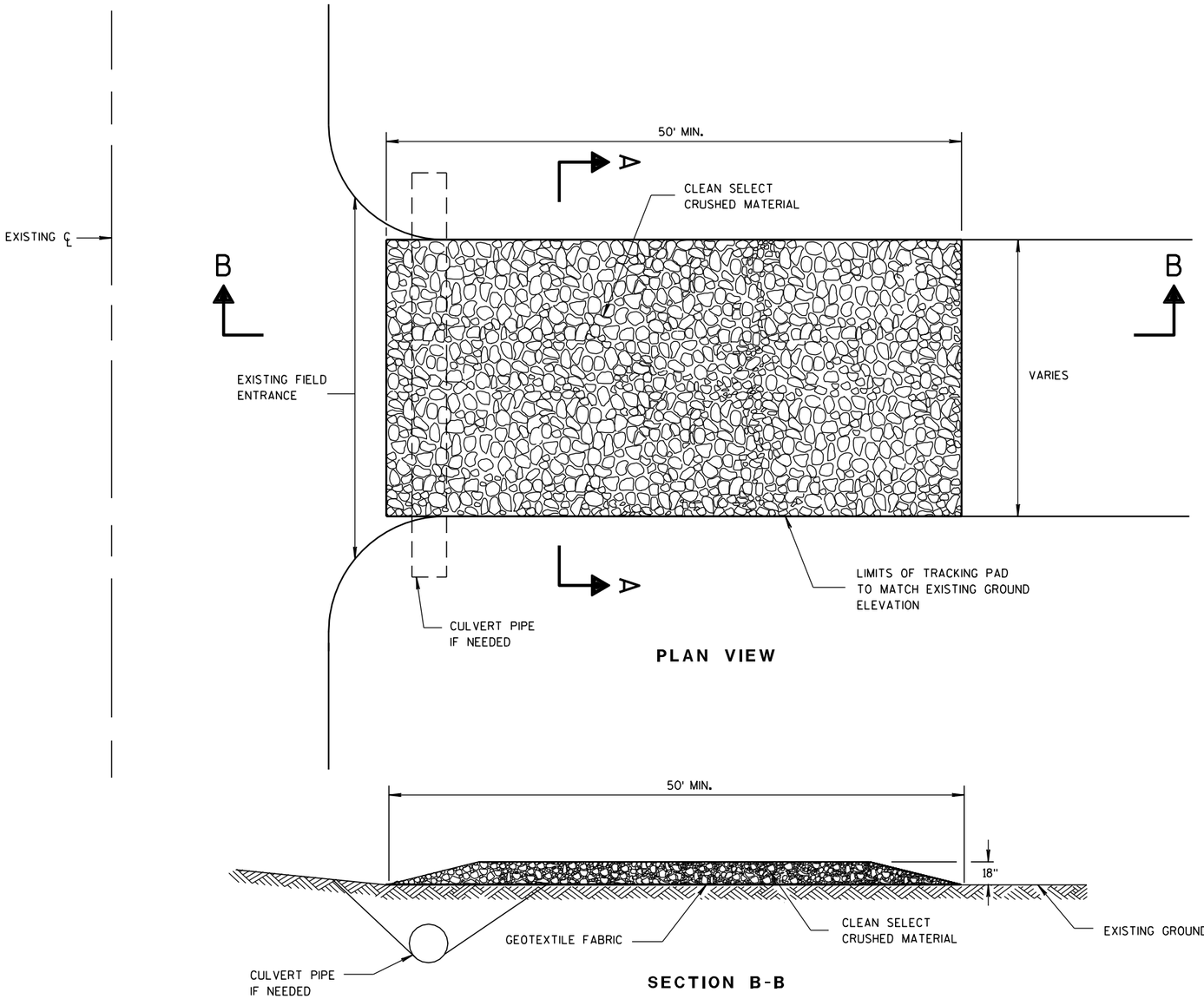
FHWA

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S.D.D. 8 E 10-2

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S.D.D. 8 E 10-2



PLAN VIEW

SECTION B-B

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

TRACKING PAD SHALL BE INSPECTED DAILY. DEFICIENT AREAS SHALL BE REPAIRED OR REPLACED IMMEDIATELY.

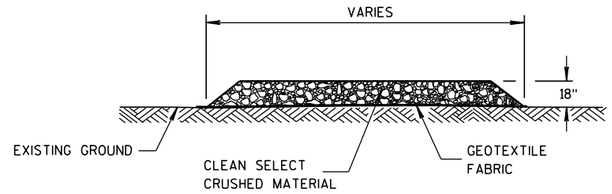
TRACKING PAD TO BE REMOVED AFTER CONSTRUCTION IS COMPLETED.

TRACKING PAD SHALL BE THE FULL WIDTH OF THE EGRESS POINT.

SURFACE WATER MUST BE PREVENTED FROM PASSING THROUGH THE TRACKING PAD. FLOWS SHALL BE DIVERTED AWAY, AROUND OR CONVEYED UNDER THE TRACKING PAD.

CULVERT PIPE OR OTHER BMP USED TO DIVERT WATER AWAY, AROUND OR UNDER THE TRACKING PAD SHALL BE DESIGNED TO CONVEY THE 2 YEAR - 24 HOUR EVENT.

THE COST OF ADDITIONAL BMP TO DIVERT WATER ARE INCIDENTAL TO THE TRACKING PAD BID ITEM.



SECTION A-A

TRACKING PAD

6

S.D.D. 8 E 14-1

TRACKING PAD

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

3/24/2011	/S/ Jerry H. Zoda	
DATE	ROADWAY STANDARDS ENGINEER 745	ENT

FHWA

6

S.D.D. 8 E 14-1

METAL APRON ENDWALLS

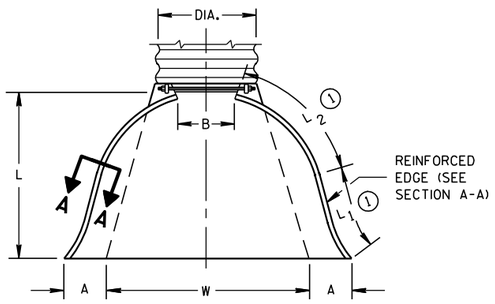
PIPE DIA. (IN.)	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4	36	2 1/2 to 1	1 Pc.
21	.064	.060	9	12	6	36	18	29 5/8	42	2 1/2 to 1	1 Pc.
24	.064	.075	10	13	6	41	18	37 1/4	48	2 1/2 to 1	1 Pc.
30	.079	.075	12	16	8	51	18	52 1/4	60	2 1/2 to 1	1 Pc.
36	.079	.105	14	19	9	60	24	59 3/4	72	2 1/2 to 1	2 Pc.
42	.109	.105	16	22	11	69	24	75 5/8	84	2 1/2 to 1	2 Pc.
48	.109	.105	18	27	12	78	24	81	90	2 1/4 to 1	3 Pc.
54	.109	.105	18	30	12	84	30	85 1/2	102	2 1/4 to 1	3 Pc.
60	.109×	.105×	18	33	12	87	—	—	114	2 to 1	3 Pc.
66	.109×	.105×	18	36	12	87	—	—	120	2 to 1	3 Pc.
72	.109×	.105×	18	39	12	87	—	—	126	2 to 1	3 Pc.
78	.109×	.105×	18	42	12	87	—	—	132	1 1/2 to 1	3 Pc.
84	.109×	.105×	18	45	12	87	—	—	138	1 1/2 to 1	3 Pc.
90	.109×	.105×	18	37	12	87	—	—	144	1 1/2 to 1	3 Pc.
96	.109×	.105×	18	35	12	87	—	—	150	1 1/2 to 1	3 Pc.

× EXCEPT CENTER PANEL SEE GENERAL NOTES

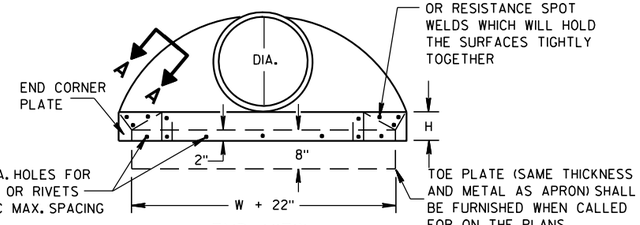
REINFORCED CONCRETE APRON ENDWALLS

PIPE DIA. (IN.)	DIMENSIONS (Inches) T	A	B	C	D	E	G	APPROX. SLOPE
12	2	4	24	48 7/8	72 1/8	24	2	3 to 1
15	2 1/4	6	27	46	73	30	2 1/4	3 to 1
18	2 1/2	9	27	46	73	36	2 1/2	3 to 1
21	2 3/4	9	36	37 1/2	73 1/2	42	2 3/4	3 to 1
24	3	9 1/2	43 1/2	30	73 1/2	48	3	3 to 1
27	3 1/4	10 1/2	49 1/2	24	73 1/2	54	3 1/4	3 to 1
30	3 1/2	12	54	19 3/4	73 1/2	60	3 1/2	3 to 1
36	4	15	63	34 3/4	97 3/4	72	4	3 to 1
42	4 1/2	21	63	35	98	78	4 1/2	3 to 1
48	5	24	72	26	98	84	5	3 to 1
54	5 1/2	27	65	* 33 1/4 - ** 35	* 98 1/4 - ** 100	90	5 1/2	2 2/5 to 1
60	6	* 30 - ** 35	60	39	99	96	5	2 to 1
66	6 1/2	* 24 - ** 30	* 72 - ** 78	* 21 - ** 27	99	102	5 1/2	2 to 1
72	7	* 24 - ** 36	78	21	99	108	6	2 to 1
78	7 1/2	* 24 - ** 36	78	21	99	114	6 1/2	2 to 1
84	8	36	90 1/2	21	111 1/2	120	6 1/2	1 1/2 to 1
90	8 1/2	41	87 1/2	24	111 1/2	132	6 1/2	1 1/2 to 1

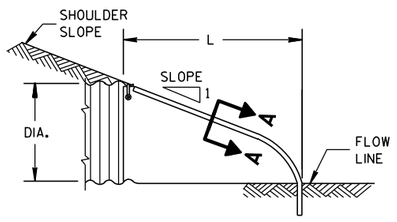
*MINIMUM
**MAXIMUM



PLAN VIEW

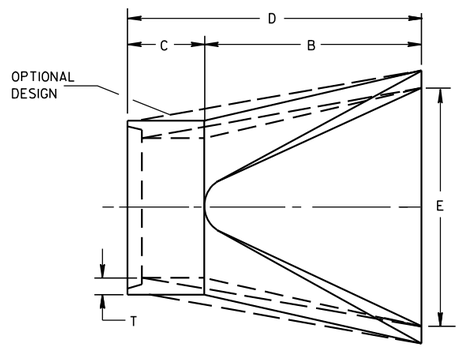


END VIEW

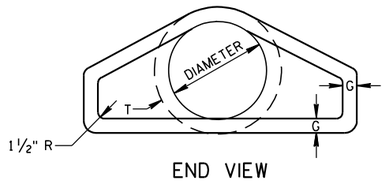


SIDE ELEVATION

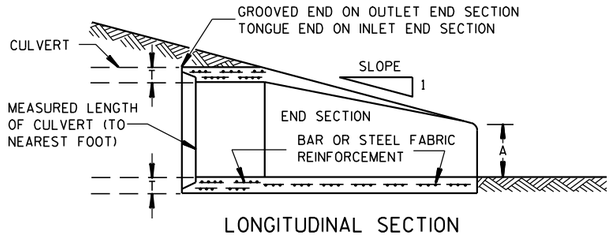
METAL ENDWALLS



PLAN

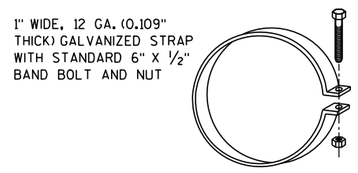


END VIEW



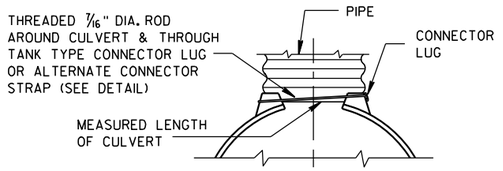
LONGITUDINAL SECTION

CONCRETE ENDWALLS

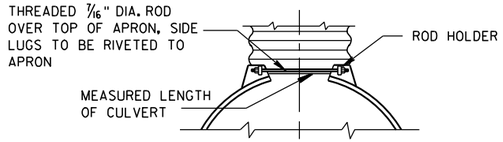


ALTERNATE FOR TYPE 1 CONNECTION

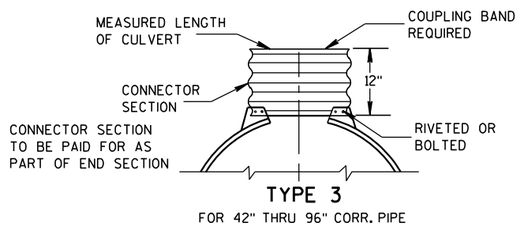
END SECTION CONNECTOR STRAP



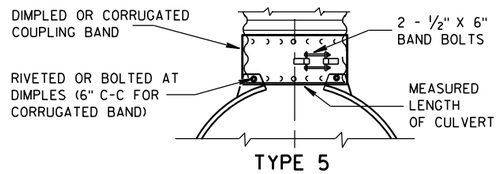
TYPE 1
FOR 12" THRU 24" CORR. PIPE



TYPE 2
FOR 30" THRU 96" CORR. PIPE



TYPE 3
FOR 42" THRU 96" CORR. PIPE



TYPE 5
ALTERNATE FOR:
ALL SIZES CORRUGATED CIRCULAR PIPE

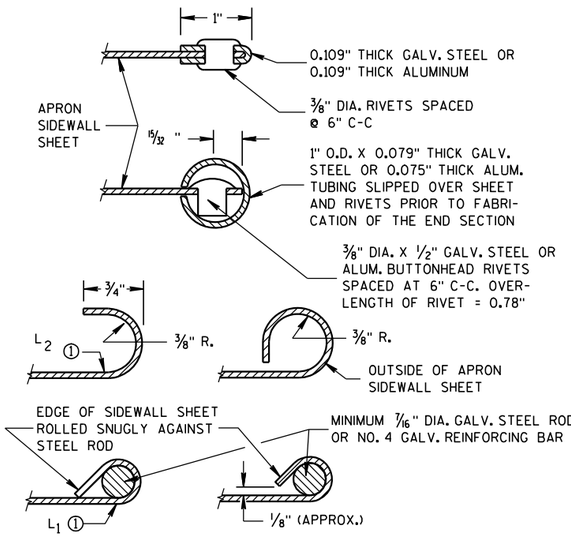
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

FOR CIRCUMFERENTIALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2, 3 OR 5 AS APPLICABLE.

FOR HELICALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2 OR 5.

FOR HELICALLY CORRUGATED PIPES WITH TWO CIRCUMFERENTIAL CORRUGATIONS AT EACH END USE ENDWALL CONNECTION DETAILS 1, 2 OR 3.

CONNECTION DETAILS



SECTION A-A

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

CONCRETE CULVERT ENDWALLS MAY NOT BE USED WITH GALVANIZED STEEL OR ALUMINUM CULVERT PIPE OR VISE VERSA. GALVANIZED STEEL OR ALUMINUM ENDWALLS SHALL NORMALLY BE INSTALLED ON CULVERT PIPE OF THE SAME METAL.

ALL THREE PIECE STEEL APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.105" SIDES AND 0.134" CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT OF THE PIPE PERIMETER.

LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS FOR STEEL UNITS AND ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS. FOR THE 60" THROUGH 96" DIAMETER APRON ENDWALL SIZES, THE REINFORCED EDGES AND CENTER PANEL SEAMS SHALL BE FURTHER REINFORCED WITH GALVANIZED STEEL OR ALUMINUM STIFFENER ANGLES. THE ANGLES SHALL BE ATTACHED BY GALVANIZED NUTS AND BOLTS FOR STEEL UNITS AND ALUMINUM NUTS AND BOLTS FOR ALUMINUM UNITS.

WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

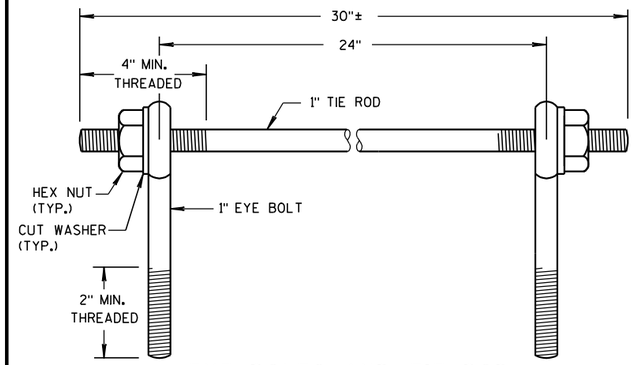
① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR CULVERT PIPE

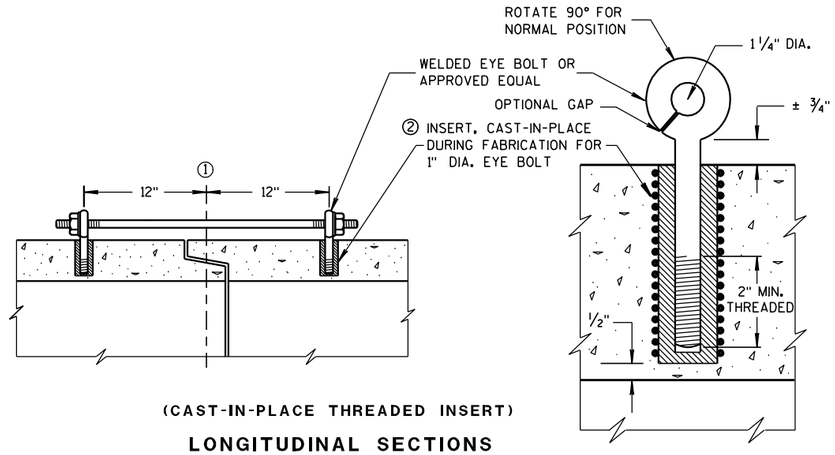
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/30/94 DATE
/S/ Rory L. Rhinesmith
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6
S.D.D. 8 F 1-11



EYE BOLTS AND TIE ROD



(CAST-IN-PLACE THREADED INSERT)

LONGITUDINAL SECTIONS

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 1)

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS, AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

CONCRETE CULVERT AND STORM SEWER PIPE SHALL BE TIED TOGETHER IN THE MANNER ILLUSTRATED BY THIS DETAIL AT LOCATIONS DESIGNATED IN THE STANDARD SPECIFICATIONS AND THE PLAN. THE CONTRACTOR MAY USE EITHER ALTERNATE 1, 2 OR 3 FOR DRAINAGE STRUCTURES. ONLY ALTERNATE 1 AND 3 MAY BE USED FOR CATTLE PASSES, UNLESS OTHERWISE STATED IN THE CONTRACT. THE MATERIALS, FABRICATION AND WORK NECESSARY TO TIE THE PIPE BY THIS DETAIL WILL BE CONSIDERED INCIDENTAL TO THE PIPE AND APRON ENDWALLS IF REQUIRED.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR JOINT TIES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

JOINT TIES TO BE HOT-DIP GALVANIZED PER ASTM A 153.

① ℄ OF TONGUE AND GROOVE OR BELL AND SPIGOT JOINTS.

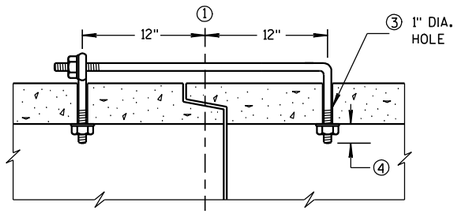
② THE INSIDE OF THE THREADED INSERTS SHALL BE CLEAN TO ALLOW THE INSERTION OF THREADED EYE BOLTS.

③ HOLES SHALL BE CAST-IN-PLACE OR DRILLED 12 INCHES FROM ℄ OF TONGUE AND GROOVE.

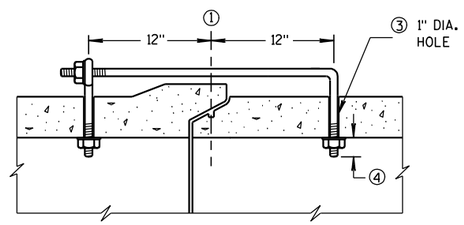
④ BOLT PROJECTION INSIDE OF PIPE SHALL NOT EXCEED 2 INCHES.

⑤ OPENING TO BE ROD DIAMETER PLUS 1 INCH.

⑥ LENGTH ADEQUATE TO EXTEND TO WITHIN 1/2 INCH OF THE INNER SURFACE OF THE PIPE.



(TONGUE & GROOVE PIPE)

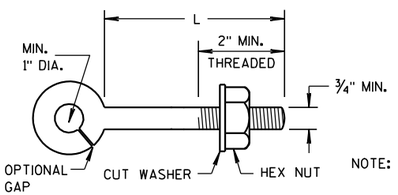


(MODIFIED BELL PIPE)

LONGITUDINAL SECTION

EYE BOLT DIMENSION TABLE

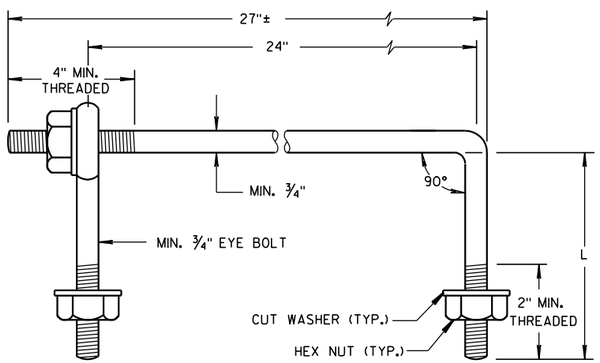
PIPE SIZE	L = LENGTH	
	TONGUE & GROOVE PIPE	MODIFIED BELL PIPE
18" TO 24"	4 1/2"	6 1/4"
30"	5"	7"
36"	5 1/2"	7"
42"	6"	
48"	6 1/2"	
60"	7 1/2"	
66"	8"	



NOTE:

EYE BOLT

NOTE: TWO EYE BOLTS MAY BE USED WITH A 30" LONG THREADED ROD IN LIEU OF THE 90° BENT TIE ROD.



EYE BOLT AND TIE ROD

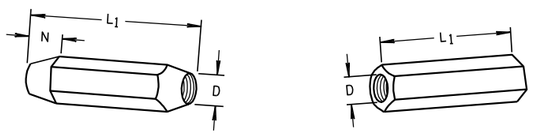
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 2)

ADJUSTABLE TIE ROD TABLE

PIPE DIAMETER	TIE ROD DIAMETER	D	L_1	N
12-60	5/8	5/8	5	1/2
66-84	3/4	3/4	5	1/2
90-108	1	1	7	1 1/16

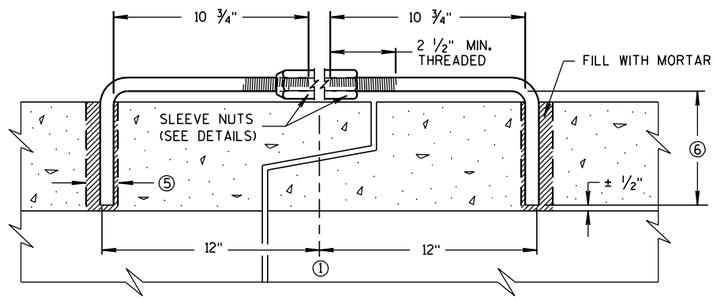
DIMENSIONS SHOWN ARE IN INCHES



TAPERED PLAIN

RIGHT AND LEFT THREADS

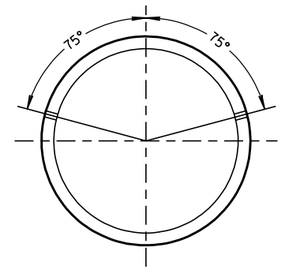
SLEEVE NUTS



LONGITUDINAL SECTION

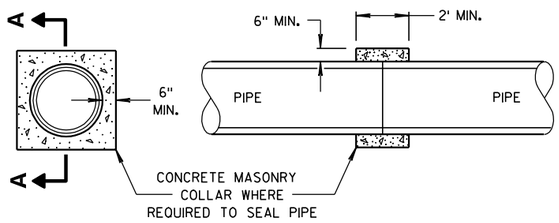
(JOINT TIES FOR 12" TO 108" DIA. CONCRETE PIPE)

ADJUSTABLE TIE ROD (ALTERNATE NO. 3)



PLACEMENT OF (2) CAST-IN-PLACE INSERTS OR HOLES DURING FABRICATION FOR PIPE SECTIONS REQUIRING TIE RODS

TRANSVERSE SECTION



SECTION A-A

CONCRETE COLLAR DETAIL

JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/5/2012 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
747 — MENT

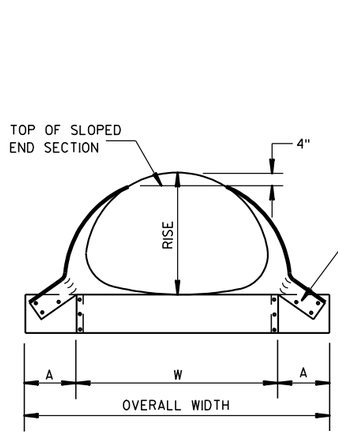
FHWA

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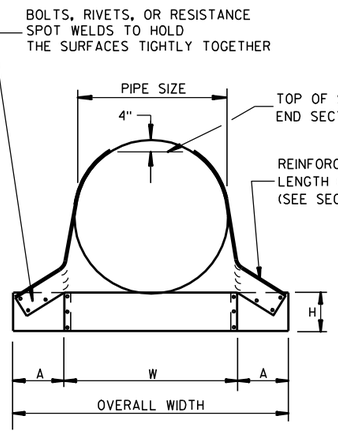
S.D.D. 8 F 4-7

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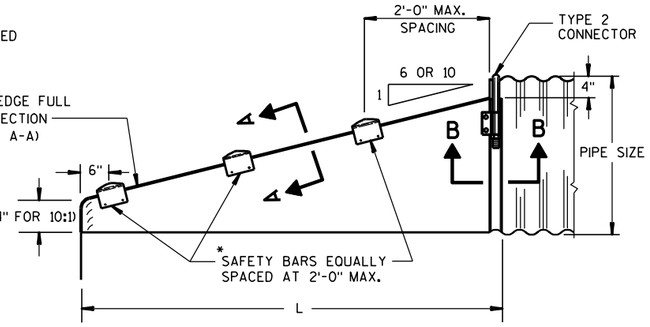
S.D.D. 8 F 4-7



FRONT VIEW



FRONT VIEW



SIDE VIEW

GENERAL NOTES

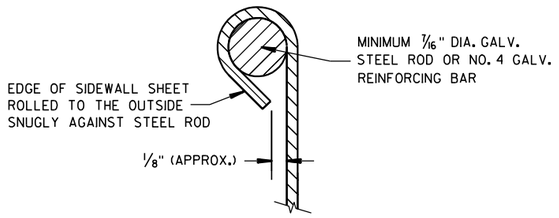
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

SLOPED END SECTIONS SHALL CONFORM TO THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS, SECTION 521 FOR STEEL APRON ENDWALLS.

SAFETY BARS SHALL BE FABRICATED FROM GALVANIZED STEEL PIPE MEETING THE REQUIREMENTS OF ASTM A-53, GRADE B, SCHEDULE 40 OR APPROVED EQUAL.

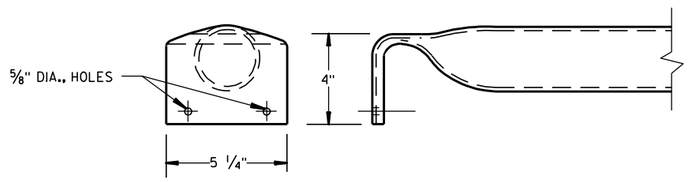
STEEL APRON ENDWALLS FOR CULVERT PIPE SLOPED SIDE DRAINS

PIPE DIA. (IN.)	MIN. THICK. (Inches)	DIMENSIONS (Inches)				L DIMENSIONS			
		A	H	W	OVERALL WIDTH	SLOPE	LENGTH INCHES	SLOPE	LENGTH INCHES
15	.064	8	6	21	37	6:1	30	10:1	70
18	.064	8	6	24	40	6:1	48	10:1	100
21	.064	8	6	27	43	6:1	66	10:1	130
24	.064	8	6	30	46	6:1	84	10:1	160
30	.109	12	9	36	60	6:1	120	10:1	220
36	.109	12	9	42	66	6:1	156	10:1	280
42	.109	16	12	48	80	6:1	192	——	——
48	.109	16	12	54	86	6:1	228	——	——
54	.109	16	12	60	92	6:1	264	——	——
60	.109	16	12	66	98	6:1	300	——	——



SECTION A-A

*NOTE:
THREE SAFETY BARS ARE SHOWN. ACTUAL NUMBER OF BARS REQUIRED AT A 2'-0" C-C MAX. SPACING WILL VARY DEPENDING ON THE LENGTH OF THE END SECTION.

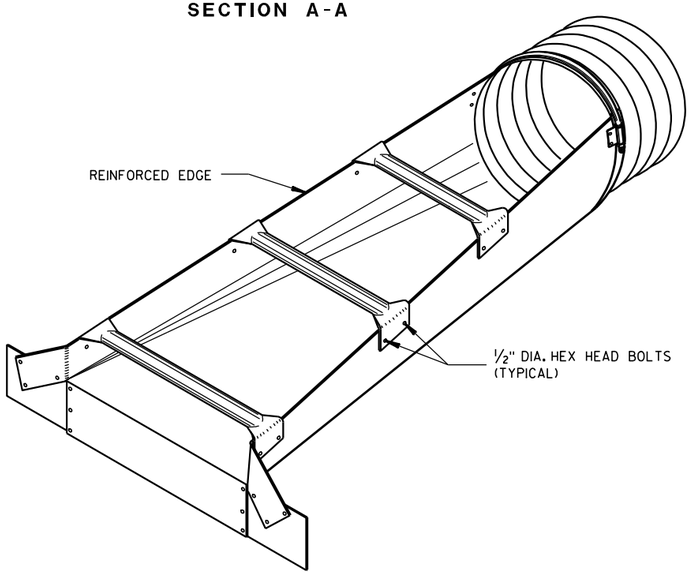


DETAIL OF SAFETY BAR

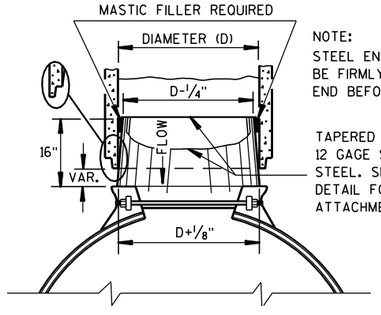
STEEL APRON ENDWALLS FOR PIPE ARCH SLOPED SIDE DRAINS

EQUIV. DIA. (Inches)	(Inches)		MIN. THICK. (Inches) ①	DIMENSIONS (Inches)				L DIMENSIONS			
	SPAN	RISE		A	H	W	OVERALL WIDTH	SLOPE	LENGTH INCHES	SLOPE	LENGTH INCHES
15	17	13	.064 *	7	6	30	44	6:1	30	10:1 ②	70
18	21	15	.064 *	8	6	27	43	6:1	30	10:1	70
21	24	18	.064 *	8	6	30	46	6:1	48	10:1	100
24	28	20	.064 *	8	6	34	50	6:1	60	10:1	120
30	35	24	.079 *	12	9	41	65	6:1	84	10:1	160
36	42	29	.109 *	12	9	48	72	6:1	114	10:1	210
42	49	33	.109	16	12	55	87	6:1	138	——	——
48	57	38	.109	16	12	63	95	6:1	168	——	——
54	64	43	.109	16	12	70	102	6:1	198	——	——

① * MINIMUM THICKNESS OF ALL 10:1 SLOPED SIDE DRAINS IS 0.109".
② ACTUAL SLOPE GREATER THAN 10:1.



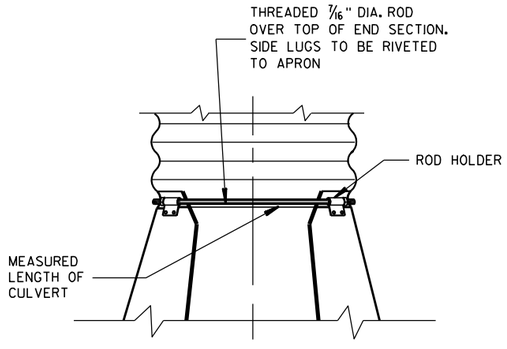
ISOMETRIC VIEW



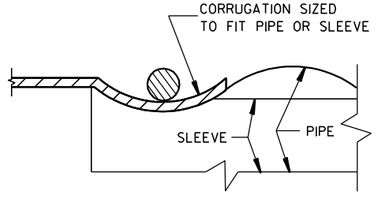
NOTE:
STEEL END SECTION SHALL BE FIRMLY WEDGED INTO PIPE END BEFORE BACKFILLING

TAPERED SLEEVE TO BE 12 GAGE SMOOTH GALVANIZED STEEL. SEE SECTION B-B DETAIL FOR END SECTION ATTACHMENT.

STEEL ADAPTER SLEEVE FOR CONCRETE PIPE



TYPE 2 CONNECTION DETAIL



SECTION B-B

STEEL APRON ENDWALLS FOR CULVERT PIPE AND PIPE ARCH SLOPED SIDE DRAINS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/5/2012 DATE
/S/ Jerry H. [illegible]
ROADWAY STANDARDS ENGINEER
FHWA

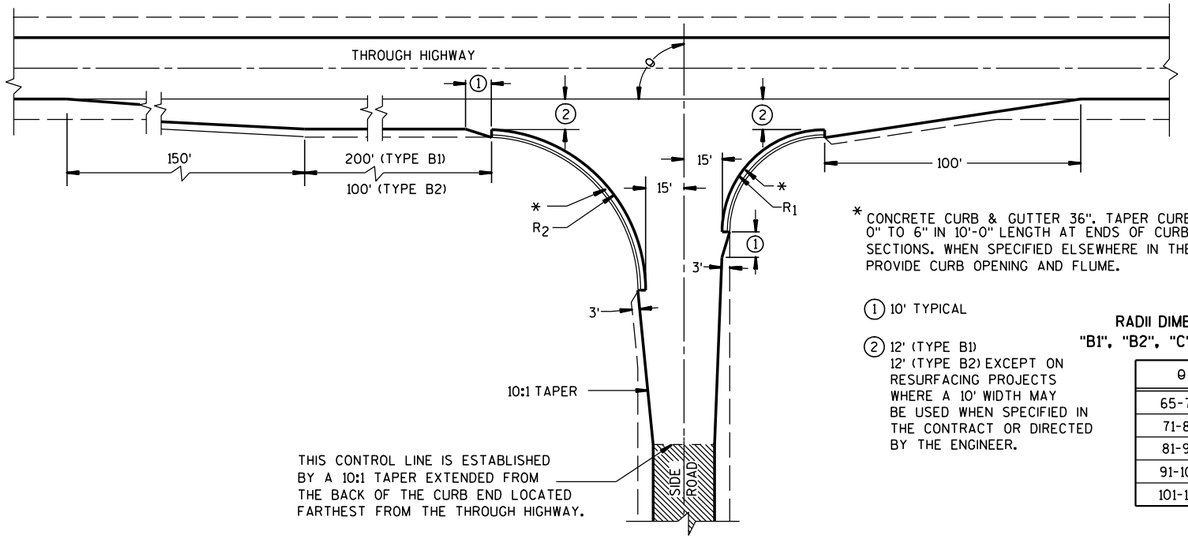
748

6

S.D.D. 8 F 7-4

6

S.D.D. 8 F 7-4



TYPE "B1" AND "B2"

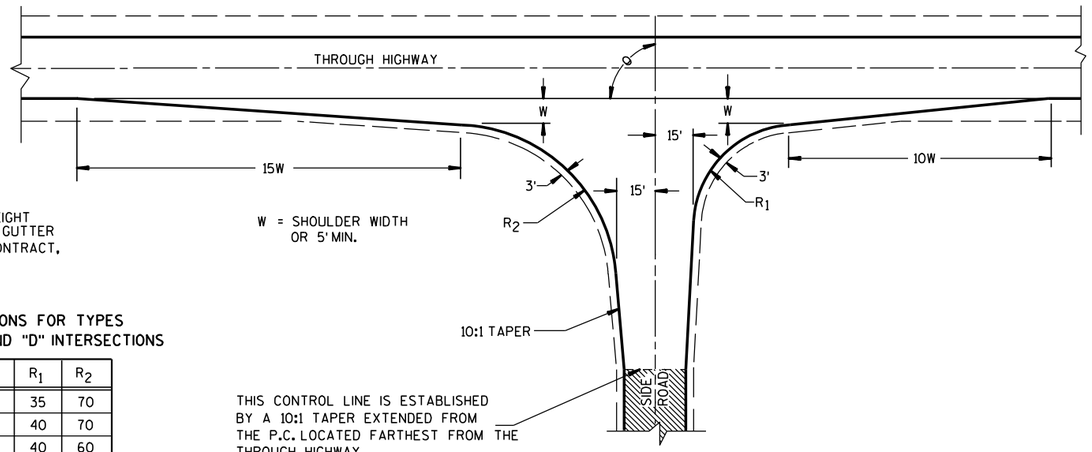
* CONCRETE CURB & GUTTER 36". TAPER CURB HEIGHT 0" TO 6" IN 10'-0" LENGTH AT ENDS OF CURB & GUTTER SECTIONS. WHEN SPECIFIED ELSEWHERE IN THE CONTRACT, PROVIDE CURB OPENING AND FLUME.

① 10' TYPICAL

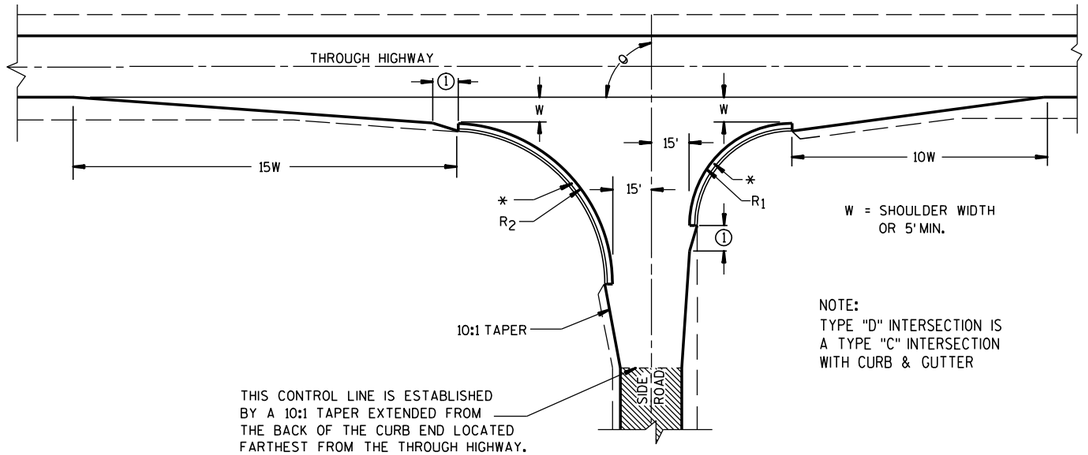
② 12' (TYPE B1)
12' (TYPE B2) EXCEPT ON RESURFACING PROJECTS WHERE A 10' WIDTH MAY BE USED WHEN SPECIFIED IN THE CONTRACT OR DIRECTED BY THE ENGINEER.

RADII DIMENSIONS FOR TYPES "B1", "B2", "C" AND "D" INTERSECTIONS

θ	R_1	R_2
65-70	35	70
71-80	40	70
81-90	40	60
91-100	50	55
101-110	60	45



TYPE "C"



TYPE "D"

NOTE:
TYPE "D" INTERSECTION IS A TYPE "C" INTERSECTION WITH CURB & GUTTER

GENERAL NOTES

DESIGNS MAY BE USED INTERCHANGEABLY IN COMBINATION OR SEPARATELY FOR ANY ONE COMPLETE INTERSECTION DEPENDING UPON INTERSECTION ANGLE AND SURFACING OF EACH APPROACH ROADWAY.

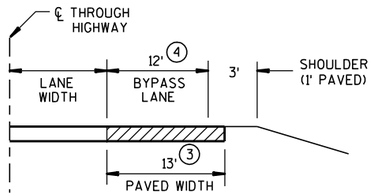
SIDE ROAD SURFACING NOTE

WHEN THE SIDE ROAD IS NOT PRESENTLY PAVED, PAVEMENT SHALL BE PLACED TO THE LIMITS SHOWN UNLESS OTHERWISE PROVIDED IN THE CONTRACT. WHERE THE CONSTRUCTION LIMITS ARE BEYOND THE PAVING LIMITS, CRUSHED AGGREGATE SURFACING SHALL BE PLACED BETWEEN THE PAVING LIMITS AND CONSTRUCTION LIMITS.

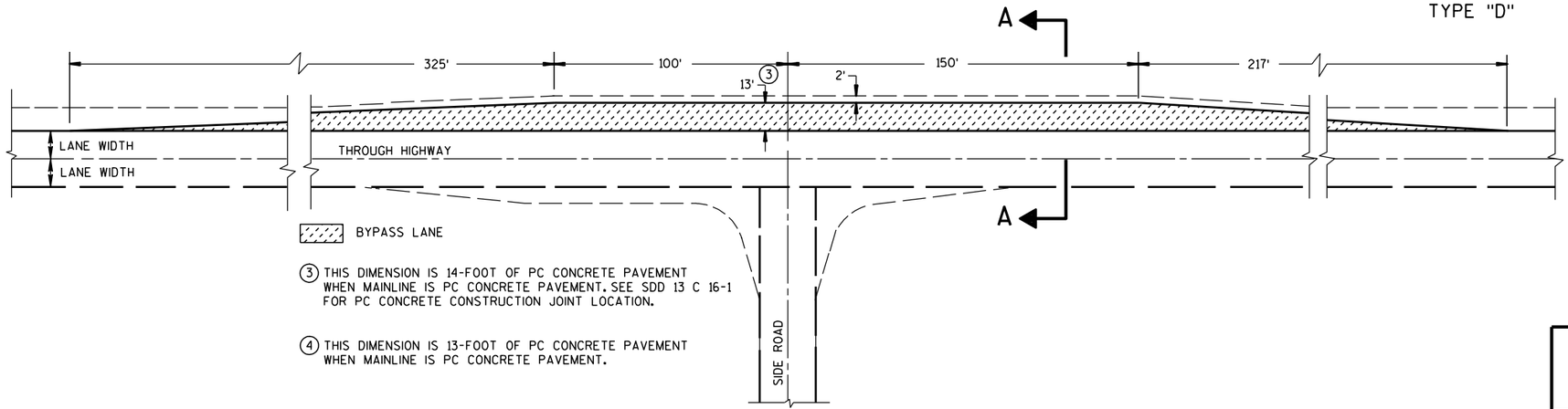
WHEN THE SIDE ROAD IS PRESENTLY PAVED, NEW PAVEMENT SHALL BE PLACED TO THE LIMITS OF DESIGN AS SHOWN AND BEYOND, IF NECESSARY, TO MEET EXISTING PAVEMENT.

WHEN THE SIDE ROAD IS THE CONSTRUCTION PROJECT, THE INTERSECTION SURFACING SHALL BE THE SAME AS FOR THE PROJECT.

▨ EXISTING SURFACE



SECTION A-A
(SHOWING BYPASS LANE AND SHOULDER)



③ THIS DIMENSION IS 14-FOOT OF PC CONCRETE PAVEMENT WHEN MAINLINE IS PC CONCRETE PAVEMENT. SEE SDD 13 C 16-1 FOR PC CONCRETE CONSTRUCTION JOINT LOCATION.

④ THIS DIMENSION IS 13-FOOT OF PC CONCRETE PAVEMENT WHEN MAINLINE IS PC CONCRETE PAVEMENT.

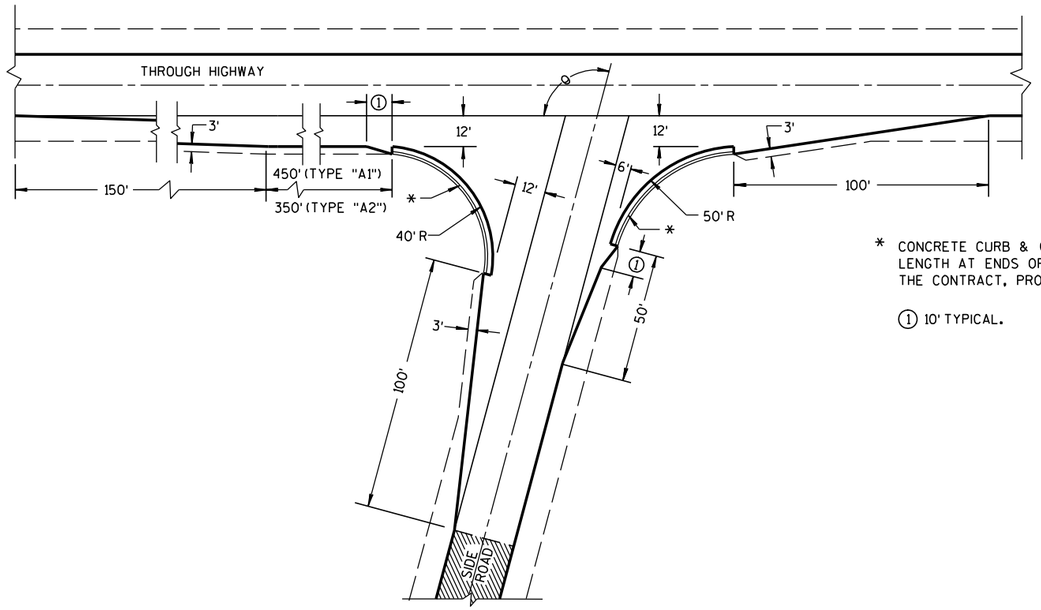
TEE INTERSECTION BYPASS LANE DETAIL

AT-GRADE SIDE ROAD INTERSECTION, TYPES "B1", "B2", "C" AND "D" AND TEE INTERSECTION BYPASS LANE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO...

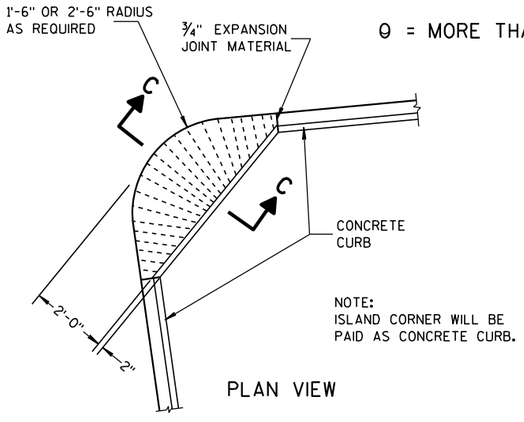
6

S.D.D. 9 A 1-12a



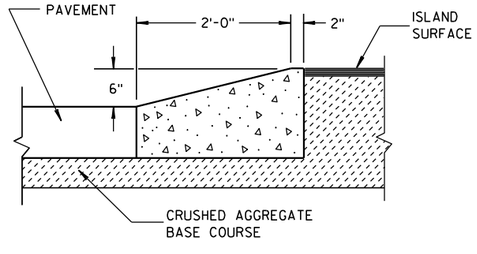
θ = MORE THAN 80°

EXISTING SURFACE



NOTE:
ISLAND CORNER WILL BE PAID AS CONCRETE CURB.

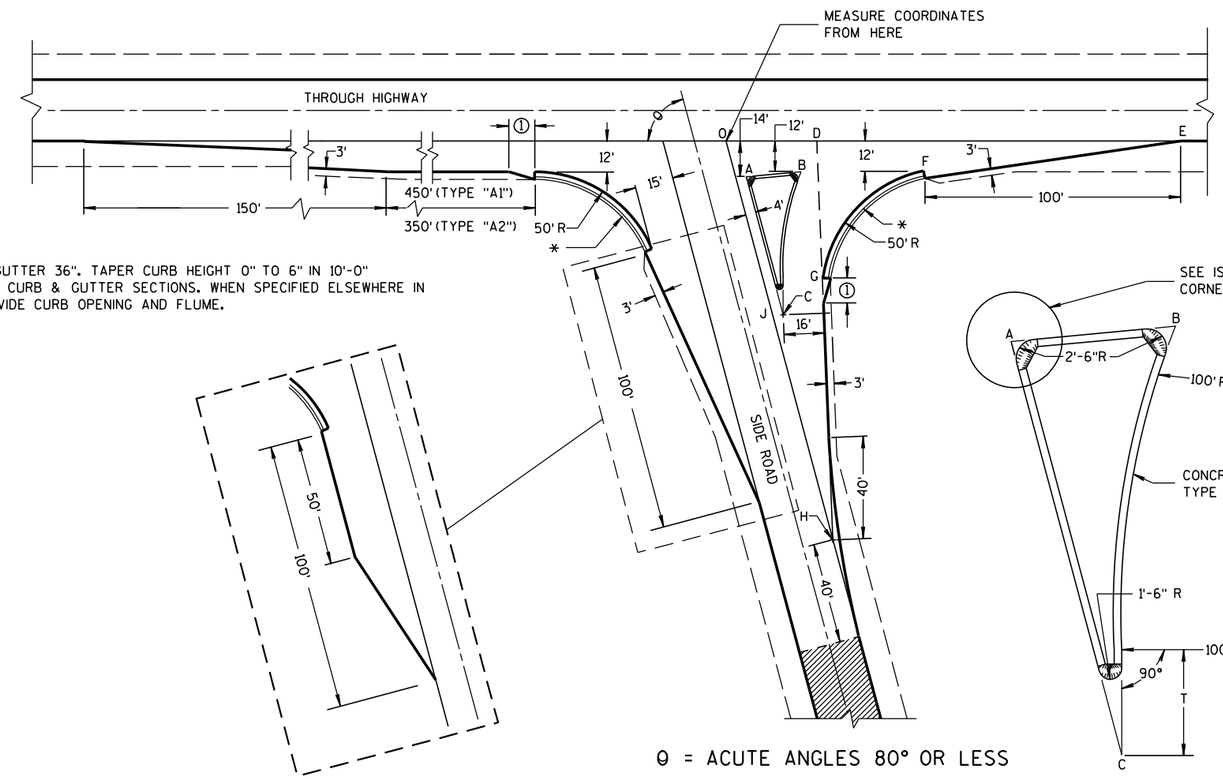
PLAN VIEW



SECTION C-C

ISLAND CORNER DETAIL

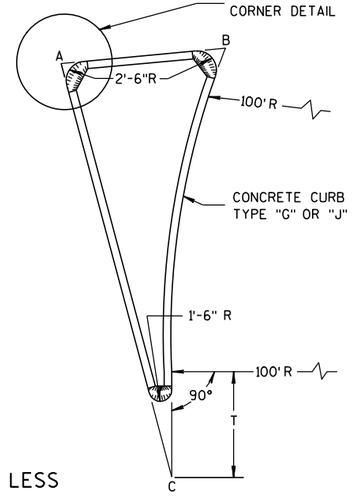
(TO BE CONSTRUCTED AT ALL ISLAND CORNERS)



* CONCRETE CURB & GUTTER 36". TAPER CURB HEIGHT 0" TO 6" IN 10'-0" LENGTH AT ENDS OF CURB & GUTTER SECTIONS. WHEN SPECIFIED ELSEWHERE IN THE CONTRACT, PROVIDE CURB OPENING AND FLUME.

① 10' TYPICAL.

θ = ACUTE ANGLES 80° OR LESS



SIDE ROAD WIDENING AND TAPER REQUIRED WHERE THE THROUGH HIGHWAY CARRIES TWO-WAY TRAFFIC
θ = ACUTE ANGLES 70° OR LESS

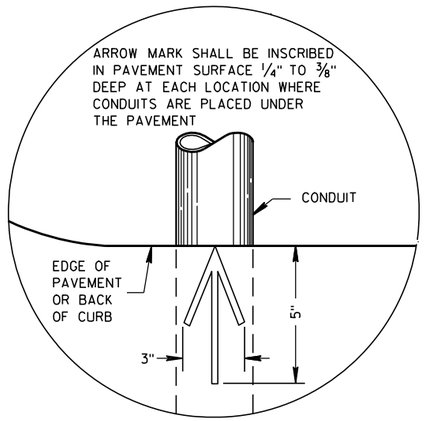
TABLE OF DIMENSIONS FOR
VARIABLE SIDE ROAD INTERSECTION ANGLES
(INTERPOLATE VALUES FOR ANGLES NOT SHOWN)

ANGLE θ DEGREES	COORDINATES IN FEET (MEASURED FROM POINT "O") X / Y								LENGTH IN FEET				
	A	B	C	D	E	F	G	H	AB	AC	T	OJ	OH
60	12.7 / -14.0	44.9 / -12.0	46.4 / -72.4	41.9 / 0.0	205.0 / 0.0	104.6 / -12.0	64.0 / -75.5	85.0 / -147.1	32.3	67.4	4.9	85.9	169.9
65	10.9 / -14.0	39.0 / -12.0	37.8 / -71.6	39.4 / 0.0	196.1 / 0.0	95.7 / -12.0	54.1 / -71.5	70.5 / -151.3	28.2	63.6	8.5	80.9	166.9
70	9.4 / -14.0	33.9 / -12.0	29.8 / -70.1	37.4 / 0.0	188.3 / 0.0	87.8 / -12.0	45.6 / -67.5	56.1 / -154.2	24.6	59.7	11.5	76.1	164.1
75	7.9 / -14.0	29.3 / -12.0	22.3 / -67.9	35.7 / 0.0	181.2 / 0.0	80.7 / -12.0	38.2 / -63.4	41.8 / -155.9	21.5	55.8	13.8	71.4	161.4
80	6.5 / -14.0	25.4 / -12.0	15.6 / -65.2	34.4 / 0.0	174.8 / 0.0	74.4 / -12.0	31.8 / -59.3	27.6 / -156.5	18.9	52.0	15.6	66.9	158.9

TYPE "A1" & "A2" SIDE ROAD INTERSECTION DETAILS

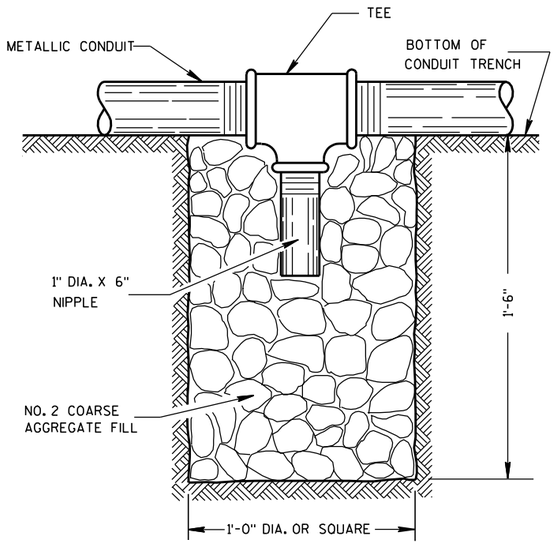
AT-GRADE SIDE ROAD INTERSECTION, TYPE "A1" & "A2"	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	
12/17/02 DATE	/S/ Beth Cannestra CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA	

6
S.D.D. 9 A 1-12b



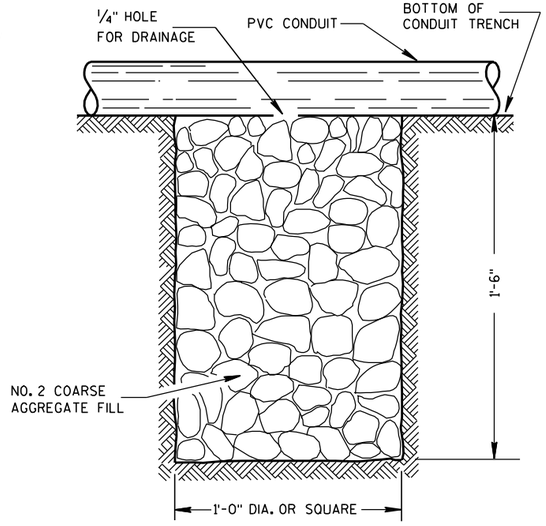
PLAN VIEW

ARROW MARK



NOTE: INSTALL AT LOCATIONS WHERE METALLIC CONDUITS CANNOT BE PITCHED TO DRAIN INTO A PULL BOX.

DRAIN SUMP FOR METALLIC CONDUIT



NOTE: INSTALL AT LOCATIONS WHERE PVC CONDUITS CANNOT BE PITCHED TO DRAIN INTO A PULL BOX.

DRAIN SUMP FOR PVC CONDUIT

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

METALLIC (STANDARD SPECIFICATION 652.2.2) OR NONMETALLIC (STANDARD SPECIFICATION 652.2.3) CONDUIT SHALL BE FURNISHED AND PLACED AS SHOWN.

DEPTH OF CONDUIT INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES MINIMUM AND 36 INCHES MAXIMUM.

DEPTH OF CONDUIT INSTALLED THAT IS NOT BELOW THE TRAVELED WAY SHALL BE 18 INCHES MINIMUM AND 36 INCHES MAXIMUM.

ANY EXCEPTION TO THE MAXIMUM DEPTH SHALL BE ONLY WITH THE WRITTEN APPROVAL OF THE ENGINEER.

THE TRENCH SHALL NOT BE BACKFILLED PRIOR TO INSPECTION OF THE CONDUIT.

ALL METALLIC CONDUIT RACEWAY ENDS SHALL BE REAMED AND THREADED.

ALL METALLIC CONDUIT IN WHICH WIRE OR CABLE IS TO BE INSTALLED SHALL BE BUSHED WITH APPROVED THREADED BUSHINGS BEFORE INSTALLATION OF THE WIRE OR CABLE.

ALL METALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT TO BE INSTALLED SHALL BE CAPPED WITH THREADED PROTECTIVE CAPS, AS APPROVED BY THE ENGINEER.

ALL NONMETALLIC CONDUIT SHALL BE CAPPED OR PLUGGED IMMEDIATELY AFTER INSTALLATION AND SHALL REMAIN CAPPED OR PLUGGED UNTIL WIRE/CABLES ARE INSTALLED.

NONMETALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

BENDING OF PVC ELECTRICAL CONDUIT SHALL BE ACCOMPLISHED BY USING A BLANKET OR EMERSION TYPE TANK DESIGNED FOR THE PURPOSE OF BENDING PVC ELECTRICAL CONDUIT.

ALL CUT ENDS SHALL BE TRIMMED INSIDE AND OUTSIDE TO REMOVE ALL ROUGH EDGES ON NONMETALLIC CONDUIT. (SEE NEC 347.5)

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY U.L. LISTED ADAPTER FITTINGS SHALL BE USED.

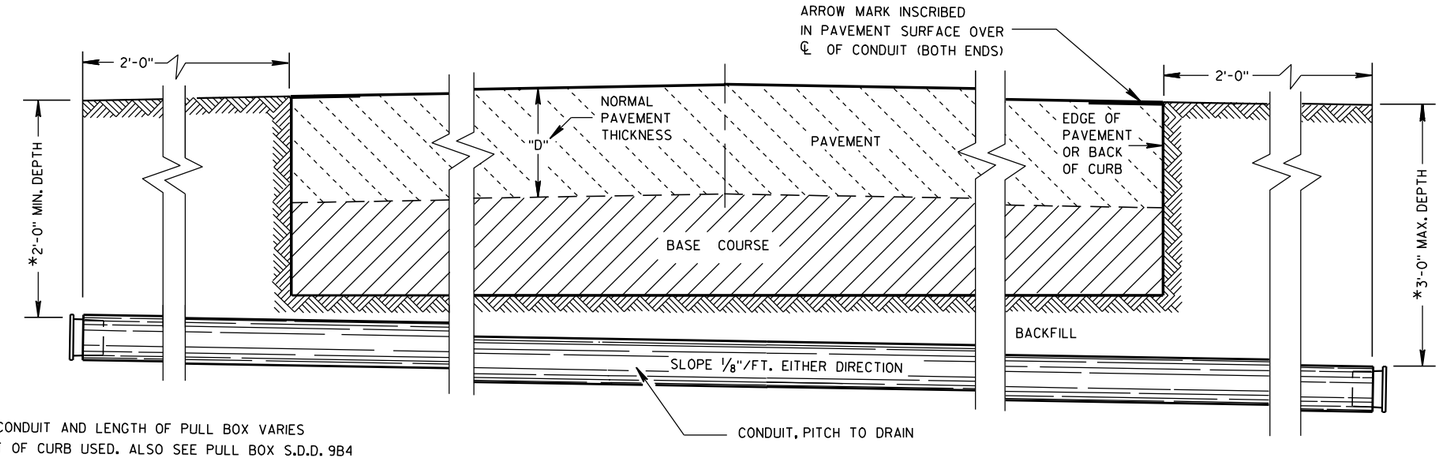
PRIOR TO CONDUIT ACCEPTANCE, CONDUIT CAPS OR PLUGS SHALL BE REMOVED, AND THE CAPS, PLUGS AND CONDUIT ENDS SHALL BE THOROUGHLY CLEANED AND THEN THE CAPS OR PLUGS REINSTALLED TO ENSURE THAT THE CAPS OR PLUGS CAN BE EASILY REMOVED IN THE FUTURE.

ALL CONDUIT BEING FURNISHED AND INSTALLED SHALL HAVE THE U.L. LABEL FIRMLY ATTACHED.

CONDUIT RUNS SHALL BE THE SAME SIZE OF CONDUIT FROM ONE END TO THE OTHER (FROM PULL BOX TO PULL BOX-OR-JUNCTION BOX TO JUNCTION BOX-OR-BASE TO BASE, ETC.).

POLY ROPE OR A PULL WIRE SHALL BE INSTALLED AS STATED IN THE STANDARD SPECIFICATION, ITEM 652.3.1.1.

ALL CONDUIT RUNS SHALL BE STRAIGHT (WITHOUT BENDS) FROM PULL BOX TO PULL BOX, PULL BOX TO BASE AND BASE TO BASE AS SHOWN ON THE PLANS.



*DEPTH OF CONDUIT AND LENGTH OF PULL BOX VARIES WITH HEIGHT OF CURB USED. ALSO SEE PULL BOX S.D.D. 9B4

SIDE ELEVATION

DETAIL FOR CONDUIT UNDER PAVED HIGHWAYS

CONDUIT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

10/23/03 — DATE

/S/ Balu Ananthanarayanan — STATE ELECTRICAL ENGI 751 HWYS

FHWA

6

S.D.D. 9 B 2-7

6

S.D.D. 9 B 2-7

TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

DIMENSION IN INCHES		CORRUGATED STEEL PIPE								
PIPE DIAMETER (INSIDE)	A	12	12	12	18	18	18	24	24	24
PIPE LENGTH **	B	24	30	36	24	30	36	36	42	48
WALL THICKNESS	C	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064
COVER	D	10 1/4	10 1/4	10 1/4	16 1/4	16 1/4	16 1/4	22 1/4	22 1/4	22 1/4
FRAME	E	14 1/2	14 1/2	14 1/2	20 1/2	20 1/2	20 1/2	26 1/2	26 1/2	26 1/2
FRAME	F	8 1/2	8 1/2	8 1/2	14 1/2	14 1/2	14 1/2	20 1/2	20 1/2	20 1/2
FRAME	G	11 1/2	11 1/2	11 1/2	17 1/2	17 1/2	17 1/2	23 1/2	23 1/2	23 1/2
WEIGHT IN POUNDS *										
FRAME AND COVER		60	60	60	110	110	110	155	155	155

* THE ACTUAL WEIGHT OF THE MANHOLE FRAME AND COVER MAY VARY WITHIN 5 PERCENT PLUS OR MINUS OF THE WEIGHTS SHOWN.

** NORMALLY USED LENGTHS. THE PROJECT ENGINEER SHALL DETERMINE IF PIPE LENGTHS, OTHER THAN THOSE SPECIFIED, SHALL BE USED, TO A MAXIMUM OF 48" (CONTINUOUS LENGTH, NON-SPLICED). THE ADDITIONAL LENGTH SHALL BE INCIDENTAL TO THE PULL BOX BID PRICE.

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

ALL FRAMES AND COVERS SHALL BE HEAVY DUTY TYPE, SUITABLE FOR VEHICULAR TRAFFIC LOADS.

PULL BOXES LOCATED IN THE ROADWAYS SHALL HAVE LOCKING COVERS.

ENTRANCE HOLES INTO PULL BOXES SHALL BE CUT WITH A CIRCULAR HOLE SAW OR HYDRAULIC CONDUIT PUNCH. HOLE SIZE SHALL BE THE OUTSIDE DIAMETER OF THE CONDUIT THAT IS TO FIT IN THE OPENING PLUS NO MORE THAN 1/4".

THE CONTRACTOR SHALL NOT INSTALL WIRE IN ANY PULL BOX UNTIL ITS INSTALLATION HAS BEEN INSPECTED AND ACCEPTED BY THE ENGINEER.

GROUNDING LUGS (MECHANICAL CONNECTORS) SHALL BE U.L. LISTED AND APPROVED FOR USE WITH COPPER WIRE. THE MECHANICAL CONNECTION (INSIDE AND OUTSIDE) TO THE PULL BOX, SHALL BE TOTALLY AND PERMANENTLY SEALED WITH A SILICONE OR RUBBERIZED CAULKING COMPOUND AS APPROVED BY THE ENGINEER.

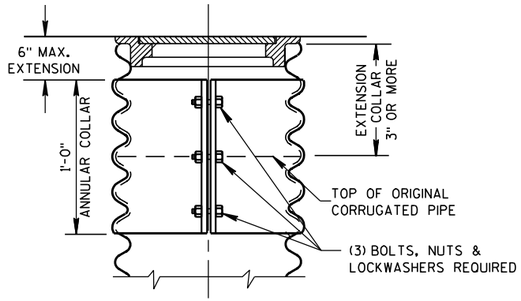
GROUNDING LUGS ARE NOT REQUIRED IN PULL BOXES WHEN VOLTAGES OF LESS THAN 50 VOLTS AC ARE THE ONLY VOLTAGES ENCOUNTERED IN THE BOXES.

ALL METALLIC CONDUIT IN WHICH WIRE AND/OR CABLE IS TO BE INSTALLED, SHALL BE BUSHED BEFORE INSTALLATION OF THE WIRE AND/OR CABLE.

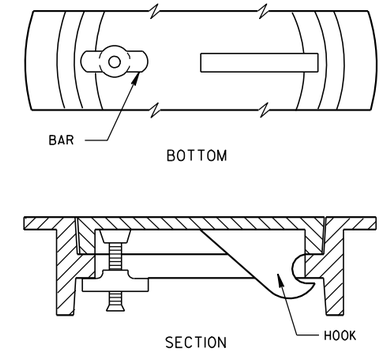
S.D.D. 9B2, "CONDUIT", APPLIES TO THIS DRAWING.

WHEN PULL BOXES ARE INSTALLED FOR FUTURE USE, DO NOT INSTALL THE EQUIPMENT GROUNDING LUG. THE EQUIPMENT GROUNDING LUG, THE EQUIPMENT GROUNDING ELECTRODE AND THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE REQUIRED AND INSTALLED UNDER A FUTURE WIRING CONTRACT.

IF PULL BOX EQUIPMENT GROUNDING IS REQUIRED USING AN EQUIPMENT GROUNDING ELECTRODE IN EACH PULL BOX, THE EQUIPMENT GROUNDING ELECTRODE SHALL BE 5/8" X 8'-0", COPPERCLAD AND BE EXOTHERMICALLY WELDED TO A #4 AWG, COPPER, STRANDED WIRE (BARE OR GREEN INSULATED). THE #4 AWG WIRE SHALL BE 4 FEET IN LENGTH, NEATLY COILED, TAPED AND AVAILABLE FOR USE WHEN REQUIRED.

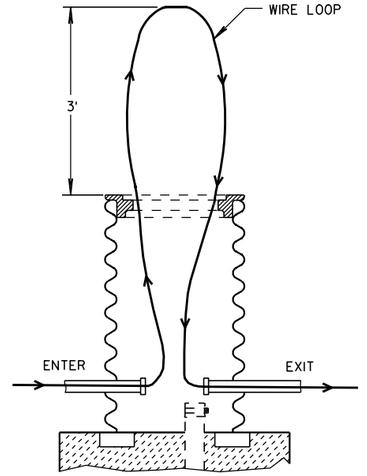


CORRUGATED PIPE EXTENDER

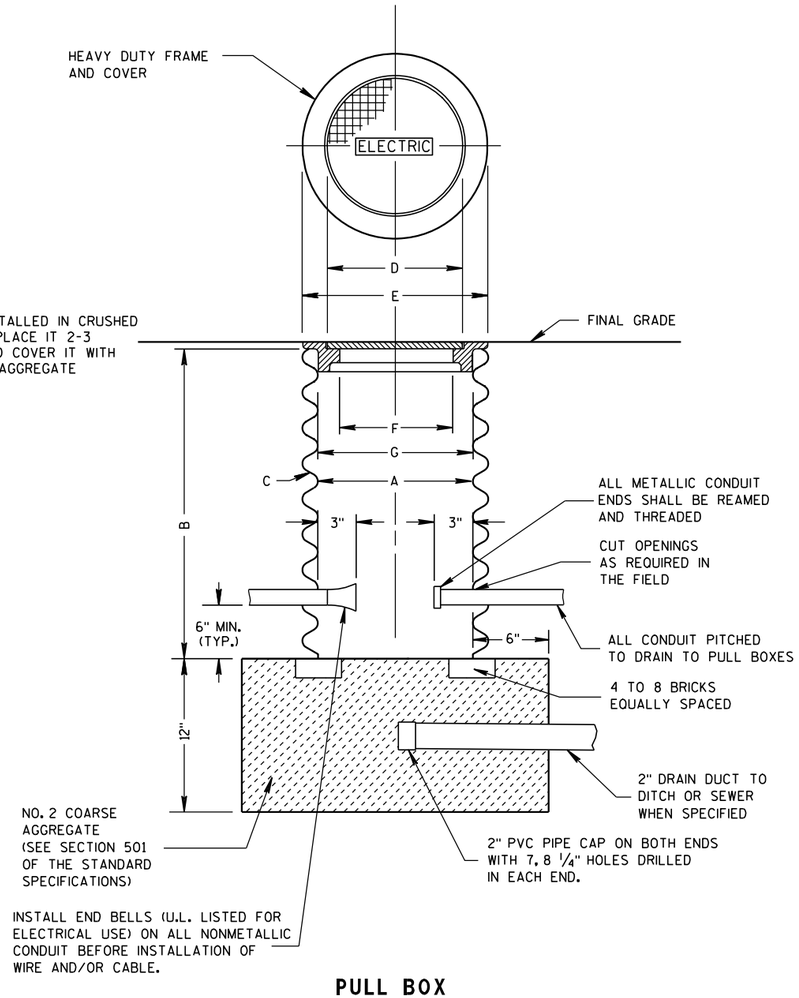


ALTERNATE COVER (LOCKING)

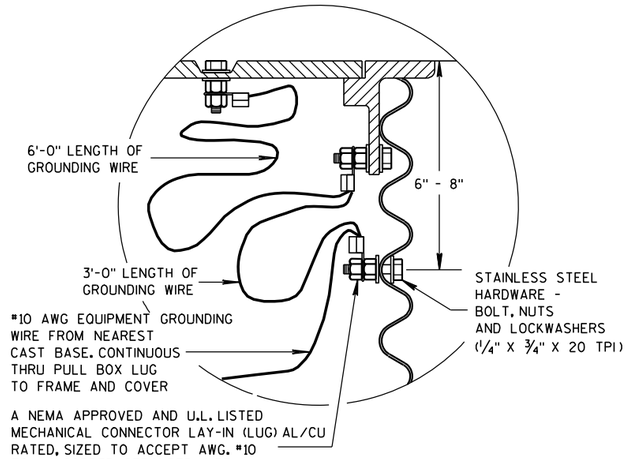
TIGHTENING BAR TYPE



MEASUREMENT DETAIL FOR WIRE/CABLE IN THE PULL BOX



PULL BOX

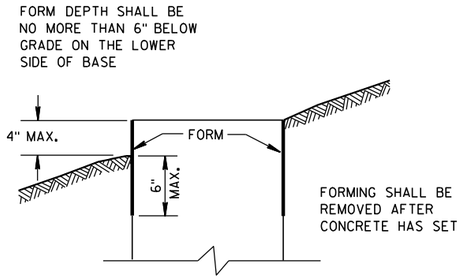


EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES

PULL BOX

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
9/27/06 DATE
/S/ Balu Ananthanarayanan
STATE ELECTRICAL ENGI 752 HWYS
FHWA



FORMING DETAIL

QUANTITY REQUIREMENTS	CONCRETE BASE TYPE		
	1	2	5
APPROX. CUBIC YARDS OF CONCRETE	0.40	0.57	0.40
LBS. OF HOOP BAR STEEL	NONE	23	16
LBS. OF VERTICAL BAR STEEL	NONE	60	18

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

BASES SHALL BE EXCAVATED BY USE OF A CIRCULAR AUGER.

TOP SURFACES OF CONCRETE BASES SHALL BE TROWEL FINISHED SMOOTH AND LEVEL.

CONDUIT SIZES AND LOCATIONS SHALL BE AS SHOWN ON THE PLANS.

THE FINAL OR TERMINATING CONCRETE BASE IN A CONDUIT RUN SHALL HAVE A 6" EXIT STUB INSTALLED FOR FUTURE CABLING USE. THE EXIT STUB SHALL BE SIZED AS USED THROUGHOUT THE CONDUIT RUN AS SHOWN AT THE ENTRANCE OF THE BASE.

MINIMUM BENDING RADIUS OF CONDUIT IS EQUAL TO 6 X THE DIAMETER.

CONDUIT HEIGHT ABOVE CONCRETE BASES SHALL BE 1 INCH. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

GENERAL NOTES (CONTINUED)

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF CONCRETE BASES BEFORE INSTALLATION OF CABLE OR WIRE.

ENDS OF CONDUIT INSTALLED BELOW GRADE FOR FUTURE USE SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC.

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

IF A BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE DIRT OR FILL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING AROUND THE BASE. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BARE CONCRETE BASE IN LAYERS OF 1 FOOT OR LESS.

A NO. 4 AWG, STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD) FOR TYPE 2 AND TYPE 5 BASES.

THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE FURNISHED AND INSTALLED TO ENTER THE BASE OF THE TYPE 2 AND TYPE 5 BASES THROUGH A 1 INCH CONDUIT INSTALLED FOR GROUNDING PURPOSES, LEAVING A 4 FOOT COIL OF WIRE ABOVE THE CONCRETE BASE. THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE NEATLY COILED AND THE COILS TIED TOGETHER.

ANCHOR RODS SHALL BE THREADED 12" IN LENGTH ON EACH END OF THE ROD. ANCHOR RODS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 654.2.1 AND 641.2.2 OF THE STANDARD SPECIFICATIONS, ASTM A-449, OR ASTM A-687 (GRADE 105).

WASHERS AND LOCK WASHERS ARE REQUIRED ON ALL ANCHOR RODS.

WHEN ANCHOR RODS USING THE ALTERNATE "L" BEND ARE FURNISHED, THE 4" "L" BEND SHALL BE IN ADDITION TO THE SPECIFIED ANCHOR ROD BAR LENGTH. THE "L" BEND END SHALL NOT BE THREADED.

ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

WELDING OF THE ANCHOR RODS TO THE CAGE IS UNACCEPTABLE. TIE WIRES SHALL BE USED.

BAR STEEL REINFORCEMENT SHALL BE COATED WITH POWDERED EPOXY RESIN IN ACCORDANCE WITH SECTION 505 OF THE STANDARD SPECIFICATIONS (LATEST EDITION).

(1) THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18 INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36 INCHES EXCEPT WITH WRITTEN APPROVAL BY THE ENGINEER.

(2) (4) 1" DIA. X 3'-6" ANCHOR RODS.

(3) (4) 1" DIA. X 5'-0" ANCHOR RODS.

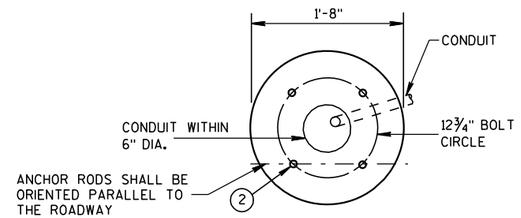
(4) (6) NO. 6 X 6'-8" BAR STEEL REINFORCEMENT.

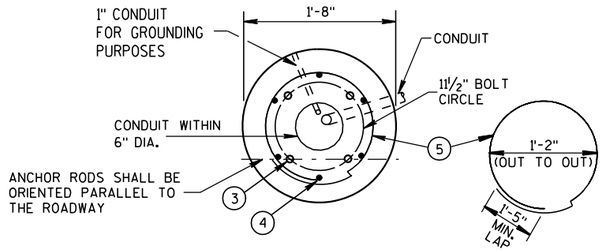
(5) (7) NO. 4 X 5'-1" BAR STEEL REINFORCEMENT @ 1'-0" C-C.

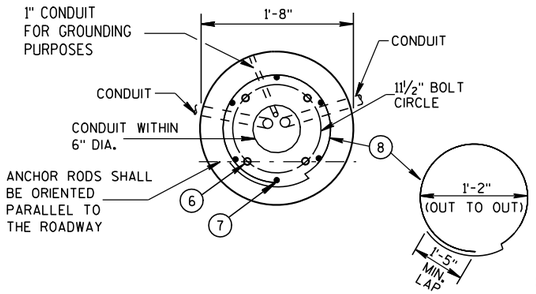
(6) (4) 1" DIA. X 3'-6" ANCHOR RODS.

(7) (6) NO.4 X 4'-8" BAR STEEL REINFORCEMENT.

(8) (5) NO. 4 X 5'-1" BAR STEEL REINFORCEMENT @ 1'-0" C-C.



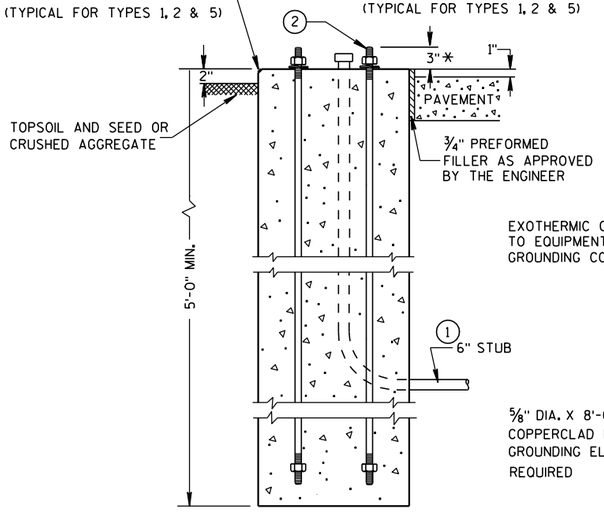




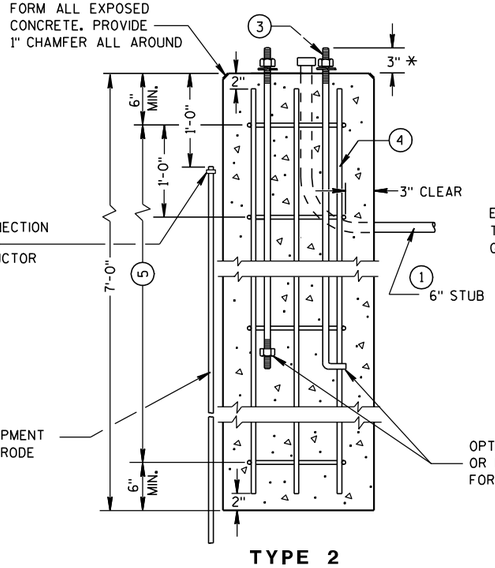
FORM ALL EXPOSED CONCRETE. PROVIDE 1" CHAMFER ALL AROUND

HALF SECTION IN UNPAVED AREA
(TYPICAL FOR TYPES 1, 2 & 5)

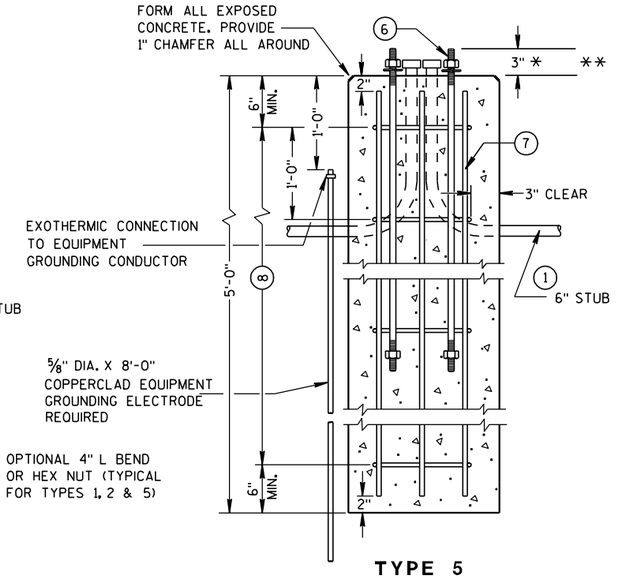
HALF SECTION IN PAVEMENT
(TYPICAL FOR TYPES 1, 2 & 5)



TYPE 1



TYPE 2



TYPE 5

CONCRETE BASES

* ANY ANCHOR ROD PROJECTION SHORTER THAN 2¾" OR LONGER THAN 3¼" SHALL REQUIRE THE BASE TO BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE.

** FOR NONBREAKAWAY INSTALLATIONS, 4½" ± ANCHOR ROD PROJECTION WITH THE USE OF LEVELING NUTS. RODENT SCREEN REQUIRED.

CONCRETE BASES, TYPES 1, 2 & 5

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
3/3/10 — DATE
/S/ Joanna L. Rush — STATE ELECTRICAL ENGI 753 — HWYS
FHWA

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S.D.D. 9 C 2-6

6

S.D.D. 9 C 2-6

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

FOUR (4) BOLTS SHALL BE FURNISHED WITH EACH TRANSFORMER BASE. BOLTS SHALL BE 1" DIAMETER, 4" IN LENGTH, WITH WASHERS, LOCK WASHERS AND NUTS. BOLTS, NUTS AND WASHERS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 641.2.2 OF THE STANDARD SPECIFICATIONS, ASTM A-325, (92,000 YIELD) HEAVY HEX NUT AND BE GALVANIZED IN ACCORDANCE WITH ASTM A-153, CLASS C.

LEVELING SHIMS, IF NEEDED, SHALL BE DESIGNED FOR THE PURPOSE AND USED UNDER CAST BASES WHEN PLUMBING POLES OR STANDARDS DURING INSTALLATION. THE USE OF WASHERS IN LIEU OF PROPER LEVELING SHIMS IS NOT ACCEPTABLE.

SHIM LENGTH SHALL BE LONG ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.

DOUBLE NUTTING IS NOT ACCEPTABLE FOR LEVELING OR MOUNTING PURPOSES.

A NEMA APPROVED AND U.L. LISTED MECHANICAL CONNECTOR (LUG) AL/CU RATED AND SIZED TO ACCEPT #10 AWG STRANDED WIRE, SHALL BE FURNISHED AND INSTALLED IN THE PEDESTAL AND TRANSFORMER BASES.

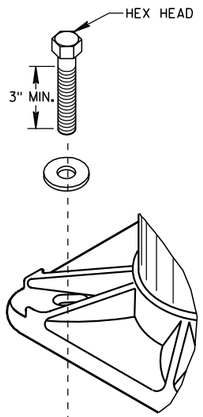
THE MECHANICAL CONNECTOR SHALL BE INSTALLED USING A 1/4" - 20 (TPI) STAINLESS STEEL HEX HEAD BOLT OF SUFFICIENT LENGTH TO FIRMLY ATTACH THE LUG TO THE BASE.

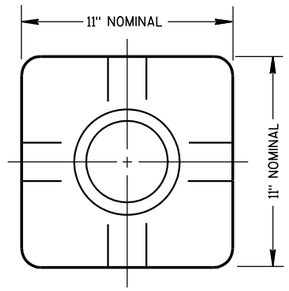
SHOULD THE MANNER OF ATTACHMENT OF THE LUG REQUIRE WASHERS, HEX NUTS, LOCK WASHER - THEY SHALL BE STAINLESS STEEL AS IS THE BOLT. THE MANNER OF ATTACHMENT SHALL NOT BLOCK ACCESSIBILITY TO WIRE PLACEMENT IN THE CONNECTOR.

PEDESTAL BASE COLLAR THREADING SHALL BE TAPERED AND IN ACCORDANCE WITH NATIONAL PIPE THREADING DIMENSIONS.

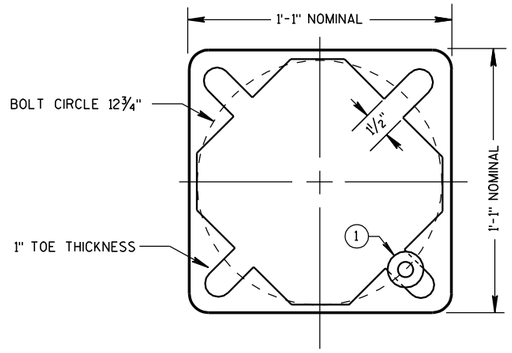
BASE COLLAR THREADING SHALL EXTEND INTO THE BASE COLLAR WITH SUFFICIENT DEPTH TO ACCEPT THE INSTALLATION OF TRAFFIC SIGNAL STANDARDS TO A DEPTH OF 1½", THEN TIGHTENING TO A POINT OF BEING IMMOVABLE.

THE ACCESS DOOR SHALL BE OF THE SAME MATERIAL AS THE BASE.

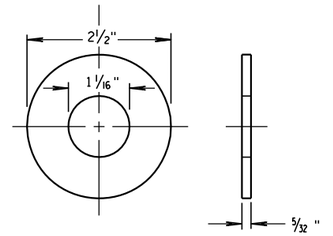




TOP VIEW
(PEDESTAL BASE)

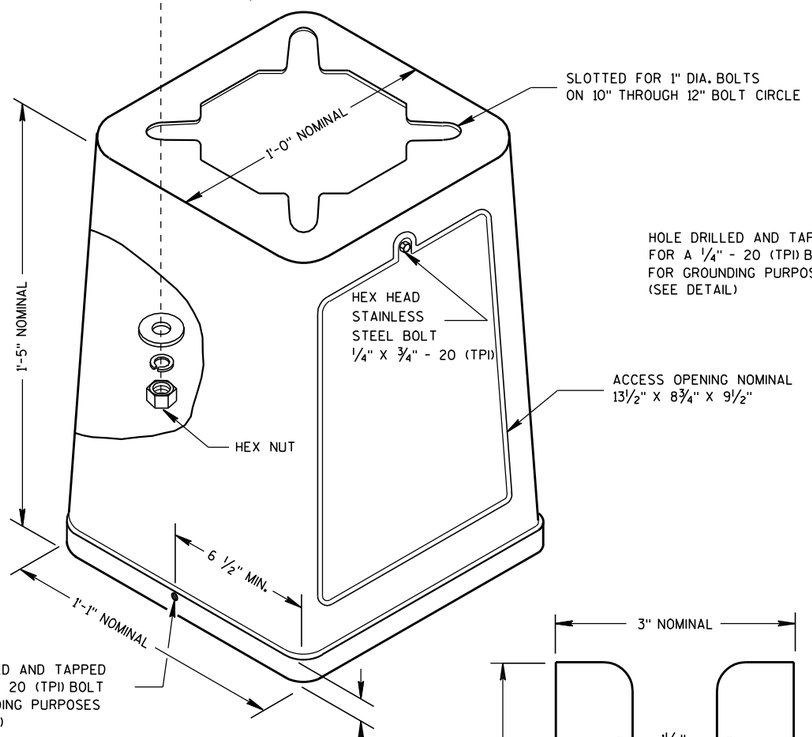


BOTTOM VIEW
(PEDESTAL BASE)

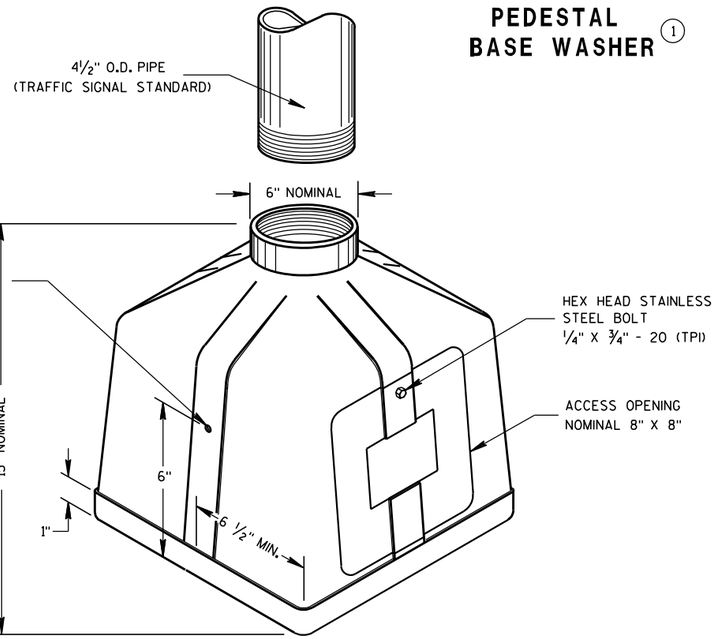


ZINC COATED STEEL WASHER
TO BE PROVIDED BY THE CONTRACTOR

PEDESTAL BASE WASHER (1)

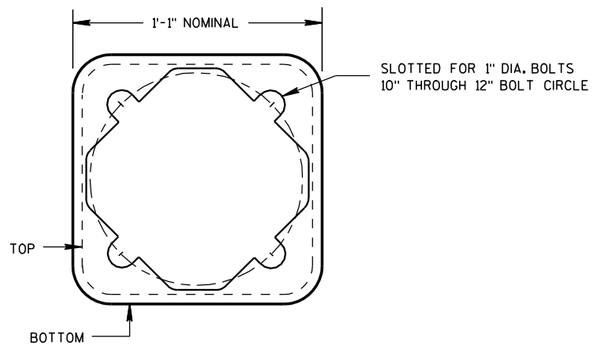


ISOMETRIC VIEW

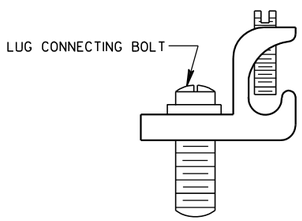


ISOMETRIC VIEW

PEDESTAL BASE



BOTTOM VIEW
(TRANSFORMER BASE)

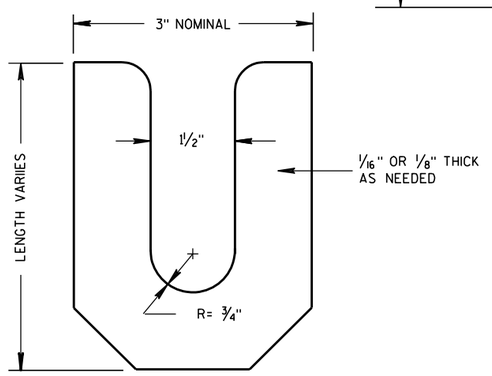


TYPICAL MECHANICAL CONNECTOR LUG

TO BE FURNISHED WITH EACH BASE

TRANSFORMER BASE

INTENDED FOR USE WITH TYPE 2, 3, 4, 5 & 6 POLES



LEVELING SHIM

TRANSFORMER/PEDESTAL BASES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/27/09 — DATE
/S/ Joanna L. [illegible] — STATE ELECTRICAL ENGI 754 — HWYS
FHWA

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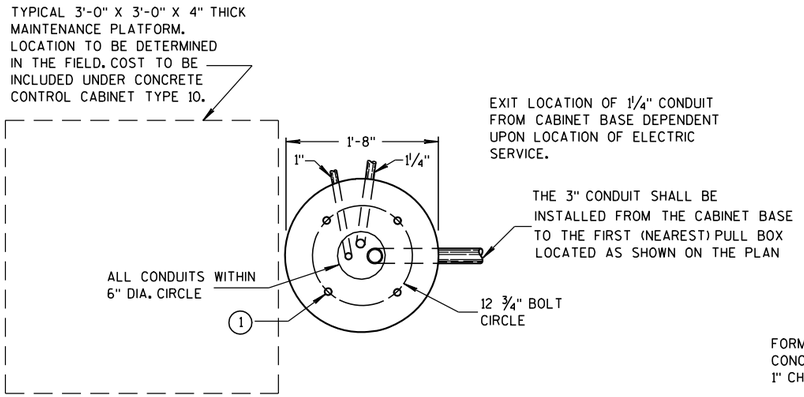
S.D.D. 9 C 3-3

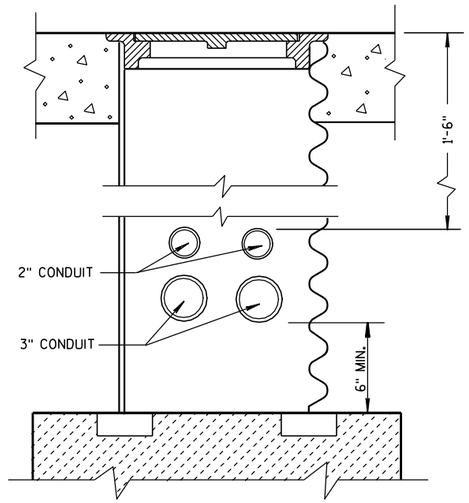
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S.D.D. 9 C 3-3

CONTROL CABINET BASE TYPE	DIMENSIONS				C.Y. CONCRETE (APPROX.)
	H	I	J	K	
TYPE 6 - 30" CABINET	34"	60"	10"	17"	.64
TYPE 7 - 38" CABINET	42"	60"	10"	21"	.93
TYPE 8 - 38" CABINET	42"	72"	12"	21"	1.29
TYPE 9 - VARIABLE	54"	72"	14"	27"	1.56
TYPE 10 - POST MOUNT	AS SHOWN				.65 *

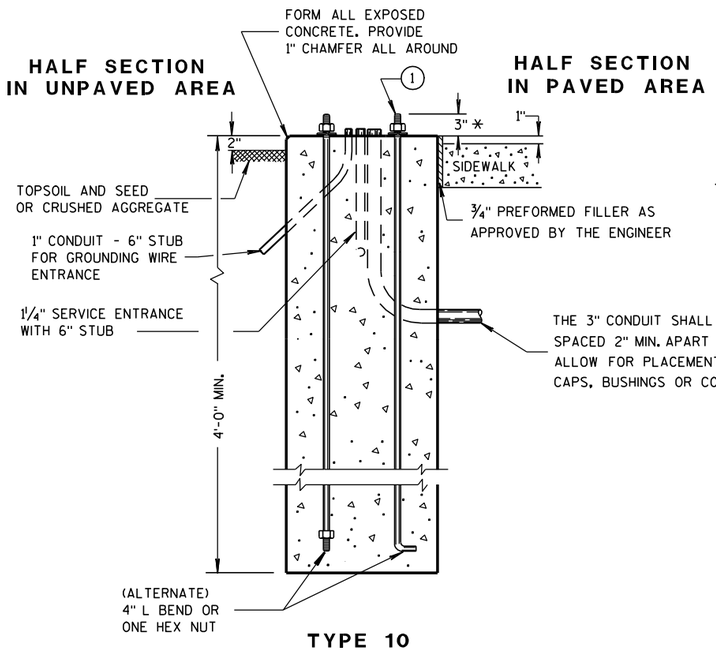
* INCLUDES MAINTENANCE PLATFORM.



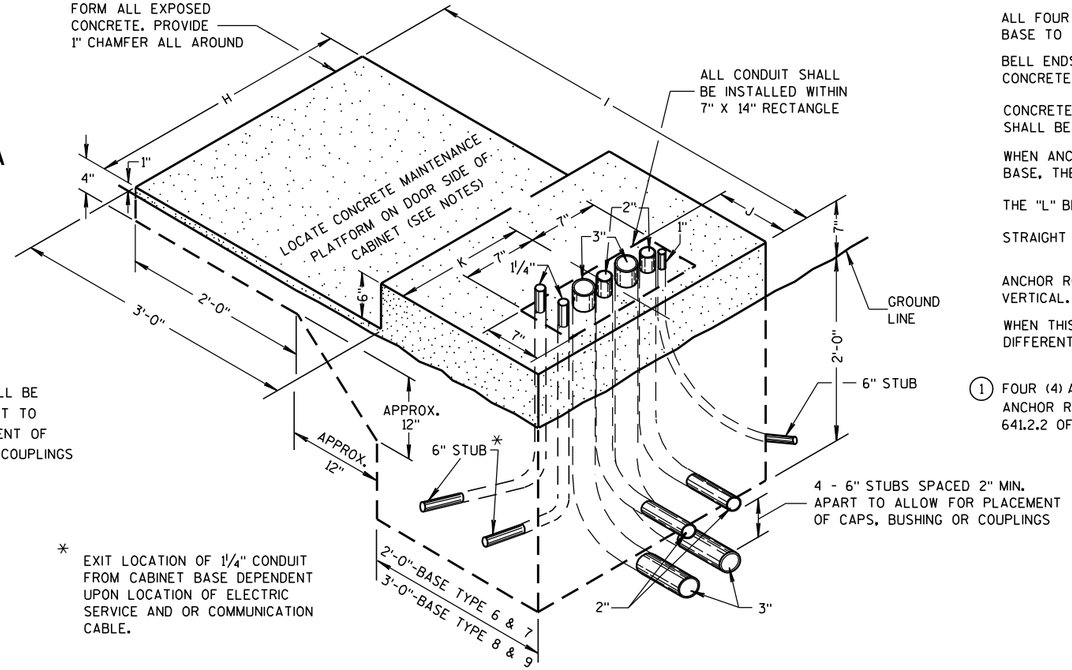


CONDUIT LOCATIONS IN 24" X 36" PULL BOX

(LEADING TO CONTROLLER CABINET BASE TYPE 6, 7, 8 AND 9)



TYPE 10



TYPE 6,7,8 AND 9 (ISOMETRIC VIEW)

* EXIT LOCATION OF 1¼" CONDUIT FROM CABINET BASE DEPENDENT UPON LOCATION OF ELECTRIC SERVICE AND OR COMMUNICATION CABLE.

* ANY ANCHOR ROD PROJECTION SHORTER THAN 2¾" OR LONGER THAN 3¼" SHALL REQUIRE THE BASE TO BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE.

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

INSTALL FOUR ½ INCH MINIMUM DIAMETER X 4 INCH MINIMUM LENGTH APPROVED CONCRETE MASONRY ANCHORS TO ANCHOR THE CABINET TO TYPE 6, 7, 8, AND 9 BASES. THE ANCHOR STUDS SHALL BE LOCATED AS DIRECTED BY THE ENGINEER TO PROPERLY ANCHOR THE CONTROL CABINET TO THE BASE.

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

CONDUIT HEIGHT ABOVE THE CONCRETE BASE SHALL BE 1 INCH.

DEPTH OF CONDUIT INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES MINIMUM AND 36 INCHES MAXIMUM.

DEPTH OF CONDUIT INSTALLED THAT IS NOT BELOW THE TRAVELED WAY SHALL BE 18 INCHES MINIMUM AND 36 INCHES MAXIMUM.

ANY EXCEPTION TO THE MAXIMUM DEPTH SHALL BE ONLY WITH THE WRITTEN APPROVAL OF THE ENGINEER.

CONTROL CABINET BASE TOP SURFACES SHALL BE TROWEL FINISHED SMOOTH AND LEVEL.

WHEN A TYPE 10 CONTROL CABINET BASE IS USED TO POST MOUNT A CONTROL CABINET, A 36" SQUARE 4" THICK CONCRETE MAINTENANCE PLATFORM SHALL BE REQUIRED ON THE DOOR SIDE OF THE CABINET. THE TOP 1 INCH SHALL BE ABOVE FINISHED GRADE AND BE BROOM FINISHED AND LEVEL.

MAINTENANCE PLATFORMS ARE NOT REQUIRED WHEN THE SURROUNDING AREA IS PAVED.

MINIMUM BENDING RADIUS OF CONDUIT = 6 X THE DIAMETER.

ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

ALL FOUR (TWO INCH AND THREE INCH) CONDUIT SHALL BE INSTALLED FROM THE CABINET BASE TO THE FIRST (NEAREST PULL BOX LOCATED AS SHOWN ON THE PLANS.

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF THE CONCRETE BASE BEFORE INSTALLATION OF CABLE OR WIRE.

CONCRETE FORM DEPTH BELOW FINISHED GRADE SHALL BE 6" MAXIMUM. CONCRETE FORMS SHALL BE REMOVED AFTER CONCRETE HAS SET.

WHEN ANCHOR RODS USING THE ALTERNATE L BEND ARE FURNISHED FOR THE TYPE 10 BASE, THE 4" L BEND SHALL BE IN ADDITION TO THE SPECIFIED ANCHOR ROD BAR LENGTH.

THE "L" BEND SHALL NOT BE THREADED.

STRAIGHT ANCHOR RODS SHALL BE THREADED 12" IN LENGTH ON EACH END OF THE ROD.

ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

WHEN THIS DRAWING IS USED FOR STREET LIGHTING CABINET BASES, CONDUIT MAY BE DIFFERENT AS SHOWN ON THE PLAN OR AS DIRECTED BY THE ENGINEER.

(1) FOUR (4) ANCHOR RODS, 1" DIA. X 3'-6"
ANCHOR RODS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 654.2.1 AND 641.2.2 OF THE STANDARD SPECIFICATIONS.

CONCRETE CONTROL CABINET BASES

CONCRETE CONTROL CABINET BASES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

3/3/10
DATE

/S/ Joanna L. [illegible]
STATE ELECTRICAL ENGI

755

HWYS

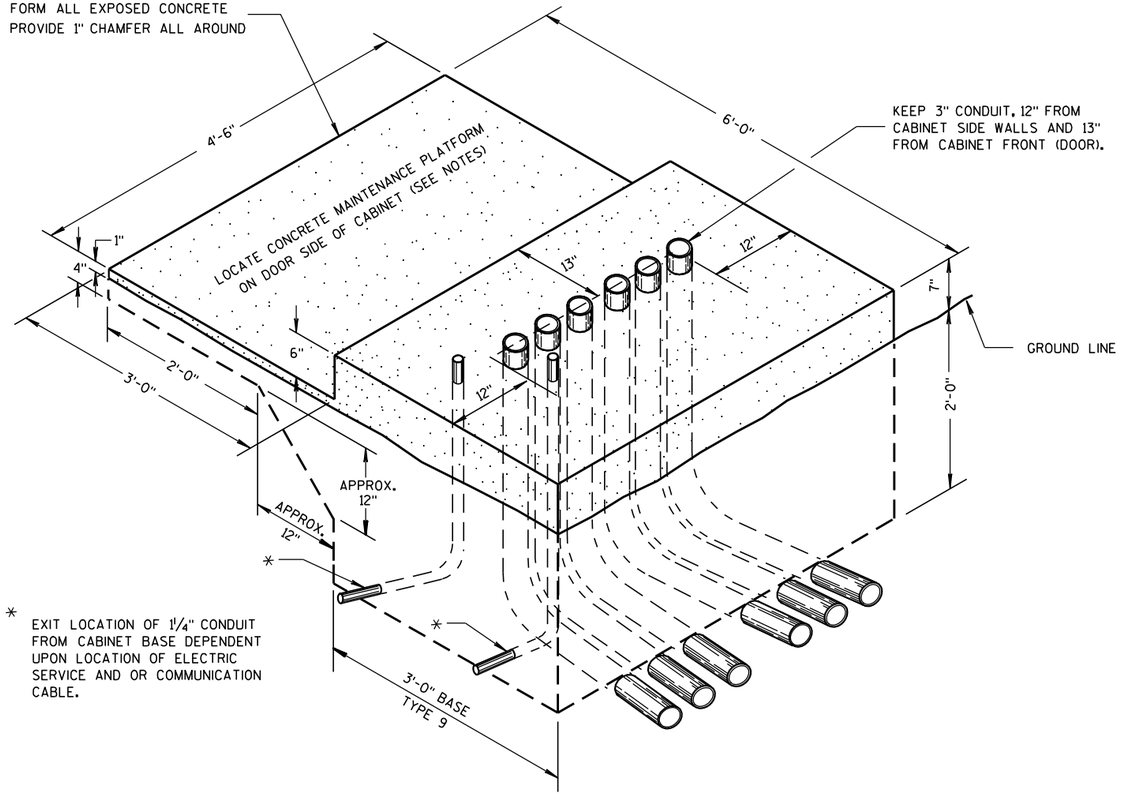
FHWA

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S.D.D. 9 C 5-7

S.D.D. 9 C 5-7

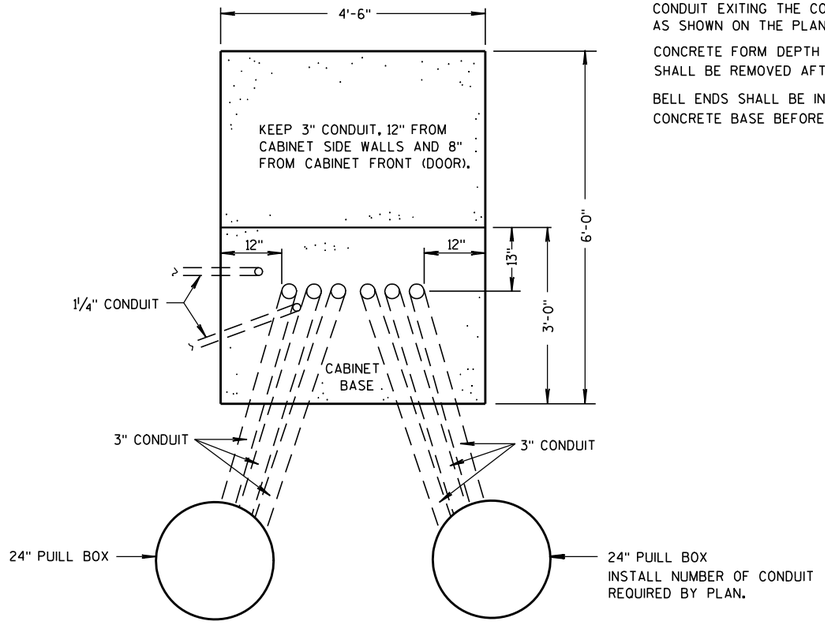


* EXIT LOCATION OF 1¼" CONDUIT FROM CABINET BASE DEPENDENT UPON LOCATION OF ELECTRIC SERVICE AND OR COMMUNICATION CABLE.

ISOMETRIC VIEW

TYPE 9, SPECIAL

(C.Y. CONCRETE = APPROX. 1.56)



PLAN VIEW

CONCRETE CONTROL CABINET BASE, TYPE 9, SPECIAL

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

INSTALL FOUR ½ INCH MINIMUM DIAMETER X 4 INCH MINIMUM LENGTH STAINLESS STEEL APPROVED CONCRETE MASONRY ANCHORS TO ANCHOR THE CABINET TO TYPE 6, 7, 8, AND 9 BASES. THE ANCHOR STUDS SHALL BE LOCATED AS DIRECTED BY THE ENGINEER TO PROPERLY ANCHOR THE CONTROL CABINET TO THE BASE.

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

CONDUIT HEIGHT ABOVE THE CONCRETE BASE SHALL BE 1 INCH.

DEPTH OF CONDUIT INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES MINIMUM AND 36 INCHES MAXIMUM.

DEPTH OF CONDUIT INSTALLED THAT IS NOT BELOW THE TRAVELED WAY SHALL BE 18 INCHES MINIMUM AND 36 INCHES MAXIMUM.

ANY EXCEPTION TO THE MAXIMUM DEPTH SHALL BE ONLY WITH THE WRITTEN APPROVAL OF THE ENGINEER.

CONTROL CABINET BASE TOP SURFACE SHALL BE TROWEL FINISHED SMOOTH AND LEVEL.

MAINTENANCE PLATFORM SHALL BE FLOAT OR BROOM FINISHED AND BE LEVEL.

MAINTENANCE PLATFORMS ARE NOT REQUIRED WHEN THE SURROUNDING AREA IS PAVED.

MINIMUM BENDING RADIUS OF CONDUIT = 6 X THE DIAMETER.

ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

CAP ALL BELOW GRADE METALLIC CONDUIT ENDS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED.

PLUG ALL BELOW GRADE NONMETALLIC CONDUIT ENDS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

CONDUIT EXITING THE CONCRETE BASE (SIX THREE INCH) SHALL TERMINATE IN PULL BOXES AS SHOWN ON THE PLANS.

CONCRETE FORM DEPTH BELOW FINISHED GRADE SHALL BE 6" MAXIMUM. CONCRETE FORMS SHALL BE REMOVED AFTER CONCRETE HAS SET.

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF THE CONCRETE BASE BEFORE INSTALLATION OF CABLE OR WIRE.

CONCRETE CONTROL CABINET BASE, TYPE 9, SPECIAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

2/27/07 — DATE

/S/ Balu Ananthapadmanabhan — STATE ELECTRICAL ENGI 756 — HWYS

FHWA

6

S.D.D. 9 C 6-5

6

S.D.D. 9 C 6-5

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

BASES SHALL BE EXCAVATED BY USE OF A CIRCULAR AUGER.

TOP SURFACES OF CONCRETE BASES SHALL BE TROWEL FINISHED SMOOTH AND LEVEL.

CONDUIT SIZES AND LOCATIONS SHALL BE AS SHOWN ON THE PLANS.

THE FINAL OR TERMINATING CONCRETE BASE IN A CONDUIT RUN SHALL HAVE A 6" EXIT STUB INSTALLED FOR FUTURE CABLING USE. THE EXIT STUB SHALL BE SIZED AS USED THROUGHOUT THE CONDUIT RUN AS SHOWN AT THE ENTRANCE OF THE BASE.

MINIMUM BENDING RADIUS OF CONDUIT IS EQUAL TO 6 X THE DIAMETER.

CONDUIT HEIGHT ABOVE CONCRETE BASES SHALL BE 1 INCH. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF CONCRETE BASES BEFORE INSTALLATION OF CABLE OR WIRE.

ENDS OF CONDUIT INSTALLED BELOW GRADE FOR FUTURE USE SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC.

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

IF A BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE DIRT OR FILL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING AROUND THE BASE. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BARE CONCRETE BASE IN LAYERS OF 1 FOOT OR LESS.

A NO. 4 AWG, STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD).

THE EQUIPMENT GROUNDING CONDUCTOR SHALL ENTER THE BASE THROUGH A 1 INCH CONDUIT INSTALLED FOR GROUNDING PURPOSES, LEAVING A 4 FOOT COIL OF WIRE ABOVE THE CONCRETE BASE. THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE NEATLY COILED AND THE COILS TIED TOGETHER.

ANCHOR RODS SHALL BE 1" X 60".

ANCHOR RODS SHALL BE THREADED 12" IN LENGTH ON EACH END OF THE ROD. ANCHOR RODS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 654.2.1 AND 641.2.2 OF THE STANDARD SPECIFICATIONS.

WHEN ANCHOR RODS USING THE ALTERNATE "L" BEND ARE FURNISHED, THE 4" "L" BEND SHALL BE IN ADDITION TO THE SPECIFIED ANCHOR ROD BAR LENGTH. THE "L" BEND END SHALL NOT BE THREADED.

WELDING OF THE ANCHOR RODS TO THE CAGE IS UNACCEPTABLE. TIE WIRES SHALL BE USED.

ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

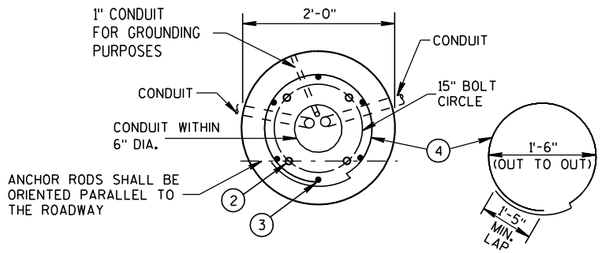
BAR STEEL REINFORCEMENT SHALL BE COATED WITH POWDERED EPOXY RESIN IN ACCORDANCE WITH SECTION 505 OF THE STANDARD SPECIFICATIONS (LATEST EDITION).

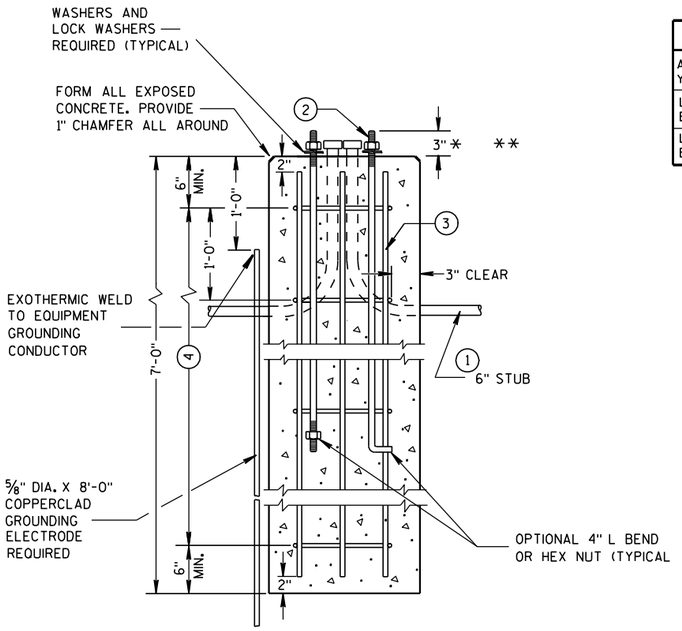
(1) THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18 INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36 INCHES EXCEPT WITH WRITTEN APPROVAL BY THE ENGINEER.

(2) (4) 1" DIA. X 5'-0" ANCHOR RODS

(3) (6) NO. 6 X 6'-8" BAR STEEL REINFORCEMENT.

(4) (7) NO. 4 X 6'-2" BAR STEEL REINFORCEMENT @ 1'-0" C-C.



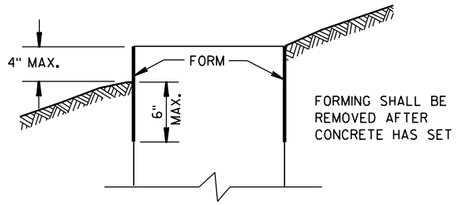


CONCRETE BASE, TYPE 7 (FOR 40' LIGHT POLES)

* ANY ANCHOR ROD PROJECTION SHORTER THAN 2¾" OR LONGER THAN 3¼" SHALL REQUIRE THE BASE TO BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE.

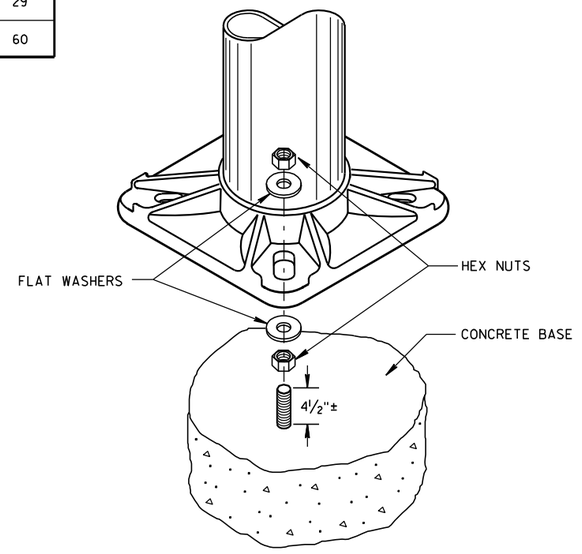
** FOR NONBREAKAWAY INSTALLATIONS, 4½" ± ANCHOR ROD PROJECTION WITH THE USE OF LEVELING NUTS. RODENT SCREEN REQUIRED.

FORM DEPTH SHALL BE NO MORE THAN 6" BELOW GRADE ON THE LOWER SIDE OF BASE



FORMING DETAIL

QUANTITY REQUIREMENTS	
APPROX. CUBIC YARDS OF CONCRETE	0.8
LBS. OF HOOP BAR STEEL	29
LBS. OF VERTICAL BAR STEEL	60



NON-BREAKAWAY INSTALLATION (LEVELING NUT)

CONCRETE BASE, TYPE 7

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

3/3/10 DATE

/S/ Joanna L. Rich
STATE ELECTRICAL ENGI 757

HWYS

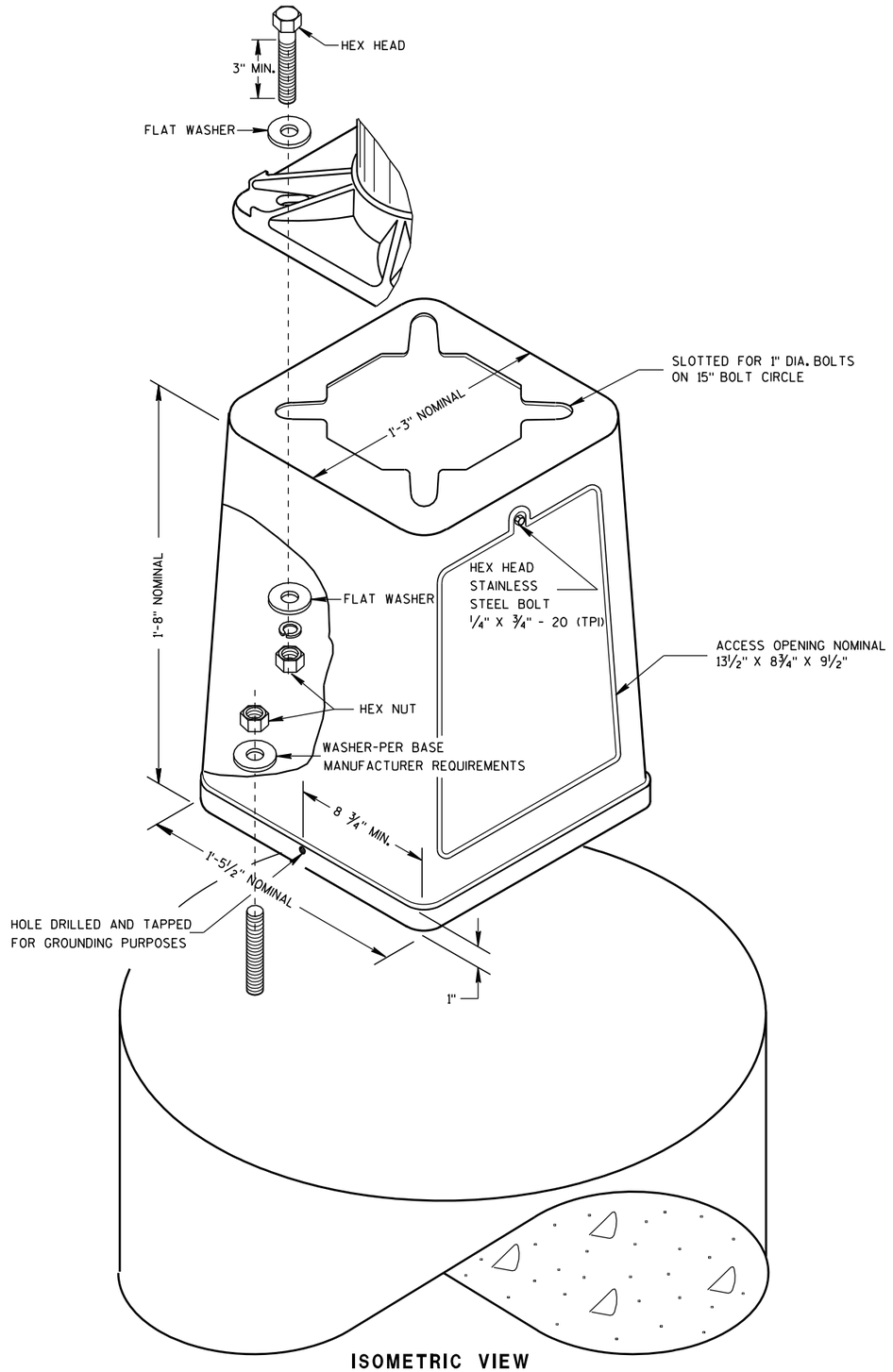
FHWA

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S.D.D. 9 C 8-4

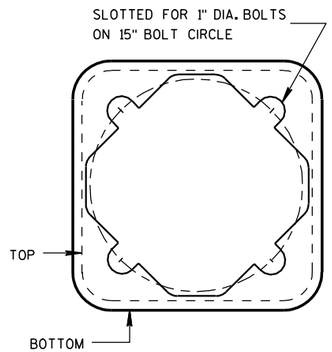
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S.D.D. 9 C 8-4

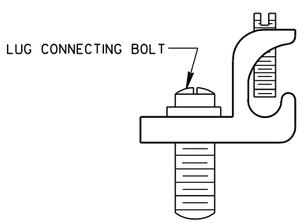


ISOMETRIC VIEW

TRANSFORMER BASE



BOTTOM VIEW



TYPICAL MECHANICAL
CONNECTOR LUG

TO BE FURNISHED WITH EACH BASE

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

BREAKAWAY BASES (WHERE REQUIRED) WILL BE MEASURED AND PAID AS SEPARATE ITEMS OF WORK IN ADDITION TO THE LIGHT POLE.

FOUR (4) BOLTS SHALL BE FURNISHED WITH EACH TRANSFORMER BASE. BOLTS SHALL BE 1" DIAMETER, 4" IN LENGTH, WITH WASHERS, LOCK WASHERS AND NUTS. BOLTS, NUTS AND WASHERS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 641.2.2 OF THE STANDARD SPECIFICATIONS, ASTM A-325, (92,000 YIELD), HEAVY HEX NUT AND BE GALVANIZED IN ACCORDANCE WITH ASTM A-153, CLASS C.

LEVELING SHIMS, IF NEEDED, SHALL BE DESIGNED FOR THE PURPOSE AND USED UNDER CAST BASES WHEN PLUMBING POLES DURING INSTALLATION. THE USE OF WASHERS IN LIEU OF PROPER LEVELING SHIMS IS NOT ACCEPTABLE.

SHIMS SHALL BE SIZED TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.

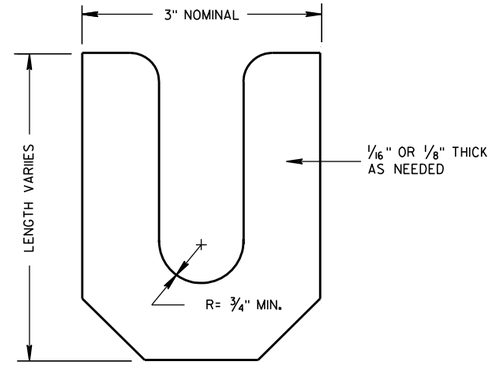
A NEMA APPROVED AND U.L. LISTED MECHANICAL CONNECTOR (LUG) AL/CU RATED AND SIZED TO ACCEPT #10 AWG STRANDED WIRE, SHALL BE FURNISHED AND INSTALLED IN THE TRANSFORMER BASES.

THE MECHANICAL CONNECTOR (GROUNDING LUG) SHALL BE INSTALLED USING THE TAPPED HOLE PROVIDED BY THE MANUFACTURER. THE MOUNTING BOLT HEXHEAD), NUT, WASHER AND LOCK WASHER SHALL BE STAINLESS STEEL, SIZED TO FIT THE THREADING AND HOLE SIZE, AND BE OF SUFFICIENT LENGTH TO FIRMLY ATTACH THE LUG TO THE BASE.

SHOULD A GROUNDING LUG MOUNTING HOLE NOT BE PROVIDED, THE MECHANICAL CONNECTOR SHALL BE INSTALLED USING A 1/4" X 3/4" - 20 (TPI) STAINLESS STEEL HEX HEAD BOLT OF SUFFICIENT LENGTH TO FIRMLY ATTACH THE LUG TO THE BASE. IT SHALL BE MOUNTED IN THE SAME LOCATION AS IS SHOWN ON THE DRAWING.

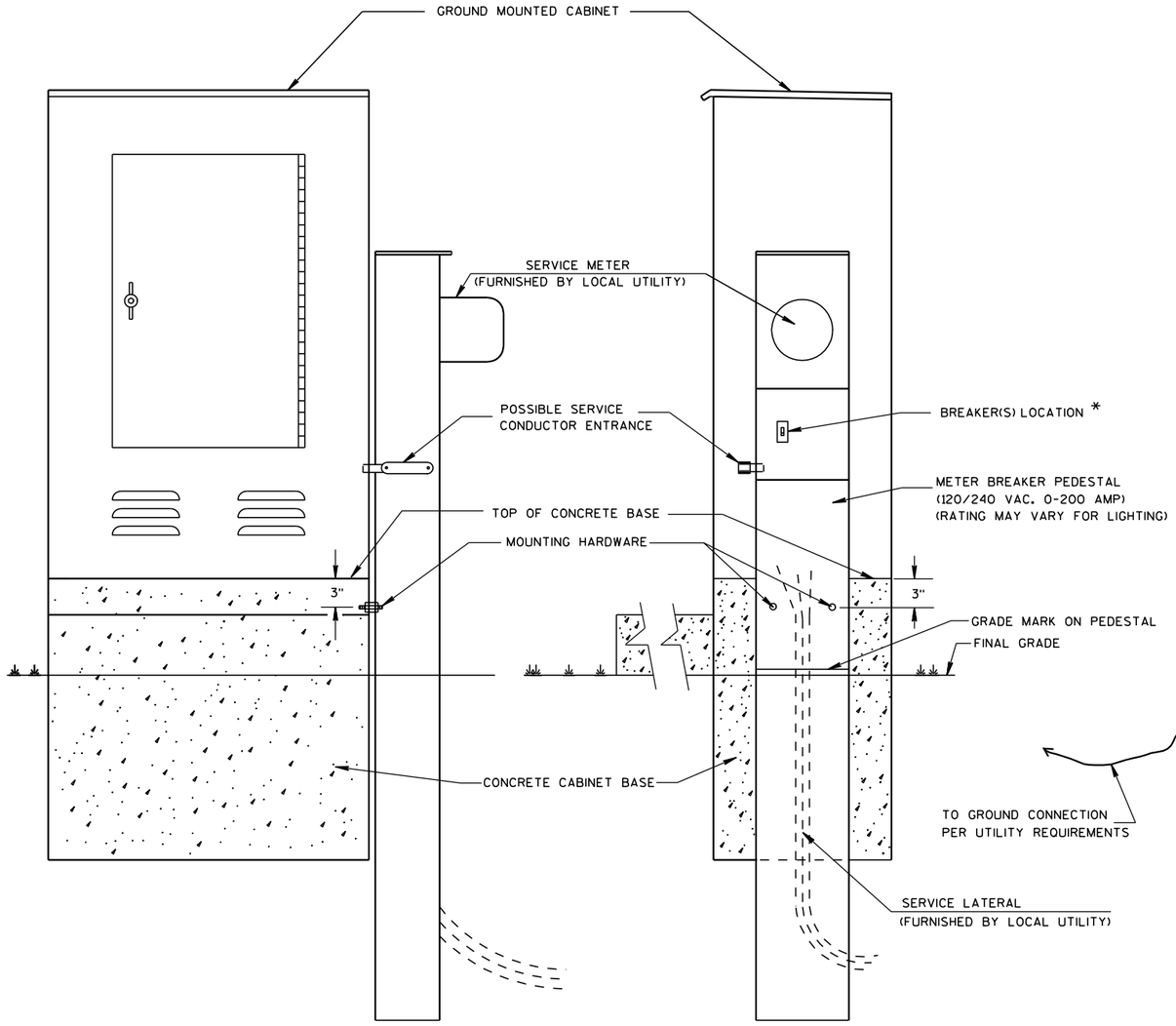
SHOULD THE MANNER OF ATTACHMENT OF THE LUG REQUIRE WASHERS, HEX NUTS, AND LOCK WASHERS, THEY SHALL BE STAINLESS STEEL AS IS THE BOLT. THE MANNER OF ATTACHMENT SHALL NOT BLOCK ACCESSIBILITY TO WIRE PLACEMENT IN THE CONNECTOR.

THE ACCESS DOOR SHALL BE MANUFACTURED OF THE SAME MATERIAL AS THE BASE.



LEVELING SHIM

TRANSFORMER BASE FOR 15" BOLT CIRCLE	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	
3/2/07 DATE	/S/ Balu Ananthanarayanan STATE ELECTRICAL ENGI 758 HWYS
FHWA	



TYPICAL CABINET SERVICE INSTALLATION

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

THE EXACT LOCATION OF THE METER BREAKER PEDESTAL SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

THE TYPE OF CONCRETE CABINET BASE TO BE INSTALLED SHALL BE AS CALLED FOR IN THE PLANS.

TO FACILITATE FLUSH MOUNTING OF THE METER BREAKER PEDESTAL AGAINST THE SIDE OF THE CABINET BASE (IF FLUSH MOUNTING POSSIBLE. CONFER WITH THE LOCAL UTILITY TO DETERMINE WHICH SIDE OF THE CONCRETE BASE THE ELECTRICAL SERVICE LATERAL WILL APPROACH. THEN FORM THAT INDICATED SIDE FOR FULL SIDE DEPTH.

WHILE FLUSH MOUNTING IS THE MOST DESIRABLE MOUNTING CONFIGURATION UTILITY REQUIREMENTS MAY PRECLUDE THIS OPTION. CONTRACTOR MUST PROVIDE UTILITY APPROVED PEDESTAL AND INSTALL PER UTILITY AND MANUFACTURERS REQUIREMENTS.

SERVICE CONDUCTOR ENTRANCES SHALL BE RIGID METALLIC CONDUIT, NIPPLES AND/OR CONDULETS AS REQUIRED.

SERVICE CONDUCTOR ENTRANCES SHALL BE SIZED AND LOCATED AS REQUIRED BY THE LOCAL UTILITY AND IN ACCORDANCE WITH APPROPRIATE ARTICLES OF THE LATEST ACCEPTED NATIONAL ELECTRICAL CODE.

IF MORE THAN ONE GROUNDING ELECTRODE IS REQUIRED, THE DISTANCE APART SHALL BE 6 FEET OR PER LOCAL UTILITY REGULATIONS.

* SOME PEDESTAL LIGHTING PLANS SHOW MAIN LUGS ONLY.

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S.D.D. 9 D 1-4

CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

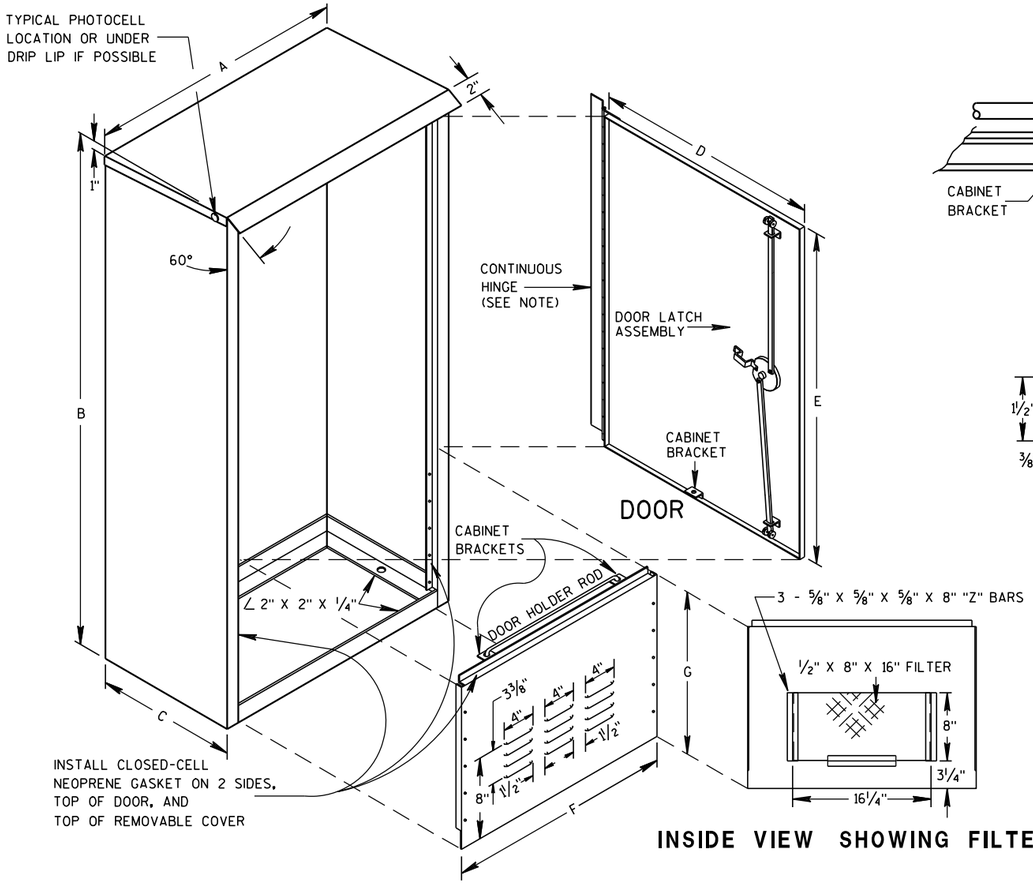
APPROVED

10/27/09 DATE

/S/ Joanna L. Bush
STATE ELECTRICAL ENGI 759

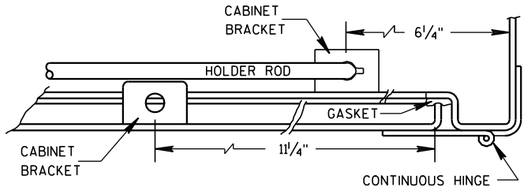
HWYS

FHWA

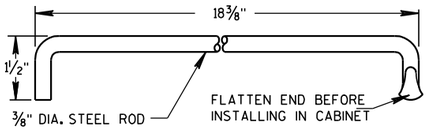


REMOVABLE COVER

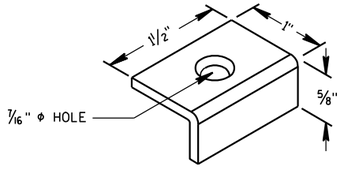
INSIDE VIEW SHOWING FILTER



HINGE & DOOR HOLDER



HOLDER ROD

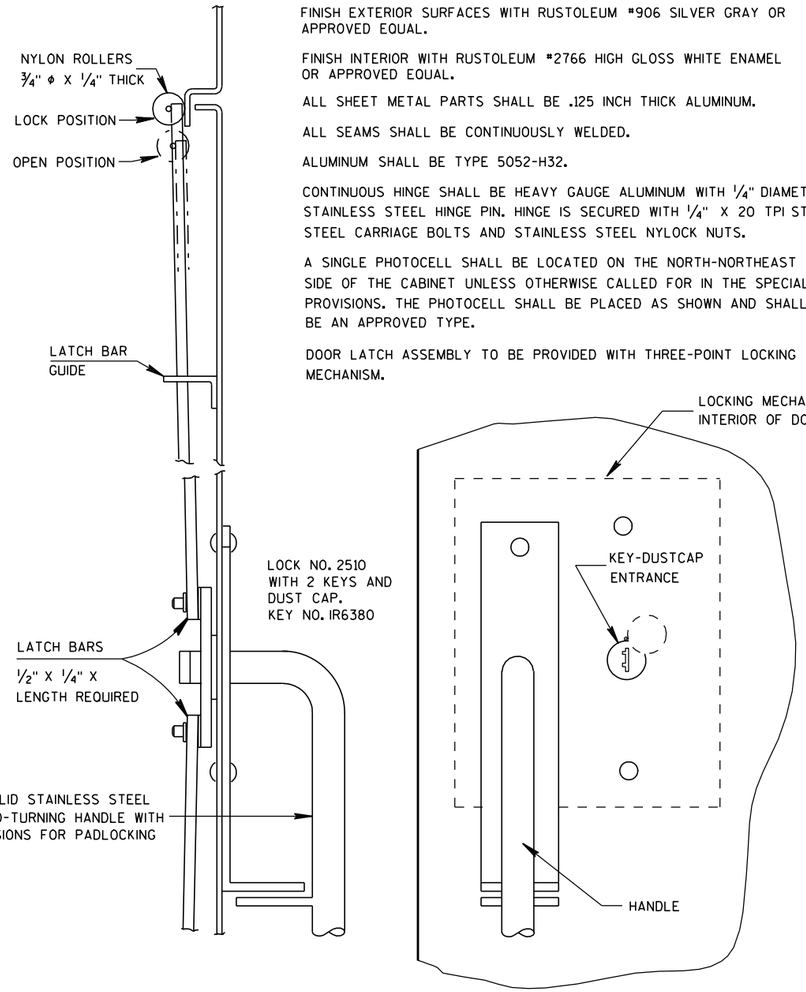


CABINET BRACKET

MOUNTING BASE

TABLE OF DIMENSIONS (INCHES)

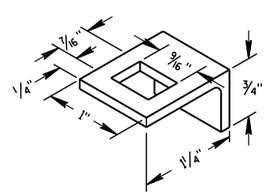
MARK	CABINET TYPE		
	3060	3860	3866
A	30	38	38
B	60	60	66
C	16 1/2	16 1/2	24
D	26 1/2	34 3/4	33 3/4
E	38 3/4	38 3/4	38 3/4
F	26 1/2	34 3/4	33 3/4
G	19	19	25
H	16 1/2	16 1/2	24
H/2	8 1/4	8 1/4	12
J	30	38	38
J/2	15	19	19
K	13 3/4	13 3/4	21 1/4
L	27 1/2	35 1/2	35 1/2



SIDE VIEW

FRONT VIEW

LATCH ASSEMBLY



LATCH BAR GUIDE

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

PRIME WITH PHOSPHATE TREATMENT AND PRIMER.

FINISH EXTERIOR SURFACES WITH RUSTOLEUM #906 SILVER GRAY OR APPROVED EQUAL.

FINISH INTERIOR WITH RUSTOLEUM #2766 HIGH GLOSS WHITE ENAMEL OR APPROVED EQUAL.

ALL SHEET METAL PARTS SHALL BE .125 INCH THICK ALUMINUM.

ALL SEAMS SHALL BE CONTINUOUSLY WELDED.

ALUMINUM SHALL BE TYPE 5052-H32.

CONTINUOUS HINGE SHALL BE HEAVY GAUGE ALUMINUM WITH 1/4" DIAMETER STAINLESS STEEL HINGE PIN. HINGE IS SECURED WITH 1/4" X 20 TPI STAINLESS STEEL CARRIAGE BOLTS AND STAINLESS STEEL NYLOCK NUTS.

A SINGLE PHOTOCELL SHALL BE LOCATED ON THE NORTH-NORTHEAST SIDE OF THE CABINET UNLESS OTHERWISE CALLED FOR IN THE SPECIAL PROVISIONS. THE PHOTOCELL SHALL BE PLACED AS SHOWN AND SHALL BE AN APPROVED TYPE.

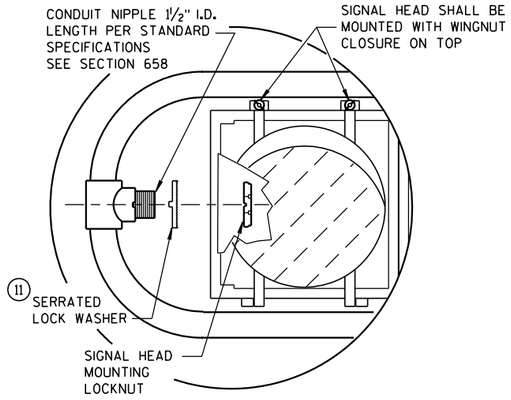
DOOR LATCH ASSEMBLY TO BE PROVIDED WITH THREE-POINT LOCKING MECHANISM.

SIGNAL OR LIGHTING CONTROL CABINET

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

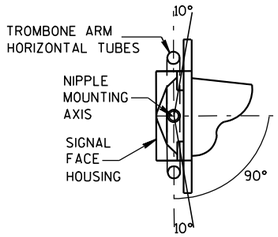
APPROVED
10/21/96 — DATE
/S/ Balu Ananthanarayanan — STATE ELECTRICAL ENGI 760 HWYS
FHWA

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S.D.D. 9 D 2-2



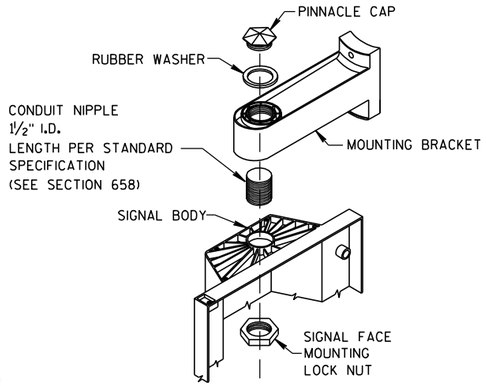
HORIZONTAL SIGNAL HEAD MOUNTING DETAIL *

* SIGNAL HEAD ATTACHMENT ALSO APPLYS TO MOUNTING AT CROSS BAR



SECTION A-A

(10 DEGREES TILT REQUIREMENT OF FACE(S) IN THE TROMBONE MOUNTING)



SIGNAL FACE MOUNTING DETAIL

(BANDED)

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

POLES SHALL BE EITHER ALUMINUM OR GALVANIZED STEEL AS CALLED FOR IN THE CONTRACT.

SECTION 657, POLES, OF THE STANDARD SPECIFICATIONS SHALL APPLY TO THIS DRAWING.

A PULL WIRE/ROPE IN ACCORDANCE WITH STANDARD SPECIFICATION 652 SHALL BE INSTALLED IN EACH TROMBONE ARM RACEWAY DURING THE MANUFACTURING PROCESS.

TYPE 2 ALUMINUM POLES SHALL BE CONSTRUCTED OF 6063-T6 ALUMINUM ALLOY. SLEEVING INSIDE THE POLE IS NOT ACCEPTABLE.

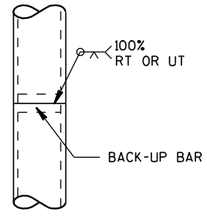
WHEN TRANSFORMER BASES ARE USED, WIRE CONNECTIONS SHALL BE MADE IN THE TRANSFORMER BASE.

1. 4" X 6" REINFORCED HANDHOLE & COVER ASSEMBLY WITH 2 (TWO) ¼" X ¾" - 20 TPI HEX HEAD STAINLESS STEEL BOLTS.
2. SIGNAL FACE MOUNTING BRACKETS. MOUNT WITH CAP SCREWS AND BANDING. (SEE STANDARD SPECIFICATIONS - SEC. 658)
3. GROMMETS, 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1⅜" HOLE IN POLE SHAFT FOR WIRING.
4. SECURELY MOUNT DULL BLACK POLYCARBONATE BACKPLATES, PROJECTING 5" BEYOND ALL SIDES OF THE SIGNAL FACE HOUSING, PER MANUFACTURER'S RECOMMENDATIONS.
5. POLE MOUNTED SIGNAL FACES SHALL REQUIRE 1 OR MORE MOUNTING SPACERS UNDER THE TOP MOUNTING BRACKET(S) AS REQUIRED, TO PLUMB THE SIGNAL FACES.
6. CAST ALUMINUM TRANSFORMER BASE, WHEN REQUIRED.
7. MOUNTING BRACKET NIPPLES FOR THE SIGNAL FACE(S) SHALL BE 2 INCHES IN LENGTH AND 1½ INCHES IN DIAMETER. (SEE STANDARD SPECIFICATION - SECTION 658).
8. VERTICAL STRUT (ADJUSTABLE). ONE (1) SET SCREW (¼" X ¾" LONG- 20 TPI, STAINLESS STEEL, HEX HEAD) INTO EACH ARM MEMBER IF STRUT IS THE SLIDING TYPE.
9. FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.
10. SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND THE TRANSFORMER BASE.
11. USE SERRATED LOCK WASHERS WITH NOTCHES BETWEEN END TEE AND SIGNAL HEAD.

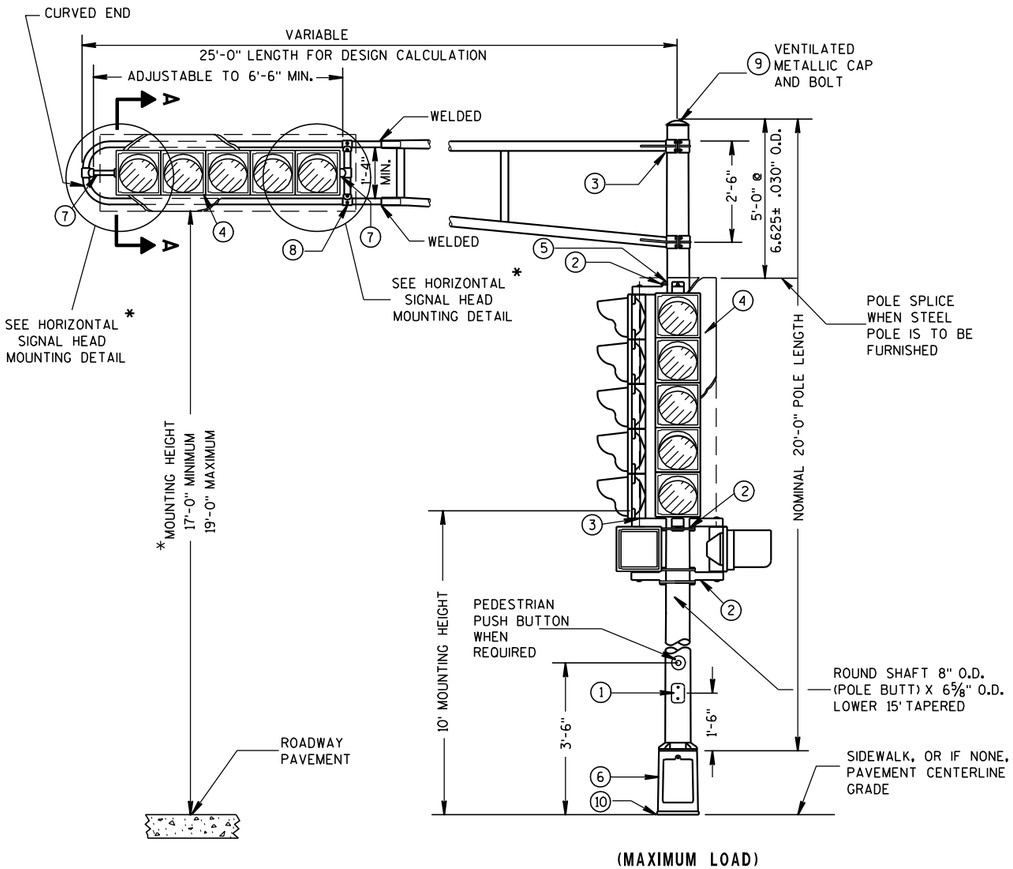
*MOUNTING HEIGHT LIMITATION DIMENSIONS OF THE TROMBONE MAST ARM WILL BE DEPENDENT UPON THE USE/NON-USE OF A TRANSFORMER BASE.

FOR MANUFACTURERS USE ONLY

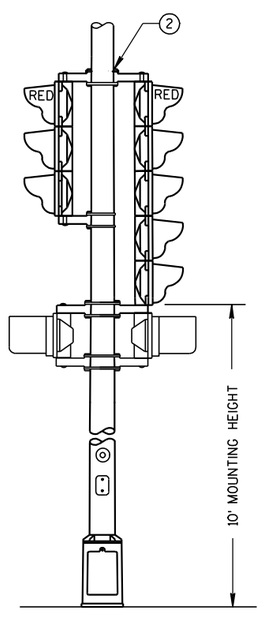
WELD TO BE 100% R.T. OR U.T. TESTED AS PER THE REQUIREMENTS OF AWS D 1.5-88. RECORDS OF COMPLIANCE OF SUCH TESTING SHALL BE FURNISHED TO THE OFFICE OF DESIGN/BRIDGE FOR VERIFICATION AND APPROVAL.



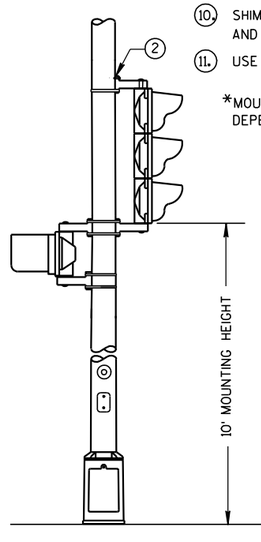
POLE SPLICE DETAIL



(MAXIMUM LOAD)



TYPICAL MOUNTING OF BACK TO BACK 3 AND 5 SECTION SIGNAL FACES



TYPICAL MOUNTING OF 3 SECTION SIGNAL FACE

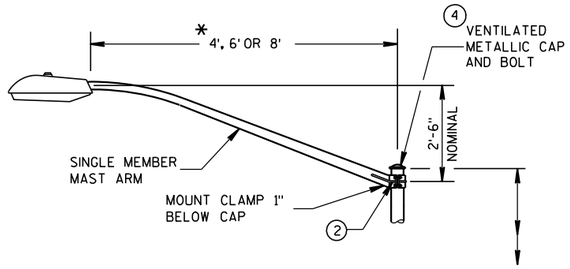
TYPE 2 POLE MOUNTING CONFIGURATION

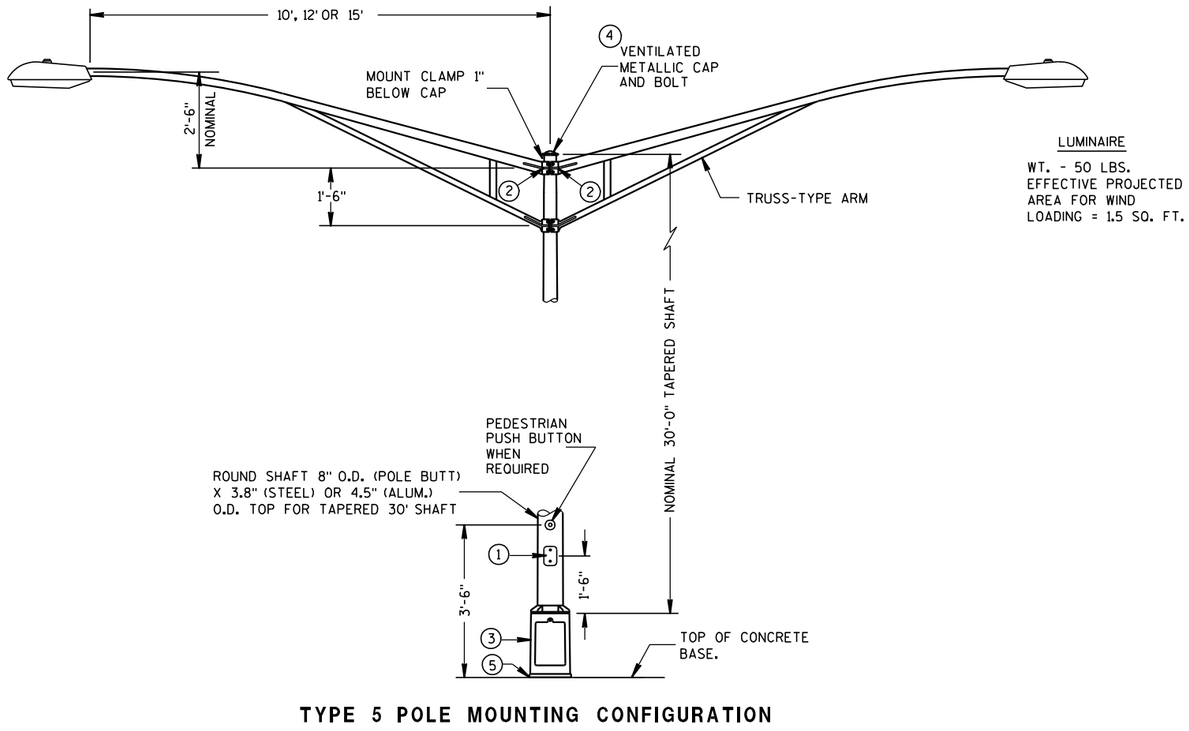
POLE MOUNTINGS FOR TRAFFIC SIGNALS TYPE 2

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

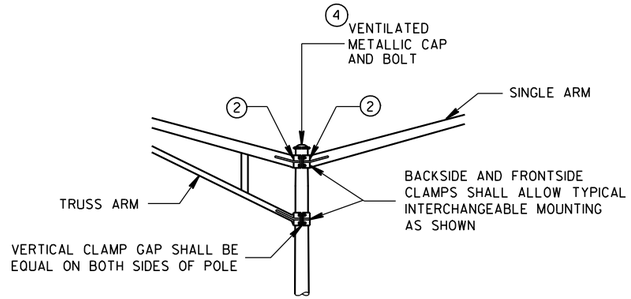
6
S.D.D. 9 E 1-11a

*RISE FOR 4' ARM SHALL BE 2'-0".





TYPE 5 POLE MOUNTING CONFIGURATION
(MAXIMUM LOAD)
LIGHTING ONLY



INTERCHANGEABLE MOUNTING DETAIL

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

ALL TYPE 5 POLE MOUNTINGS SHALL BE DESIGNED TO INCLUDE TWIN 15' ARMS WITH LUMINAIRES.

POLES SHALL BE GALVANIZED STEEL OR ALUMINUM, AS CALLED FOR IN THE CONTRACT.

TYPE 5 ALUMINUM POLES SHALL BE CONSTRUCTED OF 6063-T6 ALUMINUM ALLOY. SLEEVING INSIDE THE POLE IS NOT ACCEPTABLE.

THE TYPE 5 ALUMINUM POLES SHALL HAVE A MINIMUM WALL THICKNESS OF 0.188".

TYPE 5 STEEL POLES SHALL HAVE A MINIMUM WALL THICKNESS OF U.S. STANDARD 11 GAGE (.1196").

THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 2⅜ INCHES IN OUTSIDE DIAMETER. THE STRAIGHT PORTION OF THE SLIPFITTER END OF THE LUMINAIRE ARM SHALL BE A NOMINAL 12 INCHES IN LENGTH.

WHEN TRANSFORMER BASES ARE USED, WIRE CONEECTIONS SHALL BE MADE IN THE TRANSFORMER BASE.

1. 4" x 6" REINFORCED HANDHOLE & COVER ASSEMBLY WITH 2 (TWO) ¼" X ¾" - 20 TPI HEX HEAD STAINLESS STEEL BOLTS.
2. GROMMETS, 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1⅜" HOLE IN POLE SHAFT FOR WIRING.
3. CAST ALUMINUM TRANSFORMER BASE, WHEN REQUIRED.
4. FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.
5. SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND THE TRANSFORMER BASE.

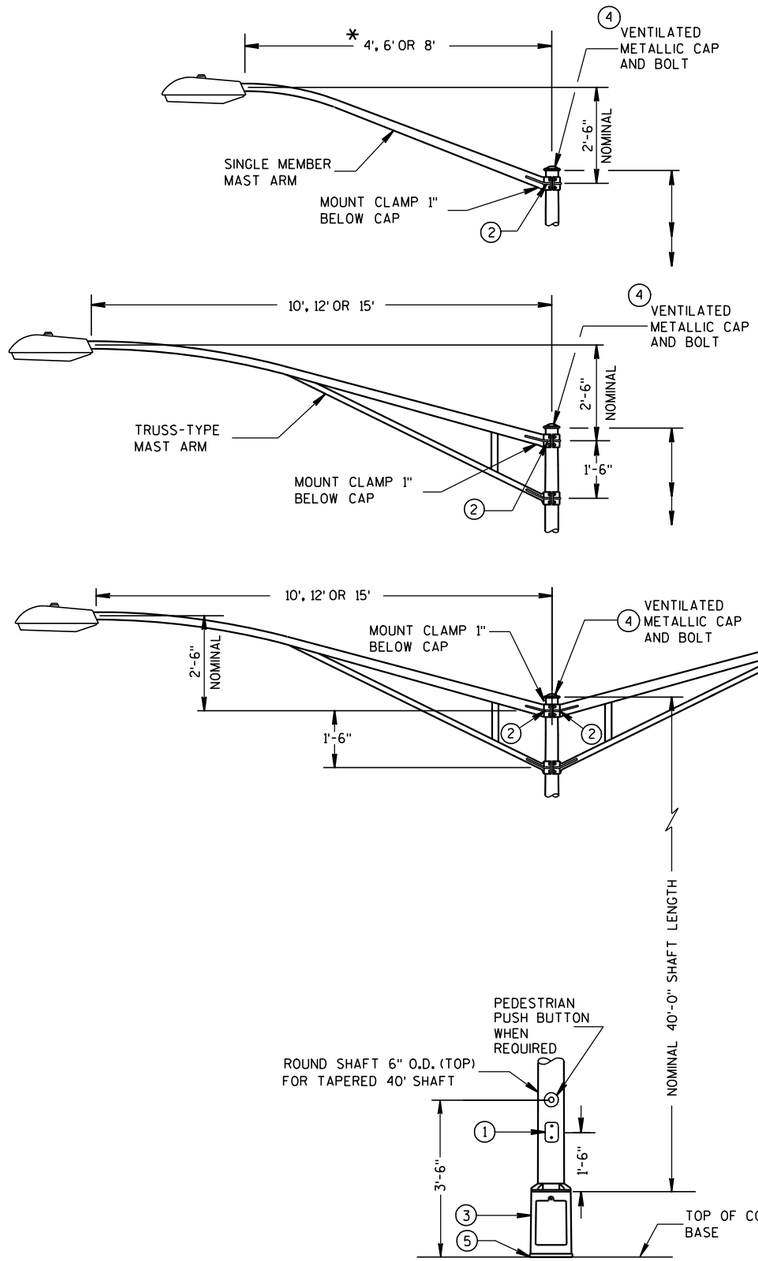
POLE MONTINGS FOR LIGHTING UNITS, TYPE 5 (30 FEET)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

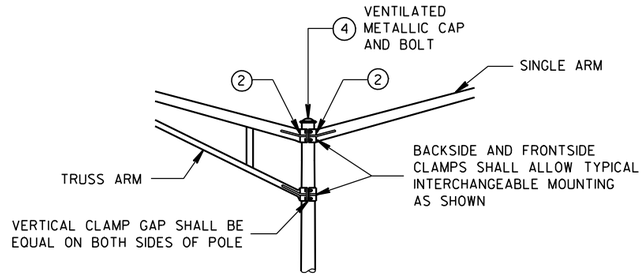
S.D.D. 9 E 1-11d

*RISE FOR 4' ARM SHALL BE 2'-0".



TYPE 17 POLE MOUNTING CONFIGURATION

(MAXIMUM LOAD)
LIGHTING ONLY



INTERCHANGEABLE MOUNTING DETAIL

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

ALL LUMINAIRE POLE MOUNTINGS SHALL BE DESIGNED FOR TWIN 15' ARMS WITH LUMINAIRES.

POLES SHALL BE GALVANIZED STEEL OR ALUMINUM, AS CALLED FOR IN THE CONTRACT.

TYPE 17 ALUMINUM POLES SHALL BE CONSTRUCTED OF 6063-T6 ALUMINUM ALLOY. SLEEVING INSIDE THE POLE IS NOT ACCEPTABLE.

TYPE 17 STEEL POLES SHALL HAVE A MINIMUM WALL THICKNESS OF U.S. STANDARD 11 GAGE (.1196").

THE SHOE BASE SHALL BE SLOTTED TO ACCEPT A 15" BOLT CIRCLE (14" X 16" SLOT) USING 1" ANCHOR RODS.

THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 2⅜ INCHES IN OUTSIDE DIAMETER. THE STRAIGHT PORTION OF THE SLIPFITTER END OF THE LUMINAIRE ARM SHALL BE A NOMINAL 12 INCHES IN LENGTH.

WHEN TRANSFORMER BASES ARE USED, WIRE CONNECTIONS SHALL BE MADE IN THE TRANSFORMER BASE.

(1) 4" x 6" REINFORCED HANDHOLE & COVER ASSEMBLY WITH 2 (TWO) ¼" X ¾" - 20 TPI HEX HEAD STAINLESS STEEL BOLTS.

(2) GROMMETS, 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR A 1⅜" HOLE IN THE POLE SHAFT FOR WIRING.

(3) CAST ALUMINUM FHWA APPROVED TRANSFORMER BASE WHEN REQUIRED, SHALL HAVE AN ULTIMATE STATIC LOAD STRENGTH OF AT LEAST 40,000 FT. - LBS.

(4) FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.

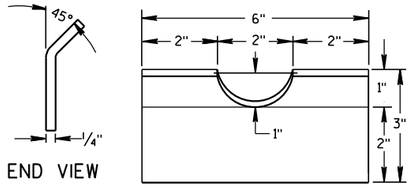
(5) SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND THE TRANSFORMER BASE.

POLE MOUNTINGS FOR LIGHTING UNIT, TYPE 17 (40 FEET)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

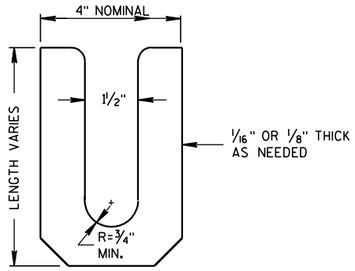
6

S.D.D. 9 E 1-11f



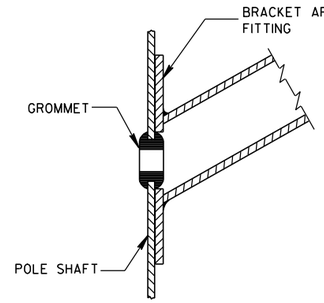
RECTANGULAR CLAMP SHIM

(4 TO A SET)

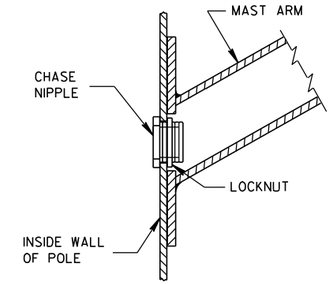


LEVELING SHIM (15)

SHALL BE ALUMINUM



TYPICAL APPLICATION OF GROMMET IN POLE SHAFT



TYPICAL APPLICATION OF CHASE NIPPLE IN POLE SHAFT

GENERAL NOTES

CLAMP BOLT-NUT TIGHTENING TORQUE SHALL BE INDICATED BY INDENT STAMPING (1/2 INCH NUMERALS AND LETTERS) OR WEATHERPROOF PRINTING ON THE INSIDE OF THE CLAMP THAT IS WELDED TO THE ARM MEMBER.

(10.) 4.5" I.D. FOR LUMINAIRE MAST ARM CLAMP.
6.625" I.D. FOR TROMBONE MAST ARM CLAMP.

(11.) INDIVIDUAL BASE PLATE ANCHOR ROD COVERS. (4 REQUIRED)

(12.) BASE PLATE SLOTTED TO ACCEPT 11" THROUGH 12" BOLT CIRCLE USING 1" DIAMETER ANCHOR RODS.

(13.) OUTSIDE SHIM DIAMETER - (4.5" O.D. FOR LUMINAIRE MAST ARM)
(6.625" O.D. FOR TROMBONE MAST ARM)

(14.) VARIABLE SHIM THICKNESS - (0.10", 0.25", 0.35", 0.53" OR 0.70")

SHIM THICKNESS FOR TROMBONE MAST ARMS MAY BE TYPICALLY 0.25", 0.35", 0.53" OR 0.70".

SHIM THICKNESS FOR LUMINAIRE MAST ARMS MAY BE TYPICALLY 0.10", 0.25" OR 0.35".

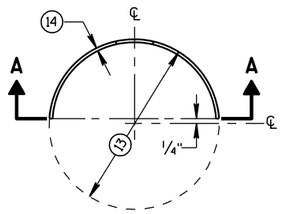
SHIM MATERIAL SHALL BE ALUMINUM ALLOY.

SHIM THICKNESS SHALL BE IMPRESSED INTO EACH SHIM. NUMERALS SHALL BE 1/4" HIGH AND LEGIBLE.

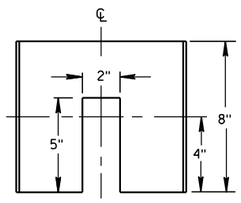
THE CONTRACTOR SHALL SUBMIT TWO COPIES OF ALL SHIM SHOP DRAWINGS TO THE ENGINEER FOR APPROVAL.

(15.) LEVELING SHIMS, DESIGNED FOR THE PURPOSE, SHALL BE USED WHEN PLUMBING POLES. THE USE OF WASHERS IN LIEU OF PROPER LEVELING SHIMS IS NOT ACCEPTABLE. LEVELING SHIMS SHALL BE USED ONLY BETWEEN THE TOP OF THE CONCRETE BASE AND A METALLIC BASE PLATE.

SHIMS SHALL BE LONG ENOUGH AND WIDE ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.



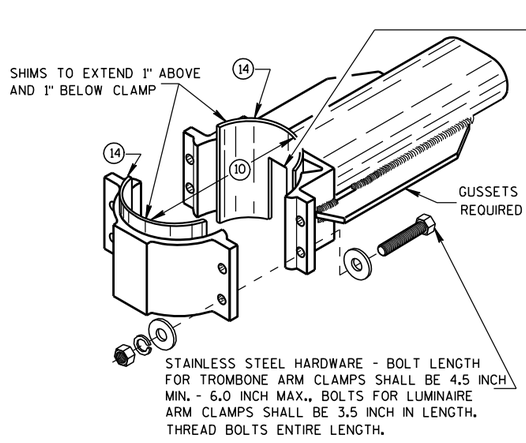
PLAN VIEW



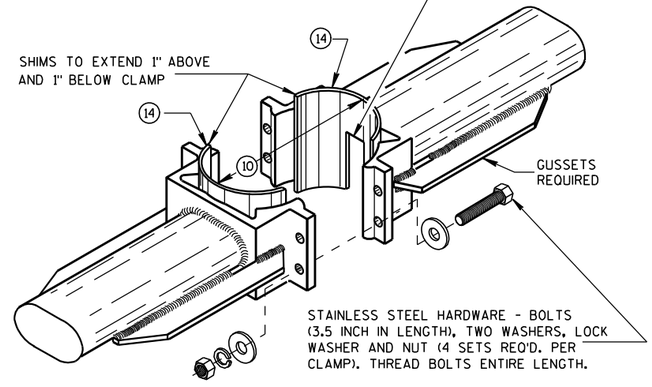
SECTION A-A

CIRCULAR CLAMP SHIM

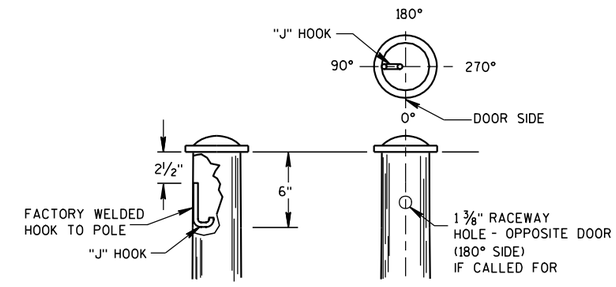
(2 TO A SET)



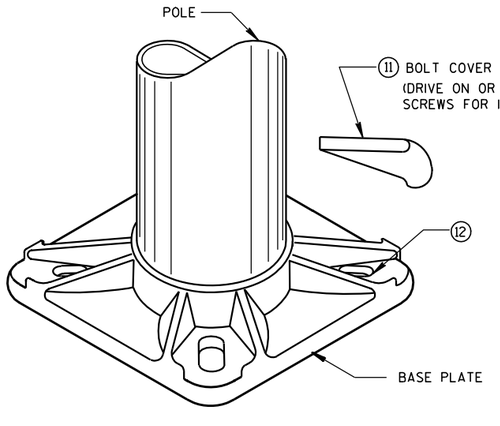
TYPICAL TROMBONE MAST ARM AND SINGLE LUMINAIRE MAST ARM MOUNTING CLAMP



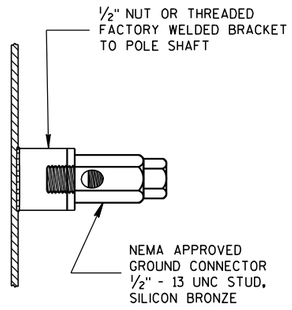
TYPICAL LUMINAIRE MAST ARM (DOUBLE) MOUNTING BRACKETS

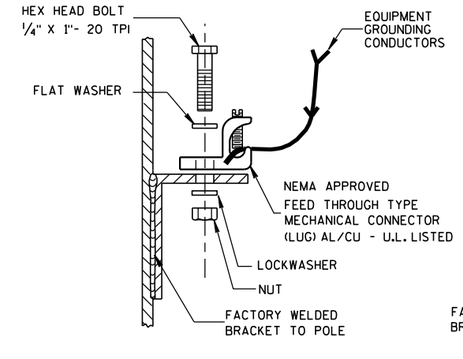


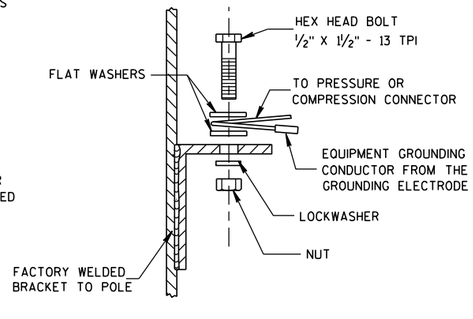
TYPICAL "J" HOOK LOCATION



BASE PLATE







TYPICAL GROUNDING CONNECTIONS

NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL

HARDWARE DETAILS FOR POLE MOUNTINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

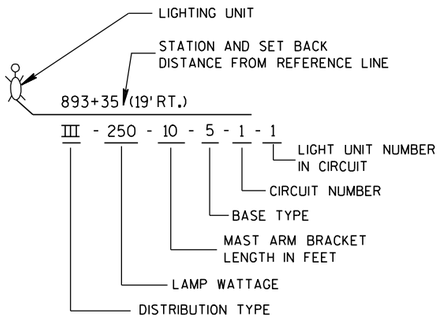
3/2/11 — DATE

/S/ Thomas J. Gosling — STATE ELECTRICAL ENGI 764 — HWYS

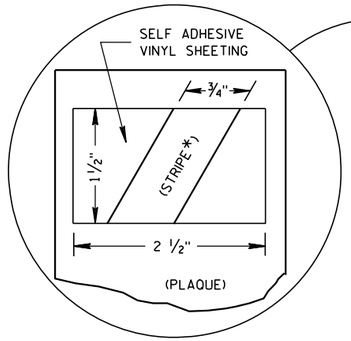
FHWA

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S.D.D. 9 E 1-11g



LIGHTING UNIT CODE
(TYPICAL)

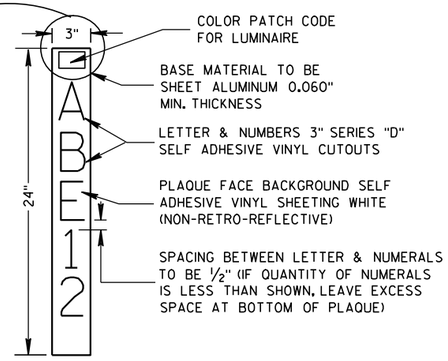


COLOR PATCH CODE FOR LUMINAIRES
(HIGH PRESSURE SODIUM)

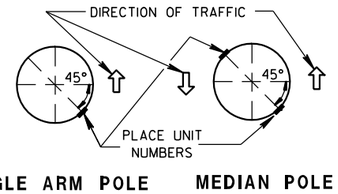
1000 WATT - NO PATCH
400 WATT - ORANGE
310 WATT - BLUE
250 WATT - ORANGE W/WHITE STRIPE*
200 WATT - RED
150 WATT - GREEN
100 WATT - BROWN

(MERCURY VAPOR)

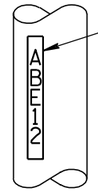
400 WATT - (NO PATCH)
250 WATT - YELLOW



IDENTIFICATION PLAQUE



SINGLE ARM POLE MEDIAN POLE



FASTEN TOP, CENTER AND BOTTOM OF PLAQUE WITH 3 ALUMINUM POP RIVETS (ALUM. POLES) OR STAINLESS STEEL POP RIVETS (STEEL POLES)

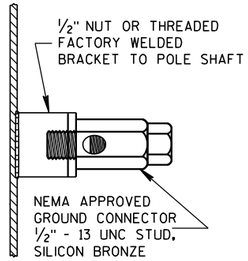
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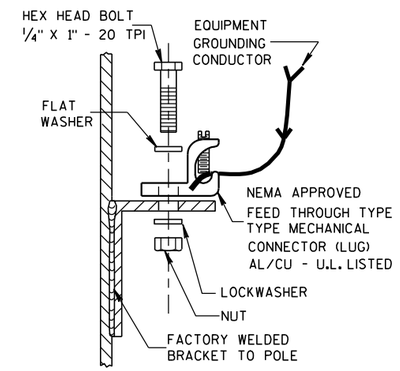
1) PLACE BOTTOM OF UNIT NUMBER PLAQUE 5'-0" ABOVE ELEVATION OF ADJACENT CURB OR SHOULDER.

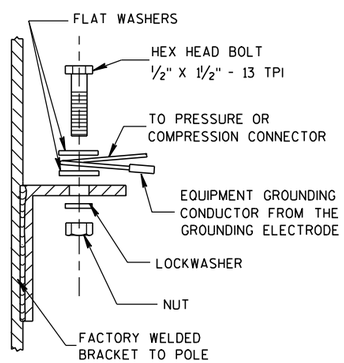
2) UNIT NUMBERS: ONE REQUIRED FOR SINGLE ARM POLES TWO REQUIRED FOR MEDIAN MOUNT POLES.

LIGHTING UNIT IDENTIFICATION PLAQUE REQUIREMENTS AND PLACEMENT
(TYPICAL ALL LIGHTING UNITS)

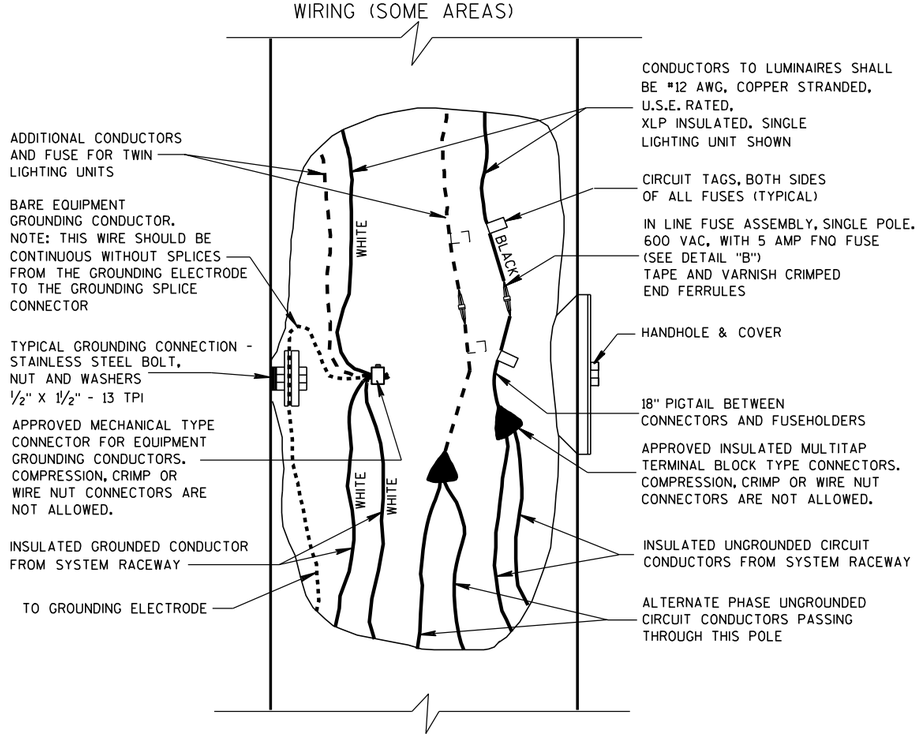
FURNISH PLAQUE WHEN CALLED FOR BY SPECIAL PROVISIONS



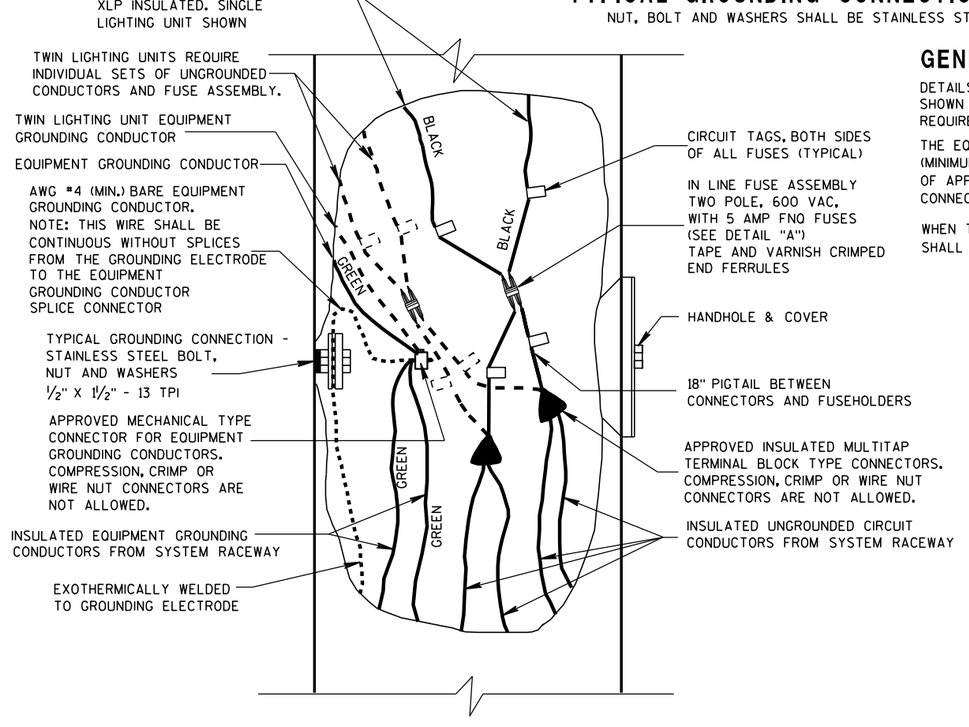




TYPICAL GROUNDING CONNECTIONS
NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL



2 WIRE - 120, 240 OR 480 VAC TO GROUND



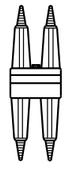
2 WIRE - 240 OR 480 VAC (UNGROUNDED CONDUCTORS) WITH EQUIPMENT GROUNDING CONDUCTOR

GENERAL NOTES

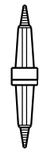
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

THE EQUIPMENT GROUND CONNECTOR SHALL BE TAPED WITH 3 WRAPS (MINIMUM) OF APPROVED RUBBER TAPE AND THEN 3 WRAPS (MINIMUM) OF APPROVED VINYL TAPE TO COVER SHARP WIRE ENDS AFTER THE CONNECTION IS COMPLETED.

WHEN TRANSFORMER BASES ARE USED, ALL WIRING CONNECTIONS SHALL OCCUR WITHIN THE TRANSFORMER BASES.



DETAIL "A"
BREAKAWAY DOUBLE POLE WITH WATERPROOF INSULATING BOOT



DETAIL "B"
BREAKAWAY SINGLE POLE WITH WATERPROOF INSULATING BOOT

FREEWAY LIGHTING UNIT POLE WIRING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

3/2/2011
DATE

/S/ Thomas J. Gorrlan
STATE ELECTRICAL ENGI 765 HWYS

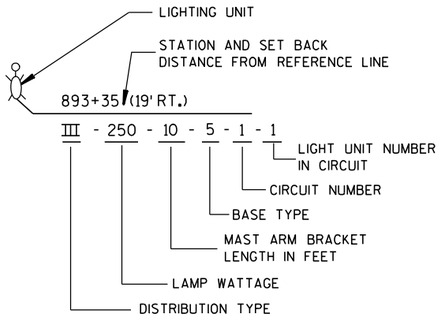
FHWA

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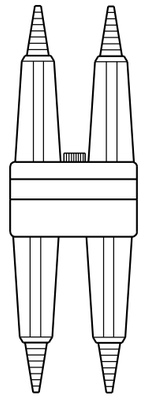
S.D.D. 9 E 2-3

6

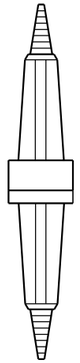
S.D.D. 9 E 2-3



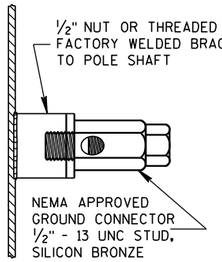
LIGHTING UNIT CODE
(TYPICAL)

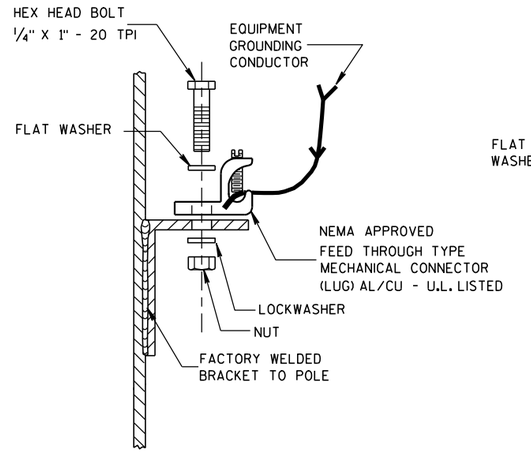


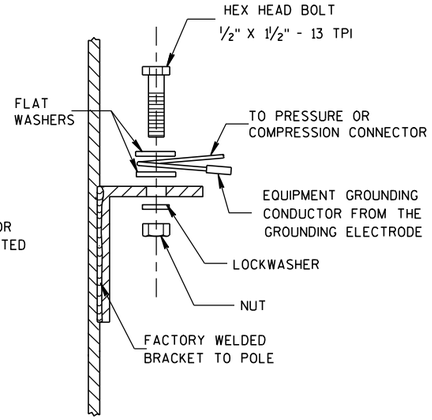
DETAIL "A"
BREAKAWY
DOUBLE POLE WITH
WATERPROOF
INSULATING BOOT



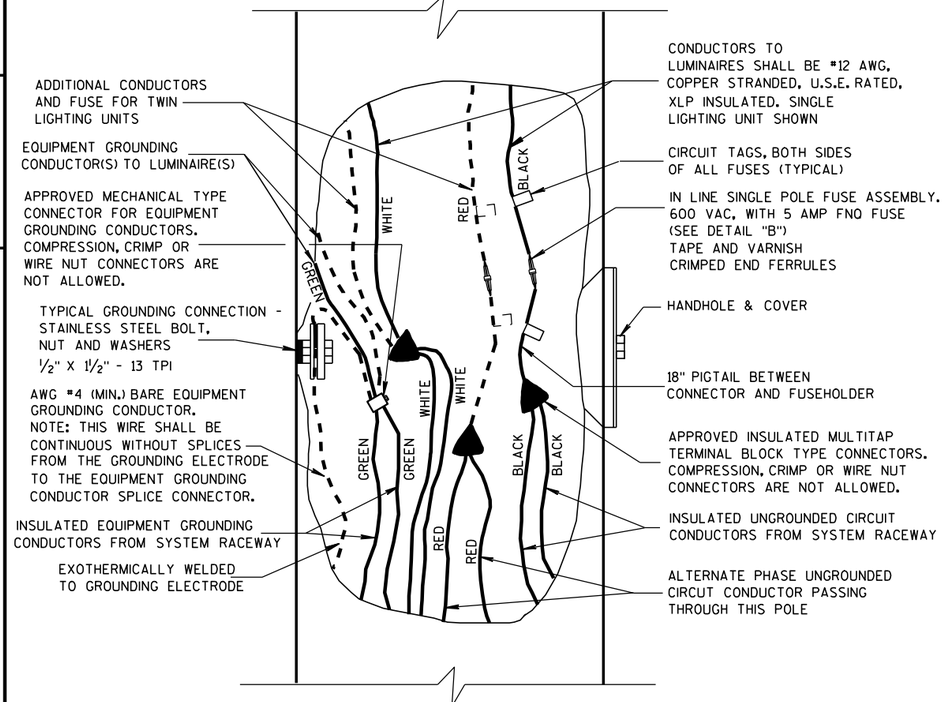
DETAIL "B"
BREAKAWY
SINGLE POLE WITH
WATERPROOF
INSULATING BOOT



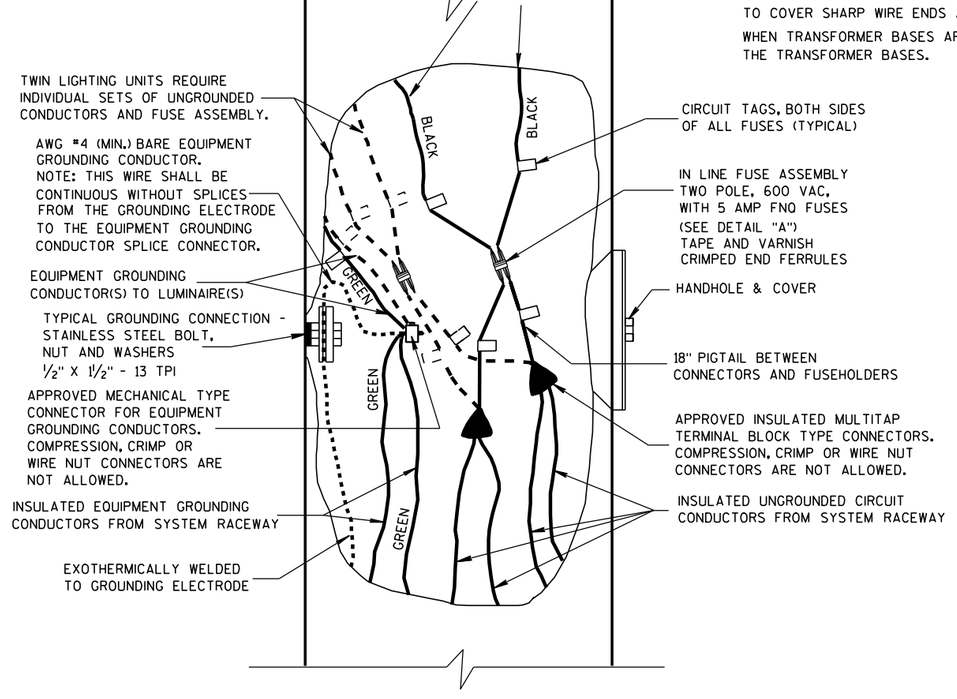




TYPICAL GROUNDING CONNECTIONS
NUT, BOLT, WASHERS AND LOCKWASHERS SHALL BE STAINLESS STEEL



3 WIRE - 120, 240 OR 480 VAC (UNGROUNDED CONDUCTOR) WITH GROUNDED CONDUCTOR AND WITH EQUIPMENT GROUNDING CONDUCTOR



2 WIRE - 240 OR 480 VAC (UNGROUNDED CONDUCTORS) WITH EQUIPMENT GROUNDING CONDUCTOR

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

THE EQUIPMENT GROUNDING CONNECTOR SHALL BE TAPED WITH 3 WRAPS (MINIMUM) OF APPROVED RUBBER TAPE AND THEN 3 WRAPS (MINIMUM) OF APPROVED VINYL TAPE TO COVER SHARP WIRE ENDS AFTER THE CONNECTION IS COMPLETED.

WHEN TRANSFORMER BASES ARE USED, ALL WIRING CONNECTIONS SHALL OCCUR WITHIN THE TRANSFORMER BASES.

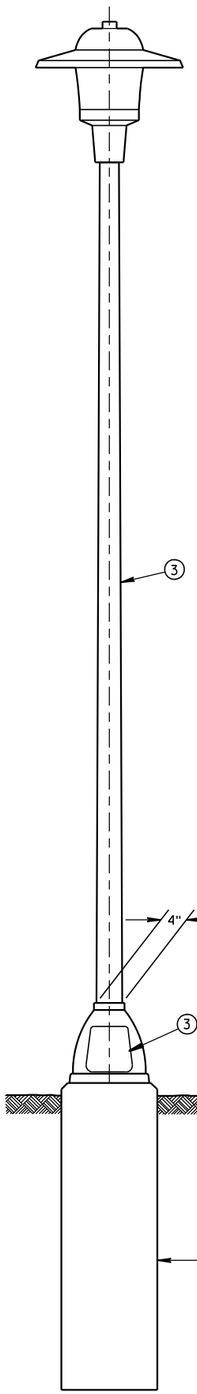
NON-FREEWAY LIGHTING UNIT POLE WIRING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

3/2/2011 DATE — /S/ Thomas J. Gosnell STATE ELECTRICAL ENGI — 766 HWYS

FHWA

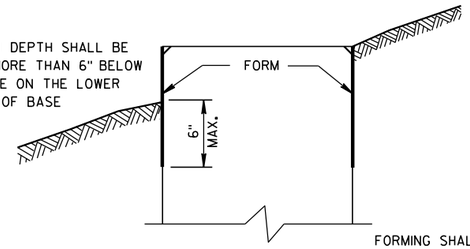


LUMINAIRE

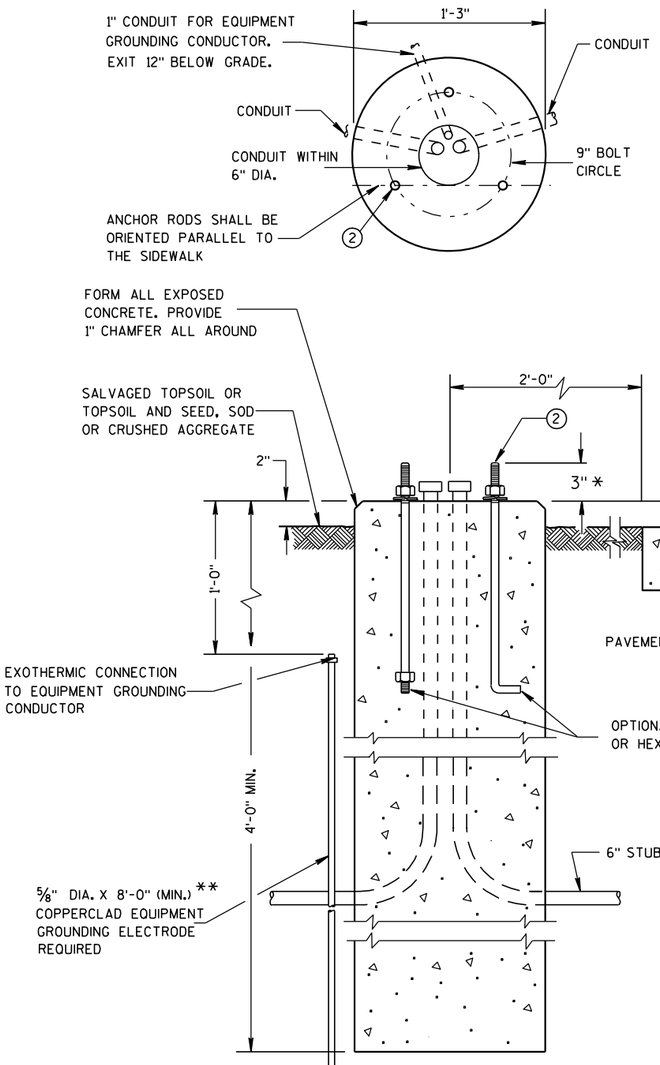
WT. = 50 LBS.
EFFECTIVE PROJECTED AREA
FOR WIND LOADING = 1.5 SQ. FT.

100 WATT HPS,
120/240 VAC HIGH POWER
FACTOR BALLAST

WALKWAY LIGHTING UNIT DETAIL



FORMING DETAIL



** GROUNDING ELECTRODE LENGTH MAY VARY, SEE SPECIAL PROVISIONS.

CONCRETE BASE, TYPE 11

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

CONCRETE BASES SHALL BE EXCAVATED BY USE OF A CIRCULAR AUGER.

TOP SURFACES OF CONCRETE BASES SHALL BE TROWEL FINISHED SMOOTH AND LEVEL.

CONDUIT RUNS, NUMBER OF CONDUITS IN EACH CONCRETE BASE AND CONDUIT SIZE IS AS SHOWN ON THE PLANS. THE 1-INCH CONDUIT IS USED IN ALL BASES.

MINIMUM BENDING RADIUS OF CONDUIT SHALL BE SIX TIMES THE DIAMETER OF THE CONDUIT.

CONDUIT HEIGHT ABOVE CONCRETE BASES SHALL BE 1-INCH. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

ALL METALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT TO BE INSTALLED SHALL BE CAPPED WITH THREADED PROTECTIVE CAPS, AS APPROVED BY THE ENGINEER.

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF THE CONCRETE BASE AND BEFORE INSTALLATION OF CABLE OR WIRE.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

ENDS OF CONDUIT INSTALLED BELOW GRADE FOR FUTURE USE SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC.

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

IF A CONCRETE BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE DIRT OR FILL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING AROUND THE CONCRETE BASE. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BARE CONCRETE BASE IN LAYERS OF 1-FOOT OR LESS.

THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE NO. 4 AWG, BARE, STRANDED COPPER. IT SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE. THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE INSTALLED LEAVING A 2-FOOT LENGTH OF WIRE ABOVE THE CONCRETE BASE. THE 2-FOOT LENGTH OF EQUIPMENT GROUNDING CONDUCTOR ABOVE THE BASE SHALL BE NEATLY COILED AND THE COILS TIED TOGETHER.

ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL PER SECTION 5.17.6.3, AASHTO 2001 4TH EDITION STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINARIES AND TRAFFIC SIGNALS.

* ANY ANCHOR ROD PROJECTION SHORTER THAN 2¾" OR LONGER THAN 3¼" SHALL REQUIRE THE BASE TO BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE.

GENERAL NOTES (CONTINUED)

(1) DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 24-INCHES MIN. DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18-INCHES MIN. DEPTH OF ALL CONDUITS SHALL NOT EXCEED 36-INCHES.

(2) THREE - ¾-INCH DIA. X 15-INCH ANCHOR RODS OR ¾-INCH DIA. X 19-INCH ANCHOR RODS INCLUDING THE 4-INCH "L" BEND. THE "L" BEND SHALL NOT BE THREADED. ANCHOR RODS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 654.2.1 AND 641.2.2 OF THE STANDARD SPECIFICATIONS.

(3) PEDESTAL BASE-STANDARD:

THE PEDESTAL BASE-STANDARD SHALL BE A ONE PIECE WELDED UNIT, WITH AN OVERALL HEIGHT OF TEN FEET.

THE POLE SHALL BE ROUND, TAPERED, ALUMINUM WITH A 3-INCH OUTSIDE DIAMETER TOP AND 0.125 INCH WALL THICKNESS.

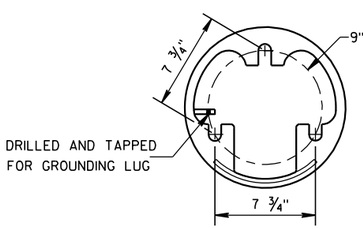
THE BELL SHAPED BASE SHALL BE 12 ½ INCHES IN DIAMETER AND HAVE A 9-INCH BOLT CIRCLE. ANCHOR RODS SHALL BE INCLUDED WITH THE BASE.

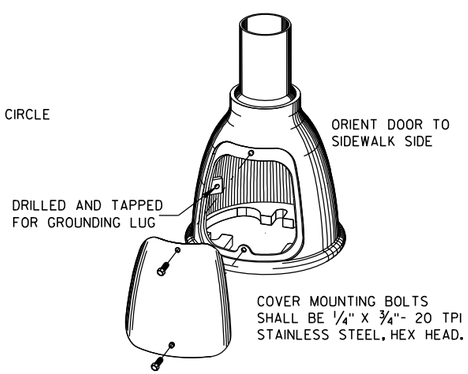
THE ACCESS DOOR OPENING SHALL BE APPROXIMATELY 7½ X 5¼ X 7½-INCHES.

THE FIXTURE AND PEDESTAL BASE-STANDARD SHALL BE PAINTED WITH AN EARTH COLORED THERMOSET POWDER COAT, ACRYLIC ENAMEL. THE ENAMEL SHALL BE FORMULATED TO SHOW NO APPRECIABLE FADING WITHIN FIVE YEARS.

GROUNDING LUGS (MECHANICAL CONNECTORS) SHALL BE U.L. LISTED "AL/CU" TYPE. CONNECTION HARDWARE SHALL BE STAINLESS STEEL (BOLT, NUT, LOCKWASHER- ¼" X ¾" - 20 TPI

ALL NONMETALLIC CONDUIT CUT ENDS SHALL BE TRIMMED INSIDE AND OUTSIDE TO REMOVE ALL ROUGH EDGES. (SEE NEC 347.5)





WALKWAY PEDESTAL BASE STANDARD DETAIL

WALKWAY LIGHTING UNIT AND CONCRETE BASE, TYPE 11

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6/11/09
DATE

/S/ Joanna L. Rich
STATE ELECTRICAL ENGI 767

HWYS

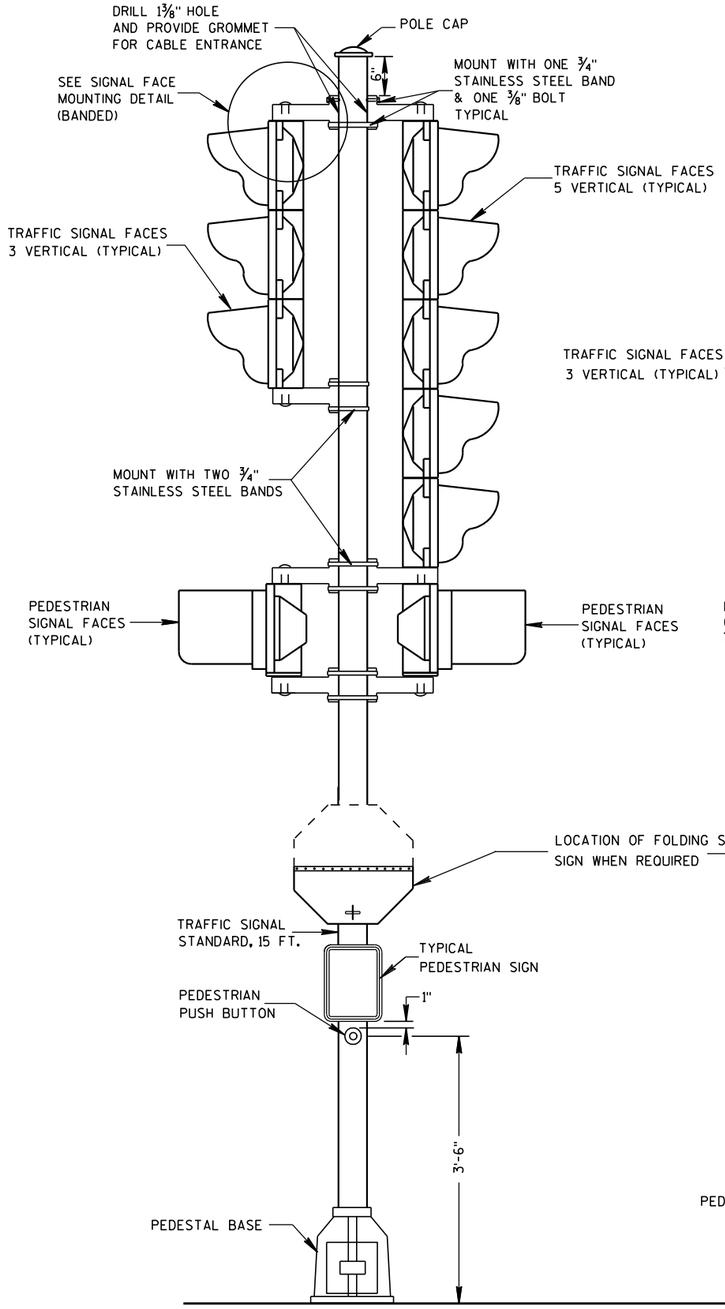
FHWA

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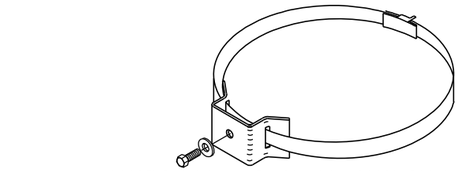
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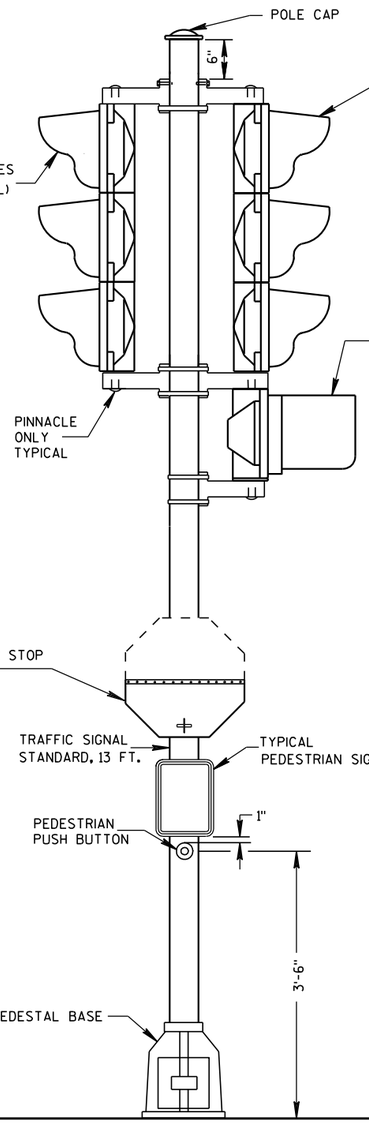
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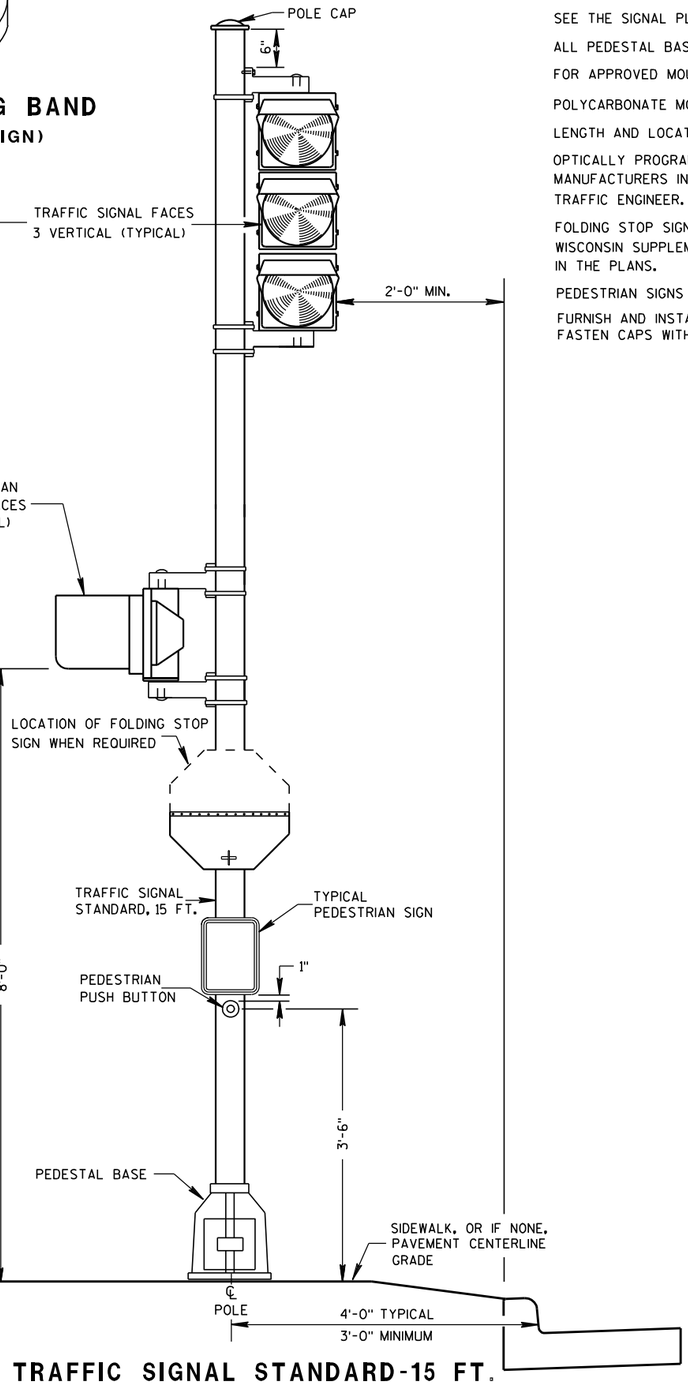
TRAFFIC SIGNAL STANDARD-15 FT.



TYPICAL SIGN MOUNTING BAND
(TOP AND BOTTOM OF SIGN)



TRAFFIC SIGNAL STANDARD-13 FT.



TRAFFIC SIGNAL STANDARD-15 FT.
3M MOUNTING (TYPICAL)

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

SEE THE SIGNAL PLAN FOR REQUIRED SIGNAL FACE SIZES.

ALL PEDESTAL BASES SHALL BE MOUNTED ON CONCRETE BASE - TYPE 1.

FOR APPROVED MOUNTING HARDWARE, SEE THE CONTRACT SPECIAL PROVISIONS.

POLYCARBONATE MOUNTING BRACKETS SHALL BE USED.

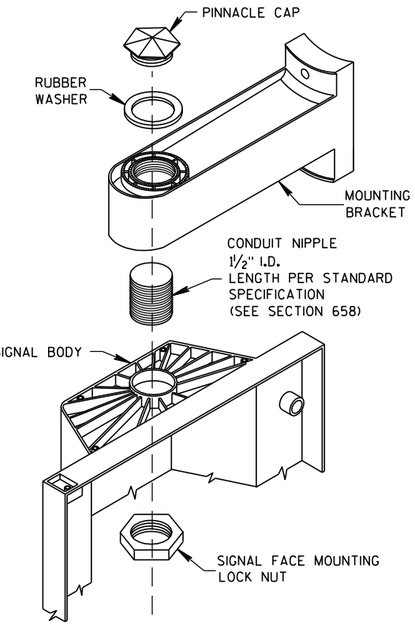
LENGTH AND LOCATION OF TRAFFIC SIGNAL STANDARDS SHALL BE AS SHOWN ON THE PLANS.

OPTICALLY PROGRAMMED SIGNAL FACES SHALL BE MASKED IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS, AND UNDER THE DIRECTIONS OF THE DISTRICT TRAFFIC ENGINEER.

FOLDING STOP SIGNS SHALL BE IN ACCORDANCE WITH THE MUTCD AND/OR THE LATEST WISCONSIN SUPPLEMENT. THE SIGNS SHALL BE SIZED AND LOCATED AS CALLED FOR IN IN THE PLANS.

PEDESTRIAN SIGNS SHALL BE AS DESIGNATED IN THE PLANS.

FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) 1/4" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.



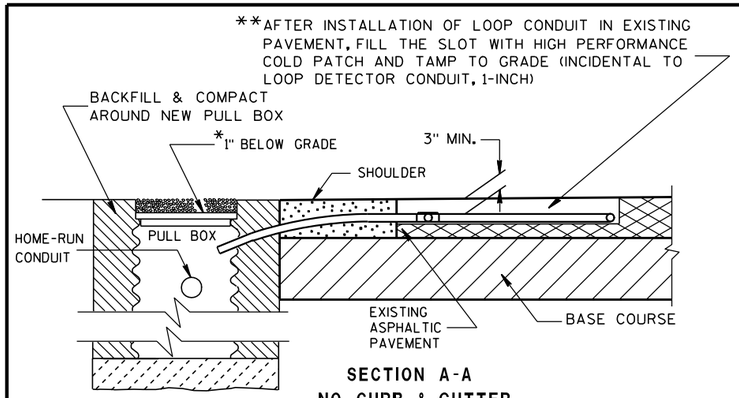
SIGNAL FACE MOUNTING DETAIL
(BANDED)

TRAFFIC SIGNAL STANDARD
POLY BRACKET MOUNTINGS
(TYPICAL) 13 FT. OR 15 FT.

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
5/11/10 DATE
/S/ John Corbin STATE ELECTRICAL ENGI
768
HWYS
FHWA

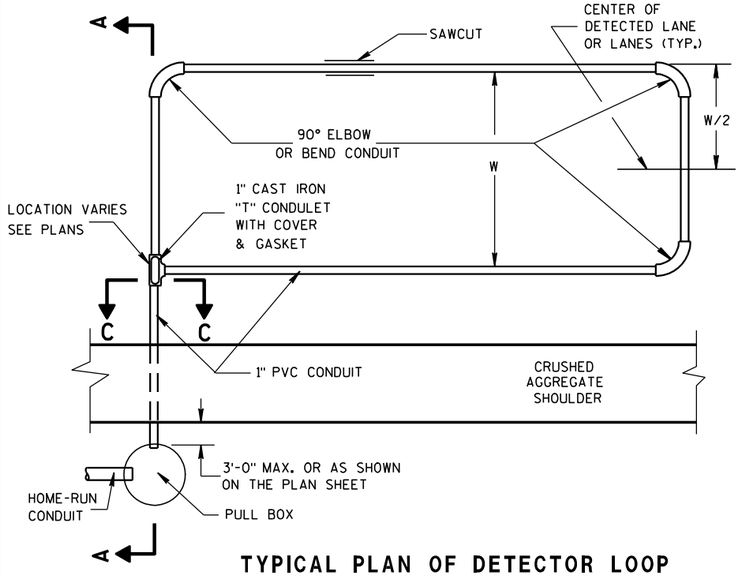
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S.D.D. 9 E 6-4



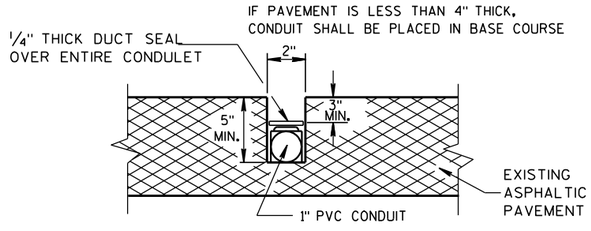
SECTION A-A
NO CURB & GUTTER

TYPICAL PLAN OF LOOP DETECTOR

*RECESS PULL BOX SO THAT THE COVER IS 3" BELOW GRADE IN SHOULDER AREAS OF CRUSHED AGGREGATE. BACKFILL OVER COVER WITH THE CRUSHED AGGREGATE TO BRING THE AREA TO GRADE LEVEL.



TYPICAL PLAN OF DETECTOR LOOP



SIDE VIEW
SECTION C-C

LOOP DETECTOR SLOT DETAIL

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

LOOP SIZE, LOCATION, NUMBER OF TURNS OF WIRE AND ASSOCIATED SIGNAL PHASE SHALL BE AS SHOWN ON THE PLANS.

PITCH LEAD OUT CONDUIT TO DRAIN TO ROADSIDE PULL BOX.

SPLICES SHALL BE INSTALLED BY USING CAST IN PLACE SPLICE KITS SUCH AS 3M TYPE 82A1 OR APPROVED EQUAL. NON-INSULATED BUTT SPLICES TO FIT #12 AWG STRANDED WIRE SHALL BE USED. SPLICES SHALL BE SOLDERED AND INSULATED FROM EACH OTHER AS PER INSTRUCTIONS INCLUDED IN THE SPLICE KIT.

MEASURE GROUND RESISITANCE USING A MEGGER. REPLACE LOOP WIRE NOT ATTAINING A READING OF INFINITY TO GROUND.

AFTER SPLICING THE LOOP WIRE TO THE LOOP LEAD-IN CABLE, THE CONTRACTOR SHALL MEASURE INDUCTANCE, GROUND RESISTANCE AND WIRE RESISTANCE AT THE CABINET END OF THE LEAD-IN CABLE AND FURNISH A COPY OF THE READINGS TO THE PROJECT ENGINEER FOR EVALUATION.

ANTI-SIEZE LUBRICATING MATERIAL SHALL BE USED ON ALL THREADS OF THREADED ASSEMBLIES BEFORE INSTALLATION.

LOOP DETECTOR LEADS SHALL BE IDENTIFIED WITH THEIR ASSOCIATED LOOP BY USE OF WATERPROOF TAGS AT BOTH ENDS OF THE CABLE. A LISTING OF THE CABLE IDENTIFICATION PER INDIVIDUAL LOOP LEAD-IN SHALL BE PLACED IN THE CABINET.

THE #12 AWG LOOP WIRE FROM THE LOOP TO THE ROADSIDE PULL BOX, SHALL BE HAND TWISTED AT LEAST 3 TWISTS PER FOOT BEFORE INSTALLATION.

SPLICES OF LOOP WIRE TO LEAD-IN CABLE SHALL BE MADE ONLY IN PULL BOXES AT THE SIDE OF THE ROAD.

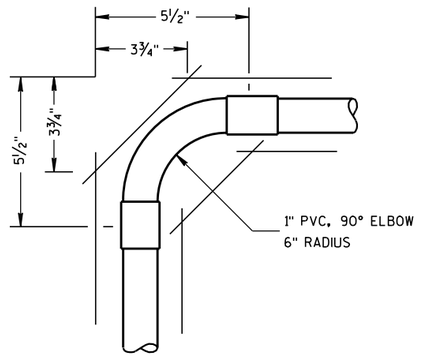
THE #12 AWG LOOP WIRE SHALL BE INSTALLED FROM THE ROADSIDE PULL BOX, THROUGH THE LOOP CONDUIT, BACK TO THE ROADSIDE PULL BOX, AND BE INSTALLED IN ONE, NON-SPLICED, CONTINUOUS LENGTH.

IN THE EVENT THAT THE EXISTING PAVEMENT IS MORE THAN 5 INCHES THICK, AND THEREFORE , THE 1 INCH CONDUIT DOES NOT REQUIRE INSTALLATION BELOW THE PAVEMENT INTO THE BASE COURSE, PLACE SOME OF THE TAR OR EPOXY SEALANT IN THE SLOT TO A DEPTH OF APPROXIMATELY 1/2 INCH BEFORE INSTALLATION OF THE CONDUIT. IF THE CONDUIT MUST BE PLACED IN THE BASE COURSE, DO NOT PLACE THE TAR OR EPOXY SEALANT IN THE SLOT.

ONCE THE 2" LOOP SLOT HAS BEEN CHIPPED OUT, THE LOOP INSTALLATION SHALL BE COMPLETED PRIOR TO OPENING THE LANE(S) TO TRAFFIC.

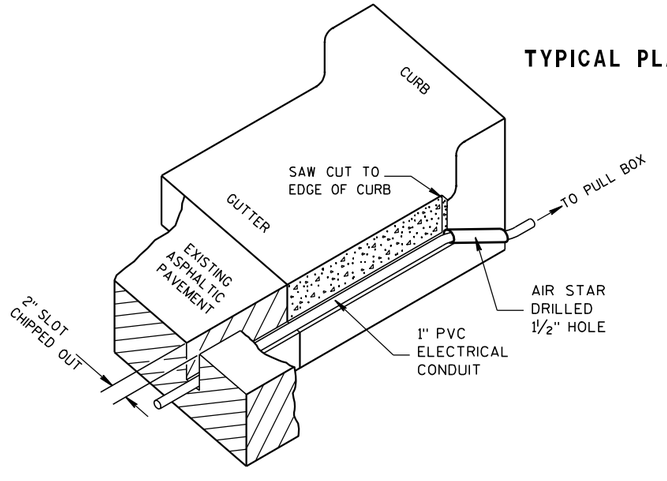
** AFTER THE HIGH PERFORMANCE COLD PATCH HAS BEEN TAMPED, SEAL THE SLOT/HIGH PERFORMANCE COLD PATCH/ PAVEMENT OPENING WITH HOT POURED ELASTIC TYPE MATERIAL CONFORMING TO THE REQUIREMENTS OF THE "SPECIFICATION FOR JOINT SEALANTS, HOT POURED, FOR CONCRETE AND ASPHALT PAVEMENTS, ASTM DESIGNATION: D3405".

IN THE EVENT HIGH PERFORMANCE COLD PATCH IS NOT AVAILABLE, AND FLEXIBLE TYPE EPOXY IS USED AS A LOOP SLOT FILLER, THE 2 INCH SLOT SHALL BE TOTALLY CLEAN AND DRY BEFORE ITS INSTALLATION. EPOXY USE SHALL BE APPROVED BY THE DISTRICT TRAFFIC ENGINEER AND THE FURNISHED EPOXY SHALL BE INSTALLED AFTER WRITTEN APPROVAL BY THE PROJECT ENGINEER.



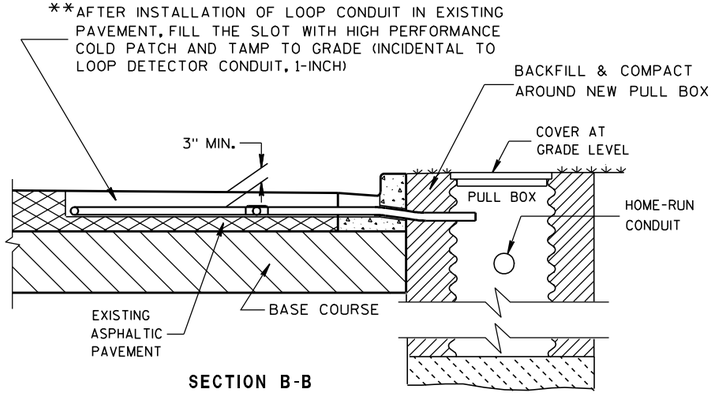
TOP VIEW

CORNER SAW SLOT DETAIL



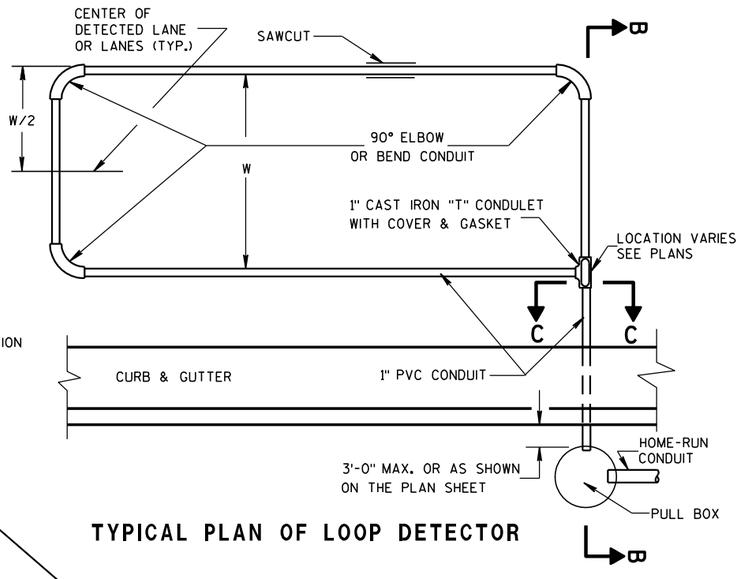
ISOMETRIC VIEW

TYPICAL SAW CUT DETAIL FOR LEAD-IN CONDUIT



SECTION B-B
CURB & GUTTER

LOOP DETECTOR INSTALLATION DETAIL



TYPICAL PLAN OF LOOP DETECTOR

LOOP DETECTOR INSTALLED IN EXISTING ASPHALTIC PAVEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/7/06 DATE
/S/ Balu Ananthanarayanan
STATE ELECTRICAL ENGI 769 HWYS
FHWA

6

S.D.D. 9 F 13-3

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S.D.D. 9 F 13-3

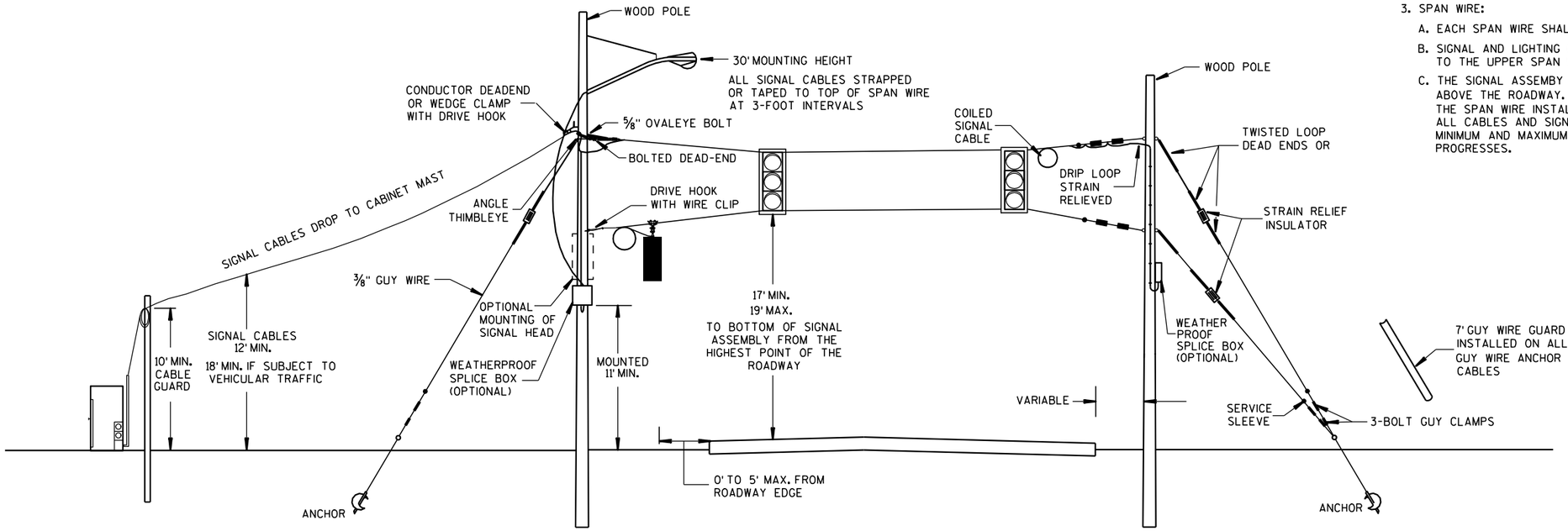
GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

1. WOOD POLES SHALL BE CLASS 4. LENGTH DETERMINED BY SIGNAL PLAN.

2. SIGNAL FACES:
   A. ALL SECTIONS SHALL BE 12" AND POLYCARBONATE.
   B. EACH SHALL CONTAIN A 5" WIDE DULL BLACK POLYCARBONATE BACKPLATE.
   C. EACH SHALL BE WIRED FROM THE TOP SIGNAL MOUNTING BRACKET.
   D. NEAR RIGHT SIGNAL FACE SUSPENDED ON THE TETHER (NO BACKPLATE) SHALL NOT BE OVER THE TRAVELED WAY. IF THE POLE IS WITHIN 5 FEET OF THE TRAVELED WAY MOUNT THE SIGNAL FACE ON THE WOOD POLE WITH BACKPLATE.

3. SPAN WIRE:
   A. EACH SPAN WIRE SHALL BE INDIVIDUALLY DOWN GUYED.
   B. SIGNAL AND LIGHTING CABLES SHALL ONLY BE ATTACHED TO THE UPPER SPAN WIRE.
   C. THE SIGNAL ASSEMBY SHALL HAVE A 17' MIN. HEIGHT ABOVE THE ROADWAY. THIS SHALL BE MEASURED AFTER THE SPAN WIRE INSTALLATION IS COMPLETED WITH ALL CABLES AND SIGNAL FACES IN PLACE. MAINTAIN MINIMUM AND MAXIMUM HEIGHTS AS ROADWAY WORK PROGRESSES.



SPAN WIRE
TEMPORARY SIGNALS

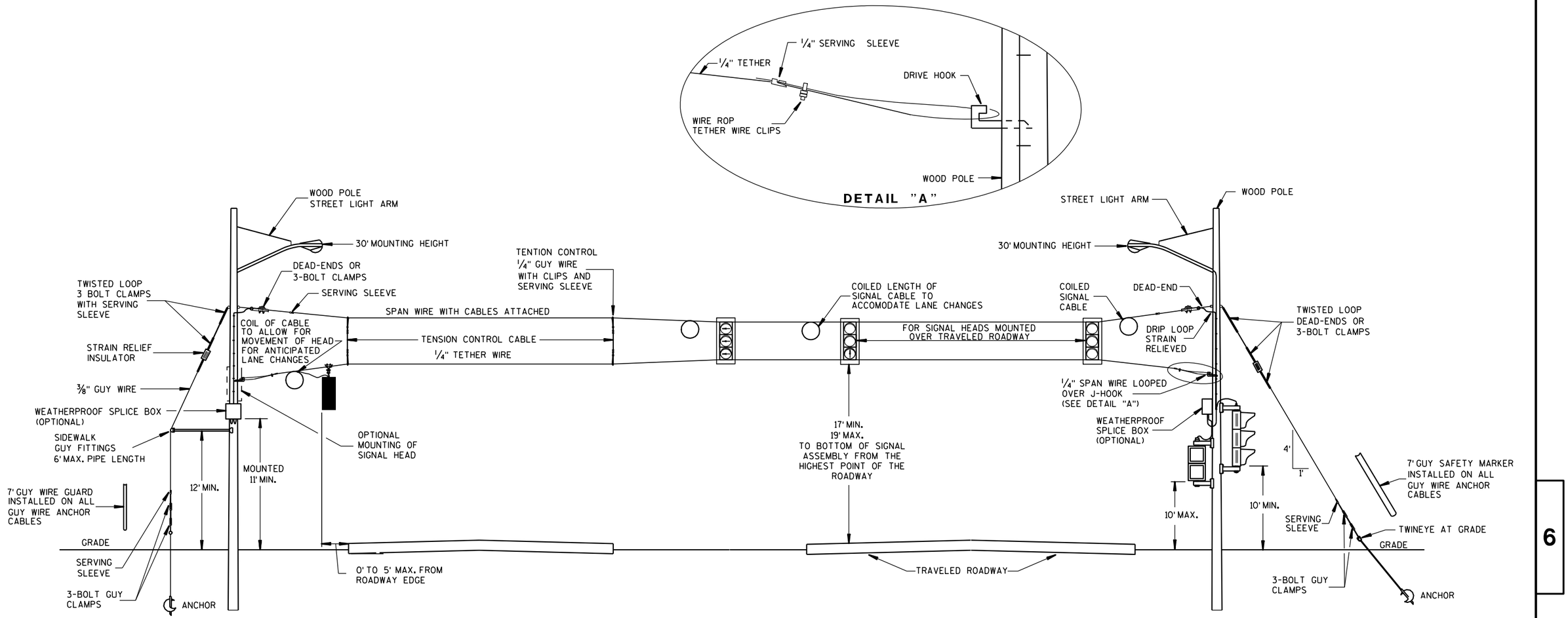
MINIMUM POLE LENGTHS	POLE BURIEL DEPTHS
25'	5'
30'	6'
35'	7'
40'	8'
45'	9'

SPAN WIRE
TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7-14-08 DATE
/S/ Balu Ananthar [illegible] n
STATE ELECTRICAL ENGI 770 HWYS
FHWA

6
S.D.D. 9 G 1-3a



GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

1. WOOD POLES SHALL BE CLASS 4. LENGTH DETERMINED BY SIGNAL PLAN.
2. SIGNAL FACES:
   A. ALL SECTIONS SHALL BE 12" AND POLYCARBONATE.
   B. EACH SHALL CONTAIN A 5" WIDE DULL BLACK POLYCARBONATE BACKPLATE.
   C. EACH SHALL BE WIRED FROM THE TOP SIGNAL MOUNTING BRACKET.
   D. NEAR RIGHT SIGNAL FACE SUSPENDED ON THE TETHER (NO BACKPLATE) SHALL NOT BE OVER THE TRAVELED WAY. IF THE POLE IS WITHIN 5 FEET OF THE TRAVELED WAY MOUNT THE SIGNAL FACE ON THE WOOD POLE WITH BACKPLATE.
   E. FAR INDICATION SHALL BE MAINTAINED OVER CENTER OF TRAFFIC LANE.
3. SPAN WIRE:
   A. EACH SPAN WIRE SHALL BE INDIVIDUALLY DOWN GUYED.
   B. SIGNAL AND LIGHTING CABLES SHALL ONLY BE ATTACHED TO THE UPPER SPAN WIRE.
   C. THE SIGNAL ASSEMBY SHALL HAVE A 17' MIN. HEIGHT ABOVE THE ROADWAY. THIS SHALL BE MEASURED AFTER THE SPAN WIRE INSTALLATION IS COMPLETED WITH ALL CABLES AND SIGNAL FACES IN PLACE. MAINTAIN MINIMUM AND MAXIMUM HEIGHTS AS ROADWAY WORK PROGRESSES.

SPAN WIRE
TEMPORARY SIGNALS
4 LANE ROADWAYS

MINIMUM POLE LENGTHS	CLASS	MIN. BURIAL DEPTHS
25'	V	5'
30'	V	6'
35'	IV	7'
40'	IV	8'
45'	IV	9'

SPAN WIRE
TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7-14-08 DATE

/S/ Balu Ananthanarayanan
STATE ELECTRICAL ENGI 771 HWYS

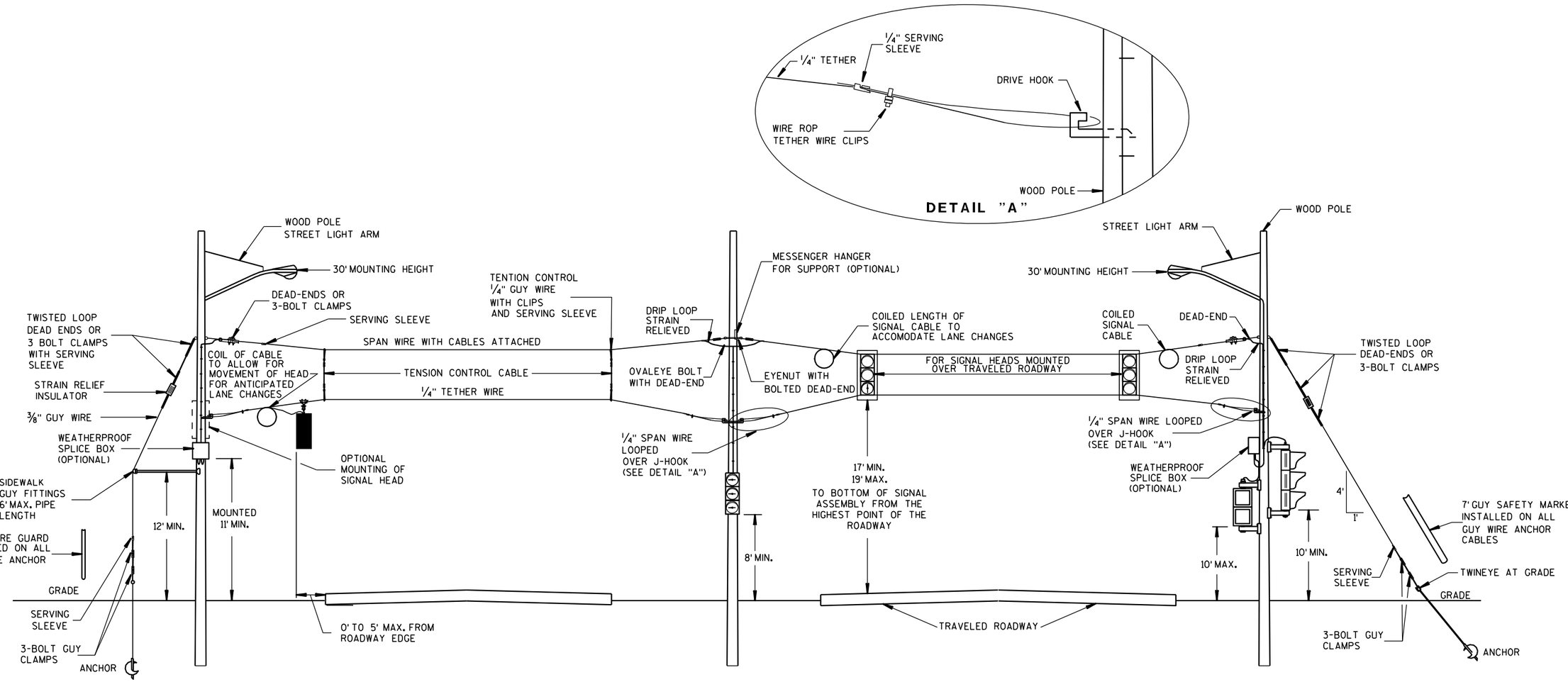
FHWA

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S.D.D. 9 G 1-3b

6

S.D.D. 9 G 1-3b



SPAN WIRE
TEMPORARY SIGNALS
4 LANE ROADWAYS

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

1. WOOD POLES SHALL BE CLASS 4. LENGTH DETERMINED BY SIGNAL PLAN.
2. SIGNAL FACES:
   A. ALL SECTIONS SHALL BE 12" AND POLYCARBONATE.
   B. EACH SHALL CONTAIN A 5" WIDE DULL BLACK POLYCARBONATE BACKPLATE.
   C. EACH SHALL BE WIRED FROM THE TOP SIGNAL MOUNTING BRACKET.
   D. NEAR RIGHT SIGNAL FACE SUSPENDED ON THE TETHER (NO BACKPLATE) SHALL NOT BE OVER THE TRAVELED WAY. IF THE POLE IS WITHIN 5 FEET OF THE TRAVELED WAY MOUNT THE SIGNAL FACE ON THE WOOD POLE WITH BACKPLATE.
   E. FAR INDICATION SHALL BE MAINTAINED OVER CENTER OF TRAFFIC LANE.
3. SPAN WIRE:
   A. EACH SPAN WIRE SHALL BE INDIVIDUALLY DOWN GUYED.
   B. SIGNAL AND LIGHTING CABLES SHALL ONLY BE ATTACHED TO THE UPPER SPAN WIRE.
   C. THE SIGNAL ASSEMBY SHALL HAVE A 17' MIN. HEIGHT ABOVE THE ROADWAY. THIS SHALL BE MEASURED AFTER THE SPAN WIRE INSTALLATION IS COMPLETED WITH ALL CABLES AND SIGNAL FACES IN PLACE. MAINTAIN MINIMUM AND MAXIMUM HEIGHTS AS ROADWAY WORK PROGRESSES.

MINIMUM POLE LENGTHS	CLASS	MIN. BURIAL DEPTHS
25'	V	5'
30'	V	6'
35'	IV	7'
40'	IV	8'
45'	IV	9'

SPAN WIRE TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

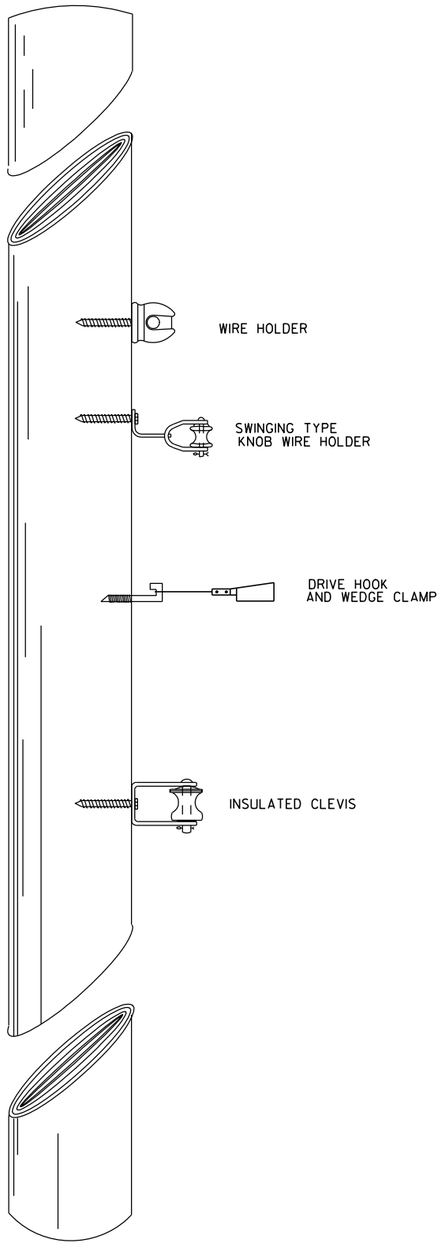
7-14-08 DATE

/S/ Balu Aganthangarayanan
STATE ELECTRICAL ENGI 772 HWYS

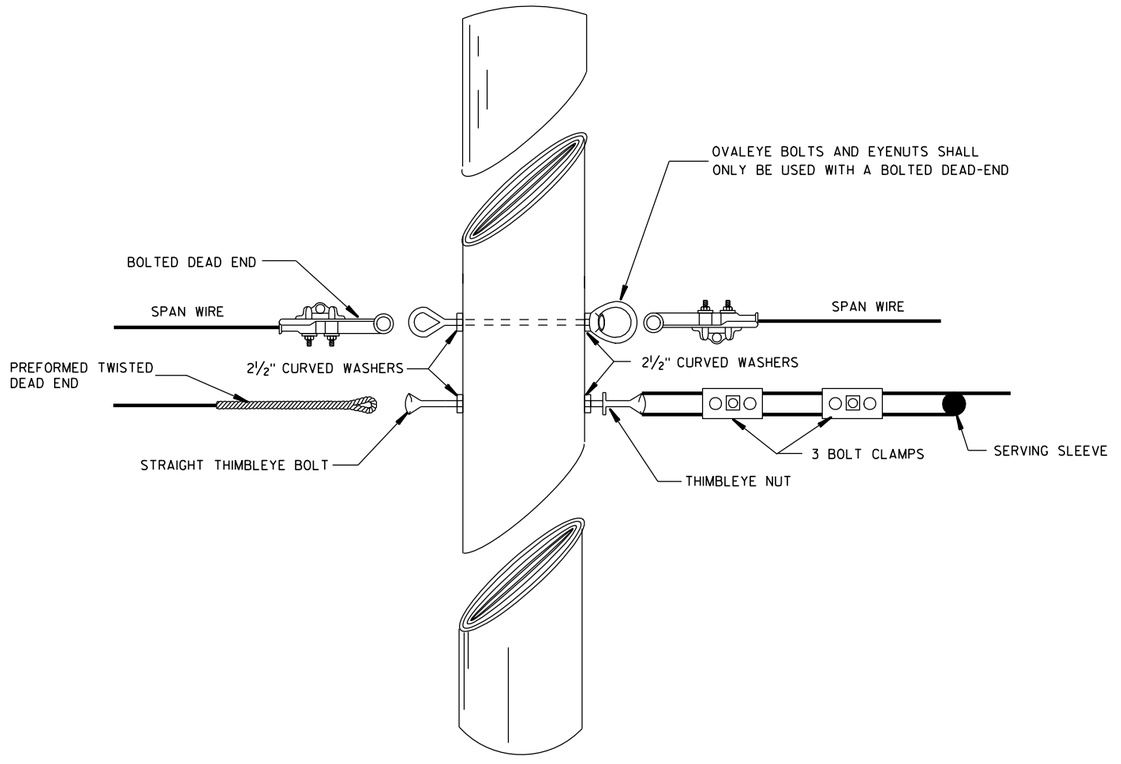
FHWA

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S.D.D. 9 G 1-3c



TYPICAL CABLE HANGERS



TYPICAL DEAD-ENDING

6

6

S.D.D. 9 G 1-3d

S.D.D. 9 G 1-3d

SPAN WIRE
TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

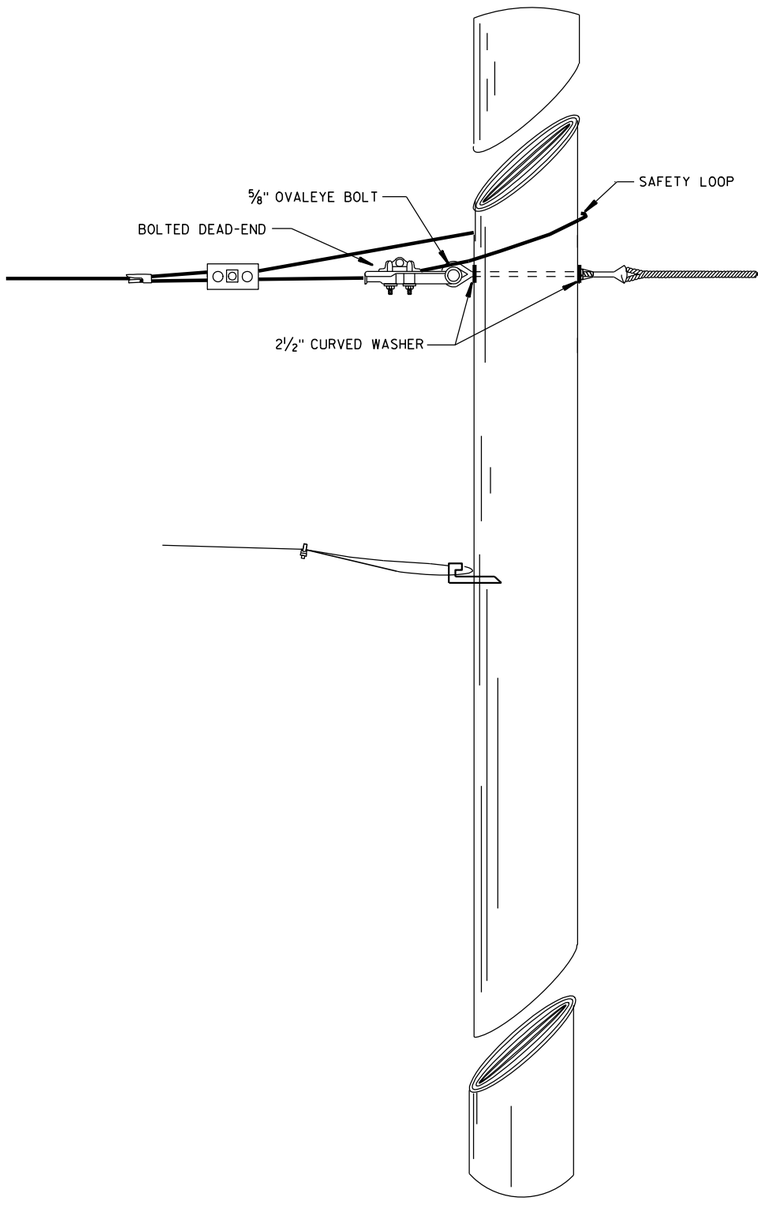
7-14-08
DATE

/S/ Balu Ananthanarayanan
STATE ELECTRICAL ENGI 773 HWYS

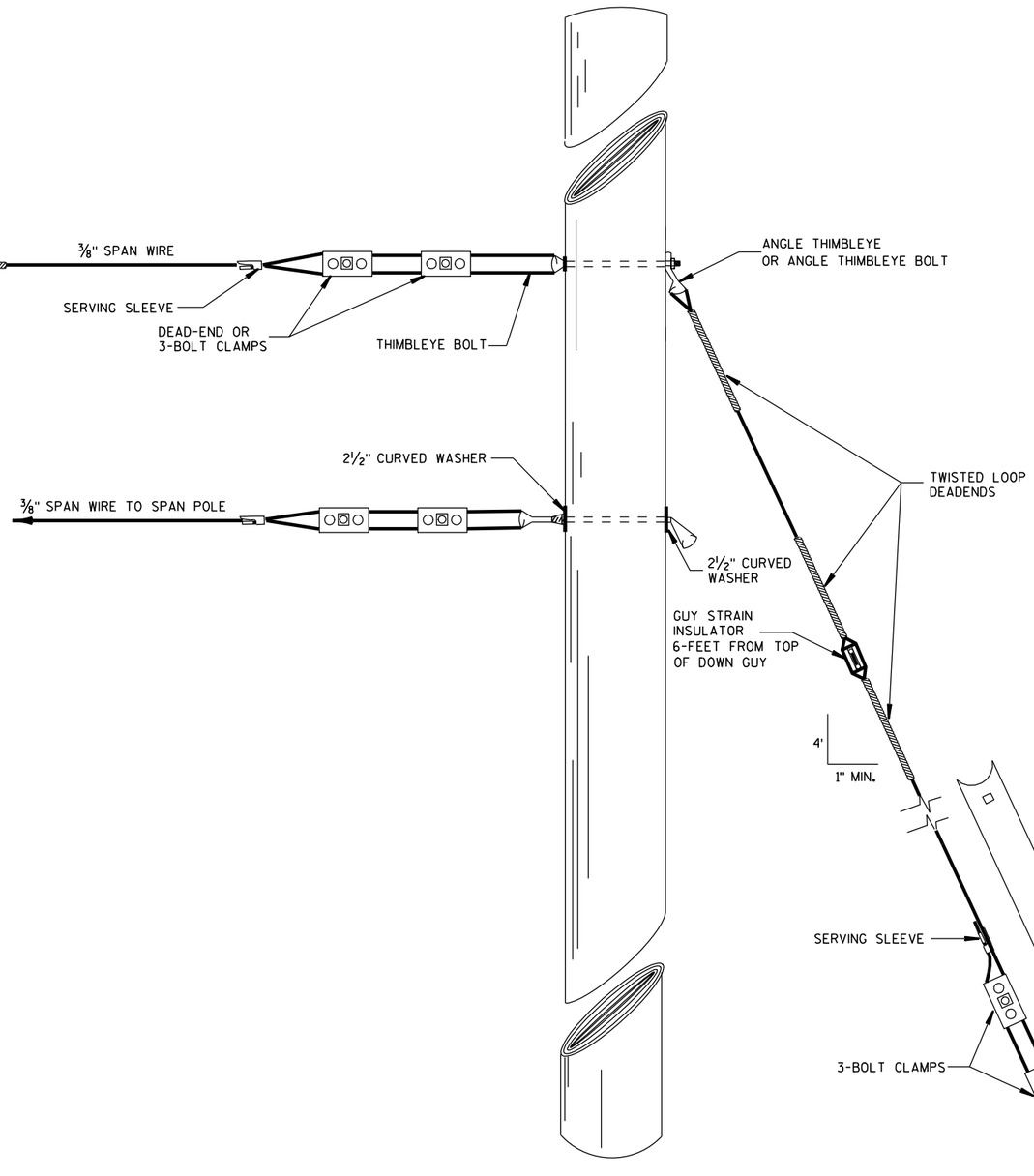
FHWA

GENERAL NOTES

1. USE ¾" DRILL IN WOOD POLE TO PROVIDE HOLE FOR ⅝" BOLTS.
2. SAFTY LOOP REQUIRED ON EACH END OF ALL SPAN WIRES.



SPAN WIRE POLE



GUY POLE

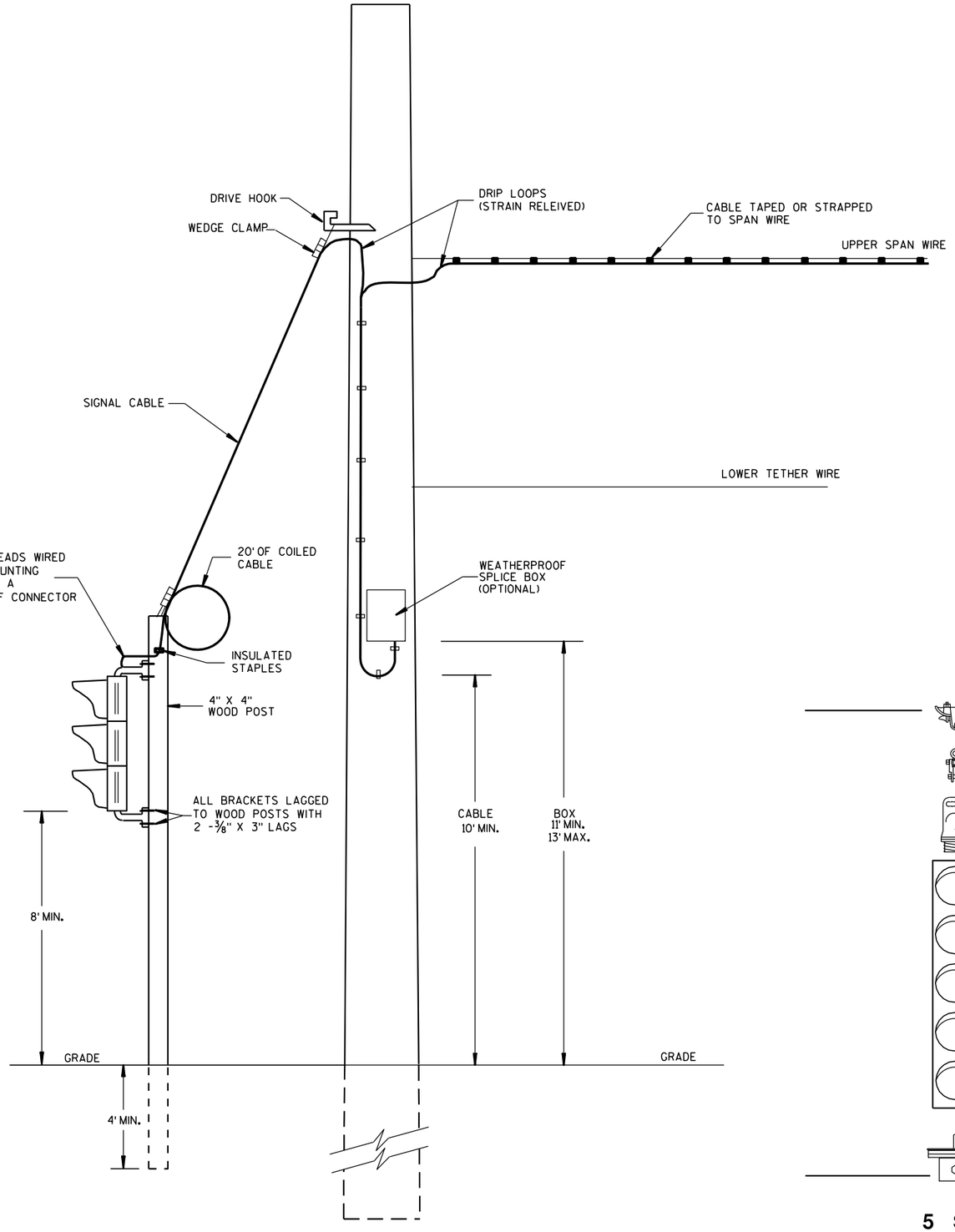
TYPICAL DEAD-ENDINGS OR GUYING

SPAN WIRE
TEMPORARY TRAFFIC SIGNAL

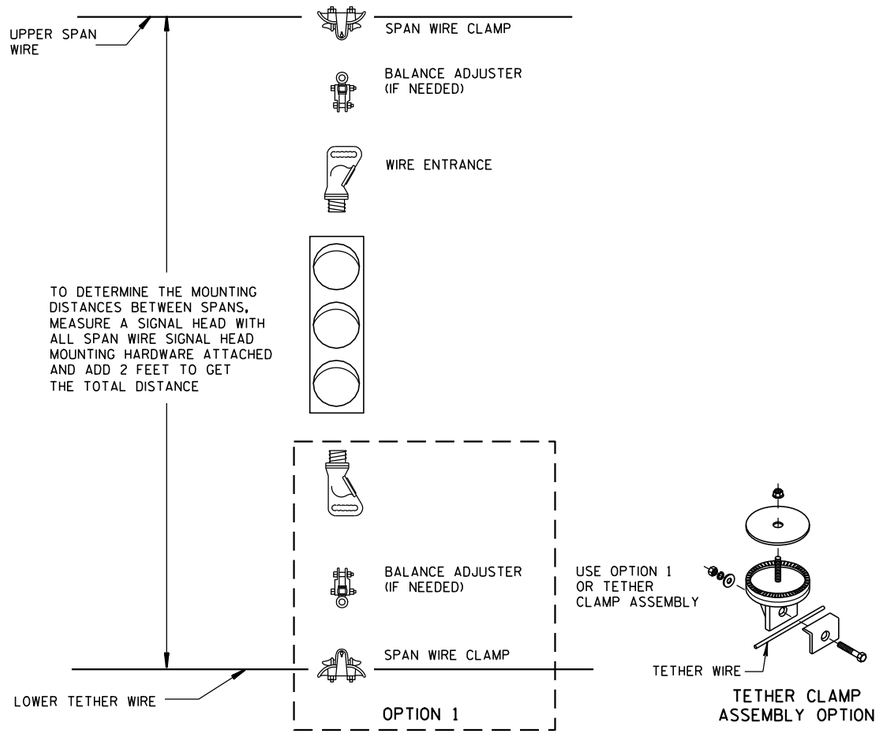
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7-14-08 DATE
/S/ Balu Aganthanarayanan
STATE ELECTRICAL ENGI 774 HWYS
FHWA

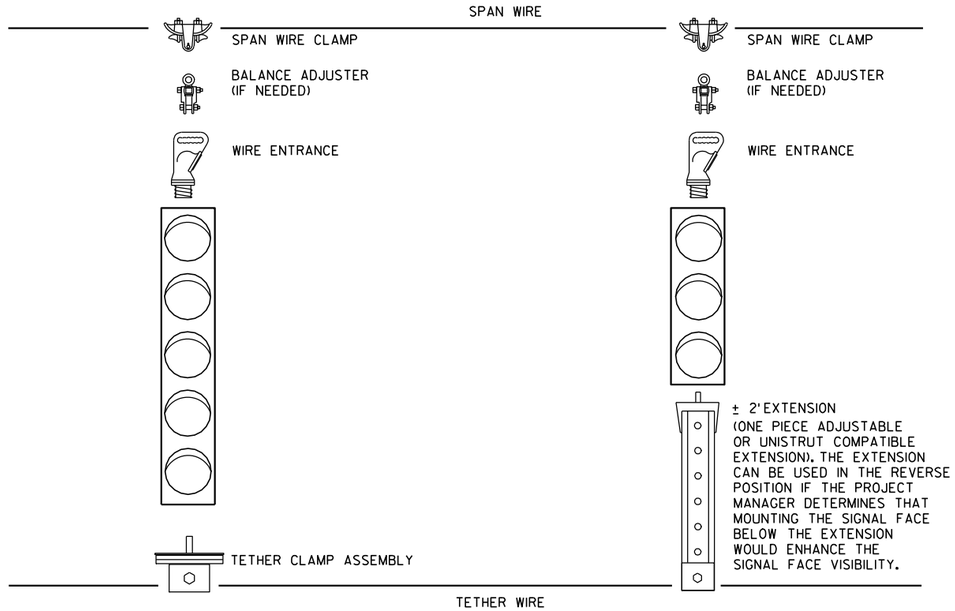
6
S.D.D. 9 G 1-3e



TYPICAL DROP TO TEMPORARY MOVEABLE SIGNAL



TYPICAL SPAN WIRE MOUNTING HARDWARE



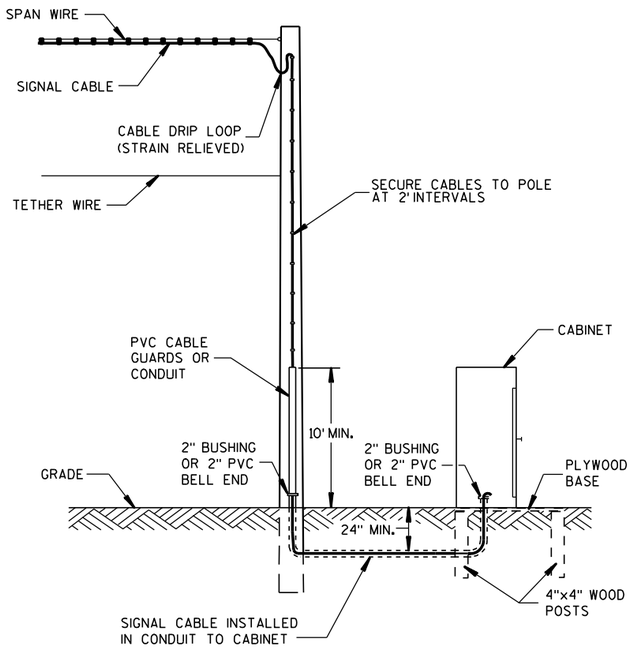
5 SECTION VERTICAL WITH 3 SECTION VERTICAL ON ONE SPAN WIRE

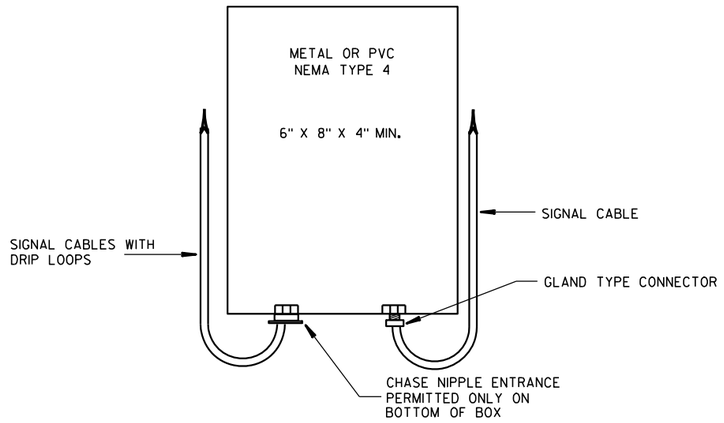
SPAN WIRE TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

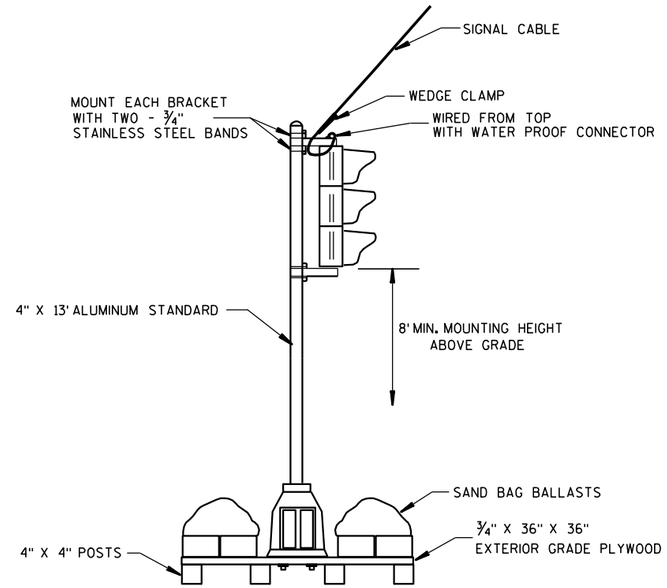
APPROVED
7-14-08
DATE
/S/ Balu Ananthanarayanan
STATE ELECTRICAL ENGI 775 HWYS
FHWA

6
S.D.D. 9 G 1-3f

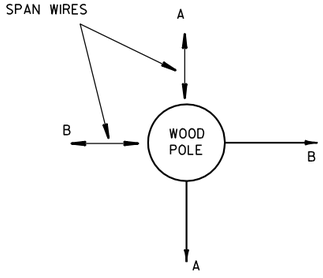




SPLICE BOX

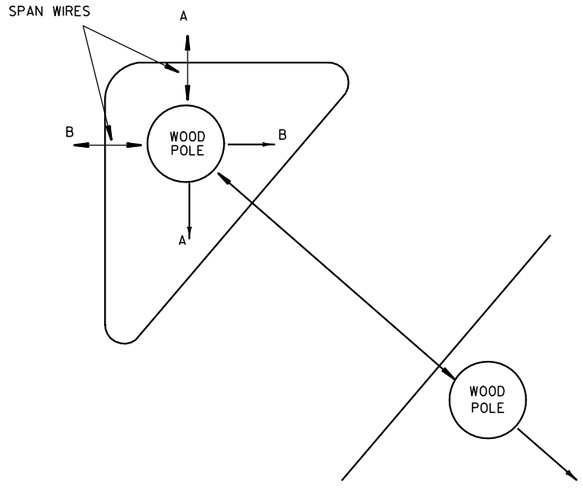


TYPICAL SKID TYPE TEMPORARY

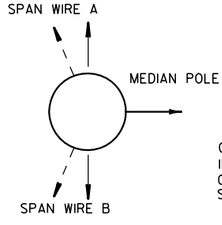


ALL DOWN OR SIDEWALK GUYS
SHALL BE INSTALLED IN THE
OPPOSITE DIRECTION OF THE
STRAIN OF THE SPAN WIRE

CORNER POLES



ISLAND POLES



GUY AWAY FROM
INTERSECTION OR IN
OPPOSITE DIRECTION OF THE
SPAN LOADING

MEDIAN POLES

SPAN WIRE
TEMPORARY TRAFFIC SIGNAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7-14-08 DATE

/S/ Balu Ananthanarayanan
STATE ELECTRICAL ENGI 776 HWYS

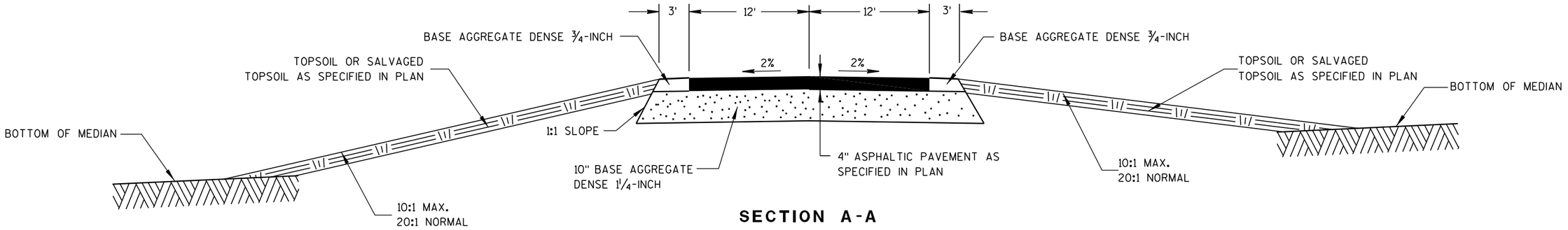
FHWA

6

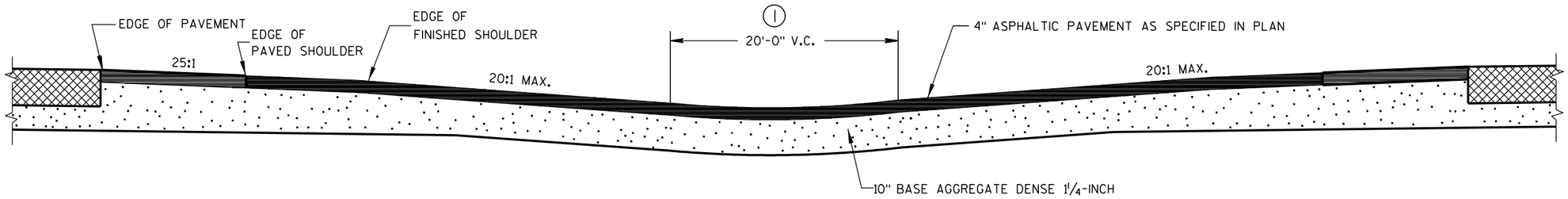
S.D.D. 9 G 1-3g

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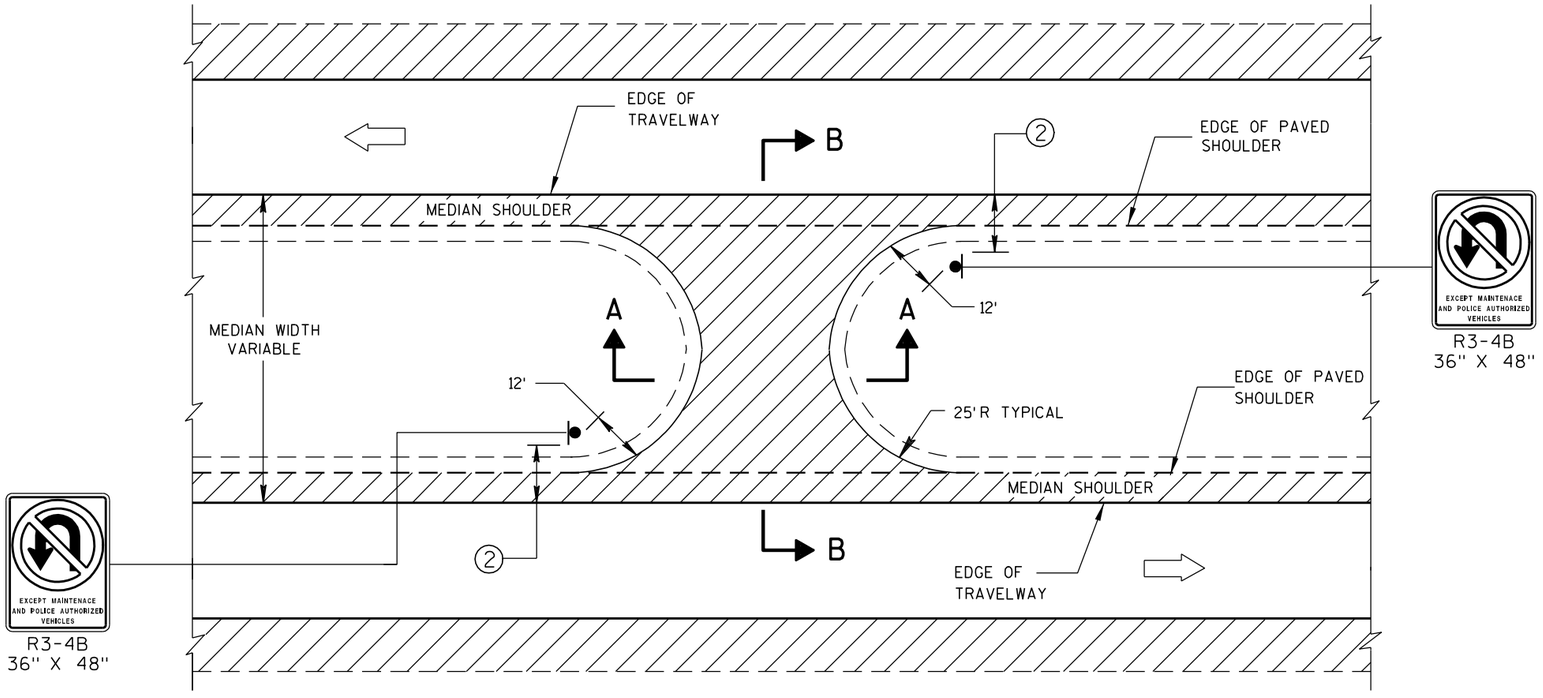
S.D.D. 9 G 1-3g



SECTION A-A



SECTION B-B



PLAN VIEW

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

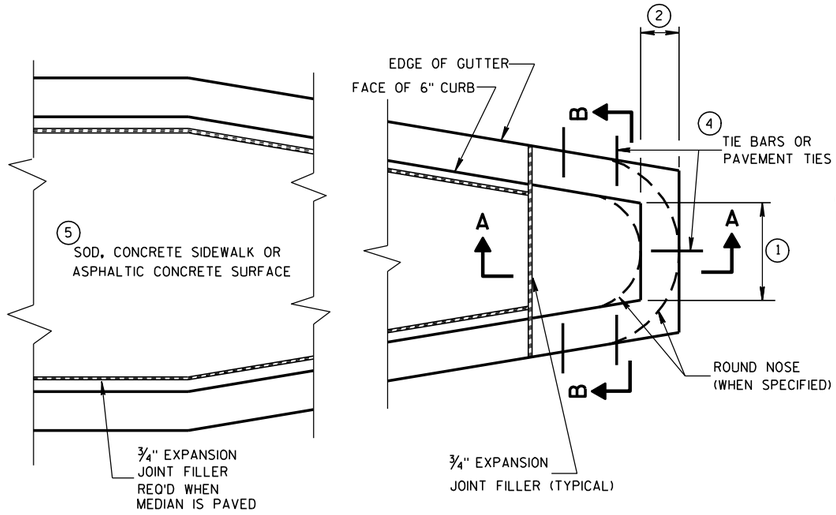
(1) ADJUST VERTICAL CURVE LOCATION LATERALLY TO MAINTAIN 20:1 MAX.

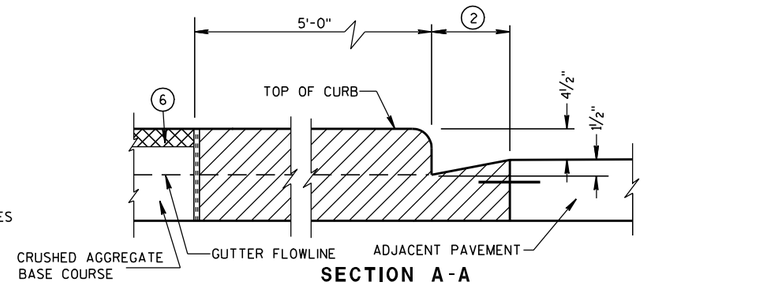
(2) SIGNING DETAILS AND SPECIFICATIONS ARE PROVIDED ELSEWHERE IN THE CONTRACT.

MAINTENANCE CROSSOVER FOR FREEWAYS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/01/2011
DATE
/S/ Jerry H. [illegible]
ROADWAY STANDARDS ENGINEER
FHWA





CONCRETE MEDIAN BLUNT NOSE DETAIL

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

(1) SEE PLAN FOR MEDIAN NOSE WIDTH AND RADIUS (FOR ROUND NOSE ALTERNATE).

(2) WIDTH OF GUTTER TO MATCH EXISTING ADJACENT GUTTER OR AS SPECIFIED ELSEWHERE IN THE PLAN.

(3) DEPTH EQUAL TO ADJACENT PAVEMENT. ADJACENT PAVEMENT STRUCTURE DETAILS ARE SHOWN ON THE PLAN. TYPICAL OPTIONS ARE:

(1) NEW OR EXISTING CONCRETE PAVEMENT.

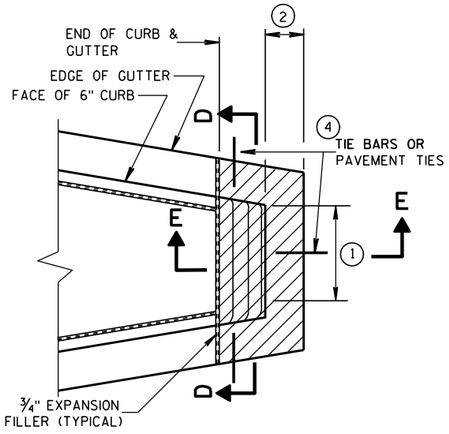
(2) ASPHALTIC CONCRETE PAVEMENT OVER NEW OR EXISTING CONCRETE BASE COURSE.

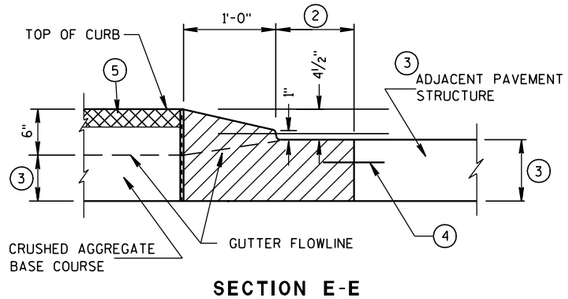
(3) ASPHALTIC CONCRETE PAVEMENT OVER CRUSHED AGGREGATE BASE COURSE.

(4) TIE BARS OR PAVEMENT TIES REQUIRED IN NEW CONCRETE PAVEMENT OR CONCRETE BASE COURSE. TIE BARS SHALL BE NO. 4 X 2'-0" SPACED AT 2'-0" C-C.

PAVEMENT TIES REQUIRED IN EXISTING CONCRETE BASE COURSE. PAVEMENT TIES SHALL BE NO. 6 X 1'-0" SPACED AT 3'-0" C-C INSTALLED ON A HORIZONTAL SKEW OF 6:1. THE DIRECTION OF SKEW SHALL ALTERNATE AFTER EVERY ONE OR TWO BARS.

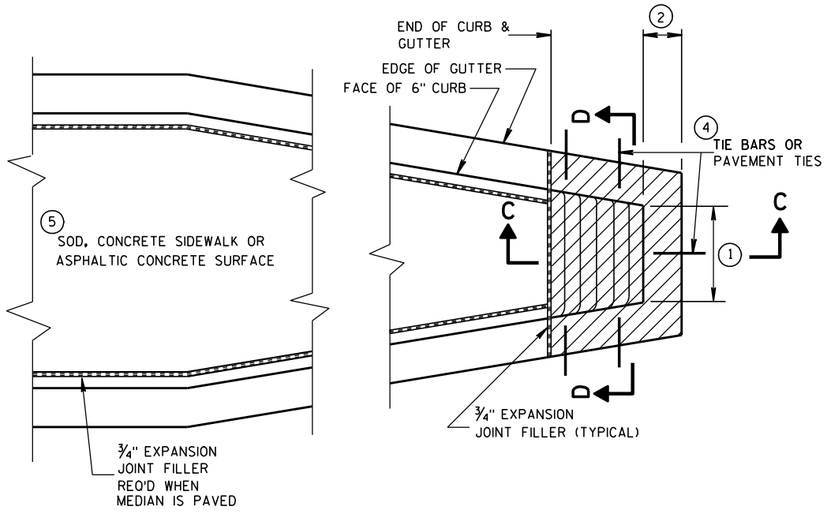
(5) SURFACE TYPE AND DETAILS ARE SHOWN ELSEWHERE IN THE PLAN.

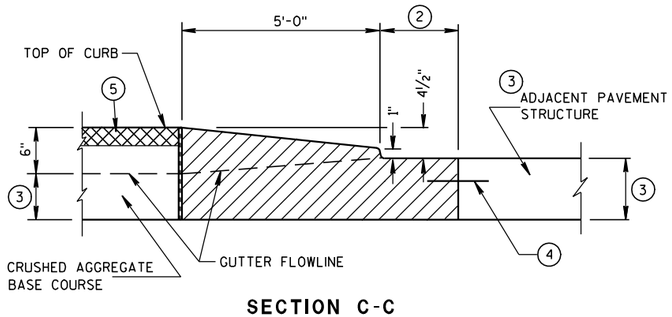




SECTION E-E

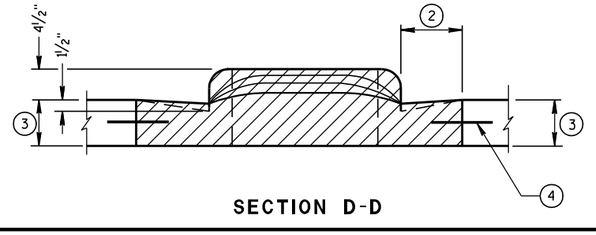
CONCRETE MEDIAN SLOPED NOSE TYPE 2





SECTION C-C

CONCRETE MEDIAN SLOPED NOSE TYPE 1



SECTION D-D

CONCRETE MEDIAN NOSE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6/8/2006
DATE

/S/ Jerry H. [illegible]
ROADWAY STANDARDS ENGINEER

1778

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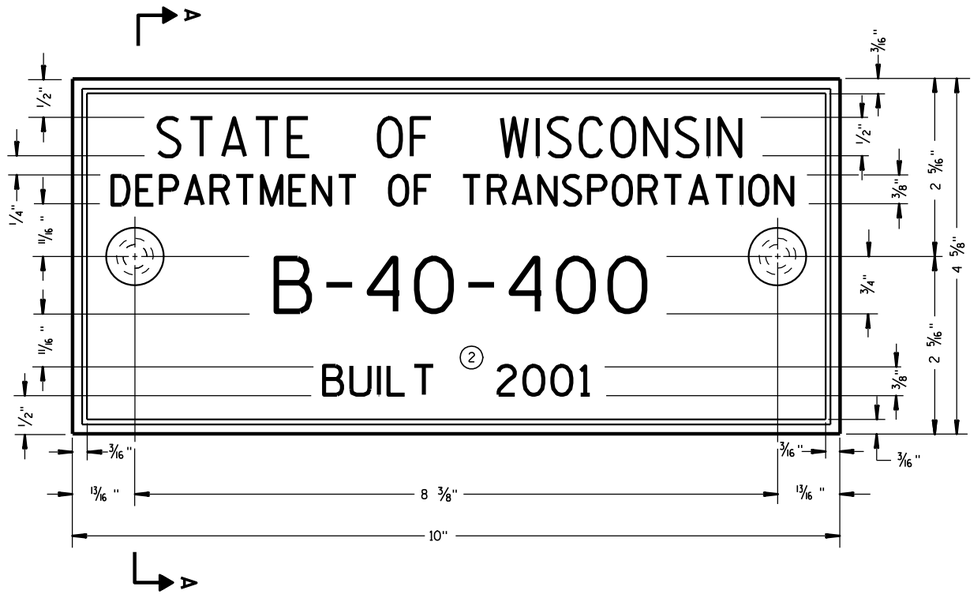
FHWA

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S.D.D. 11 B 2-2

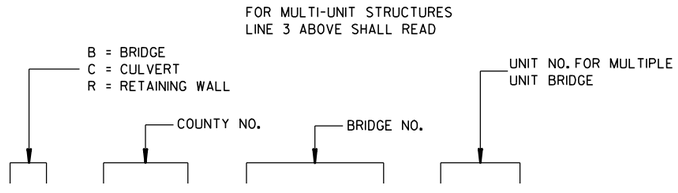
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S.D.D. 11 B 2-2



TYPICAL NAME PLATE

(BRIDGES, CULVERTS, AND RETAINING WALLS)



NUMBERING DESIGNATION
MULTI-UNIT STRUCTURES

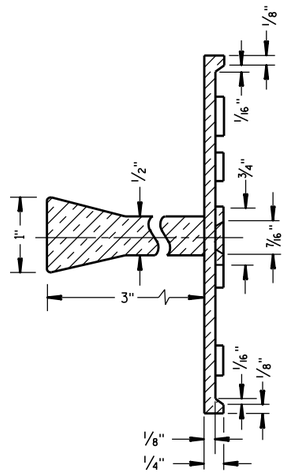
GENERAL NOTES

NAME PLATES TO BE INSTALLED ON BRIDGES, CULVERTS, AND RETAINING WALLS SHALL CONFORM TO THE REQUIREMENTS OF SECTION 502.3.11 OF THE STANDARD SPECIFICATIONS.

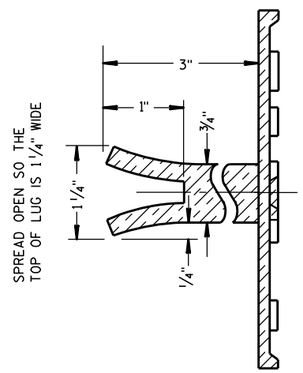
THE BRIDGE NUMBER AND YEAR BUILT SHOWN ON THIS DRAWING ARE EXAMPLES ONLY. SEE CONSTRUCTION PLANS FOR INDIVIDUAL NUMBERING AND YEAR BUILT.

(1) EPOXY RESIN SHALL BE FROM AN APPROVED MANUFACTURER AND USED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

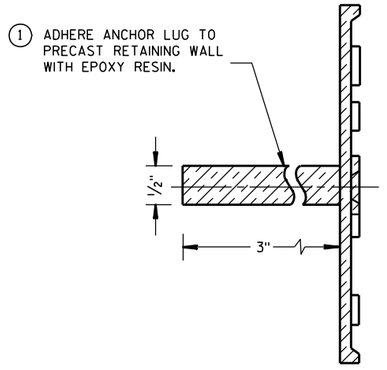
(2) REHABILITATION OF AN EXISTING STRUCTURE SHOULD USE THE DATE OF ORIGINAL STRUCTURE CONSTRUCTION.



SECTION A-A



ALTERNATE LUG



ALTERNATE LUG

(FOR ATTACHMENT TO PRECAST STRUCTURES)

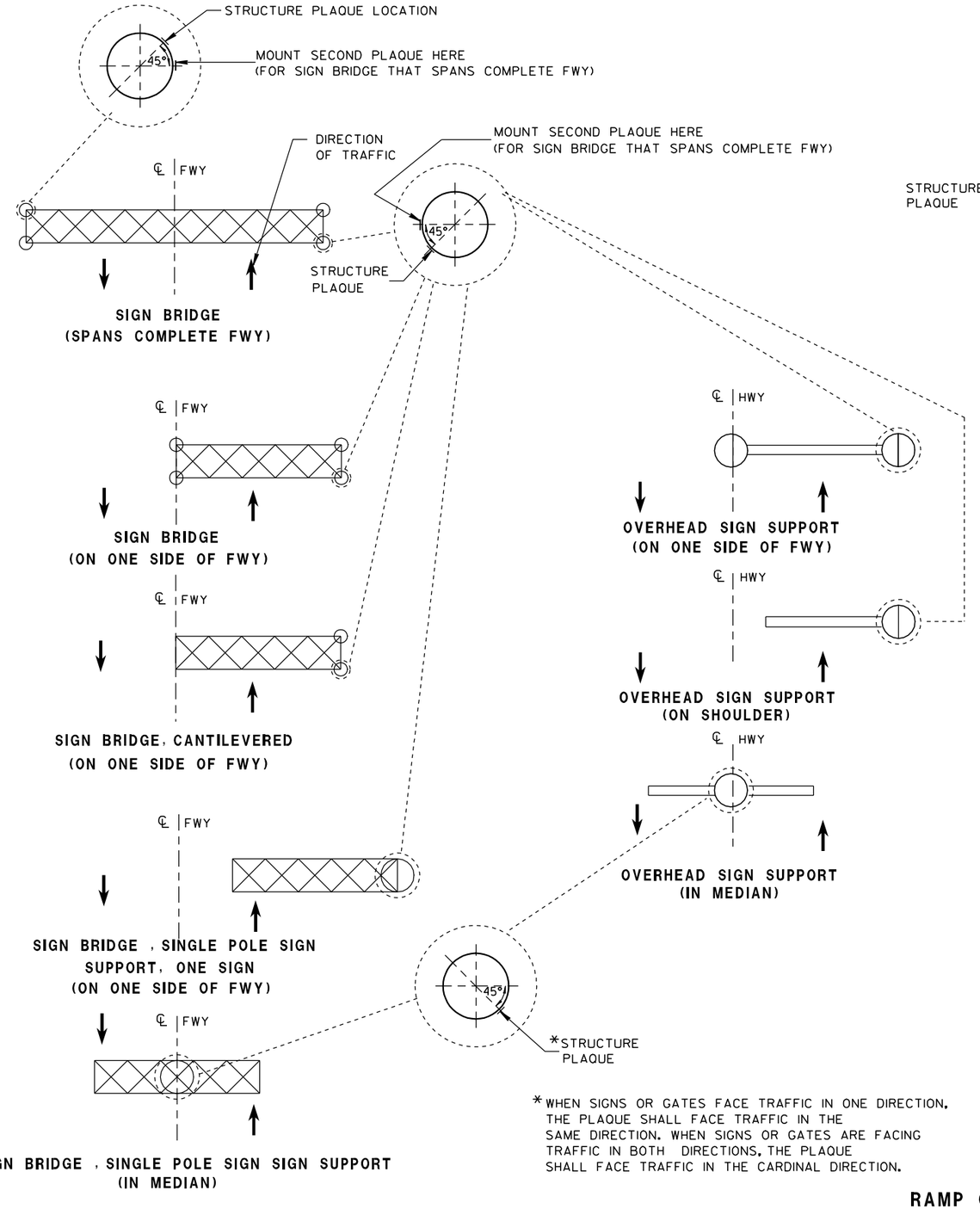
NAME PLATE (STRUCTURES)	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	
3/26/10 DATE	/S/ Scot Beck -- CHIEF STRUCTURAL DEVELOP 779 ENGINEER
FHWA	

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S.D.D. 12 A 3-10

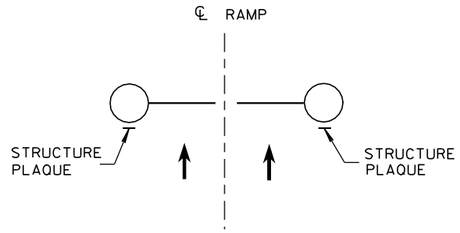
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S.D.D. 12 A 3-10

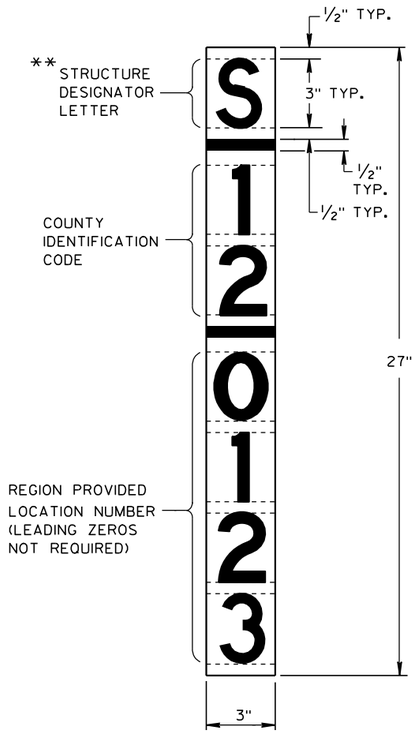


* WHEN SIGNS OR GATES FACE TRAFFIC IN ONE DIRECTION, THE PLAQUE SHALL FACE TRAFFIC IN THE SAME DIRECTION. WHEN SIGNS OR GATES ARE FACING TRAFFIC IN BOTH DIRECTIONS, THE PLAQUE SHALL FACE TRAFFIC IN THE CARDINAL DIRECTION.

LOCATION OF RAMP GATE, SIGN BRIDGE & OVERHEAD SIGN SUPPORT STRUCTURE PLAQUES



**RAMP GATE
(ACROSS FWY ON-RAMP)**



** LETTER "G" UTILIZED FOR RAMP GATES.
LETTER "S" UTILIZED FOR SIGN BRIDGES
AND OVERHEAD SIGN SUPPORTS.

RAMP GATE, SIGN BRIDGE AND OVERHEAD SIGN SUPPORT STRUCTURE PLAQUE FOR SIGN BRIDGES AND OVERHEAD SIGN SUPPORT WHICH ARE NOT STRUCTURE MOUNTED

GENERAL NOTES

DETAILS OF CONSTRUCTION AND WORKMANSHIP NOT SHOWN IN THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

PLAQUES SHALL BE INCIDENTAL TO ALL NEW INSTALLATIONS.

IF THE PROPOSED SIGN BRIDGE OR OVERHEAD SIGN SUPPORT IS REPLACING AN EXISTING SIGN BRIDGE OR OVERHEAD SIGN SUPPORT, A NEW IDENTIFICATION PLAQUE WILL BE REQUIRED.

FASTEN TOP, CENTER AND BOTTOM OF PLAQUE TO POLE OR OTHER LOCATION AS FOLLOWS:

GALVANIZED STEEL SHAFT - 3 STAINLESS STEEL POP RIVETS

A588 STEEL SHAFT - SHIM FOR DRAINAGE WITH STAINLESS WASHERS; FASTEN WITH STAINLESS SELF-TAPPING SCREWS

ALUMINUM SHAFTS - 3 ALUMINUM POP RIVETS

MOUNTING HEIGHT SHALL BE APPROXIMATELY 5.0' ABOVE CURB OR SHOULDER. ADJUST IF IT IS KNOWN THAT REQUIRED TRAFFIC SIGNS WILL OBSTRUCT.

PLAQUE MATERIALS:

BASE - SHEET ALUMINUM, 0.060" THICK.

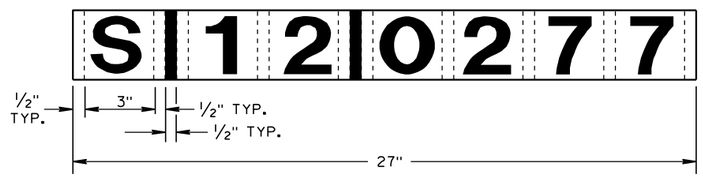
FACE - WHITE, SELF-ADHESIVE VINYL SHEETING, NON-RETROREFLECTIVE

LINES - BLACK, ½" WIDE, SELF-ADHESIVE

CHARACTERS:- BLACK, SELF ADHESIVE, SERIES "D", SIZE AS SHOWN.

FOR SIGN BRIDGES, STRUCTURE MOUNTED, THE STRUCTURE PLAQUE SHALL BE MOUNTED HORIZONTALLY AS SHOWN ON THE DRAWING. THE STRUCTURE PLAQUE SHALL BE MOUNTED HORIZONTALLY TO THE BACK OF THE SIGN, BETWEEN THE ALUMINUM EXTRUSIONS, NEAR THE TOP LEFT HAND CORNER OF THE SIGN. THE BASE MATERIAL SHALL BE OMITTED AND THE FACE ADHERED DIRECTLY TO THE ALUMINUM SURFACE. PRIOR TO ADHERING THE MATERIAL, THE ALUMINUM SURFACE SHALL BE SMOOTH, CLEAN AND DRY.

WHERE SIGN BRIDGE ILLUMINATION IS PROVIDED, THE STRUCTURE MUST ALSO HAVE A SIGN BRIDGE CIRCUIT PLAQUE AS SHOWN IN THE ELECTRICAL DETAILS.



IDENTIFICATION PLAQUE FOR SIGN BRIDGE, STRUCTURE MOUNTED

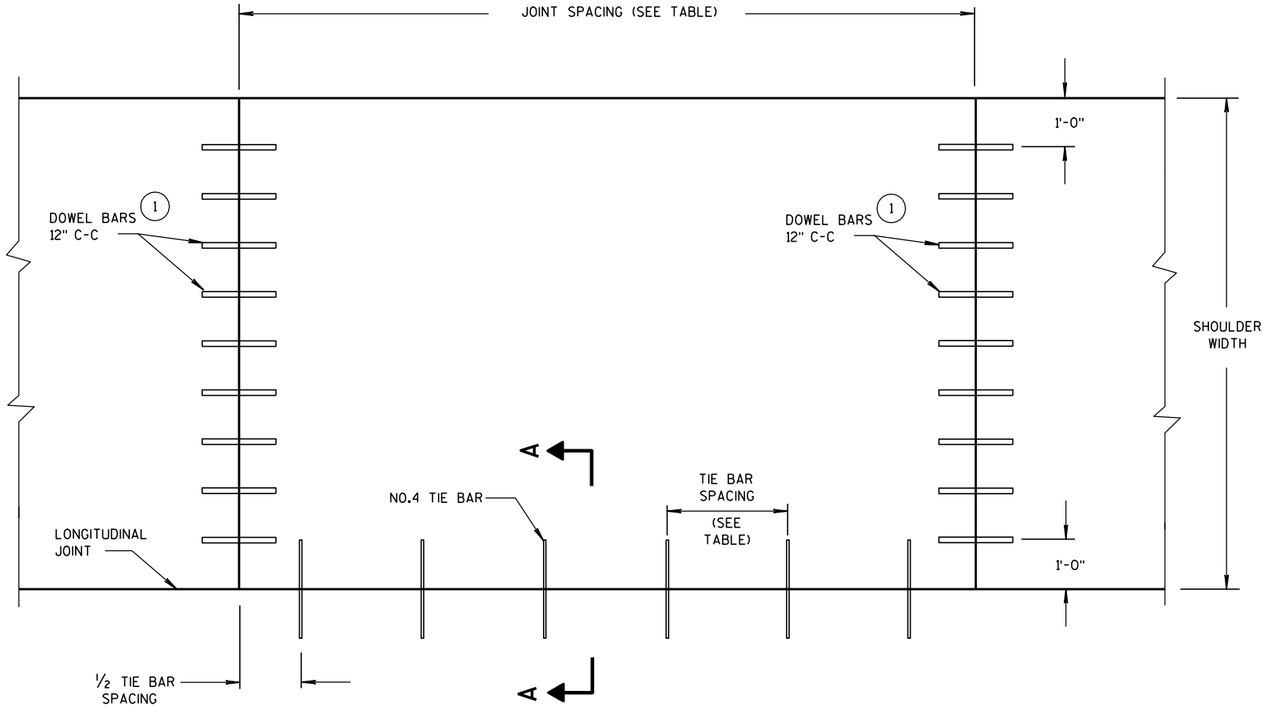
STRUCTURE IDENTIFICATION PLAQUES, RAMP GATES, SIGN BRIDGES & OVERHEAD SIGN SUPPORT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
1/9/2012 — DATE
/S/ Thomas N. Nothohm — STATE TRAFFIC ENGINEER
780 SIGN
FHWA

6

S.D.D. 12 A 4-2



PLAN VIEW

CONCRETE PAVEMENT SHOULDER

PAVEMENT TYPE OF TRAFFIC LANES	TIE BAR SPACING	SHOULDER JOINT SPACING
NON-REINFORCED	30"	MATCH JOINT SPACING OF ADJACENT TRAFFIC LANE
CONTINUOUSLY REINFORCED	30"	15' FOR 6' TO 10' WIDE SHOULDERS
CONTINUOUSLY REINFORCED	36"	12' FOR 3' WIDE SHOULDERS

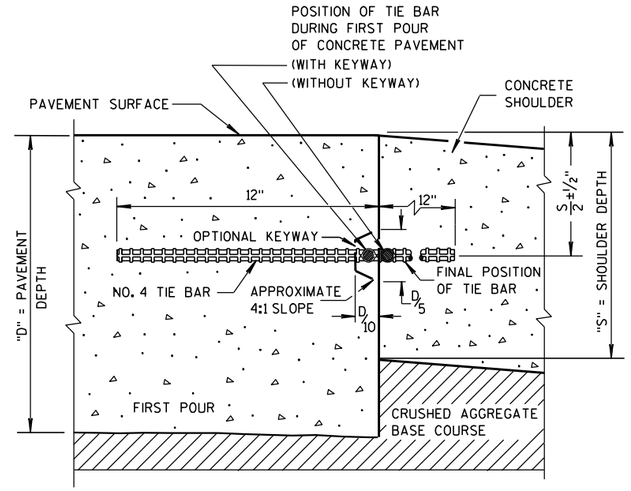
GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

TRANSVERSE JOINT DETAILS ARE SHOWN ELSEWHERE IN THE PLAN.

FINISH THE SHOULDER PAVEMENT CONFORMING TO SUBSECTION 415.3.8 OF THE STANDARD SPECIFICATIONS.

TIE BARS SHALL CONFORM TO SUBSECTION 505.2.4 OF THE STANDARD SPECIFICATIONS.



SECTION A-A

LONGITUDINAL CONSTRUCTION JOINT

(1) **PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE**

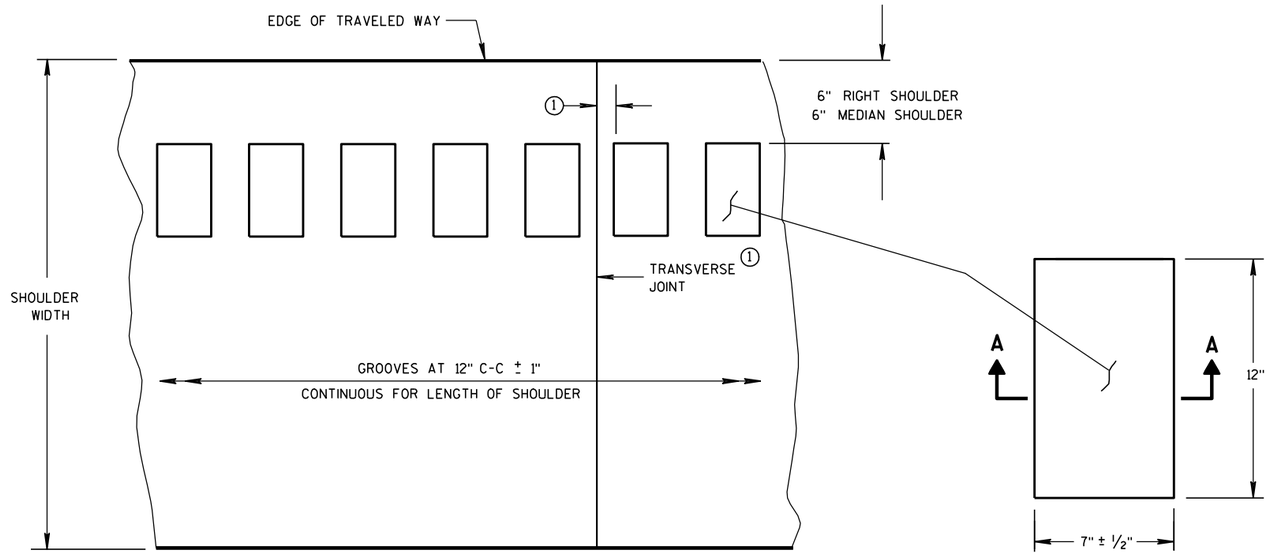
PAVEMENT DEPTH (D)	DOWEL BAR DIAMETER	CONTRACTION JOINT SPACING
5 ½", 6", 6 ½"	NONE	12'
7", 7 ½"	1"	14'
8", 8 ½"	1 ¼"	15'
9", 9 ½"	1 ¼"	15'
10" & ABOVE	1 ½"	15'

FOR DOWELED CONCRETE SHOULDERS WITH TRAPEZOIDAL CROSS SECTIONS, CHOSE THE APPROPRIATE DOWEL BAR DIAMETER BASED ON THE SMALLER PAVEMENT DEPTH (LIKELY THE OUTSIDE EDGE OF THE SHOULDER). IF USING BASKETS, USE BASKETS FOR THE AVERAGE THICKNESS OF THE CROSS SECTION.

CONCRETE PAVEMENT SHOULDERS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8/15/2011 — DATE
/S/ Deb Bischoff — PAVEMENT POLICY & D 781 — INEER
FHWA



PLAN VIEW
SHOULDER WITH GROOVES

PLAN VIEW
(SINGLE GROOVE)

PLACEMENT DETAIL FOR MILLED RUMBLE STRIP

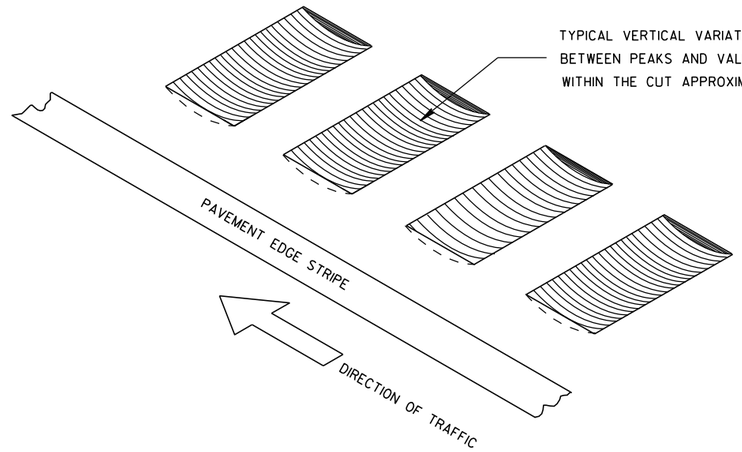
GENERAL NOTES

DETAILS OF CONSTRUCTION SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

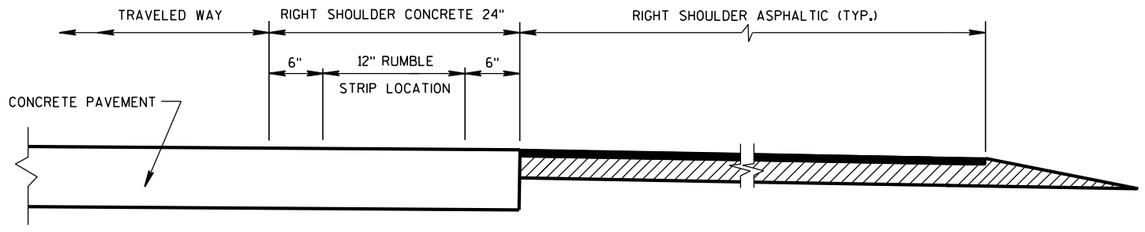
RUMBLE STRIPS ON EXPRESSWAYS

DO NOT INSTALL RUMBLE STRIPS ACROSS SIDE ROAD INTERSECTIONS, COMMERCIAL DRIVEWAYS OR ADJACENT TO RIGHT TURN LANES, LEFT TURN LANES OR TURN LANE TAPERS. THE ATTACHED STANDARD DETAIL DRAWING SHOWS THE LOCATION OF THE RUMBLE STRIPS AT INTERCHANGE AREAS.

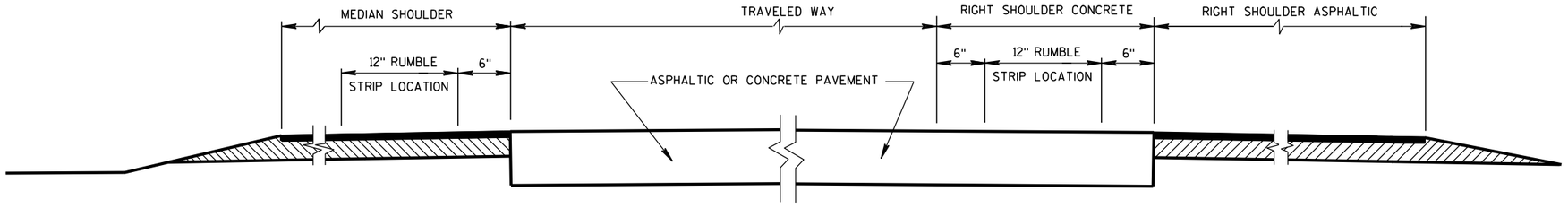
(1) CONCRETE PAVEMENT - RUMBLE STRIPS SHALL BE A MINIMUM OF 6" AWAY FROM TRANSVERSE JOINTS.



ISOMETRIC



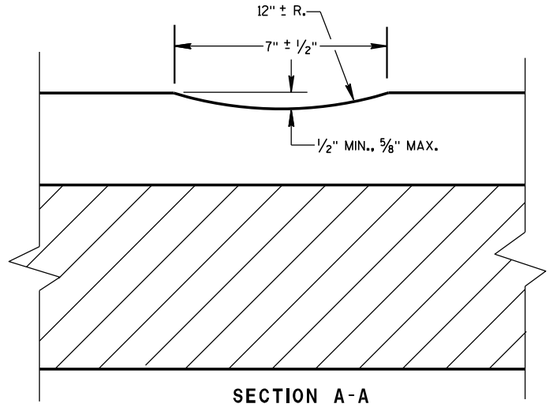
SECTION VIEW
CONCRETE PAVEMENT EXTENDS INTO RIGHT SHOULDER)



SECTION VIEW

TYPICAL LOCATIONS OF SHOULDER RUMBLE STRIPS IN RURAL DIVIDED HIGHWAYS

(ONE ROADWAY IS SHOWN)



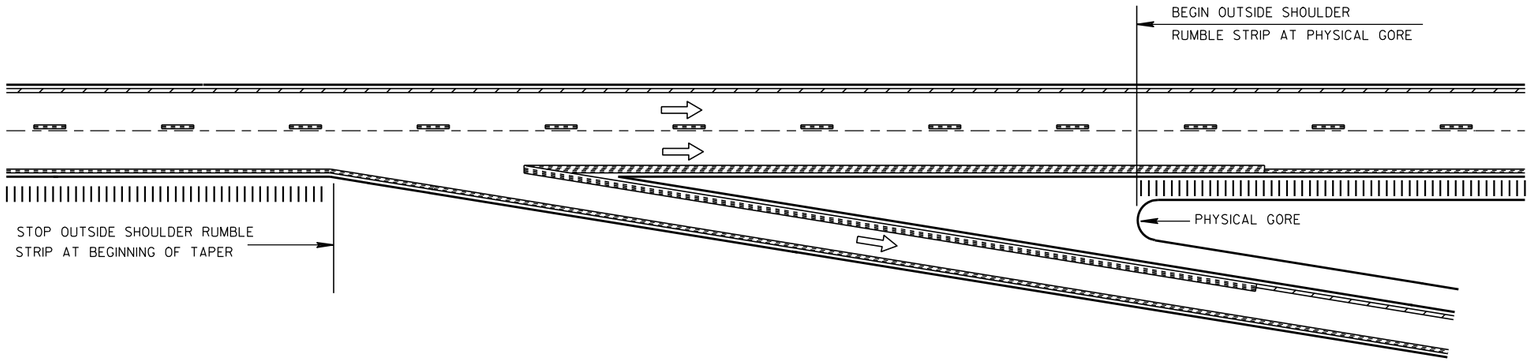
SECTION A-A

SHOULDER RUMBLE STRIP, MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

S.D.D. 13 A 5-4a



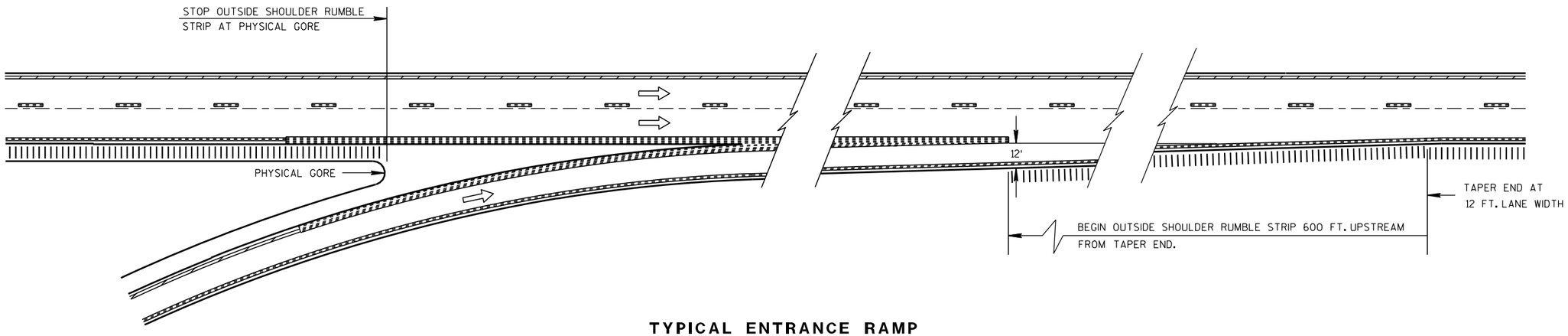
TYPICAL EXIT RAMP

NOTE:
ARROW SYMBOL (⇨)
SHOWS DIRECTION OF TRAVEL

NOTES:

NO RUMBLE STRIP ON EXIT, DIRECTIONAL, OR ENTRANCE RAMPS, EXCEPT NEAR THE ENTRANCE TAPER END AS SHOWN.

PAVEMENT MARKING DETAILS AND SPECIFICATIONS ARE PROVIDED ELSEWHERE IN THE CONTRACT.



TYPICAL ENTRANCE RAMP

RAMP AND GORE RUMBLE STRIP LOCATIONS

6

6

S.D.D. 13 A 5-4b

S.D.D. 13 A 5-4b

SHOULDER RUMBLE STRIP, MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

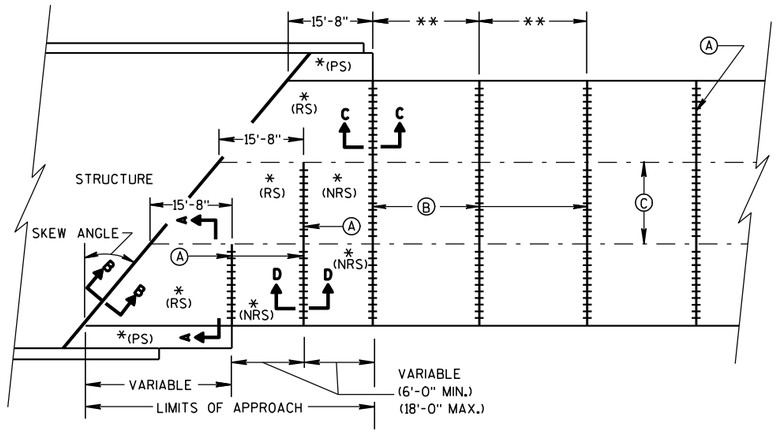
APPROVED

8/17/2011
DATE

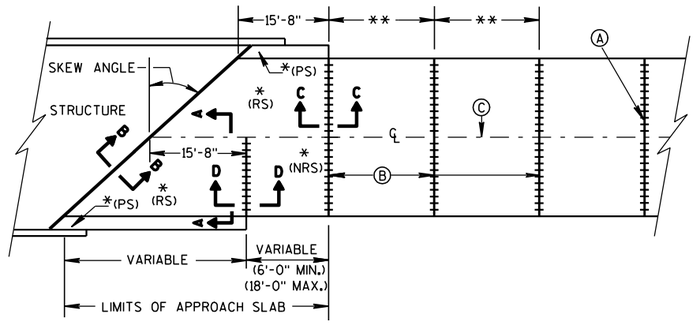
/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER

783

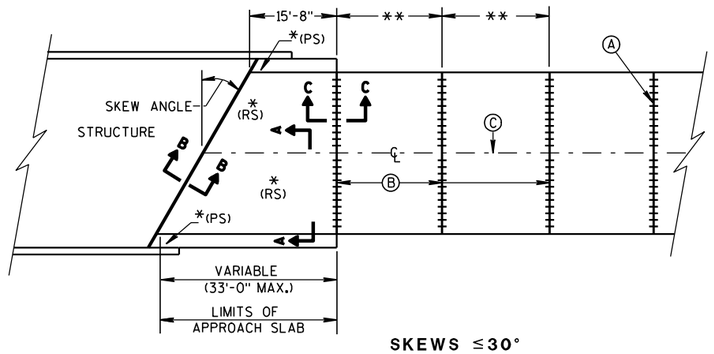
FHWA



SKEWED APPROACH
(PAVEMENT MORE THAN 2 LANES)



SKEWS >30°
(PAVEMENT WIDTH ≤30')



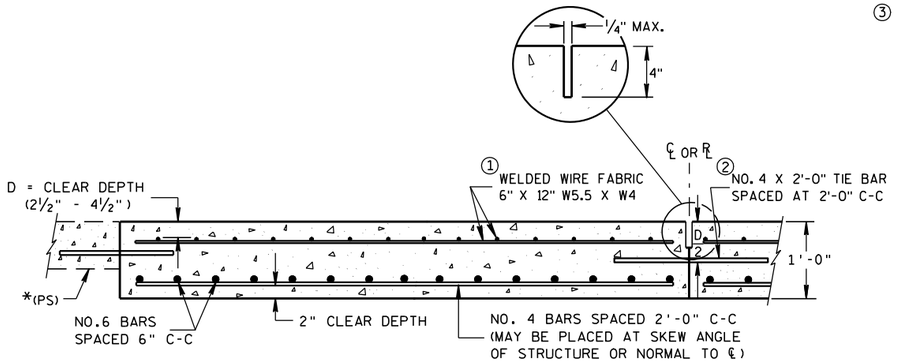
SKEWS ≤30°
(PAVEMENT WIDTH ≤30')

APPROACH SLAB AND ADJACENT PAVEMENT

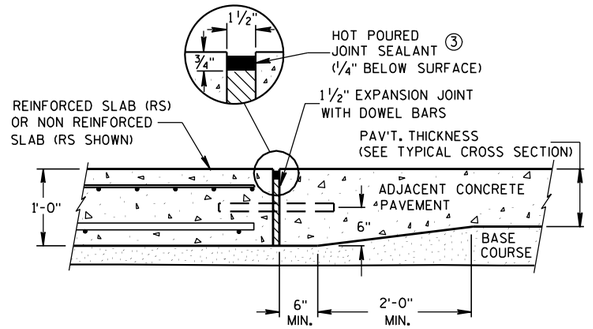
*(RS) = REINFORCED CONCRETE SLAB
*(PS) = PAVED CONCRETE SHOULDER: CONCRETE PAVEMENT, OR CONCRETE SURFACE DRAIN
(SEE DETAILS ELSEWHERE IN THE PLAN)
*(NRS) = NON-REINFORCED CONCRETE SLAB

**STANDARD TRANSVERSE JOINT SPACING
(SEE SDD 13C4, SDD 13C11, & SDD 13C13)

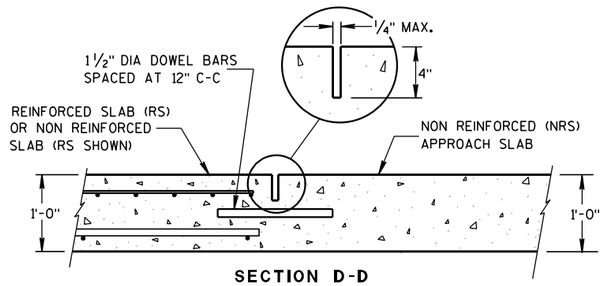
Ⓐ STANDARD CONTRACTION JOINT NORMAL TO ℄ OR ℄
Ⓑ 1½" EXPANSION JOINT WITH DOWEL BARS NORMAL TO ℄ OR ℄
Ⓒ STANDARD LONGITUDINAL JOINT AND TIE BARS.



SECTION A-A
REINFORCEMENT POSITIONING DETAIL



SECTION C-C
TRANSITION DETAIL
APPROACH SLAB TO ADJACENT PAVEMENT



SECTION D-D
CONTRACTION JOINT

GENERAL NOTES

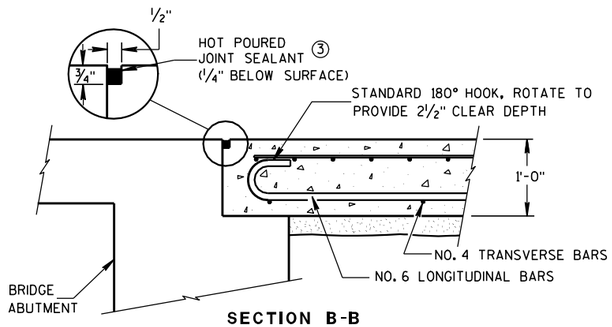
APPROACH SLABS ABUTTING AN HMA PAVEMENT OVER BASE COURSE DO NOT NEED TO BE DOWELED.

THE CONTRACTOR MAY SPLICE NO. 6 BARS IN THE APPROACH SLAB FOR SKEWED STRUCTURES ONLY. STAGGER SPLICES WITH A MAXIMUM OF ONE SPLICE PER BAR. THE LENGTH OF LAP IS 20 INCHES.

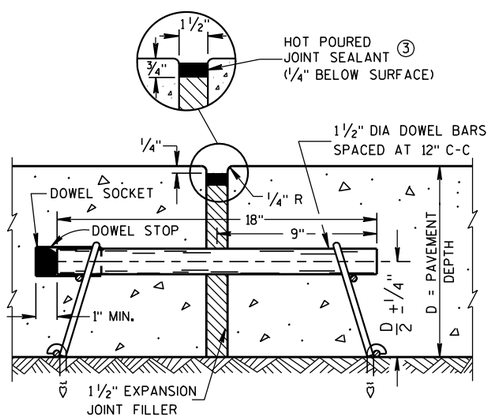
① THE CONTRACTOR MAY USE NO. 4 BARS SPACED AT 2'-0" C-C IN BOTH THE LONGITUDINAL AND TRANSVERSE DIRECTIONS FOR TOP REINFORCEMENT AS AN ALTERNATIVE TO THE WELDED WIRE FABRIC.

② THE CONTRACTOR MAY OMIT TIE BARS BETWEEN REINFORCED SLABS WHERE SLAB REINFORCEMENT BARS EXTEND ACROSS THE CENTERLINE OR REFERENCE LINE.

③ USE A JOINT SEALANT MEETING THE REQUIREMENTS OF ASTM D6690.



SECTION B-B
BEND DETAIL
BOTTOM REINFORCEMENT

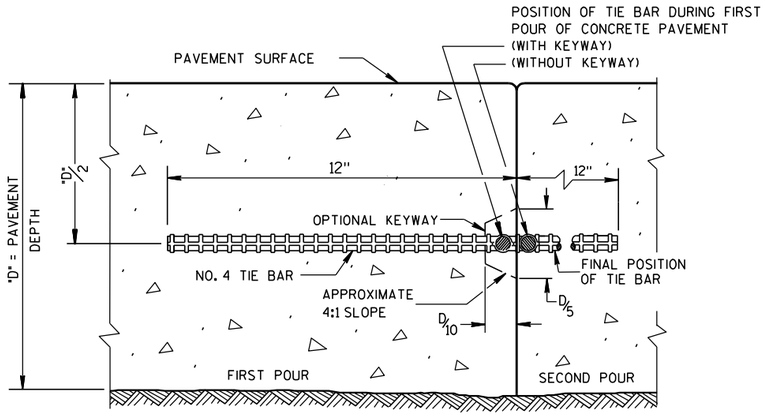


EXPANSION JOINT

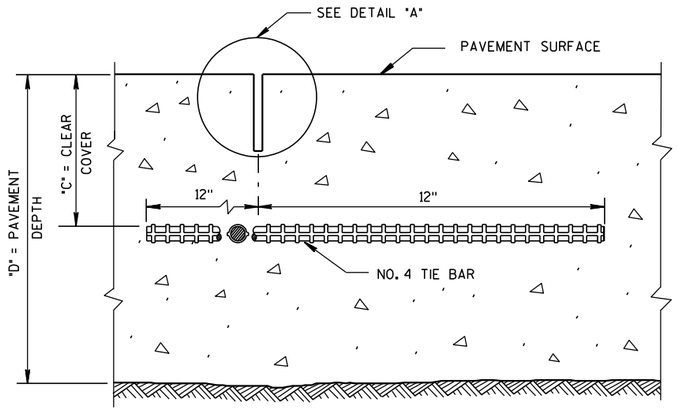
CONCRETE PAVEMENT APPROACH SLAB

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
12/11/2009
DATE
/S/ Deb Bischoff
PAVEMENT POLICY & DE 784 NEER
FHWA



CONSTRUCTION JOINT



SAWED JOINT

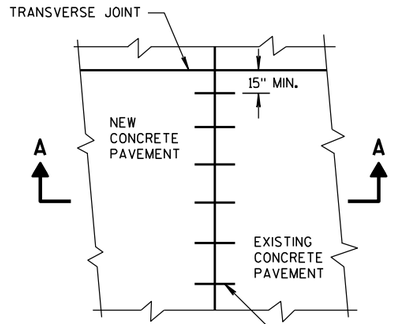
GENERAL NOTES

DO NOT SEAL OR FILL LONGITUDINAL JOINTS.

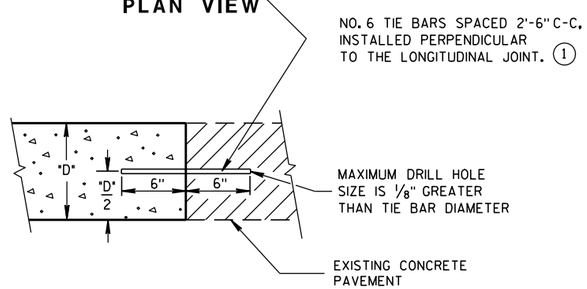
CREATE A LONGITUDINAL JOINT FOR PAVEMENT WIDTHS GREATER THAN 15 FEET.

CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

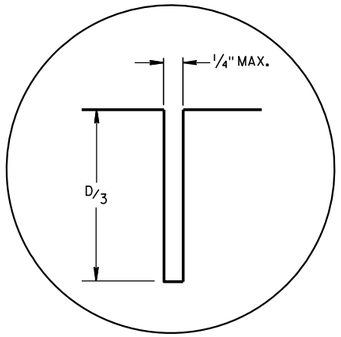
(1) ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.



PLAN VIEW

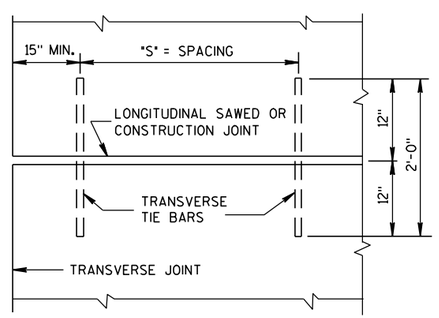


SECTION A-A
LONGITUDINAL CONSTRUCTION JOINT TIE BARS ANCHORED INTO EXISTING PAVEMENT



DETAIL "A"

PAVEMENT DEPTH "D"	CLEAR COVER "C"	MAXIMUM TIE BAR SPACING "S"	
		PAVEMENT WIDTH	
		24' OR 26'	≥ 30'
6, 6 1/2"	3"±1/2"	48"	42"
7, 7 1/2"	3 1/4"±1"	45"	36"
8, 8 1/2"	3 3/4"±1"	39"	30"
9, 9 1/2"	4 1/4"±1"	33"	27"
10, 10 1/2"	4 3/4"±1"	30"	24"
11, 11 1/2"	5 1/4"±1"	27"	21"
12"	5 3/4"±1"	24"	21"



PLAN VIEW
SHOWING LOCATION OF TIE BARS

CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

10-5-2010
DATE

/S/ Deb Bischoff
PAVEMENT POLICY & DI 785 INEER

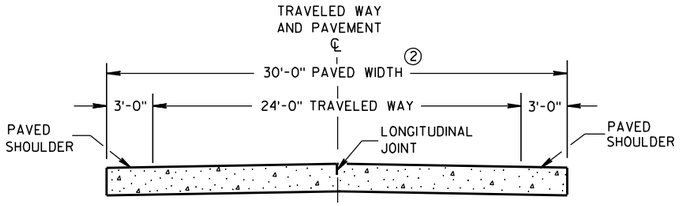
FHWA

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S.D.D. 13 C 1-15

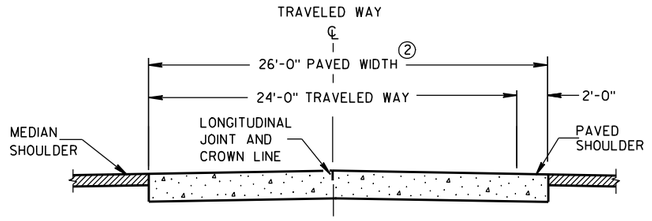
6

S.D.D. 13 C 1-15

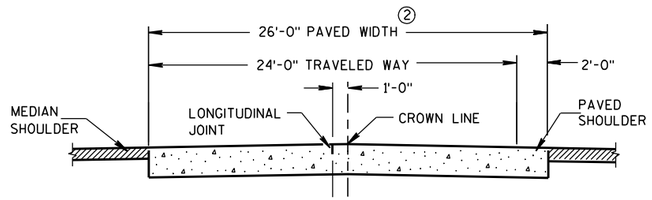


SECTION A-A ①

TWO-LANE TWO-WAY HIGHWAY



SECTION B-B



ALTERNATIVE SECTION B-B

①

DIVIDED HIGHWAY

GENERAL NOTES

CONTRACTION JOINTS

CONSTRUCT CONTRACTION JOINTS NORMAL TO THE CENTERLINE. SHOW THE LOCATION OF CONTRACTION JOINTS THROUGH INTERSECTIONS ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

DO NOT SEAL OR FILL CONTRACTION JOINTS.

INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

FOR PAVEMENT SLABS OF VARYING WIDTHS, CENTER THE DOWEL ASSEMBLY ACROSS THE LANES. LOCATE THE INNER AND OUTER MOST DOWEL BARS SO THAT THE CENTER OF THE BARS ARE A MINIMUM OF 6 INCHES AND A MAXIMUM OF 12 INCHES FROM THE LONGITUDINAL JOINT AND THE EDGE OF PAVEMENT.

CONSTRUCTION JOINTS

LOCATE CONSTRUCTION JOINTS A MINIMUM OF 4 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO CONTRACTION JOINTS.

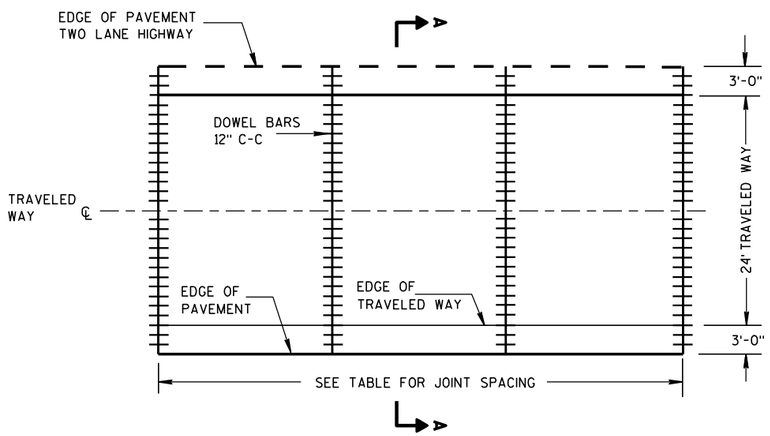
THE CONTRACTOR MAY INSERT TIE BARS THROUGH THE HEADER BOARD AFTER THE CONCRETE HAS BEEN PLACED.

① REFER TO TYPICAL CROSS SECTIONS FOR ADDITIONAL DETAILS.

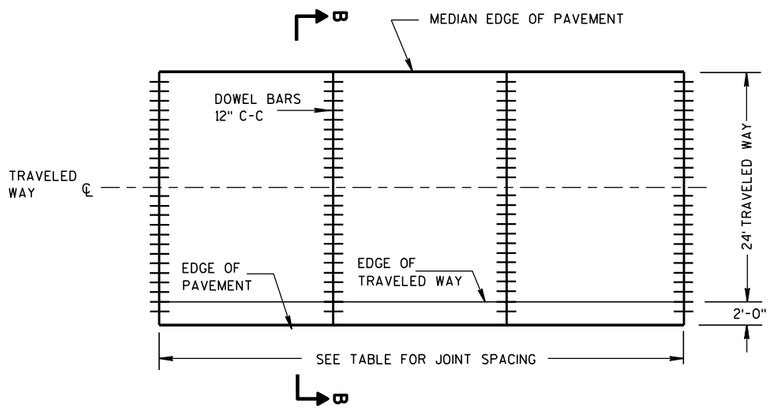
② MEASURE THE ENTIRE PAVED WIDTH INCLUDING THE PORTION(S) LABELED PAVED SHOULDER AS CONCRETE PAVEMENT.

PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	DOWEL BAR DIAMETER	CONTRACTION JOINT SPACING
5 ½", 6", 6 ½"	NONE	12'
7", 7 ½"	1"	14'
8", 8 ½"	1 ¼"	15'
9", 9 ½"	1 ¼"	15'
10" & ABOVE	1 ½"	15'



CONTRACTION JOINT LAYOUT FOR TWO-LANE TWO-WAY HIGHWAY



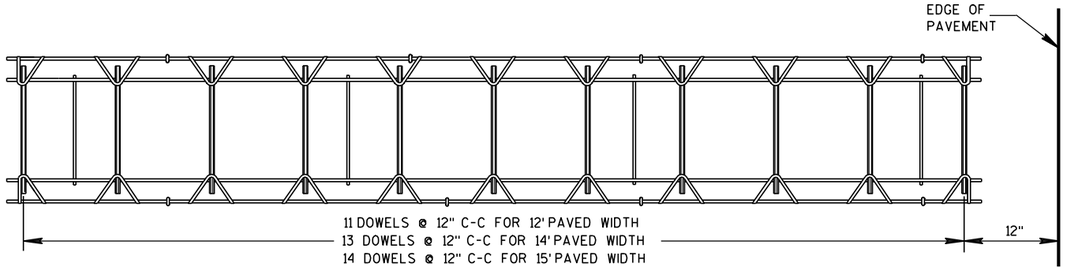
CONTRACTION JOINT LAYOUT FOR DIVIDED HIGHWAY

RURAL DOWELED CONCRETE PAVEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

S.D.D. 13 C 11-10a



PLAN VIEW

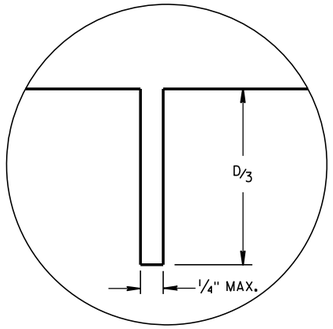


⑤

SIDE VIEW

(NORMAL TO CENTERLINE)

CONTRACTION JOINT DOWEL ASSEMBLY ①



JOINT DETAIL

GENERAL NOTES

① THE ENGINEER MAY APPROVE THE USE OF ALTERNATIVE DESIGNS OF THE DOWEL ASSEMBLY. THE CONTRACTOR MAY USE MECHANICAL DOWEL BAR INSERTERS INSTEAD OF DOWEL ASSEMBLIES.

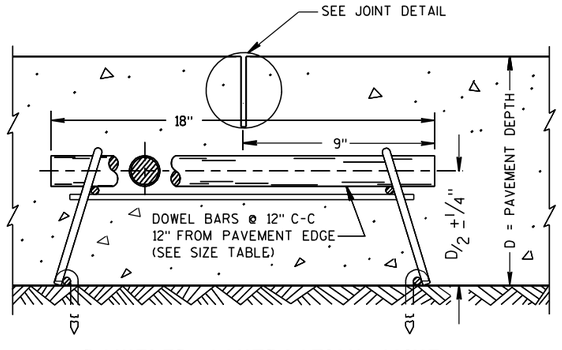
② ANCHOR DOWEL BARS INTO DRILLED HOLES WITH AN EPOXY.

③ APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.

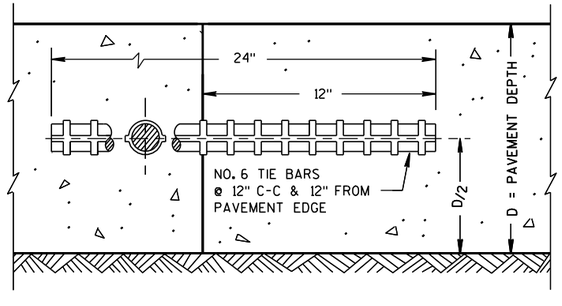
④ SPACE DOWEL BARS INSTALLED BY DRILLING 1'-3" ON CENTER. CENTER THE GROUPING OF DOWEL BARS INSIDE THE SLAB BASED ON ALL THE FOLLOWING SITUATIONS:

BETWEEN THE EDGES OF PAVEMENTS WITHOUT LONGITUDINAL JOINTS OR BETWEEN THE EDGE OF PAVEMENT AND NEAREST LONGITUDINAL JOINT OR BETWEEN TWO ADJACENT LONGITUDINAL JOINTS.

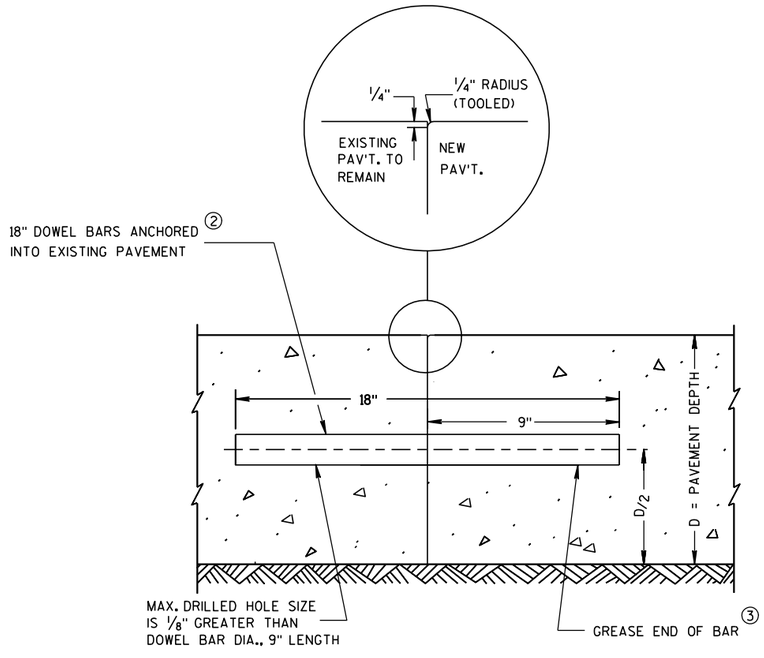
⑤ SECURE BASKETS WITH ANCHORS TO HOLD DOWEL BARS IN THE CORRECT POSITION AND ALIGNMENT. TYPE, LOCATION, NUMBER AND LENGTH OF ANCHORS ARE DEPENDENT UPON FIELD CONDITIONS.



DOWELED CONTRACTION JOINT



CONSTRUCTION JOINT



TRANSVERSE CONTRACTION JOINTS ABUTTING EXISTING PAVEMENT

④ **DOWEL BAR DETAIL**

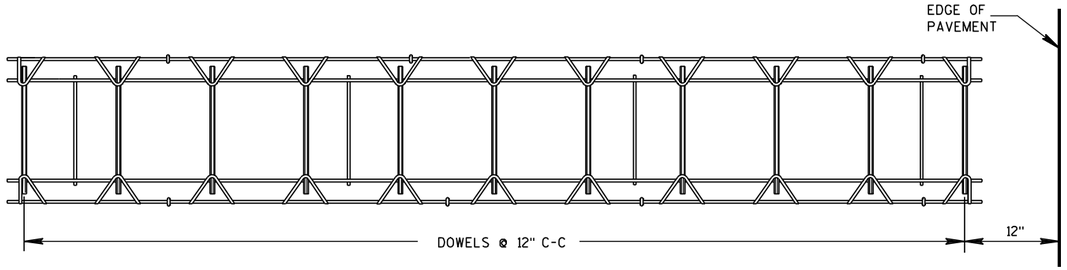
RIRAL DOWELED CONCRETE PAVEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
12/11/09
DATE
/S/ Deb Bischoff
PAVEMENT POLICY & DESIGNER
FHWA

6

S.D.D. 13 C 11-10b

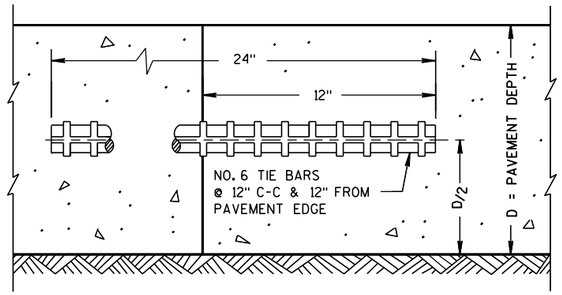


PLAN VIEW



SIDE VIEW

CONTRACTION JOINT DOWEL ASSEMBLY ①



TRANSVERSE CONSTRUCTION JOINT

GENERAL NOTES

CONTRACTION JOINTS

CONSTRUCT CONTRACTION JOINTS NORMAL TO THE CENTERLINE. SHOW THE LOCATION OF CONTRACTION JOINTS THROUGH INTERSECTIONS ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

DO NOT SEAL OR FILL CONTRACTION JOINTS.

INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

FOR PAVEMENT SLABS OF VARYING WIDTHS, CENTER THE DOWEL ASSEMBLY ACROSS THE LANES. LOCATE THE INNER AND OUTER MOST DOWEL BARS SO THAT THE CENTER OF THE BARS ARE A MINIMUM OF 6 INCHES AND A MAXIMUM OF 12 INCHES FROM THE LONGITUDINAL JOINT AND THE EDGE OF PAVEMENT.

CONSTRUCTION JOINTS

LOCATE CONSTRUCTION JOINTS A MINIMUM OF 4 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO CONTRACTION JOINTS.

THE CONTRACTOR MAY INSERT TIE BARS THROUGH THE HEADER BOARD AFTER THE CONCRETE HAS BEEN PLACED.

① THE ENGINEER MAY APPROVE THE USE OF ALTERNATIVE DESIGNS OF THE DOWEL ASSEMBLY. THE CONTRACTOR MAY USE MECHANICAL DOWEL BAR INSERTERS INSTEAD OF DOWEL ASSEMBLIES.

② ANCHOR DOWEL BARS INTO DRILLED HOLES WITH AN EPOXY.

③ APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.

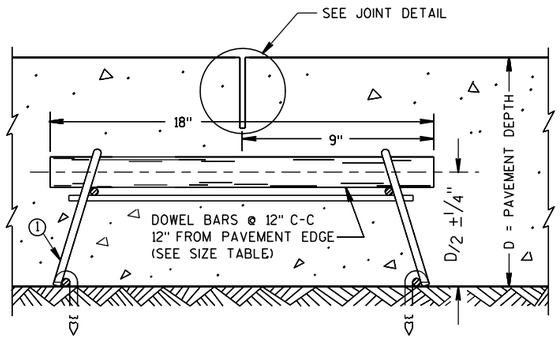
④ SPACE DOWEL BARS INSTALLED BY DRILLING 1'-3" ON CENTER. CENTER THE GROUPING OF DOWEL BARS INSIDE THE SLAB BASED ON ALL THE FOLLOWING SITUATIONS:

BETWEEN THE EDGES OF PAVEMENTS WITHOUT LONGITUDINAL JOINTS OR BETWEEN THE EDGE OF PAVEMENT AND NEAREST LONGITUDINAL JOINT OR BETWEEN TWO ADJACENT LONGITUDINAL JOINTS.

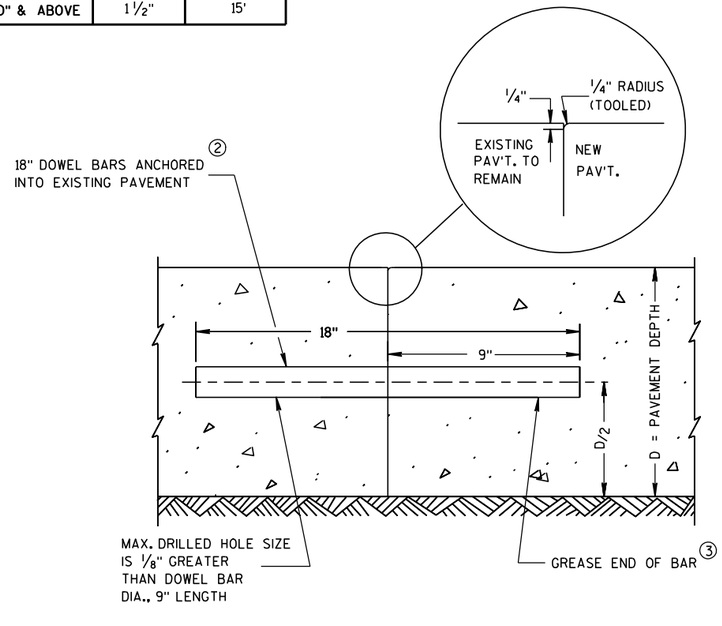
⑤ SECURE BASKETS WITH ANCHORS TO HOLD DOWEL BARS IN THE CORRECT POSITION AND ALIGNMENT. TYPE, LOCATION, NUMBER AND LENGTH OF ANCHORS ARE DEPENDENT UPON FIELD CONDITIONS.

PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	DOWEL BAR DIAMETER	CONTRACTION JOINT SPACING
5 1/2", 6", 6 1/2"	NONE	12'
7", 7 1/2"	1"	14'
8", 8 1/2"	1 1/4"	15'
9", 9 1/2"	1 1/4"	15'
10" & ABOVE	1 1/2"	15'

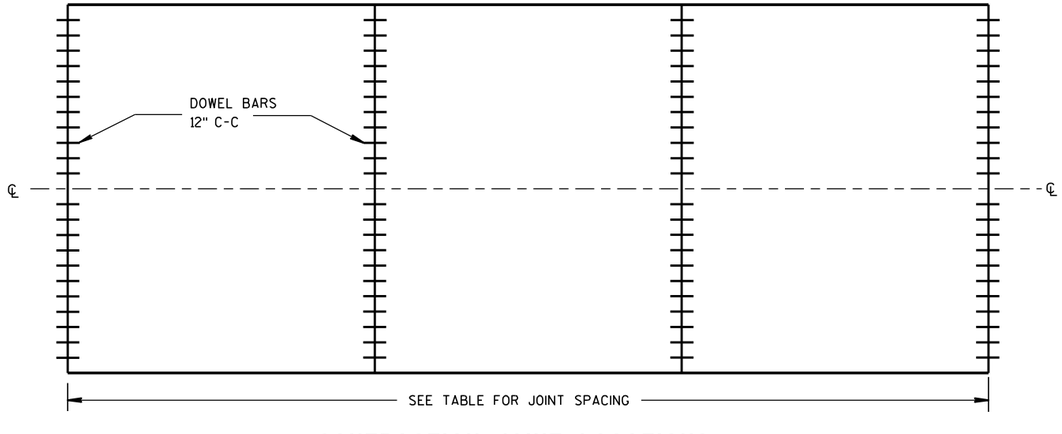


DOWELED CONTRACTION JOINT

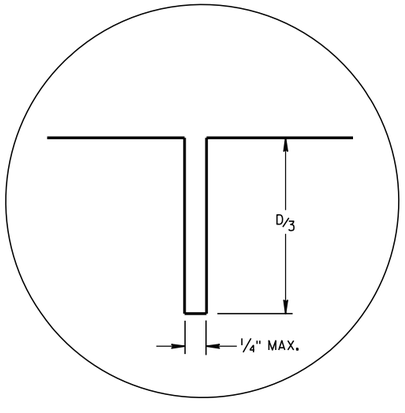


TRANSVERSE CONTRACTION JOINTS ABUTTING EXISTING PAVEMENT

④ DOWEL BAR DETAIL



CONTRACTION JOINT LOCATIONS



JOINT DETAIL

URBAN DOWELED CONCRETE PAVEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

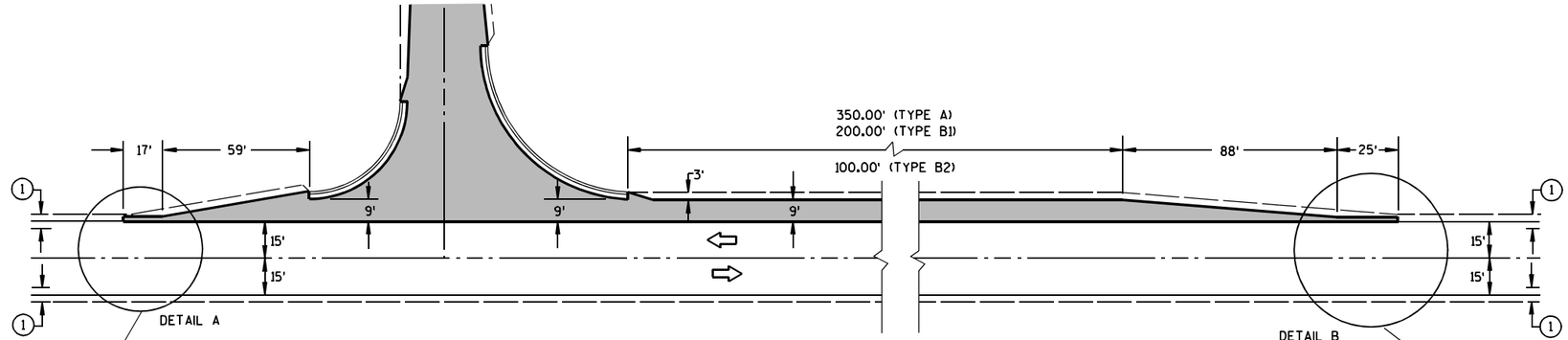
APPROVED
12/11/2009 DATE
/S/ Deb Bischoff PAVEMENT POLICY & DE
788
NEER
FHWA

6

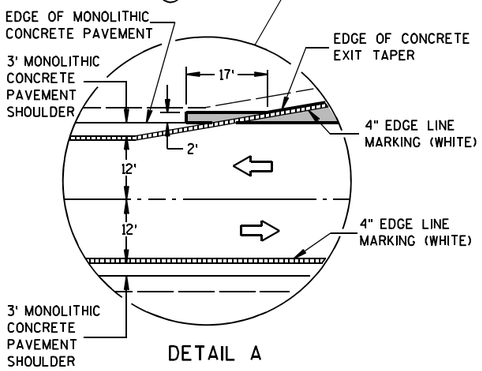
S.D.D. 13 C 13-7

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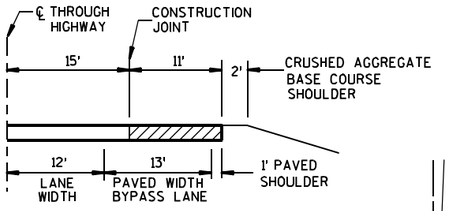
S.D.D. 13 C 13-7



RIGHT TURN LANE AND EXIT TAPER

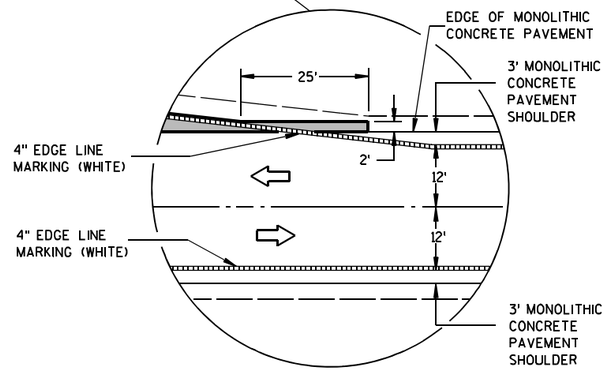


DETAIL A



SECTION A-A

(SHOWING BYPASS LANE AND SHOULDER)



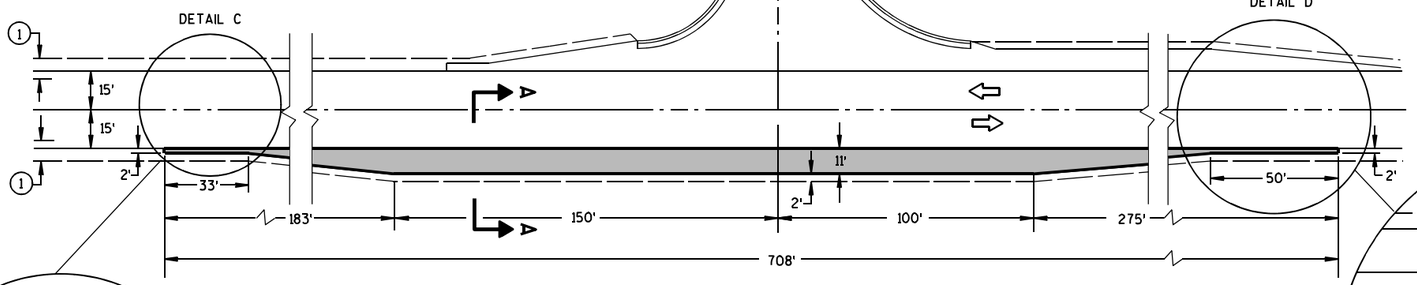
DETAIL B

GENERAL NOTES

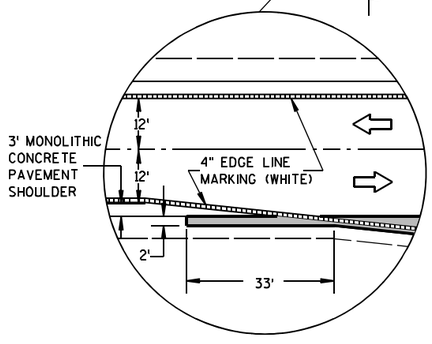
CONTINUE SAW CUT CONTRACTION JOINT ACROSS TURN LANE, EXIT TAPER AND PASSING LANE.

PAVEMENT MARKING DETAILS AND SPECIFICATIONS ARE PROVIDED ELSEWHERE IN THE CONTRACT.

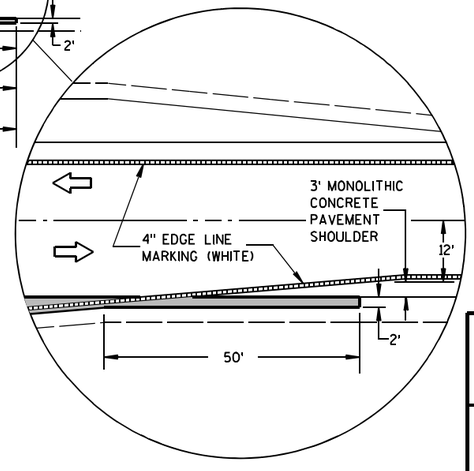
SHOULDER WIDTH TABLE (1)		
DESIGN CLASS	PAVED	TOTAL
A1	3 ft.	6 ft.
C3, L4	3 ft.	6 ft.
A2	3 ft.	10 ft.
C4, L5	3 ft.	8 ft.



TWO LANE UNDIVIDED HIGHWAY TEE INTERSECTION BYPASS LANE



DETAIL C



DETAIL D

CONCRETE PAVEMENT JOINT DETAILS

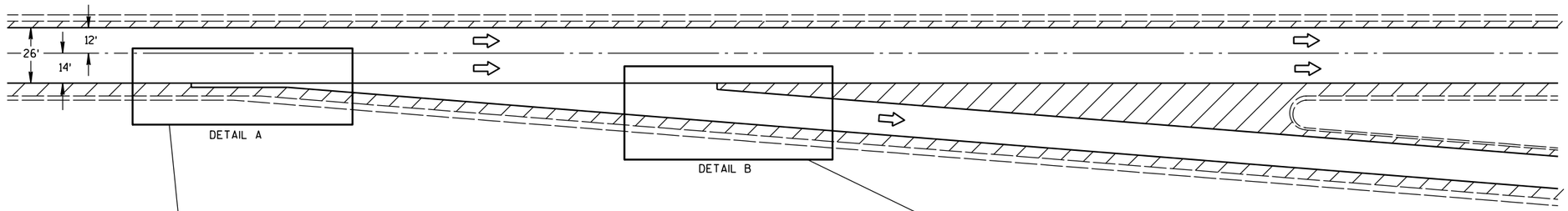
CONCRETE JOINT DETAIL FOR TEE INTERSECTION BYPASS LANE AND RIGHT TURN LANE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

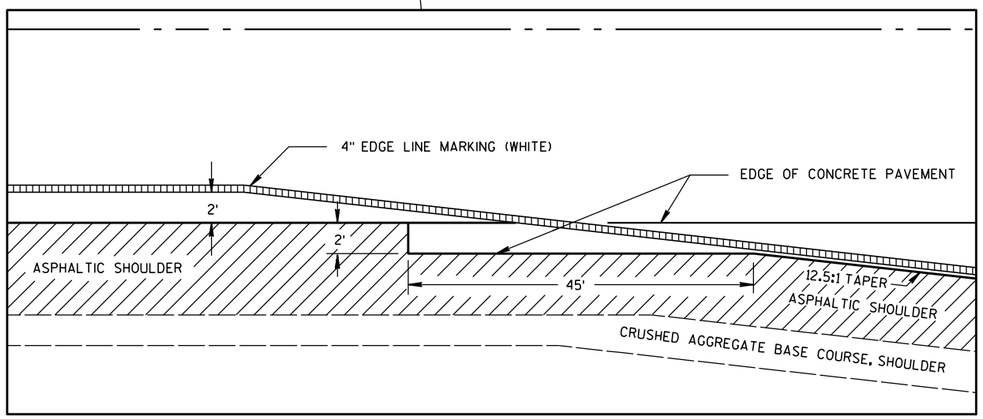
APPROVED
5/27/1998 DATE
/S/ Rory L. Rhin[illegible] CHIEF ROADWAY DEVELOP[illegible]INEER
FHWA

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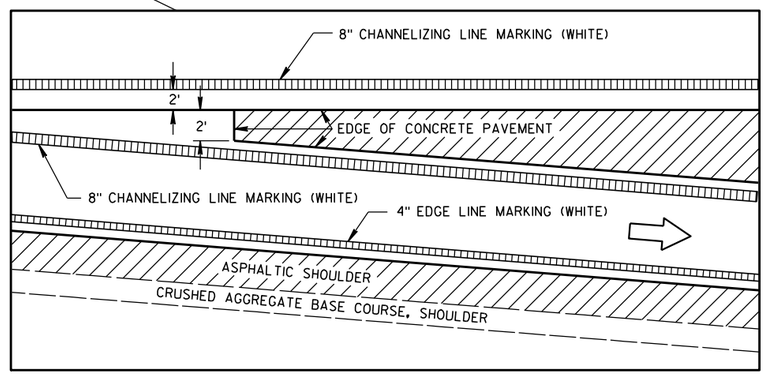
S.D.D. 13 C 16-1



EXIT RAMP DETAIL



DETAIL A



DETAIL B

CONCRETE JOINT PAVING DETAILS

GENERAL NOTES

PAVEMENT MARKING DETAILS AND SPECIFICATIONS ARE PROVIDED ELSEWHERE IN THE CONTRACT.

SEE SDD 13 A 4-4c OR SDD 13 A 5-1b FOR RAMP AND GORE RUMBLE STRIP LOCATION.

CONCRETE JOINT DETAIL FOR EXIT RAMP TERMINI

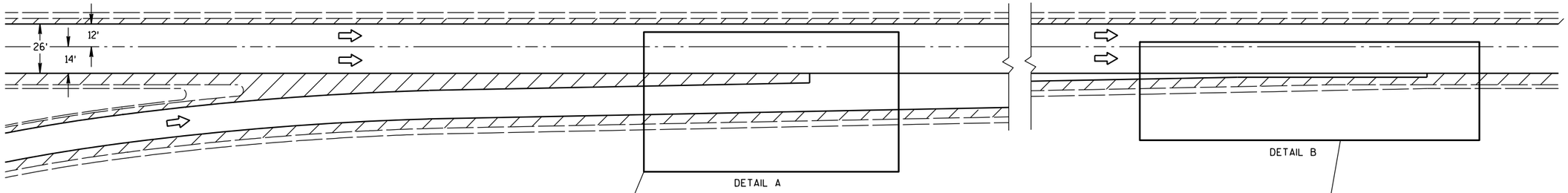
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

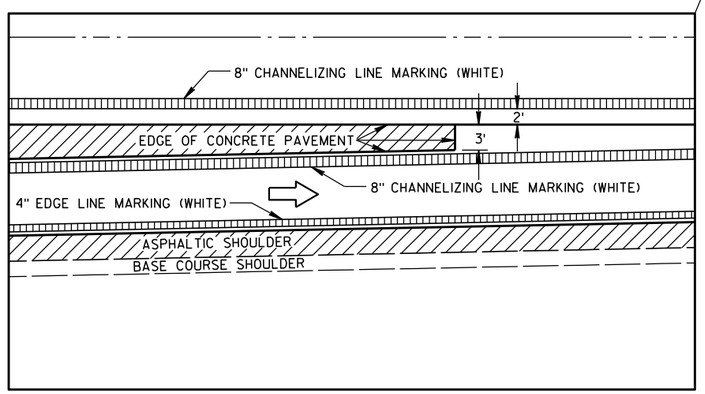
S.D.D. 13 C 17-1a

6

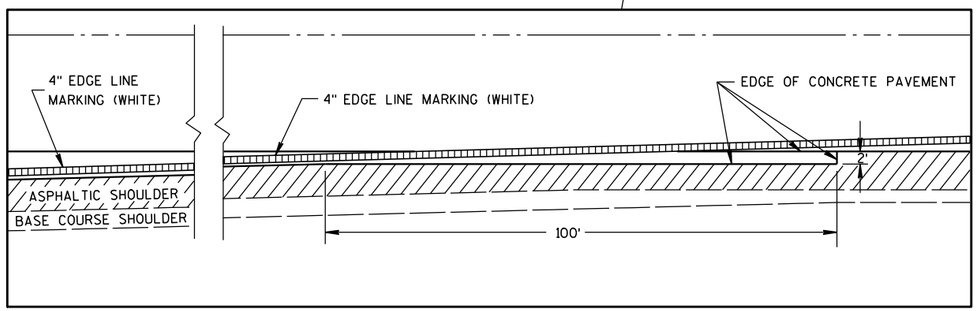
S.D.D. 13 C 17-1a



ENTRANCE RAMP DETAIL



DETAIL A



DETAIL B

CONCRETE JOINT PAVING DETAILS

GENERAL NOTES

PAVEMENT MARKING DETAILS AND SPECIFICATIONS ARE PROVIDED ELSEWHERE IN THE CONTRACT.

SEE SDD 13 A 4-4c OR SDD 13 A 5-1b FOR RAMP AND GORE RUMBLE STRIP LOCATION.

CONCRETE JOINT DETAIL FOR ENTRANCE RAMP TERMINI

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

5/27/98
DATE

/S/ Rory L. Rhinesmith
CHIEF ROADWAY DEVELOPMENT ENGINEER

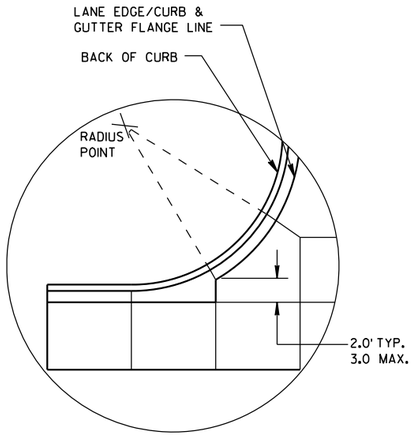
FHWA

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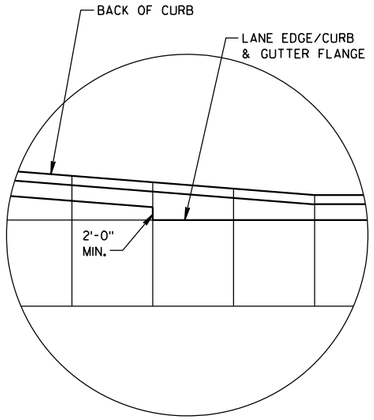
S.D.D. 13 C 17-1b

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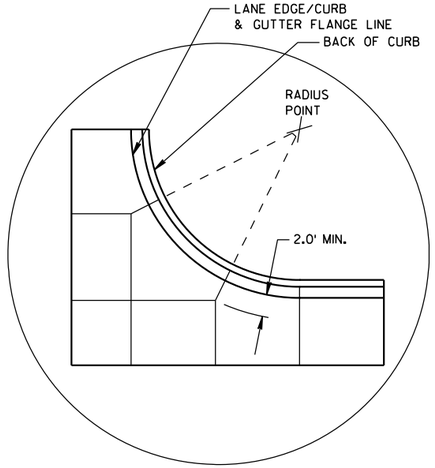
S.D.D. 13 C 17-1b



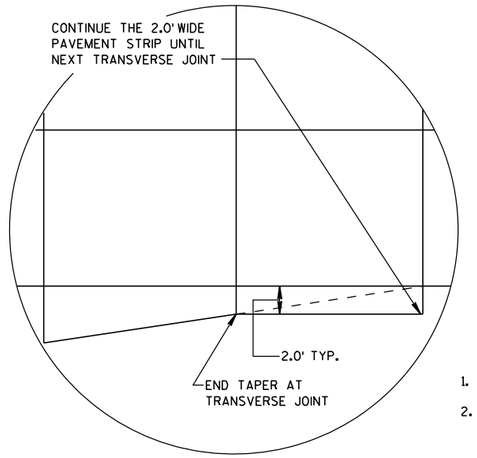
DETAIL "A"



DETAIL "B"



DETAIL "C"



DETAIL "D"

GENERAL NOTES

THE PRIMARY ROADWAY CONTROLS THE TRANSVERSE JOINT PATTERN.

ALIGN NEW JOINTS WITH EXISTING JOINTS OR CRACKS.

CONSTRUCT TRANSVERSE JOINTS PERPENDICULAR TO THE ROADWAY.

ADJUST TRANSVERSE JOINTS TO ALIGN WITH UTILITY FIXTURES (E.G. MANHOLES AND INLETS) IN THE PAVEMENT STRUCTURE WHEN POSSIBLE. WATER VALVES DO NOT REQUIRE JOINT ADJUSTMENT.

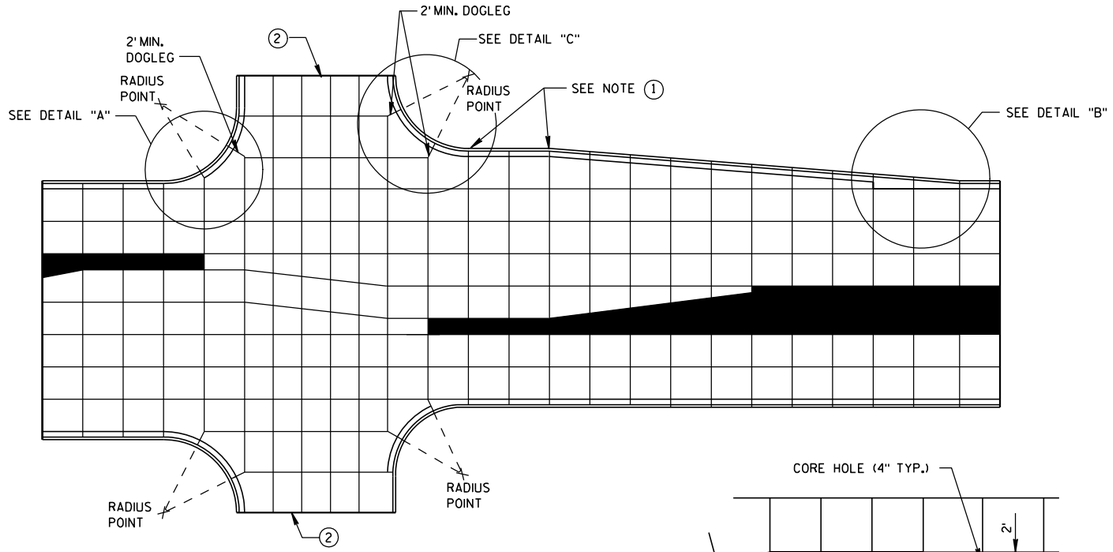
AVOID SLABS LESS THAN 2 FEET WIDE OR GREATER THAN 15 FEET WIDE.

SEE TABLE FOR TRANSVERSE JOINT SPACING. JOINT SPACING SPECIFIED IS MAXIMUM AND ACTUAL SPACING CAN BE ADJUSTED TO ACCOMMODATE INTERSECTIONS.

AVOID ANGLES LESS THAN 60° BY DOGLEGGING JOINTS THROUGH CURVE RADIUS POINTS. USE 90° ANGLES WHEN POSSIBLE.

CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

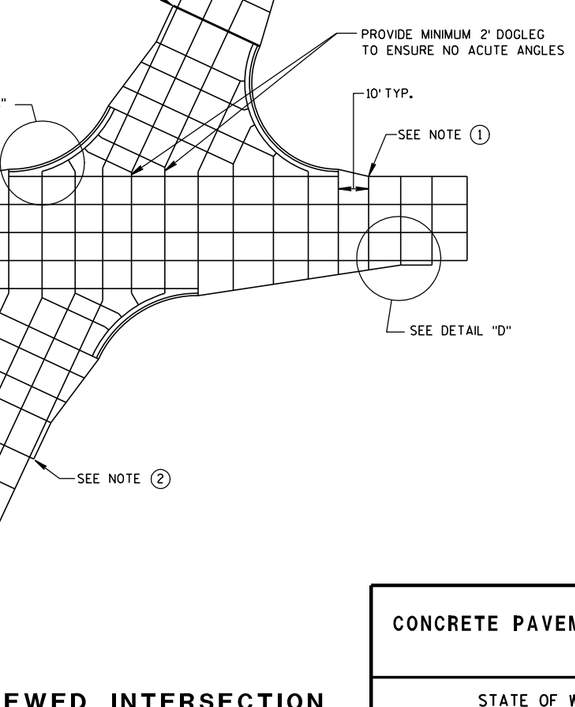
1. PROVIDE TRANSVERSE JOINTS AT ALL PAVEMENT WIDTH CHANGES.
2. CONSTRUCT DOWELED EXPANSION JOINT ON THE SIDE ROAD OF AN INTERSECTION IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH. ALIGN EXPANSION JOINT WITH EDGE OF RADIUS.
3. THE ENGINEER MAY APPROVE SLIGHT VARIATIONS FROM THESE JOINTING DETAILS.



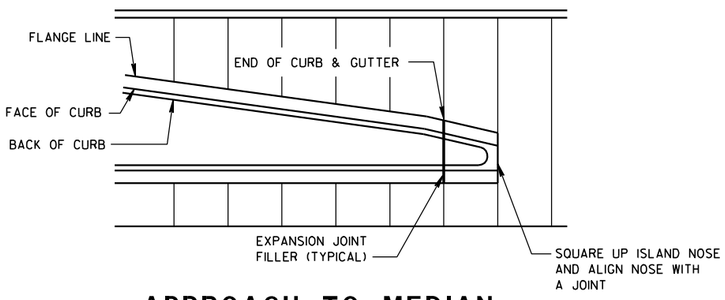
STANDARD INTERSECTION

PAVEMENT DEPTH AND JOINT SPACING TABLE

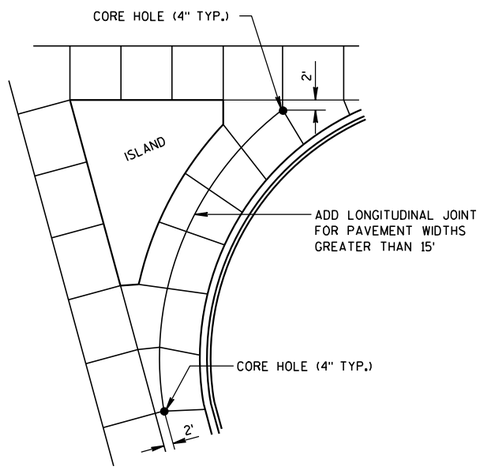
PAVEMENT DEPTH (D)	CONTRACTION JOINT SPACING
6", 6½"	12'
7", 7½"	14'
8" & ABOVE	15'



SKEWED INTERSECTION



APPROACH TO MEDIAN



LARGE RIGHT TURN

CONCRETE PAVEMENT JOINTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

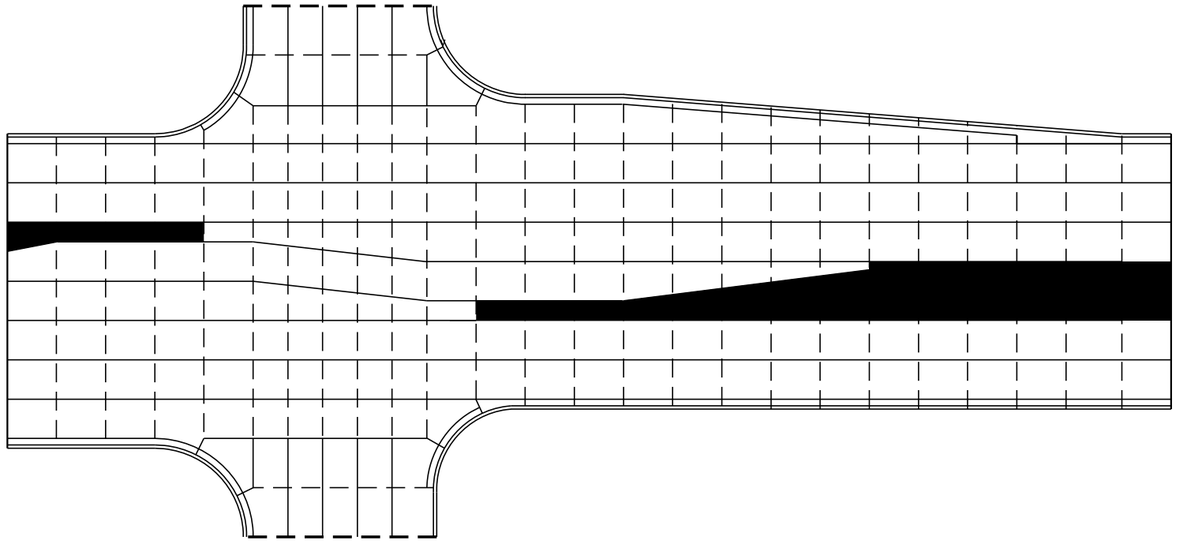
6
S.D.D. 13 C 18-1a

LEGEND

POTENTIAL DOWELED EXPANSION JOINT

DOWELED JOINT

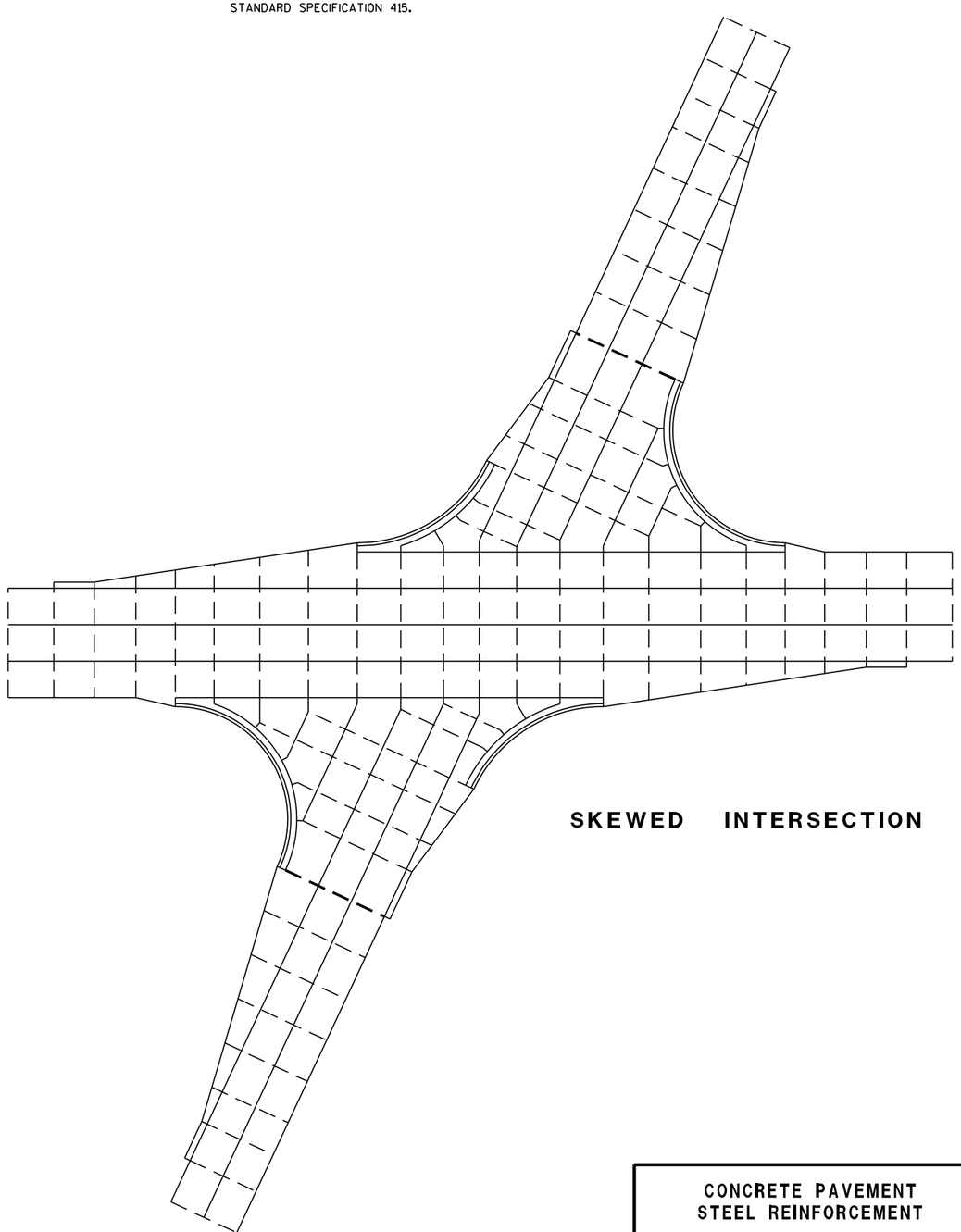
TIED JOINT



STANDARD INTERSECTION

GENERAL NOTES

USE AN EXPANSION JOINT FILLER MEETING THE REQUIREMENTS OF STANDARD SPECIFICATION 415.



SKEWED INTERSECTION

6

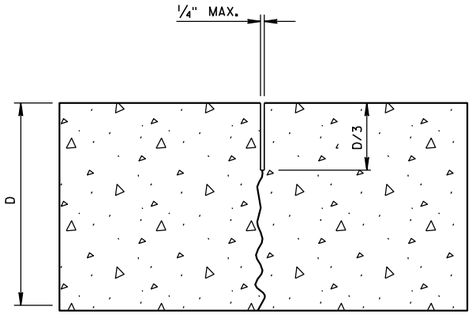
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S.D.D. 13 C 18-1b

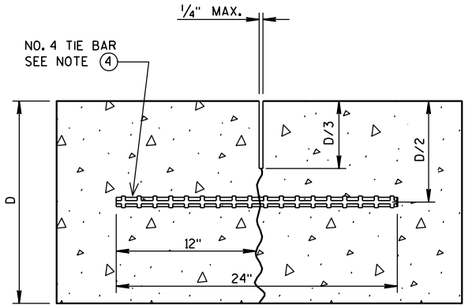
S.D.D. 13 C 18-1b

CONCRETE PAVEMENT
STEEL REINFORCEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



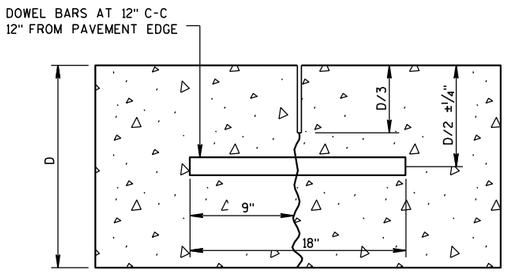
UNDOWELED-TRANSVERSE



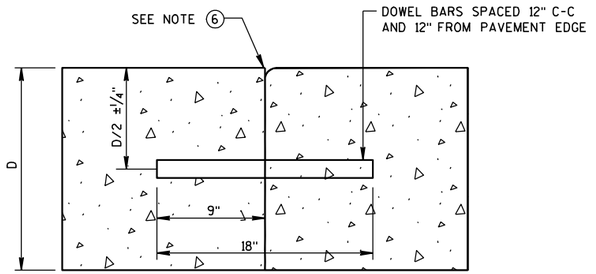
TIED LONGITUDINAL

GENERAL NOTES

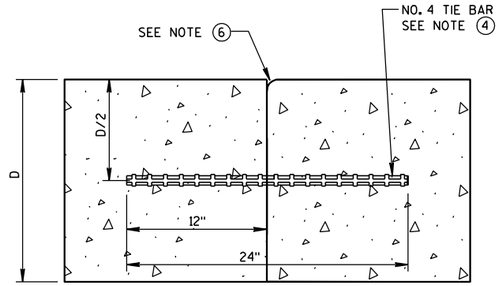
1. USE DOWELED EXPANSION JOINTS ON SIDE ROADS AT INTERSECTIONS (TO ISOLATE THE SIDE ROAD FROM THE THROUGH STREET) IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH.
2. SPACE CONTRACTION JOINTS IN ACCORDANCE WITH 13C4, 13C11 OR 13C13.
3. LOCATE CONSTRUCTION JOINTS A MINIMUM OF 4 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO THE CONTRACTION JOINTS.
4. SPACE TIE BARS AT LONGITUDINAL CONSTRUCTION OR CONTRACTION JOINTS IN ACCORDANCE WITH SDD 13C1.
5. CONSTRUCTION JOINTS CAN BE FORMED OR SAWED.
6. IF JOINT IS FORMED, PROVIDE A 1/4-INCH RADIUS.



DOWELED-TRANSVERSE



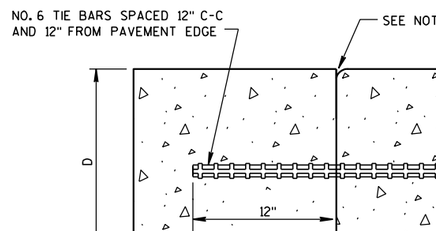
DOWELED TRANSVERSE



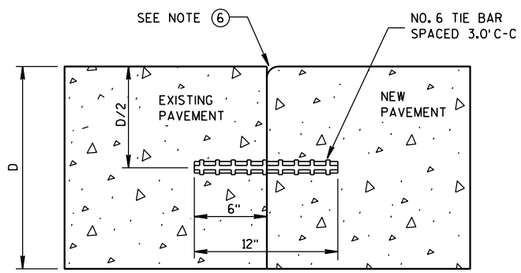
TIED LONGITUDINAL

CONTRACTION JOINTS

SEE NOTE (2)



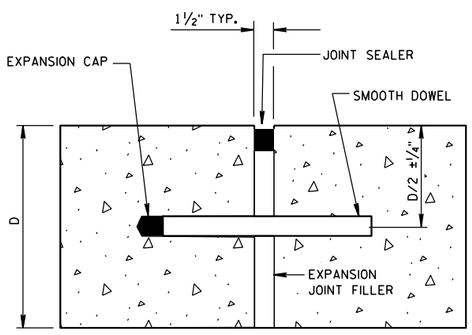
TIED TRANSVERSE
SEE NOTE (3)



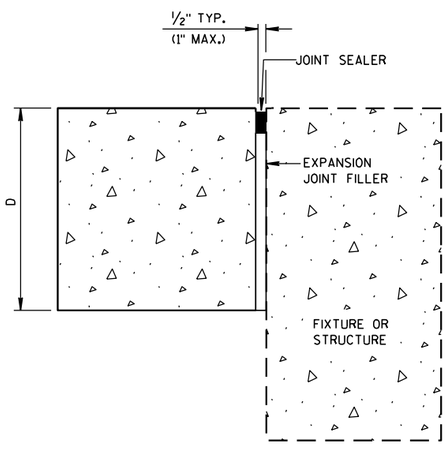
TIED LONGITUDINAL TO EXISTING

CONSTRUCTION JOINTS

SEE NOTE (5)



DOWELED-TRANSVERSE
SEE NOTE (1)



UNTIED-LONGITUDINAL

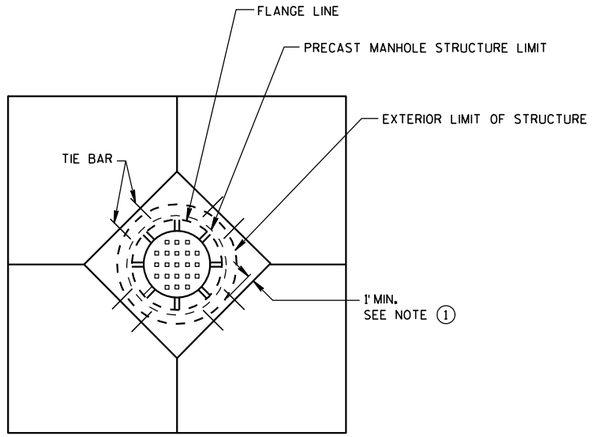
EXPANSION JOINTS

CONCRETE PAVEMENT
JOINT TYPES

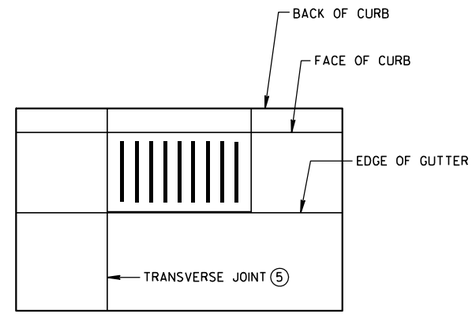
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

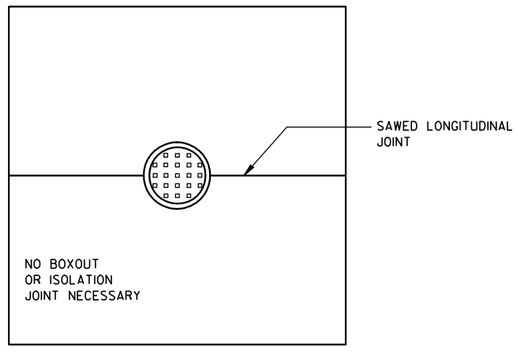
S.D.D. 13 C 18-1c



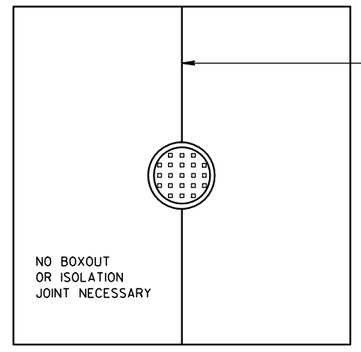
DIAGONAL MANHOLE BOXOUT FOR CONSTRUCTION JOINTS



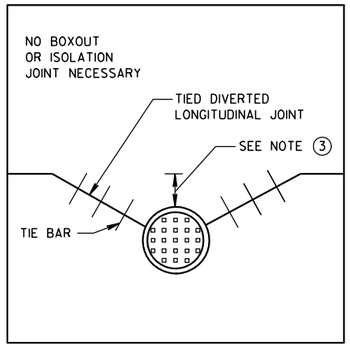
INLET WITH TRANSVERSE JOINT



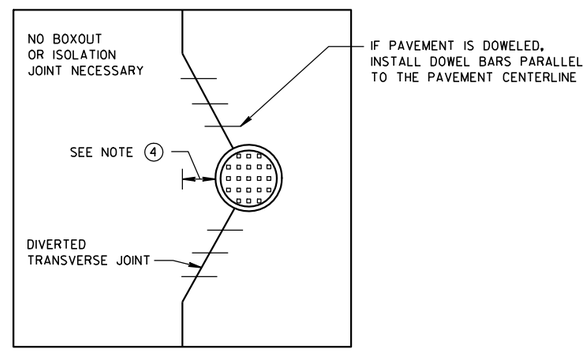
MANHOLE WITH LONGITUDINAL JOINT



MANHOLE WITH TRANSVERSE JOINT



MANHOLE WITH DIVERTED LONGITUDINAL CONTRACTION JOINT



MANHOLE WITH DIVERTED TRANSVERSE CONTRACTION JOINT

GENERAL NOTES

1. USE BOXOUTS WHEN UTILITY STRUCTURE IS IN THE PATH OF CONSTRUCTION JOINTS. PROVIDE A 1 FOOT MINIMUM CLEARANCE BETWEEN THE EXTERIOR LIMIT OF THE STRUCTURE TO THE DIAMOND BOXOUT.
2. ADJUST TRANSVERSE JOINT TO INTERSECT MANHOLE IF POSSIBLE.
3. IF DISTANCE BETWEEN THE LONGITUDINAL JOINT AND THE EDGE OF MANHOLE IS GREATER THAN 2 FEET, DO NOT DIVERT JOINT AND SAW LONGITUDINAL JOINT AS NORMAL. IF DISTANCE IS 2 FEET OR LESS, DIVERT LONGITUDINAL JOINT AT A 2:1 TAPER RATE TO THE CENTER OF THE MANHOLE.
4. IF DISTANCE FROM THE EDGE OF MANHOLE TO THE NEAREST TRANSVERSE JOINT IS GREATER THAN 4 FEET, REDIRECT JOINT TO INTERSECT MANHOLE. IF DISTANCE IS 4 FEET OR LESS, PLACE REBAR REINFORCEMENT AROUND MANHOLE.
5. ALIGN TRANSVERSE JOINT WITH ONE EDGE OF INLET WHEN PRACTICAL.

CONCRETE PAVEMENT JOINTING AT UTILITY FIXTURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10-5-2010 — DATE
/S/ Deb Bischoff — PAVEMENT POLICY & D 795 ENGINEER
FHWA

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S.D.D. 13 C 18-1d

LEGEND

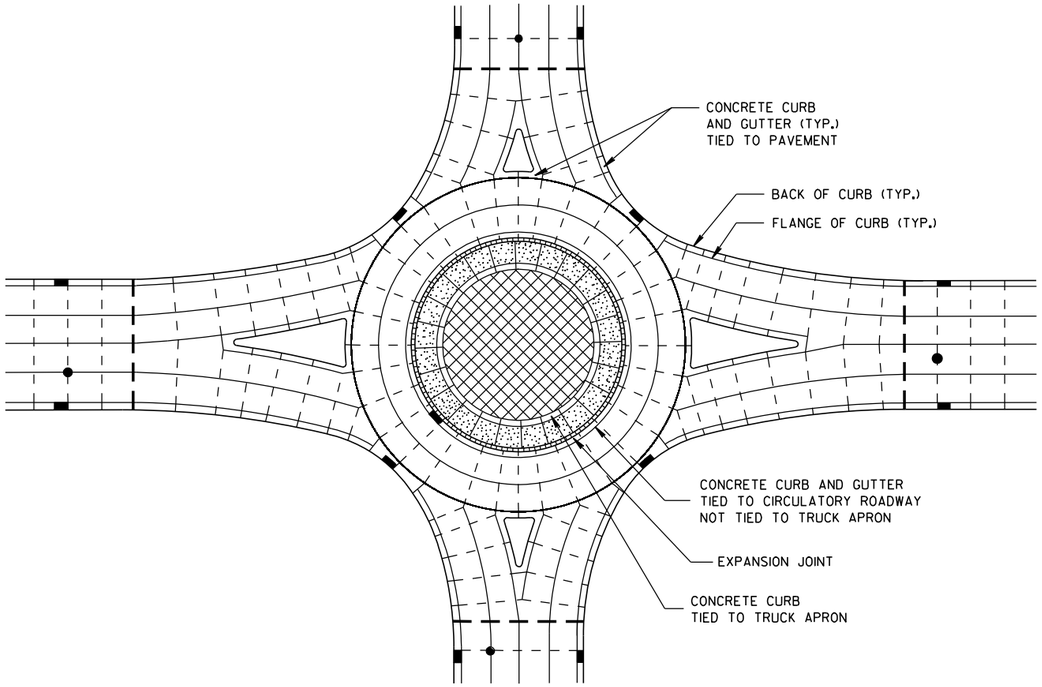
- DOWELED JOINT
- TIED JOINT
- EXPANSION JOINT
- POTENTIAL DOWELED EXPANSION JOINT
- TRUCK APRON
- CENTRAL ISLAND
- UTILITY STRUCTURES

GENERAL NOTES

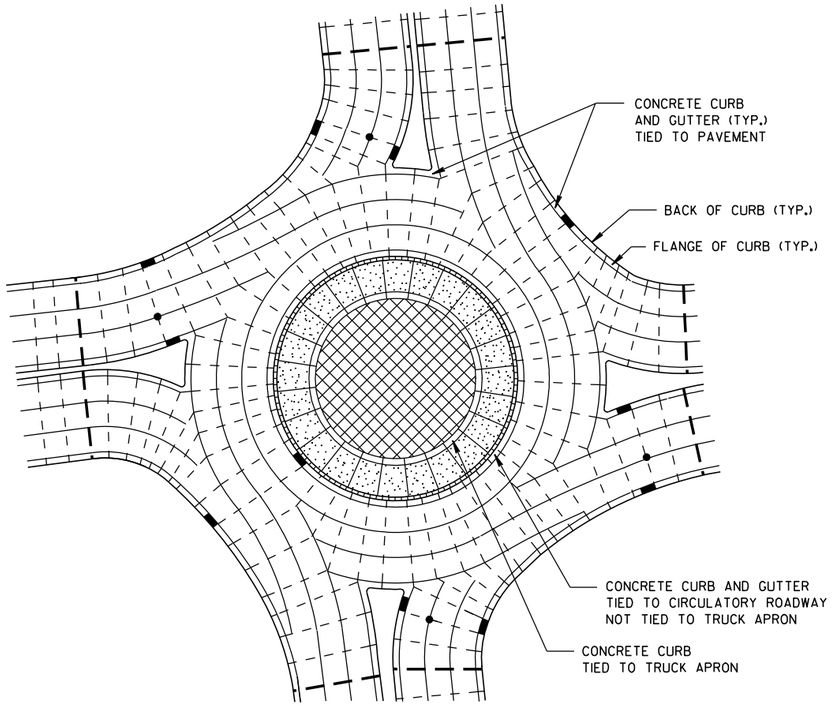
MAXIMUM JOINT SPACING IS IN ACCORDANCE WITH THE TABLE SHOWN ON SDD 13C18-1a.

USE AN EXPANSION JOINT FILLER MEETING THE REQUIREMENTS OF STANDARD SPECIFICATION 415.

DO NOT DOWEL OR TIE THE TRUCK APRON TRANSVERSE JOINTS.



ISOLATED CIRCLE JOINT LAYOUT FOR ROUNDABOUTS



PINWHEEL JOINT LAYOUT FOR ROUNDABOUTS

CONCRETE PAVEMENT JOINTING AND STEEL REINFORCEMENT IN ROUNDABOUTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

10-5-2010 DATE

/S/ Deb Bischoff
PAVEMENT POLICY & DI 796 INEER

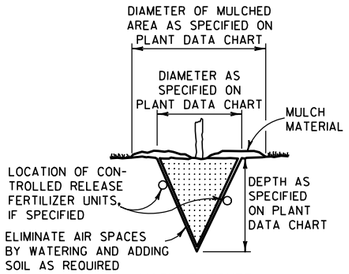
FHWA

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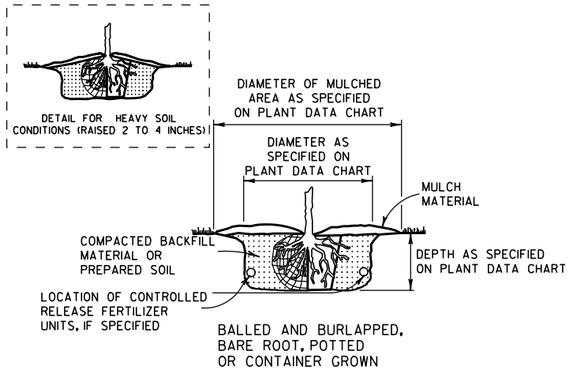
S.D.D. 13 C 18-1e

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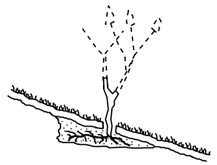
S.D.D. 13 C 18-1e



MACHINE MOVED

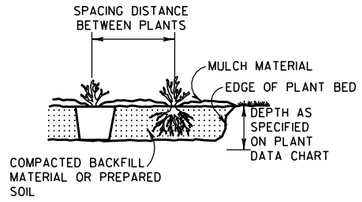


BALLED AND BURLAPPED, BARE ROOT, POTTED OR CONTAINER GROWN



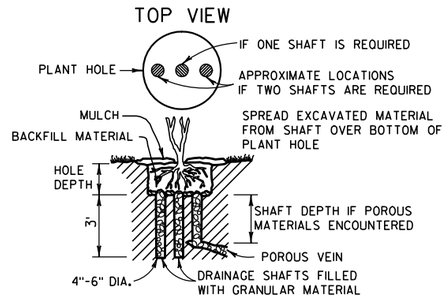
ACCOMMODATE ROOTS (SMOOTH AND STAGHORN SUMAC)

NOTE:
1) ENGINEER SHALL REQUIRE 3 SLITS IN POT TO SPEED DETERIORATION
2) METAL, PLASTIC OR OTHER NONDEGRADABLE POTS SHALL BE REMOVED PRIOR TO PLANTING



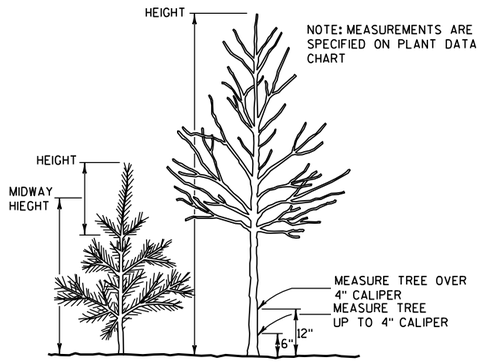
PREPARED BED (BARE ROOT AND POTTED)

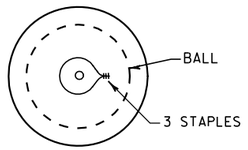
PLANTING



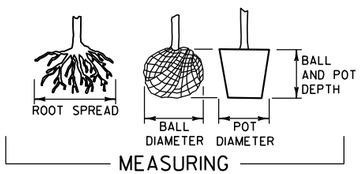
NOTE:
DRAINAGE SHAFT AS SPECIFIED ON PLANT DATA CHART

DRAINING

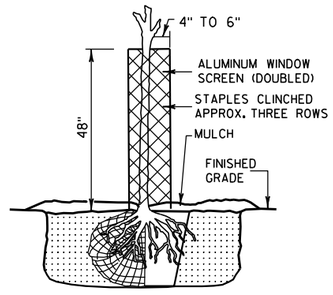




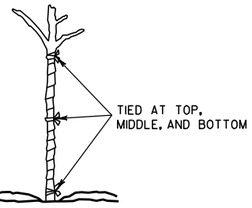
TOP VIEW



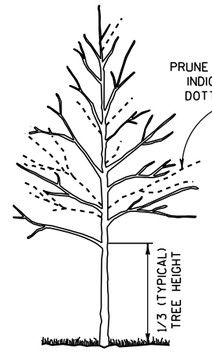
MEASURING



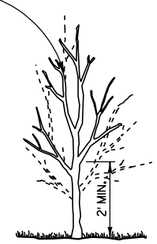
RODENT PROTECTION



WRAPPING



TALL DECIDUOUS TREES (ASH, MAPLE, LINDEN, OAK)



SINGLE STEMMED LOW DECIDUOUS TREES (CRABS AND OTHER SINGLE STEM TYPE)



MULTI-STEMMED LOW DECIDUOUS TREES OR LARGE SHRUBS (HAWTHORN, SERVICEBERRY)

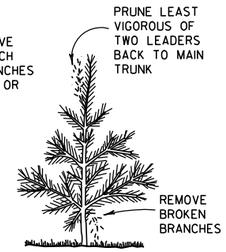
NOTE: WHEN PRUNING, PRESERVE CHARACTER AND SHAPE OF TREE. AVOID LEAVING STUBS - REMOVE BRANCH OR TWIG BACK TO THE NEAREST CROTCH
1) PRUNE TO REMOVE DEAD AND BROKEN BRANCHES
2) PRUNE TO REMOVE BRANCHES THAT TOUCH OR ARE TOO CLOSE TO OTHER BRANCHES



SHRUBS (GRAY DOGWOOD ARROWWOOD VIBURNUM)

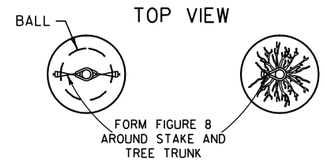


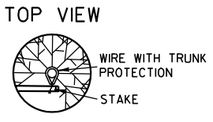
SUMAC

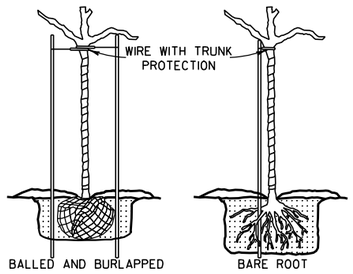


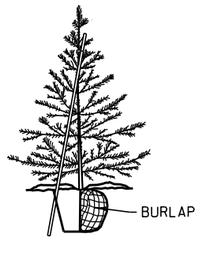
TREE TYPE EVERGREENS (PINE, SPRUCE, FIR) EVERGREENS USUALLY ARE NOT PRUNED

PRUNING



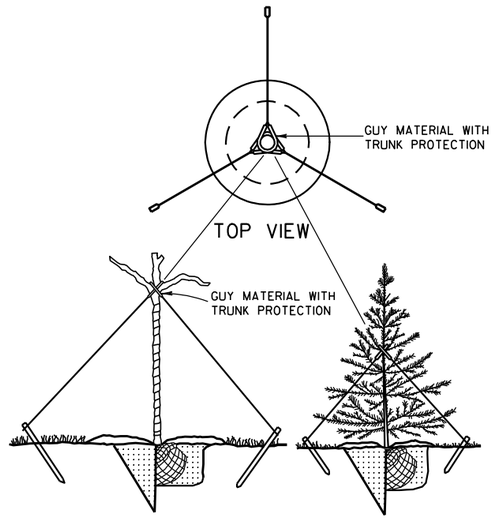




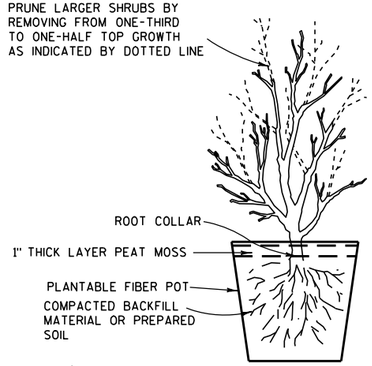


NOTE: BRACING STAKE
1) SHALL BE DRIVEN INTO THE GROUND AS CLOSE TO THE TREE AS POSSIBLE WITHOUT DAMAGING THE BRANCHES.
2) MAY BE DRIVEN AT SUCH AN ANGLE THAT IT DOES NOT PENETRATE THE BALL OR POT.
3) SHALL NOT PROTRUDE ABOVE THE TOP OF THE TREE; AND
4) SHALL HAVE A HOLE NEAR THE TOP TO HOLD THE WIRE IN PLACE.

BRACING



GUYING



POTTING

NOTES

DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

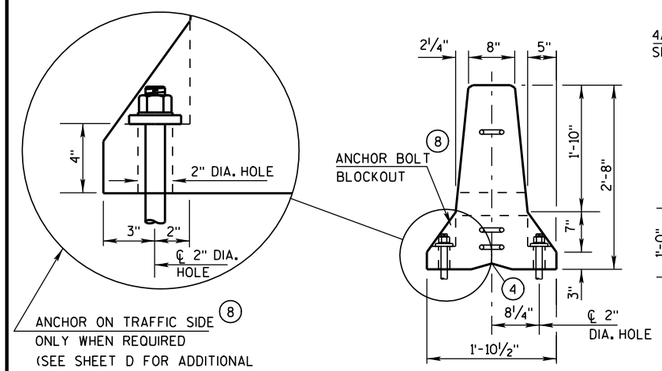
BRACING, WRAPPING, GUYING, RODENT PROTECTION, FERTILIZER AND MULCH SHALL BE USED ONLY WHEN SPECIFIED ON THE PLANT DATA CHART (PART OF PLAN) OR SPECIAL PROVISIONS.

TREE PLANTING DETAIL

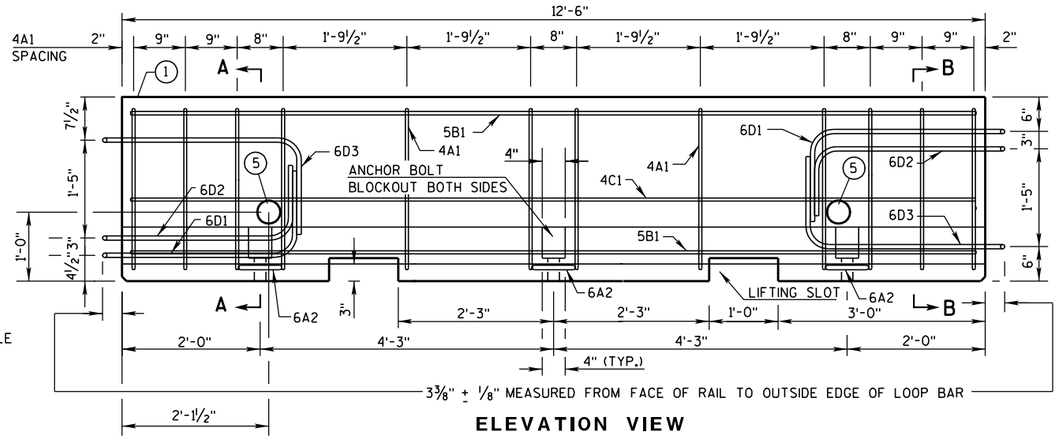
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
4/11/94
DATE
/S/ Rory L. Rhinesmith
CHIEF METHODS DEVELOPMENT ENGINEER
797
FHWA

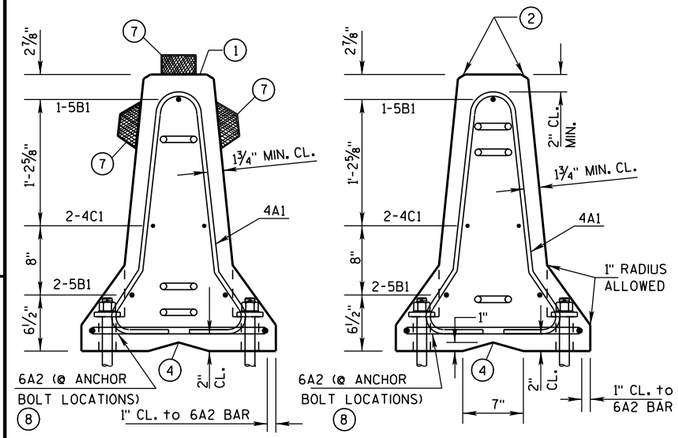
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S.D.D. 14 A 2-1
6



END VIEW

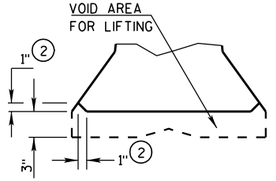


ELEVATION VIEW

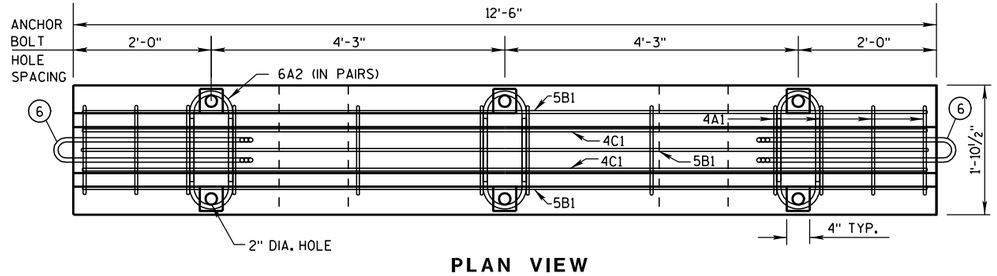


SECTION A-A
(STIRRUP PLACEMENT)

SECTION B-B
(STIRRUP PLACEMENT)

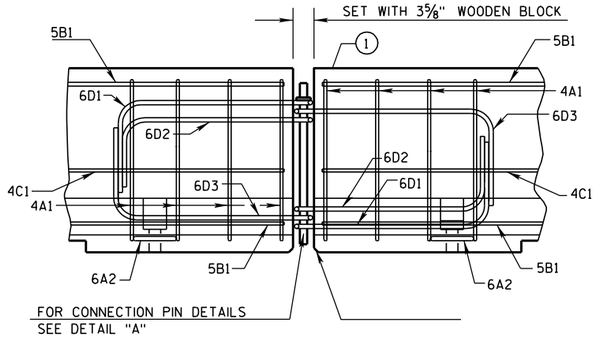


DETAIL "B"
LIFTING SLOT DETAIL

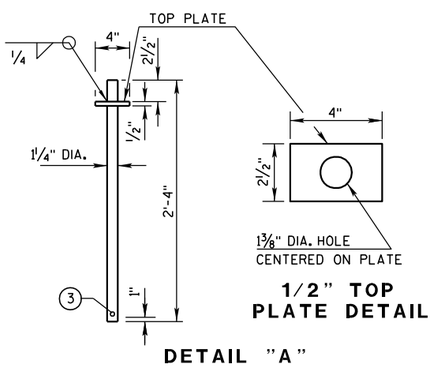


PLAN VIEW

DETAILS OF BARRIER SECTION



DETAILS OF BARRIER CONNECTION



1/2" TOP PLATE DETAIL

DETAIL "A"
CONNECTION PIN
(A36 STEEL (10.9 LB EACH))

GENERAL NOTES

THESE GENERAL NOTES APPLY TO SHEETS 14B7-12(a) THRU 14B7-12(d).

DETAILS AND REQUIREMENTS FOR THE FABRICATION AND INSTALLATION OF CONCRETE BARRIER TEMPORARY PRECAST, 12'-6" (CBTP12.5) ARE SHOWN ON 4 SHEETS, 14B7-12(a) THRU 14B7-12(d)

DO NOT INTERMIX CONCRETE BARRIER TEMPORARY PRCAST, 12'-6" (CBTP12.5) WITH OTHER TEMPORARY CONCRETE BARRIERS.

USE ASTM A-615, GRADE 60, DEFORMED STEEL BARS FOR BARS 4A1, 6A2, 5B1 AND 4C1 IN THE BARRIER SECTION AND FOR 4V1, 4V2, 4V3, 4V4, 4V5, 4V6, 4F1, 4F2 AND 5F3 IN THE BARRIER TAPER SECTION.

LOOP BARS 6D1, 6D2 AND 6D3 SHALL BE ¾" SMOOTH STEEL BARS WITH A MINIMUM YIELD STRENGTH OF 60 KSI, A TENSILE STRENGTH OF NOT LESS THAN 1.25 TIMES THE YIELD STRENGTH BUT A MINIMUM OF 80 KSI, A MINIMUM 14% ELONGATION IN 8 INCHES AND PASSING A 180 DEGREE BEND TEST USING A 3-½" PIN BEND DIAMETER FOR BEND TESTS. THE LOOPS SHALL BE INSTALLED WITHIN ⅛" OF THE PLAN DIMENSION.

CONSTRUCT LIFTING SLOTS AS SPECIFIED ON THE PLANS TO FACILITATE THE DRAINAGE OF WATER AFTER INSTALLATION.

PLACE BARRIER ON A PAVED SURFACE. REMOVE ALL LOOSE DIRT AND SAND FROM THE ROADWAY SURFACE PRIOR TO PLACEMENT OF THE BARRIER.

(1) MARK ONE END OF EACH BARRIER PERMANENTLY BY FORMING INTO THE BARRIER THE FOLLOWING INFORMATION:
- a. TYPE: WI CBTP
- b. MANUFACTURER
- c. DATE MANUFACTURED (MONTH AND YEAR)

(2) 1" CHAMFER TO PREVENT SPALLING.

(3) A ⅜" HOLE IN THE CONNECTION PIN, AT THE LOCATION SHOWN, IS ACCEPTABLE, BUT NOT REQUIRED..

(4) "V" NOTCH IS OPTIONAL.

(5) THE 4" DIAMETER, 11 GAUGE STEEL, ROUND MECHANICAL TUBING SLEEVE FOR LIFTING (OPTIONAL).

(6) NEVER USE LOOP BARS (6D1, 6D2 OR 6D3) TO LIFT, MOVE OR REPOSITION THE BARRIER.

(7) USE DELINEATORS CONFORMING TO SECTION 633 OF THE STANDARD SPECIFICATIONS. CONTRACTOR MAY USE ALTERNATE SHAPES AND HOUSING. INSTALL DELINEATORS ACCORDING TO MANUFACTURES INSTRUCTION. INSTALL YELLOW REFLECTORS WHEN BARRIER IS LOCATED TO THE LEFT OF TRAFFIC AND WHITE REFLECTORS WHEN BARRIER IS LOCATED TO THE RIGHT OF TRAFFIC. SPACE DELINEATORS A MAXIMUM OF 25 FEET APART. PROVIDE TOP MOUNTED DELINEATORS IN ADDITION TO THE SIDE MOUNTED DELINEATORS ON ALL BARRIER INSTALLATIONS LOCATED ON A CURVED ALIGNMENT LONGER THAN 200 FEET AND ON BARRIERS USED TO SEPARATE OPPOSING TRAFFIC.

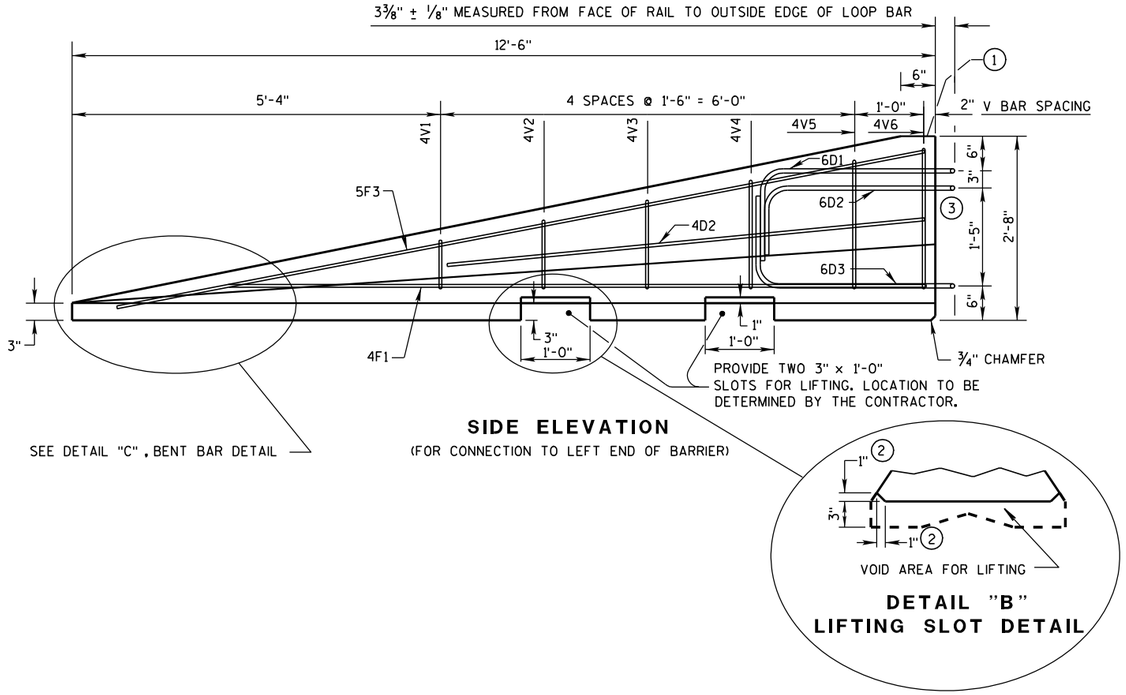
(8) SEE SHEET D FOR ANCHORING CRITERIA.

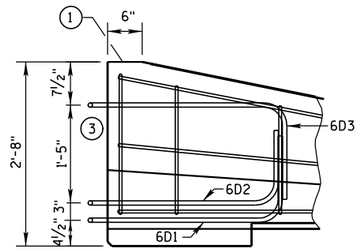
CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO...

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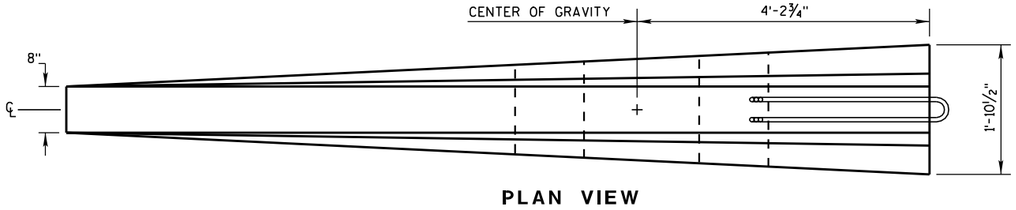
S.D.D. 14 B 7-12a

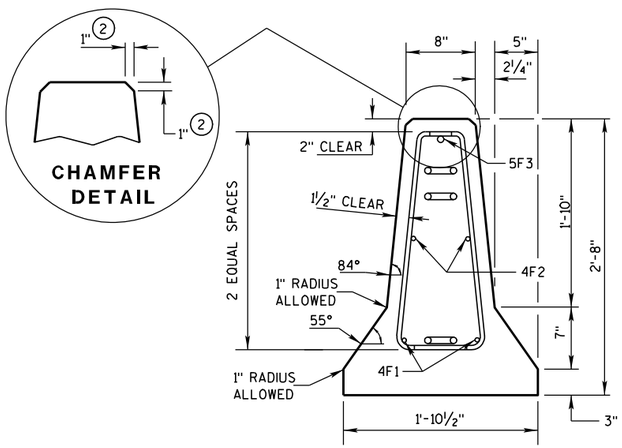


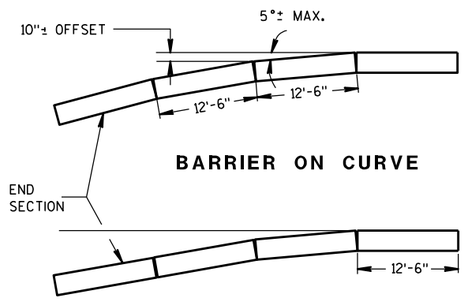


GENERAL NOTES

1. MARK ONE END OF EACH BARRIER PERMANENTLY BY FORMING INTO THE BARRIER THE FOLLOWING INFORMATION:
   a. TYPE WICBTP
   b. MANUFACTURER
   c. DATE MANUFACTURED (MONTH AND YEAR)
2. 1" CHAMFER TO PREVENT SPALLING.
3. NEVER USE LOOP BARS (6D1, 6D2 OR 6D3) TO LIFT, MOVE OR REPOSITION THE BARRIER.







POSTED SPEED, (MPH)	FLARE RATE
40 OR LESS	6:1
45 OR GREATER	8:1

DETAILS OF BARRIER TAPER SECTION

CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

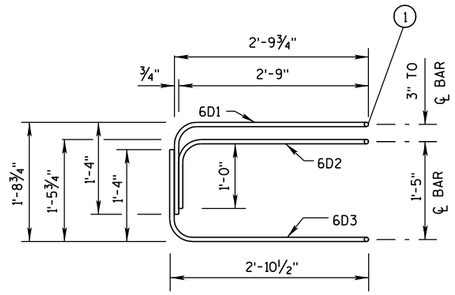
6

S.D.D. 14 B 7-12b

BARRIER TAPER SECTION BILL OF MATERIALS

(PER 12'-6" BARRIER TAPER SECTION)

BAR	BAR SIZE	NO. OF BARS	LENGTH FT.
4V1	4	2	1'-11"
4V2	4	2	2'-2"
4V3	4	2	2'-6"
4V4	4	2	2'-9"
4V5	4	2	3'-2"
4V6	4	2	3'-4"
4F1	4	2	12'-0"
4F2	4	2	7'-6"
5F3	5	1	11'-9"
LOOP ASSEMBLY			
6D1	6	1	8'-5"
6D2	6	1	7'-7"
6D3	6	1	8'-6"



ELEVATION
LOOP BAR ASSEMBLY

DETAIL "C"
BENT BAR DETAIL

BAR	a	b
V1	10"	1"
V2	1'-1"	1¼"
V3	1'-5"	1⅝"
V4	1'-8"	1⅞"
V5	2'-0½"	2⅜"
V6	2'-3"	2¾"

4V BARS
2 AT EACH SIZE REQUIRED
FOR STIRRUP ASSEMBLY

TAPER BARRIER SECTION

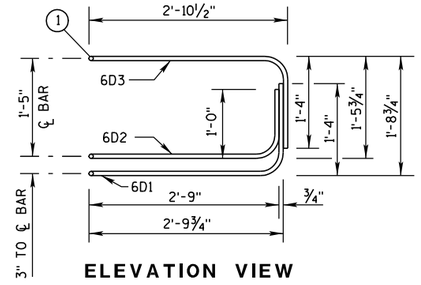
GENERAL NOTES

(1) NEVER USE LOOP BARS (6D1, 6D2 OR 6D3) TO LIFT, MOVE OR REPOSITION THE BARRIER.

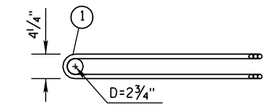
BARRIER SECTION BILL OF MATERIALS

(PER 12'-6" BARRIER SECTION)

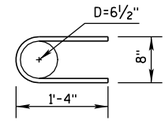
BAR	BAR SIZE	NO. OF BARS	LENGTH FT.
4A1	4	12	6'-0"
6A2	6	6	2'-11"
5B1	5	3	12'-2"
4C1	4	2	12'-2"
LOOP ASSEMBLY			
6D1	6	2	8'-5"
6D2	6	2	7'-7"
6D3	6	2	8'-6"



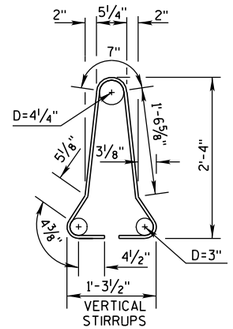
ELEVATION VIEW



PLAN VIEW
LOOP BAR ASSEMBLY
(MARKED END SHOWN, INVERT FOR OTHER END)



6A2



4A1

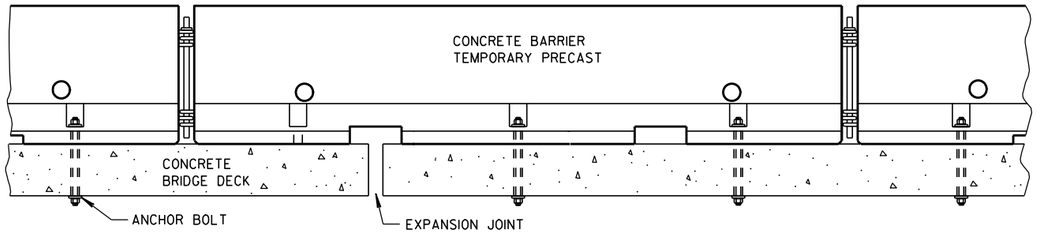
BARRIER SECTION

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

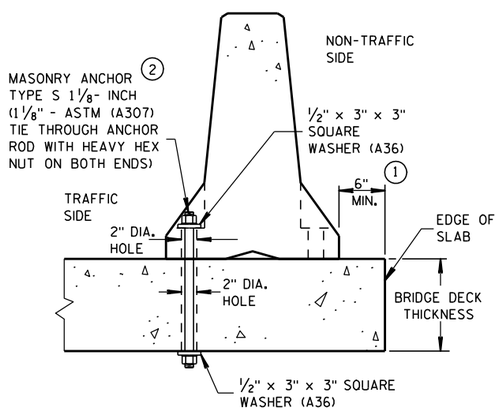
6

S.D.D. 14 B 7-12c



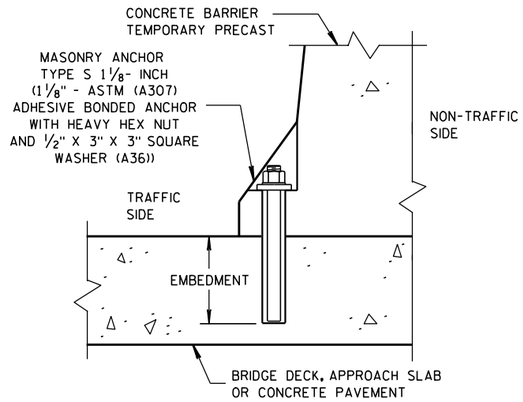
TREATMENT AT BRIDGE DECK EXPANSION JOINTS

(NO SINGLE CONCRETE BARRIER SECTION SHALL BE ANCHORED TO BOTH THE BRIDGE DECK AND THE APPROACH SLAB. ALL ANCHOR BOLT LOCATIONS SHALL BE ANCHORED TO THE DECK IN ACCORDANCE WITH THE DETAIL. NO MORE THAN ONE ANCHOR BOLT SHALL BE ELIMINATED FROM A BARRIER SECTION WHEN SPANNING AN EXPANSION JOINT.)



THROUGH BOLTED ANCHOR INSTALLATION ON BRIDGE DECK

(DO NOTUSE ON CONCRETE BRIDGE DECK WITH ASPHALT OVERLAY)



REMOVABLE ADHESIVE BONDED ANCHOR (2) INSTALLATION ON CONCRETE BRIDGE DECK, CONCRETE APPROACH SLAB, OR CONCRETE PAVEMENT

(DO NOT USE ON CONCRETE WITH AN ASPHALTIC OVERLAY)

GENERAL NOTES

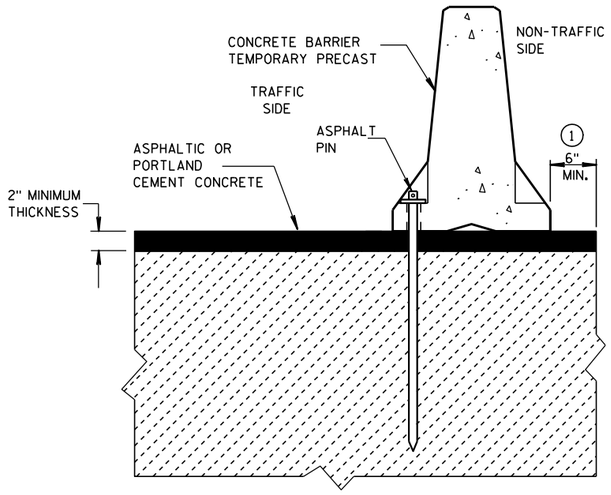
(1) CONCRETE BARRIER TEMPORARY PRECAST, 12'-6" SHALL BE ANCHORED IF:
THE DISTANCE TO A 2 FOOT OR GREATER DROPOFF THAT IS STEEPER THAN 3H : 1V, FOR EXAMPLE THE EDGE OF A BRIDGE DECK OR A DROPOFF AT THE EDGE OF PAVEMENT, IS LESS THAN 4 FEET FROM THE SIDE OF THE BARRIER CLOSEST TO THE DROPOFF AND THE POSTED SPEED IS 45 MPH OR GREATER, OR

THE DISTANCE TO A 2 FOOT OR GREATER DROPOFF THAT IS STEEPER THAN 3H : 1V, FOR EXAMPLE THE EDGE OF A BRIDGE DECK OR A DROPOFF AT THE EDGE OF PAVEMENT, IS LESS THAN 2 FEET FROM THE SIDE OF THE BARRIER CLOSEST TO THE DROPOFF AND THE POSTED SPEED IS 40 MPH OR LESS.

(2) ANCHORING IS INCIDENTAL TO CONCRETE BARRIER TEMPORARY PRECAST.

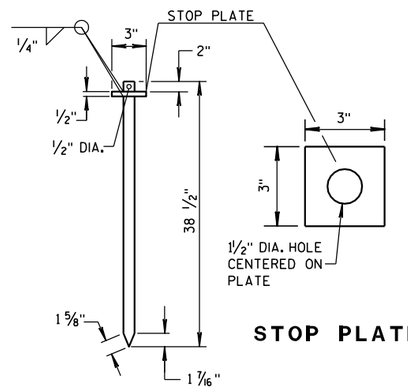
WITH THE APPROVAL OF THE ENGINEER, REMOVABLE ADHESIVE BONDED (EPOXY) ANCHOR BOLT INSTALLATION MAY BE USED IN LIEU OF THROUGH BOLTED ANCHOR INSTALLATION. THE ADHESIVE BONDED ANCHOR BOLT MUST BE REMOVABLE. USE ASTM (A307) MASONRY ANCHORS TYPE S 1⅛-INCH, EMBEDDED TO A DEPTH SUFFICIENT TO DEVELOP THE ULTIMATE CAPACITY OF THE ANCHOR BOLT AND PROVIDE DOCUMENTATION TO CONFIRM THIS.

UPON REMOVAL OR RELOCATION OF THE BARRIER UNITS, REMOVE ALLANCHOR BOLTS AND COMPLETELY FILL IN THE REMAINING HOLES IN CONCRETE BRIDGE DECKS, CONCRETE APPROACH SLABS AND CONCRETE PAVEMENTS THAT ARE TO REMAIN, WITH A NON-SHRINK COMMERICAL GROUT OR EPOXY MATERIAL IDENTIFIED ON THE CURRENT WISDOT APPROVED PRODUCTS LIST.



STAKE DOWN INSTALLATION FOR ASPHALTIC OR PORTLAND CEMENT CONCRETE SURFACE

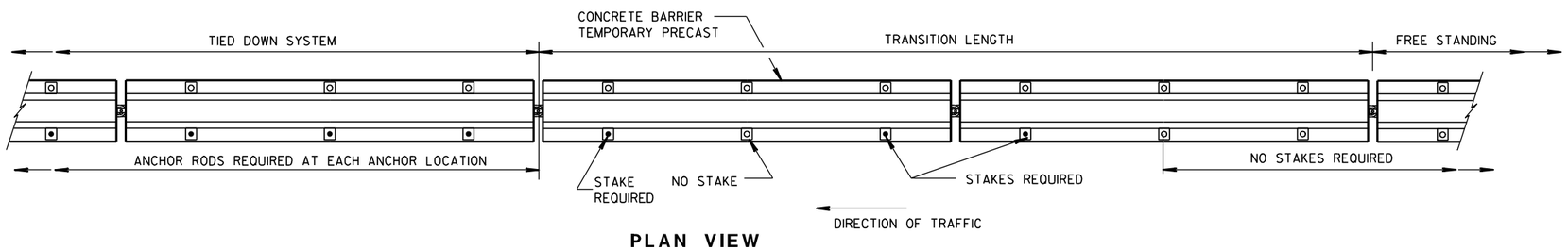
(STAKING IS INCIDENTAL TO CONCRETE BARRIER TEMPORARY PRECAST)



STOP PLATE

ASPHALT PIN

(ASTM A36 STEEL)



PLAN VIEW

FREE STANDING TRANSITION TO TIED-DOWN SYSTEM

(PLACE TRANSITION IN A TANGENT SECTION OF BARRIER PARALLEL TO THE ROADWAY. IF TRANSITION OCCURS ON STRUCTURAL SLAB, ANCHOR AS SHOWN.)

CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6-3-2010
DATE

/S/ Jerry H. Zaas
ROADWAY STANDARD D801 NT
ENGINEER

FHWA

6

S.D.D. 14 B 7-12d

6

S.D.D. 14 B 7-12d

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, AND THE APPLICABLE SPECIAL PROVISIONS.

(1) W6 X 9 OR W6 X 8.5 STEEL POSTS AND NOTCHED PLASTIC BLOCKOUTS ARE ACCEPTABLE ALTERNATIVES FOR 6" X 8" WOOD POSTS WITH WOOD OR PLASTIC BLOCKOUTS. USE APPROVED NOTCHED PLASTIC BLOCKOUTS WITH STEEL POSTS. APPROVED PLASTIC BLOCKOUT DESIGNS MAY VARY FROM THIS TYPICAL DETAIL WHEN USED IN CONJUNCTION WITH STEEL POSTS.

DO NOT MIX STEEL POSTS AND WOOD POSTS IN A SINGLE INSTALLATION.

(2) USE STRUCTURAL STEEL POSTS CONFORMING TO ASTM A 36. GALVANIZED POSTS ACCORDING TO AASHTO M 111. EITHER SET THE POSTS IN DRILLED HOLES OR DRIVE TO GRADE. REMOVE MUSHROOMING CAUSED BY DRIVING AND REPAIR DAMAGED SPELTER COATING ON GALVANIZED POSTS.

(3) INSTALL STEEL POSTS WITH HOLES ON APPROACHING TRAFFIC SIDE.

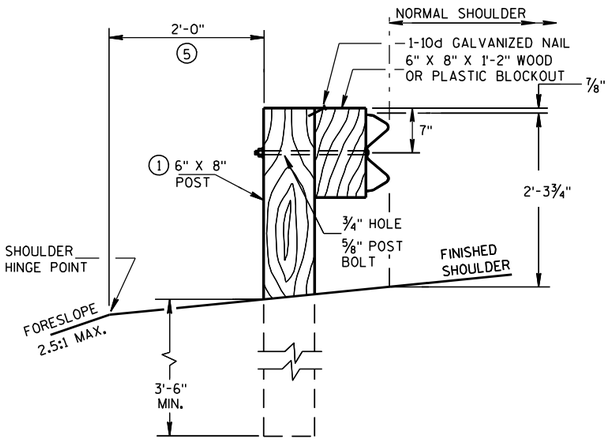
(4) USE EITHER WOOD OR APPROVED PLASTIC BLOCKOUTS ON WOOD POSTS.

(5) IF THE DISTANCE FROM BACK OF POST TO SHOULDER HINGE POINT IS LESS THAN 2 FEET INSTALL LONGER POST AT HALF POST SPACING, W BEAM (LHW).

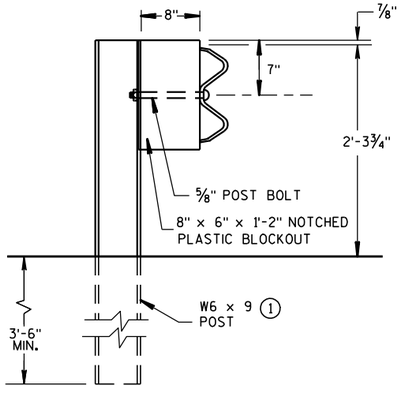
(6) IF ROCK IS ENCOUNTERED DURING EXCAVATION, THE ENGINEER MAY APPROVE USING A 12 INCH DIAMETER POST HOLE EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE APPROXIMATELY 2½ INCHES DEEP. CUT THE POSTS TO LENGTH AND PLACE IN YHE HOLE. BACKFILL WITH MATERIAL EXCAVATED FROM THE HOLE AND COMPACT ADEQUATEY.

INSTALL BEAM GUARD SECTIONS AND ALL NECESSARY HARDWARE ACCORDING TO THE APPLICABLE PLAN AND CURRENT STANDARD AND SUPPLEMENTAL SPECIFICATIONS.

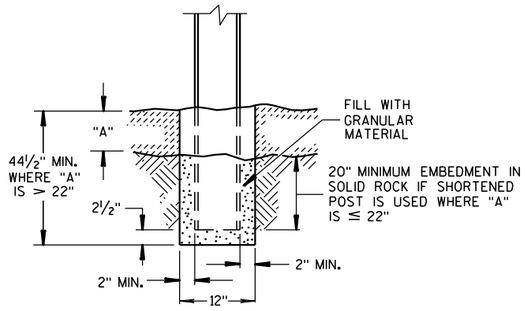
ALL DIMENSIONS ARE SUBJECT TO MANUFACTURER'S TOLERANCES EXCEPT WHERE ALLOWABLE TOLERANCES ARE SHOWN.



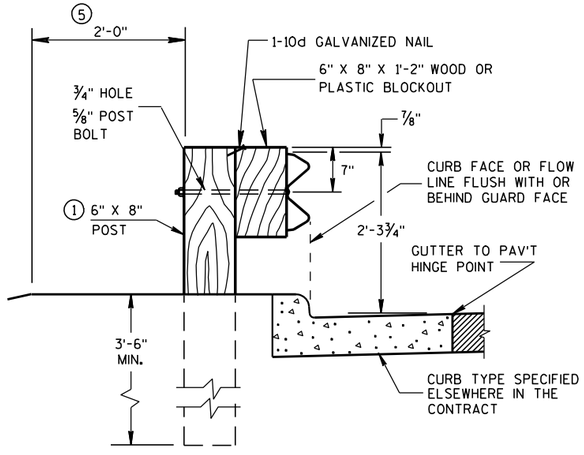
END VIEW
LOCATED ALONG A ROADWAY SHOULDER
STANDARD INSTALLATION



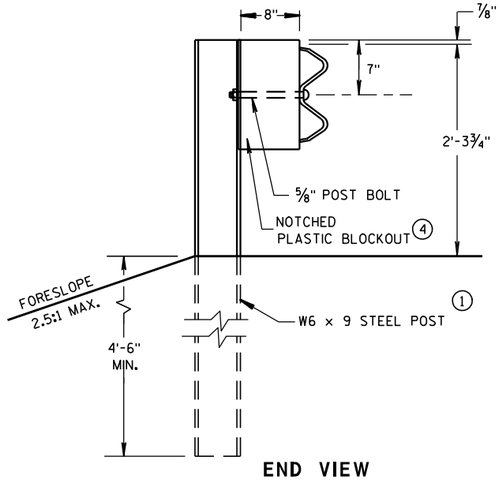
END VIEW
STEEL POST & NOTCHED
PLASTIC BLOCKOUT ALTERNATIVE
STANDARD INSTALLATION



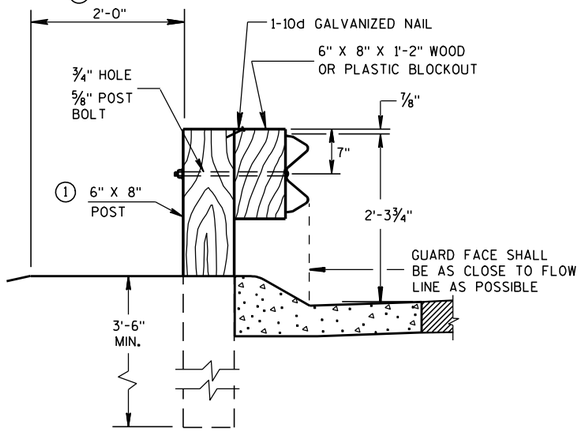
END VIEW
SETTING STEEL OR WOOD POST IN ROCK (6)



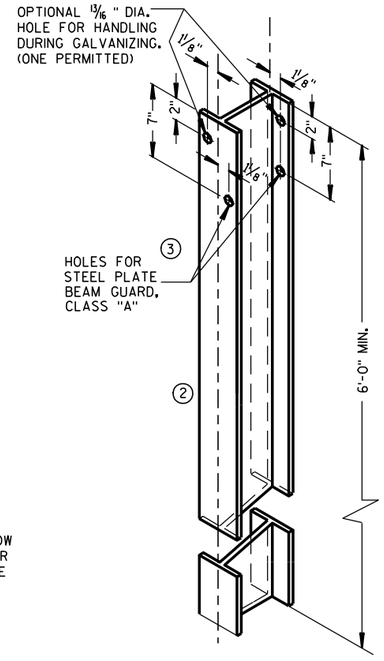
END VIEW
LOCATED ALONG A CURBED ROADWAY



END VIEW
LONGER POST AT HALF
POST SPACING W BEAM
(LHW)

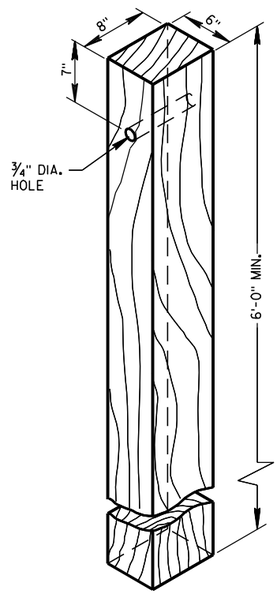


END VIEW
LOCATED ALONG A
MOUNTABLE CURBED ROADWAY

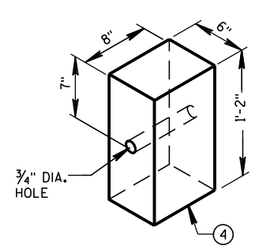


STEEL POST &
HOLE PUNCHING DETAIL
(W6 X 9) (1)

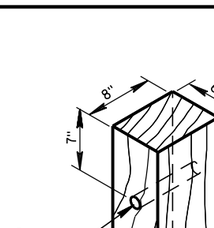
ALL HOLES 13/16" DIAMETER EXCEPT AS NOTED



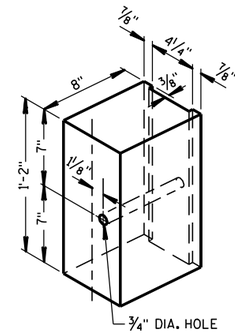
WOOD POST
(6"X8") NOMINAL



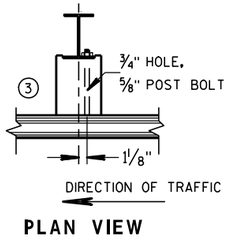
WOOD OR PLASTIC
BLOCKOUT FOR
WOOD POSTS



PLAN VIEW
WOOD POST,
BLOCKOUT & BEAM



TYPICAL NOTCHED (1)
PLASTIC BLOCKOUT
FOR STEEL POSTS



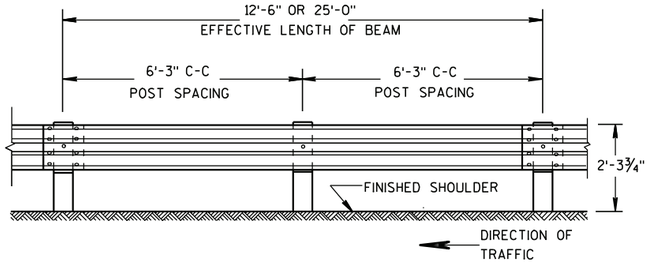
PLAN VIEW
STEEL POST, NOTCHED
PLASTIC BLOCKOUT & BEAM

TYPICAL INSTALLATION OF STEEL PLATE BEAM GUARD

STEEL PLATE BEAM GUARD,
CLASS "A"
INSTALLATION & ELEMENTS

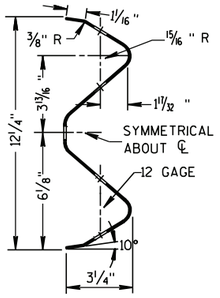
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
S.D.D. 14 B 15-7a

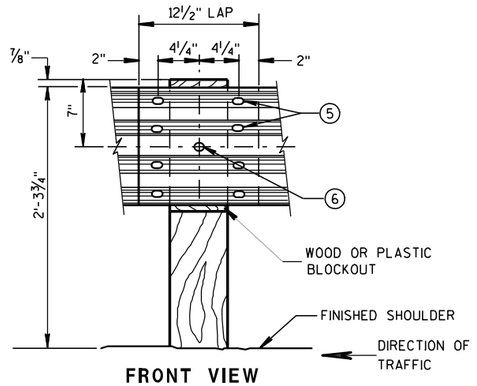


FRONT VIEW

POST SPACING STANDARD INSTALLATION



SECTION THRU W BEAM

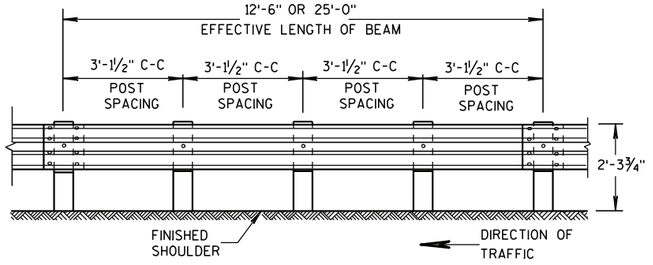


FRONT VIEW

BEAM SPLICE AT WOOD POST AND POST MOUNTING DETAIL

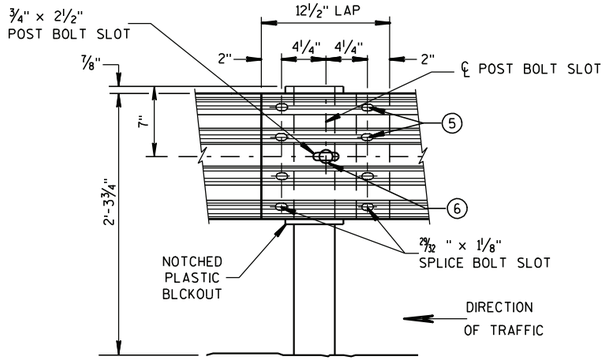
GENERAL NOTES

1. PROVIDE TYPE "H" SILVER REFLECTIVE SHEETING ON ALL REFLECTORS EXCEPT THOSE LOCATED ALONG THE LEFT EDGE OF ONE-WAY ROADWAYS, WHICH SHALL BE PROVIDED WITH TYPE "H" YELLOW REFLECTIVE SHEETING.
2. DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.
3. REVERSE EVERY OTHER REFLECTOR FOR 2-WAY VISIBILITY. THE CONTRACTOR MAY FURNISH TWO-SIDED REFLECTORS IN LIEU OF ONE-SIDED REFLECTORS.
4. PROVIDE AN ANGLE OF BEND OF 90° ± 1° FOR TWO-SIDED REFLECTORS.
5. 8 - 5/8" ϕ X 2 " BUTTON HEAD BOLTS WITH OVAL SHOULDERS & RECESS NUTS.
6. 5/8" ϕ X 1'-6" BUTTON HEAD BOLT AND AND RECESS NUT WITH ROUND WASHER UNDER NUT.



FRONT VIEW

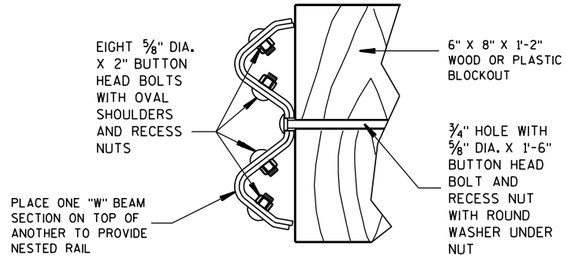
POST SPACING FOR LONGER POST AT HALF POST SPACING W BEAM (LHW)



FRONT VIEW

BEAM SPLICE AT STEEL POST

TYPICAL SPLICING DETAILS OF STEEL PLATE BEAM GUARD

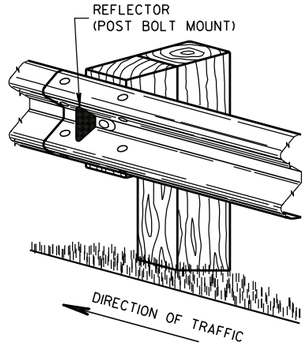


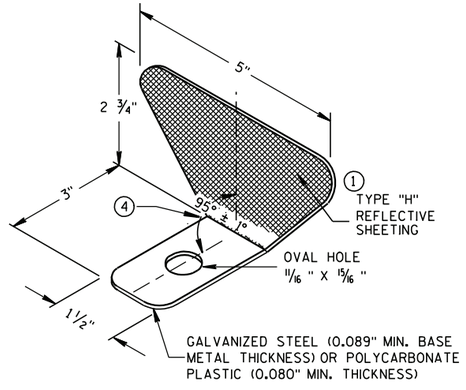
NESTED W BEAM (NW)

USE ALL OTHER STANDARD BEAM GUARD DETAILS FOR CONSTRUCTING NESTED W BEAM (NW)

REFLECTOR SPACING (2)

	BEAM GUARD LENGTH	REFLECTOR SPACING	NO. SURFACES REFLECTORIZED	MIN. NO. REFLECTORS
ONE WAY TRAFFIC	< 200'	50' C-C	1	3
	> 200'	100' C-C	1	
TWO WAY TRAFFIC	< 200'	25' C-C	1 (3)	6
	> 200'	50' C-C	1	
TWO WAY TRAFFIC	< 200'	50' C-C	2	3
	> 200'	100' C-C	2 (4)	



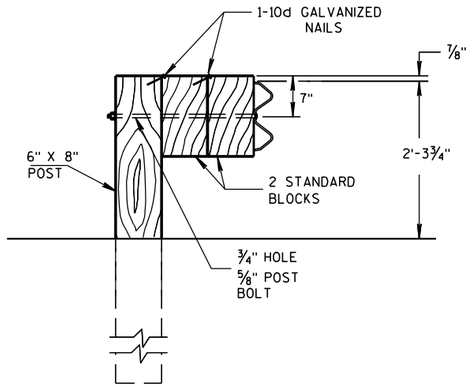


ONE SIDED REFLECTOR DETAIL AND TYPICAL INSTALLATION (1)

STEEL PLATE BEAM GUARD,
CLASS "A",
INSTALLATION & ELEMENTS

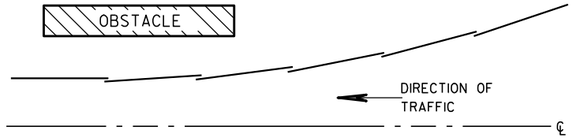
STATE OF WISCONSIN
DEPARTMENT OF TRANSPO...

6
S.D.D. 14 B 15-7b

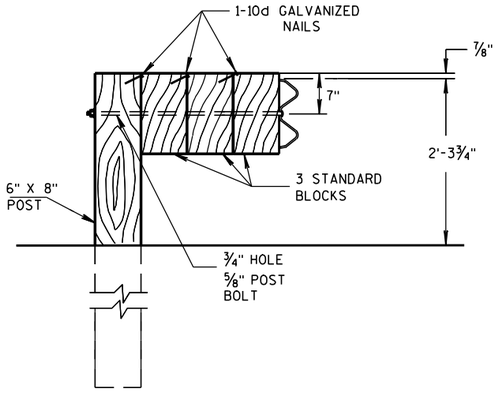


DETAIL FOR DOUBLE BLOCKS

THE NUMBER OF DOUBLE BLOCK POSTS WITHIN A BARRIER RUN IS UNLIMITED

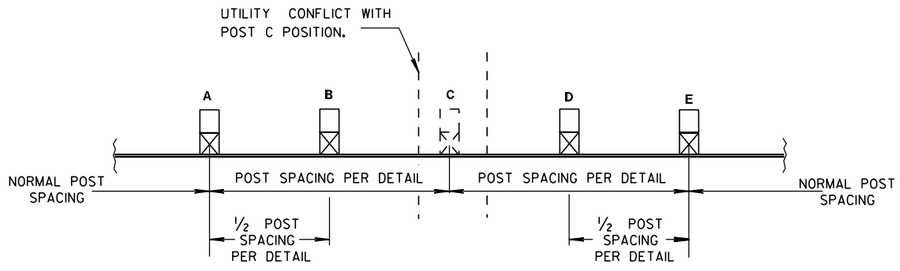


PLAN VIEW
BEAM LAPPING DETAIL



DETAIL FOR TRIPLE BLOCKS

TRIPLE BLOCK DETAIL IS LIMITED TO ONE LOCATION WITHIN A BEAM GUARD RUN.



POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION

NOTES: USE DOUBLE OR TRIPLE BLOCKS WHEN UNDERGROUND OBSTACLES PREVENT THE POST FROM BEING INSTALLED.

DO NOT USE EXTRA BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION DISTANCE OF THE BARRIER.

STEEL PLATE BEAM GUARD, CLASS "A", INSTALLATION & ELEMENTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

5/23/11
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER

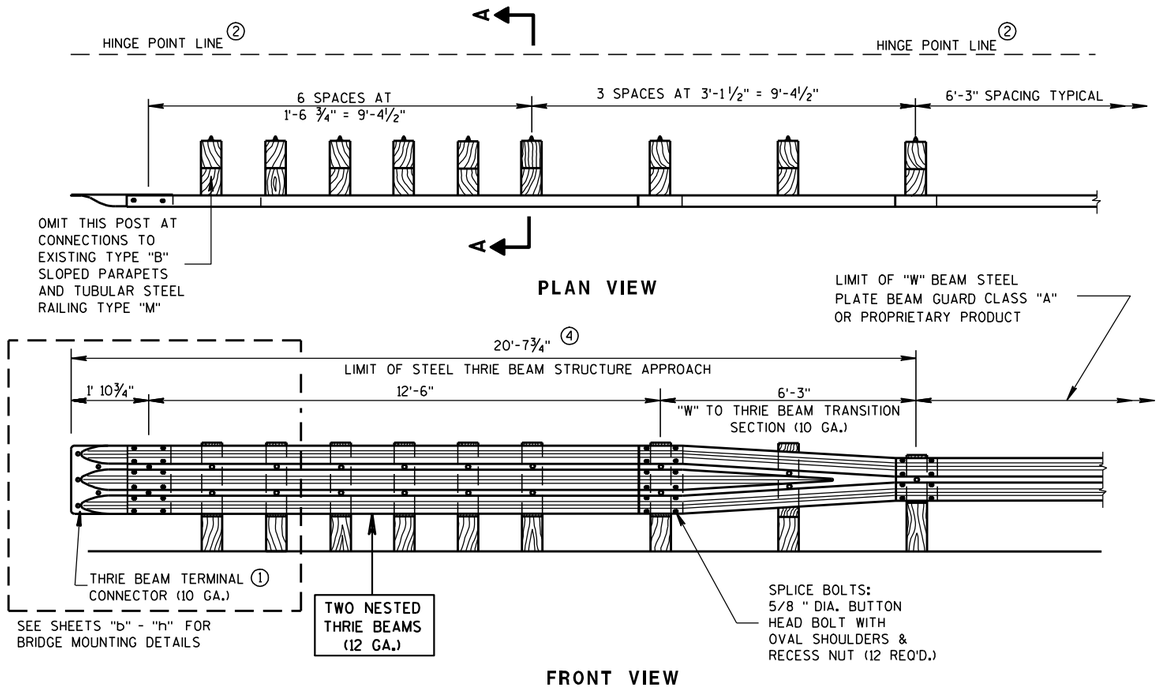
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S.D.D. 14 B 15-7c



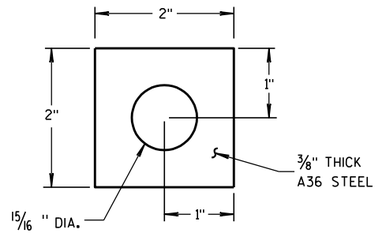


PLATE WASHER DETAIL

GENERAL NOTES

BOLT THE THRIE BEAM TO ALL POSTS AND BLOCKOUTS. DRILL OR PUNCH BOLT HOLES IN THE BEAM IF THE POST SPACING IS LESS THAN 6'-3".

DO NOT USE STEEL POSTS AND NOTCHED PLASTIC BLOCKOUTS IN THE STEEL THRIE BEAM STRUCTURAL APPROACH AND THE TRANSITION SECTION OF STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATIONS.

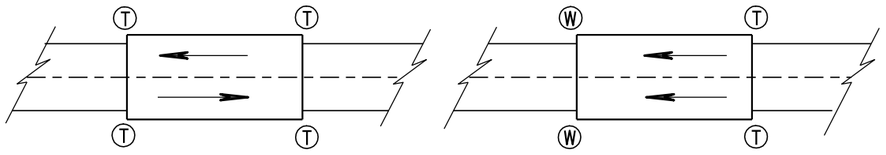
IF ROCK IS ENCOUNTERED DURING EXCAVATION, THE ENGINEER MAY APPROVE USING A 12 INCH DIAMETER POST HOLE EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE APPROXIMATELY 2 1/2 INCHES DEEP. CUT THE POSTS TO LENGTH AND PLACE IN THE HOLE. BACKFILL WITH MATERIAL EXCAVATED FROM THE HOLE AND COMPACT ADEQUATELY, (SEE SDD 14 B 15 - a).

① BRIDGE RAILING TYPE "W" DOES NOT REQUIRE A TERMINAL CONNECTOR.

② MINIMUM EMBEDMENT SHALL BE 4'-0". WHERE EXISTING CONDITIONS DO NOT PERMIT THE APPROPRIATE EARTHWORK SHOWN ON THE PLAN TYPICAL SECTIONS OR DETAILS, THE ENGINEER MAY ALLOW THE REDUCTION OR ELIMINATION OF THE 2 FOOT DISTANCE TO THE HINGE POINT. OTHERWISE BUILD AS THE PLAN SHOWS OR AS THE ENGINEER DIRECTS. IF THE 2 FOOT DISTANCE TO THE HINGE POINT IS REDUCED OR ELIMINATED, INCREASE THE POST EMBEDMENT DEPTH TO 4'-6" OR MORE.

③ POST BOLTS ARE 5/8" DIAMETER ASTM A307 BUTTON HEAD BOLT. A POST BOLT REQUIRES A 5/8" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX AND A 5/8" DIAMETER F844 FLAT WASHER. LENGTH OF POST BOLT MAY VARY.

④ ALL WOOD POSTS MUST BE 6" X 8" AND AT LEAST 7'-0" LONG.



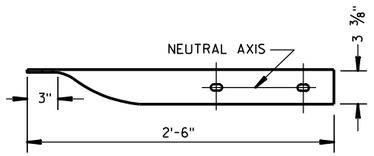
TWO WAY TRAFFIC

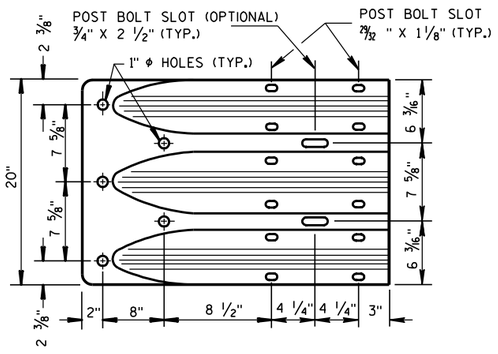
ONE WAY TRAFFIC

(T) THRIE BEAM CONNECTION

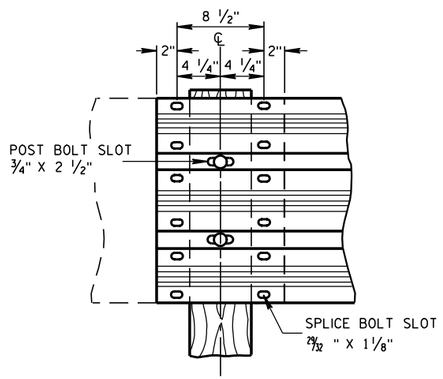
(W) W-BEAM CONNECTION WHEN REQUIRED

TYPICAL LOCATIONS OF THRIE BEAM AND W-BEAM CONNECTIONS TO BRIDGE

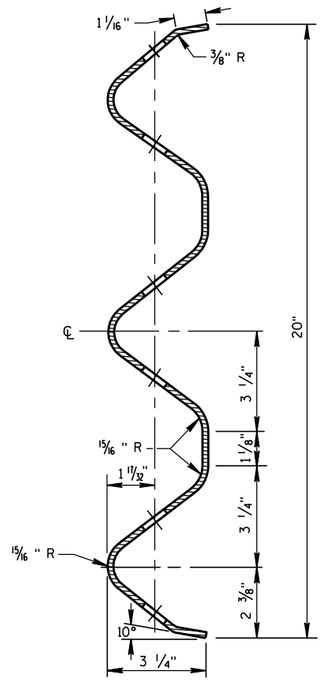




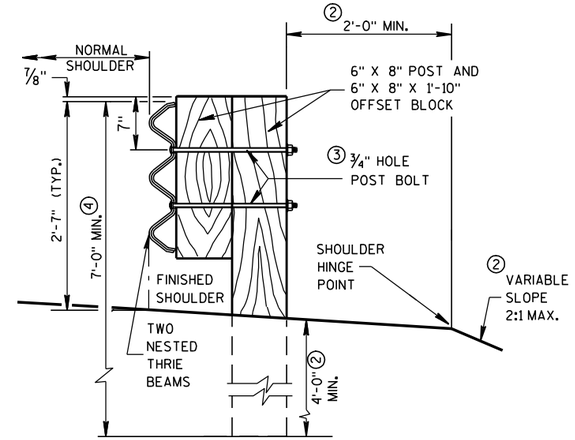
THRIE BEAM TERMINAL CONNECTOR



THRIE BEAM SPLICE



SECTION THRU THRIE BEAM RAIL ELEMENT



SECTION A-A

STEEL THRIE BEAM STRUCTURE APPROACH

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

2-8-2012
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER

805

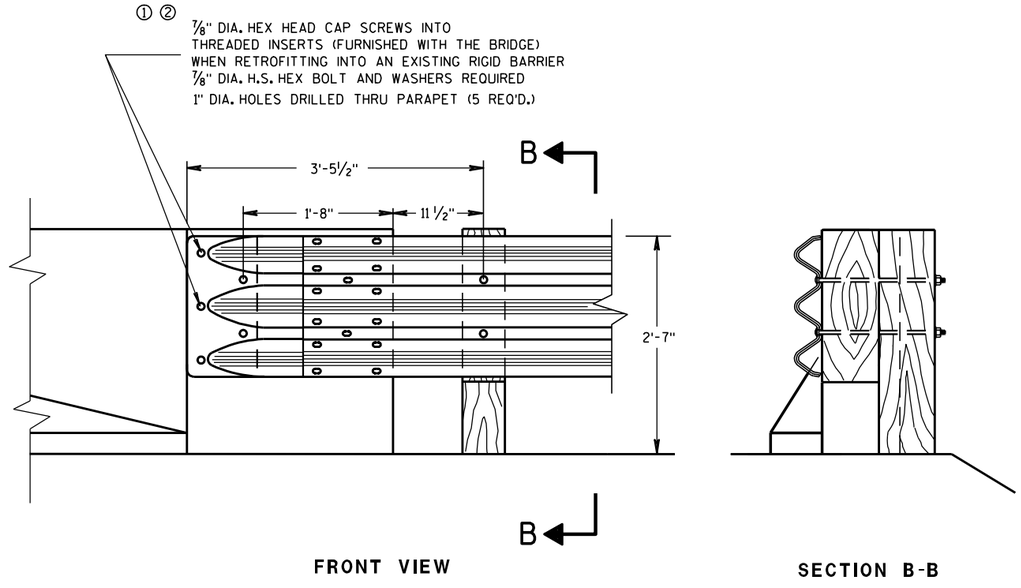
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S.D.D. 14 B 20-10a

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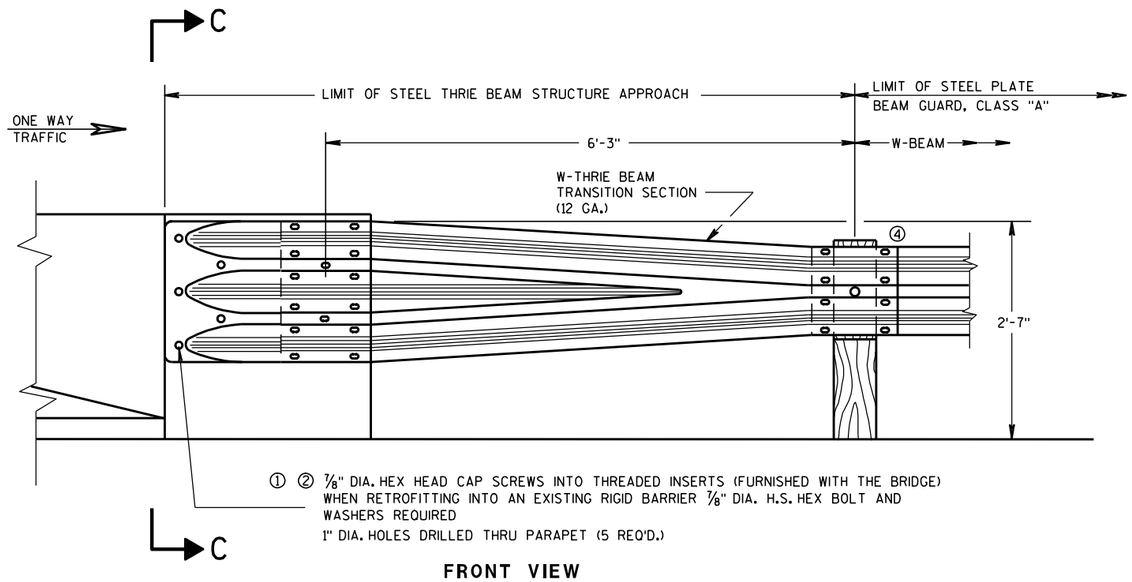
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FRONT VIEW

SECTION B-B

THRIE BEAM CONNECTION TO BRIDGE PARAPET WITH SQUARE ENDS



FRONT VIEW

W BEAM TRANSITION AND CONNECTION TO BRIDGE PARAPETS WITH SQUARE ENDS

(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)

GENERAL NOTES

THESE ARE TYPICAL CONNECTION DETAILS. ADJUST THE POSTION OF CONNECTIONS TO EXISTING BRIDGES TO FIT THE ACTUAL BRIDGE AND SITE DIMENSIONS.

BOLTS, NUTS AND WASHERS SHALL CONFORM TO ASTM A325, A449 AND GALVANIZED PER STANDARD SPECIFICATIONS 614.

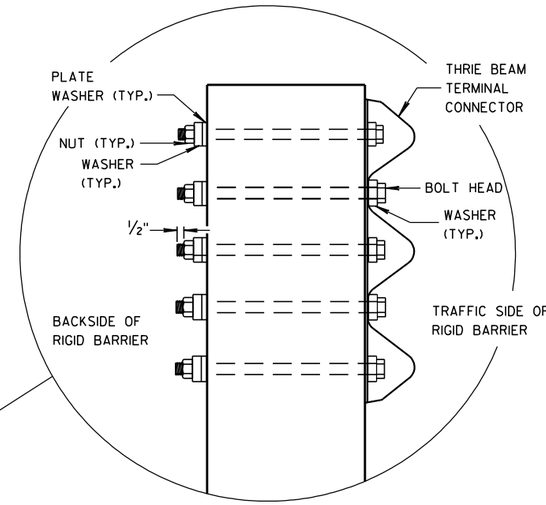
① INCLUDE THE PAYMENT FOR DRILLING BOLT HOLES THROUGH THE PARAPET, AND ALL BOLTS, NUTS AND WASHERS IN THE ITEM "STEEL THRIE BEAM STRUCTURAL APPROACH".

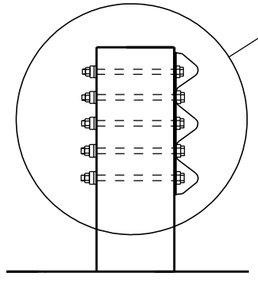
② BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM TERMINAL CONNECTOR. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X ⅝" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.

③ THE RECESS FOR A W-BEAM CONNECTION, WHICH EXISTS ON SOME PARAPETS OF THIS TYPE, SHALL BE FILLED WITH A TREATED TIMBER BLOCKOUT. BLOCKOUT SIZE IS 1'-6" X 2'-0" X 3 ½".

④ W6 X 9 OR W6 X 8.5 STEEL POSTS AND NOTCHED PLASTIC BLOCKOUTS ARE ACCEPTABLE ALTERNATIVES FOR 6" X 8" WOOD POST WITH WOOD OR PLASTIC BLOCKOUTS. USE APPROVED NOTCHED PLASTIC BLOCKOUTS WITH STEEL POSTS.

DO NOT USE STEEL POSTS AND NOTCHED PLASTIC BLOCKOUTS IN THE STEEL THRIE BEAM STRUCTURAL APPROACH AND THE TRANSITION SECTION OF STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATIONS.





SECTION C-C

STEEL THRIE BEAM STRUCTURE APPROACH, CONNECTION TO SQUARE END PARAPETS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

2-8-2012
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER

FHWA

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S.D.D. 14 B 20-10b

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S.D.D. 14 B 20-10b

GENERAL NOTES

THESE ARE TYPICAL CONNECTION DETAILS. ADJUST THE POSTION OF CONNECTIONS TO EXISTING BRIDGES TO FIT THE ACTUAL BRIDGE AND SITE DIMENSIONS.

BOLTS, NUTS AND WASHERS SHALL CONFORM TO ASTM A325, A449 AND GALVANIZED PER STANDARD SPECIFICATIONS 614.

① INCLUDE THE PAYMENT FOR DRILLING BOLT HOLES THROUGH THE PARAPET, AND ALL BOLTS, NUTS AND WASHERS IN THE ITEM "STEEL THRIE BEAM STRUCTURAL APPROACH".

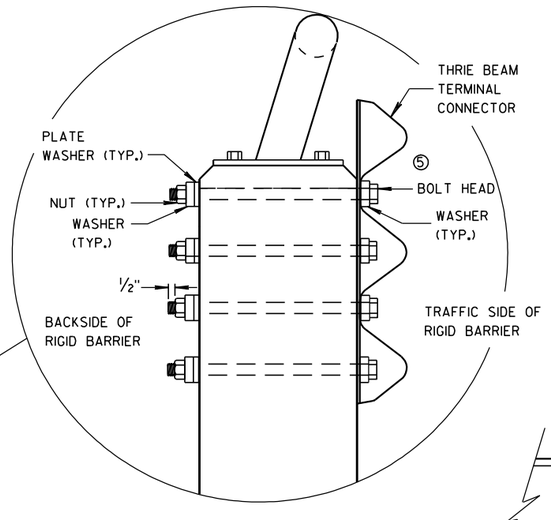
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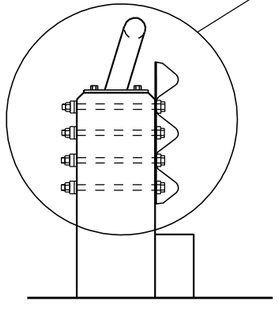
③ THE RECESS FOR A W-BEAM CONNECTION, WHICH EXISTS ON SOME PARAPETS OF THIS TYPE, SHALL BE FILLED WITH A TREATED TIMBER BLOCKOUT. BLOCKOUT SIZE IS 1'-6" X 2'-0" X 3 1/2".

④ W6 X 9 OR W6 X 8.5 STEEL POSTS AND NOTCHED PLASTIC BLOCKOUTS ARE ACCEPTABLE ALTERNATIVES FOR 6" X 8" WOOD POST WITH WOOD OR PLASTIC BLOCKOUTS. USE APPROVED NOTCHED PLASTIC BLOCKOUTS WITH STEEL POSTS.

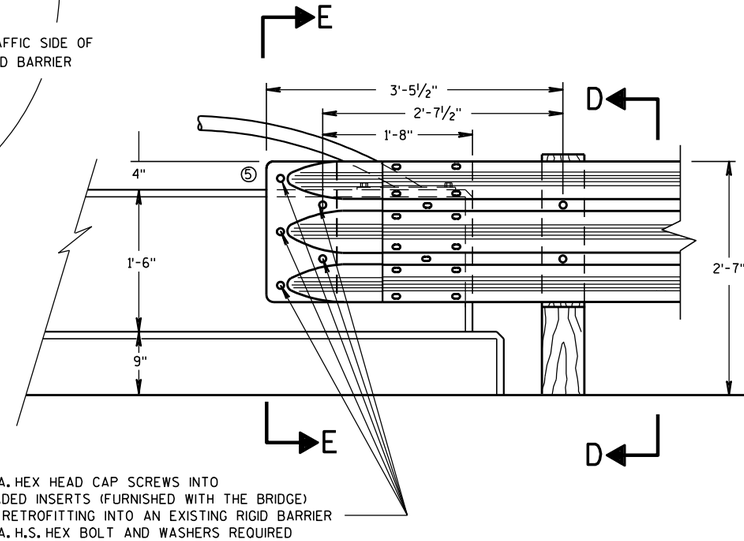
⑤ BOLT, NUT AND WASHERS NOT REQUIRED FOR THIS LOCATION WHEN RETROFITTING AN EXISTING PAPAPET AND THE HOLE IS EITHER ABOVE PARAPET OR WITHIN 4 INCHES OF THE EDGE OF PARAPET.

DO NOT USE STEEL POSTS AND NOTCHED PLASTIC BLOCKOUTS IN THE STEEL THRIE BEAM STRUCTURAL APPROACH AND THE TRANSITION SECTION OF STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATIONS.





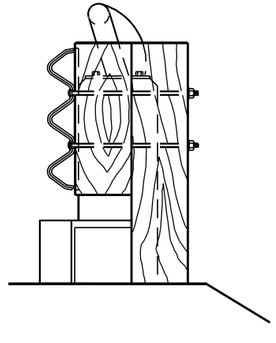
SECTION E-E



① ② 7/8" DIA. HEX HEAD CAP SCREWS INTO THREADED INSERTS (FURNISHED WITH THE BRIDGE) WHEN RETROFITTING INTO AN EXISTING RIGID BARRIER 7/8" DIA. H.S. HEX BOLT AND WASHERS REQUIRED

1" DIA. HOLES DRILLED THRU PARAPET (4 REQ'D.)

FRONT VIEW

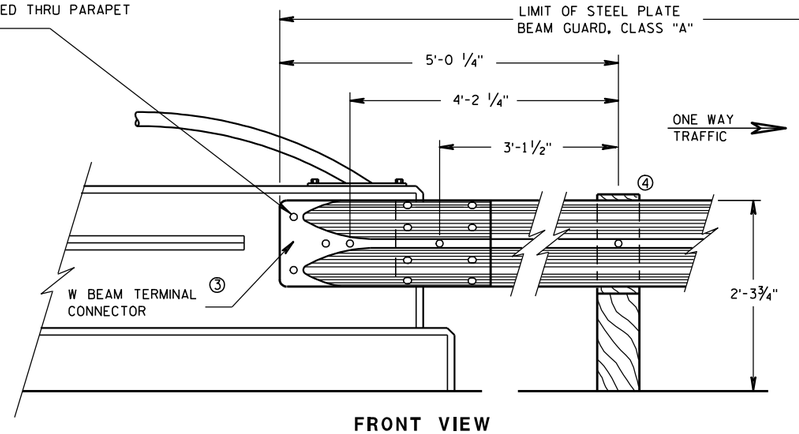


SECTION D-D

THRIE BEAM CONNECTION TO VERTICAL FACED PARAPETS

① ② 7/8" DIA. HEX HEAD CAP SCREWS INTO THREADED INSERTS (FURNISHED WITH THE BRIDGE) WHEN RETROFITTING INTO AN EXISTING RIGID BARRIER 7/8" DIA. H.S. HEX BOLT AND WASHERS REQUIRED

1" DIA. HOLES DRILLED THRU PARAPET (4 REQ'D.)



FRONT VIEW

W BEAM CONNECTION TO VERTICAL FACE PARAPET
(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)

STEEL THRIE BEAM STRUCTURE APPROACH, CONNECTION TO VERTICAL FACED PARAPETS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

2-8-2012
DATE

/S/ Jerry H. [illegible]
ROADWAY STANDARDS DEVELOPMENT ENGINEER

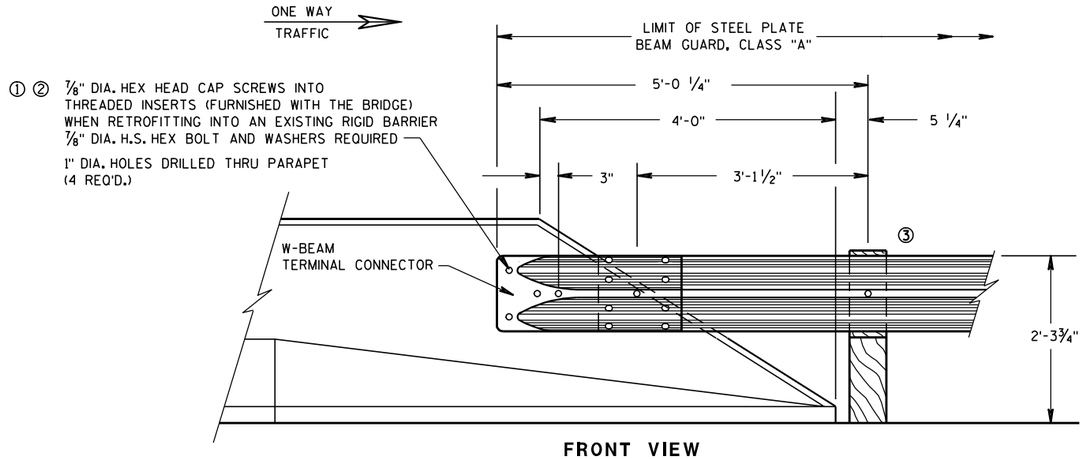
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S.D.D. 14 B 20-10c

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S.D.D. 14 B 20-10c



FRONT VIEW

W BEAM CONNECTION TO PARAPETS WITH SLOPED ENDS

(USE ONLY AT TRAFFIC EXIT END OF ONE WAY BRIDGE)

GENERAL NOTES

THESE ARE TYPICAL CONNECTION DETAILS. ADJUST THE POSTION OF CONNECTIONS TO EXISTING BRIDGES TO FIT THE ACTUAL BRIDGE AND SITE DIMENSIONS.

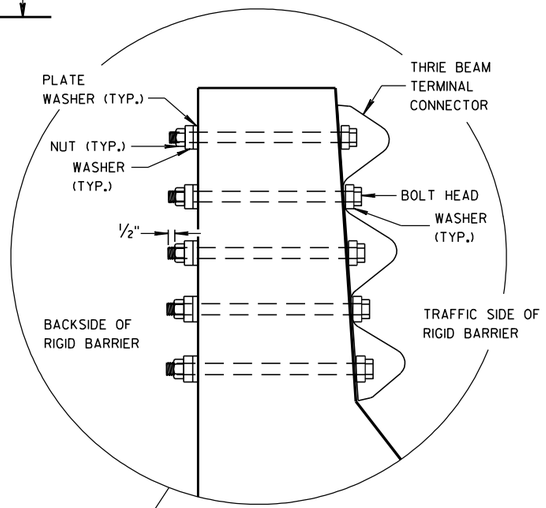
BOLTS, NUTS AND WASHERS SHALL CONFORM TO ASTM A325, A449 AND GALVANIZED PER STANDARD SPECIFICATIONS 614.

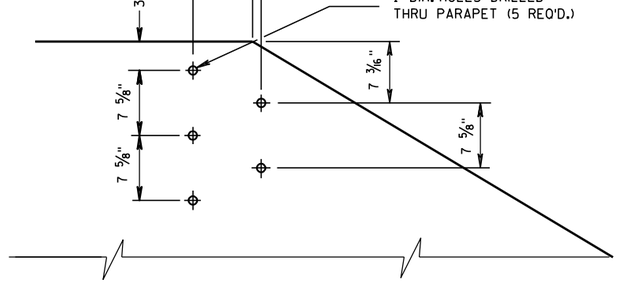
① INCLUDE THE PAYMENT FOR DRILLING BOLT HOLES THROUGH THE PARAPET, AND ALL BOLTS, NUTS AND WASHERS IN THE ITEM "STEEL THRIE BEAM STRUCTURAL APPROACH".

② BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM TERMINAL CONNECTOR. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X 5/8" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.

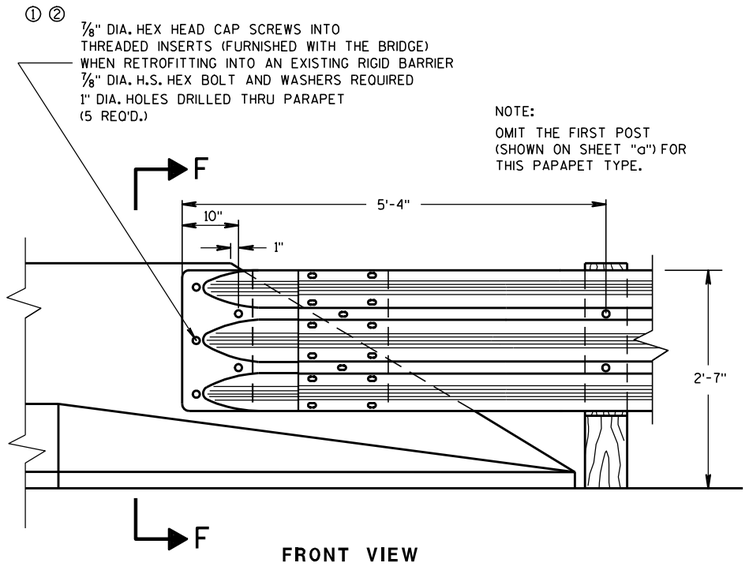
③ W6 X 9 OR W6 X 8.5 STEEL POSTS AND NOTCHED PLASTIC BLOCKOUTS ARE ACCEPTABLE ALTERNATIVES FOR 6" X 8" WOOD POST WITH WOOD OR PLASTIC BLOCKOUTS. USE APPROVED NOTCHED PLASTIC BLOCKOUTS WITH STEEL POSTS.

DO NOT USE STEEL POSTS AND NOTCHED PLASTIC BLOCKOUTS IN THE STEEL THRIE BEAM STRUCTURAL APPROACH AND THE TRANSITION SECTION OF STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATIONS.

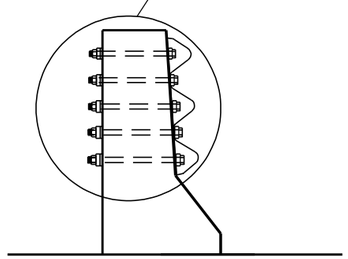




DRILL HOLE LOCATION AND PATTERN FOR THRIE BEAM CONNECTION



FRONT VIEW



SECTION F-F

THRIE BEAM CONNECTION TO BRIDGE PARAPETS WITH SLOPED ENDS

STEEL THRIE BEAM STRUCTURE APPROACH, CONNECTION TO SLOPED END PARAPETS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

2-8-2012
DATE

/S/ Jerry H.
ROADWAY STANDARDS ENGINEER

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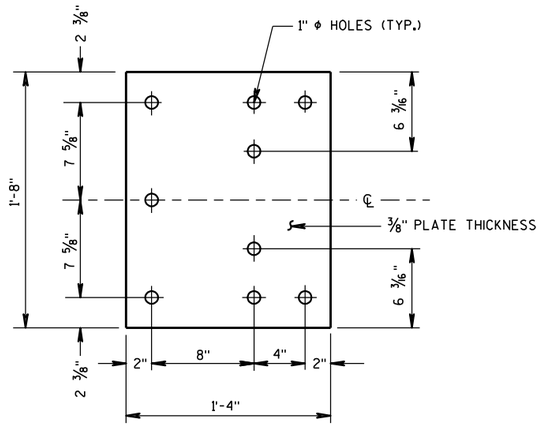
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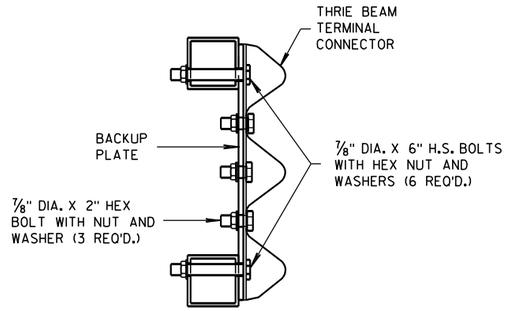
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S.D.D. 14 B 20-10d



BACK-UP PLATE DETAIL



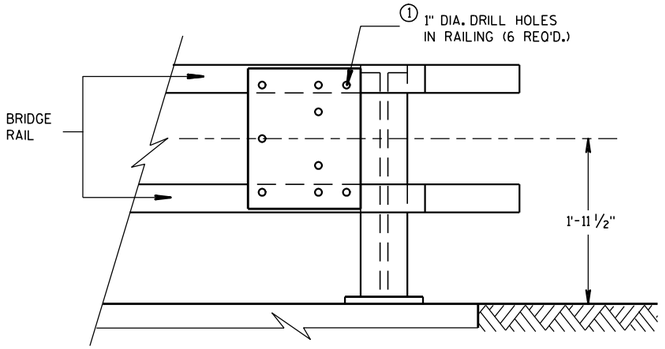
SECTION G-G

GENERAL NOTES

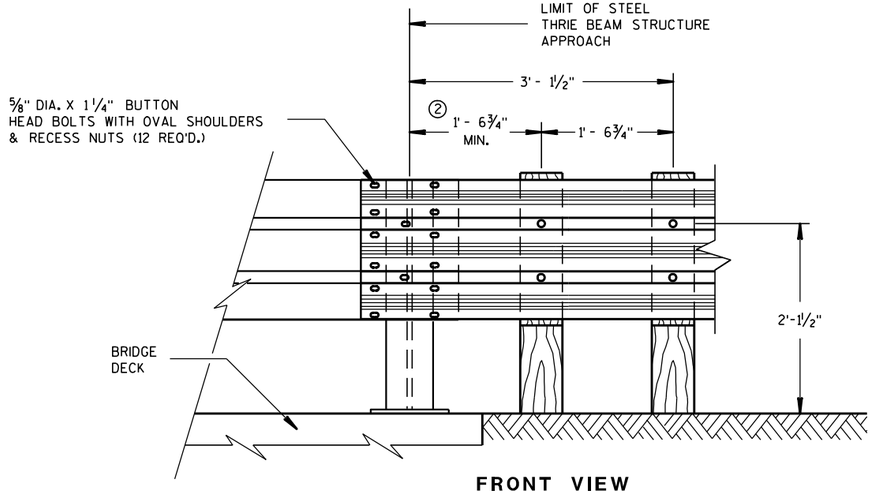
BOLTS, PLATES, NUTS AND WASHERS SHALL CONFORM TO THE REQUIREMENTS OF ASTM SPECIFICATION A 325 AND BE GALVANIZED IN ACCORDANCE WITH ASTM A 153.

① INCLUDE THE PAYMENT FOR DRILLING HOLES IN RAILING IN THE ITEM "STEEL THRIE BEAM STRUCTURE APPROACH".

② VARY THIS DIMENSION DEPENDING ON ABUTMENT TYPE, WINGWALL DETAILS, AND ANGLE OF SKEW. PLACE THE FIRST WOOD POST OFF THE BRIDGE SHALL AS CLOSE AS FEASIBLE TO THE STEEL END POST.

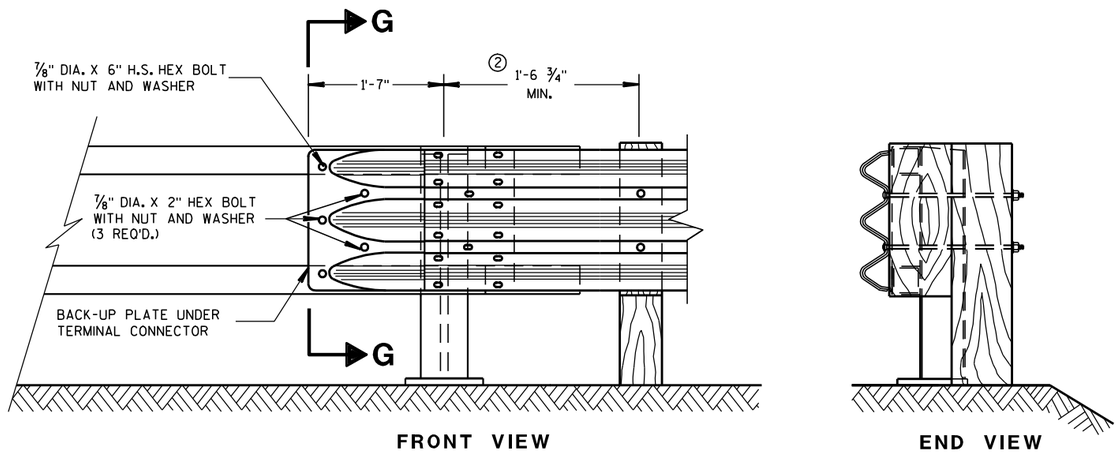


BACK-UP PLATE MOUNTING ONTO BRIDGE RAILING



FRONT VIEW

THRIE BEAM CONNECTION TO STEEL RAILING TYPE "W"



FRONT VIEW

END VIEW

THRIE BEAM CONNECTION TO TUBULAR RAILING TYPE "F"

STEEL THRIE BEAM STRUCTURE APPROACH, CONNECTION TO BRIDGE RAILING TYPES "F" AND "W"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

2-8-2012 DATE — /S/ Jerry H. [illegible] ROADWAY STANDARDS ENGINEER — ENT

FHWA

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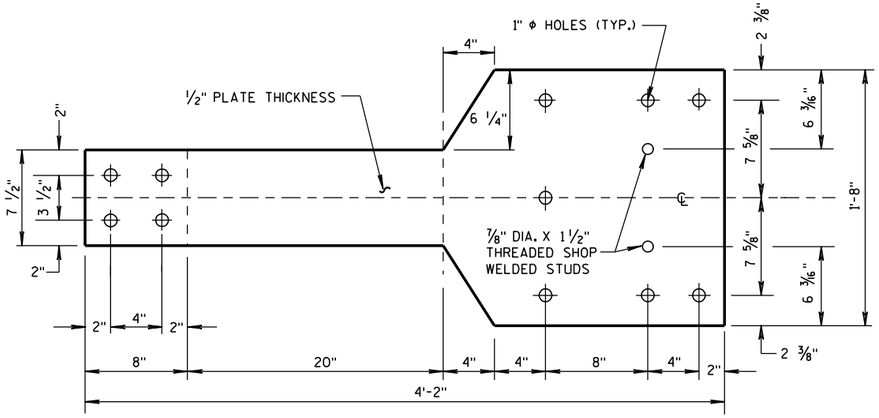
S.D.D. 14 B 20-10e

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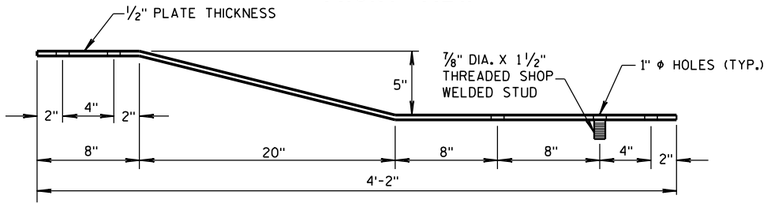
S.D.D. 14 B 20-10e

GENERAL NOTES

① VARY THIS DIMENSION DEPENDING ON ABUTMENT TYPE, WINGWALL DETAILS, AND ANGLE OF SKEW. PLACE THE FIRST WOOD POST OFF THE BRIDGE SHALL BE AS CLOSE AS FEASIBLE TO THE STEEL END POST.

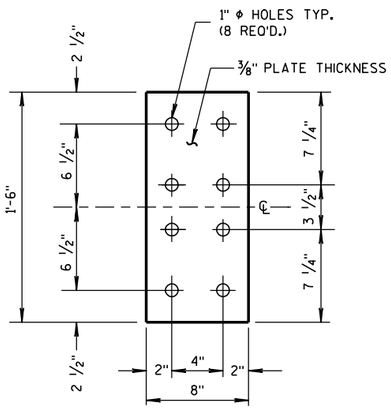


FRONT VIEW



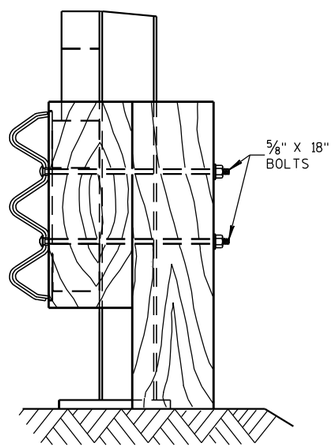
PLAN VIEW

BACK-UP PLATE DETAIL, TYPE "M"

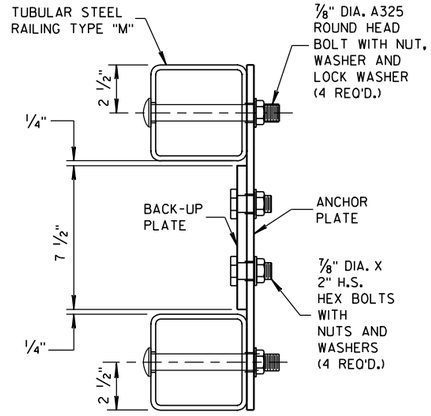


FRONT VIEW

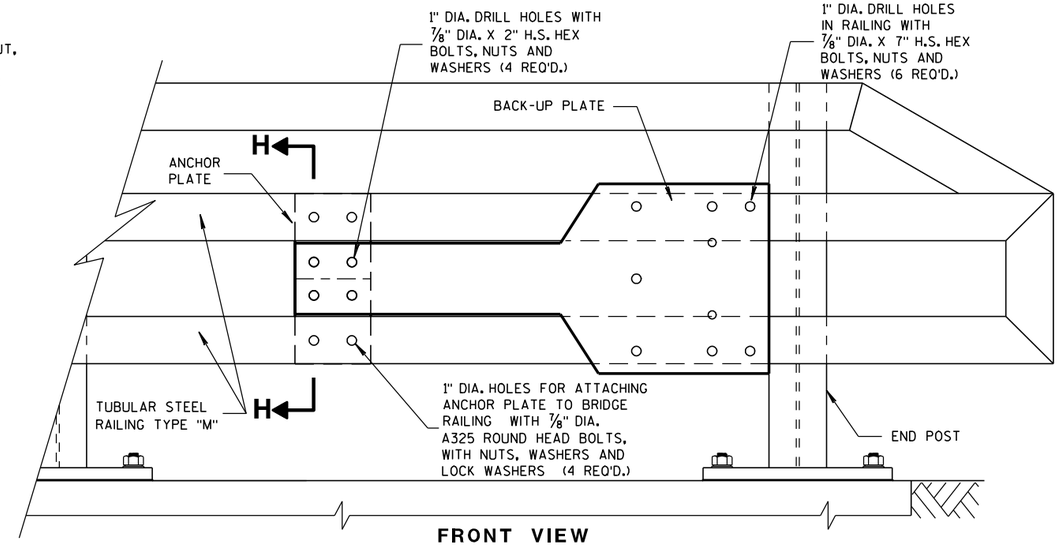
ANCHOR PLATE DETAIL, TYPE "M"



SECTION I-I

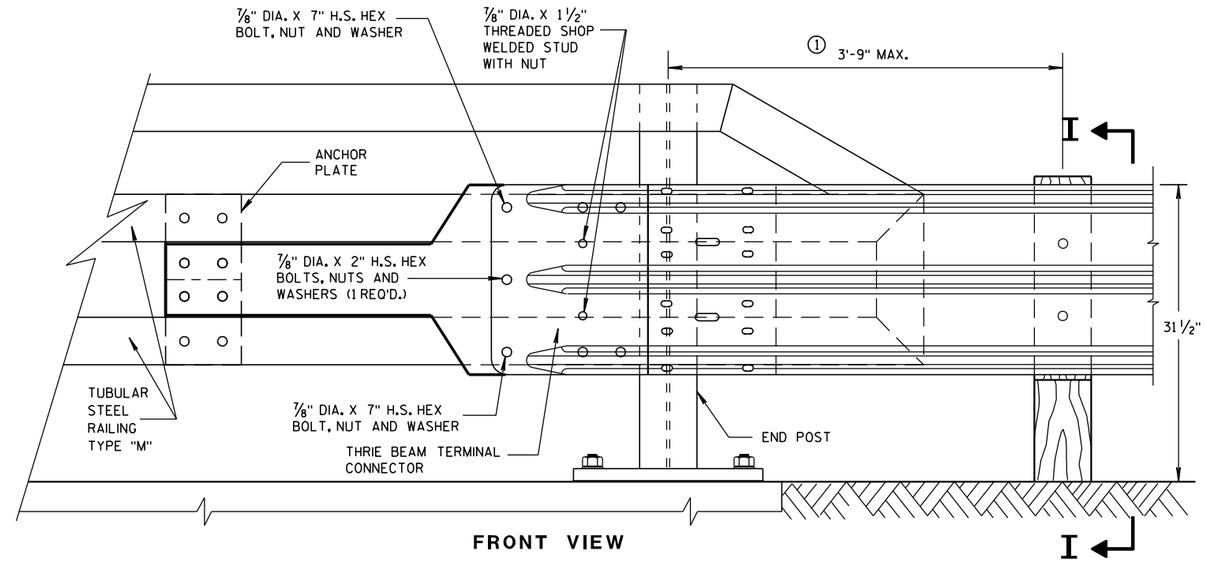


SECTION H-H

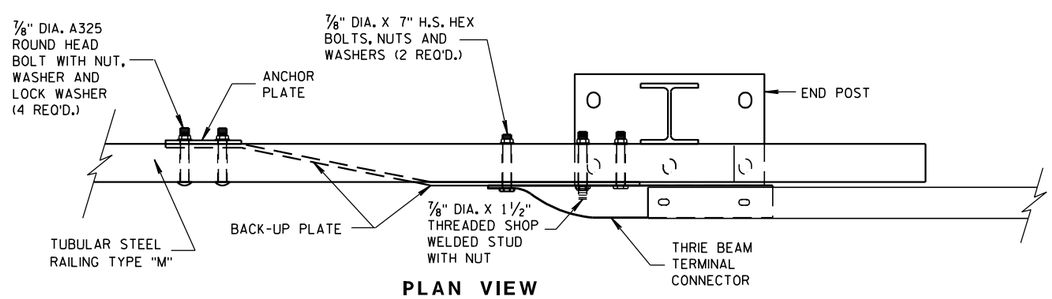


FRONT VIEW

ANCHOR AND BACK-UP PLATE MOUNTING TO BRIDGE RAILING, TYPE "M"



FRONT VIEW



PLAN VIEW

THRIE BEAM CONNECTION TO TUBULAR RAILING, TYPE "M"

STEEL THRIE BEAM STRUCTURE APPROACH, CONNECTION TO BRIDGE RAILING TYPE "M"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

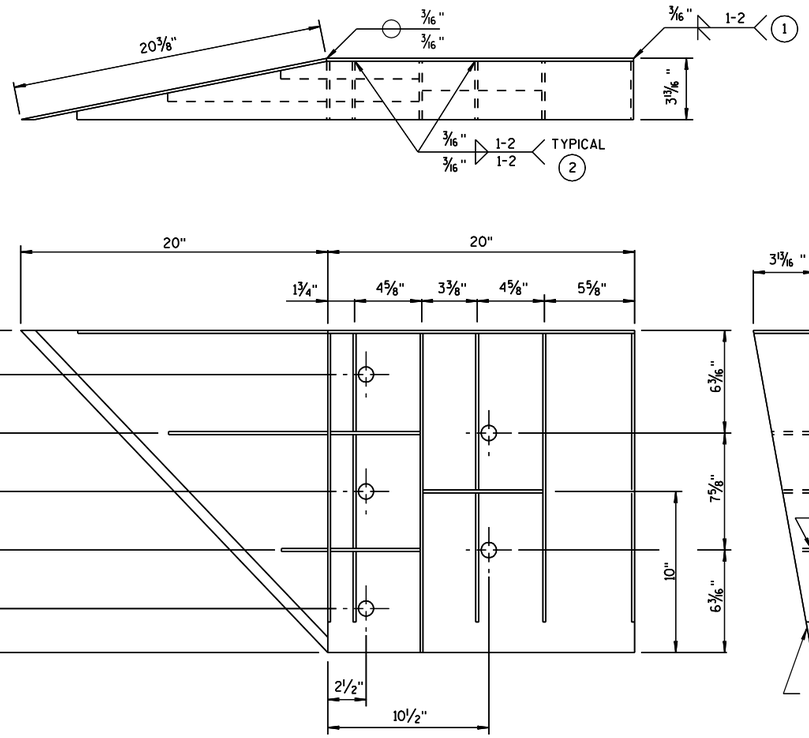
APPROVED
2-8-2012 DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER 810 ENT
FHWA

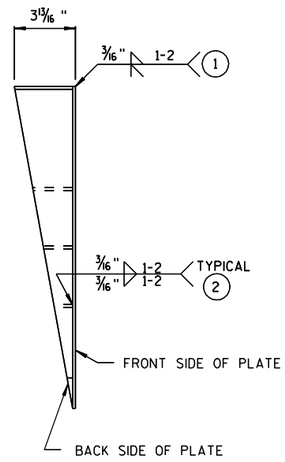
6

S.D.D. 14 B 20-10f

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S.D.D. 14 B 20-10f





WELDING INSTRUCTION

(VIEWED FROM BACK SIDE OF PLATE)

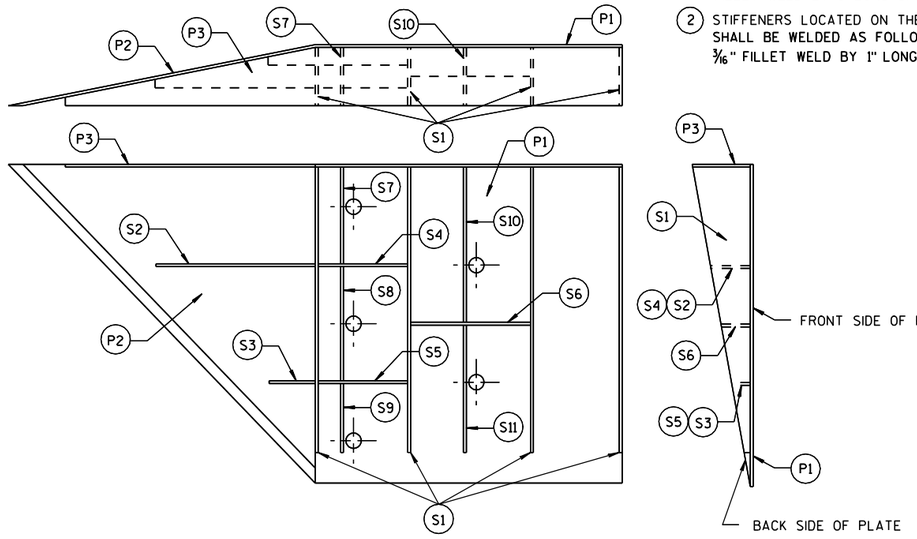


PLATE AND STIFFENER IDENTIFICATION

(VIEWED FROM BACK SIDE OF PLATE)

GENERAL NOTES

COVER PLATE PANELS ARE 3/16" THICK.

ALL STIFFENERS ARE 1/4" THICK.

CONNECTOR PLATE SHALL BE FABRICATED FROM ASTM GRADE A36 STEEL AND GALVANIZED.

FOR GALVANIZED REQUIREMENTS, SEE SECTION 614 OF THE STANDARD SPECIFICATIONS.

ALL HOLE DIAMETERS SHALL BE 1".

FOR OPPOSITE SIDE INSTALLATION MIRROR DRAWINGS.

(1) STIFFENERS LOCATED AT THE OUTSIDE EDGES OF THE COVER PLATES SHALL BE WELDED AS FOLLOWS:
SINGLE BEVEL GROOVE WELD ON EXTERNAL SIDES AND 3/16" FILLET WELD BY 1" LONG SPACED AT 2" ON INTERNAL SIDES.

(2) STIFFENERS LOCATED ON THE INSIDE OF THE COVER PLATE SHALL BE WELDED AS FOLLOWS:
3/16" FILLET WELD BY 1" LONG SPACED AT 2".

CONNECTOR PLATE DIMENSION (PER ASSEMBLY)

PLATE	QUANTITY	SHAPE	SIZE (A x B x C x D)	THICKNESS
P1	1		20" x 20"	3/16"
P2	1		20" x 20" x 28 9/16"	3/16"
P3	1		39" x 3 5/8" x 20" x 19 5/16"	3/16"
S1	4		18 7/16" x 3 5/8" x 18 3/4"	1/4"
S2	1		10 1/4" x 2 7/16" x 10 3/8" x 1/2"	1/4"
S3	1		3" x 1 1/16" x 3 1/8" x 1/2"	1/4"
S4	1		6 1/8" x 2 7/16"	1/4"
S5	1		6 1/8" x 1 1/16"	1/4"
S6	1		7 3/4" x 1 3/4"	1/4"
S7	1		2 9/16" x 6" x 3 5/8" x 5 7/8"	1/4"
S8	1		1 5/32" x 7 1/2" x 2 1/2" x 7 3/8"	1/4"
S9	1		6 1/16" x 6 3/16" x 1 3/32"	1/4"
S10	1		1 7/8" x 9 7/8" x 3 5/8" x 9 11/16"	1/4"
S11	1		8 1/2" x 8 3/4" x 1 13/16"	1/4"

STEEL THRIE BEAM STRUCTURE APPROACH

STEEL THRIE BEAM STRUCTURE APPROACH, CONNECTOR PLATE DETAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

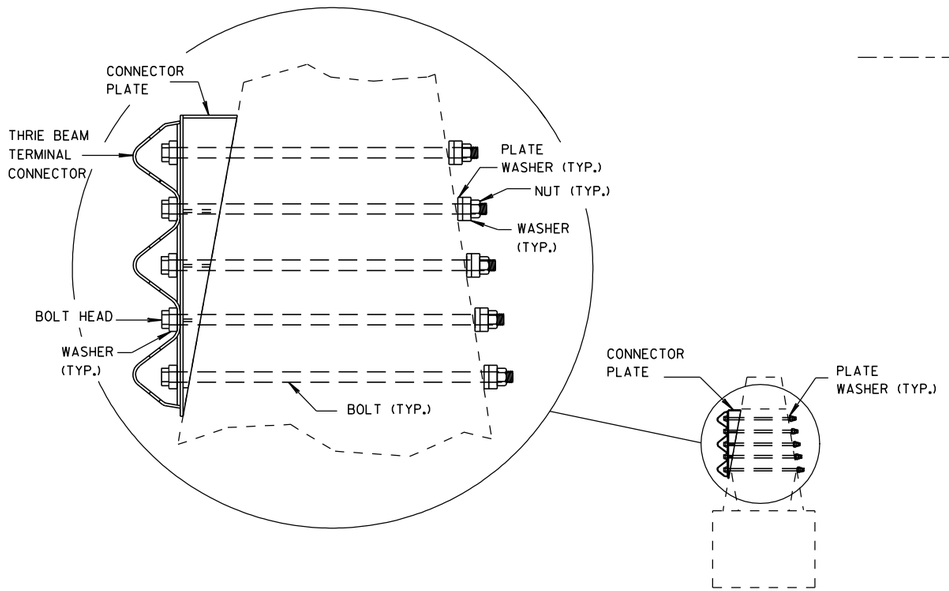
APPROVED
2-8-2012 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
811 — FHWA

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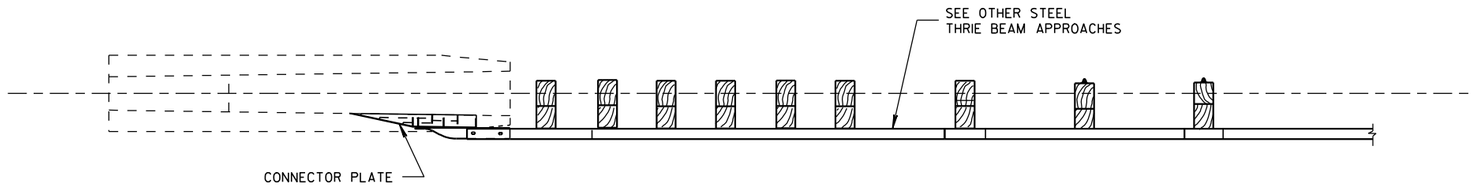
S.D.D. 14 B 20-10g

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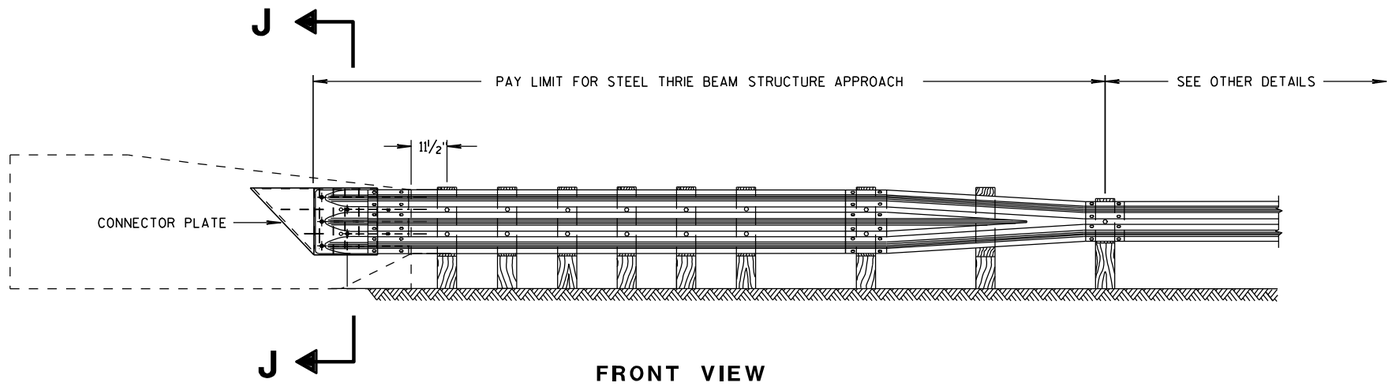
S.D.D. 14 B 20-10g



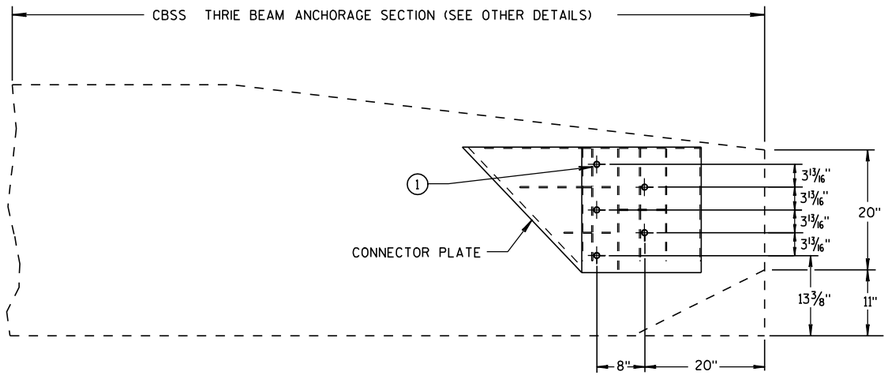
SECTION J-J



PLAN VIEW



FRONT VIEW



CONNECTOR PLATE LOCATION

GENERAL NOTES

CONSTRUCT PER STANDARD SPECIFICATION 614.

CONNECTOR PLATE INCIDENTAL TO STEEL THRIE BEAM STRUCTURE APPROACH.

(1) BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM TERMINAL CONNECTOR. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X 5/8" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.

STEEL THRIE BEAM STRUCTURE APPROACH

STEEL THRIE BEAM STRUCTURE APPROACH, SINGLE SLOPE ATTACHMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

2-8-2012 DATE — /S/ Jerry H. [illegible] ROADWAY STANDARDS ENGINEER

FHWA

812

6

S.D.D. 14 B 20-10h

6

S.D.D. 14 B 20-10h

BILL OF MATERIALS

NOTE NO.	QTY.	DESCRIPTION
(1)	4	WOOD BREAKAWAY TERMINAL POST: 5½" X 7½" X 3'-9"
(2)	**	STEEL TUBE: OPTION 1 - QUANITY OF 4 TS 8" X 6" X 0.188", 4'-6" LONG OR OPTION 2 - QUANITY OF 2 TS 8" X 6" X 0.188", 6'-0" AND 2 TS 8" X 6" X 0.188", 4'-6" LONG
(3)	2	SOIL PLATE: 2'-0" X 1'-6" X ¼" **
(4)	4	WOOD BREAKAWAY CRT POST: 6" X 8" X 6'-0"
(5)	6	WOOD OFFSET BLOCKS: 6' X 8" X 1'-2"
(6)	1	PIPE SLEEVE: 2" X 5 ½" STANDARD PIPE
(7)	1	BEARING PLATE
(8)	1	BCT CABLE ASSEMBLY
(9)	1	CABLE ANCHOR BOX
(10)	1	STRUT & YOKE
(11)	1	STEEL PLATE BEAM, END PANEL 12 GA. 13'-6½" LONG FOR SKT-350, ET-2000 AND ET-2000 PLUS
(12)	3	STEEL PLATE BEAM: 12 GA. 13'-6½"
(13)	1	ET-2000/ET-2000 PLUS GUARDRAIL EXTRUDER OR SKT-350 IMPACT HEAD: AS FURNISHED BY MANUFACTURER
(14)	1	REFLECTIVE SHEETING TYPE H: 18" X 18"
(15)	1	E.A.T. MARKER POST

GENERAL NOTES

FOLLOW MANUFACTURE'S BOLTING RECOMMENDATIONS. IF NONE ARE AVAILABLE, INSTALL ⅝" ϕ X 1'-6" BUTTON HEAD BOLTS AT ALL POSTS EXCEPT FOR POST 1.

(A) THE SLOPE IN THE AREA BOUNDED BY THE EXTENDED VEHICLE RUNOUT PATH (EVRP), THE HINGE POINT LINE (HPL),AND THE CLEAR ZONE LIMITS (CZL) SHALL BE 4:1 OR FLATTER.

(B) AFTER FINAL ASSEMBLY, RECHECK CABLE TO BE SURE IT IS TAUT AND HAS NOT RELAXED.

(C) THE 13 SLOT FIRST RAIL PANEL MAY BE USED IN LIEU OF THE 3 SLOT RAIL PANEL ON SKT-350 ONLY.

(D) THE TOP OF THE STEEL TUBE ON POSTS 1 THROUGH 4 SHALL NOT BE MORE THAN 3" ABOVE THE FINISH GROUND ELEVATION.

(E) THE CENTER OF THE UPPER 3½" DIAMETER HOLE ON POST 5 THROUGH 8 SHALL BE ¾" ABOVE THE FINISHED GROUND LINE.

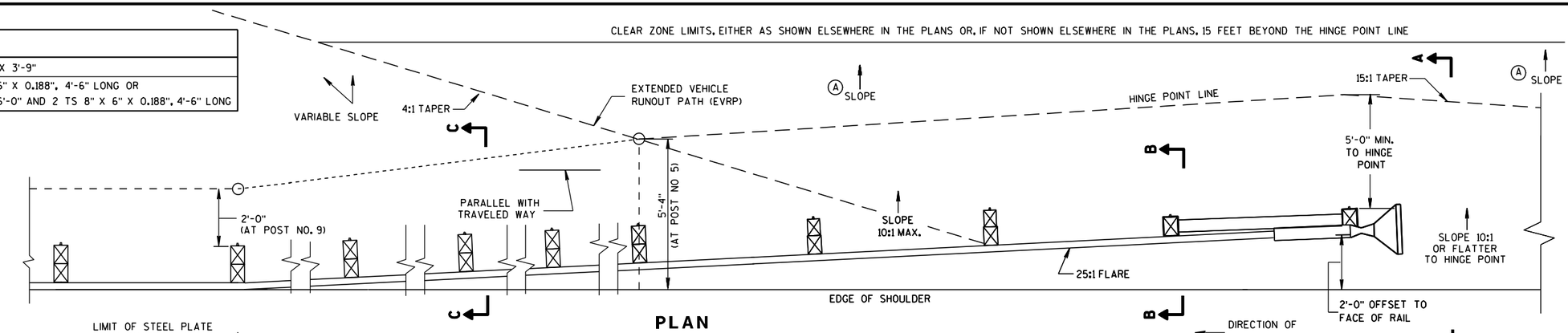
(F) SHEETING IS ATTACHED TO 0.040 ALUMINUM SHEET AND ATTACHED TO E.A.T. HEAD USING 4 STAINLESS STEEL SELF-TAPPING SCREWS. ONE SCREW PER CORNER OF E.A.T.

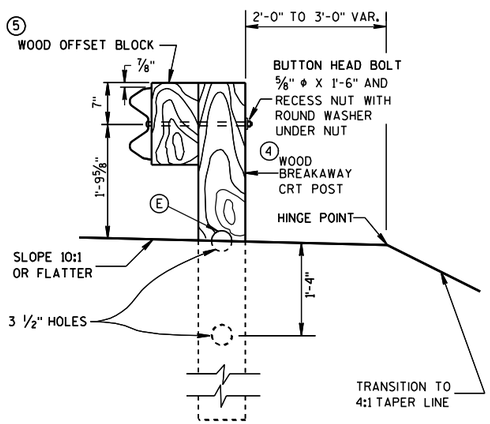
STEEL POSTS SHALL NOT BE ALLOWED FOR USE WITH ENERGY ABSORBING TERMINALS.

DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

* DO NOT ATTACH BLOCKOUTS TO POSTS 1 AND 2.

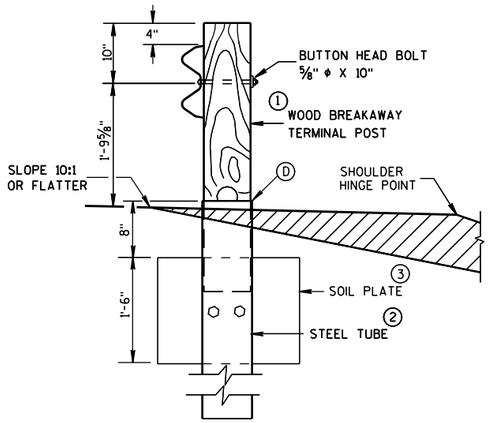
** SDD SHOWS 4 - 54 INCH STEEL TUBES WITH SOIL PLATES INSTALLED ON POST 1 AND POST 2. POST 3 AND 4 DO NOT NEED SOIL PLATES. AN ALTERNATIVE INSTALLATION WOULD CONSIST OF 2 - 72 INCH STEEL TUBES ON POST 1 AND POST 2 AND 54 INCH SOIL TUBES ON POSTS 3 AND 4. THE ALTERNATIVE INSTALLATION DOES NOT REQUIRE SOIL PLATES.





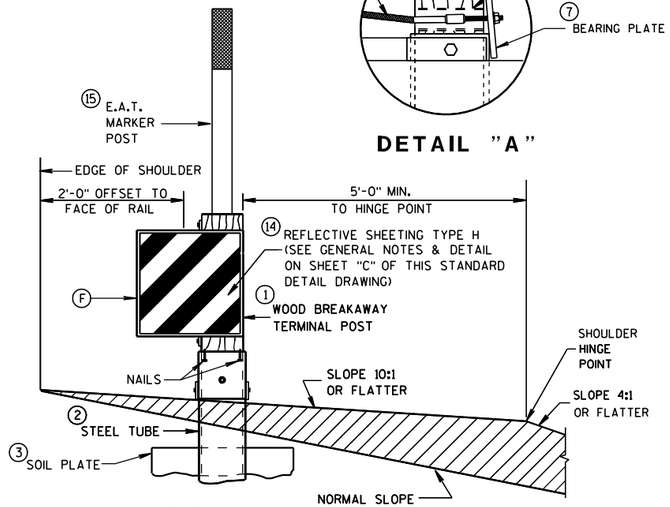
SECTION C-C

TYPICAL AT POST NOS. 6, 8



SECTION B-B

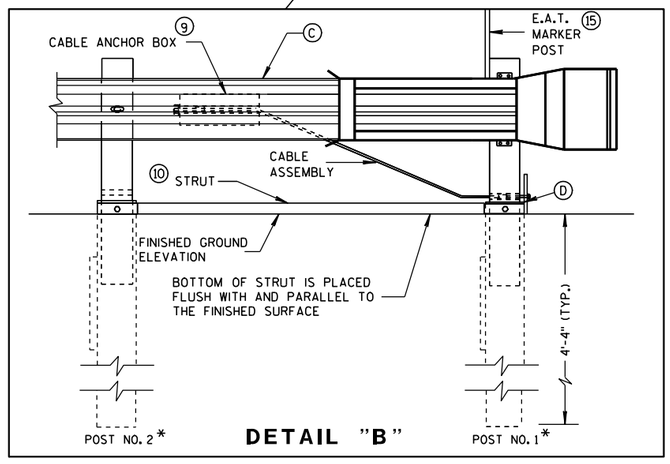
TYPICAL AT POST NO. 2*



DETAIL "A"

SECTION A-A

TYPICAL AT POST NO. 1*

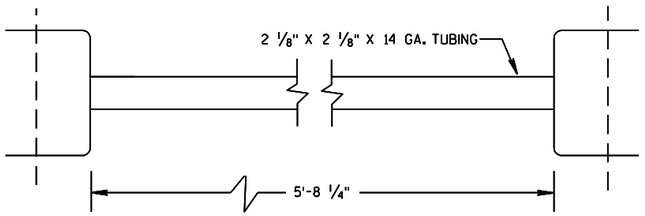


DETAIL "B"

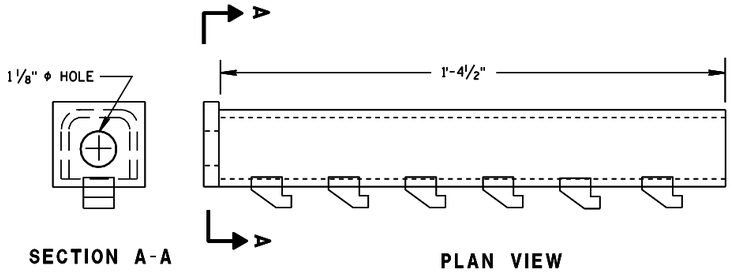
STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

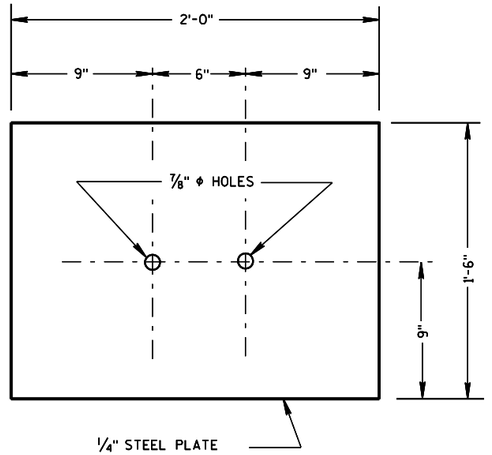
6
S.D.D. 14 B 24-7a



⑩ STRUT DETAIL (SKT-350)

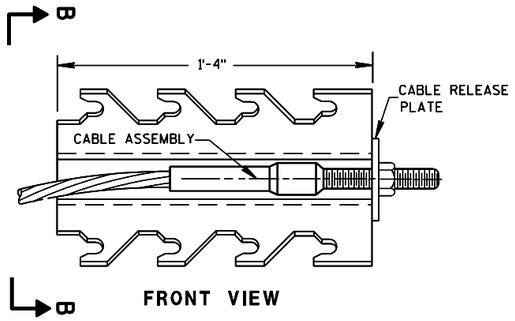


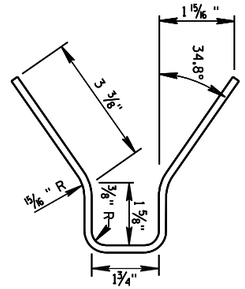
⑨ CABLE ANCHOR BOX (ET-2000/ET-2000 PLUS)



③ SOIL PLATE

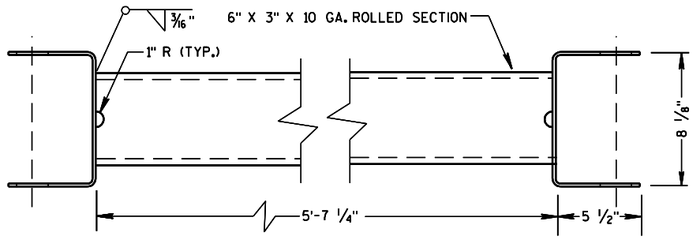
(SKT-350, ET-2000/ET-2000 PLUS)





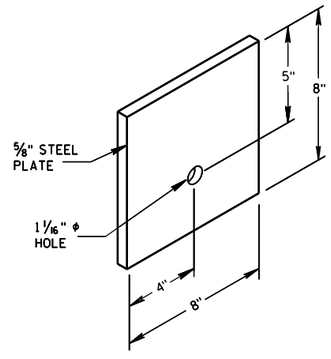
⑨ CABLE ANCHOR BOX (SKT-350)

(SKT-350)



⑩ STRUT DETAIL (ET-2000/ET-2000 PLUS)

(ET-2000/ET-2000 PLUS)



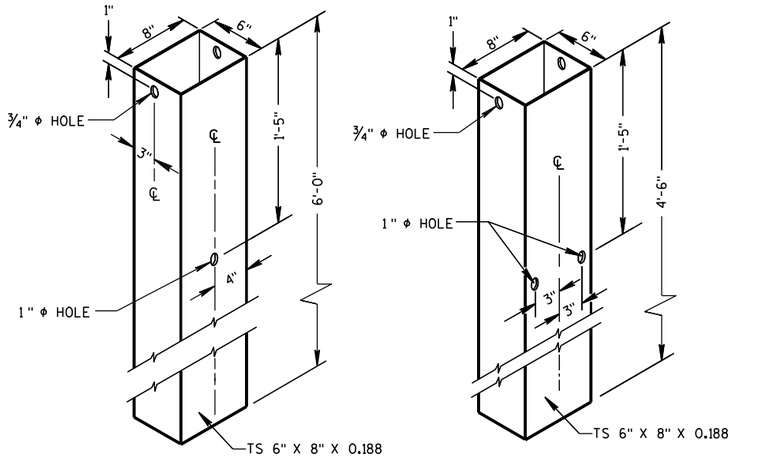
⑦ STEEL BEARING PLATE

(SKT-350, ET-2000/ET-2000 PLUS)

STEEL PLATE BEAM GUARD
ENERGY ABSORBING TERMINAL

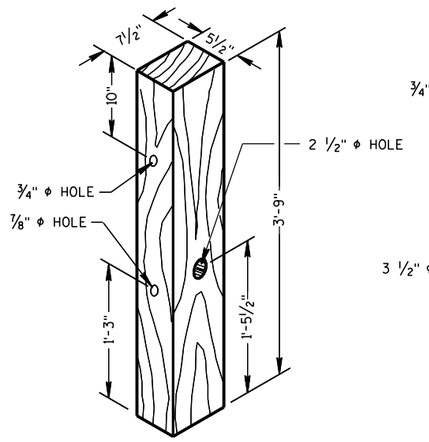
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
S.D.D. 14 B 24-7b

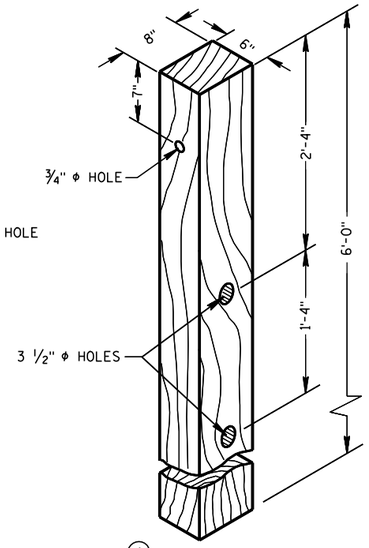


② 72" STEEL TUBE
(POSTS NO. 1-4

② 54" STEEL TUBE
(POSTS NO. 1-4



① TERMINAL POST
(POSTS NO. 1-4



④ CRT POST
(POSTS NO'S 5-8

WOOD BREAKAWAY POSTS

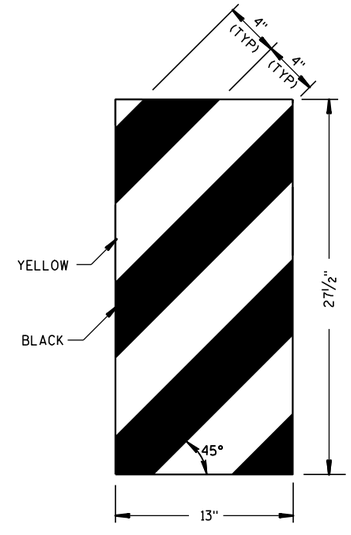
GENERAL NOTES

STEEL PLATE BEAM GUARD, ENERGY ABSORBING TERMINAL SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH, WHICH SHALL INCLUDE HARDWARE, STEEL PLATE BEAM GUARD, POSTS, REFLECTIVE SHEETING AND INSTALLATION AS SHOWN.

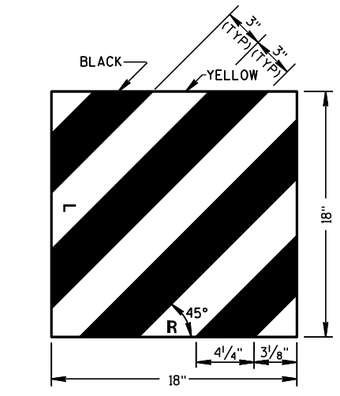
WHEN ROCK IS ENCOUNTERED DURING EXCAVATION, A 12 INCH DIA. POST HOLE EXTENDING 20 INCHES DEEP INTO THE ROCK MAY BE USED IF APPROVED BY THE ENGINEER. GRANULAR MATERIAL SHALL BE PLACED IN THE BOTTOM OF THE HOLE APPROXIMATELY 2 ½" INCHES DEEP TO PROVIDE DRAINAGE. THE SOIL TUBES SHALL BE FIELD CUT TO LENGTH, PLACED IN THE HOLE AND BACKFILLED WITH ADEQUATELY COMPACTED MATERIAL EXCAVATED FROM THE HOLE.

SEE APPROVED PRODUCTS LIST FOR ACCEPTABLE E. A. T. MARKER POST.

(G) ½" DIA. X 3" LAG BOLT WITH WASHER.

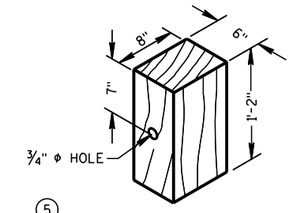


ET-2000 PLUS ONLY

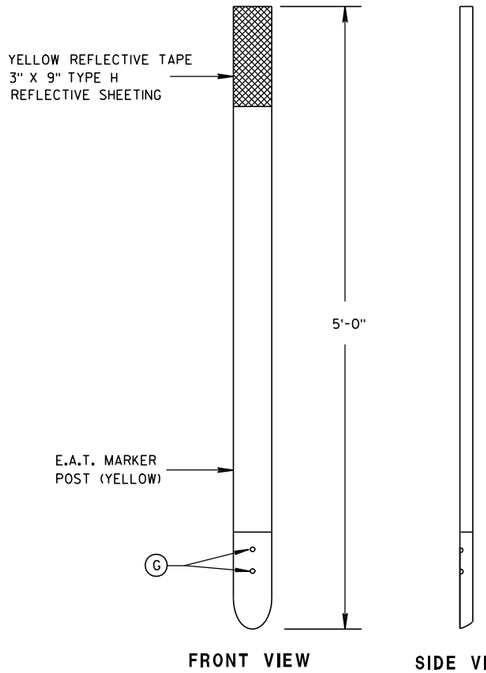


ET-2000 AND SKT-350

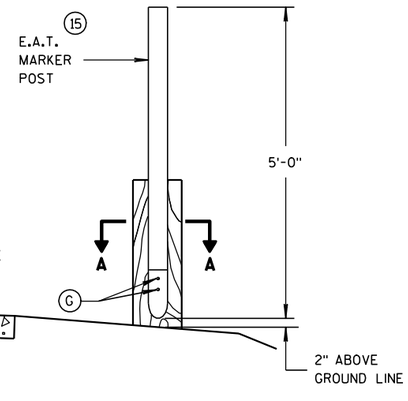
⑭ REFLECTIVE SHEETING DETAILS



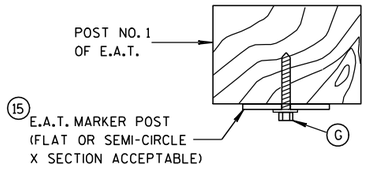
⑤ WOOD OFFSET BLOCK
REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2



⑮ E.A.T. MARKER POST



TYPICAL INSTALLATION OF E.A.T.
MARKER POST BACKSIDE OF POST NO. 1
(E.A.T. AND RAIL REMOVED FOR CLARITY)



SECTION A-A

STEEL PLATE BEAM GUARD
ENERGY ABSORBING TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

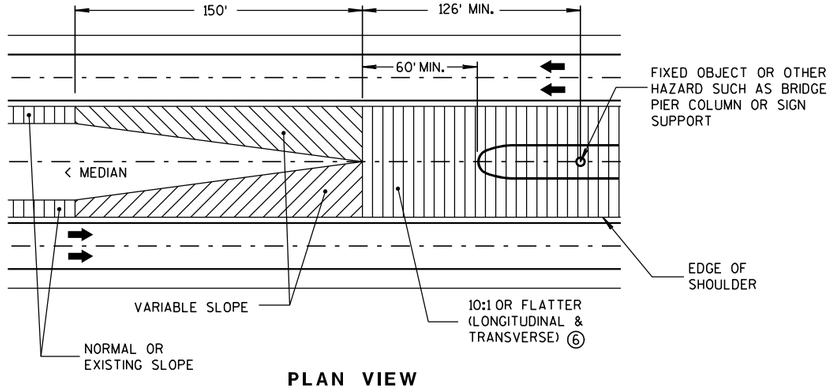
APPROVED
4-12-10
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS 815 ENT
ENGINEER
FHWA

6

S.D.D. 14 B 24-7c

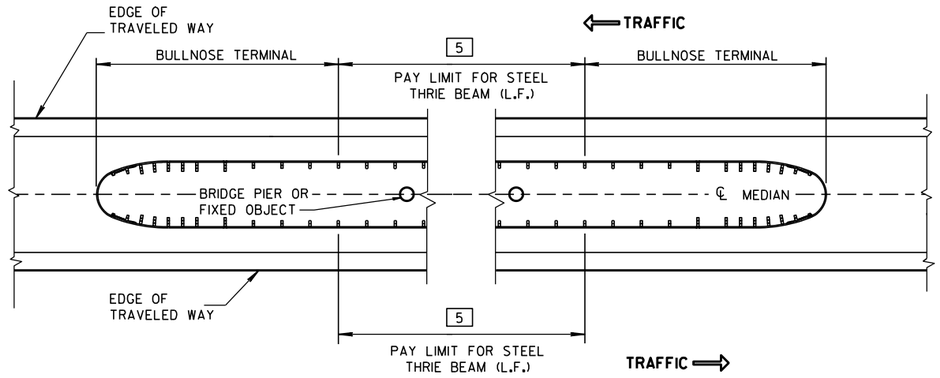
6

S.D.D. 14 B 24-7c

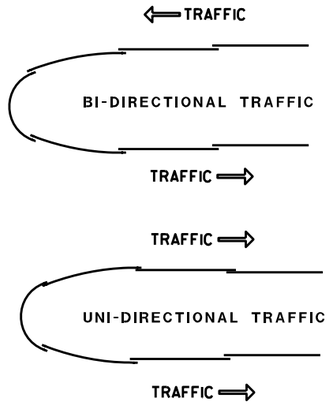


PLAN VIEW

GRADING AT BULLNOSE
(ALL INSTALLATIONS)



MEDIAN HAZARD PROTECTION PAY LIMITS



LAPPING DETAIL
(ALL INSTALLATIONS)

GENERAL NOTES

SEE STANDARD DETAIL DRAWINGS 14 B 26a-e.

PUNCHING, DRILLING, CUTTING OR WELDING IS NOT PERMITTED ON ANY GALVANIZED THRIE BEAM ACCESSORY OR TERMINAL ACCESSORY.

OTHER ANCHOR CABLE ASSEMBLIES HAVING 40,000 LBS. MIN. BREAKING STRENGTH MAY BE USED.

FOR POSTS 2 THROUGH 14, IF POST CANNOT BE INSTALLED AT SPECIFIED LOCATION 1 EXTRA STANDARD WOOD BLOCK MAY BE ADDED.

THE USE OF STEEL POSTS ON THE BULLNOSE IS NOT ALLOWED.

BOLTS AND ALL NECESSARY HARDWARE SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A 153.

ALL THRIE BEAM SHALL BE 12-GAUGE.

[1] SLOTTED THRIE BEAM RAIL NO. 1. (POST 1 TO POST 1)

[2A] SLOTTED THRIE BEAM RAIL NO. 2A. (POST 1 TO POST 5)

[3] SLOTTED THRIE BEAM RAIL NO. 3. (POST 5 TO POST 8)

[4] UNBENT STANDARD THRIE-BEAM RAIL NO.4. (POST 8 TO POST 10 & POST 10 TO POST 12)

[5] BEYOND POST 12: CONSTRUCT STEEL THRIE BEAM - USE UNBENT STANDARD THRIE BEAM RAIL NO. 5.

① DIMENSIONS ARE FROM BACK OF RAIL TO BACK OF RAIL WHERE RAIL IS BOLTED TO POST OR BLOCK.

② U-BOLT CABLE CLIPS (3 PER CABLE) SPACED OUT ON NOSE, TO HOLD CABLE TO BACKSIDE OF THE RAIL.

③ NOSE CABLE W/SWAGGED END BUTTONS.

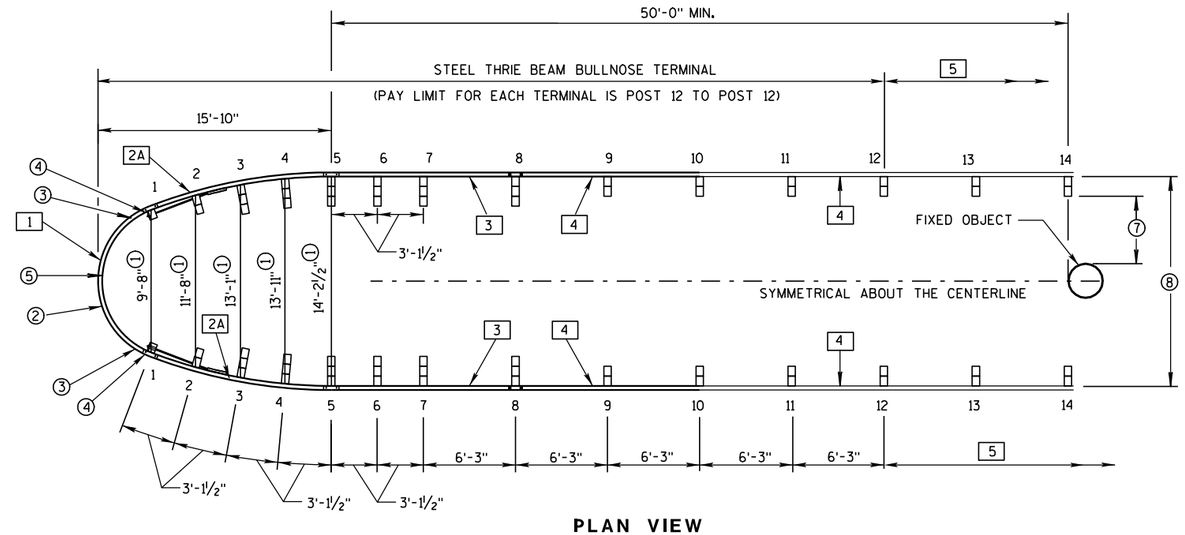
④ NOSE CABLE ANCHOR PLATE (BACKSIDE OF SPLICE).

⑤ THE SLACK IN THE NOSE CABLES SHALL BE EVENLY DISTRIBUTED BETWEEN THE CABLE CLIP FASTENERS AND POST NO. 1 ON EITHER SIDE OF THE NOSE.

⑥ PROVIDE SUITABLE DRAINAGE WHEN MEDIAN GRADING IMPEDES NORMAL FLOW.

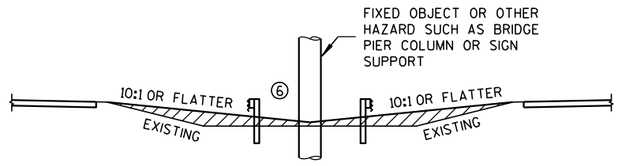
⑦ 2'-6" MINIMUM LATERAL DISTANCE BETWEEN BACK OF POST AND FACE OF FIXED OBJECT.

⑧ MAXIMUM WIDTH OF SYSTEM IS 14'-2½" MEASURED FROM BACK OF RAIL TO BACK OF RAIL WHERE RAIL IS BOLTED TO A POST OR BLOCK.

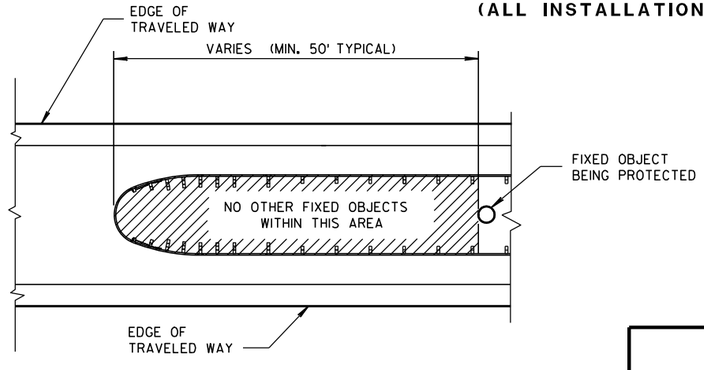


PLAN VIEW

TYPICAL BULLNOSE LAYOUT



MEDIAN GRADING SECTION
(ALL INSTALLATIONS)



HAZARD FREE AREA INSIDE BULLNOSE

STEEL THRIE BEAM BULLNOSE TERMINAL

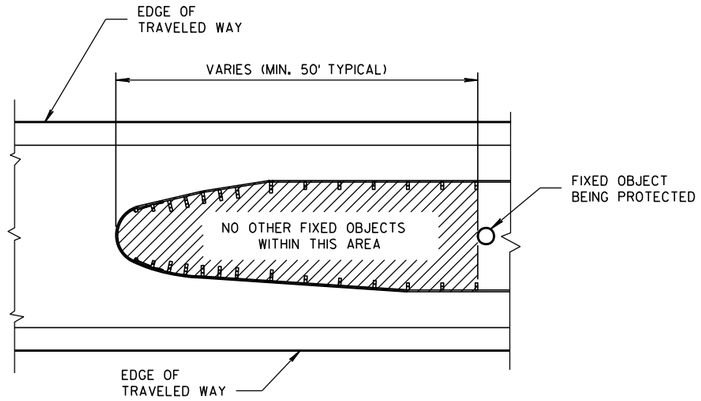
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

S.D.D. 14 B 26-2a

6

S.D.D. 14 B 26-2a



HAZARD FREE AREA INSIDE BULLNOSE

GENERAL NOTES

SEE STANDARD DETAIL DRAWINGS 14 B 26a-e.

FOR POSTS 2 THROUGH 14, IF POST CANNOT BE INSTALLED AT SPECIFIED LOCATION 1 EXTRA STANDARD WOOD BLOCK MAY BE ADDED.

[1] SLOTTED THRIE BEAM RAIL NO. 1. (POST 1 TO POST 1)

[2A] SLOTTED THRIE BEAM RAIL NO. 2A. (POST 1 TO POST 5)

[2B] SLOTTED THRIE BEAM RAIL NO. 2B. (POST 1 TO POST 5)

[3] SLOTTED THRIE BEAM RAIL NO. 3. (POST 5 TO POST 8)

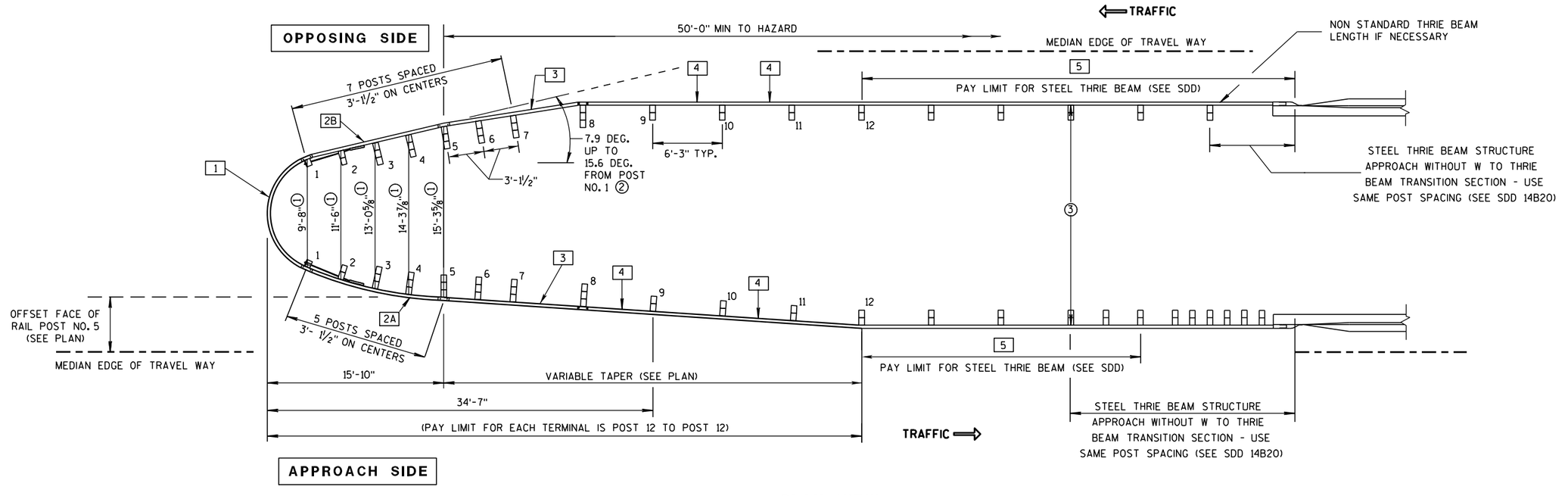
[4] UNBENT STANDARD THRIE-BEAM RAIL NO. 4, (POST 8 TO POST 10 & POST 10 TO POST 12)

[5] BEYOND POST 12: CONSTRUCT STEEL THRIE BEAM - USE UNBENT STANDARD THRIE BEAM RAIL NO. 5.

① DIMENSIONS ARE FROM BACK OF RAIL TO BACK OF RAIL WHERE RAIL IS BOLTED TO POST.

② TAPER BEGINNING AT POST NO. 1 MUST CONTINUE TO POST NO. 5. PAST POST NO. 5 TAPER MAY END OR BE EXTENDED UP TO 15.6 DEGREES TO FIT VARIABLE MEDIAN WIDTHS. (SEE PLAN)

③ FOR MEDIANS WIDER THAN 14'-2½" MEASURED FROM BACK OF RAIL TO BACK OF RAIL WHERE RAIL IS BOLTED TO A POST OR BLOCK.



PLAN VIEW

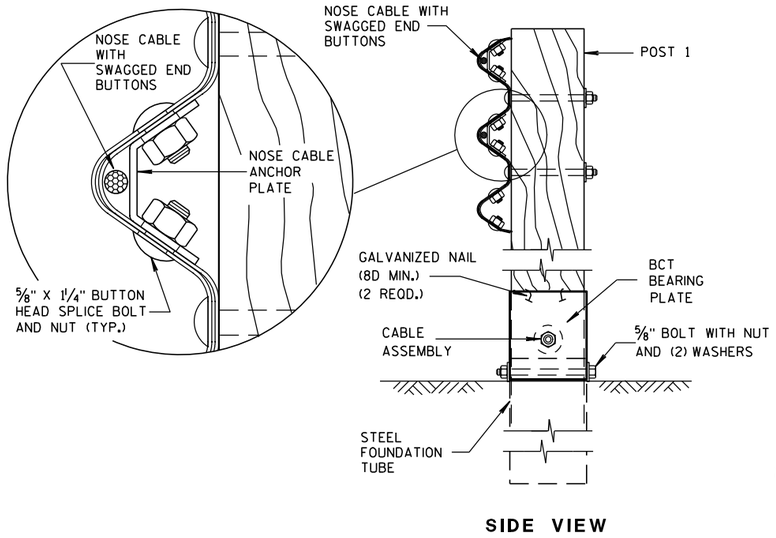
WIDENED BULLNOSE DESIGN

(INSTALLATION AT TWIN BRIDGES WITH BI-DIRECTIONAL TRAFFIC SHOWN)

STEEL THRIE BEAM BULLNOSE TERMINAL

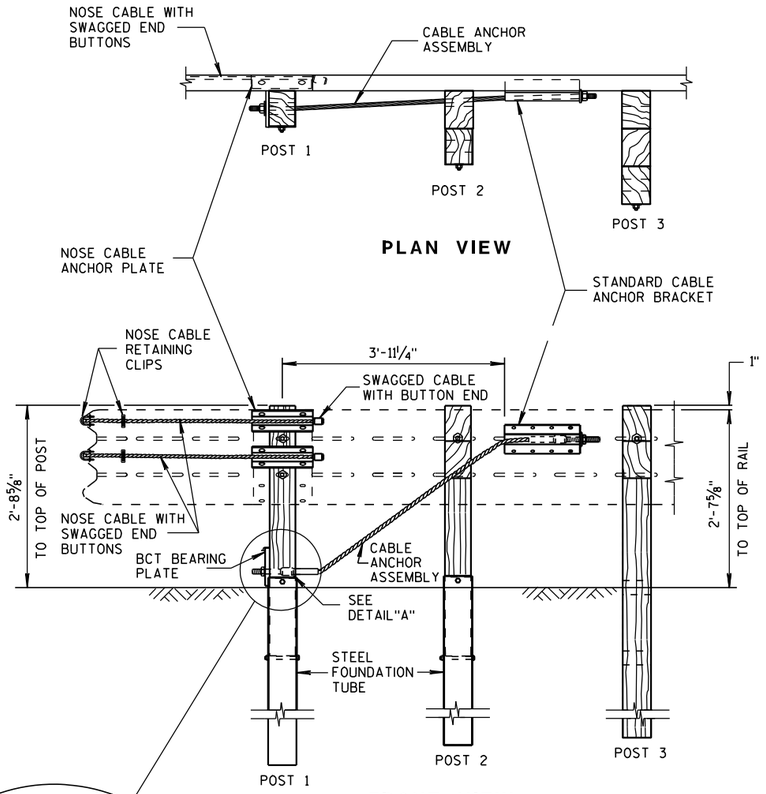
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
S.D.D. 14 B 26-2b



SIDE VIEW

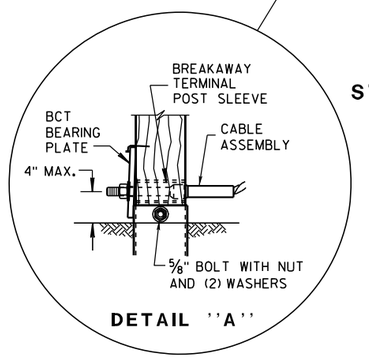
NOSE CABLE ASSEMBLY AT POST NO. 1



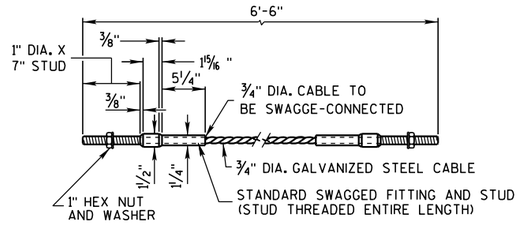
PLAN VIEW

FRONT VIEW

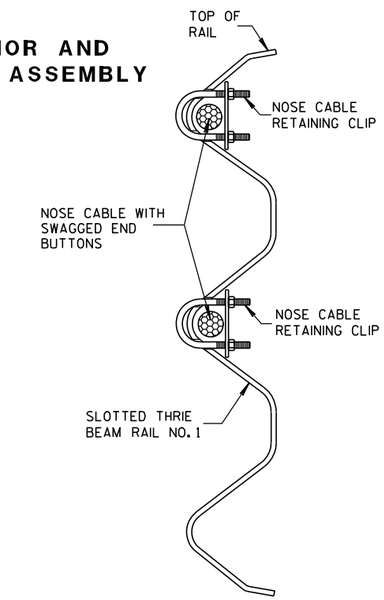
NOSE CABLE ANCHOR AND STANDARD BRACKET ASSEMBLY



DETAIL ''A''



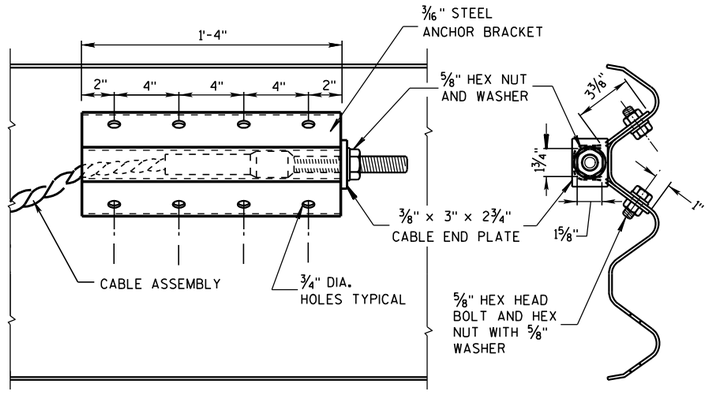
DETAILS OF CABLE ANCHOR ASSEMBLY



PLACEMENT OF NOSE CABLE RETAINING CLIP

GENERAL NOTES

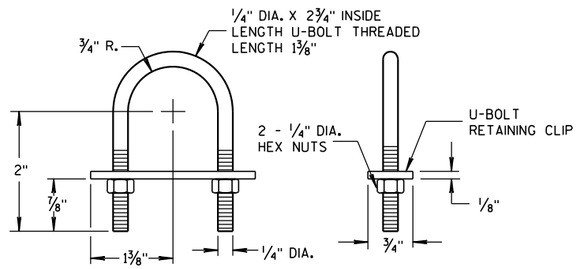
SEE STANDARD DETAIL DRAWINGS 14 B 26a-e.



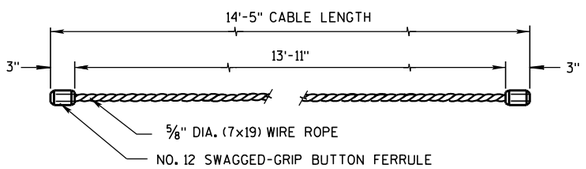
FRONT VIEW

END VIEW

DETAILS OF CABLE ANCHOR BRACKET

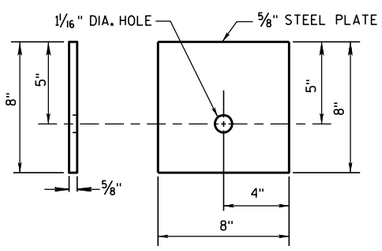


NOSE CABLE RETAINING CLIP

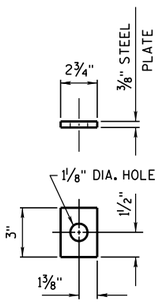


NOSE CABLE WITH SWAGGED END BUTTONS

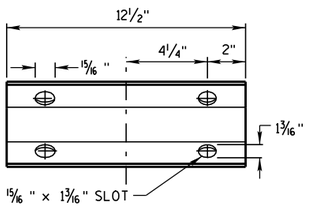
TO PULL OFF SWAGGED GRIP BUTTON FERRULE FROM WIRE ROPE REQUIRES A FORCE EQUAL TO 98% OF THE WIRE ROPE'S BREAKING STRENGHT.



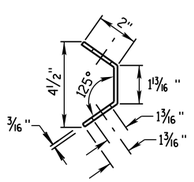
BCT BEARING PLATE



CABLE END PLATE



ELEVATION VIEW



END VIEW

NOSE CABLE ANCHOR PLATE

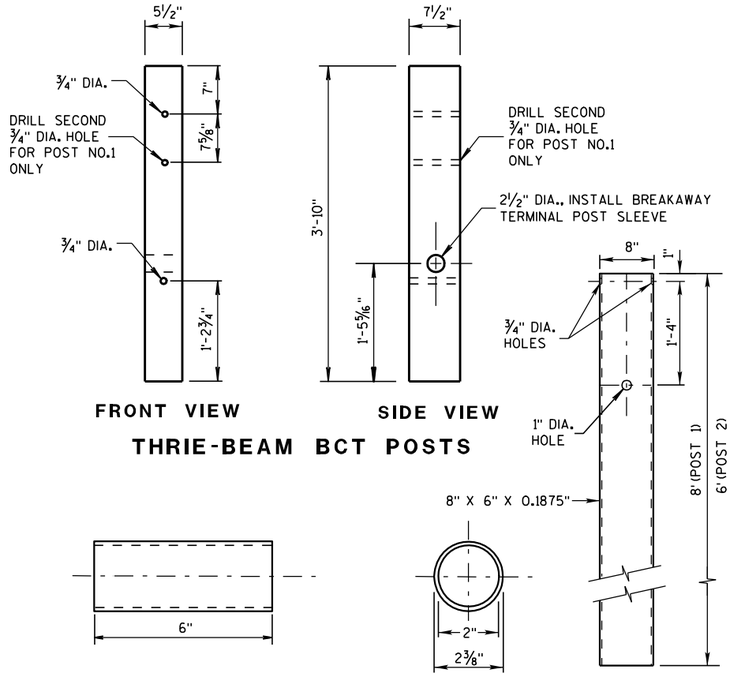
NOTE: 12 1/2" x 5 13/16" x 3/16" STEEL PLATE (A306)

STEEL THRIE BEAM BULLNOSE TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

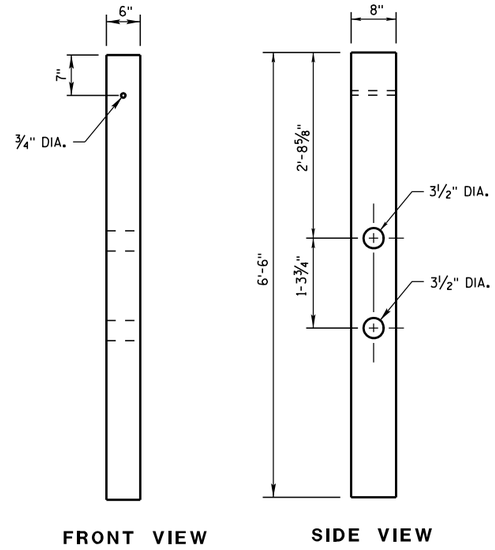
S.D.D. 14 B 26-2c



THRIE-BEAM BCT POSTS

BREAKAWAY TERMINAL POST SLEEVE

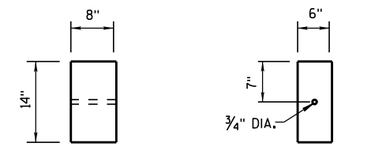
STEEL FOUNDATION TUBE



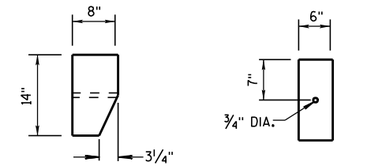
THRIE-BEAM CRT WOOD POSTS

GENERAL NOTES

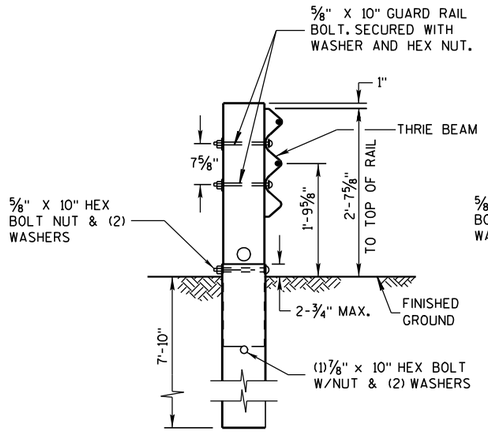
SEE STANDARD DETAIL DRAWINGS 14 B 26a-e.



STANDARD WOOD BLOCK

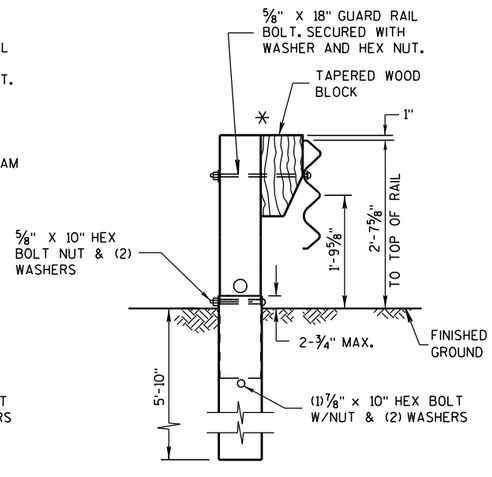


TAPERED WOOD BLOCK



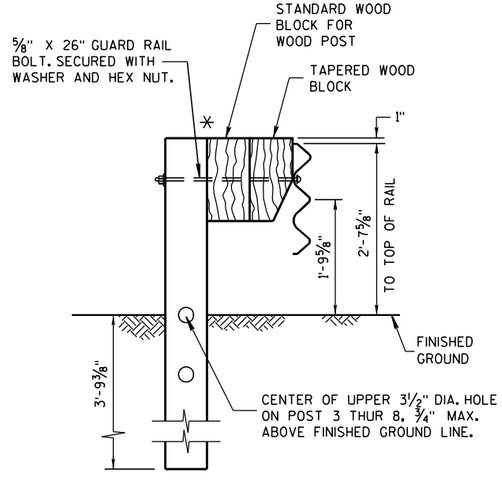
THRIE-BEAM BCT POST
(WITH 8'-0" FOUNDATION TUBE)

POST NO. 1



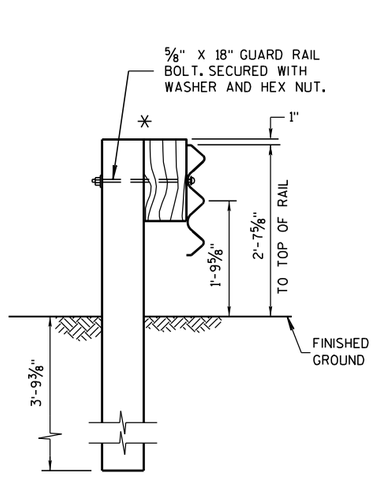
THRIE-BEAM BCT POST
(WITH 6'-0" FOUNDATION TUBE AND 1'-2" TAPERED BLOCK)

POST NO. 2



THRIE-BEAM CRT POST
(6'-6" LONG POST WITH 1'-2" BLOCK AND 1'-2" TAPERED BLOCK)

POST NO. 3,4,5,6,7, & 8



THRIE-BEAM POST
(6'-6" LONG POST WITH 1'-2" BLOCK)

POST NO. 9,10,11,& 12
(ALSO USE FOR STEEL THRIE BEAM BEYOND POST 12)

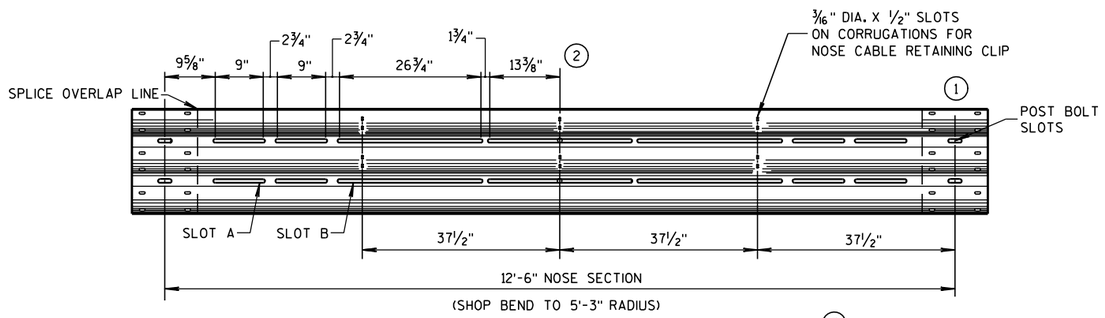
* IF NEEDED DUE TO AN UNDERGROUND OBSTACLE ADD 1 ADDITIONAL STANDARD BLOCKOUT TO POST.

STEEL THRIE BEAM BULLNOSE TERMINAL

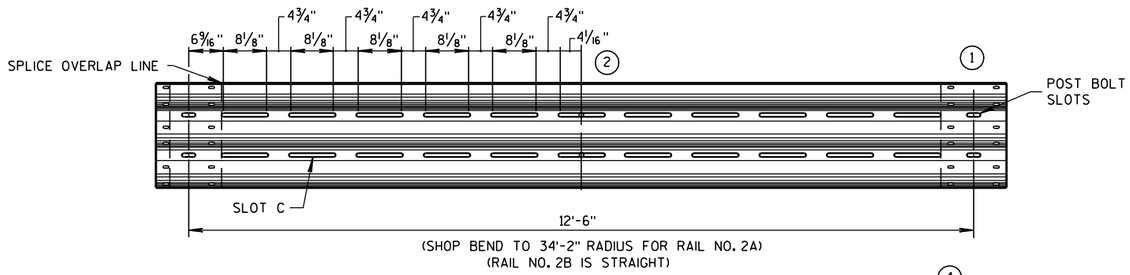
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

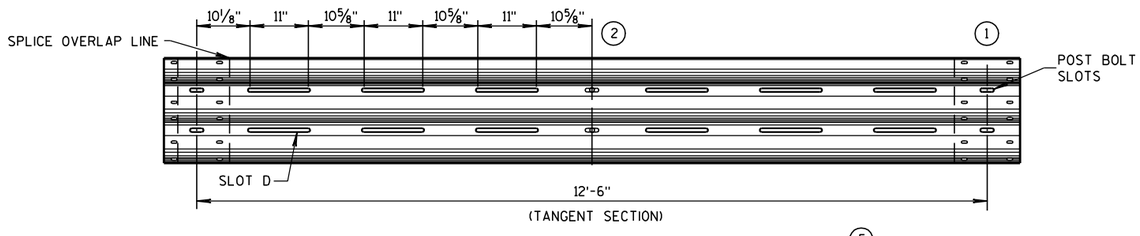
S.D.D. 14 B 26-2d



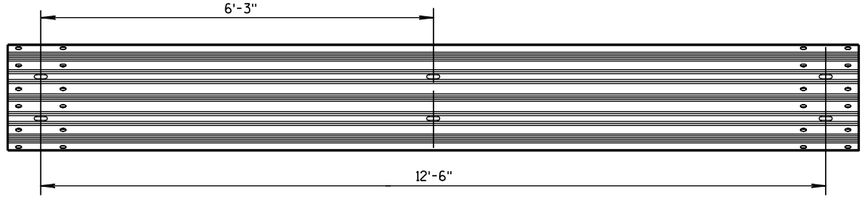
SLOTTED THRIE BEAM RAIL NO. 1 (3)



SLOTTED THRIE BEAM RAILS NO. 2A AND NO. 2B (4)



SLOTTED THRIE BEAM RAIL NO. 3 (5)



UNBENT STANDARD THRIE BEAM RAIL NO. 4 AND NO. 5

GENERAL NOTES

SEE STANADRD DETAIL DRAWINGS 14 B 26a-e.

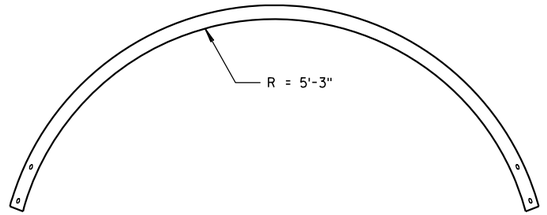
(1) SLOTTED THRIE BEAM RAIL DIMENSIONS SHOWN ARE BEFORE BENDING TO THE RADIUS SHOWN.

(2) SLOT SIZE AND SPACING SYMMETRIC.

(3) SLOTTED THRIE BEAM RAIL NO. 1, 12'-6", SHOP BEND TO R=5'-3".

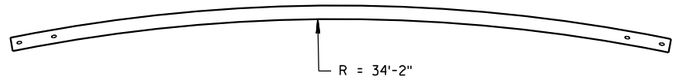
(4) SLOTTED THRIE BEAM RAIL NO. 2A, 12'-6", SHOP BEND TO R=34'-2".
SLOTTED THRIE BEAM RAIL NO. 2B, 12'-6", RAIL IS STRAIGHT.

(5) SLOTTED THRIE BEAM RAIL NO. 3, 12'-6", TANGENT.



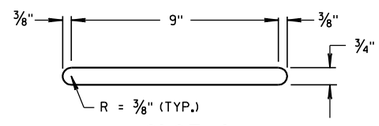
PLAN VIEW

SLOTTED THRIE BEAM RAIL NO. 1

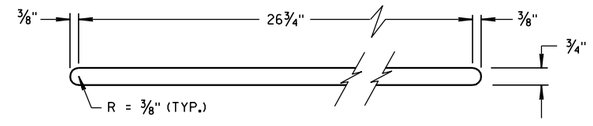


PLAN VIEW

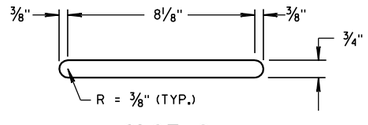
SLOTTED THRIE BEAM RAIL NO. 2A



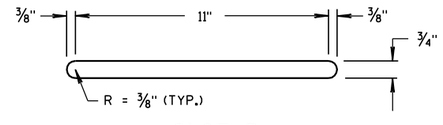
SLOT A



SLOT B



SLOT C



SLOT D

SLOT DETAILS

STEEL THRIE BEAM BULLNOSE TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

9-16-2010
DATE

/S/ Jerry H. [illegible]
ROADWAY STANDARDS | 820 ENGINEER

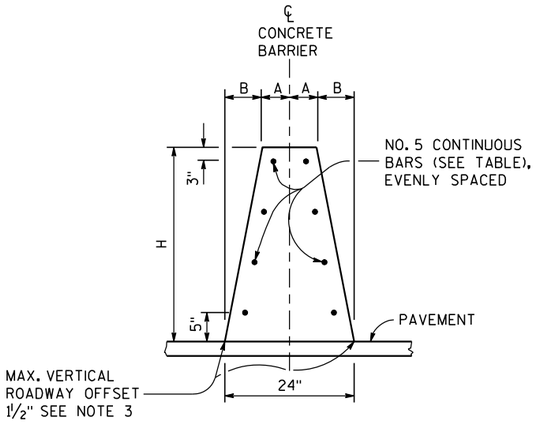
FHWA

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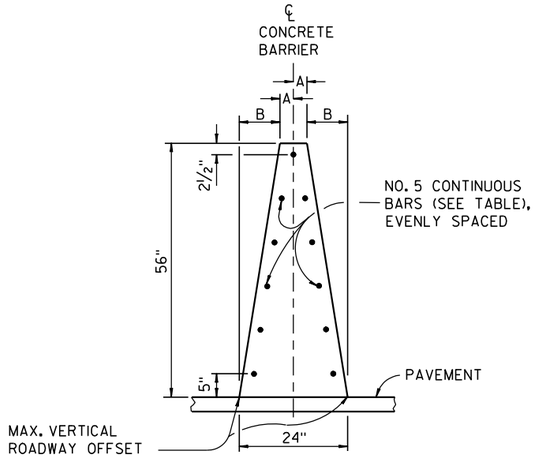
S.D.D. 14 B 26-2e

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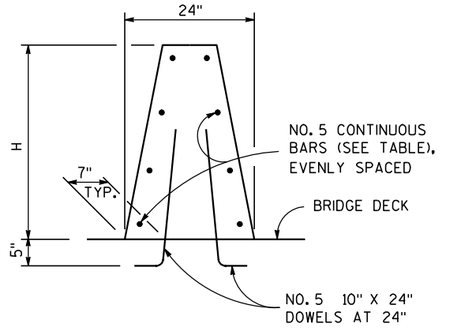
S.D.D. 14 B 26-2e



32-INCH, 36-INCH OR 42-INCH SINGLE SLOPE CONCRETE BARRIER (TYPE S32, TYPE S36, AND TYPE S42)



56-INCH SINGLE SLOPE CONCRETE BARRIER (TYPE S56)



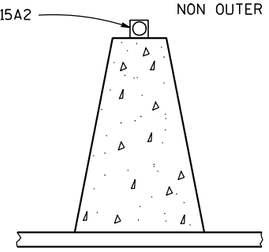
SINGLE SLOPE CONCRETE BARRIER ON BRIDGE

NON OUTER PARAPET APPLICATION

GENERAL NOTES

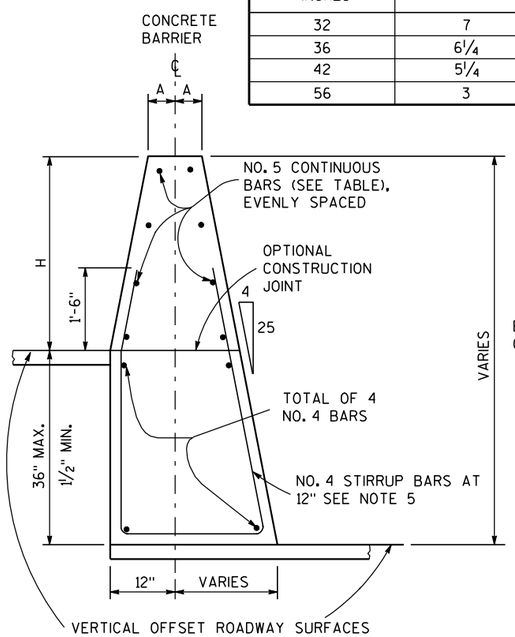
1. WHERE THE CONCRETE BARRIER IS ADDED TO THE FACE OF EXISTING CONCRETE STRUCTURE, MATCH EXISTING WEEP HOLES.
2. EXPANSION JOINTS IN CONCRETE BARRIER SHALL BE LOCATED AT ALL DECK, PAVEMENT AND PRINCIPAL WALL JOINTS. EXPANSION JOINT FILLER MATERIAL SHALL BE THE SAME SIZE AS JOINT OR ½" MINIMUM.
3. WHERE VERTICAL ROADWAY OFFSET IS GREATER THAN 1½", USE TYPE A
4. PLACE BARRIER PERPENDICULAR TO SHOULDER GRADE, UNLESS INDICATED IN PLAN.
5. EXCEPT IN ANCHORS, VERTICAL REINFORCING STIRRUP NOT REQUIRED FOR ROADWAY OFFSETS LESS THAN 1'-0".
6. FOR TYPE S32, TYPE S36, TYPE S42, AND S56 MONOLITHIC FOOTING OR DOWELED FOOTING WITH 2-#8 x 8" @ 2'-0".
7. STAGGER LAPPING OF LONGITUDINAL STEEL. MINIMUM OVERLAP OF STEEL 2 FEET. BARS AT LAPS TO BE FIRMLY TIED OR CONNECTED.
8. 4000 PSI CONCRETE AIR ENTRAINMENT PER STANDARD SPECIFICATION 501.
9. WHEN SWITCHING BETWEEN SLIP FORM AND CAST-IN-PLACE OPERATIONS, EXTEND LONGITUDINAL STEEL 3 FEET BEYOND SLIP-FORMING CUT OFF POINT. EXPOSED STEEL INTO NEXT POURS REINFORCEMENT. LAPS TO BE FIRMLY TIED.
10. USE ¾" BEVEL OR 1" RADIUS ON ALL EXPOSED SHARP EDGES UNLESS OTHERWISE NOTED.
11. 2" CLEAR COVER TYPICAL.
12. COLD-JOINTS MAY BE USED BETWEEN ANCHOR INSTALLATIONS. WHEN A COLD JOINT IS NEEDED, 3 FEET OF LAP OF LONGITUDINAL STEEL IS REQUIRED. LAPS TO BE FIRMLY TIED
13. IN TYPE S32, TYPE S36, TYPE S42 AND TYPE S56 NO ADDITIONAL VERTICAL STEEL NEEDED. IN TYPE S32A, TYPE S36A, TYPE S42A AND TYPE S56A REQUIRES VERTICAL STEEL. SEE OTHER DETAIL
14. IN TYPE S32, TYPE S36, TYPE S42 AND TYPE S56 DEPTH OF FOOTING 10". IN TYPE S32A, TYPE S36A, TYPE S42A AND TYPE S56A MATCH TOTAL HEIGHT OF SINGLE SLOPE BARRIER RETAINING WALL.
15. FOR ALL BARRIER TYPES SHOWN, ANCHOR IS REQUIRED AT CONCRETE BARRIER ENDS AND AT INTERRUPTIONS IN CONCRETE BARRIER. ANCHOR MAY BE AS SHOWN ON DRAWING OR DETAILS SHOWN ON S.D.D. 14B33. ANCHORS INCIDENTAL TO CBSS.

SEE STANDARD DETAIL DRAWING 15A2 FOR DELINEATOR DETAILS



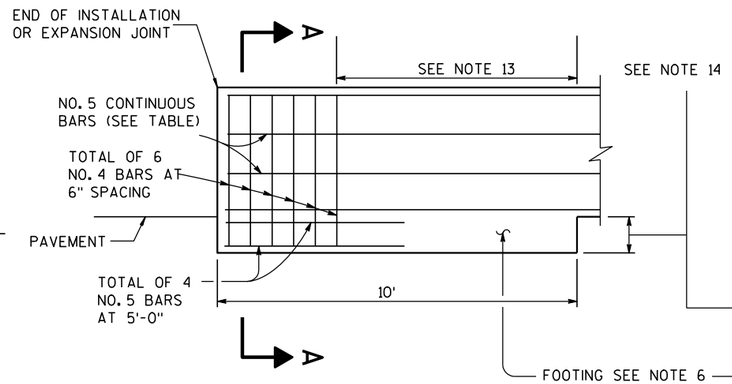
DELINEATION

BARRIER HEIGHT H INCHES	A INCHES	B INCHES	NUMBER OF NO. 5 BARS EACH
32	7	5	8
36	6¼	5¾	8
42	5¼	6¾	10
56	3	9	11



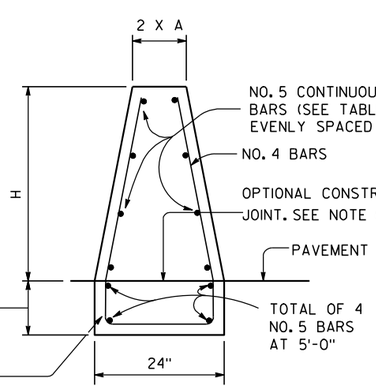
SINGLE SLOPE CONCRETE BARRIER AND RETAINING WALL (TYPE S32A, TYPE S36A, TYPE S42A, TYPE S56A)

(BETWEEN ADJACENT ROADWAYS)



END ANCHOR SINGLE SLOPE CONCRETE BARRIER

AT CONSTRUCTION JOINT



SECTION A-A

DELINEATOR SPACING ON HORIZONTAL CURVES

RADIUS OF CURVE	APPROXIMATE SPACING ON CURVE
50 FEET	20 FEET
115 FEET	25 FEET
180 FEET	35 FEET
250 FEET	40 FEET
300 FEET	50 FEET
400 FEET	55 FEET
500 FEET	65 FEET
600 FEET	70 FEET
700 FEET	75 FEET
800 FEET	80 FEET
900 FEET	85 FEET
1000 FEET	90 FEET

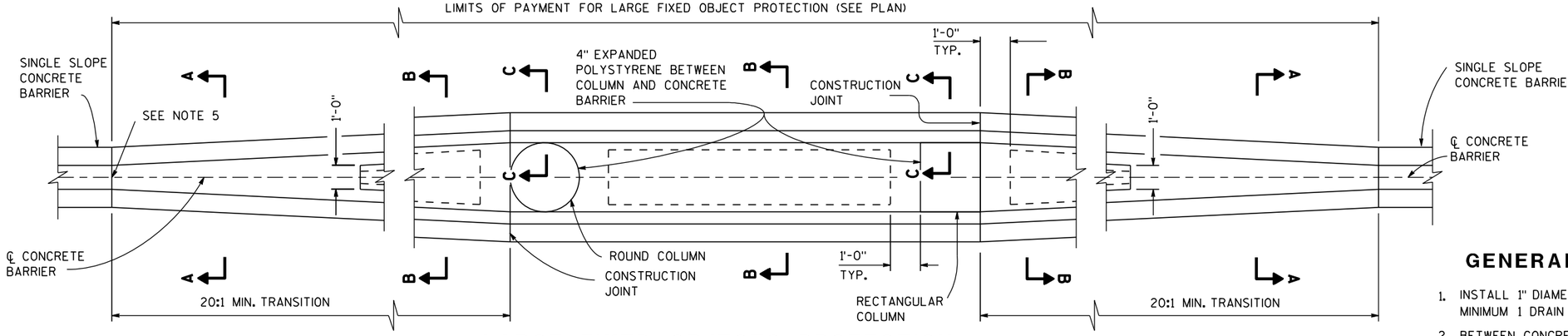
DELINEATOR SPACING ON RADIUS GREATER THAN 1000 FEET OR TANGENT SECTIONS

	LENGTH OF BARRIER	REFLECTOR SPACING	NO. SURFACES REFLECTORIZED	MIN. NO. REFLECTORS
ONE WAY TRAFFIC	< 200'	50' C-C	1	3
	> 200'	100' C-C	1	
TWO WAY TRAFFIC	< 200'	25' C-C	1	6
	> 200'	50' C-C	1	
TWO WAY TRAFFIC	< 200'	50' C-C	2	3
	> 200'	100' C-C	2	

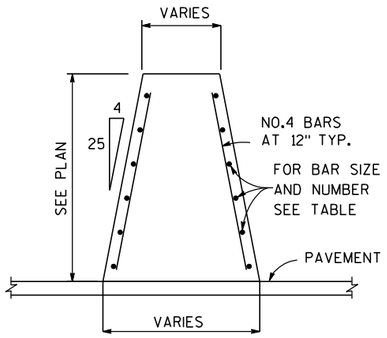
CONCRETE BARRIER SINGLE SLOPE (CBSS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

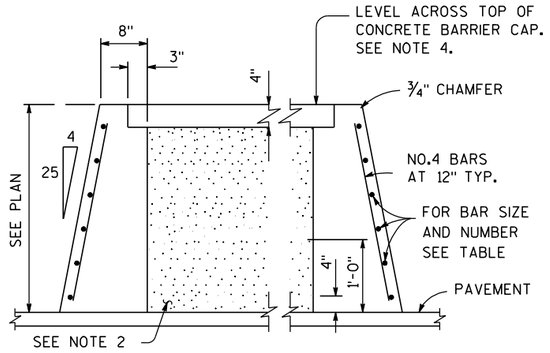
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S.D.D. 14 B 32-1a



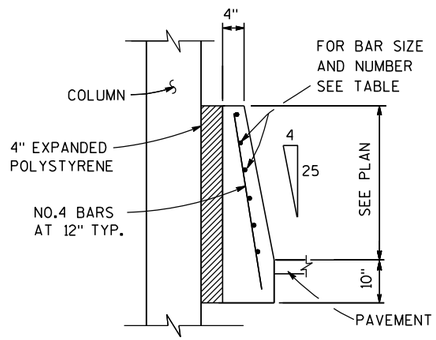
LARGE FIXED OBJECTS PROTECTION
TYPE S32, TYPE S36, TYPE S42, TYPE S56



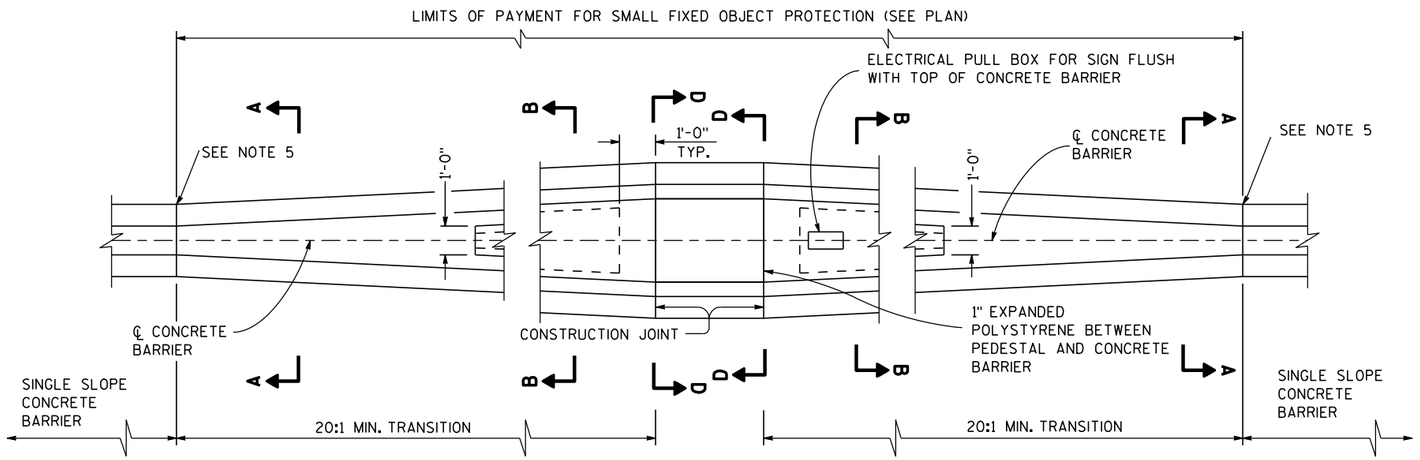
SECTION A-A



SECTION B-B



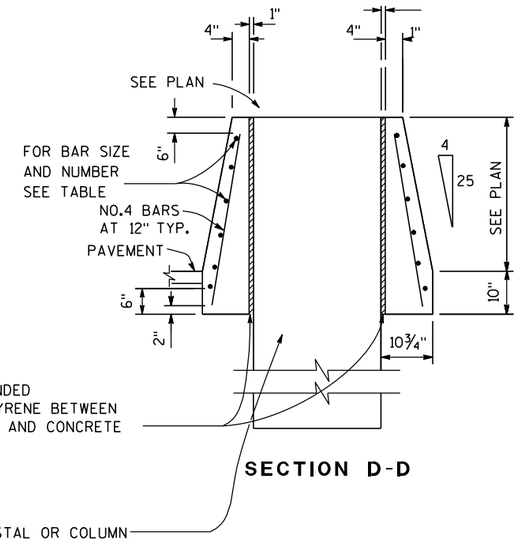
SECTION C-C



SMALL FIXED OBJECTS PROTECTION
TYPE S32, TYPE S36, TYPE S42, TYPE S56

GENERAL NOTES

1. INSTALL 1" DIAMETER DRAIN PIPE EVERY 20' OF CROSS SECTION B-B. MINIMUM 1 DRAIN PER CAVITY.
2. BETWEEN CONCRETE BARRIER WALLS FILL WITH GRANULAR BACKFILL GRADE 2
3. REINFORCING STEEL SHALL EXTEND CONTINUOUS THROUGH CONSTRUCTION JOINTS.
4. ADJUST HEIGHT OF CONCRETE BARRIER WALL ON LOW SIDE OF OFFSET OR SUPERELEVATED ROADWAYS TO PROVIDE LEVEL GRADE ACROSS TOP OF CONCRETE CAP.
5. IF FIXED OBJECT PROTECTION IS INSTALLED FIRST, USE COLD JOINTS. IF CBSS PLACED FIRST, USE EXPANSION JOINT.



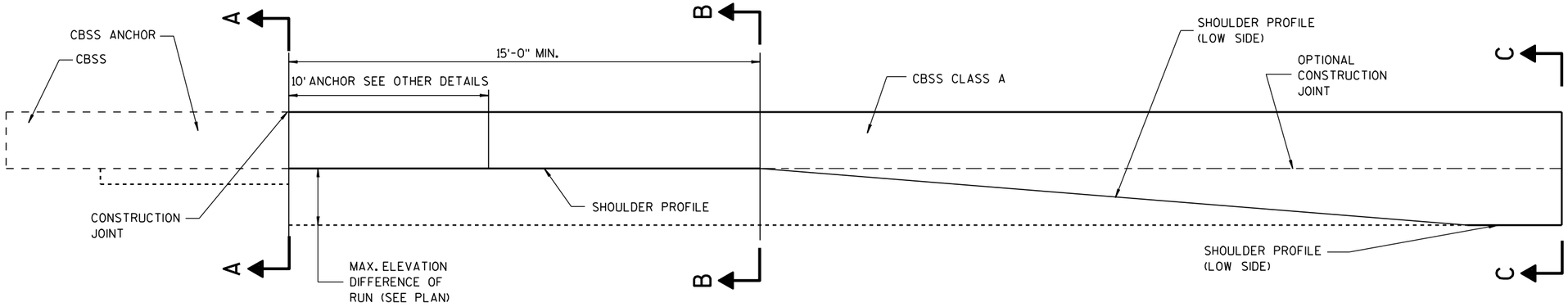
SECTION D-D

BARRIER HEIGHT H INCHES	BAR SIZE	NUMBER OF BARS EACH
32	4	6
36	4	6
42	5	6
56	5	9

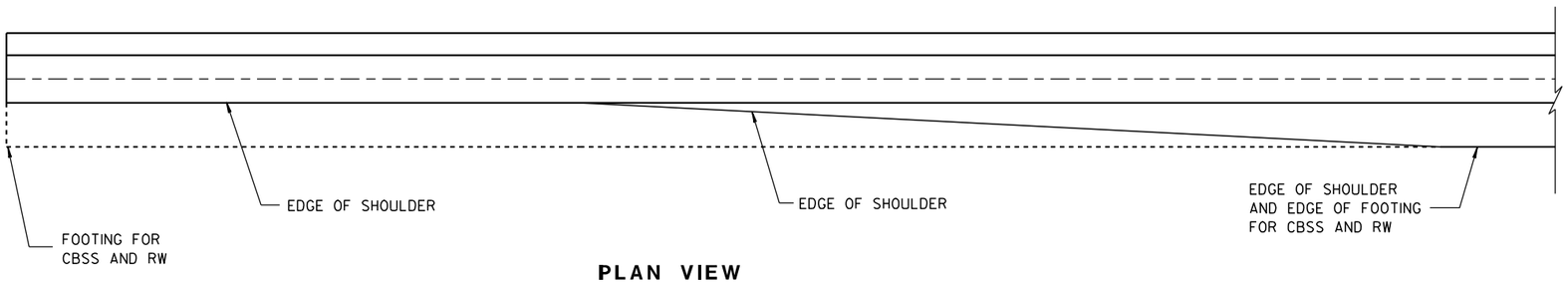
CONCRETE BARRIER SINGLE SLOPE (CBSS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

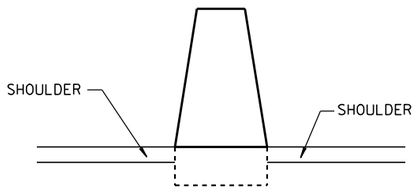
6
S.D.D. 14 B 32-1b



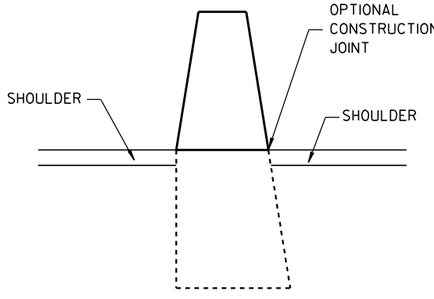
ELEVATION VIEW
TRANSITION TO CBSS CLASS A
(TYPE S32A, TYPE S36A, TYPE S42A, TYPE S56A)



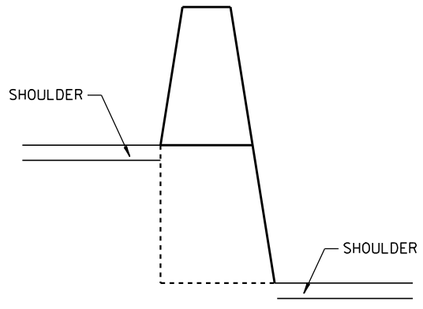
PLAN VIEW
TRANSITION TO CBSS CLASS A
(TYPE S32A, TYPE S36A, TYPE S42A, TYPE S56A)



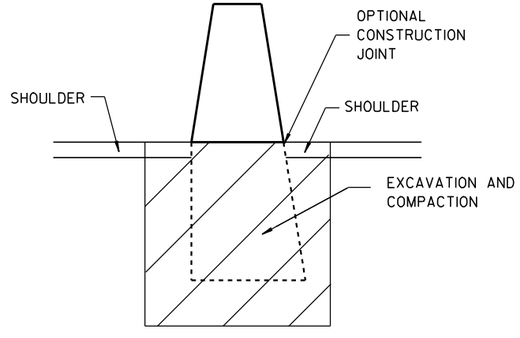
SECTION A-A



SECTION B-B



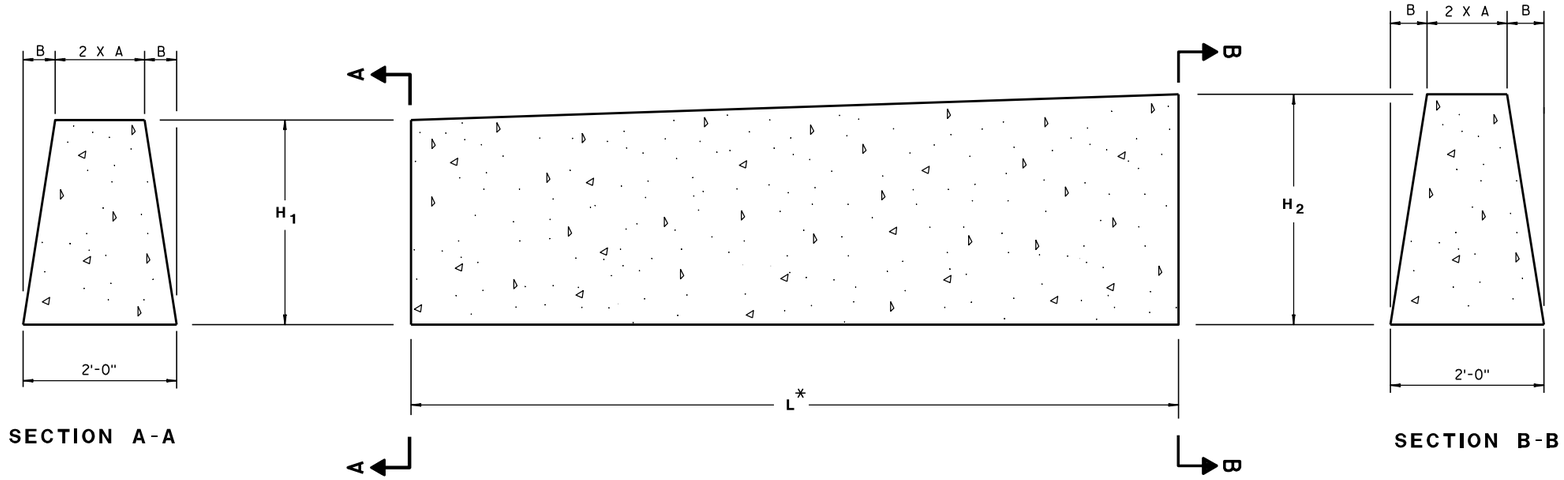
SECTION C-C



CONCRETE BARRIER SINGLE SLOPE (CBSS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
S.D.D. 14 B 32-1c



DOUBLE COLD JOINT HEIGHT TRANSITION

BARRIER DIMENSIONS

BARRIER HEIGHT INCHES	A INCHES	B INCHES
32	7	5
36	6 1/4	5 3/4
42	5 1/4	6 3/4
56	3	9

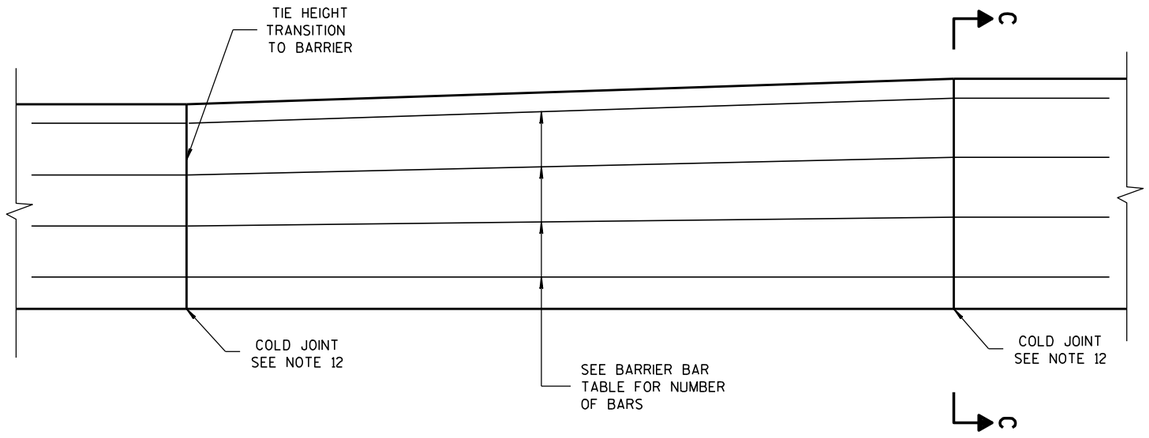
MULTIPLE HEIGHT TRANSITIONS MAY BE USED IN SEQUENCE TO GET TO APPROPRIATE HEIGHT.

USE COLD JOINT TO CONNECT MULTIPLE HEIGHT TRANSITIONS.

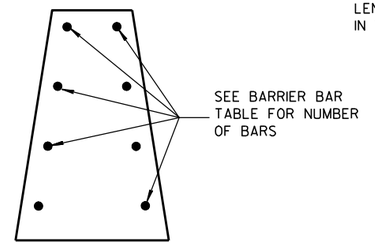
BARRIER BARS

H_1	H_2	L*	NUMBER OF NO. 5 BARS
32"	36"	10'-0"	8
36"	42"	10'-6"	10
42"	56"	24'-6"	11

* LENGTH OF DOUBLE COLD JOINT INCLUDED IN THE TOTAL LENGTH OF CBSS.



STEEL REINFORCEMENT DETAIL



SECTION C-C

CONCRETE BARRIER SINGLE SLOPE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6-3-2010
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER

824 ENT

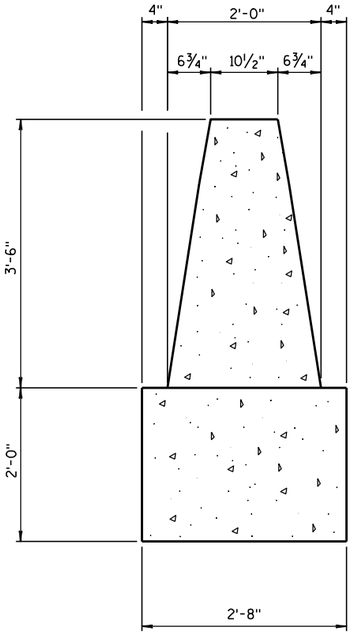
FHWA

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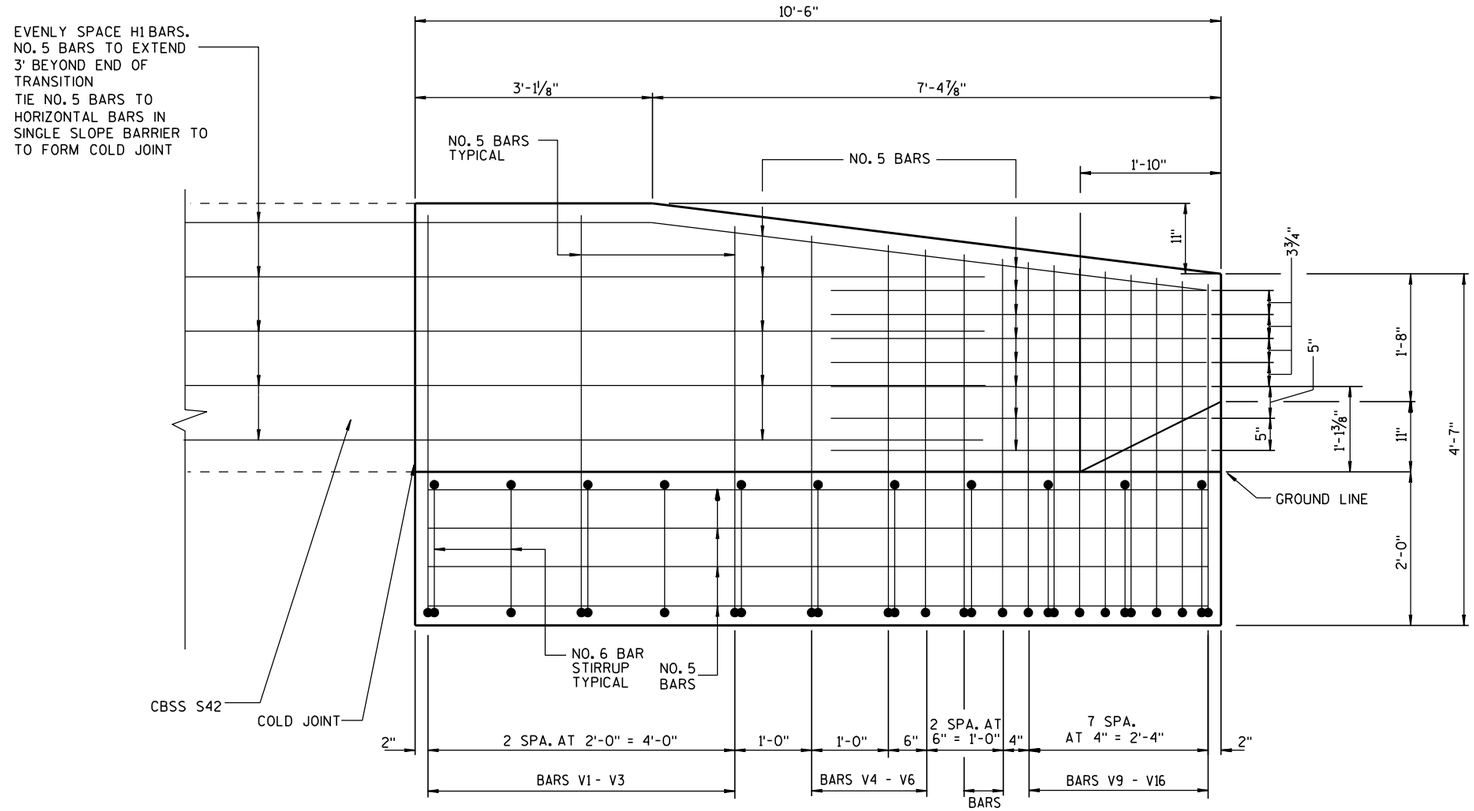
S.D.D. 14 B 32-1d

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S.D.D. 14 B 32-1d

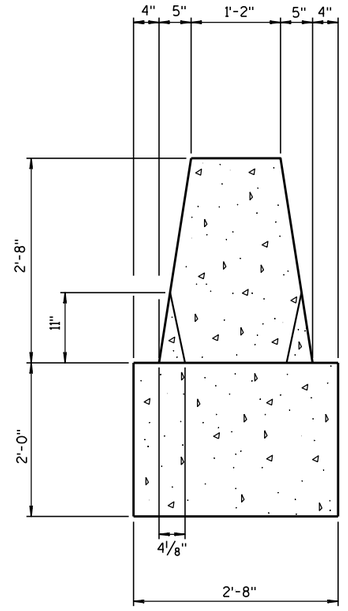


SECTION A-A

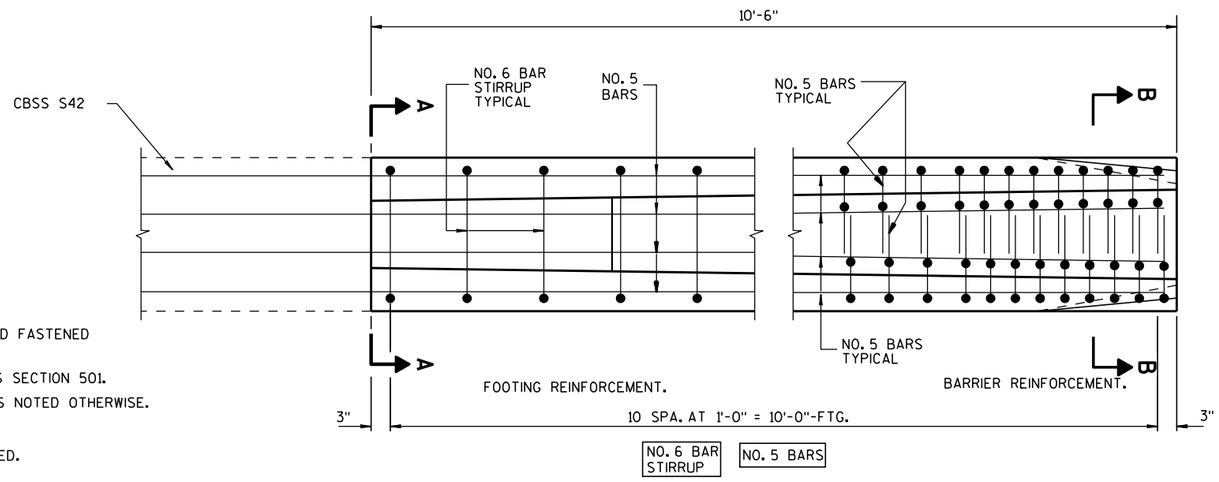


SEE SECTIONS ① THRU ⑯

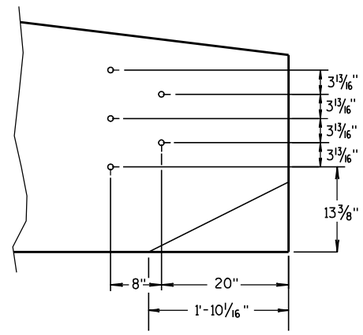
ELEVATION VIEW



SECTION B-B



PLAN VIEW



PVC PIPE LOCATIONS

GENERAL NOTES

CONSTRUCT PER STANDARD SPECIFICATION 603.

SPLICES OF LONGITUDINAL BARS TO BE 2'LONG AND FIRMLY TIED AND FASTENED TOGETHER UNLESS NOTED OTHERWISE.

4000 PSI CONCRETE AIR ENTRAINMENT PER STANDARD SPECIFICATIONS SECTION 501.

USE ¾" BEVEL OR 1" RADIUS ON ALL EXPOSED SHARP EDGES UNLESS NOTED OTHERWISE.

THRIE BEAM ANCHOR INCIDENTAL TO CONCRETE BARRIER ITEM.

INSTALL SCHEDULE 40 PVC PIPE 1" DIAMETER AT LOCATIONS INDICATED.

EXTEND PVC PIPE COMPLETELY THROUGH BARRIER.

CUT ENDS OF PVC PIPE FLUSH WITH FINISHED FACE of BARRIER.

THE NUMBER IN BAR DESIGNATION REPRESENTS THE BARS LOCATION.

2" CLEAR COVER TYPICAL.

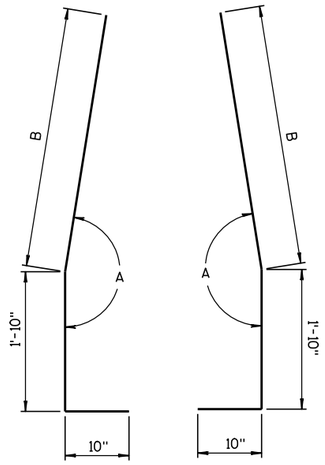
CONCRETE BARRIER SINGLE SLOPE 42" THRIE BEAM ANCHOR

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
S.D.D. 14 B 33-1g

BAR CHART
SECTIONS V1 - V11

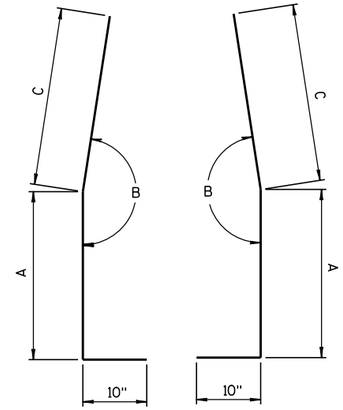
BAR	A	B
V1	170°-50'	3'-4½"
V2	171°-20'	3'-4½"
V3	171°-30'	3'-2½"
V4	171°-25'	3'-1½"
V5	171°-15'	3'-0"
V6	171°-15'	2'-11"
V7	171°-20'	2'-10½"
V8	171°-10'	2'-9½"
V9	171°-10'	2'-9"
V10	171°-05'	2'-8½"
V11	171°-10'	2'-8"



BAR BENDING DETAIL
FOR BARS V1 - V11

BAR CHART
SECTIONS V12 - V13

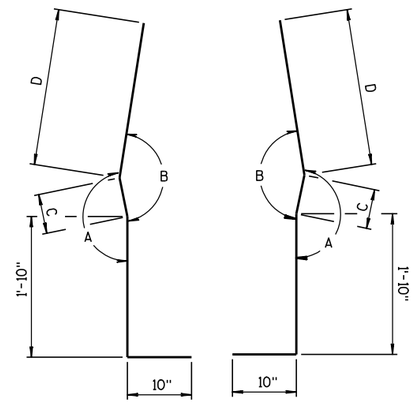
BAR	A	B	C
V12	2'-2"	171°-15'	2'-3½"
V13	2'-7"	171°-05'	1'-10"



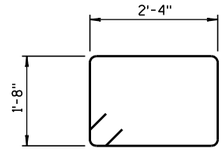
BAR BENDING DETAIL
FOR BARS V12 - V13

BAR CHART
SECTIONS V14 - V16

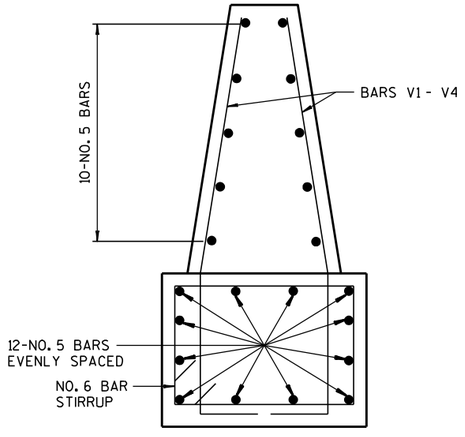
BAR	A	B	C	D
V14	168°-15'	159°-15'	6"	2'-0"
V15	169°-20'	161°-00'	8"	1'-10"
V16	168°-40'	160°-10'	10"	1'-8"



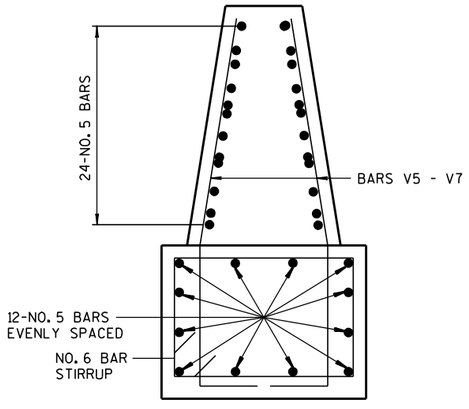
BAR BENDING DETAIL
FOR BARS V14 - V16



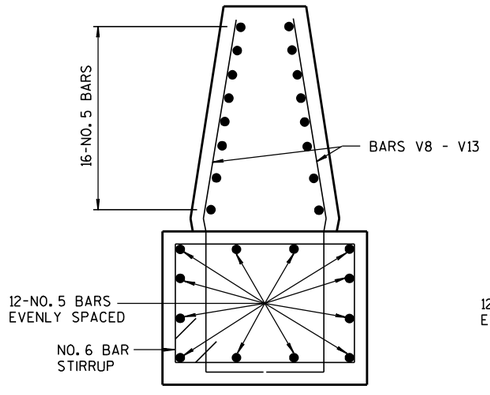
STIRRUP BAR
BENDING DETAIL



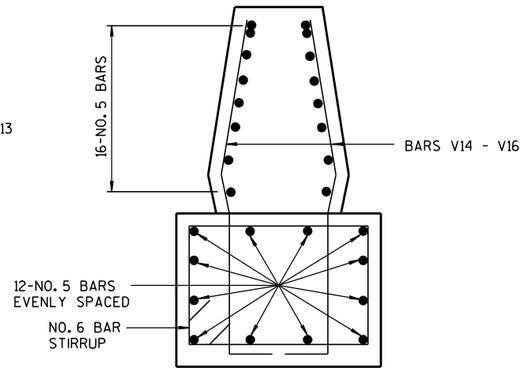
BAR DETAIL
SECTIONS V1 - V4



BAR DETAIL
SECTIONS V5 - V7



BAR DETAIL
SECTIONS V8 - V13



BAR DETAIL
SECTIONS V14 - V16

CONCRETE BARRIER
SINGLE SLOPE 42"
THRIE BEAM ANCHOR

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6-3-2010
DATE

/S/ Jerry H. Z---
ROADWAY STANDARDS ENGINEER

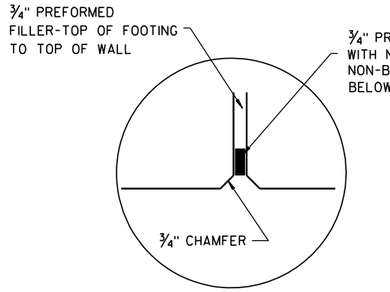
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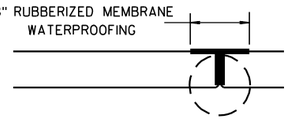
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FHWA

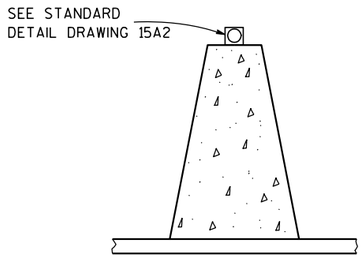
6

S.D.D. 14 B 33-1h





VERTICAL EXPANSION JOINT



DELINEATION

SPACING FOR DELINEATORS ON HORIZONTAL CURVES

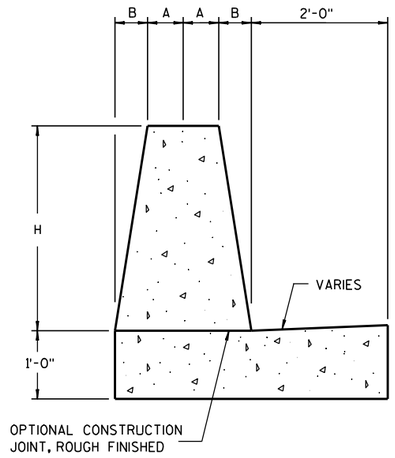
RADIUS OF CURVE	APPROXIMATE SPACING ON CURVE
50 FEET	20 FEET
115 FEET	25 FEET
180 FEET	35 FEET
250 FEET	40 FEET
300 FEET	50 FEET
400 FEET	55 FEET
500 FEET	65 FEET
600 FEET	70 FEET
700 FEET	75 FEET
800 FEET	80 FEET
900 FEET	85 FEET
1000 FEET	90 FEET

GENERAL NOTES

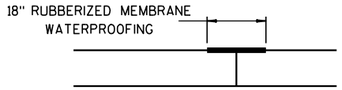
PROVIDE EXPANSION JOINTS WHERE EXISTING EXPANSION JOINTS OR AT THE END OF EACH POUR.

NO HORIZONTAL STEEL CROSSES EXPANSION JOINTS.

CONSTRUCT PER STANDARD SPECIFICATION 603.
SPLICES OF LONGITUDINAL BARS TO BE 2' LONG AND FIRMLY TIED AND FASETENED TOGETHER UNLESS NOTED OTHERWISES.
4000 PSI CONCRETE AIR ENTRAINMENT PER STANDARD SPECIFICATIONS 501.
USE ¾" BEVEL OR 1" RADIUS ON ALL EXPOSED SHARP EDGES UNLESS NOTED OTHERWISE.
2" CLEAR COVER (TYP.)



ROADSIDE RETAINING WALL



CONSTRUCTION JOINT

BARRIER HEIGHT H INCHES	A INCHES	B INCHES	NUMBER OF NO. 5 BARS EACH
36	6¼	5¾	8
42	5¼	6¾	10
56	3	9	11

V1 BAR BENDING DETAIL

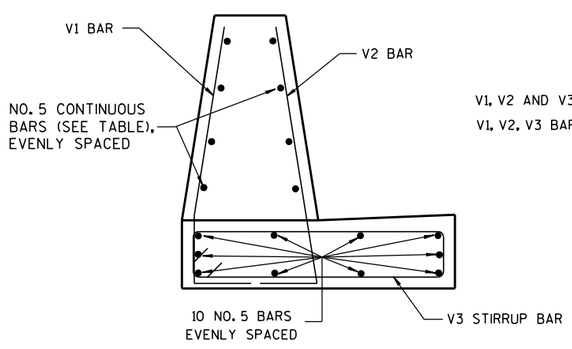
V2 BAR BENDING DETAIL

REFLECTOR SPACING

	LENGTH OF BARRIER	REFLECTOR SPACING	NO. SURFACES REFLECTORIZED	MIN. NO. REFLECTORS
ONE WAY TRAFFIC	< 200' > 200'	50' C-C 100' C-C	1 1	3
TWO WAY TRAFFIC	< 200' > 200'	25' C-C 50' C-C	1 1	6
TWO WAY TRAFFIC	< 200' > 200'	50' C-C 100' C-C	2 2	3

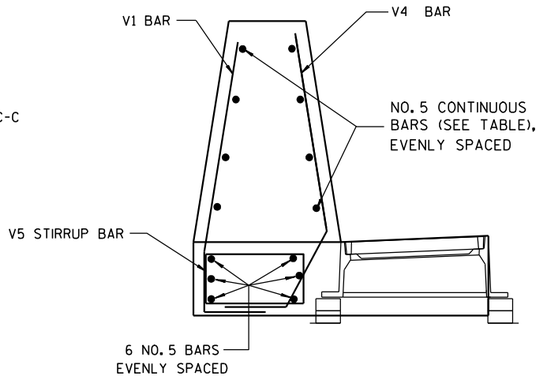
BAR CHART ROADSIDE RETAINING WALL

BARRIER HEIGHT	V1 BAR D	V2 BAR E	V4 BAR F
36"	2'-9⅝"	3'-9¾"	2'-8"
42"	3'-3⅝"	4'-2⅝"	3'-2⅛"
56"	4'-7½"	5'-6½"	4'-4⅜"

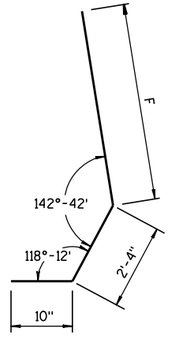


V1, V2 AND V3 ARE SPACED 18" C-C
V1, V2, V3 BARS ARE NO. 5 BARS

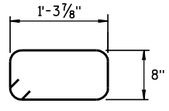
ROADSIDE RETAINING WALL NORMAL BAR PLACEMENT



ROADSIDE RETAINING WALL BAR PLACEMENT NEAR INLET



V4 BAR BENDING DETAIL



V5 STIRRUP BAR BENDING DETAIL

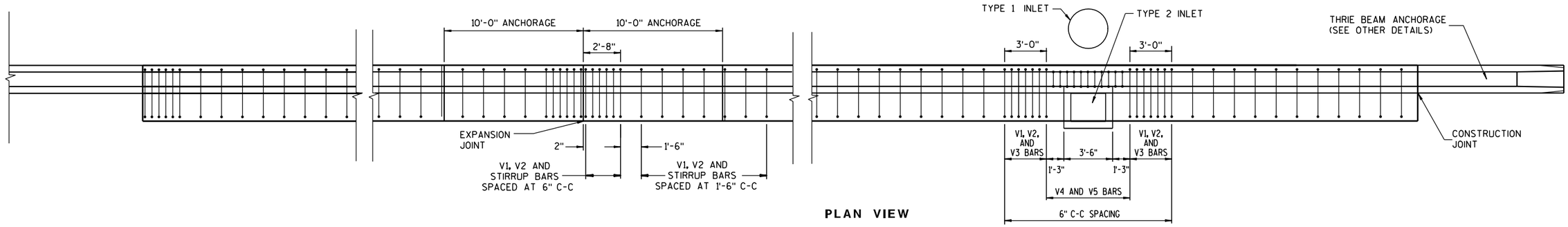


V3 STIRRUP BAR BENDING DETAIL

SINGLE SLOPE ROADSIDE RETAINING WALL

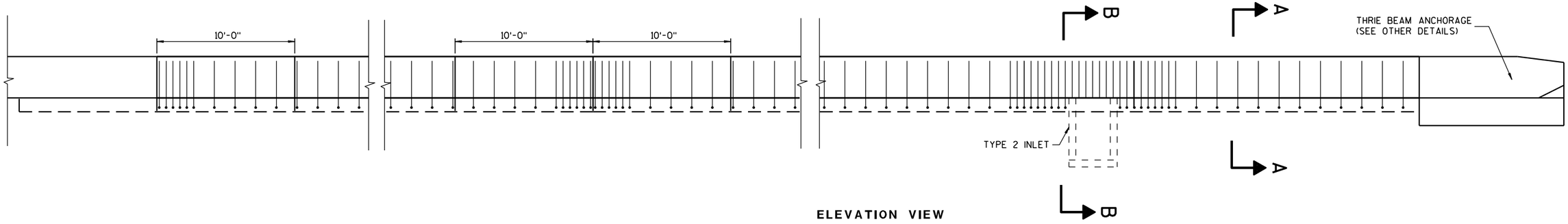
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
S.D.D. 14 B 41-1a



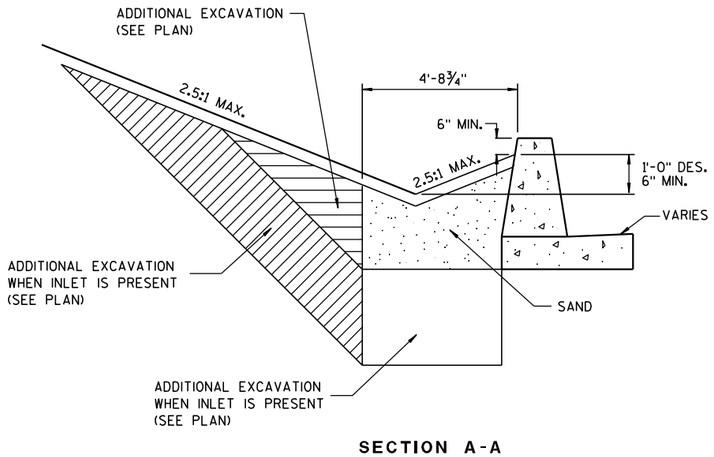
PLAN VIEW

NOTE: HORIZONTAL BARS ARE NOT SHOWN
SEE OTHER DETAILS FOR HORIZONTAL BARS.

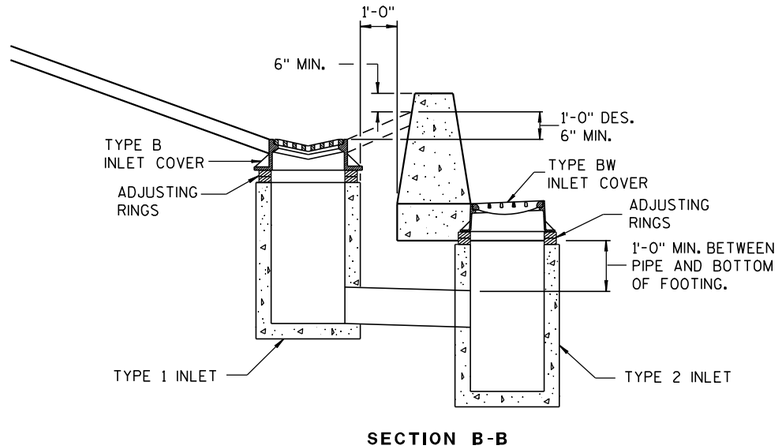


ELEVATION VIEW

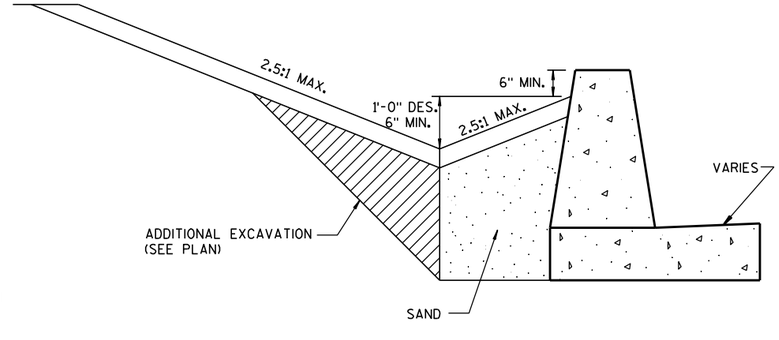
NOTE: HORIZONTAL BARS ARE NOT SHOWN
SEE OTHER DETAILS FOR HORIZONTAL BARS.



SECTION A-A



SECTION B-B



MINIMUM DESIGN OF EARTH WORK

MINIMUM DESIGN OF EARTH WORK FOR INLET

SINGLE SLOPE ROADSIDE RETAINING WALL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/13/2011
DATE
FHWA

/S/ Jerry H. Zaaa
ROADWAY STANDARDS ENGINEER 828 ENT

6

S.D.D. 14 B 41-1b

6

S.D.D. 14 B 41-1b

GENERAL NOTES

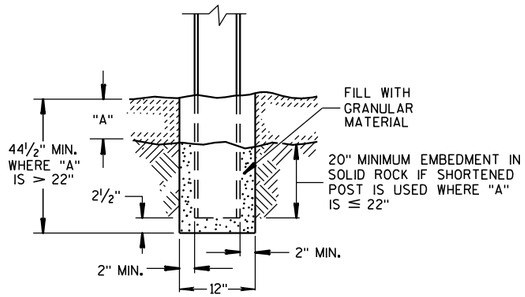
(1) WOOD OR STEEL POSTS (w6X9 OR w6X8.5) MAY BE USED. DO NOT INTERMIX WOOD AND STEEL POSTS. INSTALL STEEL POSTS WITH HOLES ON APPROACHING TRAFFIC SIDE.

(2) USE WOOD OR APPROVED PLASTIC BLOCKOUTS. WOOD BLOCKOUTS MAY BE CONSTRUCTED OUT OF TWO OR MORE WOOD BLOCKOUTS. SEE ALTERNATE WOOD BLOCKOUT DETAIL. DIMENSIONS OF APPROVED PLASTIC BLOCKOUTS MAY VARY.

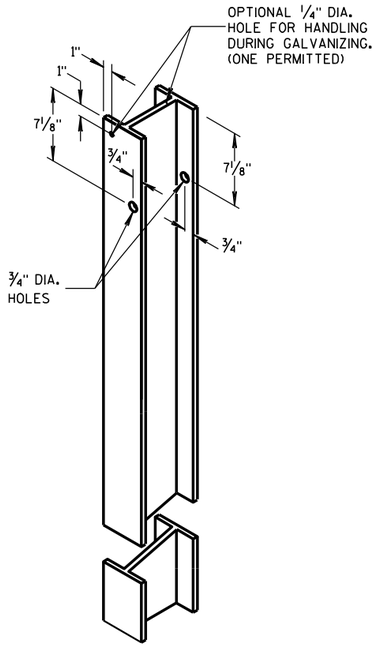
(3) IF ROCK IS ENCOUNTERED DURING EXCAVATION, PROVIDE A HOLE 12 INCHES IN DIAMETER EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE APPROXIMATELY 2½ INCHES OF GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE. CUT THE POSTS THE TO LENGTH AMD INSTALL. BACKFILL WITH EXCAVATED MATERIAL AND COMPACT. BACKFILL IS TO BE FREE OF LARGE ROCKS.

(4) WHEN THE DISTANCE FROM BACK OF POST TO SHOULDER HINGE POINT IS LESS THAN 2 FEET INSTALL LONGER POST AT HALF POST SPACING (K).

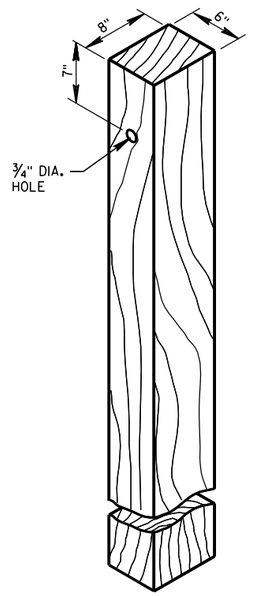
(5) FOR NEW MGS INSTALLATION TOP OF W-BEAM RAIL TOLERANCE IS ± 1". FOR EXISTING MGS INSTALLATION TOP OF W-BEAM IS BETWEEN 27¾" TO 32".



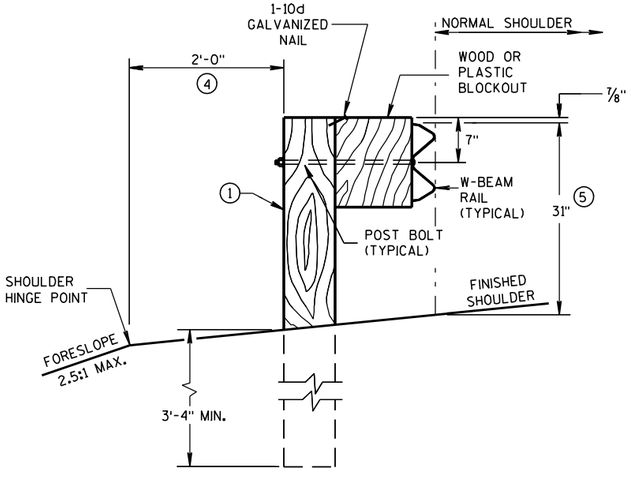
END VIEW
SETTING STEEL OR WOOD POST IN ROCK (3)



STEEL POST &
HOLE PUNCHING DETAIL
(w6X9) (1)

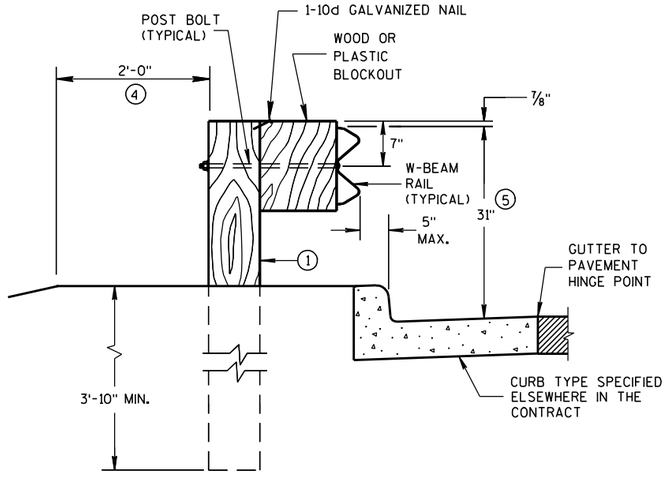


WOOD POST
(6" X 8") NOMINAL (1)



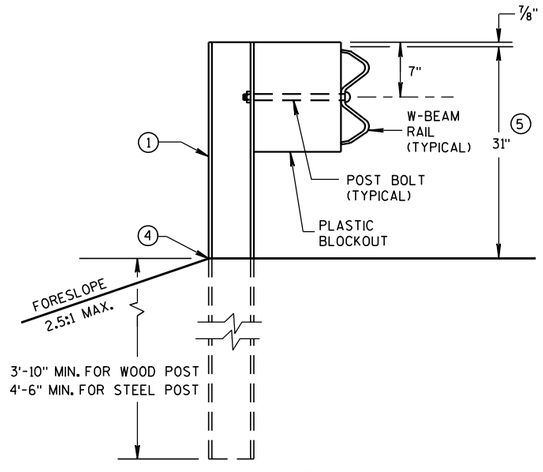
END VIEW

LOCATED ALONG A ROADWAY SHOULDER
STANDARD INSTALLATION



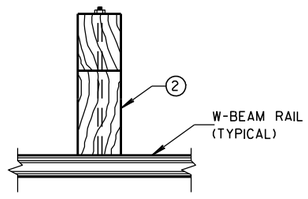
END VIEW

LOCATED ALONG A CURBED ROADWAY

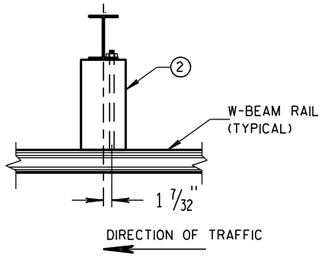


END VIEW

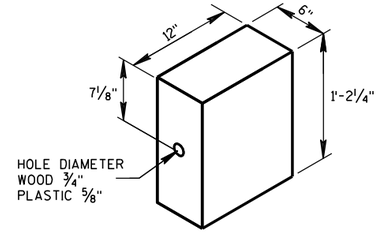
MGS LONGER POST AT HALFPOST SPACING W BEAM (K)



PLAN VIEW
WOOD POST,
BLOCKOUT & BEAM



PLAN VIEW
STEEL POST,
PLASTIC BLOCKOUT & BEAM

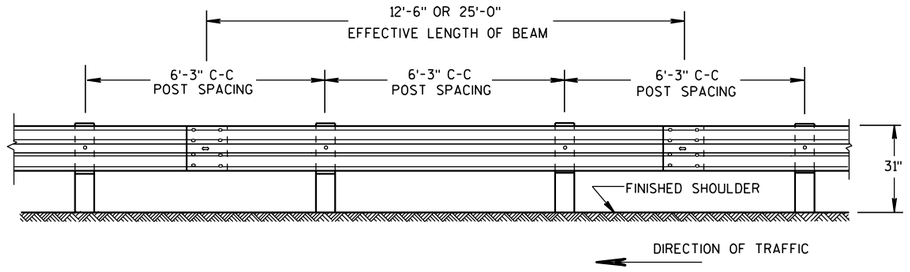


WOOD OR
PLASTIC BLOCKOUT (2)

MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

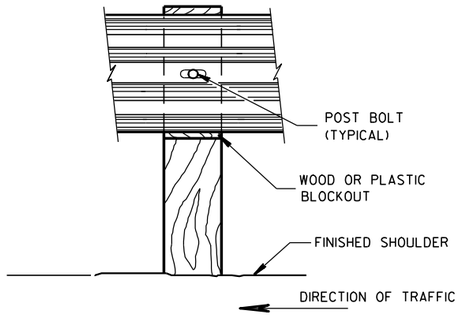
STATE OF WISCONSIN
DEPARTMENT OF TRANSPO...

6
S.D.D. 14 B 42-2a



FRONT VIEW

POST SPACING STANDARD INSTALLATION



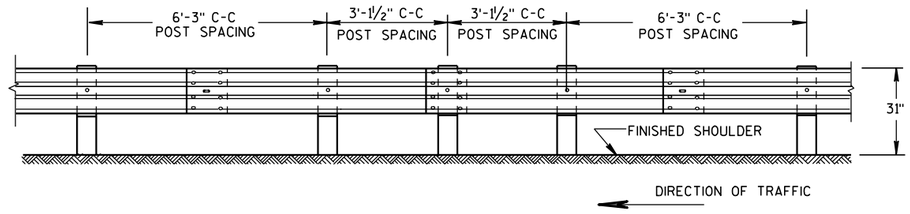
FRONT VIEW AT WOOD POST

GENERAL NOTES

1. PROVIDE TYPE "H" SILVER REFLECTIVE SHEETING ON ALL REFLECTORS EXCEPT THOSE LOCATED ALONG THE LEFT EDGE OF ONE-WAY ROADWAYS, WHICH SHALL BE PROVIDED WITH TYPE "H" YELLOW REFLECTIVE SHEETING.
2. DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL. RAIL SPLICE LOCATIONS ARE THE ONLY ACCEPTABLE LOCATIONS FOR REFLECTORS.
3. REVERSE EVERY OTHER REFLECTOR FOR 2-WAY VISIBILITY. THE CONTRACTOR MAY FURNISH TWO-SIDED REFLECTORS IN LIEU OF ONE-SIDED REFLECTORS.
4. PROVIDE AN ANGLE OF BEND OF 90° ± 1° FOR TWO-SIDED REFLECTORS.
5. 25 FEET OF HALF POST SPACING IS REQUIRED ON APPROACH AND DEPARTURE ENDS OF QUARTER POST SPACING.

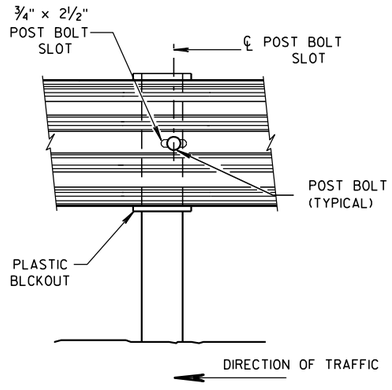
POST BOLTS ARE A 5/8" DIAMETER ASTM A307 GUARDRAIL BOLT. A POST BOLT REQUIRES 5/8" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT AND 5/8" DIAMETER F844 FLAT WASHER. POST BOLTS MAY BE LONGER IF MULTIPLE BLOCKOUTS ARE BEING USED.

GUARD RAIL SPLICE BOLTS ARE A 5/8" DIAMETER ASTM A307 GUARDRAIL HEAD BOLT. A GUARDRAIL SPLICE BOLT REQUIRES 5/8" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT.

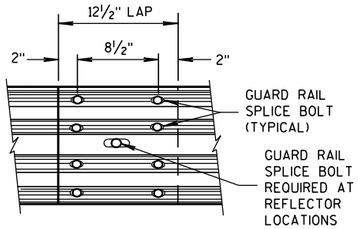


FRONT VIEW

HALF POST SPACING (HS) AND HALF POST SPACING WITH LONGER POSTS (K)

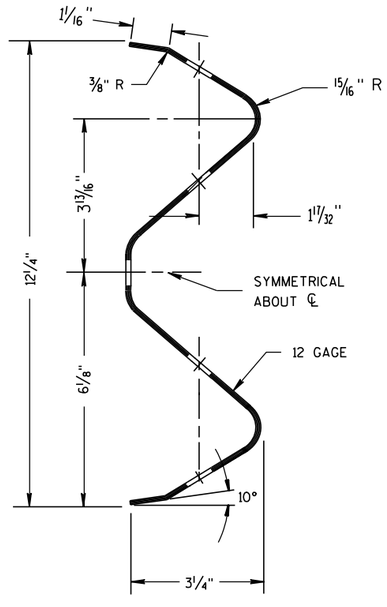


FRONT VIEW AT STEEL POST

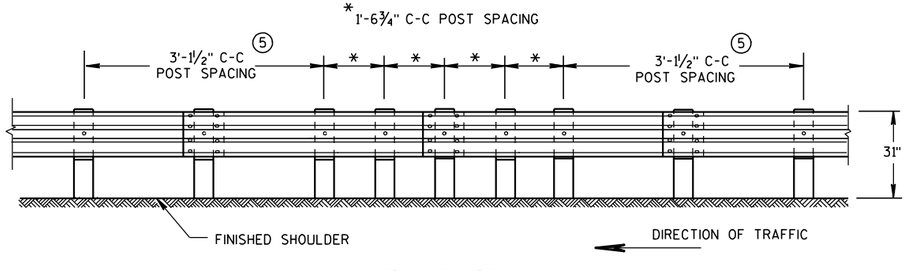


FRONT VIEW

MID-SPAN BEAM SPLICE

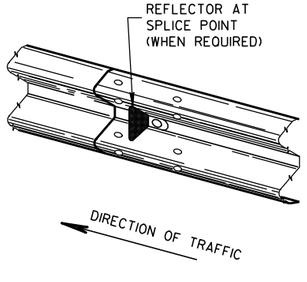


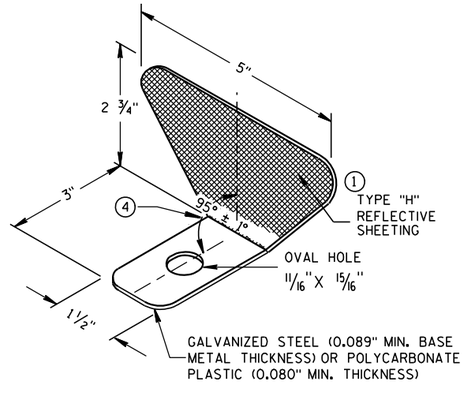
SECTION THRU W-BEAM RAIL



FRONT VIEW

QUARTER POST SPACING (QS)





ONE SIDED REFLECTOR DETAIL AND TYPICAL INSTALLATION ①

REFLECTOR SPACING ②

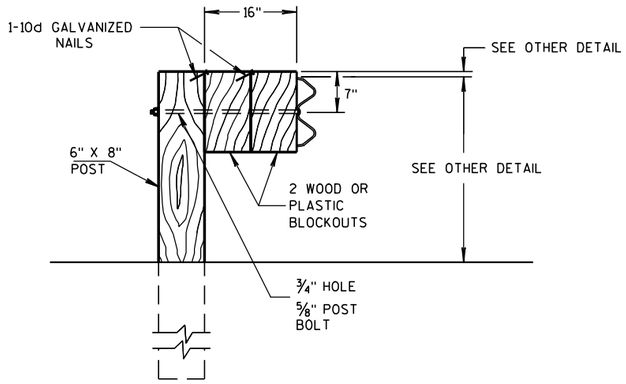
	BEAM GUARD LENGTH	REFLECTOR SPACING	NO. SURFACES REFLECTORIZED	MIN. NO. REFLECTORS
ONE WAY TRAFFIC	< 200' > 200'	50' C-C 100' C-C	1 1	3
TWO WAY TRAFFIC	< 200' > 200'	25' C-C 50' C-C	1 ③ 1	6
TWO WAY TRAFFIC	< 200' > 200'	50' C-C 100' C-C	2 ④ 2	3

MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

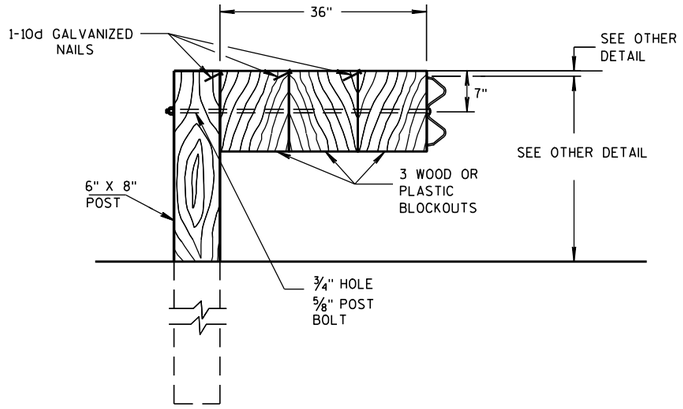
S.D.D. 14 B 42-2b

S.D.D. 14 B 42-2b



DETAIL FOR 16" BLOCKOUT DEPTH

IT IS ACCEPTABLE TO USE BLOCKOUTS UP TO 16" DEEP TO INCREASE THE POST OFFSET TO AVOID UNDERGROUND OBSTACLES. THERE IS NO LIMIT TO THE NUMBER OF POSTS THAT CAN HAVE ADDITIONAL BLOCKOUTS UP TO 16" DEEP.

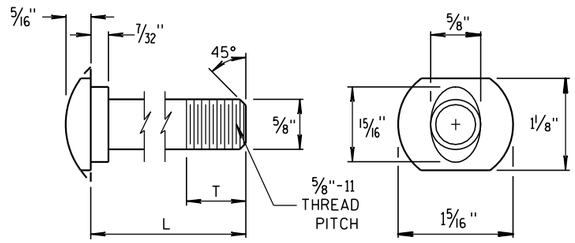


DETAIL FOR 36" BLOCKOUT DEPTH

NOTES: UNDER SPECIAL CIRCUMSTANCES, SUCH AS AVOIDING OBSTACLES THAT ARE NOT RELOCATED, IT IS ACCEPTABLE TO INSTALL ADDITIONAL BLOCKOUTS TO OBTAIN UP TO 36" DEPTH FOR ONE OR TWO POSTS IN A SECTION OF GUARDRAIL.

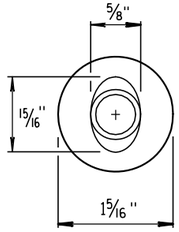
DO NOT USE 16" OR 36" BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION DISTANCE OF THE BARRIER.

NOTE: 1. ALL FILLETS SHALL HAVE A MINIMUM RADIUS OF 1/16".
2. IF THE BOLT EXTENDS MORE THAN 1/4" FROM THE NUT THE BOLT SHOULD BE TRIMMED BACK.

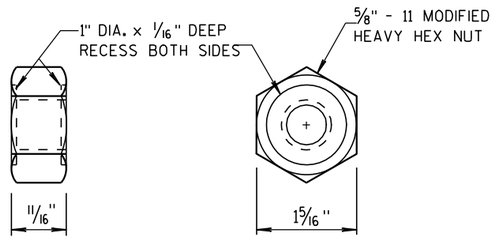


POST BOLT TABLE

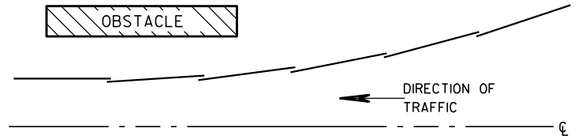
L	T (MIN.)
1 1/4"	1 1/8"
2"	1 3/4"
10"	4"
14"	4 1/16"
18"	4"
21"	4 1/16"
25"	4"



ALTERNATE BOLT HEAD

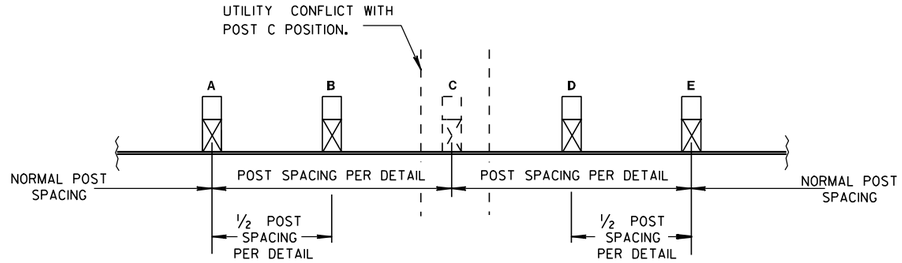


POST BOLT AND RECESS NUT

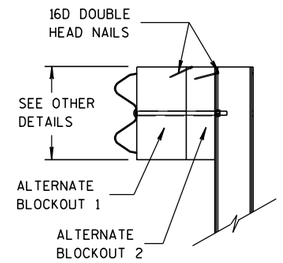


PLAN VIEW

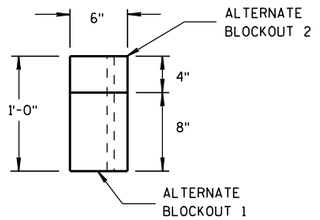
BEAM LAPPING DETAIL



POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION



SIDE VIEW



TOP VIEW

ALTERNATE WOOD BLOCKOUT DETAIL

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

11/15/2011
DATE

/S/ Jerry H. [illegible]
ROADWAY STANDARDS ENGINEER

831

ENT

FHWA

6

S.D.D. 14 B 42-2c

GENERAL NOTES

(A) THE SLOPE IN THE AREA BOUNDED BY THE EXTENDED VEHICLE RUNOUT PATH (EVRP), THE HINGE POINT LINE (HPL),AND THE CLEAR ZONE LIMITS (CZL) SHALL BE 4:1 OR FLATTER.

(B) AFTER FINAL ASSEMBLY, RECHECK CABLE TO BE SURE IT IS TAUT AND HAS NOT RELAXED.

(C) DIFFERENT MANUFACTURES REQUIRE DIFFERENT PERFORATED W-BEAM RAIL END PANELS. SEE MANUFACTURES INFORMATION.

(D) THE TOP OF THE STEEL TUBE ON POST 1 AND POST 2 SHALL NOT BE MORE THAN 3" ABOVE THE FINISH GROUND ELEVATION.

(F) SHEETING IS ATTACHED TO 0.040 ALUMINUM SHEET AND ATTACHED TO E.A.T. HEAD USING 4 STAINLESS STEEL SELF-TAPPING SCREWS. ONE SCREW PER CORNER OF E.A.T.

(G) ½" DIAMETER X 3" LONG LAG BOLT AND WASHER.

(H) HARDWARE VARIES BETWEEN DIFFERENT MANUFACTURES. SEE MANUFACTURE'S DRAWING FOR INFORMATION.

(I) DIMENSIONS MAY VARY. SEE MANUFACTURE'S INFORMATION.

SEE SDD 14B42 FOR MORE INFORMATION.

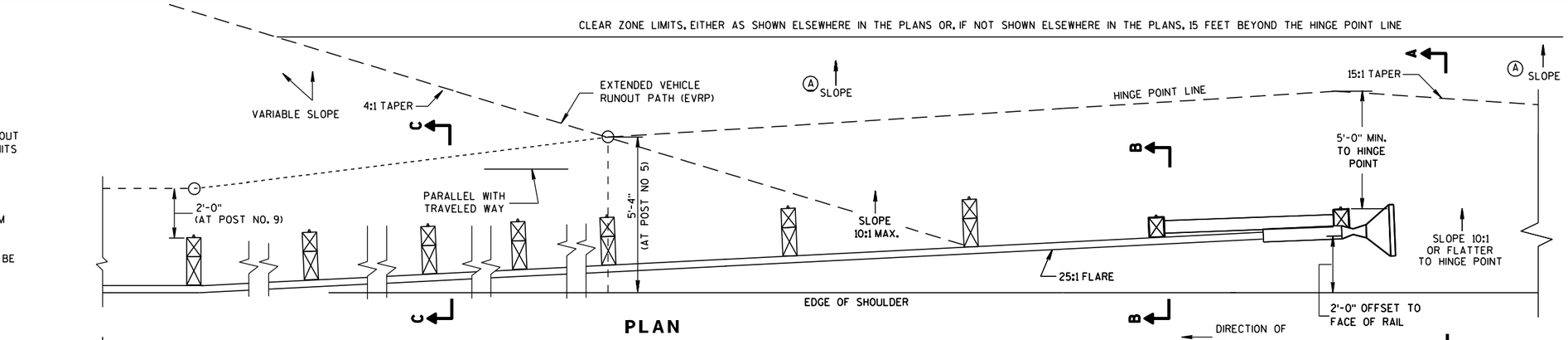
* DO NOT ATTACH BLOCKOUTS TO POSTS 1 AND 2.

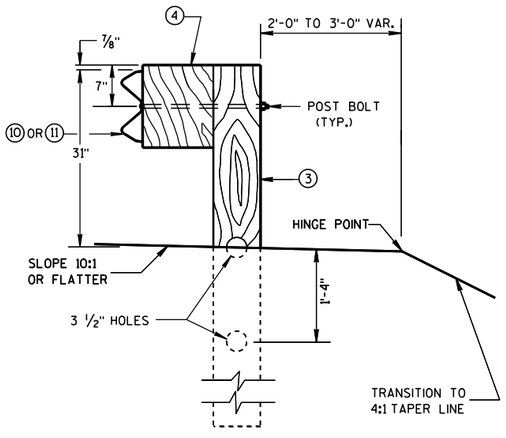
DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

W-BEAM RAIL SPLICES ARE LOCATED AT POST NUMBER 3, AND BETWEEN POST 5 AND 6, BETWEEN POSTS 7 AND 8, AND MIDDLE OF THE SPAN AFTER POST 9.

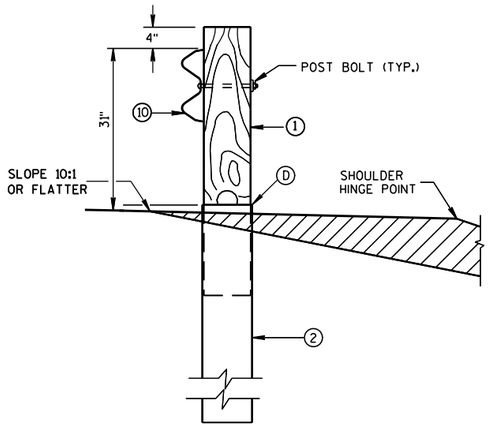
PATTERN AND COLORS ON REFLECTIVE SHEETING TYPE H ARE TO CONFORM TO OM3-L OR OM3-R OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

THE CENTER OF THE UPPER 3½" DIAMETER HOLE ON POST NUMBER 3 THROUGH POST 9 IS TO BE FLUSH WITH THE GROUND LINE (± ¾")

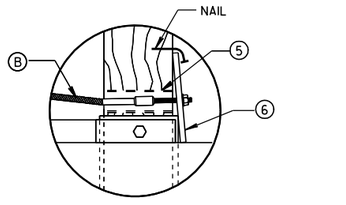


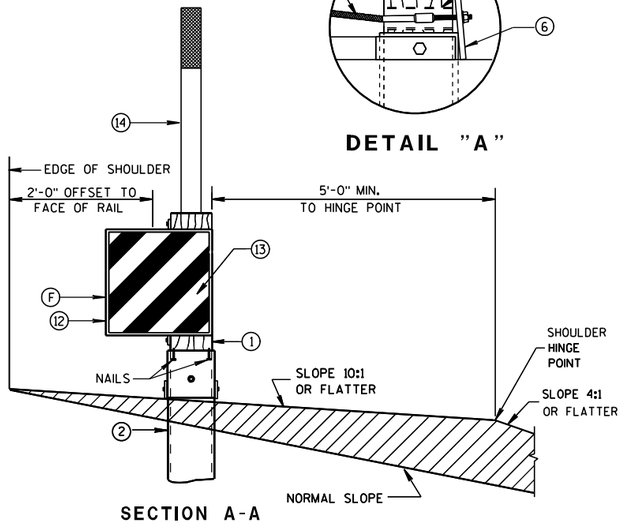


SECTION C-C
TYPICAL AT POST NOS. 3-9

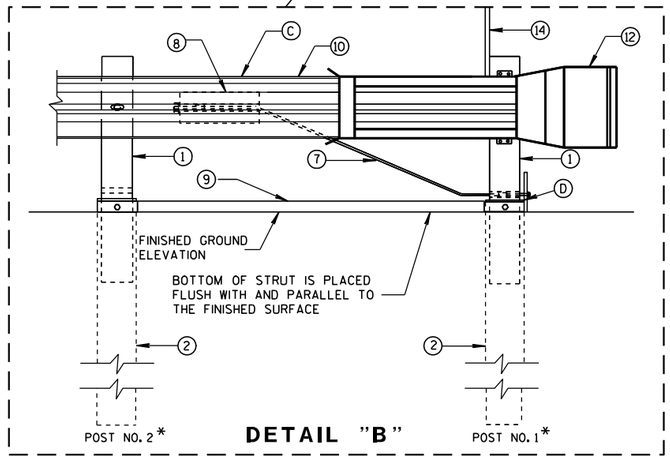


SECTION B-B
TYPICAL AT POST NO. 2*





SECTION A-A
TYPICAL AT POST NO. 1*



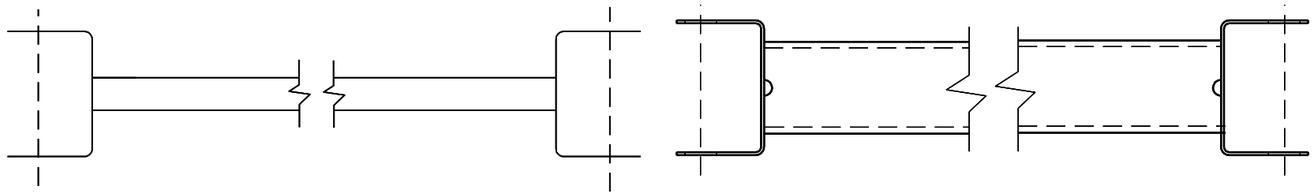
DETAIL "B"

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

S.D.D. 14 B 44-1a

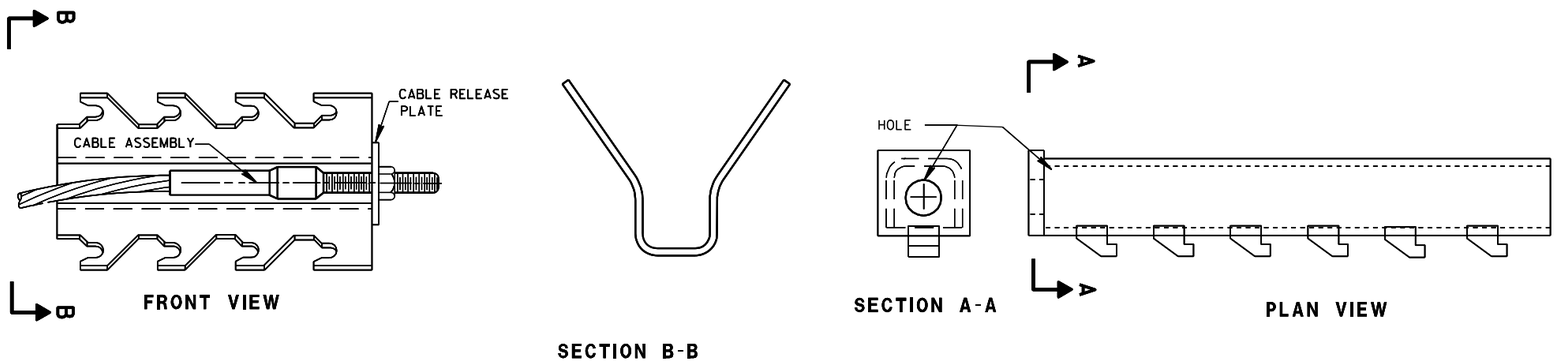
6



GENERIC GROUND STRUT (9) (H)

BILL OF MATERIALS

PART NO.	DESCRIPTION MATERIALS PROVIDED BY MGS EAT MANUFACTURER. SEE MANUFACTURER'S DETAILS FOR MORE INFORMATION.
(1)	WOOD BREAKAWAY POST
(2)	6" X 8" X 0.188", 6'-0" LONG FOUNDATION TUBE AT POSTS 1 AND 2
(3)	WOOD CRT
(4)	WOOD BLOCKOUT
(5)	PIPE SLEEVE
(6)	BEARING PLATE
(7)	BCT CABLE ASSEMBLY
(8)	ANCHOR CABLE BOX
(9)	GROUND STRUT
(10)	PERFORATED W-BEAM RAIL END PANEL, 12'-6" LONG.
(11)	STANDARD W-BEAM RAIL. MULTIPLE SECTIONS REQUIRED. SECTIONS VARY IN LENGTH.
(12)	END SECTION EAT
(13)	0.040" ALUMINUM SHEET WITH REFLECTIVE SHEETING TYPE H (ONLY THE SHEETING IS SUPPLIED BY THE MANUFACTURER)
(14)	EAT MARKER POST - YELLOW (SEE APPROVED PRODUCTS LIST)



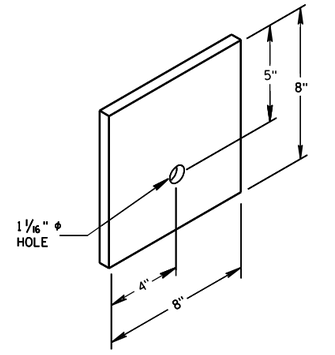
FRONT VIEW

SECTION B-B

SECTION A-A

PLAN VIEW

GENERIC ANCHOR CABLE BOX (8) (H)



BEARING PLATE (6)

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

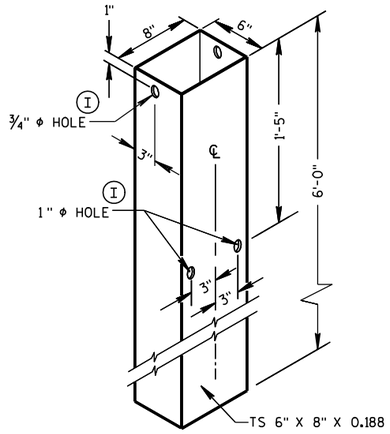
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

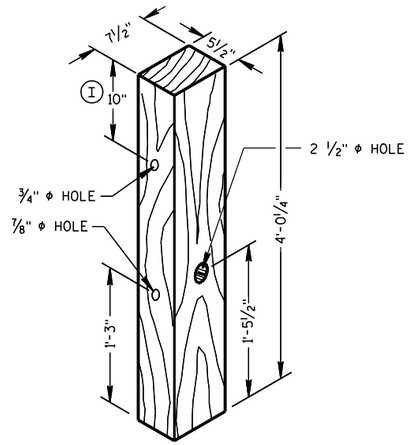
S.D.D. 14 B 44-1b

6

S.D.D. 14 B 44-1b

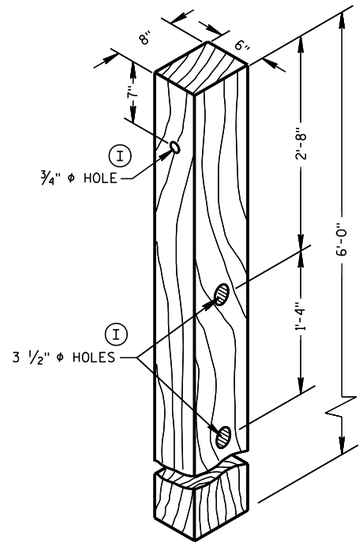


FOUNDATION TUBE (2)



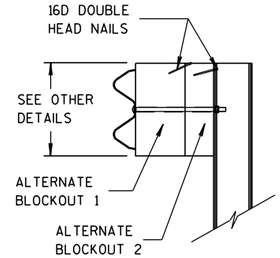
POSTS NUMBER 1 AND 2

WOOD BREAKAWAY POST (1)

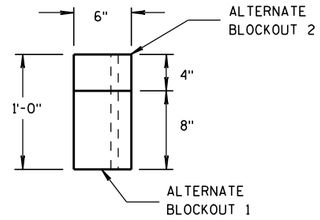


POSTS NUMBER 3-9

WOOD CRT POST (3)

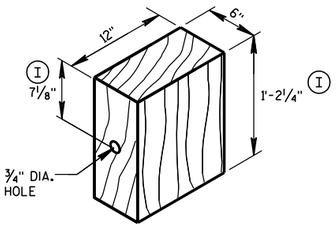


SIDE VIEW



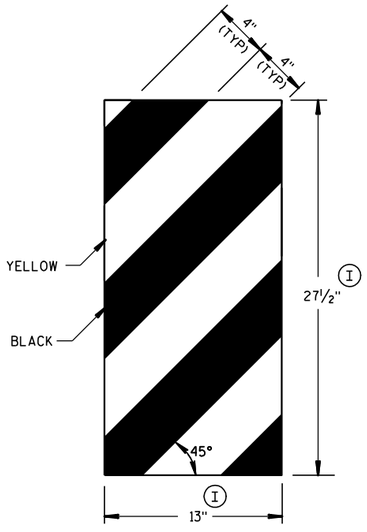
TOP VIEW

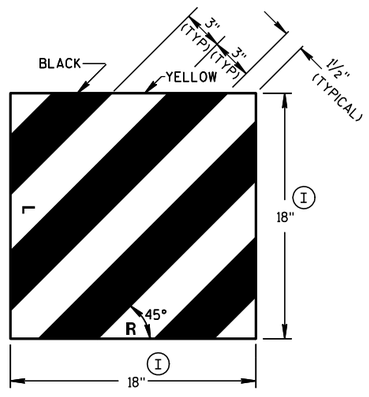
ALTERNATE WOOD BLOCKOUT DETAIL



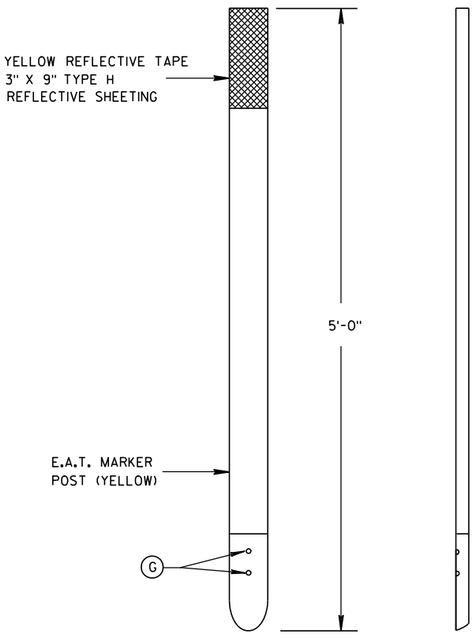
WOOD BLOCKOUT (4)

REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2





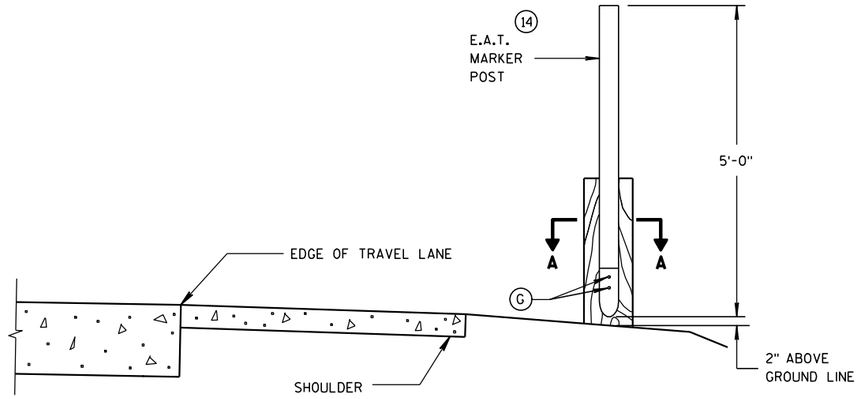
GENERIC REFLECTIVE SHEETING (13) (H)



FRONT VIEW

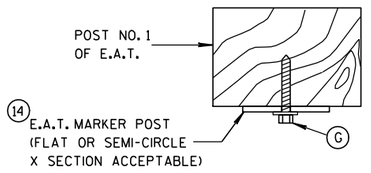
SIDE VIEW

E.A.T. MARKER POST (14)



TYPICAL INSTALLATION OF E.A.T. MARKER POST BACKSIDE OF POST NO. 1

(E.A.T. AND RAIL REMOVED FOR CLARITY)



SECTION A-A

MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

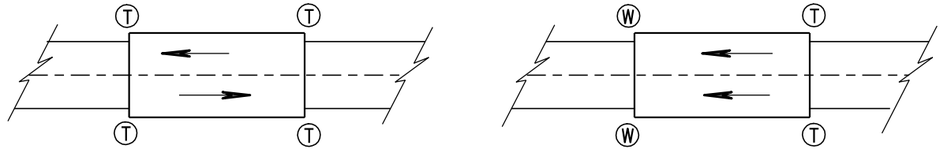
APPROVED
5/23/2011
DATE
/S/ Jerry H. [illegible]
ROADWAY STANDARDS 834
ENGINEER
tENT
FHWA

6

S.D.D. 14 B 44-1c

6

S.D.D. 14 B 44-1c



TWO WAY TRAFFIC **ONE WAY TRAFFIC**

(T) THRIE BEAM CONNECTION

(W) W-BEAM CONNECTION WHEN REQUIRED

TYPICAL LOCATIONS OF THRIE BEAM AND W-BEAM CONNECTIONS TO BRIDGE

GENERAL NOTES

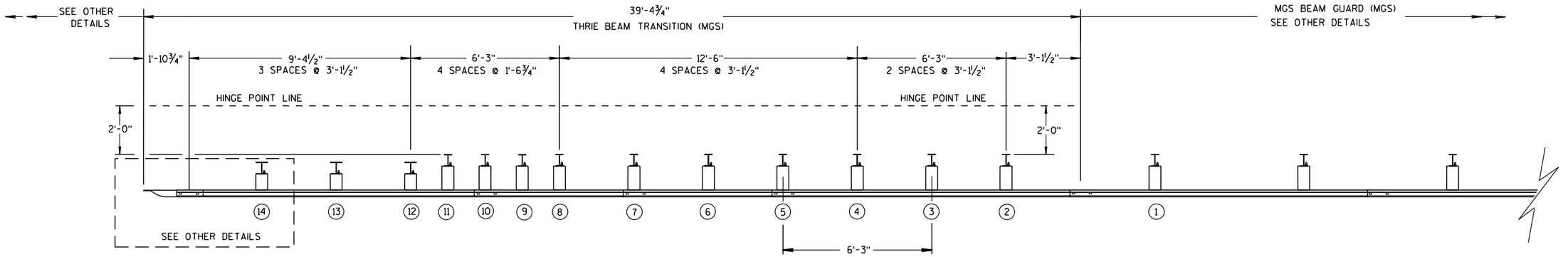
BOLT THE THRIE BEAM TO ALL POSTS AND BLOCKOUTS. DRILL OR PUNCH BOLT HOLES IN THE BEAM IF THE POST SPACING IS LESS THAN 6'-3.

IF ROCK IS ENCOUNTERED DURING EXCAVATION, SEE STANDARD DETAIL DRAWING 14 B 42.

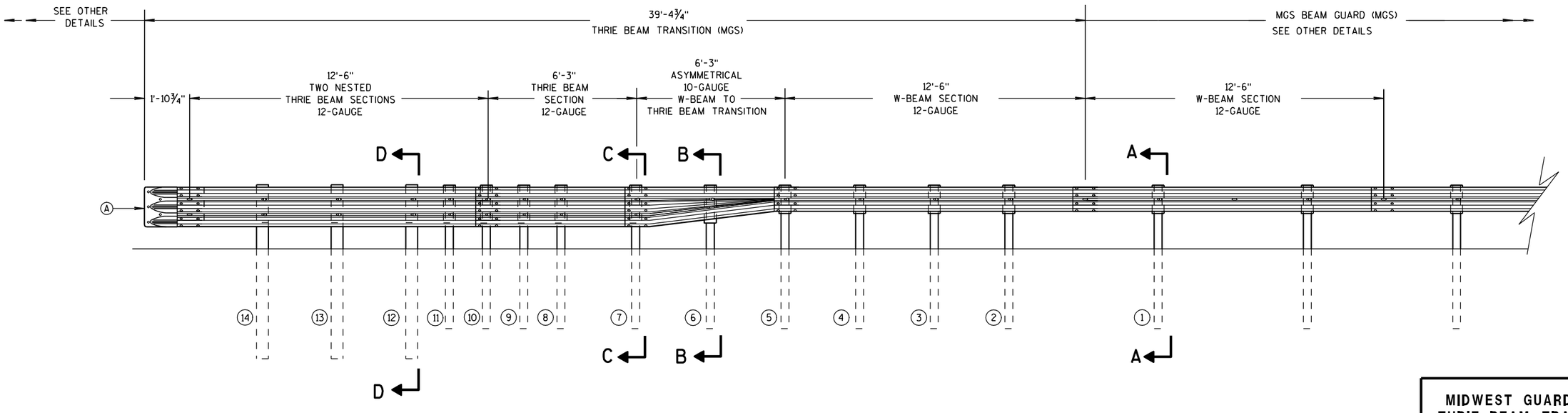
TRANSITION USES STEEL POSTS ONLY.

SEE STANDARD DETAIL DRAWING 14 B 42 FOR MORE INFORMATION.

(A) BRIDGE RAILING TYPE "W" DOES NOT REQUIRE A TERMINAL CONNECTOR.



PLAN VIEW



ELEVATION VIEW

MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION

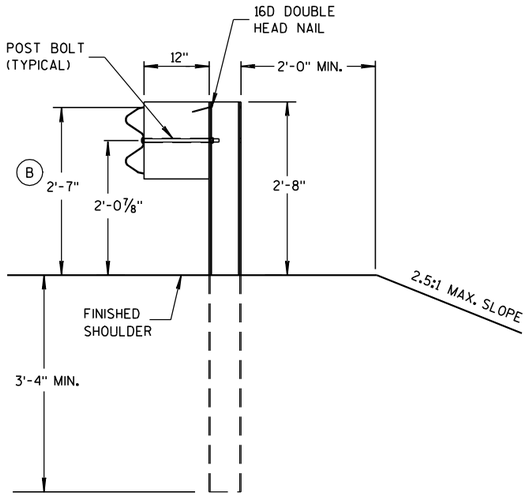
MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
S.D.D. 14 B 45-2a

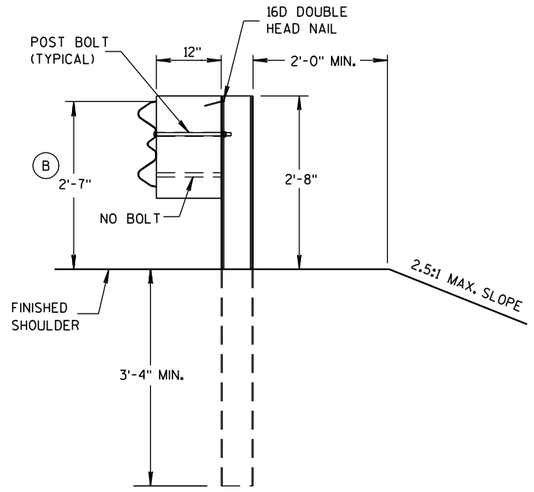
GENERAL NOTES

(B) TOLERANCE FOR TOP OF W-BEAM RAIL IS ± 1".



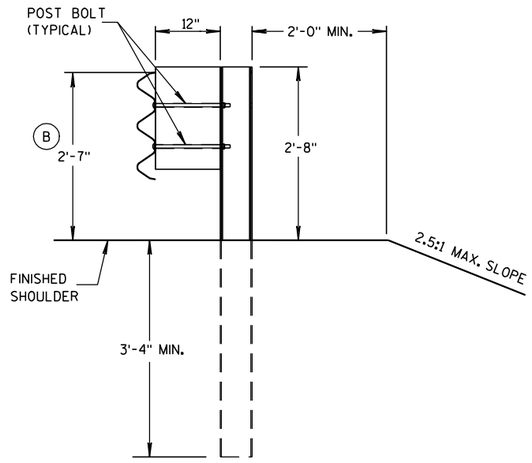
SECTION A-A

POSTS 1-5



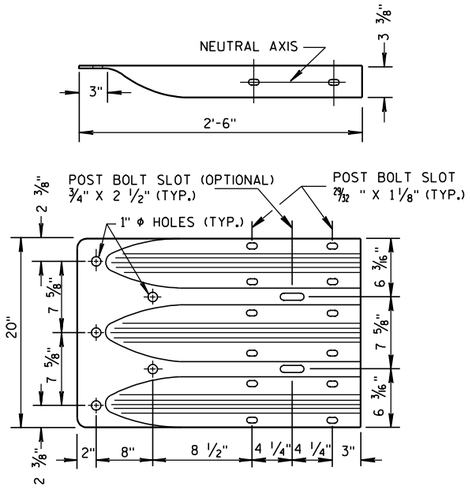
SECTION B-B

POST 6

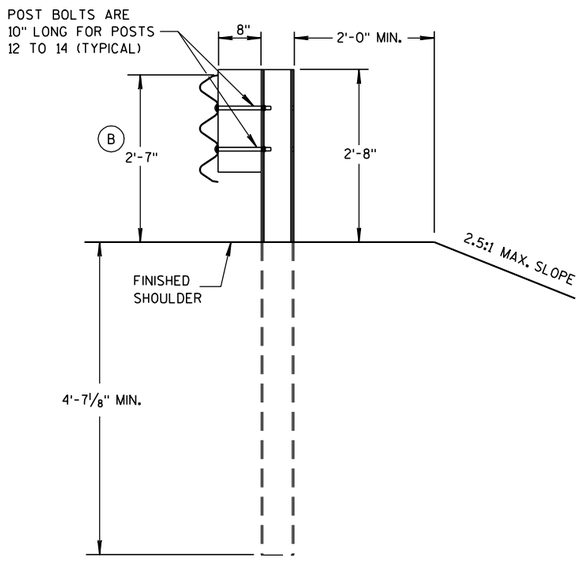


SECTION C-C

POSTS 7-11

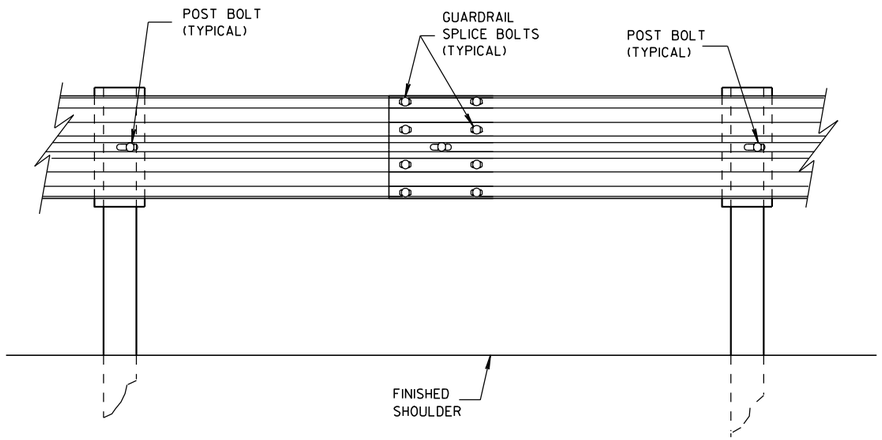


THRIE BEAM TERMINAL CONNECTOR



SECTION D-D

POSTS 12-14



SPLICE DETAIL

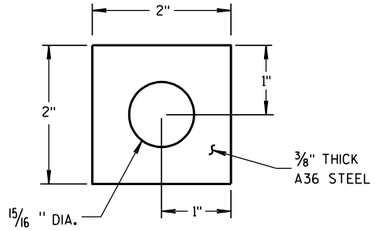
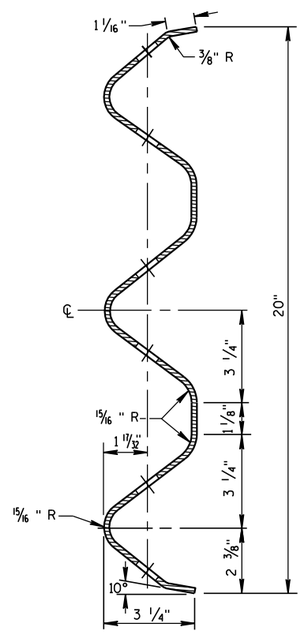


PLATE WASHER DETAIL



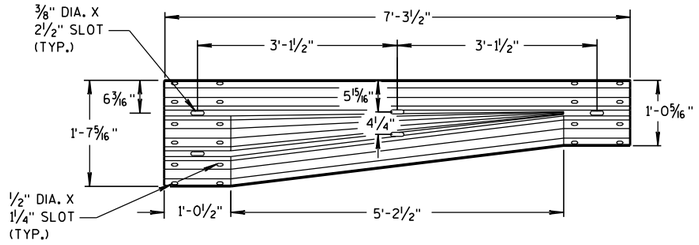
SECTION THRU THRIE BEAM RAIL ELEMENT

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

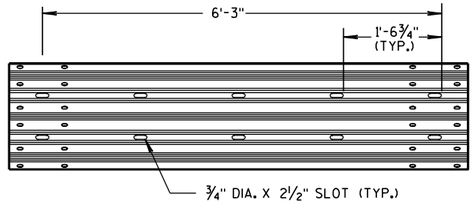
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

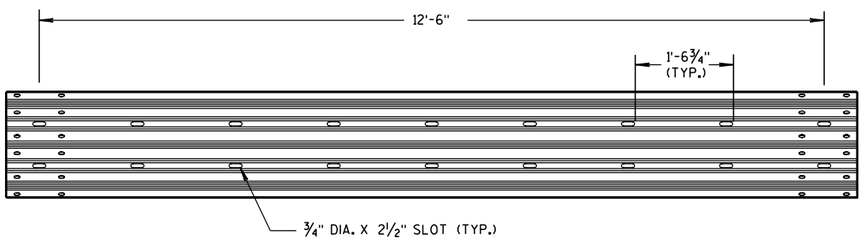
S.D.D. 14 B 45-2b



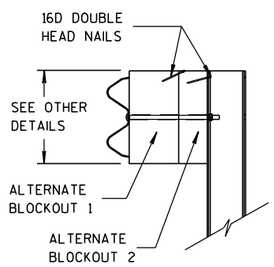
W-BEAM TO THRIE BEAM TRANSITION SECTION



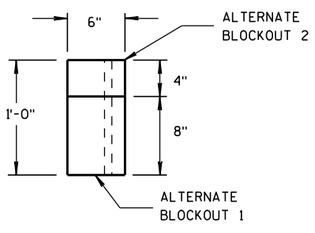
6'-3" THRIE BEAM SECTION



12'-6" THRIE BEAM SECTION

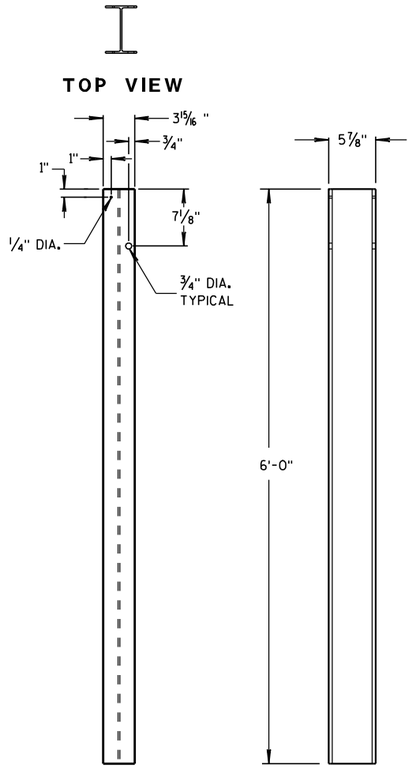


SIDE VIEW

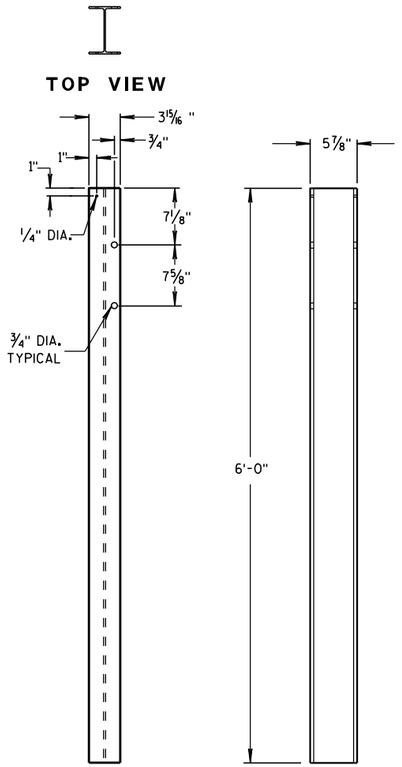


TOP VIEW

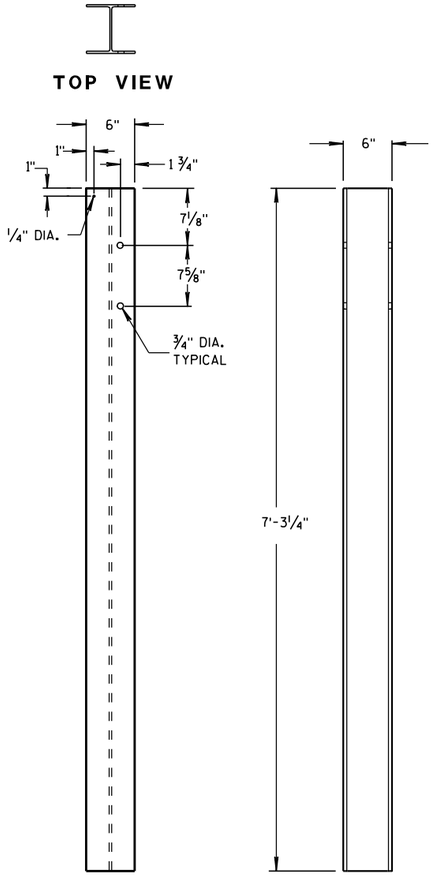
ALTERNATE WOOD BLOCKOUT DETAIL



STEEL POSTS 1-5

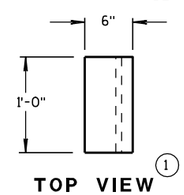


STEEL POSTS 6-11

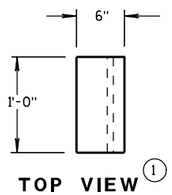


STEEL POSTS 12-14

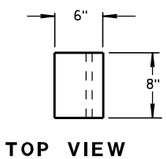
(1) WOOD BLOCKS MAY BE CONSTRUCTED OUT OF 2 WOOD BLOCKS. SEE ALTERNATE WOOD BLOCK DETAIL.



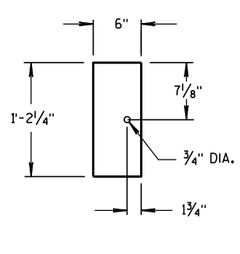
TOP VIEW (1)



TOP VIEW (1)

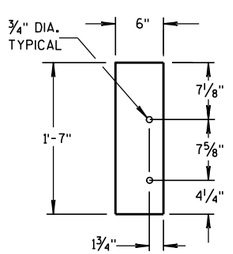


TOP VIEW



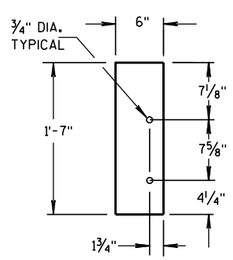
FRONT VIEW

BLOCKOUT POSTS 1-5



FRONT VIEW

BLOCKOUT POSTS 6-11



FRONT VIEW

BLOCKOUT POSTS 12-14

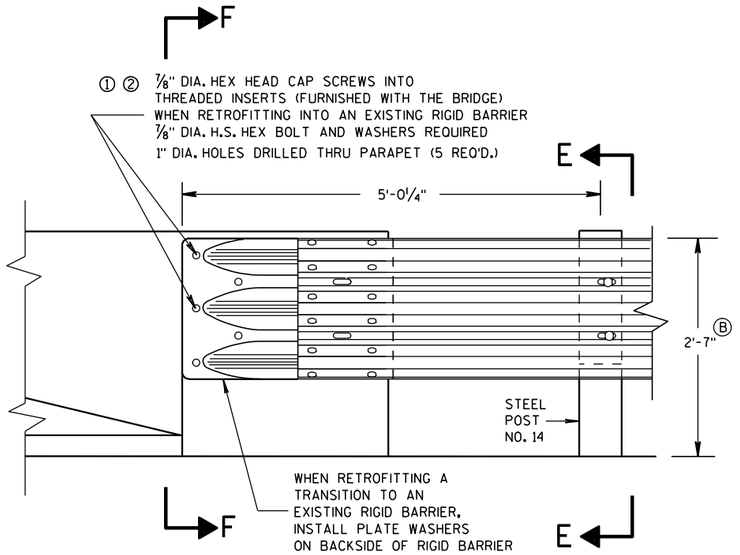
STEEL POST SIZES

POST NUMBER	SECTION TYPE	LENGTH
1	W6x9	72"
2	W6x9	72"
3	W6x9	72"
4	W6x9	72"
5	W6x9	72"
6	W6x9	72"
7	W6x9	72"
8	W6x9	72"
9	W6x9	72"
10	W6x9	72"
11	W6x9	72"
12	W6x15	87 1/8"
13	W6x15	87 1/8"
14	W6x15	87 1/8"

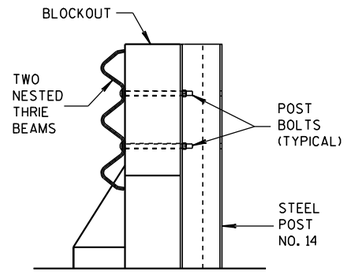
MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
S.D.D. 14 B 45-2c



FRONT VIEW



SECTION E-E

GENERAL NOTES

THESE ARE TYPICAL CONNECTION DETAILS. ADJUST THE POSTION OF CONNECTIONS TO EXISTING BRIDGES TO FIT THE ACTUAL BRIDGE AND SITE DIMENSIONS.

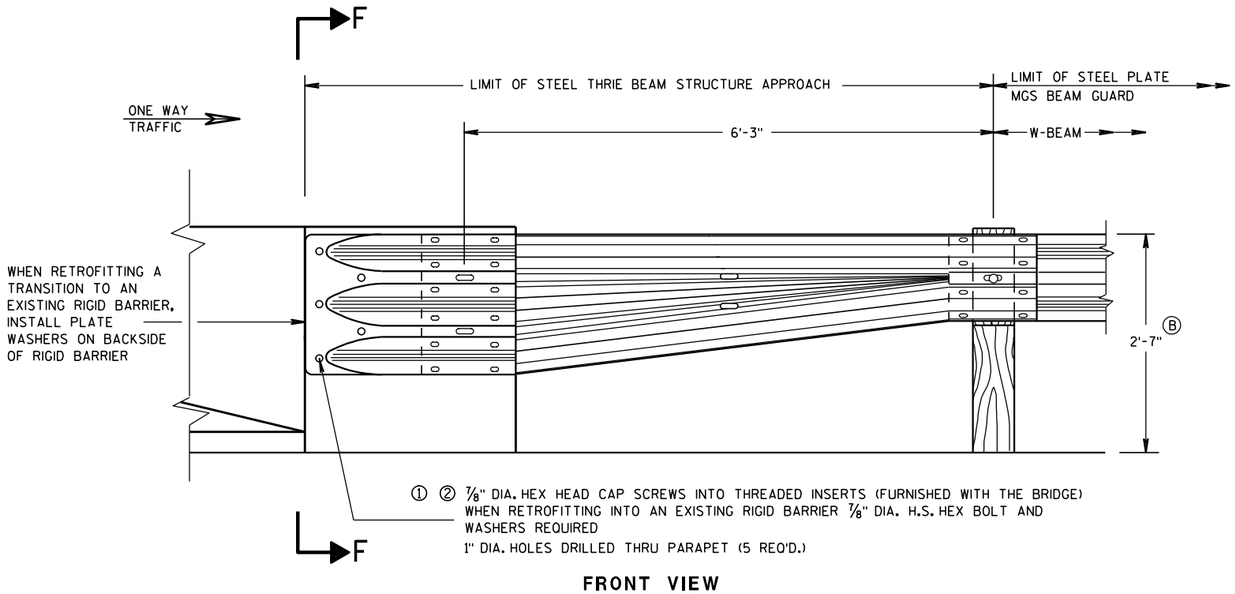
① INCLUDE THE PAYMENT FOR DRILLING BOLT HOLES THROUGH THE PARAPET, AND ALL BOLTS, NUTS AND WASHERS IN THE ITEM "STEEL THRIE BEAMSTRUCTURAL APPROACH".

② BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X ⅝" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.

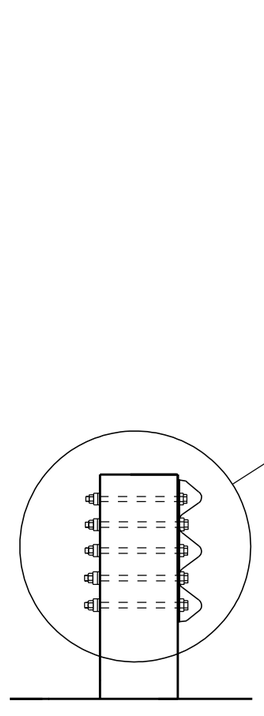
③ THE RECESS FOR A W-BEAM CONNECTION, WHICH EXISTS ON SOME PARAPETS OF THIS TYPE, SHALL BE FILLED WITH A TREATED TIMBER BLOCKOUT. BLOCKOUT SIZE IS 1'-6" X 2'-0" X 3 ½".

Ⓑ TOLERANCE FOR TOP OF BEAM IS ± 1".

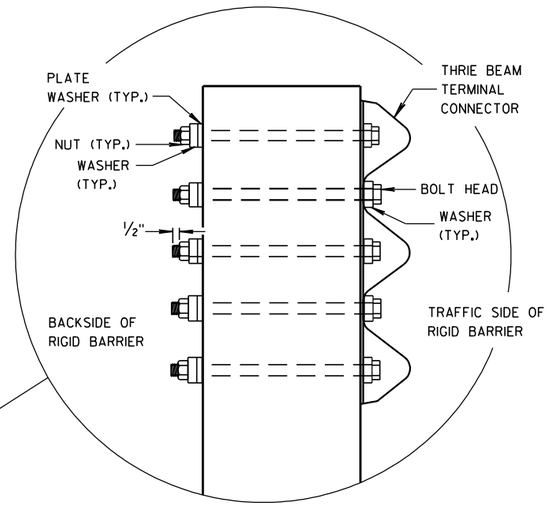
THRIE BEAM CONNECTION TO BRIDGE PARAPET WITH SQUARE ENDS



FRONT VIEW



SECTION F-F



W BEAM TRANSITION AND CONNECTION TO BRIDGE PARAPETS WITH SQUARE ENDS

(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

2/8/2012 — DATE

/S/ Jerry H. Zogg — ROADWAY STANDARDS 1838 — ENGINEER

FHWA

6

S.D.D. 14 B 45-2d

6

S.D.D. 14 B 45-2d

GENERAL NOTES

THESE ARE TYPICAL CONNECTION DETAILS. ADJUST THE POSTION OF CONNECTIONS TO EXISTING BRIDGES TO FIT THE ACTUAL BRIDGE AND SITE DIMENSIONS.

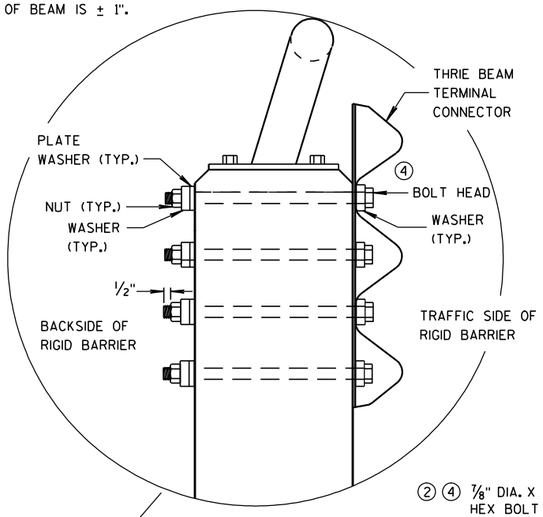
① INCLUDE THE PAYMENT FOR DRILLING BOLT HOLES THROUGH THE PARAPET, AND ALL BOLTS, NUTS AND WASHERS IN THE ITEM "STEEL THRIE BEAMSTRUCTURAL APPROACH".

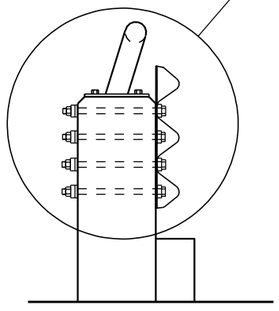
② BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X 5/8" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.

③ THE RECESS FOR A W-BEAM CONNECTION, WHICH EXISTS ON SOME PARAPETS OF THIS TYPE, SHALL BE FILLED WITH A TREATED TIMBER BLOCKOUT. BLOCKOUT SIZE IS 1'-6" X 2'-0" X 3 1/2".

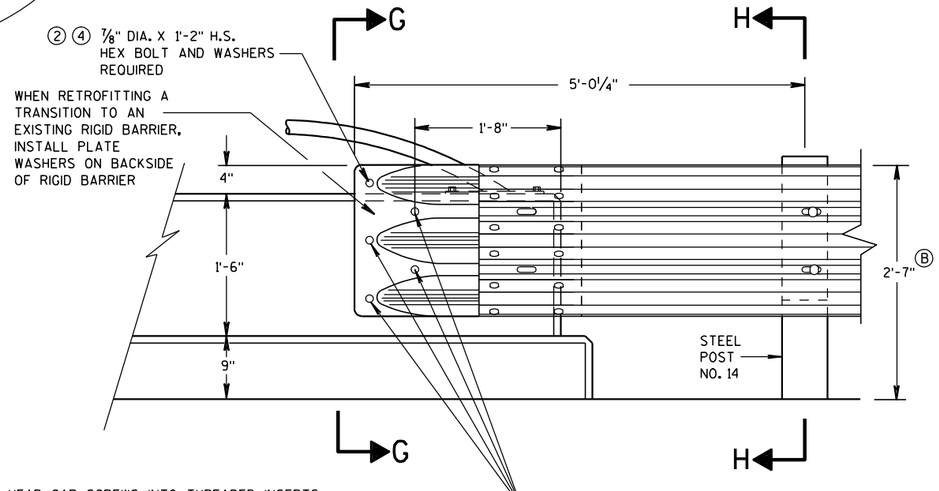
④ BOLT, NUT AND WASHERS NOT REQUIRED FOR THIS LOCATION WHEN RETROFITTING AN EXISTING PAPAPET AND THE HOLE IS EITHER ABOVE PARAPET OR WITHIN 4 INCHES OF THE EDGE OF PARAPET.

Ⓑ TOLERANCE FOR TOP OF BEAM IS ± 1".

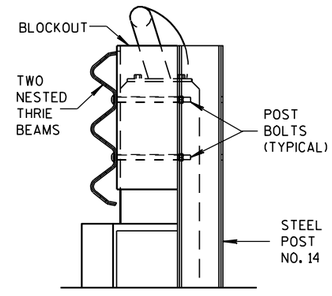




SECTION G-G

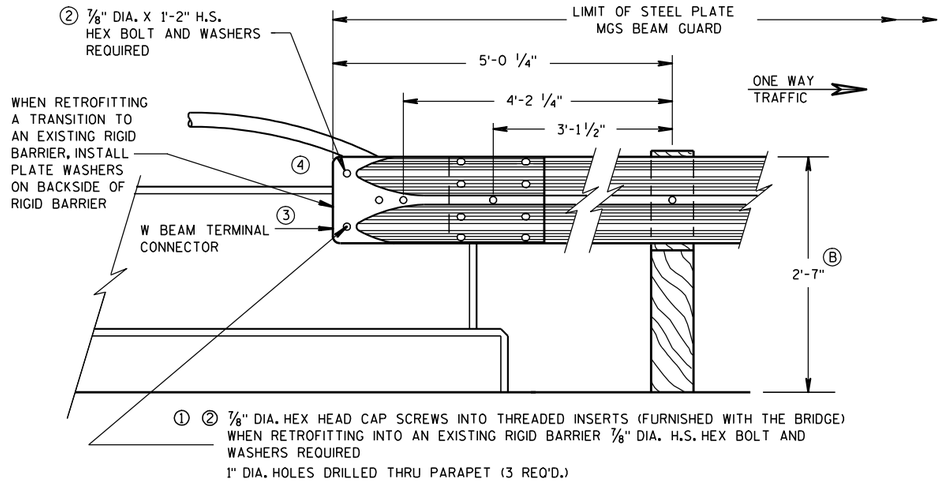


FRONT VIEW



SECTION H-H

THRIE BEAM CONNECTION TO VERTICAL FACED PARAPETS



FRONT VIEW

W BEAM CONNECTION TO VERTICAL FACE PARAPET

(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

2-8-2012
DATE

/S/ Jerry H. [illegible]
ROADWAY STANDARDS DEVELOPMENT ENGINEER

FHWA

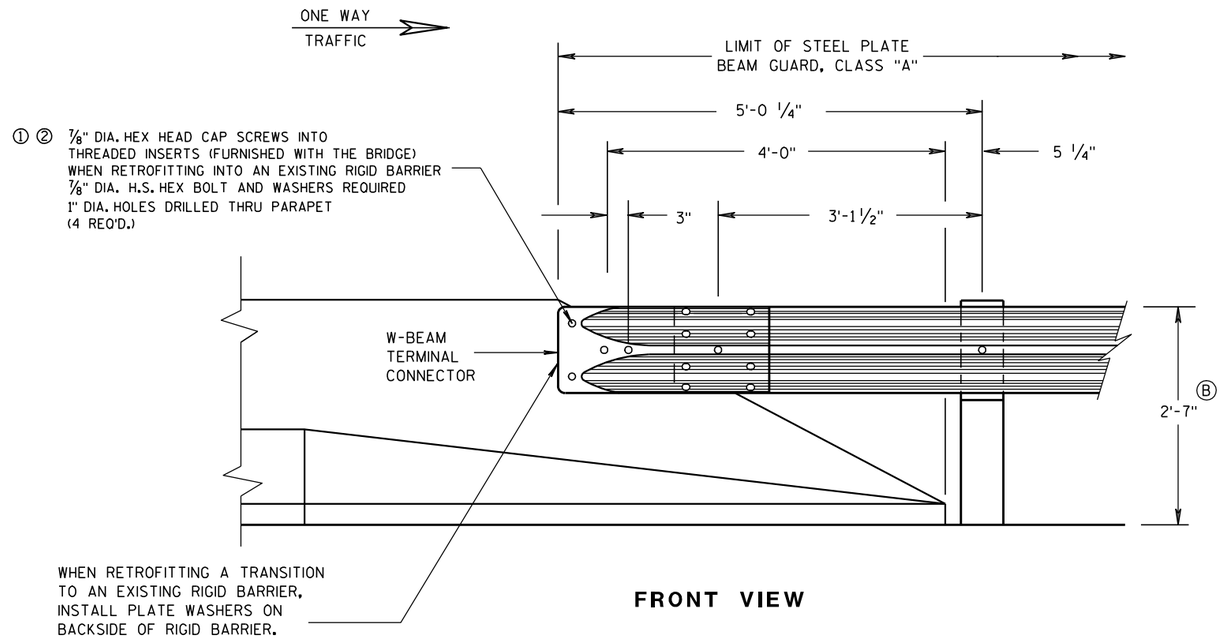
1839

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S.D.D. 14 B 45-2e

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S.D.D. 14 B 45-2e



FRONT VIEW

W BEAM CONNECTION TO PARAPETS WITH SLOPED ENDS

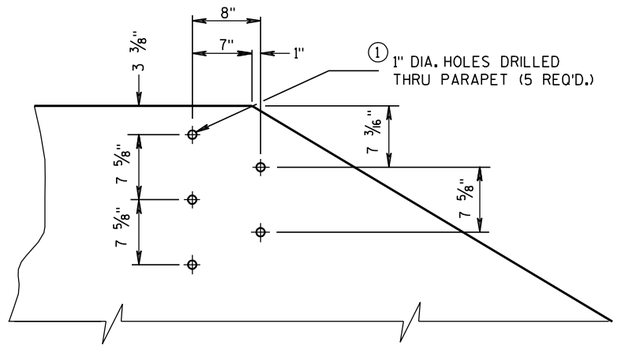
(USE ONLY AT TRAFFIC EXIT END OF ONE WAY BRIDGE)

GENERAL NOTES

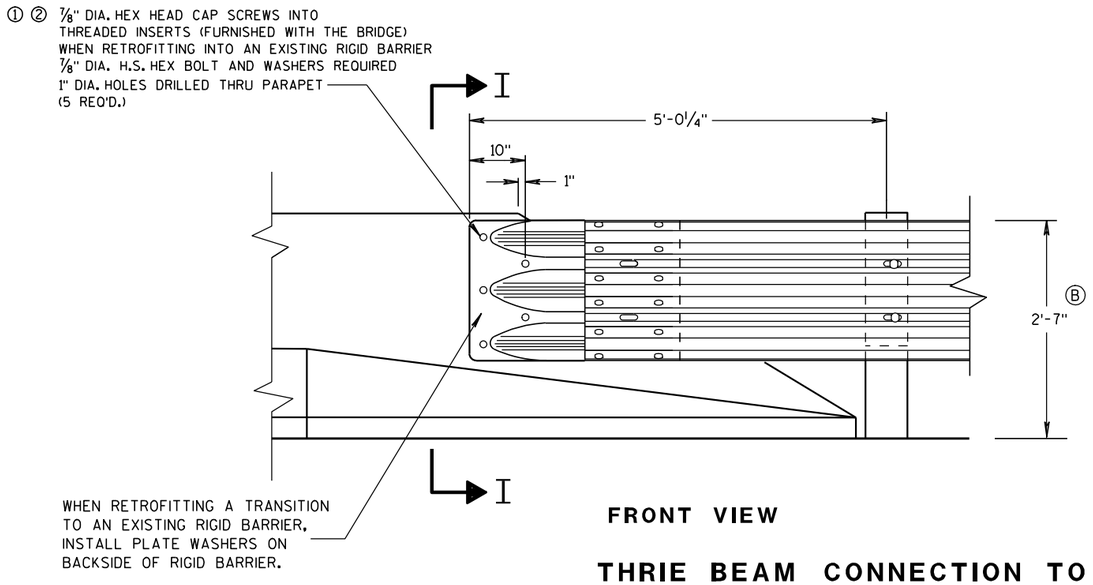
① INCLUDE THE PAYMENT FOR DRILLING BOLT HOLES THROUGH THE PARAPET, AND ALL BOLTS, NUTS AND WASHERS IN THE ITEM "STEEL THRIE BEAM STRUCTURAL APPROACH".

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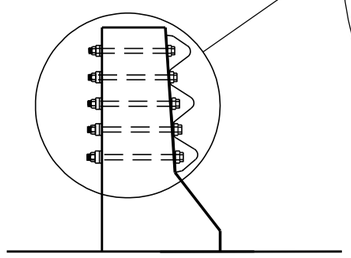
Ⓑ TOLERANCE FOR TOP OF BEAM IS ± 1".



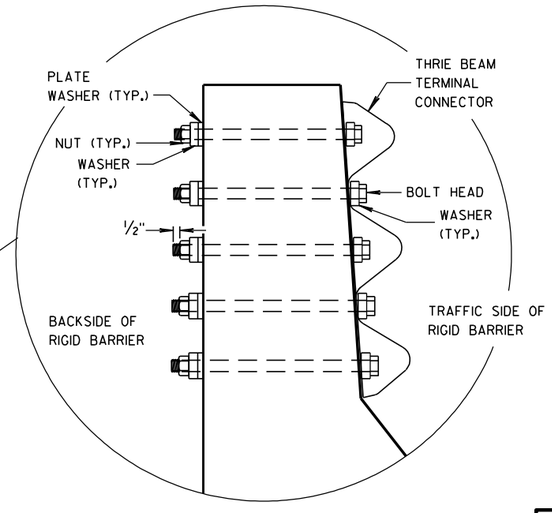
DRILL HOLE LOCATION AND PATTERN FOR THRIE BEAM CONNECTION



FRONT VIEW



SECTION I-I



THRIE BEAM CONNECTION TO BRIDGE PARAPETS WITH SLOPED ENDS

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

2-8-2012
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER

840

ENT

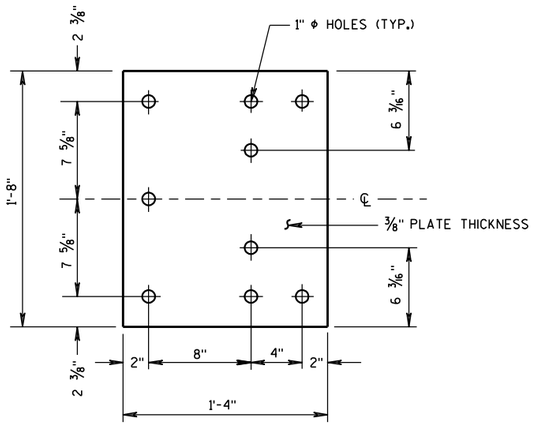
FHWA

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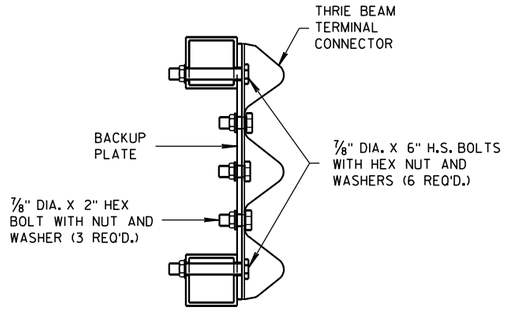
S.D.D. 14 B 45-2f

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S.D.D. 14 B 45-2f



BACK-UP PLATE DETAIL

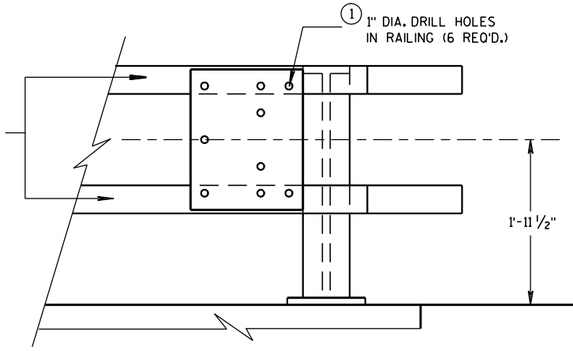


SECTION J-J

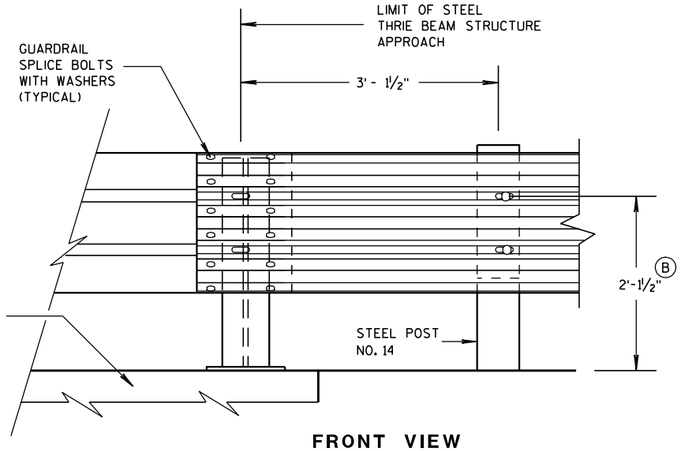
GENERAL NOTES

(1) INCLUDE THE PAYMENT FOR DRILLING HOLES IN RAILING IN THE ITEM "STEEL THRIE BEAM STRUCTURE APPROACH".

(B) TOLERANCE FOR TOP OF BEAM IS ± 1".

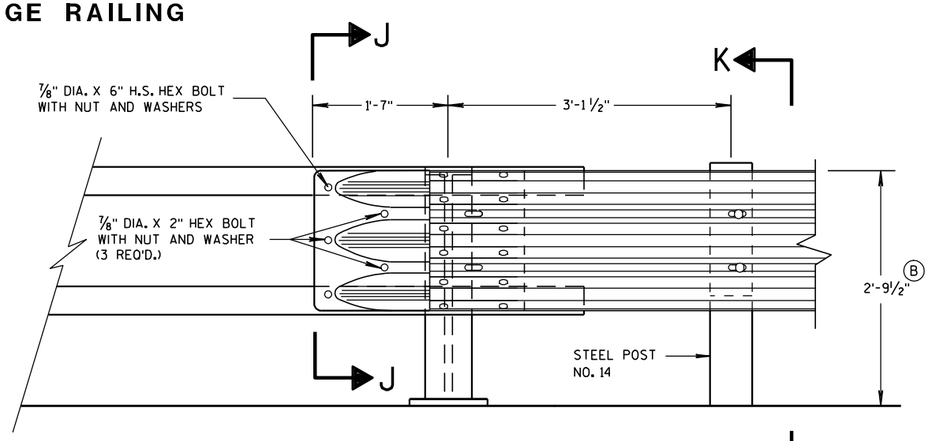


BACK-UP PLATE MOUNTING ONTO BRIDGE RAILING

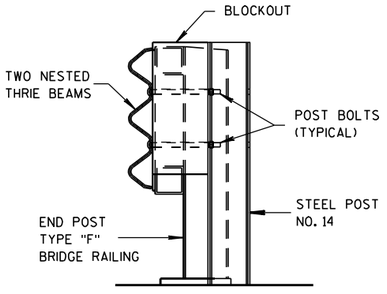


FRONT VIEW

THRIE BEAM CONNECTION TO STEEL RAILING TYPE "W"



FRONT VIEW



SECTION K-K

THRIE BEAM CONNECTION TO TUBULAR RAILING TYPE "F"

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
2-8-2012 DATE
/S/ Jerry H. [illegible]
ROADWAY STANDARDS [illegible] ENGINEER
FHWA

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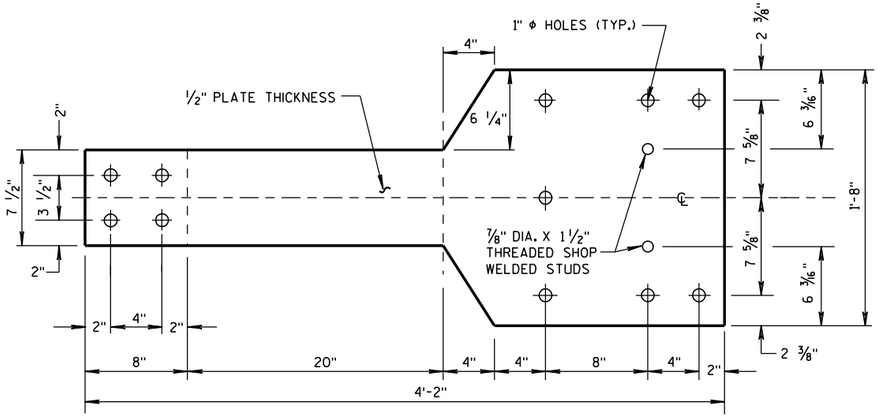
S.D.D. 14 B 45-2g

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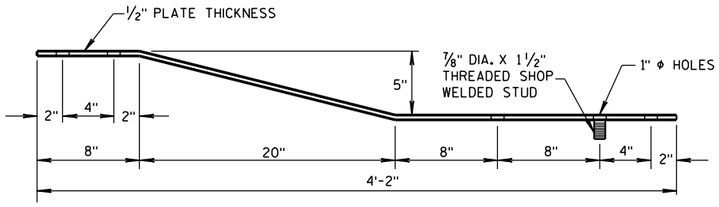
S.D.D. 14 B 45-2g

GENERAL NOTES

(B) TOLERANCE FOR TOP OF W-BEAM RAIL IS ± 1".

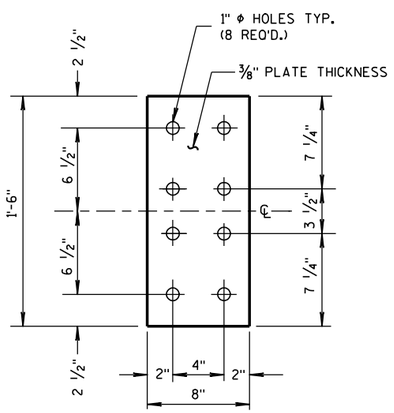


FRONT VIEW



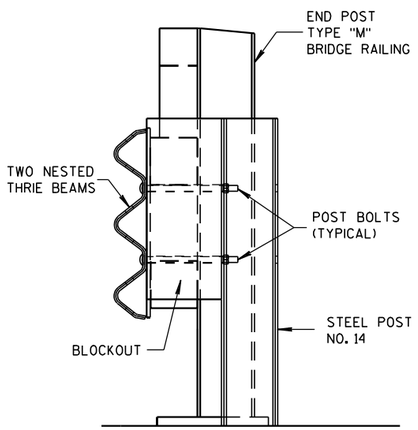
PLAN VIEW

BACK-UP PLATE DETAIL, TYPE "M"

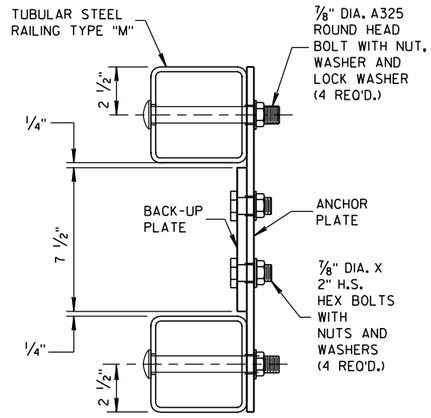


FRONT VIEW

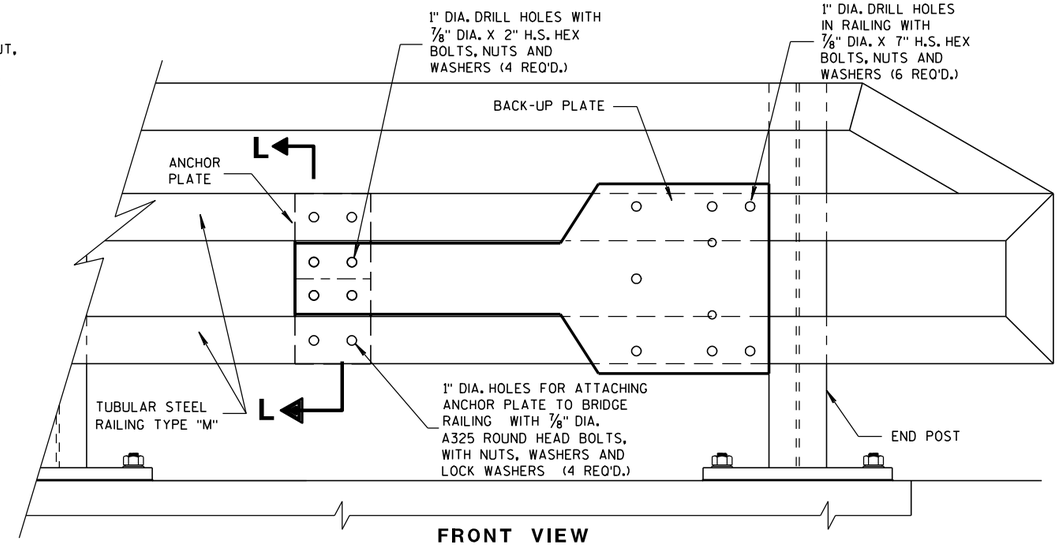
ANCHOR PLATE DETAIL, TYPE "M"



SECTION M-M

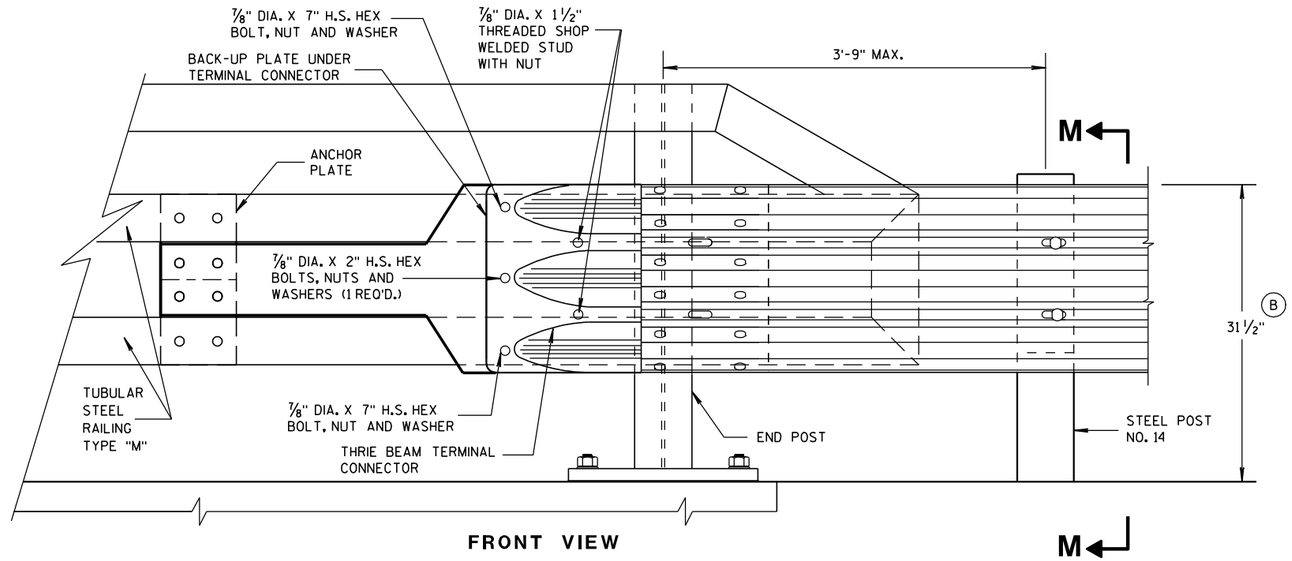


SECTION L-L

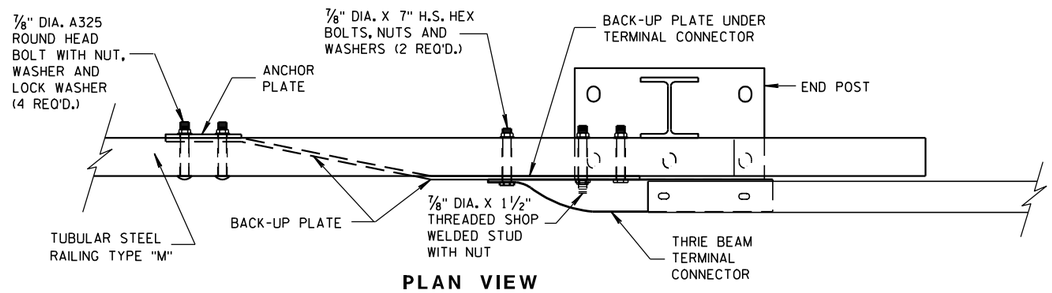


FRONT VIEW

ANCHOR AND BACK-UP PLATE MOUNTING TO BRIDGE RAILING, TYPE "M"



FRONT VIEW



PLAN VIEW

THRIE BEAM CONNECTION TO TUBULAR RAILING, TYPE "M"

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

2-8-2012 DATE

/S/ Jerry H. [illegible]
ROADWAY STANDARDS ENGINEER

842 ENT

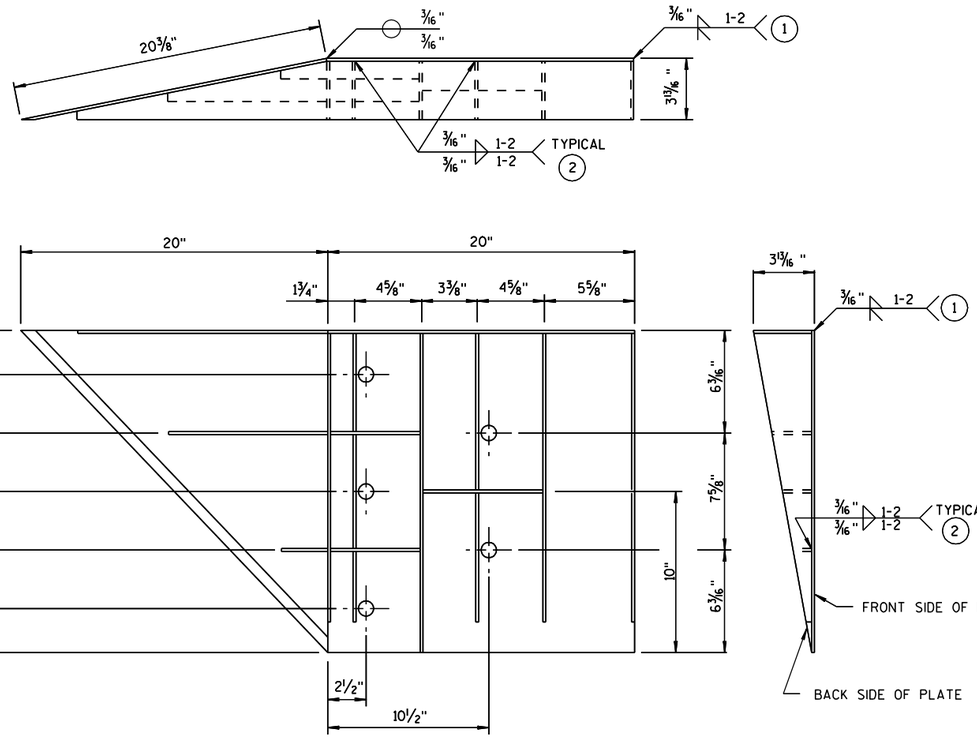
FHWA

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S.D.D. 14 B 45-2h

6

S.D.D. 14 B 45-2h



WELDING INSTRUCTION

(VIEWED FROM BACK SIDE OF PLATE)

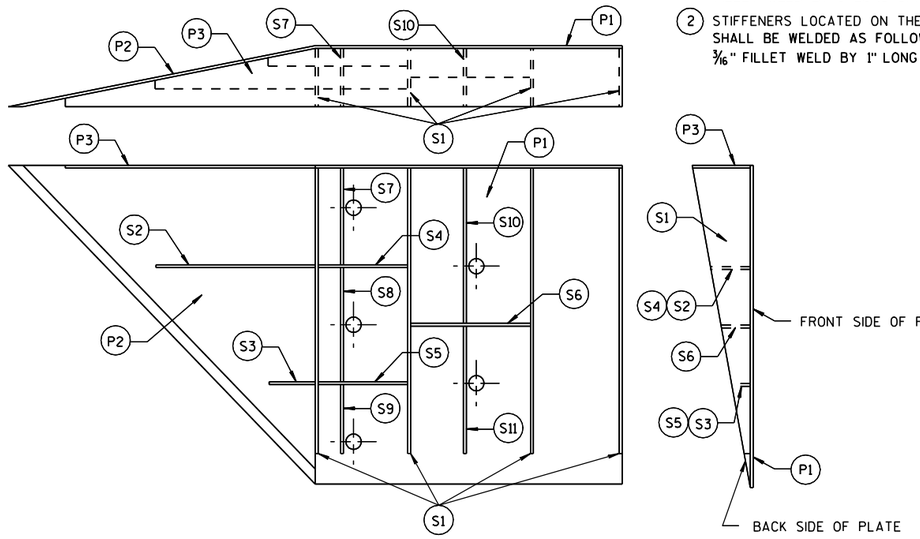


PLATE AND STIFFENER IDENTIFICATION

(VIEWED FROM BACK SIDE OF PLATE)

GENERAL NOTES

COVER PLATE PANELS ARE 3/16" THICK.

ALL STIFFENERS ARE 1/4" THICK.

CONNECTOR PLATE SHALL BE FABRICATED FROM ASTM GRADE A36 STEEL AND GALVANIZED.

FOR GALVANIZED REQUIREMENTS, SEE SECTION 614 OF THE STANDARD SPECIFICATIONS.

ALL HOLE DIAMETERS SHALL BE 1".

FOR OPPOSITE SIDE INSTALLATION MIRROR DRAWINGS.

(1) STIFFENERS LOCATED AT THE OUTSIDE EDGES OF THE COVER PLATES SHALL BE WELDED AS FOLLOWS:
SINGLE BEVEL GROOVE WELD ON EXTERNAL SIDES AND 3/16" FILLET WELD BY 1" LONG SPACED AT 2" ON INTERNAL SIDES.

(2) STIFFENERS LOCATED ON THE INSIDE OF THE COVER PLATE SHALL BE WELDED AS FOLLOWS:
3/16" FILLET WELD BY 1" LONG SPACED AT 2".

CONNECTOR PLATE DIMENSION (PER ASSEMBLY)

PLATE	QUANTITY	SHAPE	SIZE (A x B x C x D)	THICKNESS
P1	1		20" x 20"	3/16"
P2	1		20" x 20" x 28 9/16"	3/16"
P3	1		39" x 3 5/8" x 20" x 19 5/16"	3/16"
S1	4		18 7/16" x 3 5/8" x 18 3/4"	1/4"
S2	1		10 1/4" x 2 7/16" x 10 3/8" x 1/2"	1/4"
S3	1		3" x 1 1/16" x 3 1/8" x 1/2"	1/4"
S4	1		6 1/8" x 2 7/16"	1/4"
S5	1		6 1/8" x 1 1/16"	1/4"
S6	1		7 3/4" x 1 3/4"	1/4"
S7	1		2 9/16" x 6" x 3 5/8" x 5 7/8"	1/4"
S8	1		1 5/32" x 7 1/2" x 2 1/2" x 7 3/8"	1/4"
S9	1		6 1/16" x 6 3/16" x 1 3/32"	1/4"
S10	1		1 7/8" x 9 7/8" x 3 5/8" x 9 11/16"	1/4"
S11	1		8 1/2" x 8 3/4" x 1 13/16"	1/4"

SINGLE SLOPE CONNECTION PLATE

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

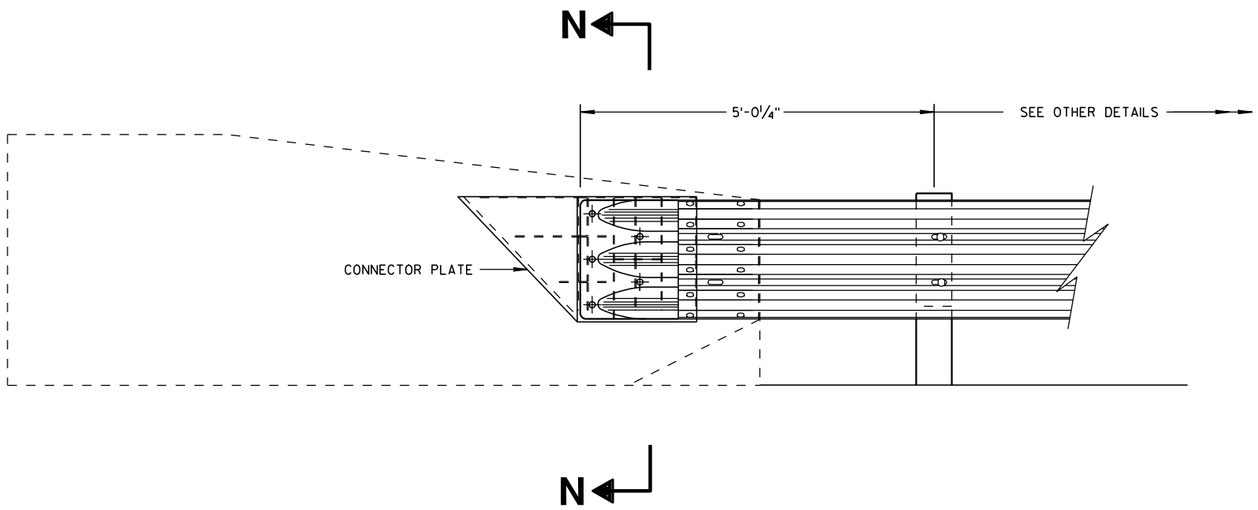
APPROVED
2-8-2012
DATE
/S/ Jerry H. Zaas
ROADWAY STANDARDS ENGINEER
843
FHWA

6

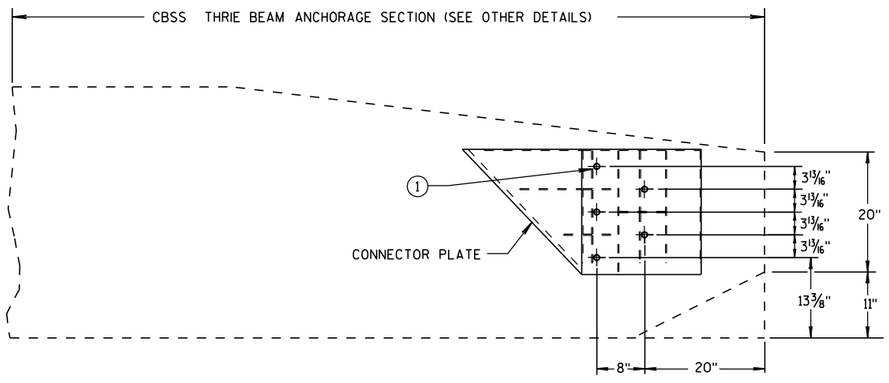
S.D.D. 14 B 45-2i

6

S.D.D. 14 B 45-2i



THRIE BEAM CONNECTION TO SINGLE SLOPE BARRIER

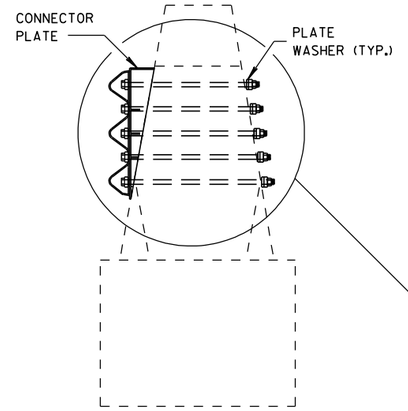


SINGLE SLOPE CONNECTION PLATE PLACEMENT

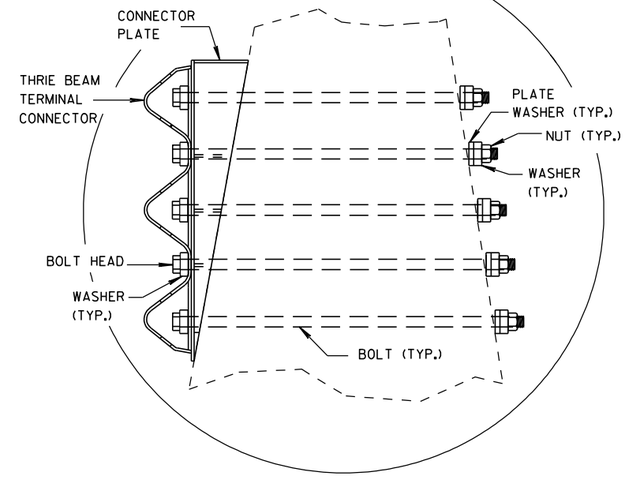
GENERAL NOTES

CONNECTION PLATE INCIDENTAL TO STEEL THRIE BEAM TRANSITION.

(1) BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X 5/8" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.



SECTION N-N



MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

2-8-2012
DATE

/S/ Jerry H. [illegible]
ROADWAY STANDARDS 1844 ENGINEER

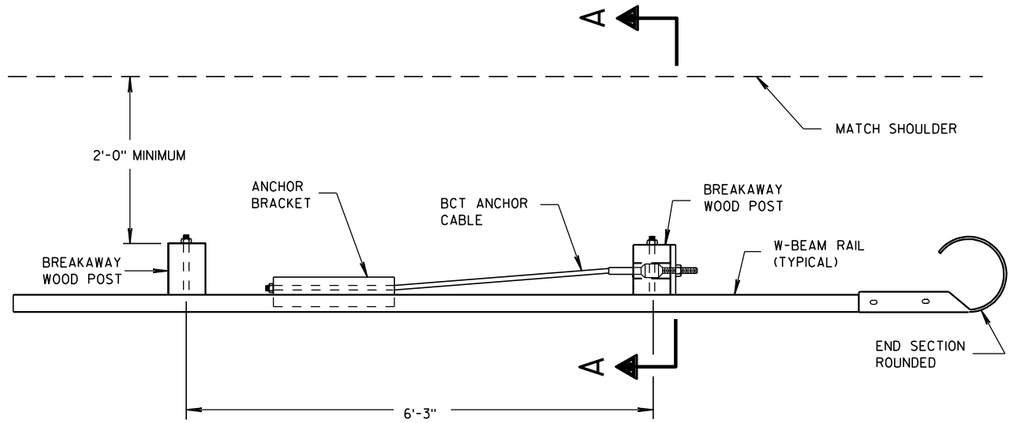
FHWA

6

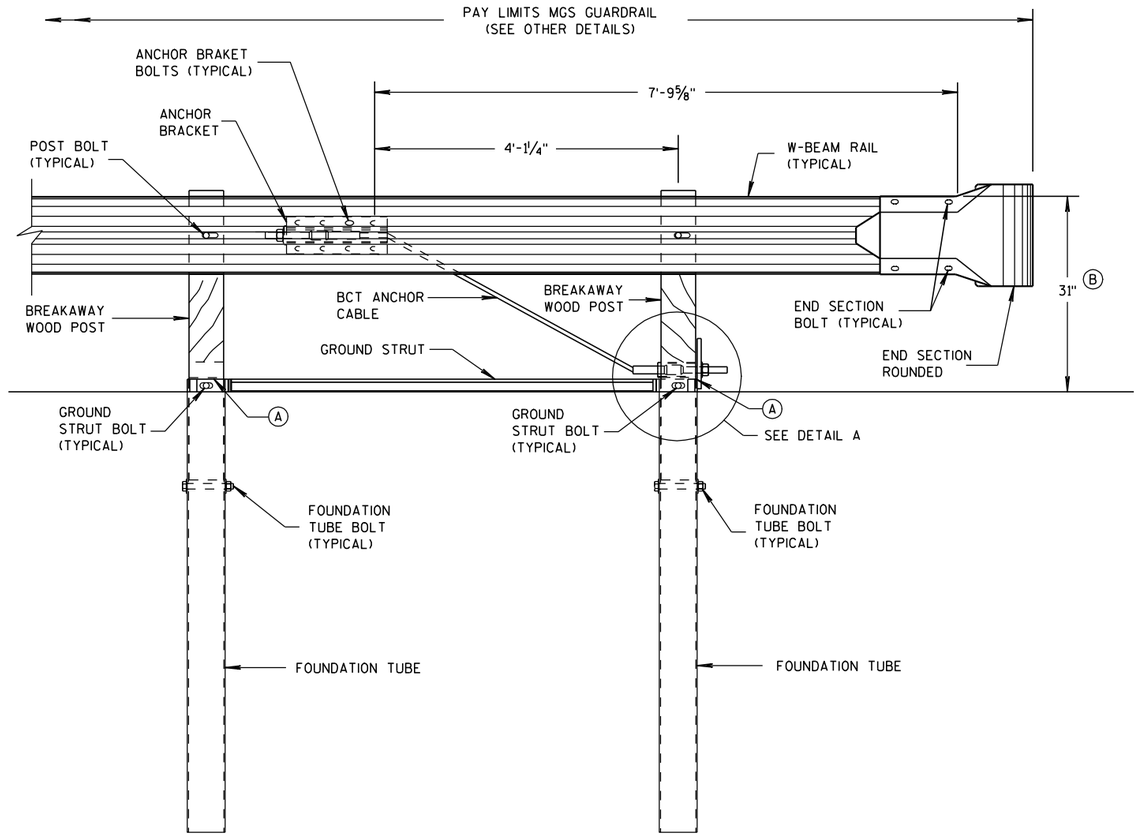
S.D.D. 14 B 45-2j

6

S.D.D. 14 B 45-2j

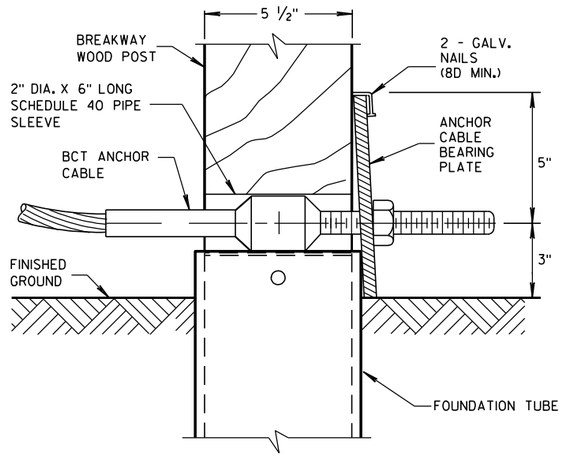


PLAN VIEW



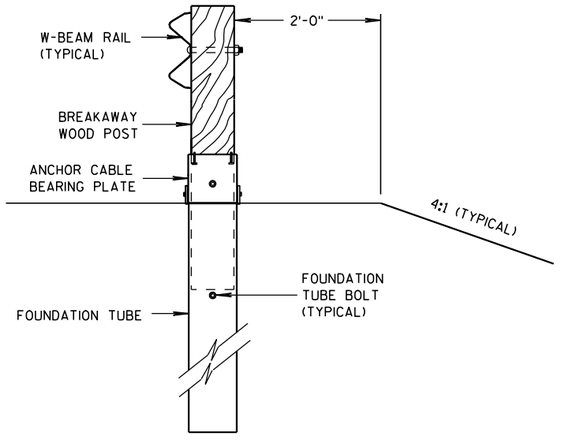
FRONT VIEW

END RAIL DETAIL



DETAIL A

POST NO. 1
GROUNG STRUT NOT SHOWN FOR CLARITY.



SECTION A-A

GENERAL NOTES

SEE SDD 14 B 42 FOR MORE INFORMATION.

POST BOLTS ARE A ⅝" DIAMETER X 10" LONG GUARDRAIL BOLT. A POST BOLT REQUIRES A ⅝" DIAMETER DH MODIFIED (RECESSED) HEAVY HEX NUT AND ⅝" DIAMETER FLAT WASHER.

FOUNDATION TUBE BOLTS ARE A ⅞" DIAMETER X 7½" LONG HEAVY HEX HEAD BOLT. A FOUNDATION TUBE BOLT REQUIRES A ⅞" DIAMETER DH HEAVY HEX NUT AND A ⅝" DIAMETER FLAT WASHER.

GROUND STRUT BOLTS ARE A ⅝" DIAMETER X 10" LONG HEAVY HEX HEAD BOLT. A GROUND STRUT BOLT REQUIRES A ⅝" DIAMETER DH HEAVY HEX NUT AND A ⅝" DIAMETER FLAT WASHER.

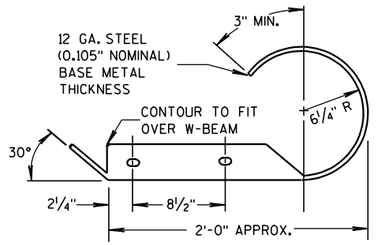
ANCHOR BRAKET BOLTS ARE A ⅝" DIAMETER X 1½" LONG HEAVY HEX HEAD BOLT. AN ANCHOR BRAKET BOLT REQUIRES A ⅝" DIAMETER DH HEAVY HEX NUT AND A FLAT WASHER.

END SECTION BOLTS ARE A ⅝" DIAMETER X 1½" HEAVY HEX HEAD BOLT. AN END SECTION BOLT REQUIRES ⅝" DIAMETER DH HEAVY HEX NUT AND A ⅝" DIAMETER FLAT WASHER.

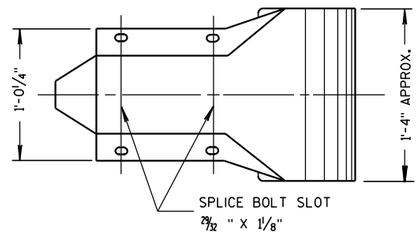
W-BEAM END SECTION ROUNDED HAS THE SAME MATERIAL PROPERTIES AS STANDARD STEEL RAIL.

(A) TOP OF FOUNDATION TUBE SHALL BE NO MORE THAN 3" ABOVE FINISHED GROUND.

(B) FOR NEW CONSTRUCTION TOP OF RAIL IS 31" ± 1".
FOR EXISTING INSTALLATIONS TOP OF RAIL IS BETWEEN 27¾" TO 32" ± 1".



PLAN VIEW



FRONT VIEW

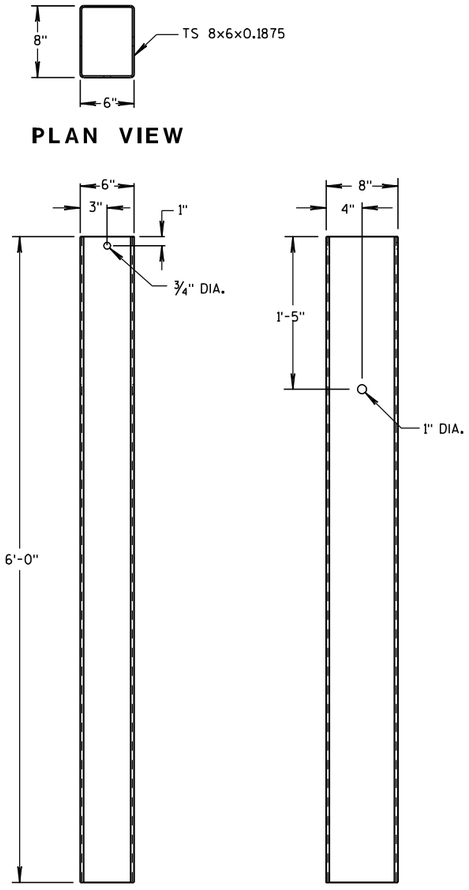
W BEAM END SECTION ROUNDED

MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

S.D.D. 14 B 47-1a

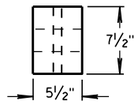


PLAN VIEW

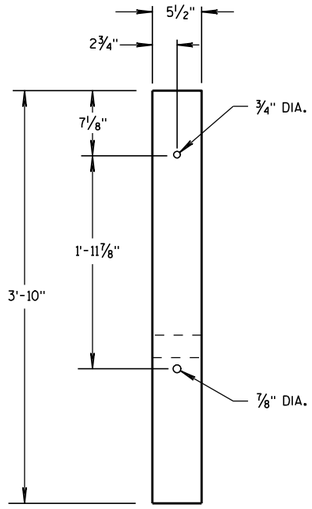
FRONT VIEW

SIDE VIEW

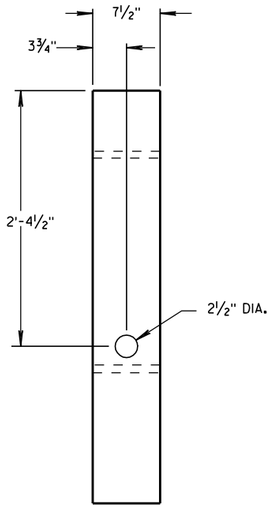
FOUNDATION TUBE



PLAN VIEW



FRONT VIEW

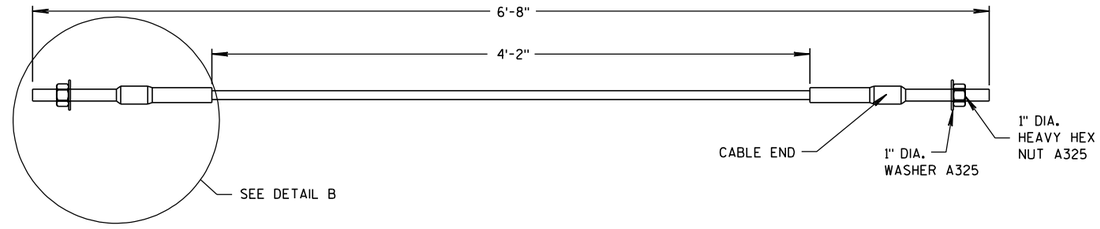


SIDE VIEW

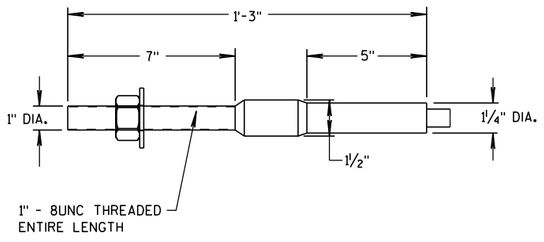
BREAKAWAY WOOD POST

GENERAL NOTES

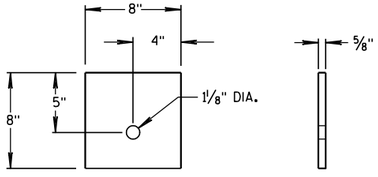
BCT ANCHOR CABLE IS A ⅜" DIAMETER 6X19 IWRC IPS GALVANIZED WIRE ROPE. THE SWAGED FITTINGS AND STUD ARE REQUIRED. THE END FITTING SHALL BE MACHINED FROM HOT-ROLLED CARBON STEEL CONFORMING TO ASTM A576 GRADE 1035 AND GALVANIZED ACCORDING TO ASTM A123. THE TREADED STUD SHOULD CONFORM TO ASTM A325 OR SAE GRADE 5. MINIMUM BREAKING STRENGTH OF WIRE ROPE IS 43,000 LB. TIGHTEN WIRE ROPE TO TAUT.



BCT ANCHOR CABLE



DETAIL B



SIDE VIEW FRONT VIEW

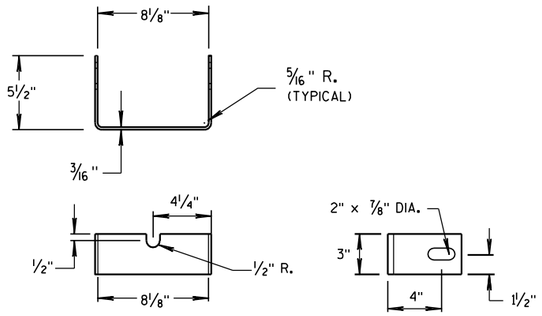
ANCHOR CABLE
BEARING PLATE

MIDWEST GUARDRAIL
SYSTEM (MGS) TYPE 2 TERMINAL

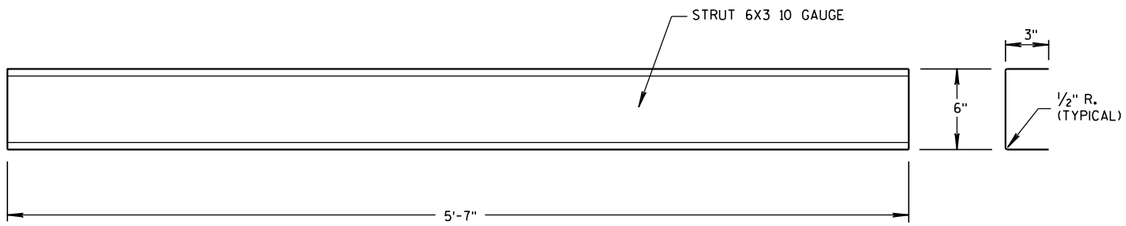
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

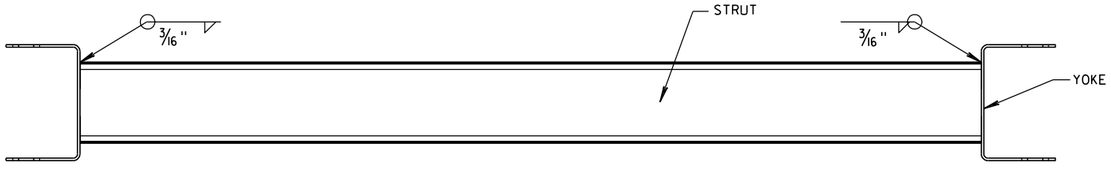
S.D.D. 14 B 47-1b



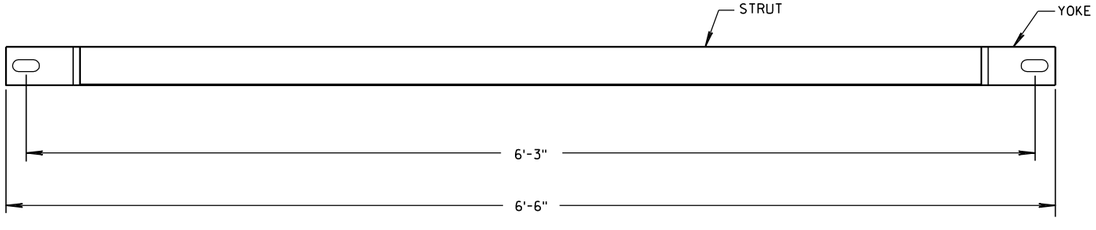
YOKE DETAIL



STRUT DETAIL

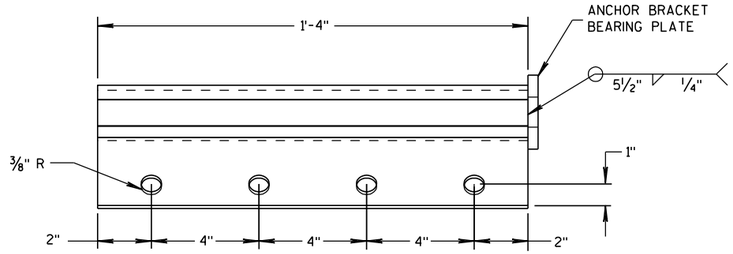


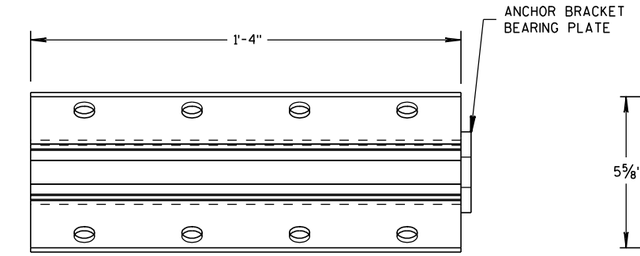
PLAN VIEW

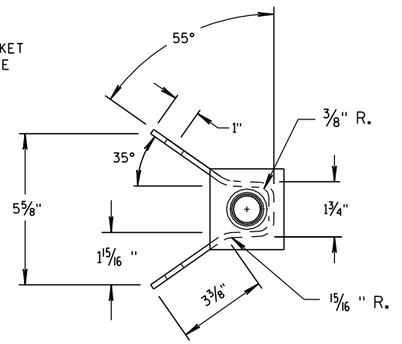


FRONT VIEW

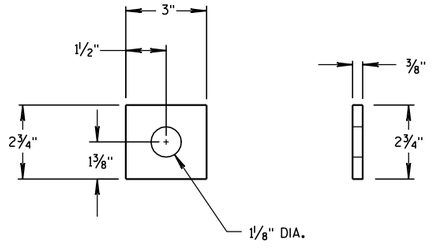
GROUND STRUT DETAIL







ANCHOR BRACKET



ANCHOR BRACKET BEARING PLATE

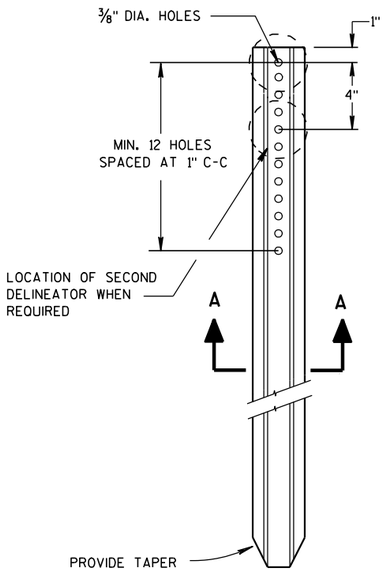
MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	
5/23/2011 DATE	/S/ Jerry H. [illegible] ROADWAY STANDARDS ENGINEER
FHWA	847 [illegible]ENT

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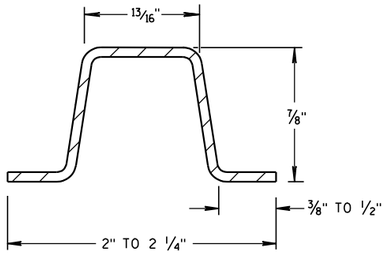
S.D.D. 14 B 47-1c

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S.D.D. 14 B 47-1c

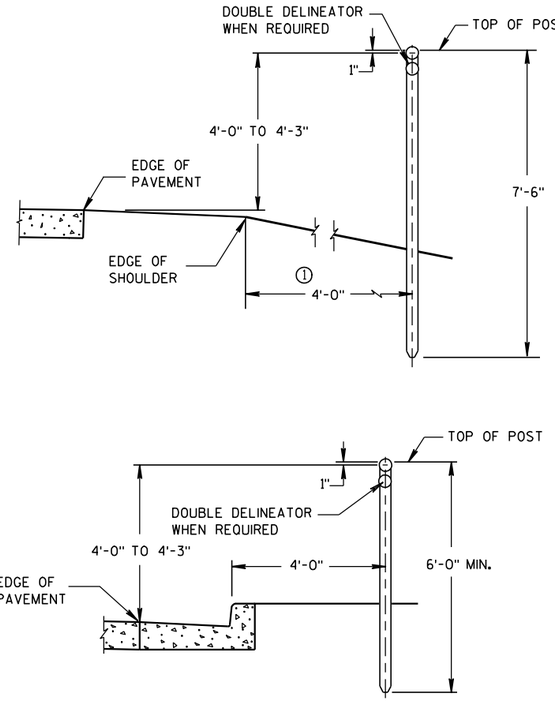


DELINEATOR POST



SECTION A-A

WEIGHT 1.12 LBS PER FT. ± 0.1 LB.

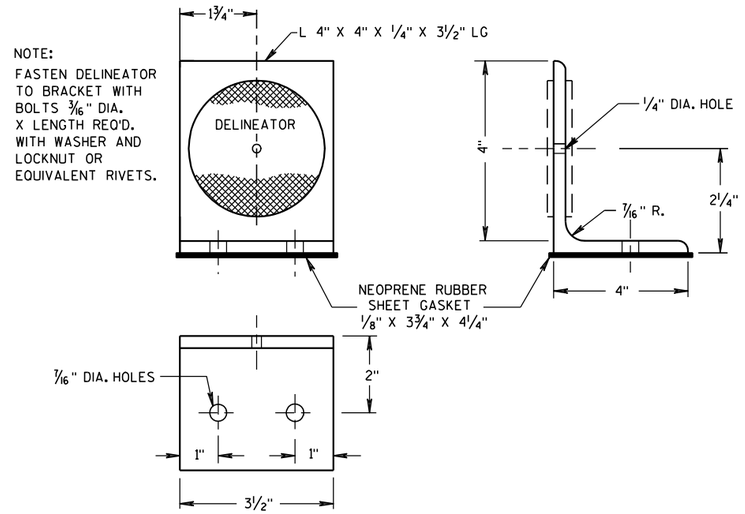


TYPICAL INSTALLATIONS OF DELINEATOR POSTS

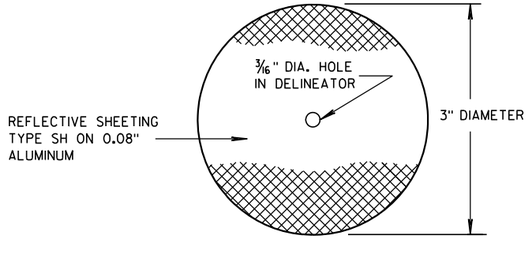
GENERAL NOTES

DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

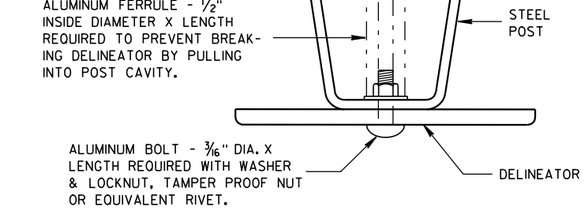
① DELINEATORS SHALL BE PLACED AT A CONSTANT DISTANCE FROM THE EDGE OF THE SHOULDER FOR THE LENGTH OF THE INSTALLATION.



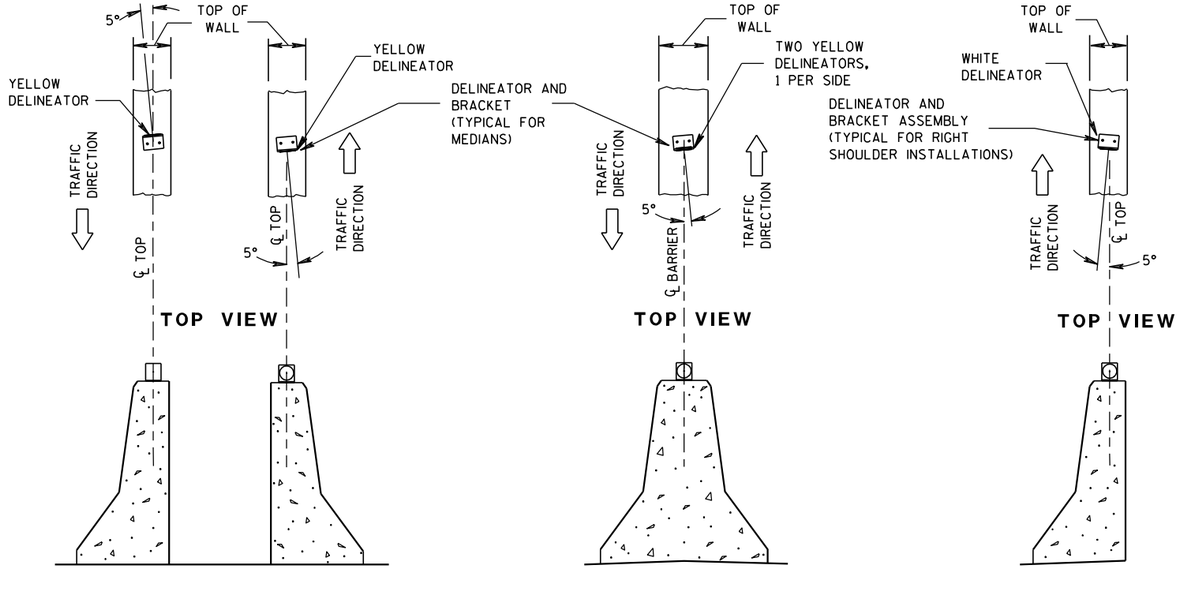
DELINEATOR BRACKET



DELINEATOR

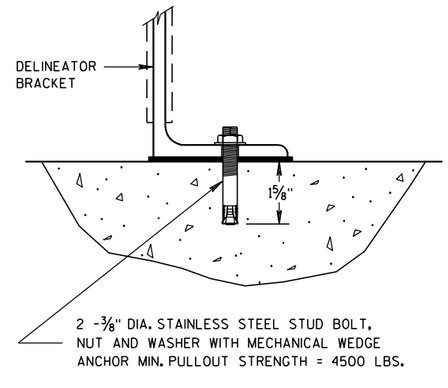


MOUNTING DETAIL FOR DELINEATOR



DOUBLE BARRIERS IN MEDIAN | MEDIAN BARRIER | BARRIER LOCATED TO RT. OF TRAFFIC FLOW

LOCATION AND AIMING DETAILS FOR DELINEATORS MOUNTED ON CONCRETE BARRIERS



DELINEATOR BRACKET MOUNTING DETAIL

DELINEATOR POST, DELINEATOR BRACKET AND DELINEATOR

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
1/25/2011
DATE
/S/ Thomas N. Nothdurft
STATE TRAFFIC ENGINEER

FHWA

848

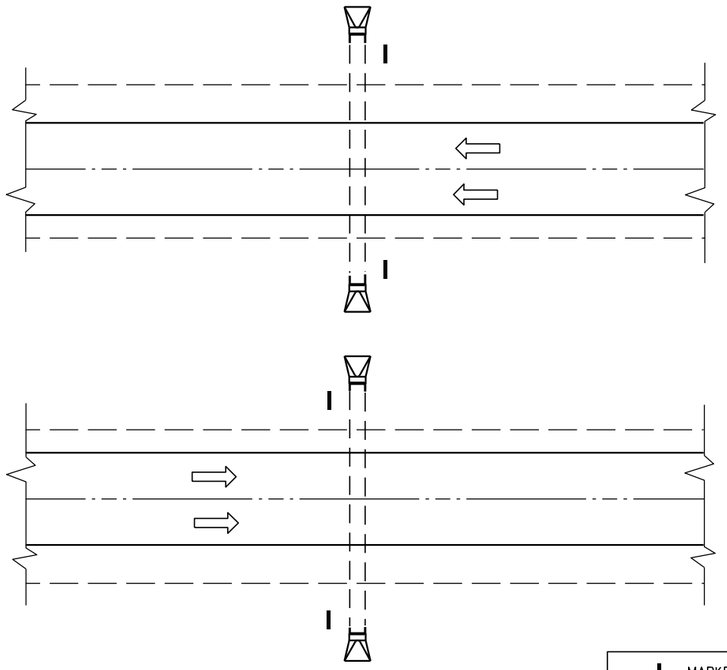
DESIGN

6

S.D.D. 15 A 2-7

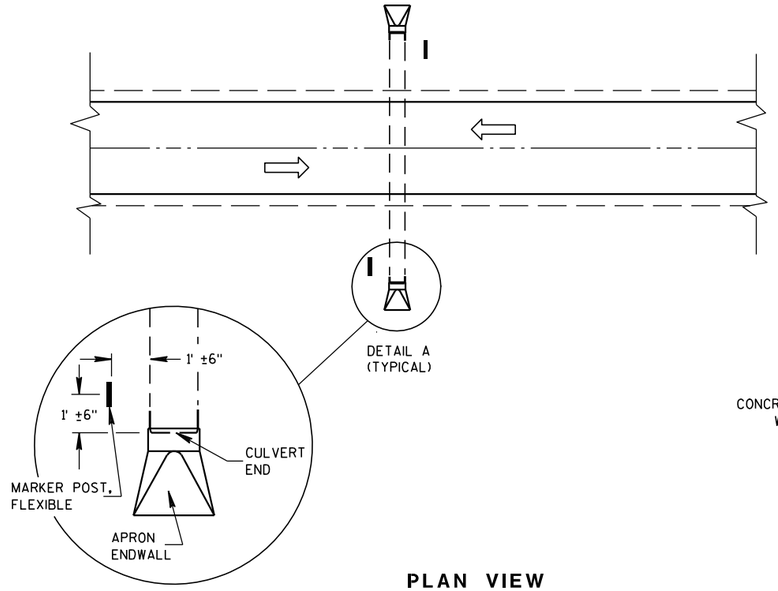
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S.D.D. 15 A 2-7



PLAN VIEW

DIVIDED HIGHWAY



DETAIL A
(TYPICAL)

PLAN VIEW

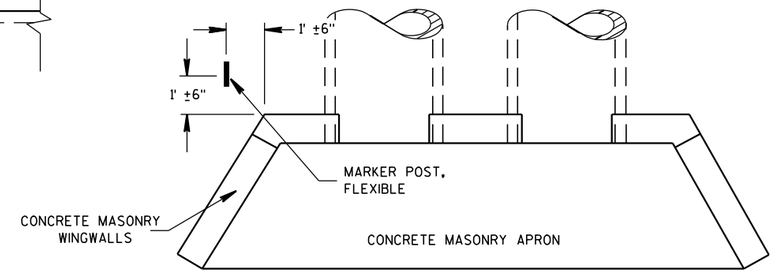
UNDIVIDED HIGHWAY

MARKER POST, FLEXIBLE

DIRECTION OF TRAFFIC FLOW

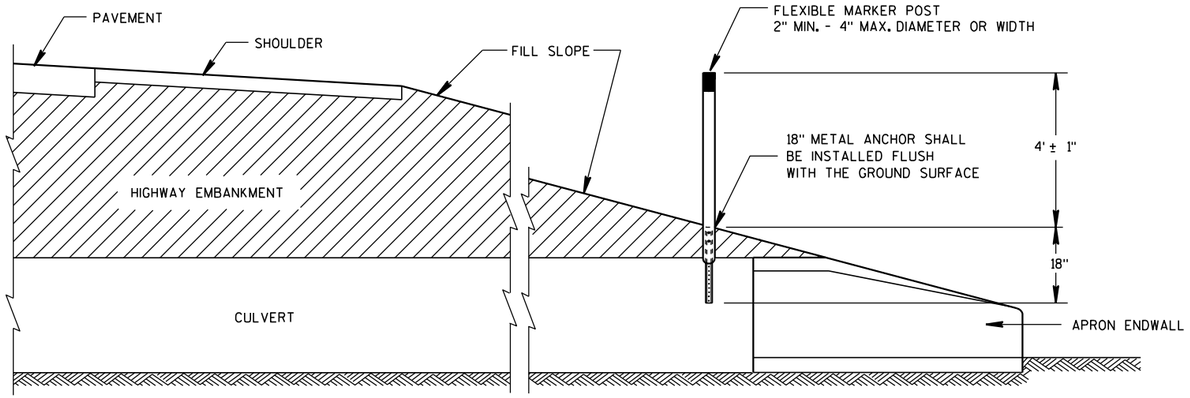
GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.



PLAN VIEW

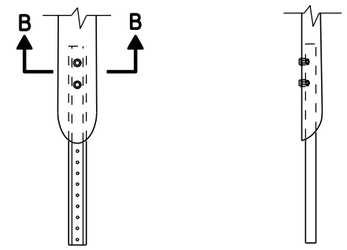
CONCRETE MASONRY ENDWALLS FOR CULVERT PIPE AND PIPE ARCH



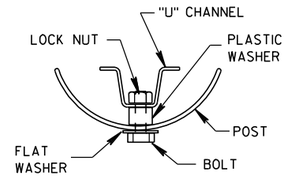
CROSS SECTION

FLEXIBLE MARKER POST

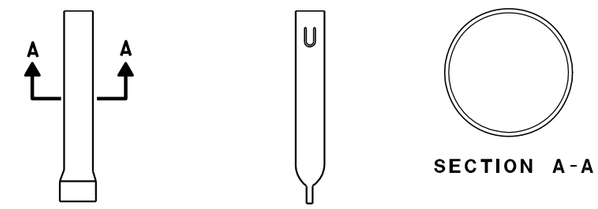
FLEXIBLE MARKER POST LOCATION



FRONT VIEW SIDE VIEW
CURVED MARKER



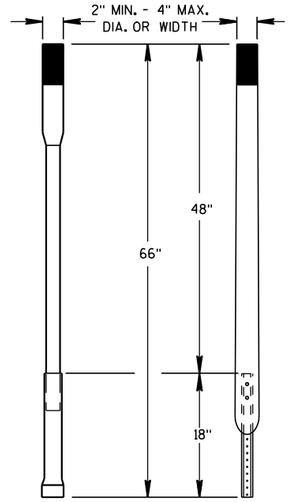
SECTION B-B



FRONT VIEW SIDE VIEW
ROUND MARKER

SECTION A-A

FLEXIBLE MARKER POST ANCHORS



ALTERNATE 1 ALTERNATE 2

FLEXIBLE MARKER POST

MARKER POST, FLEXIBLE, FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

10/1/98
DATE

/S/ Rory L. Rhinesmith
CHEIF ROADWAY DEVELOP 849 INEER

FHWA

6

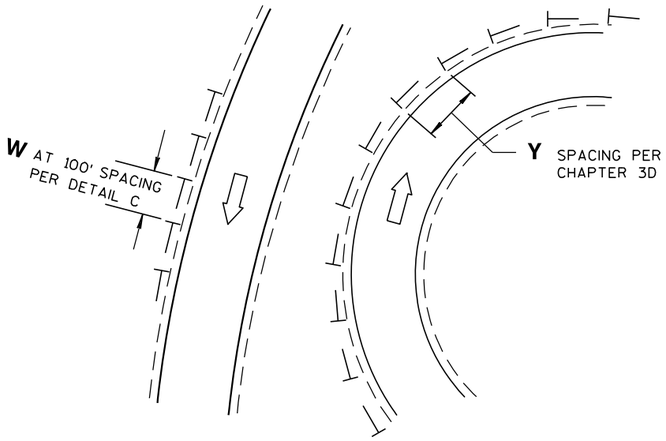
S.D.D. 15 A 3-1

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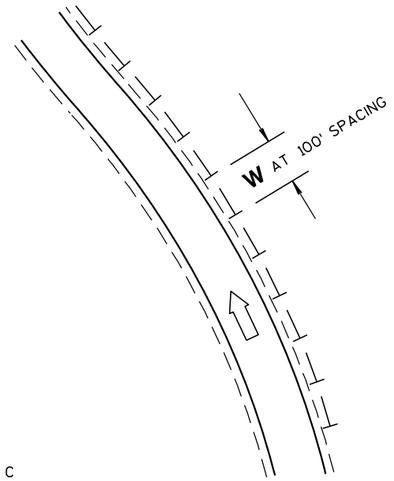
S.D.D. 15 A 3-1

GENERAL NOTES

* USE DOUBLE DELINEATOR ALONG ACCELERATION-DECELERATION LANES AND TAPERS. USE SINGLE DELINEATOR WHEN RAMP PAVEMENT IS FULL WIDTH.



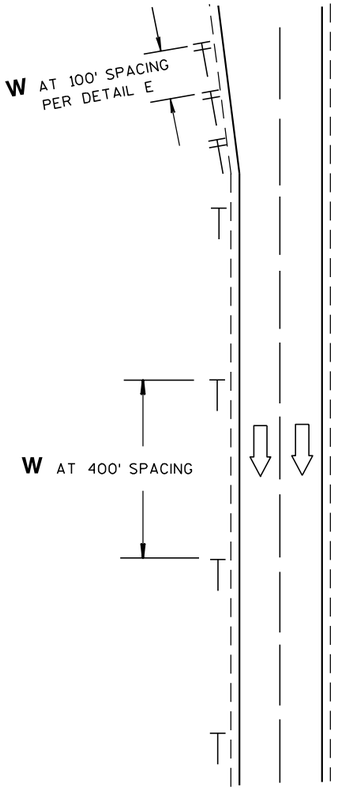
DETAIL A
DELINEATOR LAYOUT AT CURVED RAMP



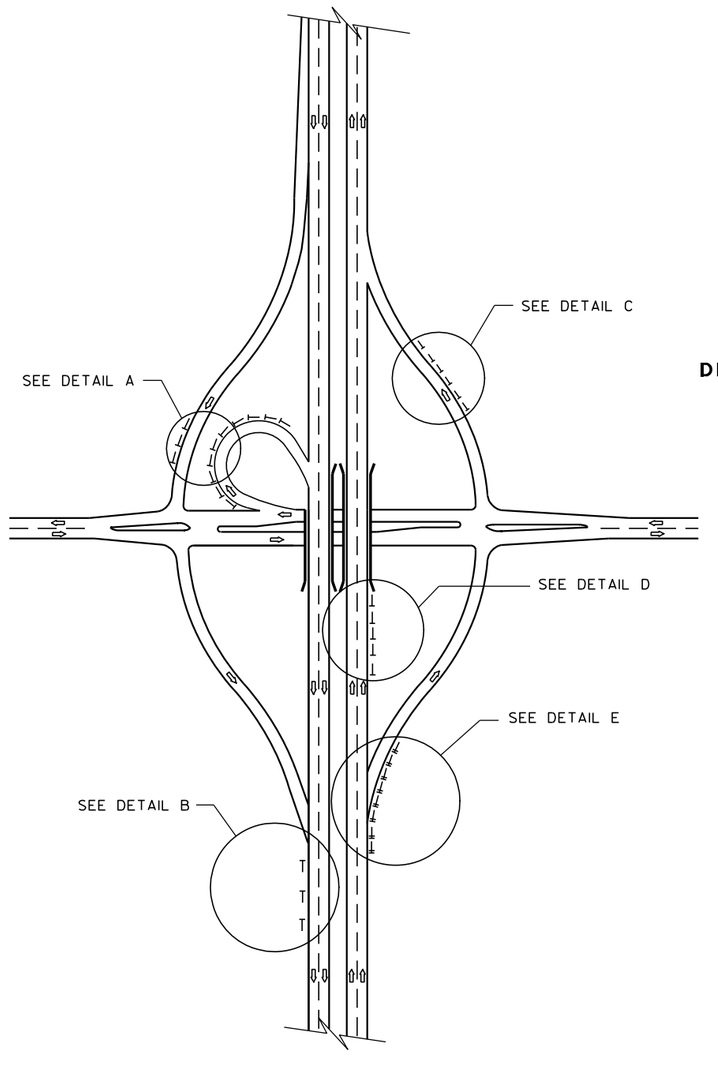
DETAIL C
DELINEATOR LAYOUT ALONG RAMP

LEGEND

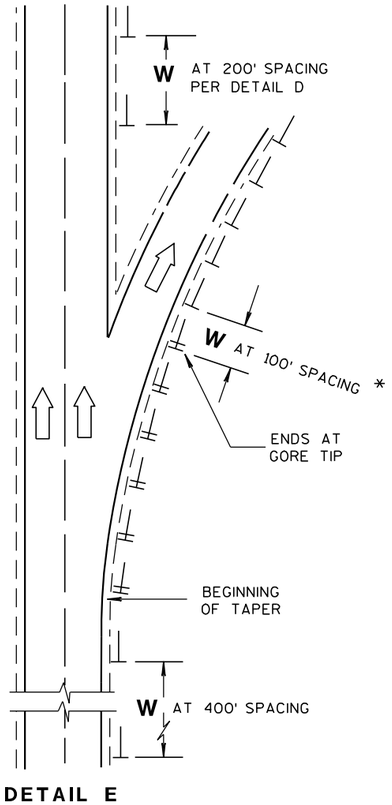
- DIRECTION OF TRAFFIC FLOW
- SINGLE DELINEATOR
- DOUBLE DELINEATOR
- W — WHITE
- Y — YELLOW



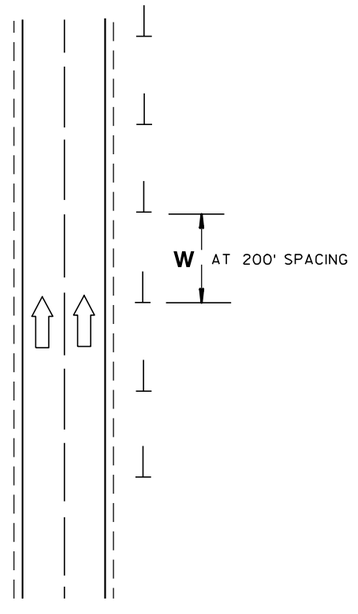
DETAIL B
DELINEATOR LAYOUT ALONG MAINLINE



DELINEATOR LAYOUT



DETAIL E
DELINEATOR LAYOUT FOR ACCELERATION - DECELERATION LANES AND TAPERS AT RAMPS



DETAIL D
DELINEATOR LAYOUT BETWEEN INTERCHANGE RAMPS

DELINEATOR LAYOUT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

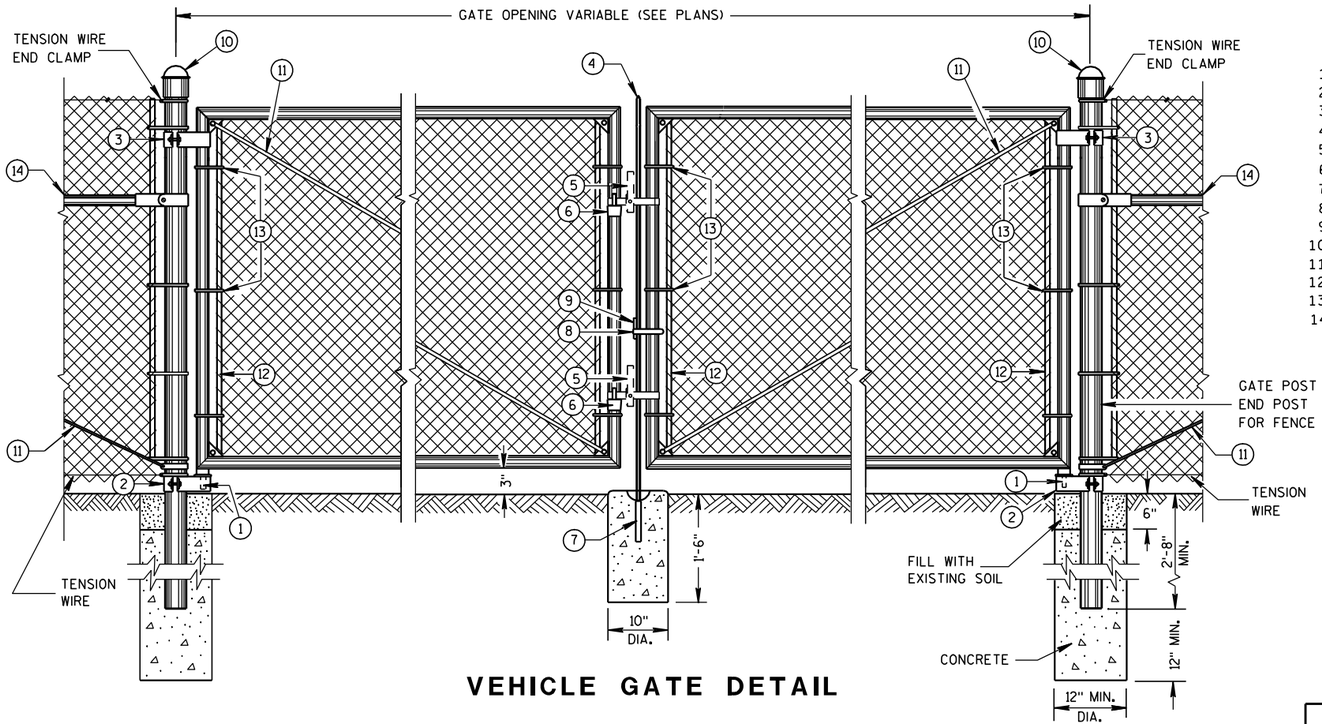
APPROVED
2/5/09 DATE
/S/ Thomas N. Nothdurft STATE TRAFFIC ENGINEER
FHWA

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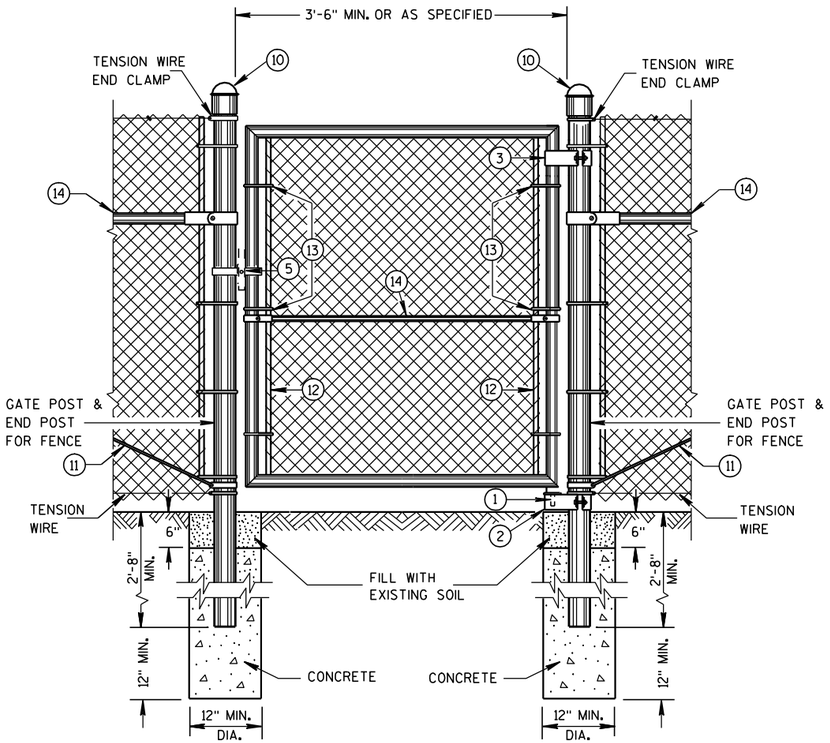
S.D.D. 15 A 6-2

6

S.D.D. 15 A 6-2



VEHICLE GATE DETAIL



PEDESTRIAN GATE DETAIL

LEGEND

1. STRAIGHT PLUG
2. BOTTOM HINGE
3. TOP HINGE
4. PLUNGER ROD
5. FULCRUM LATCH
6. FORK CATCH *
7. PLUNGER ROD CATCH
8. LOCK KEEPER GUIDE
9. LOCK KEEPER
10. DOME TOPS
11. TRUSS RODS
12. TENSION BAR
13. TENSION BANDS
14. BRACE RAIL

*NOT REQUIRED ON SINGLE SWING PEDESTRIAN GATE

GENERAL NOTES

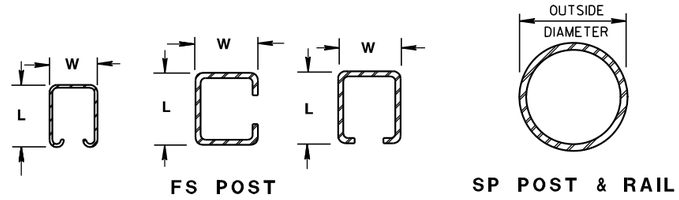
FENCE POSTS INSTALLED ON CONCRETE WALLS SHALL BE ANCHORED INTO EMBEDDED METAL SLEEVES OR CORED HOLE BY FILLING THE ANNULAR SPACE WITH PEA GRAVEL FOLLOWED BY AN EPOXY RESIN ADHESIVE. THE EPOXY RESIN ADHESIVE SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M 235, CLASS A, B OR C.

USE FENCE FABRIC KNUCKLED AT BOTH SELVAGES.

FOR LEAF GATES GREATER THAN 8 FEET WIDE, INSTALL INTERIOR VERTICAL BRACE RAIL AT 8 FOOT INTERVALS.

FOR FABRIC HEIGHTS GREATER THAN 8 FEET, INSTALL INTERIOR HORIZONTAL BRACE RAILS TO LEAF GATE.

MAXIMUM SAG FOR OUTER GATE MEMBER SHALL NOT EXCEED THE GREATER OF 1% OF THE LEAF GATE WIDTH OR 2 INCHES.



FS POST

SP POST & RAIL

CROSS SECTIONS OF POSTS AND RAILS

REQUIRED FENCE POST SIZES

USE	FABRIC HEIGHTS FEET	POST TYPE
TERMINAL POSTS **	LESS THAN OR EQUAL TO 6 FT.	SP3
	GREATER THAN OR EQUAL TO 6 FT.	SP4
LINE POSTS	LESS THAN OR EQUAL TO 6 FT.	SP2
	LESS THAN OR EQUAL TO 8 FT.	SP3
	GREATER THAN OR EQUAL TO 8 FT.	SP4
	LESS THAN OR EQUAL TO 8 FT.	FS2 OR FS2†
	GREATER THAN OR EQUAL TO 8 FT.	FS3

BRACE RAIL TYPES

USE		TYPE
BRACE RAIL		SP1 OR FS1

** INCLUDES END, CORNER, ANGLE, INTERSECTION AND INTERMEDIATE BRACED POSTS

SHAPE, SIZE AND WEIGHT REQUIREMENTS FOR FORMED STEEL FENCE POST

POST TYPE	LENGTH (L) INCH	WIDTH (W) INCH	WEIGHT LBS/FT
FS1	1.625	1.25	1.35
FS2†	1.875	1.625	1.850
FS2	1.875	1.625	2.400
FS3	2.250	1.700	2.780

REQUIRED POST SIZE FOR GATES

USE	LEAF WIDTHS FEET	POST TYPE
GATES	LESS THAN OR EQUAL TO 6 FT.	SP4
	LESS THAN OR EQUAL TO 13 FT.	SP5
	LESS THAN OR EQUAL TO 18 FT.	SP6
	LESS THAN OR EQUAL TO 23 FT.	SP7

SHAPE, SIZE AND WEIGHT REQUIREMENTS FOR ROUND STEEL FENCE POST

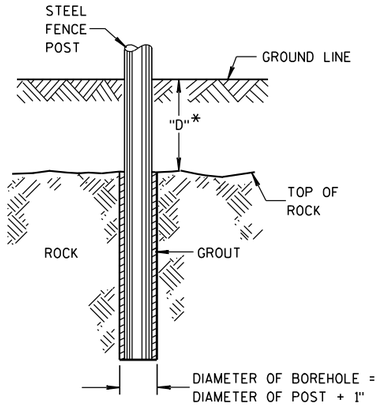
POST TYPE	OUTSIDE DIMENSION INCH	WALL THICKNESS INCH	WEIGHT LBS/FT
SP1	1.660	0.140	2.270
SP2	1.900	0.145	2.720
SP3	2.375	0.154	3.650
SP4	2.875	0.203	5.800
SP5	4.000	0.226	9.120
SP6	6.625	0.280	18.990
SP7	8.625	0.322	28.580

FENCE CHAIN LINK

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

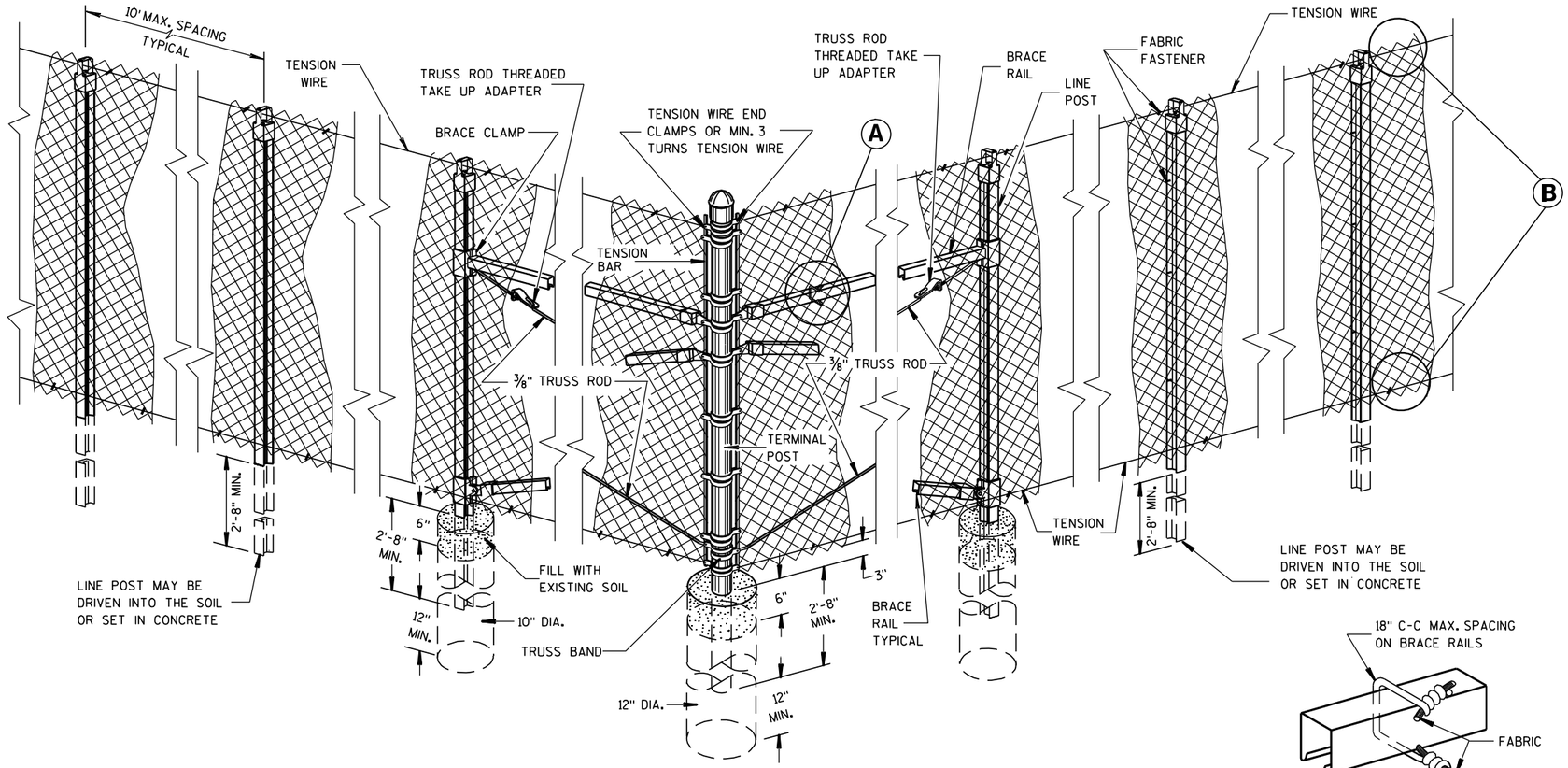
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S.D.D. 15 B 3-12a

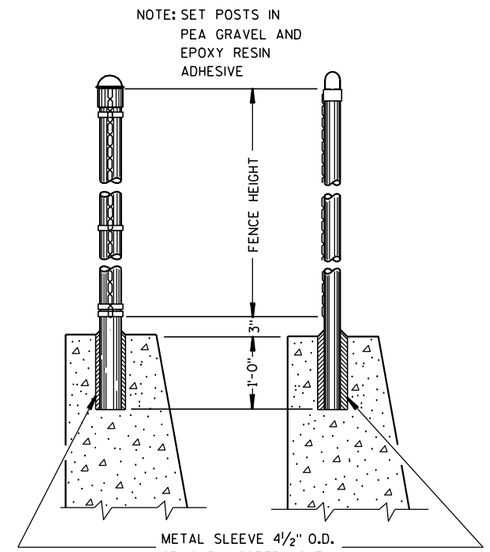


* IF "D" IS LESS THAN 2'-6", DRILL ROCK AND INSTALL GROUT

ROCK INSTALLATION OF LINE POST

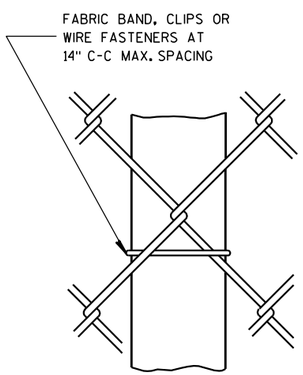


END, CORNER, ANGLE INTERSECTION & INTERMEDIATE BRACED POSTS



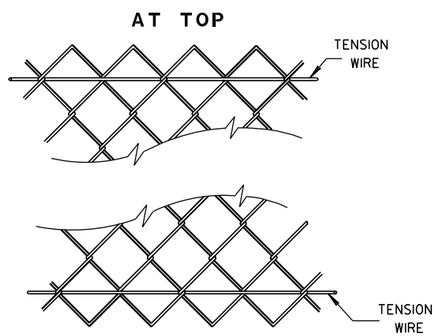
END POST & CORNER POST — LINE POST

DETAILS OF FENCE ON WALL

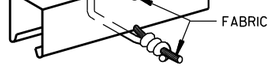


LINE POST

FABRIC FASTENER

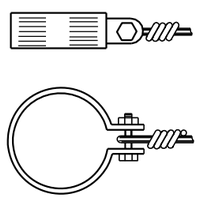


SELVAGES
(B)



BRACE RAIL

FABRIC FASTENER
(A)



TENSION WIRE END CLAMP

FENCE CHAIN LINK

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

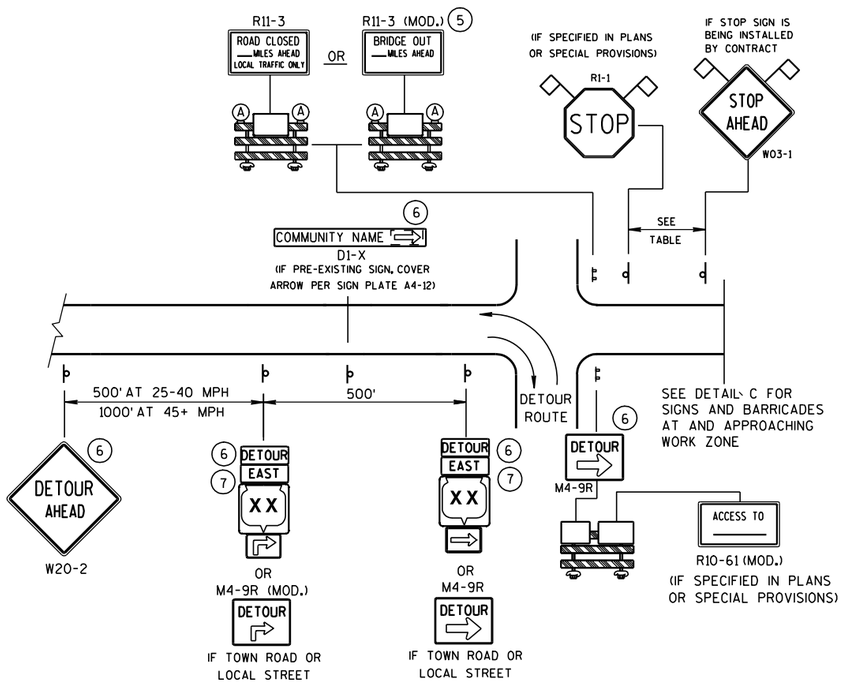
APPROVED
3/19/2010 DATE
/S/ Jerry H. [illegible]
ROADWAY STANDARDS ENGINEER
1852 ENT
FHWA

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S.D.D. 15 B 3-12b

6

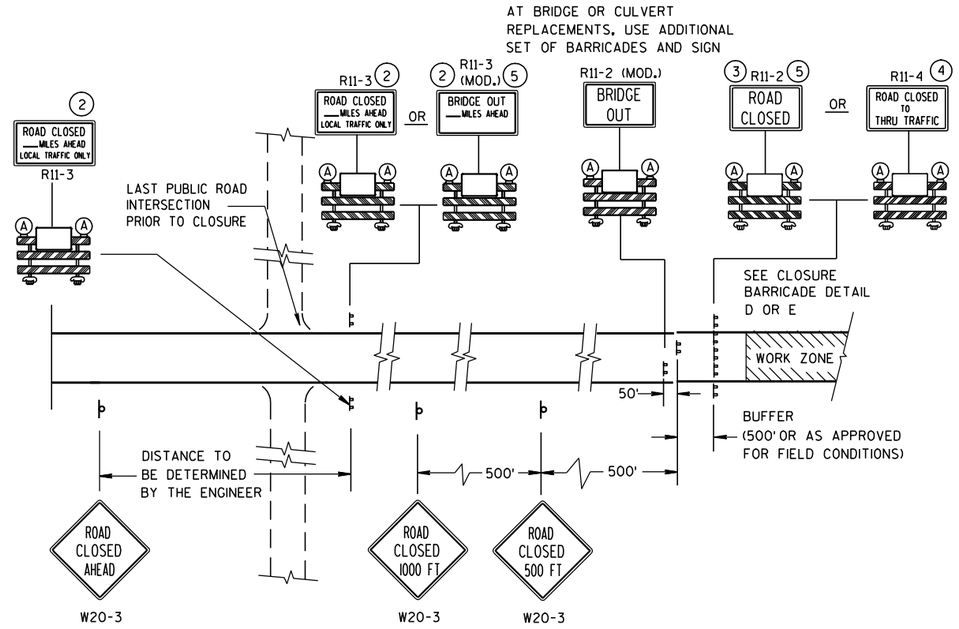
S.D.D. 15 B 3-12b



DETAIL A

MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE GREATER THAN ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)

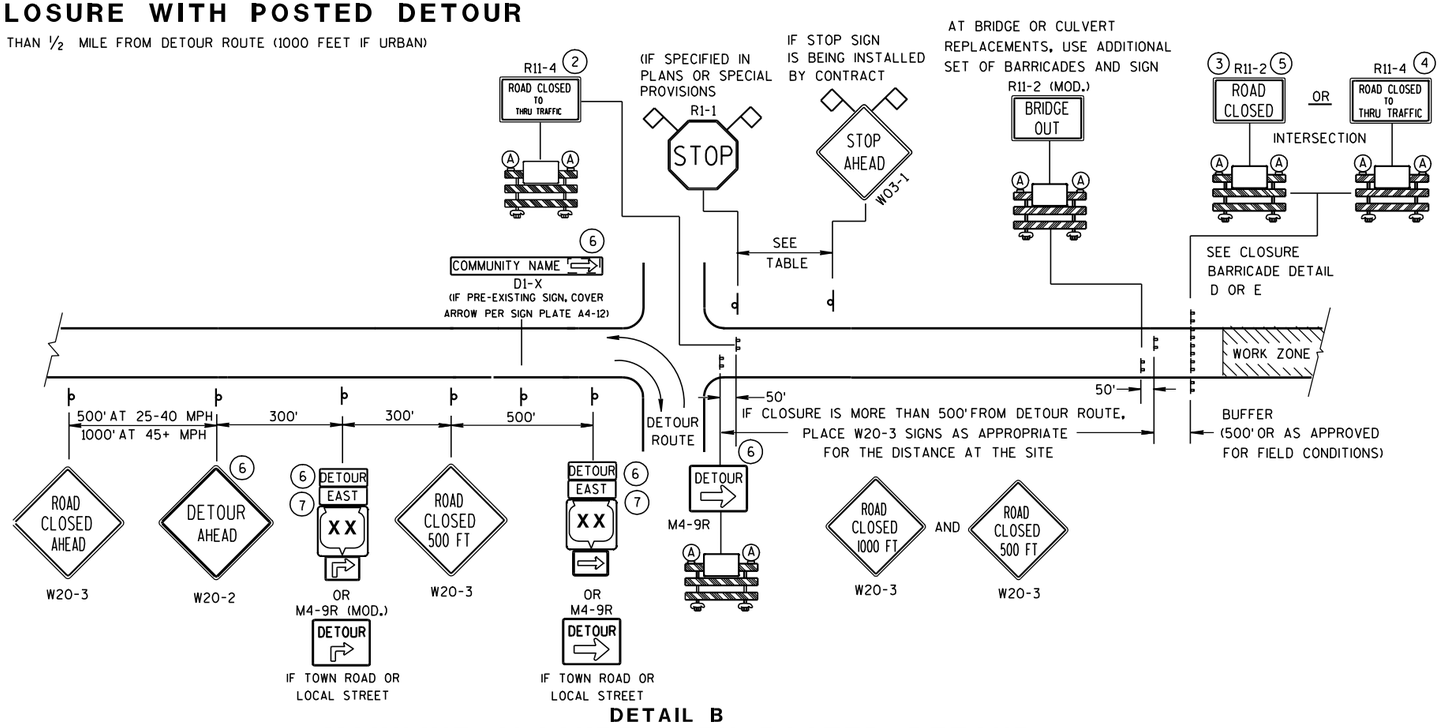


DETAIL C

MAINLINE CLOSURE, NO POSTED DETOUR

SPEED LIMIT (MPH)	"STOP AHEAD" ADVANCE WARNING DISTANCE (FT)
25	200
30	200
35	350
40	350
45	500
50	550
55	750

SEE SDD 15C2-4b
FOR GENERAL NOTES
AND FOOTNOTES ① THROUGH ⑦



DETAIL B

MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE LESS THAN ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)

LEGEND

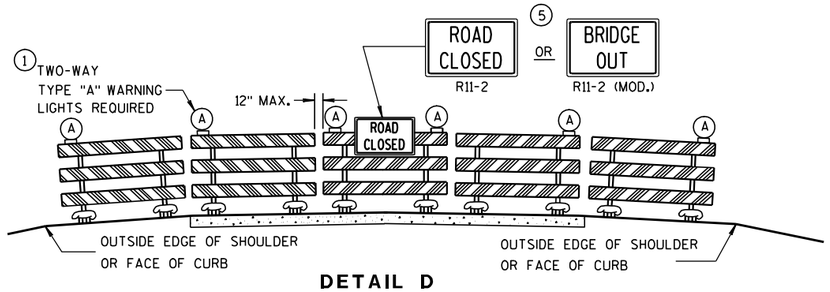
- POST MOUNTED SIGN
- TYPE III BARRICADES
- (A) TYPE "A" LOW INTENSITY FLASHING WARNING LIGHT (FOR NIGHT USE)
- WORK ZONE
- DETOUR / EAST — M4-8 / M3-X
- XX — M1-4; COUNTY XX — M1-5A; XX — M1-6
- M05-1 OR M06-1
- FLAGS, 16" X 16" MIN., (ORANGE)

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

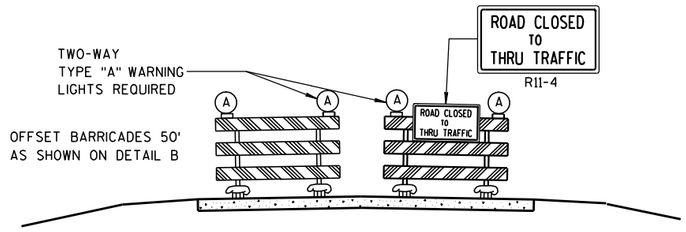
S.D.D. 15 C 2-4a



DETAIL D

ROAD CLOSURE BARRICADE DETAIL

APPROACH VIEW



DETAIL E

LANE CLOSURE BARRICADE DETAIL

APPROACH VIEW

SEE SDD 15C2-4a FOR LEGEND

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND BARRICADES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION OR, FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL D FOR FULL ROAD CLOSURES.

TYPE "A" LOW-INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE R11-2, R11-3, M4-9, R11-4 AND R10-61 SIGNS PLACED ON BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE OR BOTTOM RAILS.

THE REFLECTIVE SHEETING USED ON R11-2, R11-3, R11-4, R10-61 AND R1-1 SIGNS SHALL COMPLY WITH SUBSECTION 637.2.2.2 OF THE STANDARD SPECIFICATIONS.

"WO AND "MO" SIGNS ARE THE SAME AS "W" AND "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
- R11-2 SHALL BE 48" X 30".
- R11-3, R11-4 AND R10-61 SHALL BE 60" X 30".
- M4-9 SHALL BE 30" X 24".
- M3-X AND M4-8 SHALL BE 24" X 12". (30" X 15" IF NEEDED TO MATCH EXISTING SIGNS.)
- M1-4, M1-5A, AND M1-6 SHALL BE 24" X 24". (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS.)
- M05-1 AND M06-1 SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS.)
- D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.
- R1-1 SHALL BE 36" X 36".

(1) TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND A MINIMUM OF ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN (APPROX. 8-FOOT LIGHT SPACING).

(2) THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT INTERSECTION.

(3) FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL D.

(4) FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT, SEE LANE CLOSURE BARRICADE DETAIL E.

(5) FOR BRIDGE OR CULVERT REPLACEMENTS, SUBSTITUTE "BRIDGE OUT" INSTEAD OF "ROAD CLOSED" ON R11-2 AND R11-3 SIGNS.

(6) INSTALL DETOUR AND COMMUNITY GUIDE SIGNS AND ARROWS ONLY IF SPECIFIED IN THE CONTRACT. IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. MODIFY EXISTING SIGNS WHERE POSSIBLE. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. IF DETOUR SIGNS ARE BEING INSTALLED BY OTHERS, PLACE THE CONTRACTED TRAFFIC CONTROL SIGNS TO ALLOW FOR PLACEMENT OF ALL WARNING, DETOUR AND GUIDE SIGNS AS SHOWN.

(7) "EAST" CARDINAL DIRECTION MARKERS AND RIGHT TURN ARROWS ARE SHOWN. USE OTHER CARDINAL DIRECTIONS AND ARROWS AS APPROPRIATE.

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

9/16/03
DATE

/S/ Thomas N. N[illegible]
CHIEF SIGNS AND MAR[illegible]INEER

FHWA

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S.D.D. 15 C 2-4b

THIS DRAWING PROVIDES GENERAL GUIDANCE ON TYPICAL DETOUR SIGN LAYOUT AND SPACING. SEE PROJECT DETOUR SIGNING SHEETS FOR SPECIFIC DETAILS FOR EACH PROJECT.

GENERAL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. MODIFY EXISTING SIGNS WHERE POSSIBLE.

THE SPACING BETWEEN TRAFFIC CONTROL AND DETOUR SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE", SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

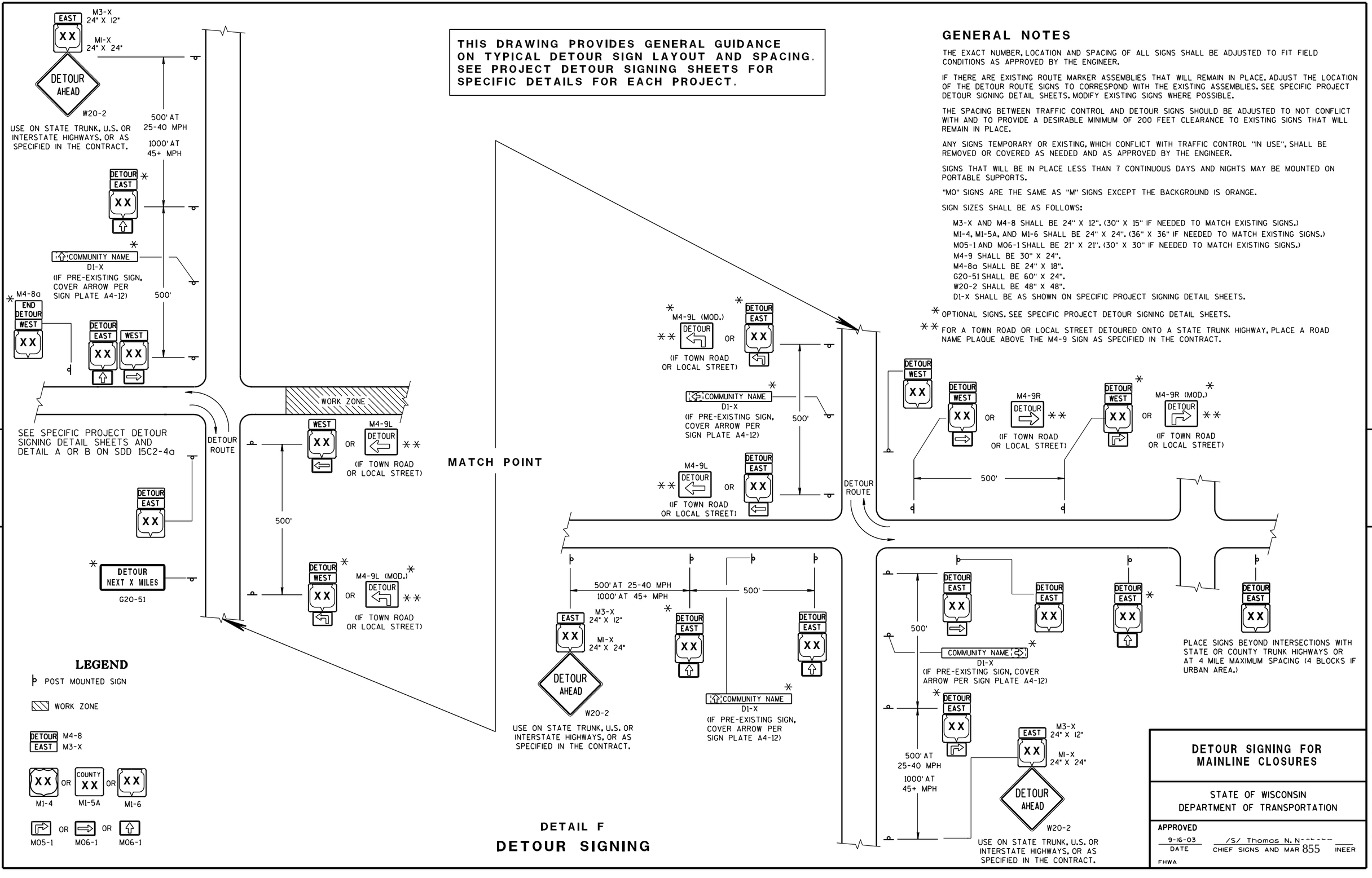
"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

SIGN SIZES SHALL BE AS FOLLOWS:

- M3-X AND M4-8 SHALL BE 24" X 12". (30" X 15" IF NEEDED TO MATCH EXISTING SIGNS.)
- M1-4, M1-5A, AND M1-6 SHALL BE 24" X 24". (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS.)
- M05-1 AND M06-1 SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS.)
- M4-9 SHALL BE 30" X 24".
- M4-8a SHALL BE 24" X 18".
- G20-51 SHALL BE 60" X 24".
- W20-2 SHALL BE 48" X 48".
- D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.

* OPTIONAL SIGNS. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS.

** FOR A TOWN ROAD OR LOCAL STREET DETOURED ONTO A STATE TRUNK HIGHWAY, PLACE A ROAD NAME PLAQUE ABOVE THE M4-9 SIGN AS SPECIFIED IN THE CONTRACT.



LEGEND

- POST MOUNTED SIGN
- WORK ZONE
- DETOUR EAST — M4-8, M3-X
- XX OR COUNTY XX OR XX — M1-4, M1-5A, M1-6
- M05-1 OR M06-1 OR M06-1

DETAIL F

DETOUR SIGNING

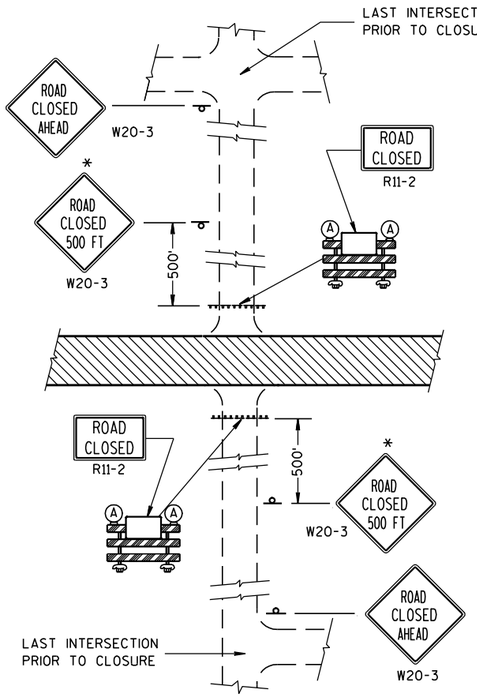
DETOUR SIGNING FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
9-16-03 DATE
/S/ Thomas N. [illegible] CHIEF SIGNS AND MAR 855 INEER
FHWA

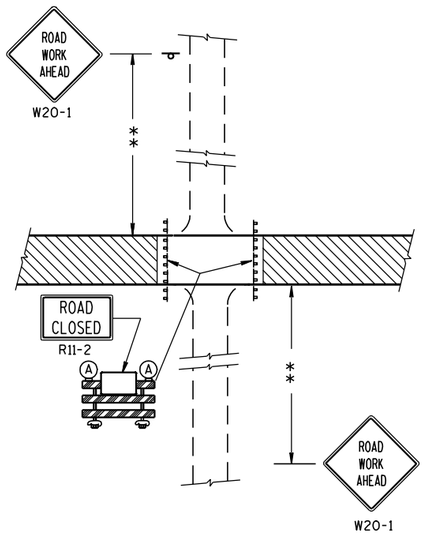
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S.D.D. 15 C 2-4c



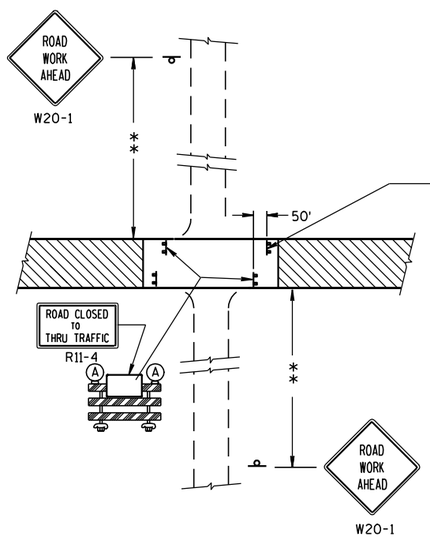
DETAIL 1

(NO ACCESS TO PROJECT)



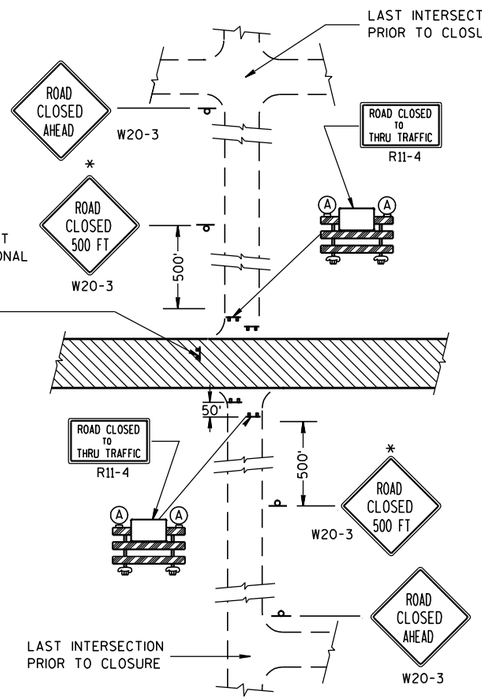
DETAIL 2

(PUBLIC CROSS-TRAFFIC MAINTAINED. NO ACCESS TO PROJECT).



DETAIL 3

(PUBLIC CROSS-TRAFFIC MAINTAINED. CONTRACTOR, LOCAL BUSINESS AND RESIDENT ACCESS).



DETAIL 4

(CONTRACTOR, LOCAL BUSINESS AND RESIDENT ACCESS TO PROJECT)

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND BARRICADES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

IF A "STOP" SIGN MUST BE REMOVED FOR A WORK OPERATION, A TEMPORARY "STOP" SIGN SHALL BE PLACED PRIOR TO THE SIGN REMOVAL, OR A FLAGGER SHALL BE PROVIDED UNTIL THE SIGN IS RE-ESTABLISHED.

BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION OR, FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL D FOR FULL ROAD CLOSURES.

TYPE "A" LOW-INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE R11-2, R11-3 AND R11-4 SIGNS PLACED ON BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE OR BOTTOM RAILS.

THE REFLECTIVE SHEETING USED ON R11-2, R11-3 AND R11-4 SIGNS SHALL COMPLY WITH SUBSECTION 637.2.2.2 OF THE STANDARD SPECIFICATIONS.

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
R11-2 SHALL BE 48" X 30".
R11-4 AND R11-3 SHALL BE 60" X 30".

*OMIT THE "ROAD CLOSED 500 FT." SIGN IF THE LAST INTERSECTION IS 500 FT. OR LESS FROM THE WORK ZONE.

**500' MAX. OR AT LAST INTERSECTION WHICHEVER IS CLOSER.

LEGEND

- POST MOUNTED WARNING SIGN
- TYPE III BARRICADES
- (A) TYPE "A" LOW INTENSITY FLASHING WARNING LIGHT (FOR NIGHT USE)
- WORK AREA

BARRICADES AND SIGNS FOR SIDEROAD CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

9-16-03 DATE

/S/ Thomas N. N[illegible] 856
CHIEF SIGNS AND MAR[illegible] INEER

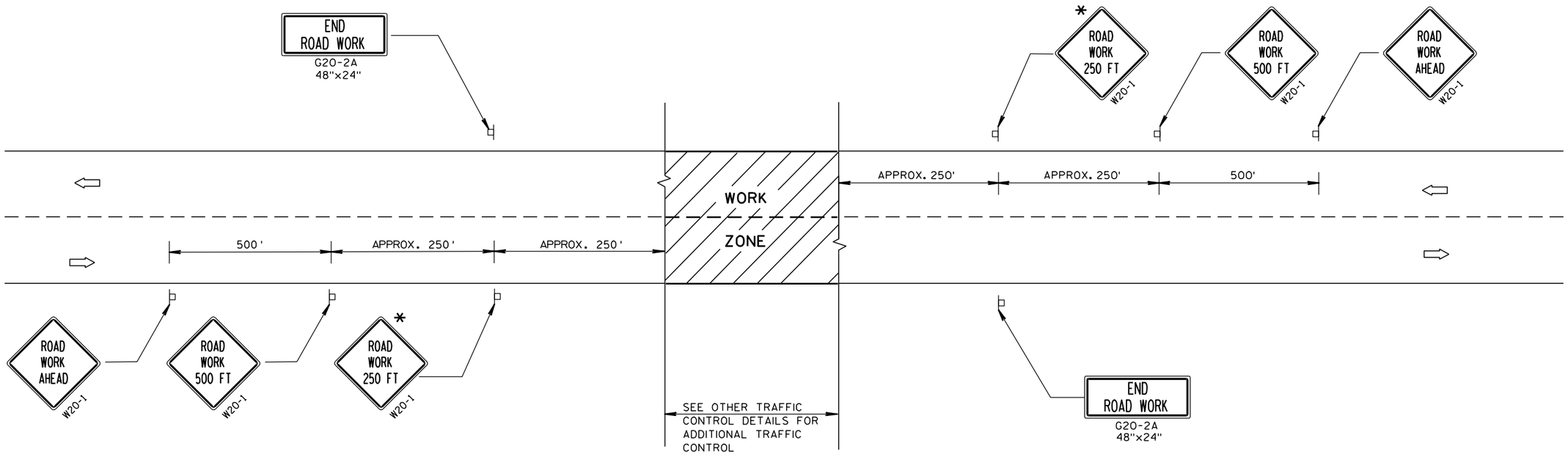
FHWA

6

S.D.D. 15 C 3-1

6

S.D.D. 15 C 3-1



GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

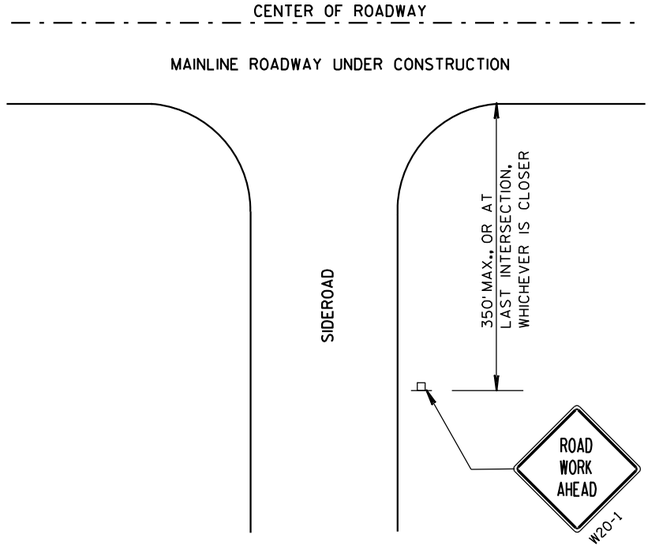
ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS, 36"x36" SIGNS MAY BE USED INSTEAD OF 48"x48" SIGNS, IF APPROVED BY DISTRICT TRAFFIC UNIT.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

IF A "STOP" SIGN MUST BE REMOVED FOR A WORK OPERATION, A TEMPORARY "STOP" SIGN SHALL BE PLACED PRIOR TO THE SIGN REMOVAL, OR A FLAGGER SHALL BE PROVIDED UNTIL THE SIGN IS RE-ESTABLISHED.

* THE THIRD W20-1 SIGN IS REQUIRED ONLY IF THERE IS AN INTERSECTION BETWEEN THE "ROAD WORK 500 FT" SIGN AND THE WORK ZONE. ADJUST THE PLACEMENT OF THIS SIGN BASED ON INTERSECTION LOCATION AND OTHER FIELD CONDITIONS.

TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL



LEGEND

POST MOUNTED SIGN

DIRECTION OF TRAFFIC FLOW

TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

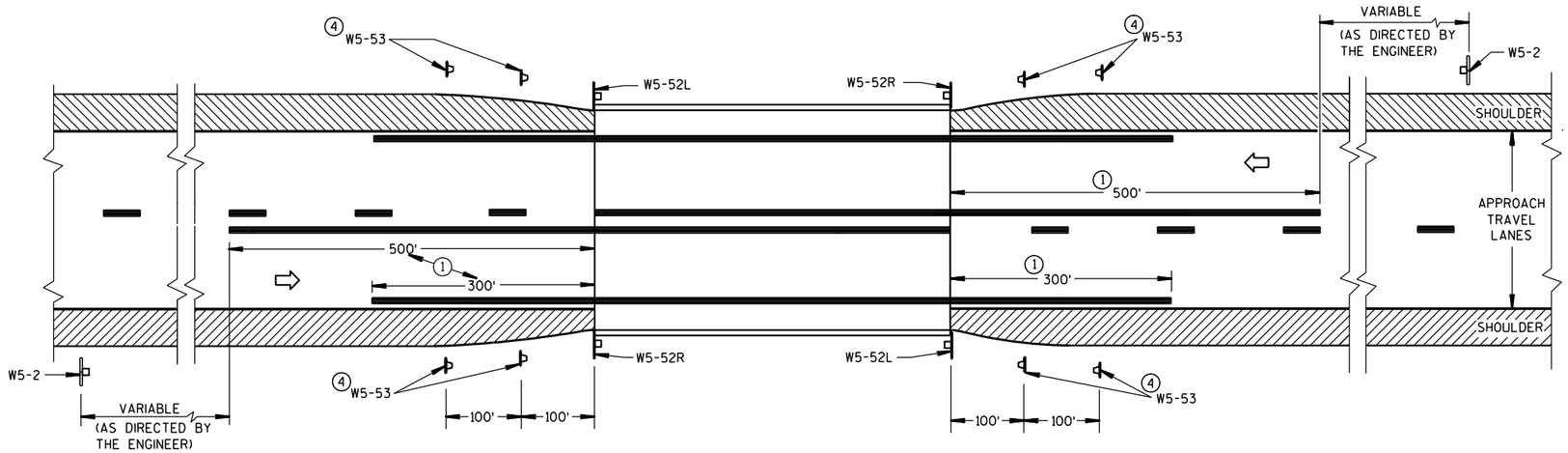
5/23/00
DATE

/S/ Chester J. [illegible]
857
CHIEF SIGNS AND MARKING ENGINEER

FHWA

6

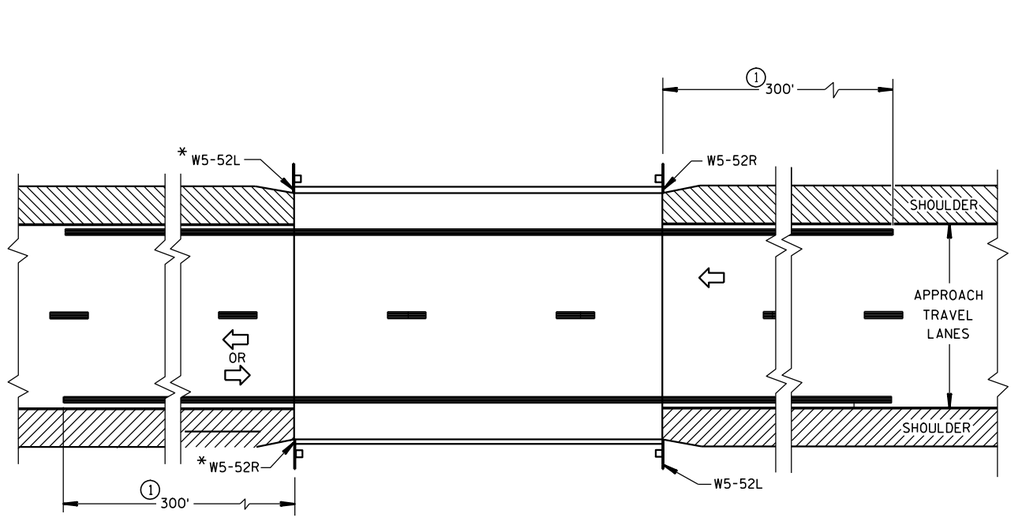
S.D.D. 15 C 5-1



SITUATION 1

WARRANTING CRITERION:

BRIDGE WIDTH IS AT LEAST 18 FEET BUT LESS THAN 24 FEET

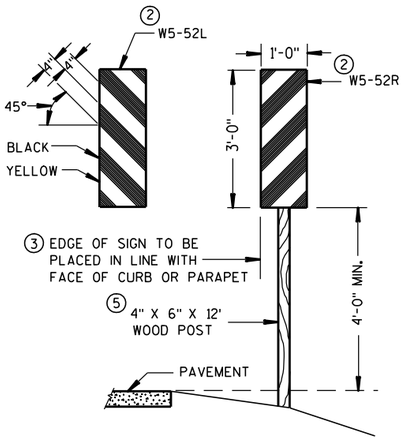


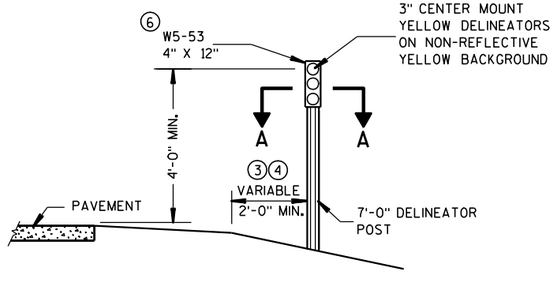
*OMIT ON ONE-WAY TRAVELLED WAYS

SITUATION 2

WARRANTING CRITERIA:

1. BRIDGE WIDTH IS AT LEAST 24 FEET AND
2. BRIDGE IS LESS THAN 6 FEET WIDER (ON EACH SIDE) THAN APPROACH TRAVEL LANES.





OBJECT MARKER PLACEMENT

GENERAL NOTES

DETAILS OF TRAFFIC CONTROL DEVICES AND INSTALLATION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

PAVEMENT MARKING SHOWN ON THIS DRAWING IS NOT REQUIRED UNLESS OTHERWISE SPECIFIED IN THE CONTRACT. WHEN SPECIFIED, PAVEMENT MARKING SHALL CONFORM TO THIS DRAWING AND OTHER CONTRACT REQUIREMENTS.

① MINIMUM DISTANCE UNLESS OTHERWISE SHOWN ON THE PLAN.

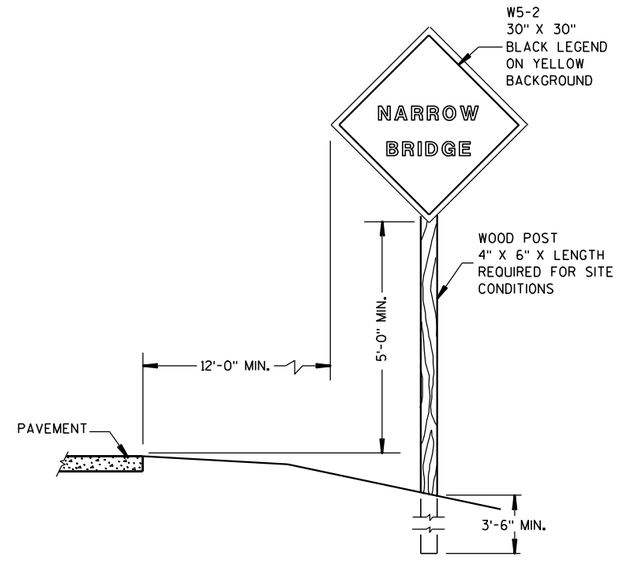
② FACE OF OBJECT MARKERS W5-52R AND W5-52L SHALL BE COVERED WITH TYPE H REFLECTIVE SHEETING.

③ LOCATE OBJECT MARKER POST(S) BEHIND GUARDRAIL WHEN PRESENT.

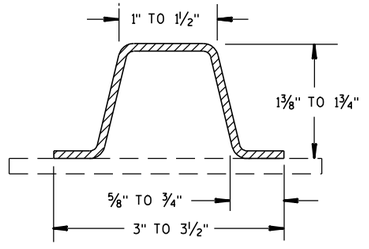
④ OBJECT MARKERS (W5-53) SHALL BE LOCATED ALONG A LINE FLARED AWAY FROM THE BRIDGE CORNER TO DELINEATE THE NARROWING OF THE SHOULDER OR BERM.

⑤ A 12 FOOT DELINEATOR POST MAY BE USED INSTEAD OF A WOOD POST.

⑥ NON-BID ITEM. INCIDENTAL TO OTHER ITEMS.



SIGN PLACEMENT



SECTION A-A

(MINIMUM WEIGHT 1.9 LBS. PER FT. AFTER GALVANIZING)

SIGNING & MARKING FOR TWO LANE BRIDGES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

9/5/06 — DATE

/S/ Thomas N. [illegible] — STATE TRAFFIC ENGINEER

858 — SIGN

FHWA

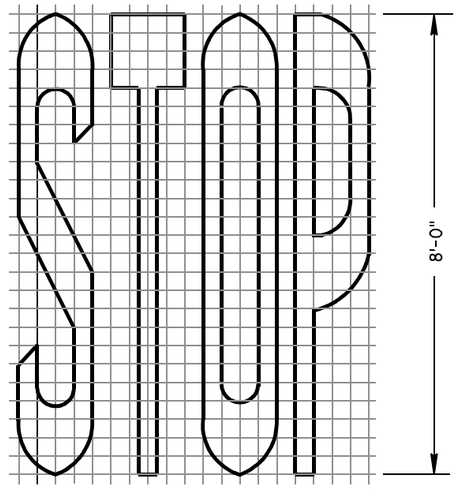
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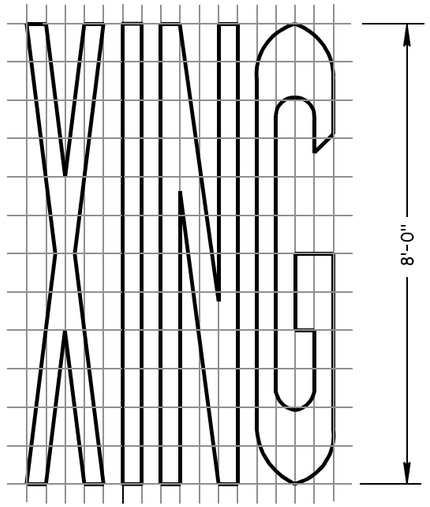
S.D.D. 15 C 6-5

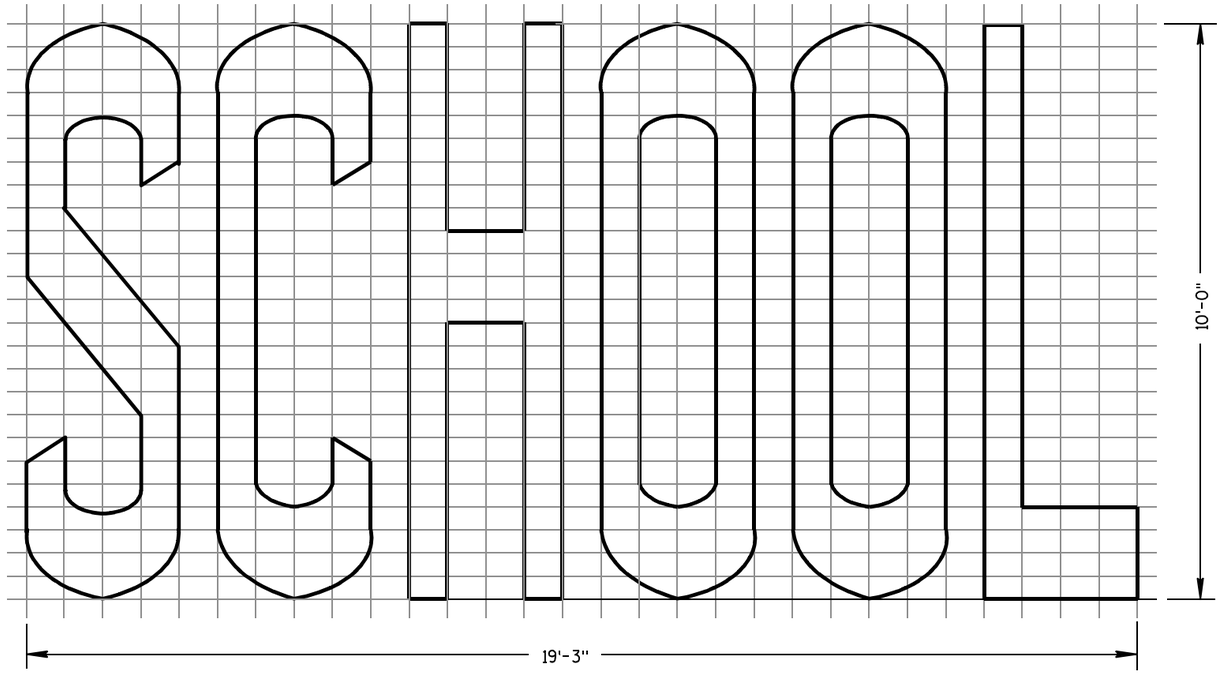
GENERAL NOTES

DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

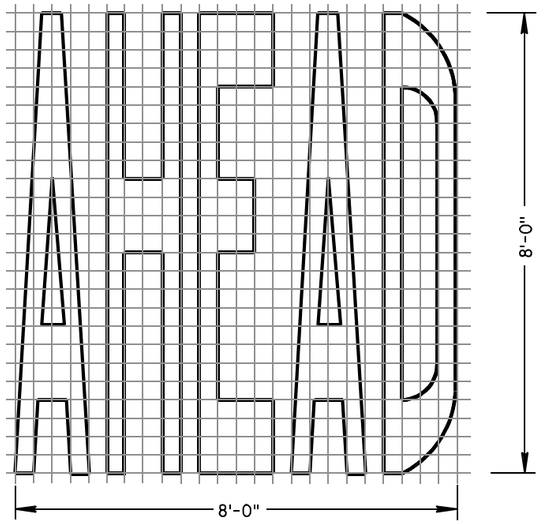
ALL LETTERS, ARROWS AND SYMBOLS SHALL BE IN CONFORMANCE WITH REQUIREMENTS INCLUDED IN "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKING" BOOK BY THE FEDERAL HIGHWAY ADMINISTRATION. ALL LETTERS, ARROWS AND SYMBOLS SHALL BE WHITE AND REFLECTORIZED. SMALL DIFFERENCES IN DIMENSIONS WITHIN THE TOLERANCES OF THAT BOOK ARE ACCEPTABLE.

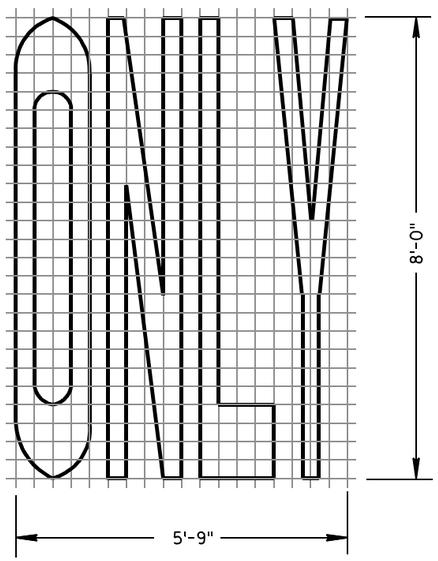


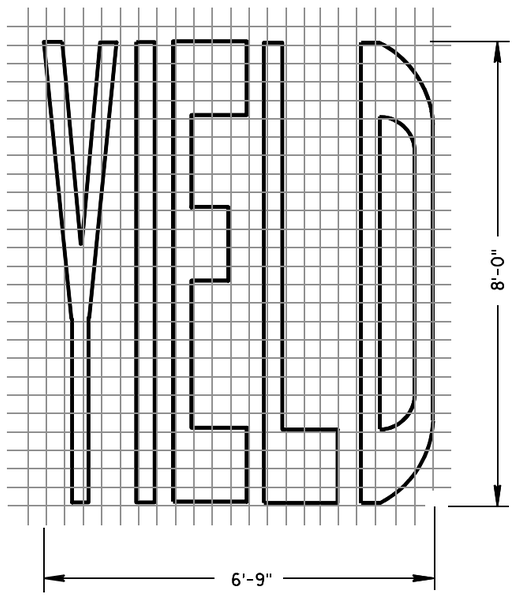


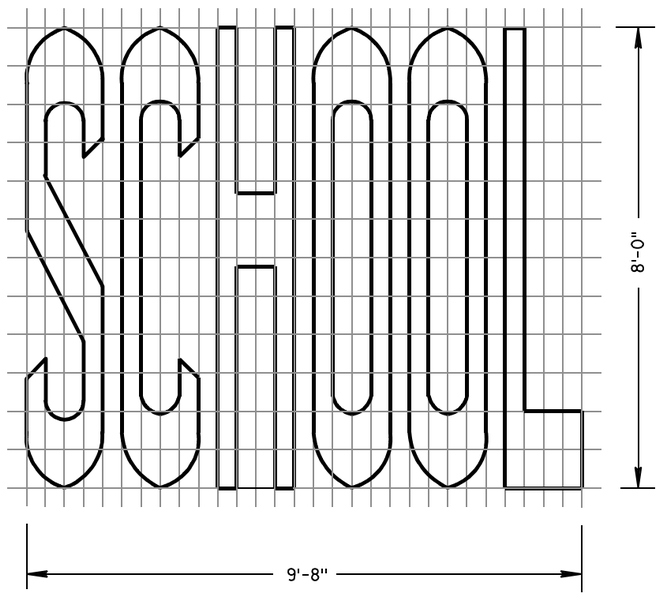


TWO-LANE









SINGLE-LANE

PAVEMENT MARKING WORDS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7-1-11 — DATE

/S/ Thomas N. Nothohm — STATE TRAFFIC ENGINEER

859 — IGN

FHWA

6

S.D.D. 15 C 7-12b

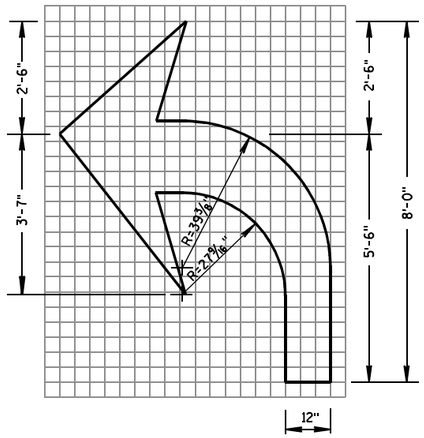
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S.D.D. 15 C 7-12b

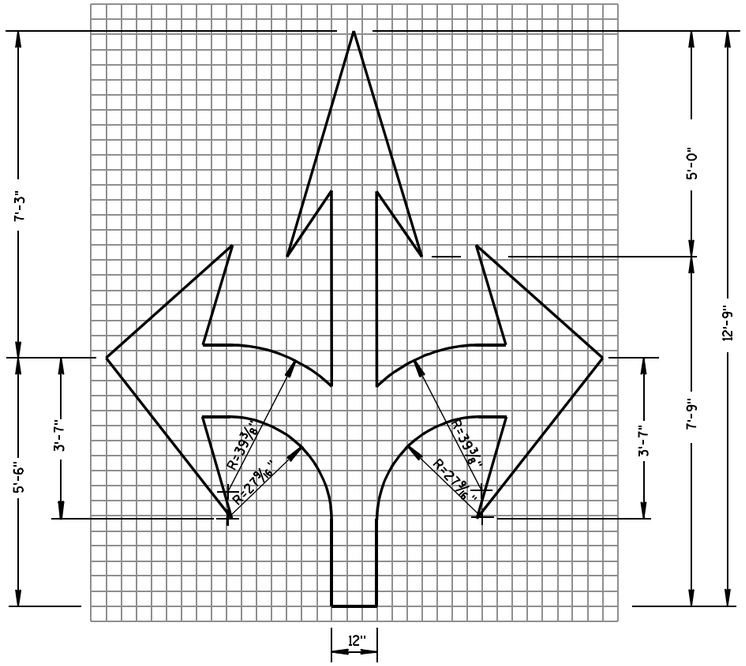
GENERAL NOTES

DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

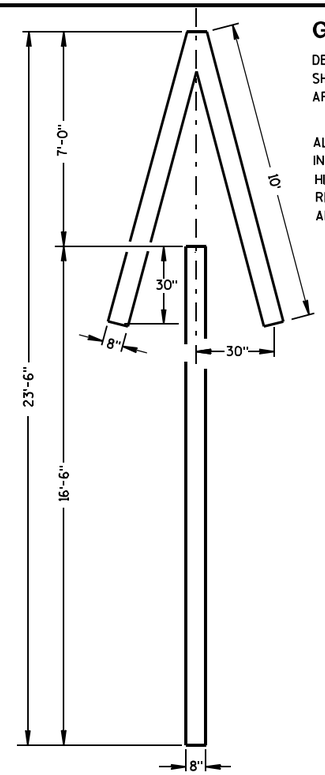
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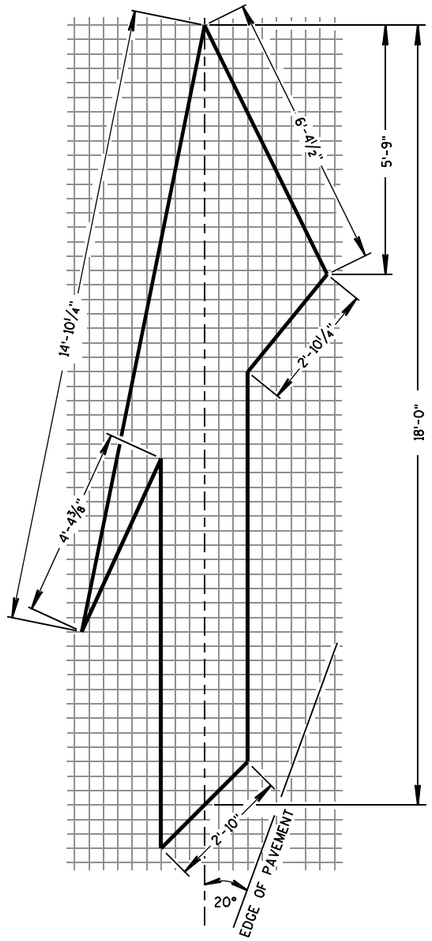
TYPE 2



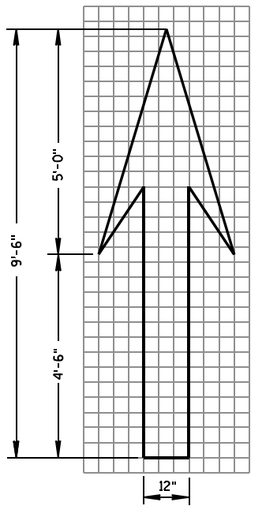
TYPE 6



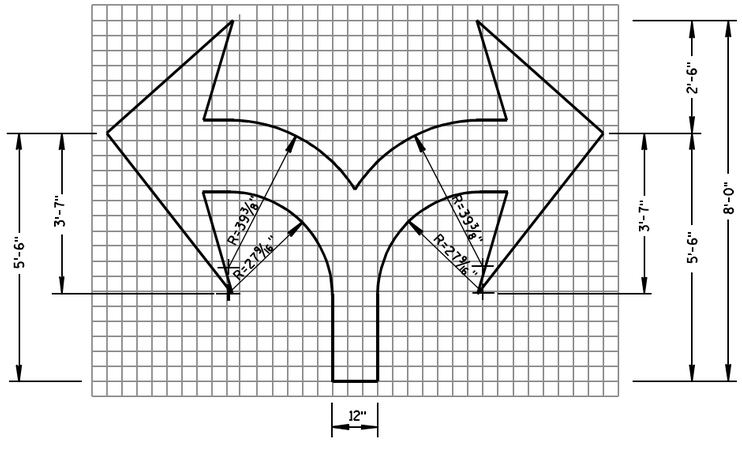
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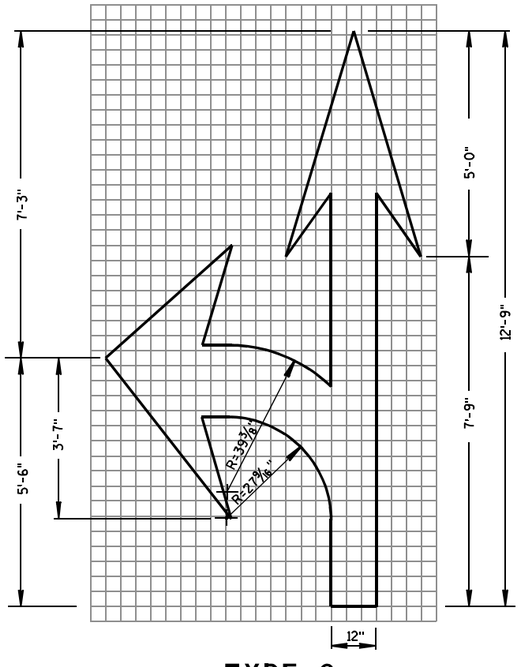
TYPE 5 LANE DROP ARROW



TYPE 1



TYPE 7



TYPE 3

PAVEMENT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7/1/11 — DATE

/S/ Thomas N. Nothdurft — STATE TRAFFIC ENGINEER

FHWA

860

6

S.D.D. 15 C 7-12c

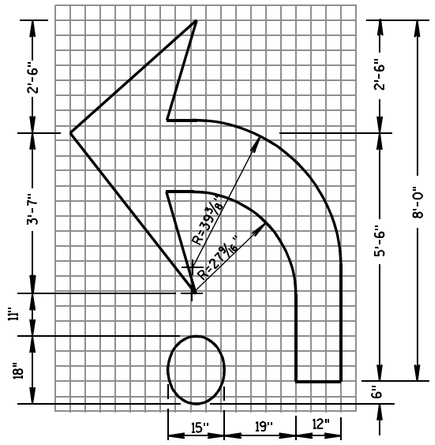
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S.D.D. 15 C 7-12c

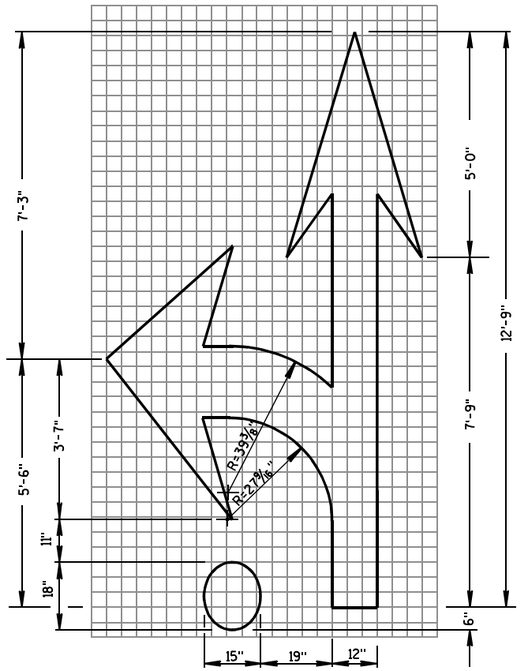
GENERAL NOTES

DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

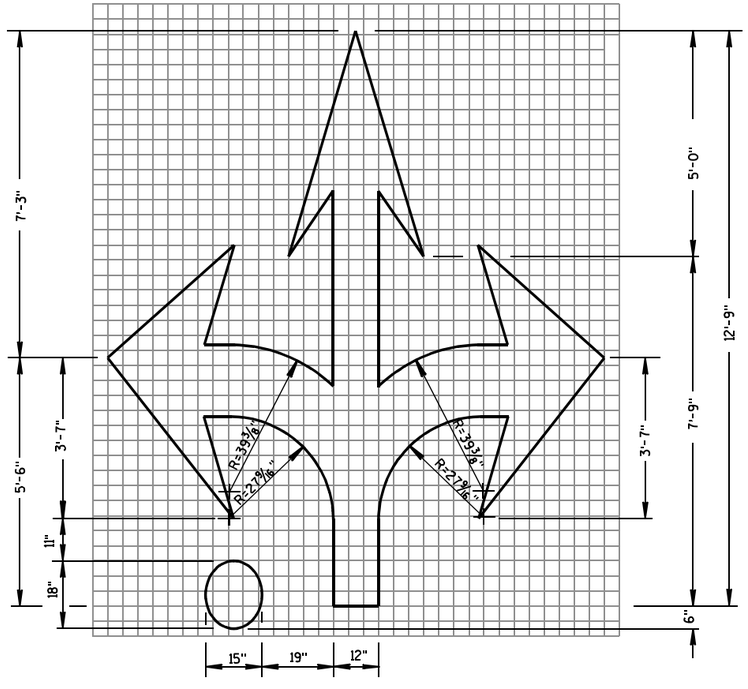
ALL LETTERS, ARROWS AND SYMBOLS SHALL BE IN CONFORMANCE WITH REQUIREMENTS INCLUDED IN "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKING" BOOK BY THE FEDERAL HIGHWAY ADMINISTRATION. ALL LETTERS, ARROWS AND SYMBOLS SHALL BE WHITE AND REFLECTORIZED. SMALL DIFFERENCES IN DIMENSIONS WITHIN THE TOLERANCES OF THAT BOOK ARE ACCEPTABLE.



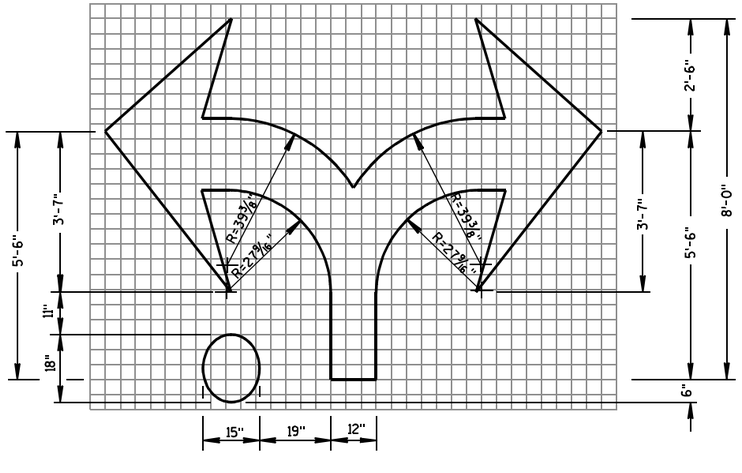
TYPE 2R



TYPE 3R



TYPE 6R



TYPE 7R

ROUNDABOUT ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

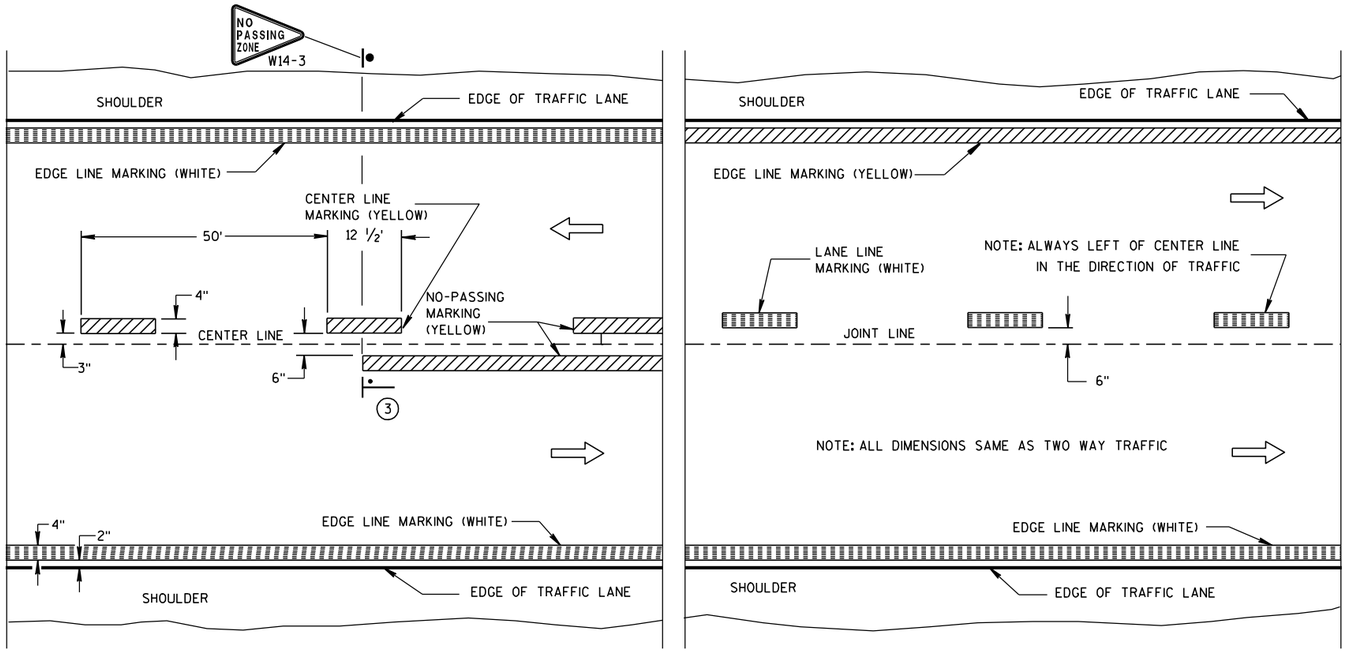
7/1/11 — DATE

/S/ Thomas N. Nothdurm — STATE TRAFFIC ENGINEER

FHWA

6

S.D.D. 15 C 7-12d



TWO WAY TRAFFIC

ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING

GENERAL NOTES

DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.

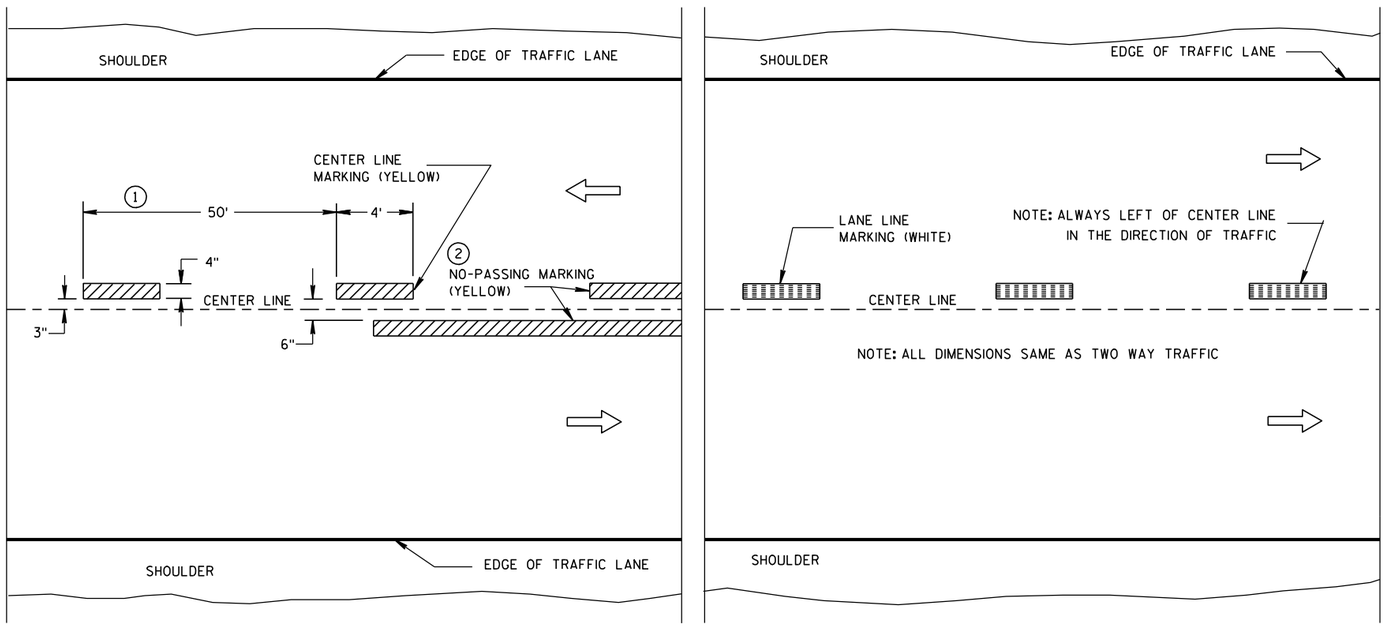
(1) HALF CYCLE LENGTHS (25'±) WITH 2' MINIMUM STRIPE LENGTHS SHALL BE PROVIDED ON ROADWAYS (INCLUDING TEMPORARY TRAVELED WAYS) WITH REVERSE CURVATURE, CURVATURE OF OVER 5 DEGREES OR WHEN DIRECTED BY THE ENGINEER TO MARK UNUSUAL ALIGNMENT OF THE TRAVELED WAY.

(2) NO PASSING ZONE TEMPORARY PAVEMENT MARKING IS REQUIRED TO BE PLACED, WHERE APPROPRIATE, ALONG WITH CENTERLINE TEMPORARY PAVEMENT MARKING WHEN A SAME DAY PERMANENT PAVEMENT MARKING ITEM IS INCLUDED IN THE CONTRACT.

(3) NO PASSING ZONE MARKINGS ARE PLACED ACCORDING TO "T" MARKINGS. IF EXISTING NO PASSING ZONE W14-3 SIGNS ARE BEYOND 50 FEET IN EITHER DIRECTION, THE SIGNS SHALL BE MOVED TO THE "T" MARKINGS.

NOTE

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL

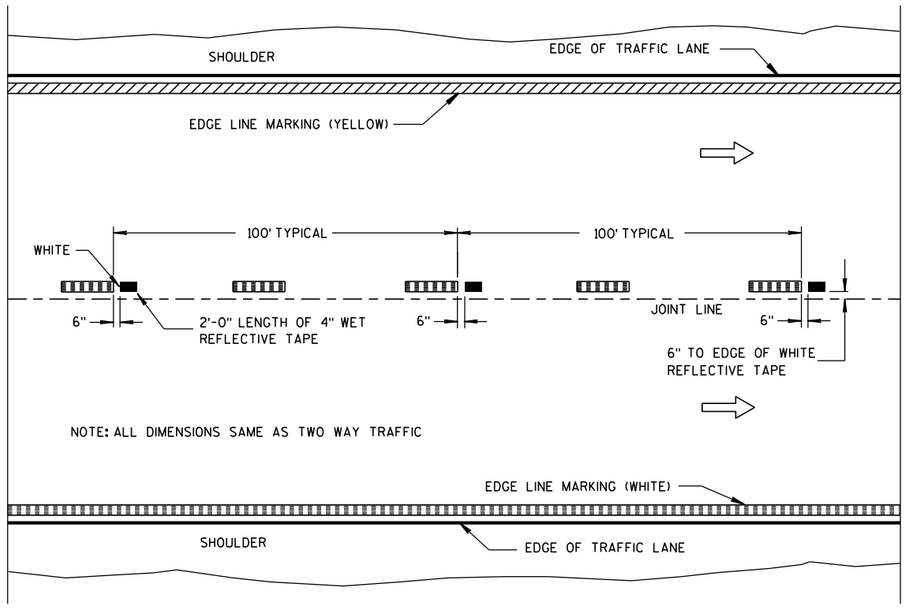


TWO WAY TRAFFIC

ONE WAY TRAFFIC

TEMPORARY (INTERMEDIATE) PAVEMENT MARKING

(SHOWS CYCLE FOR TEMPORARY CENTER LINE OR TEMPORARY LANE LINE MARKING)



WET REFLECTIVE TAPE SUPPLEMENT TO SPRAYED OR NON WET REFLECTIVE TAPE LANE LINE

LEGEND

"T" MARKING

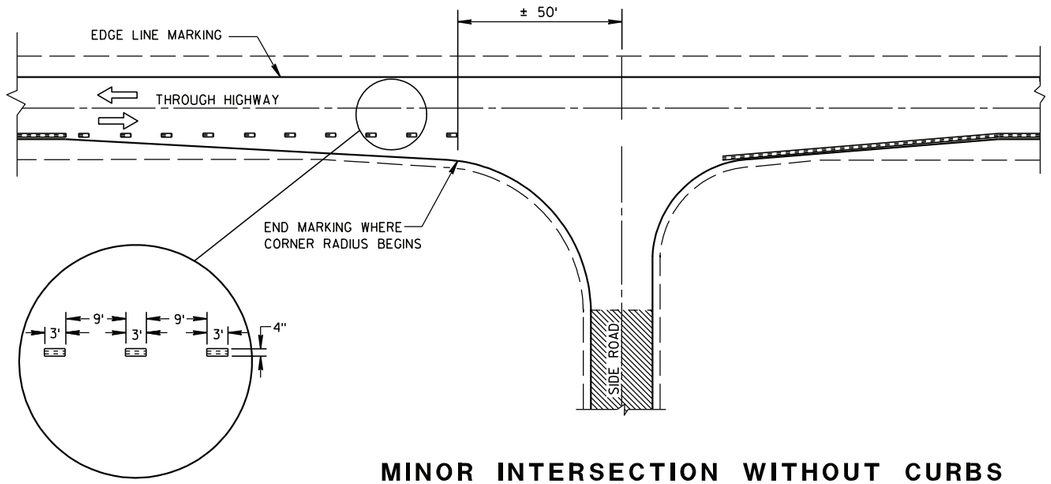
POST MOUNTED SIGN

PAVEMENT MARKING (MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6-23-11 DATE
/S/ Thomas N. Notbohm
STATE TRAFFIC ENGINEER
FHWA

6
S.D.D. 15 C 8-14a



MINOR INTERSECTION WITHOUT CURBS

GENERAL NOTES

EDGE LINES SHALL BE OMITTED THROUGH INTERSECTIONS. EDGE LINES SHALL BE CONTINUED THROUGH DRIVEWAYS.

(1) WHEN DISTANCE "A" IS LESS THAN 250 FEET, OMIT LANE LINE.

(2) WHEN DISTANCE "B" IS LESS THAN 100 FEET, OMIT CHANNELIZING LANE LINE.

(3) ALTERNATIVE MARKING SHALL BE PROVIDED WHEN SPECIFIED IN THE CONTRACT. TYPICAL SITUATIONS WHERE THIS MARKING MAY BE REQUIRED ARE WHERE THE INTERSECTION IS ON A SHARP HORIZONTAL CURVE OR CREST VERTICAL CURVE IN AN UNLIGHTED AREA SUCH THAT THE EDGE LINE MAY BE MISLEADING TO THE MOTORIST OR DISAPPEAR FROM SIGHT.

(4) THE EDGE LINE IN THE TAPER AREAS OF THE BYPASS LANE AND THE BYPASS LANE SHALL BE LOCATED 1-FOOT FROM EDGE OF PAVEMENT TO THE OUTSIDE EDGE OF EDGE LINE.

(5) BARRIER LINE ENDS AT SIDE ROAD PAVEMENT/SURFACE EDGE EXTENSION.

(6) BARRIER LINE STARTS 500 FEET PRIOR TO THE BYPASS TAPER.

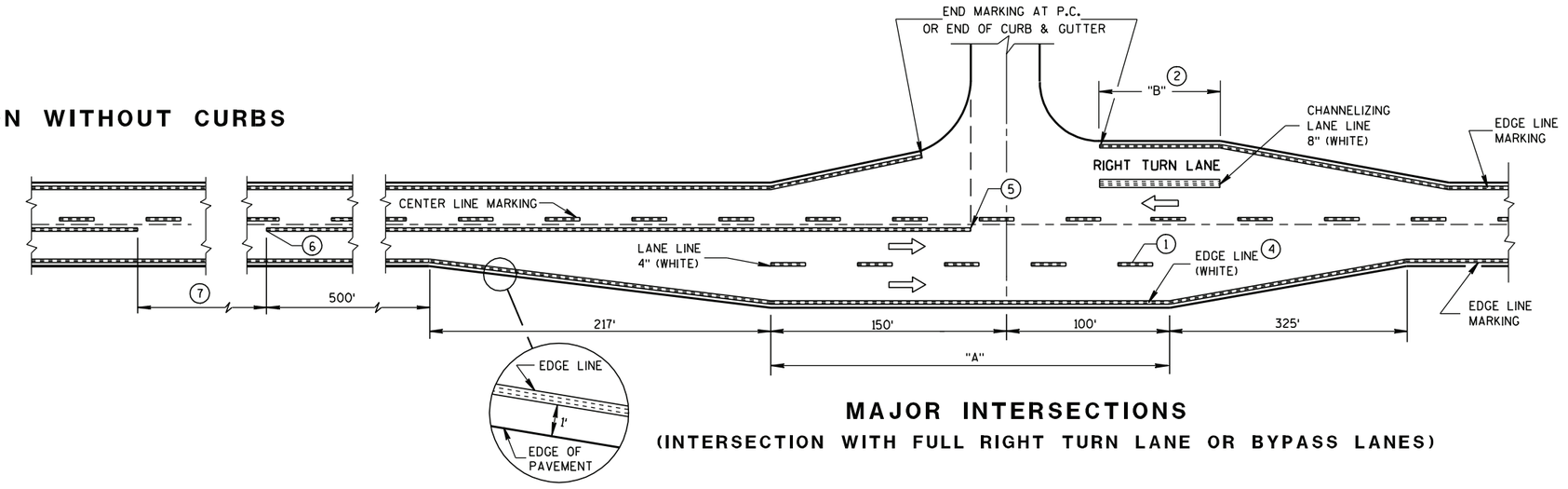
(7) IF THE DISTANCE BETWEEN 2 SUCCESSIVE NO-PASSING ZONES IS LESS THAN THE MINIMUM DISTANCE BETWEEN ZONES, CONNECT THE 2 ZONES.

(8) 3' LINE 9' GAP, EXCEPT RETRACE THE EXISTING LINE - GAP PATTERN WHERE EXISTING MARKINGS ARE IN PLACE.

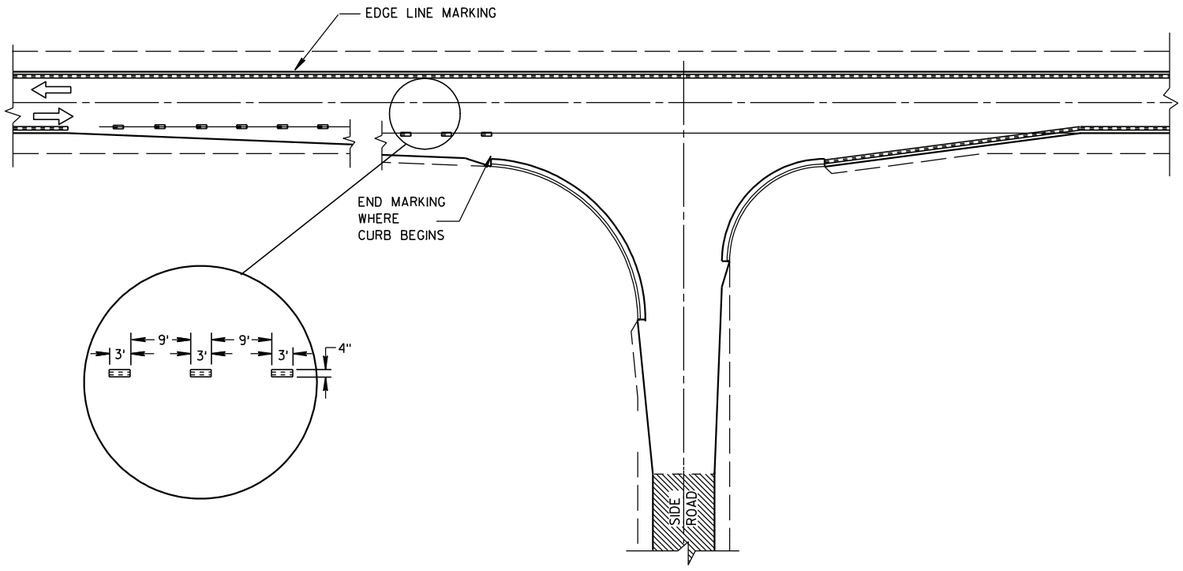
ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL

(7)

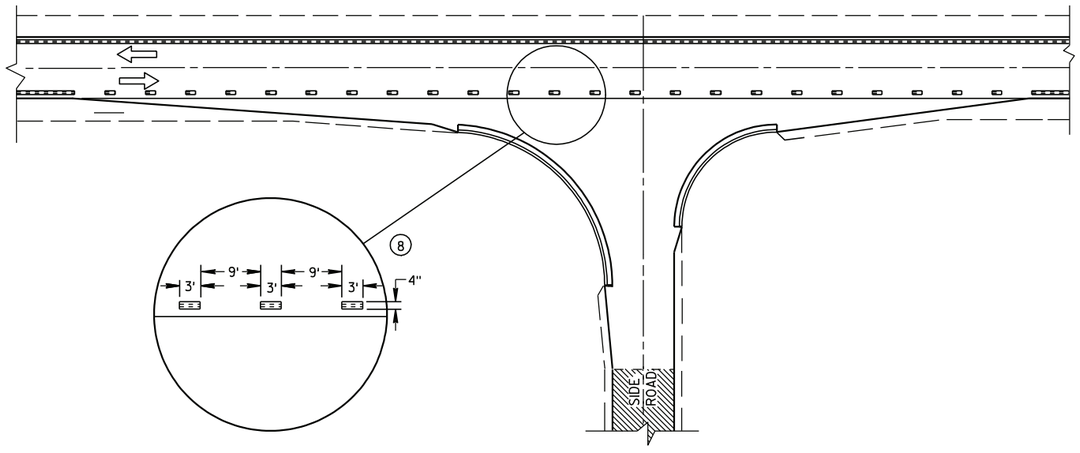
POSTED SPEED (MPH)	MINIMUM DISTANCE BETWEEN ZONES (FEET)
25 - 30	528
35 - 40	528
45 - 50	686
55	792



MAJOR INTERSECTIONS
(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANES)



MINOR INTERSECTION WITH CURBS
(TYPICAL MARKING)



MINOR INTERSECTION WITH CURBS
(3) (FOR SPECIAL CONDITIONS AS SPECIFIED)

PAVEMENT MARKING (INTERSECTIONS)

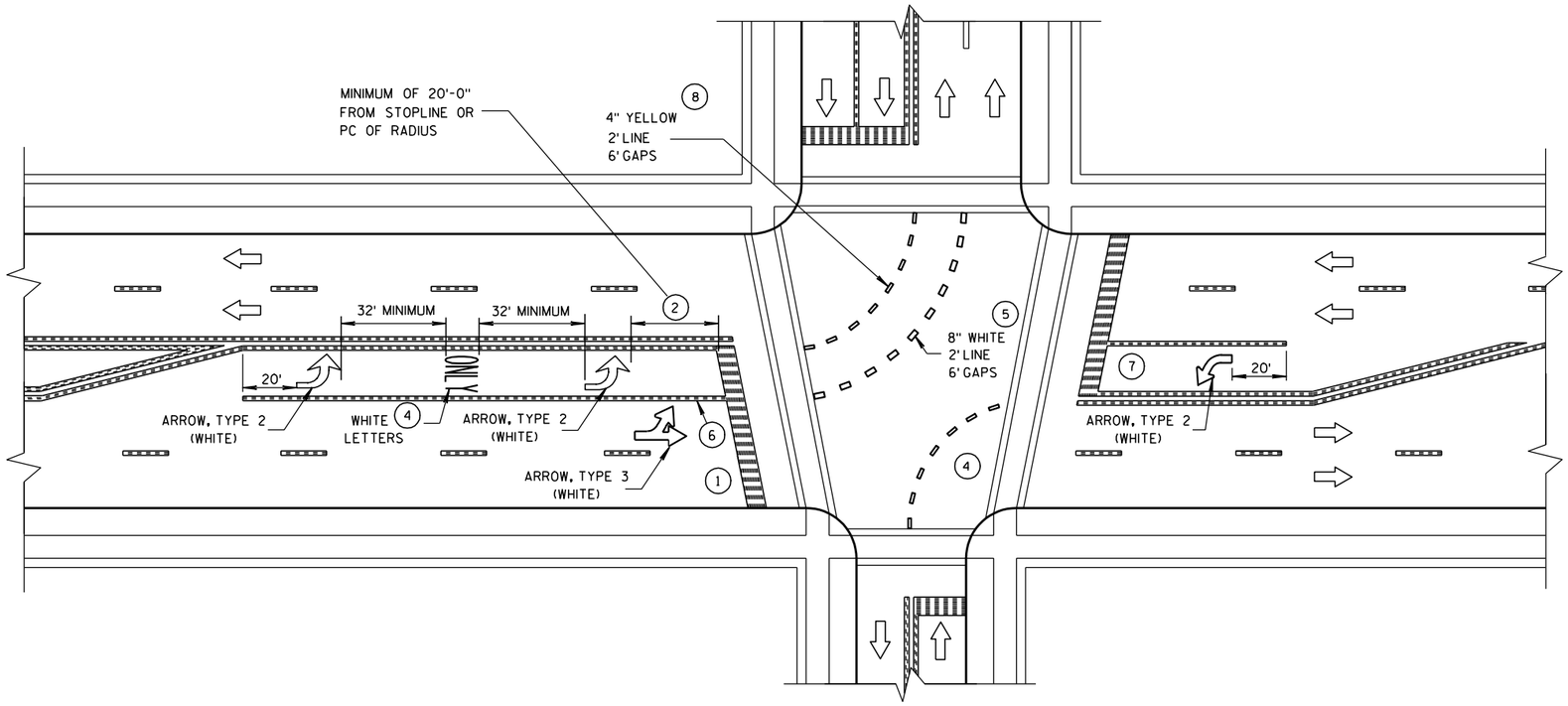
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

S.D.D. 15 C 8-14b

6

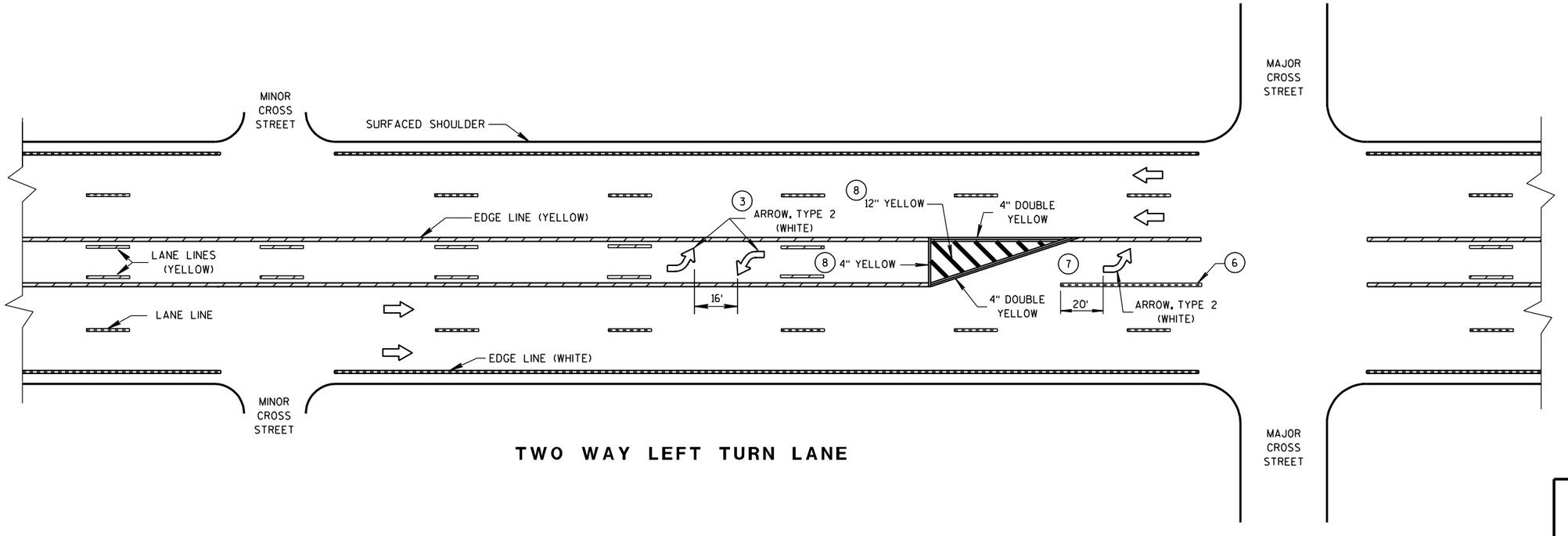
S.D.D. 15 C 8-14b



GENERAL NOTES

1. STOP BAR IS REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT.
2. DISTANCE MAY BE ADJUSTED TO ACCOMODATE SHORT LEFT TURN LANES. AS APPROVED BY THE ENGINEER.
3. A SET OF ARROWS IS REQUIRED EVERY 400' OR NEAR INTERSECTIONS OR DRIVEWAYS WITH TURNING TRAFFIC.
4. ADD EXTRA ARROW AND ONLY PER 160' OR WHEN ON A CURVE.
5. 8" WHITE WITH 2' LINE 6' GAPS FOR DUAL TURN LANE.
6. 8" WHITE
7. ADD SECOND ARROW WHEN TURN BAY IS GREATER THAN OR EQUAL TO 108'.
8. REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT.

NOTE:
ARROW SYMBOL (⇨)
SHOWS DIRECTION OF TRAVEL



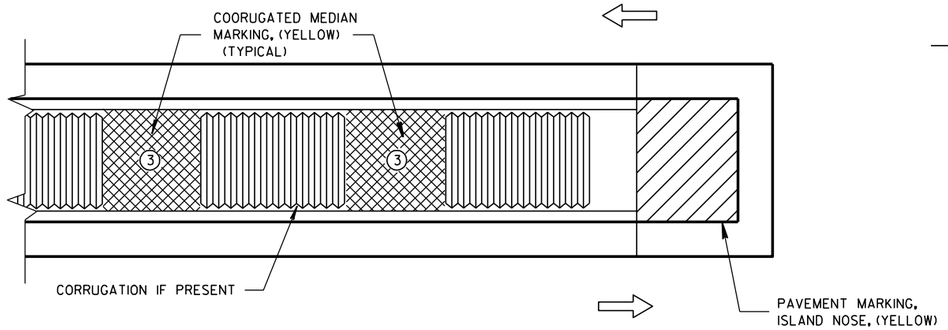
TWO WAY LEFT TURN LANE

PAVEMENT MARKING
(LEFT TURN LANE)

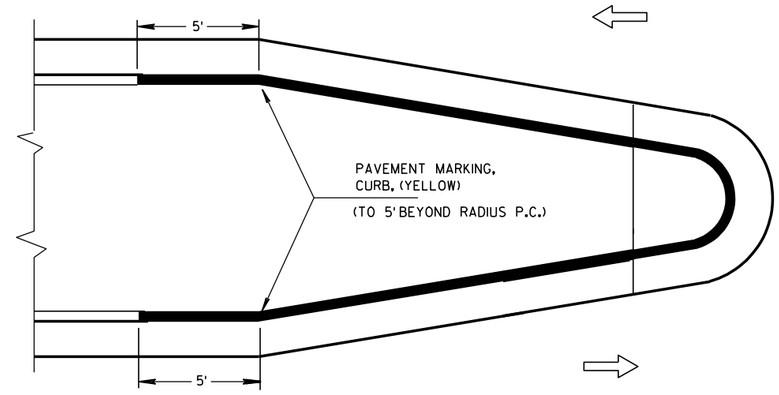
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

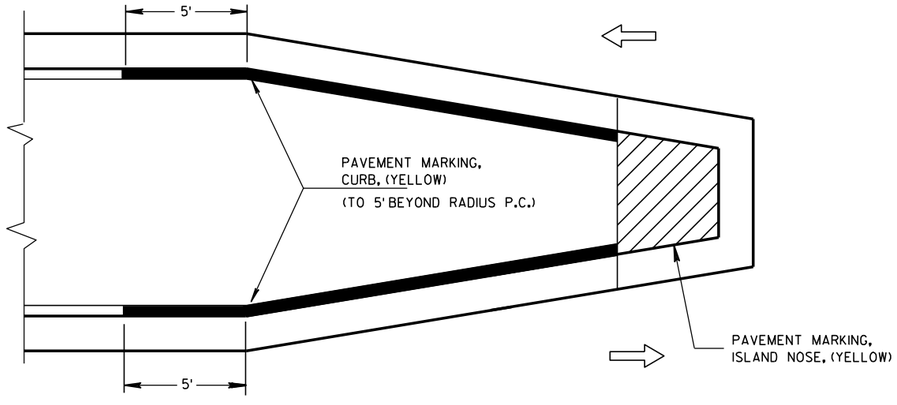
S.D.D. 15 C 8-14e



MEDIAN ISLAND WITH SQUARE BLUNT NOSE

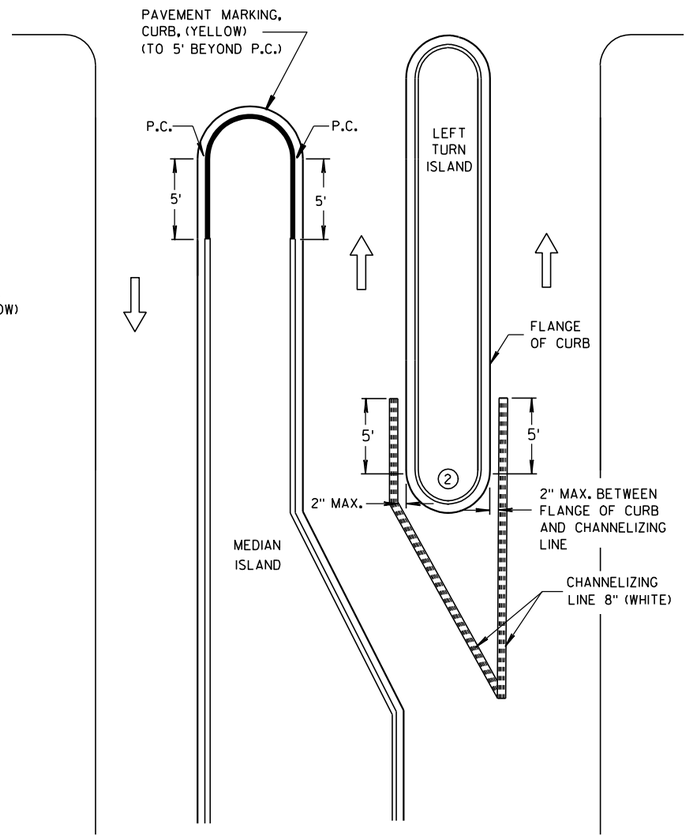


MEDIAN ISLAND WITH ROUND BLUNT NOSE



MEDIAN ISLAND WITH SLOPED NOSE

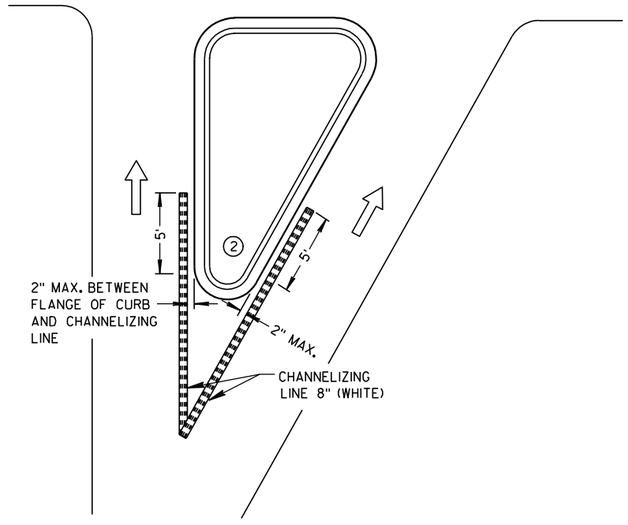
TYPICAL PLACEMENT OF PAVEMENT MARKING ON MEDIAN ISLANDS



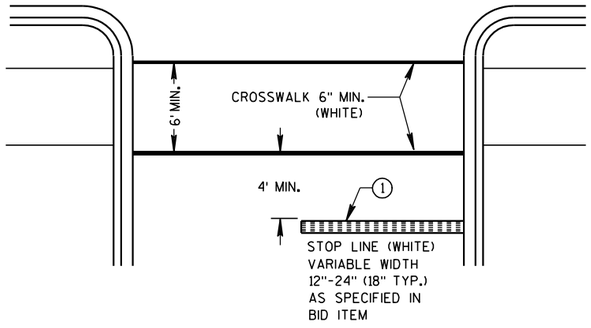
LEFT TURN & MEDIAN ISLAND

GENERAL NOTES

1. STOP LINE IS REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT.
2. DO NOT MARK CURB NOSES THAT SEPARATE LANES OF TRAFFIC TRAVELING IN THE SAME DIRECTION.
3. WHEN CONCRETE CORRUGATED MEDIAN IS CONSTRUCTED TO SEPARATE TRAFFIC OPERATING IN THE OPPOSING DIRECTION YELLOW PAVEMENT MARKING SHALL BE APPLIED TO THE FLAT PORTION OF THE CONCRETE CORRUGATED MEDIAN. THE ITEM OF PAVEMENT MARKING, CONCRETE CORRUGATED MEDIAN, WILL BE MEASURED IN PLACE AND AND ACCEPTED IN ACCORDANCE WITH THE CONTRACT AND PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE FOOT.



RIGHT TURN ISLAND



STOP LINE AND CROSSWALK

LEGEND

- ISLAND NOSE MARKING
- CURB MAKING
- CORRUGATED MEDIAN MARKING
- DIRECTION OF TRAVEL

PAVEMENT MARKING (ISLANDS, STOP LINE & CROSS WALK)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

S.D.D. 15 C 8-14f

6

S.D.D. 15 C 8-14f

TWO-LANE ROADWAY

SYMBOLS

WORK AREA

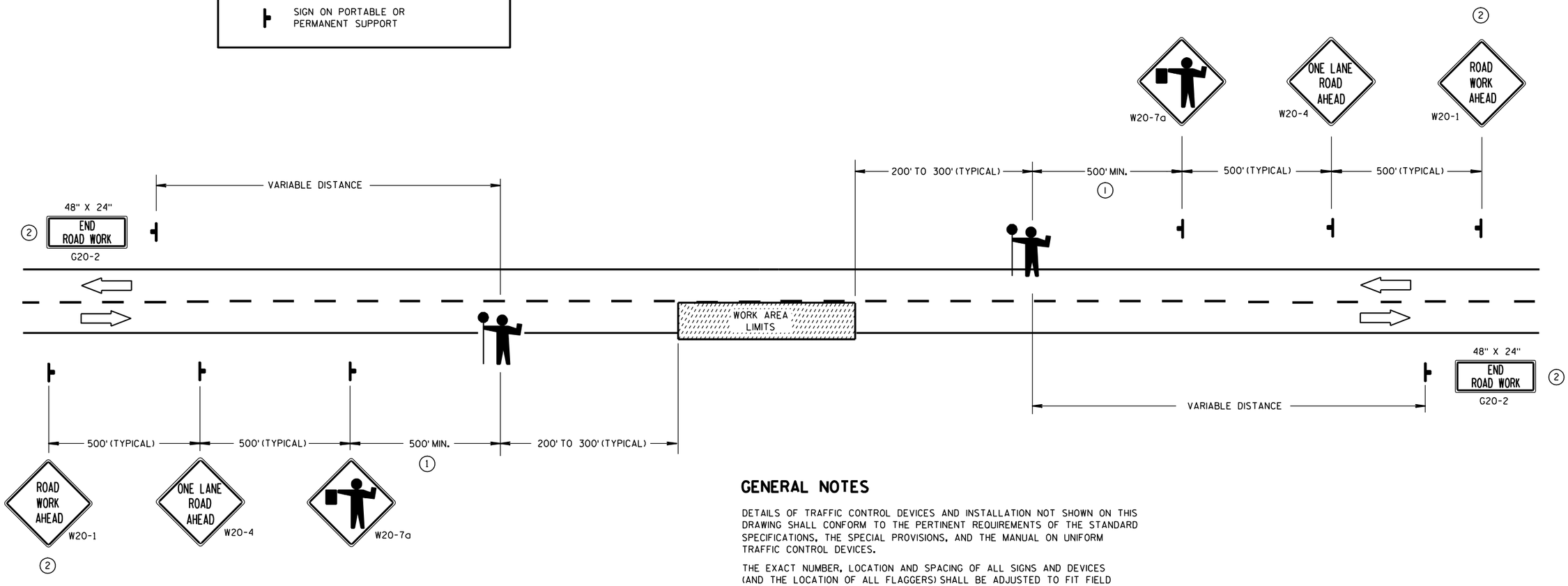
FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF

SIGN ON PORTABLE OR PERMANENT SUPPORT



W3-4

USE OF THE "BE PREPARED TO STOP" SIGN IS OPTIONAL. WHEN USED, THIS SIGN SHALL BE LOCATED BETWEEN THE W20-7a AND W20-4 SIGNS. A 500' TYPICAL SPACING SHALL BE PROVIDED BETWEEN THE SIGNS.



(1) FOR A MOVING WORK OPERATION,
SIGNING FOR BOTH DIRECTIONS SHALL BE REESTABLISHED (AS SIMULTANEOUSLY AS PRACTICAL) AT APPROXIMATELY 3500 FOOT INTERVALS IN THE MOVING WORK OPERATION OR AS APPROVED BY THE ENGINEER.

(2) SIGN NOT REQUIRED IF FLAGGING OPERATION OCCURS WITHIN A SIGNED ROAD WORK ZONE AREA.

GENERAL NOTES

DETAILS OF TRAFFIC CONTROL DEVICES AND INSTALLATION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES (AND THE LOCATION OF ALL FLAGGERS) SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE FIRST ADVANCE WARNING SIGN SHOULD TYPICALLY BE LOCATED IN ADVANCE OF THE ANTICIPATED TRAFFIC BACKUP OR QUEUE.

WHEN A SIDE ROAD OR RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.

FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT, THE "FLAGGER AHEAD", THE "ROAD WORK AHEAD" AND THE ONE LANE ROAD AHEAD" SIGNS SHALL BE COVERED OR REMOVED AND THE HIGHWAY RESTORED TO NORMAL OPERATION.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

9/5/06 — DATE

/S/ Thomas N. Nathaam — STATE TRAFFIC ENGINEER

866

FHWA

6

S.D.D. 15 C 12-3

6

S.D.D. 15 C 12-3

GENERAL NOTES

ORIENT ANCHOR BOLTS IN FOOTING AND PROVIDE ANCHOR BOLT STICK OUT ABOVE TOP OF CONCRETE FOOTING BASE PER FABRICATION DRAWING.

BENDING DIMENSIONS FOR REINFORCING BARS ARE OUT TO OUT.

USE 3" CLEAR FOR ALL REINFORCEMENT UNLESS NOTED OTHERWISE.

SIGN SUPPORTS SHALL BE LOCATED NORMAL TO ROADWAY.

THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN DETERMINATION AS TO THE TYPE AND LOCATION OF UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE THERETO.

WELDING OF ANCHOR BOLTS TO THE CAGE IS UNACCEPTABLE. TEMPLATES SHALL BE USED.

BAR CAGE TO BE ASSEMBLED USING TIE WIRES ONLY, NO WELDING.

BASES (SHAFT) SHALL BE EXCAVATED BY THE USE OF A CIRCULAR AUGER. IF A BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE SOIL, THE FORM SHALL BE REMOVED BEFORE BACK FILLING AROUND THE BASE. ANY REQUIRED BACKFILL SHALL BE WELL COMPACTED IN LAYERS OF 1 FOOT OR LESS. COMPACTION SHALL BE BY MECHANICAL MEANS. CARE SHALL BE TAKEN SO NO DAMAGE OCCURS TO THE CONCRETE BASE DURING COMPACTION.

EXCAVATION OF MATERIALS NOT OCCUPIED BY CONCRETE SHALL BE MINIMIZED TO REDUCE DISTURBANCE OF THE SURROUNDING SOILS.

THE BOTTOM OF THE DRILLED HOLE SHALL BE FIRM AND THOROUGHLY CLEANED SO NO LOOSE OR COMPRESSIBLE MATERIALS ARE PRESENT AT THE TIME OF THE CONCRETE PLACEMENT.

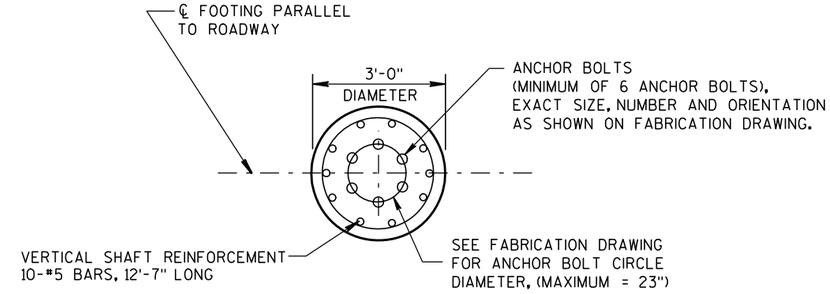
IF THE DRILLED HOLE CONTAINS STANDING WATER, THE CONCRETE SHALL BE PLACED USING A TREMIE TO DISPLACE THE WATER.

THE REINFORCEMENT AND ANCHOR BOLTS SHALL BE ADEQUATELY SUPPORTED IN THE PROPER POSITIONS SO NO MOVEMENT OCCURS DURING CONCRETE PLACEMENT.

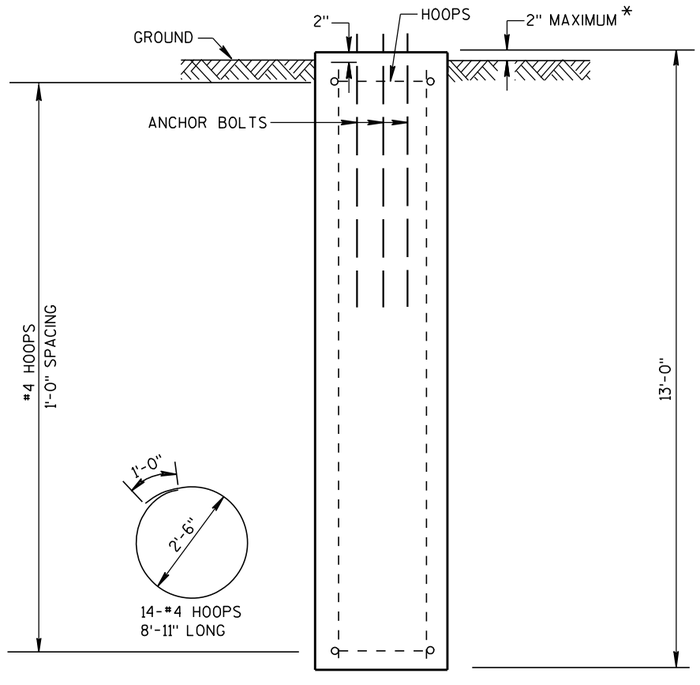
ANY DAMAGE TO THE CONCRETE BASE DURING CONSTRUCTION OPERATIONS SHALL BE REPAIRED AT THE ENGINEER'S DIRECTION, AT THE EXPENSE OF THE CONTRACTOR.

CONCRETE MASONRY	fc=3,500 p.s.i.
HIGH STRENGTH BAR STEEL REINFORCEMENT, GRADE 60	fy=60,000 p.s.i.
ANCHOR BOLTS	AASHTO M314 GRADE 55

THIS FOOTING HAS BEEN DESIGNED FOR SITES WHERE SOILS EXHIBIT A PHI-ANGLE GREATER THAN OR EQUAL TO 20 DEGREES (GRANULAR SOILS), OR A COHESION VALUE GREATER THAN OR EQUAL TO 350 PSF (COHESIVE SOILS).



PLAN VIEW



ELEVATION VIEW

* FOR OVERHEAD SIGN SUPPORTS THAT ARE INSTALLED ADJACENT TO SIDEWALKS, THE TOP OF THE BASE SHALL BE POURED FLUSH WITH THE GROUND.

CONCRETE - 3.4 C.Y. PER FOOTING
H.S. REINFORCEMENT - 215 LBS. PER FOOTING

36" DIAMETER FULL SPAN OVERHEAD SIGN SUPPORT BASE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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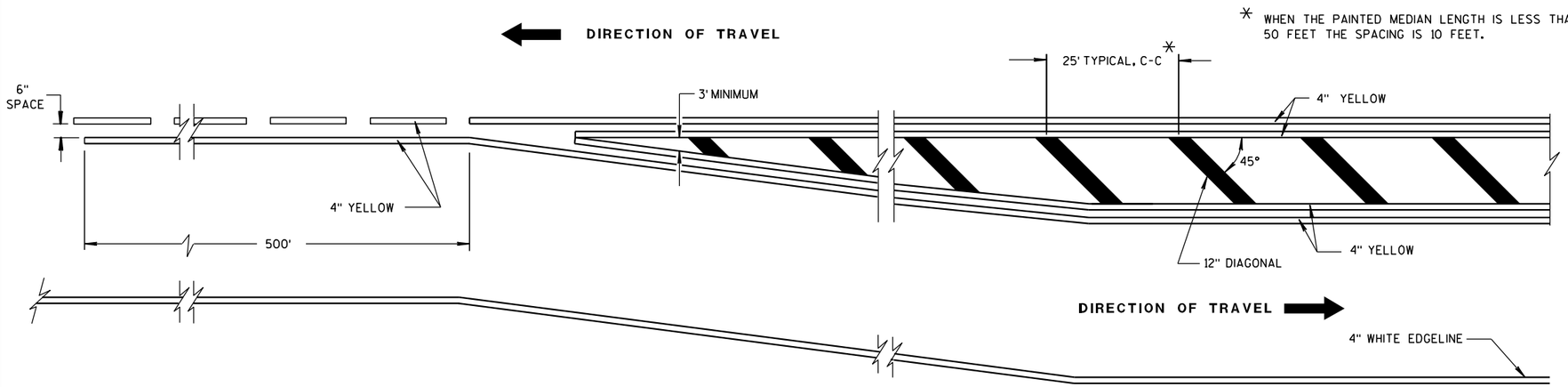
4/17/09 — DATE

/S/ Thomas N. Nothohm — STATE TRAFFIC ENGINEER

FHWA

6

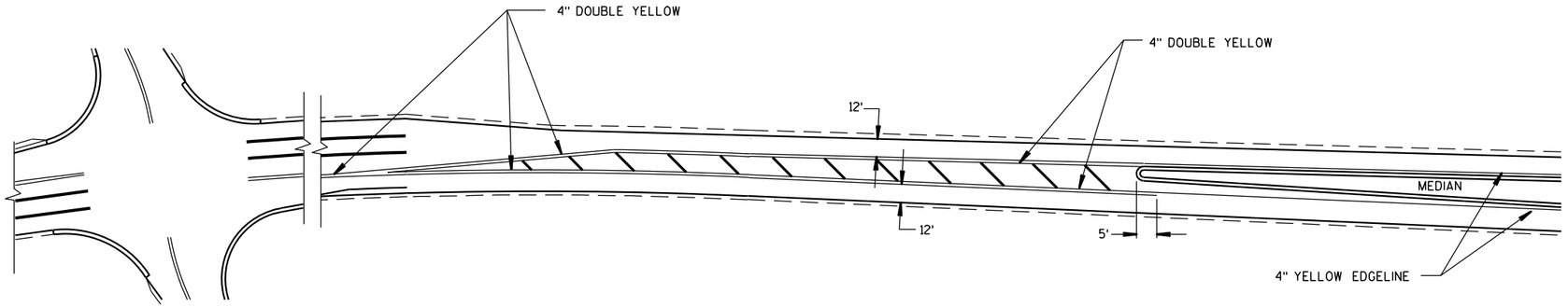
S.D.D. 15 C 15-3



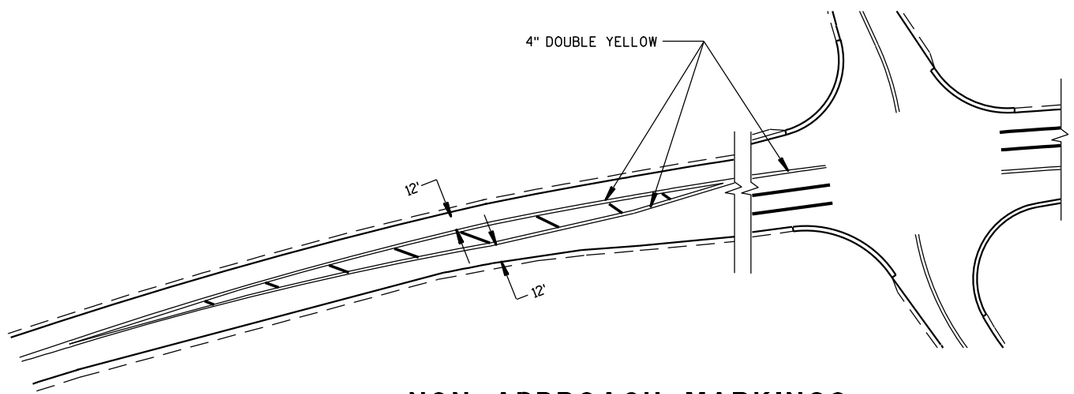
MEDIAN ISLAND DETAIL

GENERAL NOTE

DIAGONALS ARE OPTIONAL WHEN PAINTED ISLAND IS LESS THAN 6 FEET AT WIDEST POINT.



APPROACH MARKINGS FOR OTHER MEDIAN TYPES



NON APPROACH MARKINGS

MEDIAN ISLAND MARKING	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 2-5-09 DATE	/S/ Thomas N. Nothohm STATE TRAFFIC ENGINEER 868 IGN
FHWA	

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S.D.D. 15 C 18-3

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S.D.D. 15 C 18-3

GENERAL NOTES

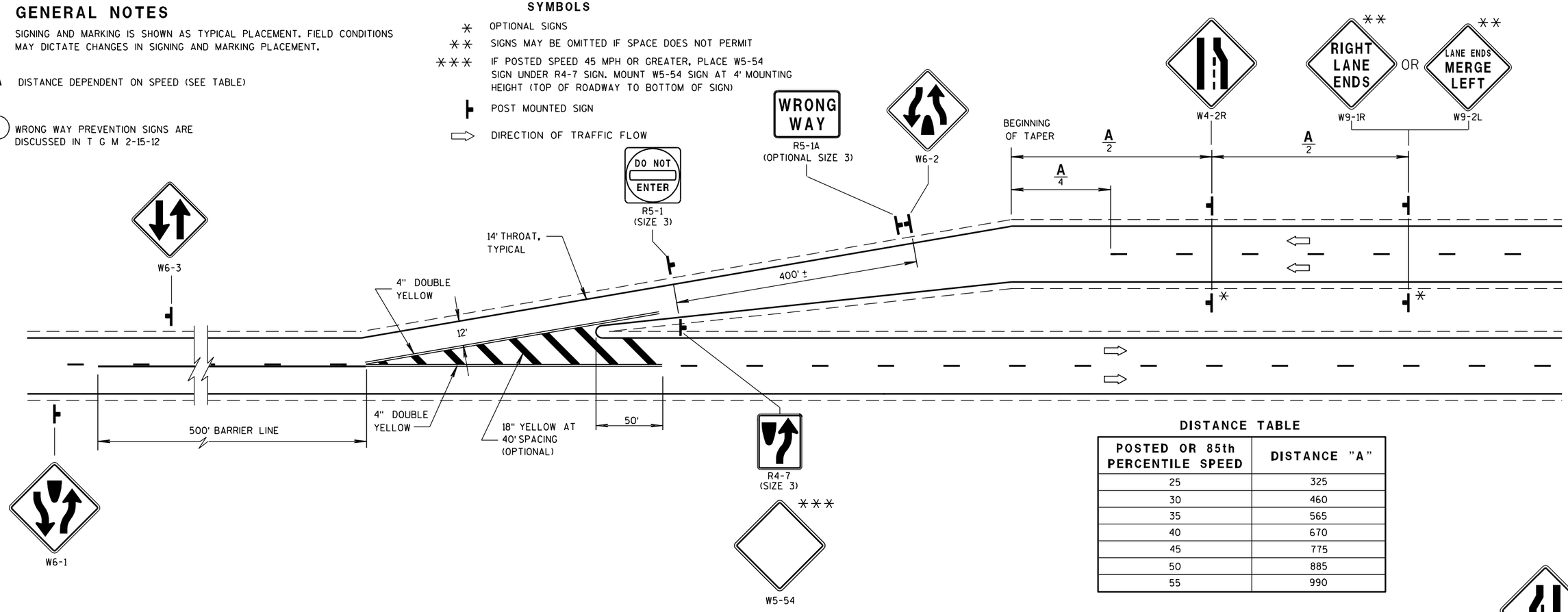
SIGNING AND MARKING IS SHOWN AS TYPICAL PLACEMENT. FIELD CONDITIONS MAY DICTATE CHANGES IN SIGNING AND MARKING PLACEMENT.

A DISTANCE DEPENDENT ON SPEED (SEE TABLE)

(1) WRONG WAY PREVENTION SIGNS ARE DISCUSSED IN T G M 2-15-12

SYMBOLS

- ✳ OPTIONAL SIGNS
- ✳✳ SIGNS MAY BE OMITTED IF SPACE DOES NOT PERMIT
- ✳✳✳ IF POSTED SPEED 45 MPH OR GREATER, PLACE W5-54 SIGN UNDER R4-7 SIGN. MOUNT W5-54 SIGN AT 4' MOUNTING HEIGHT (TOP OF ROADWAY TO BOTTOM OF SIGN)
- POST MOUNTED SIGN
- DIRECTION OF TRAFFIC FLOW



DISTANCE TABLE

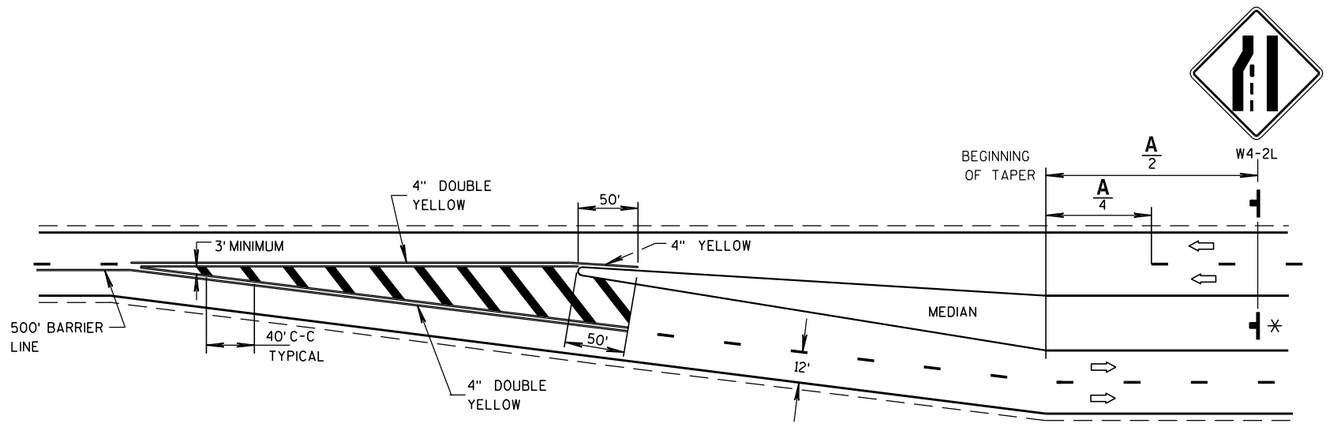
POSTED OR 85th PERCENTILE SPEED	DISTANCE "A"
25	325
30	460
35	565
40	670
45	775
50	885
55	990

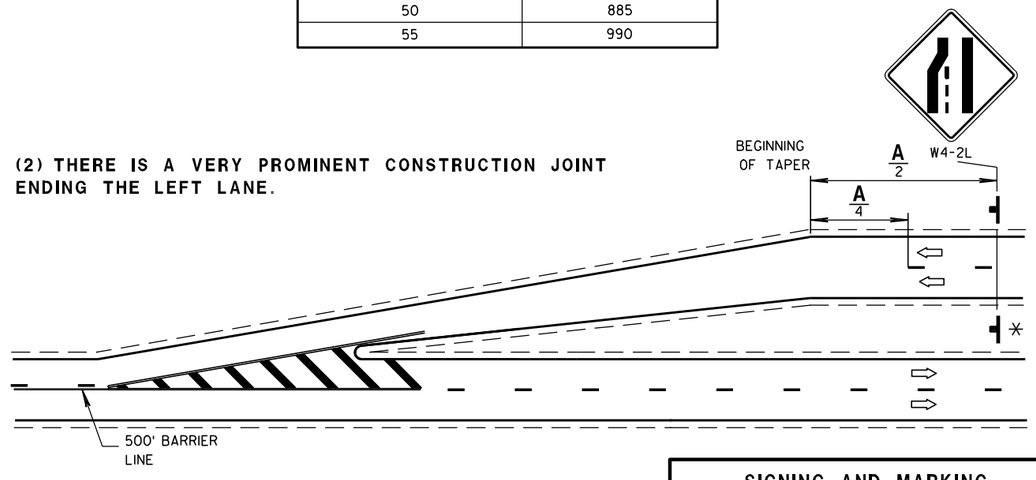
USE W4-2L IF :

(1) THE LEFT LANE IS PUSHED TO THE RIGHT:

OR

(2) THERE IS A VERY PROMINENT CONSTRUCTION JOINT ENDING THE LEFT LANE.





SIGNING AND MARKING
TWO LANE TO FOUR LANE
DIVIDED TRANSITIONS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8/27/2011 DATE
/S/ Thomas N. Notbohm
STATE TRAFFIC ENGINEER

FHWA

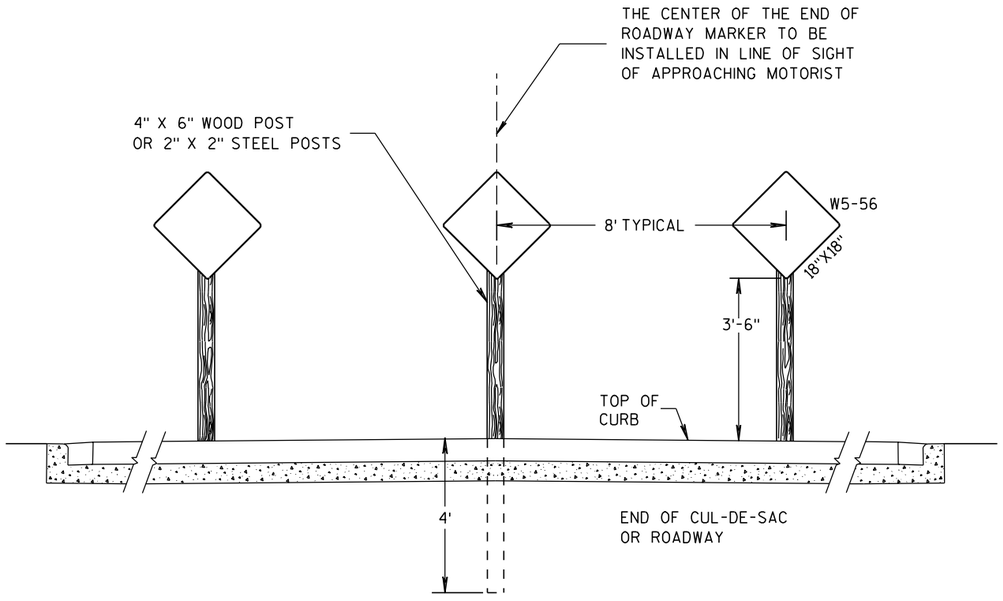
6
S.D.D. 15 C 21-4

GENERAL NOTES

SIGN LOCATIONS SHOWN ARE TYPICAL PLACEMENT AND MAY BE ADJUSTED BY THE ENGINEER AS FIELD CONDITIONS DICTATE.

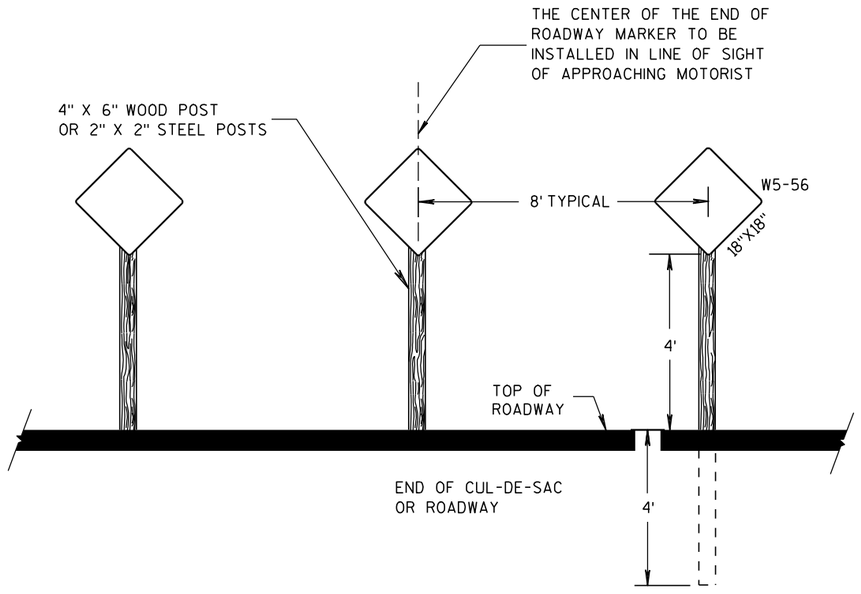
THE MINIMUM NUMBER OF END-OF-ROADWAY SIGNS ARE THREE (AS SHOWN). ADDITIONAL END-OF-ROADWAY SIGNS MAY BE INSTALLED AS FIELD CONDITIONS DICTATE. (SEE SIGNING PLAN).

WHEN BEAMGUARD IS REQUIRED, PLACE END-OF-ROADWAY SIGNING BEHIND BEAMGUARD.



TYPICAL URBAN SIGN INSTALLATION

(WITH CURB & GUTTER)



TYPICAL RURAL SIGN INSTALLATION

(WITHOUT CURB & GUTTER)

END-OF-ROADWAY SIGNING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

8/1/2011
DATE

/S/ Thomas N. Nothohm
STATE TRAFFIC ENGINEER

870
SIGN

FHWA

6

S.D.D. 15 C 26-2

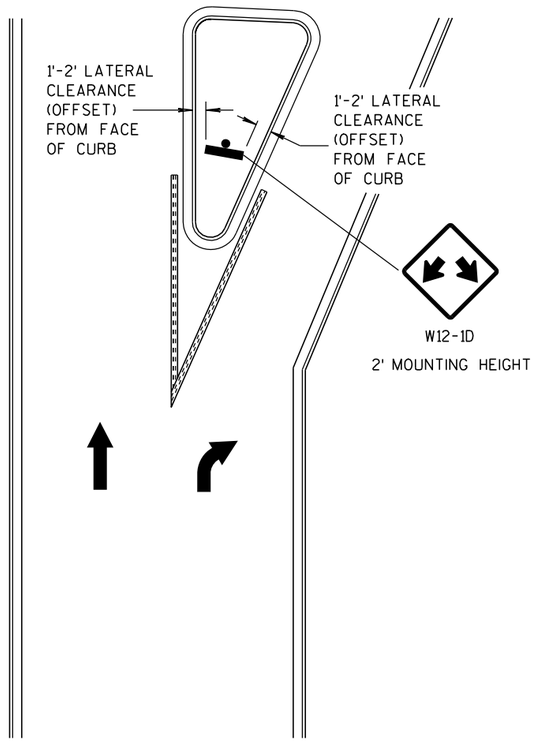
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S.D.D. 15 C 26-2

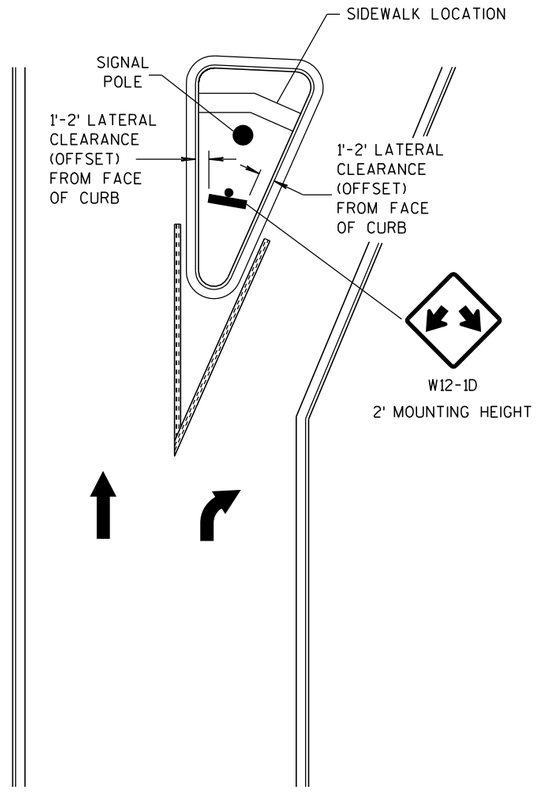
GENERAL NOTE

APPLIES TO ISLANDS AT LEFT TURNS AT ONE WAY ROADWAYS AS WELL.

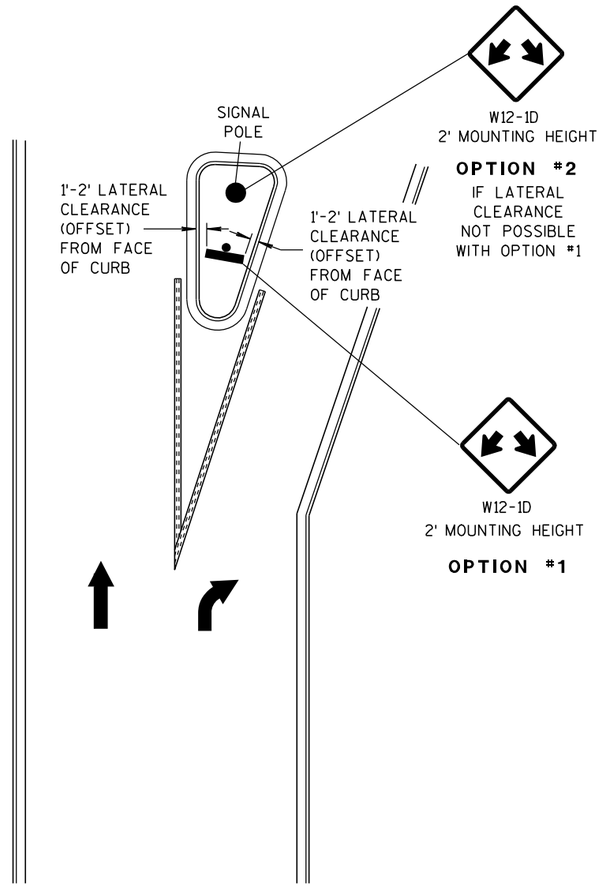
SEE MISCELLANEOUS QUANTITIES FOR SIGN SIZE.



LARGE RIGHT TURN ISLAND



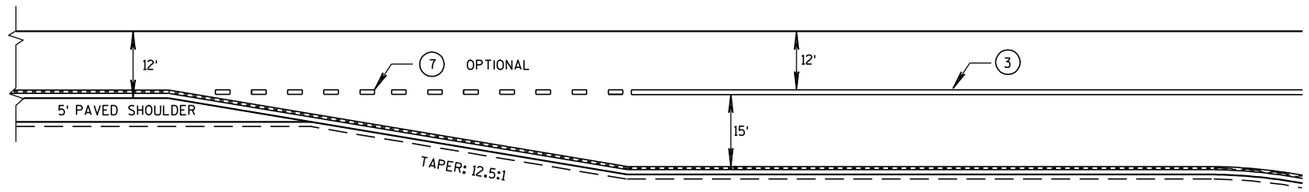
LARGE RIGHT TURN ISLAND
WITH SIGNAL POLE



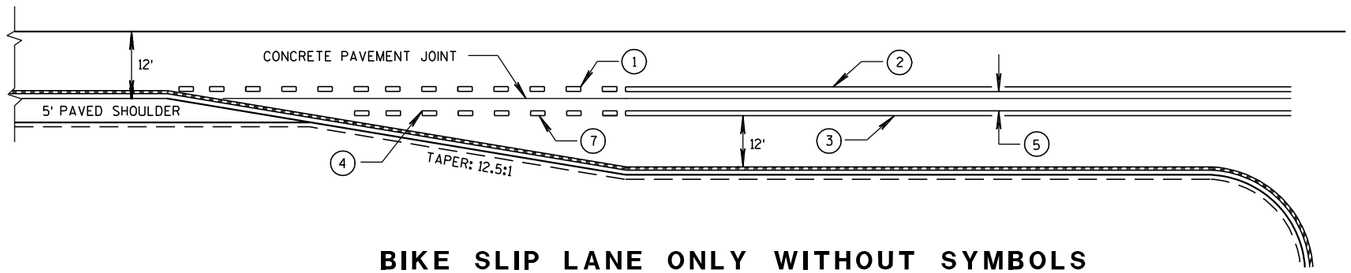
SMALL RIGHT TURN ISLAND

DOUBLE ARROW WARNING SIGN PLACEMENT

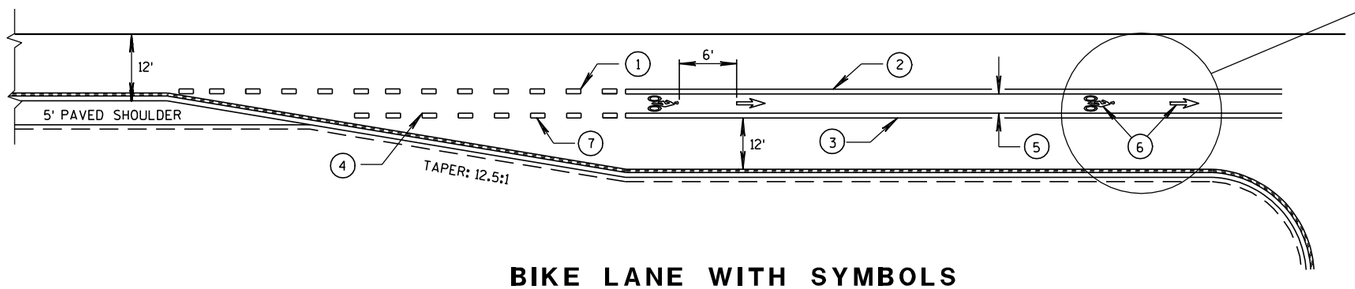
DOUBLE ARROW WARNING SIGN PLACEMENT	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	
10-22-08 DATE	/S/ Thomas N. Nothem STATE TRAFFIC ENGINEER 871 IGN
FHWA	

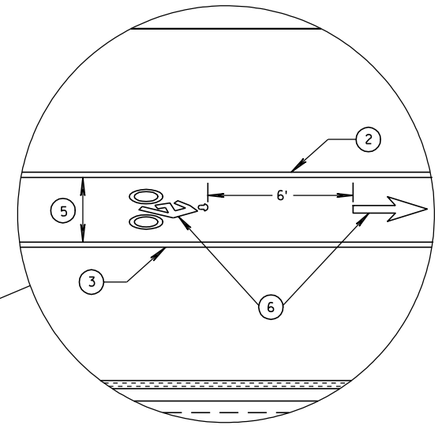


WIDER TURN LANE



BIKE SLIP LANE ONLY WITHOUT SYMBOLS





BIKE LANE WITH SYMBOLS

GENERAL NOTES

1. 3' LINE, 9' GAP - 4-INCH WIDE, WHITE.
2. 4-INCH, WHITE.
3. 8-INCH, WHITE.
4. IF SIGNED AND/OR MARKED AS A BICYCLE FACILITY INCLUDE SECOND LINE OF LINE-SPACE MARKING, OTHERWISE DO NOT.
5. BIKE ACCOMMODATION FOR CONCRETE PAVEMENT IS 5' WIDE.
   2 LANE (3' LEFT, 2' RIGHT OF JOINT).
   4 LANE (2' LEFT, 3' RIGHT OF JOINT).
   BIKE ACCOMMODATION FOR ASPHALT PAVEMENT IS A MINIMUM OF 4', 5' AT ≥45 MPH.
6. REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT.
7. 3' LINE, 9' GAP - 8-INCH WIDE, WHITE.

BICYCLE LANE MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

2/6/2012
DATE

/S/ Thomas N. N[illegible]
STATE TRAFFIC ENGINE 872
SIGN

FHWA

6

S.D.D. 15 C 29-2a

GENERAL NOTES

(1) 3' LINE, 9' GAP - 4-INCH WIDE, WHITE.

(2) 4-INCH, WHITE.

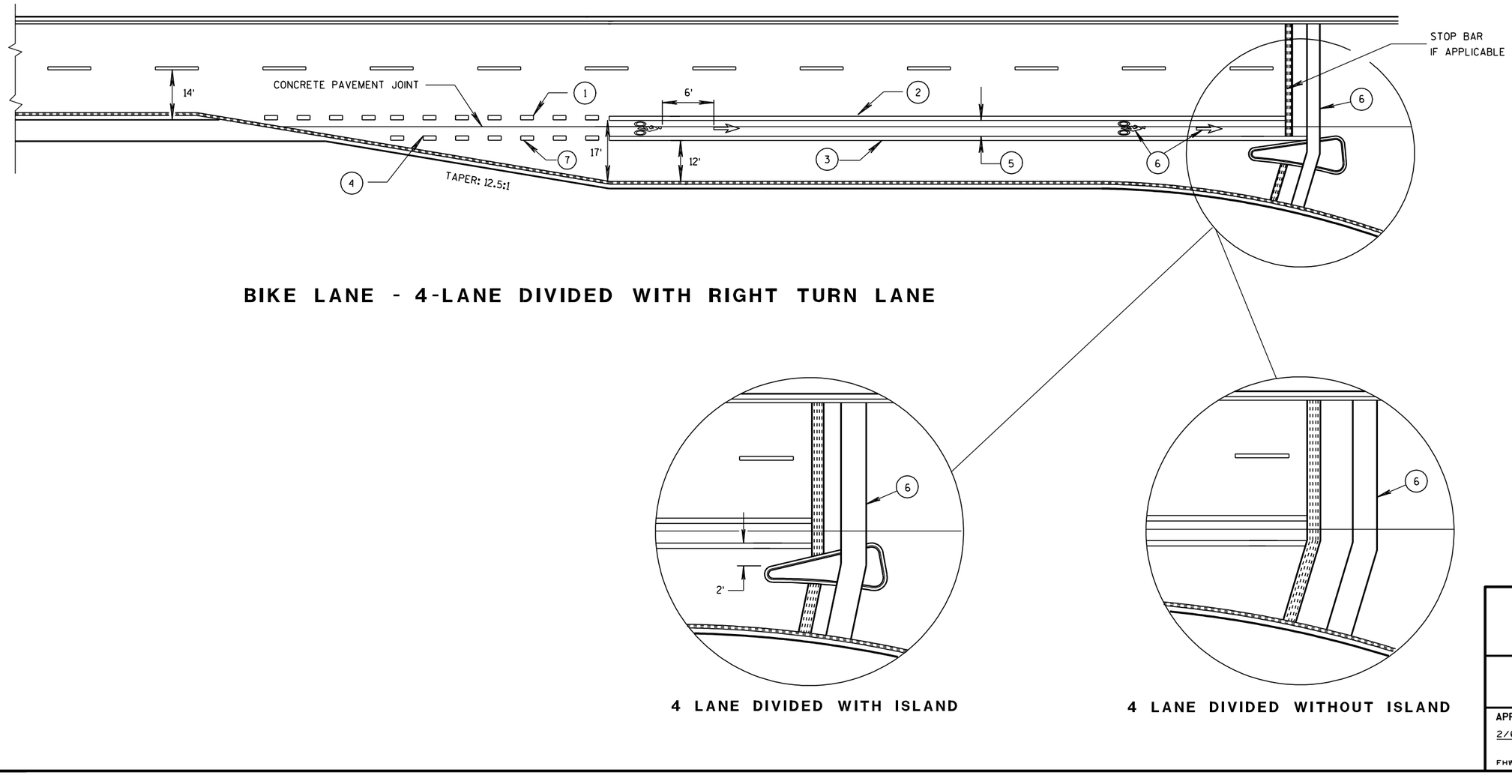
(3) 8-INCH, WHITE.

(4) IF SIGNED AND/OR MARKED AS A BICYCLE FACILITY INCLUDE SECOND LINE OF LINE-SPACE MARKING, OTHERWISE DO NOT.

(5) BIKE ACCOMMODATION FOR CONCRETE PAVEMENT IS 5' WIDE.
2 LANE (3' LEFT, 2' RIGHT OF JOINT).
4 LANE (2' LEFT, 3' RIGHT OF JOINT).
BIKE ACCOMMODATION FOR ASPHALT PAVEMENT IS A MINIMUM OF 4', 5' AT ≥ 45 MPH.

(6) REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT.

(7) 3' LINE, 9' GAP - 8-INCH WIDE, WHITE.



BIKE LANE - 4-LANE DIVIDED WITH RIGHT TURN LANE

4 LANE DIVIDED WITH ISLAND

4 LANE DIVIDED WITHOUT ISLAND

BICYCLE LANE MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
2/6/2012 DATE
/S/ Thomas N. [illegible] 873
STATE TRAFFIC ENGINEER SIGN

FHWA

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S.D.D. 15 C 29-2b

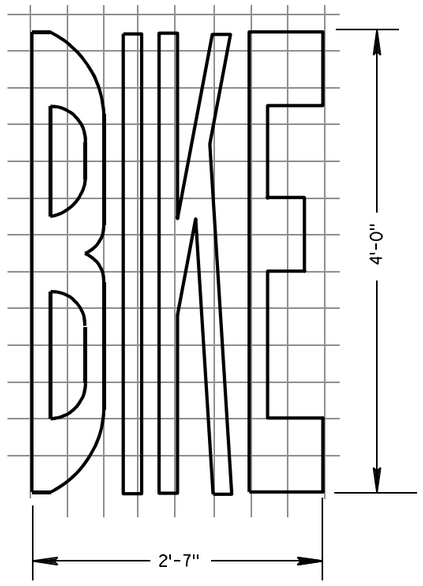
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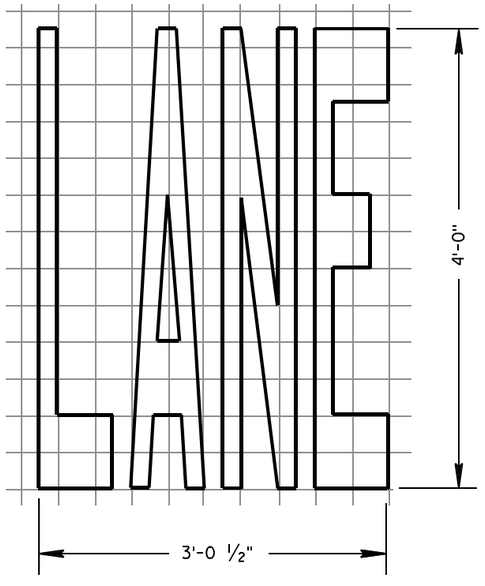
S.D.D. 15 C 29-2b

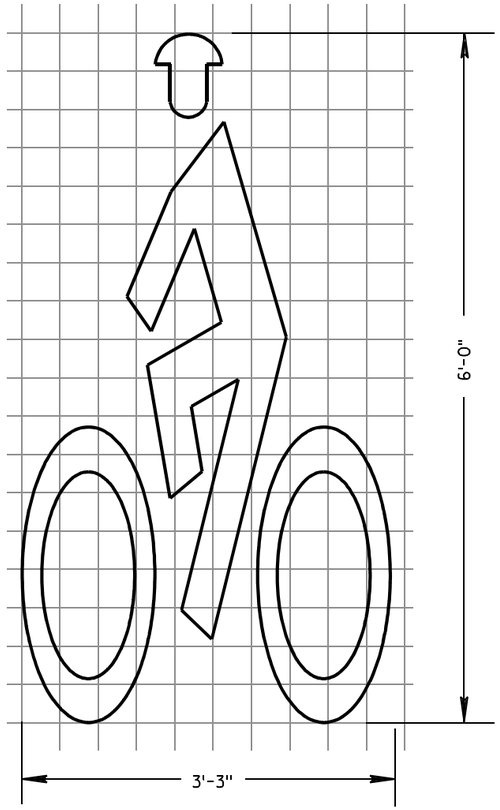
GENERAL NOTES

DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

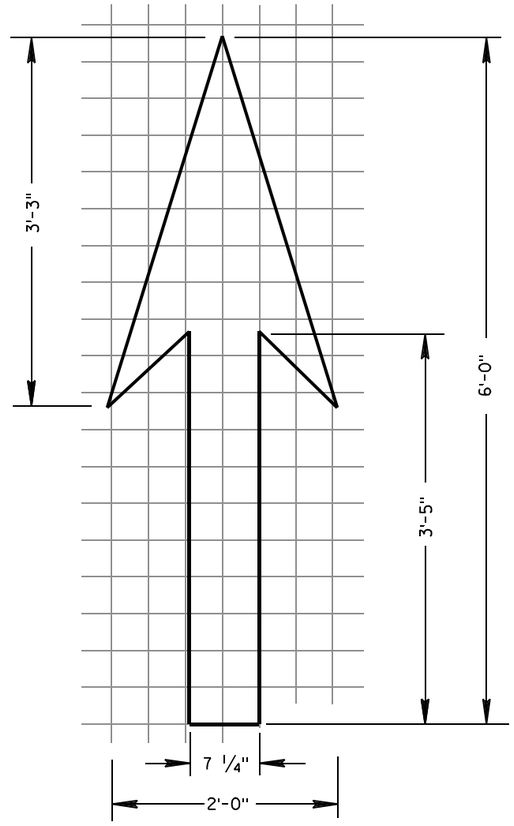
ALL LETTERS, ARROWS AND SYMBOLS SHALL BE IN CONFORMANCE WITH REQUIREMENTS INCLUDED IN "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKING" BOOK BY THE FEDERAL HIGHWAY ADMINISTRATION. ALL LETTERS, ARROWS AND SYMBOLS SHALL BE WHITE AND REFLECTORIZED. SMALL DIFFERENCES IN DIMENSIONS WITHIN THE TOLERANCES OF THAT BOOK ARE ACCEPTABLE.



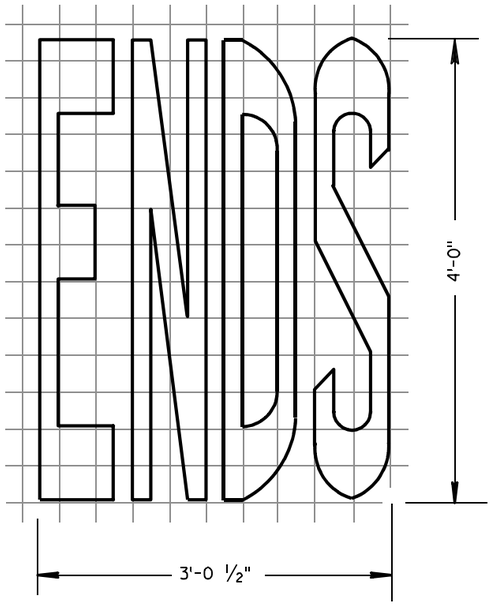




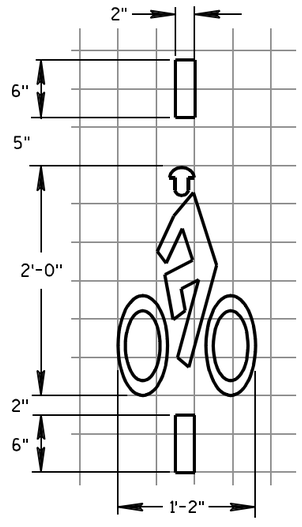
BIKE LANE SYMBOL



BIKE LANE ARROW



BIKE LANE WORDS



BICYCLE DETECTOR PAVEMENT MARKING

PAVEMENT MARKING FOR BIKE LANES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

2-6-2012 DATE

/S/ Thomas N. N[illegible] STATE TRAFFIC ENGINEER

874

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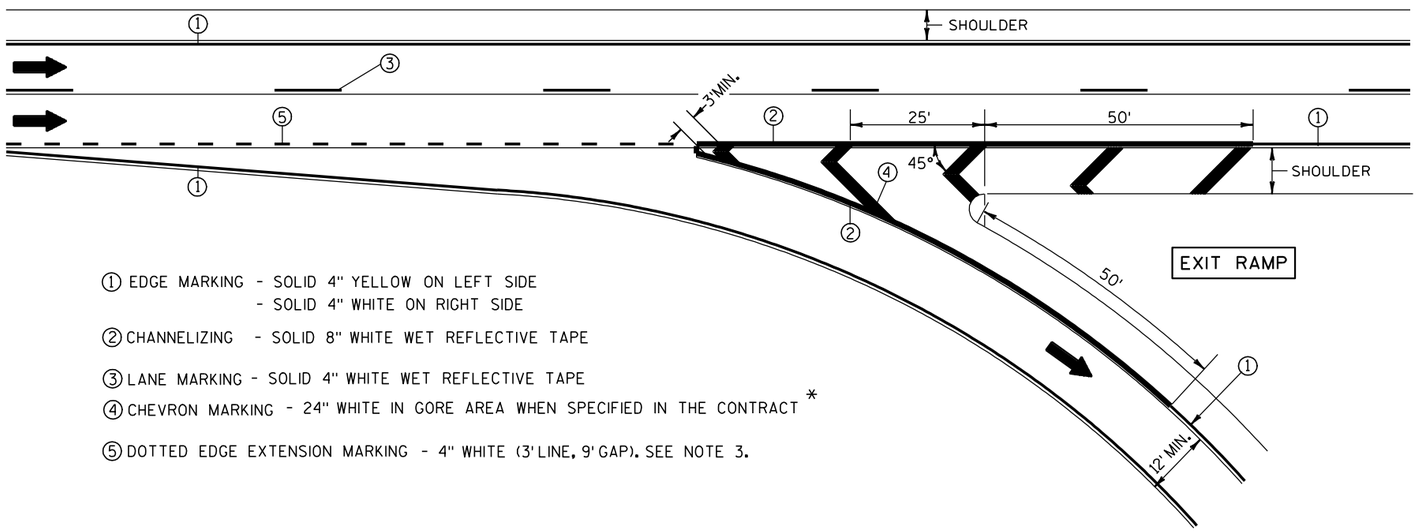
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S.D.D. 15 C 29-2e

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S.D.D. 15 C 29-2e



① EDGE MARKING - SOLID 4" YELLOW ON LEFT SIDE
- SOLID 4" WHITE ON RIGHT SIDE

② CHANNELIZING - SOLID 8" WHITE WET REFLECTIVE TAPE

③ LANE MARKING - SOLID 4" WHITE WET REFLECTIVE TAPE

④ CHEVRON MARKING - 24" WHITE IN GORE AREA WHEN SPECIFIED IN THE CONTRACT *

⑤ DOTTED EDGE EXTENSION MARKING - 4" WHITE (3' LINE, 9' GAP). SEE NOTE 3.

NOTES:

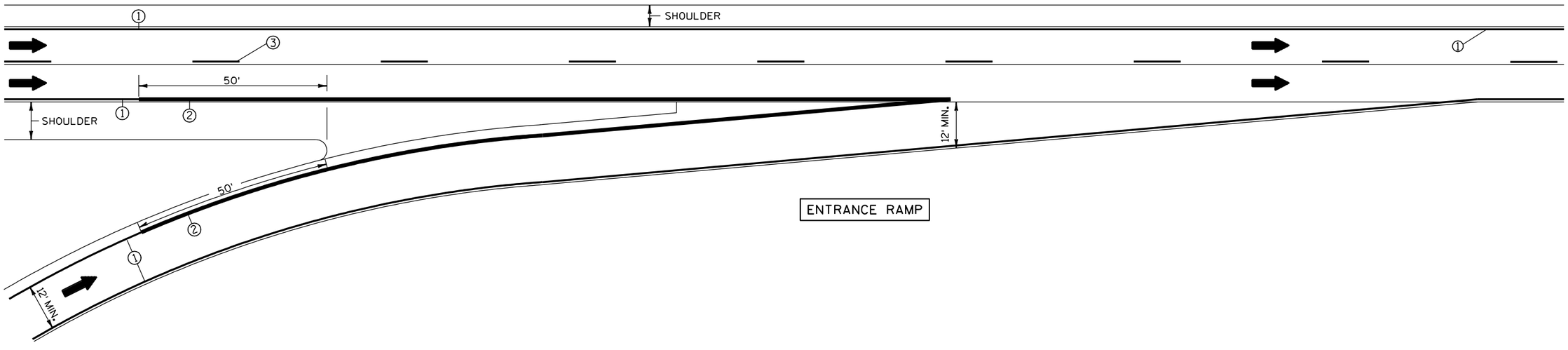
1. ARROWS SHOWN ON THIS MARKING PLAN DESIGNATE TRAFFIC FLOW, AND SHALL NOT BE TAKEN AS PROPOSED PAVEMENT MARKINGS.

2. PLACE WHITE EDGE OF TAPE 6" LEFT FROM JOINT.

3. 3' LINE 9' GAP, EXCEPT RETRACE THE EXISTING LINE-GAP PATTERN WHERE EXISTING MARKINGS ARE IN PLACE.

4. RETRACE EXISTING DIAGONAL MARKINGS.

* REFER TO DESIGN NOTES.



6

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S.D.D. 15 C 31-1a

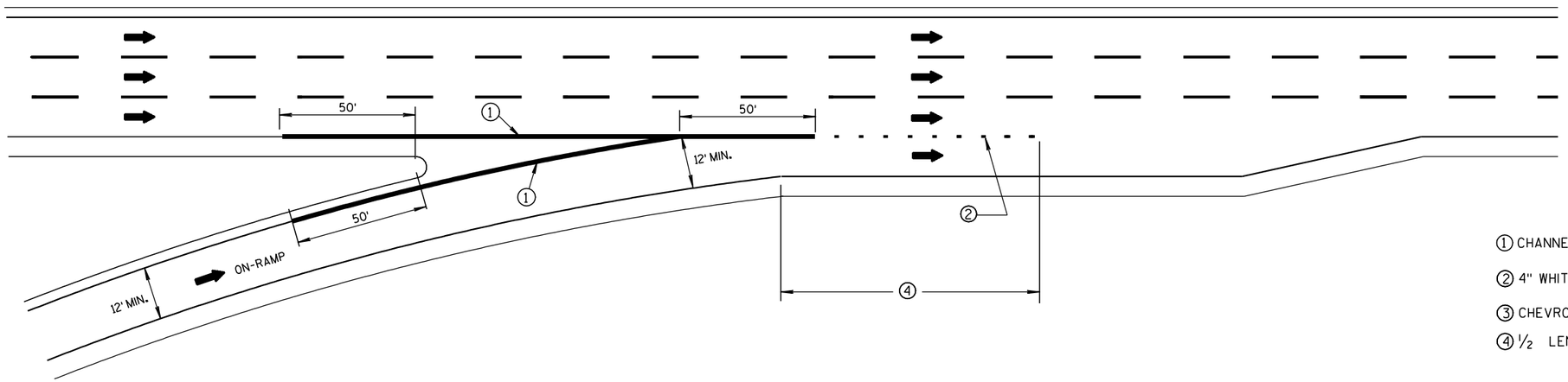
S.D.D. 15 C 31-1a

PAVEMENT MARKING
(RAMPS AND GORES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

NOTES:

1. AHEAD ARROWS SHOWN ON THIS MARKING PLAN DESIGNATE TRAFFIC FLOW, AND SHALL NOT BE TAKEN AS PROPOSED PAVEMENT MARKINGS.
2. PLACE WHITE EDGE OF TAPE 6" LEFT FROM JOINT.
3. RETRACE EXISTING DIAGONAL MARKINGS.



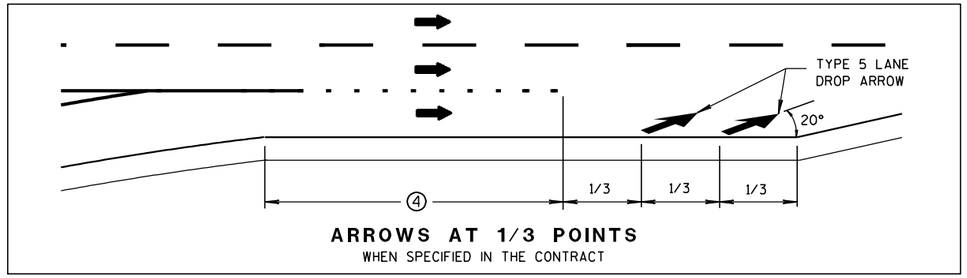
① CHANNELIZING - SOLID 8" WHITE WET REFLECTIVE TAPE IN GORE AREA.

② 4" WHITE (3' LINE, 9' GAP).

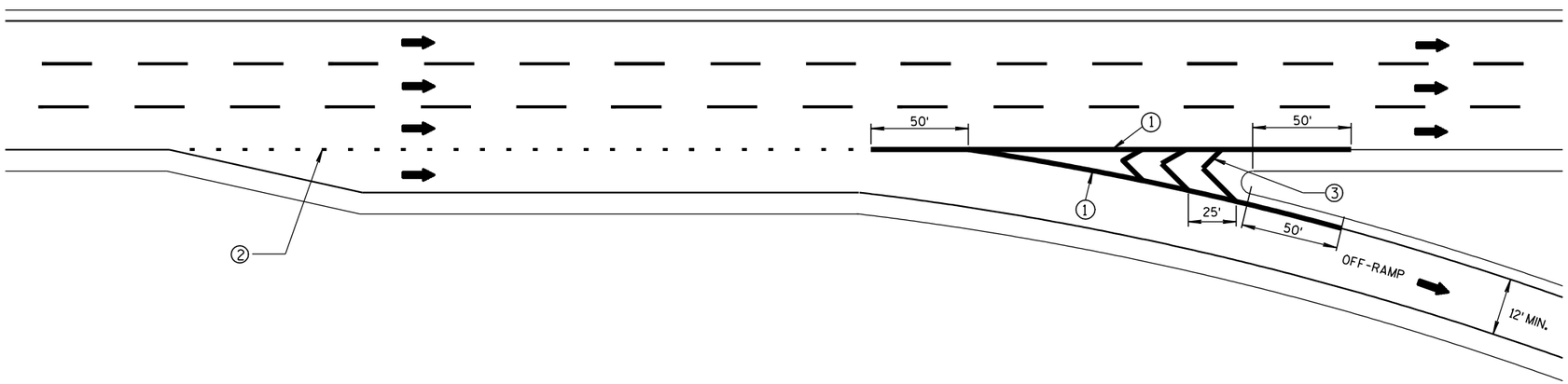
③ CHEVRON MARKING - 24" WHITE WHEN SPECIFIED IN THE CONTRACT.

④ ½ LENGTH OF FULL WIDTH ACCELERATION LANE.

SERVICE INTERCHANGE PAVEMENT MARKING FOR PARALLEL ENTRANCE-RAMP



ARROWS AT 1/3 POINTS
WHEN SPECIFIED IN THE CONTRACT



SERVICE INTERCHANGE PAVEMENT MARKING FOR PARALLEL EXIT-RAMP

PAVEMENT MARKING FOR PARALLEL ON-RAMP AND PARALLEL OFF-RAMP

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

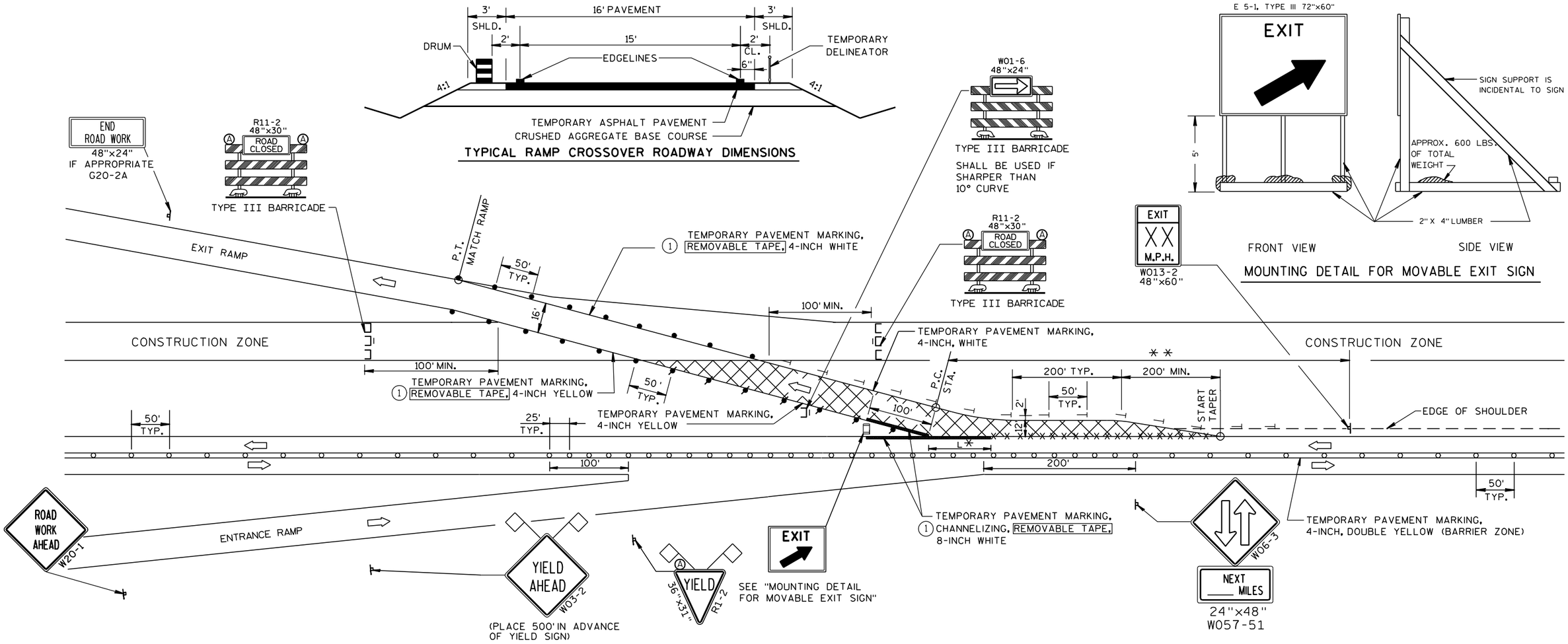
APPROVED
6/23/2011 DATE
/S/ Thomas N. Nothem
STATE TRAFFIC ENGINE 876 SIGN
FHWA

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S.D.D. 15 C 31-1d

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S.D.D. 15 C 31-1d



LEGEND

- 8' TYPE III BARRICADE WITHOUT/WITH ATTACHED SIGN
- POST WITH ATTACHED SIGN
- DRUM WITH WARNING LIGHT (TYPE C)
- DRUM
- TEMPORARY DELINEATOR - WHITE (STEEL POST W/SINGLE DELINEATOR)
- (A) WARNING LIGHT, TYPE A
- TEMPORARY CROSSOVER ASPHALTIC PAVEMENT
- REMOVING PAVEMENT MARKINGS
- FLEXIBLE TUBULAR MARKER POST AND BASE
- FLAGS, 12" X 12", RED
- DIRECTION OF TRAFFIC

GENERAL NOTES :

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET, (500 FEET DESIRABLE) DISTANCE TO EXISTING SIGNS.

(1) TEMPORARY PAVEMENT MARKING REMOVABLE TAPE SHALL BE USED WHEN CROSSING PERMANENT ROADWAY SURFACES THAT WILL REMAIN AFTER USE OF CROSSOVER. OTHERWISE TEMPORARY PAVEMENT MARKING MAY BE USED.

TRAFFIC CONTROL FOR RAMP CROSSOVERS ARE TYPICAL FOR ALL CONSTRUCTION PHASES.

* LENGTH L SHALL BE REQUIRED WHEN TANGENT LENGTH OF EXIT RAMP PARALLEL TO MAINLINE EXCEEDS 300'. LENGTH SHALL BE EQUAL TO THE EXIT RAMP TANGENT LENGTH MINUS 300' OR AS APPROVED BY THE ENGINEER AND SHALL CHANGE TO ACCOMODATE PAVING GAPS.

** ADJUST EXIT RAMP SPEED AS NEEDED IN THE FIELD. DISTANCE TO SIGN LOCATION SHALL ALSO BE PLACED ACCORDING TO TABLE.

WORK ALONG EDGES OF RAMP SHALL MAINTAIN A 10 FOOT AREA CLEAR OF PHYSICAL OBSTRUCTIONS SUCH AS DROP OFFS FROM PAVEMENT REMOVAL OR BROKEN CONCRETE CHUNKS DURING PAVEMENT REMOVAL. THESE AREAS SHALL BE LEVELED WITH TEMPORARY FILL TO PROTECT THE TRAVELING PUBLIC WHEN THE CONTRACTOR IS NOT WORKING ADJACENT TO THE CROSSOVER.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

"WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON "COVERED" OR "DOWNED" SIGNS.

** TABLE FOR ADVANCE WARNING SIGN PLACEMENT DISTANCE

POSTED SPEED MPH	DESIRED SPEED AT CONDITION (MPH)				
	10	20	30	40	50
45	350	300	250		
50	425	400	325	225	
55	500	475	400	300	
60	575	550	500	400	300
65	650	625	575	500	375

TRAFFIC CONTROL, TEMPORARY EXIT RAMP CROSSOVER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
12-4-95 DATE
/S/ Chester J. [illegible]
DIRECTOR, OFFICE OF 877

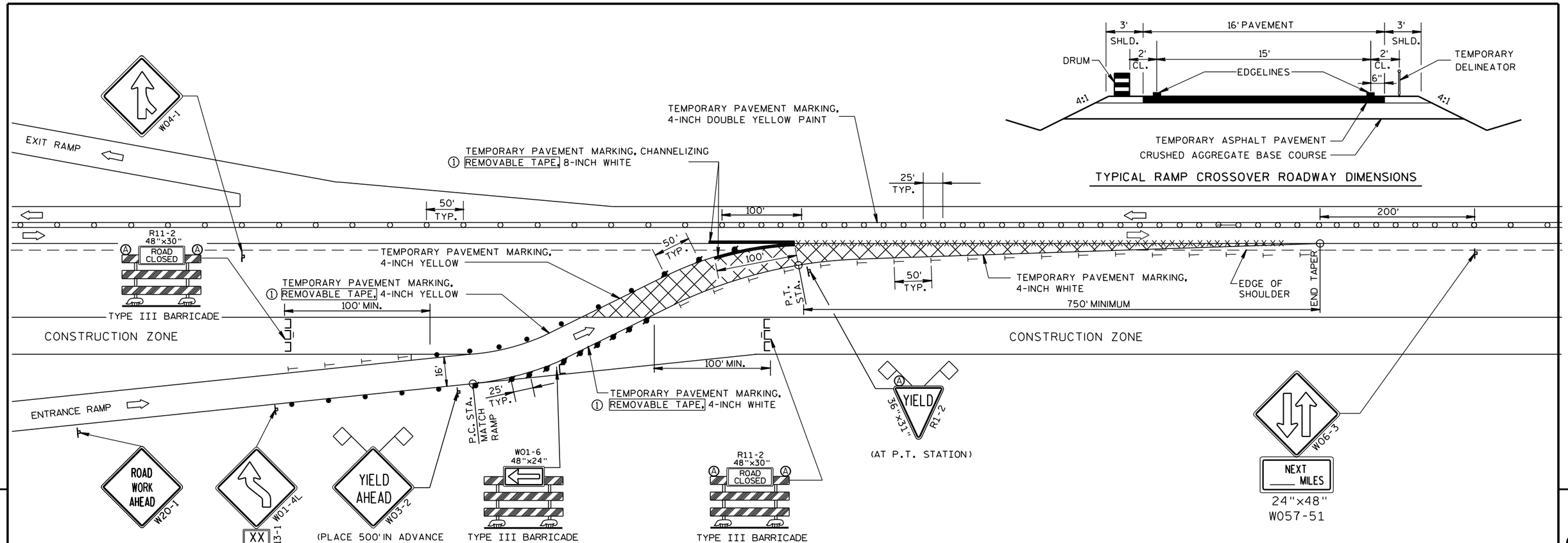
FHWA

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S.D.D. 15 D 7-3

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S.D.D. 15 D 7-3



TYPICAL RAMP CROSSOVER ROADWAY DIMENSIONS

LEGEND

- ⊏/I⊏ 8' TYPE III BARRICADE WITHOUT/WITH ATTACHED SIGN
- POST WITH ATTACHED SIGN
- DRUM WITH WARNING LIGHT (TYPE C)
- DRUM
- TEMPORARY DELINEATOR (STEEL POST W/SINGLE DELINEATOR) COLOR OF DELINEATOR SHALL MATCH THE COLOR OF THE RESPECTIVE EDGELINE MARKING
- Ⓐ WARNING LIGHT, TYPE A (SAME COLOR AS SIGN IT SUPPLEMENTS)
- TEMPORARY CROSSOVER ASPHALTIC PAVEMENT
- ~~XXXX~~ REMOVING PAVEMENT MARKINGS
- FLEXIBLE TUBULAR MARKER POST AND BASE
- FLAGS, 12" X 12", RED
- DIRECTION OF TRAFFIC

GENERAL NOTES :

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET, (500 FEET DESIRABLE) DISTANCE TO EXISTING SIGNS.

① TEMPORARY PAVEMENT MARKING REMOVABLE, TAPE SHALL BE USED WHEN CROSSING PERMANENT ROADWAY SURFACES THAT WILL REMAIN AFTER USE OF CROSSOVER.

TRAFFIC CONTROL FOR RAMP CROSSOVERS ARE TYPICAL FOR ALL CONSTRUCTION PHASES.

WORK ALONG EDGES OF RAMP SHALL MAINTAIN A 10 FOOT AREA CLEAR OF PHYSICAL OBSTRUCTIONS SUCH AS DROP OFFS FROM PAVEMENT REMOVAL OR BROKEN CONCRETE CHUNKS DURING PAVEMENT REMOVAL. THESE AREAS SHALL BE LEVELED WITH TEMPORARY FILL TO PROTECT THE TRAVELING PUBLIC WHEN THE CONTRACTOR IS NOT WORKING ADJACENT TO THE CROSSOVER.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

"WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON "COVERED" OR "DOWNED" SIGNS.

TRAFFIC CONTROL, TEMPORARY ENTRANCE RAMP CROSSOVER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

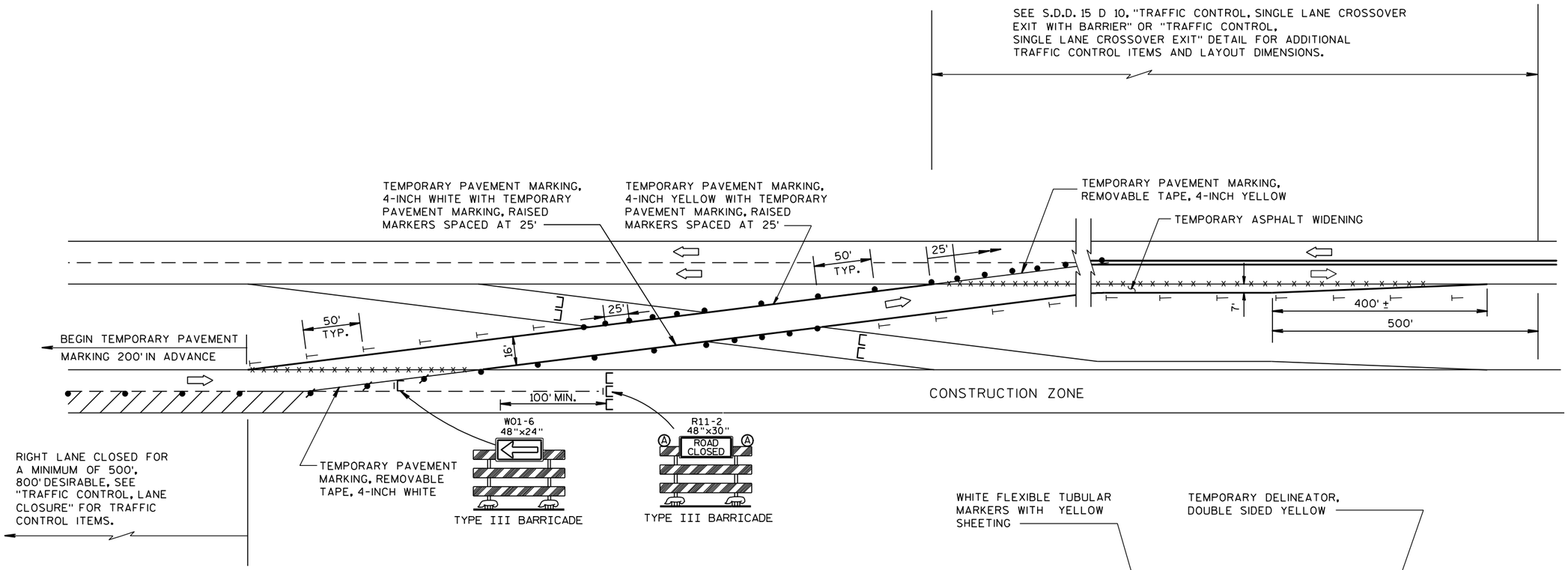
APPROVED

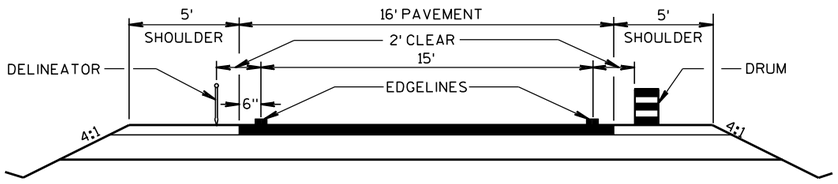
12-4-95 DATE

/S/ Chester J. [illegible] DIRECTOR, OFFICE OF [illegible]

FHWA

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S.D.D. 15 D 8-3





TYPICAL CROSSOVER ROADWAY DIMENSIONS

LEGEND

- 8' TYPE III BARRICADE WITHOUT/WITH ATTACHED SIGN
- DRUM WITH WARNING LIGHTS, TYPE C
- DRUM
- TEMPORARY DELINEATOR (STEEL POST W/SINGLE DELINEATOR) COLOR OF DELINEATOR SHALL MATCH THE COLOR OF THE RESPECTIVE EDGELINE PAINT
- (A) WARNING LIGHT, TYPE A
- REMOVING PAVEMENT MARKINGS
- TEMPORARY DELINEATOR (DOUBLE SIDED)
- FLEXIBLE TUBULAR MARKER AND BASE
- DIRECTION OF TRAFFIC

GENERAL NOTES :

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN PROPOSED SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) DISTANCE TO EXISTING SIGNS.

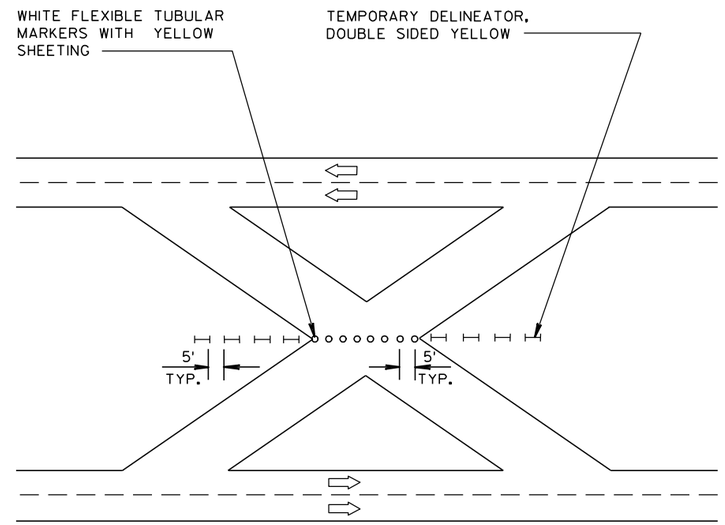
TEMPORARY PAVEMENT MARKING REMOVABLE TAPE SHALL BE USED WHEN CROSSING PERMANENT ROADWAY SURFACES THAT WILL REMAIN AFTER USE OF CROSSOVER AND TEMPORARY PAVEMENT MARKING WHERE USED.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

"WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON "COVERED" OR "DOWNED" SIGNS.

REVERSE DEVICES WHEN OTHER LEG OF CROSSOVER IS IN USE.



PROTECTION OF CROSSOVER NOT IN USE WHEN CONSTRUCTION IS NOT TAKING PLACE

TRAFFIC CONTROL, SINGLE LANE CROSSOVER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10-22-96 DATE
/S/ Chester J. [illegible]
STATE TRAFFIC E 879
FHWA

6

S.D.D. 15 D 11-3

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S.D.D. 15 D 11-3

LEGEND

- POST WITH ATTACHED SIGN
- POST WITH ATTACHED SIGN IN DRUM
- DRUM WITH WARNING LIGHT (TYPE C)
- DRUM
- ARROW BOARD
- 8' TYPE III BARRICADE
- REMOVING PAVEMENT MARKING
- DIRECTION OF TRAFFIC

GENERAL NOTES :

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET, (500 FEET DESIREABLE) DISTANCE TO EXISTING SIGNS.

THIS LANE CLOSURE IS TYPICAL FOR CLOSING RIGHT LANE - REVERSE FOR CLOSING LEFT LANE.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

"WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON "COVERED" OR "DOWNED" SIGNS.

(1) CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUMS.

FOR A LANE CLOSURE THAT IS IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.

GENERAL NOTES CONTINUED:

REMOVE PAVEMENT MARKINGS IF LANE CLOSURE IS TO BE IN PLACE FOR LONGER THAN 7 CONTINUOUS DAYS AND NIGHTS.

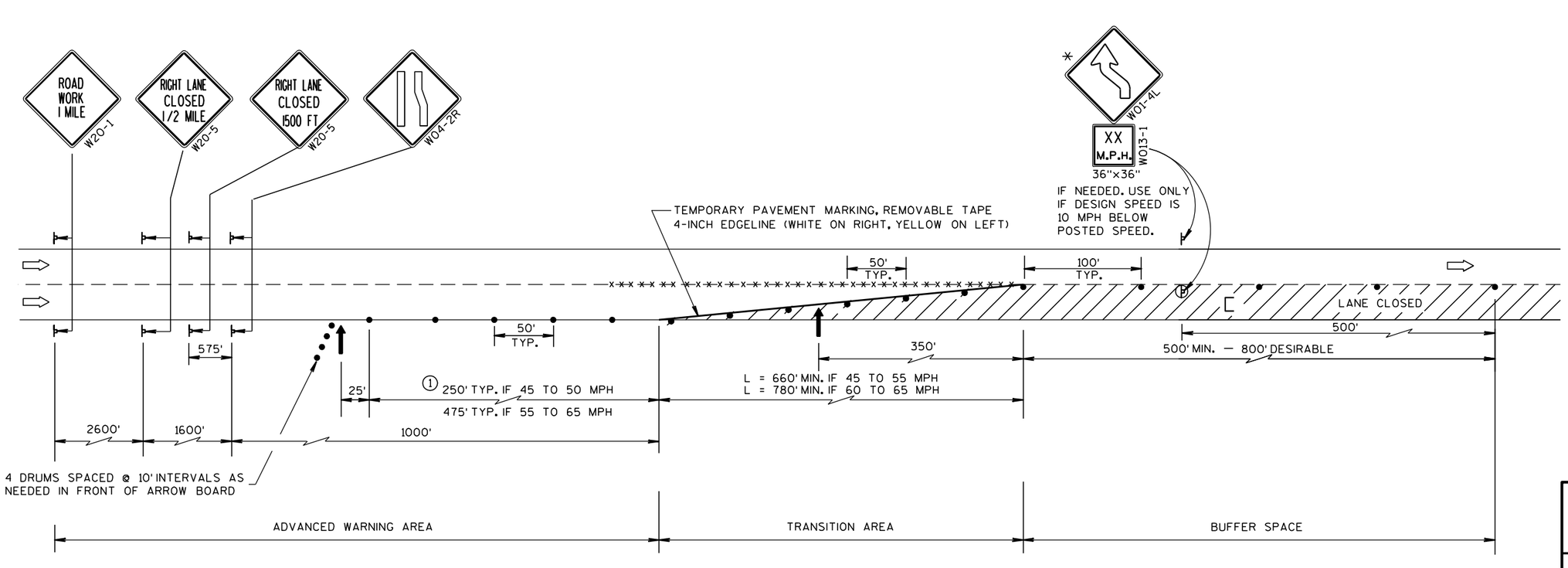
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

IF LANE CLOSURE IS MORE THAN 1 MILE, PLACE A TYPE III BARRICADE APPROXIMATELY EVERY 1/4 MILE ACROSS THE CLOSED LANE TO HELP ENFORCE THE DRUM LINE.

ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE CLOSURE OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP. THE LANE CLOSURE MUST MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE 1/2 THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.

* THE LEFT REVERSE CURVE SIGN (WO1-4L) IS ONLY REQUIRED WHEN THIS DETAIL IS USED IN COMBINATION WITH "SINGLE LANE CROSSOVER" DETAIL.



TRAFFIC CONTROL, LANE CLOSURE, SPEEDS GREATER THAN 40 M.P.H.

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

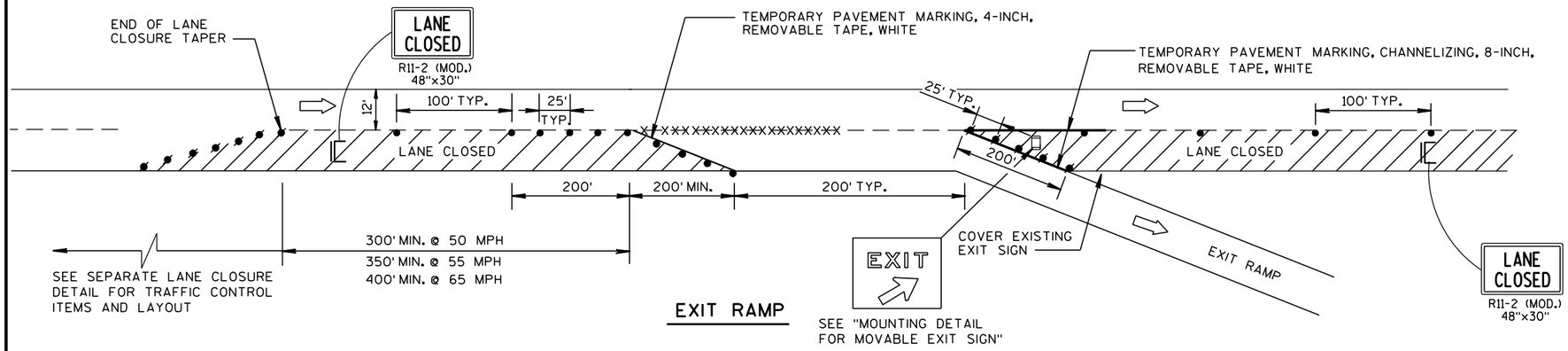
APPROVED
8-7-95 DATE
/S/ Chester J. [illegible]
DIRECTOR, OFFICE O 880 C
FHWA

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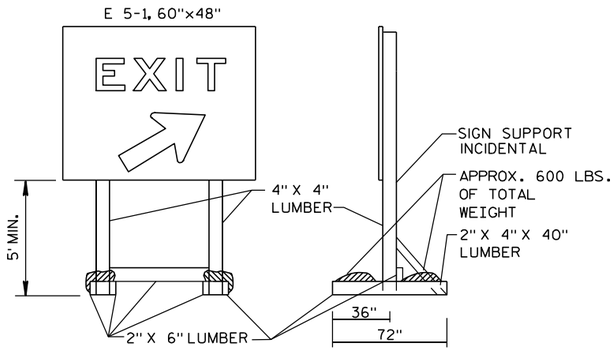
S.D.D. 15 D 12-2

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S.D.D. 15 D 12-2

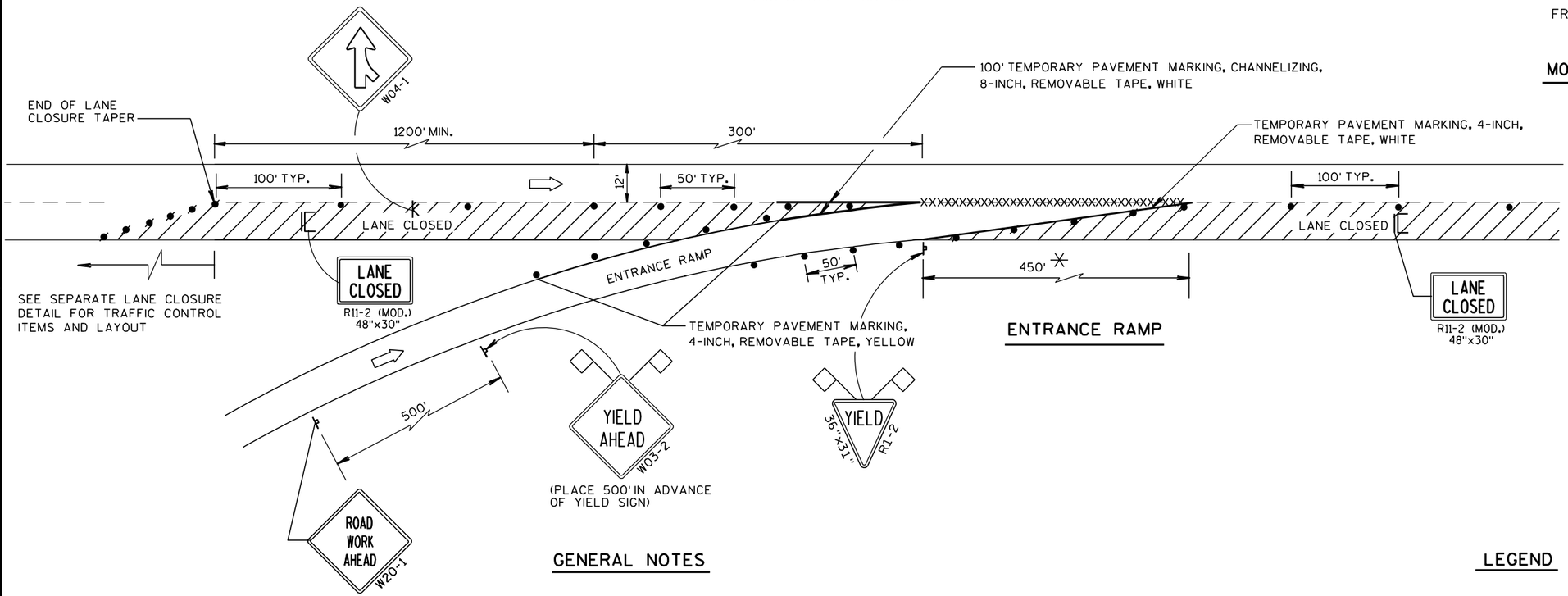


EXIT RAMP



NOTE: ALL LUMBER DIMENSIONS ARE NOMINAL

MOUNTING DETAIL FOR MOVABLE EXIT SIGN



ENTRANCE RAMP

GENERAL NOTES

THE INSTALLATIONS SHOWN ON THIS SHEET ARE TYPICAL EXAMPLES AND ARE NOT INTENDED TO REPRESENT ANY PARTICULAR RAMP. AT SPECIFIC FIELD LOCATIONS, SIMILAR INSTALLATIONS SHALL BE USED AND ADJUSTED TO THE GEOMETRICS OF THE RAMP AS COORDINATED WITH THE ENGINEER.

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET, (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

"WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

SEE SEPARATE LANE CLOSURE DETAIL FOR TYPICAL SPACING OF TYPE III BARRICADES AND R11-2 (MOD.) "LANE CLOSED" SIGNS.

YIELD SIGN AND WARNING SIGNS ON ENTRANCE RAMP ARE ALSO APPROPRIATE FOR CLOSURE OF THE MAINLINE LEFT LANE. OMIT THE YIELD SIGN IF MORE THAN ONE LANE REMAINS OPEN ON THE MAINLINE AND THE RAMP TAPER IS AT LEAST AS LONG AS THE NORMAL ENTRANCE RAMP TAPER AT THE SITE.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS.

IF INDICATED IN MISCELLANEOUS QUANTITIES, SUBSTITUTE FLEXIBLE TUBULAR MARKERS FOR DRUMS IN THE GORE BETWEEN THE ENTRANCE RAMP AND MAINLINE TRAFFIC.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR 7 OR MORE CONTINUOUS DAYS AND NIGHTS.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

✳ LENGTH OF OPENING MAY BE REDUCED TO 150 FEET DURING STAGING OF WORK IN IMMEDIATE AREA OF RAMP TAPER.

LEGEND

- POST MOUNTED SIGN
- SIGN ON PORTABLE SUPPORT
- TRAFFIC CONTROL, DRUM
- TRAFFIC CONTROL, DRUM WITH WARNING LIGHT, TYPE C (STEADY-BURN)
- REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)
- TYPE III BARRICADE (8' EQUIVALENT) WITH SIGN
- FLAGS, 16"x16" MIN., ORANGE
- DIRECTION OF TRAFFIC FLOW

TRAFFIC CONTROL, EXIT AND ENTRANCE RAMP WITHIN LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
5/24/2000
DATE
/S/ Chester J. [illegible]
CHIEF SIGNS AND MARKINGS ENGINEER
FHWA

6
S.D.D. 15 D 15-1

SYMBOLS

IC/C	TYPE III BARRICADE (8' EQUIVALENT) WITH/WITHOUT SIGN
•	DRUM
⊢	POST MOUNTED SIGN
(A)	WARNING LIGHT, TYPE A (FLASHING)
⇨	DIRECTION OF TRAFFIC

GENERAL NOTES

THIS RAMP CLOSURE DETAIL IS TYPICAL FOR CLOSING A RIGHT SIDE EXIT RAMP. FOR A LEFT SIDE EXIT RAMP, REVERSE THE TRAFFIC CONTROL.

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

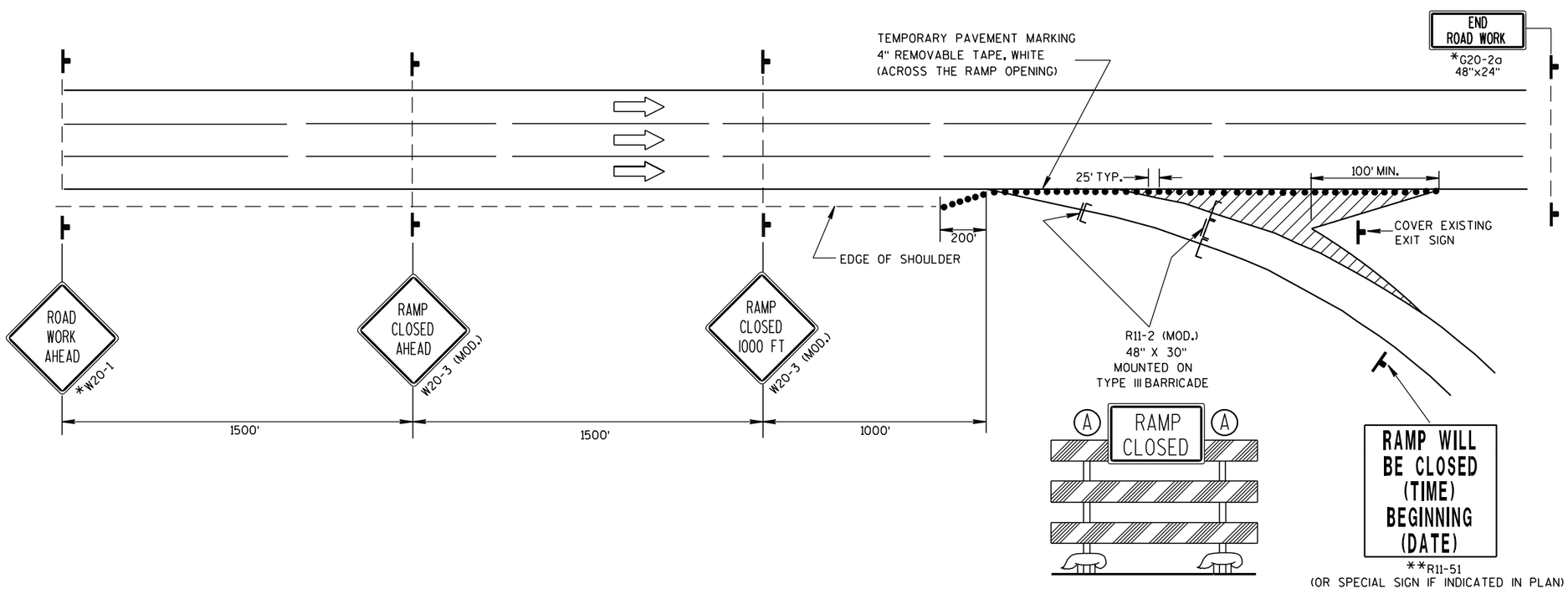
PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF RAMP CLOSURE IS TO BE IN PLACE FOR 7 OR MORE CONTINUOUS DAYS AND NIGHTS.

WORK AREAS WITH A DROPOFF ALONG THE EDGE OF AN OPEN TRAVEL LANE SHALL BE LEVELED WITH TEMPORARY FILL WHEN THE CONTRACTOR IS NOT WORKING ADJACENT TO THE TRAVEL LANE. DRUMS SHALL BE PLACED ENTIRELY OUTSIDE THE TRAVEL LANE, ALLOWING THE FULL UNOBSTRUCTED LANE WIDTH, WHEN THE WORK IS NOT IN PROGRESS.

WHERE MEDIAN BARRIER IS IN PLACE, SIGNS SHOWN ON LEFT SIDE OF ROADWAY MAY BE OMITTED FOR RIGHT SIDE RAMP CLOSURES OF LESS THAN 12-HOUR DURATION.

*W20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE RAMP CLOSURE IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT.

**USE THE "RAMP WILL BE CLOSED" SIGN IF INDICATED IN MISCELLANEOUS QUANTITIES. PLACE 10 CALENDAR DAYS PRIOR TO CLOSURE OR AS DIRECTED BY THE ENGINEER. SEE WISCONSIN STANDARD SIGN PLATES FOR SIGN LAYOUT.



TRAFFIC CONTROL,
EXIT RAMP CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

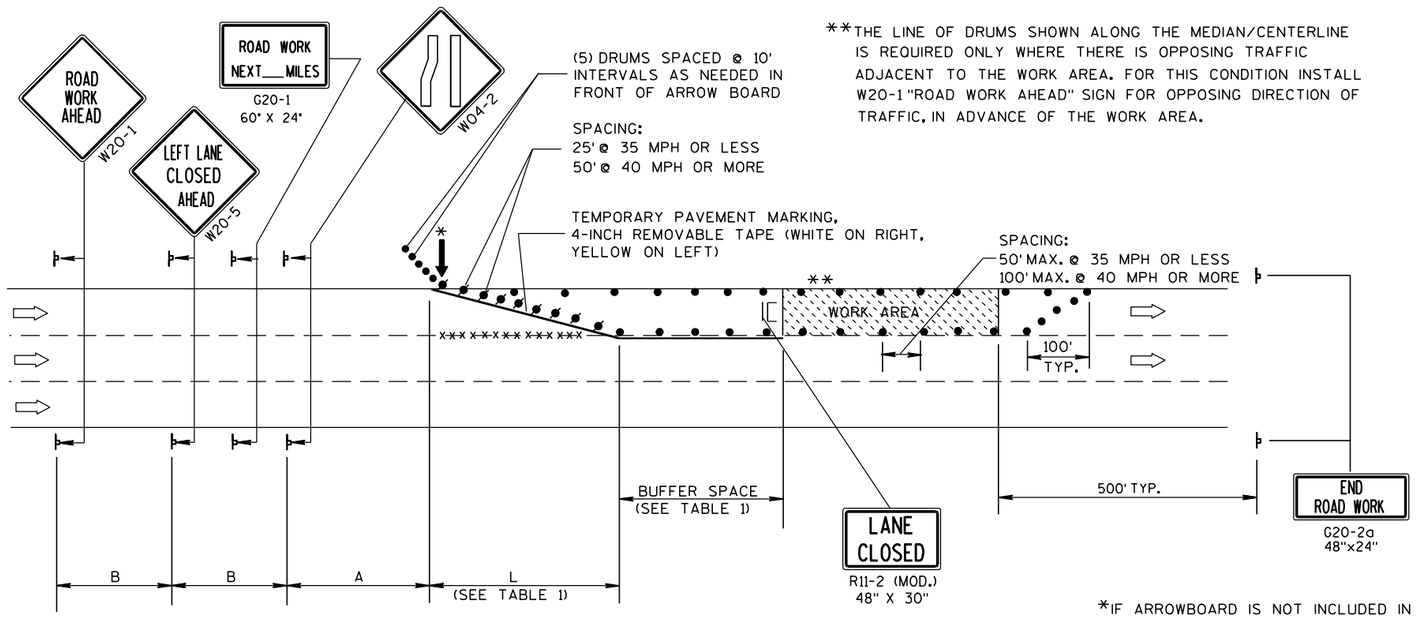
5/23/2000
DATE

/S/ Chester J. [illegible]
CHIEF SIGNS AND MARKINGS ENGINEER

FHWA

6

S.D.D. 15 D 16-1



**THE LINE OF DRUMS SHOWN ALONG THE MEDIAN/CENTERLINE IS REQUIRED ONLY WHERE THERE IS OPPOSING TRAFFIC ADJACENT TO THE WORK AREA. FOR THIS CONDITION INSTALL W20-1 "ROAD WORK AHEAD" SIGN FOR OPPOSING DIRECTION OF TRAFFIC, IN ADVANCE OF THE WORK AREA.

B=400' AT 25-30 MPH
700' AT 35-40 MPH
1000' AT 45-55 MPH

A=200' AT 25-30 MPH
350' AT 35-40 MPH
500' AT 45-55 MPH

(PLACE BARRICADE AND SIGN APPROX. EVERY 1000' ACROSS THE CLOSED LANE)

*IF ARROWBOARD IS NOT INCLUDED IN MISCELLANEOUS QUANTITIES, SUBSTITUTE A TYPE III BARRICADE WITH W01-6 SIGN IN THE LANE CLOSURE TAPER.

W01-6
48"x24"

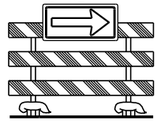


TABLE 1
TAPER AND BUFFER SPACE FOR 12' LANE WIDTH

S	L	BUFFER SPACE
25	125'	55'
30	180'	85'
35	245'	120'
40	320'	170'
45	540'	220'
50	600'	280'
55	660'	335'

FOR LANE WIDTH OTHER THAN 12':

L = WS AT 45 MPH OR GREATER

$L = \frac{WS^2}{60}$ AT 40 MPH OR LESS

L = TAPER LENGTH IN FEET

S = NON-CONSTRUCTION SPEED LIMIT (MPH)

W = WIDTH OF LANE CLOSURE

LEGEND

- DRUM WITH/WITHOUT WARNING LIGHT, TYPE C (STEADY-BURN)
- POST MOUNTED SIGN
- ARROW BOARD
- TYPE III BARRICADE (8' EQUIVALENT) AND WARNING LIGHTS, TYPE A (FLASHING) WITH/WITHOUT SIGN
- DIRECTION OF TRAFFIC FLOW
- xxxx REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)

GENERAL NOTES

THIS LANE CLOSURE DETAIL IS TYPICAL FOR CLOSING THE LEFT LANE. FOR A RIGHT LANE CLOSURE, REVERSE THE TRAFFIC CONTROL.

THIS DETAIL MAY BE USED FOR ROADWAYS WITH EITHER TWO OR THREE LANES IN EACH DIRECTION.

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" SIGNS MAY BE USED IF APPROVED BY DISTRICT TRAFFIC UNIT.

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR 7 OR MORE CONTINUOUS DAYS AND NIGHTS.

ON UNDIVIDED ROADWAYS, OMIT THE SIGNS SHOWN ON LEFT SIDE OF ROAD.

W20-1, G20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE LANE CLOSURE IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT.

OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROWBOARDS SO THE APPROACHING DRIVER HAS A CLEAR VIEW OF THE ARROWBOARDS AND LANE CLOSURE DRUMS.

PLACE THE ARROWBOARD AS CLOSE AS POSSIBLE TO THE BEGINNING OF THE LANE CLOSURE TAPER, PREFERABLY ON THE SHOULDER OR TERRACE.

CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION OR, FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

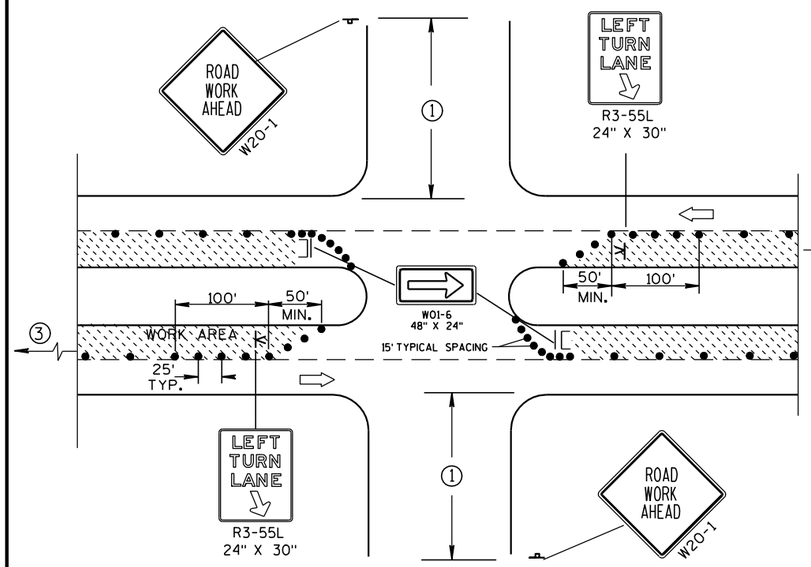
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
5/23/00 DATE
/S/ Chester J. [illegible] 883
CHIEF SIGNS AND MARKINGS ENGINEER
FHWA

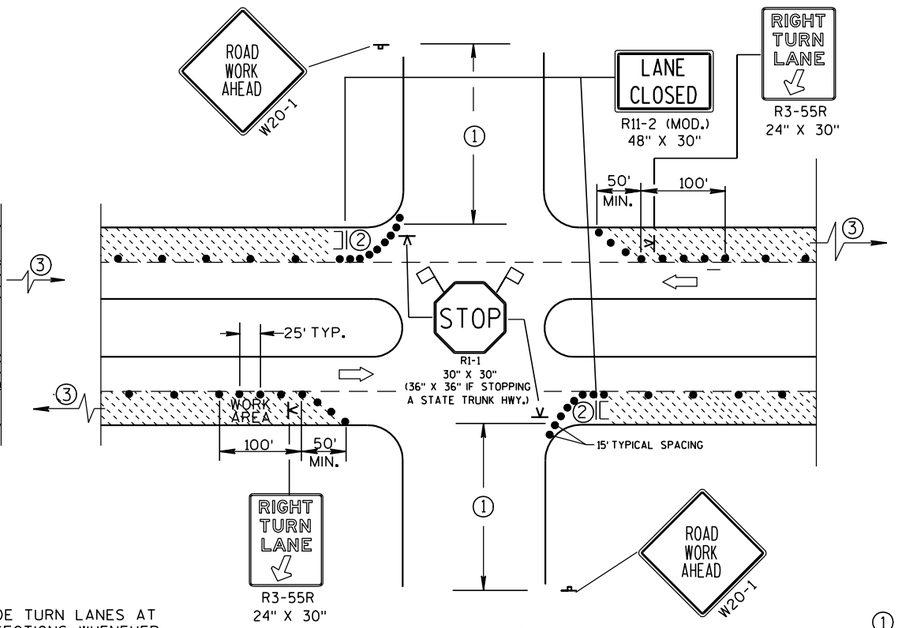
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DETAIL A

FOR LEFT LANE CLOSURE AT INTERSECTION OR MEDIAN OPENING

PROVIDE TURN LANES AT INTERSECTIONS WHENEVER STAGING OF WORK ALLOWS. TAPER AND TURN LANE LENGTHS BASED ON FIELD CONDITIONS AS APPROVED BY THE ENGINEER.



DETAIL B

FOR RIGHT LANE CLOSURE AT INTERSECTION

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48"×48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" SIGNS MAY BE USED IF APPROVED BY DISTRICT TRAFFIC UNIT.

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

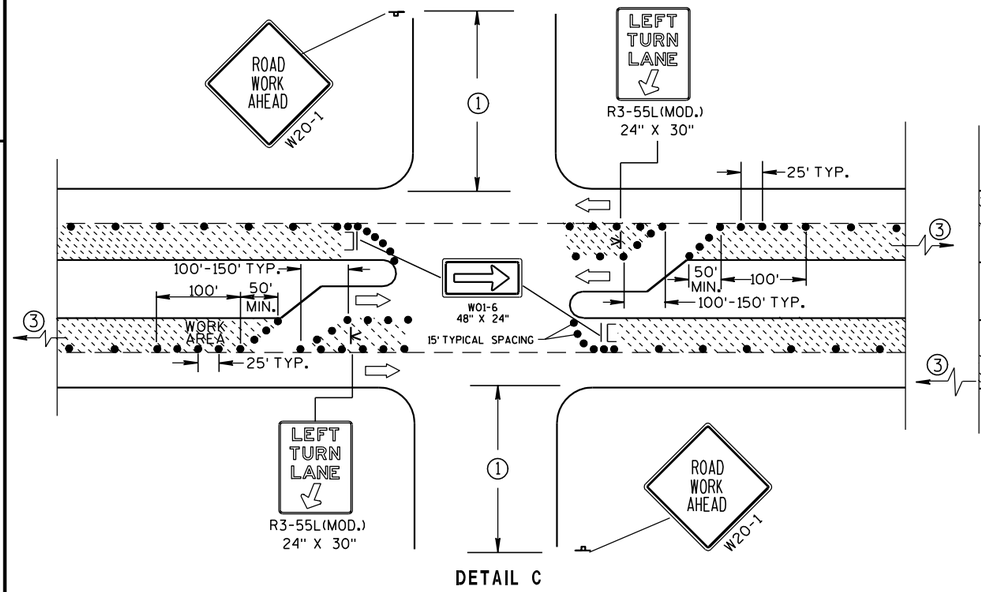
CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION OR, FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

① 500' TYPICAL OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.
350' IF 35-40 MPH.
200' IF 25-30 MPH.

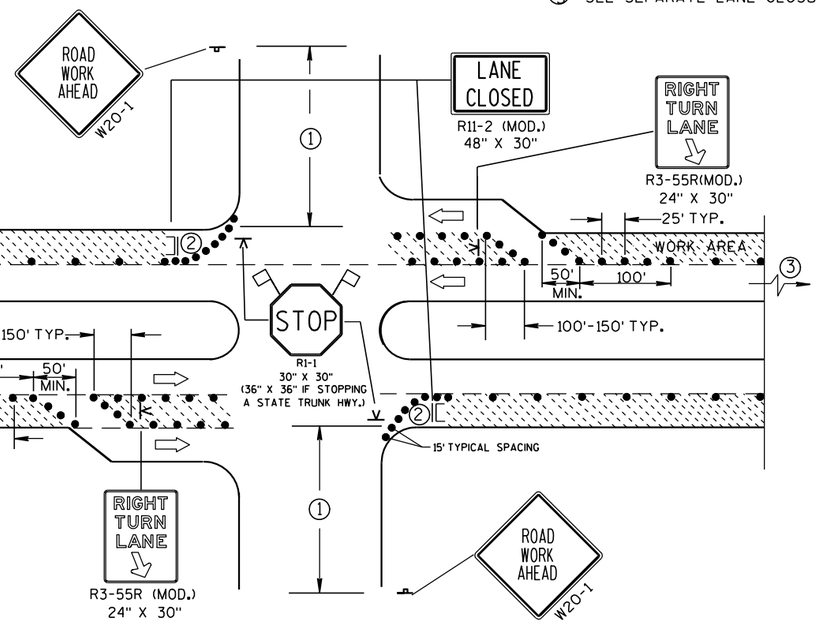
② ALSO USE BARRICADE AND 15' TYPICAL DRUM SPACING AT COMMERCIAL DRIVEWAYS.

③ SEE SEPARATE LANE CLOSURE DETAIL FOR ADDITIONAL TRAFFIC CONTROL.



DETAIL C

FOR LEFT LANE CLOSURE AT INTERSECTION OR MEDIAN OPENING (WITH LEFT TURN BAY OPEN)



DETAIL D

FOR RIGHT LANE CLOSURE AT INTERSECTION (WITH RIGHT TURN BAY OPEN)

LEGEND

- DRUM
- POST MOUNTED SIGN
- SIGN ON PORTABLE SUPPORT (5' MIN. MOUNTING HEIGHT)
- TYPE III BARRICADE (8' EQUIVALENT) AND WARNING LIGHT, TYPE A (FLASHING) WITH SIGN
- DIRECTION OF TRAFFIC FLOW
- FLAGS, 16" X 16" MIN., ORANGE

TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
5/23/00 — DATE
/S/ Chester J. Spang — CHIEF SIGNS AND MARKINGS ENGINEER
FHWA

SYMBOLS

- TRAFFIC CONTROL DRUM
- POST MOUNTED SIGN
- DIRECTION OF TRAFFIC FLOW
- ARROW BOARD IN CAUTION MODE

GENERAL NOTES

THIS DETAIL IS TYPICAL FOR CLOSING THE RIGHT SHOULDER. FOR CLOSING THE LEFT SHOULDER, REVERSE THE TRAFFIC CONTROL.

THIS DETAIL MAY BE USED FOR DIVIDED ROADWAYS WITH ANY NUMBER OF TRAVEL LANES.

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

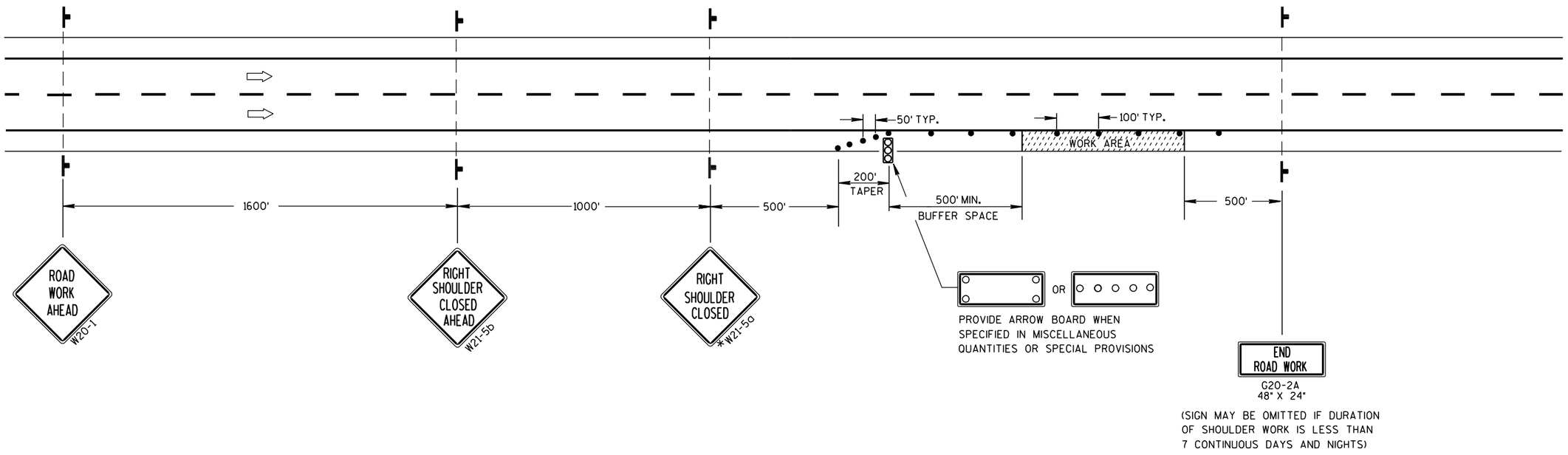
SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

CHANNELIZING DEVICES PLACED ADJACENT TO THE WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

WHEN A RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.

*FOR SHORT DURATION SHOULDER WORK OF LESS THAN ONE HOUR, THE W21-5a SIGN MAY BE OMITTED.



TRAFFIC CONTROL SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

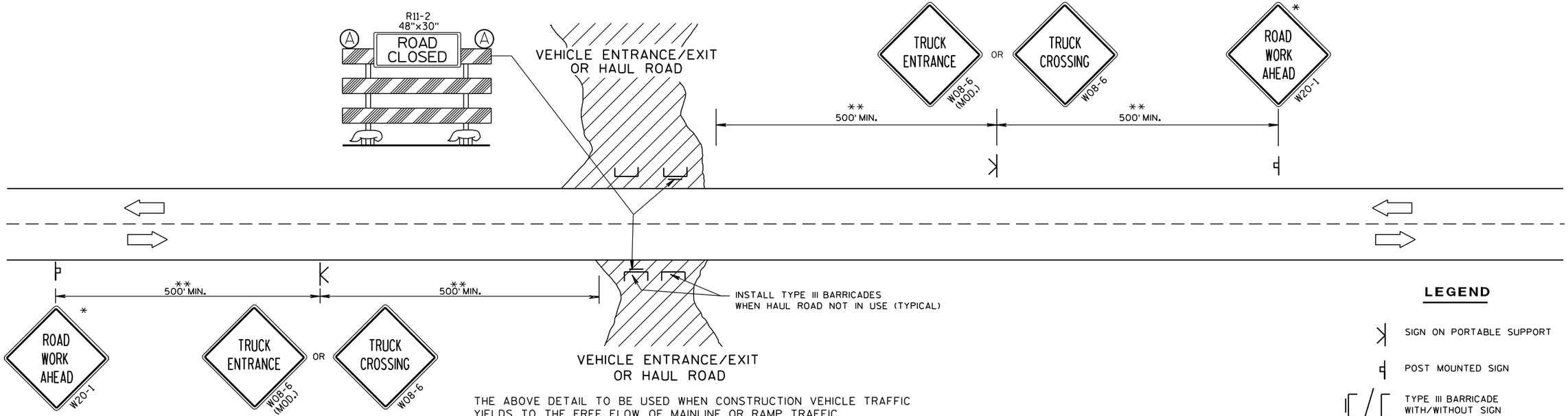
5/23/00
DATE

/S/ Chester J Spano
CHIEF SIGNS AND MARKINGS ENGINEER

FHWA

885

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S.D.D. 15 D 27-1



THE ABOVE DETAIL TO BE USED WHEN CONSTRUCTION VEHICLE TRAFFIC YIELDS TO THE FREE FLOW OF MAINLINE OR RAMP TRAFFIC

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS, DEVICES AND FLAGGERS SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

WHEN ACTIVITY REFLECTED BY THE SIGN IS NOT CURRENTLY TAKING PLACE, THE HIGHWAY SHALL BE RESTORED TO NORMAL CONDITION AND THE SIGNS SHALL BE REMOVED, COVERED OR TURNED AWAY FROM TRAFFIC.

WHEN A SIDE ROAD OR RAMP INTERSECTS WITHIN THE ADVANCE SIGNING AREA, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.

* THESE SIGNS ARE TO BE USED ONLY WHEN VEHICLE **ENTRANCE/EXIT CONDITIONS ARE SEPARATED BY MORE THAN 2 MILES** FROM PREVIOUS WORK AREA OR SIGNING OR AS DIRECTED BY THE ENGINEER.

** 500' SHOWN IS FOR ROADWAYS WITH A NON-CONSTRUCTION REGULATORY SPEED LIMIT OF 45 MPH OR MORE. FOR 35-40 MPH, USE 350'. FOR 25-30 MPH, USE 200'. USE 1000'/1500' FOR EXPRESSWAY/FREEWAY.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

"WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

PLACE SIGNS ON BOTH SIDES IF USED ON DIVIDED HIGHWAY.

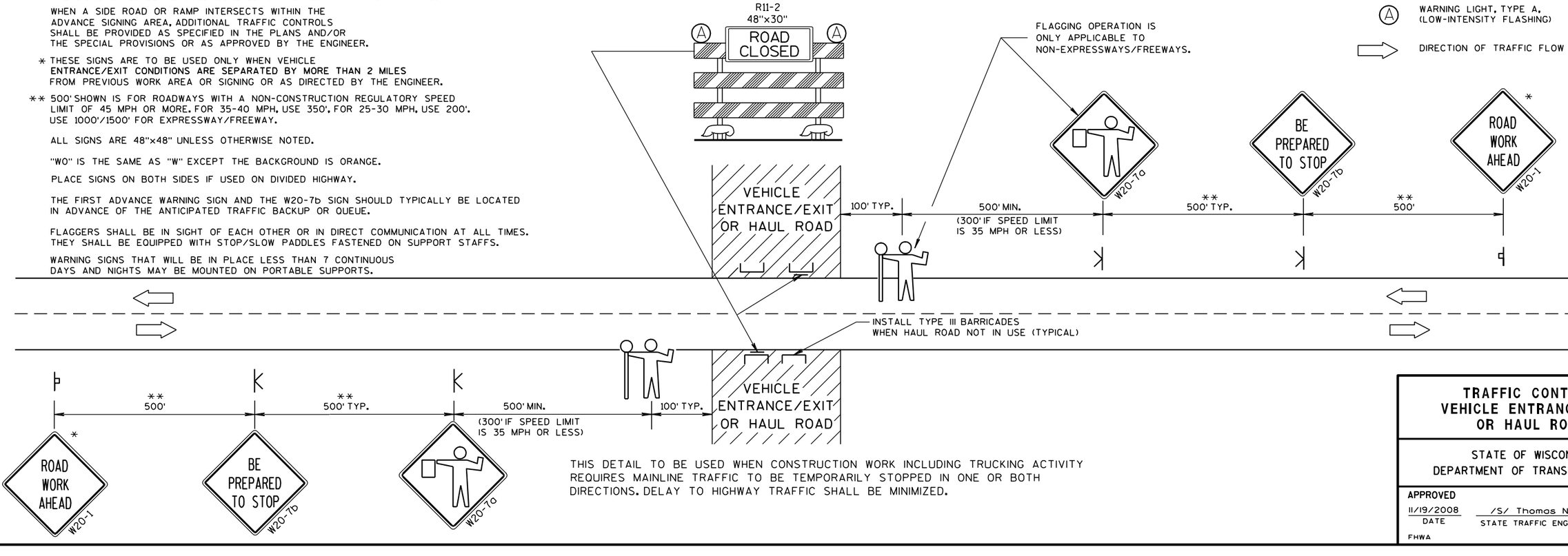
THE FIRST ADVANCE WARNING SIGN AND THE W20-7b SIGN SHOULD TYPICALLY BE LOCATED IN ADVANCE OF THE ANTICIPATED TRAFFIC BACKUP OR QUEUE.

FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS.

WARNING SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

LEGEND

- SIGN ON PORTABLE SUPPORT
- POST MOUNTED SIGN
- TYPE III BARRICADE WITH/WITHOUT SIGN
- FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF
- (A) WARNING LIGHT, TYPE A, (LOW-INTENSITY FLASHING)
- DIRECTION OF TRAFFIC FLOW



THIS DETAIL TO BE USED WHEN CONSTRUCTION WORK INCLUDING TRUCKING ACTIVITY REQUIRES MAINLINE TRAFFIC TO BE TEMPORARILY STOPPED IN ONE OR BOTH DIRECTIONS. DELAY TO HIGHWAY TRAFFIC SHALL BE MINIMIZED.

TRAFFIC CONTROL, VEHICLE ENTRANCE/EXIT OR HAUL ROAD

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

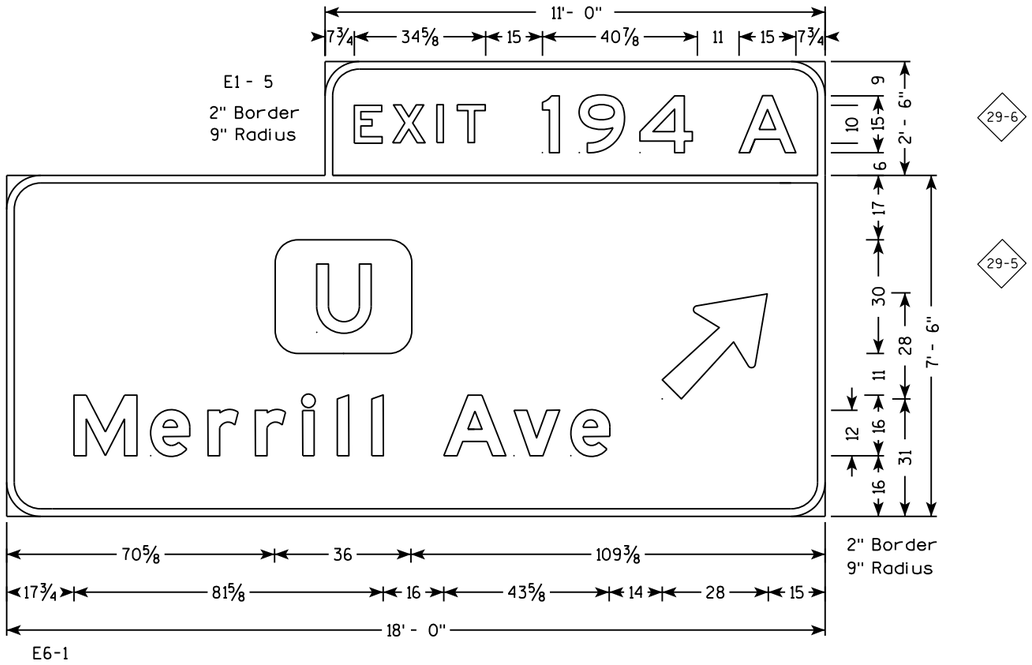
APPROVED
11/19/2008 DATE
/S/ Thomas N. N[illegible] STATE TRAFFIC ENGINEER
886 SIGN
FHWA

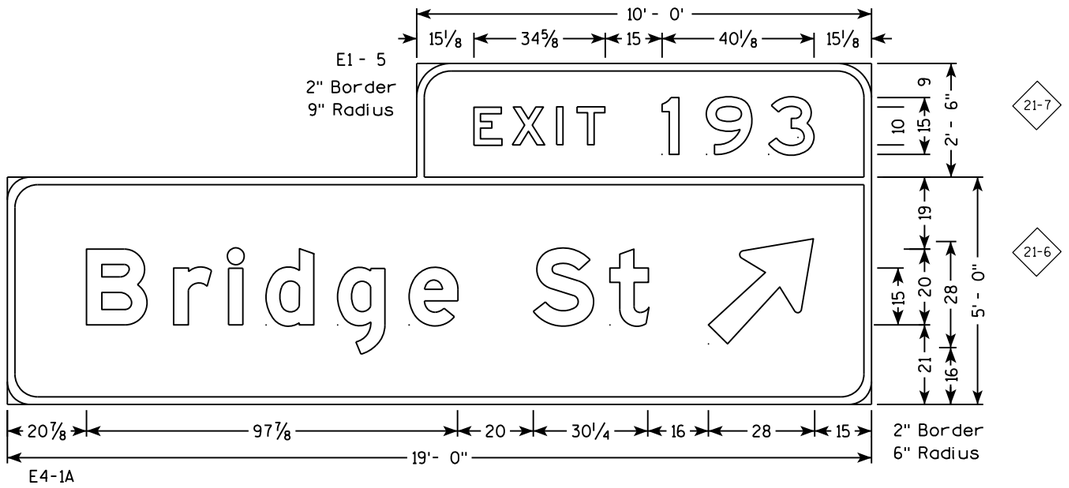
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S.D.D. 15 D 29-2

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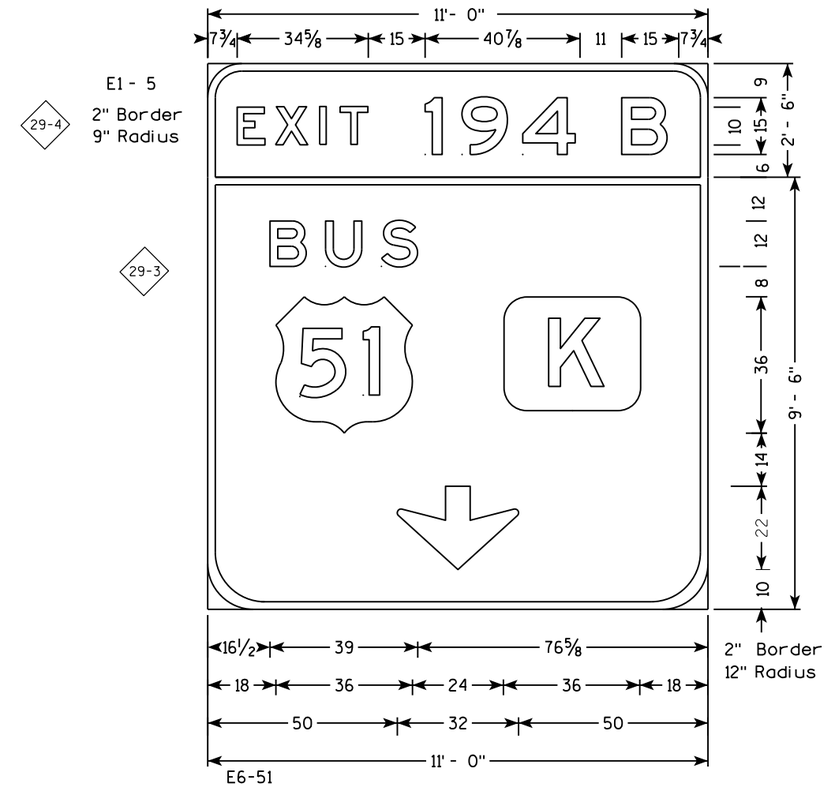
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NOTES

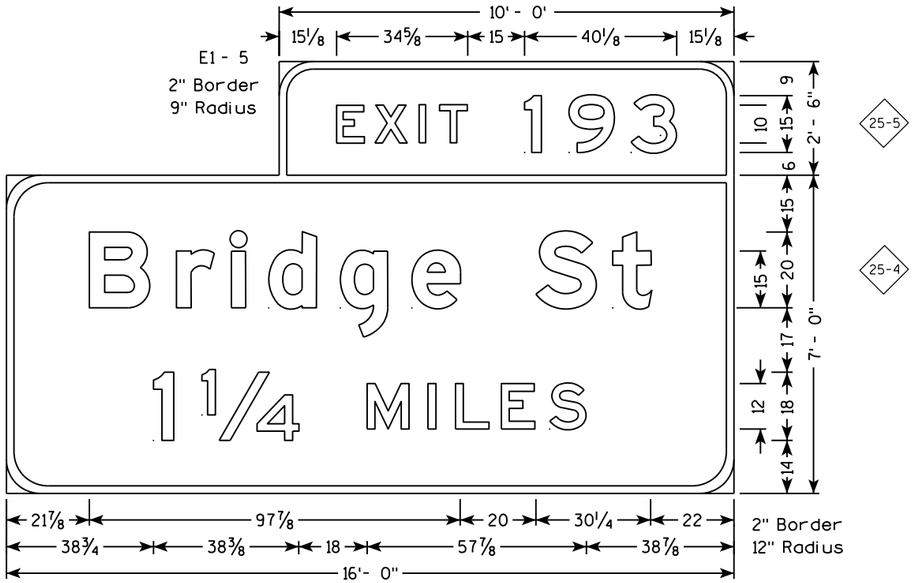
1. All Signs are Type I - Type SH Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Green except as noted
   Message - White except as noted
3. Message Series - E Modified except as noted



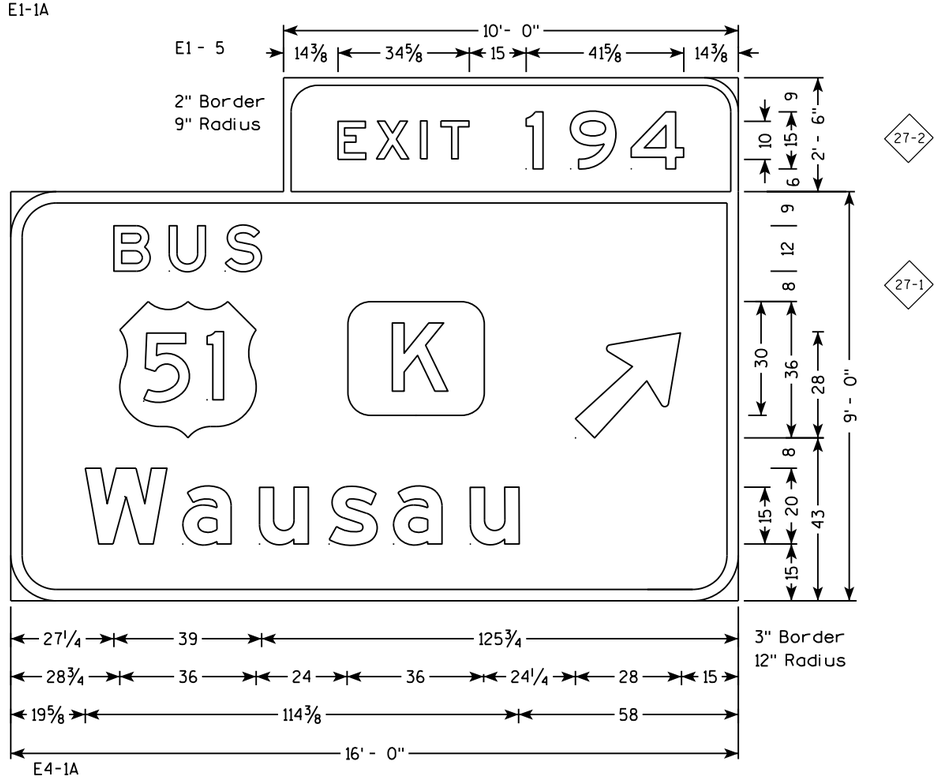
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PROJECT NO: 1170-01-70/1170-01-73	HWY: USH 51	COUNTY: MARATHON	PERMANENT SIGNING	SHEET NO: 887	E

FILE NAME : P:\44xx\4448\Plan\Signing\em_070101_sd.dgn PLOT DATE : 7/30/2012 PLOT BY : walkup PLOT NAME : PLOT SCALE : 1:39.975
WISDOT/CADDS SHEET 42



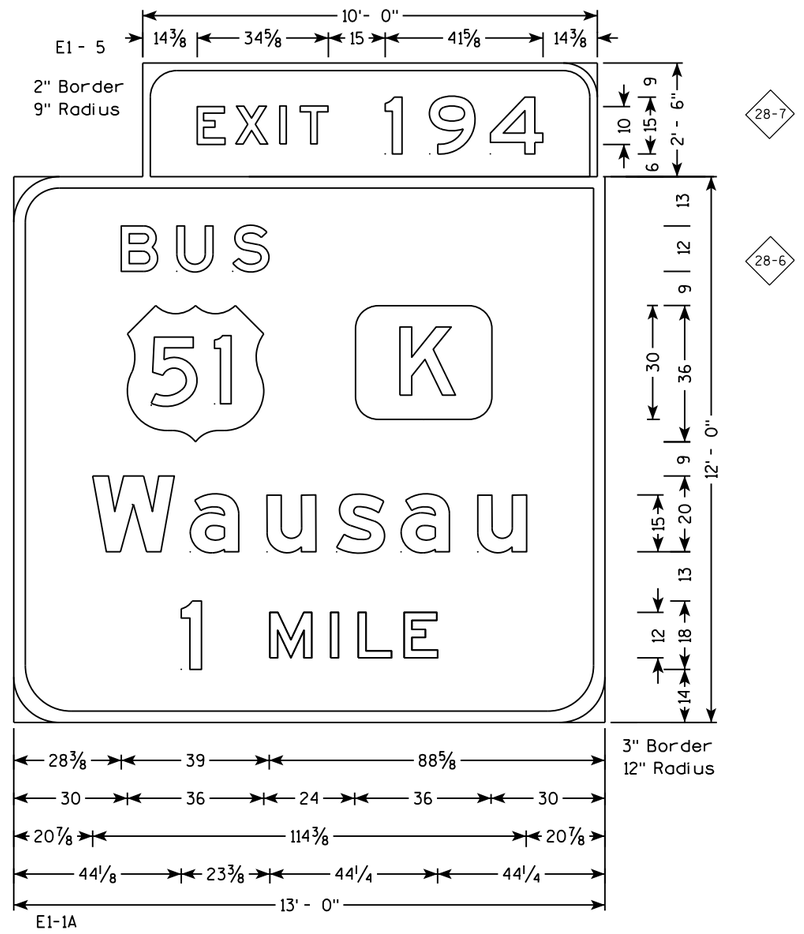
E1-1A



E4-1A

NOTES

1. All Signs are Type I - Type SH Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Green except as noted
   Message - White except as noted
3. Message Series - E Modified except as noted



E1-1A

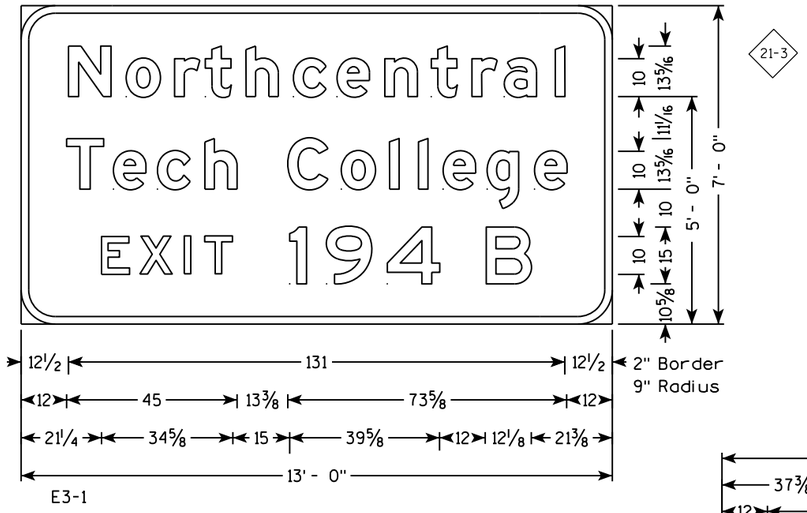
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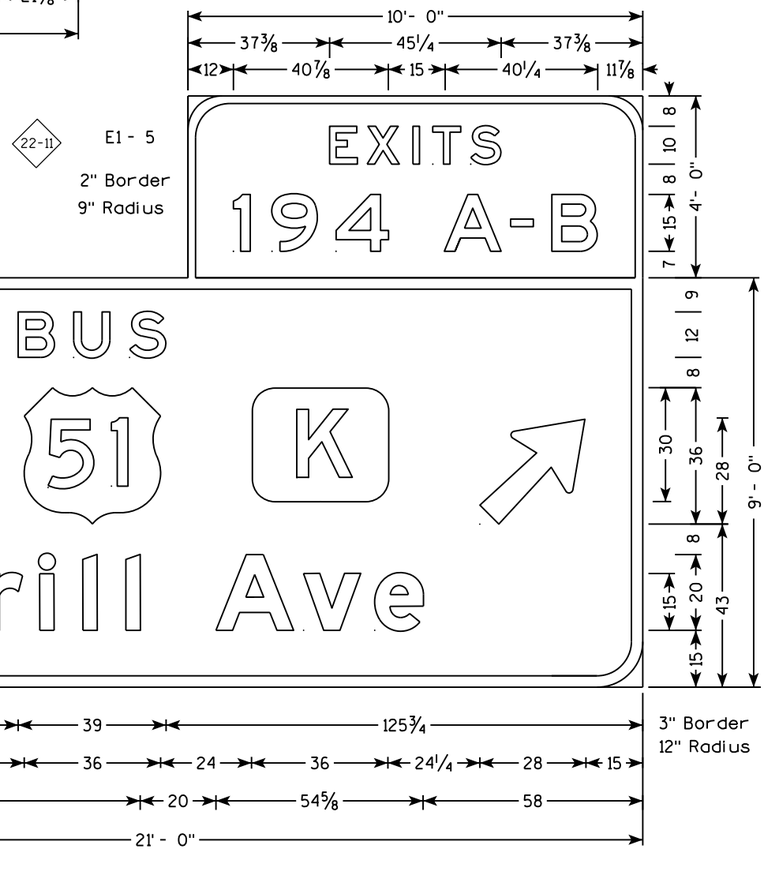
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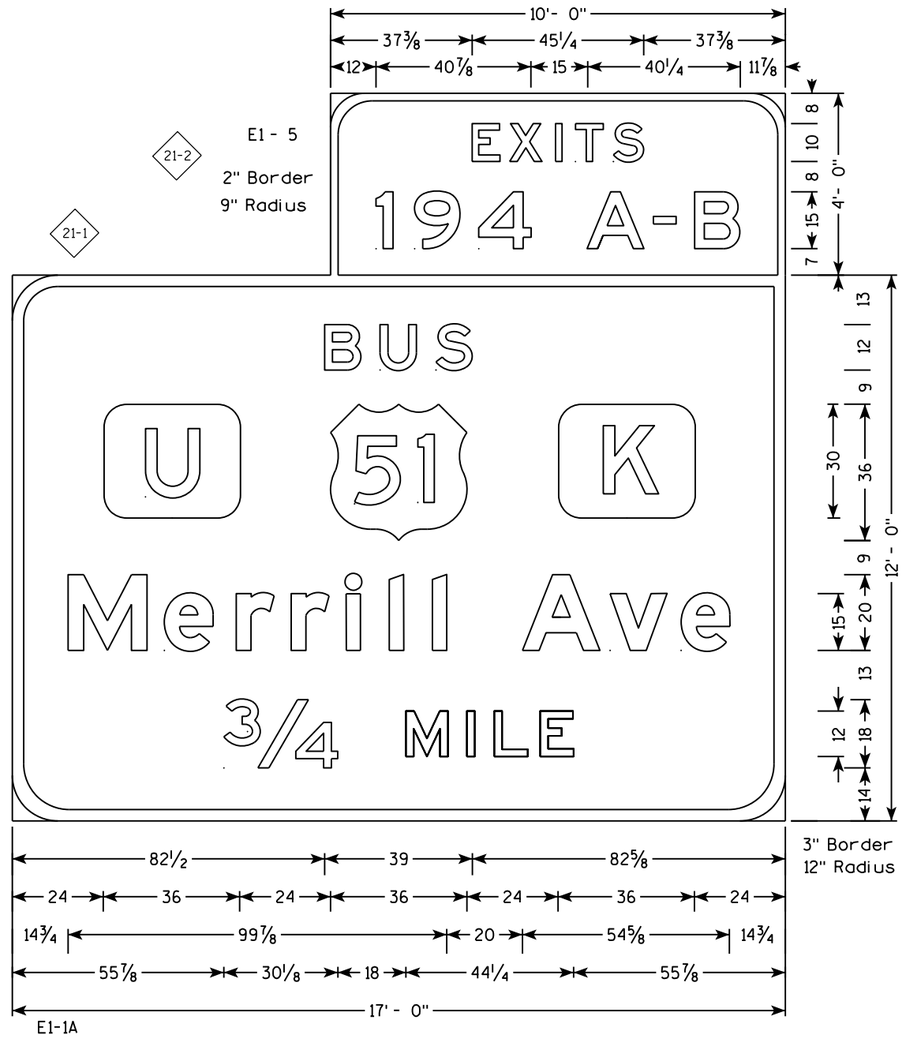
PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	PERMANENT SIGNING	SHEET NO: 888	E

NOTES

1. All Signs are Type I - Type SH Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Green except as noted
   Message - White except as noted
3. Message Series - E Modified except as noted

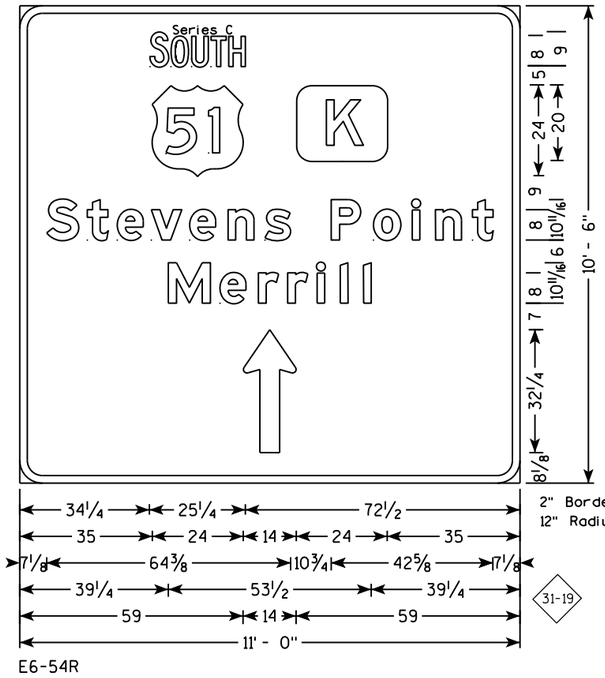


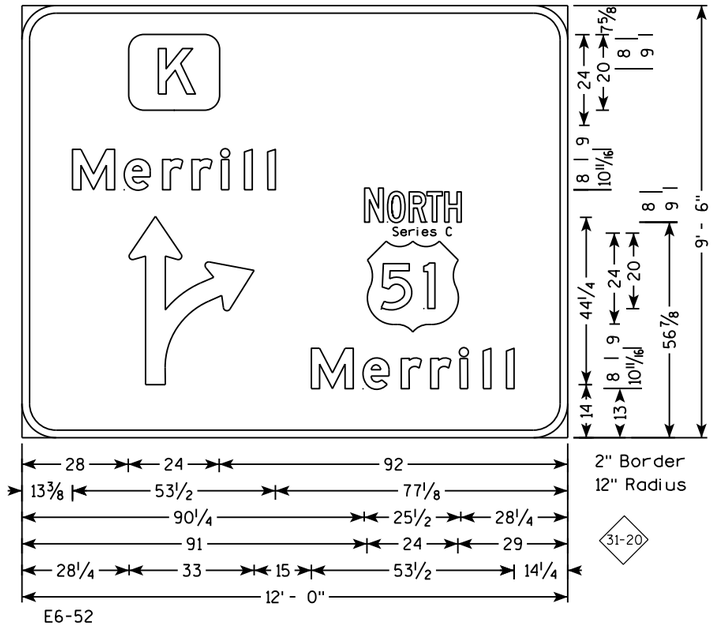


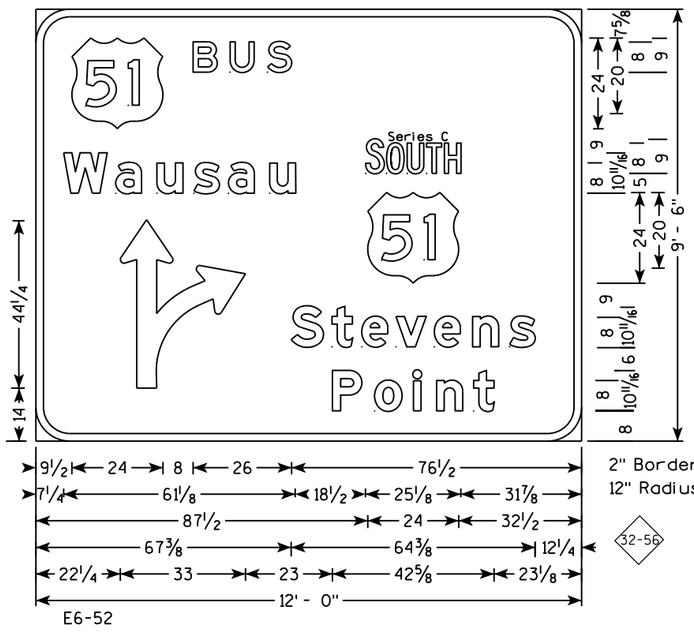


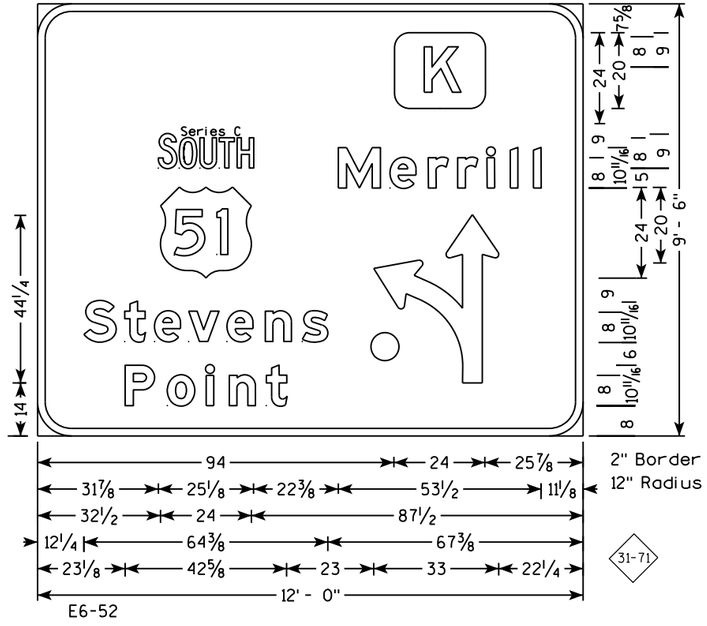
NOTES

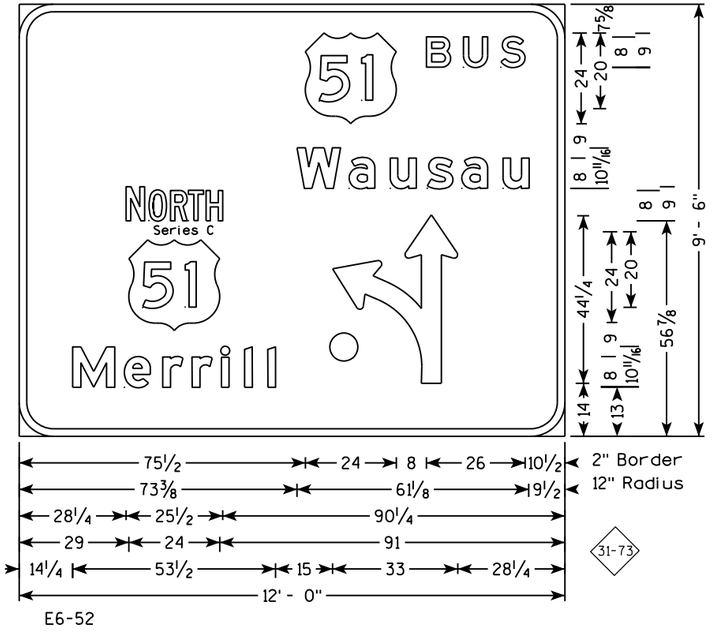
1. All Signs are Type I- Type SH Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Green except as noted
   Message - White except as noted
3. Message Series - E Modified except as noted











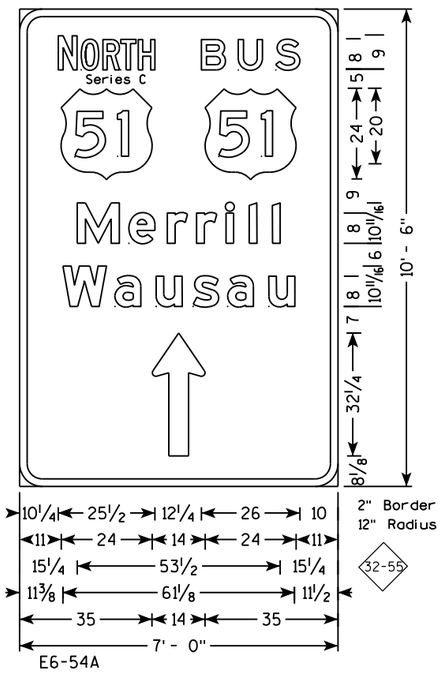
PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	PERMANENT SIGNING	SHEET NO: 890	E

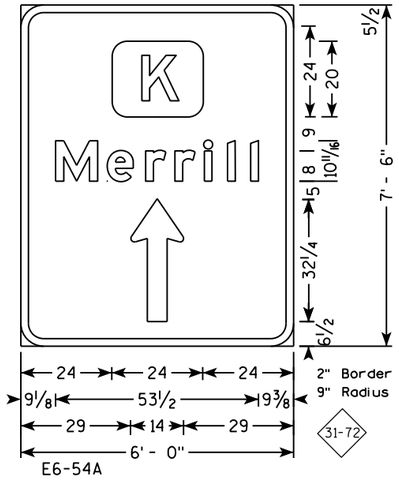
FILE NAME : P:\44xx\4448\Plan\Signing\em_070101_sd.dgn PLOT DATE : 7/30/2012 PLOT BY : walkup PLOT NAME : PLOT SCALE : 1:39.975

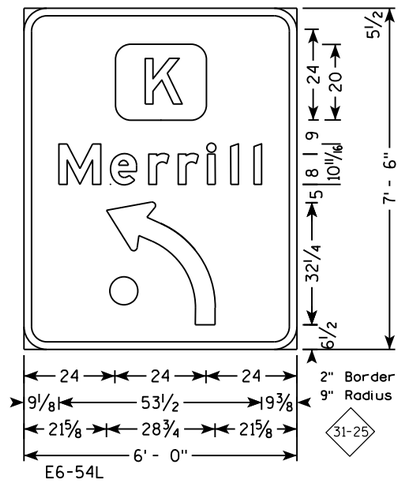
WISDOT/CADDS SHEET 42

7

7

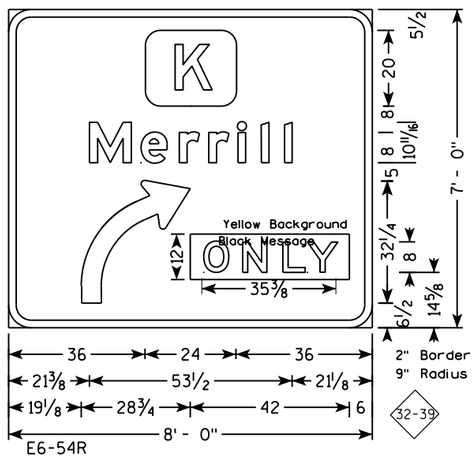


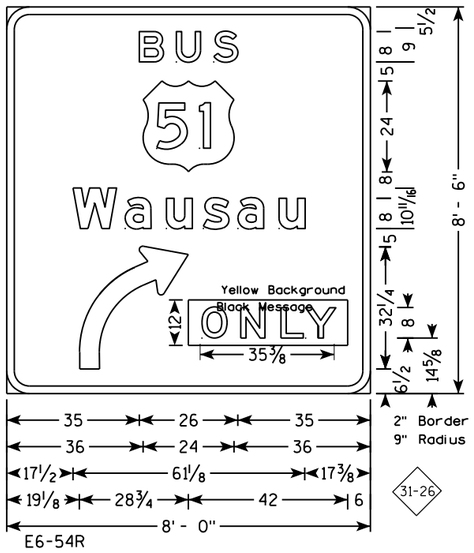


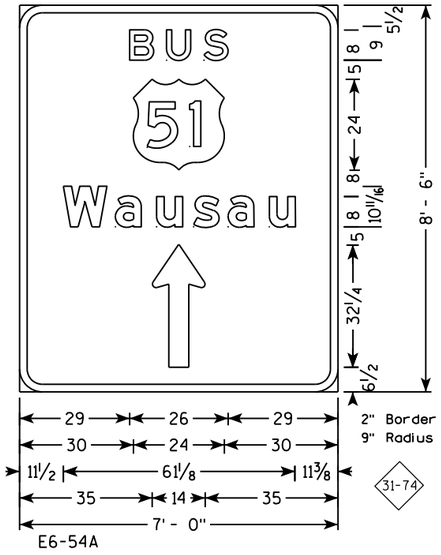


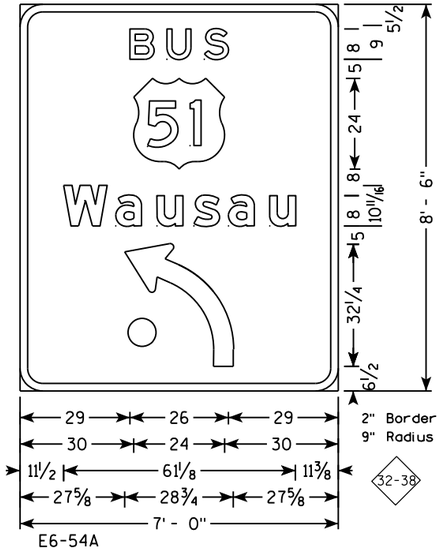
NOTES

1. All Signs are Type I - Type SH Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Green except as noted
   Message - White except as noted
3. Message Series - E Modified except as noted





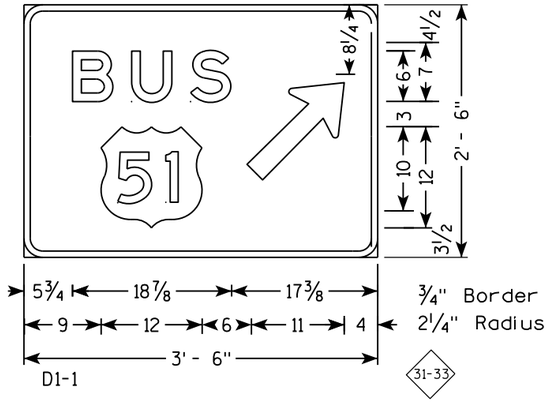


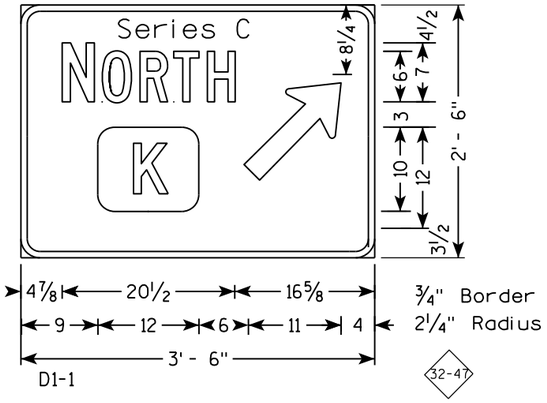


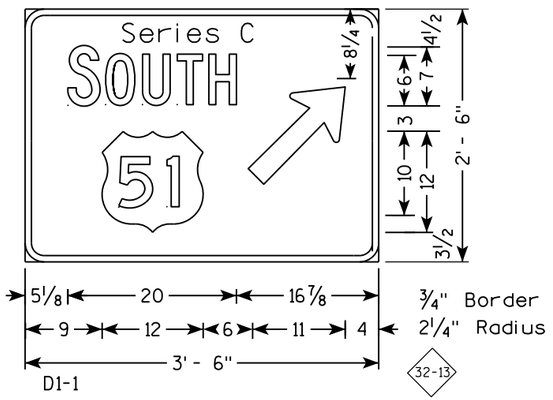
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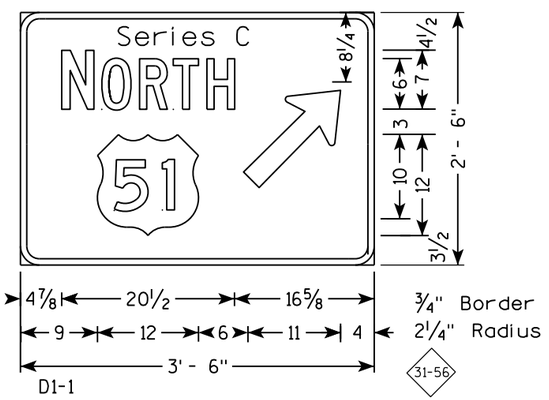
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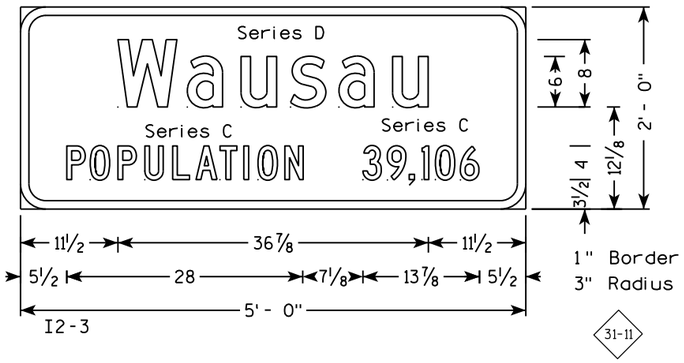
PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	PERMANENT SIGNING	SHEET NO: 891	E

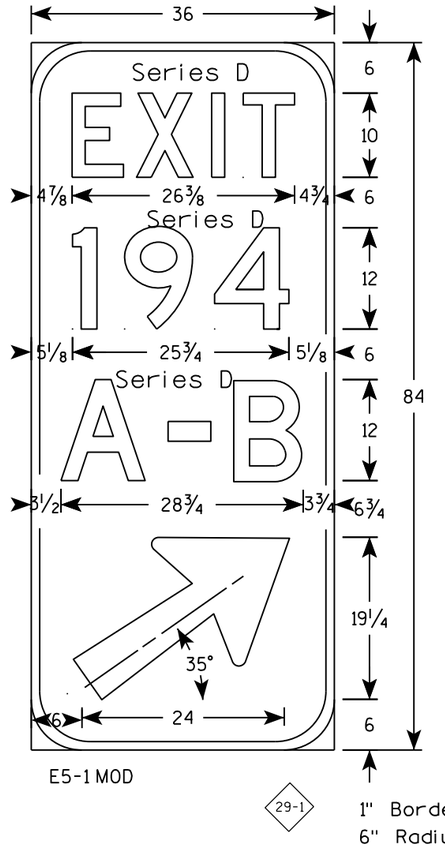












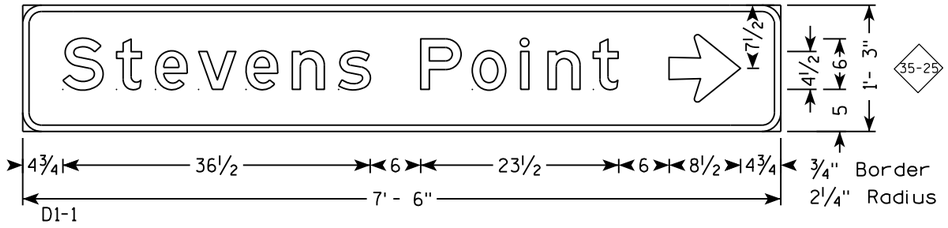
NOTES

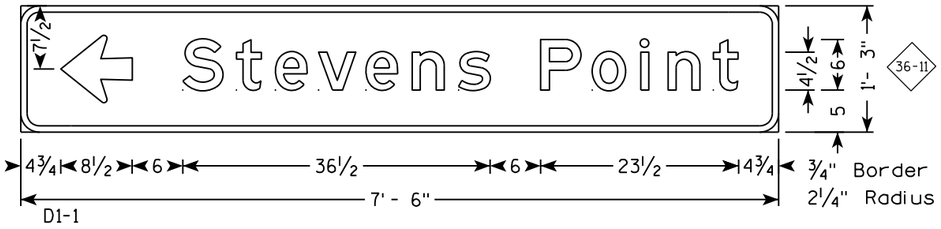
1. All Signs Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Green
   Message - White
3. Message Series - E except as noted

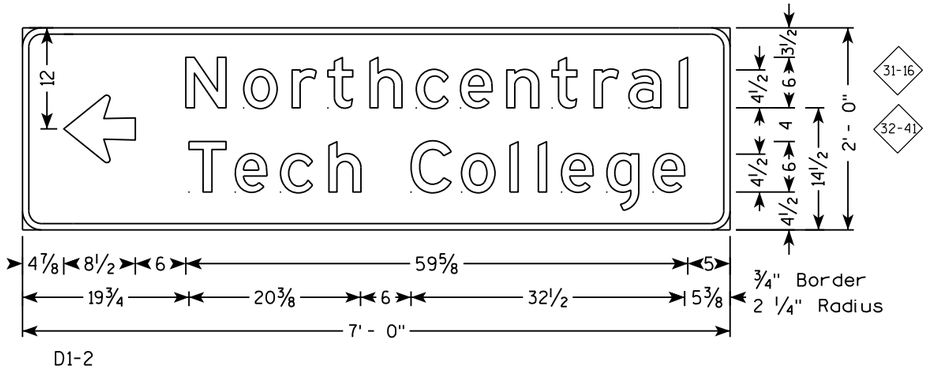
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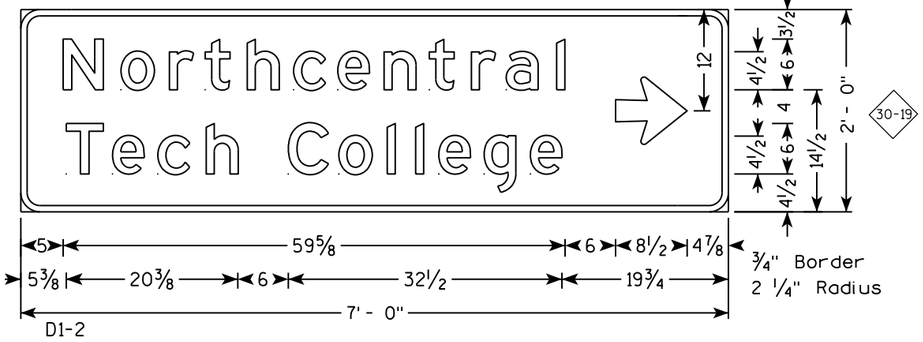
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PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	PERMANENT SIGNING	SHEET NO: 892	E



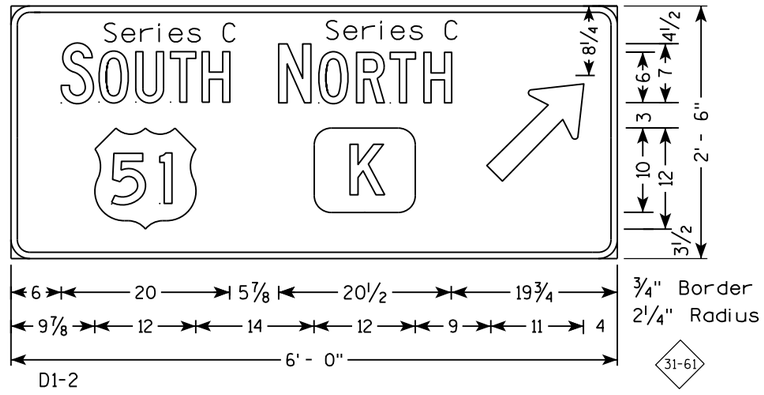


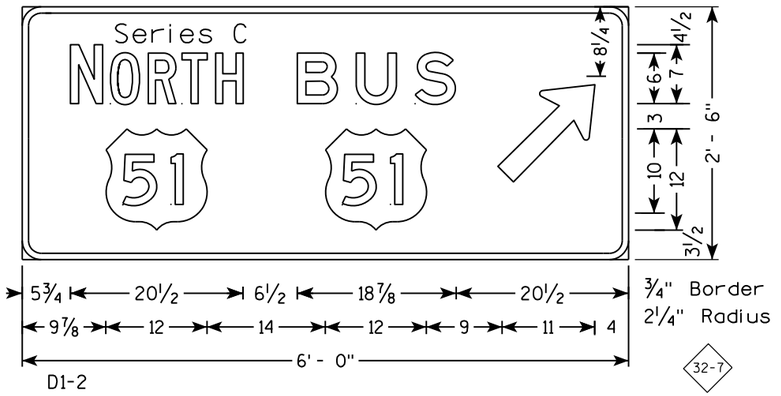




NOTES

1. All Signs Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Green
   Message - White
3. Message Series - E except as noted

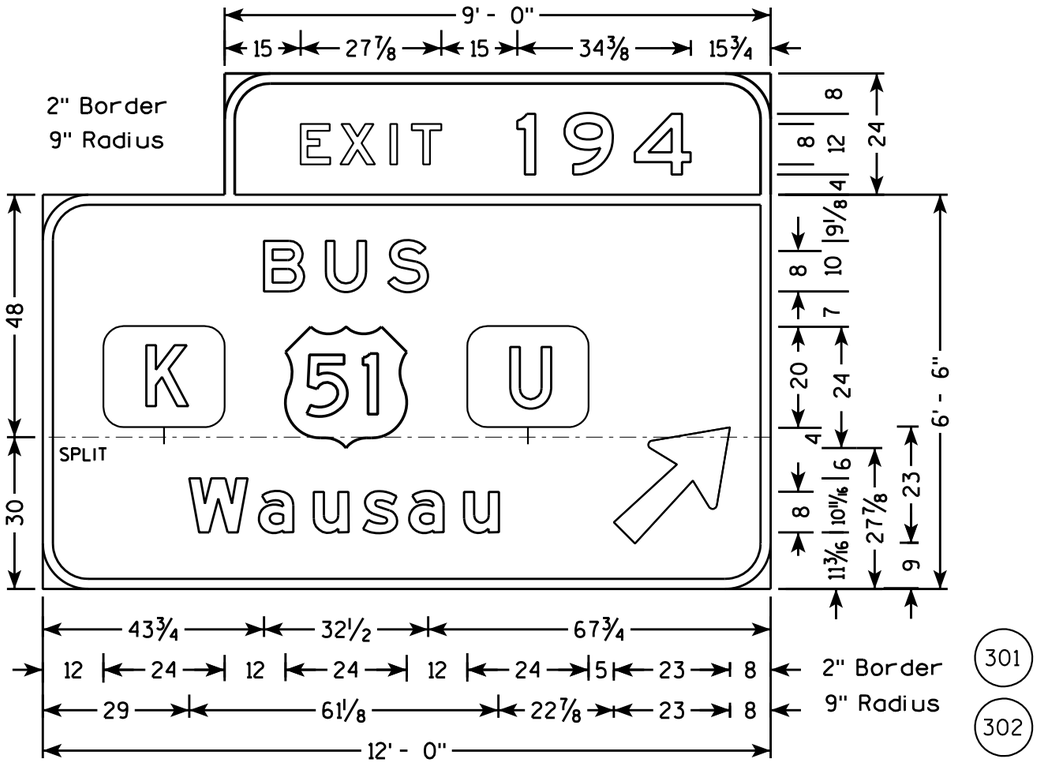




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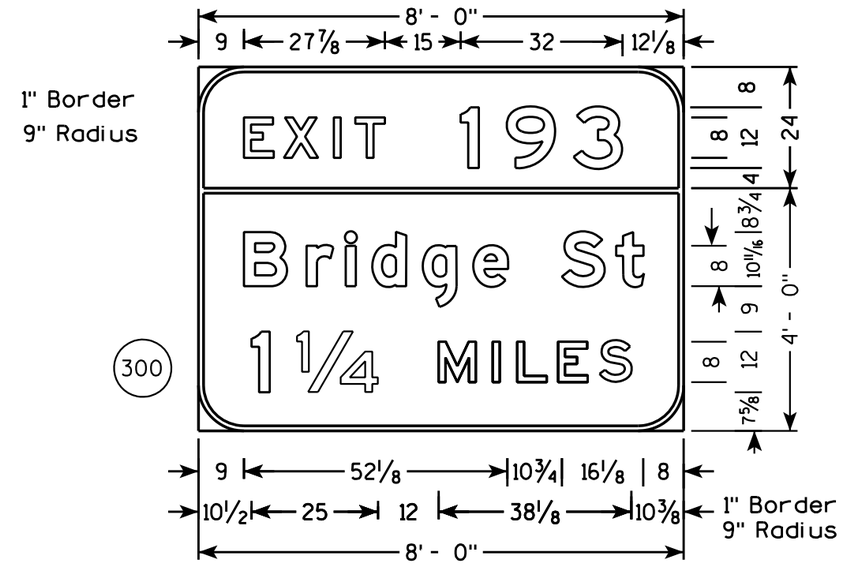
7

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	PERMANENT SIGNING	SHEET NO: 893	E



NOTES

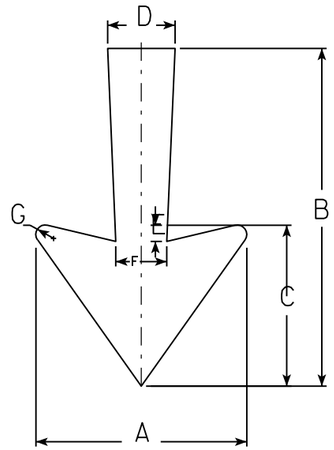
1. All Signs Type III - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - GREEN
   Message - WHITE
3. Message Series - E MODIFIED except all cap Words are Series E



7

7

PROJECT NO: 1170-01-70/73	HWY: USH 51	COUNTY: MARATHON	TEMPORARY SIGNING	SHEET NO: 894	E



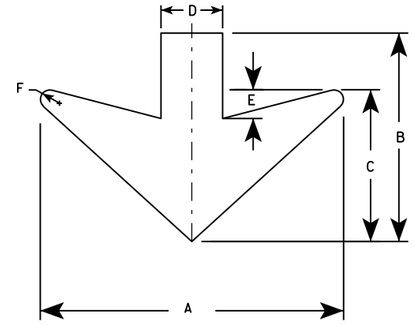
Type "A" & "B"

Type "A"

Copy Size	A	B	C	D	E	F	G
13.33 u.c. 10", 12" Caps	18 1/4	29 1/4	14	6	1 1/2	4 1/2	3/4
16" U. C.	22 1/4	35 5/8	17	7 1/8	1 3/4	5 3/8	1

Type "B"

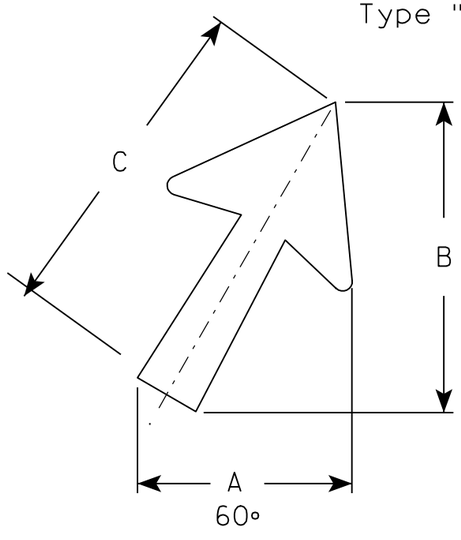
Copy Size	A	B	C	D	E	F	G
10" Caps	14 1/4	17 1/4	9 7/8	4 1/2	1 3/8	3 3/8	3/4
13.33 u.c. 12" Caps	17 1/2	20 1/4	11 3/4	5 5/8	1 1/2	4 3/8	7/8
16" U. C.	21 7/8	25	14 1/4	6 3/4	1 3/4	5	1



Type "C"

Type "C"

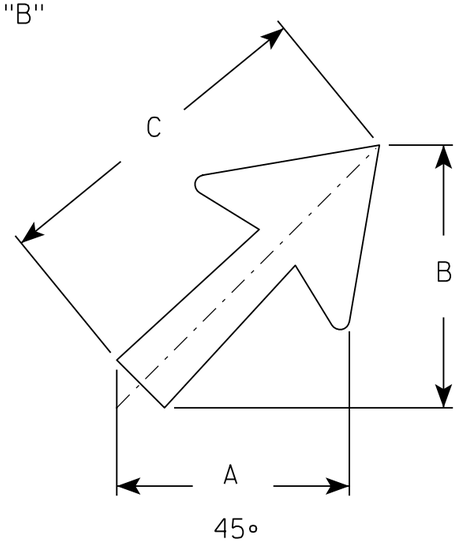
Copy Size	A	B	C	D	E	F
Overhead	32	22	16	6 1/2	3	1
Minimum	24	16	12 1/4	5	1 5/8	3/4



60°

Type "A"

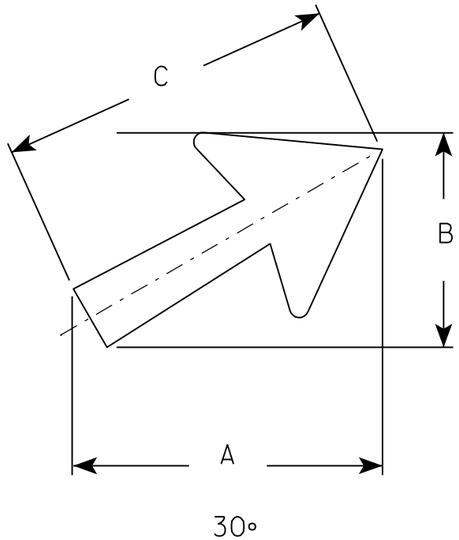
Angle	Arrow Size	A	B	C
60°	10.67" - 13" U.C. 10"- 12" Caps	18 1/2	27	29 1/4
	15" Caps - 16" U.C.	22 5/8	32 3/4	35 5/8
45°	10.67" - 13" U.C. 10"- 12" Caps	23	23	29 1/4
	15" Caps - 16" U.C.	28	28	35 5/8
30°	10.67" - 13" U.C. 10"- 12" Caps	27	18 1/2	29 1/4
	15" Caps - 16" U.C.	32 3/4	22 5/8	35 5/8



45°

Type "B"

Angle	Arrow Size	A	B	C
60°	8" - 10" Caps, 10.67 U.C.	12 1/2	16 1/8	17 1/4
	12" Caps - 13" U.C.	15 1/2	19	20 1/4
	15" Caps - 16" U.C.	19 1/8	23 1/2	25
45°	8" - 10" Caps, 10.67 U.C.	14	14	17 1/4
	12" Caps - 13" U.C.	16 5/8	16 5/8	20 1/4
	15" Caps - 16" U.C.	20 3/8	20 3/8	25
30°	8" - 10" Caps, 10.67 U.C.	16 1/8	12 1/2	17 1/4
	12" Caps - 13" U.C.	19	15 1/2	20 1/4
	15" Caps - 16" U.C.	23 1/2	19 1/8	25



30°

NOTES

1. Arrows to be of same material as other message units on each sign.
2. Taper should be held constant for longer or shorter shaft lengths on Type "A" & "B" arrows.

STANDARD ARROWS
FOR LARGE GUIDE SIGNS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang for State Traffic Engineer

DATE 10/8/82 PLATE NO. A1-1.4

PROJECT NO:

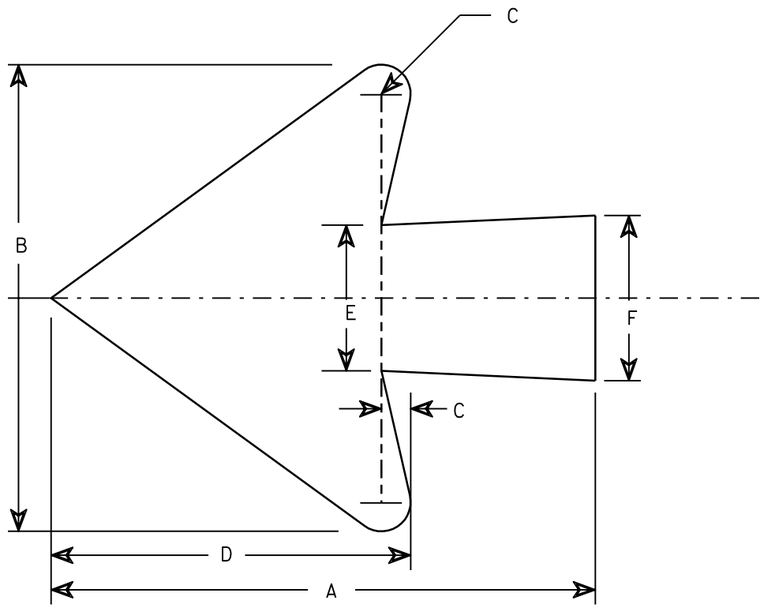
SHEET NO: 895 E

FILE NAME : C:\Users\Projects\tr_stdplate\A11.DGN PLOT DATE : 28-SEP-2005 06:57 PLOT BY : DOTDZK PLOT NAME :

WISDOT/CADDS SHEET 42

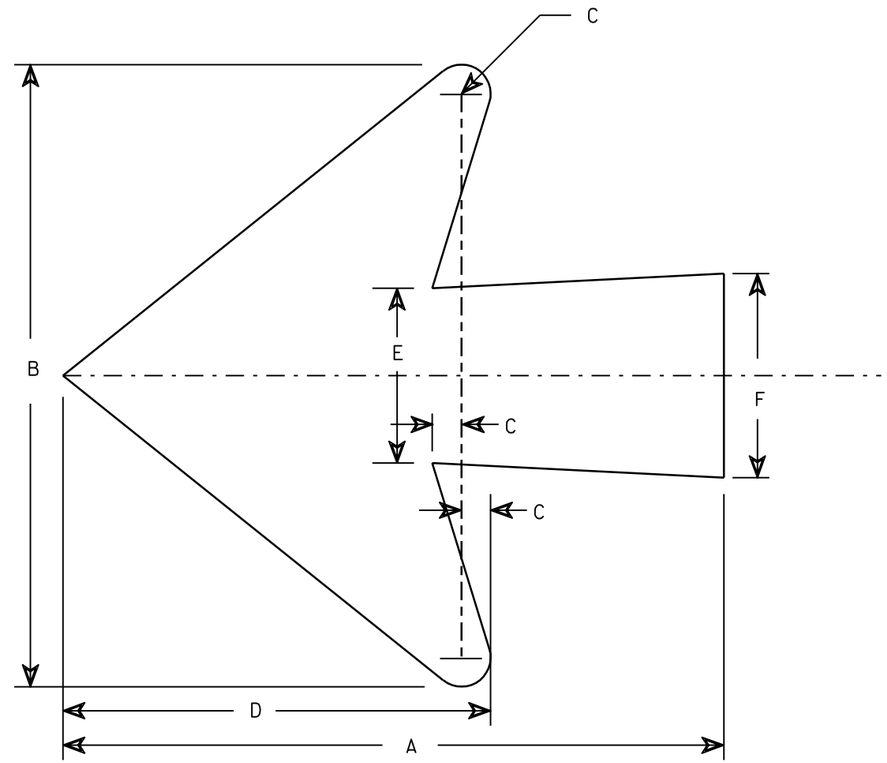
7

7



Lower Case Copy Size	A Right or Left	A * 2 Town	A * 3 Town	B	C	D	E	F
3¾ Series C	7	11	18	6	⅜	4⅝	1⅞	2⅛

* Indicates Ahead and Tilt for 2 & 3 Town applications.



Lower Case Copy Size	A Right or Left	A * 2 Town	A * 3 Town	B	C	D	E	F
4½ Series D&E	8½	11	18	8	⅜	5½	2¼	2⅝
6 Series D&E	12	18	24	10¾	½	7⅜	3¼	3½
8 Series E	15½	24	30	14¼	¾	9¾	4¼	4½

* Indicates Ahead and Tilt for 2 & 3 Town applications.

STANDARD ARROWS FOR D1 GUIDE SIGNS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang for State Traffic Engineer

DATE 8/10/92 PLATE NO. A1-2.3

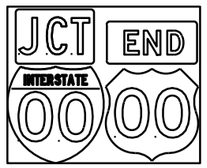
PROJECT NO:

SHEET NO: 896 E

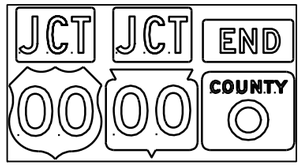
TYPICAL ASSEMBLIES



J1-1



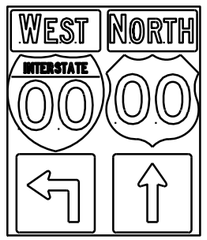
J1-2



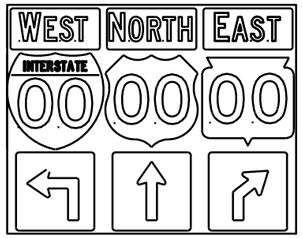
J1-3



J2-1



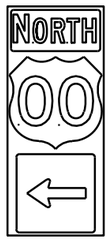
J2-2



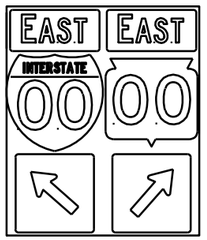
J2-3



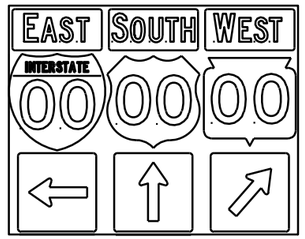
JV



J3-1



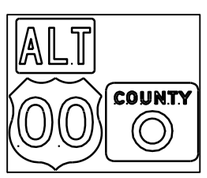
J3-2



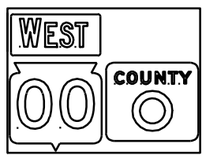
J3-3



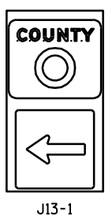
J4-1



J4-2



J4-2



J13-1



J12-1



J32-1



J33-1



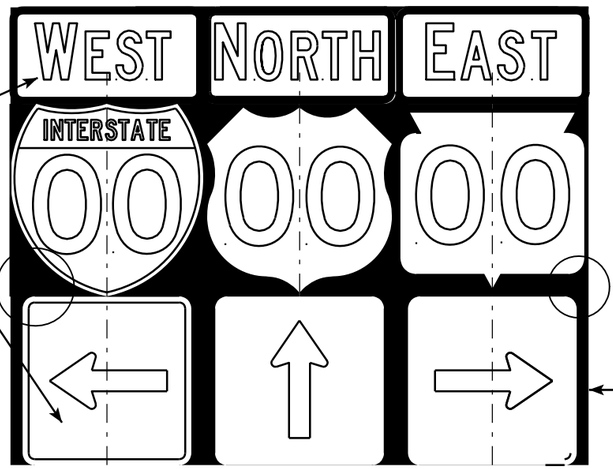
J23-1

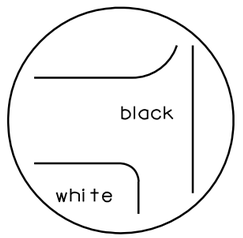


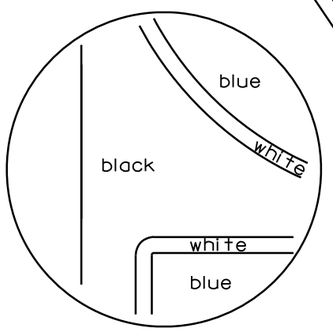
J22-1

NOTES

1. Signs are Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Black Non-reflective
   Message - see Note 5
3. Message Series - See Note 5
4. Corners shall be square since base material is plywood.
5. The colors and message spacing on each marker shall be according to the applicable route marker panel specifications.
6. Certain marker heads require the component pieces to be the same color. As an example, all the components used with an M1-1 Interstate marker shall be blue.
7. Single panel j-assemblies shall only be used with route marker shields that are same size. If the route marker shields are different size use multiple piece component.
8. Route assemblies that have 24 inch route shields and have dimensions greater than 48 inches (both vertical and horizontal) shall have one horizontal splice between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 inches or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.
9. Route assemblies that have 36 inch shields and have dimensions greater than 48 inchs (both vertical and horizontal) shall have two horizontal splices. One horizontal splice shall be between the cardinal direction and route shields and the other horizontal splice shall be between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.







ROUTE MARKERS & COMPONENTS IN TYPICAL ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

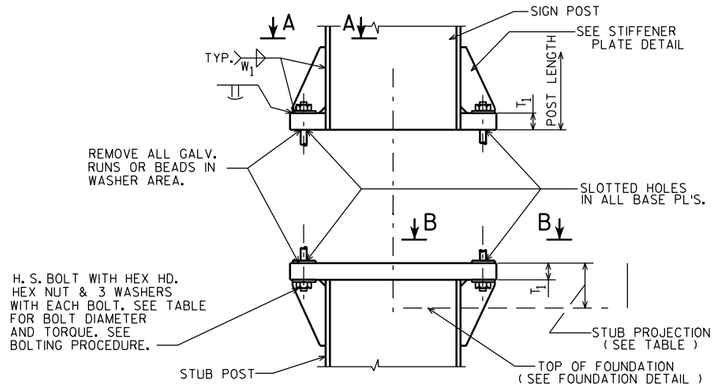
DATE 10/21/09 PLATE NO. A2-1S.6

7

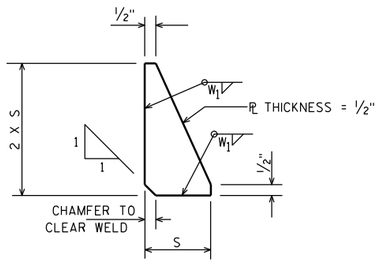
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PROJECT NO:

SHEET NO: 897 E

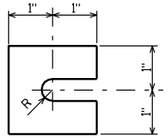


SIGN POST AND STUB POST ELEVATION



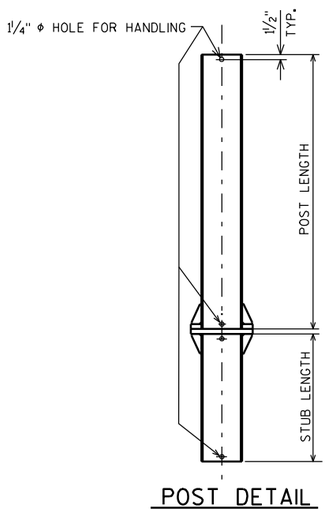
STIFFENER PLATE DETAIL

(SEE TABLE FOR DIMENSIONS)



FURNISH 2 @ .012" ± THICK AND 2 @ .032" ± THICK SHIMS PER POST. SHIMS SHALL BE FABRICATED FROM BRASS SHIM STOCK OR STRIP CONFORMING TO A.S.T.M.- B36.

SHIM DETAIL



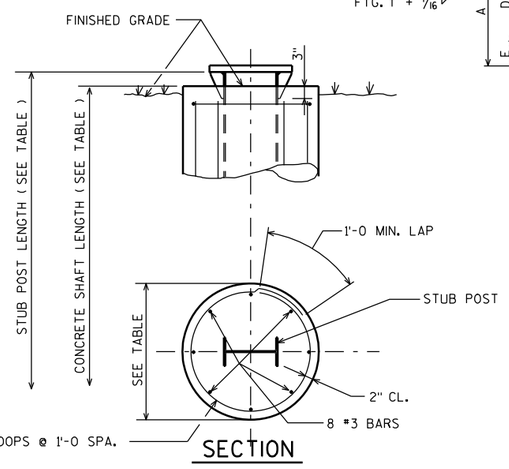
POST DETAIL

	QUANTITIES FOR 1 FOOTING	
	CONC. MASONRY C.Y.	REINF. STEEL LBS.
A	0.6	34
B	0.8	49
C	0.9	50
D	0.9	56
E	1.0	62

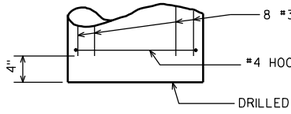
⑦

REINF.	TYPE	#3	#4
	A	8 @ 4'-5	5 @ 6'-3
	B	8 @ 6'-5	7 @ 6'-3
	C	8 @ 6'-11	7 @ 6'-3
	D	8 @ 7'-5	8 @ 6'-3
	E	8 @ 7'-11	9 @ 6'-3

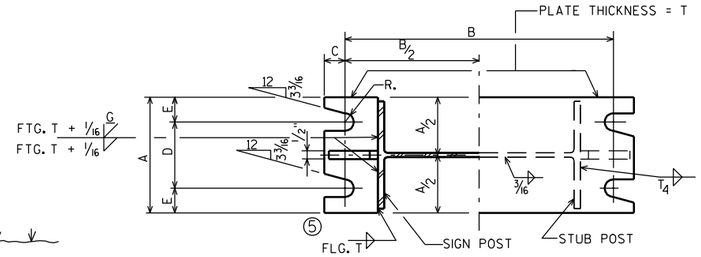
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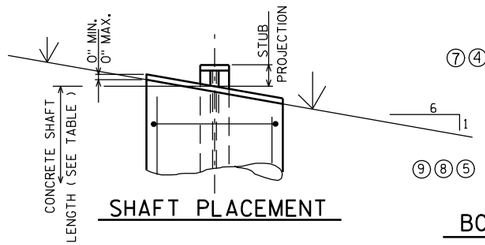
SECTION



FOUNDATION DETAIL



SECTION A-A SECTION B-B



⑦④

⑨⑧⑤

SHAFT PLACEMENT

DESIGN DATA

WIND PRESSURE = 75 M.P.H.
WIND COMPONENTS - NORMAL = 1.0 TRANSVERSE = 0.0
ICE LOAD = 3 P.S.F.

GROUP LOADS	PERCENT OF ALLOWABLE STRESS
1. DEAD	100
2. DEAD & WIND	140
3. DEAD, ICE & 1/2 WIND△	140 △25 P.S.F. MIN.

ALLOWABLE SOIL PRESSURE = 1½T / SQ. FT.
WIND LOAD WAS APPLIED TO THE AREA OF THE SIGN AND TO THE SUPPORTING MEMBERS.
ICE LOAD WAS APPLIED TO ONE FACE OF THE SIGN AND AROUND THE SURFACE OF THE SUPPORTING MEMBERS.

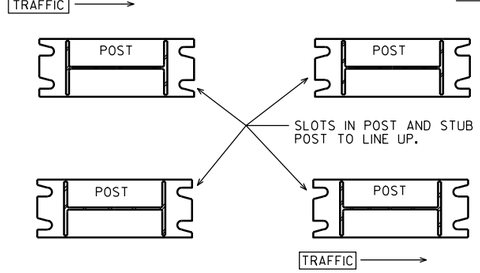
GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.
DESIGN CONFORMS WITH A.A.S.H.T.O. SPECIFICATIONS 1985.
ALL POSTS, POST STUBS & ATTACHMENTS SHALL BE A.S.T.M. A709 GRADE 50.
⑨ THE POST, BASE PLATES, UPPER SIX INCHES OF STUB POST FLANGE SPLICE PLATE AND FUSE PLATE SHALL BE GALVANIZED AFTER FABRICATION.
H.S. BOLTS, WASHERS & NUTS SHALL BE A325 GALVANIZED WHEN POSTS, POST STUBS AND ATTACHMENTS ARE A709 GRADE 50 AND GALVANIZED.

BOLTING PROCEDURE - BASE CONNECTION

1. ASSEMBLE SIGN POST TO STUB POST WITH BOLTS AND ONE OF THE FLAT WASHERS ON EACH BOLT BETW. PLATES.
2. SHIM AS REQ'D. TO PLUMB POST.
3. TIGHTEN ALL BOLTS THE MAXIMUM POSSIBLE WITH 12" OR 15" WRENCH TO BED WASHERS & SHIMS AND TO CLEAN BOLT THREADS, THEN LOOSEN EACH BOLT IN TURN AND RETIGHTEN IN A SYSTEMATIC ORDER TO THE PRESCRIBED TORQUE. (SEE TABLE)
4. BURR THREADS AT JUNCTION WITH NUT USING A CENTER PUNCH TO PREVENT NUT LOOSENING.

NOTE:
TIGHTEN THE HIGH STRENGTH BOLTS TO THE TORQUE SHOWN. DO NOT OVERTIGHTEN.



POST SLOT ORIENTATION ⑦

		BASE CONNECTION DATA TABLE											FOUNDATION DATA				②
	TYPE	DIMENSION / POST SIZE	BOLT SIZE & TORQUE	A	B	C	D	E	T_1	T_4	W_1	R	S	STUB LENGTH	STUB PROJECTION	SHAFT DIAMETER	SHAFT LENGTH	K
④	A	W10"X12.0 #/FT.	3/4" Φ @ 75#-FT.	5 1/4"	1'-0 3/8	7/8"	3 1/2"	7/8"	1"	3/16"	5/16"	13/32 "	2 1/8"	3'-6	3"	2'-0 Φ	5'-0	76.0# ④
④	B	W12"X16.0 #/FT.	7/8" Φ @ 85#-FT.	5 1/2"	1'-4 1/4	1"	3 1/2"	1"	1 1/4"	1/4"	5/16"	15/32 "	3"	5'-6	3"	2'-0 Φ	7'-0	146.5# ④
	C	W12"X19.0 #/FT.	7/8" Φ @ 85#-FT.	5 1/2"	1'-4 1/4	1"	3 1/2"	1"	1 1/2"	5/16"	5/16"	15/32 "	3"	6'-0	3"	2'-0 Φ	7'-6	182.1#
	D	W12"X22.0 #/FT.	7/8" Φ @ 85#-FT.	5 1/2"	1'-4 1/4	1"	3 1/2"	1"	1 1/2"	3/8"	5/16"	15/32 "	3"	6'-6	3"	2'-0 Φ	8'-0	210.5#
③	E	W12"X26.0 #/FT.	1" Φ @ 90#-FT.	7"	1'-4 1/4	1 1/4"	4"	1 1/2"	1 1/2"	3/8"	5/16"	17/32 "	3"	7'-0	3"	2'-0 Φ	8'-6	293.0# ③

① ⑥ ①

STRUCTURAL CARBON STEEL PAY WTS. (1 POST) = K+ (POST LENGTH X POST WT.)
" K " INCLUDES STUB, BASE PLATES, STIFFS., BOLTS, AND WASHERS.

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer
DATE 4/26/11 PLATE NO. A3-1.13

NO.	DATE	REVISION
⑨	4-26-11	REMOVE NON-GALVANIZED
⑧	10-30-96	NOT GALVANIZED/GALVANIZED
⑦	10-30-92	QUANT., A588 EXCEPT., ADD SLOT VIEW
⑥	8-24-87	BASE CONN. WELD
⑤	10-13-81	BASE CONN. WELD & FUSE PL WASHERS
④	10-19-79	POST A & B, A572 GR. 50, & K
②	11-28-78	"K" ③4-23-79 TYPE "E"
①	5-4-78	T_1 , T_2 & W_1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

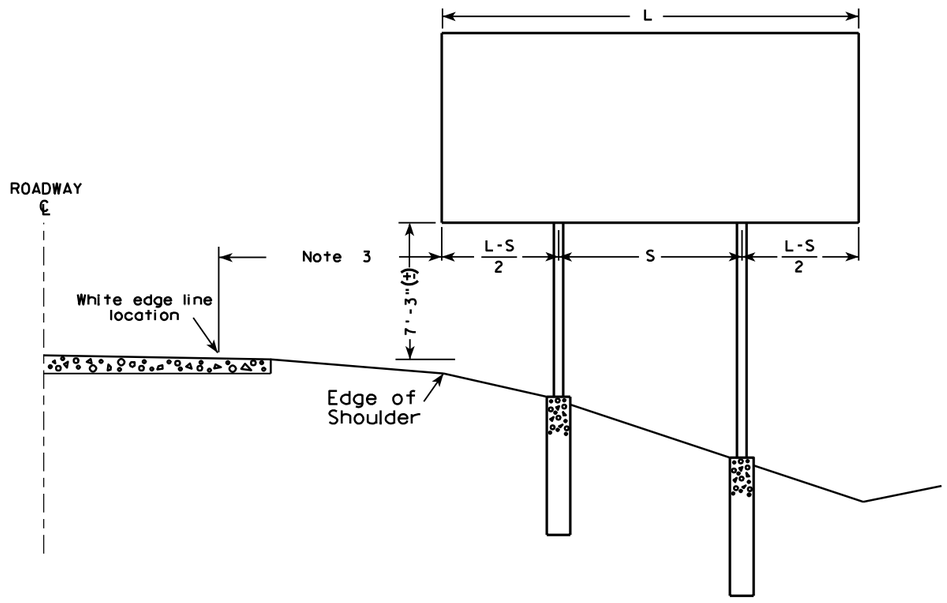
TYPE A, B, C, D, & E

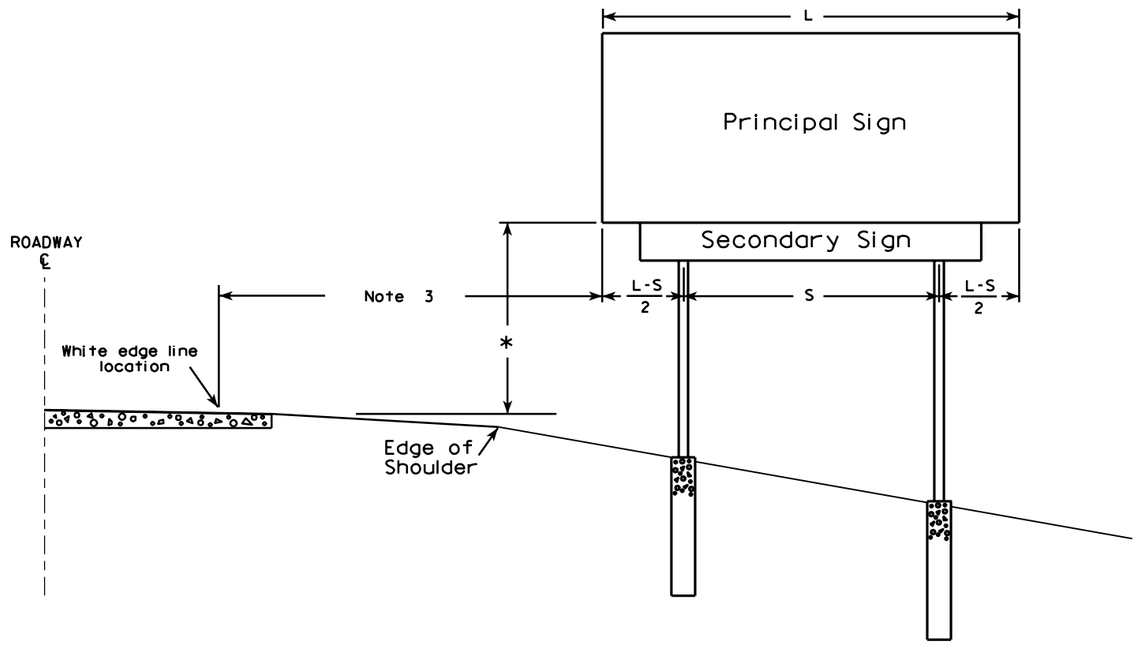
CONST. SPEC. 2011 | DRAWN BY JPH | PLANS CK'D.

FTG. & SIGN SUPPORT DETAILS GROUND MOUNT BREAK-AWAY SIGNS

SHEET

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 898 | E





GENERAL NOTES

1. For a 2 post installation, S equals 3L/5, but shall not be less than 9 ft.
2. For a 3 post installation, S equals 5L/7, but shall not be less than 18 ft., and the space between any two posts shall not be less than 9 ft.
3. Unless noted in the plan, the sign offset distance shall be a minimum of 17'-6", desirable 30'-0".
4. The (±) tolerance shown on this sheet is 3 in.
5. The vertical sign height clearance detailed is measured from the bottom of the sign to the near edge of pavement.
6. Post lengths shown in the miscellaneous quantities are estimated lengths. The contractor shall verify post lengths at the time of final grading.
7. Refer to the Traffic Guidelines Manual for further guidance on minimum vertical clearance requirements.

* Clearance is 8'-3"(±) when the secondary sign is 3 ft. or less in height. For secondary signs larger than 3 ft., the clearance to the bottom of the secondary sign shall be 5'-3"(±).

7

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TYPICAL INSTALLATION
OF TYPE I SIGNS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

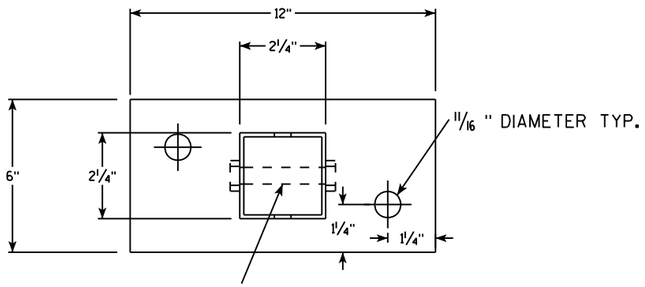
DATE 4/02/08 PLATE NO. A4-1.9

PROJECT NO:				SHEET NO: 899	E

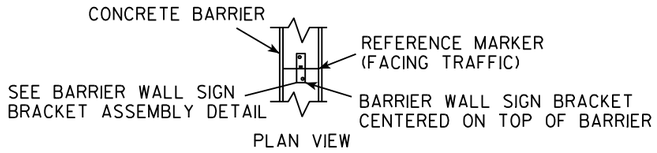
TYPICAL BARRIER WALL SIGN PLACEMENT DETAILS

TYPICAL REFERENCE MARKER MOUNTING DETAILS

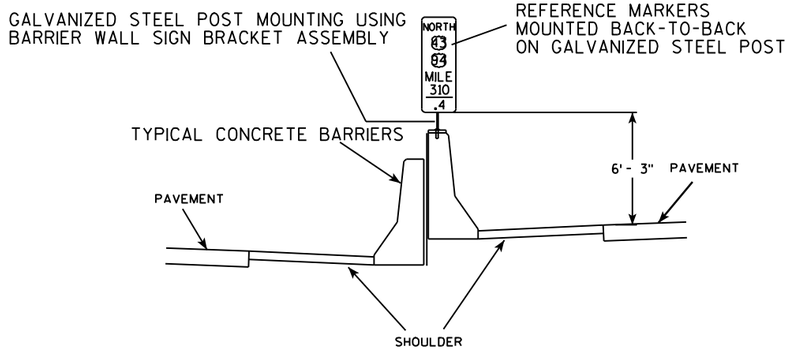
BARRIER WALL SIGN BRACKET ASSEMBLY
NOT TO SCALE



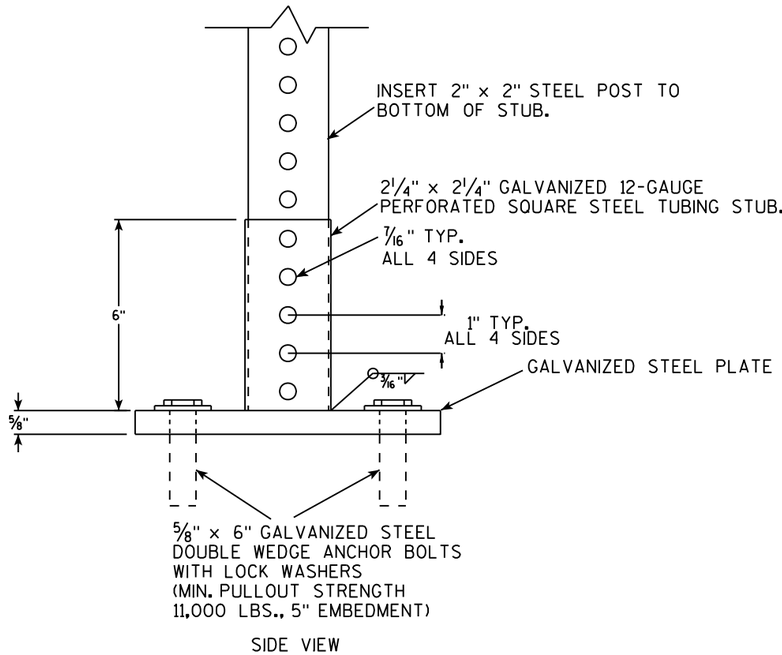
PLAN VIEW



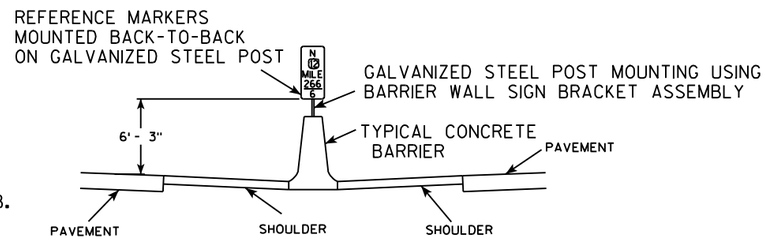
MEDIAN BARRIER MOUNTING DETAIL



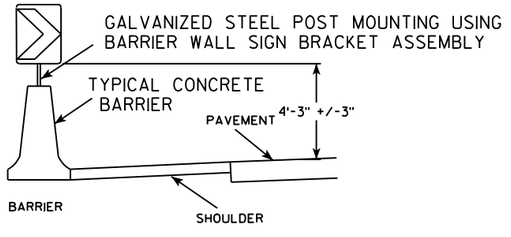
TYPICAL ENHANCED REFERENCE
MARKER PLACEMENT ON DOUBLE MEDIAN BARRIER



SIDE VIEW



TYPICAL ENHANCED REFERENCE
MARKER PLACEMENT ON SINGLE MEDIAN BARRIER



TYPICAL CHEVRON MARKER PLACEMENT

NOTES

1) ALL MATERIAL TO BE APPROVED BY ENGINEER BEFORE INSTALLATION
2) SEE SIGN PLATE A4-8 FOR SIGN HARDWARE REQUIREMENTS.

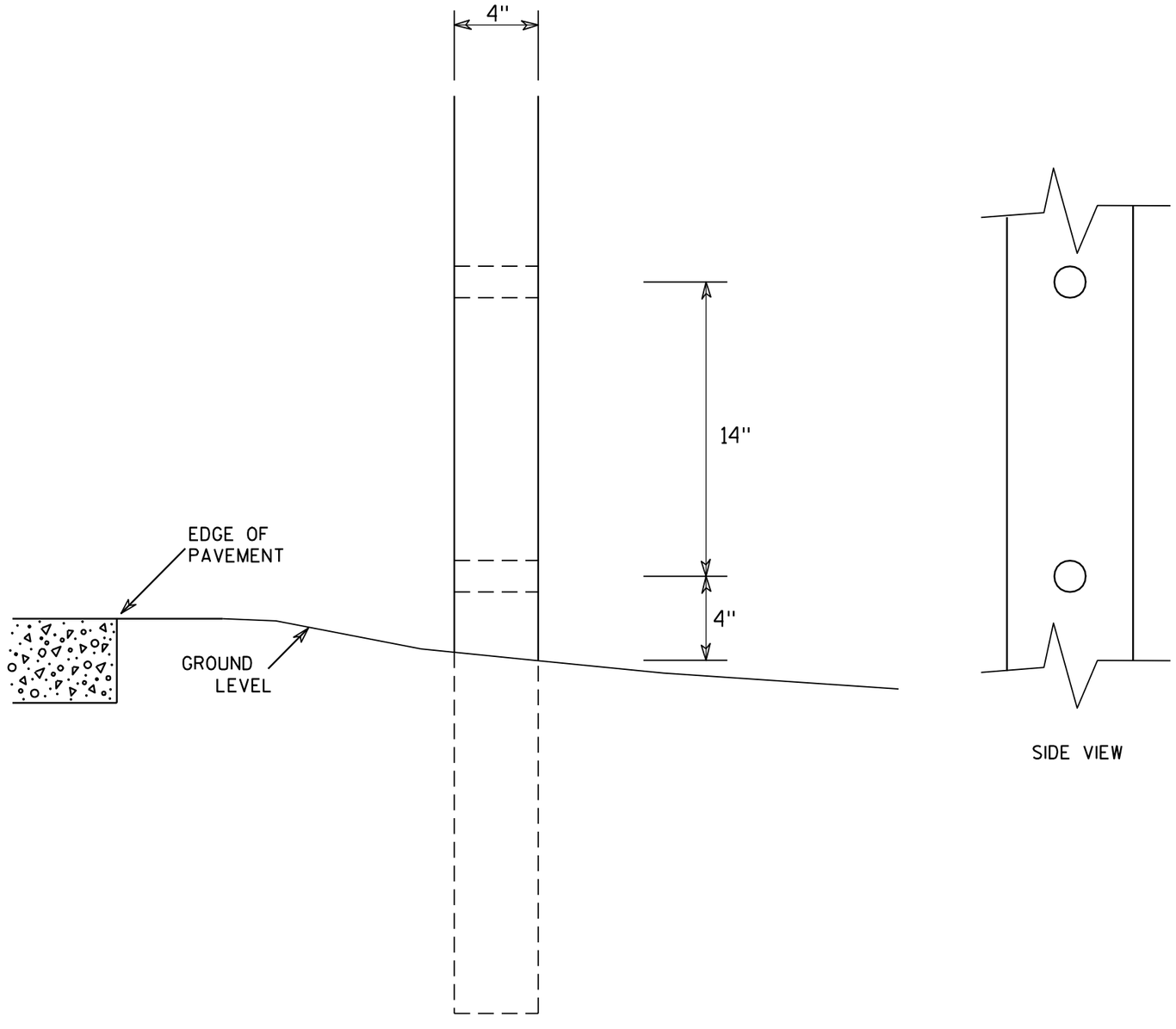
SIGN MOUNTING ON BARRIER WALL

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 8/15/2012 PLATE NO. A4-10.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 900	E



SIDE VIEW

GENERAL NOTES

1. All 4 x 6 Wood Posts shall be modified by having two 1½" diameter holes drilled perpendicular to the roadway centerline.

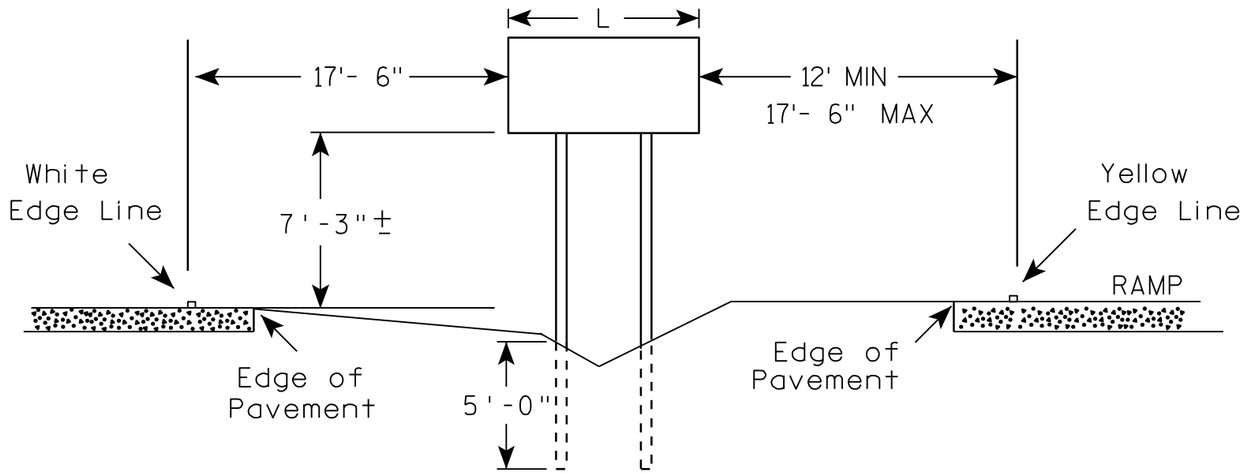
4 X 6 WOOD POST MODIFICATIONS

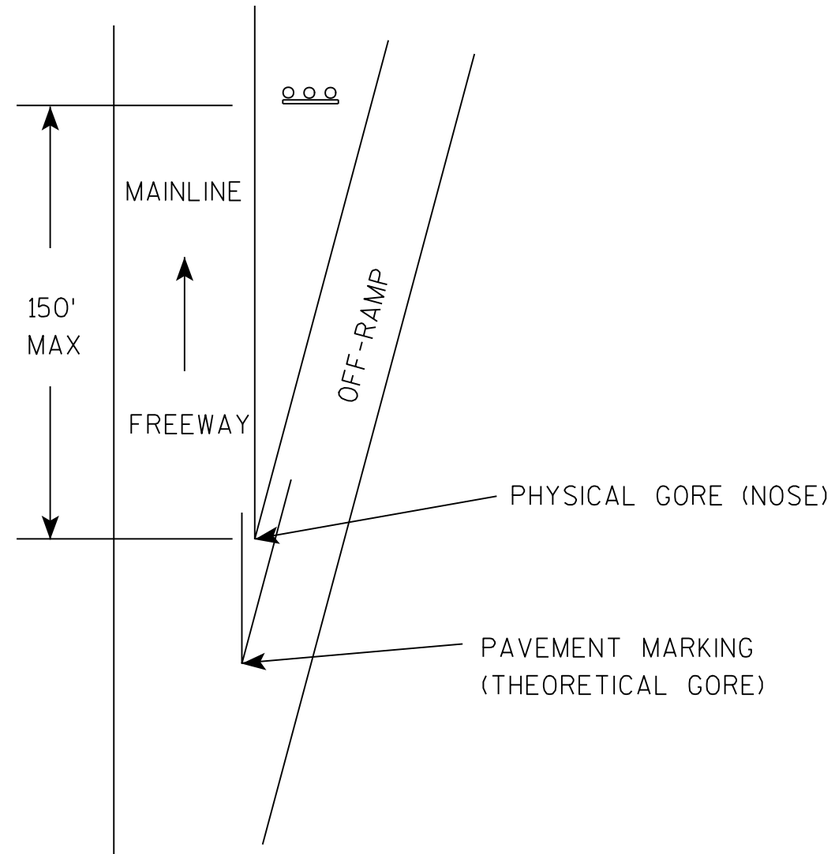
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang for State Traffic Engineer

DATE 3/27/97 PLATE NO. A4-11.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 901	E





GENERAL NOTES

1. The 150 foot distance from the physical gore (where pavement ends) will normally provide the offsets as shown.
2. If roadway geometrics permit, the sign may be closer than the 150 foot distance as long as the offsets are maintained.
3. At no time shall the location be greater than 150 feet. If the normal offsets cannot be maintained, they can be reduced to 6 feet from the edge of the paved shoulder (both freeway and ramp).
4. The offset from edge of sign to the yellow edge line on the ramp is shown as a minimum of 12 feet and a maximum of 17 feet, 6 inches. Preference is adhering to the maximum rather than the minimum dimension.
5. When L is equal to or exceeds 9 feet, use 3 posts as per A4-4.
6. The (∓) tolerance for the mounting height is 3 inches.

7

7

TYPICAL INSTALLATION
OF TYPE II SIGNS ON
WOOD POSTS IN GORE

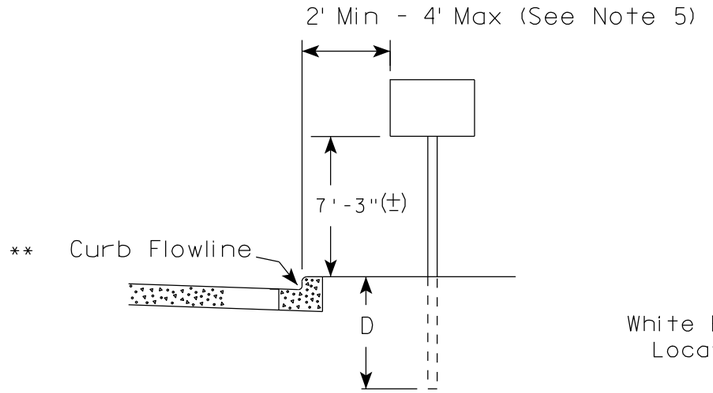
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang
for State Traffic Engineer

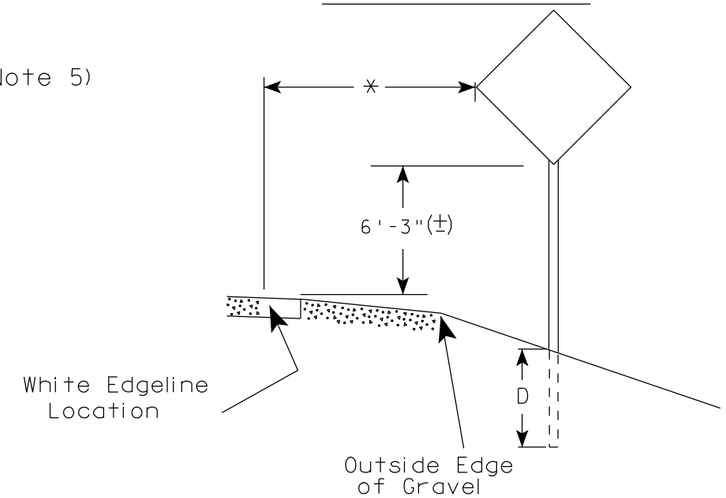
DATE 4/4/00 PLATE NO. A4-2.2

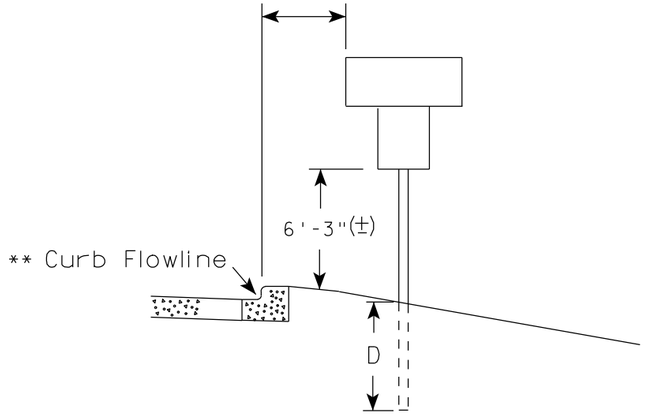
PROJECT NO:				SHEET NO: 902	E

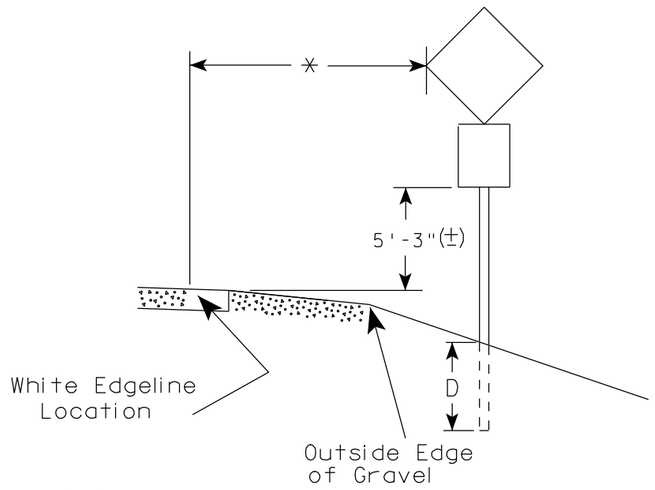
URBAN AREA



RURAL AREA (See Note 2)







** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

GENERAL NOTES

1. Signs wider than 4 feet or larger than 20 sq. ft. shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on barrier wall, see A4-10 sign plate.
3. For expressways and freeways, mounting height is 7'- 3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
4. Minimum mounting height for J assemblies (A4-5) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
5. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±).
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. The (±) tolerance for mounting height is 3 inches.
8. Folding stop signs (R1-1F) shall be mounted at a height of 5'-3" (±) or as directed by the Engineer.
9. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Clearance Markers (W5-52), Mile Markers (D10 series) & End of Road Markers (W5-56 & W5-56A) shall be mounted at a height of 4'-3" (±).

POST EMBEDMENT DEPTH

Area of Sign Installation (Sq. Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

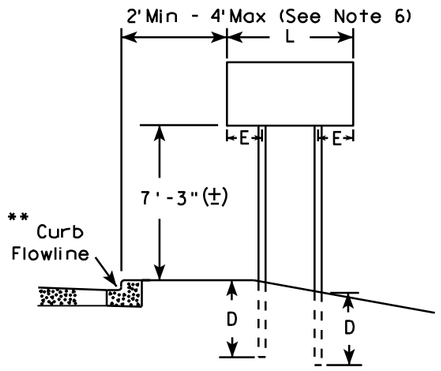
DATE 9/21/2011 PLATE NO. A4-3.16

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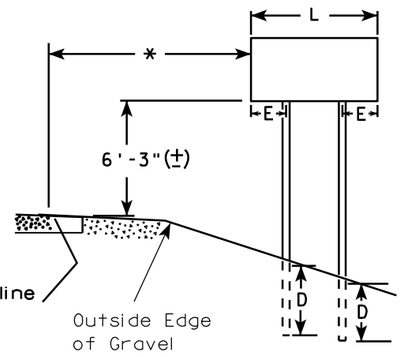
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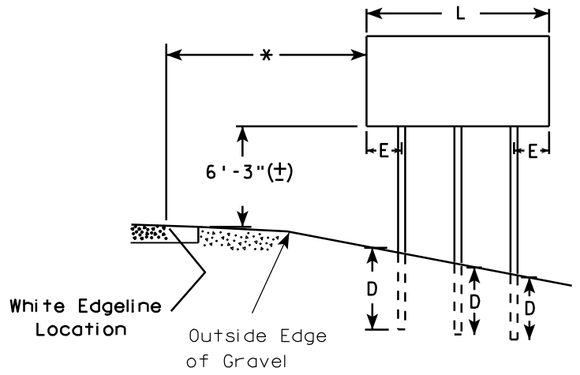
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 903 | E

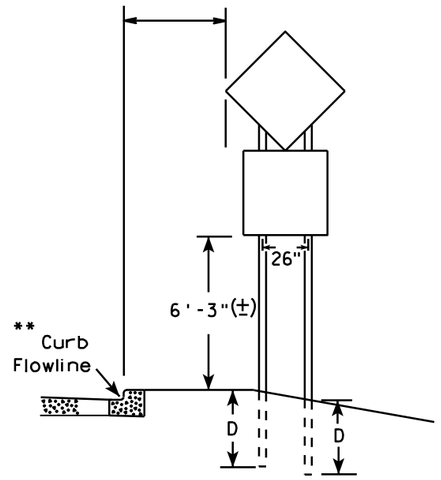
URBAN AREA



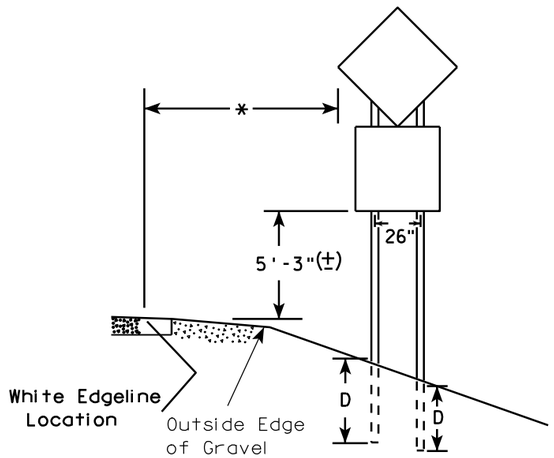
RURAL AREA (See Note 3)







48" DIAMOND WARNING SIGN



48" DIAMOND WARNING SIGN

SIGN SHAPE OTHER THAN DIAMOND (TWO POSTS REQUIRED)	
L	E
Greater than 48" Less than 60"	12"
60" to 120"	L/5

***

SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED)	
L	E
Greater than 120" less than 168"	12"

SIGN SHAPE OTHER THAN DIAMOND (FOUR POSTS REQUIRED)	
L	E
168" and greater	12"

POST EMBEDMENT DEPTH

Area of Sign Installation (Sq. Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

GENERAL NOTES

1. For multiple post installations, individual post spacing shall be greater than 3'-6".
2. See tables below for required number of posts.
3. For expressways and freeways, mounting height is 7'-3" (±) or 6'-3" (±) depending upon existence of sub-sign.
4. The (±) tolerance for mounting height is 3 inches.
5. Minimum mounting height for J assemblies (A4-5) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. Folding stop signs (R1-1F) shall be mounted at a height of 5'-3" (±) or as directed by the engineer.
8. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Clearance Markers (W5-52), Mile Markers (D10 series) & End of Road Markers (W5-56 & W5-56A) shall be mounted at a height of 4"-3" (±).

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

*** See A4-3 sign plate for signs 4' or less in width or 20 S.F. or less in area.

TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

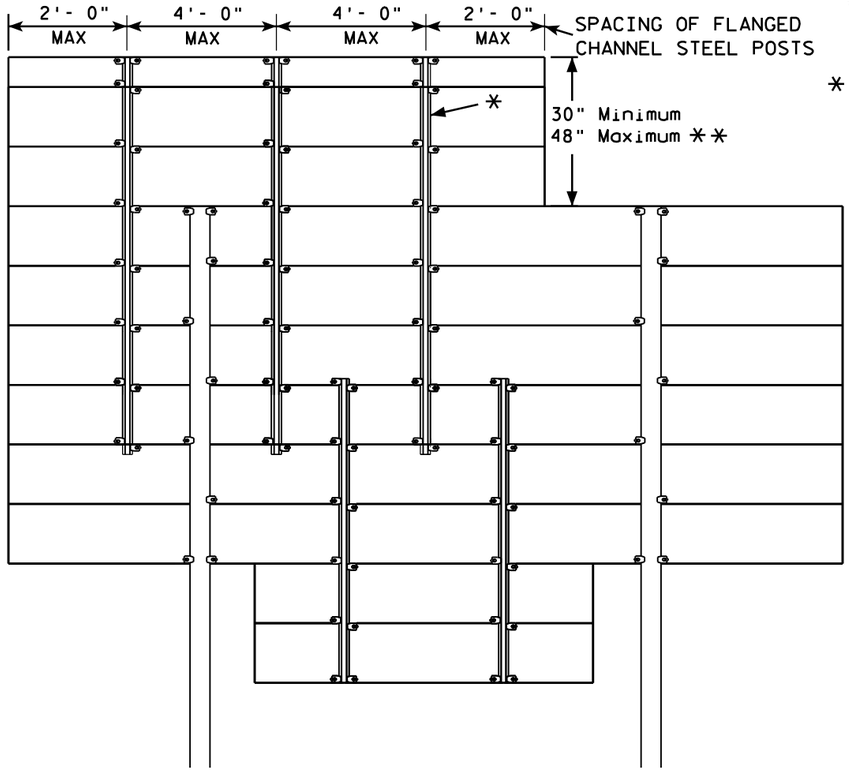
DATE 9/21/2011 PLATE NO. A4-4.11

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 904	E

7

FILE NAME : C:\Users\PROJECTS\tr_stdplate\A44.DGN PLOT DATE : 21-SEP-2011 13:36 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 109.249131:1.000000
WISDOT/CADDS SHEET 42

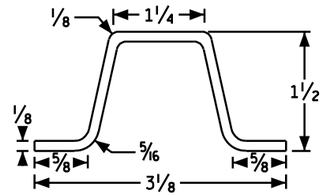
GROUND MOUNTED SIGN



*=2.00 lb/ft FLANGED CHANNEL, MIN. YIELD STRENGTH = 60,000 PSI (GRADE 60) GALVANIZED

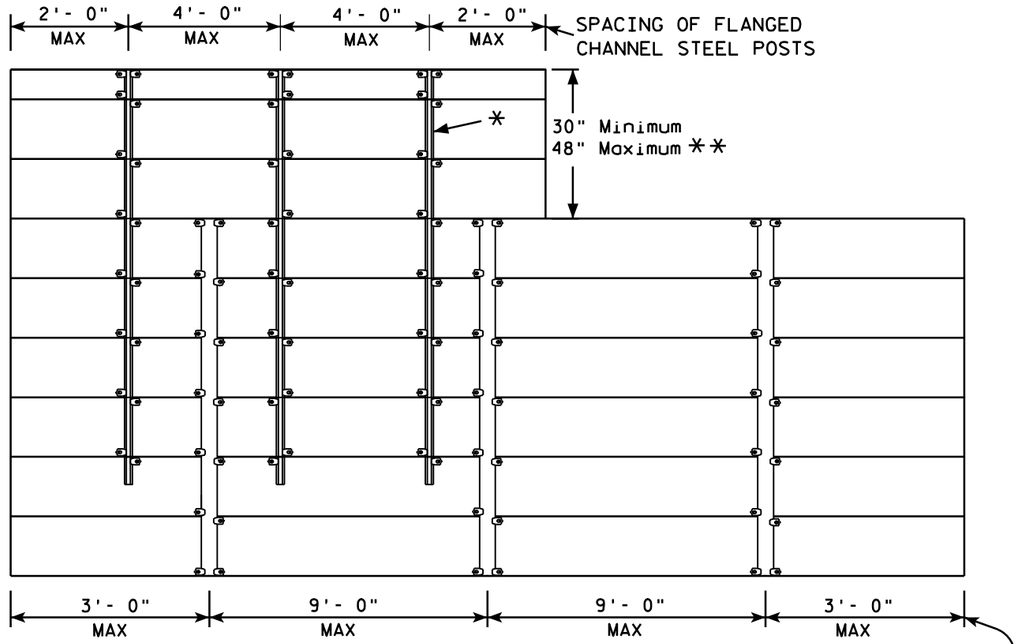
**=FOR 48" HEIGHT PANELS ON OVERHEAD STRUCTURES, ENTIRE SIGN SHALL BE CENTERED VERTICALLY ABOUT THE DEPTH OF THE TRUSS.

FLANGE CHANNEL DETAIL



NOT TO SCALE

SIGN BRIDGE MOUNTED SIGN



GENERAL NOTES

1. Flanged channel steel posts shall conform to size and material above, and shall be considered as incidental to other items in the contract.
2. Number of Flanged channel steel supports varies with length of panel and shall be spaced as shown:

   PANEL LENGTH 8'-0" OR LESS = 2 CHANNELS
   PANEL LENGTH 9'- 0" - 12'- 0" = 3 CHANNELS
   PANEL LENGTH 13'- 0" OR MORE = 4 CHANNELS

   If the flanged channel steel posts can not be horizontally spaced as shown, they can be moved so as to securely hold the sign.
3. The EXIT NUMBER PANEL shall normally be positioned above the guide sign aligned with the right edge of the guide sign. If the guide sign indicates a left exit, the EXIT NUMBER PANEL shall be aligned with the left edge of the guide sign.
4. If the bolt holes in the top panel (EXIT NUMBER), or sub panel (NEXT EXIT) line up with holes in main sign panel, stitch bolts shall be used in addition to the channels.
5. Provide post clips for each sign as shown. (Please note the differences between a ground mounted versus Sign bridge mounted sign as far as number of clips required on the main supports or beams)

7

7

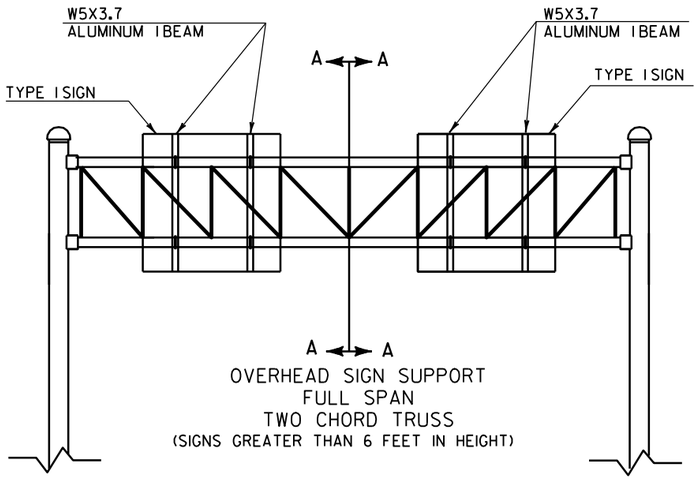
ATTACHMENT OF GUIDE SIGNS TO SUPPORTS

WISCONSIN DEPT OF TRANSPORTATION

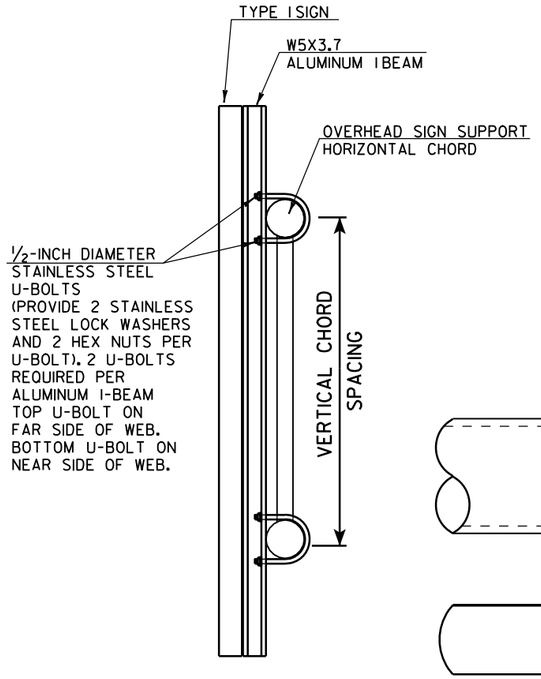
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/10 PLATE NO. A4-6.11

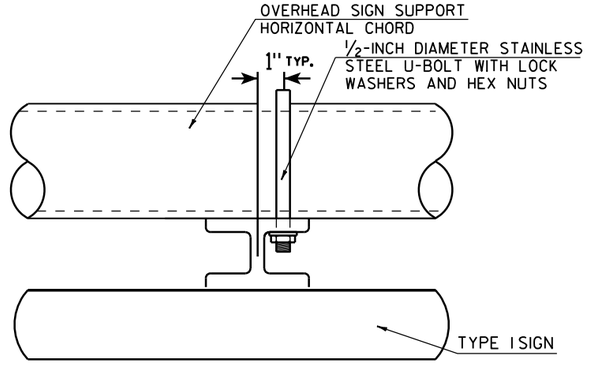
PROJECT NO:				SHEET NO: 905	E



OVERHEAD SIGN SUPPORT
FULL SPAN
TWO CHORD TRUSS
(SIGNS GREATER THAN 6 FEET IN HEIGHT)



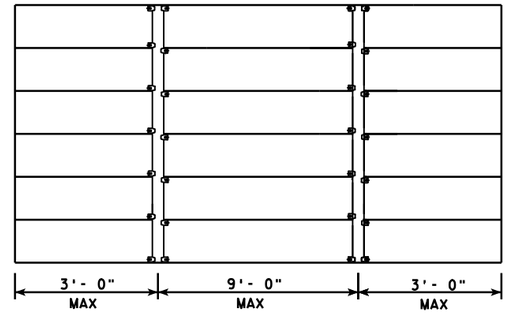
CUT SECTION A-A



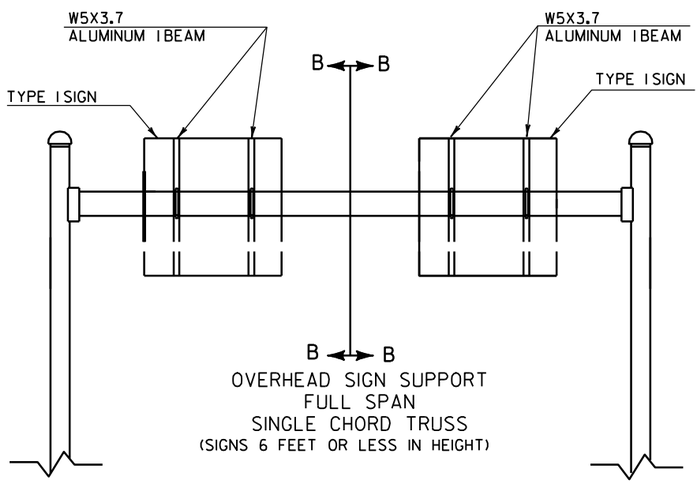
TYPICAL SIGN CONNECTION FOR
TWO CHORD TRUSS
PLAN VIEW

GENERAL NOTES

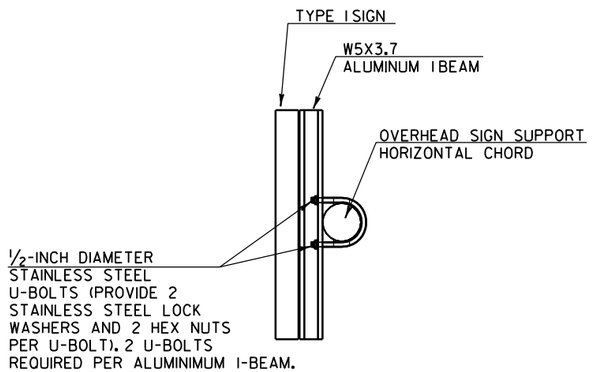
1. USE STAINLESS STEEL U-BOLTS, WASHERS, AND NUTS.
2. USE CLIPS ON EVERY EXTRUDED PANEL JOINT PER SIGN PLATE A4-6.
3. USE ALUMINUM VERTICAL SIGN SUPPORT BEAMS HAVING A 5 INCH BEAM DEPTH AND WEIGHT OF 3.7 LBS PER FOOT.
4. U-BOLTS SHALL BE STAINLESS STEEL AND MANUFACTURED TO THE PROPER SIZE TO FIT THE CHORDS OF THE OVERHEAD SIGN STRUCTURE.
5. DIAMETER OF U-BOLTS SHALL BE AS SHOWN.
6. THE LENGTH OF THE ALUMINUM VERTICAL SIGN SUPPORT BEAMS SHALL BE THE SAME AS THE HEIGHT OF THE SIGN THEY ARE SUPPORTING. BEAM LENGTHS MAY BE LONGER FOR PROPER ATTACHMENT TO CHORDS.
7. MINIMUM NUMBER OF BRACKETS PER SIGN IS TWO. SEE DETAIL BELOW FOR SPACING OF ALUMINUM VERTICAL SIGN SUPPORTS
8. MATERIAL NOTES:
   STAINLESS STEEL U-BOLTS AND LOCKWASHERS ASTM 304.
   STAINLESS STEEL HEX NUTS ASTM A276.
   ALUMINUM I-BEAMS ARE 6061-T6.



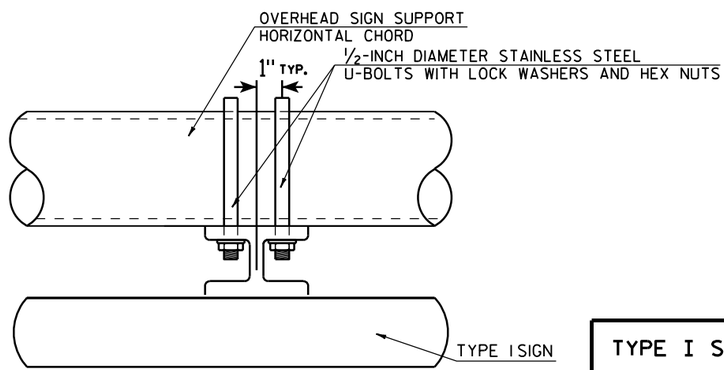
SPACING OF W5X3.7 ALUMINUM
VERTICAL SIGN SUPPORT



OVERHEAD SIGN SUPPORT
FULL SPAN
SINGLE CHORD TRUSS
(SIGNS 6 FEET OR LESS IN HEIGHT)



CUT SECTION B-B



TYPICAL SIGN CONNECTION FOR
SINGLE CHORD TRUSS
PLAN VIEW

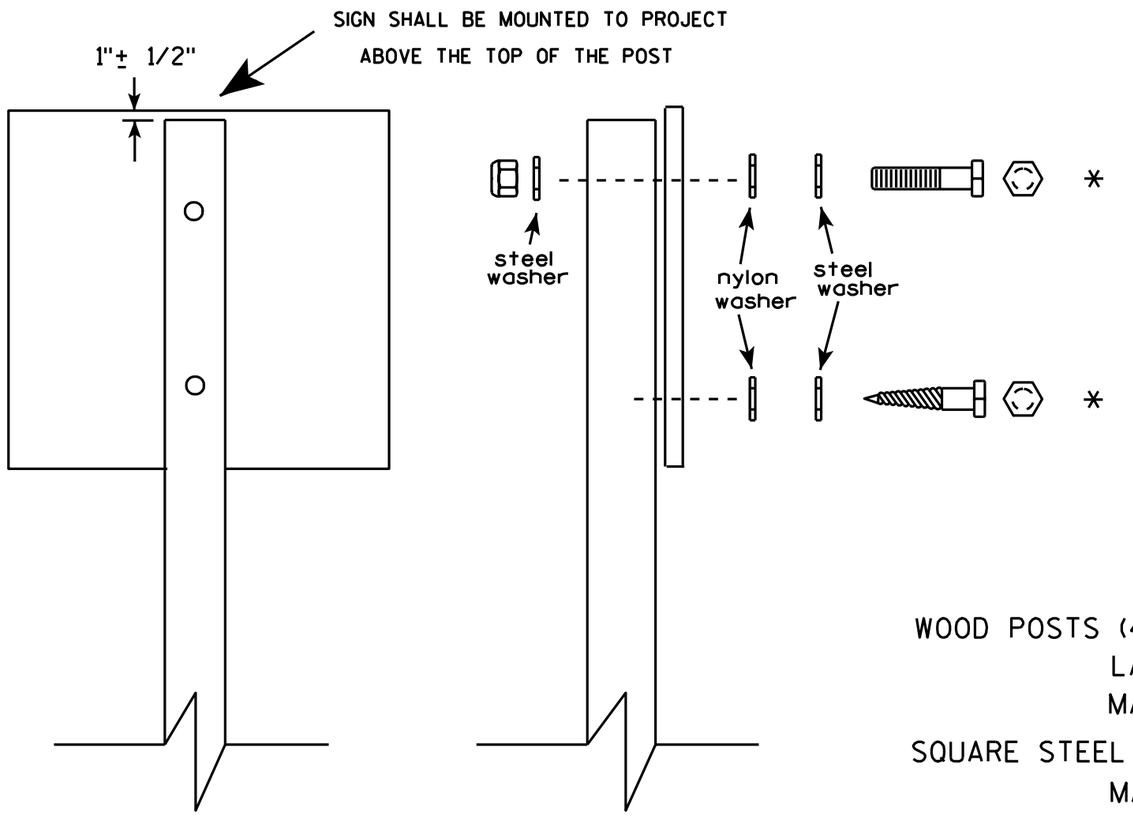
TYPE I SIGN CONNECTION TO OVERHEAD SIGN SUPPORT

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/26/10 PLATE NO. A4-7.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 906	E



Nuts, bolts and lags used for mounting signs shall have hexagonal heads and shall be either :

a. Hot dip galvanized in accordance with ASTM Designation: A 153, Class D, or SC 3

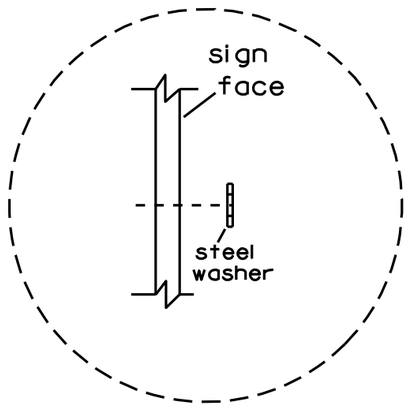
b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

Threads on bolts and nuts shall be manufactured with sufficient allowance for the cadmium plate or galvanized coating to permit the nuts to run freely on the bolts.

WOOD POSTS (4" x 4" or 4" x 6")
LAG SCREWS - 3/8" X 3"
MACHINE BOLTS - 5/16" X 6-1/2" or 7" Length w/ nuts

SQUARE STEEL POSTS (2" x 2")
MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts
RIVETS - 9/32 " (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL
O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH

WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON for all Type H signs.



Washer Placement when Sign Has Other Than Type H or Type F Face

* Two different fastening systems are shown for illustration purposes. On any individual sign, either one or the other system shall be used. Actual number of fasteners per sign varies with the sign area, but normally there are two. For a single post installation, all signs greater than 9 sq. ft. require the use of 3 fasteners.

ATTACHMENT OF SIGNS TO POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/23/10 PLATE NO. A4-8.7

7

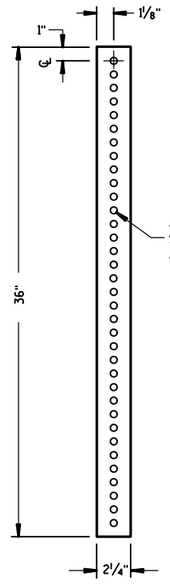
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PROJECT NO:

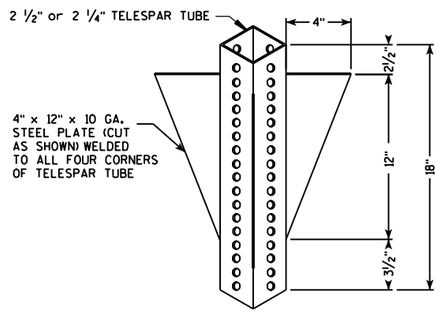
SHEET NO: 907 E

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

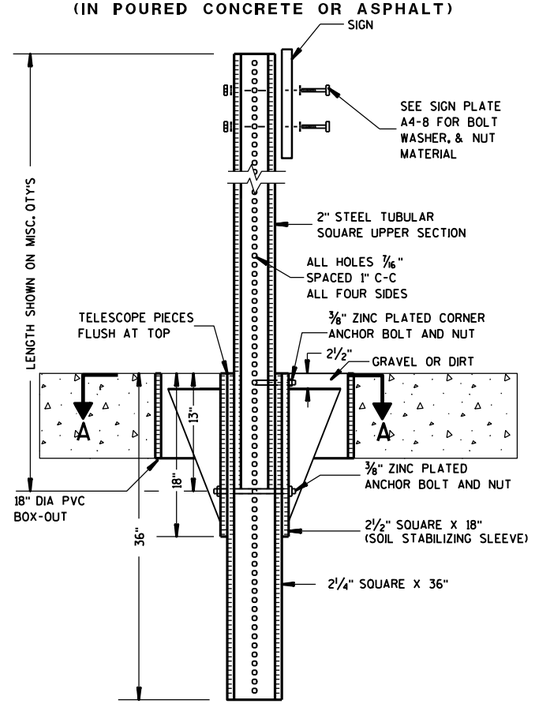
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



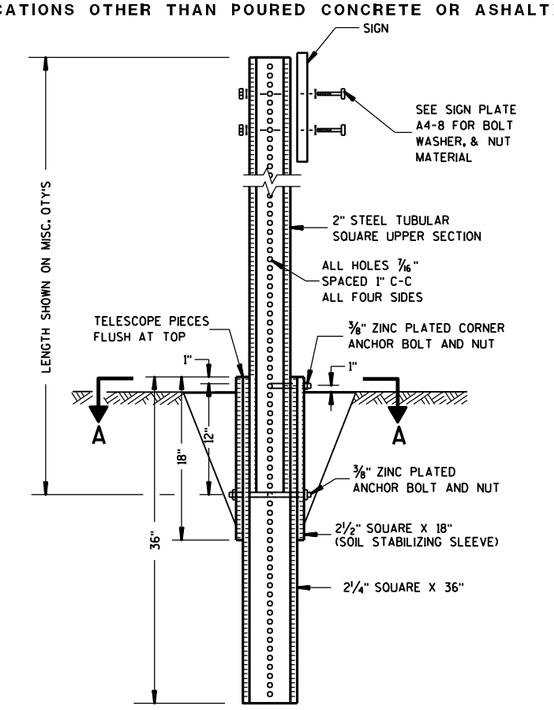
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

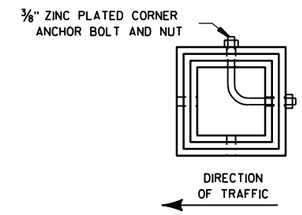


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



DETAIL OF TUBULAR STEEL SIGN POST
(IN LOCATIONS OTHER THAN POURED CONCRETE OR ASHALT)





SECTION A-A

Area of Sign Installation (Sq. Ft.)	Number of Required Posts
9 or less	1
Greater than 9 less than or equal to 18	2
Greater than 18 less than or equal to 27	3

Signs wider than 3 feet or larger than 9 sq. ft shall be mounted on multiple posts (see above table).

TUBULAR STEEL SIGN POST A4-9

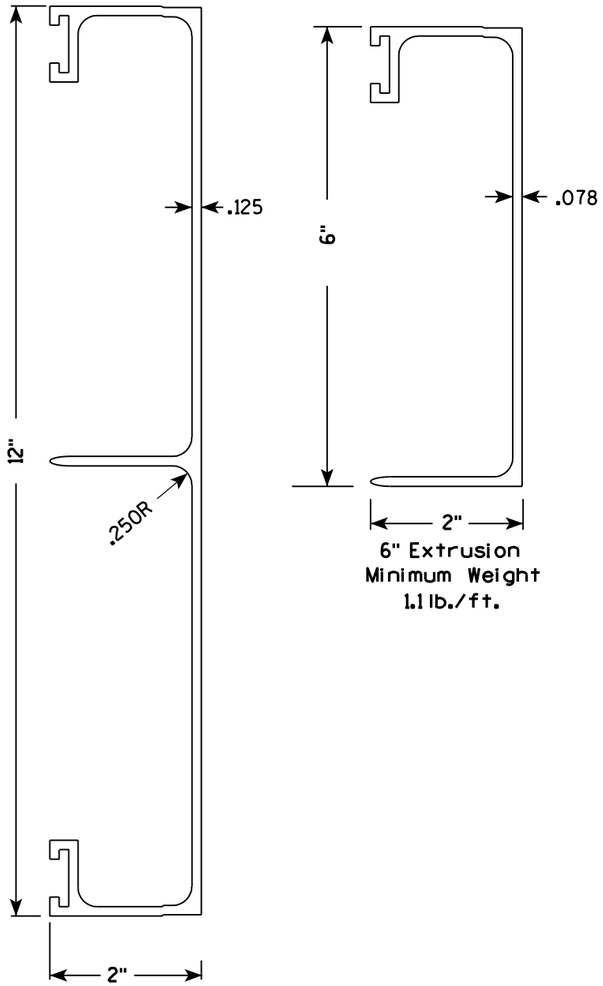
WISCONSIN DEPT OF TRANSPORTATION

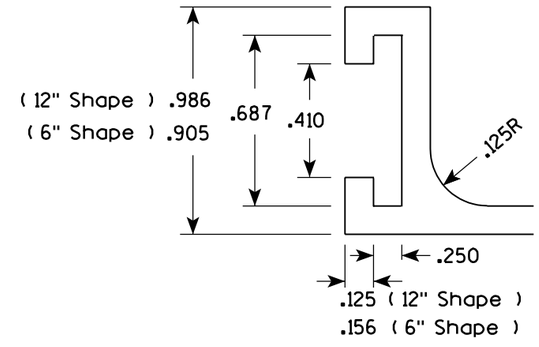
APPROVED Matthew R Rauch
for State Traffic Engineer

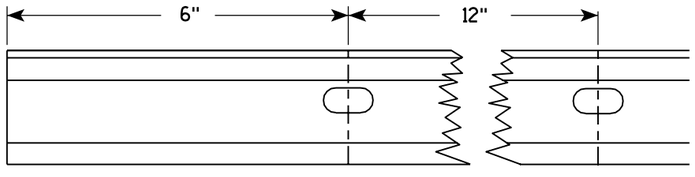
DATE 5/30/12 PLATE NO. A4-9.7

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 908	E

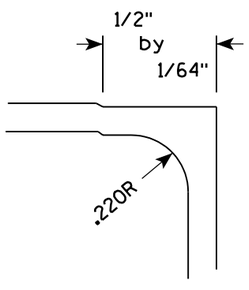
Extruded Shape







Punch 7/16" x 7/8" oval holes beginning 6" in from end of extrusion 12" CC on both edges of 6" and 12" panels.

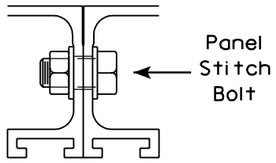


Hardware

STITCH BOLT, WASHER & NUT

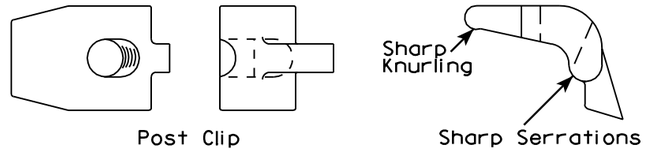
The hardware includes:

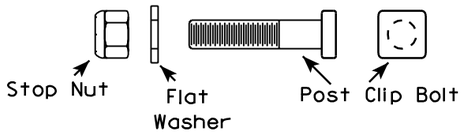
3/8 " - 16 X 3/4 " Economy Bolt 2024-T4 alloy
3/8 " - Stainless steel stop nut
3/8" X .064 Flat Washers, Alclad 2024-T4 alloy



POST CLIP, POST CLIP BOLT, WASHER & NUT

Post Clip shall be Alum. Alloy 356-T6
Post Clip Bolt shall be Stainless Steel.
Flat washer shall be 3/8" X .091, Stainless Steel.
Stop nut shall be stainless steel.





NOTES

1. The contractor may select any brand of extrusion that conforms to the illustrations or meets with the approval of the engineer, but all extrusions used on this contract shall be of the same brand.
2. Panel Stitch Bolts shall be used to assemble adjacent panels. Maximum stitch bolt spacing shall be 24" C-C, and a minimum of 4 bolts shall be used to connect any two extrusions.
3. Post Clips shall be used to attach the sign panel to the sign support.

ALUMINUM EXTRUSIONS FOR TYPE I SIGNS

WISCONSIN DEPT OF TRANSPORTATION

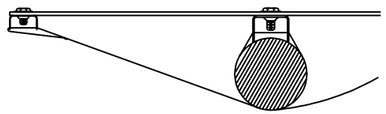
APPROVED Chester J Spang
for State Traffic Engineer

DATE 11/18/99 PLATE NO. A5-2.9

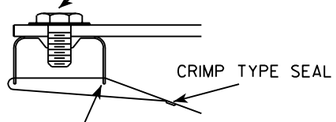
PROJECT NO:

SHEET NO: 909 E

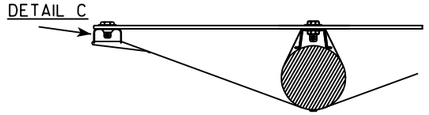
BRACE BANDING

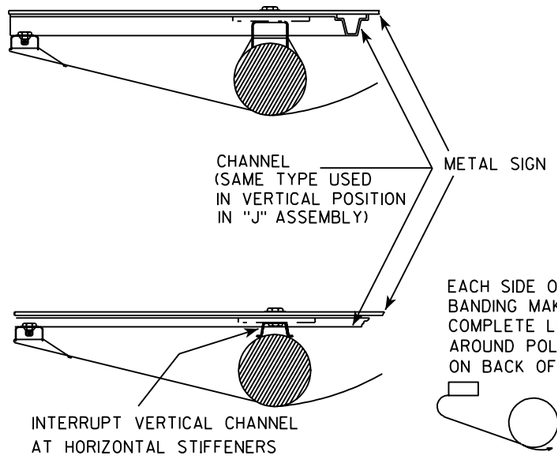


DETAIL C
CADMIUM PLATED STEEL BOLT
THROUGH BLACK BORDER



DETAIL C

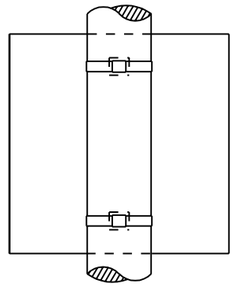


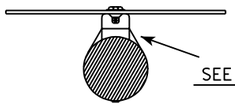


EACH SIDE OF BRACE
BANDING MAKES ONE
COMPLETE LOOP
AROUND POLE-SEAL
ON BACK OF POLE

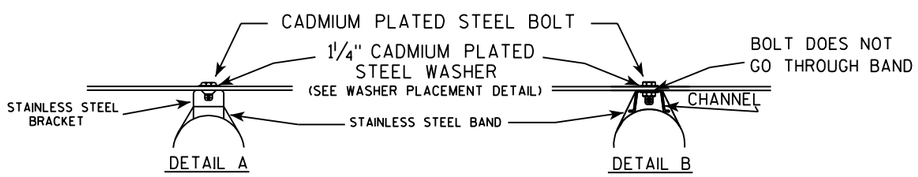
BRACKET BANDING

SINGLE SIGN

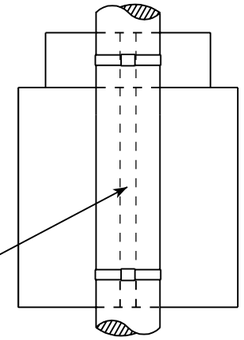




SEE DETAIL A



"J" ASSEMBLY

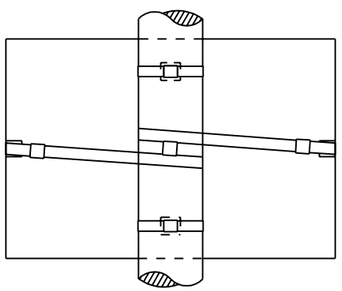


CHANNEL
SEE TYPICAL PANEL
INSTALLATION SHEET

SEE DETAIL B

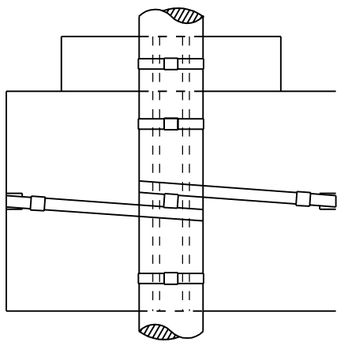
GENERAL NOTES

1. Signs 4' or greater in width shall have one brace band installed at the center of the sign.
2. Signs 3' or greater in height shall have three bracket bands installed. Signs less than 3' in height shall have two bracket bands installed.
3. Banding and assembly bracket shall be stainless steel. All bands shall be ¾" in width and 0.025" thickness.

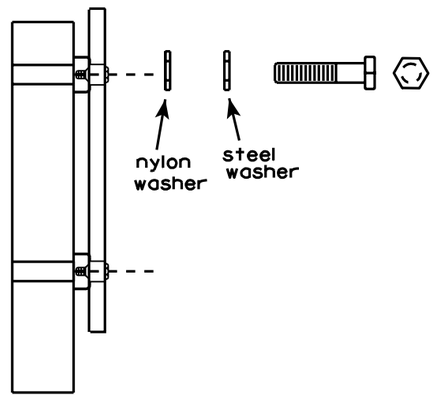


BRACE BANDING

BRACE BANDING SHALL BE TIGHTENED FIRMLY BUT NOT SO TIGHT AS TO APPRECIABLY CURVE FACE OF SIGN.



WASHER PLACEMENT



WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

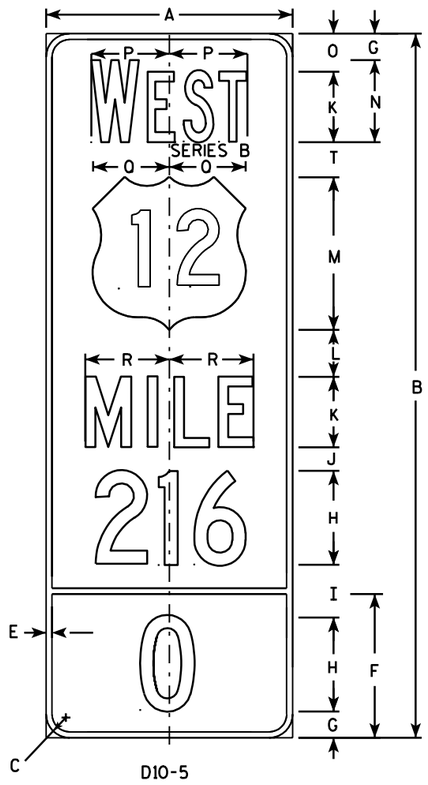
STANDARD SIGN
SIGN BANDING DETAILS

WISCONSIN DEPT OF TRANSPORTATION

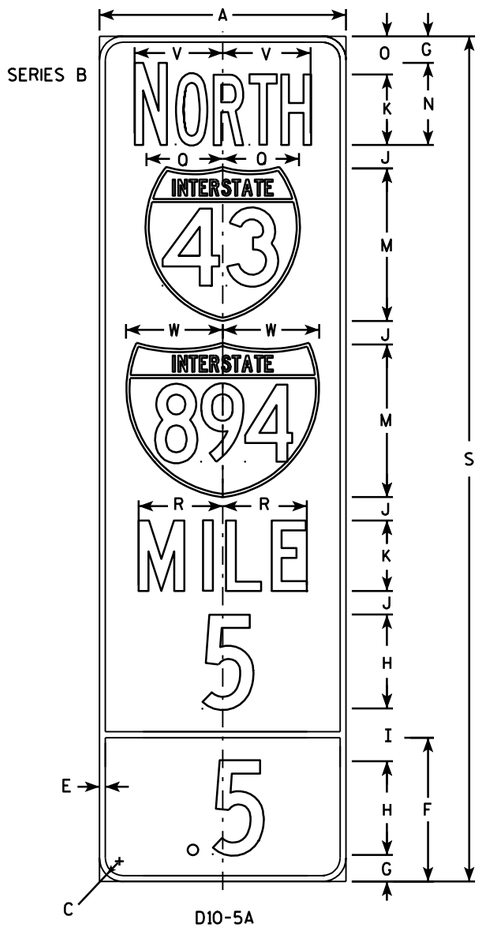
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/08/05 PLATE NO. A5-9.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 910	E



D10-5



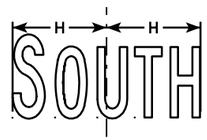
D10-5A

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - BLUE
   Message - WHITE
3. Interstate Shield Color
   Background - Top Red
   - Bottom Blue
   Message - White
4. Message Series - C or as noted on the Sign.
5. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
6. The decimal point is required for all digits except "0".
7. Optically adjust mileage numbers about the centerline of the sign to achieve proper balance.



SERIES B



SERIES B

Metric equivalent for this sign is:		Metric equivalent for this sign is:	
SIZE	D10-5	SIZE	D10-5A
1		1	
2		2	
3		3	
4	525 mm X 1500 mm	4	525 mm X 1950 mm
5	525 mm X 1500 mm	5	525 mm X 1950 mm

																										D10-5		D10-5A	
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2	Area sq. ft.	Area m2
1																														
2																														
3																														
4	21	60	1 ½		½	12 ¼	2 ¼	8	4 ½	2	6	4	13	7	3 ¼	6 ⅝	6 ½	7 ⅛	72	3		7 ½	8 ¼				8.75	0.79	10.5	1.03
5	21	60	1 ½		½	12 ¼	2 ¼	8	4 ½	2	6	4	13	7	3 ¼	6 ⅝	6 ½	7 ⅛	72	3		7 ½	8 ¼				8.75	0.79	10.5	1.03

STANDARD SIGN
D10-5

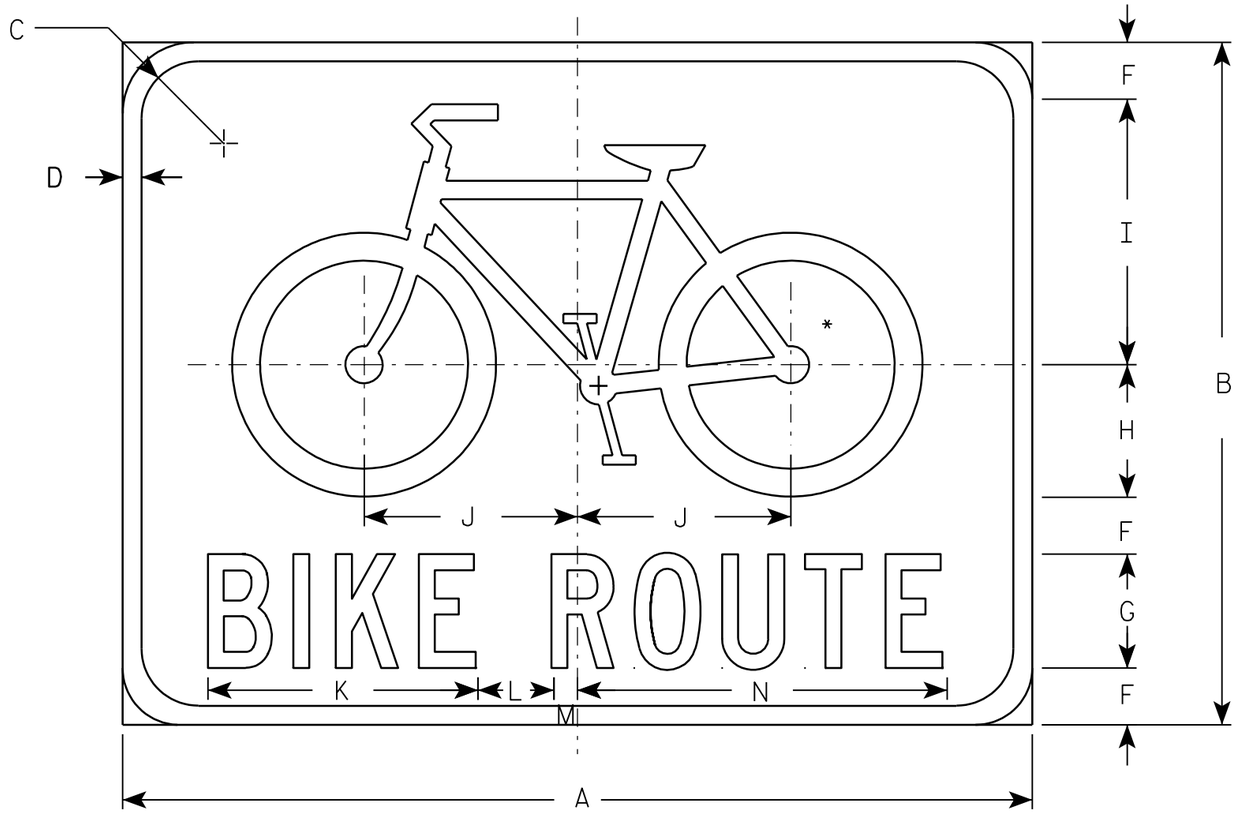
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/09/05 PLATE NO. D10-5.1

PROJECT NO:

SHEET NO: 911 E



D11-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - GREEN
   Message - WHITE
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

* See W11-1 for symbol design

Metric equivalent for this sign is:

SIZE	
1	
2	600 mm X 450 mm
3	750 mm X 600 mm
4	
5	

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1																												
2	24	18	1 1/2	1/2		1 1/2	3	3 1/2	7	5 5/8	7 1/8	2	5/8	9 3/4													3.0	0.27
3	30	24	1 1/4	5/8		2	4	4 3/4	9 1/4	7 1/2	9 1/2	2 5/8	7/8	13													5.0	0.45
4																												
5																												

STANDARD SIGN
D11-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/24/04 PLATE NO. D11-1.1

PROJECT NO:

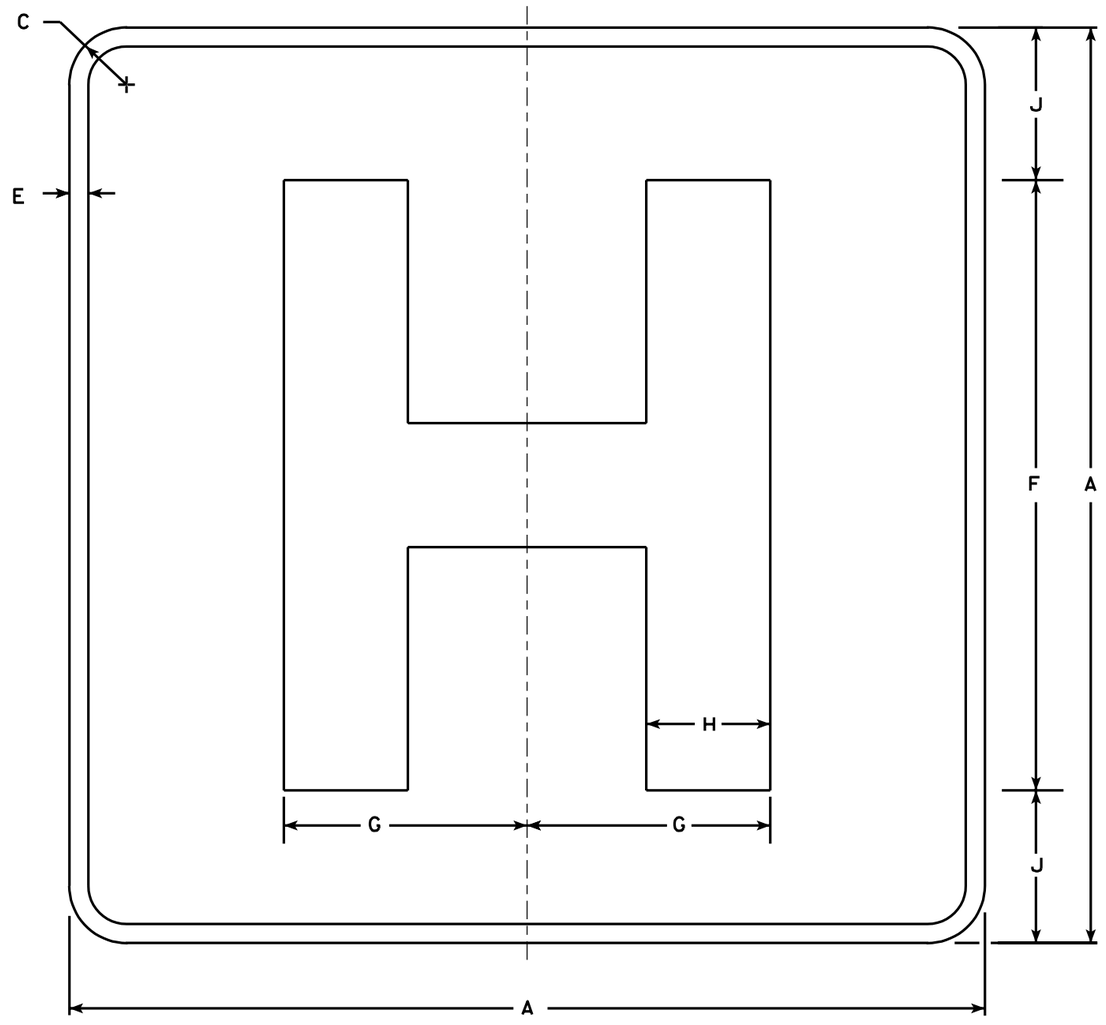
SHEET NO: 912 E

FILE NAME : C:\Users\Projects\tr_stdplate\D111.DGN PLOT DATE : 17-MAR-2005 10:38 PLOT BY : DOTDZK

WISDOT/CADDS SHEET 42

7

7



D9-2

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Blue
   Message - White - Type H Reflective
3. Message Series - E Modified
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

Metric equivalent for this sign is:

SIZE	
1	450 mmX 450 mm
2	600 mmX 600 mm
3	900 mmX 900 mm
4	X
5	X

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18		1 1/8		1/2	12	4 3/4	2 3/8		3																	4.0
2	24		1 1/2		1/2	16	6 3/8	3 1/4		4																	4.0
3	36		2 1/4		3/4	24	9 1/2	4 7/8		6																	9.0
4																											
5																											

STANDARD SIGN
D9-2

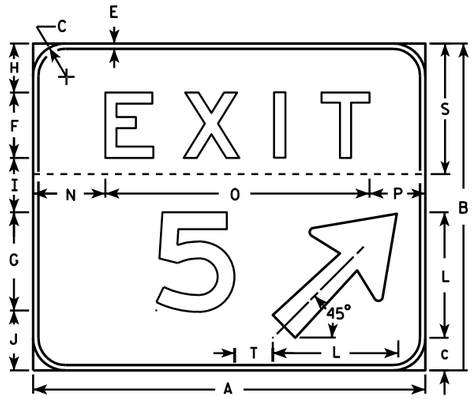
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spong
for State Traffic Engineer

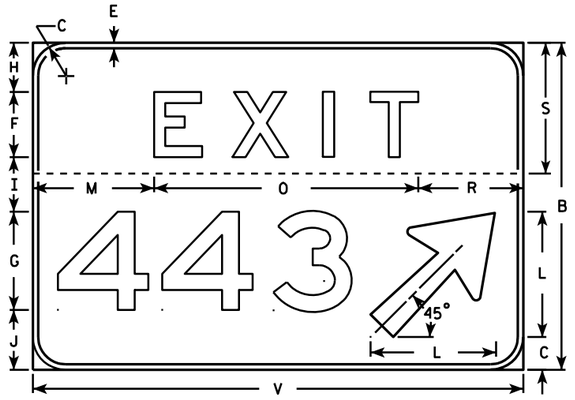
DATE 1/15/02 PLATE NO. D9-2.4

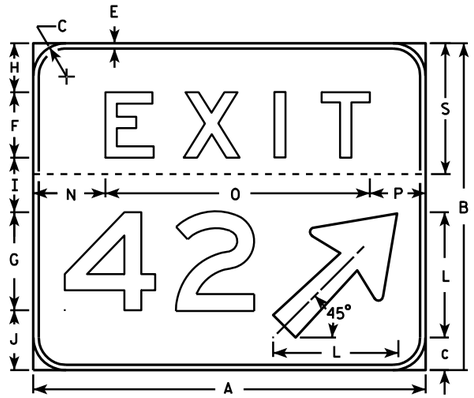
PROJECT NO:

SHEET NO: 913 E



NOTE: T diminision shall be measured from the back of the number to the front of the arrow

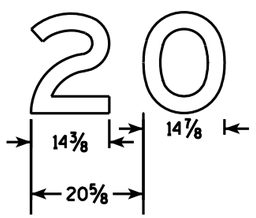




NOTES

1. Sign is Type II - Type H reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Green
   Message - White (Type H reflective)
3. Message Series - E
4. Corners may be square or rounded but the border shall be rounded as shown.
5. Base material for this sign shall be plywood and shall be split into two seperate pieces as shown on each detail by the dashed line (----------).
6. Arrow is Type "A" from sign plate A1-1.
7. Substitute appropriate message, space per the table and adjust placement on sign to achieve proper balance.
8. As per the Standard Spec's, these signs shall not have a vertical joint.

EXAMPLE FOR USING SPACING CHART



SPACING CHART FOR 18" NUMERALS

NUMBERS	WIDTH	0	1	2	3	4	5	6	7	8	9	A	B	C
0	14 7/8	21 5/8	21 5/8	21 1/4	20 3/8	21 1/4	21 1/4	21 5/8	19 7/8	22 1/8	21 5/8			
1	5 7/8	14	14	14	13 1/8	12 1/8	14	14	12 1/4	14	14			
2	14 3/8	20 5/8	21 1/8	20 5/8	19 3/4	20 1/4	20 5/8	20 5/8	18 7/8	21 1/8	20 5/8			
3	14 3/8	20 3/4	21 1/8	20 3/4	20 1/4	19 3/4	20 3/4	20 3/4	19 3/8	21 1/8	20 3/4			
4	16 5/8	22 7/8	22	22 1/2	21 5/8	21 5/8	22 7/8	22 7/8	20 5/8	23 3/8	22 7/8			
5	14 1/4	20 5/8	20 5/8	20 1/8	18 3/4	18 3/4	20 5/8	20 5/8	18 3/8	20 5/8	20 5/8			
6	14 1/2	21 1/4	20 3/4	20 3/4	19 7/8	19 1/2	20 3/8	20 3/4	19	20 3/4	20 3/8			
7	14 3/8	19 3/4	19 3/4	20 1/4	19 3/4	17	19 3/4	20 5/8	18 7/8	20 5/8	19 3/4			
8	14 1/4	21 1/2	21 1/2	20 5/8	19 1/4	19 3/4	20 5/8	21 1/2	19 5/8	21 1/2	20 5/8			
9	14 1/2	21 1/4	21 1/4	20 7/8	20	20 7/8	20 7/8	21 1/4	19 1/2	21 3/4	21 1/4			
A	18	19 3/4	19 3/4	20 1/4	19 3/4	17	19 3/4	20 5/8	18 7/8	20 5/8	19 3/4	21 5/8	23 7/8	23
B	14 1/4	21 1/2	21 1/2	20 5/8	19 1/4	19 3/4	20 5/8	21 1/2	19 5/8	21 1/2	20 5/8	19 1/2	22 3/8	21 1/2
C	14 1/4	21 1/4	21 1/4	20 7/8	20	20 7/8	20 7/8	21 1/4	19 1/2	21 3/4	21 1/4	18 3/8	21	19 3/4

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
2																										
3																										
4																										
5	72	60	6		1	12	18	9	10	11	8 7/8	23	22 1/4	13 1/4	48 1/2	10 1/4		19 1/4	24	7		90		96	7 1/2	

1-2 Digit Bid Area	3 Digit Bid Area
Sq. Ft.	
30	37.5

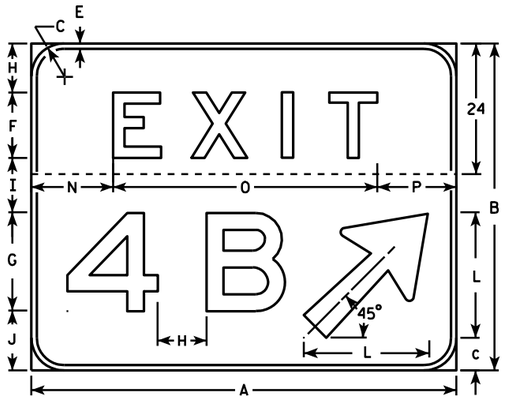
STANDARD SIGN
E5-1A

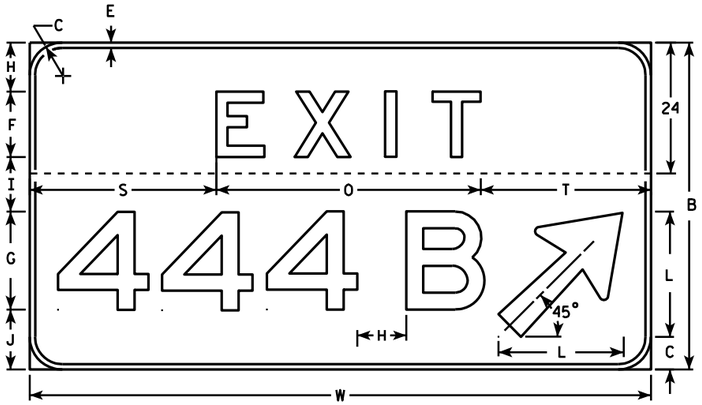
WISCONSIN DEPT OF TRANSPORTATION

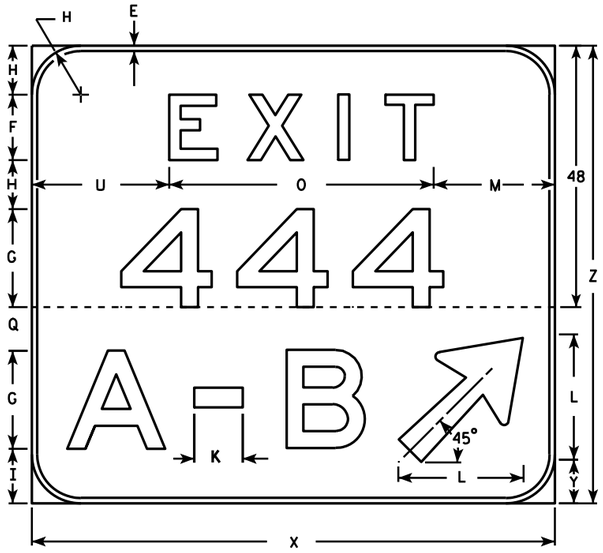
APPROVED Matthew R Rauch for State Traffic Engineer

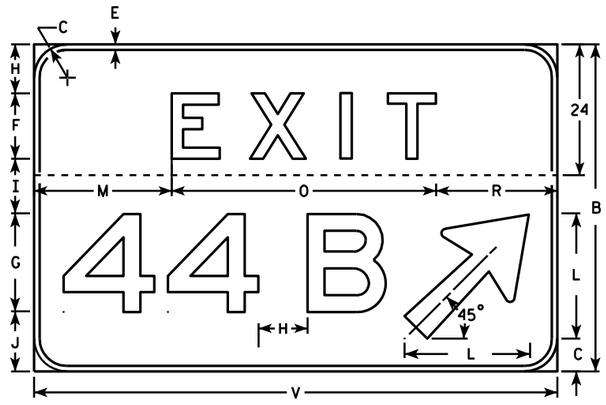
DATE 5/11/10 PLATE NO. E5-1A.12

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 914 | E

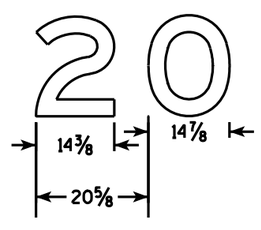








EXAMPLE FOR USING SPACING CHART



NOTES

1. Sign is Type II - Type H reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Green
   Message - White (Type H reflective)
3. Message Series - E
4. Corners may be square or rounded but the border shall be rounded as shown.
5. Base material for this sign shall be plywood and shall be split into two seperate pieces as shown on each detail by the dashed line (----------).
6. Arrow is Type "A" from sign plate A1-1.
7. Substitute appropriate message, space per the table and adjust placement on sign to achieve proper balance.
8. When two letters are hyphenated, the distance between them should be equal to two letter heights and the hyphen is spaced optically between them.
9. As per the Standard Spec's, these signs shall not have a vertical joint.

SPACING CHART FOR 18" NUMERALS

NUMBERS	WIDTH	0	1	2	3	4	5	6	7	8	9	A	B	C
0	14 7/8	21 5/8	21 5/8	21 1/4	20 3/8	21 1/4	21 1/4	21 5/8	19 7/8	22 1/8	21 5/8	19 7/8	22 1/8	22 1/8
1	5 7/8	14	14	14	13 1/8	12 1/8	14	14	12 1/4	14	14	9 7/8	14	14
2	14 3/8	20 5/8	21 1/8	20 5/8	19 3/4	20 1/4	20 5/8	20 5/8	18 7/8	21 1/8	20 5/8	20 1/4	21 1/8	21 1/8
3	14 3/8	20 3/4	21 1/8	20 3/4	20 1/4	19 3/4	20 3/4	20 3/4	19 3/8	21 1/8	20 3/4	20 1/4	21 1/8	21 1/8
4	16 5/8	22 7/8	22	22 1/2	21 5/8	21 5/8	22 7/8	22 7/8	20 5/8	23 3/8	22 7/8	22 1/2	25 1/2	23 3/8
5	14 1/4	20 5/8	20 5/8	20 1/8	18 3/4	18 3/4	20 5/8	20 5/8	18 3/8	20 5/8	20 5/8	19 1/4	20 5/8	20 5/8
6	14 1/2	21 1/4	20 3/4	20 3/4	19 7/8	19 1/2	20 3/8	20 3/4	19	20 3/4	20 3/8	18	20 3/4	20 3/4
7	14 3/8	19 3/4	19 3/4	20 1/4	19 3/4	17	19 3/4	20 5/8	18 7/8	20 5/8	19 3/4	20 1/4	20 5/8	20 5/8
8	14 1/4	21 1/2	21 1/2	20 5/8	19 1/4	19 3/4	20 5/8	21 1/2	19 5/8	21 1/2	20 5/8	19 1/4	21 1/2	21 1/2
9	14 1/2	21 1/4	21 1/4	20 7/8	20	20 7/8	20 7/8	21 1/4	19 1/2	21 3/4	21 1/4	18	21 3/4	21 3/4
A	18	19 3/4	19 3/4	20 1/4	19 3/4	17	19 3/4	20 5/8	18 7/8	20 5/8	19 3/4	21 5/8	23 7/8	23
B	14 1/4	21 1/2	21 1/2	20 5/8	19 1/4	19 3/4	20 5/8	21 1/2	19 5/8	21 1/2	20 5/8	19 1/2	22 3/8	21 1/2
C	14 1/4	21 1/4	21 1/4	20 7/8	20	20 7/8	20 7/8	21 1/4	19 1/2	21 3/4	21 1/4	18 3/8	21	19 3/4

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
2																										
3																										
4																										
5	78	60	6		1	12	18	9	10	11	8 7/8	23	25 1/4	15	48 1/2	14 1/2	8	22 1/4	34 1/4	31 1/4	25 1/4	96	114	96	7 1/2	84

2 Digit Bid Area	3 Digit Bid Area	4 Digit Bid Area	5 Digit Bid Area
Sq. Ft.			
32.5	40.0	47.5	56.0

STANDARD SIGN
E5-1B

WISCONSIN DEPT OF TRANSPORTATION

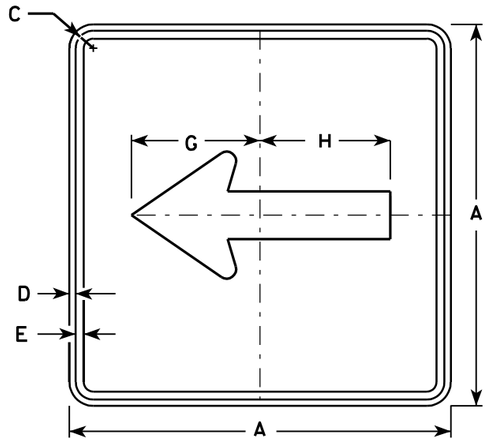
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 6/8/10 PLATE NO. E5-1B.12

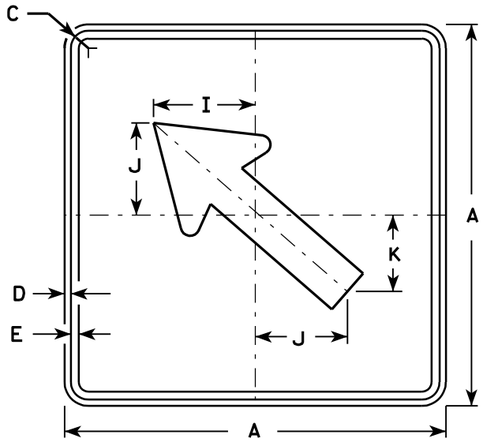
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 915 | E

7

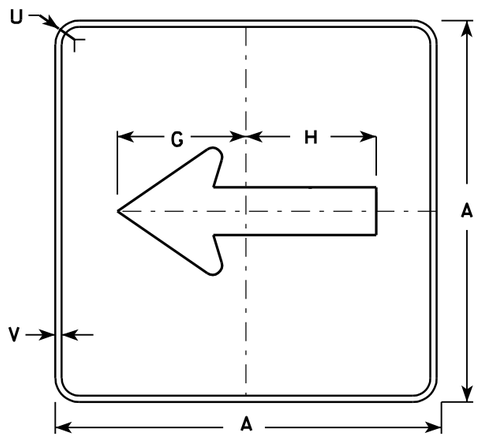
FILE NAME : C:\Users\PROJECTS\tr_stdplate\E51B.DGN PLOT DATE : 08-JUN-2010 12:42 PLOT BY : ditjph PLOT NAME : PLOT SCALE : 27.808870:1.000000
WISDOT/CADDS SHEET 42



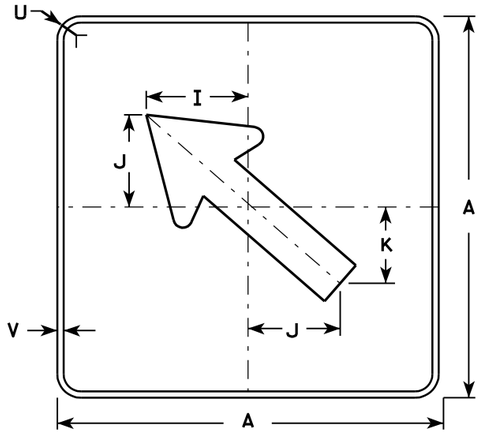
M6-1
MK6-1
MM6-1
MO6-1
MR6-1



M6-2
MK6-2
MM6-2
MO6-2
MR6-2



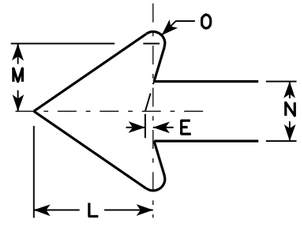
MB6-1
MG6-1
MN6-1



MB6-2
MG6-2
MN6-2

NOTES

1. Signs are Type II - See Note 4 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-1 and M6-2 Background - White - Type H Reflective (Detour or temporary Signs - Reflective) Message - Black
   MB6-1 and MB6-2 Background - Blue Message - White - Type H Reflective (Detour or temporary Signs - Reflective)
   MG6-1 and MG6-2 Background - Green Message - White - Type H Reflective
   MK6-1 and MK6-2 Background - Green Message - White - Type H Reflective
   MM6-1 and MM6-2 Background - White - Type H Reflective Message - Green
   MN6-1 and MN6-2 Background - Brown Message - White - Type H Reflective
   MO6-1 and MO6-2 Background - Orange - Reflective Message - Black
   MR6-1 and MR6-2 Background - Brown Message - Yellow - Type H Reflective



Metric equivalent for this sign is:

SIZE	
1	
2	525 mm X 525 mm
3	750 mm X 750 mm
4	750 mm X 750 mm
5	750 mm X 750 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1																												
2	21		1 1/8	3/8	3/8		7 1/2	7 1/8	5 5/8	5	4 1/4	5 1/4	3	2 5/8	1/2						1 1/2	1/2					3.06	0.28
3	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25	0.56
4	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25	0.56
5	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25	0.56

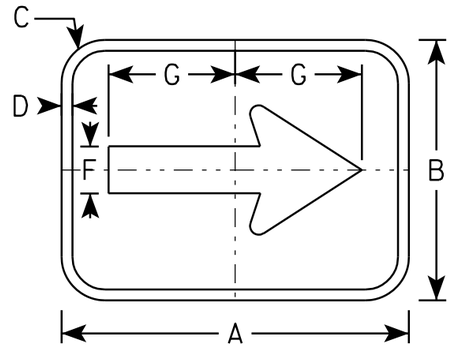
STANDARD SIGN M6-1 & M6-2 SERIES

WISCONSIN DEPT OF TRANSPORTATION

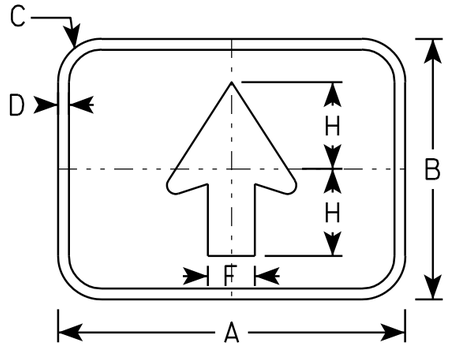
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/16/10 PLATE NO. M6-1.12

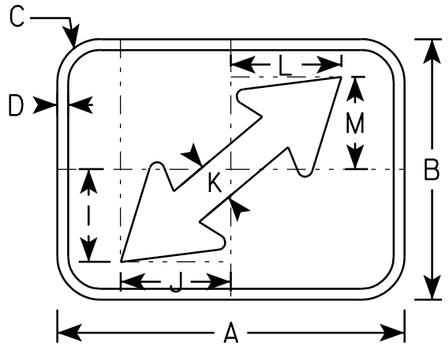
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 916	E



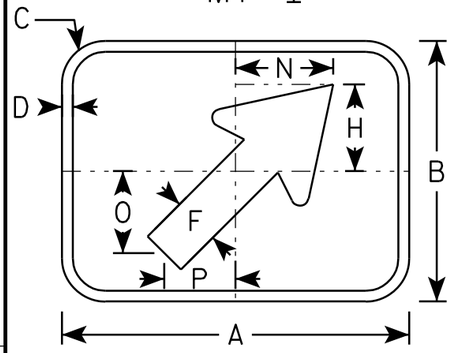
M7-1



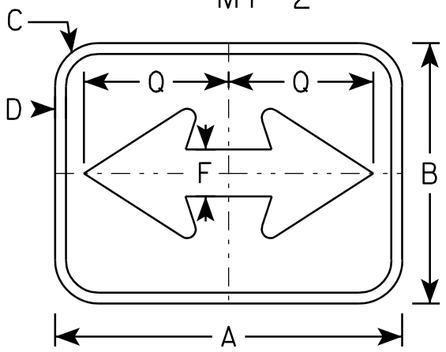
M7-2



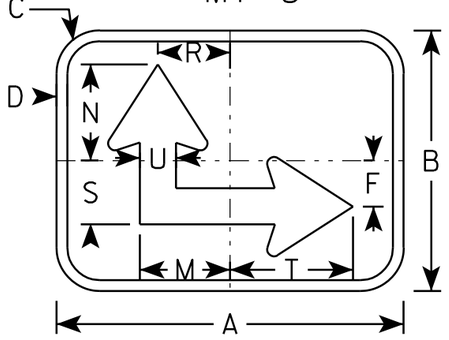
M7-3



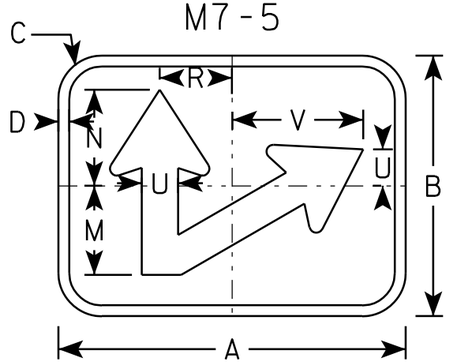
M7-4



M7-5



M7-6



M7-7

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Green
   Message -White
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	12	9	1 1/2	3/8		1 5/8	4 3/8	3	3 1/4	3 3/4	1 3/8	3 7/8	3 1/8	3 3/8	2 7/8	2 1/2	5	2 1/2	2 1/4	4 1/4	1 1/4	4 1/2					.75
3																											
4																											
5																											

STANDARD SIGN
M7 SERIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 05/04/10 PLATE NO. M7-1.1

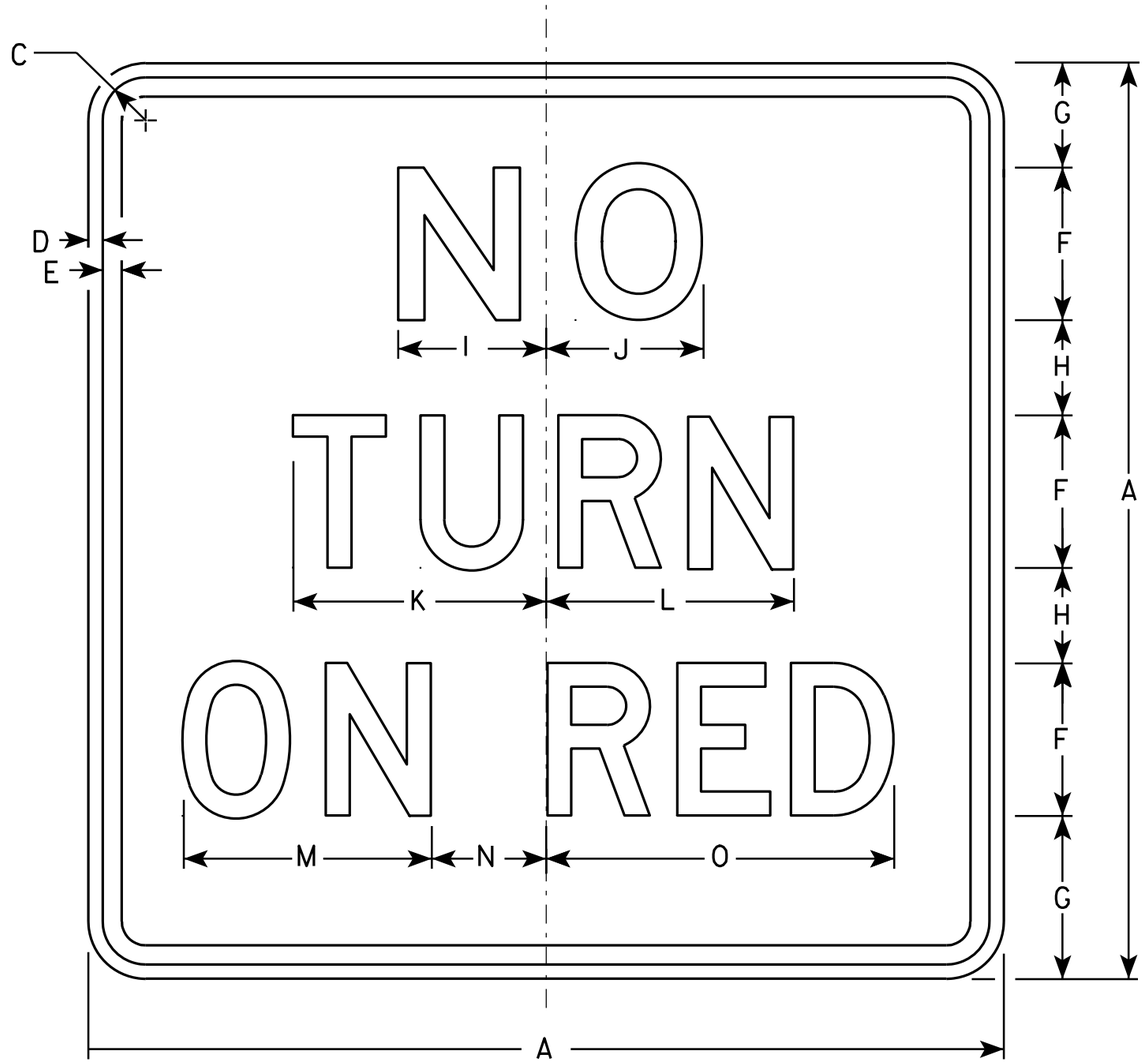
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 917	E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\M71.DGN PLOT DATE : 28-MAY-2010 08:14 PLOT BY : ditjph PLOT NAME : PLOT SCALE : 5.237442:1.000000

WISDOT/CADDS SHEET 42

7

7



R10-11B

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - See Note 5.
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Line 1 is Series E.
   Lines 2 and 3 are Series D.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18		1 1/8	3/8	3/8	3	2 3/4	1 3/4	3	3 1/8	5	4 7/8	5 1/4	1 7/8	7 1/8												2.25
2S	24		1 1/8	3/8	1/2	4	3 1/2	2 1/2	3 7/8	4 1/8	6 5/8	6 1/2	6 1/2	3	9 1/8												4.0
2M	24		1 1/8	3/8	1/2	4	3 1/2	2 1/2	3 7/8	4 1/8	6 5/8	6 1/2	6 1/2	3	9 1/8												4.0
3	30		1 3/8	1/2	5/8	5	4 1/2	3	4 7/8	5 1/4	8 1/4	8 1/8	7 3/4	4 1/8	11 7/8												6.25
4																											
5																											

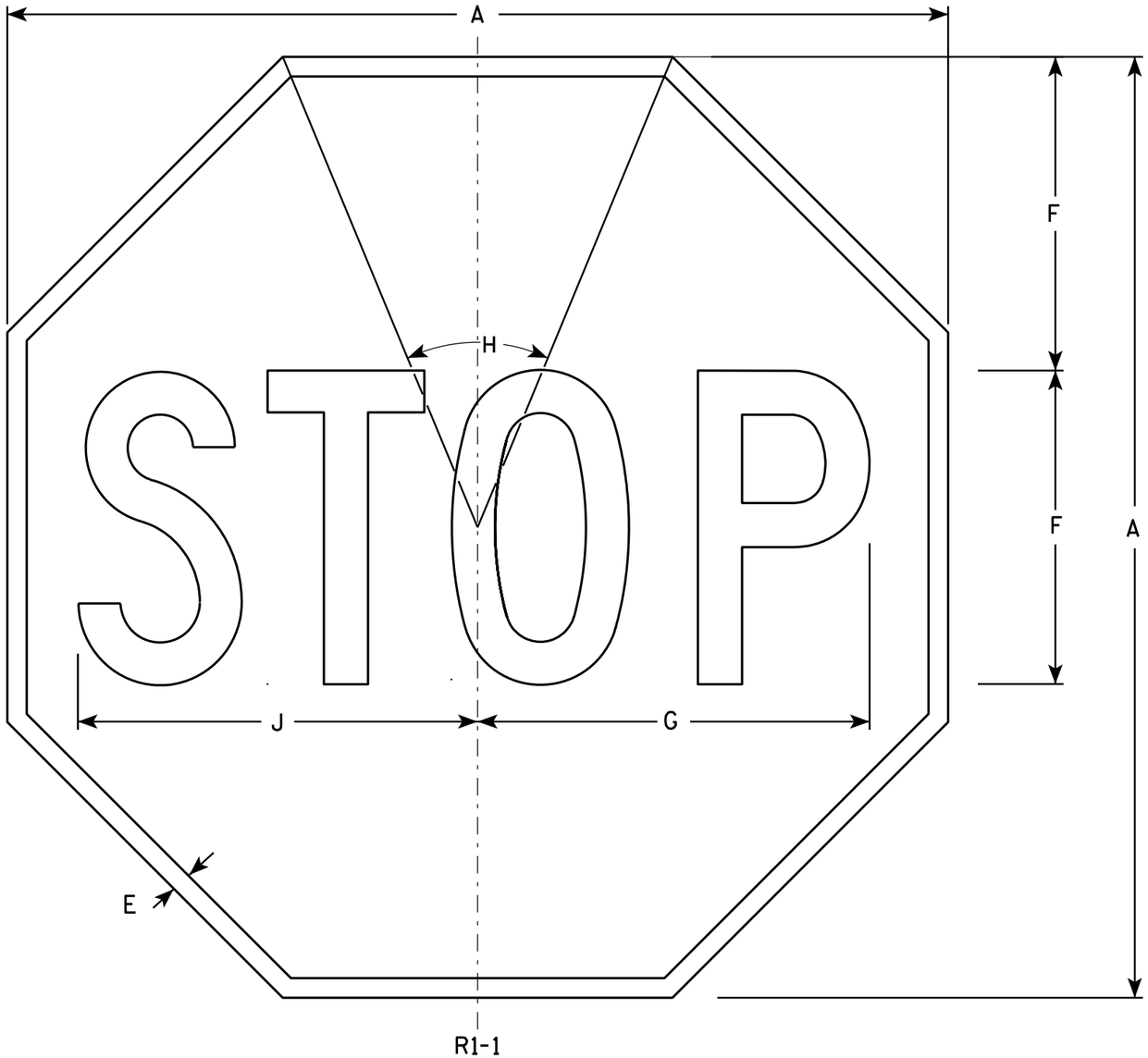
STANDARD SIGN
R10-11B

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/5/11 PLATE NO. R10-11B.4

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 918 | E



NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Red
   Message - White
3. Message Series - C

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24				3/8	8	10	45°		10 1/4																	3.31
2S	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2M	36				3/4	12	15	45°		15 3/8																	7.46
3	36				3/4	12	15	45°		15 3/8																	7.46
4	48				1	16	20	45°		20 1/2																	13.25
5	48				1	16	20	45°		20 1/2																	13.25
6	18				3/8	6	7 3/4	45°		7 3/4																	1.86
7	12				1/4	4	5	45°		5 1/8																	0.78

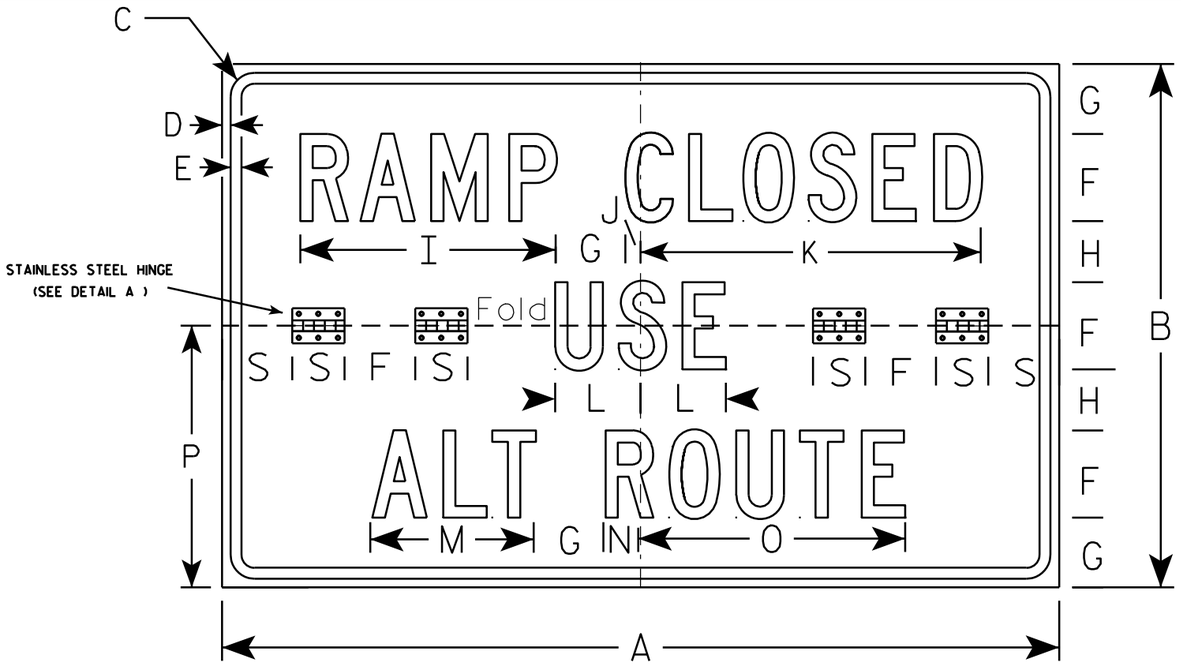
STANDARD SIGN
R1-1

WISCONSIN DEPT OF TRANSPORTATION

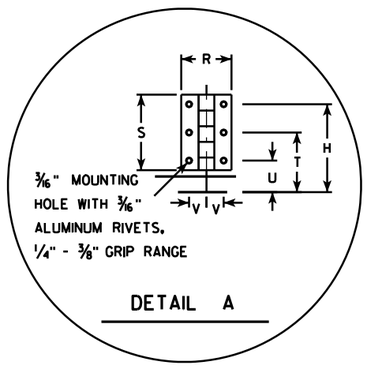
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/03/10 PLATE NO. R1-1.12

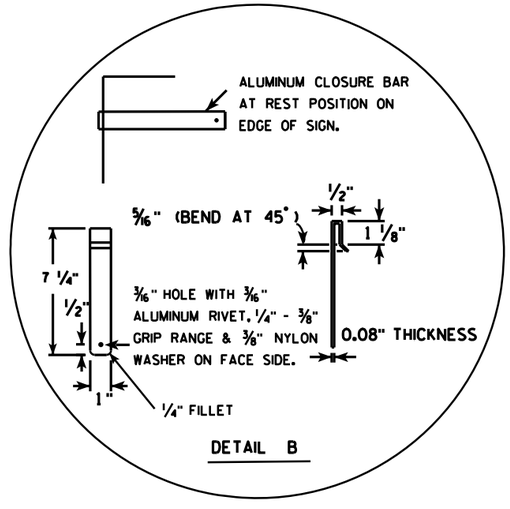
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 919	E



R11-54F



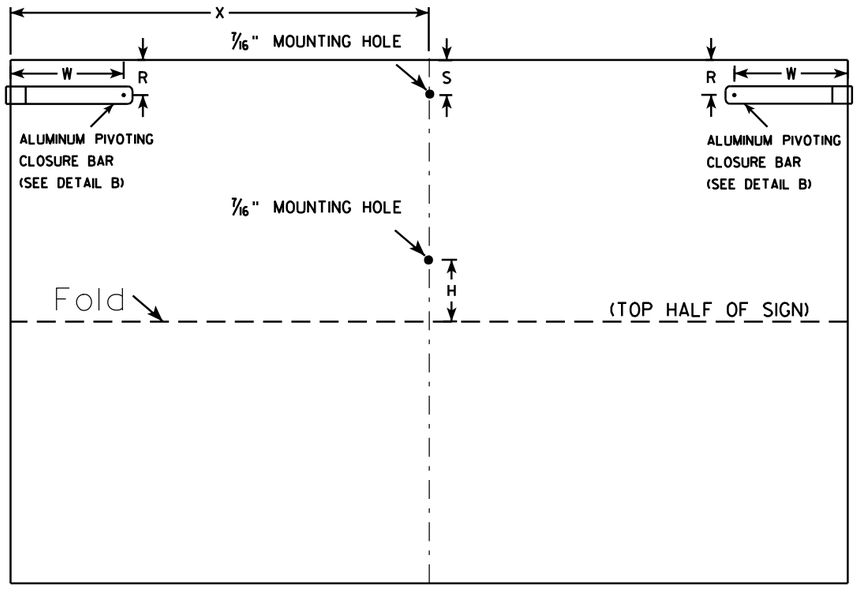
DETAIL A



DETAIL B

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - WHITE
   Message - BLACK
3. Message Series - C
4. Sign Base Material shall be aluminum corners and borders shall be rounded.
5. All hardware used on the folding sign installation shall conform to 637.2.4 of the WIS DOT Standard Specification.



(BACK VIEW)

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	30	1 3/8	1/2	5/8	5	4	3 1/2	14 5/8	7/8	19 1/2	4 7/8	9 3/8	2	15 1/4	15		2	3	2 5/8	1 1/4	11/16	6 1/2	24			10.0
2M	48	30	1 3/8	1/2	5/8	5	4	3 1/2	14 5/8	7/8	19 1/2	4 7/8	9 3/8	2	15 1/4	15		2	3	2 5/8	1 1/4	11/16	6 1/2	24			10.0
3																											
4																											
5																											

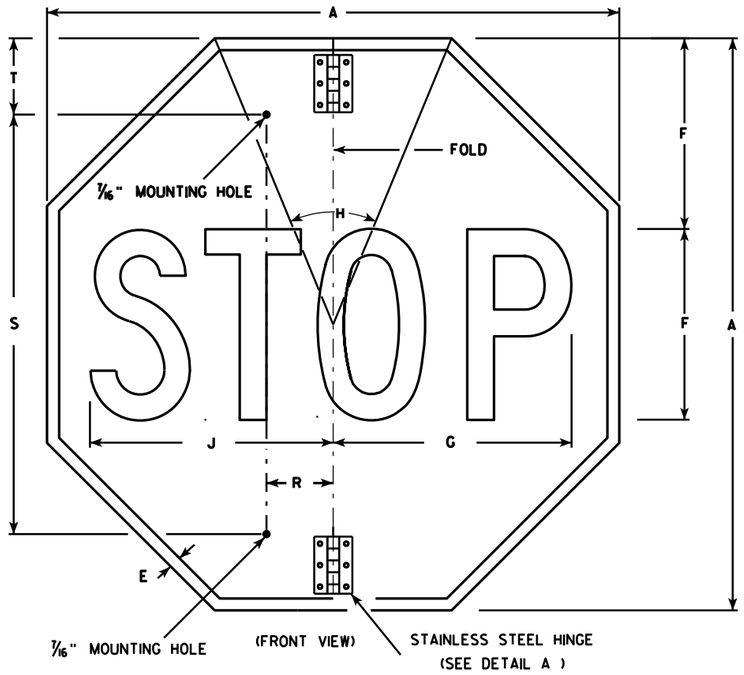
STANDARD SIGN
R11-54F

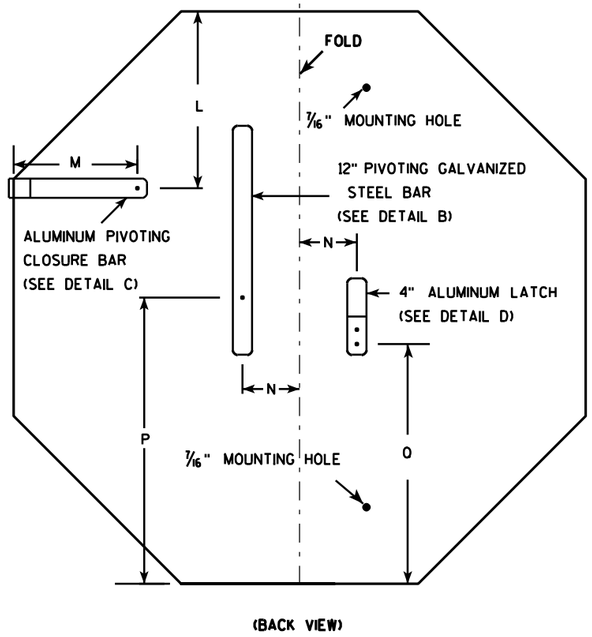
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/1/11 PLATE NO. R11-54F.2

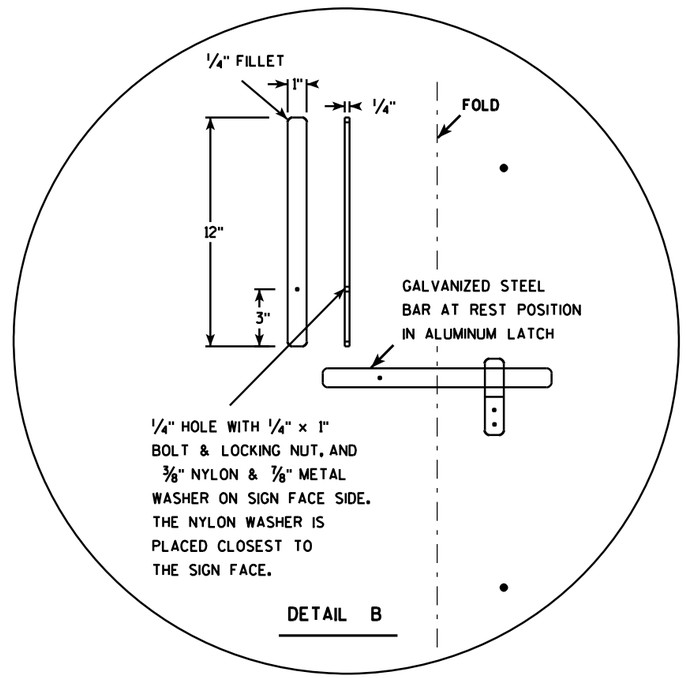
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 920	E

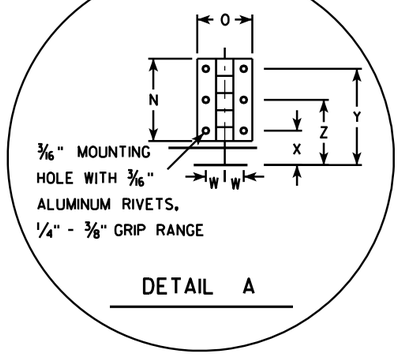


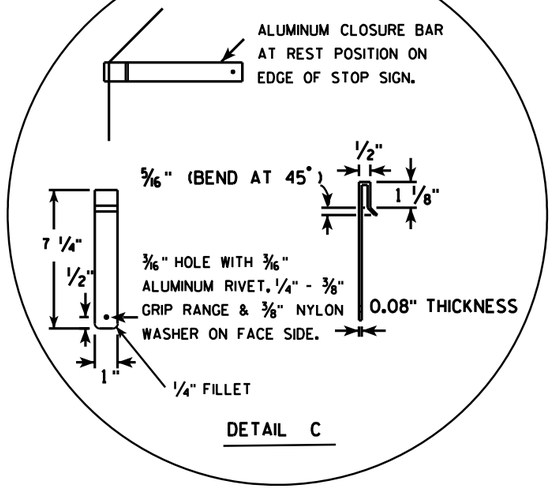


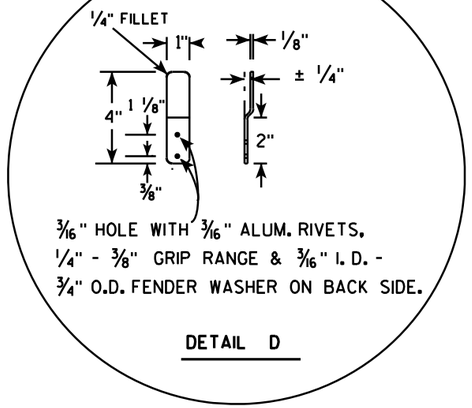
NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Red
   Message - White
3. Message Series - C
4. All hardware used on the folding STOP sign installation shall conform to 637.2.4 of the WIS DOT Standard Specification.









SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30				5/8	10	12 1/2	45		12 3/4		9 1/4	6 1/2	3	2	15	12 3/8	2 1/2	22	5			11/16	1 1/4	3 1/2	2 3/8	5.18
2M	36				3/4	12	15	45		15 3/8		11	6 1/2	3	2	18	15 3/8	2 1/2	26	5			11/16	1 1/4	3 1/2	2 3/8	7.46
3	36				3/4	12	15	45		15 3/8		11	6 1/2	3	2	18	15 3/8	2 1/2	26	5			11/16	1 1/4	3 1/2	2 3/8	7.46
4																											
5																											

STANDARD SIGN
R1-1F

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/03/10 PLATE NO. R1-1F.3

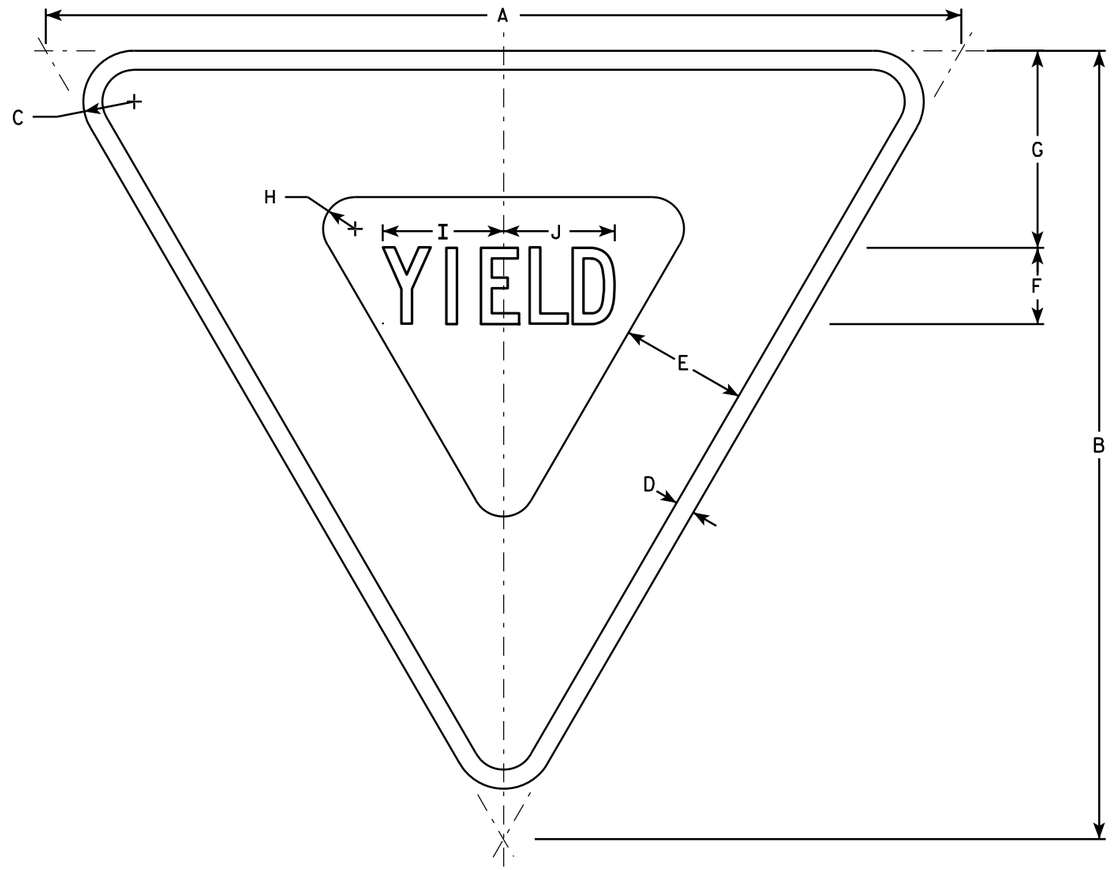
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 921	E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R11F.DGN PLOT DATE : 02-DEC-2010 15:26 PLOT BY : dotsja PLOT NAME : PLOT SCALE : 7.945391:1.000000

WISDOT/CADDS SHEET 42

7

7



R1-2

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. The border strip and word message are reflectorized red.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30	26	1 1/2	5/8	4	2 1/2	6 3/8	7/8	4	3 5/8																	2.71
2S	36	31	2	3/4	5	3	7 3/4	1 1/4	4 3/4	4 3/8																	3.88
2M	48	42	3	1	6	4	9 3/4	2	6 1/4	5 7/8																	7.00
3	48	42	3	1	6	4	9 3/4	2	6 1/4	5 7/8																	7.00
4	48	42	3	1	6	4	9 3/4	2	6 1/4	5 7/8																	7.00
5	60	52	3	1 1/2	8	5	13	2 1/2	7 7/8	7 1/4																	10.83
6	24	21	1 1/2	3/8	3	2	4 3/4	7/8	3 1/4	3																	1.75
7	18	15 1/2	1	3/8	2 1/2	1 1/2	3 7/8	5/8	2 3/8	2 1/4																	0.97

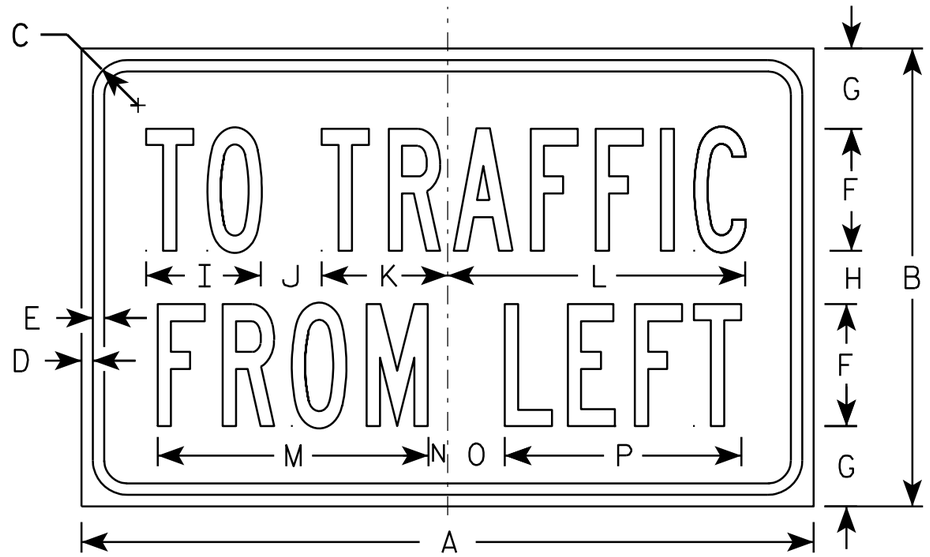
STANDARD SIGN
R1-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/02/10 PLATE NO. R1-2.11

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 922 | E



R1-54

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - B

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	15	1 1/8	3/8	3/8	4	2 5/8	1 3/4	3 3/4	2	4 1/8	9 3/4	8 7/8	5/8	1 7/8	7 3/4											2.5
2M	24	15	1 1/8	3/8	3/8	4	2 5/8	1 3/4	3 3/4	2	4 1/8	9 3/4	8 7/8	5/8	1 7/8	7 3/4											2.5
3																											
4																											
5																											

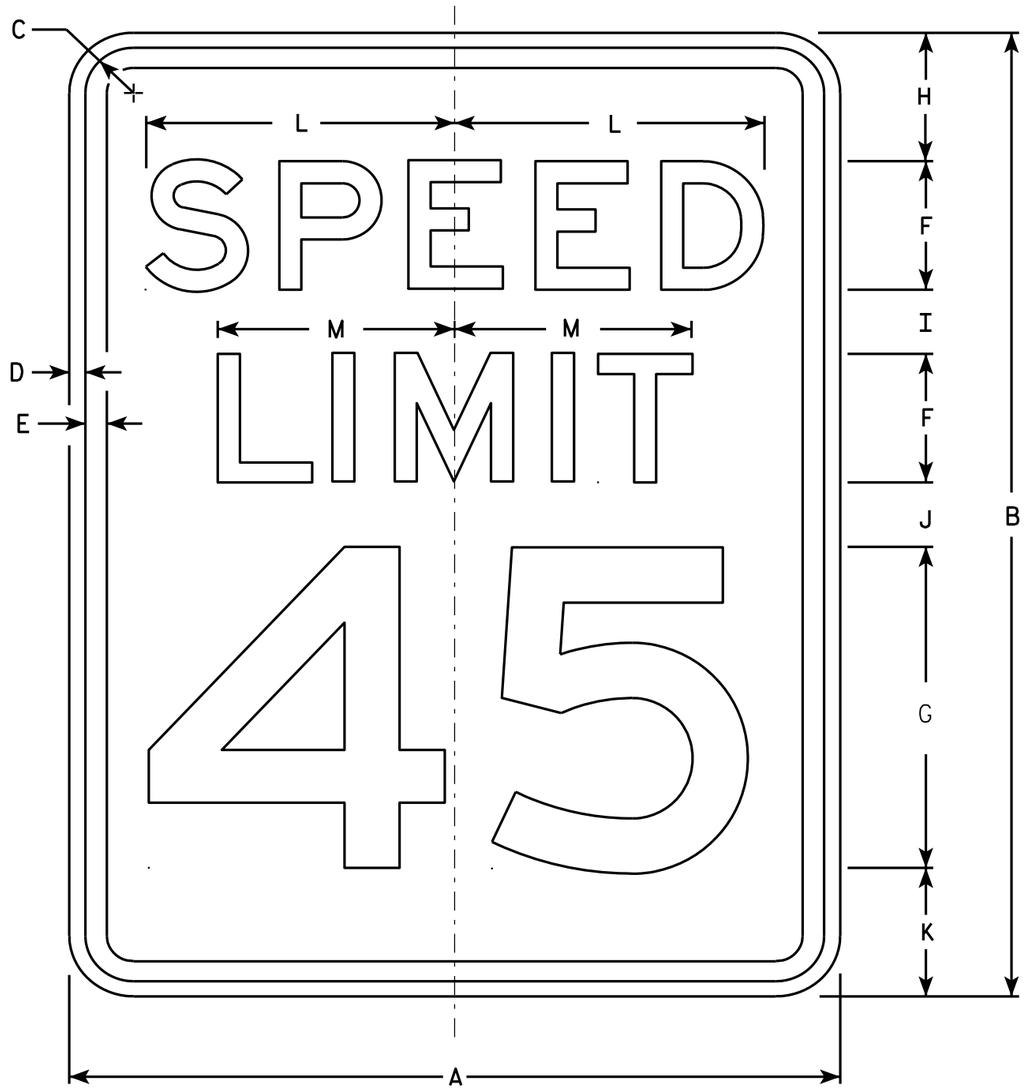
STANDARD SIGN
R1-54

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/03/10 PLATE NO. R1-54.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 923	E



R2-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and optically adjust spacing to achieve proper balance.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18	24	1 1/8	3/8	1/2	3	8	3	2	2	3	7 1/4	5 1/2														3.0
2S	24	30	1 1/8	3/8	1/2	4	10	3	2 1/4	3 3/8	3 3/8	9 5/8	7 3/8														5.0
2M	30	36	1 3/8	1/2	5/8	5	12	5	2 1/2	2 1/2	4	12	9 1/4														7.5
3	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
4	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
5	48	60	2 1/4	3/4	1	8	20	6	4 1/2	6 3/4	6 3/4	19 1/4	14 5/8														20.0

STANDARD SIGN
R2-1

WISCONSIN DEPT OF TRANSPORTATION

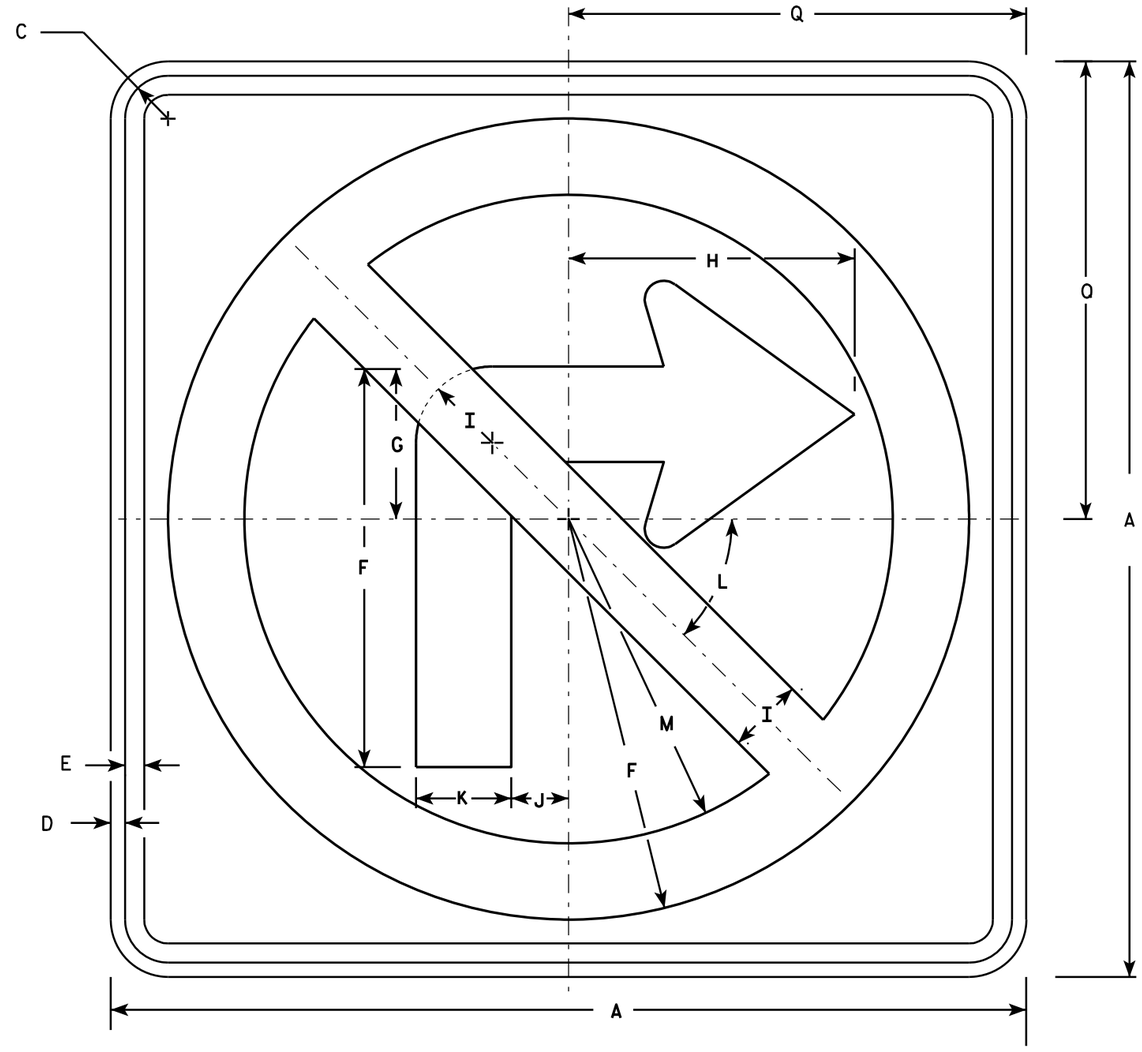
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/26/10 PLATE NO. R2-1.13

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 924 | E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R21.DGN PLOT DATE : 28-MAY-2010 08:32 PLOT BY : ditjph PLOT NAME : PLOT SCALE : 4.717577:1.000000

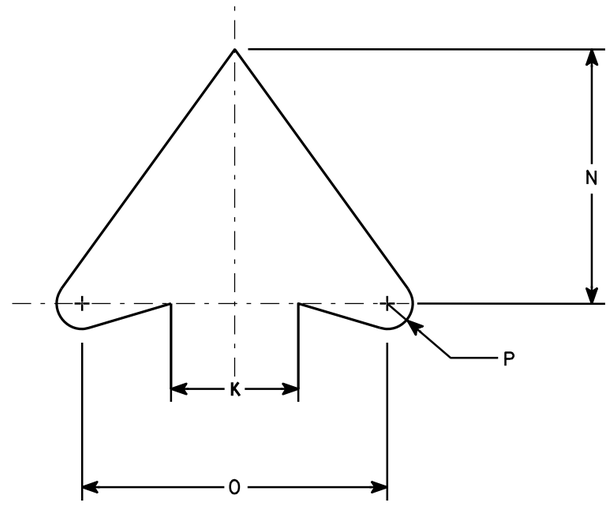
WISDOT/CADDS SHEET 42



R3-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. Border & Arrow are non reflective black, the circle with diagonal bar is reflective red.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45	8 1/2	5	6	1/2	12										4.0
2S	24		1 1/8	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45°	8 1/2	5	6	1/2	12										4.0
2M	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45	12 3/4	7 1/2	9	3/4	18										9.0
3	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45	12 3/4	7 1/2	9	3/4	18										9.0
4	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4	18										9.0
5	48		2 1/4	3/4	1	21	8	15	4	3	5	45°	17	10	12	1	24										16.0

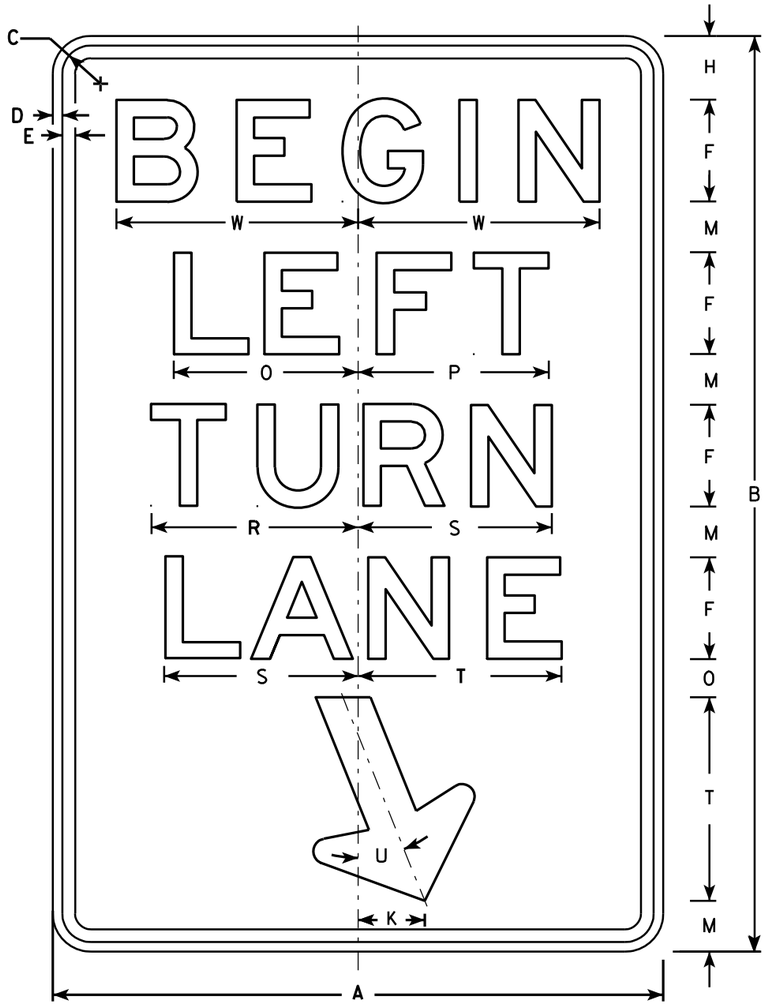
STANDARD SIGN
R3-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/08/10 PLATE NO. R3-1.5

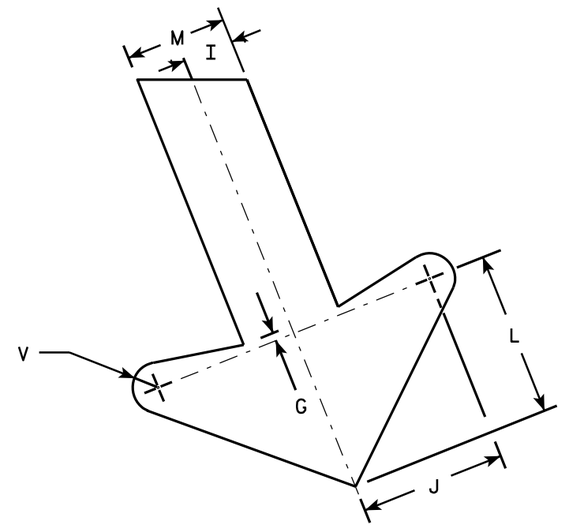
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 925	E



R3-20L

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	7 1/4	7 1/2		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
2M	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	7 1/4	7 1/2		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
3	36	54	1 3/4	1/2	5/8	6	3/8	3 3/4	1 1/2	4 1/4	4	4 7/8	3	2 1/4	10 7/8	11 1/4		12 1/4	11 1/2	12	22°	3/4	13 1/4				13.5
4																											
5																											

STANDARD SIGN
R3-20L

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/18/10 PLATE NO. R3-20L.7

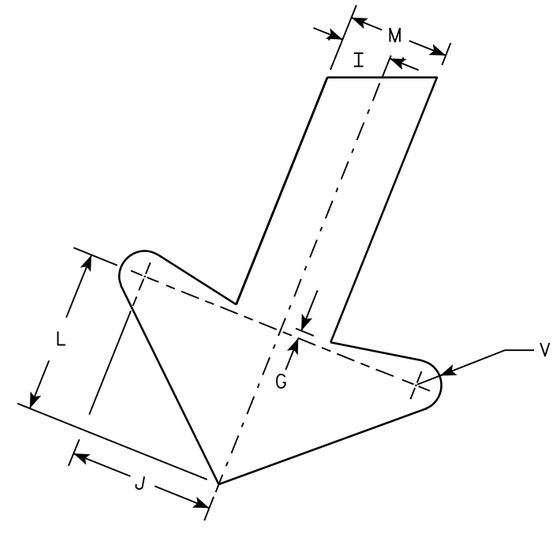
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 926	E



R3-20R

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	8 1/2	8 1/4		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
2M	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	8 1/2	8 1/4		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
3	36	54	1 3/4	1/2	5/8	6	3/8	3 3/4	1 1/2	4 1/4	4	4 7/8	3	2 1/4	12 3/4	12 1/2		12 1/4	11 1/2	12	22°	3/4	13 1/4				13.5
4																											
5																											

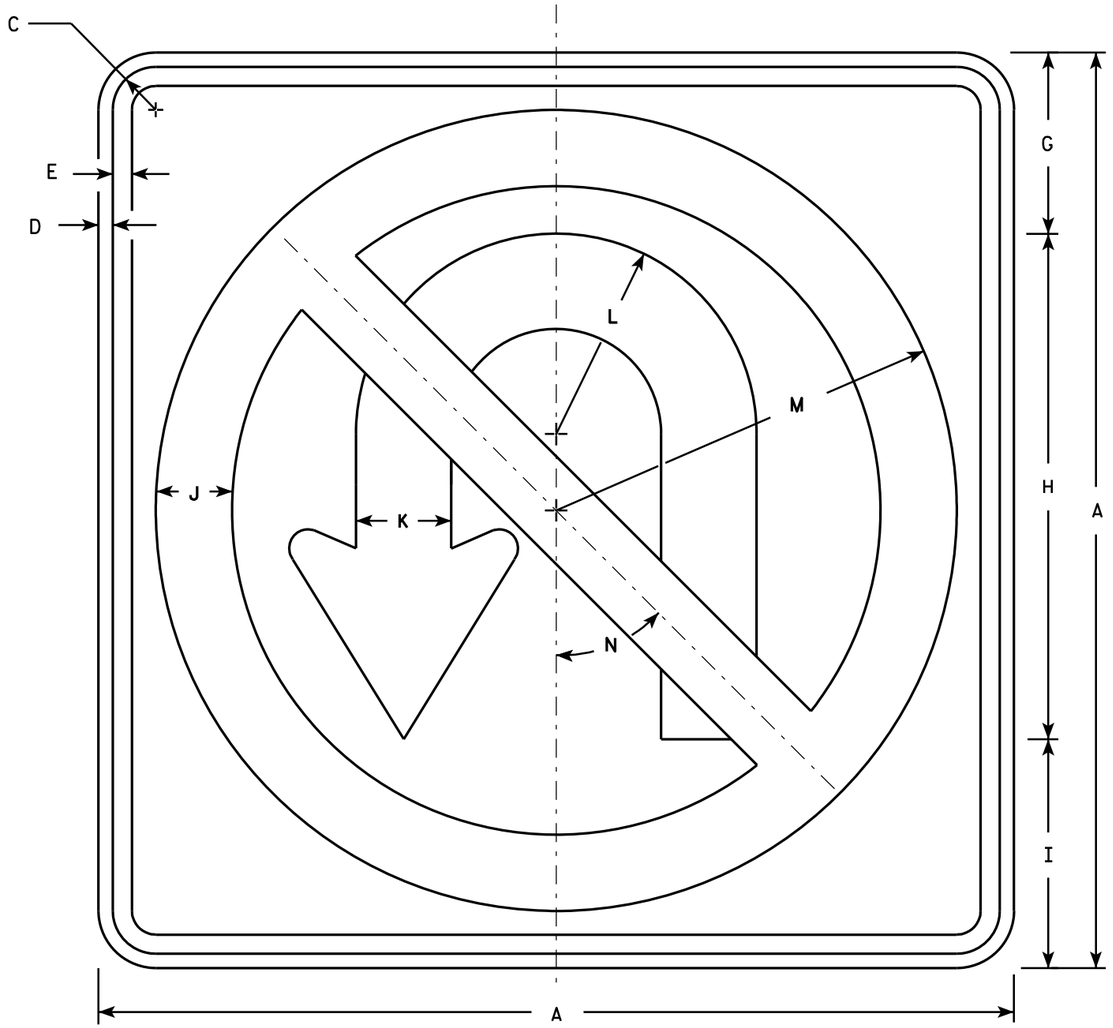
STANDARD SIGN
R3-20R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/18/10 PLATE NO. R3-20R.6

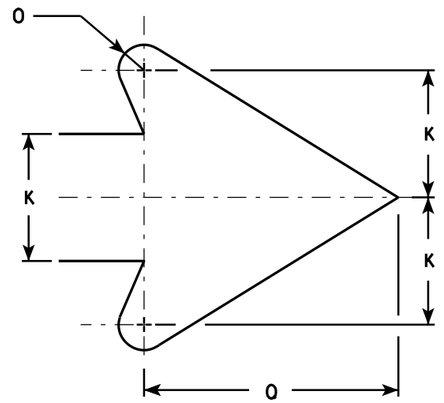
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 927 | E



R3-4

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. Border & Arrow are non reflective black, the circle with diagonal bar is reflective red.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24		1 1/8	3/8	1/2		4 3/4	13 1/4	6	2	2 1/2	5 1/4	10 1/2	45°	1/2		5										4.0
2M	36		1 5/8	5/8	3/4		7 1/8	19 7/8	9	3	3 3/4	7 7/8	15 3/4	45°	3/4		7 5/8										9.0
3	36		1 5/8	5/8	3/4		7 1/8	19 7/8	9	3	3 3/4	7 7/8	15 3/4	45°	3/4		7 5/8										9.0
4	36		1 5/8	5/8	3/4		7 1/8	19 7/8	9	3	3 3/4	7 7/8	15 3/4	45°	3/4		7 5/8										9.0
5	36		1 5/8	5/8	3/4		7 1/8	19 7/8	9	3	3 3/4	7 7/8	15 3/4	45°	3/4		7 5/8										9.0

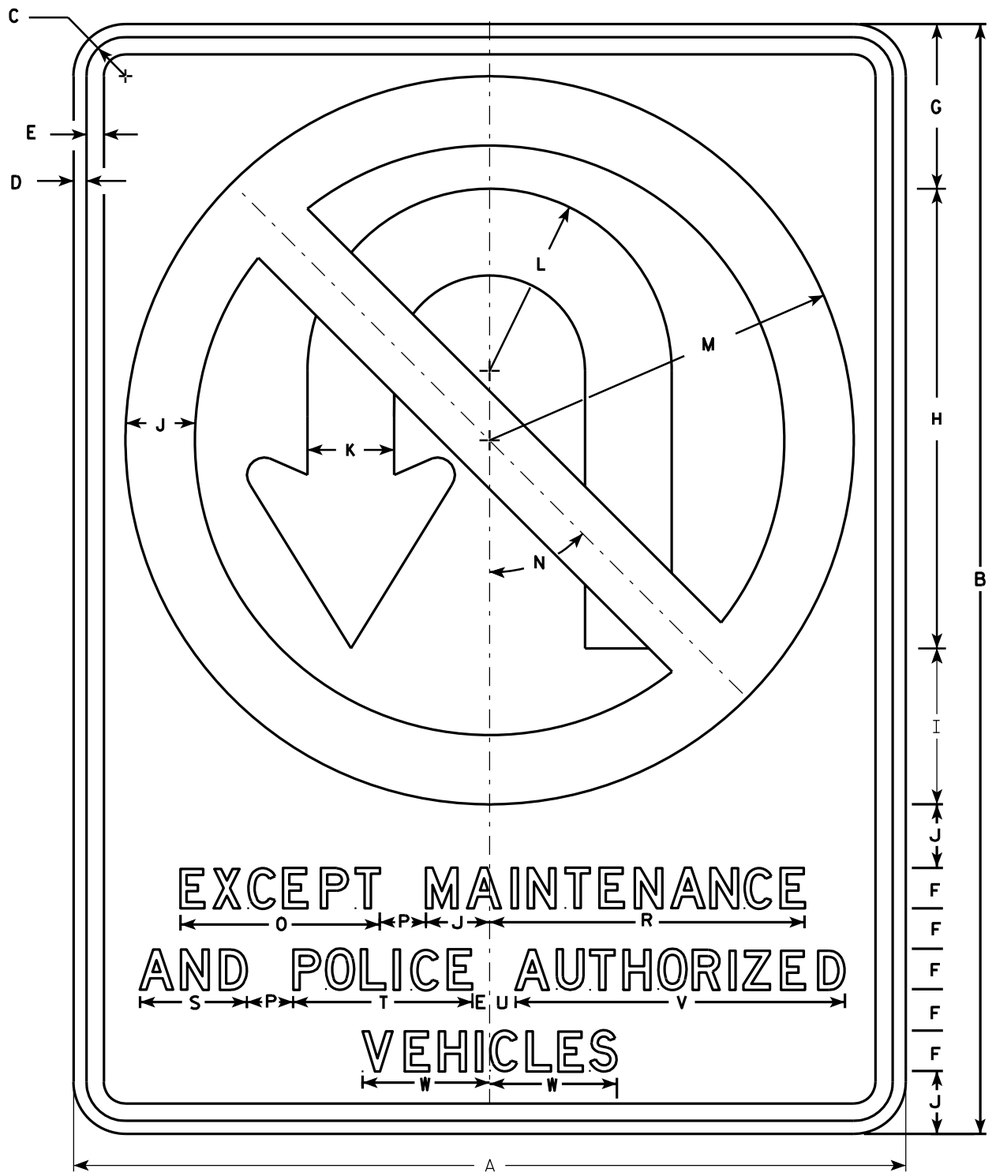
STANDARD SIGN
R3-4

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/08/10 PLATE NO. R3-4.11

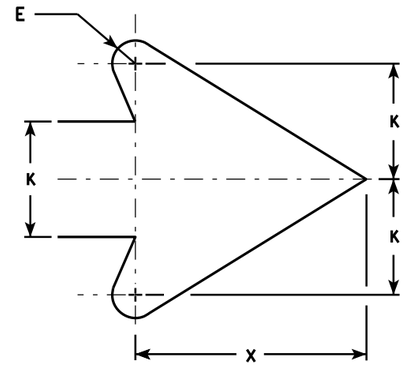
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 928	E



R3-4B

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. Border & Arrow are non reflective black, the circle with diagonal bar is reflective red.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S																											
2M																											
3																											
4	36	48	1 5/8	5/8	3/4	1 3/4	7 1/8	19 7/8	6 3/4	2 3/4	3 3/4	7 7/8	15 3/4	45°	8 5/8	2		13 5/8	4 5/8	7 3/4	1 1/8	14 1/4	5 1/2	7 5/8			12.0
5	36	48	1 5/8	5/8	3/4	1 3/4	7 1/8	19 7/8	6 3/4	2 3/4	3 3/4	7 7/8	15 3/4	45°	8 5/8	2		13 5/8	4 5/8	7 3/4	1 1/8	14 1/4	5 1/2	7 5/8			12.0

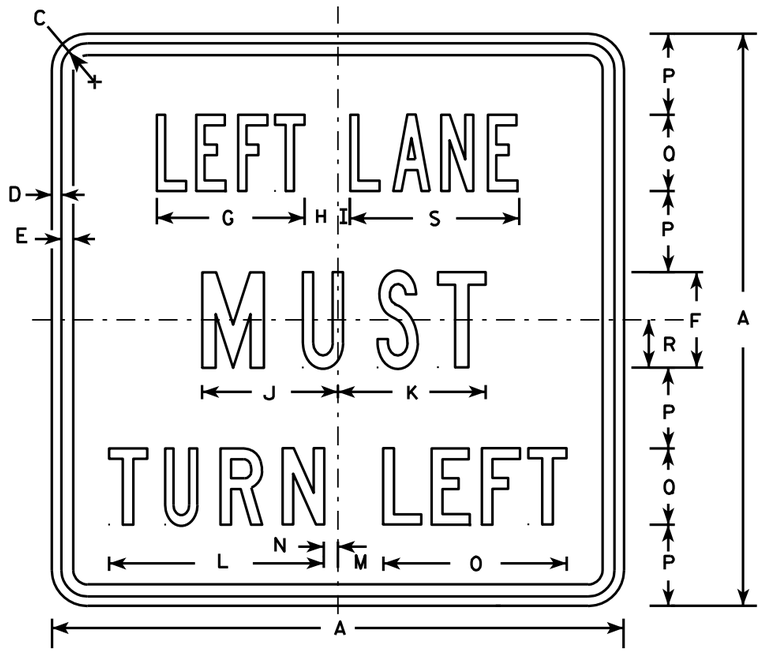
STANDARD SIGN
R3-4B

WISCONSIN DEPT OF TRANSPORTATION

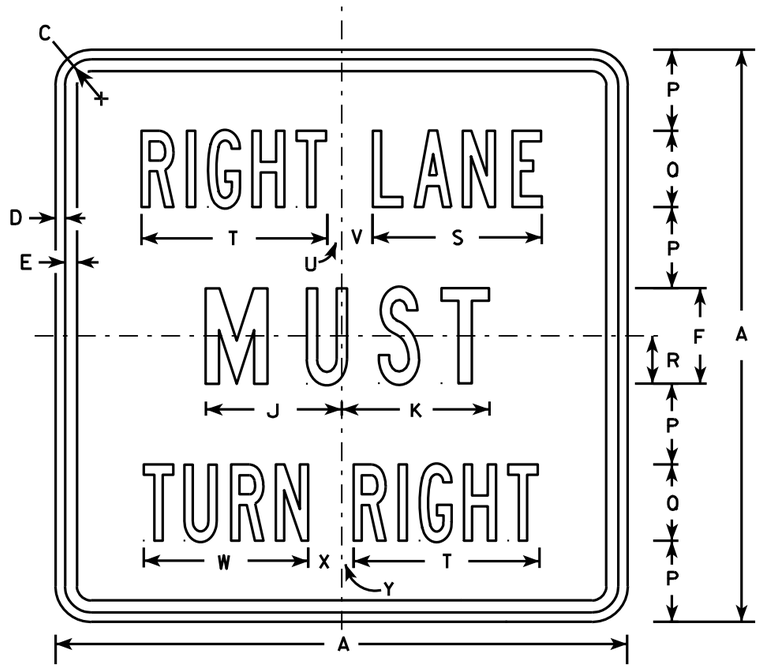
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/17/2011 PLATE NO. R3-4B.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 929	E



R3-7L



R3-7R

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - Line 1 is Series B.
   Line 2 is Series C.
   Line 3 on plate R3-7R is Series B and Series C on plate R3-7L.
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8	5	7 3/4	1 3/4	5/8	7 1/8	7 3/4	11 1/4	2 3/8	3/4	9 5/8	4 1/4	4	2 1/2	8 7/8	9 3/4	3/4	1 5/8	8 5/8	1 5/8	5/8		6.25
2S	30		1 3/8	1/2	5/8	5	7 3/4	1 3/4	5/8	7 1/8	7 3/4	11 1/4	2 3/8	3/4	9 5/8	4 1/4	4	2 1/2	8 7/8	9 3/4	3/4	1 5/8	8 5/8	1 5/8	5/8		6.25
2M	30		1 3/8	1/2	5/8	5	7 3/4	1 3/4	5/8	7 1/8	7 3/4	11 1/4	2 3/8	3/4	9 5/8	4 1/4	4	2 1/2	8 7/8	9 3/4	3/4	1 5/8	8 5/8	1 5/8	5/8		6.25
3	36		1 5/8	5/8	3/4	6	9 5/8	2	1 1/8	8 3/4	9	13 1/2	3 7/8	1 1/2	12 1/2	5	5	3	10 5/8	12	7/8	2 1/4	10 5/8	2 1/8	1		9.00
4	48		2 1/4	3/4	1	8	13 1/2	2 3/8	1 1/2	11 1/2	11 7/8	17 3/4	3 5/8	2 1/2	16 3/8	6 1/2	7	4	14 3/8	16 7/8	5/8	3 1/4	15 1/8	2 3/4	1 1/8		16.00
5																											

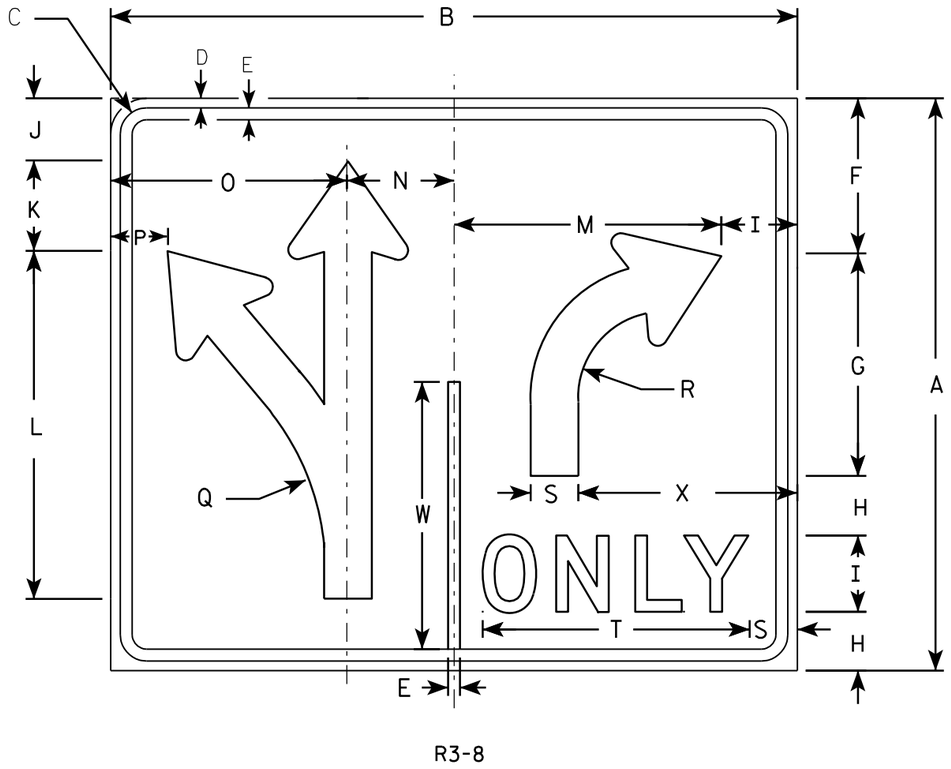
STANDARD SIGN
R3-7L & R3-7R

WISCONSIN DEPT OF TRANSPORTATION

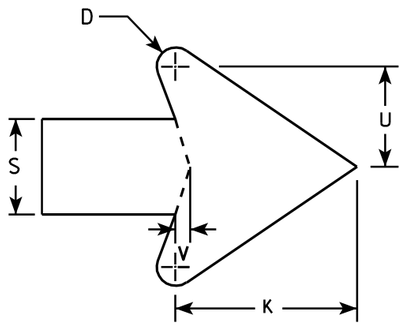
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/2011 PLATE NO. R3-7.3

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 930 | E



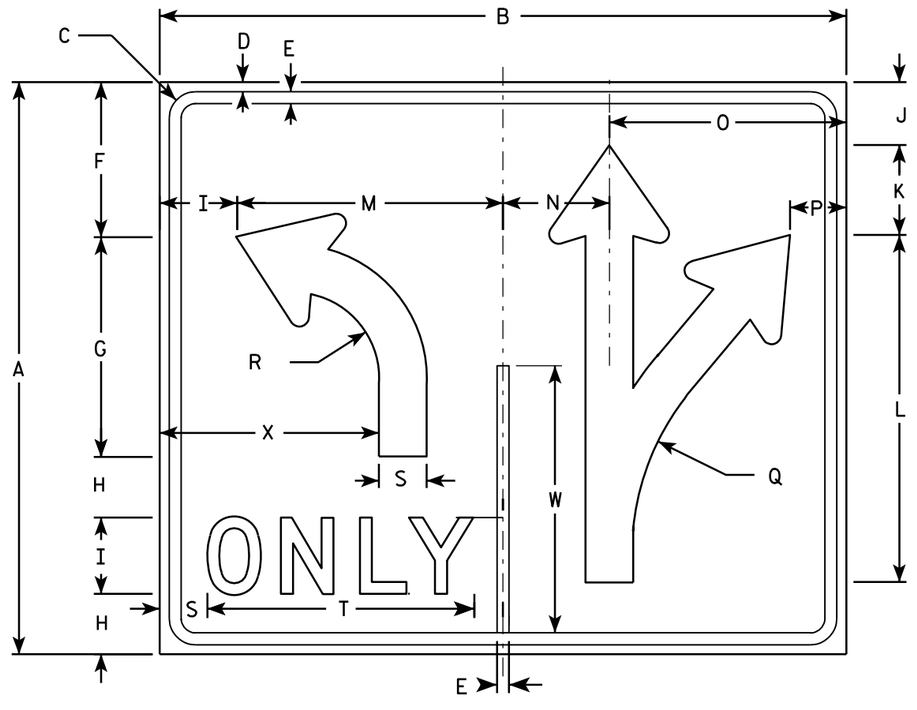
R3-8



ARROW DETAIL

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - WHITE
   Message - BLACK
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



R3-8A

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	36	1 3/8	1/2	5/8	8 1/8	11 5/8	3 1/8	4	3 1/4	4 3/4	18 1/4	14	5 5/8	12 3/8	3	13 1/4	4 1/2	2 1/2	14	2 5/8	3/8	14	11 1/2			7.5
2M	30	36	1 3/8	1/2	5/8	8 1/8	11 5/8	3 1/8	4	3 1/4	4 3/4	18 1/4	14	5 5/8	12 3/8	3	13 1/4	4 1/2	2 1/2	14	2 5/8	3/8	14	11 1/2			7.5
3																											
4	48	54	2 1/4	3/4	1	13 1/4	18 1/2	5 1/8	6	5 1/4	7 1/8	29 1/8	21	8 3/8	18 5/8	4 3/8	21 7/8	7 1/4	3 3/4	20 5/8	4	5/8	22 3/8	17 1/4			18.0
5	48	54	2 1/4	3/4	1	13 1/4	18 1/2	5 1/8	6	5 1/4	7 1/8	29 1/8	21	8 3/8	18 5/8	4 3/8	21 7/8	7 1/4	3 3/4	20 5/8	4	5/8	22 3/8	17 1/4			18.0

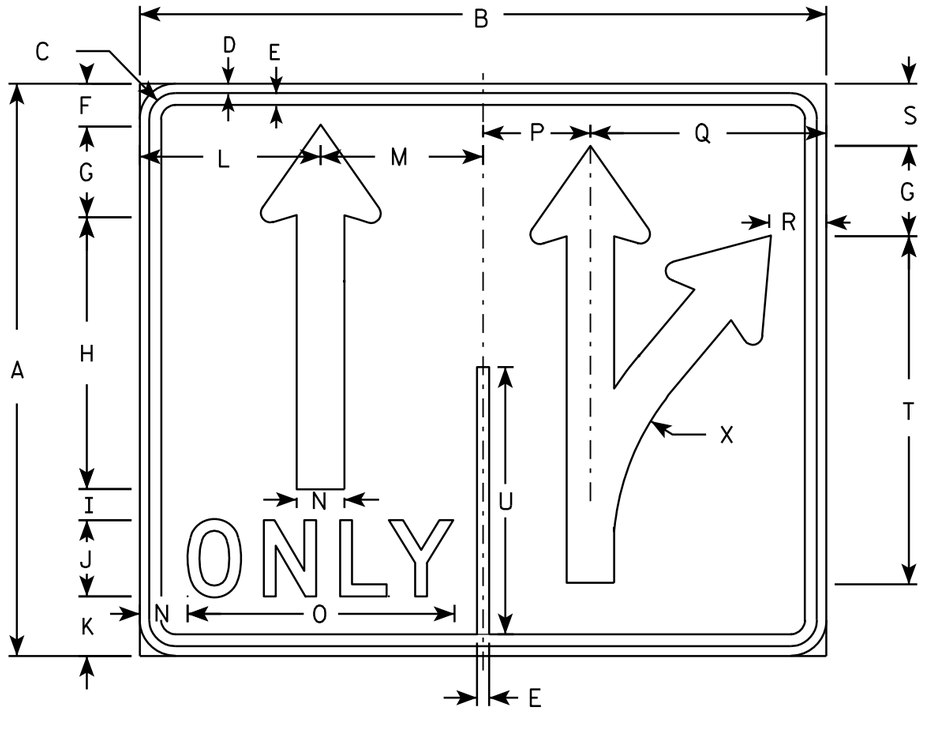
STANDARD SIGN
R3-8 & R3-8A

WISCONSIN DEPT OF TRANSPORTATION

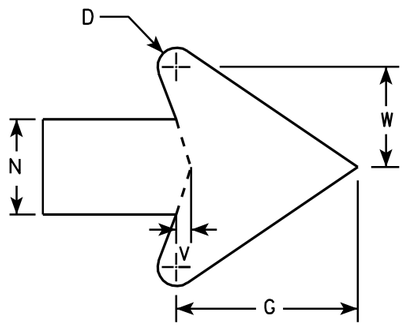
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/2011 PLATE NO. R3-8.5

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 931	E



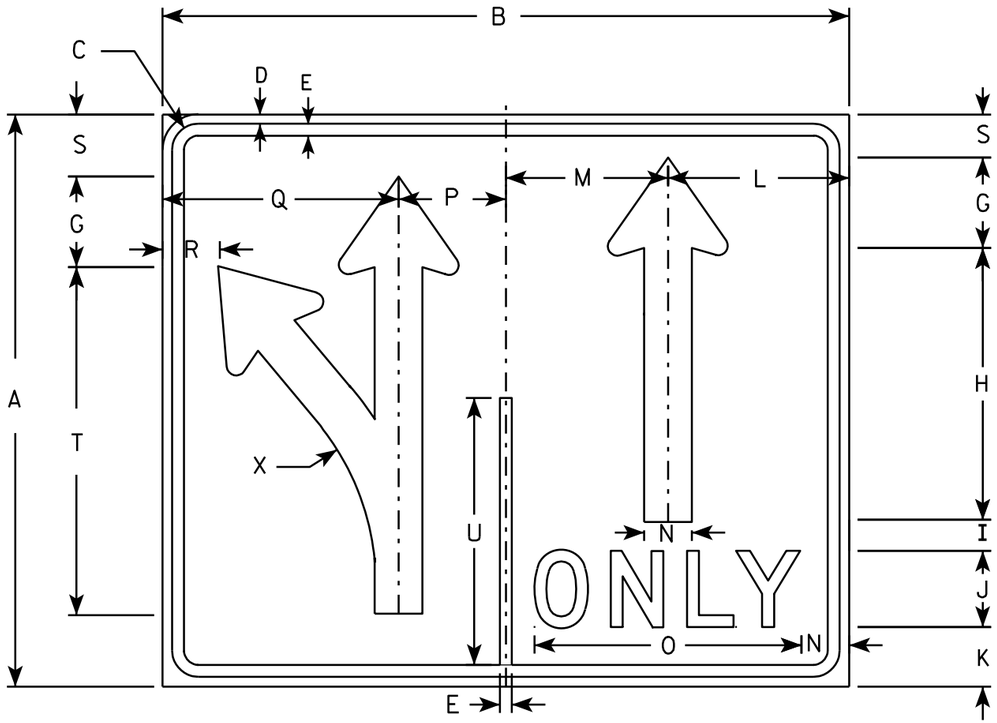
R3-8G



ARROW DETAIL

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - WHITE
   Message - BLACK
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



R3-8H

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	36	1 3/8	1/2	5/8	2 1/4	4 3/4	14 1/4	1 5/8	4	3 1/8	9 1/2	8 1/2	2 1/2	14	5 5/8	12 3/8	3	3 1/4	18 1/4	14	3/8	2 5/8	13 1/4			7.5
2M	30	36	1 3/8	1/2	5/8	2 1/4	4 3/4	14 1/4	1 5/8	4	3 1/8	9 1/2	8 1/2	2 1/2	14	5 5/8	12 3/8	3	3 1/4	18 1/4	14	3/8	2 5/8	13 1/4			7.5
3																											
4	48	54	2 1/4	3/4	1	3 1/2	7 1/8	29 1/8	2 7/8	6	5 1/8	14 1/4	12 3/4	3 3/4	20 5/8	8 3/8	18 5/8	4 3/8	5 1/4	29 1/8	22 3/8	5/8	4	21 7/8			18.0
5	48	54	2 1/4	3/4	1	3 1/2	7 1/8	29 1/8	2 7/8	6	5 1/8	14 1/4	12 3/4	3 3/4	20 5/8	8 3/8	18 5/8	4 3/8	5 1/4	29 1/8	22 3/8	5/8	4	21 7/8			18.0

STANDARD SIGN
R3-8G & R3-8H

WISCONSIN DEPT OF TRANSPORTATION

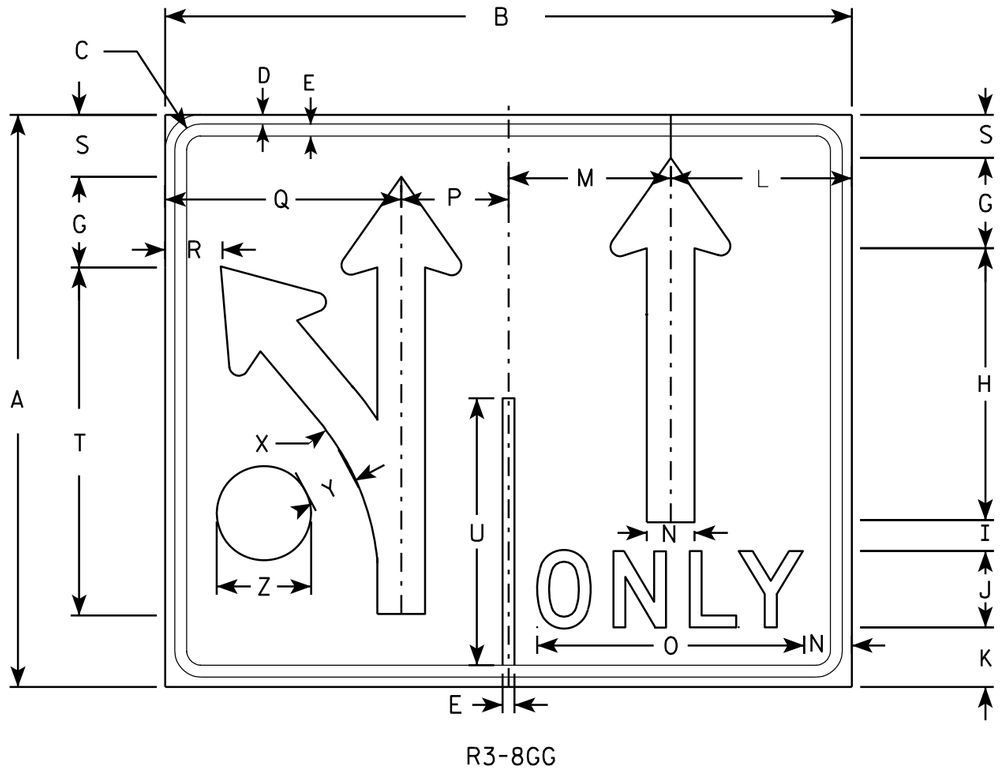
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/2011 PLATE NO. R3-8G.2

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 932 | E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R38G.DGN PLOT DATE : 18-MAR-2011 13:55 PLOT BY : mscsja PLOT NAME : 7.945391:1.000000

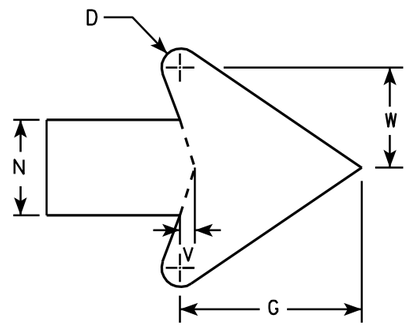
WISDOT/CADDS SHEET 42



R3-8GG

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - WHITE
   Message - BLACK
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	36	1 3/8	1/2	5/8	2 1/4	4 3/4	14 1/4	1 5/8	4	3 1/8	9 1/2	8 1/2	2 1/2	14	5 5/8	12 3/8	3	3 1/4	18 1/4	14	3/8	2 5/8	13 1/4	2 1/2	5	7.5
2M	30	36	1 3/8	1/2	5/8	2 1/4	4 3/4	14 1/4	1 5/8	4	3 1/8	9 1/2	8 1/2	2 1/2	14	5 5/8	12 3/8	3	3 1/4	18 1/4	14	3/8	2 5/8	13 1/4	2 1/2	5	7.5
3																											
4																											
5																											

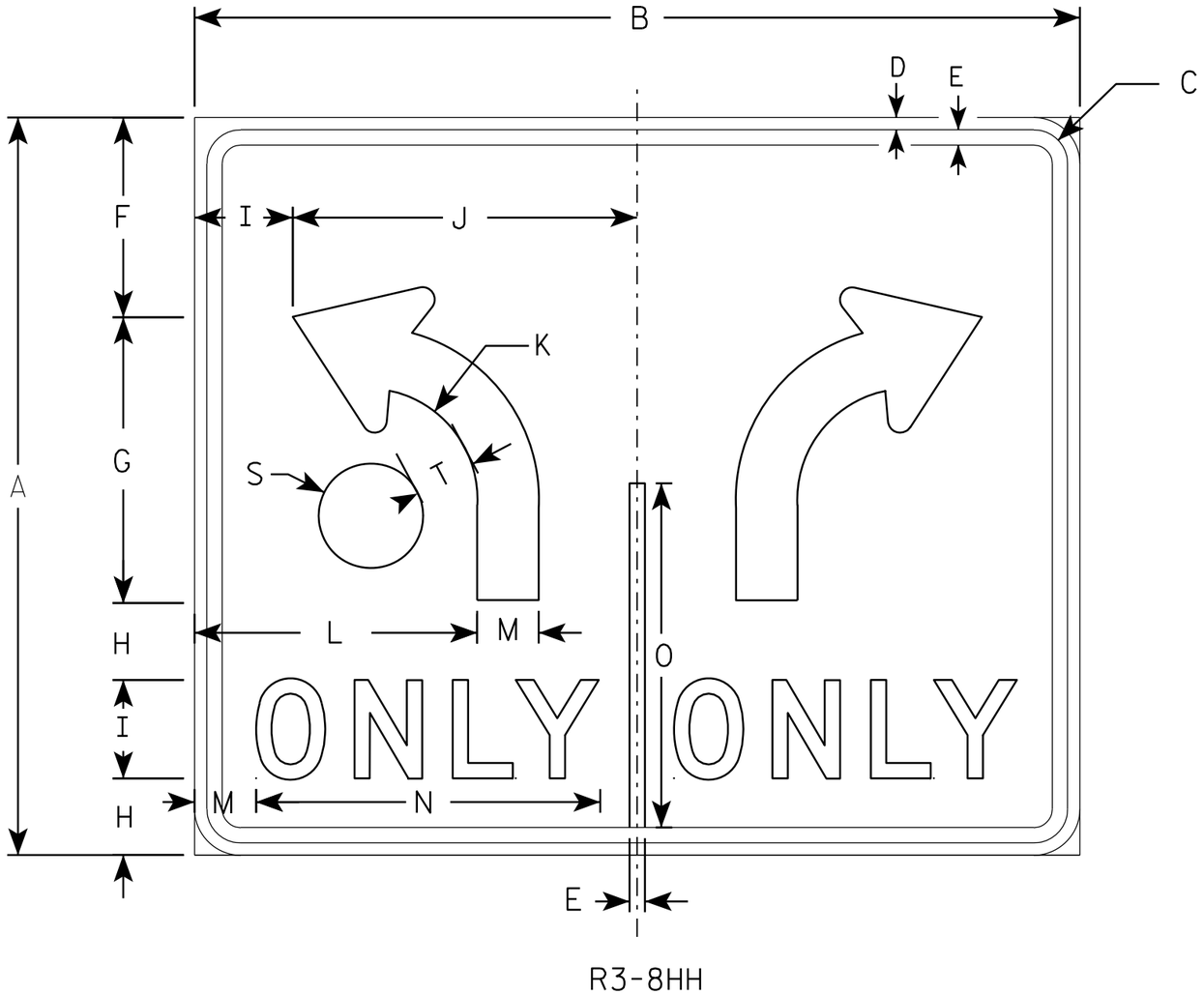
STANDARD SIGN
R3-8GG

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/2011 PLATE NO R3-8GG.2

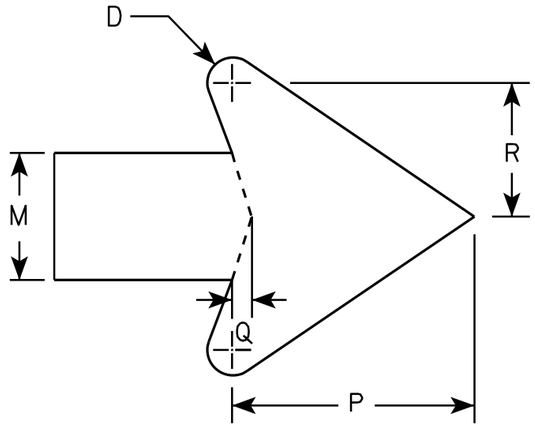
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 933	E



R3-8HH

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - WHITE
   Message - BLACK
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	36	1 3/8	1/2	5/8	8 1/8	11 5/8	3 1/8	4	14	4 1/2	11 1/2	2 1/2	14	14	4 3/4	3/8	2 5/8	4 1/4	2 1/2							7.5
2M	30	36	1 3/8	1/2	5/8	8 1/8	11 5/8	3 1/8	4	14	4 1/2	11 1/2	2 1/2	14	14	4 3/4	3/8	2 5/8	4 1/4	2 1/2							7.5
3																											
4																											
5																											

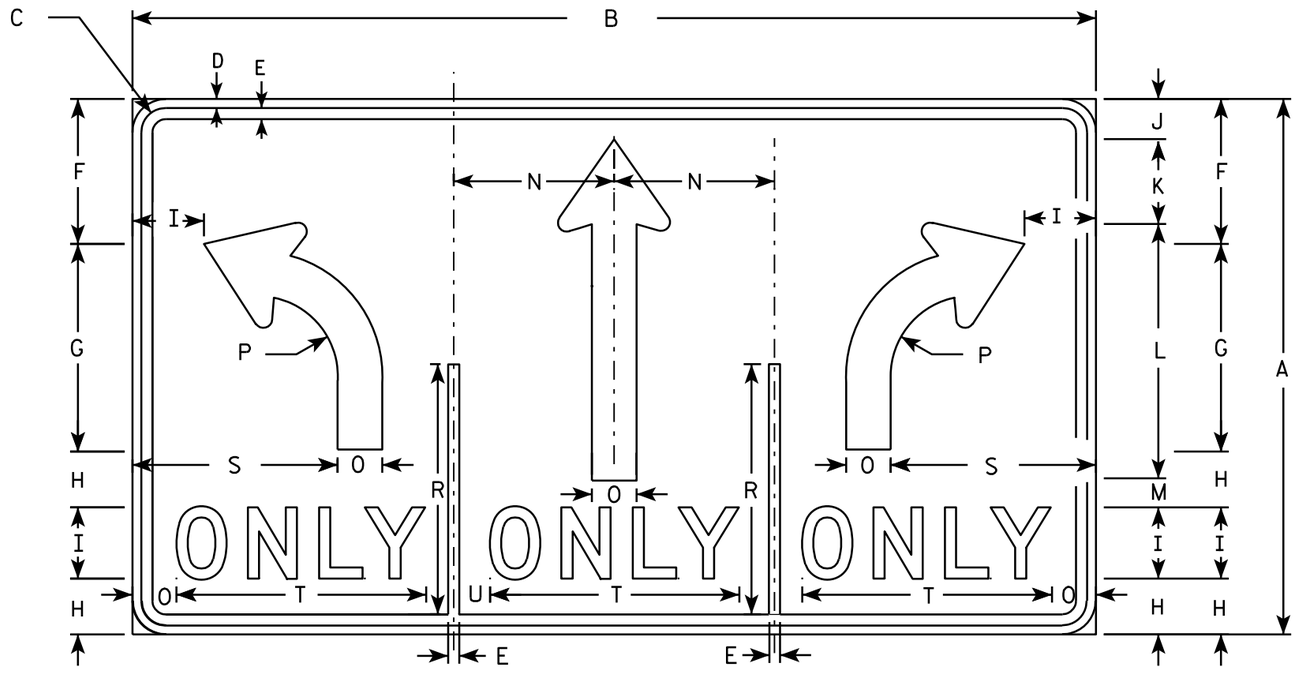
STANDARD SIGN
R3-8HH

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/2011 PLATE NO. R3-8HH.2

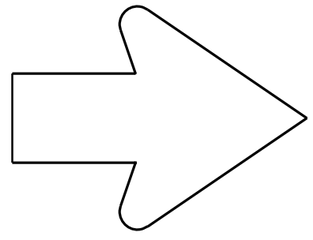
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 934	E



R3-8W

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - WHITE
   Message - BLACK
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



SEE R3-8 FOR ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	54	1 3/8	1/2	5/8	8 1/8	11 5/8	3 1/8	4	2 1/4	4 3/4	14 1/4	1 5/8	9	2 1/2	4 1/2		14	11 1/2	14	2						11.25
2M	30	54	1 3/8	1/2	5/8	8 1/8	11 5/8	3 1/8	4	2 1/4	4 3/4	14 1/4	1 5/8	9	2 1/2	4 1/2		14	11 1/2	14	2						11.25
3																											
4	48	84	2 1/4	3/4	1	13	18 1/2	5 1/4	6	3 3/4	7	29 1/8	2 3/8	14	3 3/4	7 1/4		22 3/8	17 1/4	20 1/2	3 1/4						28.0
5	48	84	2 1/4	3/4	1	13	18 1/2	5 1/4	6	3 3/4	7	29 1/8	2 7/8	14	3 3/4	7 1/4		22 3/8	17 1/4	20 1/2	3 1/4						28.0

STANDARD SIGN
R3-8W

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 3/24/2011 PLATE NO. R3-8W.4

PROJECT NO:

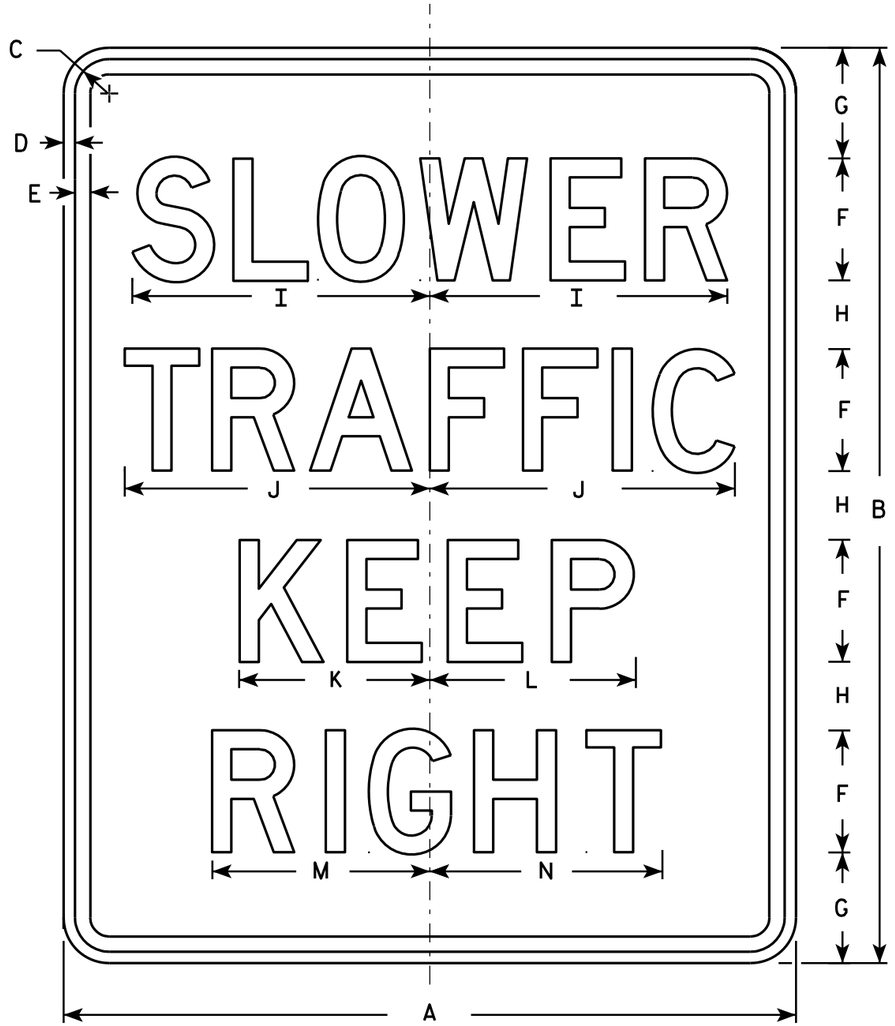
SHEET NO: 935 E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R38W.DGN PLOT DATE : 24-MAR-2011 10:19 PLOT BY : mscsja PLOT NAME :

WISDOT/CADDS SHEET 42

7

7



R4-3

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	30	1 1/8	3/8	1/2	4	3 5/8	2 1/4	9 3/4	10	6 1/4	6 3/4	7 1/8	7 5/8													5.0
2M	24	30	1 1/8	3/8	1/2	4	3 5/8	2 1/4	9 3/4	10	6 1/4	6 3/4	7 1/8	7 5/8													5.0
3	36	48	1 5/8	5/8	3/4	6	6	4	14 5/8	15	9 3/8	10	10 3/4	11 3/8													12.0
4	36	48	1 5/8	5/8	3/4	6	6	4	14 5/8	15	9 3/8	10	10 3/4	11 3/8													12.0
5	48	60	2 1/4	3/4	1	8	7 1/4	4 1/2	19 1/2	20	12 1/2	13 1/2	14 1/4	15 1/4													20.0

STANDARD SIGN
R4-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/25/2011 PLATE NO. R4-3.8

PROJECT NO:

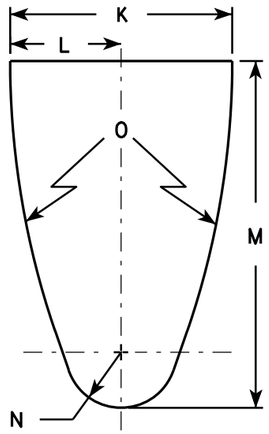
SHEET NO: 936 E

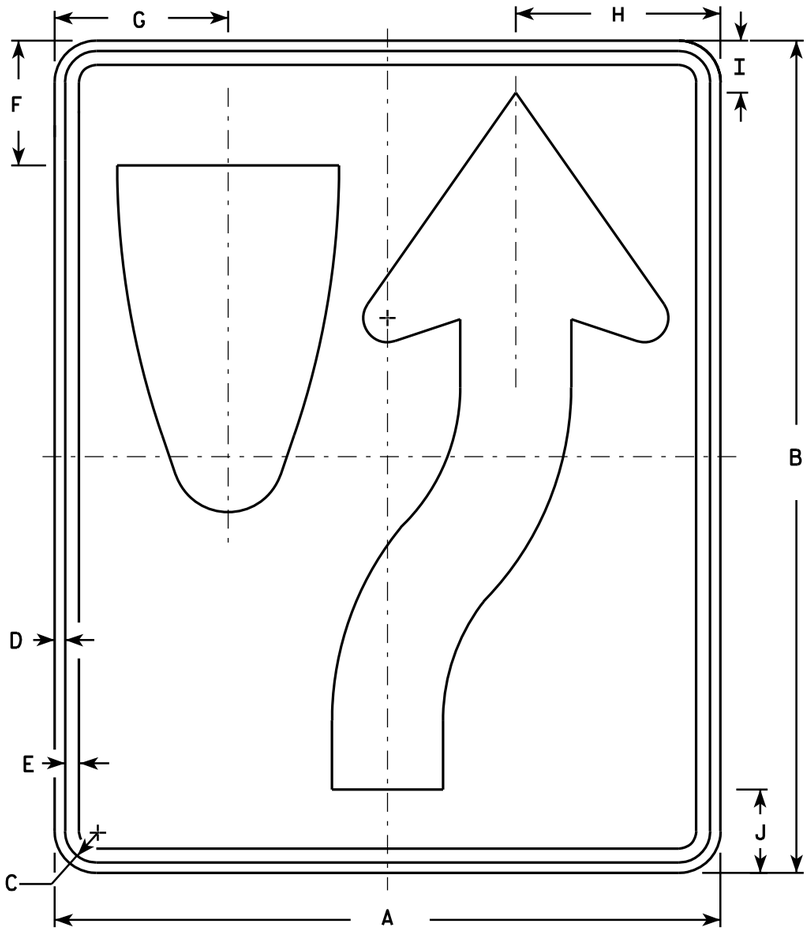
FILE NAME : C:\Users\PROJECTS\tr_stdplate\R43.DGN PLOT DATE : 25-MAR-2011 13:40 PLOT BY : mscsja

WISDOT/CADDS SHEET 42

7

7

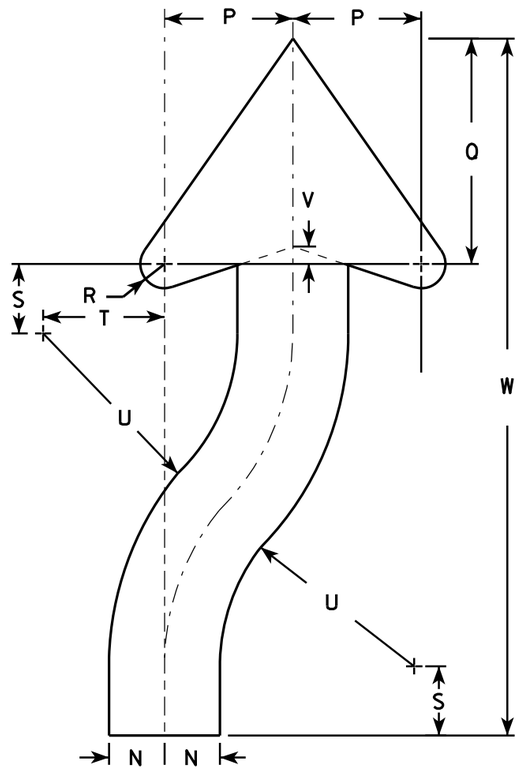




R4-7

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition. material is plywood but borders shall be rounded
2. Color:
   Background - White
   Message - Black
3. Corners may be square or rounded when base as shown. When base material is metal, the corners and borders shall be rounded.
4. R4-8 is the same as R4-7 except Legend is reversed.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18	24	1 1/8	3/8	1/2	3 3/8	4 3/4	5 1/2	1 3/8	2 1/4	6	3	9 3/8	1 1/2	22 1/2	3 1/2	6 1/8	5/8	1 7/8	3 1/4	6 3/4	1/2	20 3/8				3.0
2S	24	30	1 1/8	3/8	1/2	4 1/2	6 1/4	7 3/8	1 7/8	3	8	4	12 1/2	2	30	4 5/8	8 1/8	7/8	2 1/2	4 3/8	9	5/8	25 1/8				5.0
2M	24	30	1 1/8	3/8	1/2	4 1/2	6 1/4	7 3/8	1 7/8	3	8	4	12 1/2	2	30	4 5/8	8 1/8	7/8	2 1/2	4 3/8	9	5/8	25 1/8				5.0
3	36	48	1 3/4	1/2	5/8	6 3/4	9 3/8	11 1/8	2 7/8	4 1/2	12	6	18 3/4	3	45	6 7/8	12 1/4	1 1/4	3 3/4	6 5/8	13 1/2	1	40 3/4				12.0
4	36	48	1 3/4	1/2	5/8	6 3/4	9 3/8	11 1/8	2 7/8	4 1/2	12	6	18 3/4	3	45	6 7/8	12 1/4	1 1/4	3 3/4	6 5/8	13 1/2	1	40 3/4				12.0
5	48	60	2 1/4	3/4	1	9	12 1/2	14 3/4	3 3/4	6	16	8	25	4	60	9 1/4	16 1/4	1 5/8	5	8 3/4	18	1 1/4	50 1/4				20.0

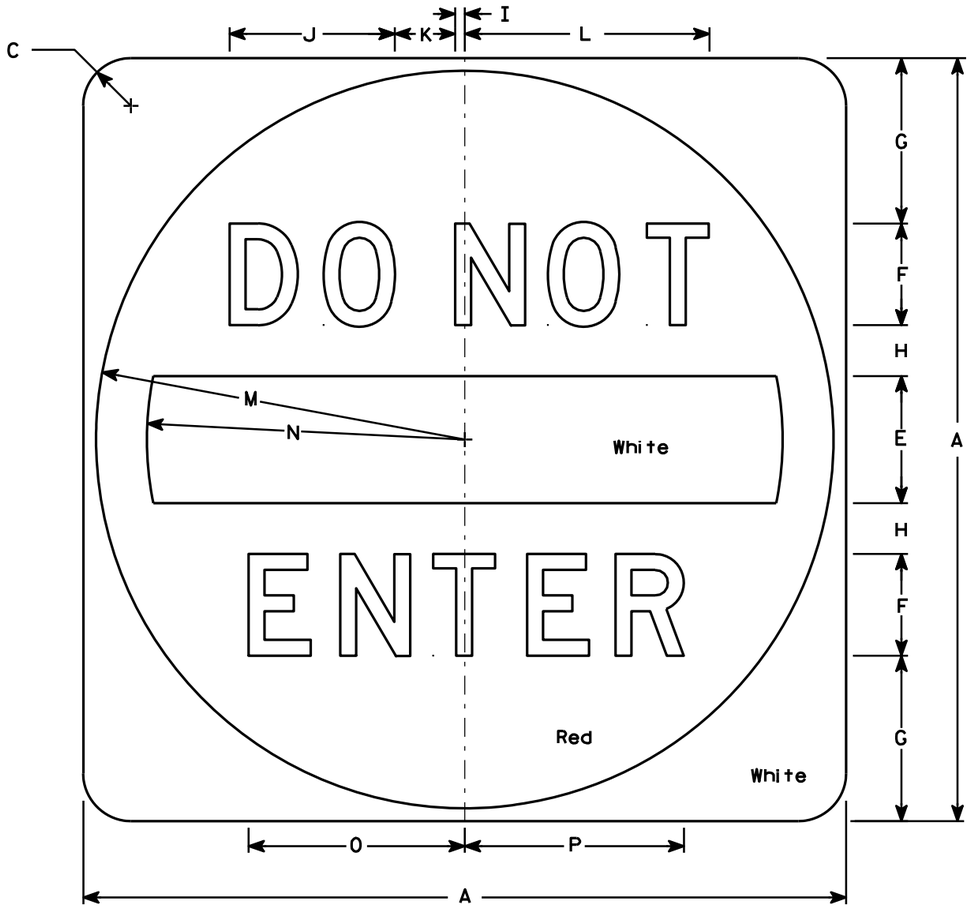
STANDARD SIGN
R4-7 & R4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 3/25/2011 PLATE NO. R4-7.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 937	E



R5-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - See detail
   Message - White - Type H Reflective
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but when base material is metal, the cornors shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30		1 7/8		5	4	6 1/2	2	3/8	6 1/2	2 3/8	9 5/8	14 1/2	12 1/2	8 1/2	8 5/8											6.26
2M	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4											9.0
3	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4											9.0
4	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4											9.0
5	48		3		8	6	11	3	5/8	9 3/4	3 5/8	14 1/2	23 1/2	20	12 3/4	12 7/8											16.0

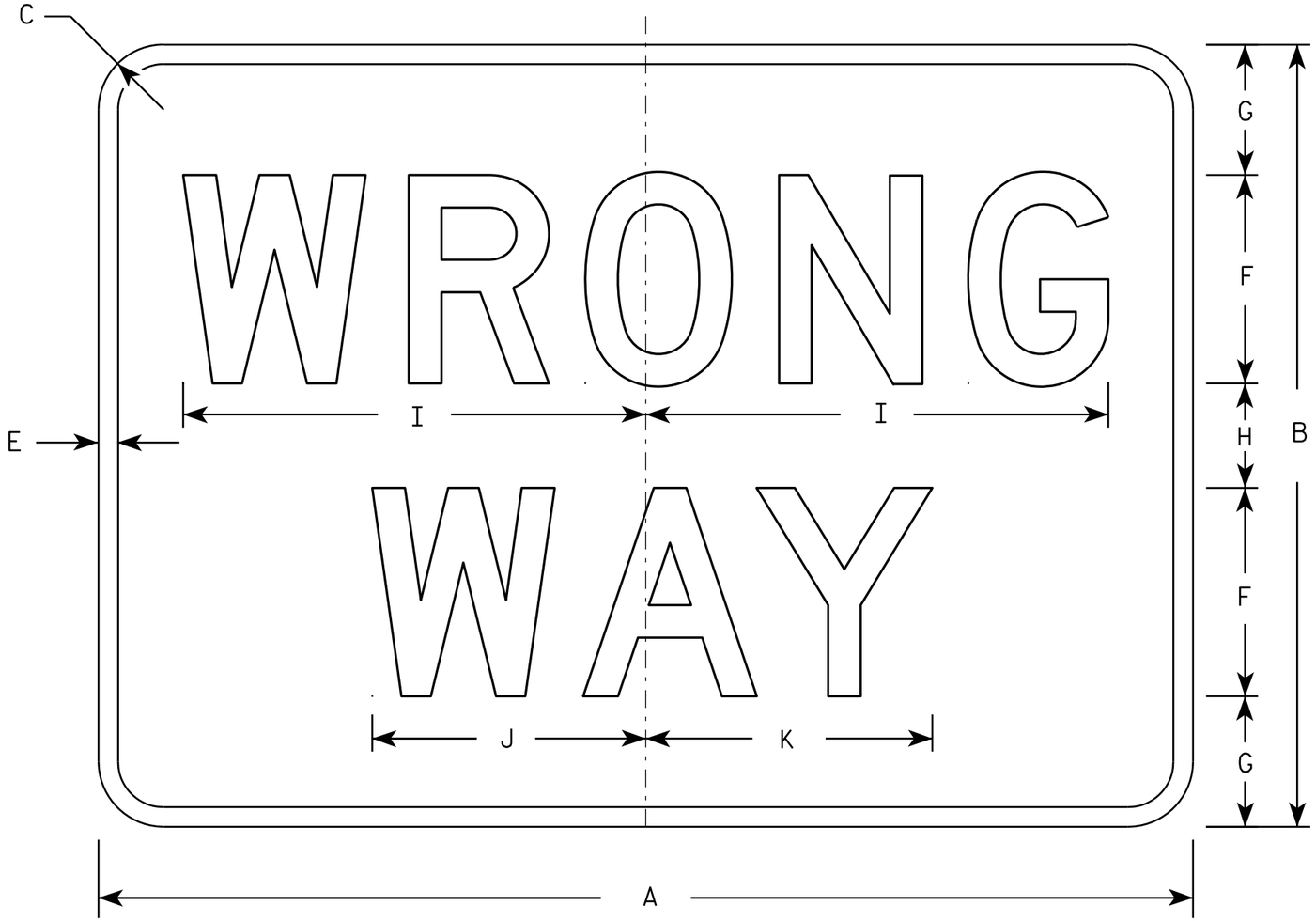
STANDARD SIGN
R5-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/17/10 PLATE NO. R5-1.15

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 938 | E



R5-1A

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Red
   Message - White
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30	18	1 1/2		1/2	5	3	2	11	6 1/2	6 7/8																3.75
2S	36	24	2		5/8	6	4 1/2	3	13 1/4	7 7/8	8 1/4																6.00
2M	42	30	2 1/2		3/4	8	5	4	17 3/4	10 1/2	11																8.75
3	42	30	2 1/2		3/4	8	5	4	17 3/4	10 1/2	11																8.75
4	42	30	2 1/2		3/4	8	5	4	17 3/4	10 1/2	11																8.75
5	42	30	2 1/2		3/4	8	5	4	17 3/4	10 1/2	11																8.75

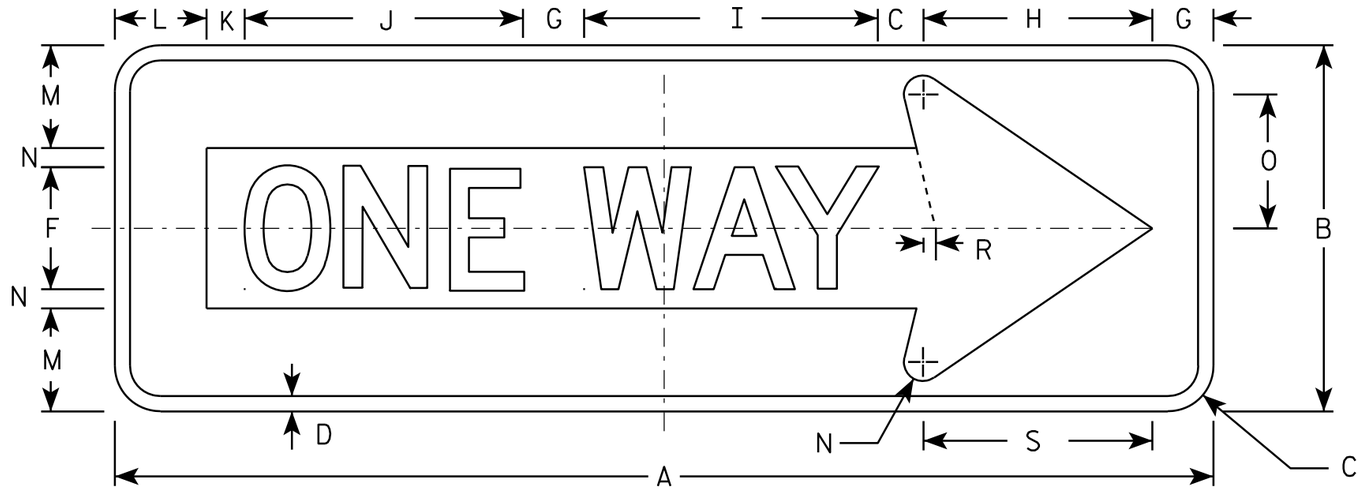
STANDARD SIGN
R5-1A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/17/10 PLATE NO. R5-1A.2

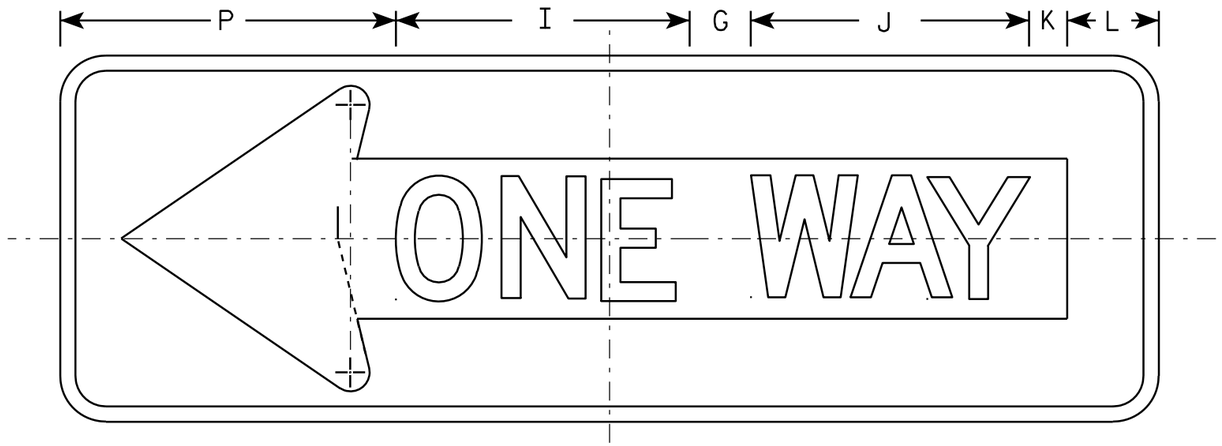
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 939	E



R6-1R

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - BLACK
   Message - BLACK LEGEND & WHITE ARROW & BORDER
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



R6-1L

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	36	12	1 ½	½		4	2	7 ½	9 ⅝	9 ⅛	1 ¼	3	3 ⅜	⅝	4 ⅜	11		⅜	7 ½								3.0
2M	54	18	2 ¼	¾		6	3	11 ¼	14 ½	13 ⅝	1 ⅞	4 ½	5	1	6 ½	16 ½		⅝	11 ¼								6.75
3	54	18	2 ¼	¾		6	3	11 ¼	14 ½	13 ⅝	1 ⅞	4 ½	5	1	6 ½	16 ½		⅝	11 ¼								6.75
4	54	18	2 ¼	¾		6	3	11 ¼	14 ½	13 ⅝	1 ⅞	4 ½	5	1	6 ½	16 ½		⅝	11 ¼								6.75
5																											

STANDARD SIGN
R6-1 L & R

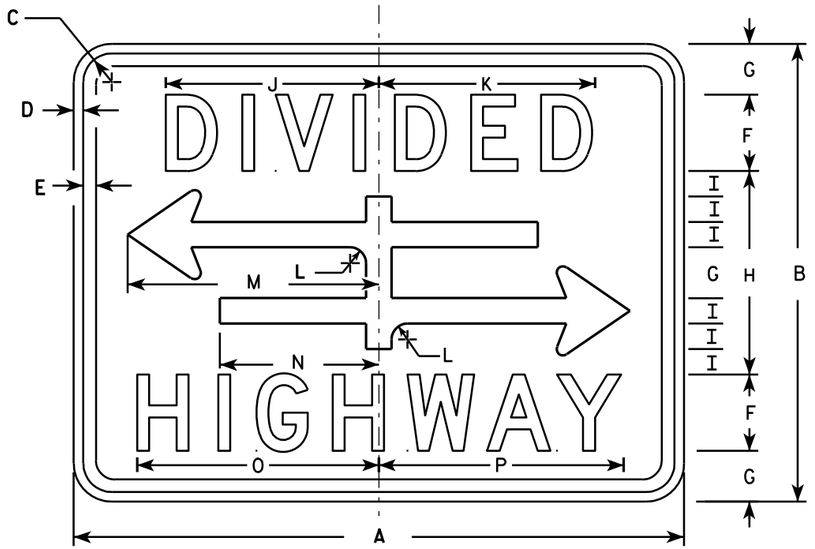
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/17/10 PLATE NO. R6-1.2

PROJECT NO:

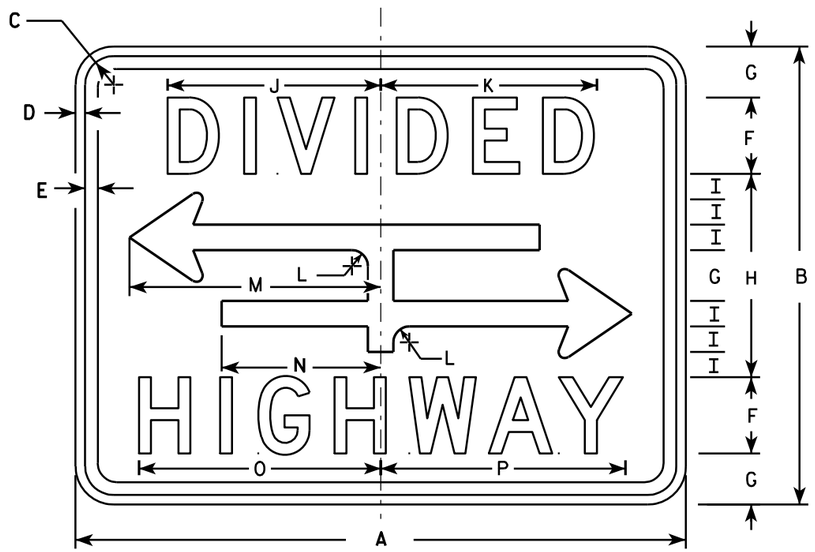
SHEET NO: 940 E



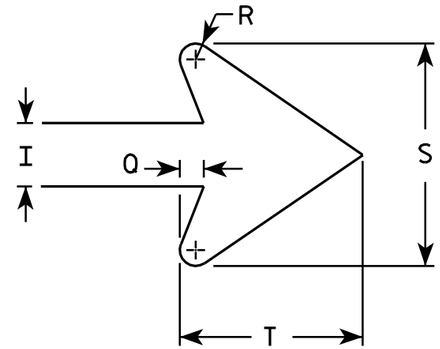
R6-3

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



R6-3A



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24	18	1 1/8	3/8	3/8	3	2	8	1	8 3/8	8 1/2	5/8	9 7/8	6 1/4	9 1/2	9 5/8	3/8	1/4	3 1/2	2 3/4							3.0
2S	30	24	1 1/8	3/8	1/2	4	2 5/8	10 3/4	1 3/8	10 1/2	10 5/8	7/8	12 1/2	7 7/8	12 1/4	12 3/8	1/2	3/8	4 5/8	3 5/8							5.0
2M	30	24	1 1/8	3/8	1/2	4	2 5/8	10 3/4	1 3/8	10 1/2	10 5/8	7/8	12 1/2	7 7/8	12 1/4	12 3/8	1/2	3/8	4 5/8	3 5/8							5.0
3																											
4																											
5																											

STANDARD SIGN
R6-3 & R6-3A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

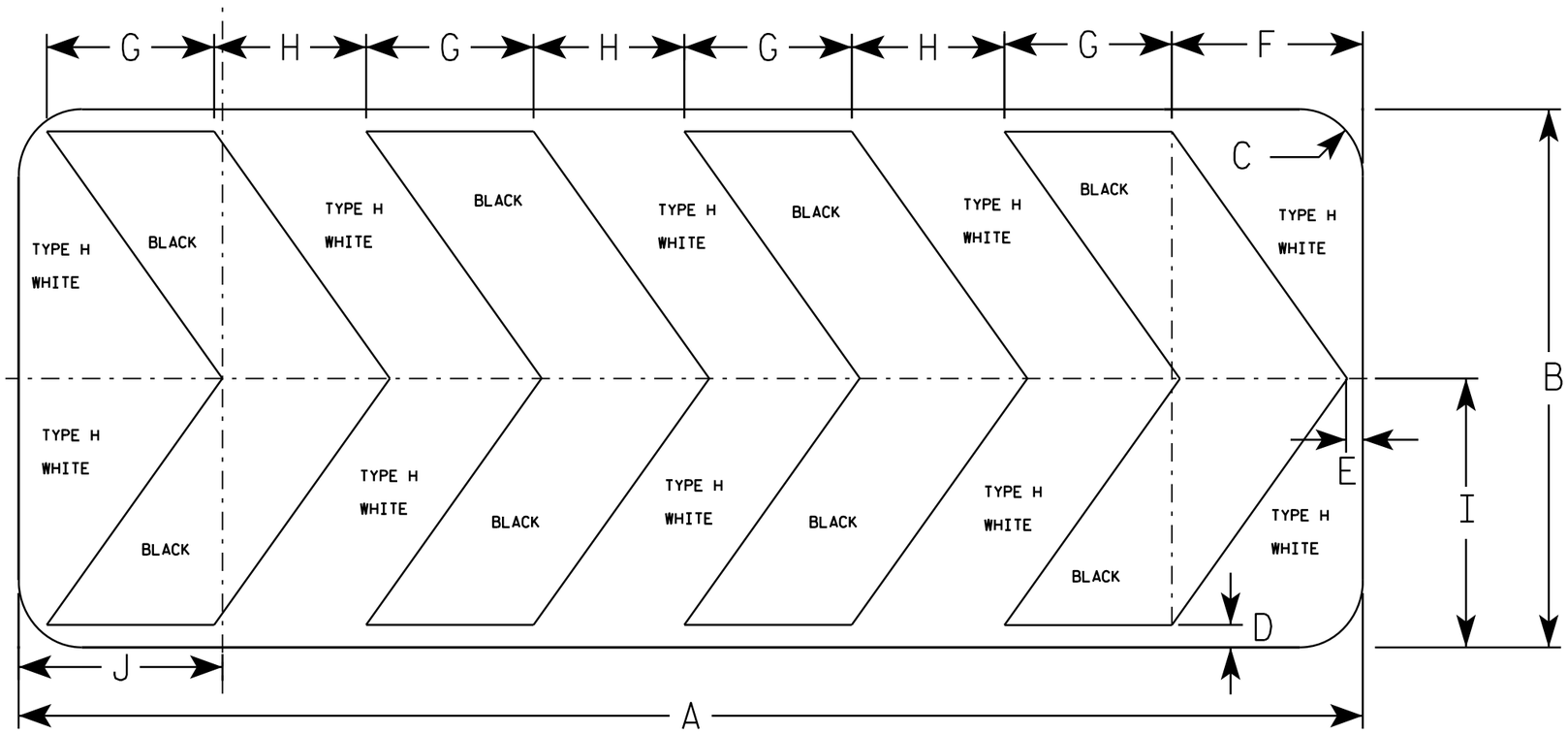
DATE 3/31/2011 PLATE NO. R6-3.5

PROJECT NO:

SHEET NO: 941 E

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - WHITE
   Message - BLACK
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



R6-4B

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	60	24	2 1/4	1	3/4	8 1/2	7 1/2	6 3/4	12	9 1/8																	10.0
2M	60	24	2 1/4	1	3/4	8 1/2	7 1/2	6 3/4	12	9 1/8																	10.0
3																											
4																											
5																											

STANDARD SIGN
R6-4B

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/03/11 PLATE NO. R6-4B.2

PROJECT NO:

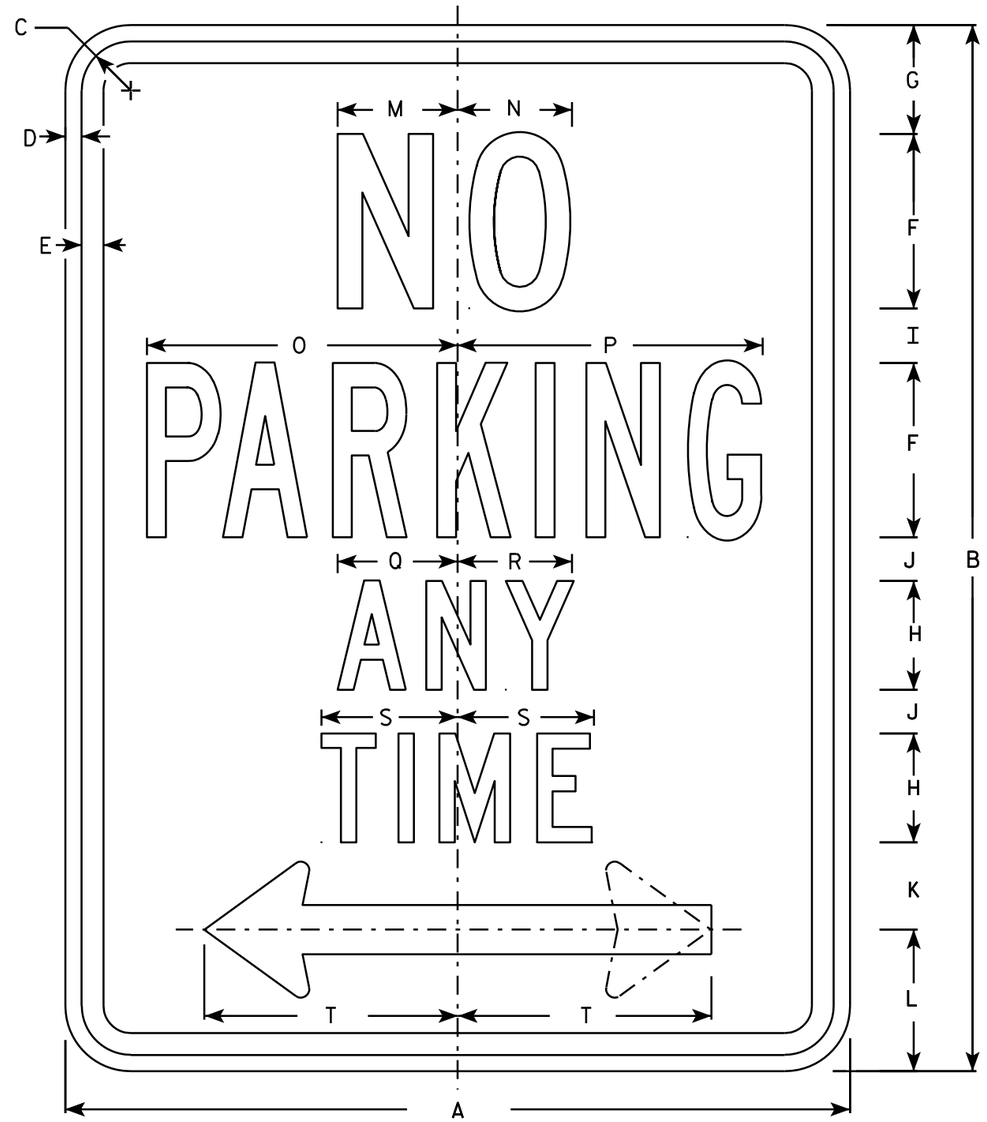
SHEET NO: 942 E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R64B.DGN PLOT DATE : 03-JAN-2011 14:30 PLOT BY : dotsja

WISDOT/CADDS SHEET 42

7

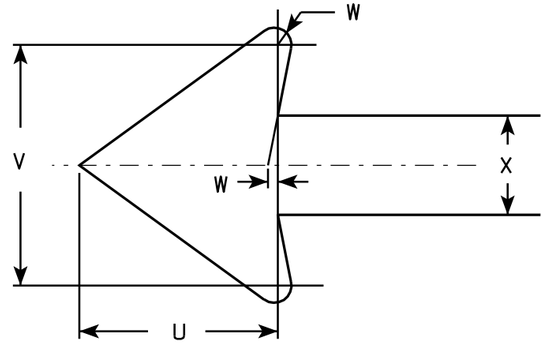
7



R7-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Red
3. Message Series - See Note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Lines 1, 3 and 4 are series C, line 2 is series B.
6. R7-1D (double arrow)
   R7-1L (left arrow)
   R7-1R (right arrow)



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	12	18	1 1/8	3/8	3/8	3	1 7/8	2	7/8	5/8	1 1/2	2 1/2	2	2	4 7/8	4 7/8	2 1/4	2 1/8	2 1/2	3 7/8	1 1/2	1 3/4	1/8	3/4			1.5
2S	18	24	1 1/8	3/8	1/2	4	2 1/2	2 1/2	1 1/4	1	2	3 1/4	2 3/4	2 5/8	7 1/8	7	2 3/4	2 5/8	3 1/8	5 7/8	2 1/4	2 5/8	1/4	1 1/8			3.0
2M	24	30	1 1/8	3/8	1/2	5	3	3	2	1 1/4	2 1/2	4	3 1/4	3 3/8	9 1/4	9 1/4	3 1/4	3 1/4	3 3/4	7 3/4	3	3 1/2	1/4	1 1/2			5.0
3	24	30	1 1/8	3/8	1/2	5	3	3	2	1 1/4	2 1/2	4	3 1/4	3 3/8	9 1/4	9 1/4	3 1/4	3 1/4	3 3/4	7 3/4	3	3 1/2	1/4	1 1/2			5.0
4																											
5																											

STANDARD SIGN
R7-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/31/2011 PLATE NO. R7-1.9

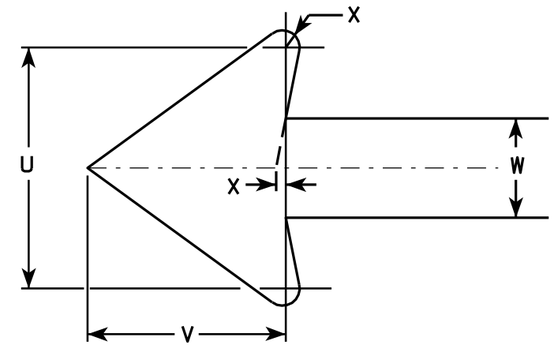
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 943	E



R7-7

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Red
3. Message Series - See Note 6
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. R7-7D (double arrow)
   R7-7R (right arrow)
   R7-7L (left arrow)
6. Lines 1, 3 and 4 are Series C.
   Line 2 is Series B.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	12	18	1 1/8	3/8	3/8	3	2	1 7/8	7/8	5/8	1 1/2	2 1/2	2	2	4 7/8	4 7/8	2	2 3/4	2 5/8	3 7/8	1 3/4	1 1/2	3/4	1/8			1.50
2S	18	24	1 1/8	3/8	1/2	4	2 1/2	2 1/2	1 1/4	1	2	3 1/4	2 3/4	2 5/8	7 1/8	7	2 1/2	3 3/8	3 3/8	5 7/8	2 5/8	2 1/4	1 1/8	1/4			3.00
2M	24	30	1 1/8	3/8	1/2	5	3	3	2	1 1/4	2 1/2	4	3 1/4	3 3/8	9 1/4	9 1/4	3	4 1/8	4	7 3/4	3 1/2	3	1 1/2	1/4			5.00
3	24	30	1 1/8	3/8	1/2	5	3	3	2	1 1/4	2 1/2	4	3 1/4	3 3/8	9 1/4	9 1/4	3	4 1/8	4	7 3/4	3 1/2	3	1 1/2	1/4			5.00
4																											
5																											

STANDARD SIGN
R7-7

WISCONSIN DEPT OF TRANSPORTATION

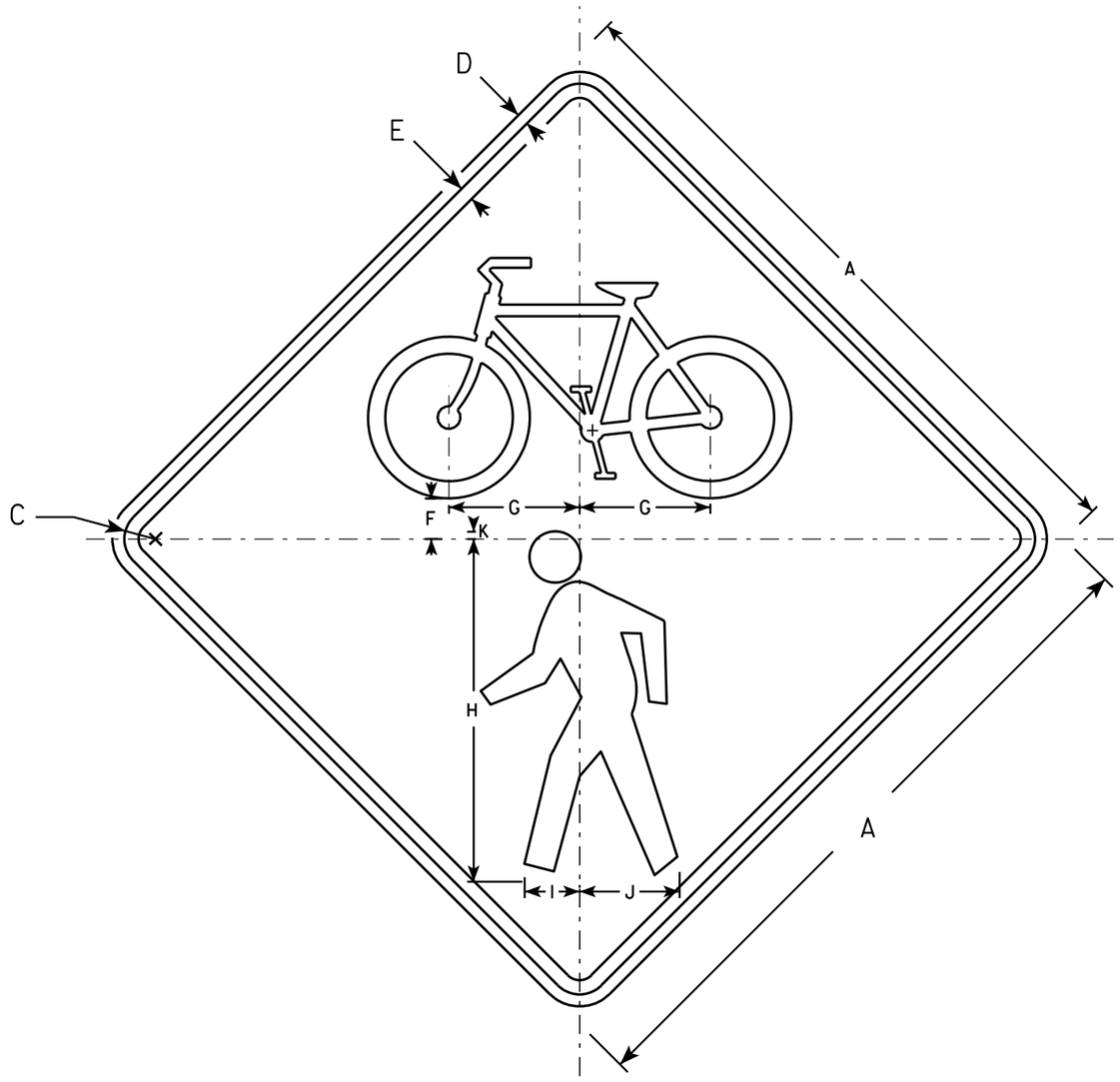
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/31/2011 PLATE NO. R7-7.8

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 944 | E

7

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R77.DGN PLOT DATE : 31-MAR-2011 10:59 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 3.476110:1.000000
WISDOT/CADDS SHEET 42



W11-15

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/4	1/2	1 3/8	4 5/8	12	1 7/8	3 1/2	1/4																4.0
2S	30		1 3/8	1/2	5/8	1 3/4	5 3/4	15	2 3/8	4 3/8	3/8																6.25
2M	36		1 5/8	5/8	3/4	2 1/8	6 7/8	18	2 7/8	5 1/4	3/8																9.0
3	36		1 5/8	5/8	3/4	2 1/8	6 7/8	18	2 7/8	5 1/4	3/8																16.0
4	48		2 1/4	3/4	1	2 7/8	9 1/8	24	3 7/8	7	1/2																16.0
5																											

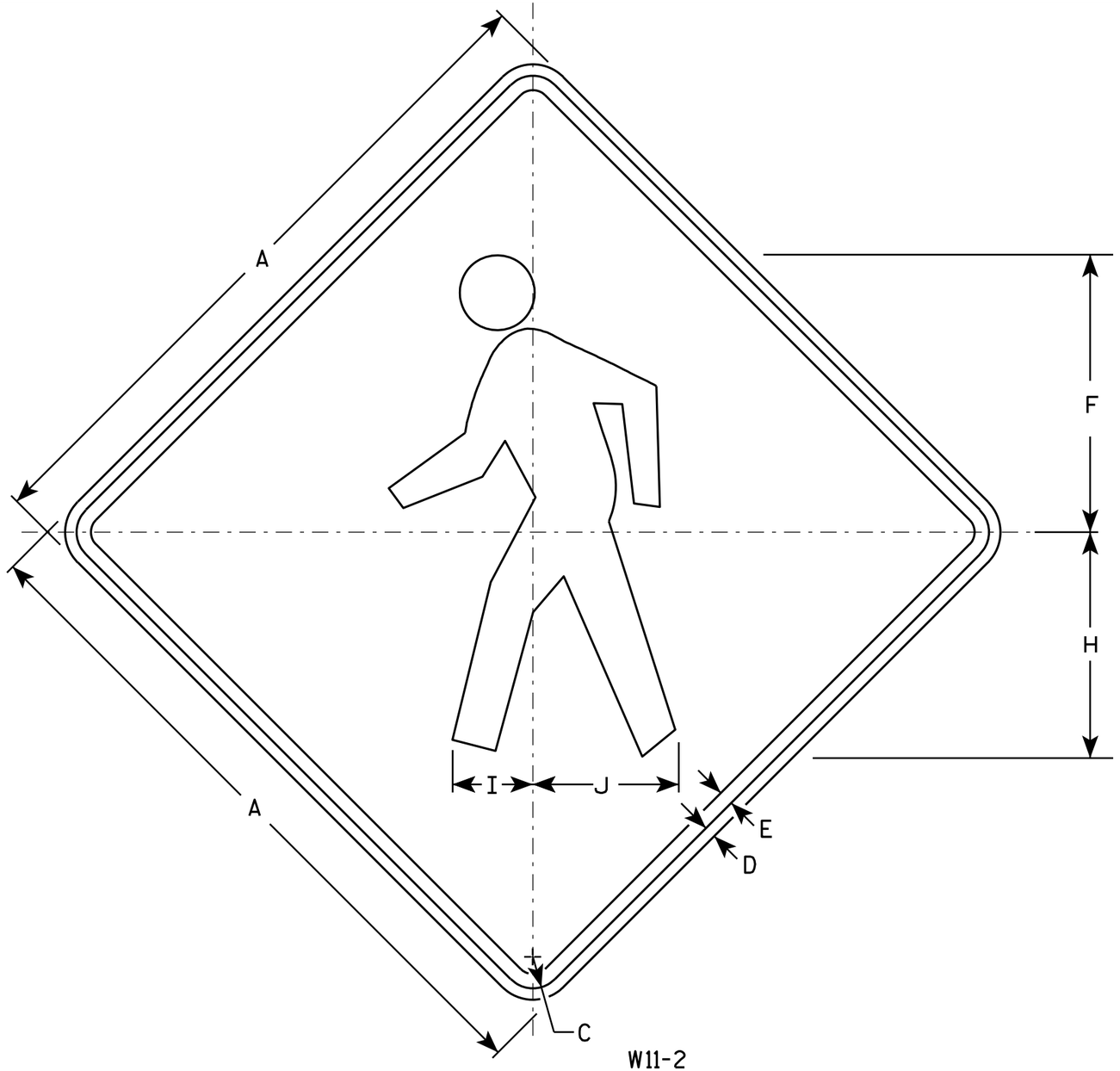
STANDARD SIGN
W11-15

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/29/11 PLATE NO. W11-15.3

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 945	E



W11-2

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	9 3/4		7 7/8	2 7/8	5 1/8																	4.0
2S	30		1 3/8	1/2	5/8	12 1/8		9 7/8	3 1/2	6 3/8																	6.25
2M	36		1 5/8	5/8	3/4	14 1/2		11 7/8	4 1/4	7 5/8																	9.0
3	36		1 5/8	5/8	3/4	14 1/2		11 7/8	4 1/4	7 5/8																	9.0
4	48		2 1/4	3/4	1	19 3/8		15 3/4	5 5/8	10 1/4																	16.0
5																											

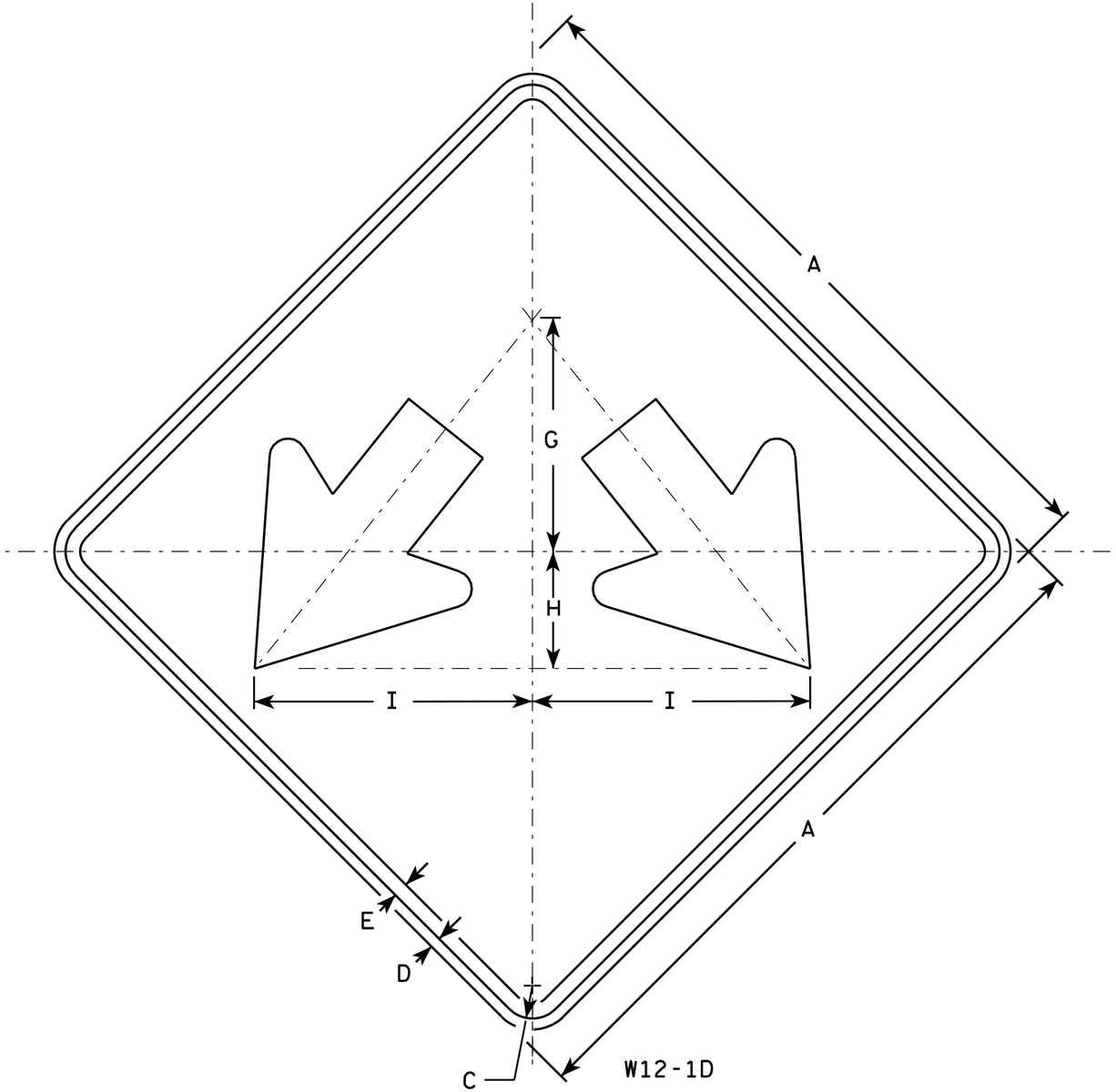
STANDARD SIGN
W11-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W11-2.7

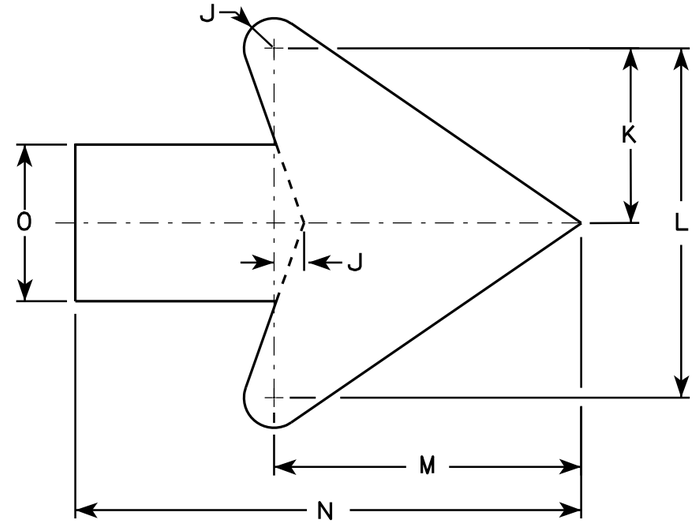
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 946	E



W12-1D

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



Arrow Detail

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24		1 1/8	1/2	3/8		8	4	9 1/2	3/8	3 3/8	7 1/4	6 3/8	10 3/8	3 1/4												4.0
2M	24		1 1/8	1/2	3/8		8	4	9 1/2	3/8	3 3/8	7 1/4	6 3/8	10 3/8	3 1/4												4.0
3	30		1 3/8	1/2	5/8		10	5	11 7/8	3/4	4 1/2	9	7 7/8	13	4												6.25
4	36		1 3/8	1/2	5/8		12	6	14 1/4	1	5 1/2	10 7/8	9 5/8	15 3/4	4 3/4												9.0
5	48		2 1/4	3/4	1		16	8	19	1 1/4	7 1/4	14 1/2	12 3/4	21	6 1/4												16.0

STANDARD SIGN
W12-1D

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/15/11 PLATE NO. W12-1D.14

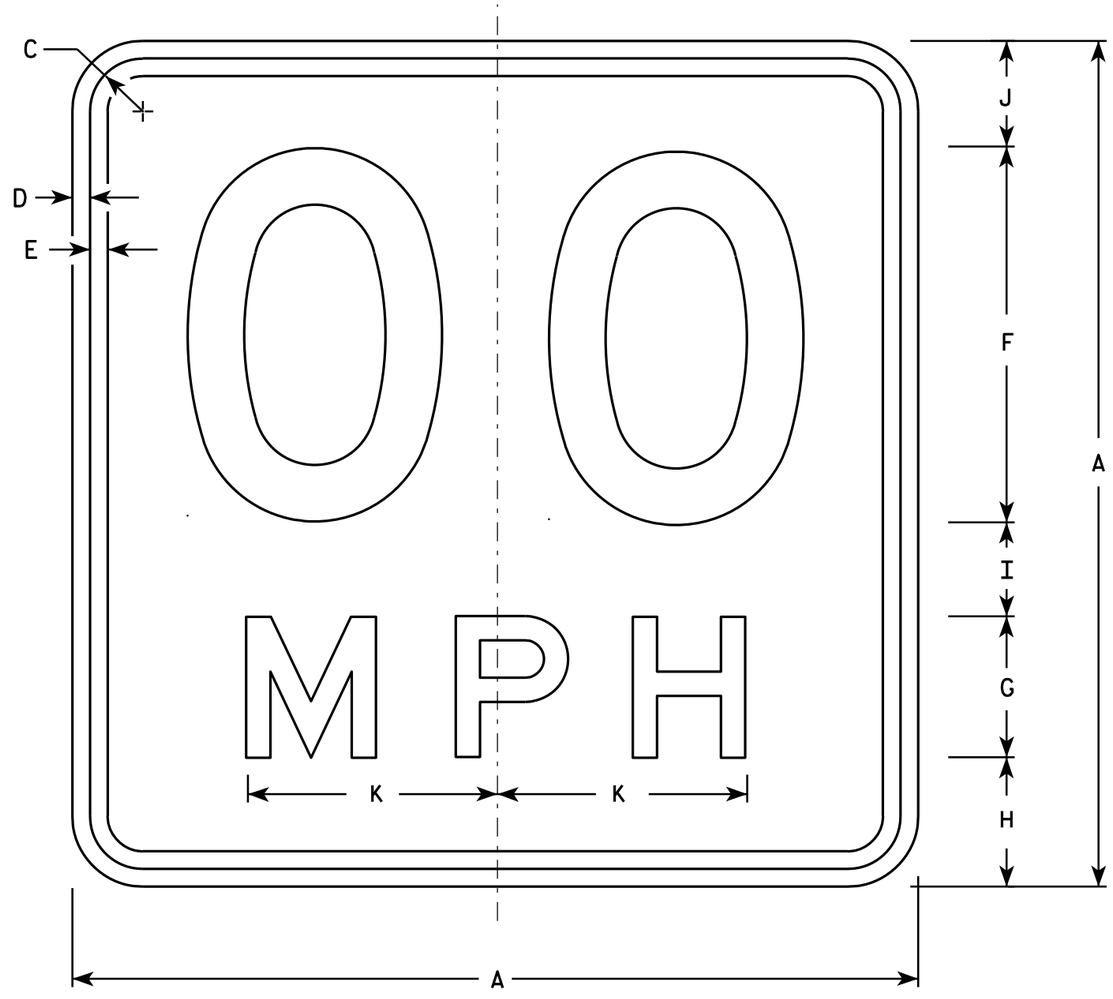
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 947	E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\W121D.DGN PLOT DATE : 16-MAR-2011 14:10 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 4.717577:1.000000

WISDOT/CADDS SHEET 42

7

7



W13-1

* For 30" x 30" Warning Signs, use 18" x 18" W13-1 signs.
For 36" x 36" Warning Signs, use 24" x 24" W13-1 signs.

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - See Note 6
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and optically space about centerline to achieve proper balance.
6. Line 1 is Series D
   Line 2 is Series E

	SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
	1	18		1 1/8	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25
*	2S	18		1 1/8	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25
*	2M	18		1 1/8	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25
	3	24		1 1/8	3/8	1/2	10	4	4	2 3/4	3 1/4	6 5/8																4.00
	4	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00
	5	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00

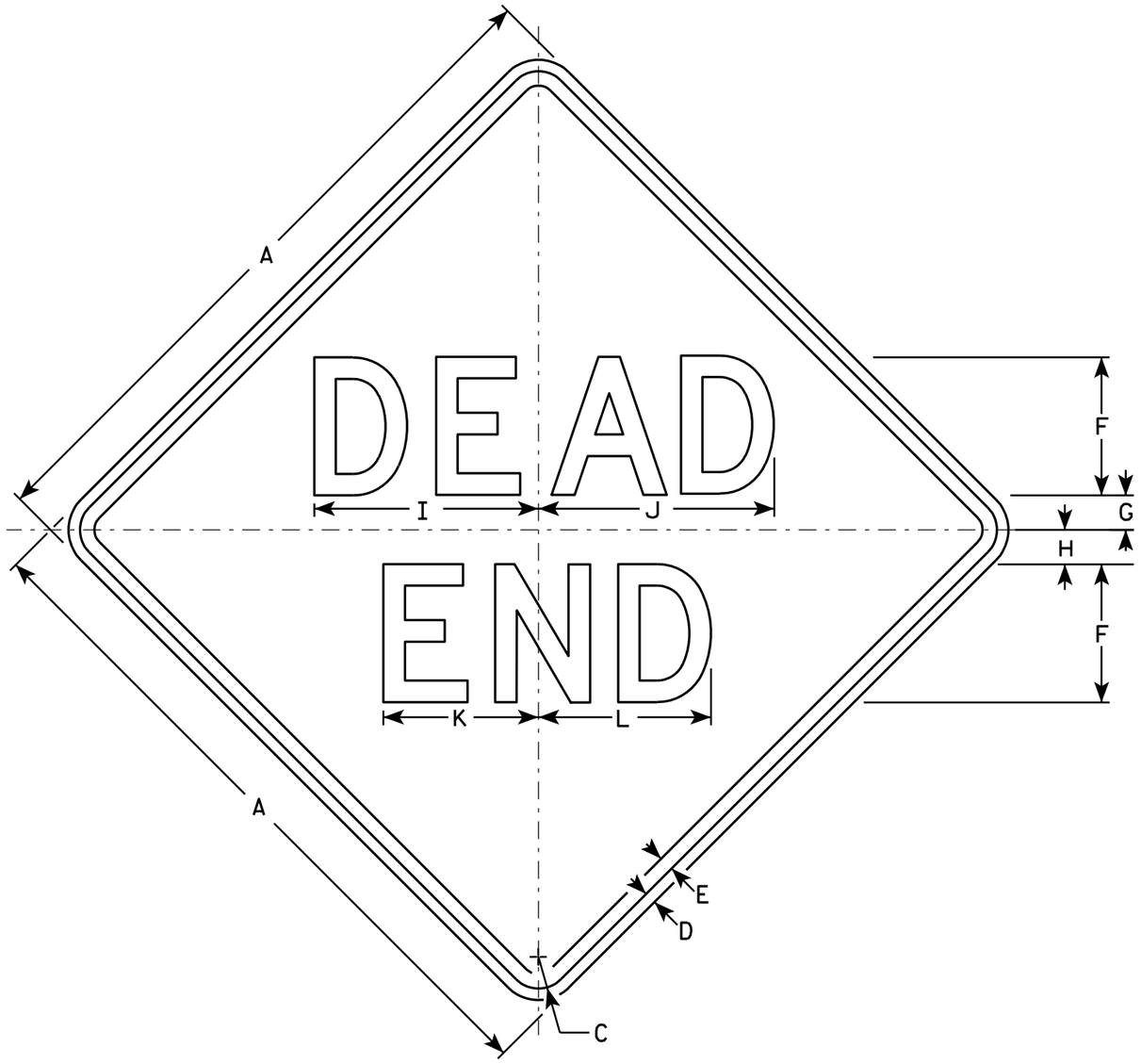
STANDARD SIGN
W13-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 5/31/12 PLATE NO. W13-1.16

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 948 | E



W14-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	5	1	2	8 1/4	8 5/8	5 5/8	6 1/4															4.0
2S	30		1 3/8	1/2	5/8	6	1 1/2	2 1/2	9 3/4	10 1/4	6 3/4	7 1/2															6.25
2M	30		1 3/8	1/2	5/8	6	1 1/2	2 1/2	9 3/4	10 1/4	6 3/4	7 1/2															6.25
3	36		1 5/8	5/8	3/4	7	2	3	11 3/8	12	7 7/8	8 3/4															9.0
4																											
5																											

STANDARD SIGN
W14-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

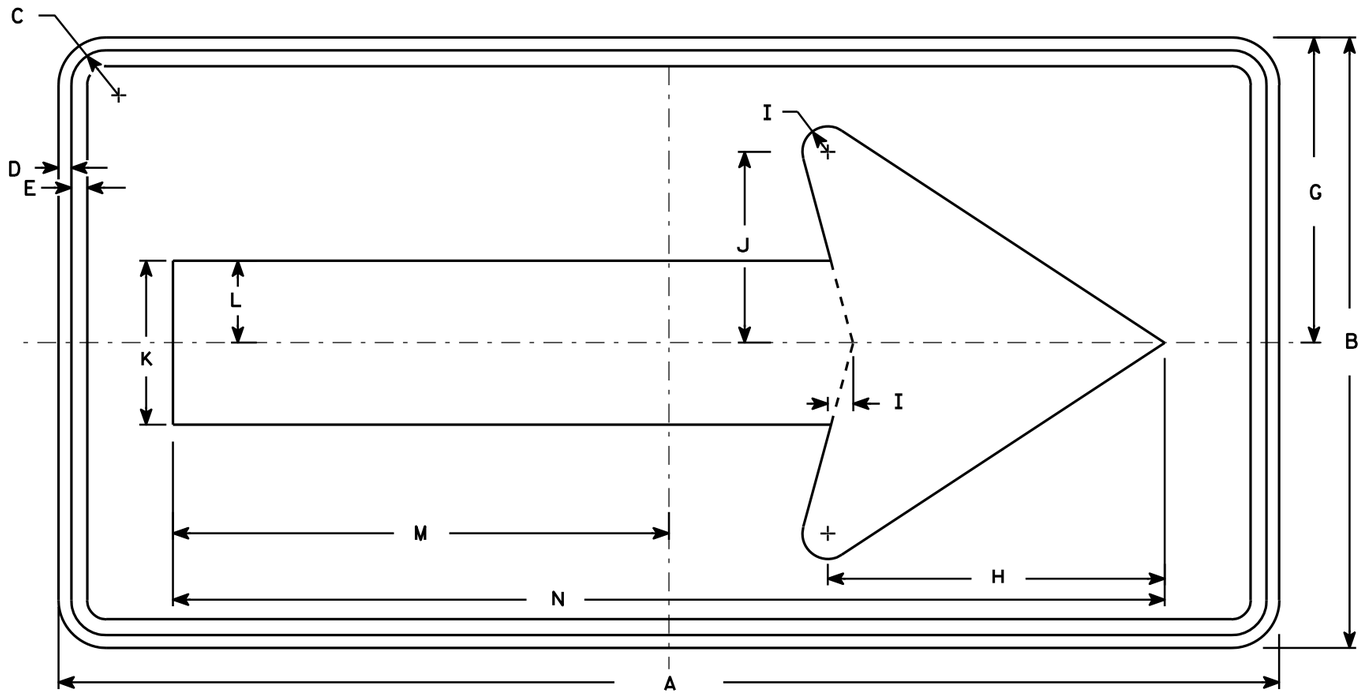
DATE 3/16/11 PLATE NO. W14-1.6

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 949 | E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\W141.DGN PLOT DATE : 16-MAR-2011 15:47 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 6.207338:1.000000
WISDOT/CADDS SHEET 42

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



W1-6

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	18	1 1/8	3/8	3/8		9	10	3/4	5 5/8	4 3/4	2 3/8	14 5/8	29 1/4													4.5
2S	48	24	1 3/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
2M	48	24	1 3/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
3	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
4	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
5	96	48	2 1/4	3/4	1		24	26 1/2	2	15	13	6 1/2	39	78													32.0

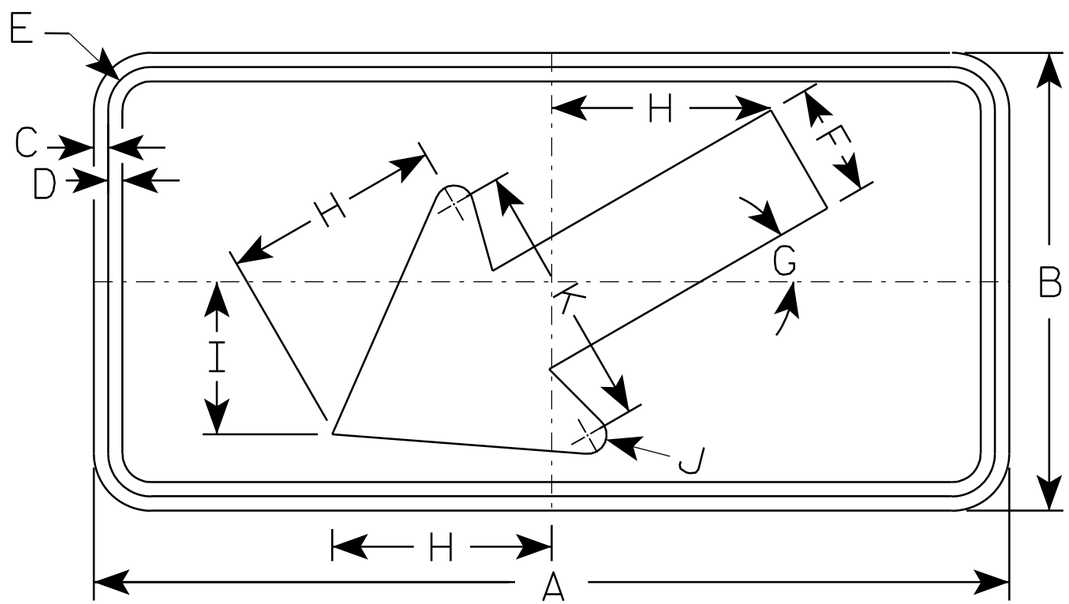
STANDARD SIGN
W1-6

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W1-6.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 950



W16-7L

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W16-7R is the same as W16-L except the arrow is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	12	3/8	3/8	1 1/8	3	30°	5 3/4	4	1/2	7																2.0
2M	30	18	3/8	1/2	1 1/8	4 1/2	30°	8 1/2	6	5/8	10 1/4																3.75
3	30	18	3/8	1/2	1 1/8	4 1/2	30°	8 1/2	6	5/8	10 1/4																3.75
4																											8
5																											8

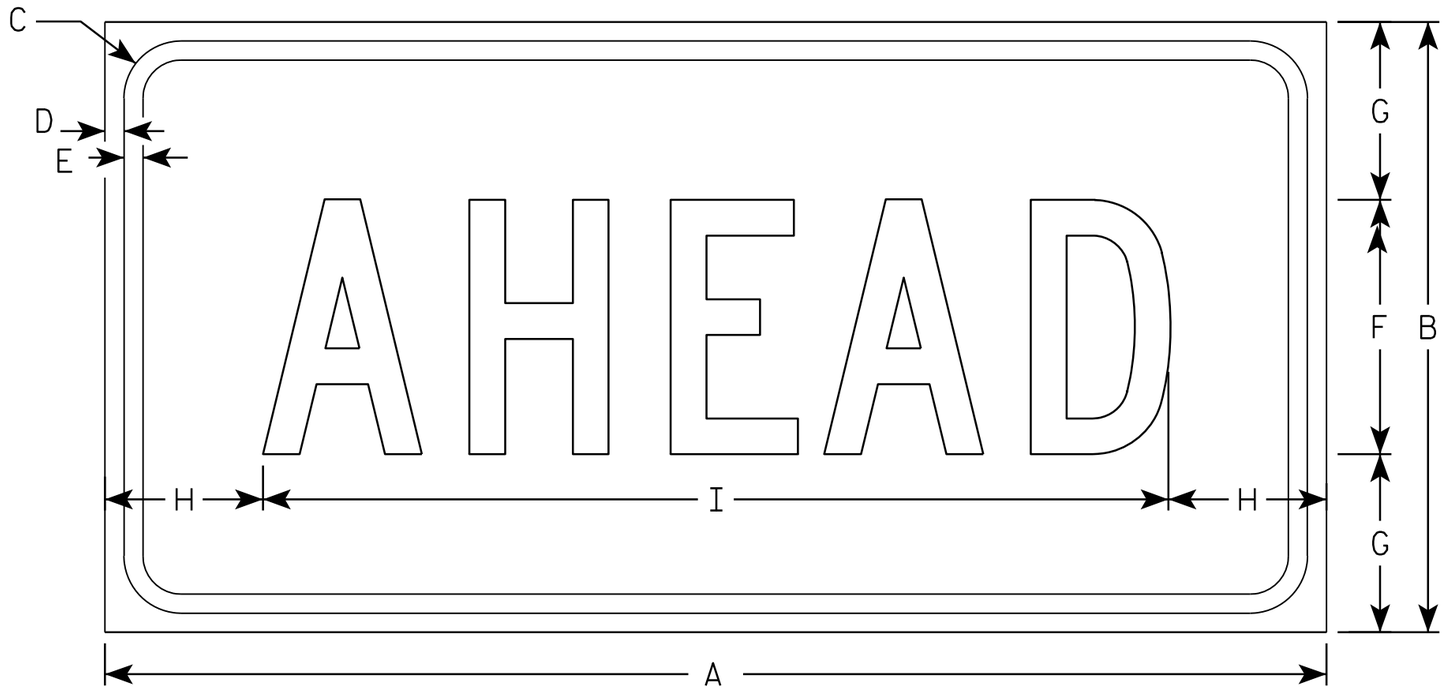
STANDARD SIGN
W16-7

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/02/10 PLATE NO. W16-7.5

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 951	E



W16-9P

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	12	1 1/8	3/8	3/8	5	3 1/2	3 1/8	17 3/4																		2.0
2M	30	18	1 1/8	3/8	1/2	7	5 1/2	2 3/4	24 1/2																		3.75
3	30	18	1 1/8	3/8	1/2	7	3 1/2	2 3/4	24 1/2																		3.75
4	48	24	1 3/8	1/2	5/8	10	7	6 1/8	35 3/4																		8.0
5																											

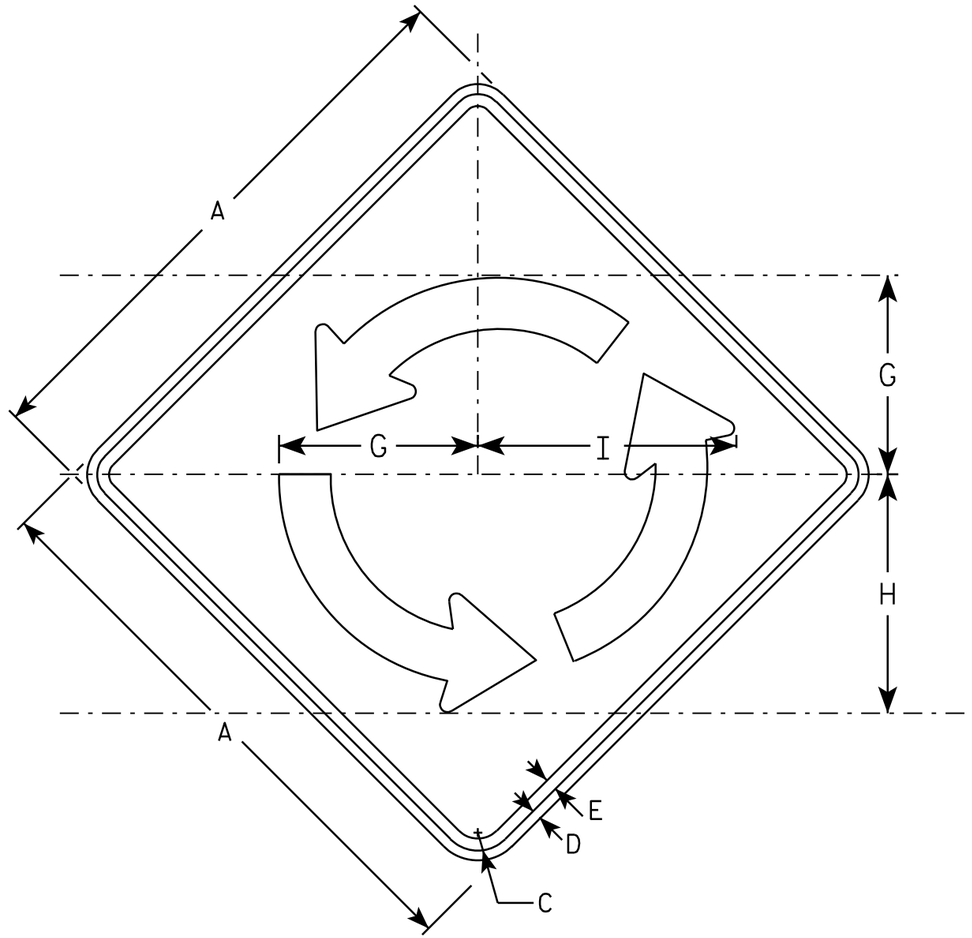
STANDARD SIGN
W16-9P

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/28/10 PLATE NO. W16-9P.6

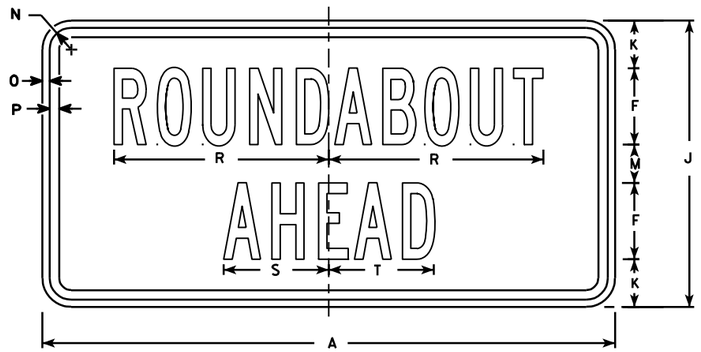
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 952 | E



W2-6

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - YELLOW
   Message - BLACK
3. Message Series - B
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



W2-6P

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	W2-6 Area sq. ft.	W2-6P Area sq. ft.
1																										
2S	30		1 3/8	1/2	5/8	4	10 3/8	12 1/2	13 1/2	15	2 1/2		2	1 1/8	3/8	1/2		11 1/4	5 1/2	5 1/2					6.25	3.12
2M	30		1 3/8	1/2	5/8	4	10 3/8	12 1/2	13 1/2	15	2 1/2		2	1 1/8	3/8	1/2		11 1/4	5 1/2	5 1/2					6.25	3.12
3	36		1 5/8	5/8	3/4	5	12 1/2	15	16 1/4	18	2 5/8		2 3/4	1 1/8	3/8	1/2		14	7	6 3/4					9.00	4.50
4	48		2 1/4	3/4	1	6	16 5/8	20	16 1/4	24	4 3/8		3 5/8	1 3/8	1/2	5/8		17	8 1/4	8 1/4					16.0	8.0
5																										

STANDARD SIGN
W2-6

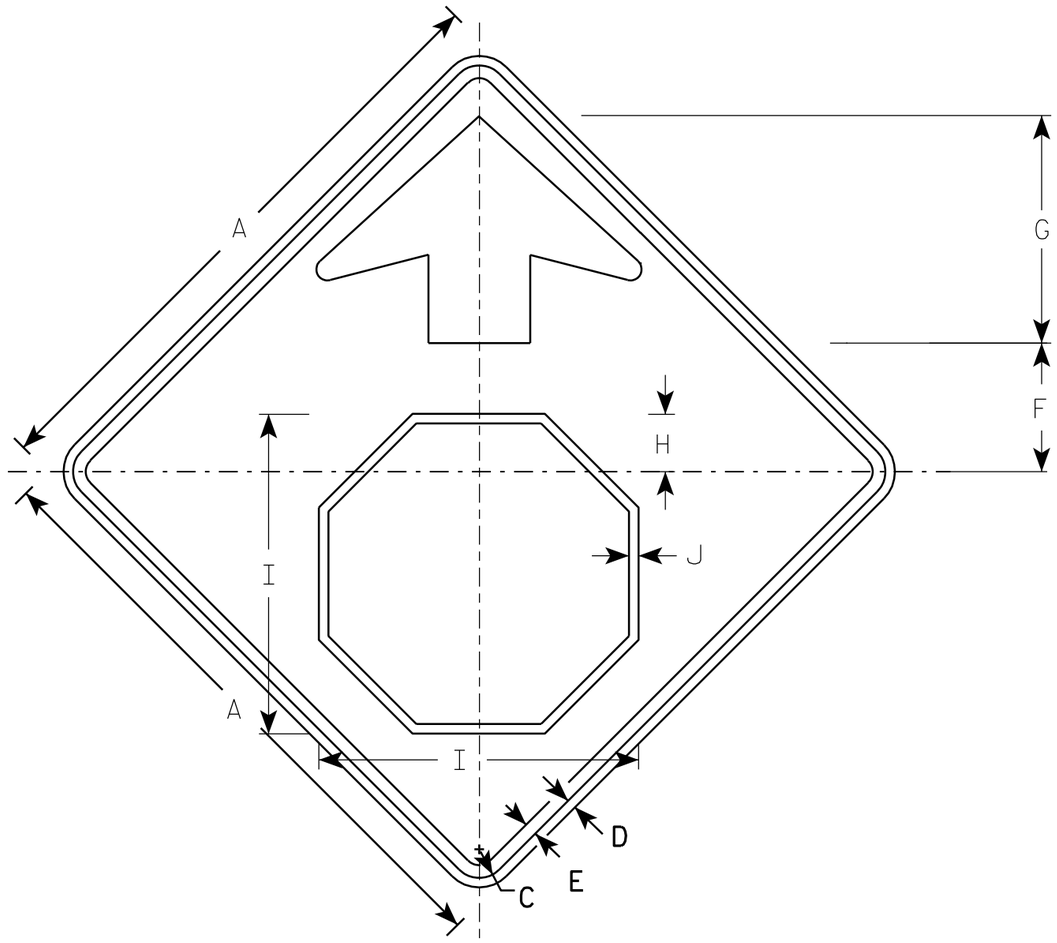
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/29/12 PLATE NO. W2-6.5

PROJECT NO:

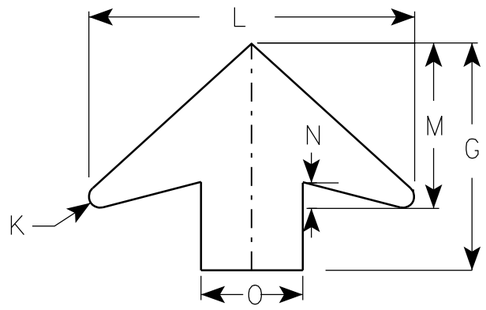
SHEET NO: 953 E



W3-1

NOTES

1. All Signs Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - YELLOW
   Arrow & Border - BLACK
   Stop Symbol - WHITE BORDER ON RED BACKGROUND



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8	6 1/4	11 1/4	2 7/8	15 3/4	1/2	1/2	16	8	1 1/4	5												6.25
2S	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 1/2	19	5/8	5/8	19 1/4	9 3/4	1 5/8	6												9.0
2M	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 1/2	19	5/8	5/8	19 1/4	9 3/4	1 5/8	6												9.0
3	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 1/2	19	5/8	5/8	19 1/4	9 3/4	1 5/8	6												9.0
4	48		2 1/4	3/4	1	10	17 7/8	4 1/2	25 1/8	3/4	7/8	25 5/8	13	2	8												16.0
5	48		2 1/4	3/4	1	10	17 7/8	4 1/2	25 1/8	3/4	7/8	25 5/8	13	2	8												16.0

STANDARD SIGN
W3-1

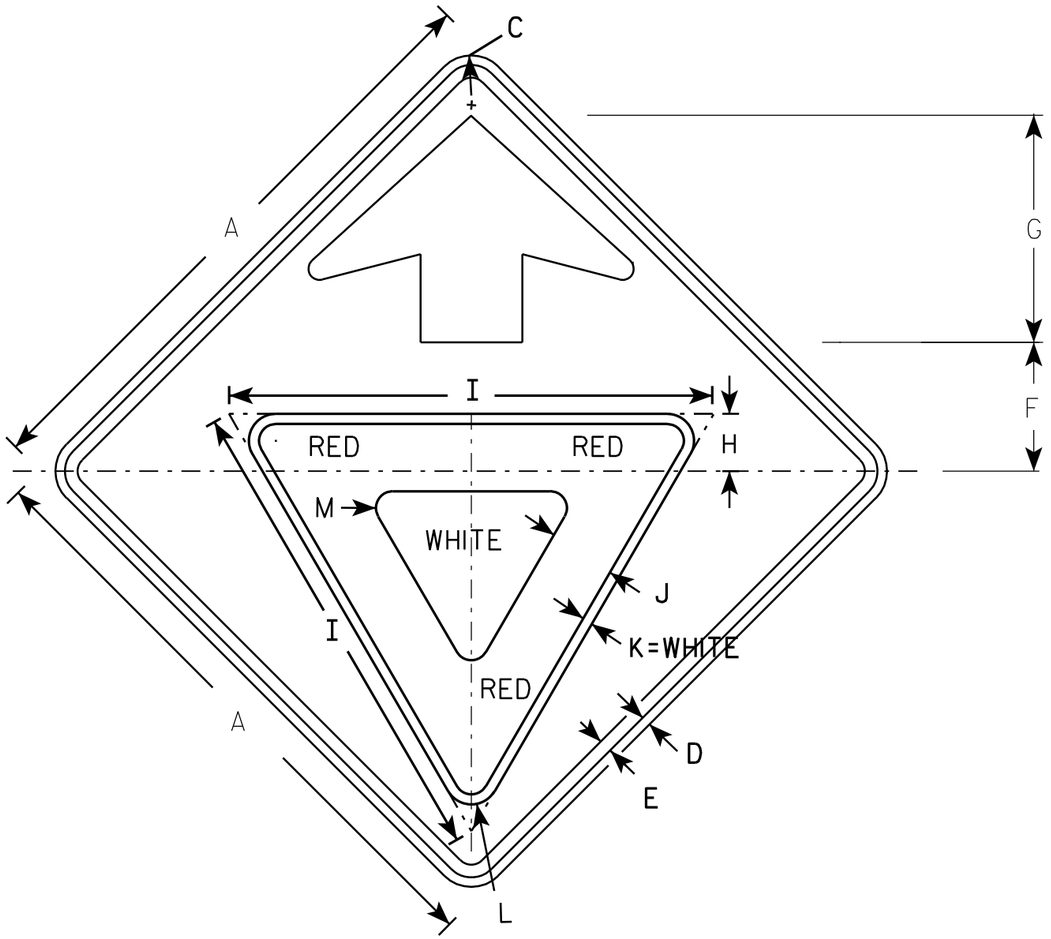
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W3-1.12

PROJECT NO:

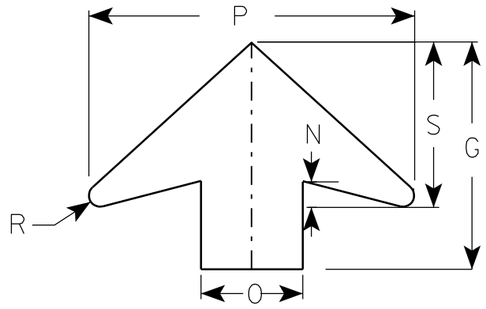
SHEET NO: 954 E



W3-2

NOTES

1. All Signs Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - YELLOW
   Arrow & Border - BLACK
   Yield Symbol - WHITE BORDER ON RED BACKGROUND



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8	6 1/4	11 1/4	3	25	3 3/8	1/2	1 3/8	7/8	1 1/4	5	16		1/2	8								6.25
2S	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 3/8	28	3 3/4	5/8	1 1/2	1	1 5/8	6	19 1/4		5/8	9 3/4								9.0
2M	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 3/8	28	3 3/4	5/8	1 1/2	1	1 5/8	6	19 1/4		5/8	9 3/4								9.0
3	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 3/8	28	3 3/4	5/8	1 1/2	1	1 5/8	6	19 1/4		5/8	9 3/4								9.0
4	48		2 1/4	3/4	1	10	17 7/8	4 1/2	38	5	3/4	2 1/8	1 3/8	2	8	25 5/8		7/8	13								16.0
5	48		2 1/4	3/4	1	10	17 7/8	4 1/2	38	5	3/4	2 1/8	1 3/8	2	8	25 5/8		7/8	13								16.0

STANDARD SIGN
W3-2

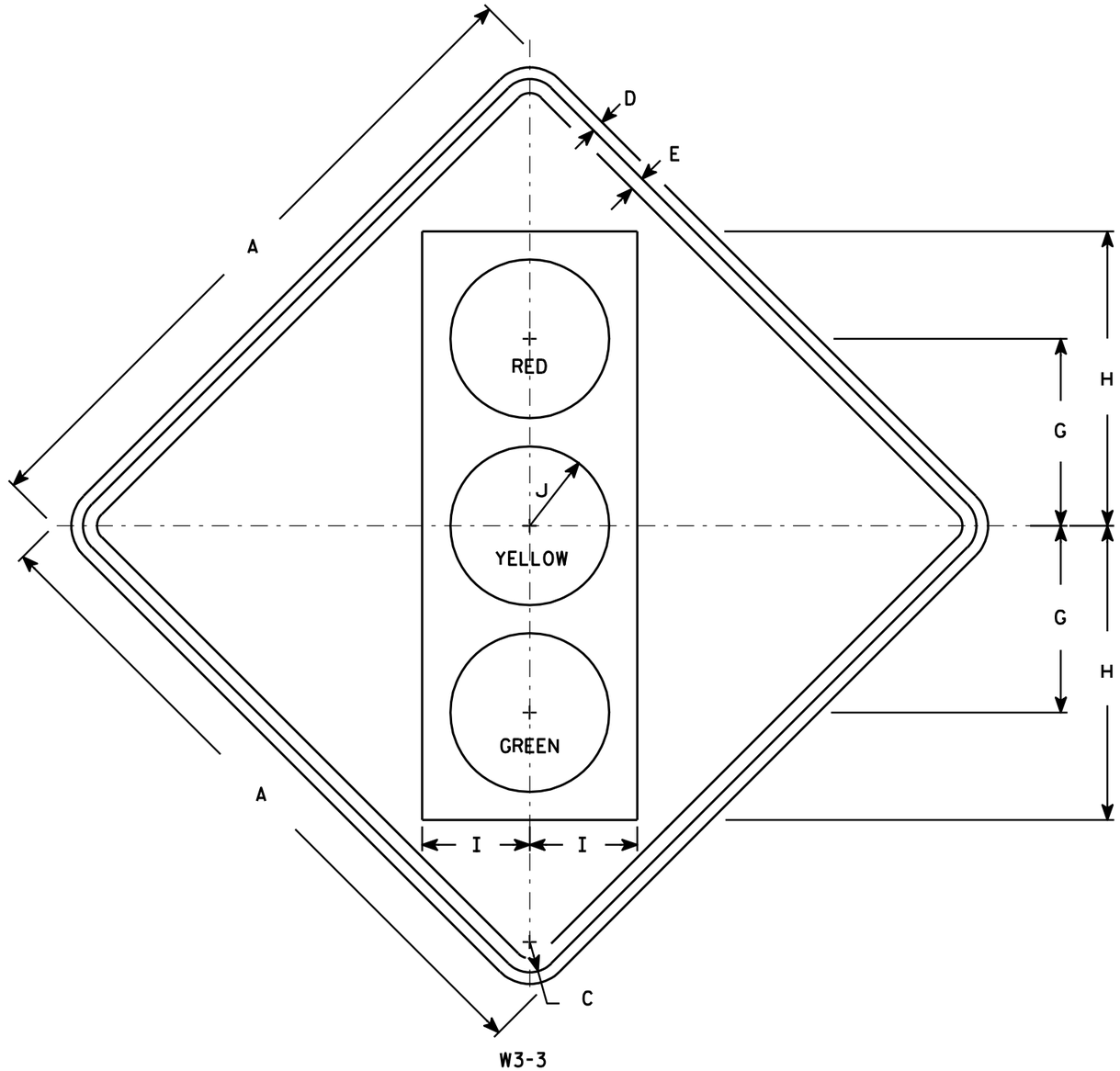
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W3-2..9

PROJECT NO:

SHEET NO: 955 E



NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - See Note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. Symbol and border are non-reflective black.
   Top circle - Type H Reflectorized Red
   Center circle - Same as background
   Bottom circle - Type H Reflectorized Green

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8		8 3/4	13 3/4	5	3 3/4																	6.25
2S	36		1 5/8	5/8	3/4		10	15 3/4	5 3/4	4 1/4																	9.0
2M	36		1 5/8	5/8	3/4		10	15 3/4	5 3/4	4 1/4																	9.0
3	36		1 5/8	5/8	3/4		10	15 3/4	5 3/4	4 1/4																	9.0
4	48		2 1/4	3/4	1		12 1/2	20	7 1/2	5																	16.0
5	48		2 1/4	3/4	1		12 1/2	20	7 1/2	5																	16.0

STANDARD SIGN
W3-3

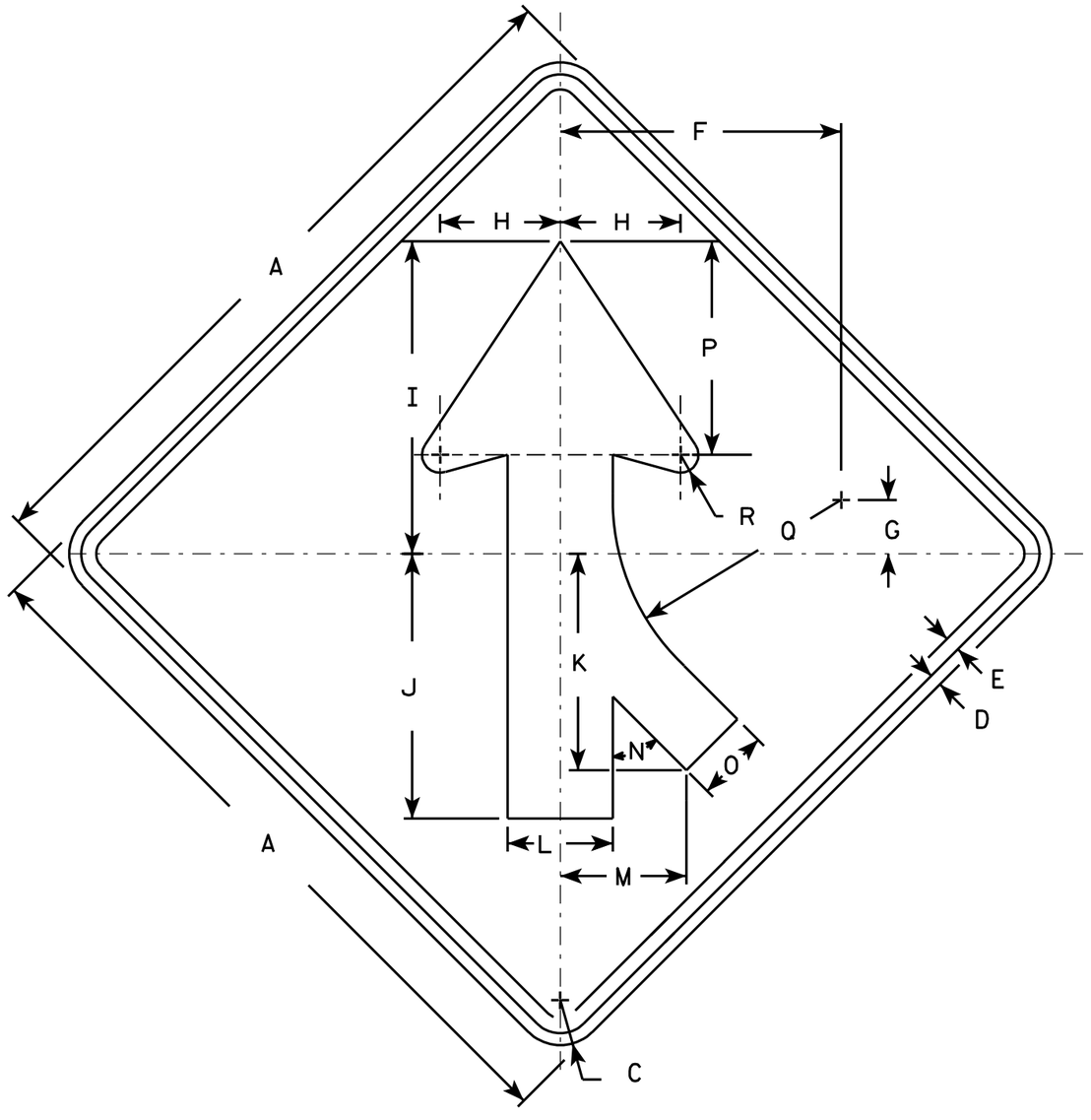
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W3-3.11

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 956 | E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\W33.DGN PLOT DATE : 07-JUN-2010 13:07 PLOT BY : ditjph PLOT NAME : PLOT SCALE : 7.448805:1.000000
WISDOT/CADDS SHEET 42



W4-1 R

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W4-1L is the same as W4-1R except the arrow is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8	11 5/8	2 1/2	5	13	11	9	4 3/8	5 1/4	45°	3	8 7/8	9 1/2	3/4									6.25
2S	36		1 5/8	5/8	3/4	14	2 3/4	6	15 3/4	13 1/4	10 1/4	5 1/4	6 3/8	45°	3 5/8	10 5/8	11 3/8	7/8									9.0
2M	36		1 5/8	5/8	3/4	14	2 3/4	6	15 3/4	13 1/4	10 1/4	5 1/4	6 3/8	45°	3 5/8	10 5/8	11 3/8	7/8									9.0
3	36		1 5/8	5/8	3/4	14	2 3/4	6	15 3/4	13 1/4	10 1/4	5 1/4	6 3/8	45°	3 5/8	10 5/8	11 3/8	7/8									9.0
4	48		2 1/4	3/4	1	18 3/4	3 5/8	8	20 1/2	17 1/2	14 3/8	7	8 3/8	45°	4 3/4	14 1/4	15 1/4	1 1/4									16.0
5	48		2 1/4	3/4	1	18 3/4	3 5/8	8	20 1/2	17 1/2	14 3/8	7	8 3/8	45°	4 3/4	14 1/4	15 1/4	1 1/4									16.0

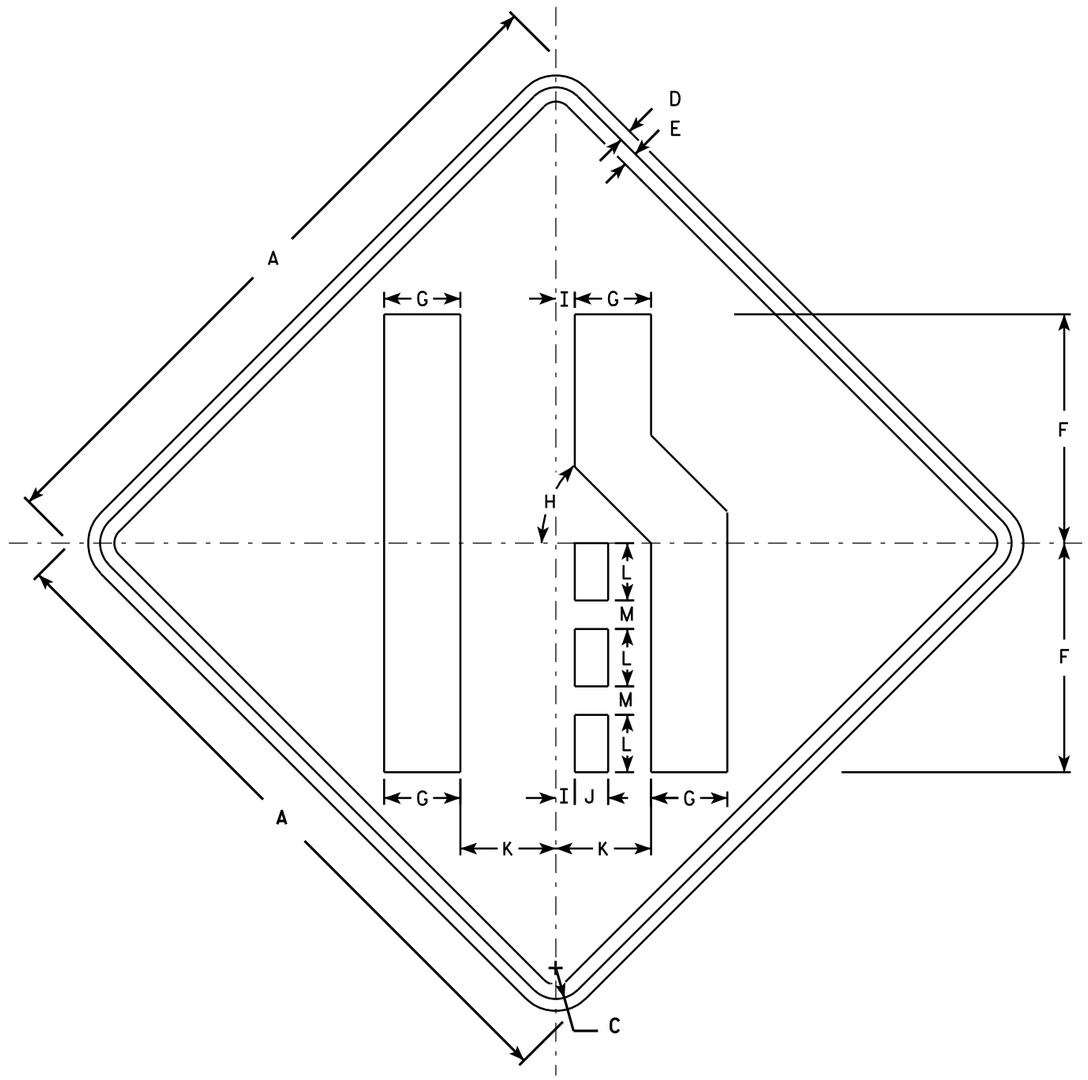
STANDARD SIGN
W4-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 3/21/11 PLATE NO. W4-1.13

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 957 | E



W4-2R

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W4-2L is the same as W4-2R except the symbol is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8	10	3 3/8	45°	7/8	1 1/2	4 1/4	2 1/2	1 1/4														6.25
2S	36		1 5/8	5/8	3/4	12	4	45°	1	1 3/4	5	3	1 1/2														9.0
2M	36		1 5/8	5/8	3/4	12	4	45°	1	1 3/4	5	3	1 1/2														9.0
3	36		1 5/8	5/8	3/4	12	4	45°	1	1 3/4	5	3	1 1/2														9.0
4	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
5	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0

STANDARD SIGN
W4-2

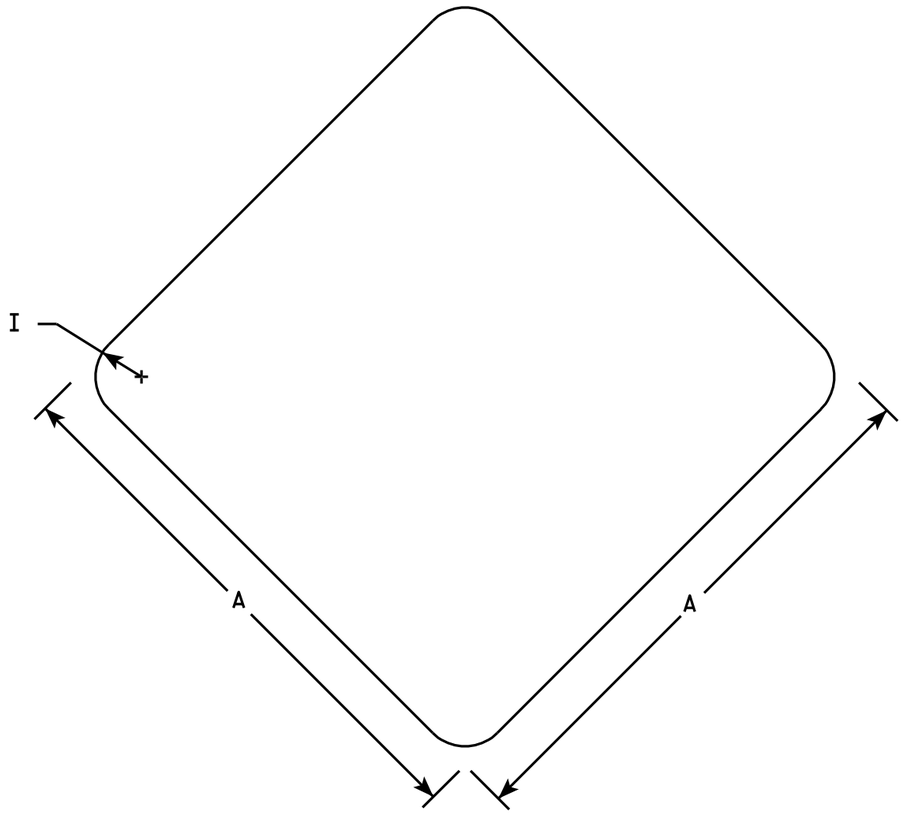
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/29/2012 PLATE NO. W4-2.13

PROJECT NO:

SHEET NO: 958 E



W5-56

NOTES

1. Sign is Type II - Type SH Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Red
3. Corners may be square or rounded when base material is plywood. When base material is metal the corners shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	12								1																		1.0
2S	18								1 ½																		2.25
2M	18								1 ½																		2.25
3																											
4																											
5																											

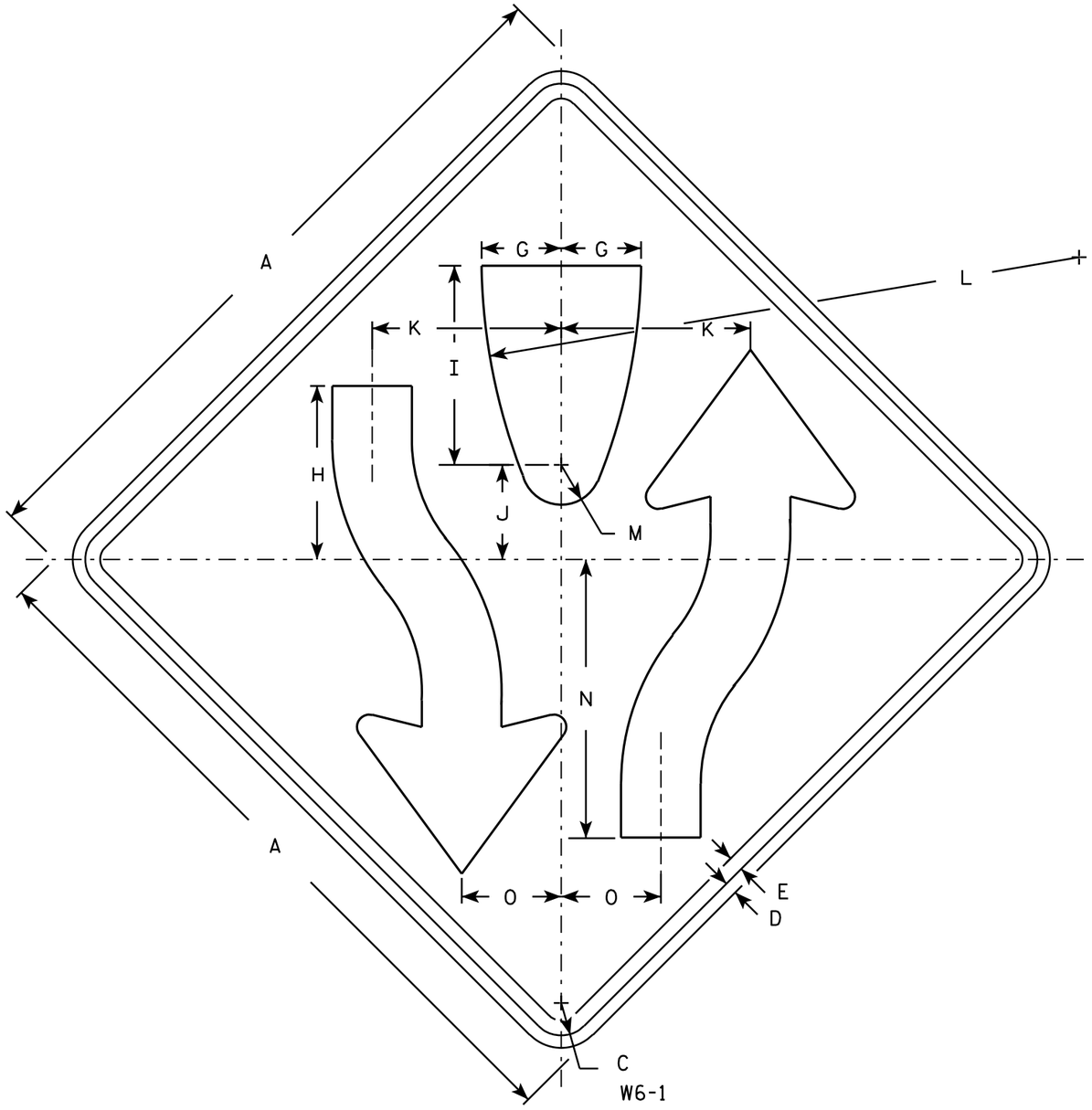
STANDARD SIGN
W5-56

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

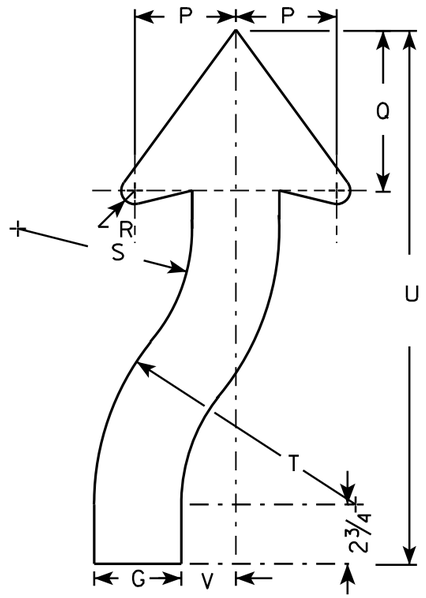
DATE 11/2/10 PLATE NO. W5-56.6

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 959	E



NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W6-2 same as W6-1 but is rotated 180° when mounted.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8		3 1/4	8	8 1/4	4 1/8	7 7/8	25	1 3/4	11 5/8	4 1/8	3 7/8	6 3/4	5/8	6 5/8	9 7/8	21 5/8	2					6.25
2S	36		1 5/8	5/8	3/4		4	8 3/4	10	4 3/4	9 1/2	30	2	14	5	4 5/8	7 3/8	7/8	8	12	24 1/2	2 1/2					9.0
2M	36		1 5/8	5/8	3/4		4	8 3/4	10	4 3/4	9 1/2	30	2	14	5	4 5/8	7 3/8	7/8	8	12	24 1/2	2 1/2					9.0
3																											
4	48		2 1/4	3/4	1		5 3/8	11 5/8	13 3/8	6 3/8	12 5/8	40	2 5/8	18 5/8	6 5/8	6 1/4	9 7/8	1 1/4	10 5/8	16	32 5/8	3 3/8					16.0
5	48		2 1/4	3/4	1		5 3/8	11 5/8	13 3/8	6 3/8	12 5/8	40	2 5/8	18 5/8	6 5/8	6 1/4	9 7/8	1 1/4	10 5/8	16	32 5/8	3 3/8					16.0

STANDARD SIGN
W6-1 & W6-2

WISCONSIN DEPT OF TRANSPORTATION

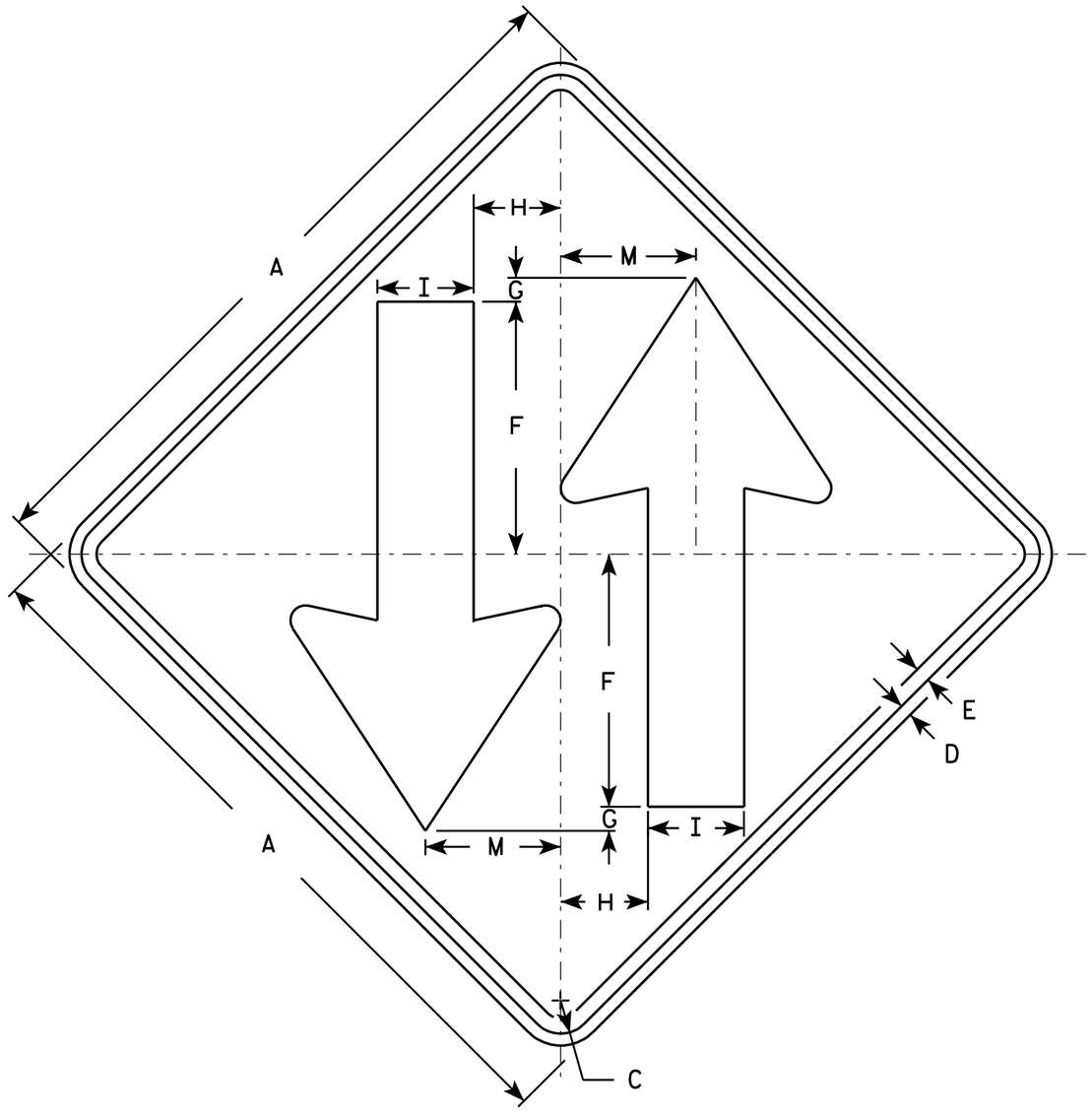
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/22/11 PLATE NO. W6-1.13

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 960	E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\W61.DGN PLOT DATE : 22-MAR-2011 13:21 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 6.952219:1.000000

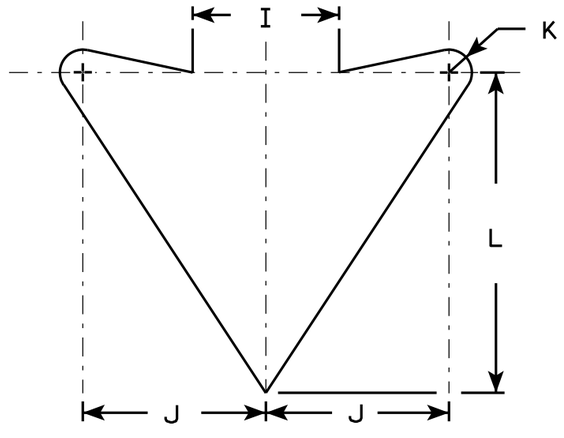
WISDOT/CADDS SHEET 42



W6-3

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8	10 1/2	1	3 5/8	4	5	5/8	8 3/4	5 5/8														6.25
2S	36		1 5/8	5/8	3/4	12	1	4 1/4	5	6	3/4	10 1/2	6 3/4														9.0
2M	36		1 5/8	5/8	3/4	12	1	4 1/4	5	6	3/4	10 1/2	6 3/4														9.0
3																											
4	48		2 1/4	3/4	1	15 1/2	1	6	6	8	1	14	9														16.0
5	48		2 1/4	3/4	1	15 1/2	1	6	6	8	1	14	9														16.0

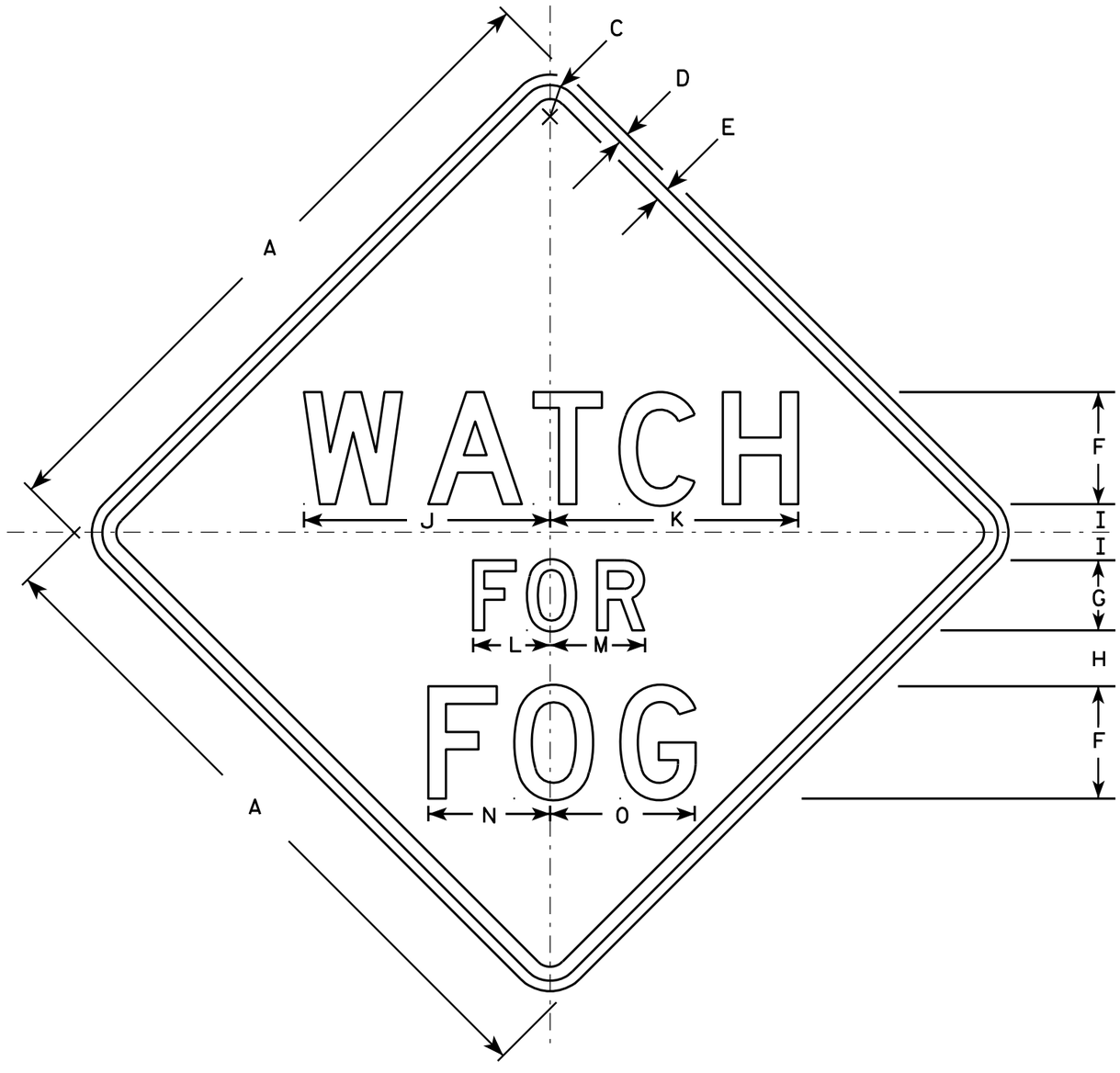
STANDARD SIGN
W6-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/22/11 PLATE NO. W6-3.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 961	E



W8 - 69

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	36		1 5/8	5/8	3/4	5	4	2 3/4	1 1/2	13 1/4	13 1/4	4 1/2	5 1/2	6 3/4	8 1/4												9.0
2M	36		1 5/8	5/8	3/4	5	4	2 3/4	1 1/2	13 1/4	13 1/4	4 1/2	5 1/2	6 3/4	8 1/4												9.0
3																											
4	48		2 1/4	3/4	1	8	5	4	2	17 5/8	17 3/4	5 1/2	6 3/4	8 3/4	10 3/8												16.0
5																											

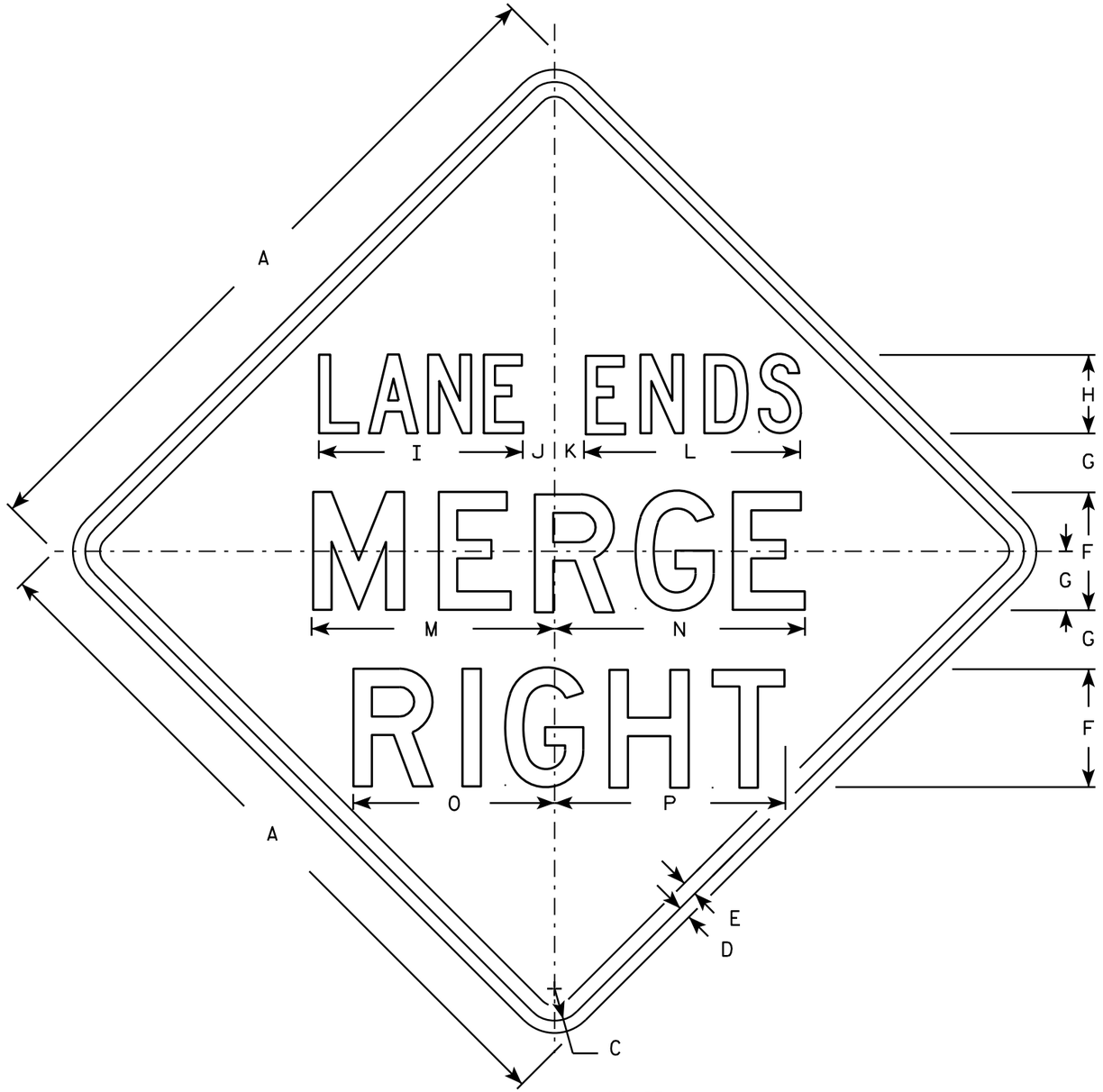
STANDARD SIGN
W8-69

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/23/11 PLATE NO. W8-69.3

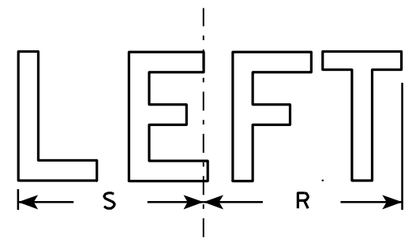
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 962	E



W9-2R

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - See note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Line 1is Series C, lines 2 & 3 are Series D.
6. W9-1L is the same as W9-2R except the word LEFT replaces RIGHT.



W9-2L

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8	5	2 1/2	3	8	1	1 1/8	8 1/4	10 3/8	10 5/8	8 5/8	9 7/8		7 5/8	7 1/8								6.25
2S	36		1 5/8	5/8	3/4	6	3	4	10 3/8	1 5/8	1 1/2	11	12 3/8	12 3/4	10 1/4	11 3/4		9 1/8	8 1/2								9.0
2M	36		1 5/8	5/8	3/4	6	3	4	10 3/8	1 5/8	1 1/2	11	12 3/8	12 3/4	10 1/4	11 3/4		9 1/8	8 1/2								9.0
3																											
4	48		2 1/4	3/4	1	8	4	6	14 1/2	2	3 1/4	13 3/4	16 3/8	17 1/8	13 3/4	15 3/4		12 1/4	11 1/4								16.0
5	48		2 1/4	3/4	1	8	4	6	14 1/2	2	3 1/4	13 3/4	16 3/8	17 1/8	13 3/4	15 3/4		12 1/4	11 1/4								16.0

STANDARD SIGN
W9-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew L Rauch
for State Traffic Engineer

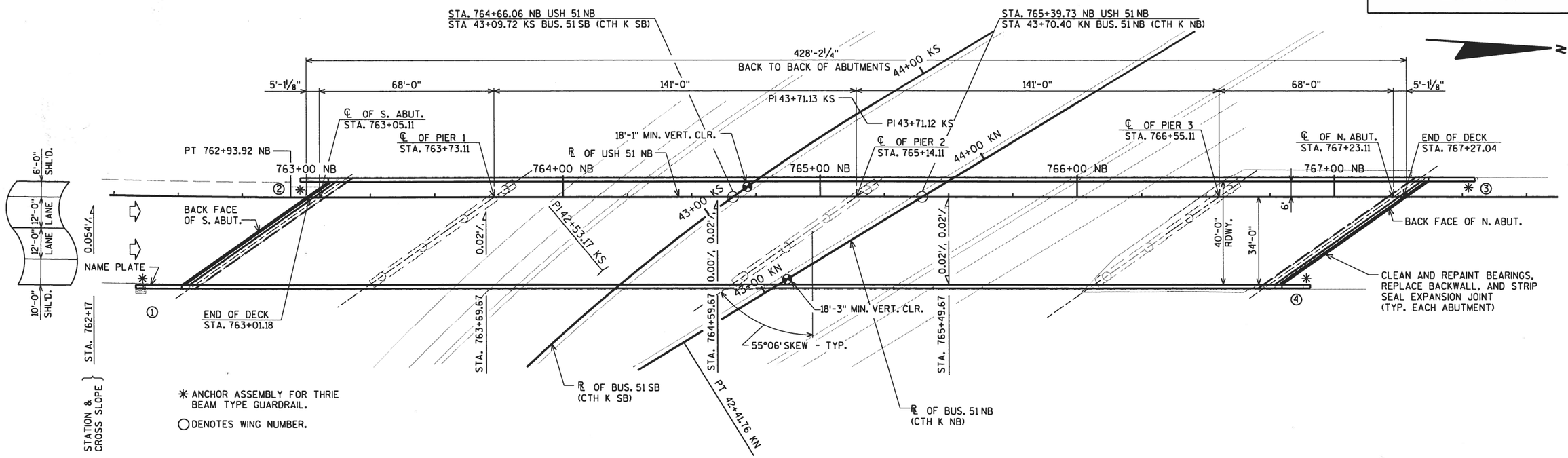
DATE 3/23/11 PLATE NO. W9-2.9

PROJECT NO:

SHEET NO: 963 E

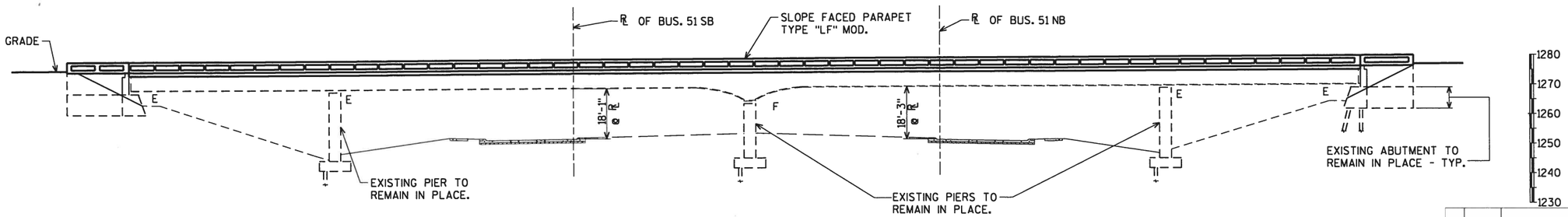
STATE PROJECT NUMBER

1170-01-70



PLAN

4-SPAN CONTINUOUS HAUNCHED STEEL GIRDER BRIDGE
PAINTING AND DECK REPLACEMENT



ELEVATION

(TAKEN NORMAL TO USH 51)

LISTS OF DRAWINGS

1. GENERAL PLAN
2. TYPICAL SECTION
3. QUANTITIES AND NOTES
4. SOUTH ABUTMENT
5. SOUTH ABUTMENT WING 1 DETAILS
6. SOUTH ABUTMENT WING 2 DETAILS
7. SOUTH ABUTMENT DETAILS
8. NORTH ABUTMENT
9. NORTH ABUTMENT WING 3 DETAILS
10. NORTH ABUTMENT WING 4 DETAILS
11. NORTH ABUTMENT DETAILS
12. EXPANSION JOINT DETAILS ABUTMENTS
13. EXPANSION JOINT DETAILS ABUTMENTS
14. EXISTING GIRDER ELEVATION
15. HAUNCH RENIFORCEMENT DETAILS
16. HAUNCH RENIFORCEMENT DETAILS
17. DECK ELEVATIONS
18. TABLE OF DEFLECTIONS
19. SUPERSTRUCTURE
20. SUPERSTRUCTURE PLAN
21. SUPERSTRUCTURE DETAILS AND BILL OF BARS
22. SLOPED FACE PARAPET LF MODIFIED

FOR DESIGN DATA SEE SHEET 2

WISCONSIN PROFESSIONAL ENGINEER
DANIEL N. SYDOW
E-38363
WI
7/30/12

BRIDGE OFFICE CONTACT:
WILLIAM DREHER
(608)-266-8489

CONSULTANT CONTACT:
DAN SYDOW
(715)-834-3161

NO.	DATE	REVISION	BY

ORIGINAL PLANS PREPARED BY

AYRES ASSOCIATES
3433 Oakwood Hills Parkway
Eau Claire, WI 54701
www.AyresAssociates.com

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher KAR 08/15/12
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE B-37-153

USH 51 NB OVER BUSINESS USH 51 (CTH K)

COUNTY	TOWN/~~CITY/VILLAGE~~
MARATHON	MAINE

DESIGN SPEC. REHABILITATION N/A

DESIGNED BY	CJM	DESIGN CK'D.	KLW	DRAWN BY	CJM	PLANS CK'D.	DNS

GENERAL PLAN

SHEET 1 OF 22
964

I.D. DATE:

DATE: 5/29/12
DATE: 5/31/12
DATE:
CHECKED BY: DNS
BACK CHECKED BY: KLW
CORRECTED BY:

11X17-5200.plt
B-37-153gpREHAB.dgn

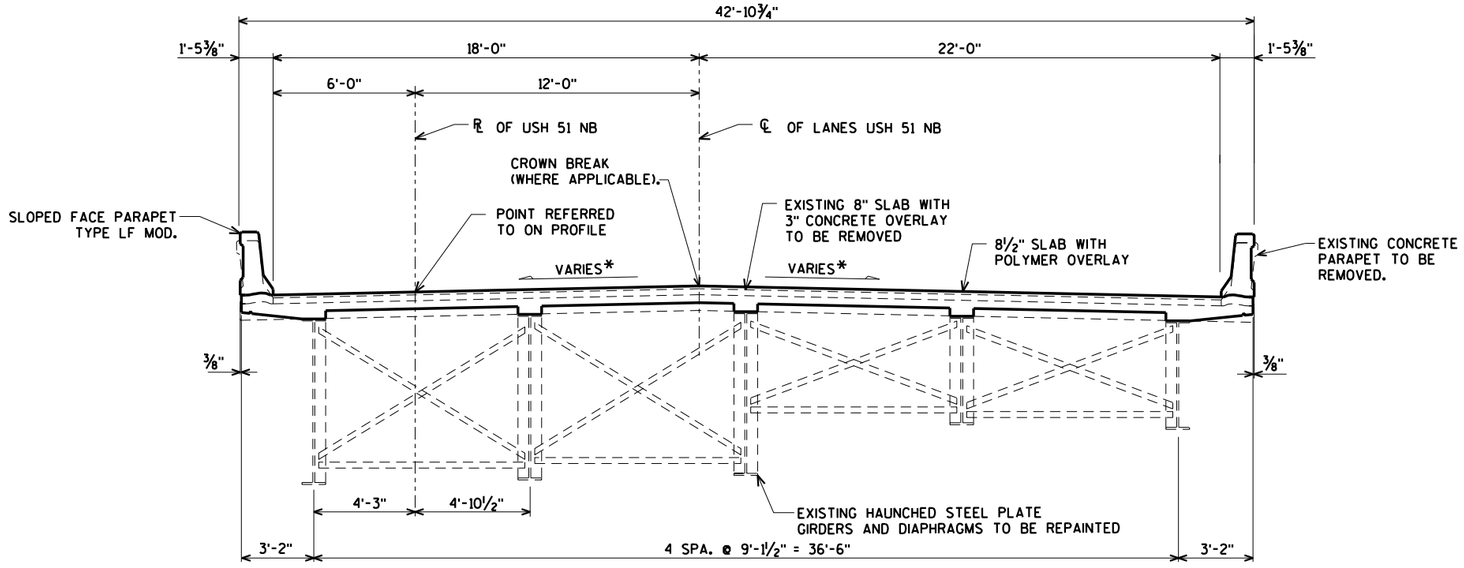
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STATE PROJECT NUMBER

1170-01-70



HALF SECTION AT PIER 2
(81" TALL WEB)

HALF SECTION IN SPAN
(54" TALL WEB)

CROSS SECTION THRU BRIDGE

(LOOKING NORTH)

*CROSS SLOPE VARIES FROM SUPERELEVATED TO NORMAL CROWN ALONG LENGTH OF BRIDGE. SEE PLAN VIEW ON SHEET 1 FOR STATIONING AND CROSS SLOPE.

DESIGN DATA

LIVE LOAD:

DESIGN LOAD: HS-20
INVENTORY RATING: HS-25
OPERATING RATING: HS-42
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV) = 200 KIPS

(STRUCTURE IS DESIGNED FOR A FUTURE WEARING SURFACE OF 20 PSF.)

ULTIMATE DESIGN STRESSES:

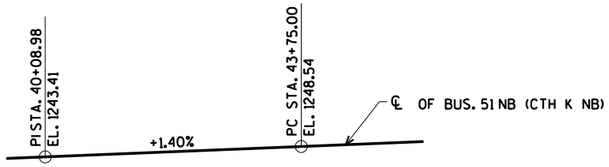
CONCRETE MASONRY — SLAB f'_c = 4,000 p.s.i.
CONCRETE MASONRY — ALL OTHER f'_c = 3,500 p.s.i.
BAR STEEL REINF. HS COATED (GRADE 60) f_y = 60,000 p.s.i.

TRAFFIC DATA:

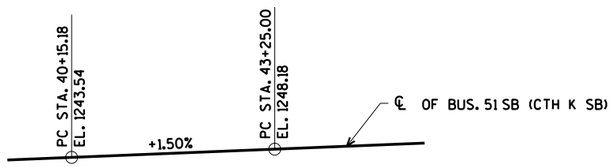
USH 51	BUS 51/CTH K
A.D.T. = 31,000 (2015)	A.D.T. = 14,500 (2015)
A.D.T. = 41,300 (2035)	A.D.T. = 16,800 (2035)
R.D.S. = 70 M.P.H.	R.D.S. = 40 M.P.H.

BENCHMARK

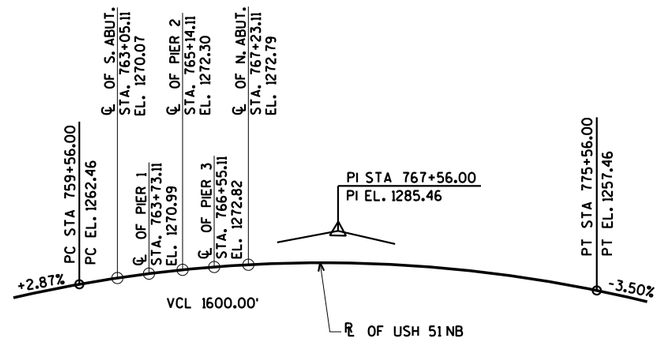
POINT ID: BM 234
DESCRIPTION: BM DOT DISK ON TOP OF SE PARAPET B-37-153
N: 212801.18
E: 274453.67
EL: 1273.26



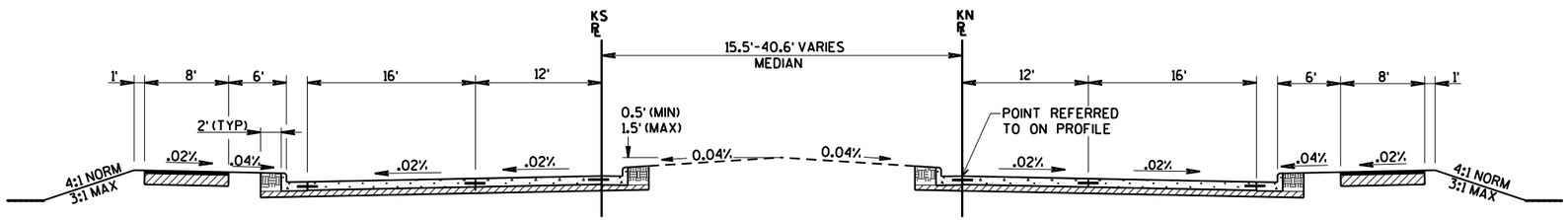
PROFILE GRADE LINE
℄ OF BUS. 51 NB (CTH K NB)



PROFILE GRADE LINE
℄ OF BUS. 51 SB (CTH K SB)



PROFILE GRADE LINE
℄ OF USH 51 NB



TYPICAL FINISHED SECTION - CTH K/BUS 51

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-37-153

DRAWN BY CLS | PLANS CK'D. KLW

TYPICAL SECTION

SHEET 2 OF 22
965

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7/30/2012

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STATE PROJECT NUMBER

1170-01-70

TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEMS	UNIT	S. ABUT.	PIER 1	PIER 2	PIER 3	N. ABUT.	SUPER.	TOTAL
203.0200	REMOVING OLD STRUCTURE STATION 765+14.11 NB	LS	-----	-----	-----	-----	-----	-----	1
206.1000	EXCAVATION FOR STRUCTURES BRIDGES B-37-153	LS	-----	-----	-----	-----	-----	-----	1
210.0100	BACKFILL STRUCTURE	CY	70	-----	-----	-----	75	-----	145
502.0100	CONCRETE MASONRY BRIDGES	CY	37	-----	-----	-----	38	600	675
502.3100	EXPANSION DEVICE B-37-153	LS	-----	-----	-----	-----	-----	-----	1
502.3200	PROTECTIVE SURFACE TREATMENT	SY	13	-----	-----	-----	15	2,217	2,245
502.5005	MASONRY ANCHOR TYPE L NO. 5 BARS	EACH	180	-----	-----	-----	188	-----	368
502.6110	MASONRY ANCHOR TYPE S 3/4-INCH	EACH	-----	-----	-----	-----	5	-----	5
505.0605	BAR STEEL REINFORCEMENT HS COATED BRIDGES	LB	4,120	-----	-----	-----	4,340	138,030	146,490
506.3015	WELDED STUD SHEAR CONNECTORS 7/8 x 6-INCH	EACH	-----	-----	-----	-----	-----	4,620	4,620
● 509.1500	CONCRETE SURFACE REPAIR	SF	-----	-----	-----	-----	-----	-----	50
509.5100.S	POLYMER OVERLAY	SY	-----	-----		-----	-----	1,895	1,895
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	17	-----	-----	-----	18	-----	35
517.0900.S	PREPARATION AND COATING OF TOP FLANGES B-37-153	LS	-----	-----	-----	-----	-----	-----	1
517.1010.S	CONCRETE STAINING B-37-153	SF	80	-----	-----	-----	100	5200	5380
△ 517.1800.S	STRUCTURE REPAINTING RECYCLED ABRASIVE STRUCTURE B-37-153	LS	-----	-----	-----	-----	-----	-----	1
517.4500.S	NEGATIVE PRESSURE CONTAINMENT AND COLLECTION OF WASTE MATERIALS B-37-153	LS	-----	-----	-----	-----	-----	-----	1
517.6001.S	PORTABLE DECONTAMINATION FACILILY	EACH	-----	-----	-----	-----	-----	-----	0.5
614.0150	ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD	EACH	2	-----	-----	-----	2	-----	4
SPV.0060	CLEANING AND PAINTING BEARINGS	EACH	5	5	5	5	5	-----	25
	NON-BID ITEMS								
	FILLER	SIZE	-----	-----	-----	-----	-----	-----	1/2" & 3/4"

● UNDISTRIBUTED QUANTITY FOR REPAIRS AS DIRECTED BY THE ENGINEER, IF NECESSARY.

△ REPAINT ABUTMENT DIAPHRAGMS PRIOR TO PLACING ABUTMENT BACKWALLS.

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS SHOWN OR NOTED OTHERWISE.

THE FIRST DIGIT OF A THREE DIGIT BAR NO. AND THE FIRST TWO DIGITS OF A FOUR DIGIT BAR NO. SIGNIFIES THE BAR SIZE.

THE EXISTING GROUNDLINE SHALL BE THE UPPER LIMIT FOR EXCAVATION FOR STRUCTURES.

AT ABUTMENTS ALL SPACES EXCAVATED AND NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH BACKFILL STRUCTURE.

PROTECTIVE SURFACE TREATMENT IS TO BE APPLIED TO THE TOP OF DECK AND TOP AND INSIDE FACES OF PARAPETS.

UTILIZE EXISTING BAR STEEL REINFORCEMENT WHERE SHOWN AND EXTEND 24 BAR DIAMETERS INTO NEW WORK.

DIMENSIONS ARE BASED ON ORIGINAL PLANS, THEREFORE THE CONTRACTOR SHALL VERIFY THEM IN THE FIELD BEFORE ACCEPTANCE.

ALL CONCRETE REMOVAL SHALL BE DEFINED BY A 1" DEEP SAW CUT.

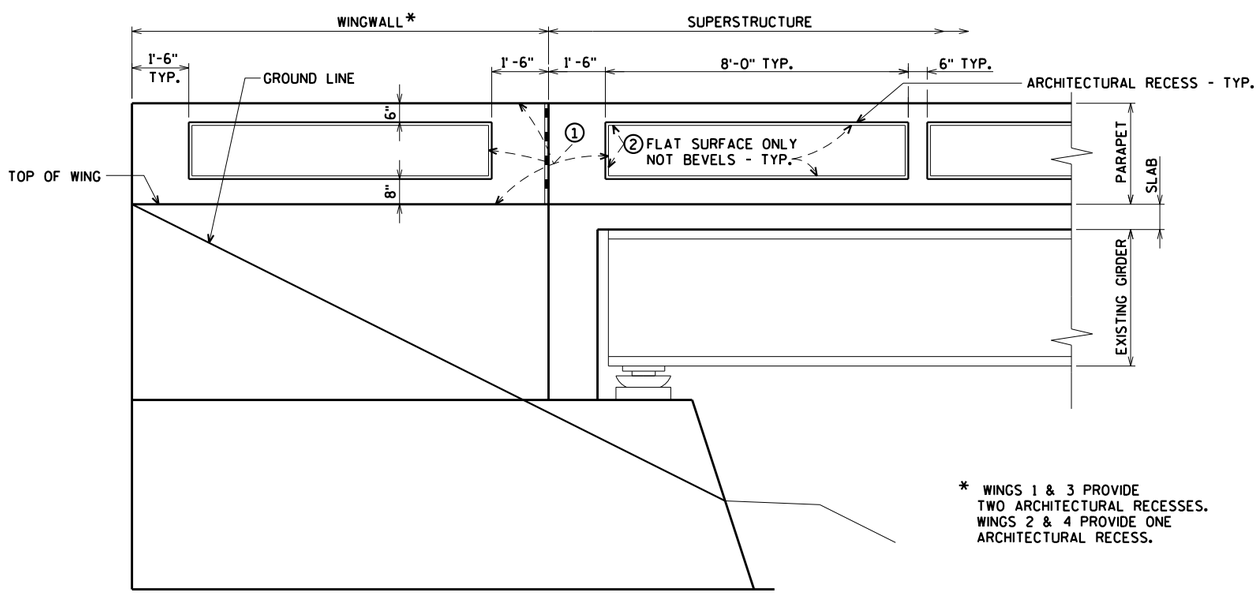
VARIATIONS TO THE NEW GRADE LINE OVER 1/4" MUST BE SUBMITTED BY THE FIELD ENGINEER TO THE STRUCTURES DESIGN SECTION FOR REVIEW.

THE CONTRACTOR SHALL SUPPLY A NEW NAME PLATE IN ACCORDANCE WITH SECTION 502.3.11 OF THE STANDARD SPECIFICATIONS AND THE STANDARD DETAIL DRAWINGS. NAME PLATE TO SHOW ORIGINAL CONSTRUCTION YEAR.

ORIGINAL CONSTRUCTION YEAR IS 1975.

JOINT FILLER SHALL CONFORM TO THE REQUIREMENTS OF A.A.S.H.T.O. DESIGNATION M 153, TYPE I, II OR III OR A.A.S.H.T.O. DESIGNATION M 213.

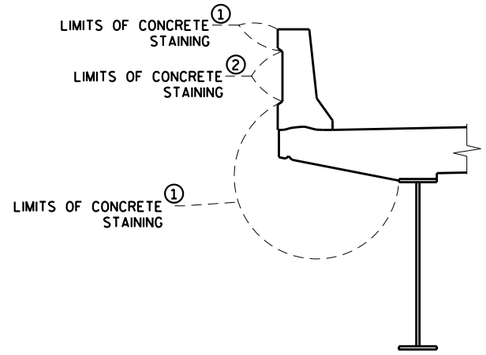
THE COLOR OF THE FINISH EPOXY TOP COAT FOR THE GIRDERS AND CONNECTING STRUCTURAL STEEL SHALL BE GRAY (FEDERAL COLOR NO. 36424).



* WINGS 1 & 3 PROVIDE TWO ARCHITECTURAL RECESSES. WINGS 2 & 4 PROVIDE ONE ARCHITECTURAL RECESS.

ABUTMENT WINGWALLS

(STAIN EXTERIOR FACE OF PARAPET ON WING WALLS)



SUPERSTRUCTURE

① FEDERAL STANDARD COLOR NUMBER 36424 (MEDIUM GRAY).

② FEDERAL STANDARD COLOR NUMBER 30372 (SAND).
NOTE: APPLY TO FLAT SURFACE ONLY (NOT BEVELS).

ARCHITECTURAL TREATMENT AND CONCRETE STAINING DETAILS

SEE SPECIAL PROVISIONS

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-37-153

DRAWN BY CJM | PLANS CK'D. KLW

QUANTITIES AND NOTES

SHEET 3 OF 22
966

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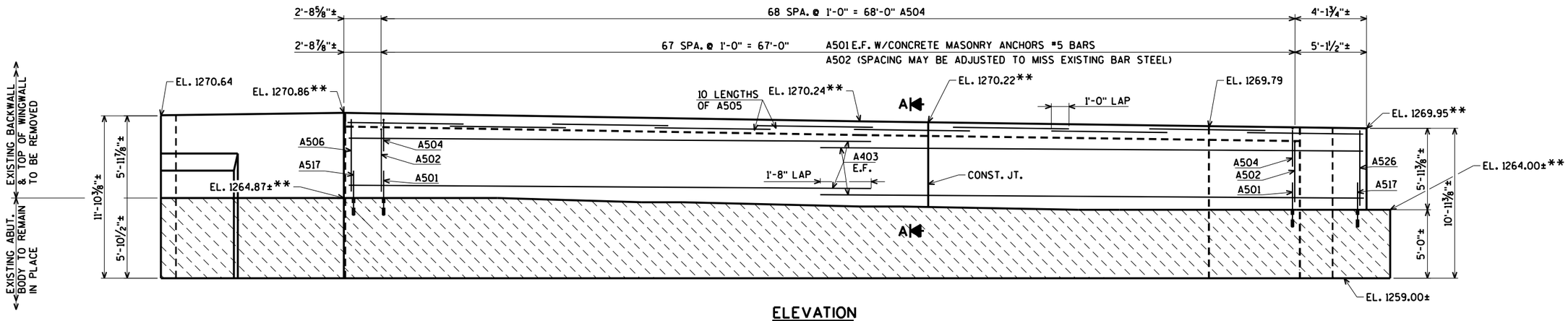
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7/30/2012

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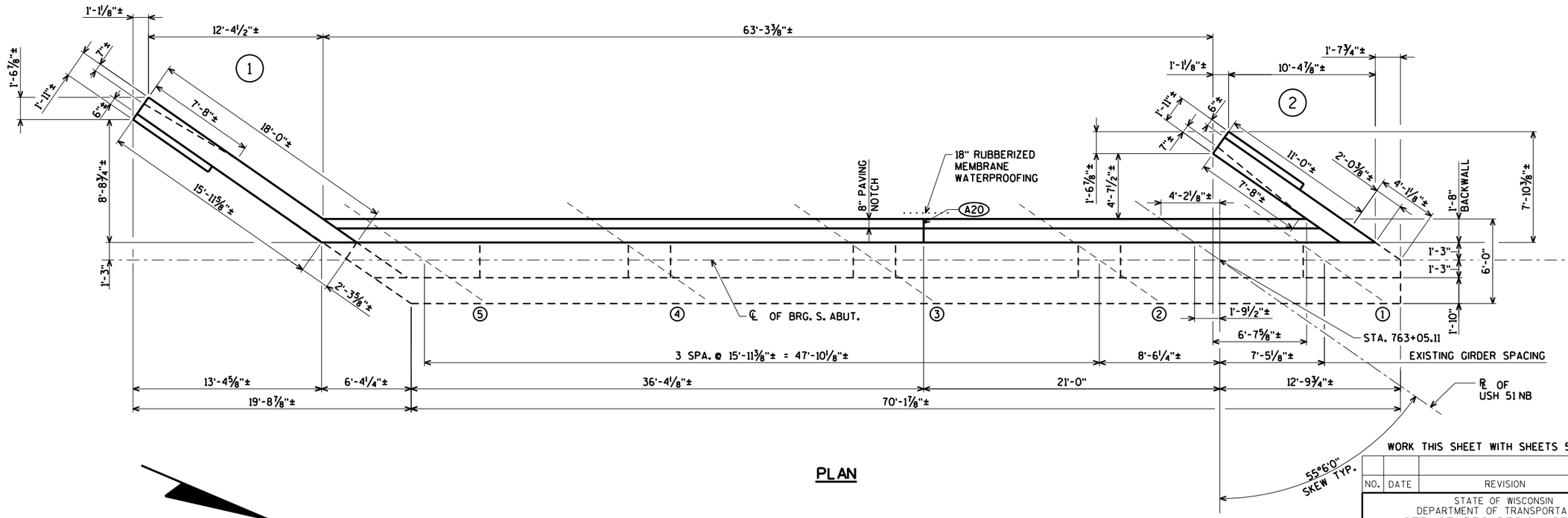
STATE PROJECT NUMBER
1170-01-70

**ELEVATIONS GIVEN AT F.F. OF BACKWALL.



ELEVATION
(LOOKING SOUTH)

FOR SECTIONS "A" SEE SHEET 7.



PLAN

WORK THIS SHEET WITH SHEETS 5 - 7.

NO.	DATE	REVISION	BY

(A20) VERT. CONST. JOINT - KEYWAY FORMED BY A SURFACE BEVELED 2"X8". BEVEL EXPOSED EDGE ¾".

E.F. DENOTES EACH FACE
F.F. DENOTES FRONT FACE

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Eau Claire, WI 54701
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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-37-153

DRAWN BY	CJM	PLANS CK'D.	KLW

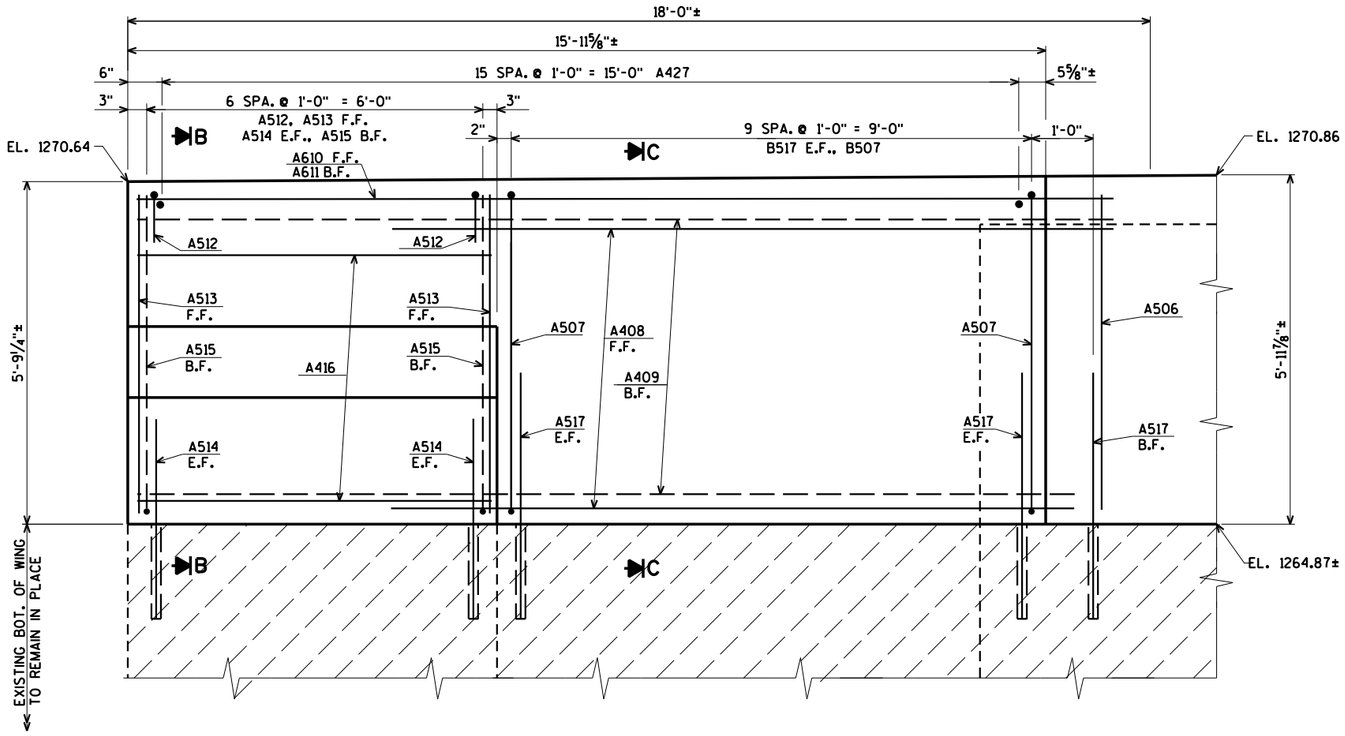
SOUTH ABUTMENT

SHEET 4 OF 22
967

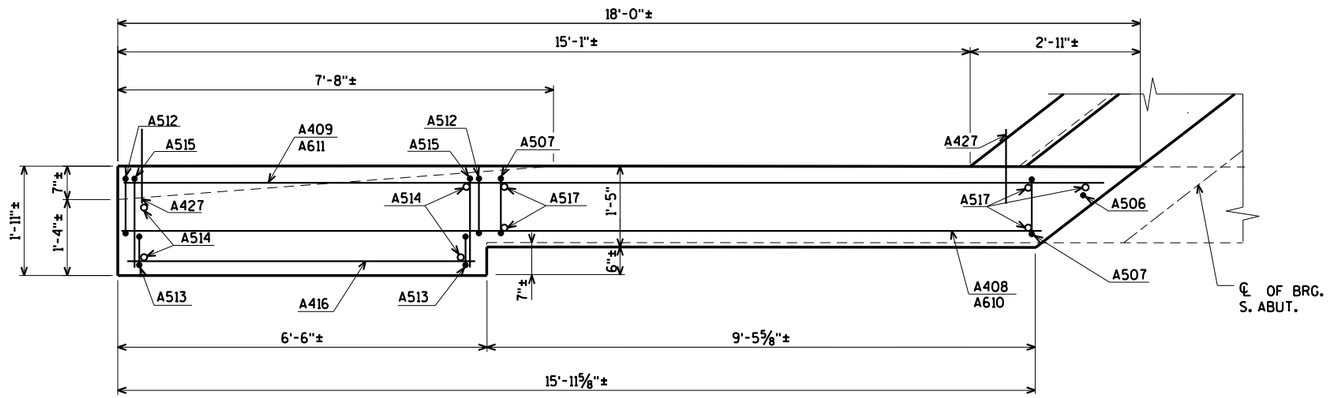
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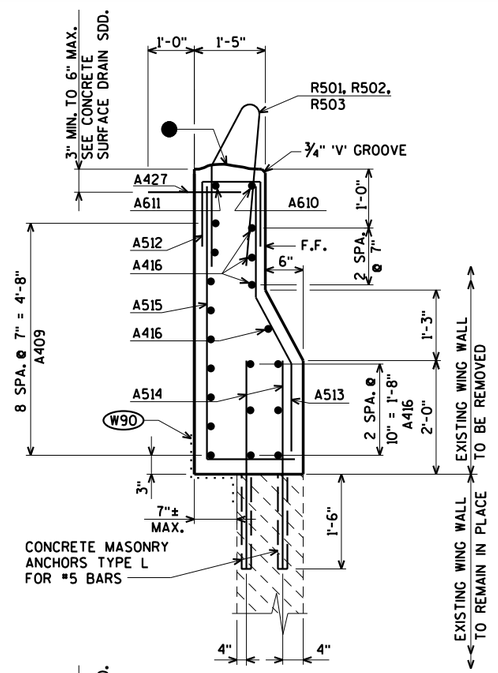
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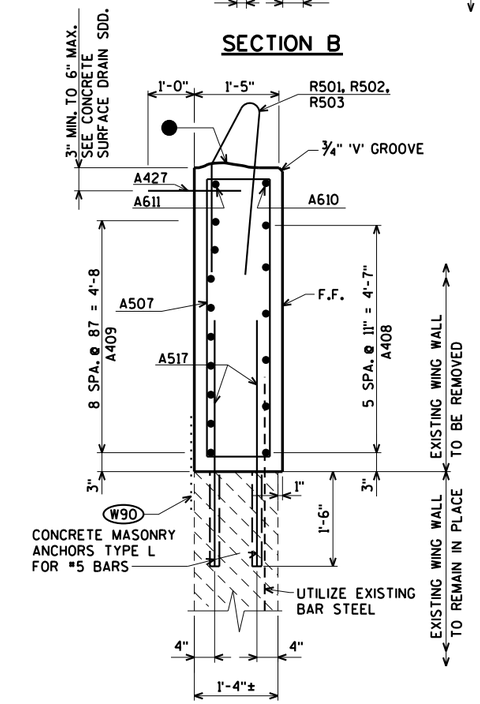
ELEVATION WING 1



PLAN - WING 1



SECTION B



SECTION C

STATE PROJECT NUMBER

1170-01-70

SLOPED FACE PARAPET LF
MODIFIED NOT SHOWN.
FOR DETAILS SEE SHEET 22.

● STRIKE OFF AS SHOWN AND LEAVE ROUGH.

(W90) 18" RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACK FACE OF ABUTMENT.

F.F. DENOTES FRONT FACE

B.F. DENOTES BACK FACE

E.F. DENOTES EACH FACE

WORK THIS SHEET WITH SHEETS 4, 6 & 7.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-37-153

DRAWN BY CJM | PLANS CK'D. KLW

SOUTH ABUTMENT
WING 1 DETAILS

SHEET 5 OF 22
968

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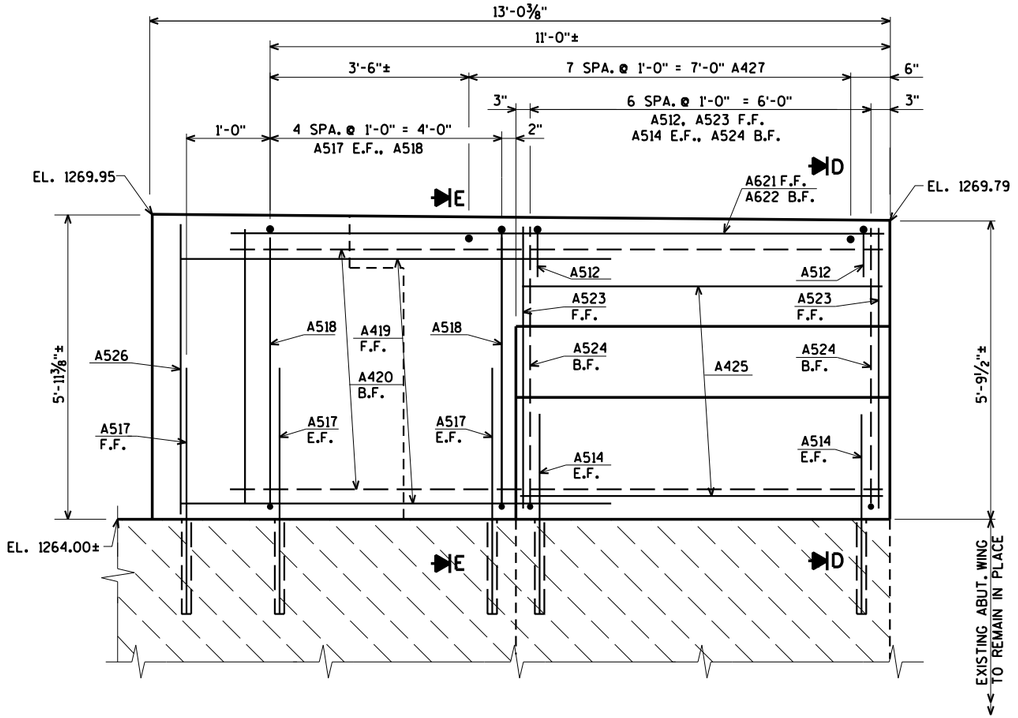
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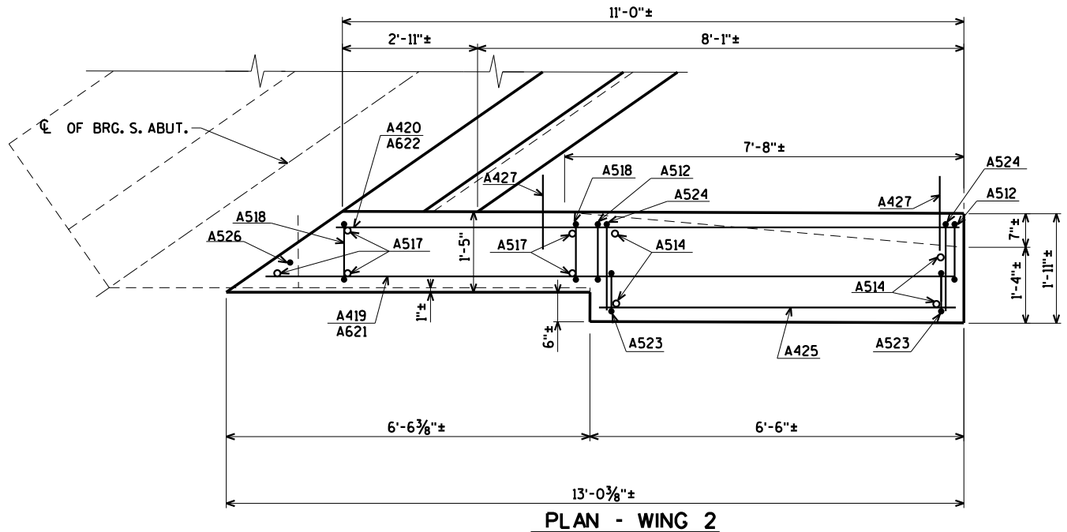
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7/30/2012

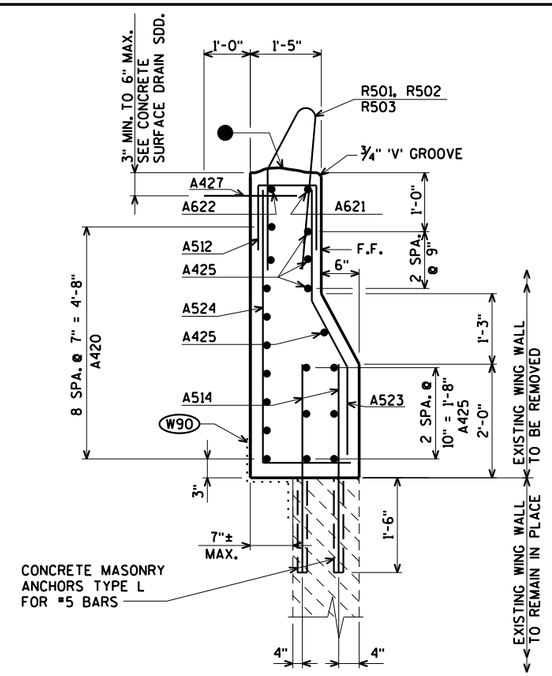
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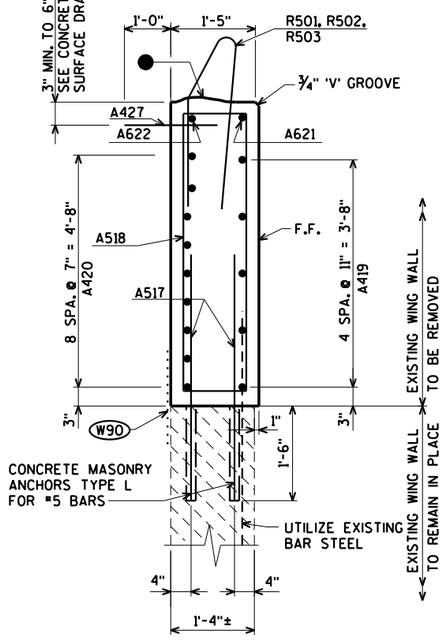
ELEVATION WING 2



PLAN - WING 2



SECTION D



SECTION E

STATE PROJECT NUMBER

1170-01-70

SLOPED FACE PARAPET LF MODIFIED NOT SHOWN. FOR DETAILS SEE SHEET 22.

● STRIKE OFF AS SHOWN AND LEAVE ROUGH.

(W90) 18" RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACK FACE OF ABUTMENT.

F.F. DENOTES FRONT FACE

B.F. DENOTES BACK FACE

E.F. DENOTES EACH FACE

WORK THIS SHEET WITH SHEETS 4, 5 & 7.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-37-153

DRAWN BY CJM | PLANS CK'D. KLW

SOUTH ABUTMENT WING 2 DETAILS

SHEET 6 OF 22
969

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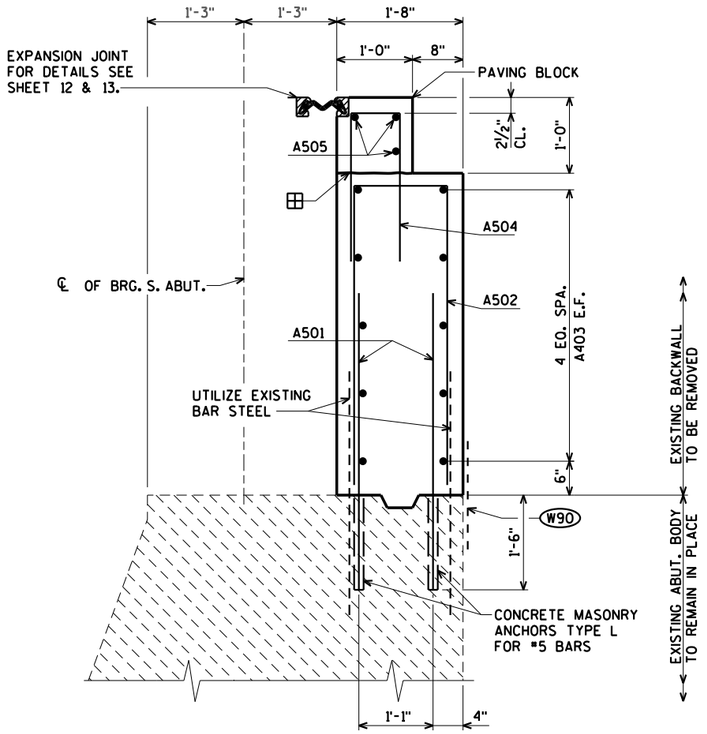
(W90) 18" RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACK FACE OF ABUTMENT.

⊞ CONST. JOINT - POUR CONCRETE ABOVE THIS JOINT AFTER SUPERSTRUCTURE IS IN PLACE. STRIKE OFF AND LEAVE ROUGH.

F.F. DENOTES FRONT FACE

B.F. DENOTES BACK FACE

E.F. DENOTES EACH FACE



SECTION A

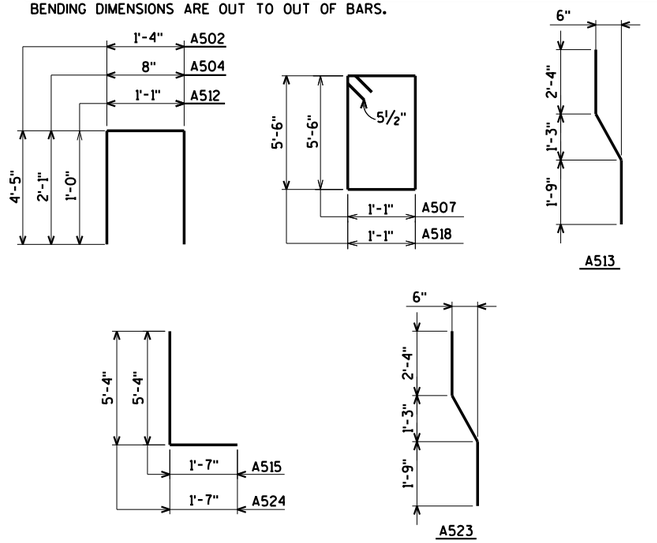
FOR LOCATION OF SECTION "A" SEE SHEET 4

BILL OF BARS

WEIGHTS INCLUDE PARAPET STEEL SHOWN ON SHEET 22.

BAR. NO.	COATED BAR	NO. REQ'D.	LENGTH	BENT BAR	BUNDLED BAR	SERIES	4,120# COATED LOCATION
A501	X	136	4-1				BACKWALL VERT. DOWELS E.F.
A502	X	68	9-11	X			BACKWALL VERT.
A403	X	20	38-2				BACKWALL HORIZ.
A504	X	69	4-7	X			BACKWALL ℄ PAVING BLOCK VERT.
A505	X	30	8-5				PAVING BLOCK HORIZ.
A506	X	1	5-7				WING 1 VERT. ℄ ABUT.
A507	X	10	13-8	X			WING 1 VERT.
A408	X	5	11-3				WING 1 HORIZ. F.F.
A409	X	9	17-3				WING 1 HORIZ. B.F.
A610	X	1	15-9				WING 1 HORIZ. F.F.
A611	X	1	17-3				WING 1 HORIZ. B.F.
A512	X	14	2-10	X			WINGS 1 & 2 VERT.
A513	X	7	5-5	X			WING 1 VERT. F.F.
A514	X	14	3-6				WINGS 1 & 2 VERT. DOWELS E.F.
A515	X	7	6-9	X			WING 1 VERT. B.F.
A416	X	10	6-2				WING 1 HORIZ. F.F.
A517	X	30	4-1				WINGS 1 & 2 VERT. DOWEL E.F.
A518	X	5	13-8	X			WING 2 VERT.
A419	X	5	7-10				WING 2 HORIZ. F.F.
A420	X	9	10-9				WING 2 HORIZ. B.F.
A621	X	1	12-4				WING 2 HORIZ. F.F.
A622	X	1	10-9				WING 2 HORIZ. B.F.
A523	X	7	5-5	X			WING 2 VERT. F.F.
A524	X	7	6-9	X			WING 2 VERT. B.F.
A425	X	10	6-2				WING 2 HORIZ. F.F.
A526	X	1	5-7				WING 2 VERT. ℄ ABUT.
A427	X	24	2-0				WING 1 & 2 DOWELS

BENDING DIMENSIONS ARE OUT TO OUT OF BARS.



WORK THIS SHEET WITH SHEETS 4 - 6.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-37-153

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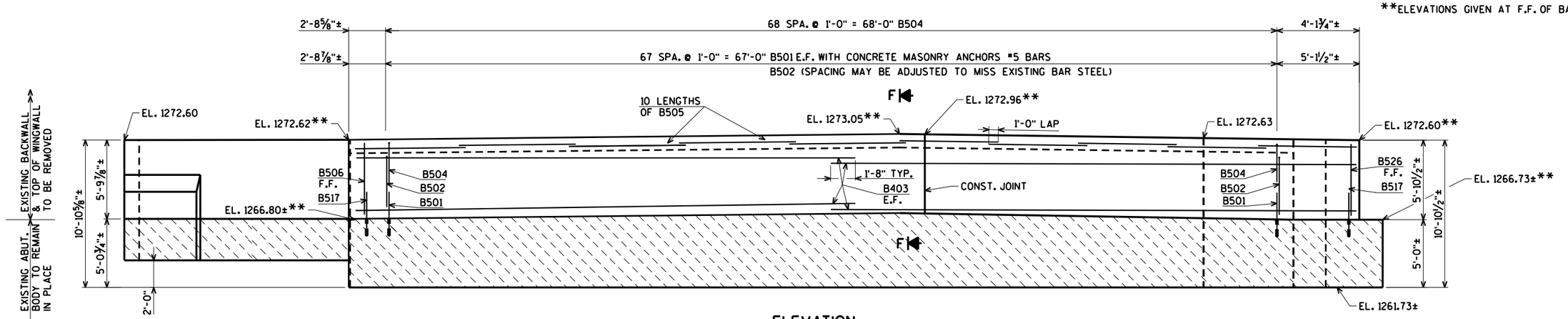
SOUTH ABUTMENT DETAILS

SHEET 7 OF 22
970

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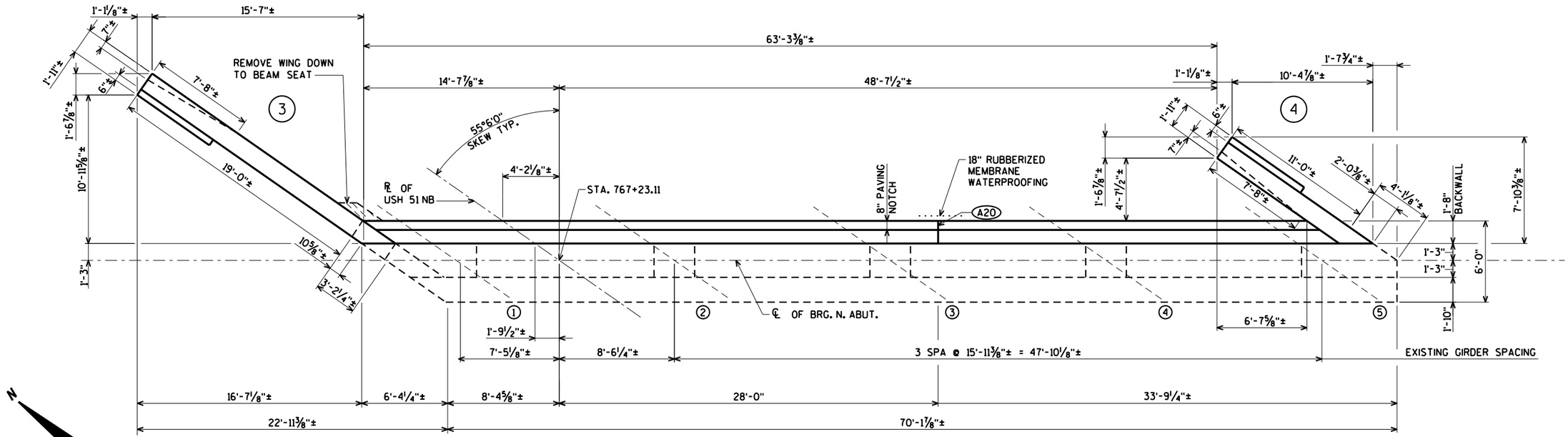
STATE PROJECT NUMBER
1170-01-70

**ELEVATIONS GIVEN AT F.F. OF BACKWALL.



ELEVATION
(LOOKING NORTH)

FOR SECTION "F" SEE SHEET 11.



PLAN

WORK THIS SHEET WITH SHEETS 9 - 11.

(A20) VERT. CONST. JOINT - KEYWAY FORMED BY A SURFACE BEVELED 2"X8". BEVEL EXPOSED EDGE ¾".

E.F. DENOTES EACH FACE

F.F. DENOTES FRONT FACE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
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STRUCTURES DESIGN SECTION

STRUCTURE B-37-153

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NORTH ABUTMENT

SHEET 8 OF 22
971

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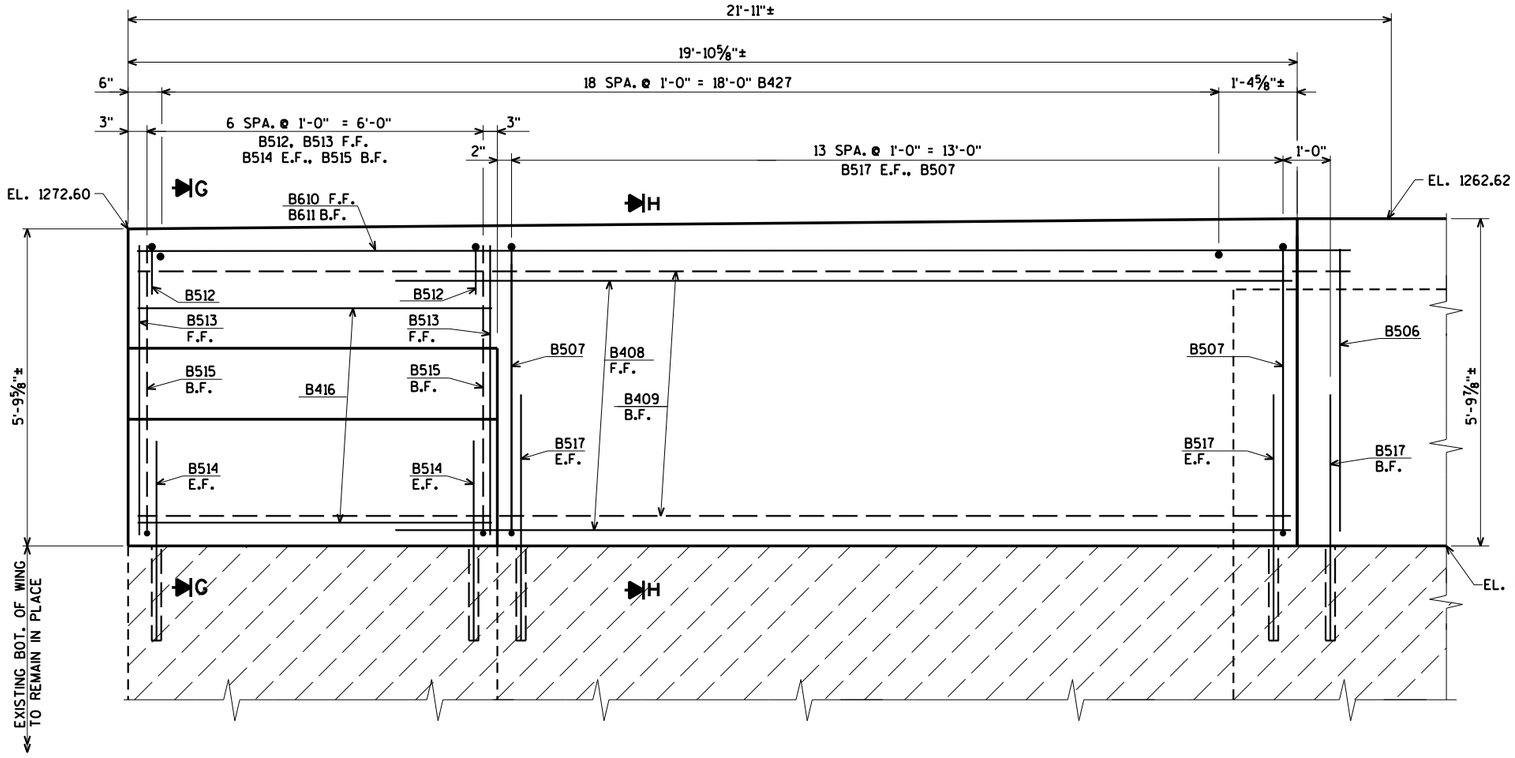
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STATE PROJECT NUMBER

1170-01-70

SLOPED FACE PARAPET LF
MODIFIED NOT SHOWN.
FOR DETAILS SEE SHEET 22.



ELEVATION WING 3

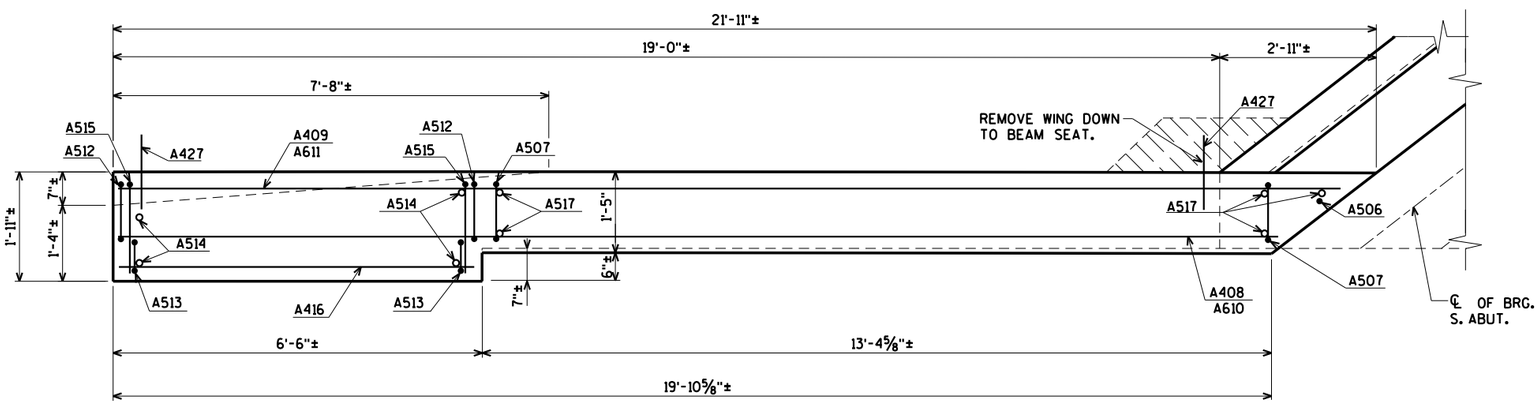
● STRIKE OFF AS SHOWN AND LEAVE ROUGH.

(W90) 18" RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACK FACE OF ABUTMENT.

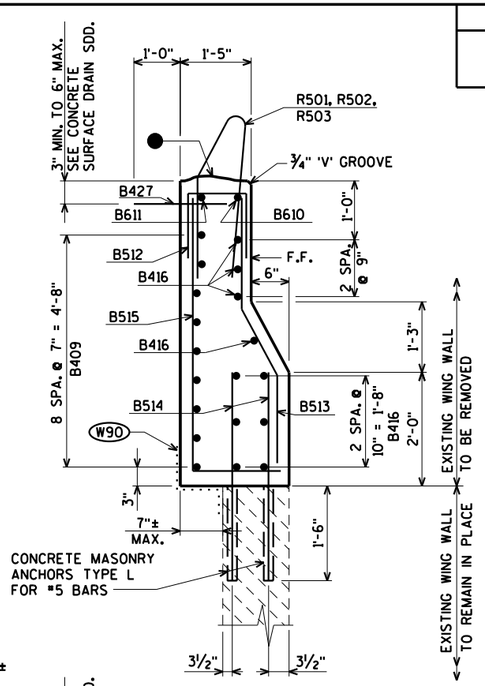
F.F. DENOTES FRONT FACE

B.F. DENOTES BACK FACE

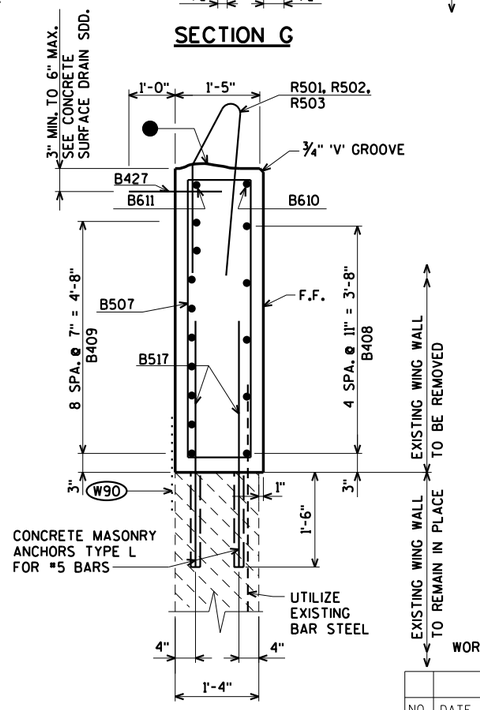
E.F. DENOTES EACH FACE



PLAN - WING 3



SECTION G



SECTION H

WORK THIS SHEET WITH SHEETS 8, 10 & 11.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
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STRUCTURES DESIGN SECTION

STRUCTURE B-37-153

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NORTH ABUTMENT
WING 3 DETAILS

SHEET 9 OF 22
972

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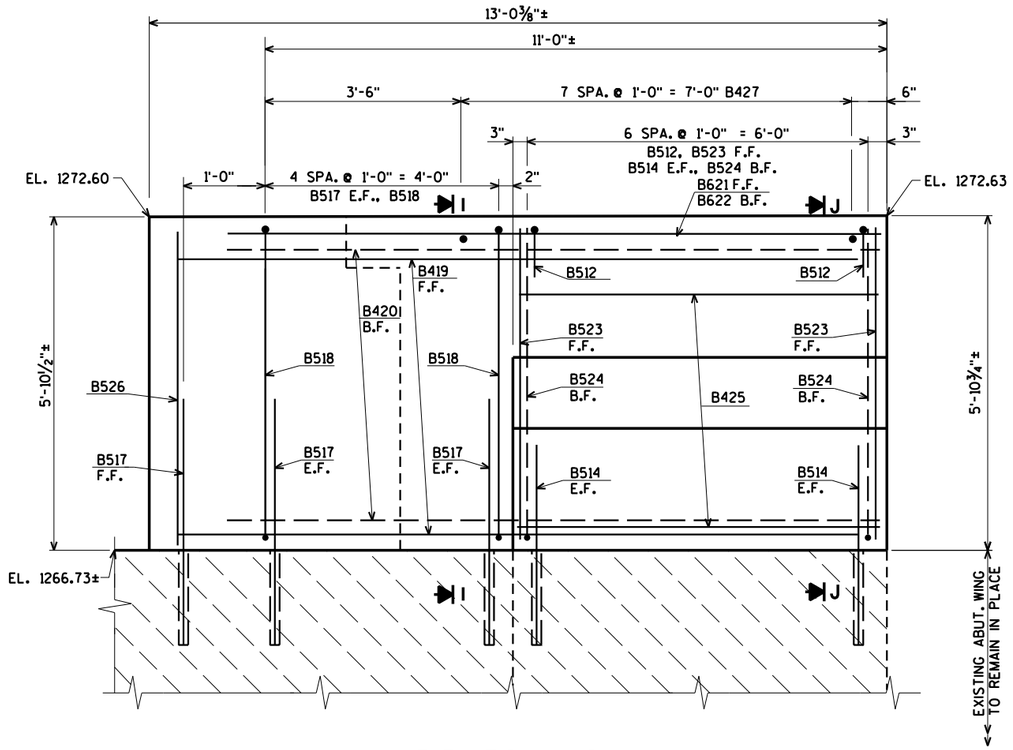
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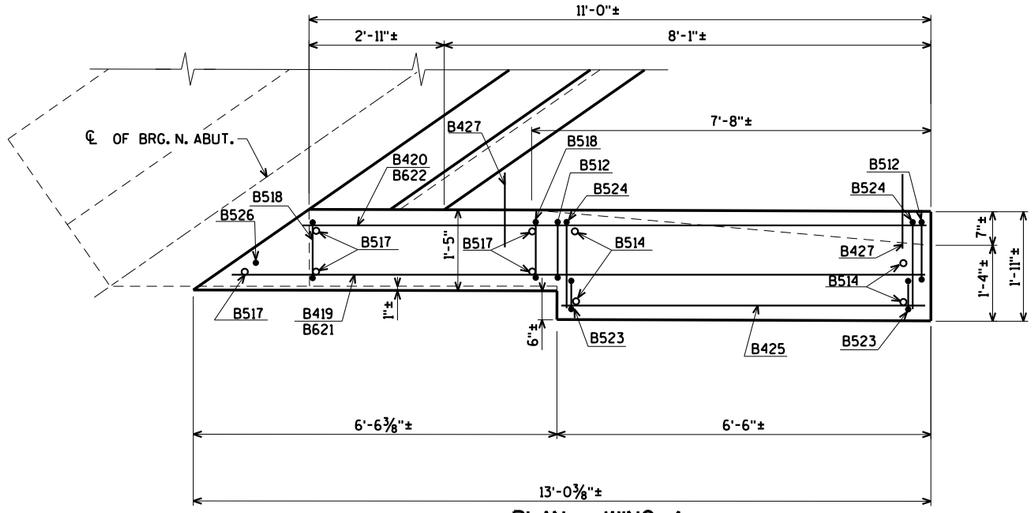
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7/30/2012

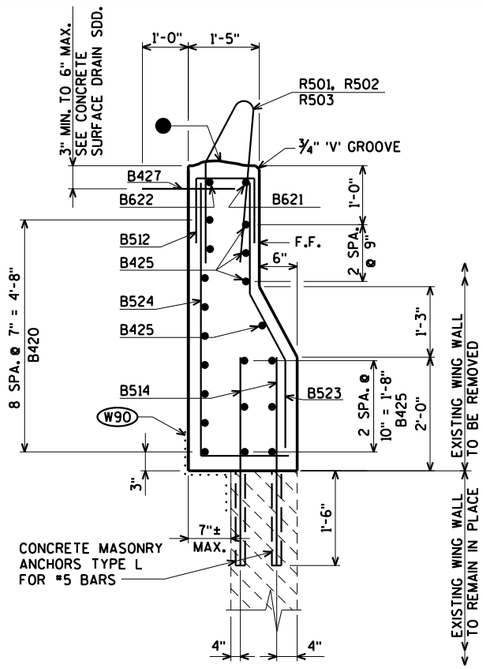
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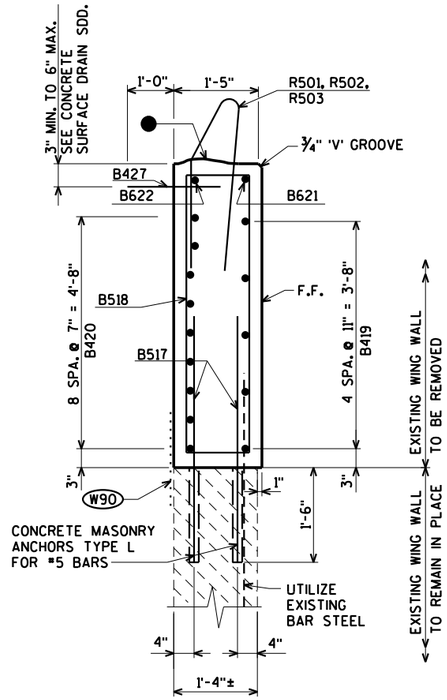
ELEVATION WING 4



PLAN - WING 4



SECTION J



SECTION I

STATE PROJECT NUMBER

1170-01-70

SLOPED FACE PARAPET LF MODIFIED NOT SHOWN. FOR DETAILS SEE SHEET 22.

● STRIKE OFF AS SHOWN AND LEAVE ROUGH.

(W90) 18" RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACK FACE OF ABUTMENT.

F.F. DENOTES FRONT FACE

B.F. DENOTES BACK FACE

E.F. DENOTES EACH FACE

WORK THIS SHEET WITH SHEETS 8, 9 & 11.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-37-153

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NORTH ABUTMENT WING 4 DETAILS

SHEET 10 OF 22
973

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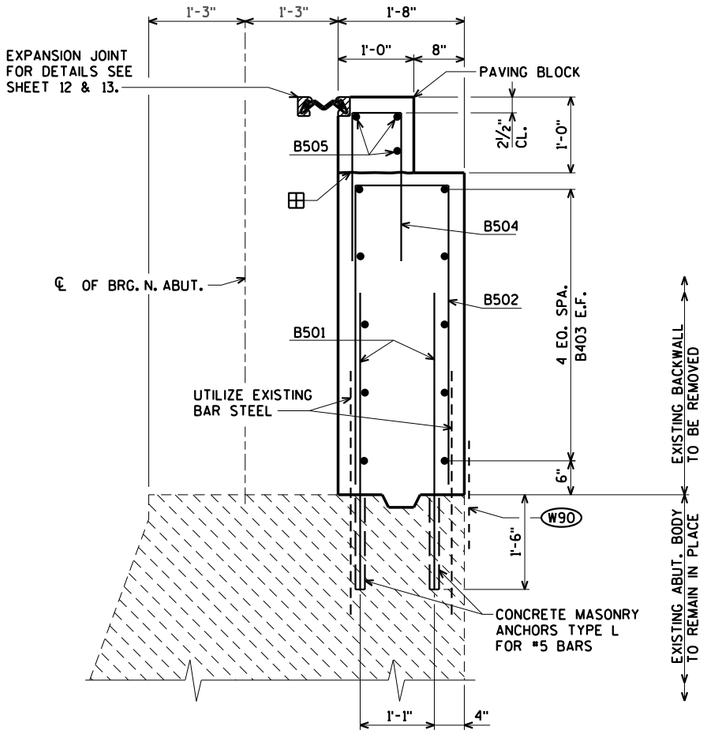
(W90) 18" RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACK FACE OF ABUTMENT.

⊞ CONST. JOINT - POUR CONCRETE ABOVE THIS JOINT AFTER SUPERSTRUCTURE IS IN PLACE. STRIKE OFF AND LEAVE ROUGH.

F.F. DENOTES FRONT FACE

B.F. DENOTES BACK FACE

E.F. DENOTES EACH FACE



SECTION F

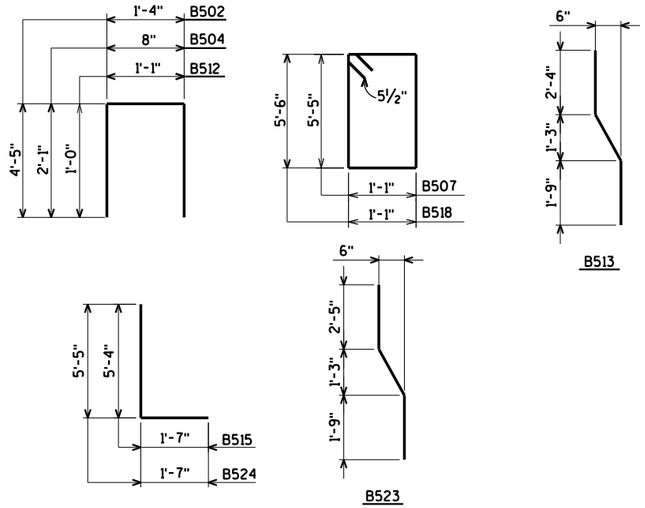
FOR LOCATION OF SECTION "F" SEE SHEET 8.

BILL OF BARS

WEIGHTS INCLUDE PARAPET STEEL SHOWN ON SHEET 22.

BAR. NO.	COATED BAR	NO. REQ'D.	LENGTH	BENT BAR	BUNDLED BAR	SERIES	4,340# COATED LOCATION
B501	X	136	4-1				BACKWALL VERT. DOWELS E.F.
B502	X	68	9-11	X			BACKWALL VERT.
B403	X	20	38-2				BACKWALL HORIZ.
B504	X	69	4-7	X			BACKWALL ℄ PAVING BLOCK VERT.
B505	X	30	8-5				PAVING BLOCK HORIZ.
B506	X	1	5-5				WING 3 VERT. ℄ ABUT.
B507	X	14	13-6	X			WING 3 VERT.
B408	X	5	15-2				WING 3 HORIZ. F.F.
B409	X	9	21-2				WING 3 HORIZ. B.F.
B610	X	1	19-8				WING 3 HORIZ. F.F.
B611	X	1	21-2				WING 3 HORIZ. B.F.
B512	X	14	2-10	X			WINGS 3 & 4 VERT.
B513	X	7	5-5	X			WING 3 VERT. F.F.
B514	X	14	3-6				WINGS 3 & 4 VERT. DOWELS E.F.
B515	X	7	6-9	X			WING 3 VERT. B.F.
B416	X	10	6-2				WING 3 HORIZ. F.F.
B517	X	38	4-1				WINGS 3 & 4 VERT. DOWEL E.F.
B518	X	5	13-8	X			WING 4 VERT.
B419	X	5	7-10				WING 4 HORIZ. F.F.
B420	X	9	10-9				WING 4 HORIZ. B.F.
B621	X	1	12-4				WING 4 HORIZ. F.F.
B622	X	1	10-9				WING 4 HORIZ. B.F.
B523	X	7	5-6	X			WING 4 VERT. F.F.
B524	X	7	6-10	X			WING 4 VERT. B.F.
B425	X	10	6-2				WING 4 HORIZ. F.F.
B526	X	1	5-6				WING 4 VERT. ℄ ABUT.
B427	X	27	2-0				WING 3 & 4 DOWELS

BENDING DIMENSIONS ARE OUT TO OUT OF BARS.



WORK THIS SHEET WITH SHEETS 8 - 10.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
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STRUCTURES DESIGN SECTION

STRUCTURE B-37-153

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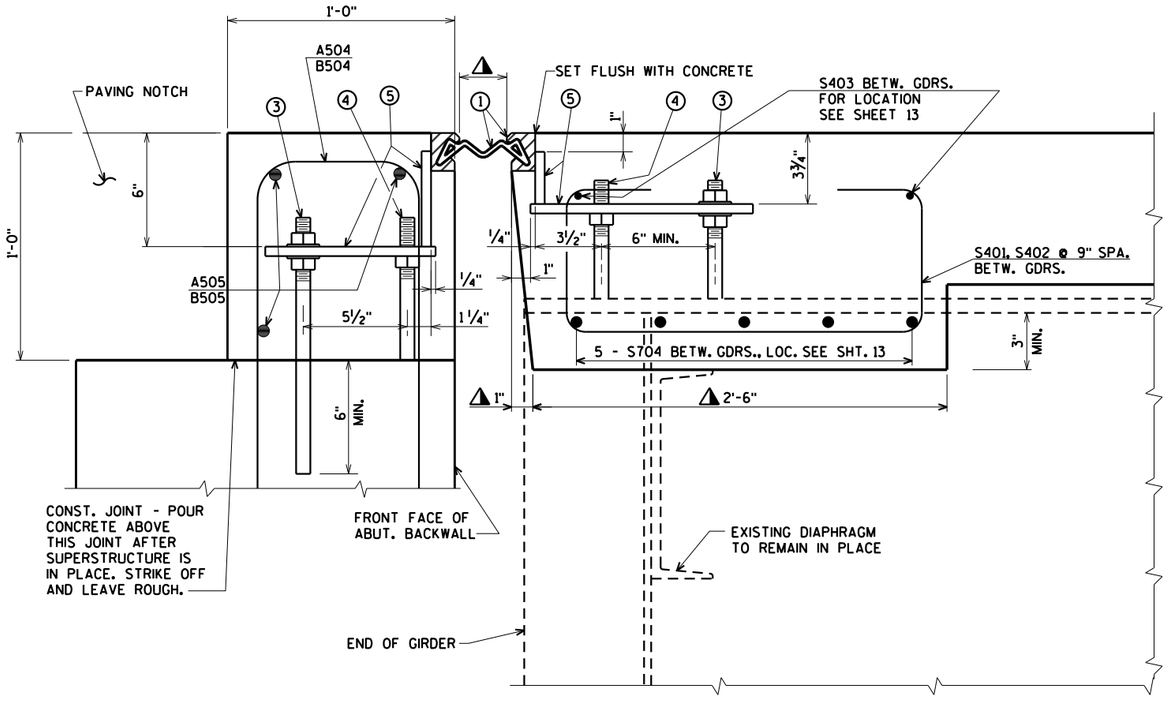
NORTH ABUTMENT DETAILS

SHEET 11 OF 22
974

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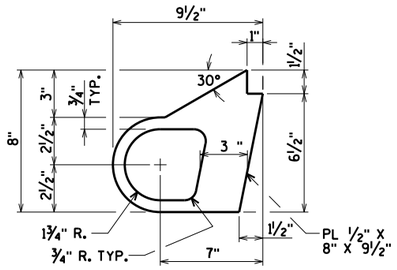
STATE PROJECT NUMBER

1170-01-70



TYPICAL SECTION THRU JOINT

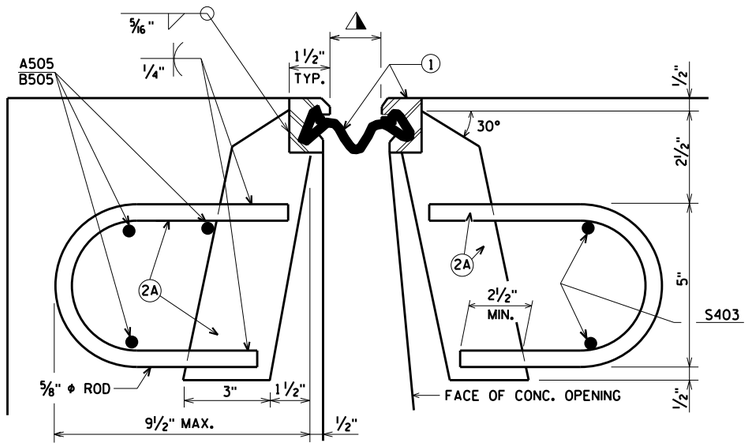
NORMAL TO ℄ SUBSTRUCTURE



ALTERNATE STRIP SEAL ANCHOR

LEGEND

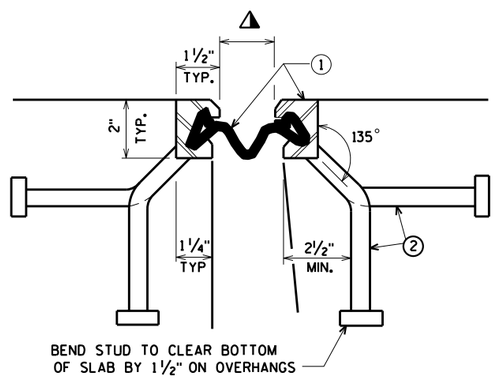
1. NEOPRENE STRIP SEAL (4 - INCH) & STEEL EXTRUSIONS. SET JOINT OPENING AT 1¾".
2. STUDS ⅝" ϕ X 6⅜" LONG AT 6" ALTERNATE CENTERS. WELD TO EXTRUSIONS & BEND AS SHOWN AFTER WELDING.
2A. ½" THICK ANCHOR PLATE WITH ⅝"ϕ ROD (OR ALTERNATE STRIP SEAL ANCHOR). WELD ROD TO ANCHOR PLATE. WELD ANCHOR PLATE TO NO. 1 AT 1'-6" CTRS. BETWEEN GIRDERS.
3. ¾" ϕ THREADED ROD WITH 2 NUTS AND PLATE WASHERS. WELD THREADED ROD TO TOP FLANGE OR ATTACH BY BOLTING THRU FLANGE. ON ABUTMENT SIDE, GROUT THREADED ROD INTO FIELD DRILLED HOLES IN ABUTMENT BACKWALL AS SHOWN.
4. ¾"ϕ THREADED ROD WITH NUT. TACK WELD NUT TO NO. 5.
5. FABRICATE SUPPORT FROM 3" X ½" BAR AS SHOWN OR EQUIVALENT, ONE PER GIRDER PER SIDE. FIELD OR SHOP WELD TO NO. 1. IF FIELD WELDED, COVER WELDED AREAS WITH EPOXY-COATING MATERIAL. PROVIDE 1½" ϕ HOLE FOR NO. 3 & 1" ϕ HOLE FOR NO. 4.
6. GALVANIZED PLATE ⅜" x 10½" x 3'-0" LONG WITH HOLES FOR #7. BEND AS SHOWN.
7. ¾" ϕ x 1½" STAINLESS STEEL SOCKET FLAT HEAD SCREWS WITH ANTI-SEIZE LUBRICANT. PLACE IN COUNTERSUNK HOLES. RECESS 1/16" BELOW PLATE SURFACE.
8. ¾" ϕ x 4" GALV. HEX HEAD BOLT. BEND 45°.
9. ¾" ϕ x 2 ¼" GALV. THREADED COUPLING.
10. 1" x 5" SLOTTED COUNTERSUNK HOLE FOR NO. 7. PLACE SLOT PARALLEL TO DIRECTION OF MOVEMENT.



AT PAVING BLOCK AT SLAB

SECTION THRU JOINT

ROADWAY TRAFFIC AREA BETWEEN EXTERIOR GIRDERS.



SECTION THRU JOINT

EXTERIOR GIRDER TO EDGE OF SLAB & AT PARAPETS.

GENERAL NOTES

ONE FIELD SPLICE PERMITTED IN STEEL EXTRUSIONS. IF USED, DETAILS SHALL BE SUBMITTED FOR APPROVAL. NO SPLICING PERMITTED IN NEOPRENE STRIP SEAL.

AFTER FABRICATION, BUT BEFORE SHIPMENT, STRAIGHTEN STEEL EXTRUSIONS SUCH THAT THEY SHALL BE FREE FROM WARP, TWIST & SWEEP.

FABRICATOR SHALL PROVIDE MEANS OF KEEPING GALVANIZED EXTRUSIONS CLEAN & SMOOTH DURING SHIPMENT AND PRIOR TO APPLYING LUBRICANT ADHESIVE FOR NEOPRENE GLAND INSTALLATION.

SANDBLAST PLATES & EXTRUSIONS AFTER FABRICATION IN ACCORDANCE WITH SSPC SP. NO. 6 "COMMERICAL BLAST CLEANING. AFTER BLAST CLEANING THE PLATES & EXTRUSIONS SHALL BE HOT DIPPED GALVANIZED.

ANCHOR SYSTEM NO. 8 & NO. 9 SHALL CONFORM TO ASTM A307 & SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A153 CLASS C & D.

STRIP SEAL EXPANSION JOINT ASSEMBLY, INCLUDING ANCHOR STUDS & HARDWARE WILL BE PAID FOR AT THE LUMP SUM PRICE BID FOR "EXPANSION DEVICE B-37-153".

△ DIMENSION IS TAKEN NORMAL TO CENTERLINE OF ABUTMENT.

WORK THIS SHEET WITH SHEET 13.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
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STRUCTURES DESIGN SECTION

STRUCTURE B-37-153

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EXPANSION JOINT DETAILS ABUTMENTS

SHEET 12 OF 22
975

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8

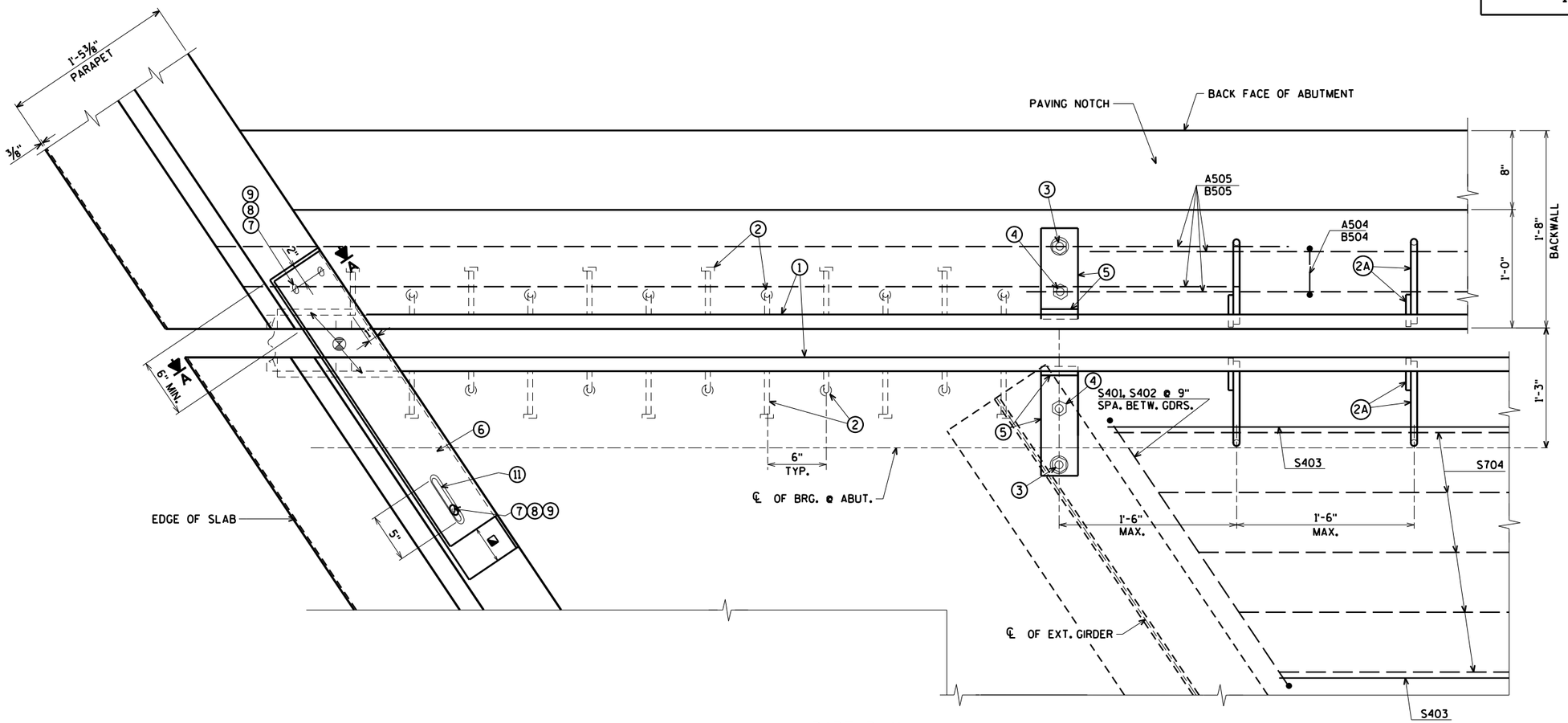
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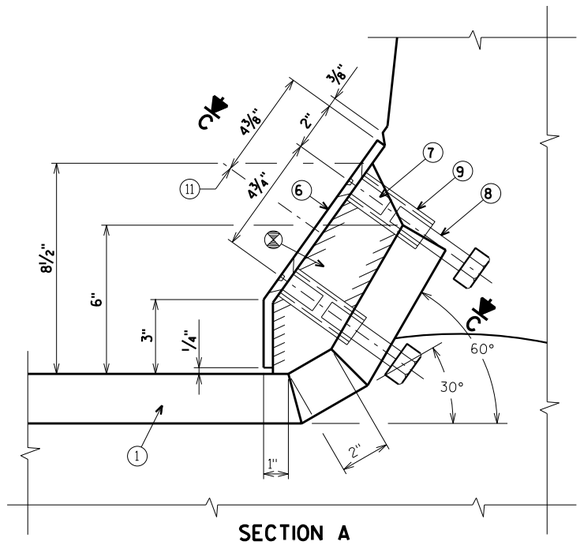
STATE PROJECT NUMBER

1170-01-70

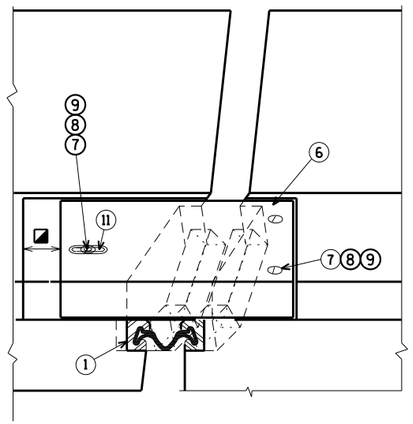


PART PLAN

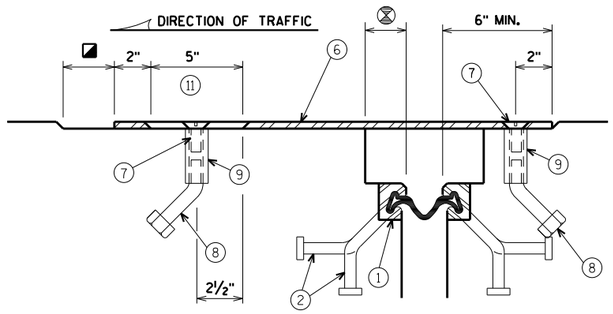
(WING 1 SHOWN, OTHERS SIMILAR)



SECTION A



VIEW OF PARAPET PLATES FROM ROADWAY



SECTION C

⊠ BLOCK OUT CONCRETE 2" EACH SIDE OF JOINT OPENING.

◪ JOINT OPENING DIM. ALONG SKEW PLUS ½".

WORK THIS SHEET WITH SHEET 12.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
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STRUCTURES DESIGN SECTION

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EXPANSION JOINT DETAILS ABUTMENTS

SHEET 13 OF 22
976

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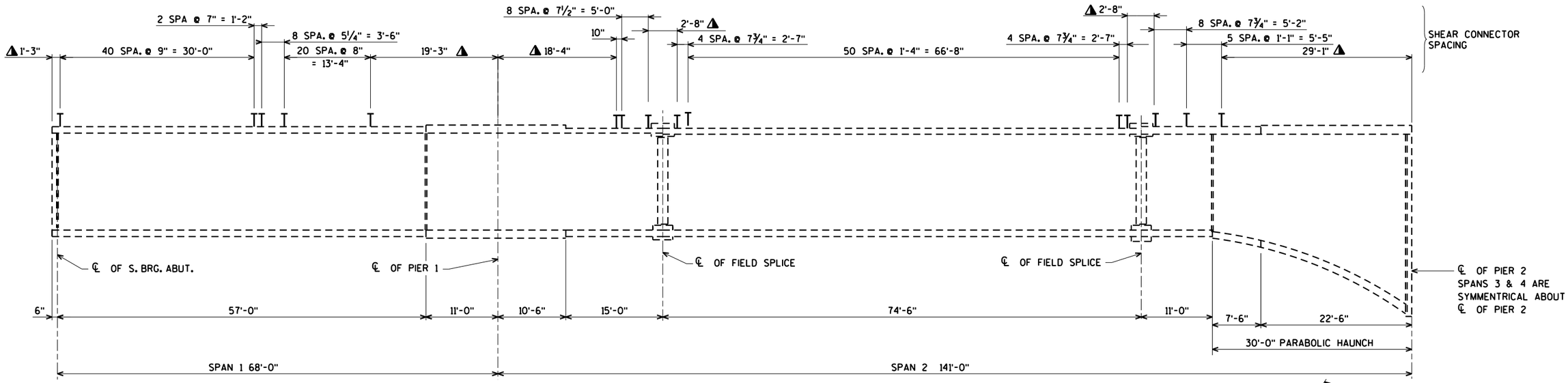
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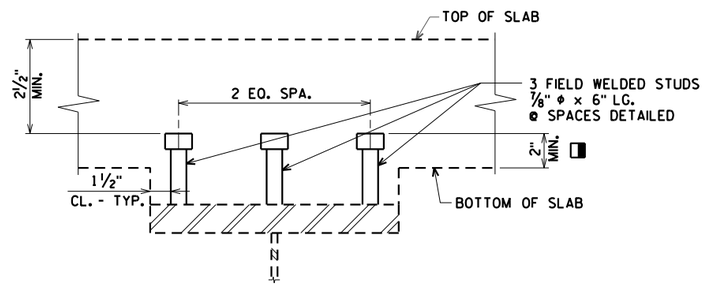
STATE PROJECT NUMBER

1170-01-70

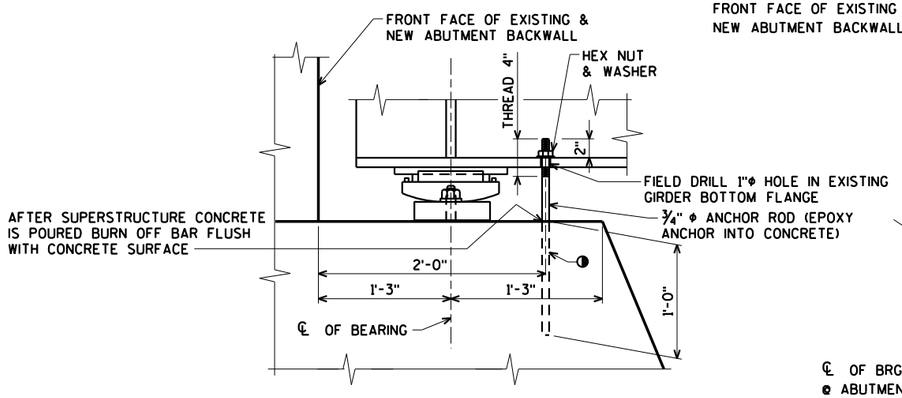


PART SHEAR CONNECTOR LAYOUT - GIRDERS 1 THRU 5

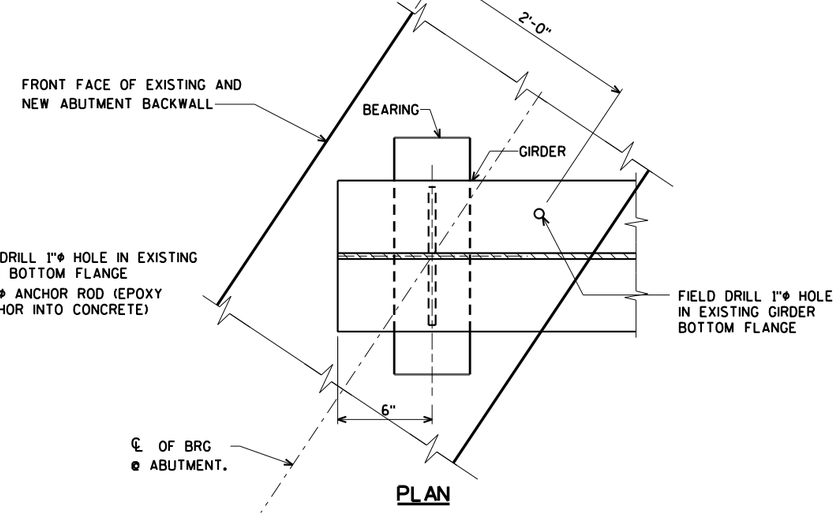
⚠ NO SHEAR CONNECTORS IN THIS AREA



SHEAR CONNECTOR DETAIL
EXISTING GIRDERS



SECTION THRU ABUTMENT



PLAN

NOTE: THE EXISTING GIRDERS HAVE 3 - ⅞" ϕ x 4" LONG STUDS. LEAVE EXISTING SHEAR LUGS OR STUDS IN PLACE. IF THE NEW SHEAR STUD LOCATIONS ARE LOCATED AT THESE SHEAR LUGS OR STUDS, SHIFT THE SHEAR STUD SPACING ACCORDINGLY.

◨ USE REINFORCEMENT IN THE HAUNCHES WHERE THE 2" MIN EMBEDMENT INTO THE DECK CANNOT BE OBTAINED. SEE SUPERSTRUCTURE SHEETS FOR DETAILS.

TEMPORARY HOLD DOWN DEVICE DETAIL

◑ PLACE ONE ANCHOR ROD PER GIRDER AT ABUTMENT WHERE SLAB POUR TERMINATES. LOCATE 4" (NORMAL) OFF ℄ OF GIRDER. ANCHOR ROD, NUT, WASHER & DRILLED HOLE IN GIRDER FLANGE SHALL BE PAID FOR AS "MASONRY ANCHORS TYPE S ¾-INCH". MINIMUM PULLOUT CAPACITY OF 27 KIPS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
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STRUCTURES DESIGN SECTION

STRUCTURE B-37-153

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EXISTING GIRDER ELEVATION

SHEET 14 OF 22
977

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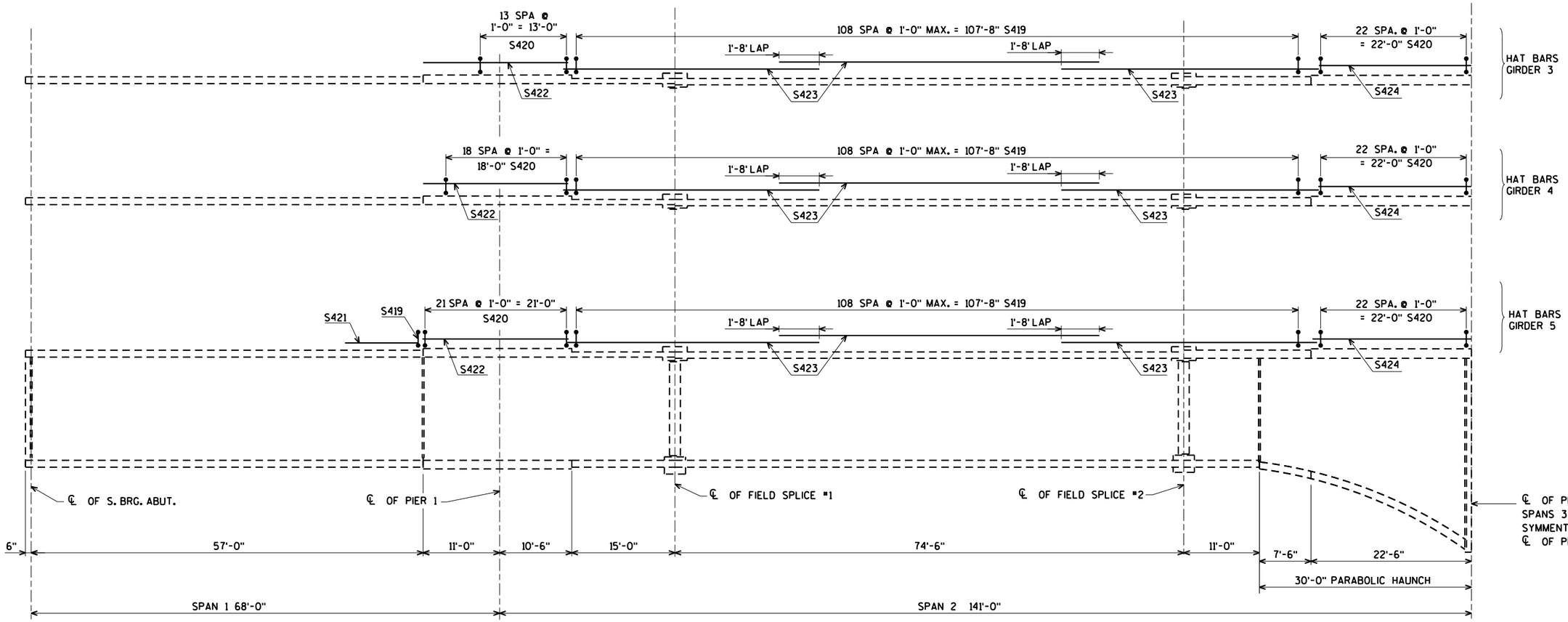
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STATE PROJECT NUMBER

1170-01-70



PART HAT BAR LAYOUT - GIRDERS 3 THRU 5

(SEE DETAIL C ON SHEET 19)

NOTE: HAT BARS NOT REQUIRED ON GIRDERS 1 & 2

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
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STRUCTURES DESIGN SECTION

STRUCTURE B-37-153

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HAUNCH RENIFORCEMENT DETAILS

SHEET 15 OF 22
978

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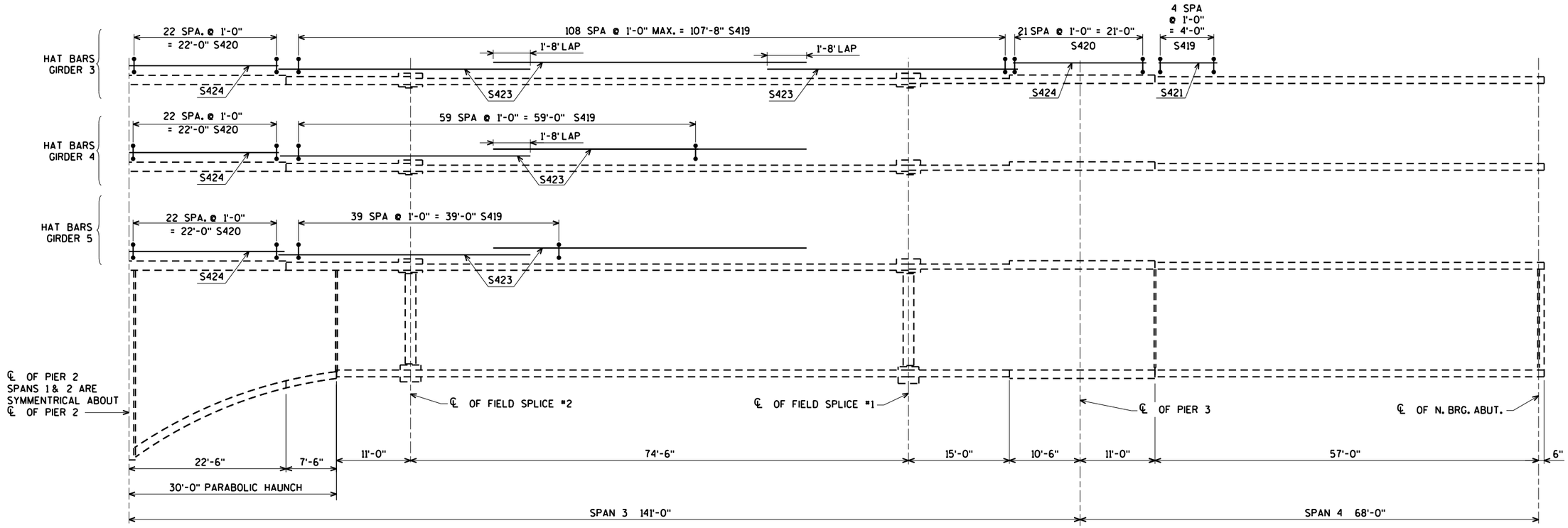
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7/30/2012

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STATE PROJECT NUMBER
1170-01-70



PART HAT BAR LAYOUT - GIRDERS 3 THRU 5

(SEE DETAIL C ON SHEET 19)

NOTE: HAT BARS NOT REQUIRED ON GIRDERS 1 & 2

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-37-153

DRAWN BY CJM | PLANS CK'D. KLW

HAUNCH RENIFORCEMENT DETAILS

SHEET 16 OF 22
979

ORIGINAL PLANS PREPARED BY
AYRES ASSOCIATES
3433 Oakwood Hills Parkway
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STATE PROJECT NUMBER

1170-01-70

ELEVATIONS AT TOP OF DECK

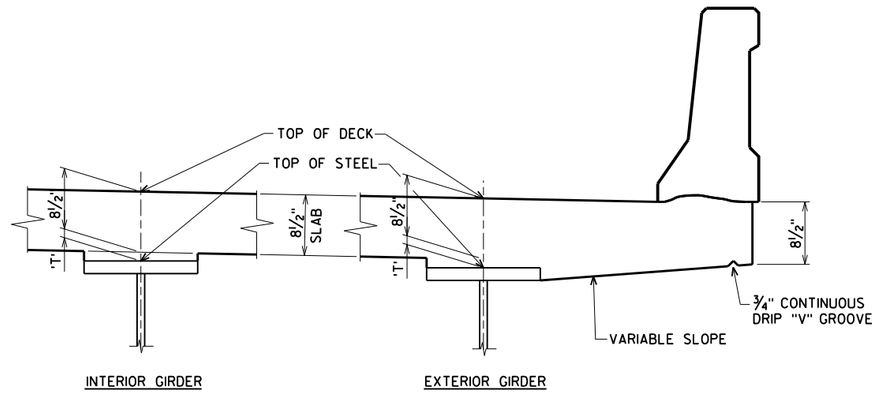
		℄ BRG. S. ABUT.	0.1 PT.	0.2 PT.	0.3 PT.	0.4 PT.	0.5 PT.	0.6 PT.	0.7 PT.	0.8 PT.	0.9 PT.	℄ OF PIER 1
SPAN 1	WEST EOD	1269.99	1270.09	1270.20	1270.31	1270.41	1270.51	1270.61	1270.71	1270.80	1270.88	1270.96
	GIRDER 1	1270.02	1270.12	1270.23	1270.33	1270.43	1270.52	1270.62	1270.71	1270.80	1270.89	1270.97
	REF. LINE	1270.07	1270.17	1270.27	1270.36	1270.46	1270.55	1270.64	1270.73	1270.82	1270.90	1270.99
	GIRDER 2	1270.14	1270.23	1270.33	1270.42	1270.51	1270.59	1270.68	1270.76	1270.84	1270.92	1271.00
	℄ OF LANES	1270.27	1270.35	1270.44	1270.52	1270.60	1270.68	1270.76	1270.83	1270.91	1270.98	1271.05
	GIRDER 3	1270.31	1270.39	1270.47	1270.55	1270.63	1270.71	1270.79	1270.86	1270.93	1271.00	1271.07
	GIRDER 4	1270.52	1270.60	1270.67	1270.74	1270.81	1270.87	1270.94	1271.00	1271.06	1271.12	1271.18
	GIRDER 5	1270.78	1270.85	1270.91	1270.97	1271.03	1271.08	1271.14	1271.19	1271.24	1271.29	1271.34
	EAST EOD	1270.88	1270.94	1271.00	1271.06	1271.11	1271.17	1271.22	1271.27	1271.31	1271.36	1271.40

		℄ OF PIER 1	0.1 PT.	0.2 PT.	0.3 PT.	0.4 PT.	0.5 PT.	0.6 PT.	0.7 PT.	0.8 PT.	0.9 PT.	℄ OF PIER 2
SPAN 2	WEST EOD	1270.96	1271.13	1271.28	1271.42	1271.56	1271.69	1271.81	1271.93	1272.03	1272.13	1272.22
	GIRDER 1	1270.97	1271.14	1271.29	1271.44	1271.58	1271.71	1271.84	1271.95	1272.06	1272.16	1272.25
	REF. LINE	1270.99	1271.15	1271.31	1271.46	1271.61	1271.74	1271.87	1271.99	1272.10	1272.20	1272.30
	GIRDER 2	1271.00	1271.17	1271.33	1271.49	1271.63	1271.77	1271.90	1272.03	1272.14	1272.25	1272.35
	℄ OF LANES	1271.05	1271.19	1271.36	1271.52	1271.67	1271.82	1271.95	1272.08	1272.20	1272.32	1272.42
	GIRDER 3	1271.07	1271.20	1271.33	1271.45	1271.56	1271.66	1271.76	1271.84	1272.18	1272.29	1272.39
	GIRDER 4	1271.18	1271.29	1271.40	1271.49	1271.58	1271.67	1271.74	1271.81	1271.86	1272.17	1272.25
	GIRDER 5	1271.34	1271.43	1271.51	1271.59	1271.66	1271.72	1271.77	1271.81	1271.85	1271.88	1272.16
	EAST EOD	1271.40	1271.49	1271.56	1271.63	1271.69	1271.75	1271.79	1271.83	1271.86	1271.88	1272.14

		℄ OF PIER 2	0.1 PT.	0.2 PT.	0.3 PT.	0.4 PT.	0.5 PT.	0.6 PT.	0.7 PT.	0.8 PT.	0.9 PT.	℄ OF PIER 3
SPAN 3	WEST EOD	1272.22	1272.30	1272.37	1272.44	1272.50	1272.55	1272.59	1272.63	1272.65	1272.67	1272.68
	GIRDER 1	1272.25	1272.34	1272.42	1272.48	1272.54	1272.60	1272.64	1272.68	1272.71	1272.73	1272.74
	REF. LINE	1272.30	1272.39	1272.47	1272.54	1272.60	1272.66	1272.71	1272.75	1272.78	1272.81	1272.82
	GIRDER 2	1272.35	1272.44	1272.53	1272.60	1272.67	1272.73	1272.78	1272.83	1272.86	1272.89	1272.91
	℄ OF LANES	1272.42	1272.52	1272.61	1272.69	1272.76	1272.83	1272.89	1272.94	1272.98	1273.01	1273.04
	GIRDER 3	1272.39	1272.48	1272.56	1272.64	1272.71	1272.78	1272.84	1272.89	1272.93	1272.97	1273.00
	GIRDER 4	1272.25	1272.32	1272.39	1272.44	1272.49	1272.53	1272.60	1272.66	1272.71	1272.75	1272.79
	GIRDER 5	1272.16	1272.21	1272.25	1272.29	1272.32	1272.33	1272.36	1272.42	1272.48	1272.53	1272.57
	EAST EOD	1272.14	1272.18	1272.22	1272.25	1272.27	1272.28	1272.28	1272.34	1272.40	1272.45	1272.50

		℄ OF PIER 3	0.1 PT.	0.2 PT.	0.3 PT.	0.4 PT.	0.5 PT.	0.6 PT.	0.7 PT.	0.8 PT.	0.9 PT.	℄ BRG. N. ABUT.
SPAN 4	WEST EOD	1272.68	1272.68	1272.68	1272.68	1272.68	1272.67	1272.67	1272.66	1272.65	1272.64	1272.62
	GIRDER 1	1272.74	1272.75	1272.75	1272.75	1272.75	1272.74	1272.74	1272.73	1272.72	1272.71	1272.69
	REF. LINE	1272.82	1272.83	1272.83	1272.83	1272.83	1272.83	1272.83	1272.82	1272.81	1272.80	1272.79
	GIRDER 2	1272.91	1272.92	1272.93	1272.93	1272.93	1272.93	1272.93	1272.92	1272.92	1272.91	1272.90
	℄ OF LANES	1273.04	1273.05	1273.06	1273.07	1273.07	1273.07	1273.07	1273.07	1273.07	1273.06	1273.06
	GIRDER 3	1273.00	1273.01	1273.02	1273.02	1273.03	1273.03	1273.03	1273.03	1273.03	1273.03	1273.02
	GIRDER 4	1272.79	1272.80	1272.81	1272.83	1272.83	1272.84	1272.85	1272.85	1272.85	1272.85	1272.85
	GIRDER 5	1272.57	1272.59	1272.61	1272.62	1272.63	1272.64	1272.65	1272.66	1272.66	1272.67	1272.67
	EAST EOD	1272.50	1272.52	1272.53	1272.55	1272.56	1272.57	1272.58	1272.59	1272.60	1272.60	1272.60

NOTE: EOD IS EDGE OF DECK.



SLAB HAUNCH DETAIL

TO DETERMINE 'T': AFTER ALL DECK IS REMOVED. ELEVATIONS OF THE TOP FLANGES OR TOP OF SPLICE PLATES, OR TOP OF COVER PLATES WHICHEVER APPLIES, SHALL BE TAKEN AT CENTERLINE OF BEARINGS, CENTERLINE OF FIELD SPLICES, AND AT TENTH POINTS OF EACH SPAN.

TOP OF DECK ELEVATION AT FINAL GRADE
- TOP OF STEEL ELEVATION AFTER DECK REMOVAL
+ CONCRETE ONLY DEFLECTION: DOWNWARD DEFLECTION IS ADDED, UPWARD DEFLECTION IS SUBTRACTED
- SLAB THICKNESS (8½")

= HAUNCH THICKNESS 'T'

AVERAGE "T" USED FOR ESTIMATING QUANTITIES

GIRDER	AVERAGE "T" (INCHES)
1	2¾"
2	3¼"
3	3¾"
4	3½"
5	3¼"

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-37-153

DRAWN BY CJM | PLANS CK'D. KLW

DECK ELEVATIONS

SHEET 17 OF 22
980

ORIGINAL PLANS PREPARED BY
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STATE PROJECT NUMBER
1170-01-70

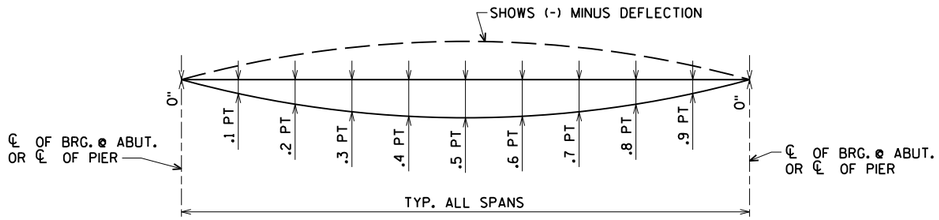
TABLE OF DEFLECTIONS (IN INCHES)

		DEFLECTION	℄ BRG. S. ABUT	0.1 PT	0.2 PT	0.3 PT	0.4 PT	0.5 PT	0.6 PT	0.7 PT	0.8 PT	0.9 PT	℄ OF PIER 1
SPAN 1	GIRDER 1	CONCRETE ONLY	0.0	0.0	0.0	-0.1	-0.1	-0.2	-0.2	-0.3	-0.3	-0.2	0.0
	GIRDER 2	CONCRETE ONLY	0.0	0.0	0.0	-0.1	-0.1	-0.2	-0.2	-0.3	-0.3	-0.2	0.0
	GIRDER 3	CONCRETE ONLY	0.0	0.0	0.0	-0.1	-0.1	-0.2	-0.2	-0.3	-0.3	-0.2	0.0
	GIRDER 4	CONCRETE ONLY	0.0	0.0	0.0	-0.1	-0.1	-0.2	-0.2	-0.3	-0.3	-0.2	0.0
	GIRDER 5	CONCRETE ONLY	0.0	0.0	0.0	-0.1	-0.1	-0.2	-0.2	-0.3	-0.3	-0.2	0.0

		DEFLECTION	℄ OF PIER 1	0.1 PT	0.2 PT	0.3 PT	0.4 PT	0.5 PT	0.6 PT	0.7 PT	0.8 PT	0.9 PT	℄ OF PIER 2
SPAN 2	GIRDER 1	CONCRETE ONLY	0.0	0.6	1.5	2.3	2.8	2.8	2.3	1.6	0.8	0.2	0.0
	GIRDER 2	CONCRETE ONLY	0.0	0.6	1.5	2.3	2.8	2.8	2.3	1.6	0.8	0.2	0.0
	GIRDER 3	CONCRETE ONLY	0.0	0.6	1.5	2.3	2.8	2.8	2.3	1.6	0.8	0.2	0.0
	GIRDER 4	CONCRETE ONLY	0.0	0.6	1.5	2.3	2.8	2.8	2.3	1.6	0.8	0.2	0.0
	GIRDER 5	CONCRETE ONLY	0.0	0.6	1.5	2.3	2.8	2.8	2.3	1.6	0.8	0.2	0.0

		DEFLECTION	℄ OF PIER 2	0.1 PT	0.2 PT	0.3 PT	0.4 PT	0.5 PT	0.6 PT	0.7 PT	0.8 PT	0.9 PT	℄ OF PIER 3
SPAN 3	GIRDER 1	CONCRETE ONLY	0.0	0.2	0.8	1.6	2.3	2.8	2.8	2.3	1.5	0.6	0.0
	GIRDER 2	CONCRETE ONLY	0.0	0.2	0.8	1.6	2.3	2.8	2.8	2.3	1.5	0.6	0.0
	GIRDER 3	CONCRETE ONLY	0.0	0.2	0.8	1.6	2.3	2.8	2.8	2.3	1.5	0.6	0.0
	GIRDER 4	CONCRETE ONLY	0.0	0.2	0.8	1.6	2.3	2.8	2.8	2.3	1.5	0.6	0.0
	GIRDER 5	CONCRETE ONLY	0.0	0.2	0.8	1.6	2.3	2.8	2.8	2.3	1.5	0.6	0.0

		DEFLECTION	℄ OF PIER 3	0.1 PT	0.2 PT	0.3 PT	0.4 PT	0.5 PT	0.6 PT	0.7 PT	0.8 PT	0.9 PT	℄ BRG. N. ABUT
SPAN 4	GIRDER 1	CONCRETE ONLY	0.0	-0.2	-0.3	-0.3	-0.2	-0.2	-0.1	-0.1	0.0	0.0	0.0
	GIRDER 2	CONCRETE ONLY	0.0	-0.2	-0.3	-0.3	-0.2	-0.2	-0.1	-0.1	0.0	0.0	0.0
	GIRDER 3	CONCRETE ONLY	0.0	-0.2	-0.3	-0.3	-0.2	-0.2	-0.1	-0.1	0.0	0.0	0.0
	GIRDER 4	CONCRETE ONLY	0.0	-0.2	-0.3	-0.3	-0.2	-0.2	-0.1	-0.1	0.0	0.0	0.0
	GIRDER 5	CONCRETE ONLY	0.0	-0.2	-0.3	-0.3	-0.2	-0.2	-0.1	-0.1	0.0	0.0	0.0



DEFLECTION DIAGRAM

NOTE: DEFLECTIONS ARE THEORETICAL AND MAY VARY IN THE FIELD.
CONCRETE ONLY = CONCRETE DECK DEFLECTIOIN + COMPOSITE DEAD LOAD DEFLECTION.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-37-153

DRAWN BY CJM | PLANS CK'D. KLW

TABLE OF DEFLECTIONS

SHEET 18 OF 22
981

ORIGINAL PLANS PREPARED BY
AYRES ASSOCIATES
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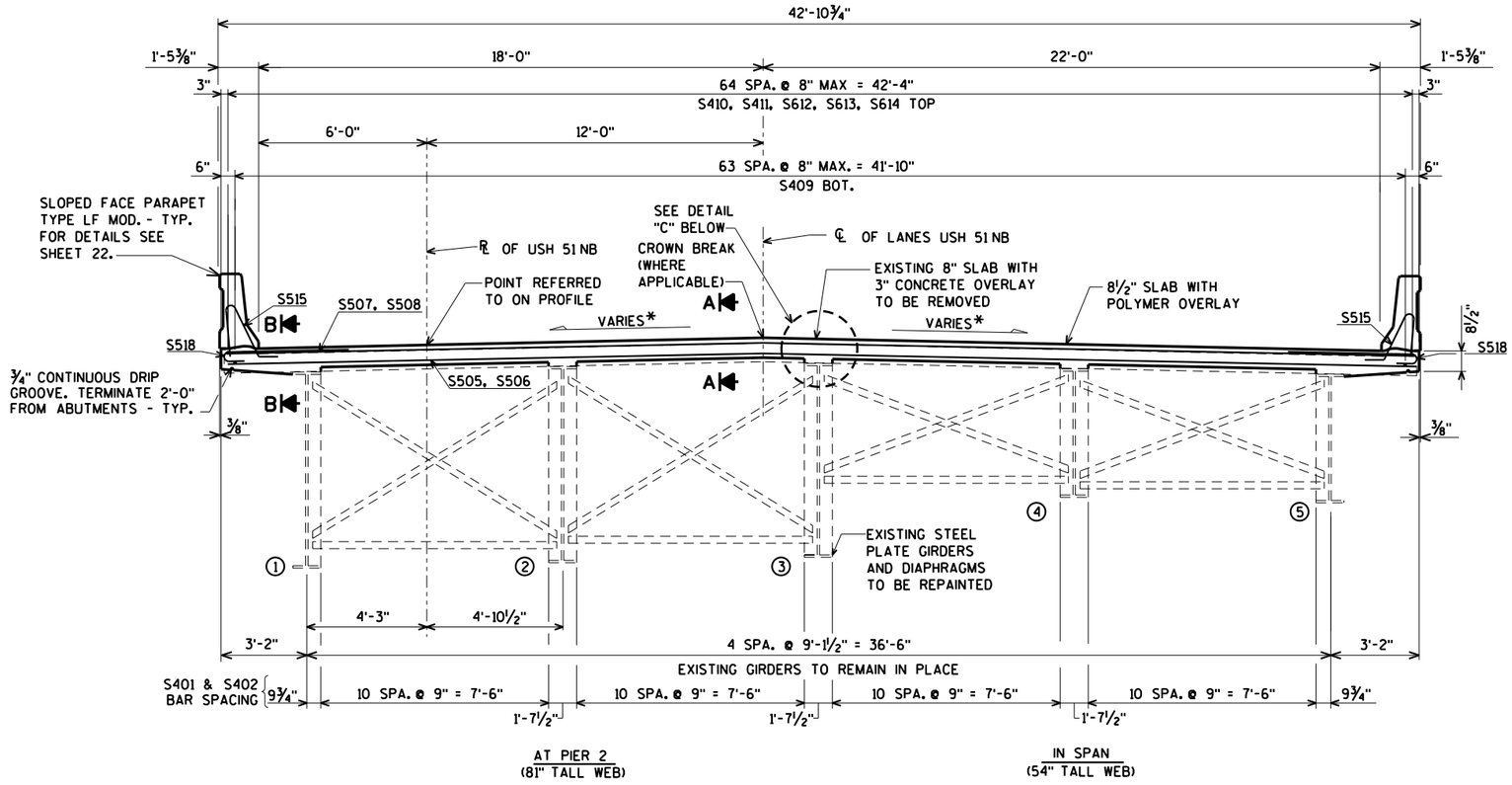
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7/30/2012

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STATE PROJECT NUMBER

1170-01-70



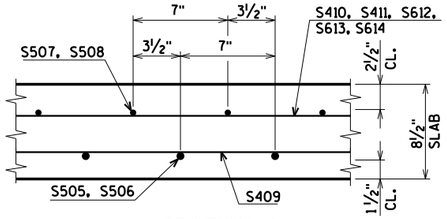
AT PIER 2
(81" TALL WEB)

IN SPAN
(54" TALL WEB)

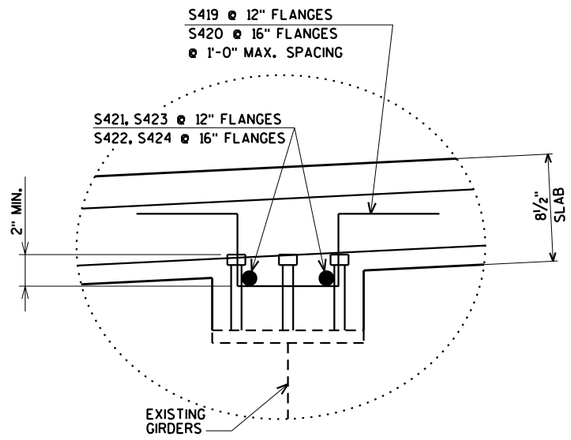
* CROSS SLOPE VARIES FROM SUPERELEVATED TO NORMAL CROWN ALONG LENGTH OF THE BRIDGE. SEE PLAN VIEW ON SHEET 1 FOR STATIONING AND CROSS SLOPE.

TYPICAL CROSS SECTION THRU DECK

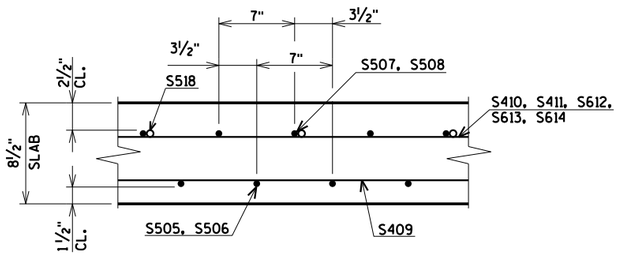
(LOOKING NORTH)



SECTION A



DETAIL "C"



SECTION B

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-37-153

DRAWN BY CJM | PLANS CK'D. KLW

SUPERSTRUCTURE

SHEET 19 OF 22
982

ORIGINAL PLANS PREPARED BY
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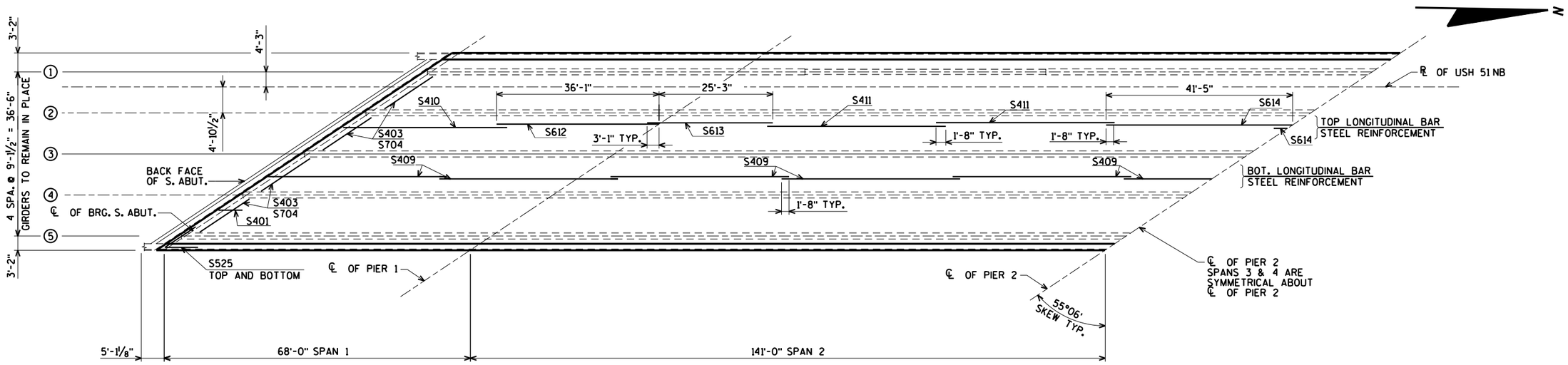
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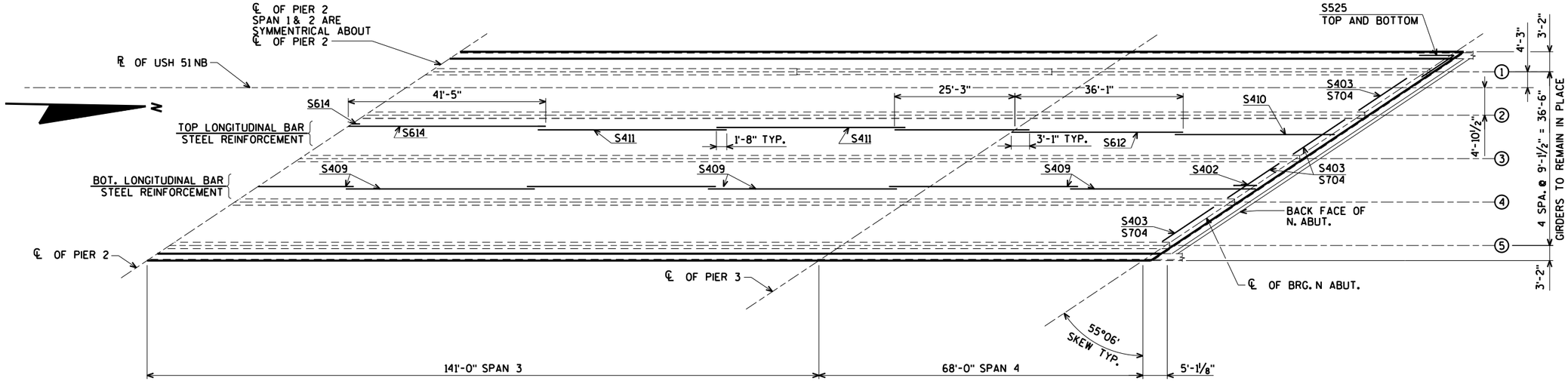
STATE PROJECT NUMBER

1170-01-70

NOTE: PER SPECIFICATIONS, THE CONTRACTOR IS RESPONSIBLE TO PROVIDE EXTERIOR GIRDER BRACING FOR SLAB OVERHANGS.



PART PLAN - SPAN 1& 2



PART PLAN - SPAN 3 & 4

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-37-153

DRAWN BY CJM | PLANS CK'D. KLW

SUPERSTRUCTURE PLAN

SHEET 20 OF 22
983

ORIGINAL PLANS PREPARED BY
AYRES ASSOCIATES
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Eau Claire, WI 54701
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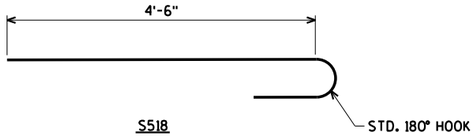
STATE PROJECT NUMBER

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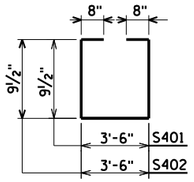
BAR SERIES TABLE

BAR MARK	NO REQ'D.	LENGTH
S505	2 SERIES OF 103	11" TO 42'-5"
S508	2 SERIES OF 103	8" TO 42'-2"

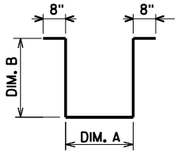
BUNDLE AND TAG EACH SERIES SEPARATELY.

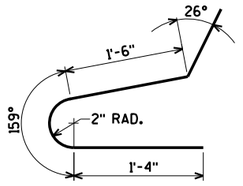


S518

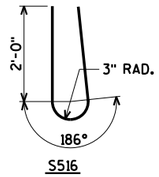


BAR	DIMENSION "A"	DIMENSION "B"
S419	9"	5"
S420	1'-1"	5"

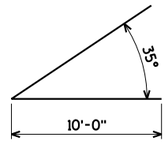




S515



S516

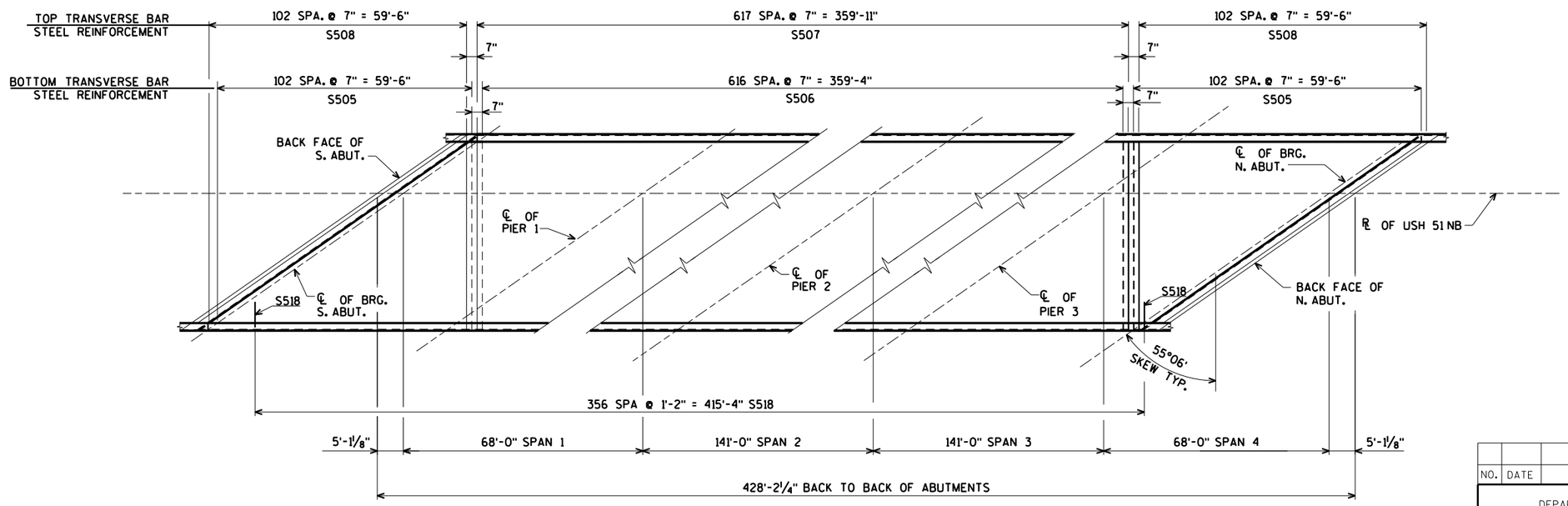


S525

BILL OF BARS

BAR. NO.	COATED BAR	NO. REQ'D.	LENGTH	BENT BAR	BUNDLED	BAR SERIES	138,030# COATED LOCATION
S401	X	44	6-1	X			DIAPH. @ S. ABUT. VERT.
S402	X	44	6-1	X			DIAPH. @ N. ABUT. VERT.
S403	X	16	13-7				DIAPH. @ ABUT. HORIZ.
S704	X	40	13-7				DIAPH. @ ABUT. HORIZ.
S505	X	206	21-8			⊗	SLAB TRANS. BOT.
S506	X	617	42-6				SLAB TRANS. BOT.
S507	X	618	42-6				SLAB TRANS. TOP
S508	X	206	21-5			⊗	SLAB TRANS. TOP
S409	X	704	39-8				SLAB LONG. BOT.
S410	X	130	35-1				SLAB LONG. TOP SPAN 1, 4
S411	X	260	39-8				SLAB LONG. TOP SPAN 2, 3
S612	X	130	36-1				SLAB LONG. TOP @ PIER 1 & 3
S613	X	130	28-4				SLAB LONG. TOP @ PIER 1 & 3
S614	X	130	43-0				SLAB LONG. TOP @ PIER 2
S515	X	1266	4-2	X			SLAB @ PARAPET VERT.
S516	X	1266	4-10	X			PARAPET VERT.
S517	X	100	43-8				PARAPET HORIZ.
S518	X	714	5-3	X			SLAB TRANS. TOP @ PARAPET
S419	X	542	2-7	X			SLAB HAUNCH @ GIRDERS 3, 4, 5 @ 12" FLANGE
S420	X	215	2-11	X			SLAB HAUNCH @ GIRDERS 3, 4, 5 @ 16" FLANGE
S421	X	4	4-6				SLAB HAUNCH @ GIRDERS 3 & 5 @ 12" FLANGE SPANS 2 &
S422	X	8	21-2				SLAB HAUNCH @ GIRDERS 3-5 @ 16" FLANGE PIERS 1 & 3
S423	X	30	38-2				SLAB HAUNCH @ GIRDERS 3-5 @ 12" FLANGE SPANS 2 & 3
S424	X	16	44-8				SLAB HAUNCH @ GIRDERS 3-5 @ 16" FLANGE PIER 2
S425	X	4	20-2	X			SLAB TOP AND BOTOM AT CORNERS

BENDING DIMENSIONS ARE OUT TO OUT OF BARS.
⊗ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.



TRANSVERSE BAR STEEL LAYOUT

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-37-153

DRAWN BY CJM | PLANS CK'D. KLW

SUPERSTRUCTURE DETAILS AND BILL OF BARS

SHEET 21 OF 22
984

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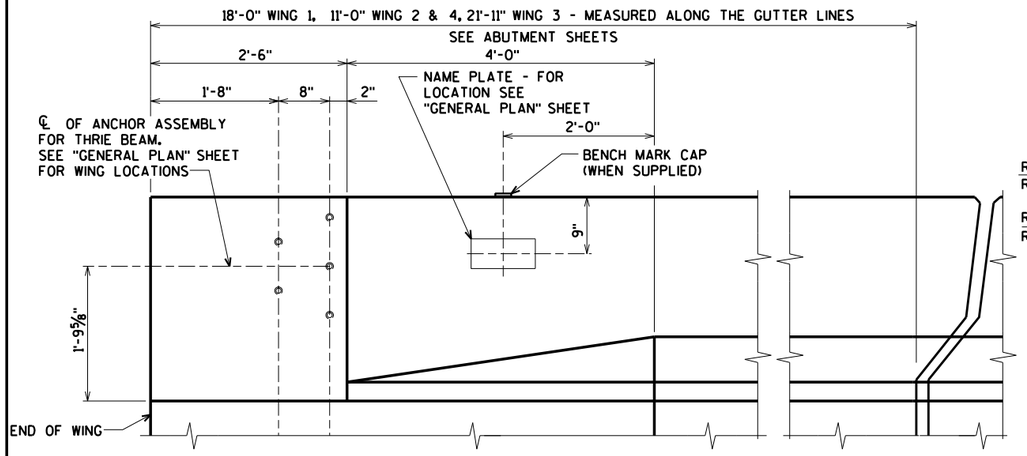
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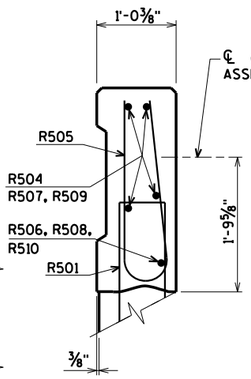
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STATE PROJECT NUMBER

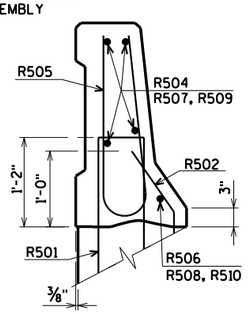
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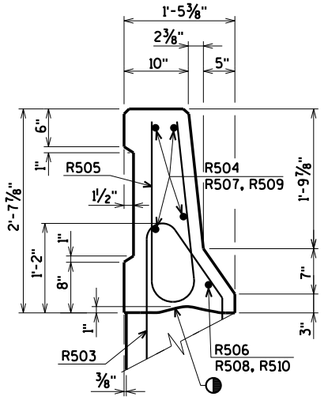
INSIDE ELEVATION



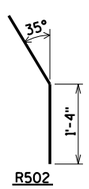
SECTION A



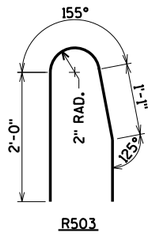
SECTION B



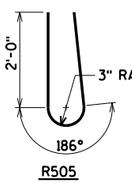
SECTION C



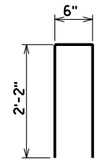
R502



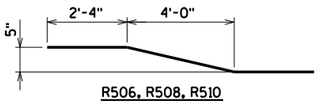
R503



R505



R501



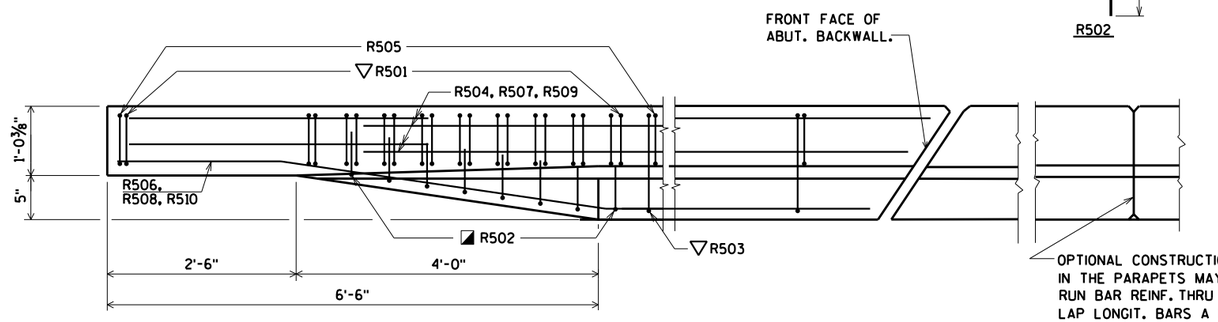
R506, R508, R510

BILL OF BARS

WEIGHTS INCLUDED IN ABUTMENT WEIGHTS SHOWN ON SHEETS 7 & 11.

BAR MARK	COATED	NO. REQ'D. SOUTH ABUT.	NO. REQ'D. NORTH ABUT.	LENGTH	BENT BAR	680" SOUTH ABUT. 760" NORTH ABUT. LOCATION
R501	X	28	28	4-7	X	PARAPET VERT.
R502	X	16	16	2-4	X	PARAPET VERT.
R503	X	20	26	4-7	X	PARAPET VERT.
R504	X	8	---	9-6		PARAPET HORIZ. WING 1
R505	X	48	54	4-10	X	PARAPET VERT.
R506	X	1	---	17-0	X	PARAPET HORIZ. WING 1
R507	X	8	8	7-4		PARAPET HORIZ. WING 2 & 4
R508	X	1	1	11-0	X	PARAPET HORIZ. WING 2 & 4
R509	X	---	8	11-5		PARAPET HORIZ. WING 3
R510	X	---	1	20-11	X	PARAPET HORIZ. WING 3

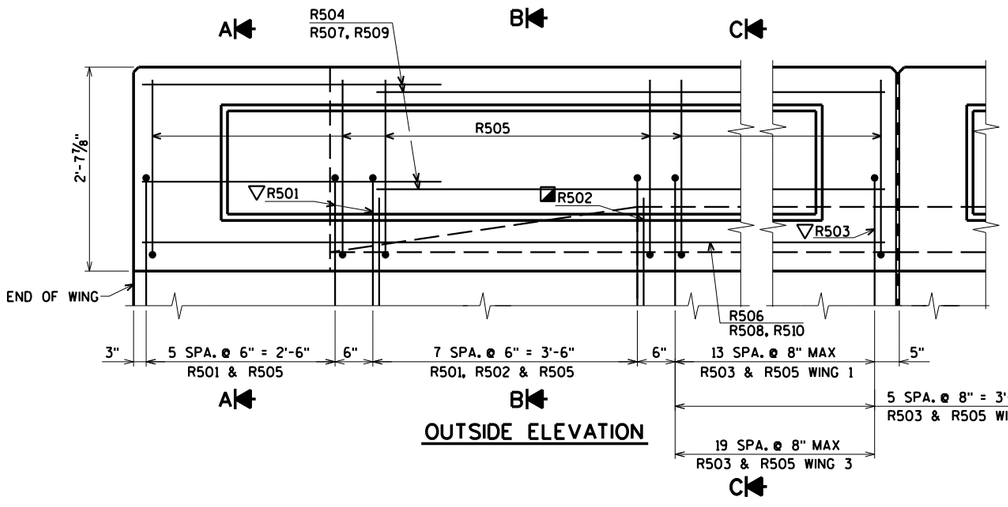
BENDING DIMENSIONS ARE OUT TO OUT OF BARS.



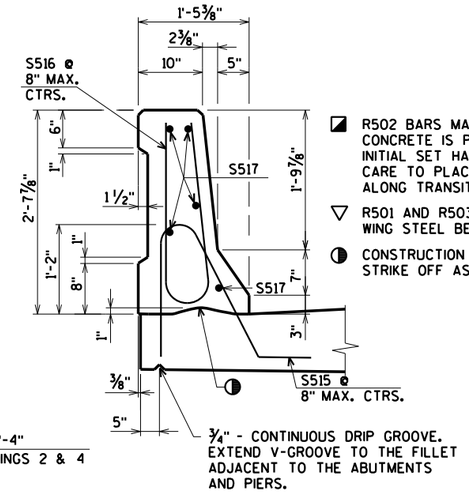
PLAN

(WING 2 & 4 SHOWN, WING 1 & 3 SIMILAR)

OPTIONAL CONSTRUCTION JOINTS IN THE PARAPETS MAY BE USED. RUN BAR REINF. THRU THE JOINT. LAP LONGIT. BARS A MIN. OF 1'-9". MIN. JOINT SPACING OF 80'-0". DEFINE CONST. JOINT WITH A ¾" 'V' GROOVE.

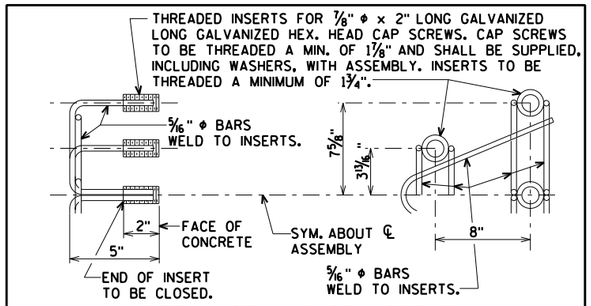


OUTSIDE ELEVATION



SECTION THRU PARAPET ON BRIDGE

- R502 BARS MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. USE CARE TO PLACE R502 BARS CORRECTLY ALONG TRANSITION OF PARAPET.
- ▽ R501 AND R503 BARS TO BE TIED TO WING STEEL BEFORE WING IS POURED.
- ◑ CONSTRUCTION JOINT STRIKE OFF AS SHOWN.



DETAIL OF ANCHOR ASSEMBLY

NOTE: HEX. HEAD CAP SCREWS & WASHERS TO BE GALVANIZED IN ACCORDANCE WITH AASHTO M232 CLASS C. SEE SHEET 1 FOR LOCATION. ASSEMBLY BID ITEM SHALL BE "ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD".

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-37-153

DRAWN BY CJM | PLANS CK'D. KLW

SLOPED FACE PARAPET "LF" MOD.

SHEET 22 OF 22

985

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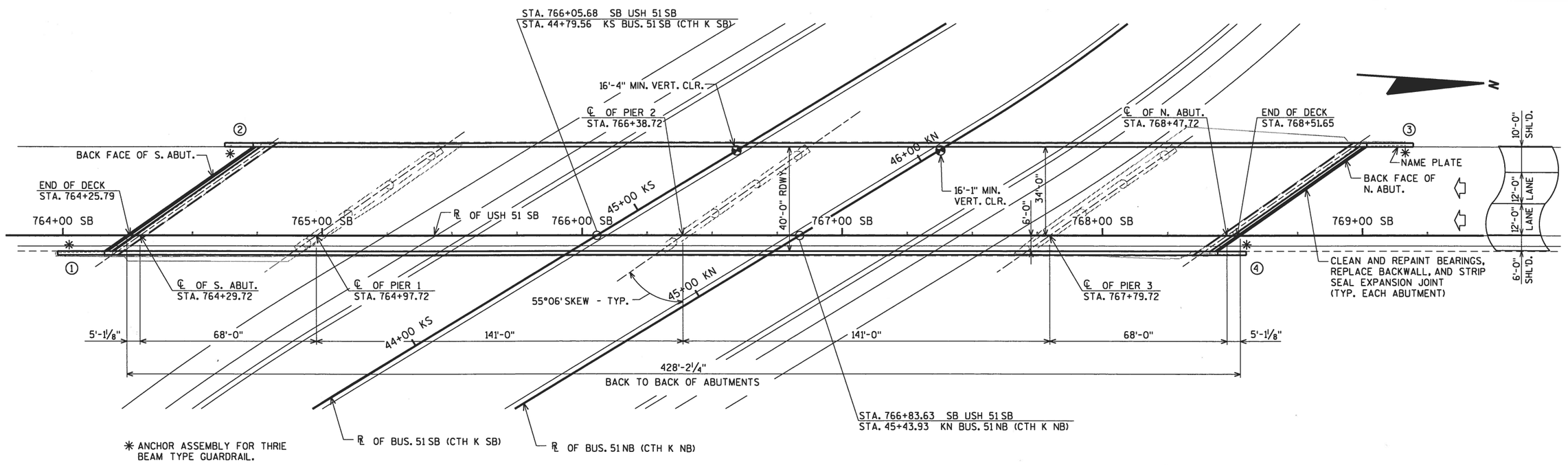
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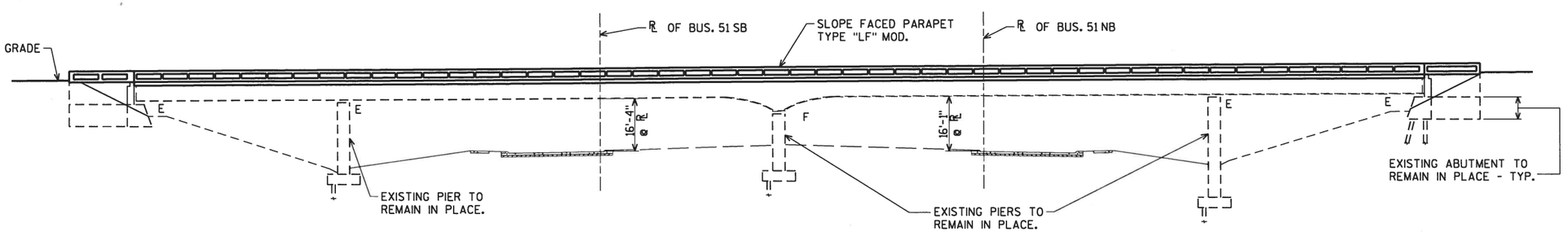
STATE PROJECT NUMBER

1170-01-70



PLAN

4-SPAN CONTINUOUS HAUNCHED STEEL GIRDER BRIDGE
PAINTING AND DECK REPLACEMENT



ELEVATION

(TAKEN NORMAL TO USH 51)

LISTS OF DRAWINGS

1. GENERAL PLAN
2. TYPICAL SECTION
3. QUANTITIES AND NOTES
4. SOUTH ABUTMENT
5. SOUTH ABUTMENT WING 1 DETAILS
6. SOUTH ABUTMENT WING 2 DETAILS
7. SOUTH ABUTMENT DETAILS
8. NORTH ABUTMENT
9. NORTH ABUTMENT WING 3 DETAILS
10. NORTH ABUTMENT WING 4 DETAILS
11. NORTH ABUTMENT DETAILS
12. EXPANSION JOINT DETAILS ABUTMENTS
13. EXPANSION JOINT DETAILS ABUTMENTS
14. EXISTING GIRDER ELEVATION
15. HAUNCH RENIFORCEMENT DETAILS
16. DECK ELEVATIONS
17. TABLE OF DEFLECTIONS
18. SUPERSTRUCTURE
19. SUPERSTRUCTURE PLAN
20. SUPERSTRUCTURE DETAILS AND BILL OF BARS
21. SLOPED FACE PARAPET LF MODIFIED

FOR DESIGN DATA SEE SHEET 2

WISCONSIN PROFESSIONAL ENGINEER
DANIEL N. SYDOW
E-38363
WI
7/30/12

BRIDGE OFFICE CONTACT:
WILLIAM DREHER
(608)-266-8489

CONSULTANT CONTACT:
DAN SYDOW
(715)-834-3161

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3433 Oakwood Hills Parkway
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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher KAR 08/15/12
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE B-37-154

USH 51 SB OVER BUSINESS USH 51 (CTH K)

COUNTY	TOWN ~~CITY/VILLAGE~~
MARATHON	MAINE

DESIGN SPEC. REHABILITATION N/A

DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
CJM	KLW	CLS/CJM	DNS

GENERAL PLAN

SHEET 1 OF 21
986

DATE: 5-30-12
DATE: 5-31-12
DATE:

CHECKED BY: KLW
BACK CHECKED BY: KLW
CORRECTED BY:

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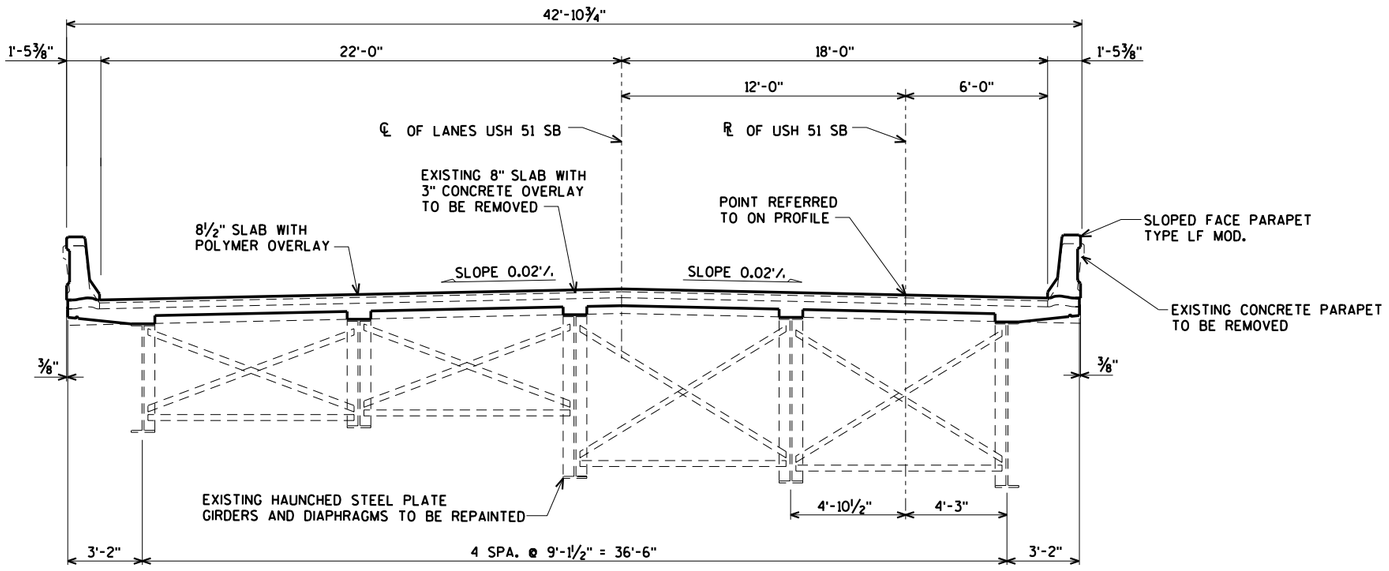
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7/24/2012 black.tbl LD DATE:

STATE PROJECT NUMBER

1170-01-70



HALF SECTION IN SPAN
(54" TALL WEB)

HALF SECTION AT PIER 2
(81" TALL WEB)

CROSS SECTION THRU BRIDGE
(LOOKING NORTH)

DESIGN DATA

LIVE LOAD:

DESIGN LOAD: HS-20
INVENTORY RATING: HS-25
OPERATING RATING: HS-42
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV) = 200 KIPS

(STRUCTURE IS DESIGNED FOR A FUTURE WEARING SURFACE OF 20 PSF.)

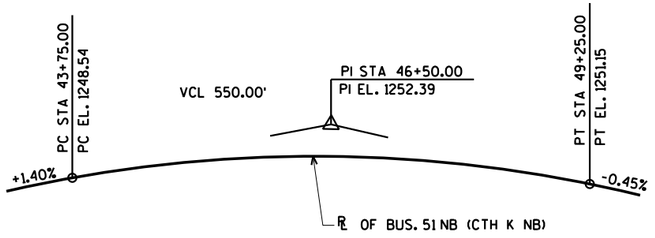
ULTIMATE DESIGN STRESSES:

CONCRETE MASONRY	SLAB f'_c	=	4,000 p.s.i.
	ALL OTHER f'_c	=	3,500 p.s.i.
BAR STEEL REINF. HS COATED (GRADE 60)	f_y	=	60,000 p.s.i.

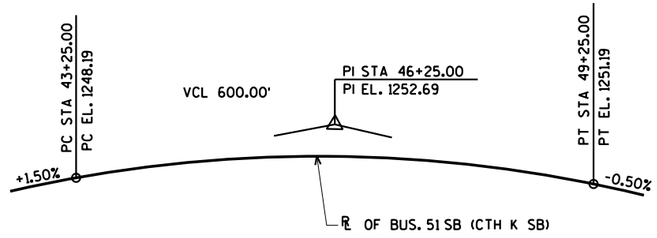
TRAFFIC DATA:

USH 51	BUS 51/CTH K
A.D.T. = 31,000 (2015)	A.D.T. = 14,500 (2015)
A.D.T. = 41,300 (2035)	A.D.T. = 16,800 (2035)
R.D.S. = 70 M.P.H.	R.D.S. = 40 M.P.H.

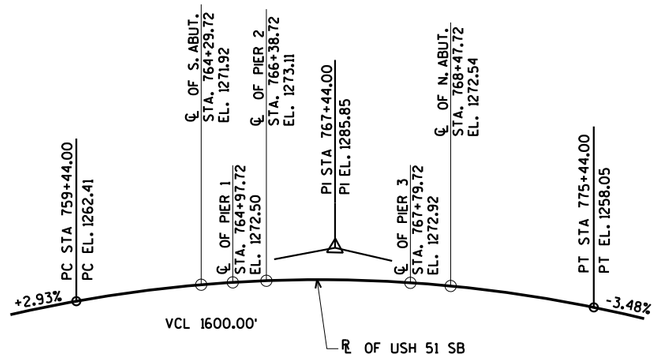
BENCHMARK
POINT ID: BM 234
DESCRIPTION: BM DOT DISK ON TOP OF SE PARAPET B-37-153
N: 212801.18
E: 274453.67
EL: 1273.26



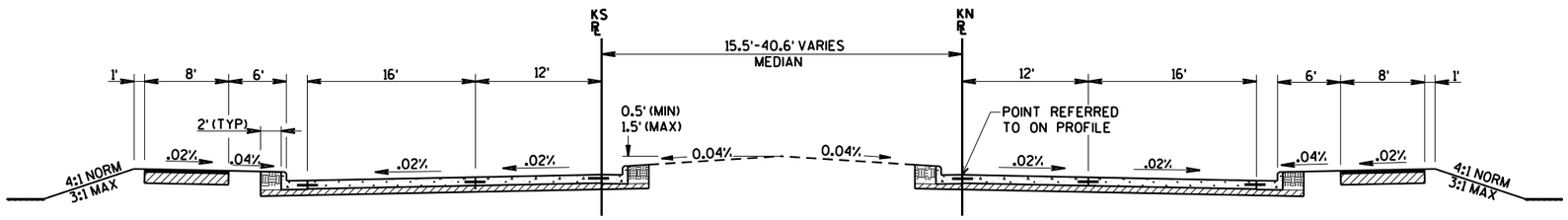
PROFILE GRADE LINE
℄ OF BUS. 51 NB (CTH K NB)



PROFILE GRADE LINE
℄ OF BUS. 51 SB (CTH K SB)



PROFILE GRADE LINE
℄ OF USH 51 SB



TYPICAL FINISHED SECTION - CTH K/BUS 51

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-37-154

DRAWN BY CJM | PLANS CK'D. KLW

TYPICAL SECTION

SHEET 2 OF 21
987

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STATE PROJECT NUMBER

1170-01-70

TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEMS	UNIT	S. ABUT.	PIER 1	PIER 2	PIER 3	N. ABUT.	SUPER.	TOTAL
203.0200	REMOVING OLD STRUCTURE STATION 766+38.72 SB	LS	-----	-----	-----	-----	-----	-----	1
206.1000	EXCAVATION FOR STRUCTURES BRIDGES B-37-154	LS	-----	-----	-----	-----	-----	-----	1
210.0100	BACKFILL STRUCTURE	CY	75	-----	-----	-----	85	-----	160
502.0100	CONCRETE MASONRY BRIDGES	CY	39	-----	-----	-----	39	622	700
502.3100	EXPANSION DEVICE B-37-154	LS	-----	-----	-----	-----	-----	-----	1
502.3200	PROTECTIVE SURFACE TREATMENT	SY	15	-----	-----	-----	13	2,217	2,245
502.5005	MASONRY ANCHOR TYPE L NO. 5 BARS	EACH	188	-----	-----	-----	180	-----	368
502.6110	MASONRY ANCHOR TYPE S 3/4-INCH	EACH	-----	-----	-----	-----	5	-----	5
505.0605	BAR STEEL REINFORCEMENT HS COATED BRIDGES	LB	4,310	-----	-----	-----	4,300	142,180	150,790
506.3015	WELDED STUD SHEAR CONNECTORS 7/8 x 6-INCH	EACH	-----	-----	-----	-----	-----	4,620	4,620
● 509.1500	CONCRETE SURFACE REPAIR	SF	-----	-----	-----	-----	-----	-----	50
509.5100.S	POLYMER OVERLAY	SY	-----	-----	-----	-----	-----	1,895	1,895
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	18	-----	-----	-----	17	-----	35
517.0900.S	PREPARATION AND COATING OF TOP FLANGES B-37-154	LS	-----	-----	-----	-----	-----	-----	1
517.1010.S	CONCRETE STAINING B-37-154	SF	100	-----	-----	-----	80	5,200	5,380
△ 517.1800.S	STRUCTURE REPAINTING RECYCLED ABRASIVE STRUCTURE B-37-154	LS	-----	-----	-----	-----	-----	-----	1
517.4500.S	NEGATIVE PRESSURE CONTAINMENT AND COLLECTION OF WASTE MATERIALS B-37-154	LS	-----	-----	-----	-----	-----	-----	1
517.6001.S	PORTABLE DECONTAMINATION FACILILY	EACH	-----	-----	-----	-----	-----	-----	0.5
614.0150	ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD	EACH	2	-----	-----	-----	2	-----	4
SPV.0060	CLEANING AND PAINTING BEARINGS	EACH	5	5	5	5	5	-----	25
	NON-BID ITEMS								
	FILLER	SIZE	-----	-----	-----	-----	-----	-----	1/2" & 3/4"

● UNDISTRIBUTED QUANTITY FOR REPAIRS AS DIRECTED BY THE ENGINEER, IF NECESSARY.

△ REPAINT ABUTMENT DIAPHRAGMS PRIOR TO PLACING ABUTMENT BACKWALLS.

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS SHOWN OR NOTED OTHERWISE.

THE FIRST DIGIT OF A THREE DIGIT BAR NO. AND THE FIRST TWO DIGITS OF A FOUR DIGIT BAR NO. SIGNIFIES THE BAR SIZE.

THE EXISTING GROUNDLINE SHALL BE THE UPPER LIMIT FOR EXCAVATION FOR STRUCTURES.

AT ABUTMENTS ALL SPACES EXCAVATED AND NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH BACKFILL STRUCTURE.

PROTECTIVE SURFACE TREATMENT IS TO BE APPLIED TO THE TOP OF DECK AND TOP AND INSIDE FACES OF PARAPETS.

UTILIZE EXISTING BAR STEEL REINFORCEMENT WHERE SHOWN AND EXTEND 24 BAR DIAMETERS INTO NEW WORK.

DIMENSIONS ARE BASED ON ORIGINAL PLANS, THEREFORE THE CONTRACTOR SHALL VERIFY THEM IN THE FIELD BEFORE ACCEPTANCE.

ALL CONCRETE REMOVAL SHALL BE DEFINED BY A 1" DEEP SAW CUT.

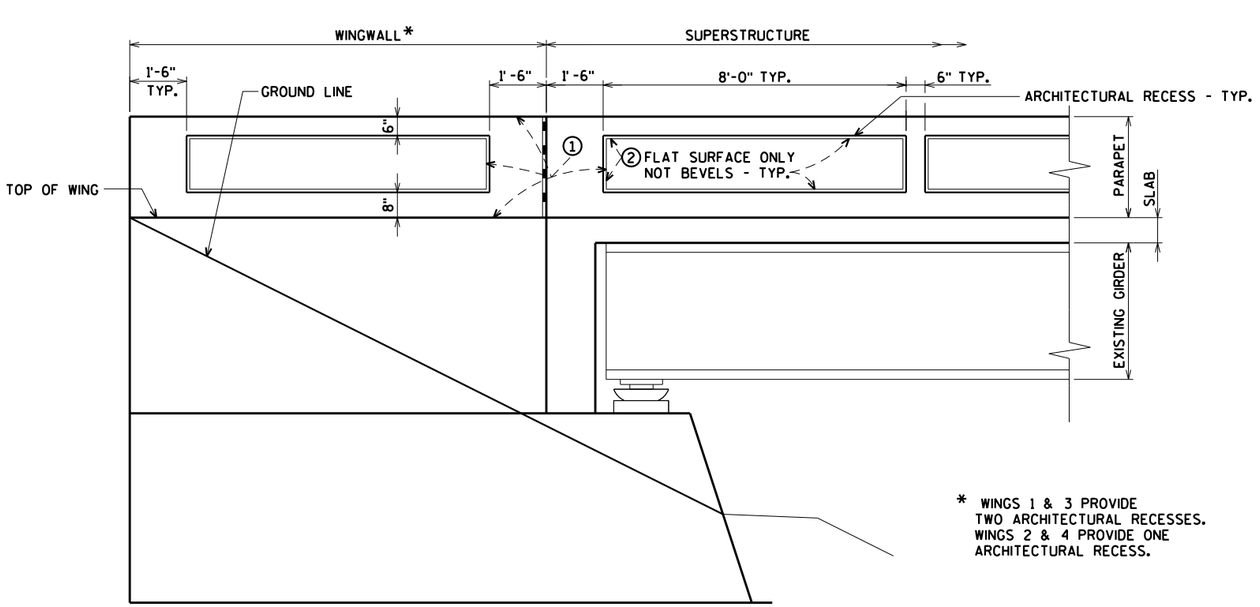
VARIATIONS TO THE NEW GRADE LINE OVER 1/4" MUST BE SUBMITTED BY THE FIELD ENGINEER TO THE STRUCTURES DESIGN SECTION FOR REVIEW.

THE CONTRACTOR SHALL SUPPLY A NEW NAME PLATE IN ACCORDANCE WITH SECTION 502.3.11 OF THE STANDARD SPECIFICATIONS AND THE STANDARD DETAIL DRAWINGS. NAME PLATE TO SHOW ORIGINAL CONSTRUCTION YEAR.

ORIGINAL CONSTRUCTION YEAR IS 1975.

JOINT FILLER SHALL CONFORM TO THE REQUIREMENTS OF A.A.S.H.T.O. DESIGNATION M 153, TYPE I, II OR III OR A.A.S.H.T.O. DESIGNATION M 213.

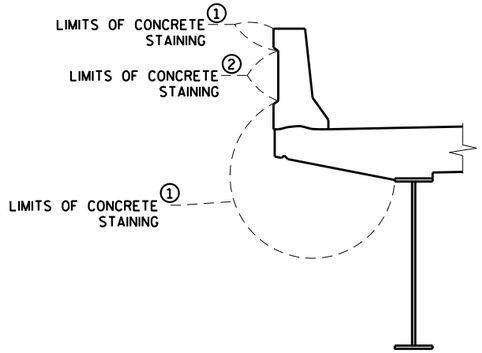
THE COLOR OF THE FINISH EPOXY TOP COAT FOR THE GIRDERS AND CONNECTING STRUCTURAL STEEL SHALL BE GRAY (FEDERAL COLOR NO. 36424).



* WINGS 1 & 3 PROVIDE TWO ARCHITECTURAL RECESSES. WINGS 2 & 4 PROVIDE ONE ARCHITECTURAL RECESS.

ABUTMENT WINGWALLS

(STAIN EXTERIOR FACE OF PARAPET ON WING WALLS)



SUPERSTRUCTURE

ARCHITECTURAL TREATMENT AND CONCRETE STAINING DETAILS

SEE SPECIAL PROVISIONS

1. FEDERAL STANDARD COLOR NUMBER 36424 (MEDIUM GRAY).
2. FEDERAL STANDARD COLOR NUMBER 30372 (SAND). NOTE: APPLY TO FLAT SURFACE ONLY (NOT BEVELS).

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-37-154

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QUANTITIES AND NOTES

SHEET 3 OF 21

988

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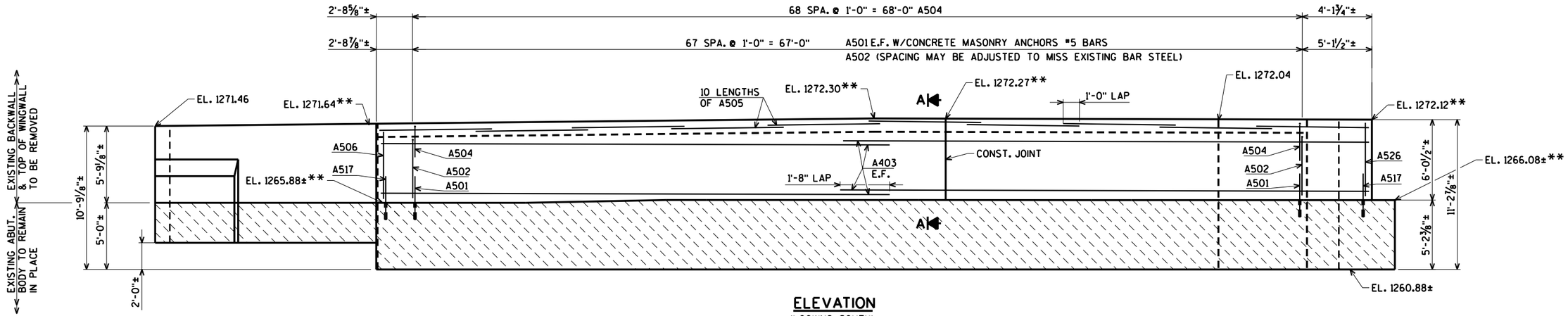
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7/30/2012

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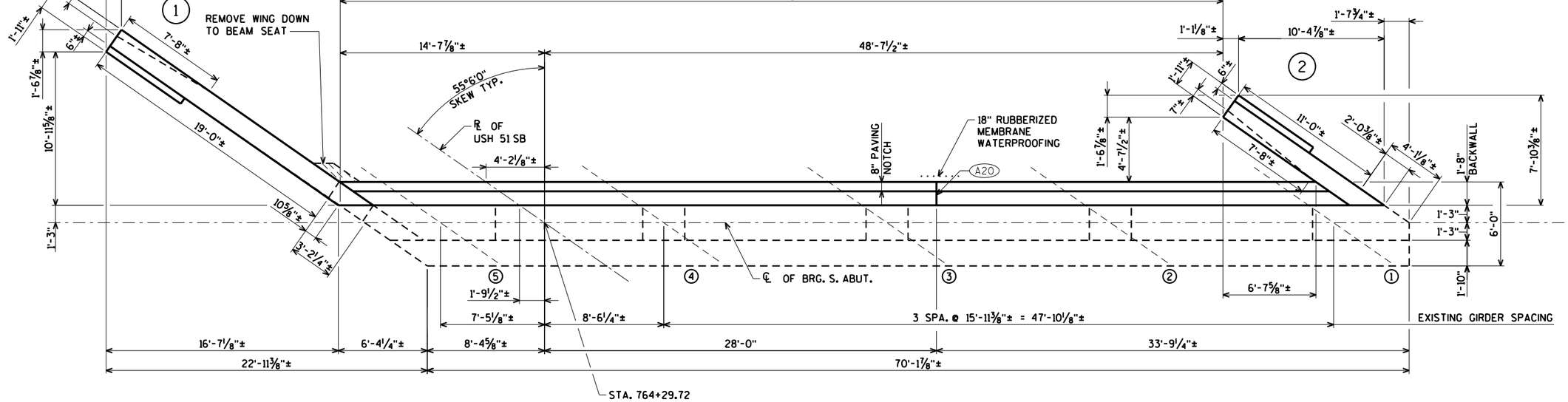
STATE PROJECT NUMBER
1170-01-70

**ELEVATIONS GIVEN AT F.F. OF BACKWALL.



ELEVATION
(LOOKING SOUTH)

FOR SECTIONS "A" SEE SHEET 7.



PLAN

A20 VERT. CONST. JOINT - KEYWAY FORMED BY A SURFACE BEVELED 2"X8". BEVEL EXPOSED EDGE ¾".

E.F. DENOTES EACH FACE

F.F. DENOTES FRONT FACE

WORK THIS SHEET WITH SHEETS 5 - 7.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-37-154

DRAWN BY CJM | PLANS CK'D. KLW

SOUTH ABUTMENT

SHEET 4 OF 21
989

ORIGINAL PLANS PREPARED BY
AYRES ASSOCIATES
3433 Oakwood Hills Parkway
Eau Claire, WI 54701
www.AyresAssociates.com

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B-37-154SA.DGN

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8

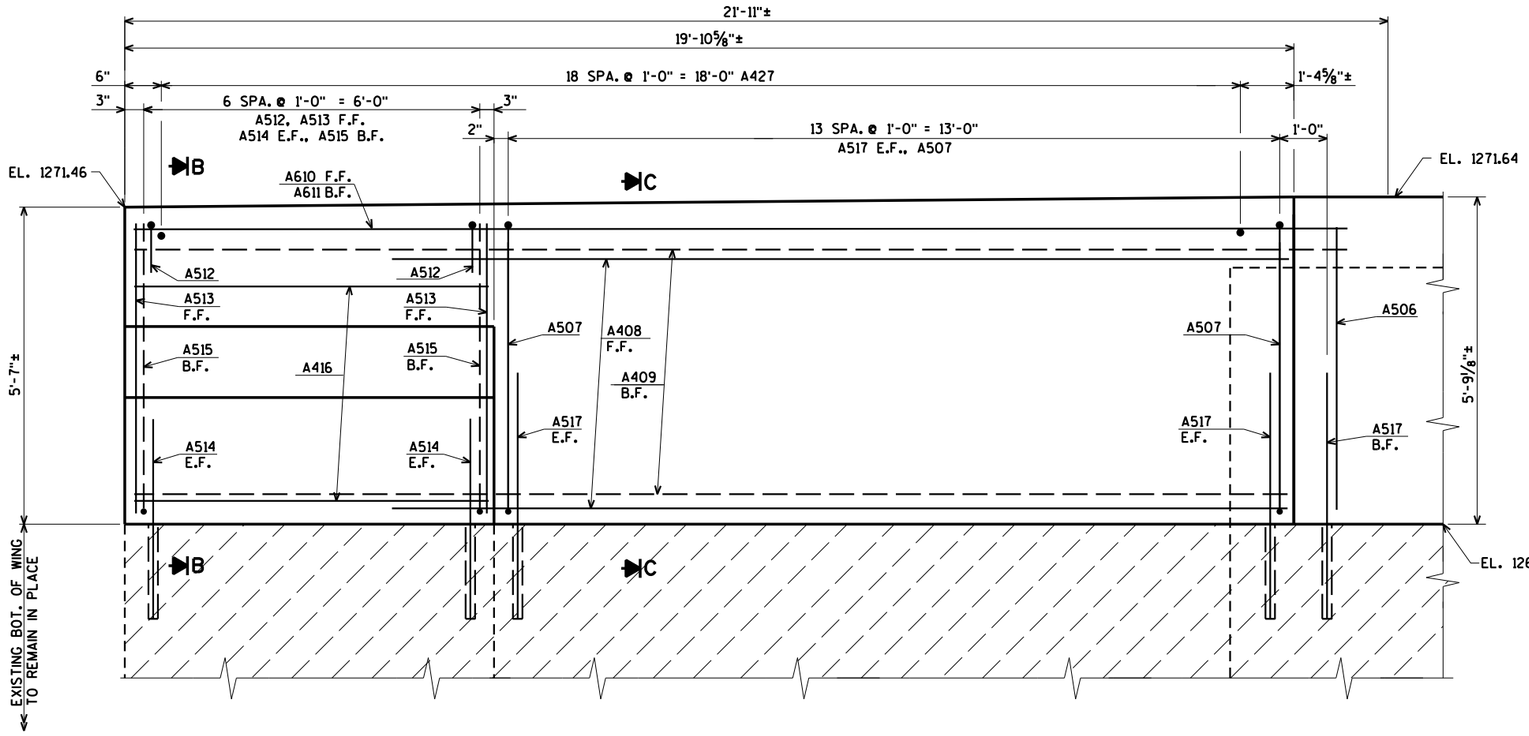
7/30/2012

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STATE PROJECT NUMBER

1170-01-70

SLOPED FACE PARAPET LF
MODIFIED NOT SHOWN.
FOR DETAILS SEE SHEET 21.



ELEVATION WING 1

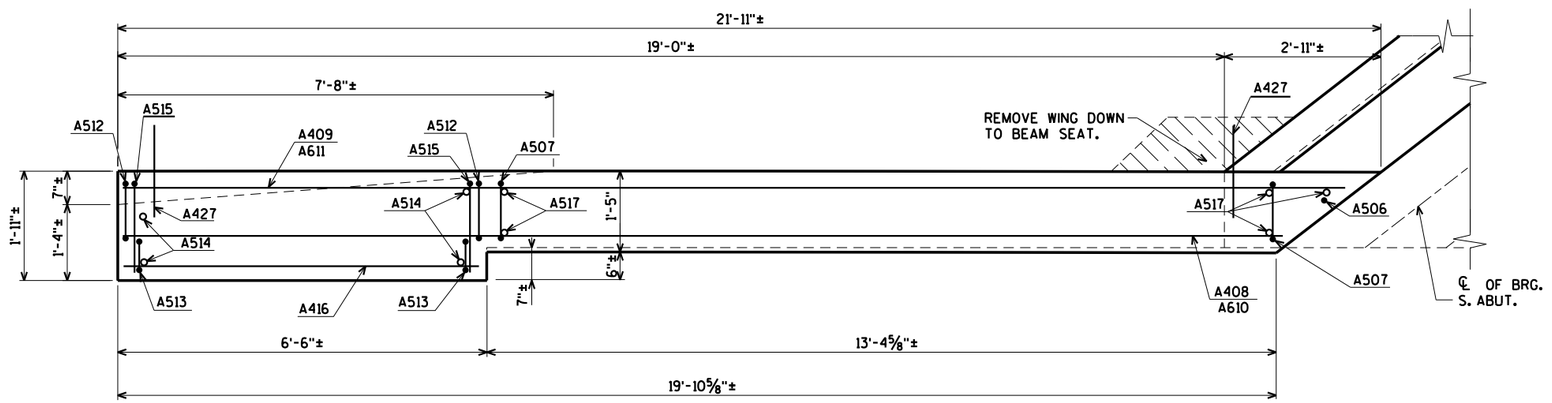
● STRIKE OFF AS SHOWN AND LEAVE ROUGH.

(W90) 18" RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACK FACE OF ABUTMENT.

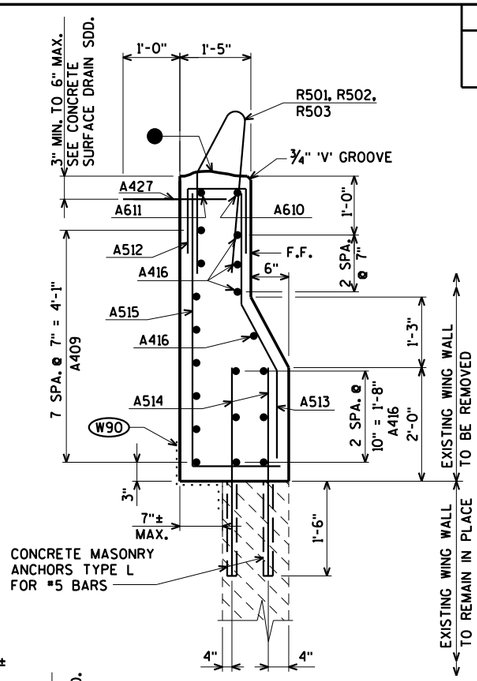
F.F. DENOTES FRONT FACE

B.F. DENOTES BACK FACE

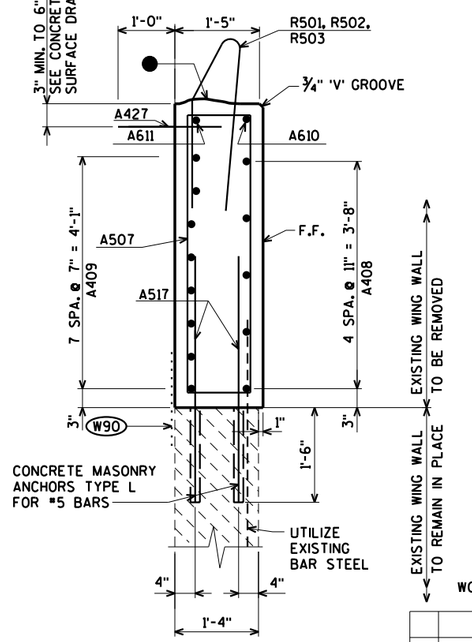
E.F. DENOTES EACH FACE



PLAN - WING 1



SECTION B



SECTION C

WORK THIS SHEET WITH SHEETS 4, 6 & 7.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-37-154

DRAWN BY CJM | PLANS CK'D. KLW

SOUTH ABUTMENT WING 1 DETAILS

SHEET 5 OF 21
990

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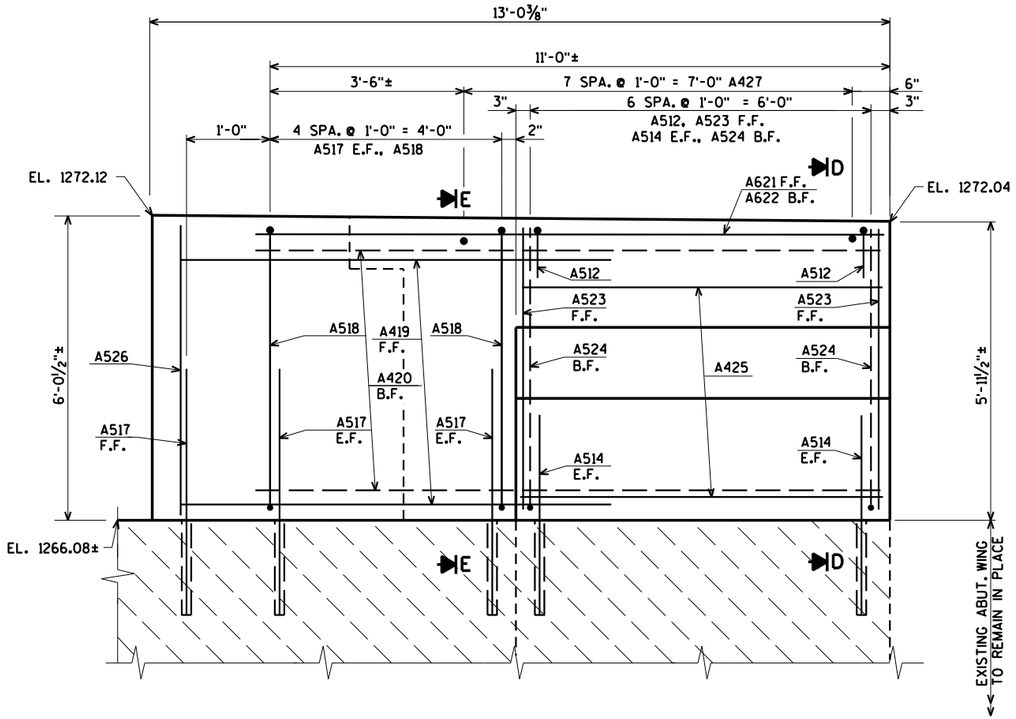
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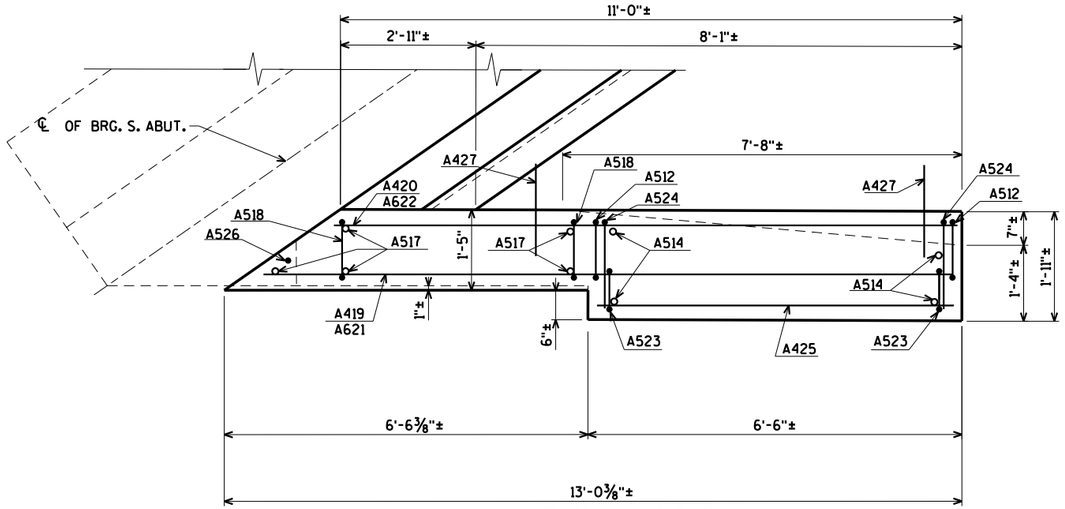
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7/30/2012

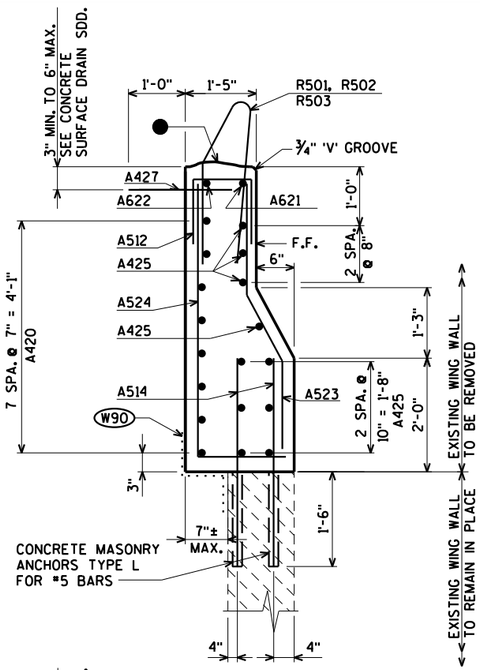
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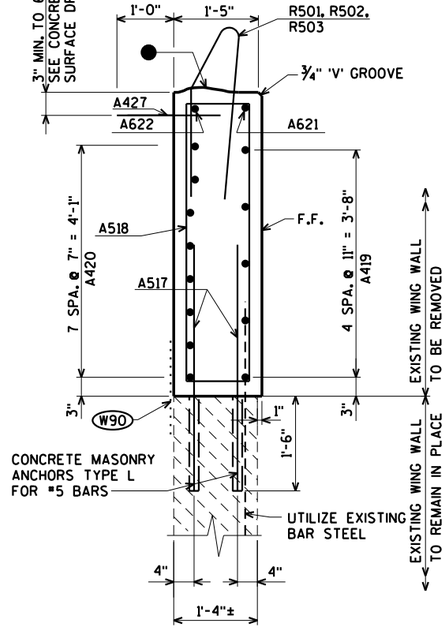
ELEVATION WING 2



PLAN - WING 2



SECTION D



SECTION E

STATE PROJECT NUMBER

1170-01-70

SLOPED FACE PARAPET LF MODIFIED NOT SHOWN. FOR DETAILS SEE SHEET 21.

● STRIKE OFF AS SHOWN AND LEAVE ROUGH.

(W90) 18" RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACK FACE OF ABUTMENT.

F.F. DENOTES FRONT FACE

B.F. DENOTES BACK FACE

E.F. DENOTES EACH FACE

WORK THIS SHEET WITH SHEETS 4, 5 & 7.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-37-154

DRAWN BY CJM | PLANS CK'D. KLW

SOUTH ABUTMENT
WING 2 DETAILS

SHEET 6 OF 21
991

ORIGINAL PLANS PREPARED BY
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7/30/2012

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STATE PROJECT NUMBER

1170-01-70

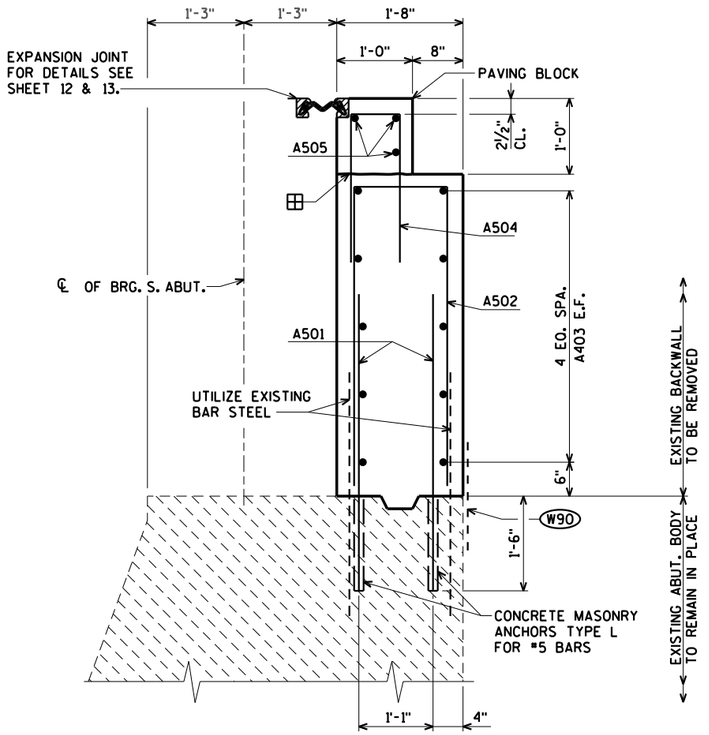
(W90) 18" RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACK FACE OF ABUTMENT.

⊞ CONST. JOINT - POUR CONCRETE ABOVE THIS JOINT AFTER SUPERSTRUCTURE IS IN PLACE. STRIKE OFF AND LEAVE ROUGH.

F.F. DENOTES FRONT FACE

B.F. DENOTES BACK FACE

E.F. DENOTES EACH FACE



SECTION A

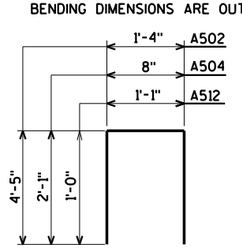
FOR LOCATION OF SECTION "A" SEE SHEET 4

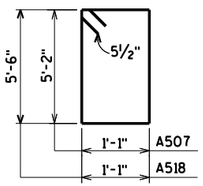
BILL OF BARS

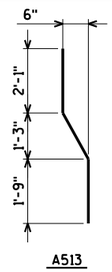
WEIGHTS INCLUDE PARAPET STEEL SHOWN ON SHEET 21.

BAR. NO.	COATED BAR	NO. REQ'D.	LENGTH	BENT BAR	BUNDLED BAR	SERIES	4,310# COATED LOCATION
A501	X	136	4-1				BACKWALL VERT. DOWELS E.F.
A502	X	68	9-11	X			BACKWALL VERT.
A403	X	20	38-2				BACKWALL HORIZ.
A504	X	69	4-7	X			BACKWALL ℄ PAVING BLOCK VERT.
A505	X	30	8-5				PAVING BLOCK HORIZ.
A506	X	1	5-3				WING 1 VERT. ℄ ABUT.
A507	X	14	13-0	X			WING 1 VERT.
A408	X	5	15-2				WING 1 HORIZ. F.F.
A409	X	8	21-2				WING 1 HORIZ. B.F.
A610	X	1	19-8				WING 1 HORIZ. F.F.
A611	X	1	21-2				WING 1 HORIZ. B.F.
A512	X	14	2-10	X			WINGS 1 & 2 VERT.
A513	X	7	5-2	X			WING 1 VERT. F.F.
A514	X	14	3-6				WINGS 1 & 2 VERT. DOWELS E.F.
A515	X	7	6-6	X			WING 1 VERT. B.F.
A416	X	10	6-2				WING 1 HORIZ. F.F.
A517	X	38	4-1				WINGS 1 & 2 VERT. DOWEL E.F.
A518	X	5	13-8	X			WING 2 VERT.
A419	X	5	7-10				WING 2 HORIZ. F.F.
A420	X	8	10-9				WING 2 HORIZ. B.F.
A621	X	1	12-4				WING 2 HORIZ. F.F.
A622	X	1	10-9				WING 2 HORIZ. B.F.
A523	X	7	5-6	X			WING 2 VERT. F.F.
A524	X	7	6-11	X			WING 2 VERT. B.F.
A425	X	10	6-2				WING 2 HORIZ. F.F.
A526	X	1	5-6				WING 2 VERT. ℄ ABUT.
A427	X	27	2-0				WING 1 & 2 DOWELS

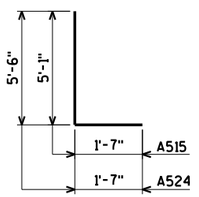
BENDING DIMENSIONS ARE OUT TO OUT OF BARS.

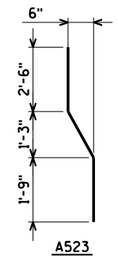






A513





A523

WORK THIS SHEET WITH SHEETS 4 - 6.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-37-154

DRAWN BY CJM | PLANS CK'D. KLW

SOUTH ABUTMENT DETAILS

SHEET 7 OF 21
992

ORIGINAL PLANS PREPARED BY
AYRES ASSOCIATES
3433 Oakwood Hills Parkway
Eau Claire, WI 54701
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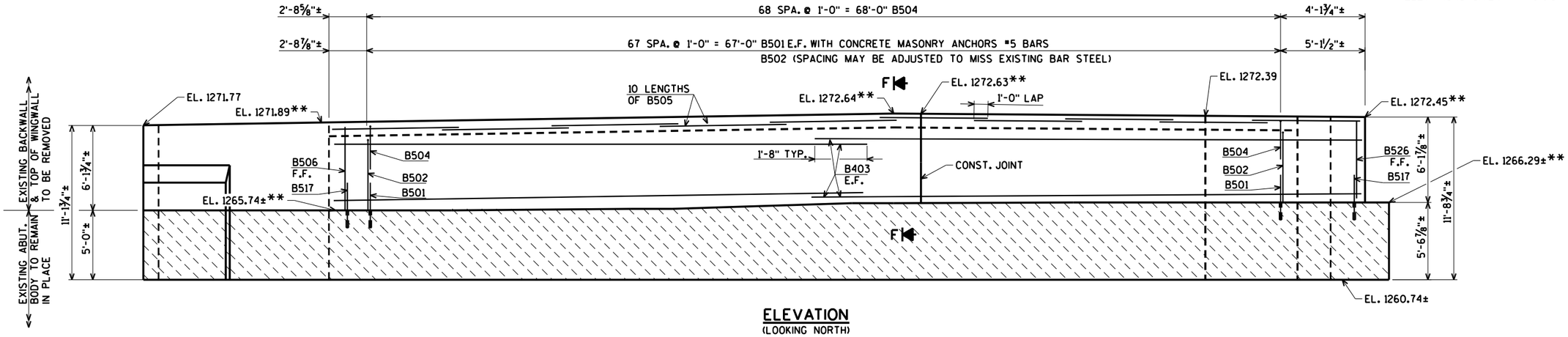
7/30/2012

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STATE PROJECT NUMBER

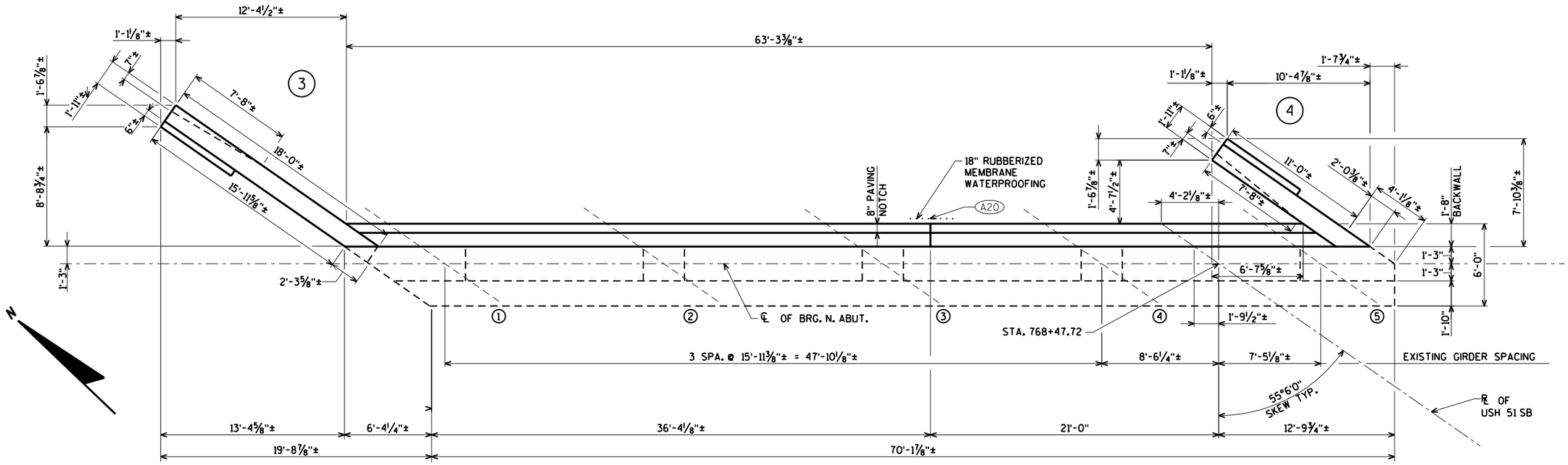
1170-01-70

**ELEVATIONS GIVEN AT F.F. OF BACKWALL.



ELEVATION
(LOOKING NORTH)

FOR SECTION "F" SEE SHEET 11.



PLAN

WORK THIS SHEET WITH SHEETS 9 - 11.

A20 VERT. CONST. JOINT - KEYWAY FORMED BY A SURFACE BEVELED 2"X8". BEVEL EXPOSED EDGE ¾".

E.F. DENOTES EACH FACE

F.F. DENOTES FRONT FACE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-37-154

DRAWN BY CJM | PLANS CK'D. KLW

NORTH ABUTMENT

SHEET 8 OF 21
993

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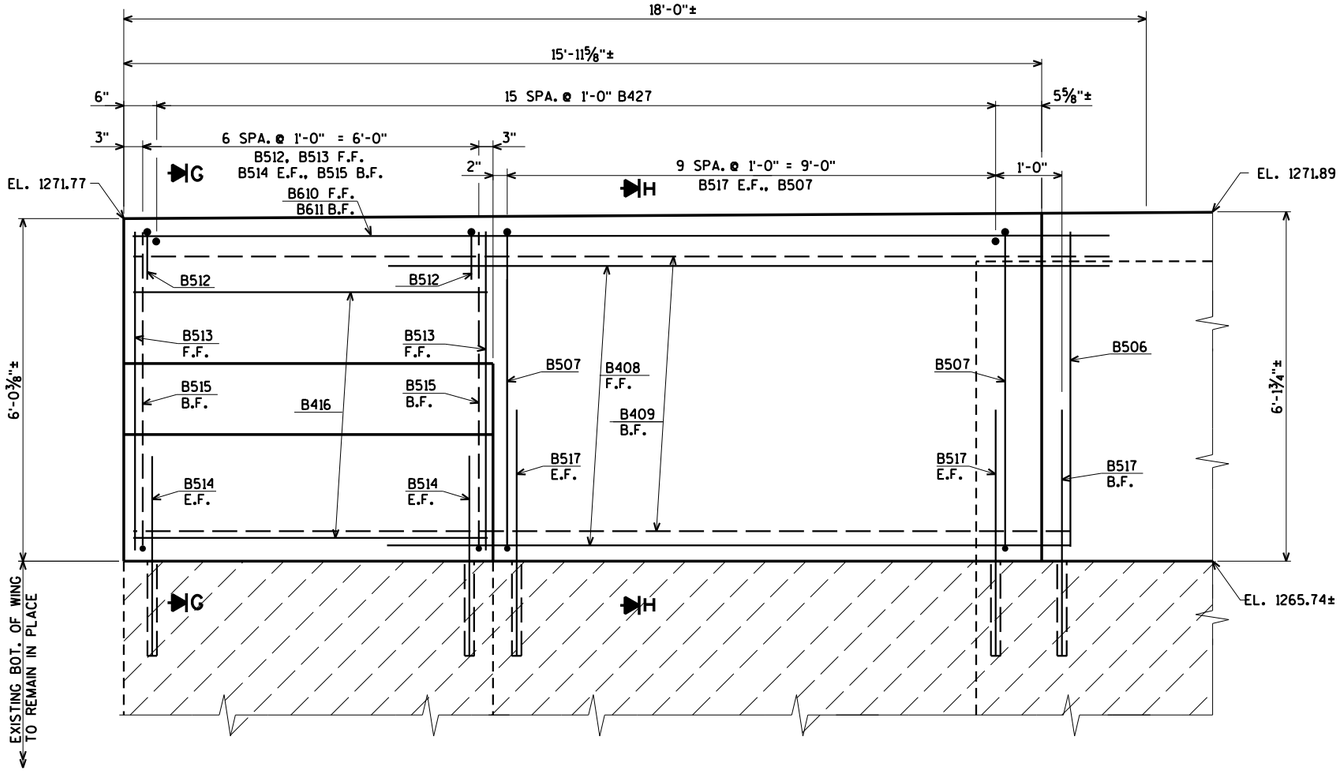
7/30/2012

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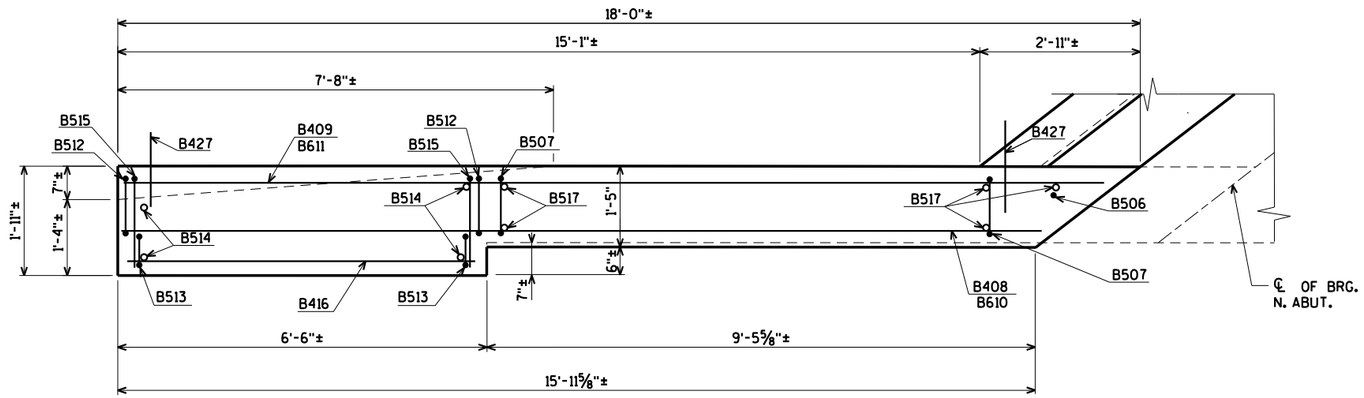
STATE PROJECT NUMBER

1170-01-70

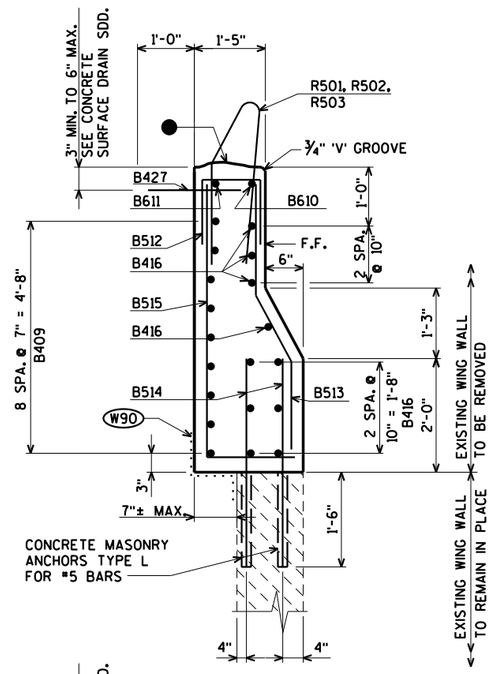
SLOPED FACE PARAPET LF MODIFIED NOT SHOWN. FOR DETAILS SEE SHEET 21.



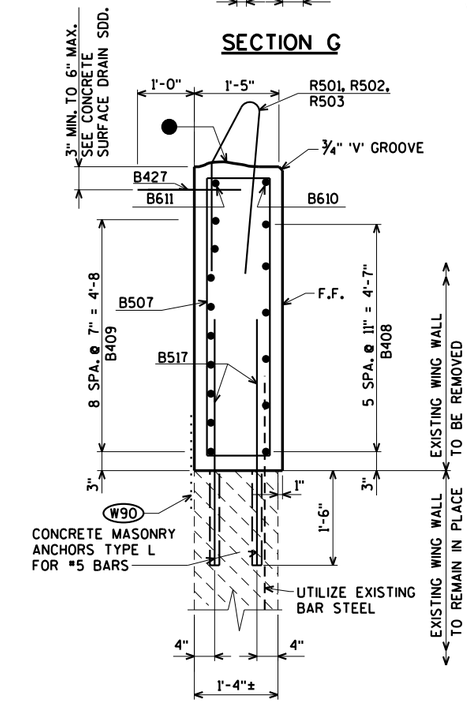
ELEVATION WING 3



PLAN - WING 3



SECTION G



SECTION H

● STRIKE OFF AS SHOWN AND LEAVE ROUGH.

(W90) 18" RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACK FACE OF ABUTMENT.

F.F. DENOTES FRONT FACE

B.F. DENOTES BACK FACE

E.F. DENOTES EACH FACE

WORK THIS SHEET WITH SHEETS 8, 10 & 11.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-37-154

DRAWN BY CJM | PLANS CK'D. KLW

NORTH ABUTMENT WING 3 DETAILS

SHEET 9 OF 21
994

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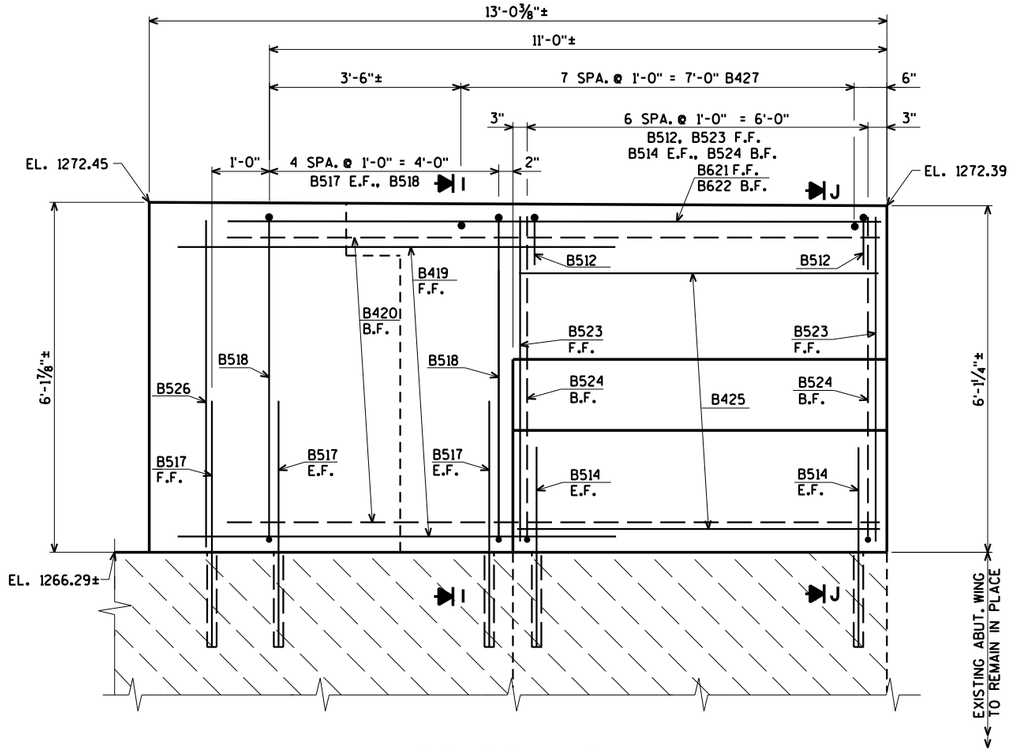
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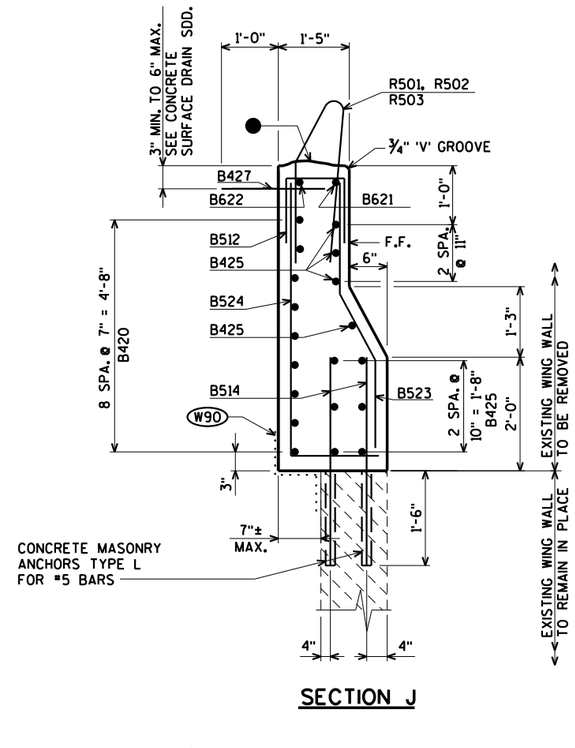
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7/30/2012

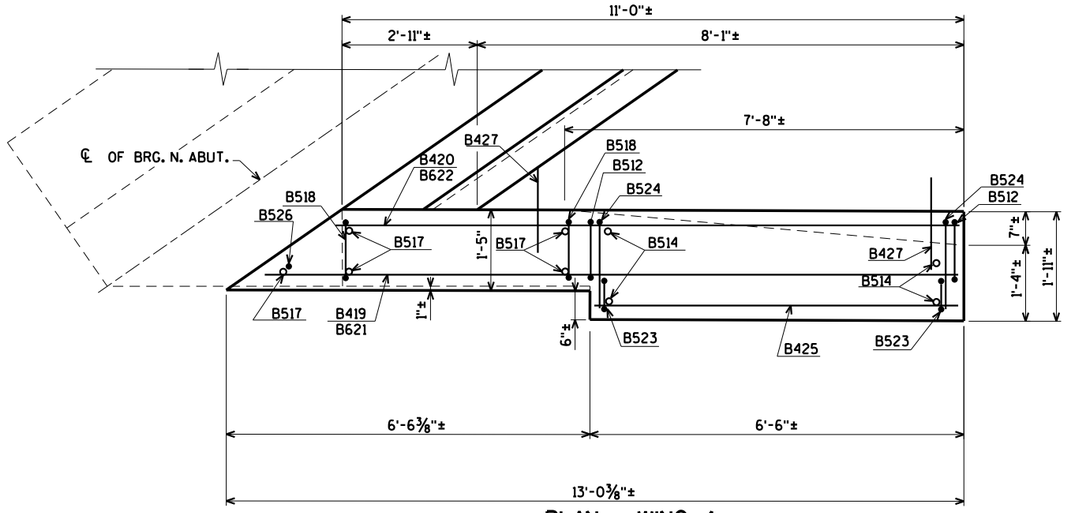
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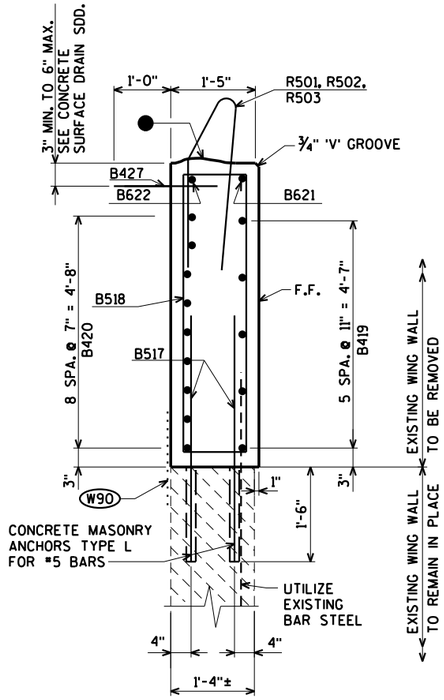
ELEVATION WING 4



SECTION J



PLAN - WING 4



SECTION I

STATE PROJECT NUMBER

1170-01-70

SLOPED FACE PARAPET LF MODIFIED NOT SHOWN. FOR DETAILS SEE SHEET 21.

● STRIKE OFF AS SHOWN AND LEAVE ROUGH.

(W90) 18" RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACK FACE OF ABUTMENT.

F.F. DENOTES FRONT FACE

B.F. DENOTES BACK FACE

E.F. DENOTES EACH FACE

WORK THIS SHEET WITH SHEETS 8, 9 & 11.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-37-154

DRAWN BY CJM | PLANS CK'D. KLW

NORTH ABUTMENT
WING 4 DETAILS

SHEET 10 OF 21
995

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7/30/2012

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STATE PROJECT NUMBER

1170-01-70

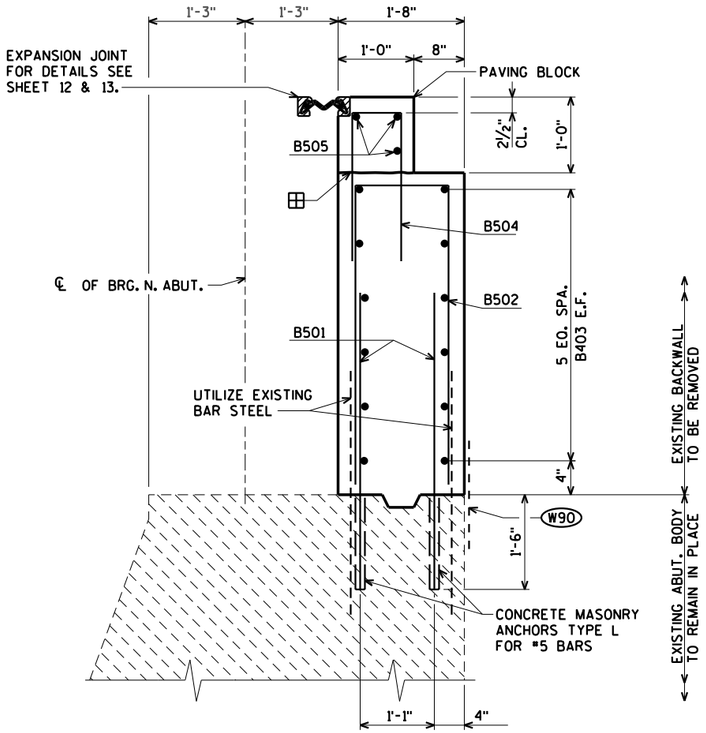
(W90) 18" RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACK FACE OF ABUTMENT.

⊞ CONST. JOINT - POUR CONCRETE ABOVE THIS JOINT AFTER SUPERSTRUCTURE IS IN PLACE. STRIKE OFF AND LEAVE ROUGH.

F.F. DENOTES FRONT FACE

B.F. DENOTES BACK FACE

E.F. DENOTES EACH FACE



SECTION F

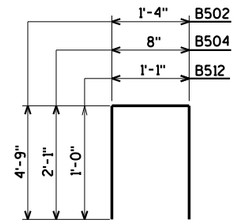
FOR LOCATION OF SECTION "F" SEE SHEET 8.

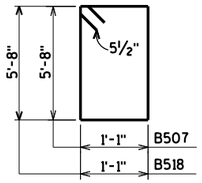
BILL OF BARS

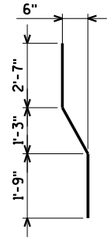
WEIGHTS INCLUDE PARAPET STEEL SHOWN ON SHEET 21.

BAR. NO.	COATED BAR	NO. REQ'D.	LENGTH	BENT BAR	BUNDLED BAR	SERIES	4,300# COATED LOCATION
B501	X	136	4-1				BACKWALL VERT. DOWELS E.F.
B502	X	68	10-7	X			BACKWALL VERT.
B403	X	24	38-2				BACKWALL HORIZ.
B504	X	69	4-7	X			BACKWALL ℄ PAVING BLOCK VERT.
B505	X	30	8-5				PAVING BLOCK HORIZ.
B506	X	1	5-8				WING 3 VERT. ℄ ABUT.
B507	X	10	14-0	X			WING 3 VERT.
B408	X	6	11-3				WING 3 HORIZ. F.F.
B409	X	9	17-3				WING 3 HORIZ. B.F.
B610	X	1	15-9				WING 3 HORIZ. F.F.
B611	X	1	17-3				WING 3 HORIZ. B.F.
B512	X	14	2-10	X			WINGS 3 & 4 VERT.
B513	X	7	5-8	X			WING 3 VERT. F.F.
B514	X	14	3-6				WINGS 3 & 4 VERT. DOWELS E.F.
B515	X	7	7-0	X			WING 3 VERT. B.F.
B416	X	10	6-2				WING 3 HORIZ. F.F.
B517	X	30	4-1				WINGS 3 & 4 VERT. DOWEL E.F.
B518	X	5	14-0	X			WING 4 VERT.
B419	X	6	7-10				WING 4 HORIZ. F.F.
B420	X	9	10-9				WING 4 HORIZ. B.F.
B621	X	1	12-4				WING 4 HORIZ. F.F.
B622	X	1	10-9				WING 4 HORIZ. B.F.
B523	X	7	5-8	X			WING 4 VERT. F.F.
B524	X	7	7-0	X			WING 4 VERT. B.F.
B425	X	10	6-2				WING 4 HORIZ. F.F.
B526	X	1	5-9				WING 4 VERT. ℄ ABUT.
B427	X	24	2-0				WING 3 & 4 DOWELS

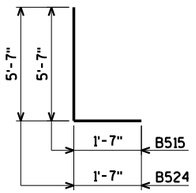
BENDING DIMENSIONS ARE OUT TO OUT OF BARS.

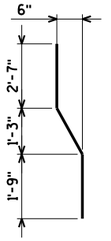






B513





B523

WORK THIS SHEET WITH SHEETS 8 - 10.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-37-154

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NORTH ABUTMENT DETAILS

SHEET 11 OF 21
996

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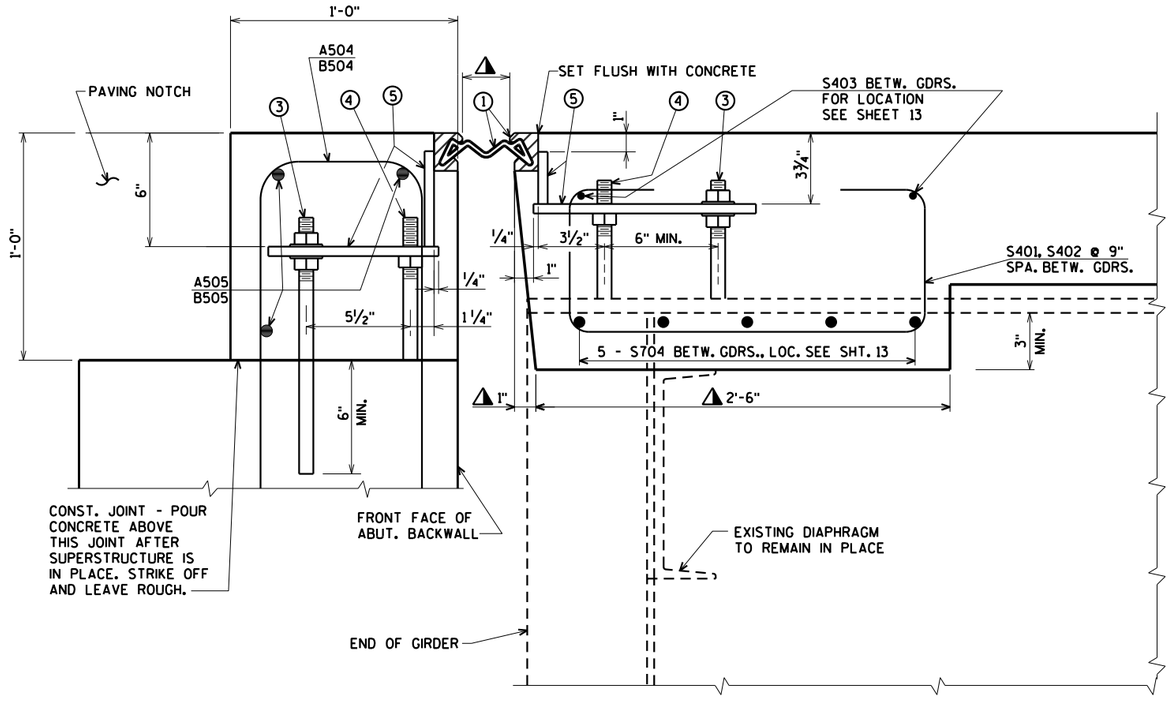
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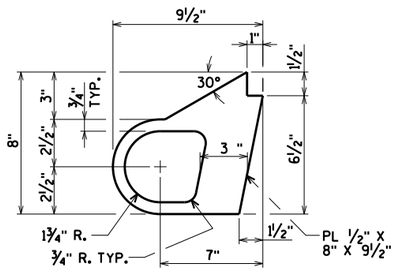
STATE PROJECT NUMBER

1170-01-70



TYPICAL SECTION THRU JOINT

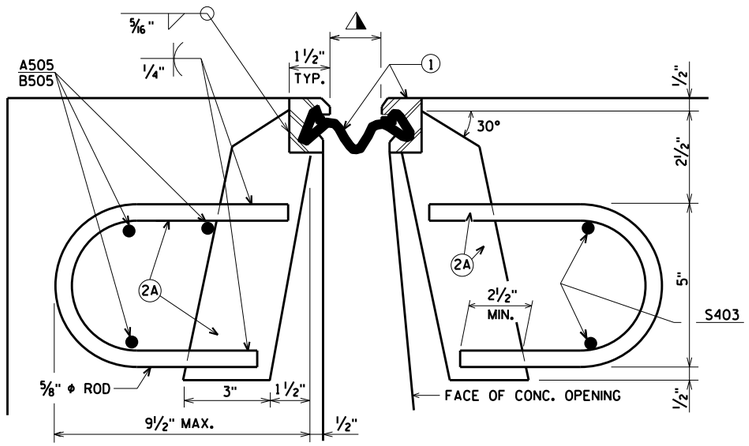
NORMAL TO ℄ SUBSTRUCTURE



ALTERNATE STRIP SEAL ANCHOR

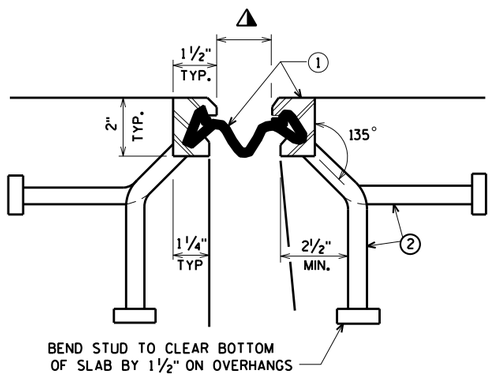
LEGEND

1. NEOPRENE STRIP SEAL (4 - INCH) & STEEL EXTRUSIONS. SET JOINT OPENING AT 1¾".
2. STUDS ⅝" ϕ X 6⅜" LONG AT 6" ALTERNATE CENTERS. WELD TO EXTRUSIONS & BEND AS SHOWN AFTER WELDING.
2A. ½" THICK ANCHOR PLATE WITH ⅝"ϕ ROD (OR ALTERNATE STRIP SEAL ANCHOR). WELD ROD TO ANCHOR PLATE. WELD ANCHOR PLATE TO NO. 1 AT 1'-6" CTRS. BETWEEN GIRDERS.
3. ¾" ϕ THREADED ROD WITH 2 NUTS AND PLATE WASHERS. WELD THREADED ROD TO TOP FLANGE OR ATTACH BY BOLTING THRU FLANGE. ON ABUTMENT SIDE, GROUT THREADED ROD INTO FIELD DRILLED HOLES IN ABUTMENT BACKWALL AS SHOWN.
4. ¾"ϕ THREADED ROD WITH NUT. TACK WELD NUT TO NO. 5.
5. FABRICATE SUPPORT FROM 3" X ½" BAR AS SHOWN OR EQUIVALENT, ONE PER GIRDER PER SIDE. FIELD OR SHOP WELD TO NO. 1. IF FIELD WELDED, COVER WELDED AREAS WITH EPOXY-COATING MATERIAL. PROVIDE 1½" ϕ HOLE FOR NO. 3 & 1" ϕ HOLE FOR NO. 4.
6. GALVANIZED PLATE ⅜" x 10½" x 3'-0" LONG WITH HOLES FOR #7. BEND AS SHOWN.
7. ¾" ϕ x 1½" STAINLESS STEEL SOCKET FLAT HEAD SCREWS WITH ANTI-SEIZE LUBRICANT. PLACE IN COUNTERSUNK HOLES. RECESS 1/16" BELOW PLATE SURFACE.
8. ¾" ϕ x 4" GALV. HEX HEAD BOLT. BEND 45°.
9. ¾" ϕ x 2 ¼" GALV. THREADED COUPLING.
10. 1" x 5" SLOTTED COUNTERSUNK HOLE FOR NO. 7. PLACE SLOT PARALLEL TO DIRECTION OF MOVEMENT.



SECTION THRU JOINT

ROADWAY TRAFFIC AREA BETWEEN EXTERIOR GIRDERS.



SECTION THRU JOINT

EXTERIOR GIRDER TO EDGE OF SLAB & AT PARAPETS.

GENERAL NOTES

ONE FIELD SPLICE PERMITTED IN STEEL EXTRUSIONS. IF USED, DETAILS SHALL BE SUBMITTED FOR APPROVAL. NO SPLICING PERMITTED IN NEOPRENE STRIP SEAL.

AFTER FABRICATION, BUT BEFORE SHIPMENT, STRAIGHTEN STEEL EXTRUSIONS SUCH THAT THEY SHALL BE FREE FROM WARP, TWIST & SWEEP.

FABRICATOR SHALL PROVIDE MEANS OF KEEPING GALVANIZED EXTRUSIONS CLEAN & SMOOTH DURING SHIPMENT AND PRIOR TO APPLYING LUBRICANT ADHESIVE FOR NEOPRENE GLAND INSTALLATION.

SANDBLAST PLATES & EXTRUSIONS AFTER FABRICATION IN ACCORDANCE WITH SSPC SP. NO. 6 "COMMERICAL BLAST CLEANING. AFTER BLAST CLEANING THE PLATES & EXTRUSIONS SHALL BE HOT DIPPED GALVANIZED.

ANCHOR SYSTEM NO. 8 & NO. 9 SHALL CONFORM TO ASTM A307 & SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A153 CLASS C & D.

STRIP SEAL EXPANSION JOINT ASSEMBLY, INCLUDING ANCHOR STUDS & HARDWARE WILL BE PAID FOR AT THE LUMP SUM PRICE BID FOR "EXPANSION DEVICE B-37-154".

⚠ DIMENSION IS TAKEN NORMAL TO CENTERLINE OF ABUTMENT.

WORK THIS SHEET WITH SHEET 13.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-37-154

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EXPANSION JOINT DETAILS ABUTMENTS

SHEET 12 OF 21
997

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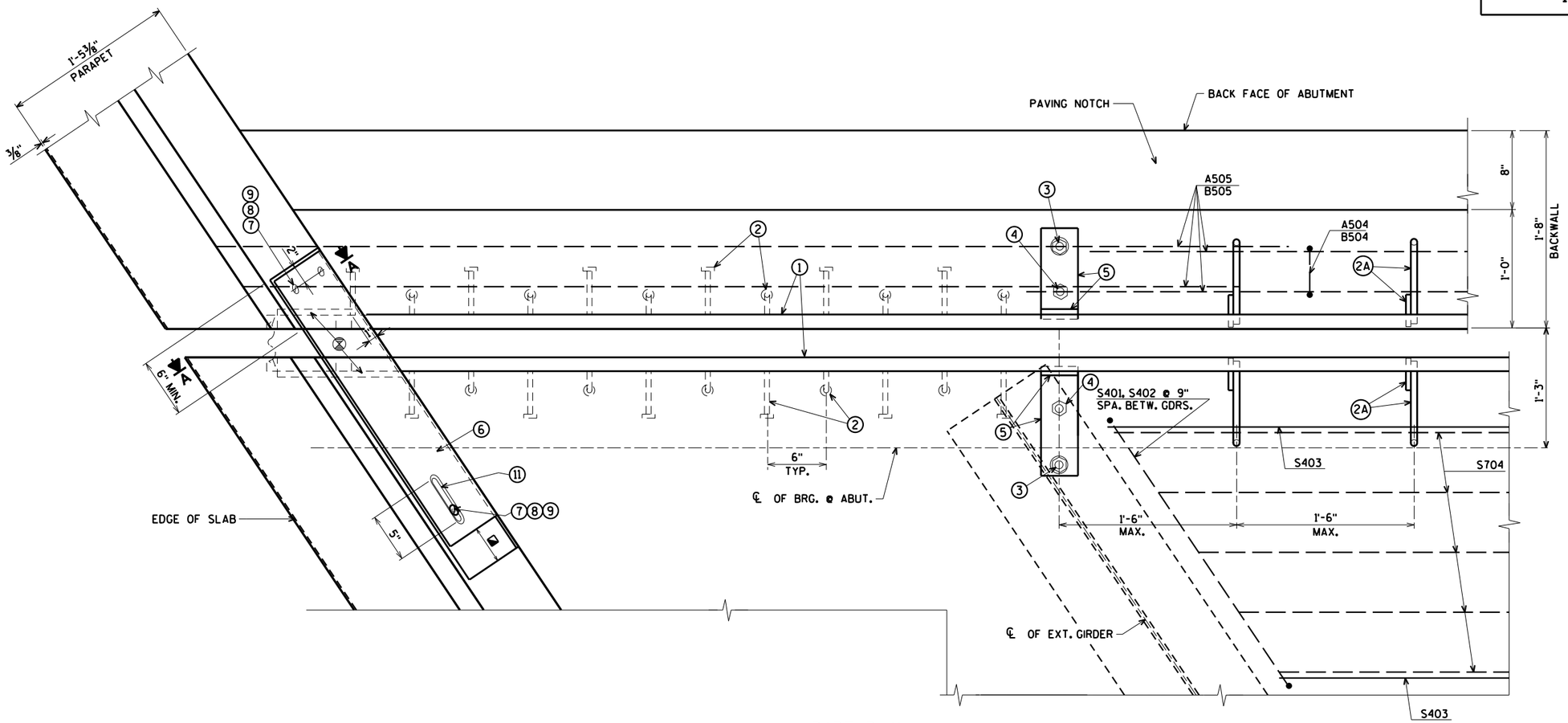
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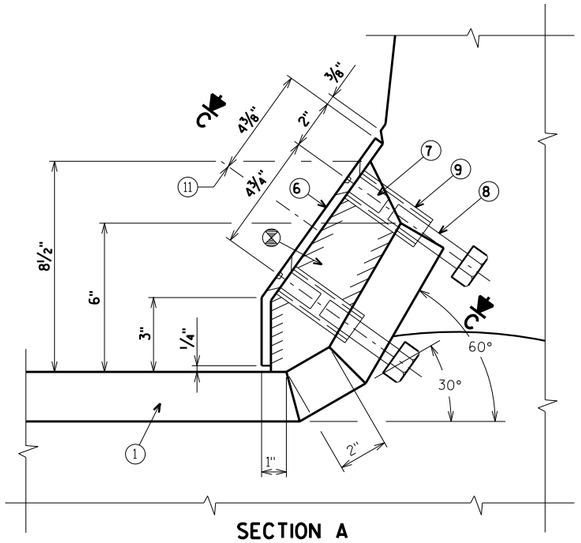
STATE PROJECT NUMBER

1170-01-70

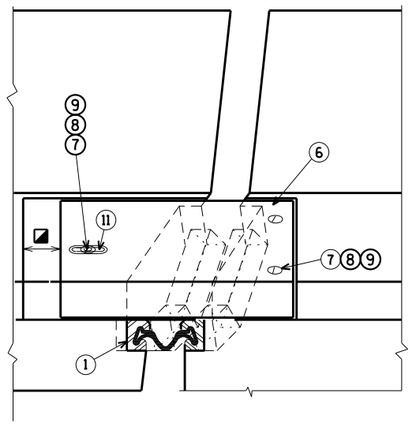


PART PLAN

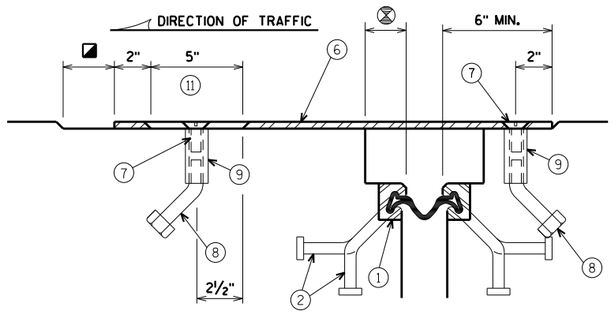
(WING 3 SHOWN, OTHERS SIMILAR)



SECTION A



VIEW OF PARAPET PLATES FROM ROADWAY



SECTION C

⊠ BLOCK OUT CONCRETE 2" EACH SIDE OF JOINT OPENING.

◪ JOINT OPENING DIM. ALONG SKEW PLUS ½".

WORK THIS SHEET WITH SHEET 12.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
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STRUCTURES DESIGN SECTION

STRUCTURE B-37-154

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EXPANSION JOINT DETAILS ABUTMENTS

SHEET 13 OF 21
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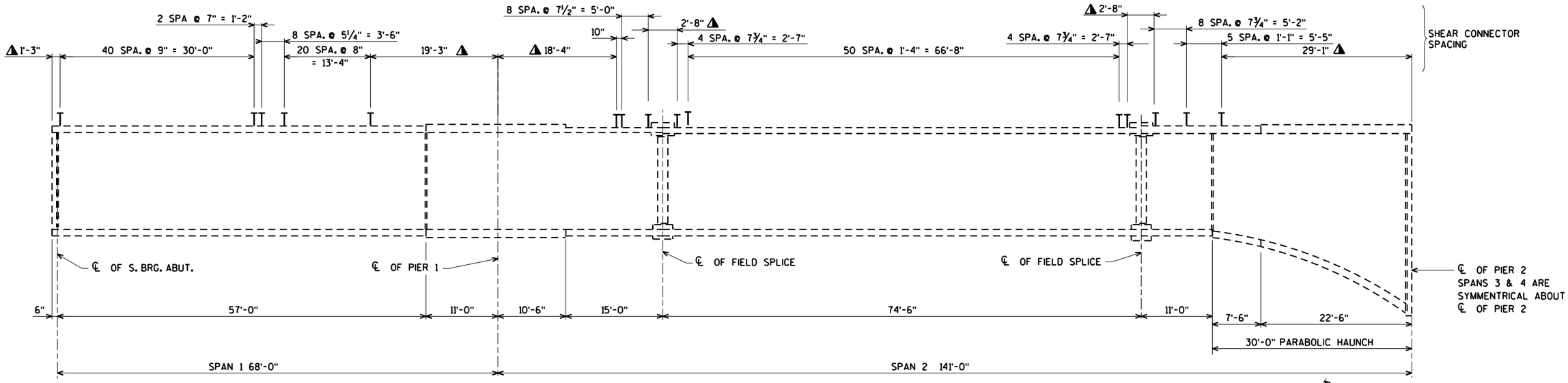
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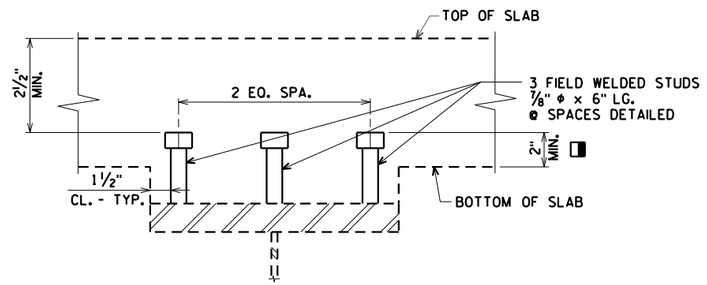
STATE PROJECT NUMBER

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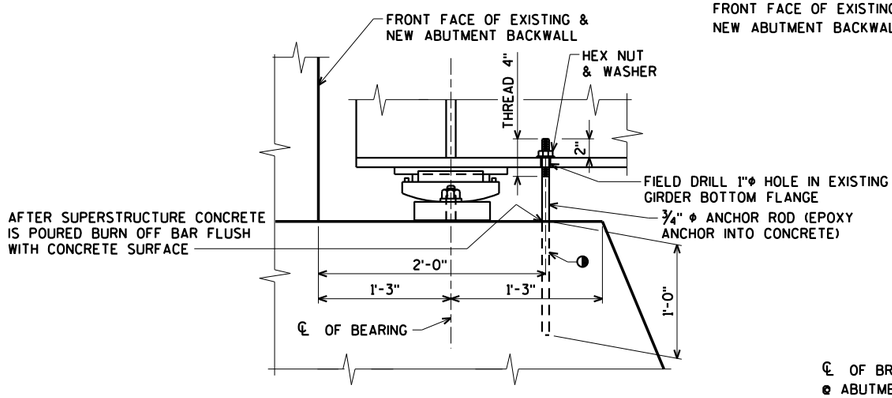
PART SHEAR CONNECTOR LAYOUT - GIRDERS 1 THRU 5

⚠ NO SHEAR CONNECTORS IN THIS AREA

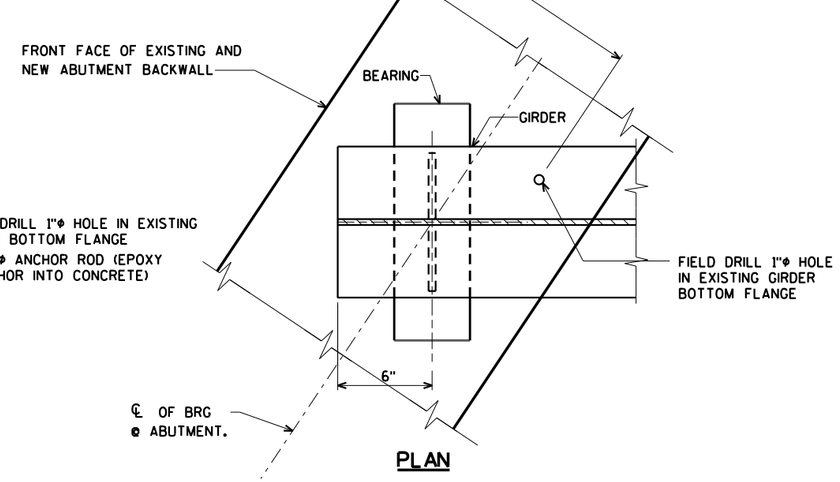


SHEAR CONNECTOR DETAIL

EXISTING GIRDERS



SECTION THRU ABUTMENT



PLAN

NOTE: THE EXISTING GIRDERS HAVE 3 - ⅞" Φ x 4" LONG STUDS. LEAVE EXISTING SHEAR LUGS OR STUDS IN PLACE. IF THE NEW SHEAR STUD LOCATIONS ARE LOCATED AT THESE SHEAR LUGS OR STUDS, SHIFT THE SHEAR STUD SPACING ACCORDINGLY.

◨ USE REINFORCEMENT IN THE HAUNCHES WHERE THE 2" MIN EMBEDMENT INTO THE DECK CANNOT BE OBTAINED. SEE SUPERSTRUCTURE SHEETS FOR DETAILS.

TEMPORARY HOLD DOWN DEVICE DETAIL

◑ PLACE ONE ANCHOR ROD PER GIRDER AT ABUTMENT WHERE SLAB POUR TERMINATES. LOCATE 4" (NORMAL) OFF ℄ OF GIRDER. ANCHOR ROD, NUT, WASHER & DRILLED HOLE IN GIRDER FLANGE SHALL BE PAID FOR AS "MASONRY ANCHORS TYPE S ¾-INCH". MINIMUM PULLOUT CAPACITY OF 27 KIPS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-37-154

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EXISTING GIRDER ELEVATION

SHEET 14 OF 21
999

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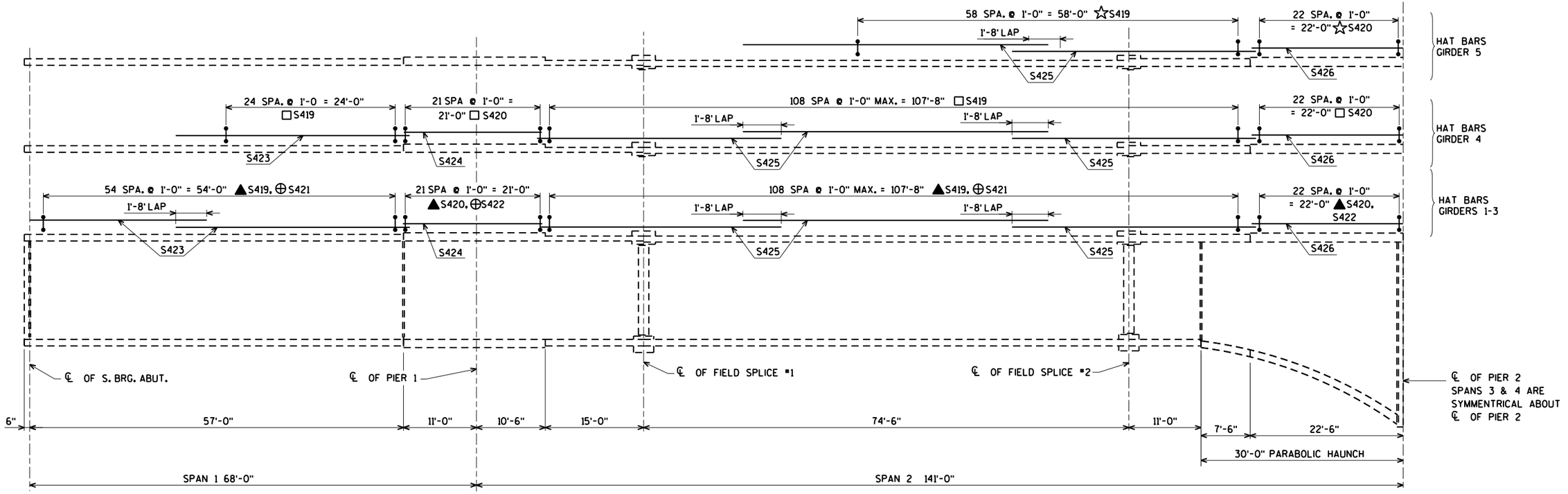
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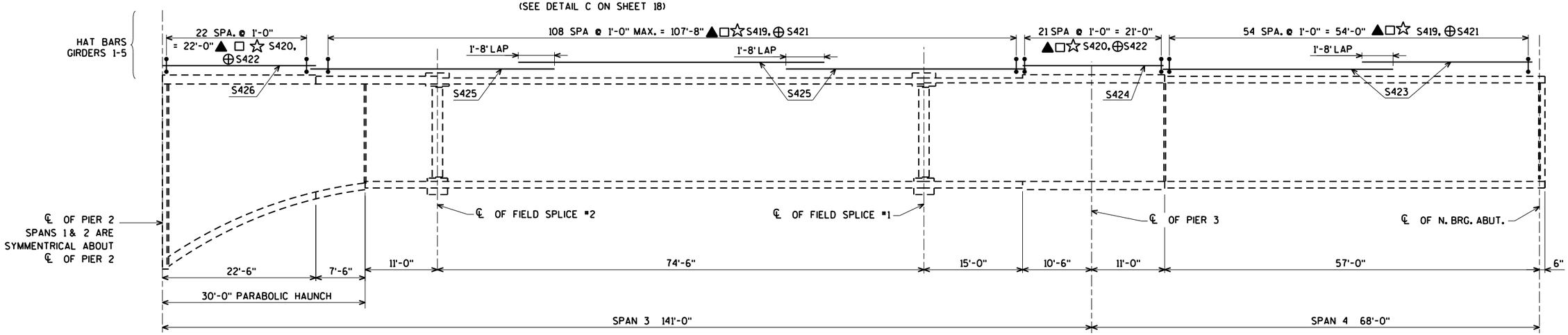
STATE PROJECT NUMBER

1170-01-70



PART HAT BAR LAYOUT - GIRDERS 1 THRU 5

(SEE DETAIL C ON SHEET 18)



PART HAT BAR LAYOUT - GIRDERS 1 THRU 5

(SEE DETAIL C ON SHEET 18)

NOTE:

▲ GIRDER 1, 2
⊕ GIRDER 3
□ GIRDER 4
☆ GIRDER 5

NO.	DATE	REVISION	BY

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STRUCTURES DESIGN SECTION

STRUCTURE B-37-154

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HAUNCH RENIFORCEMENT DETAILS

SHEET 15 OF 21
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STATE PROJECT NUMBER

1170-01-70

ELEVATIONS AT TOP OF DECK

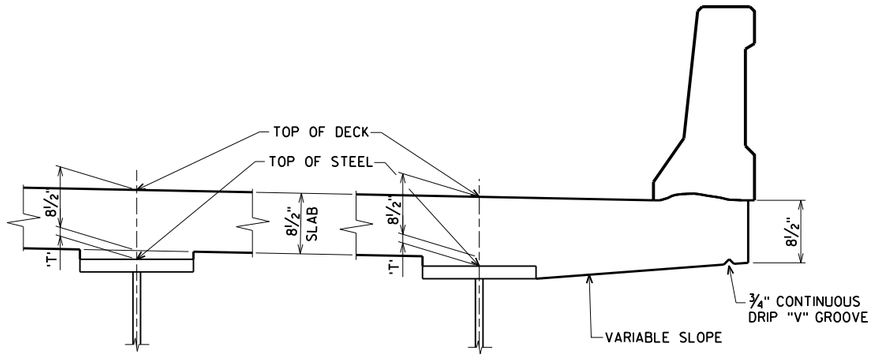
		℄ BRG. S. ABUT.	0.1 PT.	0.2 PT.	0.3 PT.	0.4 PT.	0.5 PT.	0.6 PT.	0.7 PT.	0.8 PT.	0.9 PT.	℄ OF PIER 1
SPAN 1	WEST EOD	1272.14	1272.19	1272.24	1272.29	1272.34	1272.38	1272.43	1272.47	1272.51	1272.54	1272.58
	GIRDER 1	1272.17	1272.22	1272.27	1272.32	1272.37	1272.42	1272.46	1272.50	1272.54	1272.58	1272.62
	GIRDER 2	1272.24	1272.30	1272.35	1272.41	1272.46	1272.51	1272.56	1272.60	1272.65	1272.69	1272.73
	GIRDER 3	1272.31	1272.37	1272.43	1272.49	1272.54	1272.59	1272.65	1272.69	1272.74	1272.79	1272.83
	CROWN PT.	1272.32	1272.38	1272.44	1272.50	1272.56	1272.61	1272.66	1272.71	1272.76	1272.81	1272.85
	GIRDER 4	1272.08	1272.15	1272.21	1272.27	1272.33	1272.39	1272.44	1272.50	1272.55	1272.60	1272.64
	REF. LINE	1271.92	1271.99	1272.05	1272.11	1272.17	1272.23	1272.29	1272.34	1272.40	1272.45	1272.50
	GIRDER 5	1271.77	1271.84	1271.91	1271.97	1272.03	1272.09	1272.15	1272.21	1272.26	1272.32	1272.37
	EAST EOD	1271.66	1271.73	1271.80	1271.87	1271.93	1271.99	1272.05	1272.11	1272.16	1272.22	1272.27

		℄ OF PIER 1	0.1 PT.	0.2 PT.	0.3 PT.	0.4 PT.	0.5 PT.	0.6 PT.	0.7 PT.	0.8 PT.	0.9 PT.	℄ OF PIER 2
SPAN 2	WEST EOD	1272.58	1272.65	1272.71	1272.76	1272.80	1272.84	1272.87	1272.89	1272.90	1272.90	1272.90
	GIRDER 1	1272.62	1272.69	1272.75	1272.81	1272.85	1272.89	1272.92	1272.95	1272.96	1272.97	1272.97
	GIRDER 2	1272.73	1272.81	1272.88	1272.94	1272.99	1273.04	1273.08	1273.11	1273.13	1273.14	1273.15
	GIRDER 3	1272.83	1272.92	1272.99	1273.06	1273.13	1273.18	1273.22	1273.26	1273.29	1273.31	1273.33
	CROWN PT.	1272.85	1272.94	1273.02	1273.09	1273.15	1273.21	1273.26	1273.30	1273.33	1273.35	1273.36
	GIRDER 4	1272.64	1272.74	1272.82	1272.90	1272.97	1273.03	1273.08	1273.12	1273.16	1273.19	1273.21
	REF. LINE	1272.50	1272.59	1272.68	1272.76	1272.84	1272.90	1272.96	1273.01	1273.05	1273.08	1273.11
	GIRDER 5	1272.37	1272.47	1272.56	1272.64	1272.72	1272.79	1272.85	1272.90	1272.95	1272.98	1273.01
	EAST EOD	1272.27	1272.37	1272.47	1272.55	1272.63	1272.70	1272.77	1272.82	1272.87	1272.91	1272.94

		℄ OF PIER 2	0.1 PT.	0.2 PT.	0.3 PT.	0.4 PT.	0.5 PT.	0.6 PT.	0.7 PT.	0.8 PT.	0.9 PT.	℄ OF PIER 3
SPAN 3	WEST EOD	1272.90	1272.89	1272.87	1272.84	1272.81	1272.76	1272.71	1272.65	1272.58	1272.51	1272.43
	GIRDER 1	1272.97	1272.96	1272.94	1272.92	1272.88	1272.84	1272.79	1272.74	1272.67	1272.60	1272.52
	GIRDER 2	1273.15	1273.15	1273.14	1273.12	1273.10	1273.06	1273.02	1272.97	1272.91	1272.85	1272.77
	GIRDER 3	1273.33	1273.33	1273.33	1273.32	1273.30	1273.28	1273.24	1273.20	1273.15	1273.09	1273.03
	CROWN PT.	1273.36	1273.37	1273.37	1273.36	1273.35	1273.32	1273.29	1273.25	1273.20	1273.14	1273.08
	GIRDER 4	1273.21	1273.23	1273.23	1273.23	1273.22	1273.20	1273.17	1273.14	1273.09	1273.04	1272.98
	REF. LINE	1273.11	1273.12	1273.13	1273.13	1273.13	1273.11	1273.09	1273.06	1273.02	1272.97	1272.92
	GIRDER 5	1273.01	1273.03	1273.04	1273.05	1273.04	1273.03	1273.01	1272.99	1272.95	1272.91	1272.86
	EAST EOD	1272.94	1272.96	1272.98	1272.98	1272.98	1272.97	1272.96	1272.93	1272.90	1272.86	1272.81

		℄ OF PIER 3	0.1 PT.	0.2 PT.	0.3 PT.	0.4 PT.	0.5 PT.	0.6 PT.	0.7 PT.	0.8 PT.	0.9 PT.	℄ BRG. N. ABUT.
SPAN 4	WEST EOD	1272.43	1272.38	1272.34	1272.29	1272.24	1272.19	1272.14	1272.09	1272.03	1271.97	1271.91
	GIRDER 1	1272.52	1272.48	1272.43	1272.39	1272.34	1272.29	1272.24	1272.19	1272.13	1272.07	1272.02
	GIRDER 2	1272.77	1272.74	1272.70	1272.65	1272.61	1272.57	1272.52	1272.47	1272.42	1272.36	1272.31
	GIRDER 3	1273.03	1272.99	1272.95	1272.92	1272.88	1272.83	1272.79	1272.74	1272.70	1272.65	1272.60
	CROWN PT.	1273.08	1273.05	1273.01	1272.97	1272.93	1272.89	1272.85	1272.80	1272.76	1272.71	1272.66
	GIRDER 4	1272.98	1272.95	1272.92	1272.89	1272.85	1272.81	1272.77	1272.73	1272.68	1272.64	1272.59
	REF. LINE	1272.92	1272.89	1272.86	1272.82	1272.79	1272.75	1272.71	1272.67	1272.63	1272.59	1272.54
	GIRDER 5	1272.86	1272.83	1272.80	1272.77	1272.74	1272.70	1272.66	1272.63	1272.58	1272.54	1272.50
	EAST EOD	1272.81	1272.78	1272.76	1272.73	1272.69	1272.66	1272.63	1272.59	1272.55	1272.51	1272.46

NOTE: EOD IS EDGE OF DECK.



SLAB HAUNCH DETAIL

TO DETERMINE 'T': AFTER DECK IS REMOVED, ELEVATIONS OF THE TOP FLANGES OR TOP OF SPLICE PLATES, OR TOP OF COVER PLATES WHICHEVER APPLIES, SHALL BE TAKEN AT CENTERLINE OF BEARINGS, CENTERLINE OF FIELD SPLICES, AND AT TENTH POINTS OF EACH SPAN.

TOP OF DECK ELEVATION AT FINAL GRADE
- TOP OF STEEL ELEVATION AFTER DECK REMOVAL
+ CONCRETE ONLY DEFLECTION: DOWNWARD DEFLECTION IS ADDED, UPWARD DEFLECTION IS SUBTRACTED
- SLAB THICKNESS (8½")

= HAUNCH THICKNESS 'T'

AVERAGE "T" USED FOR ESTIMATING QUANTITIES

GIRDER	AVERAGE "T" (INCHES)
1	5¼"
2	6"
3	6½"
4	5¼"
5	4¼"

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STRUCTURE B-37-154

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DECK ELEVATIONS

SHEET 16 OF 21
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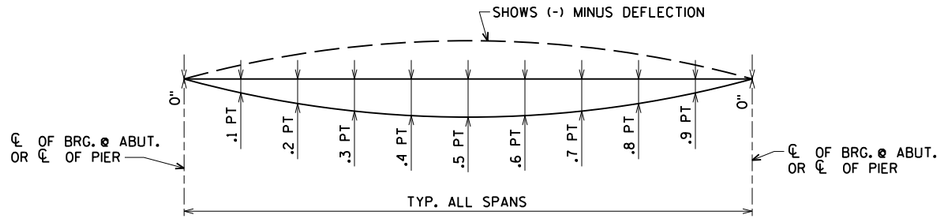
TABLE OF DEFLECTIONS (IN INCHES)

	DEFLECTION	℄ BRG. S. ABUT	0.1 PT	0.2 PT	0.3 PT	0.4 PT	0.5 PT	0.6 PT	0.7 PT	0.8 PT	0.9 PT	℄ OF PIER 1
GIRDER 1	CONCRETE ONLY	0.0	0.0	0.0	-0.1	-0.1	-0.2	-0.2	-0.3	-0.3	-0.2	0.0
GIRDER 2	CONCRETE ONLY	0.0	0.0	0.0	-0.1	-0.1	-0.2	-0.2	-0.3	-0.3	-0.2	0.0
GIRDER 3	CONCRETE ONLY	0.0	0.0	0.0	-0.1	-0.1	-0.2	-0.2	-0.3	-0.3	-0.2	0.0
GIRDER 4	CONCRETE ONLY	0.0	0.0	0.0	-0.1	-0.1	-0.2	-0.2	-0.3	-0.3	-0.2	0.0
GIRDER 5	CONCRETE ONLY	0.0	0.0	0.0	-0.1	-0.1	-0.2	-0.2	-0.3	-0.3	-0.2	0.0

	DEFLECTION	℄ OF PIER 1	0.1 PT	0.2 PT	0.3 PT	0.4 PT	0.5 PT	0.6 PT	0.7 PT	0.8 PT	0.9 PT	℄ OF PIER 2
GIRDER 1	CONCRETE ONLY	0.0	0.7	1.6	2.4	2.8	2.8	2.4	1.6	0.8	0.2	0.0
GIRDER 2	CONCRETE ONLY	0.0	0.7	1.6	2.4	2.8	2.8	2.4	1.6	0.8	0.2	0.0
GIRDER 3	CONCRETE ONLY	0.0	0.7	1.6	2.4	2.8	2.8	2.4	1.6	0.8	0.2	0.0
GIRDER 4	CONCRETE ONLY	0.0	0.7	1.6	2.4	2.8	2.8	2.4	1.6	0.8	0.2	0.0
GIRDER 5	CONCRETE ONLY	0.0	0.7	1.6	2.4	2.8	2.8	2.4	1.6	0.8	0.2	0.0

	DEFLECTION	℄ OF PIER 2	0.1 PT	0.2 PT	0.3 PT	0.4 PT	0.5 PT	0.6 PT	0.7 PT	0.8 PT	0.9 PT	℄ OF PIER 3
GIRDER 1	CONCRETE ONLY	0.0	0.2	0.8	1.6	2.4	2.8	2.8	2.4	1.6	0.7	0.0
GIRDER 2	CONCRETE ONLY	0.0	0.2	0.8	1.6	2.4	2.8	2.8	2.4	1.6	0.7	0.0
GIRDER 3	CONCRETE ONLY	0.0	0.2	0.8	1.6	2.4	2.8	2.8	2.4	1.6	0.7	0.0
GIRDER 4	CONCRETE ONLY	0.0	0.2	0.8	1.6	2.4	2.8	2.8	2.4	1.6	0.7	0.0
GIRDER 5	CONCRETE ONLY	0.0	0.2	0.8	1.6	2.4	2.8	2.8	2.4	1.6	0.7	0.0

	DEFLECTION	℄ OF PIER 3	0.1 PT	0.2 PT	0.3 PT	0.4 PT	0.5 PT	0.6 PT	0.7 PT	0.8 PT	0.9 PT	℄ BRG. N. ABUT
GIRDER 1	CONCRETE ONLY	0.0	-0.2	-0.3	-0.3	-0.2	-0.2	-0.1	-0.1	0.0	0.0	0.0
GIRDER 2	CONCRETE ONLY	0.0	-0.2	-0.3	-0.3	-0.2	-0.2	-0.1	-0.1	0.0	0.0	0.0
GIRDER 3	CONCRETE ONLY	0.0	-0.2	-0.3	-0.3	-0.2	-0.2	-0.1	-0.1	0.0	0.0	0.0
GIRDER 4	CONCRETE ONLY	0.0	-0.2	-0.3	-0.3	-0.2	-0.2	-0.1	-0.1	0.0	0.0	0.0
GIRDER 5	CONCRETE ONLY	0.0	-0.2	-0.3	-0.3	-0.2	-0.2	-0.1	-0.1	0.0	0.0	0.0



DEFLECTION DIAGRAM

NOTE: DEFLECTIONS ARE THEORETICAL AND MAY VARY IN THE FIELD.
CONCRETE ONLY = CONCRETE DECK DEFLECTIOIN + COMPOSITE DEAD LOAD DEFLECTION.

Ayres_printer_pltcfg
B-37-154DEFL.DGN

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NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-37-154

DRAWN BY CJM | PLANS CK'D. KLW

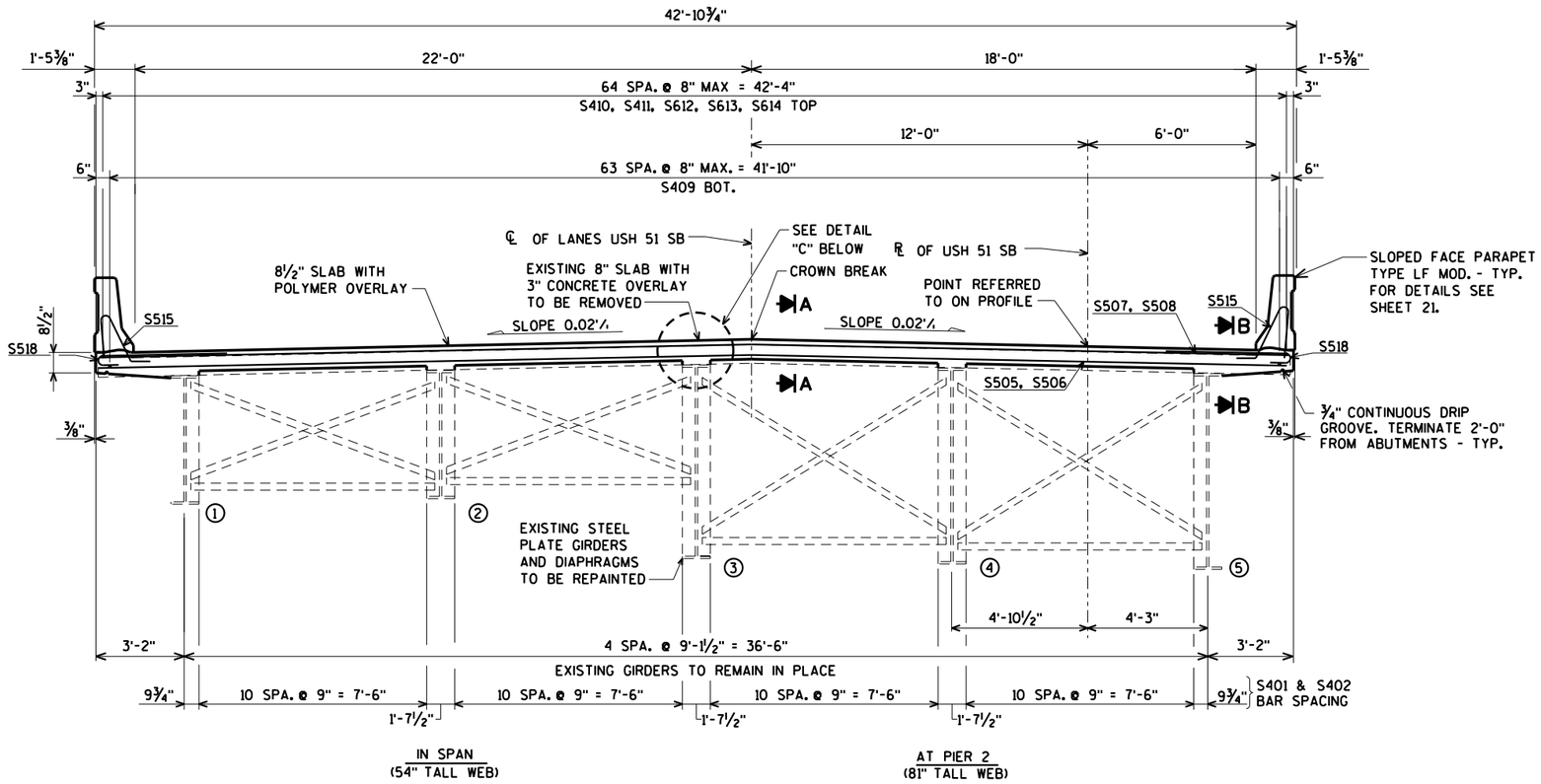
TABLE OF DEFLECTIONS

SHEET 17 OF 21
1002

ORIGINAL PLANS PREPARED BY
AYRES ASSOCIATES
3433 Oakwood Hills Parkway
Eau Claire, WI 54701
www.AyresAssociates.com

STATE PROJECT NUMBER

1170-01-70

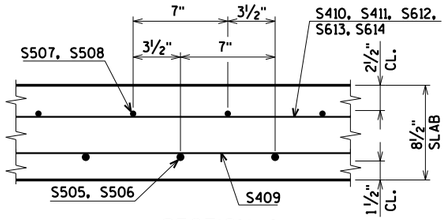


IN SPAN
(54" TALL WEB)

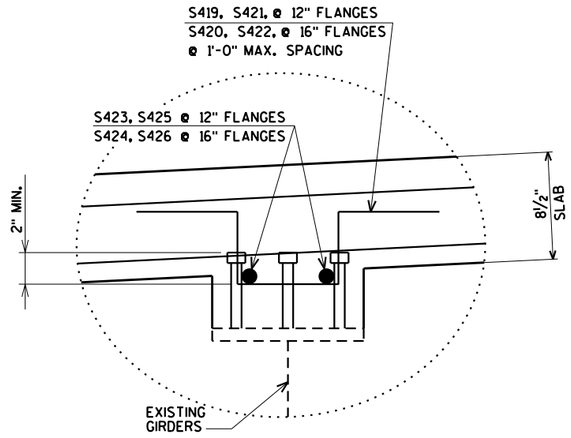
AT PIER 2
(81" TALL WEB)

TYPICAL CROSS SECTION THRU DECK

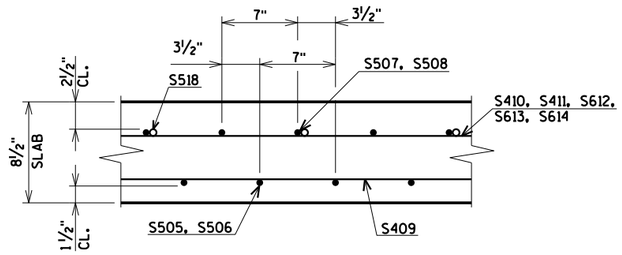
(LOOKING NORTH)



SECTION A



DETAIL "C"



SECTION B

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-37-154

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SUPERSTRUCTURE

SHEET 18 OF 21
1003

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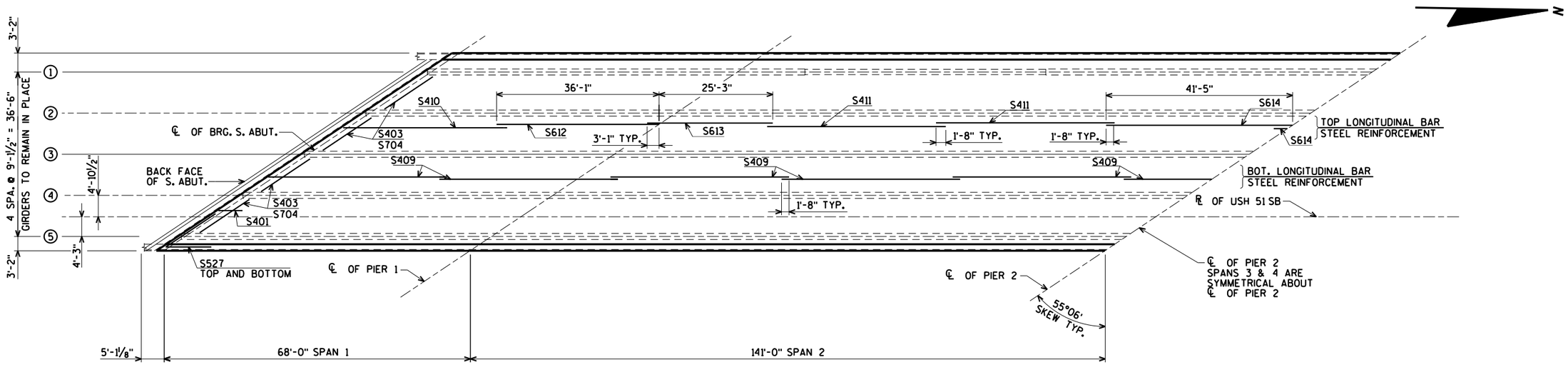
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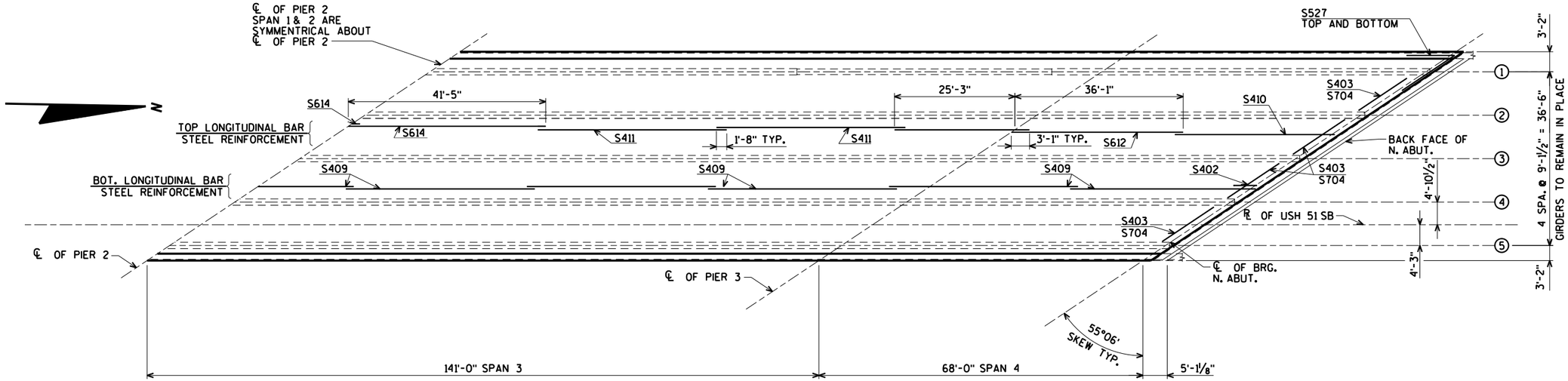
STATE PROJECT NUMBER

1170-01-70

NOTE: PER SPECIFICATIONS, THE CONTRACTOR IS RESPONSIBLE TO PROVIDE EXTERIOR GIRDER BRACING FOR SLAB OVERHANGS.



PART PLAN - SPAN 1& 2



PART PLAN - SPAN 3 & 4

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-37-154

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SUPERSTRUCTURE PLAN

SHEET 19 OF 21
1004

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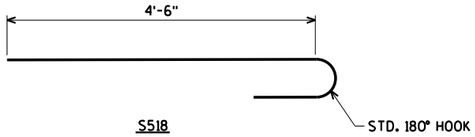
STATE PROJECT NUMBER

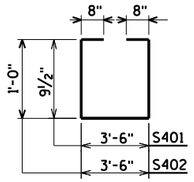
1170-01-70

BAR SERIES TABLE

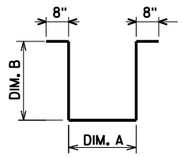
BAR MARK	NO REQ'D.	LENGTH
S505	2 SERIES OF 103	11" TO 42'-5"
S508	2 SERIES OF 103	8" TO 42'-2"

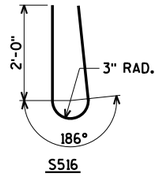
BUNDLE AND TAG EACH SERIES SEPARATELY.

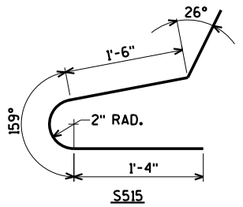


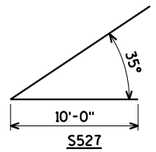


BAR	DIMENSION "A"	DIMENSION "B"
S419	9"	7"
S420	1'-1"	7"
S421	9"	8"
S422	1'-1"	8"







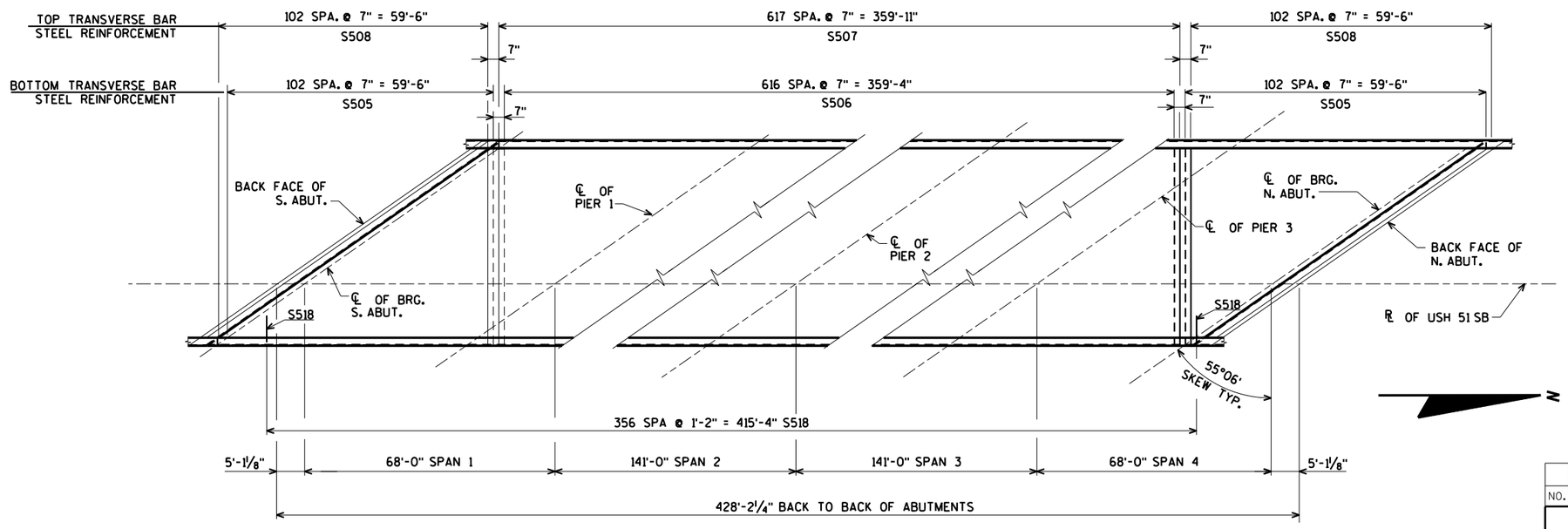


BILL OF BARS

BAR. NO.	COATED BAR	NO. REQ'D.	LENGTH	BENT BAR	BUNDLED BAR SERIES	142,180# COATED LOCATION
S401	X	44	6-1	X		DIAPH. @ S. ABUT. VERT.
S402	X	44	6-6	X		DIAPH. @ N. ABUT. VERT.
S403	X	16	13-7			DIAPH. @ ABUT. HORIZ.
S704	X	40	13-7			DIAPH. @ ABUT. HORIZ.
S505	X	206	21-8		⊗	SLAB TRANS. BOT.
S506	X	617	42-6			SLAB TRANS. BOT.
S507	X	618	42-6			SLAB TRANS. TOP
S508	X	206	21-5		⊗	SLAB TRANS. TOP
S409	X	704	39-8			SLAB LONG. BOT.
S410	X	130	35-1			SLAB LONG. TOP SPAN 1, 4
S411	X	260	39-8			SLAB LONG. TOP SPAN 2, 3
S612	X	130	36-1			SLAB LONG. TOP @ PIER 1 & 3
S613	X	130	28-4			SLAB LONG. TOP @ PIER 1 & 3
S614	X	130	43-0			SLAB LONG. TOP @ PIER 2
S515	X	1266	4-2	X		SLAB @ PARAPET VERT.
S516	X	1266	4-10	X		PARAPET VERT.
S517	X	100	43-8			PARAPET HORIZ.
S518	X	714	5-3	X		SLAB TRANS. TOP @ PARAPET
S419	X	1177	2-11	X		SLAB HAUNCH @ GIRDERS 1, 2, 4, 5 @ 12" FLANGE
S420	X	338	3-3	X		SLAB HAUNCH @ GIRDERS 1, 2, 4, 5 @ 16" FLANGE
S421	X	328	3-1	X		SLAB HAUNCH @ GIRDER 3 @ 12" FLANGE
S422	X	90	3-5	X		SLAB HAUNCH @ GIRDER 3 @ 16" FLANGE
S423	X	34	27-0			SLAB HAUNCH @ GIRDERS 1-5 @ 12" FLANGE SPANS 2 & 4
S424	X	18	21-2			SLAB HAUNCH @ GIRDERS 1-5 @ 16" FLANGE PIERS 1 & 3
S425	X	58	38-2			SLAB HAUNCH @ GIRDERS 1-5 @ 12" FLANGE SPANS 2 & 3
S426	X	10	44-8			SLAB HAUNCH @ GIRDERS 1-5 @ 16" FLANGE PIER 2
S527	X	4	20-2			SLAB TOP AND BOTTOM AT CORNERS

BENDING DIMENSIONS ARE OUT TO OUT OF BARS.

⊗ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.



TRANSVERSE BAR STEEL LAYOUT

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-37-154

DRAWN BY CJM | PLANS CK'D. KLW

SUPERSTRUCTURE DETAILS AND BILL OF BARS

SHEET 20 OF 21
1005

ORIGINAL PLANS PREPARED BY
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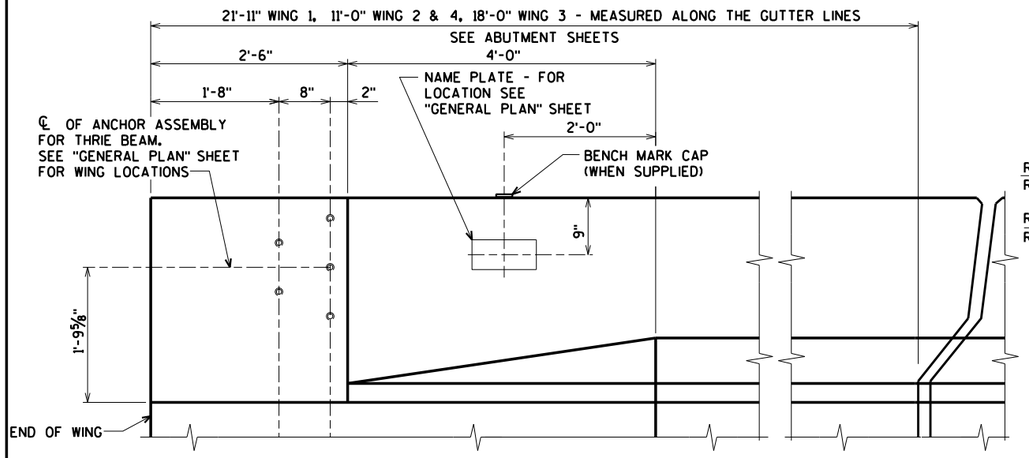
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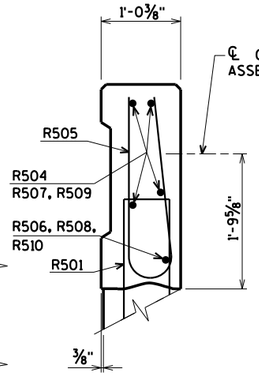
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STATE PROJECT NUMBER

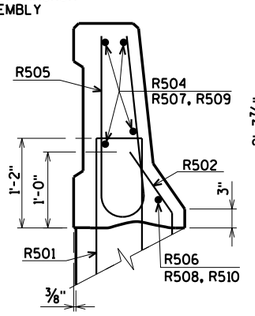
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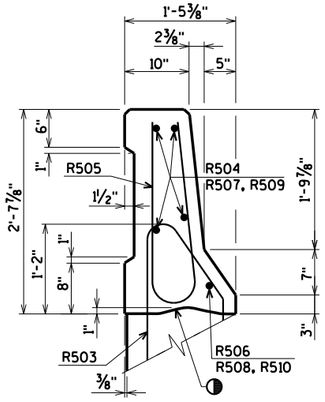
INSIDE ELEVATION



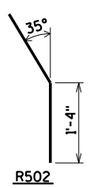
SECTION A



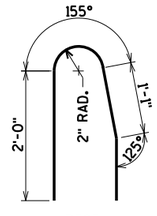
SECTION B



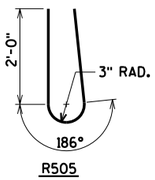
SECTION C



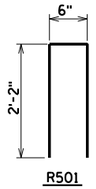
R502



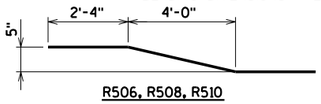
R503



R505



R501



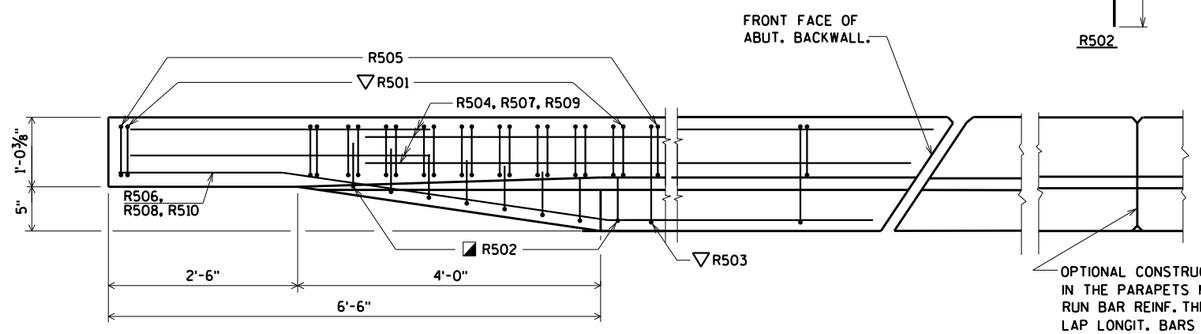
R506, R508, R510

BILL OF BARS

WEIGHTS INCLUDED IN ABUTMENT WEIGHTS SHOWN ON SHEETS 7 & 11.

BAR MARK	COATED	NO. REQ'D. SOUTH ABUT.	NO. REQ'D. NORTH ABUT.	LENGTH	BENT BAR	760* SOUTH ABUT. 680* NORTH ABUT. LOCATION
R501	X	28	28	4-7	X	PARAPET VERT.
R502	X	16	16	2-4	X	PARAPET VERT.
R503	X	26	20	4-7	X	PARAPET VERT.
R504	X	8	---	11-5		PARAPET HORIZ. WING 1
R505	X	54	48	4-10	X	PARAPET VERT.
R506	X	1	---	20-11	X	PARAPET HORIZ. WING 1
R507	X	8	8	7-4		PARAPET HORIZ. WING 2 & 4
R508	X	1	1	11-0	X	PARAPET HORIZ. WING 2 & 4
R509	X	---	8	9-6		PARAPET HORIZ. WING 3
R510	X	---	1	17-0	X	PARAPET HORIZ. WING 3

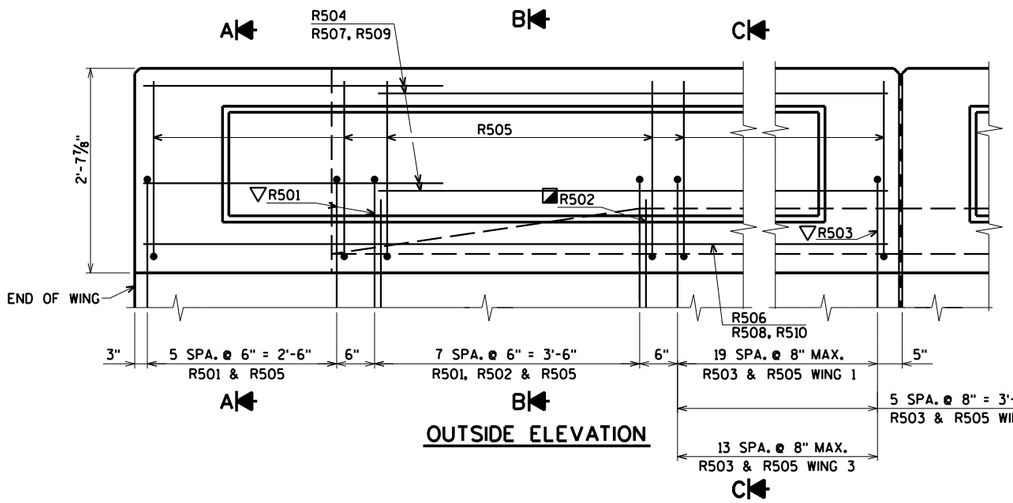
BENDING DIMENSIONS ARE OUT TO OUT OF BARS.



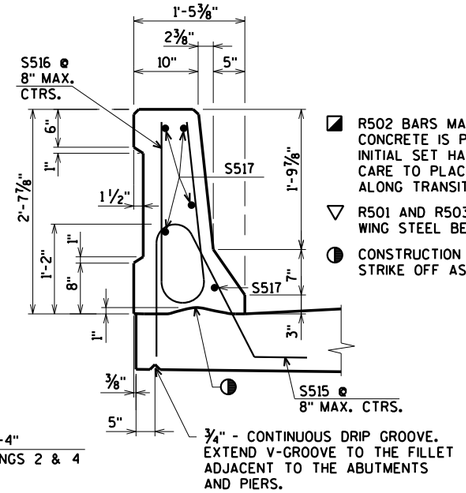
PLAN

(WING 2 & 4 SHOWN, WING 1 & 3 SIMILAR)

OPTIONAL CONSTRUCTION JOINTS IN THE PARAPETS MAY BE USED. RUN BAR REINF. THRU THE JOINT. LAP LONGIT. BARS A MIN. OF 1'-9". MIN. JOINT SPACING OF 80'-0". DEFINE CONST. JOINT WITH A ¾" 'V' GROOVE.

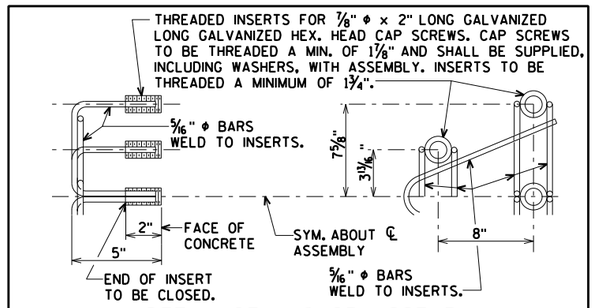


OUTSIDE ELEVATION



SECTION THRU PARAPET ON BRIDGE

- ◪ R502 BARS MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. USE CARE TO PLACE R502 BARS CORRECTLY ALONG TRANSITION OF PARAPET.
- ▽ R501 AND R503 BARS TO BE TIED TO WING STEEL BEFORE WING IS POURED.
- ◑ CONSTRUCTION JOINT STRIKE OFF AS SHOWN.



DETAIL OF ANCHOR ASSEMBLY

NOTE: HEX. HEAD CAP SCREWS & WASHERS TO BE GALVANIZED IN ACCORDANCE WITH AASHTO M232 CLASS C. SEE SHEET 1 FOR LOCATION. ASSEMBLY BID ITEM SHALL BE "ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD".

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-37-154

DRAWN BY CJM | PLANS CK'D. KLW

SLOPED FACE PARAPET "LF" MOD.

SHEET 21 OF 21
1006

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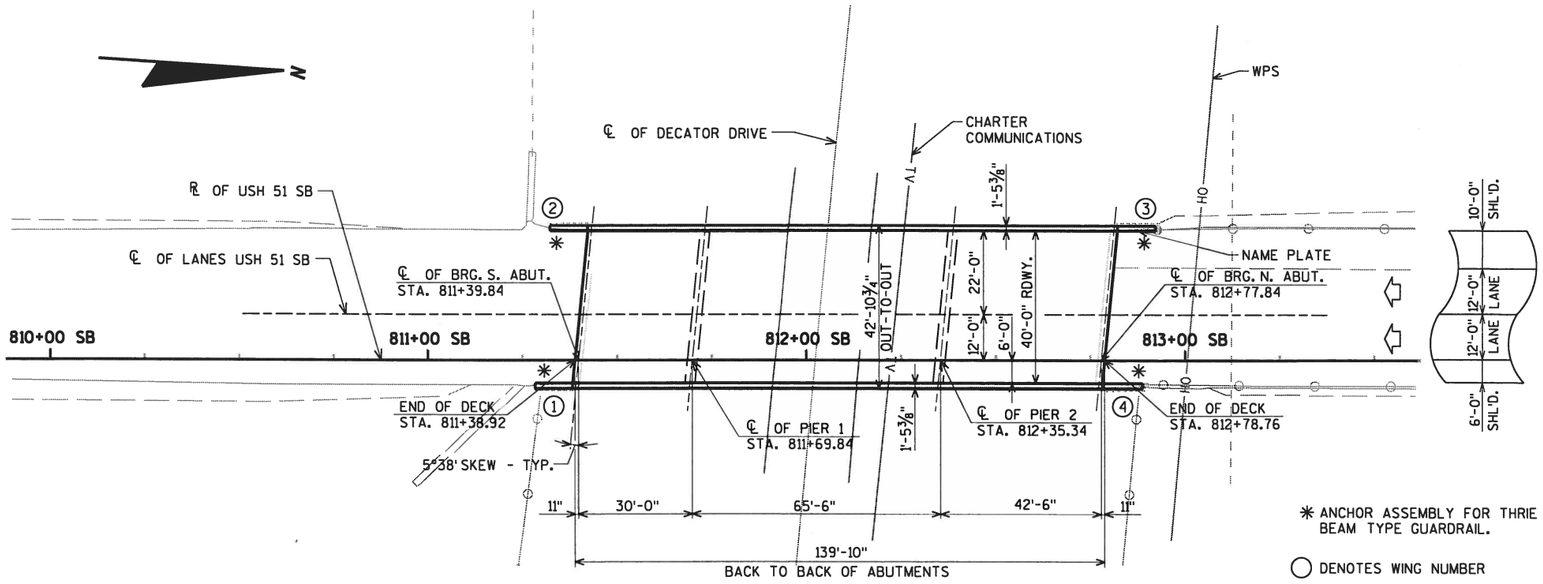
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STATE PROJECT NUMBER

1170-01-73

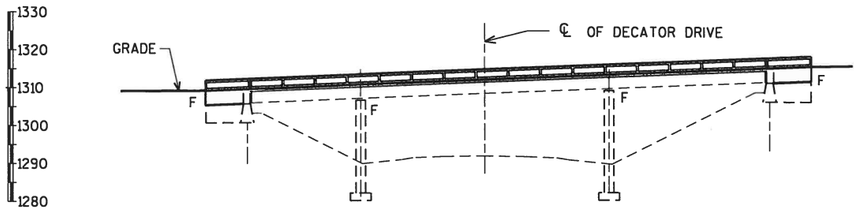


✳ ANCHOR ASSEMBLY FOR THRIE BEAM TYPE GUARDRAIL.

◯ DENOTES WING NUMBER

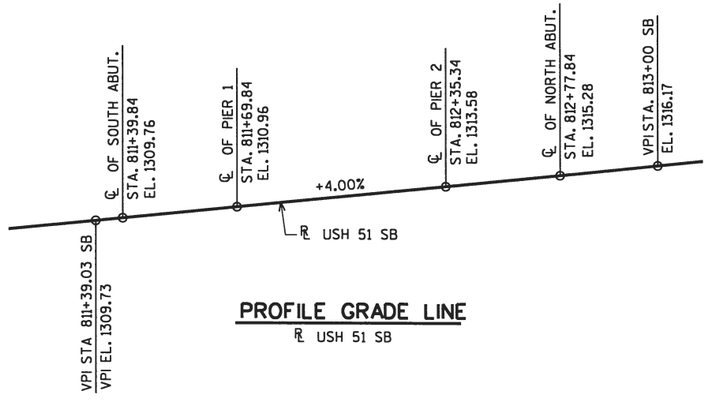
PLAN

3-SPAN 36" PRESTRESSED CONCRETE GIRDER BRIDGE
DECK REPLACEMENT



ELEVATION

(TAKEN NORMAL TO DECATOR DRIVE)



PROFILE GRADE LINE

℄ USH 51 SB

LISTS OF DRAWINGS

1. GENERAL PLAN
2. TYPICAL SECTION, QUANTITIES, AND NOTES
3. SOUTH ABUTMENT
4. SOUTH ABUTMENT WING DETAILS
5. NORTH ABUTMENT
6. NORTH ABUTMENT WING DETAILS
7. INTERMEDIATE STEEL DIAPHRAGM DETAILS
8. SUPERSTRUCTURE PLAN
9. SUPERSTRUCTURE SECTIONS
10. SUPERSTRUCTURE ELEVATIONS
11. SLOPED FACE PARAPET "LF" MODIFIED

DESIGN DATA

LIVE LOAD:

DESIGN LOADING: HS-20
INVENTORY RATING: HS-25
OPERATING RATING: HS-42
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV) = 240 KIPS
(STRUCTURE IS DESIGNED FOR A FUTURE WEARING SURFACE OF 20 #/S.F.)

ULTIMATE DESIGN STRESSES:

CONCRETE MASONRY	SLAB	f'_c = 4,000 p.s.i.
	ALL OTHER	f'_c = 3,500 p.s.i.
HIGH STRENGTH BAR STEEL REINFORCEMENT (GRADE 60)		f'_y = 60,000 p.s.i.

TRAFFIC DATA:

USH 51	DECATOR DRIVE
A.D.T. = 31,000 (2015)	A.D.T. = 395 (2015)
A.D.T. = 41,300 (2035)	A.D.T. = 480 (2035)
R.D.S. = 70 M.P.H.	R.D.S. = 50 M.P.H.

BENCHMARK

POINT ID: BM 236
DESCRIPTION: BM DOT DISK ON TOP OF SE PARAPET B-37-155 (USH 51 NB OVER DECATOR DRIVE)
N: 217655.95
E: 273981.46
EL: 1315.42
NAVD 88 DATUM

WISCONSIN
DANIEL N. SYDOW
E-38363
WI
PROFESSIONAL ENGINEER
7/30/12

BRIDGE OFFICE CONTACT:
WILLIAM DREHER
(608)-266-8489

CONSULTANT CONTACT:
DAN SYDOW
(715)-834-3161

NO.	DATE	REVISION	BY

ORIGINAL PLANS PREPARED BY
AYRES ASSOCIATES
3433 Oakwood Hills Parkway
Eau Claire, WI 54701
www.AyresAssociates.com

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher KAR 08/15/12
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE B-37-156

USH 51 SB OVER DECATOR DRIVE

COUNTY MARATHON | TOWN ~~CITY/VILLAGE~~ MAINE

DESIGN SPEC. REHABILITATION N/A

DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
KAZ	KLW	CLS	DNS

GENERAL PLAN

SHEET 1007 OF 11

8

8

11X17-5200.plt
B-37-156 FINAL.dgn

DATE:
DATE:
DATE:

CHECKED BY:
BACK CHECKED BY:
CORRECTED BY:

41-0525.00 - MARATHON CO. UK AND USH 51

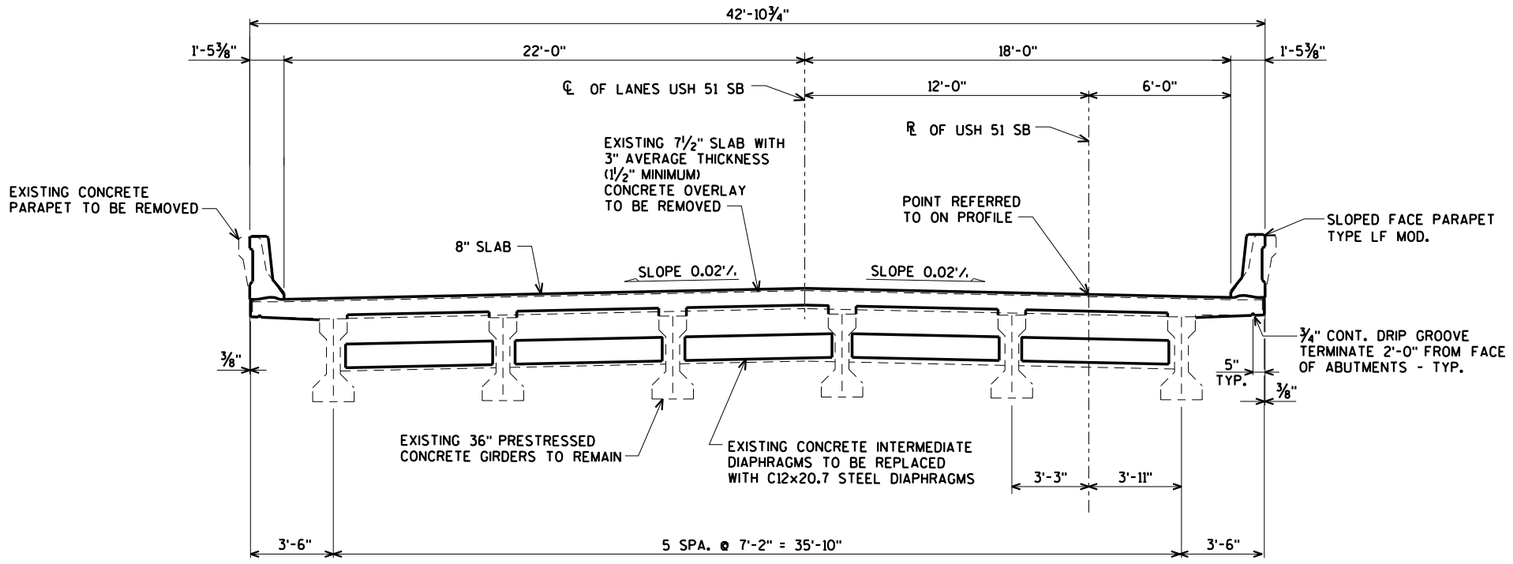
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DATE:

STATE PROJECT NUMBER

1170-01-73



CROSS SECTION THRU BRIDGE

(LOOKING NORTH)

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS SHOWN OR NOTED OTHERWISE.

THE FIRST DIGIT OF A THREE DIGIT BAR NO. AND THE FIRST TWO DIGITS OF A FOUR DIGIT BAR NO. SIGNIFIES THE BAR SIZE.

THE EXISTING GROUNDLINE SHALL BE THE UPPER LIMIT FOR EXCAVATION FOR STRUCTURES.

AT ABUTMENTS ALL SPACES EXCAVATED AND NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH BACKFILL STRUCTURE.

PROTECTIVE SURFACE TREATMENT IS TO BE APPLIED TO THE TOP OF DECK AND TOP AND INSIDE FACES OF PARAPETS.

UTILIZE EXISTING BAR STEEL REINFORCEMENT WHERE SHOWN AND EXTEND 24 BAR DIAMETERS INTO NEW WORK.

DIMENSIONS ARE BASED ON ORIGINAL PLANS, THEREFORE THE CONTRACTOR SHALL VERIFY THEM IN THE FIELD BEFORE ACCEPTANCE.

ALL CONCRETE REMOVAL SHALL BE DEFINED BY A 1" DEEP SAW CUT.

VARIATIONS TO THE NEW GRADE LINE OVER ½" MUST BE SUBMITTED BY THE FIELD ENGINEER TO THE STRUCTURES DESIGN SECTION FOR REVIEW.

THE CONTRACTOR SHALL SUPPLY A NEW NAME PLATE IN ACCORDANCE WITH SECTION 502.3.11 OF THE STANDARD SPECIFICATIONS AND THE STANDARD DETAIL DRAWINGS. NAME PLATE TO SHOW ORIGINAL CONSTRUCTION YEAR.

ORIGINAL CONSTRUCTION YEAR IS 1975.

JOINT FILLER SHALL CONFORM TO THE REQUIREMENTS OF A.A.S.H.T.O. DESIGNATION M 153, TYPE I, II OR III OR A.A.S.H.T.O. DESIGNATION M 213.

TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEMS	UNIT	S. ABUT.	N. ABUT.	SUPER.	TOTAL
203.0200	REMOVING OLD STRUCTURE STATION 812+08.84 SB	LS	-----	-----	-----	1
206.1000	EXCAVATION FOR STRUCTURES BRIDGES B-37-156	LS	-----	-----	-----	1
210.0100	BACKFILL STRUCTURE	CY	20	30	-----	50
502.0100	CONCRETE MASONRY BRIDGES	CY	6	8	196	210
502.3200	PROTECTIVE SURFACE TREATMENT	SY	8	8	734	750
502.5005	MASONRY ANCHOR TYPE L NO. 5 BARS	EACH	56	64	-----	120
505.0605	BAR STEEL REINFORCEMENT HS COATED BRIDGES	LB	1,190	1,390	46,660	49,240
506.4000	STEEL DIAPHRAGMS B-37-156	EACH	-----	-----	15	15
● 509.1500	CONCRETE SURFACE REPAIR	SF	-----	-----	-----	20
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	11	12	-----	23
614.0150	ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD	EACH	2	2	-----	4
	NON-BID ITEMS					
	FILLER	SIZE	-----	-----	-----	½" & ¾"

● UNDISTRIBUTED QUANTITY FOR REPAIRS AT ENDS OF ABUTMENTS, ABUTMENT DIAPHRAGMS, AND PIER DIAPHRAGMS AS DIRECTED BY THE ENGINEER.

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B-37-156 FINAL.dgn

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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-37-156

DRAWN BY CLS | PLANS CK'D. DNS

TYPICAL SECTION, QUANTITIES, AND NOTES

SHEET 2 OF 11
1008

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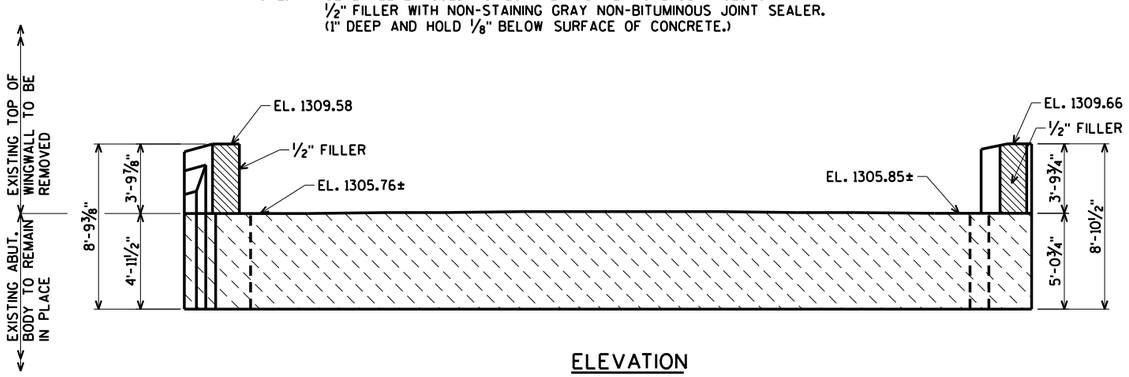
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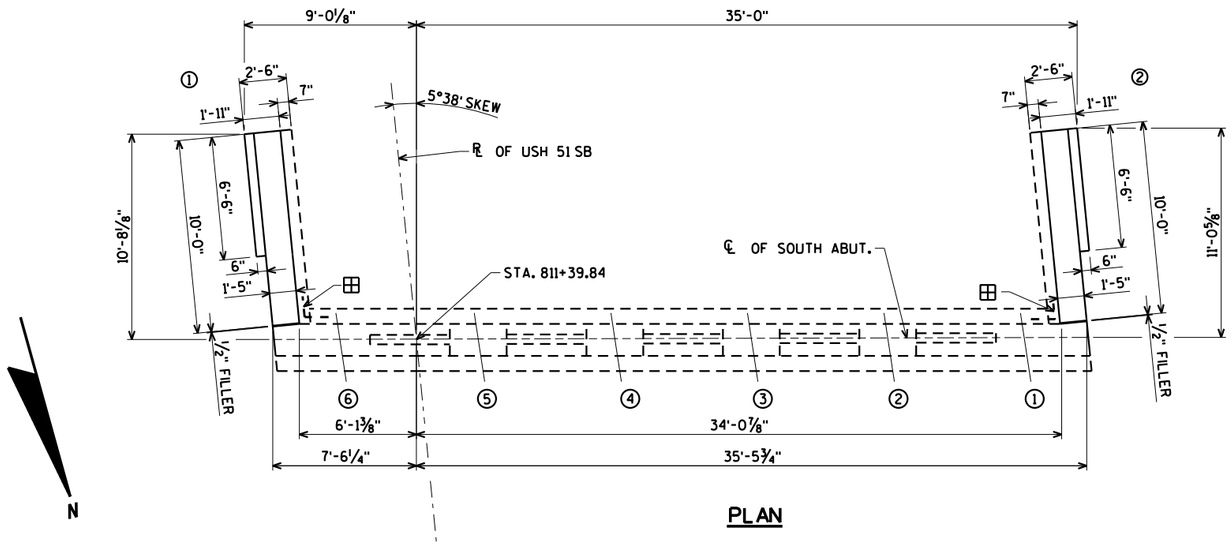
STATE PROJECT NUMBER

1170-01-73

NOTE: SEAL ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES OF ½" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE.)



ELEVATION
(LOOKING SOUTH)



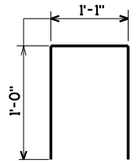
PLAN

BILL OF BARS

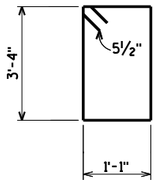
WEIGHTS INCLUDE PARAPET STEEL SHOWN ON SHEET 11.

BAR. NO.	COATED BAR	NO. REQ'D.	LENGTH	BENT BAR	BUNDLED BAR	SERIES	1,190# COATED LOCATION
A501	X	18	2-10	X			WINGS 1 & 2 VERT.
A502	X	36	2-6				WINGS 1 & 2 VERT. DOWELS E.F.
A503	X	20	4-1				WINGS 1 & 2 VERT. DOWEL E.F.
A504	X	10	9-5	X			WINGS 1 & 2 VERT.
A405	X	6	9-7				WINGS 1 & 2 HORIZ. F.F.
A406	X	10	9-7				WINGS 1 & 2 HORIZ. B.F.
A607	X	2	9-7				WINGS 1 & 2 HORIZ. F.F.
A608	X	2	9-7				WINGS 1 & 2 HORIZ. B.F.
A509	X	18	2-11	X			WINGS 1 & 2 VERT. F.F.
A510	X	18	4-4	X			WINGS 1 & 2 VERT. B.F.
A411	X	6	6-0				WINGS 1 & 2 HORIZ. F.F.
A412	X	20	2-0				WINGS 1 & 2 DOWELS

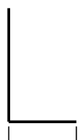
BENDING DIMENSIONS ARE OUT TO OUT OF BARS.



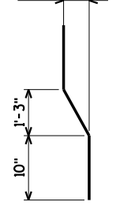
A501



A504



A510



A509

⊞ 18" RUBBERIZED MEMBRANE WATERPROOFING FROM BRIDGE SEAT TO TOP OF WING.

B.F. DENOTES BACK FACE
E.F. DENOTES EACH FACE
F.F. DENOTES FRONT FACE

ORIGINAL PLANS PREPARED BY
AYRES ASSOCIATES
3433 Oakwood Hills Parkway
Eau Claire, WI 54701
www.AyresAssociates.com

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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-37-156

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SOUTH ABUTMENT

SHEET 3 OF 11
1009

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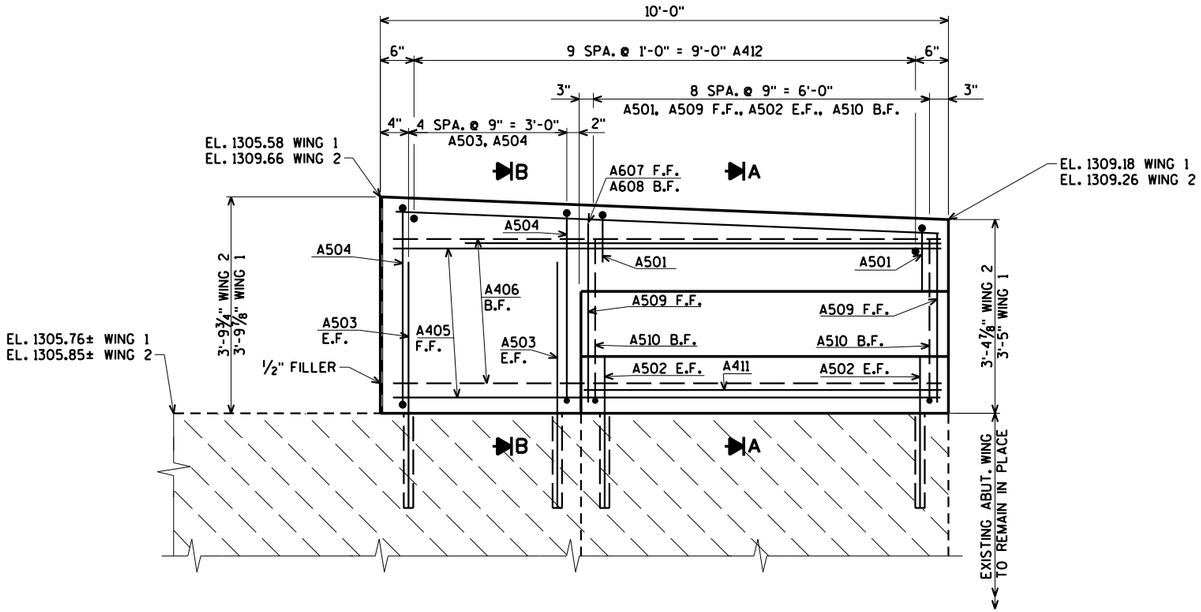
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STATE PROJECT NUMBER

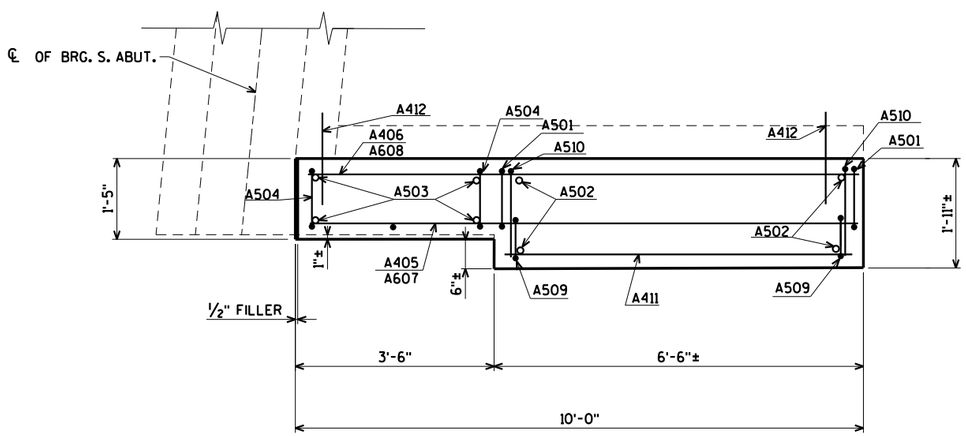
1170-01-73

SLOPED FACE PARAPET LF MODIFIED
NOT SHOWN. FOR DETAILS SEE
SHEET 11.



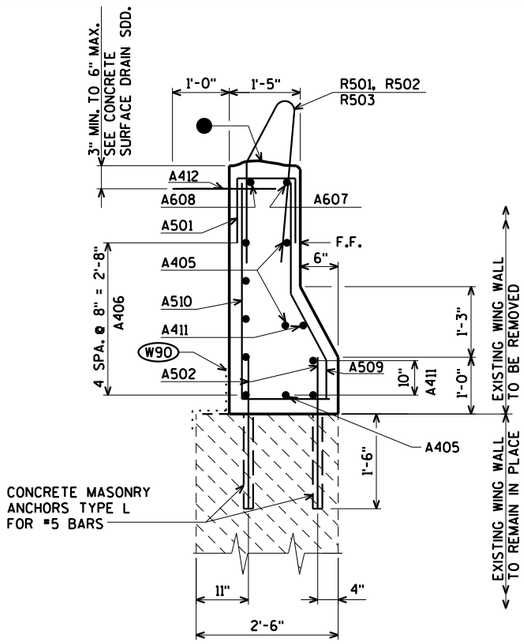
ELEVATION - WING 2

(WING 1 SIMILAR)

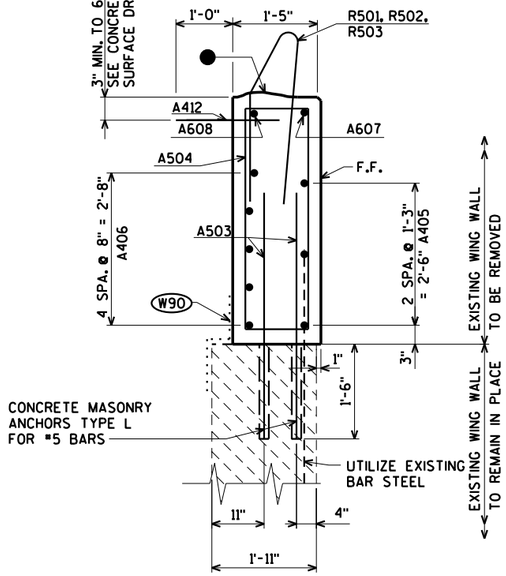


PLAN - WING 2

(WING 1 SIMILAR)



SECTION A



SECTION B

● STRIKE OFF AS SHOWN AND LEAVE ROUGH.

(W90) 18" RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACK FACE OF ABUTMENT.

F.F. DENOTES FRONT FACE

B.F. DENOTES BACK FACE

E.F. DENOTES EACH FACE

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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-37-156

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SOUTH ABUTMENT WING DETAILS

SHEET 4 OF 11
1010

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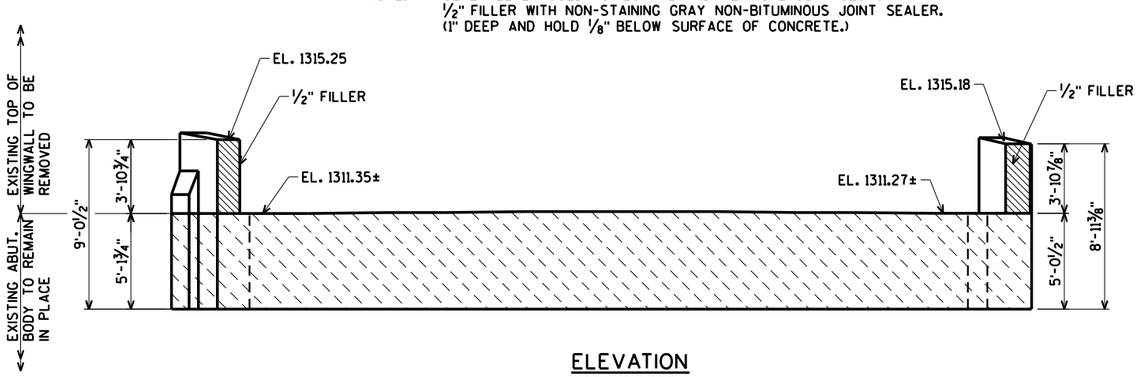
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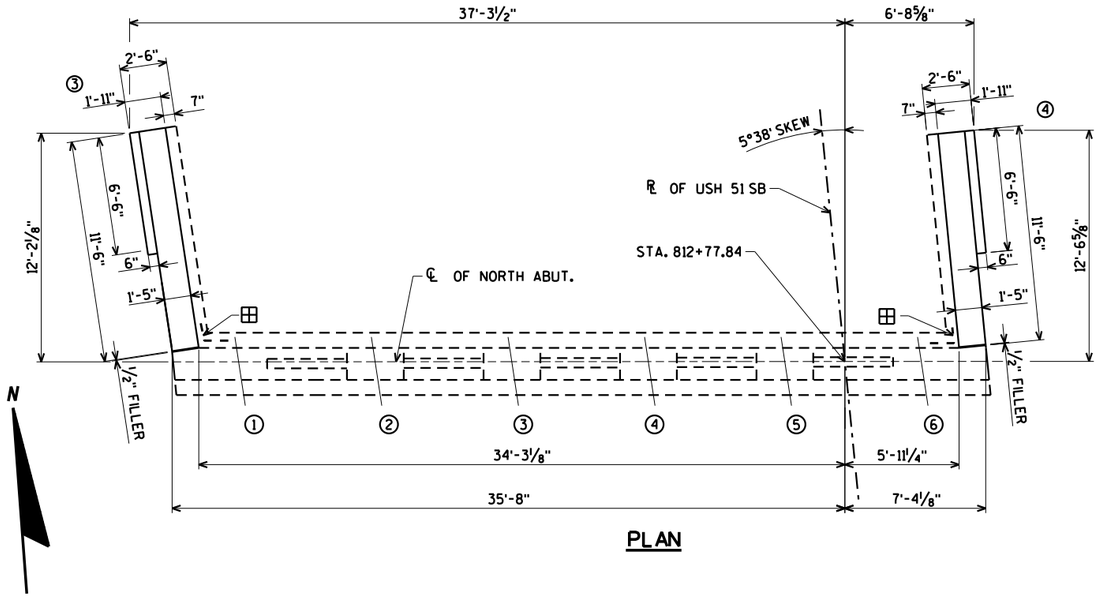
7/30/2012

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NOTE: SEAL ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES OF ½" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE.)



ELEVATION
(LOOKING NORTH)



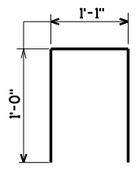
PLAN

BILL OF BARS

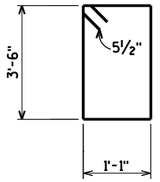
WEIGHTS INCLUDE PARAPET STEEL SHOWN ON SHEET 11.

BAR. NO.	COATED BAR	NO. REQ'D.	LENGTH	BENT BAR	BUNDLED BAR	SERIES	1,390* COATED LOCATION
B501	X	18	2-10	X			WINGS 3 & 4 VERT.
B502	X	36	2-6				WINGS 3 & 4 VERT. DOWELS E.F.
B503	X	28	4-1				WINGS 3 & 4 VERT. DOWEL E.F.
B504	X	14	9-9	X			WINGS 3 & 4 VERT.
B405	X	6	11-1				WINGS 3 & 4 HORIZ. F.F.
B406	X	12	11-1				WINGS 3 & 4 HORIZ. B.F.
B607	X	2	11-1				WINGS 3 & 4 HORIZ. F.F.
B608	X	2	11-1				WINGS 3 & 4 HORIZ. B.F.
B509	X	18	3-6	X			WINGS 3 & 4 VERT. F.F.
B510	X	18	4-10	X			WINGS 3 & 4 VERT. B.F.
B411	X	6	6-0				WINGS 3 & 4 HORIZ. F.F.
B412	X	24	2-0				WINGS 3 & 4 DOWELS

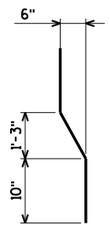
BENDING DIMENSIONS ARE OUT TO OUT OF BARS.



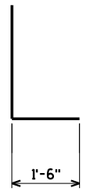
B501



B504



B509



B510

⊞ 18" RUBBERIZED MEMBRANE WATERPROOFING FROM BRIDGE SEAT TO TOP OF WING.

B.F. DENOTES BACK FACE
E.F. DENOTES EACH FACE
F.F. DENOTES FRONT FACE

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STRUCTURES DESIGN SECTION

STRUCTURE B-37-156

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NORTH ABUTMENT

SHEET 5 OF 11
1011

STATE PROJECT NUMBER
1170-01-73

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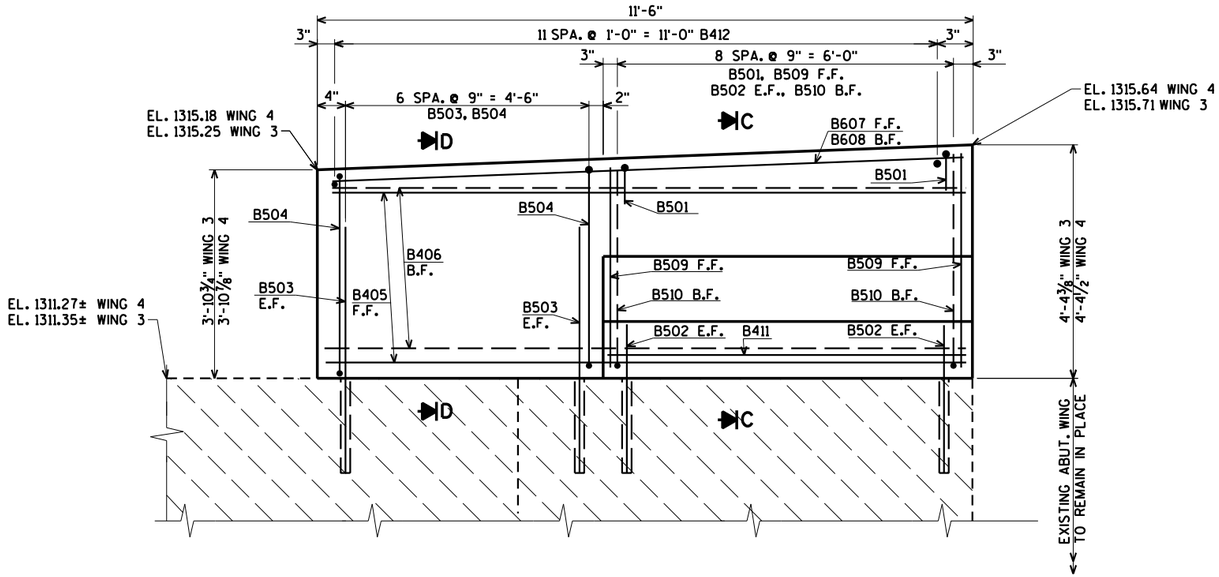
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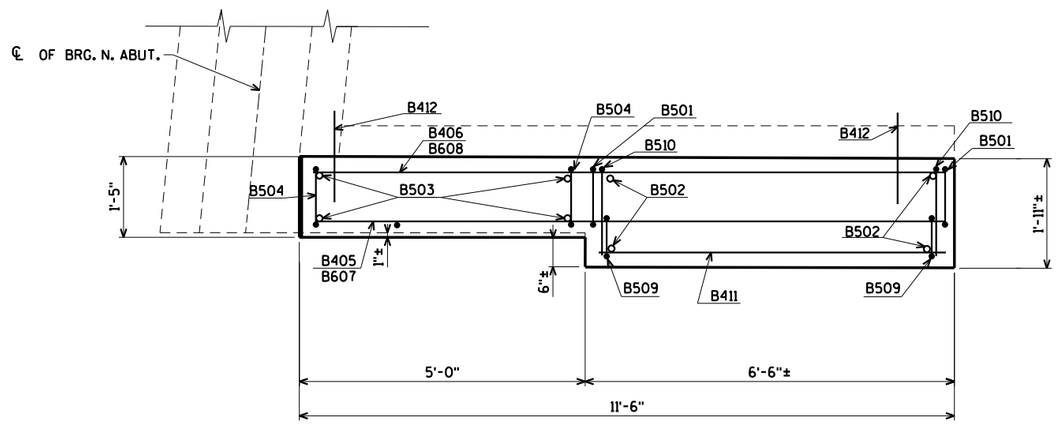
1170-01-73

SLOPED FACE PARAPET LF MODIFIED
NOT SHOWN. FOR DETAILS SEE
SHEET 11.



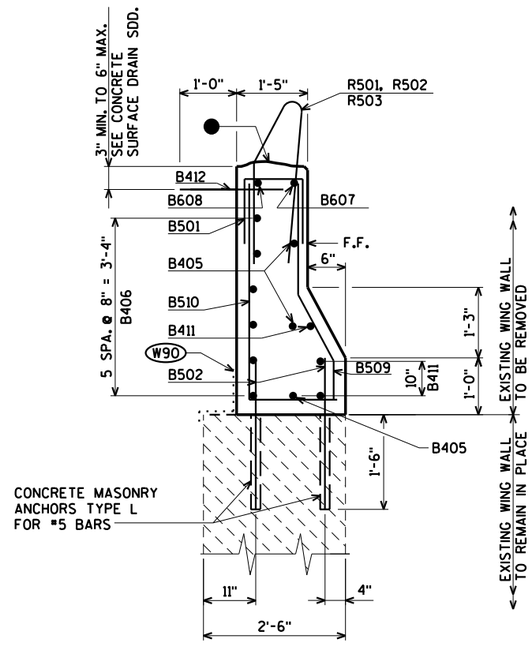
ELEVATION-WING 4

(WING 3 SIMILAR)

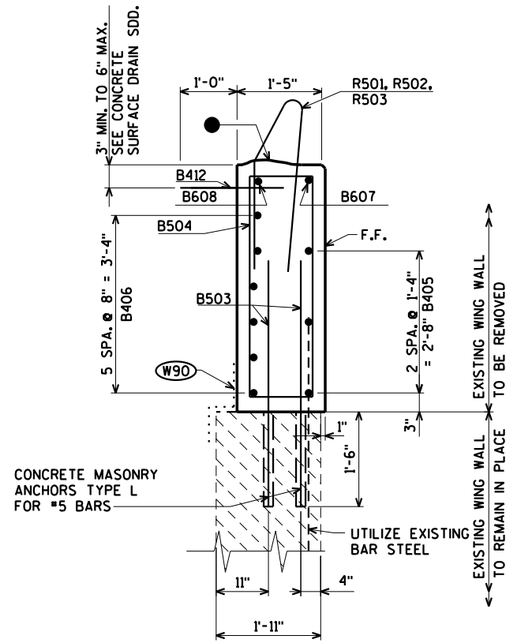


PLAN - WING 4

(WING 3 SIMILAR)



SECTION C



SECTION D

● STRIKE OFF AS SHOWN AND LEAVE ROUGH.

(W90) 18" RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACK FACE OF ABUTMENT.

F.F. DENOTES FRONT FACE

B.F. DENOTES BACK FACE

E.F. DENOTES EACH FACE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-37-156

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NORTH ABUTMENT WING DETAILS

SHEET 6 OF 11
1012

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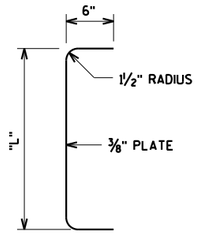
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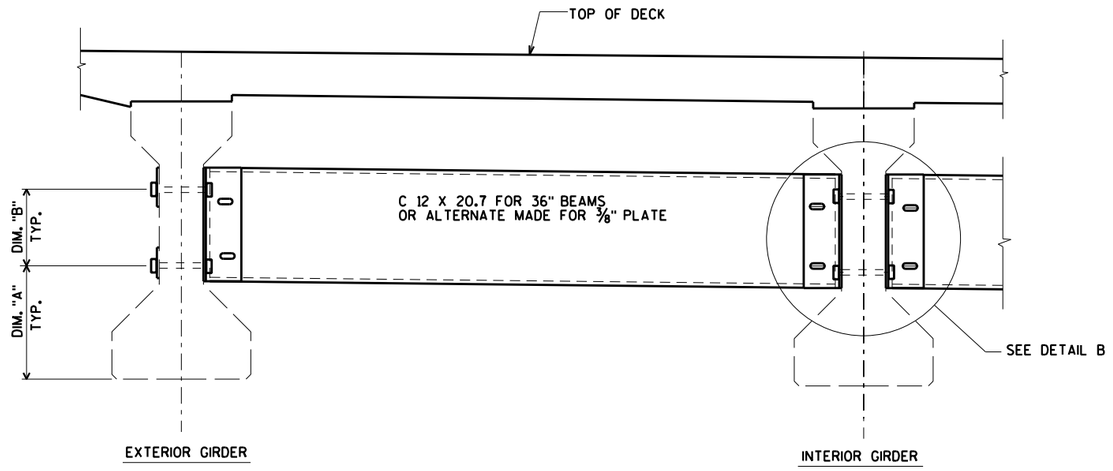
TABLE

GIRDER HEIGHT	DIM. "A"	DIM. "B"	DIM. "L"	* DIM. "X"
36"	1'-2⅞"	9⅞"	1'-1½"	3¼"



SECTION THRU ALTERNATE DIAPHRAGM

*DIM "X" = 2½" FOR ALTERNATE PLATE DIAPHRAGM



PART TRANSVERSE SECTION AT DIAPHRAGM

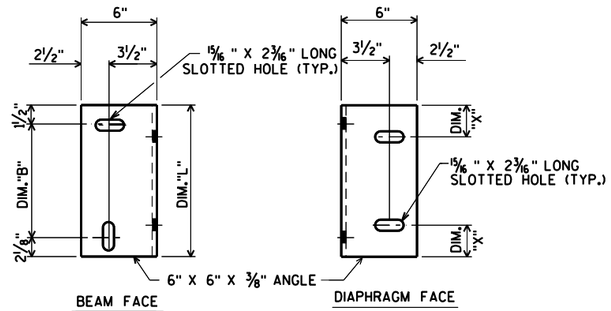
NOTES

ALL DIAPHRAGM MATERIAL AND CORED HOLES SHALL BE PAID FOR AT THE UNIT PRICE BID FOR "STEEL DIAPHRAGMS B-37-156", EACH.

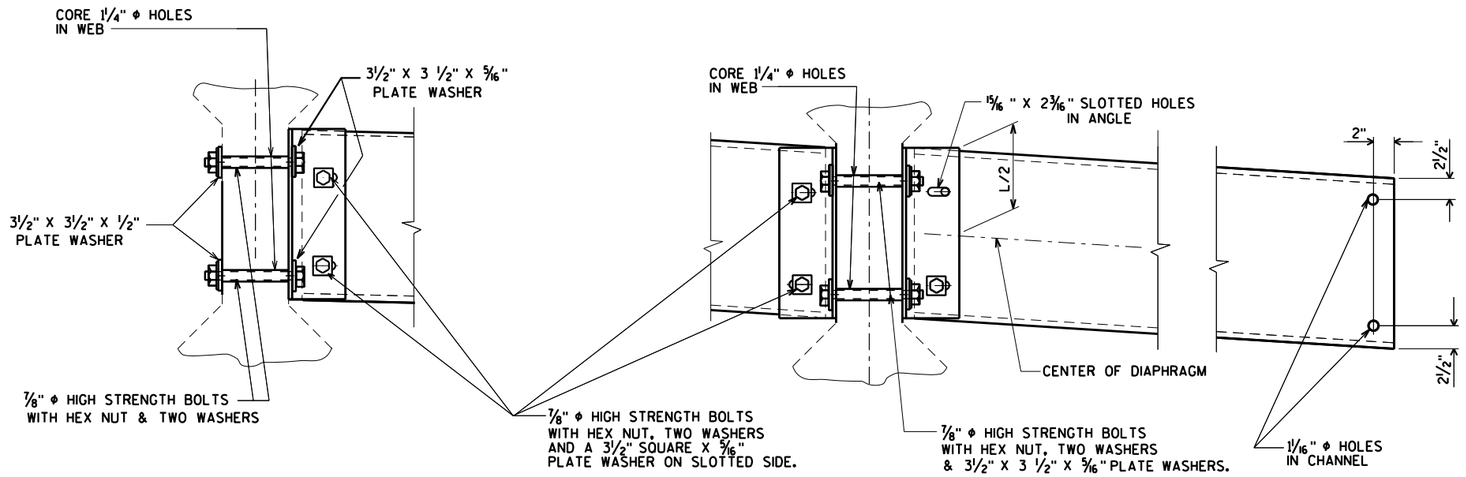
EACH DIAPHRAGM BETWEEN GIRDERS SHALL CONSTITUTE ONE UNIT.

ALL DIAPHRAGM STRUCTURAL STEEL SHALL BE ASTM A709 GRADE 36. ALL BOLTS, NUTS AND WASHERS SHALL BE ASTM A325 TYPE 1.

ALL DIAPHRAGM STRUCTURAL STEEL SHOWN SHALL BE HOT-DIPPED GALVANIZED. ALL BOLTS, NUTS AND WASHERS SHALL BE HOT-DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A153 CLASS C. GALVANIZED NUTS SHALL BE TAPPED OVERSIZED IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM A563 AND SHALL MEET THE REQUIREMENTS OF SUPPLEMENTARY REQUIREMENT S1 OF ASTM A563, LUBRICANT AND TEST FOR COATED NUTS.



DIAPHRAGM SUPPORT



(FOR EXTERIOR GIRS.)

(FOR CONTINUOUS LINE OF DIAPHRAGMS)

DETAIL B

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-37-156

DRAWN BY CJM | PLANS CK'D. DNS

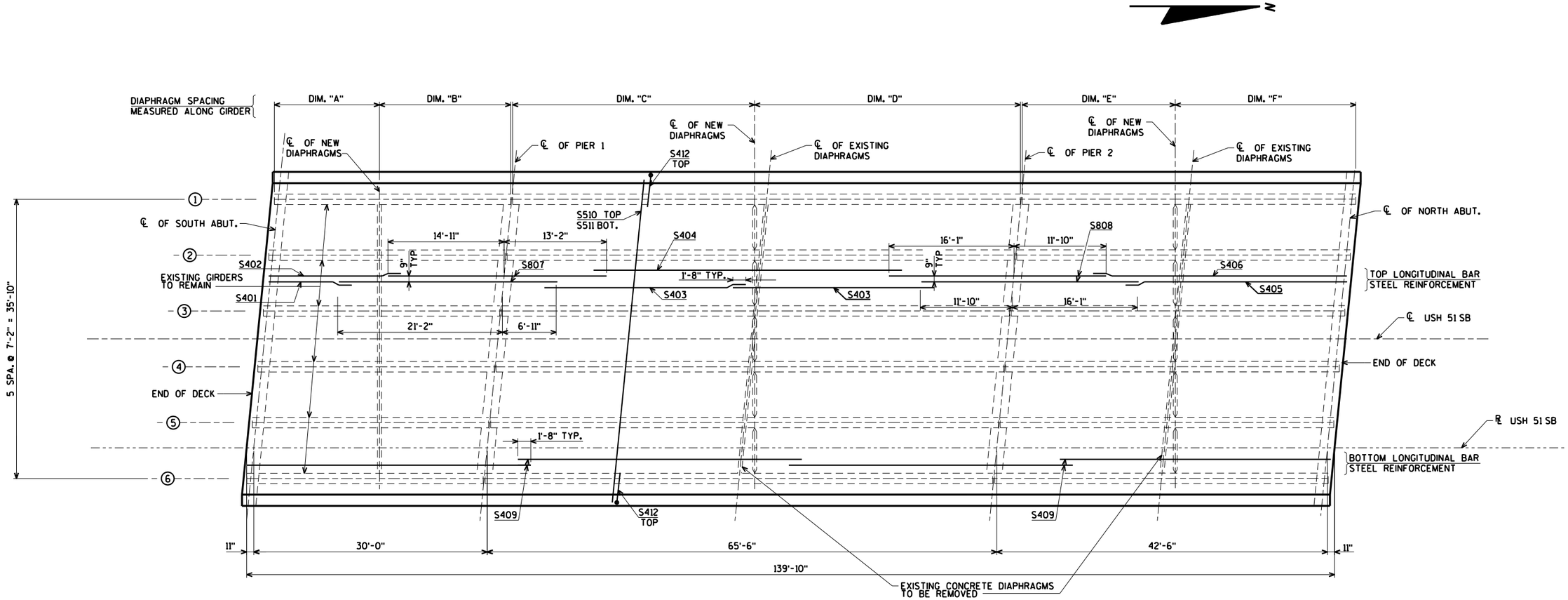
INTERM. STEEL DIAPH. DETAILS

SHEET 7 OF 11
1013

ORIGINAL PLANS PREPARED BY
AYRES ASSOCIATES
3433 Oakwood Hills Parkway
Eau Claire, WI 54701
www.AyresAssociates.com

STATE PROJECT NUMBER

1170-01-73



PLAN

NOTE: PER SPECIFICATIONS, THE CONTRACTOR IS RESPONSIBLE TO PROVIDE EXTERIOR GIRDER BRACING FOR SLAB OVERHANGS.

TABLE OF DIAPHRAGM DIMENSIONS

GIRDER	DIM. "A"	DIM. "B"	DIM. "C"	DIM. "D"	DIM. "E"	DIM. "F"
1	13'-5"	16'-11½"	30'-10¼"	34'-4¾"	19'-8"	23'-2½"
2	14'-1½"	16'-3"	31'-6¾"	33'-8¼"	20'-4½"	22'-6"
3	14'-10"	15'-6½"	32'-3¼"	32'-11¾"	21'-1"	21'-9½"
4	15'-6½"	14'-10"	32'-11¾"	32'-3¼"	21'-9½"	21'-1"
5	16'-3"	14'-1½"	33'-8¼"	31'-6¾"	22'-6"	20'-4½"
6	16'-11½"	13'-5"	34'-4¾"	30'-10¼"	23'-2½"	19'-8"

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-37-156

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SUPERSTRUCTURE PLAN

SHEET 8 OF 11
1014

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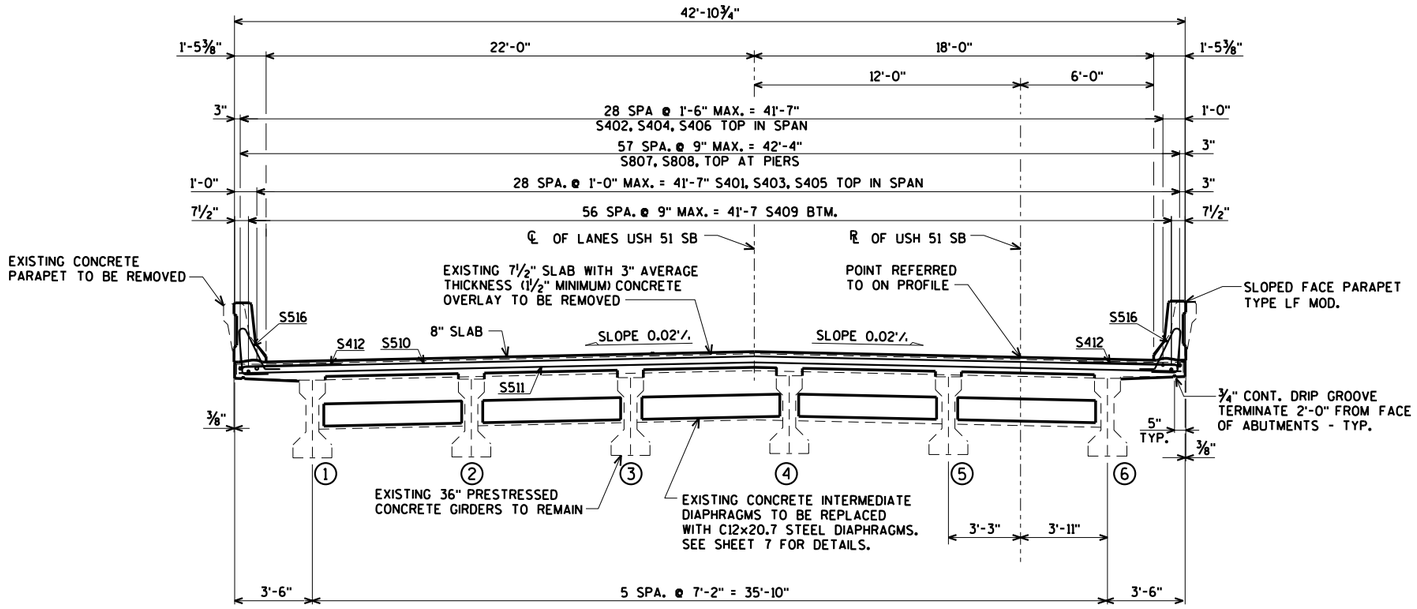
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STATE PROJECT NUMBER

1170-01-73



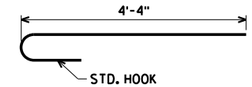
CROSS SECTION THRU BRIDGE

(LOOKING NORTH)

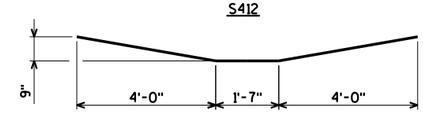
BILL OF BARS

BAR. NO.	COATED BAR	NO. REQ'D.	LENGTH	BENT BAR	BUNDLED BAR SERIES	46,660# COATED LOCATION
S401	X	29	11-3			SLAB LONG. TOP SPAN 1
S402	X	29	17-6			SLAB LONG. TOP SPAN 1
S403	X	58	25-11			SLAB LONG. TOP SPAN 2
S404	X	29	39-7			SLAB LONG. TOP SPAN 2
S405	X	29	28-10			SLAB LONG. TOP SPAN 3
S406	X	29	33-1			SLAB LONG. TOP SPAN 3
S807	X	58	28-1			SLAB LONG. TOP PIER 1
S808	X	58	27-11			SLAB LONG. TOP PIER 2
S409	X	228	36-2			SLAB LONG. BTM.
S510	X	240	42-8			SLAB TRANS. TOP
S511	X	239	42-8			SLAB TRANS. BTM.
S412	X	478	4-9	X		SLAB TRANS. TOP AT OVERHANGS
S413	X	60	5-10			SLAB TRANS. AT PIERS
S414	X	70	9-9	X		SLAB LONGIT. AT PIER HAUNCHES
S515	X	30	47-8			PARAPET HORIZ.
S516	X	420	4-2	X		PARAPET VERT.
S517	X	420	4-10	X		PARAPET VERT.

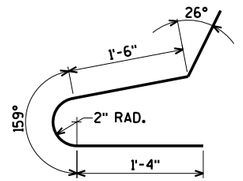
BENDING DIMENTIONS ARE OUT TO OUT OF BARS.



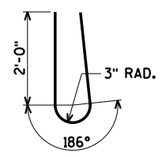
S412



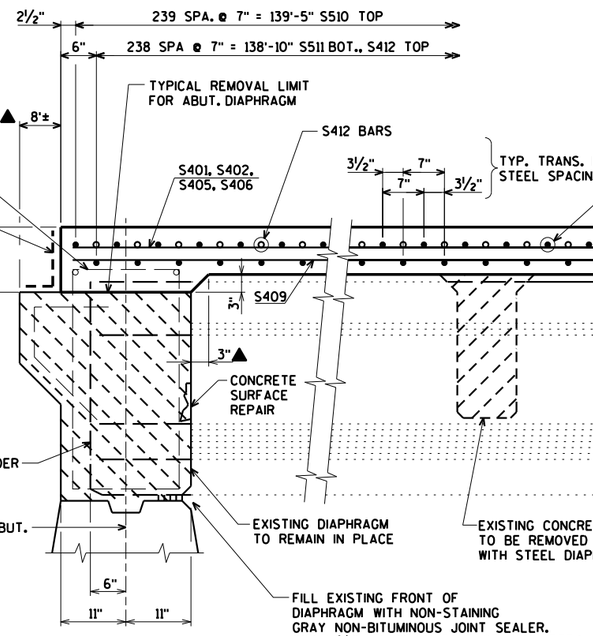
S414



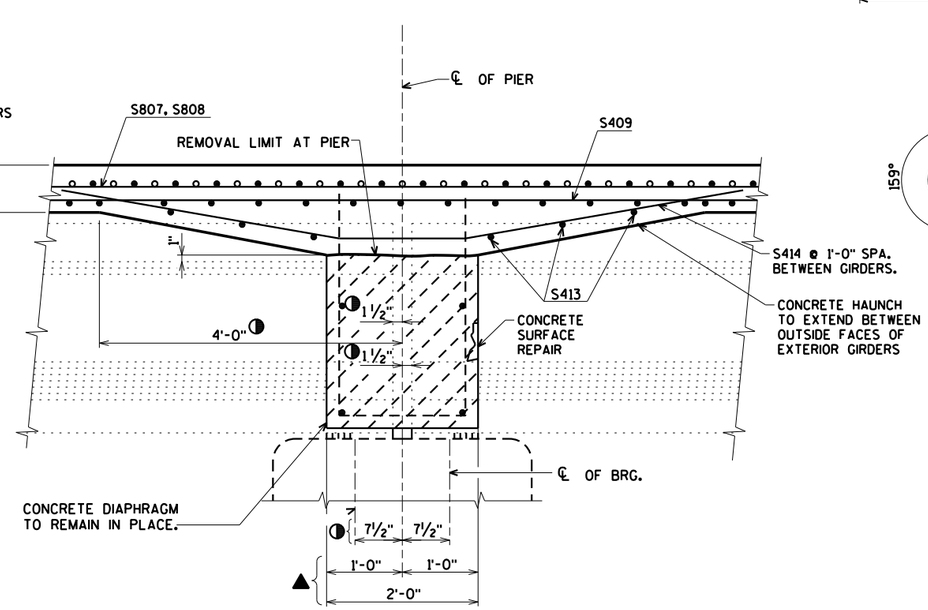
S516



S517



ABUTMENTS



PIERS

PART LONGITUDINAL SECTION

NOTE:
DAMAGE TO THE EXISTING GIRDERS CAUSED DURING DECK AND DIAPHRAGM REMOVAL OPERATIONS WILL BE REPAIRED AT THE CONTRACTORS EXPENSE.

◑ DIMENSION MEASURED ALONG ℄ OF GIRDER.

▲ DIMENSION MEASURED NORMAL TO ℄ OF SUBSTRUCTURE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-37-156

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SUPERSTRUCTURE SECTIONS

SHEET 9 OF 11

1015

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STATE PROJECT NUMBER

1170-01-73

TOP OF DECK ELEVATIONS

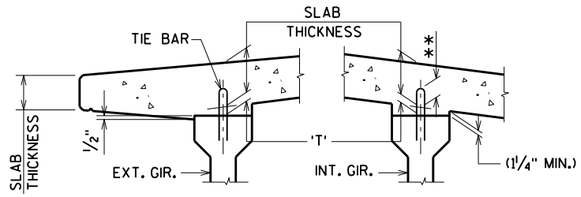
		SPAN 1									
	℄ S. ABUT.	0.1 Pt.	0.2 Pt.	0.3 Pt.	0.4 Pt.	0.5 Pt.	0.6 Pt.	0.7 Pt.	0.8 Pt.	0.9 Pt.	PIER 1
EDGE OF DECK	1309.67	1309.79	1309.91	1310.03	1310.15	1310.27	1310.39	1310.51	1310.63	1310.75	1310.87
GIRDER 1	1309.71	1309.83	1309.95	1310.07	1310.19	1310.31	1310.43	1310.55	1310.67	1310.79	1310.91
GIRDER 2	1309.82	1309.94	1310.06	1310.18	1310.30	1310.42	1310.54	1310.66	1310.78	1310.90	1311.02
GIRDER 3	1309.94	1310.06	1310.18	1310.30	1310.42	1310.54	1310.66	1310.78	1310.90	1311.02	1311.14
℄ USH 51 SB	1310.05	1310.17	1310.29	1310.41	1310.53	1310.65	1310.77	1310.89	1311.01	1311.13	1311.25
GIRDER 4	1310.01	1310.13	1310.25	1310.37	1310.49	1310.61	1310.73	1310.85	1310.97	1311.09	1311.21
GIRDER 5	1309.84	1309.96	1310.08	1310.20	1310.32	1310.44	1310.56	1310.68	1310.80	1310.92	1311.04
Ref. Line USH 51 SB	1309.76	1309.88	1310.00	1310.12	1310.24	1310.36	1310.48	1310.60	1310.72	1310.84	1310.96
GIRDER 6	1309.67	1309.79	1309.91	1310.03	1310.15	1310.27	1310.39	1310.51	1310.63	1310.75	1310.87
EDGE OF DECK	1309.58	1309.70	1309.82	1309.94	1310.06	1310.18	1310.30	1310.42	1310.54	1310.66	1310.78

		SPAN 2									
	PIER 1	0.1 Pt.	0.2 Pt.	0.3 Pt.	0.4 Pt.	0.5 Pt.	0.6 Pt.	0.7 Pt.	0.8 Pt.	0.9 Pt.	PIER 2
EDGE OF DECK	1310.87	1311.14	1311.40	1311.66	1311.92	1312.18	1312.45	1312.71	1312.97	1313.23	1313.49
GIRDER 1	1310.91	1311.18	1311.44	1311.70	1311.96	1312.22	1312.49	1312.75	1313.01	1313.27	1313.53
GIRDER 2	1311.02	1311.28	1311.55	1311.81	1312.07	1312.33	1312.59	1312.86	1313.12	1313.38	1313.64
GIRDER 3	1311.14	1311.41	1311.67	1311.93	1312.19	1312.45	1312.72	1312.98	1313.24	1313.50	1313.76
℄ USH 51 SB	1311.25	1311.51	1311.77	1312.04	1312.30	1312.56	1312.82	1313.08	1313.35	1313.61	1313.87
GIRDER 4	1311.21	1311.47	1311.74	1312.00	1312.26	1312.52	1312.78	1313.05	1313.31	1313.57	1313.83
GIRDER 5	1311.04	1311.30	1311.56	1311.83	1312.09	1312.35	1312.61	1312.87	1313.14	1313.40	1313.66
Ref. Line USH 51 SB	1310.96	1311.22	1311.49	1311.75	1312.01	1312.27	1312.53	1312.80	1313.06	1313.32	1313.58
GIRDER 6	1310.87	1311.13	1311.39	1311.65	1311.92	1312.18	1312.44	1312.70	1312.96	1313.23	1313.49
EDGE OF DECK	1310.78	1311.05	1311.31	1311.57	1311.83	1312.09	1312.36	1312.62	1312.88	1313.14	1313.40

		SPAN 3									
	PIER 2	0.1 Pt.	0.2 Pt.	0.3 Pt.	0.4 Pt.	0.5 Pt.	0.6 Pt.	0.7 Pt.	0.8 Pt.	0.9 Pt.	℄ N. ABUT.
EDGE OF DECK	1313.49	1313.66	1313.83	1314.00	1314.17	1314.34	1314.51	1314.68	1314.85	1315.02	1315.19
GIRDER 1	1313.53	1313.70	1313.87	1314.04	1314.21	1314.38	1314.55	1314.72	1314.89	1315.06	1315.23
GIRDER 2	1313.64	1313.81	1313.98	1314.15	1314.32	1314.49	1314.66	1314.83	1315.00	1315.17	1315.34
GIRDER 3	1313.76	1313.93	1314.10	1314.27	1314.44	1314.61	1314.78	1314.95	1315.12	1315.29	1315.46
℄ USH 51 SB	1313.87	1314.04	1314.21	1314.38	1314.55	1314.72	1314.89	1315.06	1315.23	1315.40	1315.57
GIRDER 4	1313.83	1314.00	1314.17	1314.34	1314.51	1314.68	1314.85	1315.02	1315.19	1315.36	1315.53
GIRDER 5	1313.66	1313.83	1314.00	1314.17	1314.34	1314.51	1314.68	1314.85	1315.02	1315.19	1315.36
Ref. Line USH 51 SB	1313.58	1313.75	1313.92	1314.09	1314.26	1314.43	1314.60	1314.77	1314.94	1315.11	1315.28
GIRDER 6	1313.49	1313.66	1313.83	1314.00	1314.17	1314.34	1314.51	1314.68	1314.85	1315.02	1315.19
EDGE OF DECK	1313.40	1313.57	1313.74	1313.91	1314.08	1314.25	1314.42	1314.59	1314.76	1314.93	1315.10

DEAD LOAD DEFLECTIONS

UNITS ARE INCHES	0.1 Pt.	0.2 Pt.	0.3 Pt.	0.4 Pt.	0.5 Pt.	0.6 Pt.	0.7 Pt.	0.8 Pt.	0.9 Pt.
SPAN 1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SPAN 2	0.3	0.6	0.9	1.0	1.1	1.0	0.9	0.6	0.3
SPAN 3	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.1



SLAB HAUNCH DETAIL

IF 1¼" MINIMUM HAUNCH HEIGHT AT EDGE OF GIRDER CANNOT BE MAINTAINED, THE GRADE LINE MAY BE REVISED BY THE ENGINEER AT THE OPTION OF THE CONTRACTOR. THE PLAN SLAB THICKNESS SHALL BE HELD. NOTIFY THE STRUCTURES SECTION IF THE GRADE LINE IS RAISED FROM THE PLAN PROFILE BY MORE THAN ½" OR,

** IF 3" MINIMUM DECK EMBEDMENT OF TIE BAR CANNOT BE OBTAINED.

TO DETERMINE 'T', ELEV. OF TOP OF GIR'S. AT ℄ OF SUBSTRUCTURE UNITS & AT 1/10 POINTS OF EACH SPAN SHALL BE TAKEN. THEN FOLLOW THIS PROCESS:

TOP OF DECK ELEV. AT FINAL GRADE
- TOP OF GIRDER ELEVATION
+ DEAD LOAD DEFLECTION
- SLAB THICKNESS
= HAUNCH HEIGHT 'T'

NOTE: AN AVERAGE HAUNCH ('T') OF 3¼" WAS USED IN THE QUANTITY "CONCRETE MASONRY BRIDGES".

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NO.	DATE	REVISION	BY

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DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-37-156

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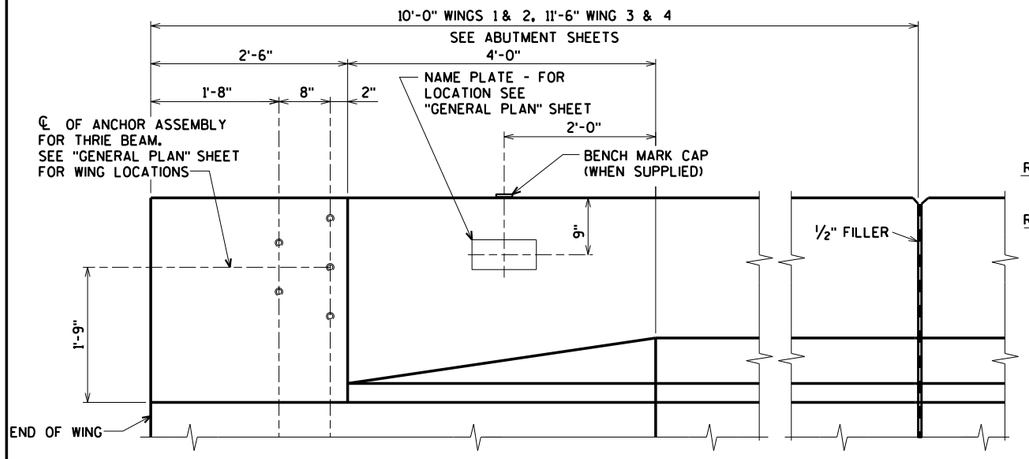
SUPERSTRUCTURE ELEVATIONS

SHEET 10 OF 11
1016

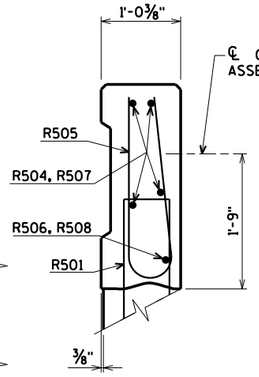
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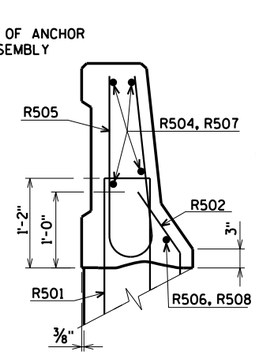
1170-01-73



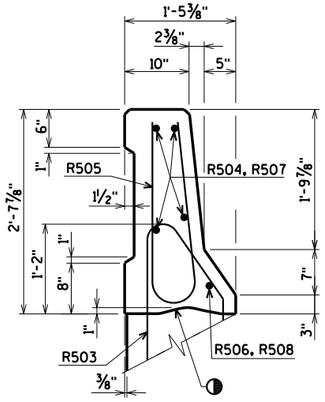
INSIDE ELEVATION



SECTION A



SECTION B



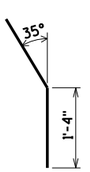
SECTION C

BILL OF BARS

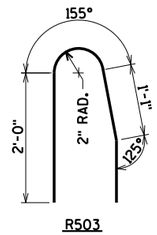
WEIGHTS INCLUDED IN ABUTMENT WEIGHTS SHOWN ON SHEETS 3 & 5.

BAR MARK	COATED	NO. REQ'D. SOUTH ABUT.	NO. REQ'D. NORTH ABUT.	LENGTH	BENT BAR	510* SOUTH ABUT. 570* NORTH ABUT. LOCATION
R501	X	28	28	4-7	X	PARAPET VERT.
R502	X	16	16	2-4	X	PARAPET VERT.
R503	X	10	14	4-7	X	PARAPET VERT.
R504	X	8	--	9-7		PARAPET HORIZ. WING 1 & 2
R505	X	38	42	4-10	X	PARAPET VERT.
R506	X	2	--	9-7	X	PARAPET HORIZ. WING 1 & 2
R507	X	--	8	11-1		PARAPET HORIZ. WING 3 & 4
R508	X	--	2	11-1	X	PARAPET HORIZ. WING 3 & 4

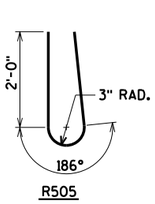
BENDING DIMENSIONS ARE OUT TO OUT OF BARS.



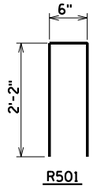
R502



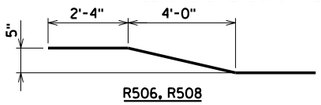
R503



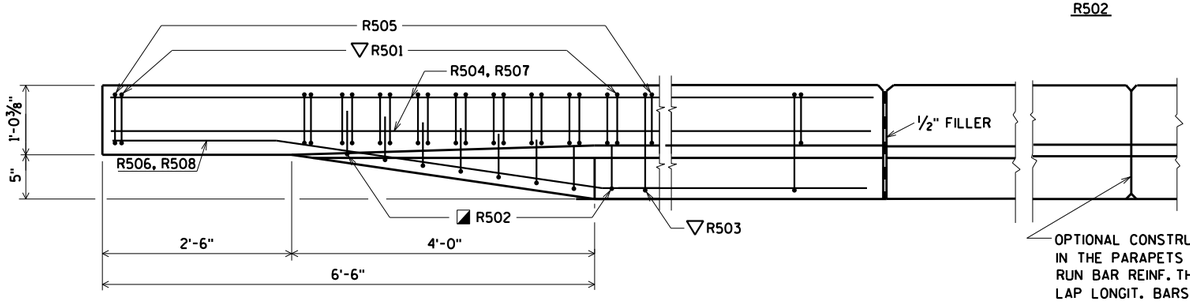
R505



R501



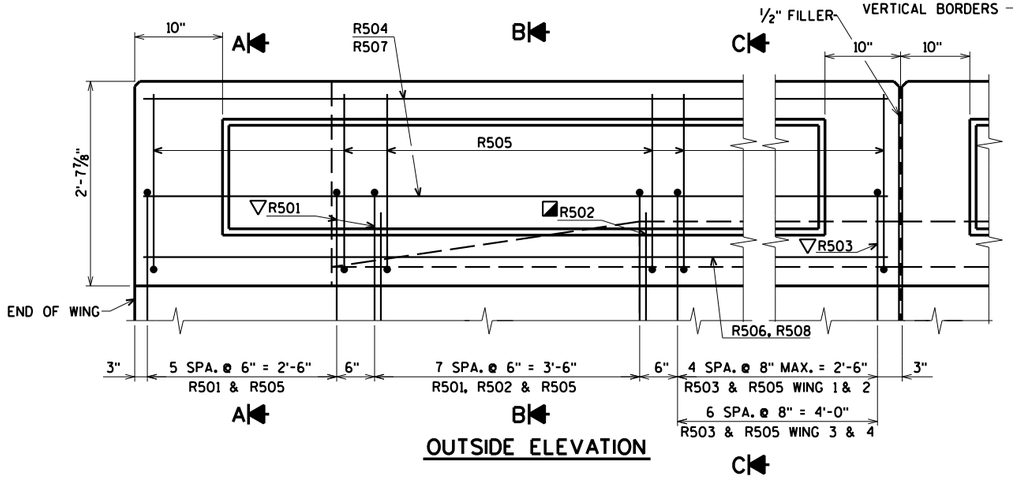
R506, R508



OPTIONAL CONSTRUCTION JOINTS IN THE PARAPETS MAY BE USED. RUN BAR REINF. THRU THE JOINT. LAP LONGIT. BARS A MIN. OF 1'-9". MIN. JOINT SPACING OF 80'-0". DEFINE CONST. JOINT WITH A ¾" 'V' GROOVE.

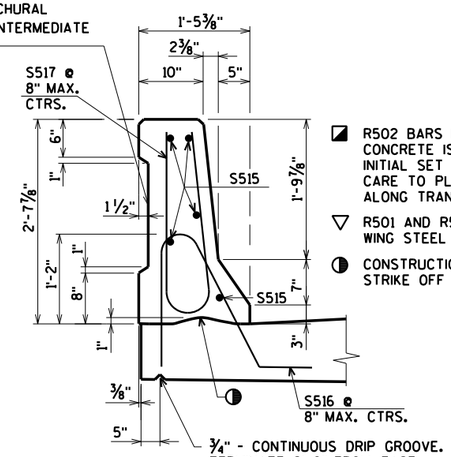
PLAN

(WING 2 & 4 SHOWN, WING 1 & 3 SIMILAR)



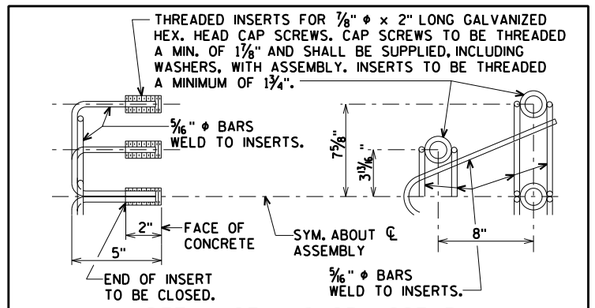
OUTSIDE ELEVATION

8'-2" LONG ARCHITECHURAL RECESSES WITH 6" INTERMEDIATE VERTICAL BORDERS



SECTION THRU PARAPET ON BRIDGE

- R502 BARS MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. USE CARE TO PLACE R502 BARS CORRECTLY ALONG TRANSITION OF PARAPET.
- ▽ R501 AND R503 BARS TO BE TIED TO WING STEEL BEFORE WING IS POURED.
- ◑ CONSTRUCTION JOINT STRIKE OFF AS SHOWN.



DETAIL OF ANCHOR ASSEMBLY

NOTE: HEX. HEAD CAP SCREWS & WASHERS TO BE GALVANIZED IN ACCORDANCE WITH AASHTO M232 CLASS C. SEE SHEET 1 FOR LOCATION. ASSEMBLY BID ITEM SHALL BE "ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD".

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-37-156

DRAWN BY CJM | PLANS CK'D. DNS

SLOPED FACE PARAPET "LF" MOD.

SHEET 11 OF 11
1017

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ecpdf.plt
B-37-156PAR.DGN

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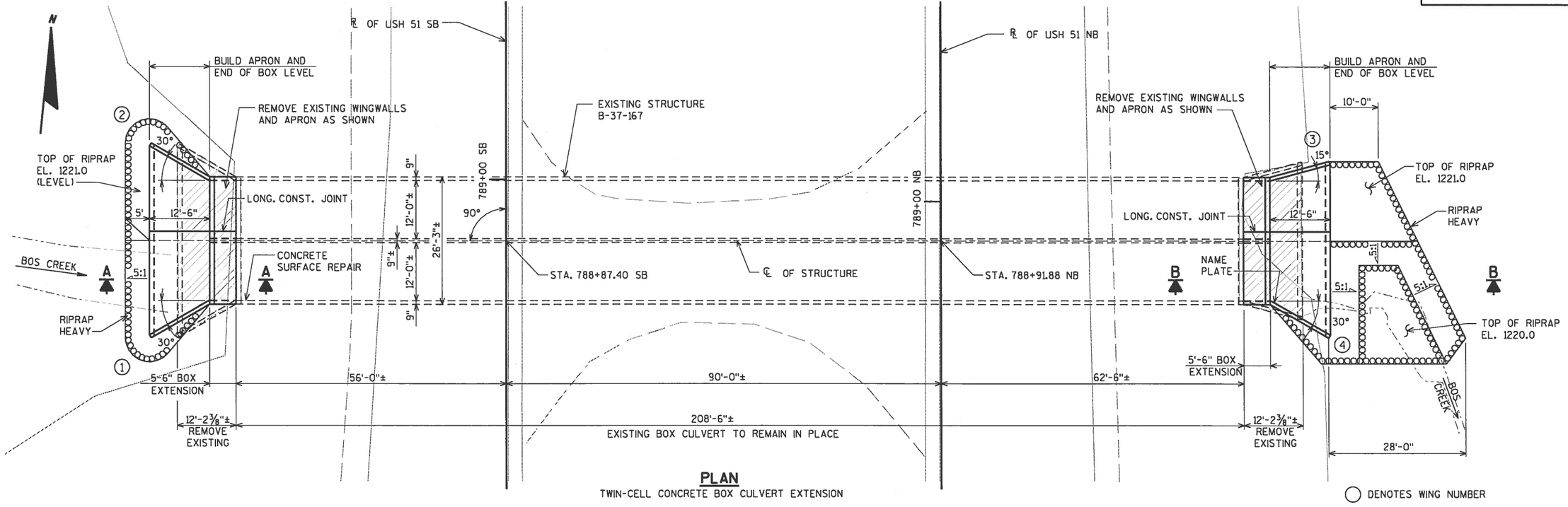
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U:±41-0525.00 - Marathon Co, UK and USH 51 Interchange±B-37-167 USH 51 over BOS Creek±Bridge±B

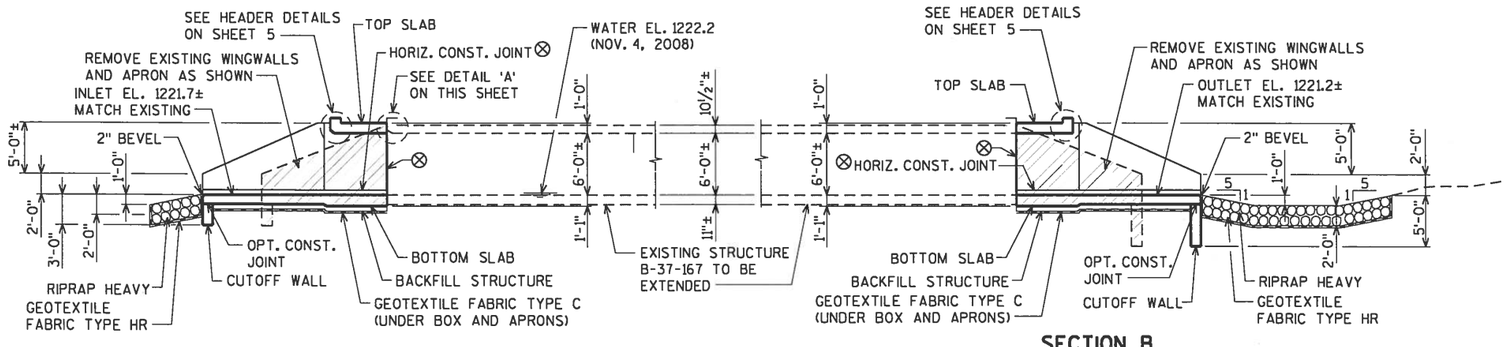
STATE PROJECT NUMBER

1170-01-73



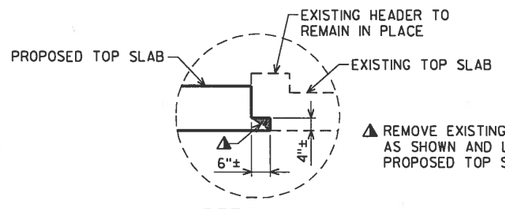
PLAN
TWIN-CELL CONCRETE BOX CULVERT EXTENSION

◯ DENOTES WING NUMBER



SECTION A
(INLET)

SECTION B
(OUTLET)



⚠ REMOVE EXISTING CONCRETE AT ENDS OF CULVERT AS SHOWN AND LEAVE ROUGH BEFORE FORMING PROPOSED TOP SLAB.

DETAIL 'A'

⊗ 18" RUBBERIZED MEMBRANE WATERPROOFING UP WALLS & ACROSS TOP SLAB AT VERTICAL CONSTRUCTION JOINTS AND ALONG HORIZONTAL CONSTRUCTION JOINTS

LIST OF DRAWINGS

1. GENERAL PLAN
2. QUANTITIES AND NOTES
3. APRON PLAN
4. WING DETAILS
5. BOX DETAILS
6. BAR STEEL LAYOUT
7. BILL OF BARS AND DETAILS

FOR GENERAL NOTES, QUANTITIES, DESIGN DATA, & PROFILE GRADE, SEE SHEET 2

WISCONSIN
DANIEL N. SYDOW
E-38363
WI
PROFESSIONAL ENGINEER
7/31/12

BRIDGE OFFICE CONTACT:
WILLIAM DREHER
(608)-266-8489

CONSULTANT CONTACT:
DAN SYDOW
(715)-834-3161

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Eau Claire, WI 54701
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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher KAR 08/15/12
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE B-37-167

USH 51 OVER BOS CREEK

COUNTY	TOWN ~~CITY/VILLAGE~~
MARATHON	MAINE

DESIGN SPEC.
AASHTO LRFD DESIGN SPEC. 5th EDITION

DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
CJM	KLW	CLS	DNS

GENERAL PLAN

SHEET 1 OF 7
1018

DATE:
DATE:
DATE:
CHECKED BY:
BACK CHECKED BY:
CORRECTED BY:

8

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GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS SHOWN OR NOTED OTHERWISE.

THE FIRST DIGIT OF A THREE DIGIT BAR NO. AND THE FIRST TWO DIGITS OF A FOUR DIGIT BAR NO. SIGNIFIES THE BAR SIZE.

JOINT FILLER SHALL CONFORM TO THE REQUIREMENTS OF A.A.S.H.T.O. DESIGNATION M 153, TYPE I, II OR III OR A.A.S.H.T.O. DESIGNATION M 213.

THE UPPER LIMITS OF "EXCAVATION FOR STRUCTURES" SHALL BE THE EXISTING GROUND LINE.

THE ALTERNATE CUTOFF WALL MAY BE USED IN LIEU OF THE CAST-IN-PLACE CONCRETE CUTOFF WALLS. PAYMENT SHALL BE BASED ON THE CONCRETE CUTOFF WALLS.

THE CONCRETE IN THE CUTOFF WALL MAY BE PLACED UNDERWATER IF THE EXCAVATION CANNOT BE DEWATERED.

ALL SPACES EXCAVATED AND NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH STRUCTURE BACKFILL TO THE ELEVATION OF THE TOP OF THE BOX WITHIN THE LENGTH OF THE BOX. THE PAY LIMITS OF THE STRUCTURAL BACKFILL ARE 3'-0" BEYOND THE HORIZONTAL PLAN LIMITS AT THE BOTTOM OF THE BOX AND APRON AND UP AT A 1:1.5 BACKFILL SLOPE FROM BOTTOM OF SLAB TO TOP OF BOX OR PROPOSED SUBGRADE ELEVATION, WHICHEVER IS LOWER, PLUS 6" BELOW BOX.

THE EXISTING STRUCTURE B-37-167, IS A 2 CELL 12'-0"± x 6'-0"± CONCRETE BOX CULVERT WITH A BARREL LENGTH OF 208'-6"±.

REMOVING OLD STRUCTURE STATION 788+91.88 NB, INCLUDES REMOVING EXISTING OUTLET AND INLET WINGS AND APRONS.

DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS. CONTRACTOR TO VERIFY DIMENSIONS IN THE FIELD. THE CONTRACTOR SHALL ADJUST THE DIMENSIONS OF THE BOX CELL OPENINGS TO MATCH THE EXISTING CULVERT.

ALL CONCRETE REMOVAL SHALL BE DEFINED BY A 1" DEEP SAW CUT UNLESS SHOWN OR NOTED OTHERWISE.

FILLET THE FORMS WITH ¾ INCH TRIANGULAR MOLDING CHAMFER STRIPS AT ALL EXPOSED, SHARP CORNERS AND AT THE EDGES OF THE CONCRETE, UNLESS SPECIFIED OTHERWISE.

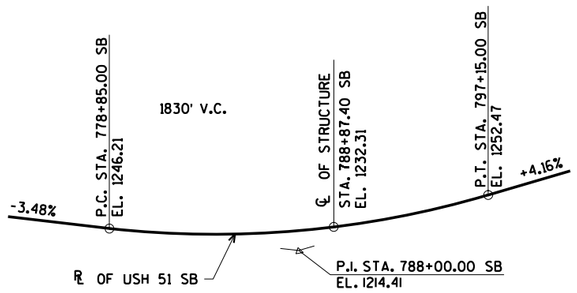
THE CONTRACTOR SHALL SUPPLY A NEW NAME PLATE IN ACCORDANCE WITH SECTION 502.3.11 OF THE STANDARD SPECIFICATIONS AND THE STANDARD DETAIL DRAWINGS. NAME PLATE TO SHOW THE ORIGINAL CONSTRUCTION YEAR (1974).

TOTAL ESTIMATED QUANTITIES

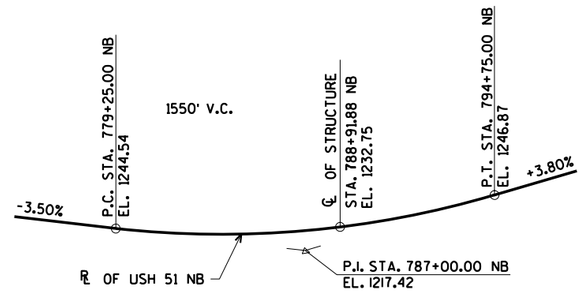
ITEM NUMBER	BID ITEMS	AMOUNT
203.0500.S	REMOVING OLD STRUCTURE OVER WATERWAY STATION 788+91.88 NB	1 LS
206.2000	EXCAVATION FOR STRUCTURES CULVERTS B-37-167	1 LS
210.0100	BACKFILL STRUCTURE	180 CY
502.5005	MASONRY ANCHORS TYPE L NO. 5 BARS	140 EACH
504.0100	CONCRETE MASONRY CULVERTS	70 CY
505.0410	BAR STEEL REINFORCEMENT HS CULVERTS	6,760 LB
509.1500	CONCRETE SURFACE REPAIR	10 SF
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	32 SY
606.0300	RIPRAP HEAVY	90 CY
645.0105	GEOTEXTILE FABRIC TYPE C	150 SY
645.0120	GEOTEXTILE FABRIC TYPE HR	175 SY

NON-BID ITEMS

FILLER	¾ SIZE



PROFILE GRADE LINE
(USH 51 SB)



PROFILE GRADE LINE
(USH 51 NB)

BENCH MARK:
POINT ID: BM235
DOT DISK ON TOP OF NE WING
STA. 789+04 NB, 62' RT.
N = 215441.64
E = 274218.17
EL. = 1228.63

DESIGN DATA

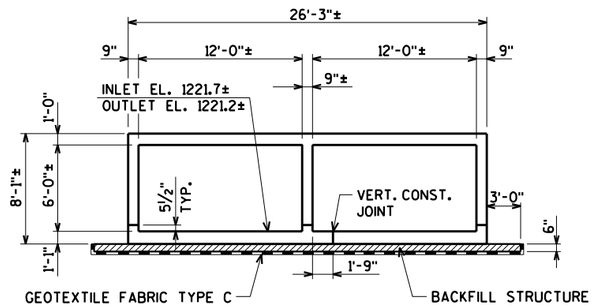
LIVE LOAD:
DESIGN LOADING: HL-93

EARTH LOAD: 2'-0" ✳

ULTIMATE DESIGN STRESSES:
CONCRETE MASONRY ——— f'_c = 3,500 p.s.i.
HIGH STRENGTH BAR STEEL REINFORCEMENT (GRADE 60) ——— f_y = 60,000 p.s.i.

TRAFFIC DATA:
A.D.T. = 31,000 (2015)
A.D.T. = 41,300 (2035)
R.D.S. = 70 M.P.H.

✳ EXISTING CULVERT WAS DESIGNED FOR 2 FEET OF FILL.



TYPICAL SECTION THRU BOX EXTENSION
NOTE: MATCH EXISTING CULVERT OPENING (LOOKING WEST)

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-37-167

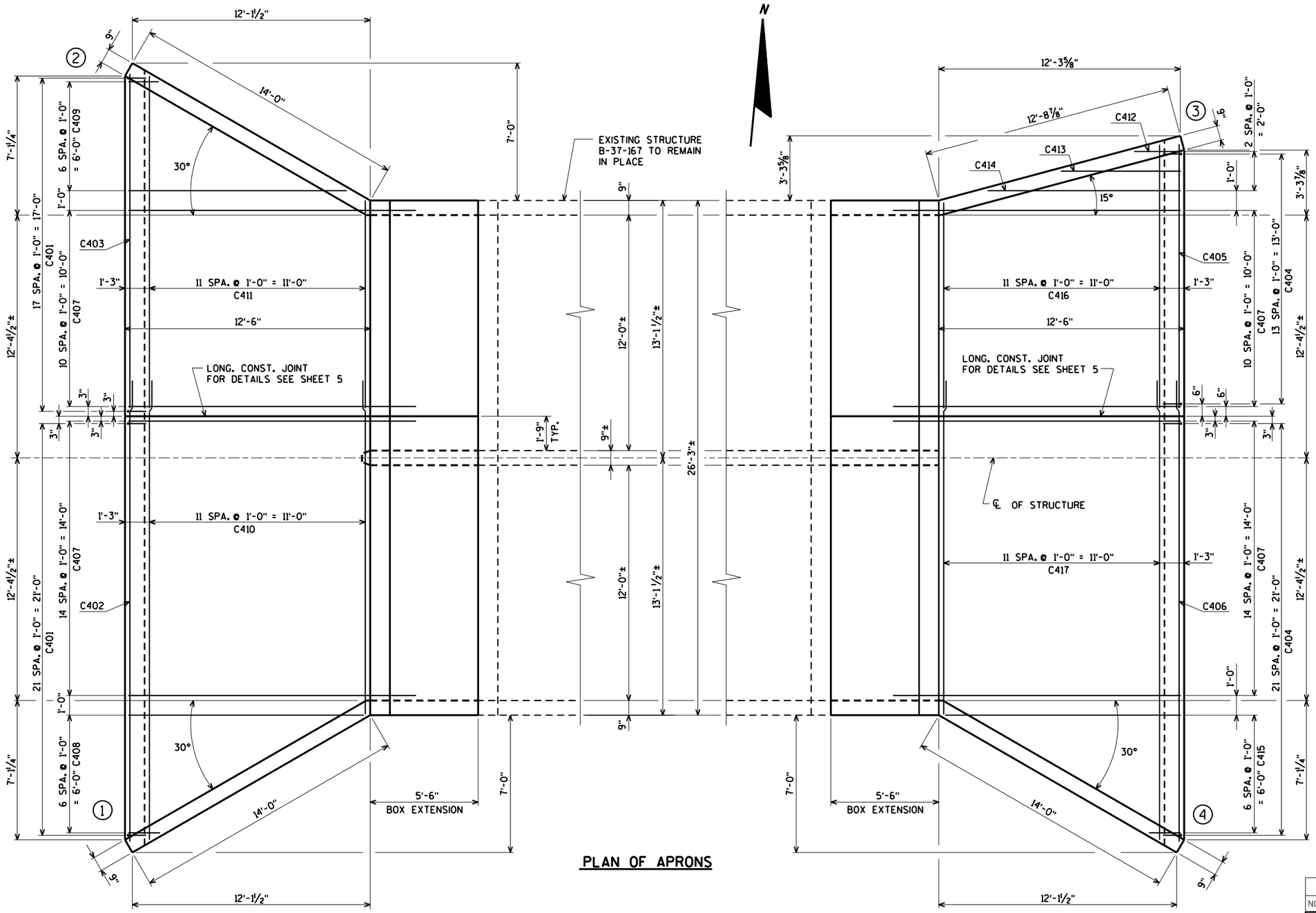
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QUANTITIES AND NOTES

SHEET 2 OF 7
1019

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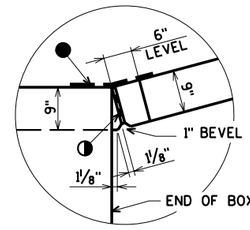
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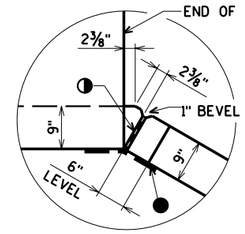
PLAN OF APRONS

INLET

OUTLET



WING 3 SHOWN



WING 4 SHOWN
WINGS 1 & 2 SIMILAR

CORNER DETAILS

● 18" RUBBERIZED MEMBRANE WATERPROOFING TO EXTEND FROM HORIZ. CONST. JOINT TO TOP OF WING.

◑ ¾" FILLER TO EXTEND FROM HORIZ. CONST. JOINT TO TOP OF WING.

NOTE:
DO NOT RUN ANY BAR STEEL REINF. THRU JOINT FILLER.

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STATE OF WISCONSIN
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STRUCTURES DESIGN SECTION

STRUCTURE B-37-167

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APRON PLAN

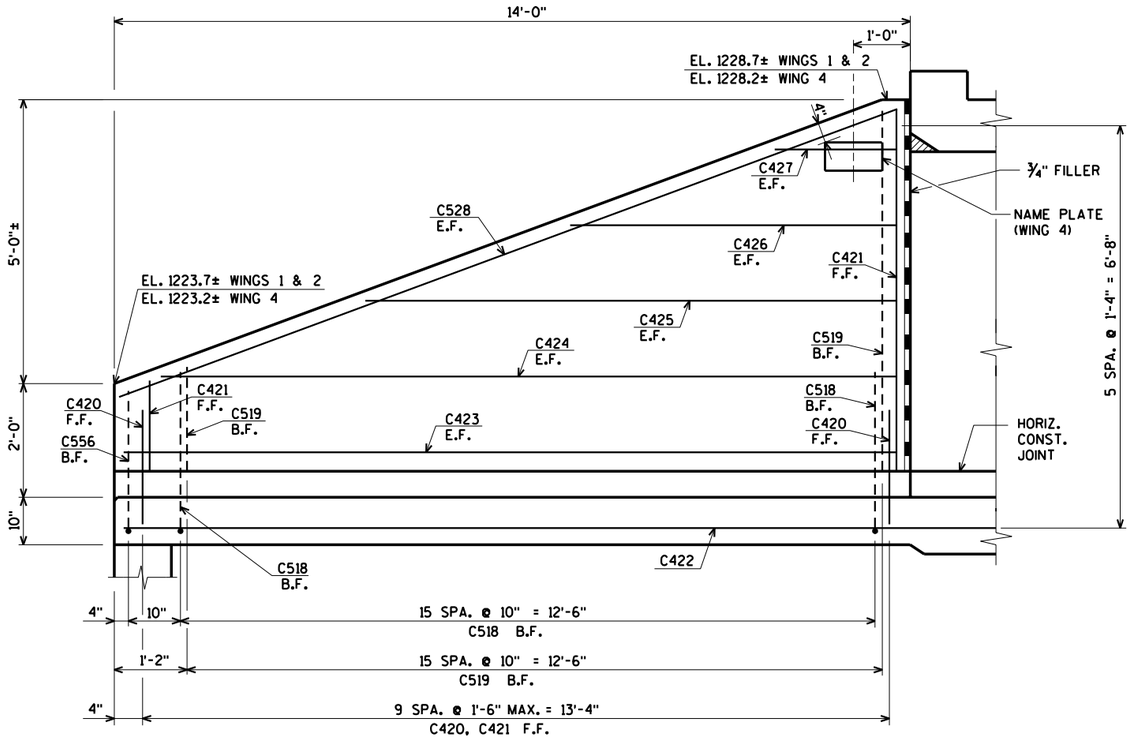
SHEET 3 OF 7
1020

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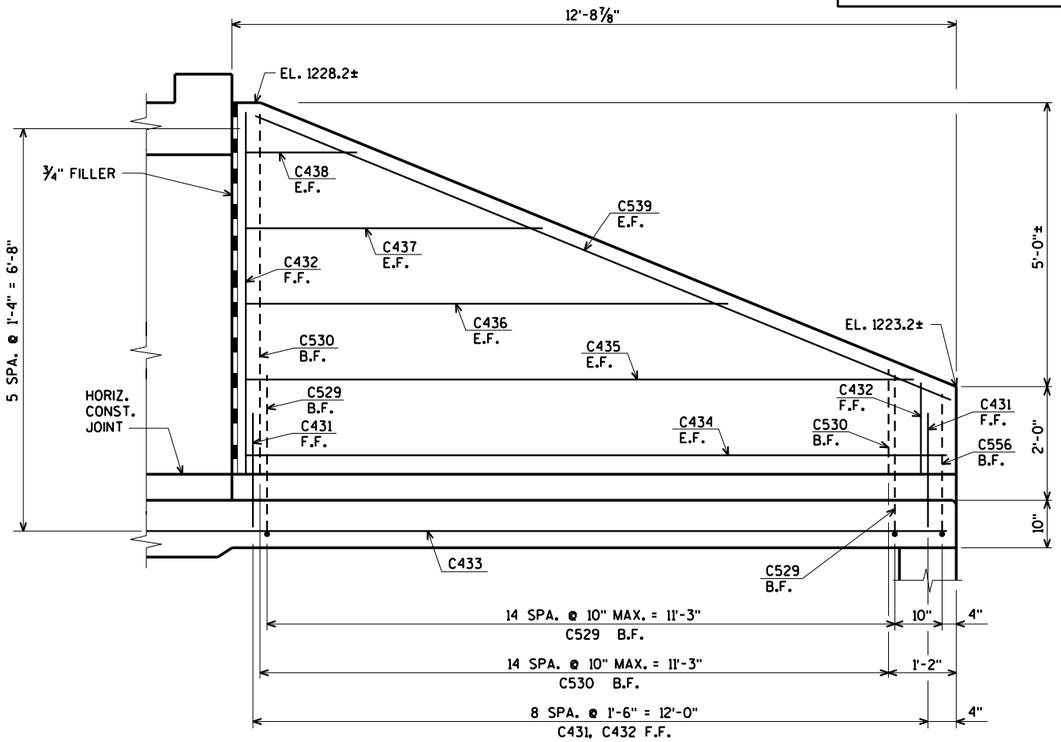
STATE PROJECT NUMBER

1170-01-73

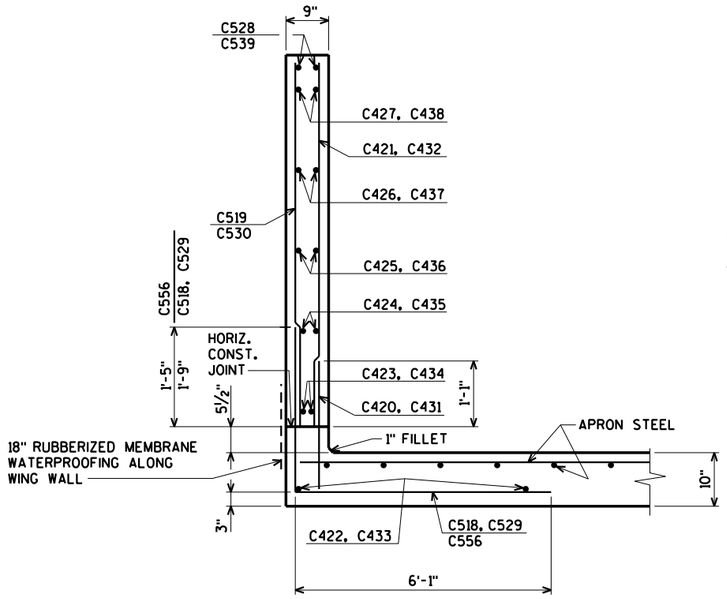


ELEVATION - WING 1

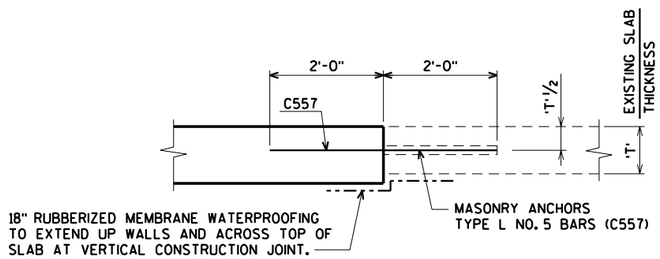
WING 2 & 4 SIMILAR



ELEVATION - WING 3

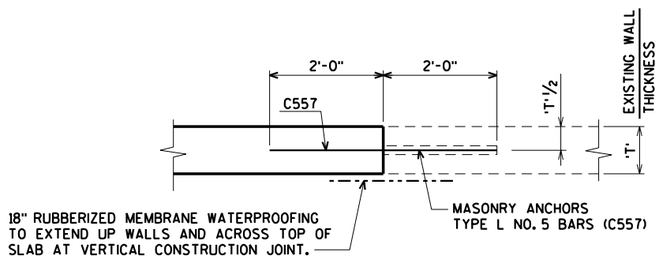


TYP. SECTION THRU WING



VERT. CONST. JOINT

(ALL SLABS)



VERT. CONST. JOINT

(ALL WALLS)

E.F. DENOTES EACH FACE

F.F. DENOTES FRONT FACE

B.F. DENOTES BACK FACE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
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STRUCTURES DESIGN SECTION

STRUCTURE B-37-167

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WING DETAILS

SHEET 4 OF 7
1021

8

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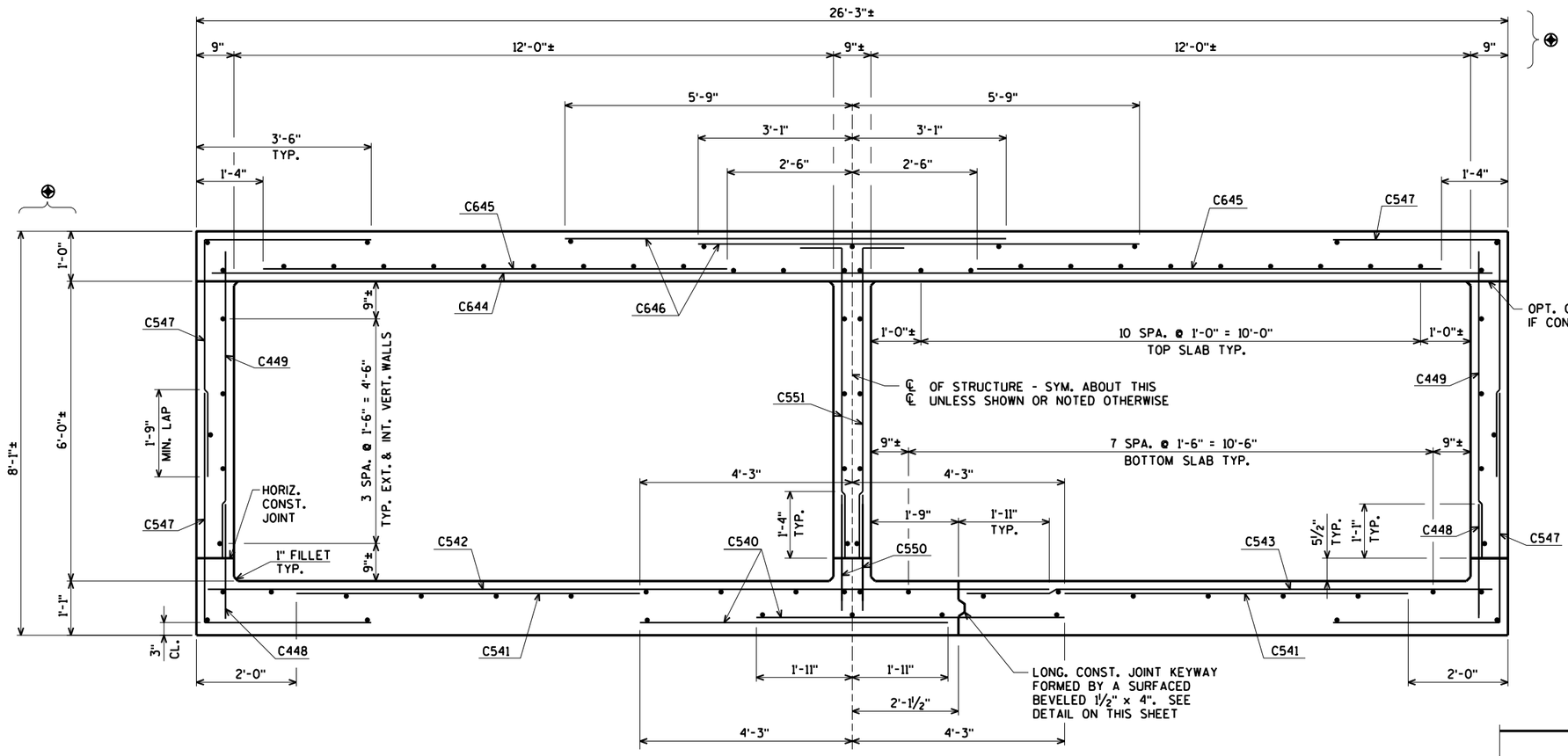
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7/31/2012

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STATE PROJECT NUMBER

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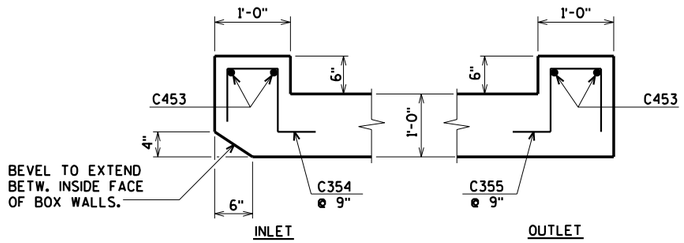
ALL LONGITUDINAL BARS IN BOX ARE C452 UNLESS SHOWN OTHERWISE

OPT. CONST. JOINT OMIT 1" FILLET IF CONST. JOINT IS USED - TYP.

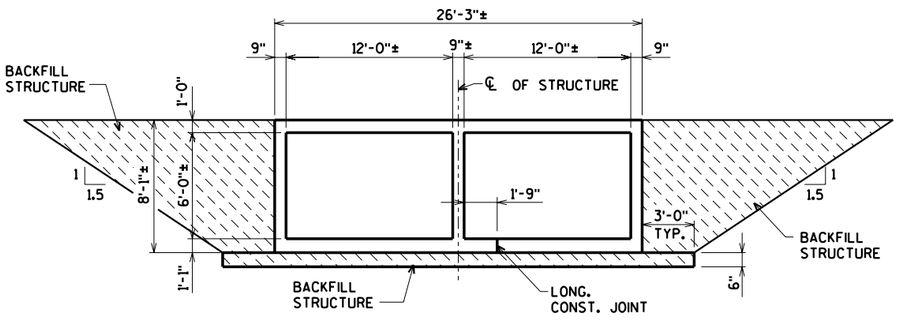
℄ ADJUST AS NECESSARY TO MATCH THE OPENINGS OF THE EXISTING CULVERT

TYPICAL SECTION THRU BOX

(LOOKING WEST)

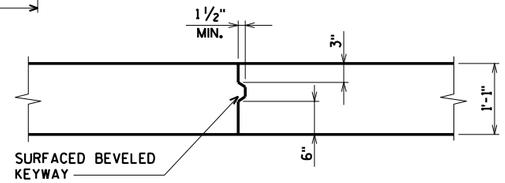


HEADER DETAILS



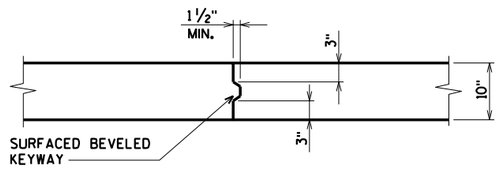
CROSS SECTION THRU CULVERT

(BACKFILL DETAIL)



LONG. CONST. JOINT DETAIL

(BOTTOM SLAB OF BOX)



LONG. CONST. JOINT DETAIL

(BOTTOM OF APRON)

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STATE OF WISCONSIN
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STRUCTURES DESIGN SECTION

STRUCTURE B-37-167

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BOX DETAILS

SHEET 5 OF 7
1022

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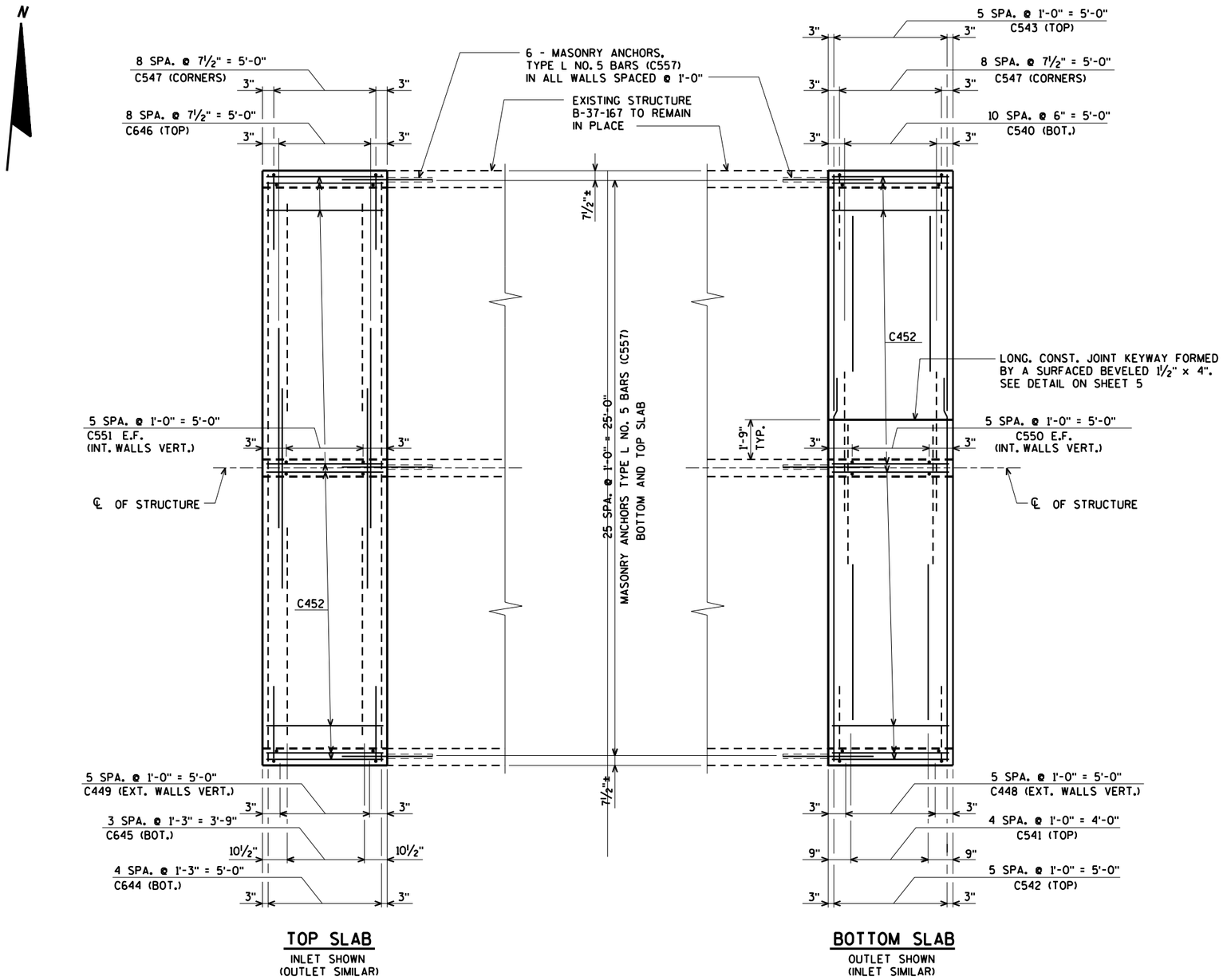
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7/31/2012

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TOP SLAB
INLET SHOWN
(OUTLET SIMILAR)

BOTTOM SLAB
OUTLET SHOWN
(INLET SIMILAR)

E.F. DENOTES EACH FACE

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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-37-167

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BAR STEEL LAYOUT

SHEET 6 OF 7
1023

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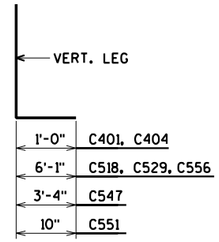
1170-01-73

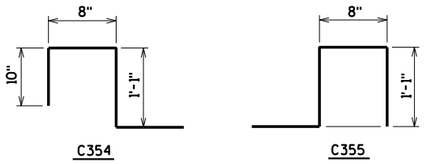
BILL OF BARS

BAR. NO.	COATED BAR	NO. REQ'D.	LENGTH	BENT BAR	BUNDLED BAR SERIES	6,760# UNCOATED LOCATION
C401		40	3-7	X		CUTOFF WALL INLET
C402		3	23-3			CUTOFF WALL INLET
C403		3	17-3			CUTOFF WALL INLET
C404		36	5-7	X		CUTOFF WALL OUTLET
C405		5	13-8			CUTOFF WALL OUTLET
C406		5	23-3			CUTOFF WALL OUTLET
C407		52	14-7			APRON INLET & OUTLET
C408		7	6-9		⊗	APRON INLET WING 1
C409		7	6-4		⊗	APRON INLET WING 2
C410		12	19-11		⊗	APRON INLET
C411		12	13-11		⊗	APRON INLET
C412		1	2-4			APRON OUTLET WING 3
C413		1	6-1			APRON OUTLET WING 3
C414		1	9-9			APRON OUTLET WING 3
C415		7	6-9		⊗	APRON OUTLET WING 4
C416		12	12-2		⊗	APRON OUTLET
C417		12	19-11		⊗	APRON OUTLET
C518		48	8-9	X		WINGS 1, 2 & 4 VERT. B.F.
C519		48	4-0		⊗	WINGS 1, 2 & 4 VERT. B.F.
C420		30	2-1			WINGS 1, 2 & 4 VERT. F.F.
C421		30	3-10		⊗	WINGS 1, 2 & 4 VERT. F.F.
C422		6	16-1			WINGS 1, 2 & 4 HORIZ.
C423		6	13-7			WINGS 1, 2 & 4 HORIZ. E.F.
C424		6	12-11			WINGS 1, 2 & 4 HORIZ. E.F.
C425		6	9-4			WINGS 1, 2 & 4 HORIZ. E.F.
C426		6	5-8			WINGS 1, 2 & 4 HORIZ. E.F.
C427		6	2-1			WINGS 1, 2 & 4 HORIZ. E.F.
C528		6	14-5			WINGS 1, 2 & 4 DIAG. E.F.
C529		15	8-9	X		WINGS 3 VERT. B.F.
C530		15	4-1		⊗	WINGS 3 VERT. B.F.
C431		9	2-1			WINGS 3 VERT. F.F.
C432		9	3-10		⊗	WINGS 3 VERT. F.F.
C433		2	14-10			WINGS 3 HORIZ.
C434		2	12-4			WINGS 3 HORIZ. E.F.
C435		2	11-9			WINGS 3 HORIZ. E.F.
C436		2	8-5			WINGS 3 HORIZ. E.F.
C437		2	5-2			WINGS 3 HORIZ. E.F.
C438		2	1-11			WINGS 3 HORIZ. E.F.
C539		2	13-3			WINGS 3 DIAG. E.F.
C540		22	6-2			BOX BOT. SLAB TRANS.
C541		20	6-10			BOX BOT. SLAB TRANS.
C542		12	16-9			BOX BOT. SLAB TRANS.
C543		12	10-5			BOX BOT. SLAB TRANS.
C644		10	25-6			BOX TOP SLAB TRANS.
C645		16	9-3			BOX TOP SLAB TRANS.
C646		18	8-10			BOX TOP SLAB TRANS.
C547		72	7-11	X		BOX CORNERS
C448		24	2-4			BOX DOWELS EXT. WALLS
C449		24	6-0			BOX EXT. WALLS VERT.
C550		24	2-7			BOX DOWELS INT. WALLS
C551		24	6-10	X		BOX INT. WALLS VERT.
C452		164	5-2			BOX LONG.
C453		4	25-11			BOX HEADER INLET & OUTLET
C354		35	2-10	X		BOX HEADER INLET
C355		35	3-1	X		BOX HEADER OUTLET
C556		4	8-5	X		WINGS 1, 2, 3 & 4 VERT. B.F.
C557		140	4-0			BOX JOINT @ EXIST. BOX

BENDING DIMENSIONS ARE OUT TO OUT OF BARS.

⊗ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

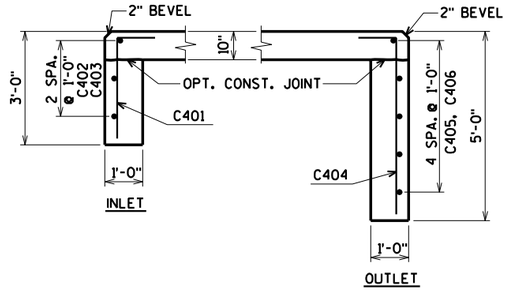




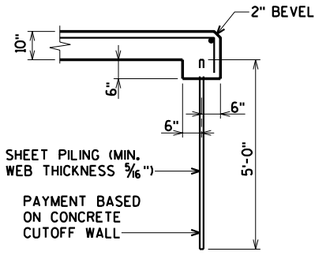
BAR SERIES TABLE

BAR NO.	NO REQ'D.	LENGTH
C408	1 SERIES OF 7	1'-7" TO 11'-11"
C409	1 SERIES OF 7	1'-2" TO 11'-6"
C410	1 SERIES OF 12	16'-7" TO 23'-2"
C411	1 SERIES OF 12	10'-9" TO 17'-1"
C415	1 SERIES OF 7	1'-7" TO 11'-11"
C416	1 SERIES OF 12	10'-8" TO 13'-8"
C417	1 SERIES OF 12	16'-7" TO 23'-2"
C519	3 SERIES OF 16	1'-9" TO 6'-3"
C421	3 SERIES OF 10	1'-5" TO 6'-3"
C530	1 SERIES OF 15	1'-10" TO 6'-4"
C432	1 SERIES OF 9	1'-5" TO 6'-3"

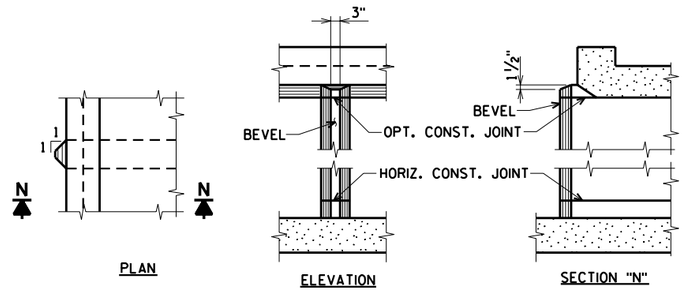
BUNDLE AND TAG EACH SERIES SEPARATELY.



SECTION THRU CUTOFF WALL



SECTION THRU ALTERNATE CUTOFF WALL



INLET NOSE DETAIL

E.F. DENOTES EACH FACE

F.F. DENOTES FRONT FACE

B.F. DENOTES BACK FACE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-37-167

DRAWN BY CLS | PLANS CK'D. KLW

BILL OF BARS AND DETAILS

SHEET 7 OF 7
1024

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Eau Claire, WI 54701
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7/31/2012

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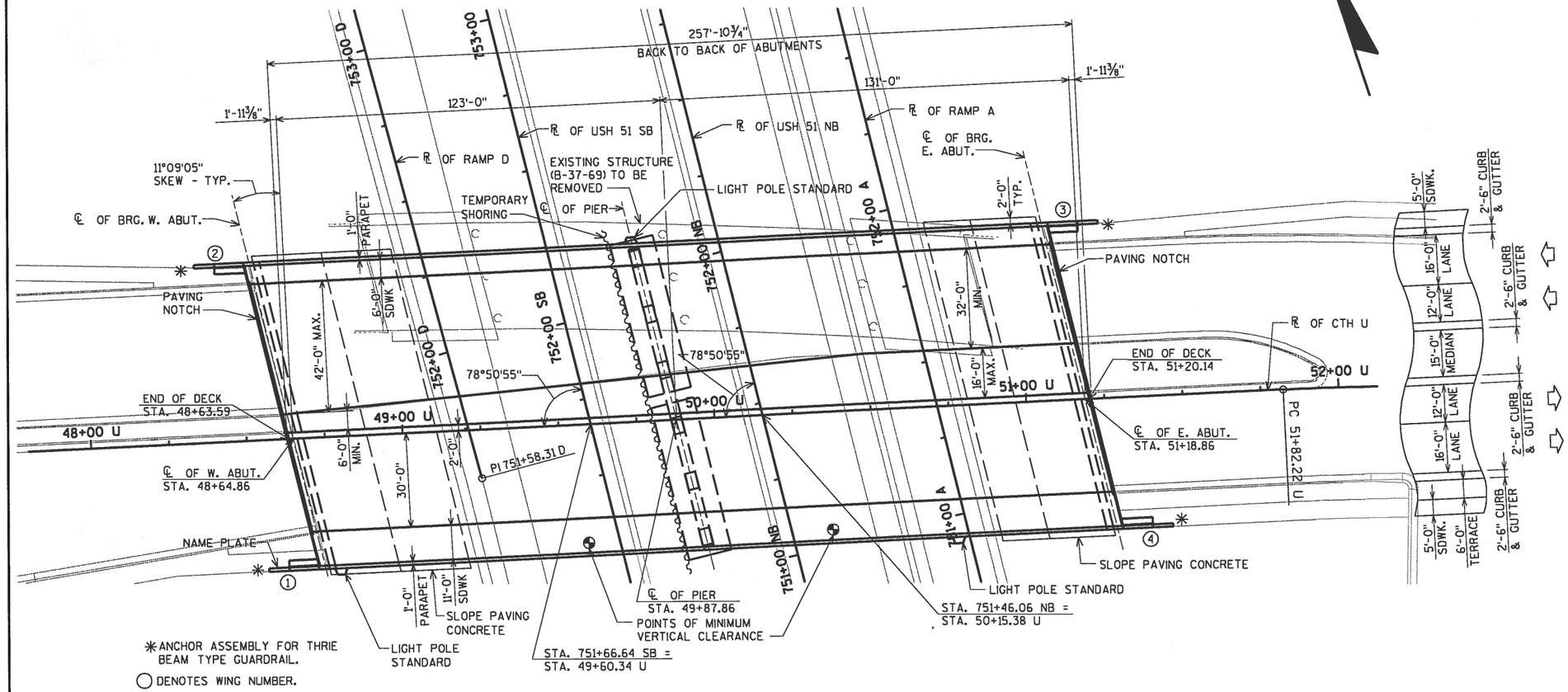
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DATE:
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CHECKED BY:
BACK CHECKED BY:
CORRECTED BY:

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1170-01-71

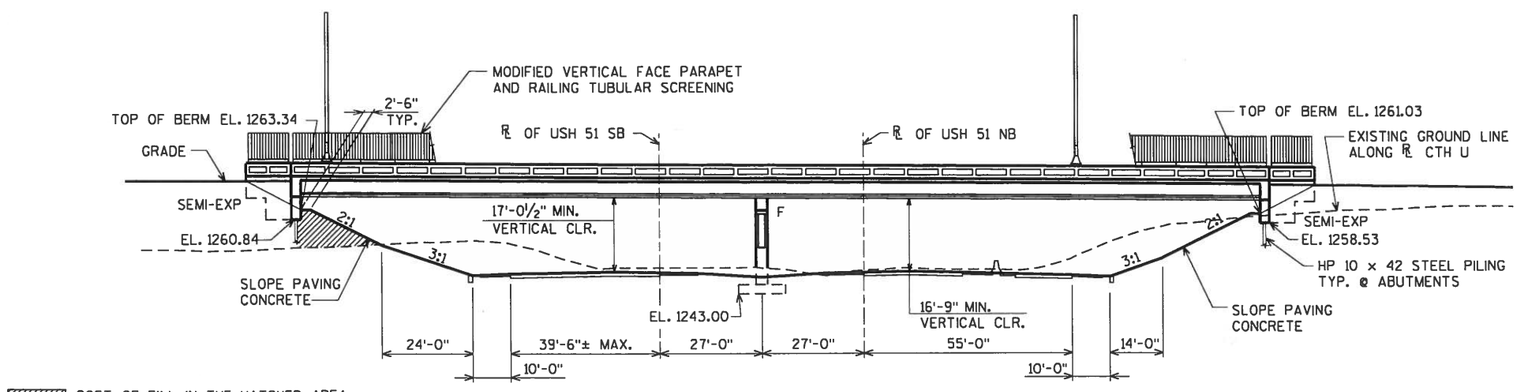


✳ANCHOR ASSEMBLY FOR THRIE BEAM TYPE GUARDRAIL.

◯ DENOTES WING NUMBER.

PLAN

TWO-SPAN 54W" PRESTRESSED CONCRETE GIRDER BRIDGE



COST OF FILL IN THE HATCHED AREA SHALL BE INCLUDED IN THE CONTRACT LUMP SUM PRICE FOR "EXCAVATION FOR STRUCTURES BRIDGES B-37-436".

ELEVATION

(NORMAL TO USH 51)

LIST OF DRAWINGS

1. GENERAL PLAN
2. TYPICAL SECTION & DESIGN DATA
3. GRADE LINES AND TYPICAL SECTION
4. QUANTITIES AND NOTES
5. SUBSURFACE EXPLORATION
6. WEST ABUTMENT
7. WEST ABUTMENT WING 1 DETAILS
8. WEST ABUTMENT WING 2 DETAILS
9. WEST ABUTMENT DETAILS
10. EAST ABUTMENT
11. EAST ABUTMENT WING 3 DETAILS
12. EAST ABUTMENT WING 4 DETAILS
13. EAST ABUTMENT DETAILS
14. PIER
15. PIER DETAILS
16. ALTERNATE CONSTRUCTION JOINT
17. STEEL INTER. DIAPHRAM DETAILS
18. 54W" PRESTRESSED GIRDER DETAILS
19. 54W" PRESTRESSED GIRDER DETAILS
20. DECK ELEVATIONS
21. SUPERSTRUCTURE
22. SUPERSTRUCTURE PLAN
23. MEDIAN AND SIDEWALK PLAN
24. SUPERSTRUCTURE DETAILS
25. SIDEWALK AND MEDIAN DETAILS
26. LIGHTING DETAILS
27. MODIFIED VERTICAL FACE PARAPET
28. RAILING TUBULAR SCREENING
29. ARCHITECTURAL TREATMENT DETAILS
30. SLOPE PAVING

FOR DESIGN DATA SEE SHEET 2

WISCONSIN ★ DANIEL N. SYDOW E-38363 WI ★ PROFESSIONAL ENGINEER

8/1/12

BRIDGE OFFICE CONTACT:
WILLIAM DREHER
(608)-266-8489

CONSULTANT CONTACT:
DAN SYDOW
(715)-834-3161

NO.	DATE	REVISION	BY

ORIGINAL PLANS PREPARED BY
AYRES ASSOCIATES
3433 Oakwood Hills Parkway
Eau Claire, WI 54701
www.AyresAssociates.com

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher KAR 08/15/12
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE B-37-436

CTH U OVER USH 51

COUNTY	TOWN/CITY/VILLAGE
MARATHON	WAUSAU

DESIGN SPEC.
AASHTO LRFD DESIGN SPEC. 5th EDITION

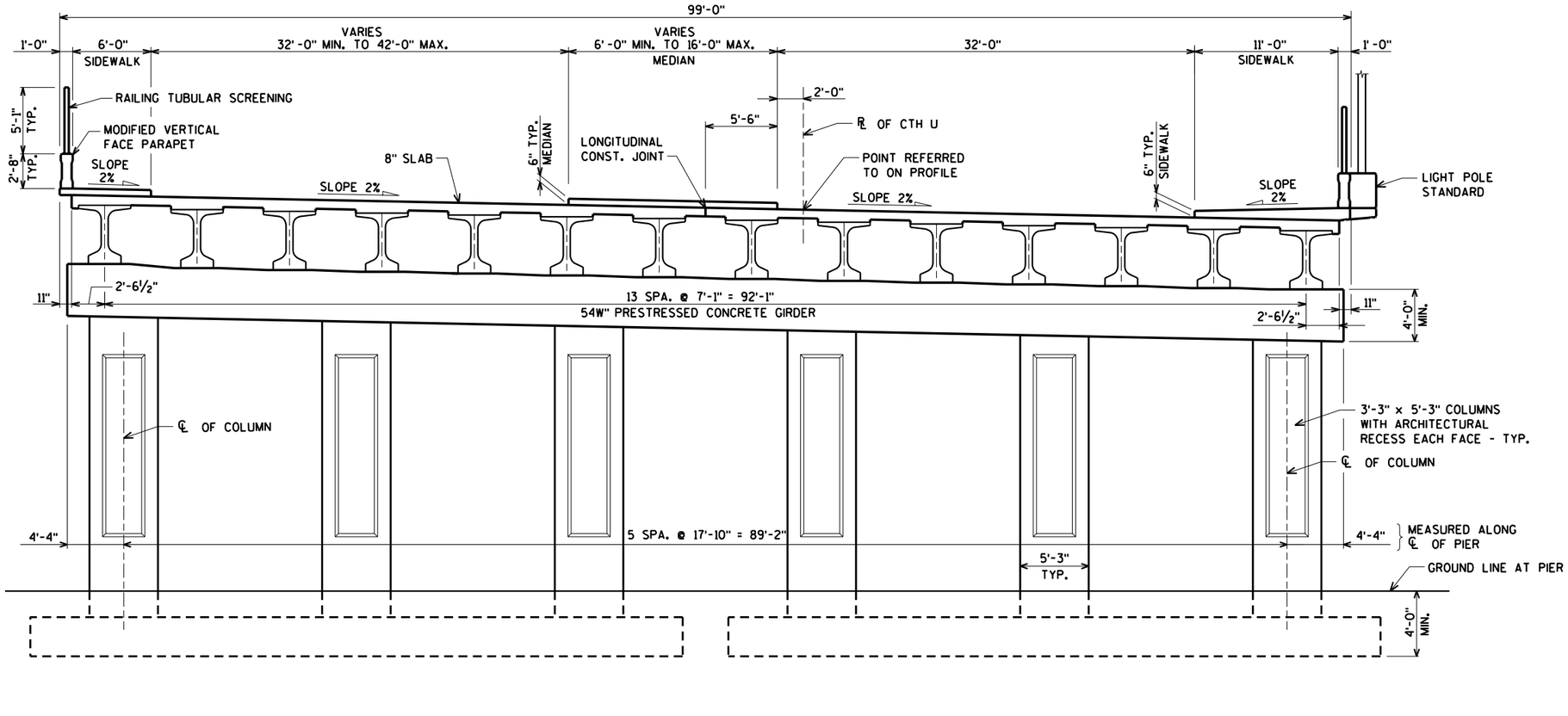
DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
CJM	AEB	CLS	DNS

GENERAL PLAN

SHEET 1 OF 30
1025

8

U:±41-0525.00 - Marathon Co, UK and USH 51Interchange±B-37-436 CTH U over USH 51±Bridge±B-37-436 gp.dgn 8/1/2012 PENTABLE:BReau_shd_util.tbl I.D. DATE:



CROSS SECTION THRU BRIDGE
(LOOKING EAST)

DESIGN DATA

LIVE LOAD:

DESIGN LOADING: HL-93
INVENTORY RATING FACTOR: 1.10
OPERATING RATING FACTOR : 1.52
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV) = 230 KIPS

STRUCTURE IS DESIGNED FOR A FUTURE WEARING SURFACE OF 20 #/S.F.

ULTIMATE DESIGN STRESSES:

CONCRETE MASONRY { SLAB	f'_c =	4,000 p.s.i.
CONCRETE MASONRY { ALL OTHER	f'_c =	3,500 p.s.i.
HIGH STRENGTH BAR STEEL REINFORCEMENT (GRADE 60)	f'_y =	60,000 p.s.i.
PRESTRESSED GIRDER		
CONCRETE MASONRY	f'_c =	8,500 p.s.i.
STRANDS - 0.6" DIA. WITH ULTIMATE TENSILE STRENGTH OF		270,000 p.s.i.

FOUNDATION DATA:

WEST ABUTMENT TO BE SUPPORTED ON HP 10 x 42 STEEL PILING WITH A REQUIRED DRIVING RESISTANCE OF 180 TONS # PER PILE. ESTIMATED LENGTH 25'-0".

PIERS TO BE SUPPORTED ON SPREAD FOOTINGS ON ROCK WITH REQUIRED FACTORED BEARING RESISTANCE OF 5 TONS PER SQUARE FOOT.

EAST ABUTMENT TO BE SUPPORTED ON HP 10 x 42 STEEL PILING WITH A REQUIRED DRIVING RESISTANCE OF 180 TONS # PER PILE. ESTIMATED LENGTH 13'-0". PREBORE PILING A MINIMUM OF 3'-0" INTO SOUND BEDROCK.

#THE FACTORED AXIAL RESISTANCE OF PILES IN COMPRESSION USED FOR DESIGN IS THE REQUIRED DRIVING RESISTANCE MULTIPLIED BY A RESISTANCE FACTOR OF 0.5 USING MODIFIED GATES TO DETERMINE DRIVEN PILE CAPACITY.

TRAFFIC DATA:

CTH U	USH 51
A.D.T. = 7,400 (2015)	A.D.T. = 31,000 (2015)
A.D.T. = 10,600 (2035)	A.D.T. = 41,300 (2035)
R.D.S. = 40 M.P.H.	R.D.S. = 70 M.P.H.

ORIGINAL PLANS PREPARED BY
AYRES ASSOCIATES
3433 Oakwood Hills Parkway
Eau Claire, WI 54701
www.AyresAssociates.com

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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-37-436

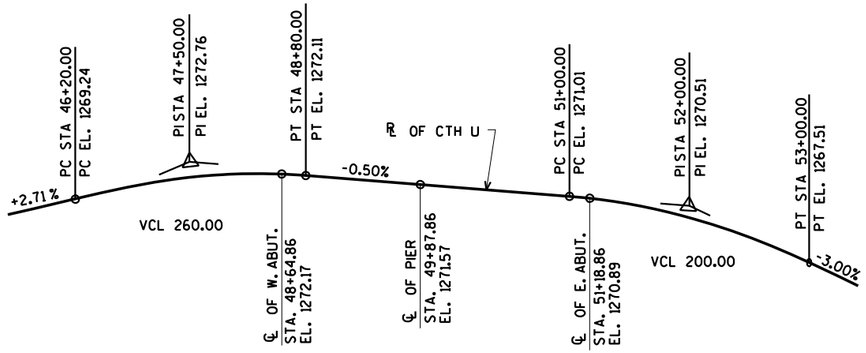
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TYPICAL SECTION AND DESIGN DATA

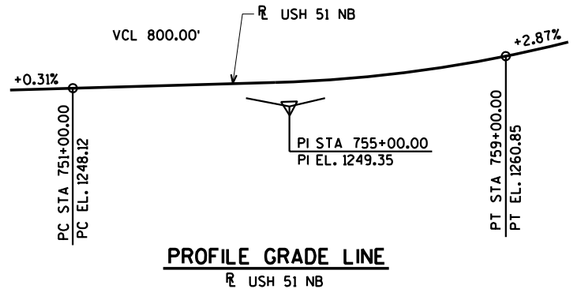
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8/1/2012
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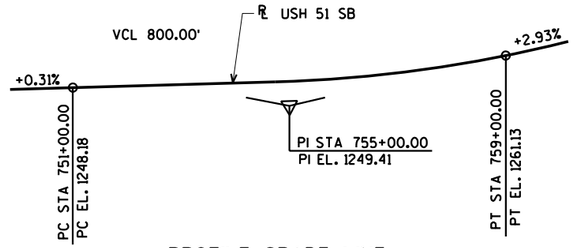
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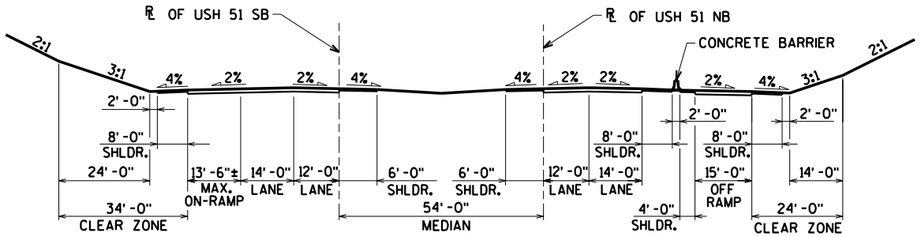
PROFILE GRADE LINE
CTH U



PROFILE GRADE LINE
℄ USH 51 NB



PROFILE GRADE LINE
℄ USH 51 SB



TYPICAL SECTION THRU USH 51

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B-37-436 gp.dgn

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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-37-436

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GRADE LINES AND TYPICAL SECTION

SHEET 3 OF 30
1027

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3433 Oakwood Hills Parkway
Eau Claire, WI 54701
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STATE PROJECT NUMBER

1170-01-71

TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEMS	UNIT	W. ABUT.	PIER	E. ABUT.	SUPER.	TOTAL
203.0200	REMOVING OLD STRUCTURE STATION 49+90	LS	-----	-----	-----	-----	1
206.1000	EXCAVATION FOR STRUCTURES BRIDGES B-37-436	LS	-----	-----	-----	-----	1
206.6000.S	TEMPORARY SHORING	SF	-----	750	-----	-----	750
210.0100	BACKFILL STRUCTURE	CY	490	-----	580	-----	1,070
502.0100	CONCRETE MASONRY BRIDGES	CY	110	264	125	1,133	1,632
502.3200	PROTECTIVE SURFACE TREATMENT	SY	-----	-----	-----	2,840	2,840
503.0155	PRESTRESSED GIRDER TYPE I 54W-INCH	LF	-----	-----	-----	3,567	3,567
505.0405	BAR STEEL REINFORCEMENT HS BRIDGES	LB	7,140	26,500	7,880	-----	41,520
505.0605	BAR STEEL REINFORCEMENT HS COATED BRIDGES	LB	3,160	42,170	3,780	226,750	275,860
506.2605	BEARING PADS ELASTOMERIC NON-LAMINATED	EACH	-----	-----	-----	56	56
506.4000	STEEL DIAPHRAGM B-37-436	EACH	-----	-----	-----	52	52
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	23	-----	24	-----	47
517.1010.S	CONCRETE STAINING B-37-436	SF	900	2,750	1,070	9,520	14,240
550.0020	PRE-BORING ROCK OR CONSOLIDATED MATERIALS	LF	-----	-----	319	-----	319
550.1100	PILING STEEL HP 10-INCH x 42 LB	LF	675	-----	377	-----	1,052
604.0400	SLOPE PAVING CONCRETE	SY	570	-----	440	-----	1,010
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	175	-----	180	-----	355
614.0150	ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD	EACH	2	-----	2	-----	4
652.0125	CONDUIT RIGID METALLIC 2-INCH	LF	80	-----	80	80	240
652.0225	CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH	LF	-----	-----	-----	1,000	1,000
653.0222	JUNCTION BOXES 18x12x6-INCH	EACH	-----	-----	-----	3	3
SPV.0105.05	RAILING TUBULAR SCREENING GALVANIZED B-37-436	LS	-----	-----	-----	-----	1
	NON-BID ITEMS						
	FILLER	SIZE	-----	-----	-----	-----	1/2" & 3/4"

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS SHOWN OR NOTED OTHERWISE.

THE FIRST DIGIT OF A THREE DIGIT BAR NO. AND THE FIRST TWO DIGITS OF A FOUR DIGIT BAR NO. SIGNIFIES THE BAR SIZE.

JOINT FILLER SHALL CONFORM TO THE REQUIREMENTS OF A.A.S.H.T.O. DESIGNATION M 153, TYPE I, II OR III OR A.A.S.H.T.O. DESIGNATION M 213.

THE SLOPE OF THE FILL IN FRONT OF THE ABUTMENTS SHALL BE COVERED WITH SLOPE PAVING CONCRETE TO THE EXTENT SHOWN ON THE GENERAL PLAN SHEET AND IN THE SLOPE PAVING DETAILS.

PROTECTIVE SURFACE TREATMENT IS TO BE APPLIED TO THE TOP OF DECK, TOP OF SIDEWALKS, TOP OF MEDIAN, AND FACE OF CURBS, AS SHOWN IN DETAIL ON THIS SHEET.

ELASTOMERIC BEARING PADS NEED NOT BE INDIVIDUALLY MOLDED PROVIDED THE CUT EDGES ARE SMOOTH AND TRUE.

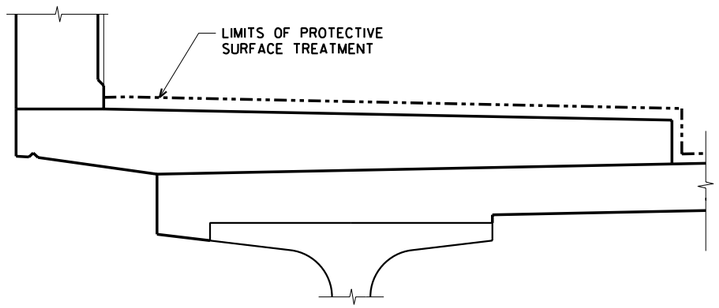
THE EXISTING GROUNDLINE SHALL BE THE UPPER LIMIT FOR EXCAVATION FOR STRUCTURES.

THE EXISTING STRUCTURE, B-37-69, TO BE REMOVED, IS A FOUR SPAN CONCRETE VOIDED SLAB, 195 FT. LONG WITH A 30.0 FT. CLEAR ROADWAY WIDTH.

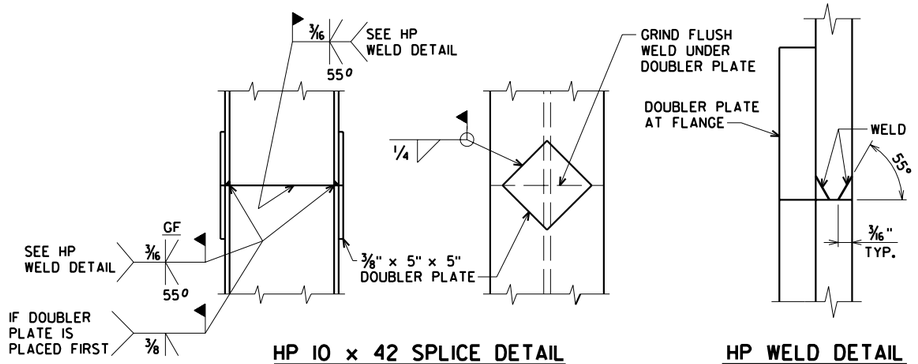
AT BACKFACE OF ABUTMENTS ALL EXCAVATED VOLUME NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH BACKFILL STRUCTURE.

CONCRETE STAINING, B-37-436, TO BE APPLIED AS SHOWN ON ARCHITECTURAL SURFACE TREATMENT DETAILS SHEET. CONCRETE STAINING MUST EXTEND 1'-0" BELOW FINISHED GRADE.

THE HAUNCH CONCRETE QUANTITY IS BASED ON THE AVERAGE HAUNCH SHOWN ON THE PRESTRESSED GIRDER DETAILS SHEET.



PROTECTIVE SURFACE TREATMENT DETAIL



HP 10 x 42 SPLICE DETAIL

HP WELD DETAIL

FLANGE SHOWN, WEB SIMILAR

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-37-436

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QUANTITIES AND NOTES

SHEET 4 OF 30
1028

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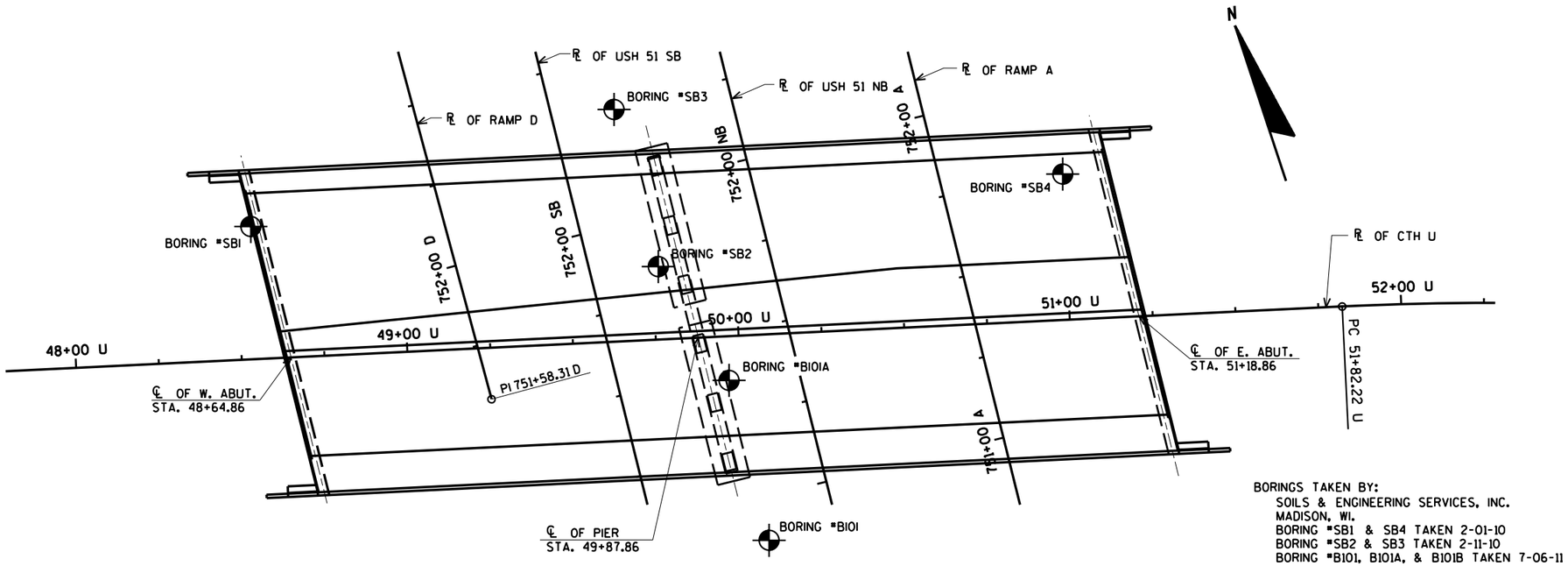
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B-37-436 QN.DGN

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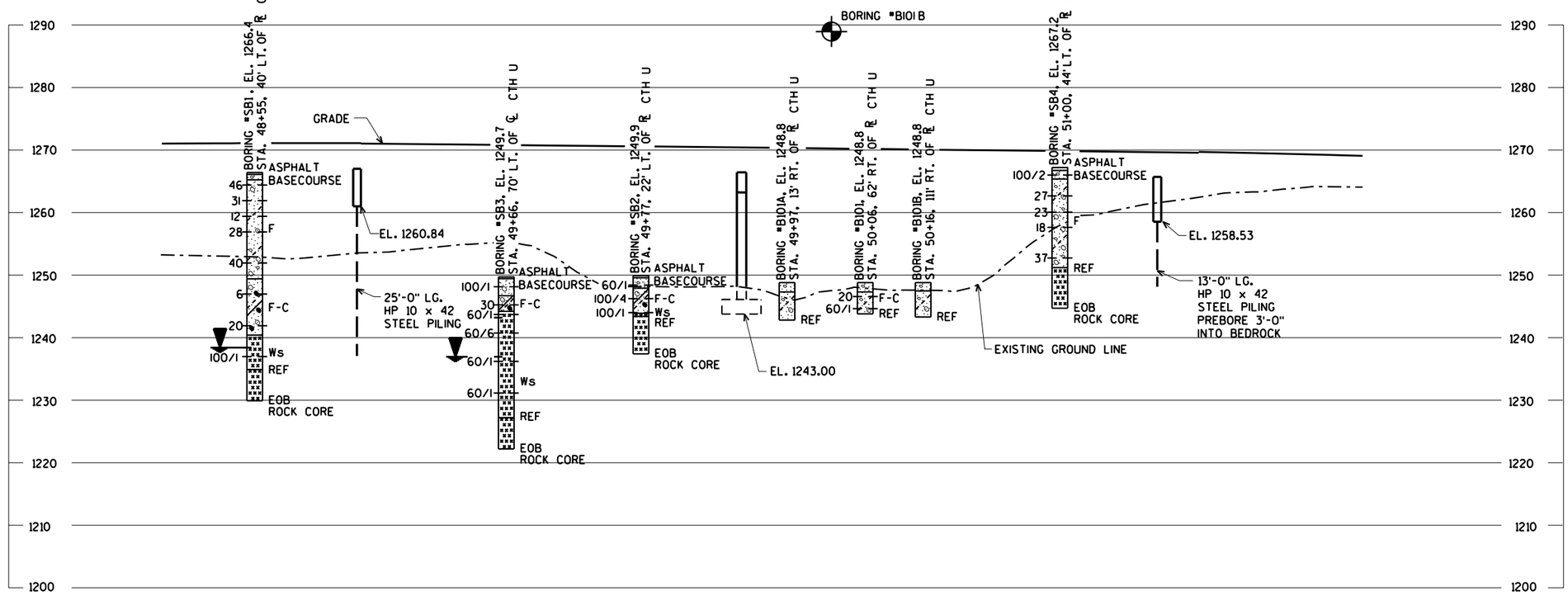
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7/26/2012

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BORINGS TAKEN BY:
SOILS & ENGINEERING SERVICES, INC.
MADISON, WI.
BORING "SB1 & SB4 TAKEN 2-01-10
BORING "SB2 & SB3 TAKEN 2-11-10
BORING "B101, B101A, & B101B TAKEN 7-06-11



STATE PROJECT NUMBER

1170-01-71

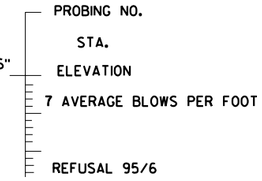
ABBREVIATIONS

F — FINE M — MEDIUM C — COARSE
WS — WEATHERED SO — SOUND

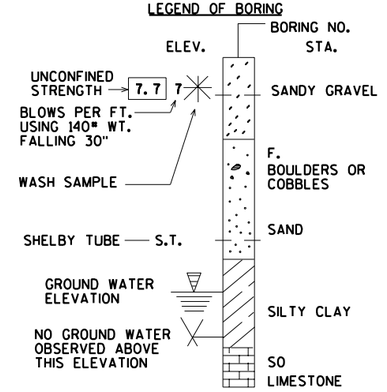
MATERIAL SYMBOLS

TOPSOIL, SILT, SANDSTONE
SAND, PEAT, LIMESTONE
GRAVEL, CLAY, IGNEOUS ROCK

LEGEND OF PROBING



LEGEND OF BORING



UNLESS OTHERWISE SPECIFIED, THE BLOWS PER FOOT AT THE LOCATIONS INDICATED ARE BASED ON DRIVING A 2" O.D. X 1.4" I.D. SPLIT SPOON SAMPLER WITH A 140# HAMMER HAVING A FREE FALL OF 30". THE BLOW COUNT IS TAKEN IN UNDISTURBED SOIL IMMEDIATELY BELOW A CASED OR OPEN HOLE ELIMINATING SIDE FRICTION ON THE DRIVE PIPE.

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

TO OBTAIN RELATIVE DATA CONCERNING THE CHARACTER OF MATERIAL IN AND UPON WHICH THE FOUNDATION MIGHT BE BUILT, BORINGS AND/OR SOUNDINGS WERE MADE AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING. THE DATA PRESENTED HEREIN REPRESENTS THE FINDINGS OF THE SUBSURFACE EXPLORATIONS MADE. HOWEVER, BECAUSE THE DEPTHS INVESTIGATED ARE LIMITED AND THE AREA OF THE BORINGS AND/OR SOUNDINGS IS VERY SMALL IN RELATION TO THE ENTIRE AREA, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT CONDITIONS BELOW THE DEPTHS INVESTIGATED OR THAT THE CLASSIFICATION OF MATERIAL ENCOUNTERED IN THESE INVESTIGATIONS IS NECESSARILY TYPICAL OF THE ENTIRE SITE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-37-436

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SUBSURFACE EXPLORATION

SHEET 5 OF 30
1029

8

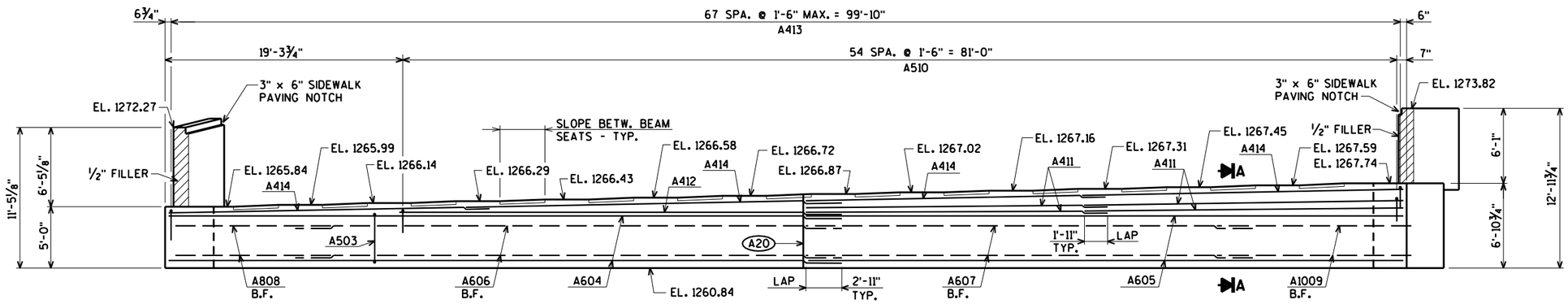
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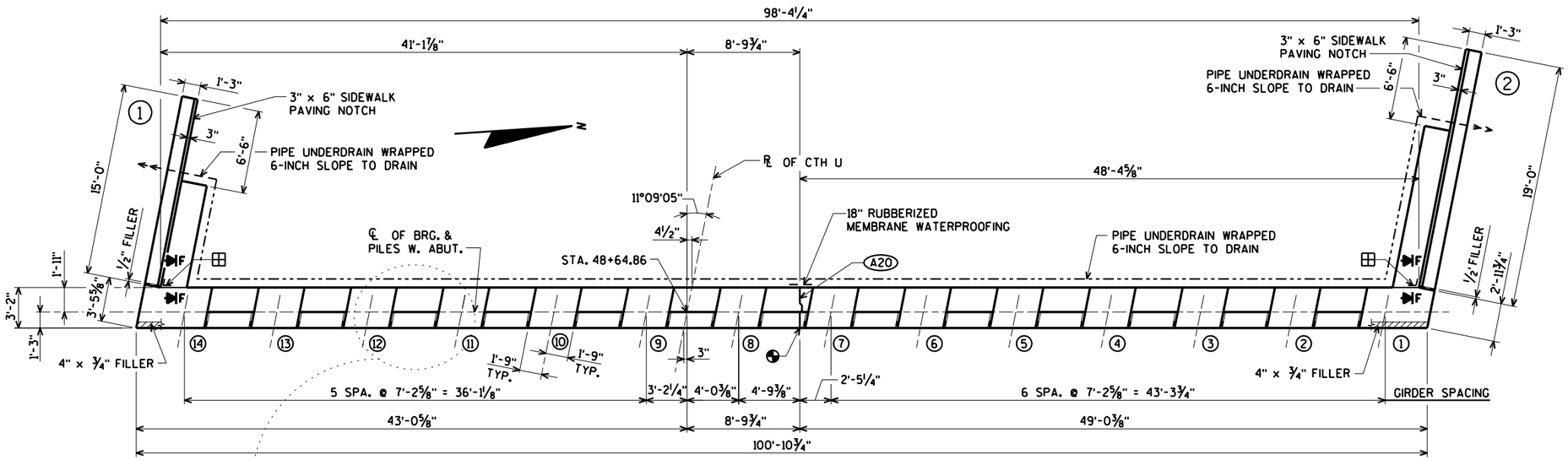
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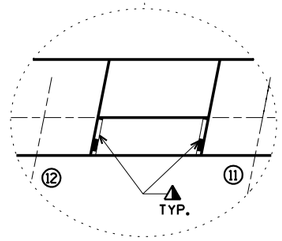
NOTE: SEAL ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES OF ½" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE.)

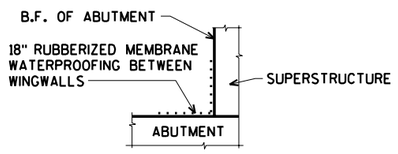


ELEVATION
(LOOKING WEST)



PLAN





SECTION F

FOR SECTION A SEE SHEET 9

¾" 'V' GROOVE ON F.F. OF ABUT.

A20 VERT. CONST. JT. - KEYWAY FORMED BY A SURFACED BEVELED 2" x 8". BEVEL EXPOSED EDGES ¾".

¾" CORK FILLER ON VERTICAL BEAM SEAT FACES THAT RUN PARALLEL WITH GIRDER.

18" RUBBERIZED MEMBRANE WATERPROOFING FROM BRIDGE SEAT TO TOP OF WING.

F.F. DENOTES FRONT FACE

B.F. DENOTES BACK FACE

E.F. DENOTES EACH FACE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-37-436

DRAWN BY CLS | PLANS CK'D. DNS

WEST ABUTMENT

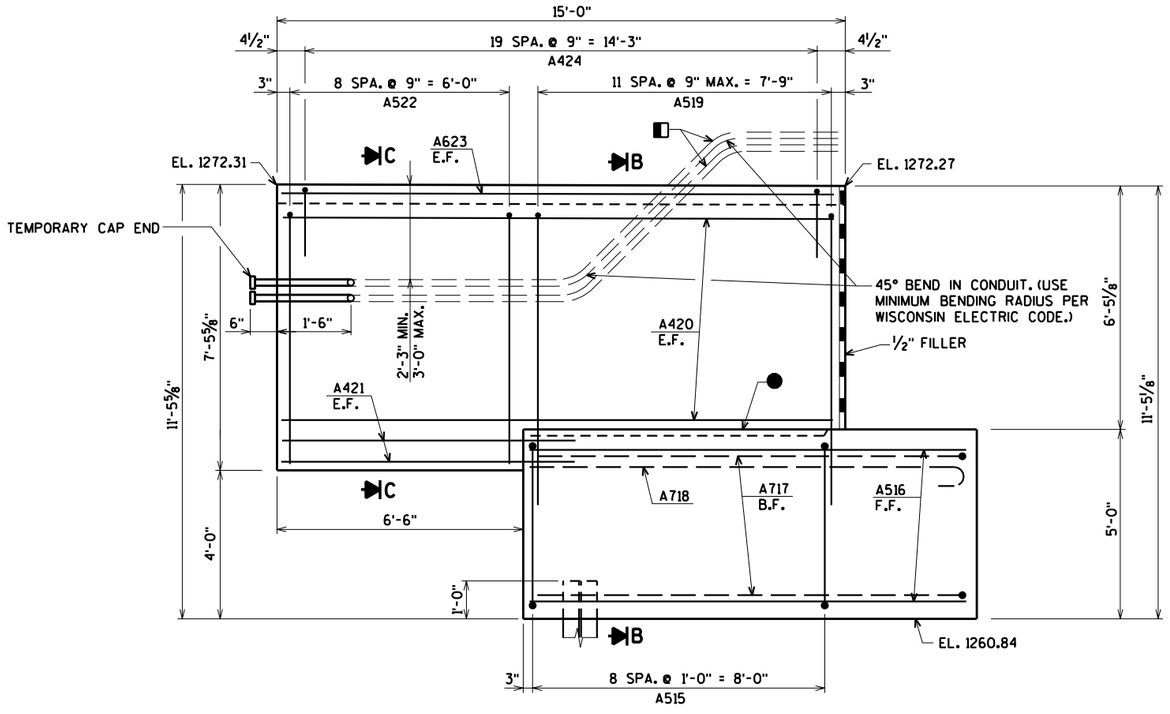
SHEET 6 OF 30
1030

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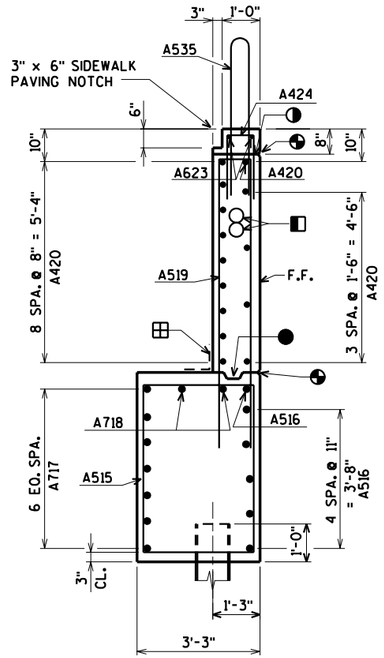
STATE PROJECT NUMBER

1170-01-71

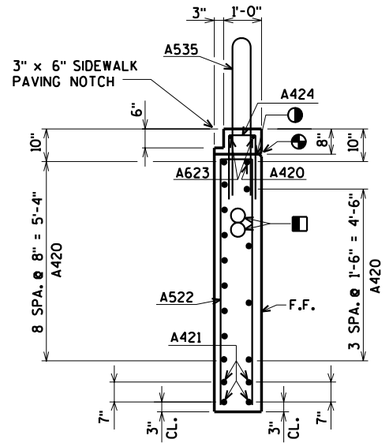


ELEVATION - WING 1

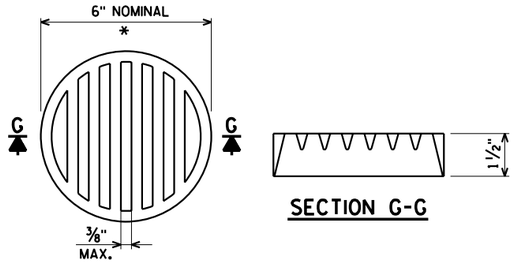
MODIFIED VERTICAL FACE PARAPET NOT SHOWN.
FOR PARAPET DETAILS SEE SHEET 27



SECTION B



SECTION C



SECTION G-G

* DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING. ORIENT SO SLOTS ARE VERTICAL.

THE RODENT SHIELD, PIPE COUPLING AND SCREWS SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".

THE RODENT SHIELD SHALL BE PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALLY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SCREEN TO THE EXPOSED END OF THE PIPE UNDERDRAIN. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 x 1-INCH SHEET METAL SCREWS.

RODENT SHIELD DETAIL

◑ CONSTRUCTION JOINT. LEAVE ROUGH. POUR CONCRETE ABOVE THIS JOINT AFTER DECK IS IN PLACE.

◧ USE 2" DIA. RIGID METALLIC CONDUIT 5'-0" INTO PARAPET ON DECK SIDE AND THRU PARAPET AND WINGWALL TO A MINIMUM OF 6" BEYOND END OF WINGWALL. (FOR GROUNDING PURPOSES.) SEE LIGHTING DETAILS SHEET FOR ADDITIONAL INFORMATION.

● OPT. KEYED CONST. JOINT - FORMED BY A SURFACED BEVELED 2" x 6".

◓ ¾" 'V' GROOVE ON F.F. OF WINGWALL.

⊞ 18" RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACKFACE OF ABUTMENT.

F.F. DENOTES FRONT FACE

B.F. DENOTES BACK FACE

E.F. DENOTES EACH FACE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
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STRUCTURES DESIGN SECTION

STRUCTURE B-37-436

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WEST ABUTMENT WING 1 DETAILS

SHEET 7 OF 30
1031

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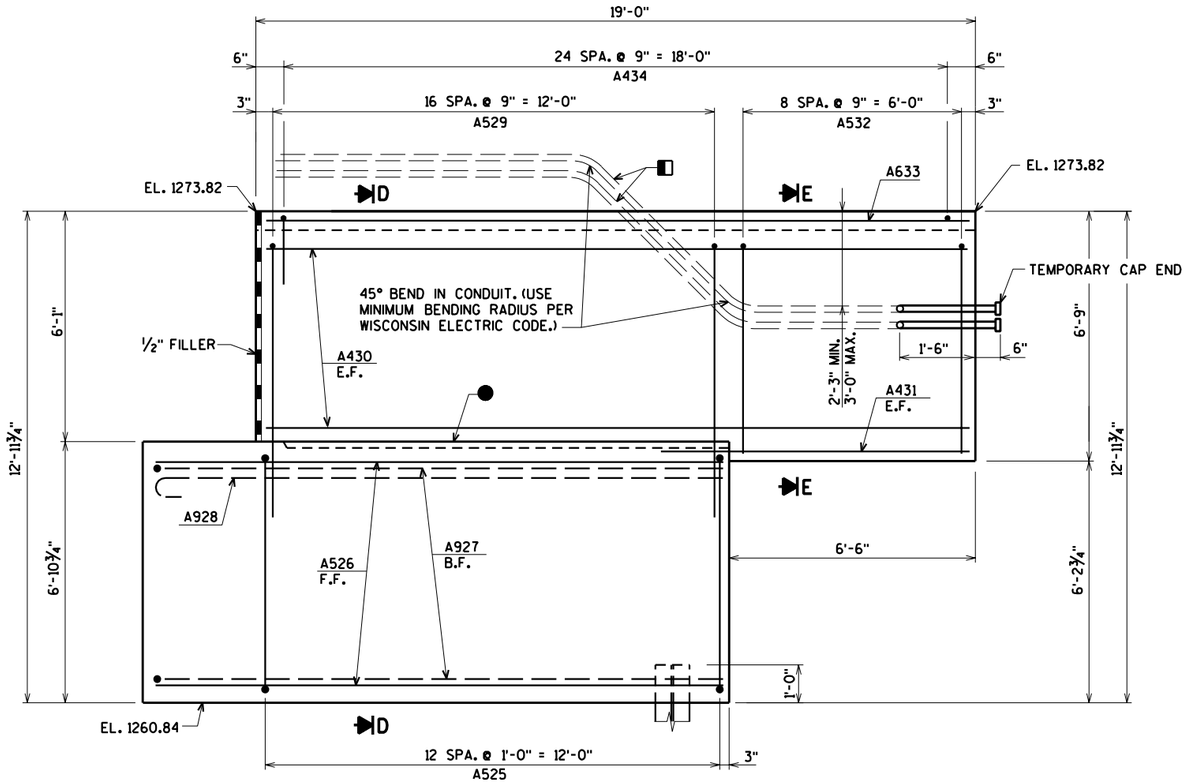
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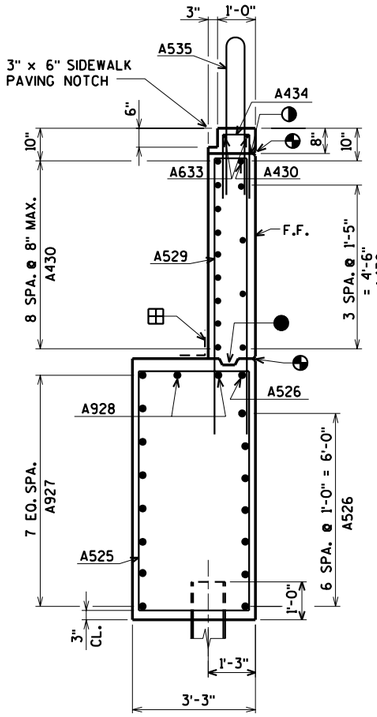
STATE PROJECT NUMBER

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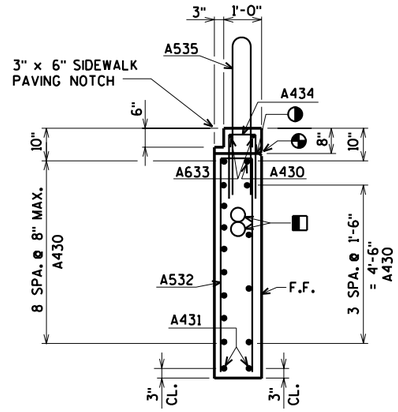


ELEVATION - WING 2

MODIFIED VERTICAL FACE PARAPET NOT SHOWN.
FOR PARAPET DETAILS SEE SHEET 27



SECTION D



SECTION E

● CONSTRUCTION JOINT. LEAVE ROUGH. POUR CONCRETE ABOVE THIS JOINT AFTER DECK IS IN PLACE.

◧ USE 2" DIA. RIGID METALLIC CONDUIT 5'-0" INTO PARAPET ON DECK SIDE AND THRU PARAPET AND WINGWALL TO A MINIMUM OF 6" BEYOND END OF WINGWALL. (FOR GROUNDING PURPOSES.) SEE LIGHTING DETAILS SHEET FOR ADDITIONAL INFORMATION.

● OPT. KEYED CONST. JOINT - FORMED BY A SURFACED BEVELED 2" x 6".

◔ ¾" 'V' GROOVE ON F.F. OF WINGWALL.

⊞ 18" RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACKFACE OF ABUTMENT.

F.F. DENOTES FRONT FACE

B.F. DENOTES BACK FACE

E.F. DENOTES EACH FACE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-37-436

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WEST ABUTMENT WING 2 DETAILS

SHEET 8 OF 30
1032

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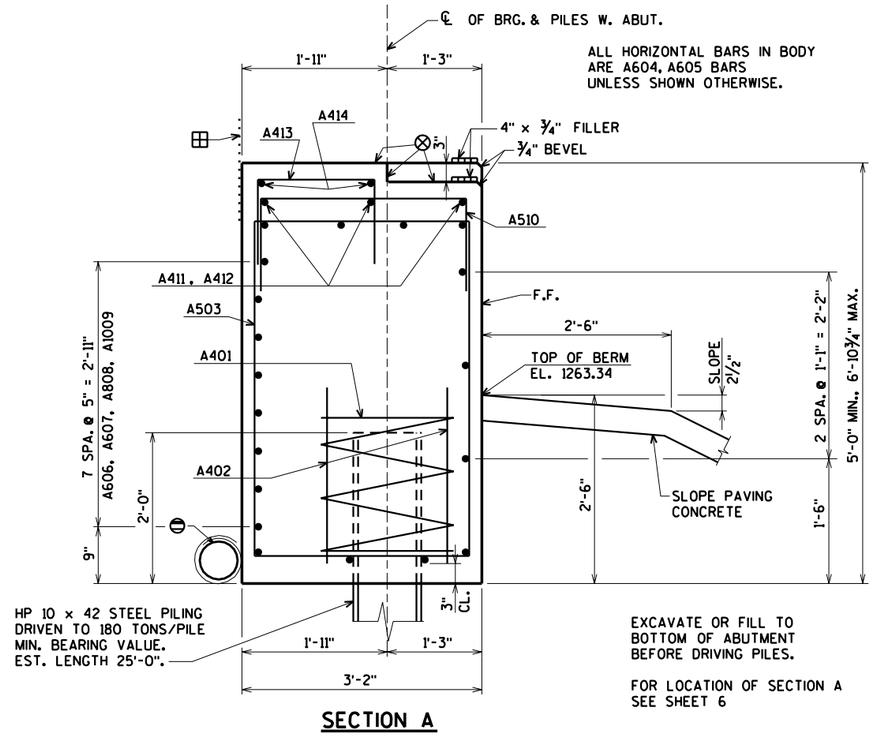
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STATE PROJECT NUMBER

1170-01-71



SECTION A

EXCAVATE OR FILL TO BOTTOM OF ABUTMENT BEFORE DRIVING PILES.

FOR LOCATION OF SECTION A SEE SHEET 6

⊖ PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT ENDS OF PIPE UNDERDRAIN AS DETAILED ON SDD REINFORCED CONCRETE APRON ENDWALL FOR PIPE UNDERDRAIN. RODENT SHIELD TO BE INCLUDED IN BID PRICE. SEE DETAIL ON SHEET 7.

⊗ STEEL TROWEL TOP SURFACE OF ABUTMENT. PLACE MULTIPLE LAYERS OF POLYETHYLENE SHEETS OVER ENTIRE ABUTMENT TOP BEFORE PLACING BEARING PADS AND SUPERSTRUCTURE. TOTAL THICKNESS OF SHEETS SHALL BE AT LEAST 0.03".

⊞ 18" RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACK FACE OF ABUTMENT AND WINGS.

◔ ¾" 'V' GROOVE ON F.F. OF ABUT.

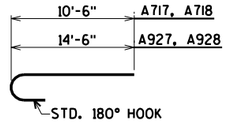
(A20) VERT. CONST. JT. - KEYWAY FORMED BY A SURFACED BEVELED 2" x 8". BEVEL EXPOSED EDGES ¾".

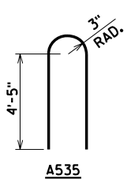
FOR PILE SPLICE DETAIL SEE SHEET 4.

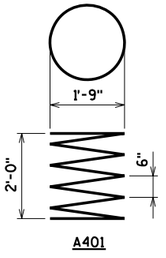
F.F. DENOTES FRONT FACE

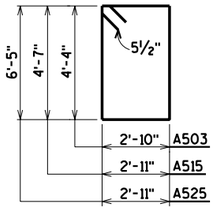
B.F. DENOTES BACK FACE

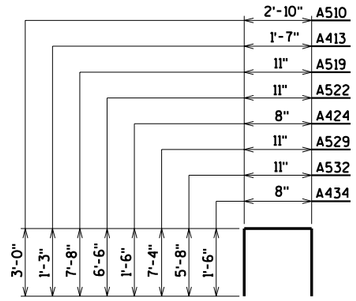
E.F. DENOTES EACH FACE







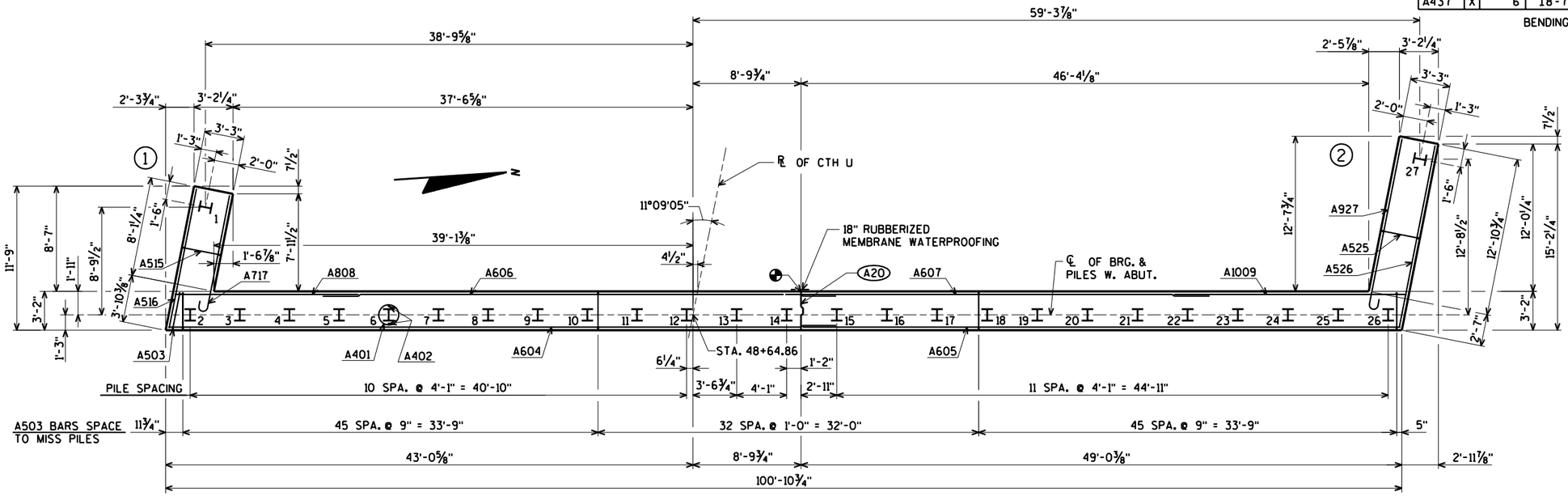




BILL OF BARS

BAR. NO.	COATED BAR	NO. REQ'D.	LENGTH	BENT BAR	BUNDLED BAR SERIES	3,160# COATED 7,140# UNCOATED LOCATION
A401		25	28-0	X		BODY ℄ PILES
A402		50	2-3			BODY ℄ PILES
A503		124	14-10	X		BODY VERT.
A604		11	54-9			BODY HORIZ.
A605		11	48-9			BODY HORIZ.
A606		8	42-3			BODY HORIZ. BETW. WINGS B.F.
A607		8	33-4			BODY HORIZ. BETW. WINGS B.F.
A808		8	15-0			BODY HORIZ. ℄ WING 1
A1009		8	19-0			BODY HORIZ. ℄ WING 2
A510		55	8-7	X		BODY VERT.
A411		12	25-5			BODY HORIZ.
A412		3	34-6			BODY HORIZ.
A413		68	3-11	X		BODY VERT.
A414		8	26-7			BODY HORIZ.
A515	X	9	15-7	X		WING 1 VERT.
A516	X	6	11-7			WING 1 HORIZ. F.F.
A717	X	7	11-4	X		WING 1 HORIZ. B.F.
A718	X	2	11-4	X		WING 1 HORIZ.
A519	X	12	16-0	X		WING 1 VERT.
A420	X	14	14-7			WING 1 HORIZ. E.F.
A421	X	4	7-9			WING 1 HORIZ. E.F.
A522	X	9	13-8	X		WING 1 VERT.
A623	X	2	14-7			WING 1 HORIZ. TOP
A424	X	20	3-6	X		WING 1 VERT.
A525	X	13	19-2	X		WING 2 VERT.
A526	X	8	15-2			WING 2 HORIZ. F.F.
A927	X	8	15-9	X		WING 2 HORIZ. B.F.
A928	X	2	15-9	X		WING 2 HORIZ.
A529	X	17	15-4	X		WING 2 VERT.
A430	X	14	18-7			WING 2 HORIZ. E.F.
A431	X	2	7-9			WING 2 HORIZ. E.F.
A532	X	9	12-0	X		WING 2 VERT.
A633	X	2	18-7			WING 2 HORIZ. TOP
A434	X	25	3-6	X		WING 2 VERT.
A535	X	42	9-6	X		WING PARAPET VERT.
A436	X	6	14-7			WING 1 PARAPET HORIZ.
A437	X	6	18-7			WING 2 PARAPET HORIZ.

BENDING DIMENSIONS ARE OUT TO OUT OF BARS.



PILE LAYOUT

NO.	DATE	REVISION	BY

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STRUCTURES DESIGN SECTION

STRUCTURE B-37-436

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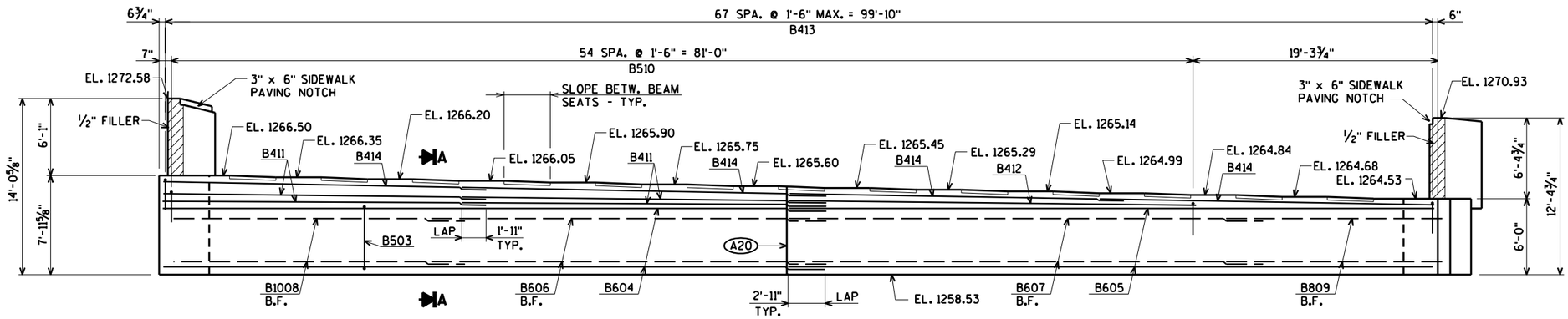
WEST ABUTMENT DETAILS

SHEET 9 OF 30
1033

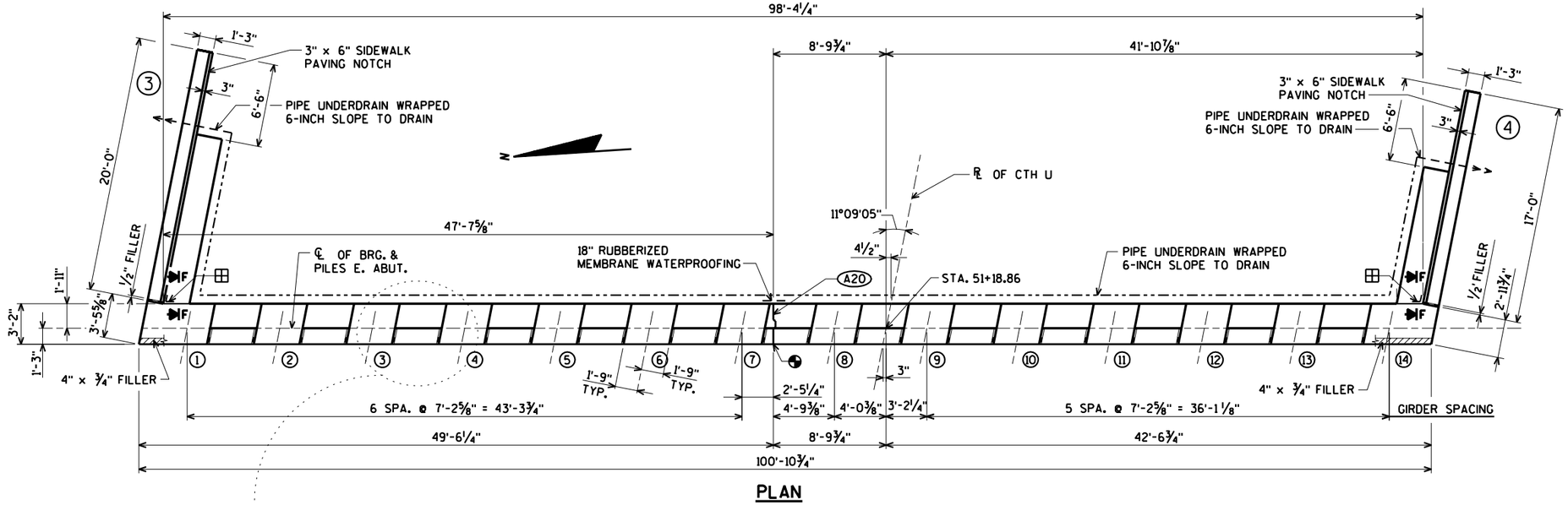
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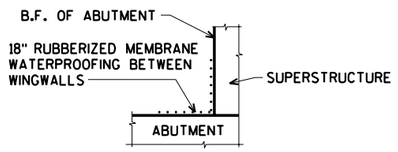
NOTE: SEAL ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES OF ½" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE.)



ELEVATION
(LOOKING EAST)



PLAN



SECTION F

FOR SECTION A SEE SHEET 13

¾" 'V' GROOVE ON F.F. OF ABUT.

(A20) VERT. CONST. JT. - KEYWAY FORMED BY A SURFACED BEVELED 2" x 8". BEVEL EXPOSED EDGES ¾".

▲ ¾" CORK FILLER ON VERTICAL BEAM SEAT FACES THAT RUN PARALLEL WITH GIRDER.

⊞ 18" RUBBERIZED MEMBRANE WATERPROOFING FROM BRIDGE SEAT TO TOP OF WING.

F.F. DENOTES FRONT FACE

B.F. DENOTES BACK FACE

E.F. DENOTES EACH FACE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-37-436

DRAWN BY CLS | PLANS CK'D. DNS

EAST ABUTMENT

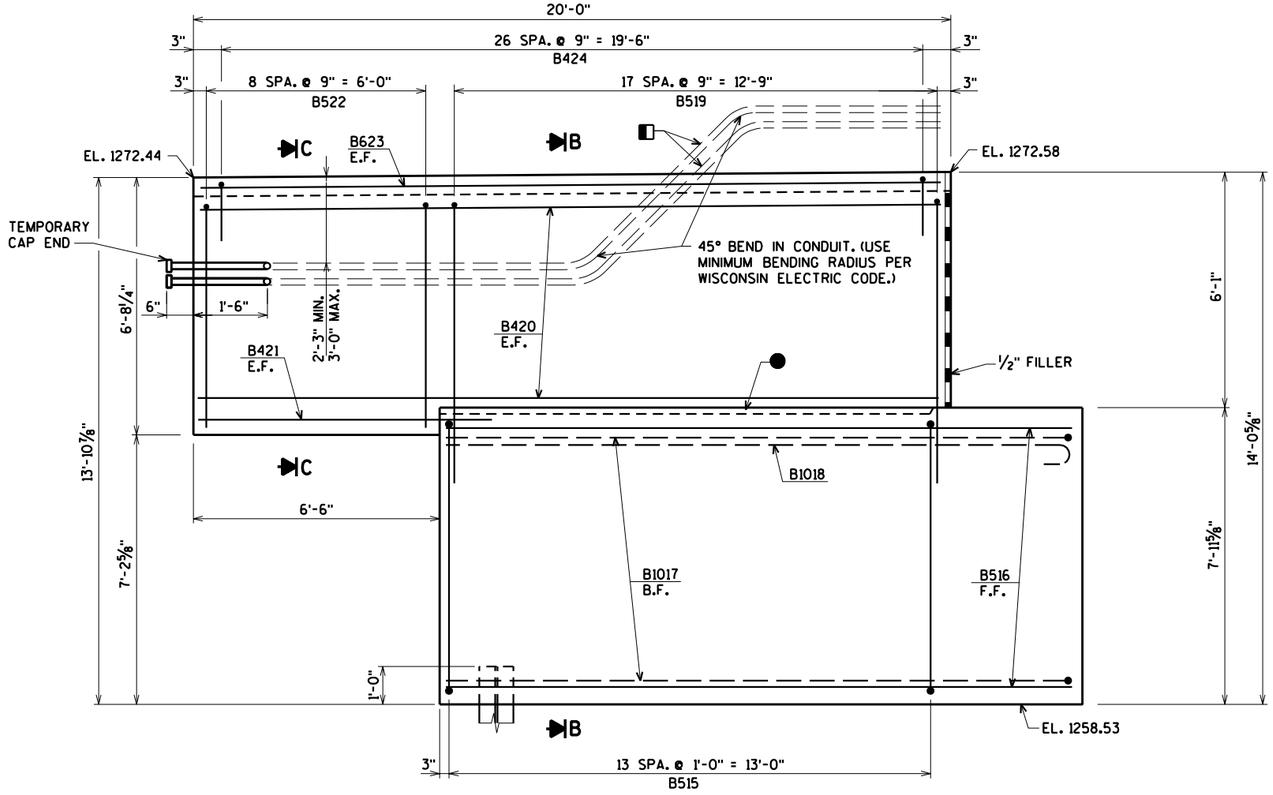
SHEET 10 OF 30
1034

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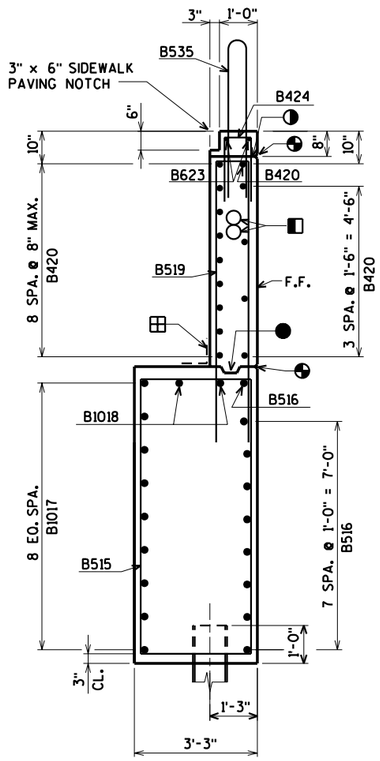
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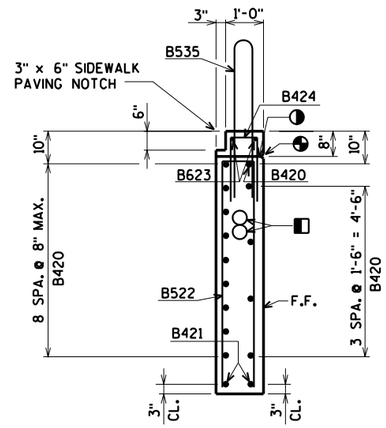


ELEVATION - WING 3

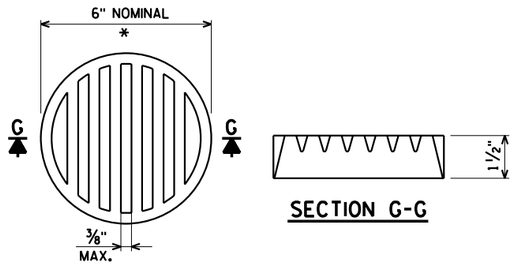
MODIFIED VERTICAL FACE PARAPET NOT SHOWN.
FOR PARAPET DETAILS SEE SHEET 27



SECTION B



SECTION C



SECTION G-G

* DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING. ORIENT SO SLOTS ARE VERTICAL.

THE RODENT SHIELD, PIPE COUPLING AND SCREWS SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".

THE RODENT SHIELD SHALL BE PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALLY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SCREEN TO THE EXPOSED END OF THE PIPE UNDERDRAIN. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 x 1-INCH SHEET METAL SCREWS.

RODENT SHIELD DETAIL

◑ CONSTRUCTION JOINT. LEAVE ROUGH. POUR CONCRETE ABOVE THIS JOINT AFTER DECK IS IN PLACE.

◧ USE 2" DIA. RIGID METALLIC CONDUIT 5'-0" INTO PARAPET ON DECK SIDE AND THRU PARAPET AND WINGWALL TO A MINIMUM OF 6" BEYOND END OF WINGWALL. (FOR GROUNDING PURPOSES.) SEE LIGHTING DETAILS SHEET FOR ADDITIONAL INFORMATION.

● OPT. KEYED CONST. JOINT - FORMED BY A SURFACED BEVELED 2" x 6".

◔ ¾" 'V' GROOVE ON F.F. OF WINGWALL.

⊞ 18" RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACKFACE OF ABUTMENT.

F.F. DENOTES FRONT FACE

B.F. DENOTES BACK FACE

E.F. DENOTES EACH FACE

NO.	DATE	REVISION	BY

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STRUCTURES DESIGN SECTION

STRUCTURE B-37-436

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EAST
ABUTMENT
WING 3 DETAILS

SHEET 11 OF 30
1035

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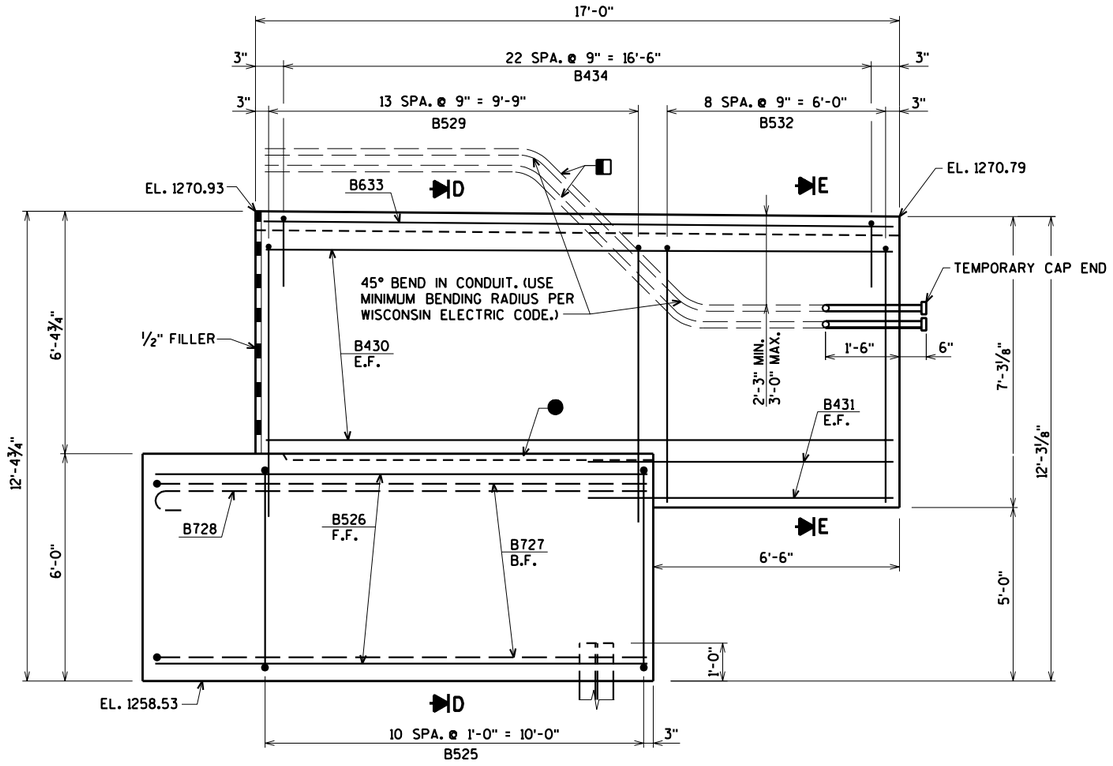
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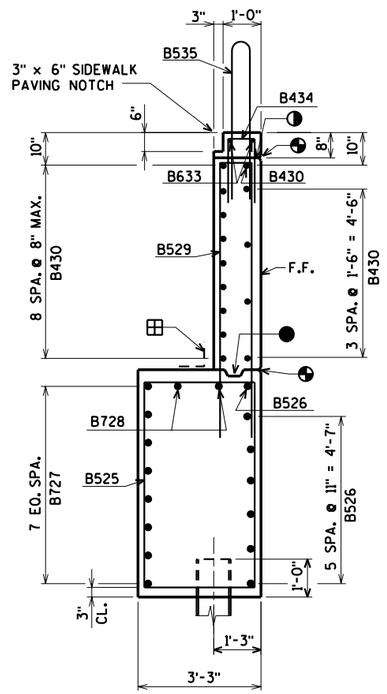
STATE PROJECT NUMBER

1170-01-71

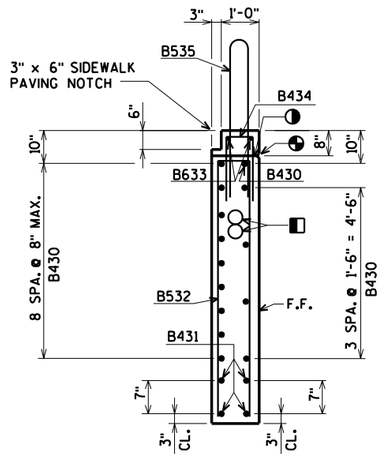


ELEVATION - WING 4

MODIFIED VERTICAL FACE PARAPET NOT SHOWN.
FOR PARAPET DETAILS SEE SHEET 27



SECTION D



SECTION E

◑ CONSTRUCTION JOINT. LEAVE ROUGH. POUR CONCRETE ABOVE THIS JOINT AFTER DECK IS IN PLACE.

◧ USE 2" DIA. RIGID METALLIC CONDUIT 5'-0" INTO PARAPET ON DECK SIDE AND THRU PARAPET AND WINGWALL TO A MINIMUM OF 6" BEYOND END OF WINGWALL. (FOR GROUNDING PURPOSES.) SEE LIGHTING DETAILS SHEET FOR ADDITIONAL INFORMATION.

● OPT. KEYED CONST. JOINT - FORMED BY A SURFACED BEVELED 2" x 6".

◔ ¾" 'V' GROOVE ON F.F. OF WINGWALL.

⊞ 18" RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACKFACE OF ABUTMENT.

F.F. DENOTES FRONT FACE

B.F. DENOTES BACK FACE

E.F. DENOTES EACH FACE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-37-436

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EAST ABUTMENT WING 4 DETAILS

SHEET 12 OF 30
1036

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ecpdf.plt
B-37-436 ea.dgn

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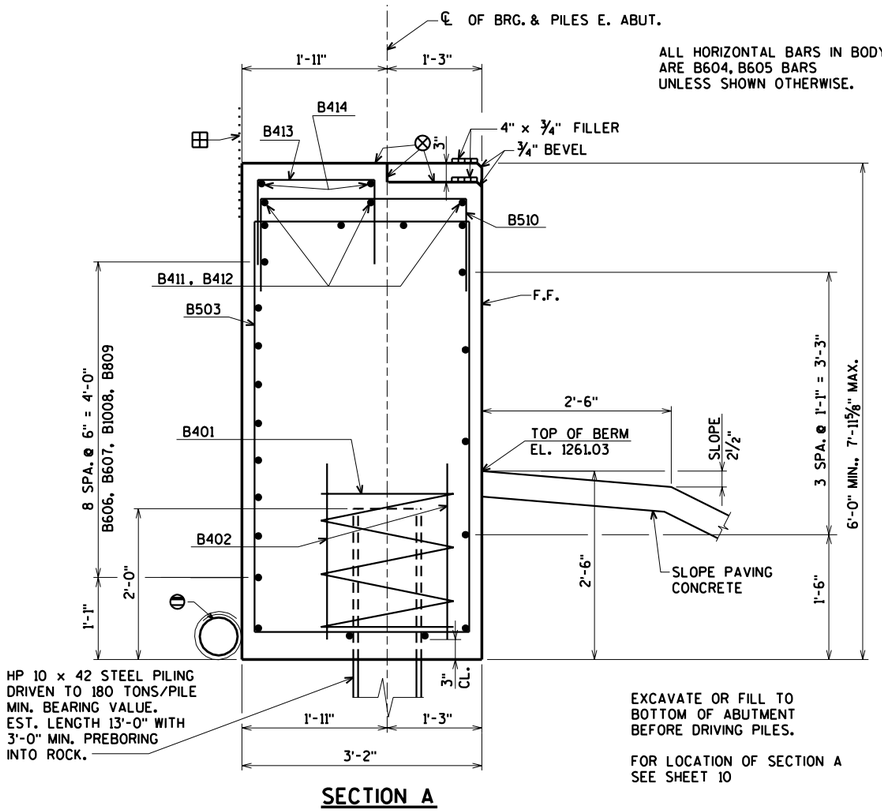
7/26/2012

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STATE PROJECT NUMBER

1170-01-71



SECTION A

ALL HORIZONTAL BARS IN BODY ARE B604, B605 BARS UNLESS SHOWN OTHERWISE.

⊖ PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT ENDS OF PIPE UNDERDRAIN AS DETAILED ON SDD REINFORCED CONCRETE APRON ENDWALL FOR PIPE UNDERDRAIN. RODENT SHIELD TO BE INCLUDED IN BID PRICE. SEE DETAIL ON SHEET 11.

⊗ STEEL TROWEL TOP SURFACE OF ABUTMENT. PLACE MULTIPLE LAYERS OF POLYETHYLENE SHEETS OVER ENTIRE ABUTMENT TOP BEFORE PLACING BEARING PADS AND SUPERSTRUCTURE. TOTAL THICKNESS OF SHEETS SHALL BE AT LEAST 0.03".

⊞ 18" RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZONTAL AND VERTICAL JOINTS ON BACK FACE OF ABUTMENT AND WINGS.

◔ ¾" 'V' GROOVE ON F.F. OF ABUT.

(A20) VERT. CONST. JT. - KEYWAY FORMED BY A SURFACED BEVELED 2" x 8". BEVEL EXPOSED EDGES ¾".

FOR PILE SPLICE DETAIL SEE SHEET 4.

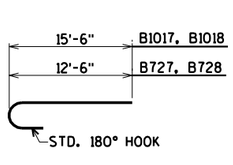
F.F. DENOTES FRONT FACE

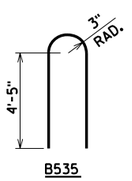
B.F. DENOTES BACK FACE

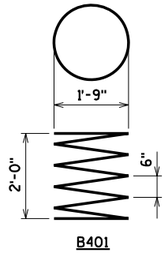
E.F. DENOTES EACH FACE

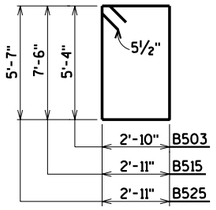
EXCAVATE OR FILL TO BOTTOM OF ABUTMENT BEFORE DRIVING PILES.

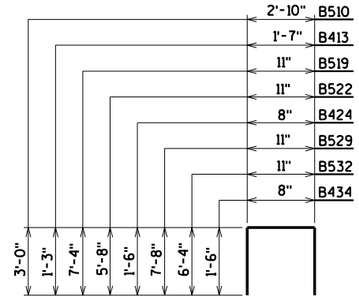
FOR LOCATION OF SECTION A SEE SHEET 10







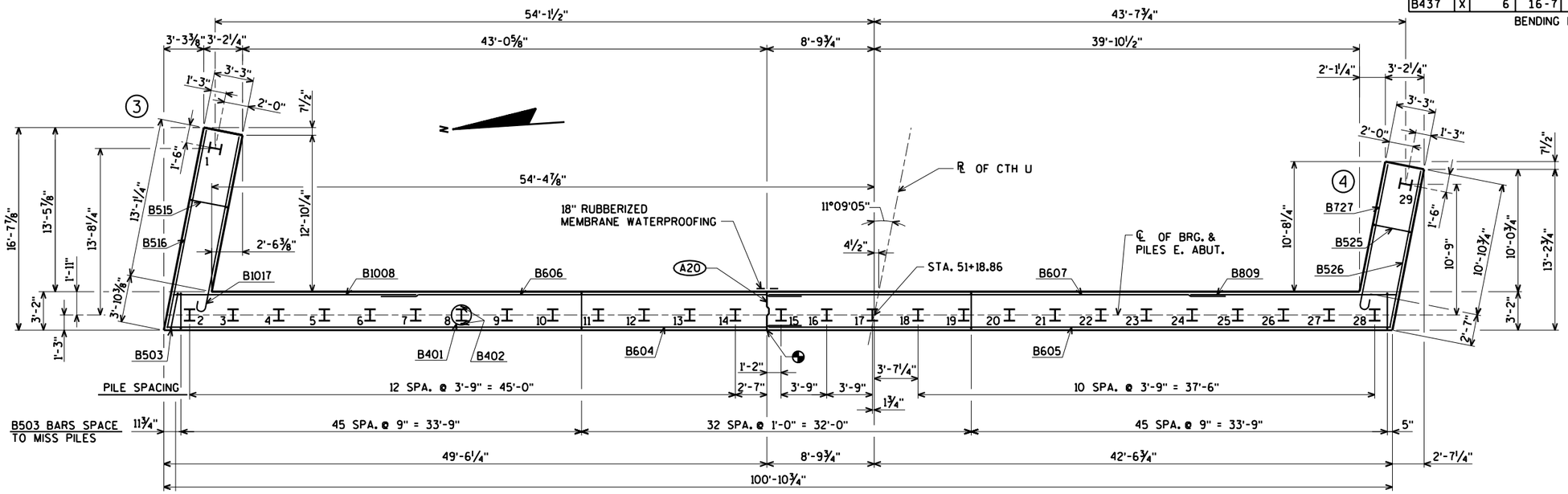




BILL OF BARS

BAR. NO.	COATED BAR	NO. REQ'D.	LENGTH	BENT BAR	BUNDLED BAR SERIES	3,780▪ COATED 7,880▪ UNCOATED LOCATION
B401		27	28-0	X		BODY @ PILES
B402		54	2-3			BODY @ PILES
B503		124	16-10	X		BODY VERT.
B604		12	52-5			BODY HORIZ.
B605		12	51-1			BODY HORIZ.
B606		9	34-9			BODY HORIZ. BETW. WINGS B.F.
B607		9	37-6			BODY HORIZ. BETW. WINGS B.F.
B1008		9	20-0			BODY HORIZ. @ WING 3
B809		9	17-0			BODY HORIZ. @ WING 4
B510		55	8-7	X		BODY VERT.
B411		12	26-7			BODY HORIZ.
B412		3	32-0			BODY HORIZ.
B413		68	3-11	X		BODY VERT.
B414		8	26-7			BODY HORIZ.
B515	X	14	21-4	X		WING 3 VERT.
B516	X	9	16-7			WING 3 HORIZ. F.F.
B1017	X	9	16-11	X		WING 3 HORIZ. B.F.
B1018	X	2	16-11	X		WING 3 HORIZ.
B519	X	18	15-4	X		WING 3 VERT.
B420	X	14	19-7			WING 3 HORIZ. E.F.
B421	X	2	7-9			WING 3 HORIZ. E.F.
B522	X	9	12-0	X		WING 3 VERT.
B623	X	2	19-7			WING 3 HORIZ. TOP
B424	X	27	3-6	X		WING 3 VERT.
B525	X	11	17-6	X		WING 4 VERT.
B526	X	7	13-2			WING 4 HORIZ. F.F.
B727	X	8	13-4	X		WING 4 HORIZ. B.F.
B728	X	2	13-4	X		WING 4 HORIZ.
B529	X	14	16-0	X		WING 4 VERT.
B430	X	14	16-7			WING 4 HORIZ. E.F.
B431	X	4	7-9			WING 4 HORIZ. E.F.
B532	X	9	13-4	X		WING 4 VERT.
B633	X	2	16-7			WING 4 HORIZ. TOP
B434	X	23	3-6	X		WING 4 VERT.
B535	X	45	9-6	X		WING PARAPET VERT.
B436	X	6	19-7			WING 3 PARAPET HORIZ.
B437	X	6	16-7			WING 4 PARAPET HORIZ.

BENDING DIMENSIONS ARE OUT TO OUT OF BARS.



PILE LAYOUT

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-37-436

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EAST ABUTMENT DETAILS

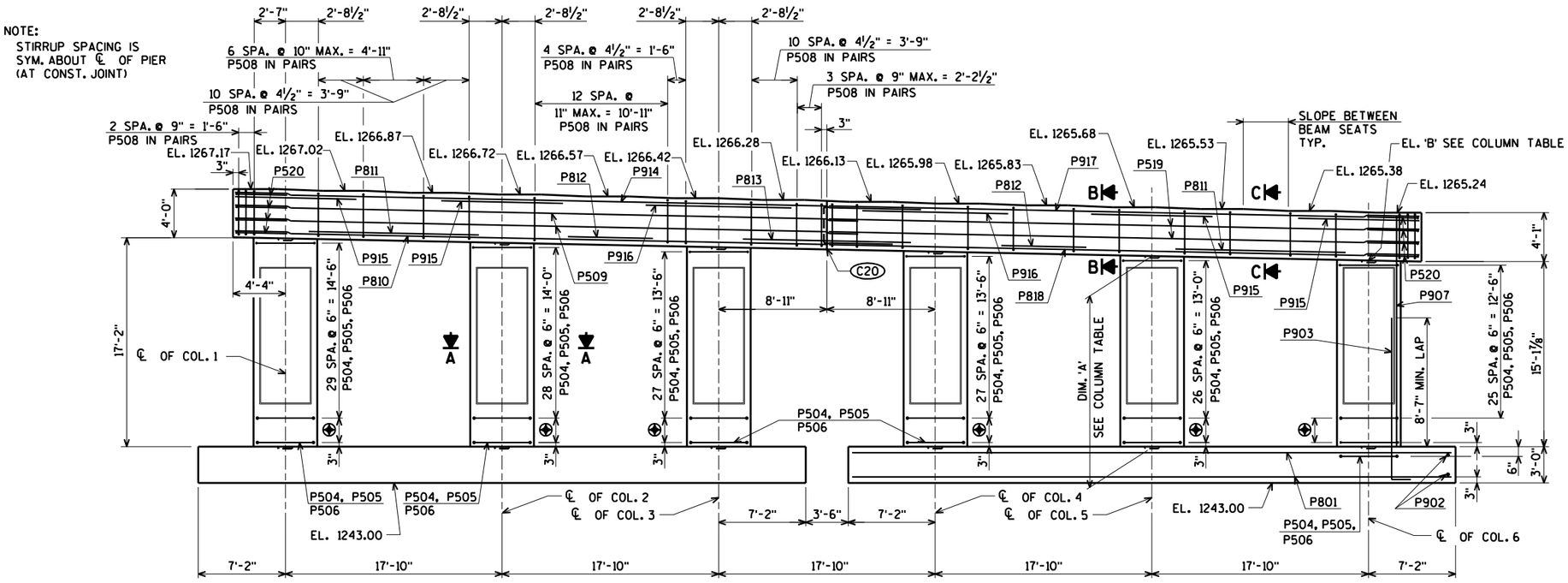
SHEET 13 OF 30
1037

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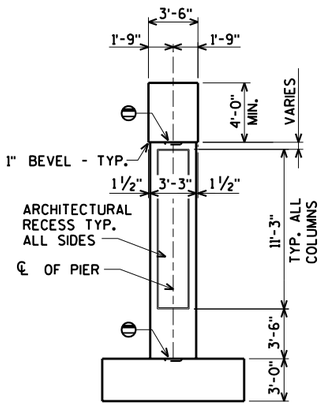
1170-01-71

NOTE:
STIRRUP SPACING IS SYM. ABOUT ℄ OF PIER (AT CONST. JOINT)



ELEVATION
(LOOKING EAST)

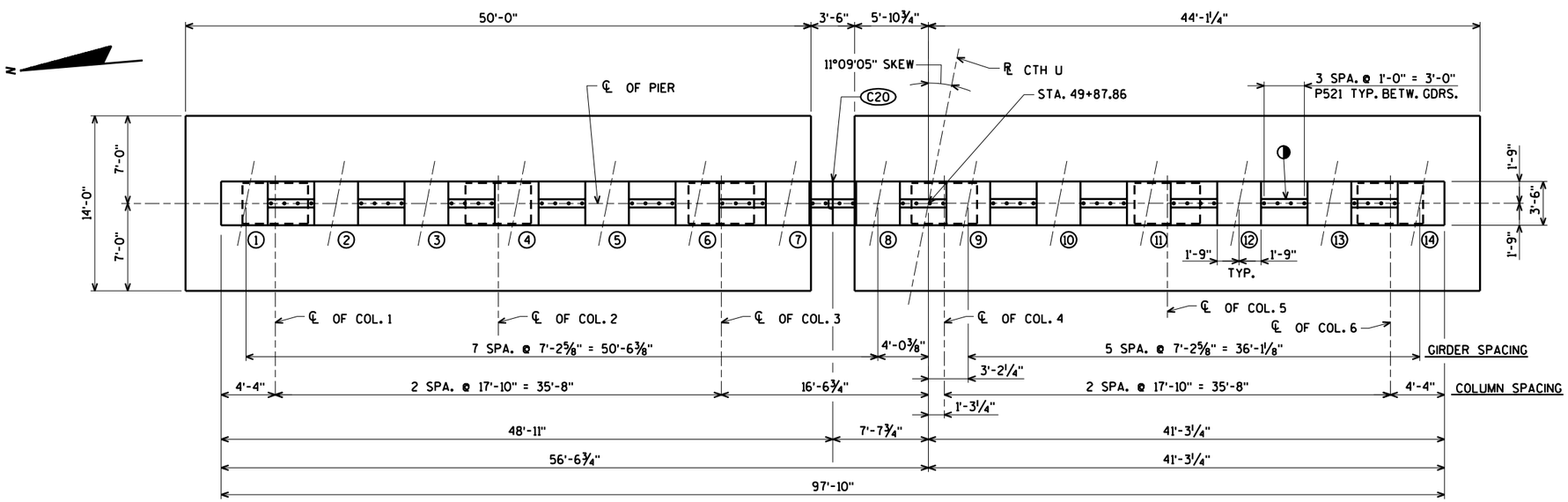
FOR SECTIONS A, B, & C, SEE SHEET 15



END VIEW

COLUMN TABLE

COLUMN	DIM. 'A'	ELEV. 'B'
1	17'-1"	1263.08
2	16'-8½"	1262.71
3	16'-4⅛"	1262.34
4	15'-11¾"	1261.98
5	15'-7⅜"	1261.61
6	15'-3"	1261.25



PLAN

FOOTING TO BE PLACED ON SOUND MATERIAL. MINIMUM REQUIRED FACTORED BEARING RESISTANCE OF 5 TONS/S.F.

PIER COLUMN HEIGHT MAY BE INCREASED A MAXIMUM OF 2 FEET (IF REQ'D. TO REACH SOUND MATERIAL) WITHOUT RE-DESIGNING PIER.

⊕ 8 SPA. @ 3" P504, P505, P506 (MAY BE INCREASED TO 6" MAX. SPACING IF PIER HEIGHT IS INCREASED).

(C20) VERT. CONST. JT. - KEYWAY FORMED BY A SURFACED BEVELED 2" x 8". BEVEL EXPOSED EDGES ¾".

◑ KEYED CONST. JOINT - FORMED BY A SURFACED BEVELED 2" x 6".

⊖ 1'-3" x 2'-6" x 4" CONST. JOINT FORMED BY BEVELED KEYWAY. TYPICAL ALL COLUMNS & FOOTINGS.

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STRUCTURES DESIGN SECTION

STRUCTURE B-37-436

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PIER

SHEET 14 OF 30
1038

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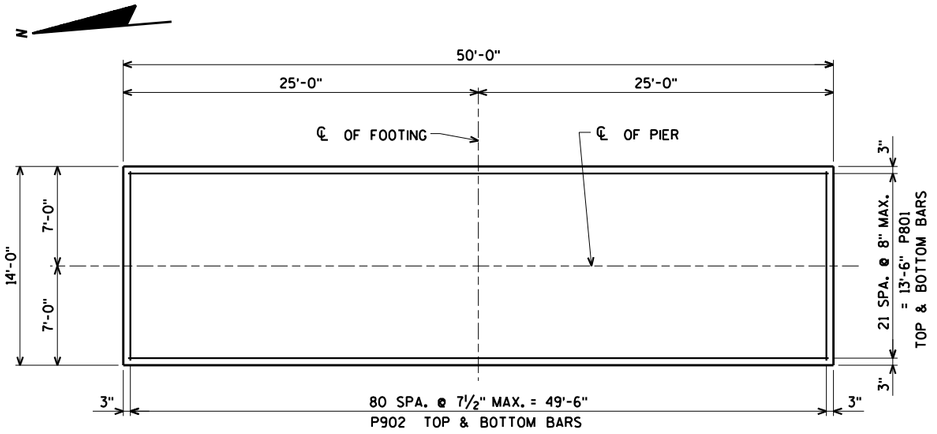
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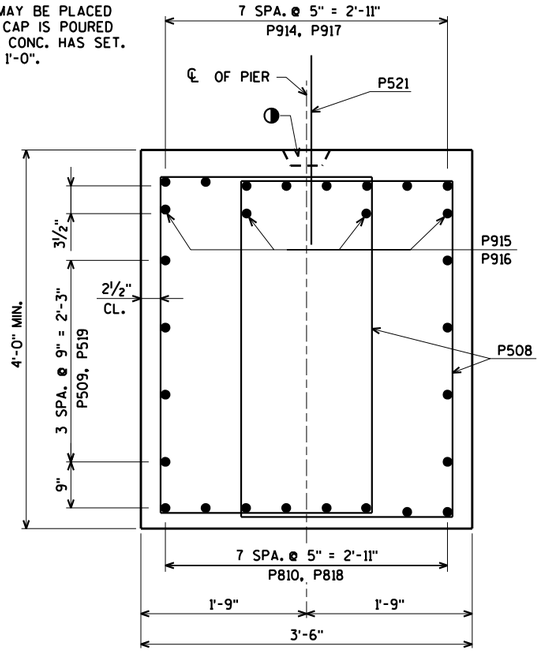
STATE PROJECT NUMBER

1170-01-71



FOOTING PLAN

P521 BARS MAY BE PLACED AFTER PIER CAP IS POURED BUT BEFORE CONC. HAS SET. IMBED BARS 1'-0".

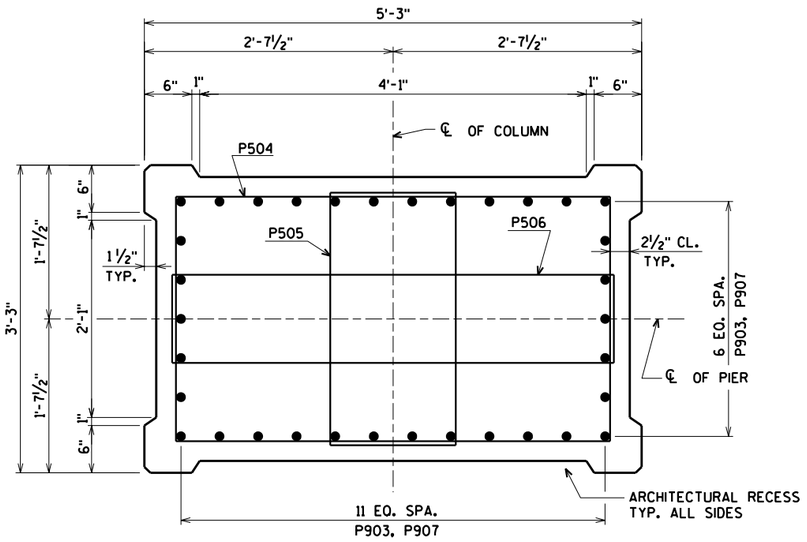


SECTION B

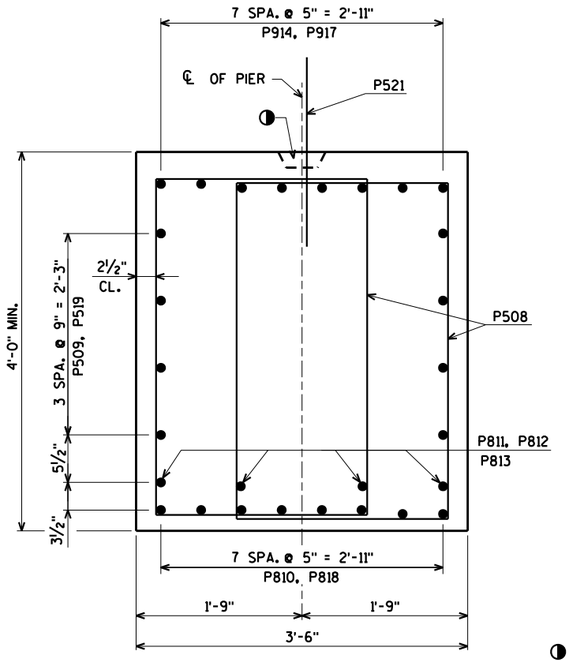
BILL OF BARS

BAR. NO.	COATED BAR	NO. REQ'D.	LENGTH	BENT BAR	BUNDLED BAR SERIES	42,170# COATED 26,500# UNCOATED LOCATION
P801		88	49-6			FOOTING TOP & BOTTOM
P902		324	13-6			FOOTING TOP & BOTTOM
P903	X	204	14-6	X		FOOTING DOWELS
P504	X	222	14-11	X		FOOTING & COLUMN HORIZ.
P505	X	222	8-7	X		FOOTING & COLUMN HORIZ.
P506	X	222	11-9	X		FOOTING & COLUMN HORIZ.
P907	X	204	19-0			COLUMN VERT
P508	X	244	12-3	X		CAP STIRRUPS
P509	X	8	51-8			CAP HORIZ. SIDES
P810	X	8	55-6			CAP HORIZ. BOT.
P811	X	8	14-0			CAP HORIZ. BOT.
P812	X	8	7-0			CAP HORIZ. BOT.
P813	X	4	13-10			CAP HORIZ. BOT.
P914	X	8	58-5			CAP HORIZ. TOP
P915	X	16	10-0			CAP HORIZ. TOP
P916	X	8	12-0			CAP HORIZ. TOP
P917	X	8	48-7			CAP HORIZ. TOP
P818	X	8	48-7			CAP HORIZ. BOT.
P519	X	8	48-7			CAP HORIZ.
P520	X	12	8-9	X		CAP END HORIZ.
P521	X	52	2-0			CAP VERT.

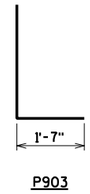
BENDING DIMENSIONS ARE OUT TO OUT OF BARS.



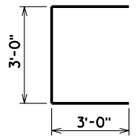
SECTION A



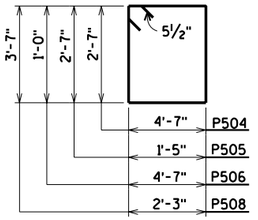
SECTION C



P903



P520



FOR LOCATION OF SECTIONS A, B. & C, SEE SHEET 14.

◑ KEYED CONST. JOINT - FORMED BY A SURFACED BEVELED 2" x 6".

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STRUCTURE B-37-436

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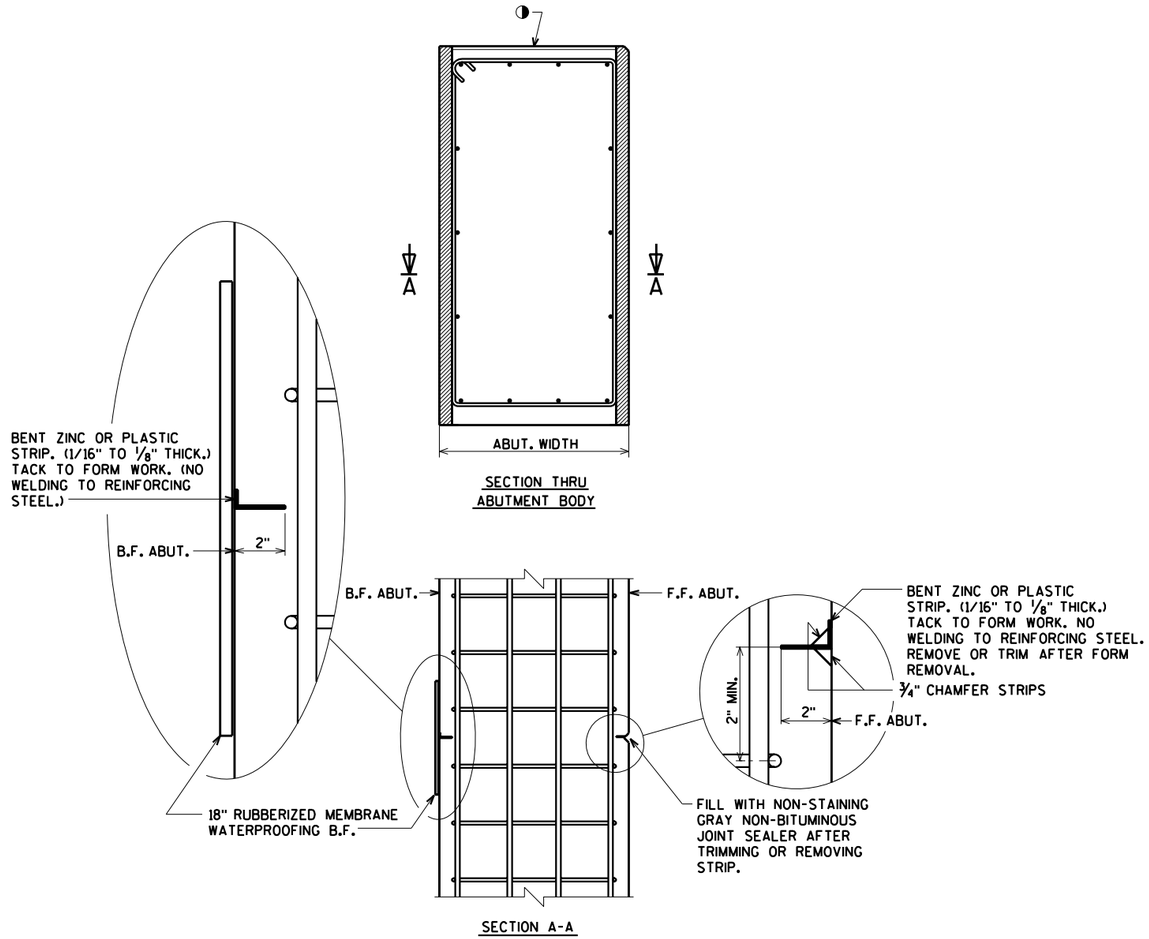
PIER DETAILS

SHEET 15 OF 30
1039

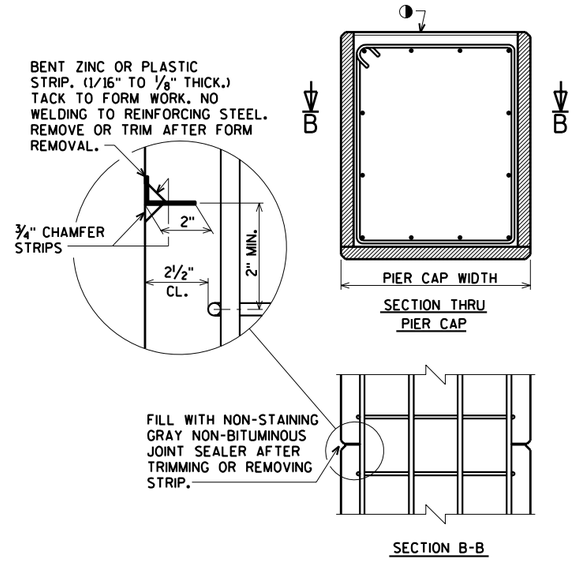
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8



ALTERNATE CONSTRUCTION JOINT AT ABUTMENT



ALTERNATE CONSTRUCTION JOINT AT PIER CAP

NOTES

PARTIAL ZINC OR PLASTIC BULKHEAD MAY BE USED AS ALTERNATE CONSTRUCTION JOINT, WITH THE PERMISSION OF THE ENGINEER, AT THE CONTRACTOR'S EXPENSE.

VERTICAL CONSTRUCTION JOINT KEYWAY IS NOT REQUIRED WHEN USING ALTERNATE CONSTRUCTION JOINT.

CARE IS TO BE USED IN CASTING CONCRETE AROUND BULKHEAD TO PREVENT DISLOCATION OR MISALIGNMENT OF THE BULKHEAD.

◑ USE A JOINT TOOL TO CONSTRUCT A CONTRACTION JOINT APPROXIMATELY 1/2" DEEP.

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ALTERNATE CONSTRUCTION JOINT

SHEET 16 OF 30
1040

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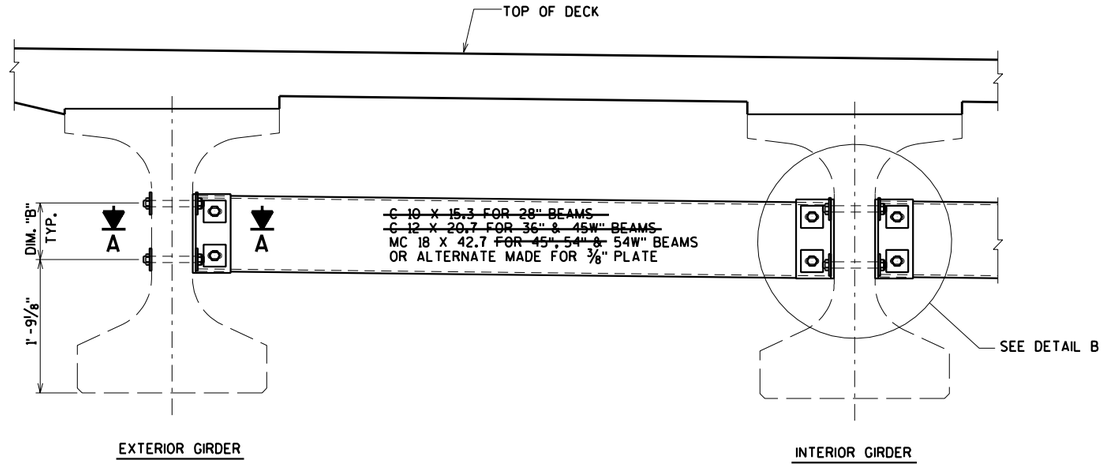
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TABLE

GIRDER HEIGHT	DIM. "A"	DIM. "B"	DIM. "L"	* DIM. "X"
54W"	1'-9 1/8"	1'-5 7/8"	1'-9 1/2"	4 1/4"



PART TRANSVERSE SECTION AT DIAPHRAGM

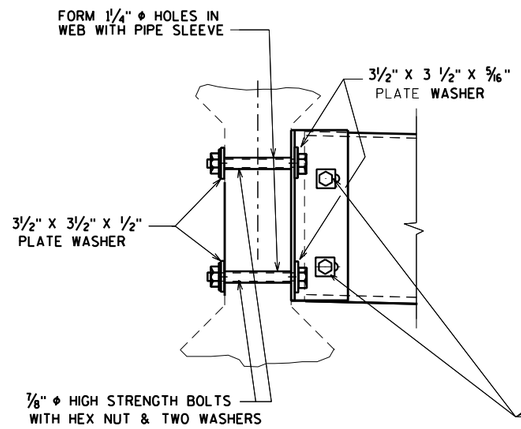
NOTES

ALL DIAPHRAGM MATERIAL NOT EMBEDDED IN THE CONCRETE GIRDER SHALL BE PAID FOR AT THE UNIT PRICE BID FOR "STEEL DIAPHRAGMS B-37-436", EACH.

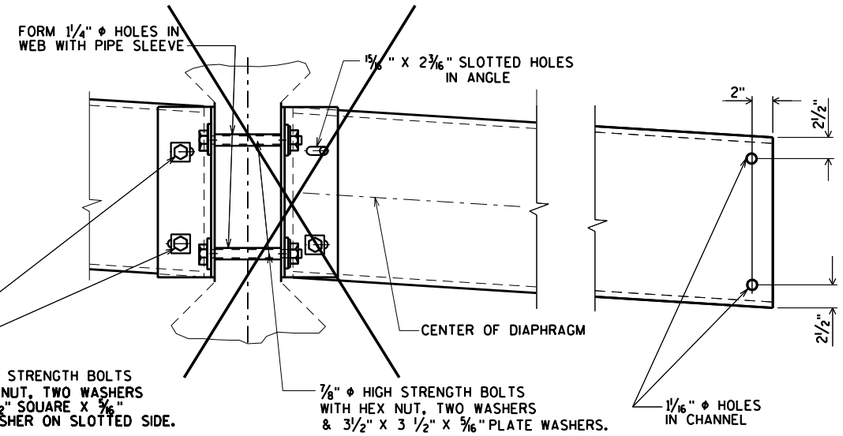
EACH DIAPHRAGM BETWEEN GIRDERS SHALL CONSTITUTE ONE UNIT.

ALL DIAPHRAGM STRUCTURAL STEEL SHALL BE ASTM A709 GRADE 36. ALL BOLTS, NUTS AND WASHERS SHALL BE ASTM A325 TYPE 1.

ALL DIAPHRAGM STRUCTURAL STEEL SHOWN SHALL BE HOT-DIPPED GALVANIZED. ALL BOLTS, NUTS AND WASHERS SHALL BE HOT-DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A153 CLASS C. GALVANIZED NUTS SHALL BE TAPPED OVERSIZED IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM A563 AND SHALL MEET THE REQUIREMENTS OF SUPPLEMENTARY REQUIREMENT S1 OF ASTM A563, LUBRICANT AND TEST FOR COATED NUTS.

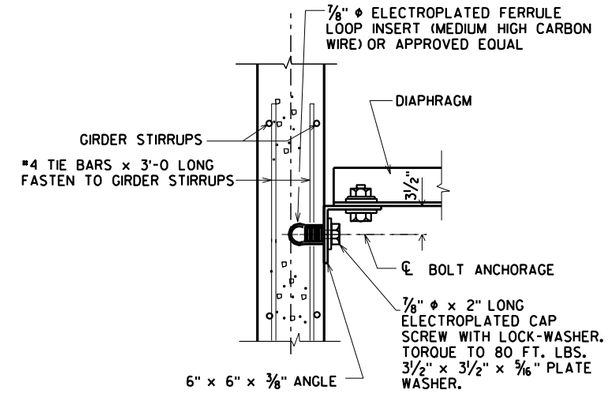


(FOR STAGGERED DIAPHRAGMS)



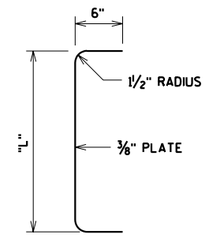
(FOR CONTINUOUS LINE OF DIAPHRAGMS)

DETAIL B



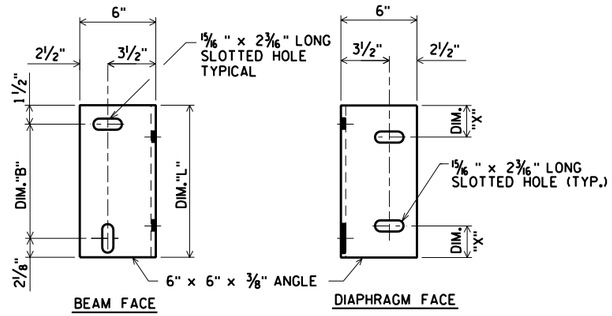
SECT. A-A

(FOR EXTERIOR ATTACHMENT)



SECTION THRU ALTERNATE DIAPHRAGM

*DIM. "X" = 2 1/2" FOR ALTERNATE PLATE DIAPHRAGM



DIAPHRAGM SUPPORT

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STRUCTURE B-37-436

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STEEL INTER. DIAPHRAGM DETAILS

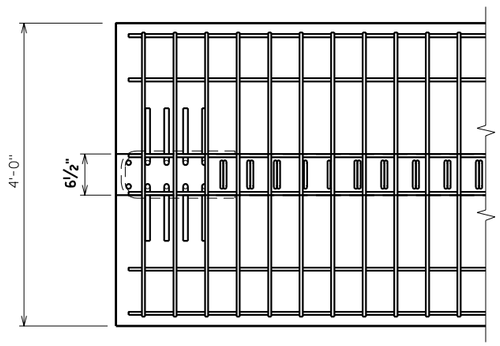
SHEET 17 OF 30
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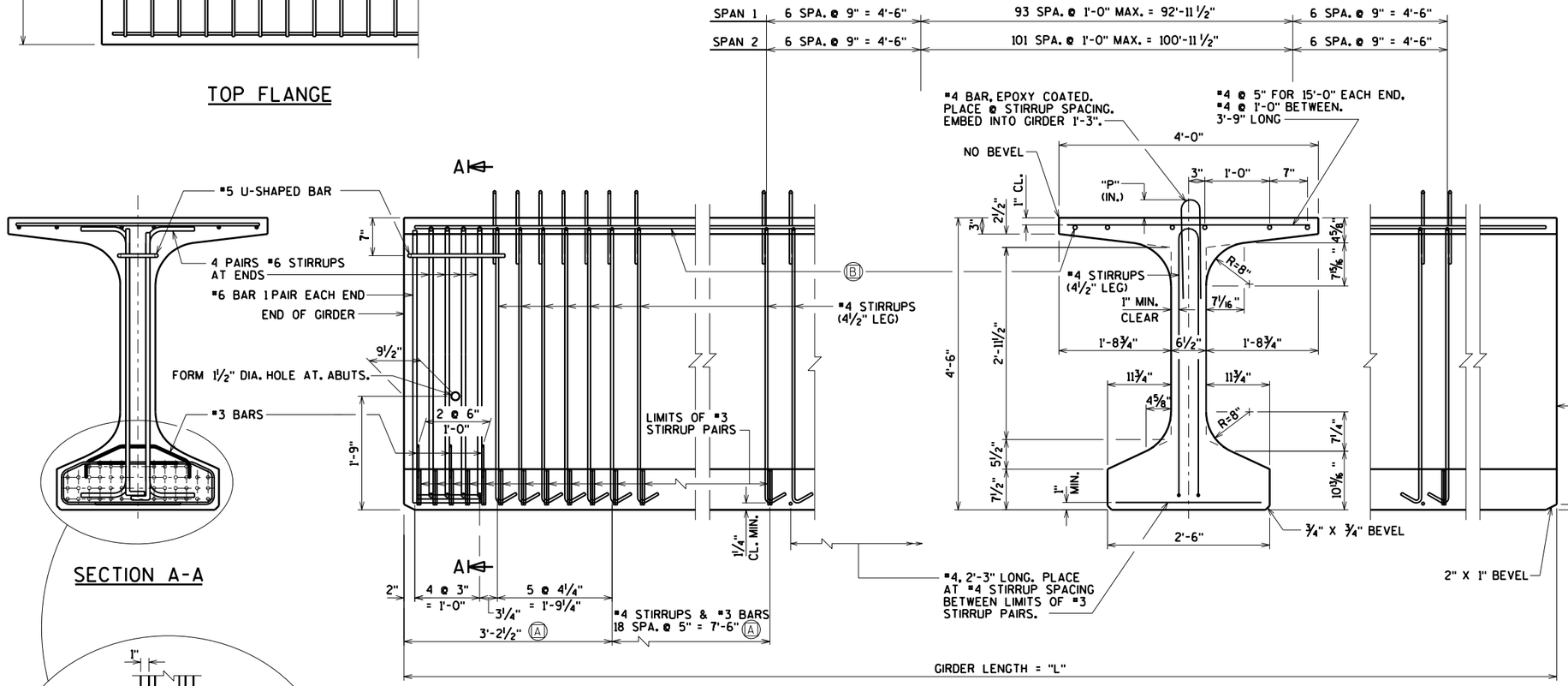
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U:\41-0525.00 - Marathon Co. UK and USH 51\Interchange\B-37-436 CTH U over USH 51\Bridge\B-37-436

STATE PROJECT NUMBER

1170-01-71



TOP FLANGE

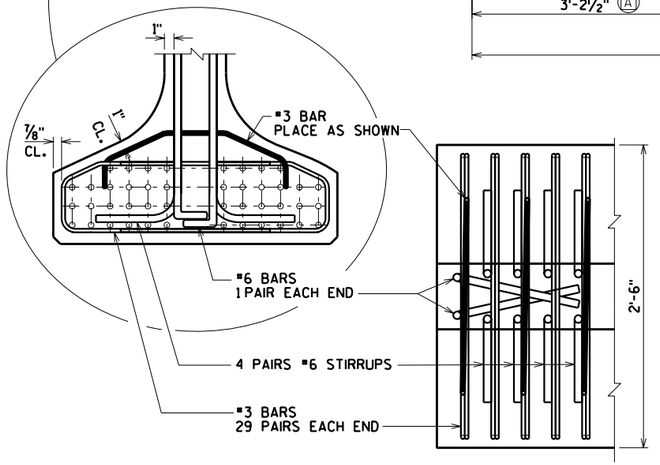


SECTION A-A

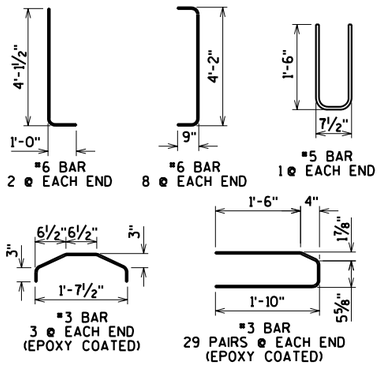
SIDE VIEW & TYP. SECTION IN SPAN

Ⓐ DETAIL TYP. AT EACH END

Ⓑ 6 #4 BARS, FULL LENGTH, MIN. LAP = 2'-4"



BOTTOM FLANGE



* MINIMUM CYLINDER STRENGTH OF CONCRETE @ TIME OF TRANSFER OF PRESTRESS FORCE.

GIRDER DATA

SPAN	GIRDER	GIRDER LENGTH "L"	DEAD LOAD DEFL. (IN.) 1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	CONC. STRGTH. f'c (p.s.i.)	"P" 1ST 1/3 OF GIRDER	"P" MID 1/3 OF GIRDER	"P" END 1/3 OF GIRDER	DIA. OF STRAND (IN.)	DRAPED PATTERN TOTAL NO. OF STRANDS	f'ci (P.S.I.) *	(IN.) "A"	"B" MIN.	"B" MAX.	"C"	UNDRAPED PATTERN TOTAL NO. OF STRANDS	f'ci (P.S.I.) *
1	ALL	123'-4½"	0.6	1.2	1.7	1.9	2.0	1.9	1.7	1.2	0.6	8,500	8"	7"	8"	0.6	38	6,800	5	16	19	5		
2	ALL	131'-4½"	0.8	1.5	2.1	2.5	2.7	2.5	2.1	1.5	0.8	8,500	8"	7"	8"	0.6	38	6,800	5	16	19	5		

GIRDER NOTES

TOP OF GIRDER TO BE ROUGH FLOATED AND BROOMED TRANSVERSELY FOR BONDING TO THE SLAB, EXCEPT THE OUTSIDE 8" OF GIRDER, WHICH SHALL RECEIVE A SMOOTH FINISH. AN APPROVED CONCRETE SEALER SHALL BE APPLIED TO ALL SMOOTH SURFACES INCLUDING THE OUTSIDE 15" OF THE TOP FLANGE.

DO NOT APPLY CONCRETE SEALER TO SURFACES RECEIVING APPLICATION OF CONCRETE STAINING.

THE GIRDERS SHALL BE PROVIDED WITH A SUITABLE LIFTING DEVICE FOR HANDLING AND ERECTING THE GIRDERS.

STRANDS SHALL BE FLUSH WITH THE END OF GIRDER. FOR GIRDER ENDS EMBEDDED COMPLETELY IN CONCRETE, ENDS OF STRANDS SHALL BE COATED WITH NON-BITUMINOUS JOINT SEALER. FOR GIRDER ENDS THAT ARE FINALLY EXPOSED, COAT THE GIRDER ENDS, EXPOSED STRAND ENDS AND ALL NON-BONDING SURFACES WITHIN 2 FEET OF THE GIRDER ENDS WITH A NON-PIGMENTED EPOXY CONFORMING TO AASHTO M-235 TYPE III, CLASS B OR C. THE EPOXY SHALL BE APPLIED AT LEAST 3 DAYS AFTER MOIST CURING HAS CEASED AND PRIOR TO APPLICATION OF THE SEALER.

ALL GIRDERS SHALL BE CAST FULL LENGTH AS SHOWN.

SPACING SHOWN FOR #4 STIRRUPS IS FOR GRADE 60 REINFORCEMENT. IF THE FABRICATOR WANTS TO BUILD A BAR STEEL CAGE BY WELDING LONGITUDINAL REINFORCEMENT TO THE #4 STIRRUPS, ONE OPTION IS AVAILABLE:

USE ASTM A706, GRADE 60 REINFORCEMENT AND THE STIRRUP SPACING AS SHOWN ON THE PLANS.

AN ALTERNATE EQUIVALENT OF WELDED WIRE FABRIC (WWF) ASTM A497 MAY BE SUBSTITUTED FOR THE STIRRUP REINFORCEMENT SHOWN, UPON APPROVAL OF THE STRUCTURES DEVELOPMENT CHIEF, (608)266-5161.

PRESTRESSING STRANDS SHALL BE 0.6" DIA.-7 WIRE LOW-RELAXATION STRANDS WITH AN ULTIMATE STRENGTH OF 270,000 psi.

FOR DIAPHRAGM INSERT & CONNECTION DETAILS SEE "STEEL INTER. DIAPHRAGM DETAILS" SHEET.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-37-436

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54W" PRESTRESSED GIRDER DETAILS

SHEET 18 OF 30
1042

ORIGINAL PLANS PREPARED BY
AYRES ASSOCIATES
3433 Oakwood Hills Parkway
Eau Claire, WI 54701
www.AyresAssociates.com

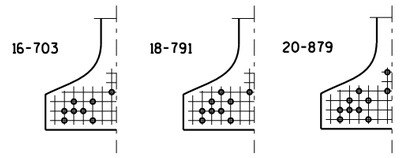
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$PRFNAME$
U:\41-0525.00 - Marathon Co. UK and USH 51\Interchange\B-37-436 CTH U over USH 51\Bridge\B-37-436

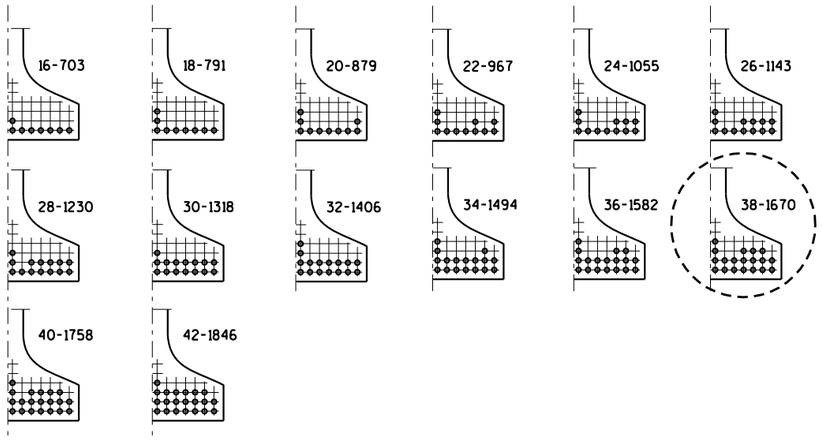
STATE PROJECT NUMBER

1170-01-71



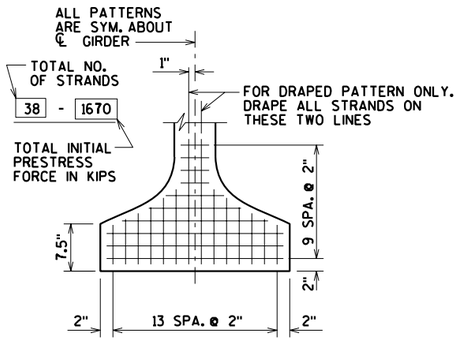
STANDARD ARRANGEMENTS TO RAISE CENTER OF GRAVITY TO AVOID DRAPING OF STRANDS

0.6"ϕ STRANDS

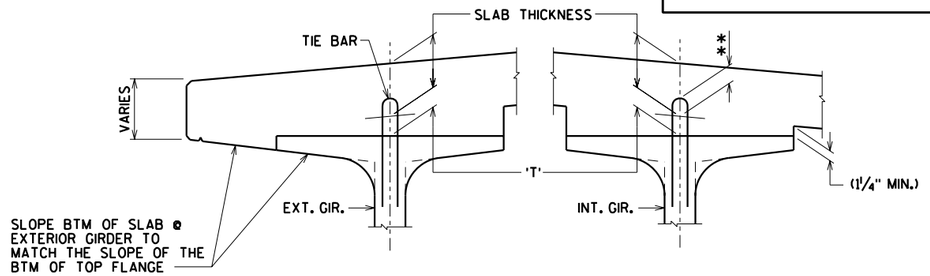


ARRANGEMENT AT ℄ SPAN - FOR GIRDERS WITH DRAPED STRANDS

0.6"ϕ STRANDS



TYP. STRAND PATTERN



SLAB HAUNCH DETAIL

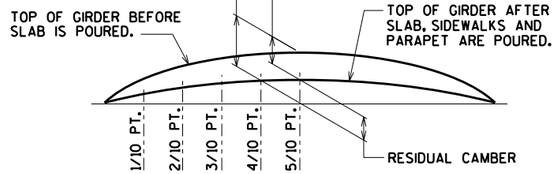
IF 1¼" MINIMUM HAUNCH HEIGHT AT EDGE OF GIRDER CANNOT BE MAINTAINED, THE GRADE LINE MAY BE REVISED BY THE ENGINEER AT THE OPTION OF THE CONTRACTOR. THE PLAN SLAB THICKNESS SHALL BE HELD. NOTIFY THE STRUCTURES SECTION IF THE GRADE LINE IS RAISED FROM THE PLAN PROFILE BY MORE THAN ½" OR,

** IF 3" MINIMUM DECK EMBEDMENT OF TIE BAR CANNOT BE OBTAINED.

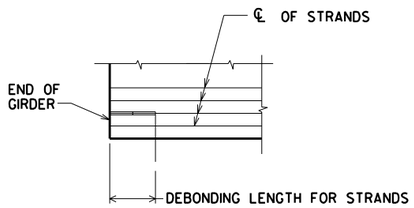
TO DETERMINE 'T', ELEV. OF TOP OF GIR'S. AT ℄ OF SUBSTRUCTURE UNITS & AT 1/10 POINTS OF EACH SPAN SHALL BE TAKEN. THEN FOLLOW THIS PROCESS:

TOP OF DECK ELEV. AT FINAL GRADE
- TOP OF GIRDER ELEVATION
+ DEAD LOAD DEFLECTION
- SLAB THICKNESS
= HAUNCH HEIGHT 'T'

NOTE: AN AVERAGE HAUNCH ('T') OF 3⅜" WAS USED IN THE QUANTITY "CONCRETE MASONRY BRIDGES".



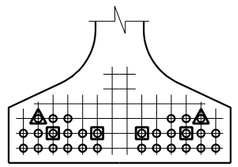
CAMBER & DEAD LOAD DEFLECTION DIAGRAM



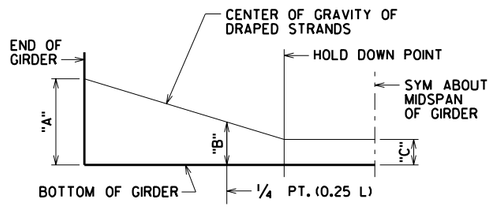
BOND BREAKER DETAIL

SHOWING LENGTHS OF DEBONDING FROM END OF GIRDER.

SYM.	HEIGHT	NO. OF STRANDS	DEBOND LENGTH
□	4"	4	4'
△	6"	2	6'



DEBONDING DETAIL



DRAPED STRAND PROFILE

*THE THEORETICAL INITIAL CAMBER VALUE AT THE TIME OF STRAND RELEASE AT MIDSPAN MULTIPLIED BY A FACTOR OF 1.4 TO ACCOUNT FOR CAMBER GROWTH FROM THE TIME OF STRAND RELEASE TO JOBSITE PLACEMENT.

SPAN	CAMBER (IN.) *
1	3.7
2	3.6

THESE VALUES ARE NOT TO BE USED IN DETERMINING 'T'. USE ACTUAL GIRDER SHOTS.

THESE VALUES ARE FOR INFORMATIONAL PURPOSES ONLY.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-37-436

DRAWN BY CLS | PLANS CK'D. DNS

54W" PRESTRESSED GIRDER DETAILS

SHEET 19 OF 30
1043

ORIGINAL PLANS PREPARED BY
AYRES ASSOCIATES
3433 Oakwood Hills Parkway
Eau Claire, WI 54701
www.AyresAssociates.com

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STATE PROJECT NUMBER
1170-01-71

ELEVATIONS AT TOP OF DECK

		℄ BRG. W. ABUT.	0.1 PT.	0.2 PT.	0.3 PT.	0.4 PT.	0.5 PT.	0.6 PT.	0.7 PT.	0.8 PT.	0.9 PT.	℄ OF PIER
SPAN 1	NORTH EOD	1273.32	1273.29	1273.24	1273.18	1273.12	1273.05	1272.99	1272.93	1272.87	1272.81	1272.75
	GIRDER 1	1273.27	1273.24	1273.19	1273.12	1273.06	1273.00	1272.94	1272.88	1272.82	1272.75	1272.69
	GIRDER 2	1273.13	1273.09	1273.04	1272.98	1272.91	1272.85	1272.79	1272.73	1272.67	1272.61	1272.54
	GIRDER 3	1272.98	1272.95	1272.89	1272.83	1272.77	1272.70	1272.64	1272.58	1272.52	1272.46	1272.40
	GIRDER 4	1272.84	1272.80	1272.74	1272.68	1272.62	1272.56	1272.49	1272.43	1272.37	1272.31	1272.25
	GIRDER 5	1272.69	1272.65	1272.59	1272.53	1272.47	1272.41	1272.35	1272.28	1272.22	1272.16	1272.10
	GIRDER 6	1272.55	1272.50	1272.44	1272.38	1272.32	1272.26	1272.20	1272.14	1272.07	1272.01	1271.95
	GIRDER 7	1272.40	1272.36	1272.29	1272.23	1272.17	1272.11	1272.05	1271.99	1271.92	1271.86	1271.80
	GIRDER 8	1272.26	1272.21	1272.15	1272.08	1272.02	1271.96	1271.90	1271.84	1271.78	1271.71	1271.65
	PGL	1272.17	1272.13	1272.06	1272.00	1271.94	1271.88	1271.82	1271.76	1271.69	1271.63	1271.57
	GIRDER 9	1272.11	1272.06	1272.00	1271.94	1271.87	1271.81	1271.75	1271.69	1271.63	1271.57	1271.50
	GIRDER 10	1271.96	1271.91	1271.85	1271.79	1271.73	1271.66	1271.60	1271.54	1271.48	1271.42	1271.36
	GIRDER 11	1271.82	1271.76	1271.70	1271.64	1271.58	1271.52	1271.45	1271.39	1271.33	1271.27	1271.21
	GIRDER 12	1271.67	1271.62	1271.55	1271.49	1271.43	1271.37	1271.31	1271.24	1271.18	1271.12	1271.06
	GIRDER 13	1271.52	1271.47	1271.40	1271.34	1271.28	1271.22	1271.16	1271.09	1271.03	1270.97	1270.91
	GIRDER 14	1271.38	1271.32	1271.25	1271.19	1271.13	1271.07	1271.01	1270.95	1270.88	1270.82	1270.76
	SOUTH EOD	1271.32	1271.26	1271.20	1271.14	1271.08	1271.02	1270.95	1270.89	1270.83	1270.77	1270.71

		℄ BRG. PIER	0.1 PT.	0.2 PT.	0.3 PT.	0.4 PT.	0.5 PT.	0.6 PT.	0.7 PT.	0.8 PT.	0.9 PT.	℄ OF E. ABUT.
SPAN 2	NORTH EOD	1272.75	1272.68	1272.62	1272.55	1272.48	1272.42	1272.35	1272.29	1272.22	1272.16	1272.09
	GIRDER 1	1272.69	1272.63	1272.56	1272.50	1272.43	1272.37	1272.30	1272.23	1272.17	1272.10	1272.03
	GIRDER 2	1272.54	1272.48	1272.41	1272.35	1272.28	1272.22	1272.15	1272.09	1272.02	1271.95	1271.88
	GIRDER 3	1272.40	1272.33	1272.27	1272.20	1272.13	1272.07	1272.00	1271.94	1271.87	1271.81	1271.73
	GIRDER 4	1272.25	1272.18	1272.12	1272.05	1271.99	1271.92	1271.85	1271.79	1271.72	1271.66	1271.58
	GIRDER 5	1272.10	1272.03	1271.97	1271.90	1271.84	1271.77	1271.71	1271.64	1271.58	1271.51	1271.43
	GIRDER 6	1271.95	1271.89	1271.82	1271.75	1271.69	1271.62	1271.56	1271.49	1271.43	1271.36	1271.28
	GIRDER 7	1271.80	1271.74	1271.67	1271.61	1271.54	1271.47	1271.41	1271.34	1271.28	1271.21	1271.13
	GIRDER 8	1271.65	1271.59	1271.52	1271.46	1271.39	1271.33	1271.26	1271.19	1271.13	1271.06	1270.98
	PGL	1271.57	1271.51	1271.44	1271.37	1271.31	1271.24	1271.18	1271.11	1271.05	1270.98	1270.89
	GIRDER 9	1271.50	1271.44	1271.37	1271.31	1271.24	1271.18	1271.11	1271.05	1270.98	1270.91	1270.83
	GIRDER 10	1271.36	1271.29	1271.23	1271.16	1271.09	1271.03	1270.96	1270.90	1270.83	1270.76	1270.67
	GIRDER 11	1271.21	1271.14	1271.08	1271.01	1270.95	1270.88	1270.81	1270.75	1270.68	1270.61	1270.52
	GIRDER 12	1271.06	1270.99	1270.93	1270.86	1270.80	1270.73	1270.67	1270.60	1270.54	1270.46	1270.37
	GIRDER 13	1270.91	1270.84	1270.78	1270.71	1270.65	1270.58	1270.52	1270.45	1270.39	1270.31	1270.22
	GIRDER 14	1270.76	1270.70	1270.63	1270.57	1270.50	1270.43	1270.37	1270.30	1270.24	1270.16	1270.06
	SOUTH EOD	1270.71	1270.64	1270.58	1270.51	1270.45	1270.38	1270.32	1270.25	1270.18	1270.11	1270.01

EOD DENOTES EDGE OF DECK

Ayres_printer.pltcfg
B-37-436 GDRelev.DGN

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NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-37-436

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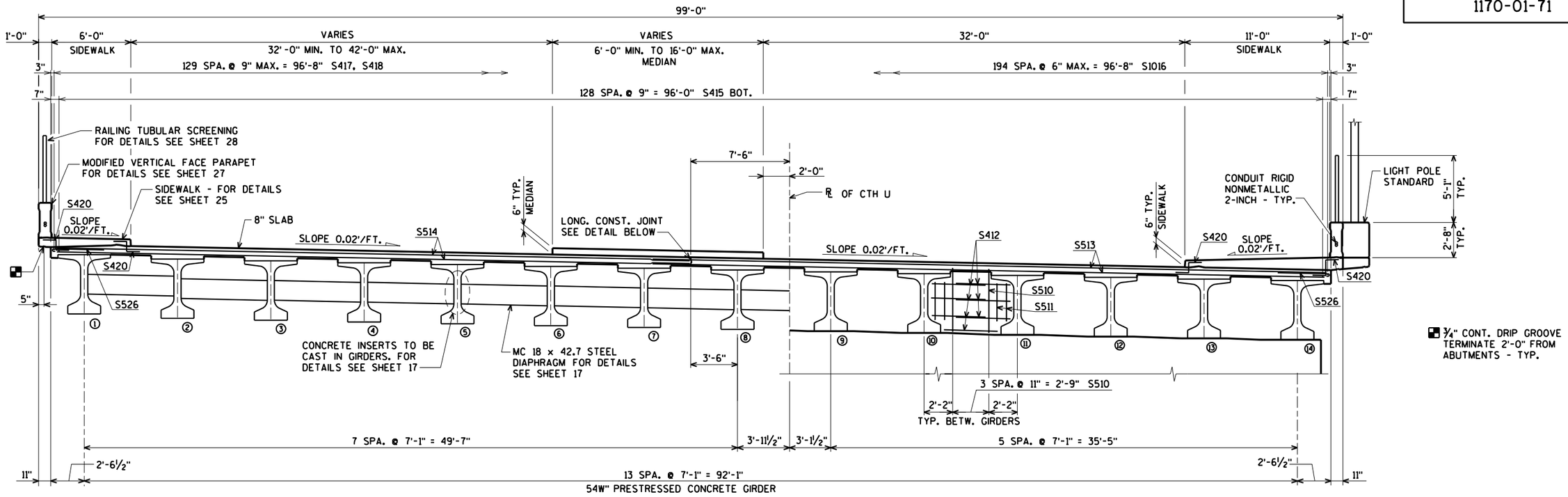
DECK ELEVATIONS

SHEET 20 OF 30
1044

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AYRES ASSOCIATES
3433 Oakwood Hills Parkway
Eau Claire, WI 54701
www.AyresAssociates.com

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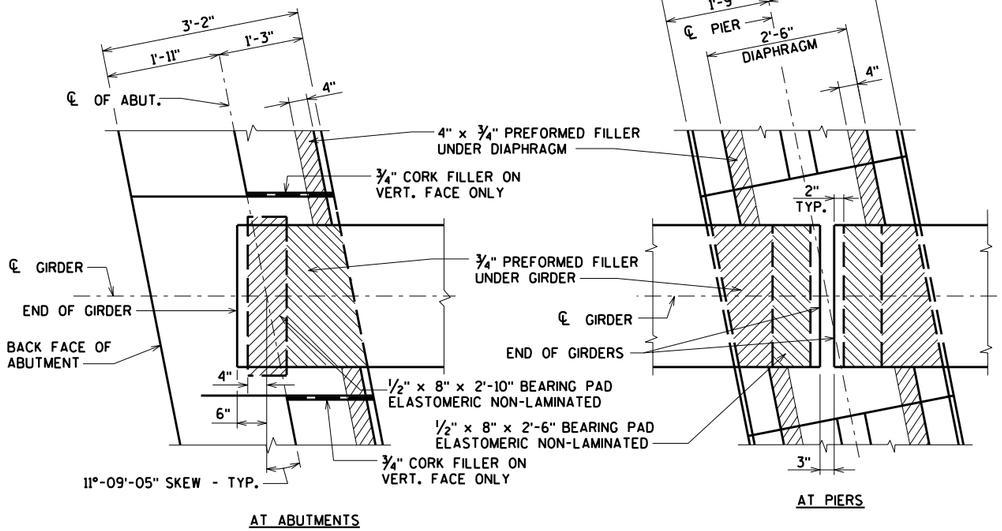
1170-01-71



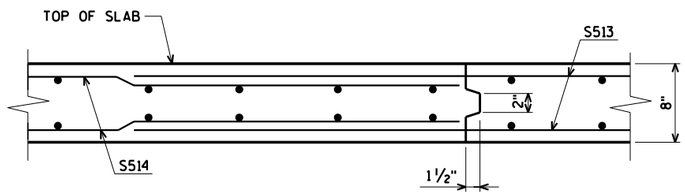
¾" CONT. DRIP GROOVE TERMINATE 2'-0" FROM ABUTMENTS - TYP.

TYPICAL CROSS SECTION THRU DECK

(LOOKING EAST)



BEARING PAD DETAIL



SECTION THRU LONGITUDINAL CONSTRUCTION JOINT

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-37-436

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SUPERSTRUCTURE

SHEET 21 OF 30
1045

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3433 Oakwood Hills Parkway
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B-37-436 sup.dgn

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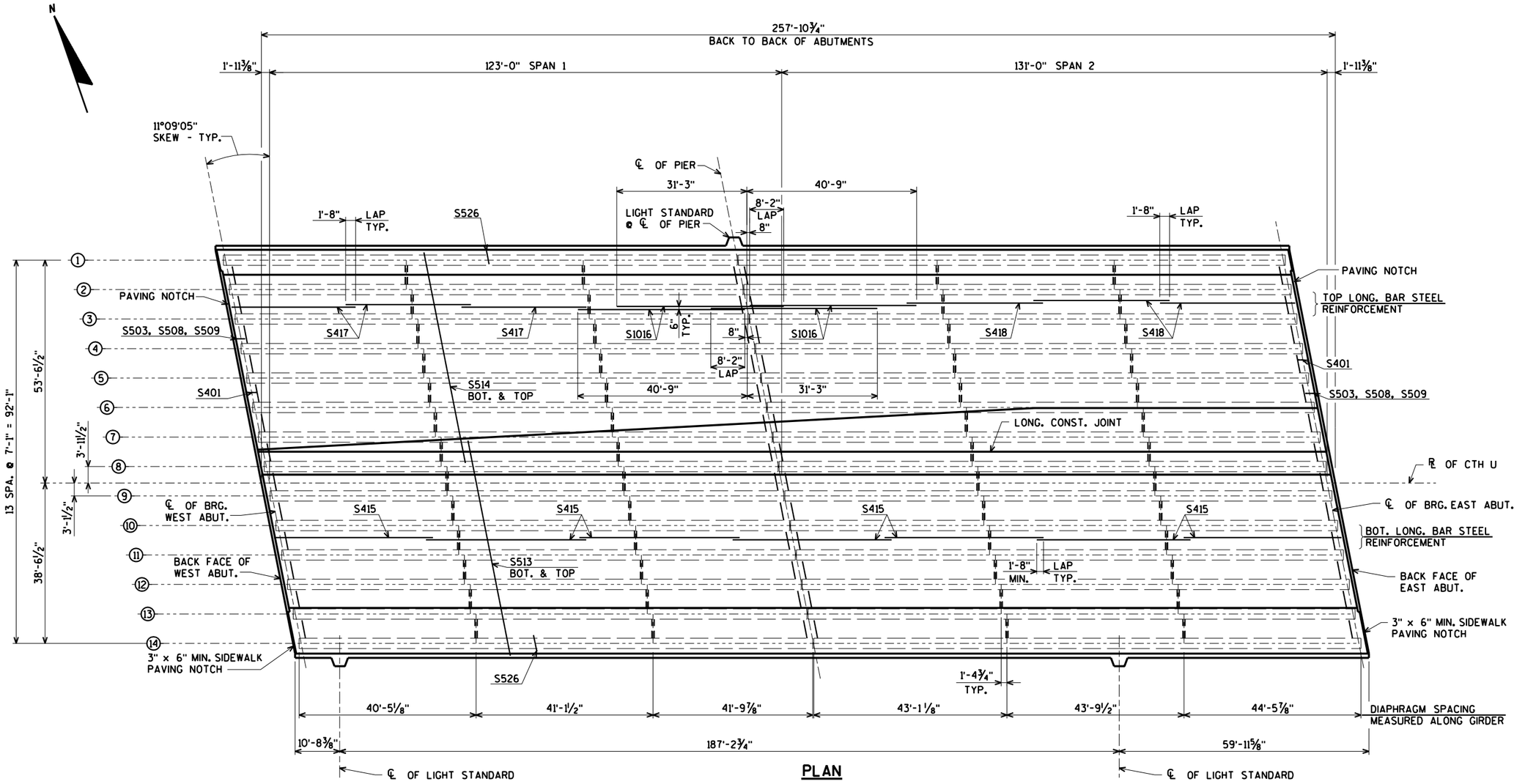
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7/26/2012

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STATE PROJECT NUMBER

1170-01-71



PLAN

FOR SIDEWALK AND MEDIAN REINFORCEMENT
SEE SHEET 23

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-37-436

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SUPERSTRUCTURE PLAN

SHEET 22 OF 30
1046

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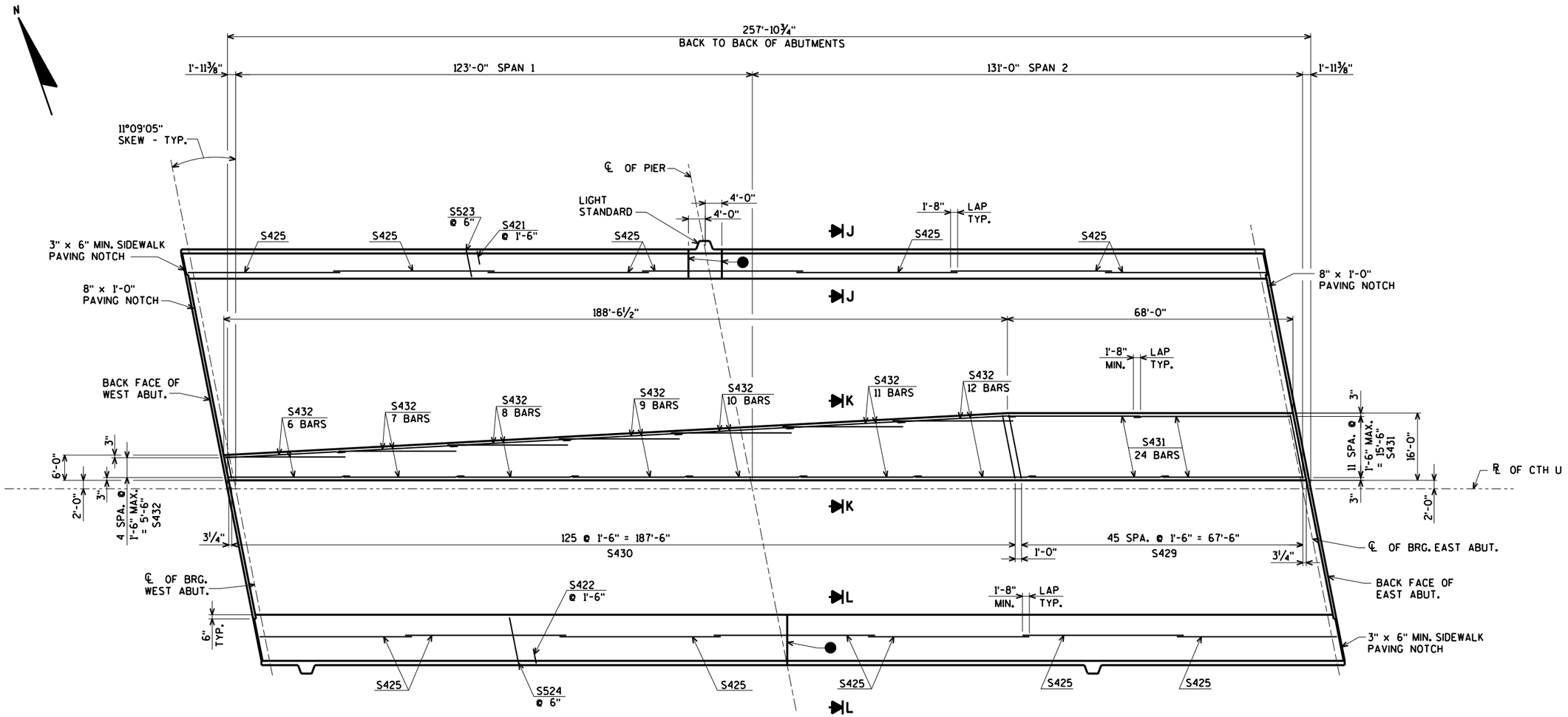
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5/31/2012

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FOR SECTIONS J, K, AND L
SEE SHEET 25

● DENOTES DEFLECTION JOINT
IN SIDEWALK AND PARAPET.
FOR DETAILS SHEE SHEET 27

PLAN
(MEDIAN AND SIDEWALKS)

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-37-436

DRAWN BY CLS | PLANS CK'D. DNS

MEDIAN
AND SIDEWALK
PLAN

SHEET 23 OF 30
1047

ORIGINAL PLANS PREPARED BY
AYRES ASSOCIATES
3433 Oakwood Hills Parkway
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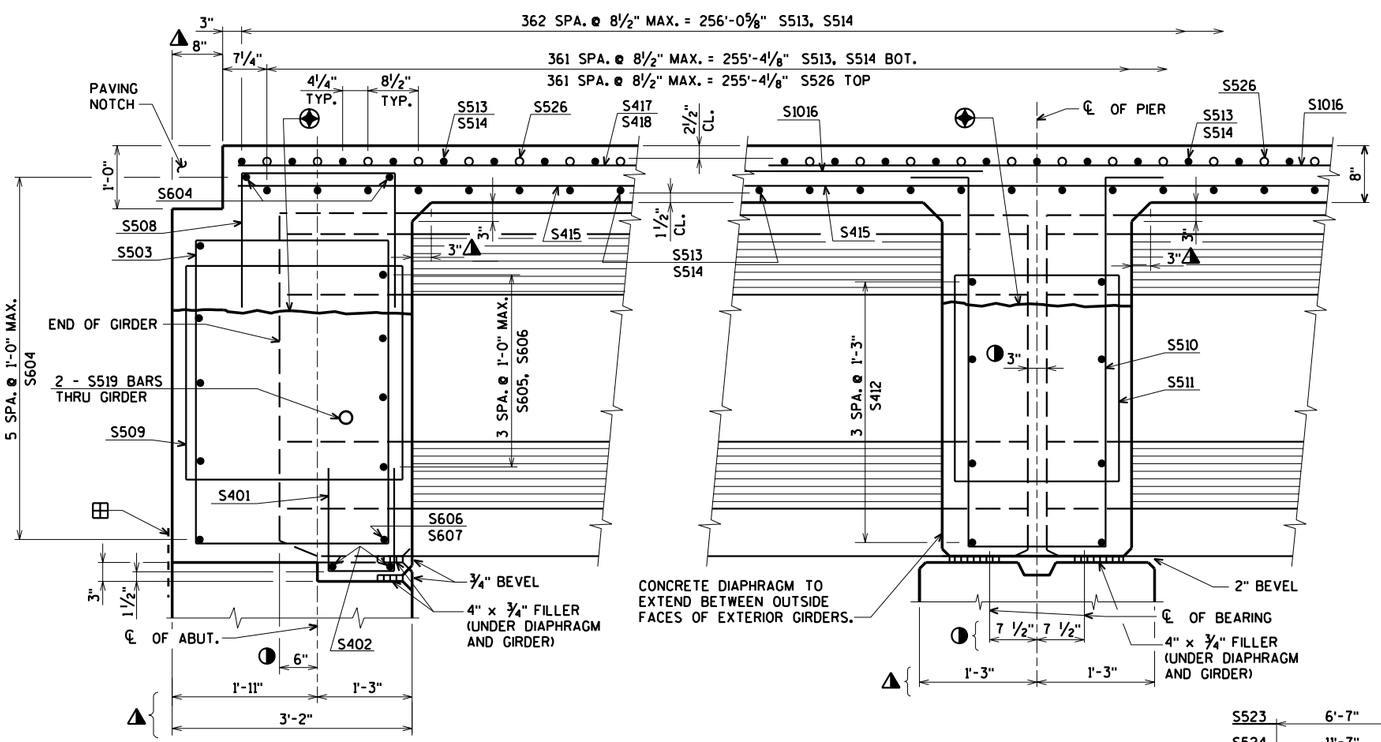
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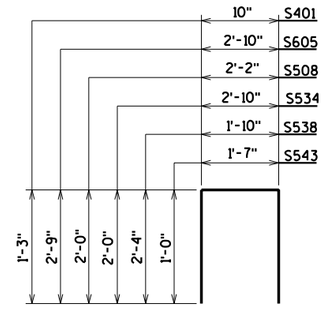
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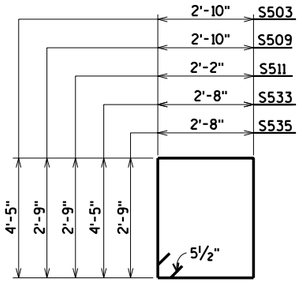
STATE PROJECT NUMBER

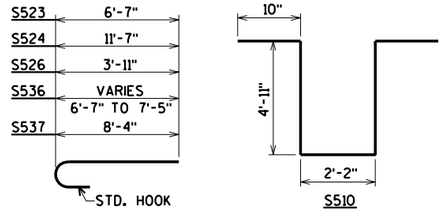
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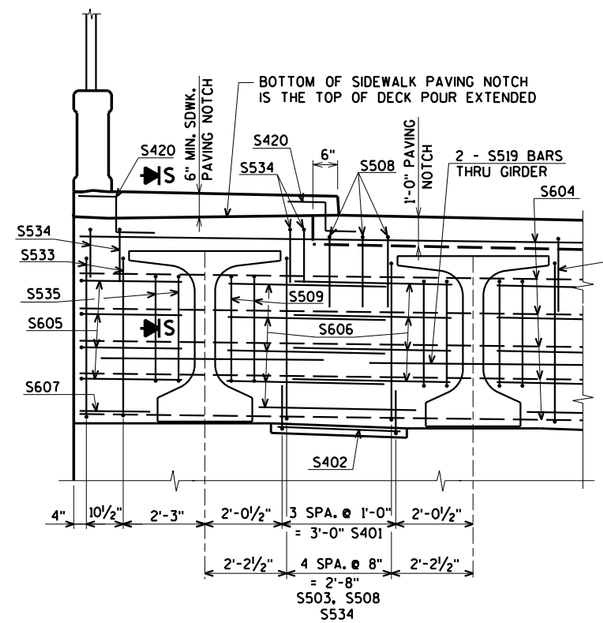


PART LONGITUDINAL SECTION

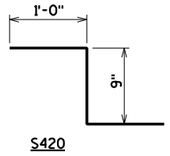


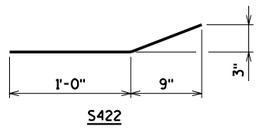


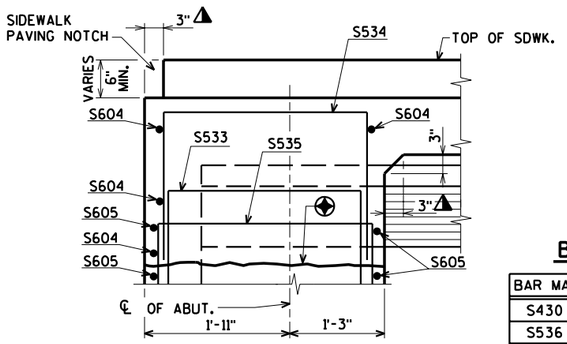




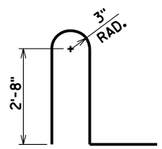
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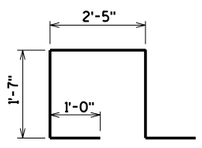


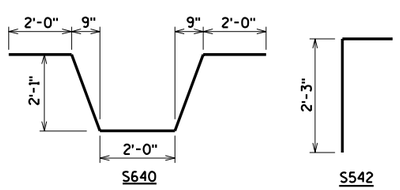




SECTION S







BAR SERIES TABLE

BAR MARK	NO REQ'D.	LENGTH
S430	1 SERIES OF 126	5'-8" TO 15'-8"
S536	6 SERIES OF 4	7'-2" TO 8'-0"
S544	6 SERIES OF 4	6'-7" TO 7'-5"

BUNDLE AND TAG EACH SERIES SEPARATELY.

BILL OF BARS

BAR. NO.	COATED BAR	NO. REQ'D.	LENGTH	BENT BAR	BUNDLED BAR SERIES	226,750# COATED LOCATION
S401	X	104	3-2	X		DIAPH. @ ABUT. VERT. @ NOTCH
S402	X	52	3-3			DIAPH. @ ABUT. HORIZ. @ NOTCH
S503	X	130	15-1	X		DIAPH. @ ABUT. VERT.
S604	X	28	52-0			DIAPH. @ ABUT. HORIZ.
S605	X	16	8-0	X		DIAPH. @ ABUT. HORIZ. @ EXT. GDR.
S606	X	234	4-3			DIAPH. @ ABUT. HORIZ. BETW. GDRS.
S607	X	4	1-10			DIAPH. @ ABUT. HORIZ. @ EXT. GDR.
S508	X	116	5-11	X		DIAPH. @ ABUT. VERT.
S509	X	104	11-9	X		DIAPH. @ ABUT. VERT. @ GDRS.
S510	X	52	13-2	X		DIAPH. @ PIERS VERT.
S511	X	52	10-5	X		DIAPH. @ PIERS VERT.
S412	X	182	4-3			DIAPH. @ PIERS HORIZ.
S513	X	725	52-1			SLAB TRANS. BOT. & TOP (S. SIDE)
S514	X	725	49-2			SLAB TRANS. BOT. & TOP (N. SIDE)
S415	X	903	38-1			SLAB LONG. BOT.
S1016	X	390	40-1			SLAB LONG. TOP @ PIER
S417	X	390	29-6			SLAB LONG. TOP SPAN 1
S418	X	390	32-2			SLAB LONG. TOP SPAN 2
* S519	X	56	6-0			DIAPH. @ ABUT. HORIZ. THRU GDR.
S420	X	2060	2-7	X		SLAB @ SDWK.
S421	X	173	1-10			SDWK. TRANS. BOT. NORTH SIDE
S422	X	173	1-10	X		SDWK. TRANS. BOT. SOUTH SIDE
S523	X	515	7-2	X		SDWK. TRANS. TOP NORTH SIDE
S524	X	515	12-2	X		SDWK. TRANS. TOP SOUTH SIDE
S425	X	210	38-2			SDWK. LONG. BOT. & TOP
S526	X	724	4-6	X		SLAB TRANS. TOP @ OVERHANG
S527	X	518	6-8	X		PARAPET MOD. VERT.
S428	X	84	38-2			PARAPET MOD. HORIZ.
S429	X	46	15-10			MEDIAN TRANS.
S430	X	126	10-8		⊗	MEDIAN TRANS.
S431	X	24	34-9			MEDIAN LONG.
S432	X	63	28-9			MEDIAN LONG.
S533	X	8	14-9	X		DIAPH. @ ABUT. HORIZ. @ EXT. GDR.
S534	X	22	6-7	X		DIAPH. @ ABUT. VERT. @ SIDEWALKS
S535	X	8	11-5	X		DIAPH. @ ABUT. VERT. @ EXT. GDR.
S536	X	24	7-7	X	⊗	SIDEWALK TOP @ LIGHT STANDARDS
S537	X	12	8-11	X		SIDEWALK TOP @ LIGHT STANDARDS
S538	X	12	6-3	X		PARAPET VERT. @ LIGHT STANDARDS
S539	X	12	7-1	X		PARAPET VERT. @ LIGHT STANDARDS
S640	X	21	10-0	X		PARAPET HORIZ. @ LIGHT STANDARDS
S541	X	12	8-4			SIDEWALK BOT. @ LIGHT STANDARDS
S542	X	6	3-2	X		PARAPET VERT. @ LIGHT STANDARDS
S543	X	6	3-5	X		PARAPET VERT. @ LIGHT STANDARDS
S544	X	24	7-0		⊗	SIDEWALK BOT. @ LIGHT STANDARDS

BENDING DIMENSIONS ARE OUT TO OUT OF BARS.

* FIELD BEND ALONG SKEW.

⊗ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

△ DIMENSIONS MEASURED NORMAL TO ℄ OF SUBSTRUCTURE UNIT.

◑ DIMENSIONS MEASURED ALONG ℄ OF GIRDER.

⊞ 18" RUBBERIZED MEMBRANE WATERPROOFING

⊕ OPTIONAL CONSTRUCTION JOINT 1'-2" BELOW TOP OF GIRDER. IF USED, DECK POUR MUST BE WITHIN 2 WEEKS FROM THE TIME OF THE DIAPHRAGM POUR.

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STRUCTURE B-37-436

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SUPERSTRUCTURE DETAILS

SHEET 24 OF 30
1048

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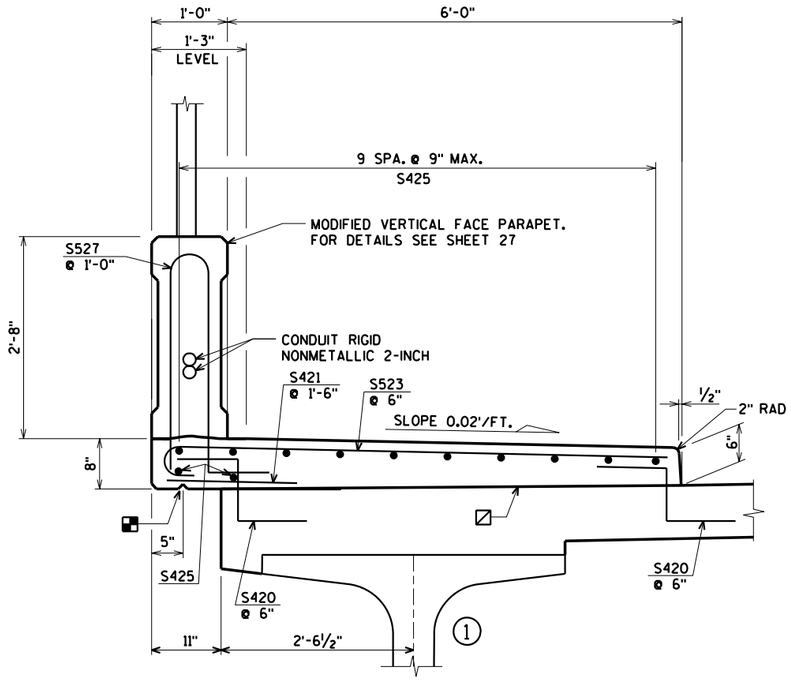
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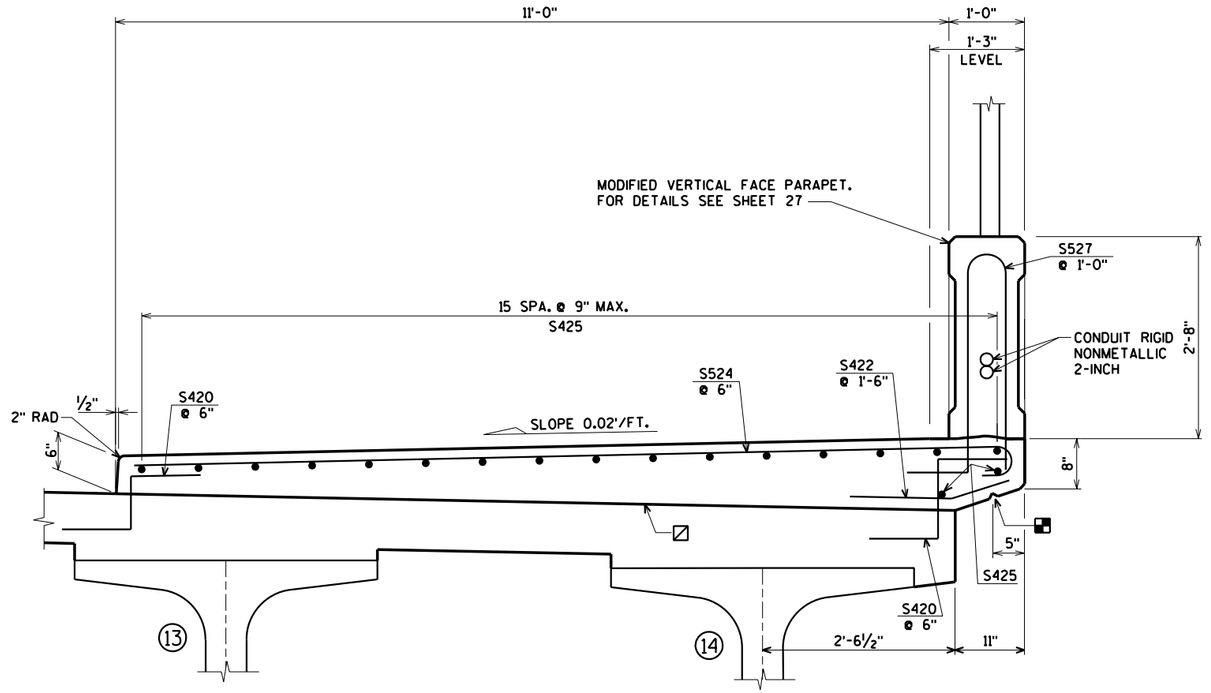
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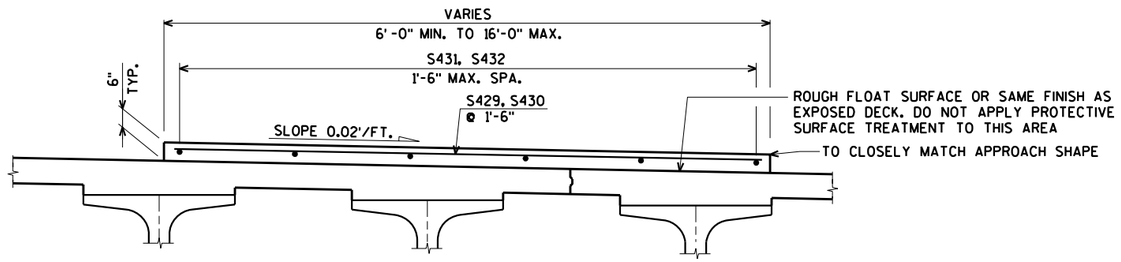
SECTION J

FOR LOCATION OF SECTION J
SEE SHEET 23



SECTION L

FOR LOCATION OF SECTION L
SEE SHEET 23



SECTION K

FOR LOCATION OF SECTION K
SEE SHEET 23

NOTE:
CLEAN ALL LOOSE MATERIAL ON THE DECK AT THE MEDIAN LOCATION PRIOR TO MEDIAN PLACEMENT USING HIGH PRESSURE WATER OR AIR, ENSURING ALL FREE-STANDING WATER IS REMOVED PRIOR TO MEDIAN PLACEMENT. NEAT CEMENT IS REQUIRED AS PER 509.3.8.2 OF THE STANDARD SPECIFICATIONS UNLESS THE MEDIAN IS POURED WITHIN 45 DAYS OF COMPLETING THE DECK POUR.

☒ CONST. JOINT - STRIKE OFF AS SHOWN AND LEAVE ROUGH. FOR DECK POUR, MATCH BRIDGE CROSS SLOPE.

☒ ¾" CONT. DRIP GROOVE TERMINATE 2'-0" FROM ABUTMENTS - TYP.

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STRUCTURE B-37-436

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SIDEWALK AND MEDIAN DETAILS

SHEET 25 OF 30
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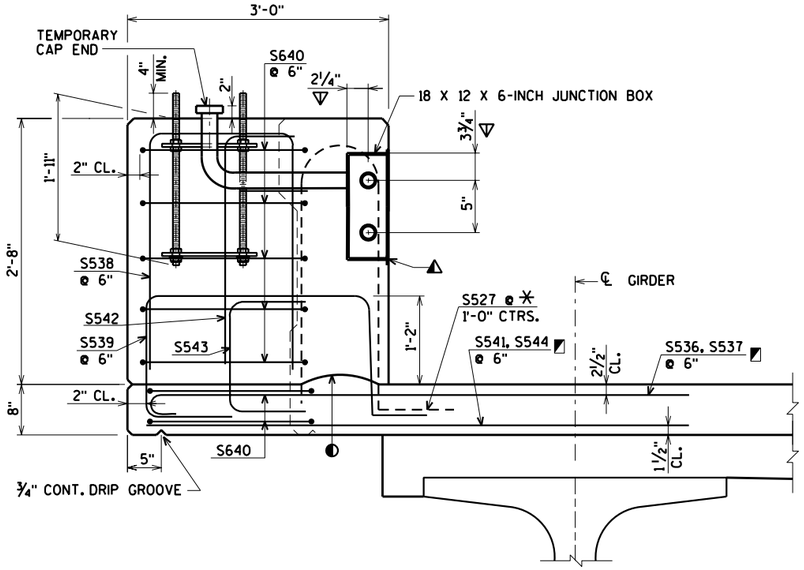
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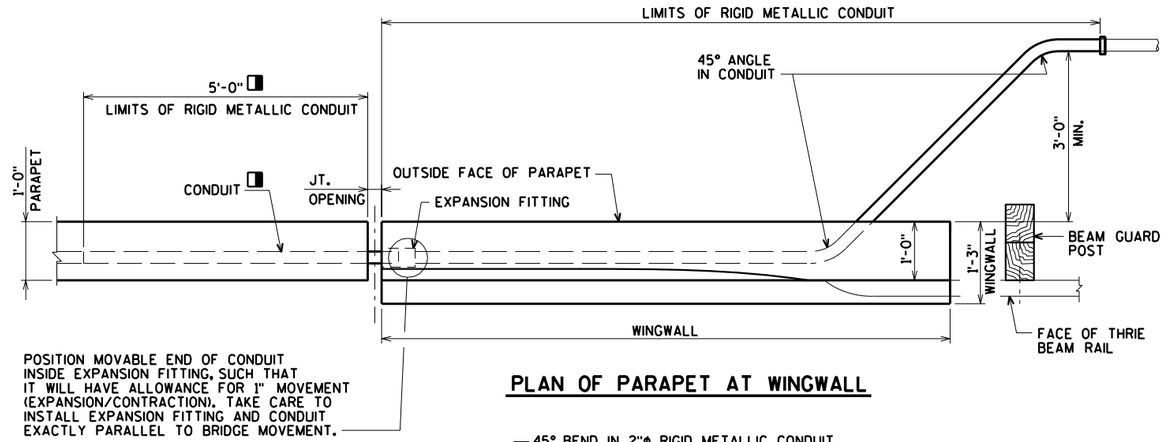
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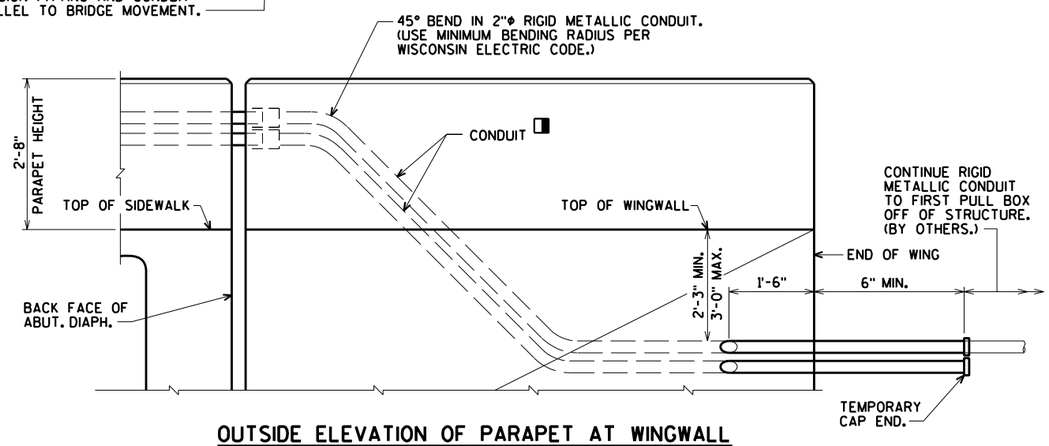


SECTION A

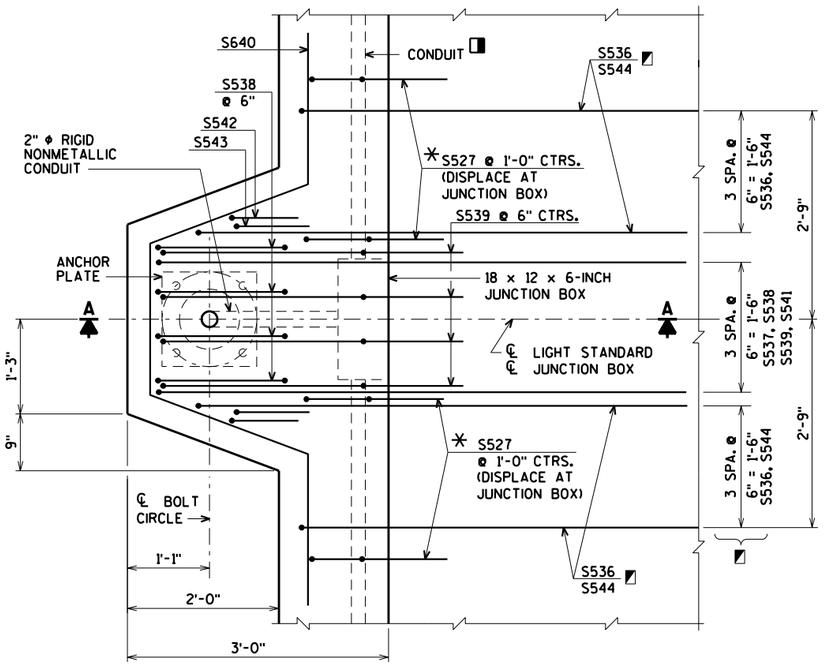


POSITION MOVABLE END OF CONDUIT INSIDE EXPANSION FITTING, SUCH THAT IT WILL HAVE ALLOWANCE FOR 1" MOVEMENT (EXPANSION/CONTRACTION). TAKE CARE TO INSTALL EXPANSION FITTING AND CONDUIT EXACTLY PARALLEL TO BRIDGE MOVEMENT.

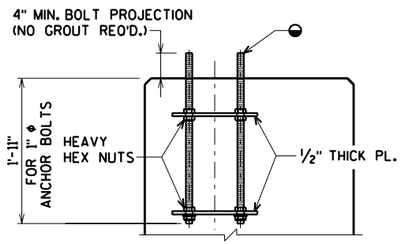
PLAN OF PARAPET AT WINGWALL



OUTSIDE ELEVATION OF PARAPET AT WINGWALL



PLAN AT LIGHT STANDARD



ANCHORAGE DETAIL

◐ CONSTR. JT. STRIKE OFF AS SHOWN

◭ CUT OUT ± 1" OF GASKET AT BOTTOM OF JUNCTION BOX COVER TO ALLOW FOR DRAINAGE.

▽ LOCATION OF CONDUIT IS MEASURED FROM OUTSIDE EDGE OF JUNCTION BOX.

◩ THESE BARS ARE IN ADDITION TO STANDARD TRANSVERSE BARS IN SIDEWALK.

◒ ANCHOR BOLTS ASTM A449 OR AASHTO M 314-90 GR 55. HOT DIP ASTM A153, CLASS C, UPPER 8" (MIN.) OF BOLT INCLUDING NUTS & WASHERS. PROVIDE ENLARGED THREAD ON NUTS FOR PROPER FIT AFTER GALVANIZING. PROVIDE DOUBLE FLAT WASHERS & NUTS.

✳ SEE PARAPET SHEET FOR ADDITIONAL BAR STEEL DETAILS.

◨ USE 2" ϕ RIGID NONMETALLIC CONDUIT EXCEPT AT EXPANSION FITTING. AT EXPANSION FITTING USE RIGID METALLIC CONDUIT 5'-0" INTO PARAPET ON DECK SIDE AND THRU PARAPET AND WINGWALL TO A MINIMUM OF 6" BEYOND END OF WINGWALL. (FOR GROUNDING PURPOSES).

TABLE FOR "TYPE 5 LIGHT POLE" FROM FACILITIES DEV. MANUAL WITH 1" ϕ ANCHOR BOLTS. (ANY OTHER LIGHT POLE TYPE MUST BE DESIGNED FOR.)

SQ	1'-1½"
E	2 11/16 "
W	8⅛"
BC	11½"
D	9½"

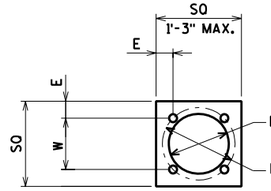


PLATE DETAIL

NOTES

BID ITEMS SHALL BE:
"JUNCTION BOXES 18 x 6 x 6-INCH", EACH.
"ANCHOR ASSEMBLIES LIGHT POLES", EACH.
"CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH"
"CONDUIT RIGID METALLIC 2-INCH".

APPROVED MANUFACTURERS - JUNCTION BOXES:
SEE APPROVED MATERIAL LIST.

APPROVED MANUFACTURER OR EQUIVALENT - EXPANSION FITTING:
O-Z/GEDNEY TYPE AX-200 AND BONDING JUMPER (4" TOTAL CONDUIT MOVEMENT).

EXPANSION FITTINGS, ANGLES AND ADAPTER FITTINGS TO BE INCIDENTAL TO "CONDUIT RIGID METALLIC 2-INCH".

WHEN CONNECTING NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS U.L. LISTED FOR ELECTRICAL USE SHALL BE USED.

W = 0.707 x BC
SQ = BC + 2d
d = ANCHOR BOLT DIA.
E = (SQ-W) /2
DMAX. = BC - 2d
DMIN. = 2 x CONDUIT DIA. + 1"

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STRUCTURE B-37-436

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LIGHTING DETAILS

SHEET 26 OF 30
1050

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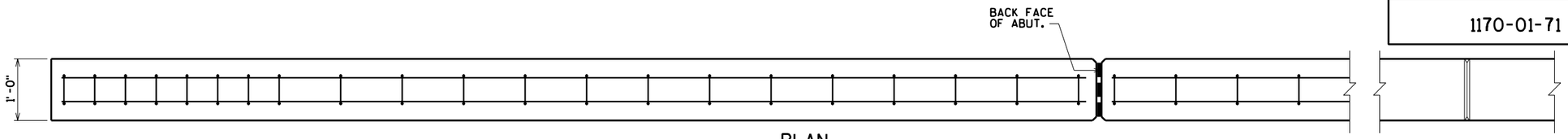
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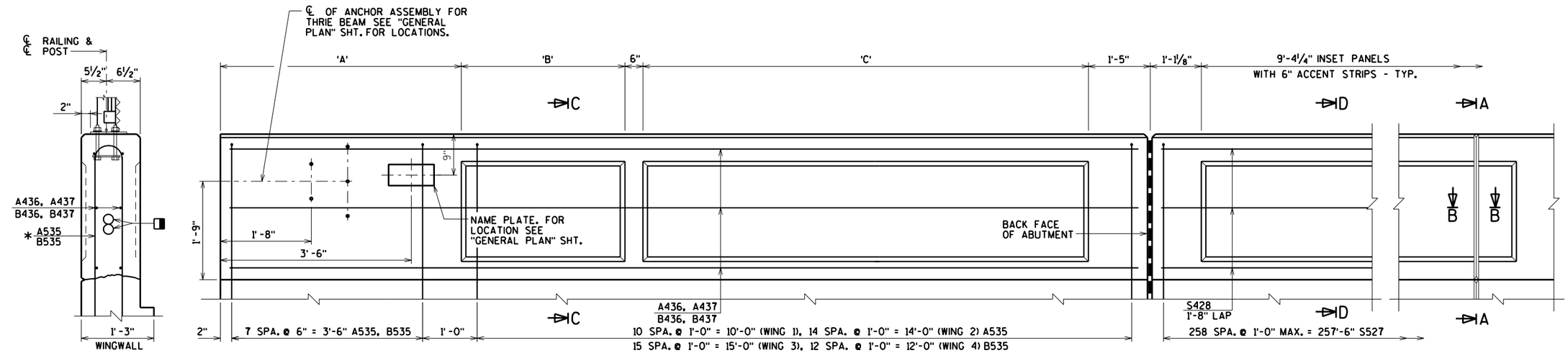
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PLAN

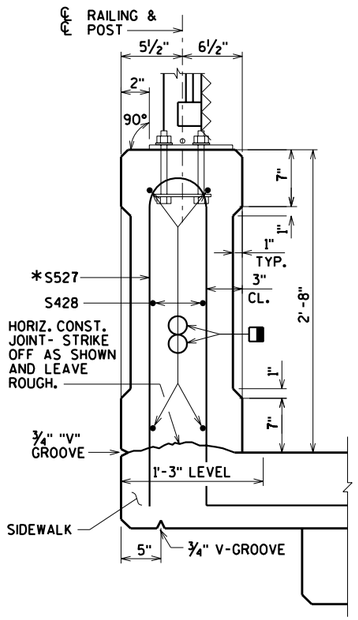


SECTION C ON WINGS

ELEVATION OF PARAPET

(INSIDE FACE SHOWN)

SEE ARCHITECTURAL TREATMENT DETAILS
SHEET FOR OUTSIDE FACE INSETS



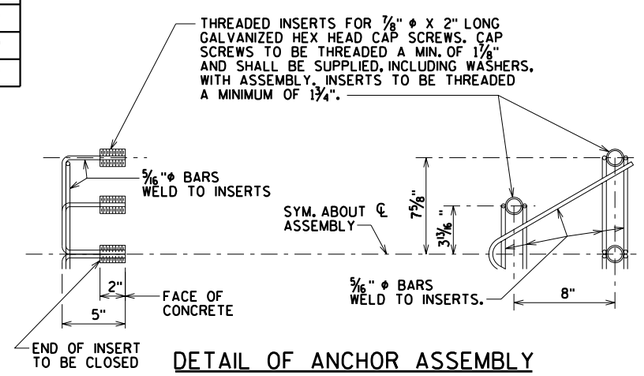
SECTION D ON BRIDGE

* ADJUST LOCATIONS OF BARS TO ALLOW PLACEMENT OF ANCHOR ASSEMBLY FOR RAILING AND BEAM GUARD.

WINGWALL INSETS

(INSIDE FACE)

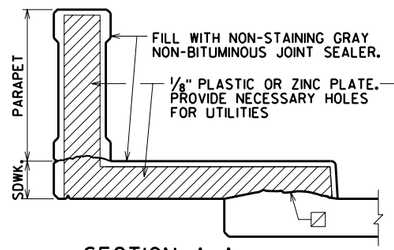
WING	'A'	'B'	'C'
1	4'-3"	2'-8½"	6'-1½"
2	2'-9"	6'-2½"	8'-1½"
3	2'-9"	6'-8½"	8'-7½"
4	2'-9"	5'-2½"	7'-1½"



DETAIL OF ANCHOR ASSEMBLY

NOTE: HEX HEAD CAP SCREWS & WASHERS TO BE GALVANIZED IN ACCORDANCE WITH AASHTO M232 CLASS C.

ASSEMBLY SHALL BE BID ITEM "ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD", EACH.



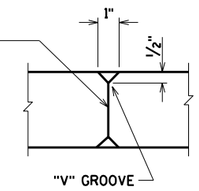
SECTION A-A

(SHOWING DEFLECTION JOINT IN PARAPET AND SIDEWALK.)

WHEN PARAPETS ARE POURED CONTINUOUSLY FROM END TO END, THEY SHALL BE SEPARATED AT THE DEFLECTION JOINTS BY A PIECE OF ⅛" ZINC OR PLASTIC PLATE CUT AS SHOWN IN SECTION A-A BY SHADED AREA. IF CONSTRUCTION JOINTS IN PARAPETS ARE USED AT THE DEFLECTION JOINTS, ONE SIDE OF JOINT SHALL BE COATED WITH AN APPROVED LIQUID BOND BREAKER AND PLATE SEPARATORS MAY BE OMITTED.

▨ HORIZ. CONST. JOINT - STRIKE OFF AS SHOWN AND LEAVE ROUGH.

◨ 2" DIA. CONDUIT. FOR DETAILS SEE SHEET 26.



SECTION B-B

NO.	DATE	REVISION	BY

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STRUCTURES DESIGN SECTION

STRUCTURE B-37-436

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MODIFIED VERTICAL FACE PARAPET

SHEET 27 OF 30
1051

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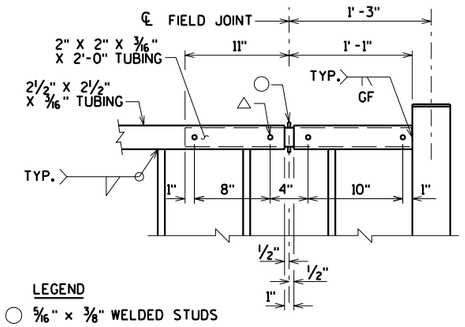
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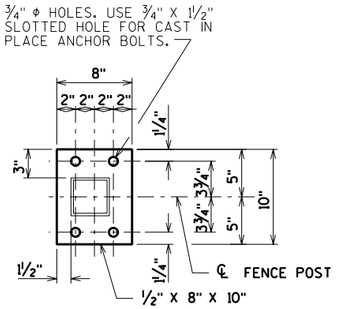


LEGEND

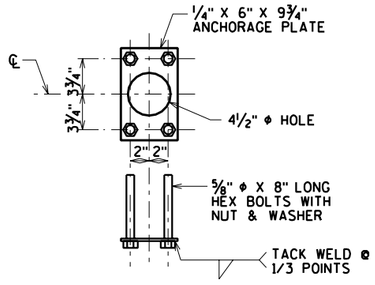
○ 5/16" × 3/8" WELDED STUDS

△ WELD BEAD ON EACH SIDE OF TUBE. GRIND BEADS SO THAT SLEEVE FITS FREELY INSIDE THE 2½" × 2½" TUBE.

RAILING EXPANSION JOINT DETAIL

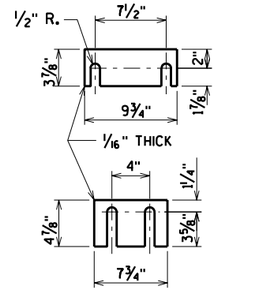


BASE PLATE



ANCHORAGE DETAIL

⅝" ϕ CONCRETE MASONRY ANCHOR, TYPE S EPOXY, 7" MINIMUM EMBEDMENT WITH A MINIMUM PULLOUT OF 20 KIPS MAY BE SUBSTITUTED FOR ⅝" CAST IN PLACE ANCHOR BOLTS. ANCHORAGE PLATE NOT REQUIRED WHEN TYPE S ANCHORS ARE USED.



SHIM PLATE DETAILS

TWO SHIMS OF EACH SIZE REQUIRED PER POST

WINGWALL POST SPACING TABLE

WING	'A'	'B'	'C'	'D'
1	6'-7½"	8¼"	7	5'-3"
2	8'-7½"	6¾"	10	7'-6"
3	9'-1½"	9¾"	10	7'-6"
4	7'-7½"	9¾"	8	6'-0"

NOTES

BID ITEM SHALL BE "RAILING TUBULAR SCREENING GALVANIZED B-37-436" WHICH SHALL INCLUDE ALL ITEMS SHOWN.

POST BASE PLATES SHALL BE FLAT WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT AND VERTICAL. ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUT.

RAILS AND POSTS TO BE ASTM A500, GRADE B. BASE PLATES AND SHIMS TO BE ASTM A709, GRADE 36. ALL GALVANIZED AFTER FABRICATION.

ANCHORAGES SHALL BE ACCURATELY PLACED TO PROVIDE CORRECT ALIGNMENT OF RAILING. SET POSTS NORMAL TO GRADE.

ALL POST SPA. ARE TAKEN HORIZ. ALONG CENTER LINE OF RAILING AT BASE OF POST.

SHIMS SHALL BE USED UNDER BASE PLATES WHERE REQUIRED FOR ALIGNMENT.

CAULK AROUND PERIMETER OF BASE PLATES AND FILL PORTION OF SLOTTED HOLES AROUND ANCHOR BOLTS WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER.

CUT BOTTOM OF POST TO MAKE VERTICAL IN TRANSVERSE DIRECTION.

ANCHOR BOLTS, NUTS AND WASHERS SHALL BE EITHER STAINLESS STEEL OR ASTM 307. IF 307 IS USED, ANCHOR BOLTS, NUTS, AND WASHERS SHALL BE GALVANIZED.

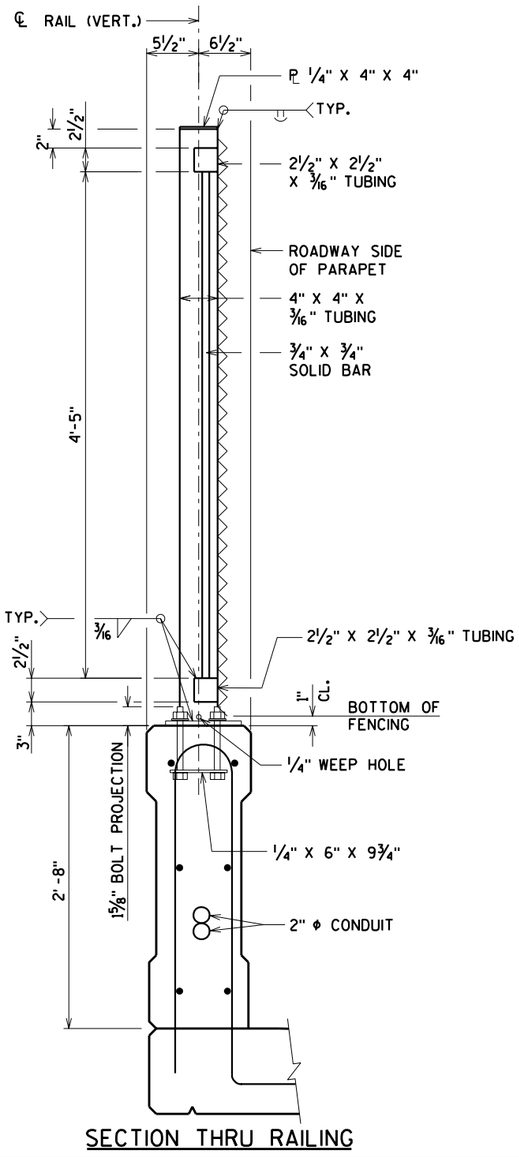
RAILING TO BE PAINTED AND FENCE FABRIC AND TIES TO BE VINYL COATED. FEDERAL COLOR NO. 27038, BLACK.

RAILING SHALL BE FABRICATED IN LENGTHS THAT INCLUDE NOT MORE THAN 3 POSTS.

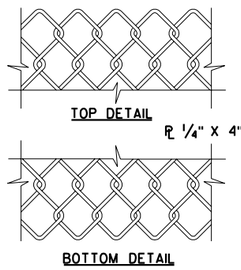
THE END OF THE FABRIC SHALL BE ATTACHED TO THE POST BY MEANS OF A TENSION BAR THREADED THROUGH THE END LOOPS OF THE FABRIC AND SECURED TO THE POST WITH CLAMPS & BOLT. THE FABRIC SHALL BE STRETCHED TO REMOVE ALL SLACK.

VENT HOLES SHALL BE DRILLED IN MEMBERS AS REQUIRED TO FACILITATE GALVANIZING.

ALL MATERIAL SHALL BE GALVANIZED AFTER FABRICATION. PRIOR TO GALVANIZING ALL STEEL RAILING POSTS AND STEEL TUBING SHALL BE GIVEN A #6 BLAST CLEANING BY SSPC SPECIFICATIONS. PAINT OVER GALVANIZING WITH APPROVED TIE COAT AND TOPCOAT.

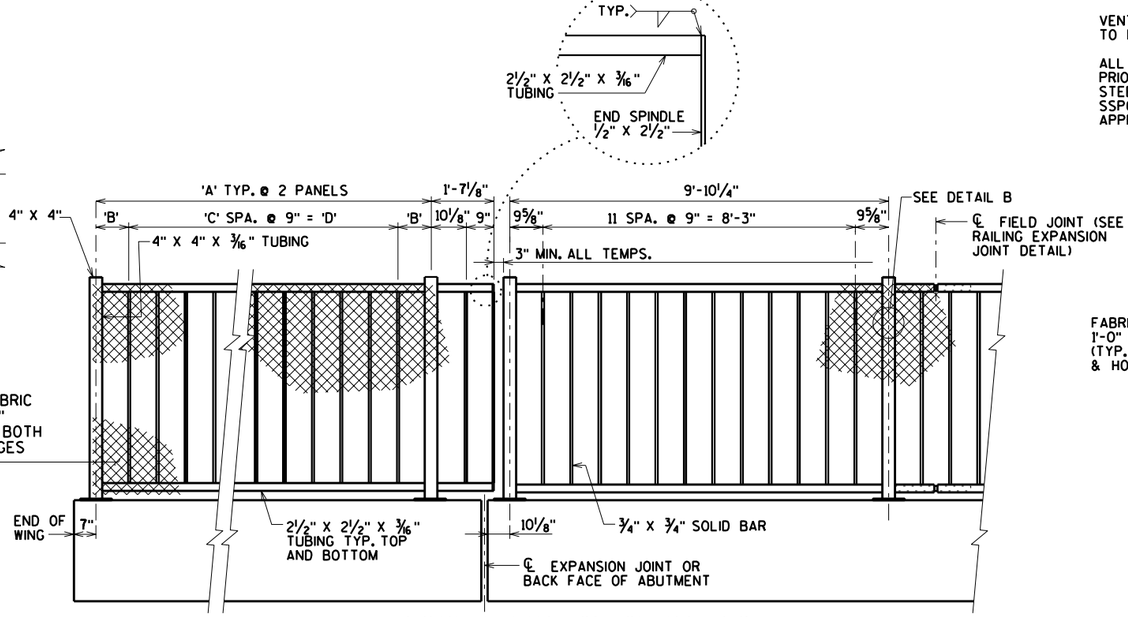


SECTION THRU RAILING

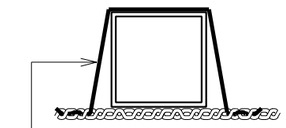


FENCE FABRIC

5'-0" VINYL COATED FENCE FABRIC WOVEN OF 9-GAUGE WIRE IN 2" DIAMOND PATTERN MESH WITH BOTH THE TOP AND BOTTOM SELVAGES KNUCKLED.

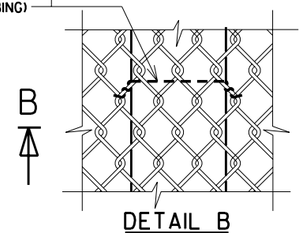


INSIDE ELEVATION OF RAILING



SECTION B-B

FABRIC TIE @ 1'-0" MAX. SPA. (TYP. RAIL POSTS & HORIZ. TUBING)



DETAIL B

STATE PROJECT NUMBER

1170-01-71

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-37-436

DRAWN BY CLS | PLANS CK'D. DNS

RAILING TUBULAR SCREENING

SHEET 28 OF 30
1052

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AYRES ASSOCIATES
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B-37-436 RLscreen.dgn

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7/26/2012

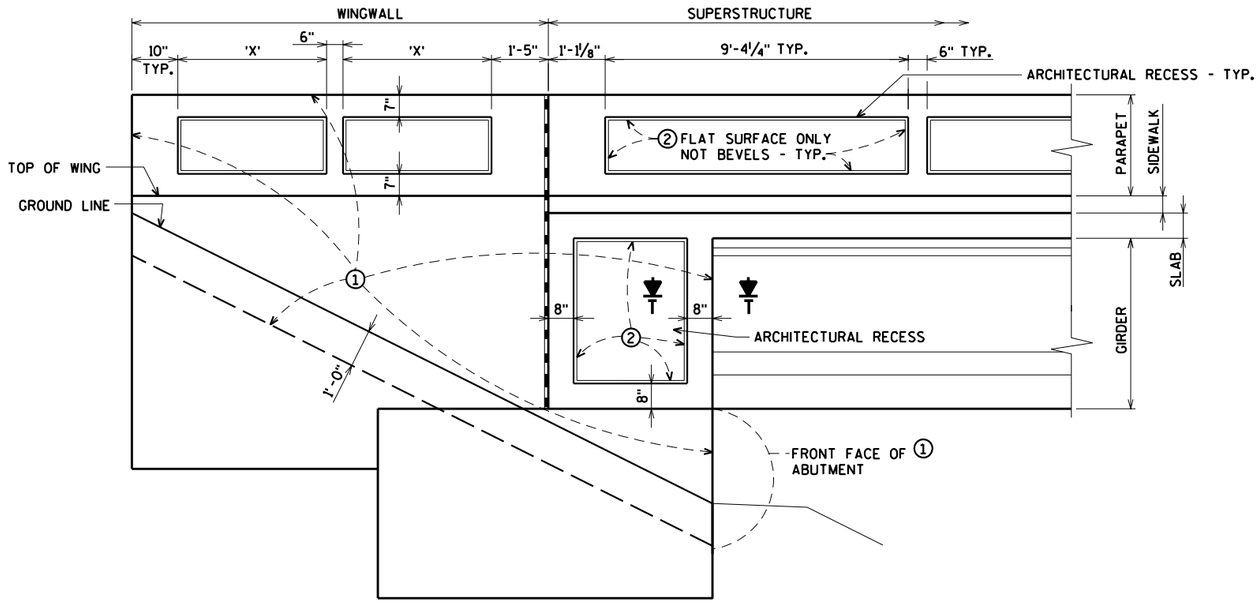
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SCREENING
7-10

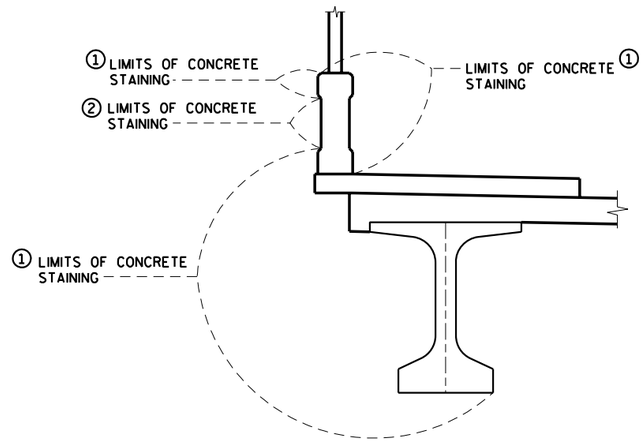
STATE PROJECT NUMBER

1170-01-71

RAILING TUBULAR SCREENING NOT SHOWN.
FOR DETAILS SEE SHEET 28



ABUTMENT WINGWALLS

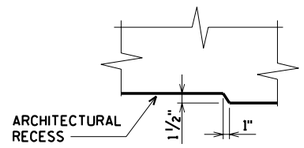


SUPERSTRUCTURE
(NORTH SIDE - SOUTH SIDE SIMILAR)

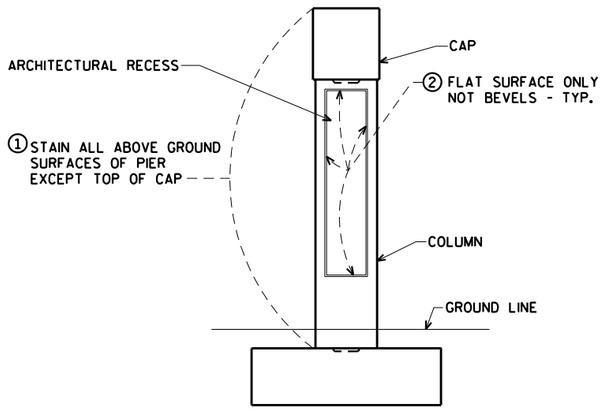
WINGWALL INSETS

(EXTERIOR FACE)

WING	'X'
1	6'-1½"
2	8'-1½"
3	8'-7½"
4	7'-1½"



SECTION T



PIER

ARCHITECTURAL TREATMENT AND CONCRETE STAINING DETAIL

SEE SPECIAL PROVISIONS

① FEDERAL STANDARD COLOR NUMBER 36424 (MEDIUM GRAY).

② FEDERAL STANDARD COLOR NUMBER 30372 (SAND).
NOTE: APPLY TO FLAT SURFACE ONLY (NOT BEVELS).

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-37-436

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ARCHITECTURAL TREATMENT DETAILS

SHEET 29 OF 30
1053

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ecpdf.plt
B-37-436 ARCH.dgn

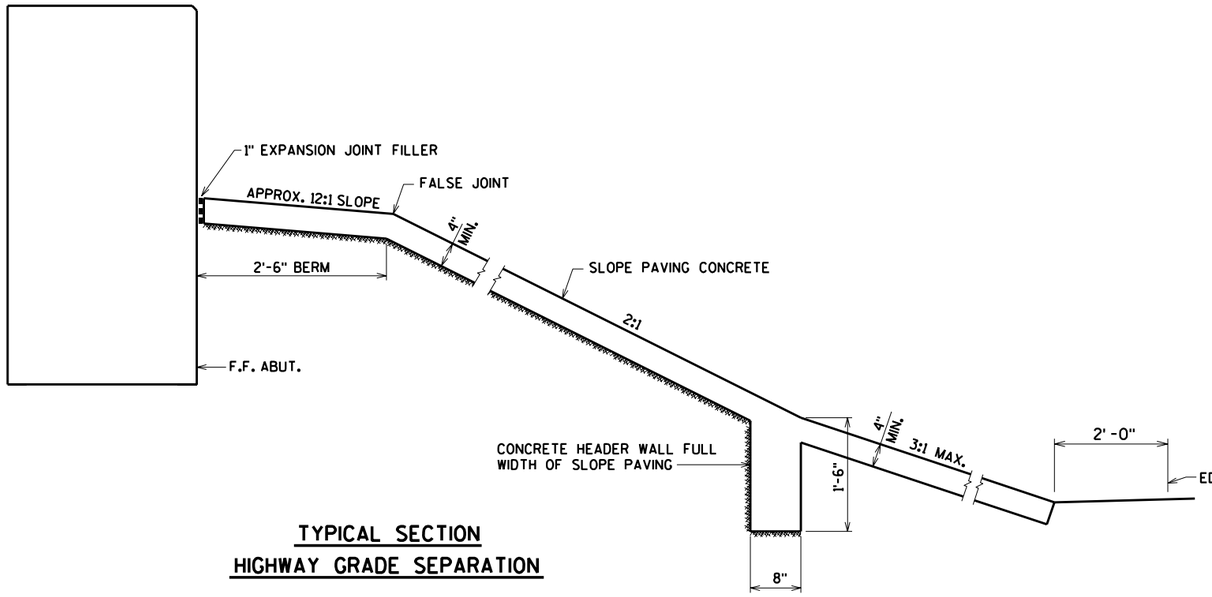
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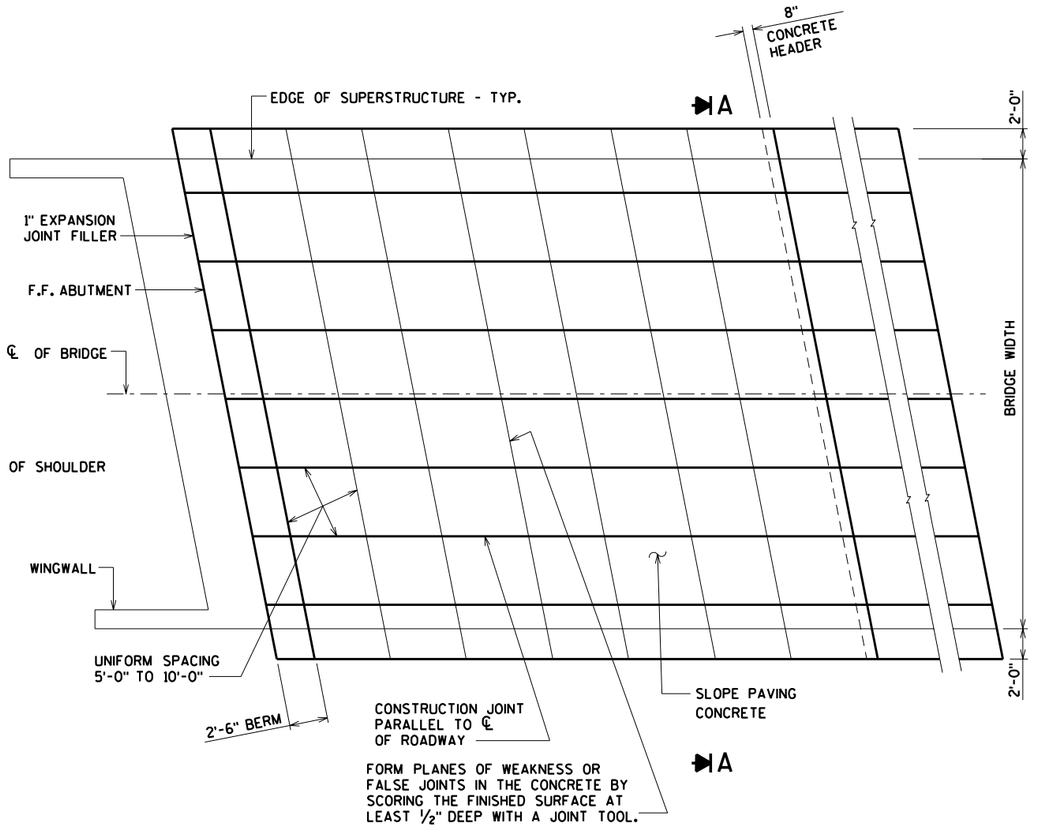
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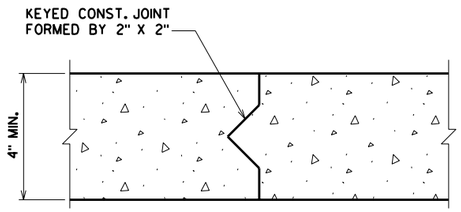
STATE PROJECT NUMBER
1170-01-71



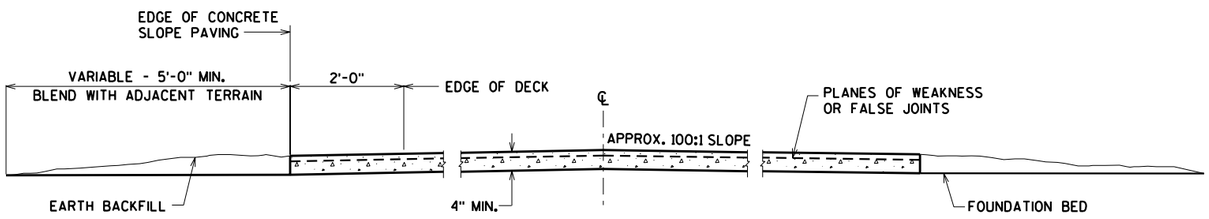
TYPICAL SECTION
HIGHWAY GRADE SEPARATION



PLAN



CONSTRUCTION JOINT DETAIL



SECTION A

GENERAL NOTES

DETAILS OF CONSTRUCTION NOT SHOWN HEREON SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
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STRUCTURES DESIGN SECTION

STRUCTURE B-37-436

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SLOPE PAVING

SHEET 30 OF 30
1054

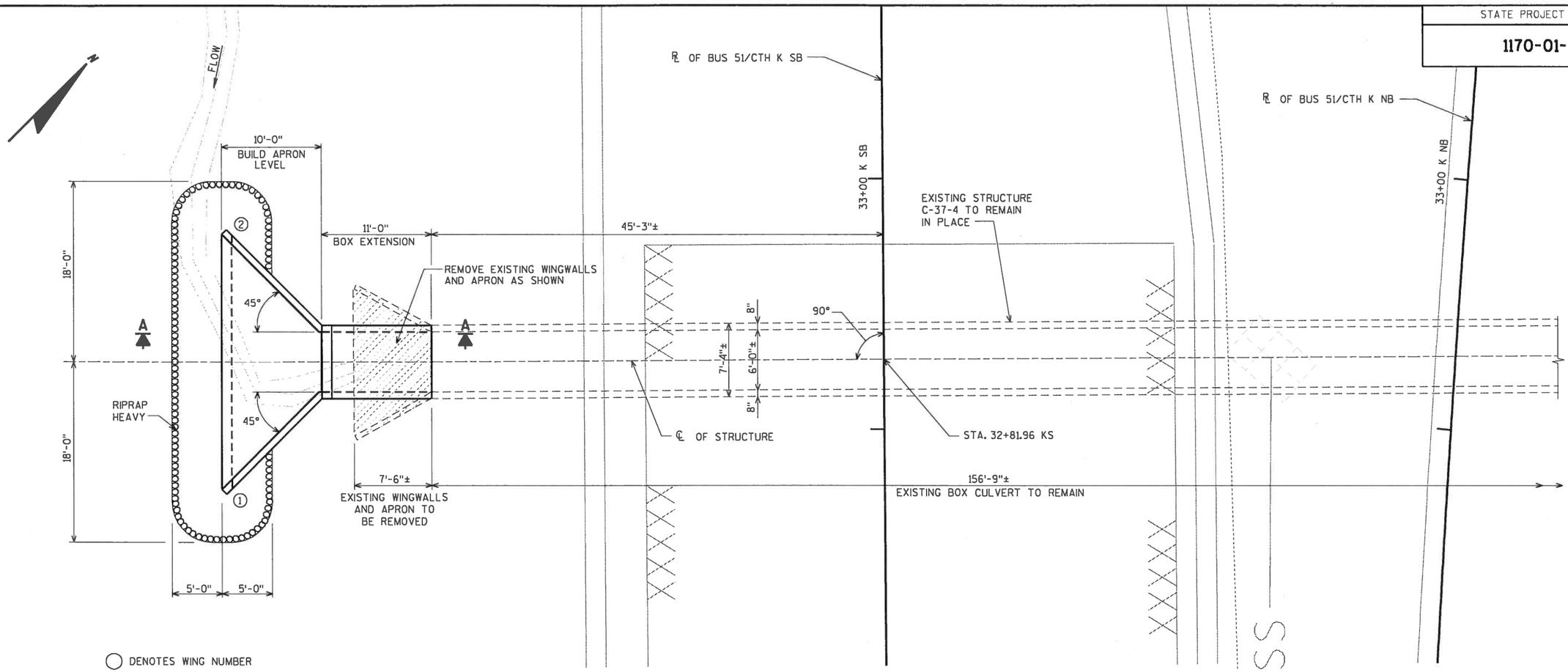
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STATE PROJECT NUMBER

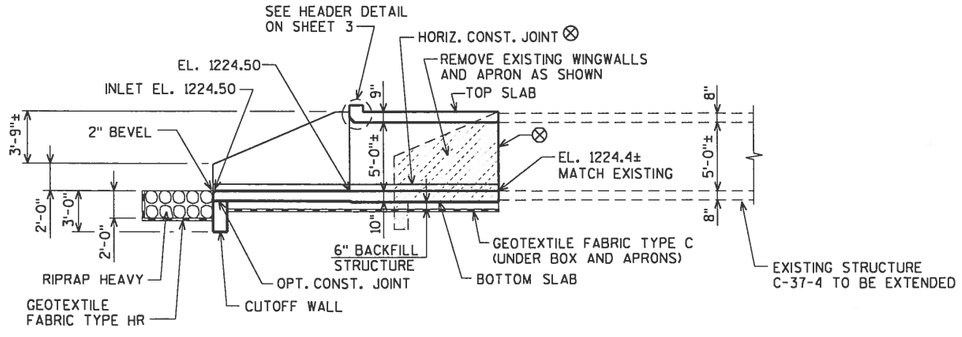
1170-01-70



○ DENOTES WING NUMBER

PLAN

SINGLE-CELL CONCRETE BOX CULVERT EXTENSION



SECTION A

(INLET)

⊗ 18" RUBBERIZED MEMBRANE WATERPROOFING UP WALLS & ACROSS TOP SLAB AT VERTICAL CONSTRUCTION JOINTS AND ALONG HORIZONTAL CONSTRUCTION JOINTS.

FOR GENERAL NOTES, DESIGN DATA, & PROFILE GRADE, SEE SHEET 2

LIST OF DRAWINGS

1. GENERAL PLAN
2. QUANTITIES AND NOTES
3. APRON PLAN
4. WING DETAILS
5. BOX DETAILS
6. BILL OF BARS AND DETAILS

WISCONSIN
DANIEL N. SYDOW
E-38363
WI
PROFESSIONAL ENGINEER
7/31/12

BRIDGE OFFICE CONTACT:
WILLIAM DREHER
(608)-266-8489

CONSULTANT CONTACT:
DAN SYDOW
(715)-834-3161

NO.	DATE	REVISION	BY

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Eau Claire, WI 54701
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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher KAR 08/15/12
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE C-37-4

BUSINESS 51 (CTH K) OVER DRAINAGE DITCH

COUNTY MARATHON	~~TOWN~~/CITY/~~VILLAGE~~ WAUSAU
DESIGN SPEC. AASHTO LRFD DESIGN SPEC. 5th EDITION	
DESIGNED BY CJM / DESIGN CK'D. KAZ	DRAWN BY KAZ/CLS / PLANS CK'D. DNS

GENERAL PLAN

SHEET 1 OF 6
1055

DATE:
DATE:
DATE:
CHECKED BY:
BACK CHECKED BY:
CORRECTED BY:

8

8

STATE PROJECT NUMBER
1170-01-70

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS SHOWN OR NOTED OTHERWISE.

THE FIRST DIGIT OF A THREE DIGIT BAR NO. AND THE FIRST TWO DIGITS OF A FOUR DIGIT BAR NO. SIGNIFIES THE BAR SIZE.

JOINT FILLER SHALL CONFORM TO THE REQUIREMENTS OF A.A.S.H.T.O. DESIGNATION M 153, TYPE I, II OR III OR A.A.S.H.T.O. DESIGNATION M 213.

THE UPPER LIMITS OF "EXCAVATION FOR STRUCTURES" SHALL BE THE EXISTING GROUND LINE.

THE ALTERNATE CUTOFF WALL MAY BE USED IN LIEU OF THE CAST-IN-PLACE CONCRETE CUTOFF WALLS. PAYMENT SHALL BE BASED ON THE CONCRETE CUTOFF WALLS.

THE CONCRETE IN THE CUTOFF WALL MAY BE PLACED UNDERWATER IF THE EXCAVATION CANNOT BE DEWATERED.

ALL SPACES EXCAVATED AND NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH STRUCTURE BACKFILL TO THE ELEVATION OF THE TOP OF THE BOX WITHIN THE LENGTH OF THE BOX. THE PAY LIMITS OF THE STRUCTURAL BACKFILL ARE 3'-0" BEYOND THE HORIZONTAL PLAN LIMITS AT THE BOTTOM OF THE BOX AND APRON AND UP AT A 1:1.5 BACKFILL SLOPE FROM BOTTOM OF SLAB TO TOP OF BOX OR PROPOSED SUBGRADE ELEVATION, WHICHEVER IS LOWER, PLUS 6" BELOW BOX.

THE EXISTING STRUCTURE C-37-4, IS A SINGLE CELL 5'-0"± x 6'-0"± CONCRETE BOX CULVERT WITH A BARREL LENGTH OF 156'-9"±.

REMOVING OLD STRUCTURE INCLUDES REMOVING EXISTING INLET WINGS AND APRON.

DIMENSIONS SHOWN ARE BASED ON ORIGINAL STRUCTURE PLANS. CONTRACTOR TO VERIFY DIMENSIONS IN THE FIELD. THE CONTRACTOR SHALL ADJUST THE DIMENSIONS OF THE BOX CELL OPENINGS TO MATCH THE EXISTING CULVERT.

ALL CONCRETE REMOVAL SHALL BE DEFINED BY A 1" DEEP SAW CUT UNLESS SHOWN OR NOTED OTHERWISE.

FILLET THE FORMS WITH ¾ INCH TRIANGULAR MOLDING CHAMFER STRIPS AT ALL EXPOSED, SHARP CORNERS AND AT THE EDGES OF THE CONCRETE, UNLESS SPECIFIED OTHERWISE.

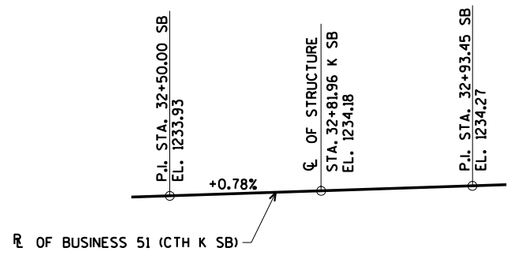
TOTAL ESTIMATED QUANTITIES

ITEM NUMBER	BID ITEMS	AMOUNT
◑ 203.0500.S	REMOVING OLD STRUCTURE OVER WATERWAY STATION 32+81.96 KS	1 LS
206.2000	EXCAVATION FOR STRUCTURES CULVERTS C-37-4	1 LS
210.0100	BACKFILL STRUCTURE	85 CY
502.5005	MASONRY ANCHORS TYPE L NO. 5 BARS	26 EACH
504.0100	CONCRETE MASONRY CULVERTS	18 CY
505.0410	BAR STEEL REINFORCEMENT HS CULVERTS	1,830 LB
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	14 SY
606.0300	RIPRAP HEAVY	20 CY
645.0105	GEOTEXTILE FABRIC TYPE C	40 SY
645.0120	GEOTEXTILE FABRIC TYPE HR	45 SY

NON-BID ITEMS

FILLER	¾ SIZE

◑ EXISTING CULVERT HAS APPROX. 1 FOOT OF SEDIMENT ON THE APRON AND BOTTOM SLAB. REMOVE SEDIMENT AS NEEDED FOR EXTENSION OF THE CULVERT.



EXISTING PROFILE GRADE LINE

(BUSINESS 51/CTH K SB)

BENCH MARK:
POINT ID: BM234
DESCRIPTION: DOT DISK ON TOP OF SE PARAPET, B-37-153
N = 212801.18
E = 274453.67
EL. = 1273.26

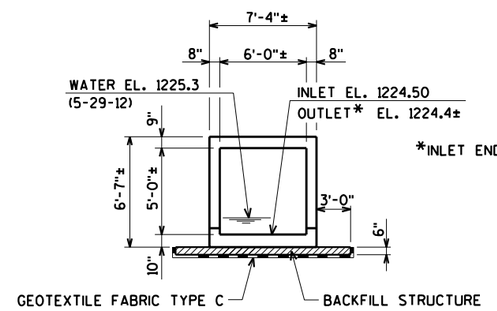
DESIGN DATA

LIVE LOAD:
DESIGN LOADING: HL-93

EARTH LOAD: 4'-0"

ULTIMATE DESIGN STRESSES:
CONCRETE MASONRY ——— f'_c = 3,500 p.s.i.
HIGH STRENGTH BAR STEEL REINFORCEMENT (GRADE 60) ——— f_y = 60,000 p.s.i.

TRAFFIC DATA:
A.D.T. = 14,500 (2015)
A.D.T. = 16,800 (2035)
R.D.S. = 40 M.P.H.



*INLET END OF EXISTING BOX CULVERT

TYPICAL SECTION THRU BOX EXTENSION

NOTE: MATCH EXISTING CULVERT OPENING

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE C-37-4

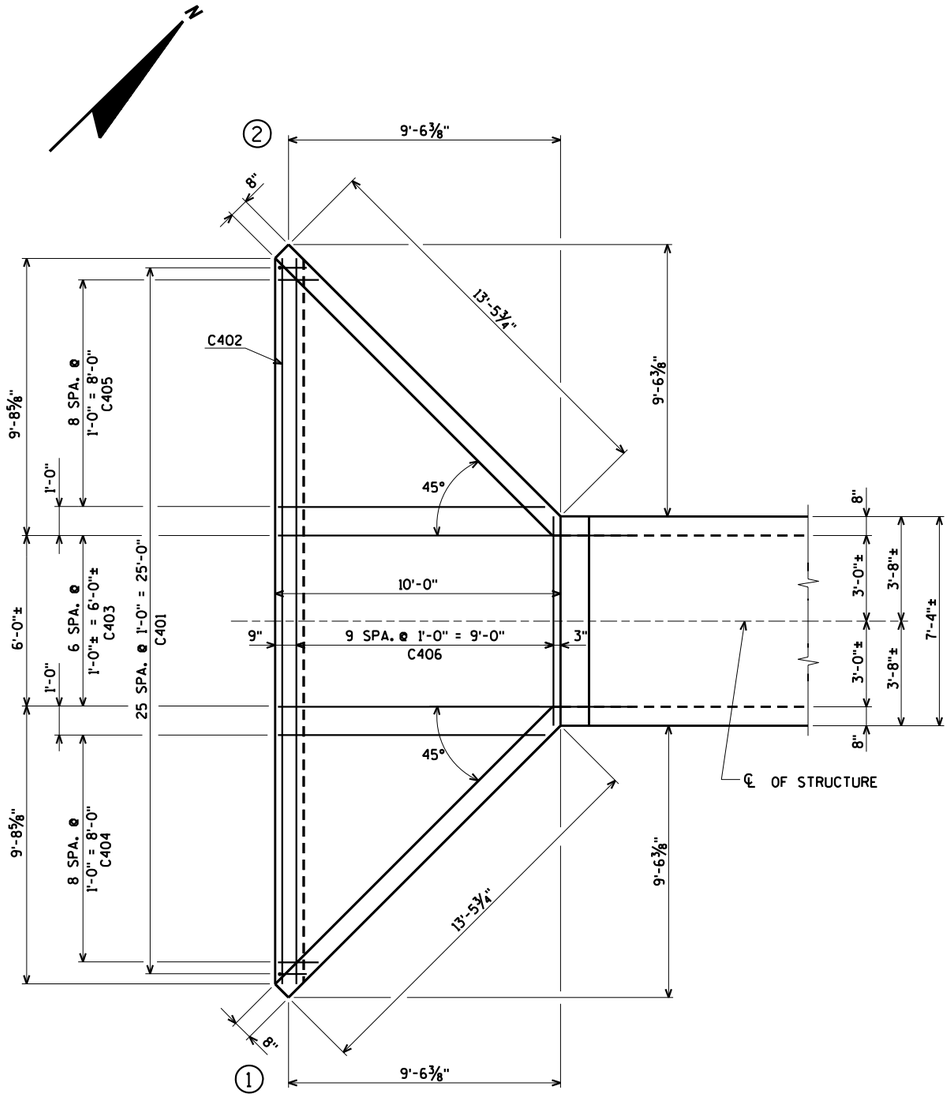
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QUANTITIES AND NOTES

SHEET 2 OF 6
1056

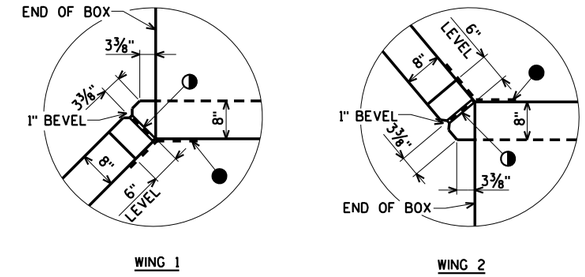
ORIGINAL PLANS PREPARED BY
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INLET

PLAN OF APRON

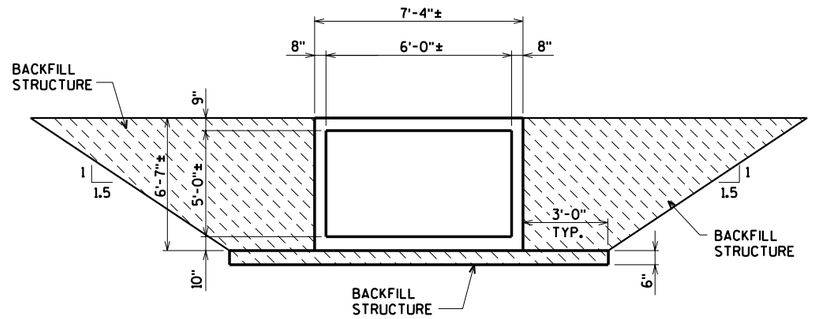


CORNER DETAILS

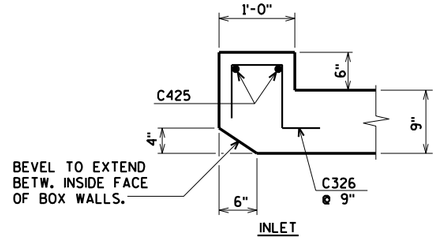
● 18" RUBBERIZED MEMBRANE WATERPROOFING TO EXTEND FROM HORIZ. CONST. JOINT TO TOP OF WING.

◑ ¾" FILLER TO EXTEND FROM HORIZ. CONST. JOINT TO TOP OF WING.

NOTE:
DO NOT RUN ANY BAR STEEL REINF. THRU JOINT FILLER.



CROSS SECTION THRU CULVERT



INLET

HEADER DETAIL

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE C-37-4

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APRON PLAN

SHEET 3 OF 6
1057

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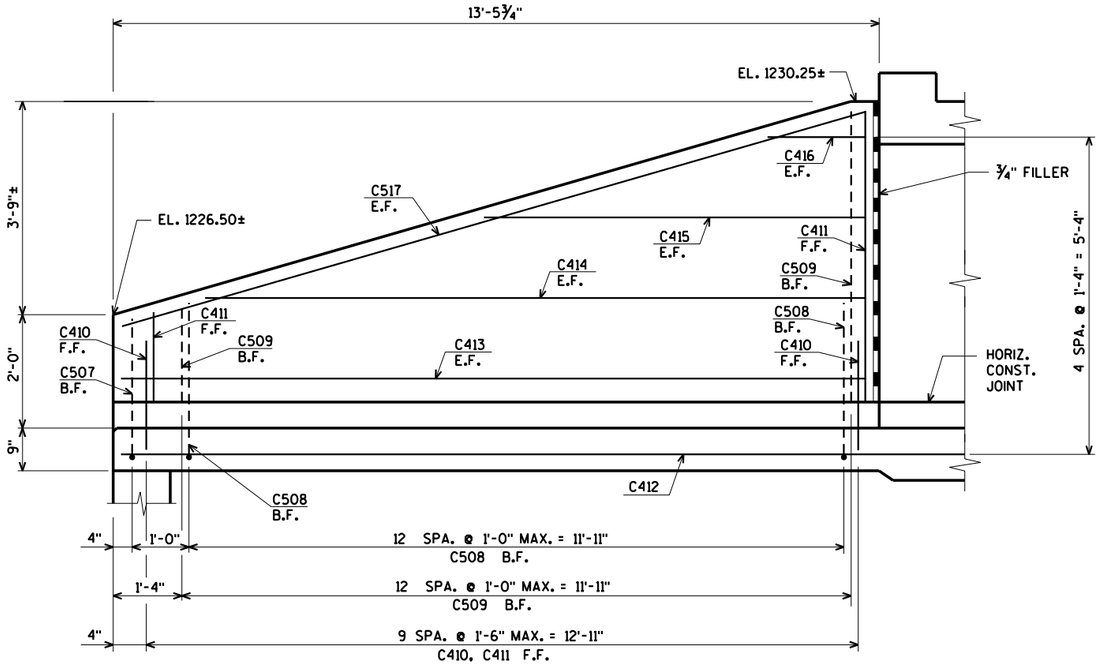
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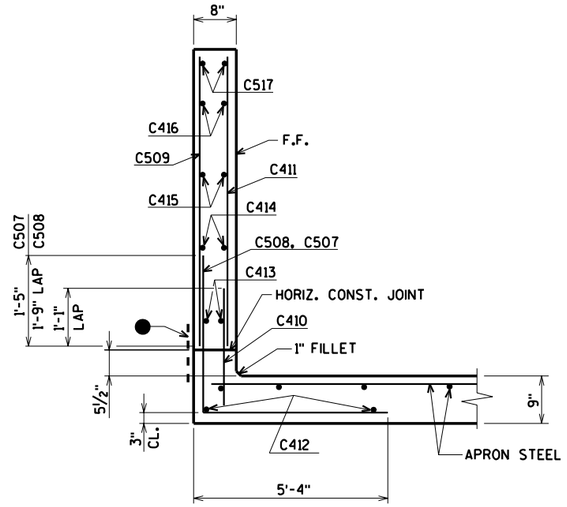
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7/31/2012

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ELEVATION - WING 1
(WING 2 SIMILAR)



TYP. SECTION THRU WING

● 18" MIN. WIDTH RUBBERIZED MEMBRANE WATERPROOFING ALONG HORIZ. CONSTR. JT. IN WING

E.F. DENOTES EACH FACE

F.F. DENOTES FRONT FACE

B.F. DENOTES BACK FACE

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE C-37-4

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WING DETAILS

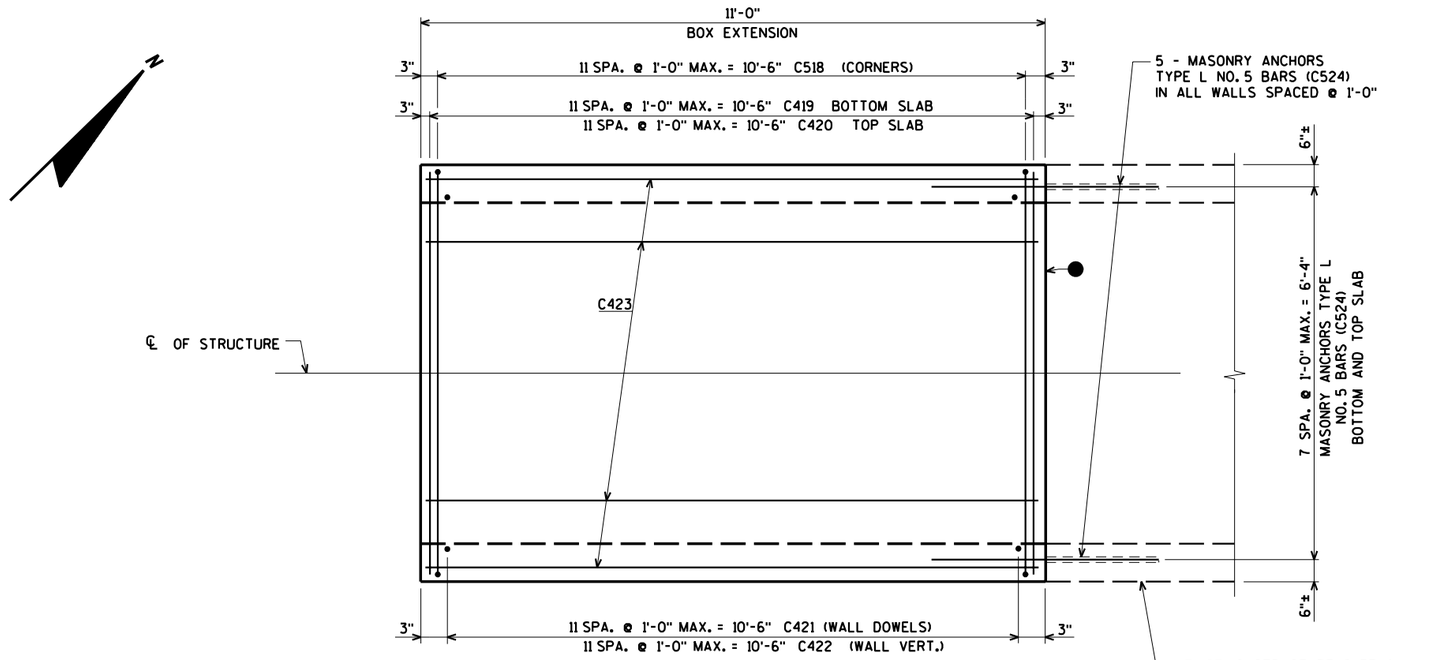
SHEET 4 OF 6
1058

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STATE PROJECT NUMBER

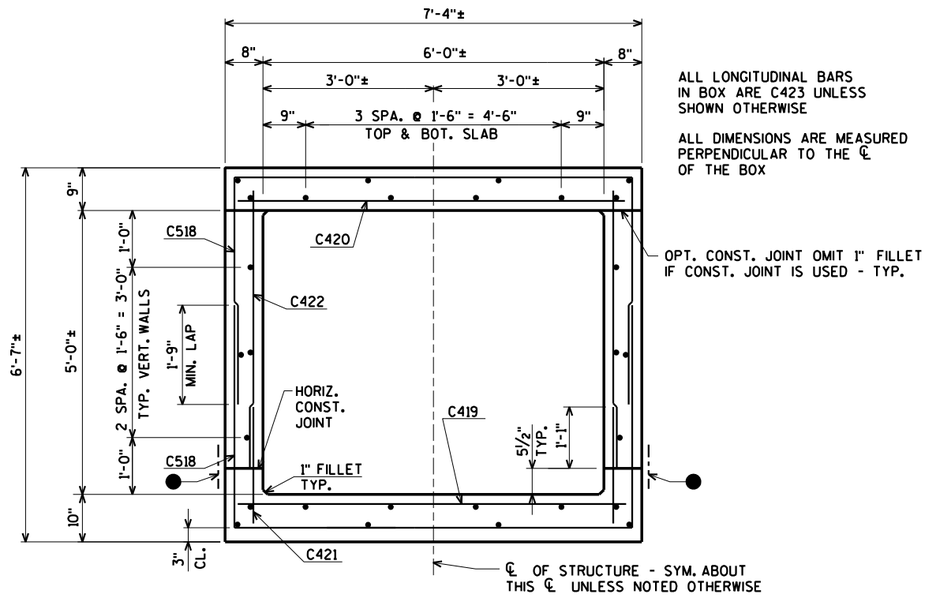
1170-01-70



BAR STEEL LAYOUT

● 18" RUBBERIZED MEMBRANE WATERPROOFING UP WALLS AND ACROSS TOP SLAB AT VERTICAL CONST. JOINTS AND ALONG HORIZONTAL CONST. JOINTS

FOR VERTICAL CONST. JOINT DETAILS SEE SHEET 6



ALL LONGITUDINAL BARS IN BOX ARE C423 UNLESS SHOWN OTHERWISE

ALL DIMENSIONS ARE MEASURED PERPENDICULAR TO THE ℄ OF THE BOX

OPT. CONST. JOINT OMIT 1" FILLET IF CONST. JOINT IS USED - TYP.

TYPICAL SECTION THRU BOX

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE C-37-4

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BOX DETAILS

SHEET 5 OF 6
1059

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U:±41-0525.00 - Marathon Co. UK and USH 51 Interchange±C-37-4 USH 51 ext±Bridge±C-37-4 cul.dgn

STATE PROJECT NUMBER

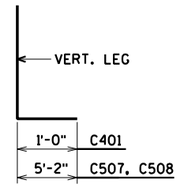
1170-01-70

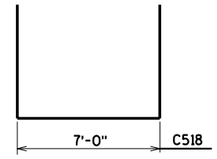
BILL OF BARS

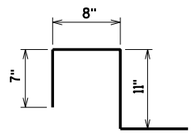
BAR. NO.	COATED BAR	NO. REQ'D.	LENGTH	BENT BAR	BUNDLED BAR	SERIES	1,830# UNCOATED LOCATION
C401		26	3-7	X			CUTOFF WALL INLET
C402		3	25-5				CUTOFF WALL INLET
C403		7	12-0				APRON INLET
C404		9	5-3			⊗	APRON INLET WING 1
C405		9	5-3			⊗	APRON INLET WING 2
C406		10	16-4			⊗	APRON INLET
C507		2	7-5	X			WINGS 1 & 2 VERT. B.F.
C508		26	7-9	X			WINGS 1 & 2 VERT. B.F.
C509		26	3-5			⊗	WINGS 1 & 2 VERT. B.F.
C410		20	2-0				WINGS 1 & 2 VERT. F.F.
C411		20	3-3			⊗	WINGS 1 & 2 VERT. F.F.
C412		4	15-7				WINGS 1 & 2 HORIZ.
C413		4	13-1				WINGS 1 & 2 HORIZ. E.F.
C414		4	11-9				WINGS 1 & 2 HORIZ. E.F.
C415		4	7-2				WINGS 1 & 2 HORIZ. E.F.
C416		4	2-7				WINGS 1 & 2 HORIZ. E.F.
C517		4	13-7				WINGS 1 & 2 DIAG. E.F.
C518		24	14-8	X			BOX CORNERS
C419		12	6-8				BOX BOT. SLAB TRANS.
C420		12	6-8				BOX TOP SLAB TRANS.
C421		24	2-1				BOX DOWELS WALLS
C422		24	4-11				BOX WALLS VERT.
C423		28	10-8				BOX LONG.
C524		26	4-0				BOX JOINT @ EXIST. BOX
C425		2	7-0				BOX HEADER INLET
C326		10	2-5	X			BOX HEADER INLET

BENDING DIMENSIONS ARE OUT TO OUT OF BARS.

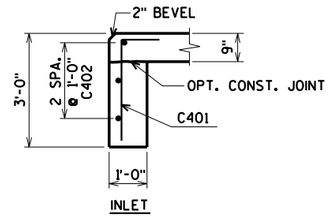
⊗ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.





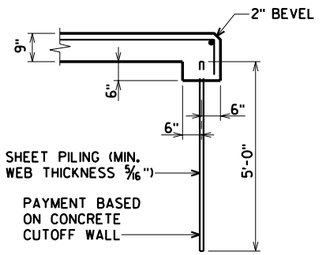


C326



INLET

SECTION THRU CUTOFF WALL

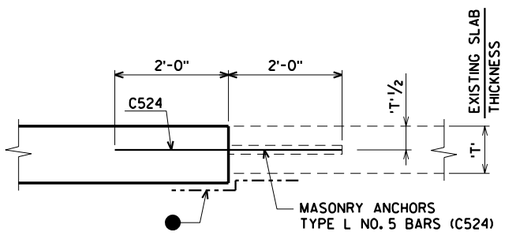


SECTION THRU ALTERNATE CUTOFF WALL

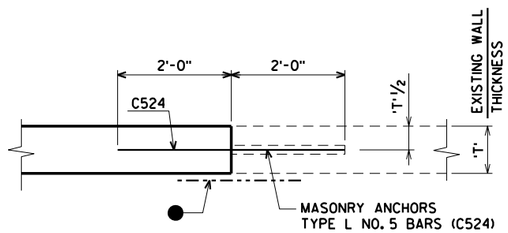
BAR SERIES TABLE

BAR NO.	NO REQ'D.	LENGTH
C404	1 SERIES OF 9	1'-3" TO 9'-3"
C405	1 SERIES OF 9	1'-3" TO 9'-3"
C406	1 SERIES OF 10	7'-4" TO 25'-4"
C509	2 SERIES OF 13	1'-9" TO 5'-1"
C411	2 SERIES OF 10	1'-5" TO 5'-1"

BUNDLE AND TAG EACH SERIES SEPARATELY.



VERT. CONST. JOINT
(ALL SLABS)



VERT. CONST. JOINT
(ALL WALLS)

● 18" RUBBERIZED MEMBRANE WATERPROOFING UP WALLS AND ACROSS TOP SLAB AT VERTICAL CONST. JOINTS AND ALONG HORIZONTAL CONST. JOINTS

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE C-37-4

DRAWN BY KAZ | PLANS CK'D. KLW

BILL OF BARS AND DETAILS

SHEET 6 OF 6
1060

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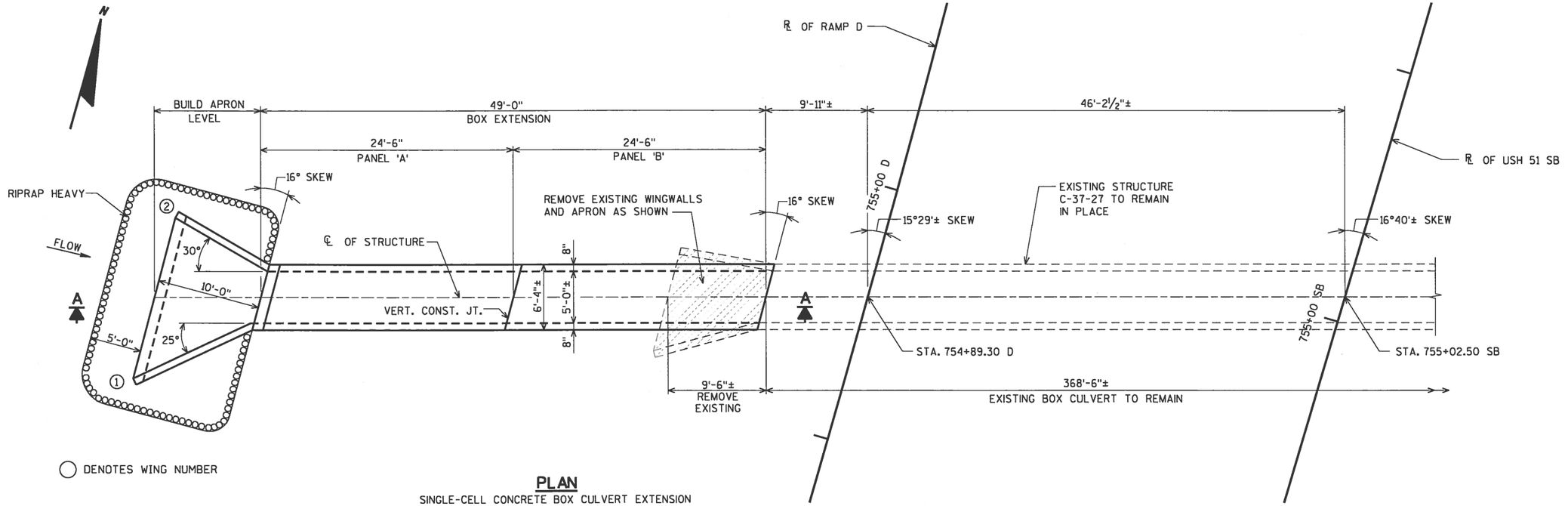
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7/31/2012

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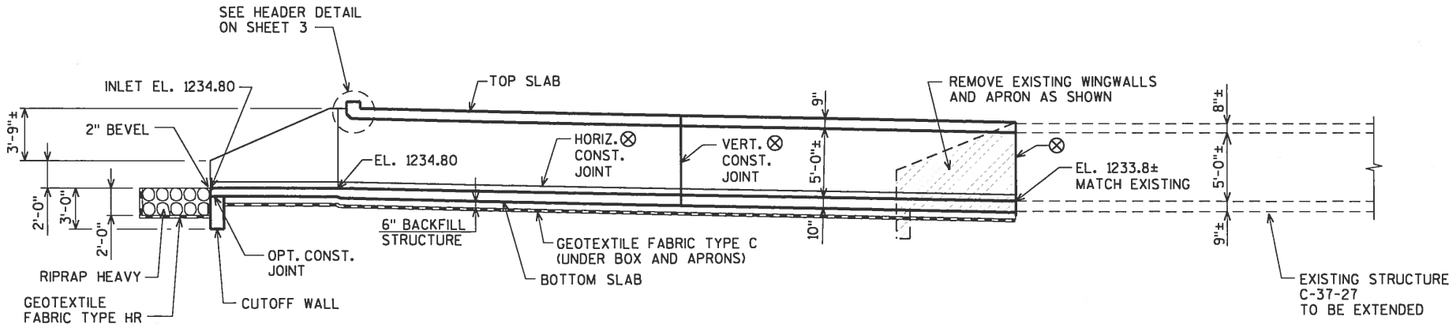
STATE PROJECT NUMBER

1170-01-73



PLAN

SINGLE-CELL CONCRETE BOX CULVERT EXTENSION



SECTION A

(INLET)

⊗ 18" RUBBERIZED MEMBRANE WATERPROOFING UP WALLS & ACROSS TOP SLAB AT VERTICAL CONSTRUCTION JOINTS AND ALONG HORIZONTAL CONSTRUCTION JOINTS

FOR GENERAL NOTES, DESIGN DATA, & PROFILE GRADE, SEE SHEET 2

LIST OF DRAWINGS

1. GENERAL PLAN
2. QUANTITIES AND NOTES
3. APRON PLAN
4. WING DETAILS
5. BOX DETAILS
6. BILL OF BARS AND DETAILS

WISCONSIN ★ DANIEL N. SYDOW E-38363 WI ★ PROFESSIONAL ENGINEER

7/31/12

BRIDGE OFFICE CONTACT:
WILLIAM DREHER
(608)-266-8489

CONSULTANT CONTACT:
DAN SYDOW
(715)-834-3161

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AYRES ASSOCIATES
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Eau Claire, WI 54701
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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher KAR 08/15/12
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE C-37-27

USH 51 OVER DRAINAGE DITCH

COUNTY MARATHON | ~~TOWN~~/CITY/~~VILLAGE~~ WAUSAU

DESIGN SPEC. AASHTO LRFD DESIGN SPEC. 5th EDITION

DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
CJM	KLW	CLS	DNS

GENERAL PLAN

SHEET 1 OF 6
1061

I.D. DATE:

DATE: DATE: DATE:
CHECKED BY: BACK CHECKED BY: CORRECTED BY:

$PRFNAME$
U:\41-0525.00 - Marathon Co, UK and USH 51\Interchange\C-37-27 USH 51over Drainage Ditch\Brid

8 8

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GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS SHOWN OR NOTED OTHERWISE.

THE FIRST DIGIT OF A THREE DIGIT BAR NO. AND THE FIRST TWO DIGITS OF A FOUR DIGIT BAR NO. SIGNIFIES THE BAR SIZE.

JOINT FILLER SHALL CONFORM TO THE REQUIREMENTS OF A.A.S.H.T.O. DESIGNATION M 153, TYPE I, II OR III OR A.A.S.H.T.O. DESIGNATION M 213.

THE UPPER LIMITS OF "EXCAVATION FOR STRUCTURES" SHALL BE THE EXISTING GROUND LINE.

THE ALTERNATE CUTOFF WALL MAY BE USED IN LIEU OF THE CAST-IN-PLACE CONCRETE CUTOFF WALLS. PAYMENT SHALL BE BASED ON THE CONCRETE CUTOFF WALLS.

THE CONCRETE IN THE CUTOFF WALL MAY BE PLACED UNDERWATER IF THE EXCAVATION CANNOT BE DEWATERED.

ALL SPACES EXCAVATED AND NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH STRUCTURE BACKFILL TO THE ELEVATION OF THE TOP OF THE BOX WITHIN THE LENGTH OF THE BOX. THE PAY LIMITS OF THE STRUCTURAL BACKFILL ARE 3'-0" BEYOND THE HORIZONTAL PLAN LIMITS AT THE BOTTOM OF THE BOX AND APRON AND UP AT A 1:1.5 BACKFILL SLOPE FROM BOTTOM OF SLAB TO TOP OF BOX OR PROPOSED SUBGRADE ELEVATION, WHICHEVER IS LOWER, PLUS 6" BELOW BOX.

THE EXISTING STRUCTURE C-37-27, IS A SINGLE CELL 5'-0"± x 5'-0"± CONCRETE BOX CULVERT WITH A BARREL LENGTH OF 368'-6"±.

REMOVING OLD STRUCTURE STATION 755+02.50 SB INCLUDES REMOVING EXISTING INLET WINGS AND APRON.

DIMENSIONS SHOWN ARE BASED ON ORIGINAL STRUCTURE PLANS. CONTRACTOR TO VERIFY DIMENSIONS IN THE FIELD. THE CONTRACTOR SHALL ADJUST THE DIMENSIONS OF THE BOX CELL OPENINGS TO MATCH THE EXISTING CULVERT.

ALL CONCRETE REMOVAL SHALL BE DEFINED BY A 1" DEEP SAW CUT UNLESS SHOWN OR NOTED OTHERWISE.

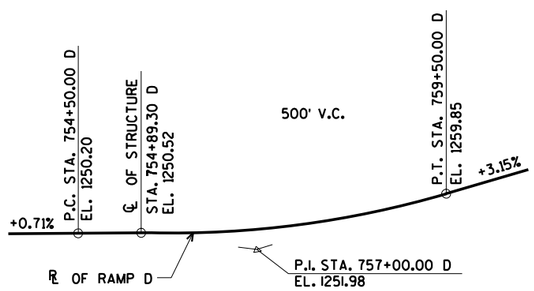
FILLET THE FORMS WITH ¾ INCH TRIANGULAR MOLDING CHAMFER STRIPS AT ALL EXPOSED, SHARP CORNERS AND AT THE EDGES OF THE CONCRETE, UNLESS SPECIFIED OTHERWISE.

TOTAL ESTIMATED QUANTITIES

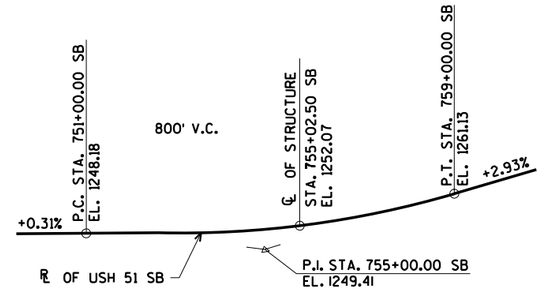
ITEM NUMBER	BID ITEMS	AMOUNT
203.0500.S	REMOVING OLD STRUCTURE OVER WATERWAY STATION 755+02.50 SB	1 LS
206.2000	EXCAVATION FOR STRUCTURES CULVERTS C-37-27	1 LS
210.0100	BACKFILL STRUCTURE	270 CY
502.5005	MASONRY ANCHORS TYPE L NO. 5 BARS	24 EACH
504.0100	CONCRETE MASONRY CULVERTS	38 CY
505.0410	BAR STEEL REINFORCEMENT HS CULVERTS	4,330 LB
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	29 SY
606.0300	RIPRAP HEAVY	20 CY
645.0105	GEOTEXTILE FABRIC TYPE C	95 SY
645.0120	GEOTEXTILE FABRIC TYPE HR	45 SY

NON-BID ITEMS

FILLER	¾ SIZE



PROFILE GRADE LINE
(RAMP D)



PROFILE GRADE LINE
(USH 51 SB)

DESIGN DATA

LIVE LOAD:
DESIGN LOADING: HL-93

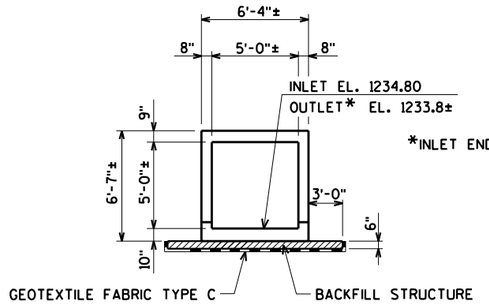
EARTH LOAD: 11'-0"

ULTIMATE DESIGN STRESSES:

CONCRETE MASONRY	f'_c =	3,500 p.s.i.
HIGH STRENGTH BAR STEEL REINFORCEMENT (GRADE 60)	f_y =	60,000 p.s.i.

TRAFFIC DATA:
A.D.T. = 31,000 (2015)
A.D.T. = 41,300 (2035)
R.D.S. = 70 M.P.H.

BENCH MARK:
POINT ID: BM244
DESCRIPTION: CHIS. SQ. WITH BLUE KEEL ON TOP OF CURB ON SE WINGWALL, B-37-69, CTH U
N = 211691.26
E = 274436.88
EL. = 1267.16



*INLET END OF EXISTING BOX CULVERT

TYPICAL SECTION THRU BOX EXTENSION
NOTE: MATCH EXISTING CULVERT OPENING

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
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STRUCTURES DESIGN SECTION

STRUCTURE C-37-27

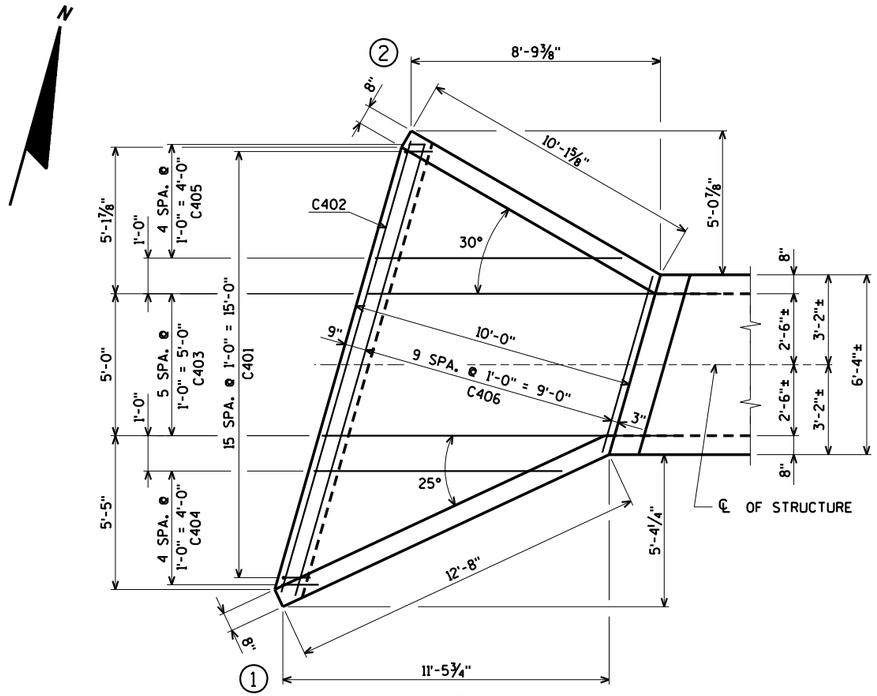
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QUANTITIES AND NOTES

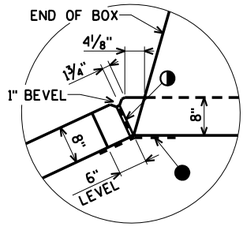
SHEET 2 OF 6
1062

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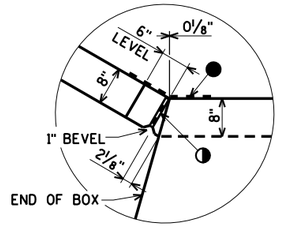
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7/31/2012
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PLAN OF APRON



WING 1



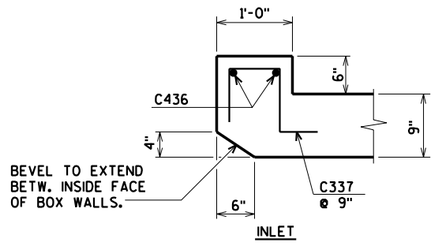
WING 2

CORNER DETAILS

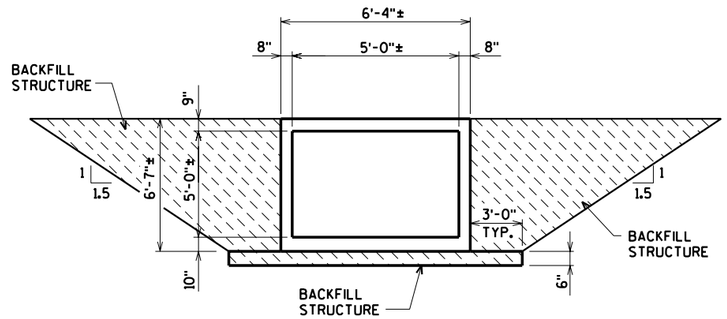
● 18" RUBBERIZED MEMBRANE WATERPROOFING TO EXTEND FROM HORIZ. CONST. JOINT TO TOP OF WING.

◑ ¾" FILLER TO EXTEND FROM HORIZ. CONST. JOINT TO TOP OF WING.

NOTE:
DO NOT RUN ANY BAR STEEL REINF. THRU JOINT FILLER.



HEADER DETAIL



CROSS SECTION THRU CULVERT

NO.	DATE	REVISION	BY

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DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE C-37-27

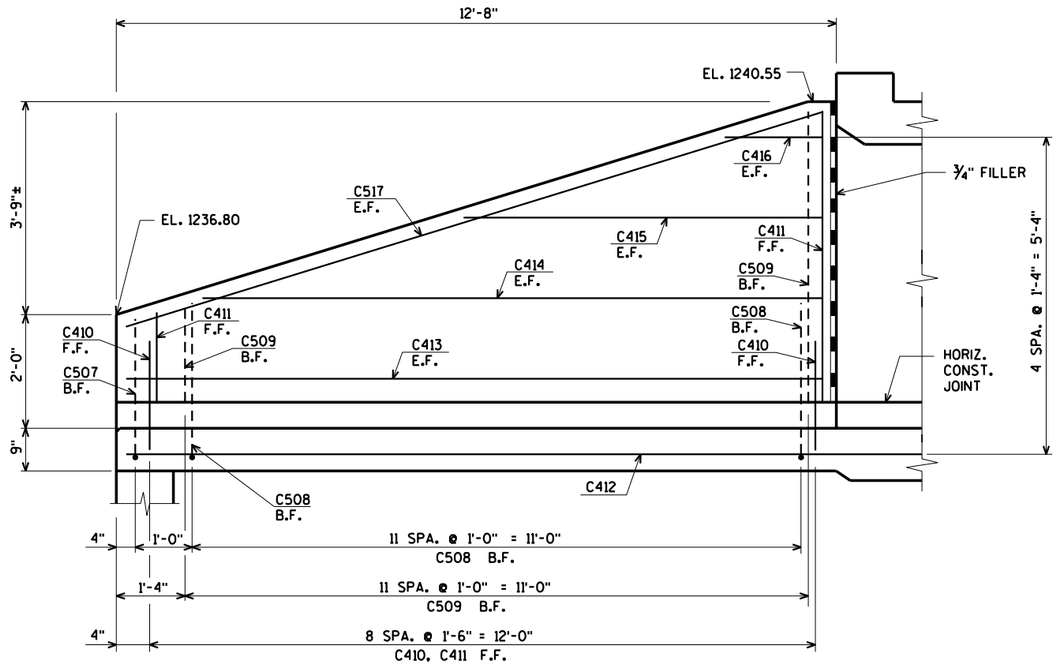
DRAWN BY CLS | PLANS CK'D. KLW

APRON PLAN

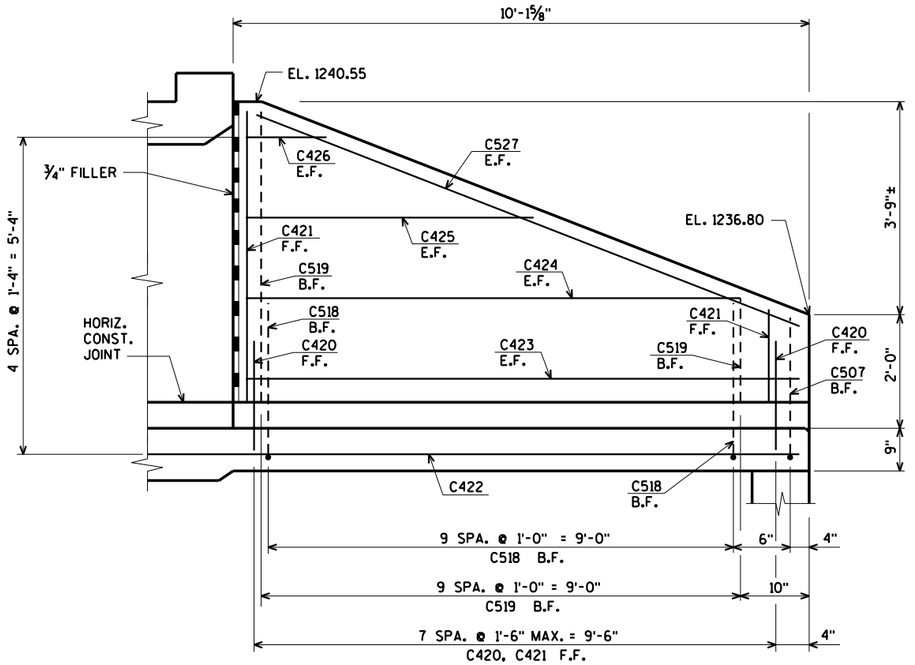
SHEET 3 OF 6
1063

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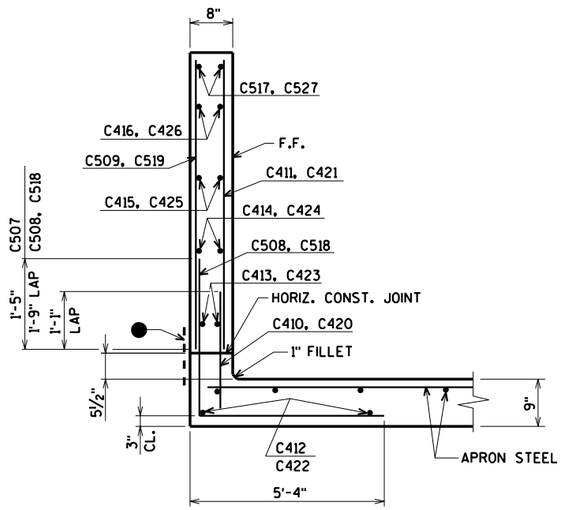
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ELEVATION - WING 1



ELEVATION - WING 2



TYP. SECTION THRU WING

● 18" MIN. WIDTH RUBBERIZED MEMBRANE WATERPROOFING ALONG HORIZ. CONSTR. JT. IN WING

E.F. DENOTES EACH FACE

F.F. DENOTES FRONT FACE

B.F. DENOTES BACK FACE

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STATE OF WISCONSIN
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STRUCTURES DESIGN SECTION

STRUCTURE C-37-27

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WING DETAILS

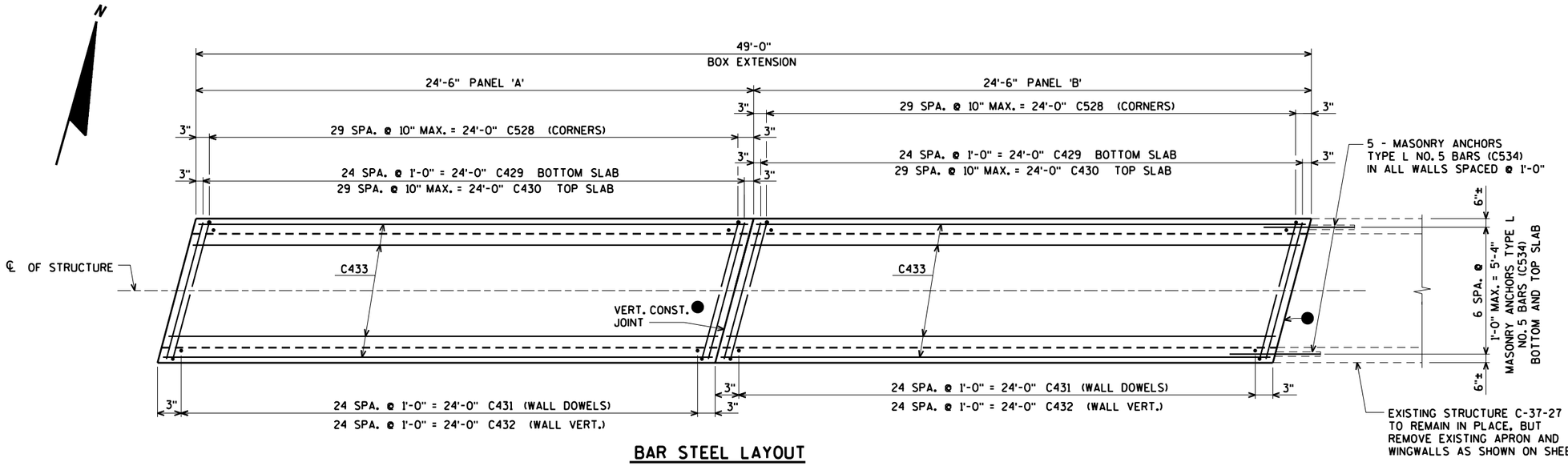
SHEET 4 OF 6
1064

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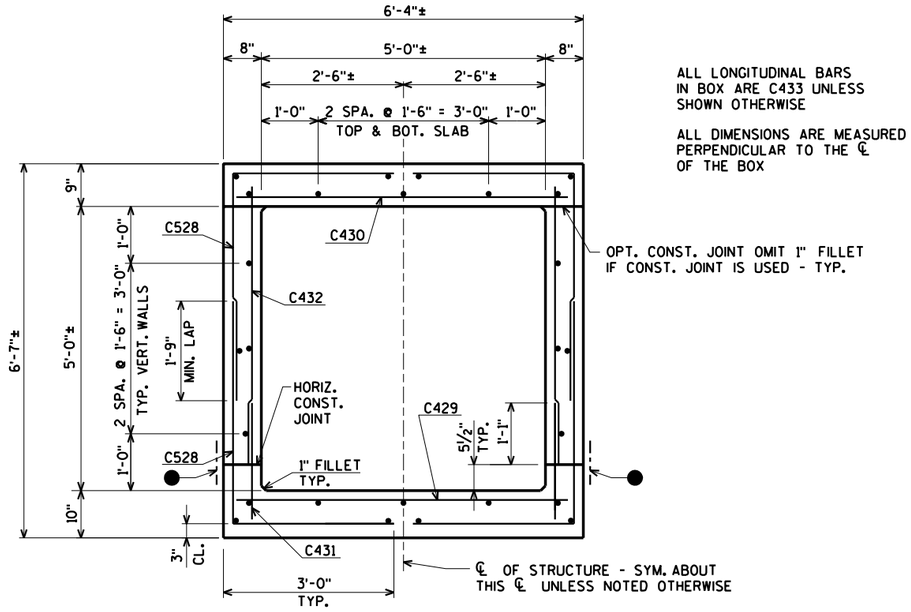
$PRFNAME$
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BAR STEEL LAYOUT

● 18" RUBBERIZED MEMBRANE WATERPROOFING UP WALLS AND ACROSS TOP SLAB AT VERTICAL CONST. JOINTS AND ALONG HORIZONTAL CONST. JOINTS

FOR VERTICAL CONST. JOINT DETAILS SEE SHEET 6



ALL LONGITUDINAL BARS IN BOX ARE C433 UNLESS SHOWN OTHERWISE

ALL DIMENSIONS ARE MEASURED PERPENDICULAR TO THE ℄ OF THE BOX

TYPICAL SECTION THRU BOX

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STRUCTURE C-37-27

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BOX DETAILS

SHEET 5 OF 6
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STATE PROJECT NUMBER

1170-01-73

BILL OF BARS

BAR. NO.	COATED BAR	NO. REQ'D.	LENGTH	BENT BAR	BUNDLED BAR	SERIES	4,330# UNCOATED LOCATION
C401		16	3-7	X			CUTOFF WALL INLET
C402		3	16-6				CUTOFF WALL INLET
C403		6	12-6				APRON INLET
C404		5	5-5			⊗	APRON INLET WING 1
C405		5	5-1			⊗	APRON INLET WING 2
C406		10	11-5			⊗	APRON INLET
C507		2	7-5	X			WINGS 1 & 2 VERT. B.F.
C508		12	7-9	X			WING 1 VERT. B.F.
C509		12	3-5			⊗	WING 1 VERT. B.F.
C410		9	2-0				WING 1 VERT. F.F.
C411		9	3-3			⊗	WING 1 VERT. F.F.
C412		2	14-9				WING 1 HORIZ.
C413		2	12-3				WING 1 HORIZ. E.F.
C414		2	11-1				WING 1 HORIZ. E.F.
C415		2	6-9				WING 1 HORIZ. E.F.
C416		2	2-5				WING 1 HORIZ. E.F.
C517		2	12-10				WING 1 DIAG. E.F.
C518		10	7-9	X			WING 2 VERT. B.F.
C519		10	3-4			⊗	WING 2 VERT. B.F.
C420		8	2-0				WING 2 VERT. F.F.
C421		8	3-3			⊗	WING 2 VERT. F.F.
C422		2	12-3				WING 2 HORIZ.
C423		2	9-8				WING 2 HORIZ. E.F.
C424		2	8-10				WING 2 HORIZ. E.F.
C425		2	5-4				WING 2 HORIZ. E.F.
C426		2	1-11				WING 2 HORIZ. E.F.
C527		2	10-5				WING 2 DIAG. E.F.
C528		240	6-8	X			BOX CORNERS
C429		50	5-8				BOX BOT. SLAB TRANS.
C430		60	5-8				BOX TOP SLAB TRANS.
C431		100	2-1				BOX DOWELS WALLS
C432		100	4-11				BOX WALLS VERT.
C433		52	24-1				BOX LONG.
C534		24	4-0				BOX JOINT @ EXIST. BOX
C535		24	4-0				BOX VERT. CONST. JT.
C436		2	6-2				BOX HEADER INLET
C337		8	2-5	X			BOX HEADER INLET

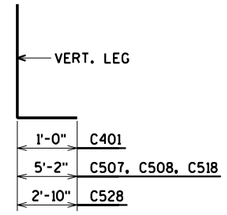
BENDING DIMENSIONS ARE OUT TO OUT OF BARS.

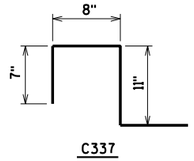
⊗ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

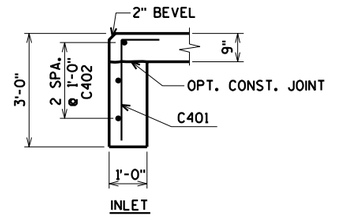
BAR SERIES TABLE

BAR NO.	NO REQ'D.	LENGTH
C404	1 SERIES OF 5	1'-9" TO 9'-1"
C405	1 SERIES OF 5	1'-1" TO 9'-1"
C406	1 SERIES OF 10	6'-5" TO 16'-5"
C509	1 SERIES OF 12	1'-9" TO 5'-1"
C411	1 SERIES OF 9	1'-5" TO 5'-1"
C519	1 SERIES OF 10	1'-8" TO 5'-0"
C421	1 SERIES OF 8	1'-5" TO 5'-1"

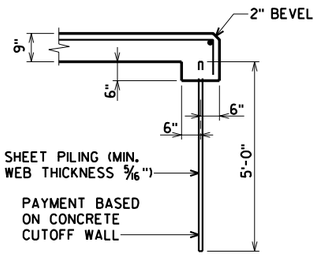
BUNDLE AND TAG EACH SERIES SEPARATELY.



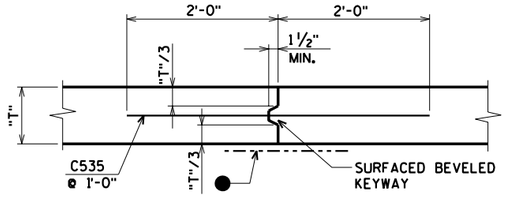




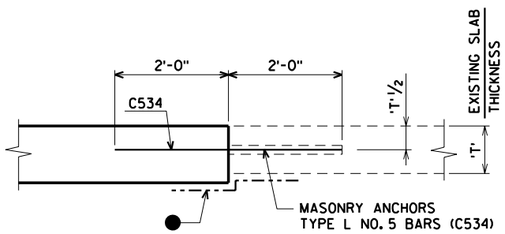
SECTION THRU CUTOFF WALL



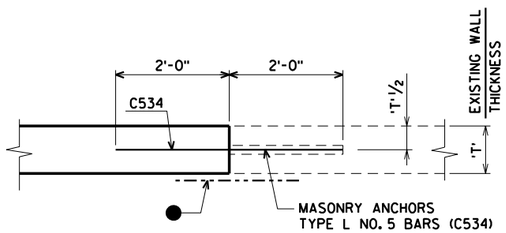
SECTION THRU ALTERNATE CUTOFF WALL



VERT. CONST. JOINT
(ALL WALLS AND SLABS)



VERT. CONST. JOINT
(ALL SLABS)



VERT. CONST. JOINT
(ALL WALLS)

● 18" RUBBERIZED MEMBRANE WATERPROOFING UP WALLS AND ACROSS TOP SLAB AT VERTICAL CONST. JOINTS AND ALONG HORIZONTAL CONST. JOINTS

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE C-37-27

DRAWN BY CLS | PLANS CK'D. KLW

BILL OF BARS AND DETAILS

SHEET 6 OF 6
1066

ORIGINAL PLANS PREPARED BY
AYRES ASSOCIATES
3433 Oakwood Hills Parkway
Eau Claire, WI 54701
www.AyresAssociates.com

$PRFNAME$
U:\41-0525.00 - Marathon Co. UK and USH 51\Interchange\C-37-27 USH 51 over Drainage Ditch\Bridge\C-37-27cul.dgn

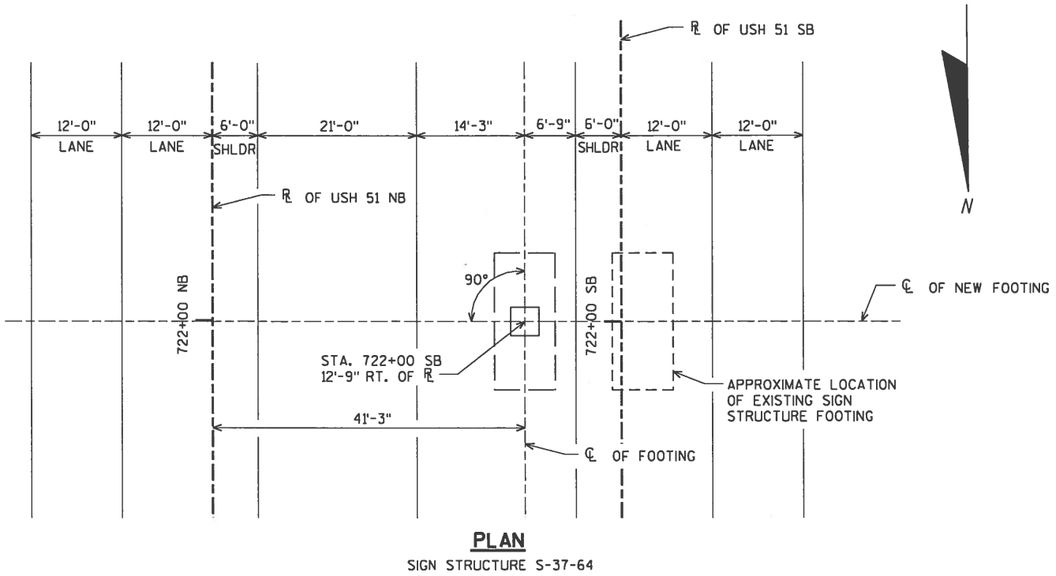
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$PRFNAME$
U:\41-0525.00 - Marathon Co. UK and USH 51 Interchange\S-37-0064\S-37-64 sign.dgn

STATE PROJECT NUMBER

1170-01-73



PLAN

SIGN STRUCTURE S-37-64

GENERAL NOTES

DESIGN IS BASED ON THE FOLLOWING:

1. DESIGN SIGN AREA = 198 SQ. FEET
   MAX. SIGN DEPTH = 9.0 FEET
   FUTURE OVERLAY THICKNESS = 3.0 INCHES
2. DESIGNED ACCORDING TO AASHTO.
3. THE WEIGHT OF THE SIGN PANEL AND BRACKETS IS EQUIVALENT TO 6.0 LBS. PER SQ. FT. ON SIGN AREA.
4. STRUCTURE IS ANALYZED AS A SPACE FRAME WITH CHORDS BEING CONSIDERED CONTINUOUS MEMBERS PINNED TO THE UPRIGHT BRACKETS. WEB MEMBERS ARE CONSIDERED PINNED AT ENDS BUT ARE DESIGNED FOR ECCENTRIC END CONNECTIONS.
5. DRAWINGS SHALL NOT BE SCALED.
6. ALTERNATE DESIGNS ARE NOT ALLOWED.
7. EXACT LOCATION OF SIGN BRIDGE SHALL BE DETERMINED BY THE DISTRICT TRAFFIC ENGINEER.

ALLOWABLE DESIGN STRESSES

PLATES & BARS	A.S.T.M. A709 GRADE 36	fy=36,000 P.S.I.
ANCHOR BOLTS	A.A.S.H.T.O. M314	fy=55,000 P.S.I.
HARDWARE GALVANIZED		A153 CLASS C
CONCRETE MASONRY		f'_c=3,500 p.s.i.
HIGH STRENGTH BAR STEEL REINFORCEMENT (GRADE 60)		f_y=60,000 p.s.i.

FOUNDATION DATA

ALLOWABLE SOIL BEARING PRESSURE = 3.0 TONS/SQ. FT.

LIST OF BID ITEMS

636.0100	SIGN SUPPORTS CONCRETE MASONRY	15 CY
636.1500	SIGN SUPPORTS STEEL COATED REINFORCEMENT HS	1,030 LB
SPV.0105	REMOVE AND REINSTALL SIGN BRIDGE CANTILEVERED S-37-64	1 LS

DESIGN DATA

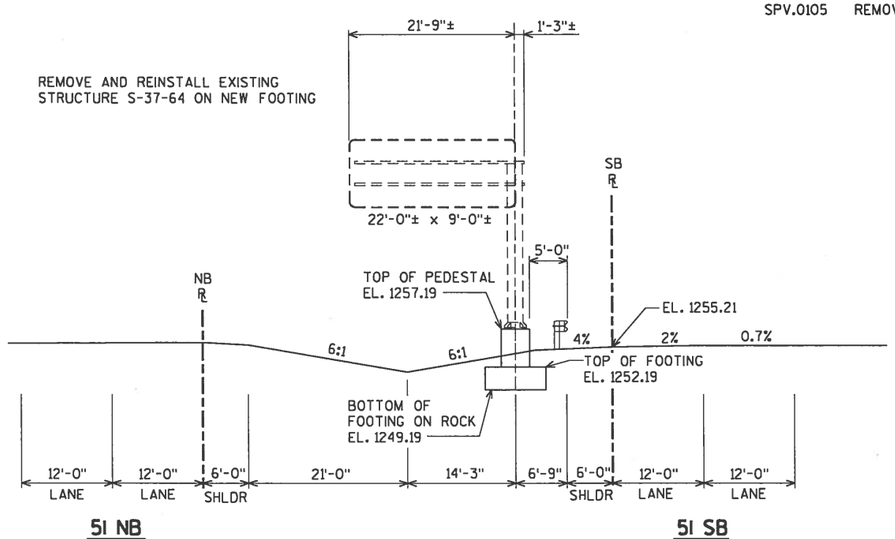
DEAD LOAD - WT. OF SIGN & SUPPORTING SRUCTURE
LIVE LOAD - N/A
ICE LOAD - 3 P.S.F. TO 1 FACE OF SIGN & AROUND SURFACE MEMBERS.
WIND PRESSURE - 90 M.P.H. (3 SECOND GUST SPEED) TO SIGN AREA & EXPOSED MEMBERS.

WIND COMPONENTS	NORMAL	TRANSVERSE
COMBINATION 1	1.0	0.2
COMBINATION 2	0.6	0.3
GROUP LOADS		% OF ALLOWABLE STRESS
1. DEAD		100
2. DEAD + WIND		133
3. DEAD + ICE + ½ (WIND*)		133

* MIN. VALUE OF 25 PSF FOR GR. 3

LIST OF DRAWINGS

1. GENERAL PLAN
2. CANTILEVER TRUSS FOOTING ON ROCK



SIGN BRIDGE S-37-64 (STA. 722+00 SB)

(LOOKING SOUTH)

WISCONSIN
DANIEL N. SYDOW
E-38363
PROFESSIONAL ENGINEER
7/31/12

BRIDGE OFFICE CONTACT:
WILLIAM DREHER
(608)-266-8489

CONSULTANT CONTACT:
DAN SYDOW
(715)-834-3161

NO.	DATE	REVISION	BY

ORIGINAL PLANS PREPARED BY
AYRES ASSOCIATES
3433 Oakwood Hills Parkway
Eau Claire, WI 54701
www.AyresAssociates.com

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher KAR 09/21/12
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE S-37-64

USH 51 STA. 722+00 'SB'

COUNTY MARATHON | ~~TOWN~~/CITY/~~VILLAGE~~ WAUSAU

DESIGN SPEC.
STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS

DESIGNED BY	CJM	DESIGN CK'D.	KLW	DRAWN BY	CLS	PLANS CK'D.	DNS

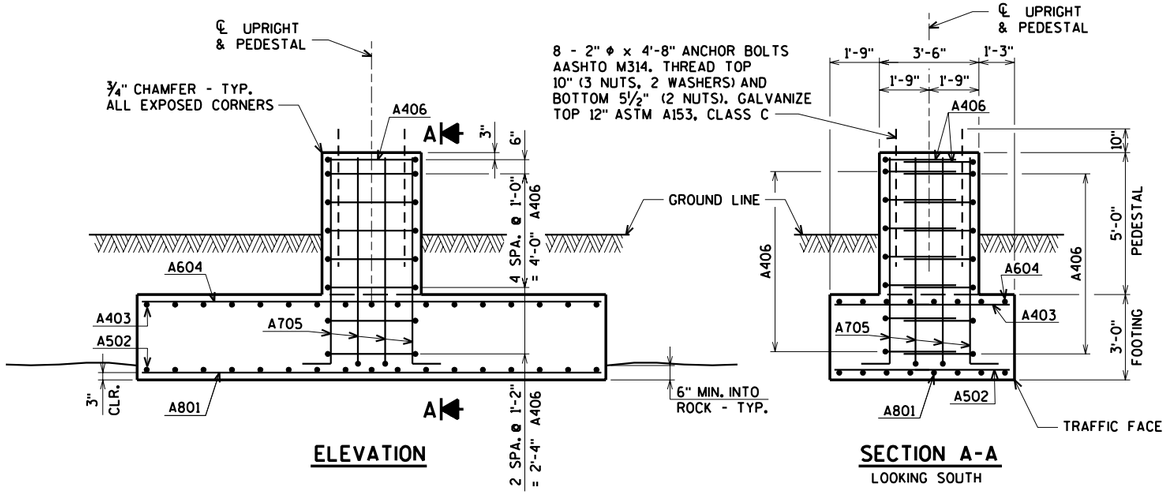
GENERAL PLAN

SHEET 1 OF 2
1067

DATE: DATE: DATE:
CHECKED BY: BACK CHECKED BY: CORRECTED BY:

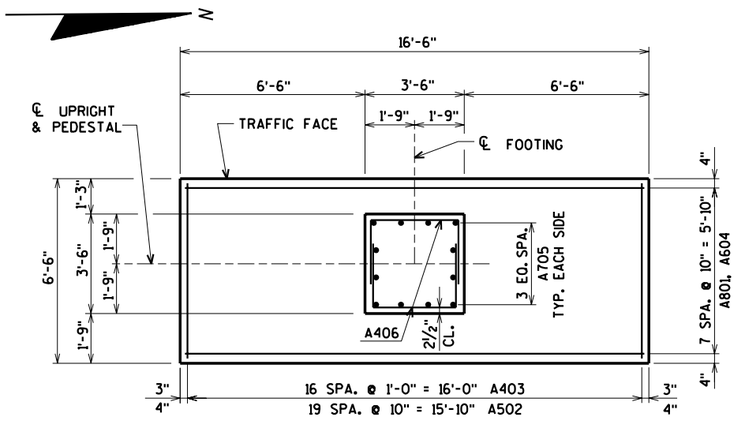
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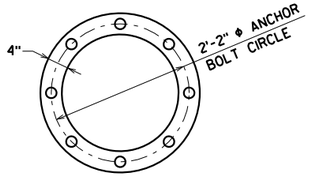


ELEVATION

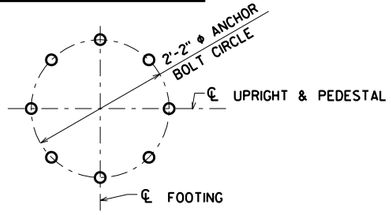
SECTION A-A
LOOKING SOUTH

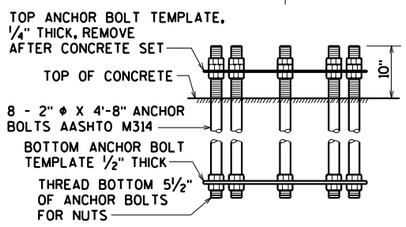


PLAN



TOP VIEW OF TOP & BOTTOM TEMPLATES





ANCHOR BOLT DETAILS

PAYMENT FOR ANCHOR BOLTS, NUTS AND BOTTOM AND TOP ANCHOR BOLT TEMPLATES IS INCLUDED IN THE BID ITEM "SIGN SUPPORTS CONCRETE MASONRY".

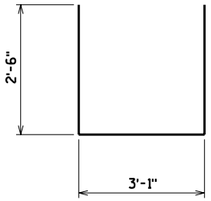
BILL OF BARS

BAR. NO.	COATED BAR	NO. REQ'D.	LENGTH	BENT BAR	BUNDLED BAR	SERIES	1,030# COATED LOCATION
A801	X	8	16-2				FOOTING - LONG. BOT.
A502	X	20	6-2				FOOTING - TRANS. BOT.
A403	X	17	6-2				FOOTING - TRANS. TOP
A604	X	8	16-2				FOOTING - LONG. TOP
A705	X	12	8-4	X			FOOTING & COLUMN - VERT.
A406	X	16	8-0	X			FOOTING & COLUMN - HORIZ. TIE

BENDING DIMENSIONS ARE OUT TO OUT OF BARS.



A705



A406

FOUNDATION NOTES

1. BAR STEEL REINF. SHALL BE IMBEDDED 2" CLEAR UNLESS OTHERWISE SHOWN.
2. THE USE OF STRUCTURAL GRADE BAR STEEL IS PROHIBITED.
3. PROVIDE 2 GALVANIZED NUTS AND WASHERS PER ANCHOR BOLT. FOR FIELD ADJUSTMENT, ENLARGE NUTS FOR PROPER FIT AFTER GALVANIZING.
4. THE FIRST TWO DIGITS OF A BAR MARK SIGNIFIES THE BAR SIZE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE S-37-64

DRAWN BY CLS | PLANS CK'D. AEB

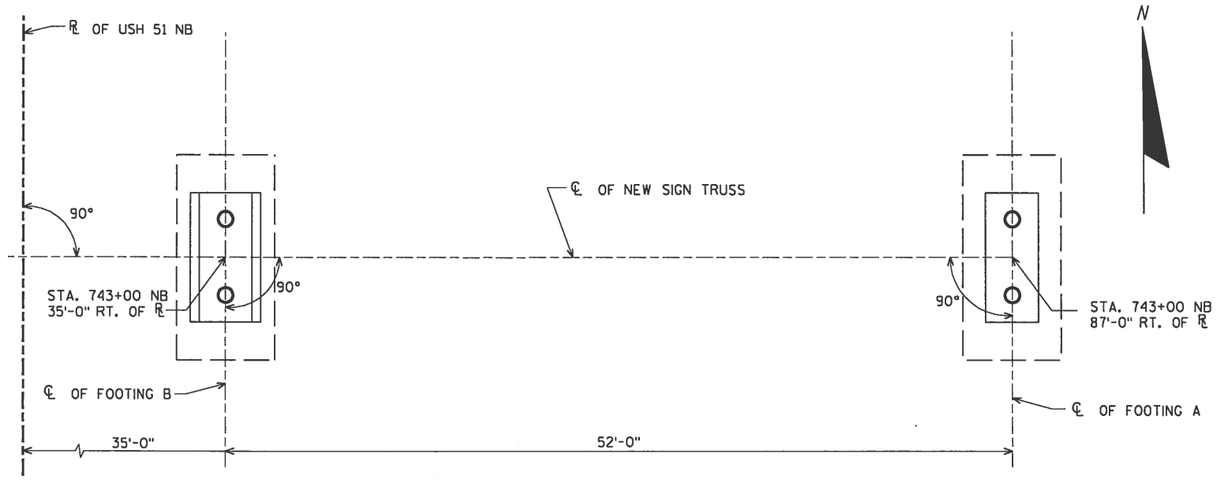
CANTILEVER TRUSS FOOTING ON ROCK

SHEET 2 OF 2
1068

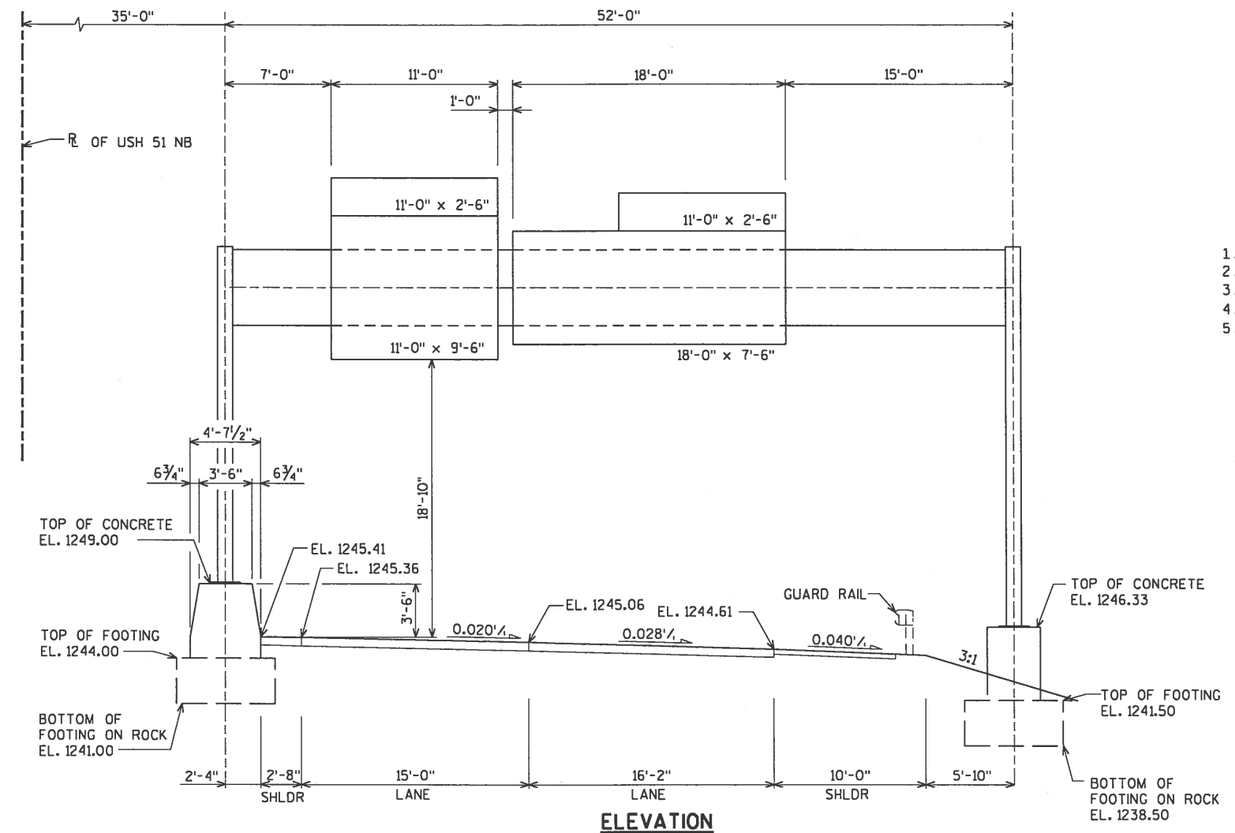
ORIGINAL PLANS PREPARED BY
AYRES ASSOCIATES
3433 Oakwood Hills Parkway
Eau Claire, WI 54701
www.AyresAssociates.com

$PRFNAME$
U:\41-0525.00 - Marathon Co, UK and USH 51 Interchange\S-37-0064\S-37-64 ftng.dgn

$PRFNAME$
U:\41-0525.00 - Marathon Co. UK and USH 51 Interchange\S-37-009\S-37-91 sign.dgn
DATE:
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CHECKED BY:
BACK CHECKED BY:
CORRECTED BY:



PLAN
SIGN STRUCTURE S-37-91



ELEVATION
(LOOKING NORTH)

GENERAL NOTES

DESIGN IS BASED ON THE FOLLOWING:

1. DESIGN SIGN AREA = 530 SQ. FEET
   MAX. SIGN DEPTH = 12 FEET
   FUTURE OVERLAY THICKNESS = 4 INCHES
2. COEFFICIENT OF HEIGHT = 1.0
3. THE WEIGHT OF THE SIGN PANEL AND BRACKETS IS EQUIVALENT TO 6.0 LBS. PER SQ. FT. ON SIGN AREA.
4. STRUCTURE IS ANALYZED AS A SPACE FRAME WITH CHORDS BEING CONSIDERED CONTINUOUS MEMBERS PINNED TO THE UPRIGHT BRACKETS. WEB MEMBERS ARE CONSIDERED PINNED AT ENDS BUT ARE DESIGNED FOR ECCENTRIC END CONNECTIONS.
5. SIGN BRIDGE IDENTIFICATION PLAQUE SHALL BE INCIDENTAL TO "SIGN BRIDGE, STRUCTURE S-37-91".
6. DRAWINGS SHALL NOT BE SCALED.
7. ALTERNATE DESIGNS ARE NOT ALLOWED.
8. HANDHOLES ARE NOT REQUIRED.
9. EXACT LOCATION OF SIGN BRIDGE SHALL BE DETERMINED BY THE DISTRICT TRAFFIC ENGINEER.
10. GROUND RODS ARE REQUIRED.

FOUNDATION DATA

ALLOWABLE SOIL BEARING PRESSURE = 3 TONS/SQ. FT.

LIST OF BID ITEMS

636.0100	SIGN SUPPORTS CONCRETE MASONRY	30 CY
636.1500	SIGN SUPPORTS STEEL COATED REINFORCEMENT HS	1,920 LB
641.6600	SIGN BRIDGE STRUCTURE S-37-91	1 LS

LIST OF DRAWINGS

1. GENERAL PLAN
2. 4-CHORD GALVANIZED STEEL SIGN BRIDGE
3. 4-CHORD SIGN BRIDGE DETAILS
4. STEEL SIGN BRIDGE FOOTING A ON ROCK
5. STEEL SIGN BRIDGE FOOTING B ON ROCK

WISCONSIN
DANIEL N. SYDOW
E-38363
WI
PROFESSIONAL ENGINEER
7/31/12

BRIDGE OFFICE CONTACT:
WILLIAM DREHER
(608)-266-8489

CONSULTANT CONTACT:
DAN SYDOW
(715)-834-3161

NO.	DATE	REVISION	BY

ORIGINAL PLANS PREPARED BY
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Eau Claire, WI 54701
www.AyresAssociates.com

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED William C. Dreher KAR 09/21/12
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE S-37-91

USH 51 STA. 743+00 'NB'

COUNTY: MARATHON — ~~TOWN~~/CITY/~~VILLAGE~~: WAUSAU

DESIGN SPEC.
STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS

DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
CJM	KLW	CLS	DNS

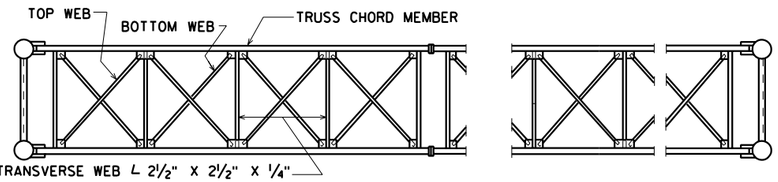
GENERAL PLAN

SHEET 1 OF 5
1069

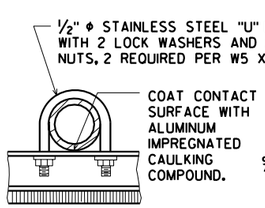
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STATE PROJECT NUMBER

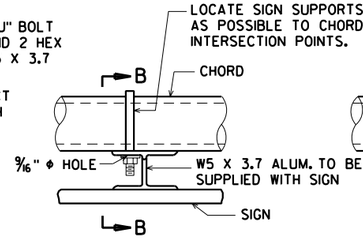
1170-01-70



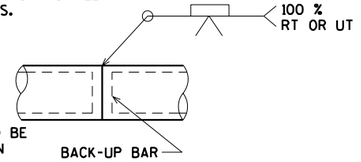
PLAN



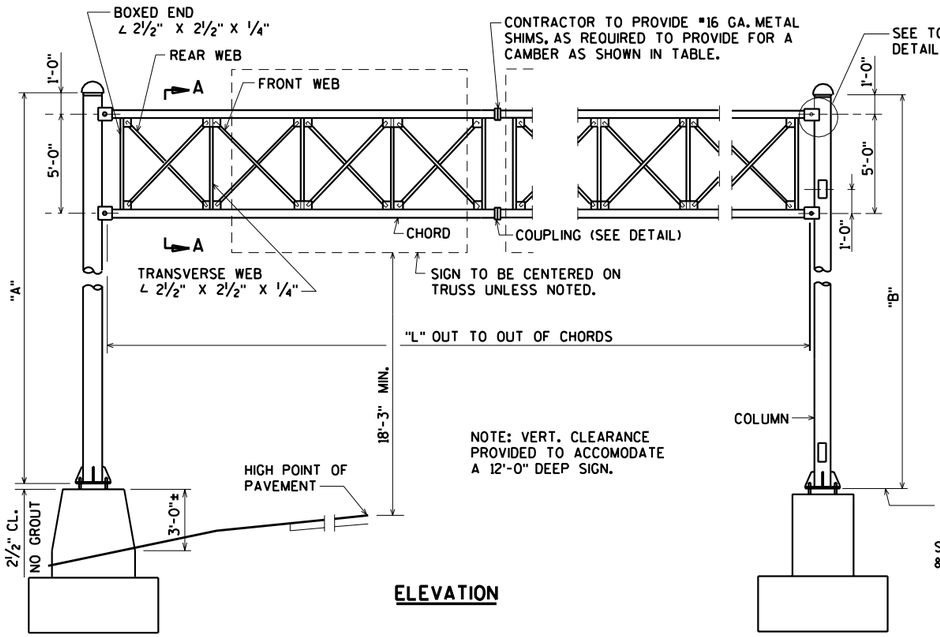
SECTION B



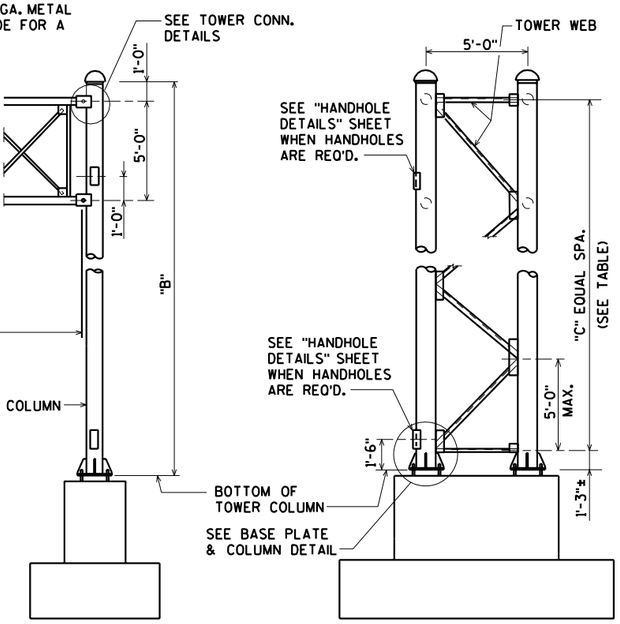
TYPICAL SIGN CONNECTION



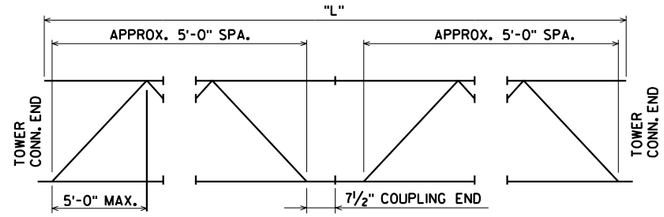
CHORD SPLICE



ELEVATION



END VIEW



TRUSS ARRANGEMENT

FABRICATOR MAY MAKE TRUSSES ANY LENGTH KEEPING A SECTION A MINIMUM OF 20'-0" & A MULTPLE OF 5'-0". CHORD FIELD SPLICES SHALL BE MADE WITH COUPLINGS. CHORD SHOP SPLICE SHALL BE THE WELDED SPLICE SHOWN ABOVE.

NOTES

DRAWINGS SHALL NOT BE SCALED.

STEEL COLUMN PIPE SHALL BE A.P.I. SPEC. 5L GRADE X42
Fy = 42,000 P.S.I.

ALL STEEL PIPE MEMBERS OF TRUSS SHALL BE A.P.I. SPEC. 5L GRADE X42 Fy = 42,000 P.S.I.

PLATES, BARS, STRUCTURAL ANGLES SHALL BE A.S.T.M. A709 GRADE 36 Fy = 36,000 P.S.I.

ALL STRUCTURAL STEEL MEMBERS SHALL BE GALVANIZED.

ALL BOLTED CONNECTIONS SHALL BE MADE WITH ¾" ϕ A325 BOLTS, GALVANIZED A.S.T.M. A153, CLASS C.

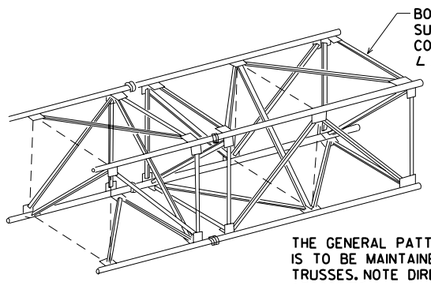
WELDED CONNECTIONS CAN BE USED IN LIEU OF BOLTED CONNECTIONS, IF UNIT CAN BE GALVANIZED IN ONE PIECE.

STEEL ANCHOR BOLTS SHALL BE A.A.S.H.T.O. M314-90 GRADE 55.
Fy = 55,000 P.S.I.

SIGNS OR BLANKS SHALL BE INSTALLED ON TRUSS AT TIME OF ERECTION. BLANKS SHALL BE ¼ THE LENGTH OF THE BRIDGE, 2'-0" DEEPER THAN C TO C OF CHORDS & SHALL BE CENTERED ON THE BRIDGE. SIGNS SHALL BE AS DESIGNATED IN PLANS.

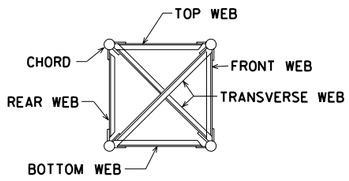
THE UPPER 12" OF ANCHOR BOLTS, NUTS AND WASHERS SHALL BE GALVANIZED IN ACCORDANCE WITH THE A.A.S.H.T.O. SPECIFICATION AS STATED IN SECTION 641. OF THE WIS. D.O.T. STANDARD SPECIFICATIONS.

WELD TEST AS PER AWS D1.1.



THE GENERAL PATTERN SHOWN ABOVE IS TO BE MAINTAINED WHEN ASSEMBLING TRUSSES. NOTE DIRECTION OF DIAGONALS AT JOINTS.

TYPICAL TRUSS SECTION



SECTION A

DESIGN DATA

DEAD LOAD - WT. OF SIGN, SUPPORTING STRUCTURE, CATWALK, LIGHTS AND RAILINGS.
ICE LOAD - 3 P.S.F. TO 1 FACE OF SIGN & AROUND SURFACE OF MEMBERS.
WIND PRESSURE - 90 M.P.H. (3-SECOND GUST SPEED) TO SIGN AREA & EXPOSED MEMBERS.

WIND COMPONENTS	NORMAL	TRANSVERSE
COMBINATION 1	1.0	0.2
COMBINATION 2	0.6	0.3
GROUP LOADS	% OF ALLOWABLE STRESS	
1. DEAD	100	
2. DEAD + WIND	133	
3. DEAD + ICE + ½ (WIND*)	133	

*MIN. VALUE OF 25 PSF FOR GR. 3

TABLE

STRUCTURE	A	B	C	CHORDS O.D. X THK.	TOP & BOTTOM WEB	FRONT & REAR WEB	COUPLING PLATE "D1" & "T"	BOLT CIRCLE DIA. "D2"	NO. OF BOLTS IN COUPLING	CAMBER	COLUMN O.D. X THK.	TOWER WEBS	"L"
S-37-91	24'-0"	26'-8"	4'-4¼"/4'-10½"	4" x 0.226"	L3" x 3" x ¼"	L3" x 3" x ¼"	9½", ⅞"	7"	6	0.8"	10¾" x 0.365"	L4" x 4" x ¼"	50'-8¼"

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE S-37-91

DRAWN BY CLS | PLANS CK'D. AEB

4-CHORD GALVANIZED STEEL SIGN BRIDGE

SHEET 2 OF 5
1070

PLANS PREPARED BY
AYRES ASSOCIATES
Engineers/Architects
Scientists/Surveyors
3433 Oakwood Hills Parkway
Eau Claire, WI 54701

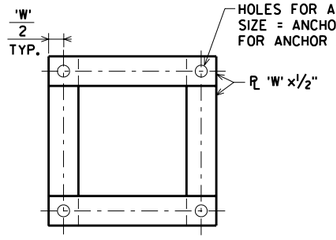
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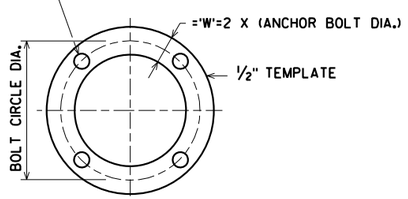
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STATE PROJECT NUMBER

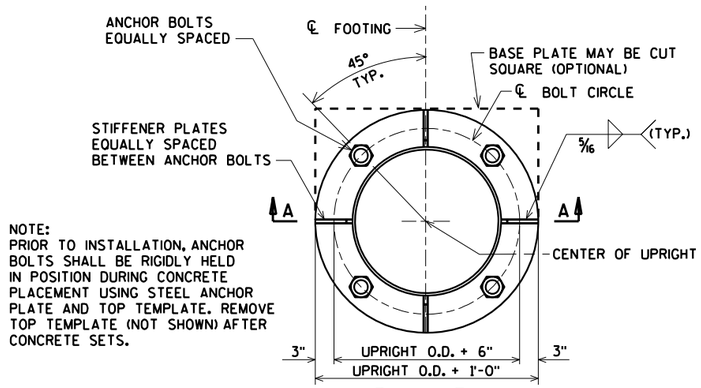
1170-01-70



ALTERNATE
ANCHOR PLATE/TEMPLATE PLAN

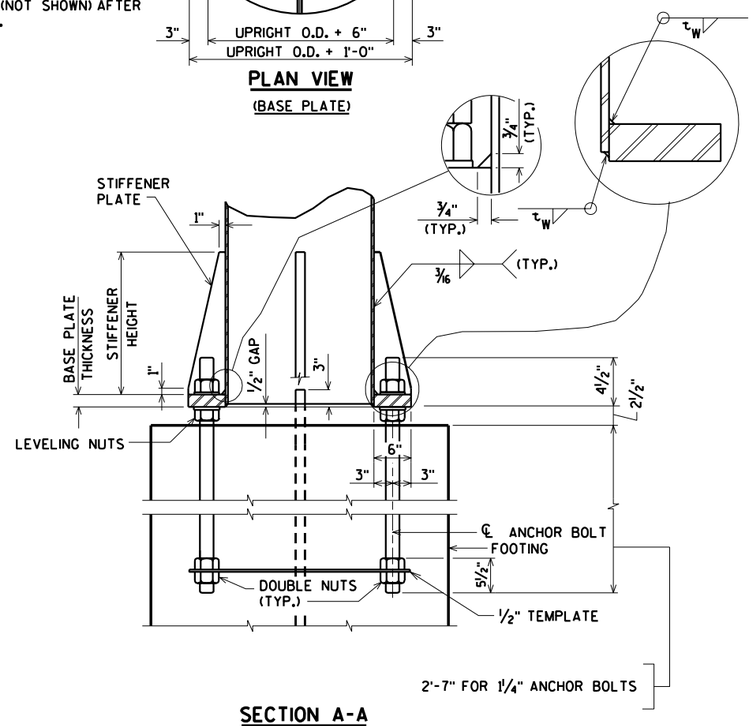


ANCHOR PLATE/TEMPLATE PLAN

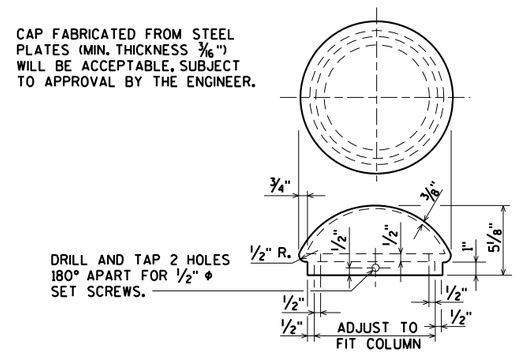


NOTE:
PRIOR TO INSTALLATION, ANCHOR BOLTS SHALL BE RIGIDLY HELD IN POSITION DURING CONCRETE PLACEMENT USING STEEL ANCHOR PLATE AND TOP TEMPLATE. REMOVE TOP TEMPLATE (NOT SHOWN) AFTER CONCRETE SETS.

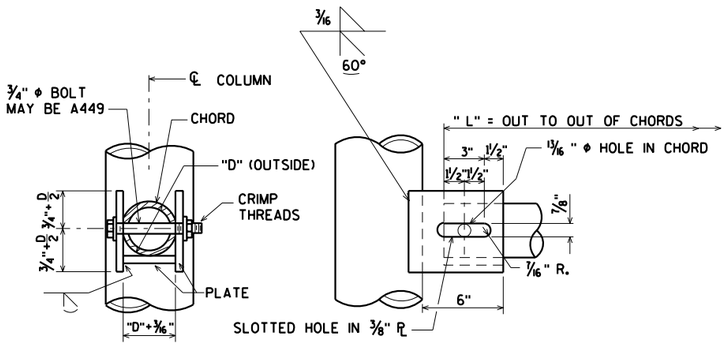
PLAN VIEW
(BASE PLATE)



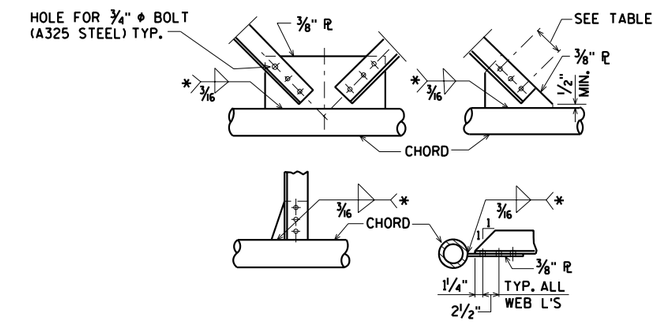
SECTION A-A



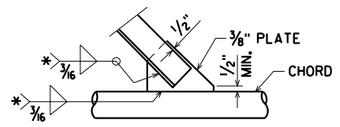
TOWER CAP DETAIL



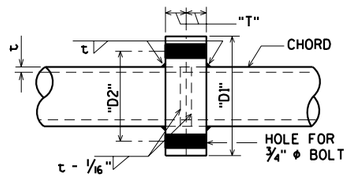
TOWER CONNECTION DETAIL



TYPICAL TRUSS CONNECTION DETAILS



TYPICAL WELDED ALTERNATE



COUPLING DETAIL

*ANGLE	WELD LENGTH	NO. OF BOLTS
● 2 1/2"x2 1/2"x1/4"	11"	3
3"x3"x3/16"	10"	3
3"x3"x1/4"	13"	4
3"x3"x5/16"	16 1/2"	5
3"x3"x3/8"	19 1/2"	6
4"x4"x1/4"	18"	5
4"x4"x5/16"	22"	6
4"x4"x3/8"	26"	8
4"x4"x7/16"	30"	9
4"x4"x1/2"	34"	10

● ONLY USED FOR BOXED END AND TRANSVERSE BRACING.

BASE PLATE & UPRIGHT COLUMN DETAILS

STRUCTURE	COLUMN O.D. X THK.	ANCHOR BOLTS	BASE PLATE THICKNESS (IN.)	STIFFENER PLATE THICKNESS (IN.)	STIFFENER PLATE HEIGHT (IN.)	τW (IN.)
S-37-91	10 3/4" x 0.365"	(4) - 1 1/4" ϕ	1 1/2	1/2	12	3/8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE S-37-91

DRAWN BY CLS | PLANS CK'D. AEB

4-CHORD SIGN BRIDGE DETAILS

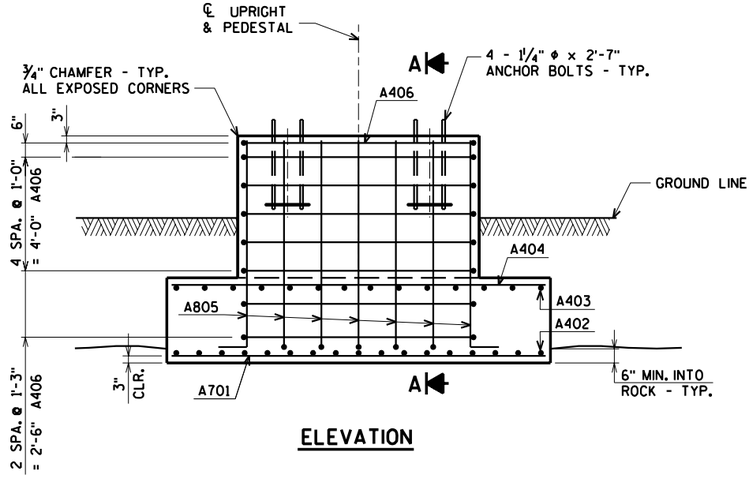
SHEET 3 OF 5
1071

PLANS PREPARED BY
AYRES ASSOCIATES
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Scientists/Surveyors
3433 Oakwood Hills Parkway
Eau Claire, WI 54701

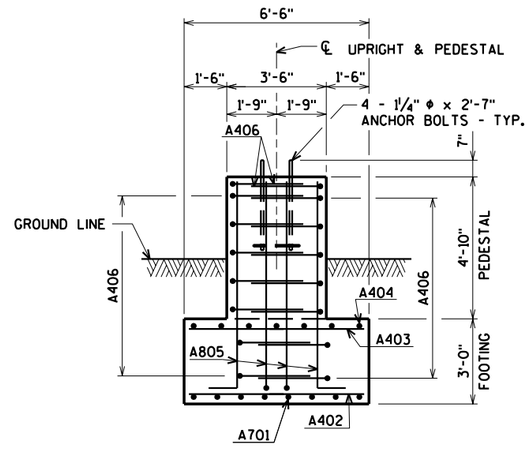
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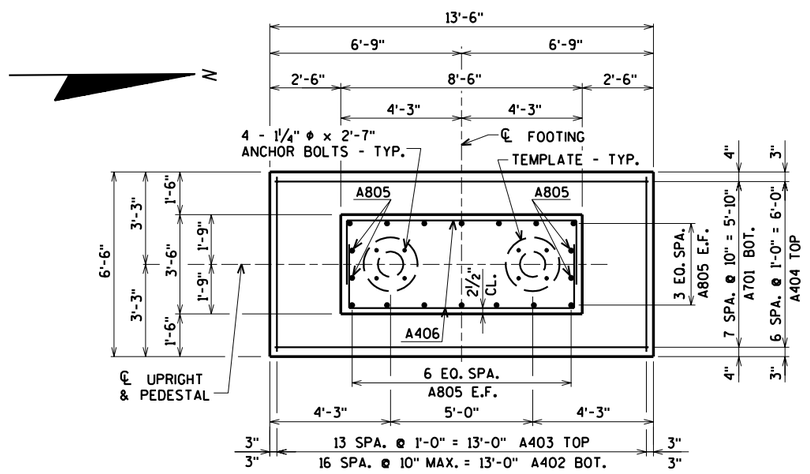
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ELEVATION



SECTION A-A
(LOOKING SOUTH)

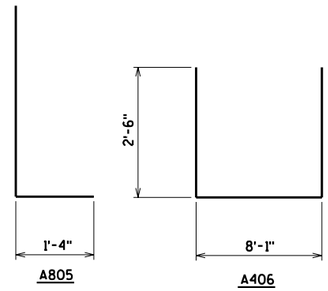


PLAN

BILL OF BARS

BAR. NO.	COATED BAR	NO. REQ'D.	LENGTH	BENT BAR	BUNDLED BAR SERIES	960# COATED LOCATION
A701	X	8	13-2			FOOTING - LONG. BOT.
A402	X	17	6-2			FOOTING - TRANS. BOT.
A403	X	14	6-2			FOOTING - TRANS. TOP
A404	X	7	13-2			FOOTING - LONG. TOP
A805	X	18	8-7	X		FOOTING & COLUMN - VERT.
A406	X	16	13-0	X		FOOTING & COLUMN - HORIZ. TIE

BENDING DIMENSIONS ARE OUT TO OUT OF BARS.



GENERAL NOTES

1. DRAWINGS SHALL NOT BE SCALED.
2. BAR STEEL REINF. SHALL BE IMBEDDED 2" CLEAR, UNLESS OTHERWISE SHOWN.
3. THE USE OF STRUCTURAL GRADE BAR STEEL IS PROHIBITED.
4. PROVIDE 2 GALVANIZED NUTS AND WASHERS PER ANCHOR BOLT. FOR FIELD ADJUSTMENT, ENLARGE NUTS FOR PROPER FIT AFTER GALVANIZING.
5. THE FIRST TWO DIGITS OF A BAR MARK SIGNIFIES THE BAR SIZE.
6. E.F. DENOTES EACH FACE

ALLOWABLE DESIGN STRESSES

CONCRETE MASONRY _____ f'_c=3,500 p.s.i.
HIGH STRENGTH BAR STEEL REINFORCEMENT (GRADE 60) _____ f_y=60,000 p.s.i.
ANCHOR BOLTS A.A.S.H.T.O. M314 _____ f_y=55,000 p.s.i.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE S-37-91

DRAWN BY CLS | PLANS CK'D. AEB

STEEL SIGN BRIDGE FOOTING A ON ROCK

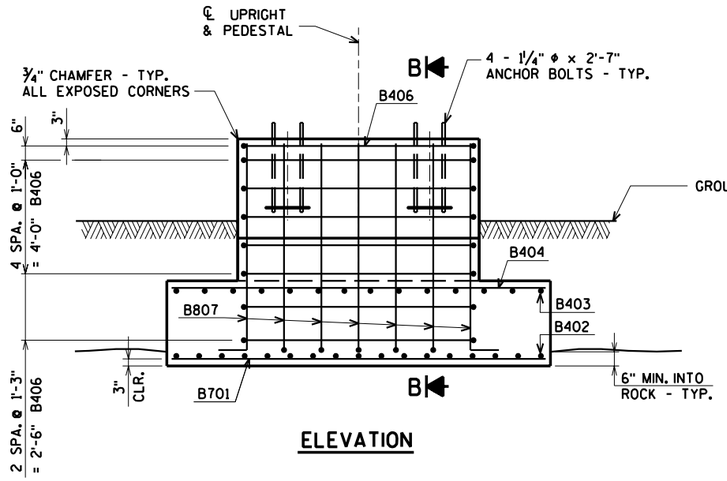
SHEET 4 OF 5
1072

ORIGINAL PLANS PREPARED BY
AYRES ASSOCIATES
3433 Oakwood Hills Parkway
Eau Claire, WI 54701
www.AyresAssociates.com

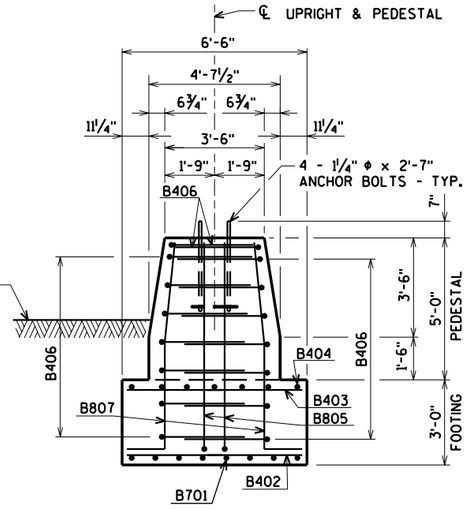
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STATE PROJECT NUMBER

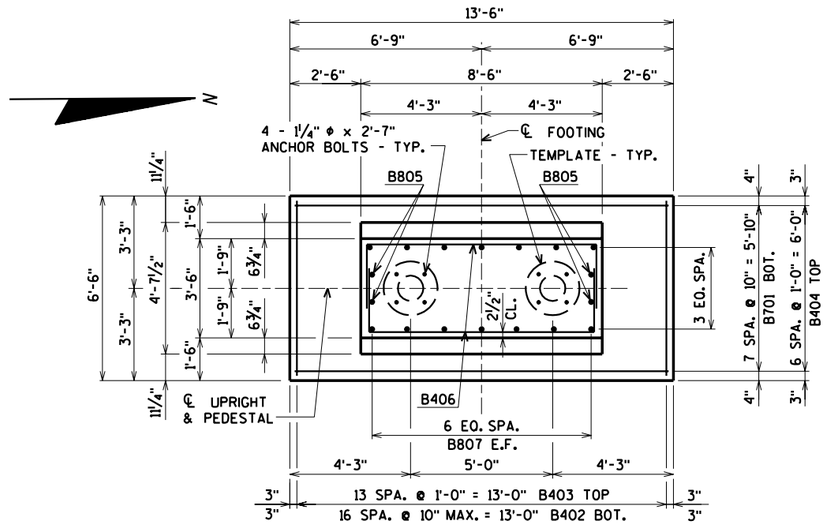
1170-01-70



ELEVATION



SECTION B-B
(LOOKING SOUTH)

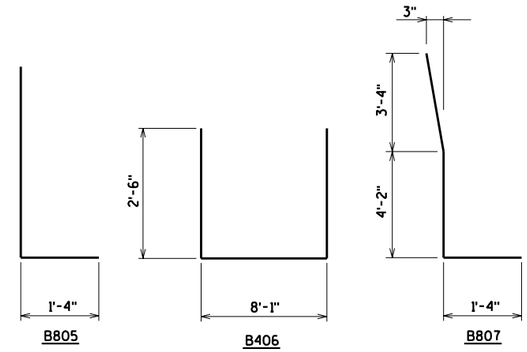


PLAN

BILL OF BARS

BAR. NO.	COATED BAR	NO. REQ'D.	LENGTH	BENT BAR	BUNDLED BAR	SERIES	960# COATED LOCATION
B701	X	8	13-2				FOOTING - LONG. BOT.
B402	X	17	6-2				FOOTING - TRANS. BOT.
B403	X	14	6-2				FOOTING - TRANS. TOP
B404	X	7	13-2				FOOTING - LONG. TOP
B805	X	4	8-7	X			FOOTING & COLUMN - VERT.
B406	X	16	13-0	X			FOOTING & COLUMN - HORIZ. TIE
B807	X	14	8-7	X			FOOTING & COLUMN - VERT.

BENDING DIMENSIONS ARE OUT TO OUT OF BARS.



GENERAL NOTES

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NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE S-37-91

DRAWN BY CLS | PLANS CK'D. AEB

STEEL SIGN BRIDGE FOOTING B ON ROCK

SHEET 5 OF 5
1073

ORIGINAL PLANS PREPARED BY
AYRES ASSOCIATES
3433 Oakwood Hills Parkway
Eau Claire, WI 54701
www.AyresAssociates.com

8

8

EARTHWORK DATA - A RAMP

STATION	COMMON SF	FILL SF	COMMON CY	FILL CY	MASS HAUL
753+50.00	350.35	6.60	0.00	0.00	0.00
754+00.00	339.72	9.67	638.95	18.83	620.12
754+50.00	340.94	6.23	630.24	18.40	1231.96
755+00.00	404.03	0.00	689.79	7.21	1914.54
755+50.00	799.78	5.28	1114.64	6.11	3023.06
756+00.00	242.45	0.00	965.03	6.11	3981.98
756+50.00	327.38	0.00	527.62	0.00	4509.60
757+00.00	441.25	0.00	711.69	0.00	5221.30
757+50.00	510.37	0.00	881.13	0.00	6102.43
758+00.00	642.89	0.00	1067.83	0.00	7170.26
758+50.00	836.74	0.00	1370.03	0.00	8540.29
759+00.00	1038.46	0.00	1736.30	0.00	10276.58
759+17.00	1105.32	0.00	674.89	0.00	10951.48
759+50.00	1242.11	0.00	1434.54	0.00	12386.02
760+00.00	1441.59	0.00	2484.91	0.00	14870.93
760+50.00	1633.33	0.70	2847.15	0.81	17717.26
761+00.00	1826.71	1.57	3203.74	2.63	20918.38

EARTHWORK DATA - B RAMP

STATION	COMMON SF	FILL SF	COMMON CY	FILL CY	MASS HAUL
761+50.00	57.02	0.00	0.00	0.00	0.00
762+00.00	112.54	2.17	157.00	2.51	154.49
762+50.00	87.72	11.57	185.43	15.90	324.01
763+00.00	413.15	18.42	463.77	34.71	753.07
763+50.00	481.15	16.15	828.06	40.01	1541.11
764+00.00	928.16	22.98	1304.92	45.29	2800.74
764+50.00	989.55	24.18	1775.66	54.58	4521.81
765+00.00	1050.75	17.64	1889.17	48.40	6362.58
765+50.00	997.25	4.45	1896.30	25.57	8233.31
766+00.00	943.67	4.41	1797.15	10.25	10020.20
766+50.00	538.93	8.62	1372.78	15.08	11377.90
767+00.00	201.85	0.95	685.91	11.08	12052.73
767+50.00	137.99	0.00	314.67	1.10	12366.30
768+00.00	99.95	0.00	220.31	0.00	12586.61
768+50.00	83.86	0.02	170.19	0.02	12756.78
769+00.00	88.74	0.04	159.81	0.07	12916.53
769+50.00	112.04	0.00	185.91	0.05	13102.39
770+00.00	139.69	0.29	233.08	0.34	13335.14
770+50.00	136.13	1.03	255.39	1.53	13589.00
771+00.00	137.50	0.01	253.36	1.20	13841.16
771+50.00	120.15	0.00	238.56	0.01	14079.71
772+00.00	120.79	0.00	223.09	0.00	14302.80
772+50.00	114.54	0.00	217.90	0.00	14520.70
773+00.00	133.20	1.11	229.39	1.28	14748.80
773+50.00	103.47	0.00	219.14	1.28	14966.66
774+00.00	82.40	0.00	172.10	0.00	15138.76
774+50.00	65.65	0.00	137.08	0.00	15275.84
775+00.00	35.59	0.00	93.74	0.00	15369.58
775+50.00	29.44	0.05	60.21	0.06	15429.74
776+00.00	34.20	0.00	58.93	0.06	15488.61
776+50.00	5.87	1.15	37.10	1.33	15524.38
777+00.00	4.46	1.20	9.56	2.72	15531.22
777+50.00	4.47	2.61	8.27	4.41	15535.08
778+00.00	8.01	0.48	11.56	3.58	15543.06
778+50.00	24.17	0.00	29.80	0.56	15572.30
779+00.00	43.07	0.00	62.26	0.00	15634.56
779+50.00	44.89	0.48	81.44	0.56	15715.45
780+00.00	57.27	0.00	94.59	0.56	15809.49
780+50.00	77.56	0.00	124.84	0.00	15934.33
781+00.00	80.56	0.00	146.41	0.00	16080.74

EARTHWORK DATA - C RAMP

STATION	COMMON SF	FILL SF	COMMON CY	FILL CY	MASS HAUL
771+50.00	34.66	486.88	0.00	0.00	0.00
772+00.00	74.90	552.74	101.44	1203.26	-1101.82
772+50.00	80.64	173.78	144.02	840.88	-1798.68
773+00.00	135.89	73.42	200.49	286.11	-1884.30
773+50.00	113.12	41.17	230.56	132.63	-1786.36
774+00.00	98.98	34.92	196.39	88.07	-1678.04
774+50.00	49.18	31.55	137.19	76.93	-1617.79
774+56.00	46.01	35.77	10.58	9.35	-1616.56
775+00.00	47.78	137.41	76.42	176.39	-1716.53
775+50.00	41.95	200.78	83.08	391.42	-2024.87
776+00.00	144.00	127.20	172.18	379.61	-2232.30
776+50.00	130.51	101.89	254.18	265.15	-2243.27
777+00.00	164.03	74.54	272.72	204.20	-2174.75
777+50.00	125.89	21.99	268.44	111.72	-2018.03
778+00.00	126.59	4.87	233.78	31.09	-1815.34
778+50.00	85.50	6.31	196.38	12.94	-1631.90
779+00.00	124.30	2.15	194.26	9.79	-1447.44
779+50.00	174.53	0.51	276.69	3.08	-1173.82
780+00.00	141.05	0.00	292.20	0.59	-882.21
780+50.00	137.28	0.00	257.71	0.00	-624.49
781+00.00	156.85	0.00	272.34	0.00	-352.15
781+50.00	41.92	0.00	184.05	0.00	-168.10
782+00.00	39.86	0.00	75.72	0.00	-92.38
782+50.00	37.88	0.00	71.98	0.00	-20.40
783+00.00	37.20	0.00	69.52	0.00	49.12
783+50.00	41.64	0.00	73.00	0.00	122.12
784+00.00	104.64	0.00	135.44	0.00	257.56
784+50.00	119.15	0.00	207.21	0.00	464.78

EARTHWORK DATA - D RAMP

STATION	END AREA						MASS HAUL
	COMMON SF	FILL SF	EBS SF	COMMON CY	FILL CY	EBS CY	
754+50.00	91.47	361.39	82.20	0.00	0.00	76.11	0.00
755+00.00	8.97	387.27	94.58	93.00	866.50	163.69	-773.50
755+50.00	36.50	182.81	95.20	42.10	659.81	175.72	-1391.22
756+00.00	161.69	63.24	0.00	183.51	284.78	88.15	-1492.49
756+50.00	366.74	0.00	0.00	489.29	73.19	0.00	-1076.40
757+00.00	587.23	2.62	0.00	883.31	3.03	0.00	-196.12
757+50.00	705.98	1.12	0.00	1197.42	4.33	0.00	996.97
758+00.00	838.33	0.40	0.00	1429.92	1.76	0.00	2425.12
758+50.00	931.34	0.10	0.00	1638.58	0.58	0.00	4063.13
759+00.00	1048.68	1.53	0.00	1833.35	1.89	0.00	5894.59
759+50.00	876.03	3.32	0.00	1782.14	5.61	0.00	7671.12
760+00.00	941.56	0.00	0.00	1682.95	3.84	0.00	9350.23
760+50.00	952.10	0.00	0.00	1753.39	0.00	0.00	11103.62
761+00.00	959.72	0.00	0.00	1770.20	0.00	0.00	12873.82
761+50.00	962.38	0.00	0.00	1779.72	0.00	0.00	14653.54
762+00.00	1146.73	0.00	0.00	1952.88	0.00	0.00	16606.42
762+50.00	1071.39	0.00	0.00	2053.81	0.00	0.00	18660.24
763+00.00	1113.65	0.00	0.00	2023.19	0.00	0.00	20683.42
763+50.00	1124.91	6.06	0.00	2072.74	7.01	0.00	22749.15
764+00.00	1029.79	0.00	0.00	1995.09	7.01	0.00	24737.23
764+50.00	720.78	0.01	0.00	1620.90	0.01	0.00	26358.12
765+00.00	995.33	0.00	0.00	1588.99	0.01	0.00	27947.09
765+50.00	1014.61	0.00	0.00	1861.06	0.00	0.00	29808.15
766+00.00	917.06	0.05	0.00	1788.58	0.06	0.00	31596.68
766+50.00	808.02	2.89	0.00	1597.30	3.40	0.00	33190.57
767+00.00	666.94	7.14	0.00	1365.70	11.61	0.00	34544.66
767+50.00	535.74	9.92	0.00	1113.59	19.75	0.00	35638.51
768+00.00	517.66	51.15	0.00	975.37	70.68	0.00	36543.20
768+50.00	381.48	52.16	0.00	832.54	119.57	0.00	37256.16
769+00.00	278.10	49.50	0.00	610.72	117.66	0.00	37749.22
769+50.00	20.73	26.87	0.00	276.69	88.39	0.00	37937.53
770+00.00	41.26	27.27	0.00	57.40	62.66	0.00	37932.26
770+50.00	138.71	3.79	0.00	166.64	35.95	0.00	38062.95

EARTHWORK DATA - E RAMP

STATION					MASS HAUL
	COMMON SF	FILL SF	COMMON CY	FILL CY	
738+50.00	35.71	70.86	0.00	0.00	0.00
739+00.00	49.97	104.51	79.33	202.97	-123.64
739+50.00	57.77	63.40	99.76	194.34	-218.22
740+00.00	118.76	19.28	163.45	95.69	-150.46
740+50.00	130.24	0.03	230.56	22.35	57.74
741+00.00	108.87	0.00	221.40	0.03	279.11
741+50.00	115.96	0.00	208.18	0.00	487.28
742+00.00	174.91	0.00	269.32	0.00	756.61
742+50.00	199.31	0.00	346.50	0.00	1103.11
743+00.00	215.07	0.00	383.69	0.00	1486.79
743+50.00	249.60	0.00	430.25	0.00	1917.04
744+00.00	136.96	8.80	357.93	10.19	2264.78
744+50.00	175.29	1.47	289.12	11.89	2542.02
745+00.00	245.18	0.00	389.32	1.70	2929.64
745+50.00	236.11	0.00	445.64	0.00	3375.28
746+00.00	236.33	0.00	437.44	0.00	3812.72
746+50.00	168.33	0.00	374.69	0.00	4187.41
747+00.00	144.64	0.96	289.79	1.11	4476.08
747+50.00	151.95	4.44	274.62	6.25	4744.45
748+00.00	360.71	28.71	474.69	38.37	5180.77
748+50.00	459.48	52.48	759.44	93.97	5846.24
749+00.00	505.91	78.51	893.88	151.61	6588.51
749+50.00	538.66	109.09	967.19	217.13	7338.57
750+00.00	542.17	152.83	1000.77	303.15	8036.19
750+50.00	597.94	187.25	1055.66	393.61	8698.24

EARTHWORK DATA - F RAMP

STATION	END AREA						MASS HAUL
	COMMON SF	ROCK SF	FILL SF	COMMON CY	ROCK CY	FILL CY	
740+50.00	390.51	58.96	21.28	0.00	0.00	0.00	0.00
741+00.00	531.91	95.88	9.38	854.09	143.37	35.49	818.61
741+50.00	683.17	145.66	4.78	1125.07	223.65	16.39	1927.29
742+00.00	845.28	269.96	2.60	1415.23	384.83	8.54	3333.98
742+50.00	1048.15	624.62	1.54	1753.18	828.31	4.79	5082.37
743+00.00	620.94	346.80	0.32	1545.45	899.46	2.15	6625.67
743+50.00	776.25	372.69	3.31	1293.69	666.19	4.20	7915.16
744+00.00	900.55	396.37	0.53	1552.59	712.09	4.44	9463.31
744+50.00	1068.56	421.45	0.00	1823.25	757.24	0.61	11285.94
745+00.00	1270.29	443.72	0.00	2165.60	801.08	0.00	13451.55
745+50.00	1556.34	484.39	0.00	2617.25	859.36	0.00	16068.80
746+00.00	1800.79	502.76	0.00	3108.45	914.03	0.00	19177.25
746+50.00	1762.68	792.05	0.00	3299.51	1198.90	0.00	22476.76
747+00.00	1382.28	893.43	3.69	2912.00	1560.63	4.27	25384.49
747+50.00	1161.77	371.12	49.22	2355.60	1170.88	61.24	27678.85
748+00.00	880.49	0.09	115.36	1890.98	343.71	190.49	29379.35
748+50.00	624.25	0.00	167.34	1393.28	0.08	327.20	30445.43
749+00.00	398.93	0.00	251.45	947.39	0.00	484.71	30908.10
749+50.00	267.35	0.00	344.73	616.93	0.00	690.02	30835.01
750+00.00	234.18	0.00	424.88	464.38	0.00	890.75	30408.63
750+50.00	204.24	0.00	502.68	405.94	0.00	1073.56	29741.01
751+00.00	167.97	0.00	661.19	344.64	0.00	1347.07	28738.58
751+50.00	0.00	0.00	886.44	155.53	0.00	1791.24	27102.87

EARTHWORK DATA - E RAMP WIDENING

STATION					MASS HAUL
	COMMON SF	FILL SF	COMMON CY	FILL CY	
746+00.00	277.30	0.00	0.00	0.00	0.00
746+50.00	205.13	0.00	446.69	0.00	446.69
747+00.00	170.18	0.96	347.51	1.11	793.09
747+50.00	148.38	4.54	294.96	6.37	1081.69
748+00.00	133.00	19.89	260.54	28.28	1313.95

EARTHWORK DATA - F RAMP WIDENING

STATION					MASS HAUL
	COMMON SF	FILL SF	COMMON CY	FILL CY	
746+00.00	1728.30	0.00	0.00	0.00	0.00
746+50.00	1702.96	0.00	3177.09	0.00	3177.09
747+00.00	1348.58	0.96	2825.50	1.11	6001.48

EARTHWORK DATA - CTH K NB

STATION	COMMON SF	FILL SF	COMMON CY	FILL CY	MASS HAUL
31+00.00	30.10	9.54	0.00	0.00	0.00
31+50.00	122.25	52.90	141.06	72.27	68.80
32+00.00	111.47	43.56	216.41	111.64	173.56
32+50.00	105.26	49.65	200.68	107.88	266.35
32+82.00	100.43	37.36	121.89	64.45	323.79
33+00.00	84.94	63.13	61.79	41.87	343.71
33+50.00	90.02	76.88	162.00	162.05	343.66
34+00.00	93.71	114.86	170.12	221.92	291.86
34+50.00	98.83	134.55	178.28	288.67	181.47
35+00.00	105.12	76.17	188.84	243.89	126.42
35+17.00	107.75	53.04	67.01	50.85	142.59
35+50.00	113.64	10.30	135.29	48.38	229.50
36+00.00	122.99	5.38	219.10	18.15	430.46
36+50.00	144.68	18.45	247.84	27.58	650.72
37+00.00	161.79	3.15	283.77	25.00	909.49
37+50.00	260.44	0.00	390.95	3.65	1296.79
38+00.00	262.26	0.00	483.98	0.00	1780.78
38+50.00	197.80	0.00	425.98	0.00	2206.76

SEE KE LINE ROUNDABOUT

40+50.00	536.80	3.16	0.00	0.00	0.00
41+00.00	824.84	1.63	1260.78	5.54	1255.23
41+50.00	352.99	1.11	1090.58	3.17	2342.65
42+00.00	229.09	1.96	538.96	3.55	2878.06
42+50.00	185.51	27.97	383.89	34.64	3227.30
42+55.00	179.16	30.66	33.77	6.79	3254.28
43+00.00	138.42	54.15	264.65	88.34	3430.59
43+50.00	116.80	41.25	236.31	110.42	3556.49
44+00.00	104.64	46.44	205.04	101.49	3660.03
44+50.00	94.71	104.46	184.58	174.65	3669.96
45+00.00	82.51	89.40	164.09	224.38	3609.68
45+50.00	67.10	85.94	138.53	202.94	3545.27
46+00.00	50.13	90.08	108.55	203.73	3450.09
46+50.00	41.69	92.79	85.02	211.66	3323.45
47+00.00	40.03	105.78	75.67	229.83	3169.29
47+50.00	39.72	136.59	73.84	280.52	2962.61
48+00.00	27.63	106.83	62.36	281.74	2743.24
48+50.00	23.84	189.27	47.66	342.71	2448.19
49+00.00	32.99	282.68	52.62	546.24	1954.57

SEE KW LINE ROUNDABOUT

EARTHWORK DATA - CTH K NB

STATION	COMMON SF	FILL SF	COMMON CY	FILL CY	MASS HAUL
51+00.00	11.94	29.12	0.00	0.00	0.00
51+50.00	36.94	433.15	45.26	535.03	-489.78
52+00.00	61.89	206.91	91.51	740.81	-1139.08
52+50.00	101.54	126.30	151.32	385.66	-1373.41
53+00.00	110.18	63.92	196.04	220.16	-1397.54
53+50.00	131.82	55.88	224.07	138.66	-1312.12
54+00.00	148.32	59.88	259.39	133.98	-1186.71
54+50.00	153.56	60.94	279.52	139.84	-1047.03
55+00.00	135.77	61.26	267.90	141.44	-920.57
55+50.00	93.04	70.16	211.86	152.11	-860.81
56+00.00	60.76	57.53	142.41	147.79	-866.20
56+50.00	45.05	76.30	97.97	154.90	-923.12
57+00.00	53.65	70.33	91.39	169.71	-1001.44
57+50.00	61.55	63.24	106.67	154.59	-1049.37
58+00.00	66.12	63.92	118.21	147.18	-1078.33
58+50.00	75.36	54.02	131.00	136.50	-1083.84
59+00.00	94.67	3.63	157.44	66.72	-993.13
59+50.00	95.68	2.50	176.25	7.09	-823.97
60+00.00	103.61	2.00	184.53	5.21	-644.65
60+50.00	136.93	3.01	222.72	5.80	-427.73
61+00.00	112.17	0.62	230.65	4.20	-201.28
61+50.00	118.22	0.43	213.32	1.22	10.83

EARTHWORK DATA - CTH K SB

STATION	COMMON SF	FILL SF	COMMON CY	FILL CY	MASS HAUL
31+00.00	14.95	68.61	0.00	0.00	0.00
31+50.00	20.24	63.83	32.58	153.29	-120.70
32+00.00	19.52	66.25	36.81	150.56	-234.44
32+50.00	19.75	77.45	36.36	166.32	-364.40
32+82.00	20.17	142.69	23.66	163.07	-503.81
33+00.00	170.82	108.28	63.66	104.57	-544.72
33+50.00	147.77	80.83	294.99	218.88	-468.61
34+00.00	126.97	116.27	254.39	228.13	-442.34
34+50.00	115.07	136.66	224.11	292.74	-510.98
35+00.00	110.79	129.29	209.13	307.81	-609.66
35+50.00	111.57	71.11	205.89	231.94	-635.71
36+00.00	145.05	11.50	237.61	95.61	-493.72
36+50.00	174.93	4.53	296.28	18.55	-215.99
37+00.00	202.25	0.00	349.24	5.24	128.01
37+50.00	136.45	0.00	313.61	0.00	441.62
38+00.00	144.77	13.14	260.39	15.21	686.80
38+50.00	188.45	0.00	308.54	15.21	980.13

SEE KE LINE ROUNDABOUT

EARTHWORK DATA - CTH K SB

STATION	COMMON SF	FILL SF	COMMON CY	FILL CY	MASS HAUL
40+50.00	585.85	35.07	0.00	0.00	0.00
41+00.00	301.83	50.94	821.93	99.55	722.38
41+50.00	206.77	60.28	470.93	128.73	1064.58
42+00.00	186.29	48.06	363.94	125.39	1303.13
42+50.00	165.85	46.82	326.06	109.81	1519.37
43+00.00	148.08	32.06	290.68	91.30	1718.75
43+50.00	135.42	36.46	262.50	79.31	1901.94
44+00.00	124.52	59.22	240.69	110.74	2031.89
44+50.00	113.82	97.16	220.69	181.00	2071.58
45+00.00	118.89	52.15	215.47	172.81	2114.24
45+50.00	117.69	57.90	219.06	127.37	2205.92
46+00.00	107.82	64.94	208.81	142.18	2272.55
46+05.00	108.23	64.79	20.00	15.02	2277.54
46+50.00	122.23	54.60	192.05	124.36	2345.22
47+00.00	122.41	45.12	226.52	115.42	2456.33
47+50.00	123.98	31.28	228.14	88.43	2596.04
48+00.00	138.47	21.31	243.01	60.87	2778.18
48+50.00	166.58	18.10	282.45	45.61	3015.02
49+00.00	206.51	21.23	345.45	45.52	3314.95

SEE KW LINE ROUNDABOUT

EARTHWORK DATA - CTH K SB

STATION	COMMON SF	FILL SF	COMMON CY	FILL CY	MASS HAUL
51+00.00	399.34	2.53	0.00	0.00	0.00
51+50.00	421.17	19.28	759.73	25.24	734.49
52+00.00	409.17	10.31	768.83	34.25	1469.07
52+50.00	315.43	25.25	670.93	41.16	2098.84
53+00.00	206.52	29.87	483.29	63.80	2518.33
53+50.00	134.52	15.43	315.78	52.43	2781.68
54+00.00	113.34	19.14	229.50	40.01	2971.17
54+50.00	116.39	53.71	212.71	84.32	3099.56
54+70.00	113.20	60.38	85.03	52.82	3131.78
55+00.00	110.52	36.78	124.29	67.47	3188.60
55+50.00	103.55	24.07	198.21	70.43	3316.38
56+00.00	102.37	21.55	190.67	52.80	3454.25
56+50.00	101.33	20.55	188.61	48.73	3594.13
57+00.00	104.37	18.77	190.46	45.51	3739.08
57+50.00	106.25	19.99	195.02	44.86	3889.24
58+00.00	103.72	24.13	194.42	51.06	4032.59
58+50.00	119.14	23.08	206.35	54.64	4184.30
59+00.00	182.39	2.04	279.19	29.07	4434.42
59+50.00	160.24	2.04	317.25	4.72	4746.95
60+00.00	134.64	4.43	273.04	7.49	5012.50
60+50.00	135.39	8.25	250.03	14.68	5247.85
61+00.00	140.40	9.76	255.36	20.84	5482.37
61+50.00	152.77	17.67	271.45	31.75	5722.07

EARTHWORK DATA - CTH K - KE RAB

STATION	COMMON SF	FILL SF	COMMON CY	FILL CY	MASS HAUL
100+00.00	232.44	0.00	0.00	0.00	0.00
100+25.00	258.59	0.00	227.33	0.00	227.33
100+50.00	244.96	0.00	233.13	0.00	460.45
100+75.00	150.54	0.00	183.10	0.00	643.56
101+00.00	221.28	0.00	172.14	0.00	815.69
101+25.00	194.87	0.00	192.66	0.00	1008.36
101+50.00	204.70	0.00	184.99	0.00	1193.34
101+75.00	199.58	0.00	187.17	0.00	1380.51
102+00.00	175.54	0.00	173.67	0.00	1554.18
102+25.00	181.98	0.00	165.52	0.00	1719.69
102+50.00	403.04	0.17	270.84	0.10	1990.44
102+75.00	488.40	3.19	412.70	1.94	2401.20
103+00.00	758.42	3.81	577.23	4.05	2974.38
103+25.00	816.14	2.29	728.96	3.53	3699.81
103+50.00	812.21	0.15	753.87	1.41	4452.27
103+75.00	614.47	0.00	660.50	0.09	5112.68
104+00.00	324.48	0.00	434.70	0.00	5547.38

EARTHWORK DATA - CTH K - KW RAB

STATION	COMMON SF	FILL SF	COMMON CY	FILL CY	MASS HAUL
200+00.00	83.78	63.20	0.00	0.00	0.00
200+25.00	29.59	93.69	52.49	90.79	-38.31
200+50.00	23.93	101.23	24.78	112.80	-126.33
200+75.00	11.26	98.94	16.29	115.84	-225.88
201+00.00	1.94	269.44	6.11	213.18	-432.95
201+25.00	1.26	299.68	1.48	329.35	-760.82
201+50.00	6.98	113.42	3.81	239.06	-996.07
201+75.00	39.30	80.40	21.43	112.16	-1086.81
202+00.00	25.45	74.69	29.98	89.75	-1146.58
202+25.00	26.82	80.65	24.20	89.90	-1212.28
202+50.00	33.60	76.29	27.97	90.82	-1275.13
202+75.00	12.08	74.91	21.15	87.50	-1341.48
203+00.00	103.76	54.61	53.63	74.95	-1362.80
203+25.00	128.21	51.25	107.39	61.26	-1316.67
203+50.00	109.68	45.81	110.13	56.17	-1262.70
203+75.00	127.44	43.71	109.78	51.81	-1204.73
204+00.00	65.10	59.76	89.14	59.88	-1175.47

EARTHWORK DATA - CTH K

STATION	COMMON SF	FILL SF	COMMON CY	FILL CY	MASS HAUL
61+50.00	247.69	15.07	0.00	0.00	0.00
62+00.00	240.98	9.65	452.47	28.61	423.86
62+50.00	237.31	5.28	442.86	17.28	849.44
63+00.00	237.66	4.19	439.79	10.96	1278.27
63+50.00	237.02	1.35	439.52	6.41	1711.38
64+00.00	239.20	2.12	440.94	4.02	2148.30
64+50.00	240.27	1.44	443.95	4.12	2588.14
65+00.00	260.79	10.24	463.94	13.52	3038.56
65+50.00	258.75	6.58	481.06	19.47	3500.15
66+00.00	252.85	2.44	473.70	10.44	3963.41
66+50.00	258.54	1.30	473.51	4.33	4432.59
66+76.00	253.74	8.77	246.65	6.06	4673.19
67+00.00	251.43	8.37	224.52	9.52	4888.19
67+50.00	264.02	1.90	477.27	11.89	5353.57
68+00.00	248.55	0.92	474.60	3.26	5824.91
68+50.00	271.22	0.00	481.27	1.06	6305.11
69+00.00	282.55	0.00	512.75	0.00	6817.86
69+50.00	259.45	0.00	501.85	0.00	7319.71
70+00.00	314.05	11.24	531.02	13.01	7837.72
70+50.00	224.01	20.82	498.20	37.11	8298.82
71+00.00	200.17	47.35	392.76	78.90	8612.68
71+50.00	199.22	77.42	369.81	144.41	8838.07
71+87.00	194.49	218.88	269.76	253.78	8854.06
72+00.00	193.38	96.60	93.38	94.94	8852.50
72+50.00	190.66	48.08	355.59	167.45	9040.64
73+00.00	193.31	36.65	355.53	98.07	9298.10
73+50.00	202.83	32.54	366.80	80.08	9584.82

EARTHWORK DATA - OVERLOOK DRIVE

STATION	COMMON SF	FILL SF	COMMON CY	FILL CY	MASS HAUL
201+00.00	9.74	63.05	0.00	0.00	0.00
202+00.00	0.00	64.68	18.04	295.67	-277.63
202+14.00	0.00	98.24	0.00	52.80	-330.43
202+29.00	0.00	92.17	0.00	66.11	-396.55
203+00.00	2.18	74.32	2.87	273.63	-667.31
203+30.00	23.17	108.85	14.08	127.20	-780.43

EARTHWORK DATA - OVERLOOK DRIVE

STATION	COMMON SF	FILL SF	COMMON CY	FILL CY	MASS HAUL
204+00.00	23.39	214.18	60.36	523.43	-1243.50
205+00.00	0.00	389.38	43.31	1397.13	-2597.32
205+28.00	0.00	377.63	0.00	497.14	-3094.45
206+00.00	29.52	192.94	39.36	950.95	-4006.04
207+00.00	54.92	89.36	156.37	653.47	-4503.14
208+00.00	1.13	29.85	103.80	275.95	-4675.30
208+90.00	46.33	30.39	79.10	125.50	-4721.70
209+00.00	39.68	17.19	15.93	11.01	-4716.78
210+00.00	55.21	0.03	175.72	39.86	-4580.92
211+00.00	116.29	0.00	317.59	0.07	-4263.40
212+00.00	101.41	0.00	403.15	0.00	-3860.25
213+00.00	67.19	1.19	312.22	2.75	-3550.78
214+00.00	77.38	3.11	267.72	9.95	-3293.01
214+58.00	121.29	6.14	213.39	12.42	-3092.05
215+00.00	132.58	0.00	197.45	5.97	-2900.56
216+00.00	83.92	1.77	400.93	4.10	-2503.73
217+00.00	96.28	6.30	333.70	18.68	-2188.71
218+00.00	125.46	0.50	410.63	15.74	-1793.82
219+00.00	231.54	0.00	661.11	1.16	-1133.87
220+00.00	458.20	0.00	1277.30	0.00	143.43
221+00.00	532.60	0.00	1834.81	0.00	1978.24
221+03.00	527.58	0.00	58.90	0.00	2037.14
222+00.00	221.08	0.00	1344.82	0.00	3381.96
222+71.00	249.92	10.32	619.28	16.96	3984.27
223+00.00	31.91	0.00	151.35	6.93	4128.70
223+30.00	221.45	5.74	140.76	3.99	4265.47
224+00.00	29.41	316.52	325.19	522.18	4068.48
225+00.00	0.00	414.11	54.46	1691.27	2431.67
226+00.00	0.00	278.74	0.00	1603.82	827.85
226+50.00	0.00	263.54	0.00	627.64	200.21
227+00.00	0.00	95.31	0.00	415.34	-215.13
228+00.00	0.00	168.17	0.00	609.91	-825.03
228+50.00	21.97	9.05	20.34	205.12	-1009.81
229+00.00	112.18	0.00	124.21	10.47	-896.07
229+50.00	247.31	0.00	332.86	0.00	-563.21
230+00.00	212.71	0.00	425.94	0.00	-137.26
230+38.00	357.95	87.64	401.58	77.09	187.22
230+50.00	229.56	240.44	130.56	91.13	226.65

EARTHWORK DATA - CASSIDY CUL-DE-SAC

STATION	COMMON SF	FILL SF	COMMON CY	FILL CY	MASS HAUL
4+50.00	65.43	0.00	0.00	0.00	0.00
4+75.00	55.09	0.00	55.80	0.00	55.80
5+00.00	93.86	1.43	68.96	0.83	123.93
5+25.00	163.96	8.72	119.36	5.87	237.41
5+50.00	198.15	0.60	167.64	5.39	399.66
5+75.00	186.45	0.00	178.06	0.35	577.37

EARTHWORK DATA - NTC TRAIL - TL LINE

STATION	COMMON SF	FILL SF	COMMON CY	FILL CY	MASS HAUL
6+25.00	52.17	0.00	0.00	0.00	0.00
6+50.00	32.63	0.00	39.26	0.00	39.26
6+75.00	29.57	0.00	28.80	0.00	68.06
7+00.00	25.25	0.00	25.38	0.00	93.44
7+25.00	12.61	0.00	17.53	0.00	110.96
7+50.00	20.89	0.00	15.51	0.00	126.47
7+75.00	23.75	0.00	20.67	0.00	147.14
8+00.00	24.97	0.00	22.56	0.00	169.69
8+25.00	21.18	0.00	21.37	0.00	191.06
8+50.00	51.10	0.00	33.46	0.00	224.52
8+75.00	13.77	0.00	30.03	0.00	254.56
9+00.00	0.00	2.86	6.38	1.66	259.28
9+26.00	0.00	18.02	0.00	12.57	246.71
9+50.00	0.00	33.77	0.00	28.77	217.94
9+76.00	0.00	33.53	0.00	40.50	177.43

EARTHWORK DATA - NTC TRAIL-TR LINE

STATION	COMMON SF	FILL SF	COMMON CY	FILL CY	MASS HAUL
25+00.00	9.40	0.00	0.00	0.00	0.00
25+25.00	0.00	73.49	4.35	42.53	-38.18
25+50.00	0.00	85.83	0.00	92.20	-130.38
25+75.00	0.00	68.04	0.00	89.05	-219.42
26+00.00	0.00	72.84	0.00	81.53	-300.95
26+25.00	0.00	76.37	0.00	86.35	-387.30
26+50.00	0.00	71.17	0.00	85.38	-472.68
26+75.00	0.00	70.29	0.00	81.86	-554.54
27+00.00	0.00	85.57	0.00	90.20	-644.74
27+25.00	0.00	99.72	0.00	107.23	-751.97
27+50.00	0.00	113.50	0.00	123.39	-875.36
27+75.00	0.00	127.61	0.00	139.53	-1014.89
28+00.00	0.00	126.01	0.00	146.77	-1161.66
28+25.00	0.00	151.64	0.00	160.68	-1322.34
28+50.00	0.00	167.90	0.00	184.92	-1507.26
28+75.00	0.00	175.56	0.00	198.76	-1706.02
29+00.00	0.00	227.70	0.00	233.37	-1939.39
29+25.00	0.00	204.75	0.00	250.26	-2189.65
29+50.00	0.00	161.48	0.00	211.94	-2401.59
29+75.00	0.00	82.87	0.00	141.41	-2542.99
30+00.00	87.75	3.23	40.63	49.83	-2552.19
30+25.00	125.82	0.00	98.88	1.87	-2455.19
30+50.00	158.24	0.00	131.51	0.00	-2323.68
30+75.00	159.36	0.00	147.04	0.00	-2176.64
31+00.00	178.96	0.00	156.63	0.00	-2020.01
31+25.00	244.75	0.00	196.16	0.00	-1823.85
31+50.00	368.50	0.00	283.91	0.00	-1539.94
31+75.00	443.73	0.00	376.03	0.00	-1163.91
32+00.00	405.92	0.00	393.36	0.00	-770.55
32+25.00	96.81	0.00	232.75	0.00	-537.80
32+50.00	0.00	26.36	44.82	15.25	-508.24
32+75.00	0.00	14.09	0.00	23.41	-531.65
33+00.00	0.75	3.32	0.35	10.08	-541.38
33+25.00	7.32	0.00	3.74	1.92	-539.56
33+50.00	11.60	0.00	8.76	0.00	-530.80
33+75.00	0.00	0.00	5.37	0.00	-525.43
34+00.00	13.56	0.00	6.28	0.00	-519.15
34+25.00	13.06	0.00	12.32	0.00	-506.83
34+50.00	12.86	0.00	12.00	0.00	-494.83
34+75.00	11.19	0.00	11.13	0.00	-483.69

EARTHWORK DATA - NTC TRAIL-TR LINE

STATION	COMMON SF	FILL SF	COMMON CY	FILL CY	MASS HAUL
35+00.00	13.43	0.00	11.40	0.00	-472.30
35+25.00	12.53	0.00	12.02	0.00	-460.28
35+50.00	8.97	0.00	9.95	0.00	-450.32
35+75.00	5.20	26.33	6.56	15.24	-459.00
36+00.00	1.74	59.53	3.21	49.69	-505.48
36+25.00	3.00	0.15	2.19	34.54	-537.82
36+50.00	10.57	0.00	6.28	0.09	-531.62

EARTHWORK DATA - 14TH AVE SIDEWALK

STATION	COMMON SF	FILL SF	COMMON CY	FILL CY	MASS HAUL
40+00.00	2.00	12.66	0.00	0.00	0.00
40+25.00	2.94	0.46	2.29	7.59	-5.31
40+50.00	3.17	0.17	2.83	0.36	-2.84
40+75.00	2.99	0.29	2.85	0.27	-0.26
41+00.00	3.01	1.11	2.78	0.81	1.71
41+25.00	1.66	2.18	2.16	1.90	1.97
41+50.00	0.30	6.22	0.91	4.86	-1.98
41+75.00	0.52	9.28	0.38	8.97	-10.57
42+00.00	4.13	12.33	2.15	12.51	-20.93
42+25.00	14.84	18.78	8.78	18.00	-30.15
42+50.00	20.28	11.68	16.26	17.63	-31.52
42+75.00	14.55	11.76	16.13	13.56	-28.96
43+00.00	1.85	2.96	7.59	8.52	-29.88
43+25.00	2.99	1.00	2.24	2.29	-29.93
43+50.00	1.67	1.95	2.16	1.71	-29.48
43+74.74	3.28	0.07	2.27	1.16	-28.37

EARTHWORK DATA - TEMP AT RAMP

STATION	END AREA						MASS HAUL
	COMMON SF	MARSH SF	FILL SF	COMMON CY	MARSH CY	FILL CY	
350+00.00	45.63	0.00	8.53	0.00	0.00	0.00	0.00
350+50.00	52.53	0.00	9.75	90.89	0.00	21.16	69.73
351+00.00	270.76	0.00	0.00	299.34	0.00	11.28	357.79
351+50.00	343.04	0.00	0.00	568.33	0.00	0.00	926.12
352+00.00	270.24	0.00	0.00	567.85	0.00	0.00	1493.97
352+50.00	6.06	0.00	20.04	255.83	0.00	23.19	1726.61
353+00.00	7.32	0.00	30.75	12.39	0.00	58.78	1680.22
353+50.00	8.79	0.00	32.97	14.92	0.00	73.75	1621.38
354+00.00	9.62	0.00	57.25	17.05	0.00	104.42	1534.01
354+50.00	28.31	0.00	126.00	35.12	0.00	212.09	1357.03
355+00.00	27.78	0.00	89.48	51.94	0.00	249.40	1159.57
355+50.00	10.38	0.00	76.43	35.33	0.00	192.03	1002.88
356+00.00	20.83	0.00	84.29	28.90	0.00	186.02	845.76
356+50.00	21.92	0.00	108.45	39.58	0.00	223.08	662.26
357+00.00	0.00	0.00	111.75	20.30	0.00	254.86	427.70
357+50.00	0.00	0.00	117.06	0.00	0.00	264.83	162.87
358+00.00	0.00	58.96	115.22	0.00	0.00	268.84	-105.97
358+50.00	10.15	95.88	92.03	9.40	143.37	239.87	-336.44
359+00.00	23.71	145.66	79.17	31.35	223.65	198.15	-503.24
359+50.00	18.01	269.96	40.56	38.63	384.83	138.58	-603.19
360+00.00	5.74	0.00	0.00	21.99	249.96	46.94	-628.14
360+50.00	0.00	0.00	0.00	5.31	0.00	0.00	-622.83

EARTHWORK DATA - TEMP BT RAMP

STATION					MASS HAUL
	COMMON SF	FILL SF	COMMON CY	FILL CY	
363+50.00	1.39	0.00	0.00	0.00	0.00
364+00.00	0.12	0.00	1.40	0.00	1.40
364+50.00	0.00	12.58	0.11	14.56	-13.05
365+00.00	11.28	14.71	10.44	31.59	-34.19
365+50.00	21.19	2.04	30.06	19.39	-23.51
365+63.00	22.74	0.13	10.58	0.65	-13.59

EARTHWORK DATA - TEMP CT RAMP

STATION					MASS HAUL
	COMMON SF	FILL SF	COMMON CY	FILL CY	
370+90.00	0.00	71.31	0.00	0.00	0.00
371+00.00	0.60	1.98	0.11	16.97	-16.85
371+50.00	7.15	0.00	7.18	2.29	-11.97
372+00.00	0.00	549.53	6.62	636.03	-641.38
372+25.00	0.00	534.53	0.00	627.35	-1268.73
372+50.00	55.63	526.55	25.75	614.05	-1857.03
373+00.00	30.24	543.76	79.51	1238.78	-3016.30
373+50.00	9.00	430.79	36.33	1127.95	-4107.92
374+00.00	12.65	202.22	20.05	732.65	-4820.52
374+50.00	1.97	1.26	13.54	235.51	-5042.50
375+00.00	2.29	0.49	3.94	2.03	-5040.58
375+50.00	12.87	14.62	14.04	17.49	-5044.03
376+00.00	19.33	11.31	29.81	30.01	-5044.22
376+50.00	36.37	8.54	51.57	22.97	-5015.63
377+00.00	45.14	9.19	75.47	20.52	-4960.67
377+50.00	42.31	10.30	80.97	22.56	-4902.26
378+00.00	39.38	12.55	75.64	26.45	-4853.07
378+50.00	37.46	10.84	71.15	27.07	-4808.99
379+00.00	35.41	7.78	67.47	21.55	-4763.07
379+50.00	35.92	5.98	66.05	15.93	-4712.95
380+00.00	30.55	3.33	61.55	10.78	-4662.18
380+25.00	28.97	2.51	27.56	3.38	-4638.00
380+50.00	20.56	1.74	22.93	2.46	-4617.53
381+00.00	33.32	1.17	49.89	3.37	-4571.01
381+50.00	27.08	0.90	55.93	2.40	-4517.48
382+00.00	31.42	0.57	54.17	1.70	-4465.02
382+50.00	33.19	0.00	59.82	0.66	-4405.85
383+00.00	29.53	0.00	58.07	0.00	-4347.78
383+50.00	24.85	0.00	50.35	0.00	-4297.42
384+00.00	26.39	0.00	47.44	0.00	-4249.98
384+50.00	24.85	0.00	47.44	0.00	-4202.54

EARTHWORK DATA - TEMP CU RAMP

STATION					MASS HAUL
	COMMON SF	FILL SF	COMMON CY	FILL CY	
372+00.00	2.41	0.00	0.00	0.00	0.00
372+25.00	0.00	175.93	1.12	101.81	-100.70
372+50.00	0.00	247.06	0.00	244.79	-345.48
373+00.00	39.91	257.69	36.95	584.20	-892.73
373+50.00	37.61	334.26	71.78	685.13	-1506.08
374+00.00	0.00	467.22	34.82	927.64	-2398.89
374+50.00	0.00	561.91	0.00	1191.12	-3590.02
375+00.00	0.00	330.93	0.00	1033.38	-4623.40
375+50.00	33.56	69.24	31.07	463.16	-5055.48
376+00.00	0.00	25.81	31.07	110.01	-5134.42
376+50.00	0.00	23.96	0.00	57.60	-5192.02

EARTHWORK DATA - TEMP DT RAMP

STATION	COMMON SF	FILL SF	COMMON CY	FILL CY	MASS HAUL
353+50.00	3.91	20.06	0.00	0.00	0.00
354+00.00	4.59	44.82	7.87	75.09	-67.22
354+50.00	3.40	69.65	7.40	132.49	-192.31
355+00.00	3.77	8.59	6.64	90.56	-276.23
355+50.00	4.56	0.52	7.71	10.54	-279.06
356+00.00	3.88	0.00	7.81	0.60	-271.85
356+50.00	4.17	0.00	7.45	0.00	-264.39
357+00.00	8.21	0.00	11.46	0.00	-252.93
357+50.00	9.75	0.00	16.63	0.00	-236.30
358+00.00	10.65	0.00	18.89	0.00	-217.41
358+50.00	26.71	0.94	34.59	1.09	-183.91
359+00.00	60.63	10.95	80.87	13.76	-116.80
359+50.00	85.29	32.10	135.11	49.83	-31.51
360+00.00	7.78	49.87	86.18	94.87	-40.21
360+50.00	39.43	72.83	43.71	142.01	-138.51
361+00.00	73.86	75.85	104.90	172.08	-205.70
361+50.00	55.96	96.92	120.20	199.97	-285.46
362+00.00	53.91	120.20	101.73	251.30	-435.02
362+50.00	25.09	143.15	73.15	304.80	-666.68
363+00.00	20.71	147.41	42.41	336.30	-960.57
363+50.00	26.81	110.37	44.00	298.36	-1214.92
364+00.00	0.78	53.08	25.55	189.18	-1378.56
364+50.00	0.26	1.37	0.96	63.02	-1440.61
365+00.00	1.07	0.00	1.23	1.59	-1440.97
365+50.00	0.94	0.00	1.86	0.00	-1439.11
366+00.00	0.00	0.00	0.87	0.00	-1438.24

EARTHWORK DATA - TEMP FT RAMP

STATION	COMMON SF	FILL SF	COMMON CY	FILL CY	MASS HAUL
342+00.00	4.04	0.00	0.00	0.00	0.00
342+50.00	3.43	0.00	6.92	0.00	6.92
343+00.00	3.48	0.00	6.40	0.00	13.31
343+50.00	9.51	0.00	12.03	0.00	25.34
344+00.00	20.31	6.66	27.61	7.71	45.25
344+50.00	1.51	21.84	20.20	32.99	32.46
345+00.00	5.30	46.35	6.31	78.92	-40.16
345+50.00	8.55	49.42	12.82	110.84	-138.18
346+00.00	8.21	59.83	15.52	126.45	-249.10

EARTHWORK DATA - TEMP ET RAMP

STATION	COMMON SF	FILL SF	COMMON CY	FILL CY	MASS HAUL
342+00.00	17.83	18.57	0.00	0.00	0.00
342+50.00	3.63	14.78	19.87	38.60	-18.73
343+00.00	3.53	8.73	6.63	27.21	-39.31
343+50.00	4.18	5.81	7.14	16.83	-49.00
344+00.00	14.38	2.97	17.19	10.16	-41.98
344+50.00	55.24	3.19	64.46	7.13	15.36
345+00.00	61.28	0.12	107.89	3.83	119.41
345+50.00	78.20	0.00	129.15	0.14	248.42

EARTHWORK DATA - USH 51 NB

STATION	COMMON SF	FILL SF	COMMON CY	FILL CY	MASS HAUL
710+00.00	174.05	2.27	0.00	0.00	0.00
711+00.00	159.55	0.72	617.78	6.92	610.86
712+00.00	154.63	0.34	581.81	2.45	1190.22
713+00.00	152.64	0.00	569.02	0.79	1758.45
714+00.00	147.89	1.81	556.54	4.19	2310.80
715+00.00	159.26	0.00	568.80	4.19	2875.40
716+00.00	151.09	0.00	574.72	0.00	3450.13
717+00.00	141.03	0.00	540.96	0.00	3991.09
718+00.00	156.33	0.00	550.67	0.00	4541.75
719+00.00	176.33	0.00	616.04	0.00	5157.79
720+00.00	185.98	0.00	670.94	0.00	5828.74
721+00.00	177.99	0.00	674.02	0.00	6502.75
722+00.00	195.66	3.42	691.94	7.92	7186.78
723+00.00	198.77	4.57	730.43	18.50	7898.71
723+31.00	223.42	4.16	242.37	6.26	8134.82
724+00.00	203.34	1.82	545.30	9.55	8670.57
725+00.00	237.08	9.88	815.59	27.08	9459.08
725+49.00	246.97	10.05	439.23	22.61	9875.70
726+00.00	249.84	10.03	469.21	23.71	10321.21
727+00.00	254.77	4.57	934.46	33.80	11221.87
728+00.00	238.88	7.39	914.17	27.69	12108.36
729+00.00	238.00	4.45	883.11	27.41	12964.06
730+00.00	295.41	0.00	987.80	10.30	13941.55
731+00.00	300.77	0.00	1104.04	0.00	15045.59
732+00.00	266.17	0.00	1049.89	0.00	16095.48
733+00.00	367.06	23.88	1172.65	55.28	17212.85
733+50.00	363.52	0.00	676.46	27.64	17861.68
734+00.00	349.74	41.09	660.43	47.56	18474.54
735+00.00	371.42	8.29	1335.48	114.31	19695.72
736+00.00	387.19	1.92	1404.83	23.63	21076.92
737+00.00	375.48	0.00	1412.35	4.44	22484.83
738+00.00	342.70	0.00	1329.96	0.00	23814.79
738+62.00	0.00	0.00	393.47	0.00	24208.26
738+67.00	265.95	0.00	24.63	0.00	24232.88
739+00.00	266.80	0.00	325.57	0.00	24558.45
740+00.00	276.84	0.00	1006.74	0.00	25565.19
741+00.00	276.85	0.00	1025.35	0.00	26590.55
742+00.00	285.18	0.00	1040.80	0.00	27631.34
743+00.00	309.16	0.00	1100.63	0.00	28731.97
744+00.00	307.18	0.00	1141.37	0.00	29873.34

EARTHWORK DATA - USH 51 NB

STATION	COMMON SF	FILL SF	COMMON CY	FILL CY	MASS HAUL
745+00.00	303.29	0.00	1130.50	0.00	31003.84
746+00.00	256.36	0.00	1036.39	0.00	32040.23
747+00.00	378.17	0.00	1175.06	0.00	33215.29
748+00.00	740.95	0.00	2072.44	0.00	35287.73
749+00.00	848.75	0.00	2943.89	0.00	38231.62
750+00.00	823.58	0.00	3096.91	0.00	41328.53
751+00.00	251.32	0.00	1990.56	0.00	43319.08
752+00.00	1388.59	0.02	3036.87	0.05	46355.91
753+00.00	382.16	0.93	3279.17	2.20	49632.87
754+00.00	176.14	0.00	1033.89	2.15	50664.61
755+00.00	134.59	0.00	575.43	0.00	51240.04
756+00.00	97.57	0.00	429.93	0.00	51669.96
757+00.00	93.11	7.26	353.11	16.81	52006.27
758+00.00	92.10	38.12	342.98	105.05	52244.20
759+00.00	99.61	66.17	355.02	241.41	52357.81
760+00.00	91.12	81.59	353.20	342.04	52368.98
761+00.00	95.50	70.66	345.59	352.43	52362.14
762+00.00	96.19	0.00	354.98	163.56	52553.56
763+00.00	24.55	0.00	223.59	0.00	52777.15

EARTHWORK DATA - USH 51 NB

STATION	COMMON SF	FILL SF	COMMON CY	FILL CY	MASS HAUL
767+00.00	54.19	48.57	0.00	0.00	0.00
768+00.00	93.63	45.78	273.74	218.40	55.34
769+00.00	85.31	41.16	331.37	201.25	185.46
770+00.00	93.24	50.23	330.65	211.55	304.56
771+00.00	93.08	34.39	345.04	195.88	453.71
772+00.00	95.34	44.43	348.93	182.45	620.19
773+00.00	98.91	72.75	359.72	271.25	708.66
774+00.00	100.84	54.26	369.91	294.00	784.56
775+00.00	100.40	11.64	372.67	152.55	1004.68
776+00.00	96.87	0.00	365.31	26.94	1343.05
777+00.00	69.75	0.00	308.56	0.00	1651.61
778+00.00	51.29	0.00	224.15	0.00	1875.75
779+00.00	41.51	0.00	171.85	0.00	2047.61
780+00.00	45.72	0.00	161.54	0.00	2209.14
781+00.00	50.63	0.00	178.43	0.00	2387.57

EARTHWORK DATA - USH 51 NB

STATION	COMMON SF	FILL SF	COMMON CY	FILL CY	MASS HAUL
782+00.00	135.55	0.00	344.78	0.00	2732.35
783+00.00	146.43	0.00	522.19	0.00	3254.53
784+00.00	147.06	0.00	543.50	0.00	3798.03
785+00.00	135.42	1.54	523.11	3.56	4317.58
786+00.00	133.02	0.54	497.11	4.81	4809.88
787+00.00	128.21	30.10	483.76	70.93	5222.71
787+66.00	127.60	38.66	312.66	105.05	5430.32
787+75.00	0.00	0.00	21.27	8.05	5443.53
788+00.00	129.69	33.89	60.04	19.61	5483.96
788+92.00	130.56	76.79	443.39	235.71	5691.64
789+00.00	130.71	82.04	38.71	29.41	5700.93
790+00.00	128.99	61.19	480.93	331.55	5850.31
791+00.00	127.38	57.74	474.76	275.30	6049.77
792+00.00	127.41	59.08	471.83	270.42	6251.18
793+00.00	128.25	66.93	473.44	291.69	6432.94
794+00.00	128.43	41.20	475.33	250.30	6657.97
795+00.00	116.51	0.00	453.59	95.37	7016.19
796+00.00	123.13	0.00	443.78	0.00	7459.97
797+00.00	118.42	0.00	447.31	0.00	7907.28
798+00.00	121.16	0.00	443.67	0.00	8350.95
799+00.00	128.50	0.00	462.33	0.00	8813.28
800+00.00	148.17	0.00	512.35	0.00	9325.64
801+00.00	135.30	0.00	524.94	0.00	9850.58
802+00.00	140.15	0.00	510.09	0.00	10360.67
803+00.00	153.14	0.00	543.13	0.00	10903.80
804+00.00	186.39	0.00	628.76	0.00	11532.56
805+00.00	239.61	0.00	788.89	0.00	12321.45
806+00.00	306.50	0.00	1011.31	0.00	13332.77
807+00.00	304.18	0.00	1130.89	0.00	14463.65
808+00.00	295.37	0.00	1110.28	0.00	15573.93
809+00.00	202.46	0.00	921.91	0.00	16495.84
810+00.00	164.30	0.00	679.19	0.00	17175.02
811+00.00	131.14	32.96	547.11	76.30	17645.84

EARTHWORK DATA - USH 51 SB

STATION	COMMON SF	FILL SF	COMMON CY	FILL CY	MASS HAUL
711+00.00	170.10	0.00	0.00	0.00	0.00
712+00.00	170.86	0.00	631.41	0.00	631.41
712+50.00	135.87	0.00	284.01	0.00	915.42
713+00.00	167.01	0.00	280.44	0.00	1195.86
714+00.00	147.97	0.00	583.30	0.00	1779.16
715+00.00	140.64	0.00	534.46	0.00	2313.62
716+00.00	140.69	0.00	520.98	0.00	2834.60
717+00.00	140.29	0.02	520.33	0.05	3354.89
718+00.00	142.86	0.00	524.35	0.05	3879.19
719+00.00	163.92	0.00	568.11	0.00	4447.31
720+00.00	193.67	0.00	662.20	0.00	5109.51
721+00.00	222.31	0.00	770.33	0.00	5879.84
722+00.00	201.24	0.00	784.35	0.00	6664.19
723+00.00	165.62	9.59	679.37	22.20	7321.37
723+30.00	162.22	18.08	182.13	19.22	7484.28
723+40.00	162.36	20.87	60.11	9.02	7535.38
723+60.00	163.75	15.79	120.78	16.97	7639.18
724+00.00	163.37	3.54	242.31	17.90	7863.60
725+00.00	148.93	2.03	578.33	12.89	8429.04
725+51.00	152.92	2.44	285.08	5.28	8708.84
726+00.00	157.93	2.47	282.07	5.57	8985.34
727+00.00	173.79	3.01	614.30	12.69	9586.95
728+00.00	260.32	1.11	803.91	9.54	10381.32
729+00.00	254.98	0.47	954.26	3.66	11331.92
730+00.00	251.52	4.19	937.96	10.79	12259.10
731+00.00	238.41	13.46	907.28	40.86	13125.52
732+00.00	232.70	52.28	872.43	152.18	13845.77
732+42.00	228.16	122.57	358.45	169.99	14034.22
733+00.00	203.99	304.10	464.16	572.84	13925.54
733+58.00	196.43	403.68	430.08	950.26	13405.36
733+67.00	196.58	430.78	65.50	173.85	13297.02
734+00.00	200.45	353.83	242.63	599.35	12940.29
734+44.00	248.19	252.50	365.56	617.56	12688.29
735+00.00	270.50	174.41	537.90	553.40	12672.79
736+00.00	279.41	76.92	1018.35	581.78	13109.36
737+00.00	278.33	110.28	1032.85	433.33	13708.88
738+00.00	268.55	193.87	1012.74	704.05	14017.57
738+76.00	229.57	495.48	701.06	1212.75	13505.88
738+85.00	224.37	519.26	75.66	211.40	13370.13
739+00.00	229.30	373.17	126.02	309.87	13186.28

EARTHWORK DATA - USH 51 SB

STATION	COMMON SF	FILL SF	COMMON CY	FILL CY	MASS HAUL
740+00.00	450.53	41.40	1258.94	959.65	13443.70
740+16.00	503.29	33.62	282.61	27.79	13698.53
741+00.00	262.09	0.00	1190.59	65.37	14823.74
742+00.00	277.52	0.00	999.28	0.00	15823.02
743+00.00	269.62	0.03	1013.22	0.07	16836.18
743+47.00	300.75	0.02	496.43	0.05	17332.55
744+00.00	301.05	0.00	590.66	0.02	17923.18
745+00.00	292.82	0.22	1099.76	0.51	19022.43
746+00.00	328.02	0.14	1149.70	0.83	20171.31
747+00.00	372.80	0.01	1297.81	0.35	21468.77
748+00.00	393.79	0.02	1419.61	0.07	22888.31
749+00.00	464.00	0.16	1588.50	0.42	24476.40
750+00.00	492.24	0.00	1770.81	0.37	26246.84
751+00.00	515.18	0.00	1865.59	0.00	28112.43
752+00.00	735.85	0.00	2316.72	0.00	30429.16
753+00.00	349.24	0.59	2009.43	1.37	32437.22
753+10.00	185.34	60.43	99.00	14.13	32522.09
754+00.00	160.14	271.17	575.80	690.83	32407.06
755+00.00	53.05	0.00	394.80	627.71	32174.14
756+00.00	65.40	0.00	219.35	0.00	32393.50
756+60.00	107.20	0.00	191.78	0.00	32585.27
757+00.00	112.23	0.00	162.54	0.00	32747.81
758+00.00	121.21	0.00	432.30	0.00	33180.11
759+00.00	166.89	0.00	533.52	0.00	33713.63
760+00.00	212.97	0.00	703.44	0.00	34417.07
761+00.00	225.52	0.00	812.02	0.00	35229.09
762+00.00	140.45	0.00	677.72	0.00	35906.81
763+00.00	283.17	3.26	784.48	7.55	36683.75
764+00.00	114.57	37.21	736.56	93.68	37326.62

EARTHWORK DATA - USH 51 SB

STATION	COMMON SF	FILL SF	COMMON CY	FILL CY	MASS HAUL
769+00.00	91.34	0.44	0.00	0.00	0.00
770+00.00	118.03	0.40	387.72	1.94	385.78
771+00.00	112.10	1.00	426.17	3.24	808.70
772+00.00	100.15	72.51	393.06	170.16	1031.60
773+00.00	95.30	15.04	361.94	202.66	1190.88
774+00.00	88.81	34.25	340.94	114.10	1417.73
775+00.00	104.50	13.72	357.98	111.04	1664.67
776+00.00	132.81	7.18	439.46	48.38	2055.75
777+00.00	168.42	31.11	557.83	88.63	2524.95
778+00.00	203.01	22.67	687.83	124.49	3088.29
779+00.00	232.13	14.63	805.81	86.34	3807.76
780+00.00	230.40	1.97	856.54	38.43	4625.88
781+00.00	236.96	0.00	865.48	4.56	5486.80
782+00.00	224.40	0.00	854.37	0.00	6341.17
783+00.00	210.49	0.00	805.35	0.00	7146.52
784+00.00	152.72	0.00	672.61	0.00	7819.13
785+00.00	144.27	79.69	549.98	184.47	8184.64
786+00.00	176.17	76.60	593.41	361.78	8416.27
787+00.00	179.30	0.53	658.28	178.54	8896.00
787+71.00	298.96	3.96	628.82	7.38	9517.45
788+00.00	145.30	0.00	238.58	2.66	9753.37
788+87.00	132.94	0.00	448.28	0.00	10201.65
789+00.00	140.42	0.00	65.81	0.00	10267.46
789+40.00	144.42	0.01	210.99	0.01	10478.44
789+71.00	130.60	0.00	157.88	0.01	10636.32
790+00.00	131.36	1.63	140.68	1.09	10775.90
791+00.00	131.53	3.17	486.83	11.11	11251.63
792+00.00	136.21	3.07	495.81	14.44	11733.00
793+00.00	138.18	2.07	508.13	11.90	12229.23
794+00.00	135.88	2.59	507.52	10.79	12725.96
795+00.00	150.71	7.30	530.72	22.89	13233.79
796+00.00	302.35	0.65	839.00	18.40	14054.39
797+00.00	146.57	12.02	831.33	29.33	14856.39
798+00.00	145.13	7.89	540.19	46.09	15350.49
799+00.00	137.38	15.47	523.17	54.07	15819.58
800+00.00	137.33	4.86	508.72	47.06	16281.24
801+00.00	140.08	3.56	513.72	19.49	16775.47
801+29.00	139.65	0.00	150.23	2.39	16923.31
802+00.00	205.60	0.00	453.94	0.00	17377.25
802+71.00	141.82	2.23	456.79	3.67	17830.38

EARTHWORK DATA - USH 51 SB

STATION	COMMON SF	FILL SF	COMMON CY	FILL CY	MASS HAUL
803+00.00	138.98	6.45	150.80	5.83	17975.35
804+00.00	218.70	0.00	662.37	14.93	18622.79
805+00.00	155.46	0.00	692.89	0.00	19315.68
806+00.00	210.65	0.00	677.98	0.00	19993.66
807+00.00	187.29	0.00	736.93	0.00	20730.59
808+00.00	158.37	0.00	640.11	0.00	21370.70
809+00.00	157.47	0.00	584.89	0.00	21955.59
810+00.00	150.82	19.86	570.91	45.97	22480.52
811+00.00	154.00	222.72	564.48	561.53	22483.48

EARTHWORK DATA - USH 51 MEDIAN

STATION	COMMON SF	FILL SF	COMMON CY	FILL CY	MASS HAUL
710+00.00	0.00	0.00	0.00	0.00	0.00
711+00.00	0.00	0.00	0.00	0.00	0.00
712+00.00	0.00	0.00	0.00	0.00	0.00
713+00.00	1.57	0.00	2.91	0.00	2.91
714+00.00	0.66	0.26	4.13	0.60	6.44
715+00.00	1.22	0.00	3.48	0.60	9.31
716+00.00	0.97	0.00	4.06	0.00	13.37
717+00.00	0.79	0.00	3.26	0.00	16.63
718+00.00	0.23	0.00	1.89	0.00	18.52
719+00.00	0.39	0.00	1.15	0.00	19.67
720+00.00	1.81	0.00	4.07	0.00	23.74
721+00.00	0.56	0.00	4.39	0.00	28.13
722+00.00	1.34	3.42	3.52	7.92	23.73
723+00.00	1.25	4.46	4.80	18.24	10.29
723+31.00	113.47	4.64	65.86	6.53	69.61
724+00.00	0.56	1.41	145.71	9.66	205.66
725+00.00	1.15	1.41	3.17	6.53	202.30
725+49.00	0.53	1.41	1.52	3.20	200.62
726+00.00	0.52	1.41	0.99	3.33	198.28
727+00.00	0.50	1.41	1.89	6.53	193.64
728+00.00	0.53	1.40	1.91	6.50	189.05
729+00.00	0.53	1.40	1.96	6.48	184.53
730+00.00	0.47	1.40	1.85	6.48	179.90
731+00.00	0.79	1.40	2.33	6.48	175.75
732+00.00	0.41	1.41	2.22	6.50	171.47

EARTHWORK DATA - USH 51 MEDIAN

STATION	COMMON SF	FILL SF	COMMON CY	FILL CY	MASS HAUL
733+00.00	0.90	1.11	2.43	5.83	168.06
733+50.00	1.70	1.05	2.41	2.50	167.97
734+00.00	1.48	1.04	2.94	2.42	168.49
735+00.00	1.38	0.99	5.30	4.70	169.09
736+00.00	0.39	1.27	3.28	5.23	167.14
737+00.00	9.70	1.26	18.69	5.86	179.97
738+00.00	12.64	0.10	41.37	3.15	218.19
738+67.00	20.98	0.54	41.71	0.99	258.91
739+00.00	18.73	0.02	24.27	0.43	282.75
740+00.00	27.57	0.00	85.74	0.05	368.44
741+00.00	34.82	0.00	115.54	0.00	483.98
742+00.00	34.88	0.00	129.07	0.00	613.05
743+00.00	38.21	0.00	135.35	0.00	748.41
744+00.00	35.89	0.00	137.22	0.00	885.63
745+00.00	37.03	0.00	135.04	0.00	1020.67
746+00.00	41.20	0.00	144.87	0.00	1165.54
747+00.00	43.40	0.00	156.67	0.00	1322.20
748+00.00	46.45	0.00	166.39	0.00	1488.59
749+00.00	48.00	0.00	174.91	0.00	1663.50
750+00.00	52.41	0.00	185.94	0.00	1849.44
751+00.00	50.40	0.00	190.39	0.00	2039.83
752+00.00	55.25	0.02	195.65	0.05	2235.43
753+00.00	58.39	0.00	210.44	0.05	2445.83
754+00.00	64.94	0.00	228.39	0.00	2674.22
755+00.00	83.58	0.00	275.04	0.00	2949.26
756+00.00	42.27	0.00	233.06	0.00	3182.31
757+00.00	40.12	0.00	152.57	0.00	3182.31
758+00.00	51.82	0.00	170.26	0.00	3182.31
759+00.00	51.18	0.00	190.74	0.00	3182.31
760+00.00	42.12	0.00	172.78	0.00	3182.31
761+00.00	33.04	5.50	139.19	0.00	3182.31
762+00.00	37.48	2.63	130.59	0.00	3182.31
763+00.00	53.54	0.00	168.56	0.00	3182.31
764+00.00	0.00	0.00	99.15	0.00	3182.31

EARTHWORK DATA - USH 51 MEDIAN

STATION	COMMON SF	FILL SF	COMMON CY	FILL CY	MASS HAUL
767+00.00	0.00	0.00	0.00	0.00	0.00
768+00.00	54.75	0.00	101.39	0.00	101.39
769+00.00	31.76	7.86	160.20	18.19	243.40
770+00.00	34.96	0.05	123.56	18.31	348.64
771+00.00	129.63	0.00	304.80	0.12	653.32
772+00.00	45.53	0.00	324.37	0.00	977.69
773+00.00	75.41	0.41	223.96	0.95	1200.71
774+00.00	95.36	0.87	316.24	2.96	1513.99
775+00.00	103.81	0.00	368.83	2.01	1880.81
776+00.00	109.06	1.21	394.20	2.80	2272.21
777+00.00	108.03	0.12	402.02	3.08	2671.15
778+00.00	69.68	0.00	329.09	0.28	2999.96
779+00.00	72.21	0.00	262.76	0.00	3262.72
780+00.00	78.75	0.00	279.56	0.00	3542.28
781+00.00	84.88	0.00	303.02	0.00	3845.30
782+00.00	96.38	0.00	335.67	0.00	4180.96
783+00.00	97.37	0.00	358.80	0.00	4539.76
784+00.00	91.81	3.05	350.33	7.06	4883.03
785+00.00	93.41	4.74	343.00	18.03	5208.00
786+00.00	161.79	0.00	472.59	10.97	5669.62
787+00.00	156.59	0.45	589.59	1.04	6258.17
787+66.00	293.47	0.33	550.07	1.19	6807.05
788+00.00	164.52	2.30	288.36	2.07	7093.35
788+92.00	122.00	0.00	488.15	4.90	7576.59
789+00.00	138.14	0.00	38.54	0.00	7615.13
789+44.00	188.78	0.00	266.38	0.00	7881.51
790+00.00	210.13	1.67	413.68	2.16	8293.03
791+00.00	188.91	0.00	738.96	3.87	9028.13
792+00.00	158.40	0.44	643.17	1.02	9670.28
793+00.00	158.39	0.08	586.65	1.20	10255.72
794+00.00	177.33	0.31	621.70	0.90	10876.52
795+00.00	152.54	0.00	610.87	0.72	11486.68
796+00.00	143.78	0.00	548.74	0.00	12035.42
797+00.00	155.86	0.62	554.89	1.44	12588.87
798+00.00	144.63	0.00	556.46	1.44	13143.90
799+00.00	150.47	0.00	546.48	0.00	13690.38
800+00.00	139.92	0.00	537.76	0.00	14228.14
801+00.00	155.90	37.88	547.81	87.69	14688.27
802+00.00	141.02	0.00	549.85	87.69	15150.44
803+00.00	135.01	0.00	511.17	0.00	15661.60

EARTHWORK DATA - USH 51 MEDIAN

STATION	COMMON SF	FILL SF	COMMON CY	FILL CY	MASS HAUL
804+00.00	123.51	0.00	478.74	0.00	16140.34
805+00.00	129.65	0.00	468.81	0.00	16609.16
806+00.00	117.32	0.00	457.35	0.00	17066.51
807+00.00	79.93	0.00	365.28	0.00	17431.79
808+00.00	61.31	0.00	261.56	0.00	17431.79
809+00.00	46.40	0.00	199.46	0.00	17431.79
810+00.00	57.28	0.00	192.00	0.00	17431.79
811+00.00	58.36	0.00	214.15	0.00	17431.79

EARTHWORK DATA - NB RUNAROUND (NR)

STATION	END AREA						MASS HAUL
	COMMON SF	MARSH SF	FILL SF	COMMON CY	MARSH CY	FILL CY	
324+00.00	16.25	0.00	39.02	0.00	0.00	0.00	0.00
325+00.00	18.07	0.00	37.06	63.56	0.00	176.11	-112.56
326+00.00	28.84	0.00	48.67	86.87	0.00	198.45	-224.13
327+00.00	27.82	0.00	44.56	104.93	0.00	215.81	-335.02
328+00.00	28.57	0.00	41.39	104.43	0.00	198.96	-429.55
329+00.00	30.87	0.00	44.82	110.07	0.00	199.56	-519.04
330+00.00	29.85	0.00	49.74	112.44	0.00	218.89	-625.48
331+00.00	29.43	0.00	54.34	109.78	0.00	240.93	-756.63
332+00.00	28.70	0.00	80.79	107.65	0.00	312.80	-961.78
332+39.00	29.52	0.00	132.49	42.05	0.00	192.54	-1112.28
332+50.00	32.38	0.00	134.60	12.61	0.00	68.01	-1167.68
333+00.00	61.07	0.00	171.92	86.53	0.00	354.77	-1435.92
333+22.00	58.02	0.00	156.23	48.52	0.00	167.11	-1554.51
333+50.00	33.10	0.00	167.29	47.25	0.00	209.69	-1716.96
334+00.00	34.00	0.00	140.10	62.13	0.00	355.78	-2010.60
335+00.00	29.00	0.00	114.60	116.67	0.00	589.58	-2483.52
336+00.00	33.21	0.00	89.14	115.20	0.00	471.62	-2839.94
337+00.00	51.96	0.00	75.59	157.72	0.00	381.32	-3063.53
338+00.00	48.33	0.00	127.35	185.72	0.00	469.77	-3347.58
338+40.00	46.76	0.00	187.65	70.44	0.00	291.67	-3568.81
338+55.00	59.00	0.00	160.53	29.38	0.00	120.90	-3660.33
339+00.00	48.55	0.00	181.28	89.63	0.00	356.05	-3926.75
340+00.00	45.50	0.00	62.47	174.17	0.00	564.24	-4316.82
341+00.00	40.66	0.00	41.60	159.56	0.00	240.90	-4398.17
341+50.00	45.76	0.00	28.06	80.02	0.00	80.63	-4398.78
342+00.00	41.49	0.00	21.75	80.79	0.00	57.65	-4375.64
342+50.00	17.69	0.00	12.26	54.80	0.00	39.36	-4360.21
343+00.00	22.41	0.00	3.20	37.13	0.00	17.89	-4340.97
344+00.00	35.41	0.00	4.85	107.07	0.00	18.63	-4252.53
345+00.00	48.44	0.00	1.93	155.28	0.00	15.69	-4112.95
346+00.00	40.38	0.00	1.45	164.48	0.00	7.82	-3956.29
347+00.00	79.73	0.00	2.10	222.43	0.00	8.22	-3742.08
348+00.00	80.22	0.00	6.41	296.20	0.00	19.70	-3465.58
349+00.00	75.87	0.00	8.87	289.06	0.00	35.37	-3211.89
350+00.00	51.77	0.00	9.52	236.37	0.00	42.57	-3018.09
351+00.00	277.82	0.00	5.46	610.35	0.00	34.68	-2442.42
352+00.00	89.04	0.00	0.00	679.37	0.00	12.64	-1775.68
352+66.00	59.79	0.00	23.52	181.90	0.00	35.93	-1629.71
353+00.00	39.16	0.00	34.92	62.30	0.00	45.99	-1613.41
354+00.00	28.58	0.00	81.24	125.44	0.00	268.89	-1756.85

EARTHWORK DATA - NB RUNAROUND (NR)

STATION	END AREA						MASS HAUL
	COMMON SF	MARSH SF	FILL SF	COMMON CY	MARSH CY	FILL CY	
355+00.00	23.50	0.00	85.24	96.44	0.00	385.37	-2045.78
355+50.00	22.37	0.00	109.54	42.47	0.00	225.44	-2228.74
356+00.00	29.86	0.00	170.41	48.36	0.00	324.02	-2504.40
356+50.00	27.65	0.00	261.07	53.25	0.00	499.40	-2950.55
357+00.00	35.92	0.00	362.97	58.86	0.00	722.27	-3613.96
357+50.00	47.05	0.00	518.29	76.82	0.00	1019.98	-4557.11
358+00.00	54.65	0.00	706.58	94.17	0.00	1417.67	-5880.62
359+00.00	79.86	134.37	1029.61	249.09	0.00	4018.96	-9650.48
360+00.00	77.59	118.88	1131.54	291.57	468.98	5002.66	-14361.57
361+00.00	85.97	105.95	980.68	302.89	416.35	4889.40	-18948.08
362+00.00	0.00	81.22	683.49	159.20	346.61	3852.25	-22641.12
363+00.00	0.00	0.00	367.88	0.00	0.00	2433.73	-25074.85
364+00.00	2.41	0.00	352.01	4.46	0.00	1666.41	-26736.80
365+00.00	20.21	0.00	427.28	41.89	0.00	1803.91	-28498.82
365+50.00	4.24	0.00	408.50	22.64	0.00	967.34	-29443.52
366+00.00	8.07	0.00	329.54	11.40	0.00	854.21	-30286.33
366+50.00	23.60	0.00	237.82	29.32	0.00	656.67	-30913.68
367+00.00	24.06	0.00	172.23	44.13	0.00	474.59	-31344.14
368+00.00	32.39	0.00	91.32	104.54	0.00	610.07	-31849.67
369+00.00	30.23	0.00	70.27	115.96	0.00	374.05	-32107.76
370+00.00	33.73	0.00	57.31	118.44	0.00	295.32	-32284.64
371+00.00	32.66	0.00	67.13	122.94	0.00	288.06	-32449.75
372+00.00	28.05	0.00	50.36	112.43	0.00	271.97	-32609.29
373+00.00	57.84	0.00	60.77	159.06	0.00	257.25	-32707.48
374+00.00	49.18	0.00	56.54	198.19	0.00	271.55	-32780.85
374+50.00	38.90	0.00	140.45	81.56	0.00	228.00	-32927.29
374+74.00	35.65	0.00	156.70	33.13	0.00	165.08	-33059.24
375+00.00	73.17	0.00	169.31	52.39	0.00	196.21	-33203.06
375+50.00	74.73	0.00	234.40	136.94	0.00	467.26	-33533.37
376+00.00	66.51	0.00	259.68	130.78	0.00	571.85	-33974.44
376+50.00	69.72	0.00	172.89	126.14	0.00	500.66	-34348.96
377+00.00	52.64	0.00	171.75	113.30	0.00	398.89	-34634.56
377+50.00	38.92	0.00	133.37	84.78	0.00	353.15	-34902.93
378+00.00	25.90	0.00	77.15	60.02	0.00	243.66	-35086.57
379+00.00	28.29	0.00	30.35	100.35	0.00	248.84	-35235.06
380+00.00	46.29	0.00	53.82	138.11	0.00	194.84	-35291.78
381+00.00	29.05	0.00	47.68	139.52	0.00	234.95	-35387.22
382+00.00	28.80	0.00	49.61	107.13	0.00	225.21	-35505.30
383+00.00	21.94	0.00	64.12	93.96	0.00	263.26	-35674.60
384+00.00	22.12	0.00	76.25	81.59	0.00	324.93	-35917.94

EARTHWORK DATA - NB RUNAROUND (NR)

STATION	END AREA						MASS HAUL
	COMMON SF	MARSH	FILL SF	COMMON CY	MARSH CY	FILL CY	
385+00.00	19.55	0.00	75.27	77.17	0.00	350.74	-36191.51
385+50.00	19.14	0.00	78.45	35.82	0.00	177.92	-36333.60
386+00.00	25.32	0.00	138.12	41.17	0.00	250.66	-36543.10
386+50.00	35.36	0.00	133.46	56.19	0.00	314.33	-36801.24
387+00.00	27.13	0.00	115.48	57.86	0.00	288.13	-37031.50
387+50.00	17.34	0.00	135.02	41.18	0.00	289.93	-37280.26
387+75.00	16.19	0.00	147.66	15.52	0.00	163.59	-37428.32
388+00.00	16.99	0.00	125.83	15.36	0.00	158.27	-37571.23
388+50.00	17.85	0.00	46.82	32.26	0.00	199.83	-37738.80
389+00.00	6.47	0.00	0.00	22.52	0.00	54.19	-37770.47
389+50.00	15.13	0.00	95.63	20.00	0.00	110.68	-37861.15
389+75.00	15.12	0.00	166.47	14.00	0.00	151.68	-37998.83
390+00.00	16.06	0.00	158.98	14.44	0.00	188.34	-38172.73
390+50.00	16.47	0.00	158.95	30.12	0.00	367.97	-38510.58
391+00.00	16.78	0.00	139.39	30.79	0.00	345.30	-38825.10
392+00.00	13.05	0.00	123.58	55.24	0.00	608.73	-39378.58
393+00.00	15.90	0.00	136.12	53.61	0.00	601.16	-39926.13
394+00.00	13.43	0.00	170.46	54.31	0.00	709.68	-40581.49
395+00.00	14.50	0.00	157.26	51.72	0.00	758.61	-41288.38
396+00.00	15.98	0.00	142.74	56.44	0.00	694.44	-41926.38
397+00.00	14.45	0.00	155.87	56.35	0.00	691.23	-42561.26
398+00.00	17.82	0.00	127.36	59.76	0.00	655.63	-43157.12
399+00.00	15.88	0.00	117.27	62.41	0.00	566.27	-43660.99
400+00.00	19.83	0.00	100.92	66.13	0.00	505.07	-44099.93
401+00.00	17.19	0.00	94.75	68.56	0.00	452.94	-44484.31
402+00.00	22.68	0.00	60.15	73.83	0.00	358.56	-44769.04
402+76.00	20.30	0.00	120.09	60.49	0.00	317.09	-45025.64
403+00.00	19.76	0.00	124.13	17.80	0.00	135.68	-45143.51
404+00.00	20.96	0.00	82.12	75.41	0.00	477.43	-45545.54
405+00.00	18.74	0.00	72.76	73.52	0.00	358.52	-45830.54
406+00.00	22.17	0.00	55.32	75.76	0.00	296.48	-46051.26
407+00.00	23.57	0.00	35.35	84.70	0.00	209.88	-46176.44
408+00.00	21.92	0.00	10.93	84.24	0.00	107.13	-46199.33
409+00.00	21.44	0.00	1.70	80.30	0.00	29.24	-46148.27
410+00.00	20.06	0.00	0.00	76.85	0.00	3.94	-46075.35
411+00.00	19.21	0.00	0.00	72.72	0.00	0.00	-46002.63

EARTHWORK DATA - NB RUNAROUND (NR)

STATION					MASS HAUL
	COMMON SF	FILL SF	COMMON CY	FILL CY	
413+00.00	5.80	32.05	0.00	0.00	0.00
414+00.00	14.47	8.22	37.54	93.22	-55.68
415+00.00	12.62	51.86	50.17	139.07	-144.59
416+00.00	12.93	107.22	47.31	368.24	-465.51
417+00.00	17.57	151.26	56.48	598.33	-1007.37
418+00.00	0.00	155.00	32.54	708.94	-1683.76
418+55.00	0.00	192.81	0.00	442.81	-2126.58
419+00.00	1.62	98.19	1.35	303.13	-2428.35
420+00.00	17.06	21.84	34.59	277.85	-2671.61
421+00.00	17.74	8.14	64.44	69.40	-2676.56
422+00.00	13.53	3.76	57.91	27.55	-2646.20
423+00.00	13.78	0.00	50.57	8.70	-2604.33

EARTHWORK DATA - NS LINE - INSIDE MEDIAN WIDENING

STATION					MASS HAUL
	COMMON SF	FILL SF	COMMON CY	FILL CY	
705+00.00	30.29	0.38	0.00	0.00	0.00
705+50.00	29.47	7.76	55.33	9.42	45.91
706+00.00	29.42	1.27	54.53	10.45	89.99
706+50.00	33.55	3.62	58.31	5.66	142.63
707+00.00	33.76	8.18	62.32	13.66	191.30
707+50.00	33.49	9.79	62.27	20.80	232.77
708+00.00	31.74	10.03	60.40	22.94	270.23
708+50.00	30.37	11.54	57.51	24.97	302.77
709+00.00	29.83	12.39	55.74	27.70	330.82
709+50.00	32.42	13.19	57.64	29.61	358.85
710+00.00	35.85	9.05	63.21	25.74	396.32
710+50.00	34.19	12.44	64.85	24.87	436.30
711+00.00	34.15	12.88	63.28	29.31	470.27
711+50.00	35.47	15.15	64.46	32.44	502.29
711+88.00	35.80	15.18	50.15	26.68	525.77
712+00.00	37.11	8.66	16.20	6.62	535.35
712+50.00	34.39	13.84	66.20	26.04	575.51
713+00.00	36.73	11.34	65.85	29.14	612.22
713+50.00	36.56	11.97	67.86	26.98	653.10
714+00.00	35.69	15.62	66.90	31.93	688.07
714+50.00	36.40	19.31	66.75	40.43	714.39
715+00.00	37.89	14.95	68.79	39.65	743.52

EARTHWORK DATA - NS LINE - INSIDE MEDIAN WIDENING

STATION					MASS HAUL
	COMMON SF	FILL SF	COMMON CY	FILL CY	
715+50.00	37.67	12.13	69.96	31.34	782.14
716+00.00	37.75	9.68	69.83	25.24	826.73
716+50.00	37.78	6.94	69.94	19.24	877.43
717+00.00	36.47	8.55	68.75	17.93	928.25
717+50.00	35.33	12.18	66.48	23.99	970.74
718+00.00	34.84	16.21	64.97	32.86	1002.85
718+50.00	34.69	24.14	64.38	46.70	1020.53
719+00.00	35.87	18.85	65.33	49.76	1036.11
719+50.00	36.36	19.93	66.88	44.88	1058.10
720+00.00	42.14	12.55	72.69	37.59	1093.20
720+50.00	45.65	7.16	81.29	22.81	1151.67
721+00.00	39.51	8.54	78.85	18.17	1212.35
721+50.00	44.71	7.59	77.98	18.67	1271.66
722+00.00	44.84	11.08	82.92	21.61	1332.97
722+50.00	40.08	11.44	78.63	26.06	1385.54
723+00.00	36.32	17.15	70.74	33.09	1423.19
723+50.00	36.21	8.61	67.16	29.81	1460.53
723+60.00	36.81	7.71	13.52	3.78	1470.28
724+00.00	34.84	3.76	53.07	10.62	1512.73
724+50.00	28.14	3.96	58.31	8.94	1562.11
725+00.00	27.99	0.00	51.97	4.58	1609.50
725+50.00	24.93	5.71	49.00	6.61	1651.89
726+00.00	28.60	0.51	49.56	7.20	1694.25
726+50.00	17.55	0.00	42.73	0.59	1736.40
727+00.00	12.94	0.00	28.23	0.00	1764.63

EARTHWORK DATA - NS LINE - OUTSIDE WIDENING

STATION	COMMON SF	FILL SF	COMMON CY	FILL CY	MASS HAUL
706+50.00	18.59	0.00	0.00	0.00	0.00
707+00.00	18.67	0.00	34.50	0.00	34.50
707+50.00	18.65	0.05	34.56	0.06	69.00
708+00.00	39.61	0.00	53.94	0.06	122.88
708+50.00	37.31	0.81	71.22	0.94	193.17
709+00.00	36.66	1.72	68.49	2.93	258.73
709+50.00	31.43	11.86	63.05	15.72	306.06
710+00.00	31.29	18.62	58.07	35.28	328.86
710+50.00	31.36	17.35	58.01	41.63	345.23
711+00.00	32.89	36.03	59.49	61.78	342.94
711+50.00	33.96	58.10	61.90	108.95	295.89
711+88.00	34.66	54.77	48.29	99.28	244.90
712+00.00	34.62	46.99	15.40	28.27	232.03
712+50.00	37.35	17.88	66.64	75.08	223.58
713+00.00	42.66	17.20	74.08	40.60	257.07
713+50.00	44.27	10.30	80.49	31.83	305.73
714+00.00	40.80	11.77	78.77	25.54	358.95
714+50.00	38.25	14.09	73.19	29.93	402.22
715+00.00	37.72	11.22	70.34	29.29	443.27
715+50.00	40.26	11.25	72.20	26.01	489.46
716+00.00	38.42	7.52	72.85	21.72	540.59
716+50.00	38.42	7.21	71.15	17.05	594.69
717+00.00	37.43	5.34	70.23	14.53	650.39
717+50.00	36.00	4.23	67.99	11.08	707.31
718+00.00	39.56	2.83	69.96	8.17	769.10
718+50.00	46.29	1.56	79.49	5.08	843.51
719+00.00	52.64	0.52	91.60	2.41	932.71
719+50.00	62.76	0.00	106.85	0.60	1038.96
720+00.00	66.29	0.49	119.49	0.57	1157.88
720+50.00	42.12	3.33	100.38	4.42	1253.84
721+00.00	40.30	0.67	76.31	4.63	1325.52
721+50.00	39.29	1.88	73.69	2.95	1396.27
722+00.00	38.37	3.95	71.91	6.75	1461.42
722+50.00	21.57	4.18	55.50	9.41	1507.52
723+00.00	18.83	5.19	37.41	10.84	1534.08
723+50.00	19.97	3.25	35.93	9.77	1560.24
723+60.00	19.80	3.21	7.36	1.50	1566.10
724+00.00	19.86	4.20	29.38	6.86	1588.62

EARTHWORK DATA - SB RUNAROUND (SR)

STATION	COMMON SF	FILL SF	COMMON CY	FILL CY	MASS HAUL
355+00.00	23.69	7.11	0.00	0.00	0.00
356+00.00	58.24	0.59	151.72	17.82	133.90
356+50.00	61.59	0.00	110.95	0.68	244.17
357+00.00	56.14	0.00	109.01	0.00	353.18
358+00.00	34.43	0.00	167.72	0.00	520.90
359+00.00	22.29	0.00	105.04	0.00	625.94
360+00.00	16.13	0.00	71.15	0.00	697.09
361+00.00	13.31	0.00	54.52	0.00	751.60
362+00.00	19.19	0.00	60.19	0.00	811.79
369+00.00	34.70	0.00	698.57	0.00	1510.36
370+00.00	11.34	0.00	85.26	0.00	1595.62
371+00.00	10.75	0.54	40.91	1.25	1635.28
372+00.00	10.88	9.85	40.06	24.05	1651.28
373+00.00	11.79	36.59	41.98	107.50	1585.77
374+00.00	10.19	67.92	40.70	241.92	1384.55
375+00.00	53.74	31.97	118.39	231.23	1271.71
376+00.00	12.40	73.49	122.48	244.12	1150.07
377+00.00	8.73	79.11	39.13	353.24	835.96
378+00.00	19.27	50.26	51.85	299.47	588.34
379+00.00	16.37	64.98	66.00	266.76	387.59
380+00.00	17.82	57.24	63.31	282.92	167.98

EARTHWORK DATA - USH 51 - ST LINE

STATION	COMMON SF	FILL SF	COMMON CY	FILL CY	MASS HAUL
348+00.00	23.09	0.00	0.00	0.00	0.00
348+50.00	22.63	0.70	42.33	0.81	41.52
349+00.00	22.27	2.17	41.57	3.32	79.78
349+50.00	21.96	0.38	40.95	2.95	117.78
350+00.00	21.61	1.20	40.34	1.83	156.29
350+50.00	24.54	2.39	42.73	4.16	194.87
351+00.00	21.46	5.81	42.59	9.49	227.97
351+50.00	23.61	2.91	41.73	10.09	259.61
352+00.00	189.68	0.00	197.49	3.37	453.73
352+50.00	295.31	0.00	449.06	0.00	902.80
353+00.00	3.47	6.26	276.65	7.25	1172.20

EARTHWORK DATA - CTH U

STATION	COMMON SF	FILL SF	COMMON CY	FILL CY	MASS HAUL
19+50.00	68.24	1.95	0.00	0.00	0.00
19+92.00	95.33	2.95	127.22	4.76	122.46
20+00.00	100.32	0.00	28.99	0.55	150.90
20+06.00	100.09	0.07	22.27	0.01	173.15
20+39.00	97.55	0.04	120.78	0.08	293.85
20+50.00	76.83	0.00	35.52	0.01	329.36
21+00.00	94.23	0.00	158.39	0.00	487.75
21+24.00	105.71	3.50	88.86	1.94	574.67
21+50.00	143.98	0.00	120.22	2.11	692.78
21+56.00	148.00	0.00	32.44	0.00	725.23
22+00.00	47.38	5.51	159.20	0.00	884.42
22+50.00	72.66	4.64	111.15	11.75	983.82
22+91.00	112.31	32.41	140.44	35.16	1089.10
23+00.00	123.99	0.88	39.38	6.94	1121.55
23+29.00	165.88	2.76	155.67	2.44	1274.78
23+50.00	152.12	4.62	123.67	3.59	1394.86
24+00.00	145.08	10.82	275.19	17.87	1652.17
24+50.00	199.81	0.00	319.34	12.52	1958.99
25+00.00	285.91	7.72	449.74	8.94	2399.80
25+50.00	238.33	14.70	485.41	25.95	2859.25
26+00.00	221.64	9.39	425.90	27.88	3257.27
26+50.00	182.78	9.43	374.46	21.78	3609.95
27+00.00	205.25	5.98	359.29	17.84	3951.40
27+16.00	229.57	2.59	128.84	3.17	4077.06
27+31.00	247.25	20.00	132.45	7.84	4201.67
27+50.00	206.13	26.02	159.52	20.24	4340.95
28+00.00	268.96	20.05	439.90	53.32	4727.53
28+50.00	219.04	29.11	451.85	56.90	5122.48
29+00.00	182.15	27.50	371.47	65.52	5428.43
29+50.00	187.75	25.44	342.50	61.27	5709.66
30+00.00	149.92	33.08	312.66	67.73	5954.59
30+44.00	130.79	24.93	228.73	59.08	6124.23
30+50.00	124.04	28.68	28.31	7.45	6145.10
31+00.00	73.83	58.59	183.21	101.01	6227.30
31+38.00	89.34	91.59	114.82	132.10	6210.02
31+50.00	66.29	89.31	34.58	50.25	6194.36
32+00.00	114.75	31.06	167.63	139.32	6222.67
32+50.00	184.18	19.53	276.79	58.55	6440.90
32+58.00	226.89	9.45	60.90	5.37	6496.44
33+00.00	189.87	28.76	324.15	37.15	6783.44

EARTHWORK DATA - CTH U

STATION	COMMON SF	FILL SF	COMMON CY	FILL CY	MASS HAUL
33+44.00	241.99	6.96	351.89	36.38	7098.94
33+50.00	215.07	13.25	50.78	2.81	7146.92
34+00.00	249.82	22.96	430.45	41.91	7535.46
34+38.00	330.35	2.98	408.27	22.82	7920.91
34+50.00	292.84	6.04	138.49	2.51	8056.89
35+00.00	319.43	8.15	566.92	16.42	8607.39
35+34.00	405.00	0.06	456.12	6.46	9057.05
35+50.00	352.83	0.29	224.54	0.13	9281.46
36+00.00	395.07	0.54	692.50	0.96	9973.00
36+34.00	459.59	0.00	538.12	0.43	10510.69
36+50.00	415.16	0.65	259.19	0.24	10769.64
36+84.00	521.76	0.00	589.91	0.51	11359.04
37+00.00	439.46	0.00	284.81	0.00	11643.84
37+50.00	624.27	0.00	984.94	0.00	12628.78
38+00.00	498.31	7.28	1039.43	8.43	13659.78
38+50.00	465.46	12.77	892.38	23.21	14528.95
38+84.00	319.51	0.00	494.24	10.05	15013.14
39+00.00	267.39	6.69	173.90	2.48	15184.56
39+50.00	276.96	6.51	504.03	15.28	15673.31
40+00.00	248.45	12.98	486.49	22.56	16137.24
40+50.00	215.14	30.07	429.25	49.83	16516.67
41+00.00	167.94	52.80	354.70	95.91	16775.46
41+50.00	122.92	92.99	269.31	168.74	16876.03
42+00.00	98.25	93.57	204.79	215.93	16864.89
42+50.00	75.63	91.49	161.00	214.19	16811.71
43+00.00	56.62	117.44	122.45	241.82	16692.34
43+50.00	45.30	195.77	94.37	362.51	16424.20
44+00.00	43.79	283.19	82.49	554.35	15952.34
44+50.00	18.69	634.53	57.85	1062.18	14948.02
45+00.00	12.04	1061.40	28.45	1962.88	13013.59
45+50.00	65.06	1118.20	71.39	2522.69	10562.29
46+00.00	64.54	1273.40	120.00	2768.06	7914.24
46+50.00	114.87	1337.40	166.12	3021.76	5058.60
47+00.00	0.00	1468.73	106.36	3247.84	1917.12
47+50.00	0.00	848.60	0.00	2682.09	-764.97
48+00.00	0.00	2288.40	0.00	3630.79	-4395.76
48+50.00	0.00	2080.88	0.00	5057.04	-9452.80
49+00.00	0.00	0.00	0.00	2408.43	-11861.22

EARTHWORK DATA - CTH U

STATION	COMMON SF	FILL SF	COMMON CY	FILL CY	MASS HAUL
51+00.00	0.00	0.00	0.00	0.00	0.00
51+50.00	122.74	750.92	113.65	869.12	-755.47
52+00.00	62.66	503.13	171.67	1451.45	-2035.25
52+50.00	0.00	539.41	58.02	1206.64	-3183.88
53+00.00	0.00	639.01	0.00	1363.91	-4547.79
53+50.00	0.00	491.87	0.00	1308.89	-5856.68
54+00.00	0.00	260.59	0.00	870.90	-6727.58
54+19.00	4.79	132.50	1.69	172.89	-6898.78
54+50.00	1.11	141.89	3.39	196.90	-7092.30
55+00.00	21.63	112.06	21.06	293.92	-7365.16
55+50.00	109.02	67.74	120.97	208.10	-7452.29
55+77.00	143.14	72.93	126.08	87.92	-7414.13
56+00.00	102.96	69.45	104.82	75.80	-7385.12
56+15.00	124.49	27.56	63.18	33.68	-7355.62
56+50.00	116.21	83.46	156.01	89.95	-7289.56
56+63.00	135.96	92.18	60.71	52.85	-7281.70
57+00.00	111.25	32.68	169.38	106.94	-7219.26
57+50.00	91.39	47.83	187.63	93.18	-7124.81
57+66.00	120.86	31.97	62.89	29.56	-7091.48
58+00.00	109.24	37.96	144.88	55.04	-7001.64
58+45.00	114.93	7.64	186.81	47.50	-6862.33
58+50.00	112.08	8.48	21.02	1.87	-6843.18
59+00.00	117.87	2.06	212.92	12.20	-6642.46
59+15.00	128.11	2.08	68.33	1.44	-6575.57
59+50.00	117.82	6.45	159.40	6.91	-6423.08
60+00.00	171.32	1.06	267.72	8.69	-6164.05
60+50.00	166.93	0.00	313.19	1.23	-5852.08
61+00.00	154.43	0.73	297.56	0.84	-5555.37
61+50.00	200.81	0.00	328.93	0.84	-5227.29
61+65.00	182.23	0.00	106.40	0.00	-5120.89
62+00.00	191.67	0.00	242.34	0.00	-4878.55
62+50.00	197.74	14.95	360.56	17.30	-4535.29
62+65.00	192.16	8.92	108.31	8.29	-4435.27
63+00.00	145.83	4.83	219.07	11.14	-4227.34
63+22.00	175.27	0.00	130.82	2.46	-4098.98
63+50.00	153.47	7.06	170.46	4.58	-3933.10
63+75.00	145.14	19.07	138.25	15.12	-3809.98
64+00.00	150.33	15.71	136.79	20.13	-3693.31
64+25.00	154.79	18.89	141.26	20.02	-3572.08
64+50.00	139.53	17.96	136.26	21.33	-3457.14

EARTHWORK DATA - CTH U

STATION	COMMON SF	FILL SF	COMMON CY	FILL CY	MASS HAUL
64+75.00	143.35	8.16	130.96	15.12	-3341.30
65+00.00	169.82	0.00	144.99	4.72	-3201.03
65+24.00	247.56	0.00	185.50	0.00	-3015.53
65+50.00	170.00	0.00	201.05	0.00	-2814.48
65+78.00	173.71	0.00	178.22	0.00	-2636.26
66+00.00	146.12	2.07	130.30	1.05	-2507.02
66+42.00	155.06	0.94	234.25	2.93	-2275.69
66+50.00	135.22	2.71	43.00	0.68	-2233.36
67+00.00	148.42	1.03	262.63	4.33	-1975.06
67+50.00	95.90	7.52	226.22	9.90	-1758.74
68+00.00	124.77	0.66	204.32	9.47	-1563.88
68+50.00	180.85	0.00	282.98	0.76	-1281.66
69+00.00	176.89	0.00	331.24	0.00	-950.42
69+50.00	23.77	0.00	185.80	0.00	-764.62
69+60.00	54.31	0.00	14.46	0.00	-750.17
70+00.00	30.99	0.00	63.19	0.00	-686.98
70+44.00	59.74	0.00	73.93	0.00	-613.05
70+50.00	60.95	0.00	13.41	0.00	-599.64
71+00.00	28.25	0.00	82.59	0.00	-517.05

EARTHWORK DATA - 18TH AVE

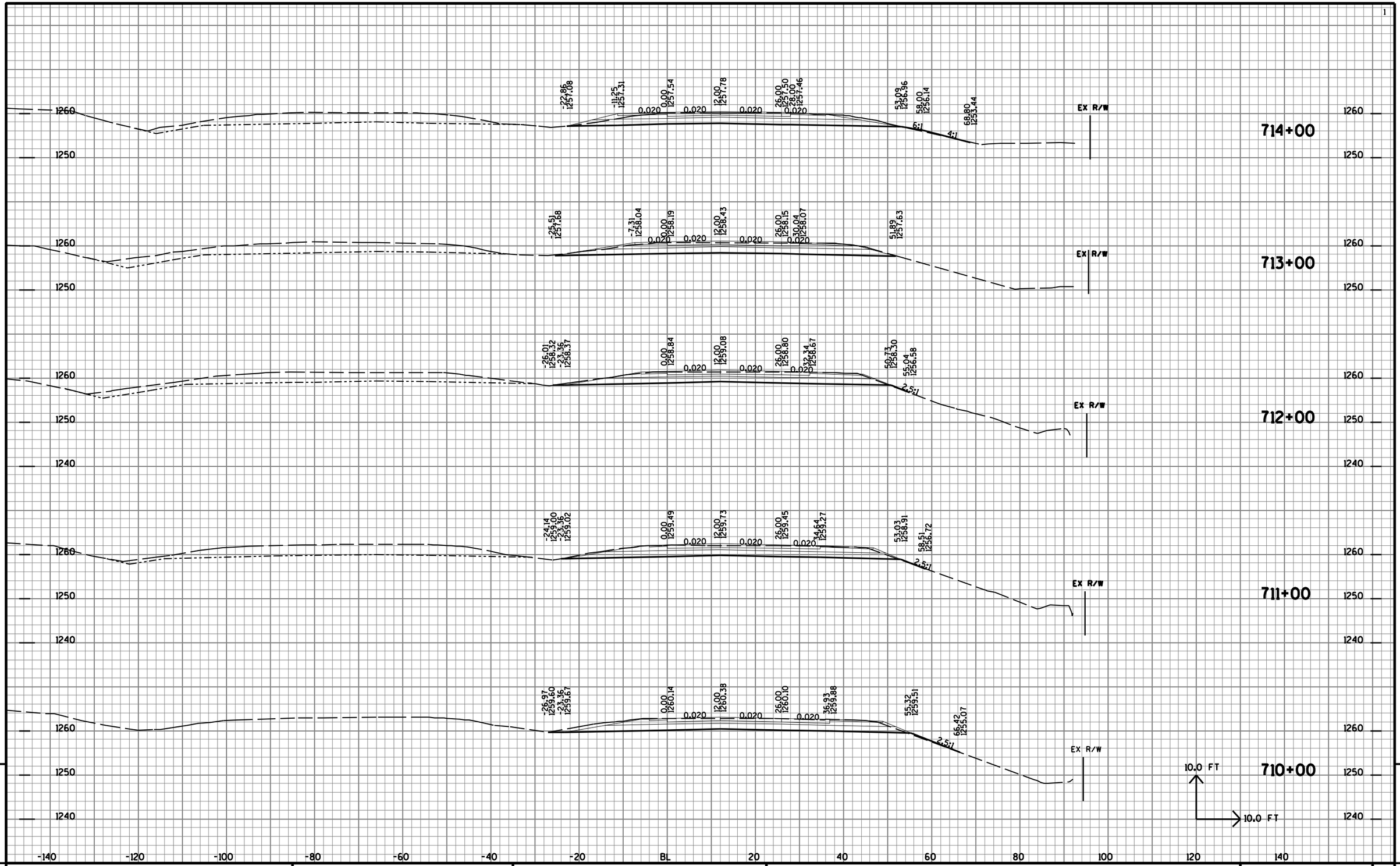
STATION	COMMON SF	FILL SF	COMMON CY	FILL CY	MASS HAUL
4+90.00	77.44	0.00	0.00	0.00	0.00
5+00.00	91.47	0.00	31.28	0.00	31.28
5+10.00	78.10	0.00	31.40	0.00	62.68
5+20.00	36.89	0.04	21.29	0.01	83.97
5+30.00	32.83	0.31	12.91	0.08	96.80
5+40.00	25.55	0.64	10.81	0.22	107.39
5+50.00	25.13	0.83	9.39	0.34	116.43

EARTHWORK DATA - MERRILL CUL-DE-SAC

STATION	COMMON SF	FILL SF	COMMON CY	FILL CY	MASS HAUL
254+25.00	1.01	640.36	0.00	0.00	0.00
254+50.00	30.56	584.31	14.62	708.72	-694.11
254+75.00	34.77	257.63	30.25	487.23	-1151.09
255+00.00	36.23	243.96	32.87	290.27	-1408.50
255+25.00	36.50	90.81	33.67	193.73	-1568.56
255+50.00	53.56	16.83	41.69	62.29	-1589.15
255+75.00	30.57	16.46	38.95	19.27	-1569.47

EARTHWORK DATA - ARTHUR AVE

STATION	COMMON SF	FILL SF	COMMON CY	FILL CY	MASS HAUL
12+00.00	86.77	0.00	0.00	0.00	0.00
12+50.00	89.40	0.00	163.12	0.00	163.12
13+00.00	97.37	0.00	172.94	0.00	336.06
13+50.00	150.64	0.00	229.64	0.00	565.69
13+64.00	224.65	0.00	97.30	0.00	662.99
14+00.00	247.27	0.00	314.61	0.00	977.61
14+50.00	168.71	0.83	385.17	0.96	1361.81

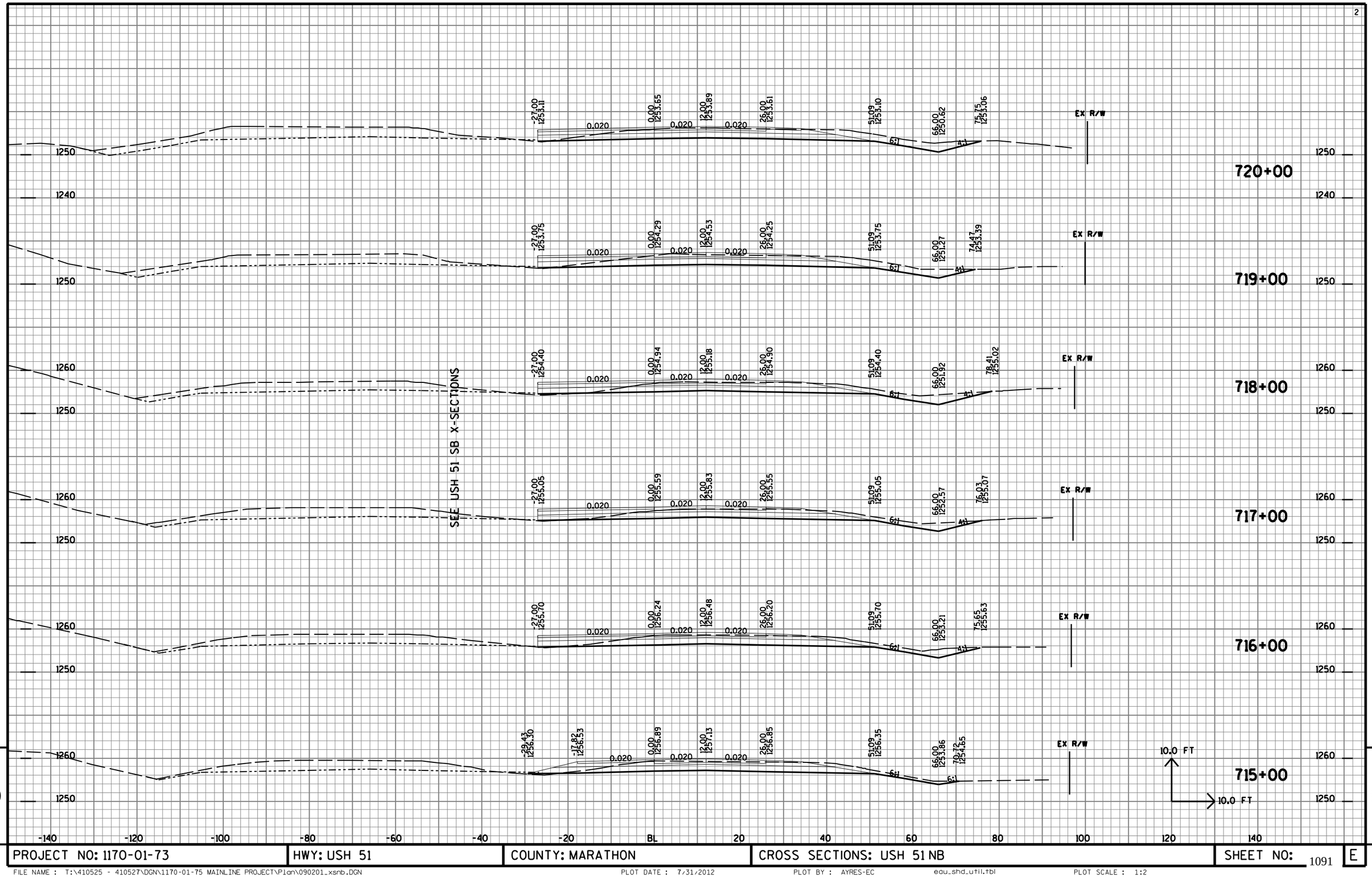


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PROJECT NO: 1170-01-73 | HWY: USH 51 | COUNTY: MARATHON | CROSS SECTIONS: USH 51 NB | SHEET NO: 1090 E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090201_xsnb.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC edu_shd_util.tbl PLOT SCALE : 1:2

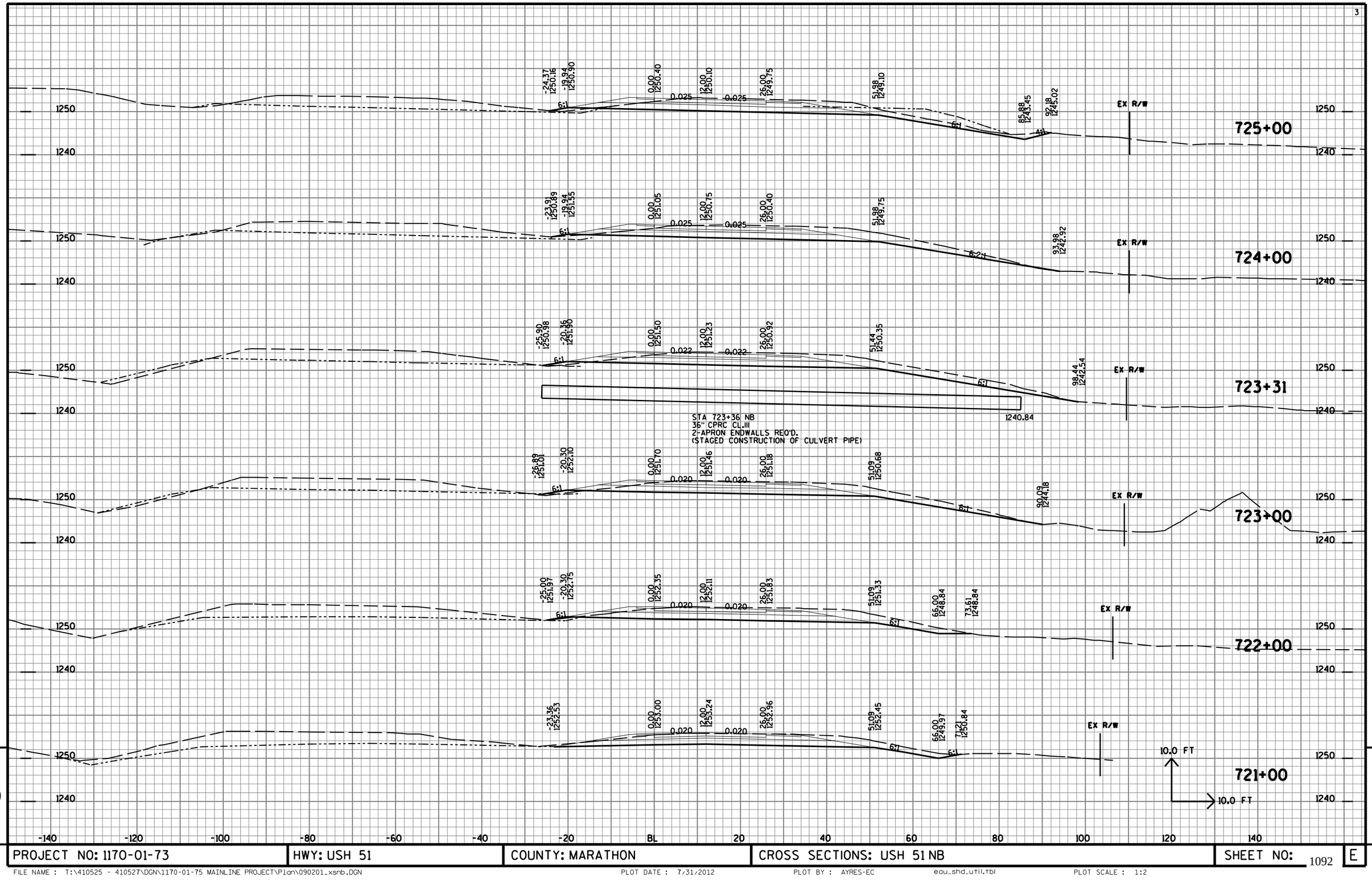


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PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: USH 51 NB	SHEET NO: 1091	E

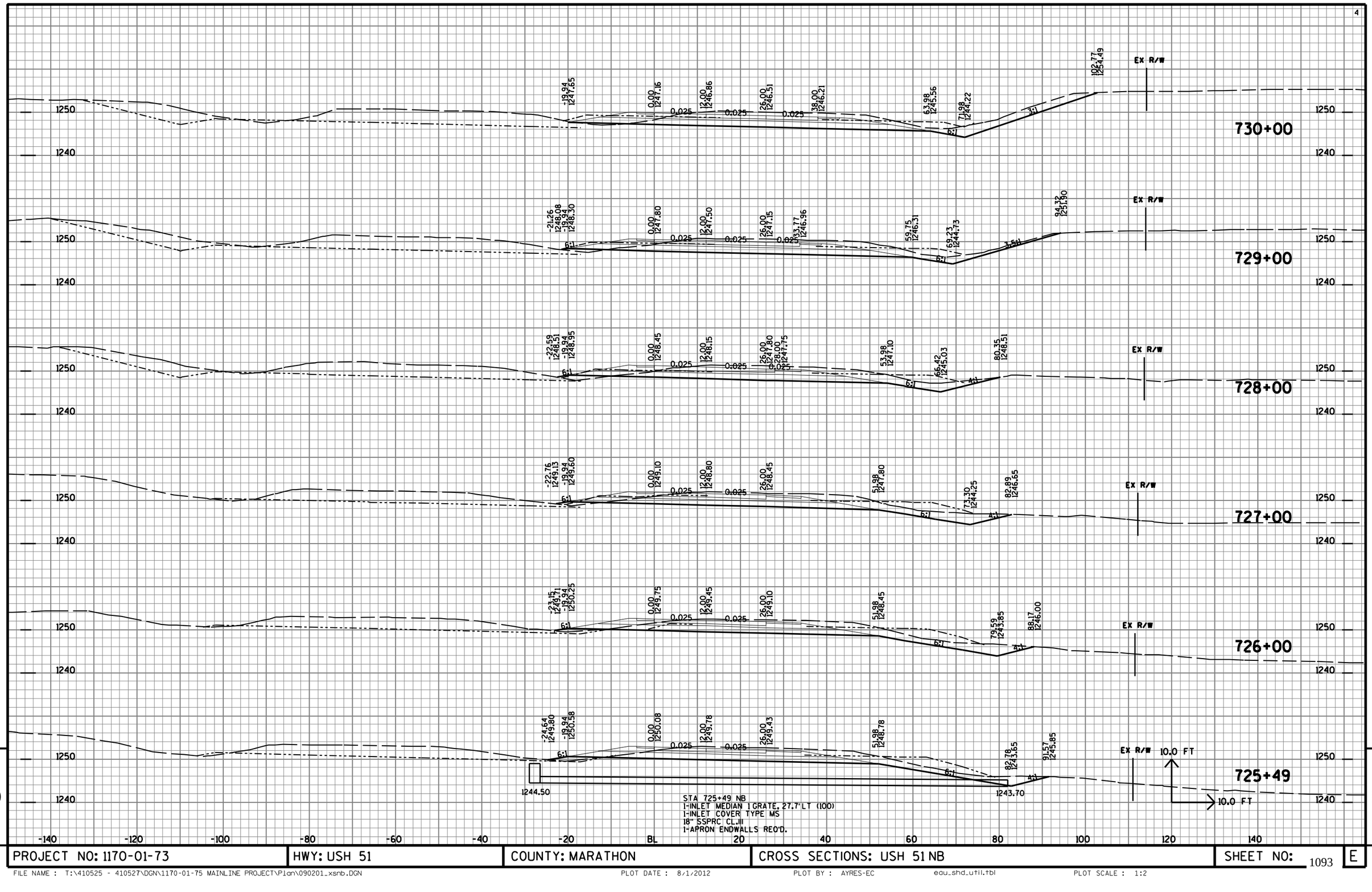
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PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: USH 51 NB	SHEET NO: 1092	E



9 9

PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: USH 51 NB	SHEET NO: 1093 E

SEE USH 51 SB X-SECTIONS

735+00

-15.72 1244.32 | 0.00 1243.93 | 0.025 | 12.00 1243.63 | 0.025 | 26.00 1243.28 | 0.025 | 43.12 1242.85 | 69.10 1242.20 | 94.55 1235.83 | 4:1 | EX R/W

734+00

-15.72 1244.95 | 0.00 1244.56 | 0.025 | 12.00 1244.26 | 0.025 | 26.00 1243.91 | 0.025 | 40.25 1243.55 | 68.23 1242.90 | 104.58 1235.32 | 4:1 | EX R/W

733+50

-15.72 1245.28 | 0.00 1244.88 | 0.025 | 12.00 1244.58 | 0.025 | 26.00 1244.23 | 0.025 | 39.09 1243.91 | 65.07 1243.26 | 102.32 1233.94 | 4:1 | EX R/W

733+00

-19.94 1245.71 | 0.00 1245.21 | 0.025 | 12.00 1244.91 | 0.025 | 26.00 1244.56 | 0.025 | 38.11 1244.26 | 64.09 1243.61 | 100.08 1234.36 | 4:1 | EX R/W

STA 733+50 NB
42" CPRC CL.III
2-APRON ENDWALLS REQ'D.
(STAGED CONSTRUCTION OF CULVERT PIPE)

1234.00

732+00

-19.94 1246.36 | 0.00 1245.86 | 0.025 | 12.00 1245.56 | 0.025 | 26.00 1245.21 | 0.025 | 38.00 1244.91 | 63.09 1244.28 | 74.37 1242.40 | 6:1 | 4:1 | 99.94 1248.79 | EX R/W

731+00

-19.94 1247.00 | 0.00 1246.51 | 0.025 | 12.00 1246.21 | 0.025 | 26.00 1245.86 | 0.025 | 38.00 1245.56 | 63.98 1244.91 | 71.38 1243.57 | 6:1 | 3:1 | 105.54 1235.09 | EX R/W | 10.0 FT | 10.0 FT

1240 1230 1250

-140 -120 -100 -80 -60 -40 -20 BL 20 40 60 80 100 120 140

9 9

PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: USH 51 NB	SHEET NO: 1094 E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090201_xsnb.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC edu_shd_util.tbl PLOT SCALE : 1:2

740+00

-17.99	0.00	12.00	26.00	35.00	40.00	55.00
1242.13	1242.47	1242.71	1242.43	1242.25	1242.15	1241.85
	0.020	0.020		0.020	0.020	0.020

739+00

-17.17	0.00	12.00	26.00	40.00	55.00
1242.33	1242.52	1242.65	1242.37	1242.09	1241.79
	0.011	0.020	0.020	0.020	

738+67

-17.17	0.00	12.00	26.00	40.00	55.00
1242.38	1242.57	1242.70	1242.42	1242.14	1241.84
	0.011	0.020	0.020	0.020	

STA 738+67 NB
48" CPRC CL.III
2-APRON ENDWALLS REQ'D.
(STAGED CONSTRUCTION OF CULVERT PIPE)

738+00

-16.31	0.00	12.00	26.00	39.60	54.60	79.69	95.54
1242.84	1242.69	1242.59	1242.46	1242.34	1242.21	1241.70	1237.74
	0.009	0.009	0.009	0.009		4:1	

737+00

-15.72	0.00	12.00	26.00	35.98	50.98	76.96	87.19
1243.38	1242.99	1242.69	1242.34	1242.09	1241.71	1241.06	1238.50
	0.025	0.025	0.025	0.025		4:1	

736+00

-18.20	-3.20	0.00	12.00	26.00	31.71	46.71	72.69	89.69
1243.03	1243.33	1243.40	1243.10	1242.75	1242.60	1242.23	1241.58	1237.33
0.020		0.025	0.025	0.025			4:1	

SEE USH 51 SB X-SECTIONS

SEE E RAMP X-SECTIONS

EX R/W

EX R/W

EX R/W

EX R/W

EX R/W

10.0 FT

10.0 FT

1232.50

1240

1230

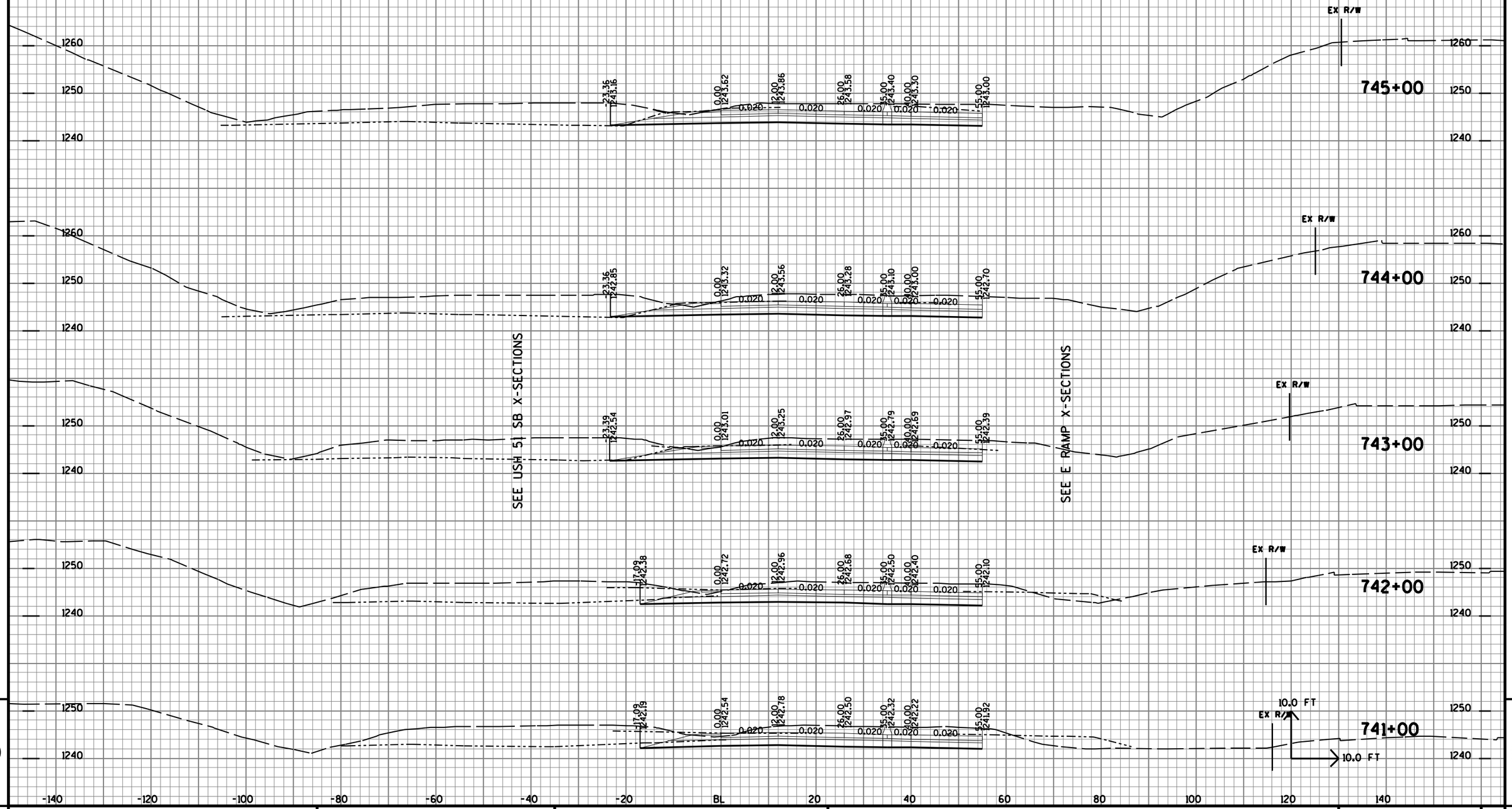
-140 -120 -100 -80 -60 -40 -20 BL 20 40 60 80 100 120 140

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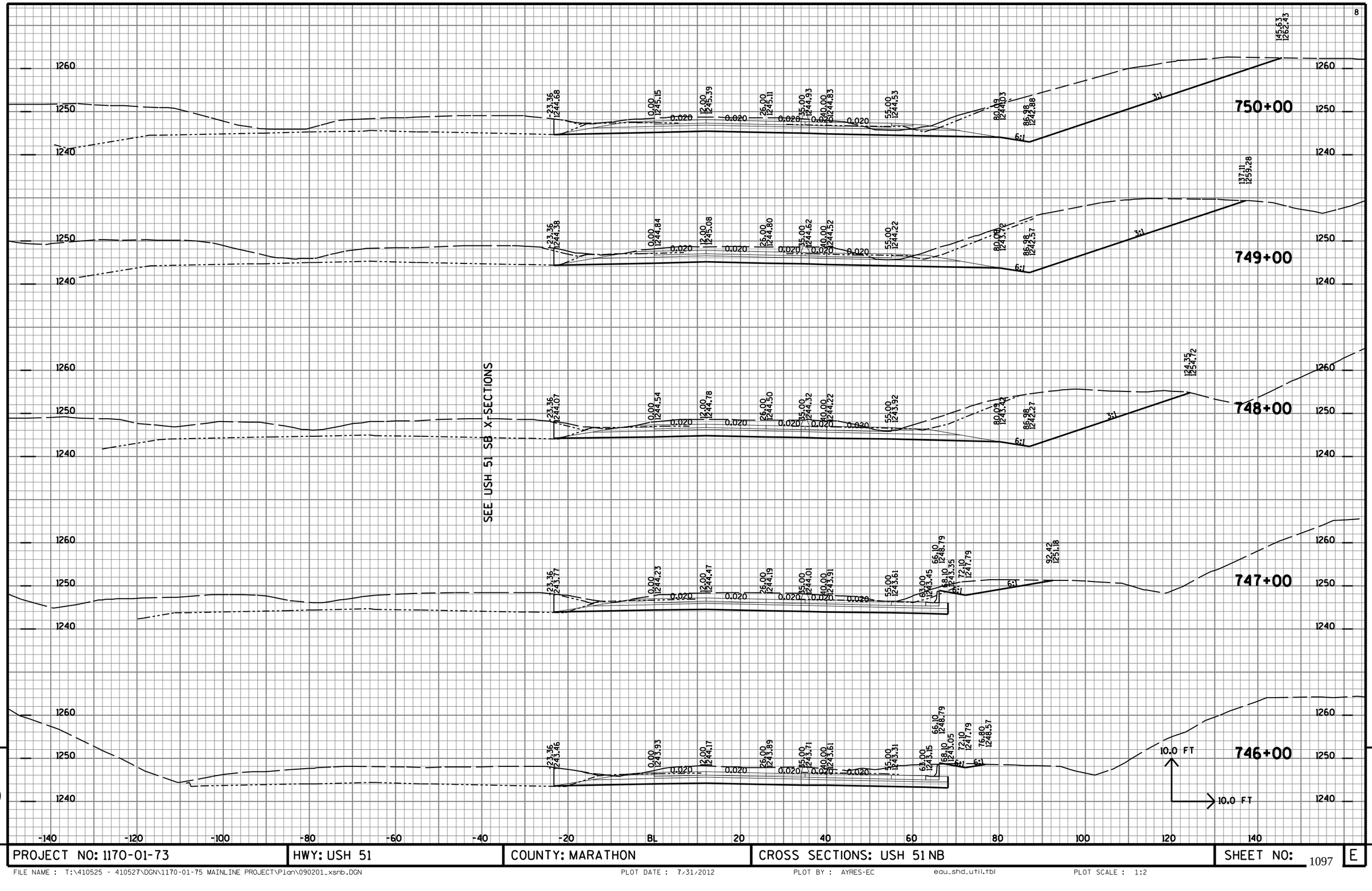
PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: USH 51 NB	SHEET NO: 1095	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090201_xsnb.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC eau_shd_util.tbl PLOT SCALE : 1:2



9 9

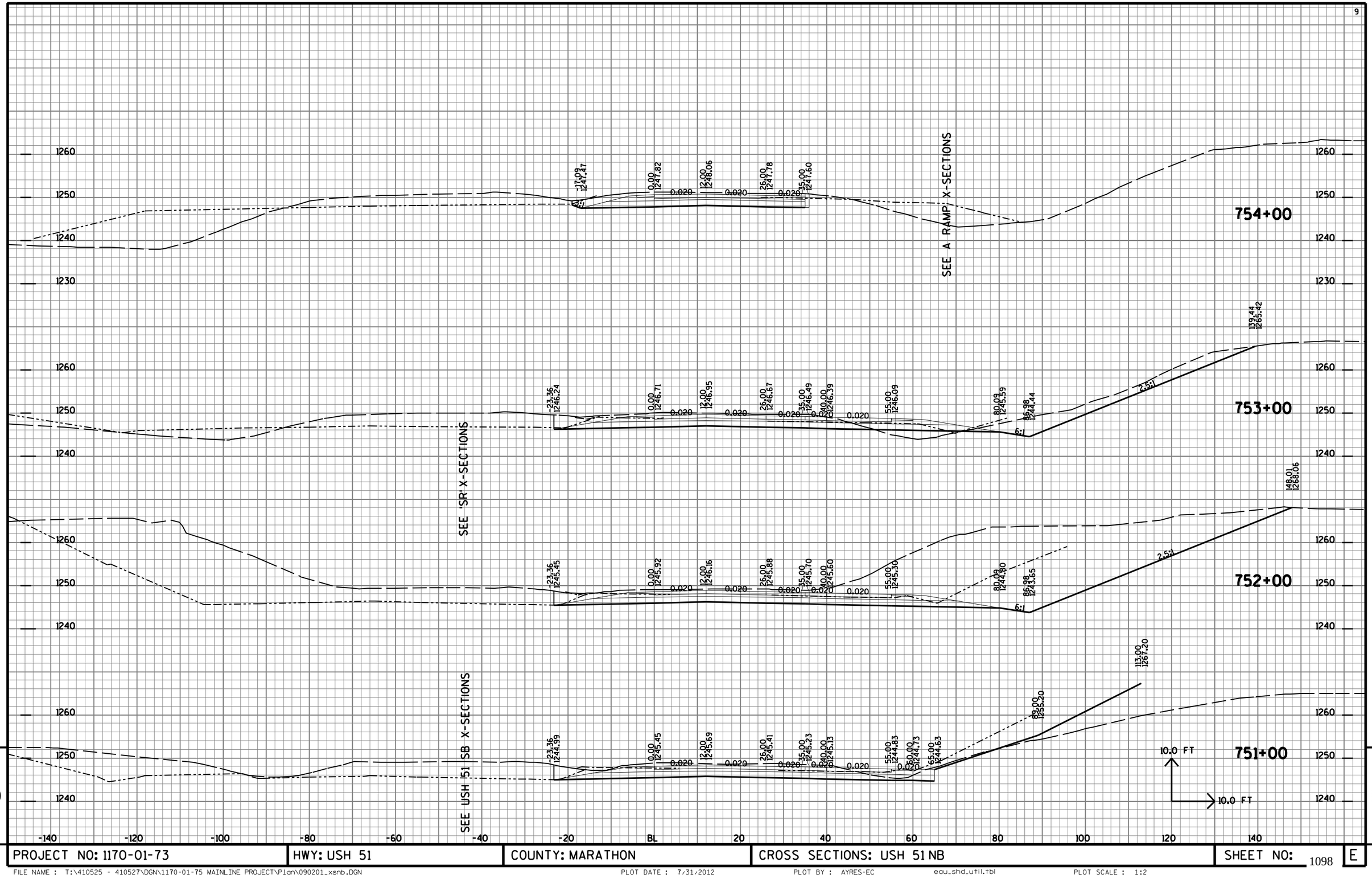
PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: USH 51 NB	SHEET NO: 1096 E



9

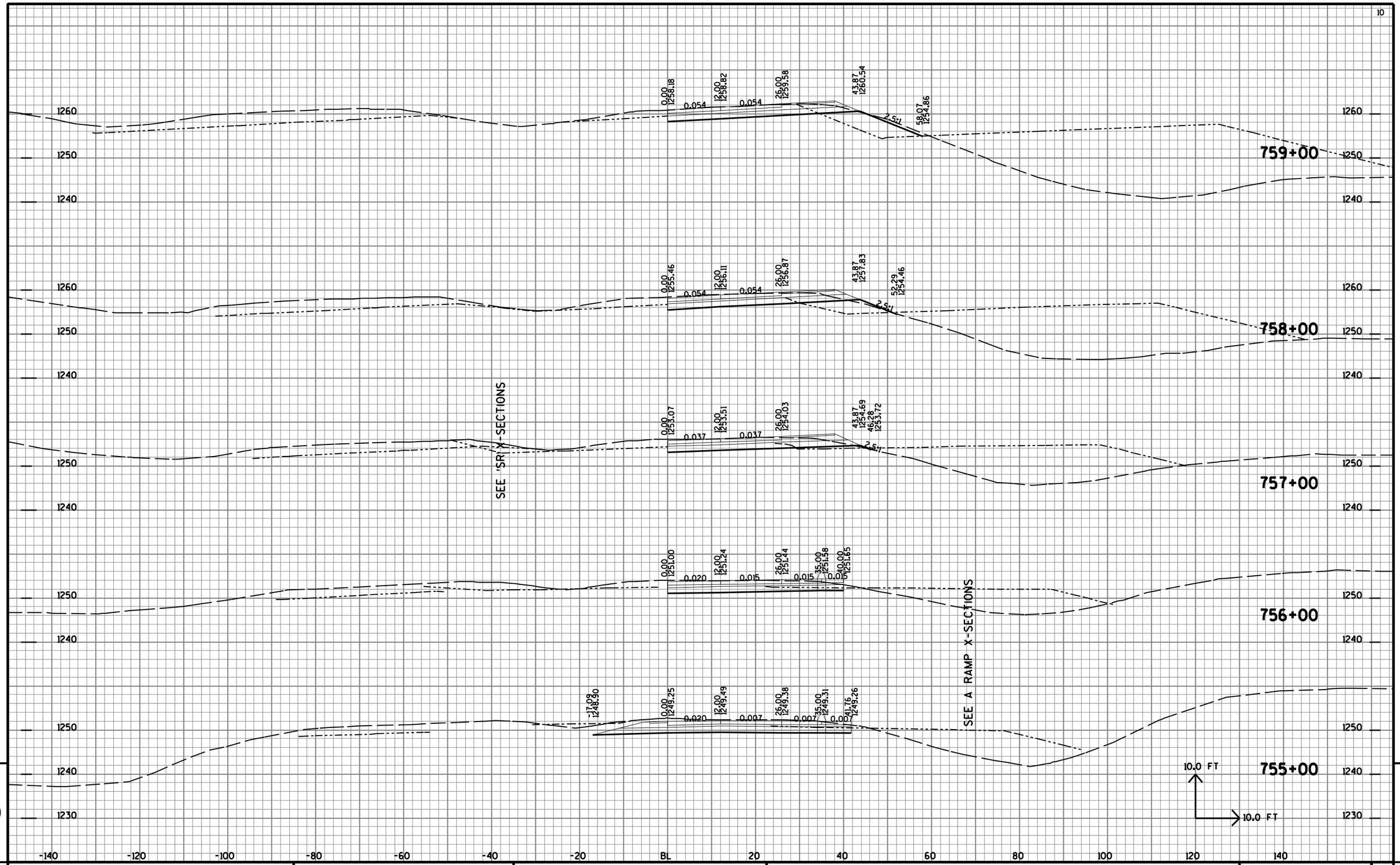
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PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: USH 51 NB	SHEET NO: 1097 E



PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: USH 51 NB	SHEET NO: 1098 E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090201_xsnb.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC edu_shd_util.tbl PLOT SCALE : 1:2

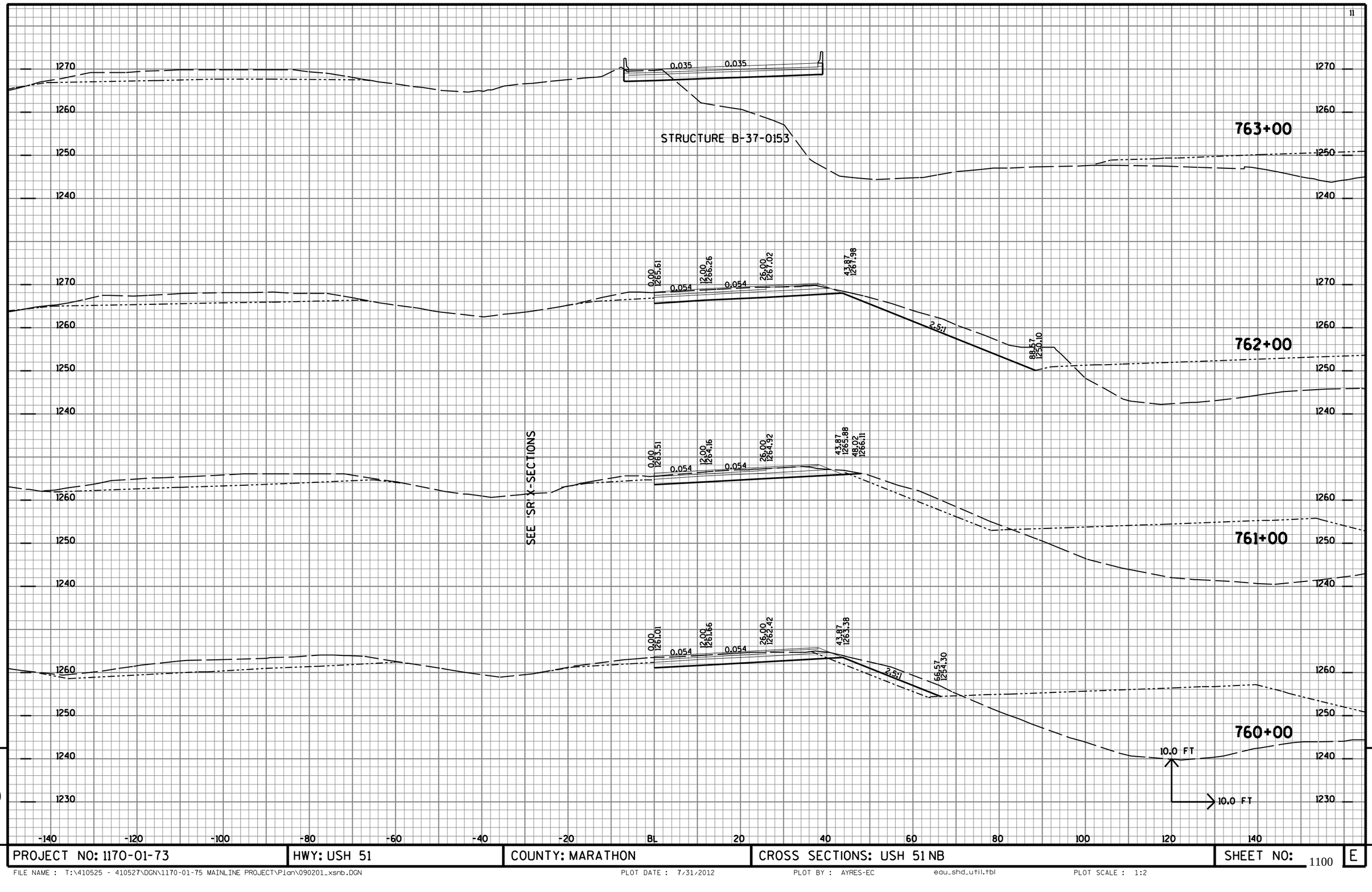


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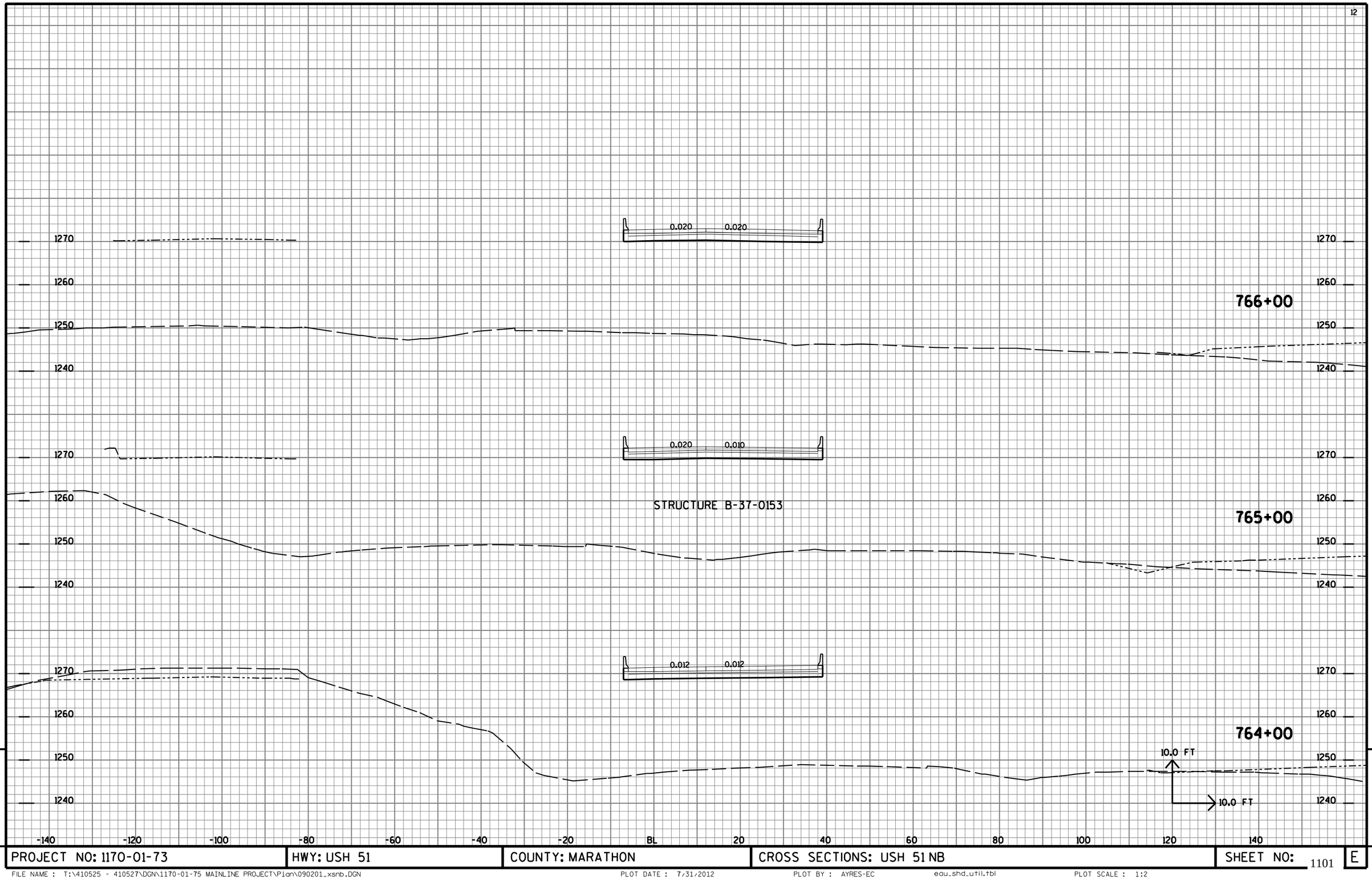
PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: USH 51 NB	SHEET NO: 1099 E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090201_xsnb.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC edu_shd_util.tbl PLOT SCALE : 1:2



PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: USH 51 NB	SHEET NO: 1100 E

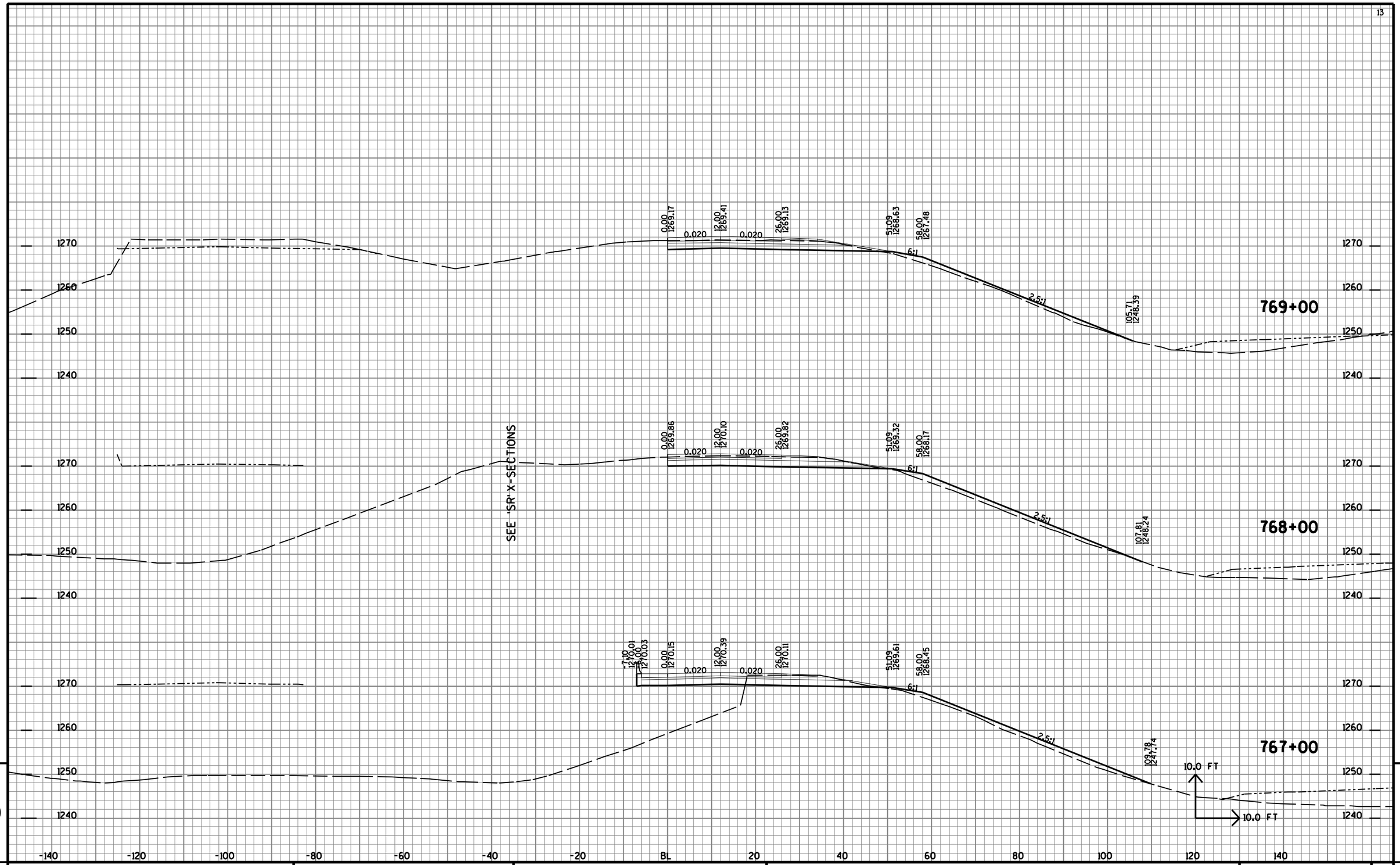
FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090201_xsnb.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC edu_shd_util.tbl PLOT SCALE : 1:2



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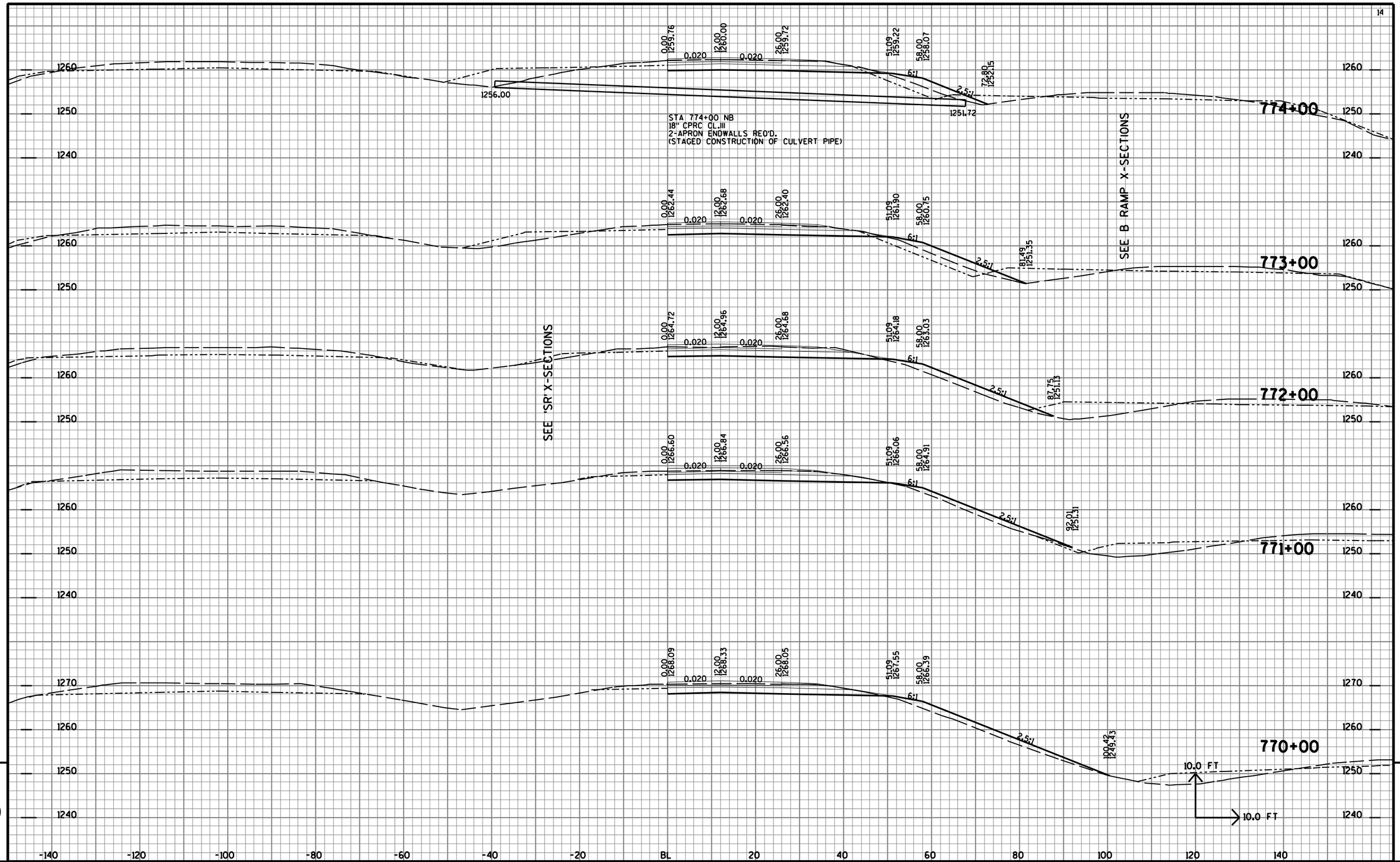
PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: USH 51 NB	SHEET NO: 1101	E



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PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: USH 51 NB	SHEET NO: 1102	E

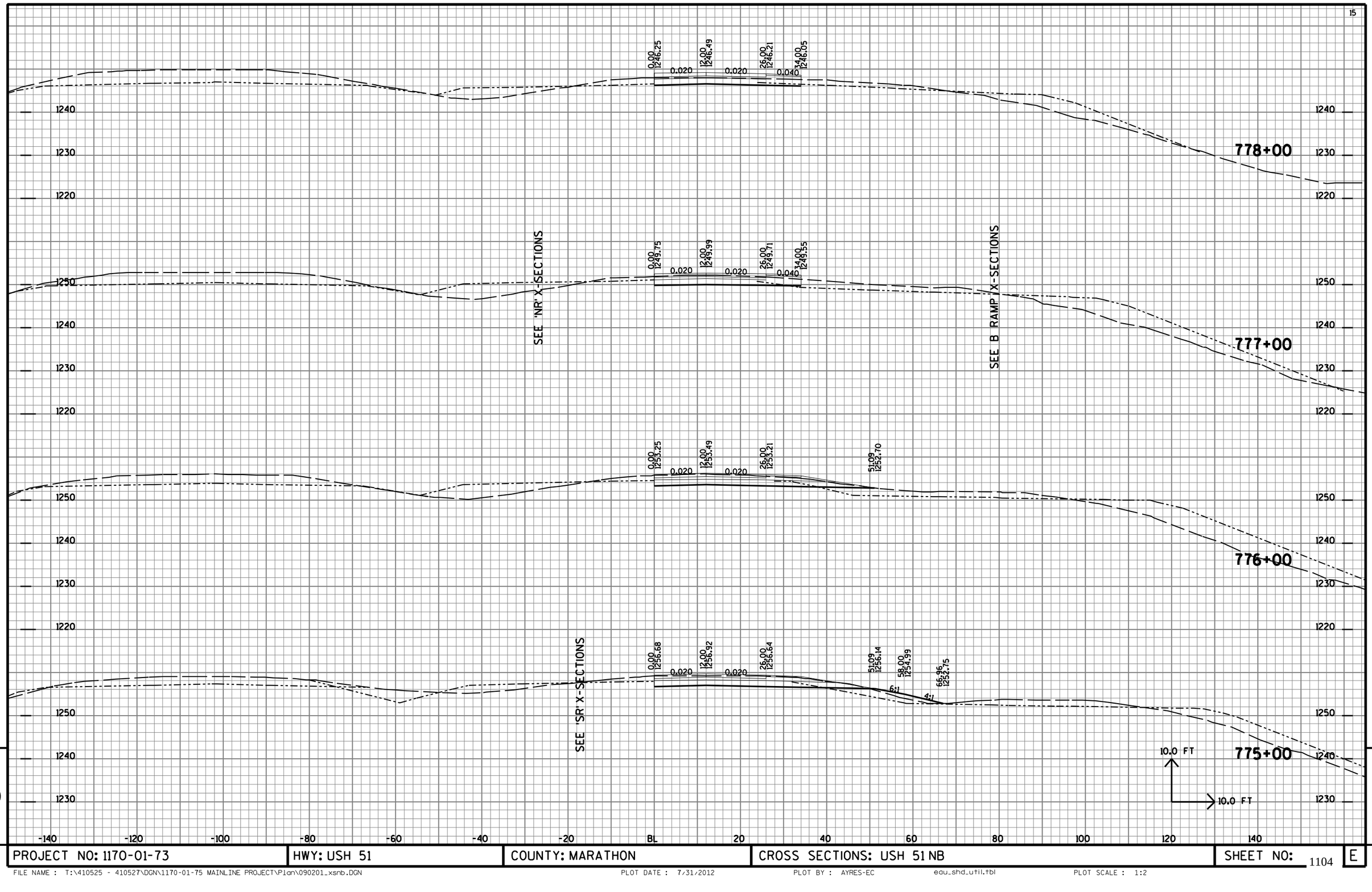


9

PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: USH 51 NB	SHEET NO: 1103	E

9

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090201_xsnb.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC edu_shd_util.tbl PLOT SCALE : 1:2

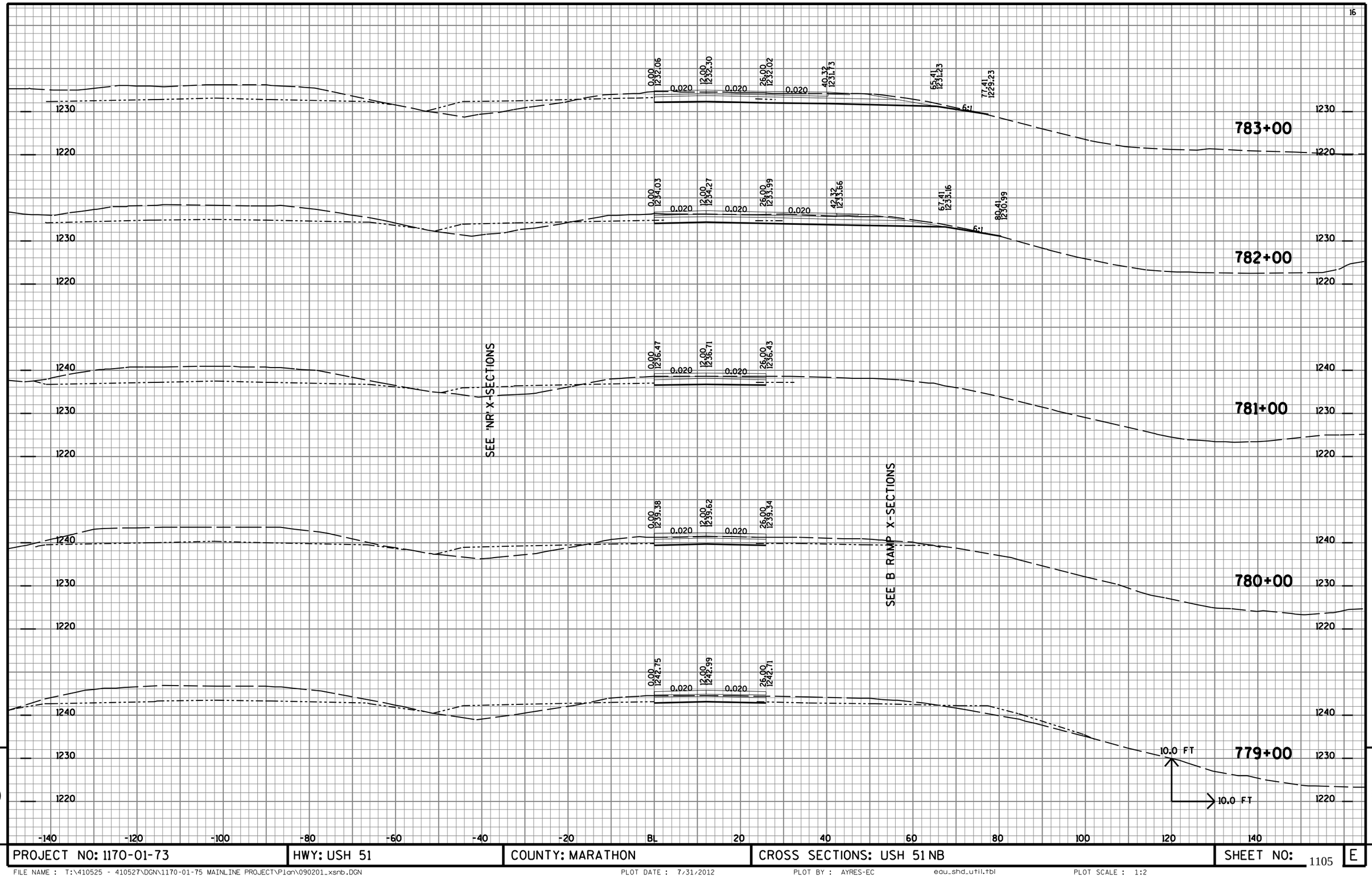


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PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: USH 51 NB	SHEET NO: 1104	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090201_xsnb.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC edu_shd_util.tbl PLOT SCALE : 1:2

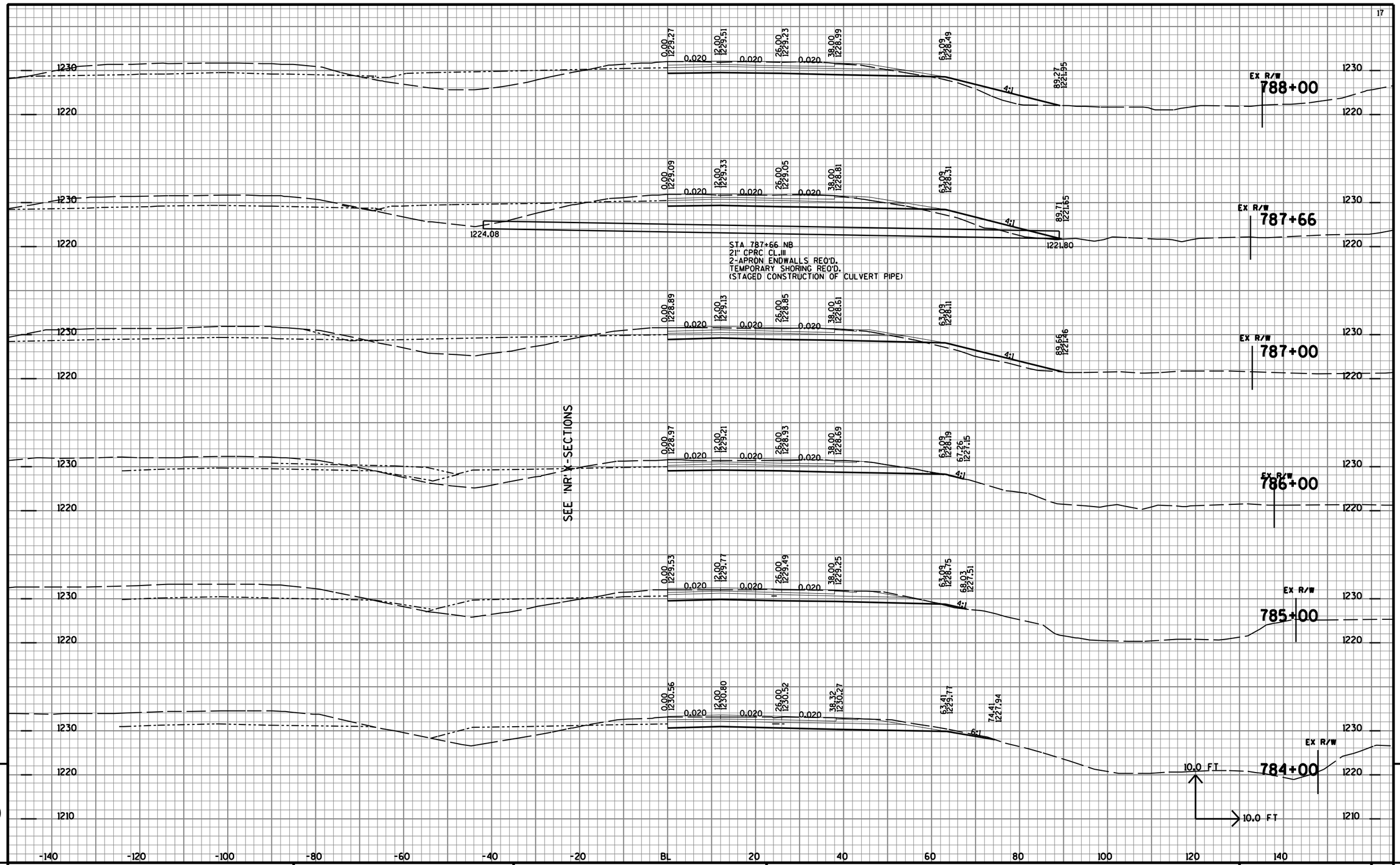


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9

PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: USH 51 NB	SHEET NO: 1105 E

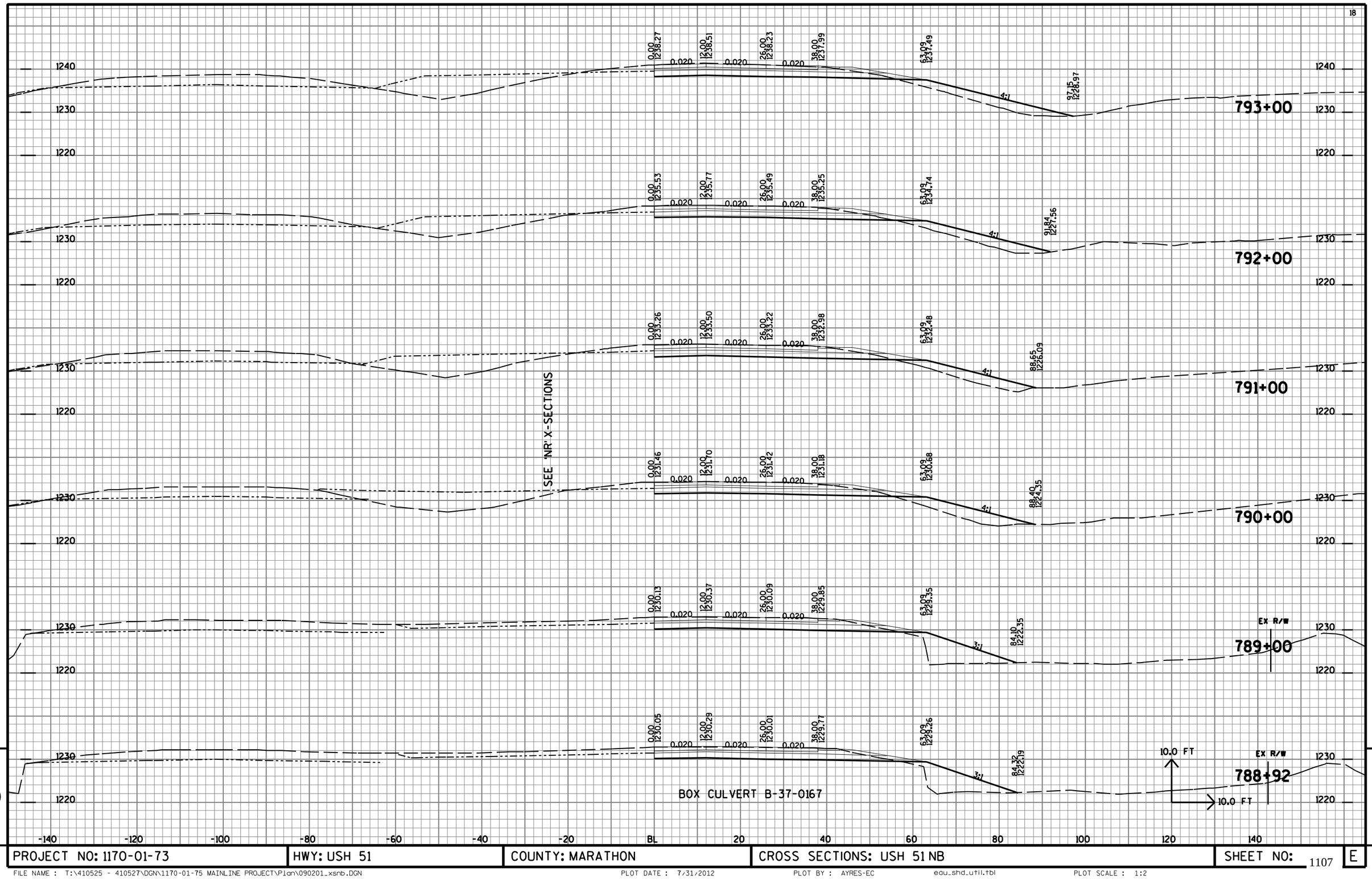
FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090201_xsnb.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC edu_shd_util.tbl PLOT SCALE : 1:2



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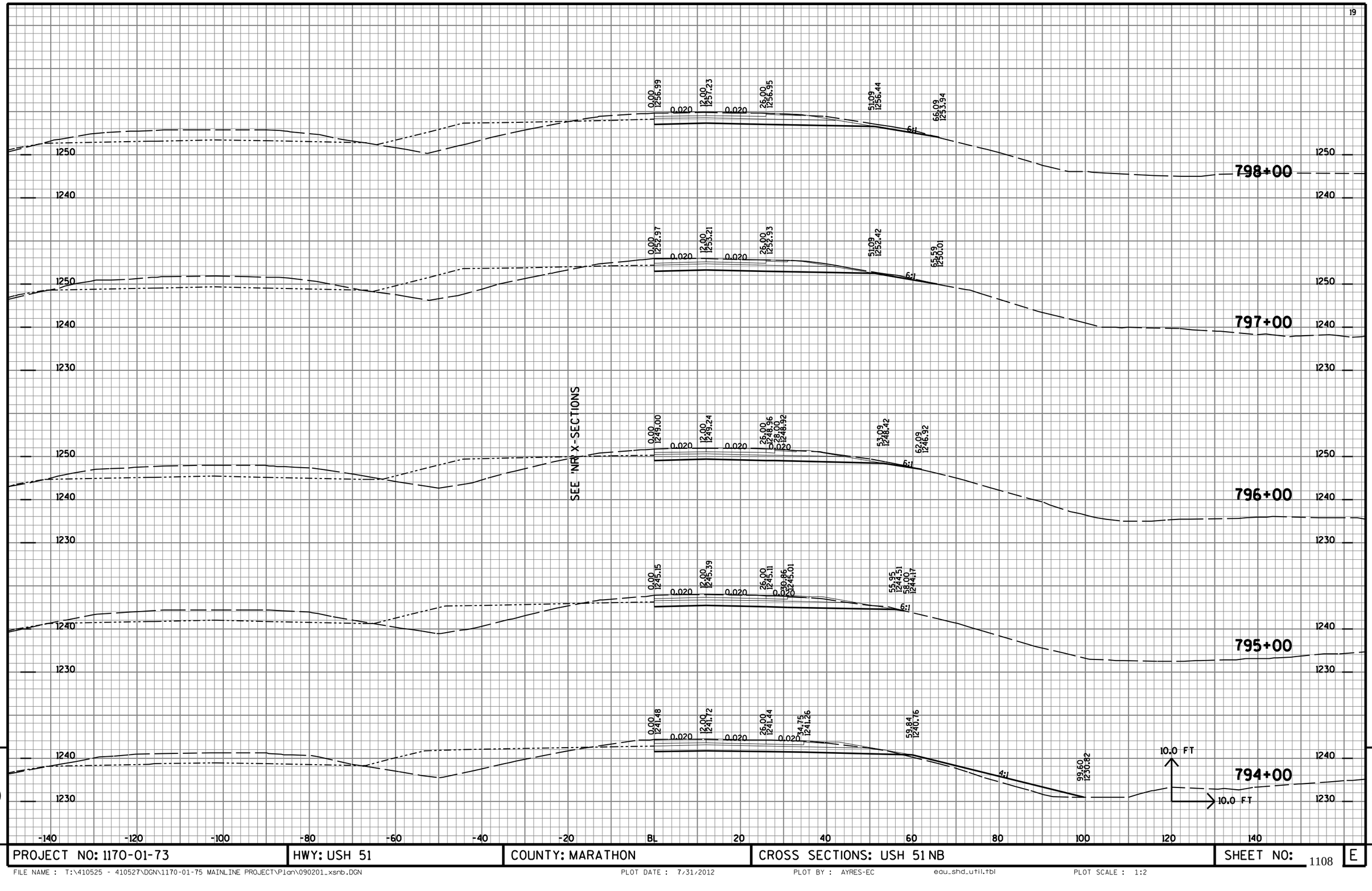
9

PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: USH 51 NB	SHEET NO: 1106	E



PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: USH 51 NB	SHEET NO: 1107	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090201_xsnb.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC edu_shd_util.tbl PLOT SCALE : 1:2

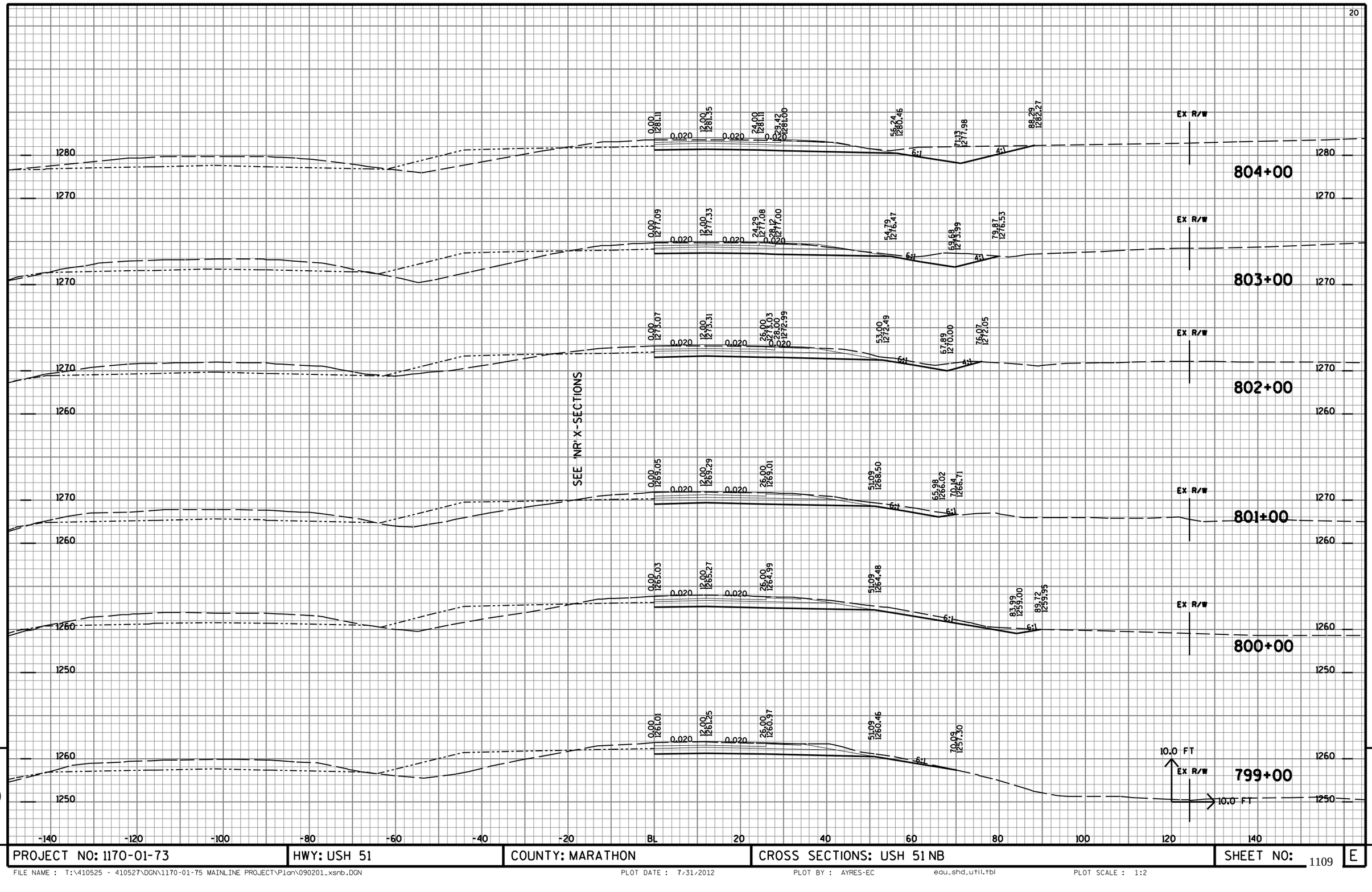


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PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: USH 51 NB	SHEET NO: 1108	E

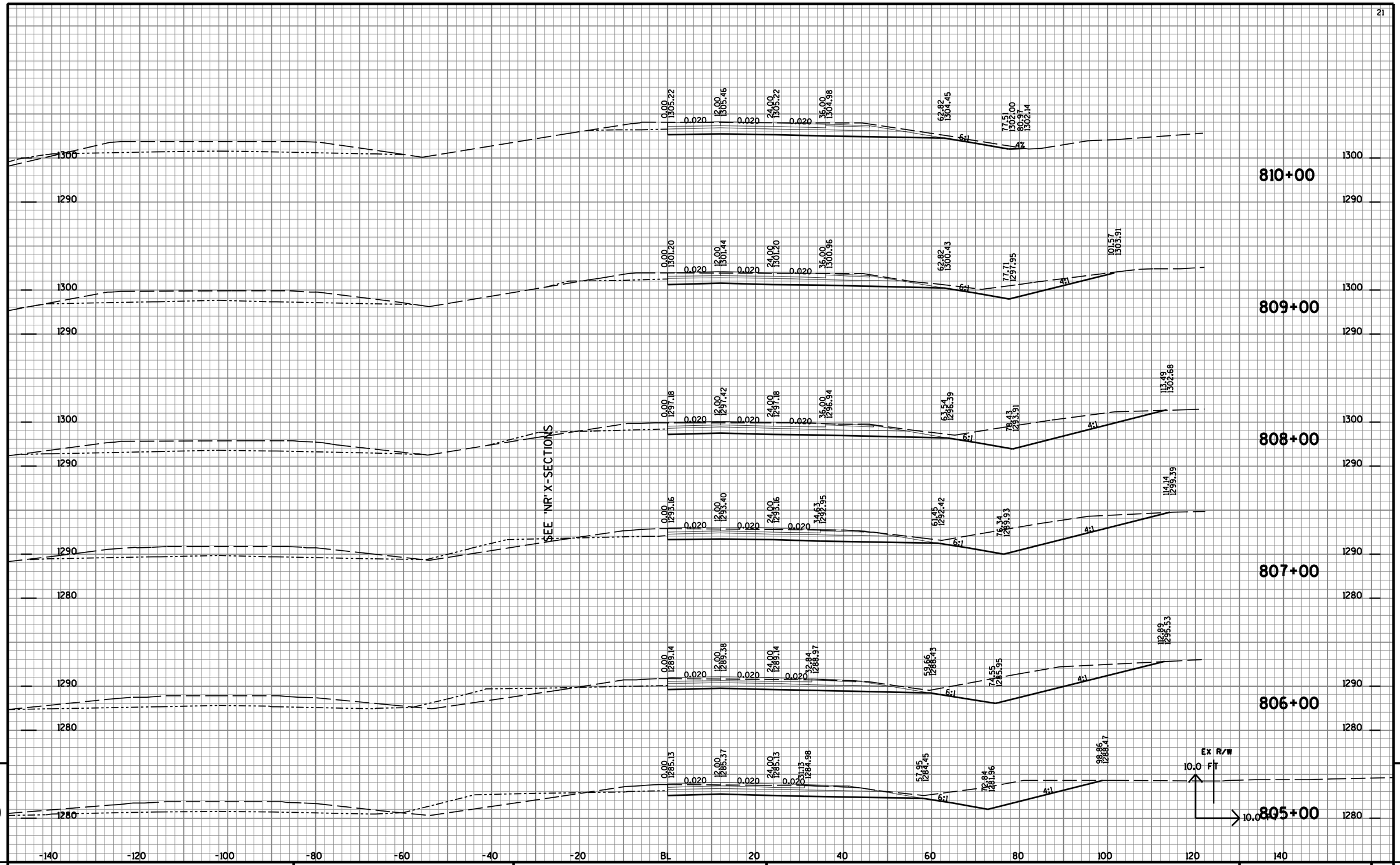
FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090201_xsnb.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC edu_shd_util.tbl PLOT SCALE : 1:2



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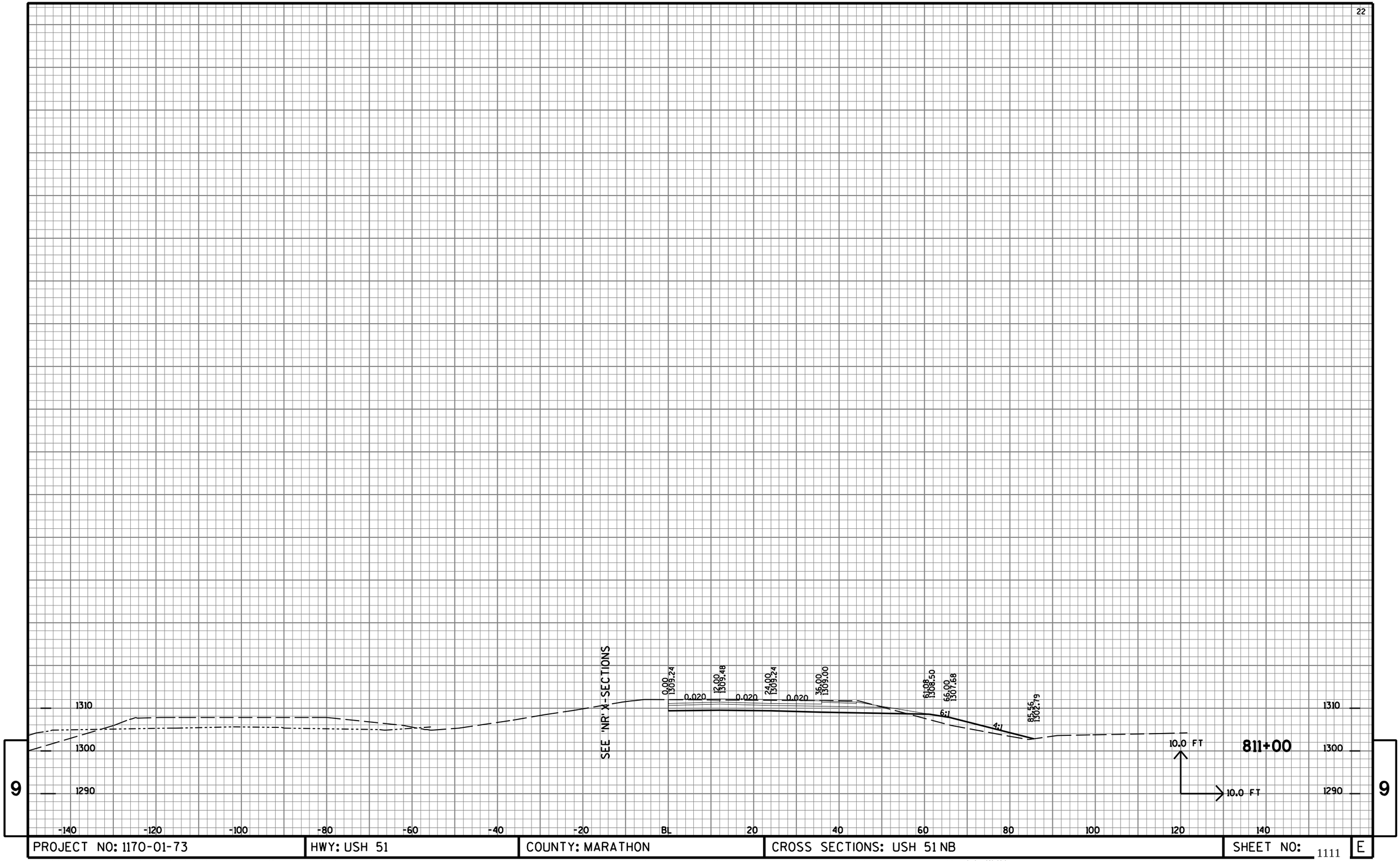
PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: USH 51 NB	SHEET NO: 1109	E



9 9

PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: USH 51 NB	SHEET NO: 1110 E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090201_xsnb.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC edu_shd_util.tbl PLOT SCALE : 1:2

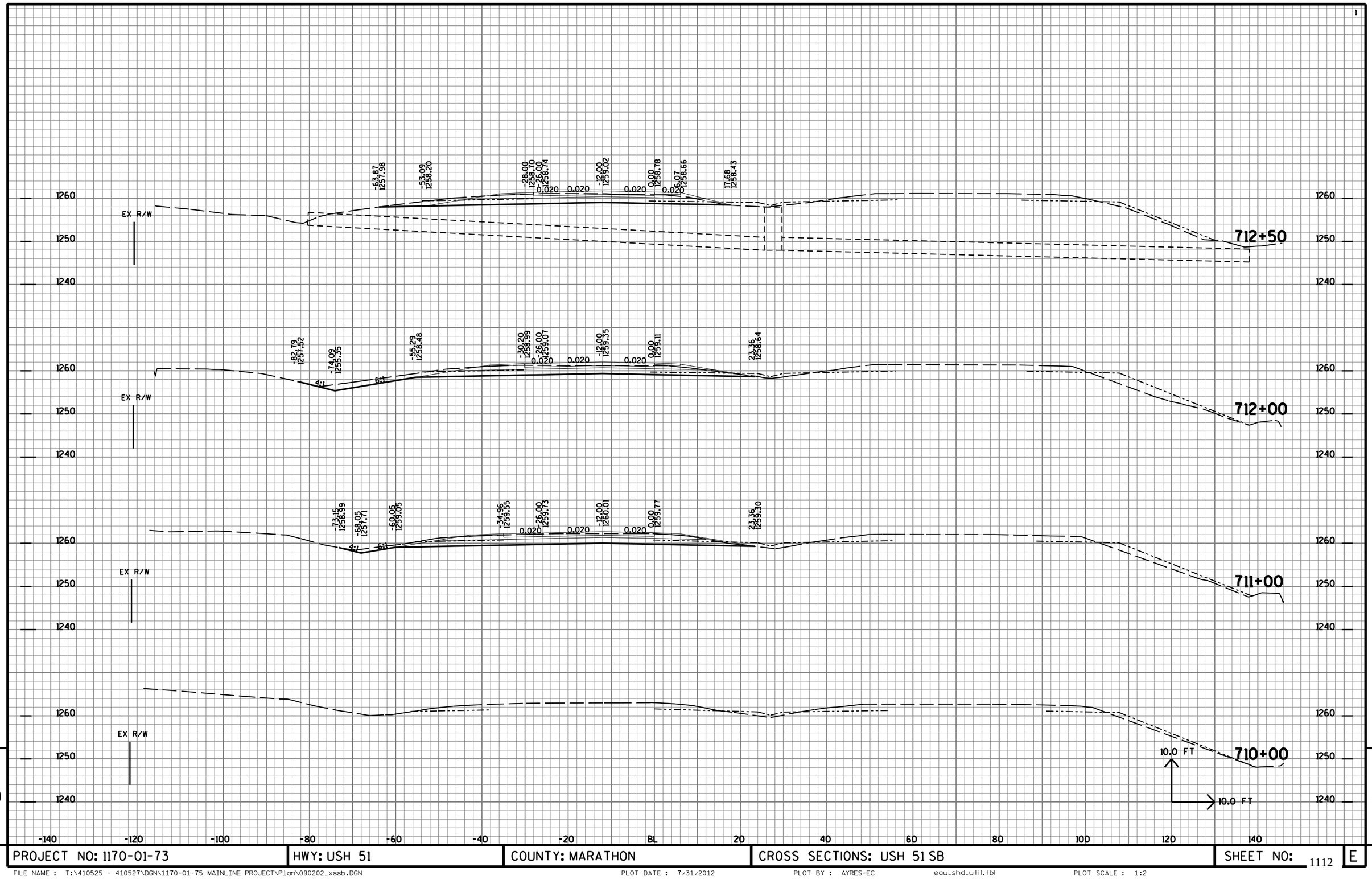


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PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: USH 51 NB	SHEET NO: 1111	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090201_xsnb.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC edu_shd_util.tbl PLOT SCALE : 1:2

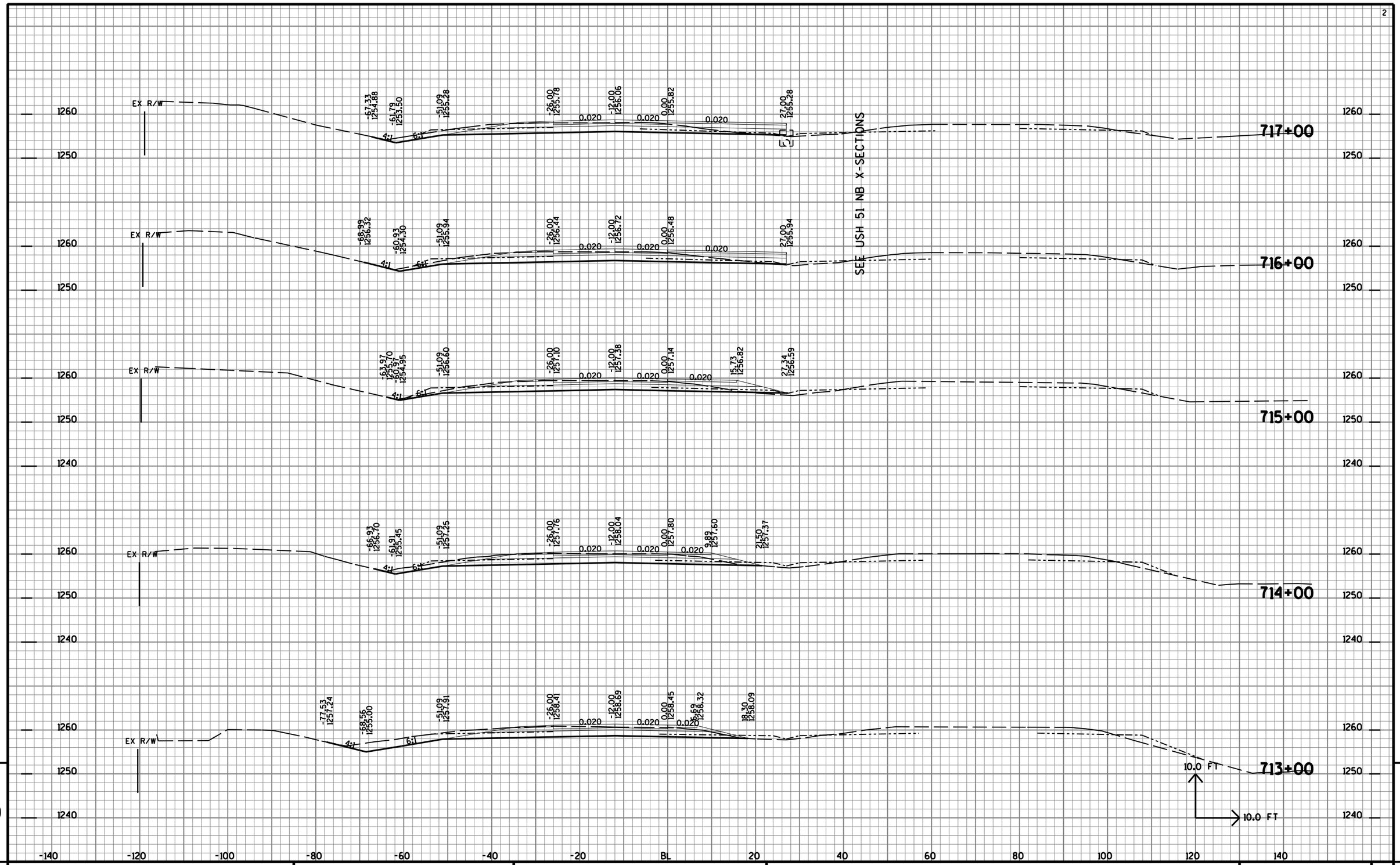


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PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: USH 51 SB	SHEET NO: 1112	E

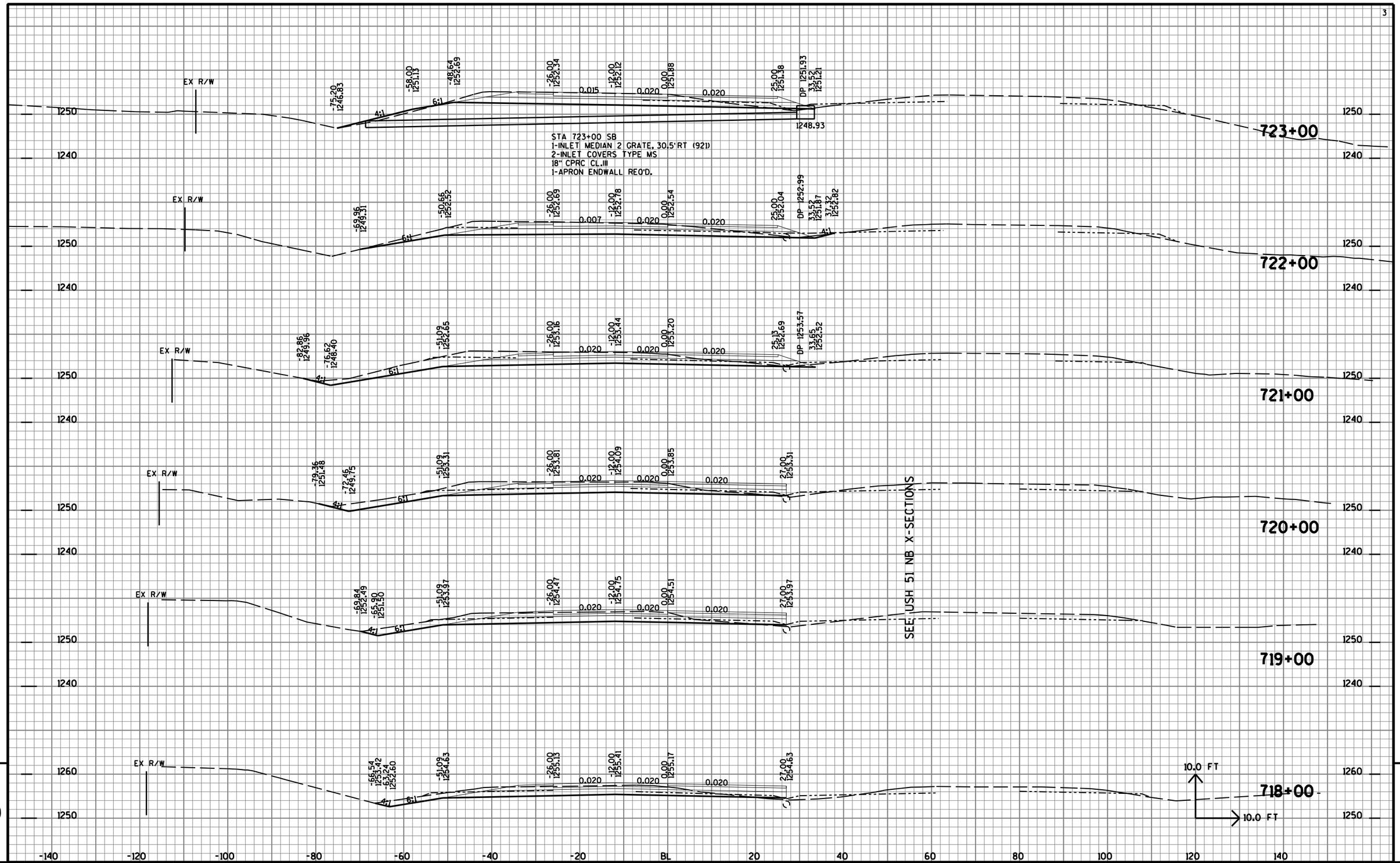
FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090202_xssb.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC eau_shd_util.tbl PLOT SCALE : 1:2



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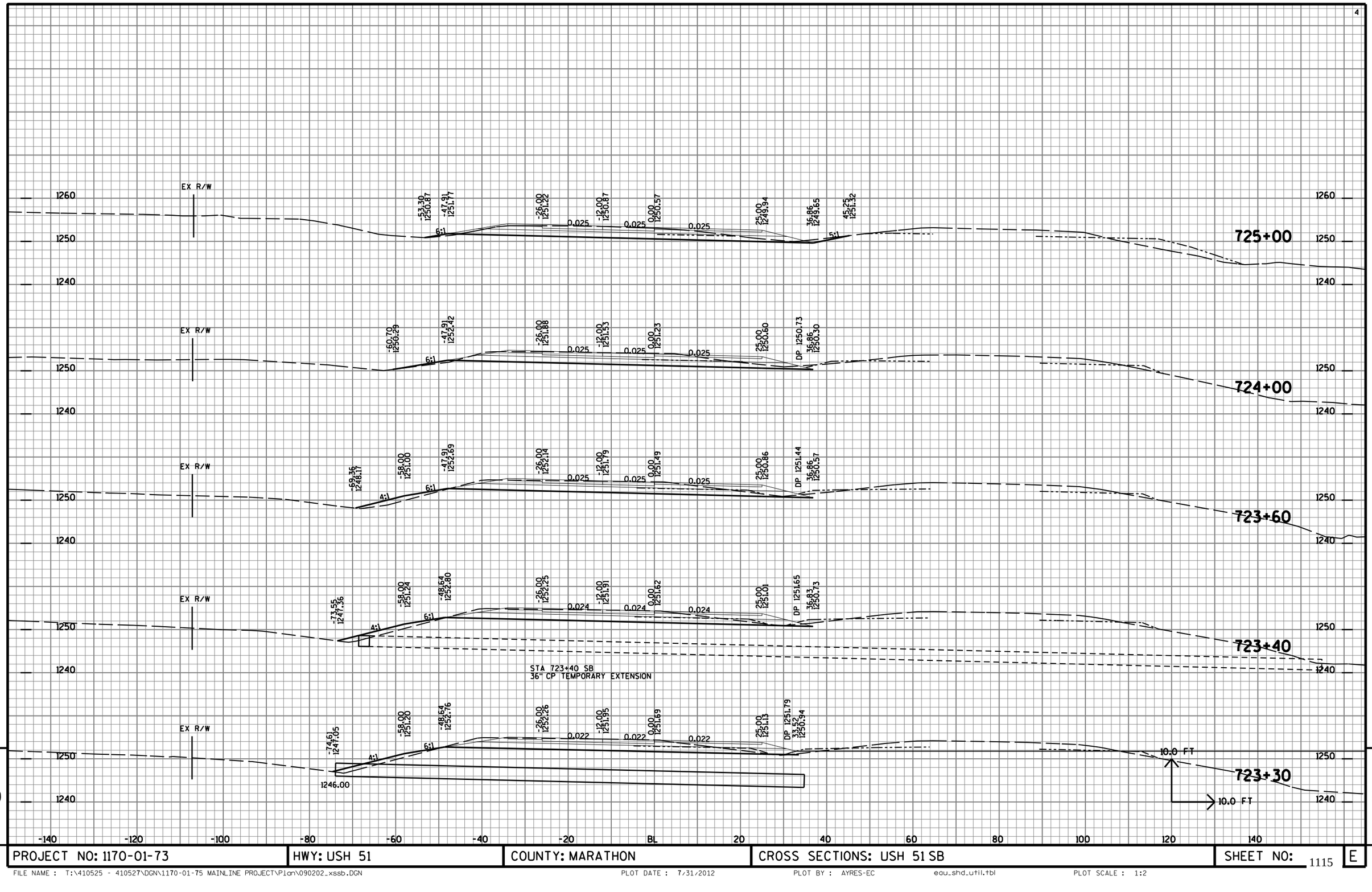
PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: USH 51 SB	SHEET NO: 1113	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090202_xssb.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC eau_shd_util.tbl PLOT SCALE : 1:2



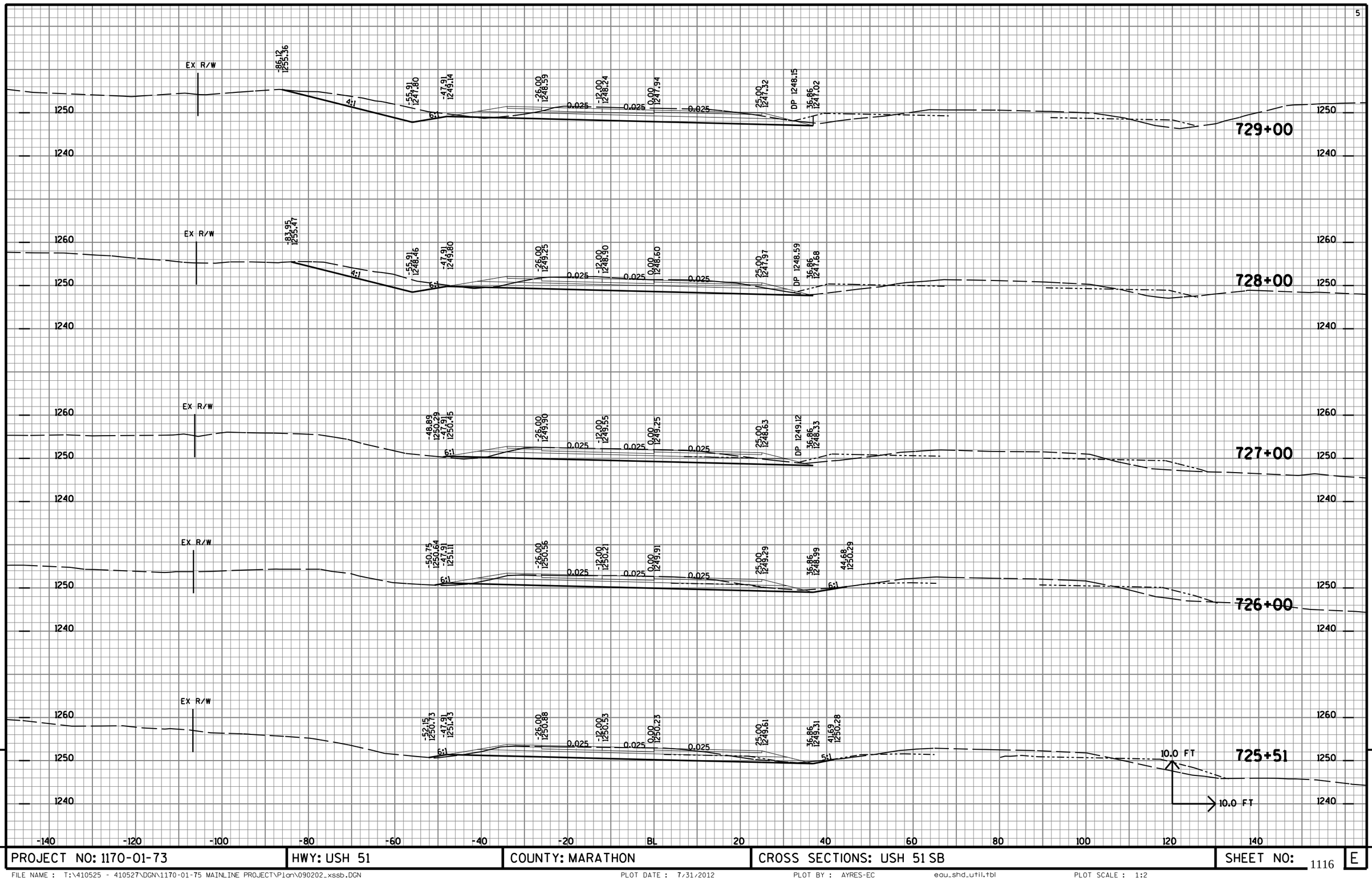
PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: USH 51 SB	SHEET NO: 1114	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090202_xssb.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC eau_shd_util.tbl PLOT SCALE : 1:2



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PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: USH 51 SB	SHEET NO: 1115	E

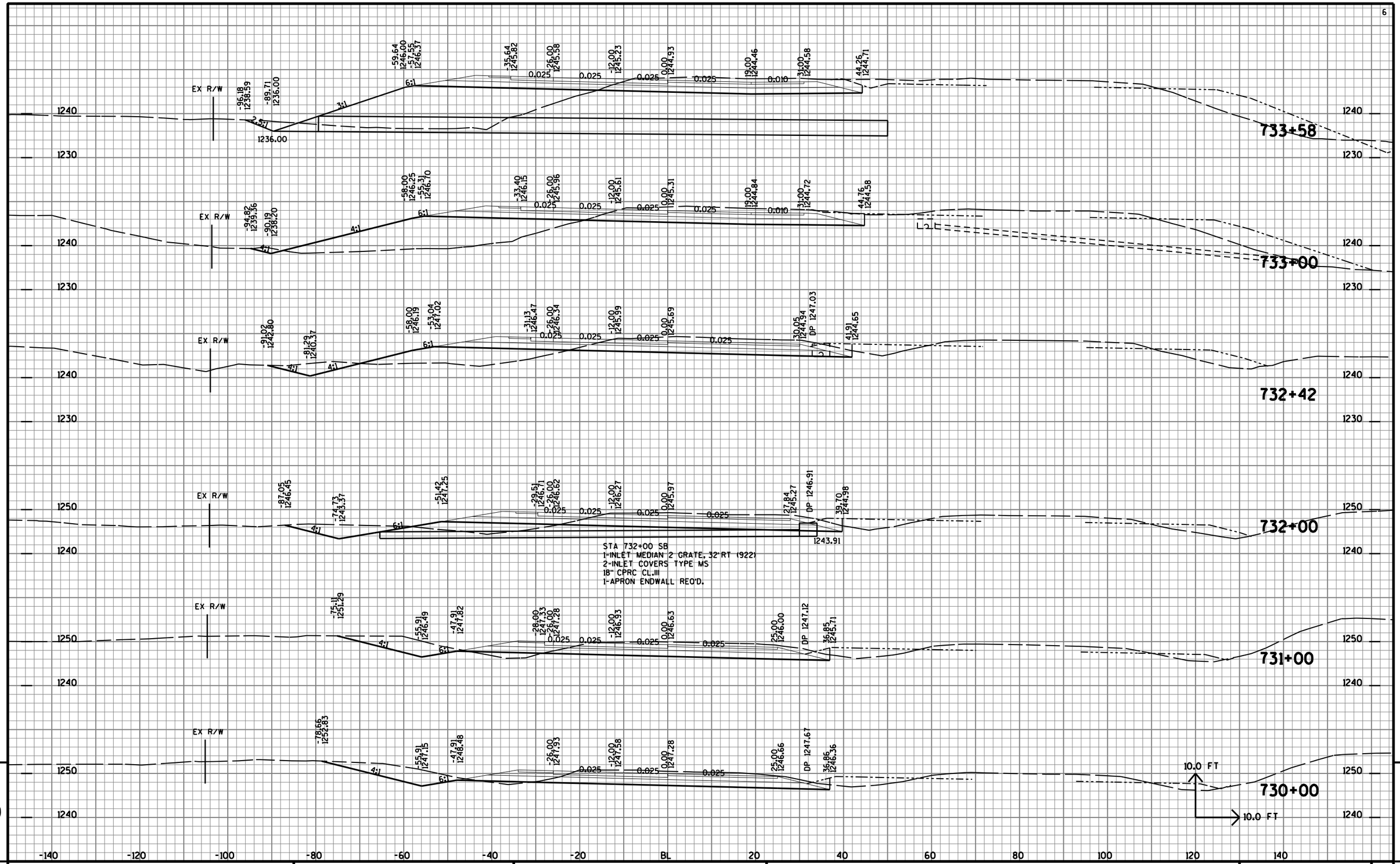


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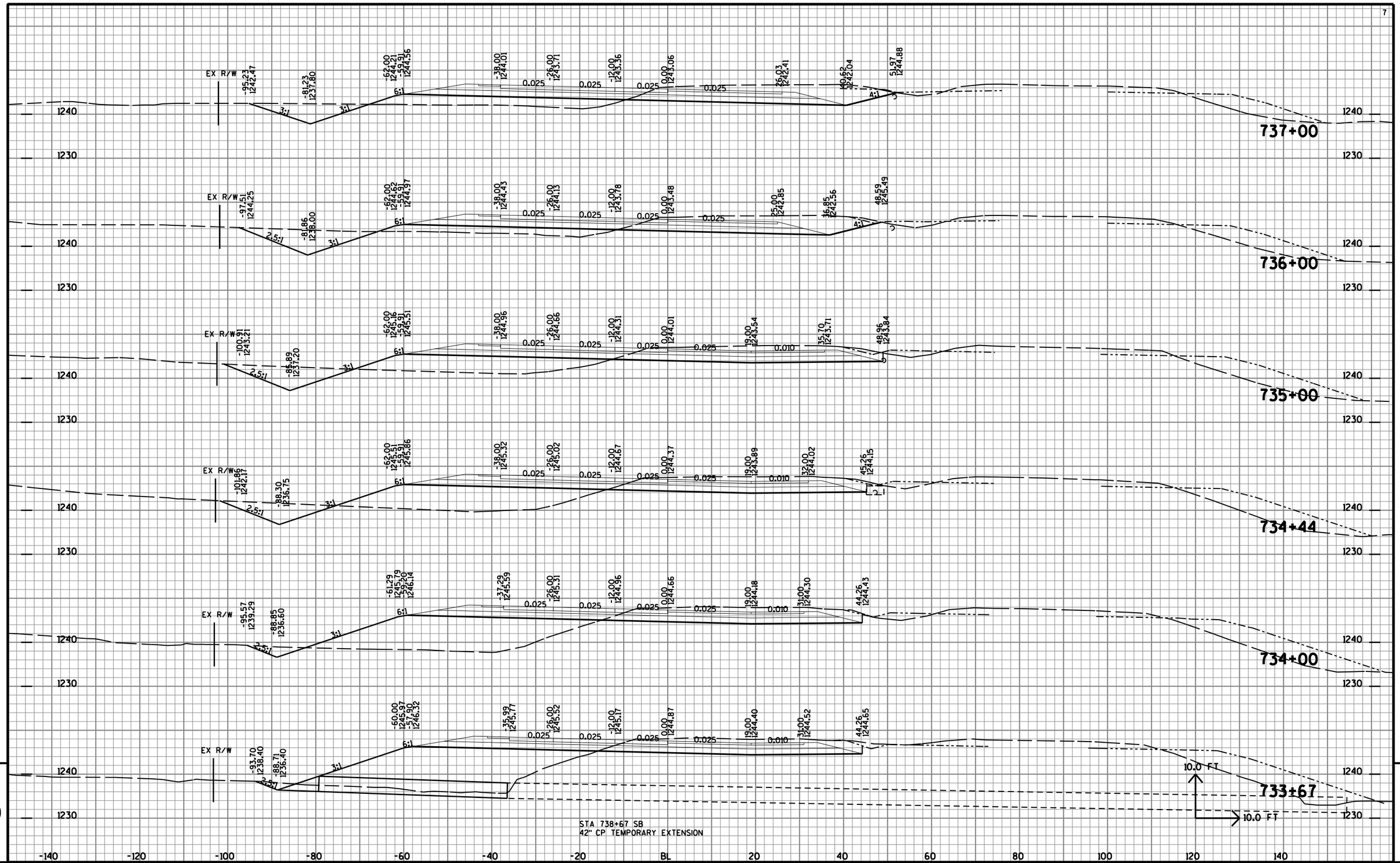
PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: USH 51 SB	SHEET NO: 1116	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090202_xssb.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC eau_shd_util.tbl PLOT SCALE : 1:2



PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: USH 51 SB	SHEET NO: 1117	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090202_xssb.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC eau_shd_util.tbl PLOT SCALE : 1:2

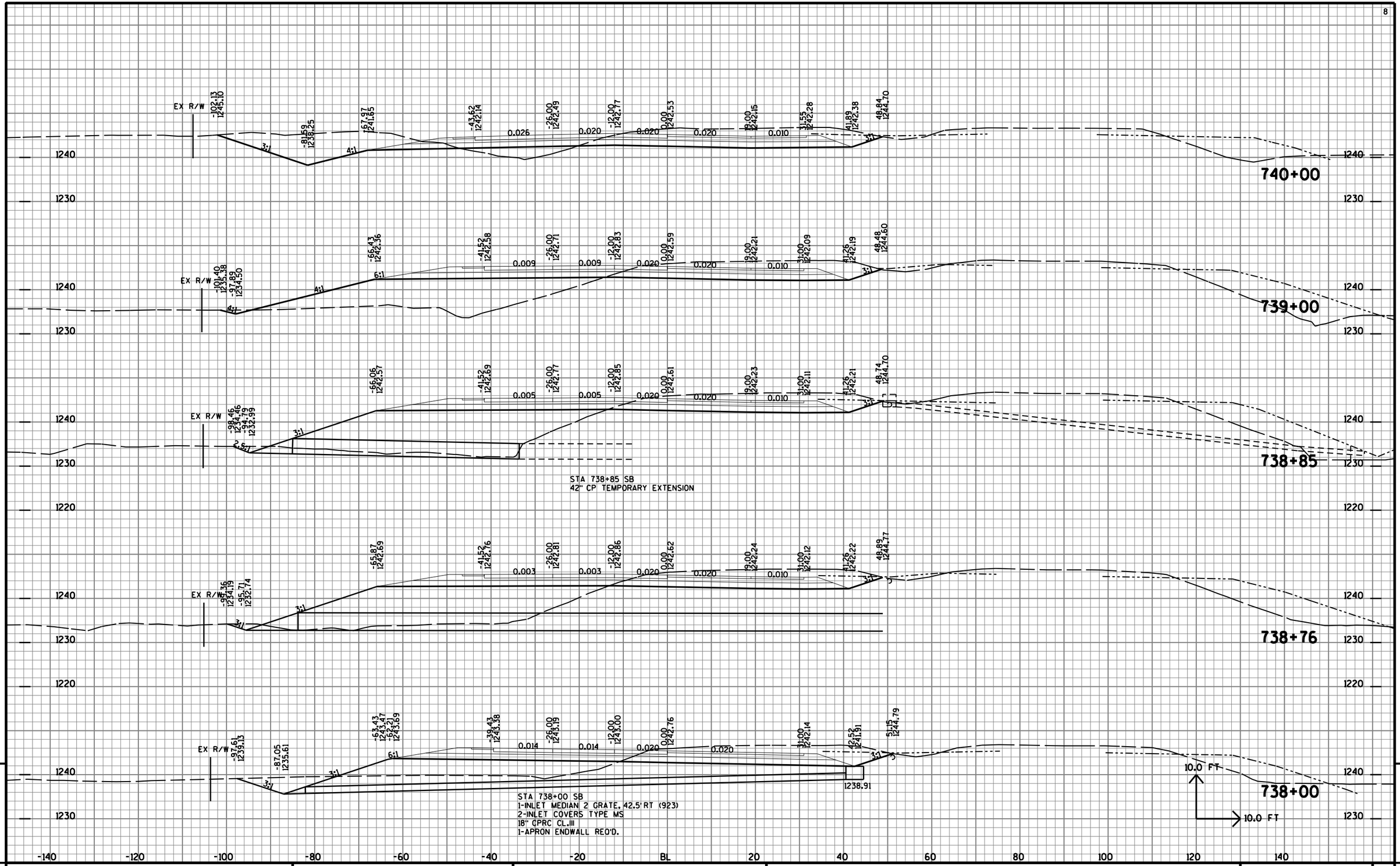


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9

PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: USH 51 SB	SHEET NO: 1118	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090202_xssb.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC eau_shd_util.tbl PLOT SCALE : 1:2

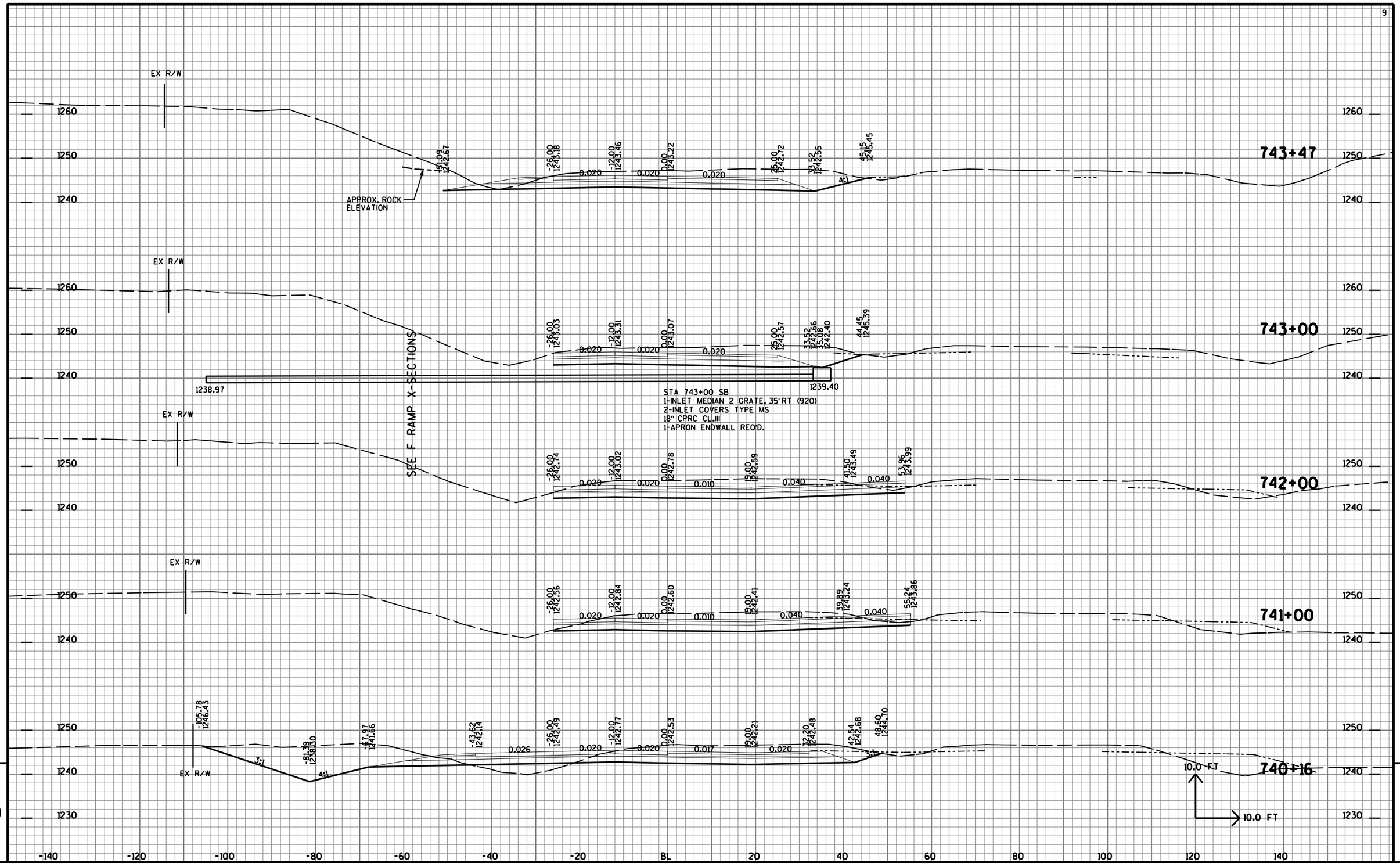


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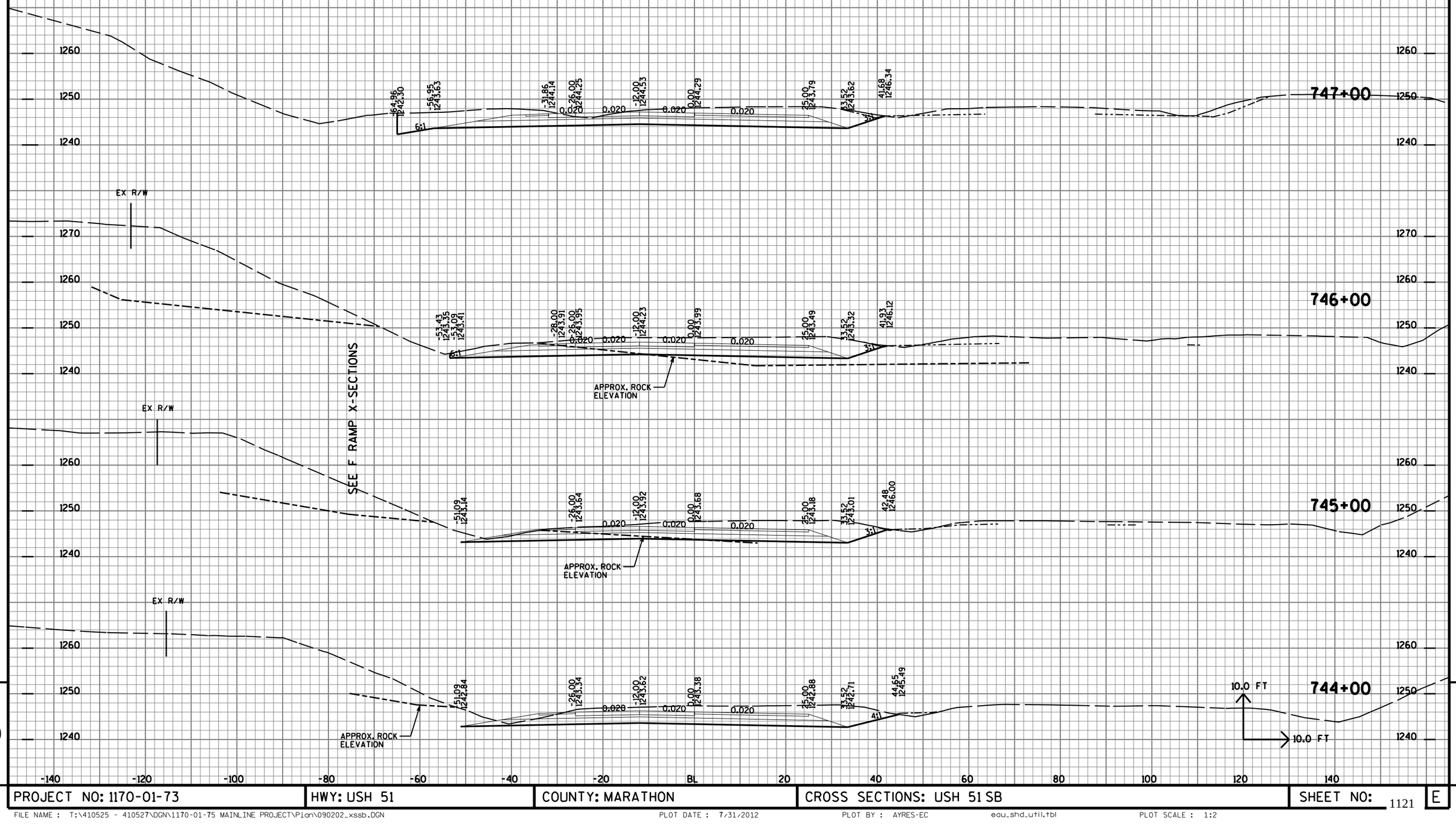
PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: USH 51 SB	SHEET NO: 1119	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090202_xssb.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC egu_shd_util.tbl PLOT SCALE : 1:2



PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: USH 51 SB	SHEET NO: 1120	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090202_xssb.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC eau_shd_util.tbl PLOT SCALE : 1:2

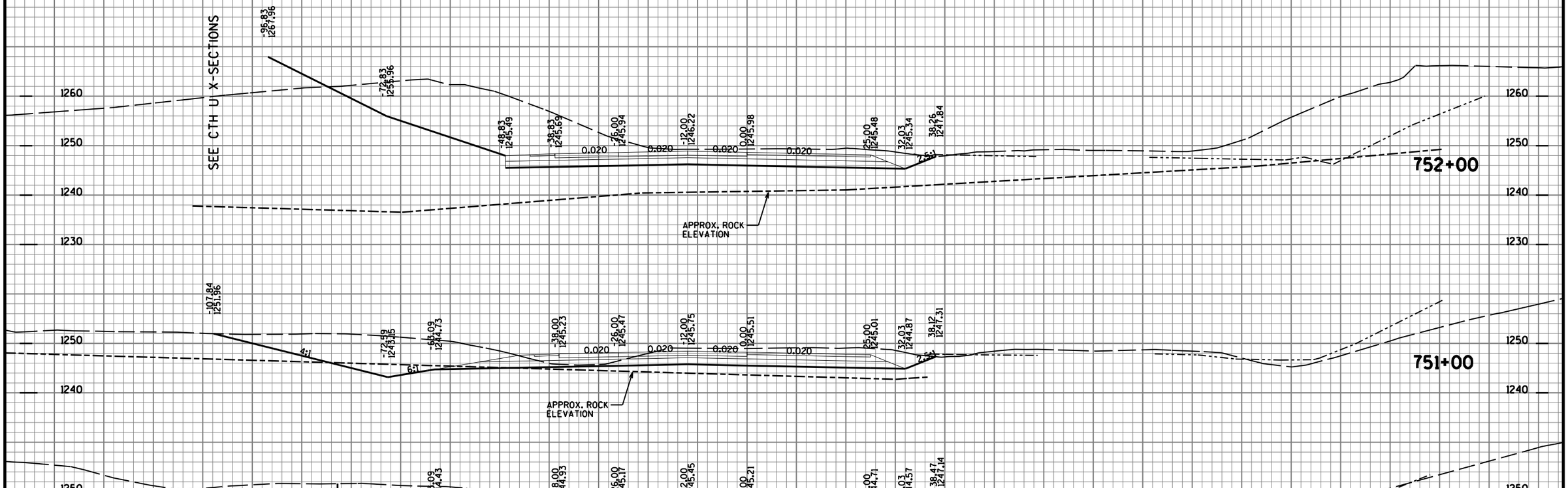


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PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: USH 51 SB	SHEET NO: 1121	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090202_xssb.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC eau_shd_util.tbl PLOT SCALE : 1:2

SEE CTH U I X-SECTIONS



SEE F RAMP X-SECTIONS

PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: USH 51 SB	SHEET NO: 1122 E

SEE D RAMP X-SECTIONS

SEE 'SR' X-SECTIONS

-33.39 1249.34 | -26.00 1249.74 | -12.00 1250.49 | 0.00 1251.14
0.054 | 0.054 | 0.054

756+00

-29.48 1248.42 | -26.00 1248.53 | -12.00 1248.98 | 0.00 1249.36
0.032 | 0.032 | 0.032

755+00

-38.63 1239.49 | -57.92 1246.67 | -42.83 1247.17 | -26.00 1247.51 | -12.00 1247.79 | 0.00 1247.91 | 30.14 1248.20 | 38.66 1248.28 | 45.40 1250.53
4:1 | 0.020 | 0.020 | 0.010 | 0.010 | 3:1

754+00

-69.13 1245.39 | -65.92 1245.52 | -40.83 1246.43 | -26.00 1246.72 | -12.00 1247.00 | 0.00 1246.88 | 26.25 1246.61 | 33.28 1246.54 | 41.62 1249.32
6:1 | 0.020 | 0.020 | 0.010 | 0.010 | 3:1

753+10

-103.39 1251.89 | -73.92 1244.52 | -65.92 1245.85 | -40.83 1246.36 | -26.00 1246.65 | -12.00 1246.93 | 0.00 1246.78 | 26.25 1246.45 | 33.28 1246.36 | 40.30 1249.17
4:1 | 6:1 | 0.020 | 0.020 | 0.013 | 0.013 | 3.5:1

753+00

10.0 FT
10.0 FT

1250 1240 1230

-140 -120 -100 -80 -60 -40 -20 BL 20 40 60 80 100 120 140

9 9

PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: USH 51 SB	SHEET NO: 1123	E

SEE D RAMP X-SECTIONS

759+00

-57.67 1255.34 | -26.00 1257.05 | -12.00 1257.81 | 0.00 1258.46 | 18.08 1259.43 | 26.19 1258.62
0.054 0.054 10%

758+00

-34.00 1253.85 | -26.00 1254.29 | -12.00 1255.04 | 0.00 1255.69 | 18.08 1256.67 | 33.28 1255.40
0.054 0.054 8.3%

757+00

-34.00 1251.42 | -26.00 1251.85 | -12.00 1252.60 | 0.00 1253.25 | 18.08 1254.23 | 31.24 1253.57
0.054 0.054 5%

756+60

-34.00 1250.53 | -26.00 1250.96 | -12.00 1251.72 | 0.00 1252.37 | 18.08 1253.34 | 31.91 1252.79
0.054 0.054 4%

10.0 FT
10.0 FT

1270 1260 1250 1240

-140 -120 -100 -80 -60 -40 -20 BL 20 40 60 80 100 120 140

9 9

PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: USH 51 SB	SHEET NO: 1124 E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090202_xssb.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC eau_shd_util.tbl PLOT SCALE : 1:2

SEE D RAMP X-SECTIONS

763+00

-73.05 1262.00
-58.00 1265.76
-51.09 1266.32
-26.00 1267.42
0.020
-12.00 1267.70
0.005
0.00 1267.64
22.49 1267.53
24.08 1267.37
4:1
10%

762+00

-62.56 1263.00
-51.09 1264.31
-26.00 1265.41
0.020
-12.00 1265.69
0.020
0.00 1265.93
20.29 1266.34
22.85 1266.08
6:1
10%

761+00

-57.83 1261.83
-55.05 1261.64
-26.00 1262.80
0.040
-12.00 1263.35
0.040
0.00 1263.83
18.90 1264.58
25.57 1263.92
6.7%
10%

760+00

-64.92 1259.66
-57.67 1258.21
-26.00 1259.92
0.054
-12.00 1260.87
0.054
0.00 1261.32
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5%
10%

10.0 FT
10.0 FT

1270
1260
1250
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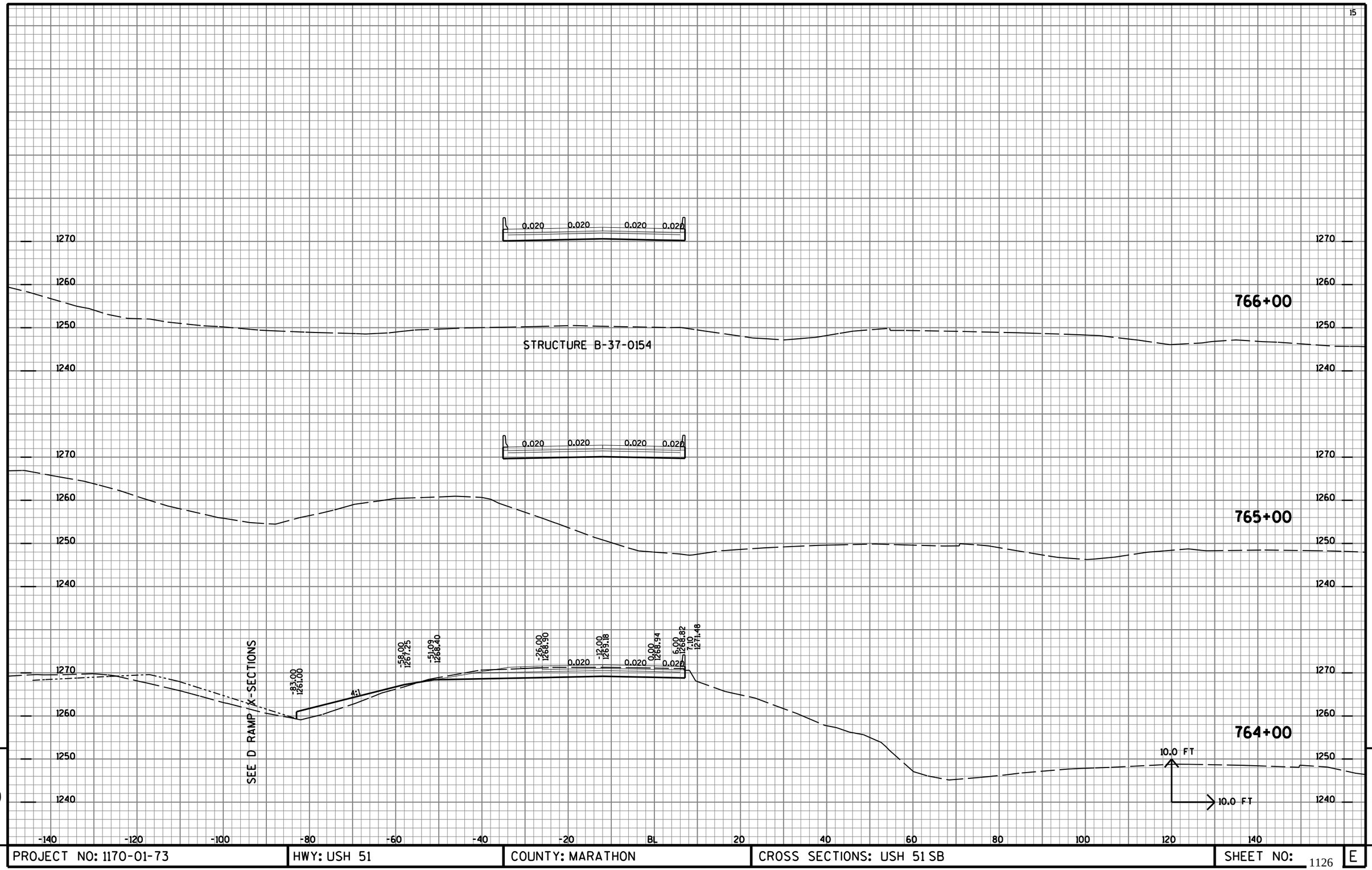
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PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: USH 51 SB	SHEET NO: 1125	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090202_xssb.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC eau_shd_util.tbl PLOT SCALE : 1:2

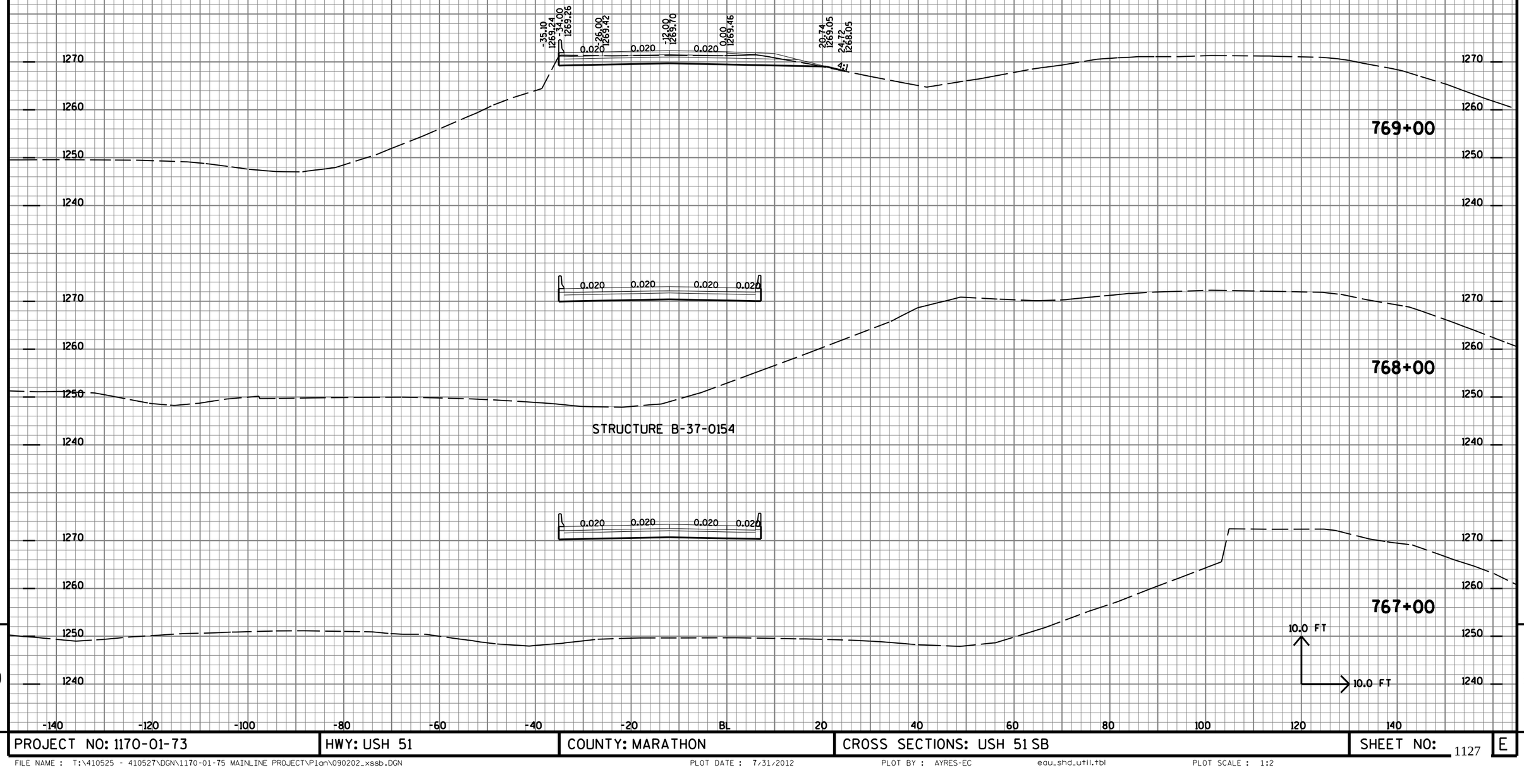


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PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: USH 51 SB	SHEET NO: 1126	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090202_xssb.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC eau_shd_util.tbl PLOT SCALE : 1:2

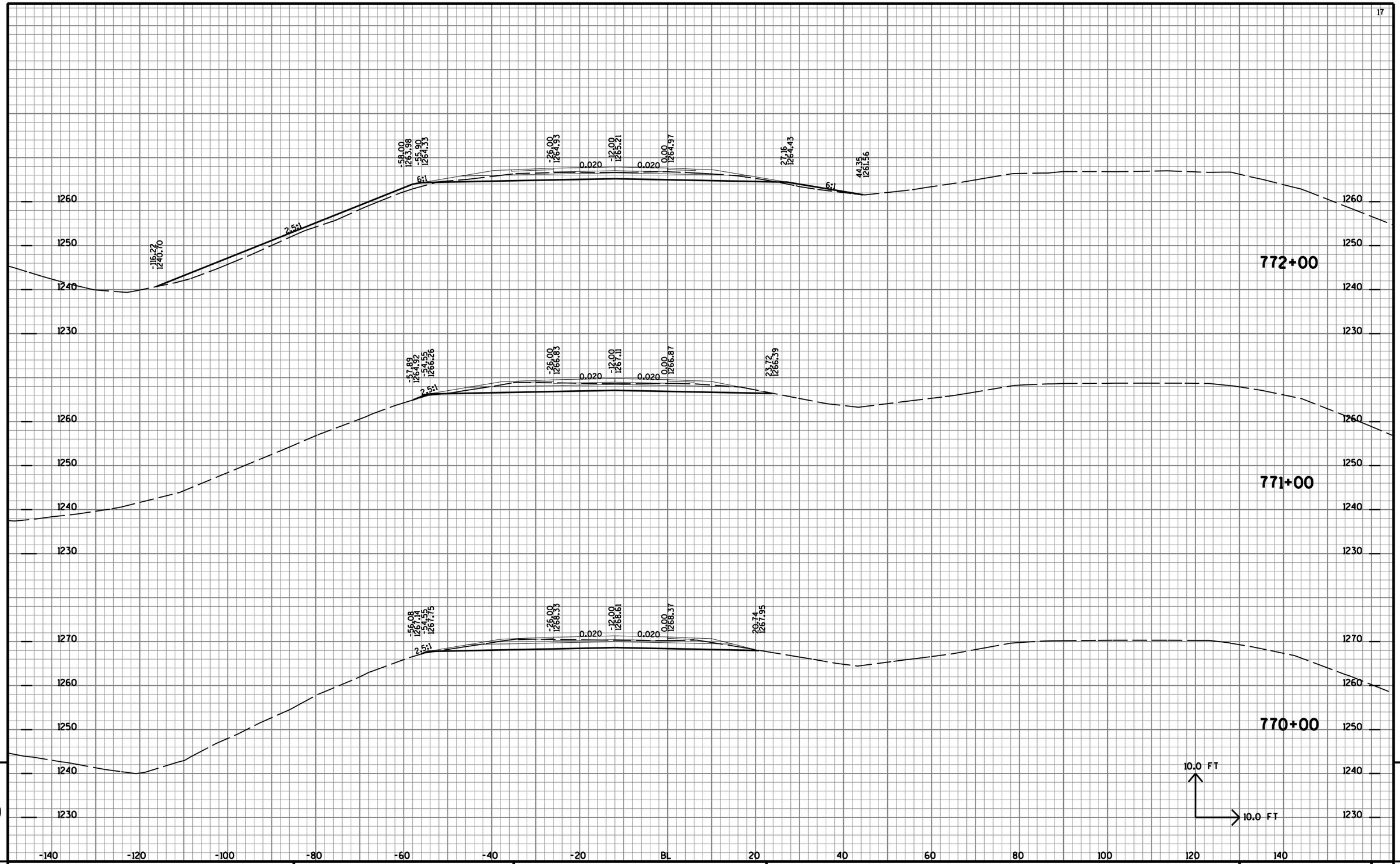


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PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: USH 51 SB	SHEET NO: 1127	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090202_xssb.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC eau_shd_util.tbl PLOT SCALE : 1:2

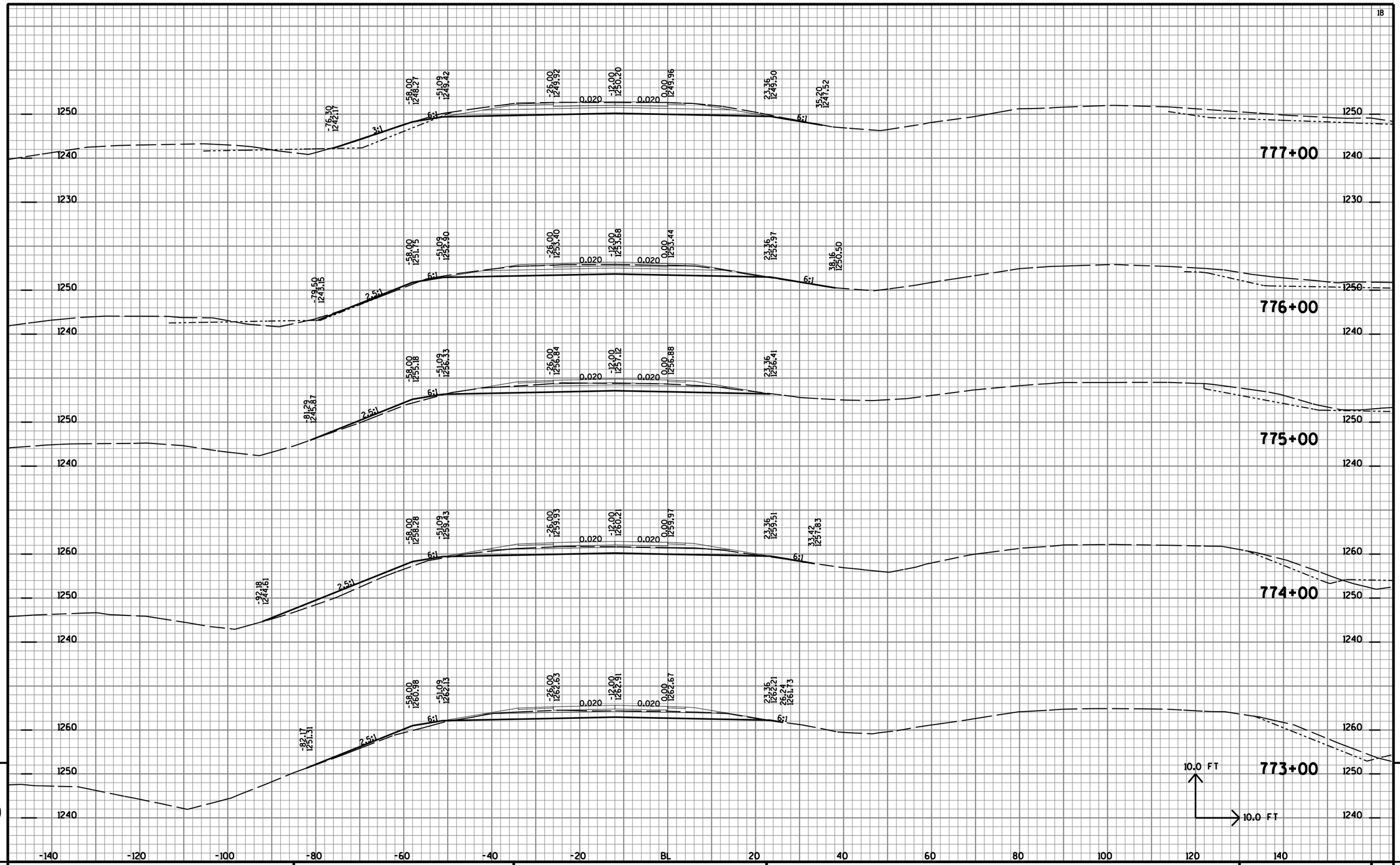


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PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: USH 51 SB	SHEET NO: 1128	E

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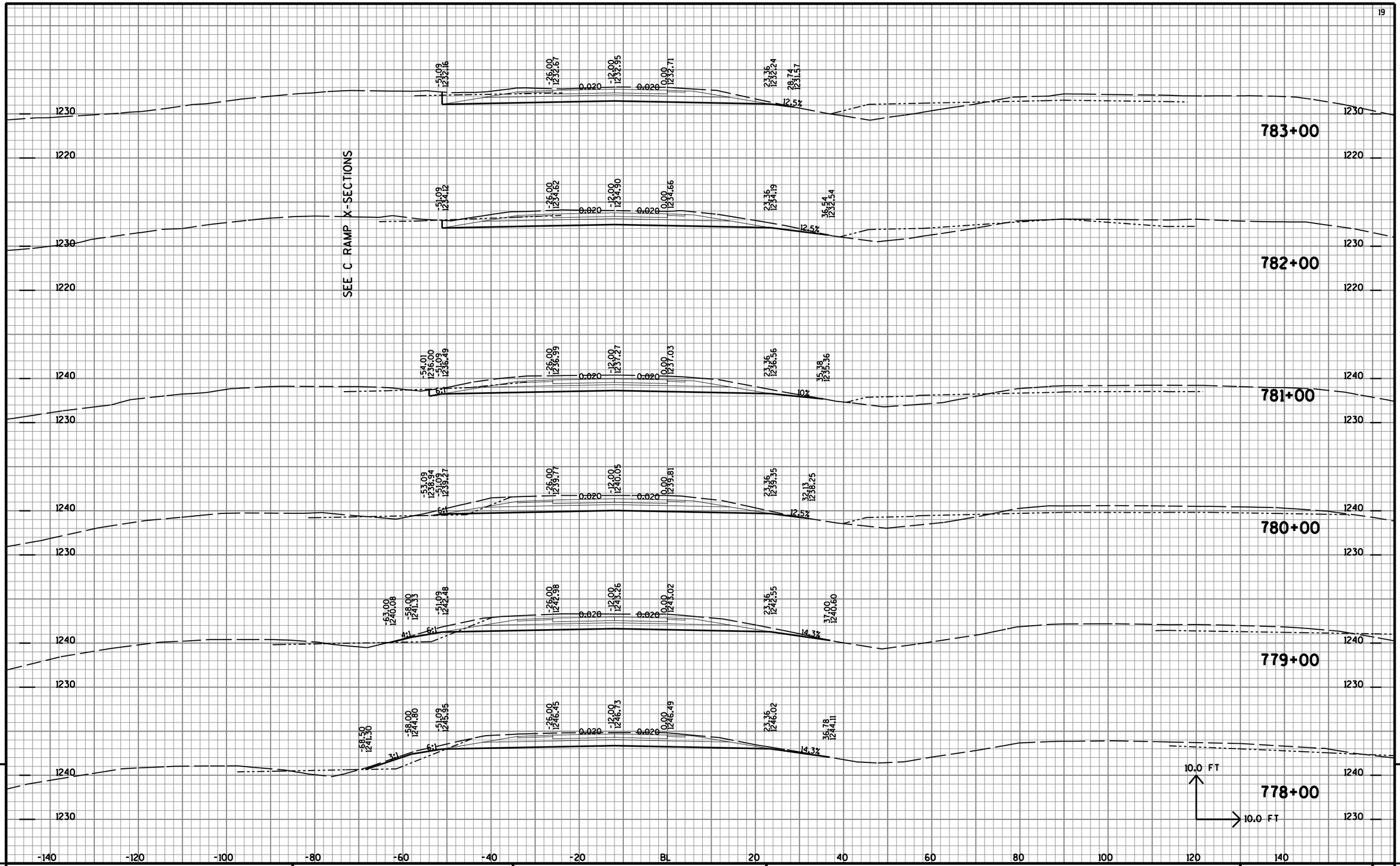


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PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: USH 51 SB	SHEET NO: 1129	E

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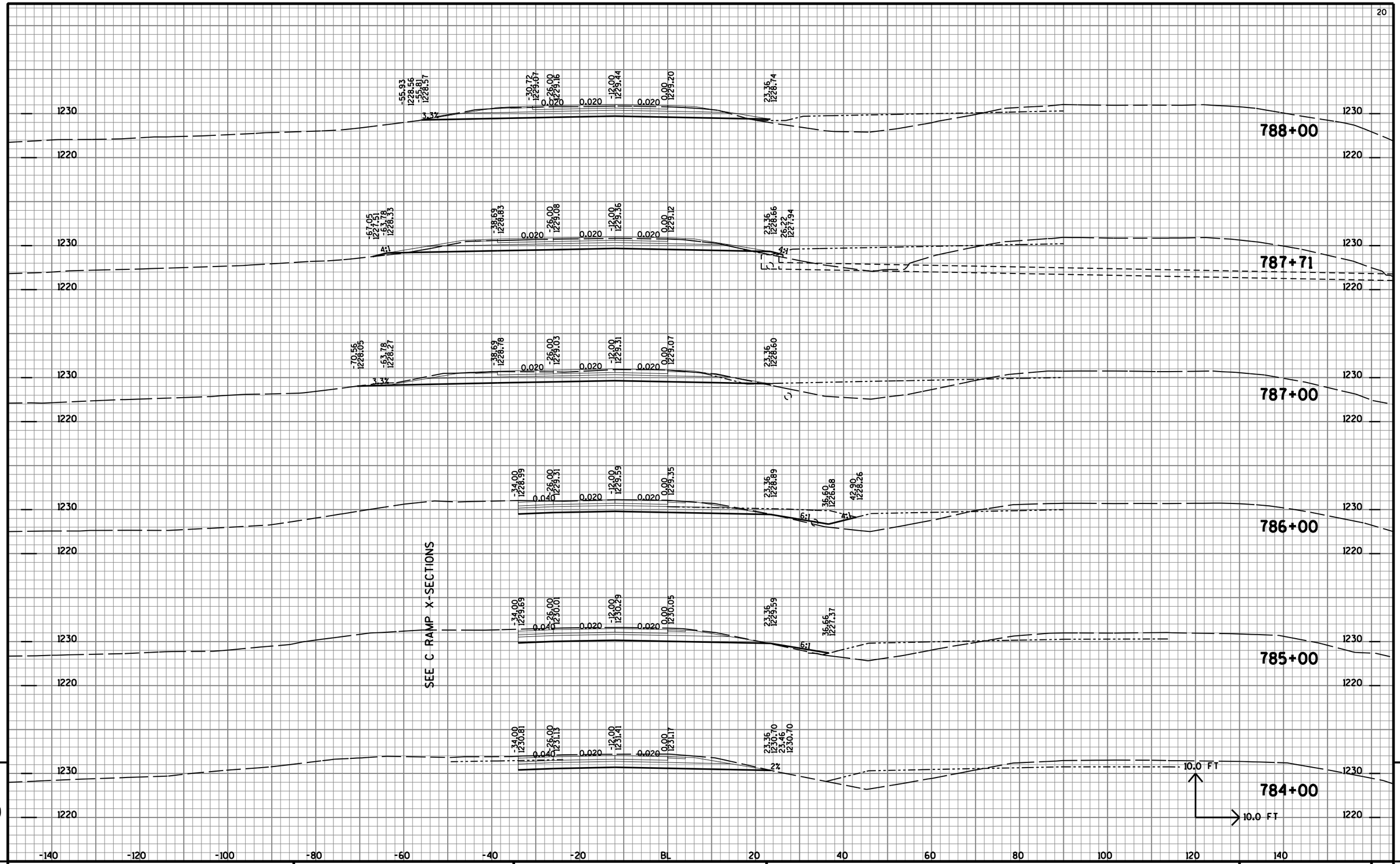
SEE C RAMP X-SECTIONS



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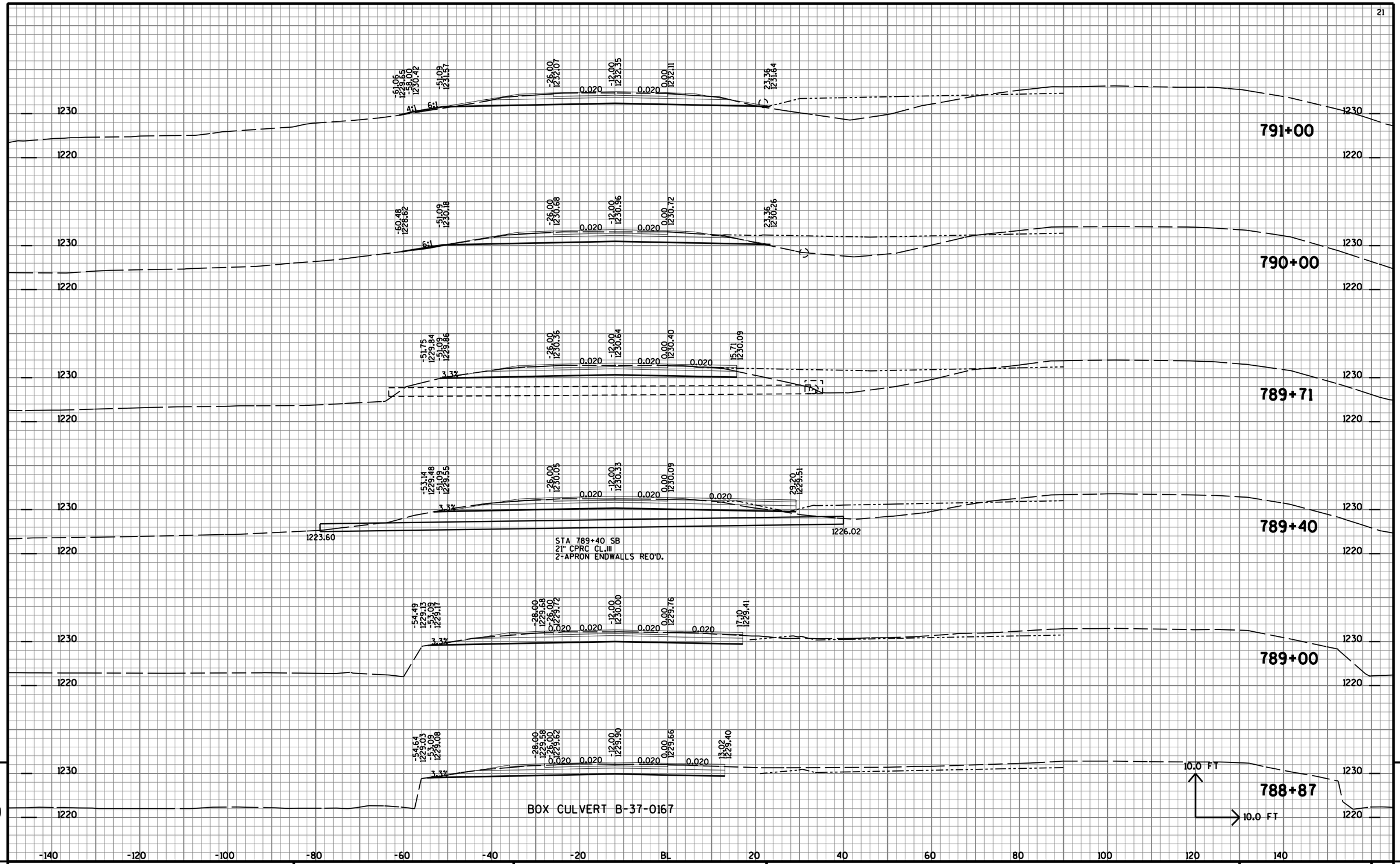
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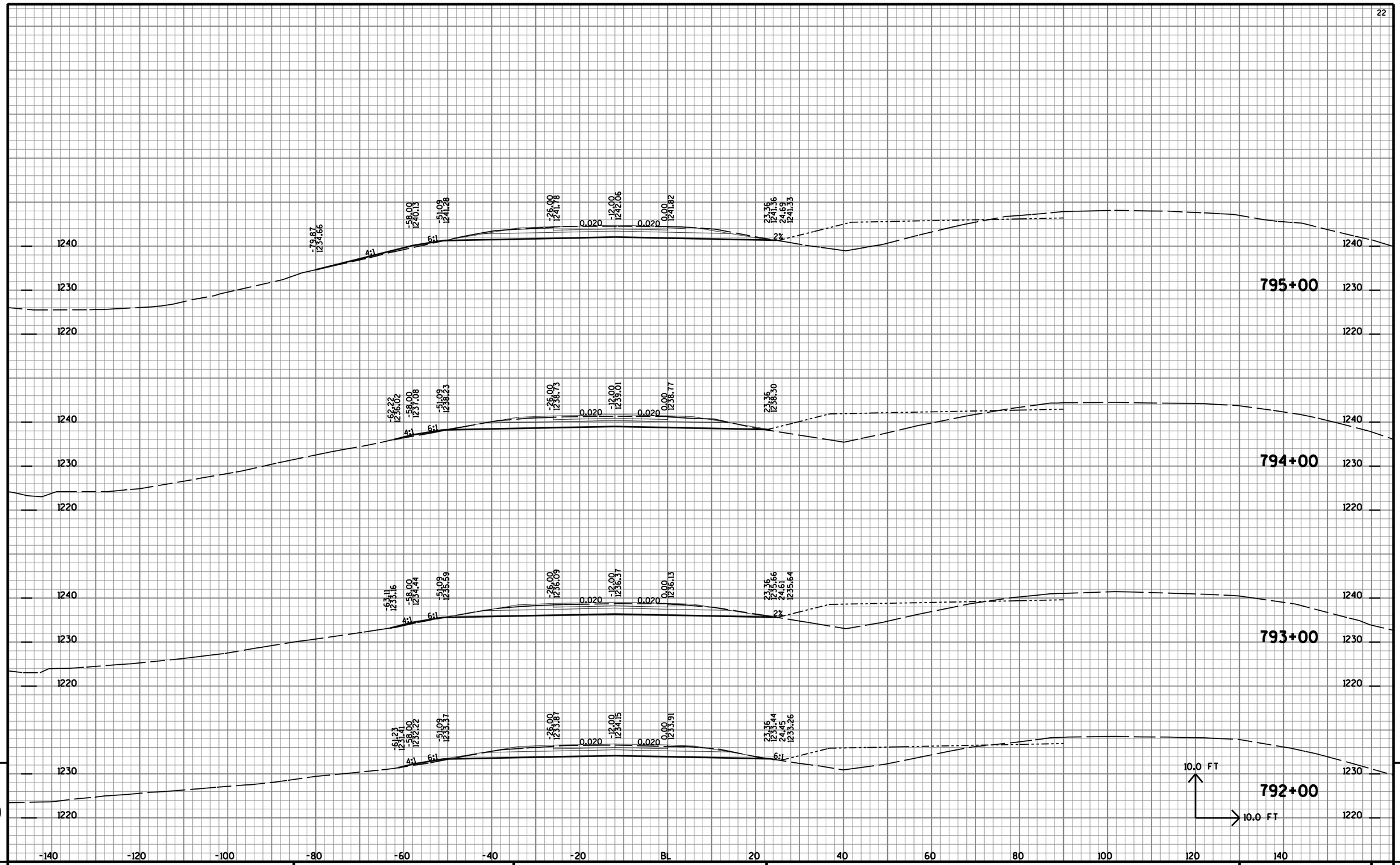
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PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: USH 51 SB	SHEET NO: 1131	E



9 9

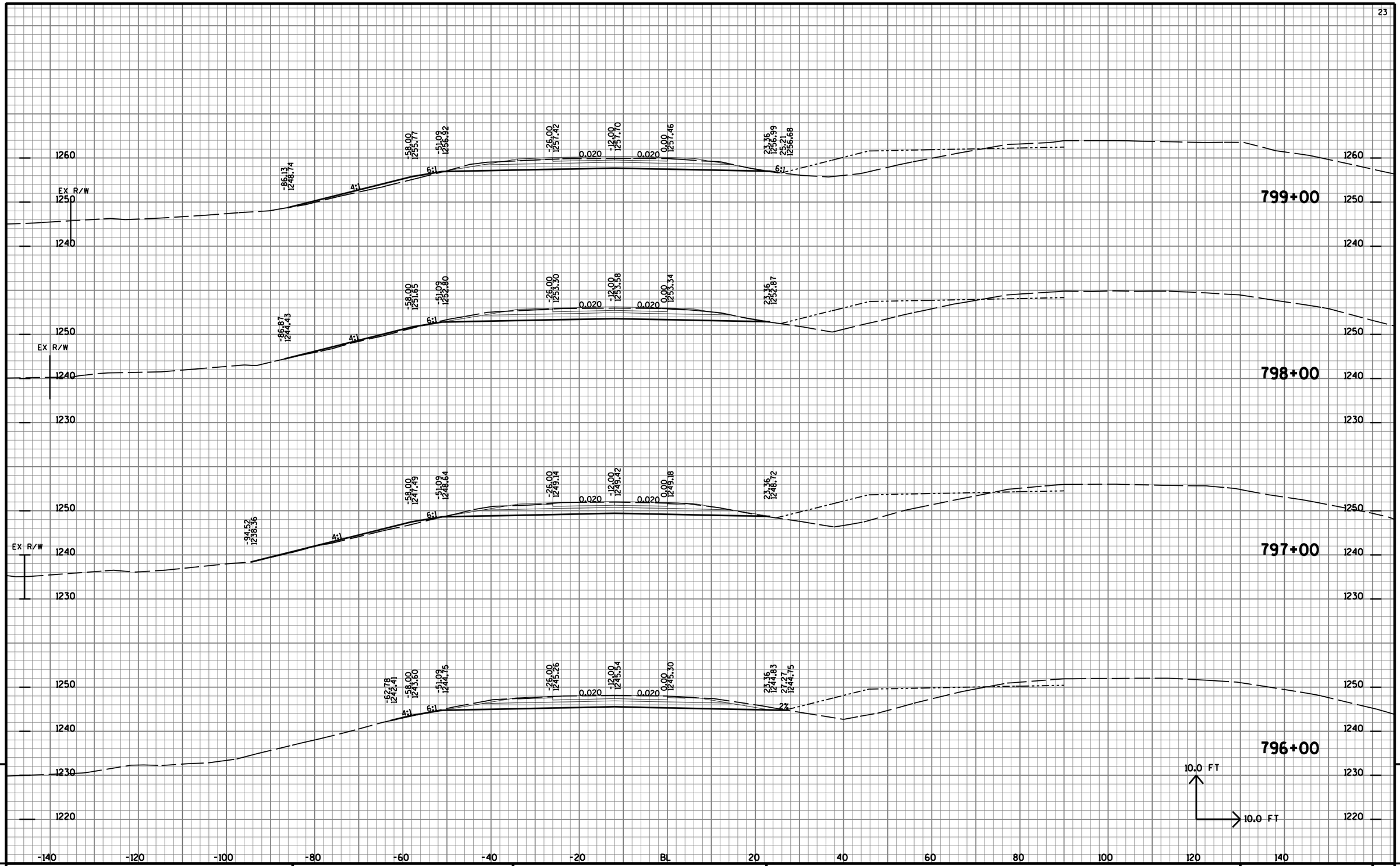
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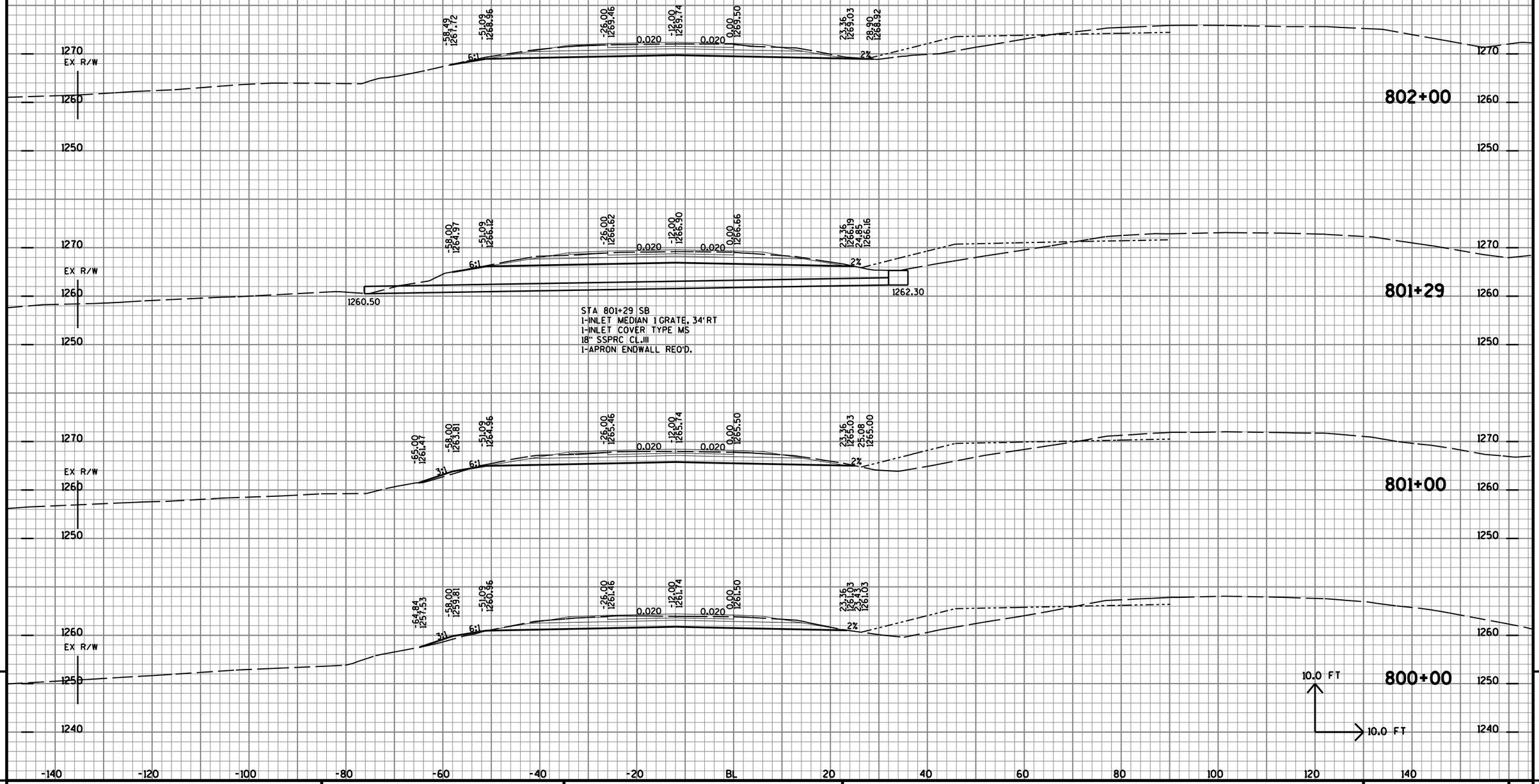
PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: USH 51 SB	SHEET NO: 1133	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090202_xssb.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC eau_shd_util.tbl PLOT SCALE : 1:2



PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: USH 51 SB	SHEET NO: 1134	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090202_xssb.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC eau_shd_util.tbl PLOT SCALE : 1:2

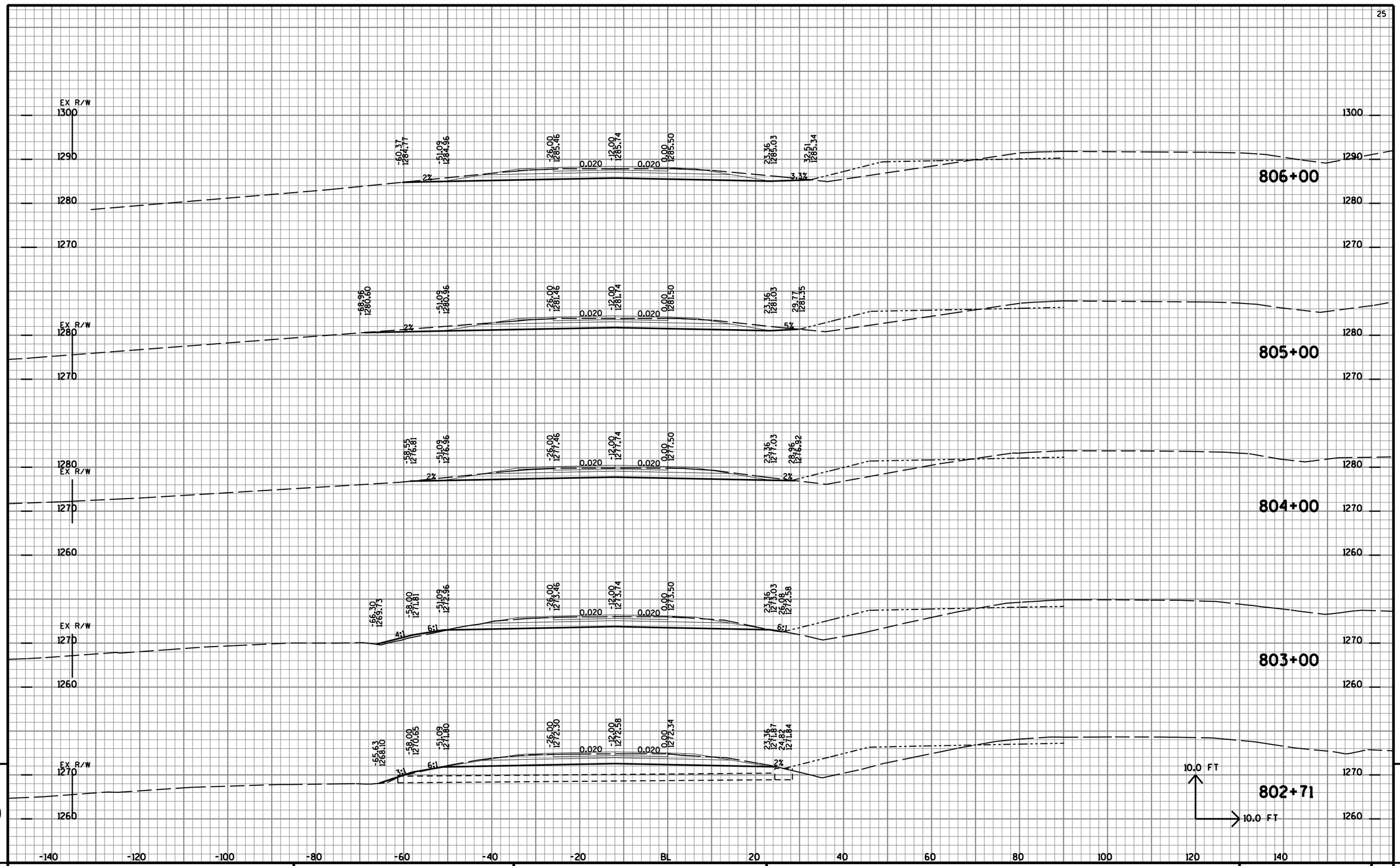


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PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: USH 51 SB	SHEET NO: 1135	E

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FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090202_xssb.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC eau_shd_util.tbl PLOT SCALE : 1:2

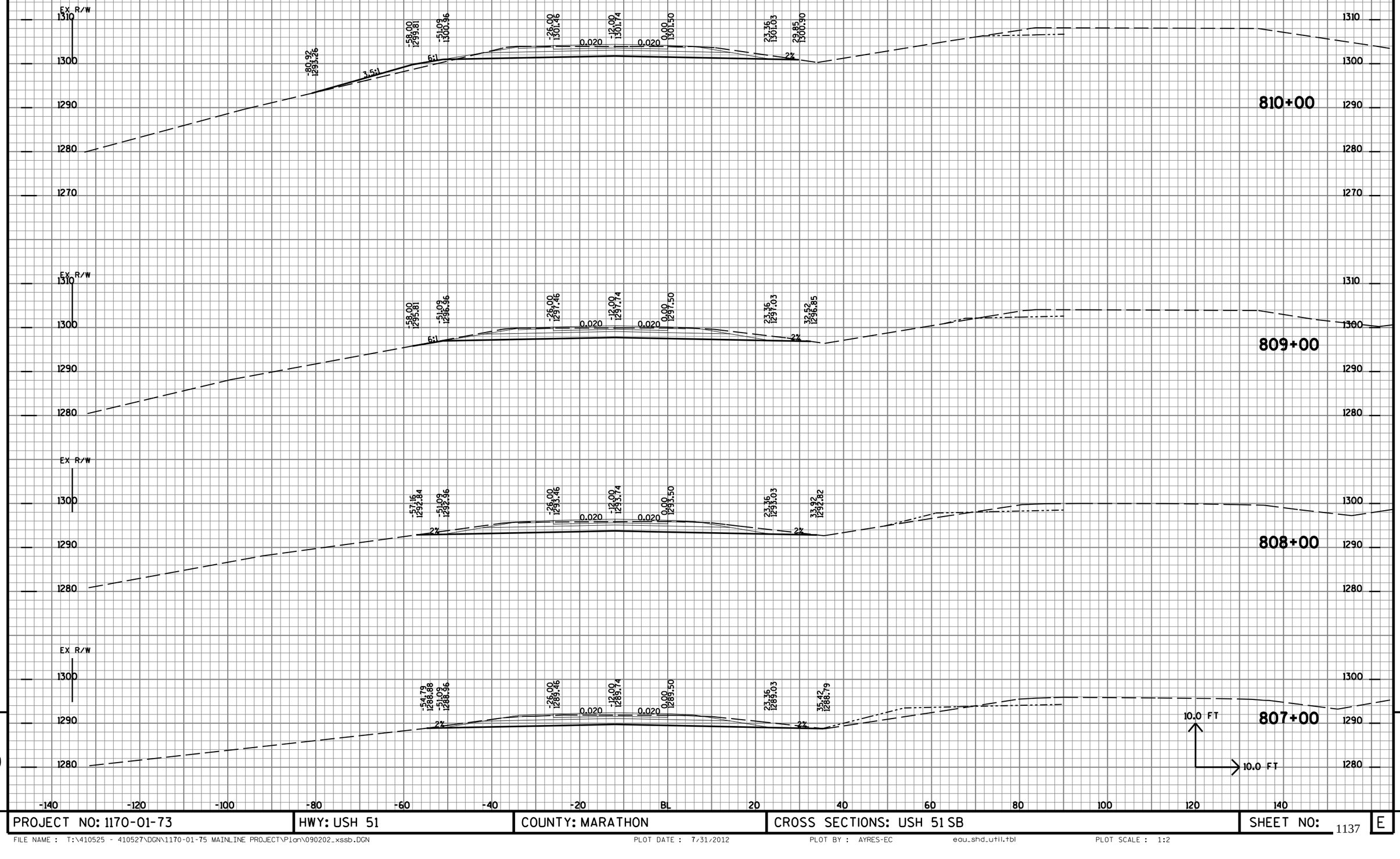


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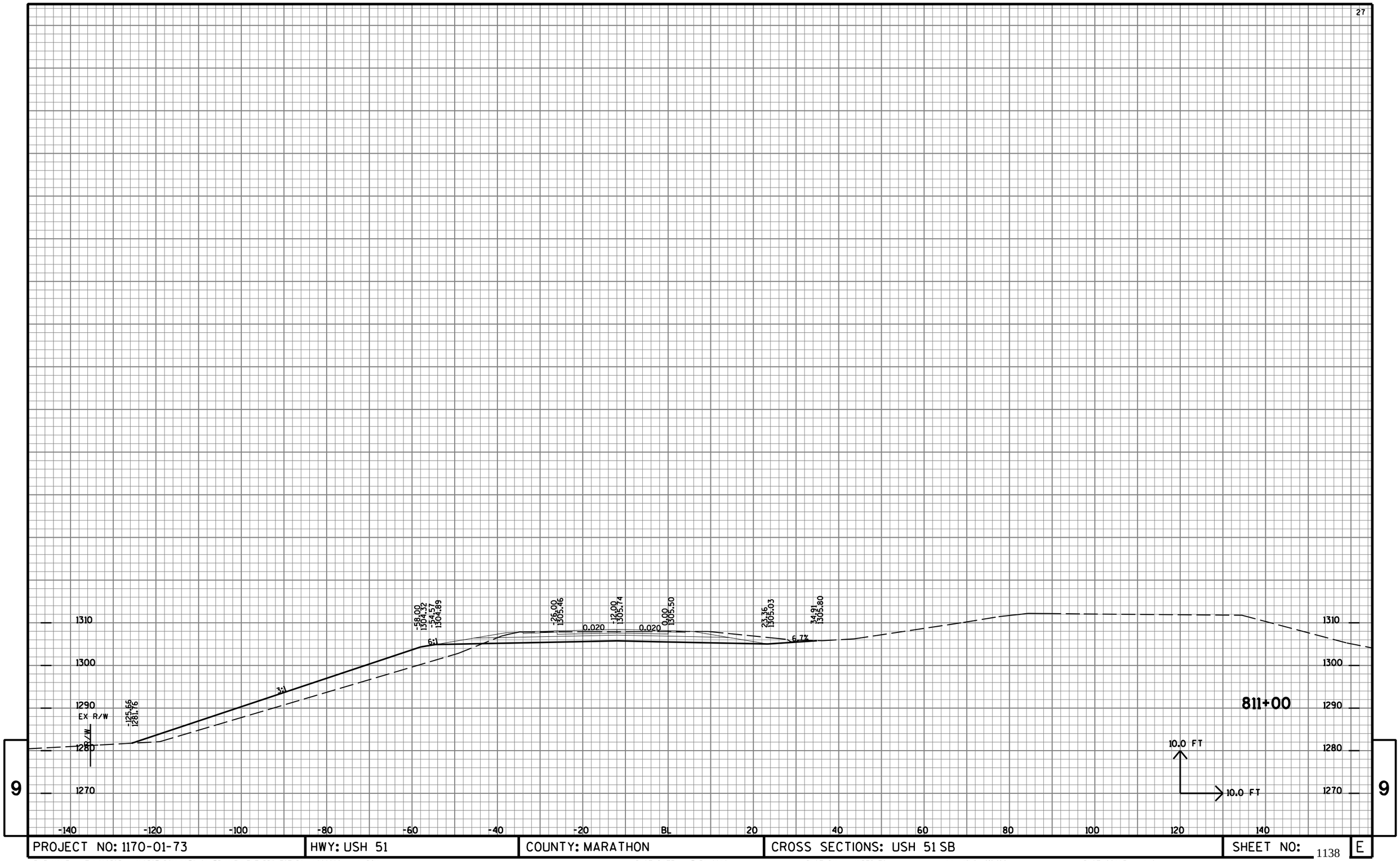
PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: USH 51 SB	SHEET NO: 1136	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090202_xssb.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC eau_shd_util.tbl PLOT SCALE : 1:2



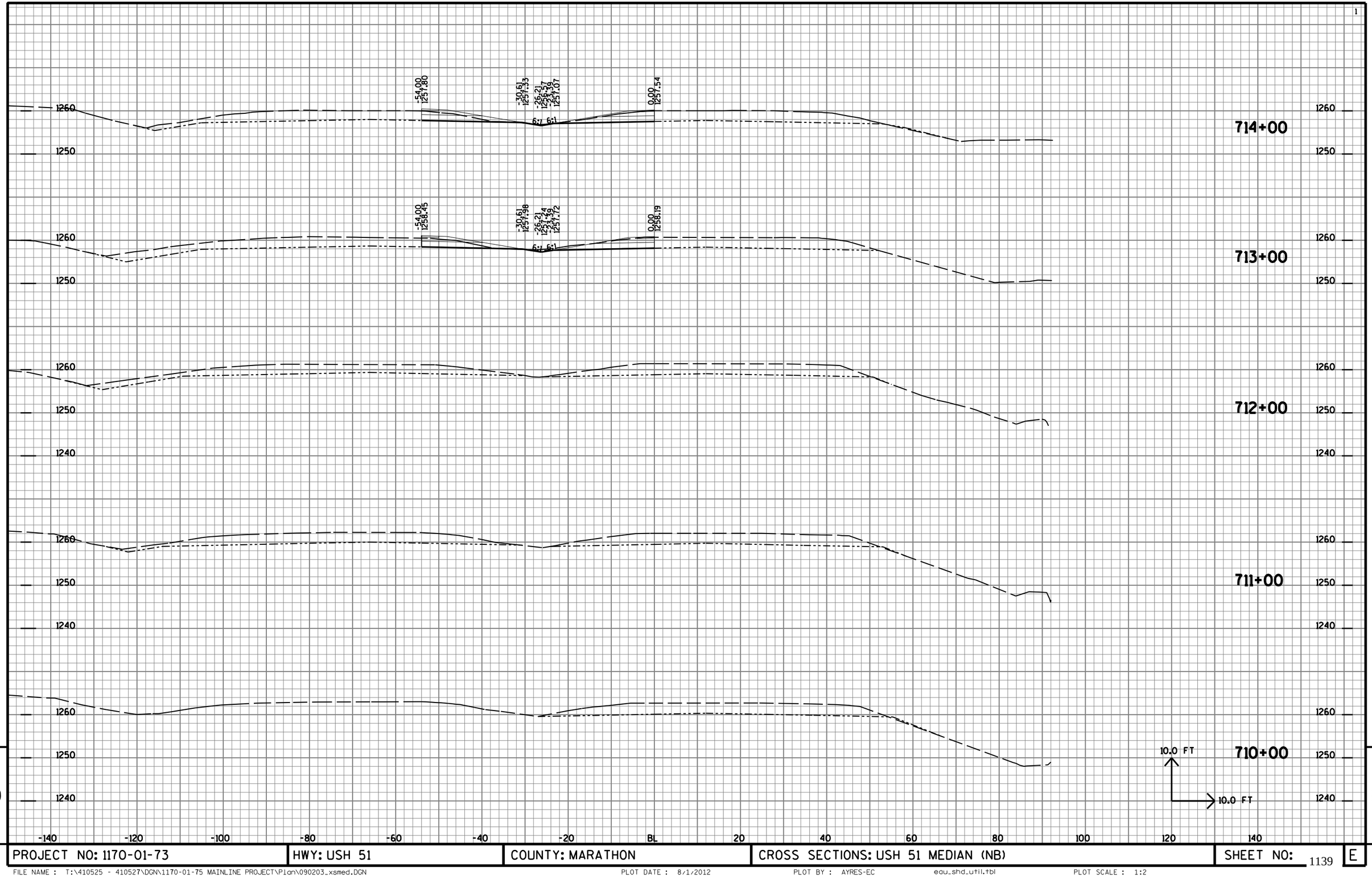
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PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: USH 51 SB	SHEET NO: 1137	E



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PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: USH 51 SB	SHEET NO: 1138	E

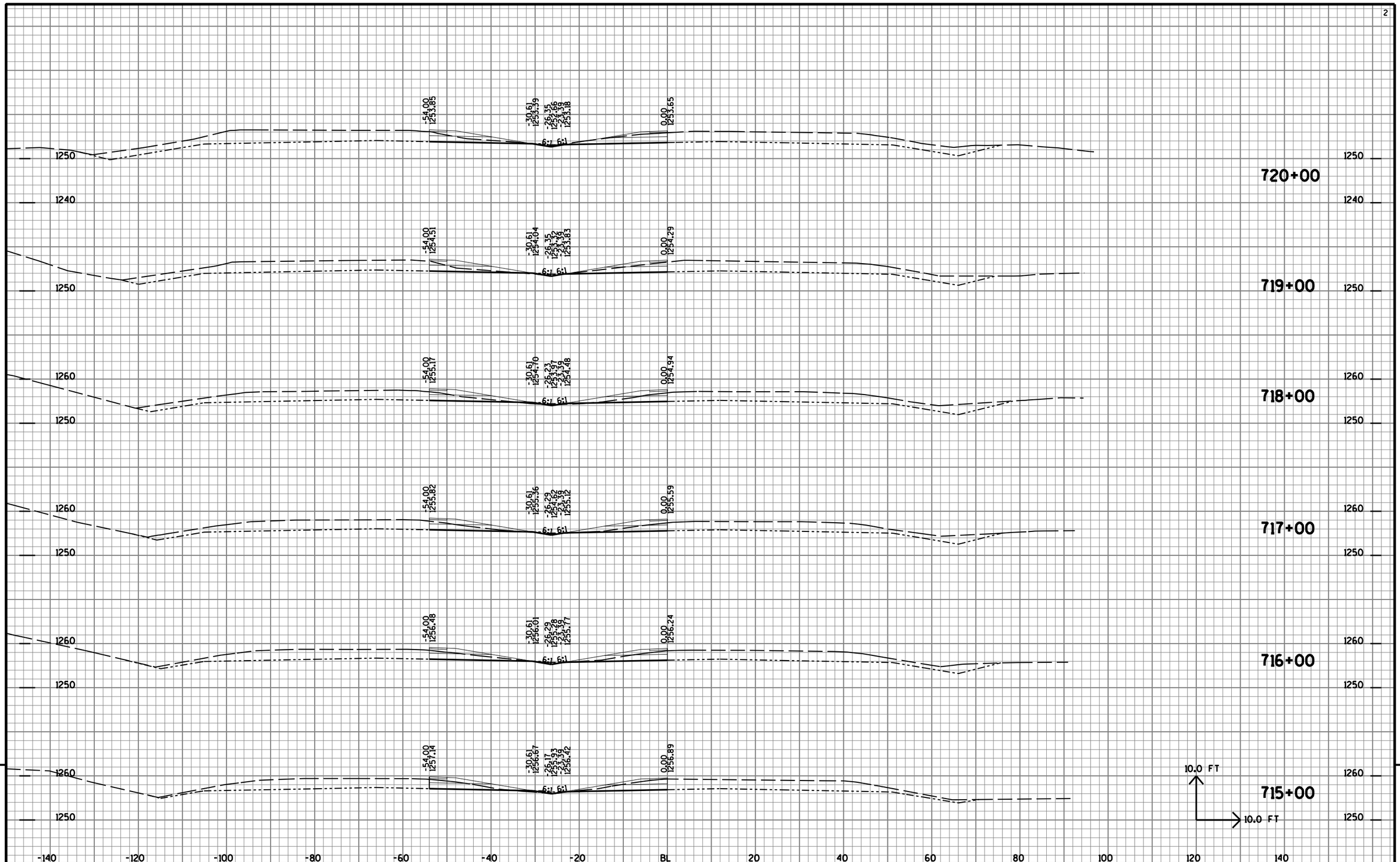


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PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: USH 51 MEDIAN (NB)	SHEET NO: 1139	E

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FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090203_xsmed.DGN PLOT DATE : 8/1/2012 PLOT BY : AYRES-EC eau_shd_util.tbl PLOT SCALE : 1:2

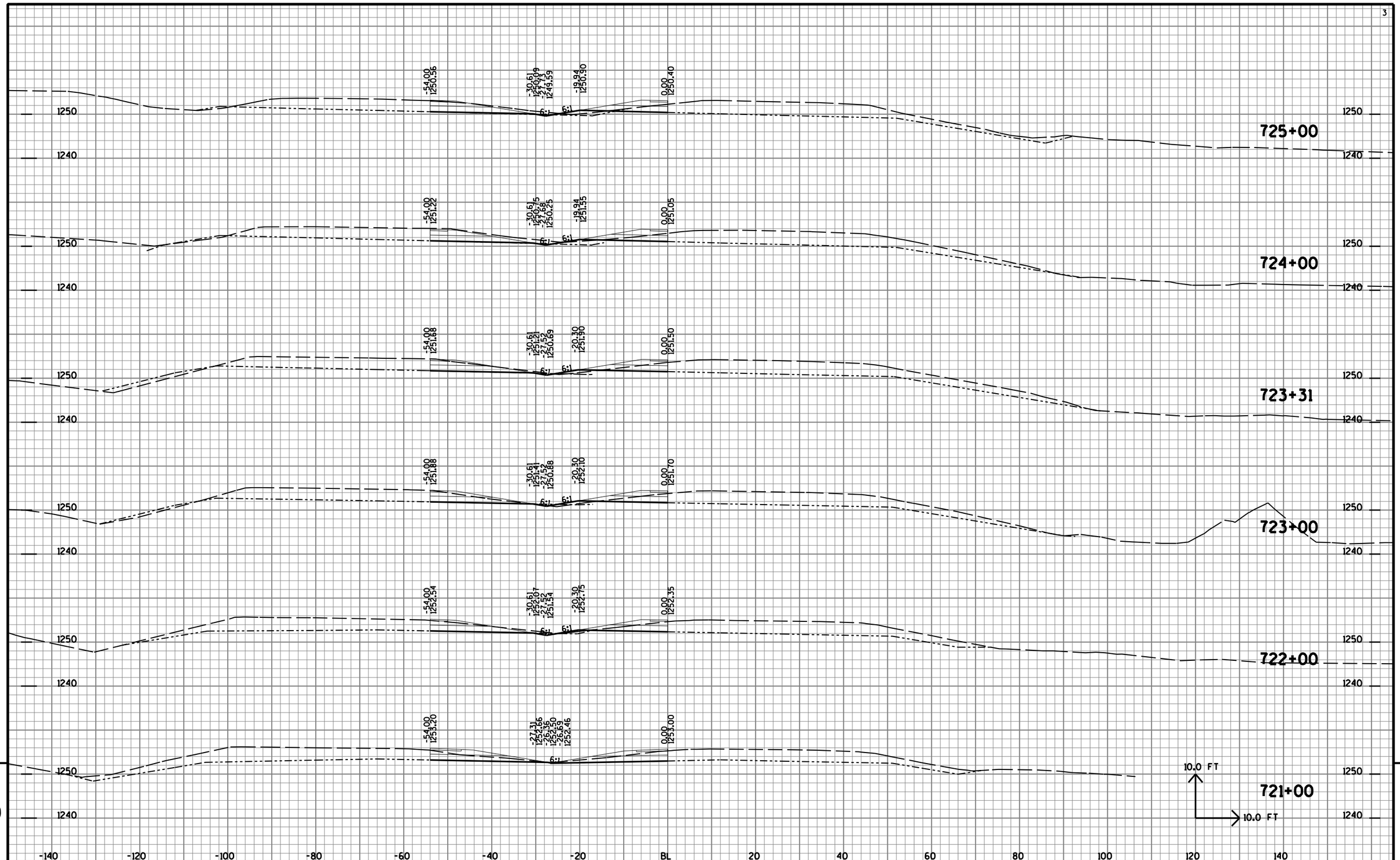


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PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: USH 51 MEDIAN (NB)	SHEET NO: 1140	E

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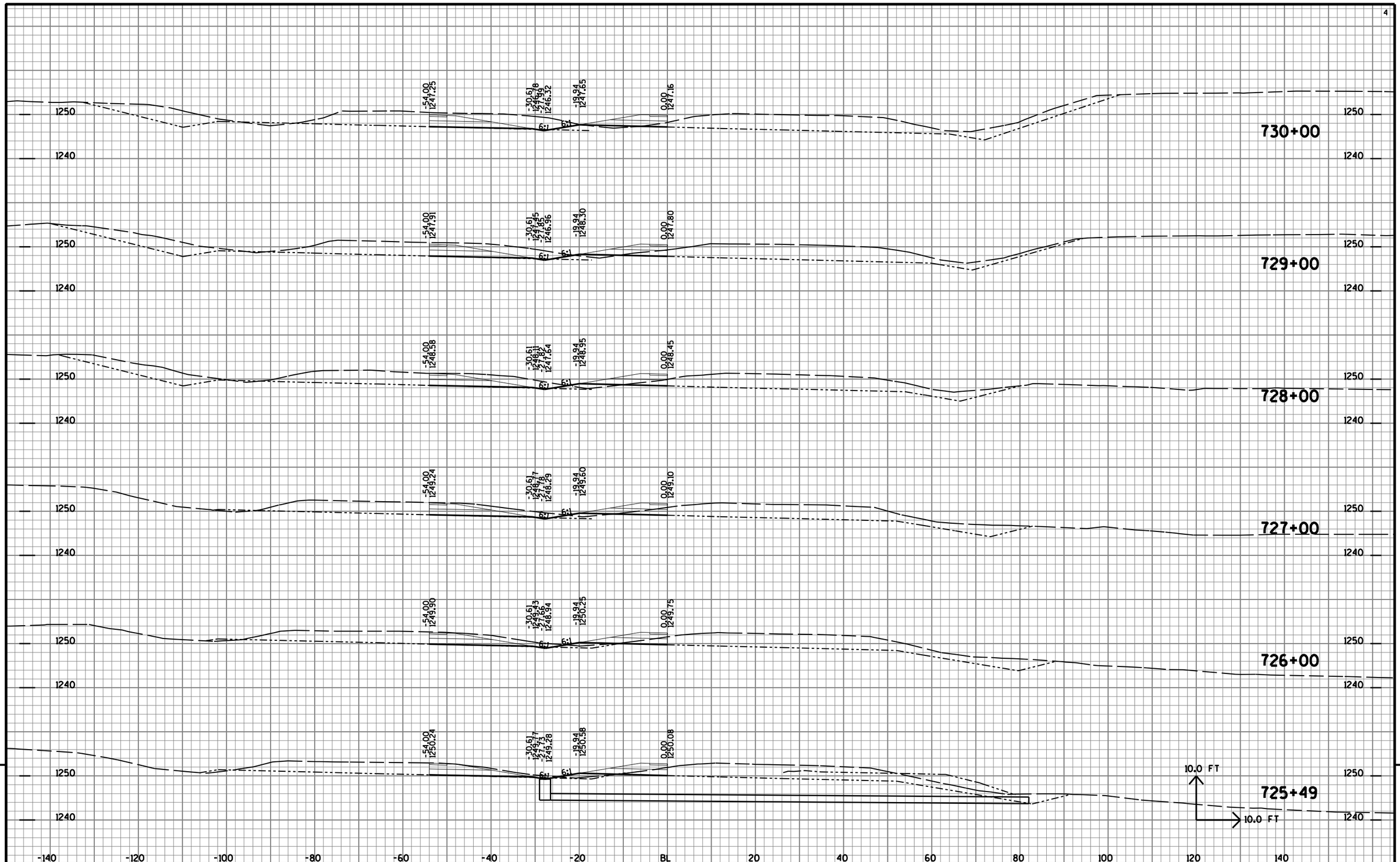


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PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: USH 51 MEDIAN (NB)	SHEET NO: 1141	E

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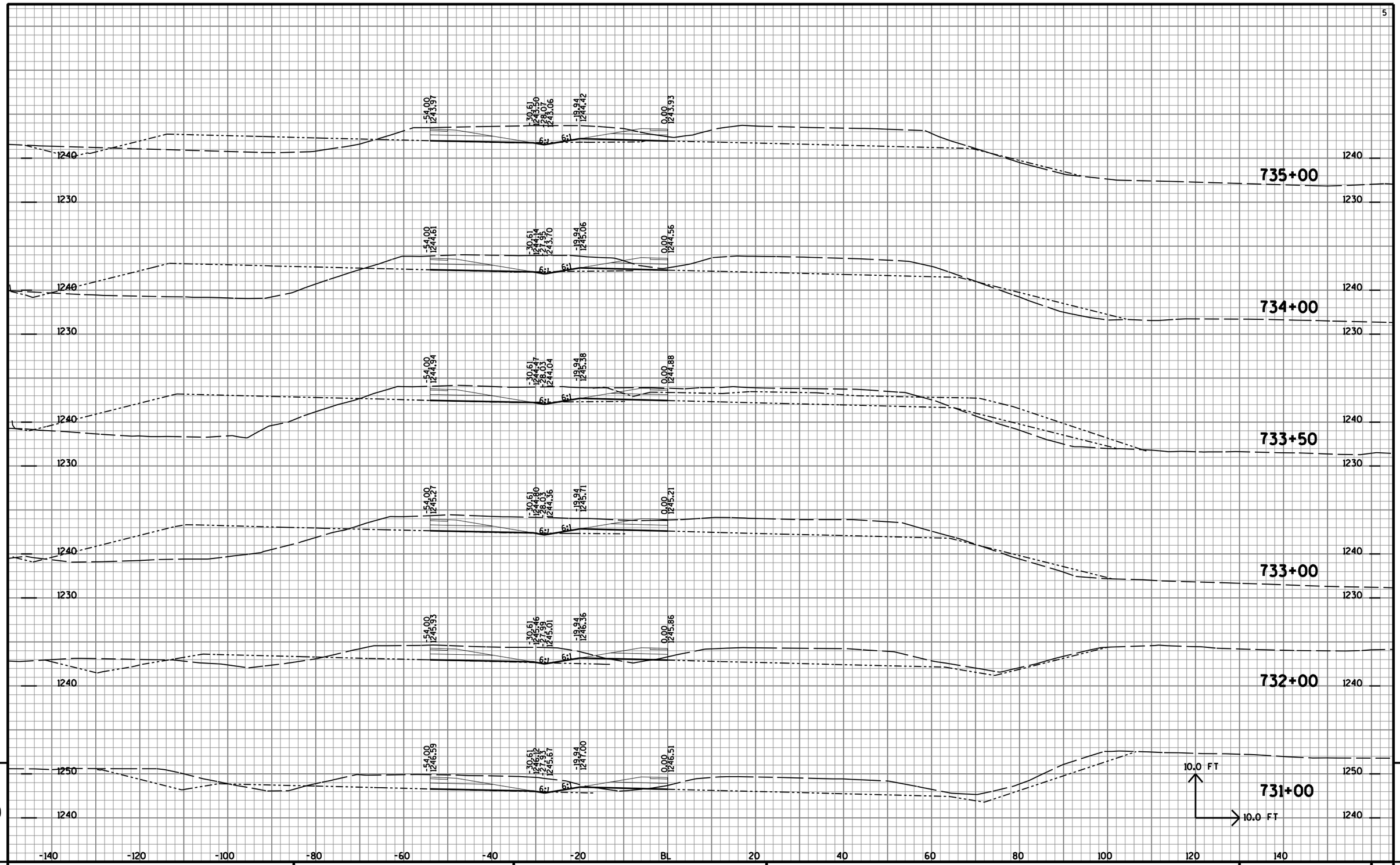


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PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: USH 51 MEDIAN (NB)	SHEET NO: 1142	E

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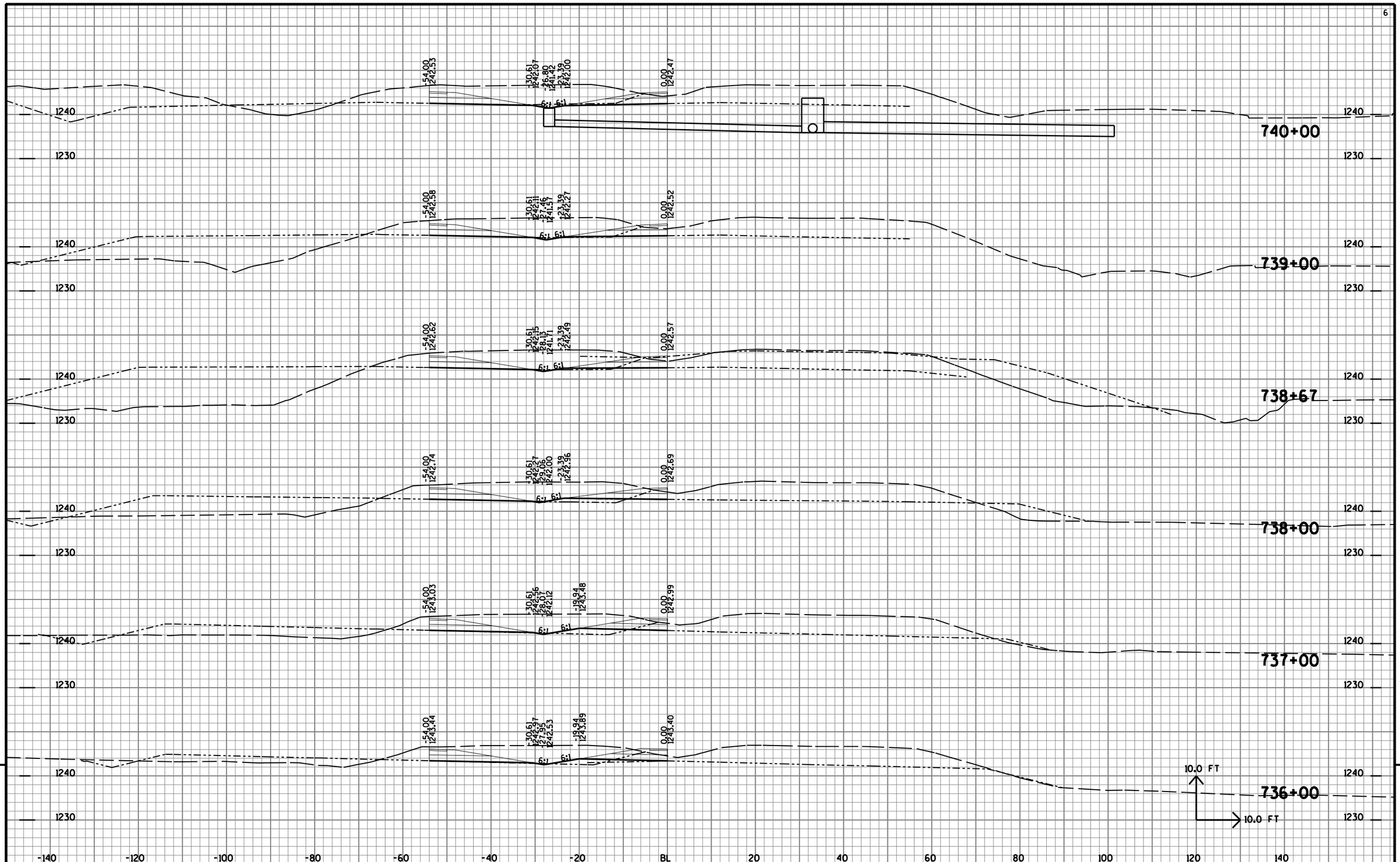


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PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: USH 51 MEDIAN (NB)	SHEET NO: 1143	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090203_xsmed.DGN PLOT DATE : 8/1/2012 PLOT BY : AYRES-EC eau_shd_util.tbl PLOT SCALE : 1:2

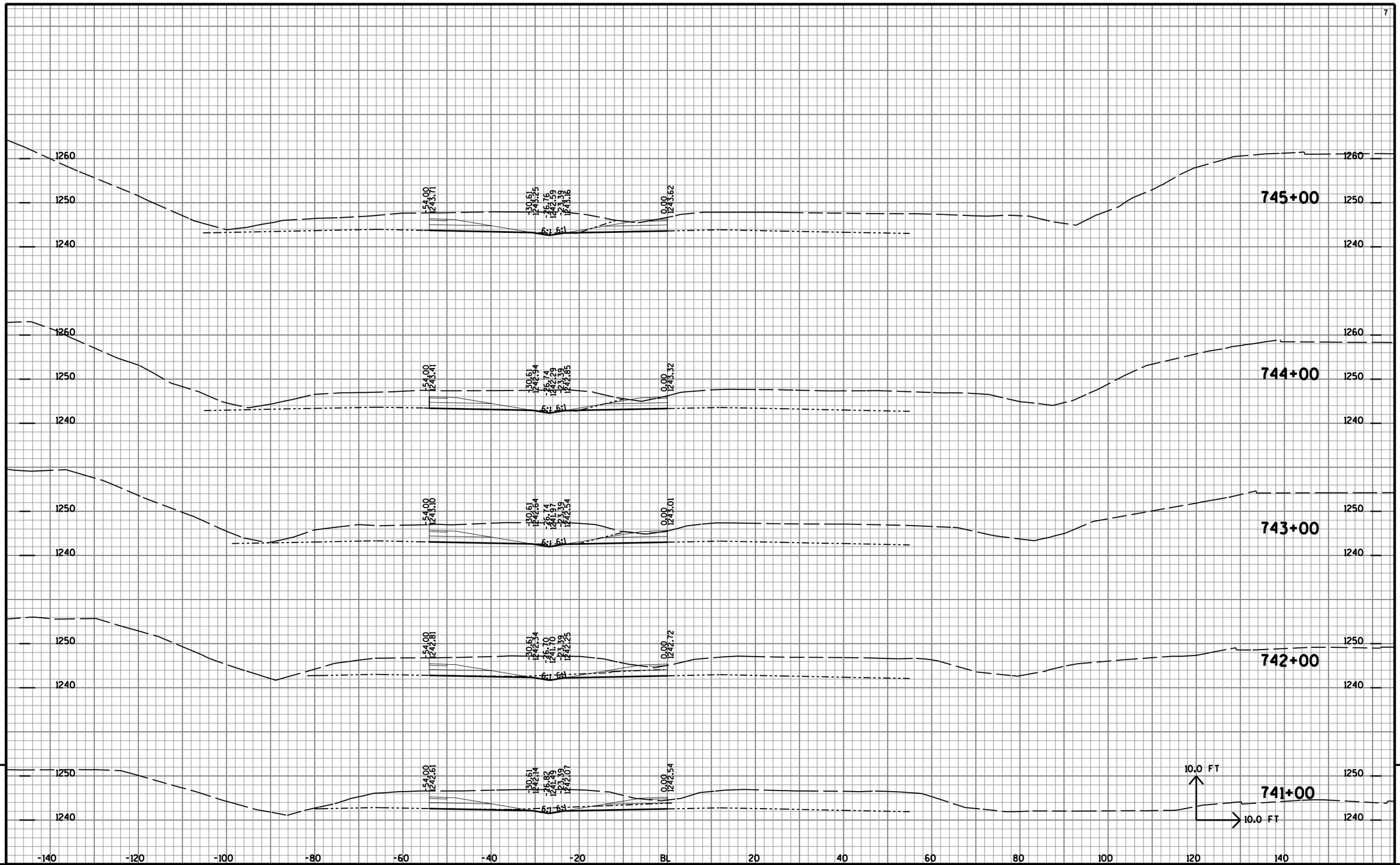


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PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: USH 51 MEDIAN (NB)	SHEET NO: 1144	E

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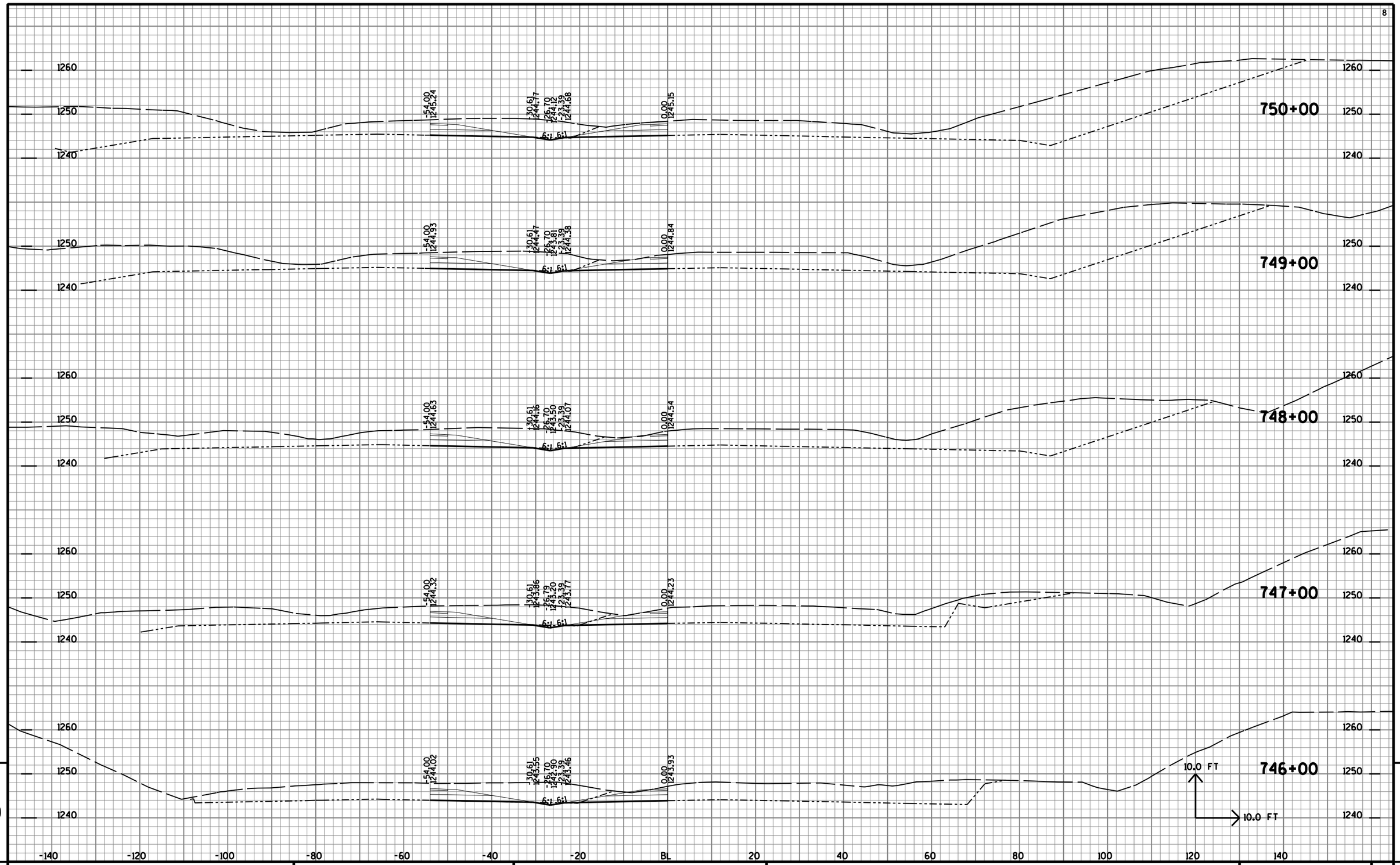


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PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: USH 51 MEDIAN (NB)	SHEET NO: 1145	E

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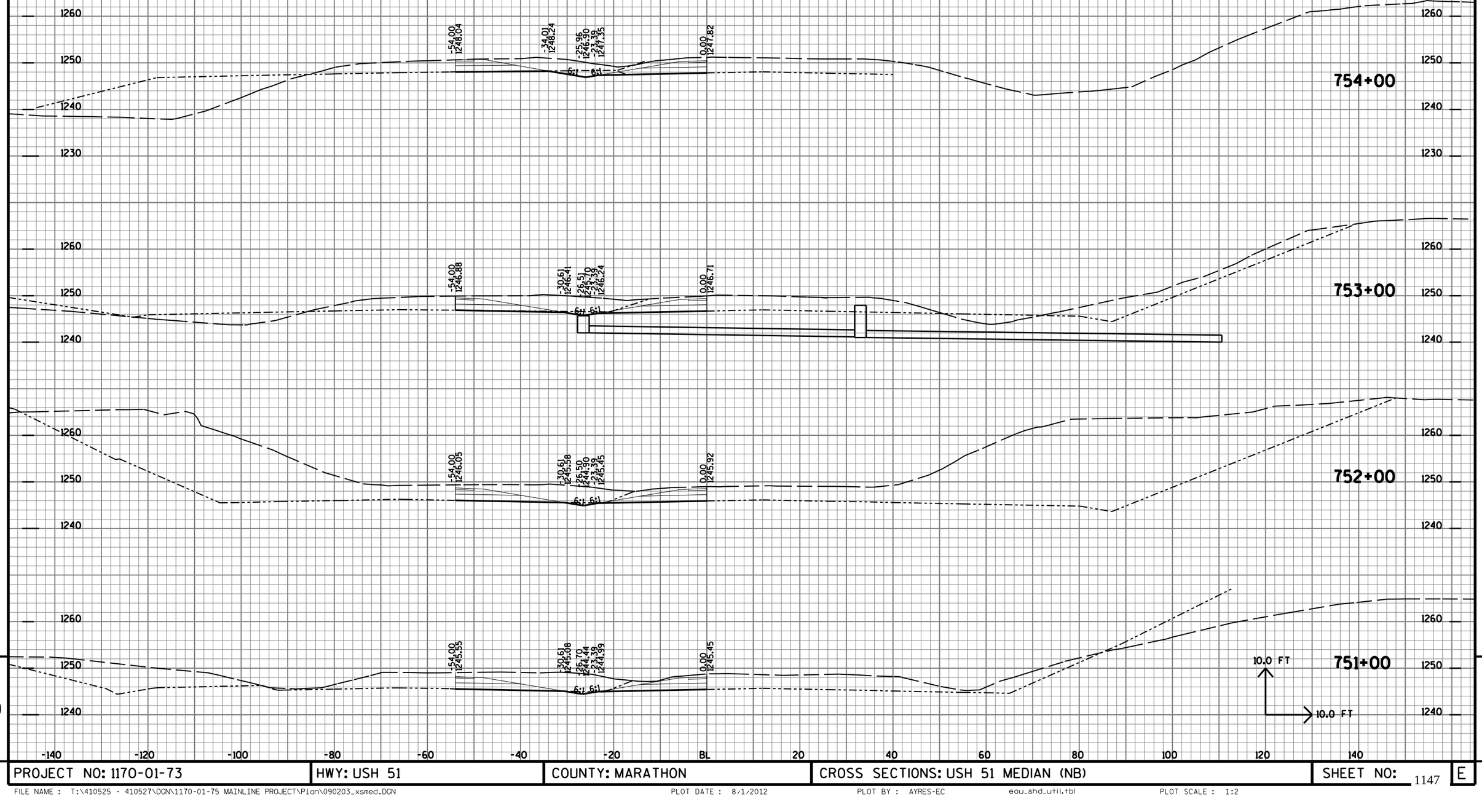


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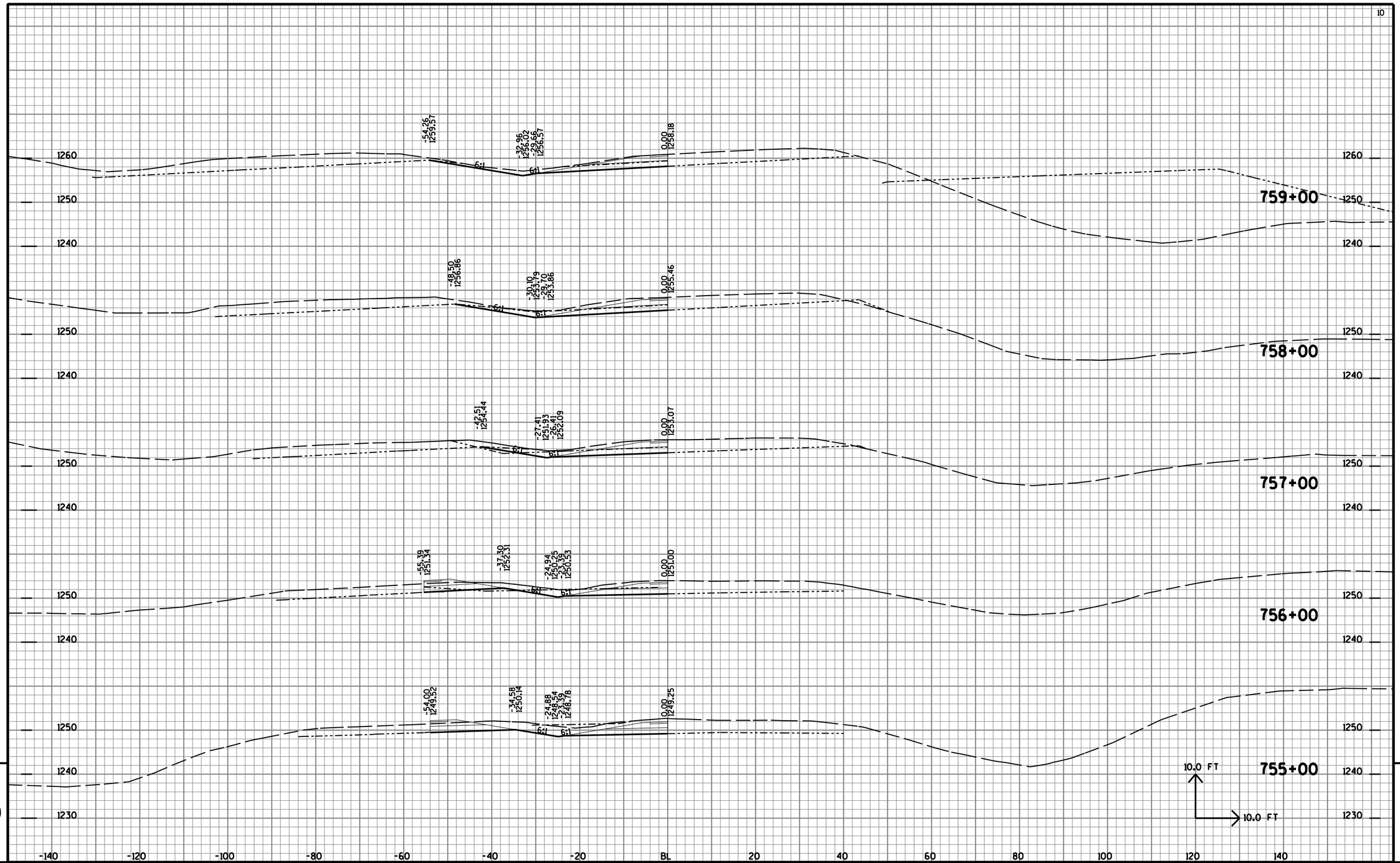
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PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: USH 51 MEDIAN (NB)	SHEET NO: 1147 E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090203_xsmed.DGN PLOT DATE : 8/1/2012 PLOT BY : AYRES-EC eau_shd_util.tbl PLOT SCALE : 1:2

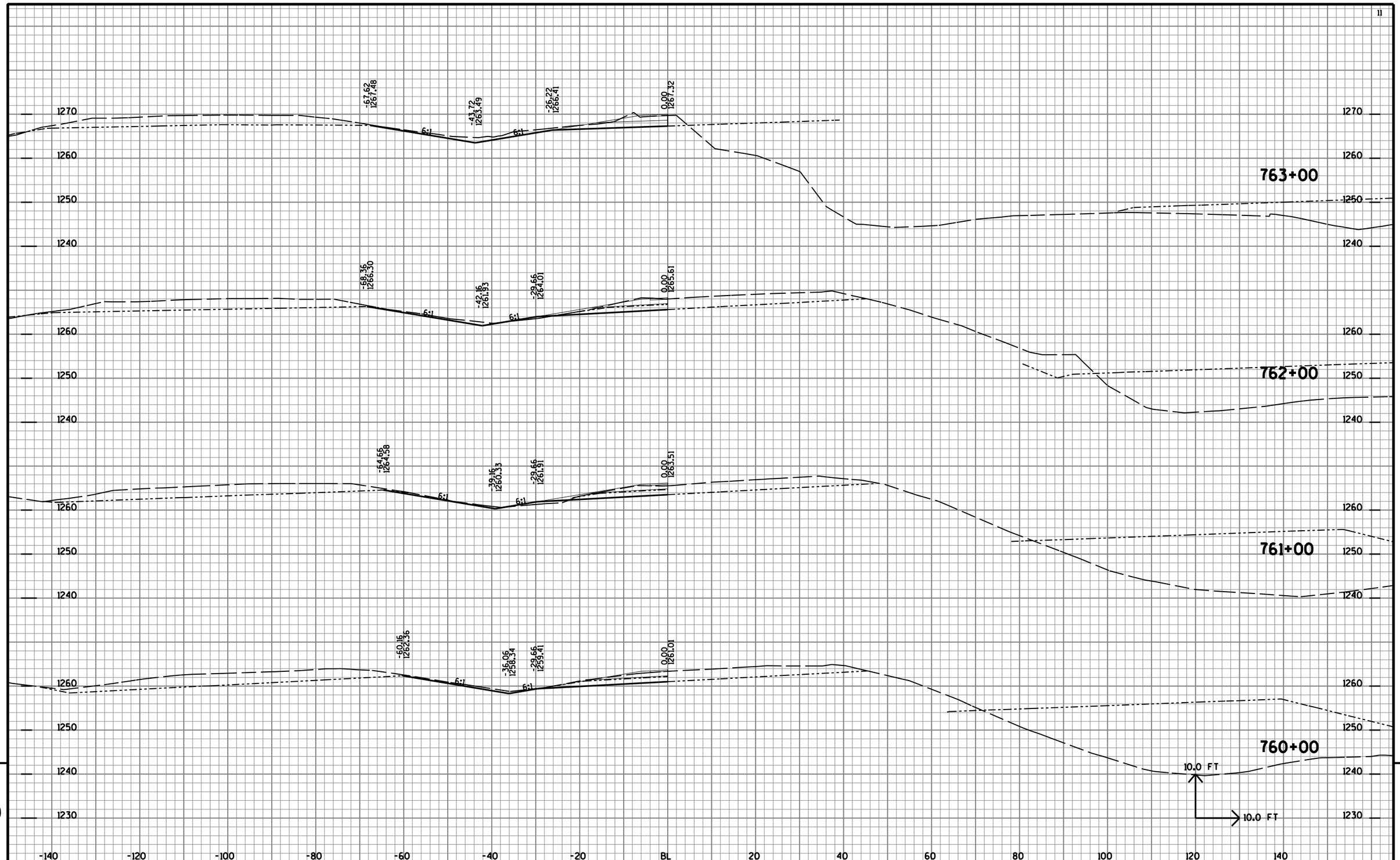


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PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: USH 51 MEDIAN (NB)	SHEET NO: 1148	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090203_xsmed.DGN PLOT DATE : 8/1/2012 PLOT BY : AYRES-EC eau_shd_util.tbl PLOT SCALE : 1:2

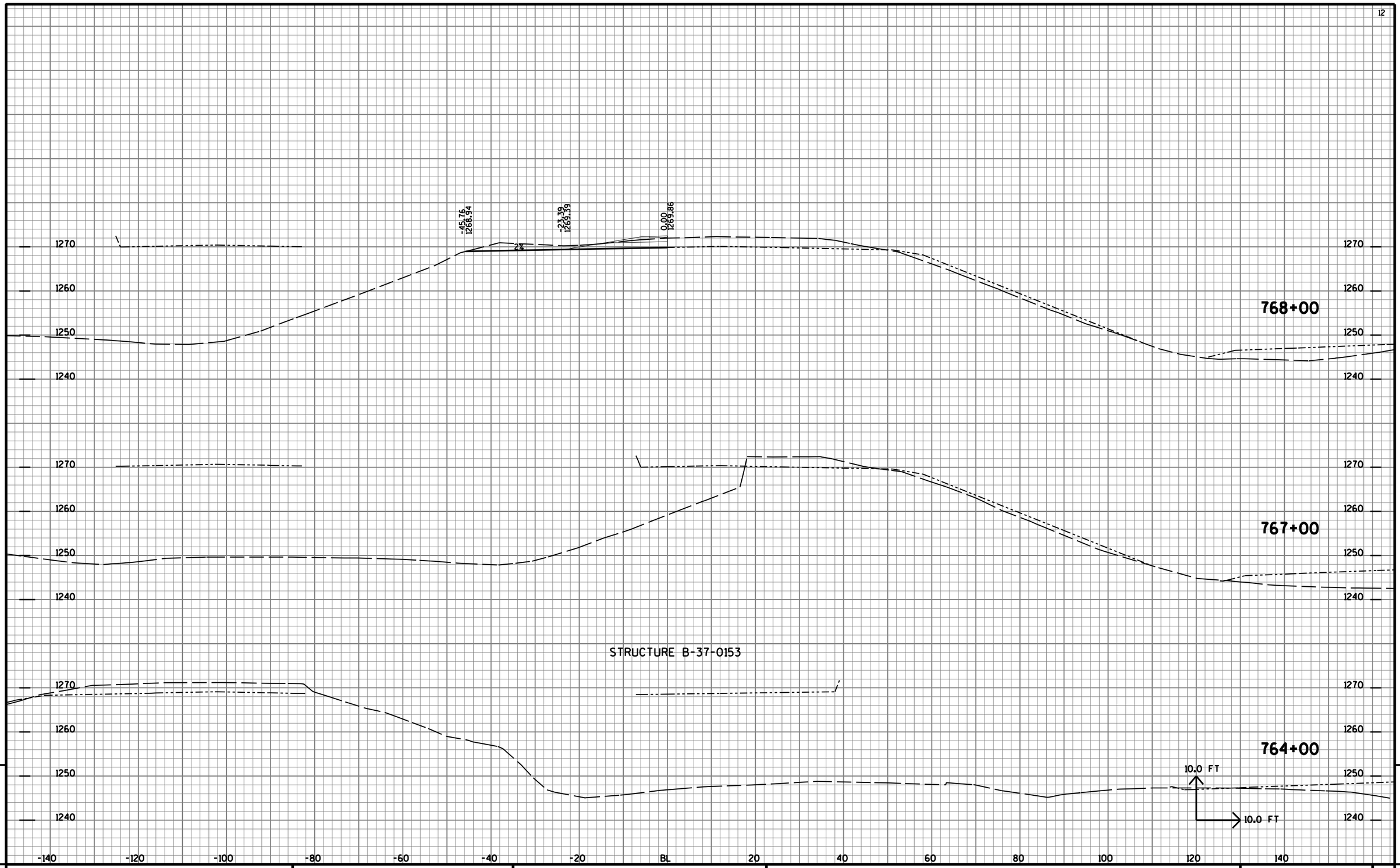


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PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: USH 51 MEDIAN (NB)	SHEET NO: 1149	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090203_xsmed.DGN PLOT DATE : 8/1/2012 PLOT BY : AYRES-EC eau_shd_util.tbl PLOT SCALE : 1:2

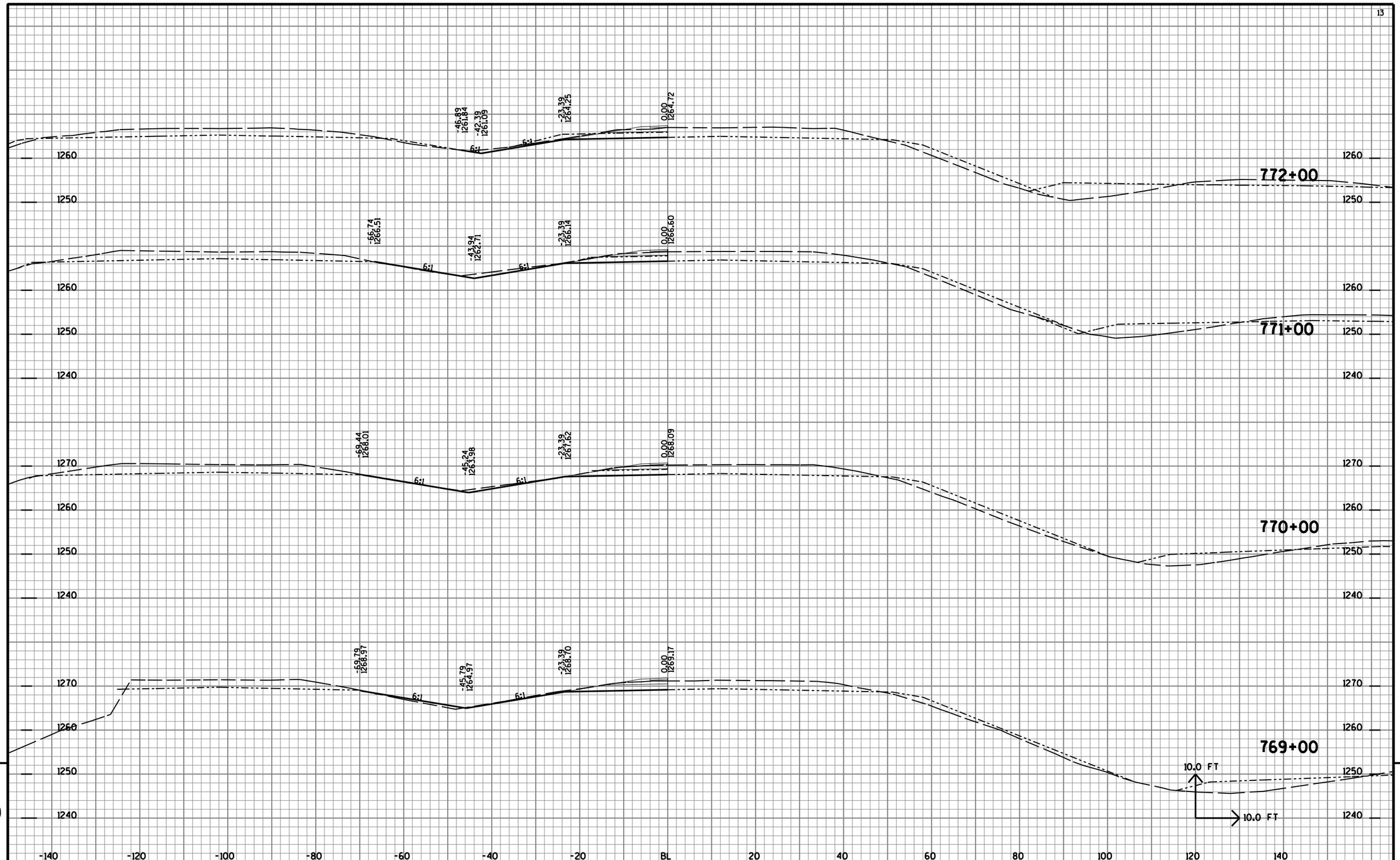


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PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: USH 51 MEDIAN (NB)	SHEET NO: 1150	E

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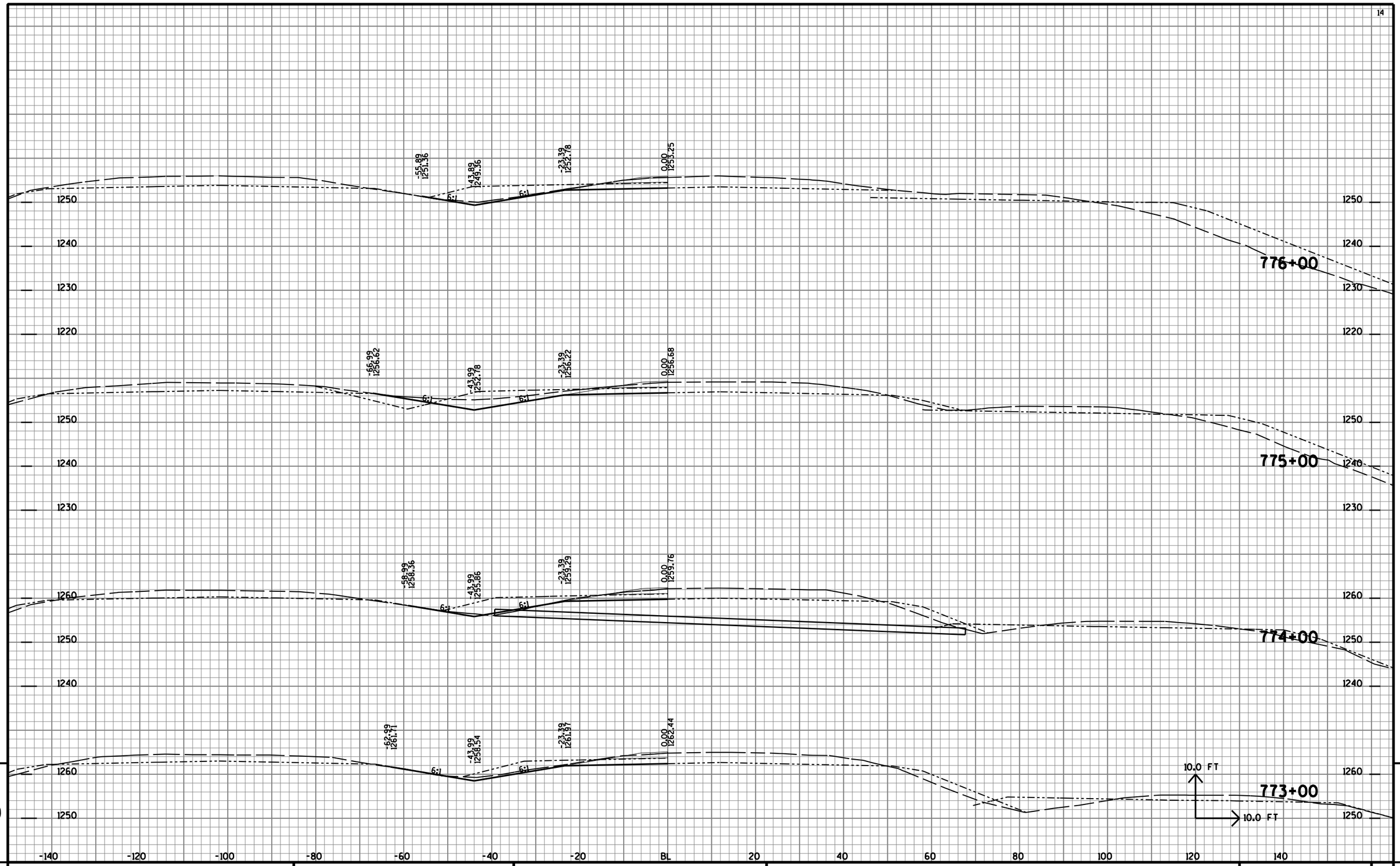


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PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: USH 51 MEDIAN (NB)	SHEET NO: 1151	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090203_xsmed.DGN PLOT DATE : 8/1/2012 PLOT BY : AYRES-EC eau_shd_util.tbl PLOT SCALE : 1:2

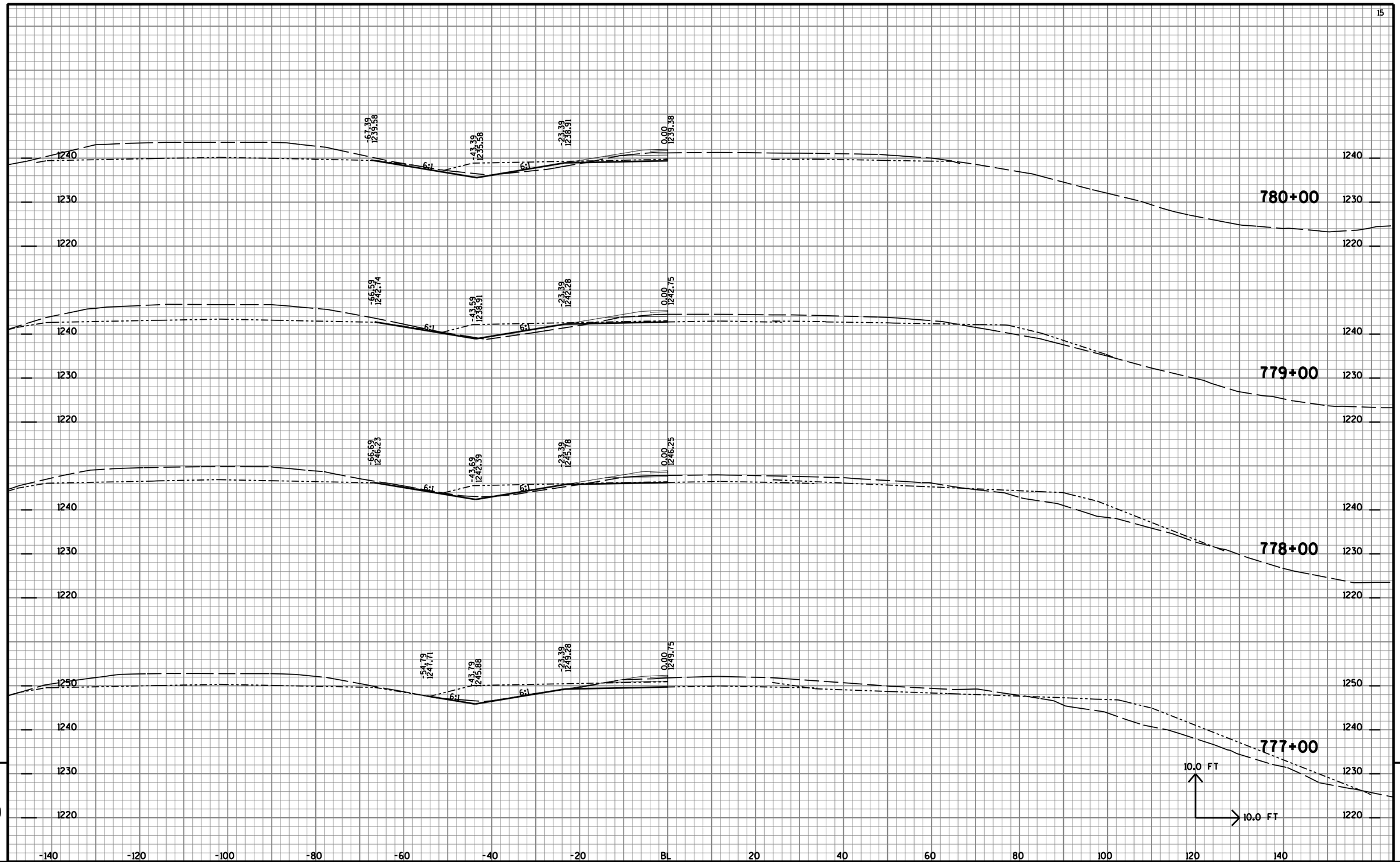


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PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: USH 51 MEDIAN (NB)	SHEET NO: 1152	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090203_xsmed.DGN PLOT DATE : 8/1/2012 PLOT BY : AYRES-EC eau_shd_util.tbl PLOT SCALE : 1:2

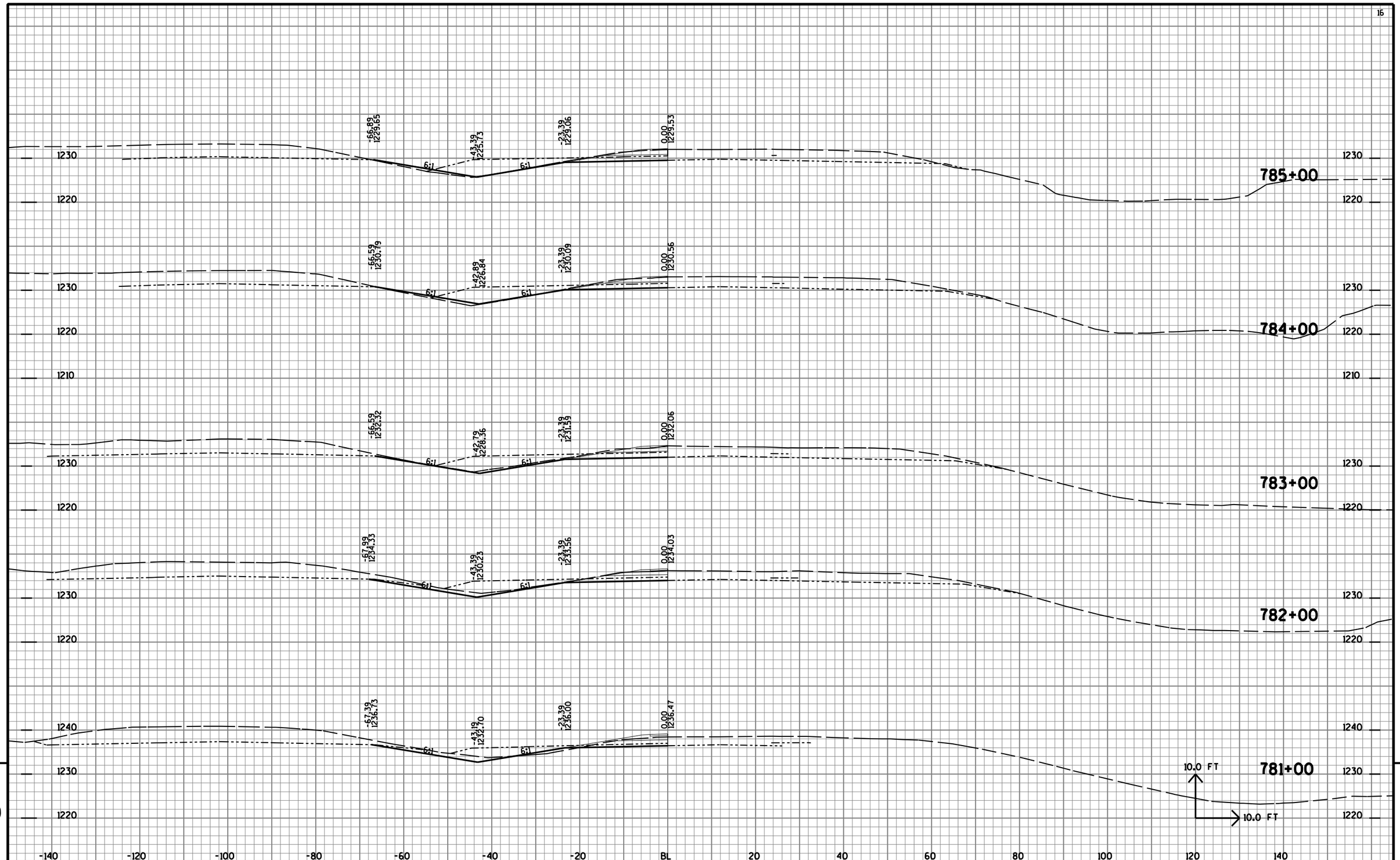


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PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: USH 51 MEDIAN (NB)	SHEET NO: 1153	E

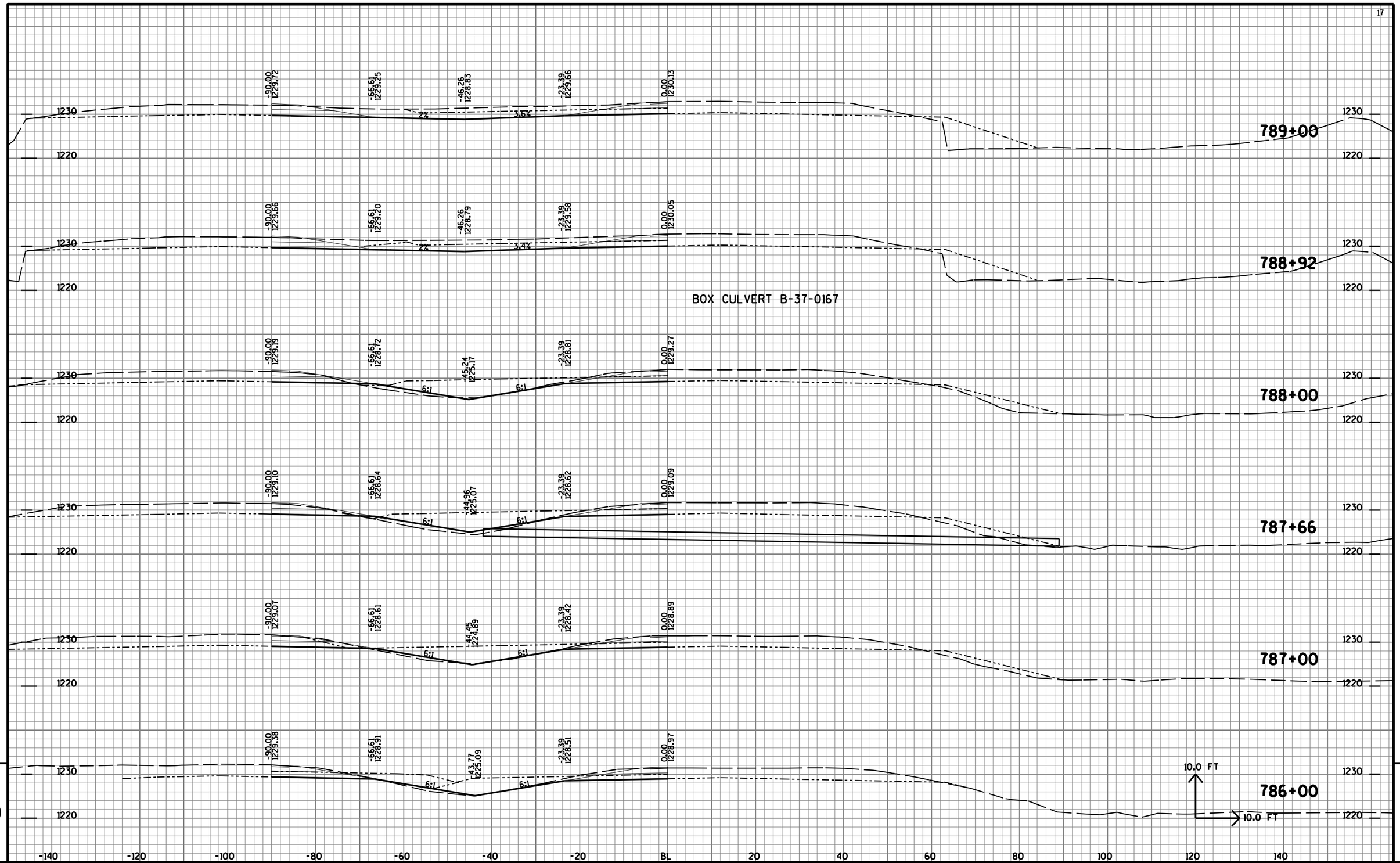
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PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: USH 51 MEDIAN (NB)	SHEET NO: 1154	E

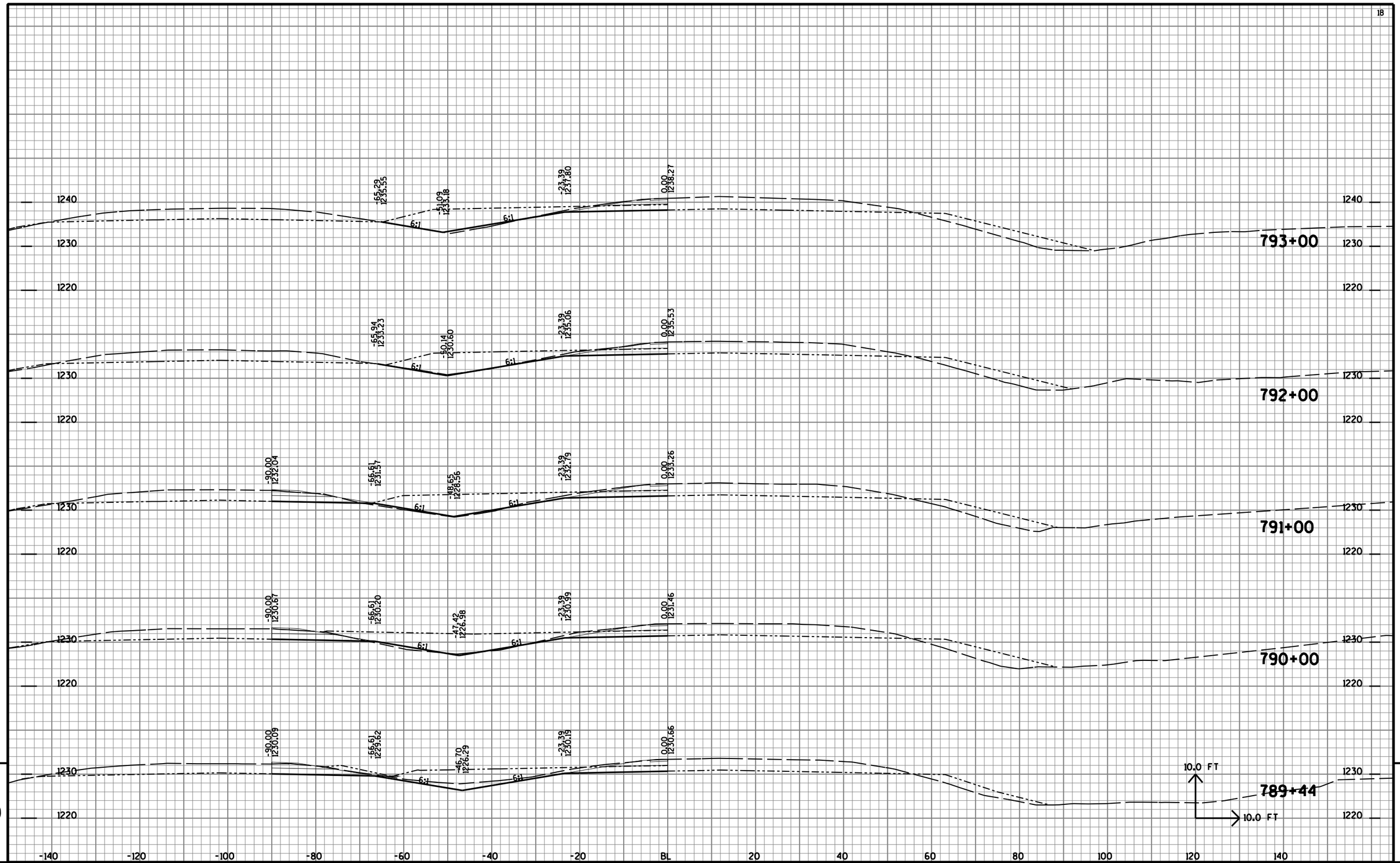


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PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: USH 51 MEDIAN (NB)	SHEET NO: 1155	E

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FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090203_xsmed.DGN PLOT DATE : 8/1/2012 PLOT BY : AYRES-EC eau_shd_util.tbl PLOT SCALE : 1:2

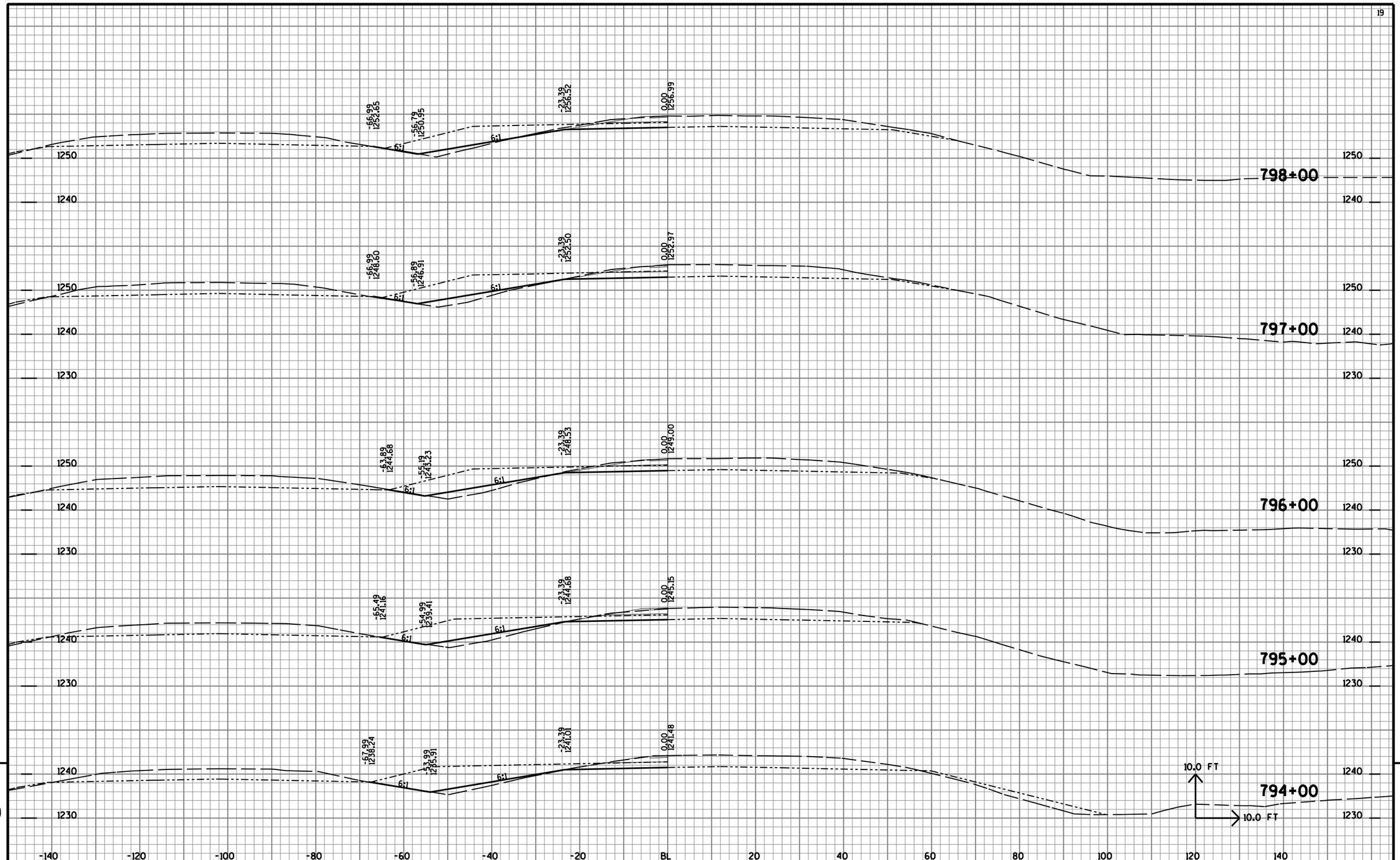


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PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: USH 51 MEDIAN (NB)	SHEET NO: 1156	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090203_xsmed.DGN PLOT DATE : 8/1/2012 PLOT BY : AYRES-EC eau_shd_util.tbl PLOT SCALE : 1:2

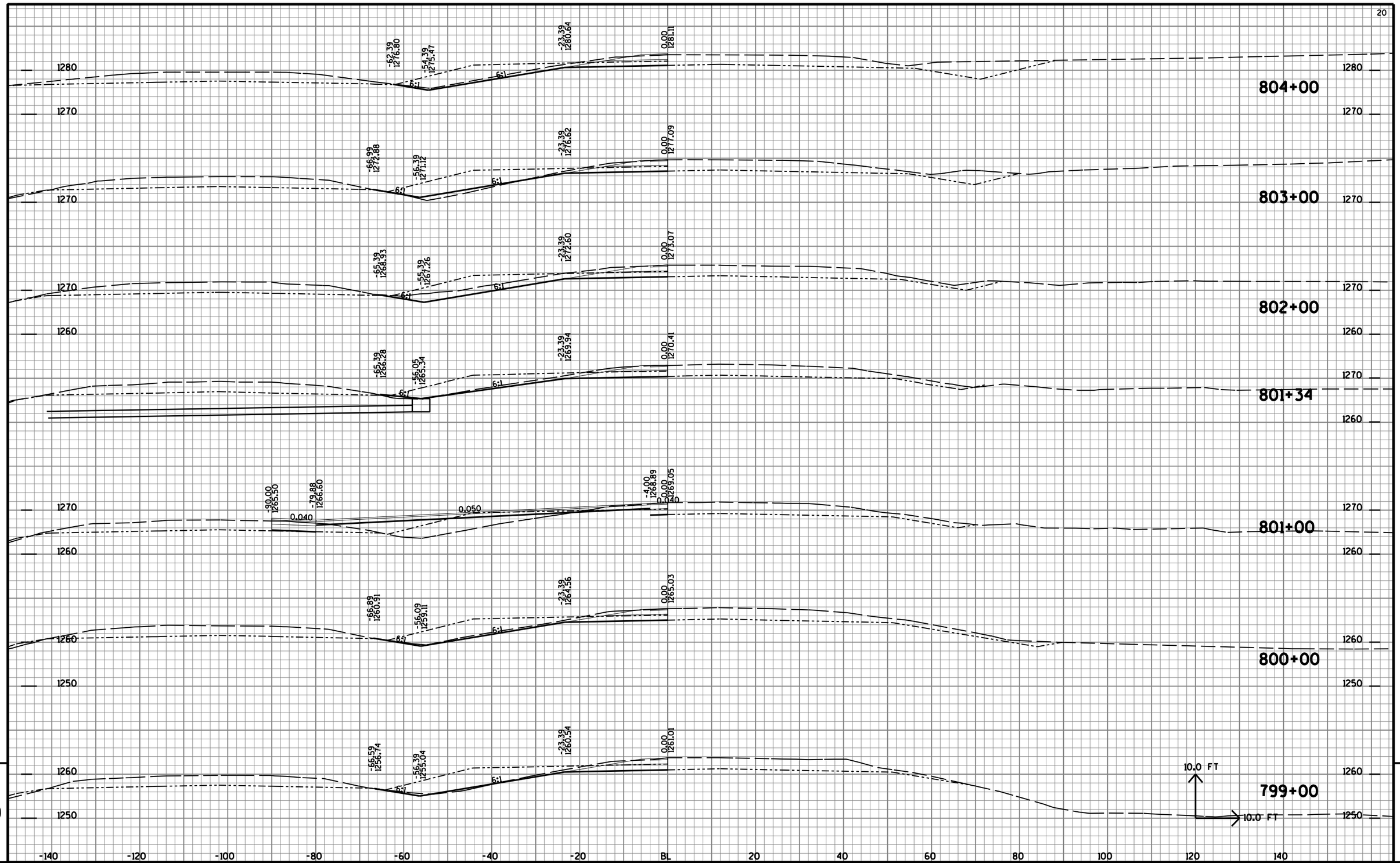


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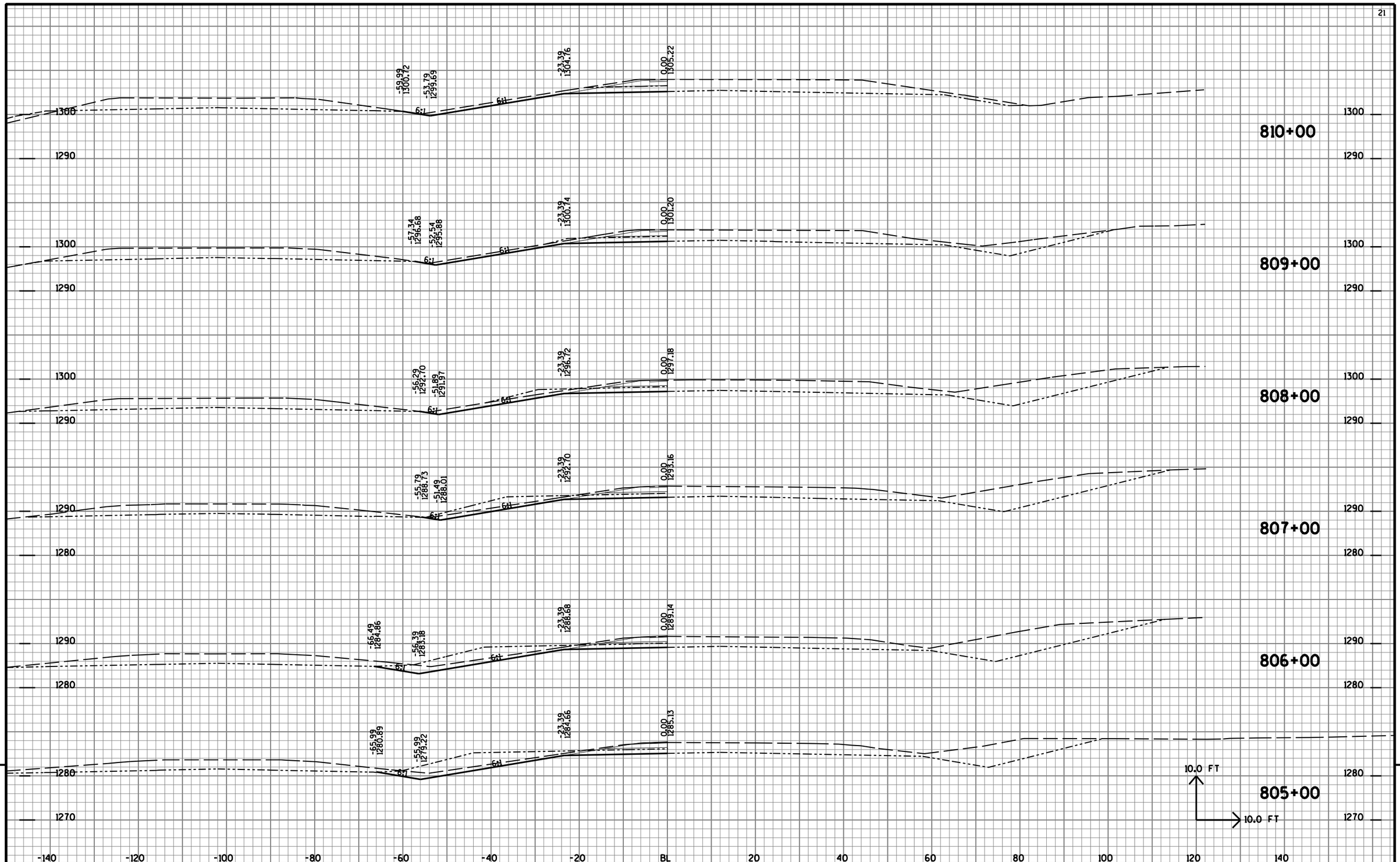
PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: USH 51 MEDIAN (NB)	SHEET NO: 1157	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090203_xsmed.DGN PLOT DATE : 8/1/2012 PLOT BY : AYRES-EC eau_shd_util.tbl PLOT SCALE : 1:2



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PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: USH 51 MEDIAN (NB)	SHEET NO: 1158	E

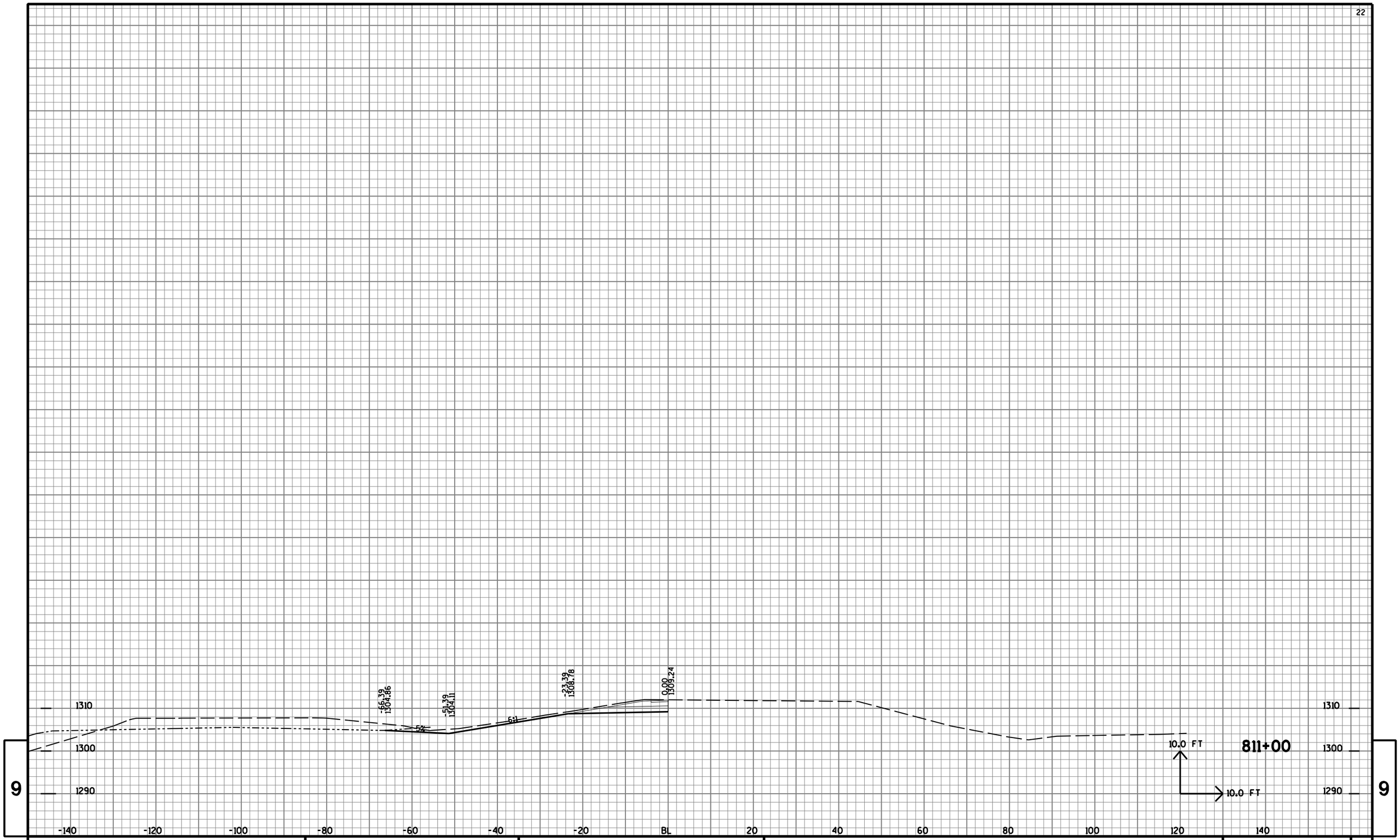


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PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: USH 51 MEDIAN (NB)	SHEET NO: 1159	E

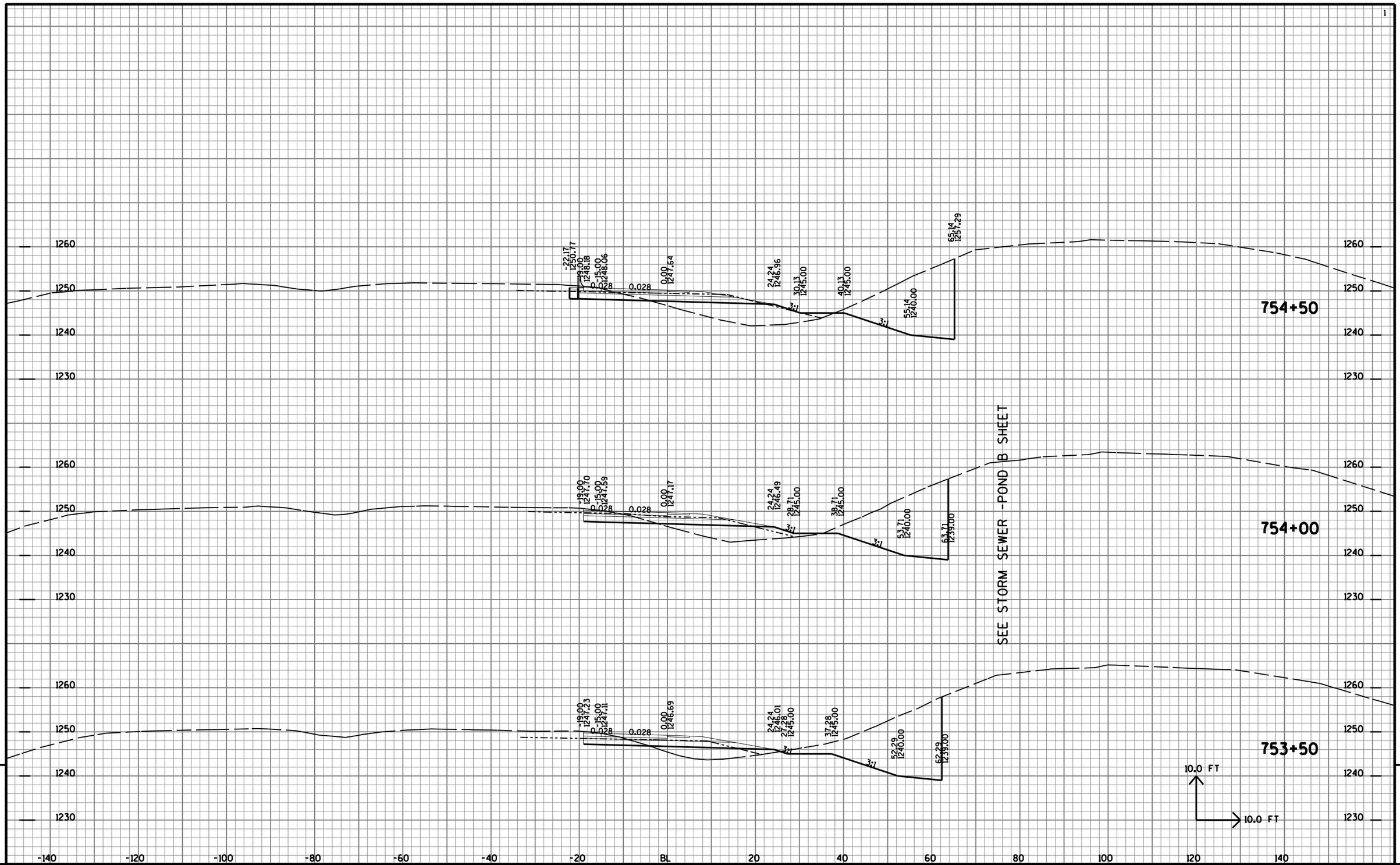
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PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: USH 51 MEDIAN (NB)	SHEET NO: 1160	E

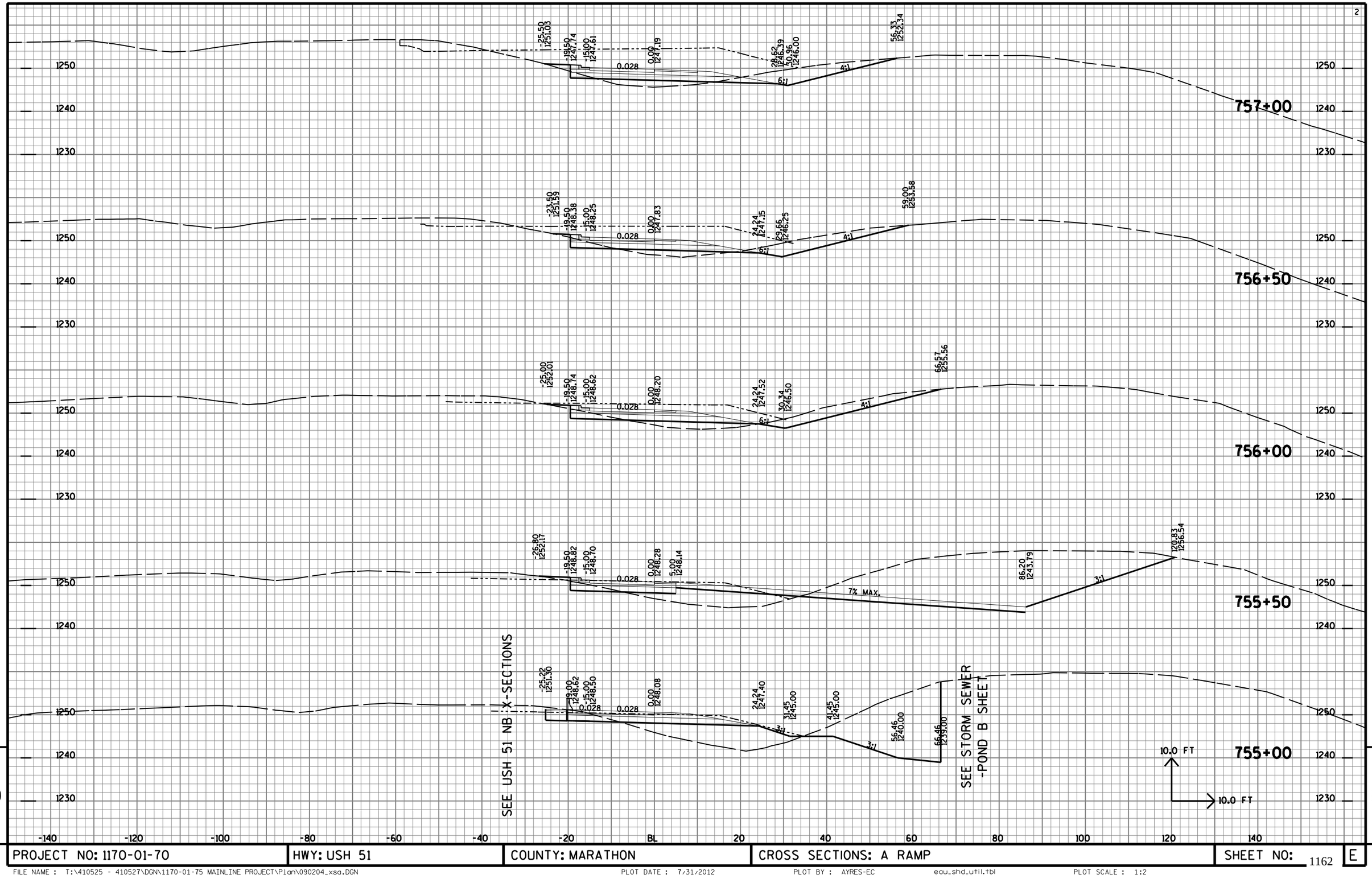


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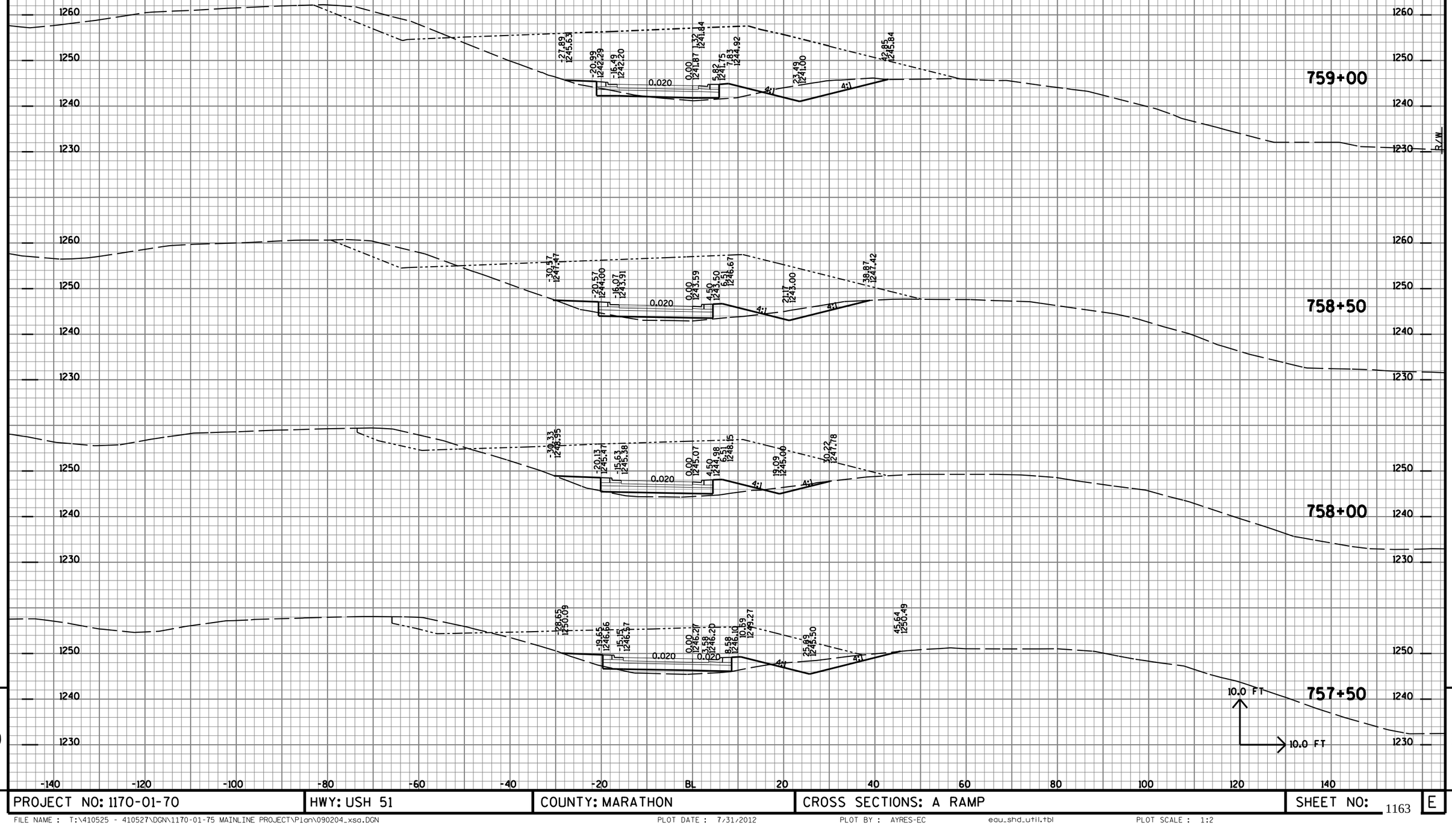
PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: A RAMP	SHEET NO: 1161	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090204_xsa.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC eau_shd_util.tbl PLOT SCALE : 1:2



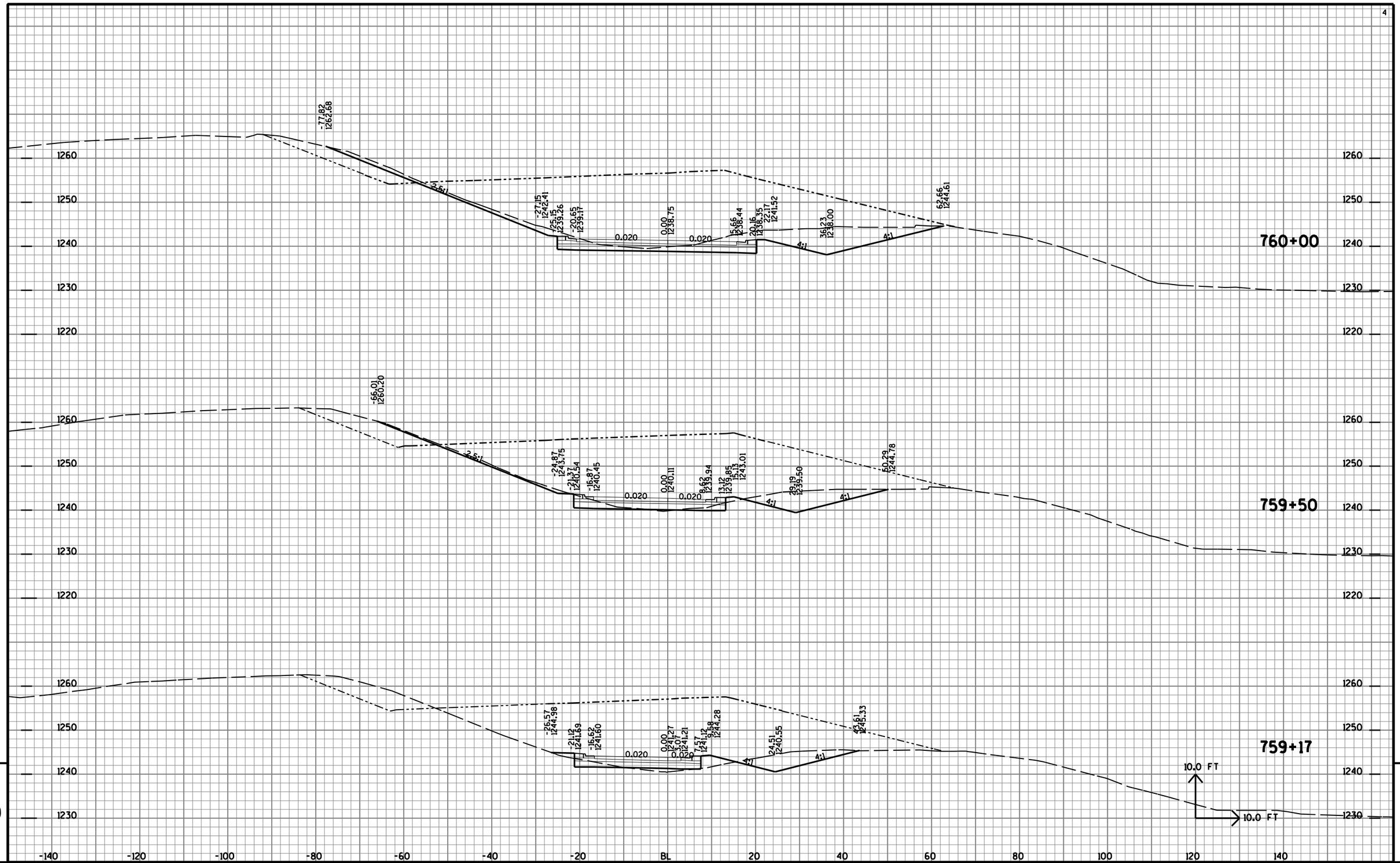
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PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: A RAMP	SHEET NO: 1162	E



PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: A RAMP	SHEET NO: 1163 E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090204_xsa.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC edu_shd_util.tbl PLOT SCALE : 1:2

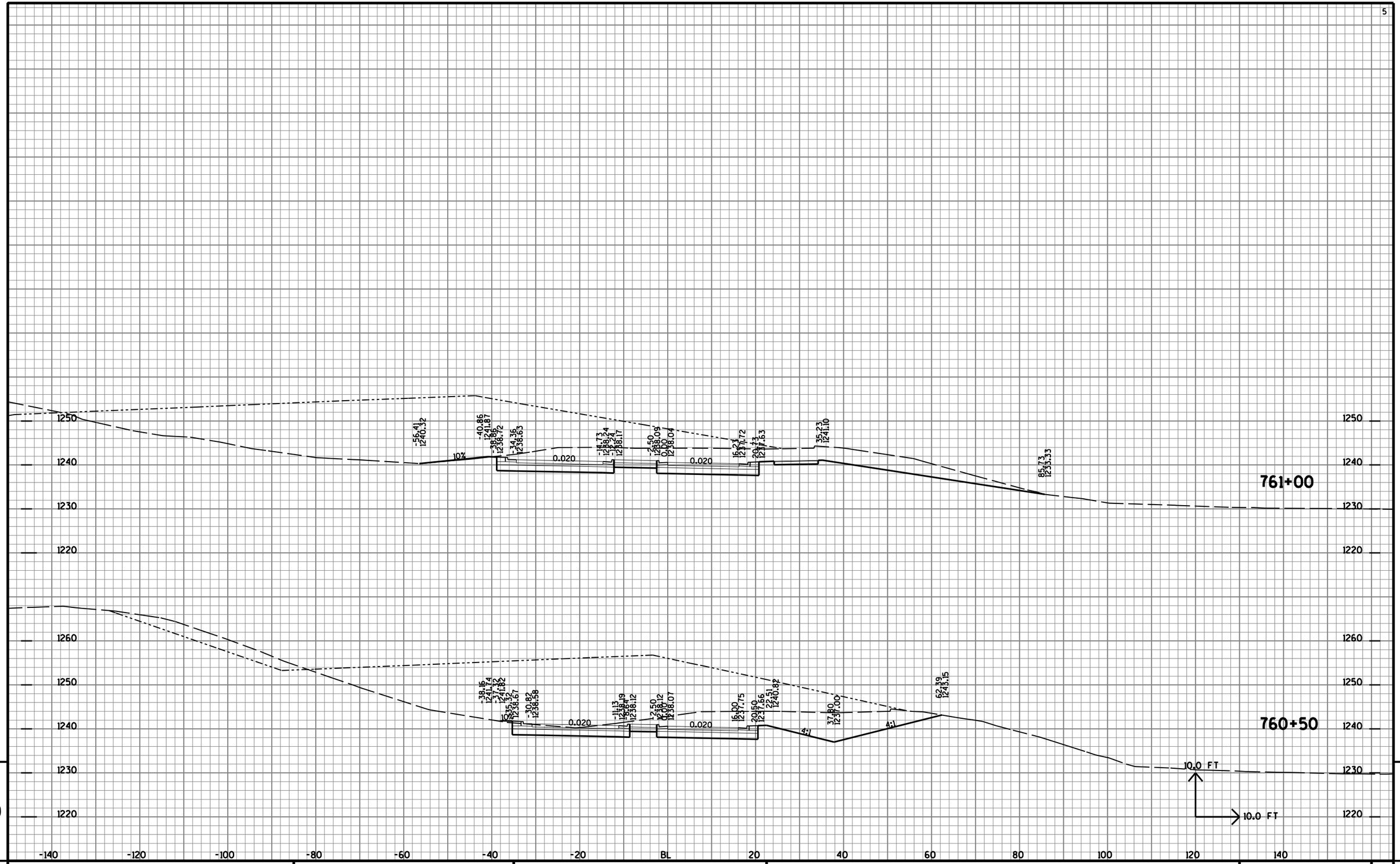


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PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: A RAMP	SHEET NO: 1164	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090204_xsa.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC eau_shd_util.tbl PLOT SCALE : 1:2

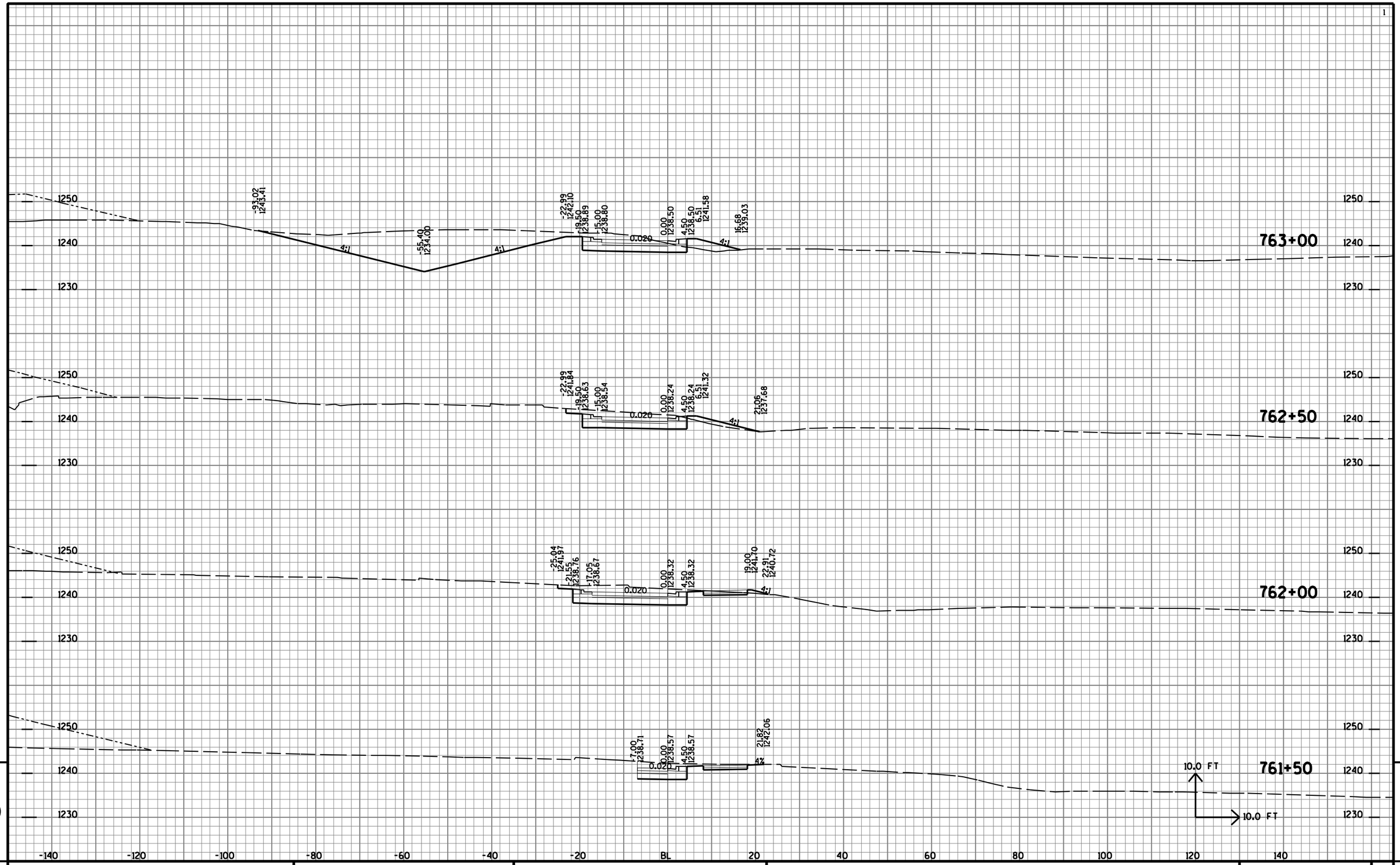


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PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: A RAMP	SHEET NO: 1165 E

9

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090204_xsa.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC edu_shd_util.tbl PLOT SCALE : 1:2



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PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: B RAMP	SHEET NO: 1166 E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090205_xsb.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC eau_shd_util.tbl PLOT SCALE : 1:2

766+00

765+50

765+00

764+50

764+00

763+50

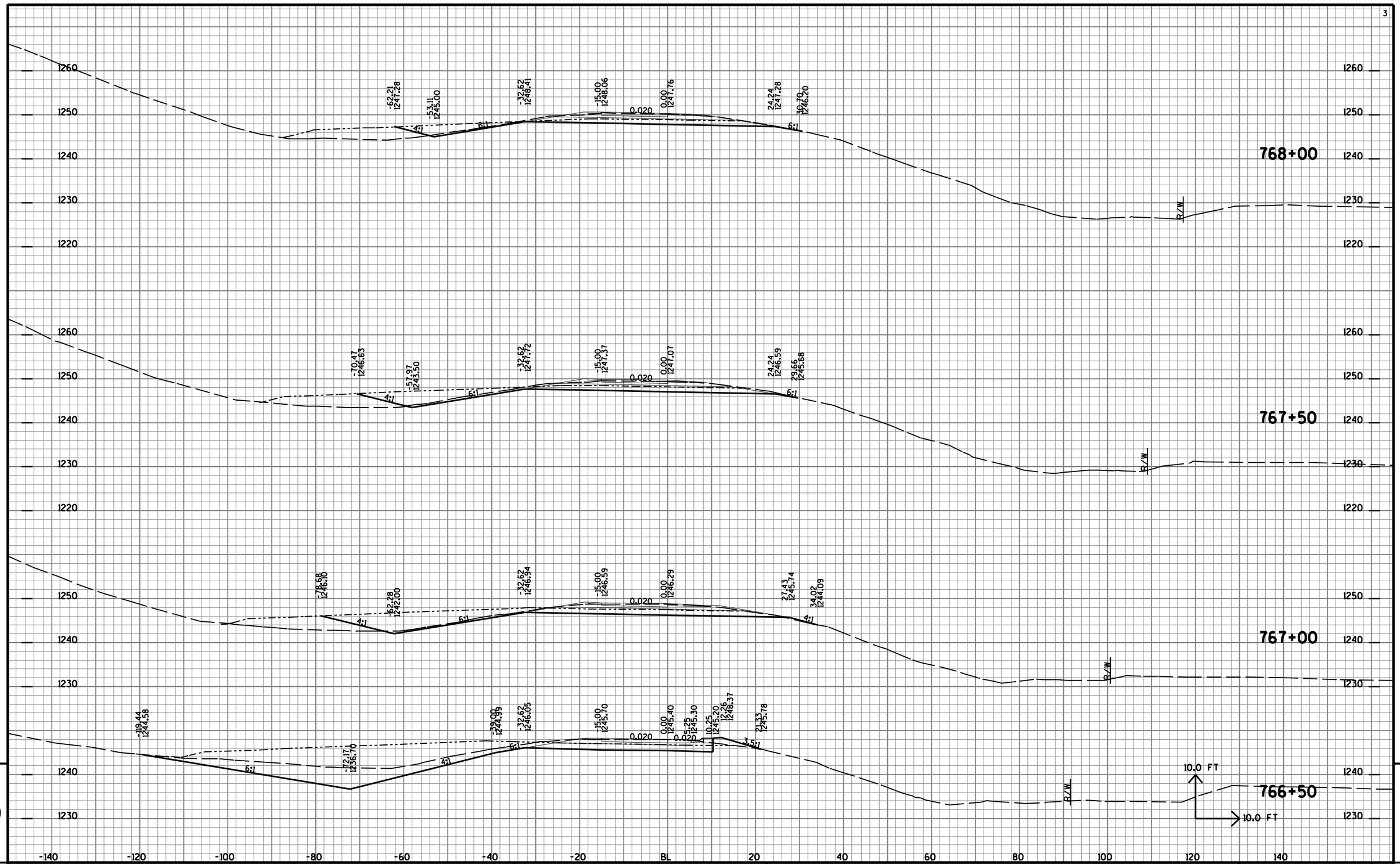
R/W

10.0 FT

10.0 FT

-140 -120 -100 -80 -60 -40 -20 BL 20 40 60 80 100 120 140

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: B RAMP	SHEET NO: 1167	E

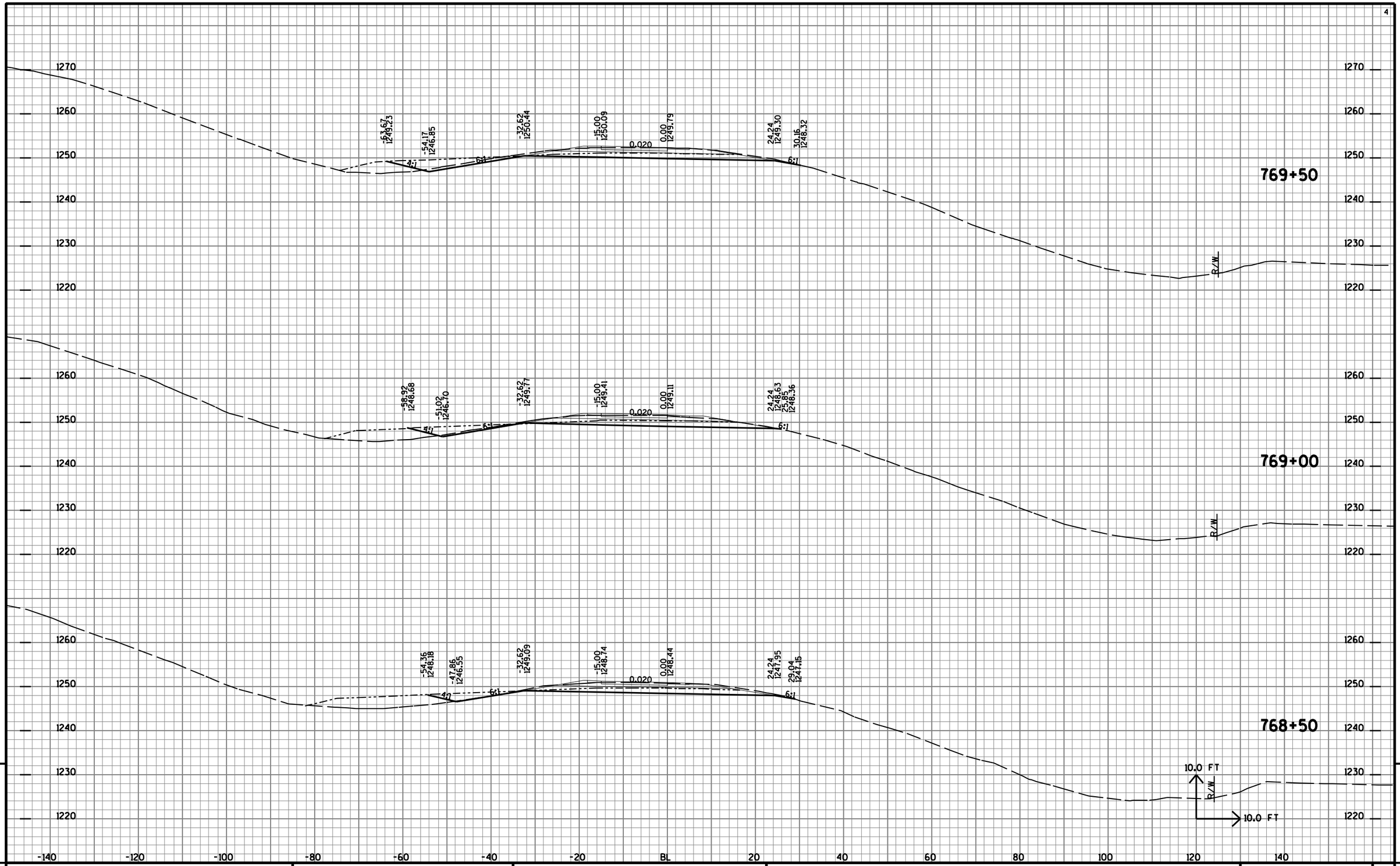


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PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: B RAMP	SHEET NO: 1168	E

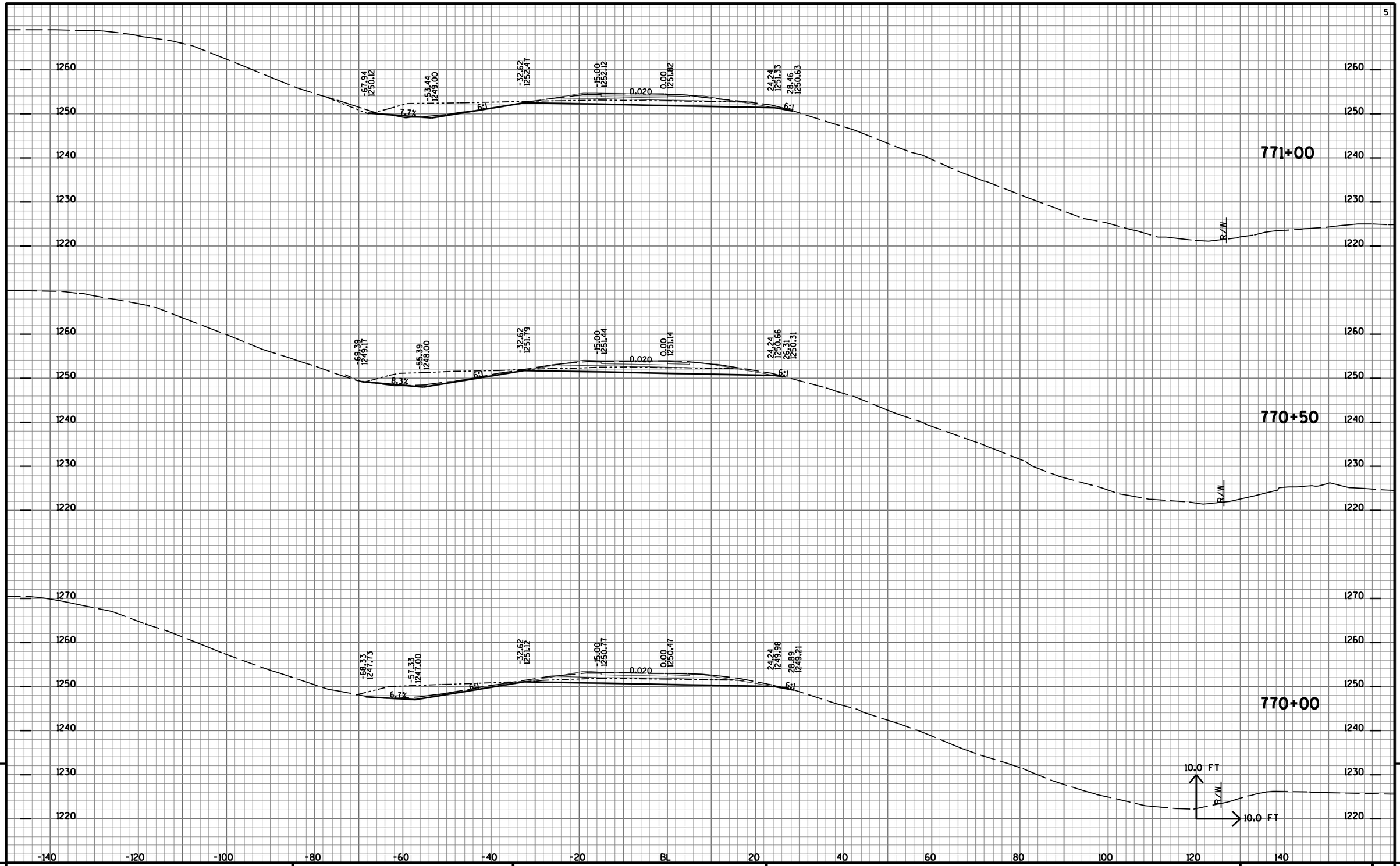
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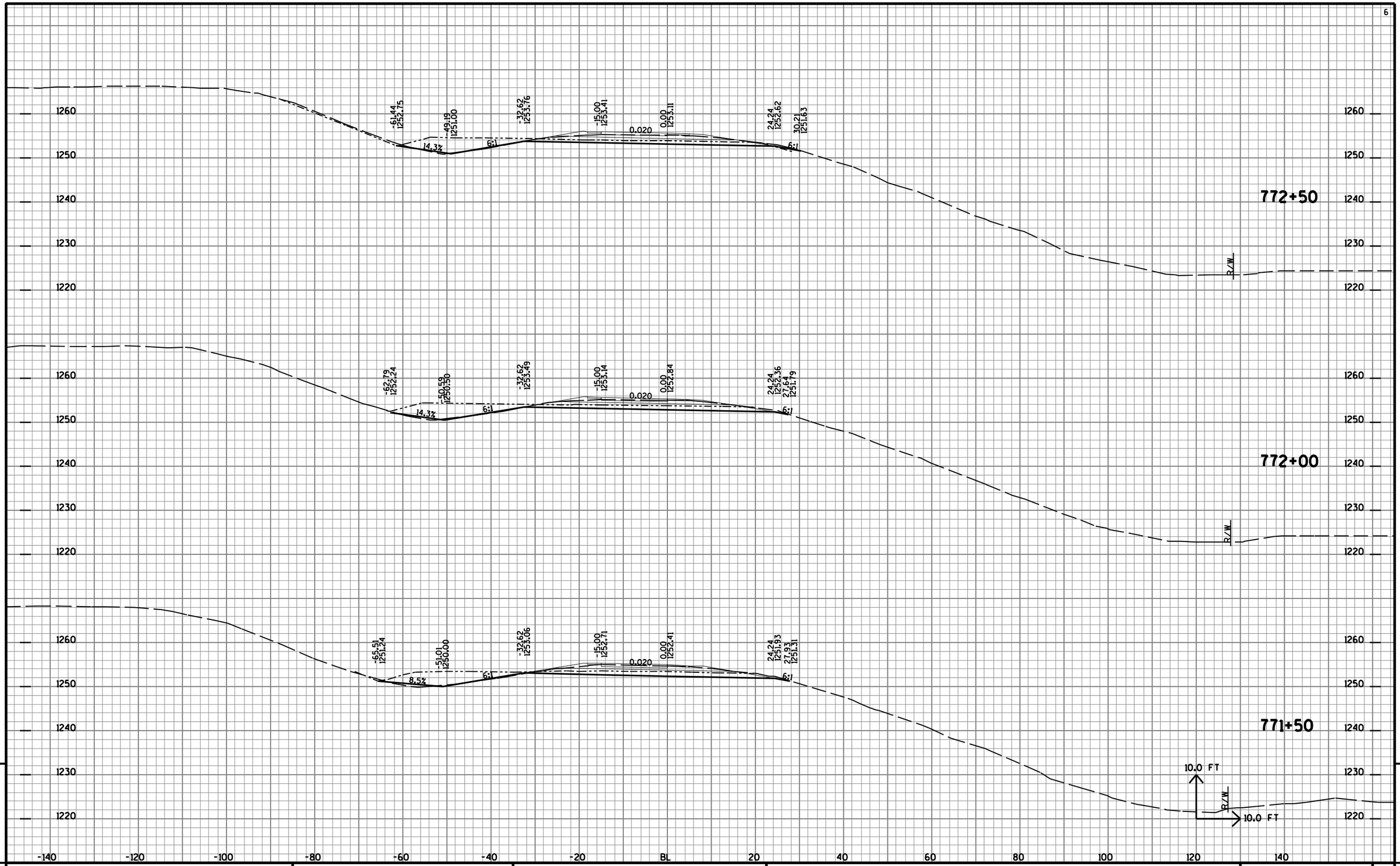
PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: B RAMP	SHEET NO: 1169	E



9

9

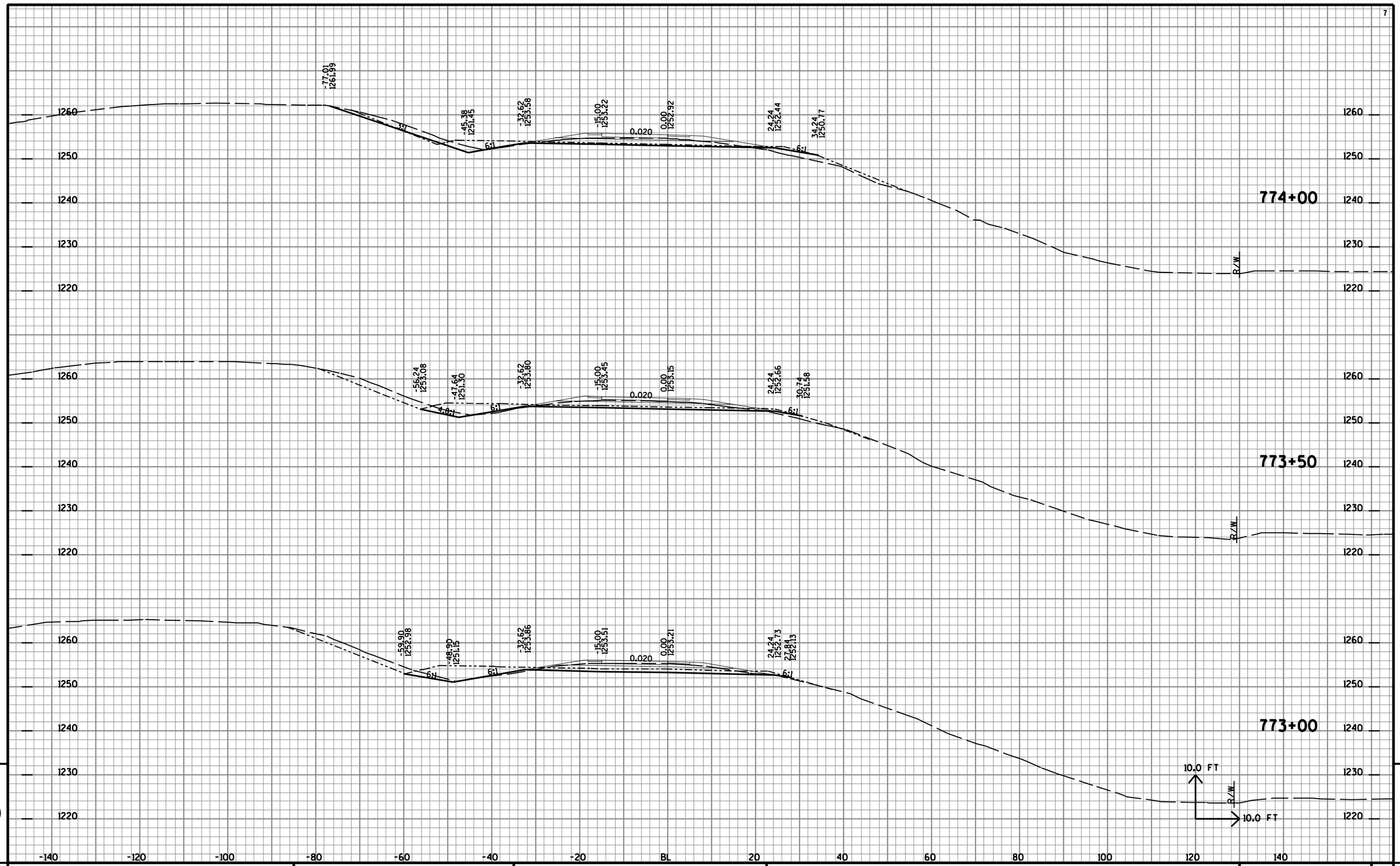
PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: B RAMP	SHEET NO: 1170	E



9 9

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: B RAMP	SHEET NO: 1171	E

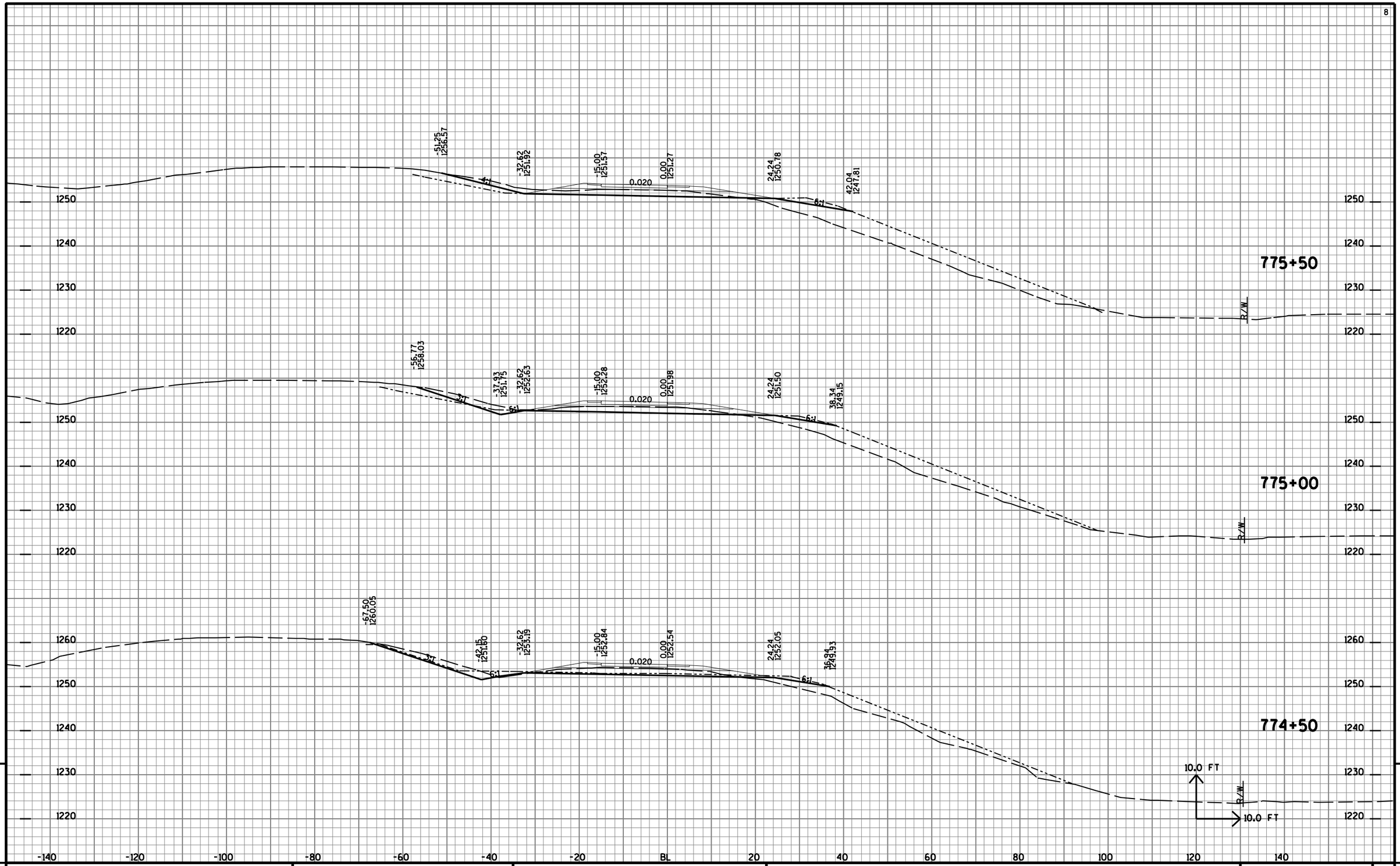
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9

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PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: B RAMP	SHEET NO: 1172	E



9

9

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: B RAMP	SHEET NO: 1173	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090205_xsb.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC eau_shd_util.tbl PLOT SCALE : 1:2

SEE USH 51 NB X-SECTIONS

777+00

-33.00 1249.82
-19.00 1248.89
-15.00 1248.73
0.00 1248.13
28.07 1247.01
41.87 1244.71
0.066
0.040
6:1

776+50

-40.48 1251.59
-19.00 1250.10
-15.00 1249.94
0.00 1249.34
28.07 1248.22
41.67 1245.95
0.069
0.040
6:1

776+00

-46.02 1255.05
-31.67 1251.46
-15.00 1250.89
0.00 1250.38
26.80 1249.48
43.80 1246.65
4:1
0.034
6:1

10.0 FT
10.0 FT

R/W

1250
1240
1230
1220

-140 -120 -100 -80 -60 -40 -20 BL 20 40 60 80 100 120 140

9

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: B RAMP	SHEET NO: 1174 E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090205_xsb.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC eau_shd_util.tbl PLOT SCALE : 1:2

SEE USH 51 NB X-SECTIONS

779+00

-24.22 1242.84
-15.00 1242.47
0.00 1241.87
0.040
28.07 1240.75
37.57 1239.16
6:1
R/W

778+50

-27.63 1244.66
-15.00 1244.15
0.00 1243.55
0.040
28.07 1242.43
38.57 1240.68
6:1
R/W

778+00

-23.76 1246.17
-15.00 1245.82
0.00 1245.22
0.040
28.07 1244.10
36.77 1242.65
6:1
R/W

777+50

-28.58 1247.31
-15.00 1247.36
0.00 1246.76
0.040
28.07 1245.64
39.87 1243.67
6:1
R/W
10.0 FT
10.0 FT

1250
1240
1230
1220

-140 -120 -100 -80 -60 -40 -20 BL 20 40 60 80 100 120 140

9

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: B RAMP	SHEET NO: 1175	E

SEE USH 51 NB X-SECTIONS

781+00

-21.55 1236.55
-15.00 1236.34
0.00 1235.85
0.033
28.07 1234.93
39.07 1233.09
6:1
R/W

780+50

-21.55 1238.09
-15.00 1237.83
0.00 1237.23
0.040
28.07 1236.10
43.07 1233.60
6:1
R/W

780+00

-21.55 1239.47
-15.00 1239.21
0.00 1238.61
0.040
28.07 1237.48
42.07 1235.15
6:1
R/W

779+50

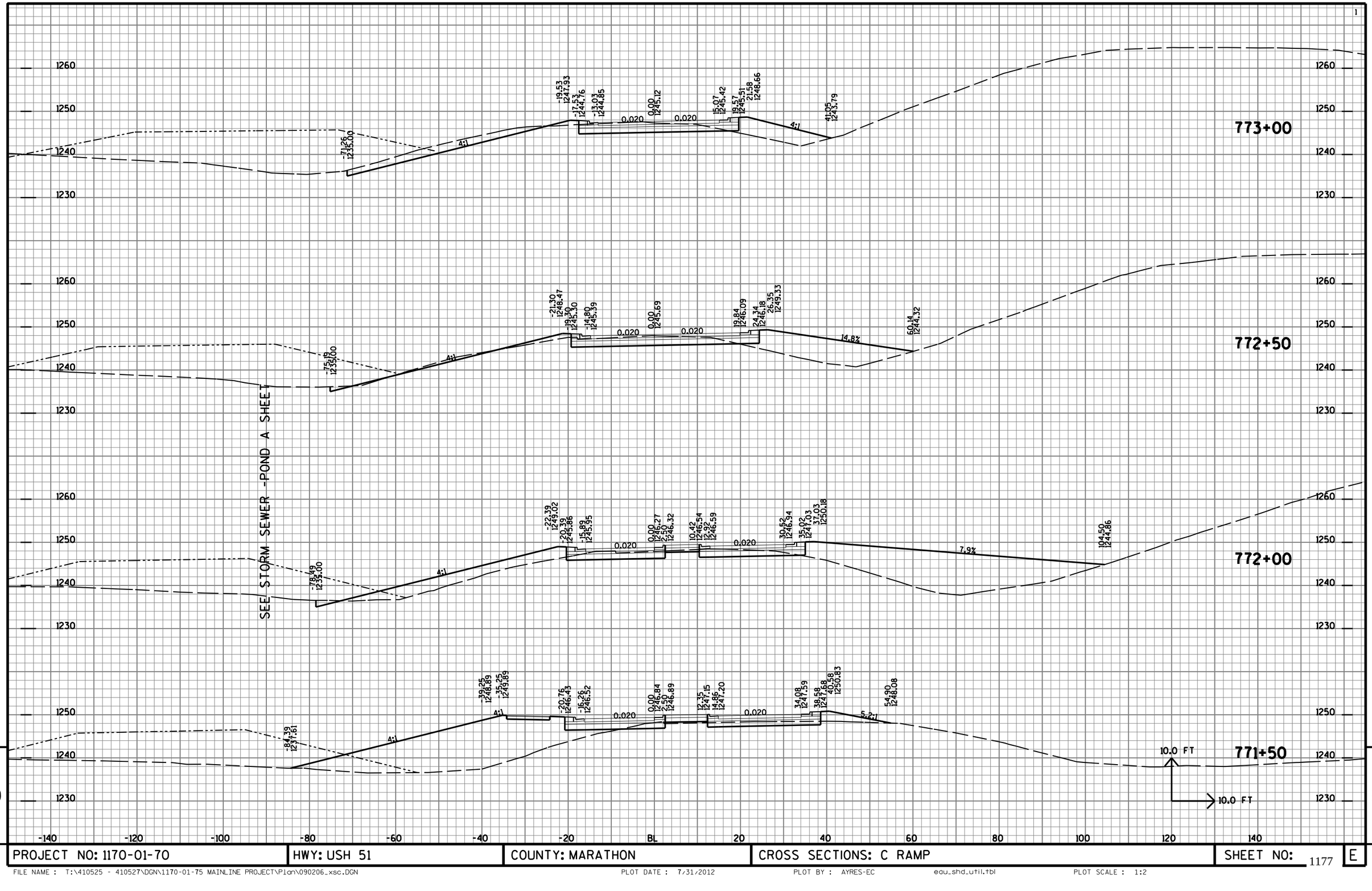
-21.55 1241.10
-15.00 1240.84
0.00 1240.24
0.040
28.07 1239.11
34.00 1238.13
35.57 1237.73
6:1 4:1
10.0 FT
R/W
10.0 FT

1240
1230
1220

-140 -120 -100 -80 -60 -40 -20 BL 20 40 60 80 100 120 140

9

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: B RAMP	SHEET NO: 1176	E



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9

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: C RAMP	SHEET NO: 1177 E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090206_xsc.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC edu_shd_util.tbl PLOT SCALE : 1:2

SEE STORM SEWER -POND A SHEET

774+56

-52.15
1235.00
4:1
-6.56
1246.40
-4.56
1245.23
-0.06
1243.32
0.00
1243.32
0.020
15.00
1243.62
19.50
1243.71
21.51
1246.86
6:1
31.80
1245.15

774+50

-52.58
1235.00
4:1
-6.72
1246.46
-4.72
1245.30
-0.22
1243.39
0.00
1243.39
0.020
15.00
1243.69
19.50
1243.78
21.51
1246.93
6:1
40.88
1243.70

774+00

-59.28
1235.00
4:1
-11.49
1246.94
-9.49
1243.78
-4.99
1243.87
0.00
1243.97
0.020
0.020
15.00
1244.27
19.50
1244.36
21.51
1247.51
4:1
39.48
1243.01

773+50

-56.25
1235.00
4:1
-16.58
1247.42
-14.58
1244.25
-10.08
1244.34
0.00
1244.54
0.020
0.020
15.00
1244.84
19.50
1244.93
21.51
1248.08
3.5:1
37.68
1243.46

1260
1250
1240
1230

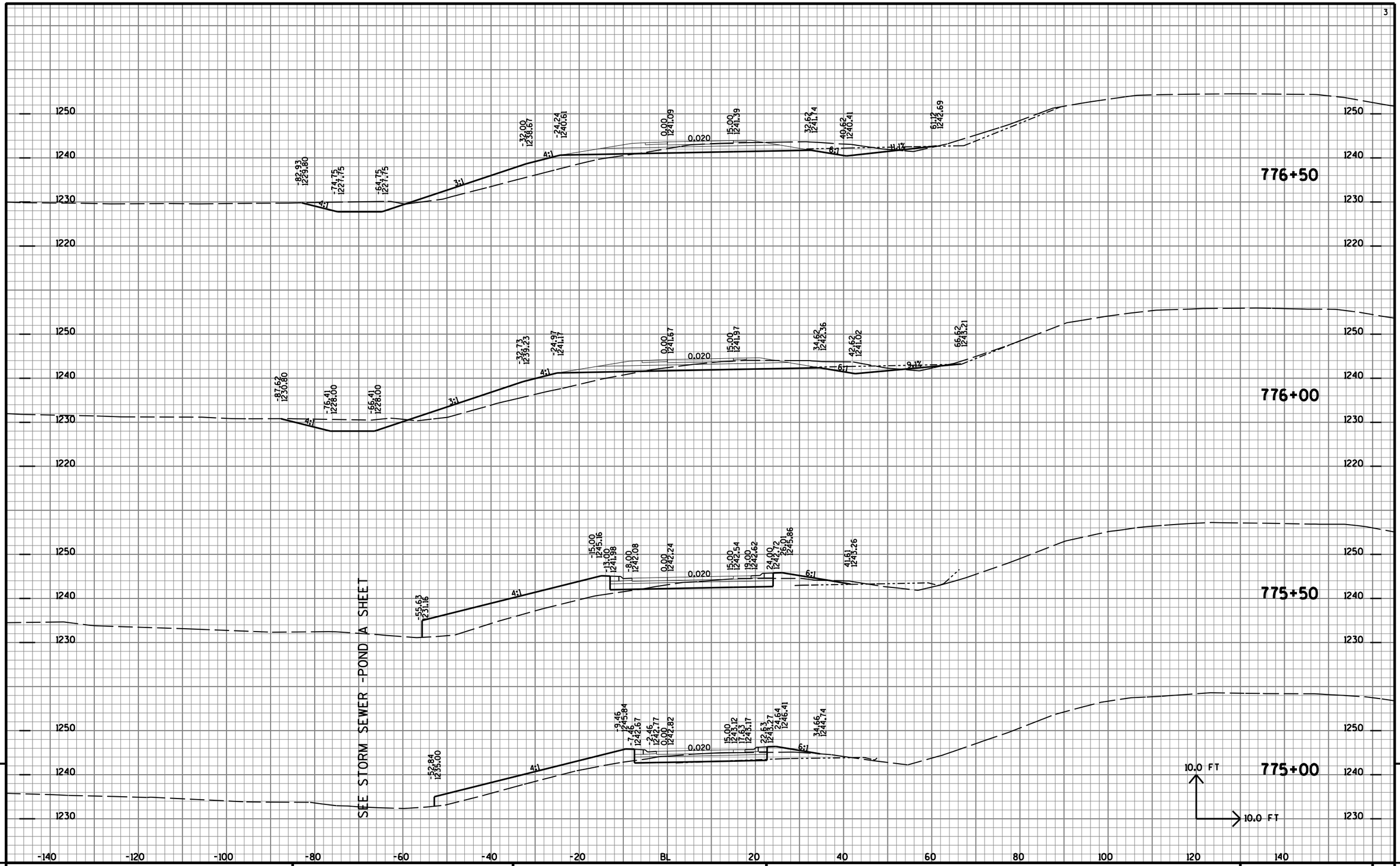
-140 -120 -100 -80 -60 -40 -20 BL 20 40 60 80 100 120 140

10.0 FT
10.0 FT

9

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: C RAMP	SHEET NO: 1178 E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090206_xsc.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC edu_shd_util.tbl PLOT SCALE : 1:2

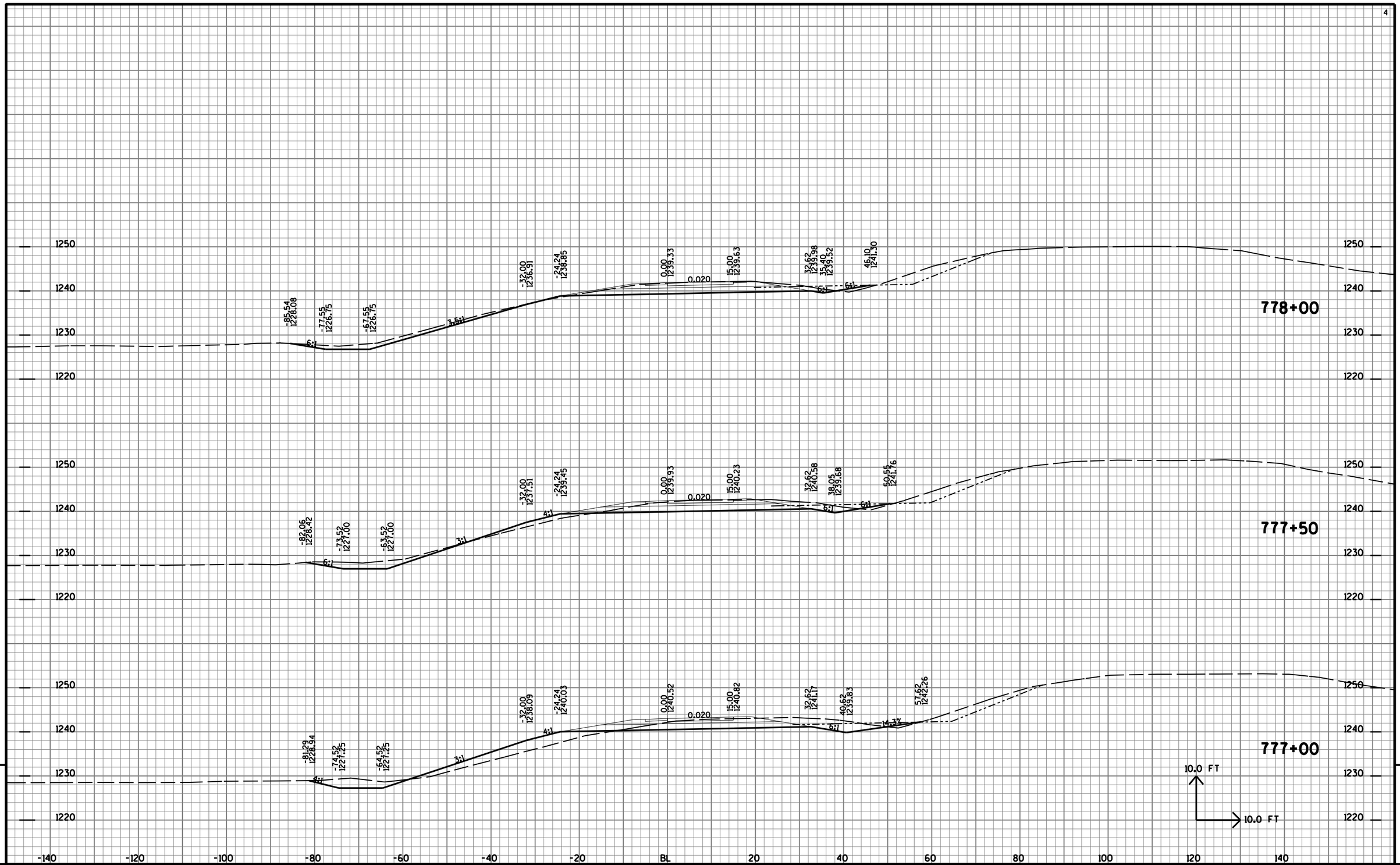


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PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: C RAMP	SHEET NO: 1179	E

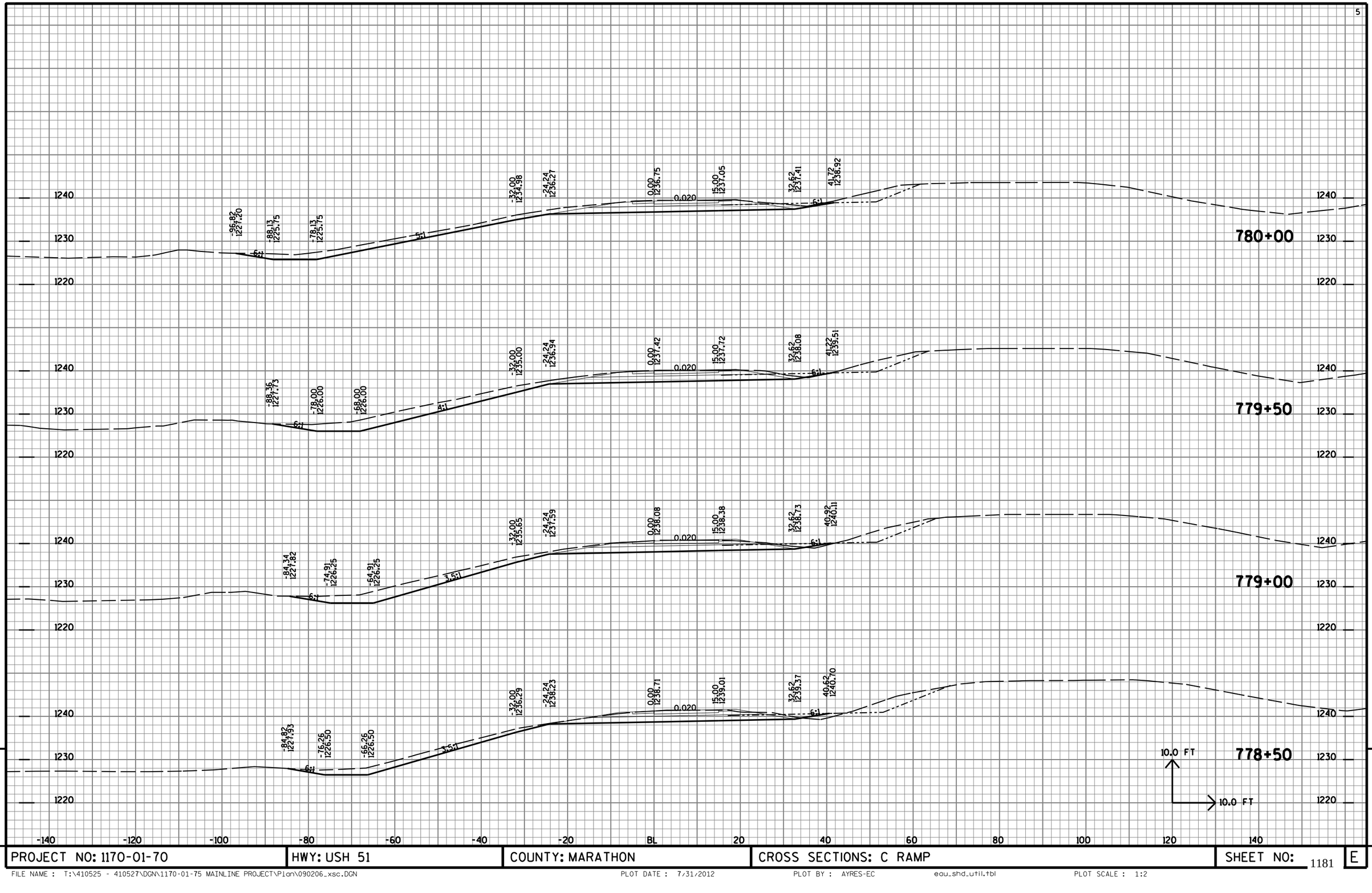
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9

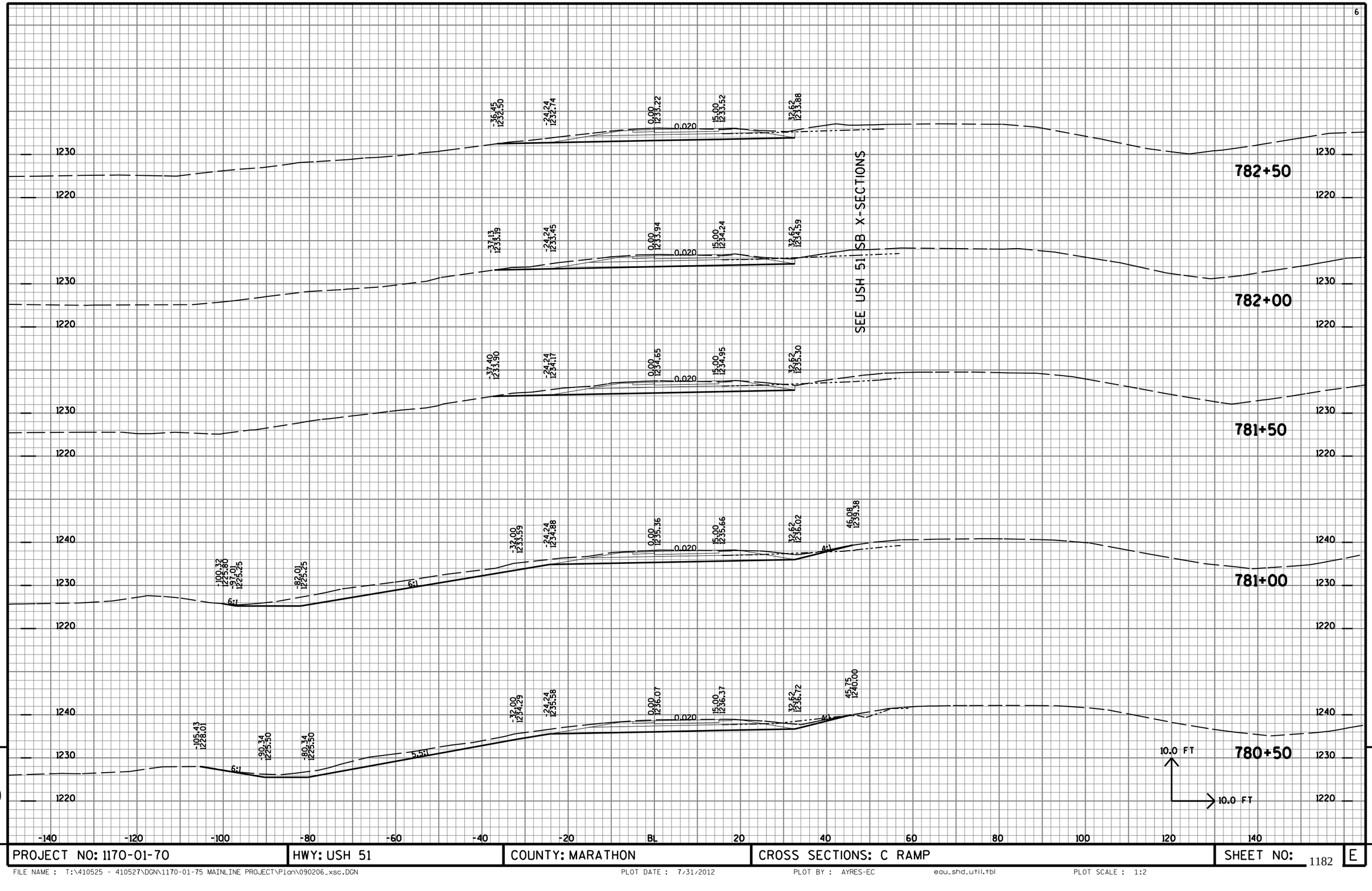
PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: C RAMP	SHEET NO: 1180 E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090206_xsc.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC eau_shd_util.tbl PLOT SCALE : 1:2



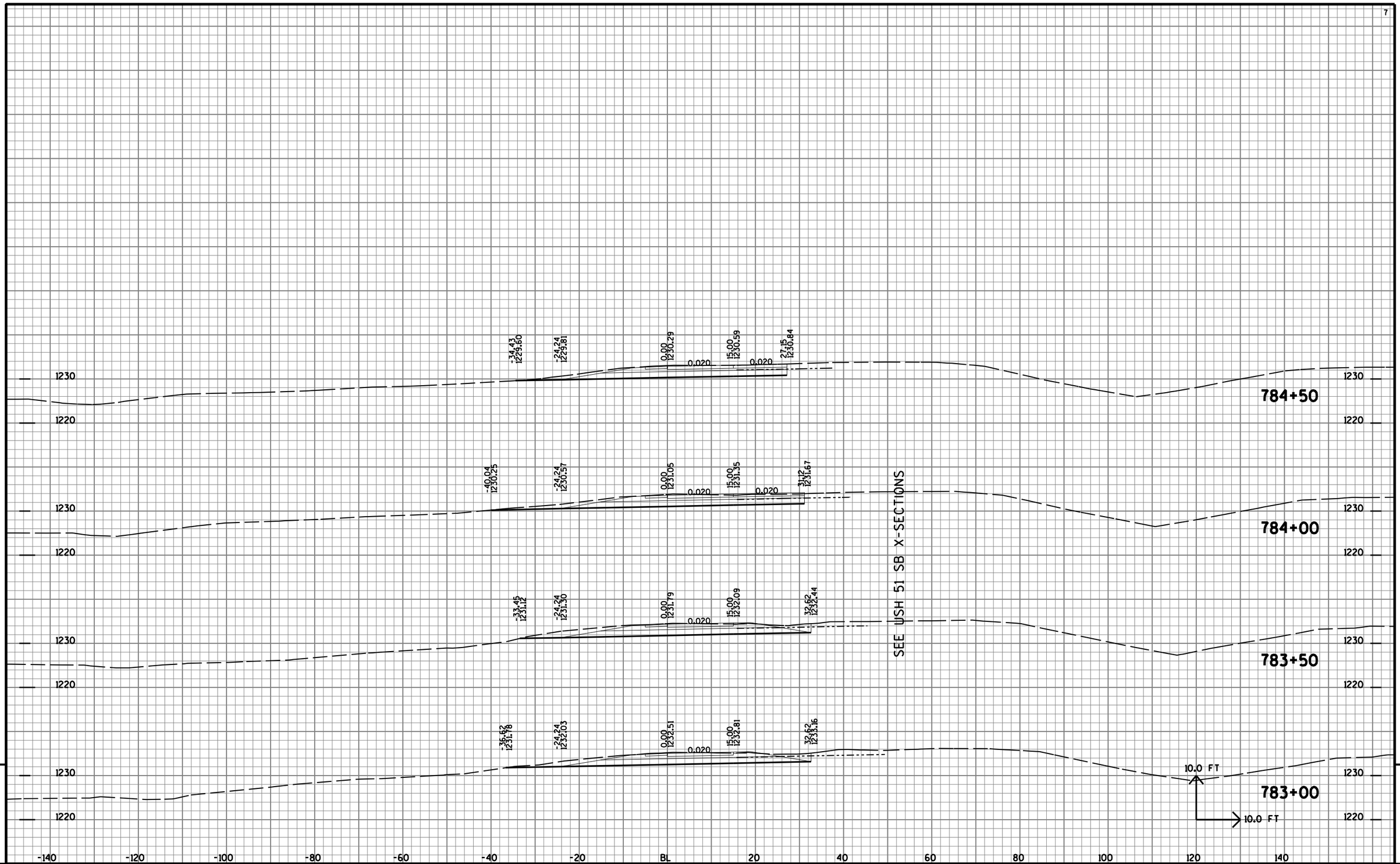
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PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: C RAMP	SHEET NO: 1181	E



9 9

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: C RAMP	SHEET NO: 1182 E

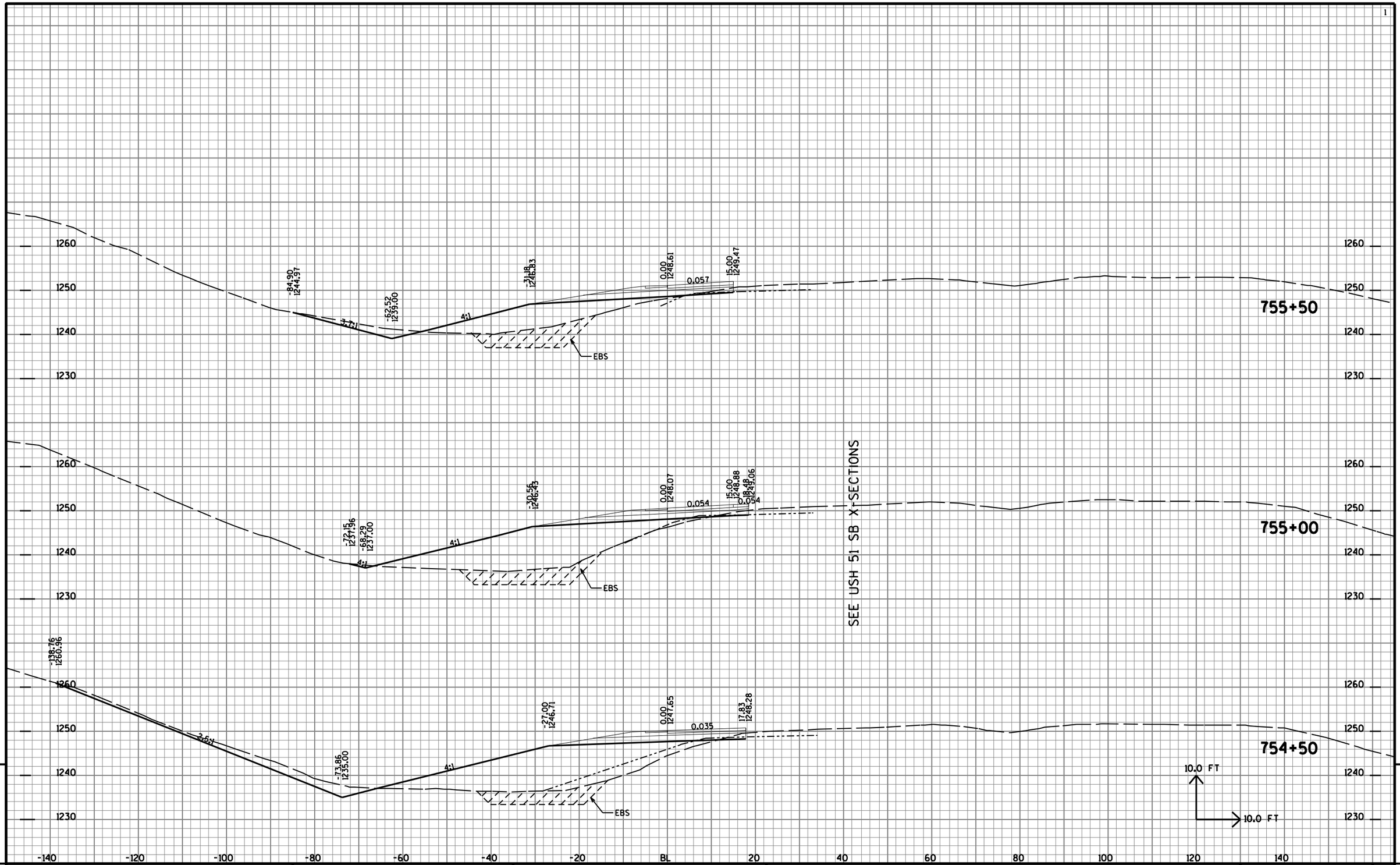


9

9

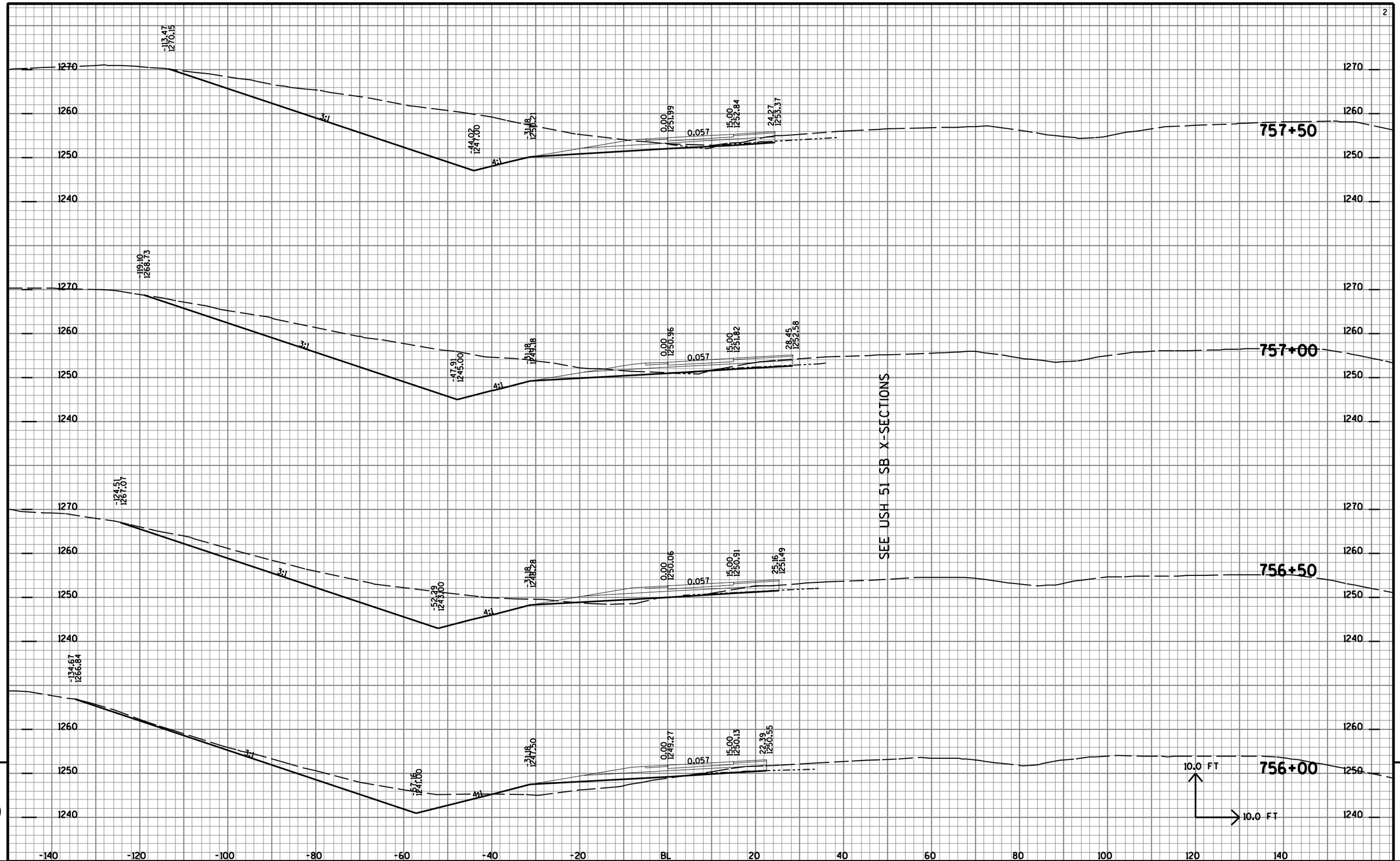
PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: C RAMP	SHEET NO: 1183	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090206_xsc.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC eau_shd_util.tbl PLOT SCALE : 1:2



9

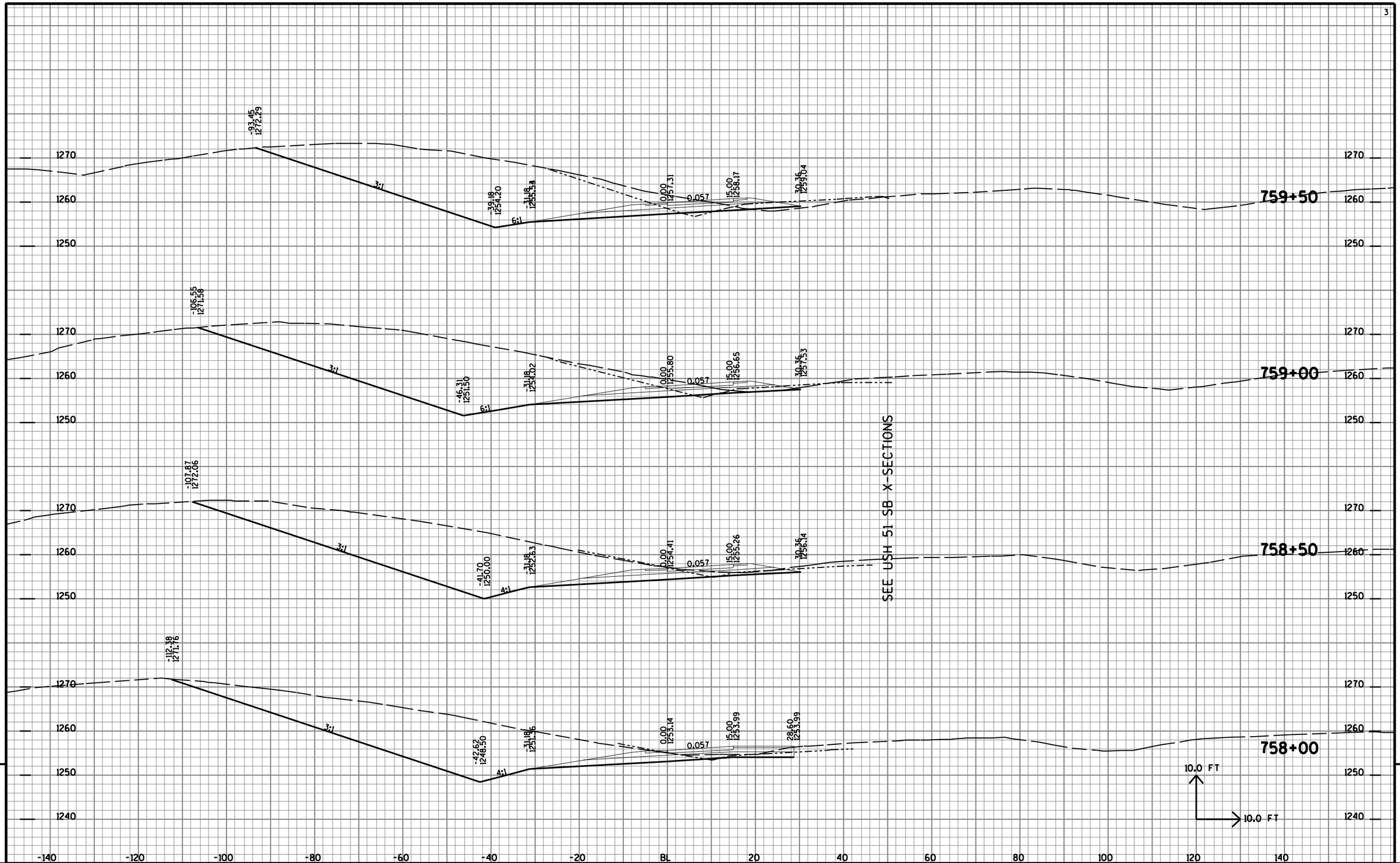
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9

9

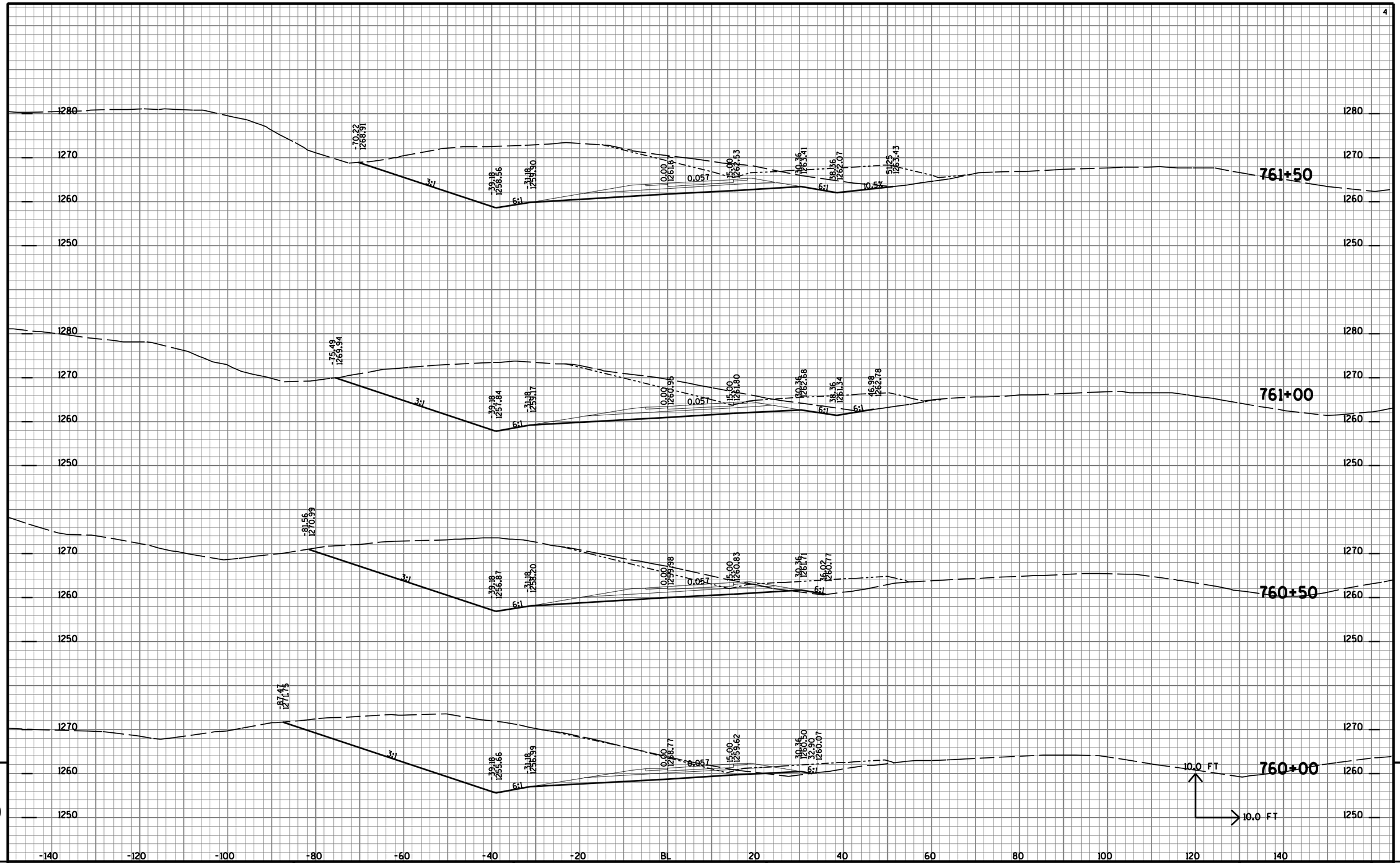
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9

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: D RAMP	SHEET NO: 1186 E

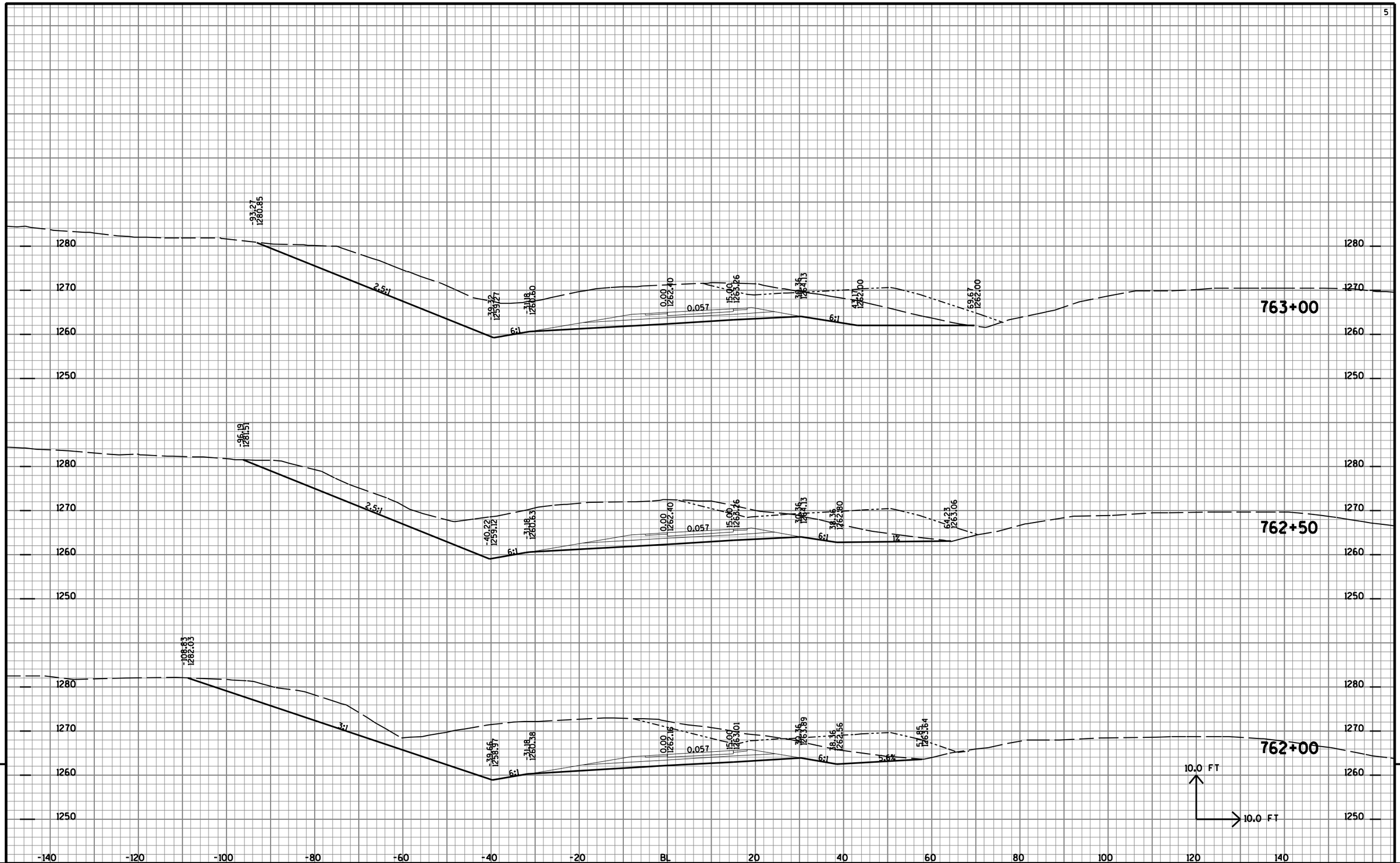
FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090207_xsd.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC eau_shd_util.tbl PLOT SCALE : 1:2



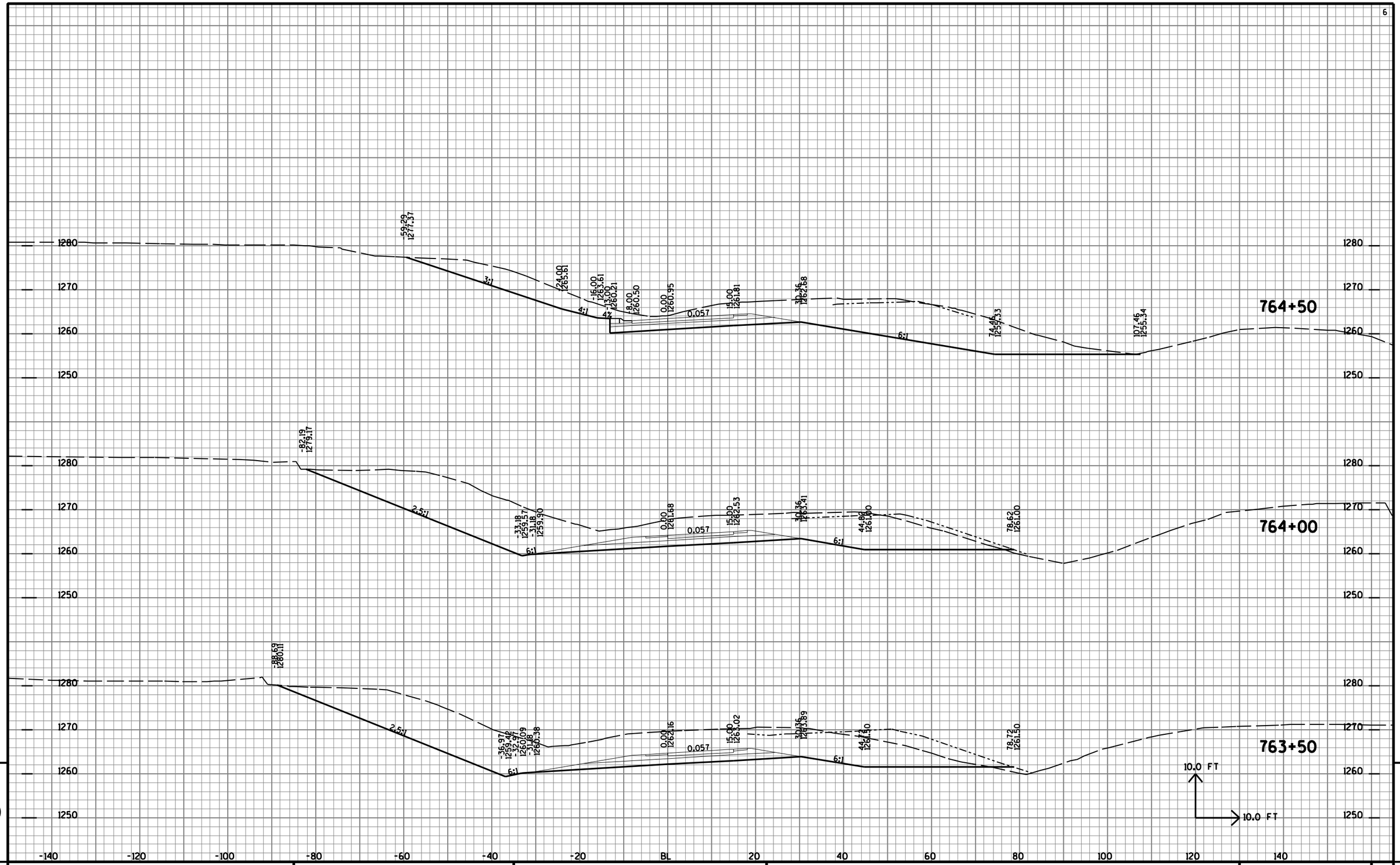
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PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: D RAMP	SHEET NO: 1187	E



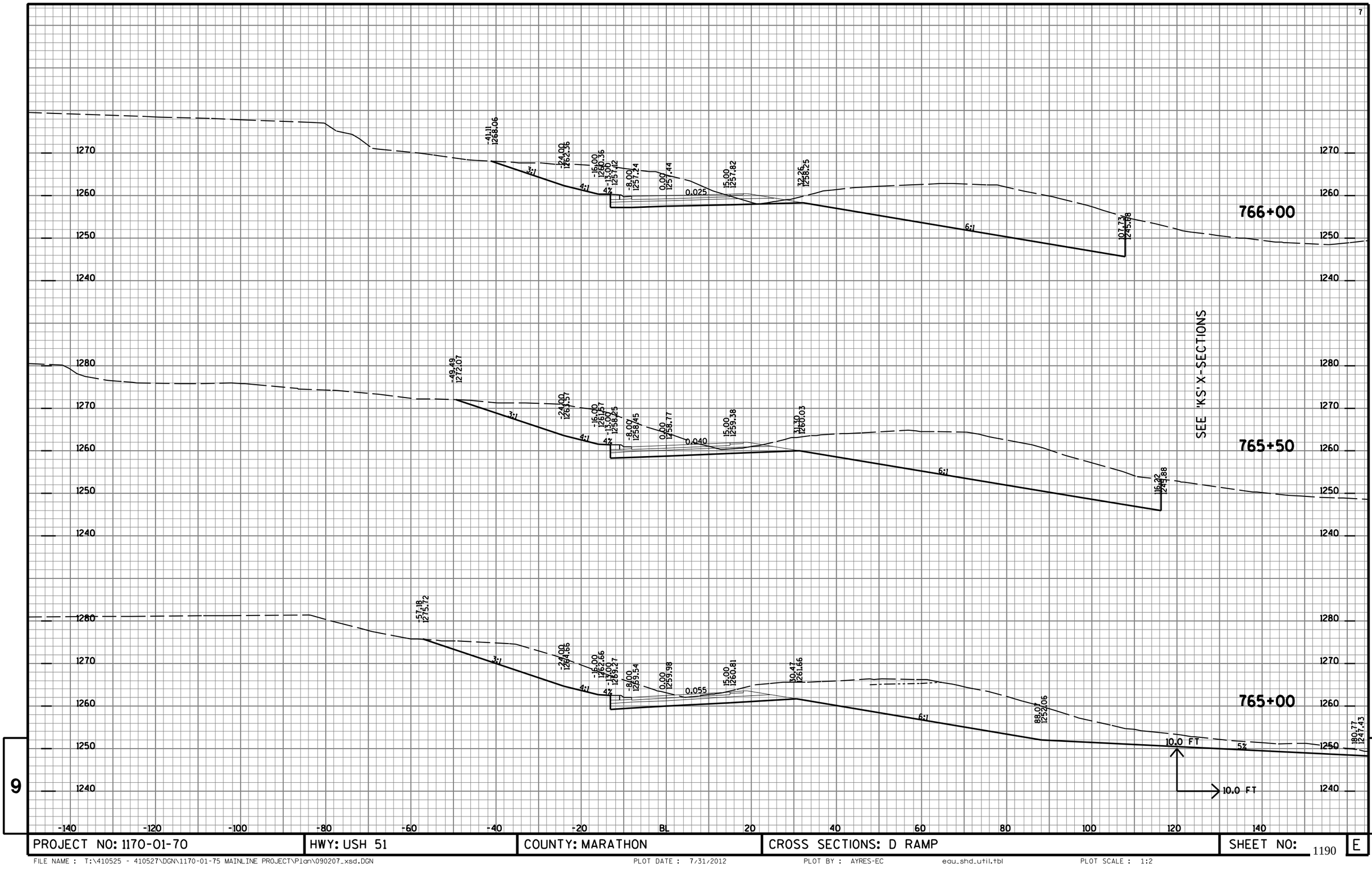
PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: D RAMP	SHEET NO: 1188 E



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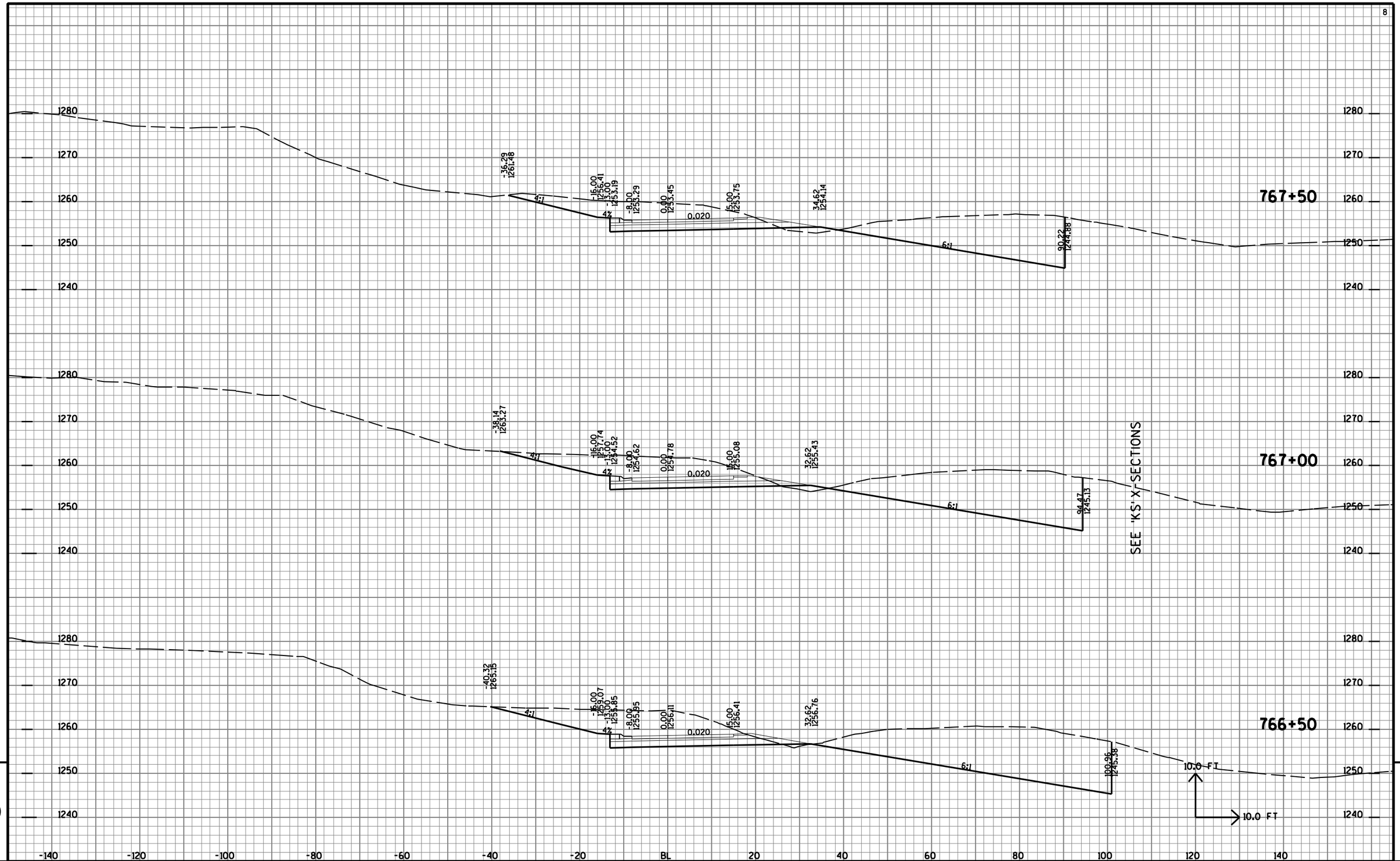
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PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: D RAMP	SHEET NO: 1189	E

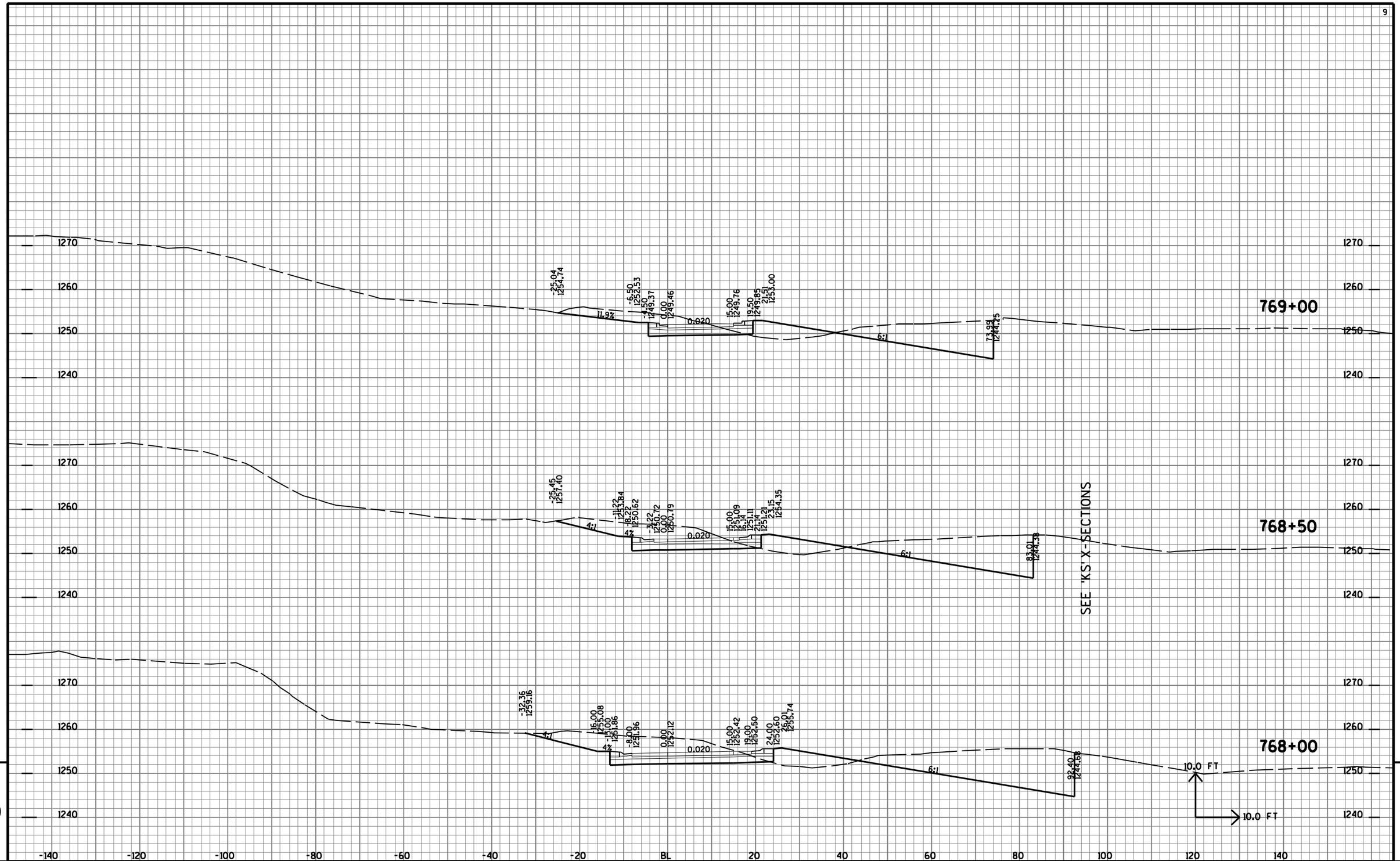


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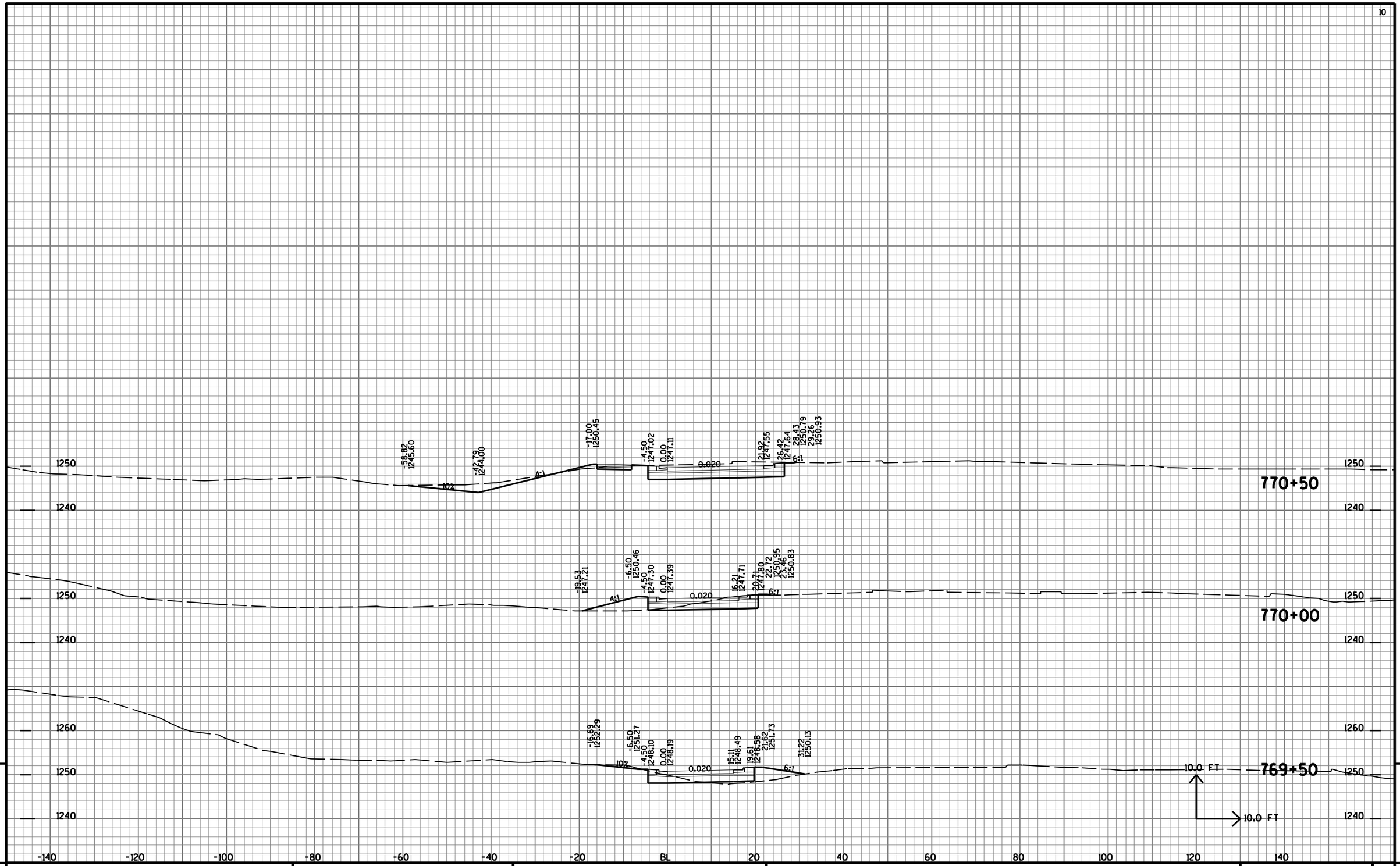
PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: D RAMP	SHEET NO: 1190	E



PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: D RAMP	SHEET NO: 1191 E



PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: D RAMP	SHEET NO: 1192	E



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PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: D RAMP	SHEET NO: 1193	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090207_xsd.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC eau_shd_util.tbl PLOT SCALE : 1:2

SEE USH 51 NB X-SECTIONS

741+00

740+50

740+00

739+50

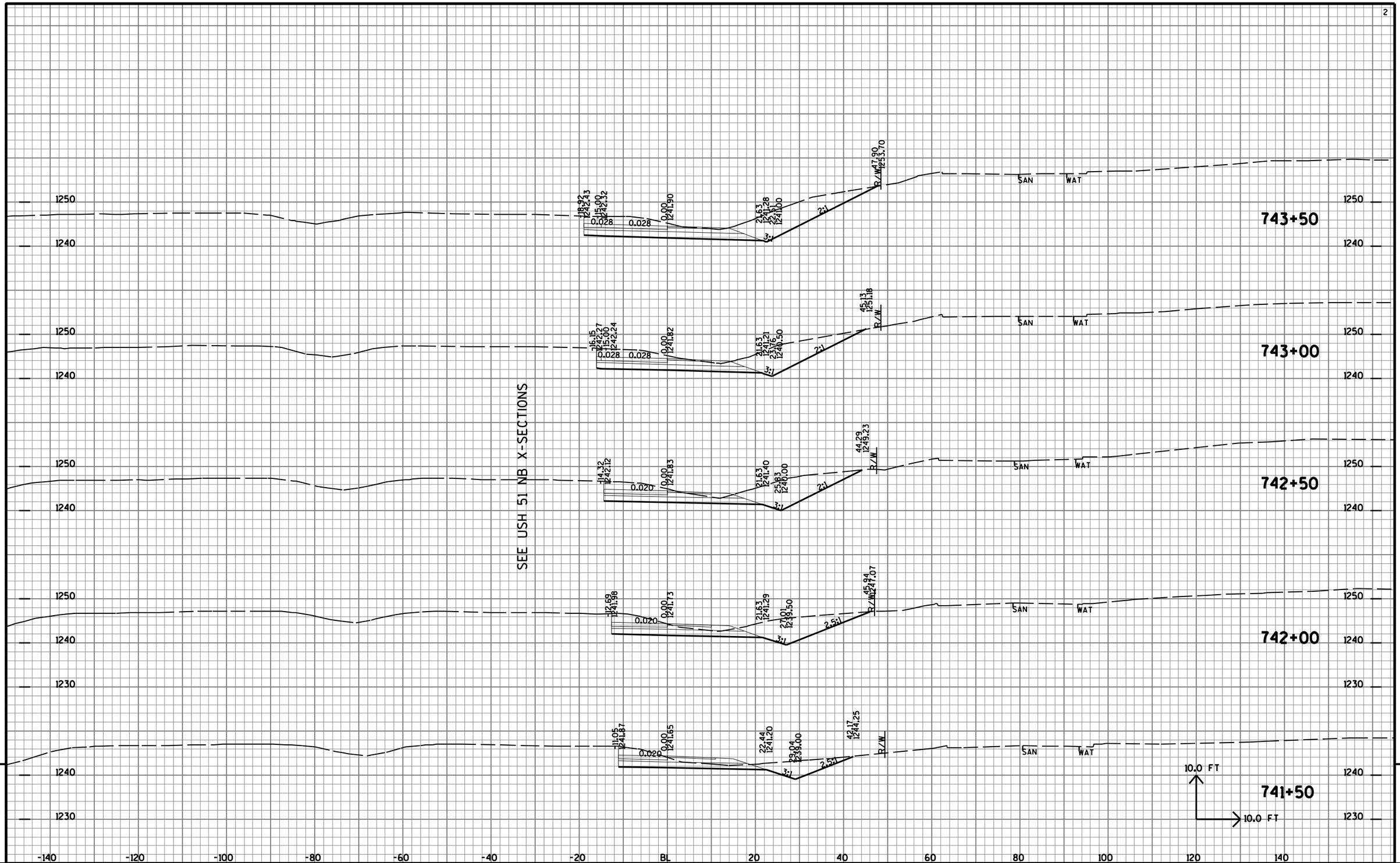
739+00

738+50

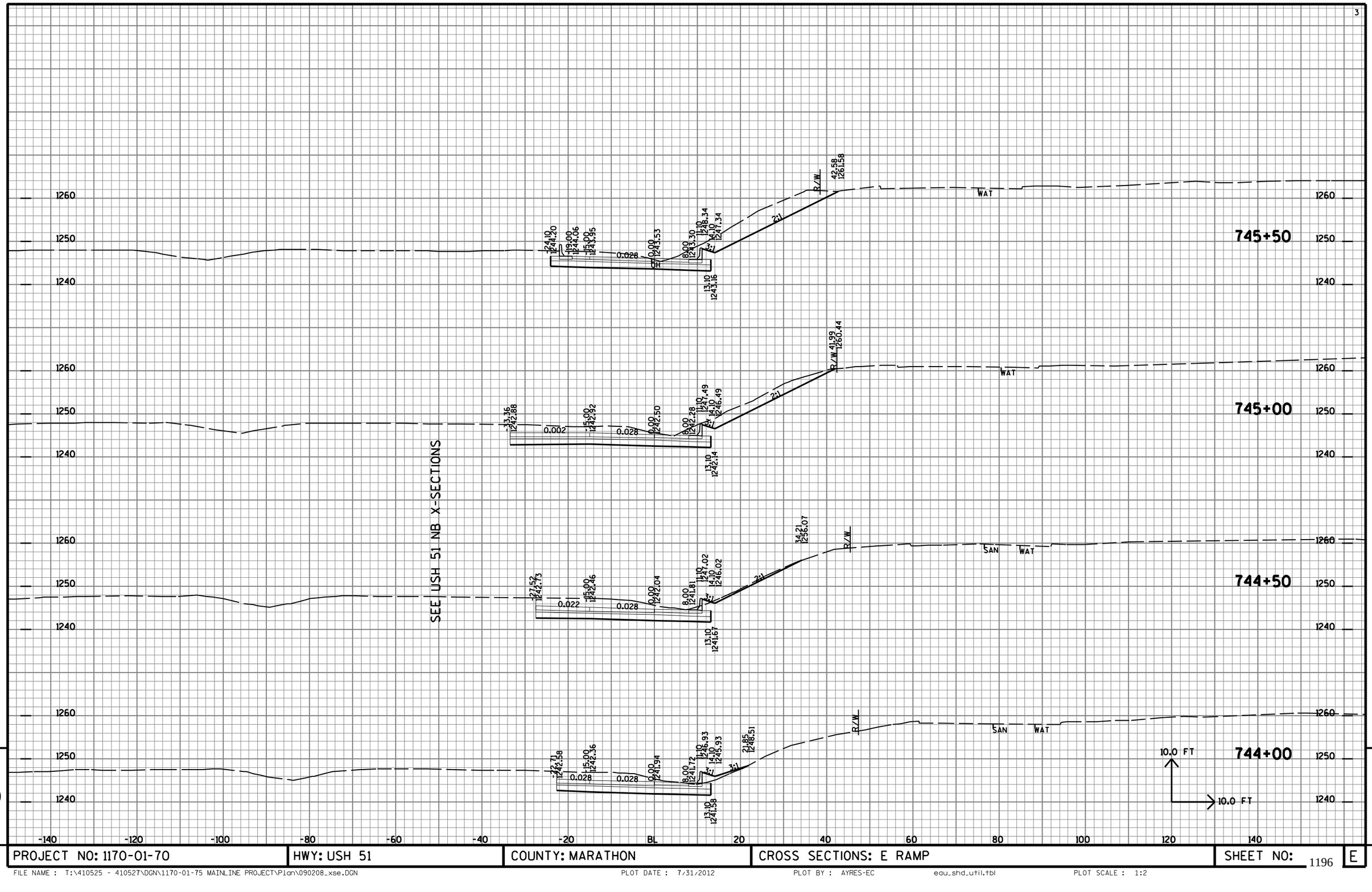
STA 738+67 NB
48" CPRC CL.III
2-APRON ENDWALLS REQ'D.
(STAGED CONSTRUCTION OF CULVERT PIPE)

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: E RAMP	SHEET NO: 1194	E

SEE USH 51 NB X-SECTIONS



PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: E RAMP	SHEET NO: 1195 E



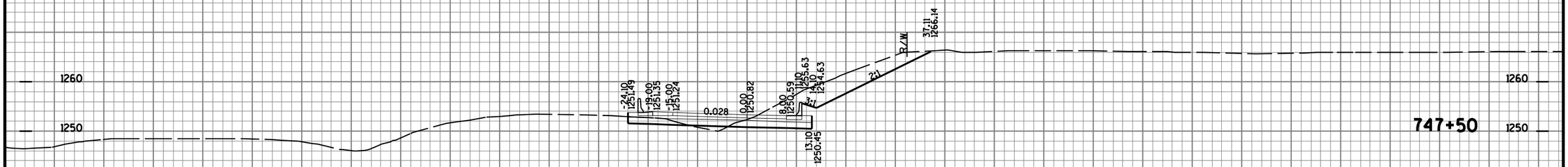
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PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: E RAMP	SHEET NO: 1196	E

SEE USH 51 NB X-SECTIONS

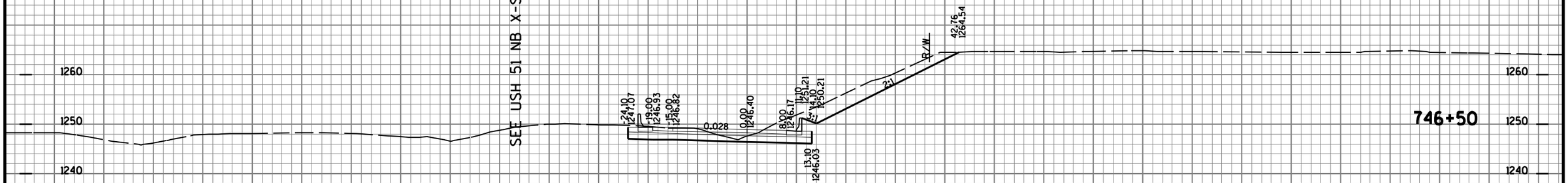
747+50



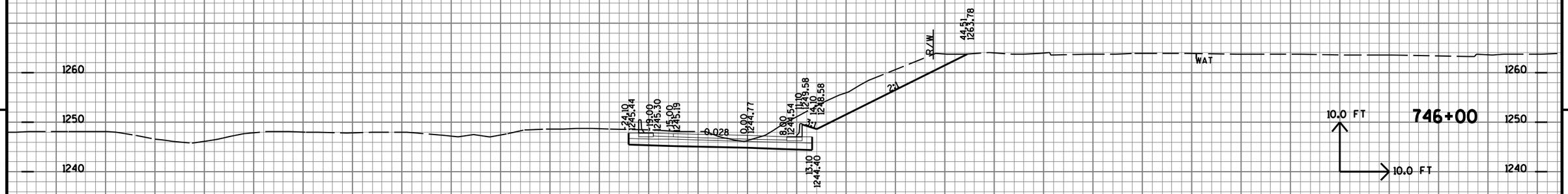
747+00



746+50



746+00



-140 -120 -100 -80 -60 -40 -20 BL 20 40 60 80 100 120 140

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: E RAMP	SHEET NO: 1197 E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090208_xse.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC eau_shd_util.tbl PLOT SCALE : 1:2

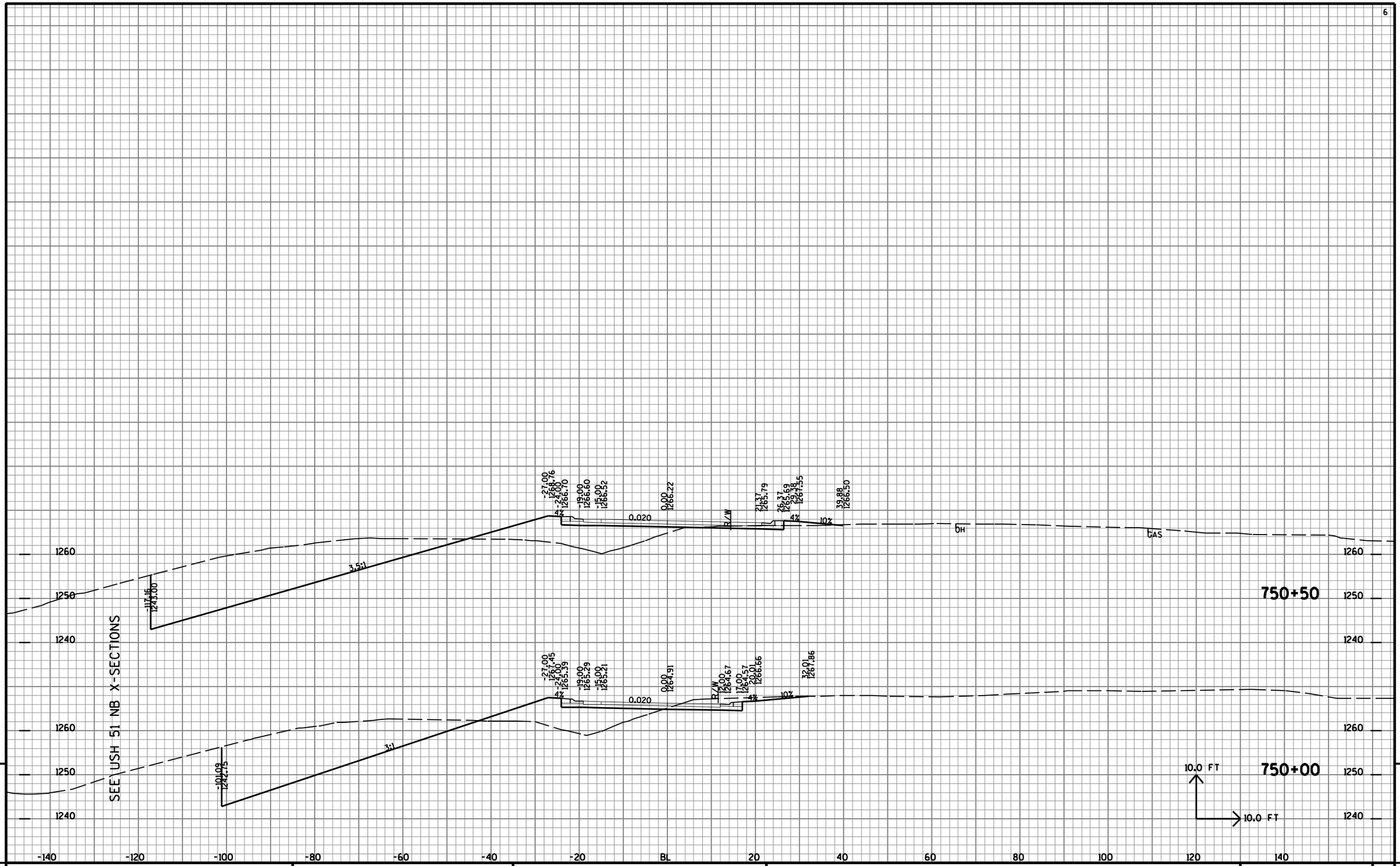


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PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: E RAMP	SHEET NO: 1198 E

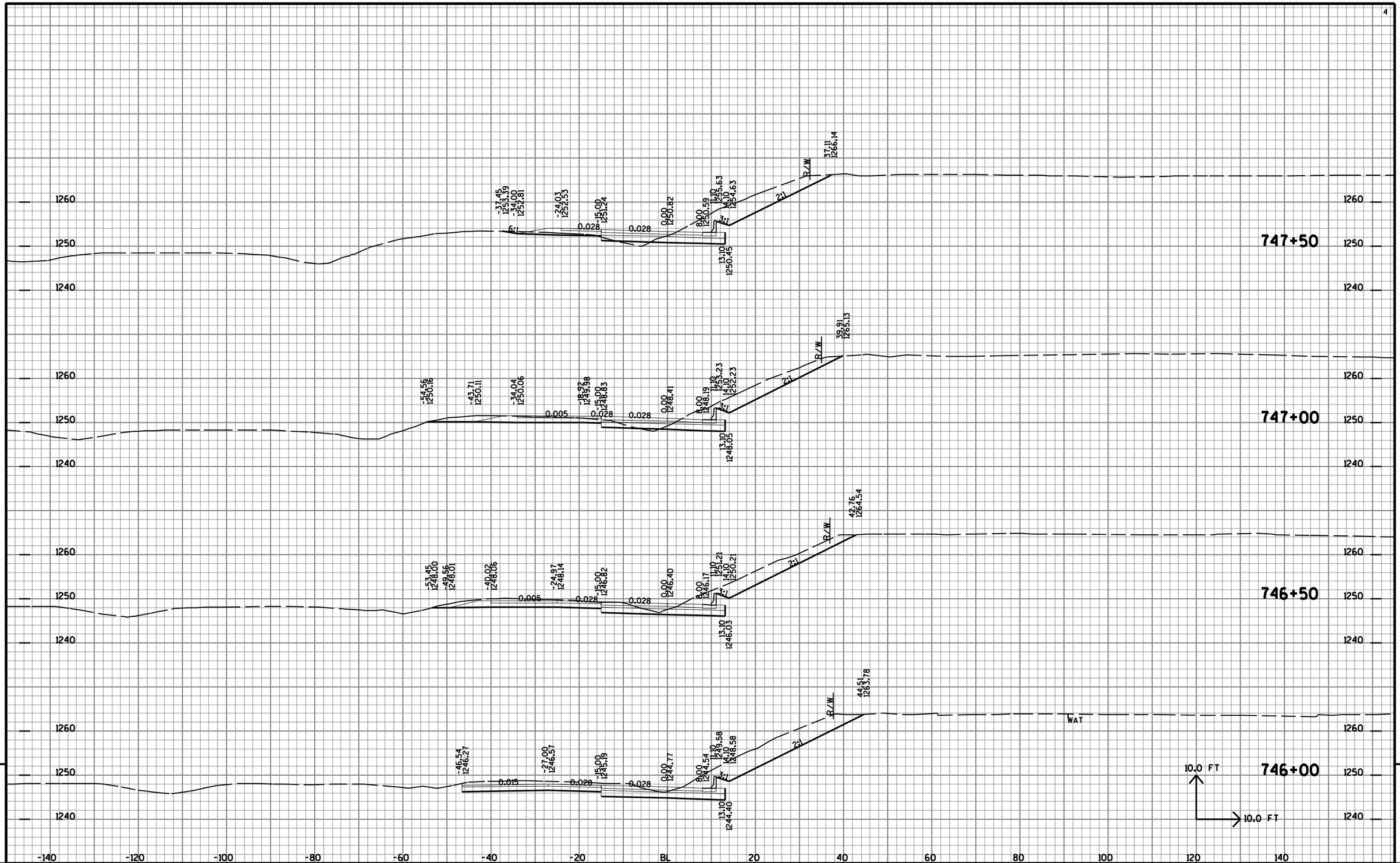
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PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: E RAMP	SHEET NO: 1199 E

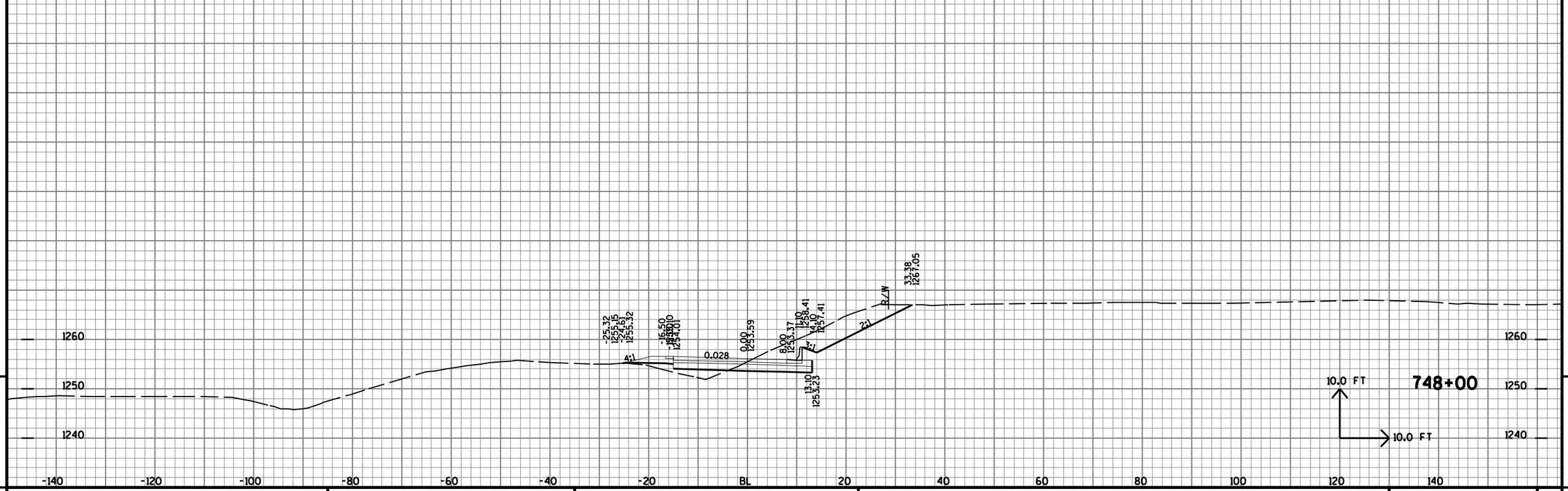


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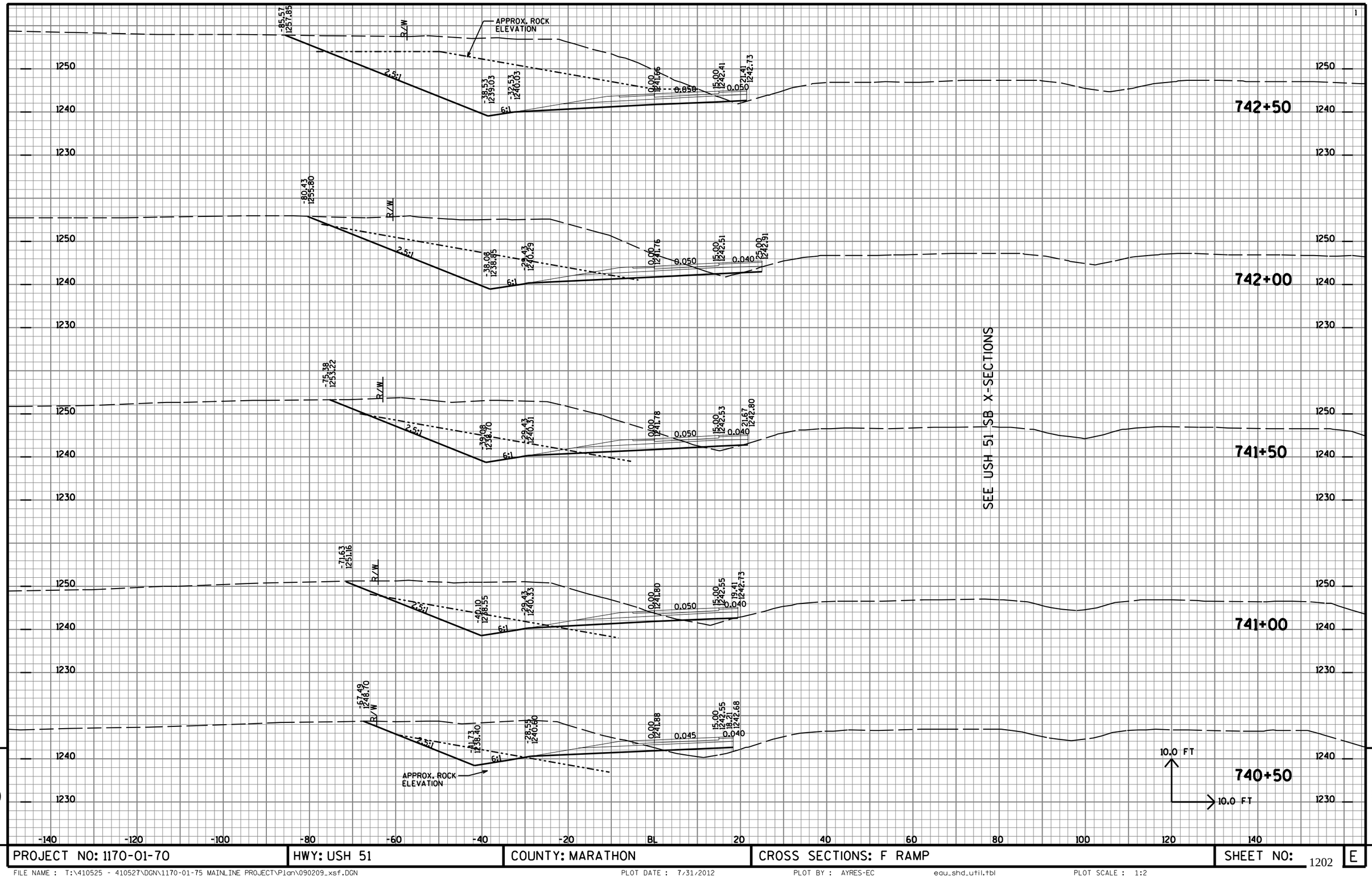
PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: FINAL E RAMP W/ET TEMP WIDENING (STAGE 2)	SHEET NO: 1200	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090208_xse2.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC eau_shd_util.tbl PLOT SCALE : 1:2



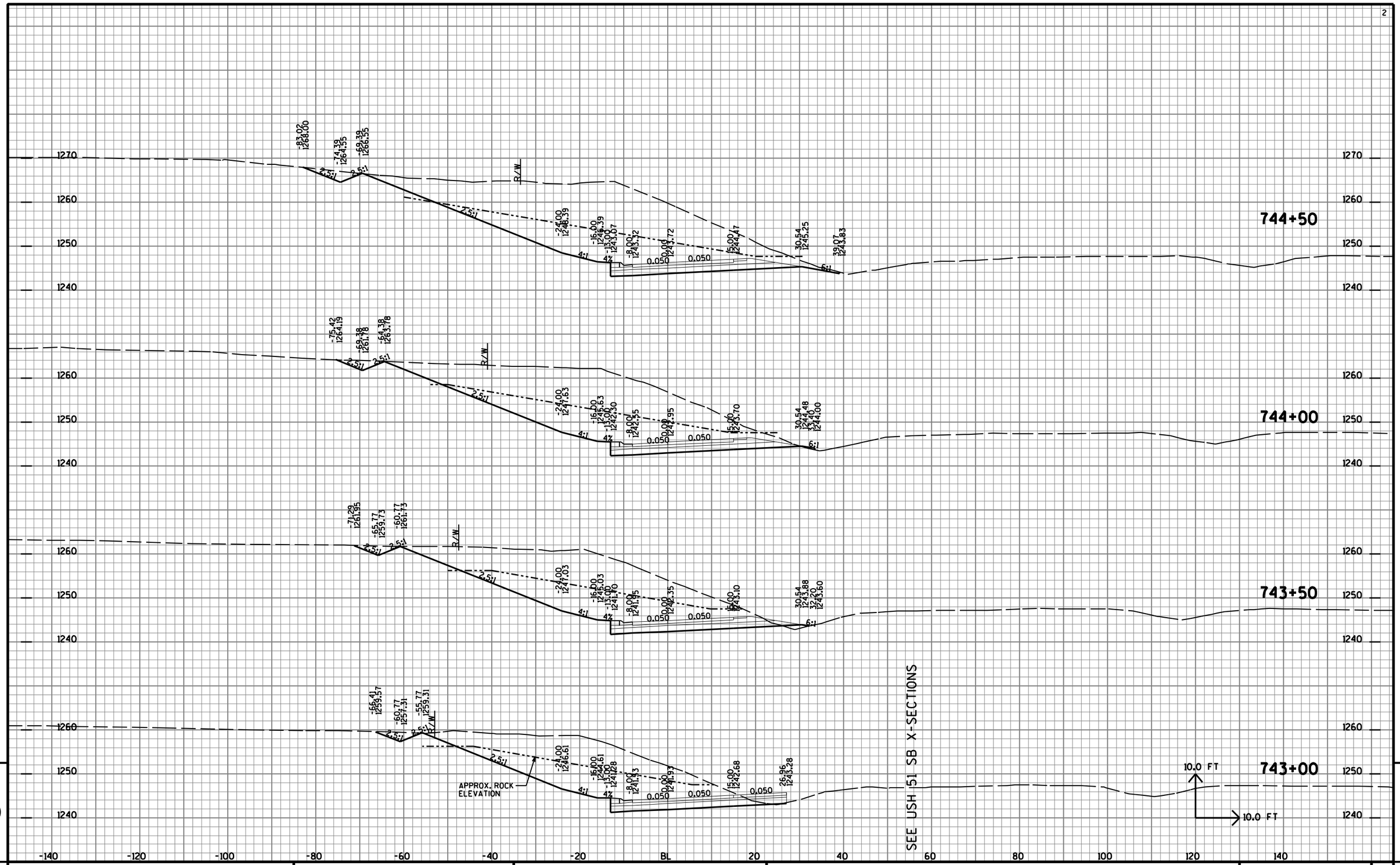
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PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: FINAL E RAMP W/ET TEMP WIDENING (STAGE 2)	SHEET NO: 1201	E

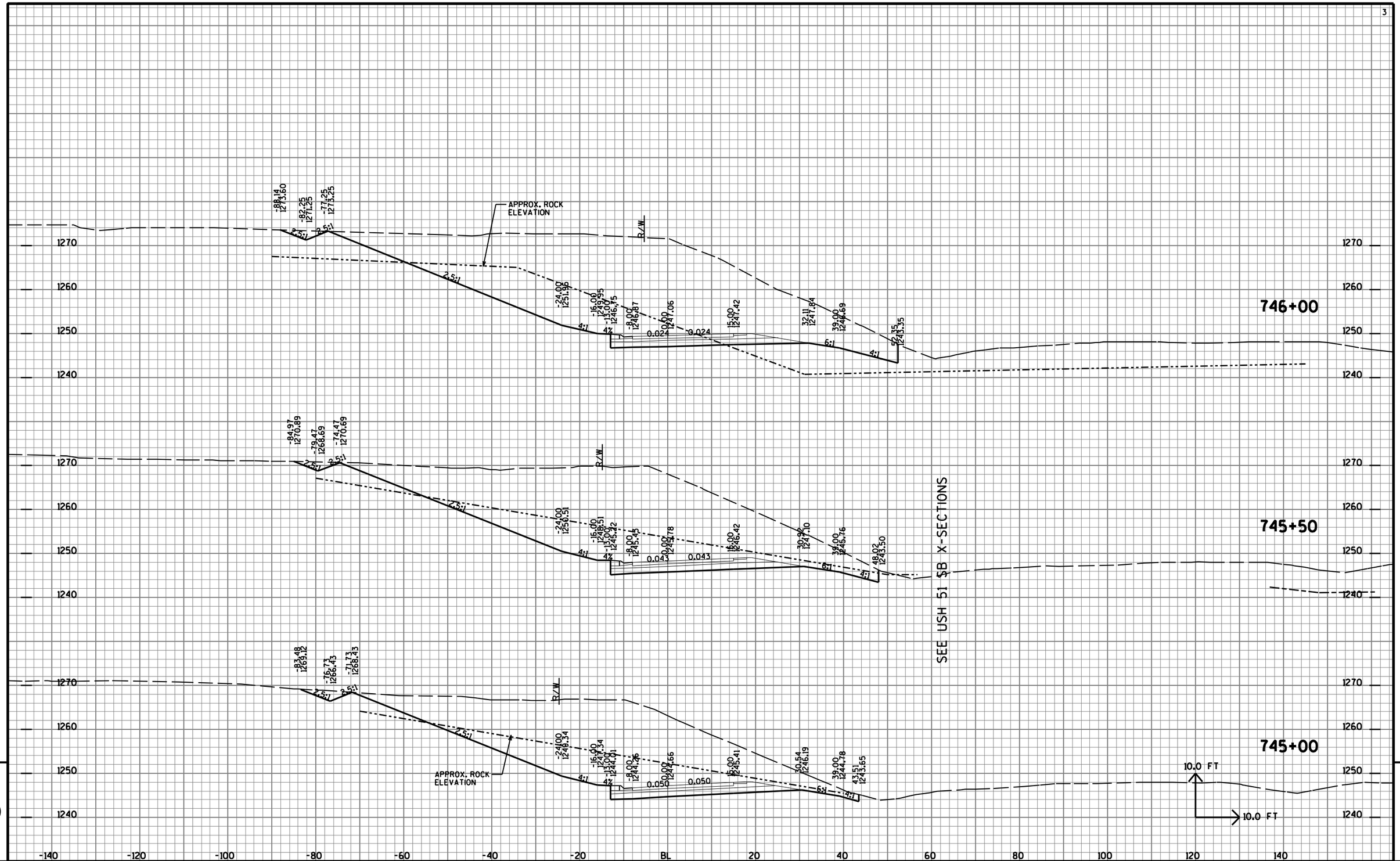


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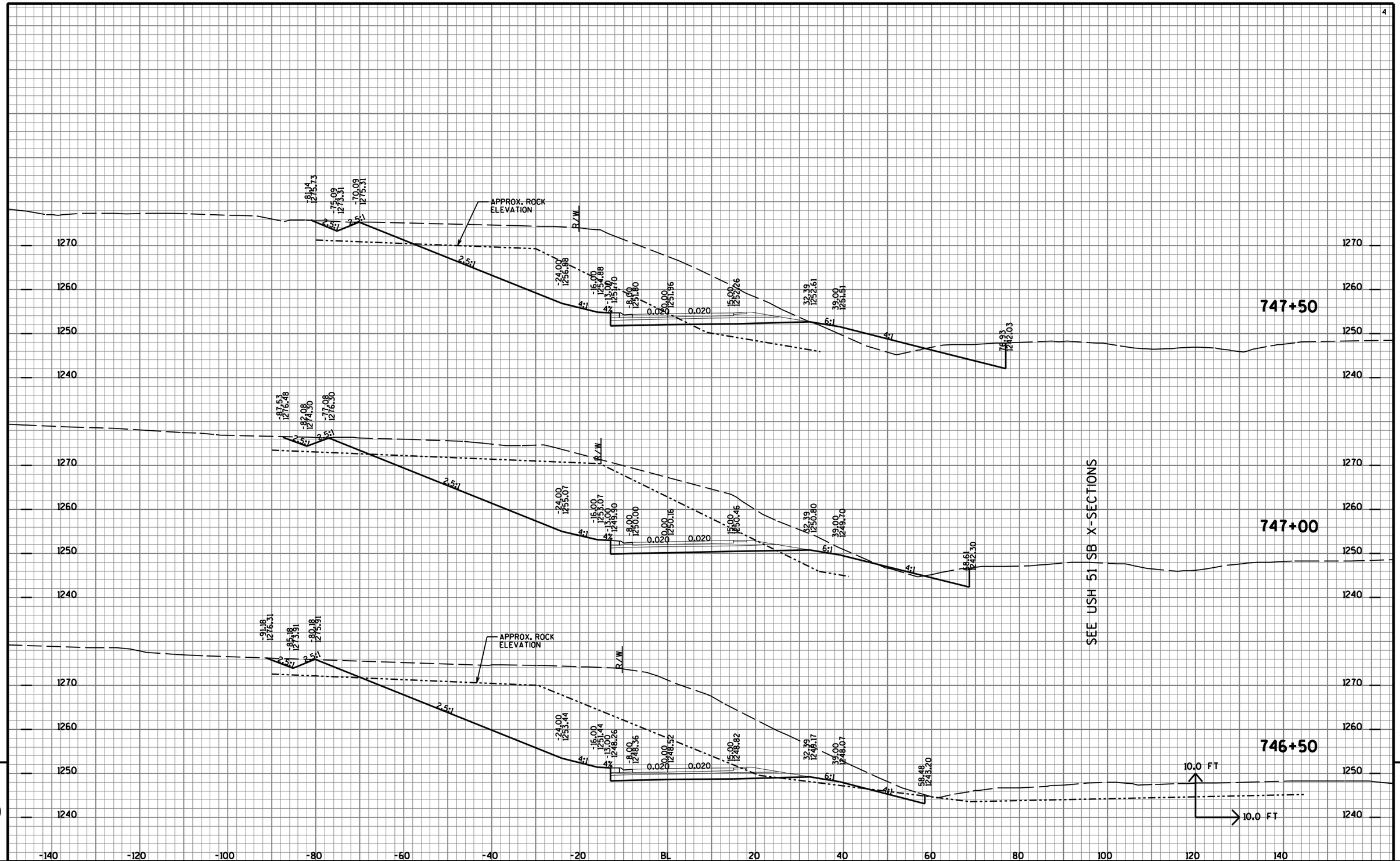
PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: F RAMP	SHEET NO: 1202	E



PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: F RAMP	SHEET NO: 1203 E



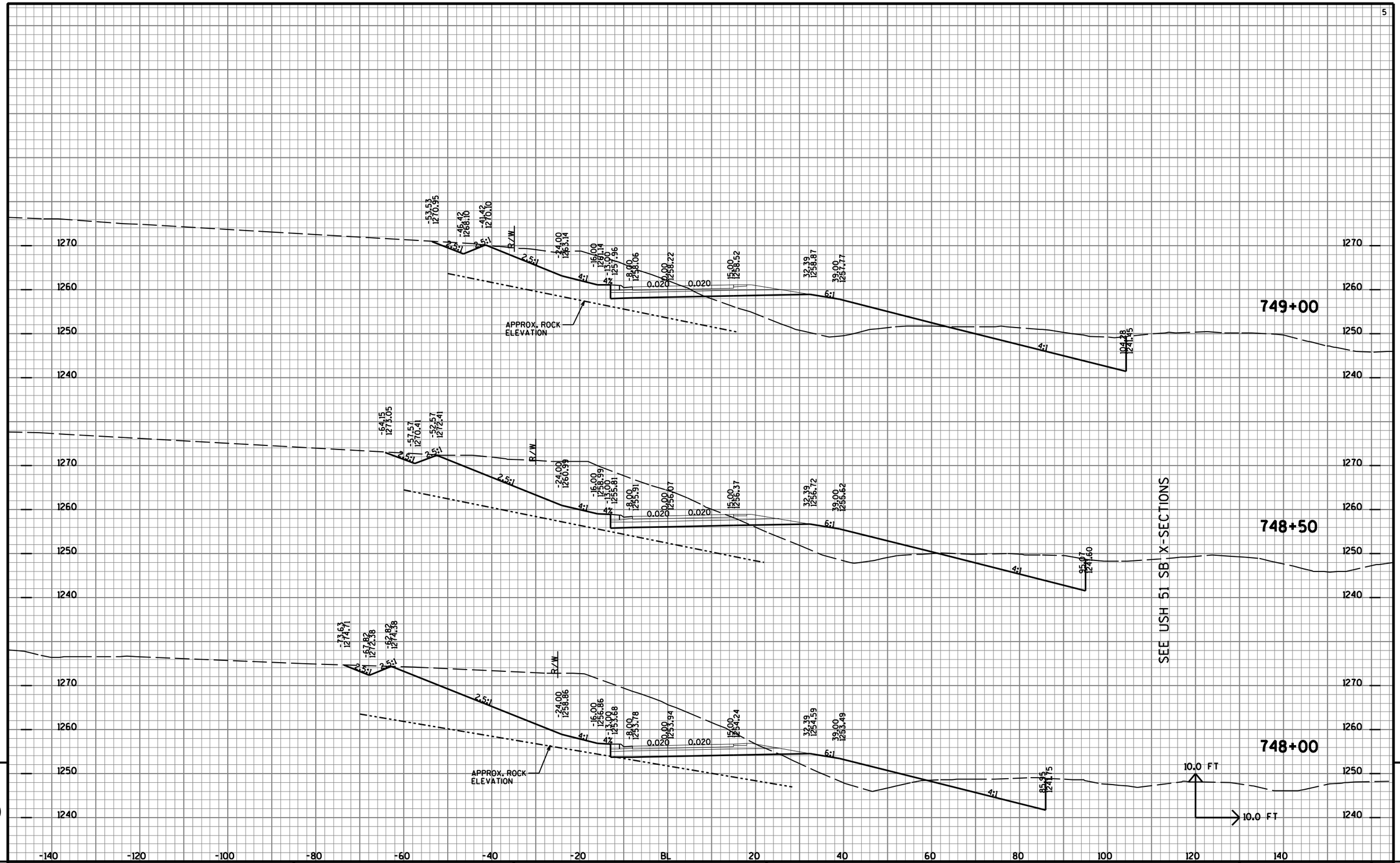
PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: F RAMP	SHEET NO: 1204 E



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PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: F RAMP	SHEET NO: 1205 E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090209_xsf.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC eau_shd_util.tbl PLOT SCALE : 1:2



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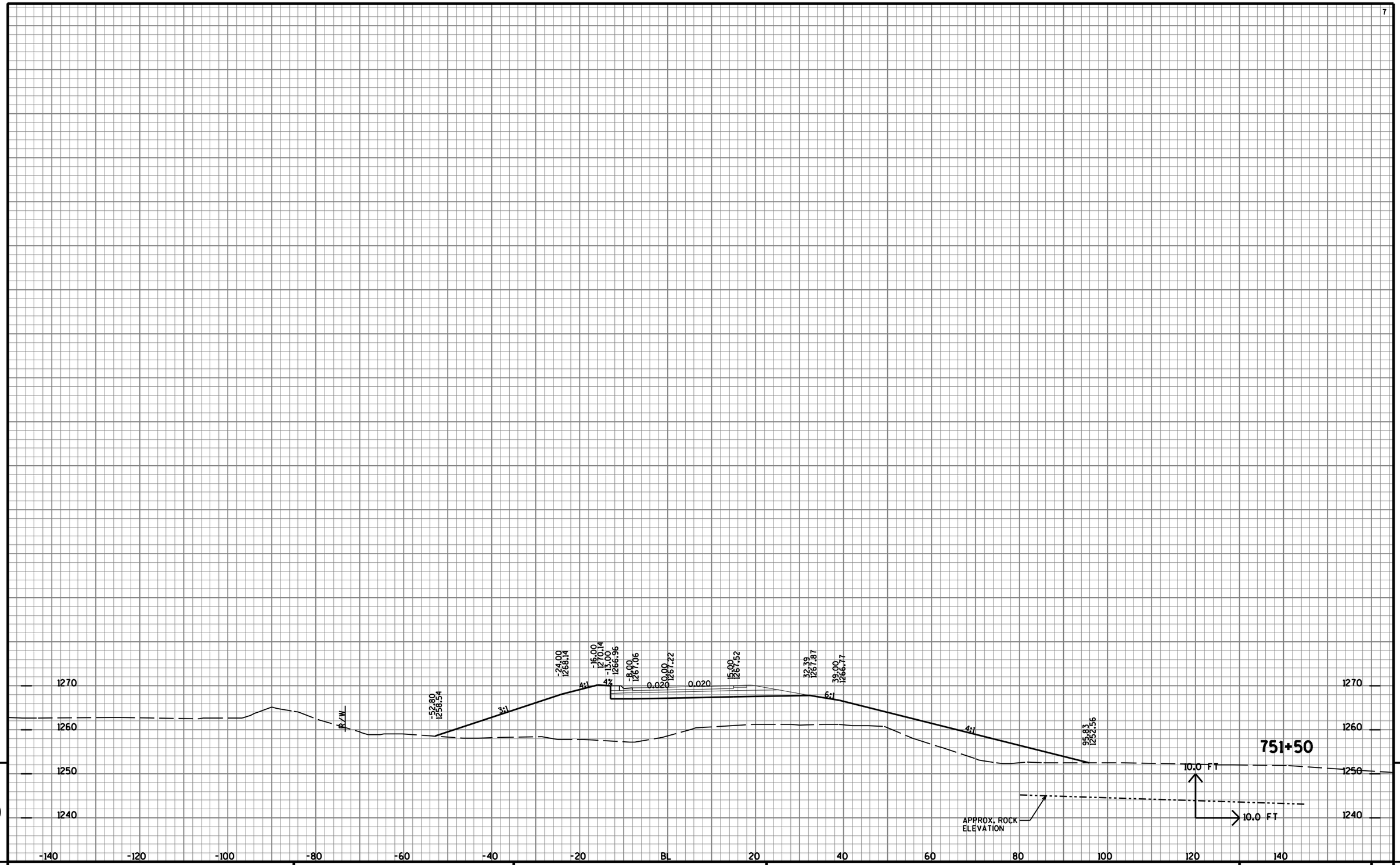
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PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: F RAMP	SHEET NO: 1206 E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090209_xsf.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC eau_shd_util.tbl PLOT SCALE : 1:2



PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: F RAMP	SHEET NO: 1207 E

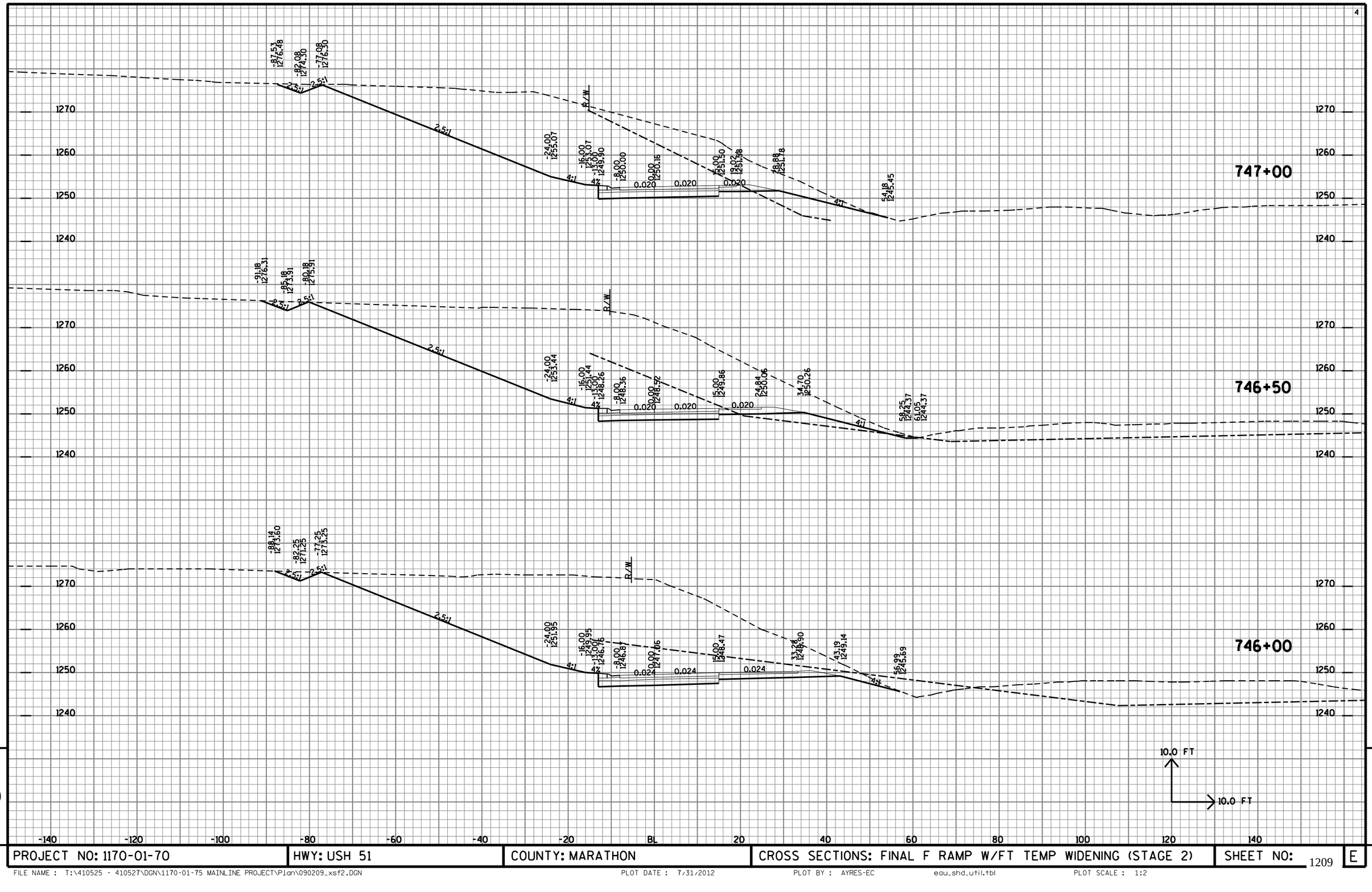


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PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: F RAMP	SHEET NO: 1208	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090209_xsf.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC eau_shd_util.tbl PLOT SCALE : 1:2

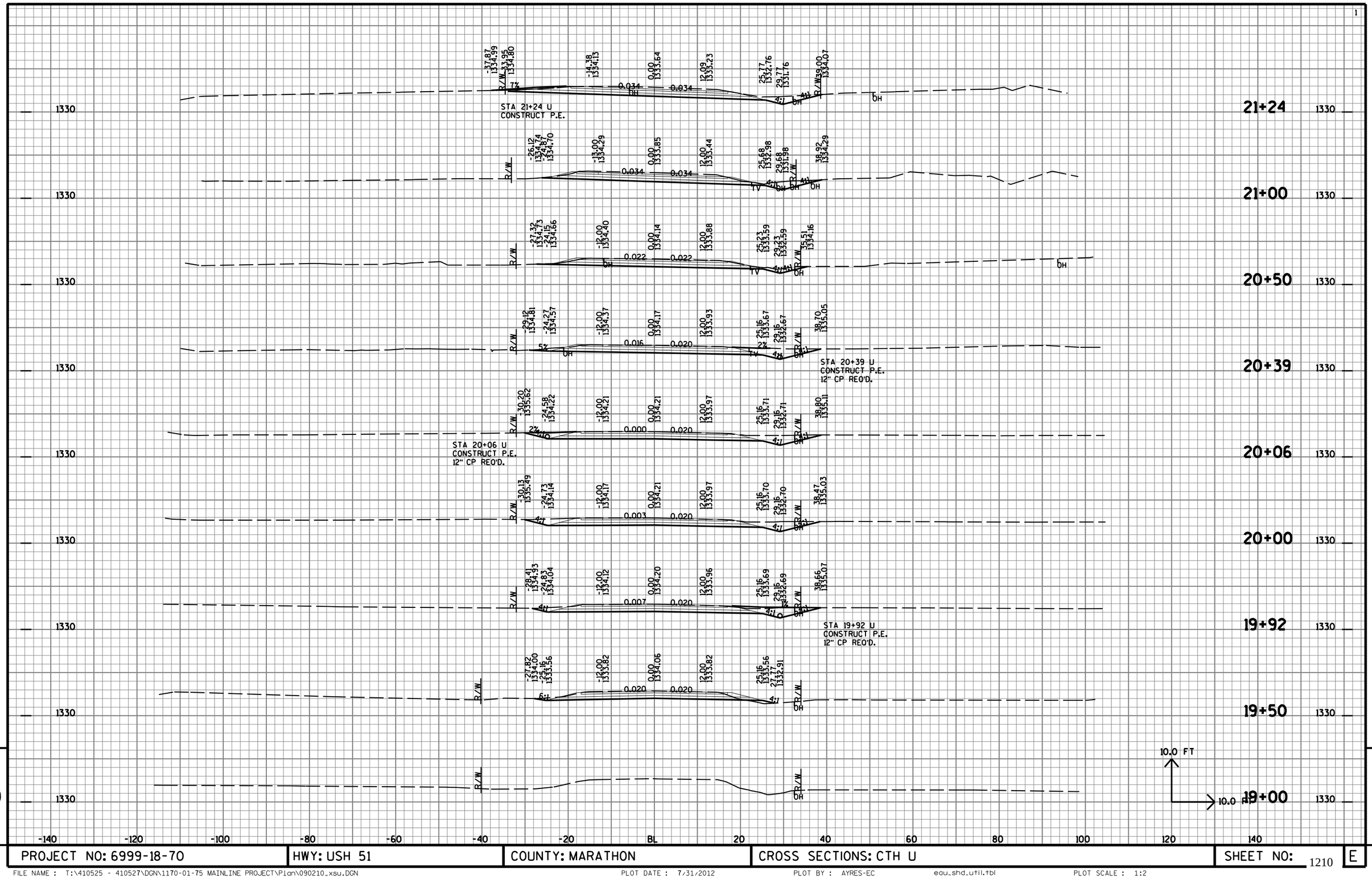


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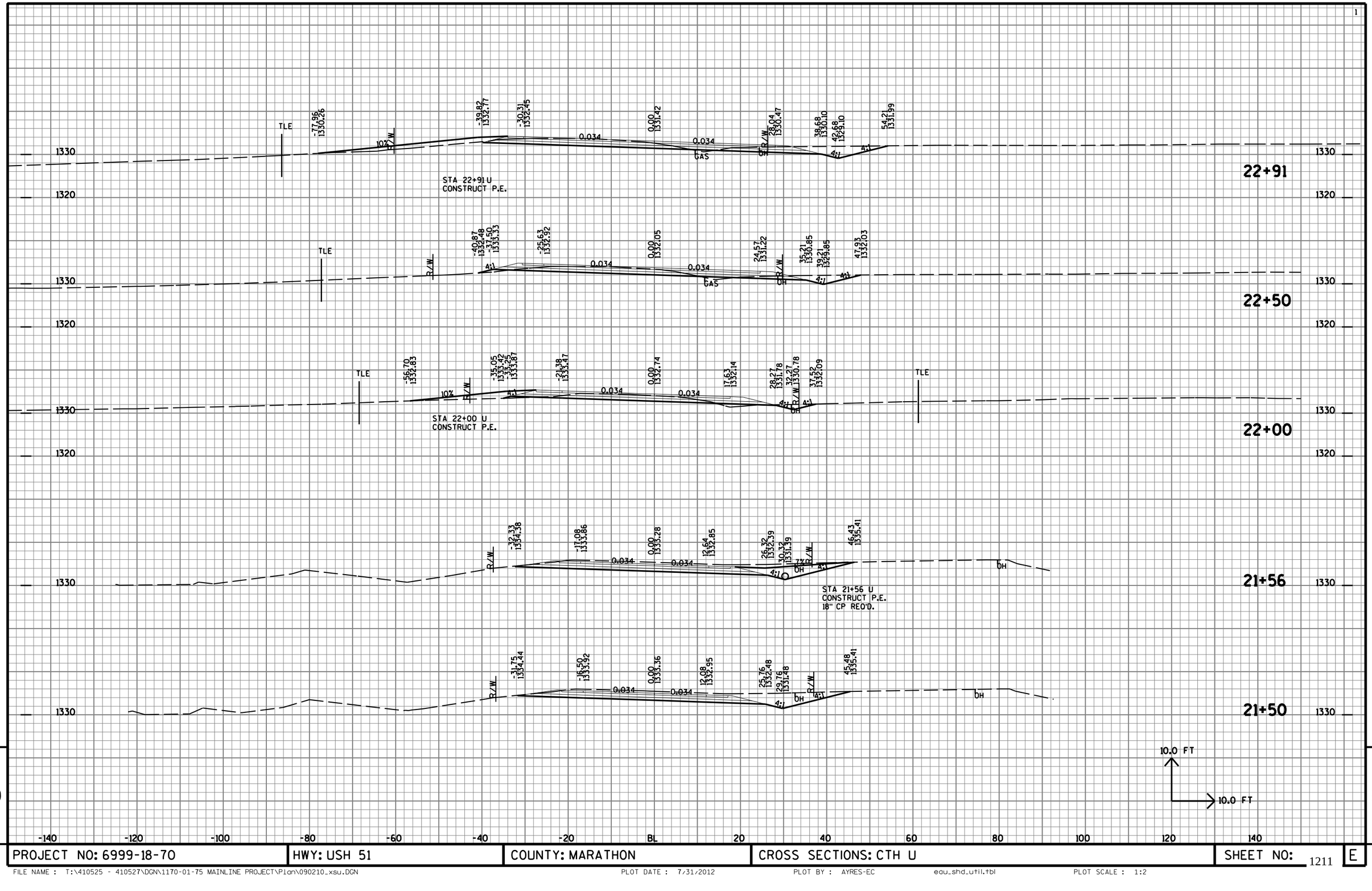
PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: FINAL F RAMP W/FT TEMP WIDENING (STAGE 2)	SHEET NO: 1209	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090209_xsf2.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC eau_shd_util.tbl PLOT SCALE : 1:2



PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: CTH U	SHEET NO: 1210 E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090210_xsu.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC eau_shd_util.tbl PLOT SCALE : 1:2

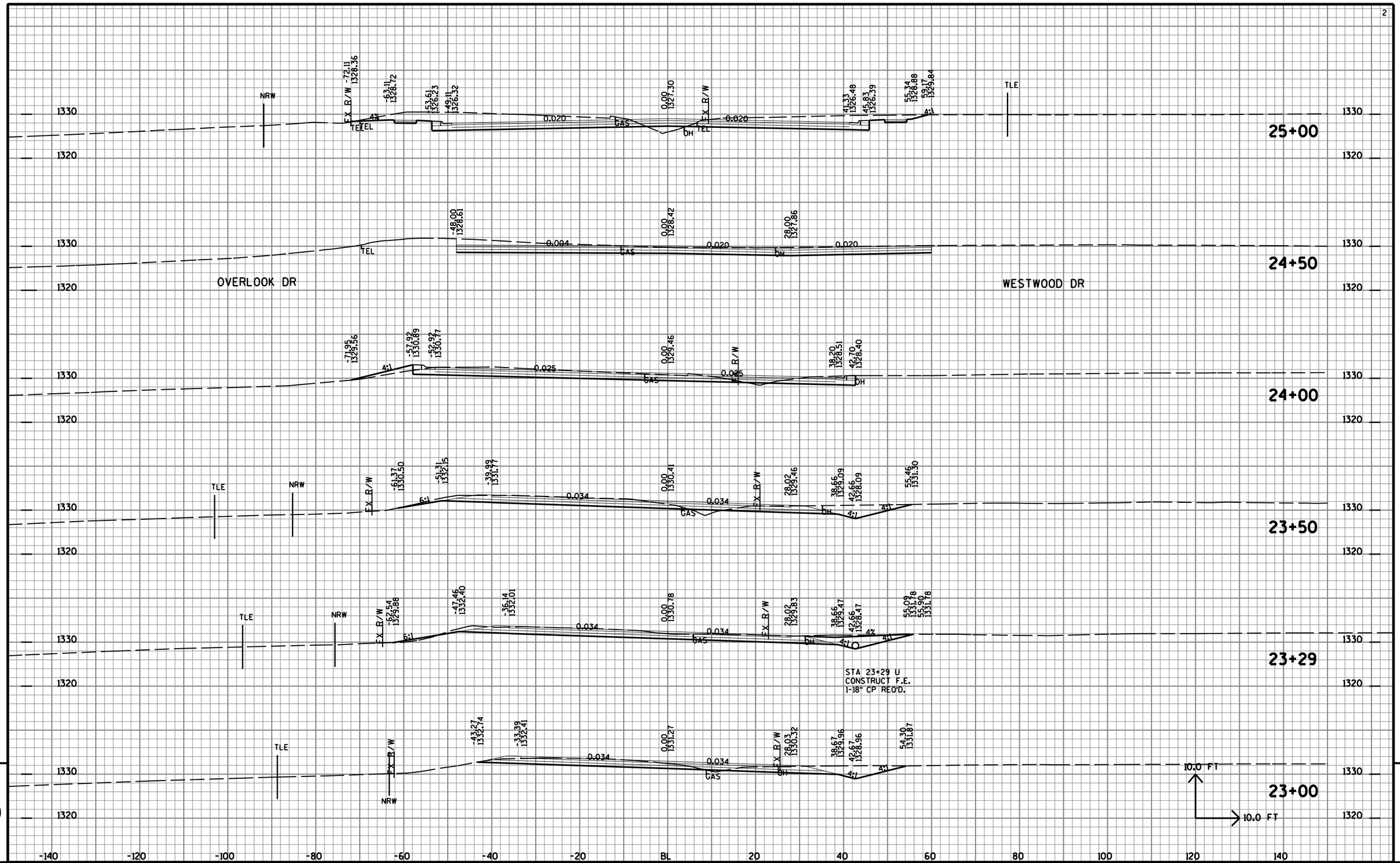


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PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: CTH U	SHEET NO: 1211	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090210_xsu.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC edu_shd_util.tbl PLOT SCALE : 1:2

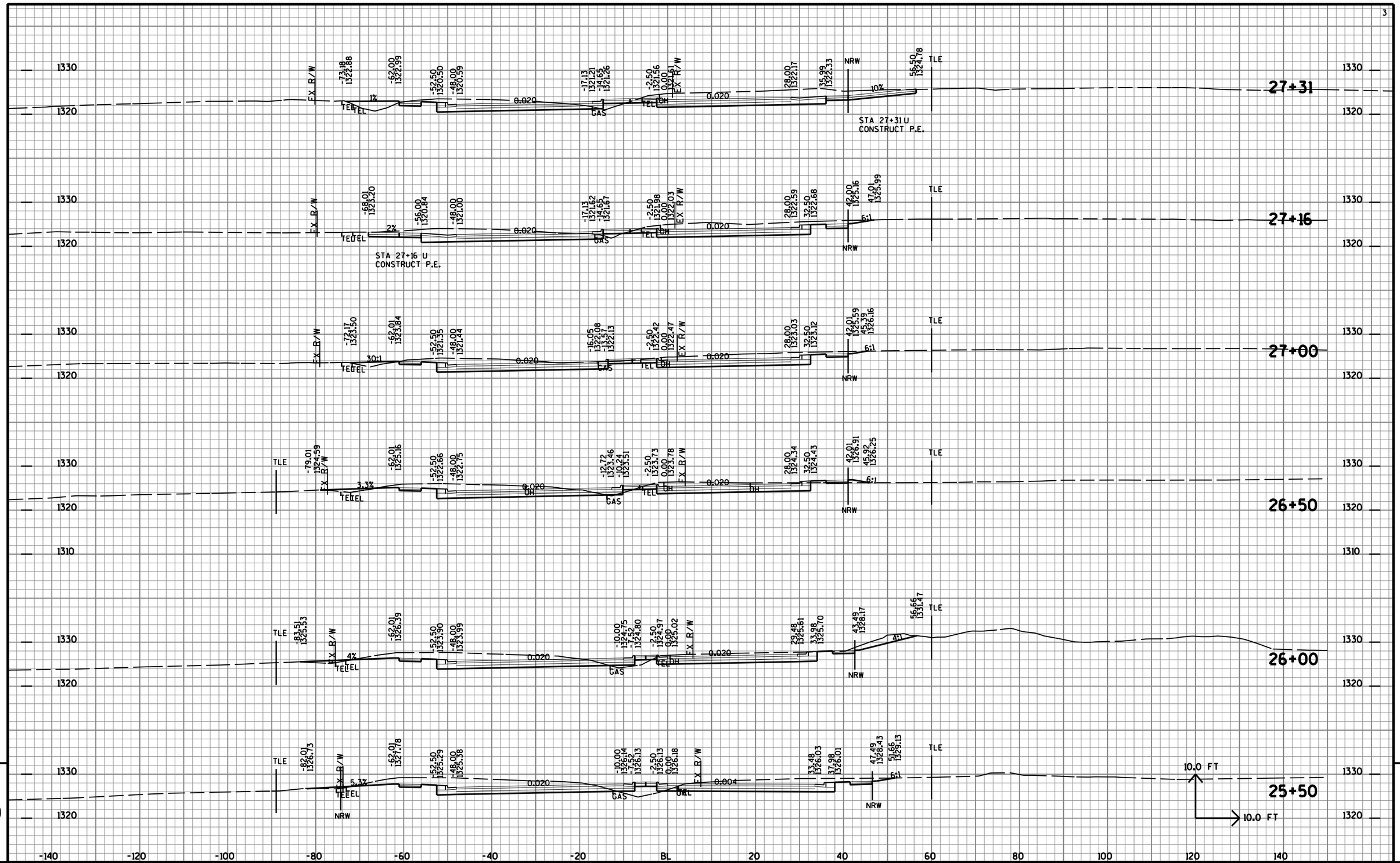


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PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: CTH U	SHEET NO: 1212	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090210_xsu.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC eau_shd_util.tbl PLOT SCALE : 1:2

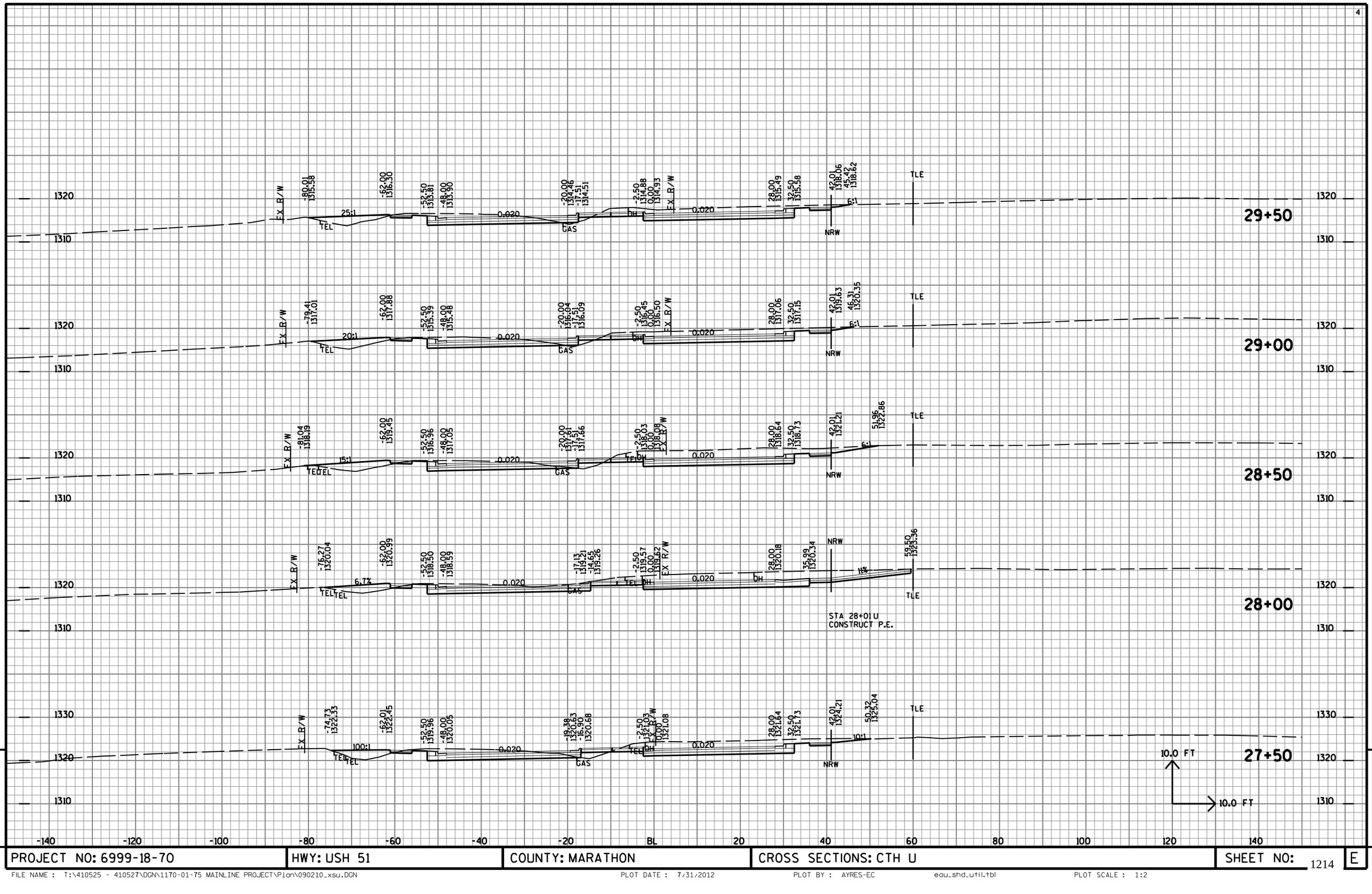


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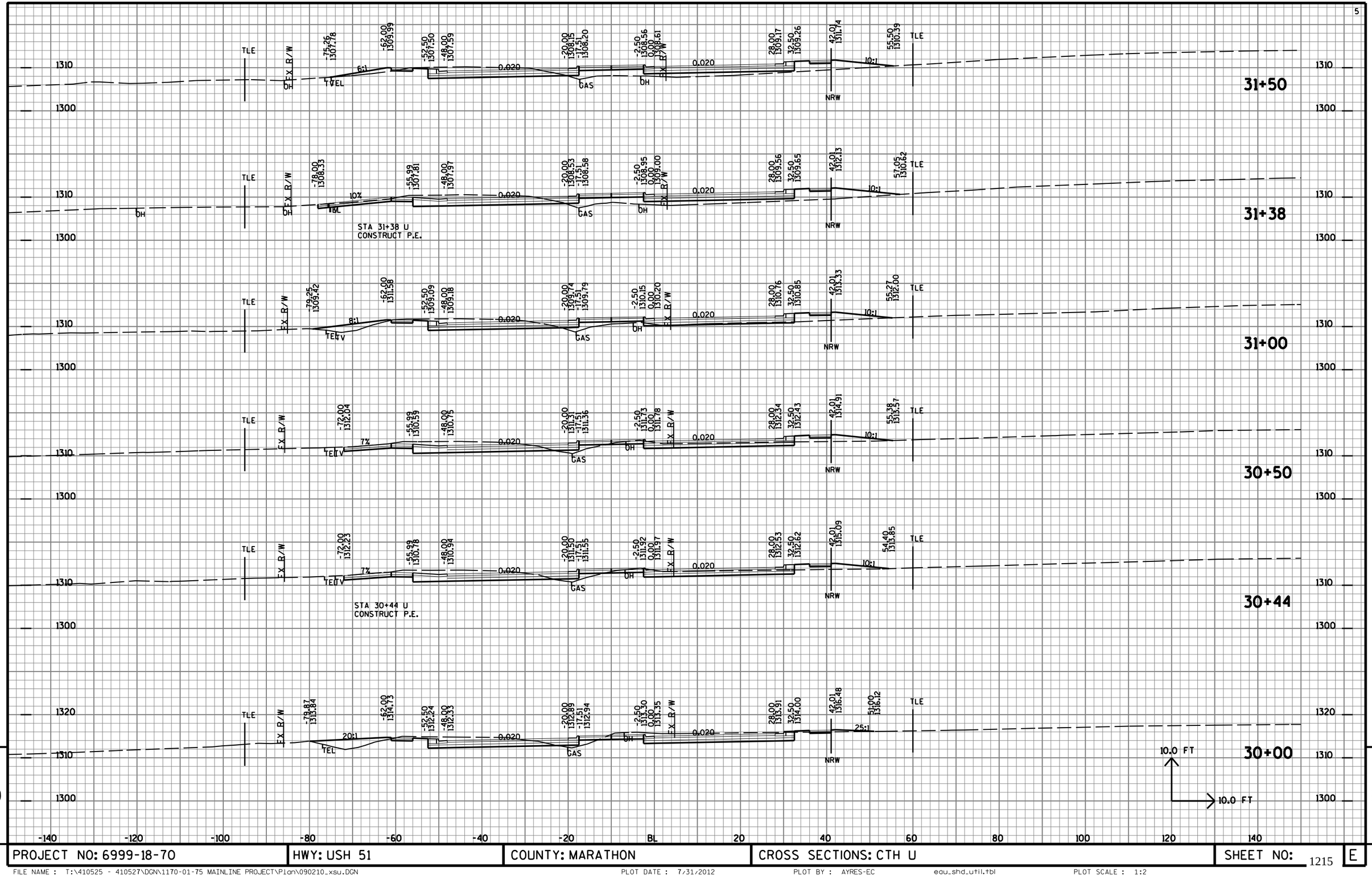
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PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: CTH U	SHEET NO: 1213	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090210_xsu.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC eau_shd_util.tbl PLOT SCALE : 1:2



PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: CTH U	SHEET NO: 1214	E

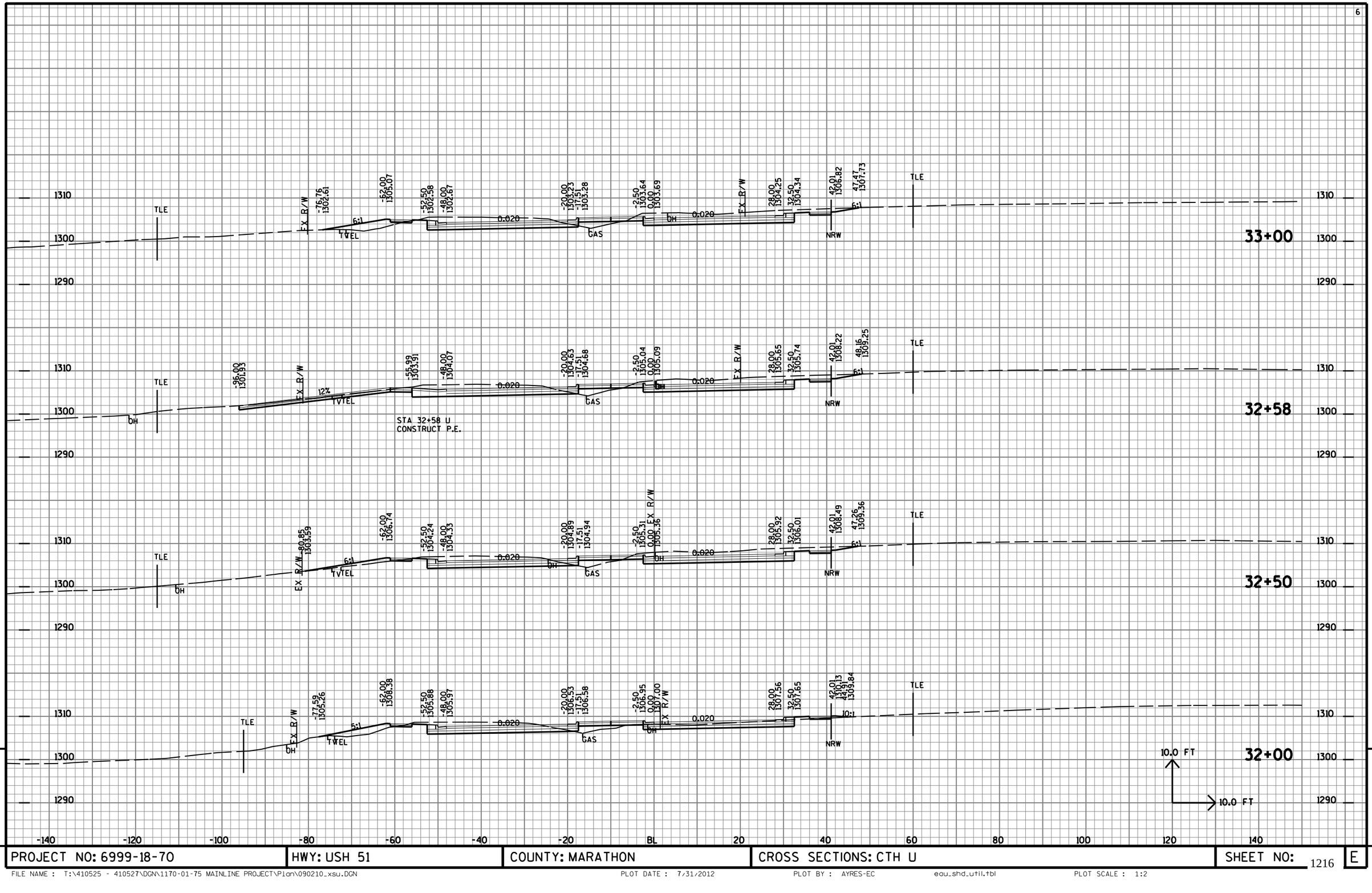


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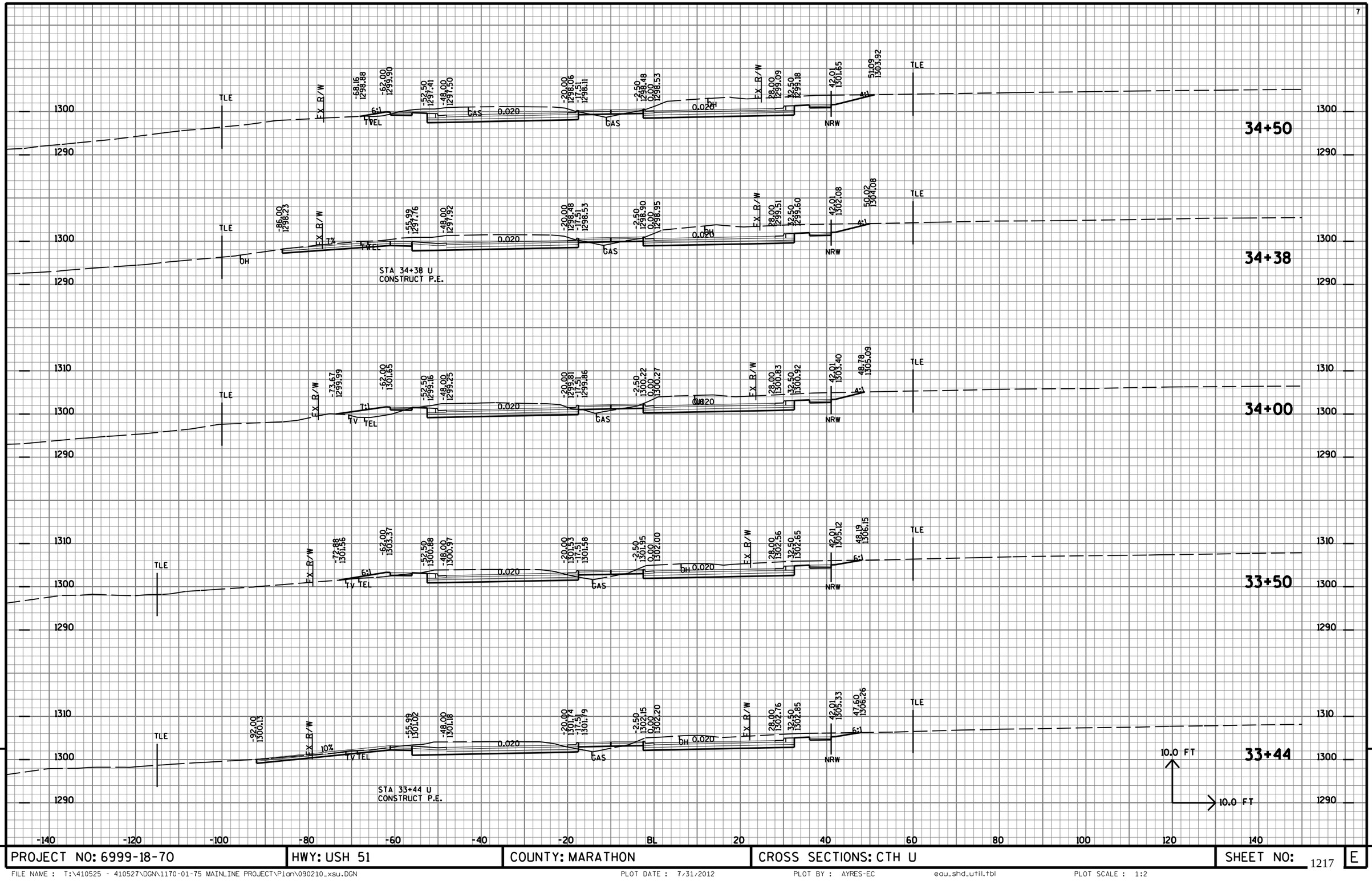
PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: CTH U	SHEET NO: 1215	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090210_xsu.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC edu_shd_util.tbl PLOT SCALE : 1:2



PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: CTH U	SHEET NO: 1216 E

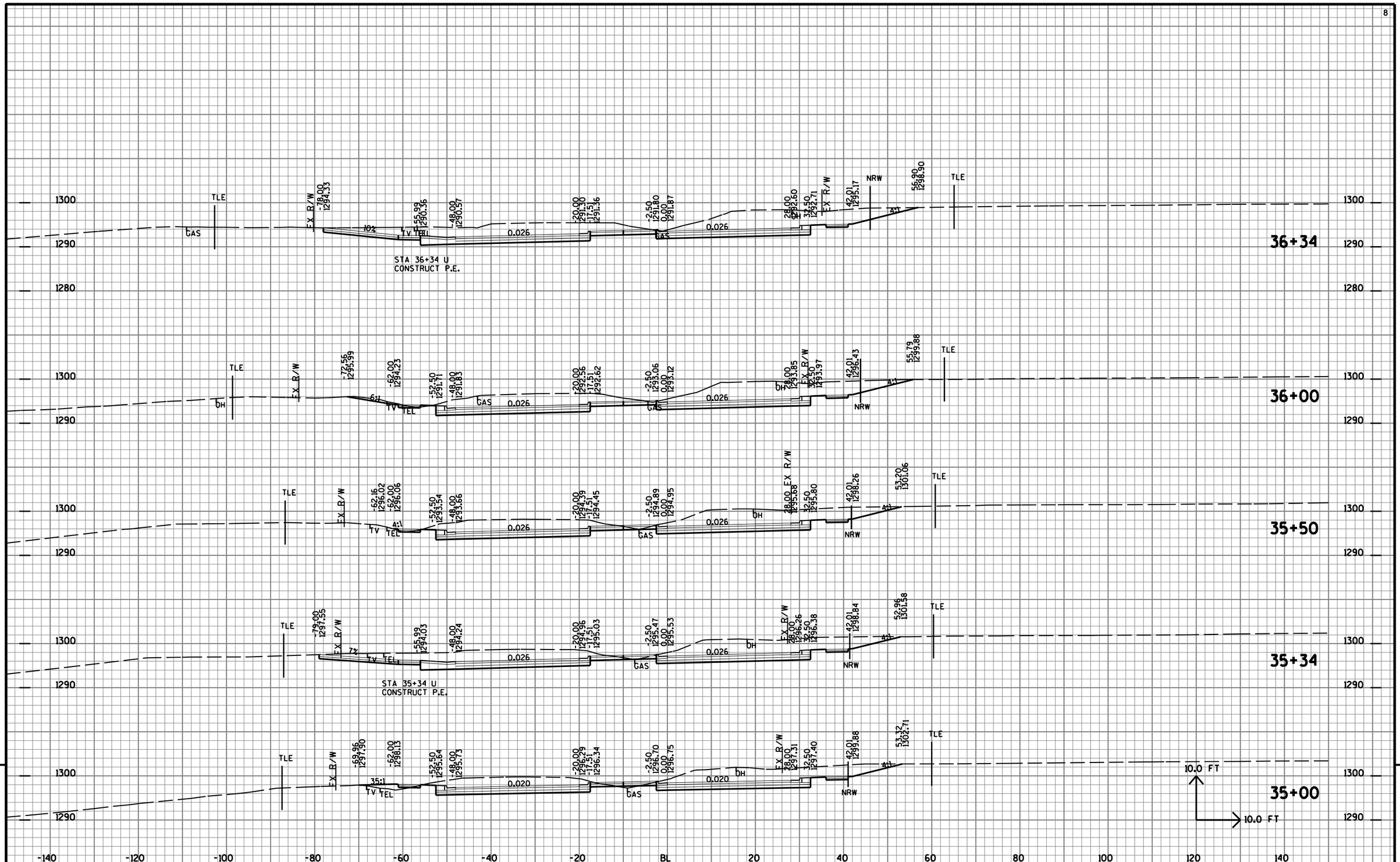
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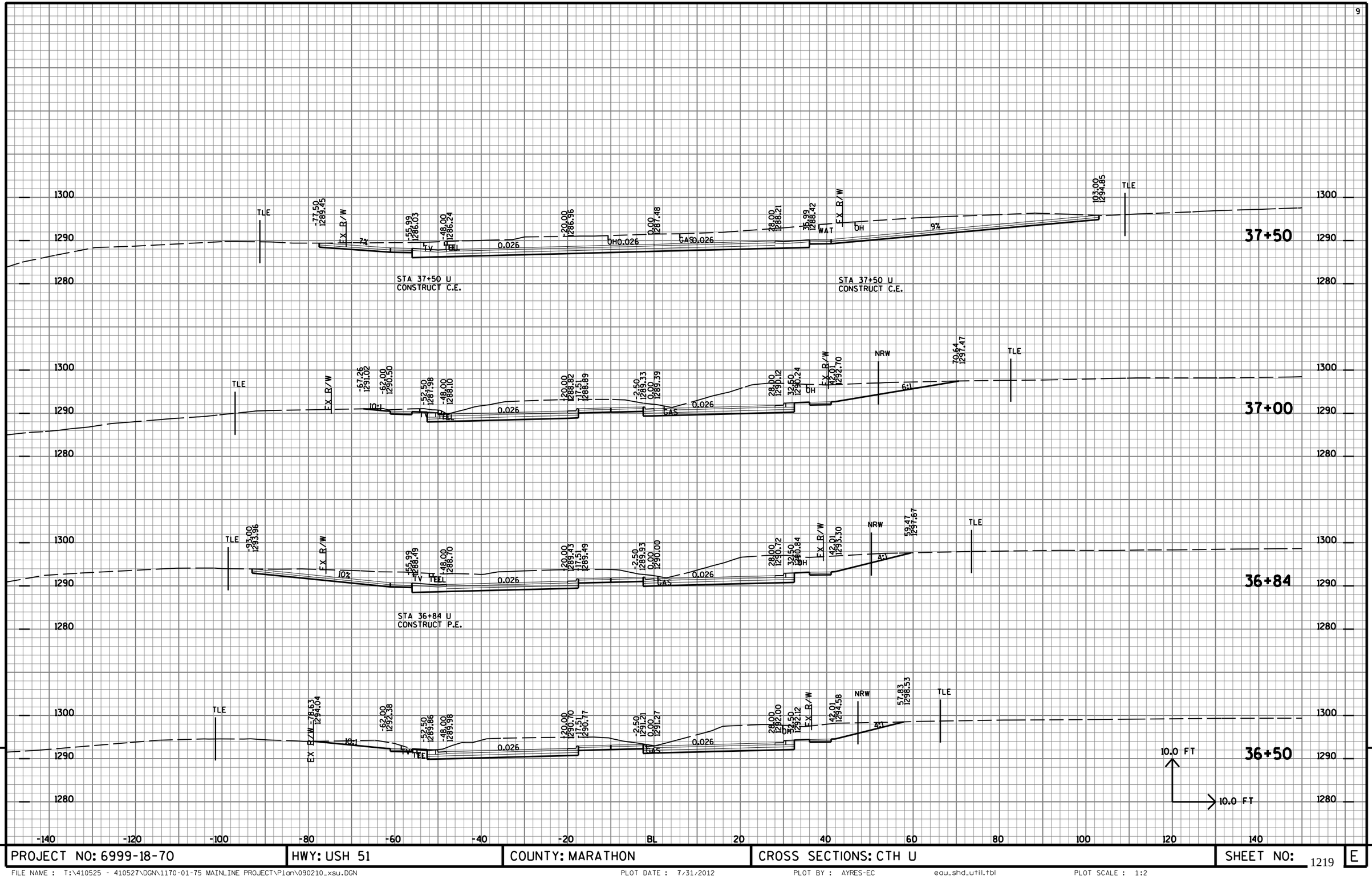
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PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: CTH U	SHEET NO: 1217	E

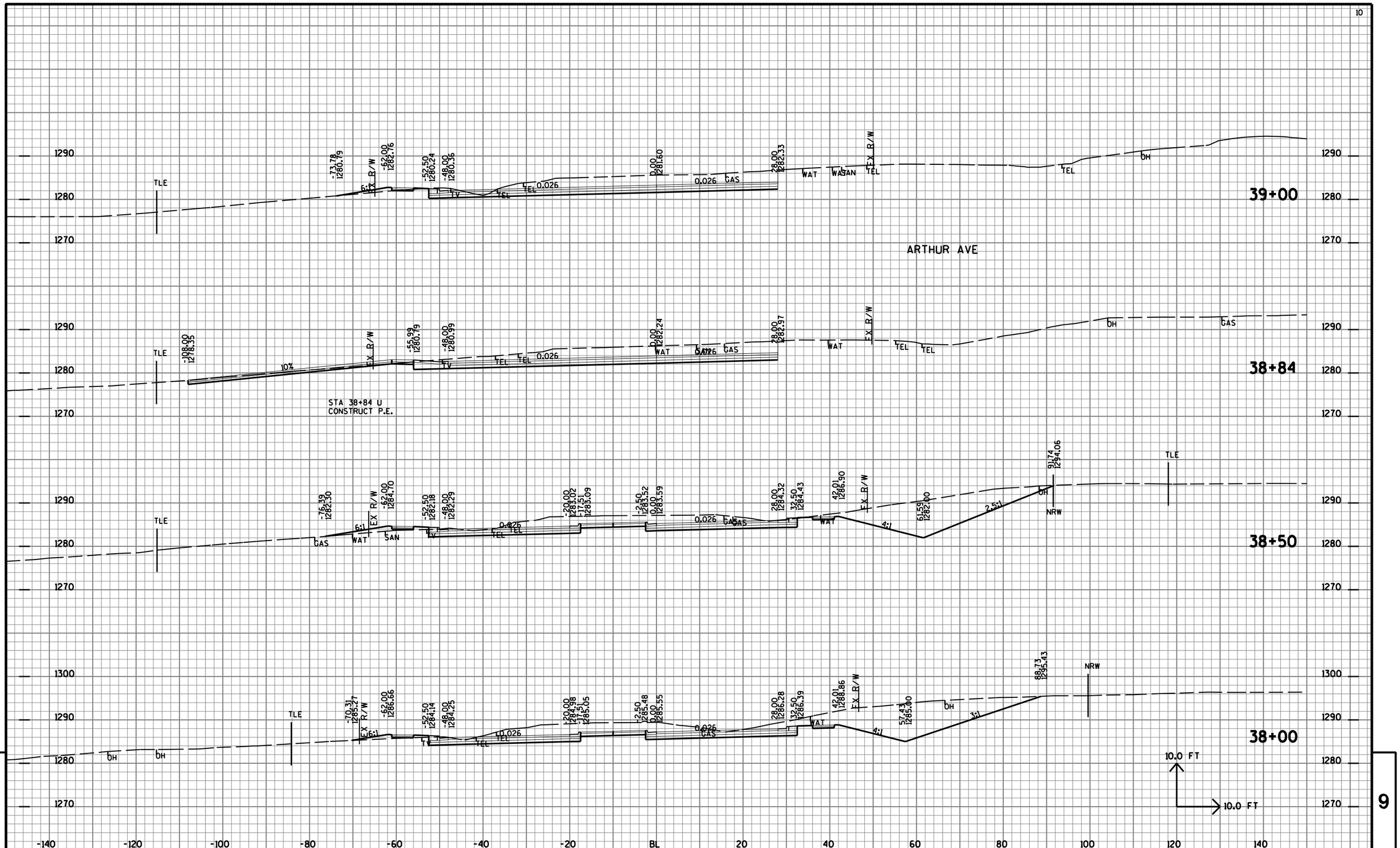


PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: CTH U	SHEET NO: 1218	E



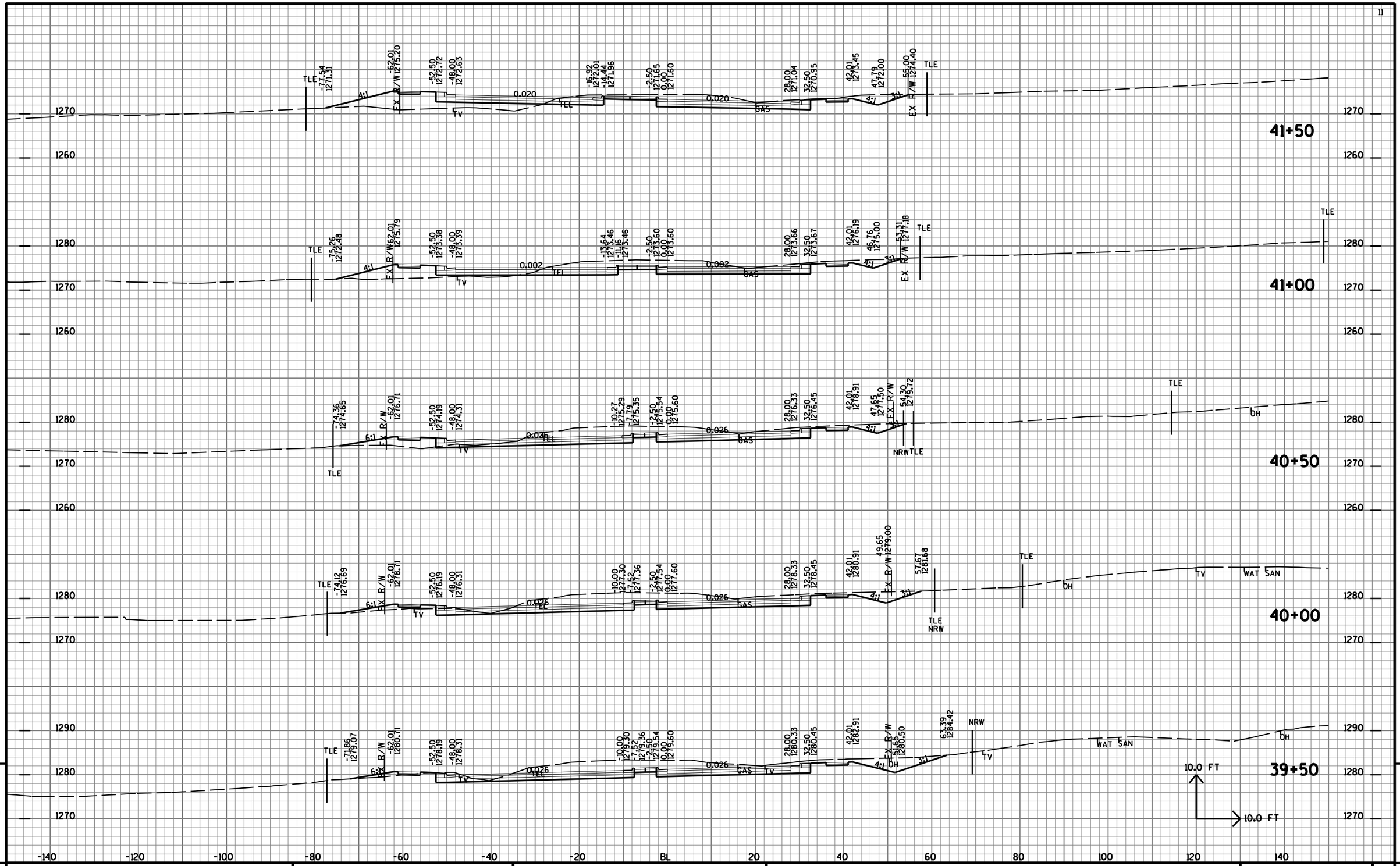
PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: CTH U	SHEET NO: 1219 E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090210_xsu.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC edu_shd_util.tbl PLOT SCALE : 1:2



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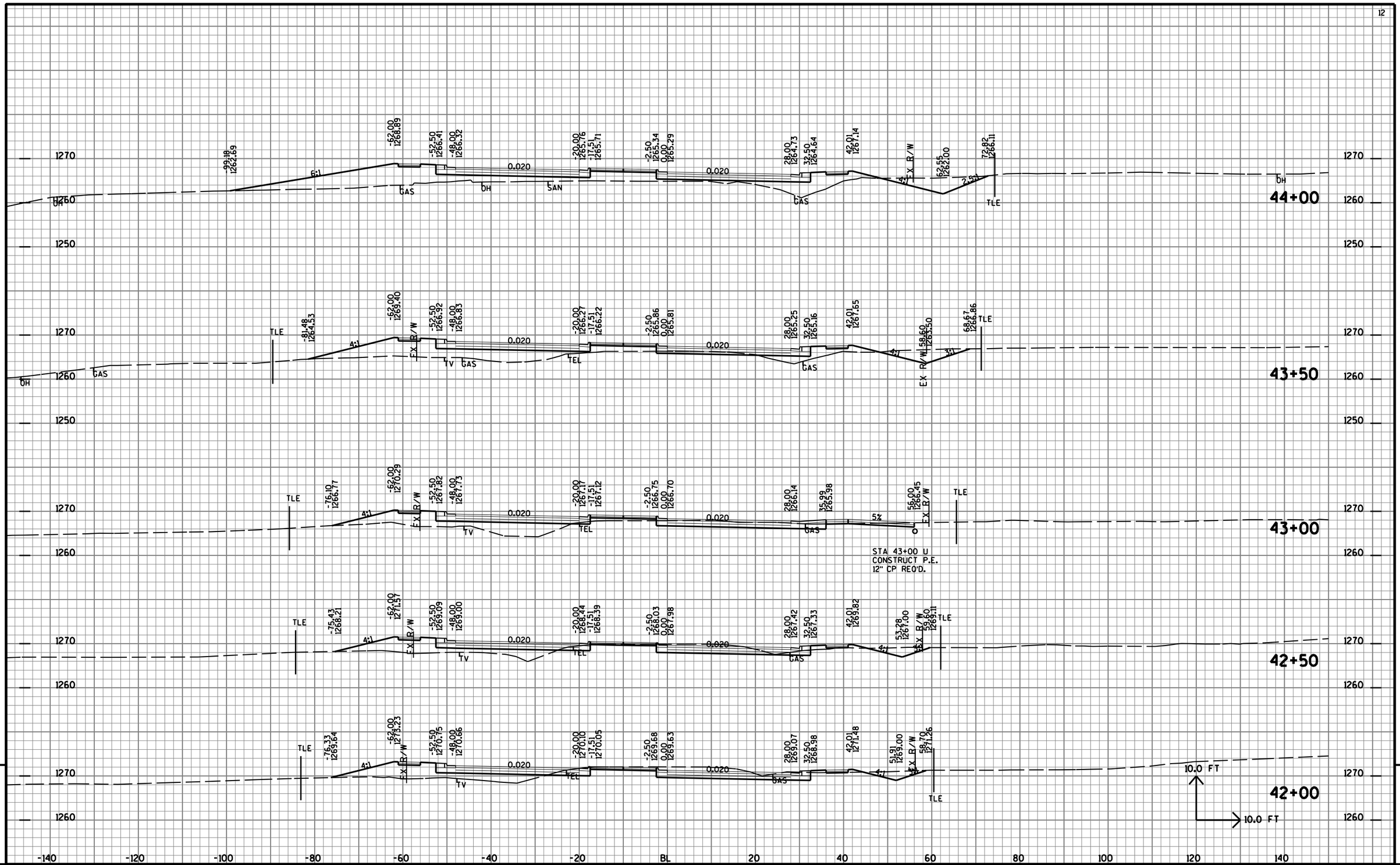
PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: CTH U	SHEET NO: 1220	E



9

PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: CTH U	SHEET NO: 1221 E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090210_xsu.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC edu_shd_util.tbl PLOT SCALE : 1:2

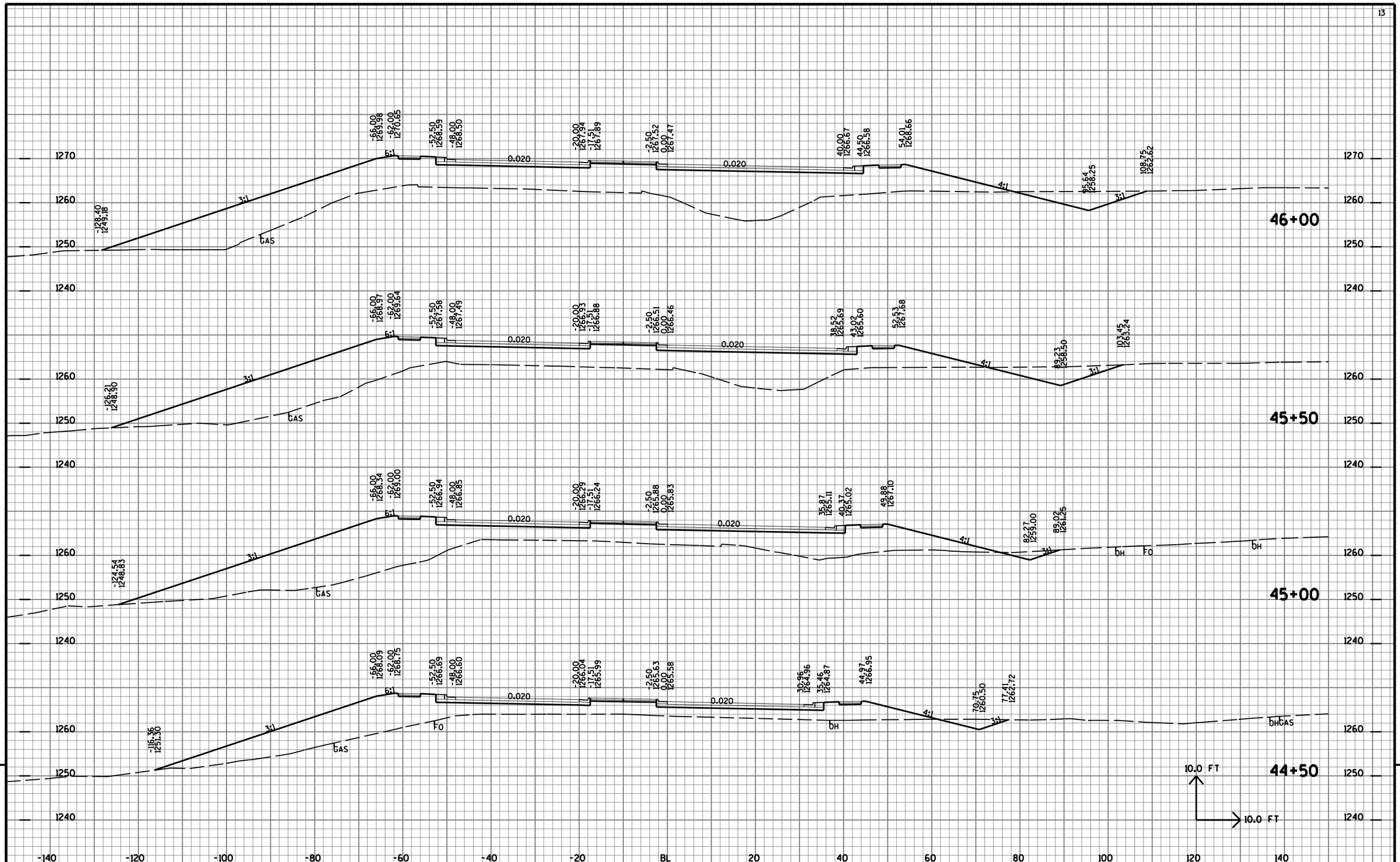


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PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: CTH U	SHEET NO: 1222	E

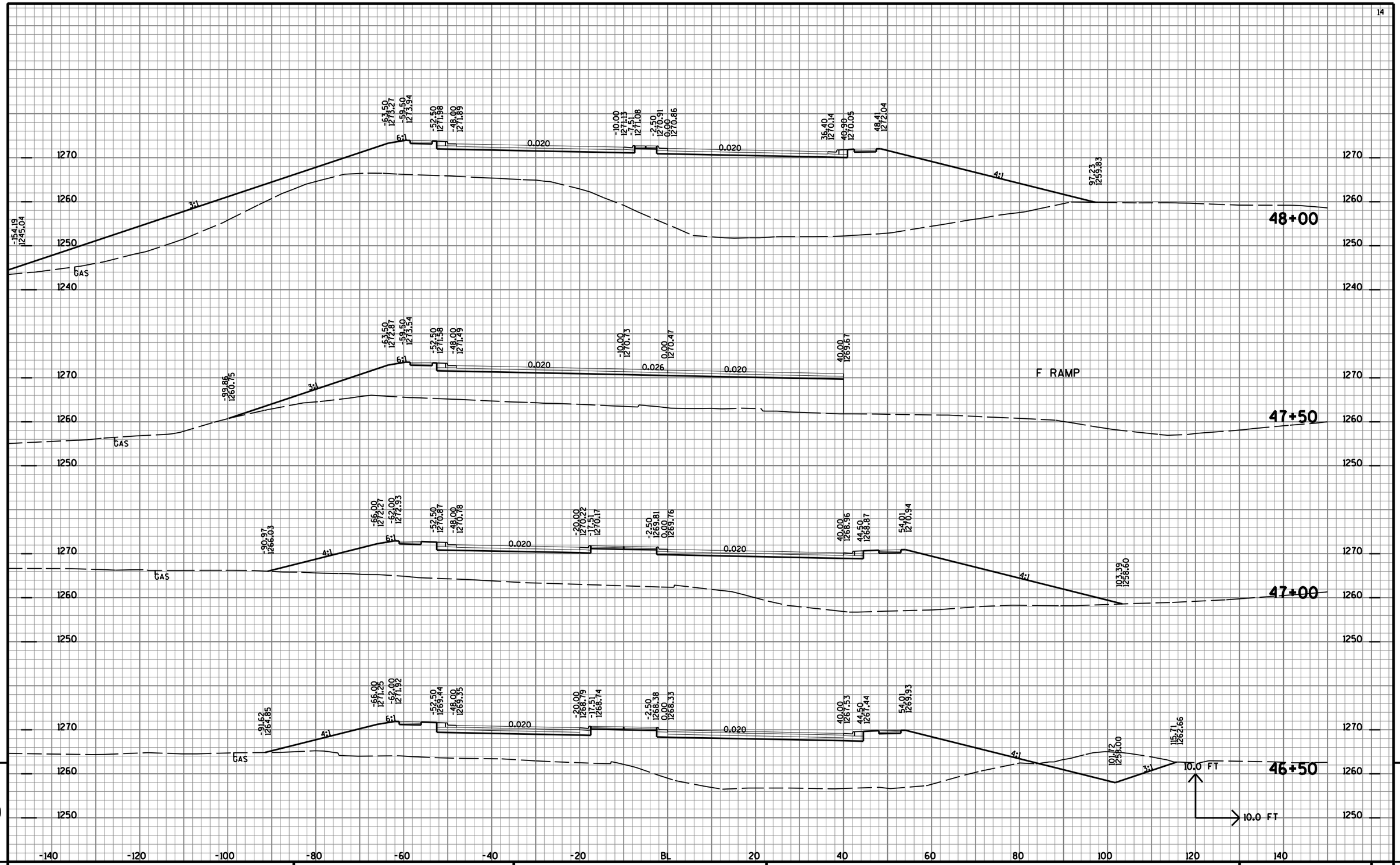
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FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090210_xsu.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC eau_shd_util.tbl PLOT SCALE : 1:2



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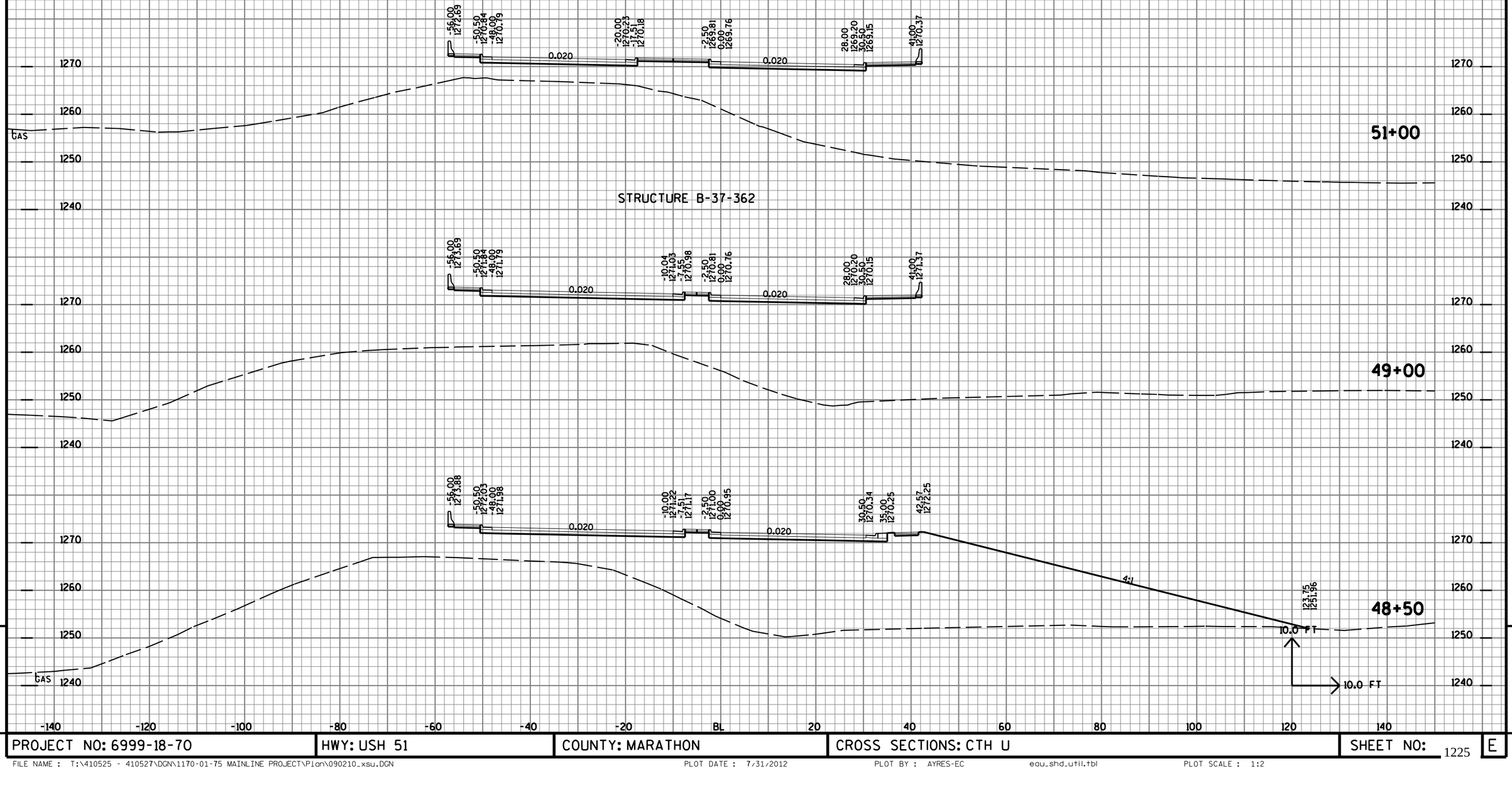
PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: CTH U	SHEET NO: 1223	E



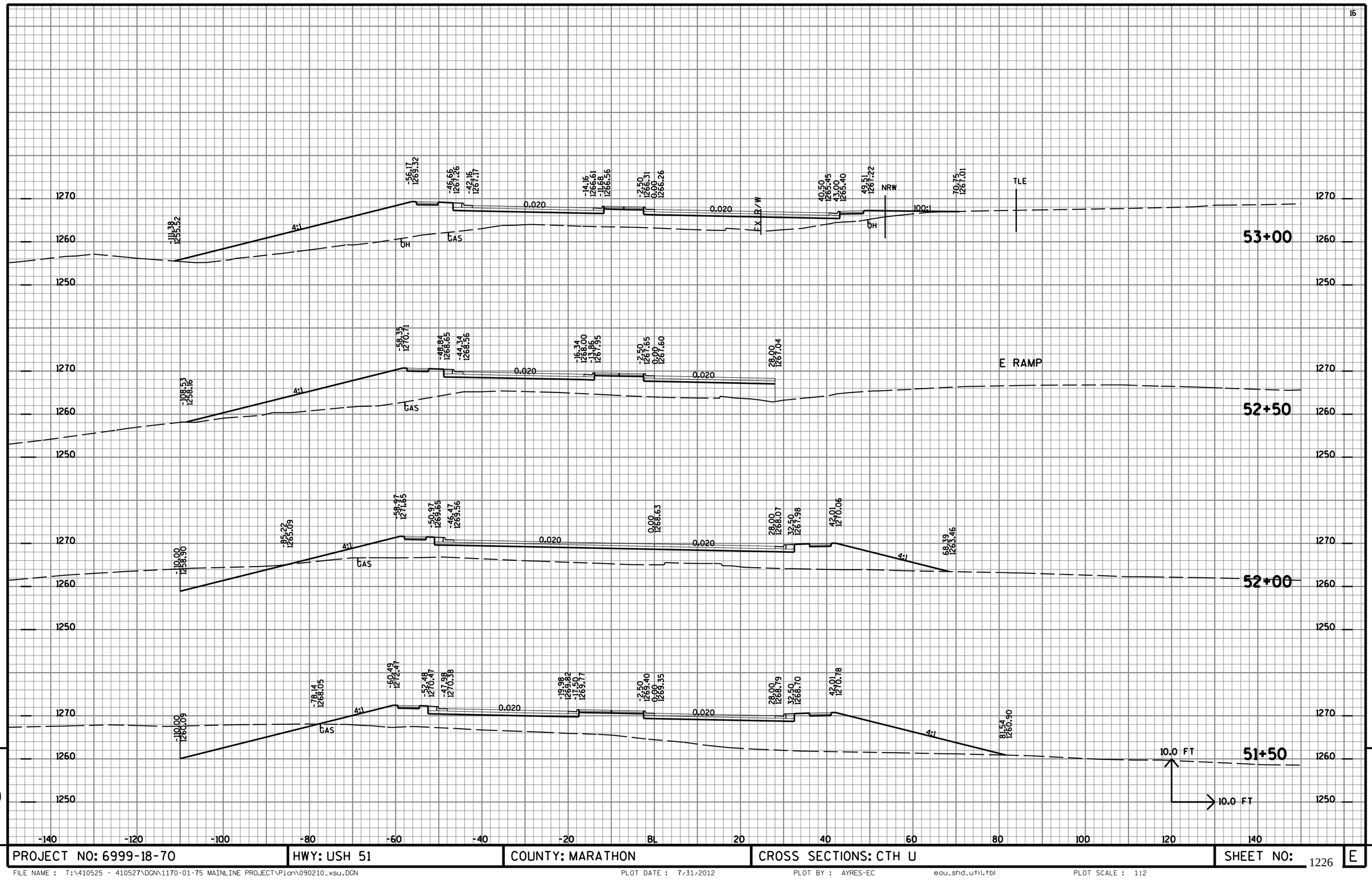
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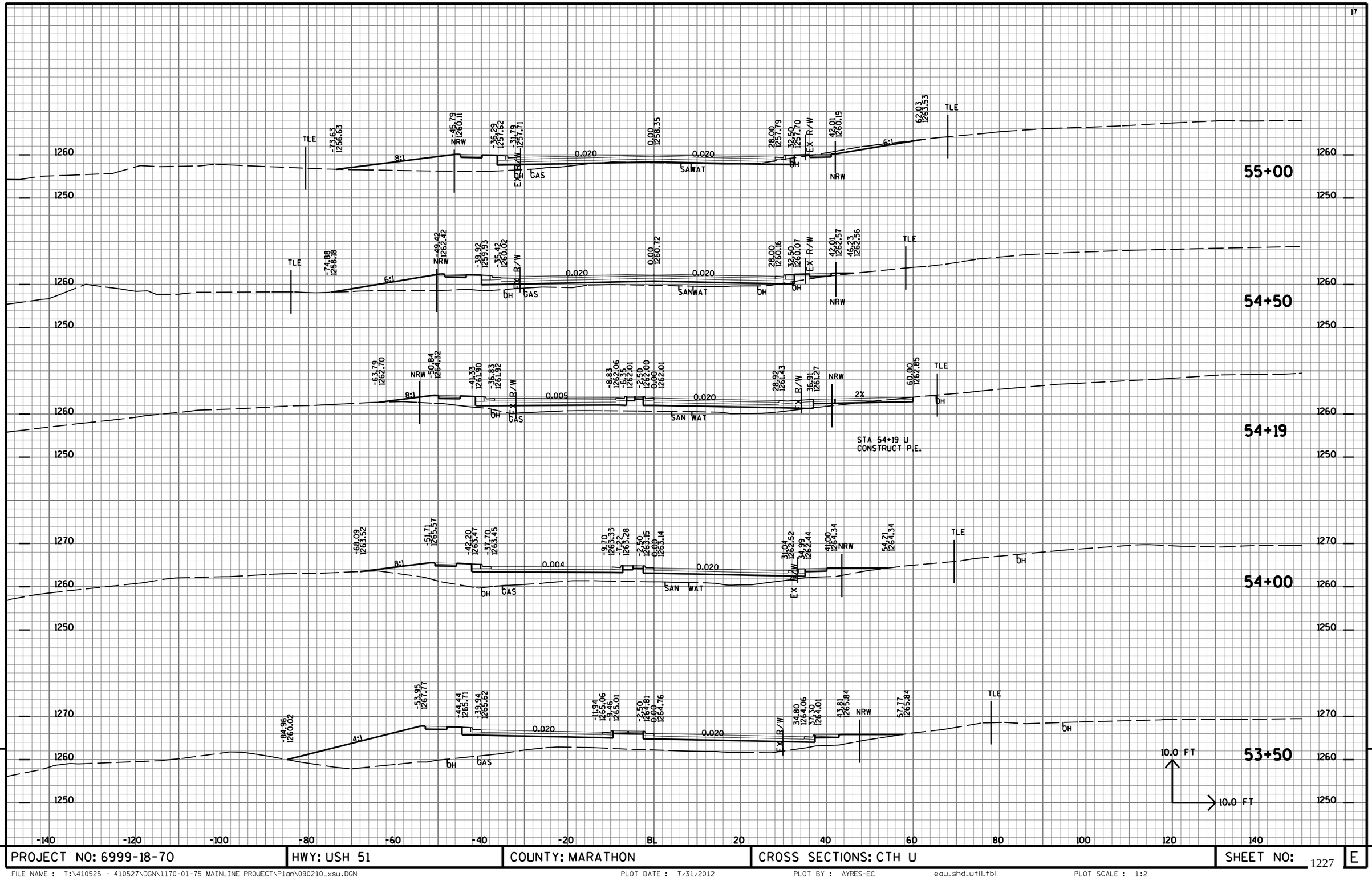
PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: CTH U	SHEET NO: 1224	E



PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: CTH U	SHEET NO: 1225 E

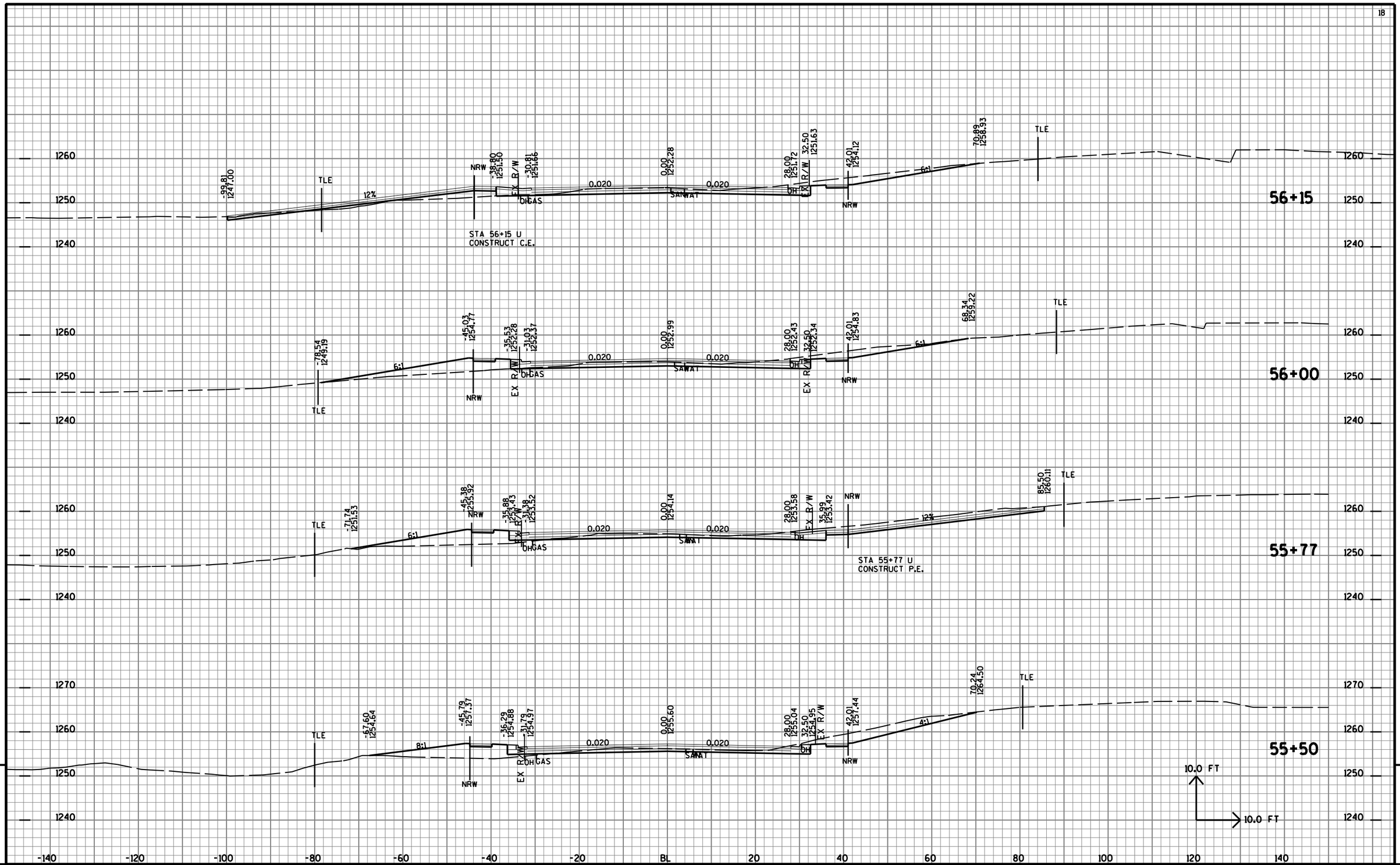


PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: CTH U	SHEET NO: 1226 E



PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: CTH U	SHEET NO: 1227 E

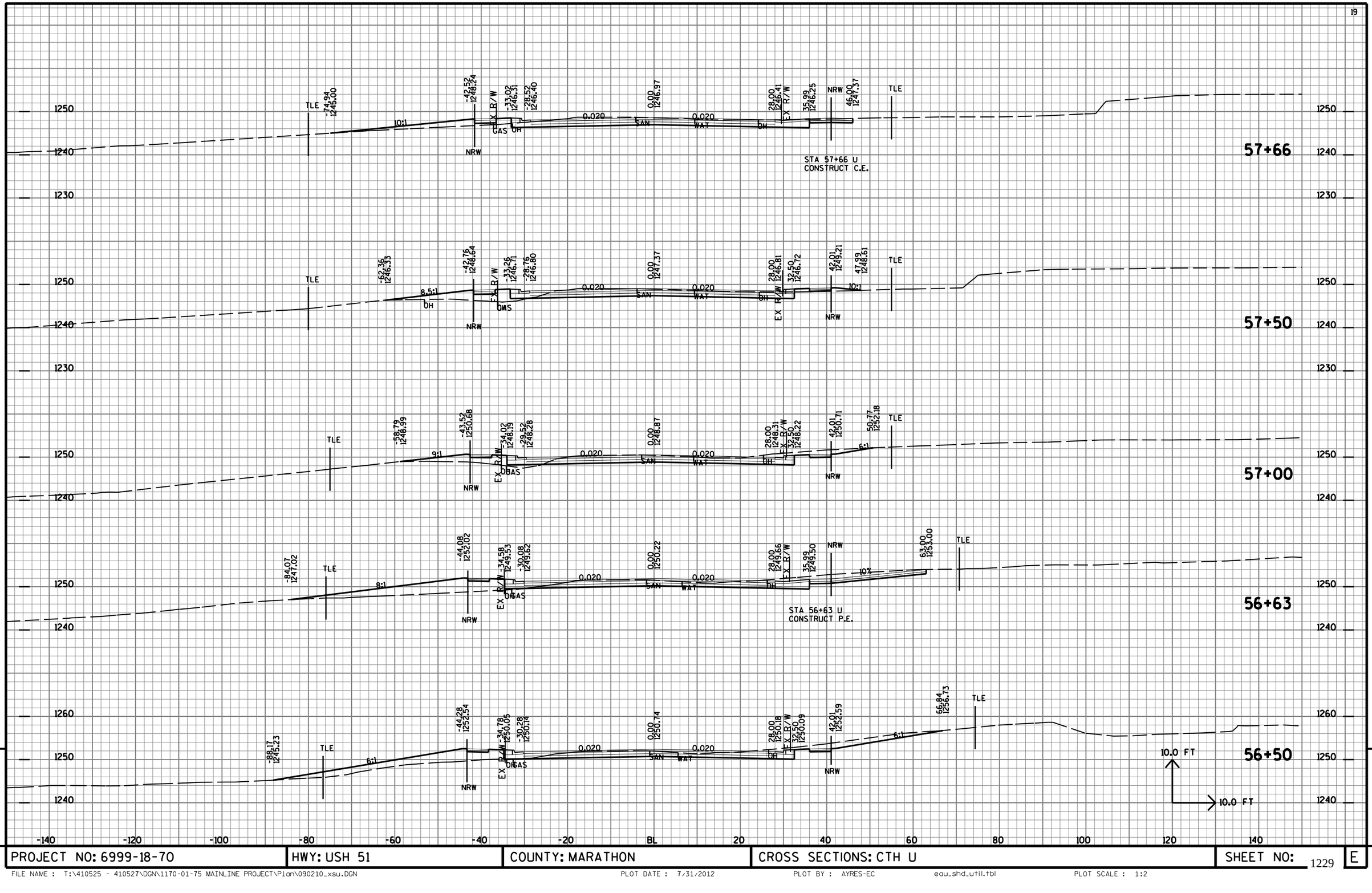
FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090210_xsu.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC edu_shd_util.tbl PLOT SCALE : 1:2



9 9

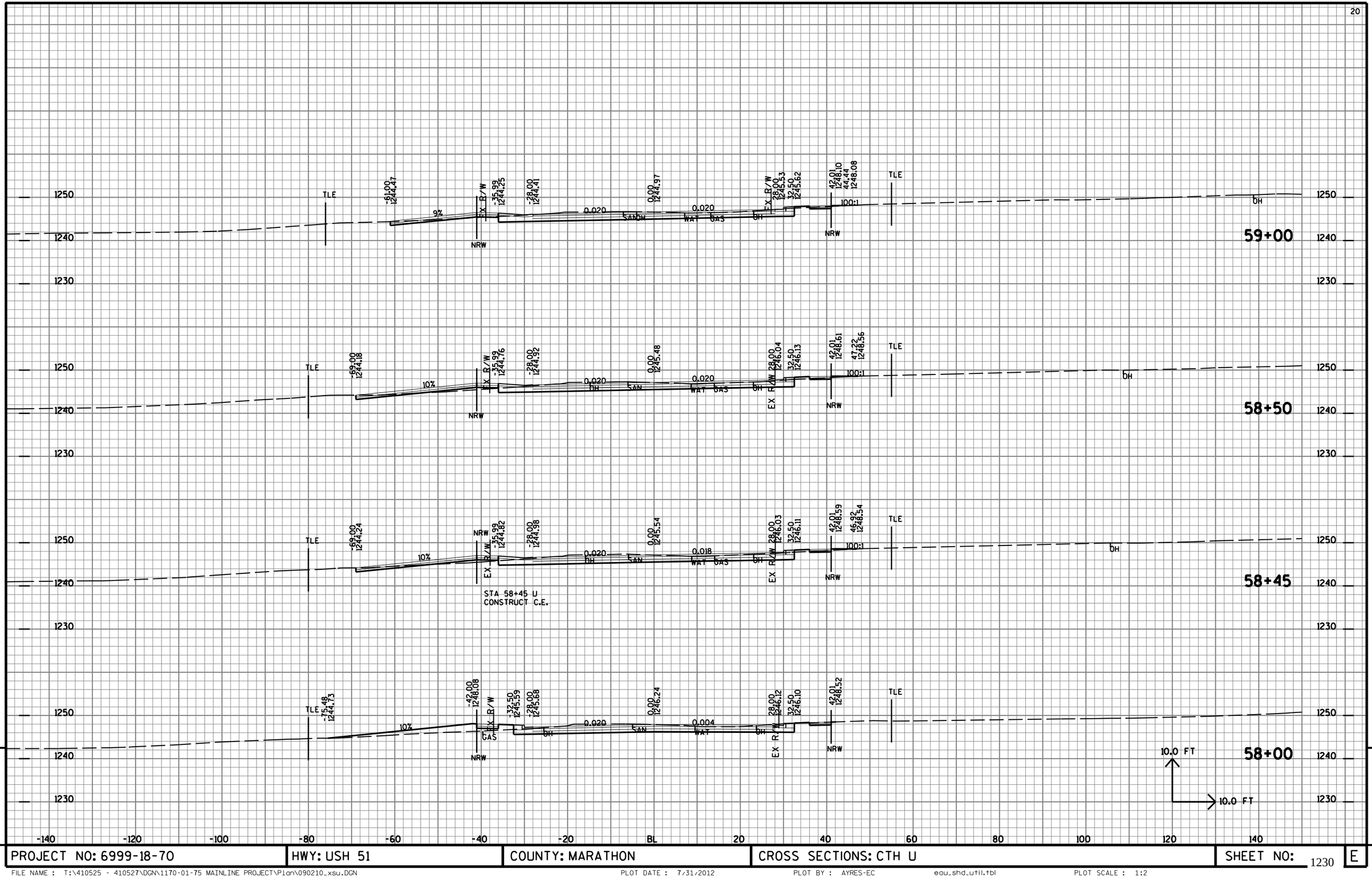
PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: CTH U	SHEET NO: 1228 E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090210_xsu.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC eau_shd_util.tbl PLOT SCALE : 1:2



PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: CTH U	SHEET NO: 1229 E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090210_xsu.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC edu_shd_util.tbl PLOT SCALE : 1:2

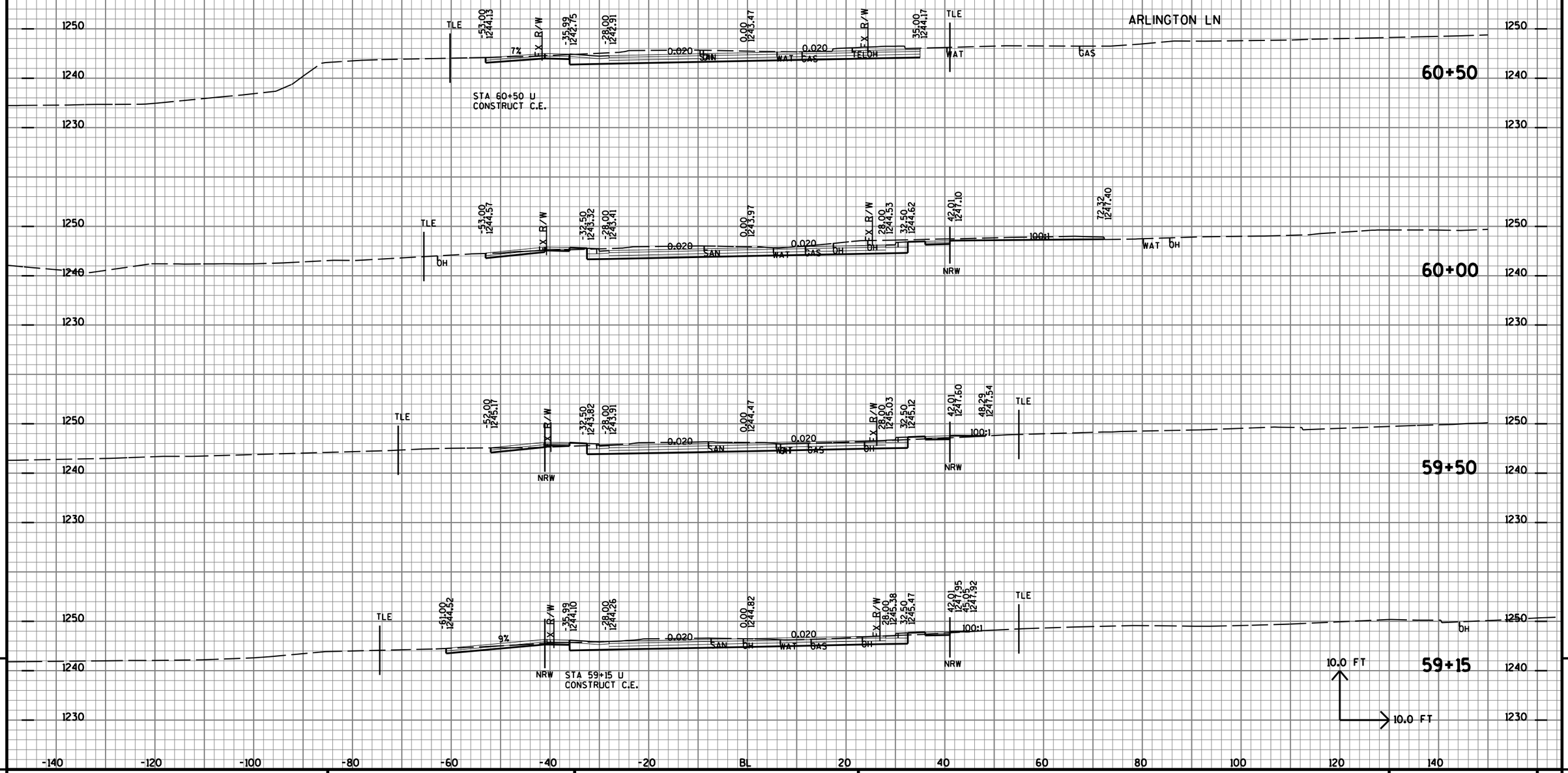


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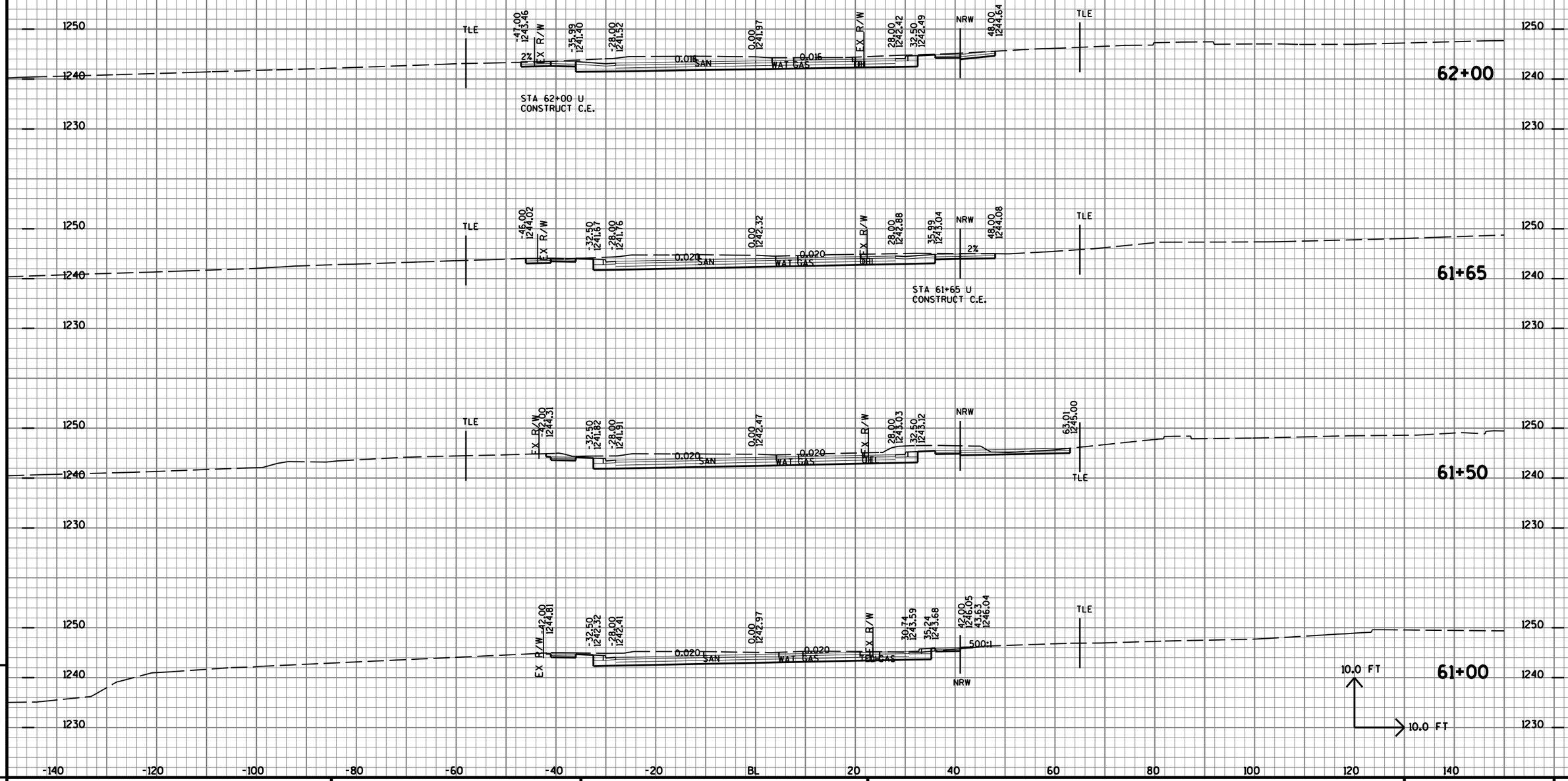
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PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: CTH U	SHEET NO: 1230 E

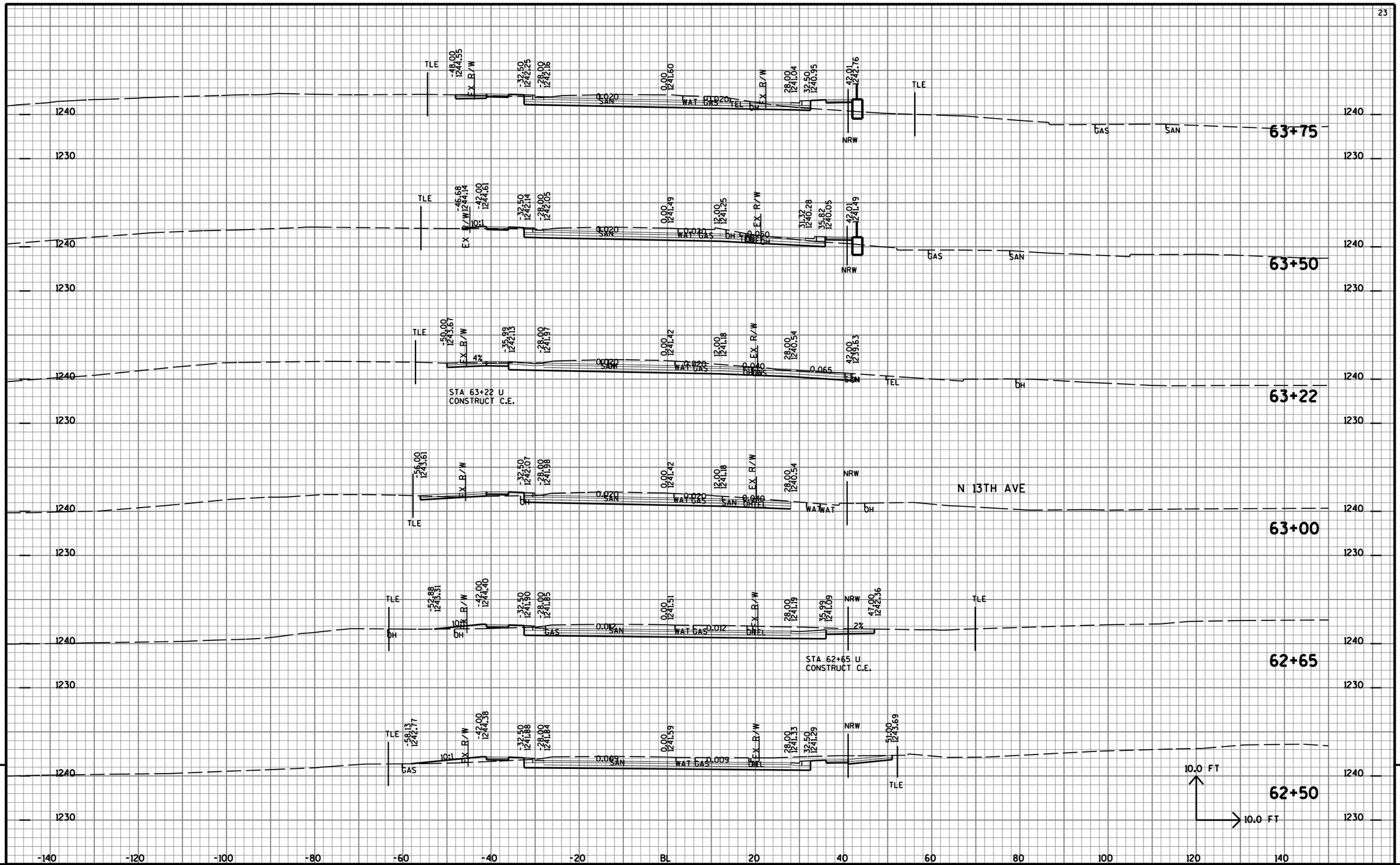
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PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: CTH U	SHEET NO: 1231 E



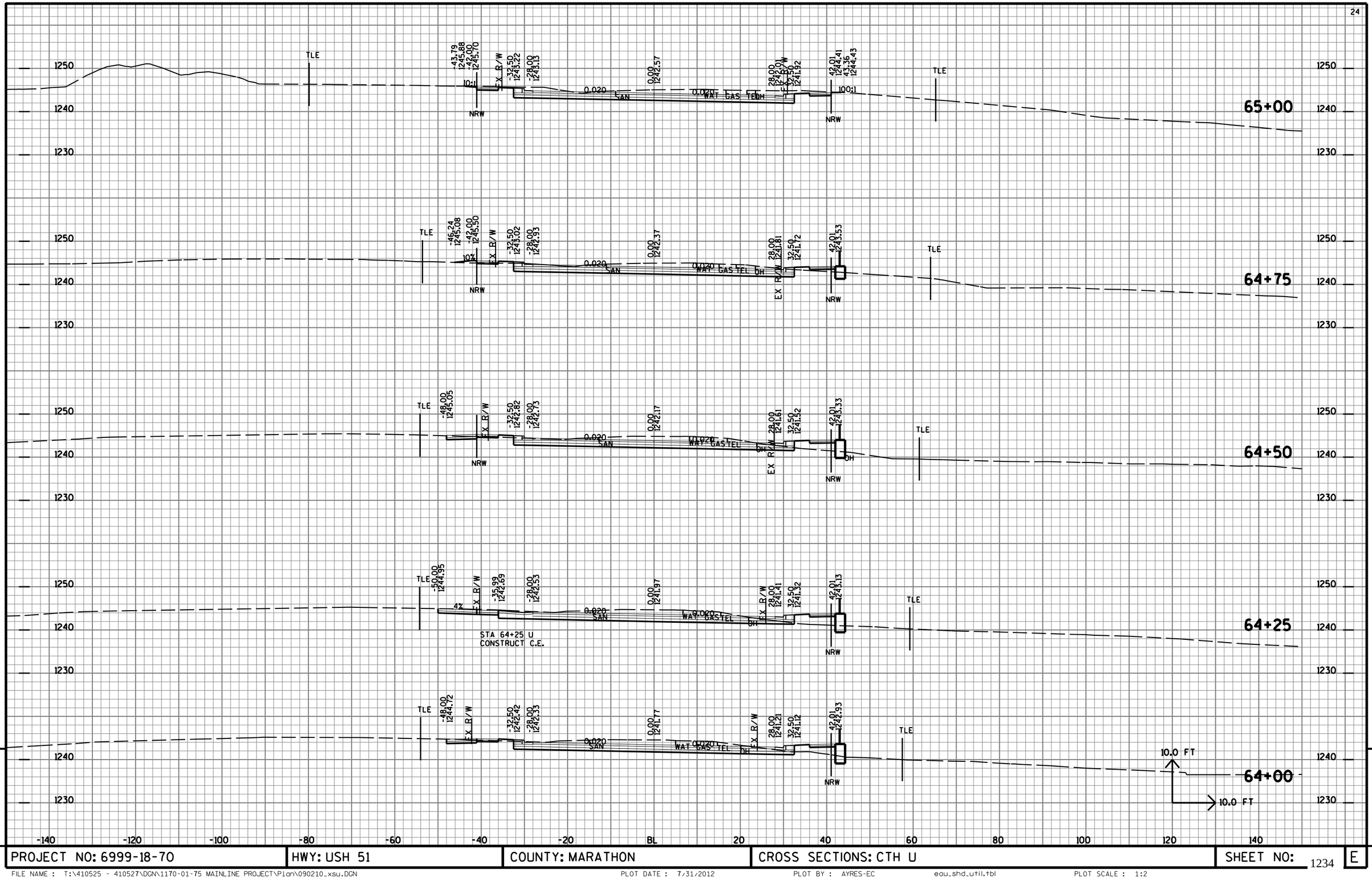
PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: CTH U	SHEET NO: 1232 E



9

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PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: CTH U	SHEET NO: 1233	E

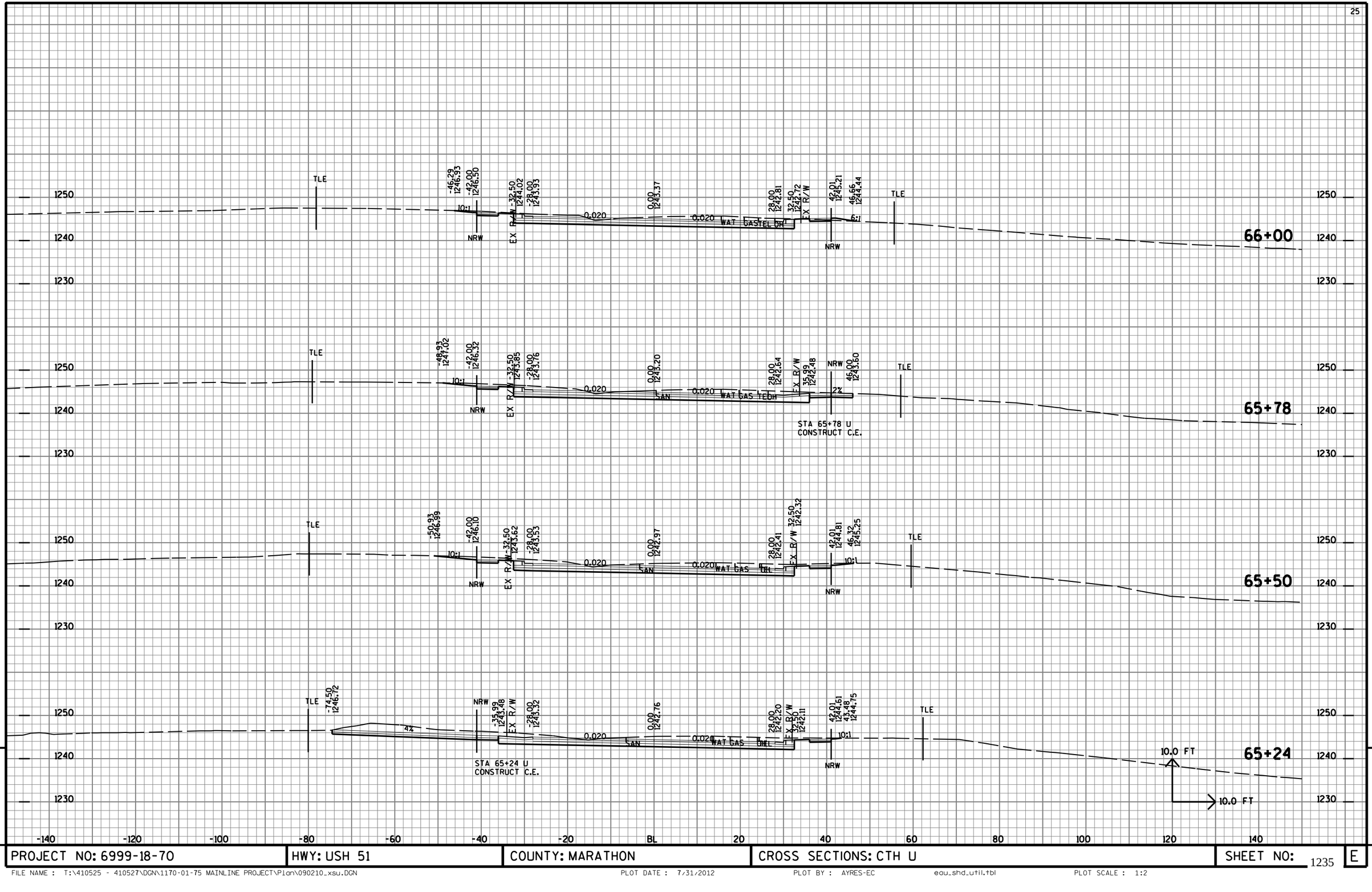


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PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: CTH U	SHEET NO: 1234	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090210_xsu.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC edu_shd_util.tbl PLOT SCALE : 1:2

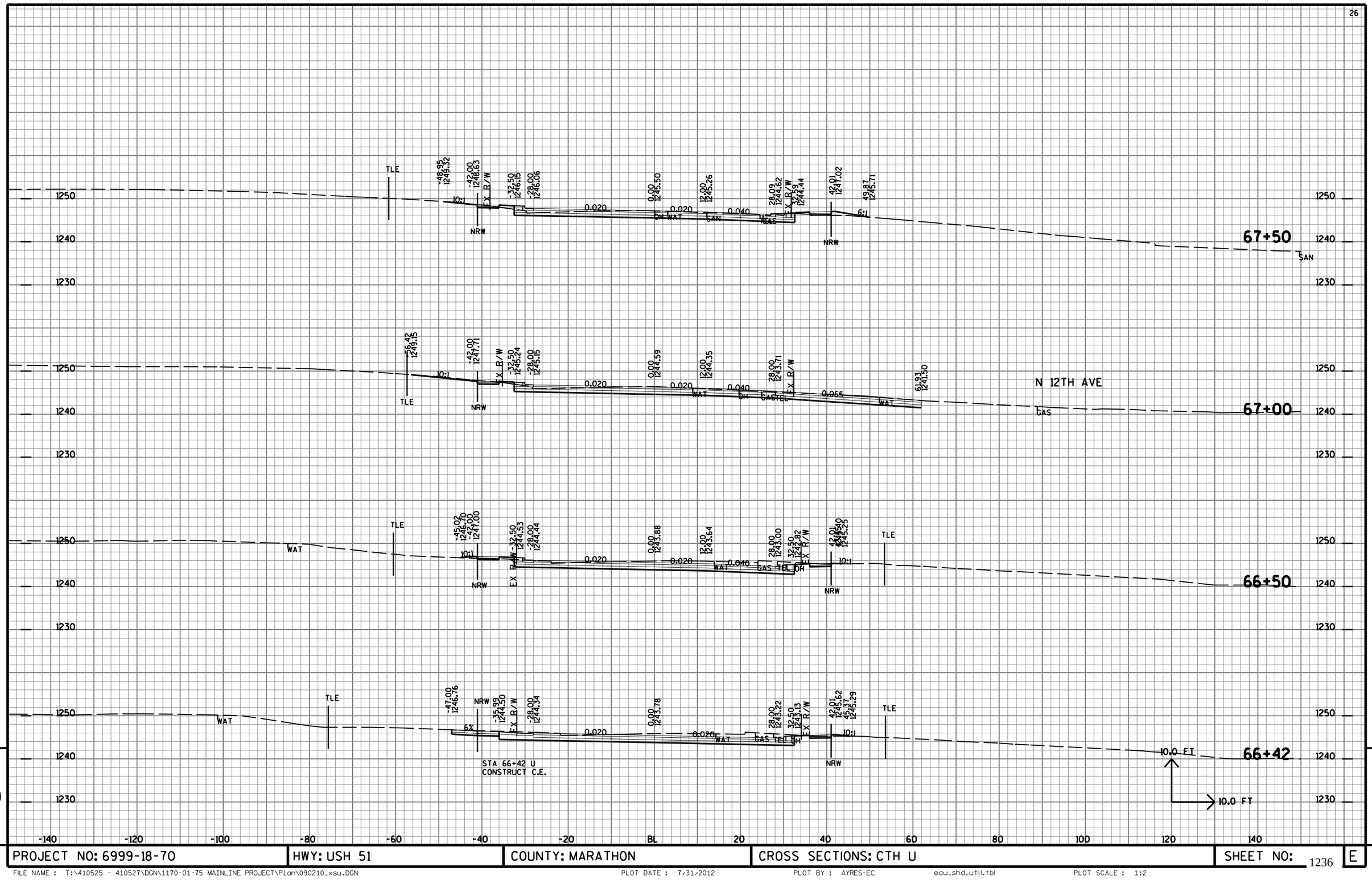


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PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: CTH U	SHEET NO: 1235	E

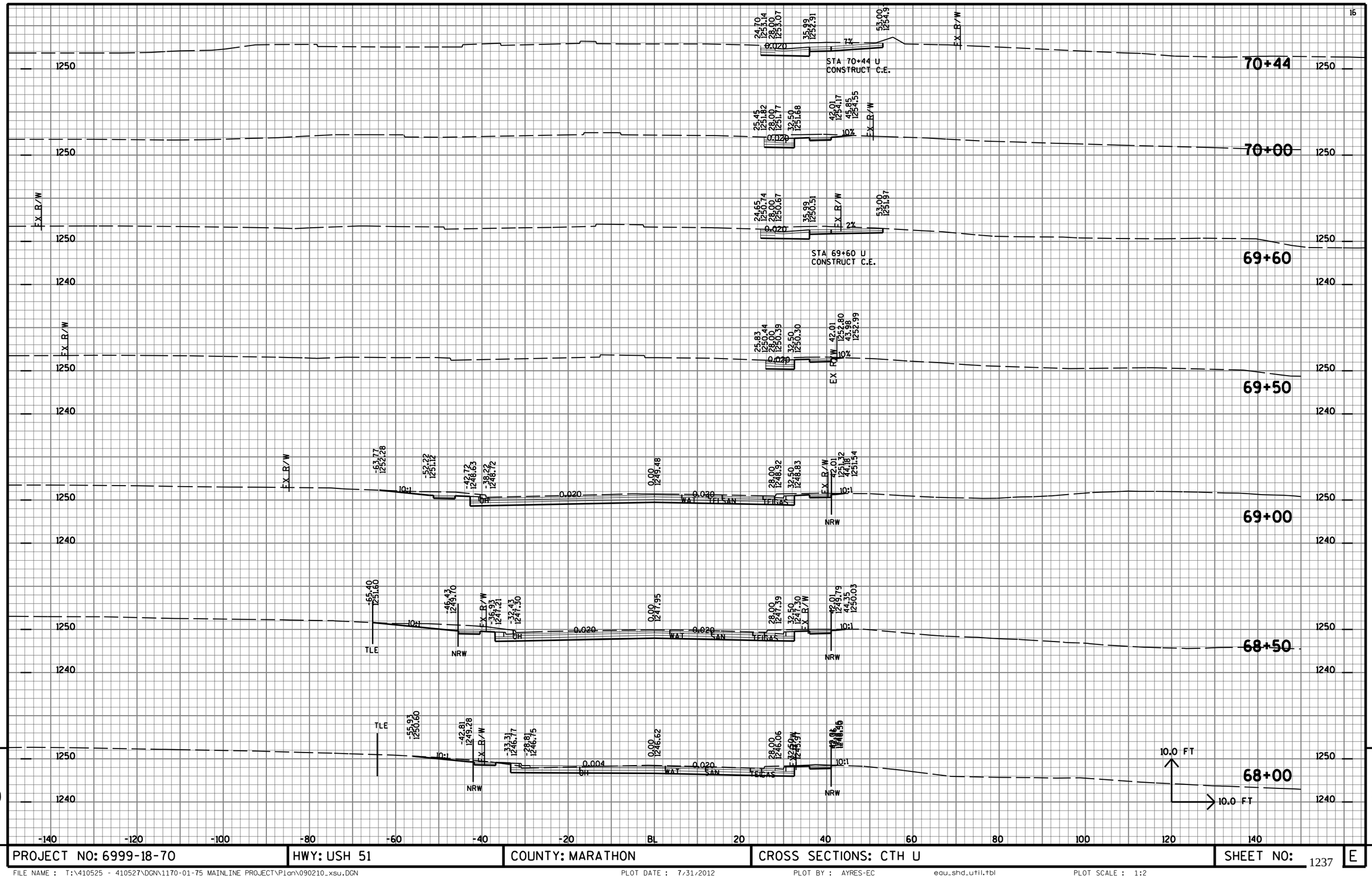
FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090210_xsu.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC edu_shd_util.tbl PLOT SCALE : 1:2



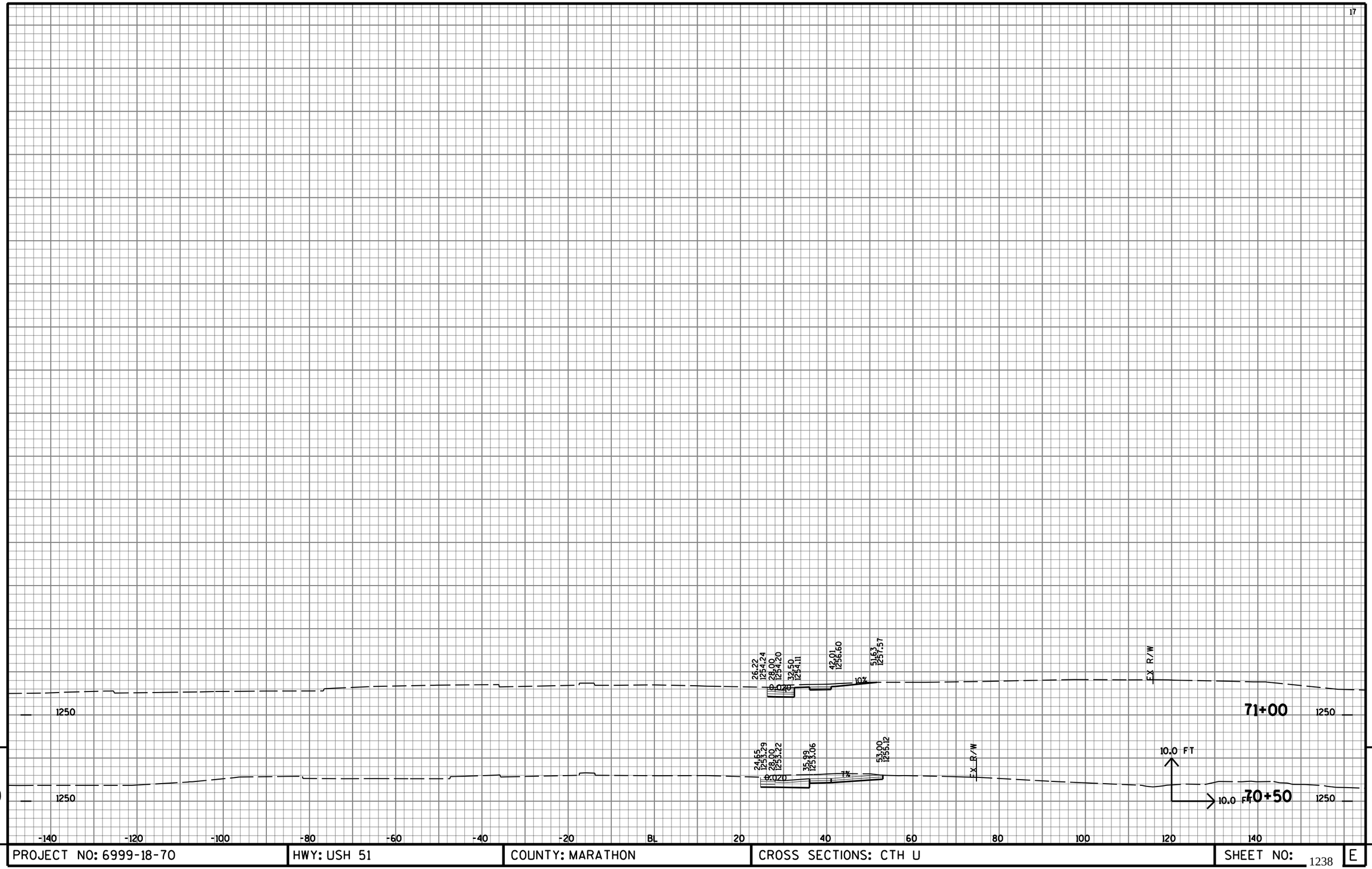
9 9

PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: CTH U	SHEET NO: 1236 E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090210_xsu.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC edu_shd_util.tbl PLOT SCALE : 1:2



PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: CTH U	SHEET NO: 1237 E



9 9

PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: CTH U	SHEET NO: 1238	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090210_xsu.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC edu_shd_util.tbl PLOT SCALE : 1:2

SEE 'KS-LINE' X-SECTIONS

32+82

32+50

32+00

31+50

31+00

30+50

10.0 FT

10.0 FT

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: CTH K NORTHBOUND	SHEET NO: 1239	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090211_xskn.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC eau_shd_util.tbl PLOT SCALE : 1:2

SEE 'KS' LINE X-SECTIONS

35+00

-25.00 1234.50 | 8.00 1236.41 | 4.50 1235.41 | 0.00 1233.32 | 12.00 1233.08 | 28.00 1232.76 | 32.50 1232.67 | 40.00 1236.01 | 58.79 1232.07 | 78.48 1225.91

11.2% | 0.020 | 0.020 | 3:1 | 3:1

34+50

-25.00 1233.93 | 8.00 1235.77 | 4.50 1234.77 | 0.00 1232.68 | 12.00 1232.44 | 28.00 1232.12 | 32.50 1232.03 | 42.00 1235.45 | 69.00 1229.35 | 79.21 1226.44

10.9% | 0.020 | 0.020 | 3.5:1 | 3.5:1

34+00

-25.00 1233.36 | 8.00 1235.21 | 4.50 1232.20 | 0.00 1232.11 | 12.00 1231.87 | 28.00 1231.55 | 32.50 1231.46 | 42.00 1234.89 | 46.00 1234.22 | 71.40 1225.75 | 87.61 1221.37

10.9% | 0.020 | 0.020 | 6:1 | 3:1 | 3:1

33+50

-22.96 1232.90 | 8.00 1234.71 | 4.59 1231.71 | 0.00 1231.62 | 12.00 1231.38 | 28.00 1231.06 | 32.50 1230.97 | 42.00 1234.39 | 46.00 1233.73 | 70.75 1225.14

12.1% | 0.020 | 0.020 | 6:1 | 3:1

33+00

-18.53 1232.45 | 8.00 1234.29 | 4.59 1231.29 | 0.00 1231.20 | 12.00 1230.96 | 28.00 1230.64 | 32.50 1230.55 | 42.00 1233.97 | 46.00 1233.31 | 70.59 1225.14

5.7% | 0.020 | 0.020 | 6:1 | 3:1

10.0 FT | 10.0 FT

R/W | ML

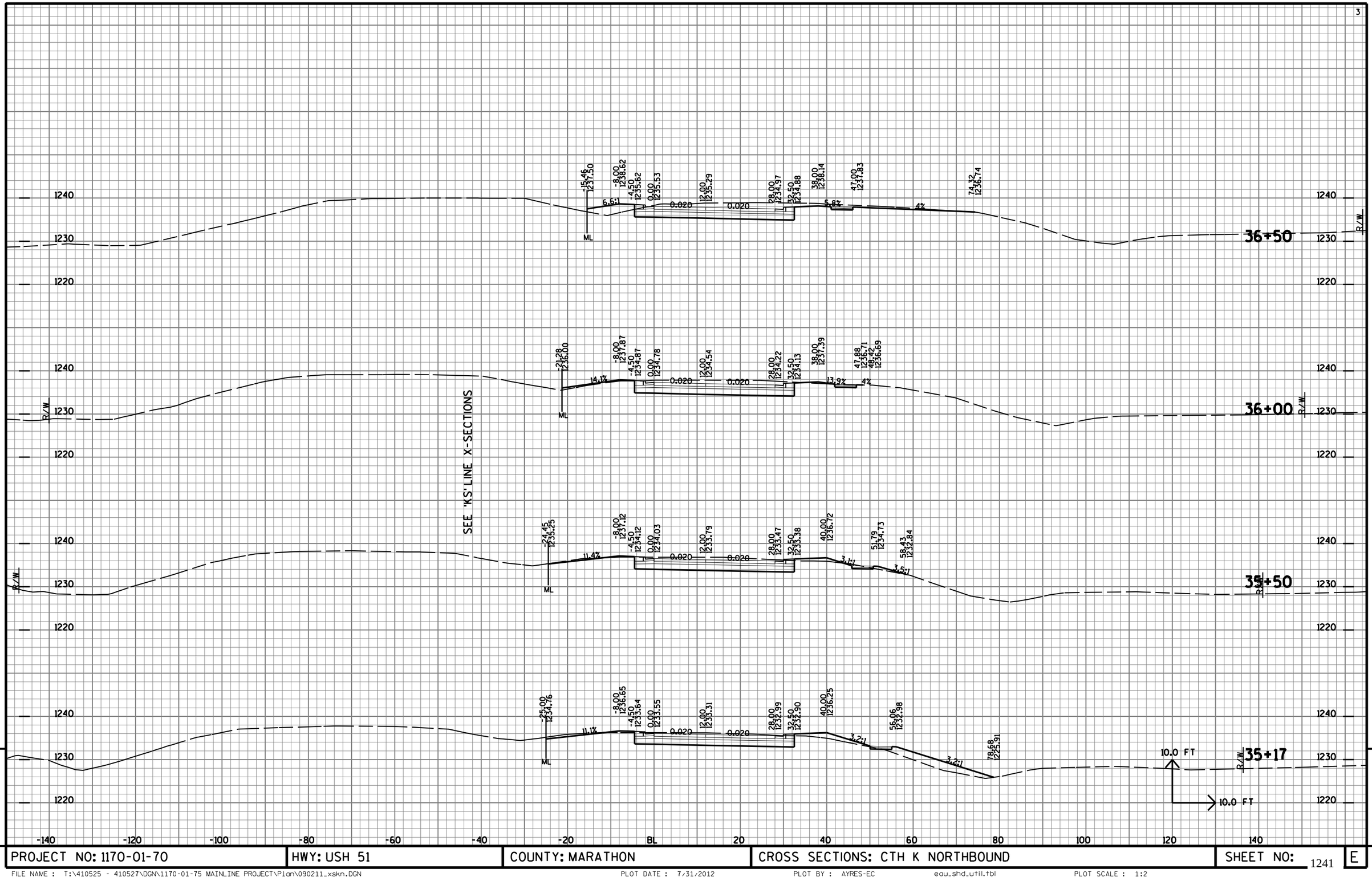
1240 | 1230 | 1220

-140 -120 -100 -80 -60 -40 -20 BL 20 40 60 80 100 120 140

9 | 9

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: CTH K NORTHBOUND	SHEET NO: 1240 E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090211_xskn.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC eau_shd_util.tbl PLOT SCALE : 1:2

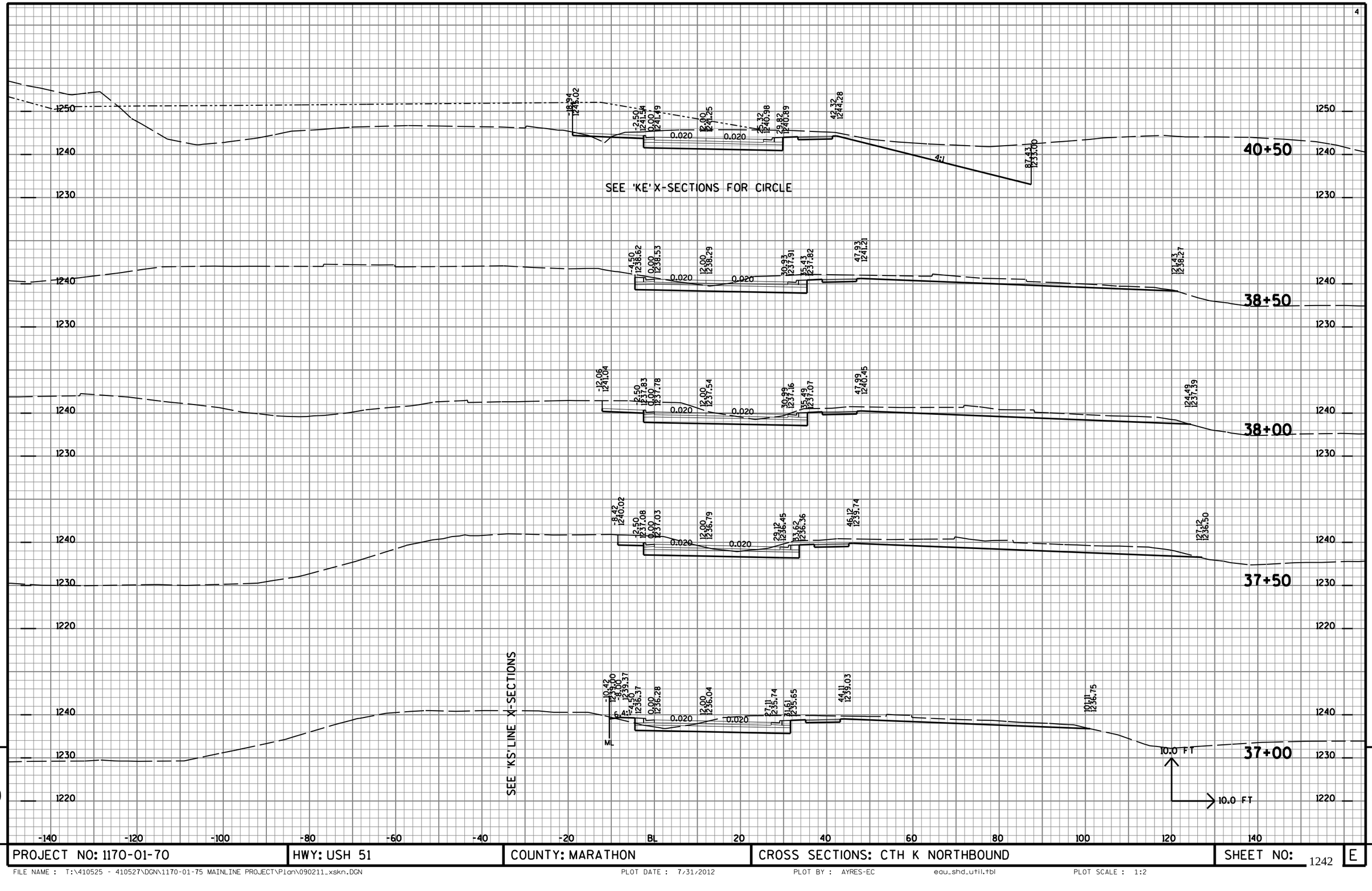


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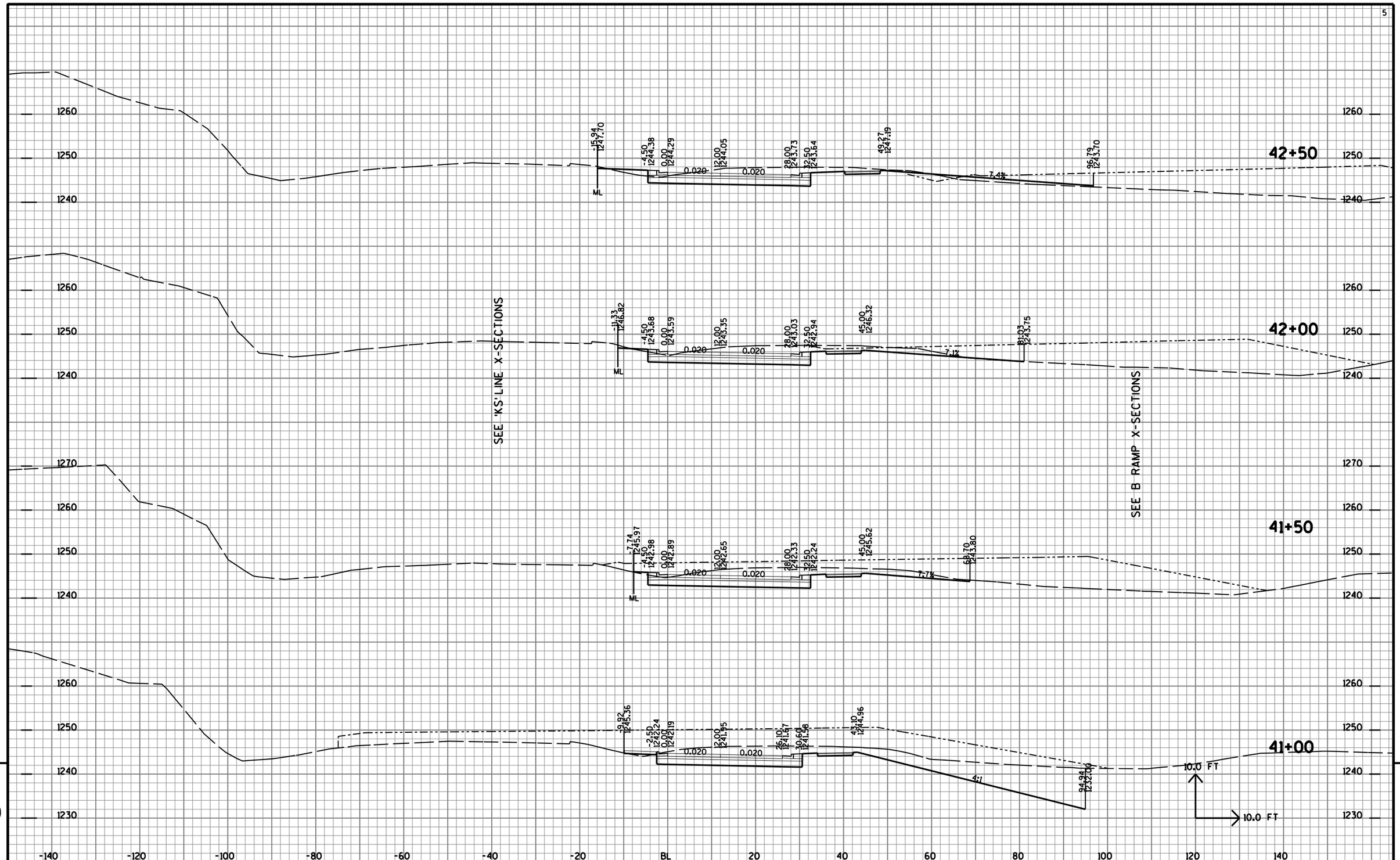
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PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: CTH K NORTHBOUND	SHEET NO: 1241	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090211_xskn.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC egu_shd_util.tbl PLOT SCALE : 1:2



PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: CTH K NORTHBOUND	SHEET NO: 1242 E

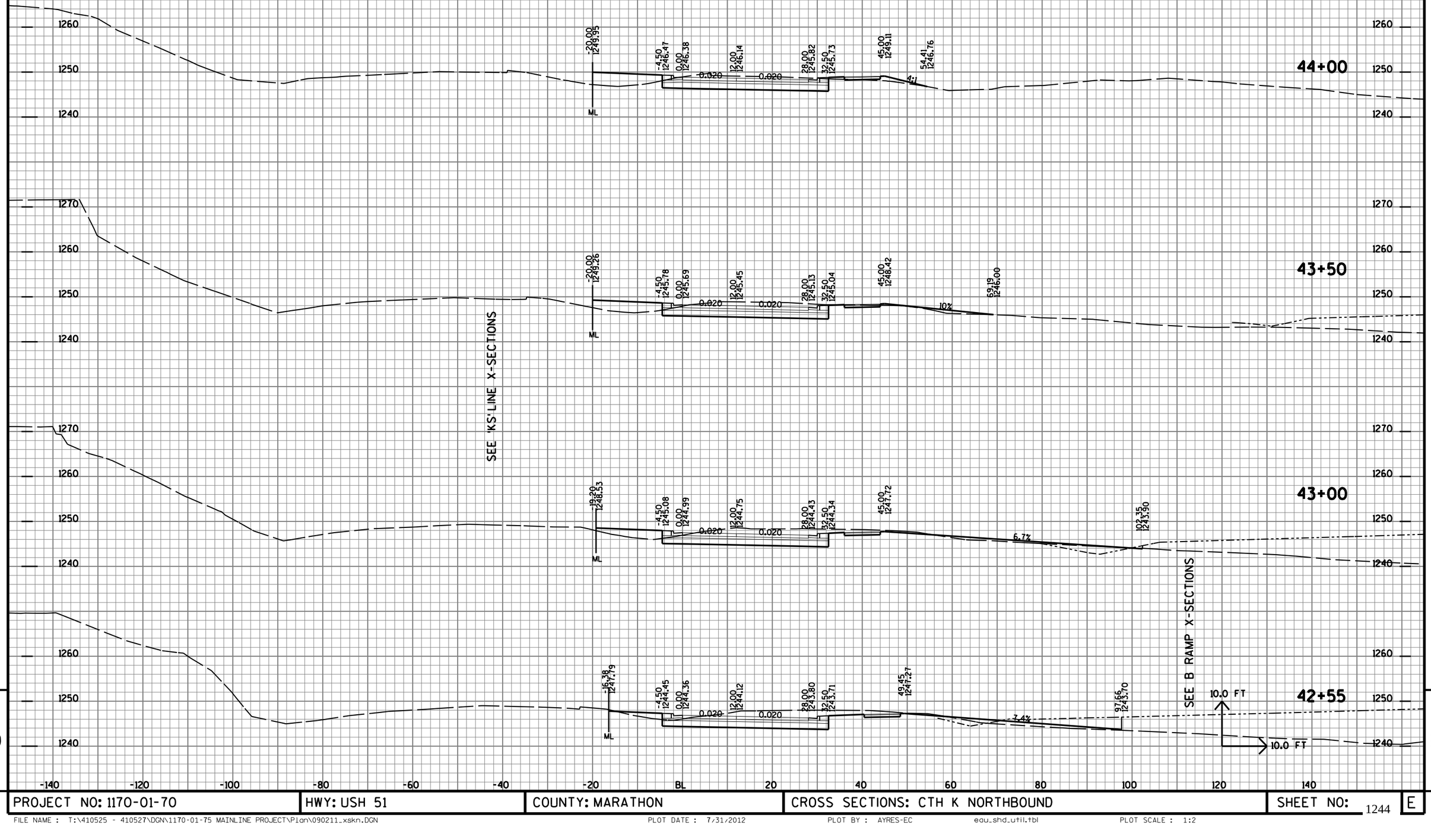


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PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: CTH K NORTHBOUND	SHEET NO: 1243	E

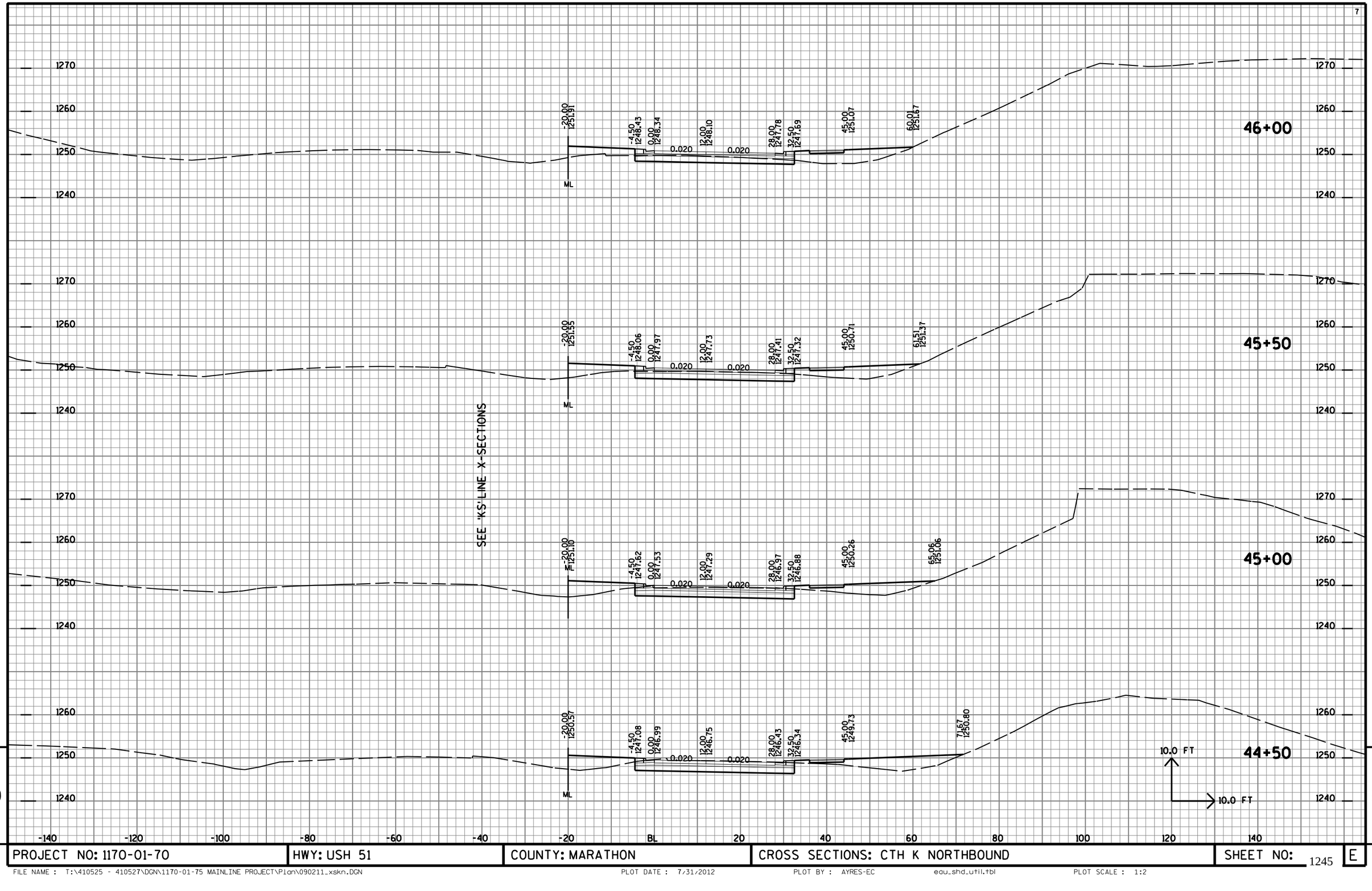
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PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: CTH K NORTHBOUND	SHEET NO: 1244	E

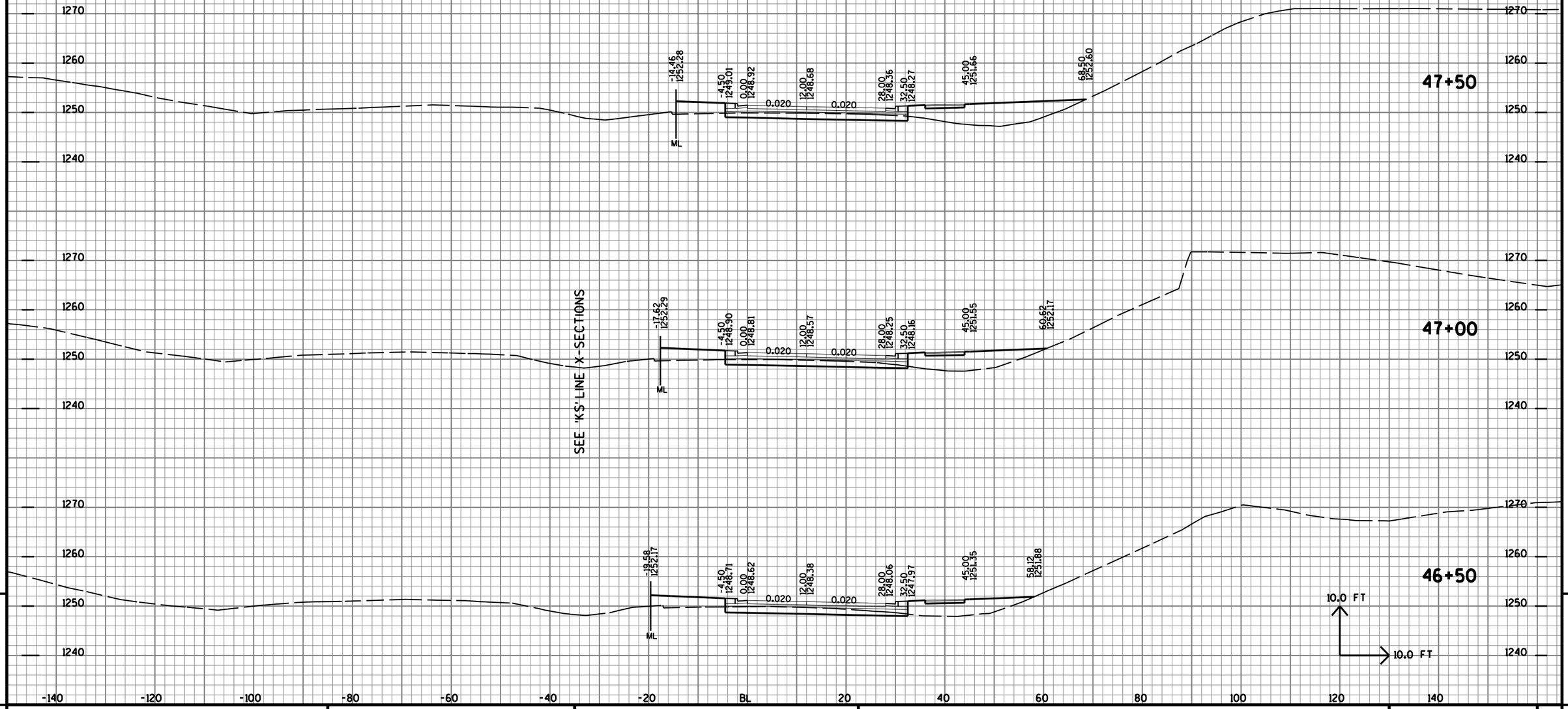


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PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: CTH K NORTHBOUND	SHEET NO: 1245 E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090211_xskn.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC egu_shd_util.tbl PLOT SCALE : 1:2

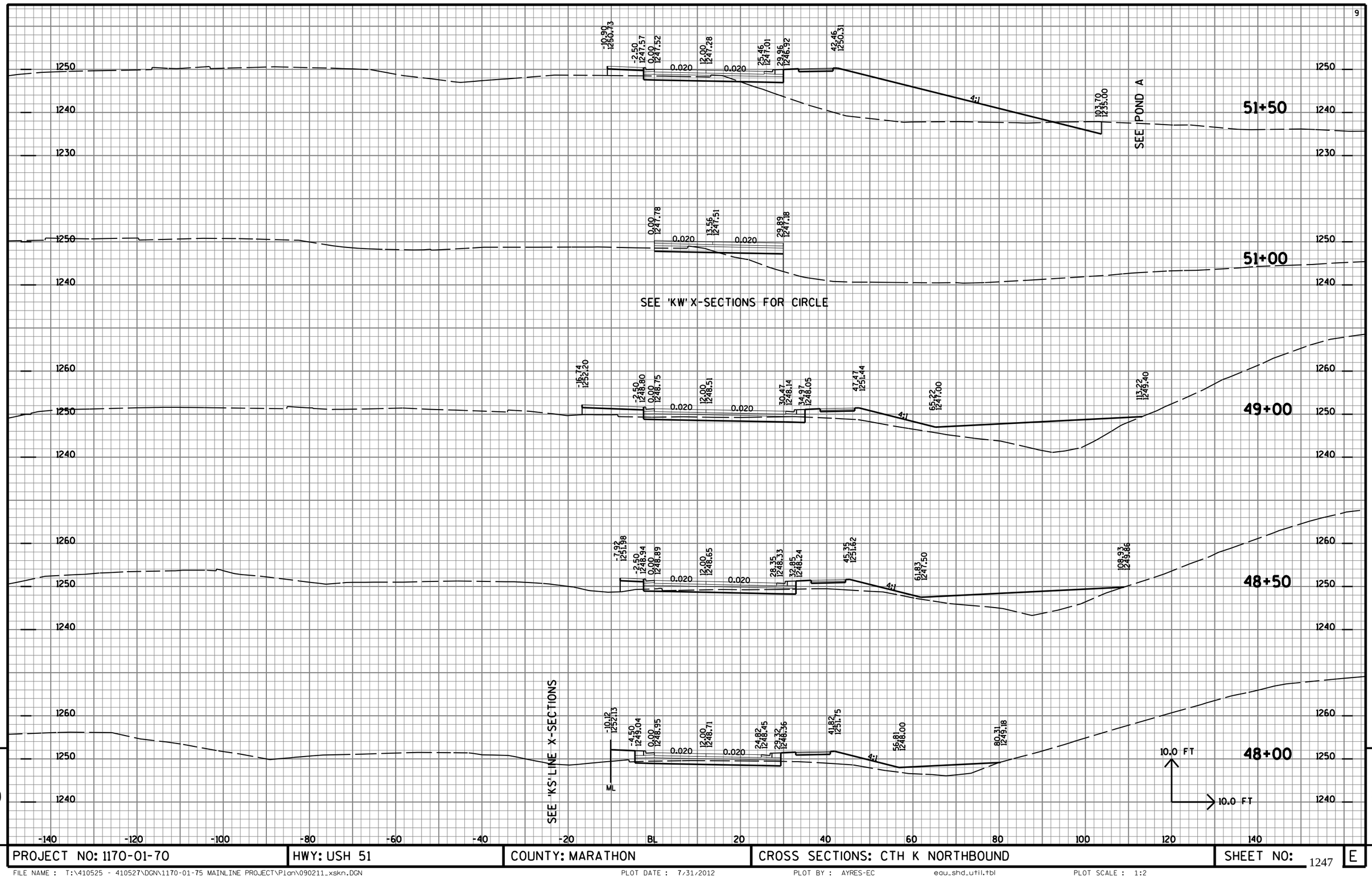


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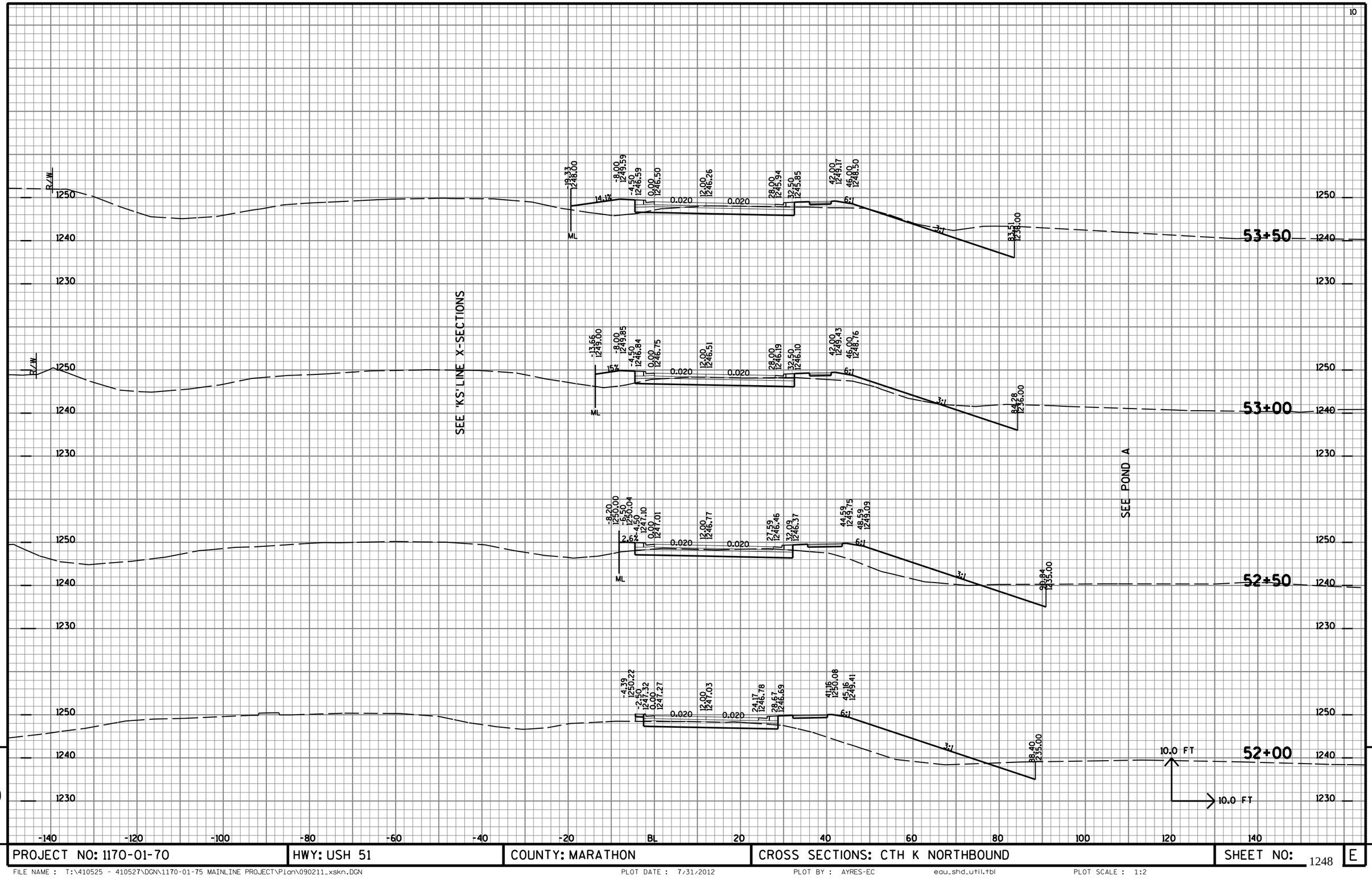
PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: CTH K NORTHBOUND	SHEET NO: 1246	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090211_xskn.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC eau_shd_util.tbl PLOT SCALE : 1:2



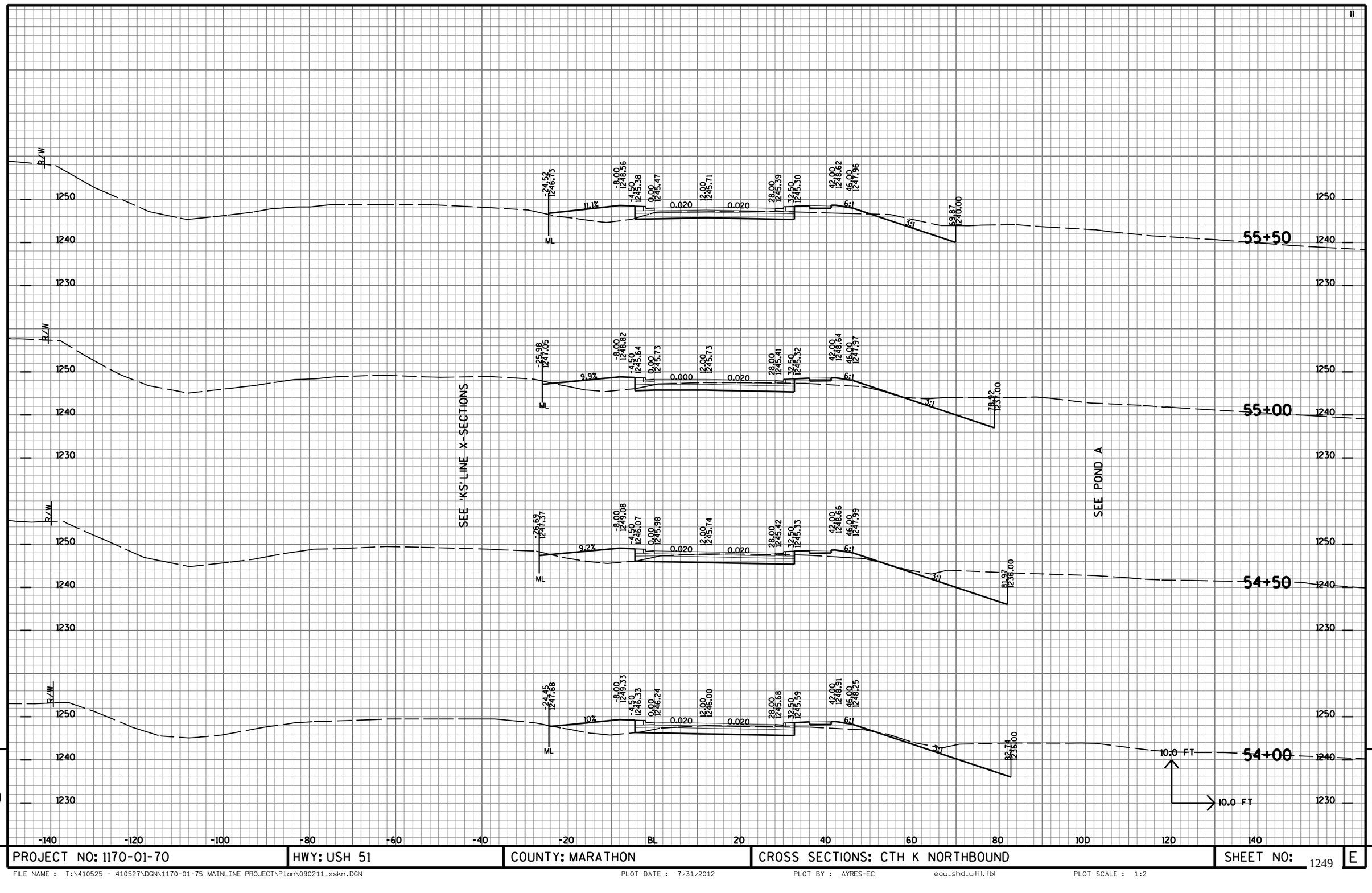
PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: CTH K NORTHBOUND	SHEET NO: 1247 E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090211_xskn.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC egu_shd_util.tbl PLOT SCALE : 1:2



PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: CTH K NORTHBOUND	SHEET NO: 1248 E

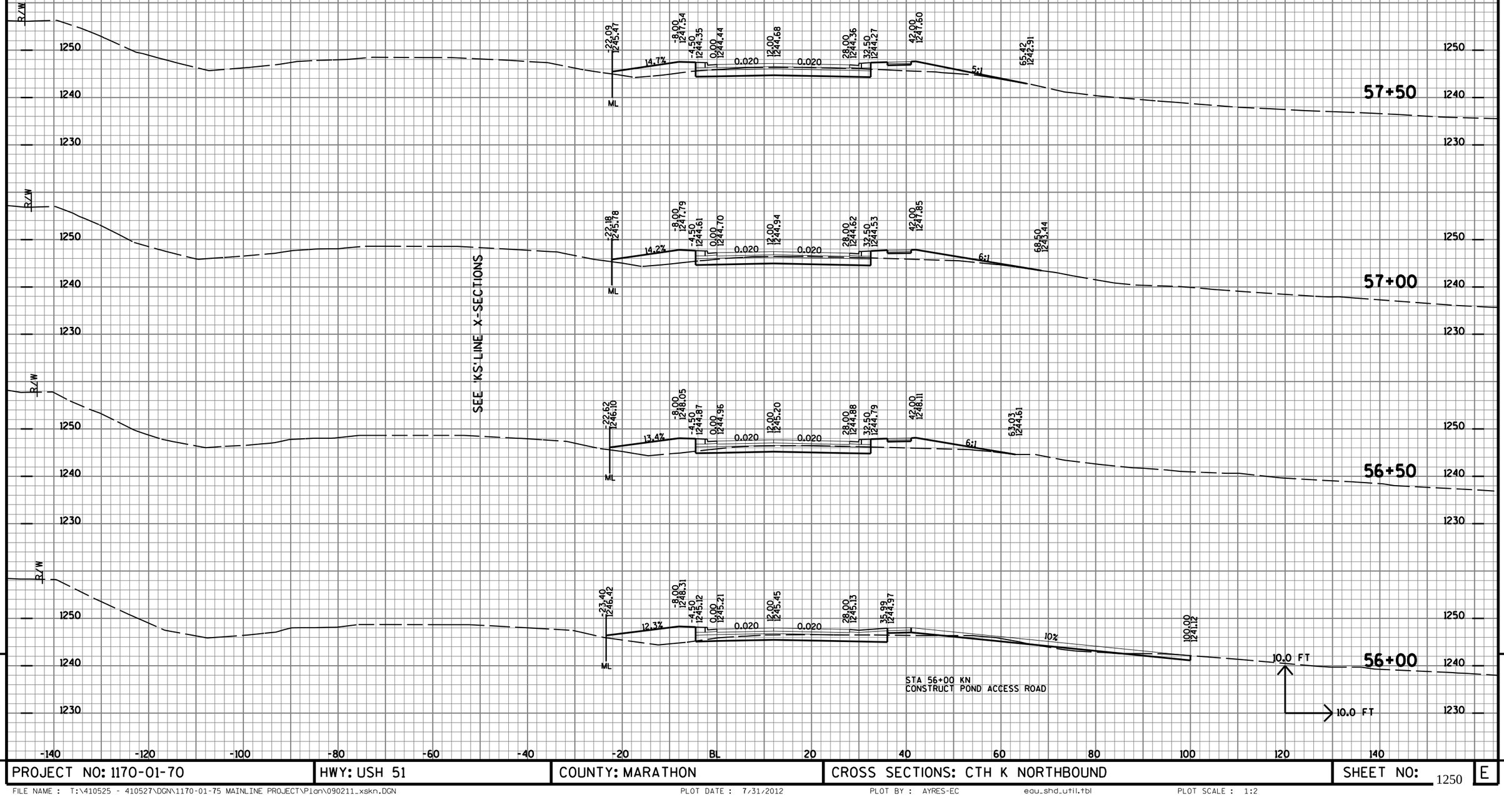
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PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: CTH K NORTHBOUND	SHEET NO: 1249 E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090211_xskn.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC egu_shd_util.tbl PLOT SCALE : 1:2

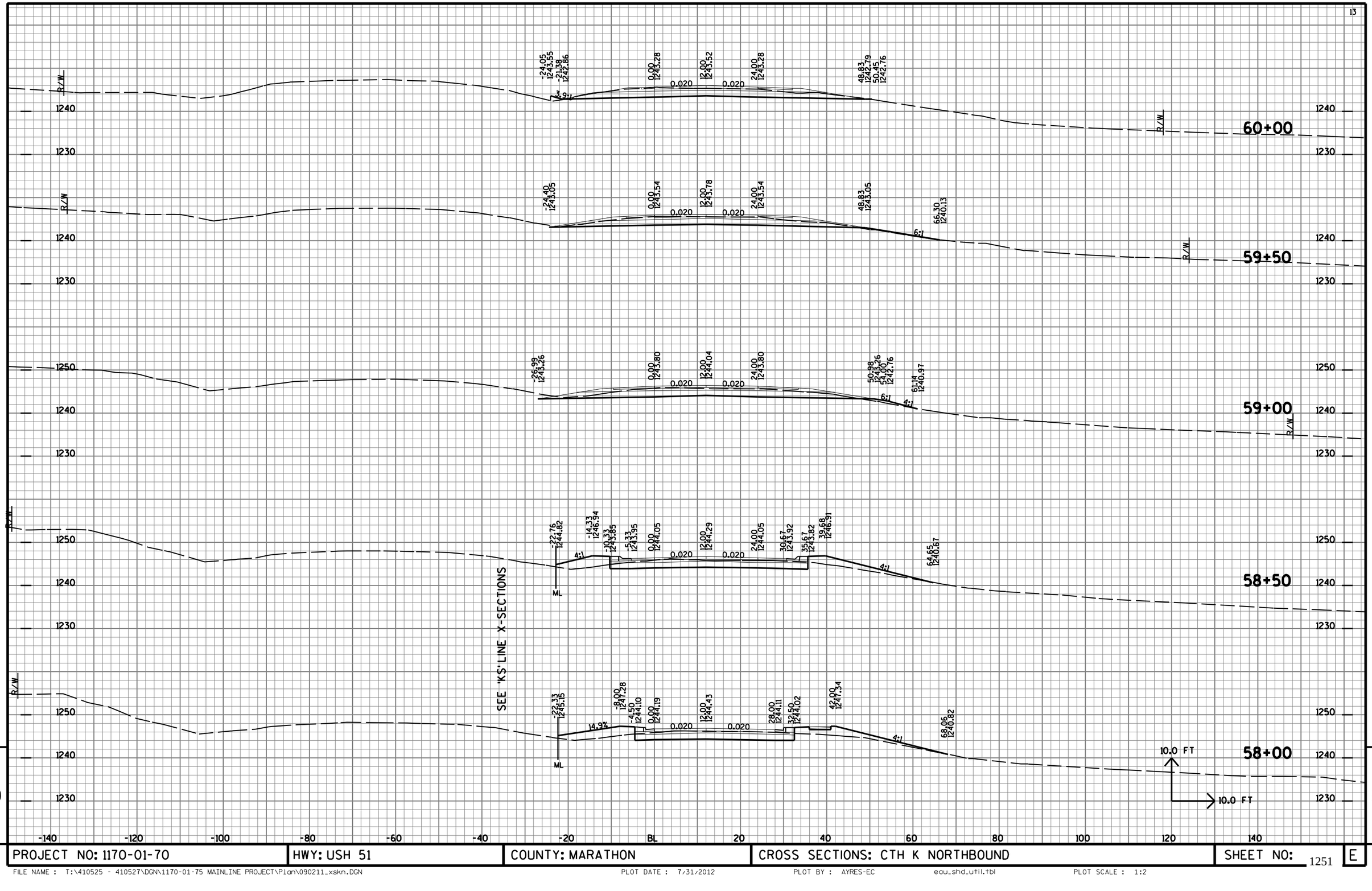
SEE 'KS' LINE X-SECTIONS



9 9

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: CTH K NORTHBOUND	SHEET NO: 1250 E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090211_xskn.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC egu_shd_util.tbl PLOT SCALE : 1:2

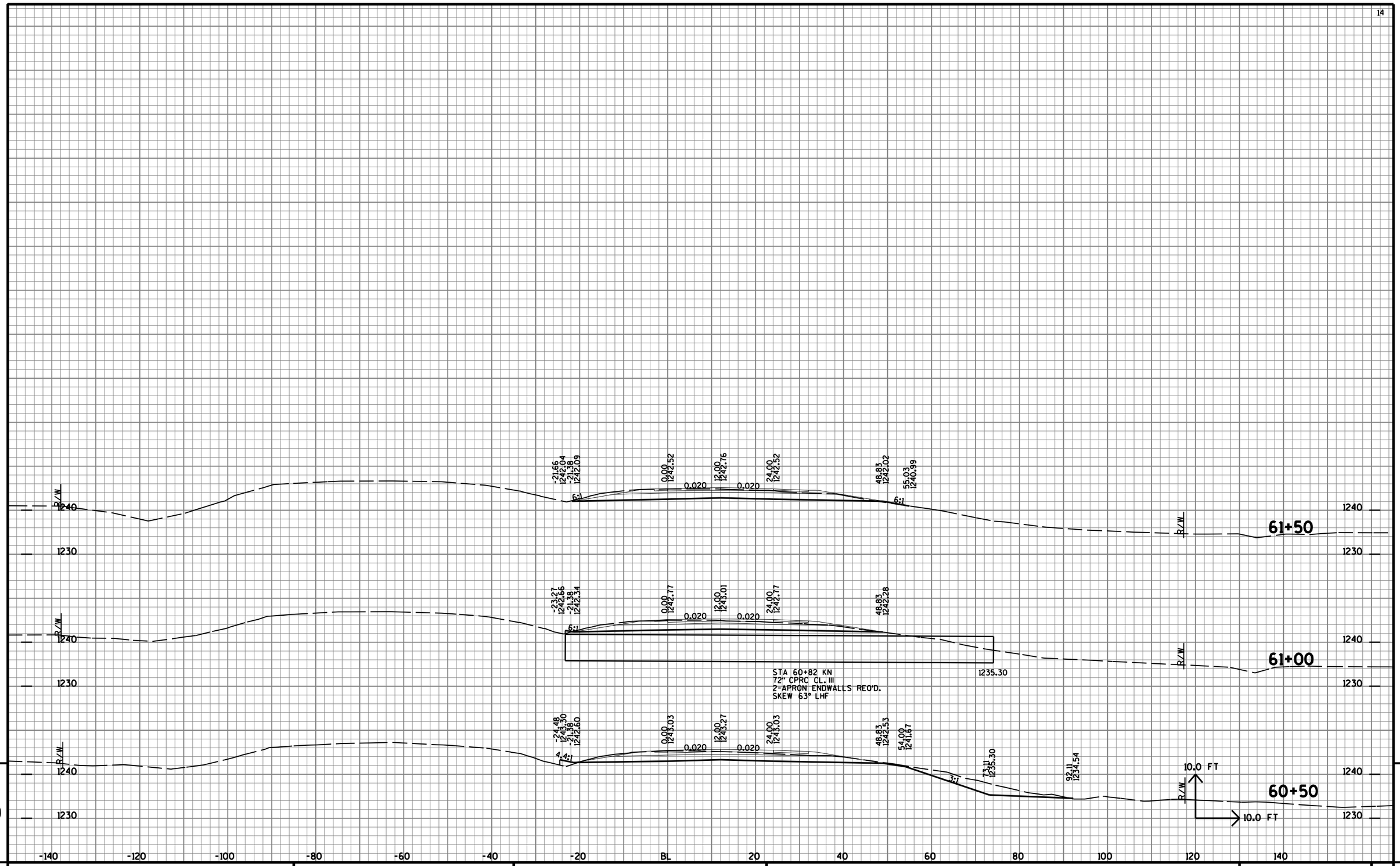


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PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: CTH K NORTHBOUND	SHEET NO: 1251	E

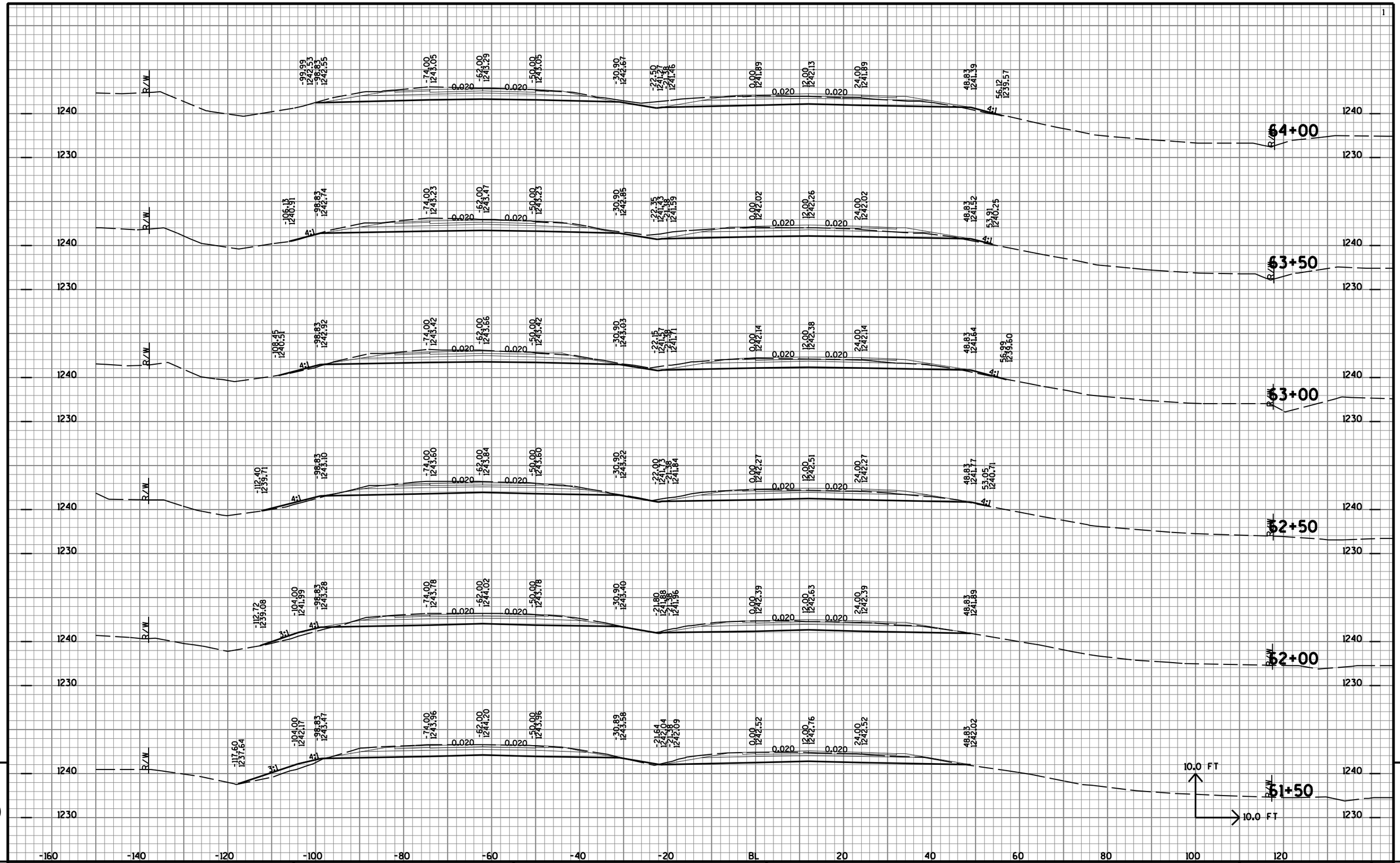
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9

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: CTH K NORTHBOUND	SHEET NO: 1252	E

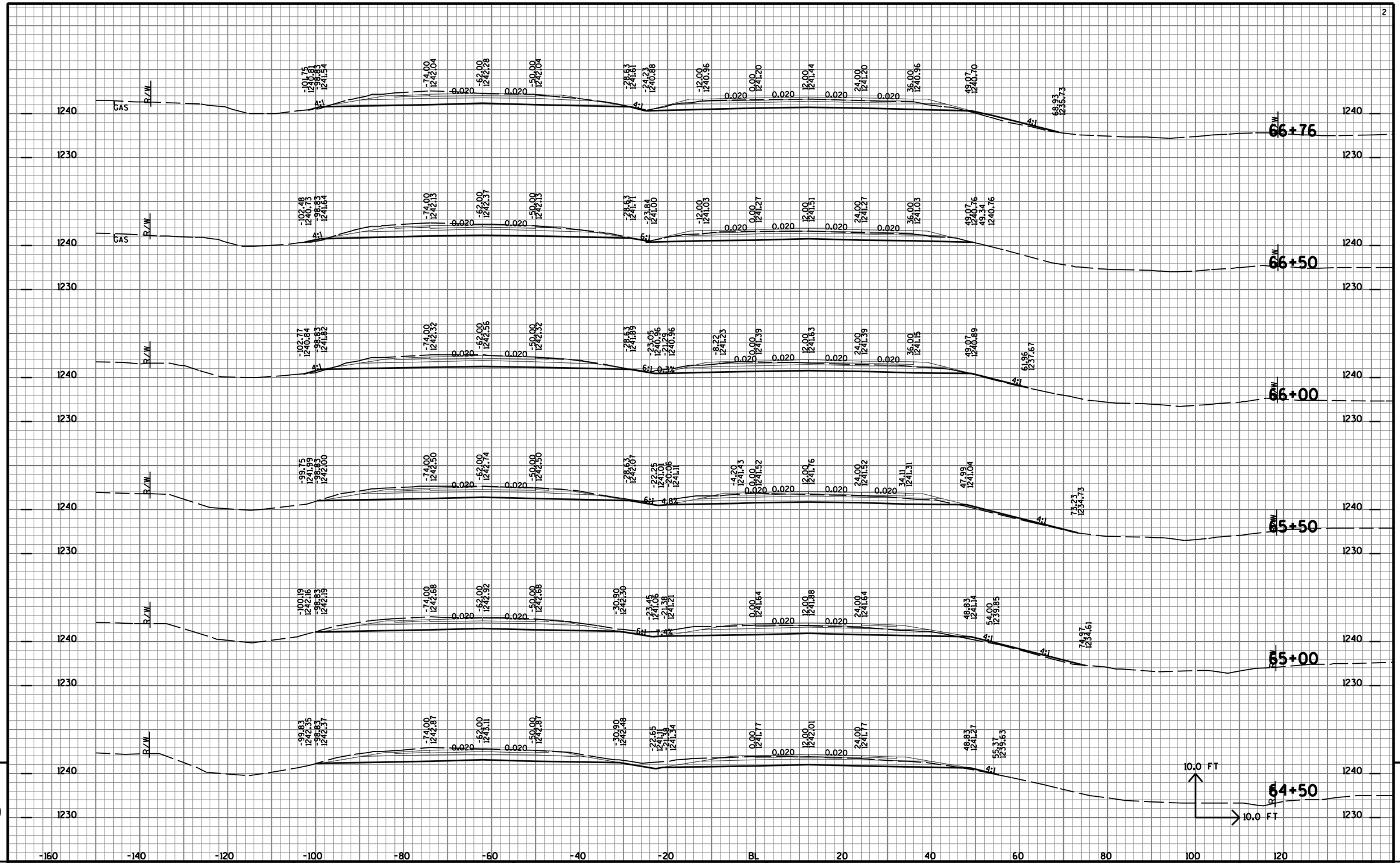


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PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: CTH K PAVEMENT REPLACEMENT	SHEET NO: 1253	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090212_xscthk.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC eau_shd_util.tbl PLOT SCALE : 1:2

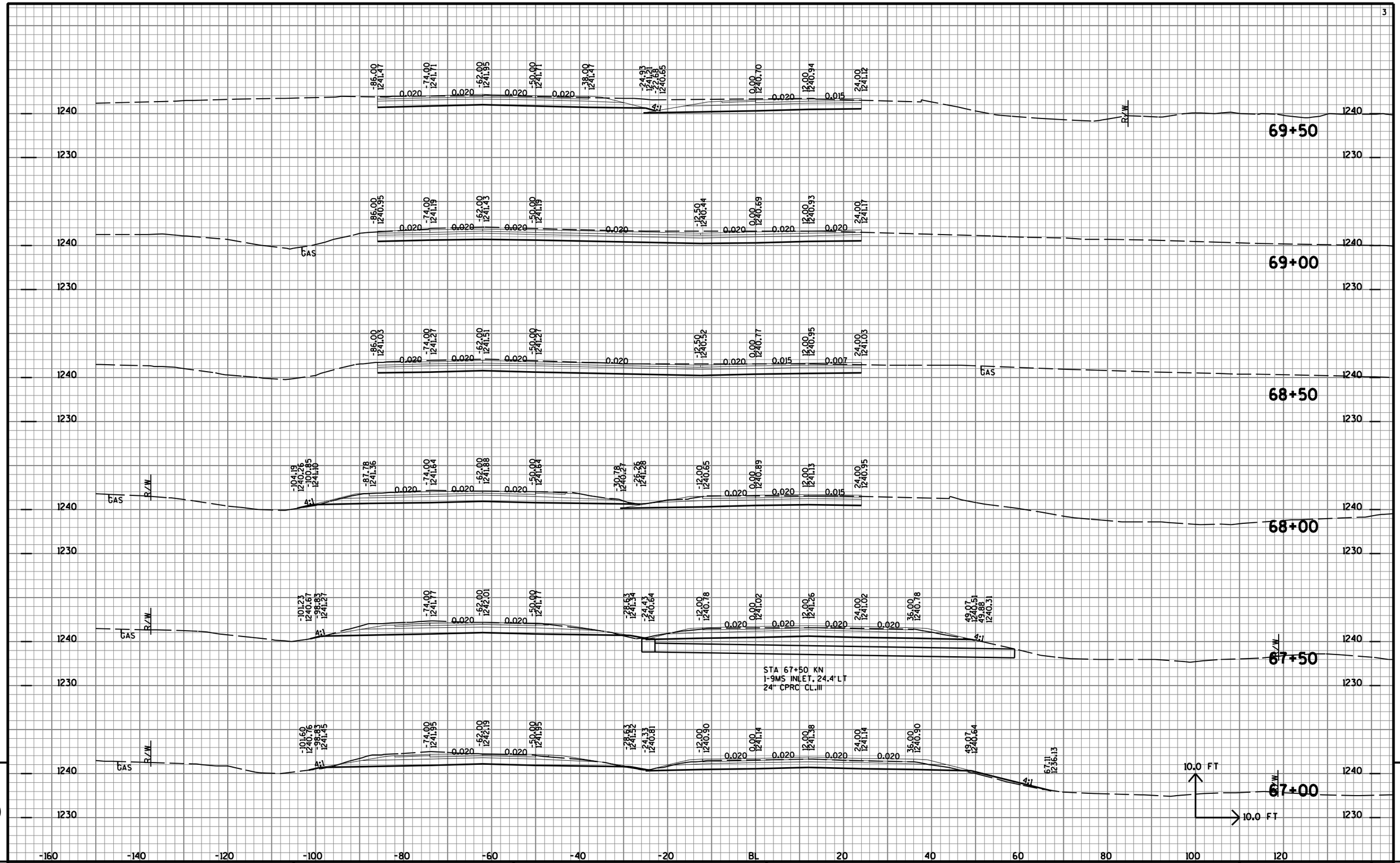


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PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: CTH K PAVEMENT REPLACEMENT	SHEET NO: 1254	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090212_xscthk.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC eau_shd_util.tbl PLOT SCALE : 1:2

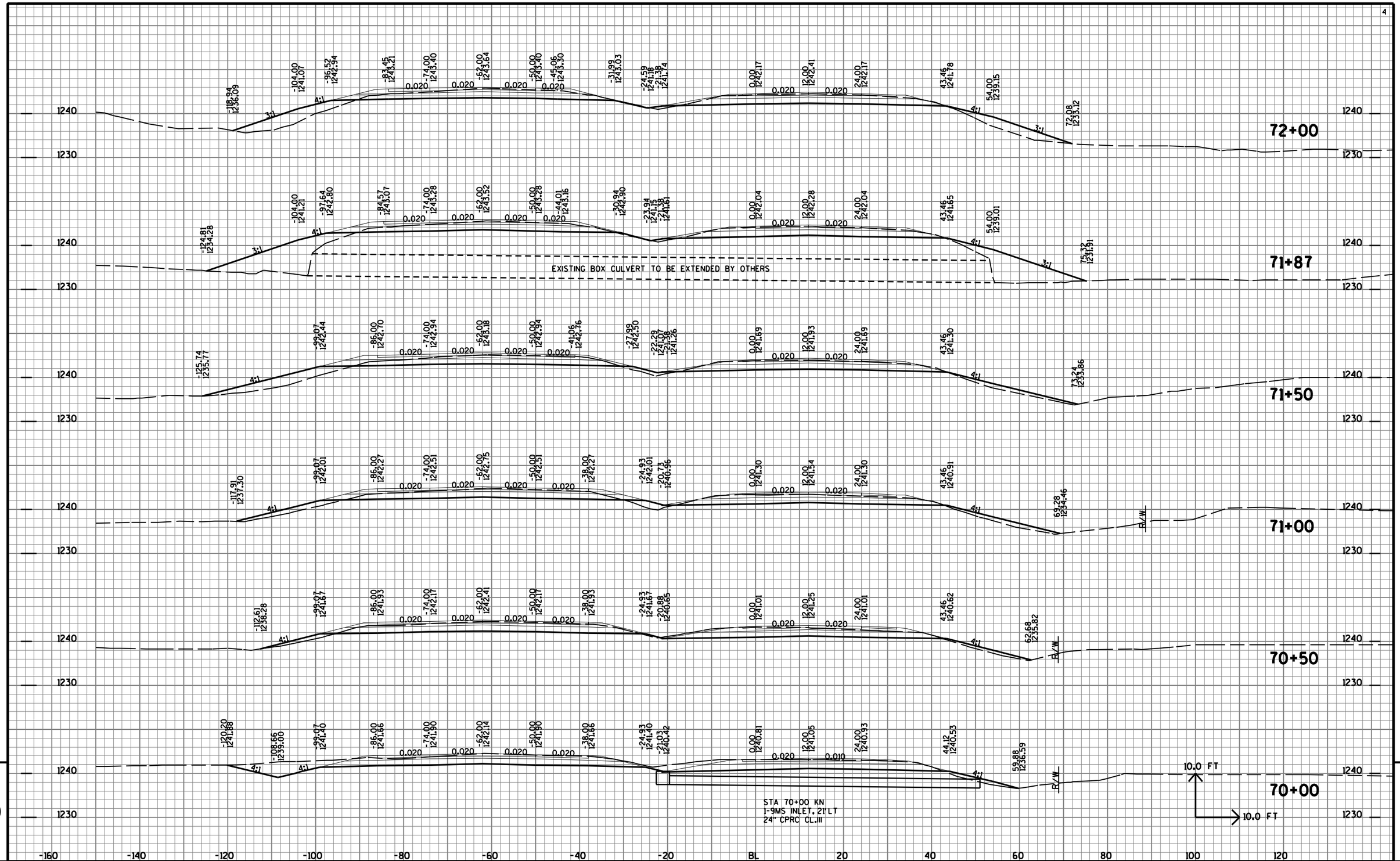


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PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: CTH K PAVEMENT REPLACEMENT	SHEET NO: 1255	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090212_xscthk.DGN PLOT DATE : 8/21/2012 PLOT BY : AYRES-EC eau_shd_util.tbl PLOT SCALE : 1:20

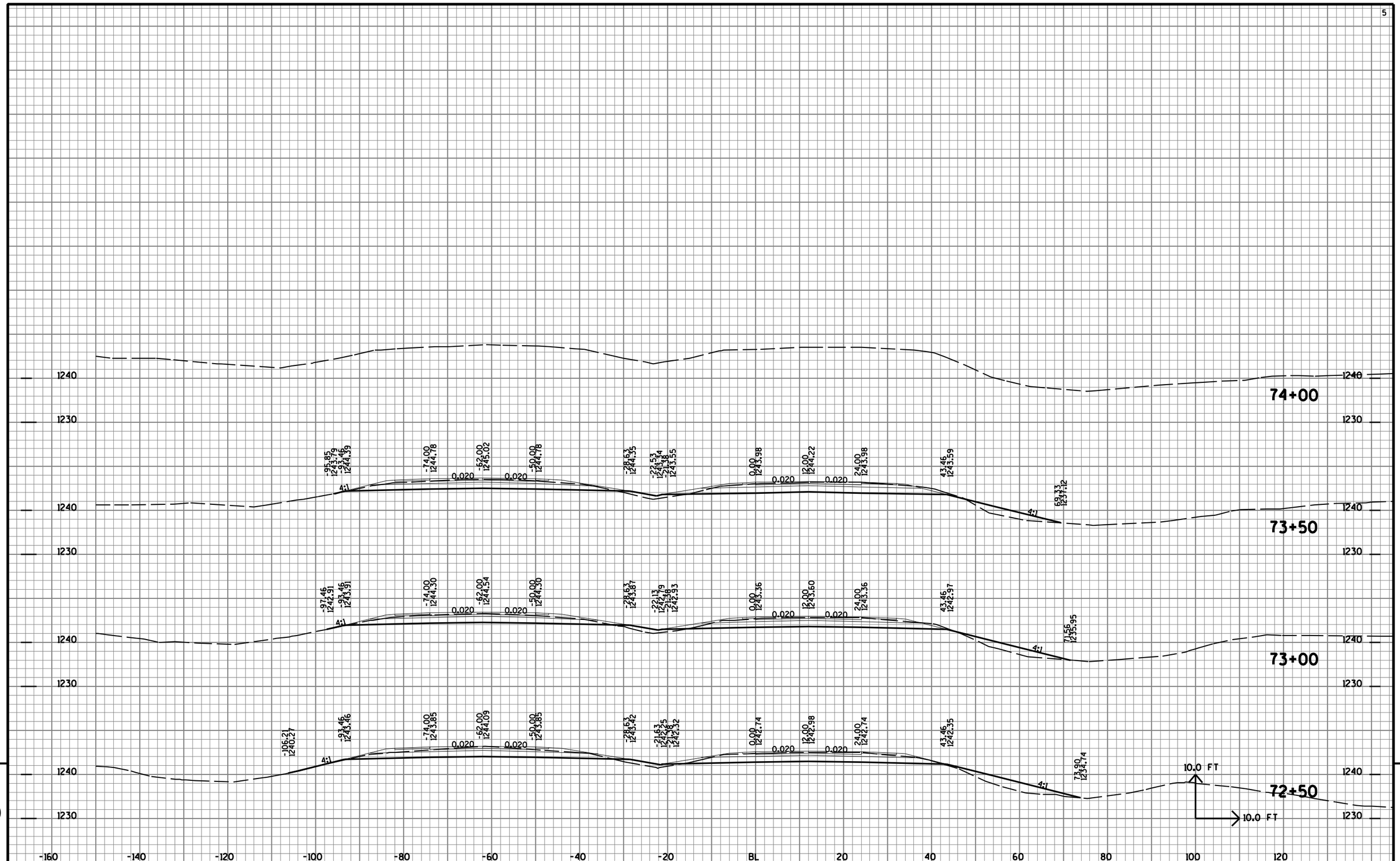


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PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: CTH K PAVEMENT REPLACEMENT	SHEET NO: 1256	E

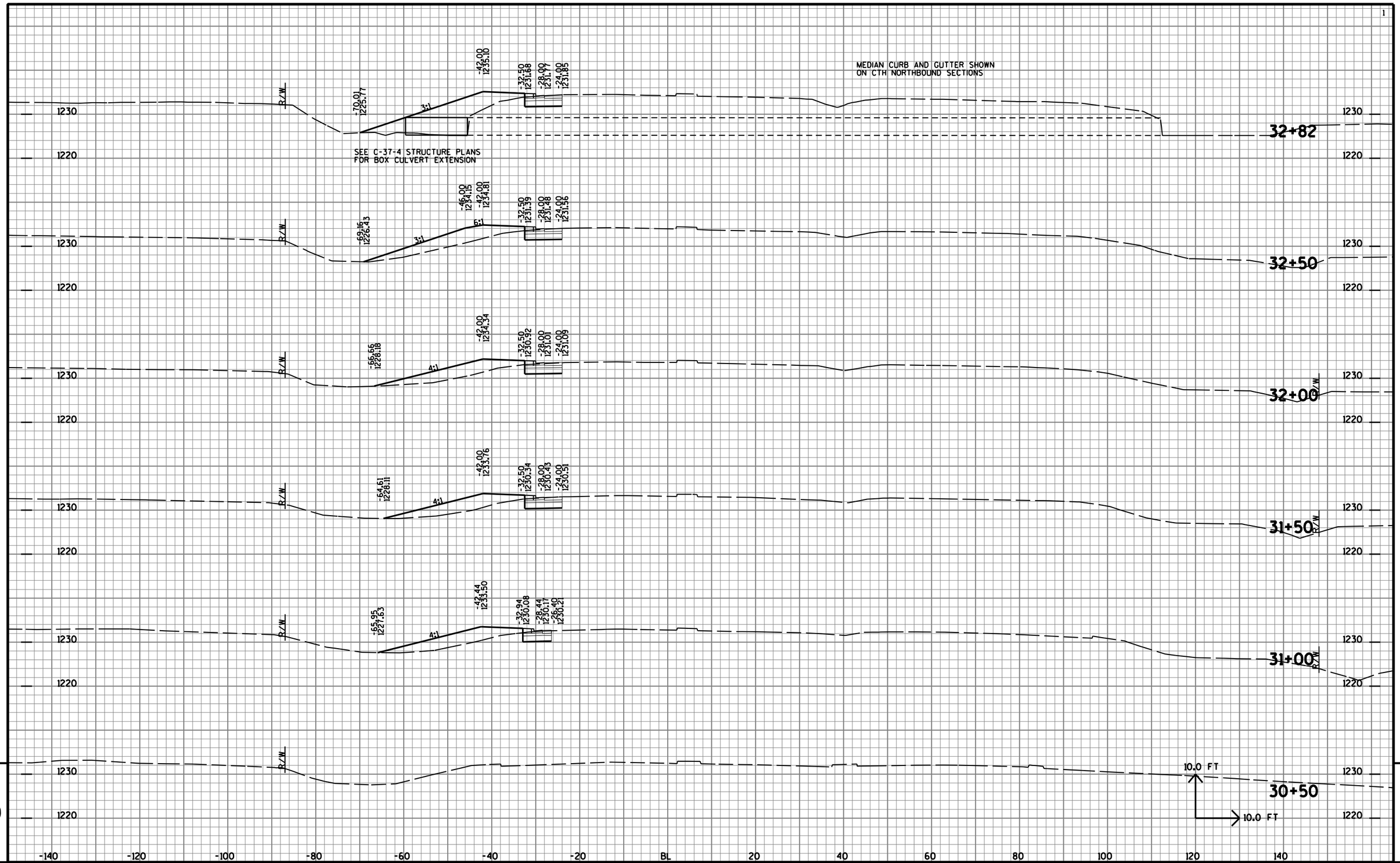
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PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: CTH K PAVEMENT REPLACEMENT	SHEET NO: 1257	E

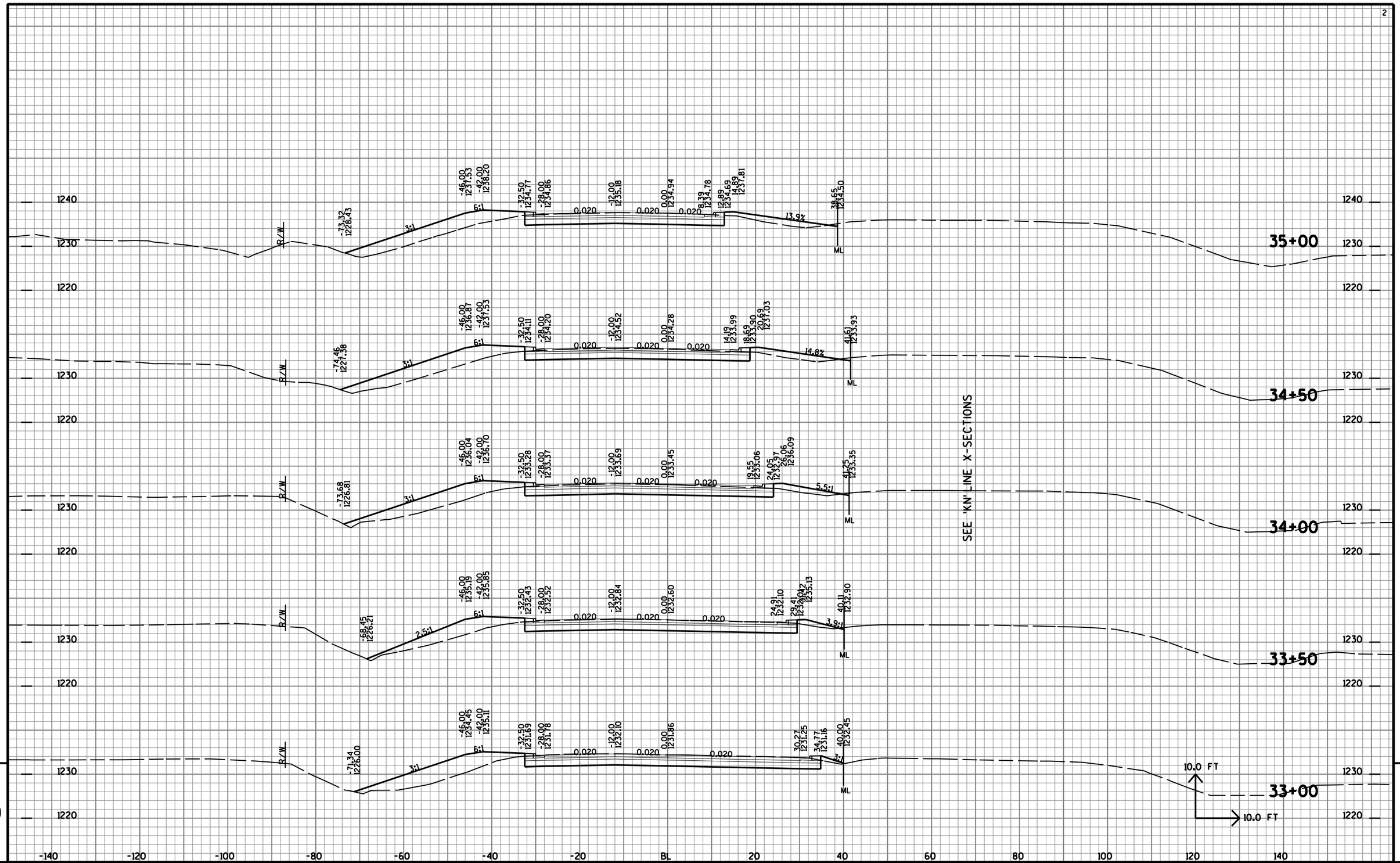


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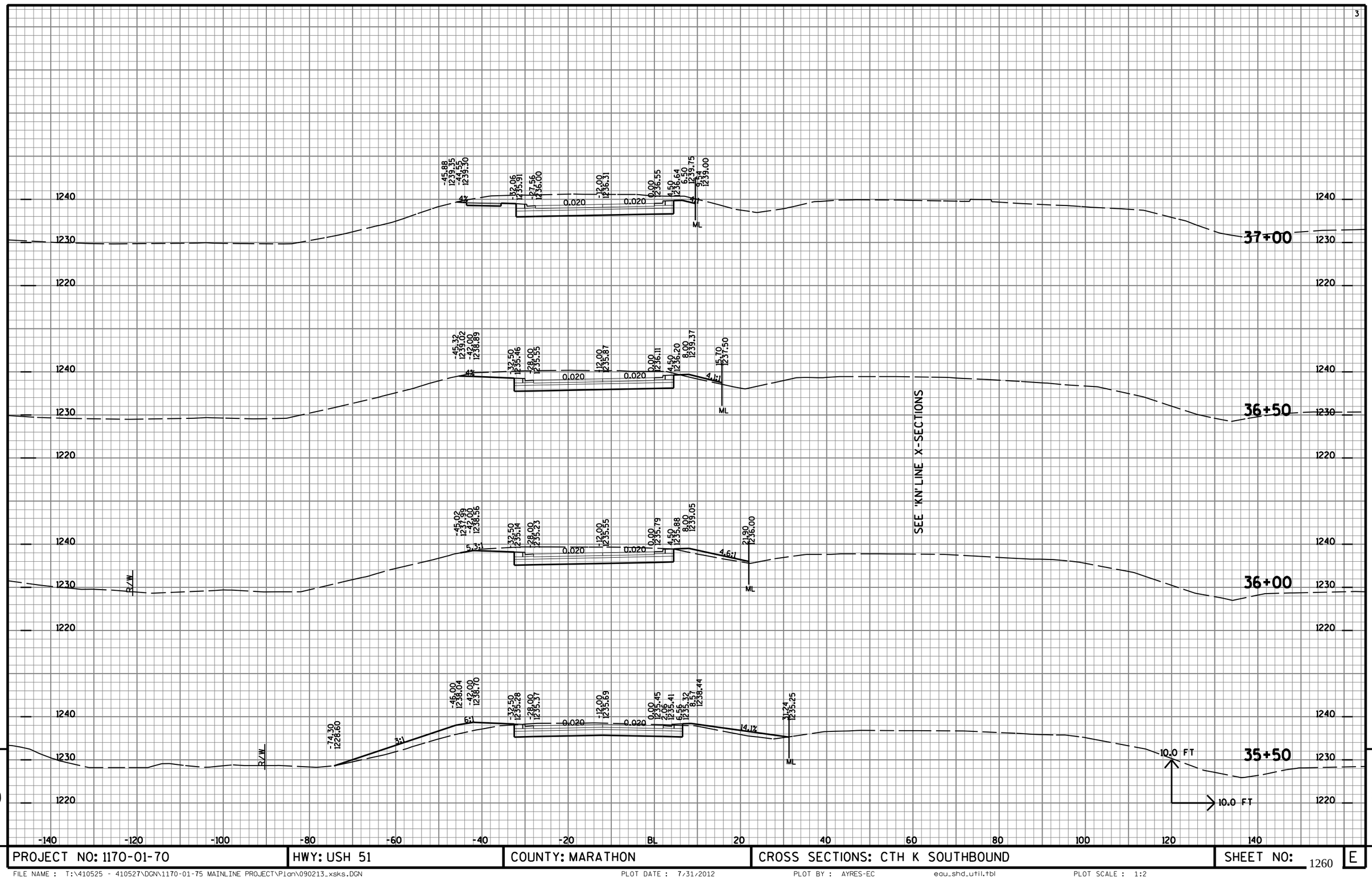
PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: CTH K SOUTHBOUND	SHEET NO: 1258	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090213_xsks.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC eau_shd_util.tbl PLOT SCALE : 1:2



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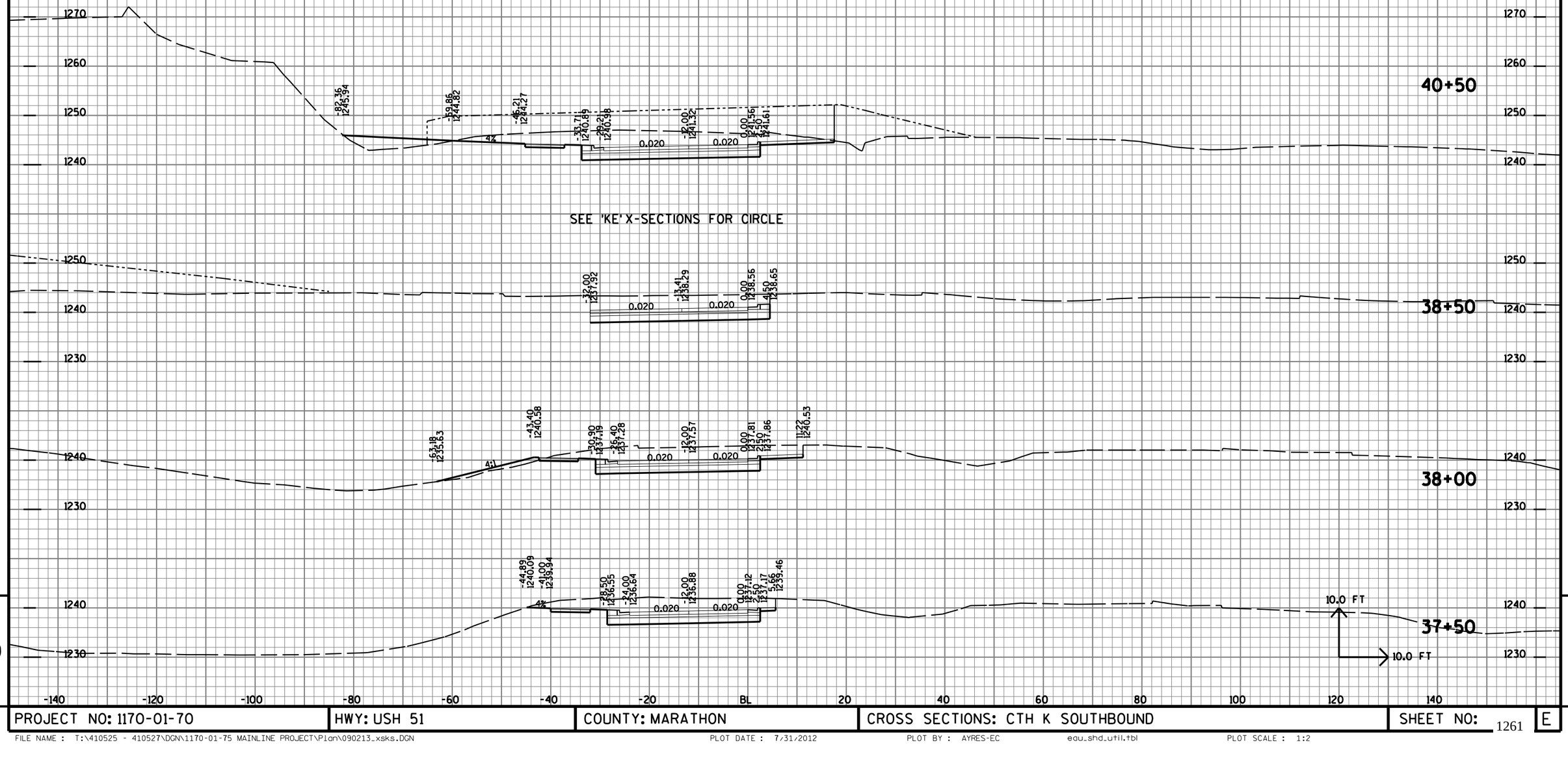
PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: CTH K SOUTHBOUND	SHEET NO: 1259	E



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PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: CTH K SOUTHBOUND	SHEET NO: 1260	E

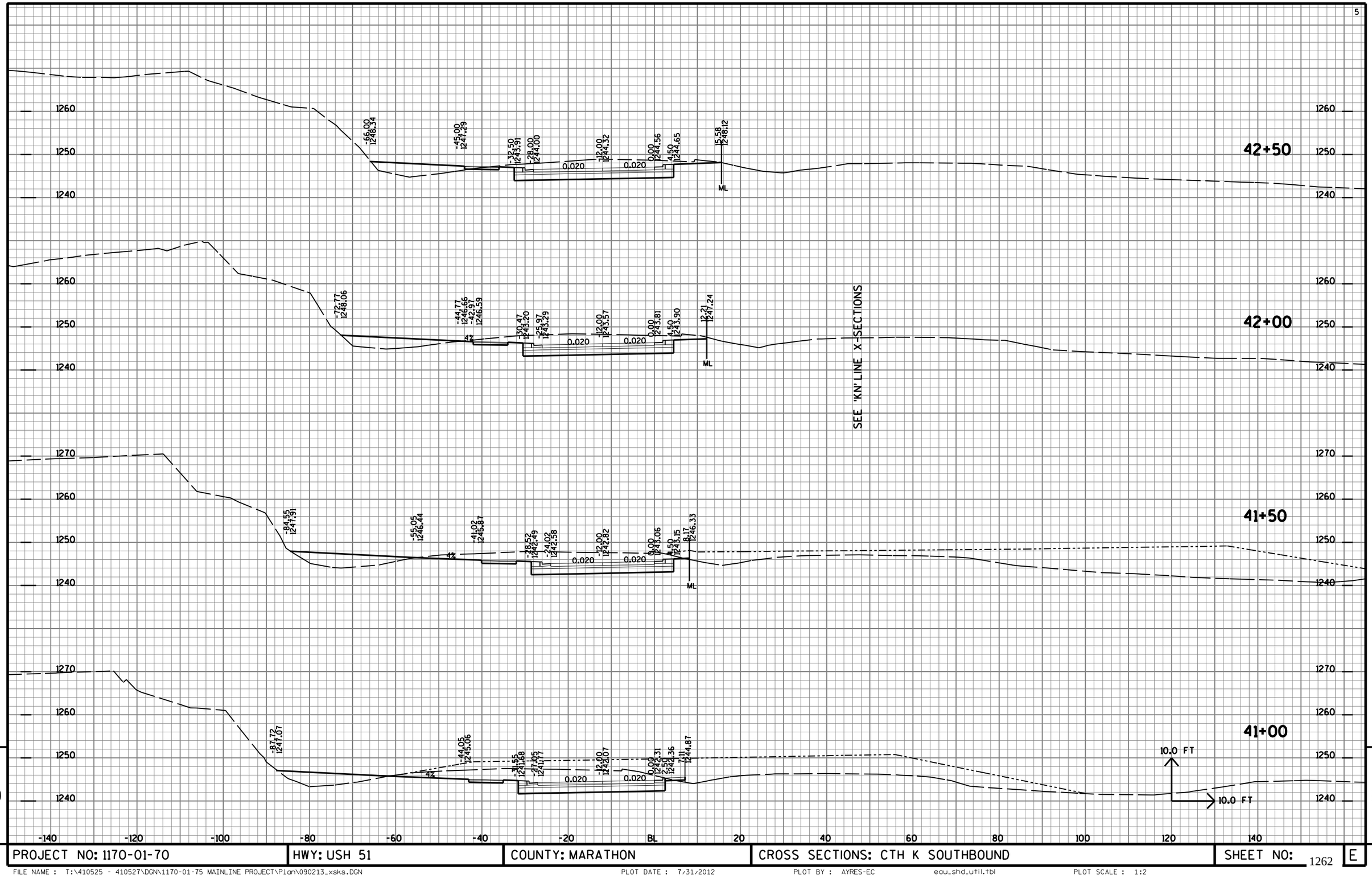


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PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: CTH K SOUTHBOUND	SHEET NO: 1261	E

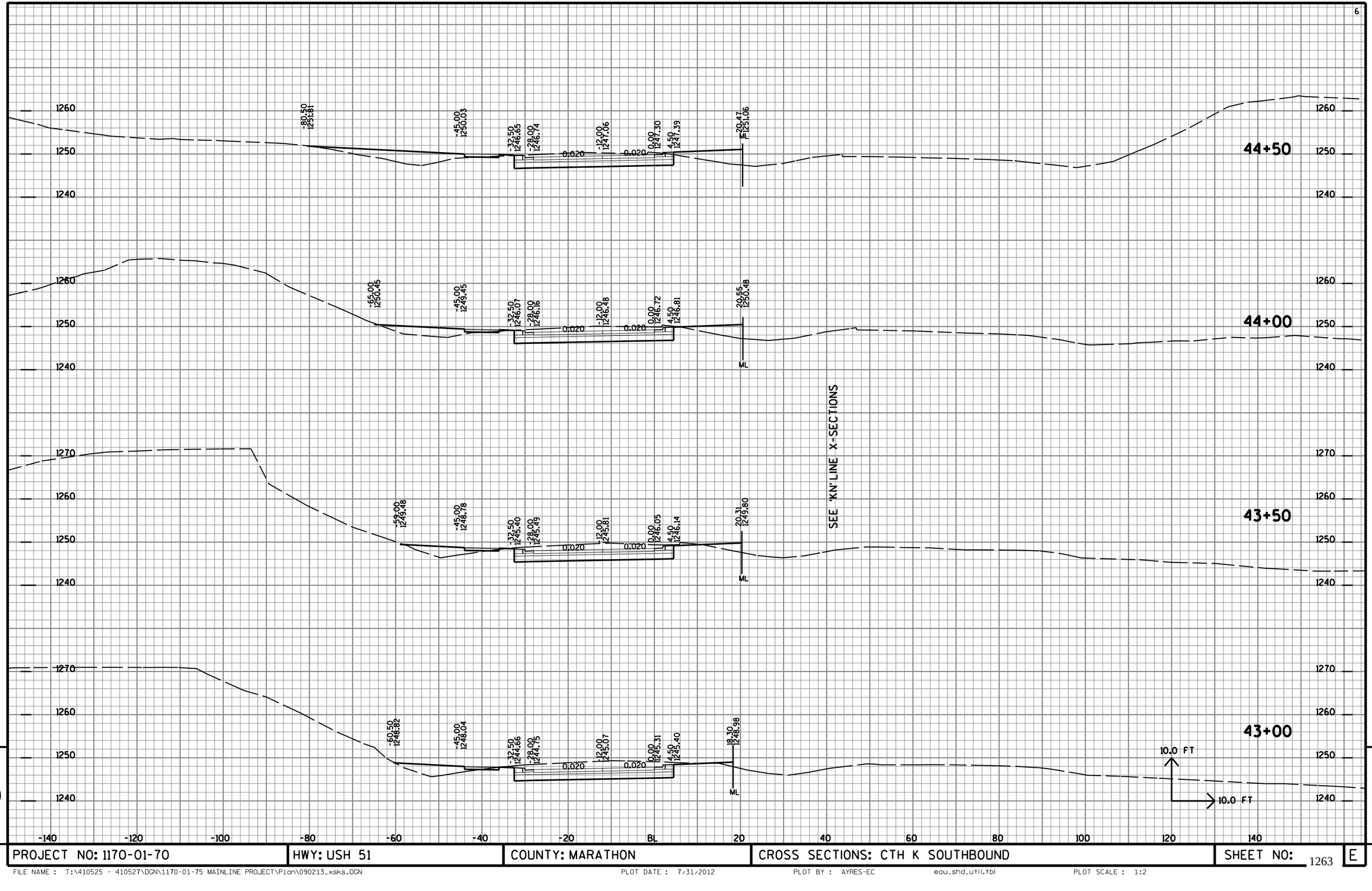
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PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: CTH K SOUTHBOUND	SHEET NO: 1262 E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090213_xsks.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC egu_shd_util.tbl PLOT SCALE : 1:2

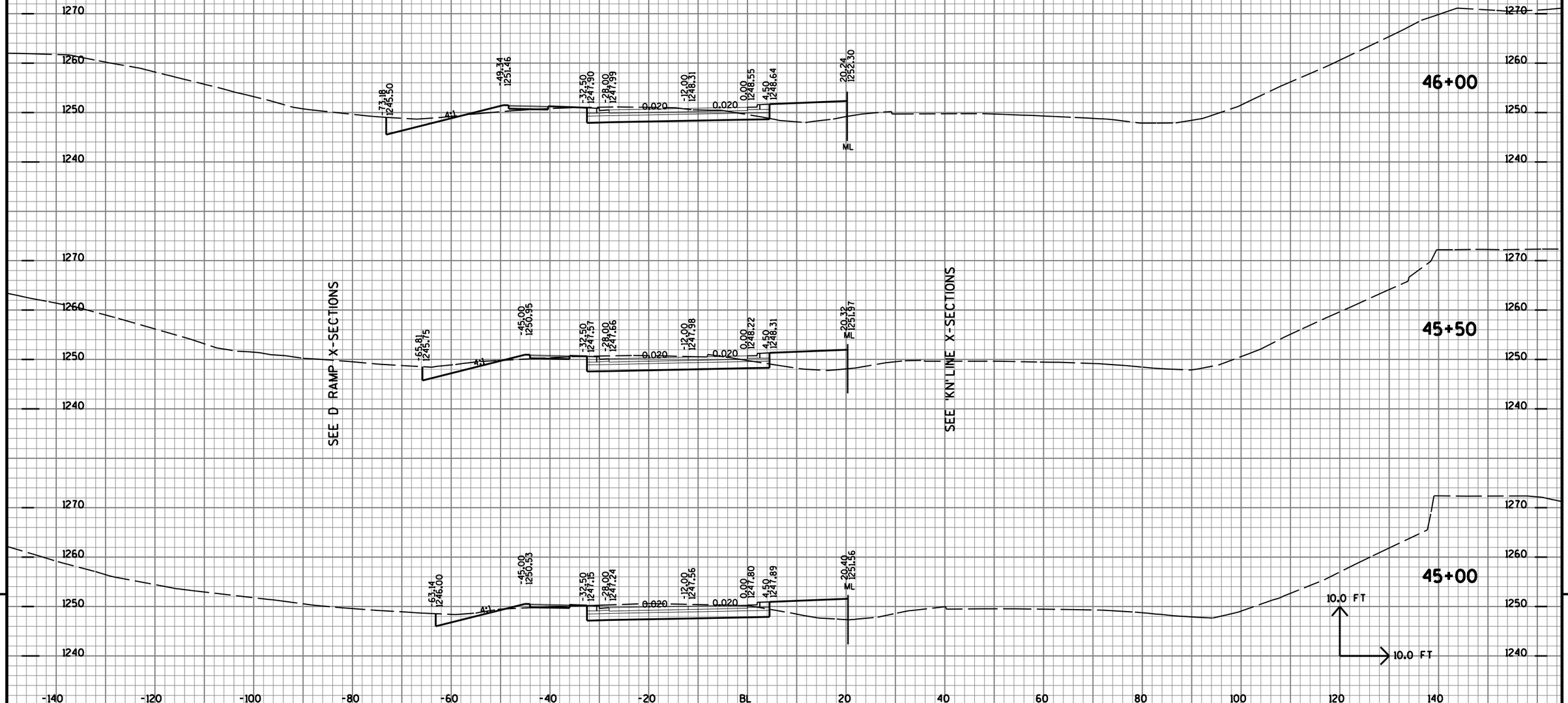


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PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: CTH K SOUTHBOUND	SHEET NO: 1263	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090213_xsks.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC edu_shd_util.tbl PLOT SCALE : 1:2

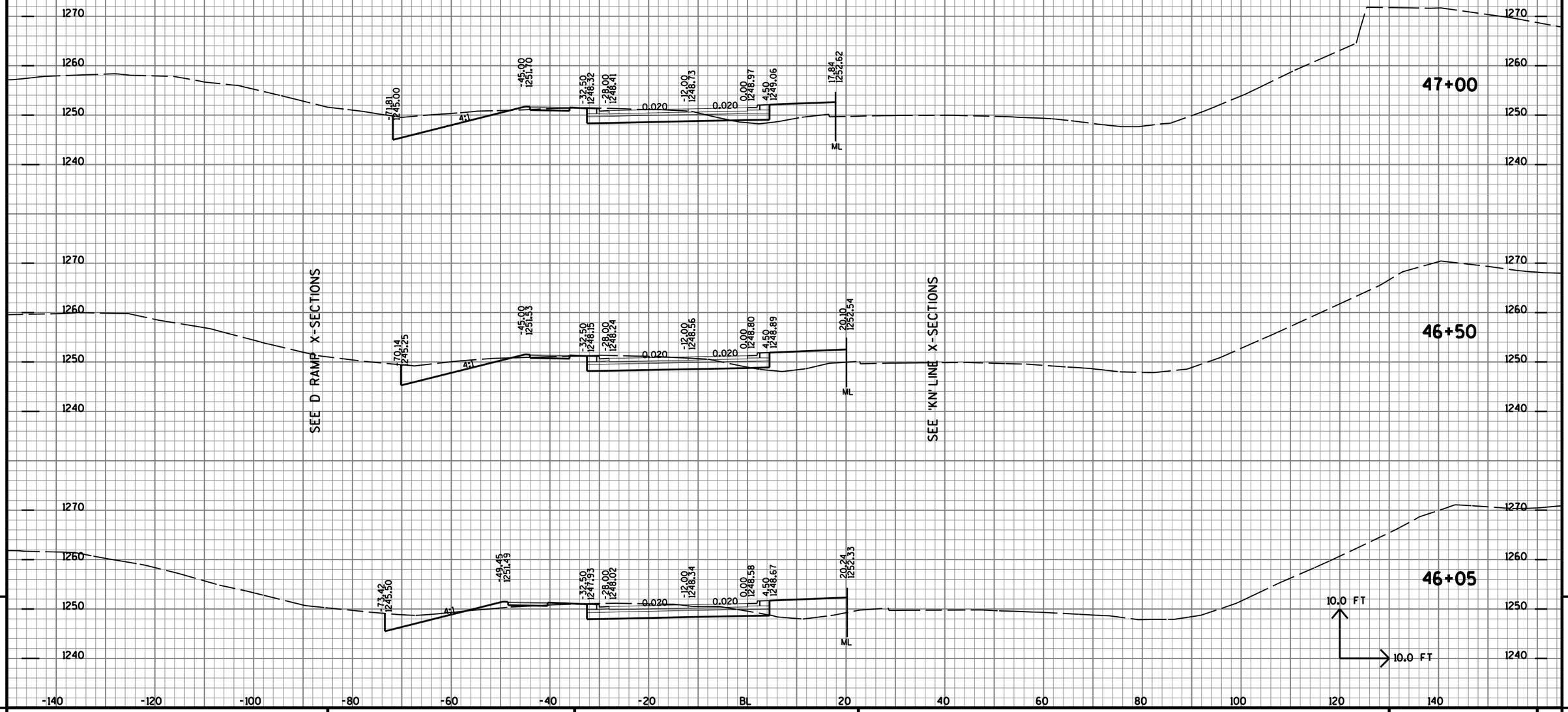


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PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: CTH K SOUTHBOUND	SHEET NO: 1264	E

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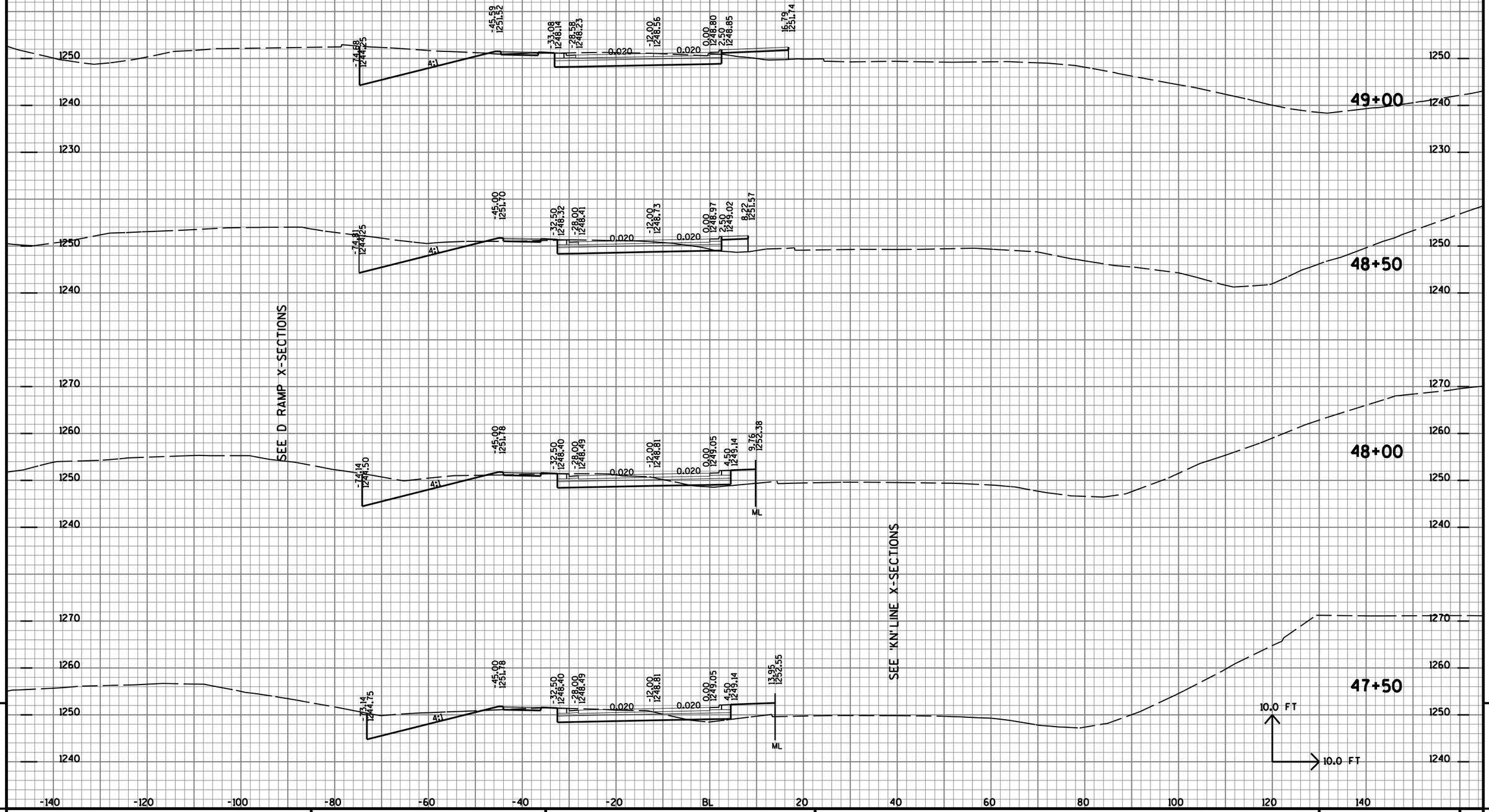
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PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: CTH K SOUTHBOUND	SHEET NO: 1265 E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090213_xsks.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC eau_shd_util.tbl PLOT SCALE : 1:2

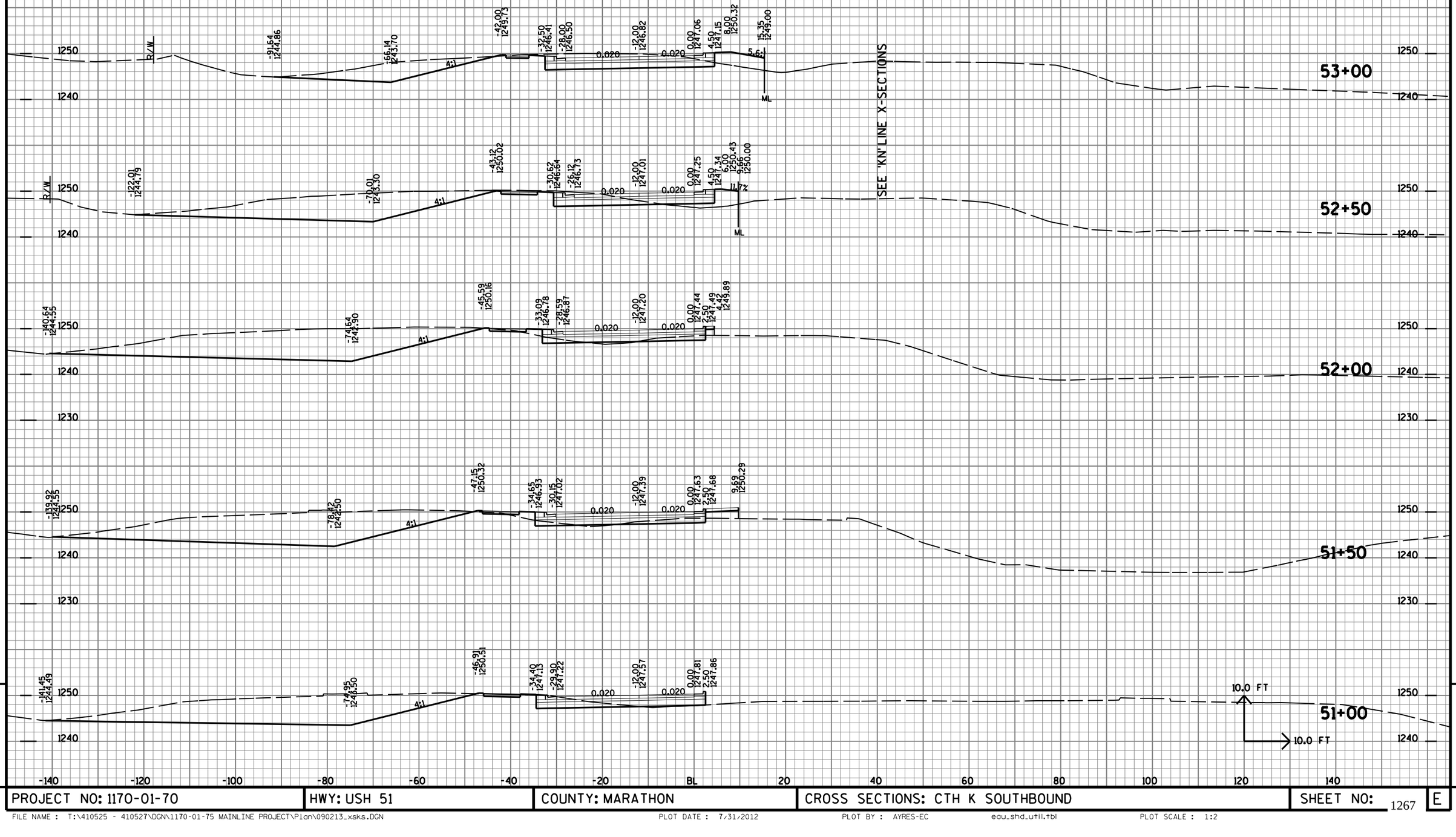
SEE 'KW' X-SECTIONS FOR CIRCLE



PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: CTH K SOUTHBOUND	SHEET NO: 1266 E

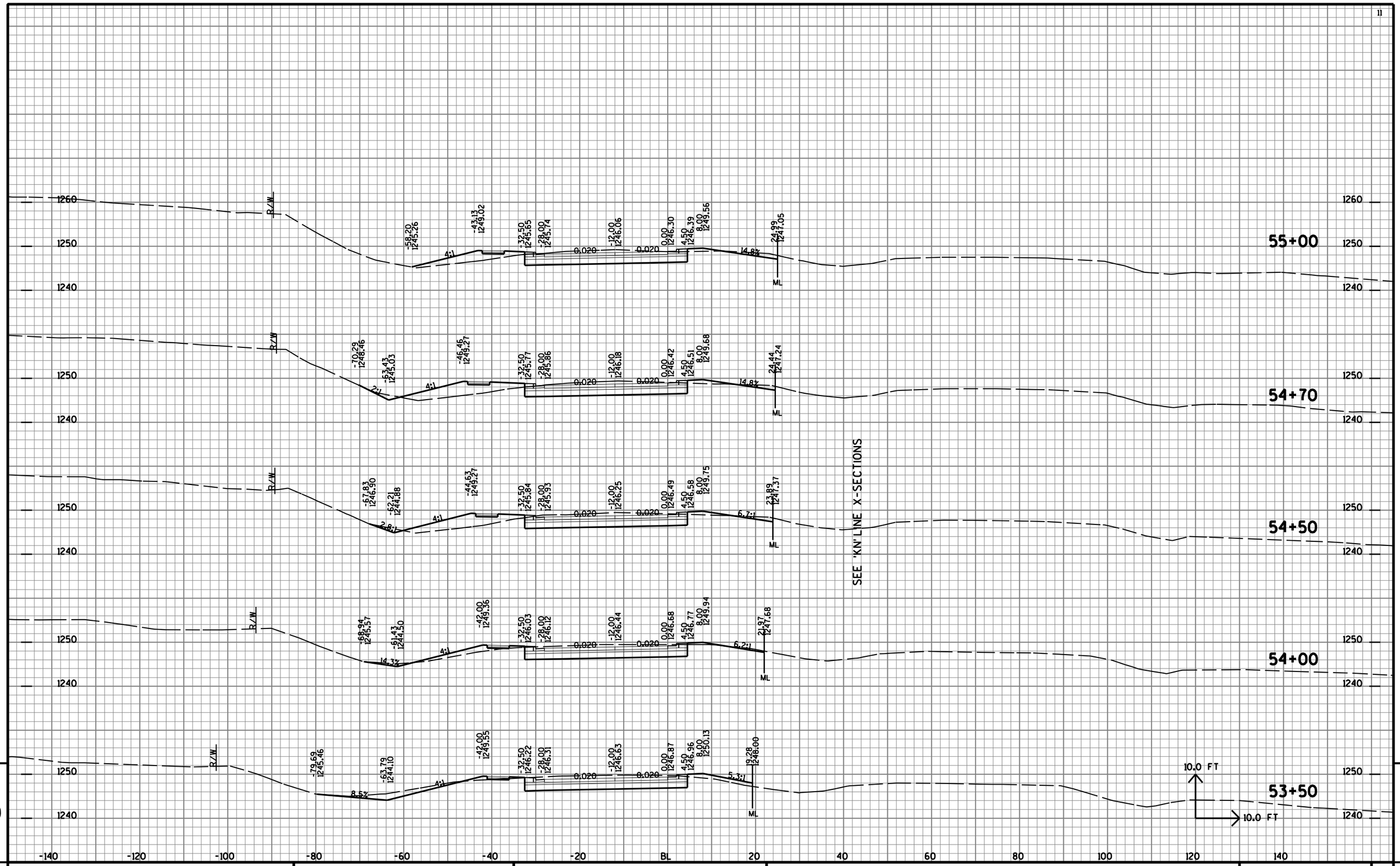
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SEE 'KN' LINE X-SECTIONS



9

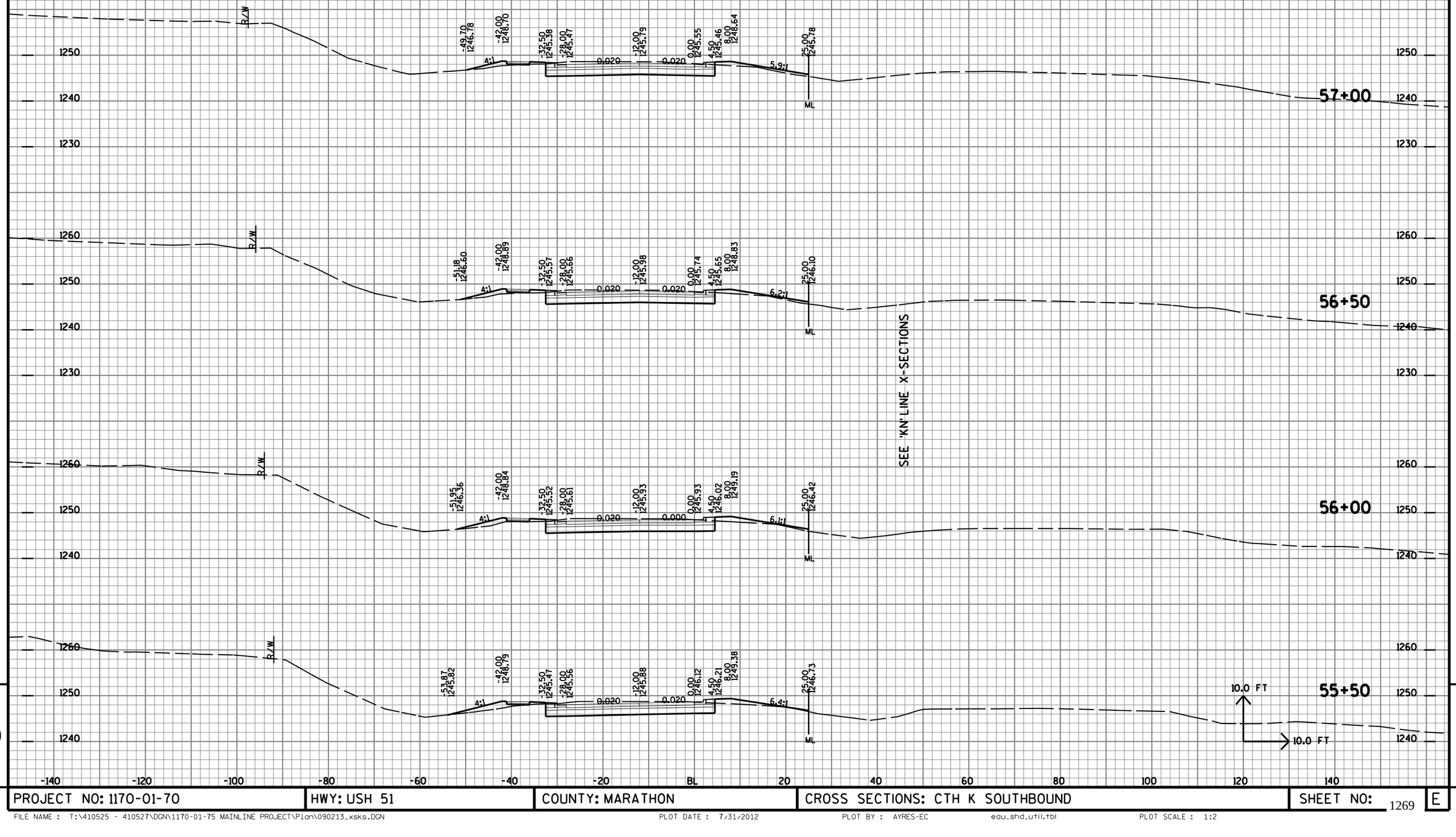
PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: CTH K SOUTHBOUND	SHEET NO: 1267 E



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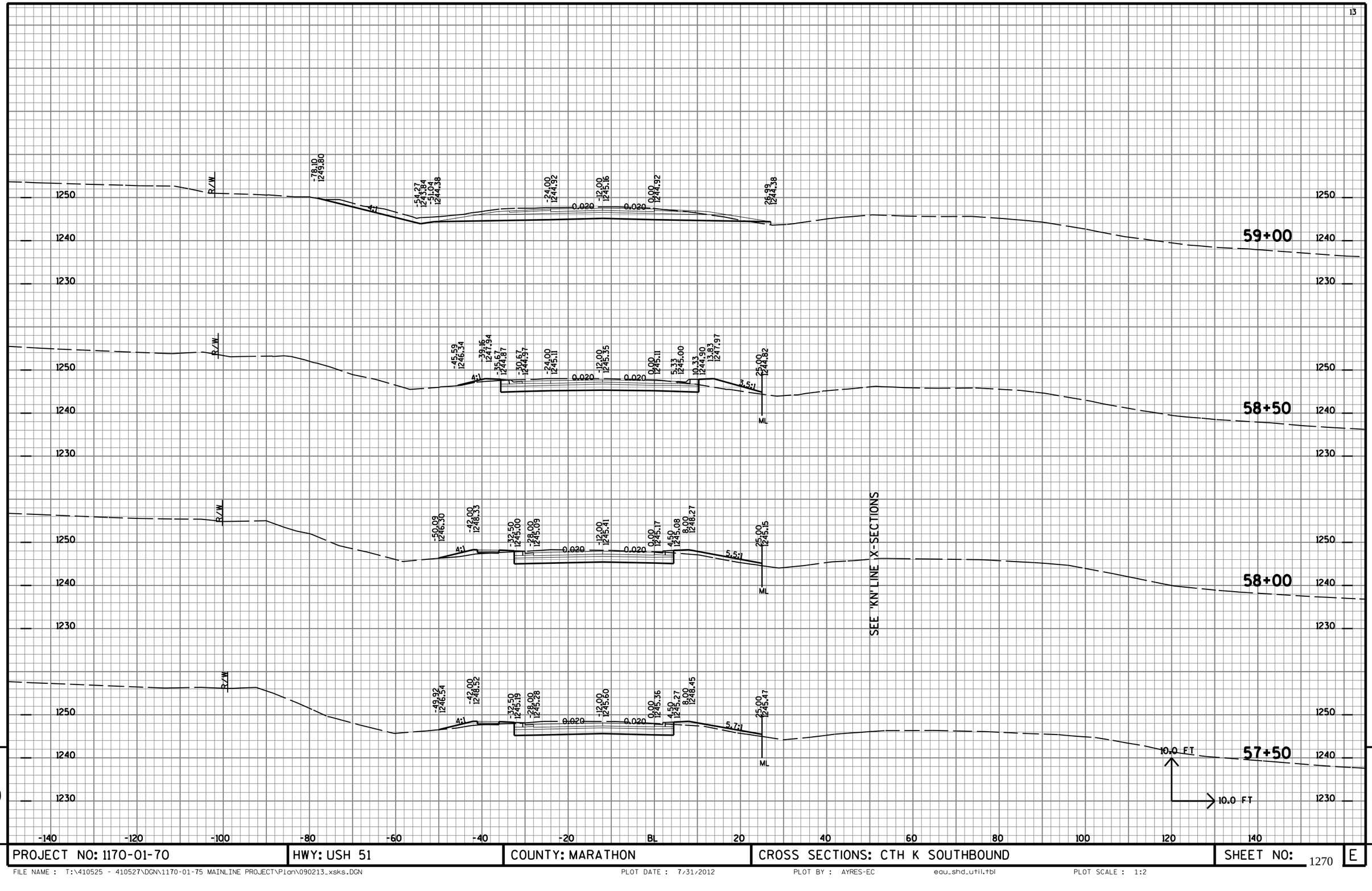
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PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: CTH K SOUTHBOUND	SHEET NO: 1268	E



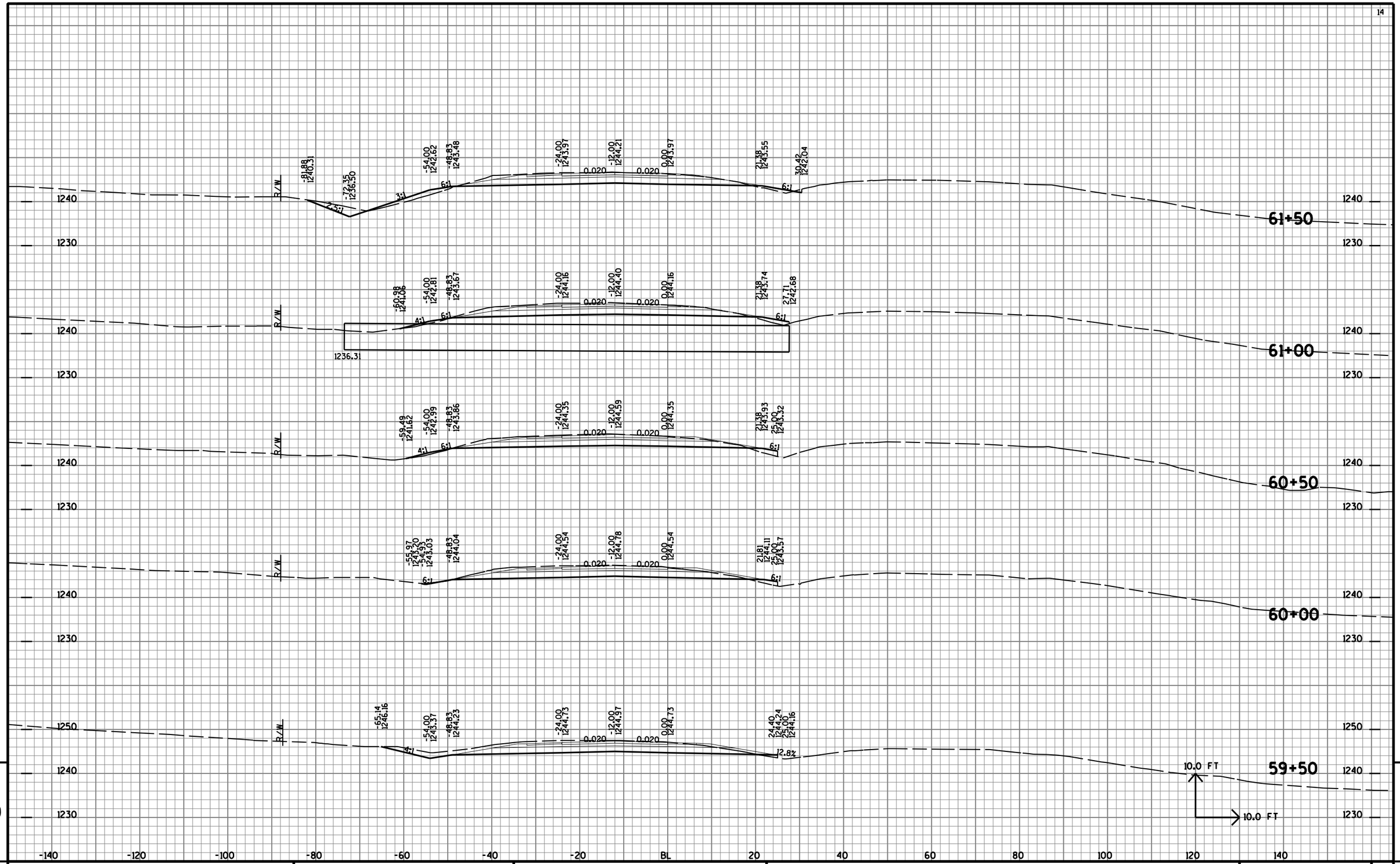
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PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: CTH K SOUTHBOUND	SHEET NO: 1269	E



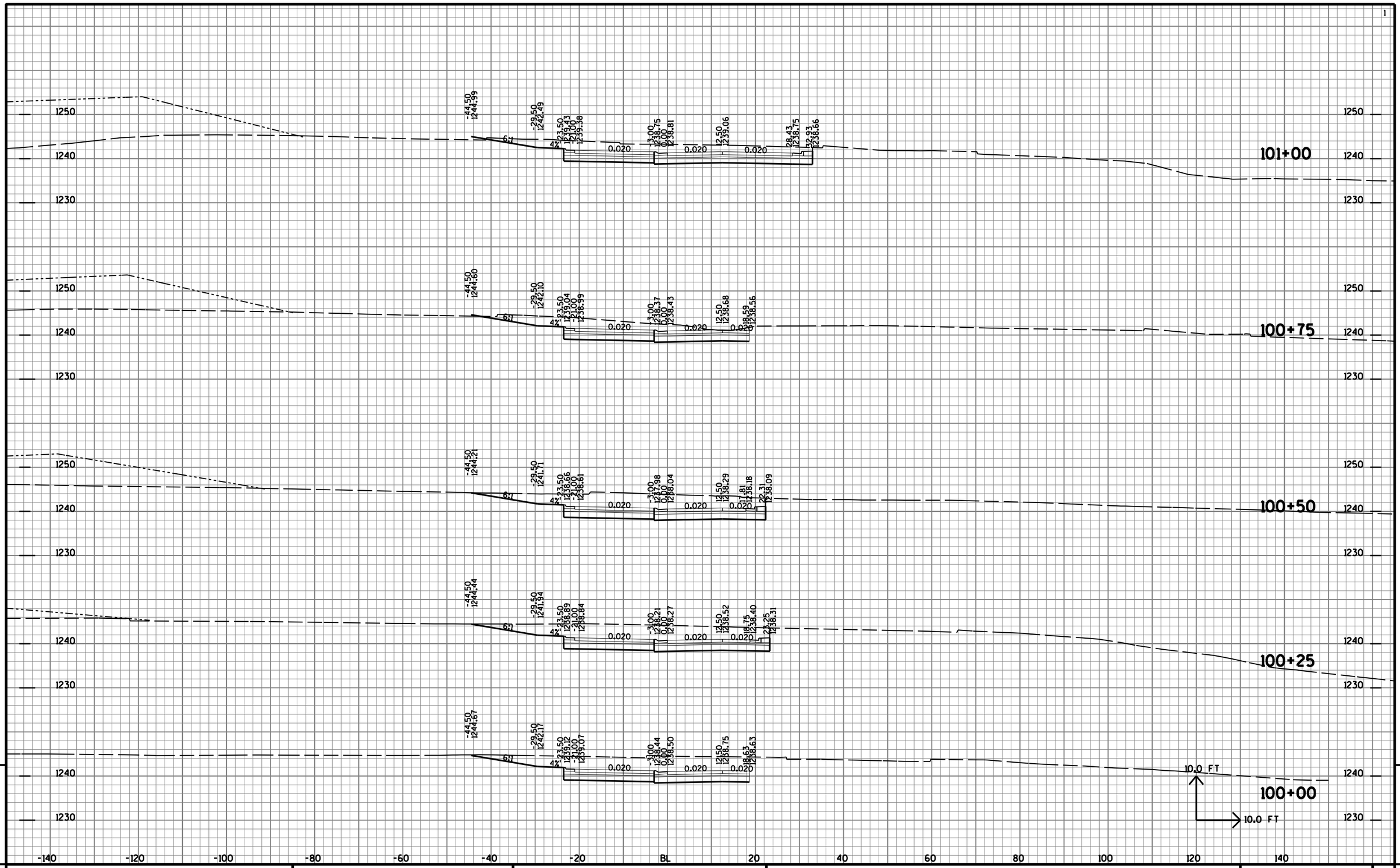
PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: CTH K SOUTHBOUND	SHEET NO: 1270	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090213_xsks.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC edu_shd_util.tbl PLOT SCALE : 1:2



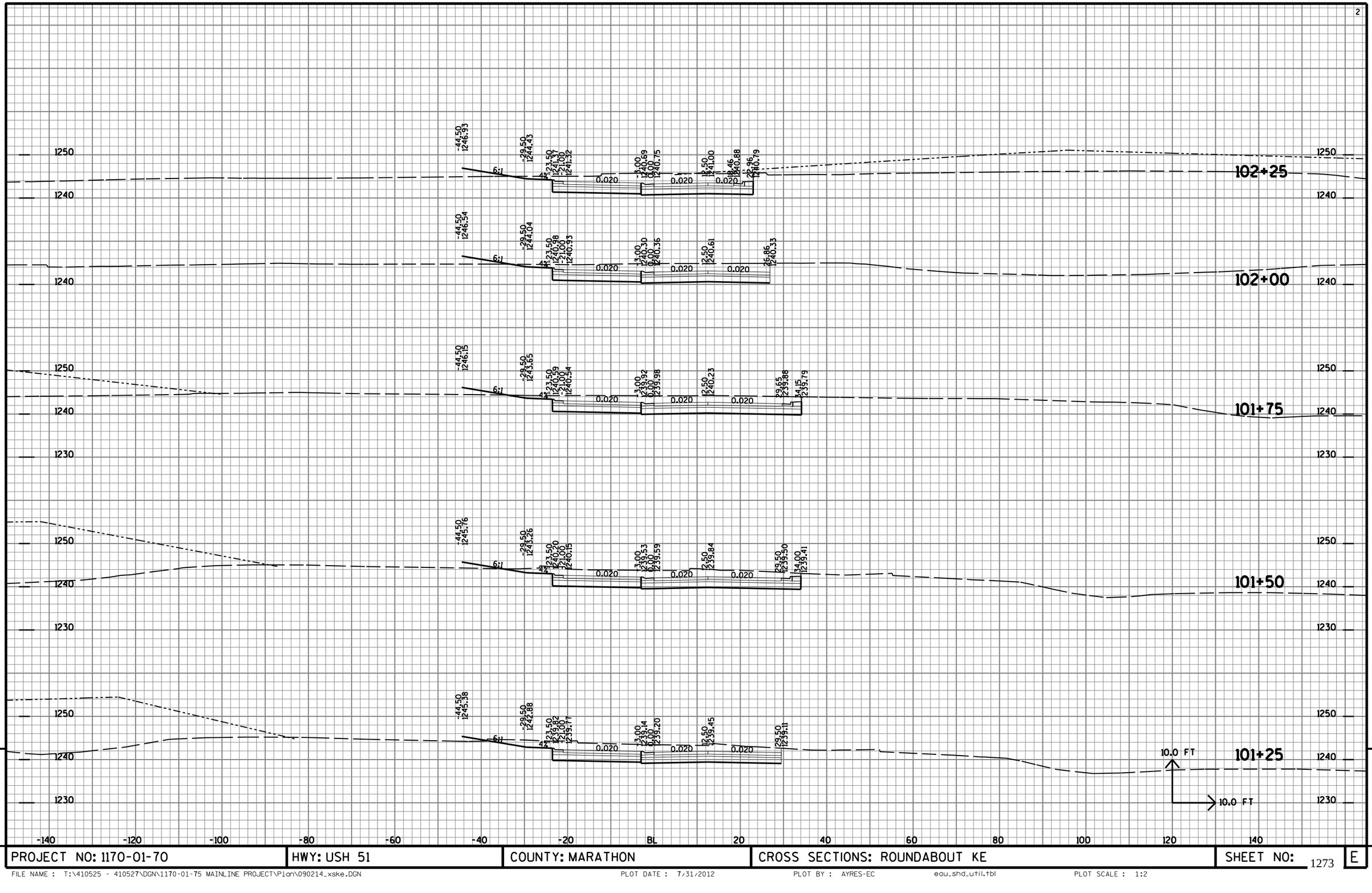
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FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090213_xsks.DGN PLOT DATE : 8/1/2012 PLOT BY : AYRES-EC equ_shd_util.tbl PLOT SCALE : 1:2



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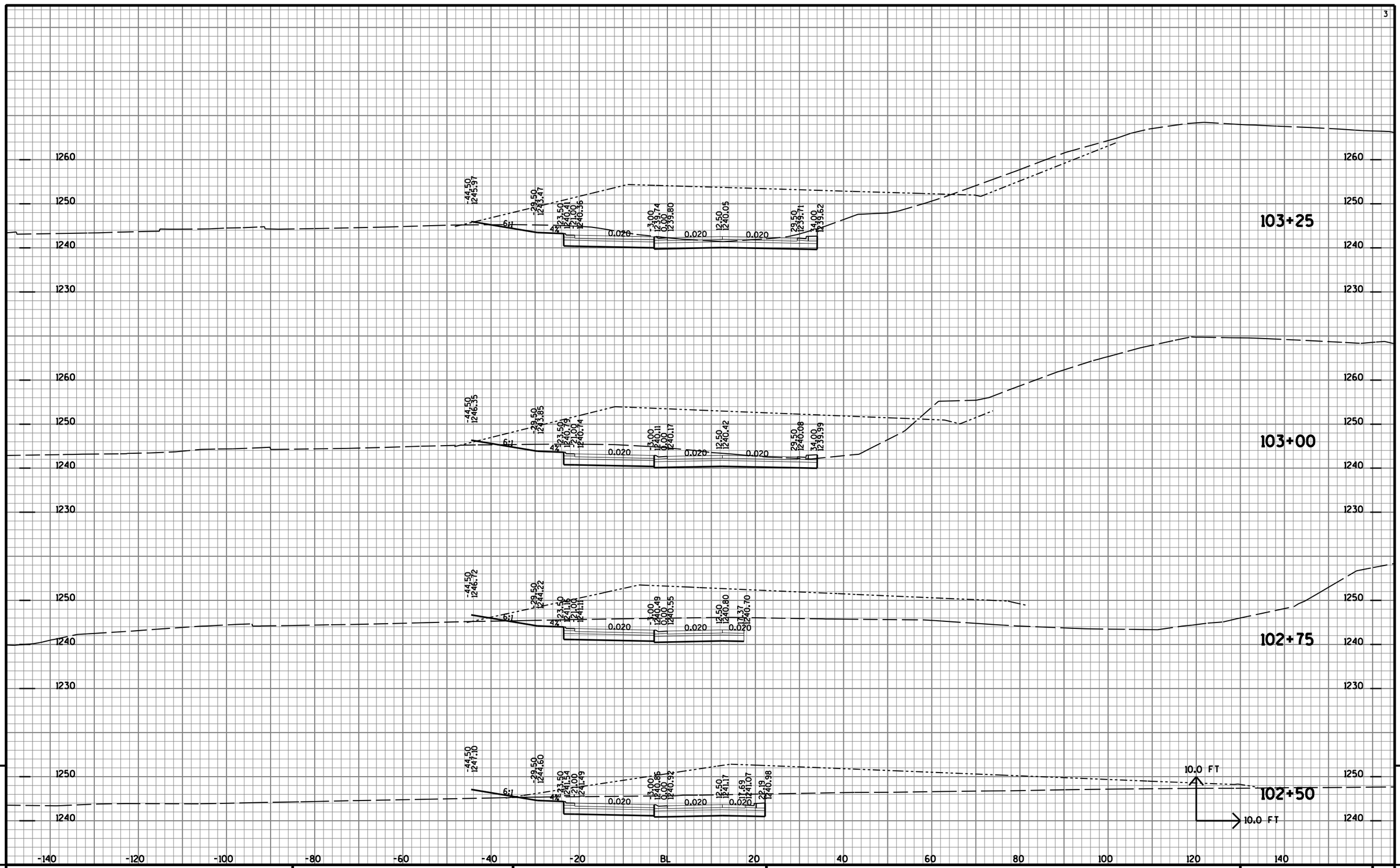
PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: ROUNDABOUT KE	SHEET NO: 1272	E



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PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: ROUNDABOUT KE	SHEET NO: 1273	E

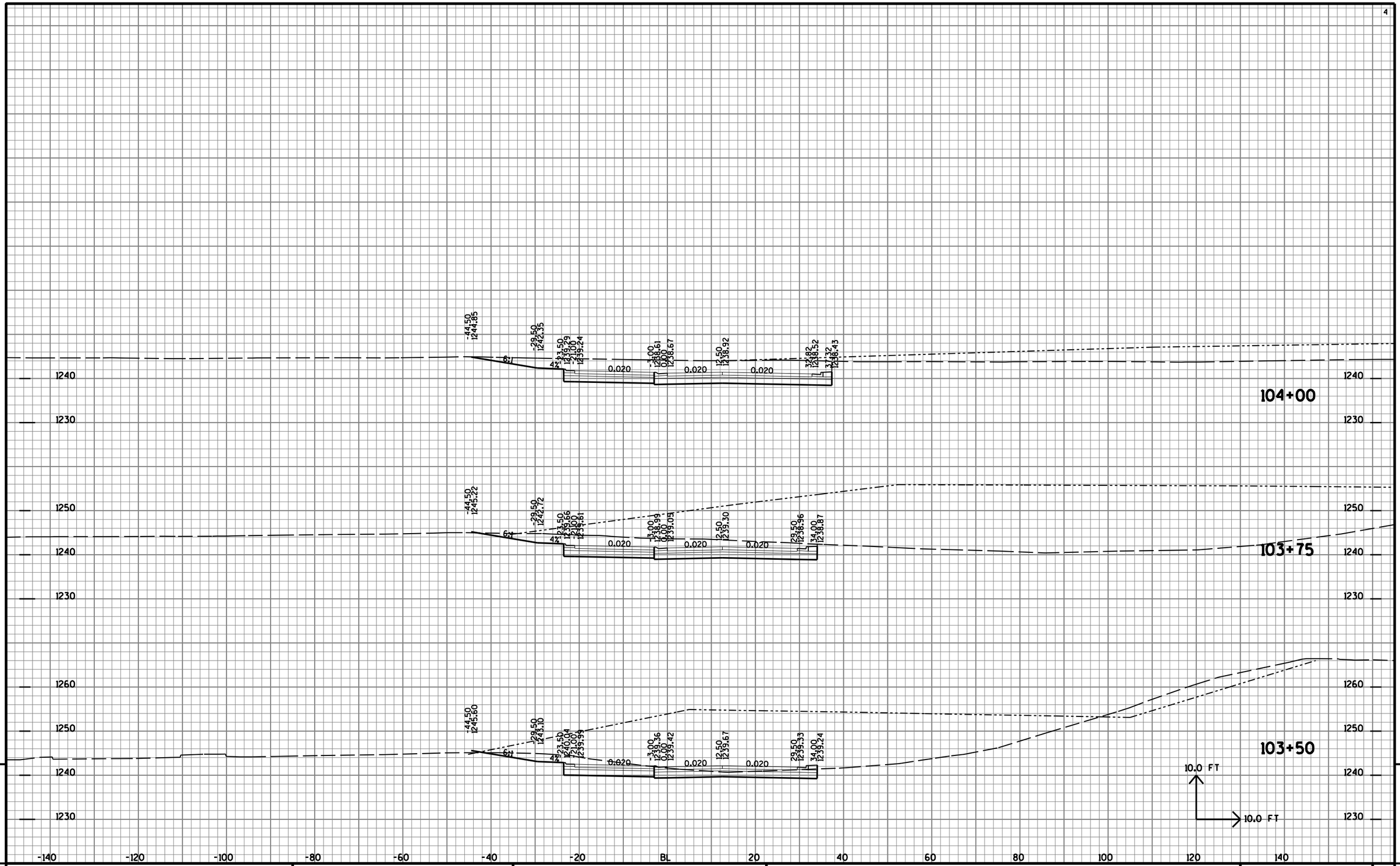


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PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: ROUNDABOUT KE	SHEET NO: 1274	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090214_xske.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC edu_shd_util.tbl PLOT SCALE : 1:2

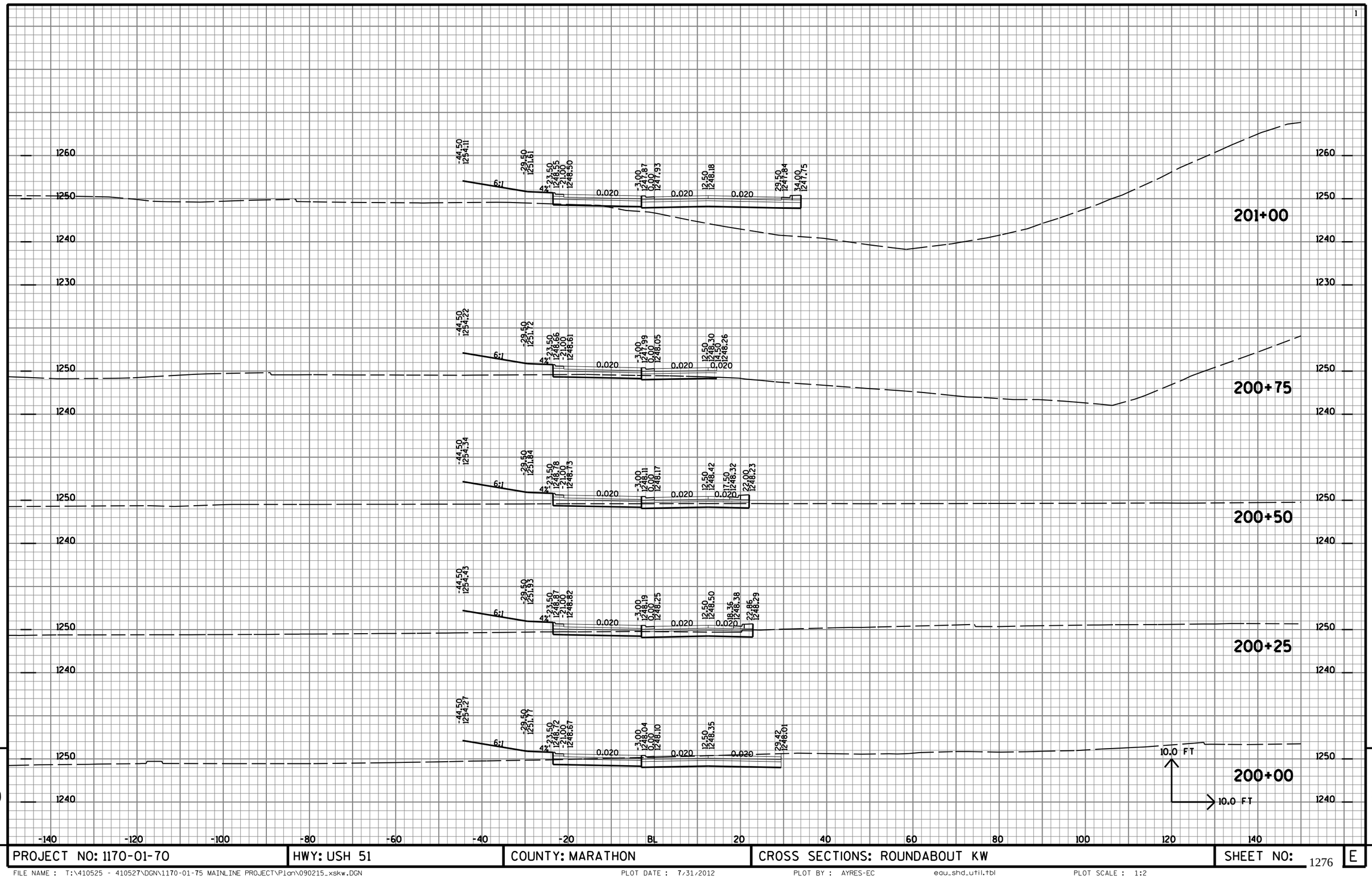


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PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: ROUNDABOUT KE	SHEET NO: 1275	E

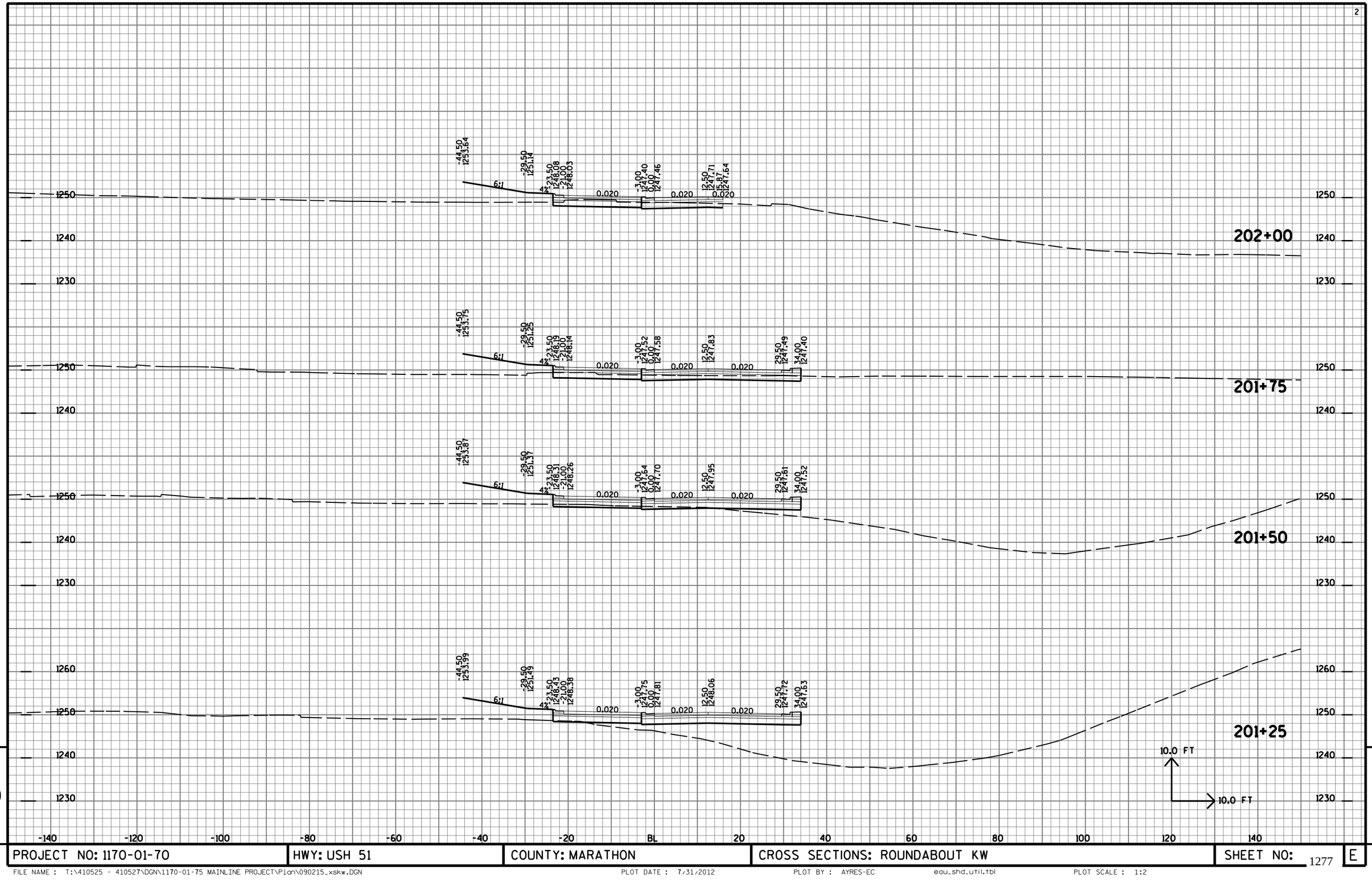
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PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: ROUNDABOUT KW	SHEET NO: 1276	E

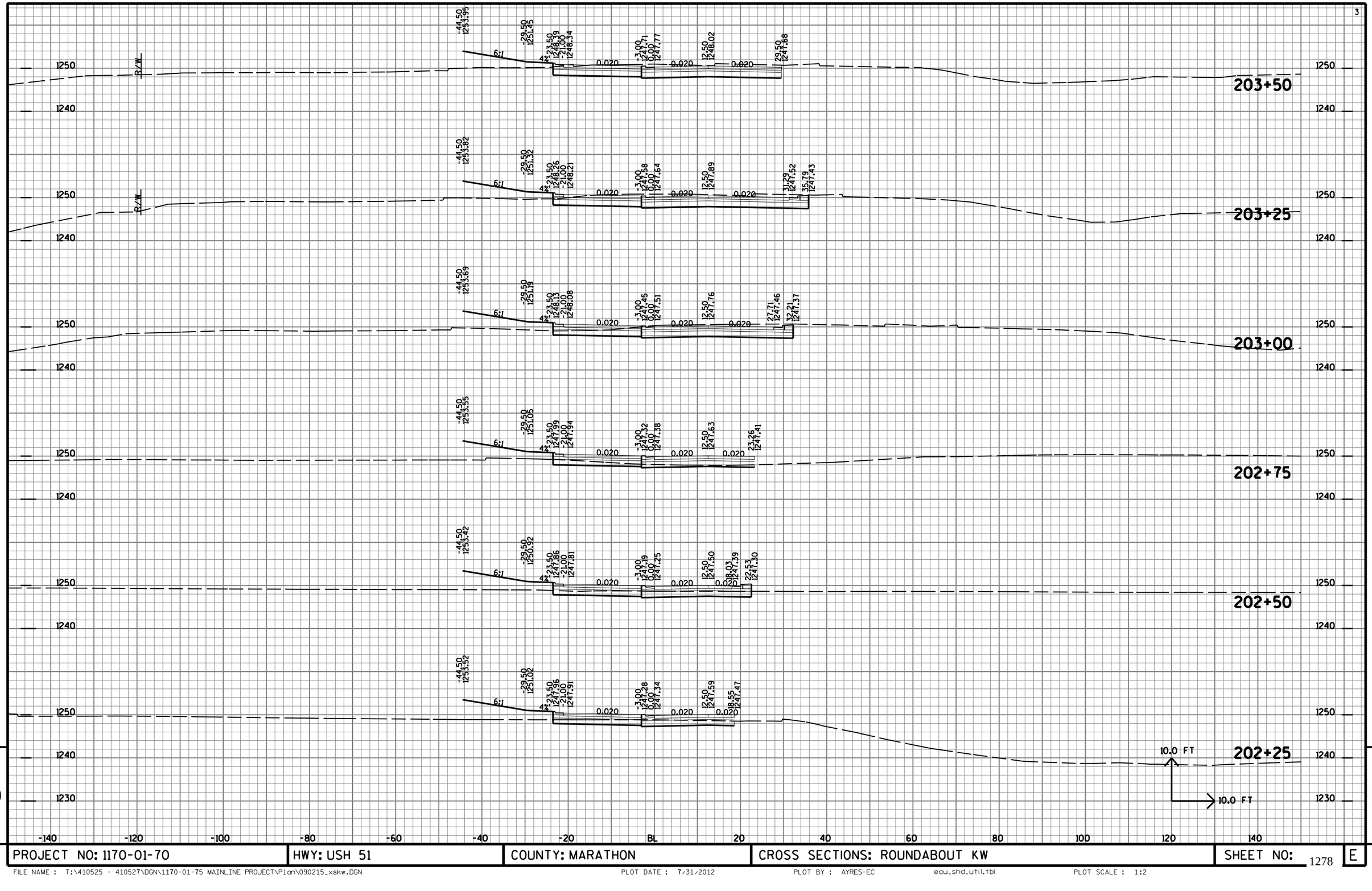


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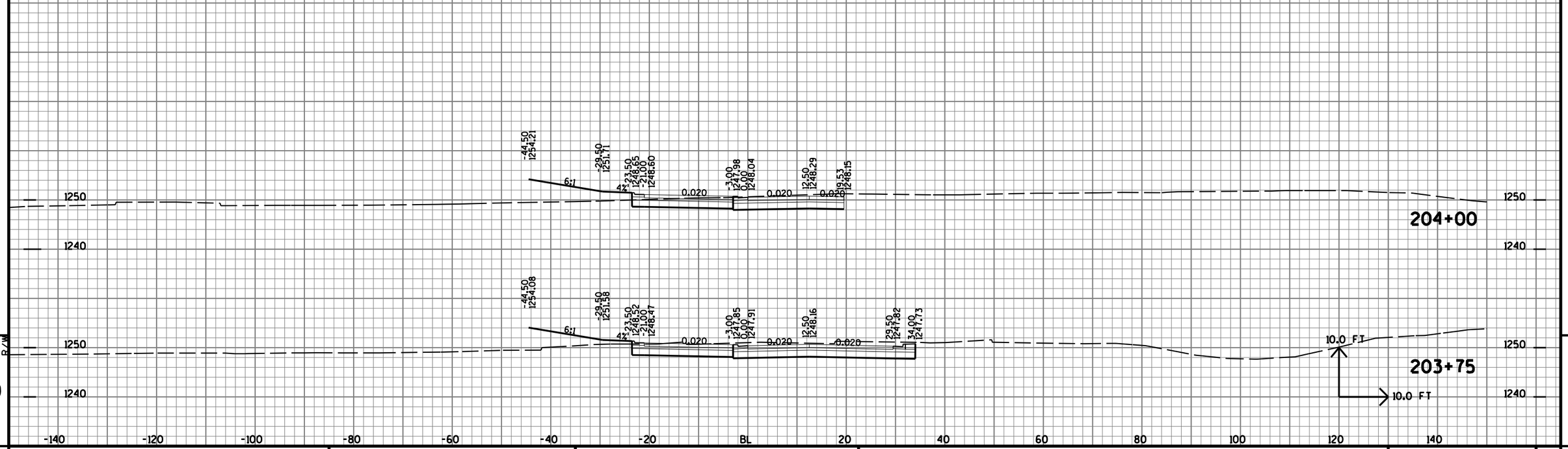
PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: ROUNDABOUT KW	SHEET NO: 1277	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090215_xskw.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC edu_shd_util.tbl PLOT SCALE : 1:2

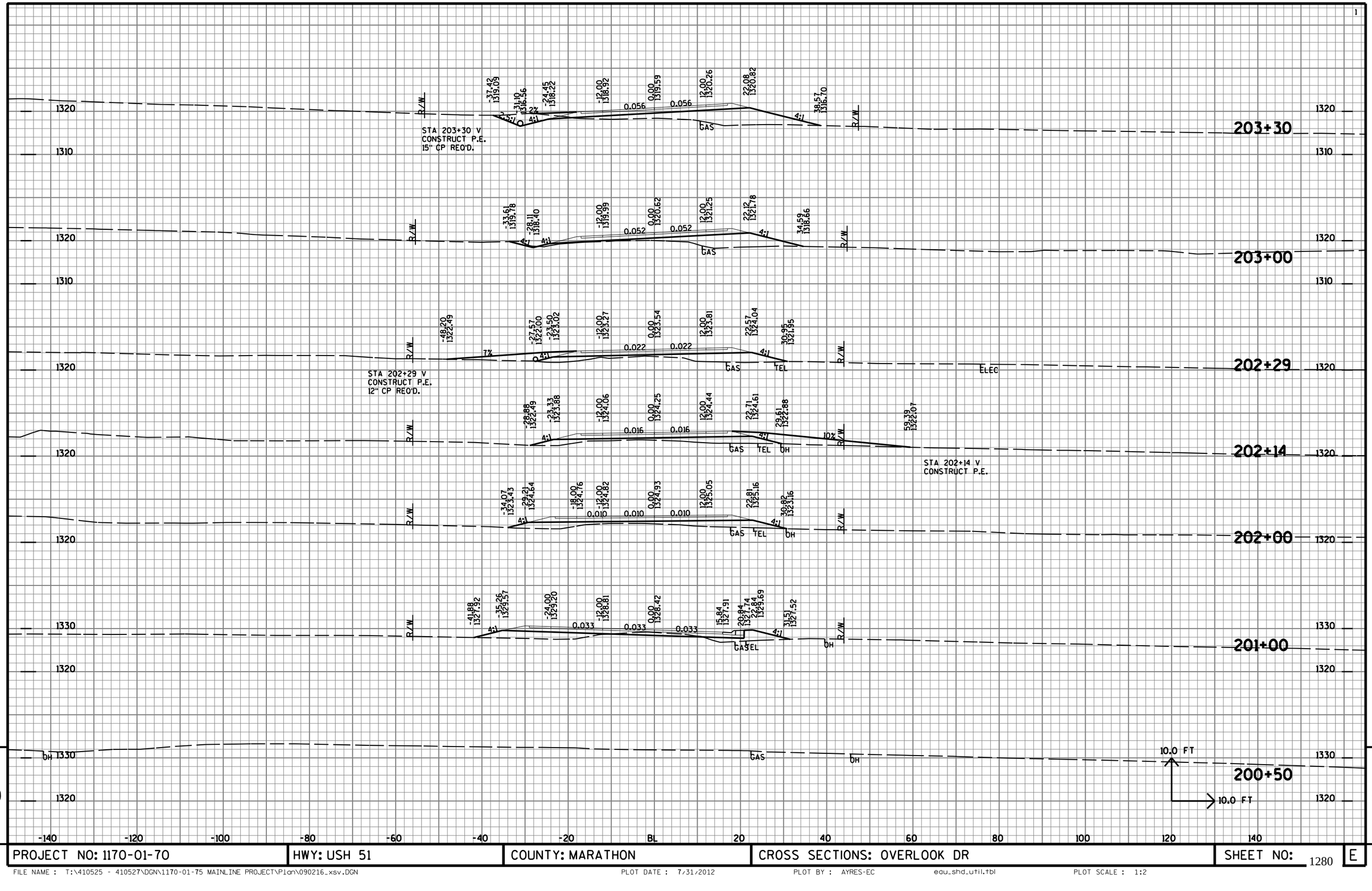


PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: ROUNDABOUT KW	SHEET NO: 1278	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090215_xskw.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC edu_shd_util.tbl PLOT SCALE : 1:2



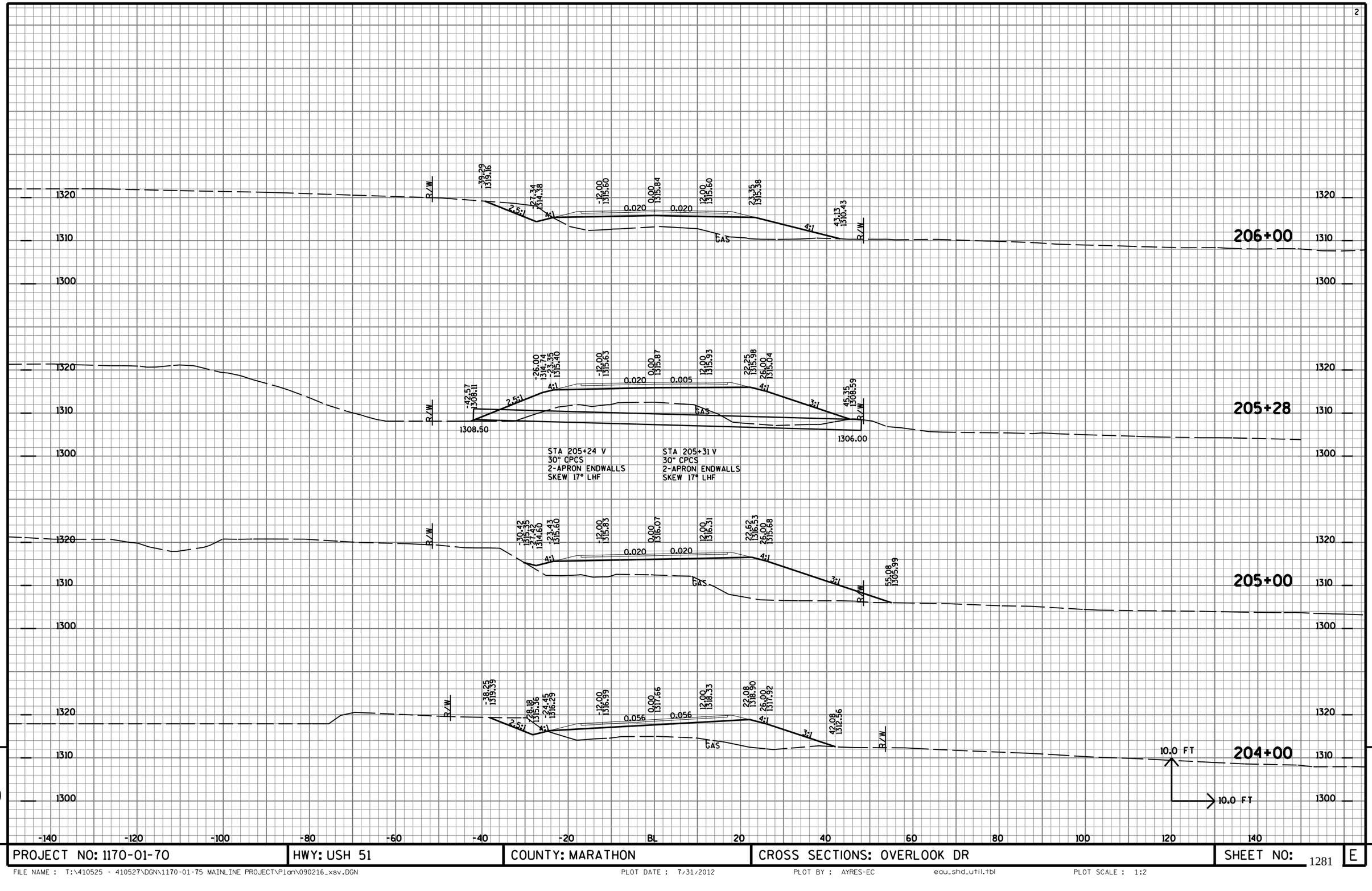
PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: ROUNDABOUT KW	SHEET NO: 1279 E



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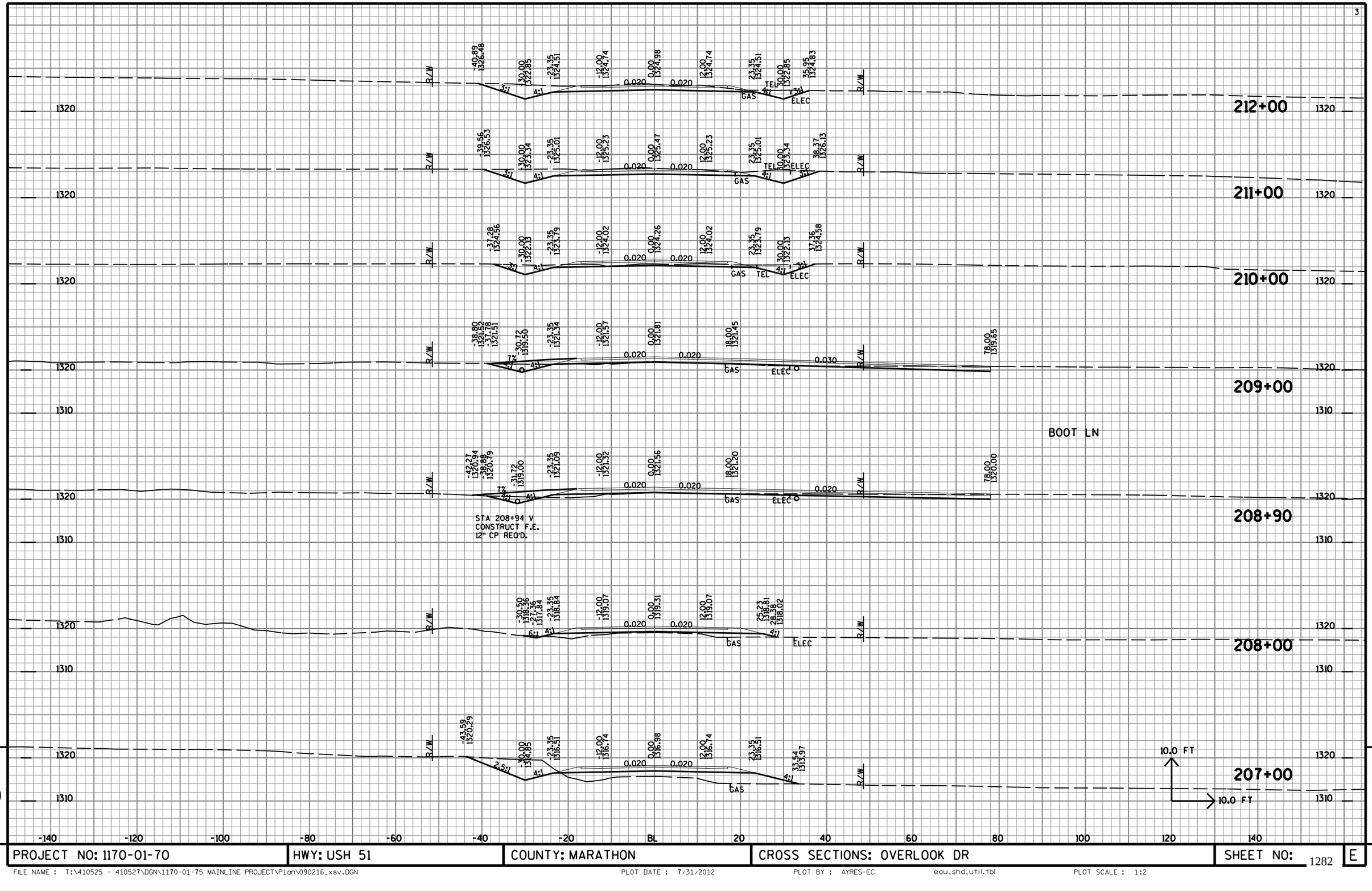
PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: OVERLOOK DR	SHEET NO: 1280	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090216_xsv.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC edu_shd_util.tbl PLOT SCALE : 1:2
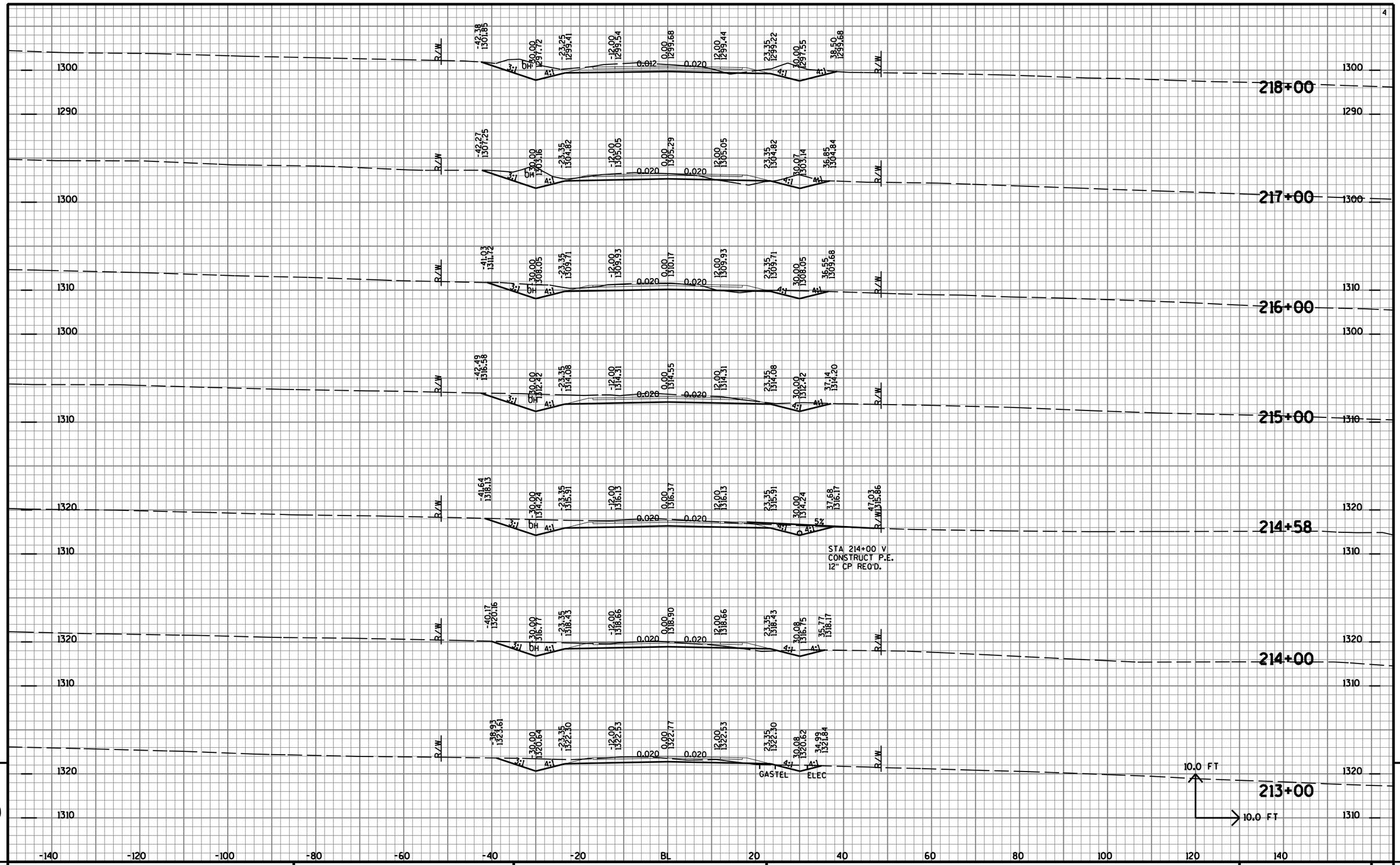


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PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: OVERLOOK DR	SHEET NO: 1281 E



PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: OVERLOOK DR	SHEET NO: 1282 E

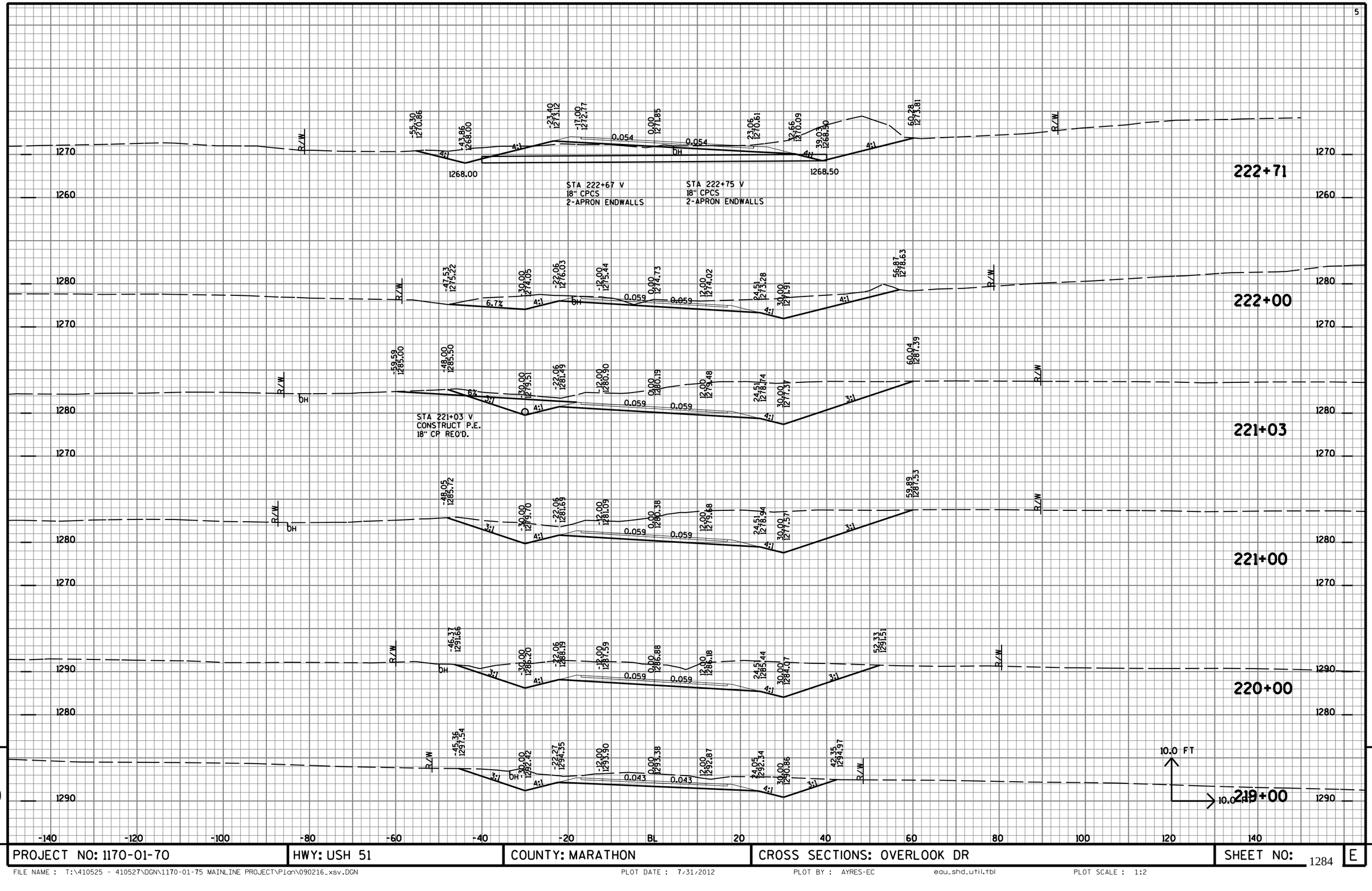
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PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: OVERLOOK DR	SHEET NO: 1283	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090216_xsv.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC edu_shd_util.tbl PLOT SCALE : 1:2



PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: OVERLOOK DR	SHEET NO: 1284	E

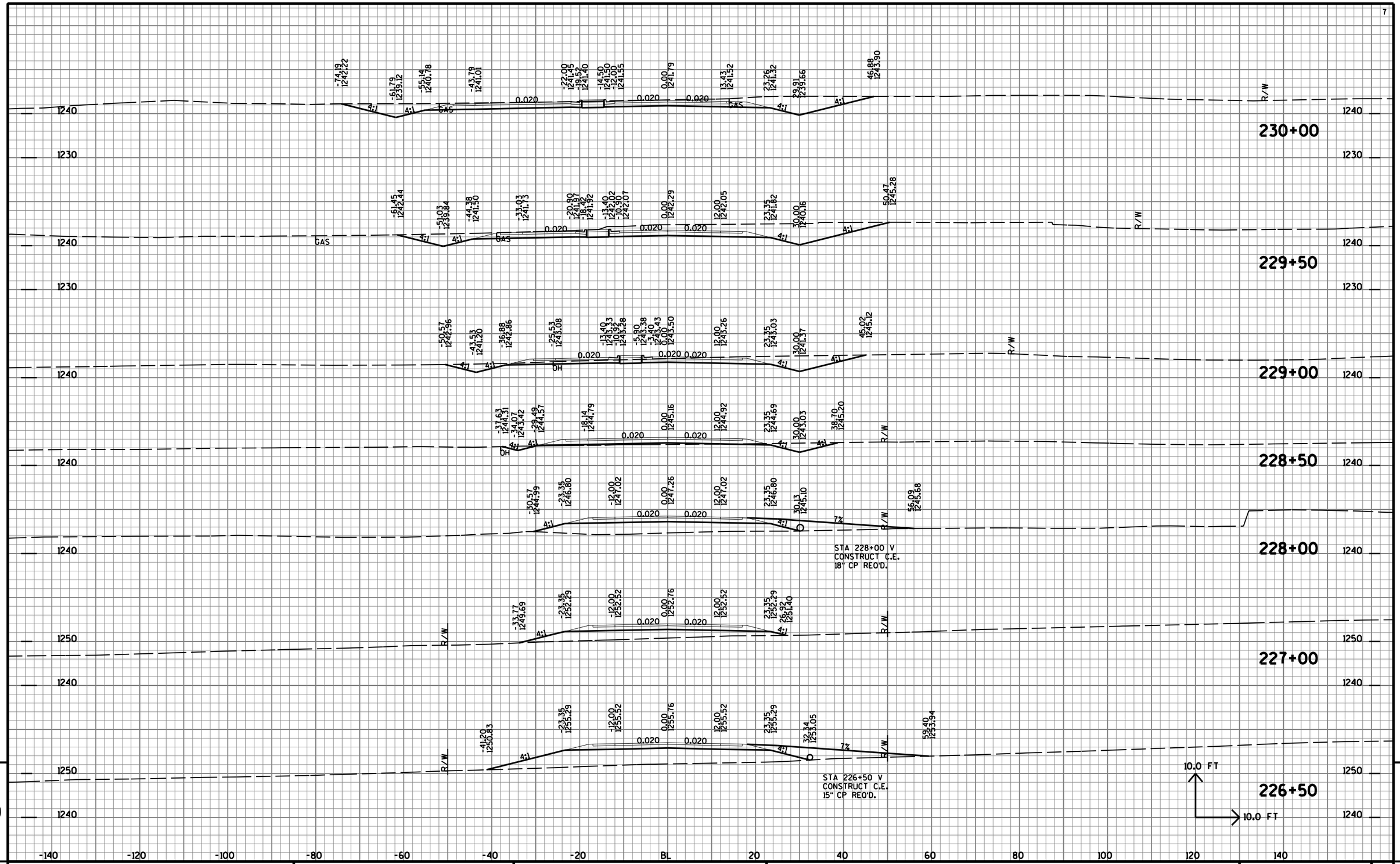


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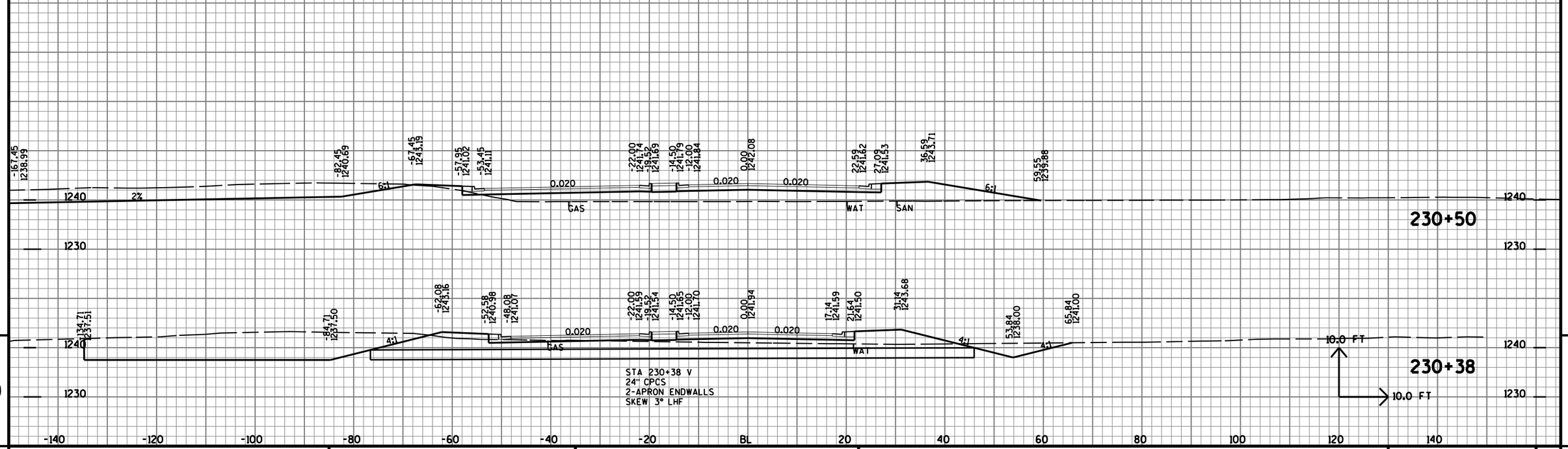
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PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: OVERLOOK DR	SHEET NO: 1285	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090216_xsv.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC edu_shd_util.tbl PLOT SCALE : 1:2



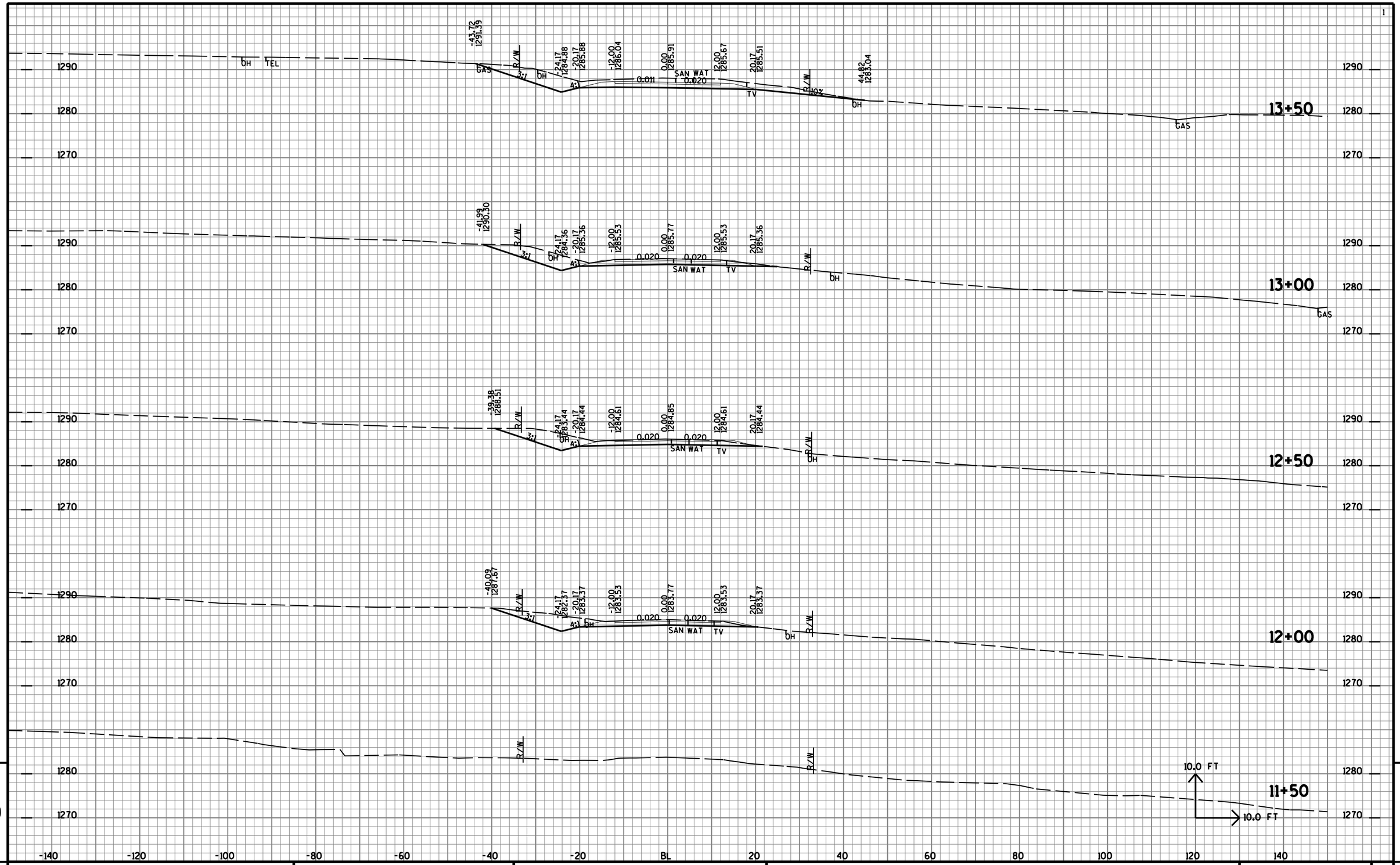
PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: OVERLOOK DR	SHEET NO: 1286	E



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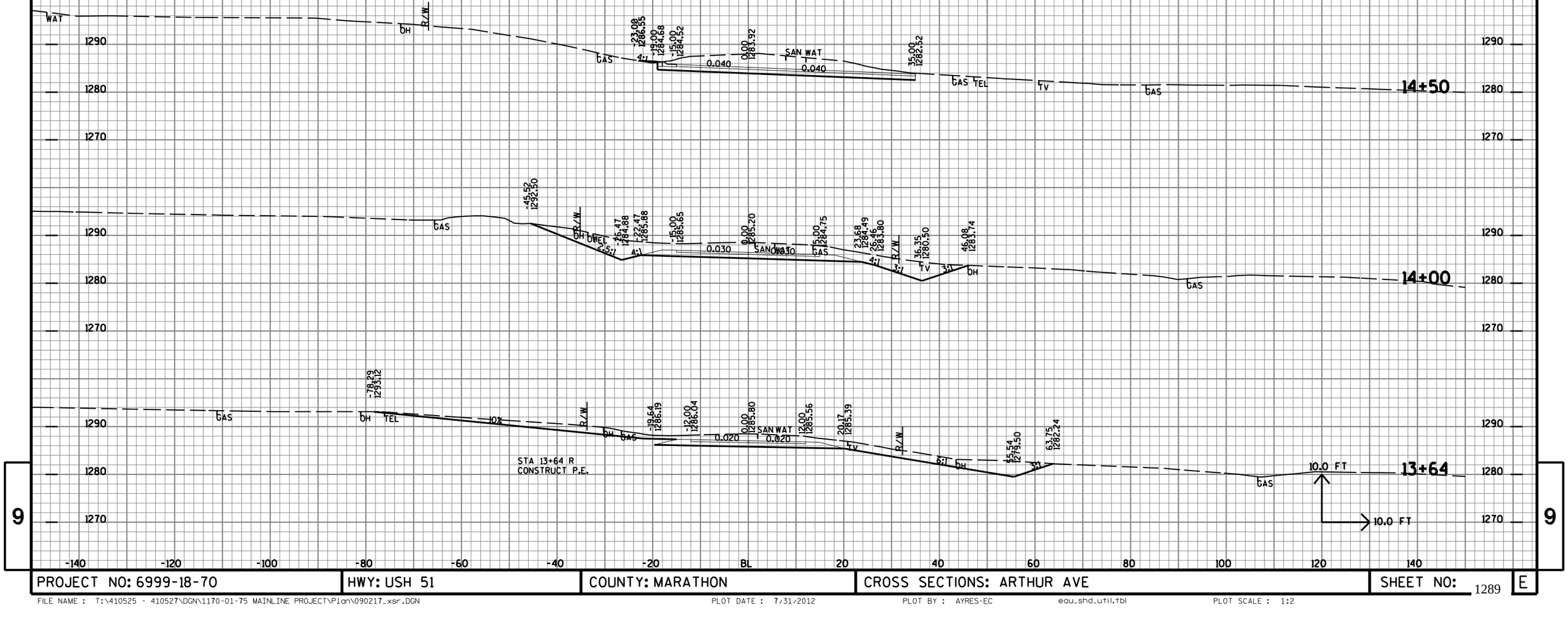
PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: OVERLOOK DR	SHEET NO: 1287	E



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PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: ARTHUR AVE	SHEET NO: 1288 E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090217_xsr.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC edu_shd_util.tbl PLOT SCALE : 1:2

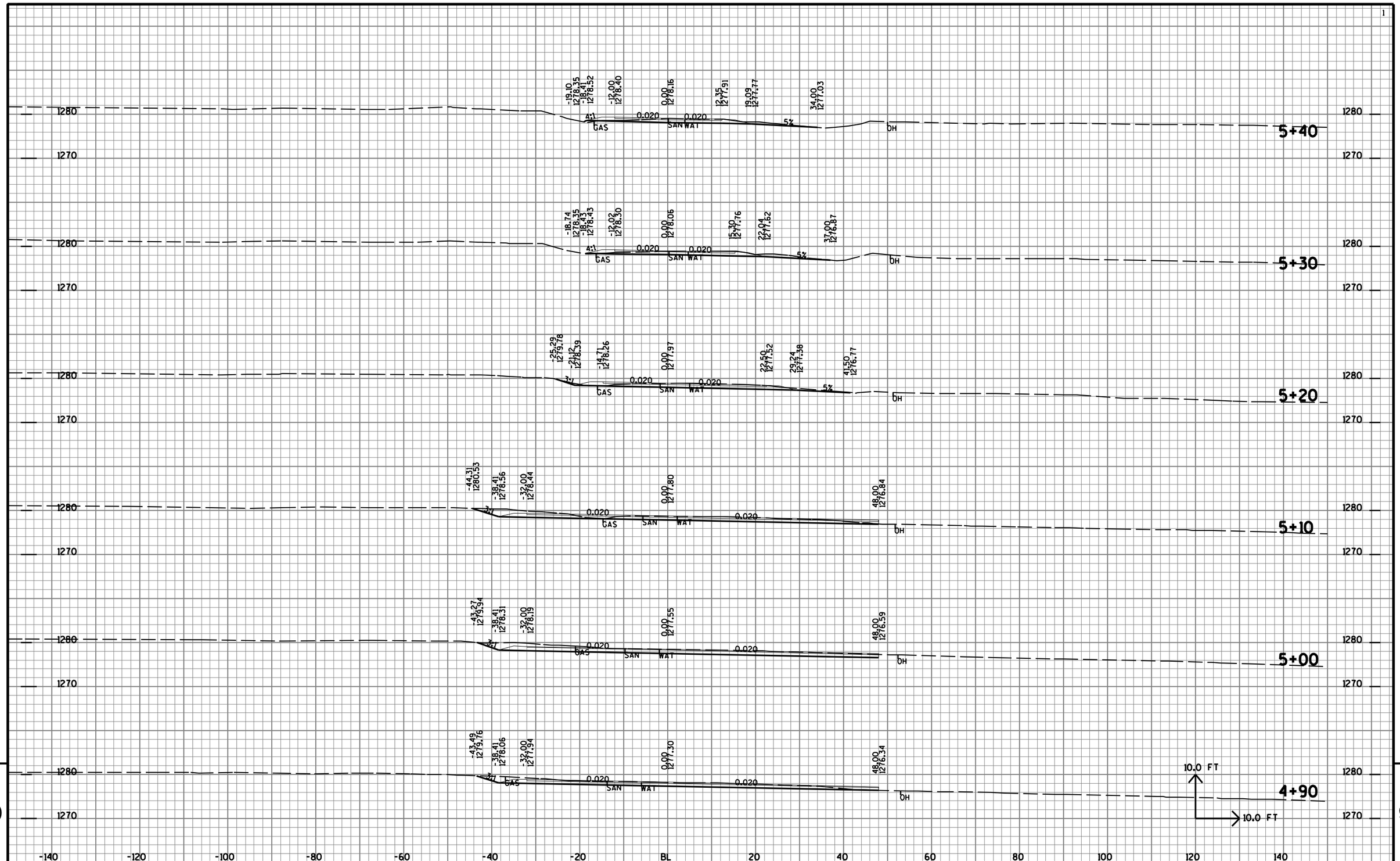


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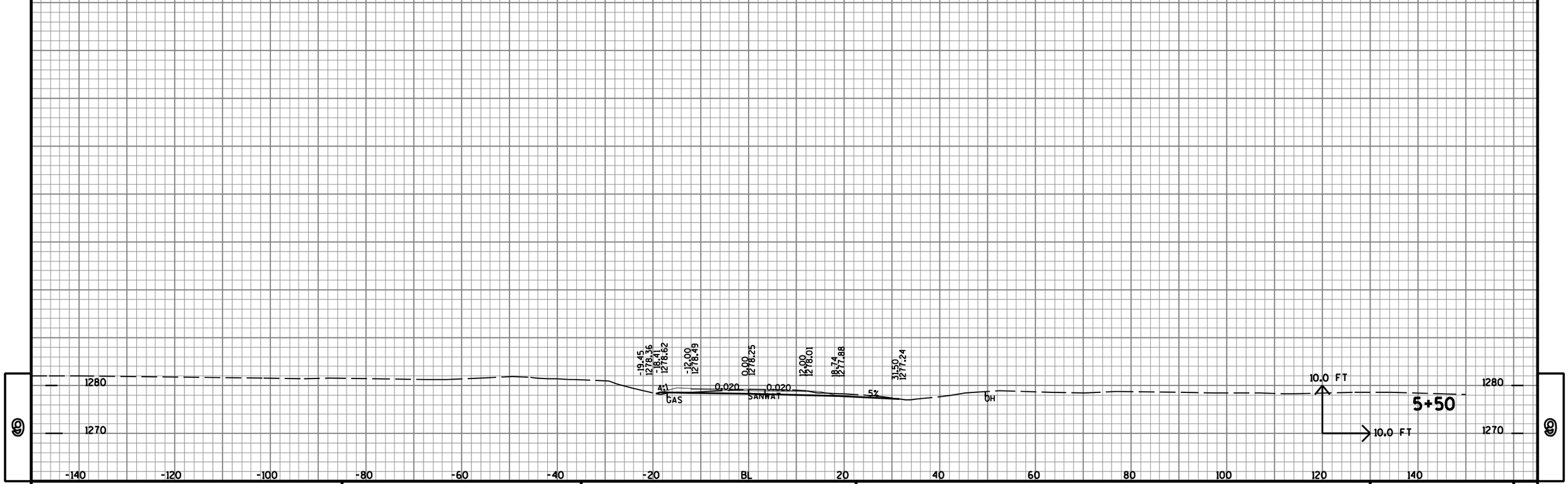
PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: ARTHUR AVE	SHEET NO: 1289	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090217_xsr.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC edu_shd_util.tbl PLOT SCALE : 1:2



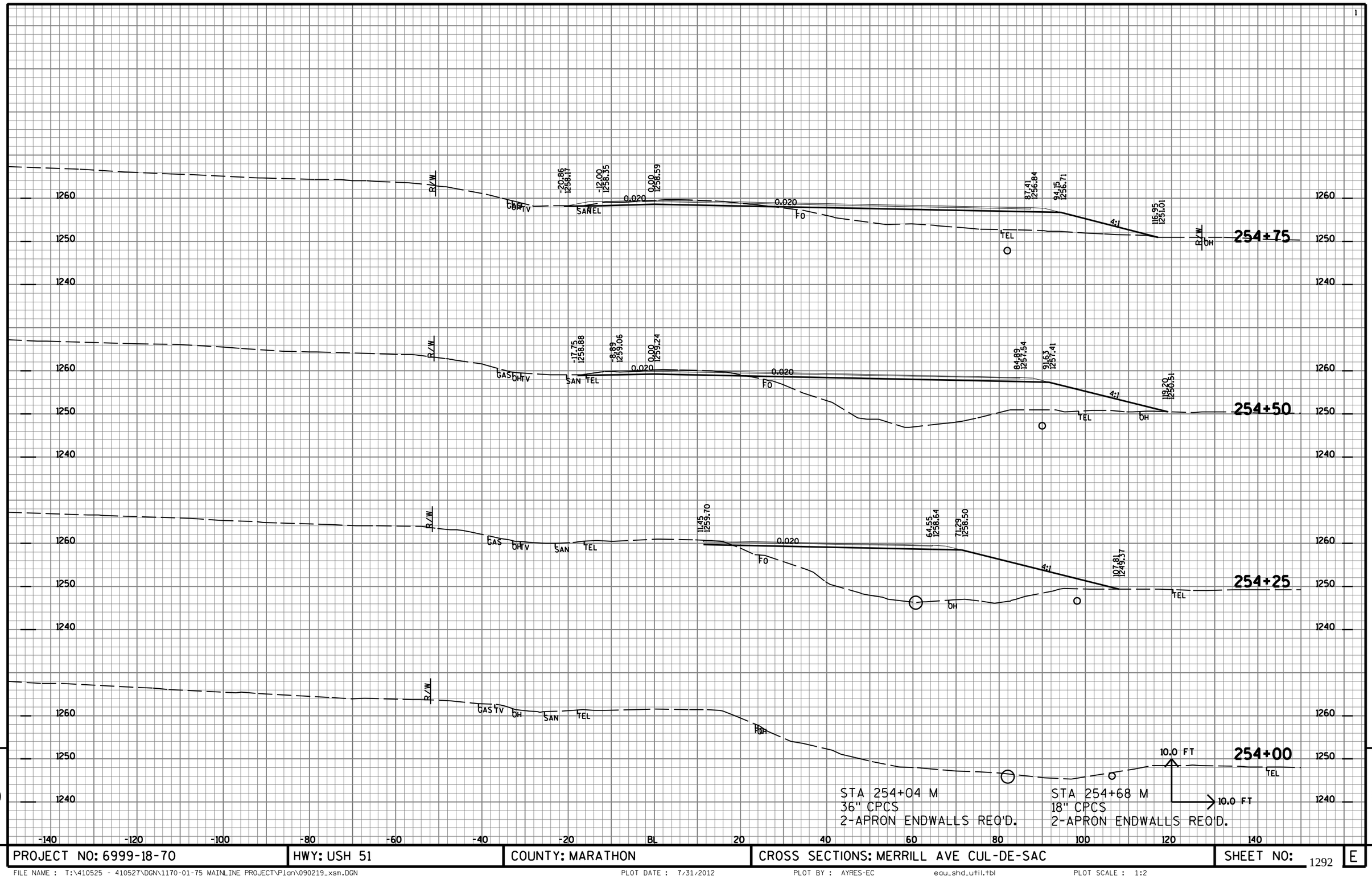
PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: N 18TH AVE	SHEET NO: 1290 E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090218_xs1.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC eau_shd_util.tbl PLOT SCALE : 1:2



PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: N 18TH AVE	SHEET NO: 1291	E

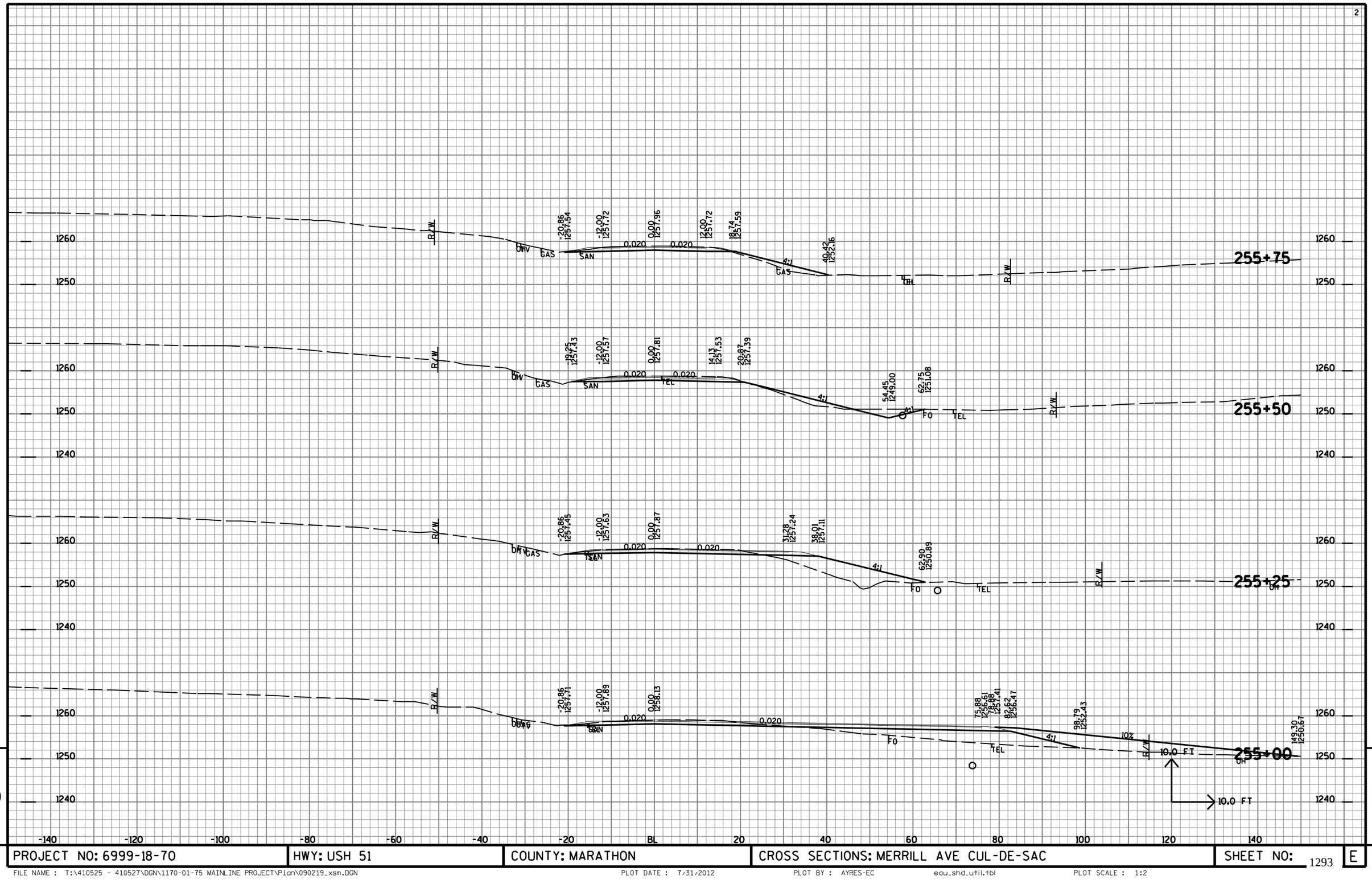
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9 9

PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: MERRILL AVE CUL-DE-SAC	SHEET NO: 1292 E

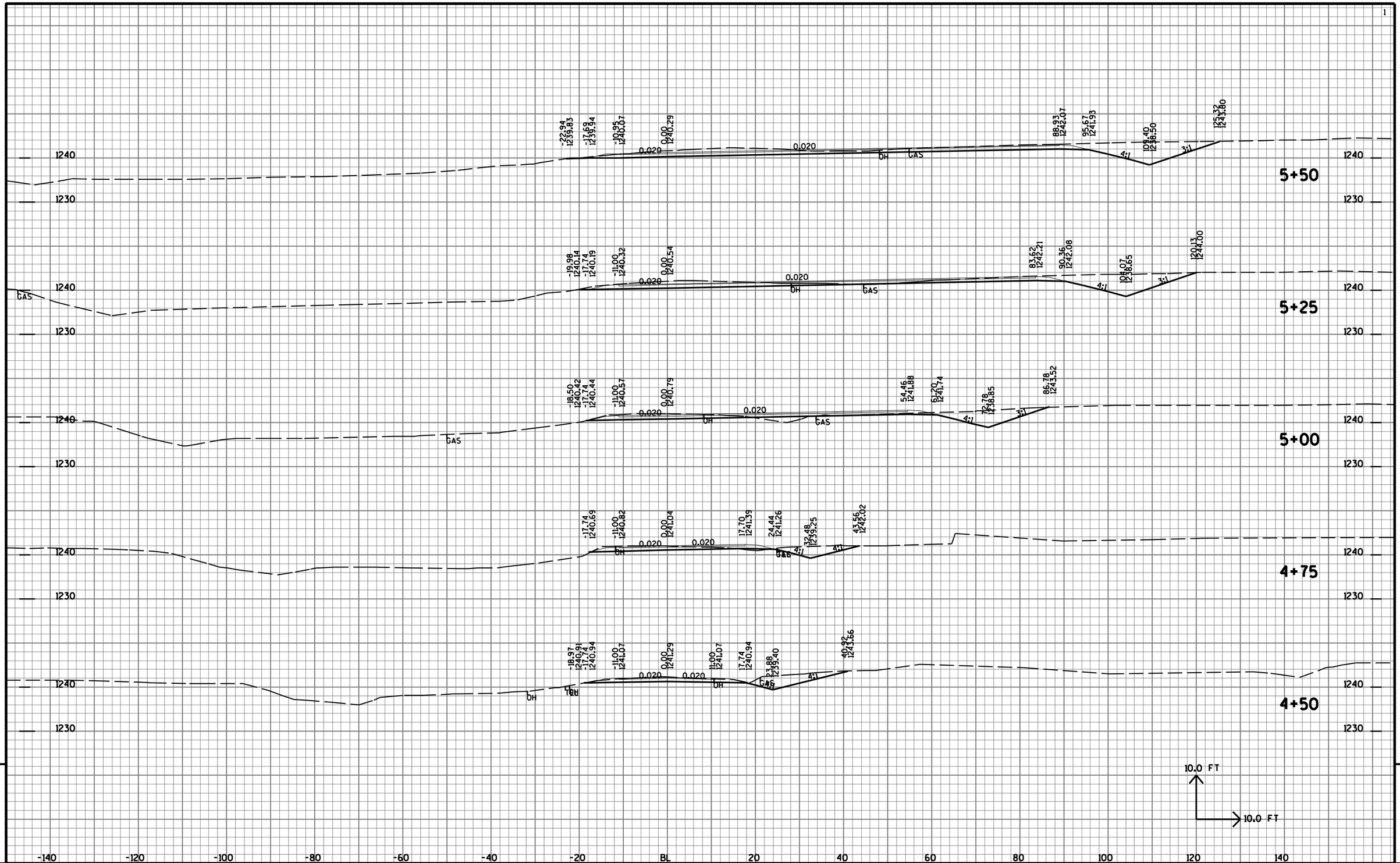
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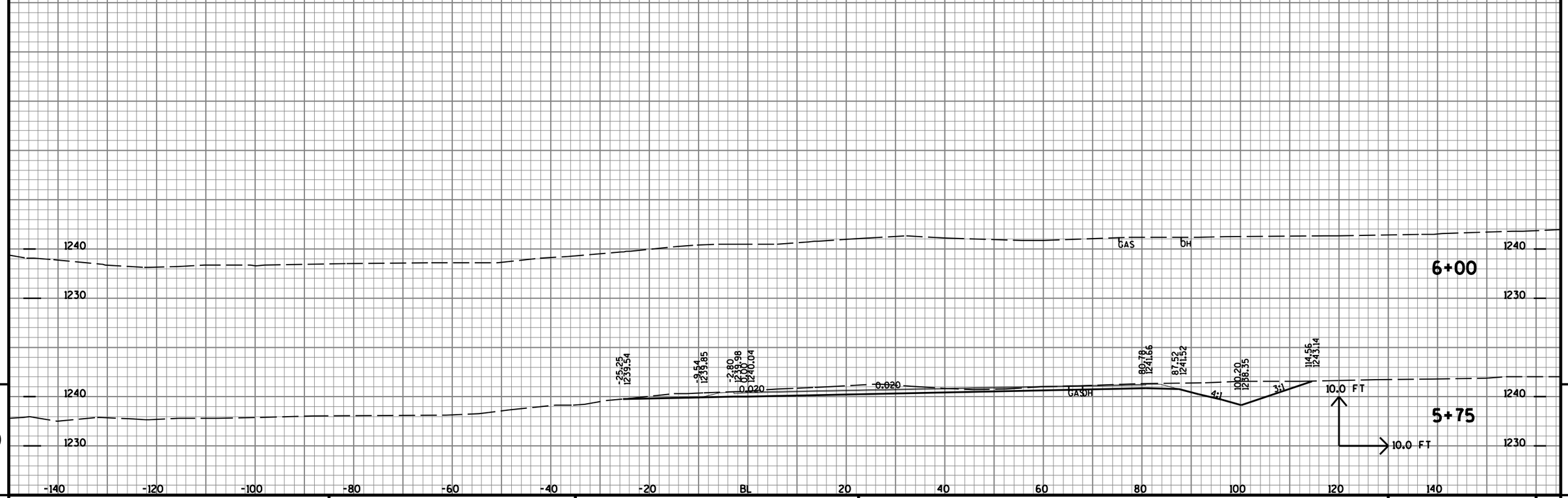
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PROJECT NO: 6999-18-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: MERRILL AVE CUL-DE-SAC	SHEET NO: 1293 E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090219_xsm.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC eau_shd_util.tbl PLOT SCALE : 1:2

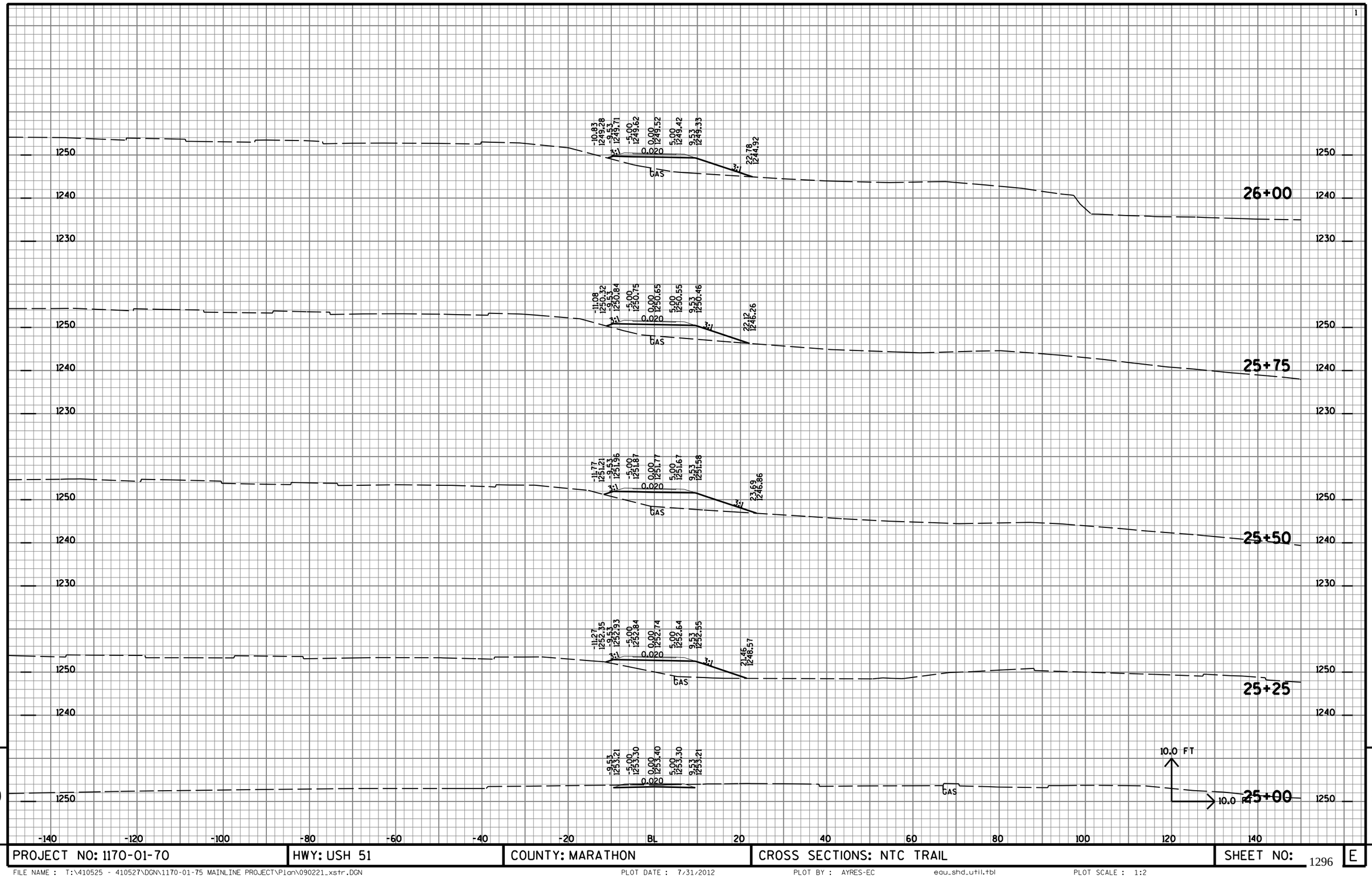


PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: CASSIDY DR CUL-DE-SAC	SHEET NO: 1294	E



9 9

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: CASSIDY DR CUL-DE-SAC	SHEET NO: 1295 E

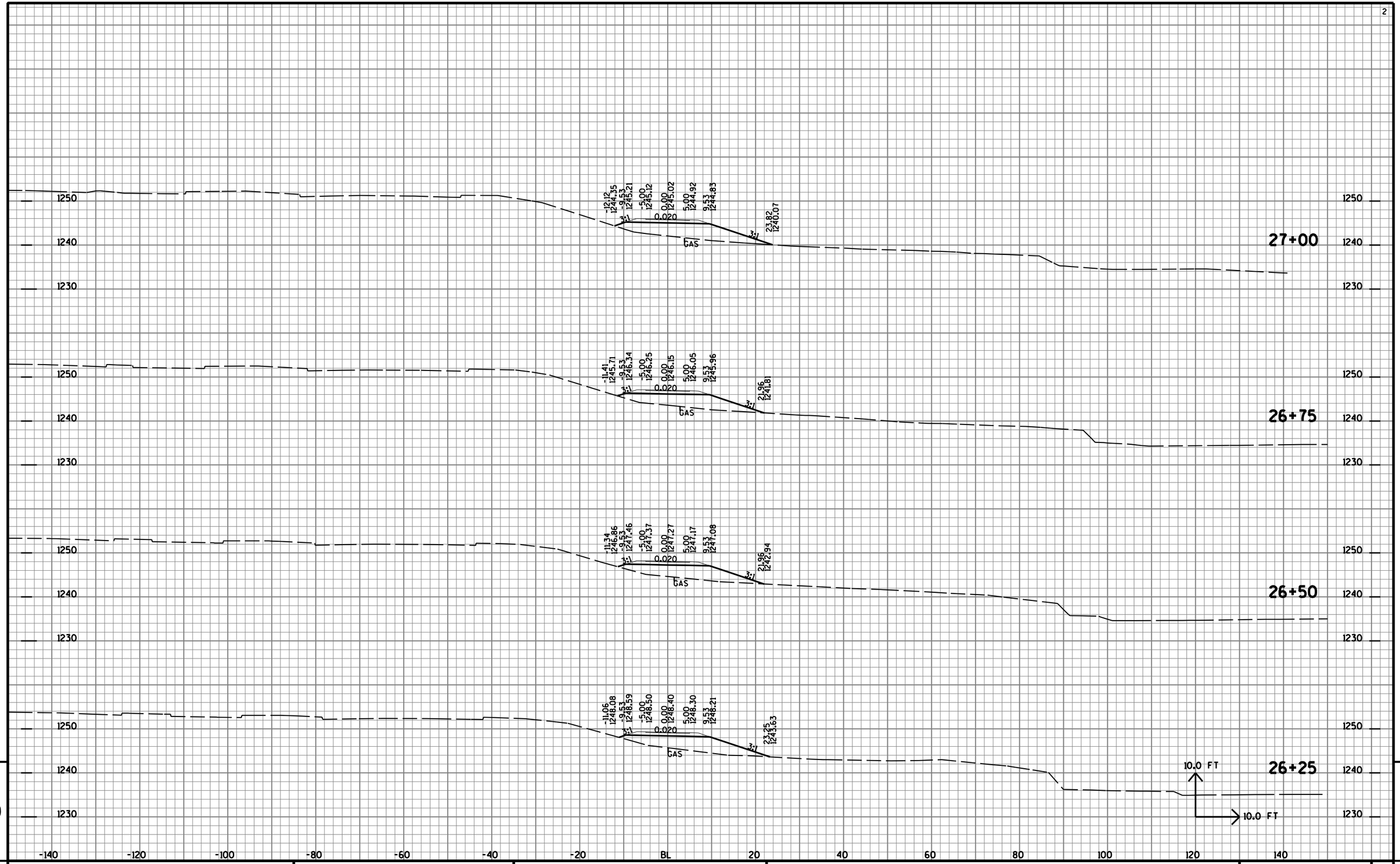


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PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: NTC TRAIL	SHEET NO: 1296 E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090221_xstr.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC eau_shd_util.tbl PLOT SCALE : 1:2

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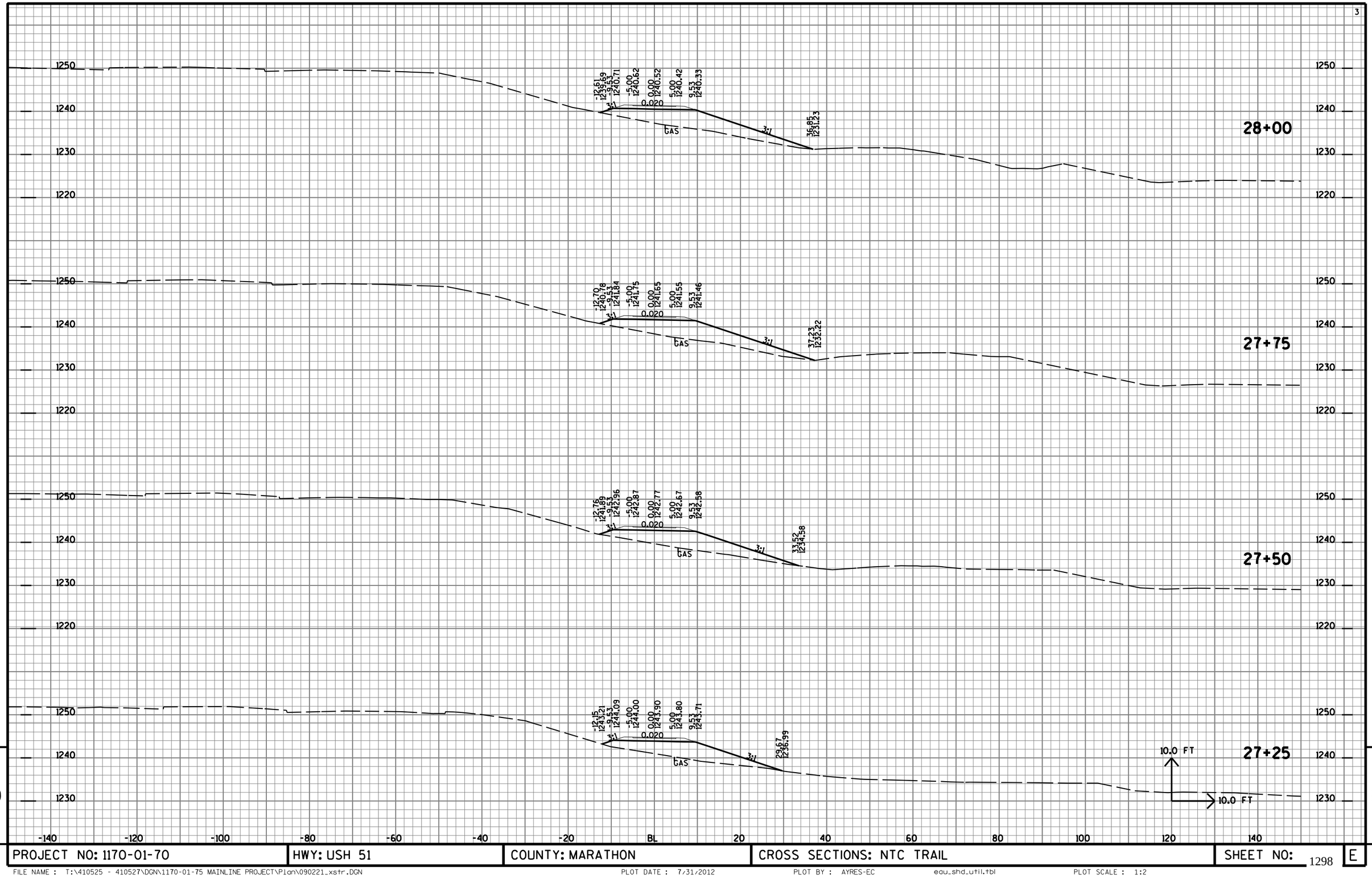


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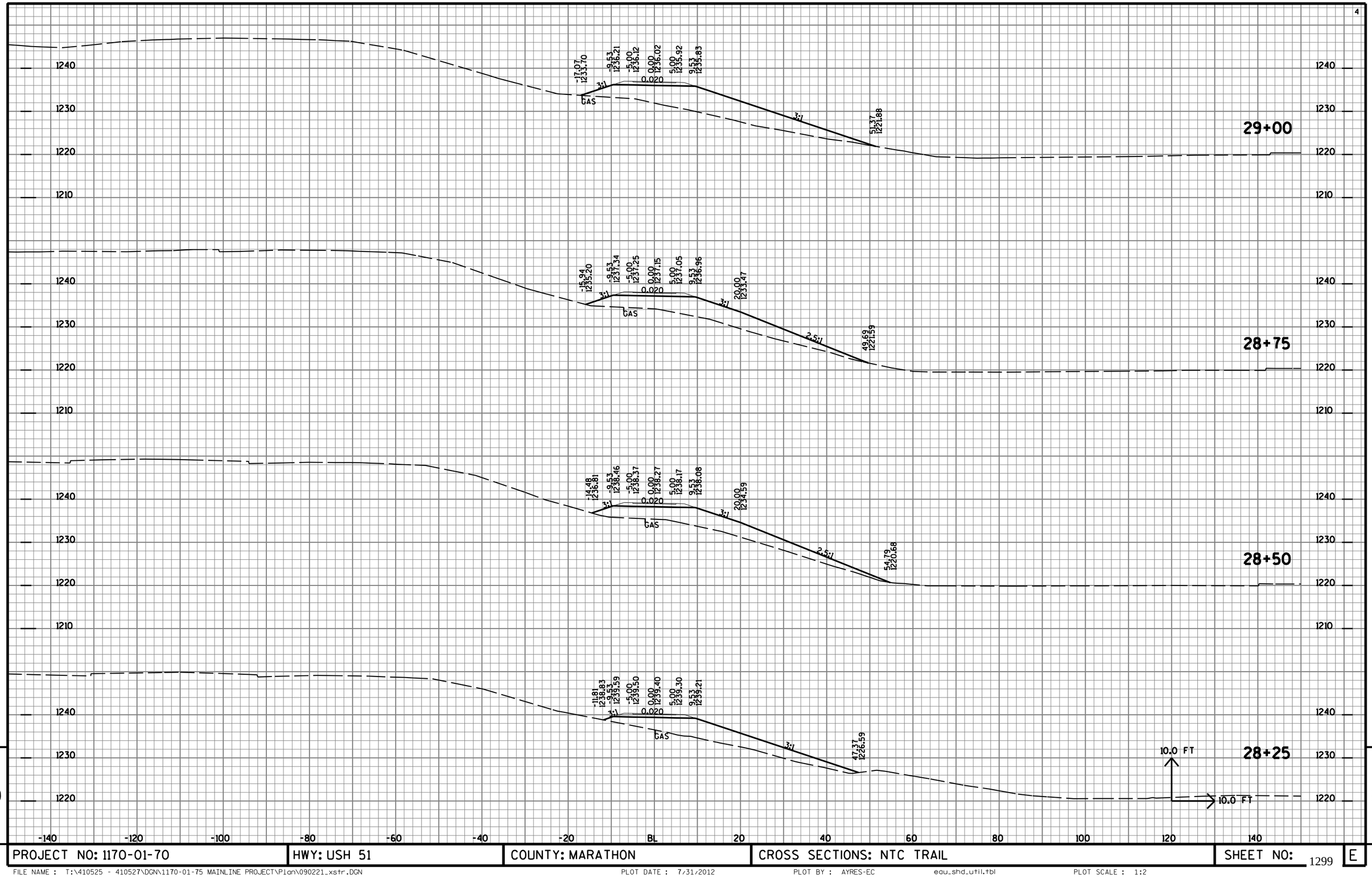
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FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090221_xstr.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC edu_shd_util.tbl PLOT SCALE : 1:2



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PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: NTC TRAIL	SHEET NO: 1298 E

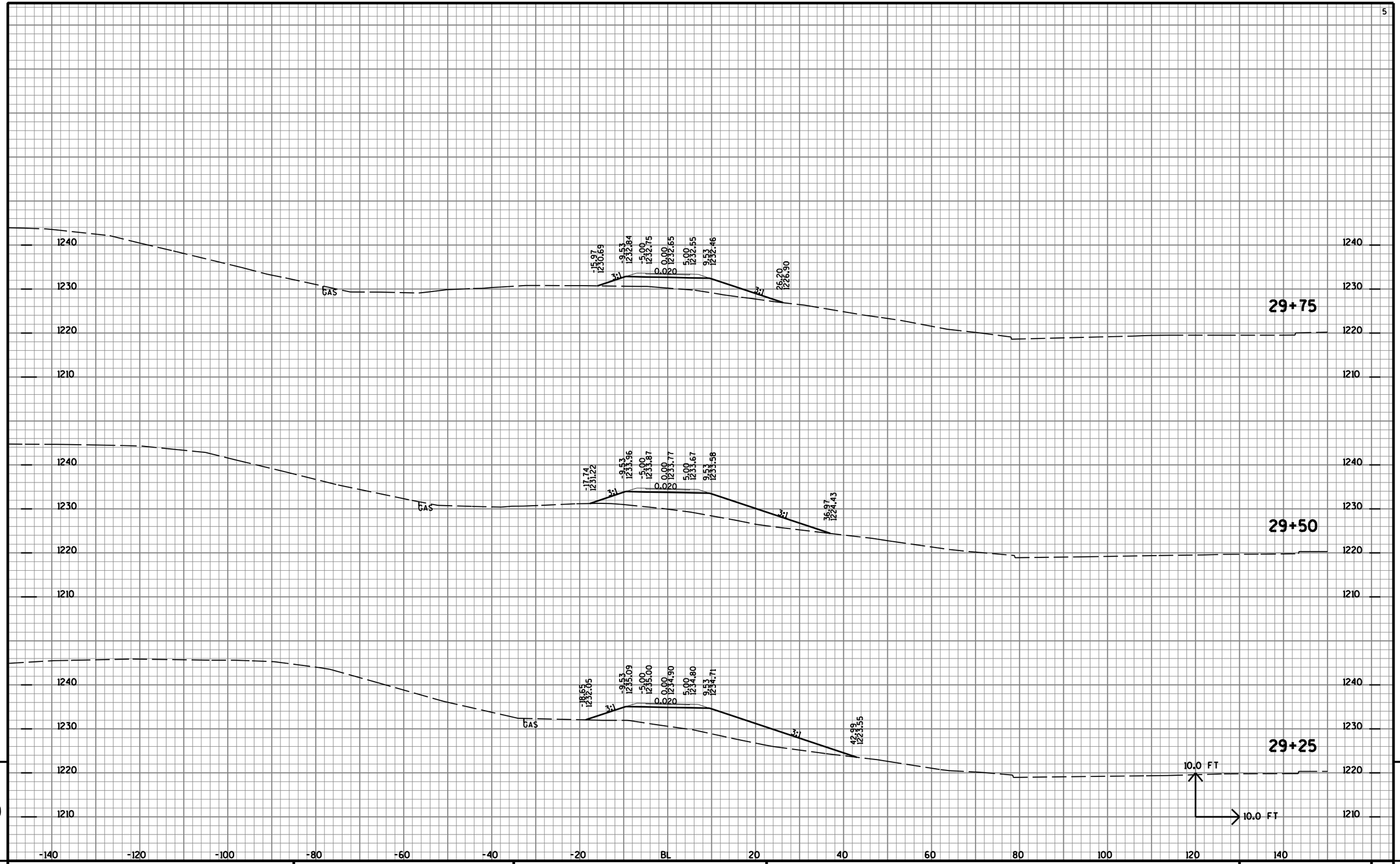


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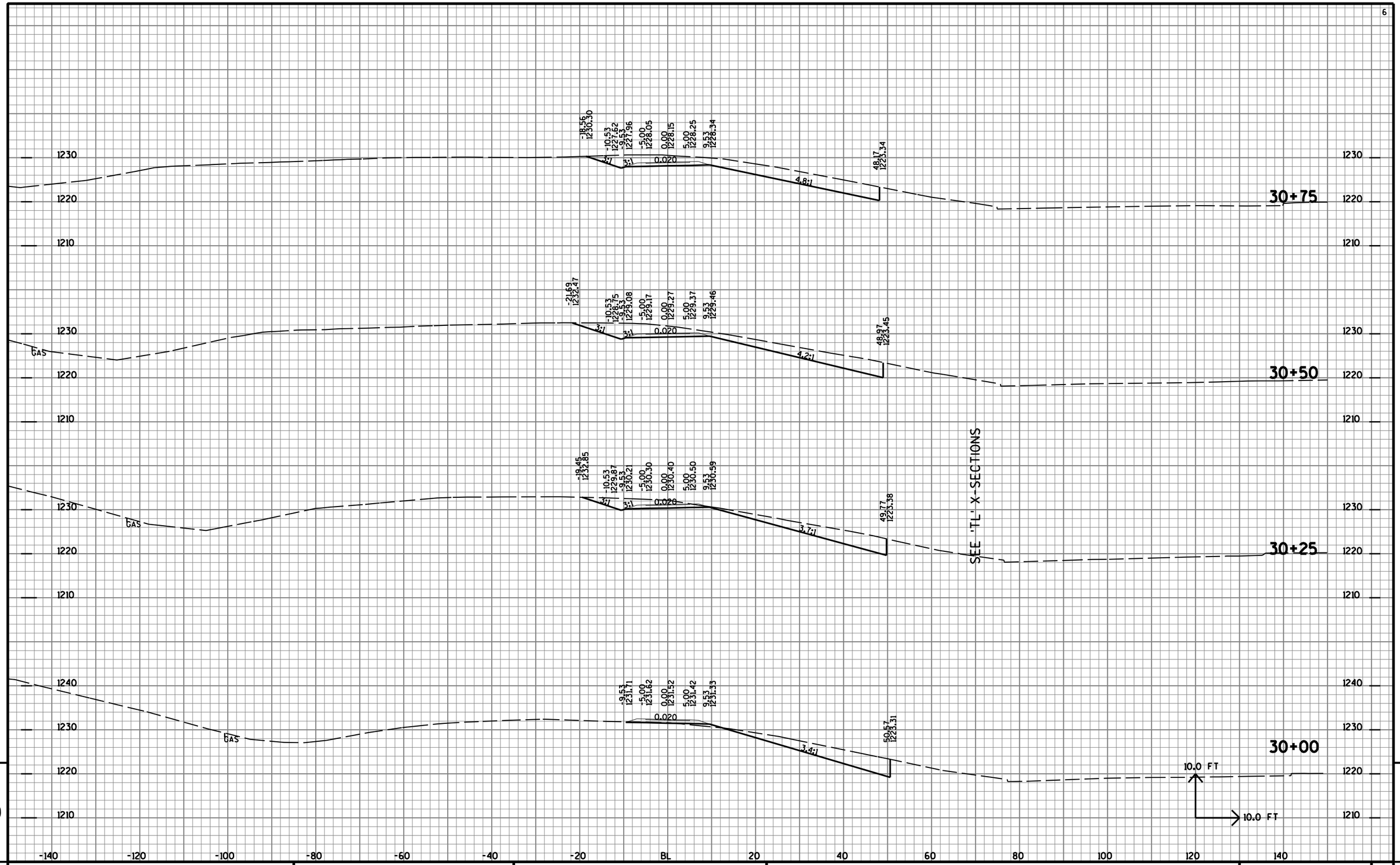
PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: NTC TRAIL	SHEET NO: 1299	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090221_xstr.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC eau_shd_util.tbl PLOT SCALE : 1:2



9 9

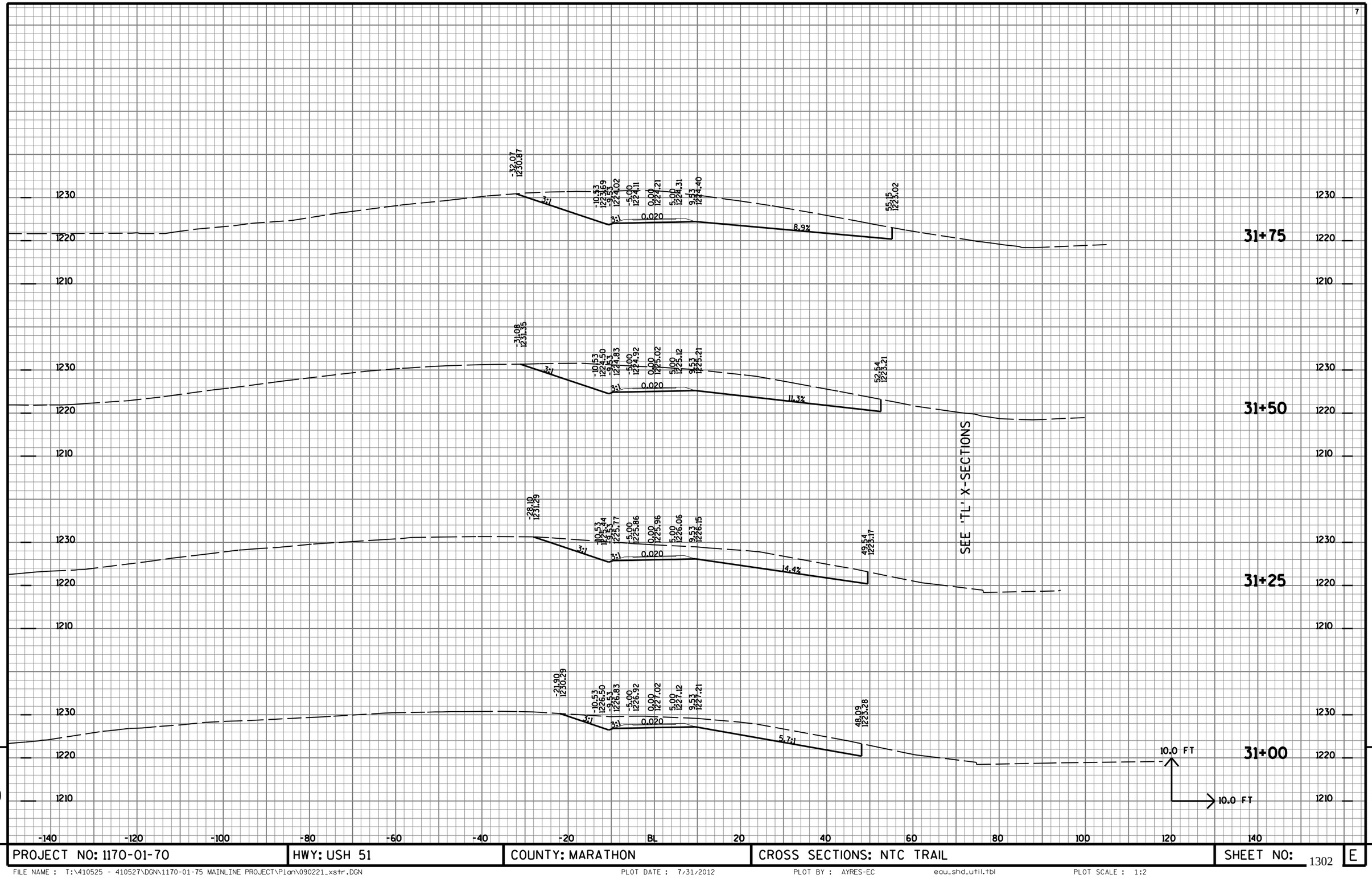
PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: NTC TRAIL	SHEET NO: 1300	E



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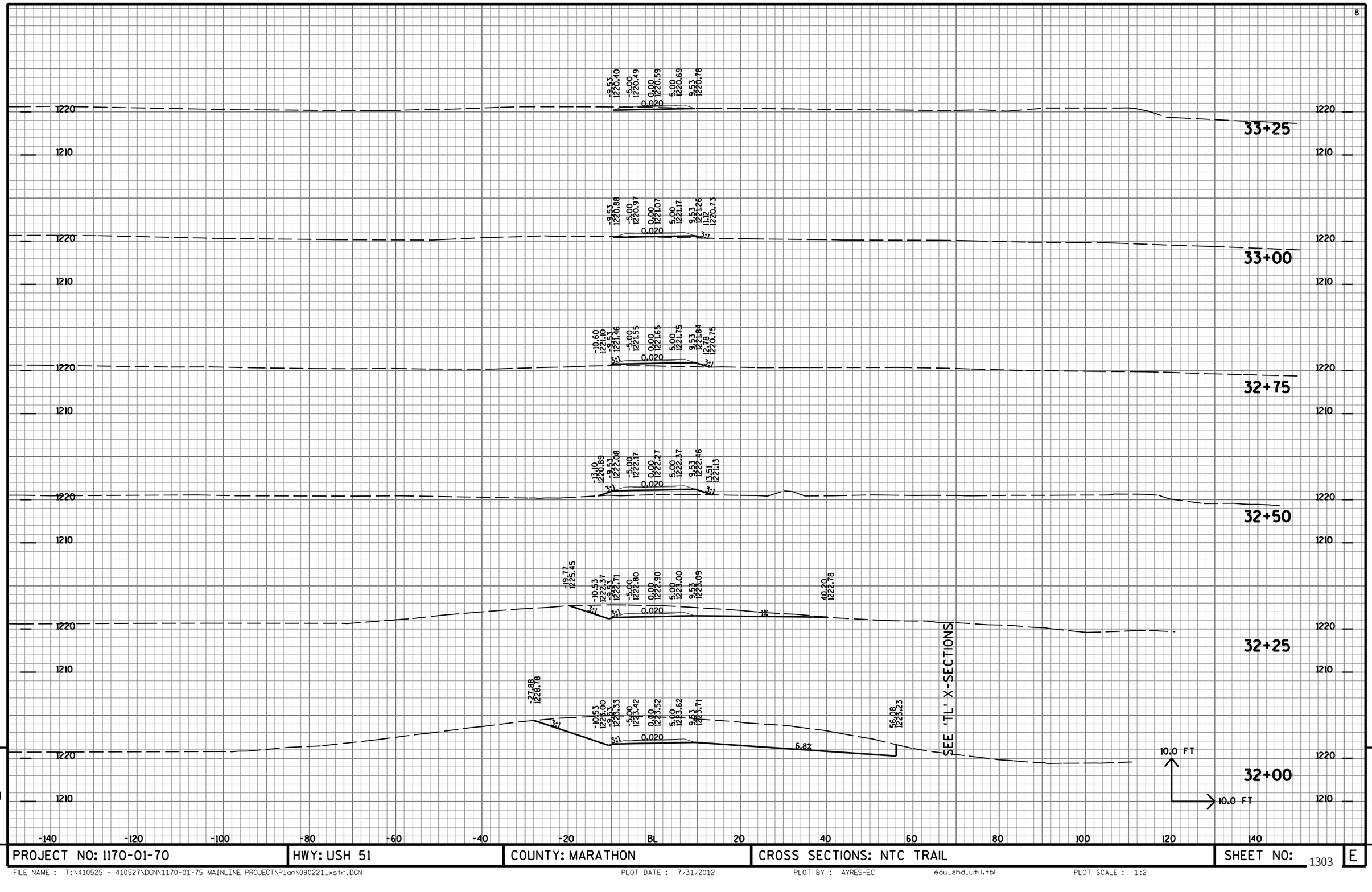
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PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: NTC TRAIL	SHEET NO: 1301	E



PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: NTC TRAIL	SHEET NO: 1302	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090221_xstr.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC edu_shd_util.tbl PLOT SCALE : 1:2

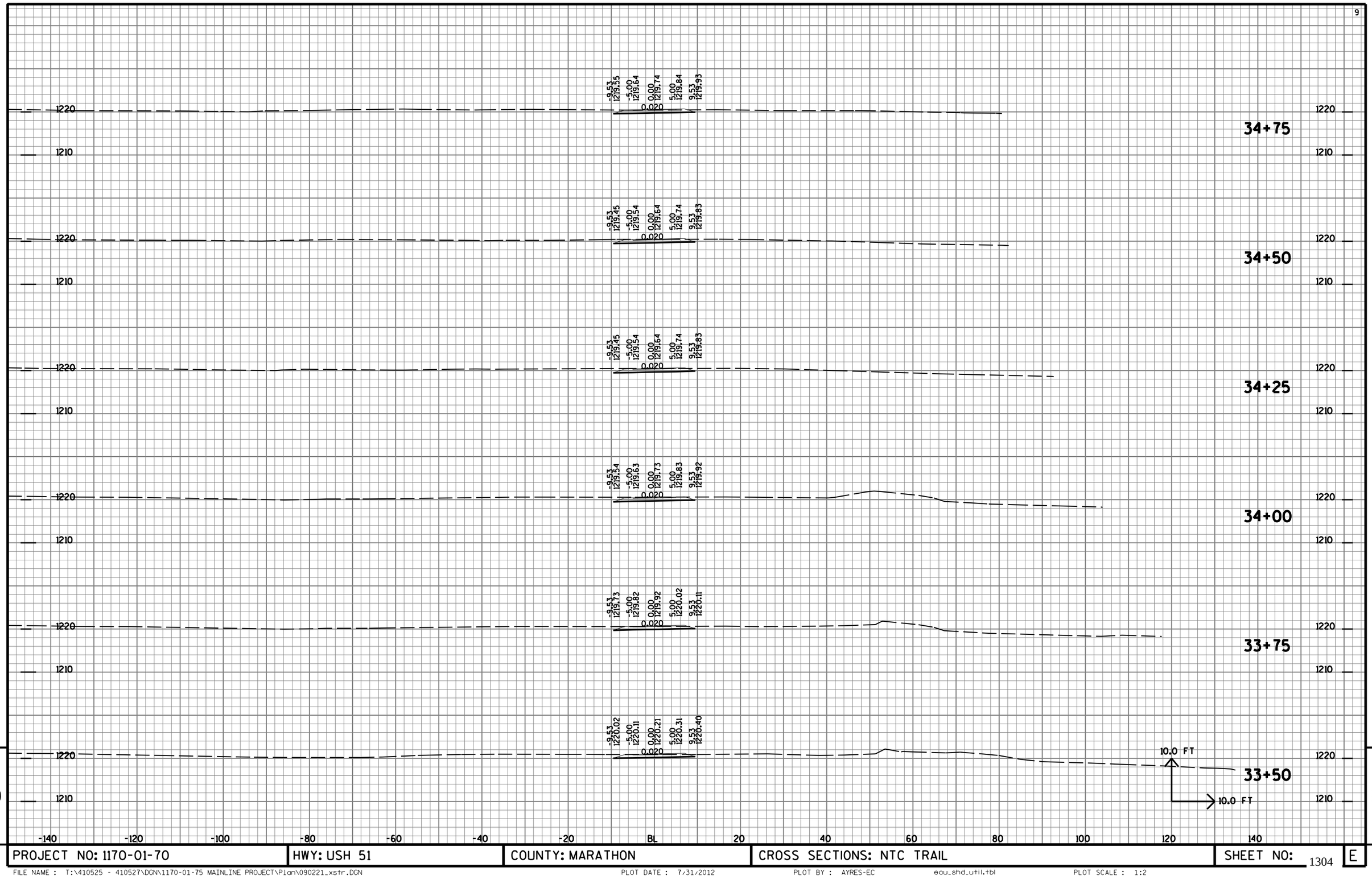


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PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: NTC TRAIL	SHEET NO: 1303	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090221_xstr.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC edu_shd_util.tbl PLOT SCALE : 1:2

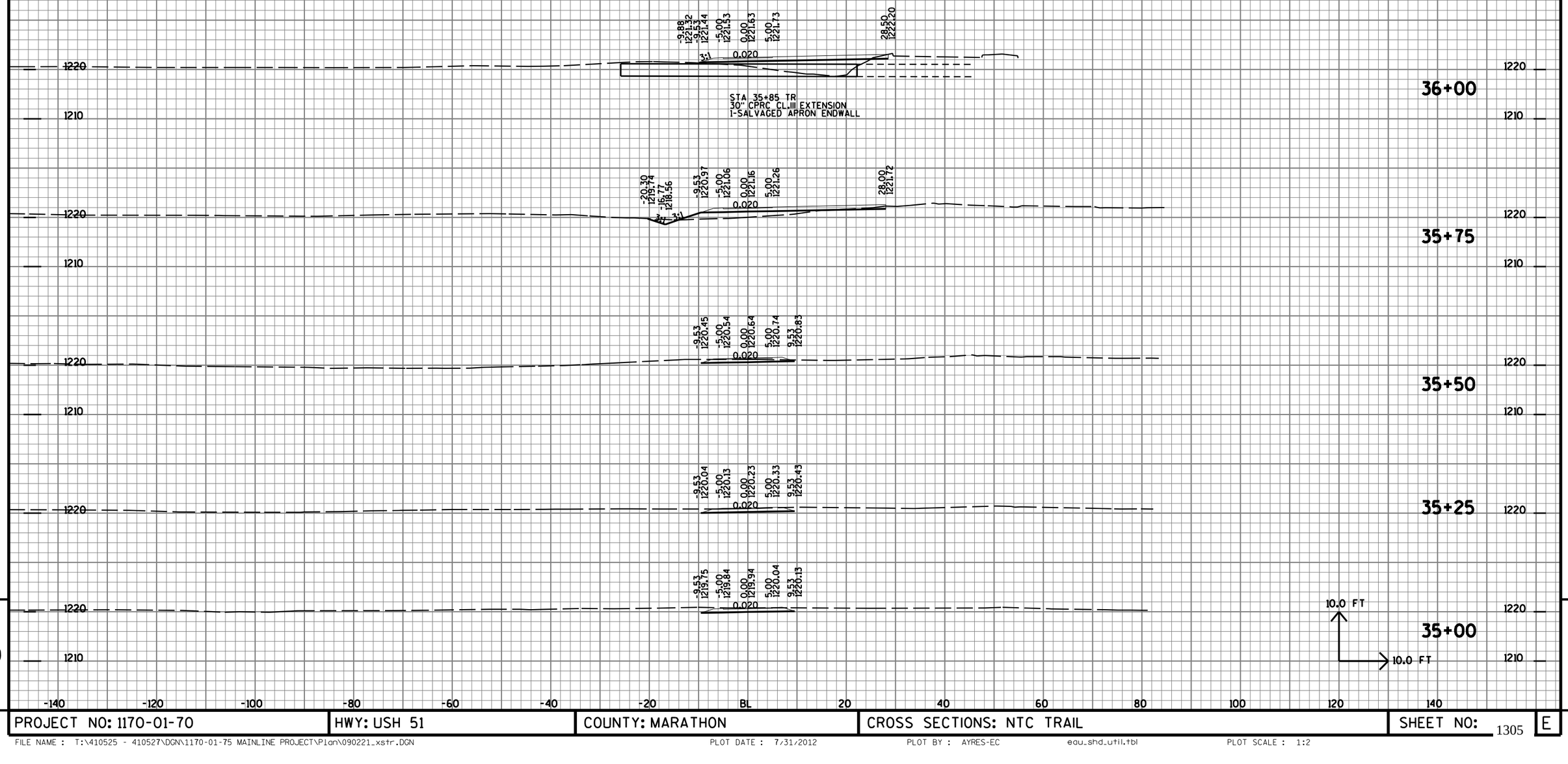


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PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: NTC TRAIL	SHEET NO: 1304	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090221_xstr.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC eau_shd_util.tbl PLOT SCALE : 1:2



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PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: NTC TRAIL	SHEET NO: 1305 E

SEE 'TR' X-SECTIONS

7+00

-7.00 1220.29
-5.00 1220.25
0.00 1220.15
0.020
5.00 1220.05
7.00 1220.01

6+75

-7.00 1220.04
-5.00 1220.00
0.00 1219.90
0.020
5.00 1219.80
7.00 1219.76

6+50

-7.00 1219.67
-5.00 1219.63
0.00 1219.53
0.020
5.00 1219.43
7.00 1219.39

6+25

-7.00 1219.23
-5.00 1219.19
0.00 1219.09
0.020
5.00 1218.99
19.75 1218.11
0.060

10.0 FT
10.0 FT

1230
1220
1210
-140 -120 -100 -80 -60 -40 -20 BL 20 40 60 80 100 120 140

9

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: NTC TRAIL CONNECTION	SHEET NO: 1306	E

SEE 'TR' X-SECTIONS

8+00

-7.00 1220.30
-5.00 1220.26
0.00 1220.16
0.020
5.00 1220.06
7.00 1220.02

7+75

-7.00 1220.32
-5.00 1220.28
0.00 1220.18
0.020
5.00 1220.08
7.00 1220.04

7+50

-7.00 1220.39
-5.00 1220.35
0.00 1220.25
0.020
5.00 1220.15
7.00 1220.11

7+25

-7.00 1220.41
-5.00 1220.37
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0.020
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7.00 1220.13

10.0 FT
10.0 FT

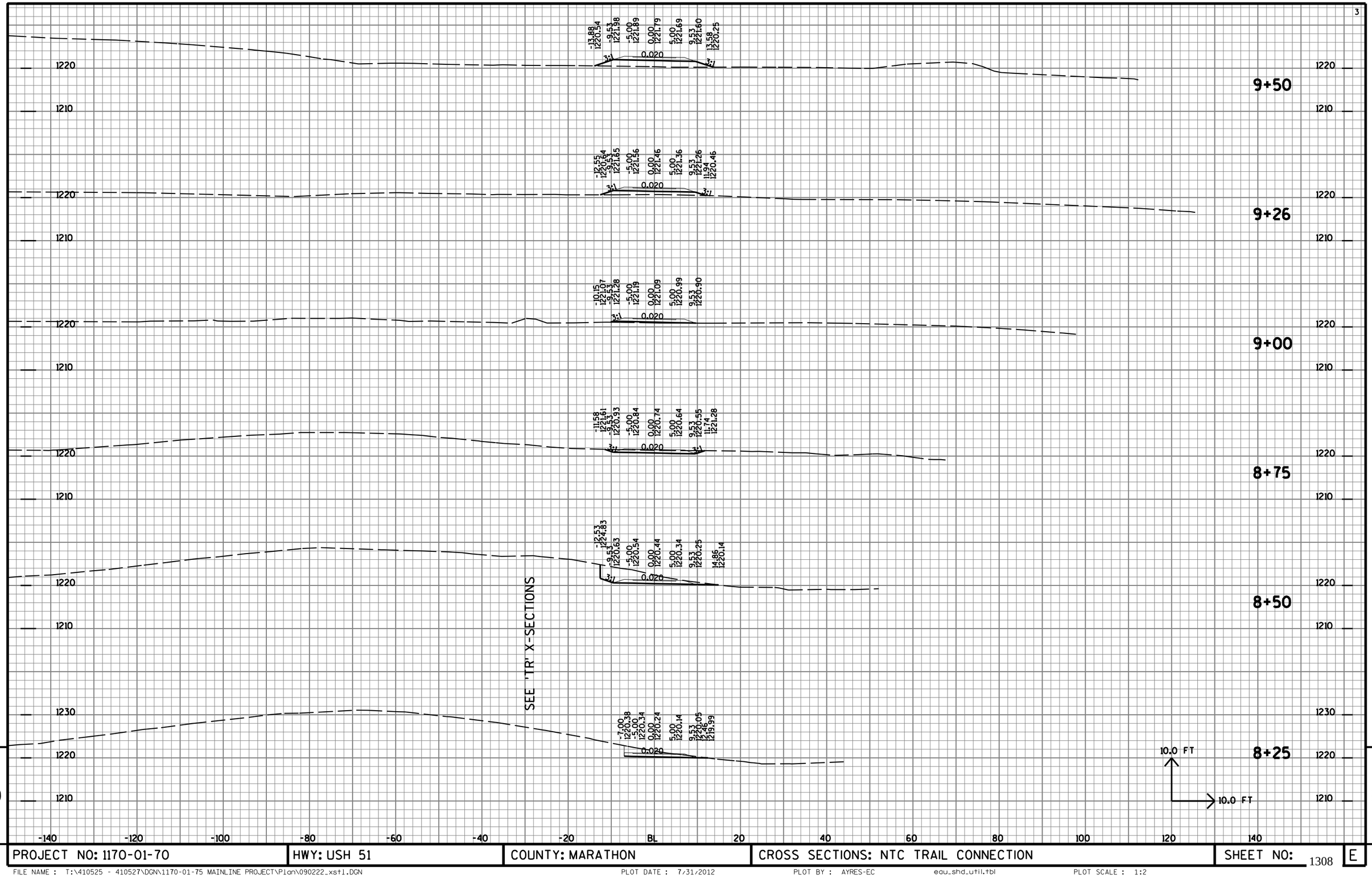
1230 1220 1210

-140 -120 -100 -80 -60 -40 -20 BL 20 40 60 80 100 120 140

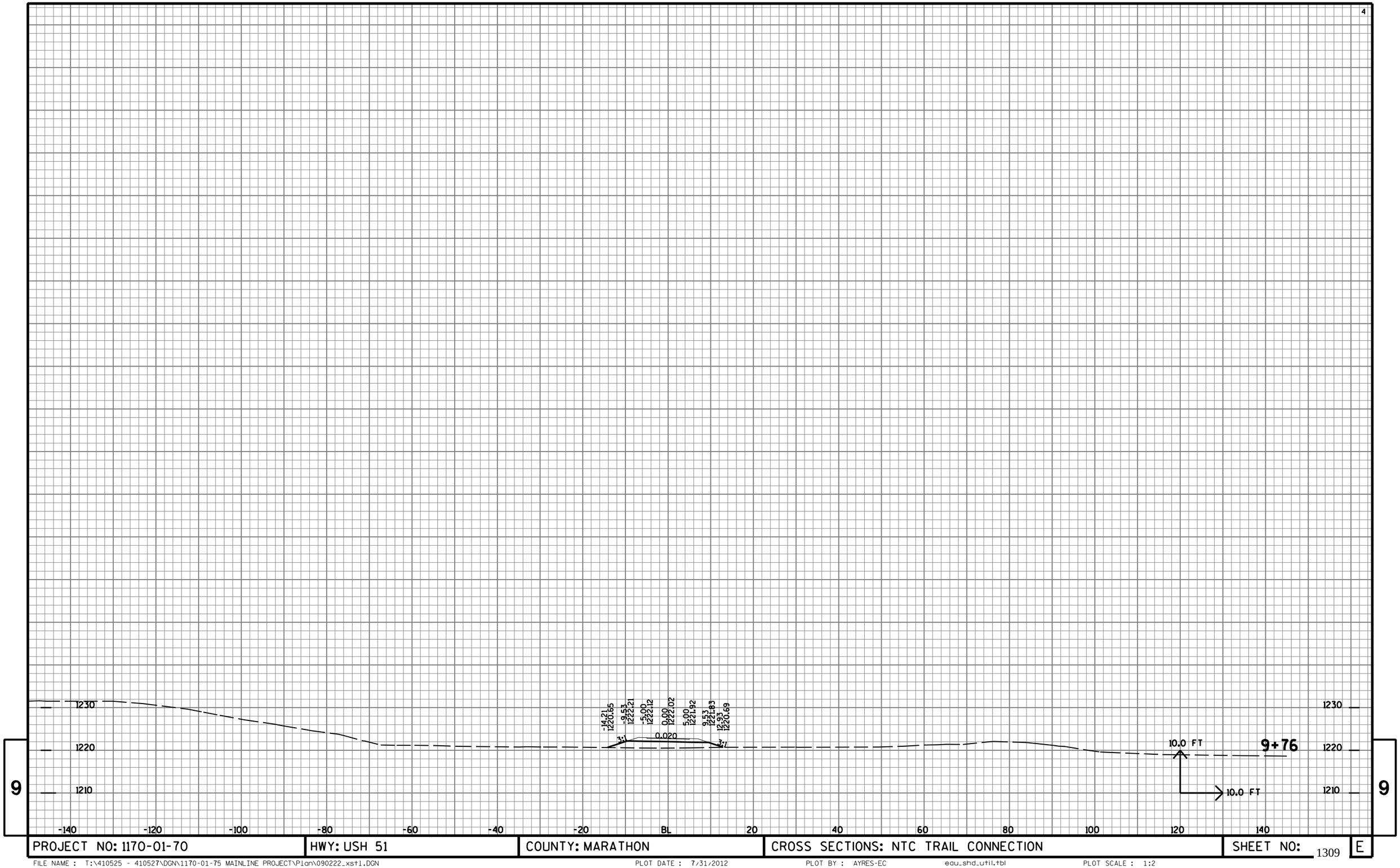
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PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: NTC TRAIL CONNECTION	SHEET NO: 1307	E



PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: NTC TRAIL CONNECTION	SHEET NO: 1308 E

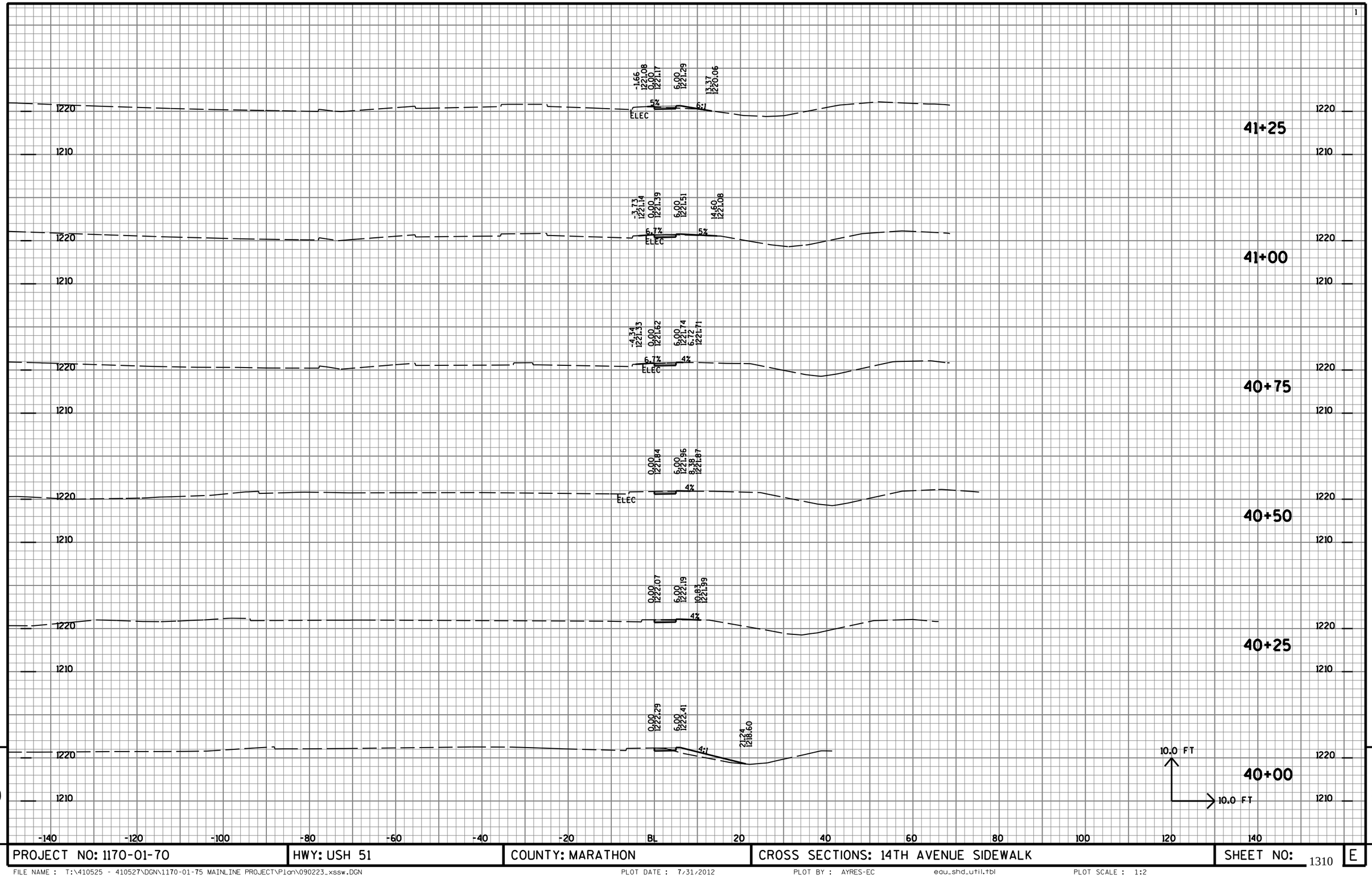


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PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: NTC TRAIL CONNECTION	SHEET NO: 1309	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090222_xst1.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC edu_shd_util.tbl PLOT SCALE : 1:2

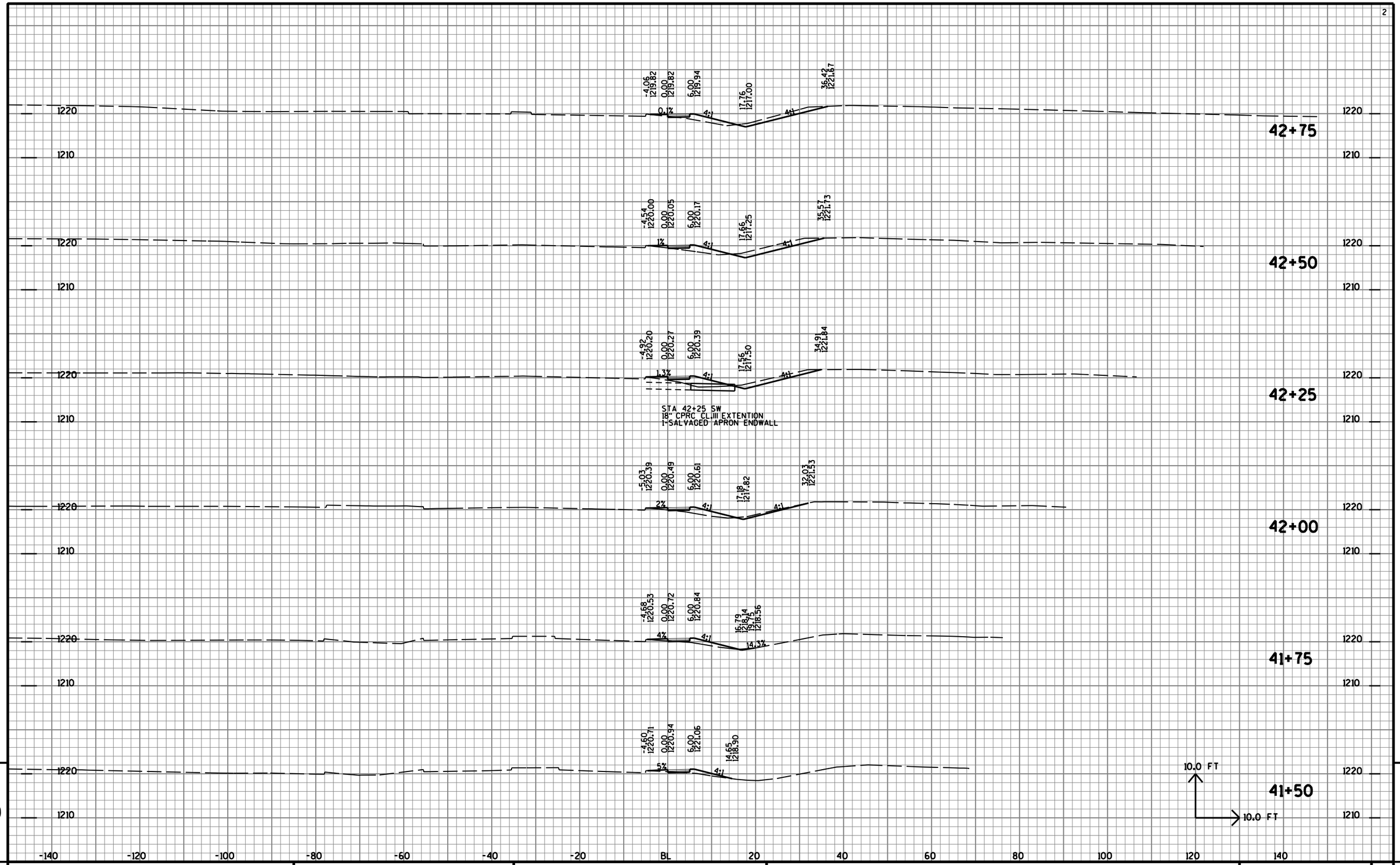


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PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: 14TH AVENUE SIDEWALK	SHEET NO: 1310	E

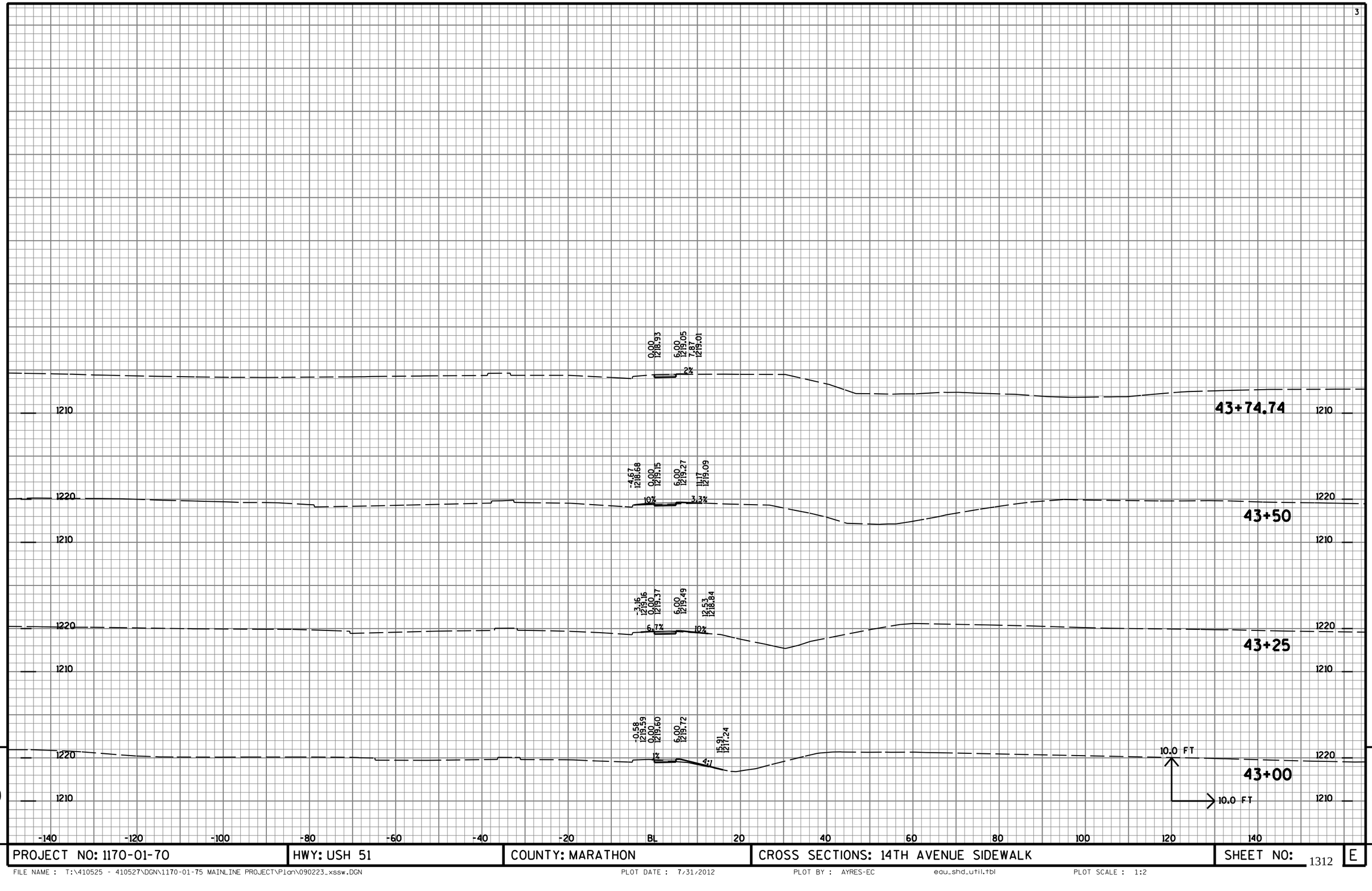
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PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: 14TH AVENUE SIDEWALK	SHEET NO: 1311	E

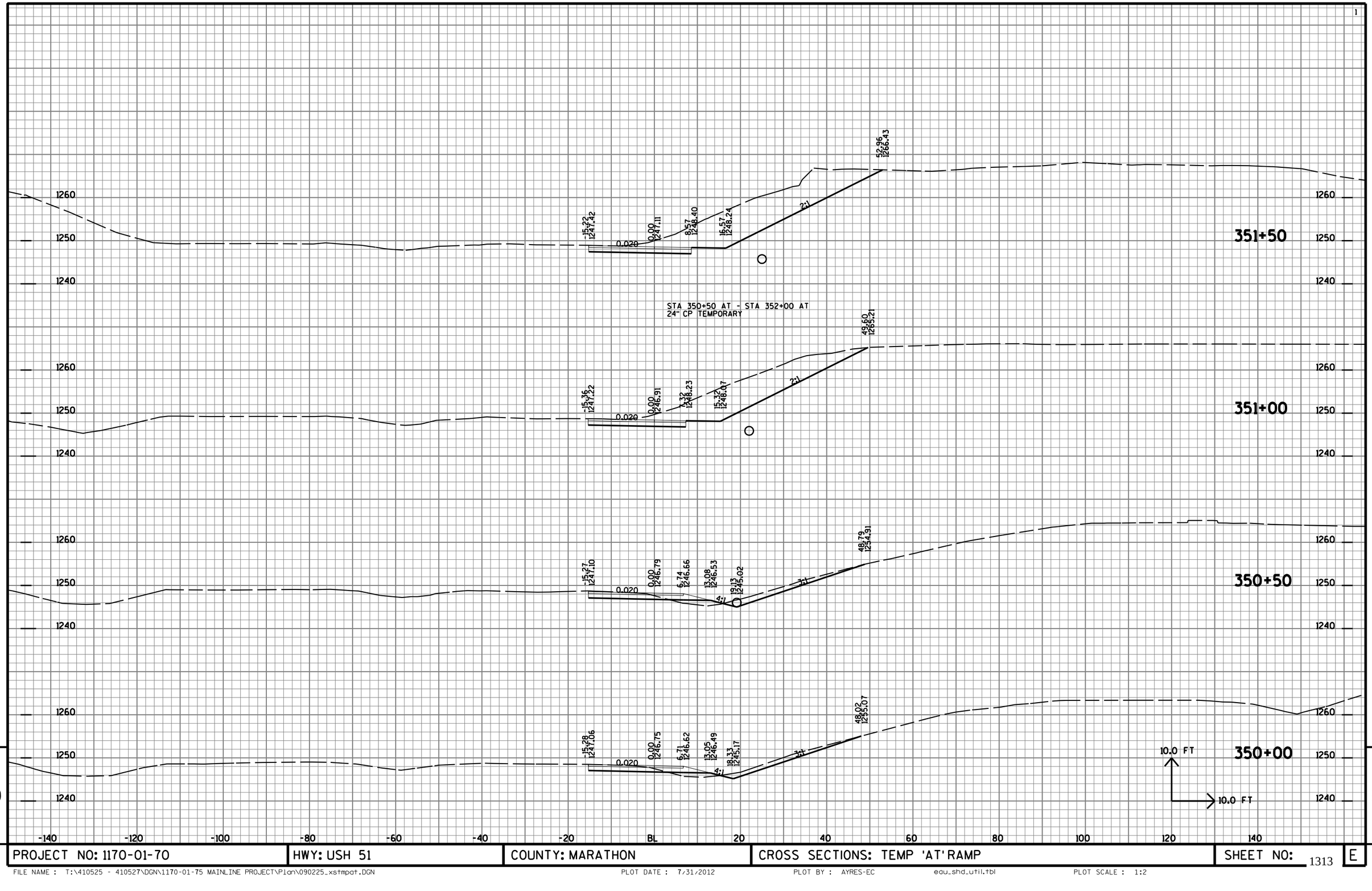


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PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: 14TH AVENUE SIDEWALK	SHEET NO: 1312	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090223_xssw.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC edu_shd_util.tbl PLOT SCALE : 1:2

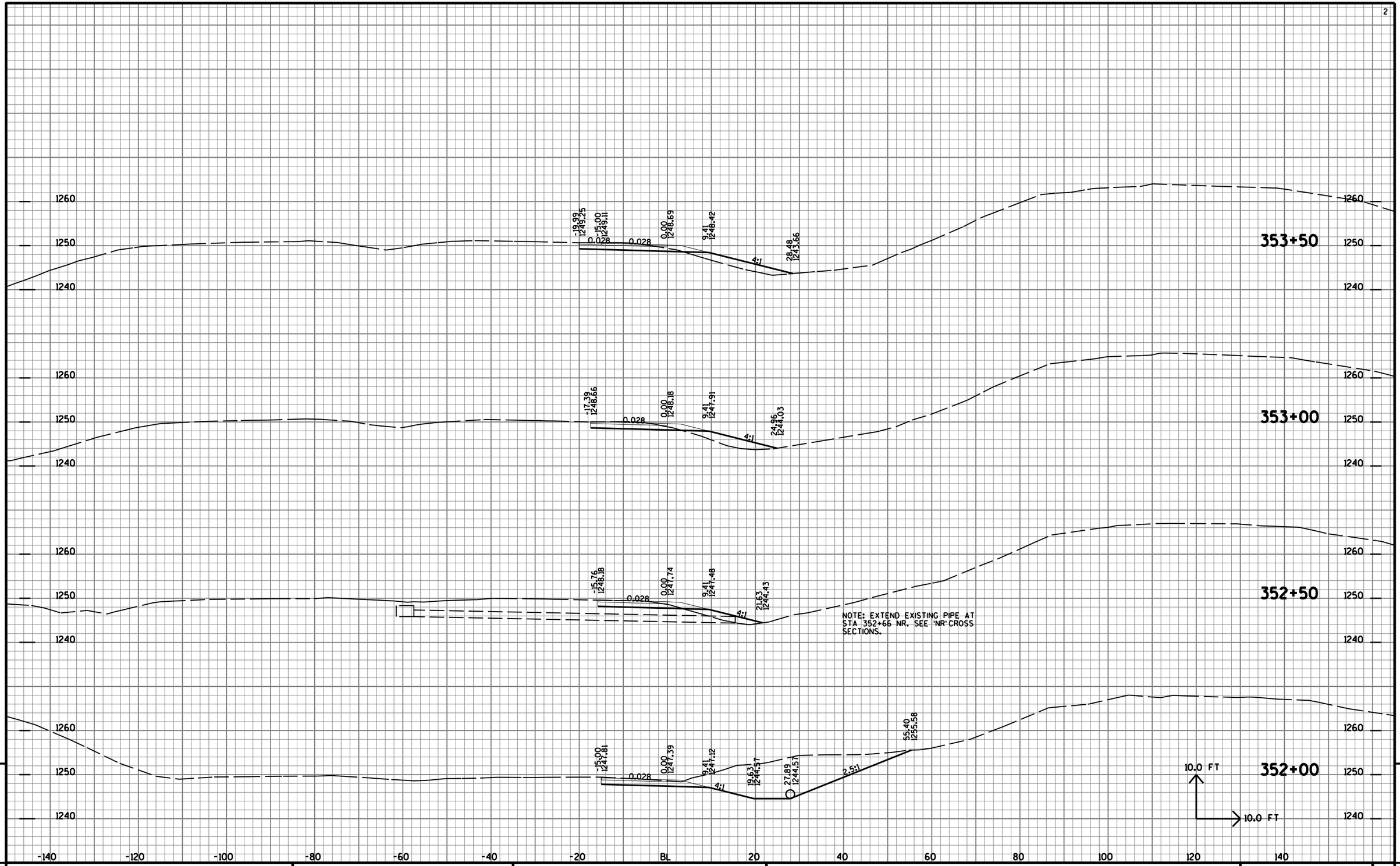


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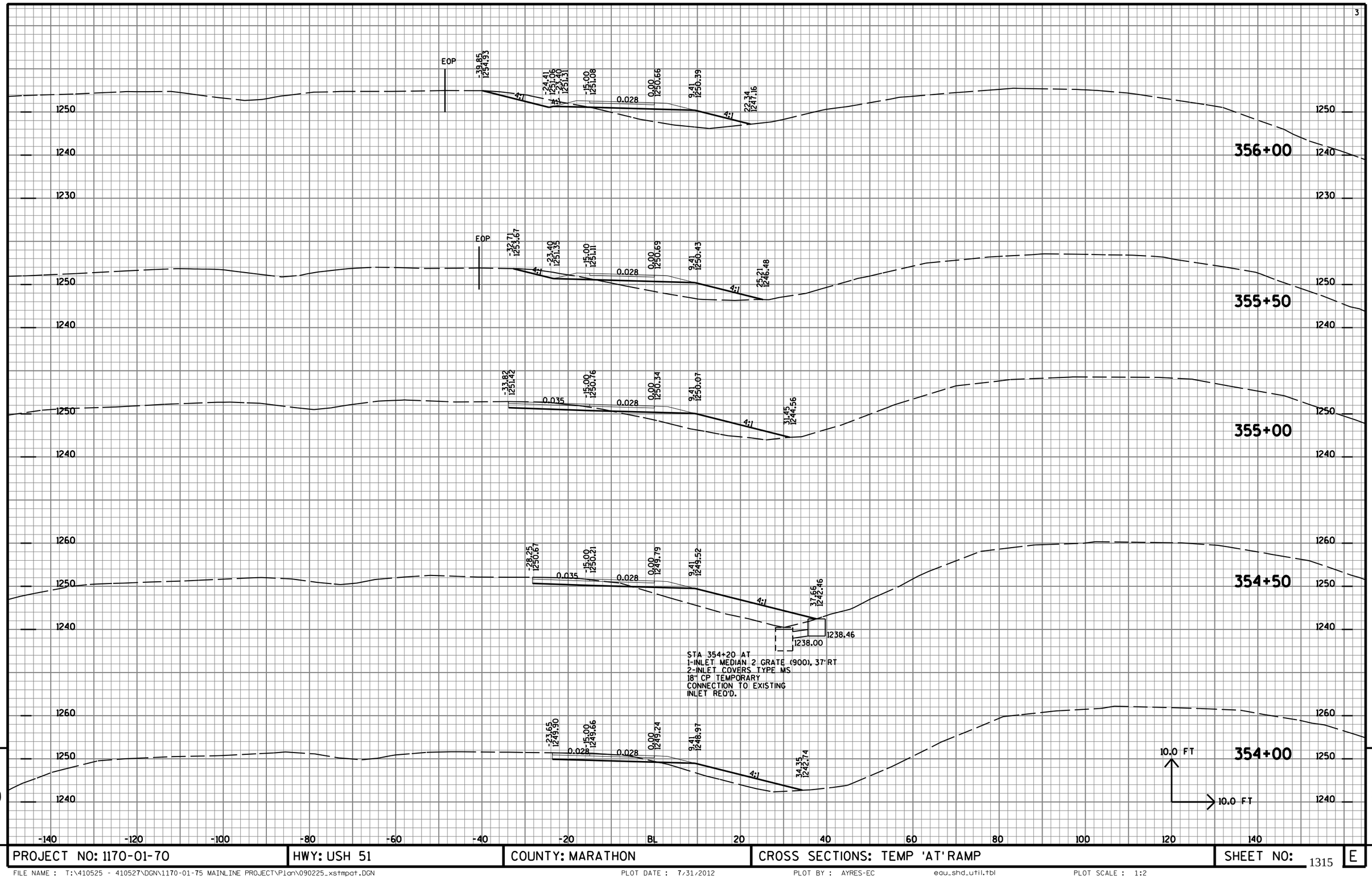
PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: TEMP 'AT' RAMP	SHEET NO: 1313	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090225_xstmpat.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC edu_shd_util.tbl PLOT SCALE : 1:2



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PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: TEMP 'AT' RAMP	SHEET NO: 1314	E

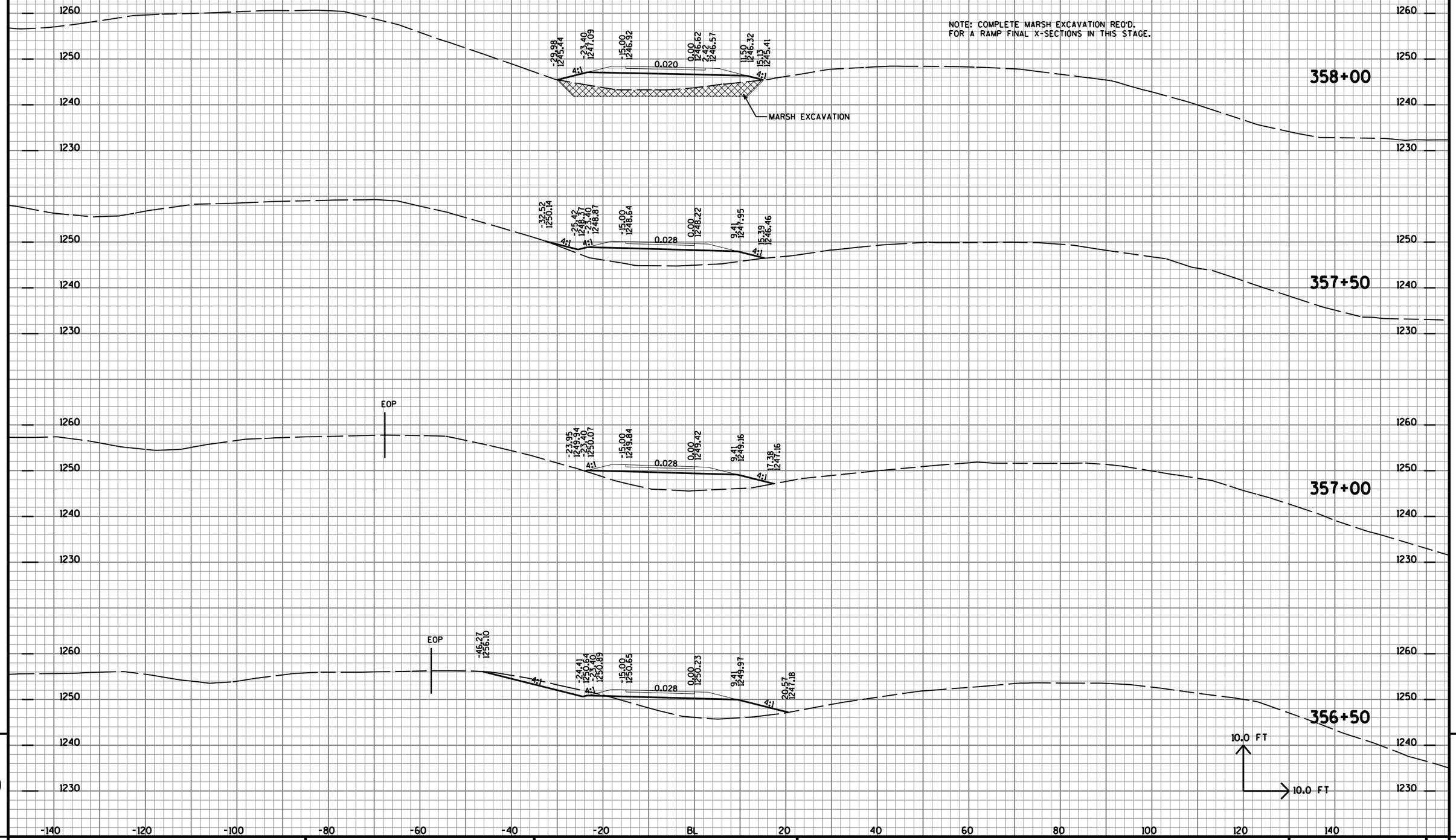


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PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: TEMP 'AT' RAMP	SHEET NO: 1315	E

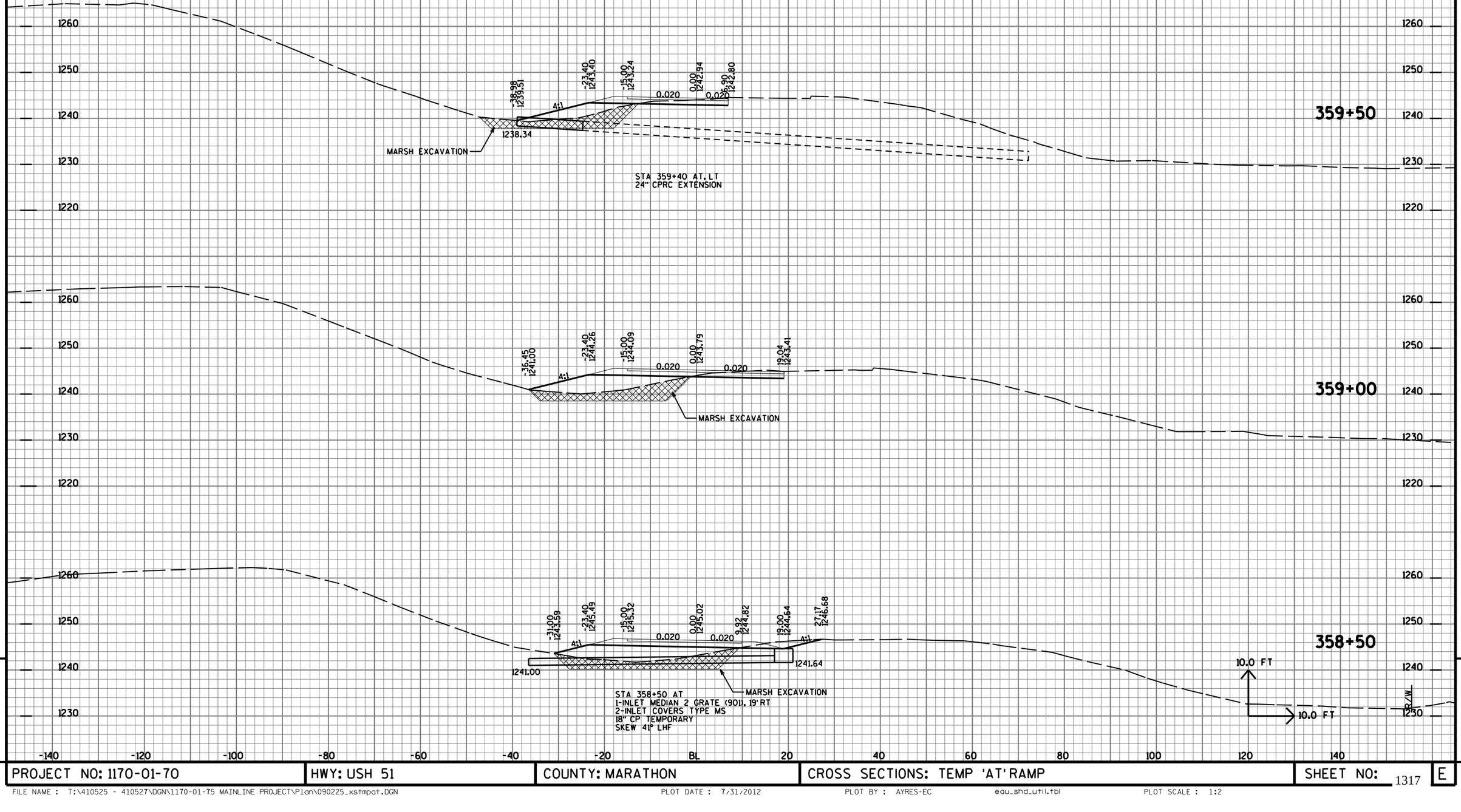
NOTE: COMPLETE MARSH EXCAVATION REQ'D.
FOR A RAMP FINAL X-SECTIONS IN THIS STAGE.



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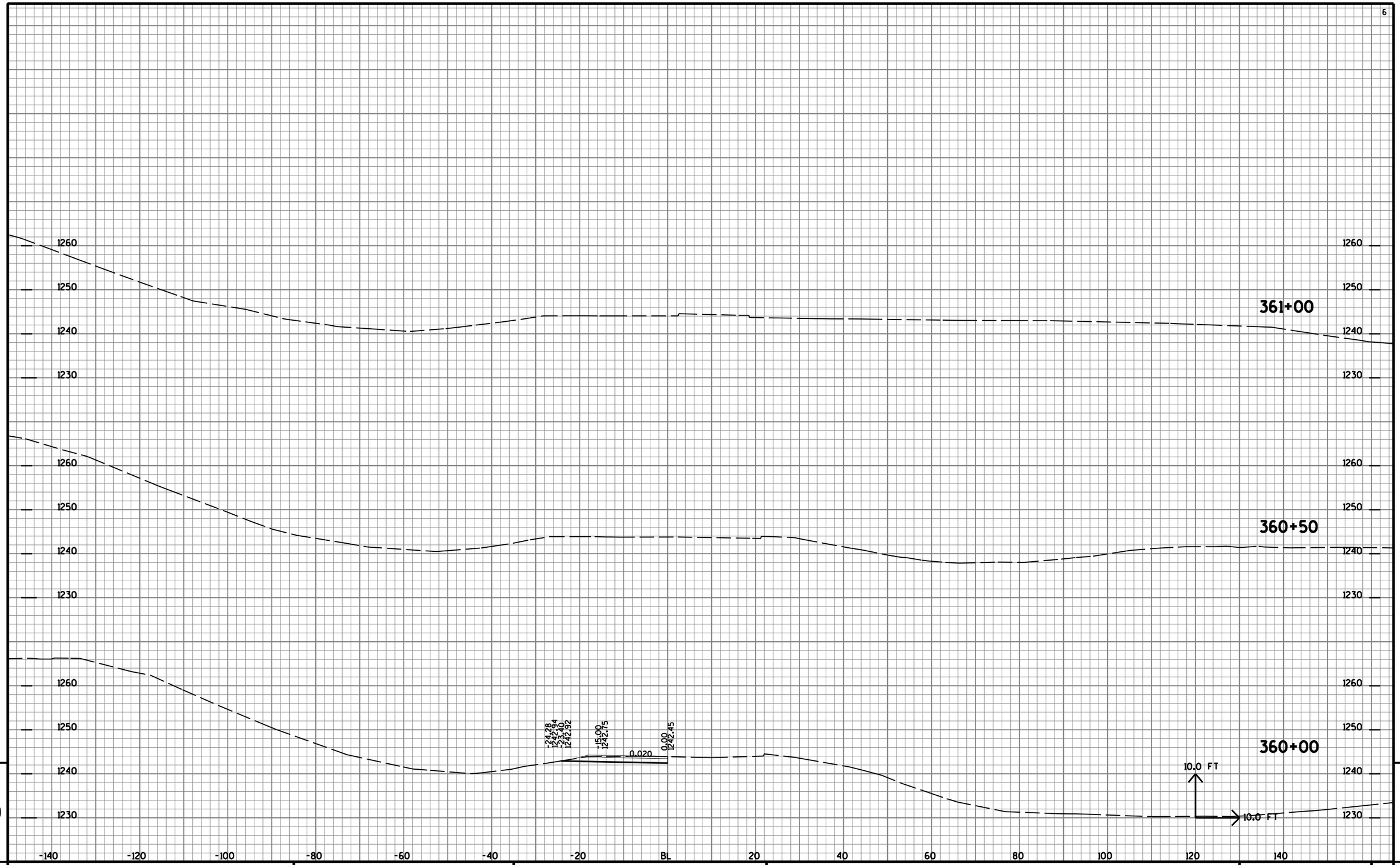
PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: TEMP 'AT' RAMP	SHEET NO: 1316	E



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PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: TEMP 'AT' RAMP	SHEET NO: 1317 E

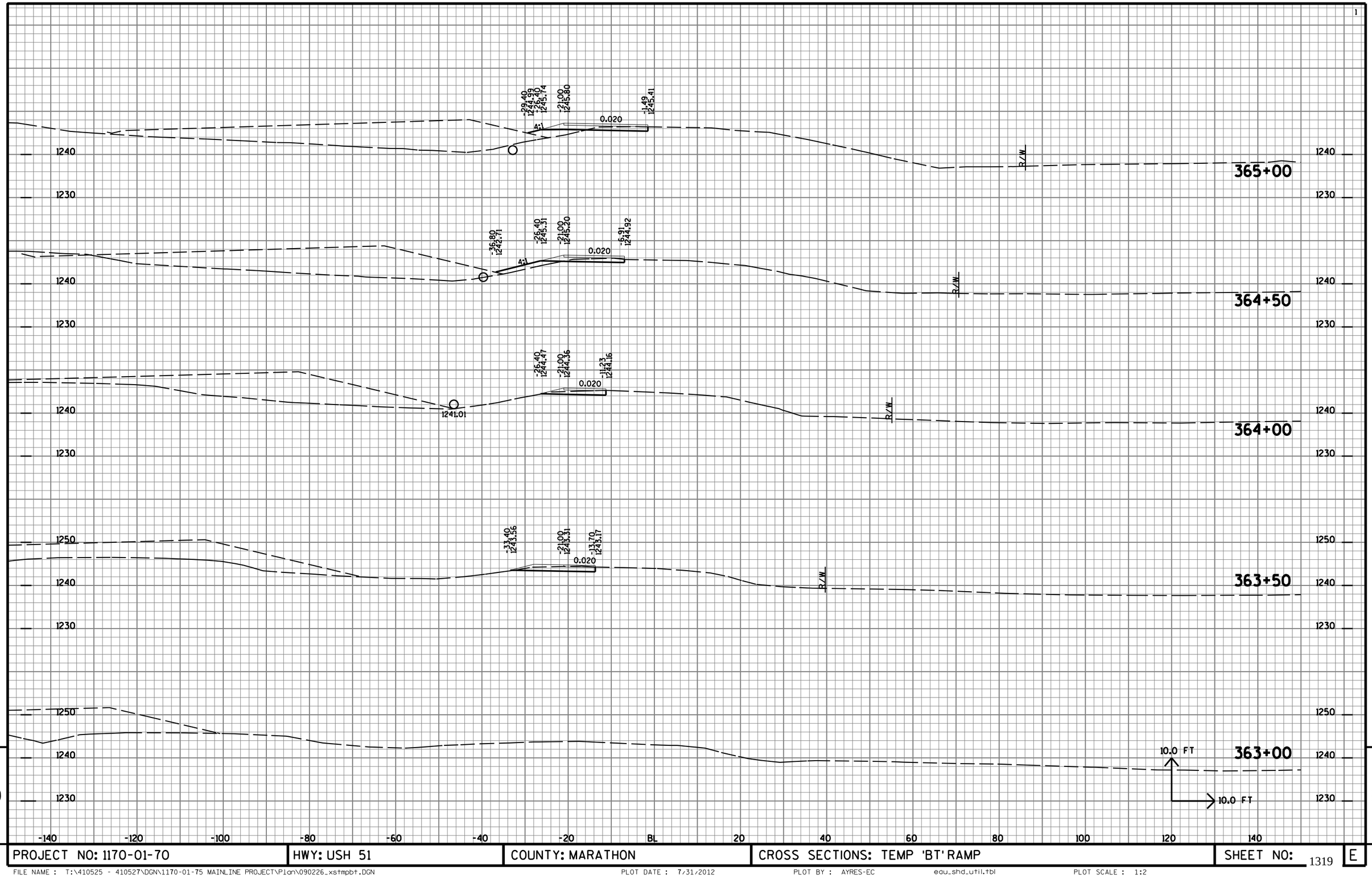


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PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: TEMP 'AT' RAMP	SHEET NO: 1318	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090225_xstmpat.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC edu_shd_util.tbl PLOT SCALE : 1:2

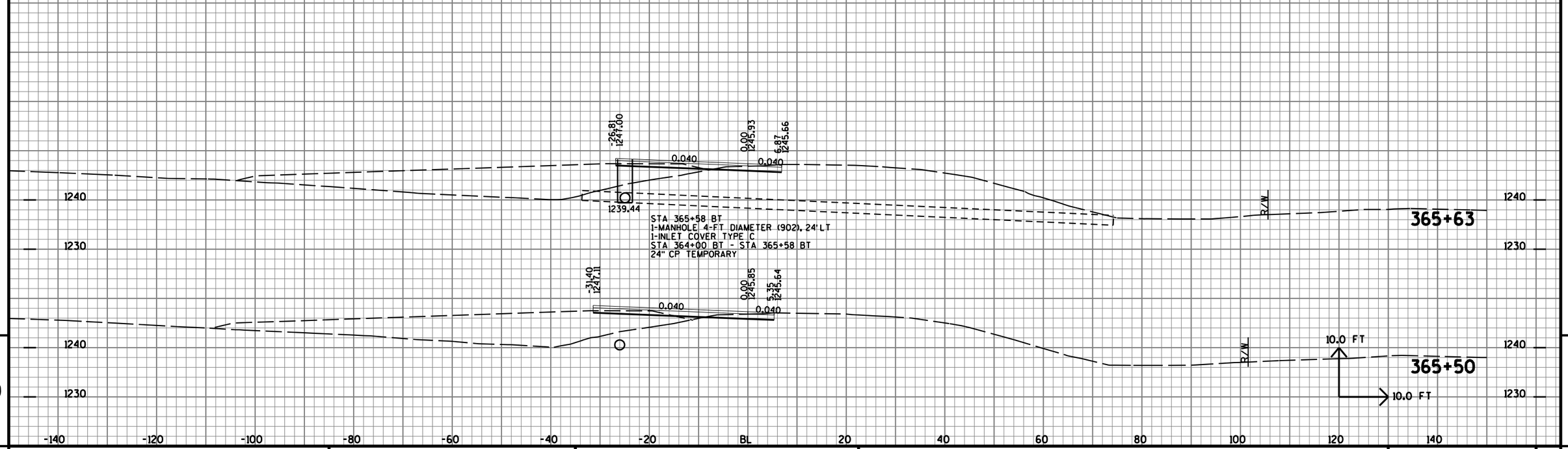


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PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: TEMP 'BT' RAMP	SHEET NO: 1319	E

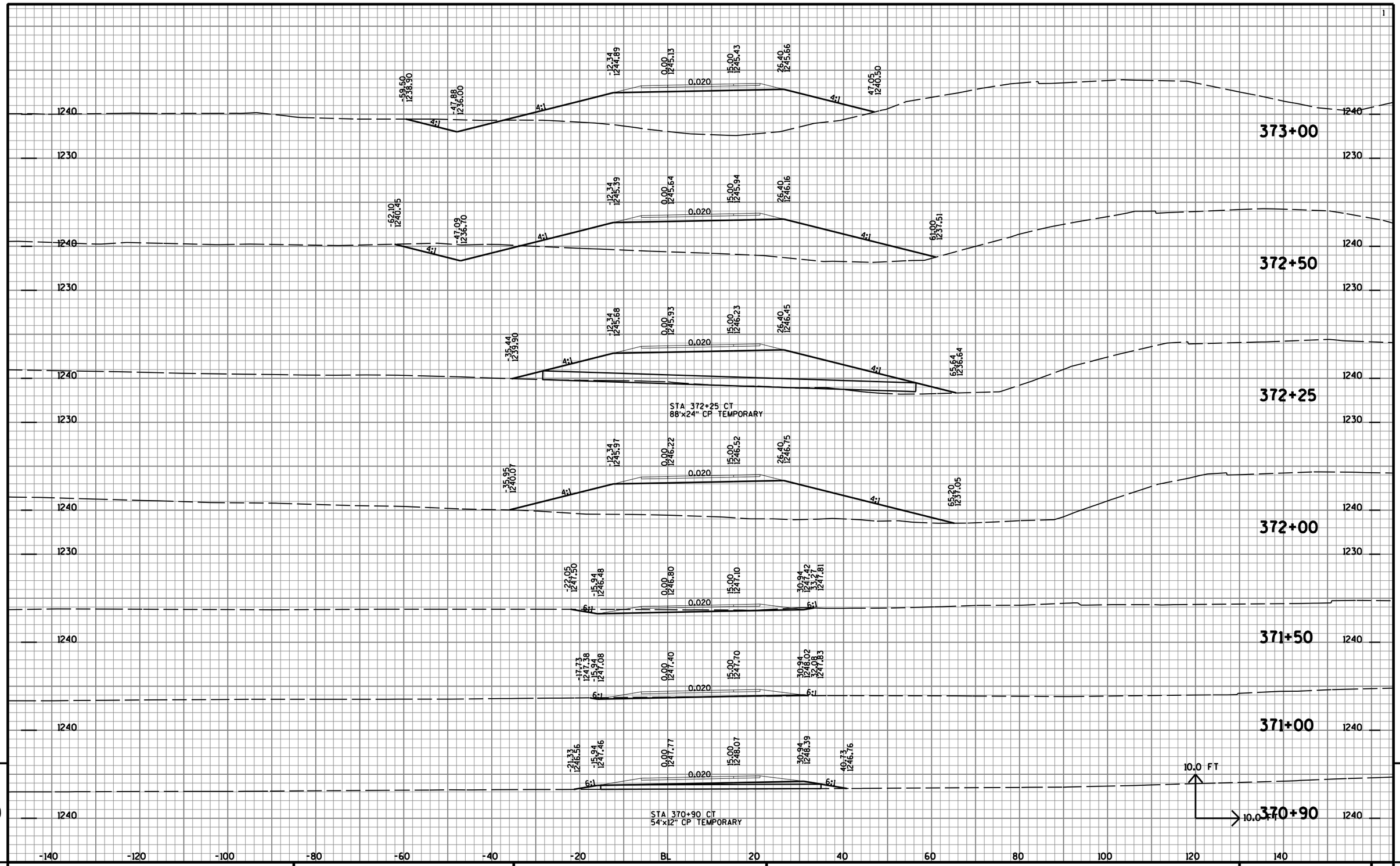
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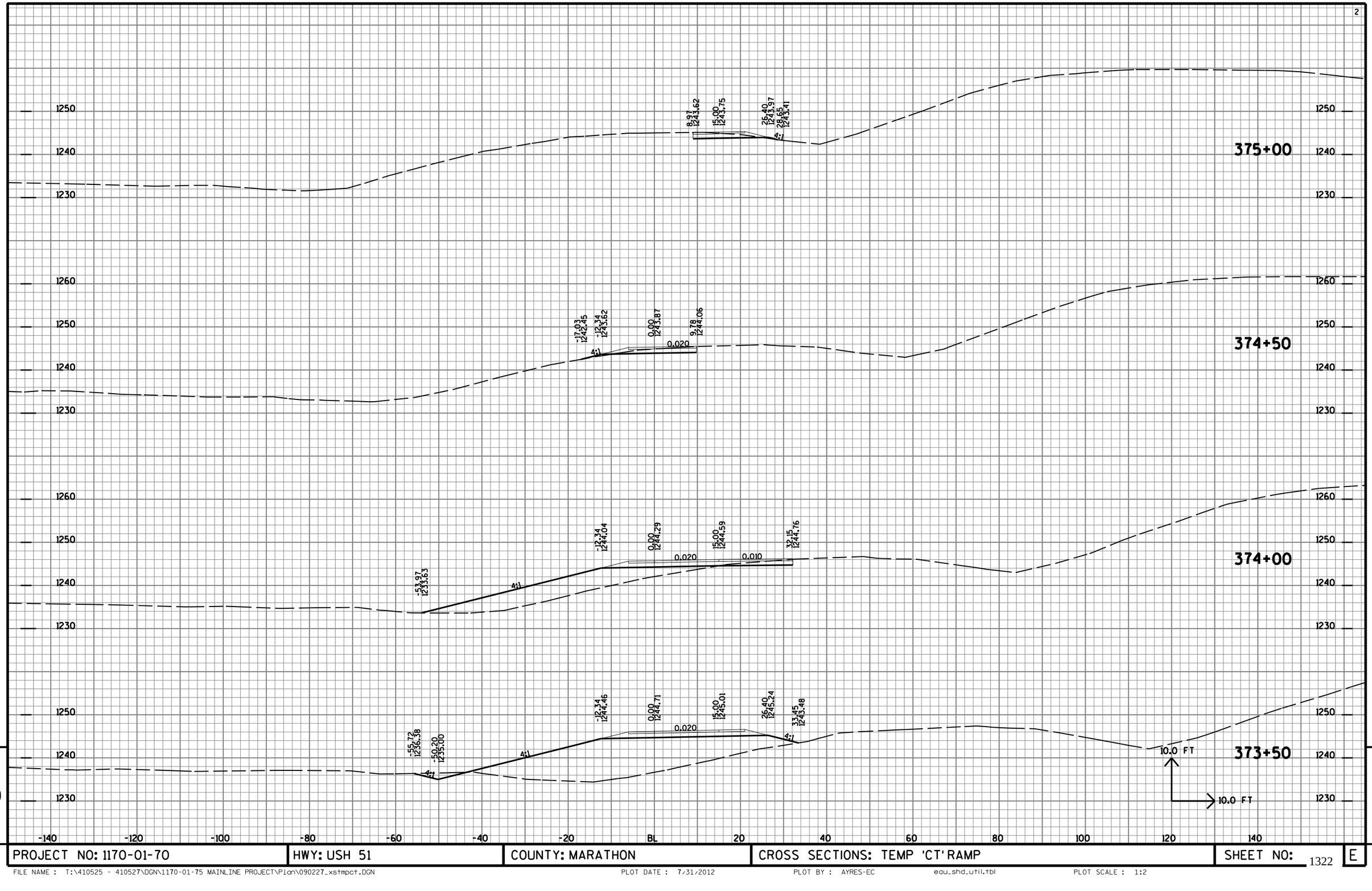
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PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: TEMP 'BT' RAMP	SHEET NO: 1320	E



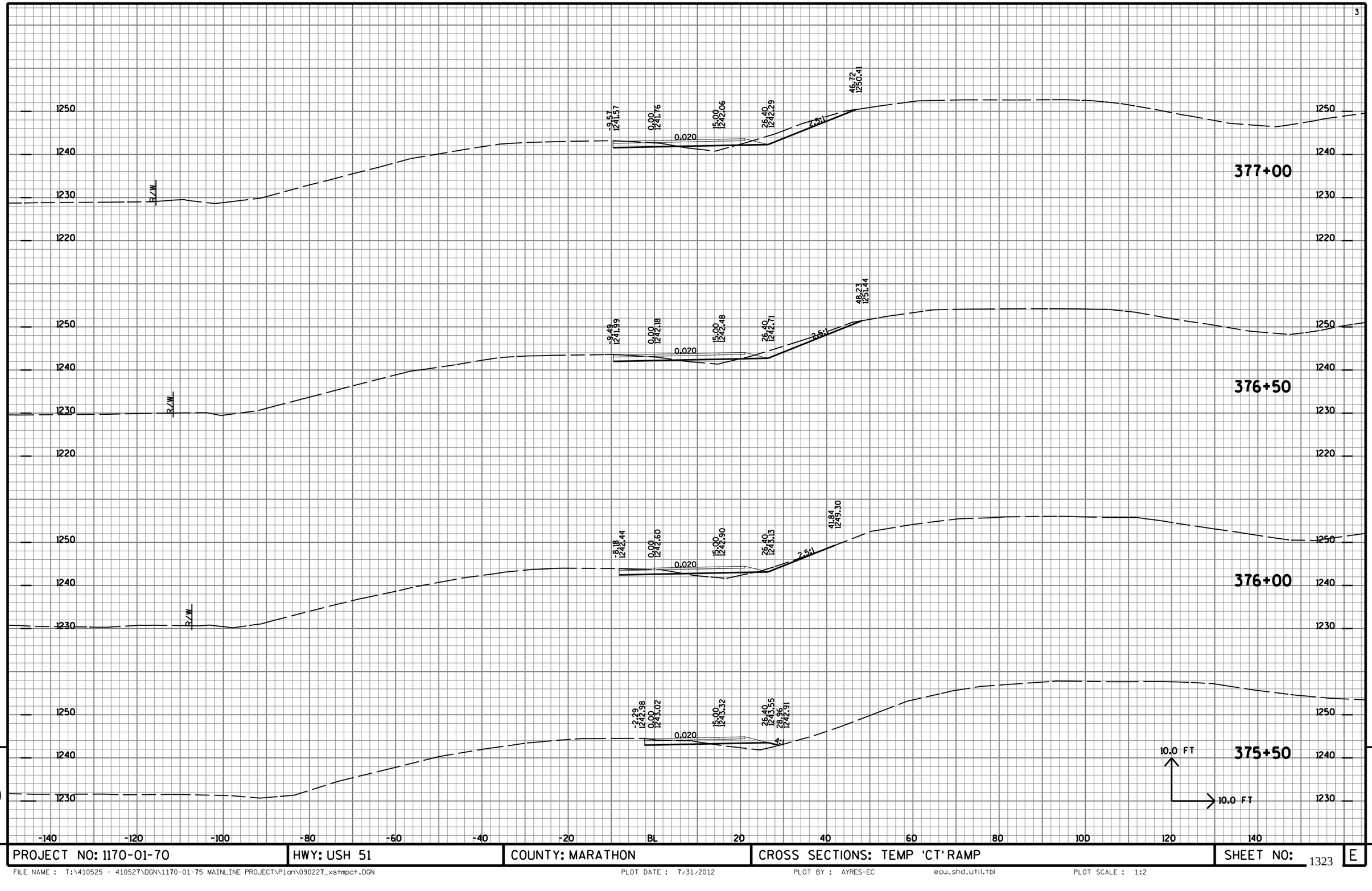
9 9

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: TEMP 'CT' RAMP	SHEET NO: 1321	E



9 9

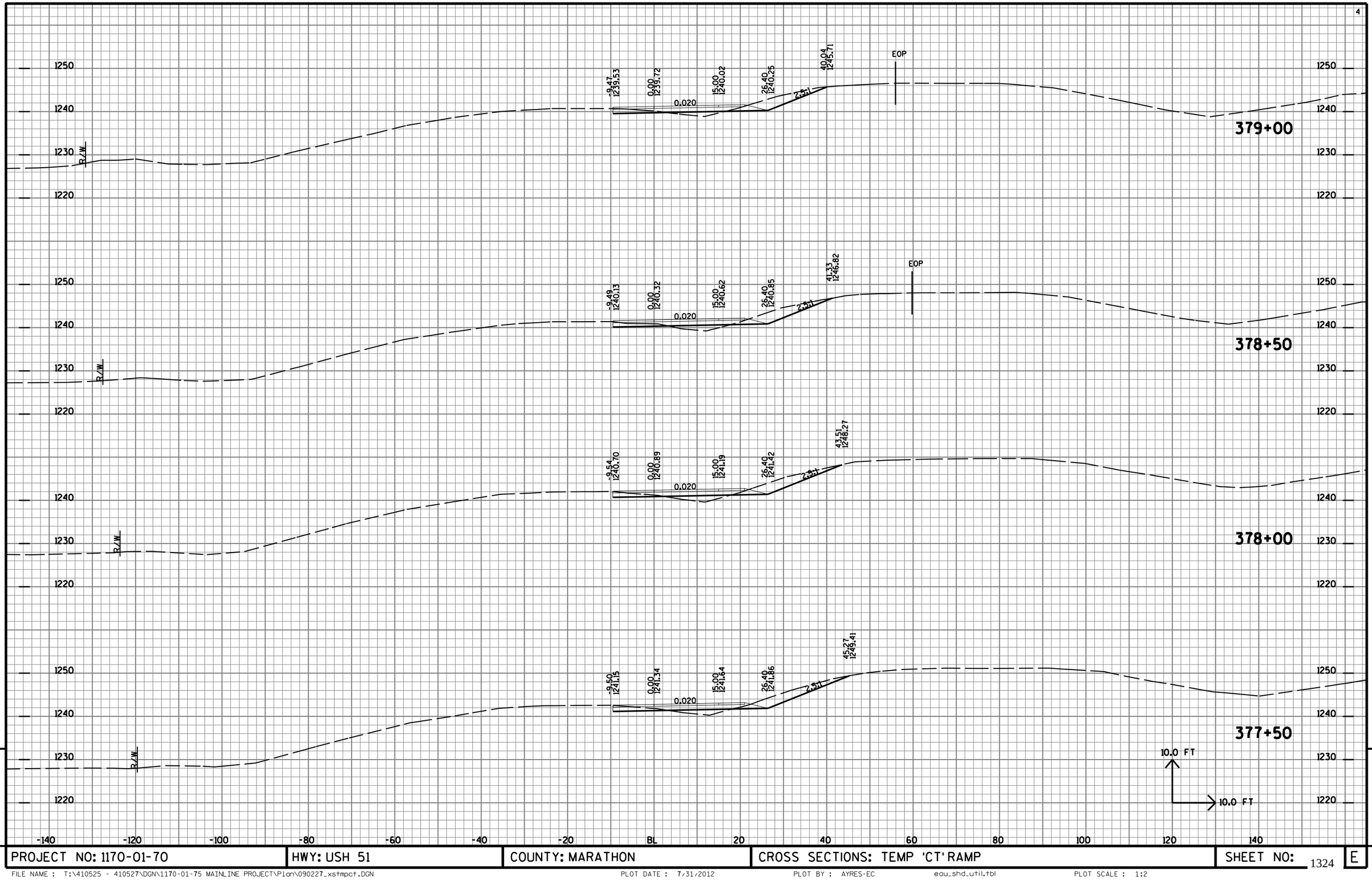
PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: TEMP 'CT' RAMP	SHEET NO: 1322 E



9

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: TEMP 'CT' RAMP	SHEET NO: 1323	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090227_xstmpct.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC edu_shd_util.tbl PLOT SCALE : 1:2

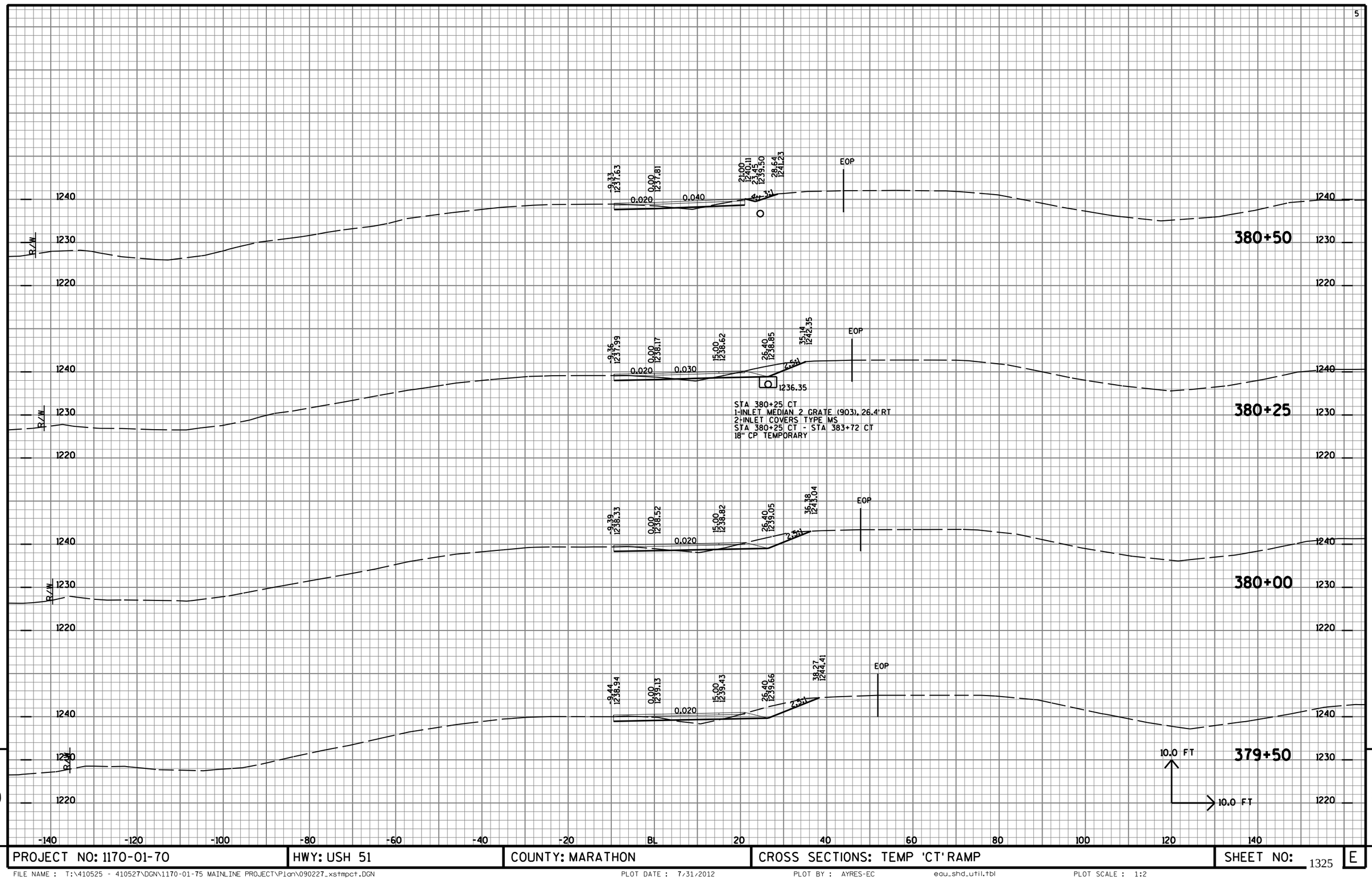


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PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: TEMP 'CT' RAMP	SHEET NO: 1324	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090227_xstmpct.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC edu_shd_util.tbl PLOT SCALE : 1:2

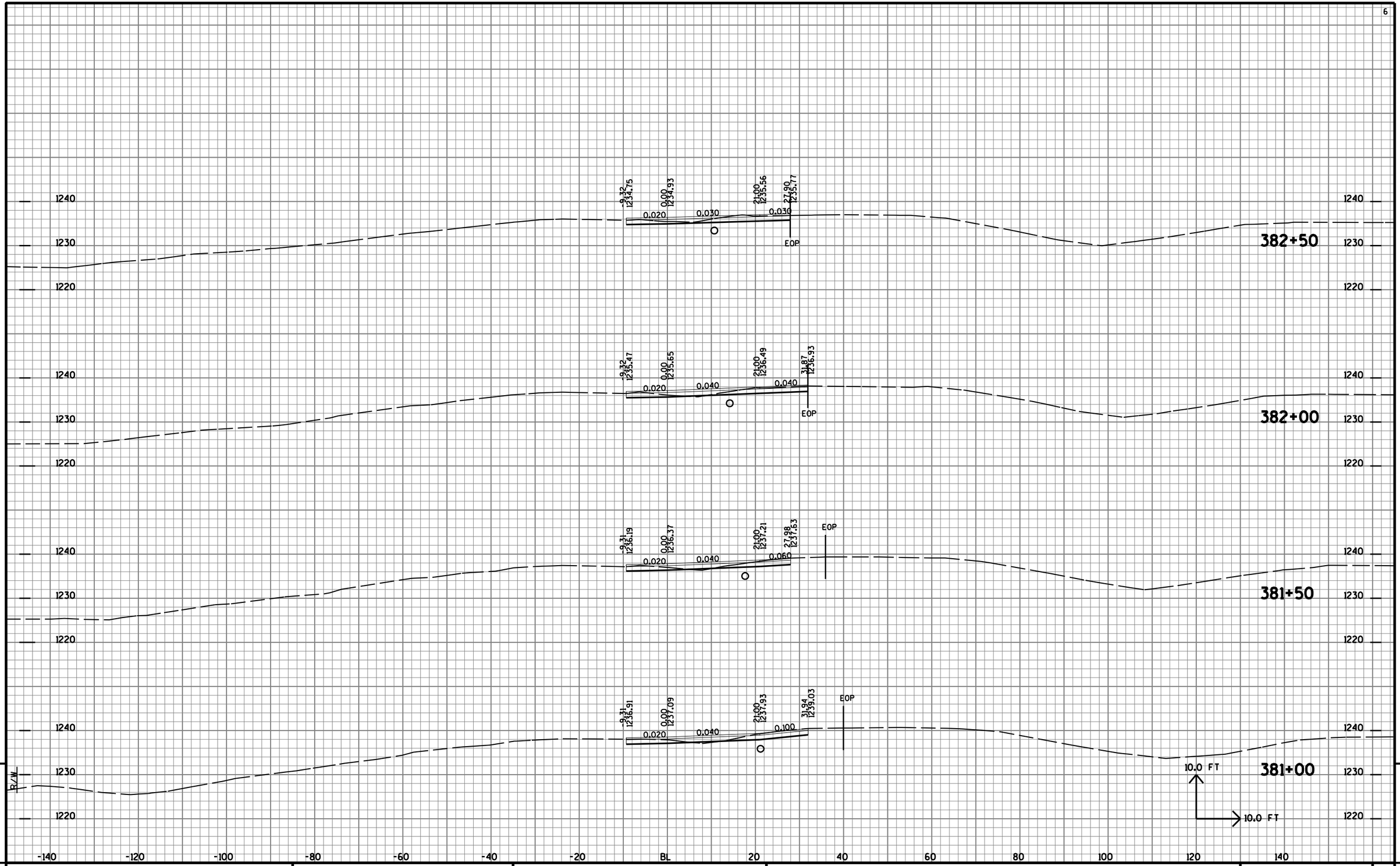


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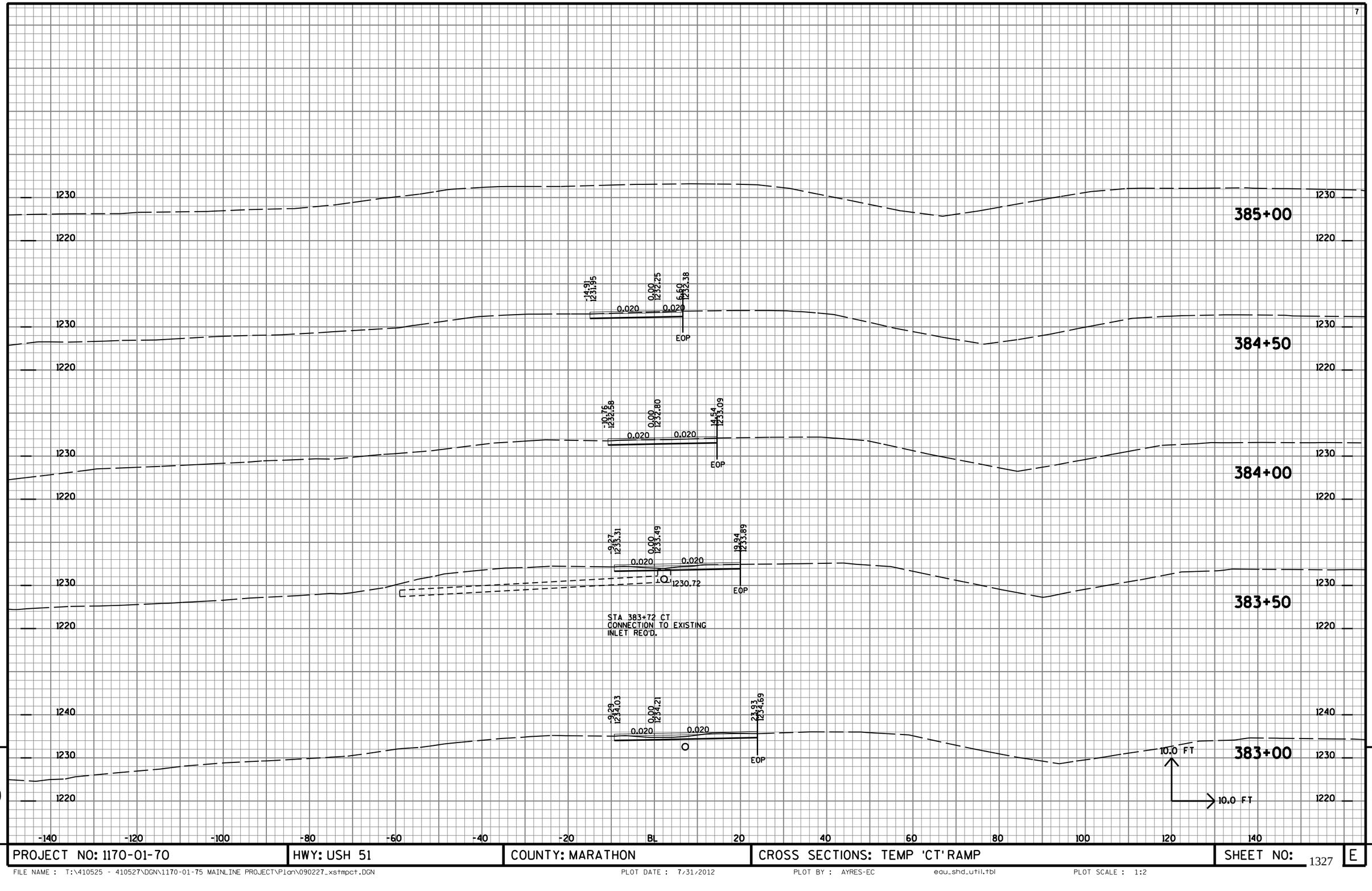
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PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: TEMP 'CT' RAMP	SHEET NO: 1326 E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090227_xstmpct.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC edu_shd_util.tbl PLOT SCALE : 1:2

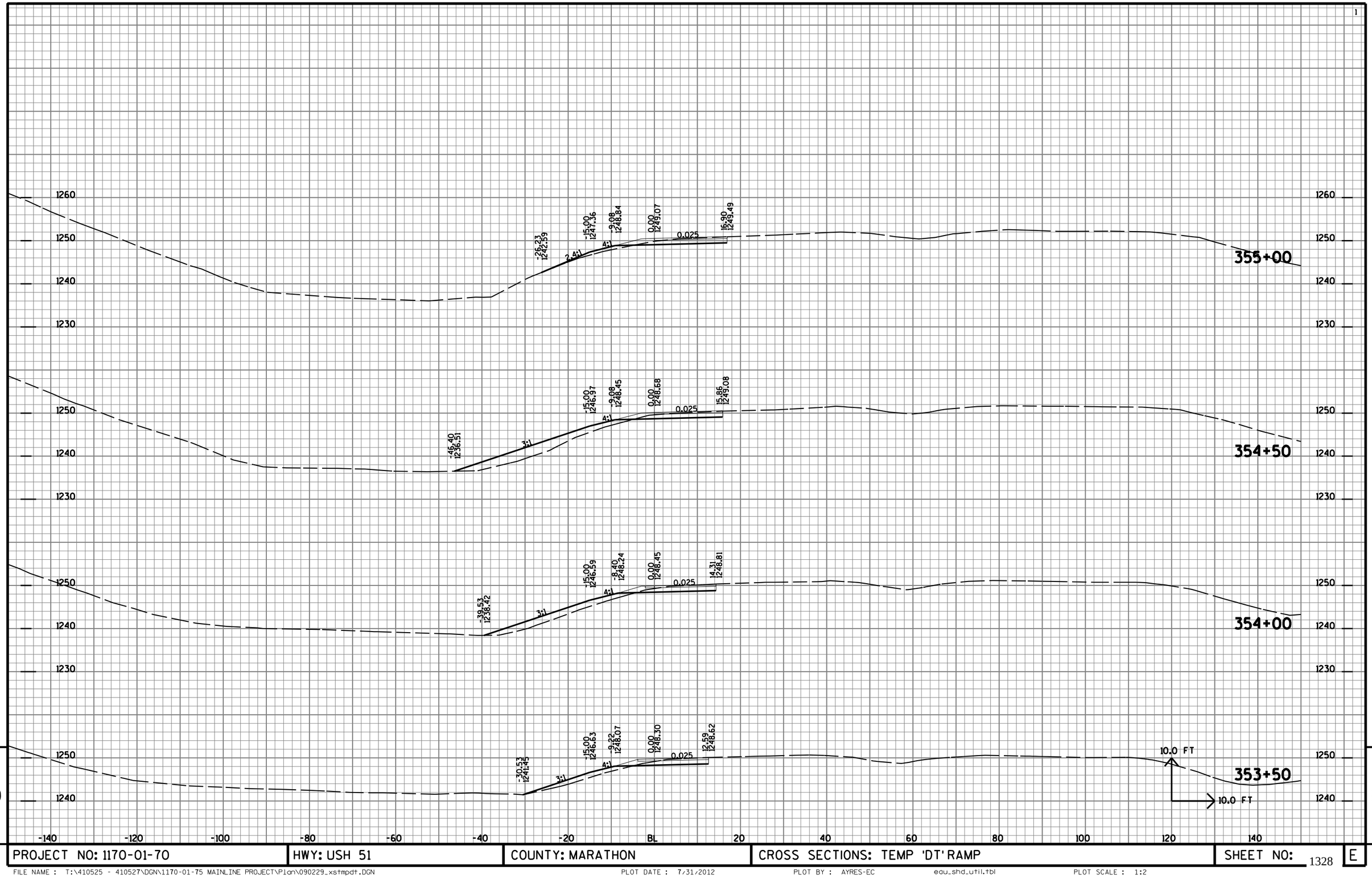


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PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: TEMP 'CT' RAMP	SHEET NO: 1327	E

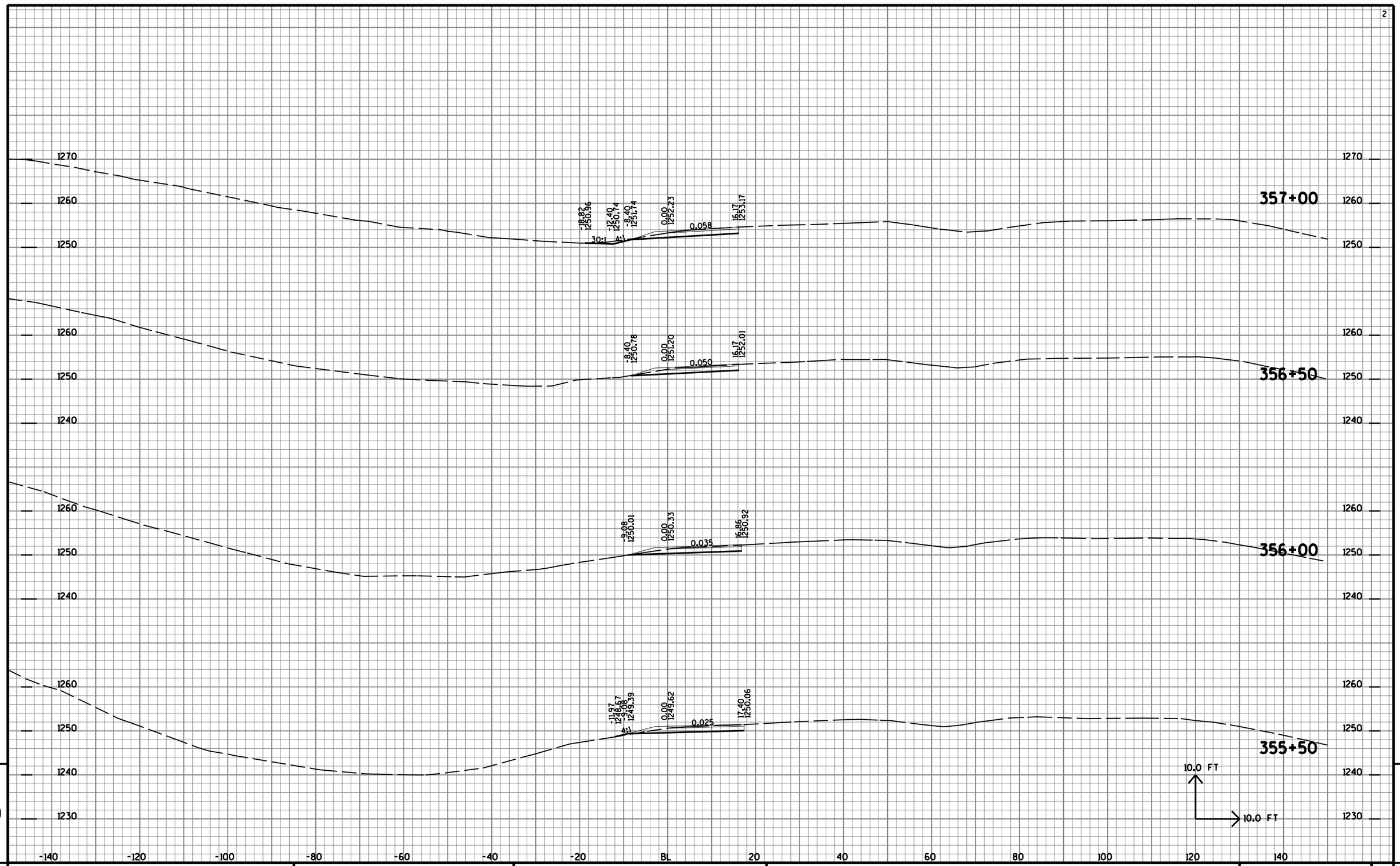
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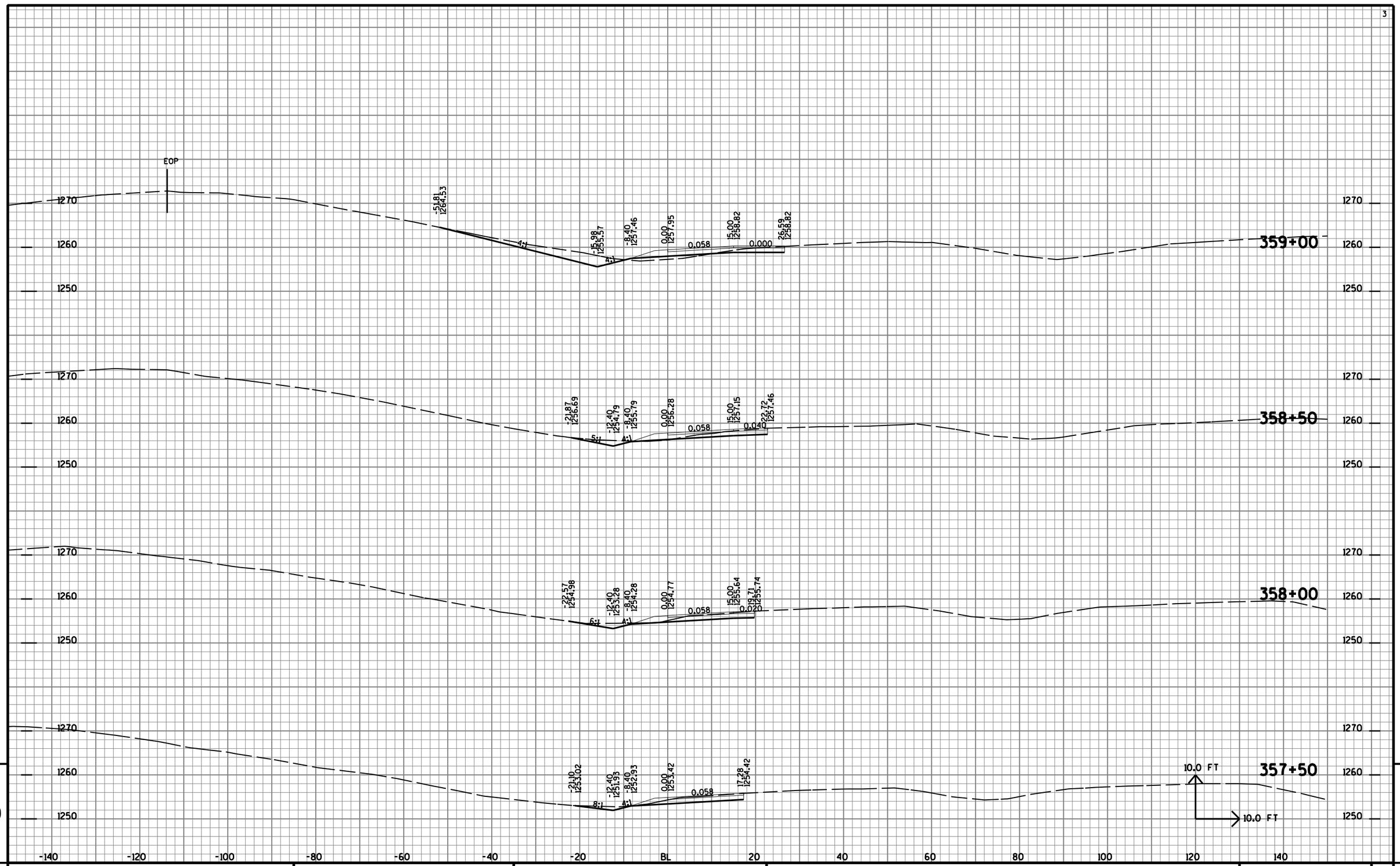
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PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: TEMP 'DT' RAMP	SHEET NO: 1328	E



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PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: TEMP 'DT' RAMP	SHEET NO: 1329 E

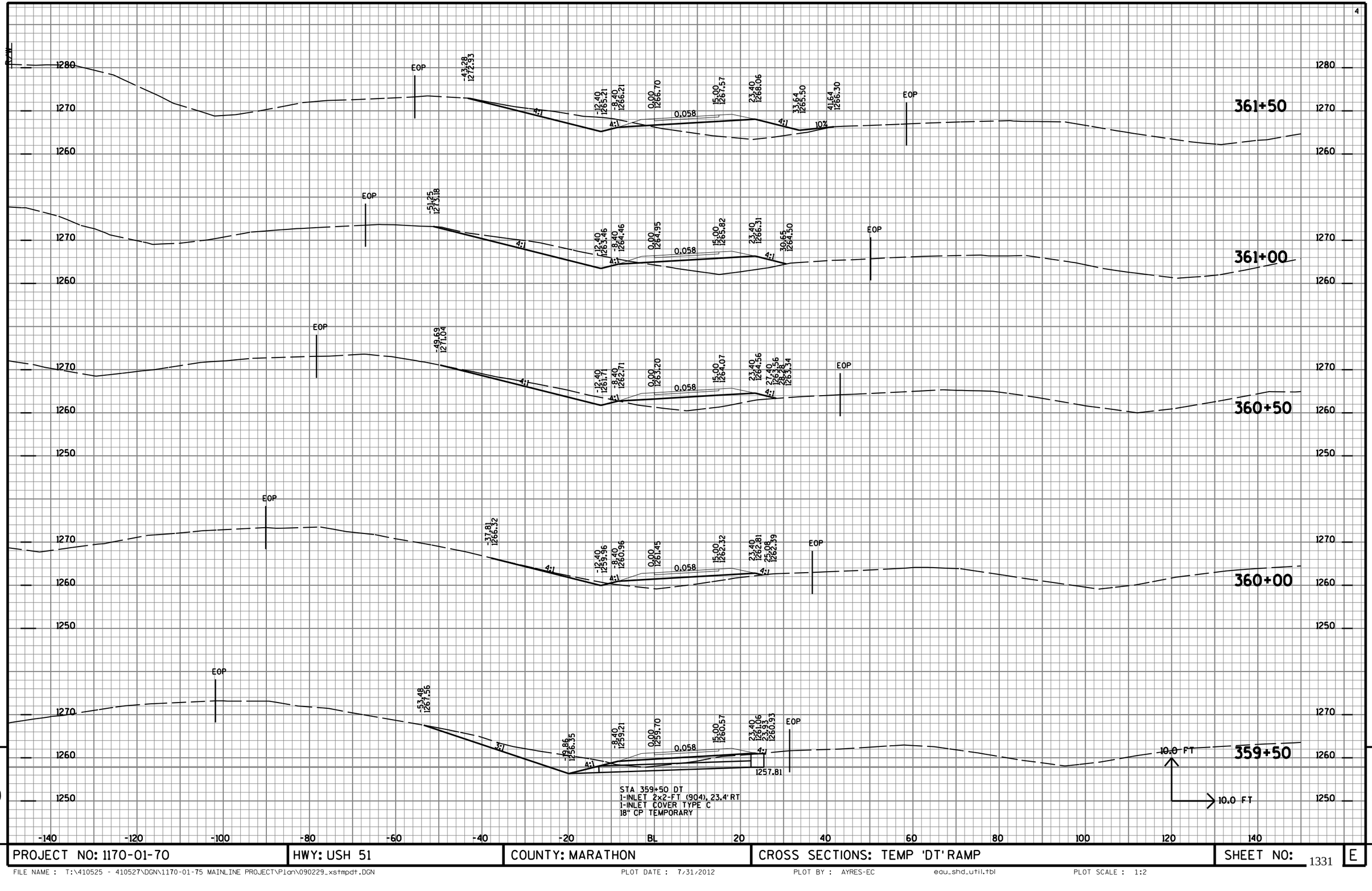


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PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: TEMP 'DT' RAMP	SHEET NO: 1330	E

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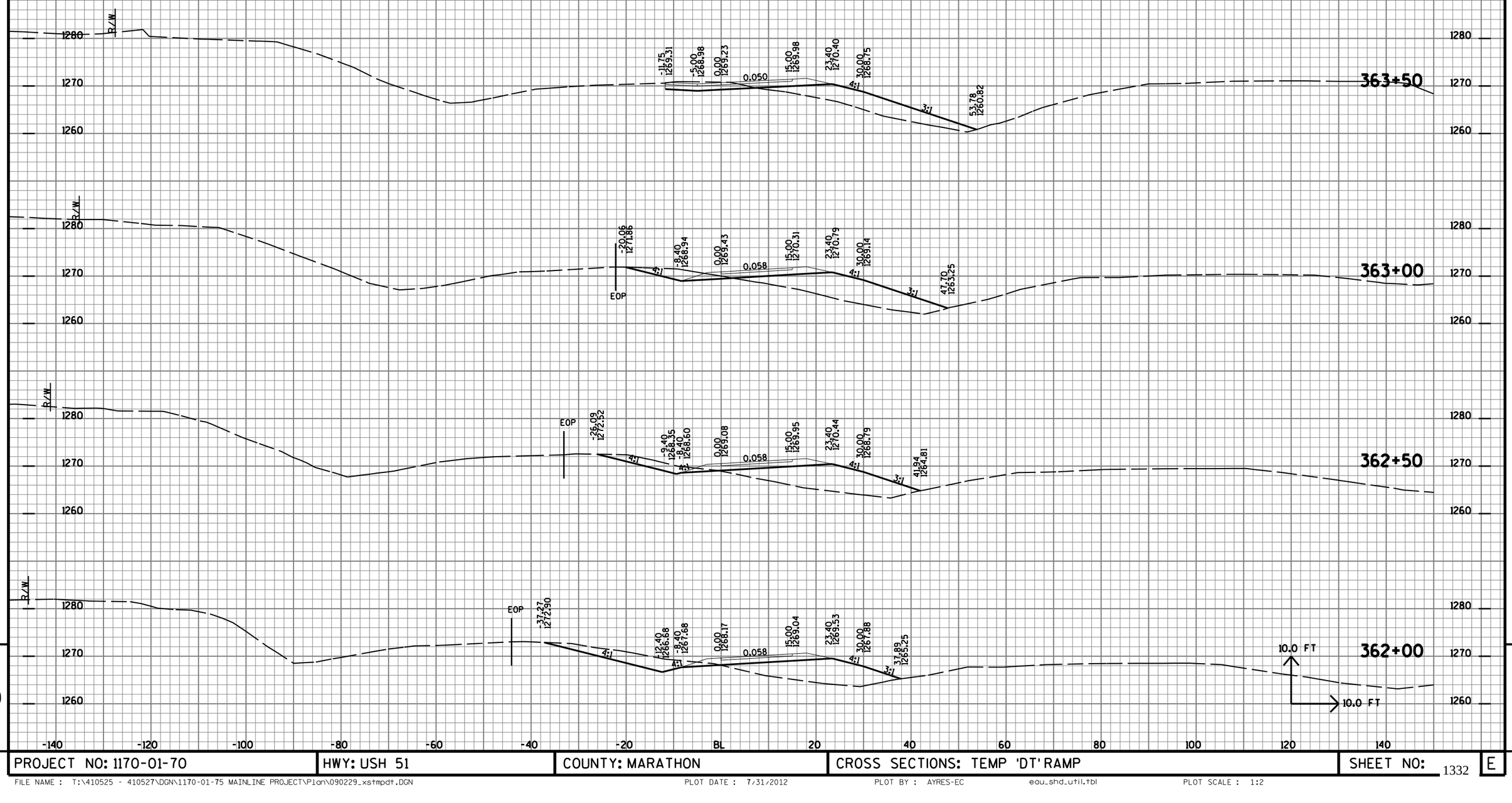


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PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: TEMP 'DT' RAMP	SHEET NO: 1331 E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090229_xstmpdt.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC edu_shd_util.tbl PLOT SCALE : 1:2

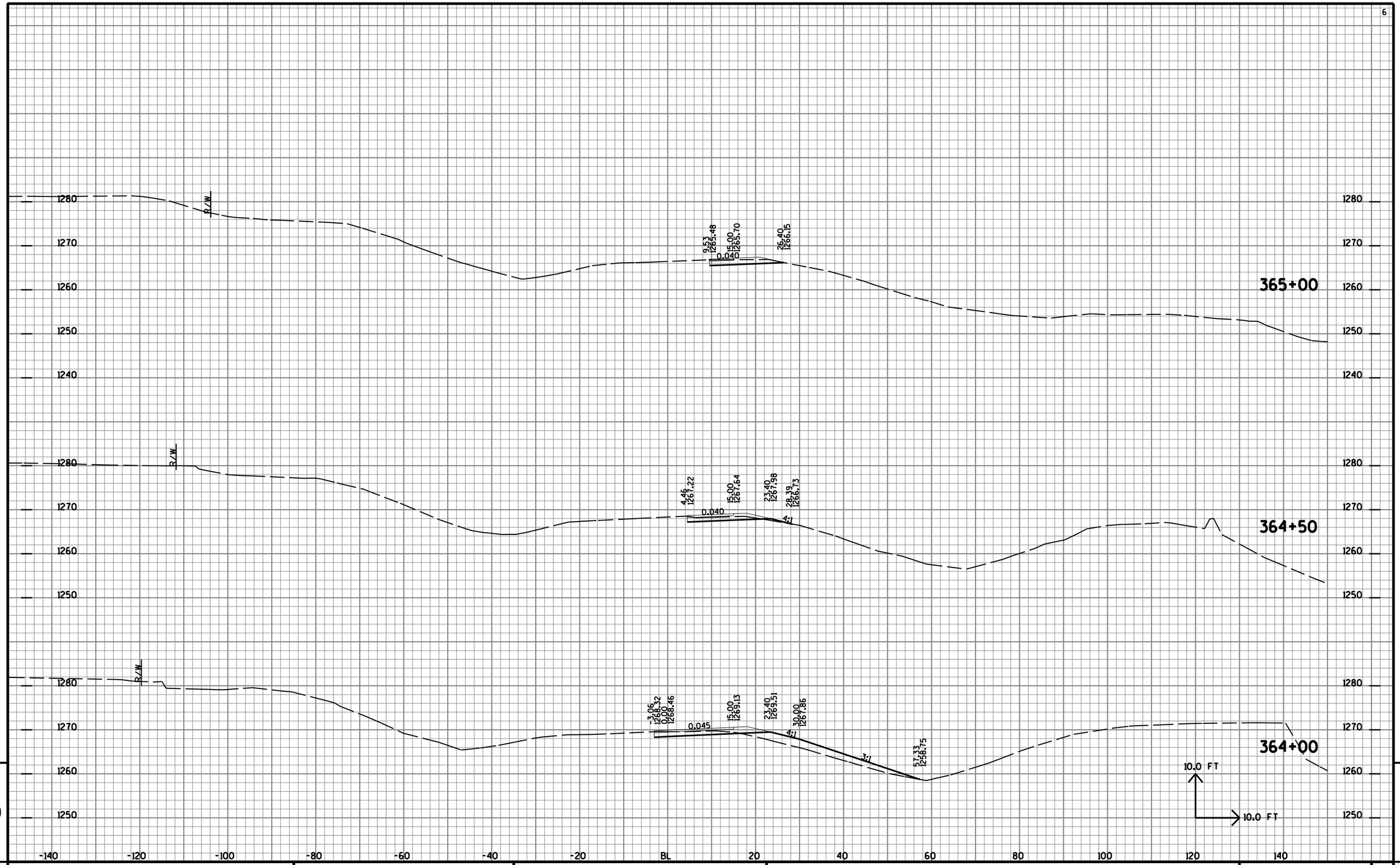


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PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: TEMP 'DT' RAMP	SHEET NO: 1332	E

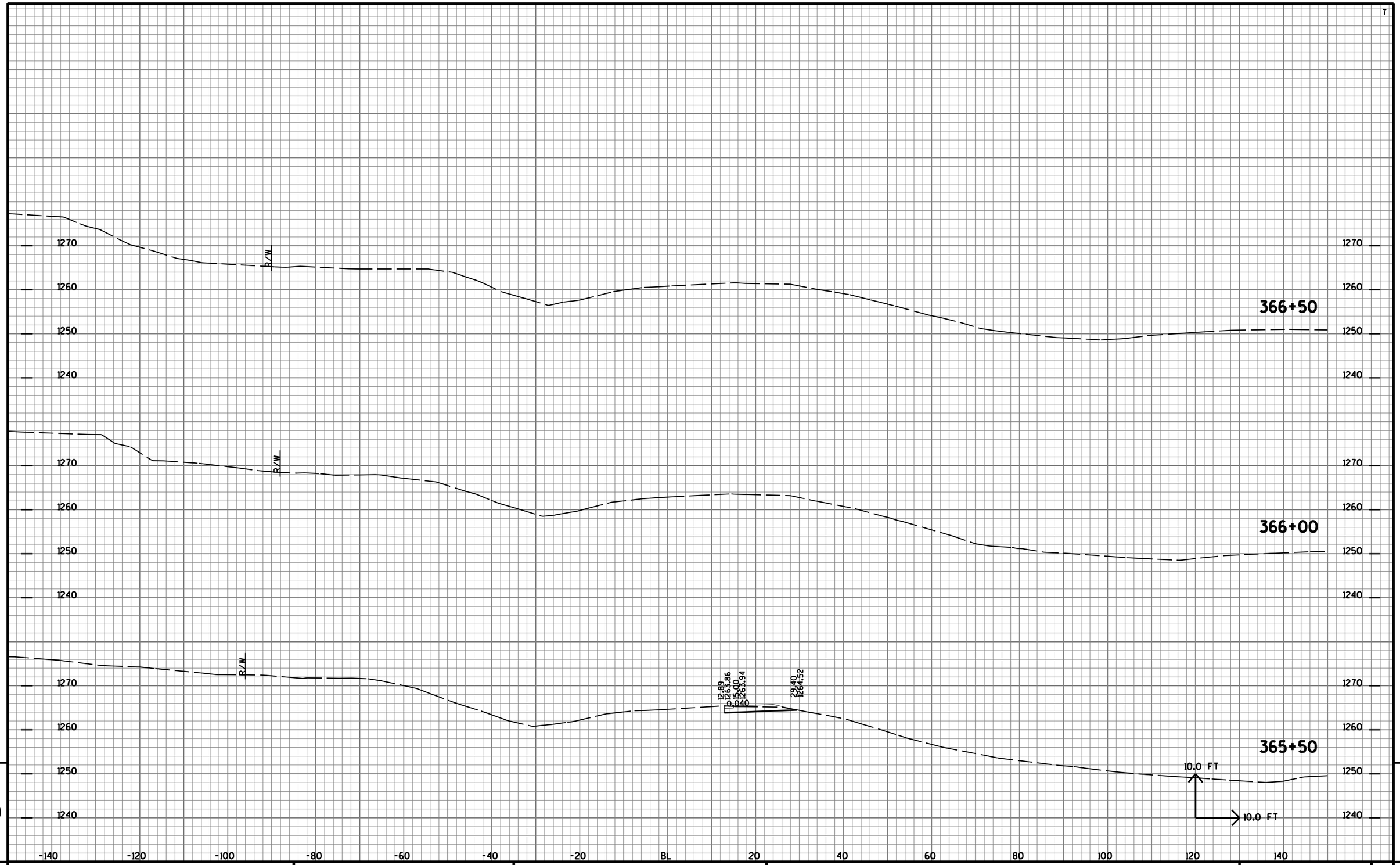
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PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: TEMP 'DT' RAMP	SHEET NO: 1333	E

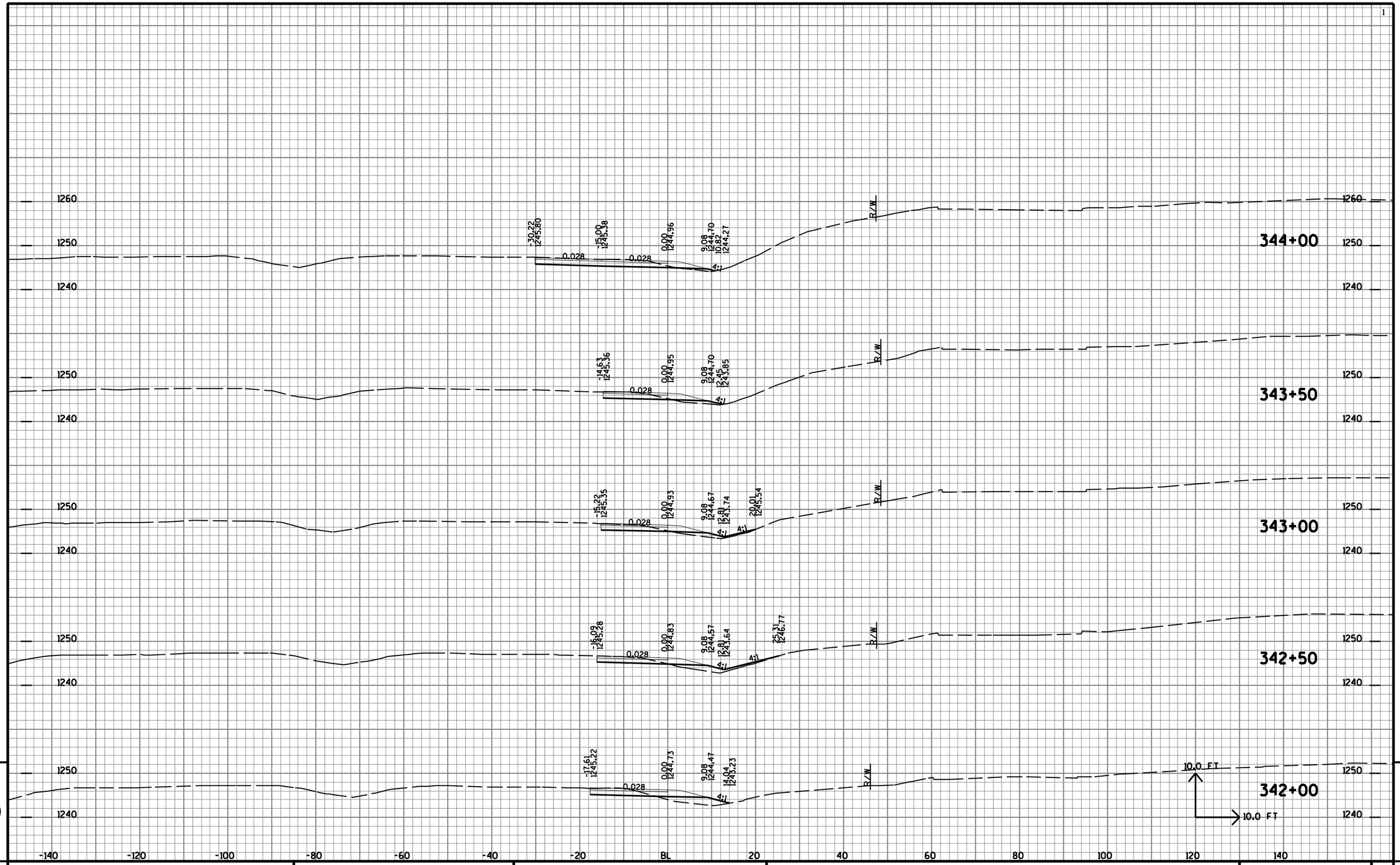


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PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: TEMP 'DT' RAMP	SHEET NO: 1334	E

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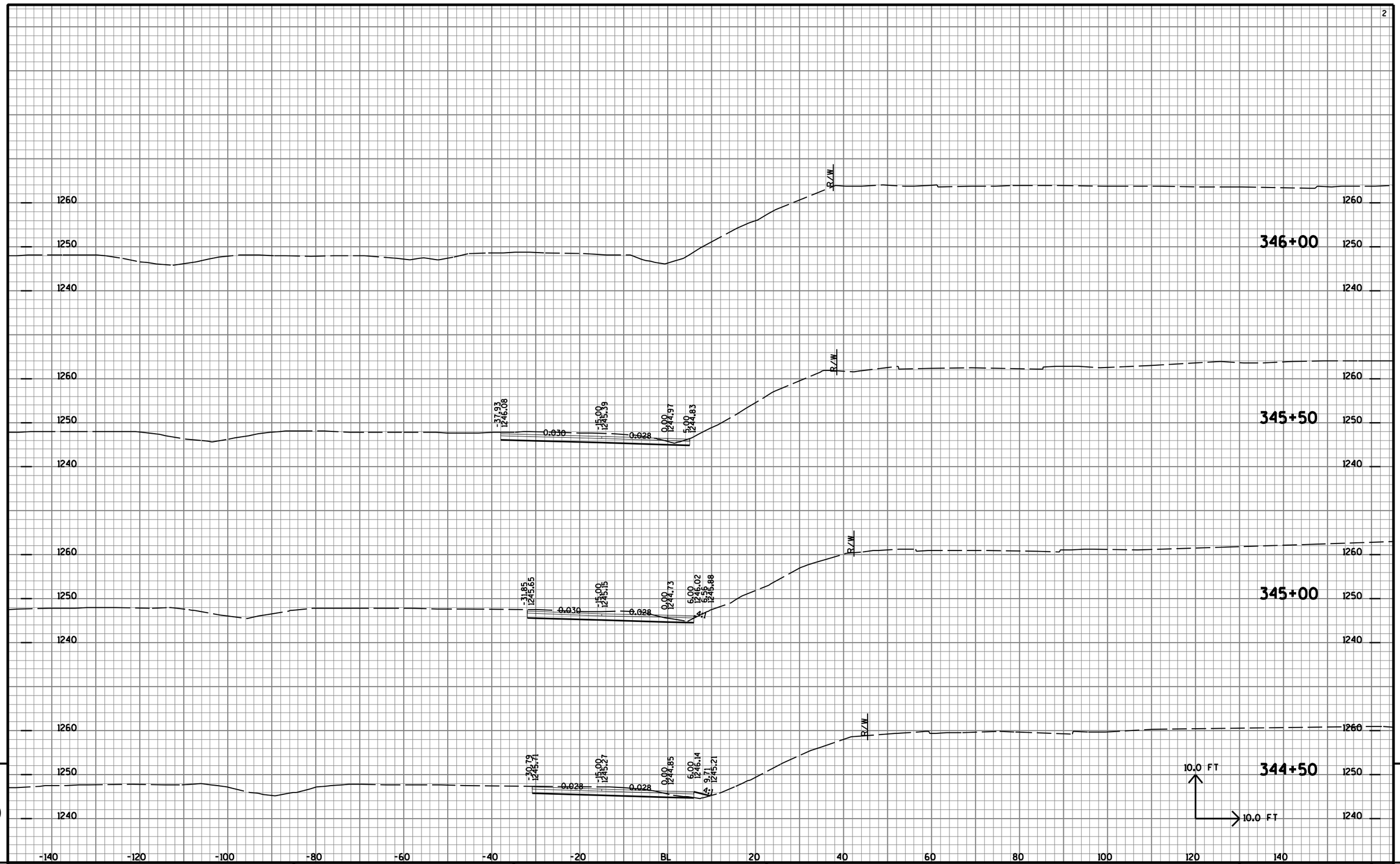


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PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: TEMP 'ET' RAMP	SHEET NO: 1335	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090230_xstmpet.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC eau_shd_util.tbl PLOT SCALE : 1:2



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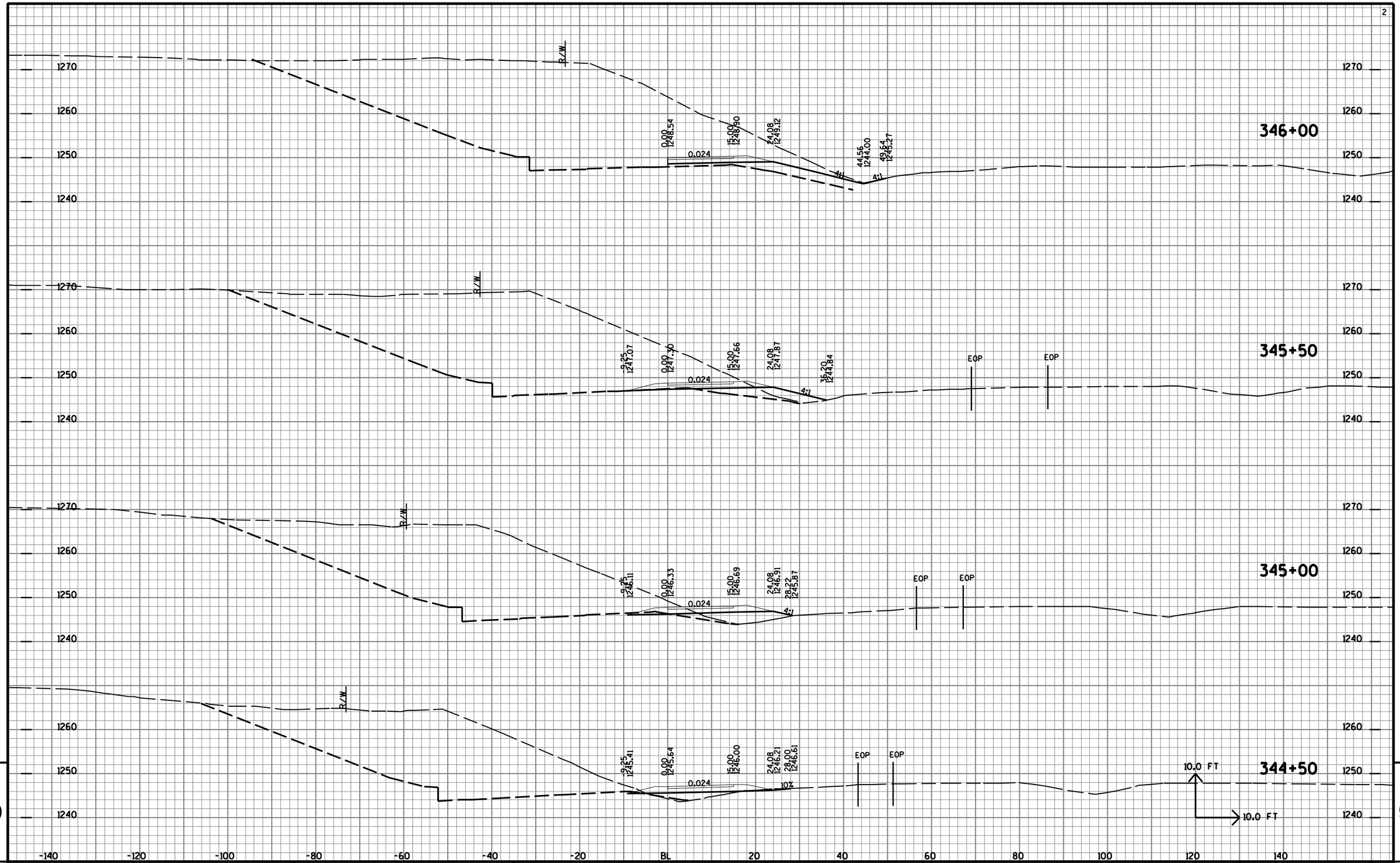
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FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090230_xstmpet.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC eau_shd_util.tbl PLOT SCALE : 1:2



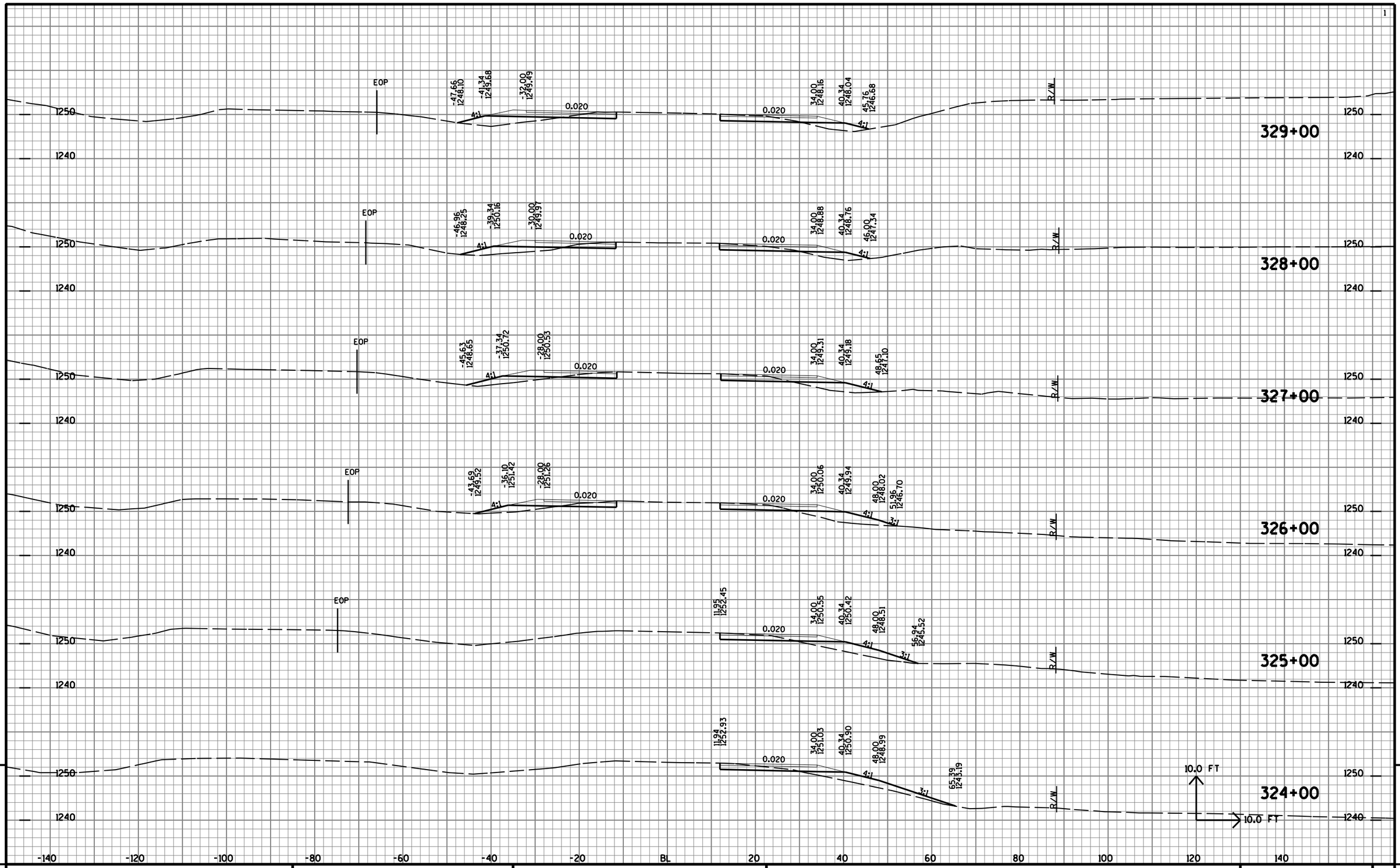
PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: TEMP 'FT RAMP	SHEET NO: 1337	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090231_xstmpft.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC eau_shd_util.tbl PLOT SCALE : 1:2



PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: TEMP 'FT' RAMP	SHEET NO: 1338 E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090231_xstmpft.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC eau_shd_util.tbl PLOT SCALE : 1:2

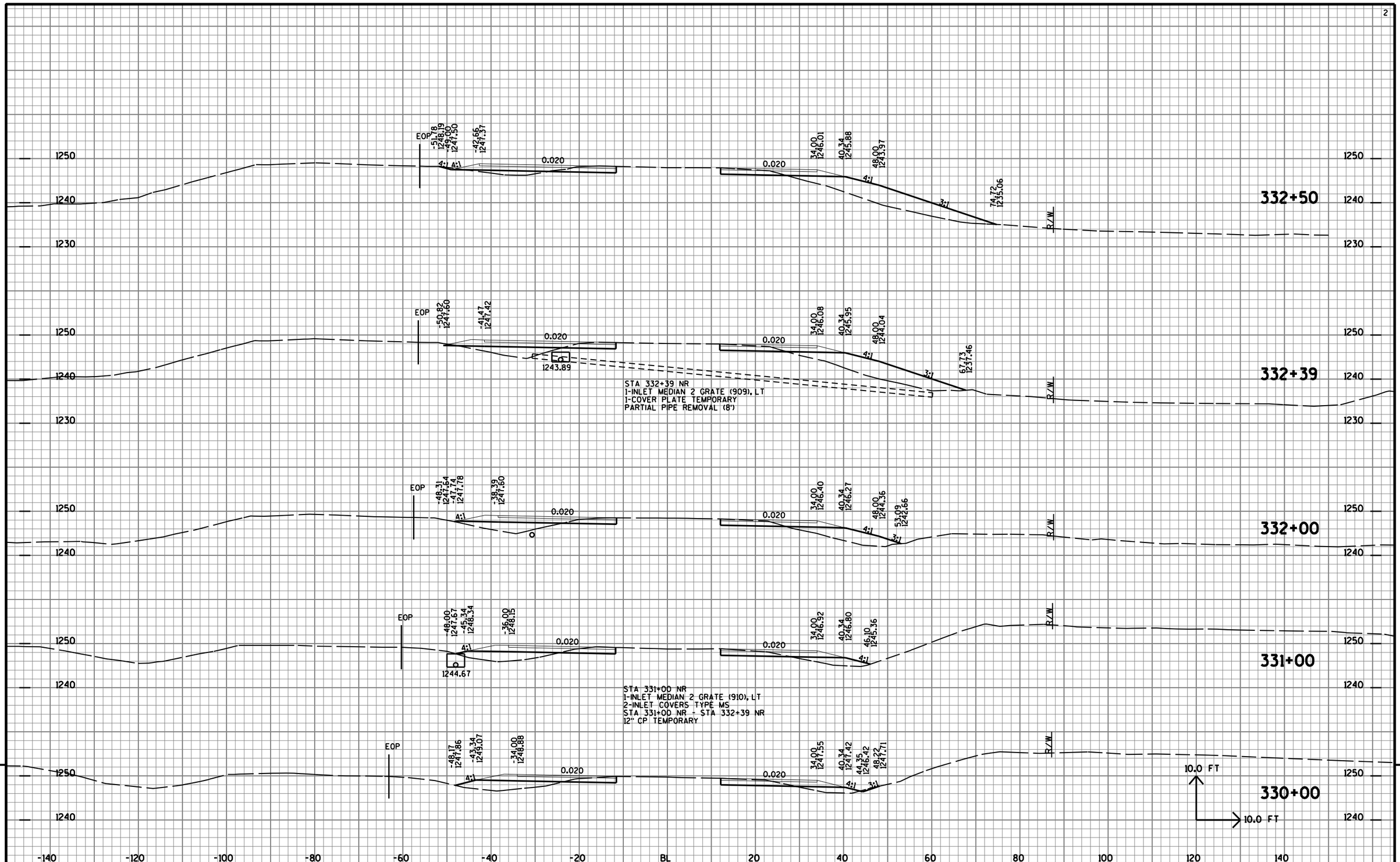


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PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: TEMP 'NR' LINE	SHEET NO: 1339	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090232_xstmpnr1.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC eau_shd_util.tbl PLOT SCALE : 1:2

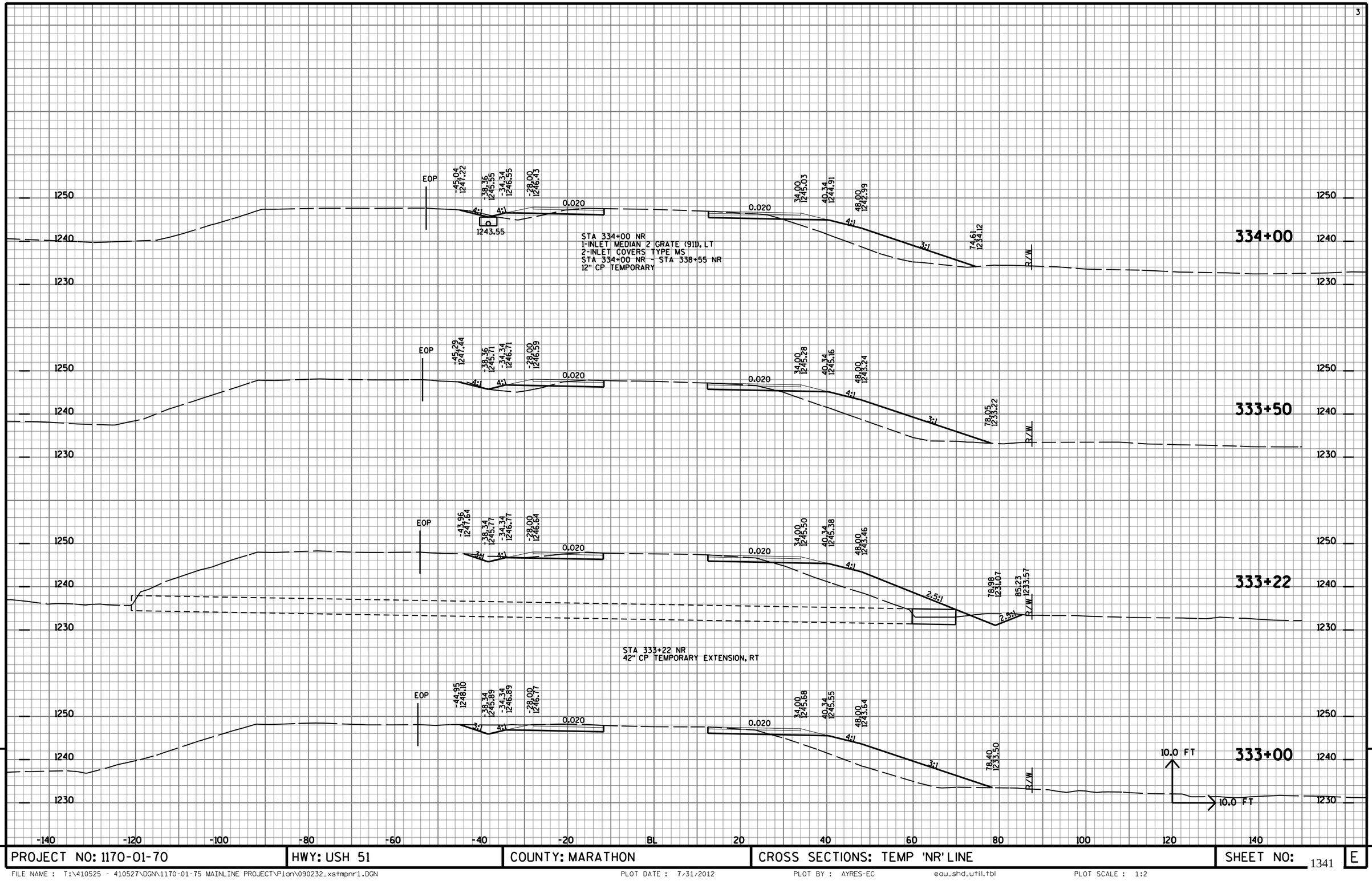


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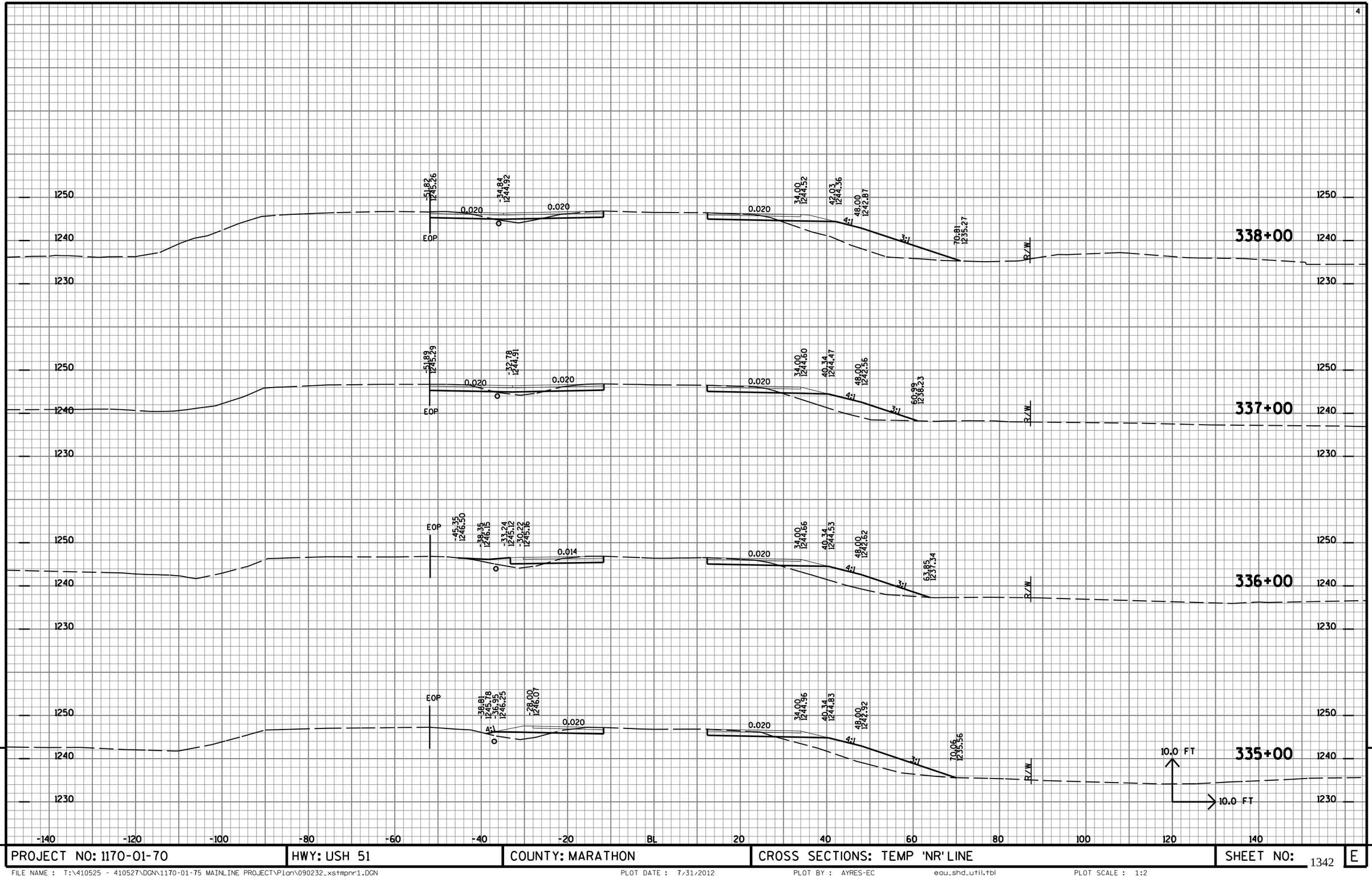
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FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090232_xstmpnr1.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC eau_shd_util.tbl PLOT SCALE : 1:2

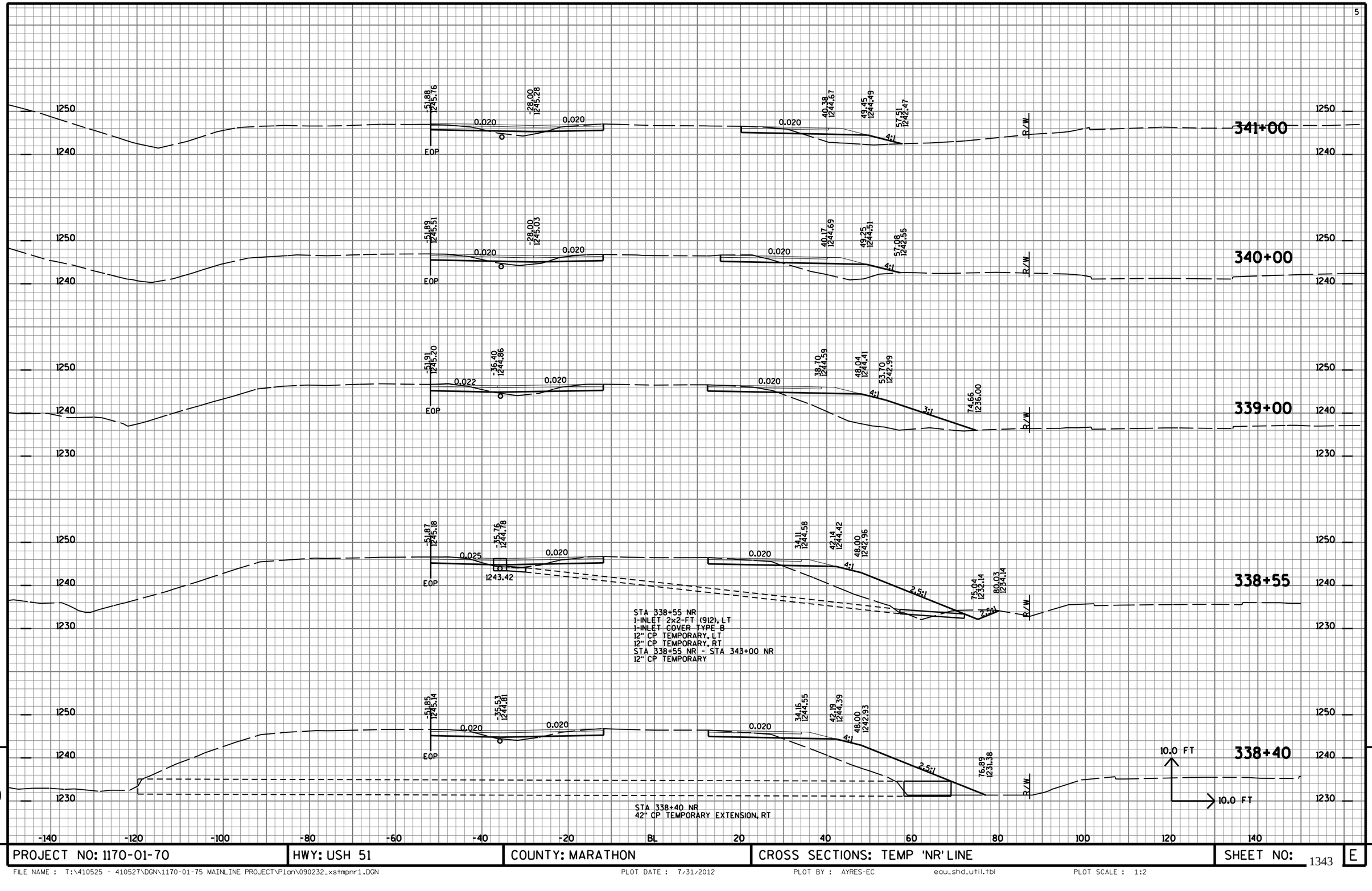


PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: TEMP 'NR' LINE	SHEET NO: 1341	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090232_xstmpnr1.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC eau_shd_util.tbl PLOT SCALE : 1:2



PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: TEMP 'NR' LINE	SHEET NO: 1342 E

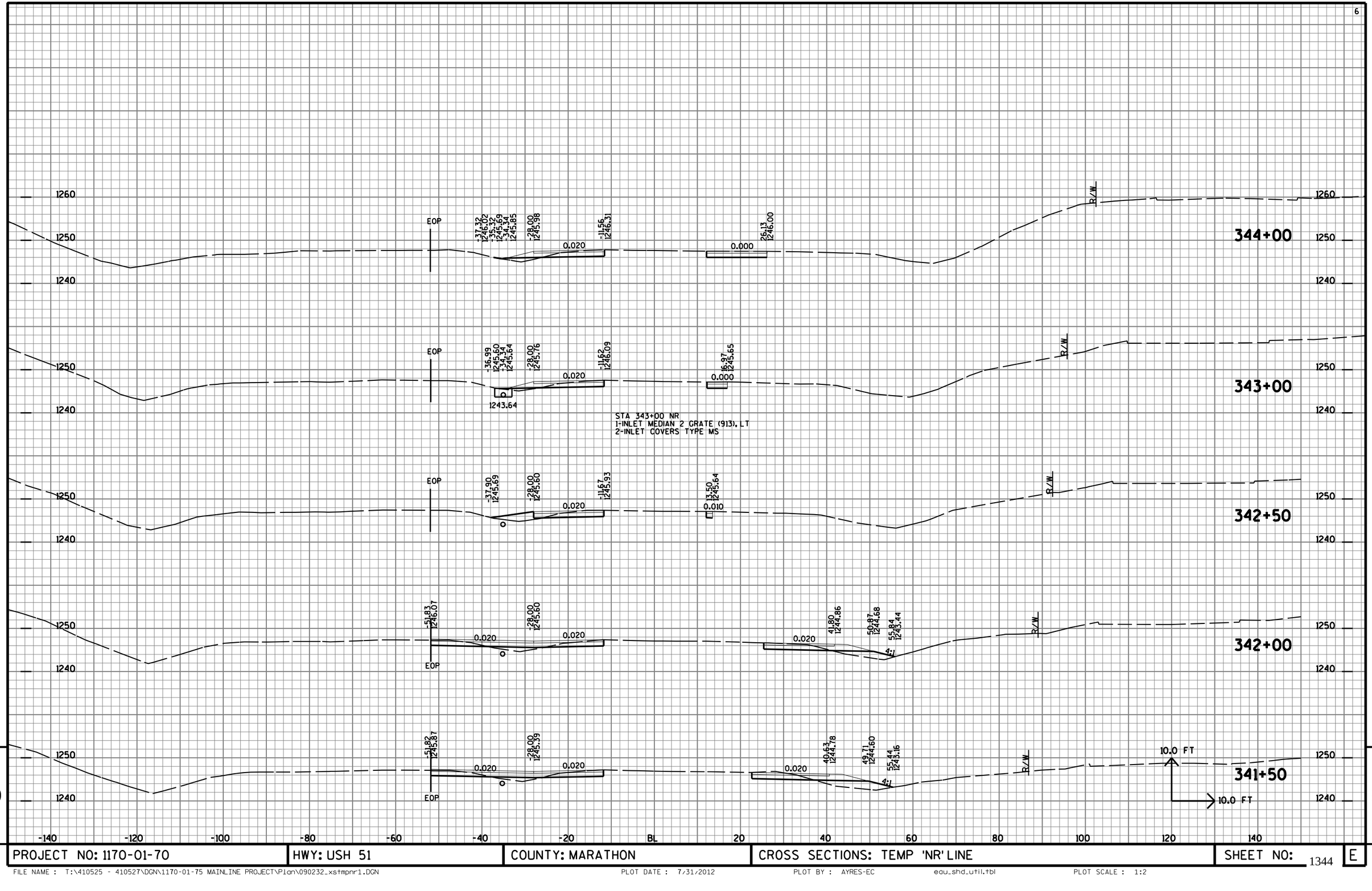


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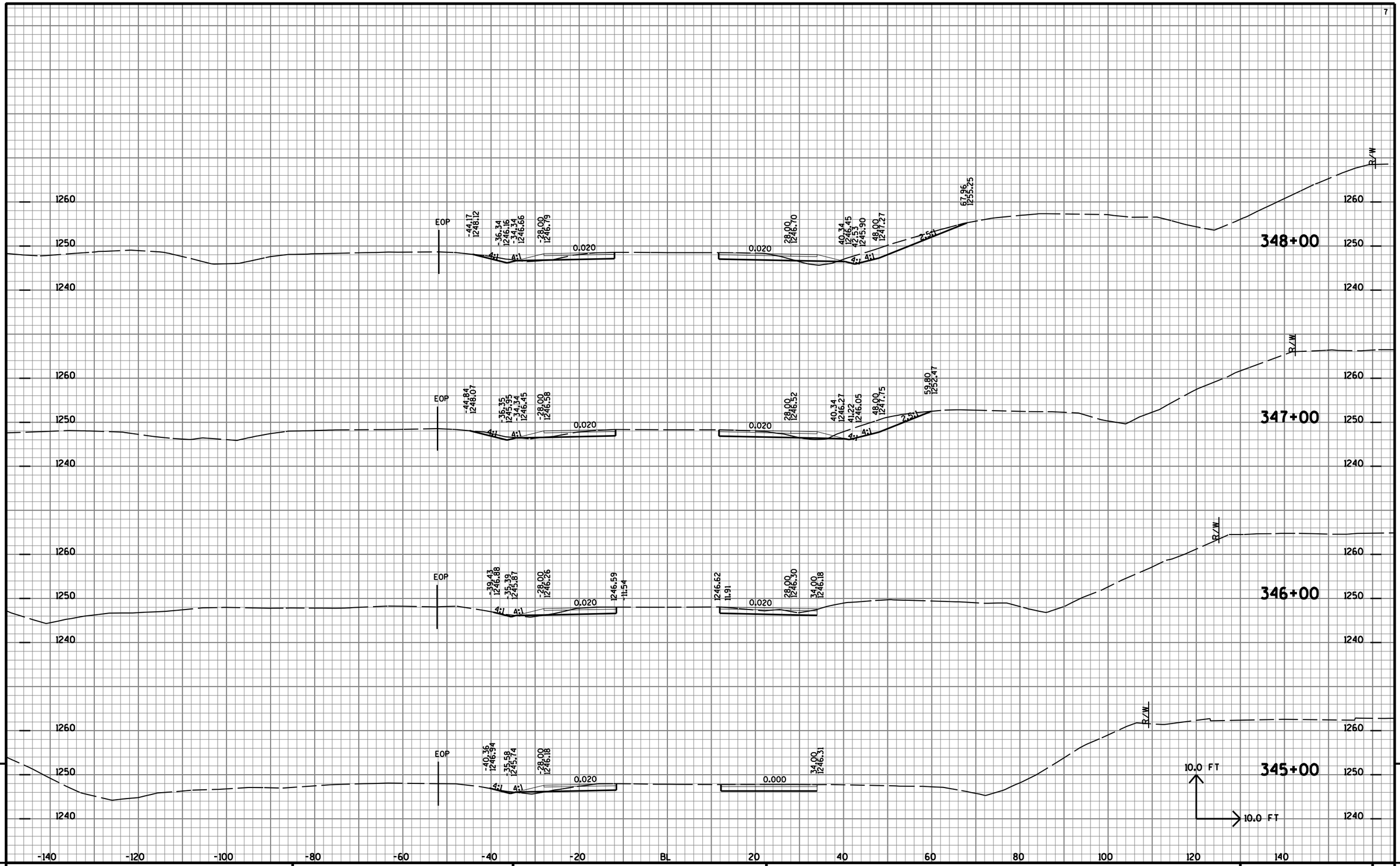
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FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090232_xstmpnr1.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC eau_shd_util.tbl PLOT SCALE : 1:2



PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: TEMP 'NR' LINE	SHEET NO: 1344 E

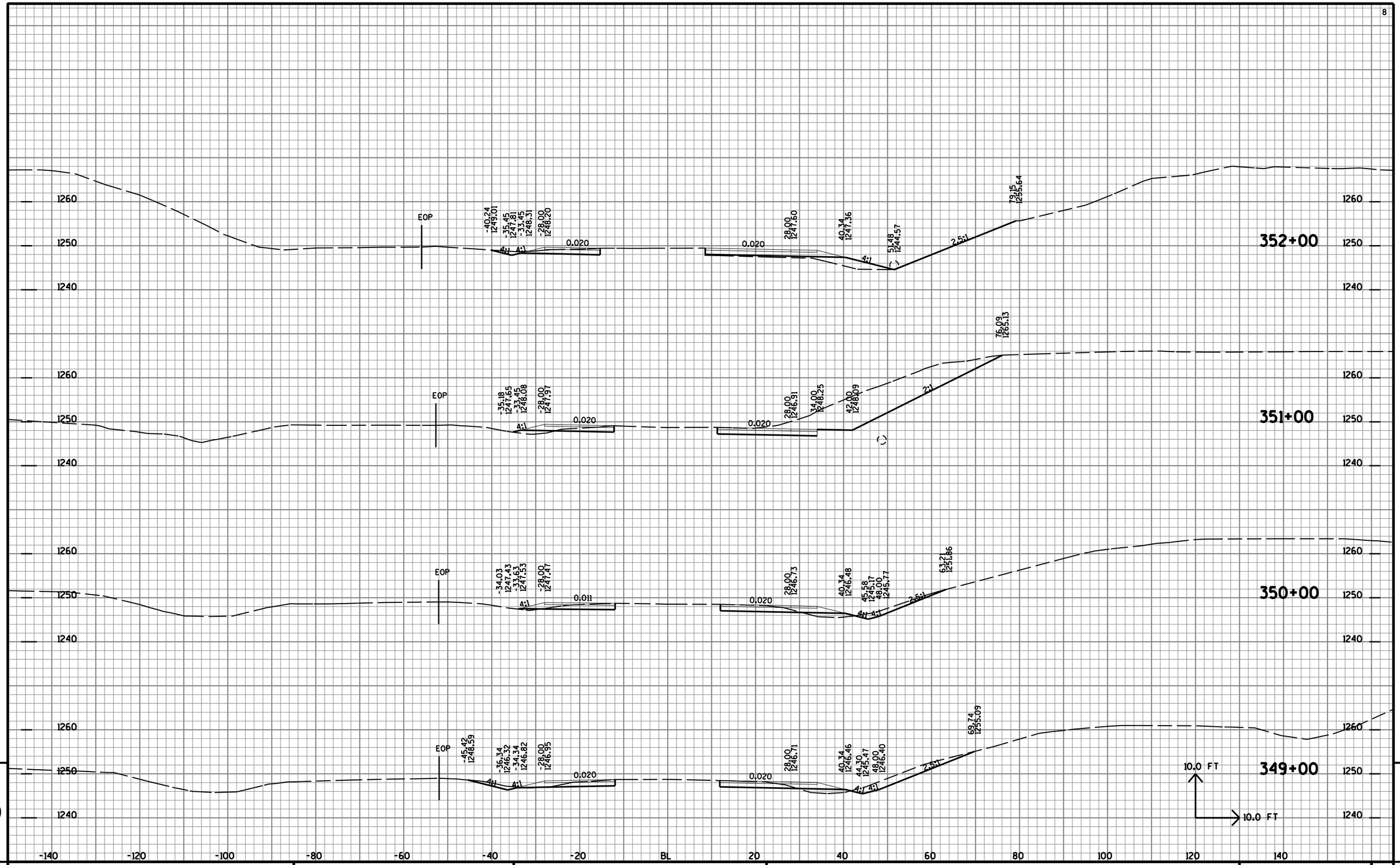
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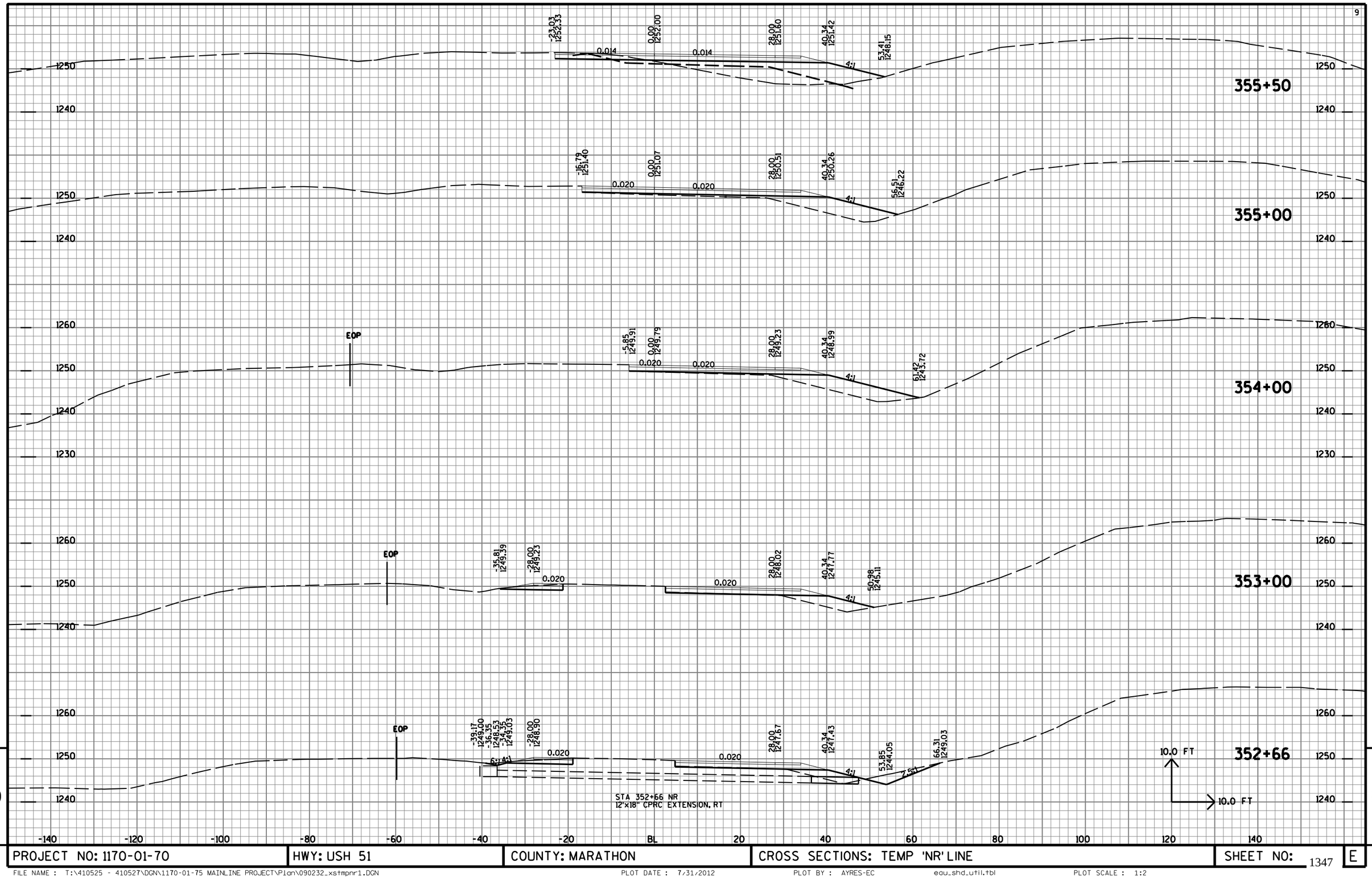
PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: TEMP 'NR' LINE	SHEET NO: 1345 E



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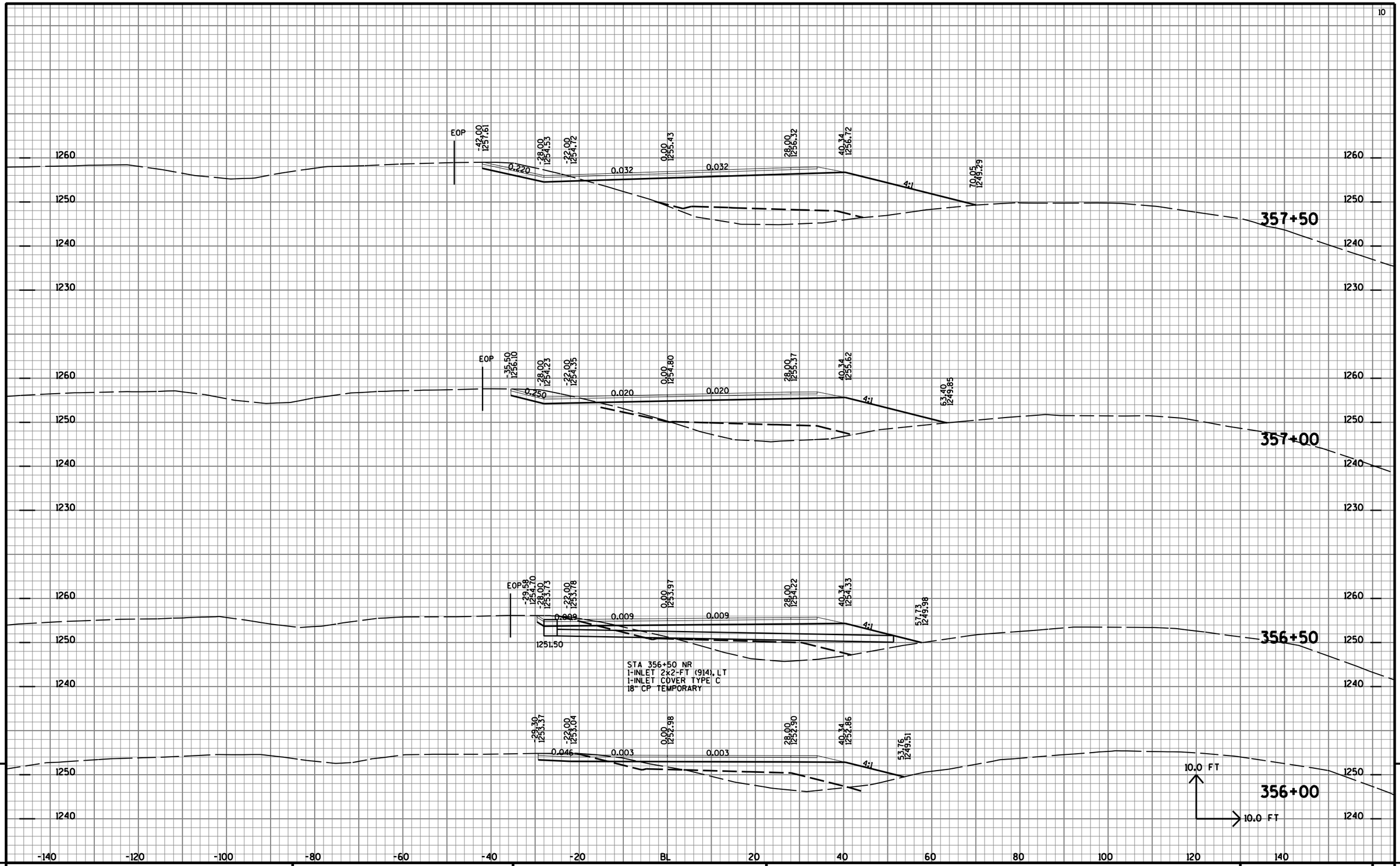
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PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: TEMP 'NR' LINE	SHEET NO: 1346	E

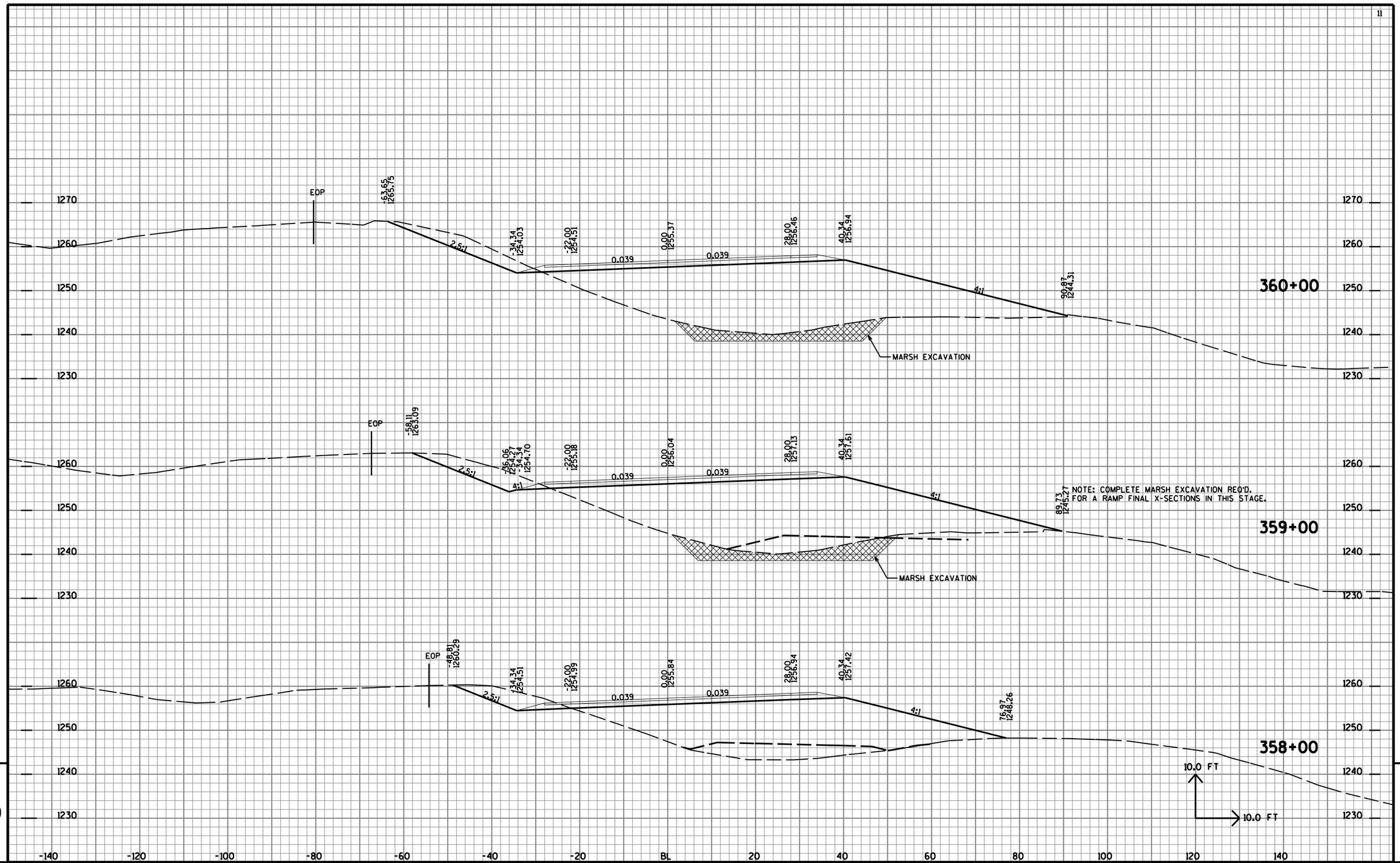


PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: TEMP 'NR' LINE	SHEET NO: 1347 E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090232_xstmpnr1.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC edu_shd_util.tbl PLOT SCALE : 1:2



PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: TEMP 'NR' LINE	SHEET NO: 1348	E

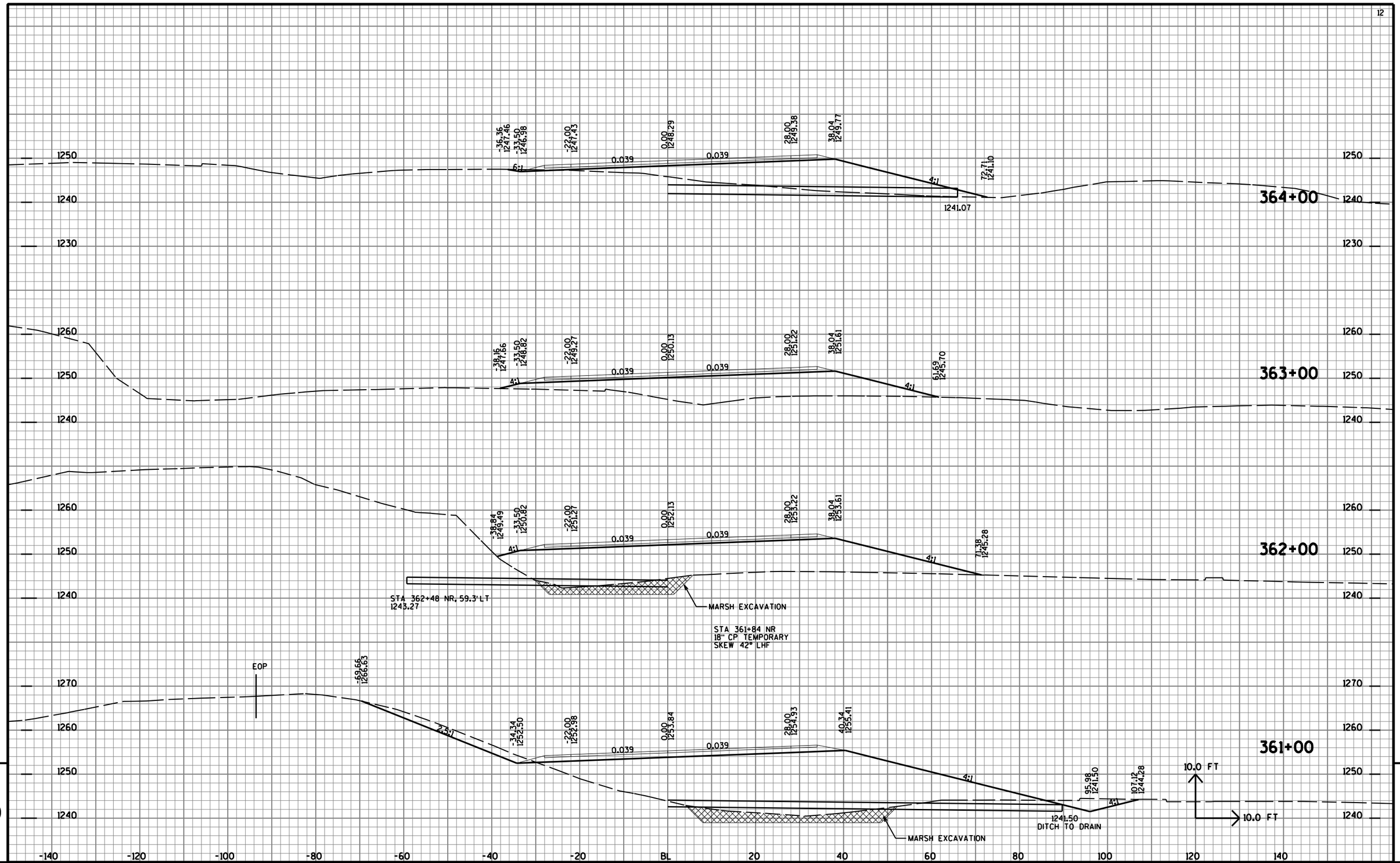


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PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: TEMP 'NR' LINE	SHEET NO: 1349 E

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FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090232_xstmpnr1.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC eau_shd_util.tbl PLOT SCALE : 1:2

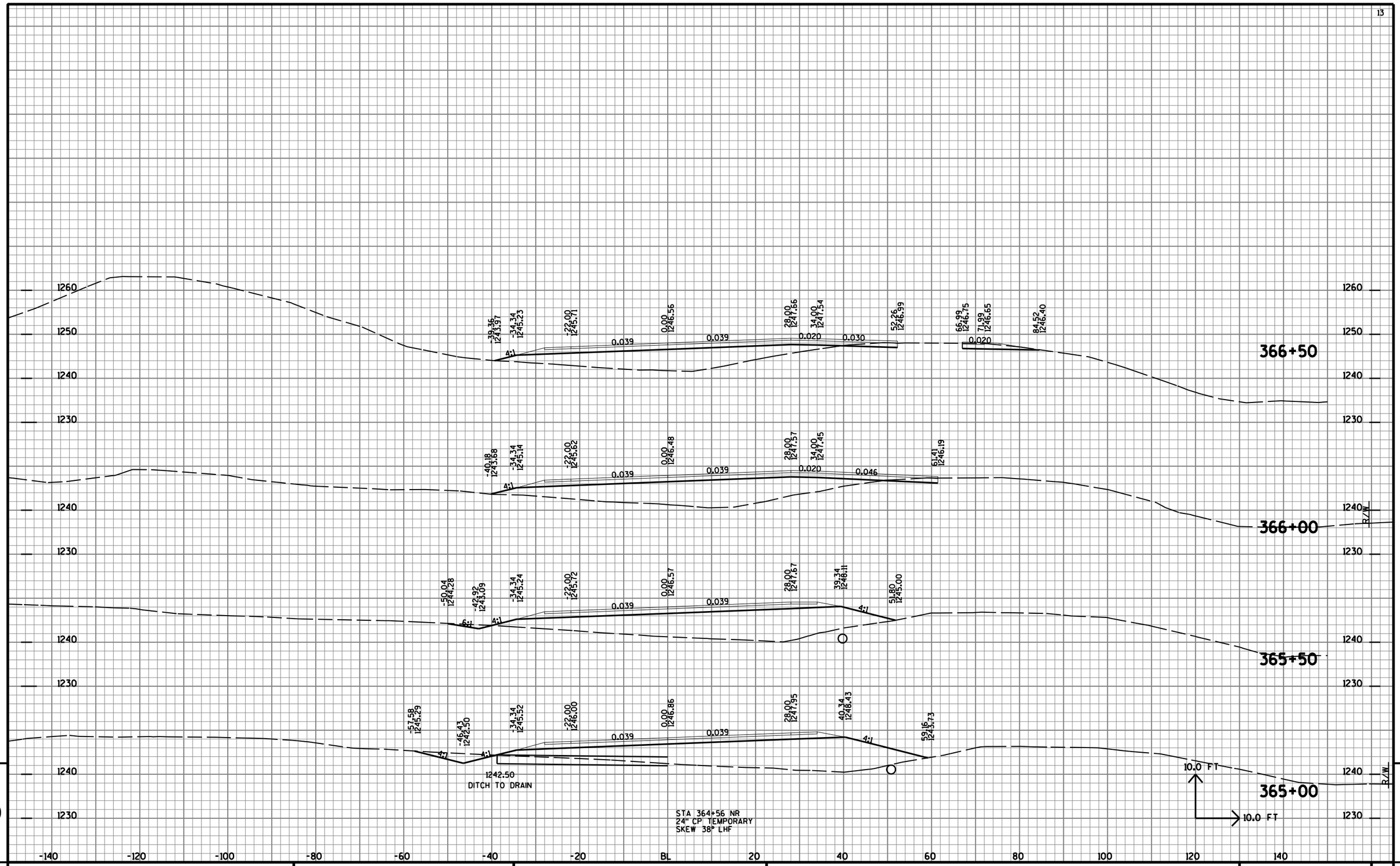


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PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: TEMP 'NR' LINE	SHEET NO: 1350	E

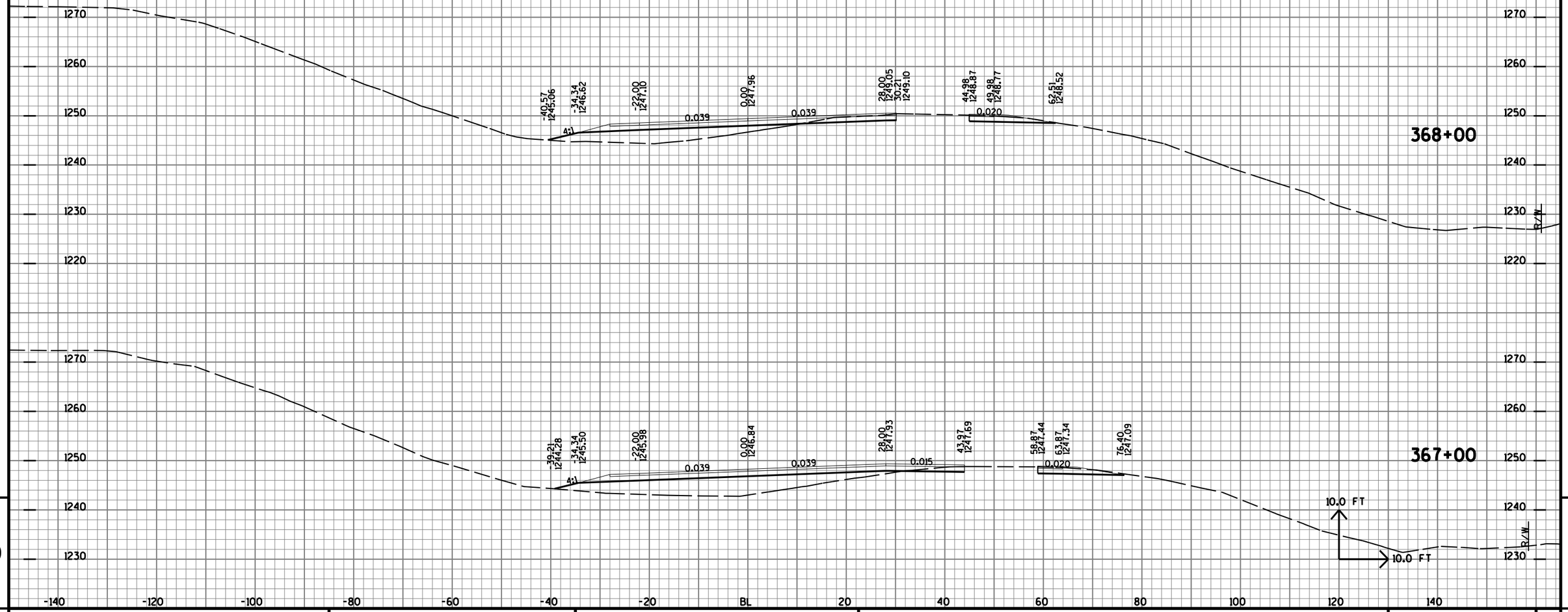
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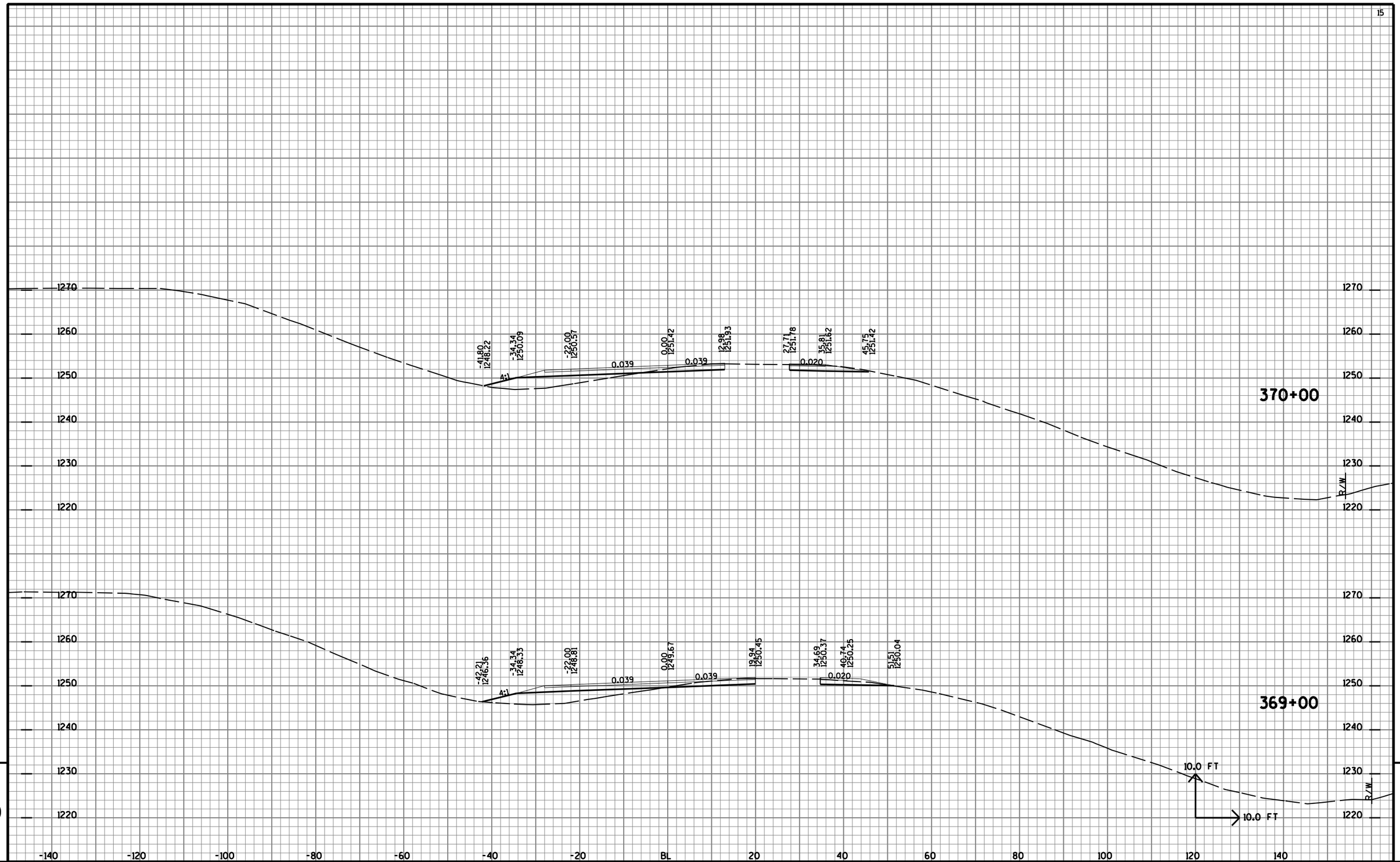
PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: TEMP 'NR' LINE	SHEET NO: 1351	E



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PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: TEMP 'NR' LINE	SHEET NO: 1352	E

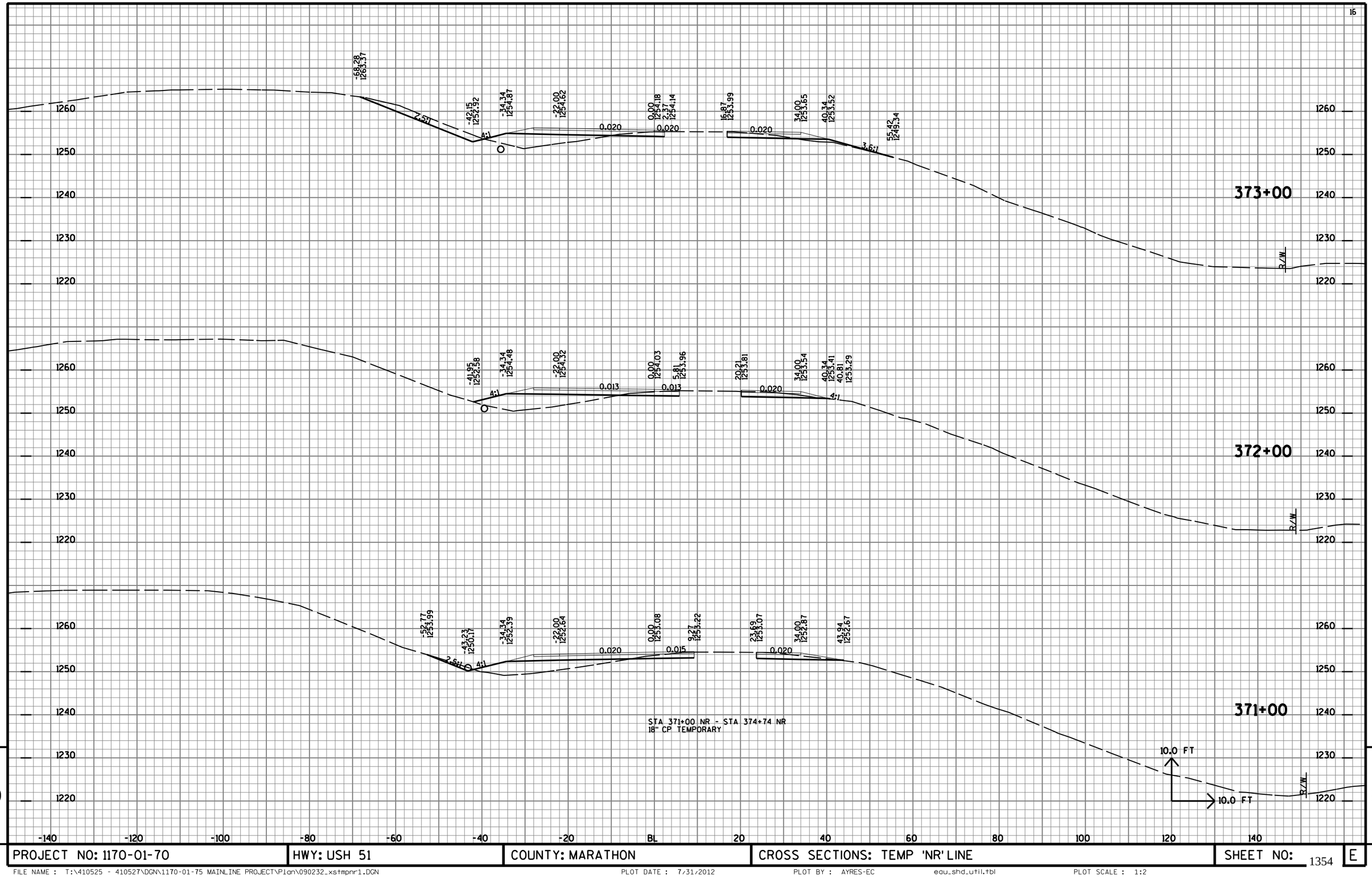


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PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: TEMP 'NR' LINE	SHEET NO: 1353	E

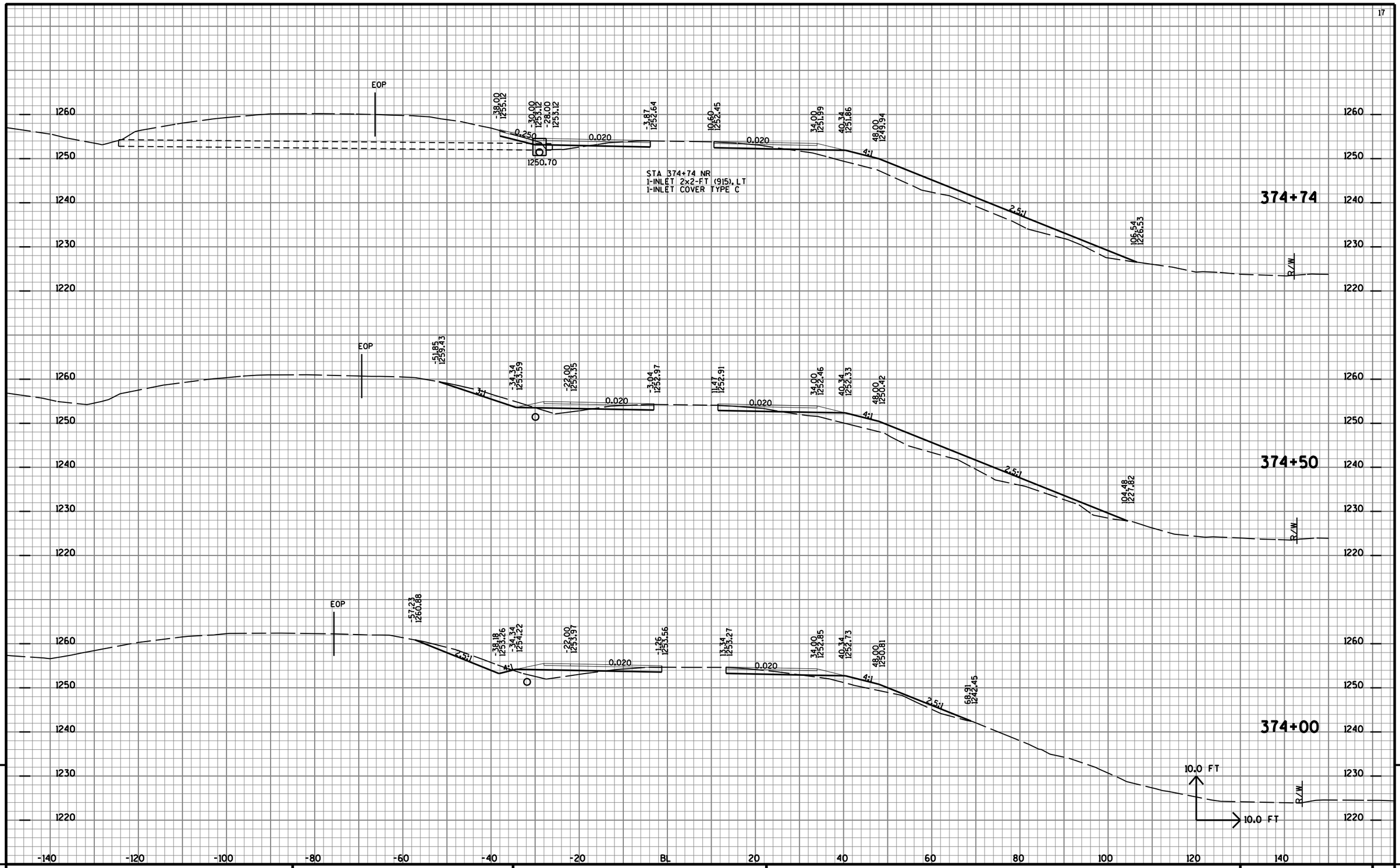
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PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: TEMP 'NR' LINE	SHEET NO: 1354	E

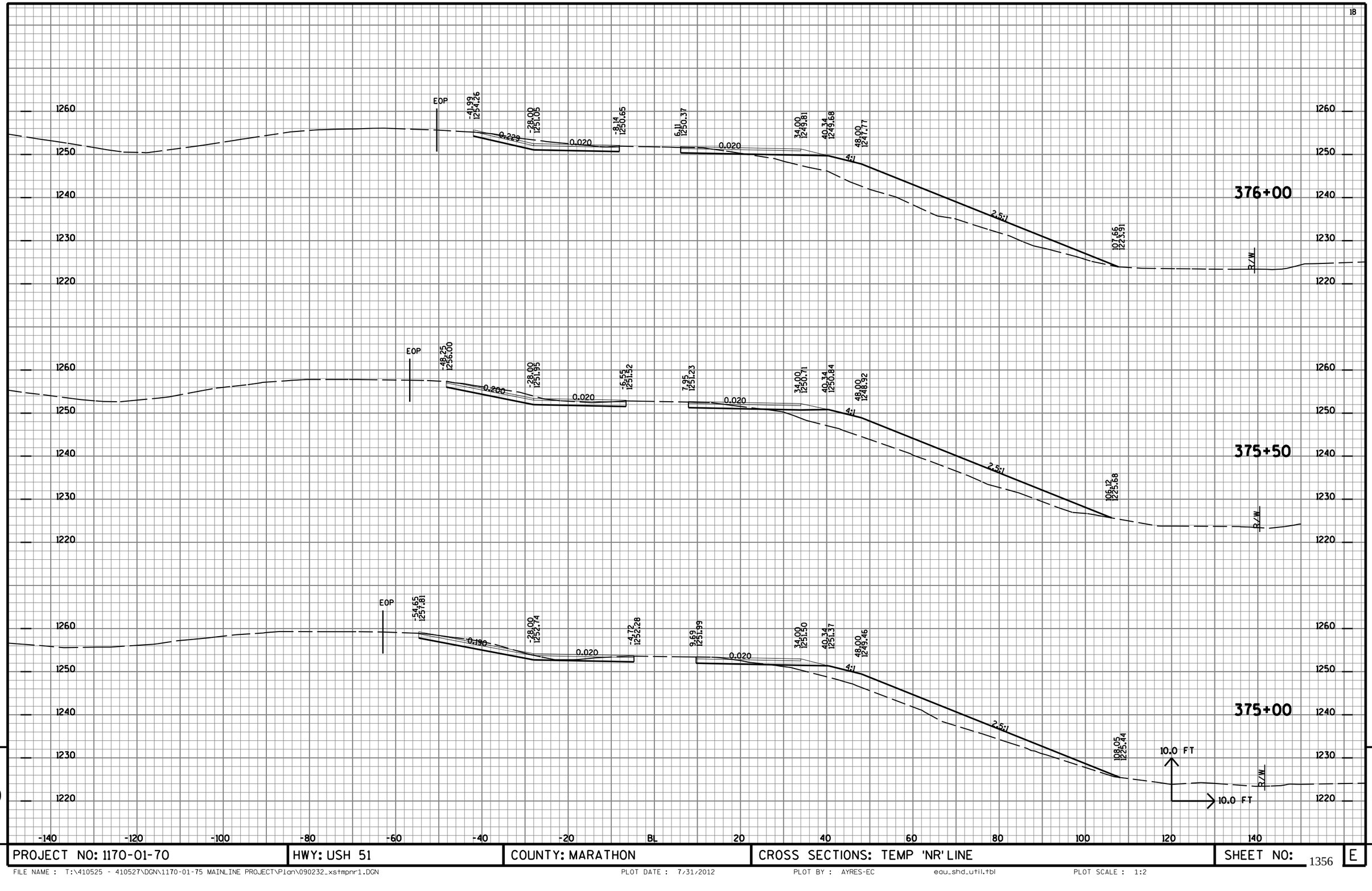


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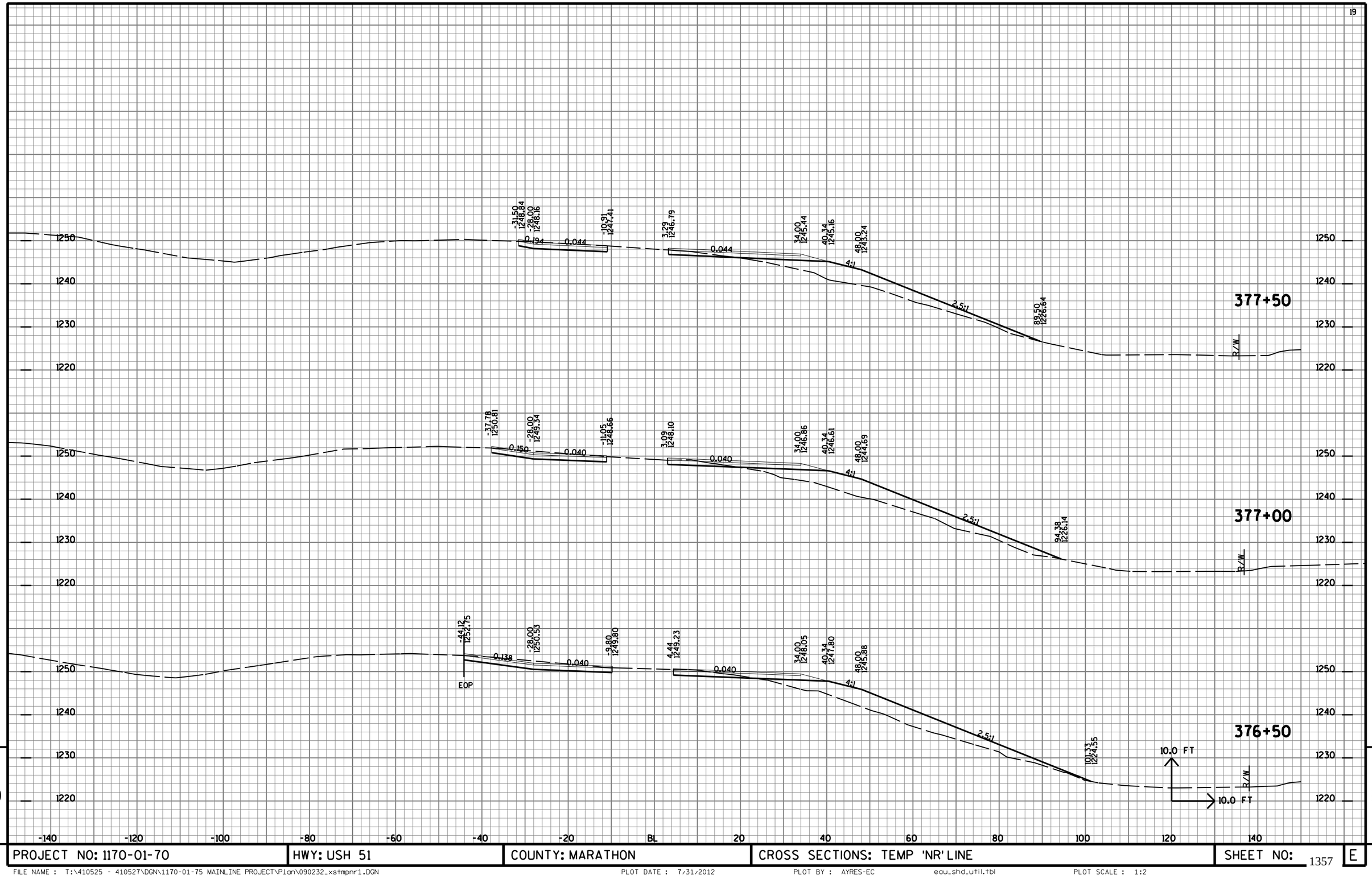
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PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: TEMP 'NR' LINE	SHEET NO: 1355	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090232_xstmpnr1.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC eau_shd_util.tbl PLOT SCALE : 1:2

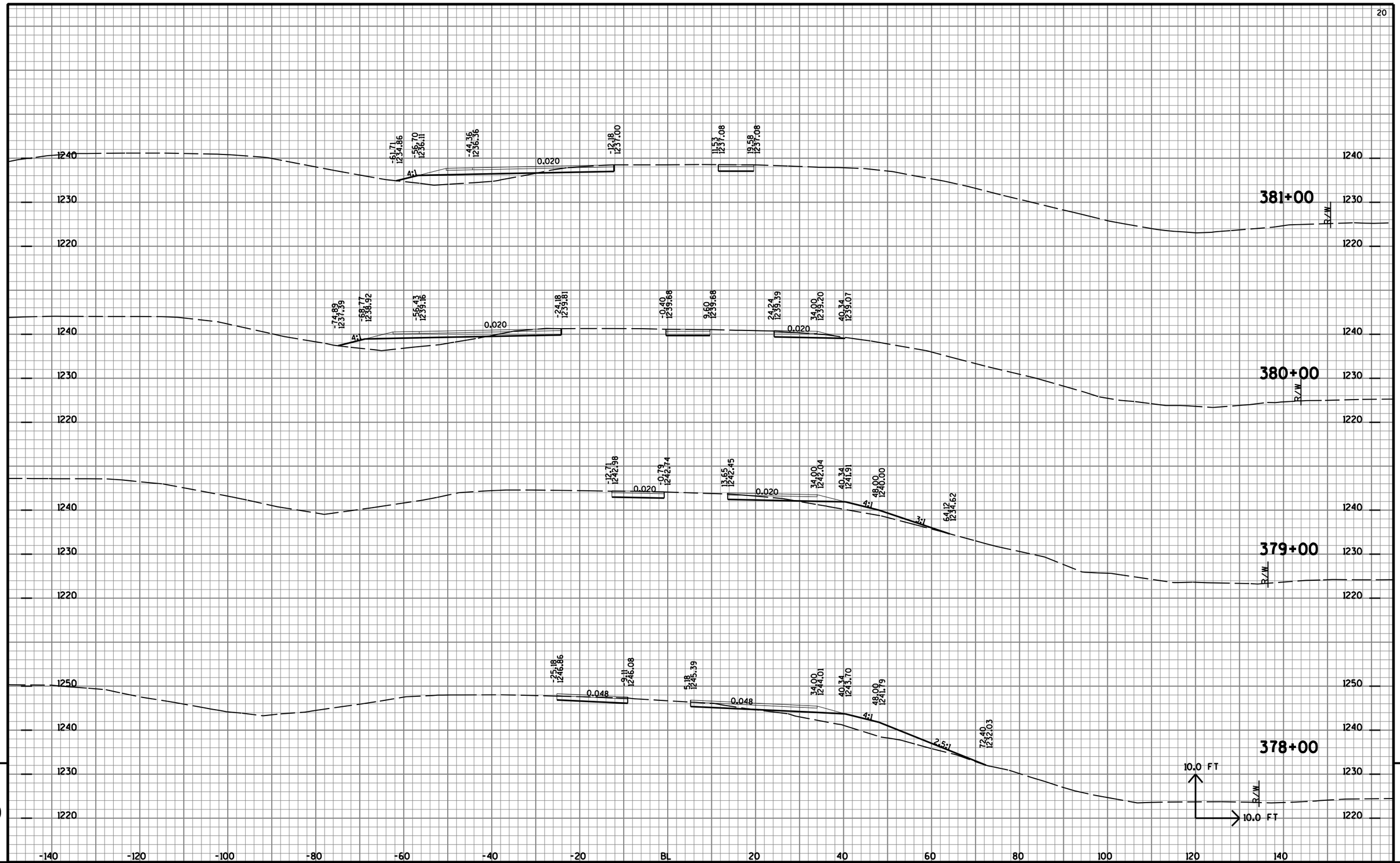


PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: TEMP 'NR' LINE	SHEET NO: 1356 E



PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: TEMP 'NR' LINE	SHEET NO: 1357	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090232_xstmpnr1.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC edu_shd_util.tbl PLOT SCALE : 1:2



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PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: TEMP 'NR' LINE	SHEET NO: 1358 E

386+00

-80.14 1230.89 | 0.020 | -51.65 1230.12 | -45.31 1230.02 | -38.00 1228.16 | -34.34 1229.08 | -22.00 1229.33 | 0.00 1229.77 | 10.00 1229.97 | 0.020 | 0.020 | 4:1 | 4:1

385+50

-80.15 1231.09 | 0.020 | -66.74 1230.82 | -50.40 1230.72 | -44.69 1226.77 | -34.34 1229.36 | -22.00 1229.61 | 0.00 1230.05 | 10.00 1230.25 | 0.020 | 0.020 | 4:1 | 4:1

STA 385+50 NR - STA 387+75 NR
18" CP TEMPORARY

385+00

-44.90 1227.01 | -34.36 1229.65 | -22.02 1229.89 | 0.00 1230.33 | 9.98 1230.53 | 33.60 1230.62 | 34.80 1230.62 | 0.020 | 0.020 | 4:1

384+00

-45.52 1228.29 | -35.97 1230.87 | -23.63 1230.32 | 0.00 1231.39 | 8.39 1231.56 | 32.14 1231.53 | 34.89 1231.51 | 0.020 | 0.020 | 4:1

383+00

-48.77 1230.13 | -40.22 1232.27 | -27.88 1232.52 | 0.00 1233.08 | 4.17 1233.16 | 27.60 1232.83 | 32.25 1232.74 | 0.020 | 0.020 | 4:1

382+00

-53.59 1232.29 | -47.12 1233.91 | -34.78 1234.16 | -2.68 1234.80 | 20.76 1234.53 | 27.16 1234.53 | 0.020 | 4:1

10.0 FT
10.0 FT

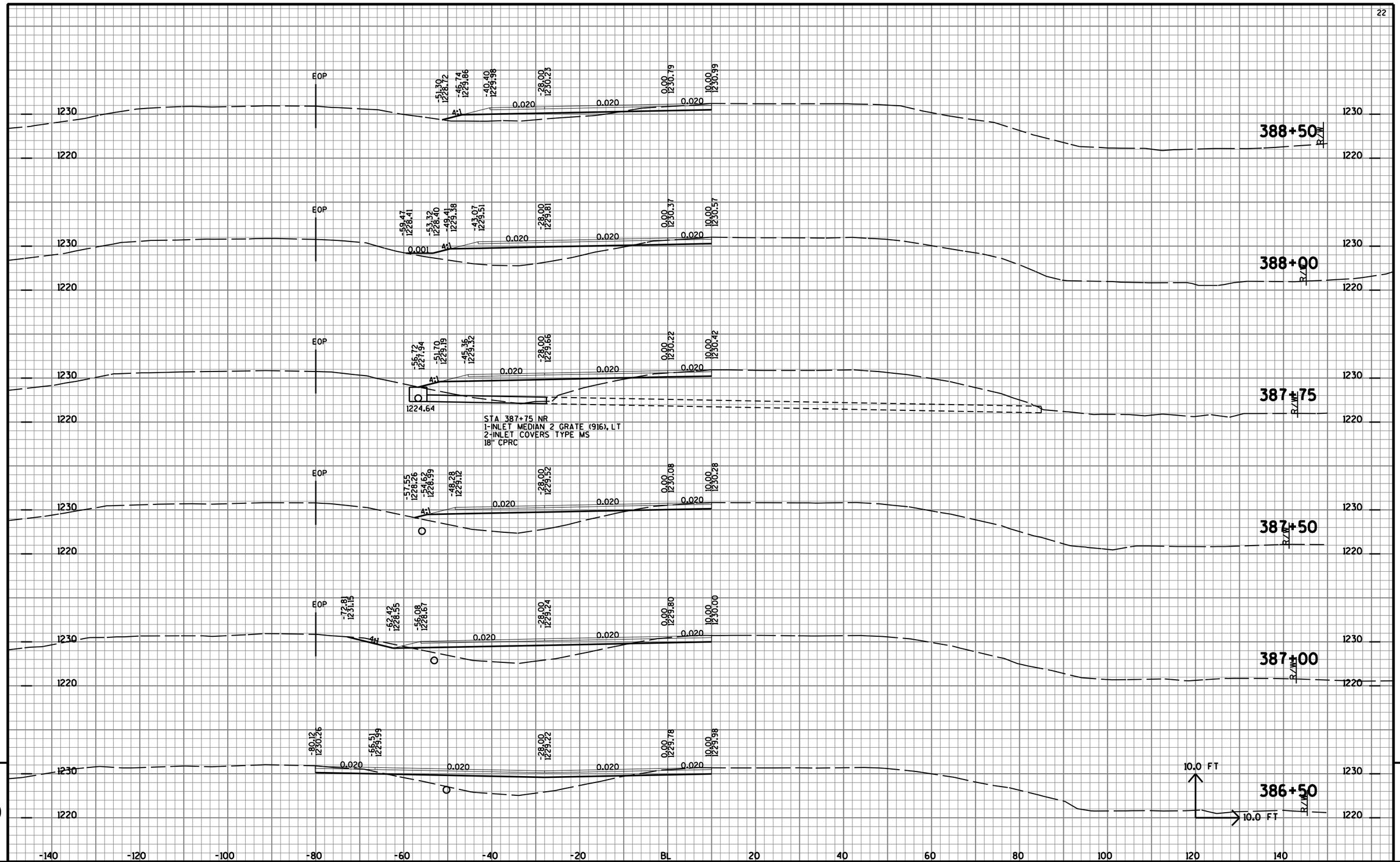
1230 1220 1210 1230 1220 1230 1220 1230 1220 1230 1220 1230 1220 1230 1220

-140 -120 -100 -80 -60 -40 -20 BL 20 40 60 80 100 120 140

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PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: TEMP 'NR' LINE	SHEET NO: 1359	E

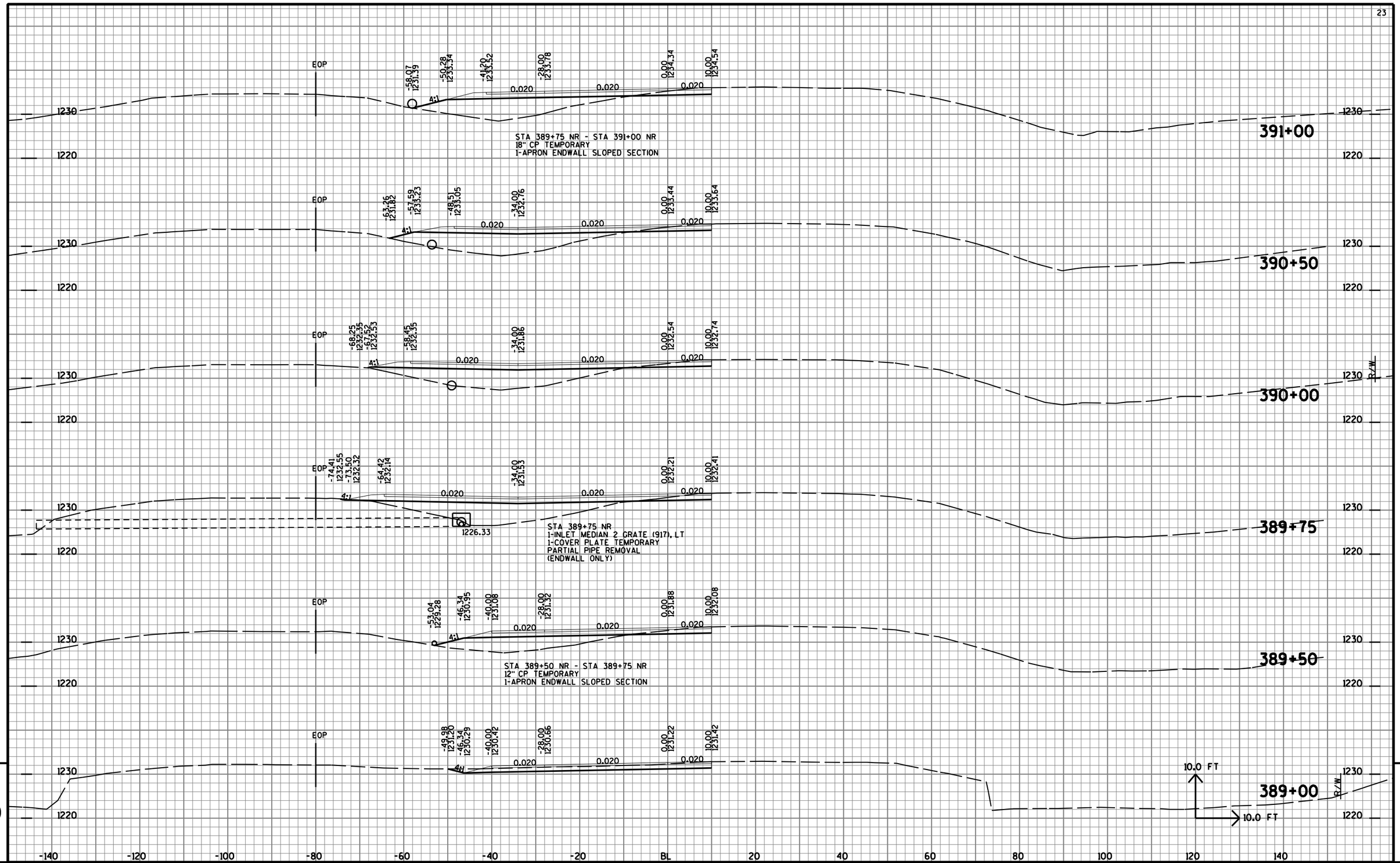
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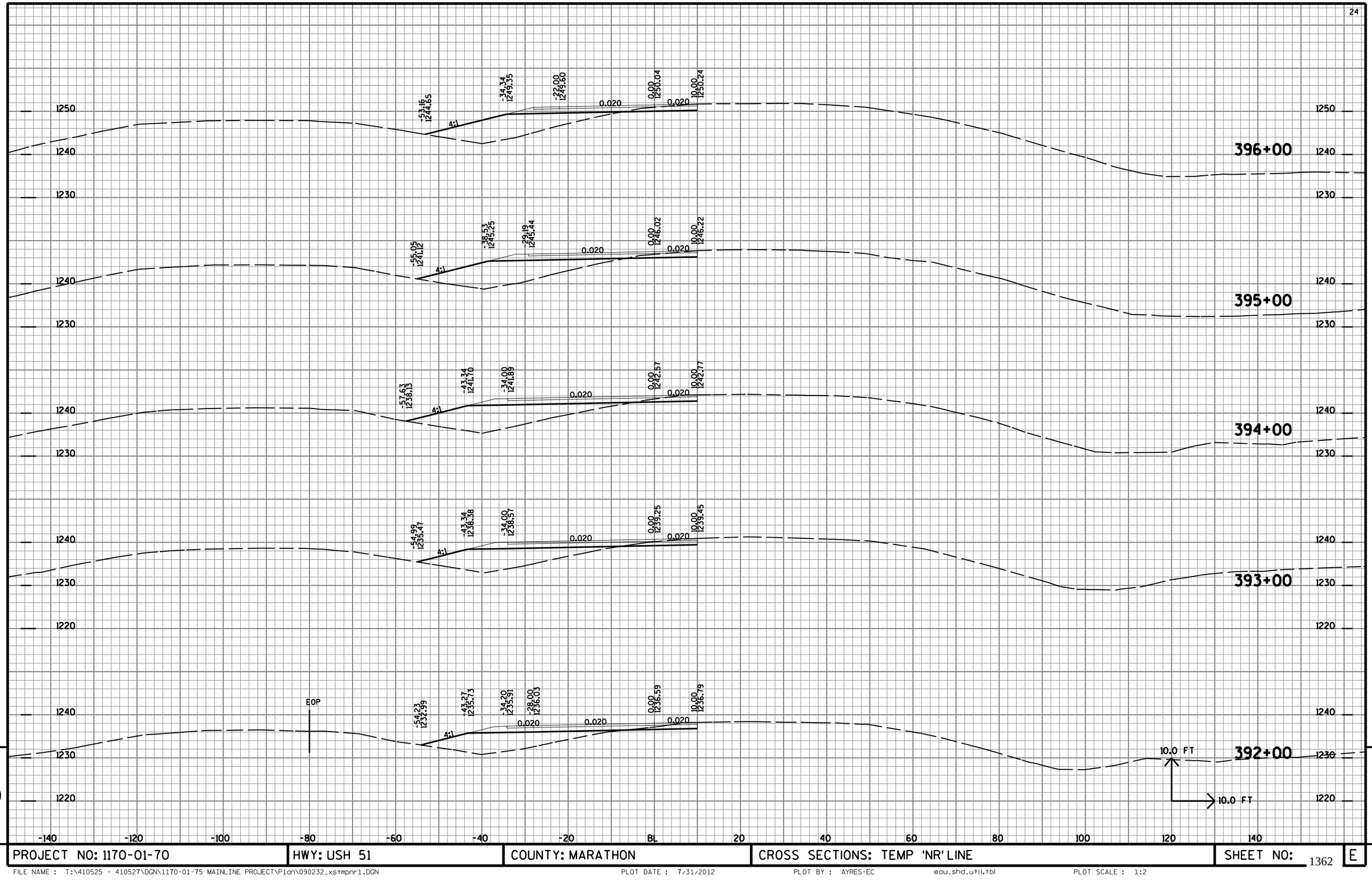
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PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: TEMP 'NR' LINE	SHEET NO: 1360	E



PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: TEMP 'NR' LINE	SHEET NO: 1361	E

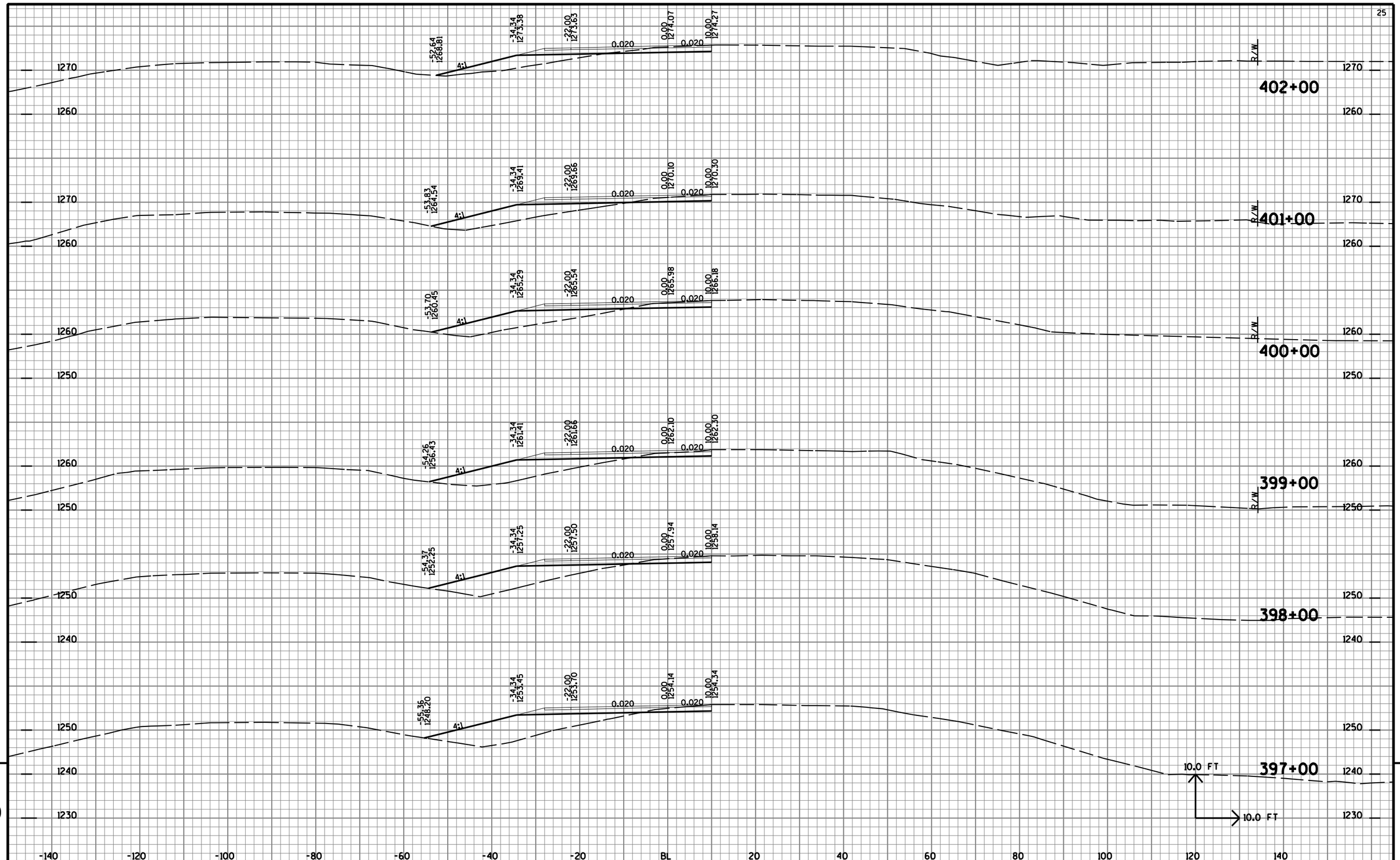
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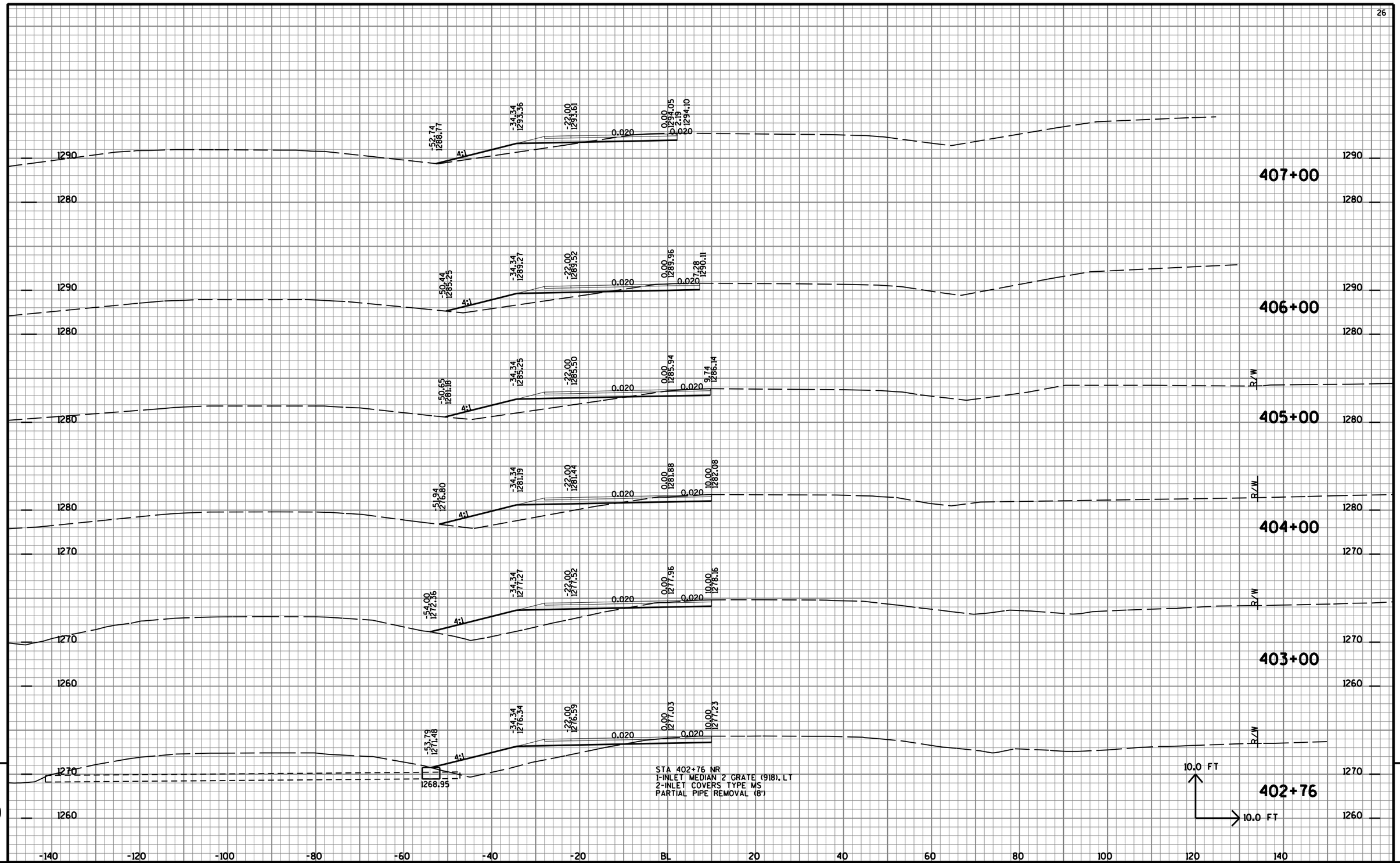
PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: TEMP 'NR' LINE	SHEET NO: 1362	E



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PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: TEMP 'NR' LINE	SHEET NO: 1363	E

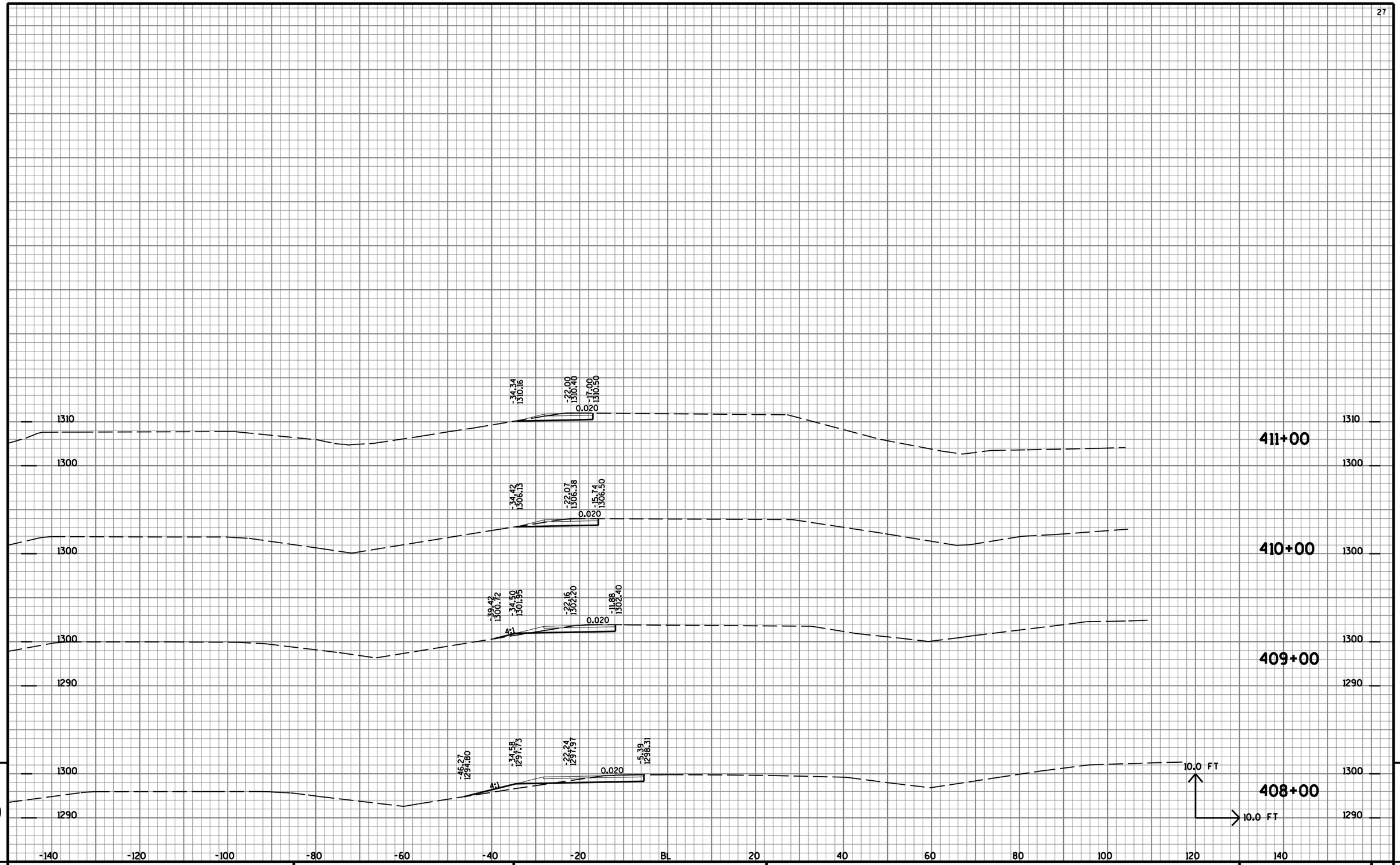
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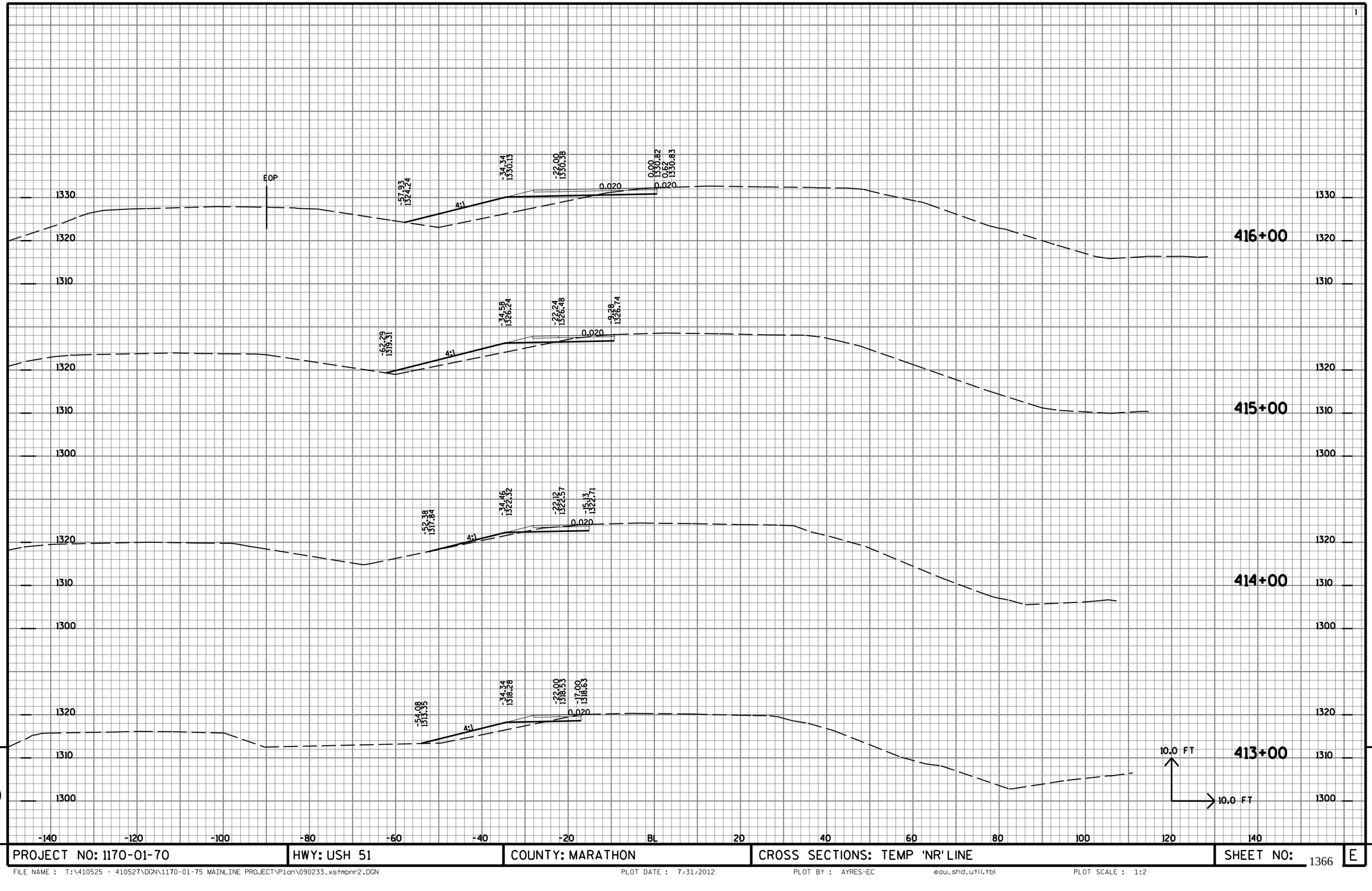
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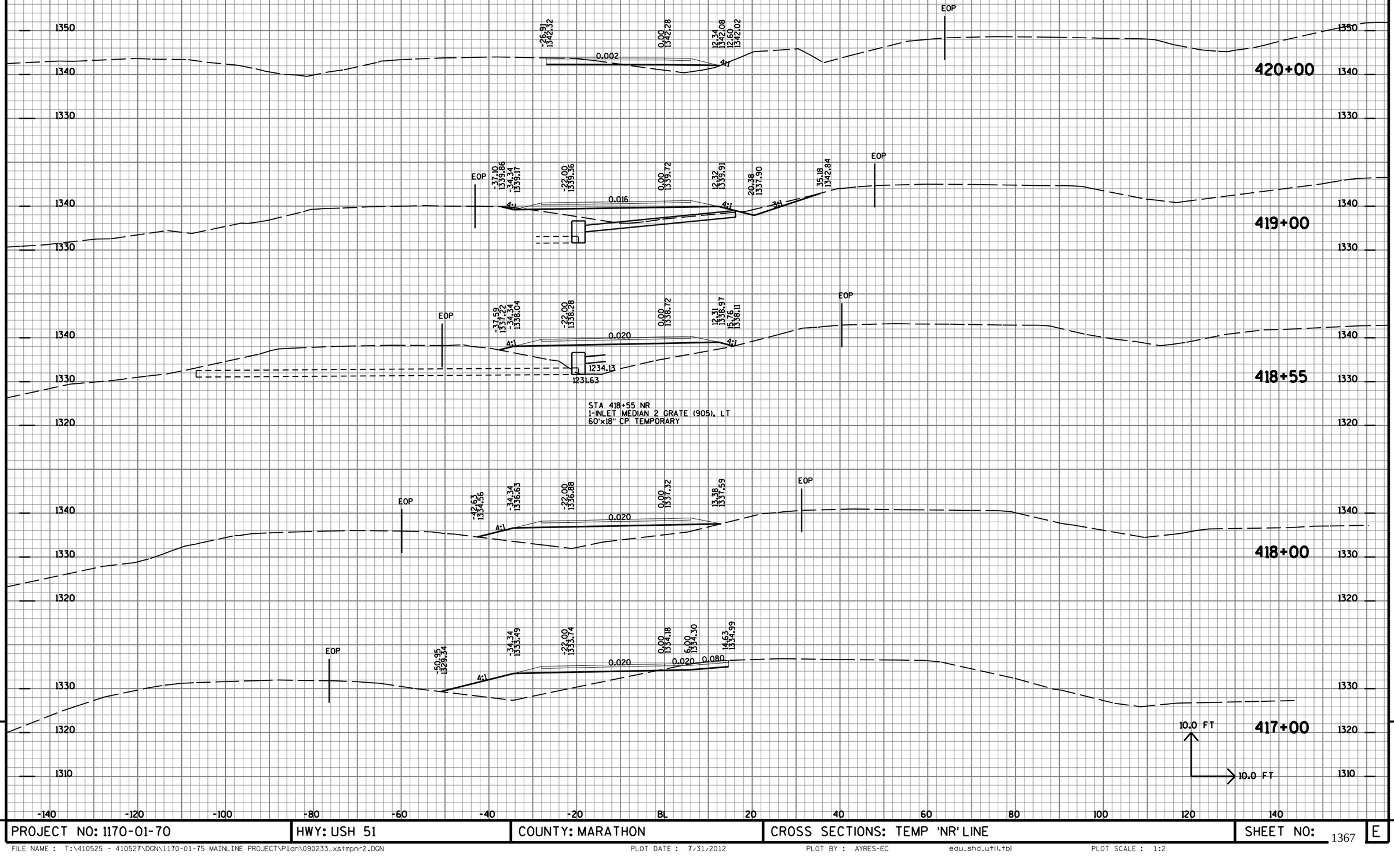
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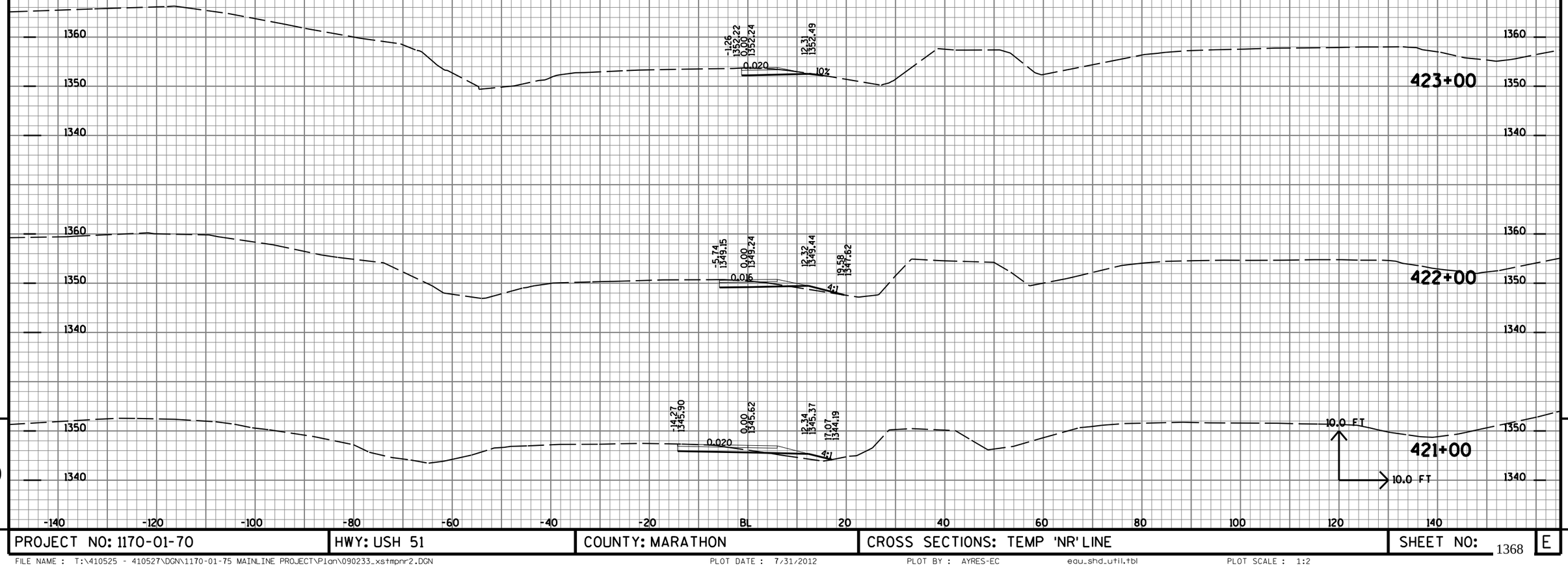
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PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: TEMP 'NR' LINE	SHEET NO: 1366	E



PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: TEMP 'NR' LINE	SHEET NO: 1367 E

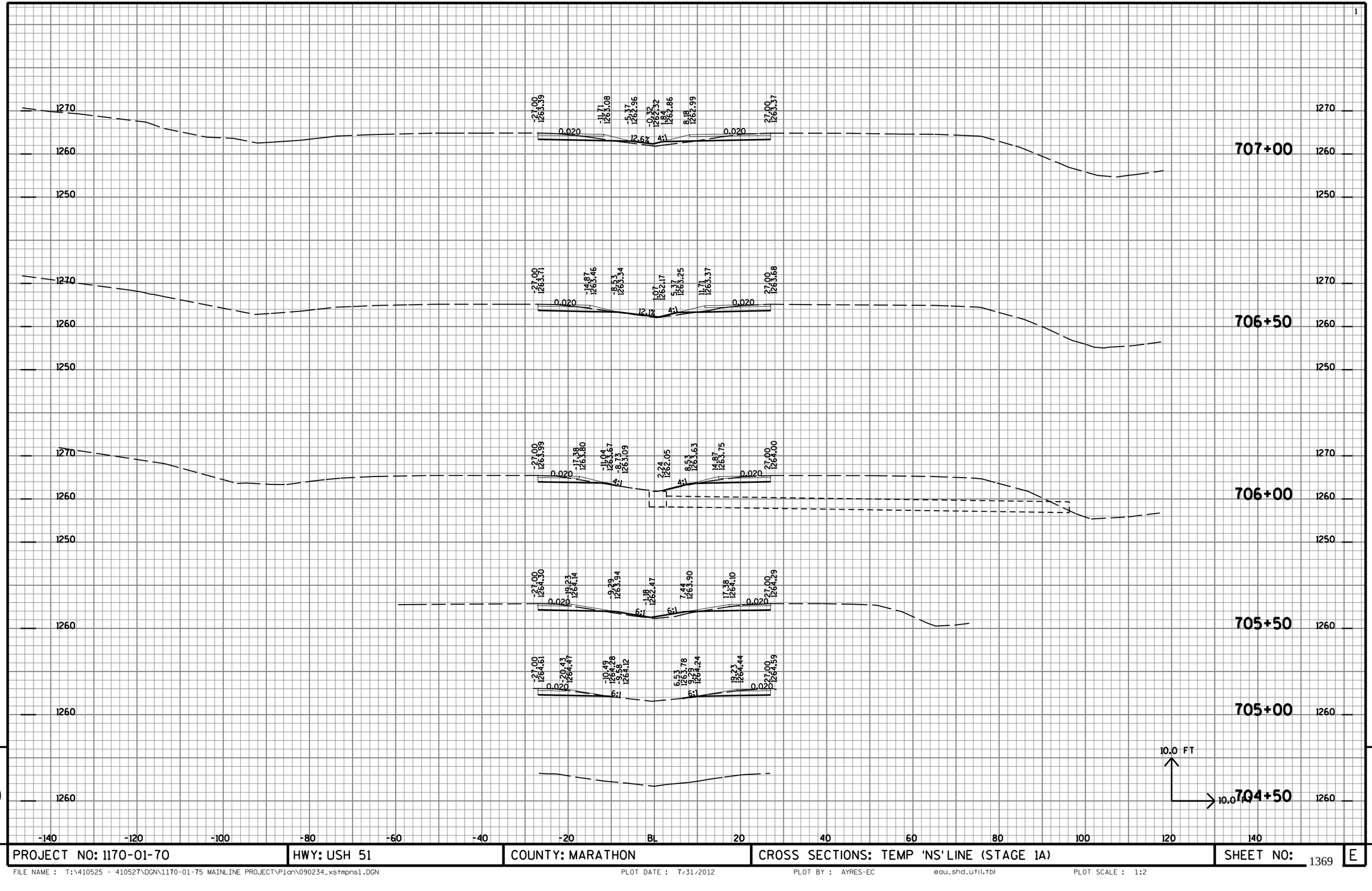
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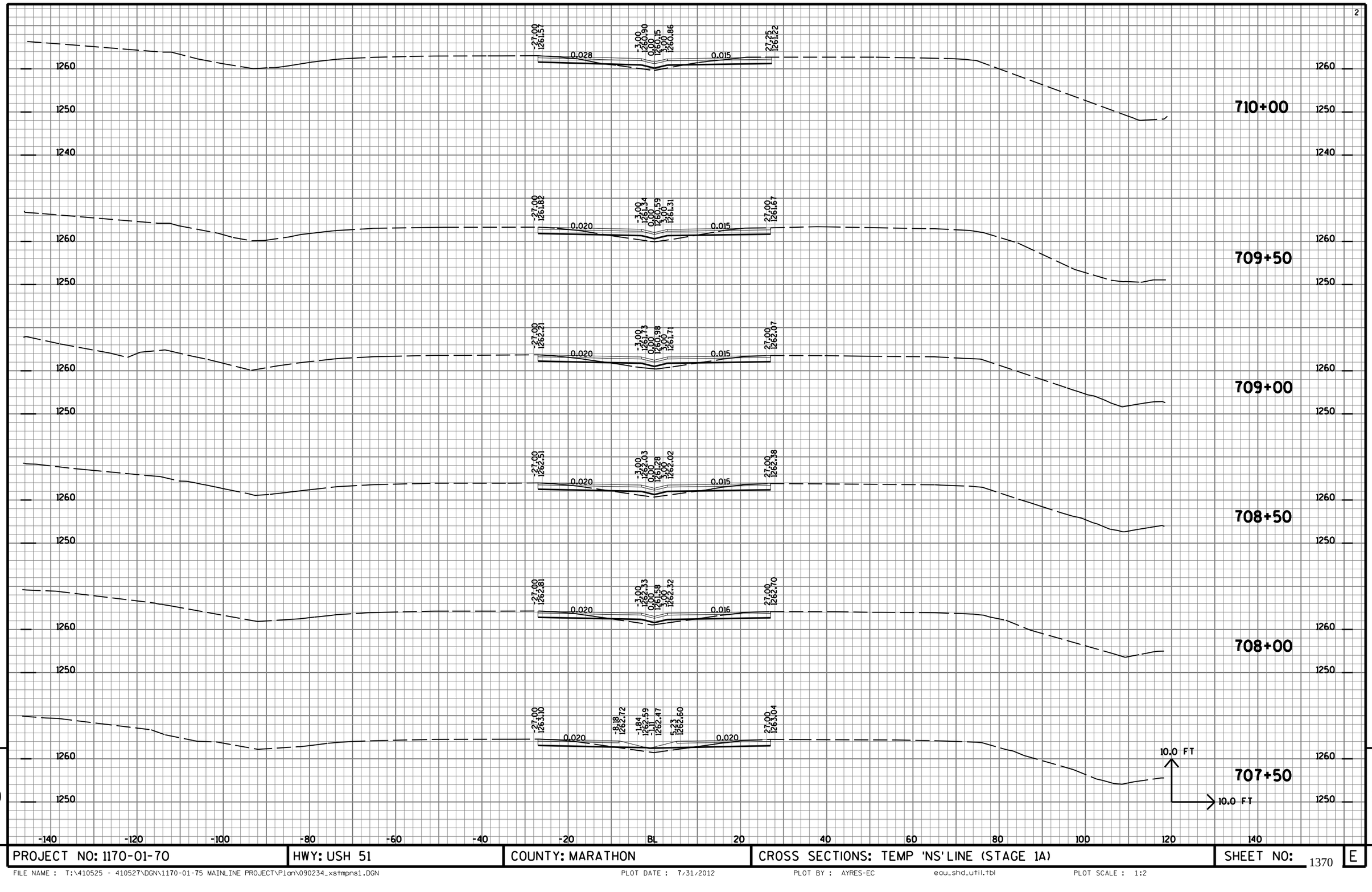
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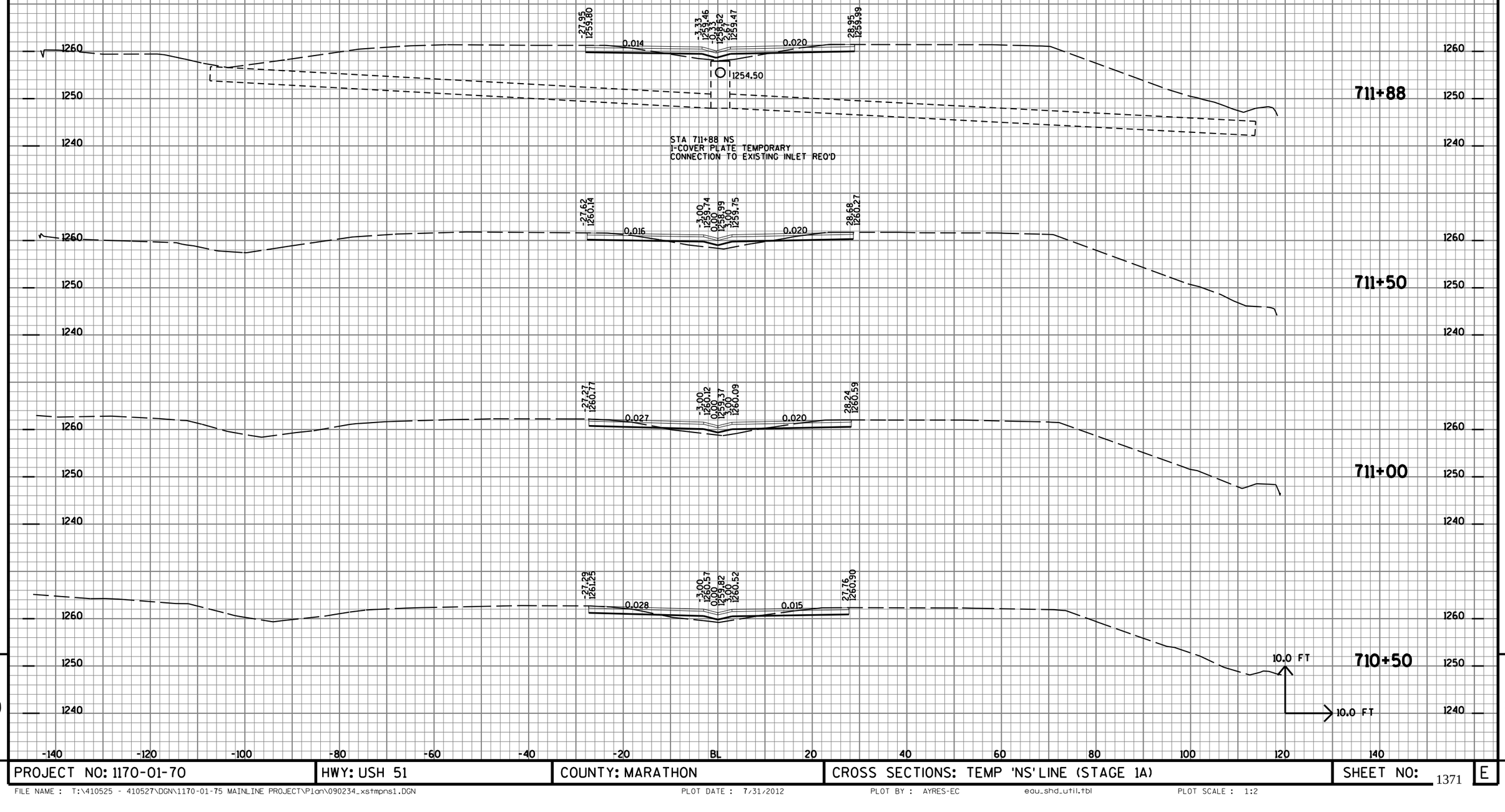
PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: TEMP 'NS' LINE (STAGE 1A)	SHEET NO: 1369	E



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PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: TEMP 'NS' LINE (STAGE 1A)	SHEET NO: 1370	E

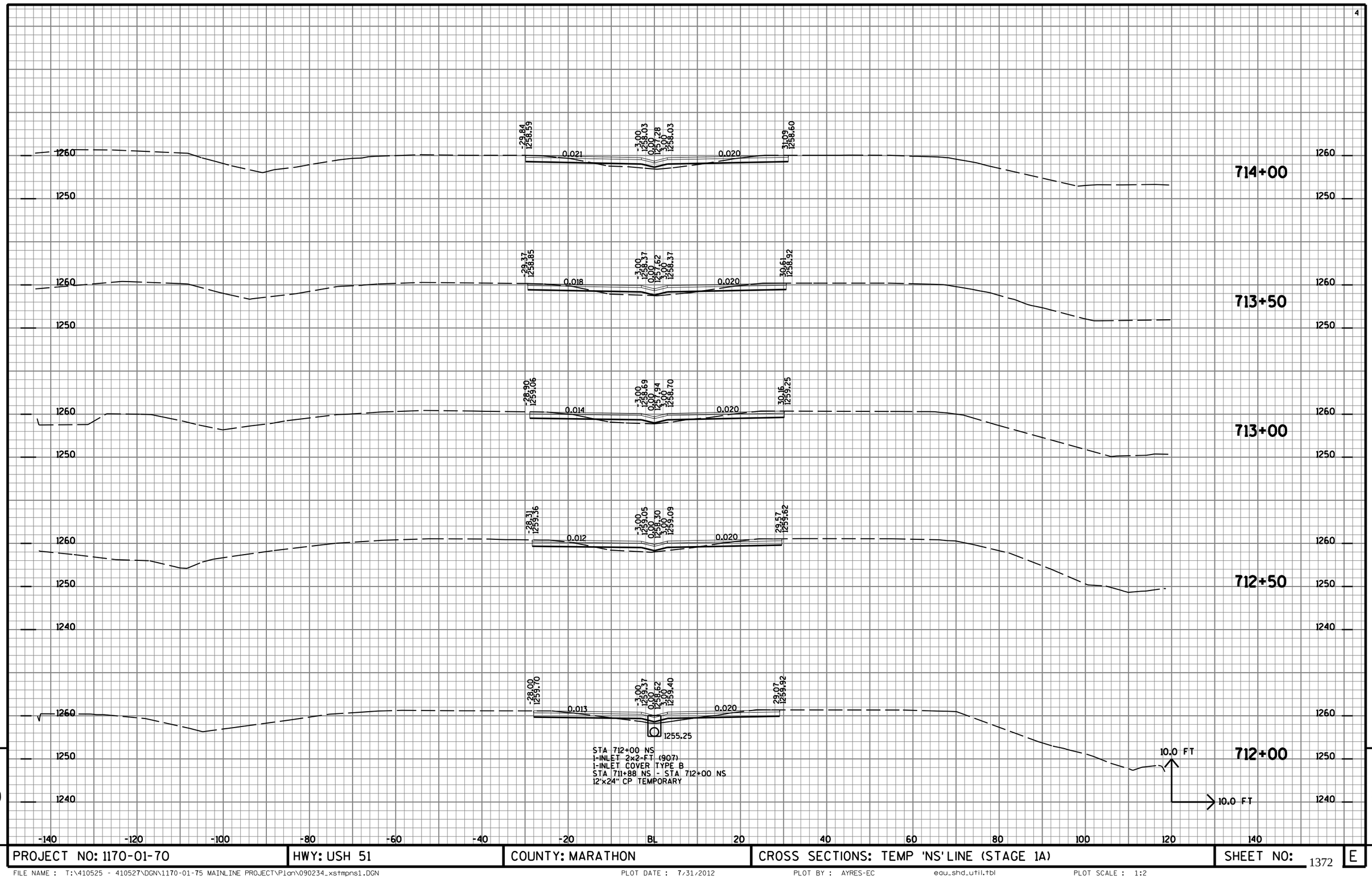


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PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: TEMP 'NS' LINE (STAGE 1A)	SHEET NO: 1371	E

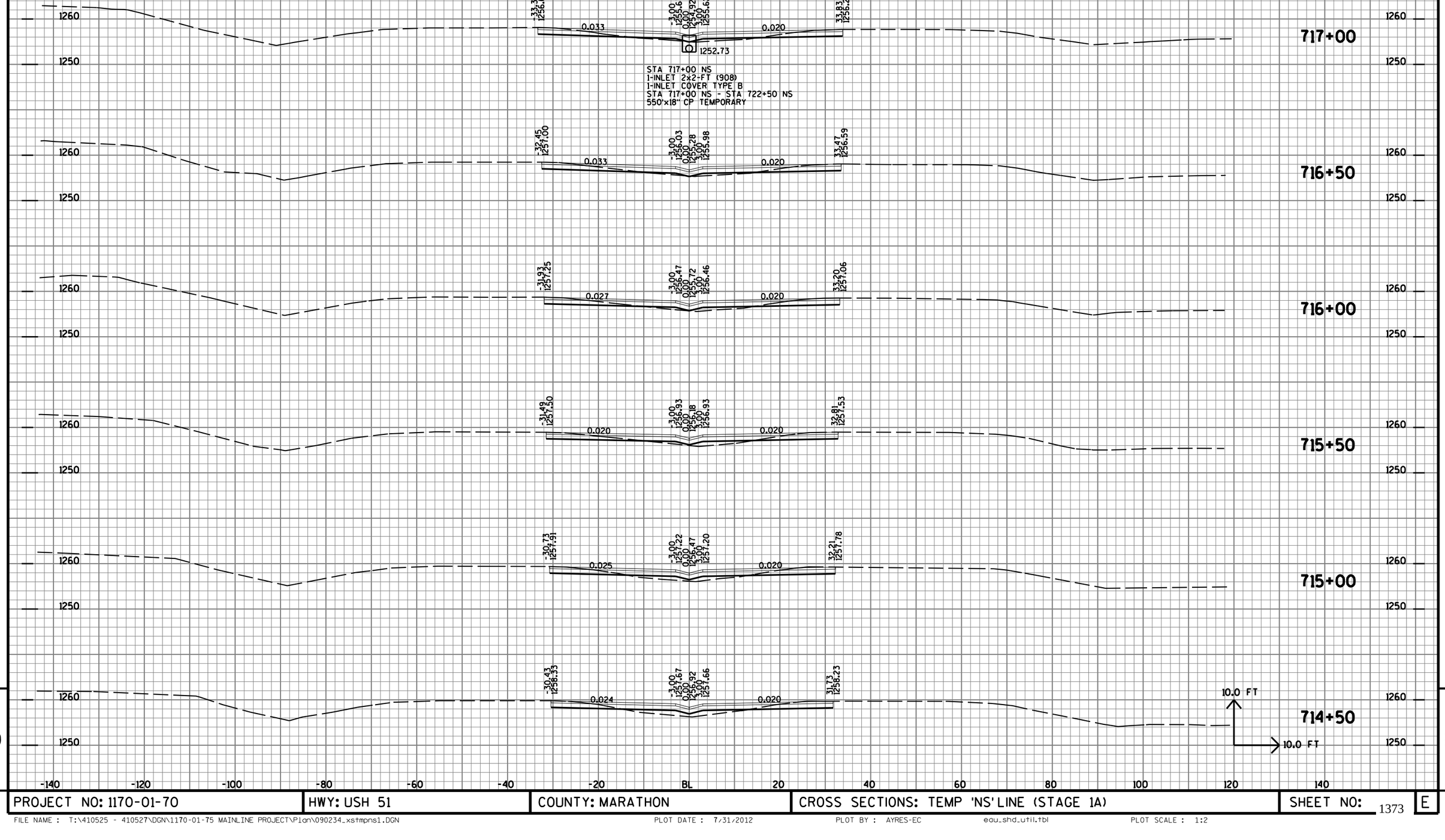
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PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: TEMP 'NS' LINE (STAGE 1A)	SHEET NO: 1372	E

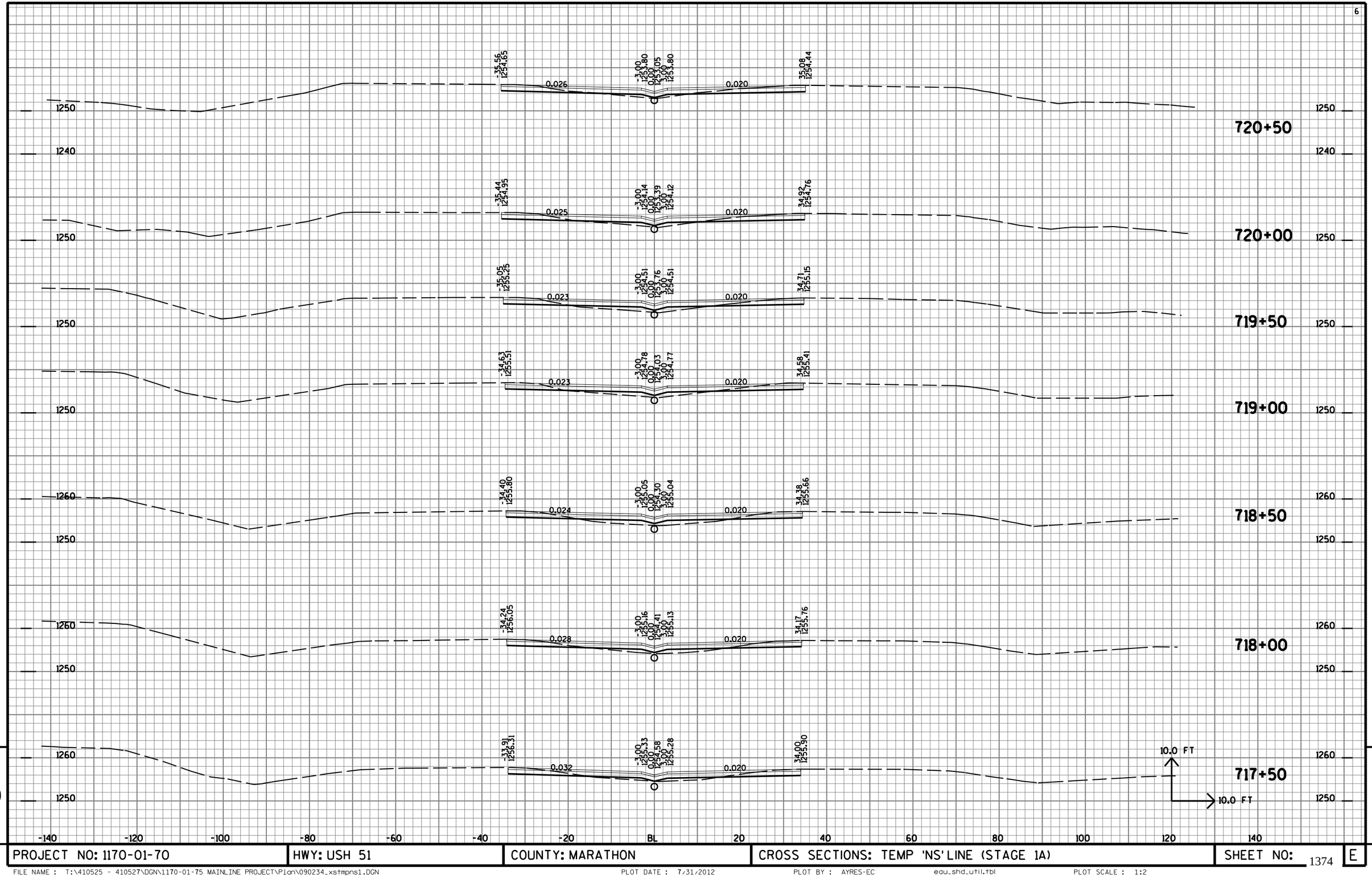


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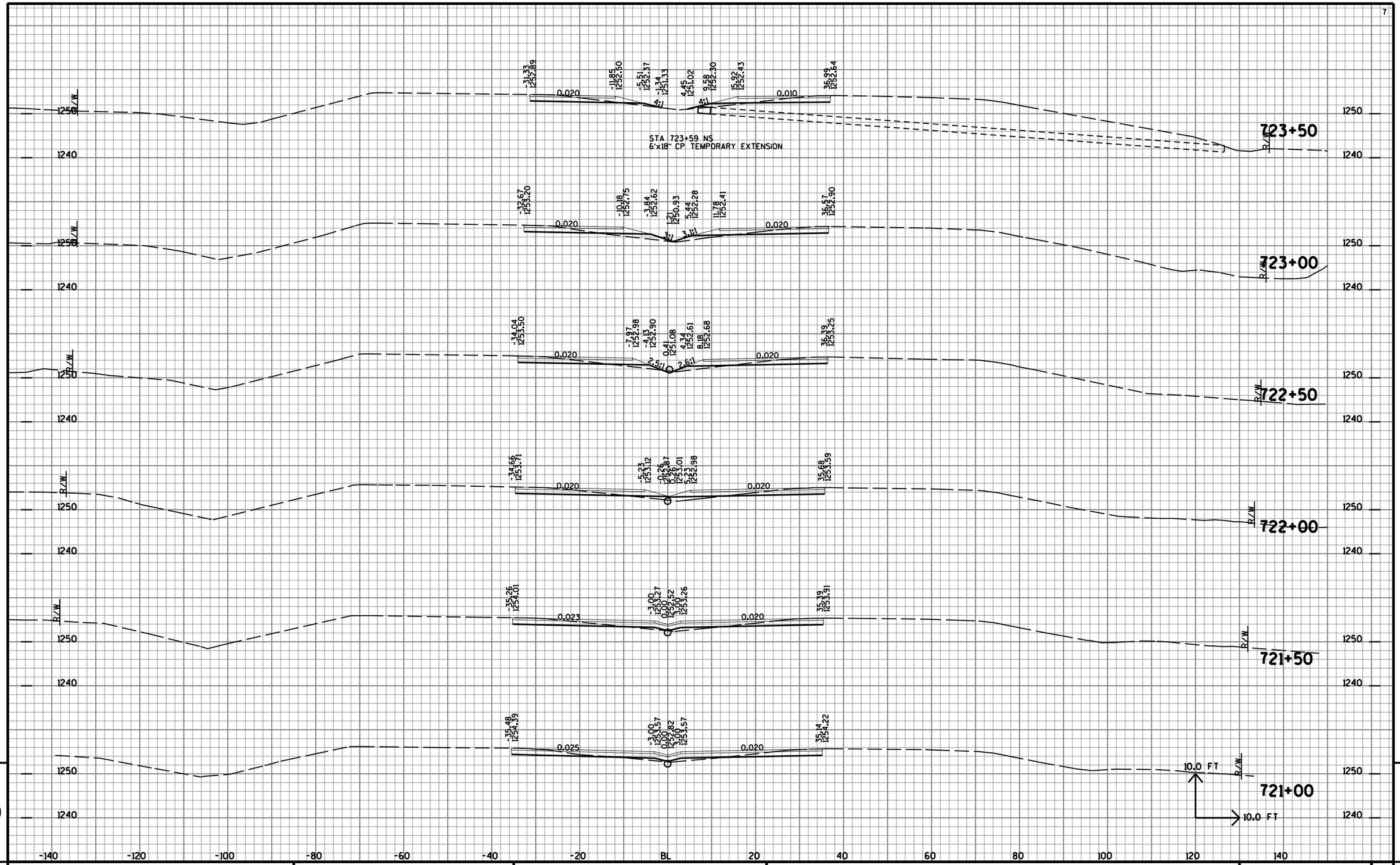
PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: TEMP 'NS' LINE (STAGE 1A)	SHEET NO: 1373	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090234_xstmpns1.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC edu_shd_util.tbl PLOT SCALE : 1:2



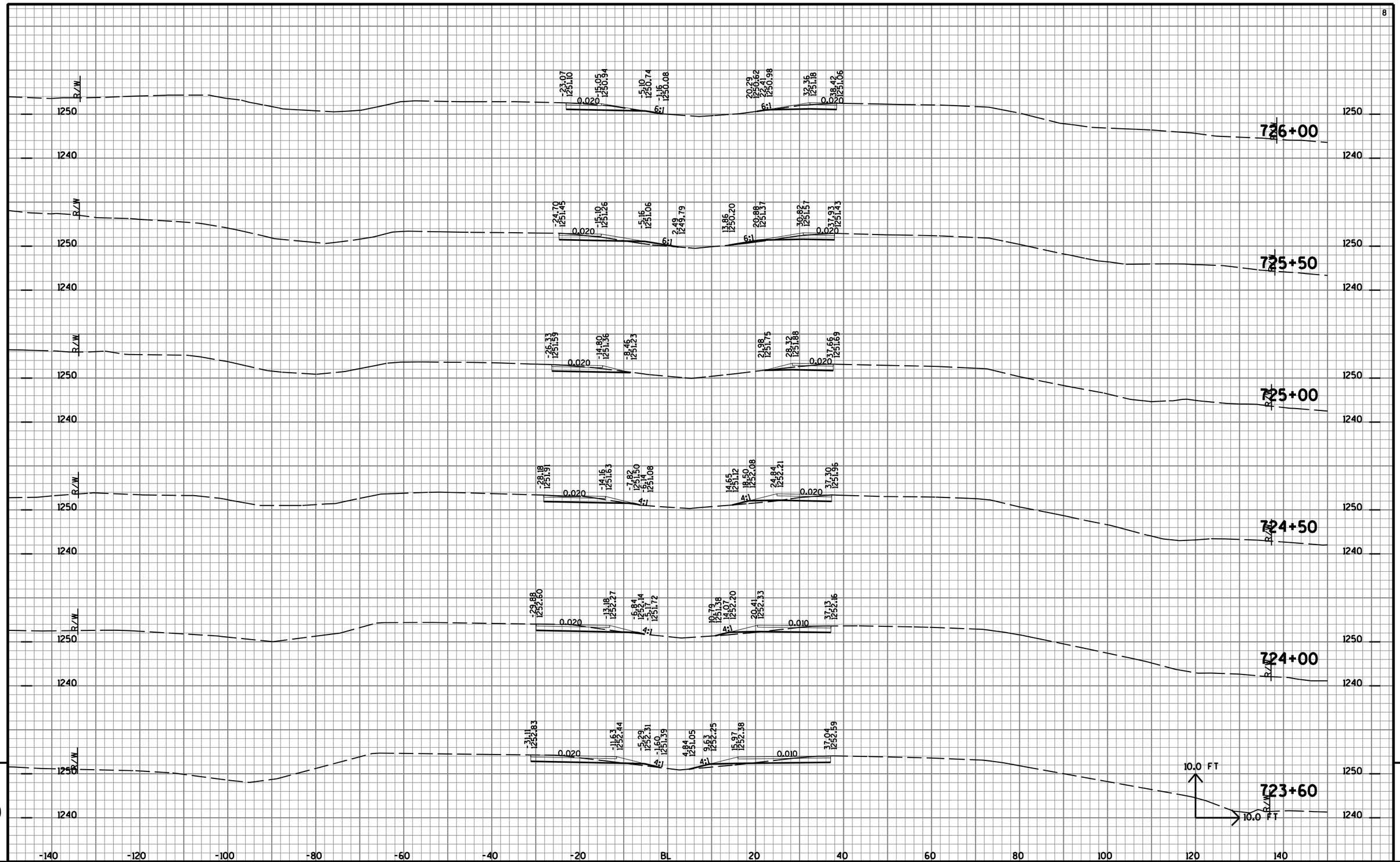
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PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: TEMP 'NS' LINE (STAGE 1A)	SHEET NO: 1374 E



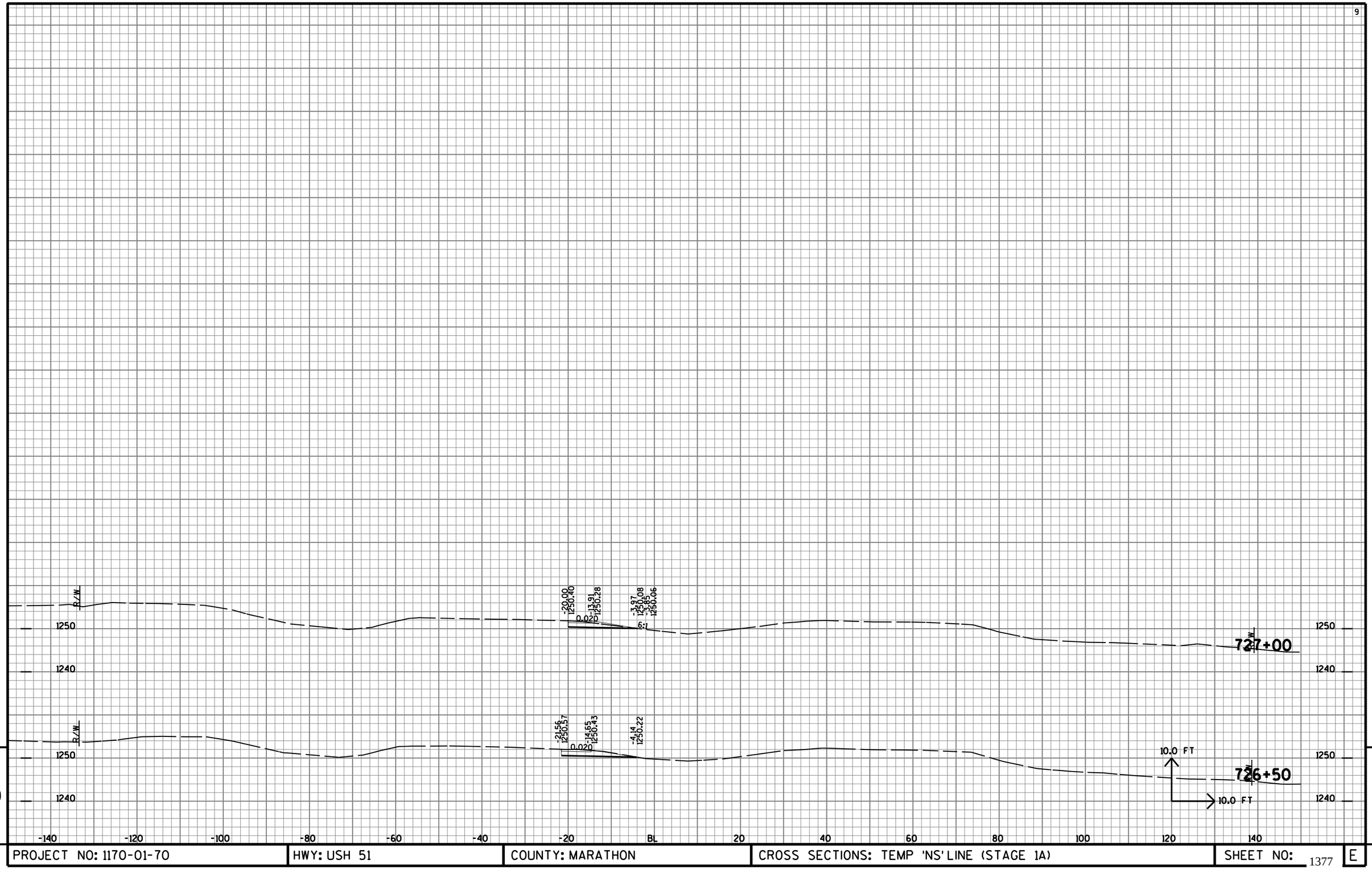
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PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: TEMP 'NS' LINE (STAGE 1A)	SHEET NO: 1375 E



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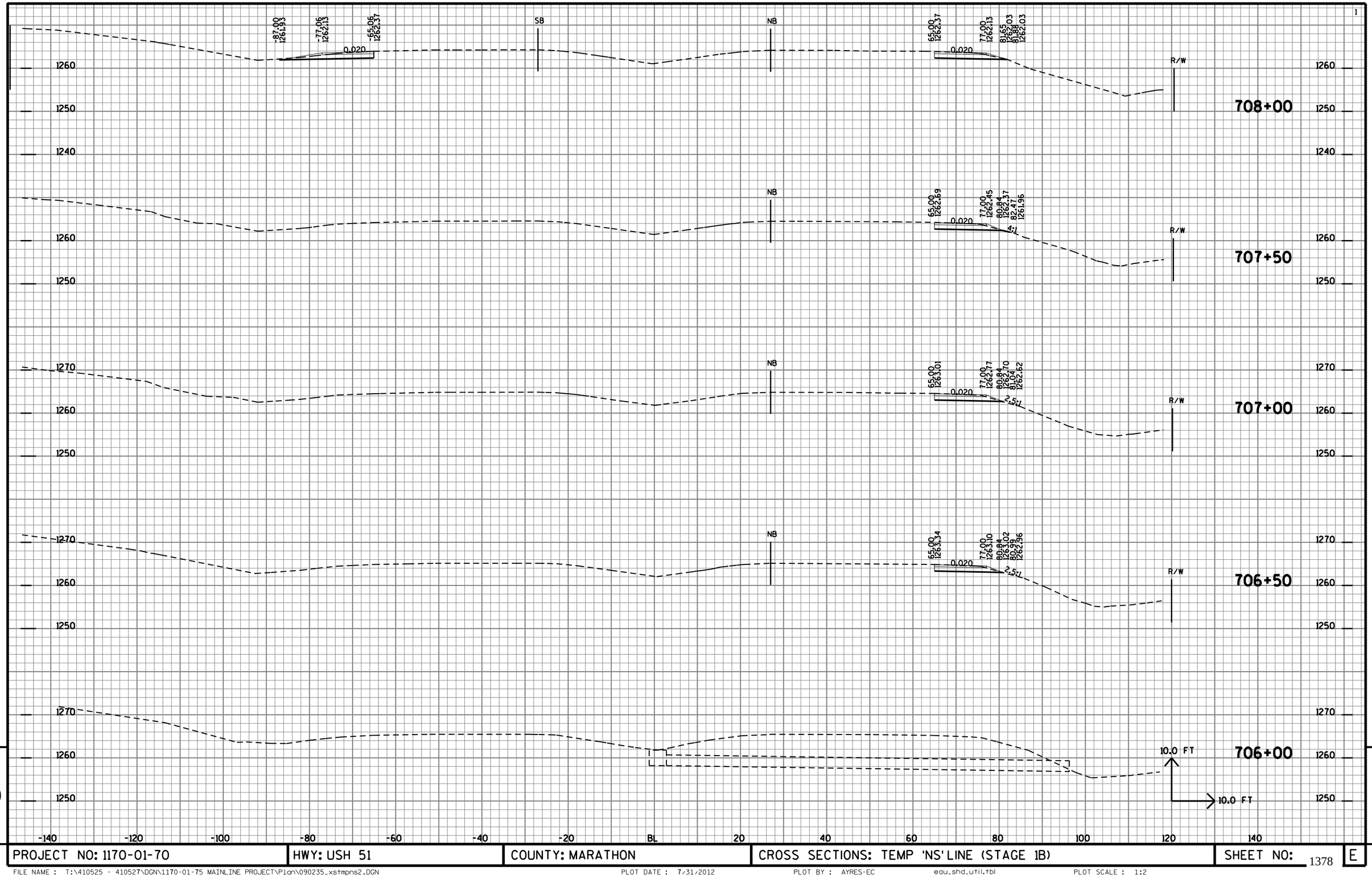
PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: TEMP 'NS' LINE (STAGE 1A)	SHEET NO: 1376	E



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PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: TEMP 'NS' LINE (STAGE 1A)	SHEET NO: 1377	E

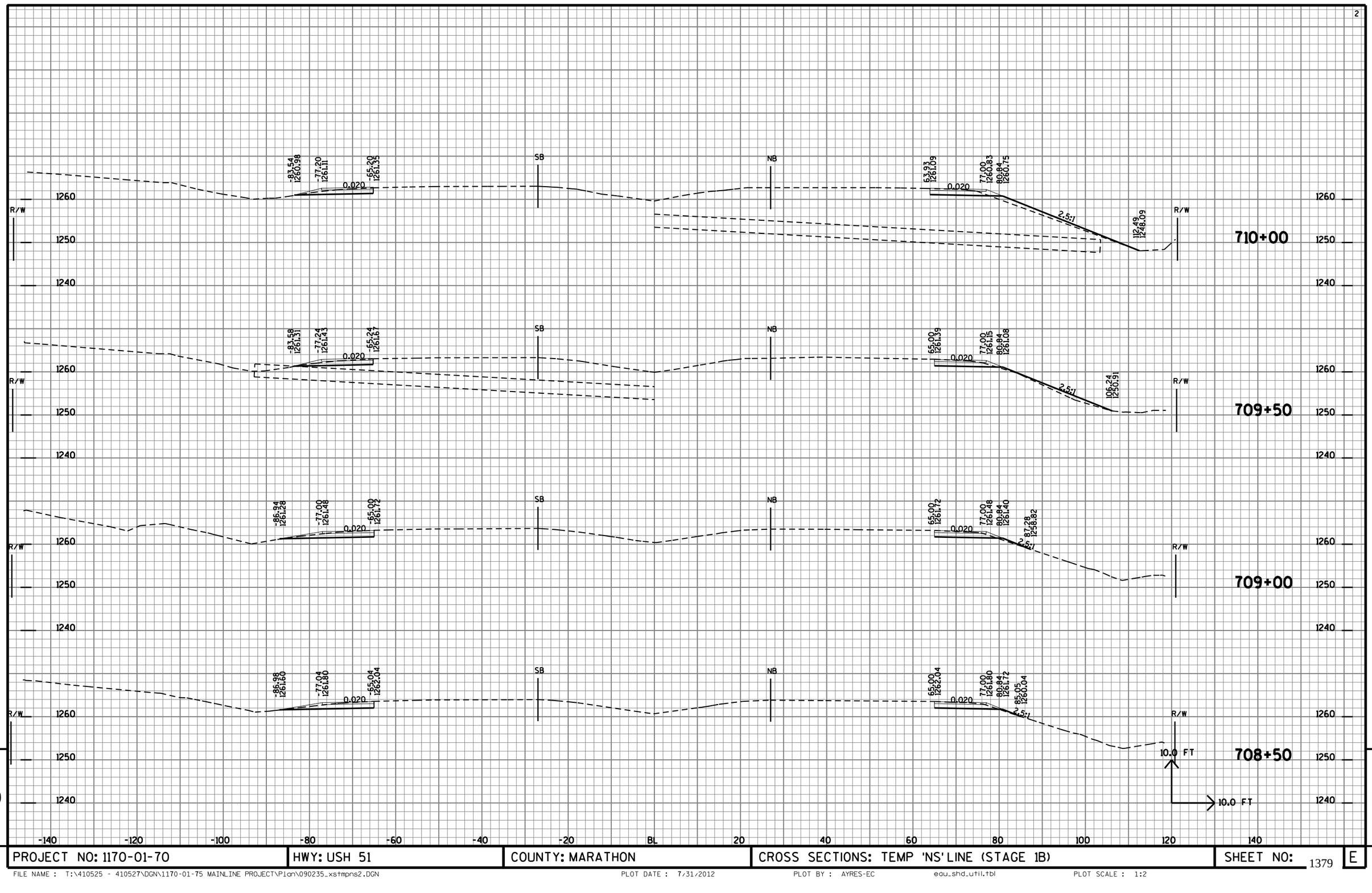


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PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: TEMP 'NS' LINE (STAGE 1B)	SHEET NO: 1378	E

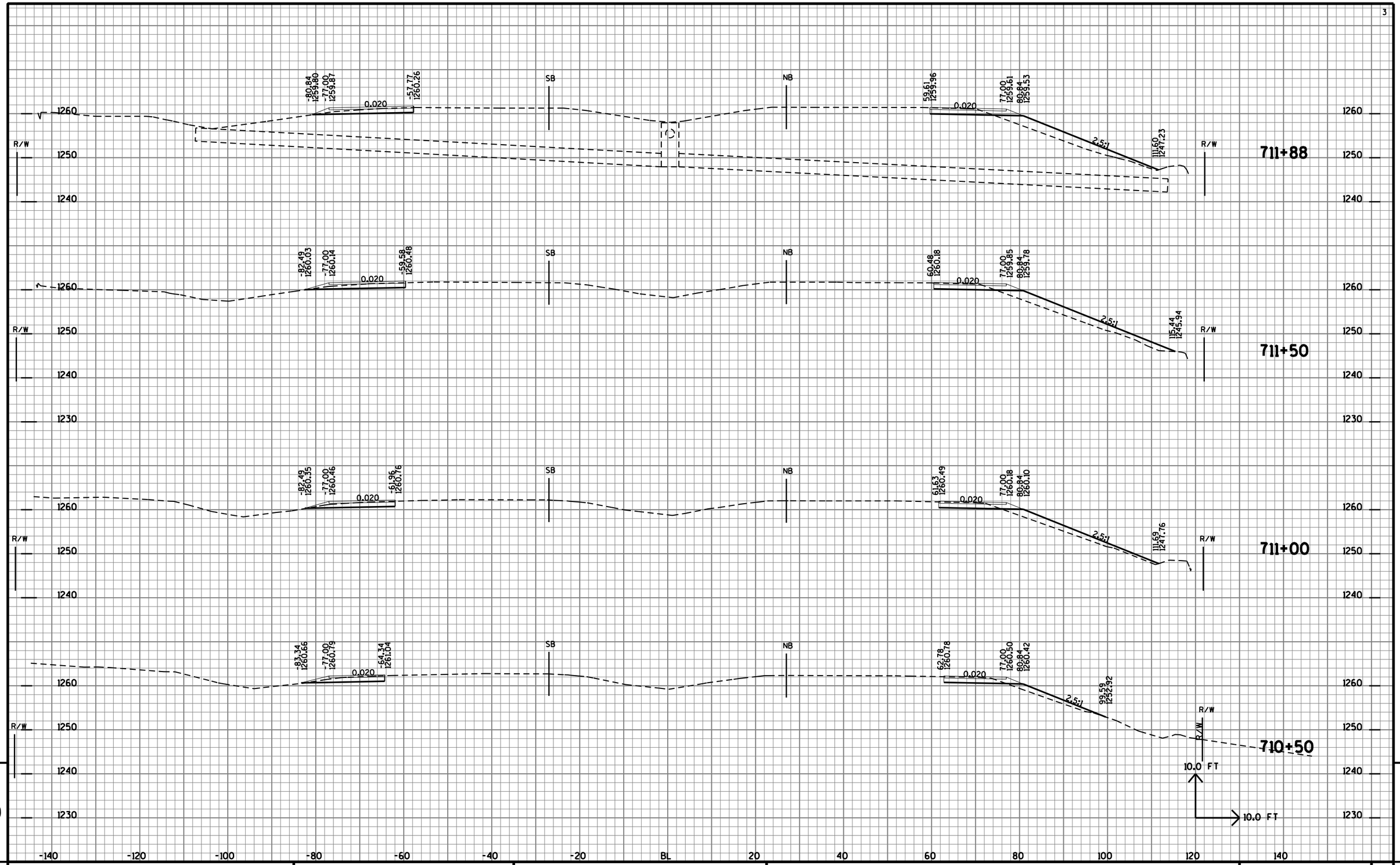
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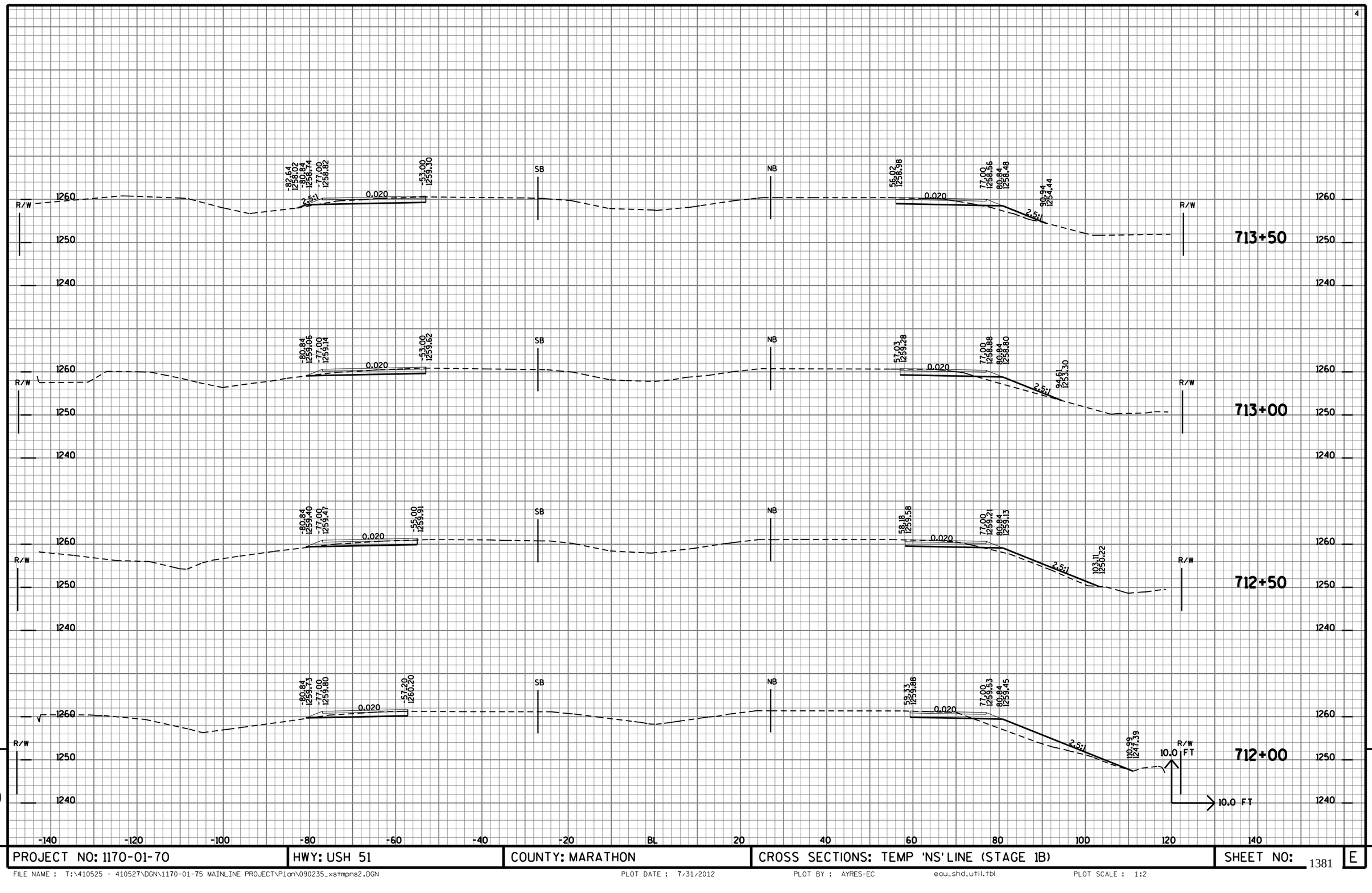
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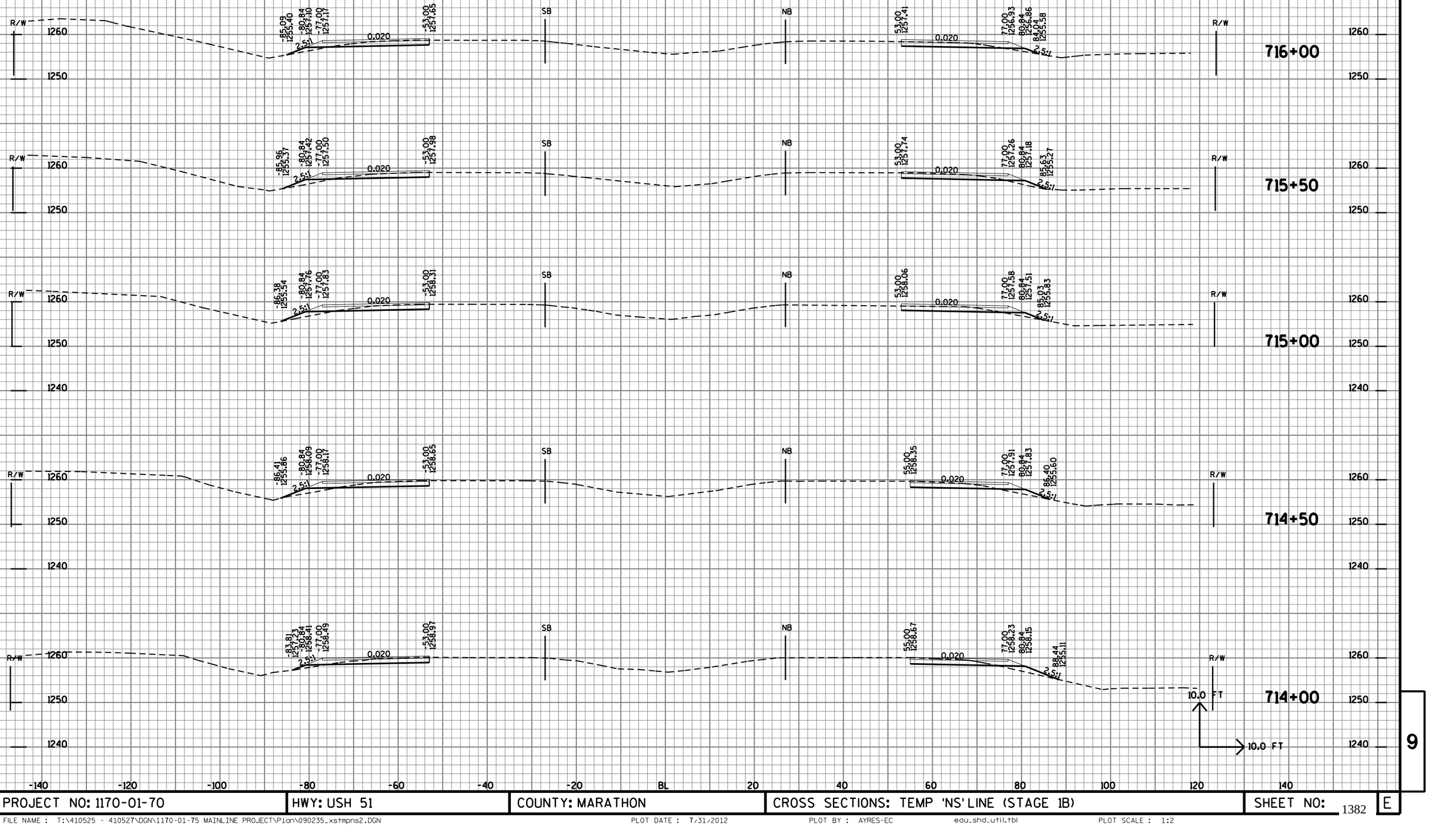
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FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090235_xstmpns2.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC edu_shd_util.tbl PLOT SCALE : 1:2



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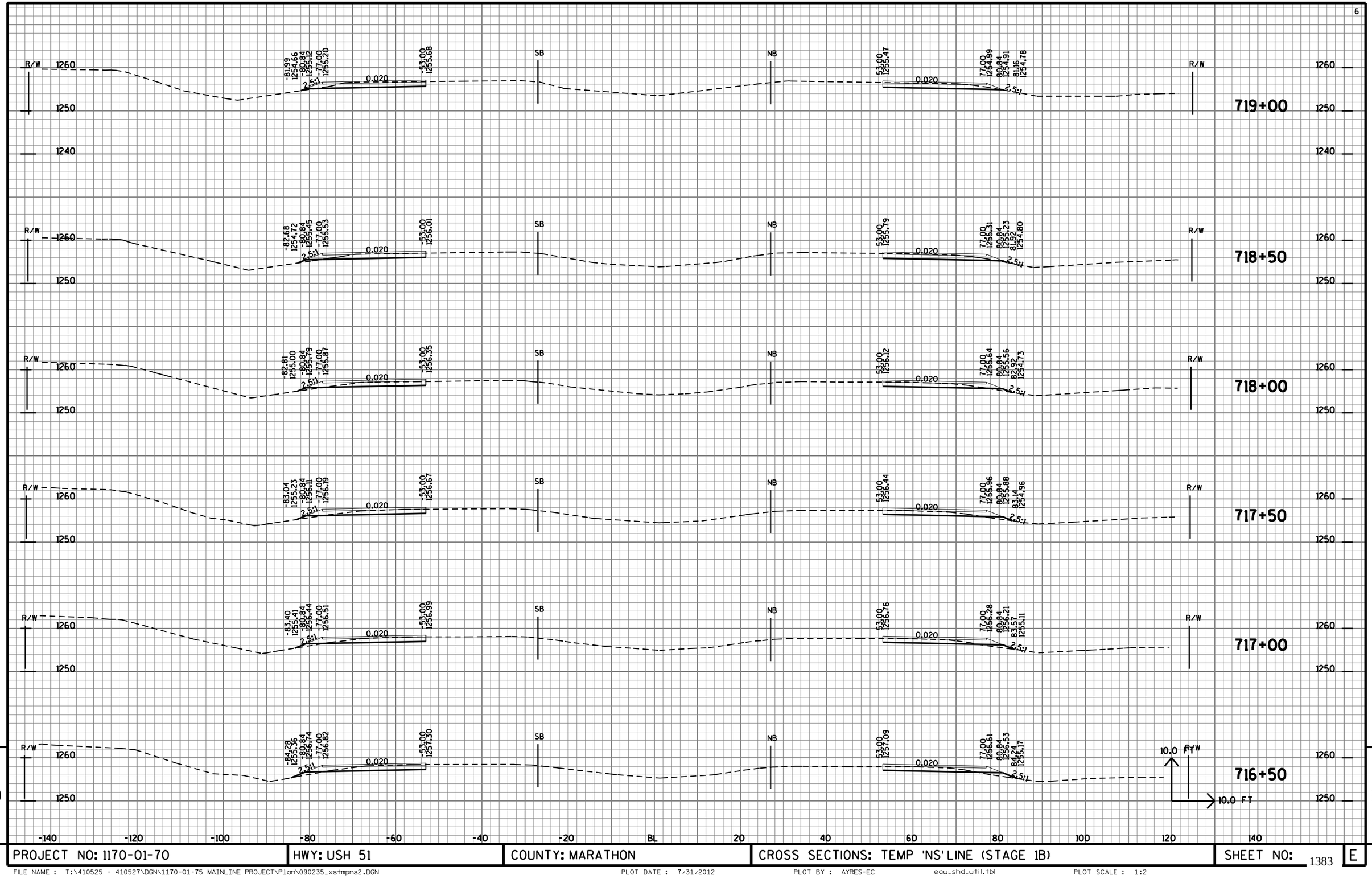
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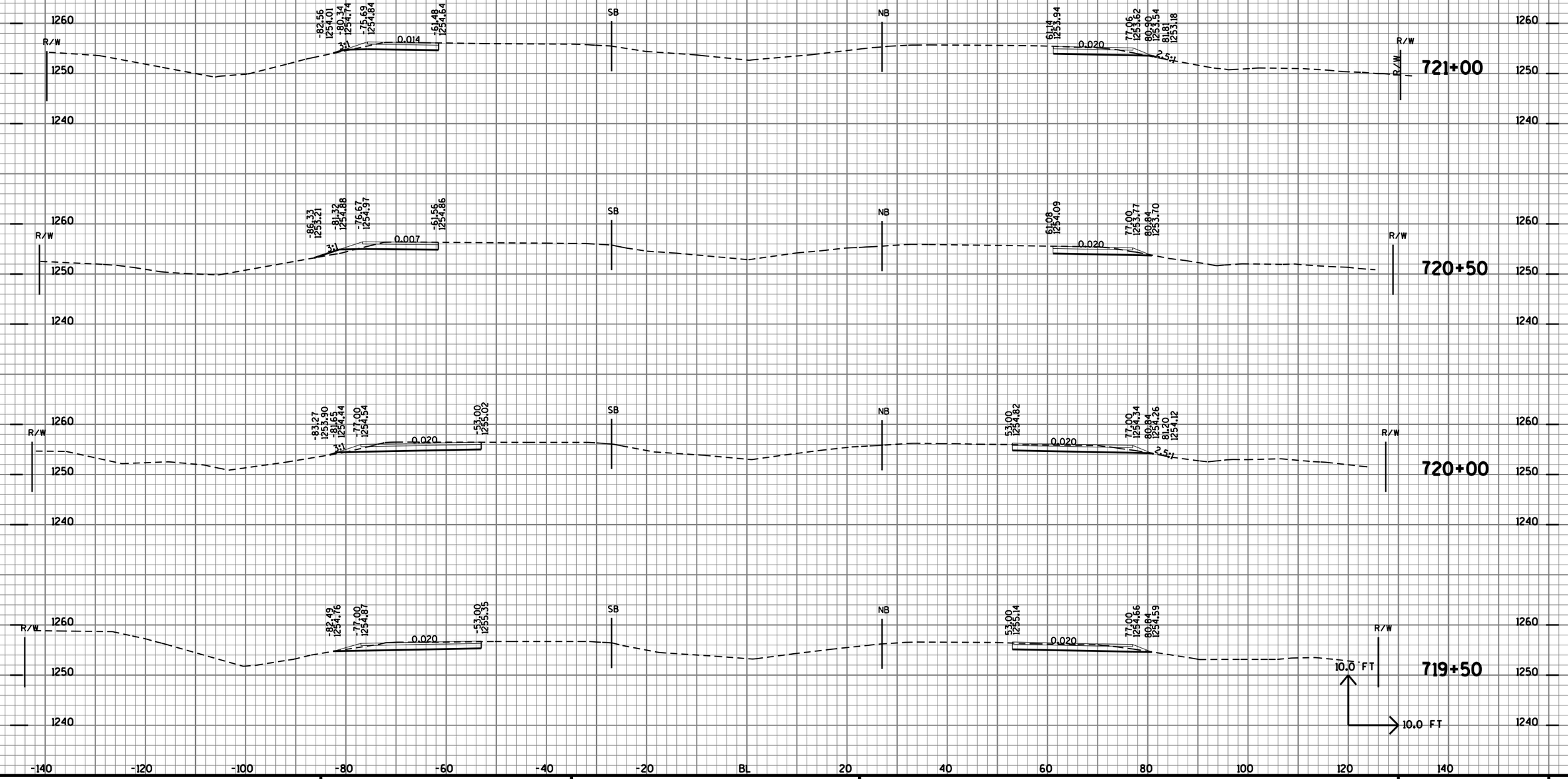
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PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: TEMP 'NS' LINE (STAGE 1B)	SHEET NO: 1382	E



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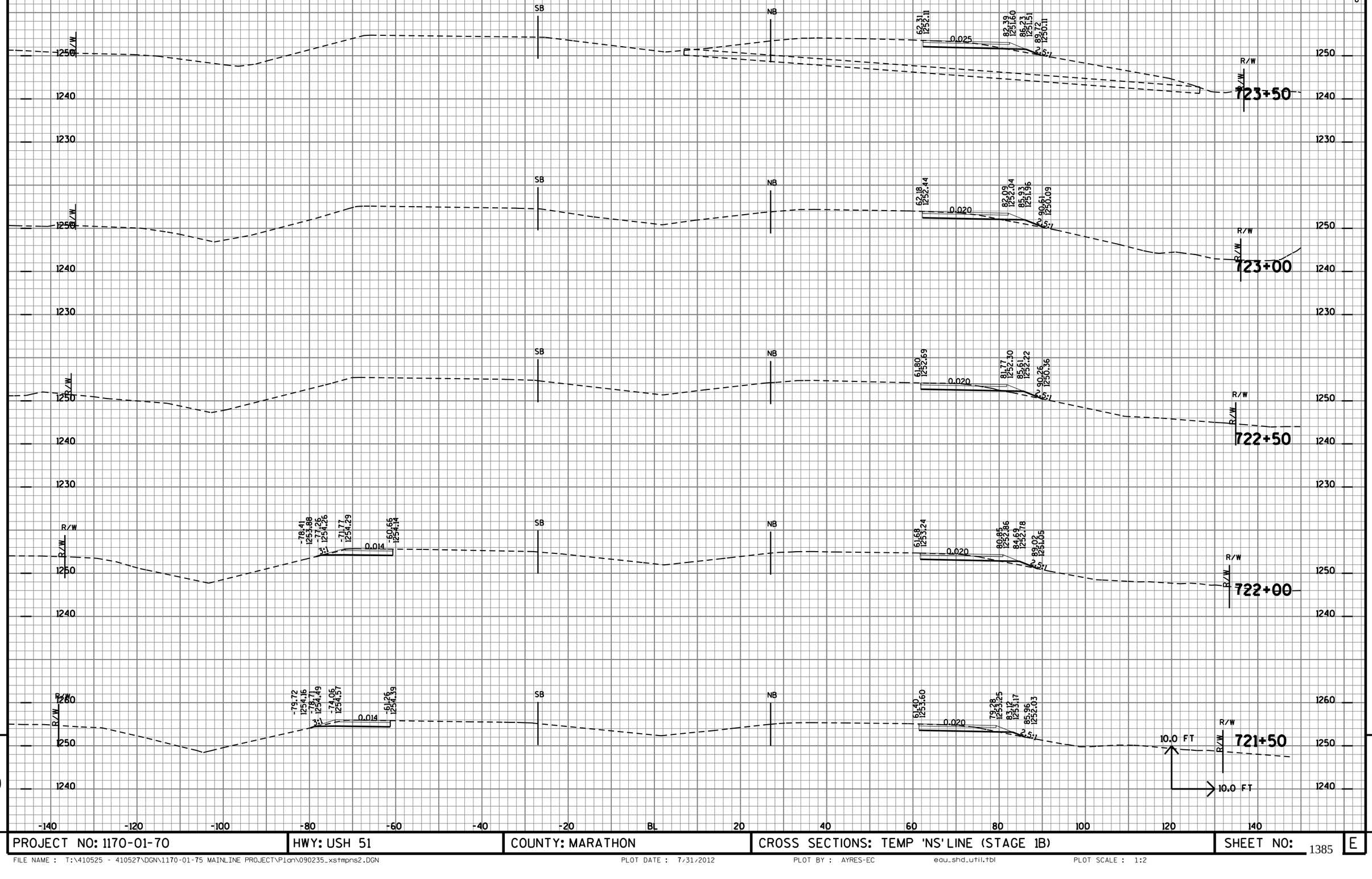
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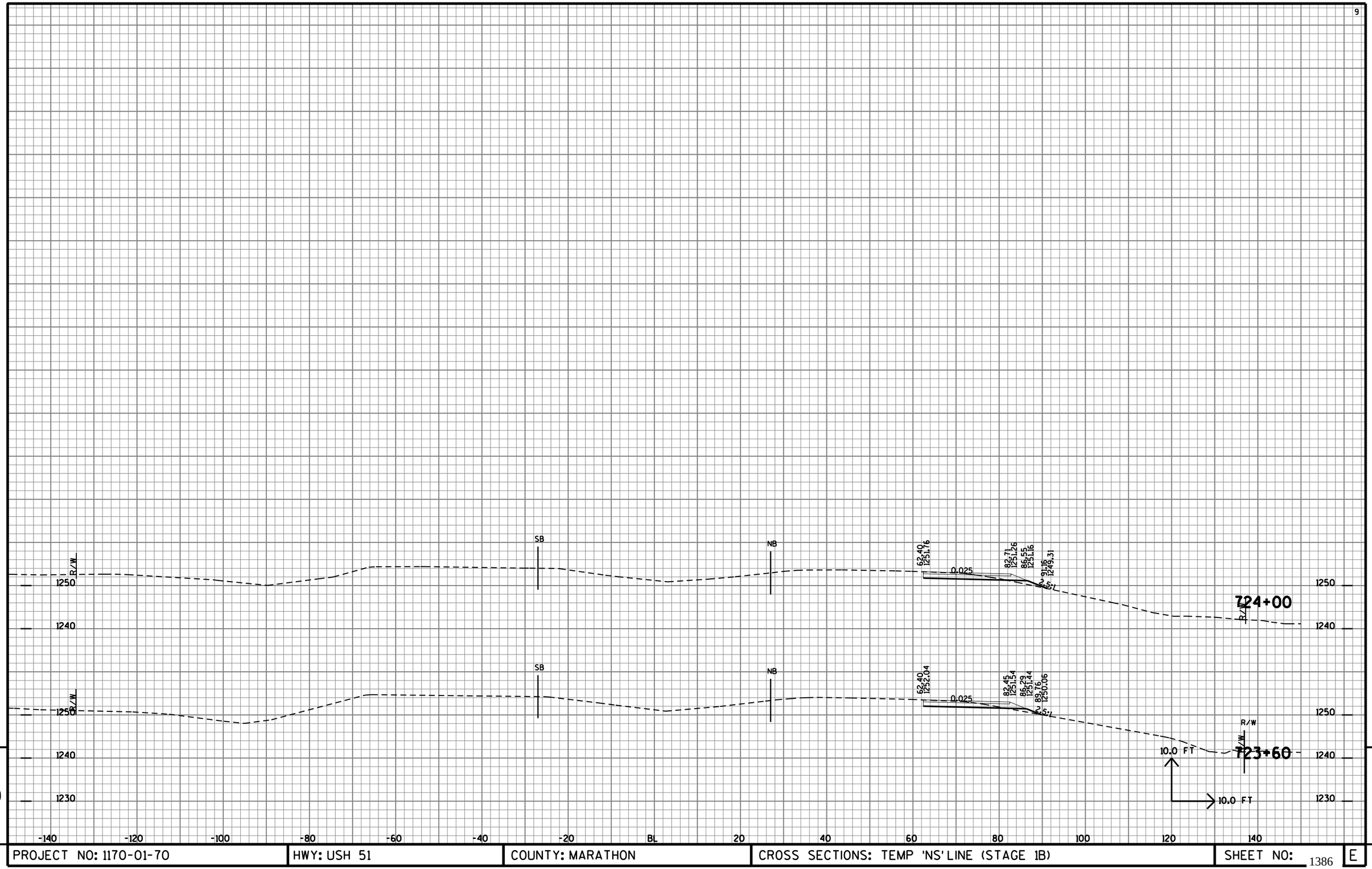
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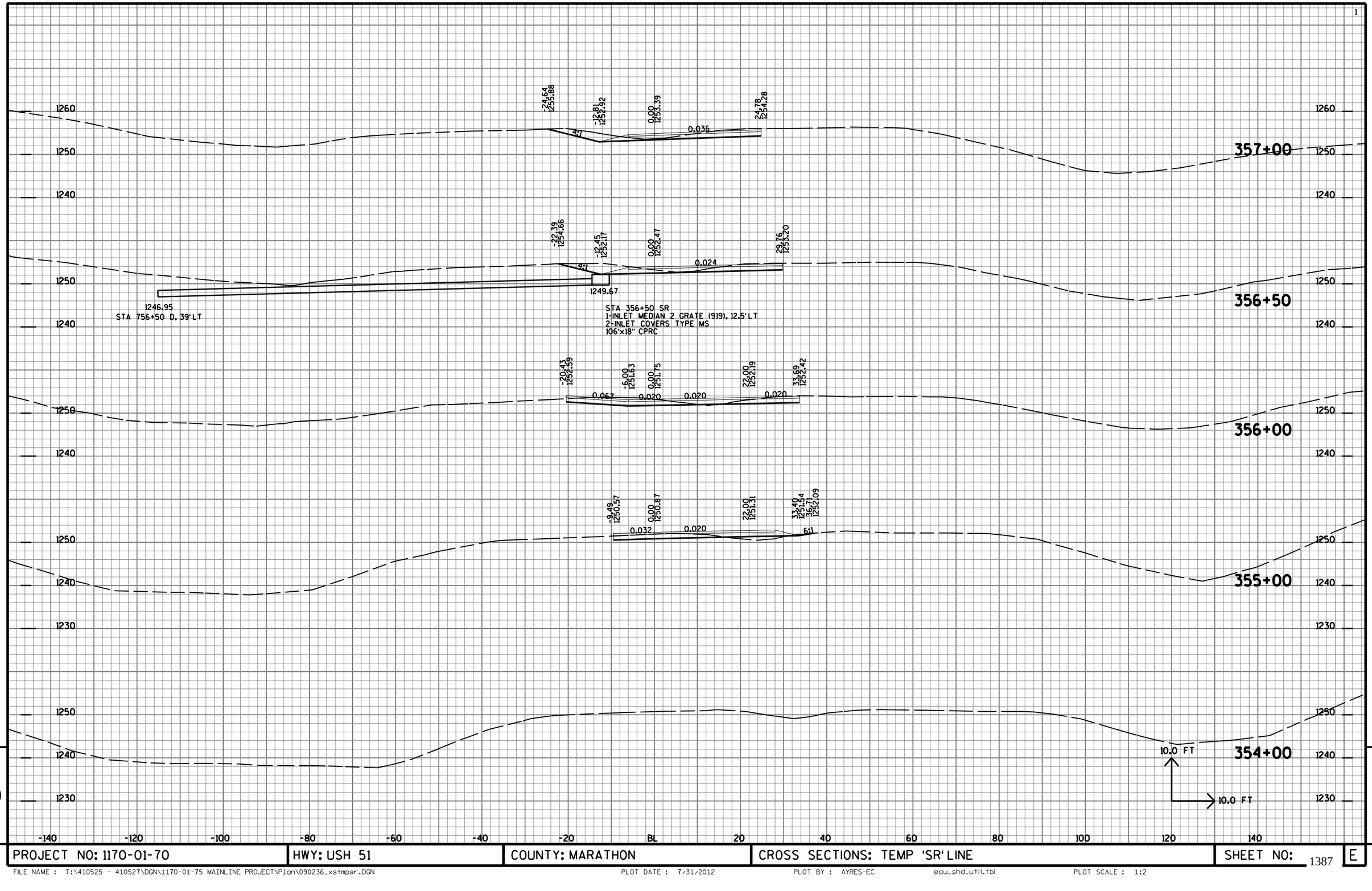


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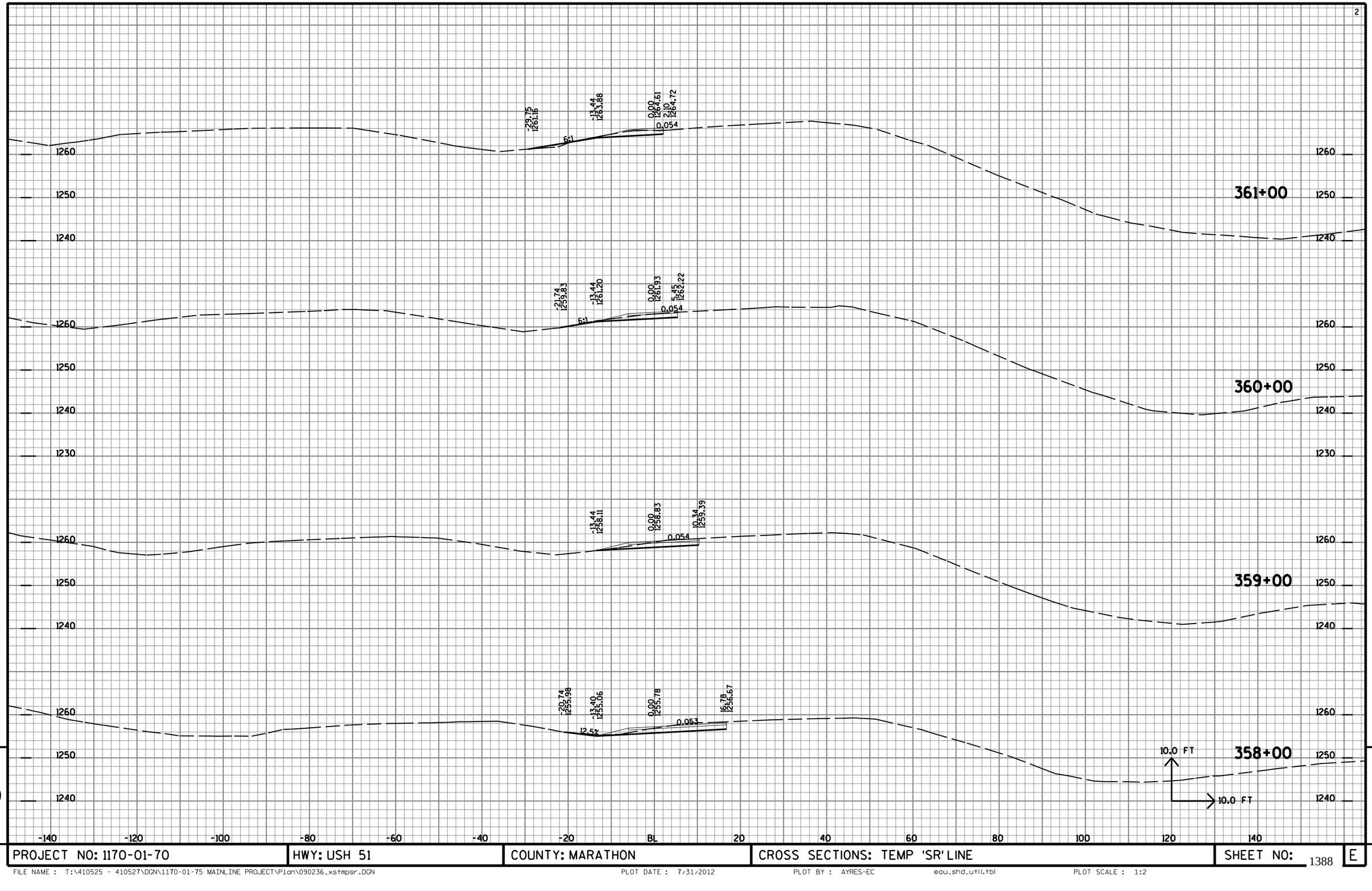
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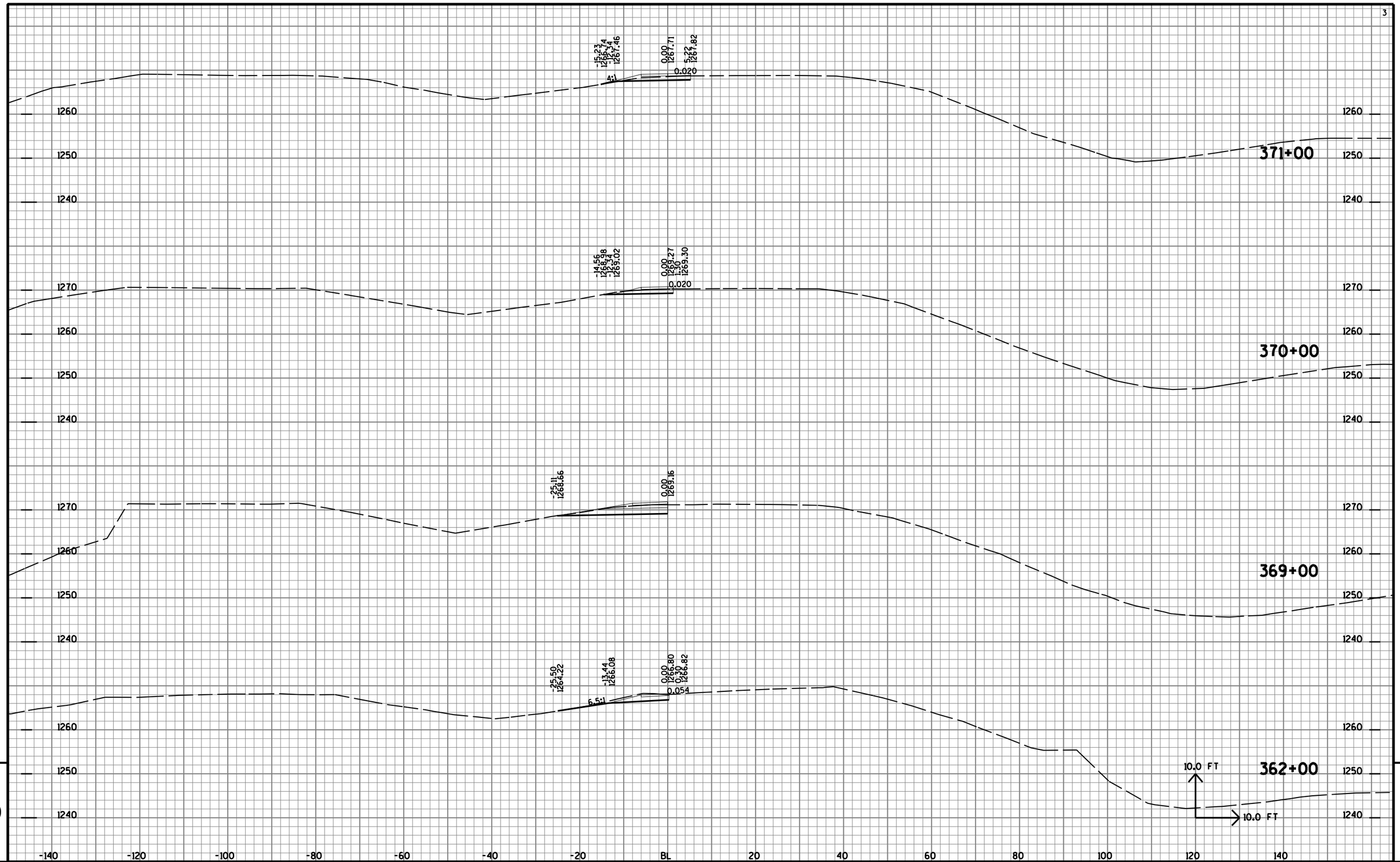
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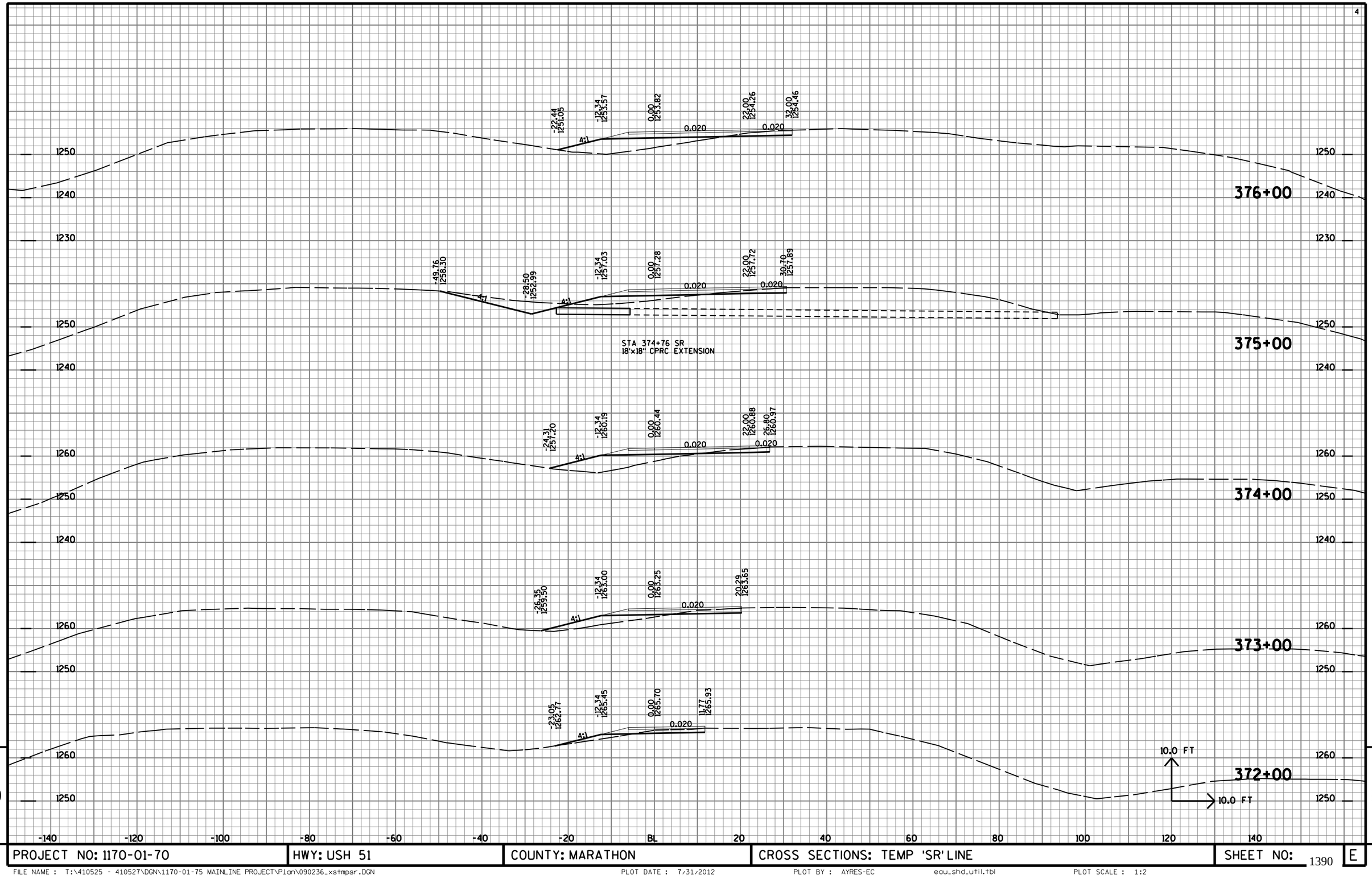
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PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: TEMP 'SR' LINE	SHEET NO: 1388	E



PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: TEMP 'SR' LINE	SHEET NO: 1389 E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090236_xstmpsr.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC eau_shd_util.tbl PLOT SCALE : 1:2

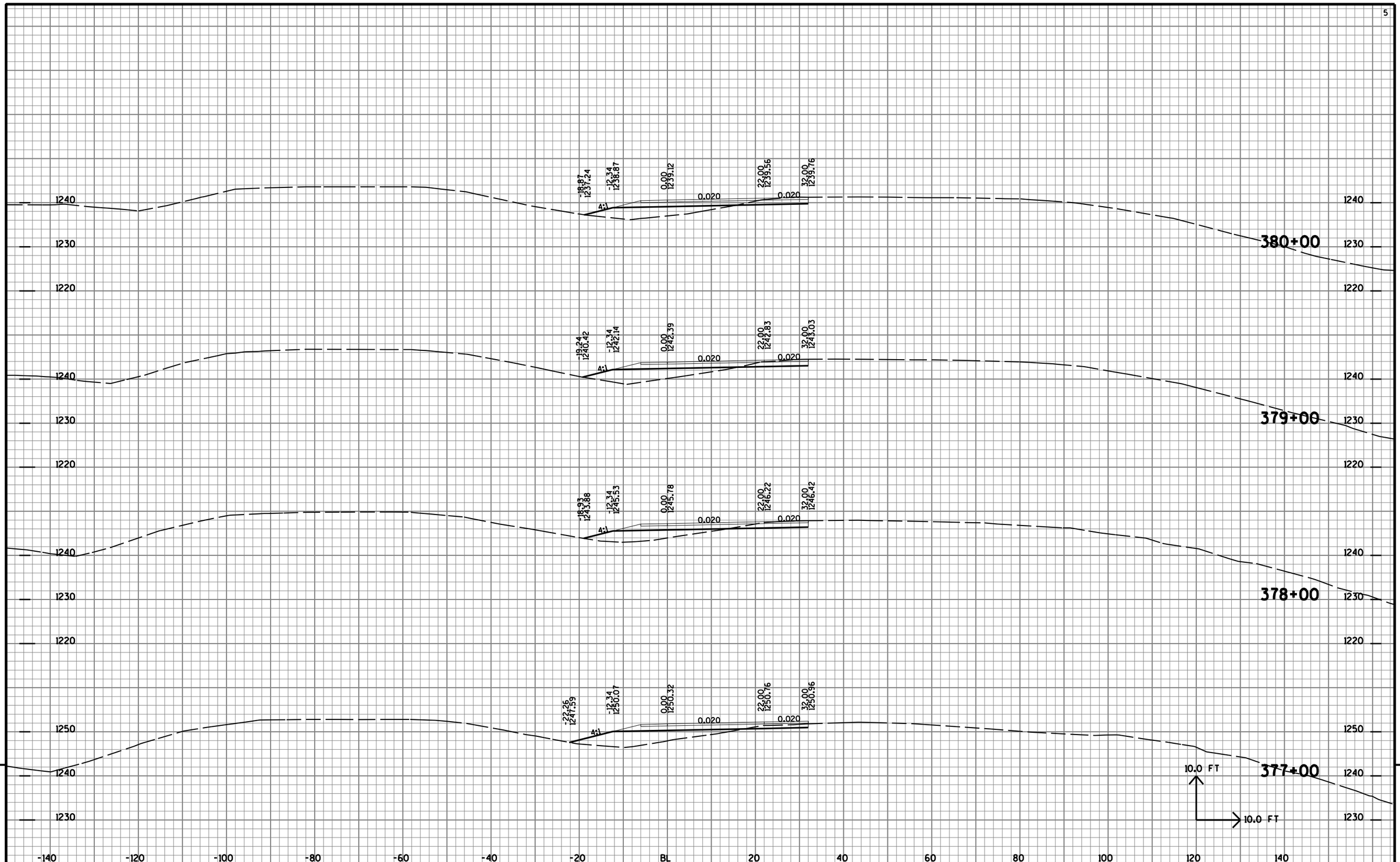


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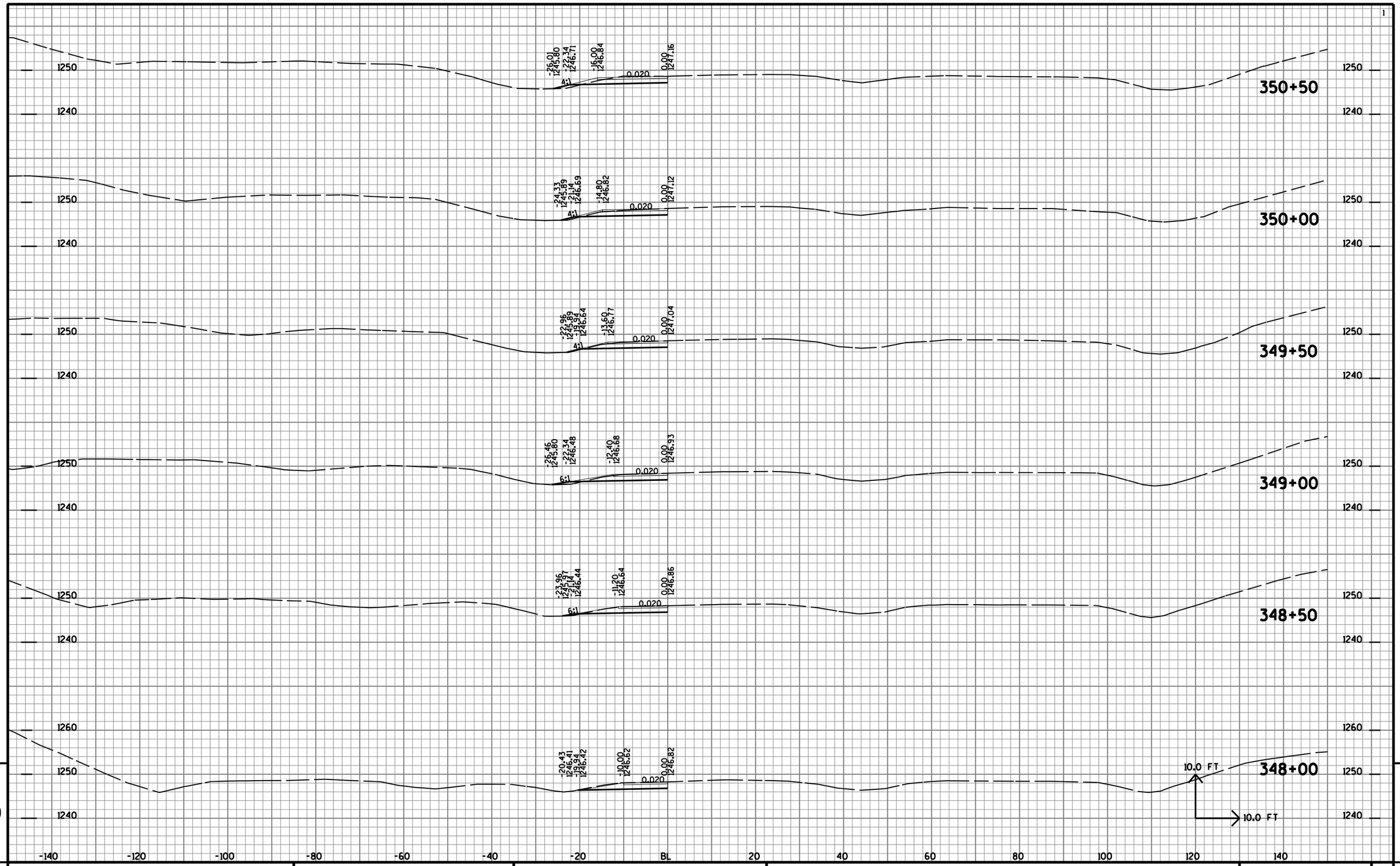
PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: TEMP 'SR' LINE	SHEET NO: 1390	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090236_xstmpsr.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC edu_shd_util.tbl PLOT SCALE : 1:2



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PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: TEMP 'SR' LINE	SHEET NO: 1391 E

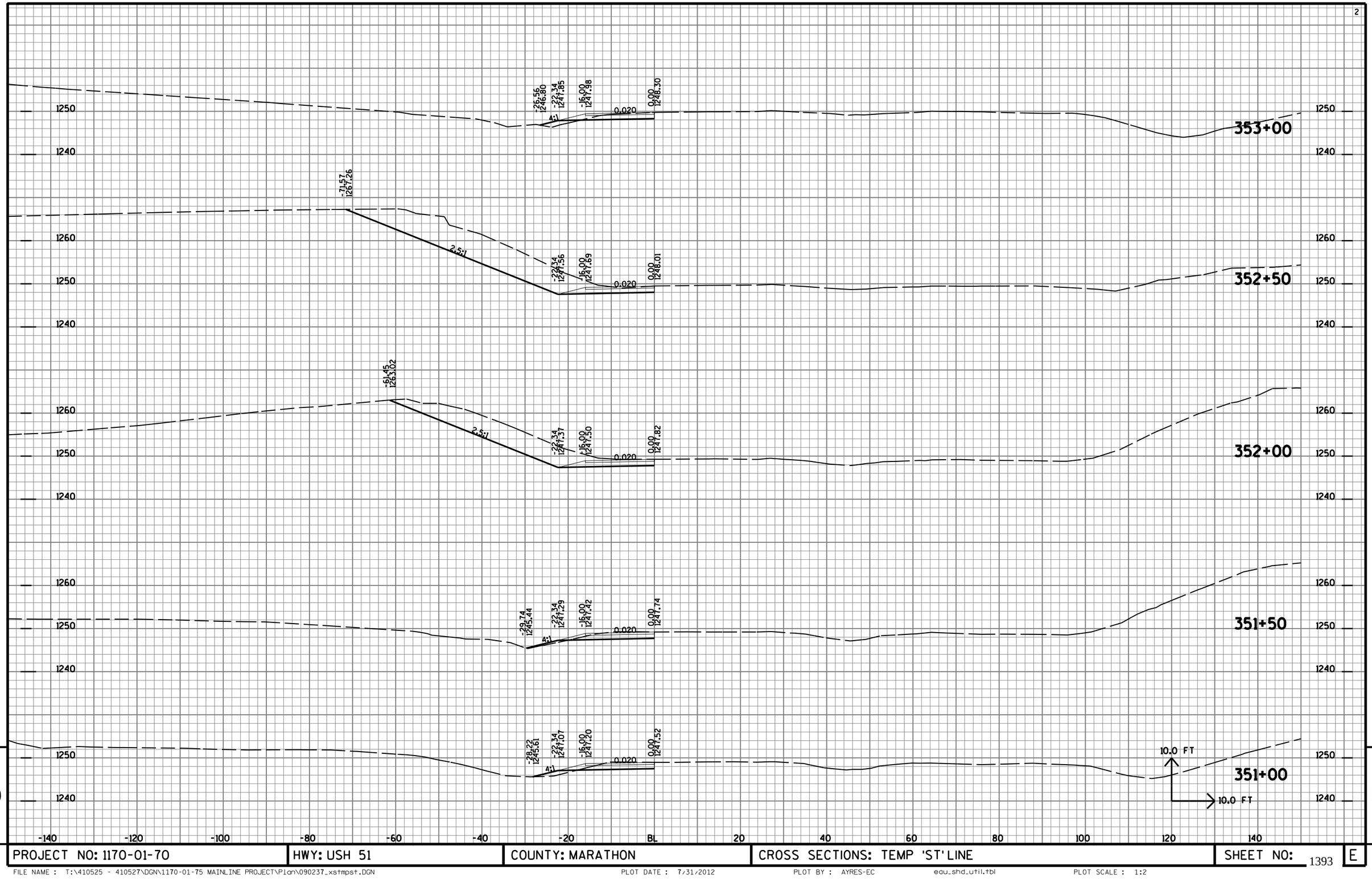


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9

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: TEMP 'ST' LINE	SHEET NO: 1392	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090237_xstmpst.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC edu_shd_util.tbl PLOT SCALE : 1:2



9

9

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: TEMP 'ST' LINE	SHEET NO: 1393	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090237_xstmpst.DGN PLOT DATE : 7/31/2012 PLOT BY : AYRES-EC edu_shd_util.tbl PLOT SCALE : 1:2

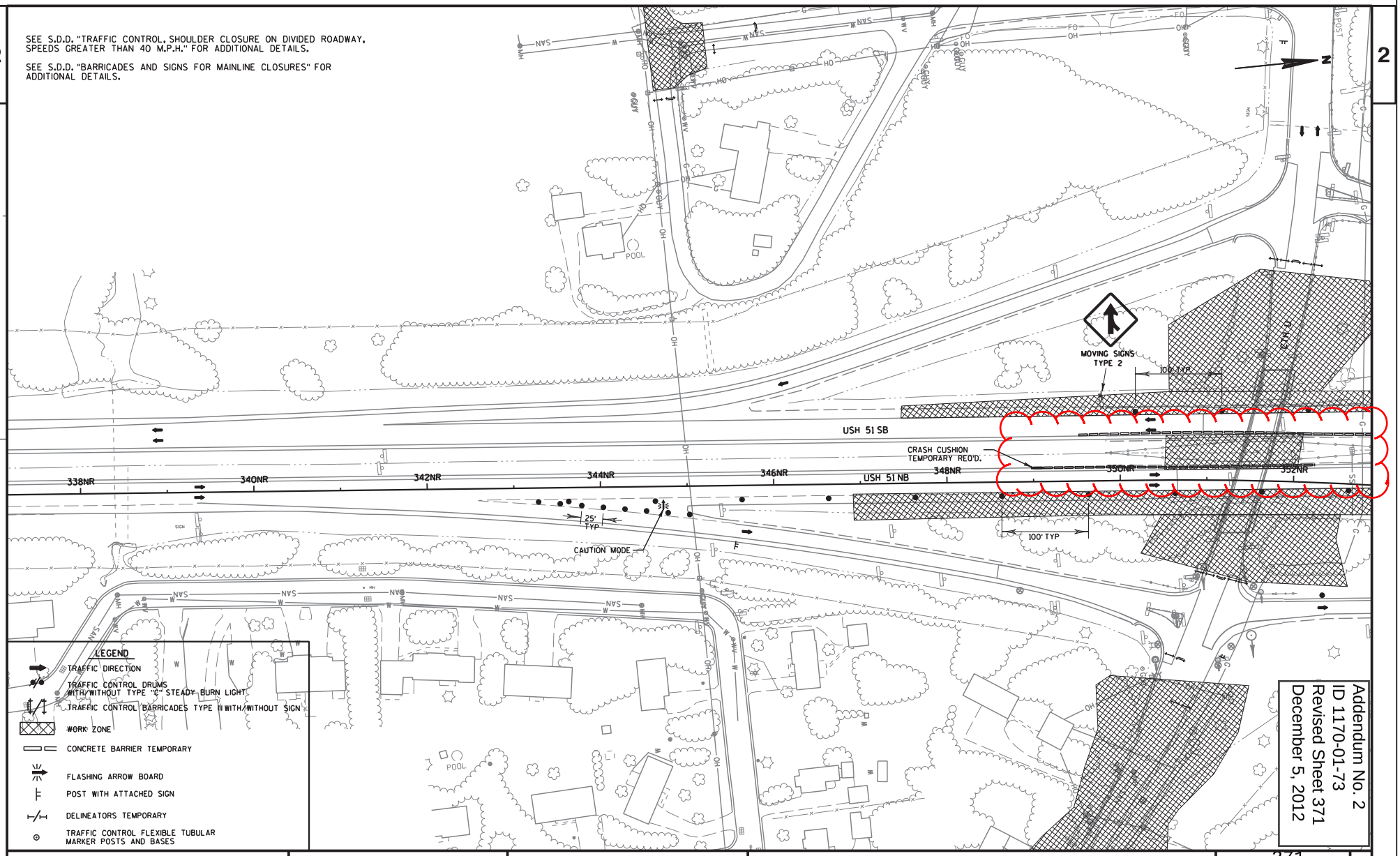
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SEE S.D.D. "TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 M.P.H." FOR ADDITIONAL DETAILS.

SEE S.D.D. "BARRICADES AND SIGNS FOR MAINLINE CLOSURES" FOR ADDITIONAL DETAILS.

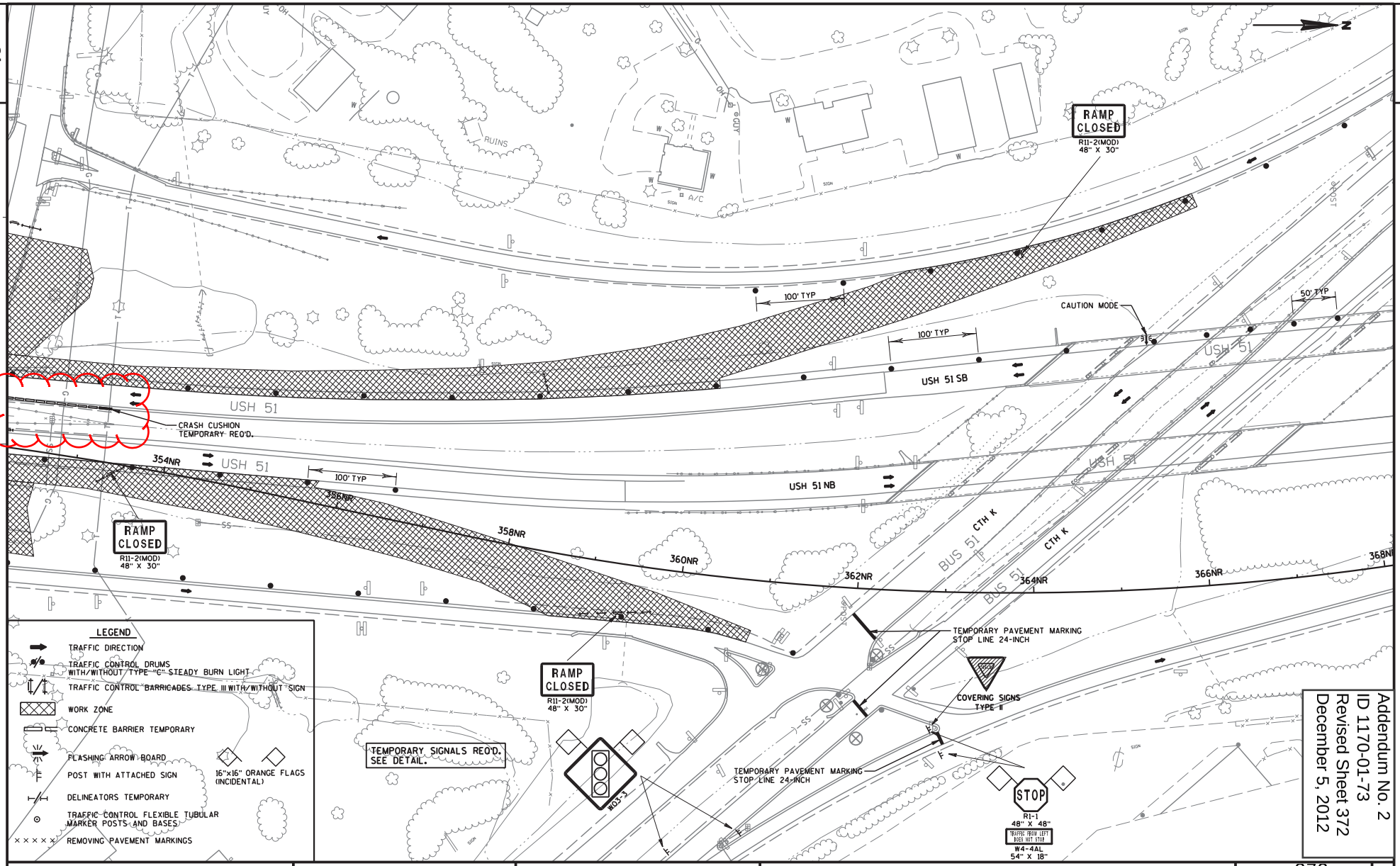


Addendum No. 2
ID 1170-01-73
Revised Sheet 371
December 5, 2012

PROJECT NO: 1190-01-70/73	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 1	SHEET 371	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\026113_s1.dgn PLOT DATE : 12/1/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

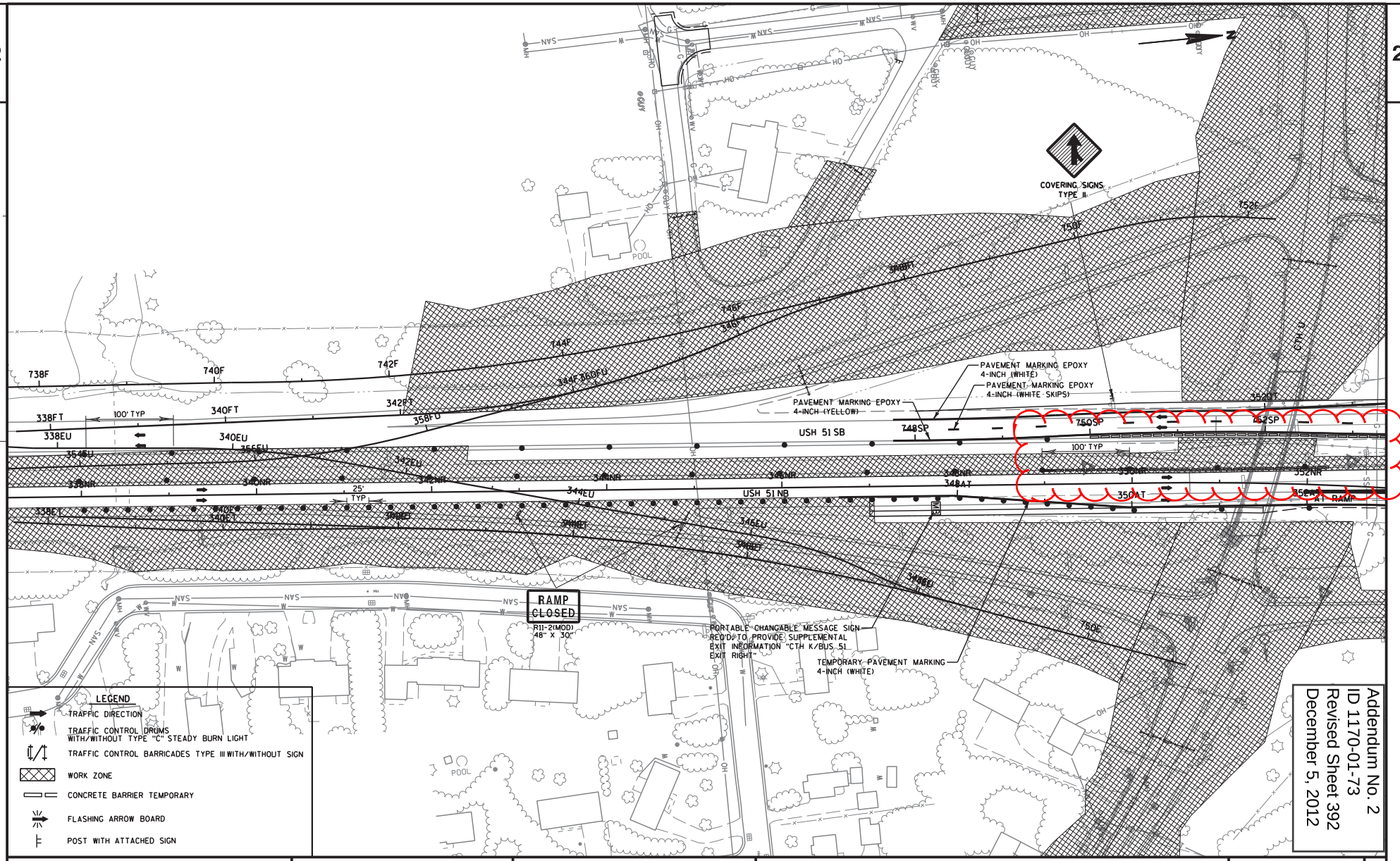


Addendum No. 2
ID 1170-01-73
Revised Sheet 372
December 5, 2012

PROJECT NO: 1170-01-70/73	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 1	SHEET 372	E

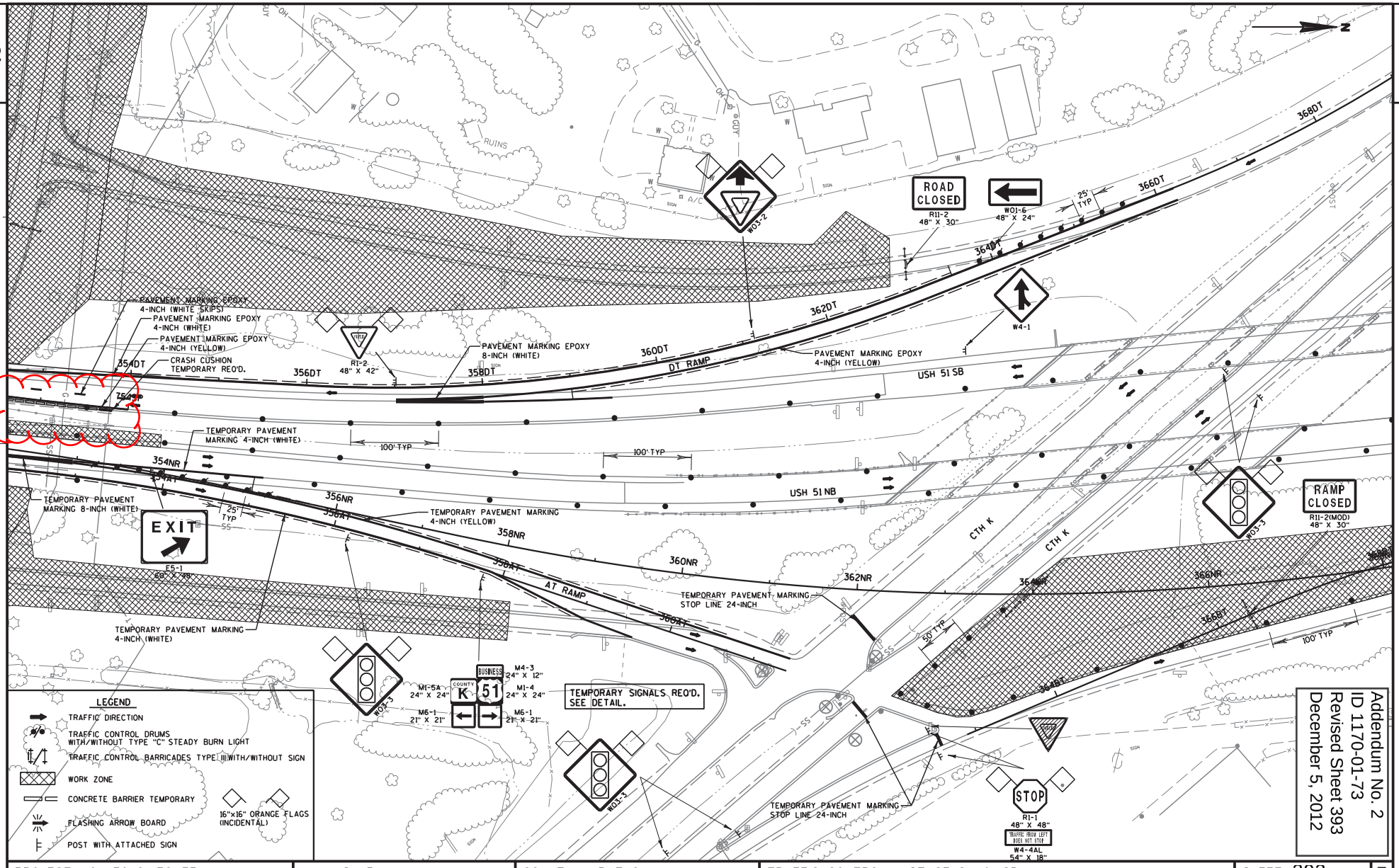
FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\026114_s1.dgn PLOT DATE : 12/1/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

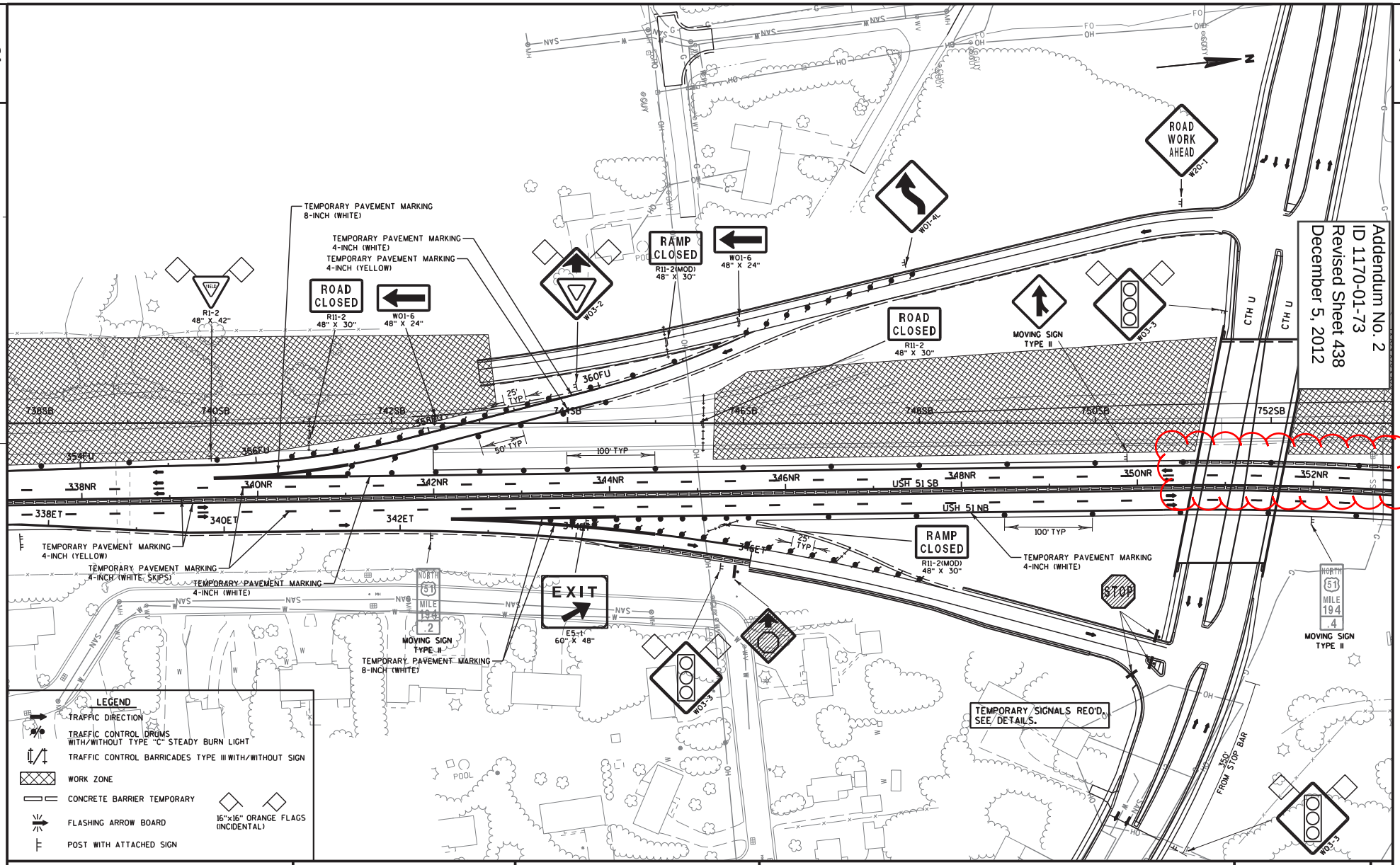


PROJECT NO: 1170-01-70/73	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 2A & 2B	SHEET 392	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\026215_s2a.dgn PLOT DATE : 12/1/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:100



PROJECT NO: 1170-01-70/73	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 2A & 2B	SHEET 393	E

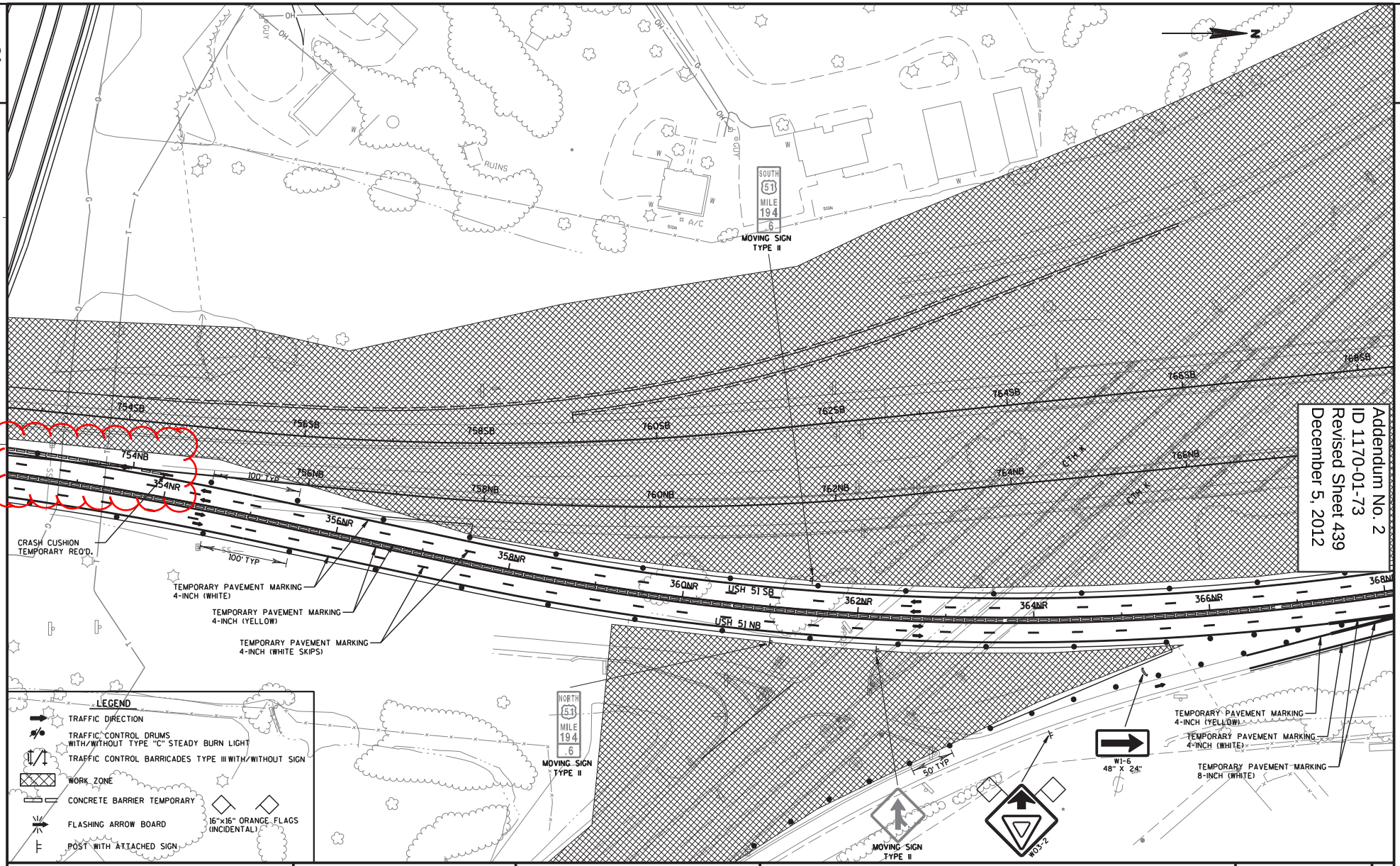


Addendum No. 2
ID 1170-01-73
Revised Sheet 438
December 5, 2012

PROJECT NO: 1170-01-70/73	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 5A	SHEET 438	E

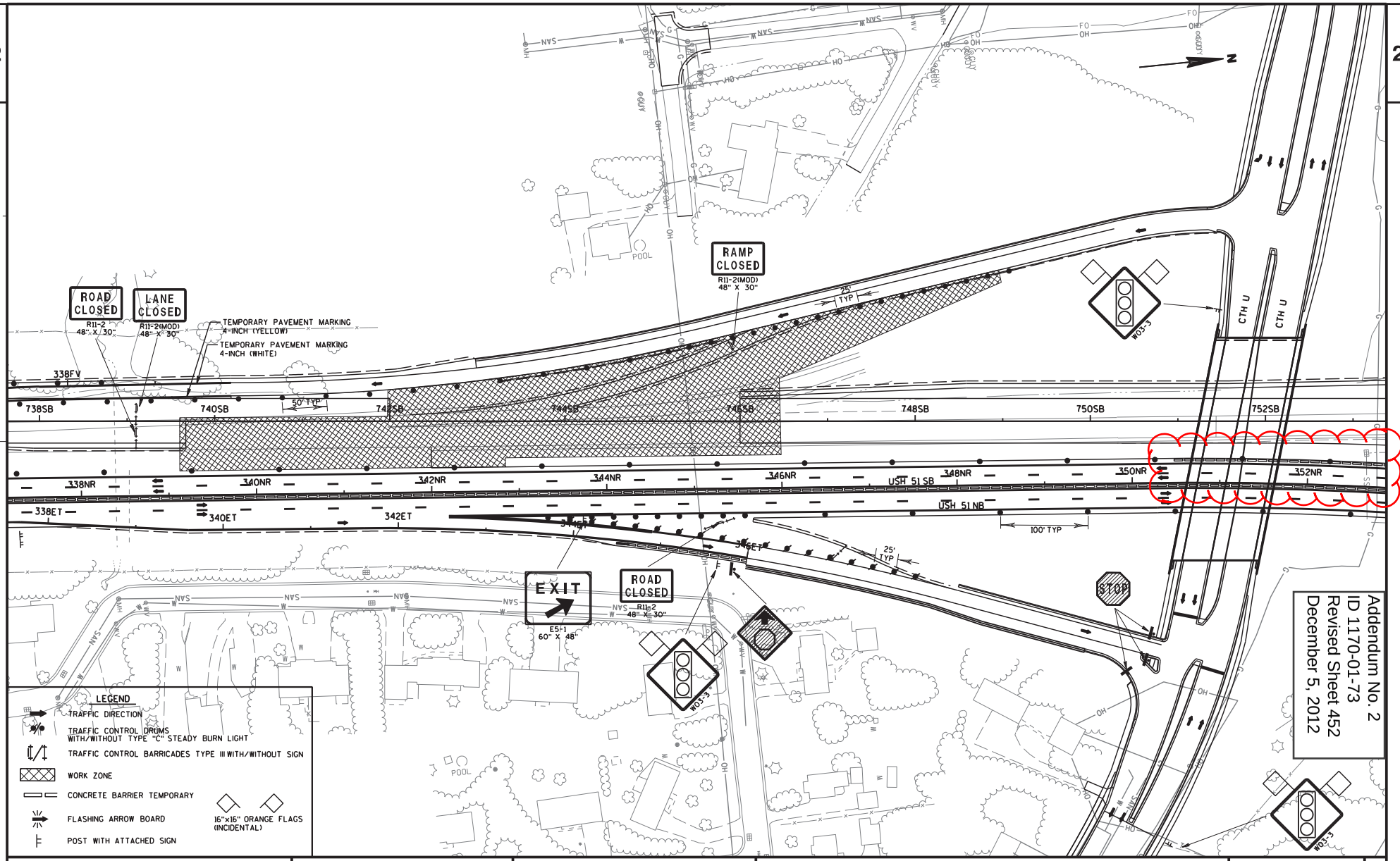
FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\026513_s5a.dgn PLOT DATE : 12/1/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42



PROJECT NO: 1170-01-70/73	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 5A	SHEET 439	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\026514_s5a.dgn PLOT DATE : 12/1/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:100

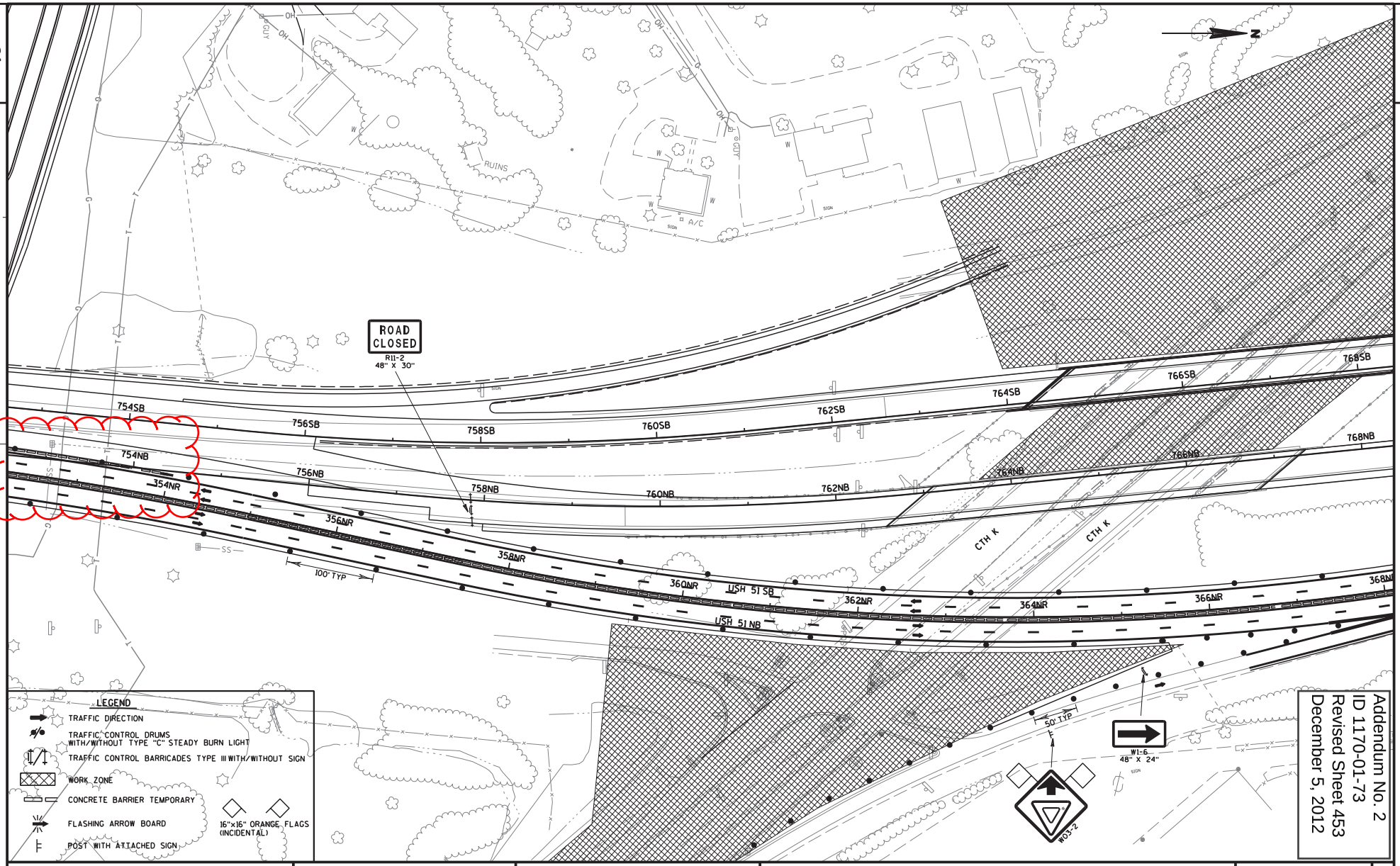


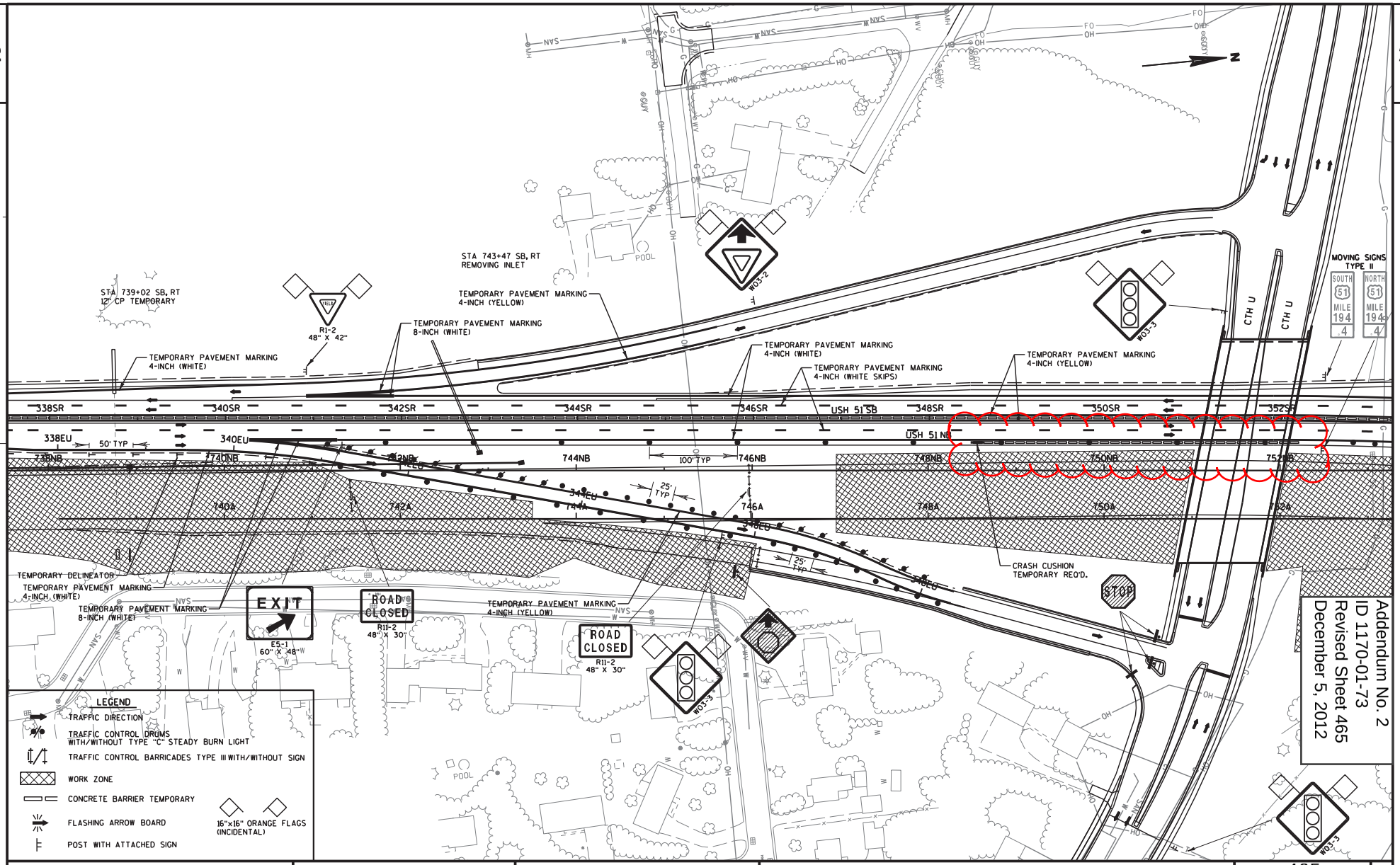
Addendum No. 2
ID 1170-01-73
Revised Sheet 452
December 5, 2012

PROJECT NO: 1170-01-70/73	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 5B	SHEET 452	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\026533_s5b.dgn PLOT DATE : 12/1/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 42

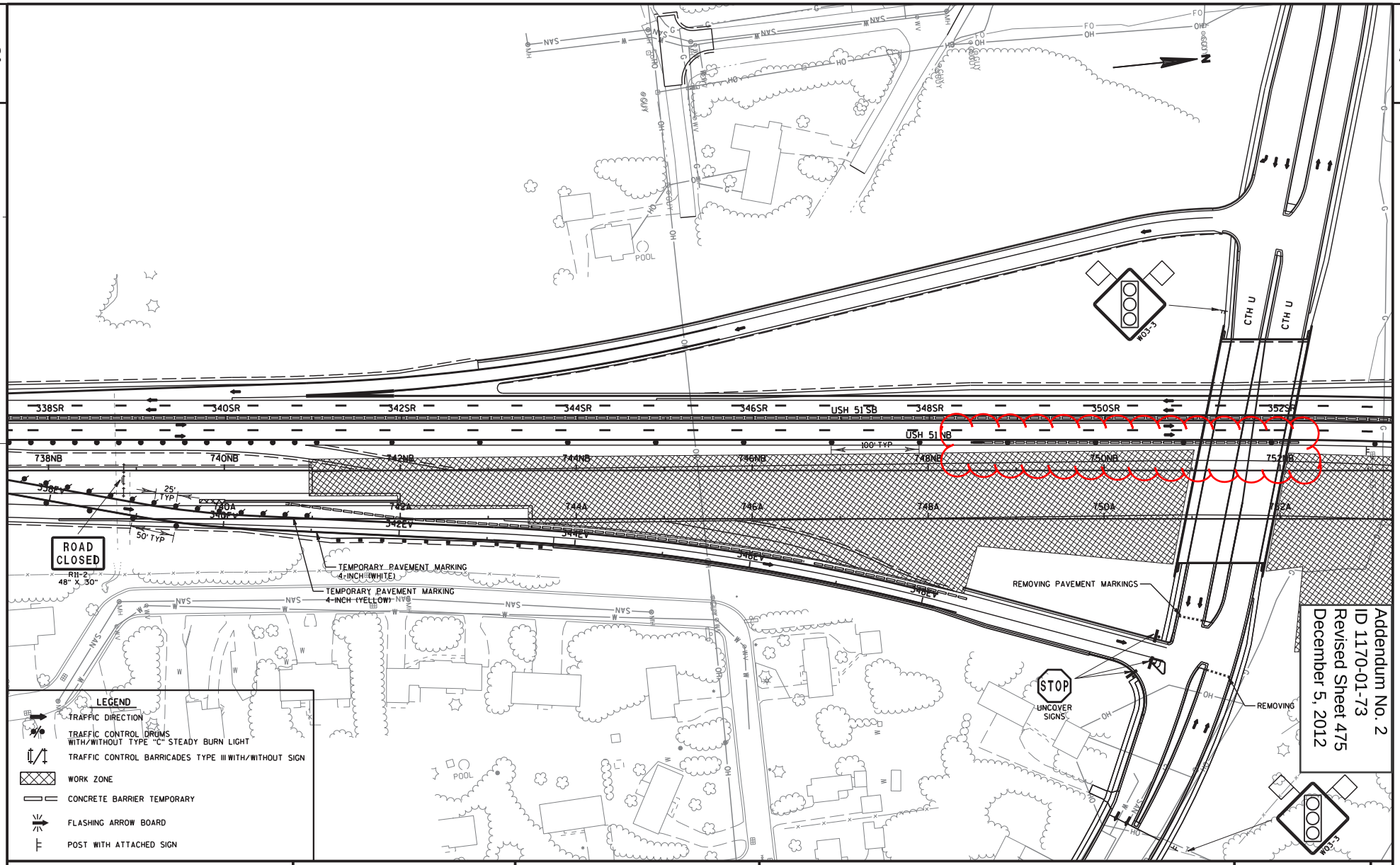

2
2
N
ROAD CLOSED
R11-2
48" X 30"
754SB
756SB
758SB
760SB
762SB
764SB
766SB
768SB
754NB
756NB
758NB
760NB
762NB
764NB
766NB
768NB
354NR
356NR
358NR
360NR
362NR
364NR
366NR
368NR
100' TYP
USH 51 SB
USH 51 NB
CTH K
CTH K
50' TYP
W1-6
48" X 24"
W03-2
LEGEND
TRAFFIC DIRECTION
TRAFFIC CONTROL DRUMS WITH/WITHOUT TYPE "C" STEADY BURN LIGHT
TRAFFIC CONTROL BARRICADES TYPE III WITH/WITHOUT SIGN
WORK ZONE
CONCRETE BARRIER TEMPORARY
FLASHING ARROW BOARD
POST WITH ATTACHED SIGN
16"x16" ORANGE FLAGS (INCIDENTAL)
Addendum No. 2
ID 1170-01-73
Revised Sheet 453
December 5, 2012
PROJECT NO: 1170-01-70/73
HWY: USH 51
COUNTY: MARATHON
TRAFFIC CONTROL - STAGE 5B
SHEET 453
E
FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\026534_s5b.dgn
PLOT DATE : 12/1/2012
PLOT BY : AYRES-EC
PLOT NAME :
PLOT SCALE : 1:100
WISDOT/CADDS SHEET 42



PROJECT NO: 1170-01-70/73	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 6A	SHEET 465	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\026613_s6a.dgn PLOT DATE : 12/1/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:100

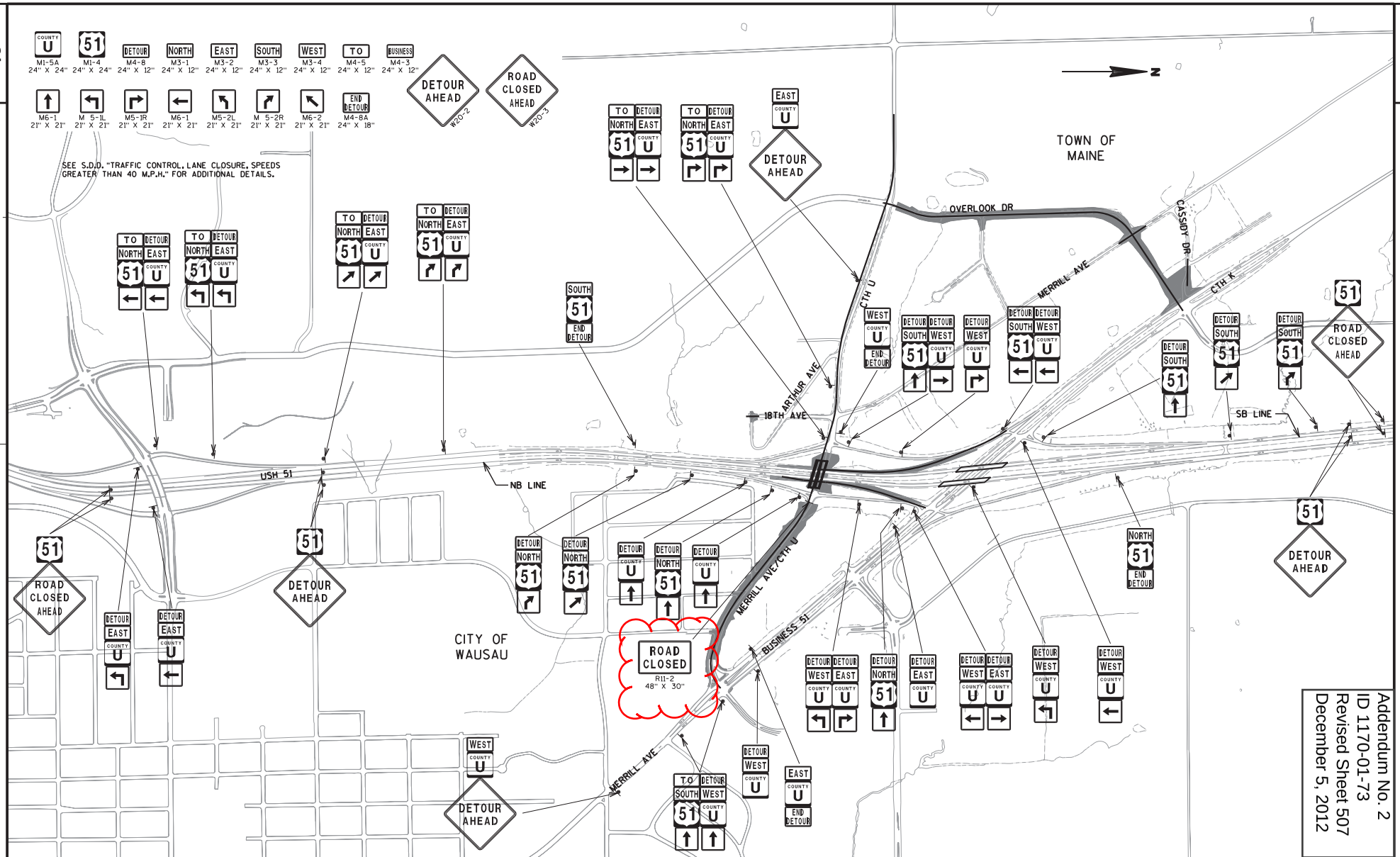
WISDOT/CADDS SHEET 42



Addendum No. 2
ID 1170-01-73
Revised Sheet 475
December 5, 2012

PROJECT NO: 1170-01-70/73	HWY: USH 51	COUNTY: MARATHON	TRAFFIC CONTROL - STAGE 6B	SHEET 475	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\026633_s6b.dgn PLOT DATE : 12/1/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:100



PROJECT NO: 1170-01-70/71/73 & 6999-18-70	HWY: USH 51	COUNTY: MARATHON	DETOUR - STAGE 1 (NIGHTTIME CLOSURE OF USH 51)	SHEET 507	E

Addendum No. 2
ID 1170-01-73
Revised Sheet 507
December 5, 2012

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\027012_dt.dgn PLOT DATE : 12/1/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:800

WISDOT/CADDS SHEET 42

EARTHWORK SUMMARY

DIVISION	STATION TO STATION	LOCATION	CUT CY	205.0100 EXCAVATION COMMON CY	SALVAGED/ UNUSABLE PAVEMENT MATERIAL CY	(9) AVAILABLE MATERIAL CY	(8) EBS CY	205.0400 EXCAVATION MARSH CY	205.0200 EXCAVATION ROCK CY	FILL CY	(6) UNEXPANDED FILL CY	(2) (4) EXPANDED FILL CY	(5) MASS ORDINATE +/- CY	(1) WASTE CY	(3) 208.0100 BORROW CY	COMMENTS
	4+50 N - 5+75 N	N LINE	589	589	---	589	---	---	---	10	10	13	577			
	40+00 SW - 43+74 SW	SW LINE	72	72	---	72	---	---	---	80	80	100	-28			CATEGORY 0090
	25+00 TL - 36+25 TL	TL LINE	2211	2211	---	2211	---	---	---	2199	2199	2749	-538			CATEGORY 0090
	6+25 TR - 9+76 TR	TR LINE	261	261	---	261	---	---	---	67	67	84	177			CATEGORY 0090
	WASTE TO THE 1170-01-73 PROJECT		---	---	---	---	---	---	---	---	---	188	-188			
DIVISION 1 SUBTOTAL				589	---	3133	---	---	---	2356	2356	3133	---	---	---	
	363+50 BT - 365+63 BT	BT RAMP	53	53	---	53	---	---	---	53	53	66	-13			
	342+00 ET - 345+50 ET	ET RAMP	352	352	---	352	---	---	---	82	82	103	250			
	342+00 FT - 346+00 FT	FT RAMP	108	108	---	108	---	---	---	286	286	358	-250			
	746+00 E - 750+50 E	E RAMP	7440	7440	470	6970	---	---	---	993	993	1241	5729			
	743+00 F - 751+50 F	F RAMP	33350	24366	530	23836	---	---	8984	5496	-4386	-5483	29319			
	223+00 V - 230+50 V	V LINE	1956	1956	---	1956	---	---	---	4686	4686	5858	-3902			
	201+00 V - 223+00 V	V LINE	9513	9513	---	9513	---	---	---	4308	4308	5385	4128			
	POND B	POND B	28136	28136	590	27546	---	---	---	252	252	315	27231			
	WASTE TO THE 1170-01-73 PROJECT		---	---	---	---	---	---	---	---	---	20282	-20282			
	WASTE TO THE 6999-18-70 PROJECT		---	---	---	---	---	---	---	---	---	12589	-12589			
DIVISION 2 SUBTOTAL				71924	1590	70334	---	---	8984	16156	6274	40713	29622	29622	---	
	370+90 CT - 384+50 CT	CT RAMP	1260	1260	---	1260	---	---	---	4370	4370	5463	-4203			
	WASTE TO THE 1170-01-73 PROJECT		---	---	---	---	---	---	---	---	---	9185	-9185			
	WASTE FROM PREVIOUS STAGES (7)		---	---	---	---	---	---	---	---	---	-29622	29622			
DIVISION 3A SUBTOTAL				1260	---	1260	---	---	---	4370	4370	-14974	16234	16234	---	
	40+50 KN - 49+00 KN	KN LINE	5007	5007	1950	3057	---	---	---	2442	2442	3053	5			
	31+00 KS - 38+50 KS	KS LINE	3148	3148	2550	598	---	---	---	1734	1734	2168	-1570			
	40+50 KS - 49+00 KS	KS LINE	5178	5178	---	5178	---	---	---	1491	1491	1864	3314			
	WASTE TO THE 1170-01-73 PROJECT		---	---	---	---	---	---	---	---	---	8179	-8179			
	WASTE FROM PREVIOUS STAGES (7)		---	---	---	---	---	---	---	---	---	-16234	16234			
DIVISION 4 SUBTOTAL				13333	4500	8833	---	---	---	5667	5667	-971	9804	9804	---	
	372+00 CU - 376+50 CU	CU RAMP	207	207	---	207	---	---	---	4319	4319	5399	-5192			
	771+50 C - 784+50 C	C RAMP	4688	4688	650	4038	---	---	---	3379	3379	4224	-186			
	754+50 D - 770+50 D	D RAMP	40512	40512	1140	39372	504	---	---	1959	2186	2732	36640			
	740+50 F - 743+00 F	F RAMP	6693	4213	---	4213	---	---	2480	54	-2674	-3343	7556			
	200+00 KW - 204+00 KW	KW LINE	700	700	---	700	---	---	---	1500	1500	1875	-1175			
	51+00 KN - 61+50 KN	KN LINE	3599	3599	---	3599	---	---	---	2871	2871	3589	10			
	61+50 KN - 73+50 KN	KN LINE/KS LINE	10704	10704	---	10704	---	---	---	895	895	1119	9585			CATEGORY 0100
	51+00 KS - 61+50 KS	KS LINE	6660	6660	---	6660	---	---	---	750	750	938	5723			
DIVISION 5 SUBTOTAL				71283	1790	69493	504	---	2480	15727	13226	16532	52961	52961	---	
	753+50 A - 761+00 A	A RAMP	20979	20979	---	20979	---	---	---	48	48	60	20919			
	766+00 B - 775+00 B	B RAMP	5382	5091	---	5091	---	---	291	26	-294	-368	5459			
	100+00 KE - 104+00 KE	KE LINE	5559	5559	---	5559	---	---	---	9	9	11	5548			
	REMOVAL OF CT LINE	CU RAMP	4370	4370	---	4370	---	---	---	---	---	---	4370			
	REMOVAL OF CU LINE	CU RAMP	4319	4319	---	4319	---	---	---	---	---	---	4319			
	POND A	POND A	11223	11223	---	11223	---	---	---	4185	4185	5231	5992			
DIVISION 6A SUBTOTAL				51541	---	51541	---	---	291	4268	3948	4935	46606	46606	---	
	738+50 E - 746+00 E	E RAMP	4352	4352	---	4352	---	---	---	431	431	539	3813			
DIVISION 6B SUBTOTAL				4352	---	4352	---	---	---	431	431	539	3813	3813	---	
	761+50 B - 766+00 B	B RAMP	10297	7645	1020	6625	---	---	2652	222	-2695	-3369	9994			
	775+00 B - 781+00 B	B RAMP	725	725	---	725	---	---	---	11	11	14	711			
	31+00 KN - 38+50 KN	KN LINE	3695	3695	500	3195	---	---	---	1190	1190	1488	1708			
DIVISION 6C SUBTOTAL				12065	1520	10545	---	---	2652	1423	-1494	-1868	12413	12413	---	
CATEGORY 0010 TOTALS				213603				---	14407						---	
CATEGORY 0090 TOTALS				2544				---	---						---	
CATEGORY 0100 TOTALS				10704				---	---						---	
PROJECT ID TOTALS				**226851**				---	**14407**						---	

(1) WASTE = EXPANDED FILL - EXCAVATION COMMON (FOR INFORMATION ONLY - NOT A BID ITEM)
(2) EXPANSION FACTOR = 1.25
(3) BORROW = EXPANDED FILL -AVAILABLE MATERIAL
(4) EXPANDED FILL = UNEXPANDED FILL * EXPANSION FACTOR
(5) THE MASS ORDINATE + OR - QTY CALCULATED FOR THE DIVISION. PLUS QUANTITY INDICATES AN EXCESS OF MATERIAL WITHIN THE DIVISION. MINUS INDICATES A SHORTAGE OF MATERIAL WITHIN THE DIVISION.
(6) UNEXPANDED FILL = FILL - (ROCK * 1.1) + (MARSH EXCAVATION * 1.5) - (MARSH EXCAVTION * 0.6) + (EBS * 1.25) - (EBS * 0.8) - ASSUMES THAT ALL MARSH AND EBS CAN BE USED IN FILL AREAS
(7) EARTHWORK FROM PREVIOUS STAGES TO BE USED INTO THIS STAGE
(8) EBS PAID AS EXCAVATION COMMON
(9) AVAILABLE MATERIAL = COMMON EXCAVATION - SALVAGED/UNUSABLE MATERIAL.

ALL ITEMS ON THIS SHEET ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

Addendum No. 2
ID 1170-01-70
Revised Sheet 550
December 5, 2012

CONCRETE CURB AND GUTTER

STATION TO STATION	LOCATION	601.0409 30-INCH TYPE A LF	601.0411 30-INCH TYPE D LF	601.0555 6-INCH SLOPED 36-INCH TYPE A LF	601.0557 6-INCH SLOPED 36-INCH TYPE D LF	601.0574 4-INCH SLOPED 30-INCH TYPE G LF	601.0580 4-INCH SLOPED 36-INCH TYPE R LF
30+80 KN - 58+75 KN	LT, CTH K NB	2372	---	---	75	---	---
31+35 KN - 58+75 KN	RT, CTH K NB	2648	---	---	75	---	---
30+65 KS - 58+75 KS	LT, CTH K SB	2716	---	---	75	---	---
30+65 KS - 58+75 KS	RT, CTH K SB	2387	---	---	75	---	---
230+24 V - 230+74 V	LT, OVERLOOK DR	---	75	---	---	---	---
230+24 V - 230+74 V	RT, OVERLOOK DR	---	75	---	---	---	---
228+73 V - 230+62 V	LT, MEDIAN	---	353	---	---	---	---
754+50 A - 761+10 A	LT, A RAMP	600	---	60	---	---	---
757+10 A - 761+33 A	RT, A RAMP	333	---	90	---	---	---
760+32 A - 761+30 A	RT, MEDIAN	---	---	---	---	196	---
761+87 B - 764+80 B	LT, B RAMP	203	---	90	---	---	---
761+29 B - 766+80 B	RT, B RAMP	471	---	80	---	---	---
771+18 C - 775+50 C	LT, C RAMP	345	---	88	---	---	---
771+42 C - 775+50 C	RT, C RAMP	321	---	86	---	---	---
771+21 C - 772+28 C	RT, MEDIAN	---	---	---	---	217	---
764+50 D - 771+05 D	LT, D RAMP	208	---	447	---	---	---
768+00 D - 770+47 D	RT, D RAMP	171	---	76	---	---	---
748+00 E - 750+88 E	LT, E RAMP	---	---	288	---	---	---
750+00 E - 750+78 E	RT, E RAMP	---	---	107	---	---	---
743+00 F - 751+99 F	LT, F RAMP	---	---	919	---	---	---
751+64 F - 751+86 F	RT, F RAMP	---	---	32	---	---	---
100+00 KE - 104+12 KE	LT, KE ROUNDABOUT	---	---	---	---	267	400
100+00 KE - 104+12 KE	RT, KE ROUNDABOUT	83	---	---	---	---	---
200+00 KW - 204+12 KW	LT, KW ROUNDABOUT	---	---	---	---	267	400
200+00 KW - 204+12 KW	RT, KW ROUNDABOUT	83	---	---	---	---	---
71+01 U - 71+07 U	LT, BUS 51 RIGHT-TURN ISLAND	---	9	---	---	---	---
71+35 U - 71+43 U	LT, BUS 51 RIGHT-TURN ISLAND	---	9	---	---	---	---
71+47 U - 71+73 U	RT, CTH U RIGHT-TURN LANE	---	42	---	---	---	---
71+61 U - 71+83 U	RT, CTH U RIGHT-TURN ISLAND	---	22	---	---	---	---
71+68 U - 71+79 U	LT, BUS 51 RIGHT-TURN ISLAND	---	10	---	---	---	---
71+74 U - 71+82 U	RT, CTH U MEDIAN ISLAND	---	9	---	---	---	---
14+40 K - 14+46 K	RT	---	10	---	---	---	---
14+80 K - 14+89 K	RT	---	9	---	---	---	---
14+80 K - 14+89 K	LT, MEDIAN ISLAND	---	18	---	---	---	---
14+80 K - 14+89 K	LT, LEFT-TURN ISLAND	---	18	---	---	---	---
14+80 K - 14+89 K	LT, CTH U RIGHT-TURN ISLAND	---	9	---	---	---	---
CATEGORY TOTALS		**12941**	**668**	**2363**	**300**	**947**	**800**
***PROJECT ID TOTALS**		**13354**	**682**	**2363**	**315**	**534**	**800**

CONCRETE SIDEWALK

CATEGORY	STATION TO STATION	LOCATION	602.0405 4-INCH SF	602.0420 7-INCH SF
0010	760+32 A - 761+30 A	SAFETY ISLAND	---	769
	771+19 C - 772+28 C	SAFETY ISLAND	---	903
	228+73 V - 230+62 V	MEDIAN ISLAND	923	---
	37+31 KN - 38+52 KN	MEDIAN, CTH K	1937	---
	40+15 KN - 41+46 KN	MEDIAN, CTH K	2251	---
	48+37 KN - 49+34 KN	MEDIAN, CTH K	2170	---
	51+04 KN - 52+43 KN	MEDIAN, CTH K	1783	---
	13+86 K - 13+95 K	LT	41	---
	14+43 K - 14+87 K	RT	256	---
	14+82 K - 14+87 K	LT, MEDIAN	32	---
	14+82 K - 14+87 K	LEFT TURN ISLAND	110	---
	14+46 K - 15+26 K	CTH U RIGHT-TURN ISLAND	449	---
	69+50 U - 71+06 U	LT, CTH U	733	---
	71+63 U - 71+69 U	RT, CTH U RIGHT-TURN LANE	34	---
	71+78 U - 71+85 U	RT, CTH U RIGHT-TURN ISLAND	153	
CATEGORY 0010 TOTALS			**10872**	**1672**
0070	33+88 KN - 36+53 KN	RT, CTH K NB	1425	---
	52+86 KN - 58+00 KN	RT, CTH K NB	2475	---
	52+96 KS - 58+00 KS	LT, CTH K SB	2590	---
CATEGORY 0070 TOTALS			**6490**	**---**
0080	36+53 KN - 52+86 KN	RT, CTH K NB	13720	---
	36+45 KS - 52+96 KS	LT, CTH K SB	13590	---
CATEGORY 0080 TOTALS			**27310**	**---**
***PROJECT ID TOTALS**			**44672**	**1672**

CONCRETE BARRIER

STATION TO STATION	LOCATION	603.1142 TYPE S42 LF	603.1442 TYPE S42C LF	614.0805 CRASH CUSHIONS PERMANENET LOW MAINTENANCE EACH	OBJECT MARKING	CRASH TEST CONDITION	WIDTH
740+00 NB - 756+96 NB	RT, USH 51 NB	1696	---	1	OM-3C	TL-3	2'
745+23 A - 747+50 A	RT, A RAMP	---	227	1	OM-3C	TL-3	6'
745+20 E - 748+00 E	LT, E RAMP	---	280	---	---	---	---
743+75 E - 750+00 E	RT, E RAMP	---	625	---	---	---	---
CATEGORY TOTALS		**1696**	**1132**	**2**			

CONCRETE BARRIER TEMPORARY PRECAST

STATION TO STATION	LOCATION	STAGE	603.8000 DELIVERED LF	603.8125 INSTALLED LF	614.0905 CRASH CUSHION TEMPORARY EACH	OBJECT MARKING	CRASH TEST CONDITION	WIDTH
344+50 ET - 346+00 ET	ET LINE RT	3A	150	150	1	OM-3R	TL-3	2'
376+40 CT - 383+60 CT	CT LINE LT	3B	720	720	1	OM-3C	TL-3	2'
374+75 CT - 391+00 CT	CT LINE RT	5A	905	1625	1	OM-3R	TL-3	2'
376+20 CU - 389+00 CU	CU LINE RT	5B	300	1280	1	OM-3C	TL-3	2'
764+00 B - 780+00 B	B RAMP	6A	400	1600	1	OM-3R	TL-3	2'
CATEGORY TOTALS			**2475**	**5375**	**5**			

*** OTHER QUANTITIES LOCATED ELSEWHERE IN PLAN**

ALL ITEMS ON THIS SHEET ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

Addendum No. 2
ID 1170-01-73
Revised Sheet 556
December 5, 2012

EARTHWORK SUMMARY

DIVISION	STATION TO STATION	LOCATION	CUT CY	205.0100 EXCAVATION COMMON CY	SALVAGED/ UNUSABLE PAVEMENT MATERIAL CY	(9) AVAILABLE MATERIAL CY	(8) EBS CY	205.0400 EXCAVATION MARSH CY	205.0200 EXCAVATION ROCK CY	FILL CY	(6) UNEXPANDED FILL CY	(2) (4) EXPANDED FILL CY	(5) MASS ORDINATE +/- CY	(1) WASTE CY	(3) 208.0100 BORROW CY
	350+00 AT - 360+50 AT	AT RAMP	2144	2144	---	2144	---	1002	---	2214	3116	3895	-1751		
	353+50 DT - 366+00 DT	DT RAMP	989	989	---	989	---	---	---	1942	1942	2428	-1439		
	705+00 NS - 727+00 NS	NS LINE (STAGE 1A)	2812	2812	---	2812	---	---	---	838	838	1048	1765		
	348+00 ST - 353+00 ST	ST LINE	1215	1215	---	1215	---	---	---	35	35	44	1171		
	WASTE FROM THE 1170-01-70 PROJECT		---	---	---	---	---	---	---	---	---	-188	188		
	WASTE FROM THE 6999-18-70 PROJECT		---	---	---	---	---	---	---	---	---	-117	117		
	UNDISTRIBUTED BORROW (10)		---	---	---	---	---	---	---	---	---	---	---		5000
DIVISION 1 SUBTOTAL				7160	---	7160	---	1002	---	5029	5931	7109	52	---	5000
	364+00 NR - 411+00 NR	NR LINE	4425	4425	---	4425	---	---	---	18953	18953	23691	-19266		
	706+50 NS - 724+00 NS	NS LINE (STAGE 1B)	2380	2380	---	2380	---	---	---	633	633	791	1589		
	413+00 NR - 423+00 NR	NR LINE	433	433	---	433	---	---	---	2430	2430	3038	-2605		
	WASTE FROM 1170-01-70 PROJECT		---	---	---	---	---	---	---	---	---	-20282	20282		
DIVISION 2 SUBTOTAL				7238	---	7238	---	---	---	22016	22016	7238	---	---	---
	324+00 NR - 361+00 NR	NR LINE	6894	6894	---	6894	---	885	---	20674	21471	26838	-19944		
	711+00 SB - 720+00 SB	SB LANES	5110	5110	93	5017	---	---	---	---	---	---	5017		
	710+00 NB - 720+00 NB	NB LANES	5847	5847	90	5757	---	---	---	15	15	19	5738		
	WASTE FROM 1170-01-70 PROJECT		---	---	---	---	---	---	---	---	---	-9189	9189		
DIVISION 3A SUBTOTAL				17851	183	17668	---	885	---	20689	21486	17668	---	---	---
	361+00 NR - 364+00 NR	NR LINE	164	164	---	164	---	347	---	6362	6674	8343	-8179		
	WASTE FROM 1170-01-70 PROJECT		---	---	---	---	---	---	---	---	---	-8179	8179		
DIVISION 4 SUBTOTAL				164	---	164	---	347	---	6362	6674	164	---	---	---
	720+00 SB - 764+00 SB	SB LANES	42179	42179	2950	39229	---	---	---	7936	7936	9920	29309		
	769+00 SB - 811+00 SB	SB LANES	25133	25133	2860	22273	---	---	---	2120	2120	2650	19623		
	355+00 SR - 380+00 SR	SR LINE	2239	2239	---	2239	---	---	---	1657	1657	2071	168		
DIVISION 5 SUBTOTAL				69551	5810	63741	---	---	---	11713	11713	14641	49100	49100	---
	720+00 NB - 740+00 NB	NB LANES	20224	20224	1340	18884	---	---	---	390	390	488	18397		
	747+00 NB - 763+00 NB	NB LANES	20788	20788	1070	19718	---	---	---	981	981	1226	18492		
	767+00 NB - 811+00 NB	NB LANES	21468	21468	2940	18528	---	---	---	3058	3058	3823	14706		
DIVISION 6A SUBTOTAL				62480	5350	57130	---	---	---	4429	4429	5536	51594	51594	---
	740+00 NB - 747+00 NB	NB LANES	7650	7650	470	7180	---	---	---	---	---	---	7180		
DIVISION 6B SUBTOTAL				7650	470	7180	---	---	---	---	---	---	7180	7180	---
	713+00 NB - 763+00 NB	MEDIAN	4533	4533	---	4533	---	---	---	102	102	128	4406		
	768+00 NB - 811+00 NB	MEDIAN	18581	18581	---	18581	---	---	---	225	225	281	18300		
DIVISION 7 SUBTOTAL				23114	---	23114	---	---	---	327	327	409	22705	22705	---
PROJECT ID TOTALS				**195208**				**2234**	**---**						**5000**

(1) WASTE = EXPANDED FILL - EXCAVATION COMMON (FOR INFORMATION ONLY - NOT A BID ITEM)
(2) EXPANSION FACTOR = 1.25
(3) BORROW = EXPANDED FILL -AVAILABLE MATERIAL
(4) EXPANDED FILL = UNEXPANDED FILL * EXPANSION FACTOR
(5) THE MASS ORDINATE + OR - QTY CALCULATED FOR THE DIVISION. PLUS QUANTITY INDICATES AN EXCESS OF MATERIAL WITHIN THE DIVISION. MINUS INDICATES A SHORTAGE OF MATERIAL WITHIN THE DIVISION.
(6) UNEXPANDED FILL = FILL - (ROCK * 1.1) + (MARSH EXCAVATION * 1.5) - (MARSH EXCAVTION * 0.6) + (EBS * 1.25) - (EBS * 0.8) - ASSUMES THAT ALL MARSH AND EBS CAN BE USED IN FILL AREAS
(7) EARTHWORK (SUCH AS POND B) FROM PREVIOUS STAGES MAY BE COMPLETED INTO THIS STAGE
(8) EBS PAID FOR AS EXCAVATION COMMON.
(9) AVAILABLE MATERIAL = COMMON EXCAVATION - SALVAGED/UNUSABLE MATERIAL.
(10) UNDISTRUBTED BORROW IS USED TO ACCOUNT FOR POTENTIAL UNUSABLE MATERIAL WITHIN THE PROJECT DURING THE EARLY STAGES OF CONSTRUCTION

ALL ITEMS ON THIS SHEET ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

Addendum No. 2
ID 1170-01-73
Revised Sheet 591
December 5, 2012

CONCRETE BARRIER TEMPORARY PRECAST

STATION TO STATION	LOCATION	STAGE	603.8000 DELIVERED LF	603.8125 INSTALLED LF	614.0905 CRASH CUSHION TEMPORARY EACH	OBJECT MARKING	CRASH TEST CONDITION	WIDTH
349+00 NR - 352+25 NR	NR LINE LT	1	325	325	1	OM-3L	TL-3	2'
349+50 NR - 353+25 NR	NR LINE LT	1	375	375	1	OM-3L	TL-3	2'
305+50 NM - 324+00 NM	NM LINE RT	1B	1850	1850	---	---	TL-3	2'
307+00 NM - 326+25 NM	NM LINE LT	1B	1925	1925	1	OM-3L	TL-3	2'
307+25 NS - 325+75 NS	NS LINE RT	1B	1850	1850	1	OM-3R	TL-3	2'
310+00 NS - 327+50 NS	NS LINE LT	1B	1750	1750	1	OM-3L	TL-3	2'
308+00 NW - 324+25 NW	NW LINE RT	1C	---	1625	1	OM-3R	TL-3	2'
310+25 NS - 324+00 NS	NS LINE LT	1C	---	1375	1	OM-3R	TL-3	2'
750+00 SP - 753+75 SP	SP LINE RT	2A	---	375	---	OM-3L	TL-3	2'
750+00 SP - 753+00 SP	SP LINE RT	2A	300	300	1	OM-3L	TL-3	2'
313+00 NR - 334+60 NR	NR LINE RT	3A	2160	2160	---	---	TL-3	2'
324+00 NR - 332+50 NR	NR LINE LT	3A	850	850	1	OM-3L	TL-3	2'
333+25 NR - 352+50 NR	NR LINE LT	3A	1925	1925	1	OM-3L	TL-3	2'
339+50 NR - 350+25 NR	NR LINE RT	3A	1075	1075	1	OM-3C	TL-3	2'
379+00 NR - 388+50 NR	NR LINE LT	3A	950	950	---	---	TL-3	2'
389+25 NR - 411+00 NR	NR LINE LT	3A	2175	2175	1	OM-3L	TL-3	2'
350+25 NR - 359+40 NR	NR LINE RT	3B	915	915	---	OM-3R	TL-3	2'
365+50 NR - 378+50 NR	NR LINE RT	3B	1300	1300	---	---	TL-3	2'
350+50 NR - 359+50 NR	NR LINE	3B	1900	1900	---	---	TL-3	2'
312+00 NR - 419+50 NR	NR LINE RT	5A	4040	10750	1	OM-3L	TL-3	2'
350+50 NR - 354+00 NR	NR LINE LT	5A	350	350	1	OM-3R	TL-3	2'
316+50 SR - 356+00 SR	SR LINE RT	6A	3950	3950	1	OM-3L	TL-3	2'
348+50 SR - 352+25 SR	SR LINE RT	6A	375	375	1	OM-3R	TL-3	2'
780+00 NB - 812+70 NB	NB LINE	6A	---	3270	---	---	TL-3	2'
340+60 EV - 348+40 EV	EV LINE LT	6B	780	780	---	---	TL-3	2'
369+00 SR - 408+20 SR	SR LINE	6C	700	3920	1	OM-3R	TL-3	2'
398+50 SR - 412+70 SR	SR LINE	6C	1420	1420	1	OM-3L	TL-3	2'
CATEGORY TOTALS			**33240**	**49815**	**18**			

MGS GUARDRAIL

STATION TO STATION	LOCATION	614.2500 MGS THRIE BEAM TRANSITION LF	614.2300 MGS GUARDRAIL 3 LF	614.2610 MGS GUARDRAIL EAT EACH	614.2620 TERMINAL TYPE 2 EACH
757+02 NB - 756+94 NB	RT	8	---	---	---
760+35 NB - 759+82 NB	LT	---	---	1	---
761+97 NB - 757+02 NB	RT	---	495	---	---
762+36 NB - 761+97 NB	RT	39	---	---	---
762+60 NB - 760+35 NB	LT	---	225	---	---
762+99 NB - 762+60 NB	LT	39	---	---	---
763+48 NB	LT (MEDIAN)	---	129	---	---
768+02 SB	RT (MEDIAN)	---	121	---	---
808+10 NB - 808+63 NB	LT	---	---	1	---
808+43 NB - 808+96 NB	RT	---	---	1	---
808+63 NB - 810+88 NB	LT	---	225	---	---
808+96 NB - 810+83 NB	RT	---	187	---	---
810+83 NB - 811+22 NB	RT	39	---	---	---
810+88 NB - 811+27 NB	LT	39	---	---	---
721+75 SB - 724+75 SB	RT	---	250	1	1
768+94 SB - 771+19 SB	RT	39	225	---	---
769+59 SB - 771+46 SB	LT	39	187	---	---
771+19 SB - 771+72 SB	RT	---	---	1	---
771+46 SB - 771+99 SB	LT	---	---	1	---
811+30 NB	LT (MEDIAN)	---	72	---	---
812+84 SB	RT (MEDIAN)	---	73	---	---
812+88 SB - 813+27 SB	RT	39	---	---	---
812+92 SB - 813+31 SB	LT	39	---	---	---
813+27 SB - 815+52 SB	RT	---	225	---	---
813+31 SB - 815+18 SB	LT	---	187	---	---
815+18 SB - 815+71 SB	LT	---	---	1	---
815+52 SB - 816+05 SB	RT	---	---	1	---
CATEGORY 0060 TOTALS		**320**	**2601**	**8**	**1**

PIPE UNDERDRAIN

STATION	LOCATION	612.0212 UNPERFORATED 12-INCH LF	521.1012 APRON ENDWALLS FOR CULVERT PIPE STEEL 12-INCH EACH	606.0200 RIPRAP MEDIUM CY	645.0120 GEOTEXTILE FABRIC TYPE HR SY
762+23 NB	SURFACE DRAIN	80	1	2	8
764+51 SB	SURFACE DRAIN	50	1	2	8
811+09 NB	SURFACE DRAIN	45	1	2	8
811+21 SB	SURFACE DRAIN	90	1	2	8
813+05 SB	SURFACE DRAIN	90	1	2	8
TOTALS		**355**	**5**	**10**	**40**
***CATEGORY TOTALS**		**355**	**6**	**246**	**668**

FENCE CHAIN LINK 6-FT

STATION TO STATION	LOCATION	616.0206 LF
712+01 NB - 738+10 NB	RT, USH 51 NB	2588
718+00 SB - 740+19 NB	LT, USH 51 SB	2230
781+05 NB - 811+23 NB	RT, USH 51 NB	3033
789+23 SB - 811+52 SB	LT, USH 51 SB	2093
812+84 SB	LT, USH 51 SB	92
CATEGORY TOTAL		**10036**

STEEL THRIE BEAM

STATION TO STATION	LOCATION	614.0230 LF	614.0220 BULL NOSE TERMINAL EACH
750+40 NB - 752+78 NB	MEDIAN	**275**	**2**
CATEGORY 0060 TOTALS		**275**	**2**

STEEL PLATE BEAM GUARD TEMPORARY

STATION TO STATION	LOCATION	614.0250 THRIE BEAM STRUCTURE APPROACH LF	614.0360 BEAMGUARD LF	614.0380 EAT EACH
412+88 NR - 418+65 NR	RT	**21**	500	**1**
CATEGORY TOTALS		**21**	**500**	**1**

STEEL PLATE BEAM GUARD CLASS A

STATION TO STATION	LOCATION
708+00 NB - 713+08 NB	RT
CATEGORY TOTAL	

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*** OTHER QUANTITIES LOCATED ELSEWHERE IN PLAN**

Addendum No. 2
ID 1170-01-73
Revised Sheet 596
December 5, 2012

PROJECT NO: 1170-01-73	HWY: USH 51	COUNTY: MARATHON	MISCELLANEOUS QUANTITIES	SHEET	E

EARTHWORK SUMMARY

DIVISION	STATION TO STATION	LOCATION	CUT CY	205.0100 EXCAVATION COMMON CY	(8) EBS CY	205.0400 EXCAVATION MARSH CY	205.0200 EXCAVATION ROCK CY	FILL CY	(6) UNEXPANDED FILL CY	(2) (4) EXPANDED FILL CY	(5) MASS ORDINATE +/- CY	(1) WASTE CY	(3) 208.0100 BORROW CY
	4+90 L - 5+50 L	L LINE	117	117	---	---	---	---	---	---	117		---
	WASTE TO THE 1170-01-73 PROJECT		---	---	---	---	---	---	---	117	-117		
DIVISION 1 SUBTOTAL				117	---	---	---	---	---	117	---	---	---
	254+25 M - 255+75 M	M LINE	192	192	---	---	---	1410	1410	1763	-1571		
	12+00 R - 14+50 R	R LINE	1363	1363	---	---	---	1	1	1	1362		
	19+50 U - 22+00 U	U LINE	894	894	---	---	---	8	8	10	884		
	22+00 U - 49+00 U	U LINE	18854	18854	---	---	---	25280	25280	31600	-12746		
	51+00 U - 71+00 U	U LINE	8301	8301	---	---	---	7055	7055	8819	-518		
	WASTE FROM 1170-01-70 PROJECT		---	---	---	---	---	---	---	-12589	12589		
DIVISION 2 SUBTOTAL				29604	---	---	---	33754	33754	29604	---	---	---
CATEGORY TOTALS				**29721**		---	---						---

(1) WASTE = EXPANDED FILL - EXCAVATION COMMON (FOR INFORMATION ONLY - NOT A BID ITEM)
(2) EXPANSION FACTOR = 1.25
(3) BORROW = EXPANDED FILL - EXCAVATION COMMON
(4) EXPANDED FILL = UNEXPANDED FILL * EXPANSION FACTOR
(5) THE MASS ORDINATE + OR - QTY CALCULATED FOR THE DIVISION. PLUS QUANTITY INDICATES AN EXCESS OF MATERIAL WITHIN THE DIVISION. MINUS INDICATES A SHORTAGE OF MATERIAL WITHIN THE
(6) UNEXPANDED FILL = FILL - (ROCK * 1.1) + (MARSH EXCAVATION * 1.5) - (MARSH EXCAVTION * 0.6) + (EBS * 1.25) - (EBS * 0.8) - ASSUMES THAT ALL MARSH AND EBS CAN BE USED IN FILL AREAS
(7) EARTHWORK (SUCH AS POND B) FROM PREVIOUS STAGES MAY BE COMPLETED INTO THIS STAGE
(8) EBS PAID FOR AS EXCAVATION COMMON

Addendum No. 2
ID 6999-18-70
Revised Sheet 608
December 5, 2012

FINISHING ROADWAY

PROJECT	213.0100 EACH
.03 6999-18-70	1
CATEGORY TOTAL	**1**

OBLITERATING OLD ROAD

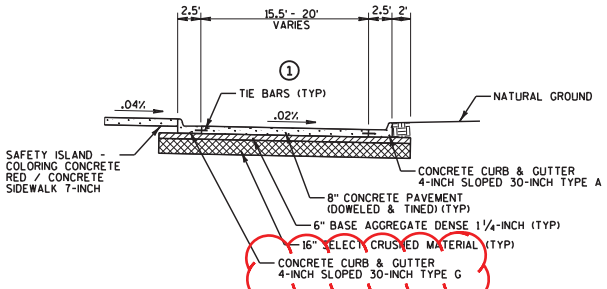
LOCATION	214.0100 STA
18TH AVE	4
MERRILL AVE	1
CATEGORY TOTAL	**5**

BASE AGGREGATE DENSE

STATION TO STATION	LOCATION	305.0110 3/4-INCH TON	305.0120 1 1/4-INCH TON	310.0110 OPEN GRADED TON
19+50 U - 48+68 U	CTH U	81	8201	9902
51+13 U - 71+47 U	CTH U	---	4534	5623
200+80 V - 201+10 V	OVERLOOK DR	4	68	71
12+00 R - 14+72 R	ARTHUR AVE	55	467	517
4+90 L - 5+50 L	18TH AVE	30	---	200
254+17 M - 255+94 M	MERRILL CUL-DE-SAC	50	---	550
PROJECT WIDE	P.E. DRIVEWAYS	260	100	---
PROJECT WIDE	C.E. DRIVEWAYS	600	120	---
24+89 U - 71+13 U	SIDEWALK	---	1110	---
23+64 U - 69+50 U	PIPE UNDERDRAIN	---	---	937
CATEGORY TOTALS		**1080**	**14600**	**17800**

*** OTHER QUANTITIES LOCATED ELSEWHERE IN PLAN**

ALL ITEMS ON THIS SHEET ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

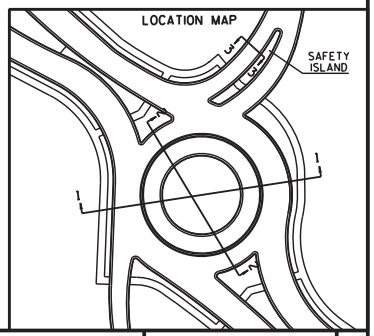


TYPICAL FINISHED SECTION USH 51 RAMPS - SECTION 3-3

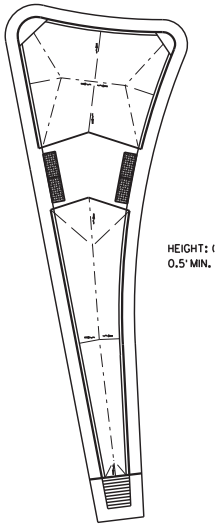
PARTIAL BYPASS LANE

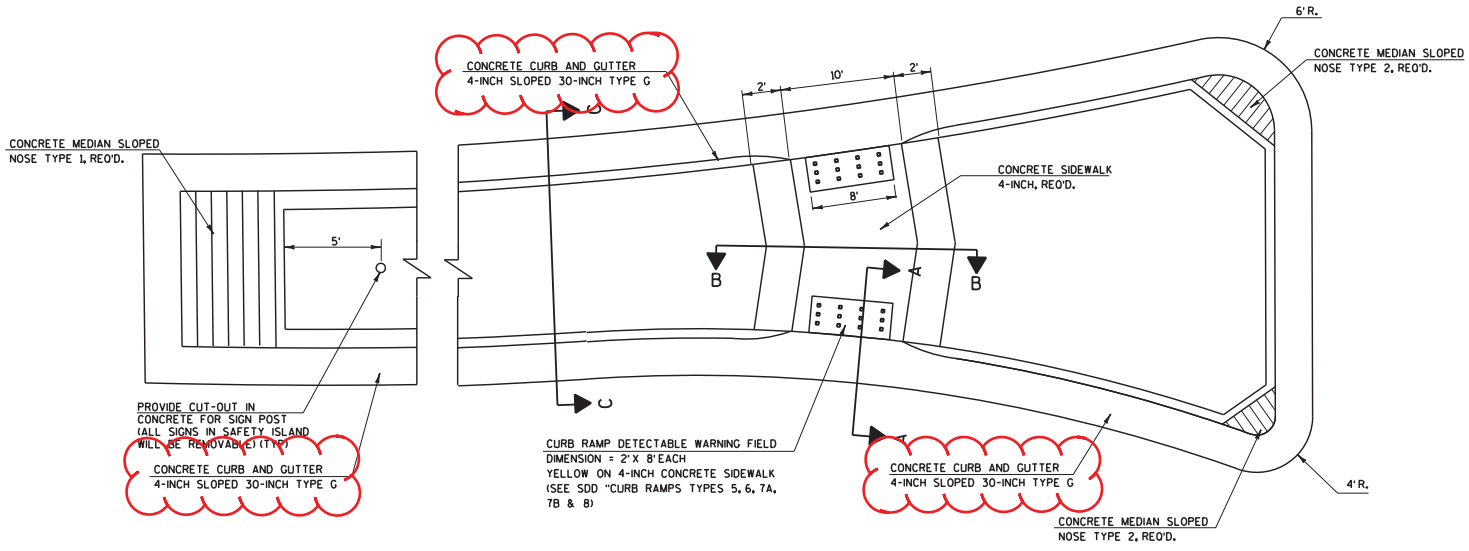
① TIE BARS ARE INCIDENTAL TO CONCRETE PAVEMENT (UNLESS DRILLED INTO EXISTING PAVEMENT)

Addendum No. 1
ID 1170-01-70
Revised Sheet 25
December 3, 2012

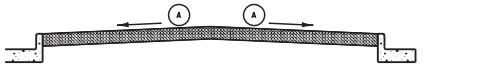


PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	TYPICAL SECTIONS - CTH K ROUNDABOUT	SHEET 25	E

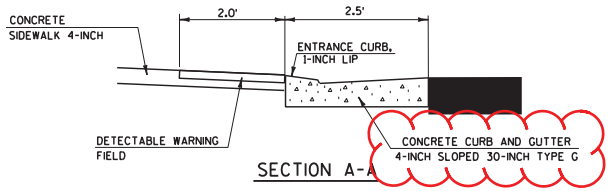




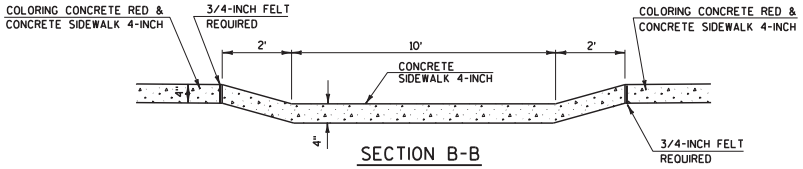
SPLITTER ISLAND DETAIL



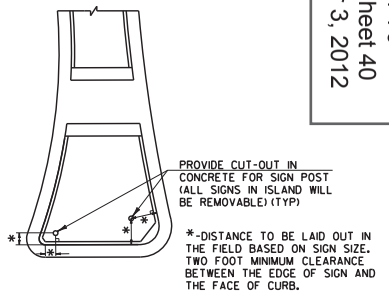
SECTION C-C



SECTION A-A



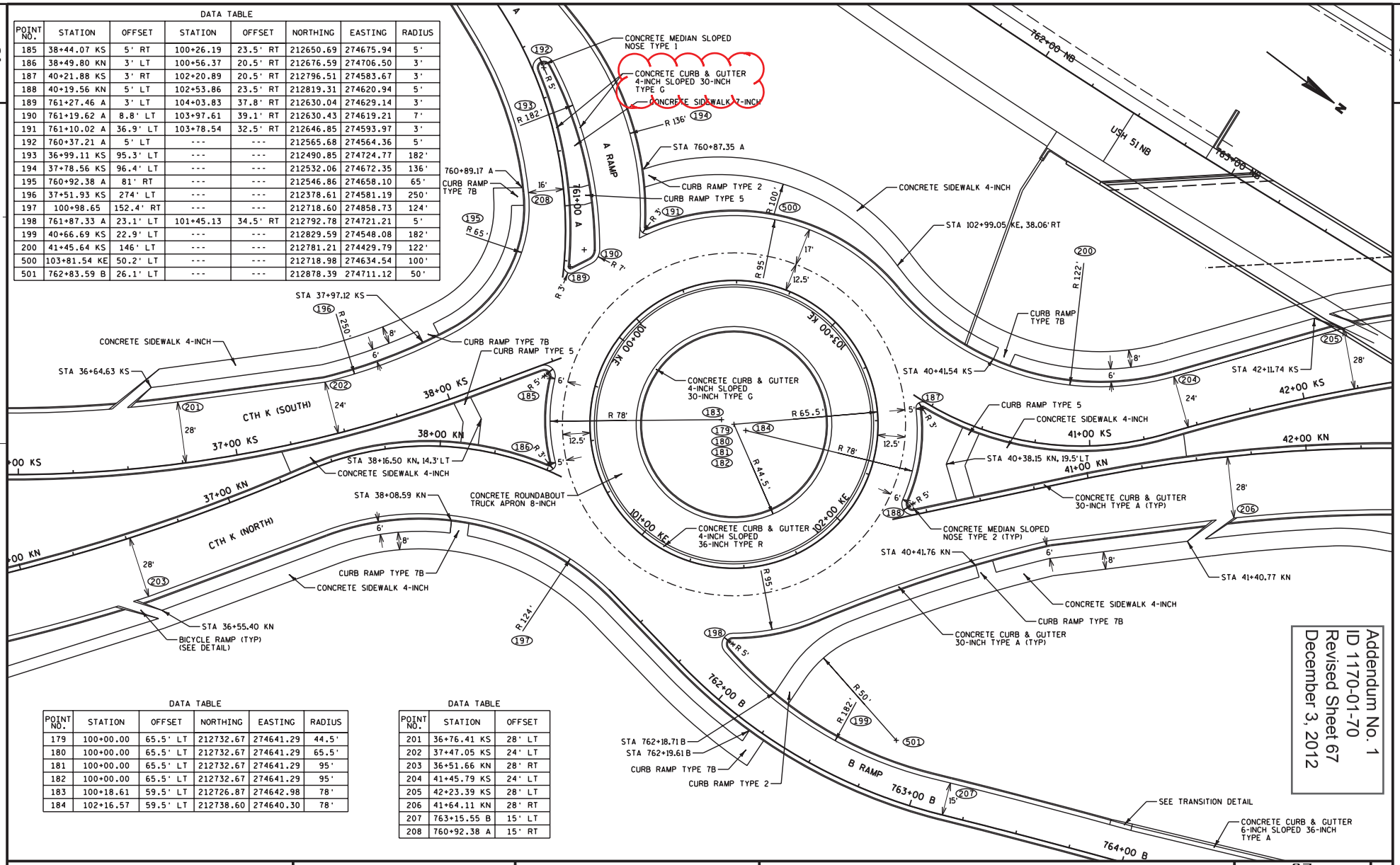
SECTION B-B



ISLAND SIGN LOCATION DETAIL (TYP)

Addendum No. 1
ID 1170-01-70
Revised Sheet 40
December 3, 2012

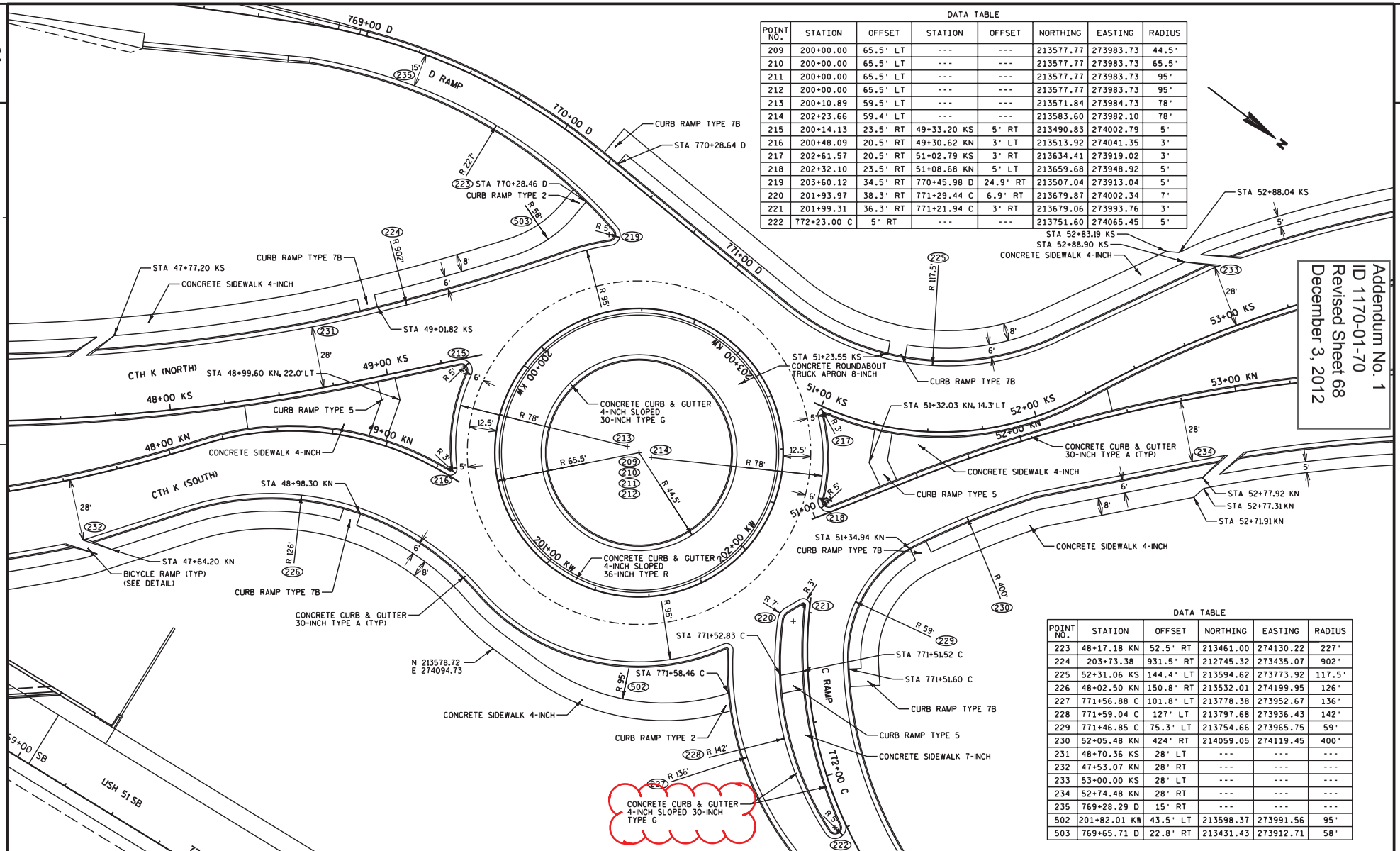
PROJECT NO: 1170-01-70/71/73 & 6999-18-70	HWY: USH 51	COUNTY: MARATHON	CONSTRUCTION DETAILS	SHEET 40	E



PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	INTERSECTION DETAIL - CTH K/BUS 51 & A RAMP/B RAMP	SHEET 67	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\021107_id.dgn PLOT DATE : 11/27/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:40

WISDOT/CADDS SHEET 42



DATA TABLE

POINT NO.	STATION	OFFSET	STATION	OFFSET	NORTHING	EASTING	RADIUS
209	200+00.00	65.5' LT	---	---	213577.77	273983.73	44.5'
210	200+00.00	65.5' LT	---	---	213577.77	273983.73	65.5'
211	200+00.00	65.5' LT	---	---	213577.77	273983.73	95'
212	200+00.00	65.5' LT	---	---	213577.77	273983.73	95'
213	200+10.89	59.5' LT	---	---	213571.84	273984.73	78'
214	202+23.66	59.4' LT	---	---	213583.60	273982.10	78'
215	200+14.13	23.5' RT	49+33.20 KS	5' RT	213490.83	274002.79	5'
216	200+48.09	20.5' RT	49+30.62 KN	3' LT	213513.92	274041.35	3'
217	202+61.57	20.5' RT	51+02.79 KS	3' RT	213634.41	273919.02	3'
218	202+32.10	23.5' RT	51+08.68 KN	5' LT	213659.68	273948.92	5'
219	203+60.12	34.5' RT	770+45.98 D	24.9' RT	213507.04	273913.04	5'
220	201+93.97	38.3' RT	771+29.44 C	6.9' RT	213679.87	274002.34	7'
221	201+99.31	36.3' RT	771+21.94 C	3' RT	213679.06	273993.76	3'
222	772+23.00 C	5' RT	---	---	213751.60	274065.45	5'

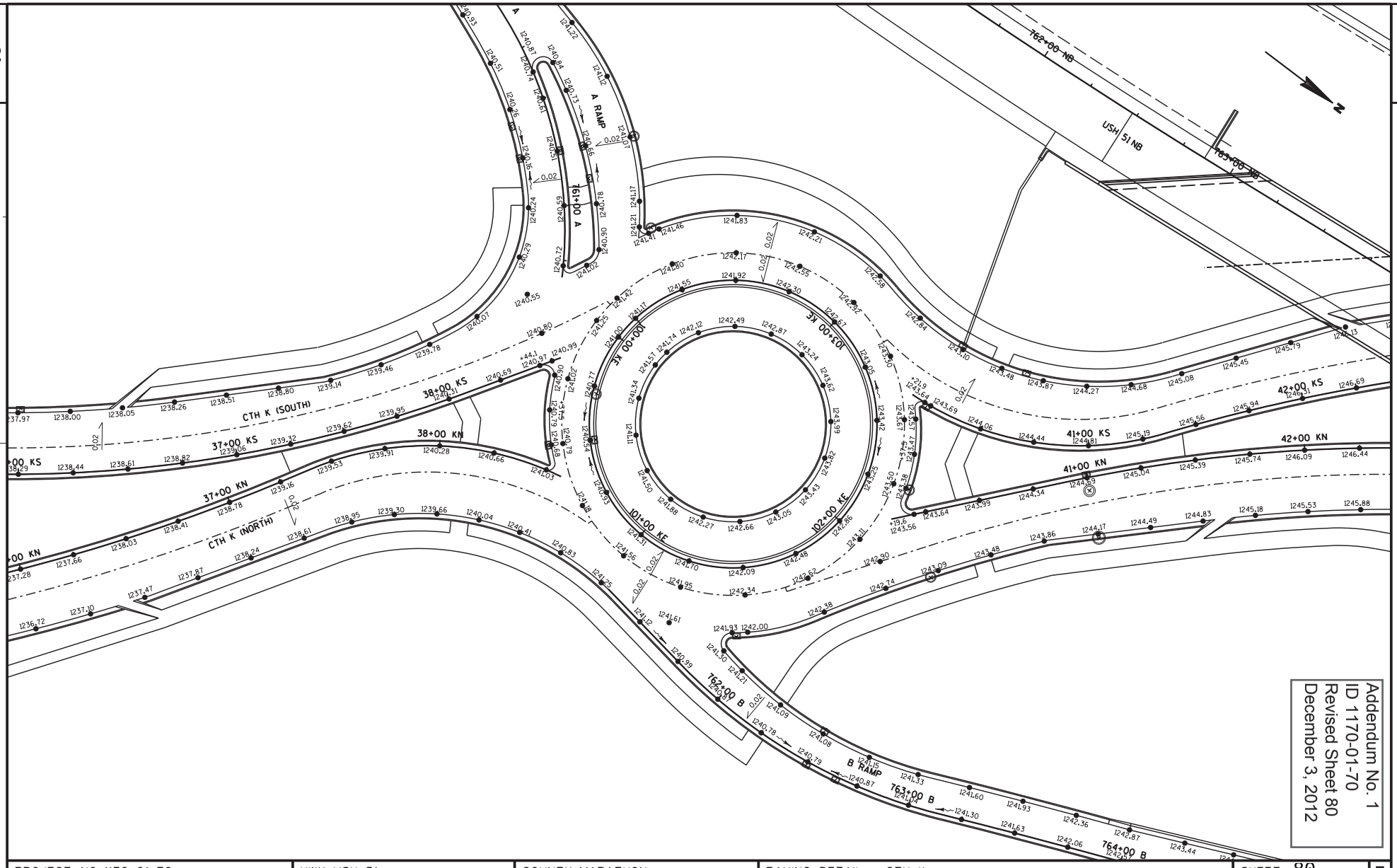
DATA TABLE

POINT NO.	STATION	OFFSET	NORTHING	EASTING	RADIUS
223	48+17.18 KN	52.5' RT	213461.00	274130.22	227'
224	203+73.38	931.5' RT	212745.32	273435.07	902'
225	52+31.06 KS	144.4' LT	213594.62	273773.92	117.5'
226	48+02.50 KN	150.8' RT	213532.01	274199.95	126'
227	771+56.88 C	101.8' LT	213778.38	273952.67	136'
228	771+59.04 C	127' LT	213797.68	273936.43	142'
229	771+46.85 C	75.3' LT	213754.66	273965.75	59'
230	52+05.48 KN	424' RT	214059.05	274119.45	400'
231	48+70.36 KS	28' LT	---	---	---
232	47+53.07 KN	28' RT	---	---	---
233	53+00.00 KS	28' LT	---	---	---
234	52+74.48 KN	28' RT	---	---	---
235	769+28.29 D	15' RT	---	---	---
502	201+82.01 KW	43.5' LT	213598.37	273991.56	95'
503	769+65.71 D	22.8' RT	213431.43	273912.71	58'

Addendum No. 1
ID 1170-01-70
Revised Sheet 68
December 3, 2012

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	INTERSECTION DETAIL - CTH K/BUS 51 & C RAMP/D RAMP	SHEET 68	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\021108_id.dgn PLOT DATE : 11/27/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:40

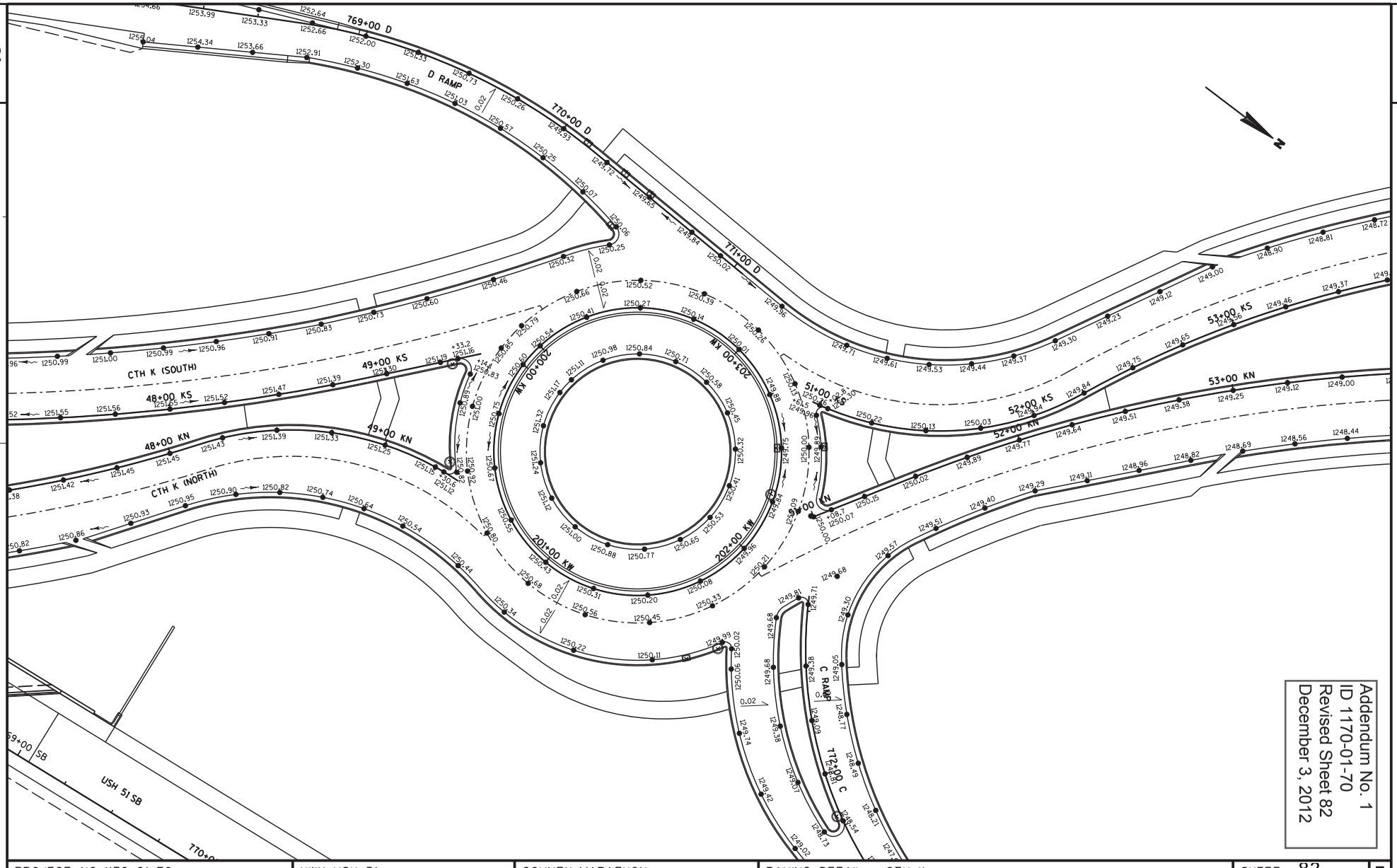


Addendum No. 1
ID 1170-01-70
Revised Sheet 80
December 3, 2012

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	PAVING DETAIL - CTH K	SHEET 80	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\021211_pd.dgn PLOT DATE : 11/28/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:40

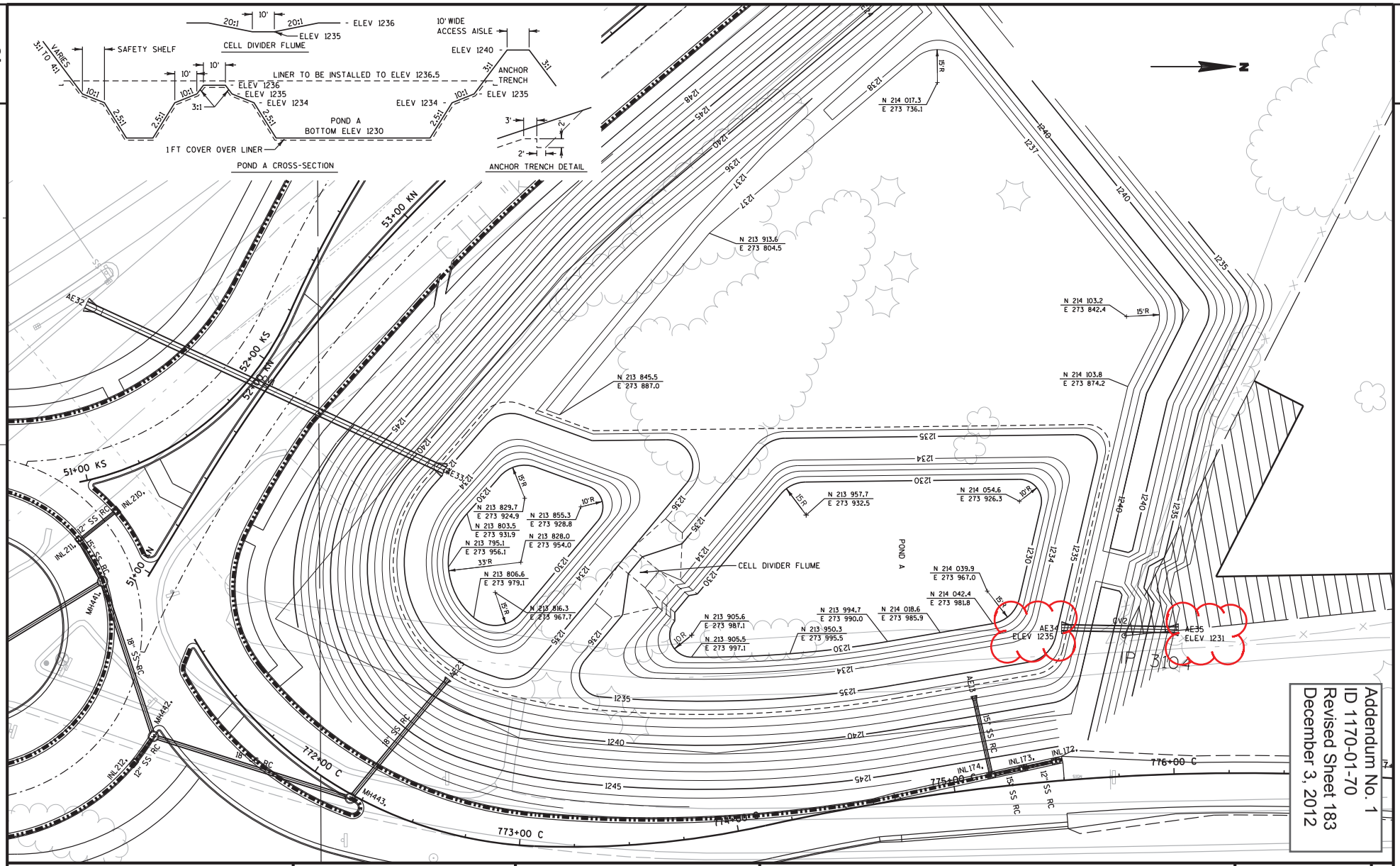
WISDOT/CADDS SHEET 42



Addendum No. 1
ID 1170-01-70
Revised Sheet 82
December 3, 2012

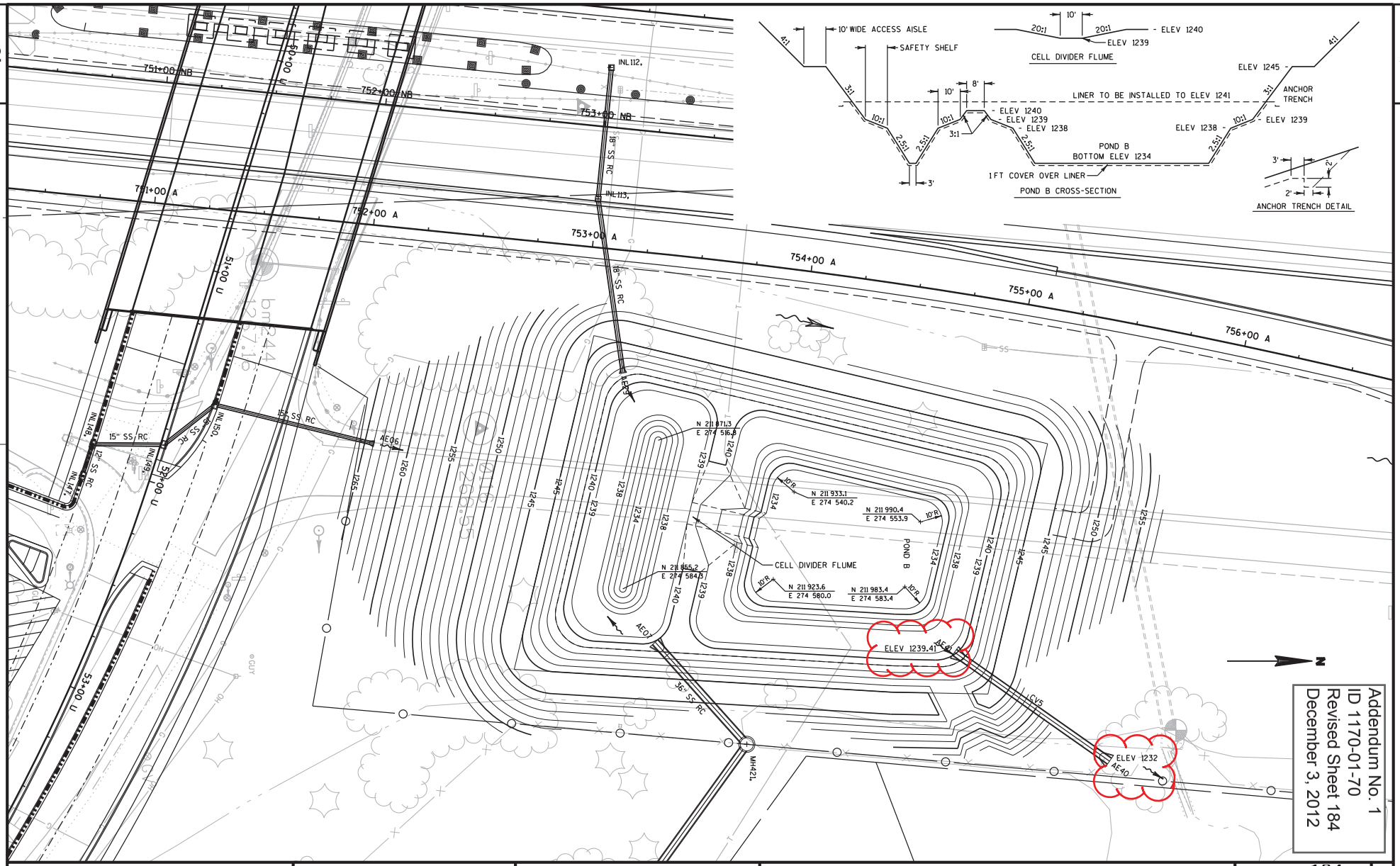
PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	PAVING DETAIL - CTH K	SHEET 82	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\021213_pd.dgn PLOT DATE : 11/28/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:40



PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	STORM SEWER - POND A	SHEET 183	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\022531_ss_pond a.dgn PLOT DATE : 11/28/2012 PLOT BY : cb685 PLOT NAME : PLOT SCALE : 1:40



PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	STORM SEWER - POND B	SHEET 184	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\022532_ss_pond b.dgn PLOT DATE : 11/28/2012 PLOT BY : cb685 PLOT NAME : PLOT SCALE : 1:40

2

2

STORM SEWER SCHEDULE

STRUCTURE NUMBER	**** STATION	**** OFFSET	INLETS 2x2-FT 611.3220 EACH	INLETS 2x2.5-FT 611.3225 EACH	INLETS 2x3-FT 611.3230 EACH	INLETS MEDIAN 1 GRATE 611.3901 EACH	INLETS MEDIAN 2 GRATE 611.3902 EACH	INLETS TYPE BW 611.0610 EACH	INLET COVERS TYPE H 611.0624 EACH	INLET COVERS TYPE HM 611.0627 EACH	INLET COVERS TYPE HM-GJ 611.0630 EACH	INLET COVERS TYPE MS 611.0642 EACH	MANHOLES TYPE T 611.0652 EACH	MANHOLES TYPE V 611.0654 EACH	MANHOLES 4-FT DIA 611.2004 EACH	MANHOLES 5-FT DIA 611.2005 EACH	MANHOLE COVERS TYPE J 611.0530 EACH	* FLOWLINE ELEV	** BOX ELEV	DEPTH	INVERT ELEV	DISCHARGE FROM	DISCHARGE ELEV	DISCHARGE TO	SLOPE %
INL110	749+00 F	9.4 LT	---	---	1	---	---	---	---	1	---	---	---	---	---	---	---	1260.42	1259.59	3.85	---	---	1255.74	AE08	0.83%
AE08	749+00 F	46.3 RT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1255.25	INL110	---
			---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
INL111	746+00 F	9.4 LT	---	---	1	---	---	---	---	1	---	---	---	---	---	---	---	1249.23	1248.40	3.52	---	---	1244.88	AE09	0.50%
AE09	746+00 F	44 RT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1244.56	INL111	---	---	---
INL114	759+00 D	27.9 RT	---	---	---	1	---	---	---	---	---	1	---	---	---	---	---	1257.34	1256.67	4.42	---	---	1252.25	AE10	1.08%
AE10	759+00 D	43 LT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1251.50	INL114	---
			---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
INL115	767+34.6 D	9.5 LT	---	---	1	---	---	---	---	1	---	---	---	---	---	---	---	1256.09	1255.26	3.85	---	---	1251.41	INL116	3.33%
INL116	767+50 D	9.5 LT	---	---	1	---	---	---	---	1	---	---	---	---	---	---	---	1255.69	1254.86	4.10	1251.01	INL115	1250.76	AE11	0.33%
AE11	767+50 D	50 RT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1250.57	INL116	---	---	---
INL222	783+00 C	31.2 RT	---	---	---	1	---	---	---	---	---	1	---	---	---	---	---	1233.69	1233.69	1.77	---	---	1231.92	INL117	0.50%
INL117	781+00.8 C	36 RT	---	---	---	---	1	---	---	---	---	1	---	---	---	---	---	1236.00	1235.33	4.66	1230.92	INL222	1230.67	AE12	0.32%
AE12	780+99.5 C	45 LT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1230.39	INL117	---	---	---
			---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
INL172	775+46.7 C	9 LT	---	---	1	---	---	---	---	1	---	---	---	---	---	---	---	1244.52	1243.69	3.87	---	---	1239.82	INL173	0.58%
INL173	775+32 C	7.1 LT	---	---	1	---	---	---	---	1	---	---	---	---	---	---	---	1244.72	1243.89	4.39	1239.75	INL172	1239.50	INL174	0.42%
INL174	775+17.2 C	5.5 LT	---	---	1	---	---	---	---	1	---	---	---	---	---	---	---	1244.93	1244.10	4.80	1239.45	INL173	1239.30	AE13	6.42%
AE13	775+13.5 C	42.2 LT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1237.00	INL174	---	---	---
INL175	30+77.8 KS	32.7 LT	---	---	1	---	---	---	1	---	---	---	---	---	---	---	---	1232.09	1231.26	3.34	---	---	1227.92	AE14	0.50%
AE14	30+78.8 KS	62 LT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1227.78	INL175	---	---	---
INL176	31+74.6 KN	18.5 LT	---	---	1	---	---	---	1	---	---	---	---	---	---	---	---	1232.62	1231.79	3.88	---	---	1227.91	INL177	0.92%
INL177	31+59.7 KN	18.1 LT	---	---	1	---	---	---	1	---	---	---	---	---	---	---	---	1232.49	1231.66	3.96	1227.80	INL176	1227.70	MH429	1.38%
MH429	31+59.7 KN	14.2 LT	---	---	---	---	---	---	---	---	---	---	---	---	1	---	1	1233.10	1231.85	5.91	1227.68	INL177	1225.94	INL178	0.53%
INL178	31+61 KN	34.3 RT	---	---	1	---	---	---	1	---	---	---	---	---	---	---	---	1232.02	1231.19	5.54	1225.70	MH429	1225.65	AE15	0.52%
			---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1227.50	INL179	---	---	---
INL179	31+76.2 KN	33.2 RT	---	---	1	---	---	---	1	---	---	---	---	---	---	---	---	1232.14	1231.31	3.73	---	---	1227.58	INL178	0.67%
AE15	31+37.5 KN	70.3 RT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1225.43	INL178	---	---	---
INL180	35+00 KS	10.4 RT	---	---	1	---	---	---	1	---	---	---	---	---	---	---	---	1237.14	1236.31	3.99	---	---	1232.32	INL181	0.53%
INL181	35+00 KS	30 LT	---	---	1	---	---	---	1	---	---	---	---	---	---	---	---	1237.23	1236.40	4.33	1232.12	INL180	1232.07	AE16	0.52%
			---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1232.40	INL182	---	---	---
INL182	36+01.2 KS	30 LT	---	---	1	---	---	---	1	---	---	---	---	---	---	---	---	1237.59	1236.76	3.85	---	---	1232.91	INL181	0.52%
AE16	34+89.2	64.0 LT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1231.93	INL181	---	---	---
INL183	35+00 KN	1.4 LT	---	---	1	---	---	---	1	---	---	---	---	---	---	---	---	1235.68	1234.85	4.01	---	---	1230.84	MH430	0.97%
MH430	35+00 KN	29.5 RT	---	---	---	---	---	---	1	---	---	---	---	---	1	---	---	1235.12	1234.29	8.72	1230.57	INL183	1225.57	AE17	0.51%
			---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1230.43	INL184	---	---	---
			---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1225.82	AE18	---	---	---
INL184	35+14.5 KN	29.5 RT	---	---	1	---	---	---	1	---	---	---	---	---	---	---	---	1235.31	1234.48	3.84	---	---	1230.64	MH430	1.83%
AE17	34+01 KN	65 RT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1225.06	MH430	---	---	---
AE18	35+11.2 KN	73.2 RT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1226.00	MH430	0.41%
INL185	762+65 B	1.5 RT	---	---	1	---	---	---	1	---	---	---	---	---	---	---	---	1240.68	1239.85	3.82	---	---	1236.03	INL186	0.58%
INL186	762+50 B	1.5 RT	---	---	1	---	---	---	1	---	---	---	---	---	---	---	---	1240.65	1239.82	3.97	1235.96	INL185	1235.85	INL187	0.64%
INL187	762+50 B	16 LT	---	---	1	---	---	---	1	---	---	---	---	---	---	---	---	1240.95	1240.12	4.62	1235.75	INL186	1235.50	AE19	0.41%
			---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1236.25	INL188	---	---	---
INL188	101+46.5 KE	31 RT	---	---	1	---	---	---	1	---	---	---	---	---	---	---	---	1241.80	1240.97	4.00	---	---	1236.97	INL187	1.28%
AE19	762+84.4 B	45.9 LT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1235.33	INL187	---	---	---
INL189	760+58.3 A	17.5 RT	---	---	1	---	---	---	1	---	---	---	---	---	---	---	---	1240.09	1239.26	3.70	---	---	1235.56	INL190	0.58%
INL190	760+74.9 A	17.5 RT	---	---	1	---	---	---	1	---	---	---	---	---	---	---	---	1240.05	1239.22	3.98	1235.49	INL189	1235.24	INL191	0.41%
INL191	760+74.9 A	1.5 LT	---	---	1	---	---	---	---	---	1	---	---	---	---	---	---	1240.37	1239.54	4.42	1235.17	INL190	1235.12	INL192	0.37%
INL192	760+74.9 A	11.6 LT	---	---	1	---	---	---	---	---	1	---	---	---	---	---	---	1240.52	1239.69	4.85	1235.09	INL191	1234.84	MH431	0.38%
			---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1235.85	INL193	---	---	---
INL193	760+89 A	12.6 LT	---	---	1	---	---	---	---	---	1	---	---	---	---	---	---	1240.58	1239.75	3.83	---	---	1235.92	INL192	0.58%
MH431	760+74.9 A	35.3 LT	---	---	---	---	---	---	1	---	---	---	---	---	1	---	---	1240.93	1240.10	5.66	1234.76	INL192	1234.44	MH432	0.36%
MH432	103+77.2 KE	31 RT	---	---	---	---	---	---	1	---	---	---	---	---	1	---	---	1241.28	1240.45	6.17	1234.30	MH431	1234.28	MH433	0.74%
MH433	100+28.5 KE	1.7 LT	---	---	---	---	---	---	---	---	---	---	1	---	1	---	---	1240.59	1239.51	5.81	1233.72	MH432	1233.70	MH434	0.33%

Addendum No. 1
ID 1170-01-70
Revised Sheet 185
December 3, 2012

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	STORM SEWER DETAIL CHART	SHEET NO:

STORM SEWER SCHEDULE

STRUCTURE NUMBER	**** STATION	**** OFFSET	INLETS 2x2-FT 611.3220 EACH	2x2.5-FT 611.3225 EACH	2x3-FT 611.3230 EACH	MEDIAN 1 GRATE 611.3901 EACH	MEDIAN 2 GRATE 611.3902 EACH	TYPE BW 611.0610 EACH	TYPE H 611.0624 EACH	INLET COVERS TYPE HM 611.0627 EACH	TYPE HM-GJ 611.0630 EACH	TYPE MS 611.0642 EACH	TYPE T 611.0652 EACH	TYPE V 611.0654 EACH	MANHOLES 4-FT DIA 611.2004 EACH	5-FT DIA 611.2005 EACH	MANHOLE COVERS TYPE J 611.0530 EACH	* FLOWLINE ELEV	** BOX ELEV	DEPTH	INVERT ELEV	DISCHARGE FROM	DISCHARGE ELEV	DISCHARGE TO	SLOPE %
			---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1235.60	INL195	---	---	---
INL194	100+49.3 KE	19.3 RT	---	---	1	---	---	---	1	---	---	---	---	---	---	---	---	1240.54	1239.71	3.89	---	---	1235.82	INL195	0.54%
INL195	100+50 KE	1.7LT	1	---	---	---	---	---	---	---	---	---	1	---	---	---	---	1240.40	1239.32	3.62	1235.72	INL194	1235.70	MH433	0.57%
MH434	102+25 KE	29 RT	---	---	---	---	---	---	1	---	---	---	---	---	1	---	---	1243.24	1242.41	9.21	1233.22	MH433	1233.20	MH435	0.32%
			---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1237.85	INL198	---	---	---
INL196	40+64.5 KS	30.3 LT	---	---	1	---	---	---	1	---	---	---	---	---	---	---	---	1243.56	1242.73	3.87	---	---	1238.86	INL197	1.76%
INL197	40+23.8 KS	31.1 LT	---	---	1	---	---	---	1	---	---	---	---	---	---	---	---	1242.94	1242.11	4.00	1238.36	INL196	1238.11	INL198	0.33%
INL198	40+23.4 KS	1.5 RT	---	---	1	---	---	---	1	---	---	---	---	---	---	---	---	1243.52	1242.69	4.72	1238.01	INL197	1237.97	MH434	0.34%
MH435	40+21 KN	29.3 RT	---	---	---	---	---	---	1	---	---	---	---	---	1	---	---	1242.88	1242.05	9.01	1233.08	MH434	1233.04	MH436	0.49%
MH436	41+00 KN	27.5 RT	---	---	---	---	---	---	1	---	---	---	---	---	1	---	---	1244.03	1243.20	10.77	1232.68	MH435	1232.43	AE20	0.62%
			---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1238.61	MH438	---	---	---
INL199	44+00 KS	29.5 LT	---	---	1	---	---	---	1	---	---	---	---	---	---	---	---	1248.52	1247.69	3.87	---	---	1243.82	INL200	0.58%
INL200	43+86 KS	29.5 LT	---	---	1	---	---	---	1	---	---	---	---	---	---	---	---	1248.32	1247.49	3.79	1243.75	INL199	1243.70	INL201	0.52%
INL201	43+86 KS	1.5 RT	---	---	1	---	---	---	1	---	---	---	---	---	---	---	---	1248.88	1248.05	4.55	1243.55	INL200	1243.50	INL202	0.54%
INL202	43+85 KN	1.5 LT	---	---	1	---	---	---	1	---	---	---	---	---	---	---	---	1248.53	1247.70	4.45	1243.31	INL201	1243.25	MH437	1.11%
MH437	43+85 KN	6 RT	---	---	---	---	---	---	---	---	---	---	---	---	1	---	1	1248.53	1247.28	4.29	1243.20	INL202	1242.99	MH438	1.42%
			---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1243.35	INL204	---	---	---
INL203	44+00 KN	29.5 RT	---	---	1	---	---	---	1	---	---	---	---	---	---	---	---	1248.18	1247.35	3.56	---	---	1243.79	INL204	0.58%
INL204	43+85 KN	29.5 RT	---	---	1	---	---	---	1	---	---	---	---	---	---	---	---	1247.97	1247.14	3.67	1243.72	INL203	1243.47	MH437	0.59%
MH438	41+00 KN	6 RT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1	1244.55	1243.30	4.48	1239.02	MH437	1238.82	MH436	1.21%
			---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1239.26	INL205	---	---	---
INL205	41+00 KN	1.5 LT	---	---	1	---	---	---	1	---	---	---	---	---	---	---	---	1244.55	1243.72	4.42	---	---	1239.30	MH438	0.89%
AE20	41+00 KN	79 RT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1232.10	MH436	---	---	---
INL206	770+12.7 D	1.5 LT	---	---	1	---	---	---	1	---	---	---	---	---	---	---	---	1249.66	1248.83	3.83	---	---	1245.00	INL207	0.42%
INL207	770+34.7 D	1.5 LT	---	---	1	---	---	---	1	---	---	---	---	---	---	---	---	1249.55	1248.72	3.81	1244.92	INL206	1244.91	INL208	0.75%
INL208	770+49.7 D	1.5 LT	---	---	1	---	---	---	1	---	---	---	---	---	---	---	---	1249.51	1248.68	4.10	1244.82	INL207	1244.58	AE21	0.64%
			---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1244.83	INL209	---	---	---
INL209	770+44.6 D	21.1 RT	---	---	1	---	---	---	1	---	---	---	---	---	---	---	---	1249.92	1249.09	4.09	---	---	1245.00	INL208	0.80%
AE21	770+49.2 D	40.2 LT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1244.34	IN208	---	---	---
AE22	48+76.7 KS	80.4 LT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1244.50	MH439	0.46%
MH439	49+30.2 KS	1.5 RT	---	---	---	---	---	---	1	---	---	---	---	---	1	---	---	1250.94	1250.11	6.12	1244.06	AE22	1243.99	MH440	0.55%
MH440	200+46 KW	19.5 RT	---	---	---	---	---	---	1	---	---	---	---	---	1	---	---	1250.69	1249.86	6.11	1243.77	MH439	1243.75	MH441	0.50%
MH441	202+28.1 KW	1.7 LT	---	---	---	---	---	---	---	---	---	---	1	---	1	---	---	1249.68	1248.60	5.56	1243.04	MH440	1243.04	MH442	0.71%
			---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1244.63	INL211	---	---	---
INL210	202+50 KW	20 RT	---	---	1	---	---	---	1	---	---	---	---	---	---	---	---	1249.75	1248.92	3.62	---	---	1245.30	INL211	1.52%
INL211	202+50 KW	1.7 LT	---	---	1	---	---	---	---	---	---	---	1	---	---	---	---	1249.61	1248.78	4.08	1245.00	INL210	1244.70	MH441	0.39%
MH442	201+70.7 KW	31 RT	---	---	---	---	---	---	1	---	---	---	---	---	1	---	---	1249.86	1249.03	6.51	1242.54	MH441	1242.52	MH443	0.86%
			---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1245.09	INL212	---	---	---
INL212	201+60.6 KW	31 RT	---	---	1	---	---	---	1	---	---	---	---	---	---	---	---	1249.91	1249.08	3.91	---	---	1245.17	MH442	0.67%
MH443	772+20 C	1.5 RT	---	---	---	---	---	---	---	---	1	---	---	---	1	---	---	1248.43	1247.60	6.01	1241.74	MH442	1241.59	AE23	6.79%
AE23	772+39.7 C	66.5 LT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1236.52	MH443	---	---	---
INL213	55+50 KS	29.5 LT	---	---	1	---	---	---	1	---	---	---	---	---	---	---	---	1247.92	1247.09	3.79	---	---	1243.30	MH444	0.55%
MH444	55+25 KS	29.5 LT	---	---	---	---	---	---	1	---	---	---	---	---	1	---	---	1248.01	1247.18	4.25	1243.18	INL213	1242.93	INL215	0.34%
			---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1243.19	INL214	---	---	---
INL214	55+00 KS	29.5 LT	---	---	1	---	---	---	1	---	---	---	---	---	---	---	---	1248.10	1247.27	3.83	---	---	1243.44	MH444	1.17%
INL215	55+25 KS	1.5 RT	---	---	1	---	---	---	1	---	---	---	---	---	---	---	---	1248.57	1247.74	4.94	1242.83	MH444	1242.80	INL216	0.31%
INL216	55+22.3 KN	1.8 LT	---	---	1	---	---	---	1	---	---	---	---	---	---	---	---	1247.97	1247.14	4.52	1242.66	INL215	1242.62	MH445	0.34%
MH445	55+21.4 KN	29.5 RT	---	---	---	---	---	---	1	---	---	---	---	---	1	---	---	1247.76	1246.93	4.83	1242.52	INL216	1242.10	AE24	0.85%
			---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1242.65	INL217	---	---	---
INL217	55+06.3 KN	29.3 RT	---	---	1	---	---	---	1	---	---	---	---	---	---	---	---	1247.76	1246.93	4.20	---	---	1242.73	MH445	0.70%
AE24	55+21.2 KN	59 RT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1241.89	MH445	---	---	---
MH446	57+96.8 KS	29.5 LT	---	---	---	---	---	---	1	---	---	---	---	---	1	---	---	1247.46	1246.63	3.93	---	---	1242.70	INL218	0.52%
INL218	57.96.8 KS	1.5 RT	---	---	1	---	---	---	1	---	---	---	---	---	---	---	---	1247.54	1246.71	4.41	1242.55	MH446	1242.30	INL219	0.33%
INL219	57+96.7 KN	1.5 LT	---	---	1	---	---	---	1	---	---	---	---	---	---	---	---	1246.46	1245.63	3.77	1242.16	INL218	1241.86	MH447	0.52%
MH447	57+96.7 KN	29.5 RT	---	---	---	---	---	---	1	---	---	---	---	---	1	---	---	1246.48	1245.65	4.64	1241.71	INL219	1241.01	AE25	1.05%

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PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	STORM SEWER DETAIL CHART	SHEET N

2

STORM SEWER SCHEDULE

STRUCTURE NUMBER	**** STATION	**** OFFSET	INLETS 2x2-FT 611.3220 EACH	2x2.5-FT 611.3225 EACH	2x3-FT 611.3230 EACH	MEDIAN 1 GRATE 611.3901 EACH	MEDIAN 2 GRATE 611.3902 EACH	TYPE BW 611.0610 EACH	TYPE H 611.0624 EACH	TYPE HT 611.0627 EACH	INLET COVERS TYPE HM-GJ 611.0630 EACH	TYPE MS 611.0642 EACH	TYPE T 611.0652 EACH	TYPE V 611.0654 EACH	MANHOLES 4-FT DIA 611.2004 EACH	5-FT DIA 611.2005 EACH	MANHOLE COVERS TYPE J 611.0530 EACH	* FLOWLINE ELEV	** BOX ELEV	DEPTH	INVERT ELEV	DISCHARGE FROM	DISCHARGE ELEV	TO	SLOPE %
			---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
INL220	57+79.5 KN	29.5 RT	---	---	1	---	---	---	1	---	---	---	---	---	---	---	---	1246.56	1245.73	3.69	---	---	1242.04	MH447	0.64%
AE25	57+80.1 KN	66 RT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1240.61	MH447	---	---	---
INL221	60+13.6 KN	22.4 LT	---	---	---	---	1	---	---	---	---	1	---	---	---	---	---	1242.80	1242.80	3.30	---	---	1239.50	AE26	1.59%
AE26	60+13.3 KN	73.1 RT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1238.00	INL221	---	---	---
INL101	748+52.9 NB	87.9 RT	---	---	---	1	---	---	---	---	---	1	---	---	---	---	---	1242.00	1242.00	1.95	---	---	1240.05	INL102	0.62%
INL102	747+99 NB	33 RT	---	1	---	---	---	---	---	---	---	---	---	1	---	---	---	1247.01	1245.76	6.41	1239.60	INL101	1239.35	MH400	0.51%
MH400	745+39.7 NB	33 RT	---	---	---	---	---	---	---	---	---	---	---	1	---	1	---	1245.50	1244.25	7.01	1238.05	INL102	1237.25	MH401	0.20%
			---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1237.97	INL108	---	---	---
INL103	748+04.6 E	20.5 LT	---	---	1	---	---	---	---	1	---	---	---	---	---	---	---	1256.50	1255.63	3.56	---	---	1252.07	INL104	2.65%
INL104	748+04.9 E	9 RT	---	1	---	---	---	1	---	---	---	---	---	---	---	---	---	1256.04	1254.79	3.55	1251.34	INL103	1251.24	INL105	3.85%
INL105	745+23.8 E	9 RT	---	1	---	---	---	1	---	---	---	---	---	---	---	---	---	1245.23	1243.98	5.41	1240.53	INL104	1238.57	INL107	0.52%
			---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1238.82	INL106	---	---	---	---
INL106	743+78.9 E	9 RT	---	1	---	---	---	1	---	---	---	---	---	---	---	---	---	1244.24	1242.99	3.45	---	---	1239.54	INL105	0.51%
			---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1239.52	MH500	---	---	---	---
MH500	743+78.9 E	27 RT	---	---	---	---	---	---	---	---	---	---	---	---	1	---	1	1244.00	1242.75	3.25			1239.50	INL106	---
INL107	745+23.8 E	20 LT	---	1	---	---	---	1	---	---	---	---	---	---	---	---	---	1245.99	1244.74	6.41	1238.43	INL105	1238.33	INL108	0.73%
INL108	745+26.5 A	9 RT	---	1	---	---	---	1	---	---	---	---	---	---	---	---	---	1245.22	1243.97	5.78	1238.29	INL107	1238.19	MH400	0.76%
MH401	742+49.3 NB	33 RT	---	---	---	---	---	---	---	---	---	---	---	1	1	---	---	1245.34	1244.09	7.62	1236.67	MH400	1236.47	MH402	0.25%
MH402	740+05.1 NB	33 RT	---	---	---	---	---	---	---	---	---	---	---	1	---	1	---	1244.94	1243.69	8.33	1235.86	MH401	1235.36	AE28	0.55%
			---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1235.86	INL109	---	---	---	---
INL109	740+06.2 NB	26.8 LT	---	---	---	---	1	---	---	---	---	1	---	---	---	---	---	1241.42	1241.42	4.17	---	---	1237.25	MH402	2.56%
AE28	740+05.2 NB	101.4 RT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1235.00	MH402	---	---	---

NOTES:

* FLOWLINE ELEVATIONS FOR INLETS IN CURB AND GUTTER AREAS ARE AT THE FLOWLINE OF THE GUTTER.

** FOR NEW STRUCTURES, TOP OF BOX ELEVATIONS ARE TYPICALLY FLOWLINE/RIM ELEVATIONS MINUS CASTING DEPTH AND 6" FOR ADJUSTING RINGS. DEPTH FOR ADJUSTMENT MAY VARY.

*** FOR INFORMATION ONLY. JOINT TIES ARE INCIDENTAL TO SSPRC.

**** STRUCTURE STATION AND OFFSET MEASURED TO CENTER OF STRUCTURE.

***** SPECIAL MH LID REQUIRED FOR TYPE V INLET COVERS

1.) ALL SUBSURFACE ELEVATIONS ARE PIPE FLOWLINES.

2.) CALCULATED DEPTH = DISTANCE FROM TOP OF BOX TO DISCHARGE ELEVATION.

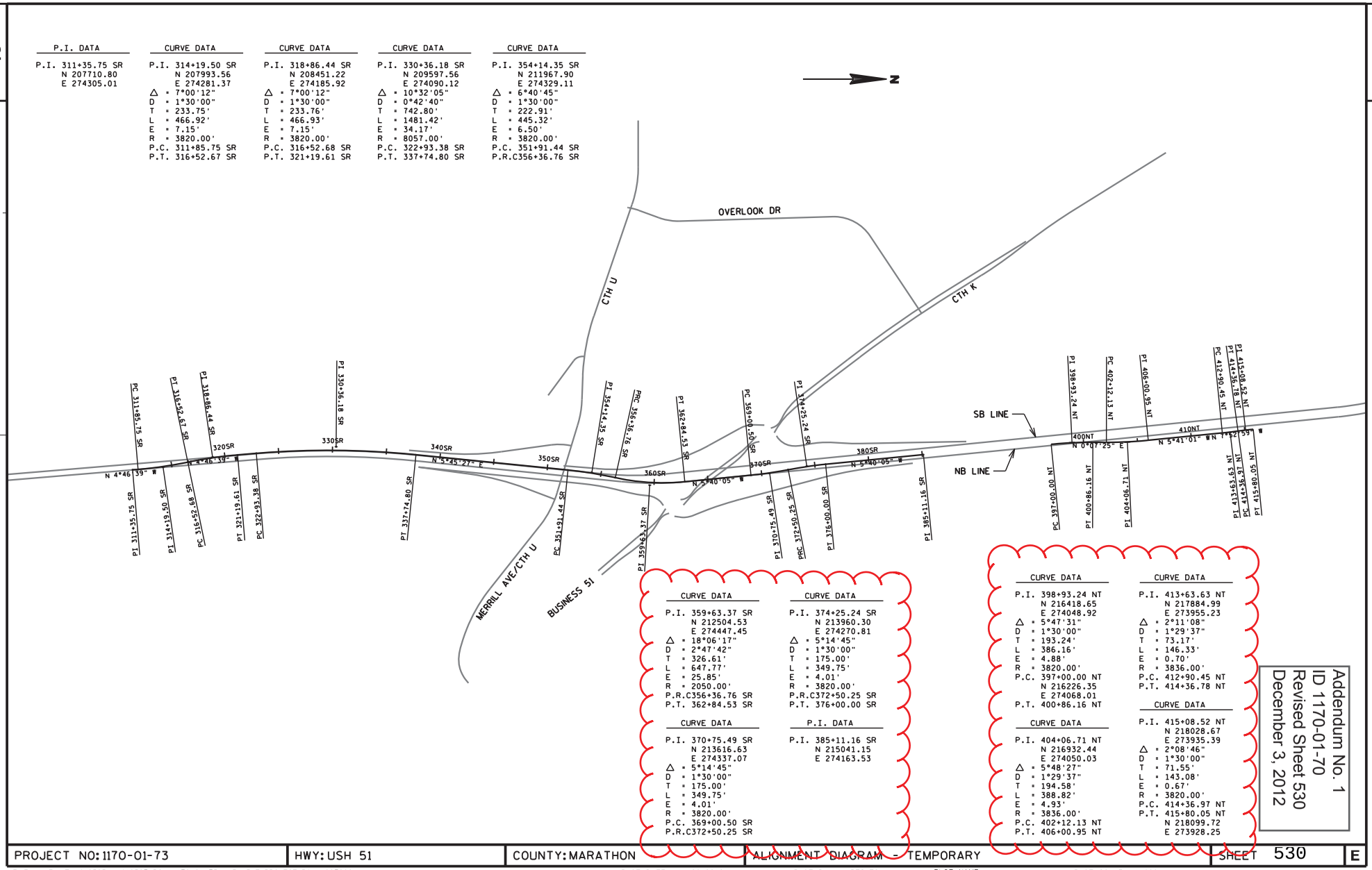
3.) PIPE LENGTHS MEASURED FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE.

4.) STORM SEWER PIPE IS REINFORCED, CLASS III, UNLESS NOTED OTHERWISE.

5.) ALL STRUCTURES HAVE THE STATUS "NEW".

6.) SLOPE IS CALCULATED BETWEEN INSIDE WALLS OF STRUCTURES. LENGTH LISTED IS BETWEEN CENTER OF

Addendum No. 1
ID 1170-01-70
Revised Sheet 187
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P.I. DATA
P.I. 311+35.75 SR
N 207710.80
E 274305.01
CURVE DATA
P.I. 314+19.50 SR
N 207993.56
E 274281.37
△ = 7°00'12"
D = 1°30'00"
T = 233.75'
L = 466.92'
E = 7.15'
R = 3820.00'
P.C. 311+85.75 SR
P.T. 316+52.67 SR
CURVE DATA
P.I. 318+86.44 SR
N 208451.22
E 274185.92
△ = 7°00'12"
D = 1°30'00"
T = 233.76'
L = 466.93'
E = 7.15'
R = 3820.00'
P.C. 316+52.68 SR
P.T. 321+19.61 SR
CURVE DATA
P.I. 330+36.18 SR
N 209597.56
E 274090.12
△ = 10°32'05"
D = 0°42'40"
T = 742.80'
L = 1481.42'
E = 34.17'
R = 8057.00'
P.C. 322+93.38 SR
P.T. 337+74.80 SR
CURVE DATA
P.I. 354+14.35 SR
N 211967.90
E 274329.11
△ = 6°40'45"
D = 1°30'00"
T = 222.91'
L = 445.32'
E = 6.50'
R = 3820.00'
P.C. 351+91.44 SR
P.R.C356+36.76 SR
N
OVERLOOK DR
CTH U
CTH K
SB LINE
NB LINE
MERRILL AVE/CTH U
BUSINESS 51
PC 311+85.75 SR
PT 311+35.75 SR
PI 314+19.50 SR
PT 316+52.67 SR
PC 316+52.68 SR
PI 318+86.44 SR
PT 321+19.61 SR
PC 322+93.38 SR
PI 330+36.18 SR
PT 337+74.80 SR
PC 351+91.44 SR
PI 354+14.35 SR
PRC 356+36.76 SR
PI 359+63.37 SR
PT 362+84.53 SR
PC 369+00.50 SR
PI 370+75.49 SR
PRC 372+50.25 SR
PI 374+25.24 SR
PT 376+00.00 SR
PI 385+11.16 SR
PC 397+00.00 NT
PI 398+93.24 NT
PT 400+86.16 NT
PC 402+12.13 NT
PI 404+06.71 NT
PT 406+00.95 NT
PC 412+90.45 NT
PT 414+36.78 NT
PI 413+63.63 NT
PC 414+36.79 NT
PI 415+08.52 NT
PT 415+80.05 NT
N 4°46'39" W
N 5°45'27" E
N 5°40'05" W
N 0°07'25" E
N 5°41'01" W
320SR
330SR
340SR
350SR
360SR
370SR
380SR
400NT
410NT
CURVE DATA
P.I. 359+63.37 SR
N 212504.53
E 274447.45
△ = 18°06'17"
D = 2°47'42"
T = 326.61'
L = 647.77'
E = 25.85'
R = 2050.00'
P.R.C356+36.76 SR
P.T. 362+84.53 SR
CURVE DATA
P.I. 374+25.24 SR
N 213960.30
E 274270.81
△ = 5°14'45"
D = 1°30'00"
T = 175.00'
L = 349.75'
E = 4.01'
R = 3820.00'
P.R.C372+50.25 SR
P.T. 376+00.00 SR
CURVE DATA
P.I. 370+75.49 SR
N 213616.63
E 274337.07
△ = 5°14'45"
D = 1°30'00"
T = 175.00'
L = 349.75'
E = 4.01'
R = 3820.00'
P.C. 369+00.50 SR
P.R.C372+50.25 SR
P.I. DATA
P.I. 385+11.16 SR
N 215041.15
E 274163.53
CURVE DATA
P.I. 398+93.24 NT
N 216418.65
E 274048.92
△ = 5°47'31"
D = 1°30'00"
T = 193.24'
L = 386.16'
E = 4.88'
R = 3820.00'
P.C. 397+00.00 NT
N 216226.35
E 274068.01
P.T. 400+86.16 NT
CURVE DATA
P.I. 404+06.71 NT
N 216932.44
E 274050.03
△ = 5°48'27"
D = 1°29'37"
T = 194.58'
L = 388.82'
E = 4.93'
R = 3836.00'
P.C. 402+12.13 NT
P.T. 406+00.95 NT
CURVE DATA
P.I. 413+63.63 NT
N 217884.99
E 273955.23
△ = 2°11'08"
D = 1°29'37"
T = 73.17'
L = 146.33'
E = 0.70'
R = 3836.00'
P.C. 412+90.45 NT
P.T. 414+36.78 NT
CURVE DATA
P.I. 415+08.52 NT
N 218028.67
E 273935.39
△ = 2°08'46"
D = 1°30'00"
T = 71.55'
L = 143.08'
E = 0.67'
R = 3820.00'
P.C. 414+36.97 NT
P.T. 415+80.05 NT
N 218099.72
E 273928.25
Addendum No. 1
ID 1170-01-70
Revised Sheet 530
December 3, 2012
PROJECT NO: 1170-01-73
HWY: USH 51
COUNTY: MARATHON
ALIGNMENT DIAGRAM - TEMPORARY
SHEET 530
E
FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\027209_adt.dgn
PLOT DATE : 11/26/2012
PLOT BY : AYRES-EC
PLOT NAME :
PLOT SCALE : 1:800
WISDOT/CADDS SHEET 42

EARTHWORK SUMMARY

DIVISION	STATION TO STATION	LOCATION	CUT CY	205.0100 EXCAVATION COMMON CY	SALVAGED/ UNUSABLE PAVEMENT MATERIAL CY	(9) AVAILABLE MATERIAL CY	(8) EBS CY	205.0400 EXCAVATION MARSH CY	205.0200 EXCAVATION ROCK CY	FILL CY	(6) UNEXPANDED FILL CY	(2) (4) EXPANDED FILL CY	(5) MASS ORDINATE +/- CY	(1) WASTE CY	(3) 208.0100 BORROW CY	COMMENTS
	4+50 N - 5+75 N	N LINE	589	589	---	589	---	---	---	10	10	13	577			
	40+00 SW - 43+74 SW	SW LINE	72	72	---	72	---	---	---	80	80	100	-28			CATEGORY 0090
	25+00 TL - 36+25 TL	TL LINE	2211	2211	---	2211	---	---	---	2199	2199	2749	-538			CATEGORY 0090
	6+25 TR - 9+76 TR	TR LINE	261	261	---	261	---	---	---	67	67	84	177			CATEGORY 0090
	WASTE TO THE 1170-01-73 PROJECT		---	---	---	---	---	---	---	---	---	188	-188			
DIVISION 1 SUBTOTAL				589	---	3133	---	---	---	2356	2356	3133	---	---	---	
	363+50 BT - 365+63 BT	BT RAMP	53	53	---	53	---	---	---	53	53	66	-13			
	342+00 ET - 345+50 ET	ET RAMP	352	352	---	352	---	---	---	82	82	103	250			
	342+00 FT - 346+00 FT	FT RAMP	108	108	---	108	---	---	---	286	286	358	-250			
	746+00 E - 750+50 E	E RAMP	6091	6091	470	5621	---	---	---	965	965	1206	4415			
	743+00 F - 751+50 F	F RAMP	27347	18363	530	17833	---	---	8984	5496	-4386	-5483	23316			
	223+00 V - 230+50 V	V LINE	1956	1956	---	1956	---	---	---	4686	4686	5858	-3902			
	201+00 V - 223+00 V	V LINE	9513	9513	---	9513	---	---	---	4308	4308	5385	4128			
	POND B	POND B	28136	28136	590	27546	---	---	---	252	252	315	27231			
	WASTE TO THE 1170-01-73 PROJECT		---	---	---	---	---	---	---	---	---	20270	-20270			
	WASTE TO THE 6999-18-70 PROJECT		---	---	---	---	---	---	---	---	---	12369	-12369			
DIVISION 2 SUBTOTAL				64572	1590	62982	---	---	8984	16128	6246	40446	22536	22536	---	
	370+90 CT - 384+50 CT	CT RAMP	1260	1260	---	1260	---	---	---	4370	4370	5463	-4203			
	WASTE TO THE 1170-01-73 PROJECT		---	---	---	---	---	---	---	---	---	13042	-13042			
	WASTE FROM PREVIOUS STAGES (7)		---	---	---	---	---	---	---	---	---	-22536	22536			
DIVISION 3A SUBTOTAL				1260	---	1260	---	---	---	4370	4370	-4032	5292	5292	---	
	40+50 KN - 49+00 KN	KN LINE	5007	5007	1950	3057	---	---	---	2442	2442	3053	5			
	31+00 KS - 38+50 KS	KS LINE	3148	3148	2550	598	---	---	---	1734	1734	2168	-1570			
	40+50 KS - 49+00 KS	KS LINE	5178	5178	---	5178	---	---	---	1491	1491	1864	3314			
	WASTE TO THE 1170-01-73 PROJECT		---	---	---	---	---	---	---	---	---	7041	-7041			
	WASTE FROM PREVIOUS STAGES (7)		---	---	---	---	---	---	---	---	---	-5292	5292			
DIVISION 4 SUBTOTAL				13333	4500	8833	---	---	---	5667	5667	8833	---	---	---	
	372+00 CU - 376+50 CU	CU RAMP	207	207	---	207	---	---	---	4319	4319	5399	-5192			
	771+50 C - 784+50 C	C RAMP	4688	4688	650	4038	---	---	---	3379	3379	4224	-186			
	754+50 D - 770+50 D	D RAMP	40512	40512	1140	39372	504	---	---	1959	2186	2732	36640			
	740+50 F - 743+00 F	F RAMP	6693	4213	---	4213	---	---	2480	54	-2674	-3343	7556			
	200+00 KW - 204+00 KW	KW LINE	700	700	---	700	---	---	---	1500	1500	1875	-1175			
	51+00 KN - 61+50 KN	KN LINE	3599	3599	---	3599	---	---	---	2871	2871	3589	10			
	61+50 KN - 73+50 KN	KN LINE/KS LINE	10704	10704	---	10704	---	---	---	1119	1119	1399	9305			CATEGORY 0100
	51+00 KS - 61+50 KS	KS LINE	6660	6660	---	6660	---	---	---	750	750	938	5723			
DIVISION 5 SUBTOTAL				71283	1790	69493	504	---	2480	15951	13450	16812	52681	52681	---	
	753+50 A - 761+00 A	A RAMP	20979	20979	---	20979	---	---	---	307	307	384	20595			
	766+00 B - 775+00 B	B RAMP	5382	5091	---	5091	---	---	291	26	-294	-368	5459			
	100+00 KE - 104+00 KE	KE LINE	5559	5559	---	5559	---	---	---	9	9	11	5548			
	REMOVAL OF CT LINE	CU RAMP	4370	4370	---	4370	---	---	---	---	---	---	4370			
	REMOVAL OF CU LINE	CU RAMP	4319	4319	---	4319	---	---	---	---	---	---	4319			
	POND A	POND A	11223	11223	---	11223	---	---	---	4185	4185	5231	5992			
DIVISION 6A SUBTOTAL				51541	---	51541	---	---	291	4527	4207	5259	46282	46282	---	
	738+50 E - 746+00 E	E RAMP	4352	4352	---	4352	---	---	---	431	431	539	3813			
DIVISION 6B SUBTOTAL				4352	---	4352	---	---	---	431	431	539	3813	3813	---	
	761+50 B - 766+00 B	B RAMP	10297	7645	1020	6625	---	---	2652	222	-2695	-3369	9994			
	775+00 B - 781+00 B	B RAMP	725	725	---	725	---	---	---	11	11	14	711			
	31+00 KN - 38+50 KN	KN LINE	3695	3695	500	3195	---	---	---	1190	1190	1488	1708			
DIVISION 6C SUBTOTAL				12065	1520	10545	---	---	2652	1423	-1494	-1868	12413	12413	---	
CATEGORY 0010 TOTALS				206251				---	14407						---	
CATEGORY 0090 TOTALS				2544				---	---						---	
CATEGORY 0100 TOTALS				10704				---	---						---	
PROJECT ID TOTALS				**219499**				---	**14407**						---	

(1) WASTE = EXPANDED FILL - EXCAVATION COMMON (FOR INFORMATION ONLY - NOT A BID ITEM)
(2) EXPANSION FACTOR = 1.25
(3) BORROW = EXPANDED FILL -AVAILABLE MATERIAL
(4) EXPANDED FILL = UNEXPANDED FILL * EXPANSION FACTOR
(5) THE MASS ORDINATE + OR - QTY CALCULATED FOR THE DIVISION. PLUS QUANTITY INDICATES AN EXCESS OF MATERIAL WITHIN THE DIVISION. MINUS INDICATES A SHORTAGE OF MATERIAL WITHIN THE DIVISION.
(6) UNEXPANDED FILL = FILL - (ROCK * 1.1) + (MARSH EXCAVATION * 1.5) - (MARSH EXCAVTION * 0.6) + (EBS * 1.25) - (EBS * 0.8) - ASSUMES THAT ALL MARSH AND EBS CAN BE USED IN FILL AREAS
(7) EARTHWORK FROM PREVIOUS STAGES TO BE USED INTO THIS STAGE
(8) EBS PAID AS EXCAVATION COMMON
(9) AVAILABLE MATERIAL = COMMON EXCAVATION - SALVAGED/UNUSABLE MATERIAL.

ALL ITEMS ON THIS SHEET ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

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ENDWALLS AND CULVERT PIPES REINFORCED CONCRETE

STATION TO STATION	LOCATION	522.1012 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 12-INCH EACH	522.1015 15-INCH EACH	522.1018 18-INCH EACH	522.1024 24-INCH EACH	522.1030 30-INCH EACH	522.1036 36-INCH EACH	522.1072 72-INCH EACH	522.0124 CULVERT PIPE REINFORCED CONCRETE CLASS III 24-INCH LF	522.0130 30-INCH LF	522.0136 36-INCH LF	522.0172 72-INCH LF	611.9800.S PIPE GRATES EACH	(1) JOINT TIES EACH
60+82 KN	LT & RT	---	---	---	---	---	---	2	---	---	---	222	---	12
52+00 KN	LT & RT	---	---	---	---	---	2	---	---	---	179	---	---	12
775+79 C	LT	---	---	---	---	2	---	---	---	53	---	---	---	12
766+53 B	LT & RT	---	---	---	2	---	---	---	192	---	---	---	---	12
755+20 NB	RT	---	---	---	---	---	2	---	---	---	88	---	---	12
740+05 NB - 748+53 NB	LT & RT	---	---	---	---	1	---	---	---	---	---	---	1	6
746+00 F - 749+00 F	LT & RT	2	---	---	---	---	---	---	---	---	---	---	2	12
759+00 D - 767+50 D	LT & RT	1	1	---	---	---	---	---	---	---	---	---	2	12
775+12 C - 783+00 C	LT & RT	---	2	---	---	---	---	---	---	---	---	---	2	12
30+76 KS - 30+79 KS	LT & RT	1	---	---	---	---	---	---	---	---	---	---	1	6
31+35 KN - 31+78 KN	LT & RT	---	1	---	---	---	---	---	---	---	---	---	1	6
34+90 KS - 36+02 KS	LT & RT	1	---	---	---	---	---	---	---	---	---	---	---	6
34+00 KN - 35+15 KN	LT & RT	1	1	---	---	---	---	---	---	---	---	---	2	12
761+85 B - 763+85 B	LT & RT	---	1	---	---	---	---	---	---	---	---	---	1	6
38+00 KN - 44+00 KN	LT & RT	---	---	---	1	---	---	---	---	---	---	---	1	6
770+10 D - 770+50 D	LT & RT	---	1	---	---	---	---	---	---	---	---	---	1	6
48+75 KN - 51+00 KN	LT & RT	---	---	2	---	---	---	---	---	---	---	---	2	12
54+95 KN - 55+50 KN	LT & RT	---	1	---	---	---	---	---	---	---	---	---	1	6
57+80 KN - 57+98 KN	LT & RT	---	1	---	---	---	---	---	---	---	---	---	1	6
60+12 KS - 60+12 KS	LT & RT	---	1	---	---	---	---	---	---	---	---	---	1	6
TOTALS		**6**	**10**	**2**	**3**	**3**	**4**	**2**	**192**	**53**	**267**	**222**	**19**	
***CATEGORY TOTALS**		**6**	**10**	**2**	**3**	**3**	**4**	**2**	**208**	**53**	**267**	**222**	**19**	
***PROJECT ID TOTALS**		**6**	**10**	**2**	**5**	**3**	**4**	**2**	**364**	**101**	**267**	**222**	**19**	

(1) FOR INFORMATION ONLY. NOT A BID ITEM.

ENDWALLS AND CULVERT PIPES CORRUGATED STEEL

STATION	LOCATION	521.1012 APRON ENDWALLS FOR CULVERT PIPE CORRUGATED 12-INCH EACH	521.1015 15-INCH EACH	521.1018 18-INCH EACH	521.1024 24-INCH EACH	521.1030 30-INCH EACH	521.0112 CULVERT PIPE CORRUGATED STEEL 12-INCH LF	521.0115 15-INCH LF	521.0118 18-INCH LF	521.0124 24-INCH LF	521.0130 30-INCH LF	THICKNESS INCHES
230+38 V	LT & RT	---	---	---	2	---	---	---	---	131	---	0.064
228+00 V	RT	---	---	2	---	---	---	---	52	---	---	0.064
226+50 V	RT	---	2	---	---	---	---	48	---	---	---	0.064
222+75 V	LT & RT	---	---	2	---	---	---	---	84	---	---	0.064
222+67 V	LT & RT	---	---	2	---	---	---	---	78	---	---	0.064
221+03 V	LT	---	---	2	---	---	---	---	28	---	---	0.064
214+00 V	RT	2	---	---	---	---	42	---	---	---	---	0.064
208+94 V	LT	2	---	---	---	---	29	---	---	---	---	0.064
208+94 V	RT	2	---	---	---	---	104	---	---	---	---	0.064
205+31 V	LT & RT	---	---	---	---	2	---	---	---	---	94	0.079
205+24 V	LT & RT	---	---	---	---	2	---	---	---	---	94	0.079
203+30 V	LT	---	2	---	---	---	---	25	---	---	---	0.064
202+29 V	LT	2	---	---	---	---	27	---	---	---	---	0.064
56+01 KN	RT	---	2	---	---	---	---	60	---	---	---	0.064
CATEGORY TOTALS		**8**	**6**	**8**	**2**	**4**	**202**	**133**	**242**	**131**	**188**	

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*** OTHER QUANTITIES LOCATED ELSEWHERE IN PLAN**

ALL ITEMS ON THIS SHEET
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UNLESS OTHERWISE NOTED

CULVERT PIPE TEMPORARY

STATION TO STATION	LOCATION	520.4012 12-INCH LF	520.4024 24-INCH LF
350+50 AT - 352+00 AT	AT RAMP RT	---	150
370+90 CT	CT RAMP	54	---
372+25 CT	CT RAMP	---	88
373+00 CU	CU RAMP	---	74
TOTALS		**54**	**312**
CATEGORY TOTALS		**249**	**470**

CULVERT PIPE REINFORCED CONCRETE TYPE III 24-INCH

STATION	LOCATION	522.0124 LF	REMARKS
359+40 AT	AT RAMP LT	16	EXTEND EXISTING PIPE
TOTAL		**16**	
CATEGORY TOTAL		**208**	
***PROJECT ID TOTAL**		**364**	

STORM SEWER PIPE REINFORCED CONCRETE

STATION TO STATION	LOCATION	608.0312 STORM SEWER PIPE REINFORCED CONCRETE, CLASS III 12-INCH LF	608.0315 15-INCH LF	608.0318 18-INCH LF	608.0321 21-INCH LF	608.0324 24-INCH LF	608.0330 30-INCH LF
746+00 F - 749+00 F	LT & RT	109	---	---	---	---	---
759+00 D - 767+50 D	LT & RT	86	60	---	---	---	---
775+12 C - 783+00 C	LT & RT	215	133	---	---	---	---
740+05 NB - 748+53 NB	LT & RT	529	296	92	---	535	68
30+76 KS - 30+79 KS	LT & RT	30	---	---	---	---	---
31+35 KN - 31+78 KN	LT & RT	34	91	---	---	---	---
34+90 KS - 36+02 KS	LT & RT	177	---	---	---	---	---
34+00 KN - 35+15 KN	LT & RT	91	111	---	---	---	---
761+85 B - 763+85 B	LT & RT	92	42	---	---	---	---
38+00 KN - 44+00 KN	LT & RT	218	125	372	349	51	---
770+10 D - 770+50 D	LT & RT	60	39	---	---	---	---
48+75 KN - 51+00 KN	LT & RT	37	21	527	---	---	---
54+95 KN - 55+50 KN	LT & RT	65	136	---	---	---	---
57+80 KN - 57+98 KN	LT & RT	48	115	---	---	---	---
60+12 KN - 60+12 KN	LT & RT	---	96	---	---	---	---
CATEGORY TOTALS		**1792**	**1264**	**991**	**349**	**586**	**68**

STORM SEWER SCHEDULE TEMPORARY DRAINAGE

STRUCTURE NUMBER	STATION	OFFSET	611.2004 MANHOLES 4-FT DIAMETER EACH	611.3220 611.3902 INLETS 2x2-FT EACH	MEDIAN 2 GRATE EACH	611.0642 611.0612 INLET COVERS TYPE MS EACH	TYPE C EACH	FLOWLINE ELEV	BOX ELEV	DEPTH	INVERT ELEV	FROM	DISCHARGE ELEV	TO	520.4012 520.4018 520.4024 CULVERT PIPE TEMPORARY 12-INCH LF	18-INCH LF	24-INCH LF	SLOPE %	SPV.0060.03 CONNECTION TO EXISTING INLETS EACH
	743+78 E	10' RT	---	---	---	---	---	---	---	---	1239.52	INLET	1239.50	MANHOLE	18	---	---	0.1	---
	742+00 E	26.9' RT	---	---	---	---	---	---	---	---	1239.50	MANHOLE	1239.50	DITCH	177	---	---	0.0	---
900	354+20 AT	37' RT	---	---	1	2	---	1242.46	1242.46	4.00	1238.46	INLET	1238.00	EX. INLET	---	28	---	1.6	1
901	358+50 AT	19' RT	---	---	1	2	---	1244.64	1244.64	3.00	1241.64	INLET	1241.00	DITCH	---	76	---	0.8	---
	364+00 BT	46' LT	---	---	---	---	---	---	---	---	1241.00	PIPE END	1239.44	902	---	---	158	1.0	---
902	365+58 BT	24' LT	1	---	---	---	1	1248.46	1247.71	8.27	1239.44	INLET	---	EX. ENDWALL	---	---	---	---	---
903	380+25 CT	26.4' RT	---	---	1	2	---	1238.85	1238.85	2.50	1236.35	INLET	1230.72	EX. INLET	---	347	---	1.6	1
904	359+50 DT	23.4' RT	---	1	---	---	1	1261.06	1260.31	2.50	1257.81	INLET	1256.35	DITCH	---	34	---	4.3	---
TOTALS			**1**	**1**	**3**	**6**	**2**								**195**	**485**	**158**		**2**
***CATEGORY TOTALS**			**23**	**2**	**6**	**12**	**2**								**249**	**485**	**470**		**2**
***PROJECT ID TOTALS**			**23**	**2**	**8**	**16**	**2**								**249**	**485**	**470**		**2**

1.) ALL SUBSURFACE ELEVATIONS ARE PIPE FLOWLINES.
2.) CALCULATED DEPTH = DISTANCE FROM TOP OF BOX TO DISCHARGE ELEVATION.
3.) PIPE LENGTHS MEASURED FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE.
4.) ALL STRUCTURES HAVE THE STATUS "NEW".

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*** OTHER QUANTITIES LOCATED ELSEWHERE IN PLAN**

ALL ITEMS ON THIS SHEET ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

STORM SEWER MANHOLES, INLETS, AND COVERS

STATION - STATION	LOCATION	611.3220 2x2-FT EACH	611.3225 2x2.5-FT EACH	611.3230 INLETS 2x3-FT EACH	611.3901 MEDIAN 1 GRATE EACH	611.3902 MEDIAN 2 GRATE EACH	611.0610 TYPE BW EACH	611.0624 TYPE H EACH	611.0627 TYPE HM EACH	611.0630 INLET COVERS TYPE HM-GJ EACH	611.0642 TYPE MS EACH	611.0652 TYPE T EACH	611.0654 TYPE V EACH	611.2004 MANHOLES 4-FT EACH	611.2005 MANHOLES 5-FT EACH	611.0530 MANHOLE COVERS TYPE J EACH	611.8120.S COVER PLATES TEMPORARY EACH
745+25 A - 760+90 A	LT & RT	---	1	5	---	---	1	3	---	3	---	---	---	1	---	---	---
746+00 F - 749+00 F	LT & RT	---	---	2	---	---	---	---	2	---	---	---	---	---	---	---	---
759+00 D - 767+50 D	LT & RT	---	---	2	1	---	---	---	2	---	1	---	---	---	---	---	---
772+20 C - 783+00 C	LT & RT	---	---	3	1	1	---	---	3	1	2	---	---	---	---	---	3
740+05 NB - 748+53 NB	LT & RT	---	6	1	1	1	5	---	1	---	2	---	4	2	2	1	2
30+76 KS - 30+79 KS	LT & RT	---	---	1	---	---	---	1	---	---	---	---	---	---	---	---	---
31+35 KN - 31+78 KN	LT & RT	---	---	4	---	---	---	4	---	---	---	---	---	1	---	1	---
34+90 KS - 36+02 KS	LT & RT	---	---	3	---	---	---	3	---	---	---	---	---	---	---	---	---
34+00 KN - 35+15 KN	LT & RT	---	---	2	---	---	---	3	---	---	---	---	---	1	---	---	---
761+85 B - 763+85 B	LT & RT	---	---	4	---	---	---	4	---	---	---	---	---	---	---	---	---
38+00 KN - 44+00 KN	LT & RT	1	---	16	---	---	---	21	---	---	---	2	---	8	---	2	---
770+10 D - 770+50 D	LT & RT	---	---	4	---	---	---	4	---	---	---	---	---	---	---	---	---
48+75 KN - 51+00 KN	LT & RT	---	---	3	---	---	---	6	---	---	---	2	---	5	---	---	---
54+95 KN - 55+50 KN	LT & RT	---	---	5	---	---	---	7	---	---	---	---	---	2	---	---	---
57+80 KN - 57+98 KN	LT & RT	---	---	3	---	---	---	5	---	---	---	---	---	2	---	---	---
60+12 KS - 60+12 KS	LT & RT	---	---	---	---	1	---	---	---	---	1	---	---	---	---	---	---
TOTALS		**1**	**7**	**58**	**3**	**3**	**6**	**61**	**8**	**4**	**6**	**4**	**4**	**22**	**2**	**4**	**5**
***CATEGORY TOTALS**		**2**	**7**	**58**	**3**	**6**	**6**	**61**	**8**	**4**	**12**	**4**	**4**	**23**	**2**	**4**	**5**
***PROJECT ID TOTALS**		**2**	**7**	**58**	**3**	**8**	**6**	**61**	**8**	**4**	**16**	**4**	**4**	**23**	**2**	**4**	**5**

PIPE UNDERDRAIN 6-INCH ITEMS

STATION TO STATION	LOCATION	612.0106 6-INCH LF	612.0206 UNPERFORATED 6-INCH LF	612.0806 APRON ENDWALLS FOR UNDERDRAIN REINFORED CONCRETE 6-INCH EACH	645.0111 GEOTEXTILE FABRIC TYPE DF SCHEDULE A SY
31+61 KN - 58+00 KN	RT	2600	---	---	1806
55+00 KN - 58+75 KN	LT	375	---	---	260
32+93 KS - 35+75 KS	RT	283	---	---	197
32+93 KS - 58+75 KS	LT	2554	---	---	1774
56+00 KS - 58+75 KS	RT	275	---	---	191
100+00 KE - 104+14 KE	LT	414	---	---	288
200+00 KW - 204+14 KW	LT	414	---	---	288
757+10 A - 761+33 A	RT	423	---	---	294
760+37 A - 761+29 A	LT	104	---	---	72
761+29 B - 766+80 B	RT	551	---	---	383
771+18 C - 775+47 C	LT	414	---	---	288
771+21 C - 772+26 C	RT	127	---	---	88
764+50 D - 771+05 D	LT	655	---	---	455
768+00 D - 770+47 D	RT	247	---	---	172
743+79 E - 750+78 E	RT	699	---	---	485
743+00 F - 751+96 F	LT	896	---	---	622
751+64 F - 751+84 F	RT	33	---	---	23
201+10 V - 230+24 V	LT/RT, OVERLOOK DR	4028	264	24	---
CATEGORY TOTALS		**15092**	**264**	**24**	**7686**
***PROJECT ID TOTALS**		**16042**	**264**	**24**	**8346**

STORM SEWER ROCK EXCAVATION

STATION TO STATION	607.5000 CY	REMARKS
762+00 B - 766+50 B	290	RAMP B AT USH 51-CTH K STM SEWER
738+00 - 748+50 NB	530	USH 51 MAINLINE STM SEWER
746+00 F - 749+00 F	50	RAMP F AT USH 51-CTH U STM SEWER
31+00 K - 44+00 K	740	CTH K, EAST OF USH 51, STM SEWER
44+00 K - 58+00 K	40	CTH K, WEST OF USH 51, STM SEWER
CATEGORY TOTAL	**1650**	

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*** OTHER QUANTITIES LOCATED ELSEWHERE IN PLAN**

ALL ITEMS ON THIS SHEET
ARE CATEGORY 0010
UNLESS OTHERWISE NOTED

CONCRETE CURB AND GUTTER

STATION TO STATION	LOCATION	601.0409 30-INCH TYPE A LF	601.0411 30-INCH TYPE D LF	601.0555 6-INCH SLOPED 36-INCH TYPE A LF	601.0557 6-INCH SLOPED 36-INCH TYPE D LF	601.0574 4-INCH SLOPED 30-INCH TYPE G LF	601.0580 4-INCH SLOPED 36-INCH TYPE R LF
30+80 KN - 58+75 KN	LT, CTH K NB	2372	---	---	75	---	---
31+35 KN - 58+75 KN	RT, CTH K NB	2648	---	---	75	---	---
30+65 KS - 58+75 KS	LT, CTH K SB	2716	---	---	75	---	---
30+65 KS - 58+75 KS	RT, CTH K SB	2387	---	---	75	---	---
230+24 V - 230+74 V	LT, OVERLOOK DR	---	75	---	---	---	---
230+24 V - 230+74 V	RT, OVERLOOK DR	---	75	---	---	---	---
228+73 V - 230+62 V	LT, MEDIAN	---	353	---	---	---	---
754+50 A - 761+10 A	LT, A RAMP	600	---	60	---	---	---
757+10 A - 761+33 A	RT, A RAMP	333	---	90	---	---	---
760+32 A - 761+30 A	RT, MEDIAN	---	---	---	---	196	---
761+87 B - 764+80 B	LT, B RAMP	203	---	90	---	---	---
761+29 B - 766+80 B	RT, B RAMP	471	---	80	---	---	---
771+18 C - 775+50 C	LT, C RAMP	345	---	88	---	---	---
771+42 C - 775+50 C	RT, C RAMP	321	---	86	---	---	---
771+21 C - 772+28 C	RT, MEDIAN	---	---	---	---	217	---
764+50 D - 771+05 D	LT, D RAMP	208	---	447	---	---	---
768+00 D - 770+47 D	RT, D RAMP	171	---	76	---	---	---
748+00 E - 750+88 E	LT, E RAMP	---	---	288	---	---	---
750+00 E - 750+78 E	RT, E RAMP	---	---	107	---	---	---
743+00 F - 751+99 F	LT, F RAMP	---	---	919	---	---	---
751+64 F - 751+86 F	RT, F RAMP	---	---	32	---	---	---
100+00 KE - 104+12 KE	LT, KE ROUNDABOUT	---	---	---	---	267	400
100+00 KE - 104+12 KE	RT, KE ROUNDABOUT	83	---	---	---	---	---
200+00 KW - 204+12 KW	LT, KW ROUNDABOUT	---	---	---	---	267	400
200+00 KW - 204+12 KW	RT, KW ROUNDABOUT	83	---	---	---	---	---
71+01 U - 71+07 U	LT, BUS 51 RIGHT-TURN ISLAND	---	9	---	---	---	---
71+35 U - 71+43 U	LT, BUS 51 RIGHT-TURN ISLAND	---	9	---	---	---	---
71+47 U - 71+73 U	RT, CTH U RIGHT-TURN LANE	---	42	---	---	---	---
71+61 U - 71+83 U	RT, CTH U RIGHT-TURN ISLAND	---	22	---	---	---	---
71+68 U - 71+79 U	LT, BUS 51 RIGHT-TURN ISLAND	---	10	---	---	---	---
71+74 U - 71+82 U	RT, CTH U MEDIAN ISLAND	---	9	---	---	---	---
14+40 K - 14+46 K	RT	---	10	---	---	---	---
14+80 K - 14+89 K	RT	---	9	---	---	---	---
14+80 K - 14+89 K	LT, MEDIAN ISLAND	---	18	---	---	---	---
14+80 K - 14+89 K	LT, LEFT-TURN ISLAND	---	18	---	---	---	---
14+80 K - 14+89 K	LT, CTH U RIGHT-TURN ISLAND	---	9	---	---	---	---
CATEGORY TOTALS		**12941**	**668**	**2363**	**300**	**947**	**800**
***PROJECT ID TOTALS**		**13354**	**682**	**2363**	**315**	**534**	**800**

CONCRETE SIDEWALK

CATEGORY	STATION TO STATION	LOCATION	602.0405 4-INCH SF	602.0420 7-INCH SF
0010	760+32 A - 761+30 A	SAFETY ISLAND	---	769
	771+19 C - 772+28 C	SAFETY ISLAND	---	903
	228+73 V - 230+62 V	MEDIAN ISLAND	923	---
	37+31 KN - 38+52 KN	MEDIAN, CTH K	1937	---
	40+15 KN - 41+46 KN	MEDIAN, CTH K	2251	---
	48+37 KN - 49+34 KN	MEDIAN, CTH K	2170	---
	51+04 KN - 52+43 KN	MEDIAN, CTH K	1783	---
	13+86 K - 13+95 K	LT	41	---
	14+43 K - 14+87 K	RT	256	---
	14+82 K - 14+87 K	LT, MEDIAN	32	---
	14+82 K - 14+87 K	LEFT TURN ISLAND	110	---
	14+46 K - 15+26 K	CTH U RIGHT-TURN ISLAND	449	---
	69+50 U - 71+06 U	LT, CTH U	733	---
	71+63 U - 71+69 U	RT, CTH U RIGHT-TURN LANE	34	---
	71+78 U - 71+85 U	RT, CTH U RIGHT-TURN ISLAND	153	
CATEGORY 0010 TOTALS			**10872**	**1672**
0070	33+88 KN - 36+53 KN	RT, CTH K NB	1425	---
	52+86 KN - 58+00 KN	RT, CTH K NB	2475	---
	52+96 KS - 58+00 KS	LT, CTH K SB	2590	---
CATEGORY 0070 TOTALS			**6490**	**---**
0080	36+53 KN - 52+86 KN	RT, CTH K NB	13720	---
	36+45 KS - 52+96 KS	LT, CTH K SB	13590	---
CATEGORY 0080 TOTALS			**27310**	**---**
***PROJECT ID TOTALS**			**44672**	**1672**

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CONCRETE BARRIER

STATION TO STATION	LOCATION	603.1142 TYPE S42 LF	603.1442 TYPE S42C LF	614.0805 CRASH CUSHIONS PERMANENET LOW MAINTENANCE EACH	OBJECT MARKING	CRASH TEST CONDITION	WIDTH
740+00 NB - 756+96 NB	RT, USH 51 NB	1696	---	1	OM-3C	TL-3	2'
745+23 A - 747+50 A	RT, A RAMP	---	227	1	OM-3C	TL-3	6'
745+20 E - 748+00 E	LT, E RAMP	---	280	---	---	---	---
743+75 E - 750+00 E	RT, E RAMP	---	625	---	---	---	---
CATEGORY TOTALS		**1696**	**1132**	**2**			

CONCRETE BARRIER TEMPORARY PRECAST

STATION TO STATION	LOCATION	STAGE	603.8000 DELIVERED LF	603.8125 INSTALLED LF	614.0905 CRASH CUSHION TEMPORARY EACH	OBJECT MARKING	CRASH TEST CONDITION	WIDTH
344+50 ET - 346+00 ET	ET LINE RT	3A	150	150	1	OM-3R	TL-3	2'
376+40 CT - 383+60 CT	CT LINE LT	3B	720	720	1	OM-3C	TL-3	2'
374+75 CT - 391+00 CT	CT LINE RT	5A	---	1625	1	OM-3R	TL-3	2'
376+20 CU - 389+00 CU	CU LINE RT	5B	---	1280	1	OM-3C	TL-3	2'
764+00 B - 780+00 B	B RAMP	6A	---	1600	1	OM-3R	TL-3	2'
CATEGORY TOTALS			**870**	**5375**	**5**			

*** OTHER QUANTITIES LOCATED ELSEWHERE IN PLAN**

ALL ITEMS ON THIS SHEET ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

EARTHWORK SUMMARY

DIVISION	STATION TO STATION	LOCATION	CUT CY	205.0100 EXCAVATION COMMON CY	SALVAGED/ UNUSABLE PAVEMENT MATERIAL CY	(9) AVAILABLE MATERIAL CY	(8) EBS CY	205.0400 EXCAVATION MARSH CY	205.0200 EXCAVATION ROCK CY	FILL CY	(6) UNEXPANDED FILL CY	(2) (4) EXPANDED FILL CY	(5) MASS ORDINATE +/- CY	(1) WASTE CY	(3) 208.0100 BORROW CY
	350+00 AT - 360+50 AT	AT RAMP	2144	2144	---	2144	---	1002	---	2214	3116	3895	-1751		
	353+50 DT - 366+00 DT	DT RAMP	989	989	---	989	---	---	---	1942	1942	2428	-1439		
	705+00 NS - 727+00 NS	NS LINE (STAGE 1A)	2812	2812	---	2812	---	---	---	838	838	1048	1765		
	348+00 ST - 353+00 ST	ST LINE	1215	1215	---	1215	---	---	---	35	35	44	1171		
	WASTE FROM THE 1170-01-70 PROJECT		---	---	---	---	---	---	---	---	---	-188	188		
	WASTE FROM THE 6999-18-70 PROJECT		---	---	---	---	---	---	---	---	---	-117	117		
	UNDISTRIBUTED BORROW (10)		---	---	---	---	---	---	---	---	---	---	---		5000
DIVISION 1 SUBTOTAL				7160	---	7160	---	1002	---	5029	5931	7109	52	---	5000
	364+00 NR - 411+00 NR	NR LINE	4425	4425	---	4425	---	---	---	18943	18943	23679	-19254		
	706+50 NS - 724+00 NS	NS LINE (STAGE 1B)	2380	2380	---	2380	---	---	---	633	633	791	1589		
	413+00 NR - 423+00 NR	NR LINE	433	433	---	433	---	---	---	2430	2430	3038	-2605		
	WASTE FROM 1170-01-70 PROJECT		---	---	---	---	---	---	---	---	---	-20270	20270		
DIVISION 2 SUBTOTAL				7238	---	7238	---	---	---	22006	22006	7238	---	---	---
	324+00 NR - 361+00 NR	NR LINE	6894	6894	---	6894	---	885	---	20674	21471	26838	-19944		
	711+00 SB - 720+00 SB	SB LANES	1257	1257	93	1164	---	---	---	---	---	---	1164		
	710+00 NB - 720+00 NB	NB LANES	5847	5847	90	5757	---	---	---	15	15	19	5738		
	WASTE FROM 1170-01-70 PROJECT		---	---	---	---	---	---	---	---	---	-13042	13042		
DIVISION 3A SUBTOTAL				13998	183	13815	---	885	---	20689	21486	13815	---	---	---
	361+00 NR - 364+00 NR	NR LINE	164	164	---	164	---	347	---	6372	6684	8355	-8191		
	WASTE FROM 1170-01-70 PROJECT		---	---	---	---	---	---	---	---	---	-7041	7041		
DIVISION 4 SUBTOTAL				164	---	164	---	347	---	6372	6684	1314	-1150	---	1150
	720+00 SB - 764+00 SB	SB LANES	46032	46032	2950	43082	---	---	---	8128	7970	9963	33120		
	769+00 SB - 811+00 SB	SB LANES	25133	25133	2860	22273	---	---	---	2120	2120	2650	19623		
	355+00 SR - 380+00 SR	SR LINE	2239	2239	---	2239	---	---	---	1657	1657	2071	168		
DIVISION 5 SUBTOTAL				73404	5810	67594	---	---	---	11905	11747	14684	52910	52910	---
	720+00 NB - 740+00 NB	NB LANES	19550	19550	1340	18210	---	---	---	390	390	488	17723		
	747+00 NB - 763+00 NB	NB LANES	20788	20788	1070	19718	---	---	---	981	981	1226	18492		
	767+00 NB - 811+00 NB	NB LANES	21468	21468	2940	18528	---	---	---	33	33	41	18487		
DIVISION 6A SUBTOTAL				61806	5350	56456	---	---	---	1404	1404	1755	54701	54701	---
	740+00 NB - 747+00 NB	NB LANES	6625	6625	470	6155	---	---	---	---	---	---	6155		
DIVISION 6B SUBTOTAL				6625	470	6155	---	---	---	---	---	---	6155	6155	---
	713+00 NB - 763+00 NB	MEDIAN	4533	4533	---	4533	---	---	---	102	102	128	4406		
	768+00 NB - 811+00 NB	MEDIAN	18581	18581	---	18581	---	---	---	225	225	281	18300		
DIVISION 7 SUBTOTAL				23114	---	23114	---	---	---	327	327	409	22705	22705	---
PROJECT ID TOTALS				**193509**				**2234**	**---**						**6150**

(1) WASTE = EXPANDED FILL - EXCAVATION COMMON (FOR INFORMATION ONLY - NOT A BID ITEM)
(2) EXPANSION FACTOR = 1.25
(3) BORROW = EXPANDED FILL -AVAILABLE MATERIAL
(4) EXPANDED FILL = UNEXPANDED FILL * EXPANSION FACTOR
(5) THE MASS ORDINATE + OR - QTY CALCULATED FOR THE DIVISION. PLUS QUANTITY INDICATES AN EXCESS OF MATERIAL WITHIN THE DIVISION. MINUS INDICATES A SHORTAGE OF MATERIAL WITHIN THE DIVISION.
(6) UNEXPANDED FILL = FILL - (ROCK * 1.1) + (MARSH EXCAVATION * 1.5) - (MARSH EXCAVTION * 0.6) + (EBS * 1.25) - (EBS * 0.8) - ASSUMES THAT ALL MARSH AND EBS CAN BE USED IN FILL AREAS
(7) EARTHWORK (SUCH AS POND B) FROM PREVIOUS STAGES MAY BE COMPLETED INTO THIS STAGE
(8) EBS PAID FOR AS EXCAVATION COMMON.
(9) AVAILABLE MATERIAL = COMMON EXCAVATION - SALVAGED/UNUSABLE MATERIAL.
(10) UNDISTRUBTED BORROW IS USED TO ACCOUNT FOR POTENTIAL UNUSABLE MATERIAL WITHIN THE PROJECT DURING THE EARLY STAGES OF CONSTRUCTION

Addendum No. 1
ID 1170-01-70
Revised Sheet 591
December 3, 2012

ITEMS ON THIS SHEET
CATEGORY 0010
SS OTHERWISE NOTED

EARTHWORK SUMMARY

DIVISION	STATION TO STATION	LOCATION	CUT CY	205.0100 EXCAVATION COMMON CY	(8) EBS CY	205.0400 EXCAVATION MARSH CY	205.0200 EXCAVATION ROCK CY	FILL CY	(6) UNEXPANDED FILL CY	(2) (4) EXPANDED FILL CY	(5) MASS ORDINATE +/- CY	(1) WASTE CY	(3) 208.0100 BORROW CY
	4+90 L - 5+50 L	L LINE	117	117	---	---	---	---	---	---	117		---
	WASTE TO THE 1170-01-73 PROJECT		---	---	---	---	---	---	---	117	-117		
DIVISION 1 SUBTOTAL				117	---	---	---	---	---	117	---	---	---
	254+25 M - 255+75 M	M LINE	192	192	---	---	---	1107	1107	1384	-1192		
	12+00 R - 14+50 R	R LINE	1363	1363	---	---	---	1	1	1	1362		
	19+50 U - 22+00 U	U LINE	735	735	---	---	---	8	8	10	725		
	22+00 U - 49+00 U	U LINE	18854	18854	---	---	---	25280	25280	31600	-12746		
	51+00 U - 71+00 U	U LINE	8301	8301	---	---	---	7055	7055	8819	-518		
	WASTE FROM 1170-01-70 PROJECT		---	---	---	---	---	---	---	-12369	12369		
DIVISION 2 SUBTOTAL				29445	---	---	---	33451	33451	29445	---	---	---
CATEGORY TOTALS				**29562**		---	---						---

(1) WASTE = EXPANDED FILL - EXCAVATION COMMON (FOR INFORMATION ONLY - NOT A BID ITEM)
(2) EXPANSION FACTOR = 1.25
(3) BORROW = EXPANDED FILL - EXCAVATION COMMON
(4) EXPANDED FILL = UNEXPANDED FILL * EXPANSION FACTOR
(5) THE MASS ORDINATE + OR - QTY CALCULATED FOR THE DIVISION. PLUS QUANTITY INDICATES AN EXCESS OF MATERIAL WITHIN THE DIVISION. MINUS INDICATES A SHORTAGE OF MATERIAL WITHIN THE
(6) UNEXPANDED FILL = FILL - (ROCK * 1.1) + (MARSH EXCAVATION * 1.5) - (MARSH EXCAVTION * 0.6) + (EBS * 1.25) - (EBS * 0.8) - ASSUMES THAT ALL MARSH AND EBS CAN BE USED IN FILL AREAS
(7) EARTHWORK (SUCH AS POND B) FROM PREVIOUS STAGES MAY BE COMPLETED INTO THIS STAGE
(8) EBS PAID FOR AS EXCAVATION COMMON

FINISHING ROADWAY

PROJECT	213.0100 EACH
.03 6999-18-70	1
CATEGORY TOTAL	**1**

OBLITERATING OLD ROAD

LOCATION	214.0100 STA
18TH AVE	4
MERRILL AVE	1
CATEGORY TOTAL	**5**

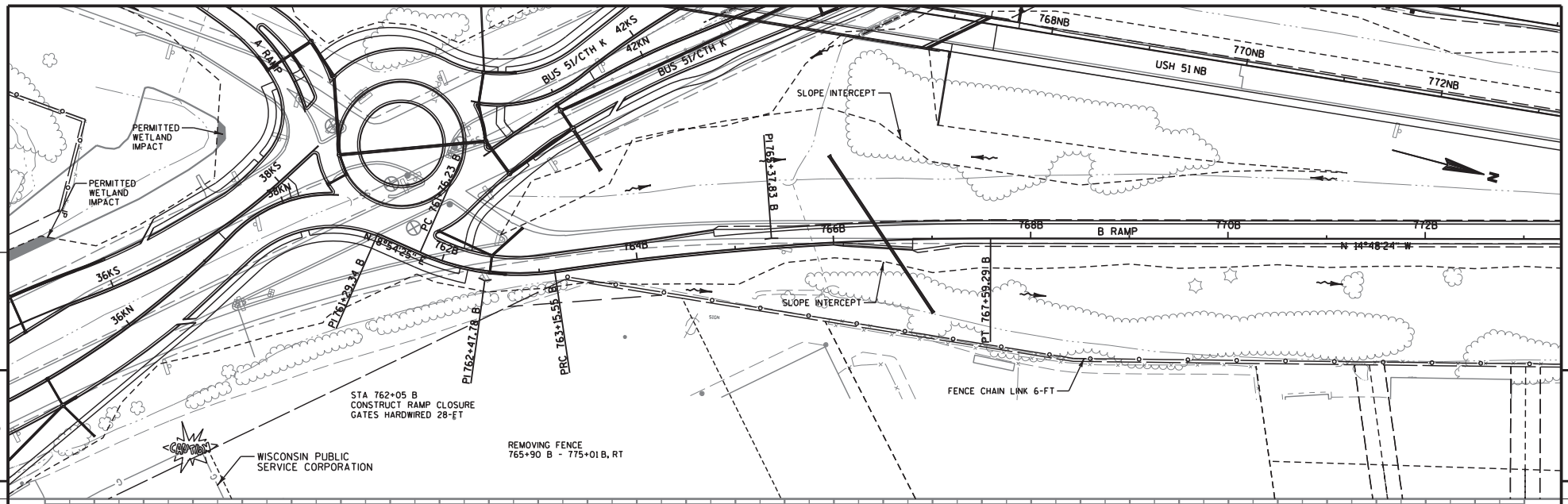
Addendum No. 1
ID 1170-01-70
Revised Sheet 608
December 3, 2012

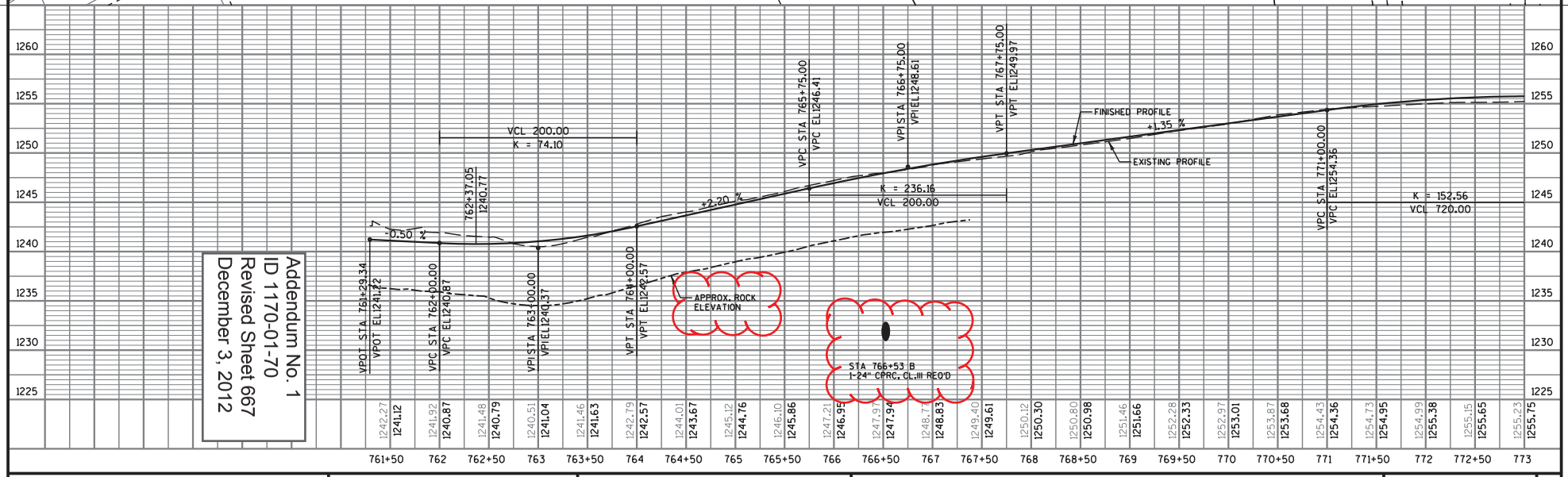
BASE AGGREGATE DENSE

STATION TO STATION	LOCATION	305.0110 3/4-INCH TON	305.0120 1 1/4-INCH TON	310.0110 OPEN GRADED TON
19+50 U - 48+68 U	CTH U	81	8201	9902
51+13 U - 71+47 U	CTH U	---	4534	5623
200+80 V - 201+10 V	OVERLOOK DR	4	68	71
12+00 R - 14+72 R	ARTHUR AVE	55	467	517
4+90 L - 5+50 L	18TH AVE	30	---	200
254+17 M - 255+94 M	MERRILL CUL-DE-SAC	50	---	550
PROJECT WIDE	P.E. DRIVEWAYS	260	100	---
PROJECT WIDE	C.E. DRIVEWAYS	600	120	---
24+89 U - 71+13 U	SIDEWALK	---	1110	---
23+64 U - 69+50 U	PIPE UNDERDRAIN	---	---	937
CATEGORY TOTALS		**1080**	**14600**	**17800**

*** OTHER QUANTITIES LOCATED ELSEWHERE IN PLAN**

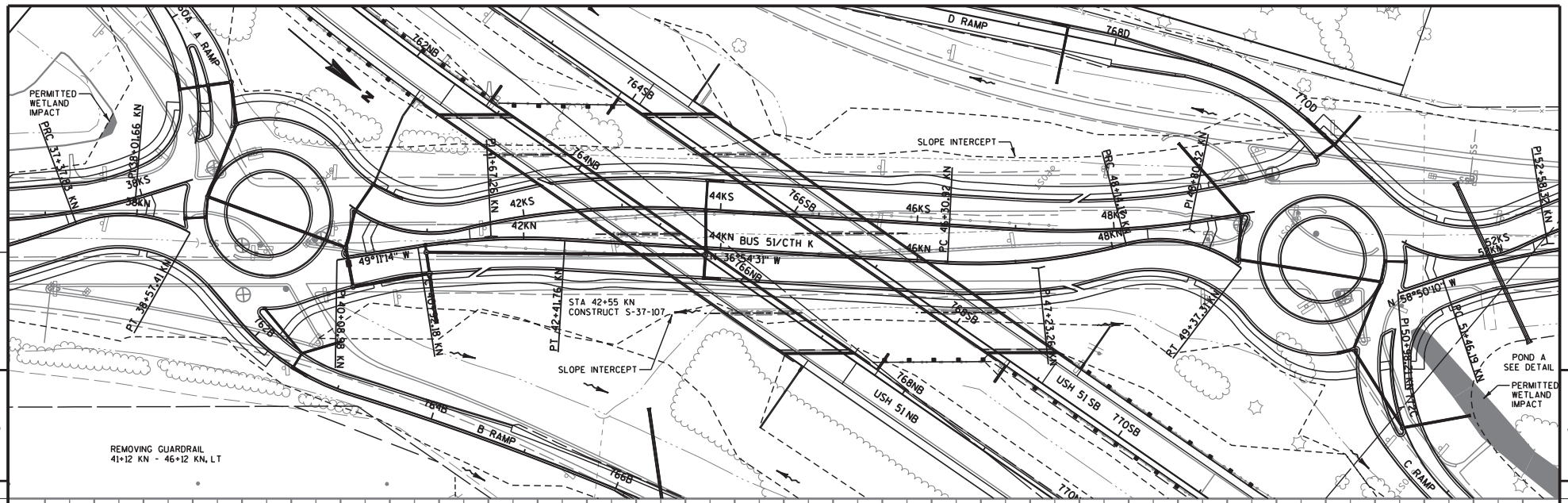
ALL ITEMS ON THIS SHEET ARE CATEGORY 0010 UNLESS OTHERWISE NOTED

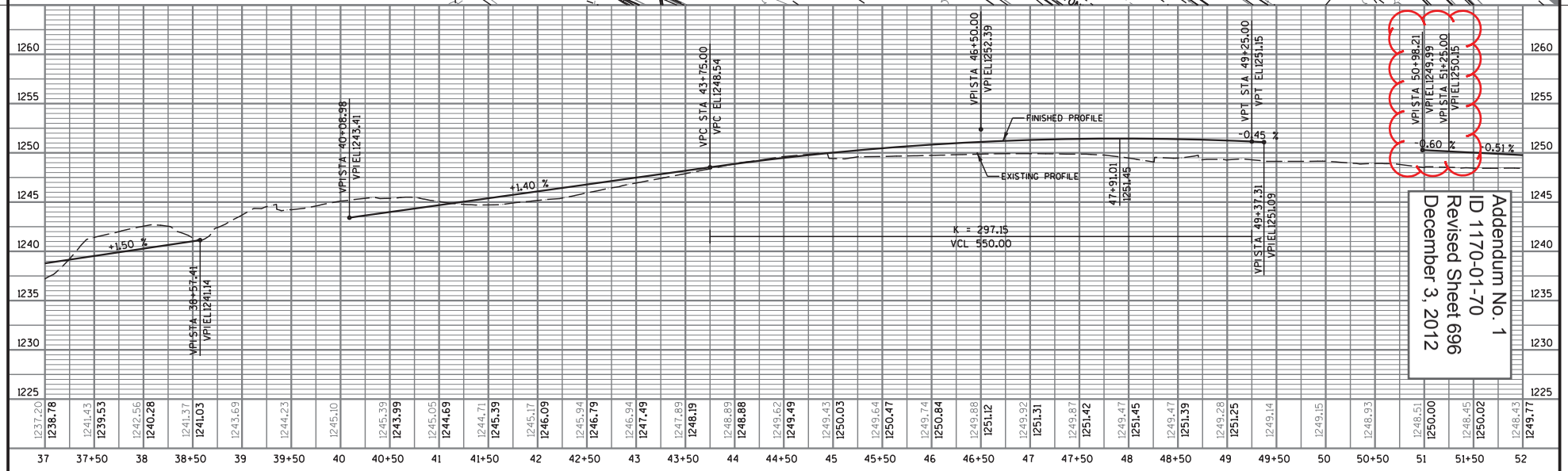




Addendum No. 1
ID 1170-01-70
Revised Sheet 667
December 3, 2012

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	PLAN & PROFILE - B RAMP	SHEET 667	E



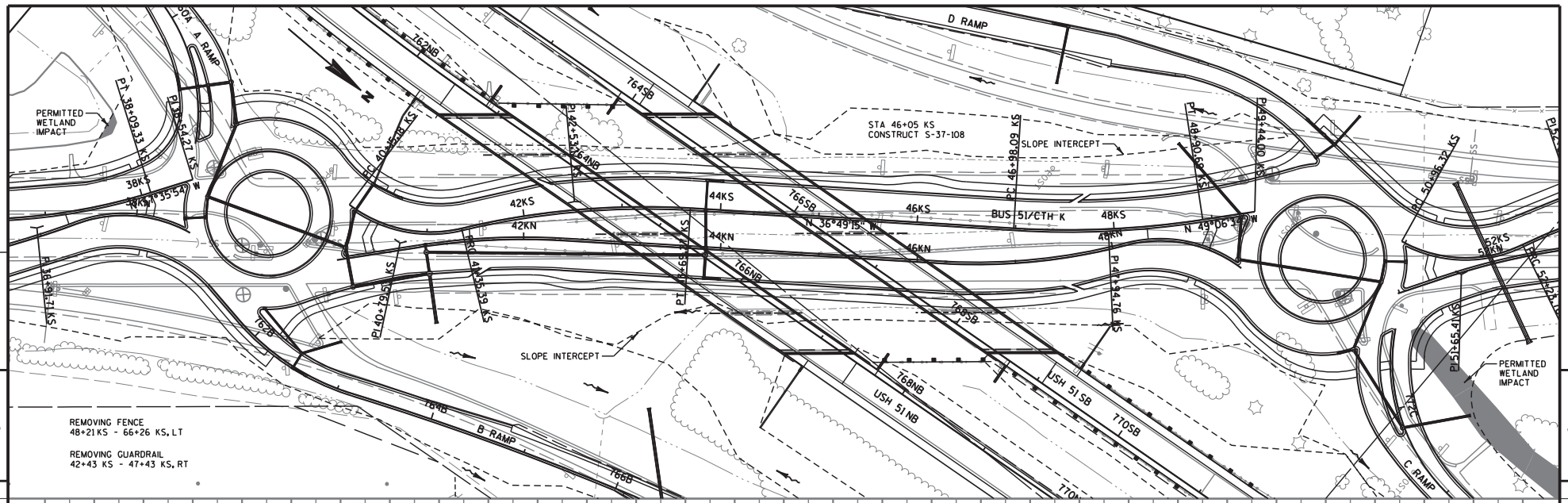


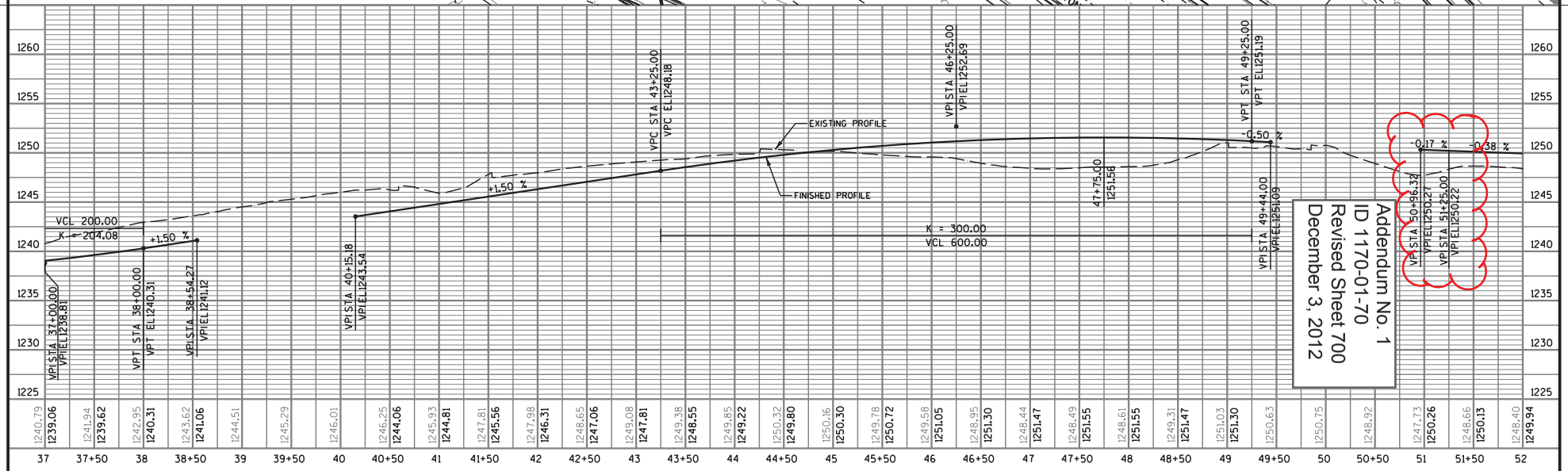
Addendum No. 1
ID 1170-01-70
Revised Sheet 696
December 3, 2012

PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	PLAN & PROFILE - CTH K (NORTHBOUND)	SHEET 696	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\050135_ppkn.dgn PLOT DATE : 11/28/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:100

WISDOT/CADDS SHEET 40





PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	PLAN & PROFILE - CTH K (SOUTHBOUND)	SHEET 700	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\050139_ppks.dgn PLOT DATE : 11/28/2012 PLOT BY : AYRES-EC PLOT NAME : PLOT SCALE : 1:100

EARTHWORK DATA - A RAMP

STATION	COMMON SF	FILL SF	COMMON CY	FILL CY	MASS HAUL
753+50.00	350.35	6.60	0.00	0.00	0.00
754+00.00	339.72	9.67	638.95	18.83	620.12
754+50.00	340.94	6.23	630.24	18.40	1231.96
755+00.00	404.03	0.00	689.79	7.21	1914.54
755+50.00	799.78	5.28	1114.64	6.11	3023.06
756+00.00	242.45	0.00	965.03	6.11	3981.98
756+50.00	327.38	0.00	527.62	0.00	4509.60
757+00.00	441.25	0.00	711.69	0.00	5221.30
757+50.00	510.37	0.00	881.13	0.00	6102.43
758+00.00	642.89	0.00	1067.83	0.00	7170.26
758+50.00	836.74	0.00	1370.03	0.00	8540.29
759+00.00	1038.46	0.00	1736.30	0.00	10276.58
759+17.00	1105.32	0.00	674.89	0.00	10951.48
759+50.00	1242.11	0.00	1434.54	0.00	12386.02
760+00.00	1441.59	0.00	2484.91	0.00	14870.93
760+50.00	1633.33	0.70	2847.15	0.81	17717.26
761+00.00	1826.71	1.57	3203.74	2.63	20918.38

EARTHWORK DATA - B RAMP

STATION	CUT SF	ROCK SF	FILL SF	CUT CY	ROCK CY	FILL CY	MASS HAUL
761+50.00	57.02	0.00	0.00	0.00	0.00	0.00	0
762+00.00	112.54	0.00	2.17	157.00	0.00	2.51	154.48843
762+50.00	87.72	0.00	11.57	185.43	0.00	15.90	324.01157
763+00.00	413.15	45.60	18.42	463.77	42.22	34.71	768.90278
763+50.00	481.15	173.60	16.15	828.06	202.96	40.01	1633.0579
764+00.00	928.16	239.70	22.98	1304.92	382.69	45.29	3036.1921
764+50.00	989.55	263.00	24.18	1775.66	465.46	54.58	4931.8148
765+00.00	1050.75	275.10	17.64	1889.17	498.24	48.40	6959.419
765+50.00	997.25	277.90	4.45	1896.30	512.04	25.57	9022.162
766+00.00	943.67	314.50	4.41	1797.15	548.52	10.25	11014.75
766+50.00	538.93	0.00	8.62	1372.78	291.20	15.08	12481.648
767+00.00	201.85	0.00	0.95	685.91	0.00	11.08	13156.479
767+50.00	137.99	0.00	0.00	314.67	0.00	1.10	13470.046
768+00.00	99.95	0.00	0.00	220.31	0.00	0.00	13690.361
768+50.00	83.86	0.00	0.02	170.19	0.00	0.02	13860.532
769+00.00	88.74	0.00	0.04	159.81	0.00	0.07	14020.278
769+50.00	112.04	0.00	0.00	185.91	0.00	0.05	14206.139
770+00.00	139.69	0.00	0.29	233.08	0.00	0.34	14438.887
770+50.00	136.13	0.00	1.03	255.39	0.00	1.53	14692.748
771+00.00	137.50	0.00	0.01	253.36	0.00	1.20	14944.905
771+50.00	120.15	0.00	0.00	238.56	0.00	0.01	15183.458
772+00.00	120.79	0.00	0.00	223.09	0.00	0.00	15406.551
772+50.00	114.54	0.00	0.00	217.90	0.00	0.00	15624.449
773+00.00	133.20	0.00	1.11	229.39	0.00	1.28	15852.553
773+50.00	103.47	0.00	0.00	219.14	0.00	1.28	16070.407
774+00.00	82.40	0.00	0.00	172.10	0.00	0.00	16242.509
774+50.00	65.65	0.00	0.00	137.08	0.00	0.00	16379.593
775+00.00	35.59	0.00	0.00	93.74	0.00	0.00	16473.333
775+50.00	29.44	0.00	0.05	60.21	0.00	0.06	16533.488
776+00.00	34.20	0.00	0.00	58.93	0.00	0.06	16592.356
776+50.00	5.87	0.00	1.15	37.10	0.00	1.33	16628.127
777+00.00	4.46	0.00	1.20	9.56	0.00	2.72	16634.972
777+50.00	4.47	0.00	2.61	8.27	0.00	4.41	16638.831
778+00.00	8.01	0.00	0.48	11.56	0.00	3.58	16646.81
778+50.00	24.17	0.00	0.00	29.80	0.00	0.56	16676.051
779+00.00	43.07	0.00	0.00	62.26	0.00	0.00	16738.31
779+50.00	44.89	0.00	0.48	81.44	0.00	0.56	16819.199
780+00.00	57.27	0.00	0.00	94.59	0.00	0.56	16913.236
780+50.00	77.56	0.00	0.00	124.84	0.00	0.00	17038.079
781+00.00	80.56	0.00	0.00	146.41	0.00	0.00	17184.486

EARTHWORK DATA - C RAMP

STATION	COMMON SF	FILL SF	COMMON CY	FILL CY	MASS HAUL
771+50.00	34.66	486.88	0.00	0.00	0.00
772+00.00	74.90	552.74	101.44	1203.26	-1101.82
772+50.00	80.64	173.78	144.02	840.88	-1798.68
773+00.00	135.89	73.42	200.49	286.11	-1884.30
773+50.00	113.12	41.17	230.56	132.63	-1786.36
774+00.00	98.98	34.92	196.39	88.07	-1678.04
774+50.00	49.18	31.55	137.19	76.93	-1617.79
774+56.00	46.01	35.77	10.58	9.35	-1616.56
775+00.00	47.78	137.41	76.42	176.39	-1716.53
775+50.00	41.95	200.78	83.08	391.42	-2024.87
776+00.00	144.00	127.20	172.18	379.61	-2232.30
776+50.00	130.51	101.89	254.18	265.15	-2243.27
777+00.00	164.03	74.54	272.72	204.20	-2174.75
777+50.00	125.89	21.99	268.44	111.72	-2018.03
778+00.00	126.59	4.87	233.78	31.09	-1815.34
778+50.00	85.50	6.31	196.38	12.94	-1631.90
779+00.00	124.30	2.15	194.26	9.79	-1447.44
779+50.00	174.53	0.51	276.69	3.08	-1173.82
780+00.00	141.05	0.00	292.20	0.59	-882.21
780+50.00	137.28	0.00	257.71	0.00	-624.49
781+00.00	156.85	0.00	272.34	0.00	-352.15
781+50.00	41.92	0.00	184.05	0.00	-168.10
782+00.00	39.86	0.00	75.72	0.00	-92.38
782+50.00	37.88	0.00	71.98	0.00	-20.40
783+00.00	37.20	0.00	69.52	0.00	49.12
783+50.00	41.64	0.00	73.00	0.00	122.12
784+00.00	104.64	0.00	135.44	0.00	257.56
784+50.00	119.15	0.00	207.21	0.00	464.78

Mass haul does not account for unusable material.

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EARTHWORK DATA - D RAMP

STATION	COMMON SF	FILL SF	EBS SF	COMMON CY	FILL CY	EBS CY	MASS HAUL
754+50.00	91.47	361.39	82.20	0.00	0.00	76.11	-42.81
755+00.00	8.97	387.27	94.58	93.00	866.50	163.69	-908.39
755+50.00	36.50	182.81	95.20	42.10	659.81	175.72	-1624.95
756+00.00	161.69	63.24	0.00	183.51	284.78	88.15	-1775.80
756+50.00	366.74	0.00	0.00	489.29	73.19	0.00	-1359.71
757+00.00	587.23	2.62	0.00	883.31	3.03	0.00	-479.44
757+50.00	705.98	1.12	0.00	1197.42	4.33	0.00	713.65
758+00.00	838.33	0.40	0.00	1429.92	1.76	0.00	2141.81
758+50.00	931.34	0.10	0.00	1638.58	0.58	0.00	3779.81
759+00.00	1048.68	1.53	0.00	1833.35	1.89	0.00	5611.28
759+50.00	876.03	3.32	0.00	1782.14	5.61	0.00	7387.81
760+00.00	941.56	0.00	0.00	1682.95	3.84	0.00	9066.92
760+50.00	952.10	0.00	0.00	1753.39	0.00	0.00	10820.31
761+00.00	959.72	0.00	0.00	1770.20	0.00	0.00	12590.51
761+50.00	962.38	0.00	0.00	1779.72	0.00	0.00	14370.23
762+00.00	1146.73	0.00	0.00	1952.88	0.00	0.00	16323.11
762+50.00	1071.39	0.00	0.00	2053.81	0.00	0.00	18376.93
763+00.00	1113.65	0.00	0.00	2023.19	0.00	0.00	20400.11
763+50.00	1124.91	6.06	0.00	2072.74	7.01	0.00	22465.84
764+00.00	1029.79	0.00	0.00	1995.09	7.01	0.00	24453.92
764+50.00	720.78	0.01	0.00	1620.90	0.01	0.00	26074.80
765+00.00	995.33	0.00	0.00	1588.99	0.01	0.00	27663.78
765+50.00	1014.61	0.00	0.00	1861.06	0.00	0.00	29524.84
766+00.00	917.06	0.05	0.00	1788.58	0.06	0.00	31313.36
766+50.00	808.02	2.89	0.00	1597.30	3.40	0.00	32907.26
767+00.00	666.94	7.14	0.00	1365.70	11.61	0.00	34261.35
767+50.00	535.74	9.92	0.00	1113.59	19.75	0.00	35355.20
768+00.00	517.66	51.15	0.00	975.37	70.68	0.00	36259.89
768+50.00	381.48	52.16	0.00	832.54	119.57	0.00	36972.85
769+00.00	278.10	49.50	0.00	610.72	117.66	0.00	37465.91
769+50.00	20.73	26.87	0.00	276.69	88.39	0.00	37654.22
770+00.00	41.26	27.27	0.00	57.40	62.66	0.00	37648.95
770+50.00	138.71	3.79	0.00	166.64	35.95	0.00	37779.64

EARTHWORK DATA - E RAMP

STATION	COMMON SF	FILL SF	COMMON CY	FILL CY	MASS HAUL
738+50.00	35.71	70.86	0.00	0.00	0.00
739+00.00	49.97	104.51	79.33	202.97	-123.64
739+50.00	57.77	63.40	99.76	194.34	-218.22
740+00.00	118.76	19.28	163.45	95.69	-150.46
740+50.00	130.24	0.03	230.56	22.35	57.74
741+00.00	108.87	0.00	221.40	0.03	279.11
741+50.00	115.96	0.00	208.18	0.00	487.28
742+00.00	174.91	0.00	269.32	0.00	756.61
742+50.00	199.31	0.00	346.50	0.00	1103.11
743+00.00	215.07	0.00	383.69	0.00	1486.79
743+50.00	249.60	0.00	430.25	0.00	1917.04
744+00.00	136.96	8.80	357.93	10.19	2264.78
744+50.00	175.29	1.47	289.12	11.89	2542.02
745+00.00	245.18	0.00	389.32	1.70	2929.64
745+50.00	236.11	0.00	445.64	0.00	3375.28
746+00.00	236.33	0.00	437.44	0.00	3812.72
746+50.00	168.33	0.00	374.69	0.00	4187.41
747+00.00	144.64	0.96	289.79	1.11	4476.08
747+50.00	151.95	4.44	274.62	6.25	4744.45
748+00.00	360.71	28.71	474.69	38.37	5180.77
748+50.00	459.48	52.48	759.44	93.97	5846.24
749+00.00	505.91	78.51	893.88	151.61	6588.51
749+50.00	538.66	109.09	967.19	217.13	7338.57
750+00.00	542.17	152.83	1000.77	303.15	8036.19
750+50.00	597.94	187.25	1055.66	393.61	8698.24

EARTHWORK DATA - F RAMP

STATION	CUT SF	ROCK SF	FILL SF	CUT CY	ROCK CY	FILL CY	MASS HAUL
740+50.00	390.51	58.96	21.28	0.00	0.00	0.00	0.00
741+00.00	531.91	95.88	9.38	854.09	143.37	35.49	872.37
741+50.00	683.17	145.66	4.78	1125.07	223.65	16.39	2064.92
742+00.00	845.28	269.96	2.60	1415.23	384.83	8.54	3615.93
742+50.00	1048.15	624.62	1.54	1753.18	828.31	4.79	5674.93
743+00.00	620.94	346.80	0.32	1545.45	899.46	2.15	7555.53
743+50.00	776.25	372.69	3.31	1293.69	666.19	4.20	9094.84
744+00.00	900.55	396.37	0.53	1552.59	712.09	4.44	10910.03
744+50.00	1068.56	421.45	0.00	1823.25	757.24	0.61	13016.63
745+00.00	1270.29	443.72	0.00	2165.60	801.08	0.00	15482.64
745+50.00	1556.34	484.39	0.00	2617.25	859.36	0.00	18422.15
746+00.00	1800.79	502.76	0.00	3108.45	914.03	0.00	21873.36
746+50.00	1762.68	792.05	0.00	3299.51	1198.90	0.00	25622.46
747+00.00	1382.28	893.43	3.69	2912.00	1560.63	4.27	29115.42
747+50.00	1161.77	371.12	49.22	2355.60	1170.88	61.24	31848.87
748+00.00	880.49	0.09	115.36	1890.98	343.71	190.49	33678.25
748+50.00	624.25	0.00	167.34	1393.28	0.08	327.20	34744.36
749+00.00	398.93	0.00	251.45	947.39	0.00	484.71	35207.04
749+50.00	267.35	0.00	344.73	616.93	0.00	690.02	35133.94
750+00.00	234.18	0.00	424.88	464.38	0.00	890.75	34707.57
750+50.00	204.24	0.00	502.68	405.94	0.00	1073.56	34039.95
751+00.00	167.97	0.00	661.19	344.64	0.00	1347.07	33037.52
751+50.00	0.00	0.00	886.44	155.53	0.00	1791.24	31401.81

EARTHWORK DATA - E RAMP WIDENING

STATION	COMMON SF	FILL SF	COMMON CY	FILL CY	MASS HAUL
746+00.00	277.30	0.00	0.00	0.00	0.00
746+50.00	205.13	0.00	446.69	0.00	446.69
747+00.00	170.18	0.96	347.51	1.11	793.09
747+50.00	148.38	4.54	294.96	6.37	1081.69
748+00.00	133.00	19.89	260.54	28.28	1313.95

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EARTHWORK DATA - F RAMP WIDENING

STATION	COMMON SF	FILL SF	COMMON CY	FILL CY	MASS HAUL
746+00.00	1728.30	0.00	0.00	0.00	0.00
746+50.00	1702.96	0.00	3177.09	0.00	3177.09
747+00.00	1348.58	0.96	2825.50	1.11	6001.48

EARTHWORK DATA - TEMP AT RAMP

STATION	COMMON SF	MARSH SF	FILL SF	COMMON CY	MARSH CY	FILL CY	MASS HAUL
350+00.00	45.63	0.00	8.53	0.00	0.00	0.00	0.00
350+50.00	52.53	0.00	9.75	90.89	0.00	21.16	69.73
351+00.00	270.76	0.00	0.00	299.34	0.00	11.28	357.79
351+50.00	343.04	0.00	0.00	568.33	0.00	0.00	926.12
352+00.00	270.24	0.00	0.00	567.85	0.00	0.00	1493.97
352+50.00	6.06	0.00	20.04	255.83	0.00	23.19	1726.61
353+00.00	7.32	0.00	30.75	12.39	0.00	58.78	1680.22
353+50.00	8.79	0.00	32.97	14.92	0.00	73.75	1621.38
354+00.00	9.62	0.00	57.25	17.05	0.00	104.42	1534.01
354+50.00	28.31	0.00	126.00	35.12	0.00	212.09	1357.03
355+00.00	27.78	0.00	89.48	51.94	0.00	249.40	1159.57
355+50.00	10.38	0.00	76.43	35.33	0.00	192.03	1002.88
356+00.00	20.83	0.00	84.29	28.90	0.00	186.02	845.76
356+50.00	21.92	0.00	108.45	39.58	0.00	223.08	662.26
357+00.00	0.00	0.00	111.75	20.30	0.00	254.86	427.70
357+50.00	0.00	0.00	117.06	0.00	0.00	264.83	162.87
358+00.00	0.00	58.96	115.22	0.00	0.00	268.84	-105.97
358+50.00	10.15	95.88	92.03	9.40	143.37	239.87	-497.74
359+00.00	23.71	145.66	79.17	31.35	223.65	198.15	-916.14
359+50.00	18.01	269.96	40.56	38.63	384.83	138.58	-1449.02
360+00.00	5.74	0.00	0.00	21.99	249.96	46.94	-1755.18
360+50.00	0.00	0.00	0.00	5.31	0.00	0.00	-1749.87

EARTHWORK DATA - TEMP BT RAMP

STATION	COMMON SF	FILL SF	COMMON CY	FILL CY	MASS HAUL
363+50.00	1.39	0.00	0.00	0.00	0.00
364+00.00	0.12	0.00	1.40	0.00	1.40
364+50.00	0.00	12.58	0.11	14.56	-13.05
365+00.00	11.28	14.71	10.44	31.59	-34.19
365+50.00	21.19	2.04	30.06	19.39	-23.51
365+63.00	22.74	0.13	10.58	0.65	-13.59

EARTHWORK DATA - TEMP CT RAMP

STATION	COMMON SF	FILL SF	COMMON CY	FILL CY	MASS HAUL
370+90.00	0.00	71.31	0.00	0.00	0.00
371+00.00	0.60	1.98	0.11	16.97	-16.85
371+50.00	7.15	0.00	7.18	2.29	-11.97
372+00.00	0.00	549.53	6.62	636.03	-641.38
372+25.00	0.00	534.53	0.00	627.35	-1268.73
372+50.00	55.63	526.55	25.75	614.05	-1857.03
373+00.00	30.24	543.76	79.51	1238.78	-3016.30
373+50.00	9.00	430.79	36.33	1127.95	-4107.92
374+00.00	12.65	202.22	20.05	732.65	-4820.52
374+50.00	1.97	1.26	13.54	235.51	-5042.50
375+00.00	2.29	0.49	3.94	2.03	-5040.58
375+50.00	12.87	14.62	14.04	17.49	-5044.03
376+00.00	19.33	11.31	29.81	30.01	-5044.22
376+50.00	36.37	8.54	51.57	22.97	-5015.63
377+00.00	45.14	9.19	75.47	20.52	-4960.67
377+50.00	42.31	10.30	80.97	22.56	-4902.26
378+00.00	39.38	12.55	75.64	26.45	-4853.07
378+50.00	37.46	10.84	71.15	27.07	-4808.99
379+00.00	35.41	7.78	67.47	21.55	-4763.07
379+50.00	35.92	5.98	66.05	15.93	-4712.95
380+00.00	30.55	3.33	61.55	10.78	-4662.18
380+25.00	28.97	2.51	27.56	3.38	-4638.00
380+50.00	20.56	1.74	22.93	2.46	-4617.53
381+00.00	33.32	1.17	49.89	3.37	-4571.01
381+50.00	27.08	0.90	55.93	2.40	-4517.48
382+00.00	31.42	0.57	54.17	1.70	-4465.02
382+50.00	33.19	0.00	59.82	0.66	-4405.85
383+00.00	29.53	0.00	58.07	0.00	-4347.78
383+50.00	24.85	0.00	50.35	0.00	-4297.42
384+00.00	26.39	0.00	47.44	0.00	-4249.98
384+50.00	24.85	0.00	47.44	0.00	-4202.54

EARTHWORK DATA - TEMP CU RAMP

STATION	COMMON SF	FILL SF	COMMON CY	FILL CY	MASS HAUL
372+00.00	2.41	0.00	0.00	0.00	0.00
372+25.00	0.00	175.93	1.12	101.81	-100.70
372+50.00	0.00	247.06	0.00	244.79	-345.48
373+00.00	39.91	257.69	36.95	584.20	-892.73
373+50.00	37.61	334.26	71.78	685.13	-1506.08
374+00.00	0.00	467.22	34.82	927.64	-2398.89
374+50.00	0.00	561.91	0.00	1191.12	-3590.02
375+00.00	0.00	330.93	0.00	1033.38	-4623.40
375+50.00	33.56	69.24	31.07	463.16	-5055.48
376+00.00	0.00	25.81	31.07	110.01	-5134.42
376+50.00	0.00	23.96	0.00	57.60	-5192.02

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EARTHWORK DATA - USH 51 MEDIAN

STATION	COMMON SF	FILL SF	COMMON CY	FILL CY	MASS HAUL
804+00.00	123.51	0.00	478.74	0.00	16140.34
805+00.00	129.65	0.00	468.81	0.00	16609.16
806+00.00	117.32	0.00	457.35	0.00	17066.51
807+00.00	79.93	0.00	365.28	0.00	17431.79
808+00.00	61.31	0.00	261.56	0.00	17431.79
809+00.00	46.40	0.00	199.46	0.00	17431.79
810+00.00	57.28	0.00	192.00	0.00	17431.79
811+00.00	58.36	0.00	214.15	0.00	17431.79

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EARTHWORK DATA - NB RUNAROUND (NR)

STATION	COMMON SF	MARSH	FILL SF	COMMON CY	MARSH CY	FILL CY	MASS HAUL
324+00.00	16.25	0.00	39.02	0.00	0.00	0.00	0
325+00.00	18.07	0.00	37.06	63.56	0.00	176.11	-112.56
326+00.00	28.84	0.00	48.67	86.87	0.00	198.45	-224.13
327+00.00	27.82	0.00	44.56	104.93	0.00	215.81	-335.02
328+00.00	28.57	0.00	41.39	104.43	0.00	198.96	-429.55
329+00.00	30.87	0.00	44.82	110.07	0.00	199.56	-519.04
330+00.00	29.85	0.00	49.74	112.44	0.00	218.89	-625.48
331+00.00	29.43	0.00	54.34	109.78	0.00	240.93	-756.63
332+00.00	28.70	0.00	80.79	107.65	0.00	312.80	-961.78
332+39.00	29.52	0.00	132.49	42.05	0.00	192.54	-1112.28
332+50.00	32.38	0.00	134.60	12.61	0.00	68.01	-1167.68
333+00.00	61.07	0.00	171.92	86.53	0.00	354.77	-1435.92
333+22.00	58.02	0.00	156.23	48.52	0.00	167.11	-1554.51
333+50.00	33.10	0.00	167.29	47.25	0.00	209.69	-1716.96
334+00.00	34.00	0.00	140.10	62.13	0.00	355.78	-2010.60
335+00.00	29.00	0.00	114.60	116.67	0.00	589.58	-2483.52
336+00.00	33.21	0.00	89.14	115.20	0.00	471.62	-2839.94
337+00.00	51.96	0.00	75.59	157.72	0.00	381.32	-3063.53
338+00.00	48.33	0.00	127.35	185.72	0.00	469.77	-3347.58
338+40.00	46.76	0.00	187.65	70.44	0.00	291.67	-3568.81
338+55.00	59.00	0.00	160.53	29.38	0.00	120.90	-3660.33
339+00.00	48.55	0.00	181.28	89.63	0.00	356.05	-3926.75
340+00.00	45.50	0.00	62.47	174.17	0.00	564.24	-4316.82
341+00.00	40.66	0.00	41.60	159.56	0.00	240.90	-4398.17
341+50.00	45.76	0.00	28.06	80.02	0.00	80.63	-4398.78
342+00.00	41.49	0.00	21.75	80.79	0.00	57.65	-4375.64
342+50.00	17.69	0.00	12.26	54.80	0.00	39.36	-4360.21
343+00.00	22.41	0.00	3.20	37.13	0.00	17.89	-4340.97
344+00.00	35.41	0.00	4.85	107.07	0.00	18.63	-4252.53
345+00.00	48.44	0.00	1.93	155.28	0.00	15.69	-4112.95
346+00.00	40.38	0.00	1.45	164.48	0.00	7.82	-3956.29
347+00.00	79.73	0.00	2.10	222.43	0.00	8.22	-3742.08
348+00.00	80.22	0.00	6.41	296.20	0.00	19.70	-3465.58
349+00.00	75.87	0.00	8.87	289.06	0.00	35.37	-3211.89
350+00.00	51.77	0.00	9.52	236.37	0.00	42.57	-3018.09
351+00.00	277.82	0.00	5.46	610.35	0.00	34.68	-2442.42
352+00.00	89.04	0.00	0.00	679.37	0.00	12.64	-1775.68
352+66.00	59.79	0.00	23.52	181.90	0.00	35.93	-1629.71
353+00.00	39.16	0.00	34.92	62.30	0.00	45.99	-1613.41
354+00.00	28.58	0.00	81.24	125.44	0.00	268.89	-1756.85

EARTHWORK DATA - NB RUNAROUND (NR)

STATION	COMMON SF	MARSH	FILL SF	COMMON CY	MARSH CY	FILL CY	MASS HAUL
355+00.00	23.50	0.00	85.24	96.44	0.00	385.37	-2045.78
355+50.00	22.37	0.00	109.54	42.47	0.00	225.44	-2228.74
356+00.00	29.86	0.00	170.41	48.36	0.00	324.02	-2504.40
356+50.00	27.65	0.00	261.07	53.25	0.00	499.40	-2950.55
357+00.00	35.92	0.00	362.97	58.86	0.00	722.27	-3613.96
357+50.00	47.05	0.00	518.29	76.82	0.00	1019.98	-4557.11
358+00.00	54.65	0.00	706.58	94.17	0.00	1417.67	-5880.62
359+00.00	79.86	134.37	1029.61	249.09	0.00	4018.96	-9650.48
360+00.00	77.59	118.88	1131.54	291.57	468.98	5002.66	-14889.17
361+00.00	85.97	105.95	980.68	302.89	416.35	4889.40	-19944.08
362+00.00	0.00	81.22	683.49	159.20	346.61	3852.25	-24027.06
363+00.00	0.00	0.00	367.88	0.00	0.00	2433.73	-26460.78
364+00.00	2.41	0.00	352.01	4.46	0.00	1666.41	-28122.73
365+00.00	20.21	0.00	427.28	41.89	0.00	1803.91	-29884.76
365+50.00	4.24	0.00	408.50	22.64	0.00	967.34	-30829.46
366+00.00	8.07	0.00	329.54	11.40	0.00	854.21	-31672.27
366+50.00	23.60	0.00	237.82	29.32	0.00	656.67	-32299.61
367+00.00	24.06	0.00	172.23	44.13	0.00	474.59	-32730.08
368+00.00	32.39	0.00	91.32	104.54	0.00	610.07	-33235.61
369+00.00	30.23	0.00	70.27	115.96	0.00	374.05	-33493.70
370+00.00	33.73	0.00	57.31	118.44	0.00	295.32	-33670.58
371+00.00	32.66	0.00	67.13	122.94	0.00	288.06	-33835.69
372+00.00	28.05	0.00	50.36	112.43	0.00	271.97	-33995.23
373+00.00	57.84	0.00	60.77	159.06	0.00	257.25	-34093.42
374+00.00	49.18	0.00	56.54	198.19	0.00	271.55	-34166.79
374+50.00	38.90	0.00	140.45	81.56	0.00	228.00	-34313.23
374+74.00	35.65	0.00	156.70	33.13	0.00	165.08	-34445.18
375+00.00	73.17	0.00	169.31	52.39	0.00	196.21	-34588.99
375+50.00	74.73	0.00	234.40	136.94	0.00	467.26	-34919.31
376+00.00	66.51	0.00	259.68	130.78	0.00	571.85	-35360.38
376+50.00	69.72	0.00	172.89	126.14	0.00	500.66	-35734.90
377+00.00	52.64	0.00	171.75	113.30	0.00	398.89	-36020.49
377+50.00	38.92	0.00	133.37	84.78	0.00	353.15	-36288.86
378+00.00	25.90	0.00	77.15	60.02	0.00	243.66	-36472.50
379+00.00	28.29	0.00	30.35	100.35	0.00	248.84	-36620.99
380+00.00	46.29	0.00	53.82	138.11	0.00	194.84	-36677.72
381+00.00	29.05	0.00	47.68	139.52	0.00	234.95	-36773.16
382+00.00	28.80	0.00	49.61	107.13	0.00	225.21	-36891.23
383+00.00	21.94	0.00	64.12	93.96	0.00	263.26	-37060.54
384+00.00	22.12	0.00	76.25	81.59	0.00	324.93	-37303.87

EARTHWORK DATA - NB RUNAROUND (NR)

STATION	COMMON SF	MARSH	FILL SF	COMMON CY	MARSH CY	FILL CY	MASS HAUL
385+00.00	19.55	0.00	75.27	77.17	0.00	350.74	-37577.45
385+50.00	19.14	0.00	78.45	35.82	0.00	177.92	-37719.54
386+00.00	25.32	0.00	138.12	41.17	0.00	250.66	-37929.03
386+50.00	35.36	0.00	133.46	56.19	0.00	314.33	-38187.18
387+00.00	27.13	0.00	115.48	57.86	0.00	288.13	-38417.44
387+50.00	17.34	0.00	135.02	41.18	0.00	289.93	-38666.20
387+75.00	16.19	0.00	147.66	15.52	0.00	163.59	-38814.26
388+00.00	16.99	0.00	125.83	15.36	0.00	158.27	-38957.17
388+50.00	17.85	0.00	46.82	32.26	0.00	199.83	-39124.74
389+00.00	6.47	0.00	0.00	22.52	0.00	54.19	-39156.41
389+50.00	15.13	0.00	95.63	20.00	0.00	110.68	-39247.09
389+75.00	15.12	0.00	166.47	14.00	0.00	151.68	-39384.76
390+00.00	16.06	0.00	158.98	14.44	0.00	188.34	-39558.67
390+50.00	16.47	0.00	158.95	30.12	0.00	367.97	-39896.52
391+00.00	16.78	0.00	139.39	30.79	0.00	345.30	-40211.04
392+00.00	13.05	0.00	123.58	55.24	0.00	608.73	-40764.52
393+00.00	15.90	0.00	136.12	53.61	0.00	601.16	-41312.07
394+00.00	13.43	0.00	170.46	54.31	0.00	709.68	-41967.43
395+00.00	14.50	0.00	157.26	51.72	0.00	758.61	-42674.32
396+00.00	15.98	0.00	142.74	56.44	0.00	694.44	-43312.32
397+00.00	14.45	0.00	155.87	56.35	0.00	691.23	-43947.19
398+00.00	17.82	0.00	127.36	59.76	0.00	655.63	-44543.06
399+00.00	15.88	0.00	117.27	62.41	0.00	566.27	-45046.92
400+00.00	19.83	0.00	100.92	66.13	0.00	505.07	-45485.86
401+00.00	17.19	0.00	94.75	68.56	0.00	452.94	-45870.25
402+00.00	22.68	0.00	60.15	73.83	0.00	358.56	-46154.98
402+76.00	20.30	0.00	120.09	60.49	0.00	317.09	-46411.58
403+00.00	19.76	0.00	124.13	17.80	0.00	135.68	-46529.45
404+00.00	20.96	0.00	82.12	75.41	0.00	477.43	-46931.47
405+00.00	18.74	0.00	72.76	73.52	0.00	358.52	-47216.47
406+00.00	22.17	0.00	55.32	75.76	0.00	296.48	-47437.20
407+00.00	23.57	0.00	35.35	84.70	0.00	209.88	-47562.38
408+00.00	21.92	0.00	10.93	84.24	0.00	107.13	-47585.27
409+00.00	21.44	0.00	1.70	80.30	0.00	29.24	-47534.21
410+00.00	20.06	0.00	0.00	76.85	0.00	3.94	-47461.29
411+00.00	19.21	0.00	0.00	72.72	0.00	0.00	-47388.57

EARTHWORK DATA - NB RUNAROUND (NR)

STATION	COMMON SF	FILL SF	COMMON CY	FILL CY	MASS HAUL
413+00.00	5.80	32.05	0.00	0.00	0.00
414+00.00	14.47	8.22	37.54	93.22	-55.68
415+00.00	12.62	51.86	50.17	139.07	-144.59
416+00.00	12.93	107.22	47.31	368.24	-465.51
417+00.00	17.57	151.26	56.48	598.33	-1007.37
418+00.00	0.00	155.00	32.54	708.94	-1683.76
418+55.00	0.00	192.81	0.00	442.81	-2126.58
419+00.00	1.62	98.19	1.35	303.13	-2428.35
420+00.00	17.06	21.84	34.59	277.85	-2671.61
421+00.00	17.74	8.14	64.44	69.40	-2676.56
422+00.00	13.53	3.76	57.91	27.55	-2646.20
423+00.00	13.78	0.00	50.57	8.70	-2604.33

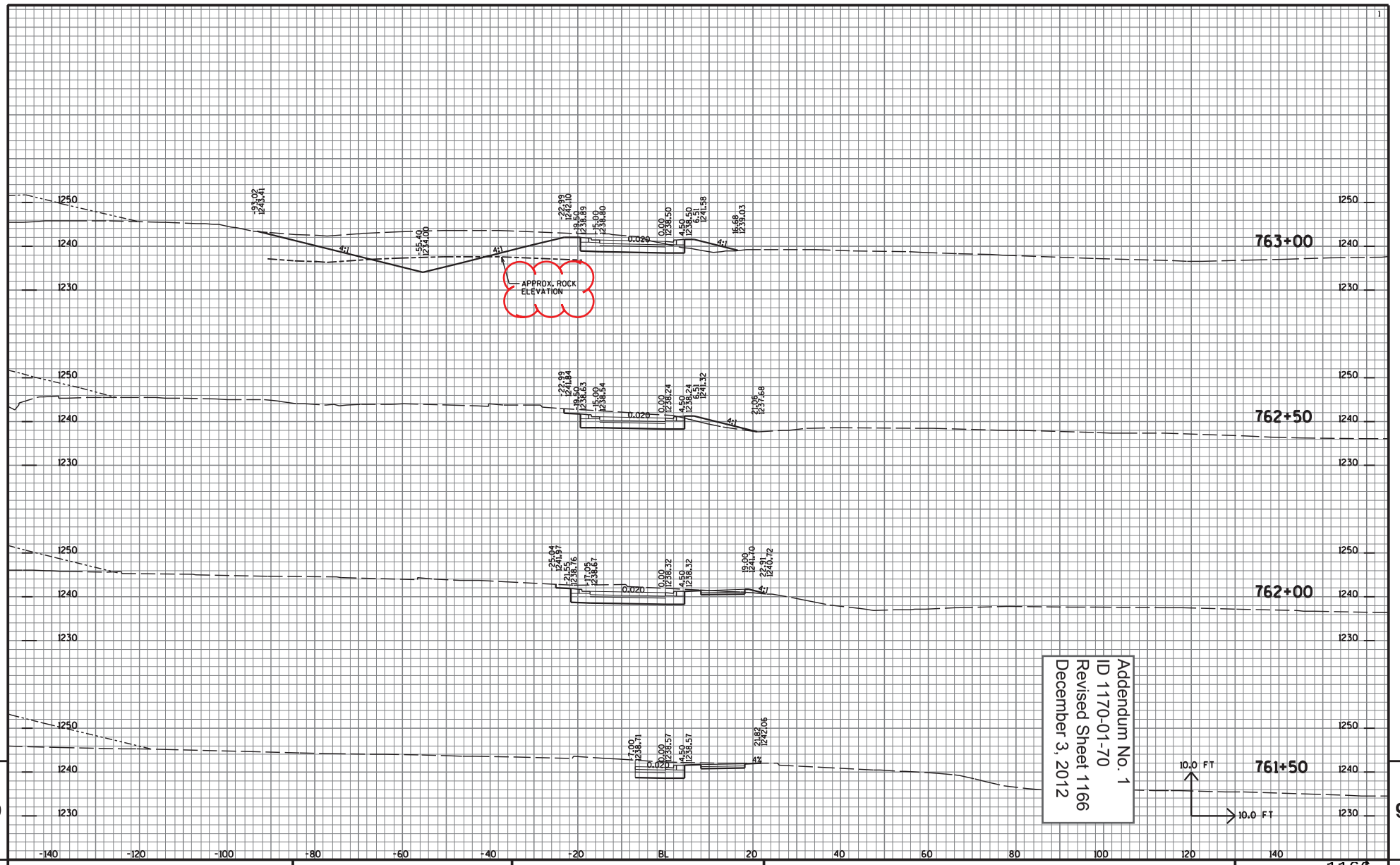
EARTHWORK DATA - NS LINE - INSIDE MEDIAN WIDENING

STATION	COMMON SF	FILL SF	COMMON CY	FILL CY	MASS HAUL
705+00.00	30.29	0.38	0.00	0.00	0.00
705+50.00	29.47	7.76	55.33	9.42	45.91
706+00.00	29.42	1.27	54.53	10.45	89.99
706+50.00	33.55	3.62	58.31	5.66	142.63
707+00.00	33.76	8.18	62.32	13.66	191.30
707+50.00	33.49	9.79	62.27	20.80	232.77
708+00.00	31.74	10.03	60.40	22.94	270.23
708+50.00	30.37	11.54	57.51	24.97	302.77
709+00.00	29.83	12.39	55.74	27.70	330.82
709+50.00	32.42	13.19	57.64	29.61	358.85
710+00.00	35.85	9.05	63.21	25.74	396.32
710+50.00	34.19	12.44	64.85	24.87	436.30
711+00.00	34.15	12.88	63.28	29.31	470.27
711+50.00	35.47	15.15	64.46	32.44	502.29
711+88.00	35.80	15.18	50.15	26.68	525.77
712+00.00	37.11	8.66	16.20	6.62	535.35
712+50.00	34.39	13.84	66.20	26.04	575.51
713+00.00	36.73	11.34	65.85	29.14	612.22
713+50.00	36.56	11.97	67.86	26.98	653.10
714+00.00	35.69	15.62	66.90	31.93	688.07
714+50.00	36.40	19.31	66.75	40.43	714.39
715+00.00	37.89	14.95	68.79	39.65	743.52

EARTHWORK DATA - NS LINE - INSIDE MEDIAN WIDENING

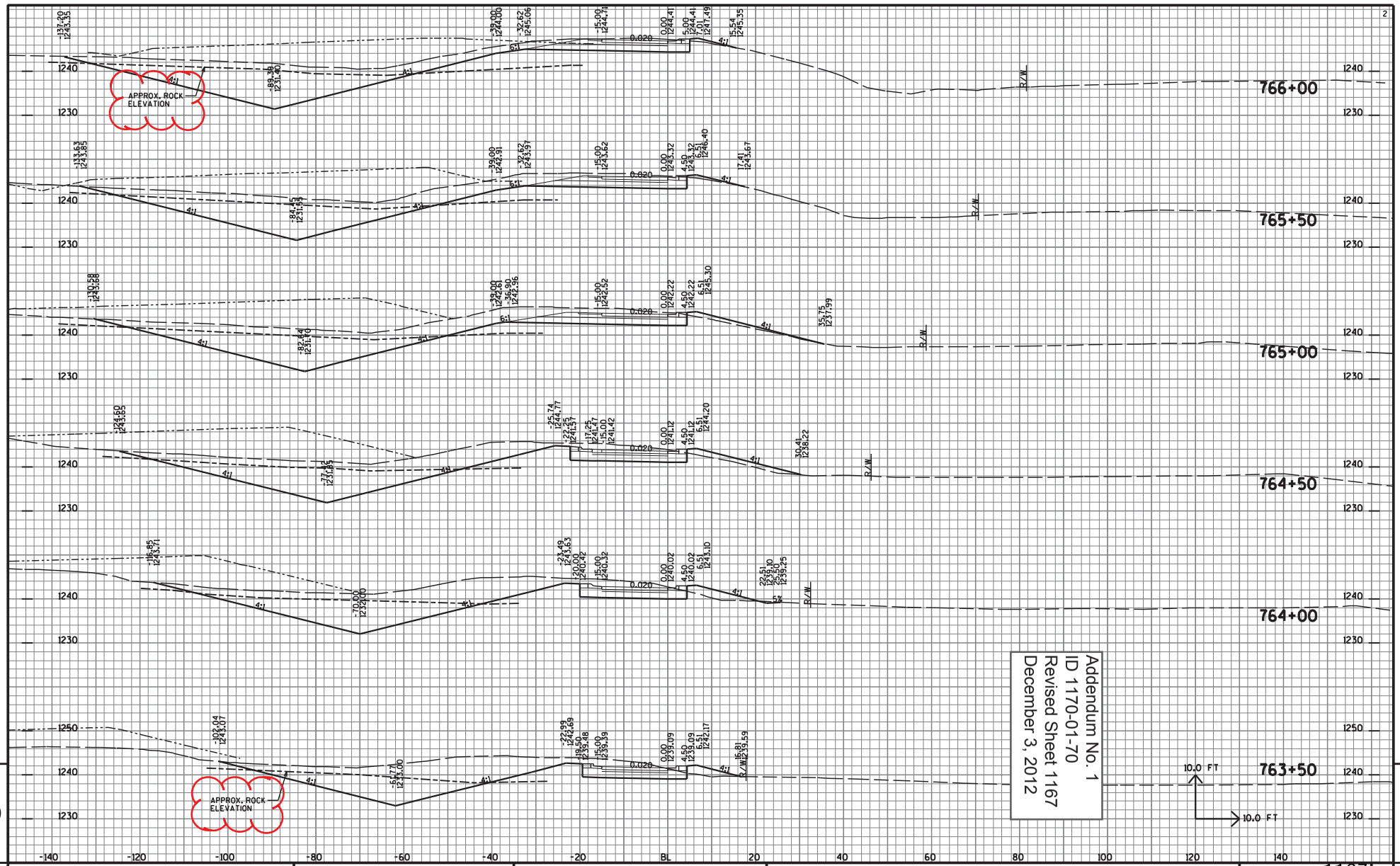
STATION	COMMON SF	FILL SF	COMMON CY	FILL CY	MASS HAUL
715+50.00	37.67	12.13	69.96	31.34	782.14
716+00.00	37.75	9.68	69.83	25.24	826.73
716+50.00	37.78	6.94	69.94	19.24	877.43
717+00.00	36.47	8.55	68.75	17.93	928.25
717+50.00	35.33	12.18	66.48	23.99	970.74
718+00.00	34.84	16.21	64.97	32.86	1002.85
718+50.00	34.69	24.14	64.38	46.70	1020.53
719+00.00	35.87	18.85	65.33	49.76	1036.11
719+50.00	36.36	19.93	66.88	44.88	1058.10
720+00.00	42.14	12.55	72.69	37.59	1093.20
720+50.00	45.65	7.16	81.29	22.81	1151.67
721+00.00	39.51	8.54	78.85	18.17	1212.35
721+50.00	44.71	7.59	77.98	18.67	1271.66
722+00.00	44.84	11.08	82.92	21.61	1332.97
722+50.00	40.08	11.44	78.63	26.06	1385.54
723+00.00	36.32	17.15	70.74	33.09	1423.19
723+50.00	36.21	8.61	67.16	29.81	1460.53
723+60.00	36.81	7.71	13.52	3.78	1470.28
724+00.00	34.84	3.76	53.07	10.62	1512.73
724+50.00	28.14	3.96	58.31	8.94	1562.11
725+00.00	27.99	0.00	51.97	4.58	1609.50
725+50.00	24.93	5.71	49.00	6.61	1651.89
726+00.00	28.60	0.51	49.56	7.20	1694.25
726+50.00	17.55	0.00	42.73	0.59	1736.40
727+00.00	12.94	0.00	28.23	0.00	1764.63

Addendum No. 1
ID 1170-01-70
Revised Sheet 1086
December 3, 2012



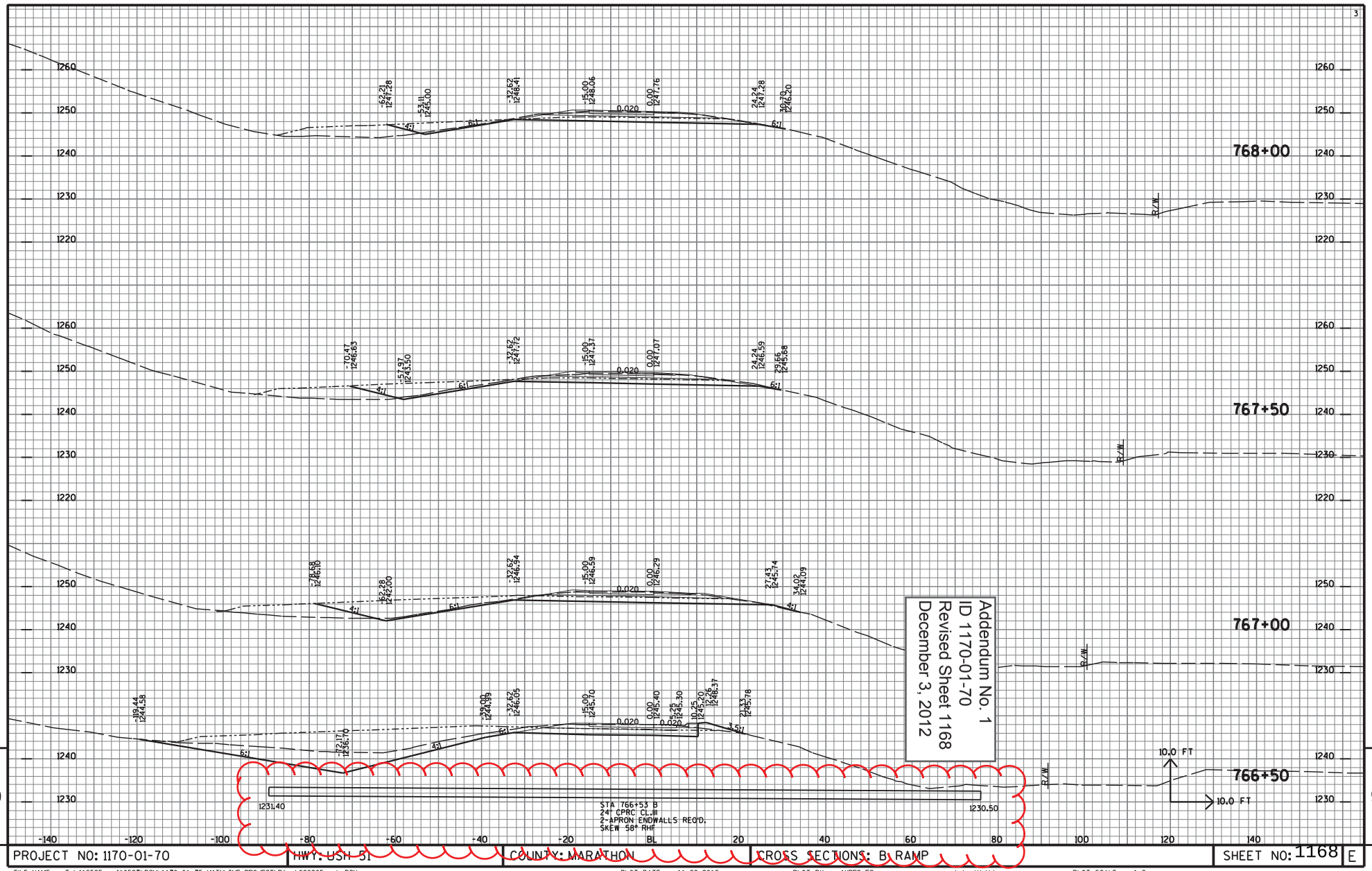
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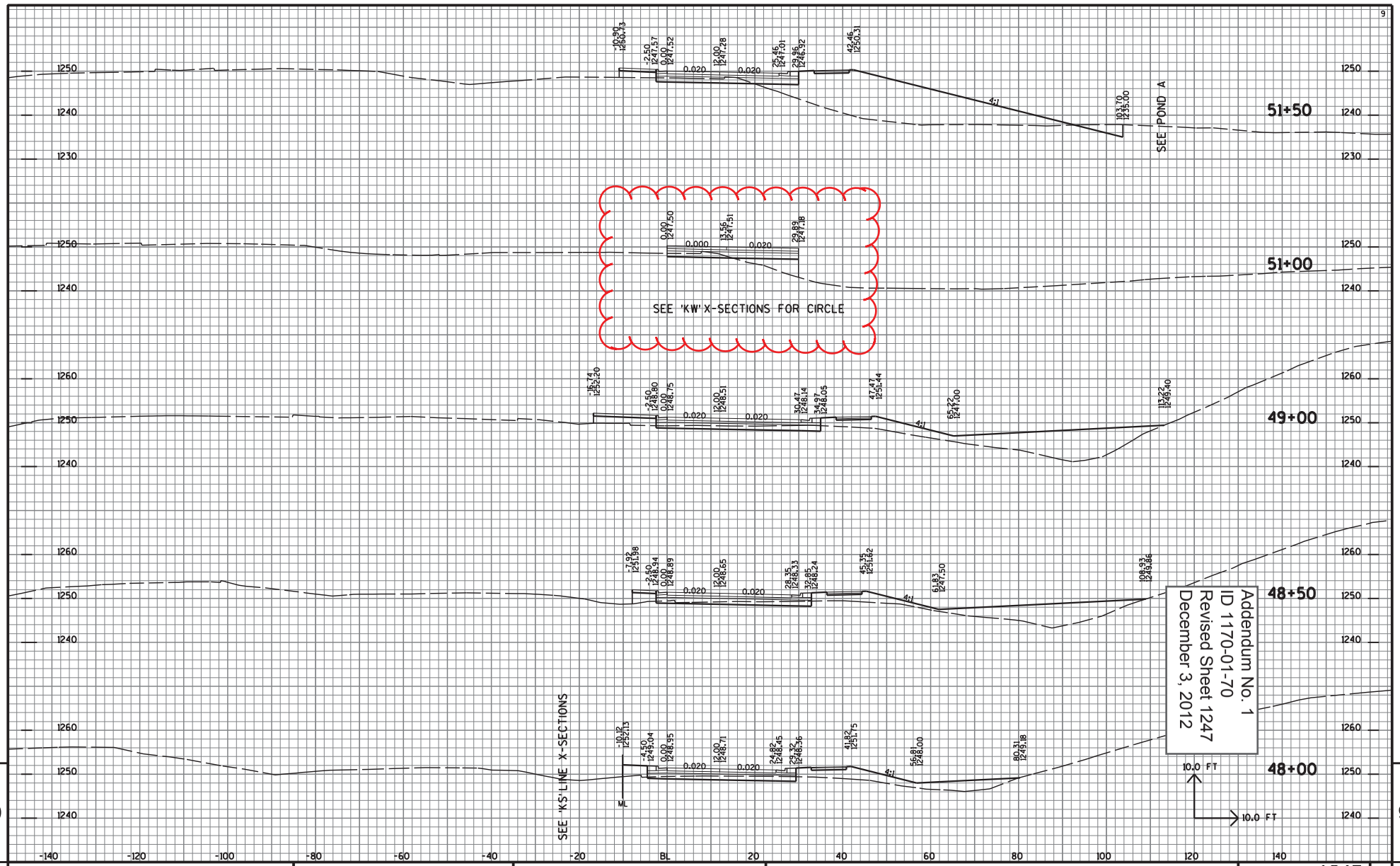
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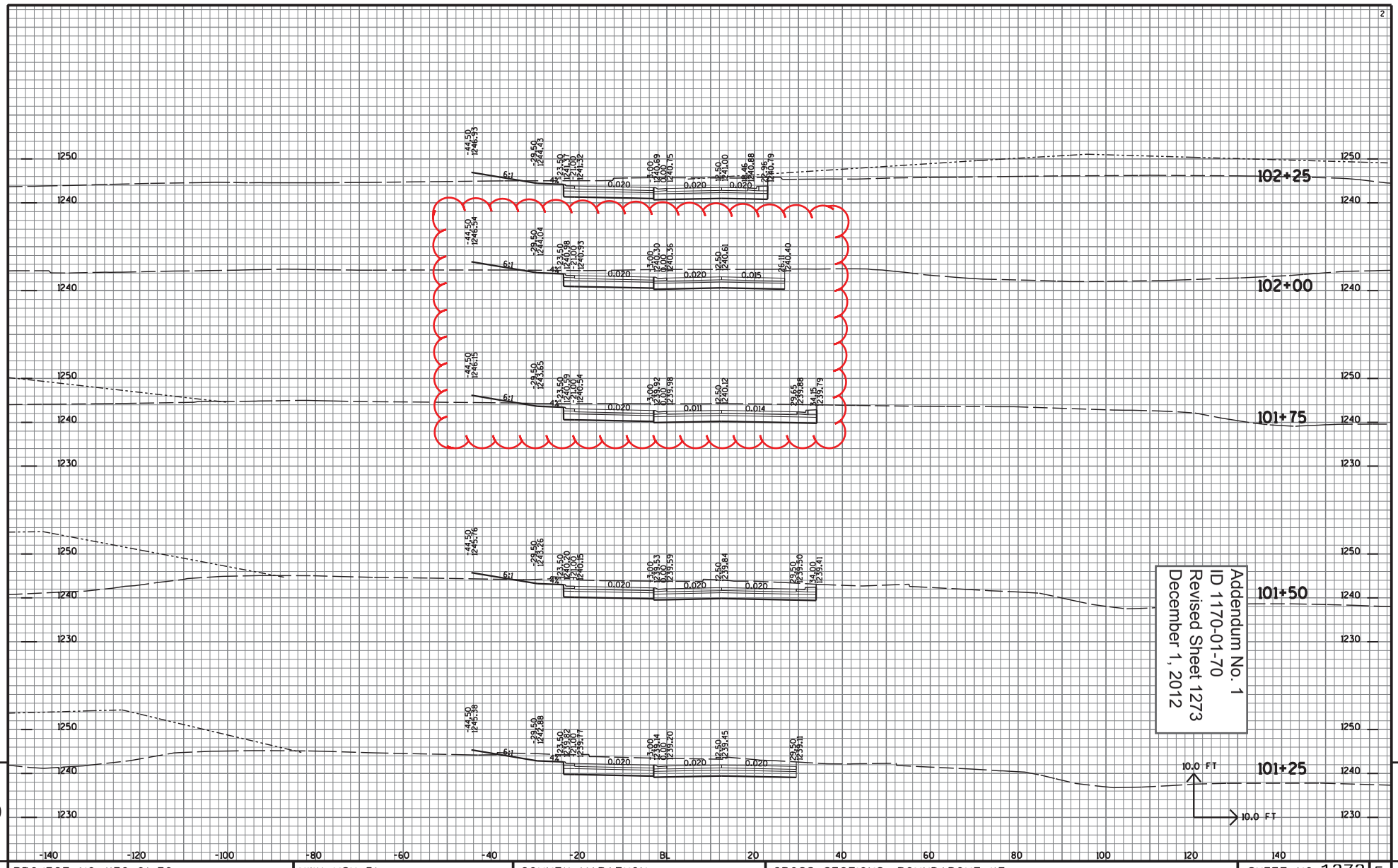
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PROJECT NO: 1170-01-70	HWY: USH 51	COUNTY: MARATHON	CROSS SECTIONS: ROUNDABOUT KE	SHEET NO: 1273	E

FILE NAME : T:\410525 - 410527\DGN\1170-01-75 MAINLINE PROJECT\Plan\090214_xske.DGN PLOT DATE : 11/28/2012 PLOT BY : AYRES-EC eau_shd_util.tbl PLOT SCALE : 1:2