MAD AUGUST 2013

PROJECT ID: 6020-02-72

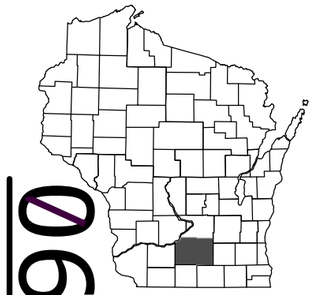
WITH:

COUNTY: DANE

ORDER OF SHEETS

Section No.	1	Title
Section No.	2	Typical Sections and Details
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 = 796



N

DESIGN DESIGNATION

A.A.D.T. 2006	=	16865
A.A.D.T. 2030	=	28800
D.H.V.	=	3139 (BIDIRECTIONAL)
D.D.	=	60-40
T.	=	8.1%
DESIGN SPEED	=	70 MPH
ESALS	=	9,059,300

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

MADISON - DEFOREST ROAD

(VINBURN ROAD - CTH V)

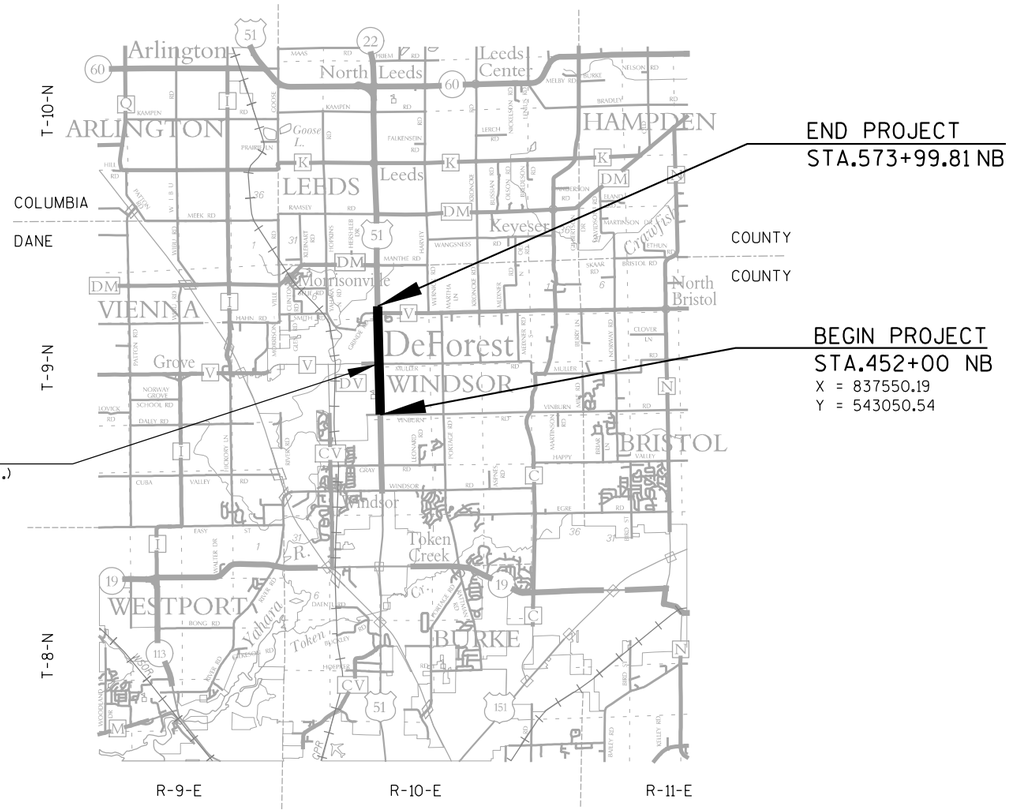
USH 51

DANE

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
6020-02-72	WISC 2013375	1

STATE PROJECT NUMBER

6020-02-72



LAYOUT

SCALE 0 1.5 MI.

TOTAL NET LENGTH OF CENTERLINE = 2.23 MI.

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	WISDOT
Designer	CHRIS HAZARD
Project Manager	ROBERT LEX
Regional Examiner	
Regional Supervisor	CHRISTOPHER HODGES
C.O. Examiner	

APPROVED FOR THE DEPARTMENT

DATE: 4/30/13 (Signature)

E

FILE NAME : P:\2011059 - US 51 WO\MicroStation\Planset\6020-02-72\010101_ti.dgn PLOT DATE : 5/21/2013 PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : 200.0000 sf / in.

WISDOT/CADDS SHEET 10

GENERAL NOTES

MISCELLANEOUS

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

THE LOCATIONS OF THE 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. THE CONTRACTOR SHALL COORDINATE HIS CONSTRUCTION ACTIVITIES WITH A CALL TO DIGGERS HOTLINE AND/OR A DIRECT CALL TO THE UTILITIES, WHICH HAVE FACILITIES IN THE AREA. NOT ALL UTILITIES ARE MEMBERS OF DIGGERS HOTLINE.

RADIUS DIMENSIONS FOR THE CURB AND GUTTER ARE TO THE FLAG OF CURB, UNLESS OTHERWISE NOTED.

CURVE DATA BASED ON ARC DEFINITION.

BEARINGS ON THE PLAN ARE GRID BEARINGS TO THE NEAREST SECOND. DISTANCES SHOWN ON THE PLAN ARE GROUND DISTANCES.

WETLANDS ARE PRESENT IN AREAS ADJACENT TO THE PROJECT. DO NOT OPERATE OR STORE EQUIPMENT OUTSIDE OF THE SLOPE INTERCEPTS IN WETLAND AREAS.

PURSUANT TO CHAPTER 59 OF THE WISCONSIN STATUTES, THE CONTRACTOR SHALL CAREFULLY MAKE A SEARCH FOR EVIDENCE OF A LANDMARK IN ALL AREAS WHERE SUCH A LANDMARK MAY EXIST.

EXISTING DRIVEWAYS SHALL BE RESTORED IN KIND, UNLESS SHOWN OTHERWISE IN THE PLAN, AS DIRECTED BY THE ENGINEER IN THE FIELD AND AT THE LOCATION DETERMINED BY THE ENGINEER.

FINISHING ROADWAY SHALL INCLUDE CLEANOUT OF ALL EXISTING DRAINAGE STRUCTURES INSTALLED UNDER THIS CONTRACT, AS DIRECTED BY THE ENGINEER, AND SHALL INCLUDE REMOVAL OF ALL EXISTING SILT FENCE THAT IS NO LONGER NEEDED FOR EROSION CONTROL.

HMA PAVEMENT WEIGHT CALCULATIONS ARE BASED ON 110 LB/SY/IN.

PLACE ASPHALTIC SURFACE TEMPORARY IN ONE LAYER.

PLACE 2" HMA PAVEMENT IN ONE LAYER.

3.5" HMA PAVEMENT FOR PAVED SHOULDERS MAY BE PLACED IN ONE LAYER.

PLACE THE 3.5" AND 4.25" HMA PAVEMENT IN TWO LAYERS. THE 12.5 mm MIX GRADATION MAY BE USED FOR BOTH LAYERS.

PLACE THE 6" HMA PAVEMENT IN THREE LAYERS. THE 12.5 mm MIX GRADATION MAY BE USED FOR ALL LAYERS.

USE ASPHALTIC MATERIAL PG58-28 WITH ALL HMA PAVEMENT TYPES EXCEPT THE UPPER LAYER OF HMA PAVEMENT E-10 USED ON CTH V.

THE CONTRACTOR'S PAVING OPERATIONS SHALL BE CONSISTENT WITH THE PLAN TYPICAL SECTIONS AND CONSTRUCTED TO PREVENT HMA LONGITUDINAL JOINTS FROM BEING LOCATED WITHIN A DRIVING, TURNING, PASSING OR PARKING LANE.

GRADING/EROSION CONTROL

THE EROSION CONTROL DEVICES AS SHOWN ON THE EROSION CONTROL SHEETS ARE AT SUGGESTED LOCATIONS. EXACT LOCATION WILL BE DETERMINED BY THE ENGINEER.

PLACE SILT FENCE AT LOCATIONS DIRECTED BY THE ENGINEER PRIOR TO THE START OF CONSTRUCTION.

DIMENSIONS OF RIPRAP PLACEMENT SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

DISTURBED AREAS WITHIN THE RIGHT OF WAY, EXCEPT AREAS WITHIN THE FINISHED SHOULDER POINTS, SHALL BE TOPSOILED OR SALVAGED TOPSOILED, FERTILIZED AND SEEDED AS DIRECTED BY THE ENGINEER.

FILLS AS SHOWN ON THE PLANS PERTAINS TO EMBANKMENTS CONSTRUCTED FROM COMMON EXCAVATION MATERIAL. THE EXPANSION FACTOR USED TO COMPUTE THE VOLUME OF MATERIAL NECESSARY FOR THE FILL IS 25% - 30% FOR COMMON EXCAVATION BASED ON ITS ORIGINAL POSITION.

EXCAVATION BELOW SUBGRADE (EBS) IS PAID FOR AS COMMON EXCAVATION. THE EXACT LOCATIONS FOR EBS WILL BE DETERMINED BY THE PROJECT ENGINEER.

REMOVALS

NO TREE OR SHRUBS SHALL BE REMOVED WITHOUT THE APPROVAL OF THE ENGINEER.

DO NOT REMOVE ANY APPLE OR PEAR TREES WITHOUT APPROVAL OF THE ENGINEER.

MISCELLANEOUS REMOVAL ITEMS REQUIRING RESTORATION OF CONCRETE OR ASPHALTIC CONCRETE, SUCH AS DRIVEWAYS, SIDEWALKS, PEDESTRIAN RAMPS, SIDE STREETS OR INLETS SHALL BE REMOVED TO AN EXISTING JOINT OR SAWED AS DETERMINED BY THE PROJECT ENGINEER, OR AS SHOWN ON THE PLANS.

ROADWAY BORING SUMMARY TABLE

EXISTING USH 51
BORINGS TAKEN 8/28/06
STATIONING APPROXIMATELY MATCHES 6030-00-71

Boring #	STA.	Offset	Bituminous	Sand/Base	Concrete	Base
11	461+00	10' RT	6	12		
12	479+00	18' RT	6	12		
13	479+65	28' RT	7	14		
14	500+00	12' LT	6	14		
15	517+00	6' RT	6	18		
16	523+50	6' RT	6	18		
17	523+50	10' RT	6	20		
18	535+40	10' LT	6	12		
19	535+40	6' LT	6	12		
20	544+25	6' RT	5	6	7	
21	544+25	10' RT	6	5	7	3

NOTE: ALL DEPTHS ARE IN INCHES

UTILITY/MUNICIPALITY	ADDRESS	CONTACT	UTILITY TYPE
* ALLIANT ENERGY CORPORATION	4902 N BILTMORE LANE SUITE 1000 MADISON, WI 53707-1007	JASON HOGAN (608) 458-4871	ELECTRIC
* ATC MANAGEMENT, INC	801 O'KEEFE RD PO BOX 6113 DE PERE, WI 54115-6113	MIKE OLSEN (920) 338-6582	ELECTRIC
* CENTURYTEL OF MIDWEST-WISCONSIN, LLC	333 N FRONT ST PO BOX 4800 LACROSSE, WI 54602	STEVE BLADO (608) 796-5543	COMMUNICATION
* CHARTER COMMUNICATIONS	2701 DANIELS ST MADISON, WI 53718	BRANDON STORM (608) 274-3822	COMMUNICATION
* MADISON GAS AND ELECTRIC	PO BOX 1231 MADISON, WI 53701-1231	TIM STATZ (608) 252-4727	GAS/PETROLEUM
* VILLAGE OF DEFOREST	306 DEFOREST ST DEFOREST, WI 53532	DEANE BAKER (608) 846-6751	WATER / SEWER

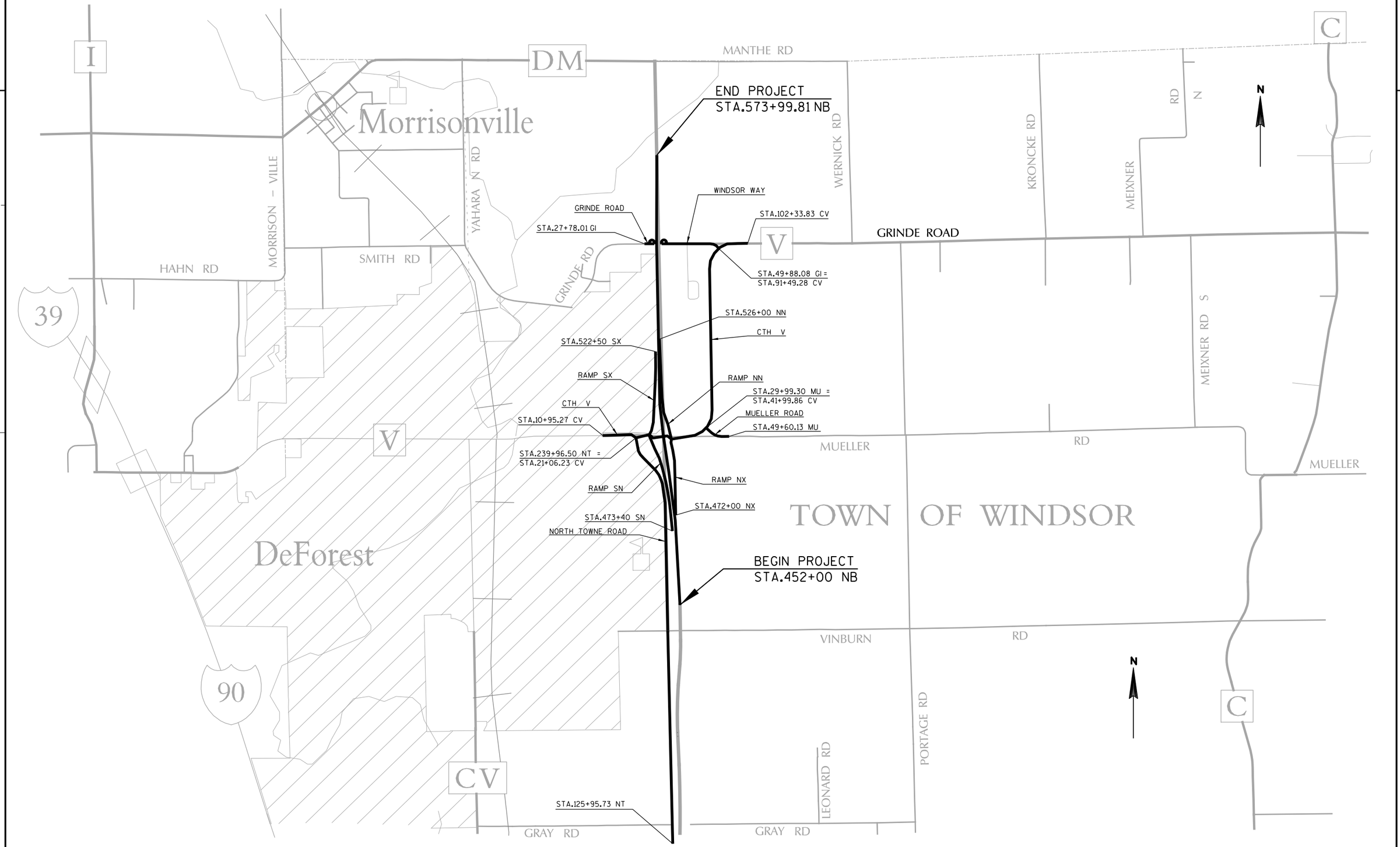
* DENOTES DIGGERS HOTLINE MEMBER

DIGGERS HOTLINE

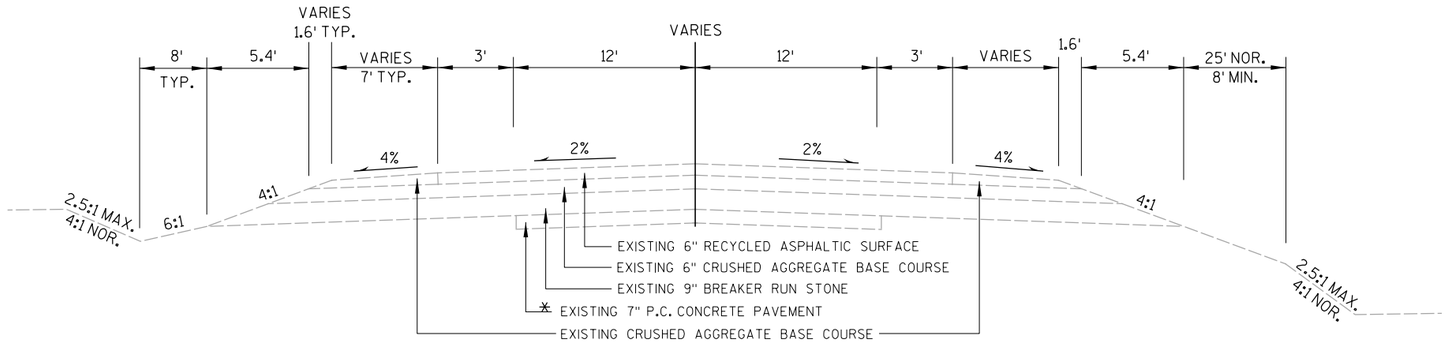
Call 811 3 Work Days Before You Dig
or Toll Free (800) 242-8511
Hearing Impaired TDD (800) 542-2289
www.DiggersHotline.com

DEPARTMENT OF NATURAL RESOURCES

AMANDA CUSHMAN
3911 FISH HATCHERY ROAD
FITCHBURG, WI 53711
608-275-3485



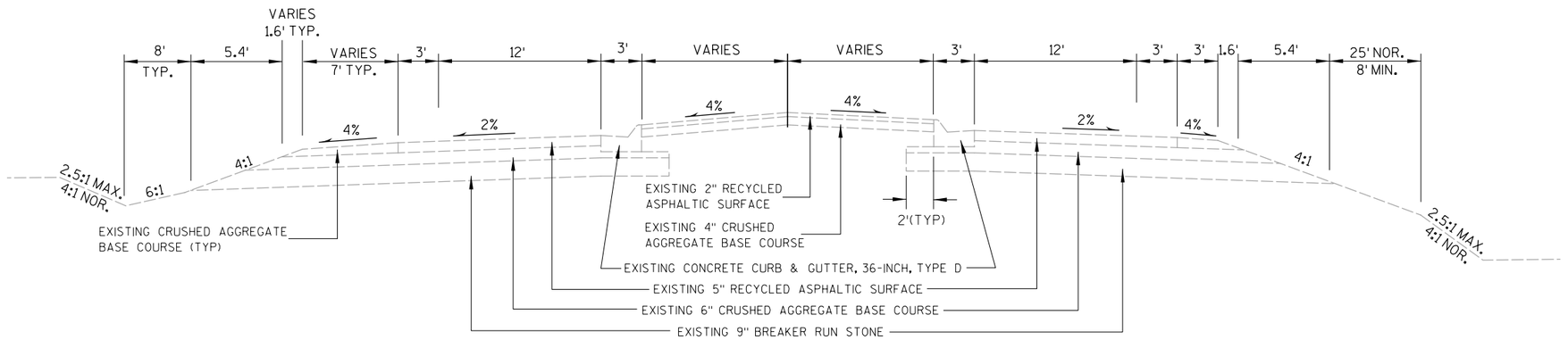
PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	PROJECT OVERVIEW	SHEET 3	E



* STA. 536+00 NB - STA. 574+00 NB

TYPICAL EXISTING SECTION

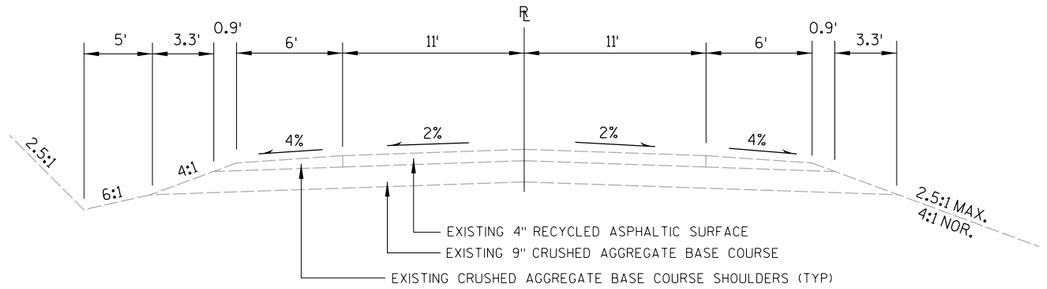
USH 51
STA. 485+00 NB - STA. 487+50 NB
STA. 505+00 NB - STA. 574+00 NB



TYPICAL EXISTING SECTION

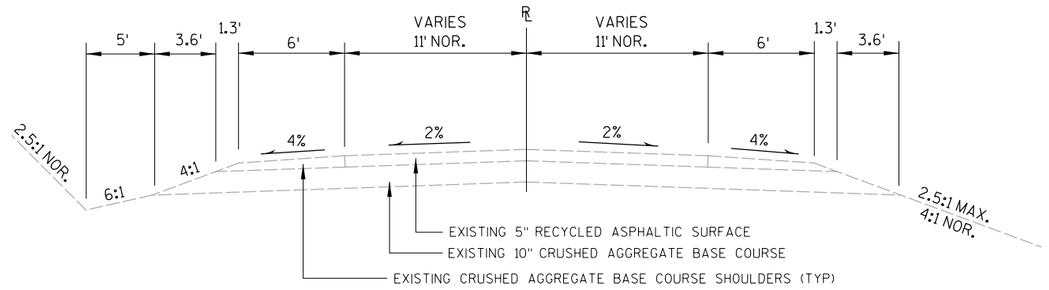
USH 51
STA. 487+50 NB - STA. 505+00 NB

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	TYPICAL EXISTING SECTIONS	SHEET 4	E



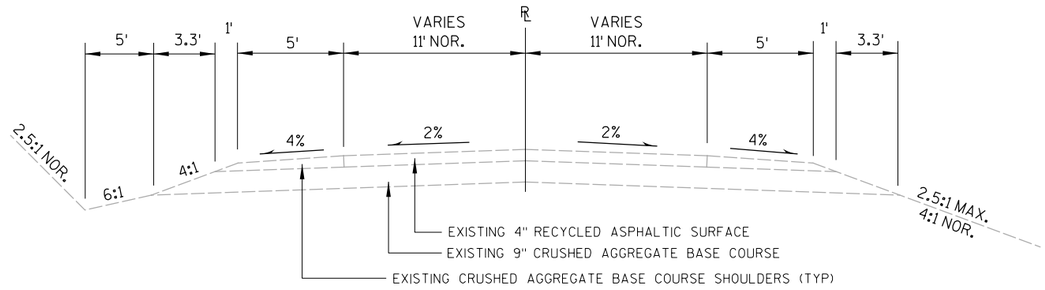
TYPICAL EXISTING SECTION

MUELLER ROAD



TYPICAL EXISTING SECTION

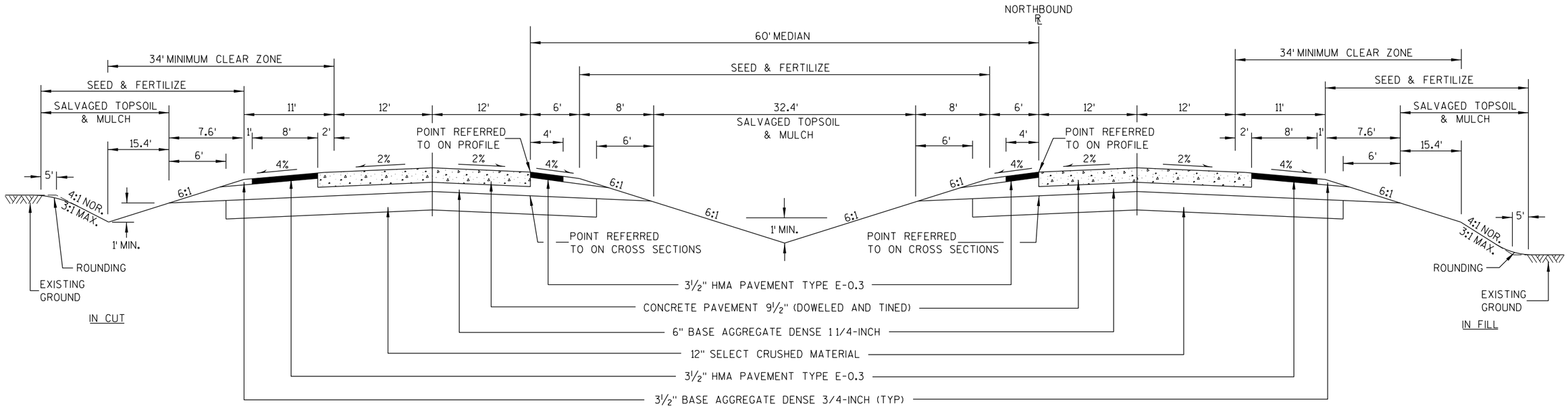
CTH V WEST



TYPICAL EXISTING SECTION

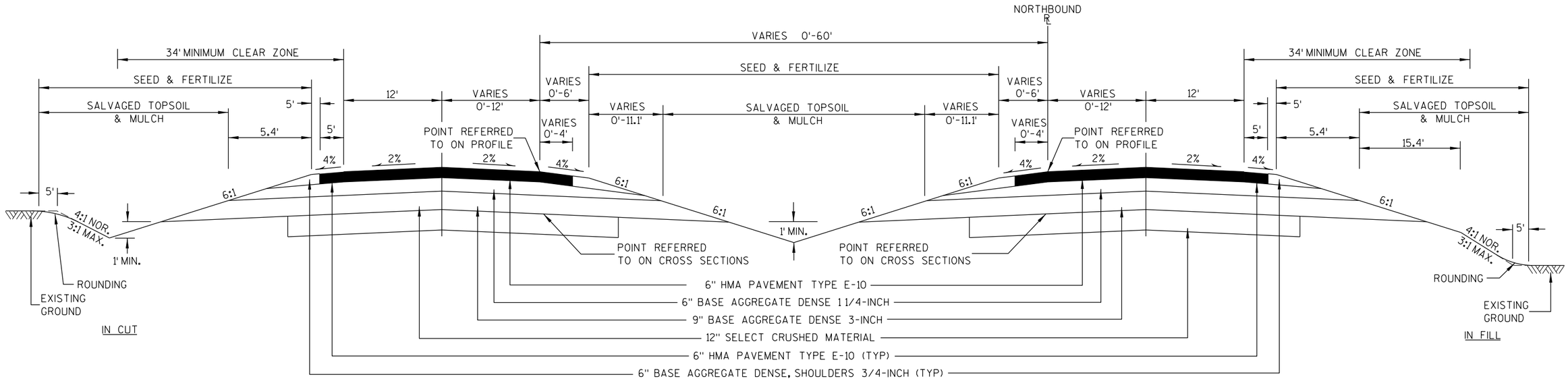
GRINDE ROAD
CTH V EAST

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	TYPICAL EXISTING SECTIONS	SHEET 5	E



TYPICAL FINISHED SECTION

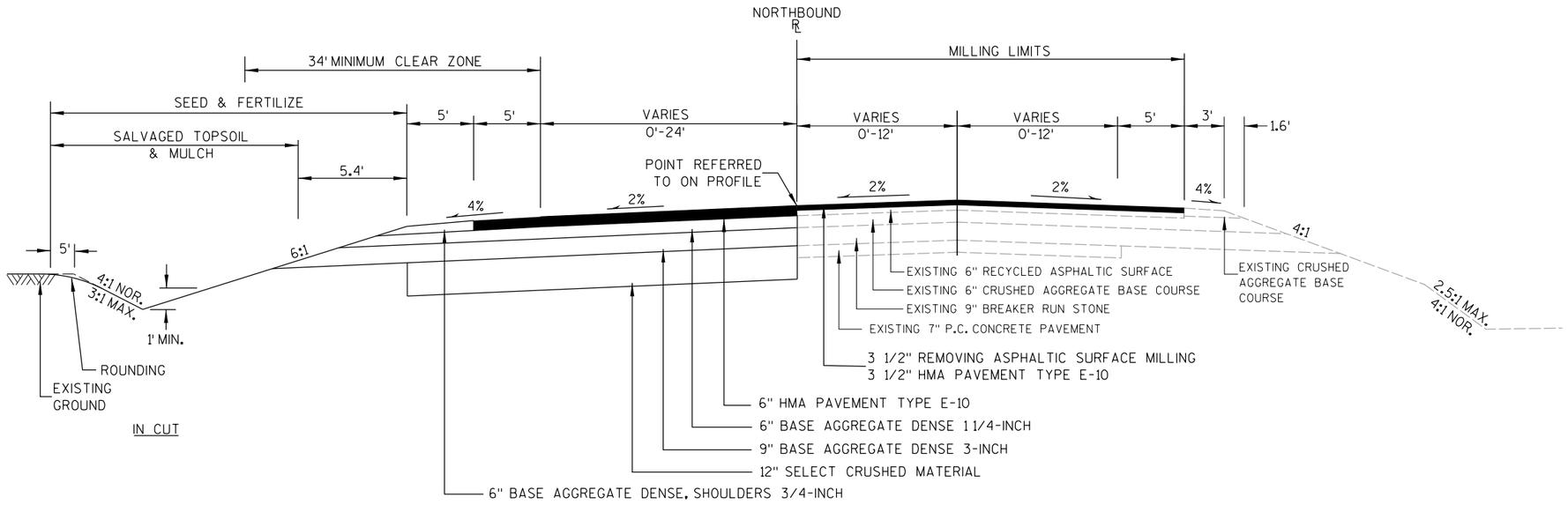
USH 51
STA.452+00 NB - STA.551+50 NB



TYPICAL FINISHED SECTION

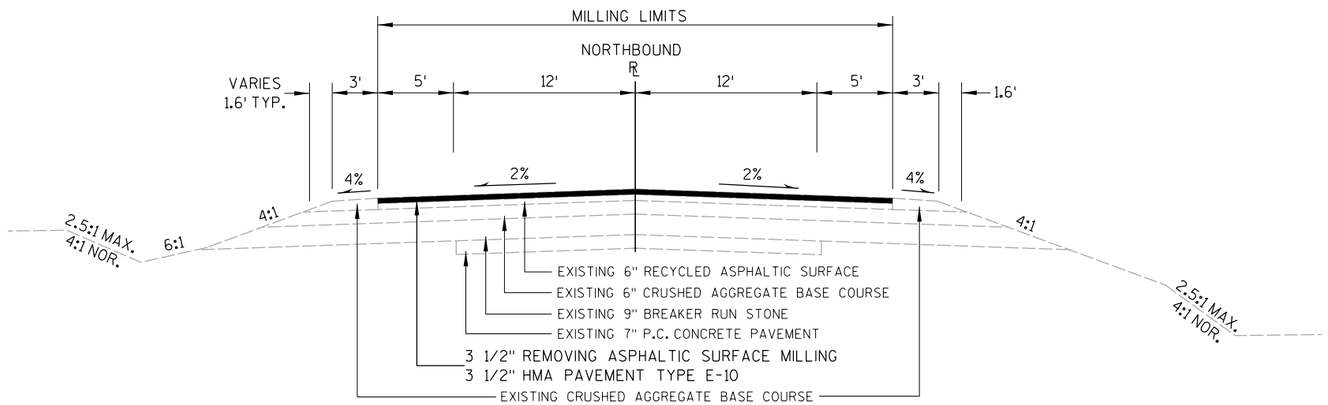
USH 51 TRANSITION SECTION
STA.551+50 - STA.568+00

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	TYPICAL FINISHED SECTIONS	SHEET 6	E



TYPICAL FINISHED SECTION

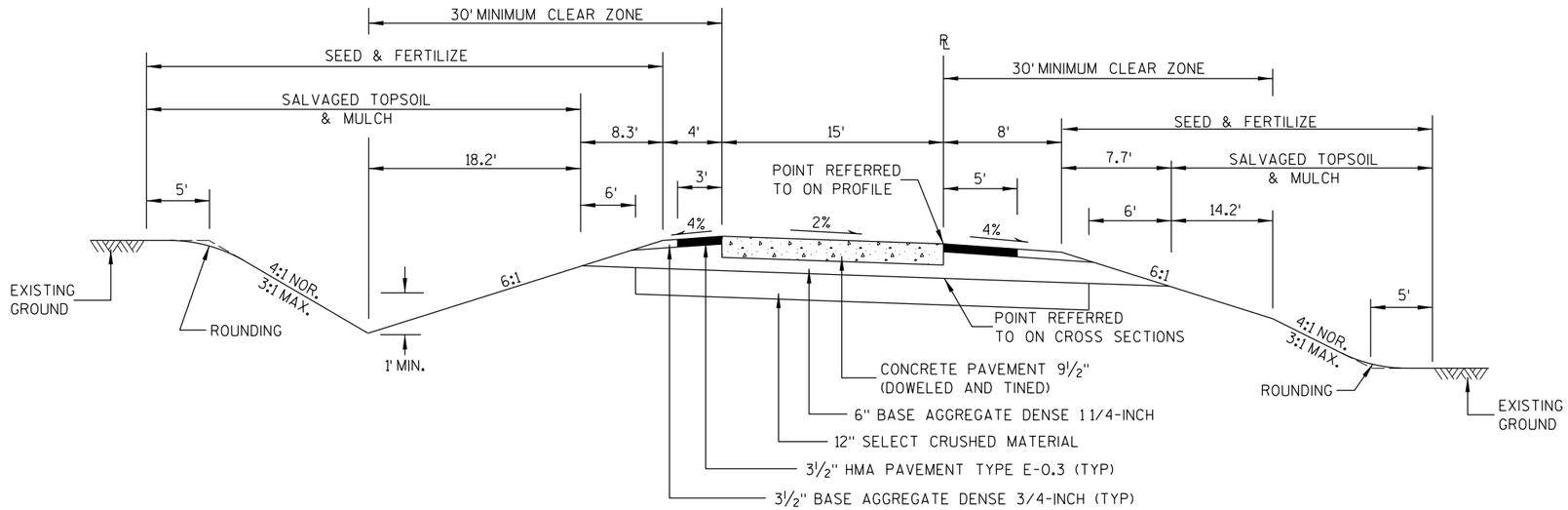
USH 51 TRANSITION SECTION
STA. 568+00 NB - STA. 570+50 NB



TYPICAL EXISTING SECTION

USH 51 TRANSITION SECTION
STA.570+50 NB - STA.573+99.81 NB

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	TYPICAL FINISHED SECTIONS	SHEET 7	E



TYPICAL FINISHED SECTION

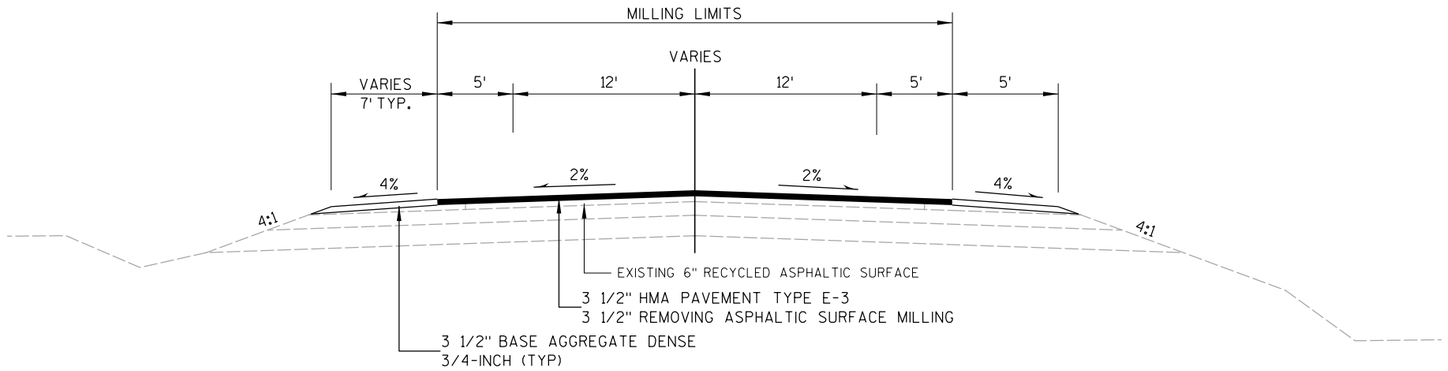
RAMPS

STA.473+40 SN - STA.498+07.69 SN
STA.502+12.19 SX - STA.522+50 SX
STA.472+00 NX - STA.495+77.47 NX
STA.500+64.03 NN - STA.526+00 NN

PROJECT NO:6020-02-72	HWY:USH 51	COUNTY:DANE	TYPICAL FINISHED SECTIONS	SHEET 8	E

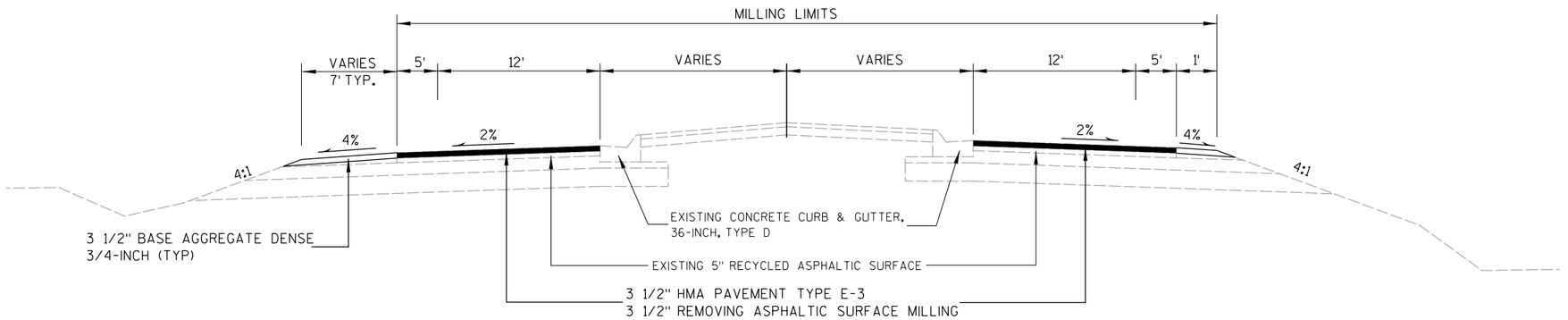
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WISDOT/CADDS SHEET 42



TYPICAL FINISHED SECTION

NORTH TOWNE ROAD
STA. 126+00 NT - STA. 169+90 NT
STA. 188+80 NT - STA. 210+50 NT

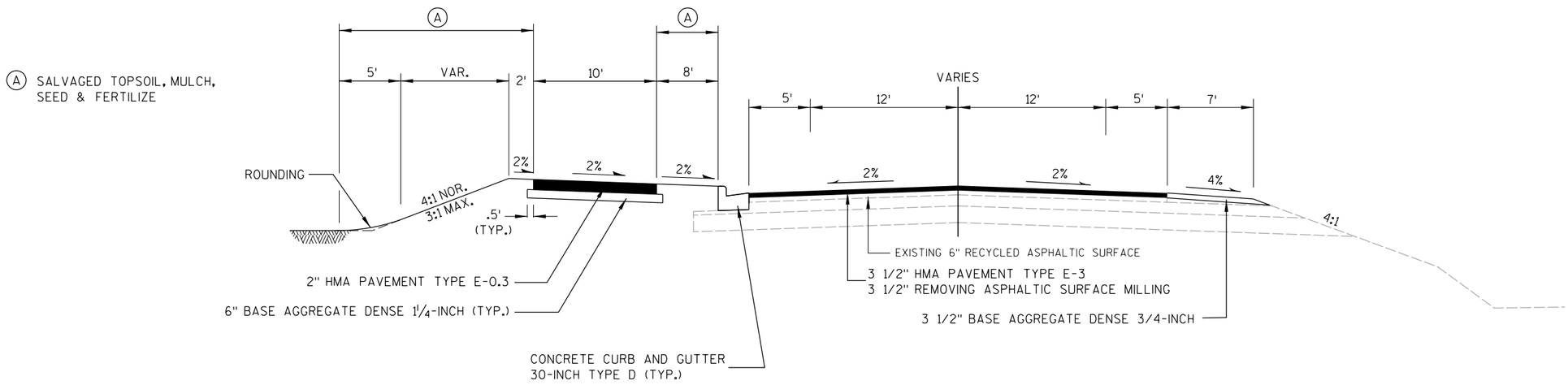


TYPICAL FINISHED SECTION

NORTH TOWNE ROAD
STA. 169+90 NT - STA. 188+80 NT

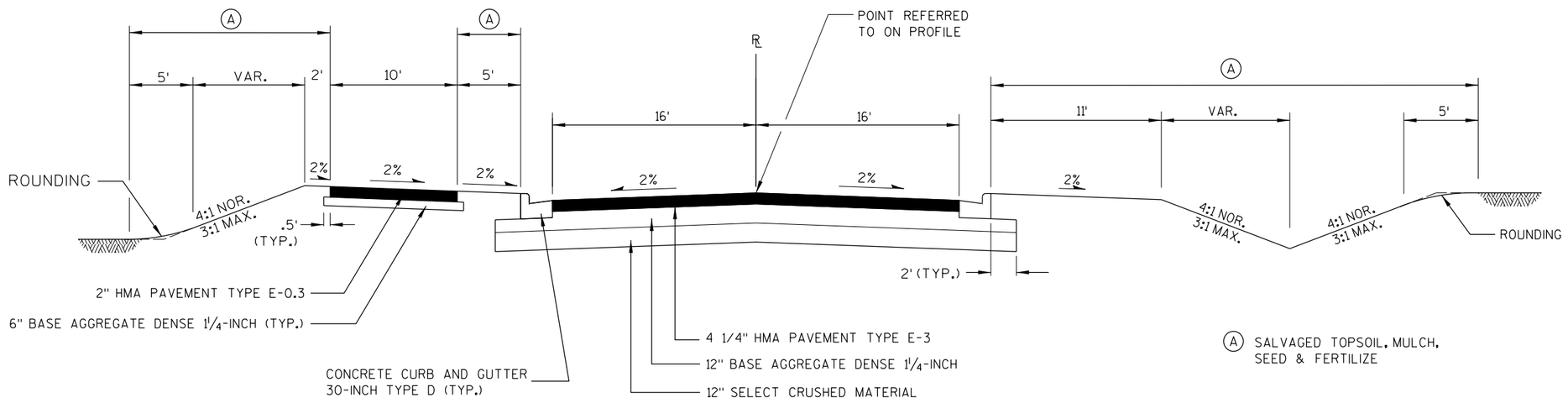
PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	TYPICAL FINISHED SECTIONS	SHEET 9	E

2



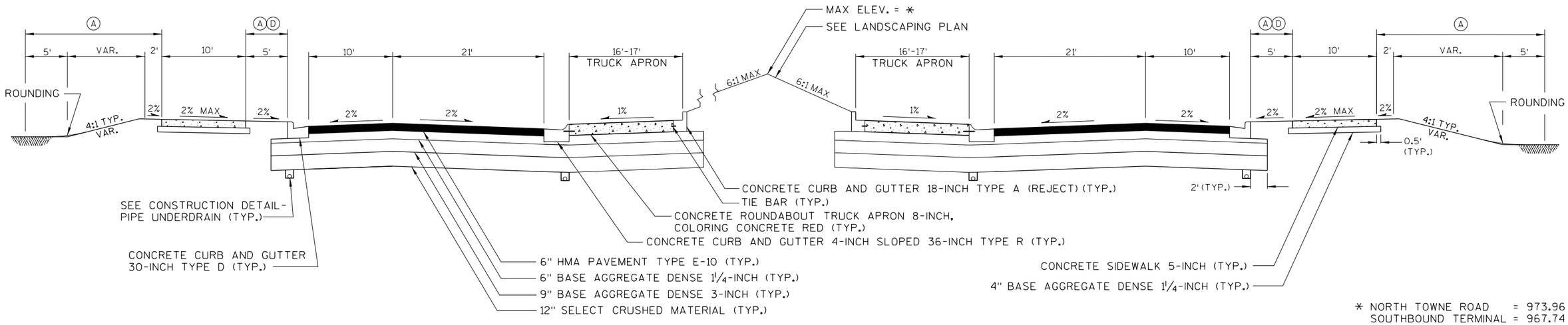
TYPICAL FINISHED SECTION

NORTH TOWNE ROAD
STA. 210+50 NT - STA. 219+50 NT



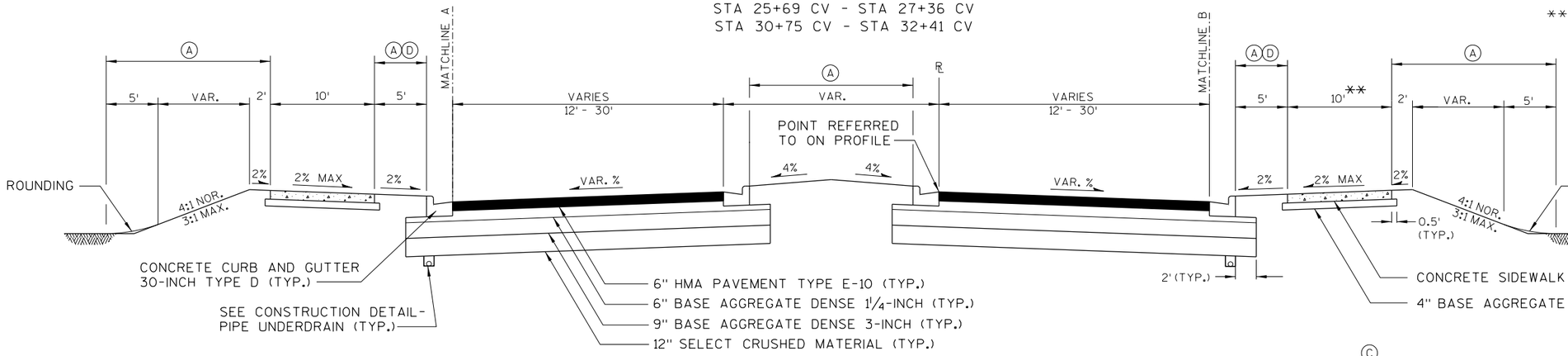
TYPICAL FINISHED SECTION

NORTH TOWNE ROAD
STA 219+50 NT - STA 237+50 NT



TYPICAL FINISHED SECTION THROUGH ROUNDABOUT

STA 20+61 CV - STA 22+50 CV
STA 25+69 CV - STA 27+36 CV
STA 30+75 CV - STA 32+41 CV



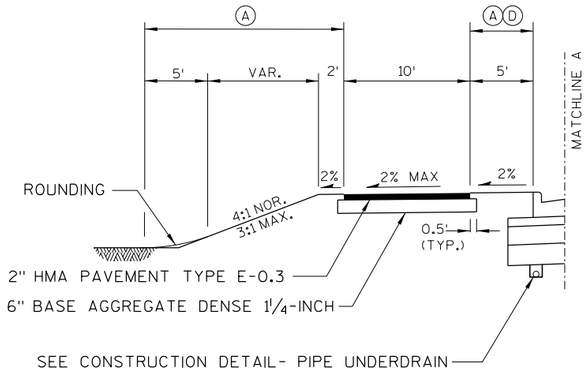
* NORTH TOWNE ROAD = 973.96
SOUTHBOUND TERMINAL = 967.74
NORTHBOUND TERMINAL = 965.10

** SIDEWALK IS 8' WIDE FROM STA. 15+79 CV - STA. 18+86 CV

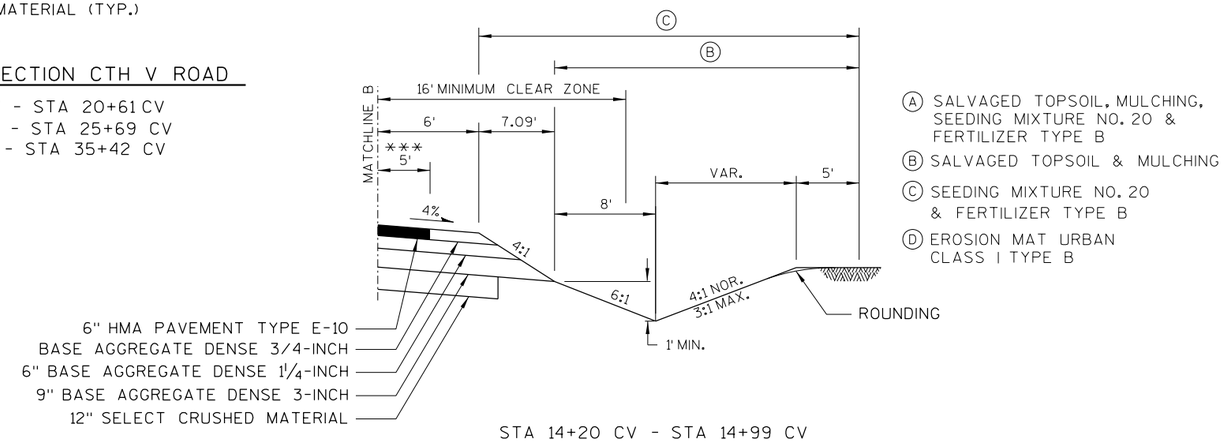
*** PAVED SHOULDER WIDTH IS 5' WIDE FROM STA. 34+60 - STA. 35+42

TYPICAL FINISHED SECTION CTH V ROAD

STA 14+20 CV - STA 20+61 CV
STA 22+50 CV - STA 25+69 CV
STA 32+41 CV - STA 35+42 CV



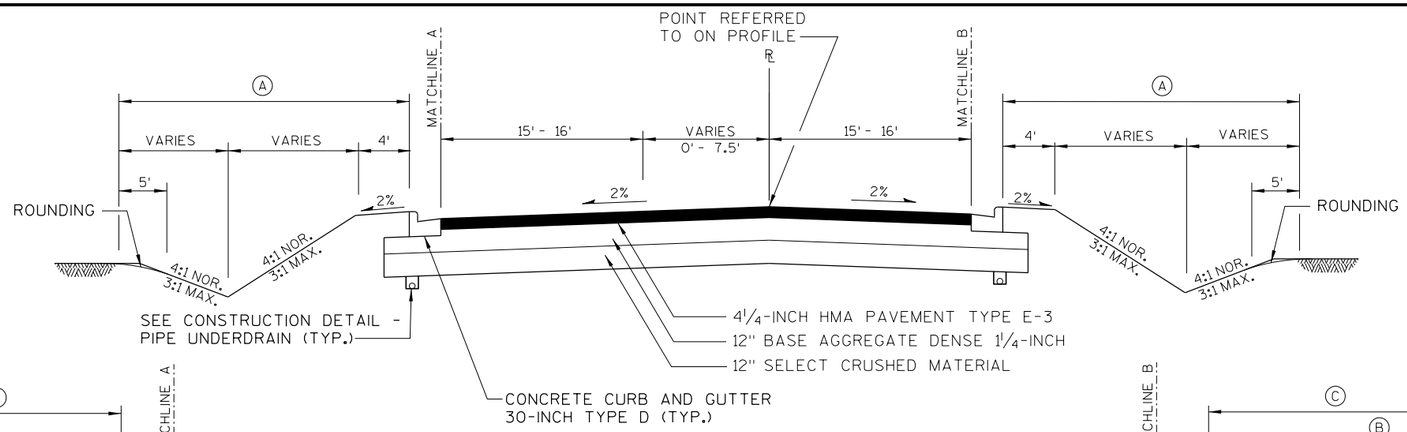
STA 14+20 CV - STA 19+33 CV

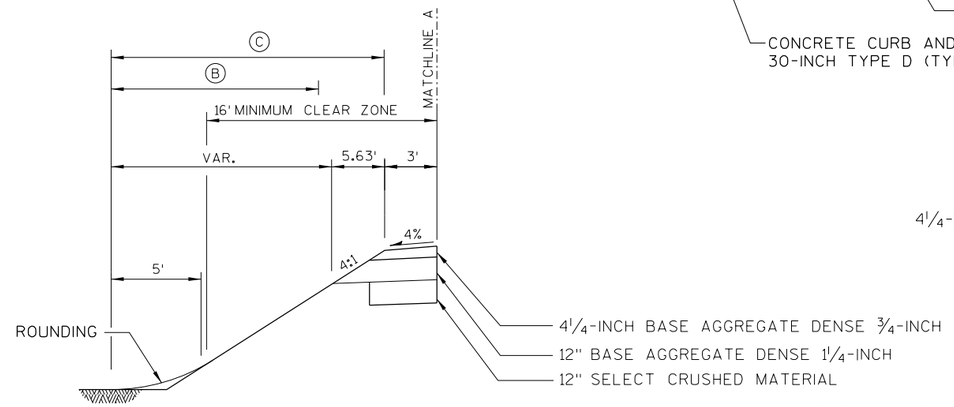


STA 14+20 CV - STA 14+99 CV
STA 34+60 CV - STA 35+42 CV ***

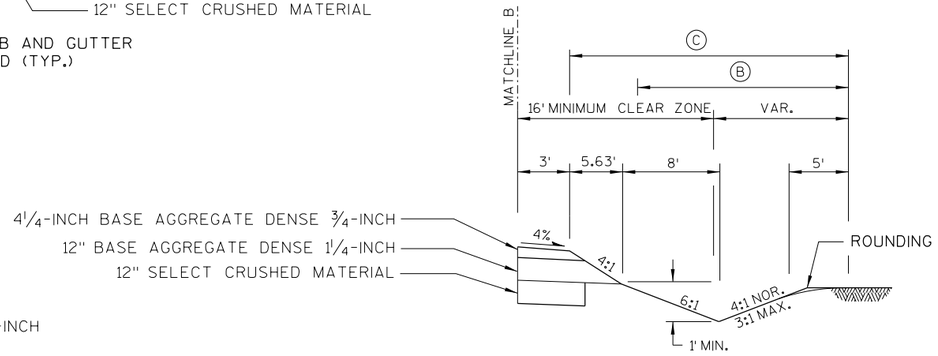
(A) SALVAGED TOPSOIL, MULCHING, SEEDING MIXTURE NO. 20 & FERTILIZER TYPE B
(B) SALVAGED TOPSOIL & MULCHING
(C) SEEDING MIXTURE NO. 20 & FERTILIZER TYPE B
(D) EROSION MAT URBAN CLASS I TYPE B

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	TYPICAL FINISHED SECTIONS	SHEET 11	E





STA 250+87 NT (NORTH) - STA 252+15 NT (NORTH)



STA 251+00 NT (NORTH) - STA 252+15 NT (NORTH)

TYPICAL FINISHED BALL COURT

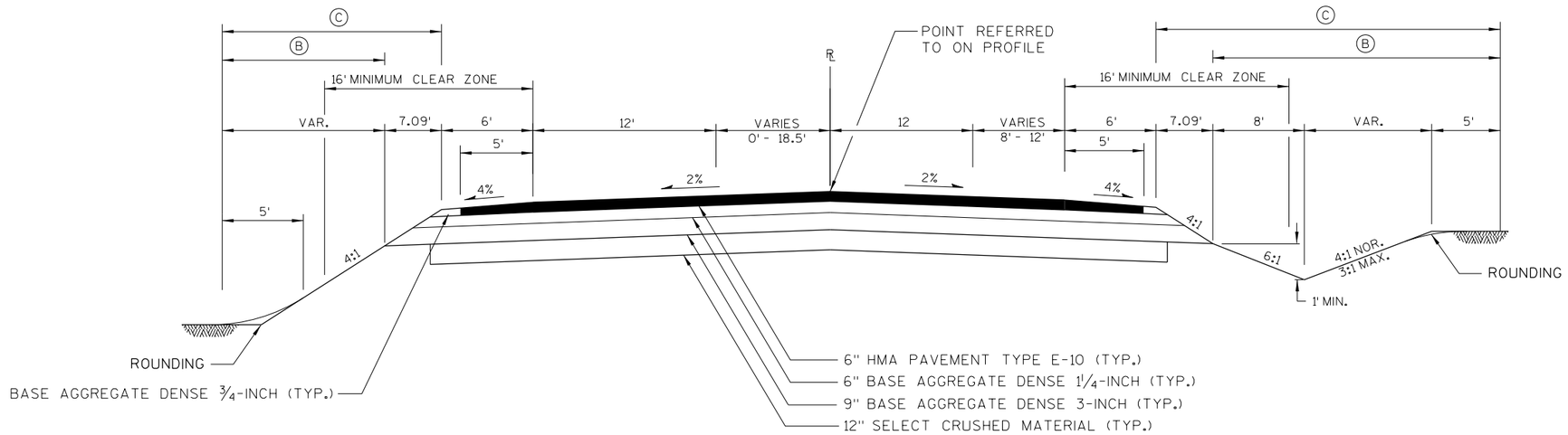
STA 248+22 NT (NORTH) - STA 252+15 NT (NORTH)

Ⓐ SALVAGED TOPSOIL, MULCHING, SEEDING MIXTURE NO. 20 & FERTILIZER TYPE B

Ⓑ SALVAGED TOPSOIL & MULCHING

Ⓒ SEEDING MIXTURE NO. 20 & FERTILIZER TYPE B

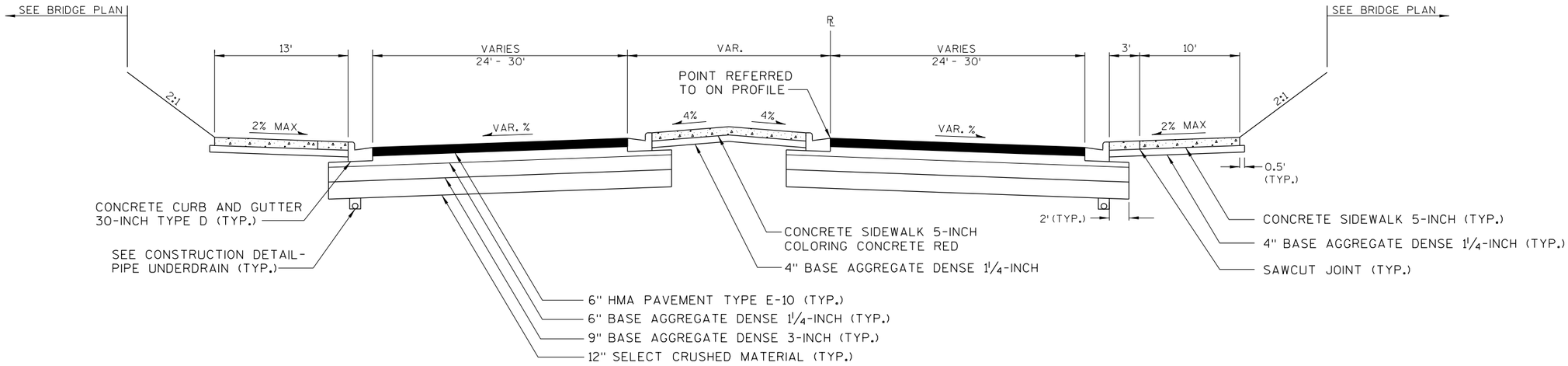
Ⓓ EROSION MAT URBAN CLASS I TYPE B



TYPICAL FINISHED CTH V ROAD

STA 35+42 CV - STA 37+35 CV

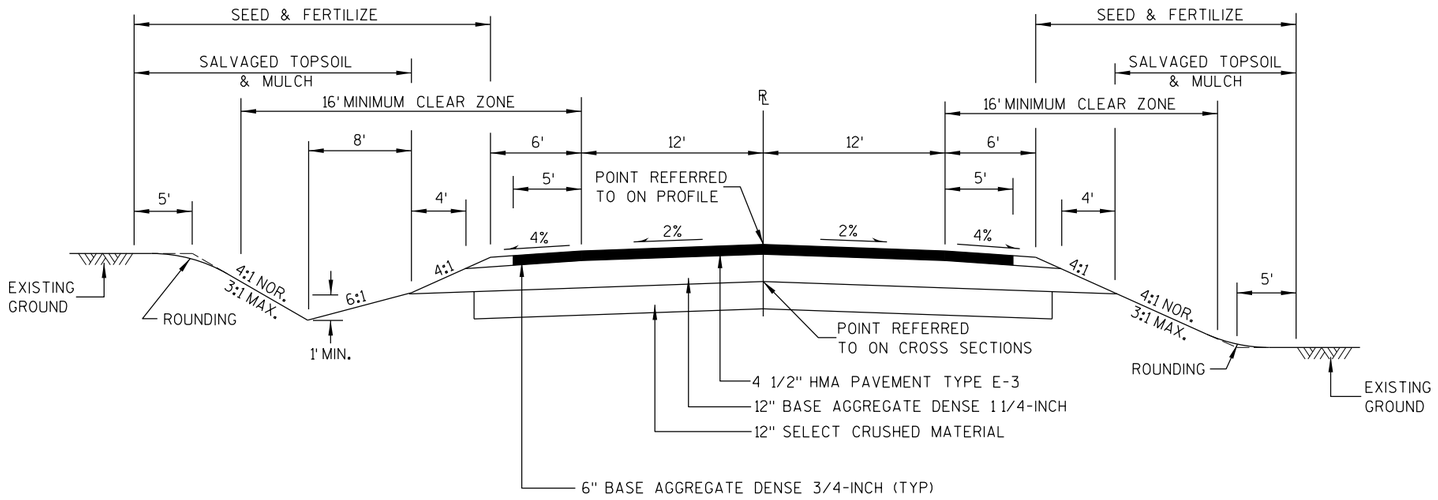
PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	TYPICAL FINISHED SECTIONS	SHEET 12	E



TYPICAL FINISHED SECTION CTH V ROAD

STA 27+36 CV - STA 30+75 CV

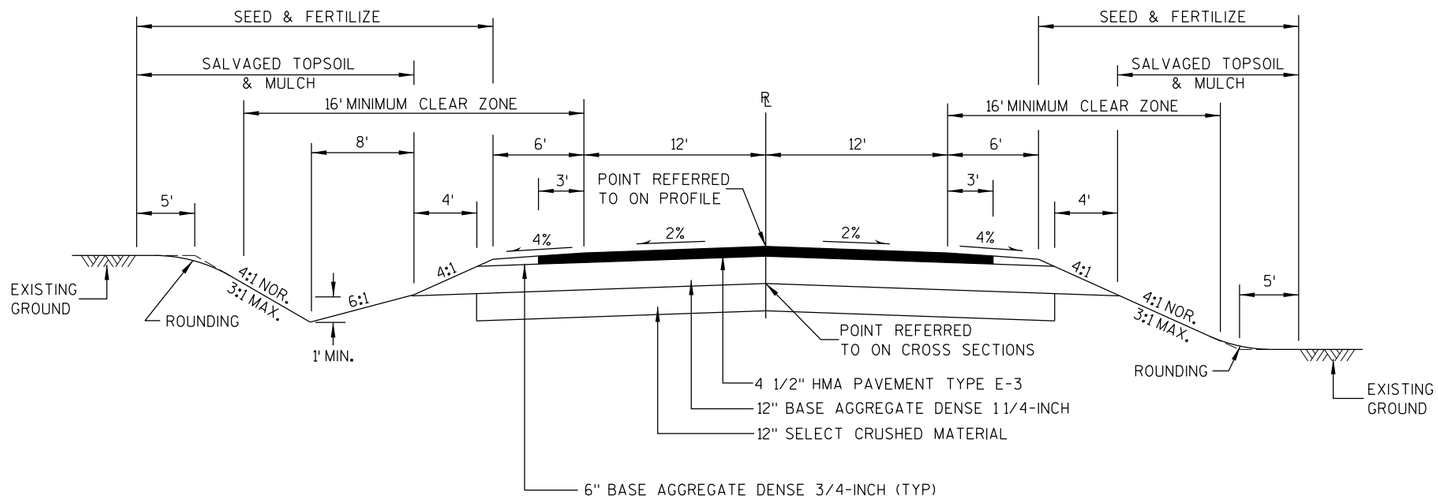
PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	TYPICAL FINISHED SECTIONS	SHEET 13	E



TYPICAL FINISHED SECTION

CTH V

STA 37+42 CV - STA 45+50 CV



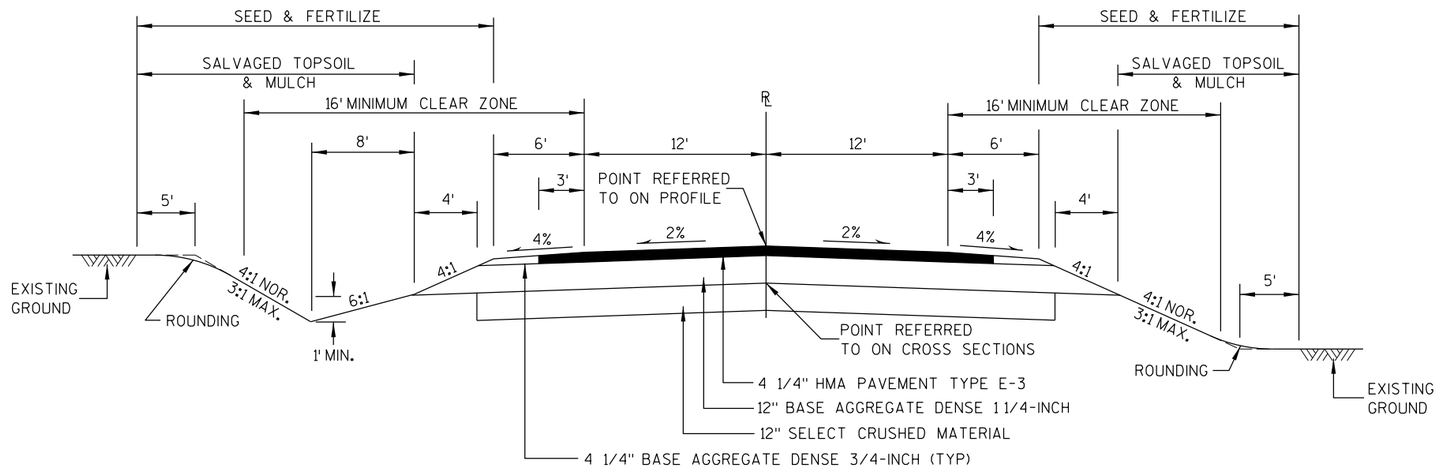
TYPICAL FINISHED SECTION

CTH V

STA 45+50 CV - STA 99+65 CV

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	TYPICAL FINISHED SECTIONS	SHEET 14	E

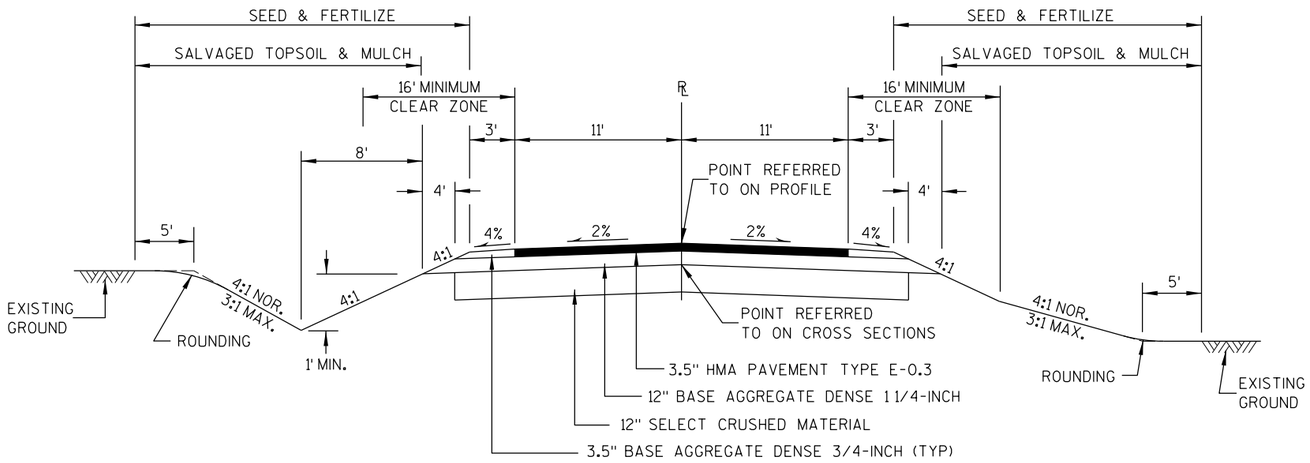
2



TYPICAL FINISHED SECTION

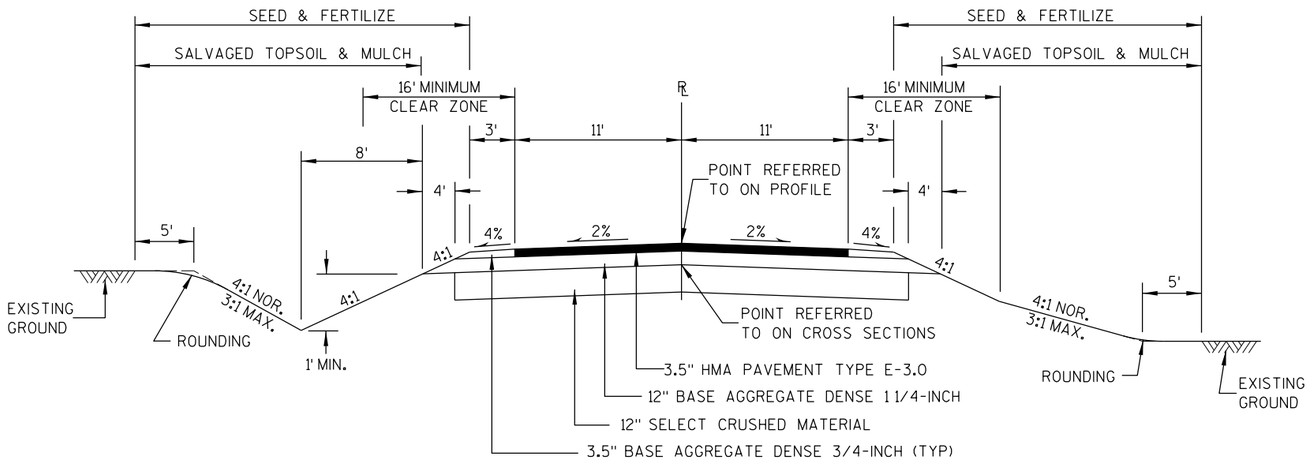
MUELLER ROAD
STA 30+00 MU - STA 37+20 MU

2



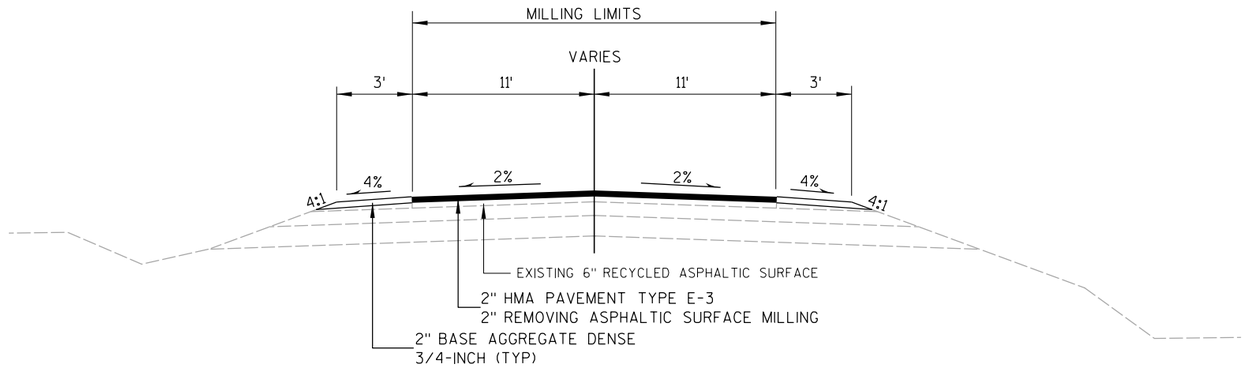
TYPICAL FINISHED SECTION

GRINDE ROAD
STA 29+00 GI - STA 30+60 GI



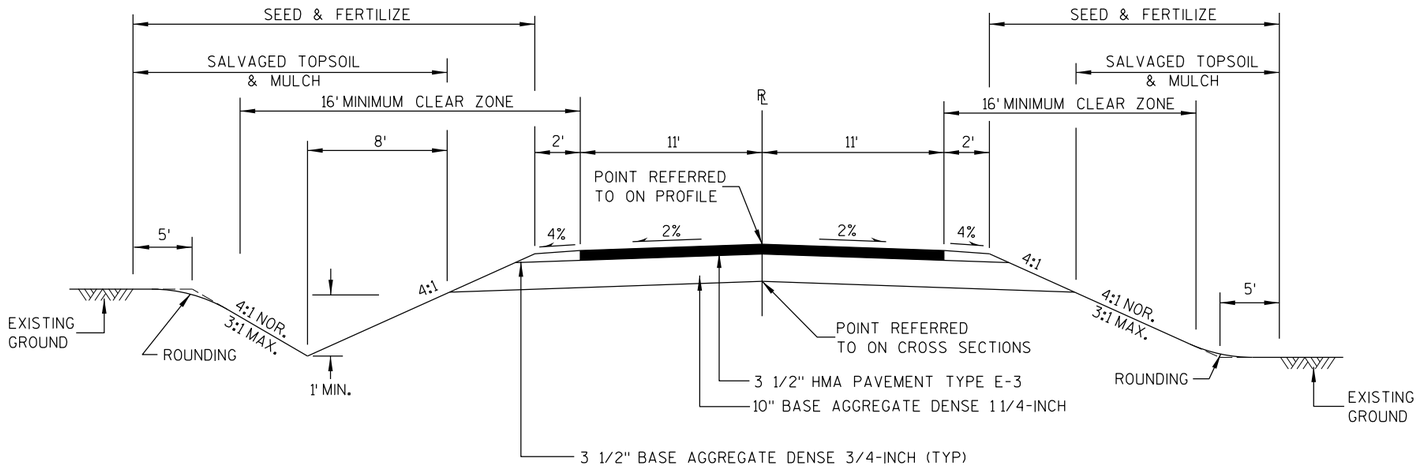
TYPICAL FINISHED SECTION

WINDSOR WAY
STA 34+90 GI - STA 36+50 GI (CUL-DE-SAC)
STA 45+00 GI - STA 49+88 GI



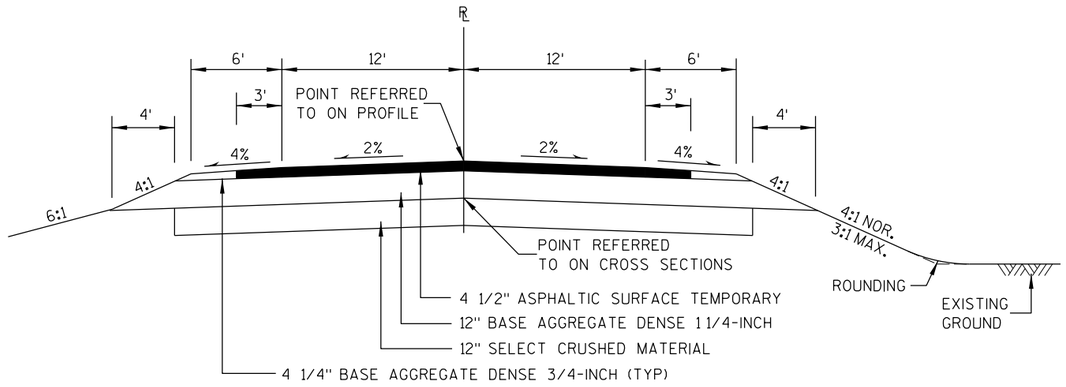
TYPICAL FINISHED SECTION

WINDSOR WAY
STA. 36+50 GI - STA. 45+00 GI



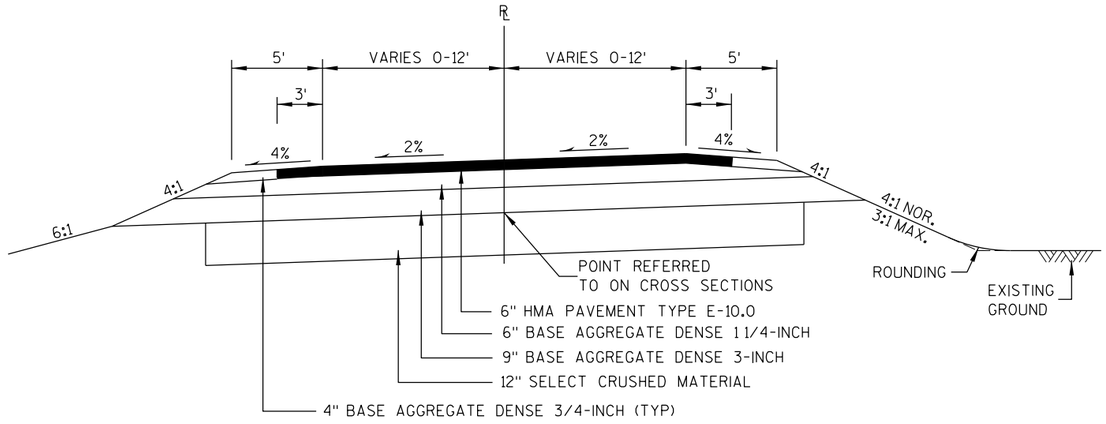
TYPICAL FINISHED SECTION

SHAWN WILLIAMS TRAIL
STA 15+00 SW - STA 20+00 SW



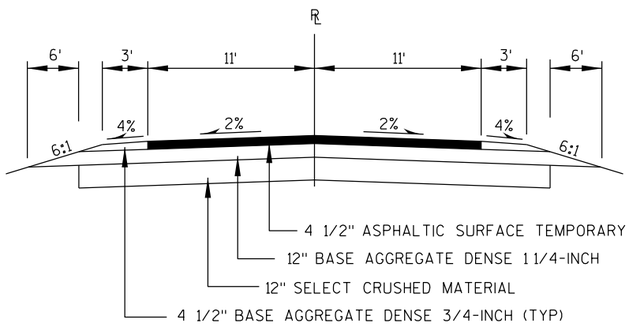
TYPICAL FINISHED SECTION

TEMPORARY ROADS
STA 110+00 TR1 - STA 141+00 TR1
STA 135+00 TR2 - STA 146+00 TR2
STA 48+50 TR3 - STA 51+00 TR3



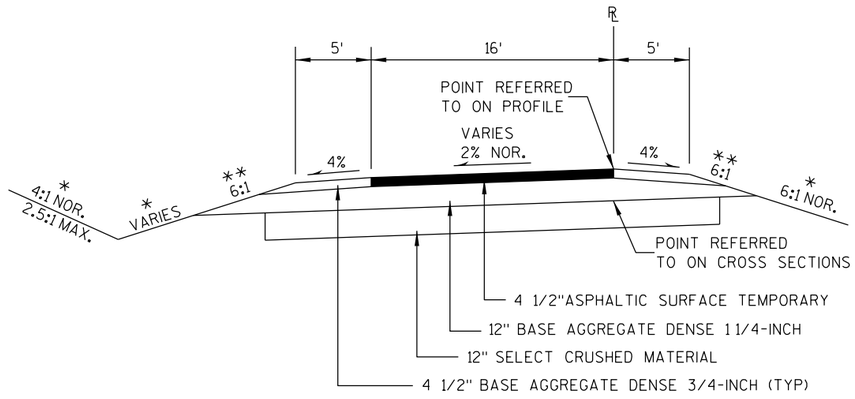
TYPICAL FINISHED SECTION

USH 51 TRANSITION WIDENING
STA 562+00 TW - STA 573+00 TW



TYPICAL FINISHED SECTION

TEMPORARY ROAD
STA 30+50 TR4 - STA 32+75 TR4
BALL COURT
STA 552+00 NT (CTH V EAST)

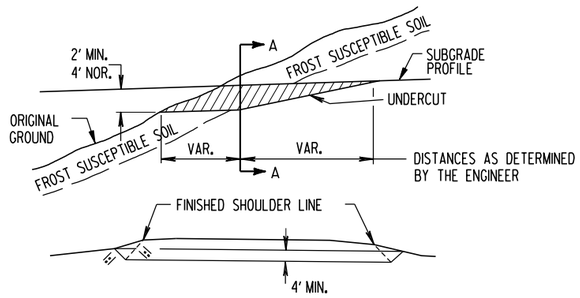


TYPICAL FINISHED SECTION

TEMPORARY ROAD
STA 102+50 TR5 - STA 110+00 TR5

* SALVAGED TOPSOIL, SEED #20, TEMPORARY SEED, FERTILIZER TYPE B AND MULCH

** SEED #20 AND FERTILIZER TYPE B



SECTION A-A

CROSS SECTION SHOWING UNDERCUT

DETAIL FOR EXCAVATION BELOW SUBGRADE AT CUT/FILL TRANSITION

NOTE: EXACT LOCATIONS AND EXTENT OF E.B.S. SECTIONS SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

E.B.S. AREA TO BE BACKFILLED WITH SUITABLE BACKFILL.

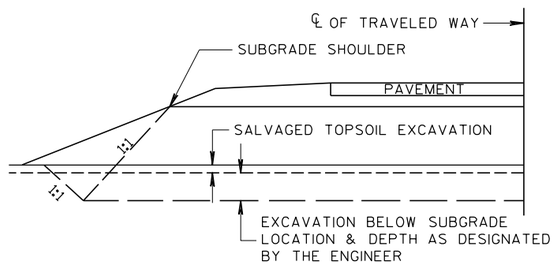
THE FILL SECTION WITHIN 100' OF THE MOUTH OF THE CUT MUST BE KEPT 2'-4' BELOW SUBGRADE UNTIL E.B.S. IS COMPLETED.

RUNOFF COEFFICIENT TABLE

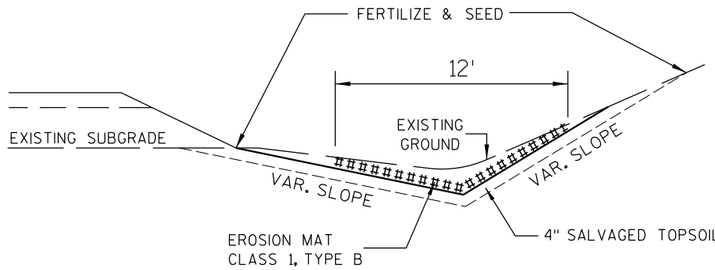
	HYDROLOGIC SOIL GROUP											
	A			B			C			D		
	SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)		
LAND USE:	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER
ROW CROPS	.08 .22	.16 .30	.22 .38	.12 .26	.20 .34	.27 .44	.15 .30	.24 .37	.33 .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 = 157.77 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 117.50 ACRES

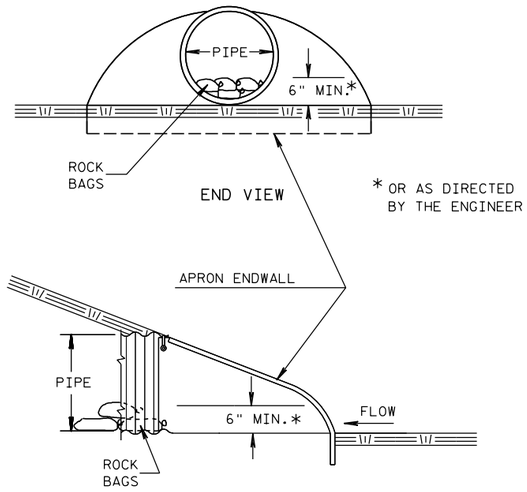
2



DETAIL FOR EXCAVATION BELOW SUBGRADE

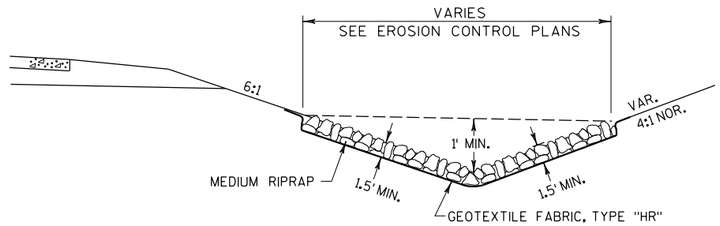


DITCH SHAPING DETAIL

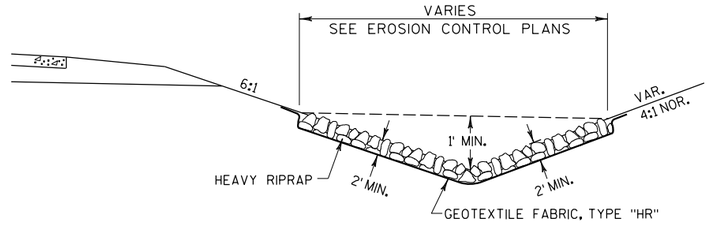


CULVERT PIPE CHECK

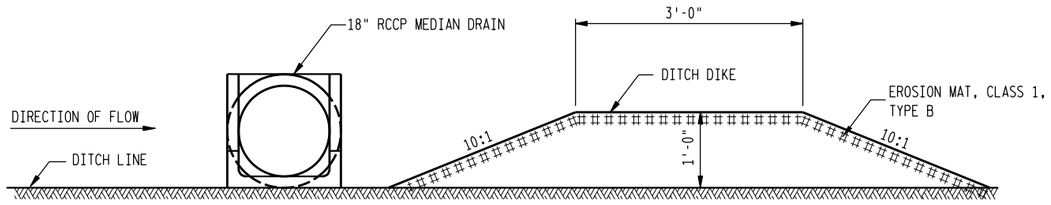
SEE EROSION CONTROL PLAN SHEETS FOR LOCATIONS



DETAIL OF MEDIUM RANDOM RIPRAP DITCH

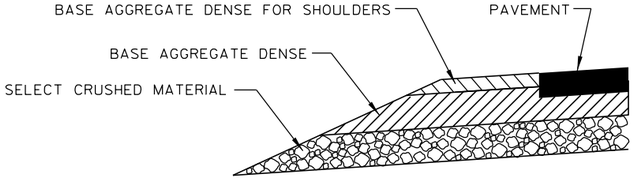


DETAIL OF HEAVY RIPRAP DITCH

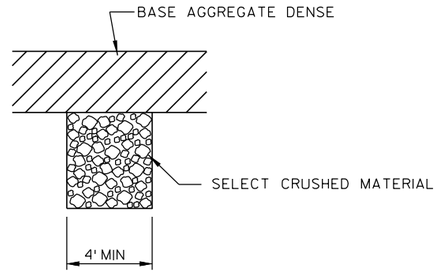


DETAIL FOR SPECIAL DITCH CHECKS AT MEDIAN DRAINS - SPV.0060.24

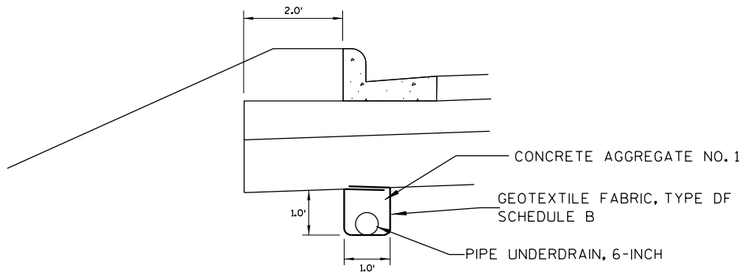
SEE EROSION CONTROL SHEETS FOR LOCATIONS



SECTION A-A



SECTION B-B

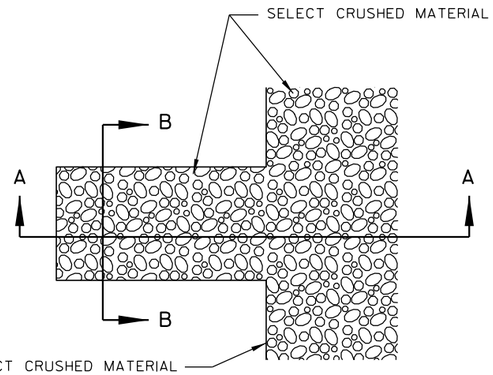


DETAIL FOR PIPE UNDERDRAIN

NOTE:

6" PIPE IS DISCHARGED INTO INLETS & DITCHES AS SHOWN ON THE PLAN.

CONCRETE AGGREGATE NO.1 IS INCIDENTAL TO PIPE UNDERDRAIN, 6-INCH.

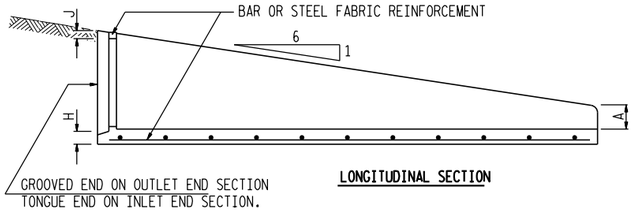


DETAIL FOR FRENCH DRAINS

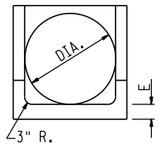
DRAINS ARE TO BE CONSTRUCTED AT LEAST EVERY 250' AND AT EACH SAG VERTICLE CURVE IN THE PROFILE.

(LOCATIONS TO BE DETERMINED IN THE FIELD BY THE ENGINEER)

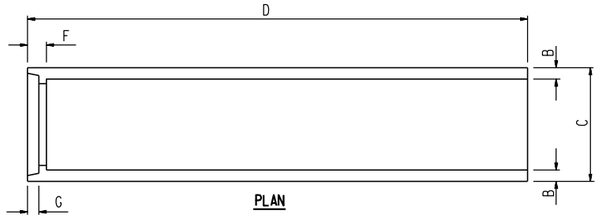
EXCAVATION REQUIRED TO CONSTRUCT FRENCH DRAINS SHALL BE CONSIDERED INCIDENTAL TO THE ITEM COMMON EXCAVATION.



LONGITUDINAL SECTION



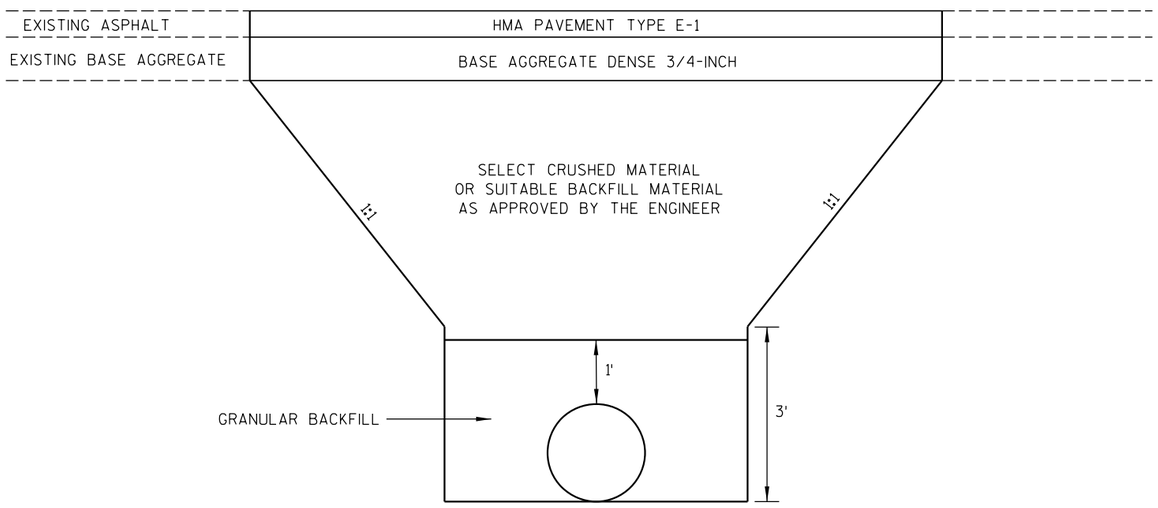
END VIEW
ROUND PIPE



PLAN

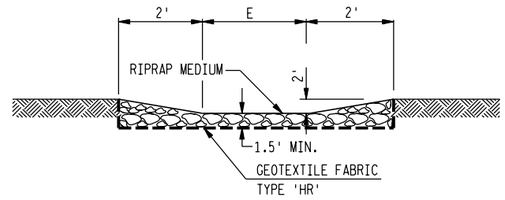
PIPE DIA. (IN.)	DIMENSIONS (INCHES)								
	A	B	C	D	E	F	G	H	J
18	6	2 1/3	24	100	4	5	3	4	2 1/3

APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 18-INCH SPECIAL

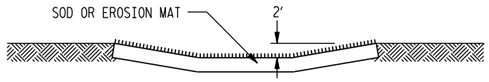


STORM SEWER INSTALLATION

STA.215+00 NT

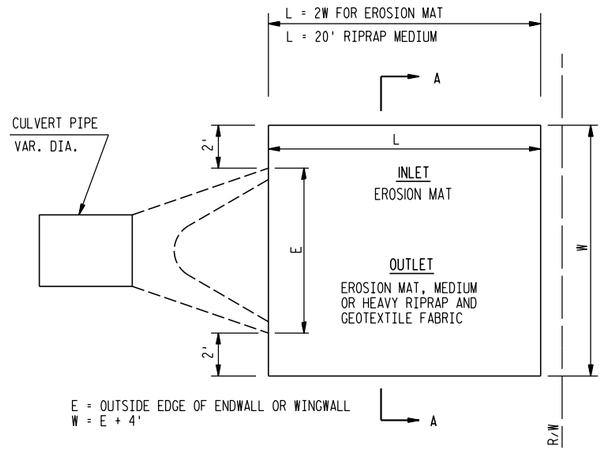


OUTLET SECTION A-A



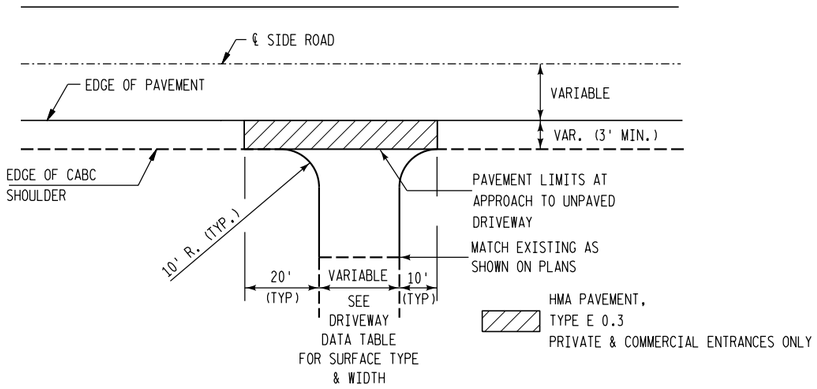
INLET AND OUTLET SECTION A-A

EROSION MAT

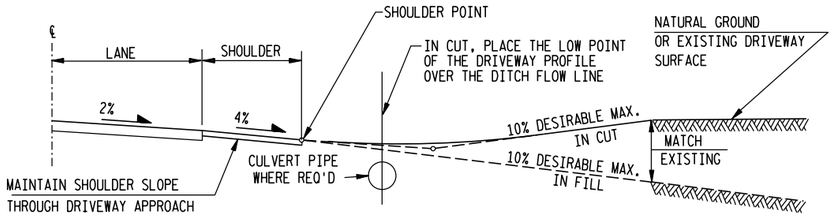


DETAIL FOR EROSION CONTROL AT CULVERT PIPE ENDS

SEE EROSION CONTROL PLAN SHEETS FOR LOCATIONS



PLAN VIEW - SIDE ROAD DRIVEWAY

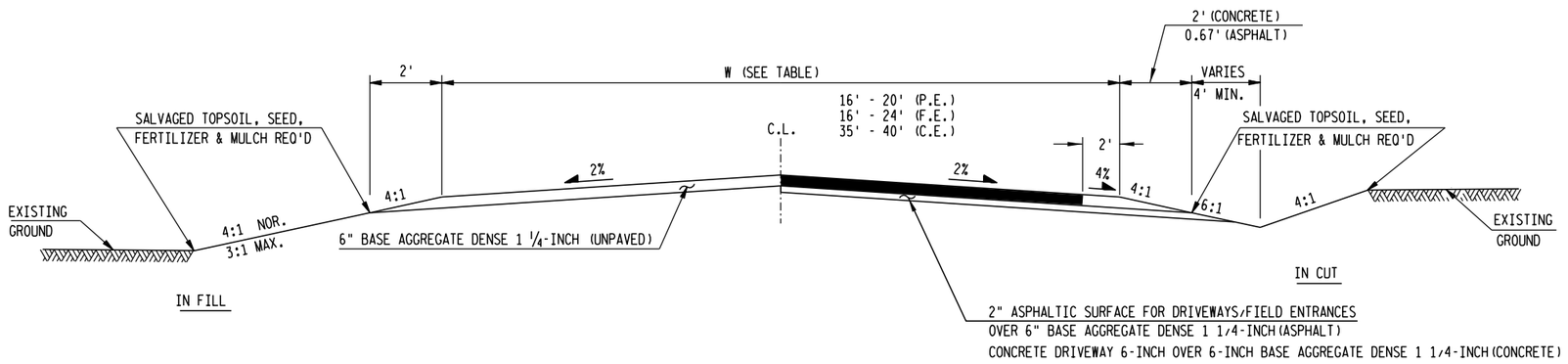


PROFILE VIEW

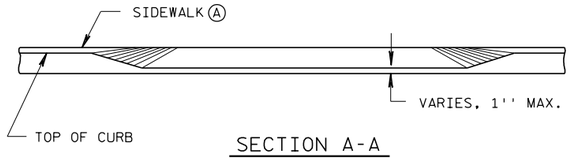
DRIVEWAY DATA

ALIGNMENT	STATION	LOCATION	TYPE	W(WIDTH)	SURFACE	REMARKS
D1	47+25 CV	LT	P.E.	28'	8" BASE AGG	LINDE SOCCER FIELD
D2	32+00 MU	RT	P.E.	20'	BASE AGG	BLIEFERNICHT
D3	62+75 CV	LT	P.E.	24'	BASE AGG	LINDE
D4	30+22.25 GI	LT	P.E.	16'	BASE AGG	MANTHE
	221+80 NT	LT	C.E.	24'	BASE AGG	--
	251+00 NT	RT	C.E.	30'	ASPHALTIC	(30' RT.)

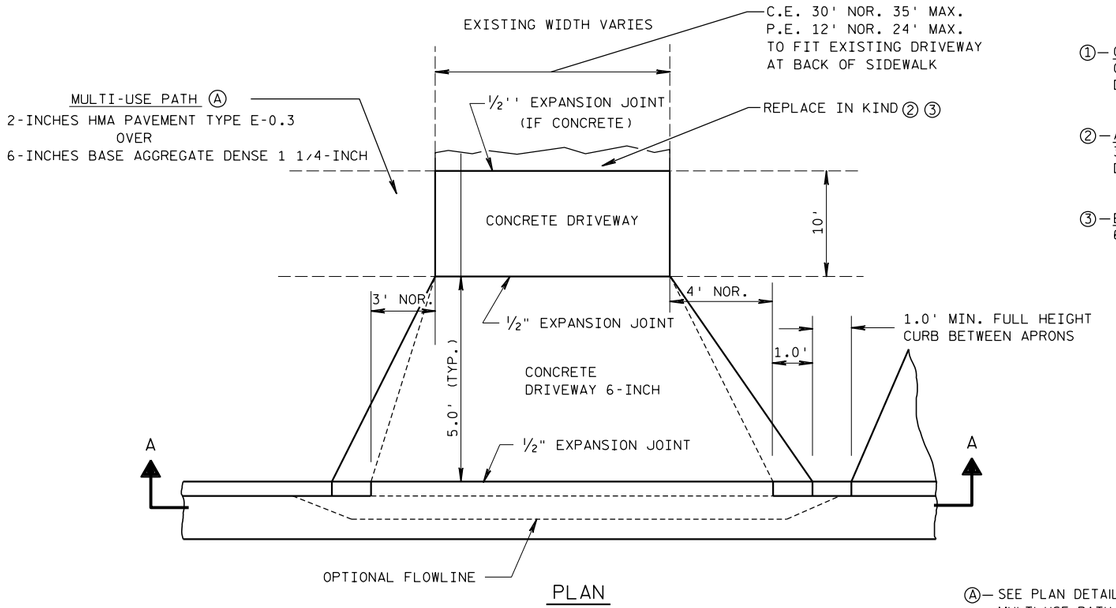
TYPICAL RURAL DRIVEWAY DETAILS



TYPICAL SECTION FOR RURAL DRIVEWAY

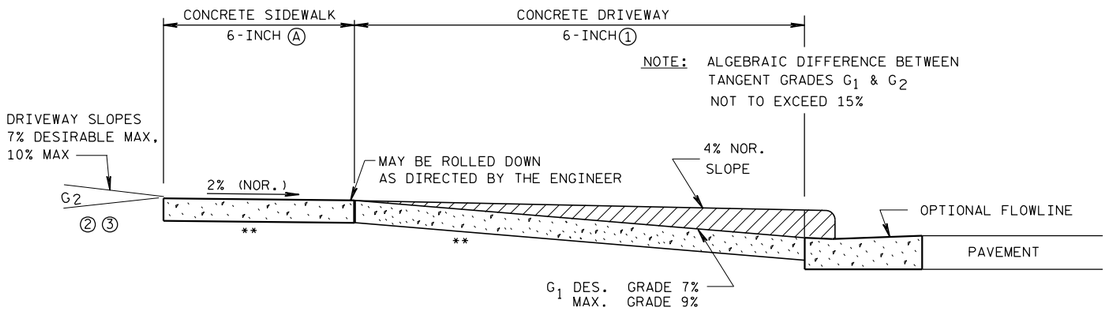


SECTION A-A



PLAN

Ⓐ— SEE PLAN DETAILS FOR MULTI-USE PATH LOCATIONS



PROFILE

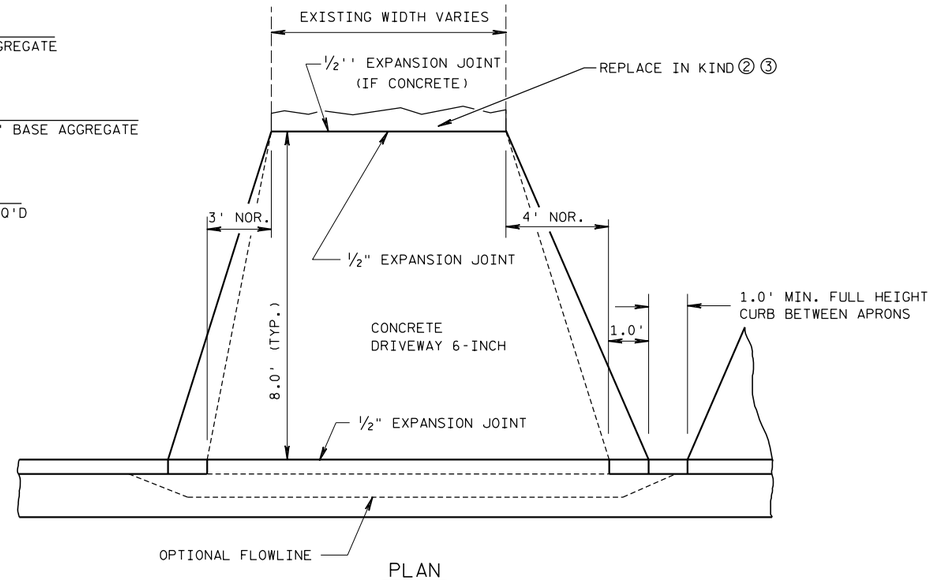
URBAN DRIVEWAY DETAIL (WITH PATH)

①— CONCRETE DRIVEWAY
CONCRETE DRIVEWAY 6" ⁄ 6" BASE AGGREGATE
DENSE 1¼-INCH

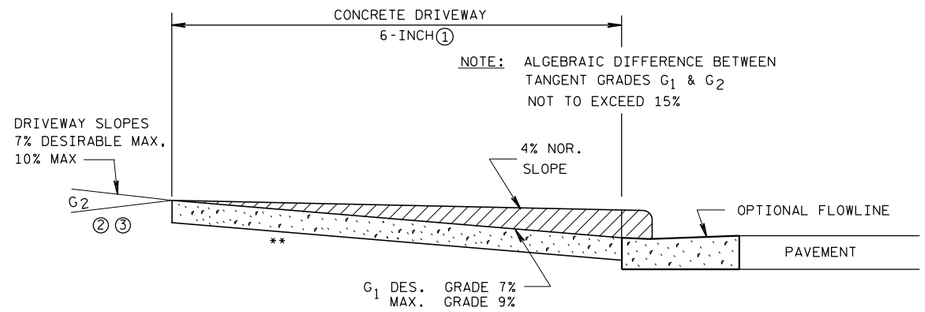
②— ASPHALT DRIVEWAYS
3.5" HMA PAVEMENT TYPE E-0.3 ⁄ 10" BASE AGGREGATE
DENSE 1¼-INCH

③— EXISTING GRAVEL
6" BASE AGGREGATE DENSE ¾-INCH REQ'D

** 6" BASE AGGREGATE DENSE 1 1⁄4-INCH
REQ'D UNDER CONCRETE DRIVEWAY



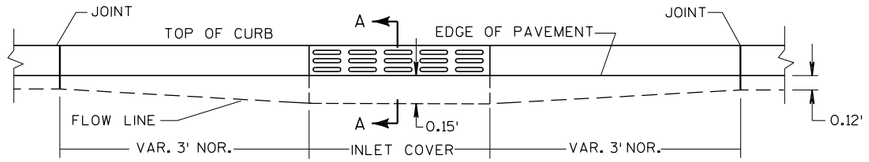
PLAN



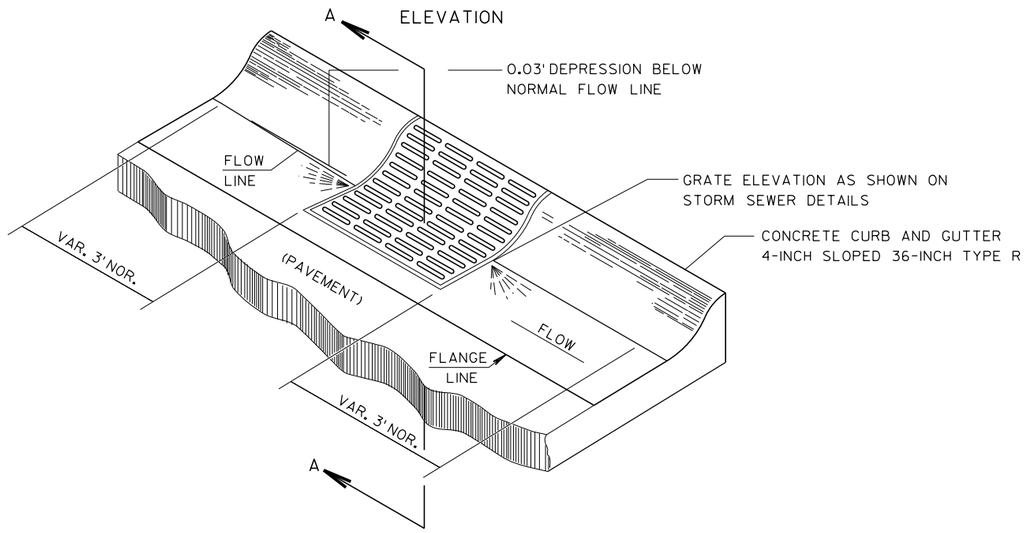
PROFILE

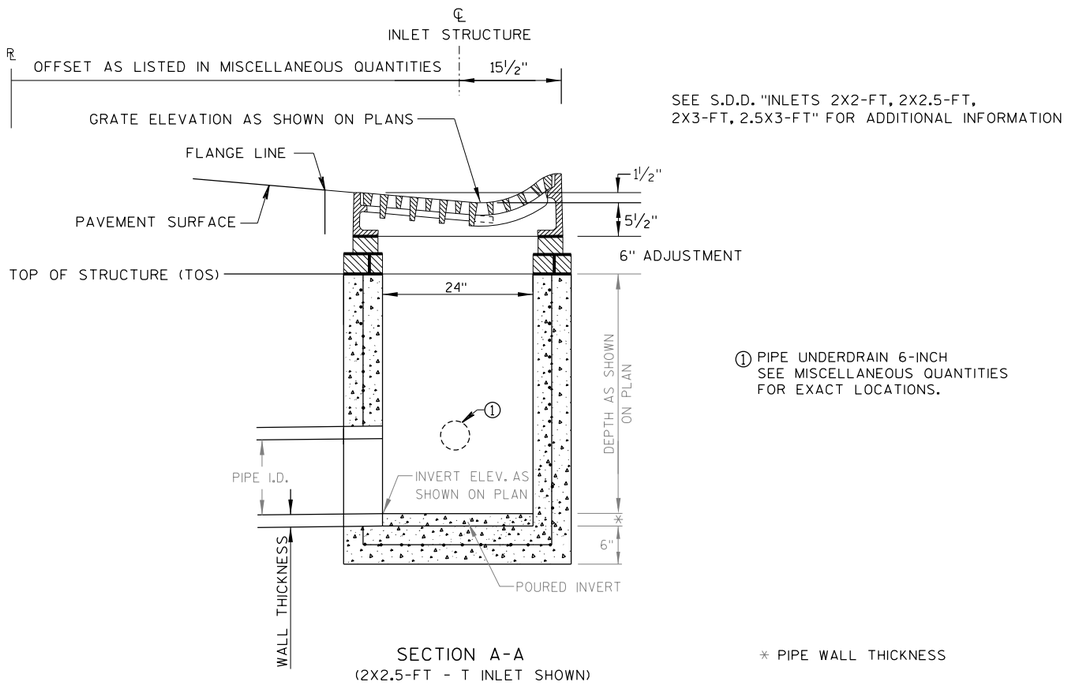
URBAN DRIVEWAY DETAIL (WITHOUT PATH)

PROJECT NO:6020-02-72	HWY:USH 51	COUNTY:DANE	CONSTRUCTION DETAILS	SHEET 23	E



ELEVATION





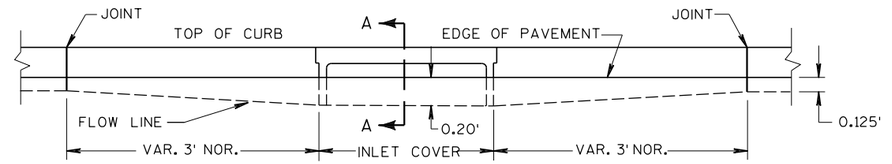
SEE S.D.D. "INLETS 2X2-FT, 2X2.5-FT, 2X3-FT, 2.5X3-FT" FOR ADDITIONAL INFORMATION

① PIPE UNDERDRAIN 6-INCH
SEE MISCELLANEOUS QUANTITIES
FOR EXACT LOCATIONS.

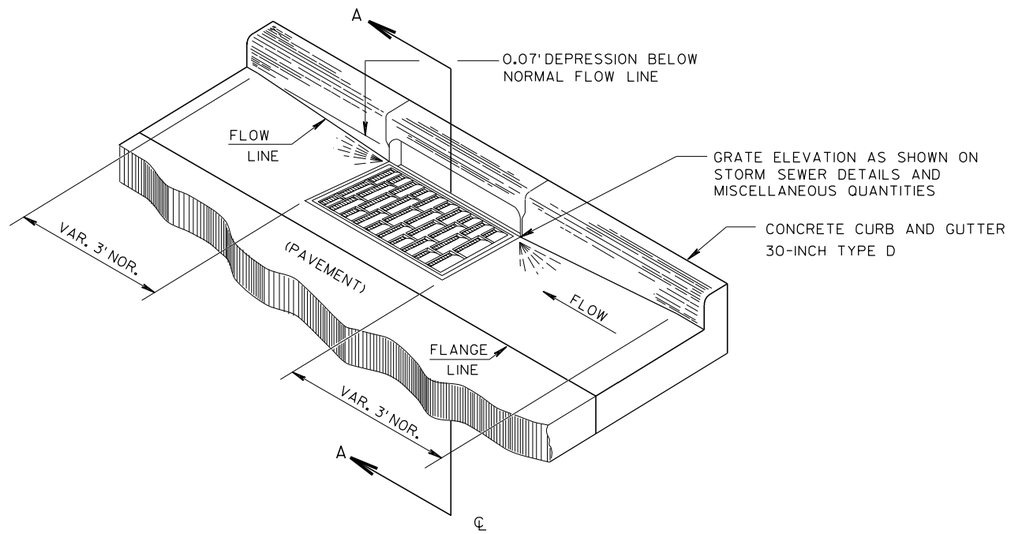
SECTION A-A
(2X2.5-FT - T INLET SHOWN)

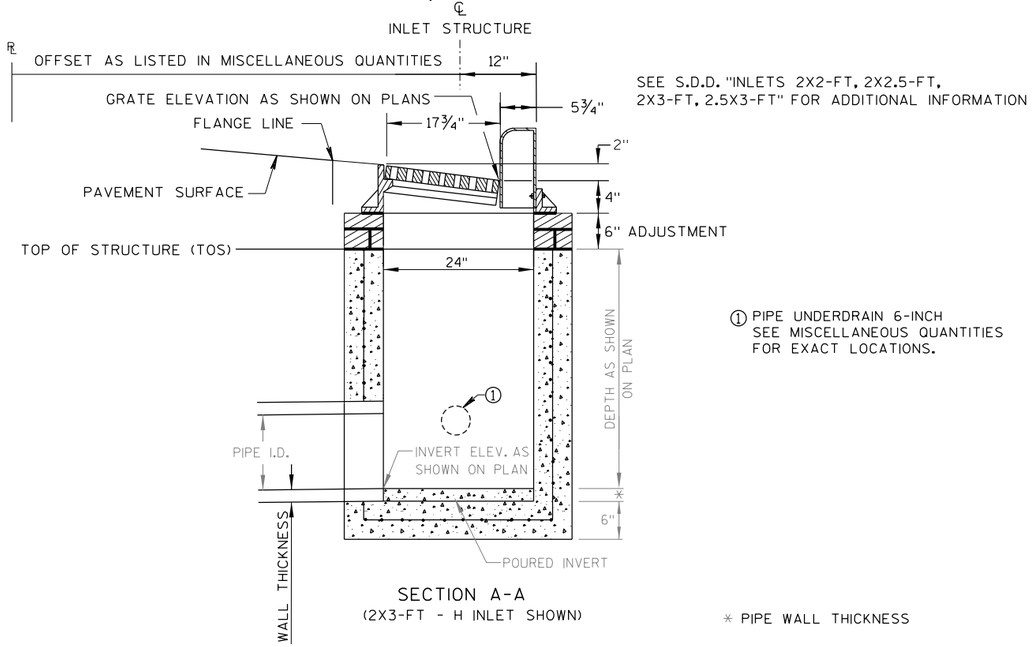
* PIPE WALL THICKNESS

DETAIL OF CONCRETE CURB AND GUTTER 36-INCH TYPE R AT INLETS



ELEVATION





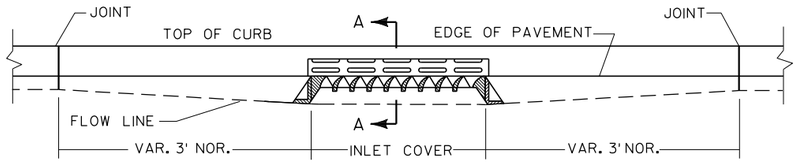
SEE S.D.D. "INLETS 2X2-FT, 2X2.5-FT, 2X3-FT, 2.5X3-FT" FOR ADDITIONAL INFORMATION

① PIPE UNDERDRAIN 6-INCH
SEE MISCELLANEOUS QUANTITIES
FOR EXACT LOCATIONS.

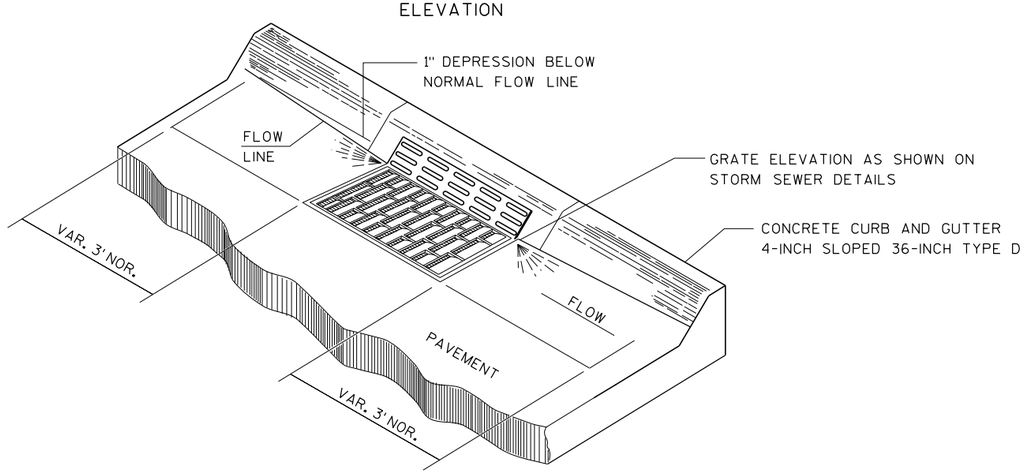
SECTION A-A
(2X3-FT - H INLET SHOWN)

* PIPE WALL THICKNESS

DETAIL OF CONCRETE CURB AND GUTTER 30-INCH TYPE D AT INLETS

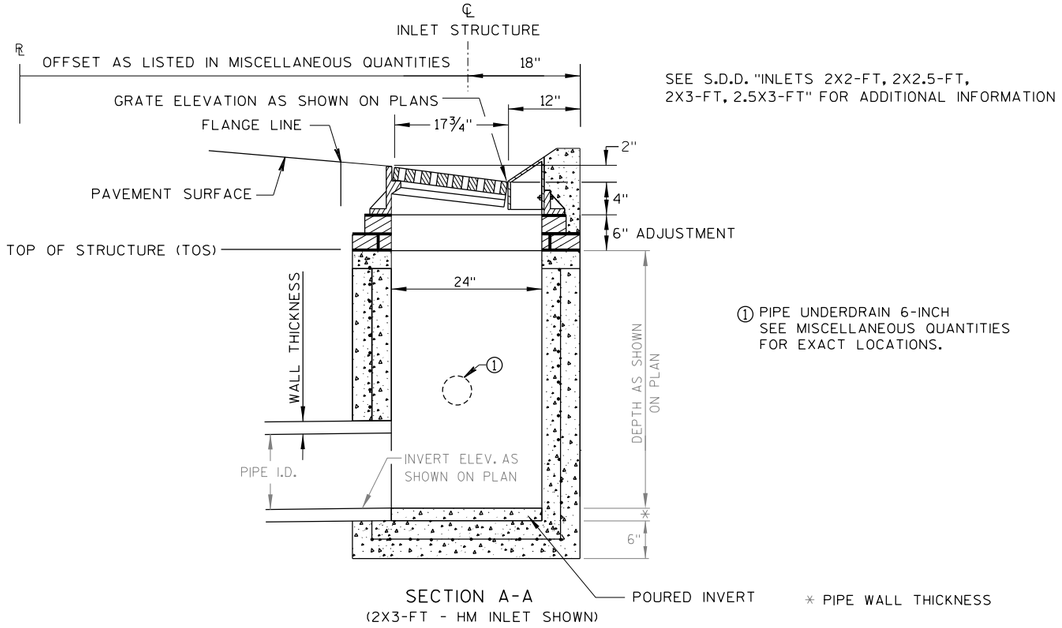


ELEVATION



DETAIL OF CURB AND GUTTER AT INLETS

(2x3-FT - HM INLET SHOWN)



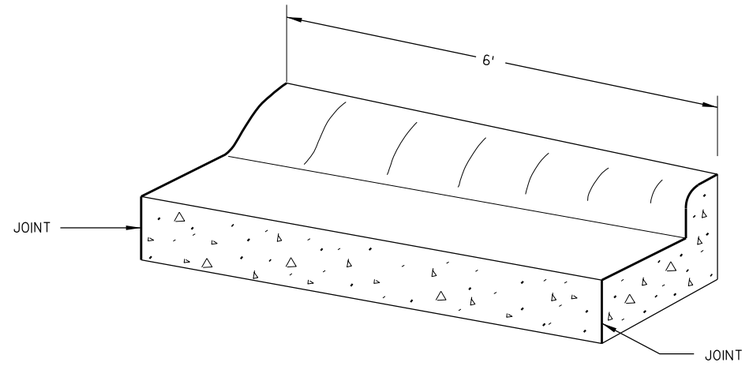
SEE S.D.D. "INLETS 2X2-FT, 2X2.5-FT, 2X3-FT, 2.5X3-FT" FOR ADDITIONAL INFORMATION

① PIPE UNDERDRAIN 6-INCH
SEE MISCELLANEOUS QUANTITIES
FOR EXACT LOCATIONS.

SECTION A-A
(2X3-FT - HM INLET SHOWN)

* PIPE WALL THICKNESS

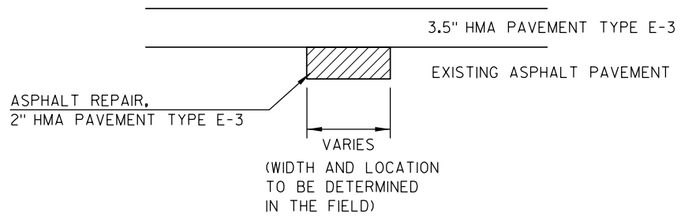
CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE D AT INLETS



TRANSITION DETAIL

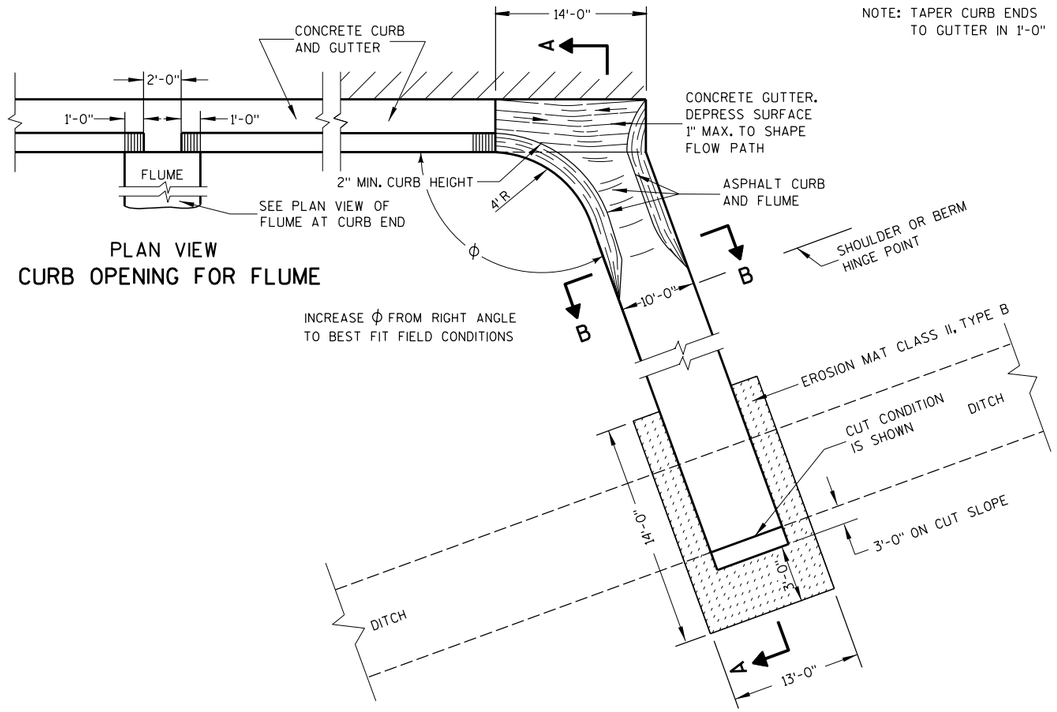
CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE D TO
CONCRETE CURB & GUTTER 30-INCH TYPE D (TO BE MEASURED AND PAID
FOR AS CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE D)

LOCATIONS:
13+46.05 NT H
498+83.53 SN
25+46.78 CV
12+91.12 NT F
15+26.63 NT E
11+22.10 SB D



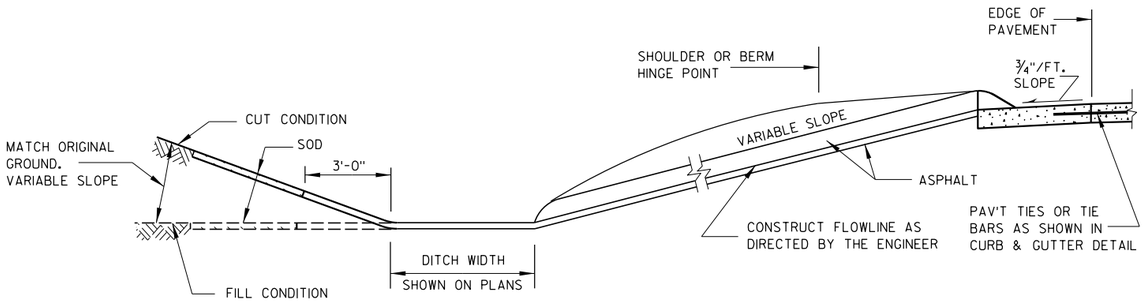
PARTIAL DEPTH ASPHALT REPAIR

NOTE:
LOCATION MAY VARY AND IS TO BE
CENTERED ON MAXIMUM DISTRESSED AREA.

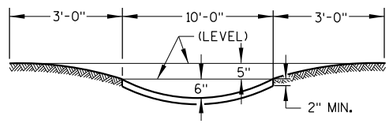


PLAN VIEW
CURB OPENING FOR FLUME

PLAN VIEW
FLUME AT CURB END

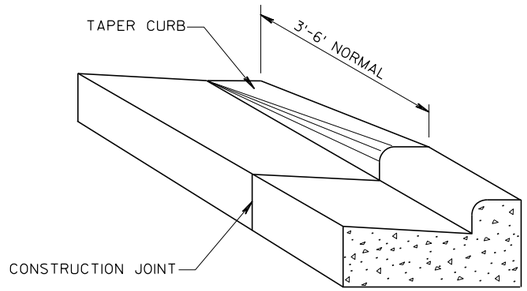


SECTION A-A

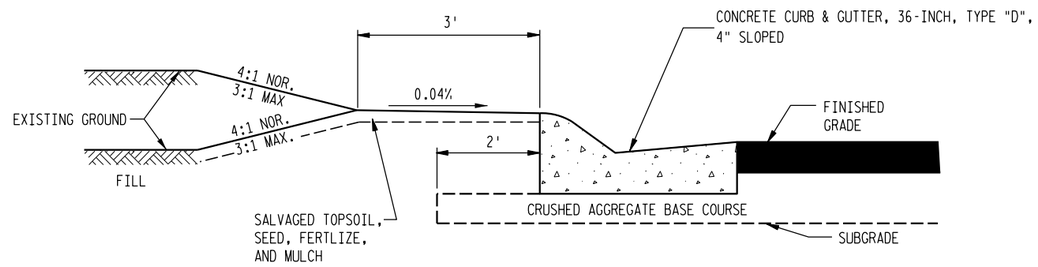


SECTION B-B

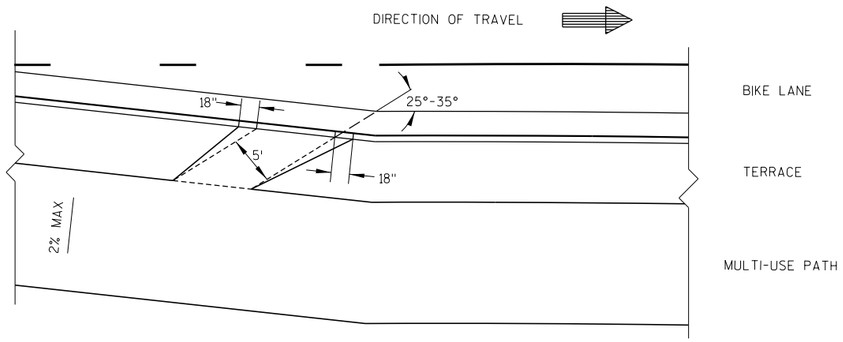
ASPHALTIC FLUME



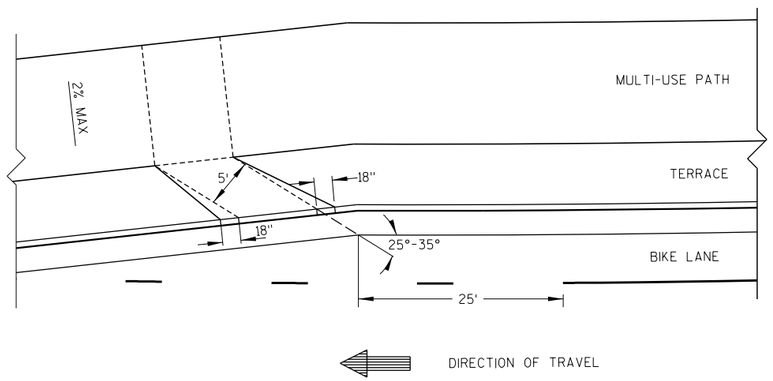
DETAIL OF CURB & GUTTER TERMINI



TYPICAL PARTIAL SECTION AT 36-INCH CURB & GUTTER

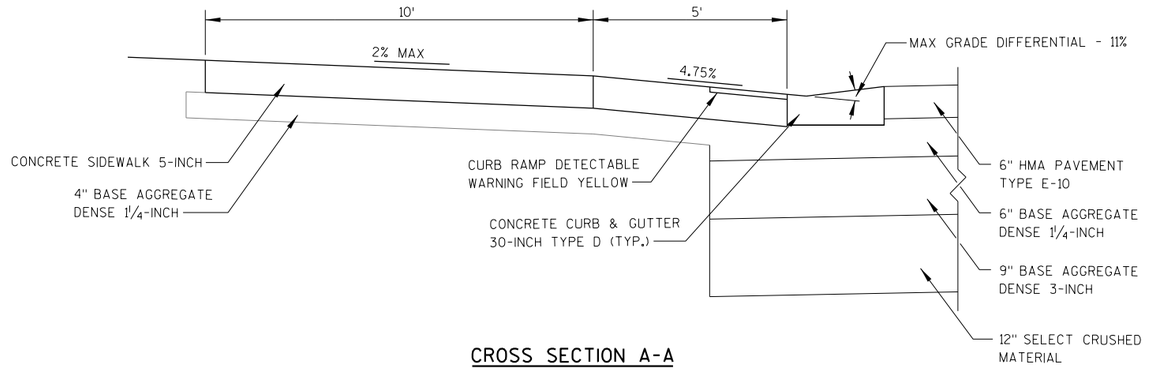


BIKE RAMP ENTRANCE

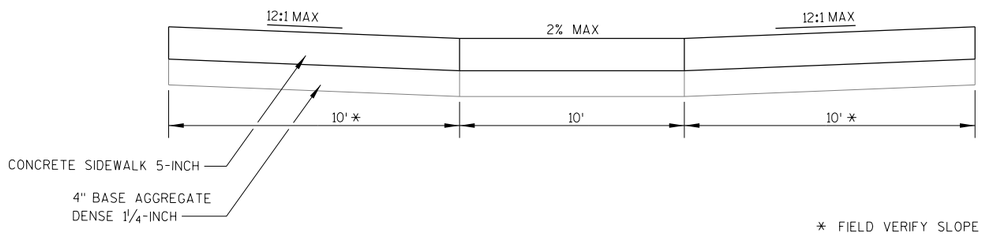


BIKE RAMP EXIT

BIKE RAMP ENTRANCE AND EXIT

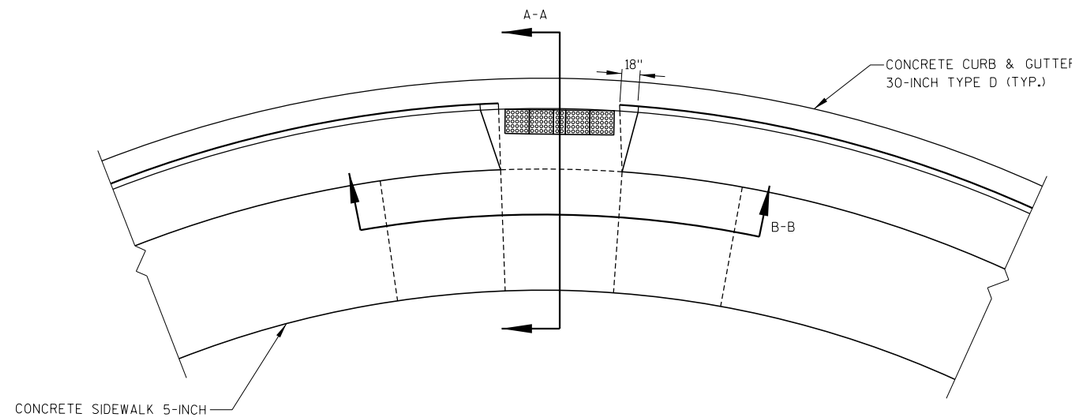


CROSS SECTION A-A



* FIELD VERIFY SLOPE DOES NOT EXCEED 12:1. ADJUST DISTANCE ACCORDINGLY.

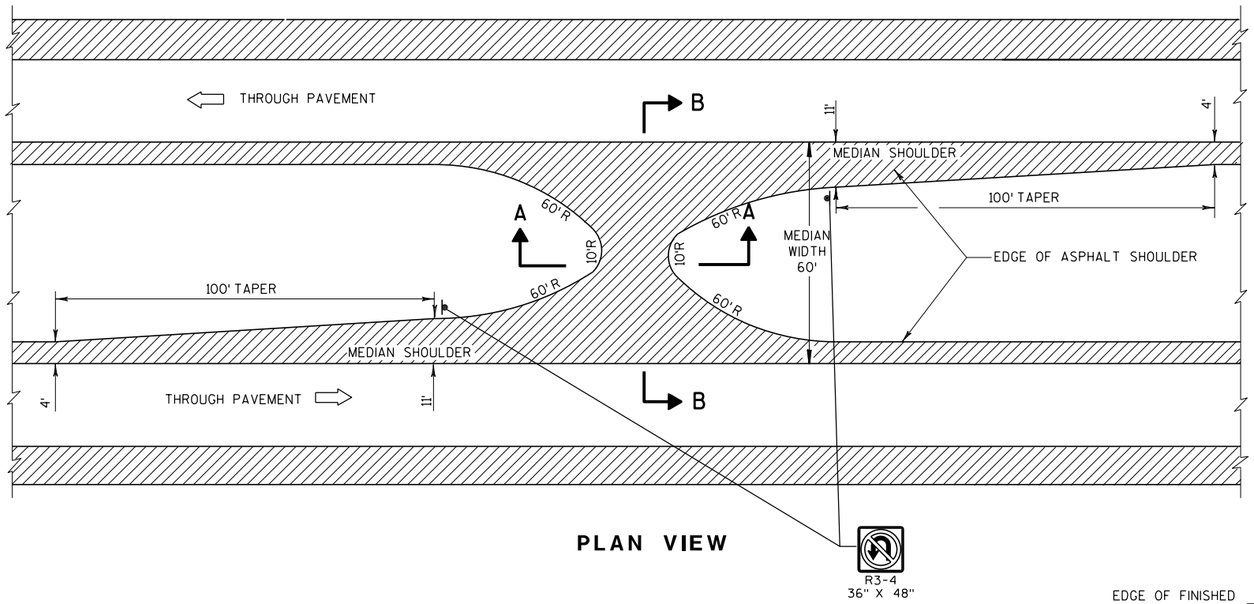
CROSS SECTION B-B



CURB RAMP DETAIL

SEE S.D.D. 8D5-15 A-F FOR ADDITIONAL INFORMATION

2

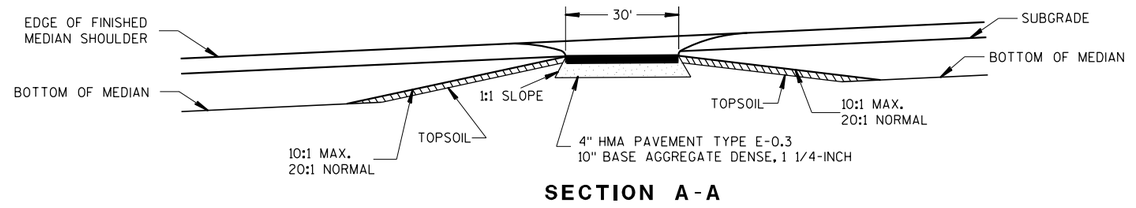


PLAN VIEW

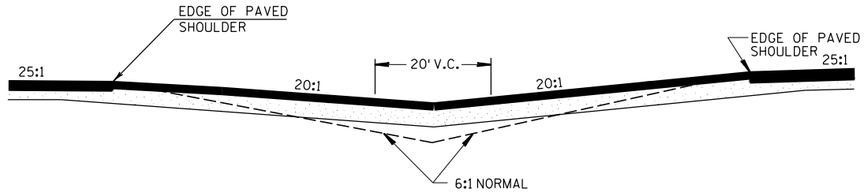
GENERAL NOTES

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.

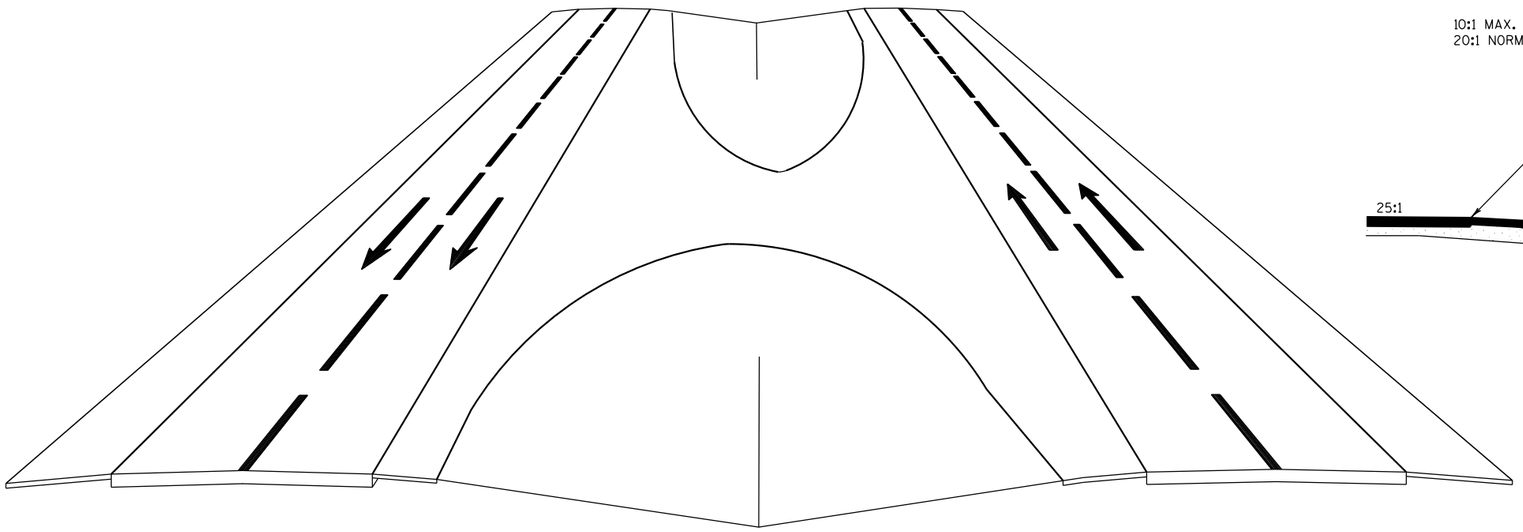
SIGNING DETAILS AND SPECIFICATIONS ARE PROVIDED ELSEWHERE IN THE CONTRACT.



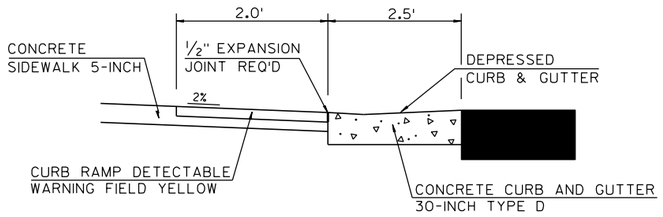
SECTION A-A



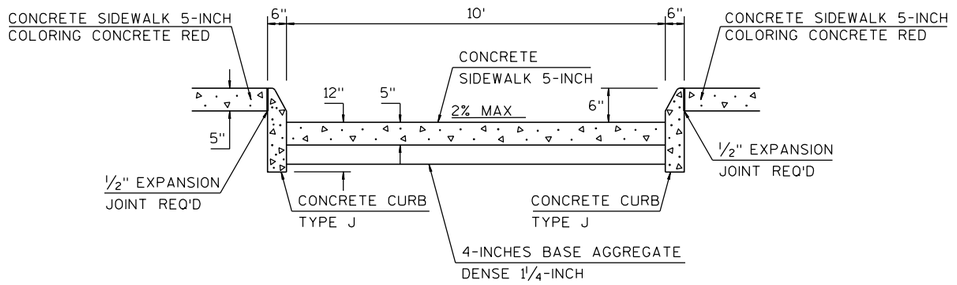
SECTION B-B



MAINTENANCE CROSSOVER

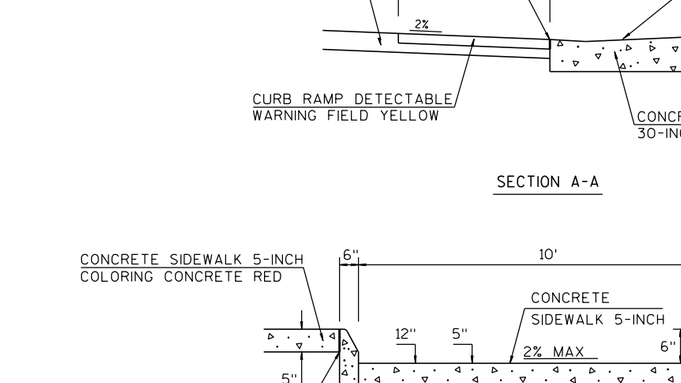


SECTION A-A



SECTION B-B

SECTION C-C

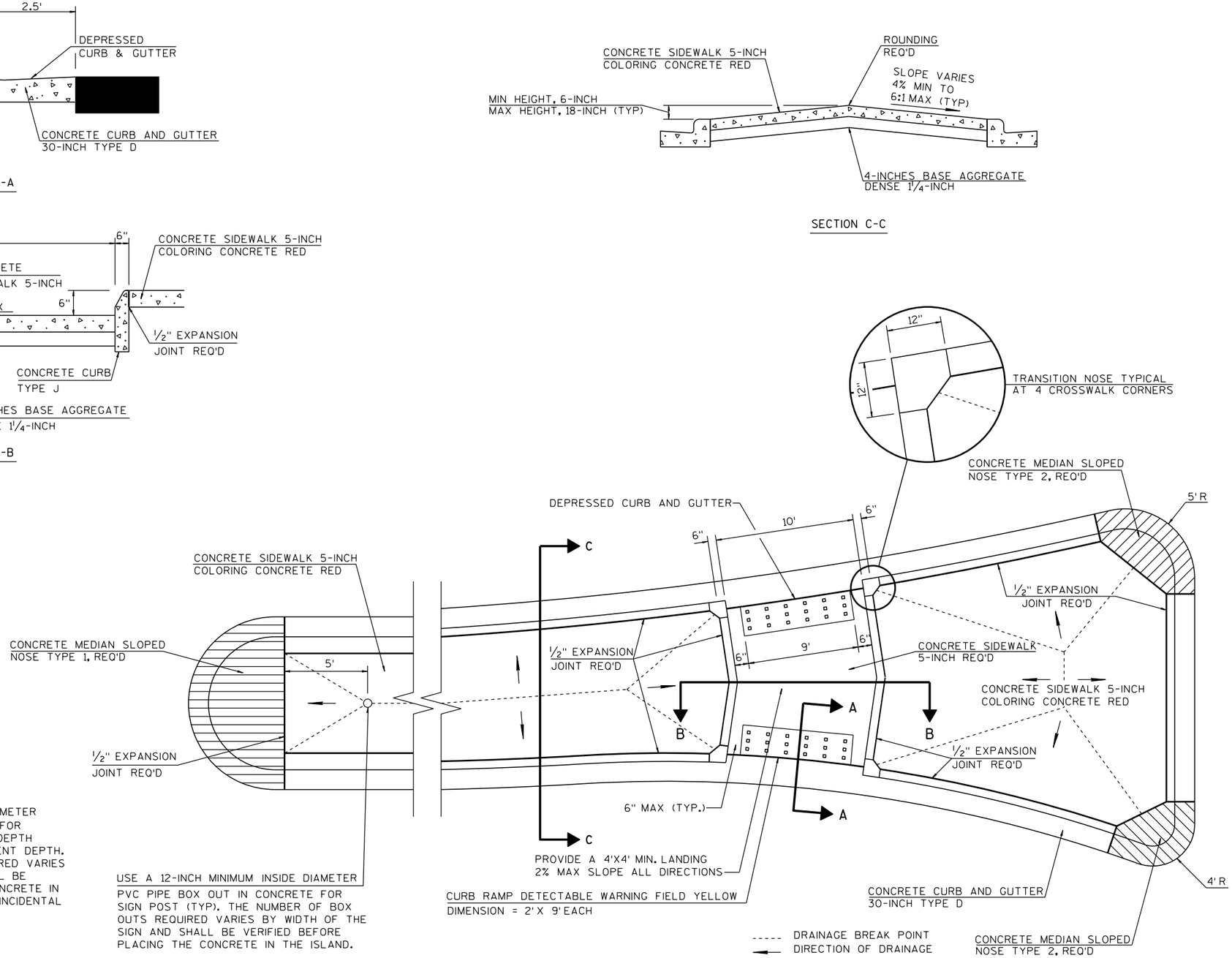


* DISTANCE TO BE LAID OUT IN THE FIELD BASED ON SIGN SIZE. TWO FOOT MINIMUM CLEARANCE BETWEEN THE EDGE OF SIGN AND THE FACE OF CURB.

** SEE A4-4 SIGN PLATE FOR POST SPACING REQUIREMENTS.

USE A 12-INCH MINIMUM INSIDE DIAMETER PVC PIPE BOX OUT IN CONCRETE FOR SIGN POST (TYP). PVC BOX OUT DEPTH SHOULD MATCH ADJACENT PAVEMENT DEPTH. THE NUMBER OF BOX OUTS REQUIRED VARIES BY WIDTH OF THE SIGN AND SHALL BE VERIFIED BEFORE PLACING THE CONCRETE IN THE ISLAND. GRAVEL BACKFILL IS INCIDENTAL TO POSTS WOOD BID ITEM.

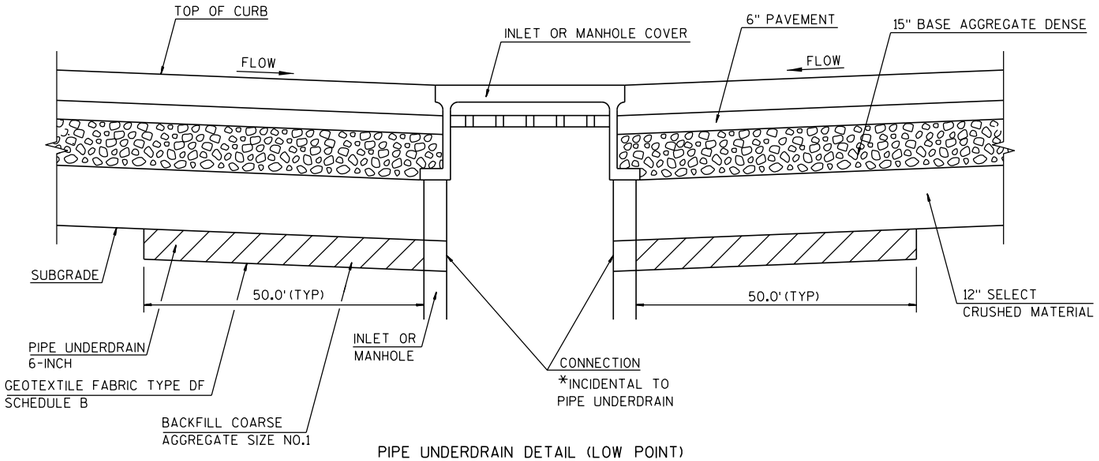
CENTER AND SPLITTER ISLAND SIGN LOCATION DETAIL (TYP)



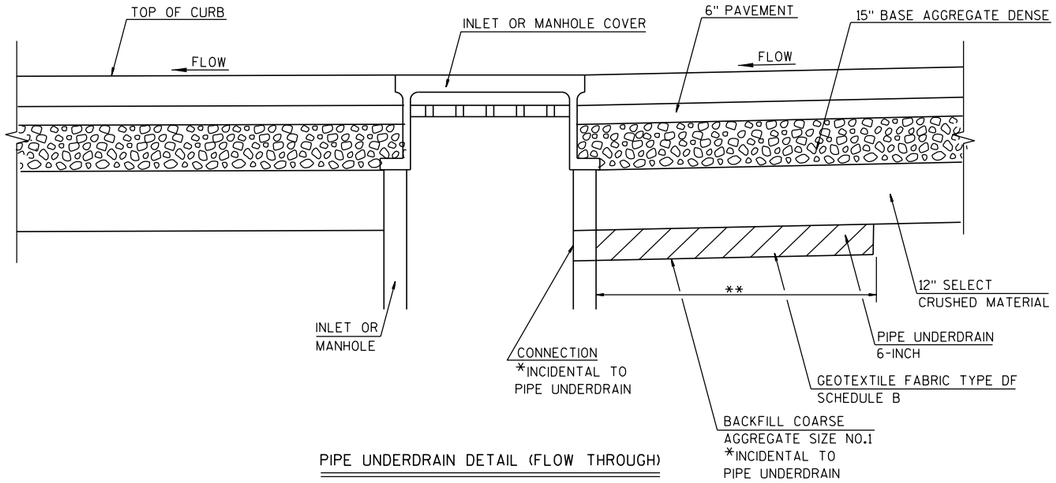
USE A 12-INCH MINIMUM INSIDE DIAMETER PVC PIPE BOX OUT IN CONCRETE FOR SIGN POST (TYP). THE NUMBER OF BOX OUTS REQUIRED VARIES BY WIDTH OF THE SIGN AND SHALL BE VERIFIED BEFORE PLACING THE CONCRETE IN THE ISLAND.

SPLITTER ISLAND DETAIL

NOTE: INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS.) DO NOT MARK TRANSITION NOSE.

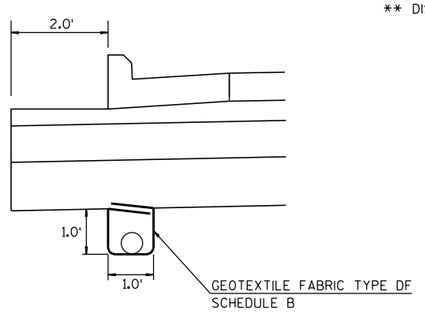


PIPE UNDERDRAIN DETAIL (LOW POINT)



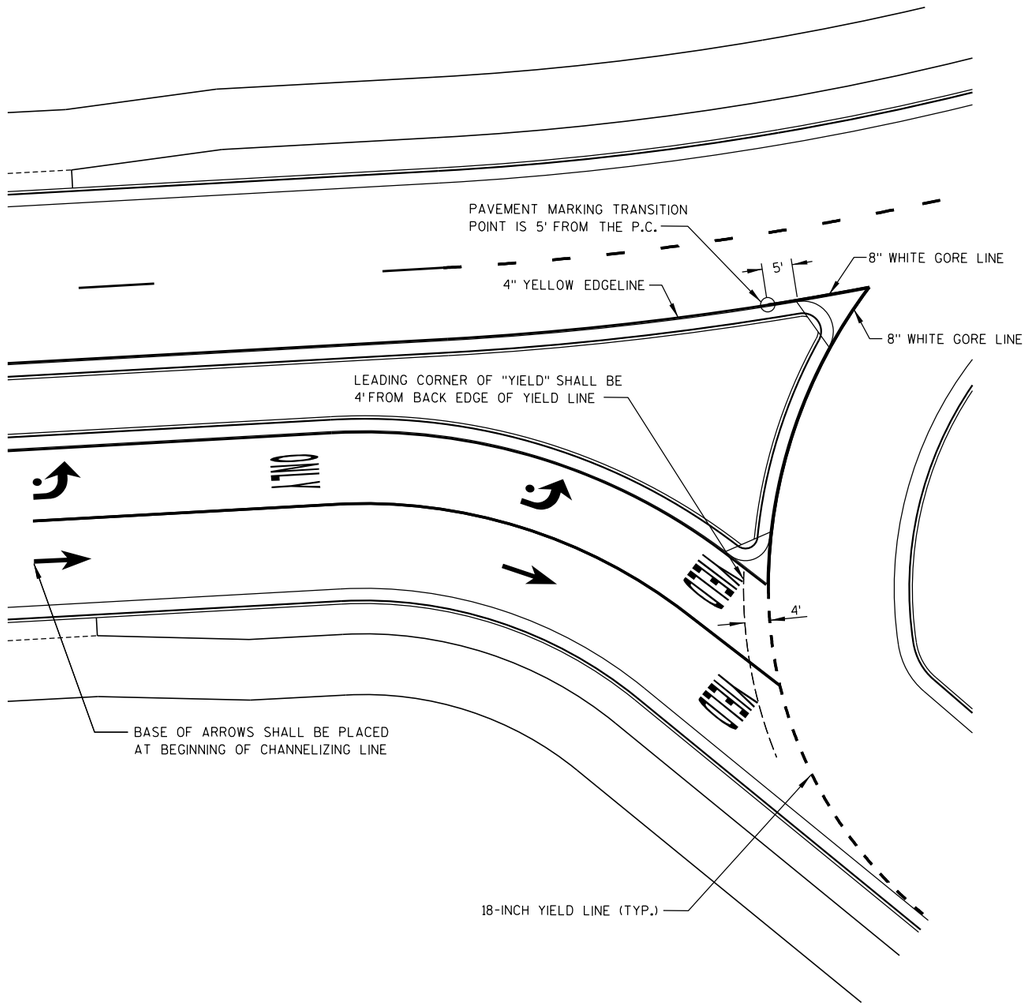
PIPE UNDERDRAIN DETAIL (FLOW THROUGH)

** DISTANCE VARIES, SEE MISC. QUANTITIES

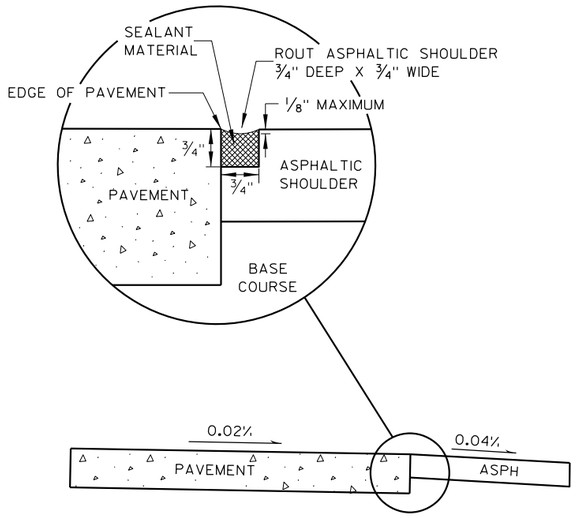


PIPE UNDERDRAIN DETAIL

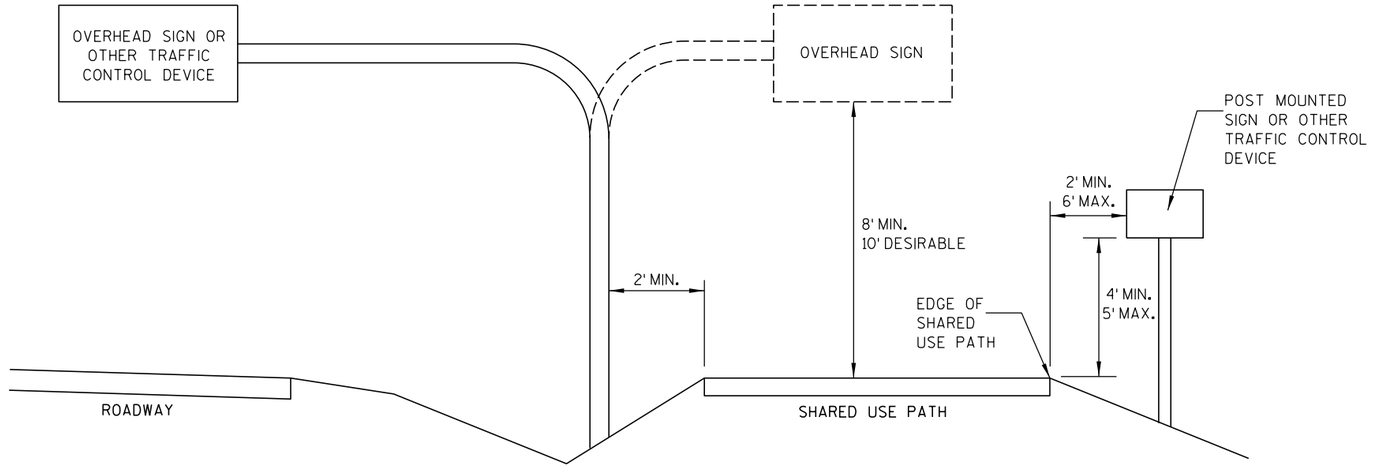
NOTE:
UNDERDRAIN TO BE DISCHARGED INTO STORM SEWER INLETS



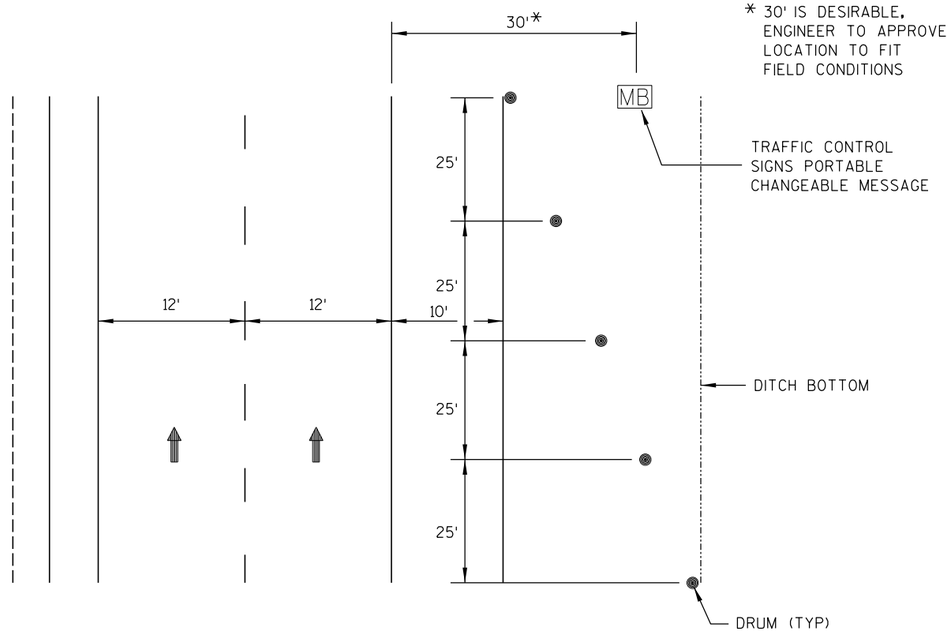
ROUNDABOUT PAVEMENT MARKING DETAILS



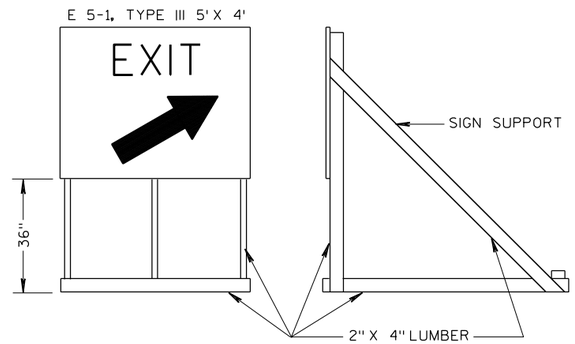
ROUTE AND SEAL DETAIL



SIGN PLACEMENT ON SHARED-USE PATHS

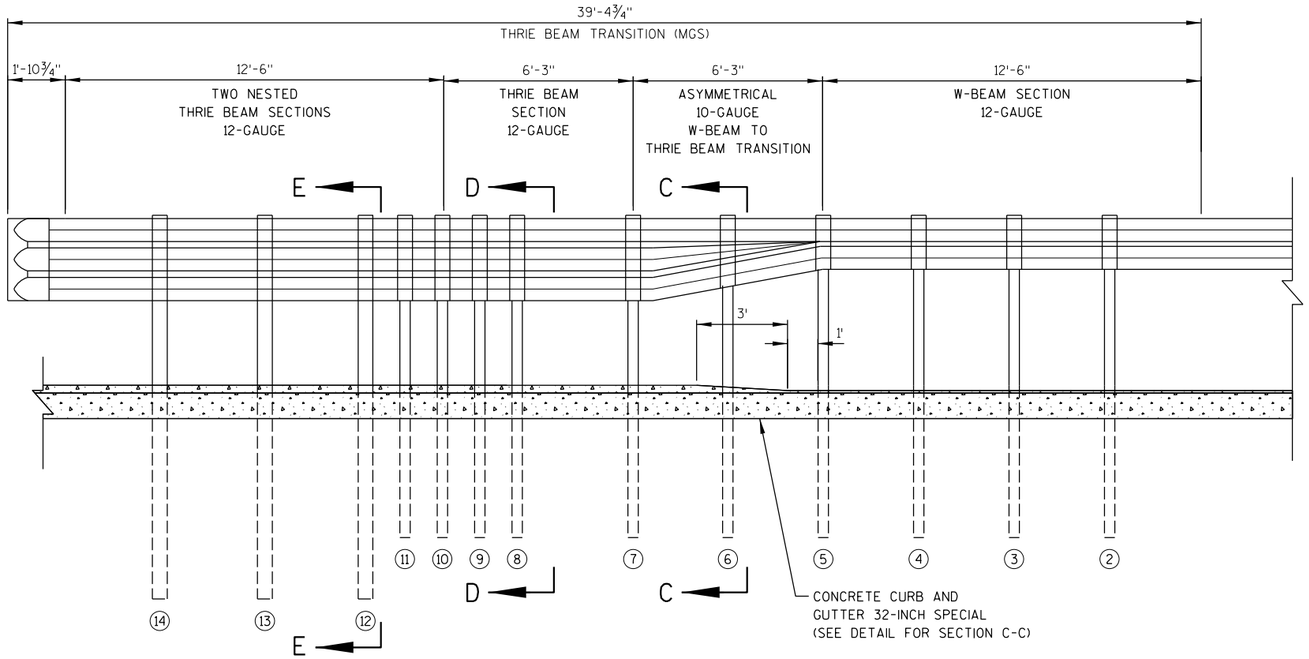


CHANGEABLE MESSAGE SIGN DELINEATION DETAIL

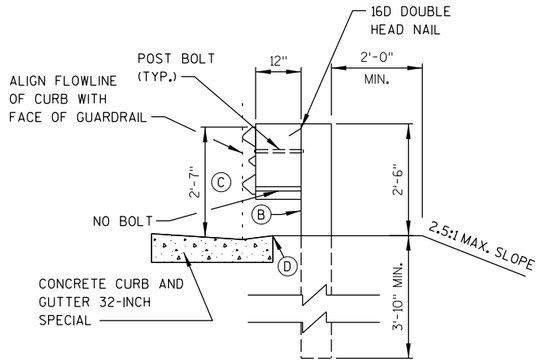


MOUNTING DETAIL FOR MOVABLE EXIT SIGN

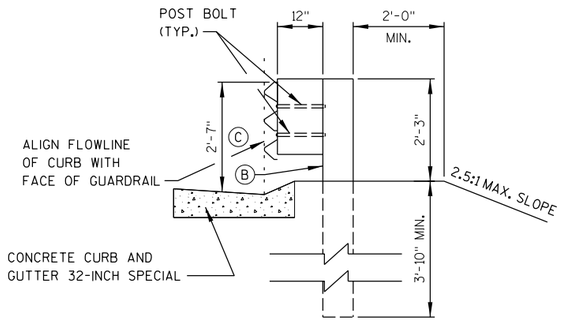
PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CONSTRUCTION DETAILS	SHEET 31	E



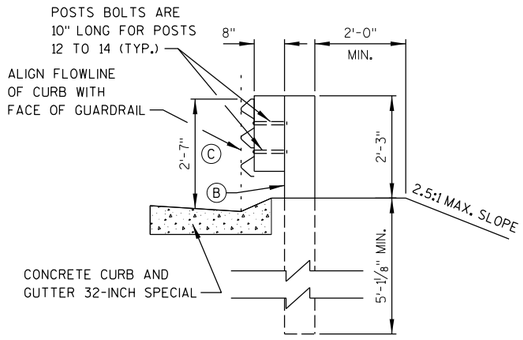
MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION WITH CONCRETE CURB AND GUTTER



SECTION C-C
POST 6



SECTION D-D
POSTS 7-11



SECTION E-E
POSTS 12-14

Ⓑ 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.

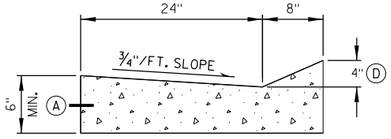
Ⓒ FOR NEW MGS INSTALLATION TOP OF W-BEAM RAIL TOLERANCE IS ± 1".

Ⓓ DEPRESS 4-INCH CURB HEAD TO 1-INCH AT ASYMMETRICAL AND W-BEAM SECTIONS OF THRIE BEAM TRANSITION.

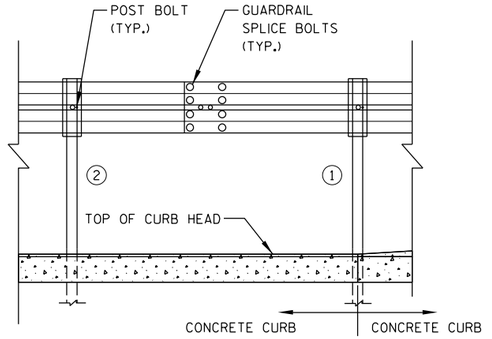
UTILIZE INLET COVER TYPE V, PLACED ON INLETS TYPE 1 WHEN A DRAINAGE STRUCTURE IS REQUIRED. THE TYPICAL LOCATION FOR THE DRAINAGE STRUCTURE IS WHERE THE POST SPACING IS 3'-1½".

SEE MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL AND MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS) DETAILS WHEN NECESSARY

Ⓐ 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.



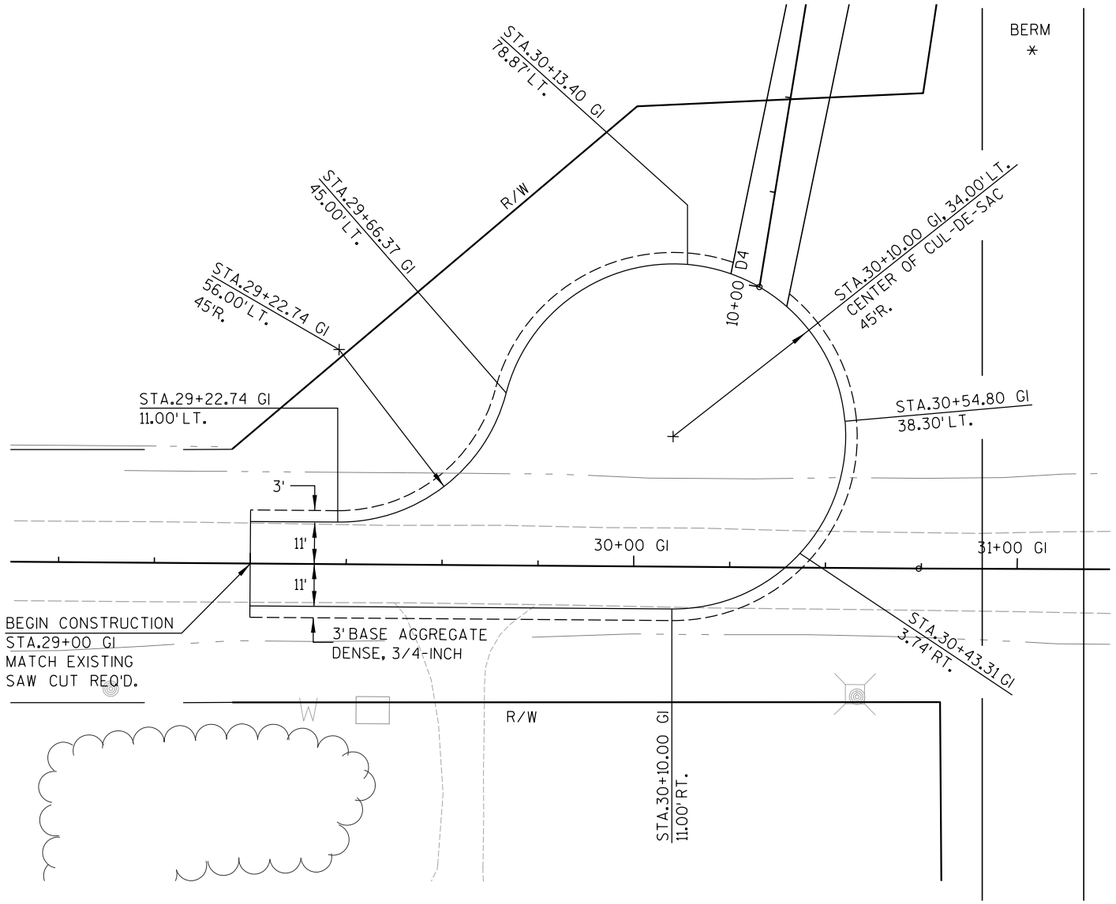
CONCRETE CURB AND GUTTER 32-INCH SPECIAL



SPLICE DETAIL

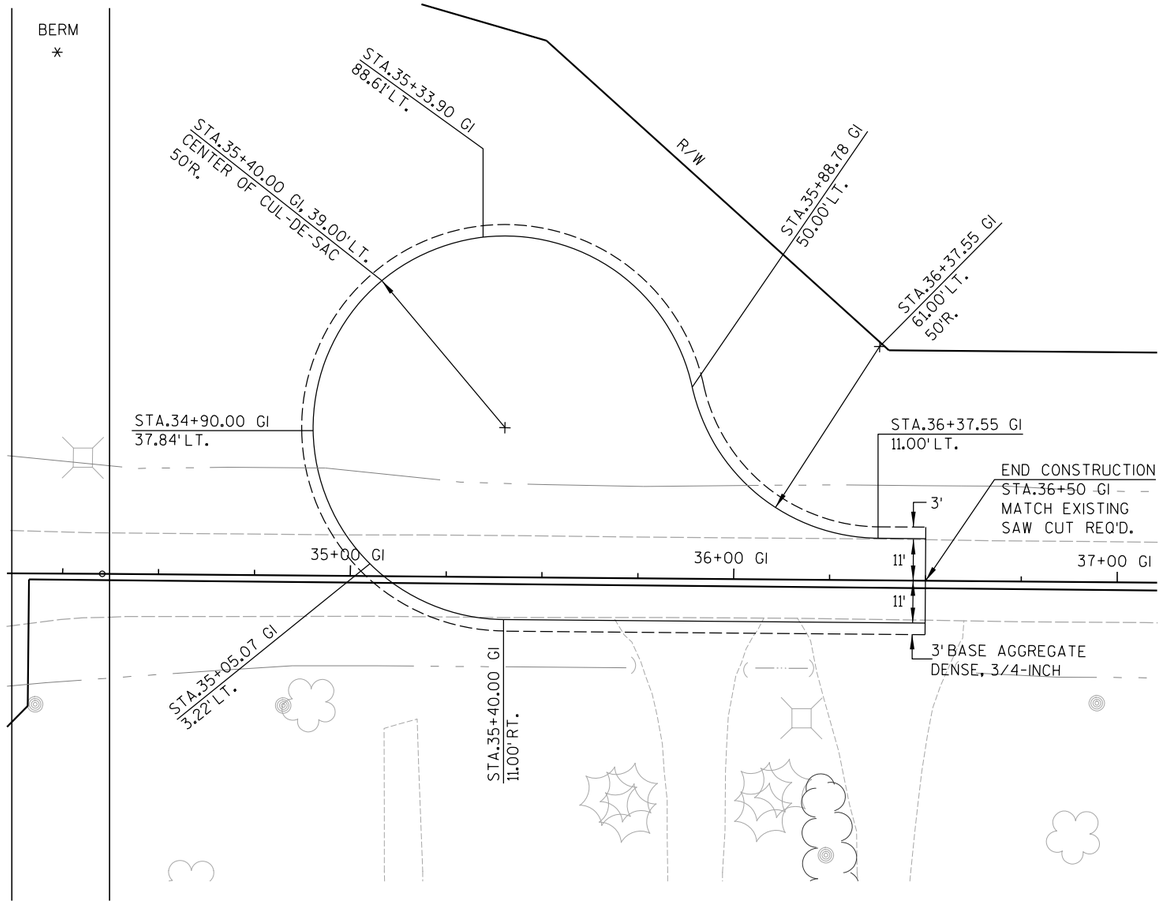
PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	THRIE BEAM TRANSITION DETAIL	SHEET 32	E

* SEE US 51 CROSS SECTIONS

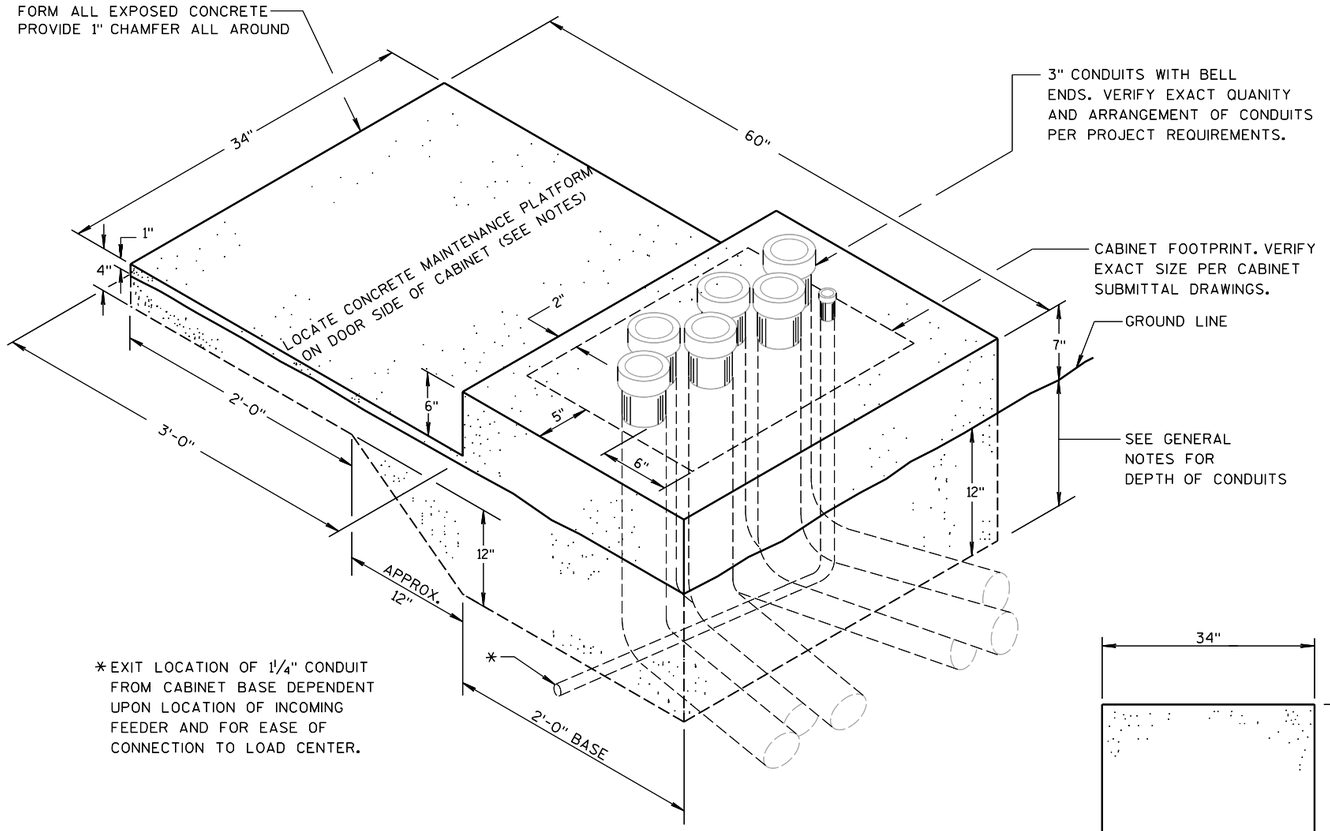


GRINDE ROAD CUL-DE-SAC DETAIL

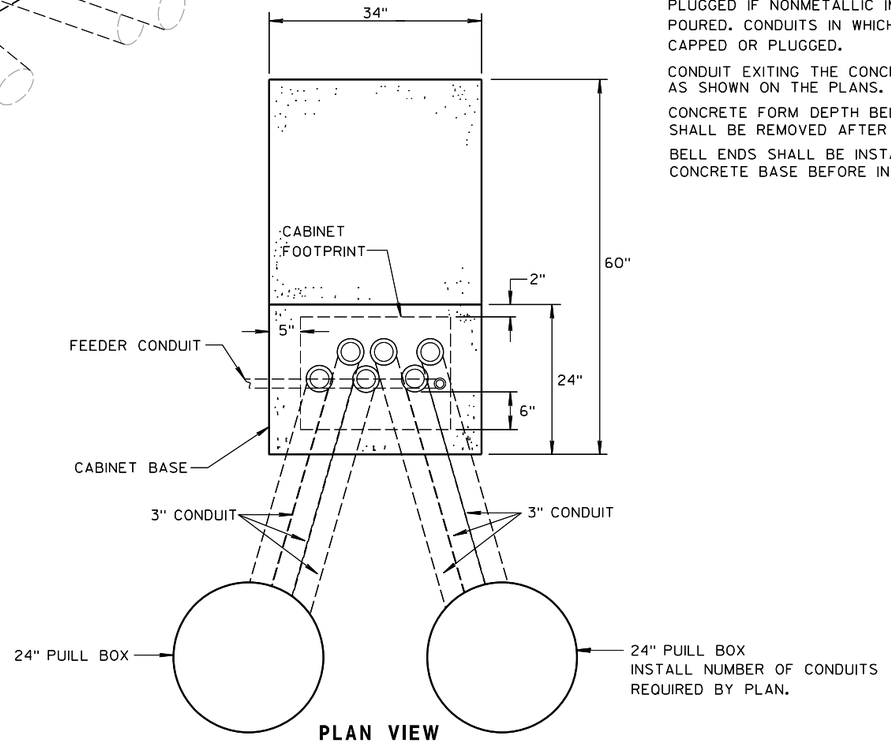
* SEE US 51 CROSS SECTIONS



WINDSOR WAY CUL-DE-SAC DETAIL



ISOMETRIC VIEW



PLAN VIEW

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

INSTALL FOUR STAINLESS STEEL APPROVED CONCRETE MASONRY ANCHORS TO ANCHOR THE CABINET BASES. THE ANCHORS 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.

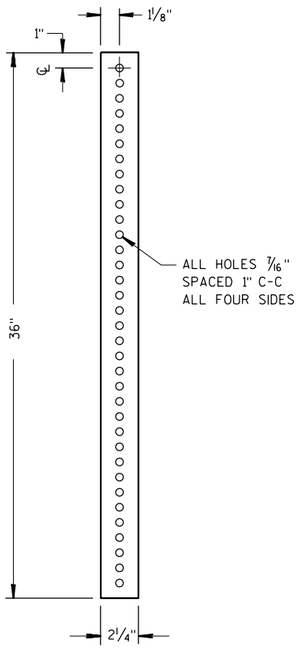
BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF THE CONCRETE BASE BEFORE INSTALLATION OF CABLE OR WIRE.

CONCRETE CONTROL CABINET BASES SPECIAL

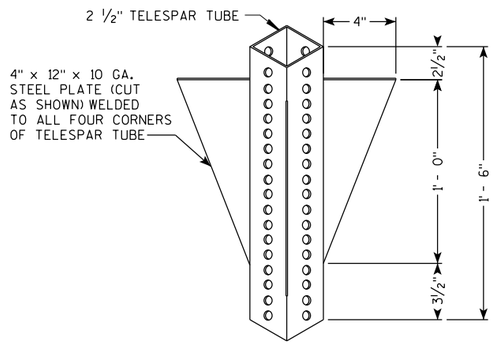
2

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

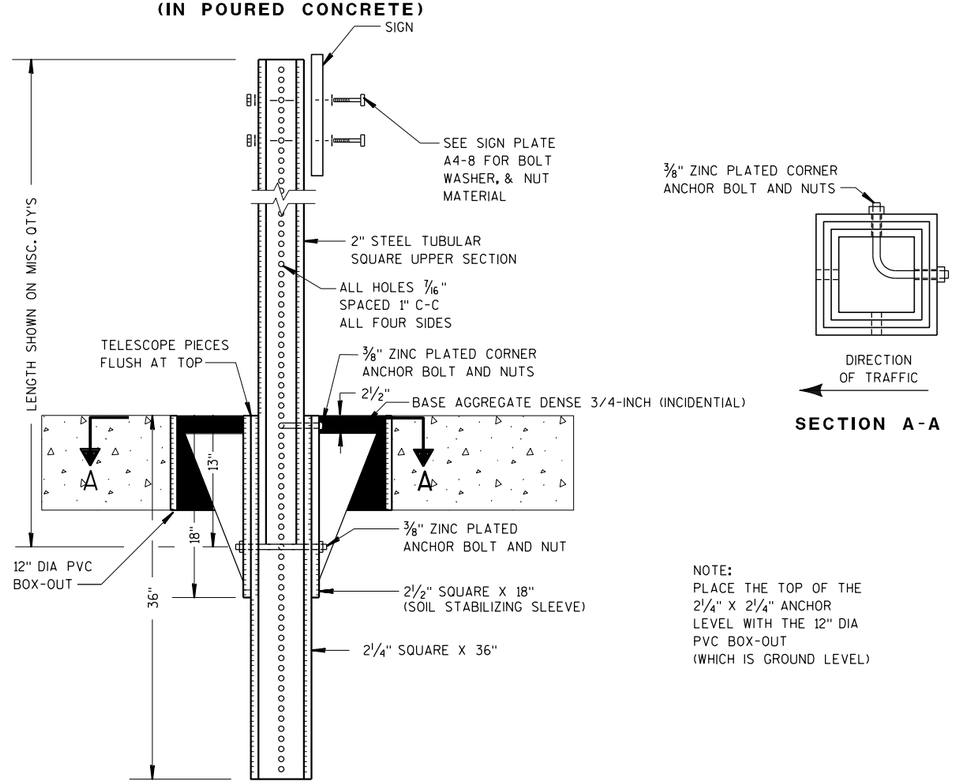
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH



DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE)



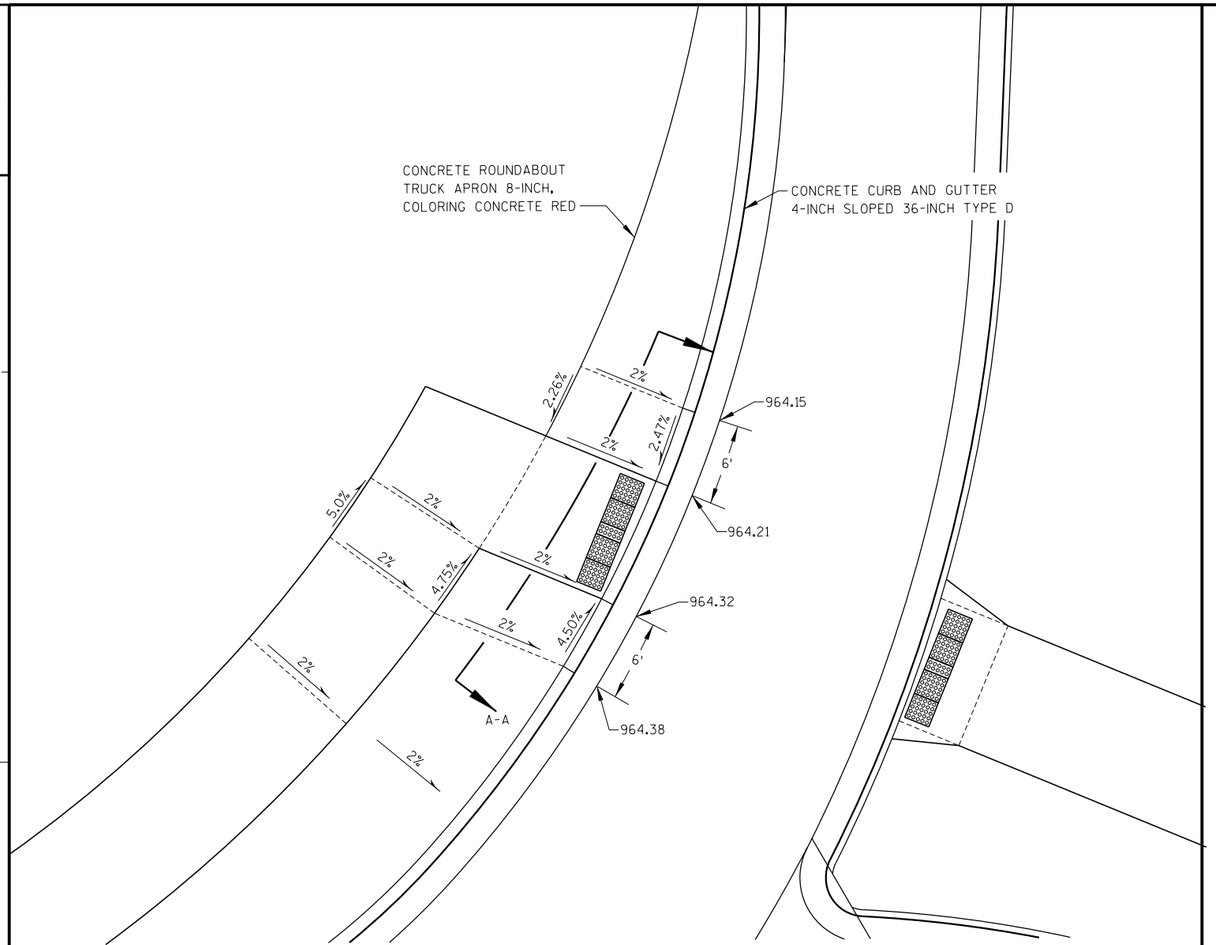
SECTION A-A

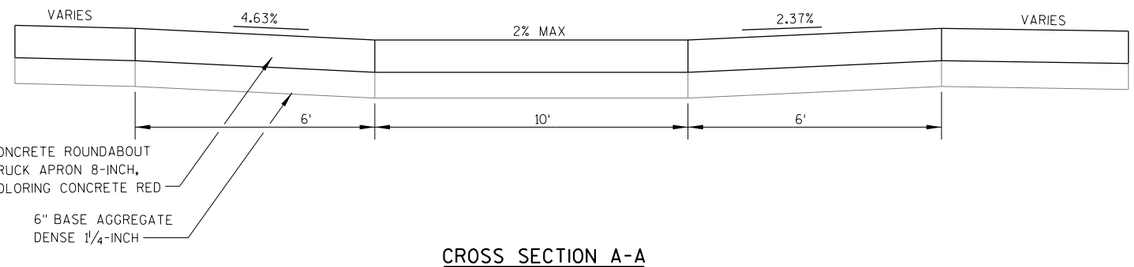
NOTE:
PLACE THE TOP OF THE 2¼" X 2¼" ANCHOR LEVEL WITH THE 12" DIA PVC BOX-OUT (WHICH IS GROUND LEVEL)

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).

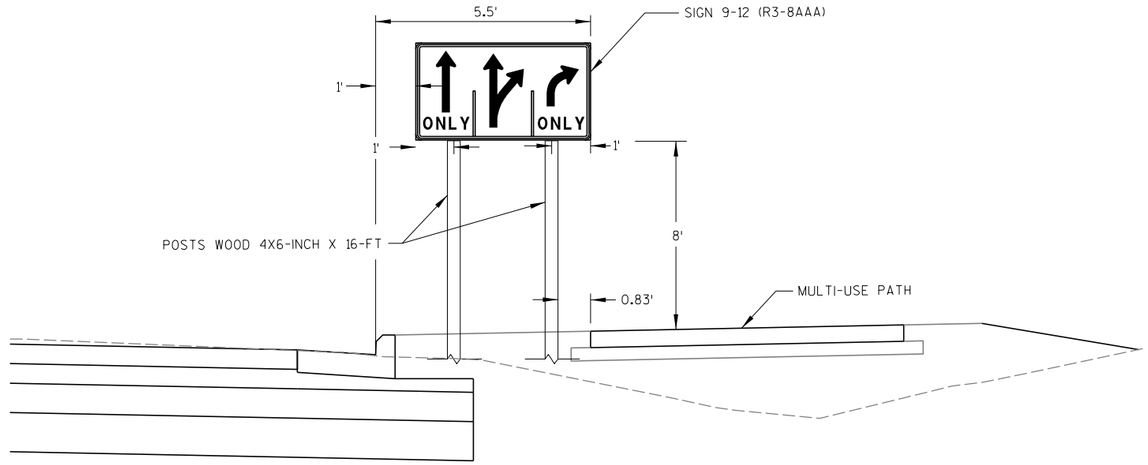
REMOVABLE SIGN POST

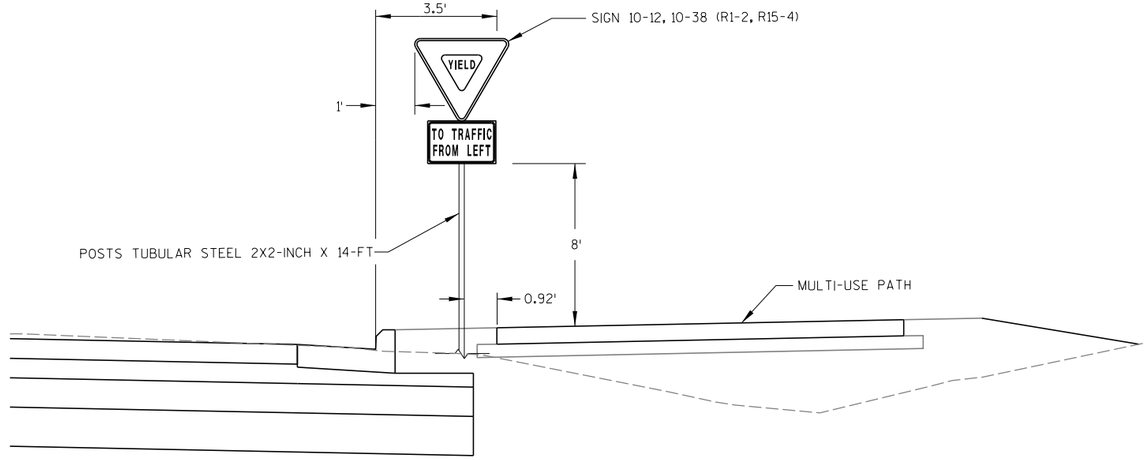




CROSS SECTION A-A

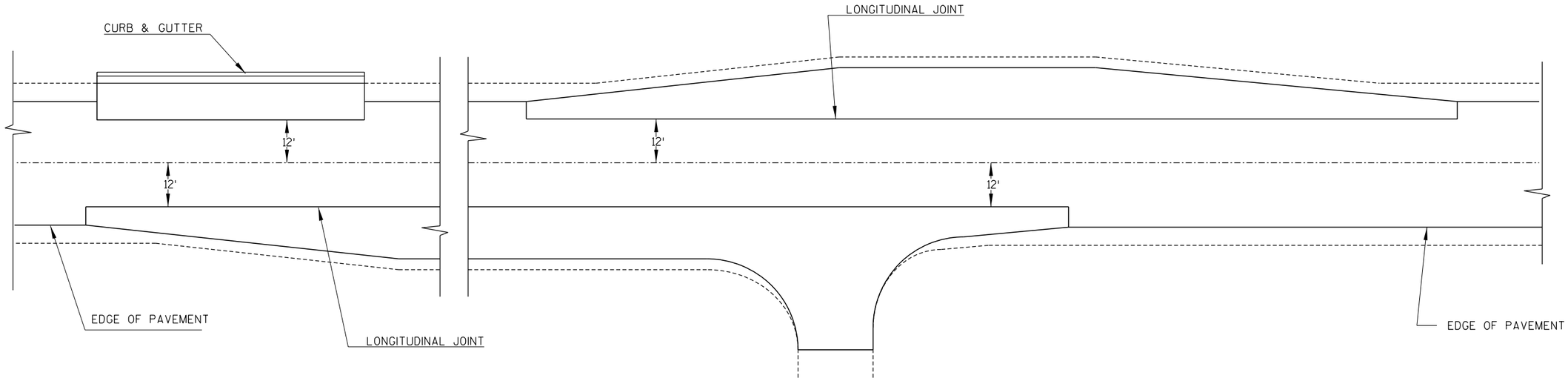
CURB RAMP DETAIL - SB OFF-RAMP





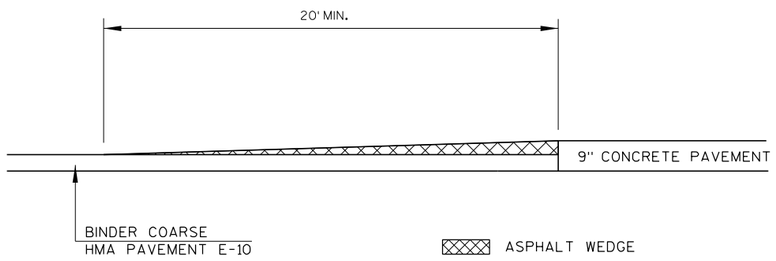
SIGN MOUNTING DETAIL - 9-12, 10-12, 10-38

2



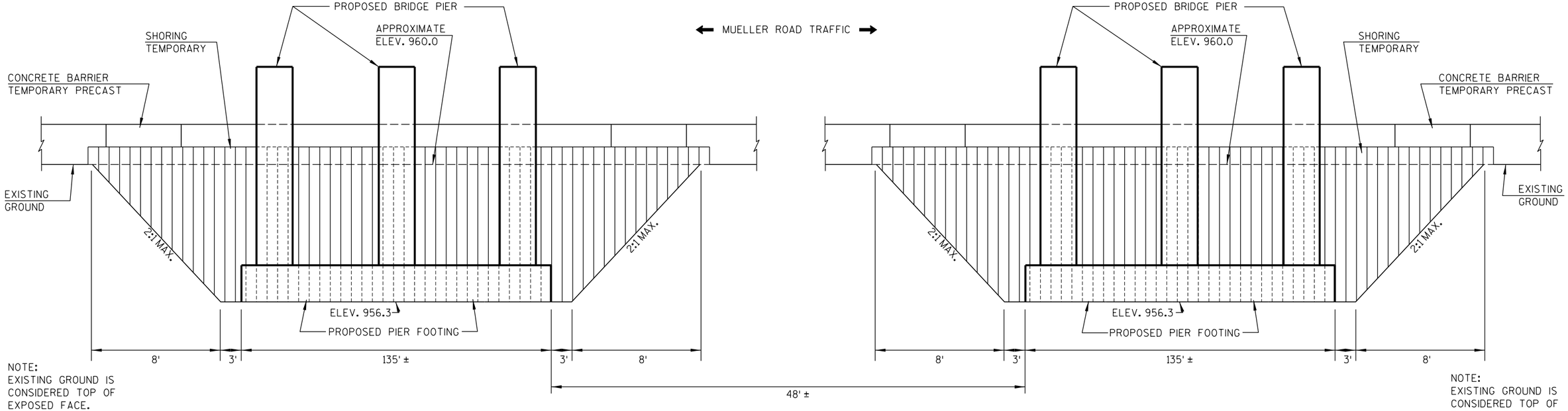
HMA LONGITUDINAL JOINT DETAIL *

* TO BE USED AT ALL INTERSECTIONS, BYPASS, PASSING LANE AND RURAL CURB SECTIONS



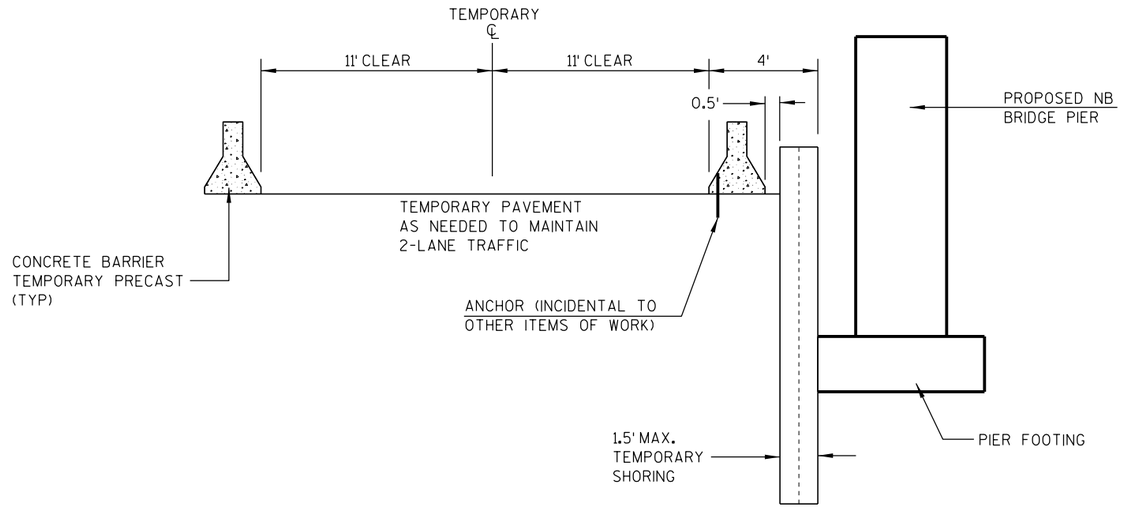
ASPHALT WEDGE DETAIL

2



NOTE:
EXISTING GROUND IS CONSIDERED TOP OF EXPOSED FACE.

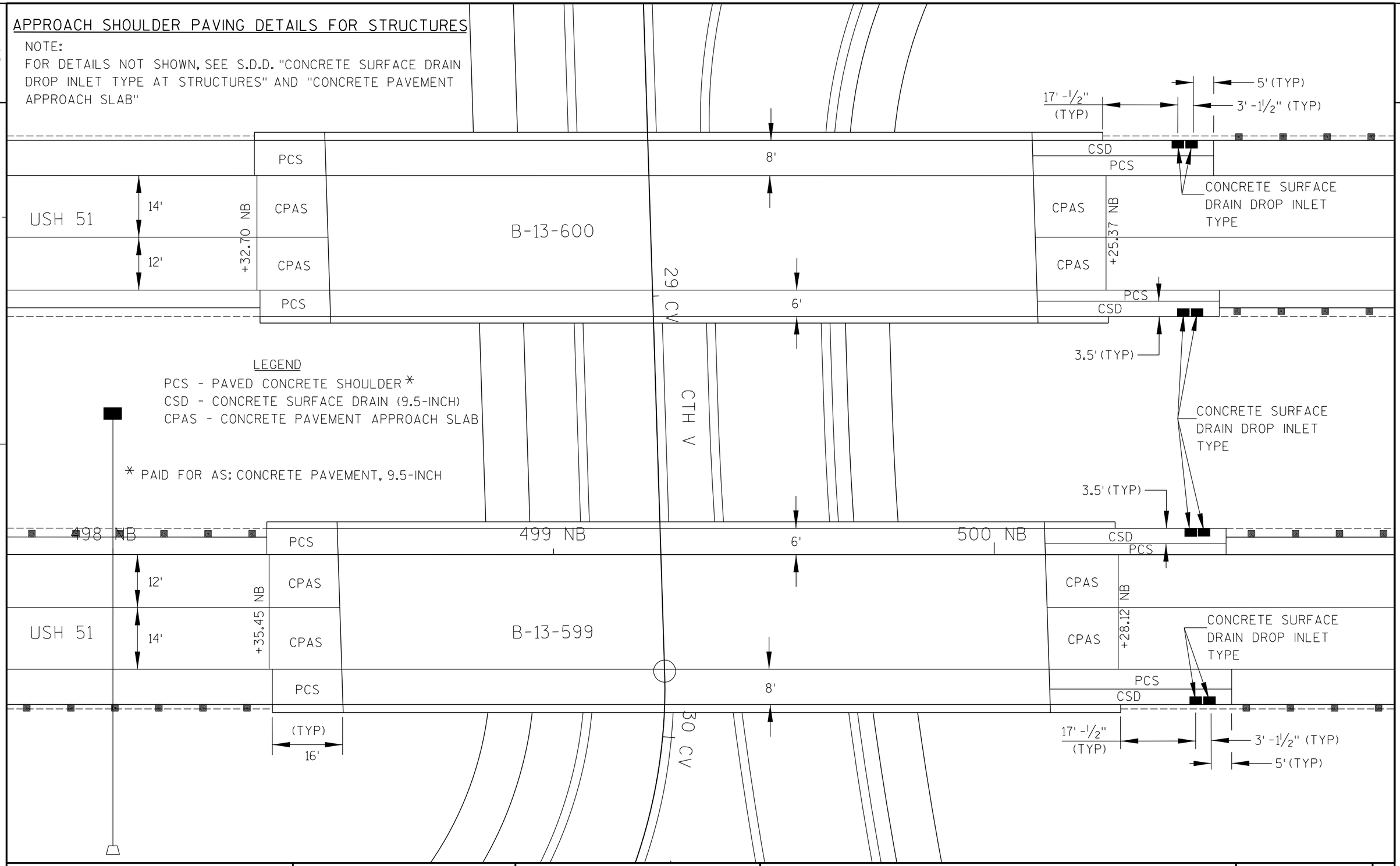
NOTE:
EXISTING GROUND IS CONSIDERED TOP OF EXPOSED FACE.



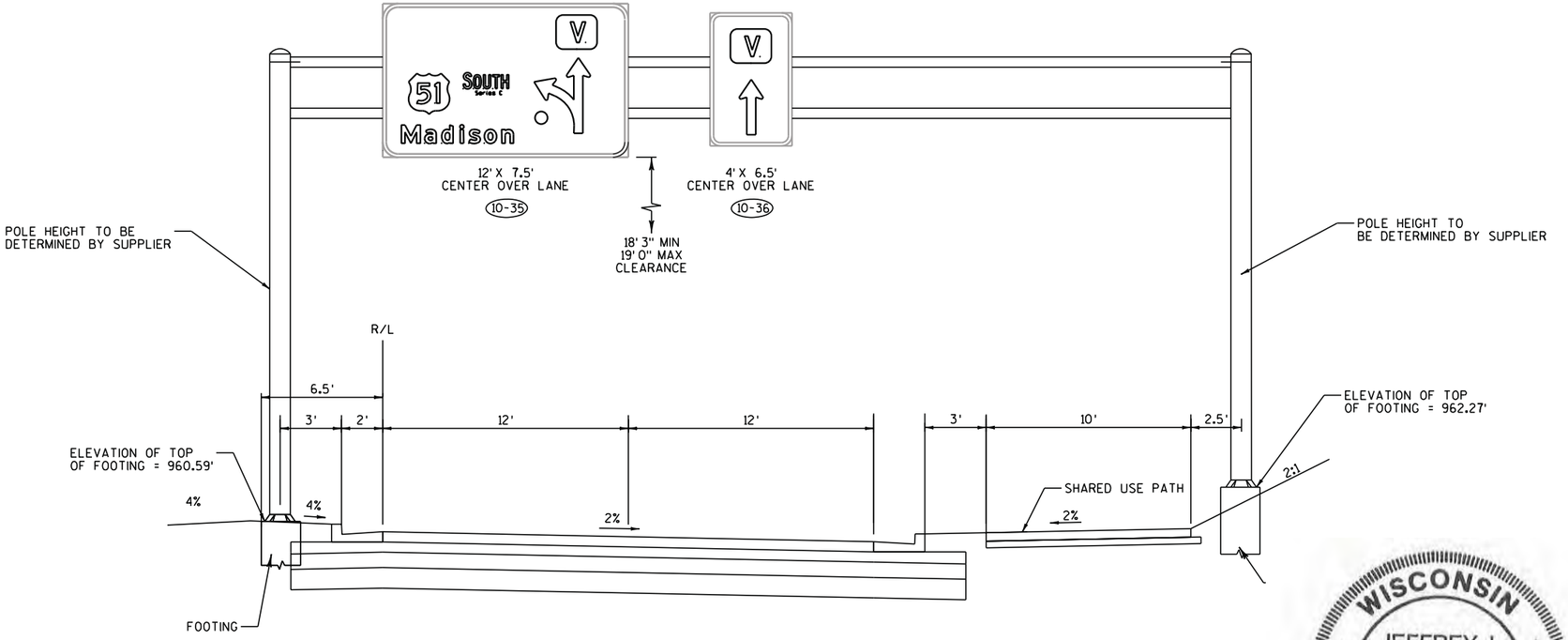
TEMPORARY SHORING TO CONSTRUCT PIERS FOR STRUCTURE B-13-599 & B-13-600

APPROACH SHOULDER PAVING DETAILS FOR STRUCTURES

NOTE:
FOR DETAILS NOT SHOWN, SEE S.D.D. "CONCRETE SURFACE DRAIN DROP INLET TYPE AT STRUCTURES" AND "CONCRETE PAVEMENT APPROACH SLAB"

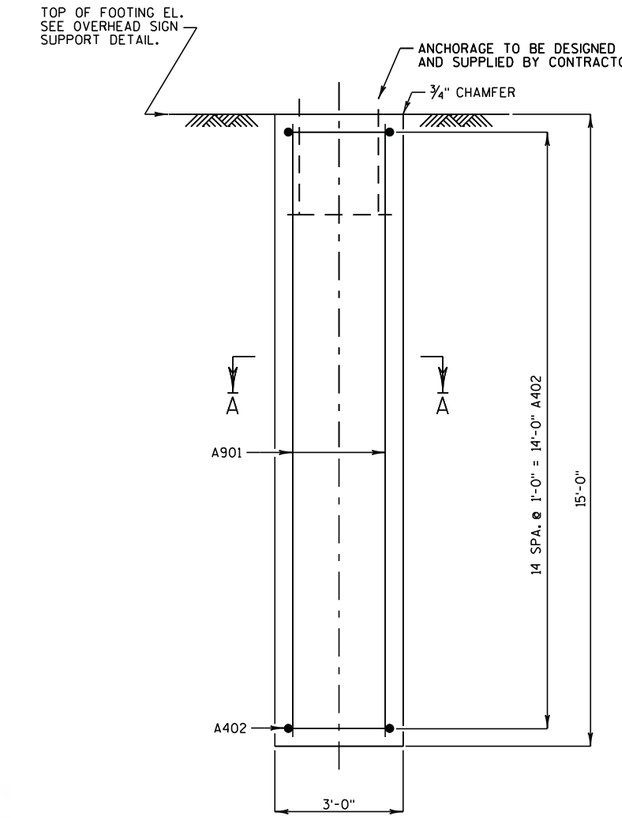


PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CONSTRUCTION DETAILS - BRIDGE APPROACHES	SHEET 39	E

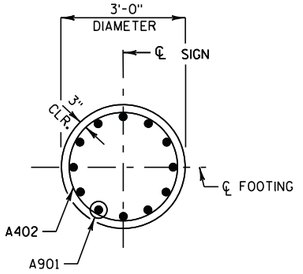


OVERHEAD SIGN SUPPORT DETAIL

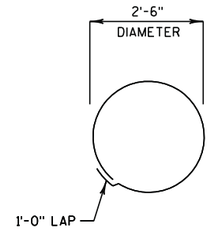
S-13-331
STA 10+00 NB A
CTH V/NORTH ST
FACING WEST



ELEVATION



SECTION A-A



A402

WISCONSIN
JEFFREY J. KOCH
E-28802
PLAIN, WISCONSIN
PROFESSIONAL ENGINEER

4/23/13
Foundation Design Only

GENERAL NOTES

DRAWINGS NOT TO SCALE

DESIGN ACCORDING TO AASHTO "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINARIES, AND TRAFFIC SIGNALS".

THE SIGN STRUCTURES SHALL BE DESIGNED TO SUPPORT THE SIGNS SHOWN.

WIND VELOCITY PER WISDOT STANDARD SPECIFICATIONS.

BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 3" CLEAR UNLESS DETAILED OTHERWISE.

CONTRACTOR SHALL SUBMIT SHOP DRAWINGS AND DESIGN CALCULATION OF OVERHEAD SIGN SUPPORT.

UNDER THE BID ITEM EXCAVATION FOR STRUCTURES, BRIDGES, S-13-331, LS DEWATERING UNDER SECTION 206.3.9, AND AS DIRECTED BY THE ENGINEER, IS REQUIRED.

UNDER THE BID ITEM EXCAVATION FOR STRUCTURES, BRIDGES, S-13-331, LS, REMOVAL OF DRILLED SHAFT OBSTRUCTIONS IS INCLUDED UNDER SECTION 206.3.1(2) FOR THE OVERHEAD SIGN SUPPORT FOUNDATION. GROUNDWATER, COBLES AND BOULDERS MAY BE PRESENT AT FOUNDATION LOCATION.

UNDER THE BID ITEM OVERHEAD SIGN SUPPORTS, S-13-331, CASING OF THE DRILLED SHAFT EXCAVATION IS INCLUDED UNDER SECTION 636.3.3, OF THE STANDARD SPECIFICATIONS. CASING OF THE DRILLED SHAFT IS REQUIRED AS DIRECTED BY THE ENGINEER.

PLACEMENT OF SIGNS AND ATTACHMENTS TO BE INCLUDED UNDER SECTION 637 OF THE STANDARD SPECIFICATIONS, SEE ROADWAY PLANS FOR DETAILS.

ALL ANCHOR BOLTS SHALL CONFORM TO SECTION 641.2.2 OF THE STANDARD SPECIFICATIONS. A MINIMUM OF 6 ANCHOR BOLTS SHALL BE USED.

INSTALLATION AND TENSIONING OF THE ANCHOR BOLTS IS TO BE IN ACCORDANCE WITH SECTION 641.3.1.2.

ALL HIGH STRENGTH BAR STEEL REINFORCEMENT IS TO CONFORM TO AASHTO M31 GRADE 60

CONCRETE MASONRY IS TO CONFORM TO SECTION 502 OF THE STANDARD SPECIFICATIONS, INCLUDING AIR ENTRAINMENT, AND IS TO HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3500 PSI.

ID PLAQUE INCIDENTAL TO OVERHEAD SIGN SUPPORT.

DESIGN DATA

ULTIMATE DESIGN STRESSES:

CONCRETE MASONRY ---------- f'c = 3,500 P.S.I

BAR STEEL REINFORCEMENT,
GRADE 60 ---------- fy = 60,000 P.S.I.

FOUNDATIONA DATA

ALLOWABLE BEARING PRESSURE = 4,000 PSF

FOOTING FOR S-13-331

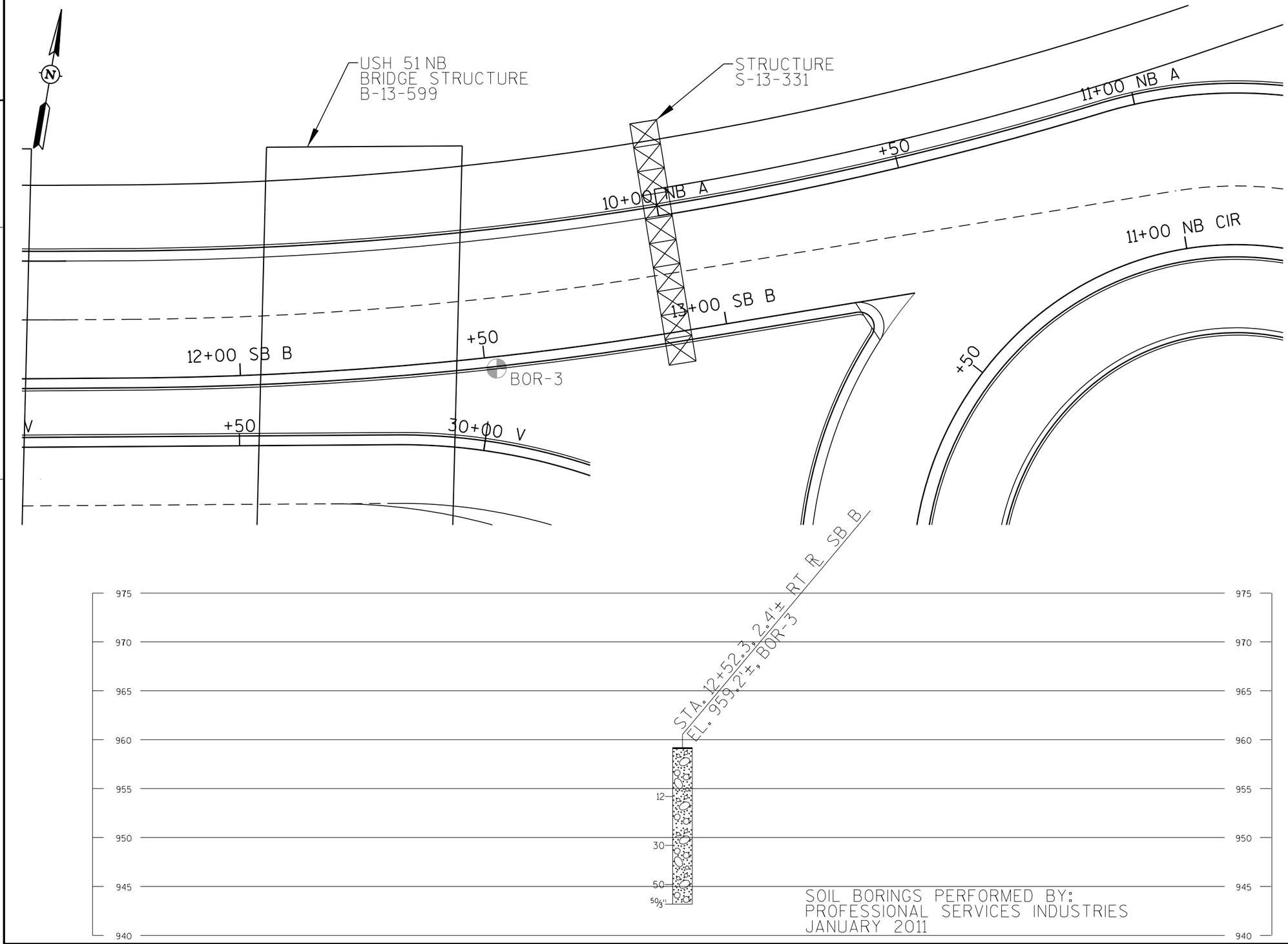
THE NUMBER OF BARS SHOWN IS FOR 1 SIGN SUPPORT.

BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION	
A901		12	14-6			FOOTING	VERTICAL
A402		15	8-9	X		FOOTING	STIRRUP

PROJECT NO: 6020-02-71	HWY: USH 51	COUNTY: DANE	OVERHEAD SIGN SUPPORT S-13-331	SCALE, FEET 0 NTS	SHEET 40	E



SOIL BORINGS PERFORMED BY:
PROFESSIONAL SERVICES INDUSTRIES
JANUARY 2011

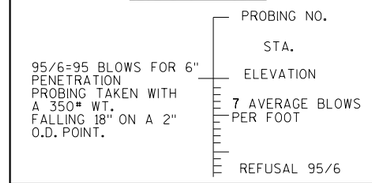
ABBREVIATIONS

F — FINE M — MEDIUM C — COARSE
WS — WEATHERED SO — SOUND

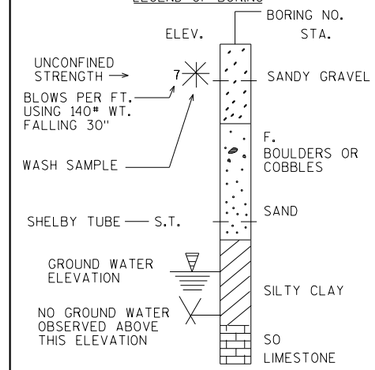
MATERIAL SYMBOLS

TOPSOIL, SILT, SANDSTONE
SAND, PEAT, LIMESTONE
GRAVEL, CLAY, IGNEOUS ROCK

LEGEND OF PROBING



LEGEND OF BORING

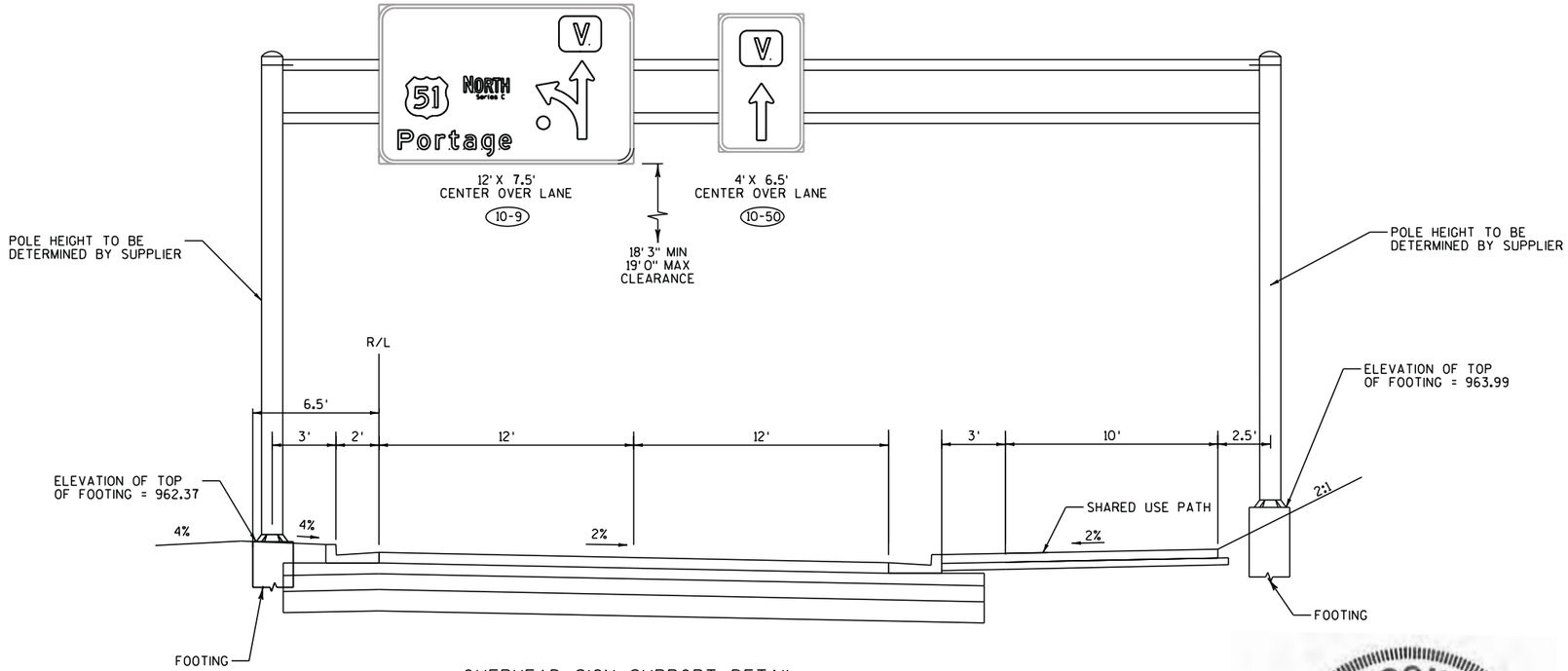


UNLESS OTHERWISE SPECIFIED, THE BLOWS PER FOOT AT THE LOCATIONS INDICATED ARE BASED ON DRIVING A 2" O.D. X 1.4" I.D. SPLIT SPOON SAMPLER WITH A 140# HAMMER HAVING A FREE FALL OF 30". THE BLOW COUNT IS TAKEN IN UNDISTURBED SOIL IMMEDIATELY BELOW A CASED OR OPEN HOLE ELIMINATING SIDE FRICTION ON THE DRIVE PIPE.

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

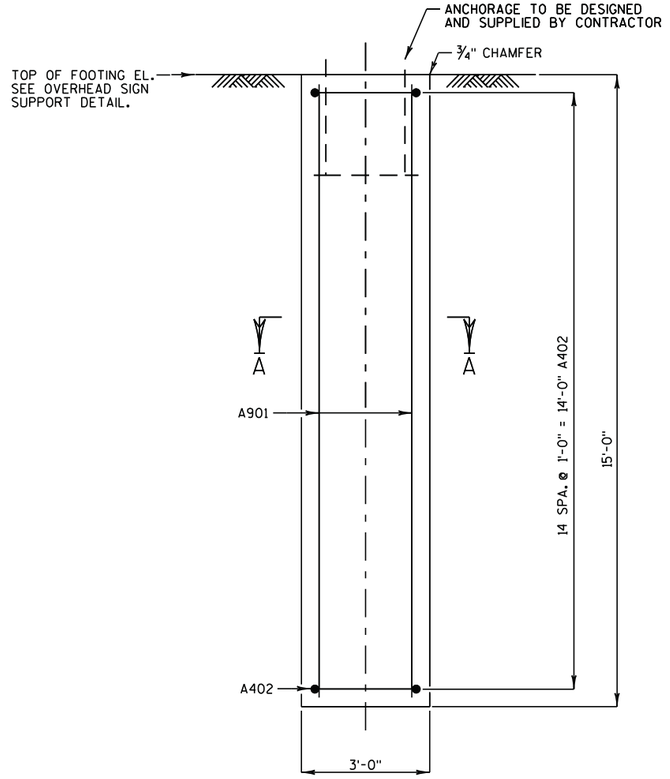
TO OBTAIN RELATIVE DATA CONCERNING THE CHARACTER OF MATERIAL IN AND UPON WHICH THE FOUNDATION MIGHT BE BUILT, BORINGS AND/OR SOUNDINGS WERE MADE AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING. THE DATA PRESENTED HEREIN REPRESENTS THE FINDINGS OF THE SUBSURFACE EXPLORATIONS MADE. HOWEVER, BECAUSE 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.

PROJECT NO: 6020-02-71	HWY: USH 51	COUNTY: DANE	SUBSURFACE EXPLORATION S-13-331	SHEET 41	E

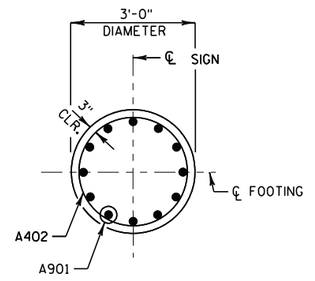


OVERHEAD SIGN SUPPORT DETAIL

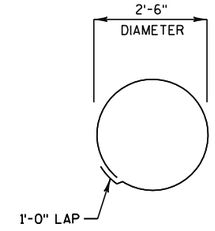
S-13-324
STA 28+00
CTH V/NORTH ST.
FACING EAST



ELEVATION



SECTION A-A



A402

FOOTING FOR S-13-324

THE NUMBER OF BARS SHOWN IS FOR 1 SIGN SUPPORT.



4/23/13

Foundation Design Only

GENERAL NOTES

DRAWINGS NOT TO SCALE

DESIGN ACCORDING TO AASHTO "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINARIES, AND TRAFFIC SIGNALS".

THE SIGN STRUCTURES SHALL BE DESIGNED TO SUPPORT THE SIGNS SHOWN.

WIND VELOCITY PER WISDOT STANDARD SPECIFICATIONS.

BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 3" CLEAR UNLESS DETAILED OTHERWISE.

CONTRACTOR SHALL SUBMIT SHOP DRAWINGS AND DESIGN CALCULATION OF OVERHEAD SIGN SUPPORT.

UNDER THE BID ITEM EXCAVATION FOR STRUCTURES, BRIDGES, S-13-324, LS DEWATERING UNDER SECTION 206.3.9, AND AS DIRECTED BY THE ENGINEER, IS REQUIRED.

UNDER THE BID ITEM EXCAVATION FOR STRUCTURES, BRIDGES, S-13-324, LS, REMOVAL OF DRILLED SHAFT OBSTRUCTIONS IS INCLUDED UNDER SECTION 206.3.1(2) FOR THE OVERHEAD SIGN SUPPORT FOUNDATION. GROUNDWATER, COBLES AND BOULDERS MAY BE PRESENT AT FOUNDATION LOCATION.

UNDER THE BID ITEM OVERHEAD SIGN SUPPORTS, S-13-324, CASING OF THE DRILLED SHAFT EXCAVATION IS INCLUDED UNDER SECTION 636.3.3. OF THE STANDARD SPECIFICATIONS. CASING OF THE DRILLED SHAFT IS REQUIRED AS DIRECTED BY THE ENGINEER.

PLACEMENT OF SIGNS AND ATTACHMENTS TO BE INCLUDED UNDER SECTION 637 OF THE STANDARD SPECIFICATIONS. SEE ROADWAY PLANS FOR DETAILS.

ALL ANCHOR BOLTS SHALL CONFORM TO SECTION 641.2.2 OF THE STANDARD SPECIFICATIONS. A MINIMUM OF 6 ANCHOR BOLTS SHALL BE USED.

INSTALLATION AND TENSIONING OF THE ANCHOR BOLTS IS TO BE IN ACCORDANCE WITH SECTION 641.3.1.2.

ALL HIGH STRENGTH BAR STEEL REINFORCEMENT IS TO CONFORM TO AASHTO M31 GRADE 60

CONCRETE MASONRY IS TO CONFORM TO SECTION 502 OF THE STANDARD SPECIFICATIONS, INCLUDING AIR ENTRAINMENT, AND IS TO HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3500 PSI.

ID PLAQUE INCIDENTAL TO OVERHEAD SIGN SUPPORT.

DESIGN DATA

ULTIMATE DESIGN STRESSES:

CONCRETE MASONRY ---------- f'c = 3,500 P.S.I

BAR STEEL REINFORCEMENT,
GRADE 60 ---------- fy = 60,000 P.S.I.

FOUNDATIONA DATA

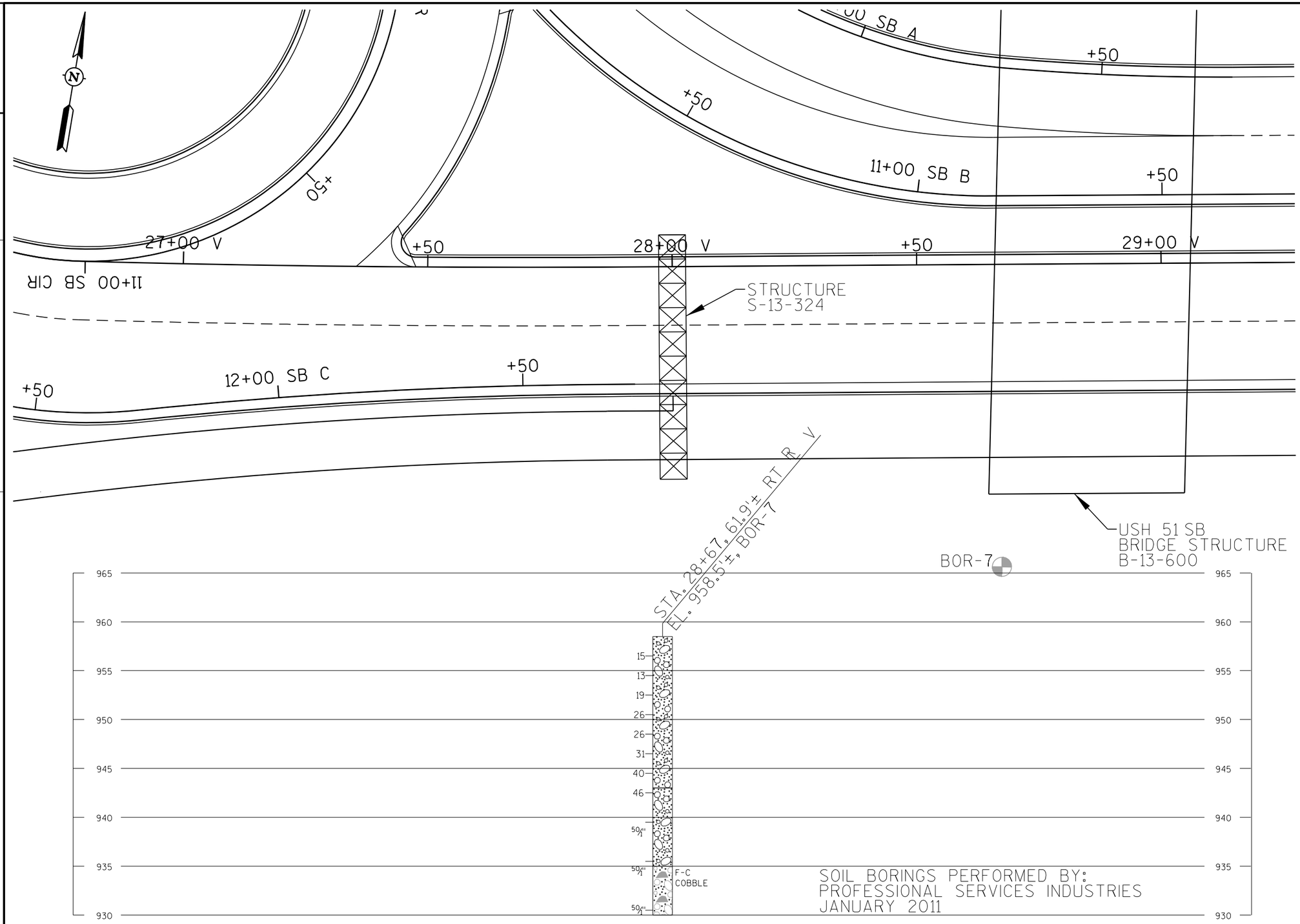
ALLOWABLE BEARING PRESSURE = 4,000 PSF

BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION	
A901		12	14-6			FOOTING	VERTICAL
A402		15	8-9	X		FOOTING	STIRRUP

PROJECT NO: 6020-02-71	HWY: USH 51	COUNTY: DANE	OVERHEAD SIGN SUPPORT S-13-324	SCALE, FEET 0 NTS	SHEET 42	E



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

PROBING NO.
STA.
ELEVATION
7 AVERAGE BLOWS PER FOOT
REFUSAL 95/6

95/6=95 BLOWS FOR 6" PENETRATION
PROBING TAKEN WITH A 350# WT. FALLING 18" ON A 2" O.D. POINT.

LEGEND OF BORING

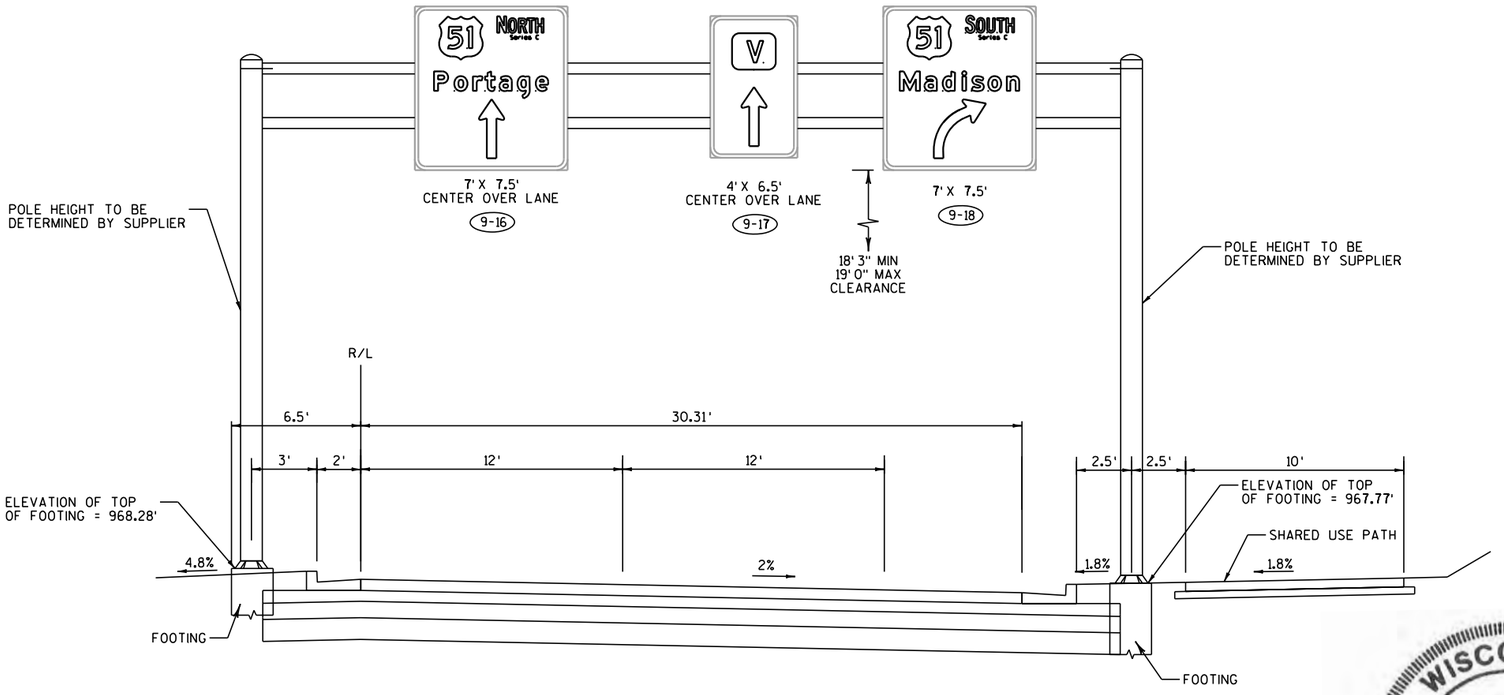
BORING NO.
ELEV.
STA.
UNCONFINED STRENGTH — 7.7 7
BLOWS PER FT. USING 140# WT. FALLING 30"
WASH SAMPLE
SHELBY TUBE — S.T.
GROUND WATER ELEVATION
NO GROUND WATER OBSERVED ABOVE THIS ELEVATION
SANDY GRAVEL
F. BOULDERS OR COBBLES
SAND
SILTY CLAY
SO LIMESTONE

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

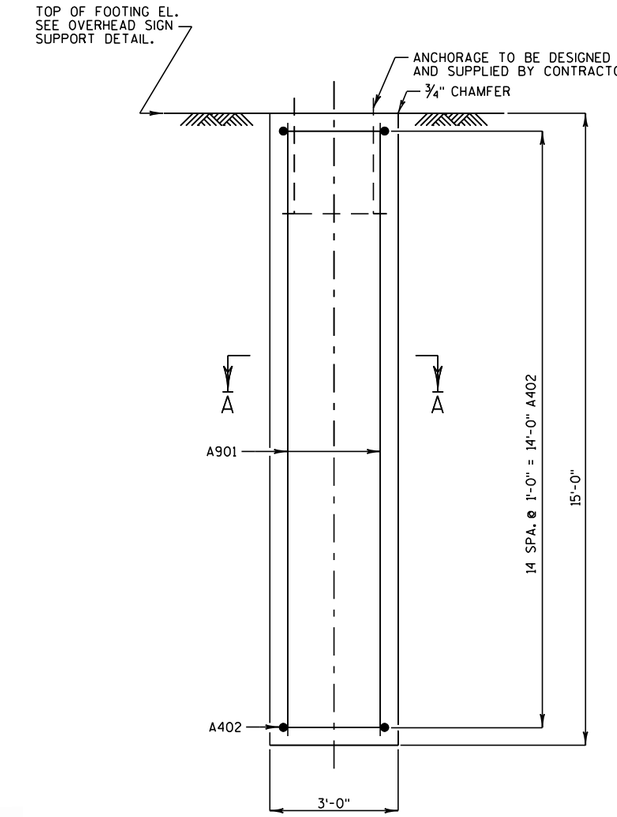
TO OBTAIN RELATIVE DATA CONCERNING THE CHARACTER OF MATERIAL IN AND UPON WHICH THE FOUNDATION MIGHT BE BUILT, BORINGS AND/OR SOUNDINGS WERE MADE AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING. THE DATA PRESENTED HEREIN REPRESENTS THE FINDINGS OF THE SUBSURFACE EXPLORATIONS MADE. HOWEVER, BECAUSE 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.

PROJECT NO: 6020-02-71	HWY: USH 51	COUNTY: DANE	SUBSURFACE EXPLORATION S-13-324	SHEET 43	E

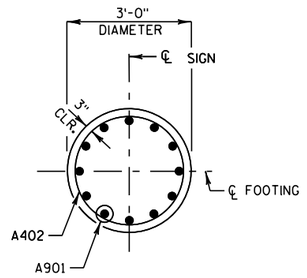


OVERHEAD SIGN SUPPORT DETAIL

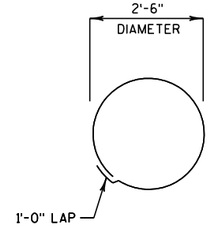
S-13-329
STA 23+50
CTH V/NORTH ST
FACING EAST



ELEVATION



SECTION A-A



A402

GENERAL NOTES

DRAWINGS NOT TO SCALE

DESIGN ACCORDING TO AASHTO "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINARIES, AND TRAFFIC SIGNALS".

THE SIGN STRUCTURES SHALL BE DESIGNED TO SUPPORT THE SIGNS SHOWN.

WIND VELOCITY PER WISDOT STANDARD SPECIFICATIONS.

BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 3" CLEAR UNLESS DETAILED OTHERWISE.

CONTRACTOR SHALL SUBMIT SHOP DRAWINGS AND DESIGN CALCULATION OF OVERHEAD SIGN SUPPORT.

UNDER THE BID ITEM EXCAVATION FOR STRUCTURES, BRIDGES, S-13-329, LS DEWATERING UNDER SECTION 206.3.9, AND AS DIRECTED BY THE ENGINEER, IS REQUIRED.

UNDER THE BID ITEM EXCAVATION FOR STRUCTURES, BRIDGES, S-13-329, LS, REMOVAL OF DRILLED SHAFT OBSTRUCTIONS IS INCLUDED UNDER SECTION 206.3.1(2) FOR THE OVERHEAD SIGN SUPPORT FOUNDATION. GROUNDWATER, COBLES AND BOULDERS MAY BE PRESENT AT FOUNDATION LOCATION.

UNDER THE BID ITEM OVERHEAD SIGN SUPPORTS, S-13-329, CASING OF THE DRILLED SHAFT EXCAVATION IS INCLUDED UNDER SECTION 636.3.3. OF THE STANDARD SPECIFICATIONS. CASING OF THE DRILLED SHAFT IS REQUIRED AS DIRECTED BY THE ENGINEER.

PLACEMENT OF SIGNS AND ATTACHMENTS TO BE INCLUDED UNDER SECTION 637 OF THE STANDARD SPECIFICATIONS, SEE ROADWAY PLANS FOR DETAILS.

ALL ANCHOR BOLTS SHALL CONFORM TO SECTION 641.2.2 OF THE STANDARD SPECIFICATIONS. A MINIMUM OF 6 ANCHOR BOLTS SHALL BE USED.

INSTALLATION AND TENSIONING OF THE ANCHOR BOLTS IS TO BE IN ACCORDANCE WITH SECTION 641.3.1.2.

ALL HIGH STRENGTH BAR STEEL REINFORCEMENT IS TO CONFORM TO AASHTO M31 GRADE 60

CONCRETE MASONRY IS TO CONFORM TO SECTION 502 OF THE STANDARD SPECIFICATIONS, INCLUDING AIR ENTRAINMENT, AND IS TO HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3500 PSI.

ID PLAQUE INCIDENTAL TO OVERHEAD SIGN SUPPORT.



DESIGN DAT

Foundation Design Only

ULTIMATE DESIGN STRESSES:

CONCRETE MASONRY ---------- f'c = 3,500 P.S.I

BAR STEEL REINFORCEMENT,
GRADE 60 ---------- fy = 60,000 P.S.I.

FOUNDATIONA DATA

ALLOWABLE BEARING PRESSURE = 4,000 PSF

FOOTING FOR S-13-329

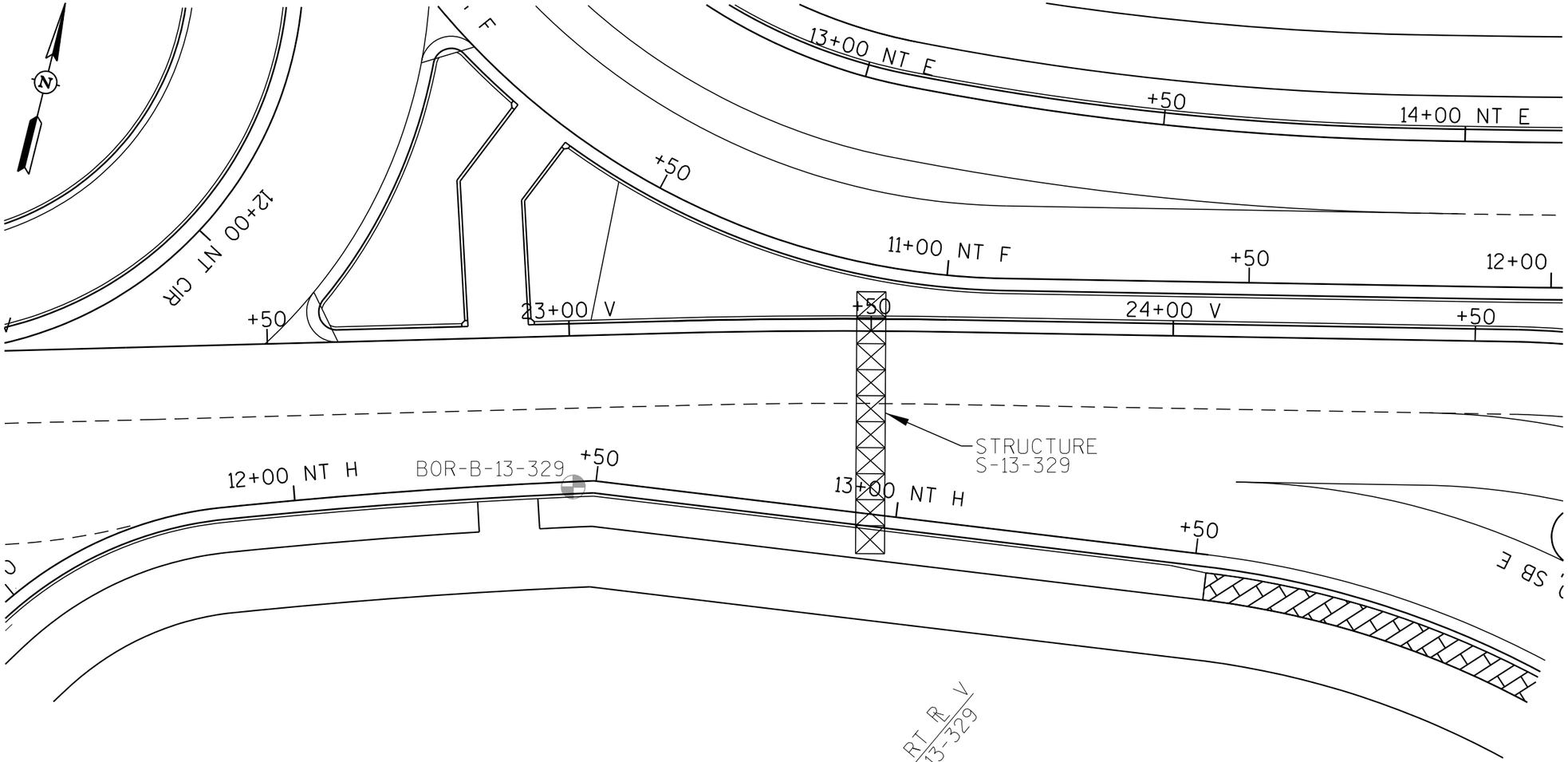
THE NUMBER OF BARS SHOWN IS FOR 1 SIGN SUPPORT.

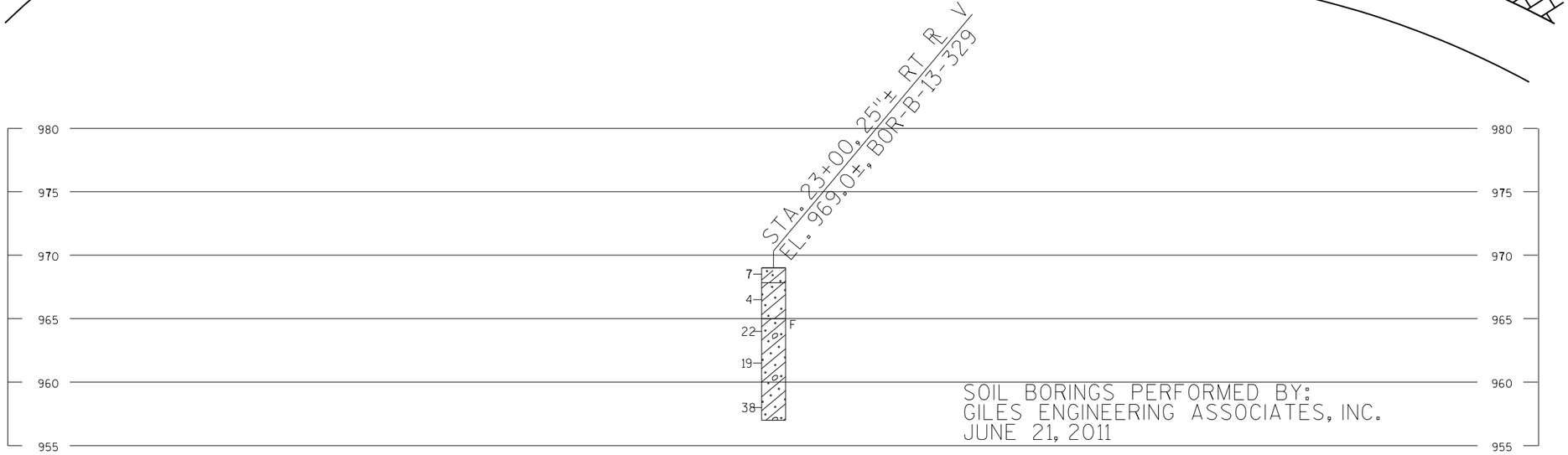
BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION	
A901		12	14-6			FOOTING	VERTICAL
A402		15	8-9	X		FOOTING	STIRRUP

PROJECT NO: 6020-02-71	HWY: USH 51	COUNTY: DANE	OVERHEAD SIGN SUPPORT S-13-329	SCALE, FEET 0 NTS	SHEET 44	E





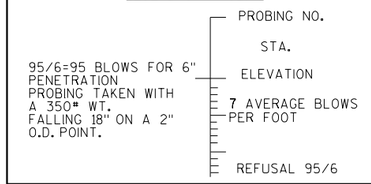
ABBREVIATIONS

F — FINE M — MEDIUM C — COARSE
WS — WEATHERED SO — SOUND

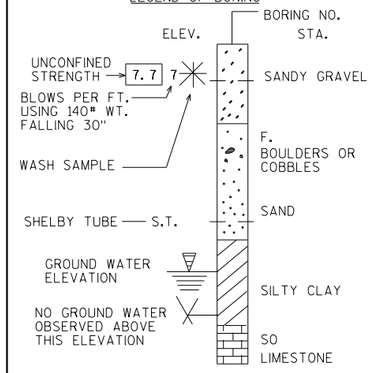
MATERIAL SYMBOLS

TOPSOIL, SILT, SANDSTONE, SAND, PEAT, LIMESTONE, GRAVEL, CLAY, IGNEOUS ROCK

LEGEND OF PROBING



LEGEND OF BORING

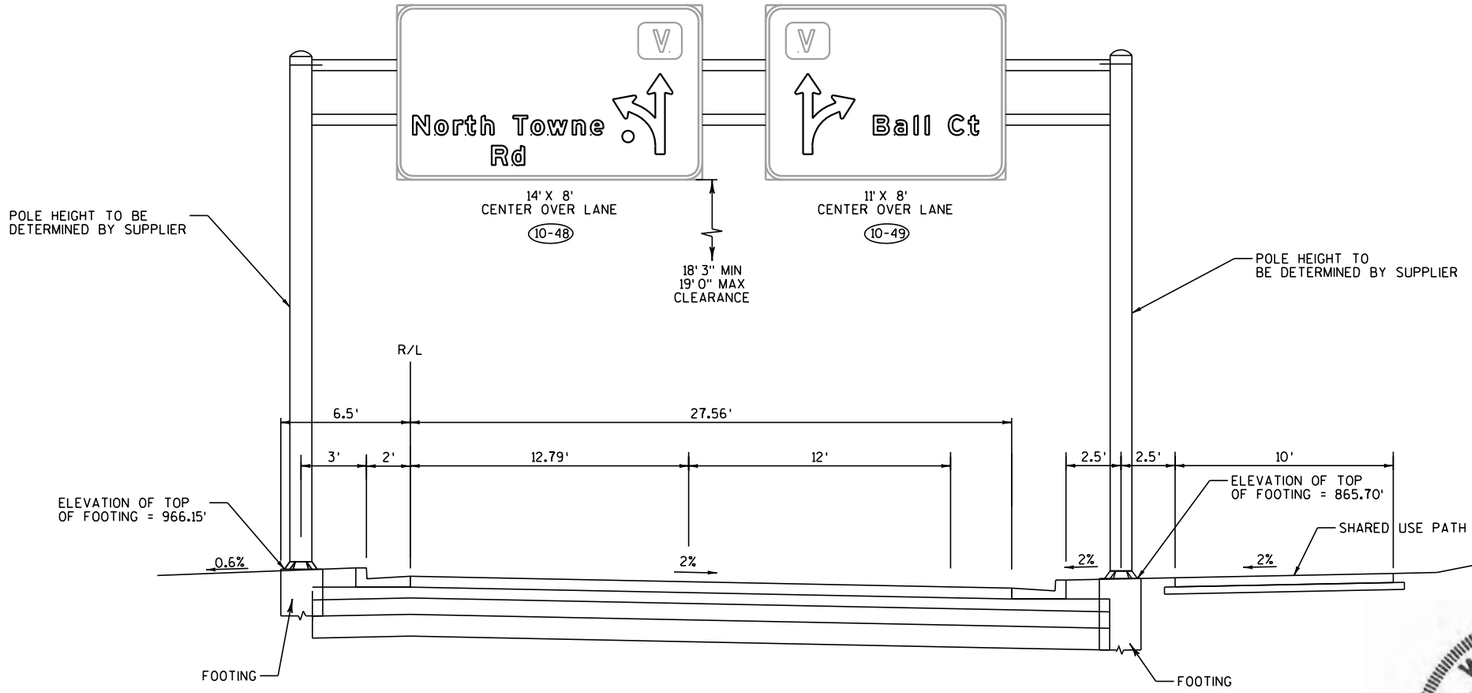


UNLESS OTHERWISE SPECIFIED, THE BLOWS PER FOOT AT THE LOCATIONS INDICATED ARE BASED ON DRIVING A 2" O.D. X 1.4" I.D. SPLIT SPOON SAMPLER WITH A 140# HAMMER HAVING A FREE FALL OF 30". THE BLOW COUNT IS TAKEN IN UNDISTURBED SOIL IMMEDIATELY BELOW A CASED OR OPEN HOLE ELIMINATING SIDE FRICTION ON THE DRIVE PIPE.

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

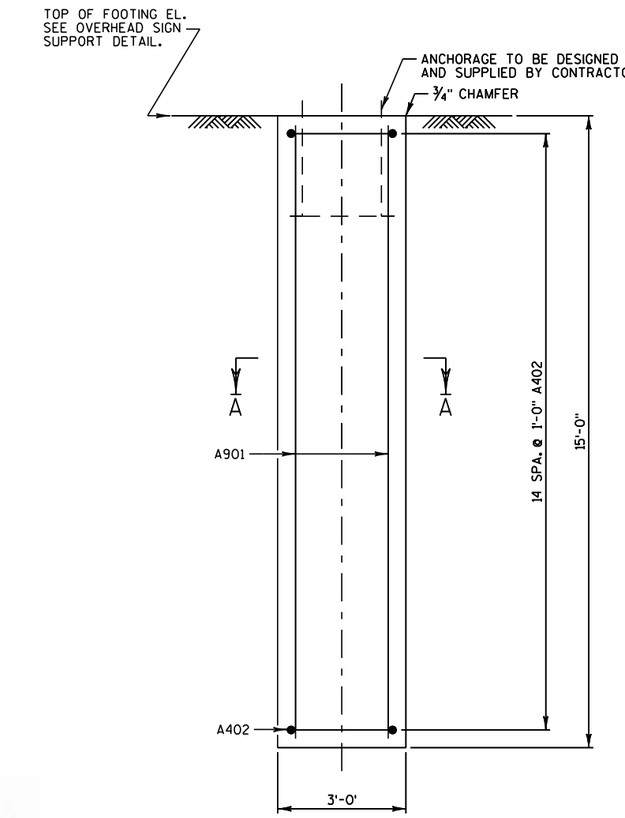
TO OBTAIN RELATIVE DATA CONCERNING THE CHARACTER OF MATERIAL IN AND UPON WHICH THE FOUNDATION MIGHT BE BUILT, BORINGS AND/OR SOUNDINGS WERE MADE AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING. THE DATA PRESENTED HEREIN REPRESENTS THE FINDINGS OF THE SUBSURFACE EXPLORATIONS MADE. HOWEVER, BECAUSE 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.

PROJECT NO: 6020-02-71	HWY: USH 51	COUNTY: DANE	SUBSURFACE EXPLORATION S-13-329	SHEET 45	E

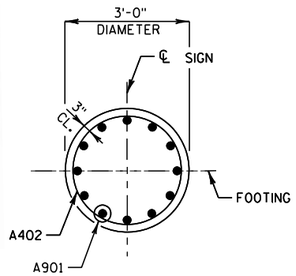


OVERHEAD SIGN SUPPORT DETAIL

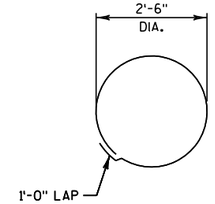
S-13-330
STA 14+75 NT E
CTH V/NORTH ST
FACING WEST



ELEVATION



SECTION A-A



A402

GENERAL NOTES

DRAWINGS NOT TO SCALE

DESIGN ACCORDING TO AASHTO "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINARIES, AND TRAFFIC SIGNALS".

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WIND VELOCITY PER WISDOT STANDARD SPECIFICATIONS.

BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 3" CLEAR UNLESS DETAILED OTHERWISE.

CONTRACTOR SHALL SUBMIT SHOP DRAWINGS AND DESIGN CALCULATION OF OVERHEAD SIGN SUPPORT.

UNDER THE BID ITEM EXCAVATION FOR STRUCTURES, BRIDGES, S-13-330, LS DEWATERING UNDER SECTION 206.3.9, AND AS DIRECTED BY THE ENGINEER, IS REQUIRED.

UNDER THE BID ITEM EXCAVATION FOR STRUCTURES, BRIDGES, S-13-330, LS, REMOVAL OF DRILLED SHAFT OBSTRUCTIONS IS INCLUDED UNDER SECTION 206.3.1(2) FOR THE OVERHEAD SIGN SUPPORT FOUNDATION. GROUNDWATER, COBLES AND BOULDERS MAY BE PRESENT AT FOUNDATION LOCATION.

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ID PLAQUE INCIDENTAL TO OVERHEAD SIGN SUPPORT.



4/23/13
Foundation Design Only

DESIGN DATA

ULTIMATE DESIGN STRESSES:

CONCRETE MASONRY ---------- f'c = 3,500 P.S.I

BAR STEEL REINFORCEMENT,
GRADE 60 ---------- fy = 60,000 P.S.I.

FOUNDATIONA DATA

ALLOWABLE BEARING PRESSURE = 4,000 PSF

FOOTING FOR S-13-330

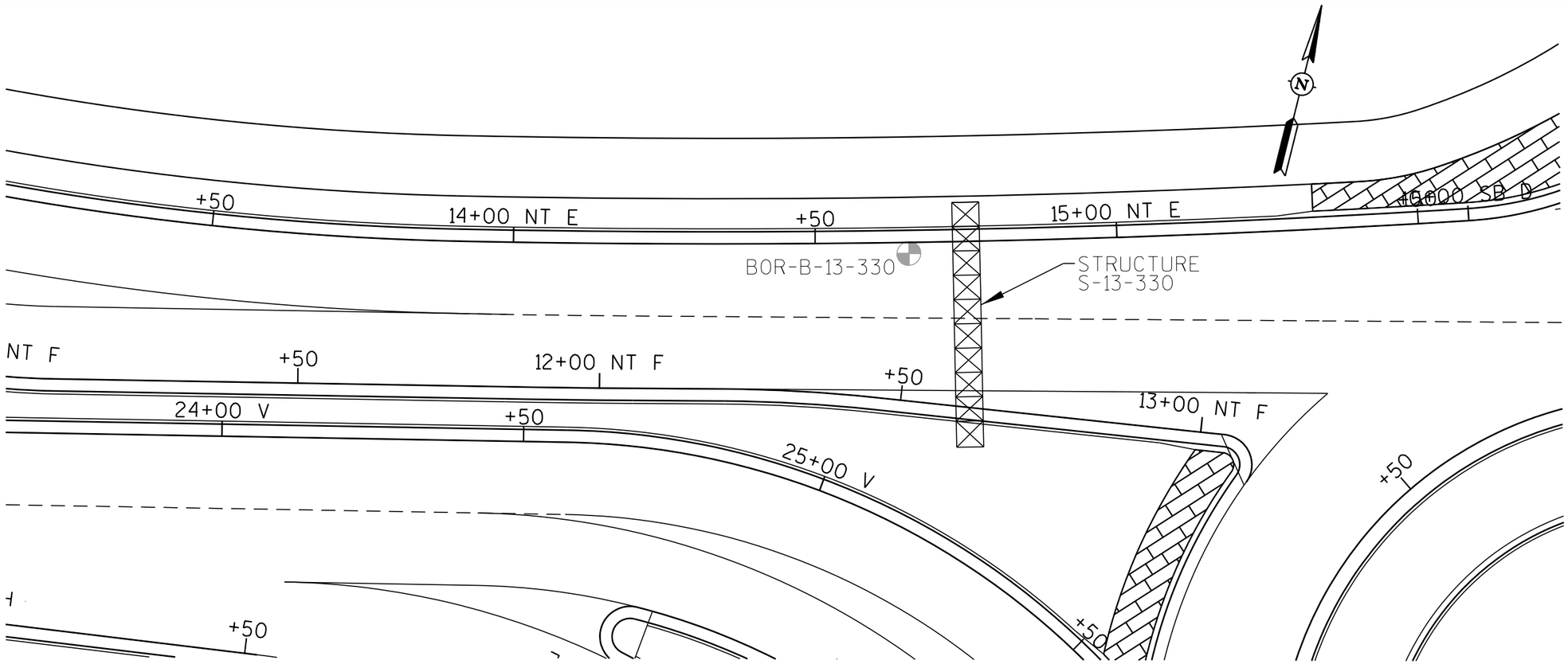
THE NUMBER OF BARS SHOWN IS FOR 1 SIGN SUPPORT.

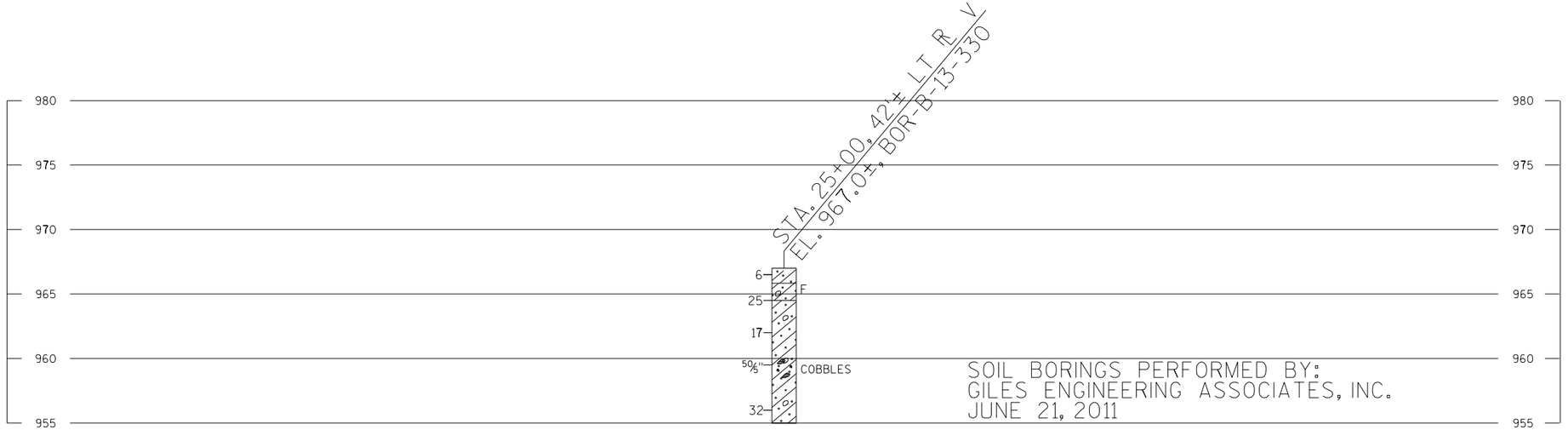
BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION	
A901		12	14-6			FOOTING	VERTICAL
A402		15	8-9	X		FOOTING	STIRRUP

PROJECT NO: 6020-02-71	HWY: USH 51	COUNTY: DANE	OVERHEAD SIGN SUPPORT S-13-330	SCALE, FEET 0 NTS	SHEET 46	E





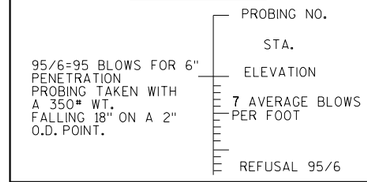
ABBREVIATIONS

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WS — WEATHERED SO — SOUND

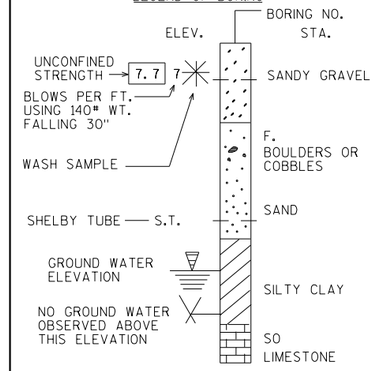
MATERIAL SYMBOLS

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

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PROJECT NO: 6020-02-71	HWY: USH 51	COUNTY: DANE	SUBSURFACE EXPLORATION S-13-330	SHEET 47	E

2

N

E. HOLUM ST.

28 DV

29 DV

STA.28+30 DV
MATCH EXISTING
SAW CUT REQ'D.

STA.218+42.14 NT, 71'LT. =
STA.29+33.49 DV, 67'RT.
50'R.

STA.29+33.49 DV
21'RT.

STA.29+33.49 DV
25'LT.

STA.219+88.18 NT, 75'LT. =
STA.29+33.49 DV, 66'LT.
50'R.

TYPE 2 CURB RAMP REQ'D.

TYPE 2 CURB RAMP REQ'D.

963.55
963.63
964.05

963.99
964.22
963.62

3%
2%
963.17
1%
963.32
2%
962.84

0.7%
0.7%
964.32
1%
964.48
2%
964.86

216 NT
217 NT
218 NT
219 NT
220 NT
221 NT

NORTHTOWNE ROAD

963.66
963.99
964.82

STA.218+42.14 NT
17'LT.

STA.219+88.18 NT
16'LT.

STA.221+57.63 NT, 16'RT.
END TAPER

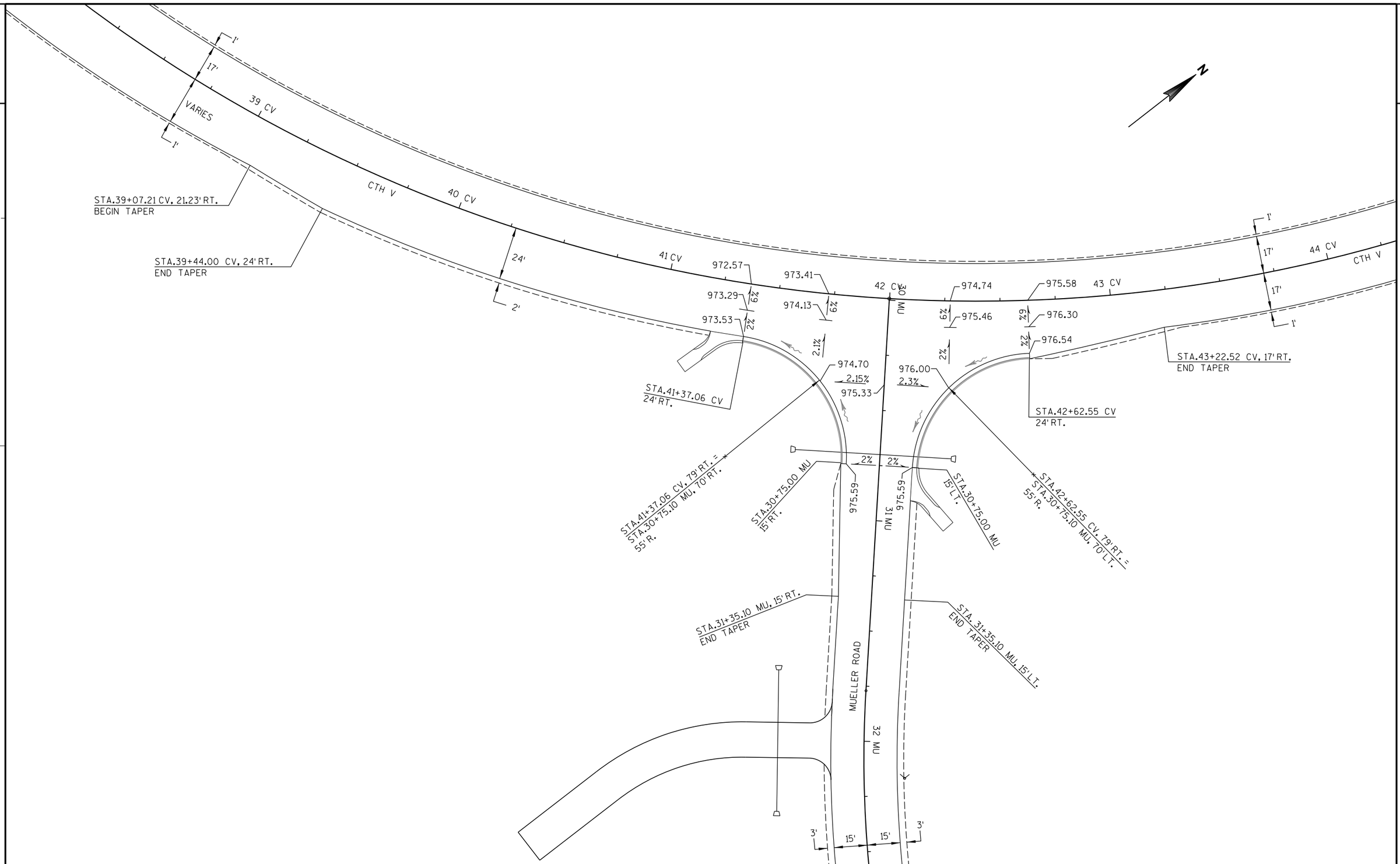
STA.220+30.00 NT, 25'RT.
BEGIN TAPER

STA.216+00.00 NT, 25'RT.
BEGIN CONCRETE CURB & GUTTER

ASPHALTIC
FLUME
REQ'D.

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	INTERSECTION DETAILS - NORTHTOWNE / E. HOLUM ST.	SHEET 48	E

2



PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	INTERSECTION DETAILS - CTH V / MUELLER ROAD	SHEET 49	E

2

2

N

STA.19+35.61 D1, 52.00' RT. =
STA.46+70.70 CV, 64.00' LT.
40' R.

STA.19+35.61 D1
14' RT.

STA.19+35.61 D1
14' LT.

STA.19+36.02 D1, 52.00' LT. =
STA.47+77.00 CV, 64.00' LT.
40' R.

STA.45+99.64 CV
17.00' LT.
BEGIN TAPER

STA.46+70.70 CV
24.00' LT.

STA.47+77.00 CV
24.00' LT.

STA.48+77.00 CV
24.00' LT.
BEGIN TAPER

STA.49+51.98 CV
17.00' LT.
END TAPER

1'
17'
17'
1'
45 CV
46 CV
47 CV
48 CV
49 CV
50 CV
3'
24'
17'
17'
3'
24'
2'

STA.45+57.06 CV
17.00' RT.
BEGIN TAPER

STA.46+00.00 CV
24.00' RT.
END TAPER

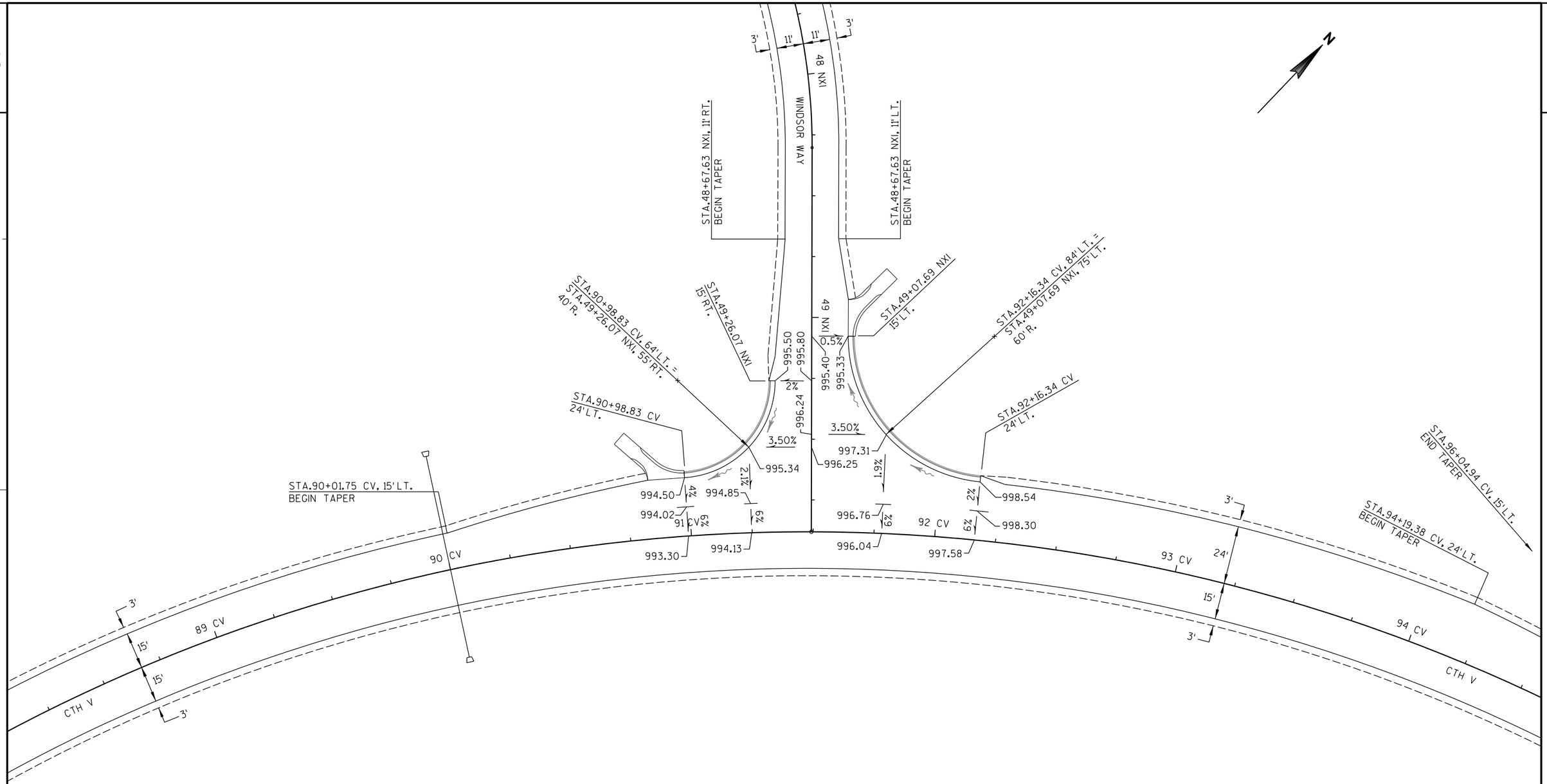
STA.47+00.00 CV
24.00' RT.

STA.48+25.00 CV
24.00' RT.
BEGIN TAPER

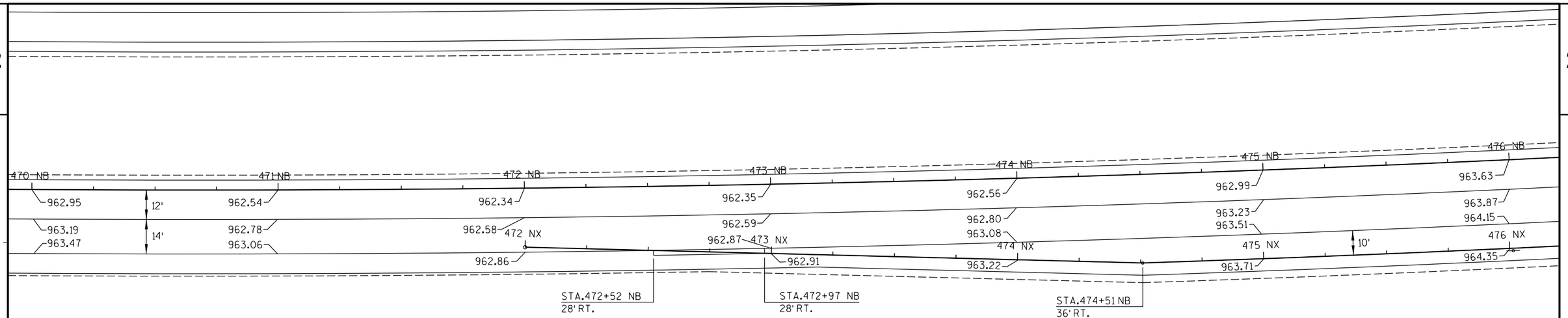
STA.50+12.56 CV
17.00' RT.
END TAPER

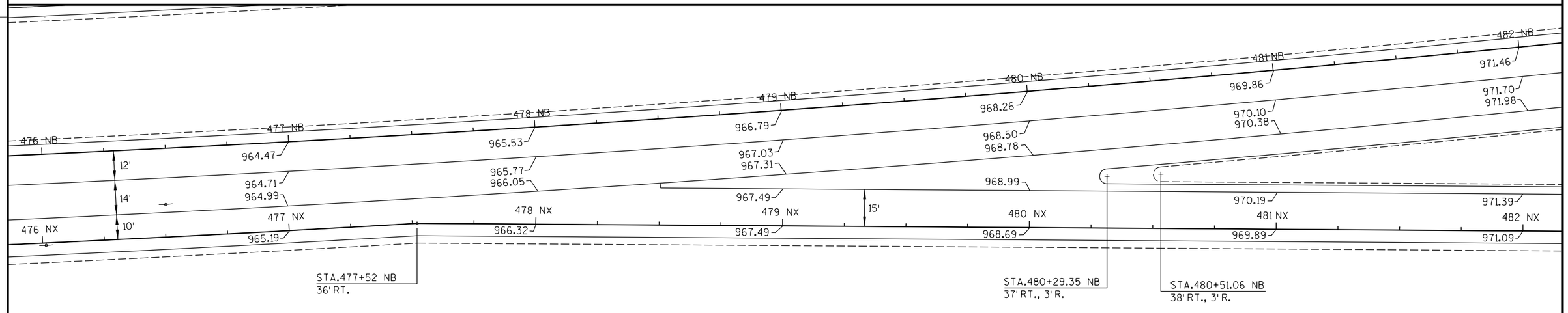
PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	INTERSECTION DETAIL - DRIVEWAY D1	SHEET 50	E

2



PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	INTERSECTION DETAILS - CTH V / WINDSOR WAY	SHEET 51	E


470 NB
471 NB
472 NB
473 NB
474 NB
475 NB
476 NB
962.95
963.19
963.47
962.54
962.78
963.06
962.34
962.58
962.86
962.35
962.59
962.87
962.91
962.56
962.80
963.08
963.22
962.99
963.23
963.51
963.71
963.63
963.87
964.15
964.35
12'
14'
10'
472 NX
473 NX
474 NX
475 NX
476 NX
STA.472+52 NB
28' RT.
STA.472+97 NB
28' RT.
STA.474+51 NB
36' RT.
N
NOTE:
ALL ELEVATIONS SHOWN ARE ON EVEN
STATIONS UNLESS OTHERWISE NOTED.


476 NB
477 NB
478 NB
479 NB
480 NB
481 NB
482 NB
964.47
964.71
964.99
965.53
965.77
966.05
966.79
967.03
967.31
967.49
968.26
968.50
968.78
968.99
969.86
970.10
970.38
970.19
971.46
971.70
971.98
971.39
12'
14'
10'
15'
476 NX
477 NX
478 NX
479 NX
480 NX
481 NX
482 NX
965.19
966.32
967.49
968.69
969.89
971.09
STA.477+52 NB
36' RT.
STA.480+29.35 NB
37' RT., 3' R.
STA.480+51.06 NB
38' RT., 3' R.
N
STA.480+51.06 NB
BEGIN RAMP CONCRETE PAVEMENT
AND RAMP SUBGRADE
END RAMP PARALLEL LANE
AND MAINLINE SUBGRADE

2

510 NB 979.59
974.19
973.73

511 NB 973.85
973.81
973.53

512 NB 973.15
973.39
973.11

12'
14'
15'

513 NB 972.51
972.75
972.47

514 NB 971.91
972.15
971.87

515 NB 971.36
971.60
971.32

516 NB 970.86
971.10
970.82

510 NN 972.37
972.93

511 NN 972.44
973.00

512 NN 972.30
972.86

513 NN 971.94
972.39

514 NN 971.44
971.74

515 NN 970.94
971.24

516 NN 970.50

STA.510+82.48 NB
38'RT., 3'R.

STA.511+10.33 NB
37'RT., 3'R.

STA.510+82.48 NB
END RAMP CONCRETE PAVEMENT
AND RAMP SUBGRADE
BEGIN PARALLEL LANE CONCRETE
PAVEMENT AND MAINLINE SUBGRADE

N

NOTE:
ALL ELEVATIONS SHOWN ARE ON EVEN
STATIONS UNLESS OTHERWISE NOTED.

516 NB 970.41
970.65
970.37

517 NB 970.01
970.25
969.97

518 NB 969.65
969.89
969.61

519 NB 969.35
969.59
969.31

520 NB 969.10
969.34
969.06

521 NB 968.90
969.14
968.86

516 NN 970.07

517 NN 969.71

518 NN 969.39

519 NN 969.11

520 NN 968.86

521 NN 968.66

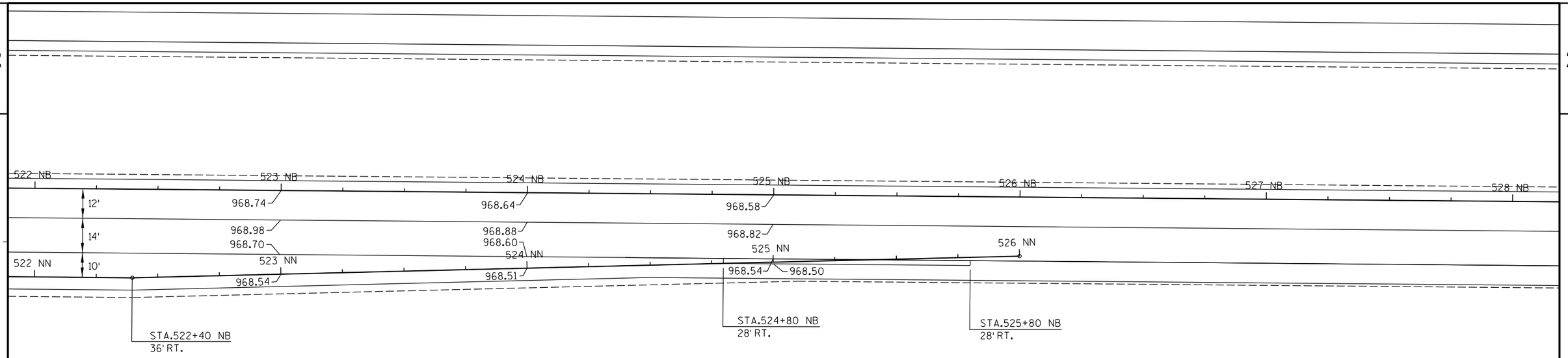
10'

STA.519+40 NB
36'RT.

N

PROJECT NO:6020-02-72	HWY:USH 51	COUNTY:DANE	PLAN DETAILS - RAMP NN	SHEET 53	E

FILE NAME : P:\2011059 - US 51 WO\MicroStation\Planset\6020-02-72\021202_pd.dgn PLOT DATE : 2/20/2013 PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : 40.0000 sf / in.

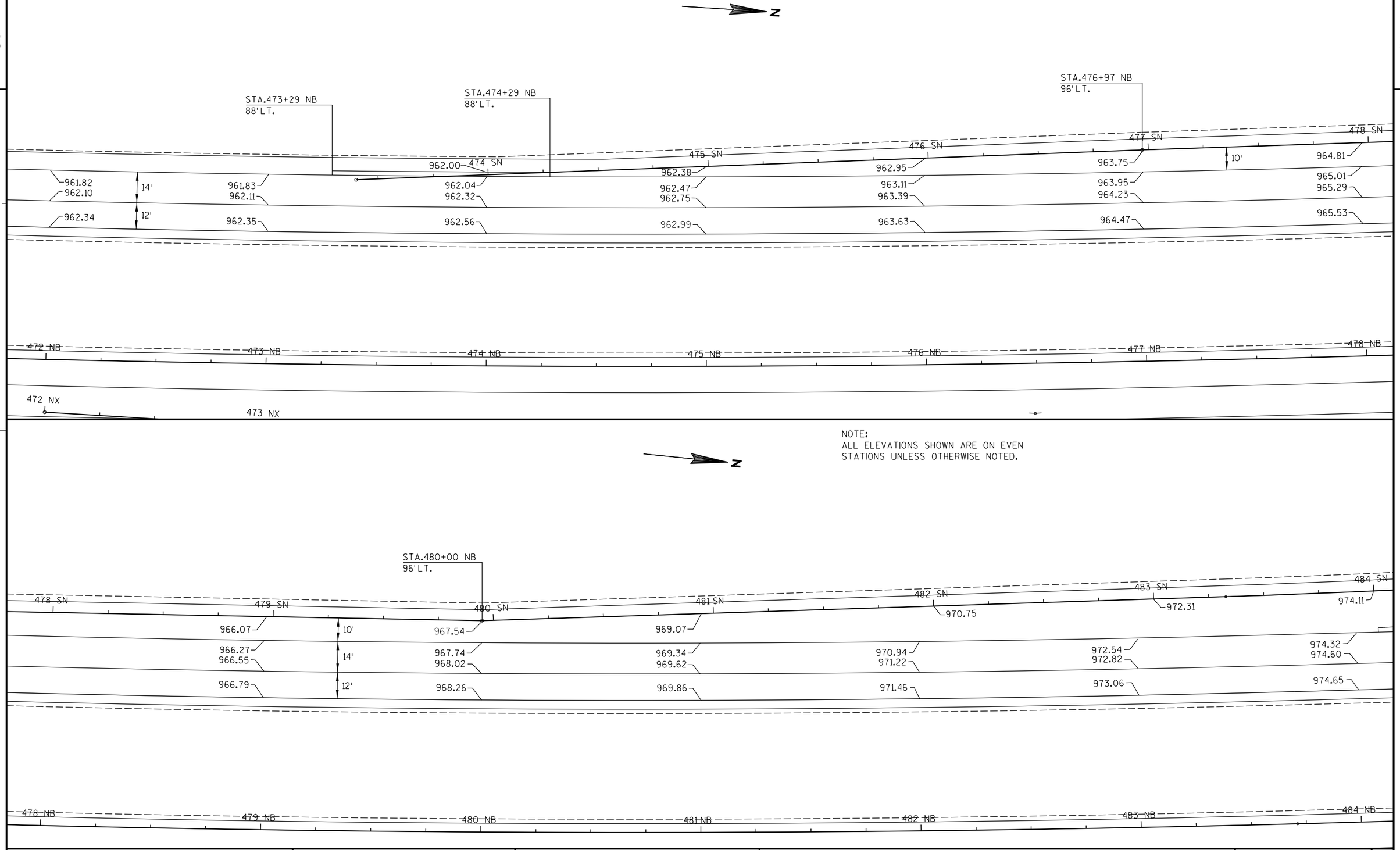


N

NOTE:
ALL ELEVATIONS SHOWN ARE ON EVEN STATIONS UNLESS OTHERWISE NOTED.

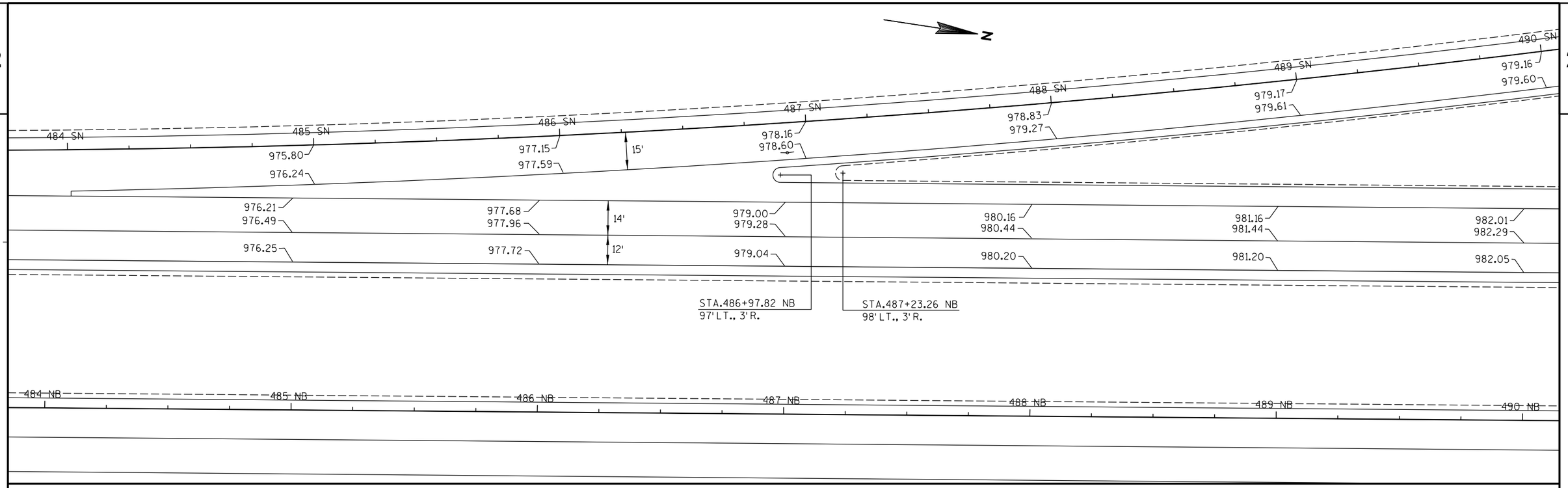
PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	PLAN DETAILS - RAMP NN	SHEET 54	E

2



NOTE:
ALL ELEVATIONS SHOWN ARE ON EVEN STATIONS UNLESS OTHERWISE NOTED.

PROJECT NO:6020-02-72	HWY:USH 51	COUNTY:DANE	PLAN DETAILS - RAMP SN	SHEET 55	E



STA.487+23.26 NB
BEGIN RAMP CONCRETE PAVEMENT
AND RAMP SUBGRADE
END RAMP PARALLEL LANE
AND MAINLINE SUBGRADE

NOTE:
ALL ELEVATIONS SHOWN ARE ON EVEN STATIONS UNLESS OTHERWISE NOTED.

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	PLAN DETAILS - RAMP SN	SHEET 56	E

2

STA.512+94.45 NB
END RAMP CONCRETE PAVEMENT
AND RAMP SUBGRADE
BEGIN PARALLEL LANE CONCRETE
PAVEMENT AND MAINLINE SUBGRADE

N

STA.512+94.45 NB
98'LT., 3'R.

STA.513+28.18 NB
97'LT., 3'R.

STA.517+00 NB
96'LT.

512 SX
513 SX
514 SX
515 SX
516 SX
517 SX
518 SX

972.80
973.10
971.94
972.24
971.09
971.39
970.77
971.07
970.52
970.82
970.17
970.37
969.77
969.97
15'
10'

973.11
973.39
972.47
972.75
971.87
972.15
971.32
971.60
971.10
970.65
970.25
14'

973.15
972.51
971.91
971.36
970.86
970.41
970.01
12'

512 NB
513 NB
514 NB
515 NB
516 NB
517 NB
518 NB
518 NN

NOTE:
ALL ELEVATIONS SHOWN ARE ON EVEN
STATIONS UNLESS OTHERWISE NOTED.

N

STA.520+00 NB
96'LT.

STA.521+67 NB
88'LT.

STA.522+12 NB
88'LT.

518 SX
519 SX
520 SX
521 SX
522 SX

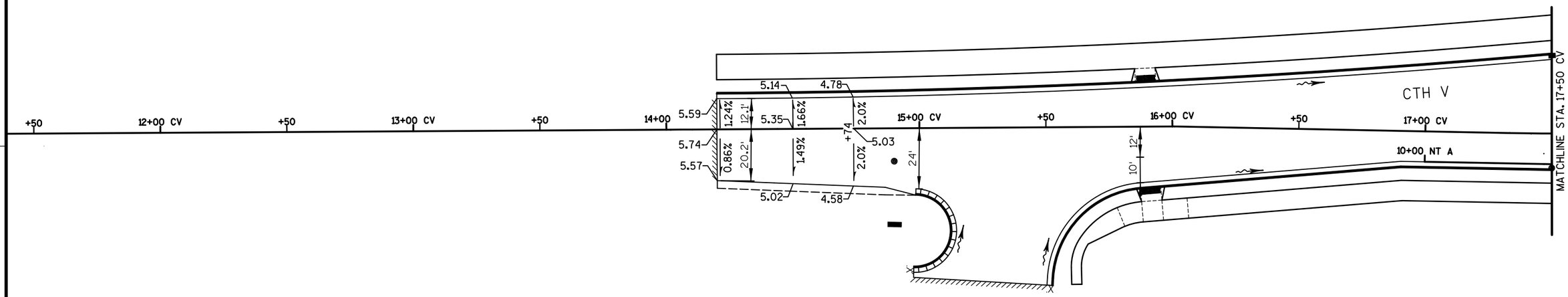
969.41
969.61
969.89
969.65
969.11
969.31
969.59
969.35
968.96
969.06
969.34
969.10
968.86
968.82
969.14
968.90
10'
14'
12'

518 NB
519 NB
520 NB
521 NB
522 NB
523 NB
524 NB

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	PLAN DETAILS - RAMP SX	SHEET 57	E

2

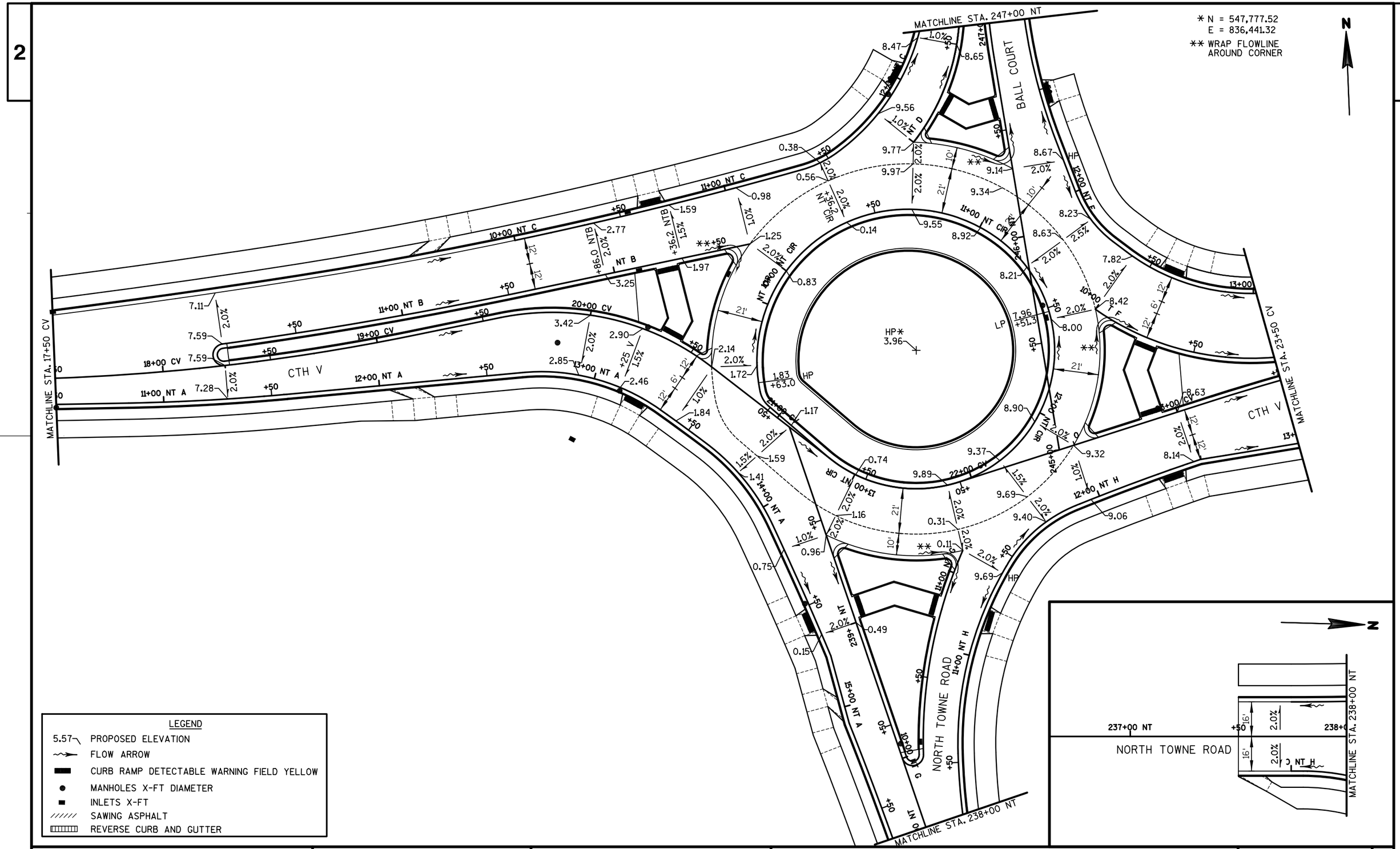
N



LEGEND

5.57	PROPOSED ELEVATION
~~→	FLOW ARROW
▬	CURB RAMP DETECTABLE WARNING FIELD YELLOW
●	MANHOLES X-FT DIAMETER
■	INLETS X-FT
//////	SAWING ASPHALT
▭	REVERSE CURB AND GUTTER

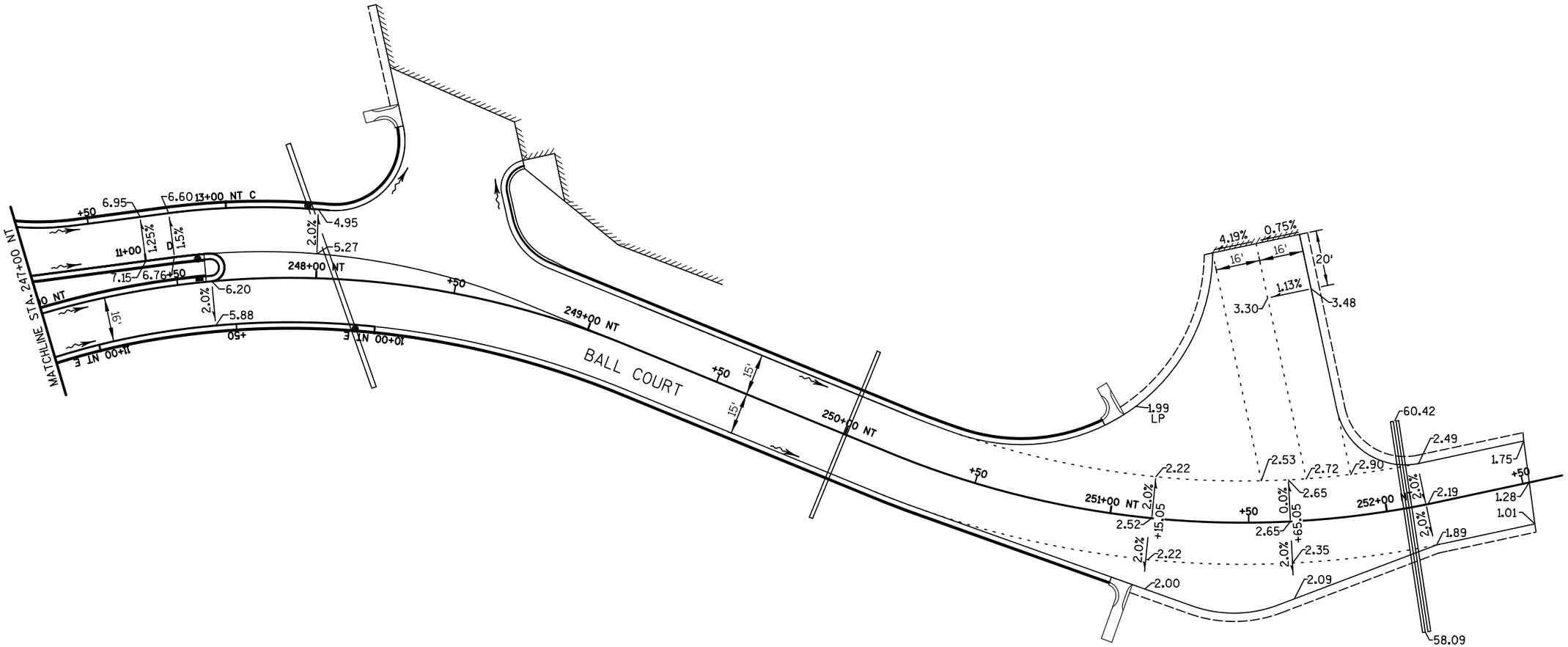
PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	PLAN DETAIL - CTH V	SHEET 58	E



PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	PLAN DETAIL - CTH V / NORTH TOWNE ROAD / BALL COURT	SHEET 59 E

2

N



LEGEND

5.57	PROPOSED ELEVATION
	FLOW ARROW
	CURB RAMP DETECTABLE WARNING FIELD YELLOW
	MANHOLES X-FT DIAMETER
	INLETS X-FT
	SAWING ASPHALT
	REVERSE CURB AND GUTTER

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	PLAN DETAIL - BALL COURT	SHEET 60 E

* N = 547,770.35
E = 836,903.38

** WRAP FLOWLINE AROUND CORNER

SEE CONSTRUCTION DETAIL - CURB RAMP DETAIL - SB OFF-RAMP

MATCHLINE STA. 501+00 SX

SOUTHBOUND OFF-RAMP

CTH V

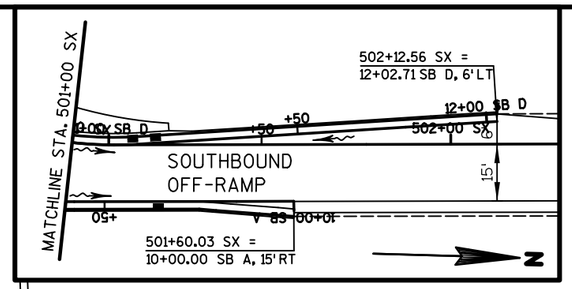
MATCHLINE STA. 23+50 CV

MATCHLINE STA. 29+50 CV

SOUTHBOUND ON-RAMP

MATCHLINE SEE PLAN DETAILS - RAMP SN

498+07.70 SN = 10+00.00 SB C, 27'RT



LEGEND

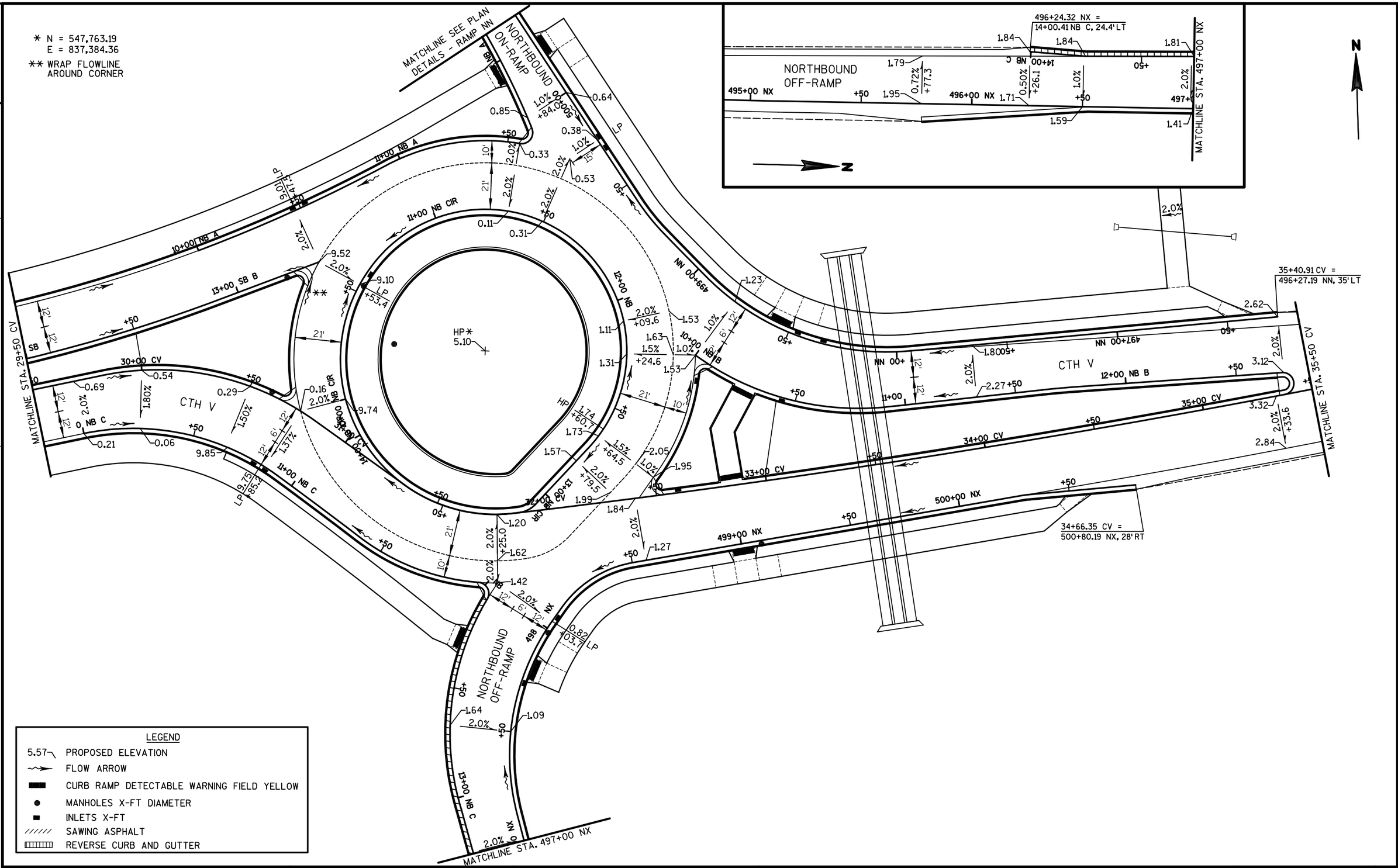
- 5.57 PROPOSED ELEVATION
- FLOW ARROW
- CURB RAMP DETECTABLE WARNING FIELD YELLOW
- MANHOLES X-FT DIAMETER
- INLETS X-FT
- SAWING ASPHALT
- REVERSE CURB AND GUTTER

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	PLAN DETAIL - CTH V / SB USH 51	SHEET 61 E

FILE NAME : S:\MAD\1000--1099\1089\234\Micros\PLAN\0272\021103_id.dgn PLOT DATE : 4/17/2013 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

* N = 547,763.19
E = 837,384.36

** WRAP FLOWLINE AROUND CORNER



LEGEND

5.57	PROPOSED ELEVATION
~~→	FLOW ARROW
▬	CURB RAMP DETECTABLE WARNING FIELD YELLOW
●	MANHOLES X-FT DIAMETER
■	INLETS X-FT
//////	SAWING ASPHALT
▭▭▭	REVERSE CURB AND GUTTER

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	PLAN DETAIL - CTH V / NB USH 51	SHEET	E

FILE NAME : S:\MAD\1000--1099\1089\234\Micros\PLAN\0272\021104_id.dgn PLOT DATE : 4/17/2013 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$
WISDOT/CADDS SHEET 42

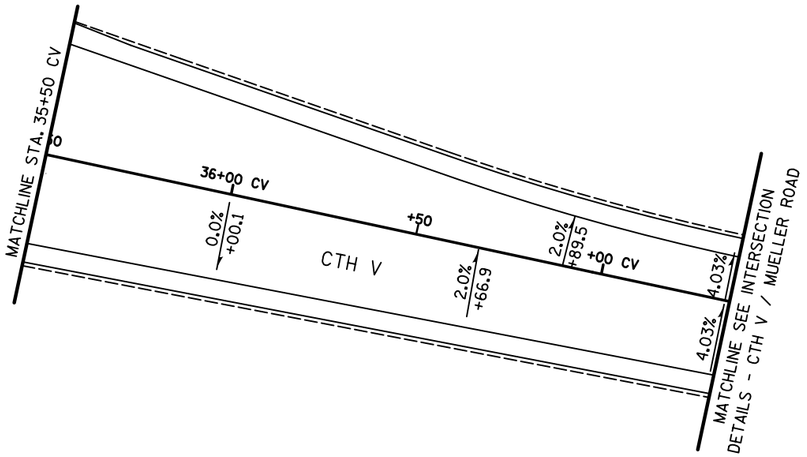
2

2

LEGEND

5.57	PROPOSED ELEVATION
	FLOW ARROW
	CURB RAMP DETECTABLE WARNING FIELD YELLOW
	MANHOLES X-FT DIAMETER
	INLETS X-FT
	SAWING ASPHALT
	REVERSE CURB AND GUTTER

N



SUPERELEVATION TABLE	
RT LANE RATE %	CTH V STATION
-2.0	35+33.61 CV
0.0	36+00.14 CV
2.0	36+66.89 CV
4.03	37+34.61 CV

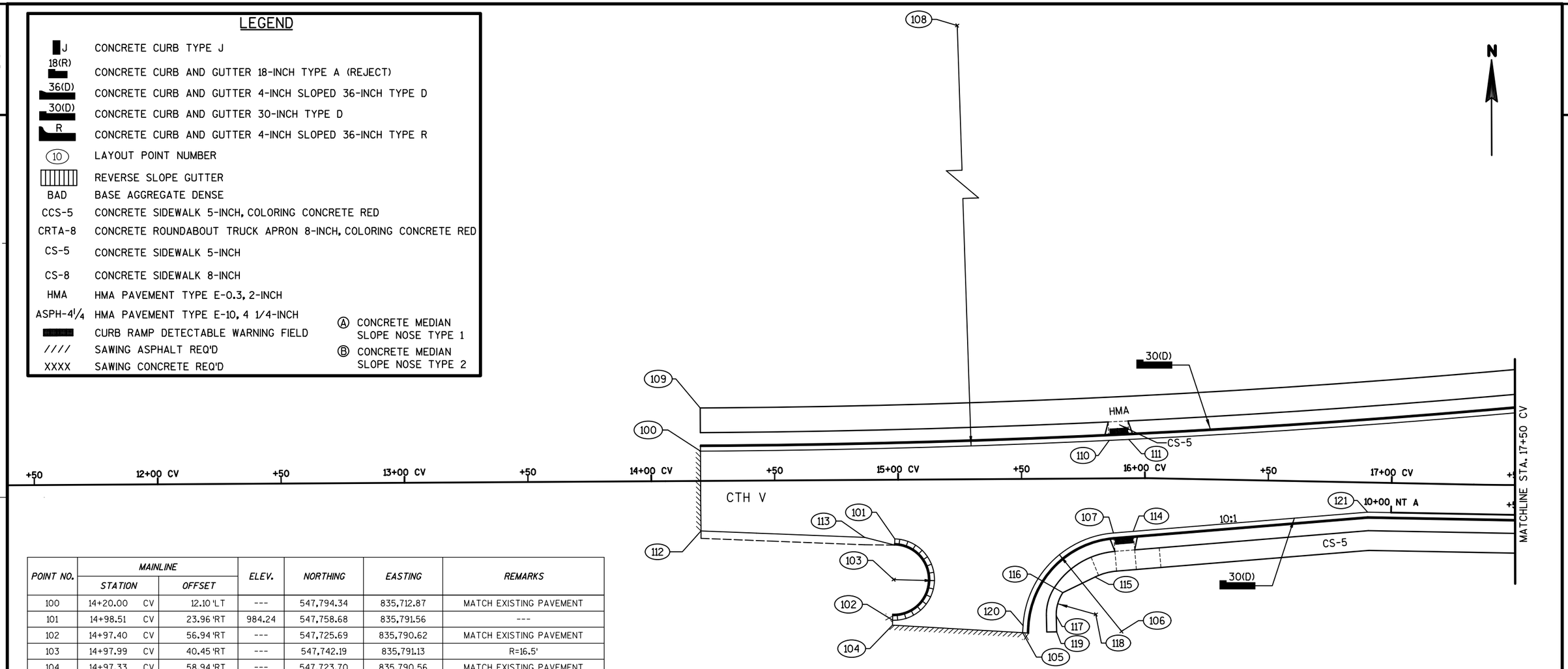
SUPERELEVATION TABLE	
LT LANE RATE %	CTH V STATION
-2.0	36+89.51 CV
-4.03	37+34.61 CV

LEGEND

J	CONCRETE CURB TYPE J
18(R)	CONCRETE CURB AND GUTTER 18-INCH TYPE A (REJECT)
36(D)	CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE D
30(D)	CONCRETE CURB AND GUTTER 30-INCH TYPE D
R	CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE R
(10)	LAYOUT POINT NUMBER
	REVERSE SLOPE GUTTER
BAD	BASE AGGREGATE DENSE
CCS-5	CONCRETE SIDEWALK 5-INCH, COLORING CONCRETE RED
CRTA-8	CONCRETE ROUNDABOUT TRUCK APRON 8-INCH, COLORING CONCRETE RED
CS-5	CONCRETE SIDEWALK 5-INCH
CS-8	CONCRETE SIDEWALK 8-INCH
HMA	HMA PAVEMENT TYPE E-0.3, 2-INCH
ASPH-4 1/4	HMA PAVEMENT TYPE E-10, 4 1/4-INCH
	CURB RAMP DETECTABLE WARNING FIELD
////	SAWING ASPHALT REQ'D
XXXX	SAWING CONCRETE REQ'D

Ⓐ CONCRETE MEDIAN SLOPE NOSE TYPE 1

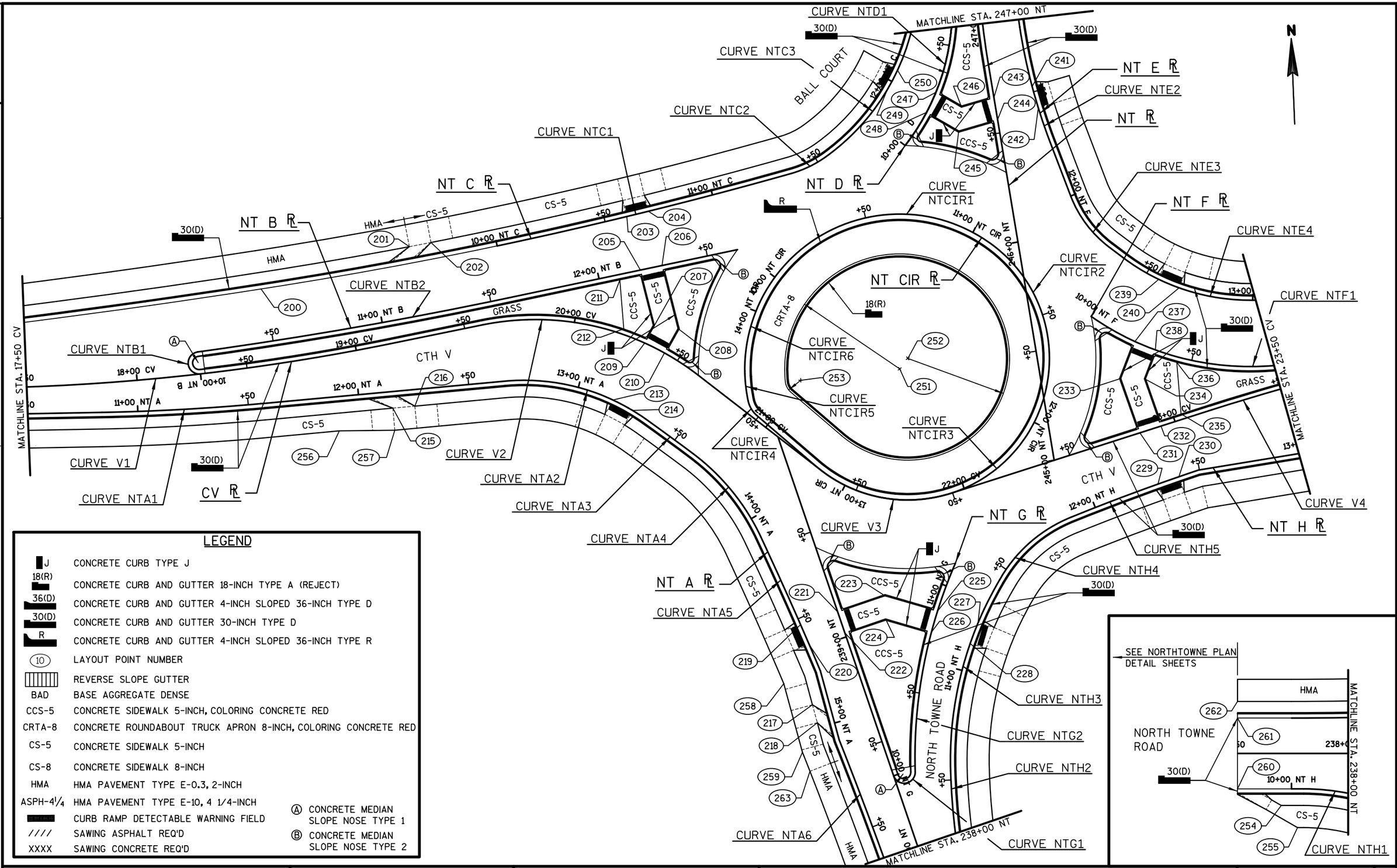
Ⓑ CONCRETE MEDIAN SLOPE NOSE TYPE 2



POINT NO.	MAINLINE STATION	MAINLINE OFFSET	ELEV.	NORTHING	EASTING	REMARKS
100	14+20.00 CV	12.10 'LT	---	547,794.34	835,712.87	MATCH EXISTING PAVEMENT
101	14+98.51 CV	23.96 'RT	984.24	547,758.68	835,791.56	---
102	14+97.40 CV	56.94 'RT	---	547,725.69	835,790.62	MATCH EXISTING PAVEMENT
103	14+97.99 CV	40.45 'RT	---	547,742.19	835,791.13	R=16.5'
104	14+97.33 CV	58.94 'RT	---	547,723.70	835,790.56	MATCH EXISTING PAVEMENT
105	15+50.05 CV	62.31 'RT	---	547,720.59	835,843.30	MATCH EXISTING PAVEMENT
106	15+90.15 CV	62.00 'RT	---	547,721.11	835,883.40	R=40'
107	15+87.12 CV	22.10 'RT	983.25	547,760.98	835,880.16	CURB RAMP OPENING
108	14+22.51 CV	4012.10 'LT	---	551,794.30	835,694.88	R=4000'
109	14+20.00 CV	29.60 'LT	---	547,811.84	835,712.78	BACK OF SIDEWALK
110	15+85.60 CV	15.43 'LT	983.35	547,798.51	835,878.45	CURB RAMP OPENING
111	15+93.59 CV	15.76 'LT	983.18	547,798.89	835,886.44	CURB RAMP OPENING
112	14+20.00 CV	20.25 'RT	---	547,761.99	835,713.04	MATCH EXISTING PAVEMENT
113	14+86.30 CV	23.28 'RT	---	547,759.29	835,779.35	EDGE OF PAVEMENT
114	15+95.10 CV	21.50 'RT	983.07	547,761.62	835,888.14	CURB RAMP OPENING
115	15+79.57 CV	39.90 'RT	---	547,743.15	835,872.70	BACK OF SIDEWALK
116	15+66.44 CV	46.19 'RT	---	547,736.79	835,859.60	BACK OF SIDEWALK
117	15+63.76 CV	55.52 'RT	---	547,727.46	835,856.97	BACK OF SIDEWALK
118	15+79.75 CV	55.07 'RT	---	547,727.99	835,872.96	R=16'
119	15+63.85 CV	62.04 'RT	---	547,720.94	835,857.10	MATCH EXISTING SIDEWALK
120	15+50.23 CV	59.44 'RT	984.60	547,723.46	835,843.47	---
121	16+90.49 CV	12.00 'RT	980.96	547,769.33	835,983.15	---

NOTE:
ALL CURB AND GUTTER POINTS ARE TO FLANGE LINE UNLESS OTHERWISE NOTED

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	LAYOUT DETAIL - CTH V	SHEET 64	E



LEGEND

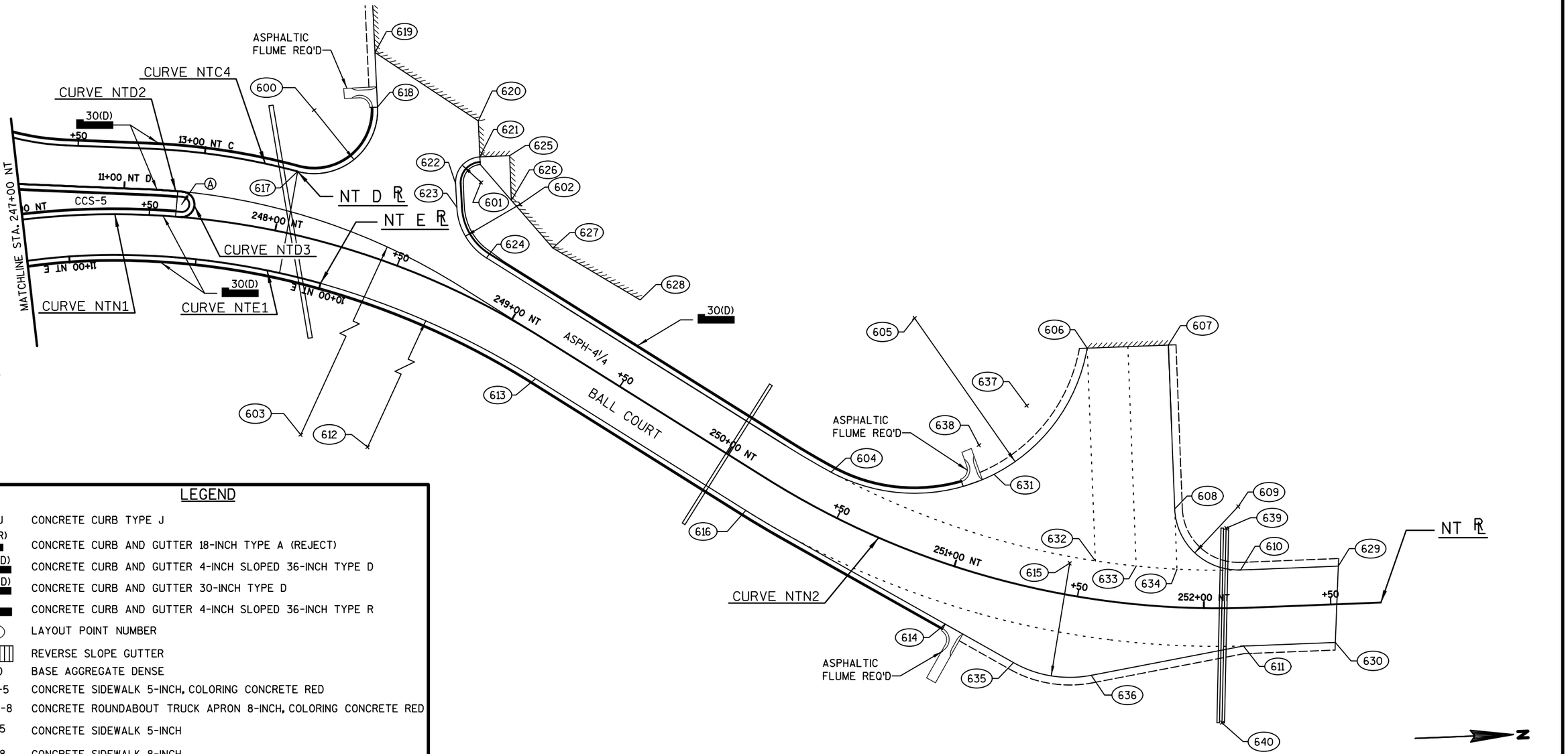
J	CONCRETE CURB TYPE J
18(R)	CONCRETE CURB AND GUTTER 18-INCH TYPE A (REJECT)
36(D)	CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE D
30(D)	CONCRETE CURB AND GUTTER 30-INCH TYPE D
R	CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE R
(10)	LAYOUT POINT NUMBER
	REVERSE SLOPE GUTTER
BAD	BASE AGGREGATE DENSE
CCS-5	CONCRETE SIDEWALK 5-INCH, COLORING CONCRETE RED
CRTA-8	CONCRETE ROUNDABOUT TRUCK APRON 8-INCH, COLORING CONCRETE RED
CS-5	CONCRETE SIDEWALK 5-INCH
CS-8	CONCRETE SIDEWALK 8-INCH
HMA	HMA PAVEMENT TYPE E-0.3, 2-INCH
ASPH-4 1/4	HMA PAVEMENT TYPE E-10, 4 1/4-INCH
	CURB RAMP DETECTABLE WARNING FIELD
////	SAWING ASPHALT REQ'D
XXXX	SAWING CONCRETE REQ'D
Ⓐ	CONCRETE MEDIAN SLOPE NOSE TYPE 1
Ⓑ	CONCRETE MEDIAN SLOPE NOSE TYPE 2

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	LAYOUT DETAIL - CTH V / NORTH TOWNE ROAD / BALL COURT	SHEET 65	E

POINT NO.	MAINLINE STATION	MAINLINE OFFSET	ELEV.	NORTHING	EASTING	REMARKS
200	18+61.51 CV	34.48 'LT	---	547,820.33	836,150.49	---
201	19+32.85 CV	41.28 'LT	---	547,836.85	836,218.17	FRONT OF SIDEWALK
202	19+42.84 CV	41.18 'LT	---	547,838.35	836,228.05	FRONT OF SIDEWALK
203	10+60.03 NT C	7.50 'LT	---	547,853.90	836,315.42	CURB RAMP OPENING
204	10+70.07 NT C	7.50 'LT	---	547,855.90	836,325.21	CURB RAMP OPENING
205	12+19.11 NT B	0.00 'RT	---	547,822.18	836,322.12	CURB RAMP OPENING
206	12+29.11 NT B	0.00 'RT	---	547,823.86	836,331.99	CURB RAMP OPENING
207	20+33.86 CV	9.06 'LT	---	547,796.91	836,327.47	---
208	20+43.17 CV	12.63 'LT	---	547,795.10	836,338.07	---
209	20+33.16 CV	0.00 'RT	---	547,789.15	836,322.75	CURB RAMP OPENING
210	20+43.17 CV	0.00 'RT	---	547,784.31	836,331.51	CURB RAMP OPENING
211	12+09.06 NT B	2.50 'RT	---	547,818.03	836,312.64	CCS-5 LIMITS
212	20+22.12 CV	2.50 'LT	---	547,795.94	836,313.57	CCS-5 LIMITS
213	13+16.67 NT A	0.00 'RT	---	547,763.96	836,307.45	CURB RAMP OPENING
214	13+26.68 NT A	0.00 'RT	---	547,758.92	836,316.08	CURB RAMP OPENING
215	12+14.94 NT A	7.50 'RT	---	547,764.19	836,207.88	FRONT OF SIDEWALK
216	12+24.94 NT A	7.50 'RT	---	547,764.72	836,217.86	FRONT OF SIDEWALK
217	14+89.44 NT A	7.50 'RT	---	547,622.77	836,392.11	FRONT OF SIDEWALK
218	14+97.84 NT A	7.50 'RT	---	547,614.59	836,393.99	FRONT OF SIDEWALK
219	14+52.83 NT A	0.00 'RT	---	547,659.19	836,388.16	CURB RAMP OPENING
220	14+62.86 NT A	0.00 'RT	---	547,649.84	836,391.79	CURB RAMP OPENING
221	239+11.91 NT S	0.00 'RT	---	547,664.26	836,405.17	CURB RAMP OPENING
222	239+01.91 NT S	0.00 'RT	---	547,654.68	836,408.02	CURB RAMP OPENING
223	239+11.91 NT S	22.57 'RT	---	547,670.71	836,426.80	---
224	239+01.91 NT S	19.42 'RT	---	547,660.23	836,426.63	---
225	10+87.96 NT G	0.00 'RT	---	547,662.89	836,450.25	CURB RAMP OPENING
226	10+77.96 NT G	0.00 'RT	---	547,653.40	836,447.09	CURB RAMP OPENING
227	11+22.69 NT H	0.00 'RT	---	547,656.85	836,468.36	CURB RAMP OPENING
228	11+12.66 NT H	0.00 'RT	---	547,647.63	836,464.41	CURB RAMP OPENING
229	12+30.21 NT H	0.00 'RT	---	547,716.31	836,552.04	CURB RAMP OPENING
230	12+40.21 NT H	0.00 'RT	---	547,719.25	836,561.59	CURB RAMP OPENING
231	22+83.35 CV	0.00 'RT	---	547,739.79	836,544.81	CURB RAMP OPENING
232	22+93.36 CV	0.00 'RT	---	547,742.46	836,554.45	CURB RAMP OPENING
233	22+82.62 CV	26.06 'LT	---	547,764.70	836,537.14	---
234	22+92.72 CV	22.68 'LT	---	547,764.14	836,547.78	---
235	23+03.68 CV	2.50 'LT	---	547,747.62	836,563.73	CCS-5 LIMITS
236	10+43.63 NT F	2.50 'RT	---	547,770.95	836,562.69	CCS-5 LIMITS
237	10+22.84 NT F	0.00 'RT	---	547,781.14	836,544.17	CURB RAMP OPENING
238	10+32.84 NT F	0.00 'RT	---	547,776.99	836,553.27	CURB RAMP OPENING
239	12+56.05 NT E	0.00 'RT	---	547,808.80	836,556.01	CURB RAMP OPENING
240	12+66.06 NT E	0.00 'RT	---	547,804.57	836,565.08	CURB RAMP OPENING
241	11+47.49 NT E	0.00 'RT	---	547,898.15	836,502.28	CURB RAMP OPENING
242	11+57.49 NT E	0.00 'RT	---	547,888.44	836,504.66	CURB RAMP OPENING
243	246+66.16 NT N	0.00 'RT	---	547,893.78	836,484.84	CURB RAMP OPENING
244	246+56.09 NT N	0.00 'RT	---	547,883.79	836,486.10	CURB RAMP OPENING
245	246+53.89 NT N	18.17 'LT	---	547,879.34	836,468.35	---
246	246+64.33 NT N	15.13 'LT	---	547,890.08	836,470.07	---
247	10+27.91 NT D	0.00 'RT	---	547,897.23	836,458.73	CURB RAMP OPENING
248	10+17.87 NT D	0.00 'RT	---	547,888.30	836,454.14	CURB RAMP OPENING
249	11+95.74 NT C	0.00 'RT	---	547,899.25	836,436.79	CURB RAMP OPENING
250	12+05.75 NT C	0.00 'RT	---	547,907.92	836,441.79	CURB RAMP OPENING

POINT NO.	MAINLINE STATION	MAINLINE OFFSET	ELEV.	NORTHING	EASTING	REMARKS
251	13+12.74 NT CIR	58.00 'RT	973.66	547,772.93	836,437.46	R=52'
252	11+11.67 NT CIR	64.00 'RT	973.96	547,777.52	836,441.32	R=46'
253	13+46.24 NT CIR	25.00 'RT	---	547,769.55	836,392.59	R=7'
254	237+69.78 NT S	23.50 'RT	---	547,534.77	836,468.29	FRONT OF SIDEWALK
255	237+77.10 NT S	33.50 'RT	---	547,544.64	836,475.79	BACK OF SIDEWALK
256	11+89.94 NT A	15.50 'RT	---	547,754.88	836,183.34	BACK OF SIDEWALK
257	12+14.94 NT A	17.50 'RT	---	547,754.20	836,208.41	BACK OF SIDEWALK
258	14+74.45 NT A	17.50 'RT	---	547,632.85	836,379.53	BACK OF SIDEWALK
259	15+07.95 NT A	17.53 'RT	---	547,601.51	836,386.73	BACK OF SIDEWALK
260	237+50.00 NT S	16.00 'RT	---	547,513.67	836,466.76	---
261	237+50.00 NT S	16.00 'LT	---	547,504.53	836,436.09	---
262	237+50.00 NT S	23.50 'LT	---	547,502.39	836,428.90	FRONT OF SIDEWALK
263	238+47.78 NT S	35.16 'LT	---	547,592.76	836,389.80	CONCRETE TO HMA TRANSITION

2



LEGEND

J	CONCRETE CURB TYPE J
18(R)	CONCRETE CURB AND GUTTER 18-INCH TYPE A (REJECT)
36(D)	CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE D
30(D)	CONCRETE CURB AND GUTTER 30-INCH TYPE D
R	CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE R
(10)	LAYOUT POINT NUMBER
	REVERSE SLOPE GUTTER
BAD	BASE AGGREGATE DENSE
CCS-5	CONCRETE SIDEWALK 5-INCH, COLORING CONCRETE RED
CRTA-8	CONCRETE ROUNDABOUT TRUCK APRON 8-INCH, COLORING CONCRETE RED
CS-5	CONCRETE SIDEWALK 5-INCH
CS-8	CONCRETE SIDEWALK 8-INCH
HMA	HMA PAVEMENT TYPE E-0.3, 2-INCH
ASPH-4¼	HMA PAVEMENT TYPE E-10, 4 1/4-INCH
	CURB RAMP DETECTABLE WARNING FIELD
////	SAWING ASPHALT REQ'D
XXXX	SAWING CONCRETE REQ'D

Ⓐ CONCRETE MEDIAN SLOPE NOSE TYPE 1

Ⓑ CONCRETE MEDIAN SLOPE NOSE TYPE 2

NOTE:
ALL CURB AND GUTTER POINTS ARE TO FLANGE LINE UNLESS OTHERWISE NOTED

FRENCH DRAIN REQUIRED AT LOW POINTS - POINT NO. 631 AND 635

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	LAYOUT DETAIL - BALL COURT	SHEET 67 E

POINT NO.	MAINLINE		ELEV.	NORTHING	EASTING	REMARKS
	STATION	OFFSET				
600	248+04.75 NT N	49.59 'LT	---	548,043.81	836,442.47	R=25'
601	248+67.02 NT N	42.93 'LT	---	548,108.35	836,473.45	R=10'
602	248+82.57 NT N	41.69 'LT	---	548,123.43	836,482.67	R=25'
603	247+48.64 NT N	239.91 'RT	---	547,957.12	836,720.26	R=250'
604	250+39.32 NT N	15.00 'LT	962.60	548,241.58	836,592.94	---
605	250+39.32 NT N	84.00 'LT	---	548,276.81	836,533.61	R=69'
606	251+32.52 NT N	96.80 'LT	---	548,344.26	836,548.12	MATCH EXISTING
607	251+77.31 NT N	102.86 'LT	---	548,376.26	836,548.15	MATCH EXISTING
608	251+86.28 NT N	38.65 'LT	963.09	548,376.21	836,612.74	EDGE OF PAVEMENT
609	252+14.57 NT N	40.00 'LT	---	548,401.21	836,612.76	R=25'
610	252+14.91 NT N	15.00 'LT	962.49	548,401.22	836,637.76	EDGE OF PAVEMENT
611	252+15.18 NT N	15.00 'RT	961.89	548,401.15	836,667.77	EDGE OF PAVEMENT
612	246+73.50 NT N	338.61 'RT	---	547,943.37	836,819.88	R=325'
613	249+20.26 NT N	15.00 'RT	963.20	548,126.79	836,551.59	EDGE OF PAVEMENT
614	251+03.44 NT N	22.76 'RT	962.12	548,284.15	836,654.54	EDGE OF PAVEMENT
615	251+44.57 NT N	12.44 'LT	---	548,334.04	836,632.46	R=45'
616	250+17.92 NT N	15.00 'RT	962.71	548,207.42	836,606.71	EDGE OF PAVEMENT
617	248+03.68 NT N	24.62 'LT	964.86	548,036.36	836,466.34	---
618	248+25.20 NT N	56.92 'LT	963.25	548,068.81	836,442.25	EDGE OF PAVEMENT
619	248+19.59 NT N	77.36 'LT	---	548,068.62	836,420.71	MATCH EXISTING PARKING LOT
620	248+58.16 NT N	64.78 'LT	---	548,108.25	836,449.27	MATCH EXISTING PARKING LOT
621	248+63.23 NT N	51.93 'LT	---	548,108.31	836,463.45	MATCH EXISTING PARKING LOT
622	248+59.05 NT N	38.58 'LT	961.77	548,098.35	836,473.54	EDGE OF PAVEMENT
623	248+62.66 NT N	30.13 'LT	962.25	548,098.43	836,482.89	EDGE OF PAVEMENT
624	248+80.27 NT N	16.81 'LT	963.49	548,109.32	836,503.30	EDGE OF PAVEMENT
625	248+72.16 NT N	57.15 'LT	---	548,120.01	836,463.37	MATCH EXISTING PARKING LOT
626	248+79.22 NT N	41.49 'LT	---	548,120.01	836,481.03	MATCH EXISTING PARKING LOT
627	249+00.00 NT N	32.49 'LT	---	548,135.58	836,500.44	SAW CUT LIMIT
628	249+38.63 NT N	33.16 'LT	---	548,169.14	836,522.20	SAW CUT LIMIT
629	252+53.53 NT N	15.00 'LT	---	548,439.66	836,637.79	MATCH EXISTING PARKING LOT
630	252+51.19 NT N	15.00 'RT	---	548,437.33	836,667.79	MATCH EXISTING PARKING LOT
631	251+04.03 NT N	39.28 'LT	961.99	548,305.59	836,596.32	LOW POINT - FRENCH DRAIN REQ'D
632	251+54.83 NT N	15.00 'LT	962.53	548,344.20	836,631.97	---
633	251+71.81 NT N	15.00 'LT	962.72	548,360.20	836,634.64	---
634	251+88.68 NT N	15.00 'LT	962.90	548,376.20	836,636.49	---
635	251+31.14 NT N	30.41 'RT	961.88	548,310.40	836,670.75	LOW POINT - FRENCH DRAIN REQ'D
636	251+59.62 NT N	29.84 'RT	962.02	548,340.81	836,676.94	---
637	251+09.43 NT N	68.97 'LT	961.31	548,319.62	836,569.76	DITCH BOTTOM
638	250+93.44 NT N	48.42 'LT	959.38	548,300.18	836,584.53	DITCH BOTTOM
639	252+09.10 NT N	31.56 'LT	960.42	548,396.15	836,621.10	INVERT LOCATION
640	252+07.00 NT N	45.11 'RT	958.09	548,391.54	836,697.66	OUTFALL LOCATION

CV LINE

P.I. = 10+95.27 CV
Y = 547,780.57
X = 835,388.21

P.I. = 16+00.86 CV
Y = 547,783.16
X = 835,893.79

CURVE V1
P.I. = 18+24.64 CV
Y = 547,178.59
X = 836,117.52
DELTA = 10° 26' 21.52" (LT)
D = 5° 43' 46.48"
T = 91.35
L = 182.20
R = 1,000.00
P.C. = 17+33.29 CV
Y = 547,780.46
X = 836,026.19
P.T. = 19+15.49 CV
Y = 547,793.31
X = 836,207.68

CURVE V2
P.I. = 20+13.26 CV
Y = 547,809.06
X = 836,304.18
DELTA = 49° 16' 17.79" (RT)
D = 47° 44' 47.34"
T = 55.03
L = 103.19
R = 120.00
P.C. = 19+58.23 CV
Y = 547,800.19
X = 836,249.86
P.T. = 20+61.42 CV
Y = 547,773.68
X = 836,346.33

CURVE V3
P.I. = 21+65.37 CV
Y = 547,706.86
X = 836,425.96
DELTA = 55° 29' 18.01" (LT)
D = 89° 31' 28.75"
T = 33.66
L = 61.98
R = 64.00
P.C. = 21+31.71 CV
Y = 547,728.50
X = 836,400.18
P.T. = 21+93.69 CV
Y = 547,715.85
X = 836,458.40

CURVE V4
P.I. = 23+39.92 CV
Y = 547,754.89
X = 836,599.33
DELTA = 2° 31' 48.80" (RT)
D = 5° 35' 43.05"
T = 22.61
L = 45.22
R = 1,024.00
P.C. = 23+17.31 CV
Y = 547,748.85
X = 836,577.53
P.T. = 23+62.53 CV
Y = 547,759.96
X = 836,621.36

NT A LINE

P.I. = 10+00.00 NT A
Y = 547,769.14
X = 835,992.66

CURVE NTA1
P.I. = 11+20.47 NT A
Y = 547,766.68
X = 836,113.11
DELTA = 4° 12' 01.12" (LT)
D = 5° 43' 46.48"
T = 36.67
L = 73.31
R = 1,000.00
P.C. = 10+83.80 NT A
Y = 547,767.43
X = 836,076.45
P.T. = 11+57.11 NT A
Y = 547,768.62
X = 836,149.73

CURVE NTA2
P.I. = 13+01.65 NT A
Y = 547,776.26
X = 836,294.07
DELTA = 40° 41' 56.45" (RT)
D = 60° 18' 40.85"
T = 35.23
L = 67.48
R = 95.00
P.C. = 12+66.42 NT A
Y = 547,774.40
X = 836,258.88
P.T. = 13+33.90 NT A
Y = 547,754.73
X = 836,321.96

CURVE NTA3
P.I. = 13+47.23 NT A
Y = 547,746.58
X = 836,332.51
DELTA = 1° 33' 21.05" (RT)
D = 5° 50' 04.56"
T = 13.33
L = 26.67
R = 982.00
P.C. = 13+33.90 NT A
Y = 547,754.73
X = 836,321.96
P.T. = 13+60.56 NT A
Y = 547,738.15
X = 836,342.84

CURVE NTA4
P.I. = 13+85.38 NT A
Y = 547,722.45
X = 836,362.07
DELTA = 27° 52' 44.11" (RT)
D = 57° 17' 44.81"
T = 24.82
L = 48.66
R = 100.00
P.C. = 13+60.56 NT A
Y = 547,738.15
X = 836,342.84
P.T. = 14+09.22 NT A
Y = 547,699.59
X = 836,371.73

CURVE NTA5
P.I. = 14+42.43 NT A
Y = 547,669.00
X = 836,384.65
DELTA = 2° 18' 21.50" (RT)
D = 3° 28' 20.90"
T = 33.21
L = 66.41
R = 1,650.00
P.C. = 14+09.22 NT A
Y = 547,699.59
X = 836,371.73
P.T. = 14+75.63 NT A
Y = 547,637.91
X = 836,396.33

CURVE NTA6
P.I. = 15+49.26 NT A
Y = 547,567.46
X = 836,417.33
DELTA = 2° 52' 30.62" (RT)
D = 3° 28' 51.28"
T = 41.31
L = 82.60
R = 1,646.00
P.C. = 15+07.95 NT A
Y = 547,606.41
X = 836,403.56
P.T. = 15+90.55 NT A
Y = 547,527.87
X = 836,429.13

NT B LINE

CURVE NTB1
P.I. = 14+36.17 NT B
Y = 547,750.34
X = 835,686.69
DELTA = 178° 41' 11.16" (RT)
D = 1145° 54' 56.12"
T = 436.17
L = 15.59
R = 5.00
P.C. = 10+00.00 NT B
Y = 547,783.07
X = 836,121.63
P.T. = 10+15.59 NT B
Y = 547,793.03
X = 836,120.77

CURVE NTB2
P.I. = 10+86.83 NT B
Y = 547,800.00
X = 836,191.66
DELTA = 4° 01' 53.74" (LT)
D = 2° 49' 50.95"
T = 71.24
L = 142.42
R = 2,024.00
P.C. = 10+15.59 NT B
Y = 547,793.03
X = 836,120.77
P.T. = 11+58.01 NT B
Y = 547,811.94
X = 836,261.89

NT C LINE

CURVE NTC1
P.I. = 10+68.53 NT C
Y = 547,847.09
X = 836,325.43
DELTA = 3° 55' 30.30" (LT)
D = 2° 51' 53.24"
T = 68.53
L = 137.01
R = 2,000.00
P.C. = 10+00.00 NT C
Y = 547,835.60
X = 836,257.87
P.T. = 11+37.01 NT C
Y = 547,863.17
X = 836,392.05

CURVE NTC2
P.I. = 11+45.75 NT C
Y = 547,865.22
X = 836,400.55
DELTA = 19° 50' 09.68" (LT)
D = 114° 35' 29.61"
T = 8.74
L = 17.31
R = 50.00
P.C. = 11+37.01 NT C
Y = 547,863.17
X = 836,392.05
P.T. = 11+54.32 NT C
Y = 547,870.04
X = 836,407.85

CURVE NTC3
P.I. = 12+03.09 NT C
Y = 547,896.89
X = 836,448.56
DELTA = 51° 59' 30.41" (LT)
D = 57° 17' 44.81"
T = 48.76
L = 90.74
R = 100.00
P.C. = 11+54.32 NT C
Y = 547,870.04
X = 836,407.85
P.T. = 12+45.06 NT C
Y = 547,945.49
X = 836,452.47

CURVE NTC4
P.I. = 13+07.81 NT C
Y = 548,008.03
X = 836,457.50
DELTA = 12° 43' 59.48" (RT)
D = 21° 32' 23.16"
T = 29.68
L = 59.11
R = 266.00
P.C. = 12+78.13 NT C
Y = 547,978.45
X = 836,455.12
P.T. = 13+37.24 NT C
Y = 548,036.36
X = 836,466.34

NT CIR LINE

CURVE NTCIR1
P.I. = 10+71.74 NT CIR
Y = 547,872.66
X = 836,427.50
DELTA = 91° 24' 21.78" (RT)
D = 81° 51' 04.01"
T = 71.74
L = 111.67
R = 70.00
P.C. = 10+00.00 NT CIR
Y = 547,816.60
X = 836,382.75
P.T. = 11+11.67 NT CIR
Y = 547,826.55
X = 836,482.46

CURVE NTCIR2
P.I. = 11+77.30 NT CIR
Y = 547,784.36
X = 836,532.73
DELTA = 91° 26' 22.08" (RT)
D = 89° 31' 28.76"
T = 65.63
L = 102.14
R = 64.00
P.C. = 11+11.67 NT CIR
Y = 547,826.55
X = 836,482.46
P.T. = 12+13.81 NT CIR
Y = 547,735.16
X = 836,489.29

CURVE NTCIR3
P.I. = 12+79.44 NT CIR
Y = 547,685.97
X = 836,445.86
DELTA = 91° 26' 22.08" (RT)
D = 89° 31' 28.76"
T = 65.63
L = 102.14
R = 64.00
P.C. = 12+13.81 NT CIR
Y = 547,735.16
X = 836,489.29
P.T. = 13+15.95 NT CIR
Y = 547,730.63
X = 836,397.77

CURVE NTCIR4
P.I. = 13+55.04 NT CIR
Y = 547,757.23
X = 836,369.12
DELTA = 37° 30' 40.43" (RT)
D = 477° 27' 53.39"
T = 4.07
L = 7.86
R = 12.00
P.C. = 13+50.97 NT CIR
Y = 547,754.45
X = 836,372.11
P.T. = 13+58.82 NT CIR
Y = 547,761.24
X = 836,368.44

CURVE NTCIR5
P.I. = 13+64.96 NT CIR
Y = 547,767.29
X = 836,367.42
DELTA = 10° 00' 51.49" (RT)
D = 81° 51' 04.01"
T = 6.13
L = 12.23
R = 70.00
P.C. = 13+58.82 NT CIR
Y = 547,761.24
X = 836,368.44
P.T. = 13+71.06 NT CIR
Y = 547,773.42
X = 836,367.46

CURVE NTCIR6
P.I. = 13+95.29 NT CIR
Y = 547,797.66
X = 836,367.63
DELTA = 38° 11' 22.15" (RT)
D = 81° 51' 04.01"
T = 24.23
L = 46.66
R = 70.00
P.C. = 13+71.06 NT CIR
Y = 547,773.42
X = 836,367.46
P.T. = 14+17.72 NT CIR
Y = 547,816.60
X = 836,382.75

NT D LINE

CURVE NTD1
P.I. = 10+32.24 NT D
Y = 547,898.30
X = 836,464.72
DELTA = 35° 44' 22.87" (LT)
D = 57° 17' 44.81"
T = 32.24
L = 62.38
R = 100.00
P.C. = 10+00.00 NT D
Y = 547,873.72
X = 836,443.85
P.T. = 10+62.38 NT D
Y = 547,930.44
X = 836,467.31

CURVE NTD2
P.I. = 11+16.18 NT D
Y = 547,984.06
X = 836,471.62
DELTA = 3° 10' 15.81" (RT)
D = 22° 55' 05.92"
T = 6.92
L = 13.84
R = 250.00
P.C. = 11+09.26 NT D
Y = 547,977.17
X = 836,471.07
P.T. = 11+23.09 NT D
Y = 547,990.92
X = 836,472.56

CURVE NTD3
P.I. = 18+65.30 NT D
Y = 548,726.32
X = 836,572.90
DELTA = 179° 13' 40.99" (RT)
D = 1145° 54' 56.12"
T = 742.21
L = 15.64
R = 5.00
P.C. = 11+23.09 NT D
Y = 547,990.92
X = 836,472.56
P.T. = 11+38.73 NT D
Y = 547,989.63
X = 836,482.47

NT E LINE

CURVE NTE1
P.I. = 10+40.45 NT E
Y = 548,005.17
X = 836,498.27
DELTA = 15° 21' 35.03" (LT)
D = 19° 05' 54.94"
T = 40.45
L = 80.42
R = 300.00
P.C. = 10+00.00 NT E
Y = 548,043.66
X = 836,510.74
P.T. = 10+80.42 NT E
Y = 547,964.76
X = 836,496.43

CURVE NTE2
P.I. = 11+27.79 NT E
Y = 547,917.44
X = 836,494.28
DELTA = 21° 17' 31.60" (LT)
D = 22° 44' 11.11"
T = 47.37
L = 93.65
R = 252.00
P.C. = 10+80.42 NT E
Y = 547,964.76
X = 836,496.43
P.T. = 11+74.07 NT E
Y = 547,872.57
X = 836,509.45

CURVE NTE3
P.I. = 12+15.02 NT E
Y = 547,833.78
X = 836,522.58
DELTA = 32° 00' 33.62" (LT)
D = 110° 11' 03.09"
T = 14.92
L = 29.05
R = 52.00
P.C. = 12+00.11 NT E
Y = 547,847.90
X = 836,517.80
P.T. = 12+29.16 NT E
Y = 547,824.33
X = 836,534.12

CURVE NTE4
P.I. = 12+74.00 NT E
Y = 547,795.92
X = 836,568.82
DELTA = 42° 14' 43.15" (LT)
D = 60° 18' 40.85"
T = 36.70
L = 70.05
R = 95.00
P.C. = 12+37.30 NT E
Y = 547,819.17
X = 836,540.42
P.T. = 13+07.34 NT E
Y = 547,797.81
X = 836,605.47

CURVE NTE5
P.I. = 13+49.05 NT E
Y = 547,799.95
X = 836,647.12
DELTA = 9° 46' 08.04" (LT)
D = 11° 44' 27.38"
T = 41.70
L = 83.20
R = 488.00
P.C. = 13+07.34 NT E
Y = 547,797.81
X = 836,605.47
P.T. = 13+90.55 NT E
Y = 547,809.13
X = 836,687.80

CURVE NTE6
P.I. = 14+74.52 NT E
Y = 547,827.60
X = 836,769.71
DELTA = 4° 48' 30.08" (LT)
D = 2° 51' 53.24"
T = 83.97
L = 167.84
R = 2,000.00
P.C. = 13+90.55 NT E
Y = 547,809.13
X = 836,687.80
P.T. = 15+58.39 NT E
Y = 547,852.88
X = 836,849.79

NT F LINE

CURVE NTF1
P.I. = 10+58.62 NT F
Y = 547,757.72
X = 836,571.49
DELTA = 50° 15' 09.62" (LT)
D = 45° 50' 11.84"
T = 58.62
L = 109.63
R = 125.00
P.C. = 10+00.00 NT F
Y = 547,793.24
X = 836,524.85
P.T. = 11+09.63 NT F
Y = 547,770.87
X = 836,628.62

CURVE NTF2
P.I. = 11+94.96 NT F
Y = 547,790.00
X = 836,711.77
DELTA = 0° 35' 50.12" (LT)
D = 2° 49' 50.95"
T = 10.55
L = 21.10
R = 2,024.00
P.C. = 11+84.41 NT F
Y = 547,787.63
X = 836,701.49
P.T. = 12+05.51 NT F
Y = 547,792.47
X = 836,722.03

CURVE NTF3
P.I. = 12+33.18 NT F
Y = 547,798.95
X = 836,748.92
DELTA = 5° 39' 16.71" (RT)
D = 22° 44' 11.11"
T = 12.45
L = 24.87
R = 252.00
P.C. = 12+20.73 NT F
Y = 547,796.04
X = 836,736.82
P.T. = 12+45.60 NT F
Y = 547,800.66
X = 836,761.25

CURVE NTF4
P.I. = 13+12.62 NT F
Y = 547,809.87
X = 836,827.63
DELTA = 119° 40' 21.43" (RT)
D = 1145° 54' 56.12"
T = 8.60
L = 10.44
R = 5.00
P.C. = 13+04.02 NT F
Y = 547,808.69
X = 836,819.11
P.T. = 13+14.46 NT F
Y = 547,801.88
X = 836,824.44

NT G LINE

CURVE NTG1
P.I. = 10+33.17 NT G
Y = 547,557.47
X = 836,437.00
DELTA = 162° 51' 13.64" (LT)
D = 1145° 54' 56.12"
T = 33.17
L = 14.21
R = 5.00
P.C. = 10+00.00 NT G
Y = 547,589.25
X = 836,427.53
P.T. = 10+14.21 NT G
Y = 547,590.63
X = 836,437.32

CURVE NTG2
P.I. = 10+63.46 NT G
Y = 547,639.88
X = 836,437.79
DELTA = 25° 14' 06.75" (RT)
D = 26° 02' 36.73"
T = 49.25
L = 96.90
R = 220.00
P.C. = 10+14.21 NT G
Y = 547,590.63
X = 836,437.32
P.T. = 11+11.11 NT G
Y = 547,684.22
X = 836,459.21

NT H LINE

P.I. = 10+00.00 NT H
Y = 547,537.02
X = 836,459.80

CURVE NTH1
P.I. = 10+15.81 NT H
Y = 547,552.17
X = 836,455.28
DELTA = 11° 39' 18.34" (RT)
D = 57° 17' 44.81"
T = 10.21
L = 20.34
R = 100.00
P.C. = 10+05.60 NT H
Y = 547,542.39
X = 836,458.20
P.T. = 10+25.95 NT H
Y = 547,562.34
X = 836,454.40

CURVE NTH2
P.I. = 10+40.05 NT H
Y = 547,576.38
X = 836,453.19
DELTA = 5° 29' 28.01" (RT)
D = 19° 29' 18.10"
T = 14.10
L = 28.18
R = 294.00
P.C. = 10+25.95 NT H
Y = 547,562.34
X = 836,454.40
P.T. = 10+54.12 NT H
Y = 547,590.48
X = 836,453.32

CURVE NTH3
P.I. = 11+01.62 NT H
Y = 547,637.97
X = 836,453.77
DELTA = 32° 55' 40.73" (RT)
D = 35° 39' 08.00"
T = 47.49
L = 92.36
R = 160.71
P.C. = 10+54.12 NT H
Y = 547,590.48
X = 836,453.32
P.T. = 11+46.48 NT H
Y = 547,677.59
X = 836,479.97

CURVE NTH4
P.I. = 11+68.06 NT H
Y = 547,695.59
X = 836,491.87
DELTA = 36° 43' 24.62" (RT)
D = 88° 08' 50.47"
T = 21.57
L = 41.66
R = 65.00
P.C. = 11+46.48 NT H
Y = 547,677.59
X = 836,479.97
P.T. = 11+88.14 NT H
Y = 547,702.90
X = 836,512.17

CURVE NTH5
P.I. = 12+18.89 NT H
Y = 547,713.31
X = 836,541.10
DELTA = 3° 31' 21.06" (RT)
D = 5° 43' 46.48"
T = 30.75
L = 61.48
R = 1,000.00
P.C. = 11+88.14 NT H
Y = 547,702.90
X = 836,512.17
P.T. = 12+49.62 NT H
Y = 547,721.93
X = 836,570.61

P.I. = 13+52.05 NT H
Y = 547,734.59
X = 836,672.26

NT LINE

CURVE NTS1
P.I. = 226+37.84
Y = 546,633.59
X = 837,157.69
DELTA = 43° 43' 58.11" (LT)
D = 7° 50' 55.45"
T = 292.96
L = 557.20
R = 730.00
P.C. = 223+44.88
Y = 546,340.65
X = 837,161.22
P.T. = 229+02.08
Y = 546,842.82
X = 836,952.62

CURVE NTS2
P.I. = 235+22.69
Y = 547,285.82
X = 836,517.99
DELTA = 27° 57' 05.10" (RT)
D = 9° 59' 58.73"
T = 142.60
L = 279.52
R = 572.98
P.C. = 233+80.08
Y = 547,184.20
X = 836,618.03
P.T. = 236+59.61
Y = 547,422.48
X = 836,477.25

P.I. = 239+95.47 NT
Y = 547,744.34
X = 836,381.29

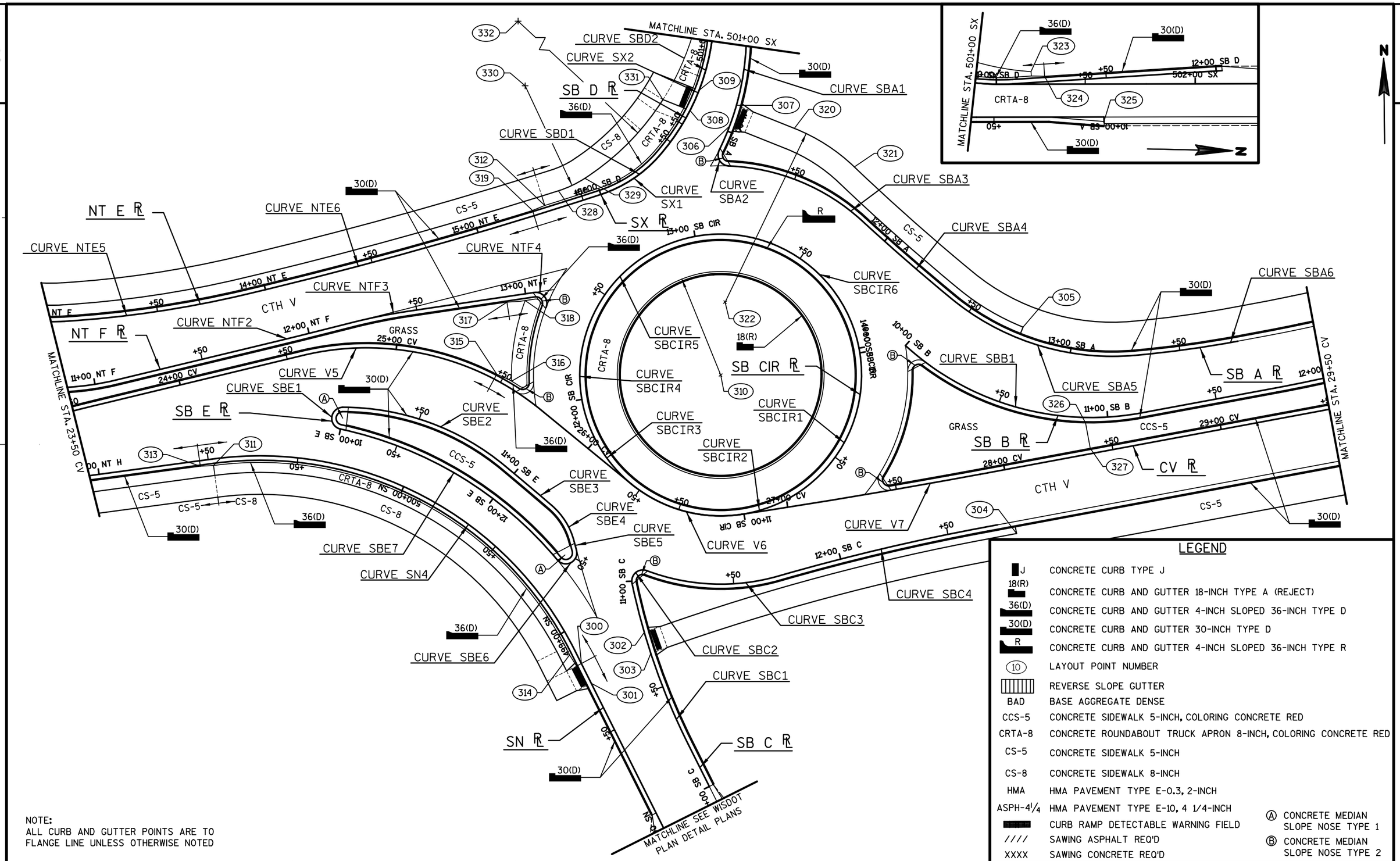
P.I. = 245+00.00 NT
Y = 547,728.92
X = 836,505.60

P.I. = 246+31.71 NT
Y = 547,859.60
X = 836,489.15

CURVE NTN1
P.I. = 248+04.01 NT
Y = 548,030.55
X = 836,467.62
DELTA = 41° 32' 14.13" (RT)
D = 18° 07' 53.67"
T = 119.84
L = 229.09
R = 316.00
P.C. = 246+84.17 NT
Y = 547,911.65
X = 836,482.59
P.T. = 249+13.26 NT
Y = 548,129.48
X = 836,535.26

CURVE NTN2
P.I. = 251+21.50 NT
Y = 548,301.38
X = 836,652.79
DELTA = 34° 21' 36.31" (LT)
D = 17° 06' 11.58"
T = 103.57
L = 200.90
R = 335.00
P.C. = 250+17.92 NT
Y = 548,215.88
X = 836,594.33
P.T. = 252+18.82 NT
Y = 548,404.95
X = 836,652.79

P.I. = 252+69.74 NT
Y = 548,455.87
X = 836,652.79



NOTE:
ALL CURB AND GUTTER POINTS ARE TO FLANGE LINE UNLESS OTHERWISE NOTED

LEGEND

J	CONCRETE CURB TYPE J
18(R)	CONCRETE CURB AND GUTTER 18-INCH TYPE A (REJECT)
36(D)	CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE D
30(D)	CONCRETE CURB AND GUTTER 30-INCH TYPE D
R	CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE R
(10)	LAYOUT POINT NUMBER
	REVERSE SLOPE GUTTER
BAD	BASE AGGREGATE DENSE
CCS-5	CONCRETE SIDEWALK 5-INCH, COLORING CONCRETE RED
CRTA-8	CONCRETE ROUNDABOUT TRUCK APRON 8-INCH, COLORING CONCRETE RED
CS-5	CONCRETE SIDEWALK 5-INCH
CS-8	CONCRETE SIDEWALK 8-INCH
HMA	HMA PAVEMENT TYPE E-0.3, 2-INCH
ASPH-4¼	HMA PAVEMENT TYPE E-10, 4 1/4-INCH
	CURB RAMP DETECTABLE WARNING FIELD
////	SAWING ASPHALT REQ'D
XXXX	SAWING CONCRETE REQ'D
Ⓐ	CONCRETE MEDIAN SLOPE NOSE TYPE 1
Ⓑ	CONCRETE MEDIAN SLOPE NOSE TYPE 2

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	LAYOUT DETAIL - CTH V / SB USH 51	SHEET 70	E

POINT NO.	MAINLINE STATION	MAINLINE OFFSET	ELEV.	NORTHING	EASTING	REMARKS
300	498+83.53 SN	0.00 'RT	---	547,639.88	836,838.80	CURB RAMP OPENING
301	498+73.58 SN	0.00 'RT	---	547,630.93	836,843.16	CURB RAMP OPENING
302	10+76.13 SB C	0.00 'RT	---	547,653.88	836,867.50	CURB RAMP OPENING
303	10+66.12 SB C	0.00 'RT	---	547,644.28	836,870.35	CURB RAMP OPENING
304	28+00.00 CV	29.50 'RT	---	547,696.94	837,037.01	FRONT OF SIDEWALK
305	12+75.61 SB A	5.50 'LT	---	547,790.68	837,040.94	FRONT OF SIDEWALK
306	10+97.57 SB A	0.00 'RT	---	547,883.29	836,908.60	CURB RAMP OPENING
307	10+87.55 SB A	0.00 'RT	---	547,892.77	836,911.83	CURB RAMP OPENING
308	10+57.19 SB D	0.00 'RT	---	547,890.63	836,890.72	CURB RAMP OPENING
309	10+67.20 SB D	0.00 'RT	---	547,899.72	836,894.91	CURB RAMP OPENING
310	10+00.00 SB CIR	64.00 'RT	967.74	547,770.35	836,903.38	R=47'
311	500+88.83 SN	3.00 'LT	---	547,731.61	836,672.63	CRTA-8 LIMITS
312	15+32.64 NT E	3.00 'LT	---	547,848.16	836,824.31	CRTA-8 LIMITS
313	13+46.05 NT H	2.50 'RT	---	547,731.37	836,666.61	CURB TRANSITION
314	498+89.53 SN	3.00 'LT	---	547,643.96	836,833.47	CURB TRANSITION
315	25+46.78 CV	2.50 'LT	---	547,771.77	836,801.71	CURB TRANSITION
316	25+54.05 CV	3.00 'LT	---	547,768.52	836,808.40	CRTA-8 LIMITS
317	12+91.12 NT F	2.50 'RT	---	547,804.44	836,806.68	CURB TRANSITION
318	12+99.41 NT F	3.00 'RT	---	547,805.08	836,814.96	CRTA-8 LIMITS
319	15+26.63 NT E	2.50 'LT	---	547,845.96	836,818.71	CURB TRANSITION
320	11+43.30 SB A	21.91 'LT	---	547,882.01	836,938.03	BACK OF SIDEWALK
321	11+69.95 SB A	17.34 'LT	---	547,864.24	836,965.08	BACK OF SIDEWALK
322	11+21.47 SB A	61.89 'RT	---	547,803.38	836,905.73	R=85'
323	11+16.10 SB D	5.00 'LT	---	547,947.58	836,896.92	CRTA-8 LIMITS
324	11+22.10 SB D	2.50 'LT	---	547,953.63	836,899.29	CURB TRANSITION
325	10+00.00 SB A	2.00 'LT	---	547,979.89	836,920.93	---
326	28+40.00 CV	14.10 'LT	---	547,746.84	837,068.86	CCS-5 LIMITS
327	28+40.00 CV	2.50 'LT	---	547,735.37	837,070.88	CCS-5 LIMITS
328	15+40.56 NT E	7.50 'LT	---	547,854.76	836,830.56	FRONT OF SIDEWALK
329	15+53.82 NT E	9.23 'LT	---	547,860.32	836,842.67	FRONT OF SIDEWALK
330	15+40.56 NT E	57.50 'LT	---	547,902.57	836,815.94	R=50'
331	10+55.78 SB D	13.18 'LT	964.52	547,895.66	836,878.47	FRONT OF SIDEWALK
332	11+31.05 SB D	122.05 'LT	---	547,960.04	836,779.58	R=118'

CV LINE

CURVE_V5	CURVE_V6	CURVE_V7
P.I. = 25+19.31 CV	P.I. = 26+53.76 CV	P.I. = 27+35.55 CV
Y = 547,795.11	Y = 547,703.02	Y = 547,714.85
X = 836,774.15	X = 836,884.09	X = 836,968.42
DELTA = 52° 54' 21.19" (RT)	DELTA = 47° 56' 08.23" (LT)	DELTA = 1° 58' 07.72" (LT)
D = 45° 50' 11.84"	D = 89° 31' 28.76"	D = 1° 44' 10.45"
T = 62.19	T = 28.45	T = 56.70
L = 115.42	L = 53.54	L = 113.40
R = 125.00	R = 64.00	R = 3,300.00
P.C. = 24+57.11 CV	P.C. = 26+25.31 CV	P.C. = 26+78.85 CV
Y = 547,781.17	Y = 547,721.29	Y = 547,706.97
X = 836,713.54	X = 836,862.28	X = 836,912.27
P.T. = 25+72.53 CV	P.T. = 26+78.85 CV	P.T. = 27+92.25 CV
Y = 547,755.18	Y = 547,706.97	Y = 547,724.65
X = 836,821.83	X = 836,912.27	X = 837,024.27

SB A LINE

P.I. = 10+00.00 SB A
Y = 547,979.81
X = 836,918.92

CURVE_SBA1	CURVE_SBA2	CURVE_SBA3	CURVE_SBA4	CURVE_SBA5	CURVE_SBA6
P.I. = 10+84.10 SB A	P.I. = 11+17.10 SB A	P.I. = 11+54.27 SB A	P.I. = 12+13.14 SB A	P.I. = 12+67.19 SB A	P.I. = 13+53.18 SB A
Y = 547,895.78	Y = 547,865.62	Y = 547,863.54	Y = 547,821.27	Y = 547,773.58	Y = 547,779.19
X = 836,915.57	X = 836,900.32	X = 836,942.89	X = 836,987.96	X = 837,044.62	X = 837,115.21
DELTA = 24° 32' 26.25" (RT)	DELTA = 114° 01' 45.30" (LT)	DELTA = 40° 22' 06.08" (RT)	DELTA = 3° 04' 37.69" (LT)	DELTA = 44° 38' 00.65" (LT)	DELTA = 5° 24' 25.25" (LT)
D = 47° 44' 47.34"	D = 1145° 54' 56.12"	D = 60° 18' 40.85"	D = 5° 43' 46.48"	D = 49° 49' 20.70"	D = 11° 27' 32.96"
T = 26.10	T = 7.70	T = 34.92	T = 26.86	T = 47.20	T = 23.61
L = 51.40	L = 9.95	L = 66.93	L = 53.71	L = 89.59	L = 47.19
R = 120.00	R = 5.00	R = 95.00	R = 1,000.00	R = 115.00	R = 500.00
P.C. = 10+58.00 SB A	P.C. = 11+09.40 SB A	P.C. = 11+19.35 SB A	P.C. = 11+86.28 SB A	P.C. = 12+39.99 SB A	P.C. = 13+29.57 SB A
Y = 547,921.86	Y = 547,872.49	Y = 547,865.24	Y = 547,839.65	Y = 547,803.98	Y = 547,777.32
X = 836,916.61	X = 836,903.79	X = 836,908.01	X = 836,968.37	X = 837,008.51	X = 837,091.68
P.T. = 11+09.40 SB A	P.T. = 11+19.35 SB A	P.T. = 11+86.28 SB A	P.T. = 12+39.99 SB A	P.T. = 13+29.57 SB A	P.T. = 13+76.76 SB A
Y = 547,872.49	Y = 547,865.24	Y = 547,839.65	Y = 547,803.98	Y = 547,777.32	Y = 547,783.28
X = 836,903.79	X = 836,908.01	X = 836,968.37	X = 837,008.51	X = 837,091.68	X = 837,138.47

SB B LINE

CURVE_SBB1	CURVE_SBB2	
P.I. = 10+62.26 SB B	P.I. = 12+33.84 SB B	P.I. = 13+26.74 SB B
Y = 547,740.40	Y = 547,771.61	Y = 547,801.68
X = 837,032.99	X = 837,210.84	X = 837,298.97
DELTA = 52° 57' 24.11" (LT)	DELTA = 8° 53' 02.92" (LT)	
D = 45° 50' 11.84"	D = 7° 54' 49.61"	P.I. = 13+39.02 SB B
T = 62.26	T = 56.24	Y = 547,805.65
L = 115.53	L = 112.26	X = 837,310.60
R = 125.00	R = 724.00	
P.C. = 10+00.00 SB B	P.C. = 11+77.59 SB B	
Y = 547,782.86	Y = 547,761.89	
X = 836,987.45	X = 837,155.44	
P.T. = 11+15.53 SB B	P.T. = 12+89.86 SB B	
Y = 547,751.16	Y = 547,789.77	
X = 837,094.32	X = 837,264.07	

SB C LINE

P.I. = 10+00.00 SB C
Y = 547,583.55
X = 836,896.30

CURVE_SBC1	CURVE_SBC2	CURVE_SBC3	CURVE_SBC4	
P.I. = 10+60.51 SB C	P.I. = 11+08.22 SB C	P.I. = 11+41.37 SB C	P.I. = 12+19.03	P.I. = 12+72.94 SB C
Y = 547,637.94	Y = 547,685.15	Y = 547,670.37	Y = 547,691.68	Y = 547,701.01
X = 836,869.78	X = 836,860.37	X = 836,898.30	X = 836,975.25	X = 837,028.42
DELTA = 14° 43' 24.32" (RT)	DELTA = 122° 33' 47.30" (RT)	DELTA = 36° 46' 35.01" (LT)	DELTA = 5° 31' 35.19" (RT)	
D = 18° 18' 19.60"	D = 1145° 54' 56.13"	D = 60° 18' 40.99"	D = 5° 43' 46.47"	
T = 39.02	T = 9.13	T = 31.58	T = 48.26	
L = 77.61	L = 10.70	L = 60.98	L = 96.45	
R = 302.00	R = 5.00	R = 95.00	R = 1,000.00	
P.C. = 10+21.49 SB C	P.C. = 10+99.09 SB C	P.C. = 11+09.79 SB C	P.C. = 11+70.77	
Y = 547,602.87	Y = 547,676.20	Y = 547,681.84	Y = 547,678.80	
X = 836,886.88	X = 836,862.16	X = 836,868.88	X = 836,928.74	
P.T. = 10+99.09 SB C	P.T. = 11+09.79 SB C	P.T. = 11+70.77 SB C	P.T. = 12+67.22	
Y = 547,676.20	Y = 547,681.84	Y = 547,678.80	Y = 547,700.03	
X = 836,862.16	X = 836,868.88	X = 836,928.74	X = 837,022.79	

SB CIR LINE

CURVE_SBCIR1	CURVE_SBCIR2	CURVE_SBCIR3	CURVE_SBCIR4	CURVE_SBCIR5	CURVE_SBCIR6
P.I. = 10+38.20 SB CIR	P.I. = 11+19.56 SB CIR	P.I. = 11+76.18 SB CIR	P.I. = 12+24.77 SB CIR	P.I. = 13+00.94 SB CIR	P.I. = 13+72.38 SB CIR
Y = 547,741.99	Y = 547,688.74	Y = 547,735.14	Y = 547,784.02	Y = 547,848.96	Y = 547,815.69
X = 836,972.30	X = 836,901.14	X = 836,845.75	X = 836,834.64	X = 836,880.61	X = 836,961.34
DELTA = 61° 39' 28.10" (RT)	DELTA = 76° 45' 18.08" (RT)	DELTA = 37° 14' 49.47" (RT)	DELTA = 48° 05' 44.09" (RT)	DELTA = 77° 06' 19.04" (RT)	DELTA = 59° 08' 21.22" (RT)
D = 89° 31' 28.76"	D = 89° 31' 28.76"	D = 89° 31' 28.76"	D = 89° 31' 28.76"	D = 89° 31' 28.76"	D = 89° 31' 28.76"
T = 38.20	T = 50.68	T = 21.57	T = 28.56	T = 51.00	T = 36.31
L = 68.87	L = 85.74	L = 41.61	L = 53.72	L = 86.13	L = 66.06
R = 64.00	R = 64.00	R = 64.00	R = 64.00	R = 64.00	R = 64.00
P.C. = 10+00.00 SB CIR	P.C. = 10+68.87 SB CIR	P.C. = 11+54.61 SB CIR	P.C. = 11+96.21 SB CIR	P.C. = 12+49.94 SB CIR	P.C. = 13+36.06 SB CIR
Y = 547,779.77	Y = 547,719.11	Y = 547,721.29	Y = 547,756.17	Y = 547,807.33	Y = 547,829.52
X = 836,966.68	X = 836,941.72	X = 836,862.28	X = 836,840.97	X = 836,851.14	X = 836,927.77
P.T. = 10+68.87 SB CIR	P.T. = 11+54.61 SB CIR	P.T. = 11+96.21 SB CIR	P.T. = 12+49.94 SB CIR	P.T. = 13+36.06 SB CIR	P.T. = 14+02.12 SB CIR
Y = 547,719.11	Y = 547,721.29	Y = 547,756.17	Y = 547,807.33	Y = 547,829.52	Y = 547,779.77
X = 836,941.72	X = 836,862.28	X = 836,840.97	X = 836,851.14	X = 836,927.77	X = 836,966.68

SB D LINE

CURVE_SBD1	CURVE_SBD2	
P.I. = 10+16.20 SB D	P.I. = 10+71.52 SB D	P.I. = 12+02.71 SB D
Y = 547,857.76	Y = 547,899.26	Y = 548,034.29
X = 836,865.23	X = 836,902.95	X = 836,900.07
DELTA = 30° 12' 51.50" (LT)	DELTA = 43° 29' 10.67" (LT)	
D = 95° 29' 34.68"	D = 57° 17' 44.81"	
T = 16.20	T = 39.88	
L = 31.64	L = 75.90	
R = 60.00	R = 100.00	
P.C. = 10+00.00 SB D	P.C. = 10+31.64 SB D	
Y = 547,852.88	Y = 547,869.75	
X = 836,849.79	X = 836,876.13	
P.T. = 10+31.64 SB D	P.T. = 11+07.54 SB D	
Y = 547,869.75	Y = 547,939.13	
X = 836,876.13	X = 836,902.10	

SB E LINE

CURVE_SBE1	CURVE_SBE2	CURVE_SBE3	CURVE_SBE4	CURVE_SBE5	CURVE_SBE6	CURVE_SBE7
P.I. = 10+47.19 SB E	P.I. = 10+56.42 SB E	P.I. = 11+08.60 SB E	P.I. = 11+32.40 SB E	P.I. = 11+43.88 SB E	P.I. = 11+68.95 SB E	P.I. = 12+20.44 SB E
Y = 547,757.87	Y = 547,757.07	Y = 547,721.02	Y = 547,705.33	Y = 547,693.61	Y = 547,669.36	Y = 547,734.28
X = 836,684.41	X = 836,773.35	X = 836,815.67	X = 836,833.57	X = 836,836.53	X = 836,842.87	X = 836,789.86
DELTA = 167° 54' 11.78" (RT)	DELTA = 39° 55' 04.03" (RT)	DELTA = 0° 47' 32.73" (RT)	DELTA = 34° 36' 17.93" (RT)	DELTA = 0° 28' 17.25" (LT)	DELTA = 155° 24' 34.83" (RT)	DELTA = 38° 09' 24.05" (LT)
D = 1145° 54' 56.12"	D = 49° 49' 20.70"	D = 2° 51' 53.24"	D = 179° 02' 57.52"	D = 1145° 06' 13.81"	D = 1145° 50' 06.56"	D = 32° 33' 19.01"
T = 47.19	T = 41.76	T = 13.83	T = 9.97	T = 2.12	T = 22.94	T = 60.87
L = 14.65	L = 80.12	L = 27.66	L = 19.33	L = 4.25	L = 13.56	L = 117.21
R = 5.00	R = 115.00	R = 2,000.00	R = 32.00	R = 516.00	R = 5.00	R = 176.00
P.C. = 10+00.00 SB E	P.C. = 10+14.65 SB E	P.C. = 10+94.77 SB E	P.C. = 11+22.43 SB E	P.C. = 11+41.76 SB E	P.C. = 11+46.01 SB E	P.C. = 11+59.57 SB E
Y = 547,747.57	Y = 547,757.45	Y = 547,729.99	Y = 547,711.90	Y = 547,695.67	Y = 547,691.56	Y = 547,687.13
X = 836,730.46	X = 836,731.59	X = 836,805.14	X = 836,826.07	X = 836,836.01	X = 836,837.07	X = 836,828.36
P.T. = 10+14.65 SB E	P.T. = 10+94.77 SB E	P.T. = 11+22.43 SB E	P.T. = 11+41.76 SB E	P.T. = 11+46.01 SB E	P.T. = 11+59.57 SB E	P.T. = 12+76.78 SB E
Y = 547,757.45	Y = 547,729.99	Y = 547,711.90	Y = 547,695.67	Y = 547,691.56	Y = 547,687.13	Y = 547,747.57
X = 836,731.59	X = 836,805.14	X = 836,826.07	X = 836,836.01	X = 836,837.07	X = 836,828.36	X = 836,730.46

SX LINE

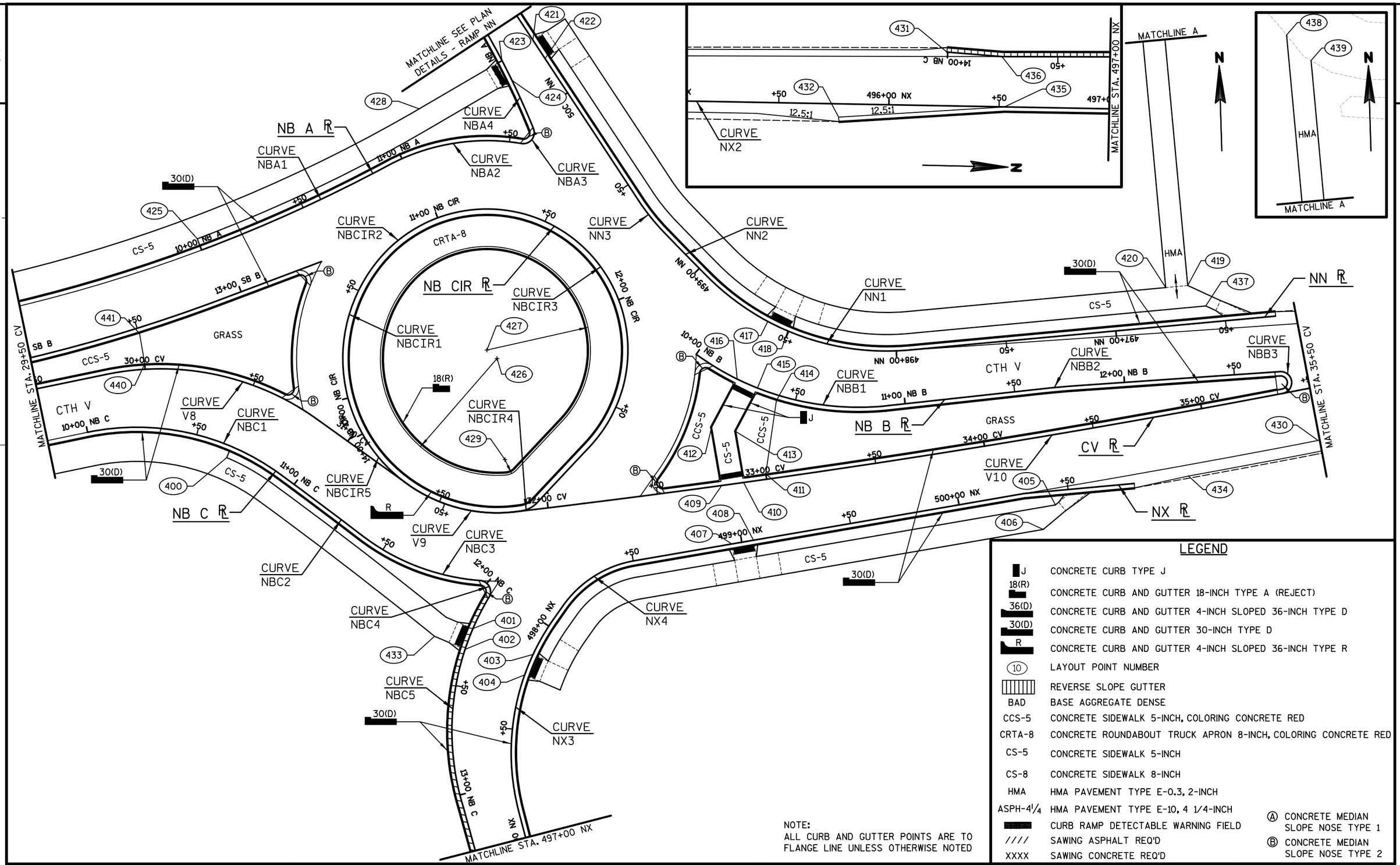
CURVE_SX1	CURVE_SX2	
P.I. = 500+25.86 SX	P.I. = 500+77.68 SX	P.I. = 516+99.72 SX
Y = 547,857.76	Y = 547,896.67	Y = 549,520.39
X = 836,865.23	X = 836,900.59	X = 836,965.33
DELTA = 30° 12' 53.61" (LT)	DELTA = 39° 58' 53.91" (LT)	
D = 95° 29' 34.68"	D = 57° 17' 44.81"	P.I. = 519+99.72 SX
T = 16.20	T = 36.38	Y = 549,820.33
L = 31.64	L = 69.78	X = 836,959.52
R = 60.00	R = 100.00	
P.C. = 500+09.66 SX	P.C. = 500+41.30 SX	
Y = 547,852.88	Y = 547,869.75	P.I. = 522+50.00 SX
X = 836,849.79	X = 836,876.13	Y = 550,070.52
P.T. = 500+41.30 SX	P.T. = 501+11.08 SX	X = 836,966.67
Y = 547,869.75	Y = 547,933.02	
X = 836,876.13	X = 836,902.04	

SN LINE

P.I. = 473+40.00 SN
Y = 545,185.71
X = 837,424.94

CURVE_SN1	CURVE_SN2	CURVE_SN3	CURVE_SN4
P.I. = 478+46.06	P.I. = 486+92.29	P.I. = 493+47.03	P.I. = 500+04.61
Y = 545,689.43	Y = 546,527.18	Y = 547,156.89	Y = 547,748.72
X = 837,376.47	X = 837,257.53	X = 837,074.27	X = 836,785.73
DELTA = 1° 30' 02.18" (LT)	DELTA = 7° 45' 35.18" (LT)	DELTA = 9° 45' 55.50" (LT)	DELTA = 71° 06' 23.09" (LT)
D = 0° 30' 15.13"	D = 1° 04' 51.77"	D = 2° 51' 53.24"	D = 35° 48' 35.50"
T = 148.82	T = 359.45	T = 170.85	T = 114.35
L = 297.62	L = 717.80	L = 340.88	L = 198.57
R = 11,363.64	R = 5,300.02	R = 2,000.00	R = 160.00
P.C. = 476+97.25	P.C. = 483+32.84	P.C. = 491+76.17	P.C. = 498+90.26
Y = 545,541.13	Y = 546,171.65	Y = 546,992.85	Y = 547,645.93
X = 837,388.85	X = 837,310.45	X = 837,122.01	X = 836,835.85
P.T. = 479+94.86	P.T. = 490+50.64	P.T. = 495+17.05	P.T. = 500+88.83
Y = 545,837.36	Y = 546,872.31	Y = 547,310.47	Y = 547,734.59
X = 837,360.21	X = 837,157.09	X = 836,999.40	X = 836,672.26

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	LAYOUT DETAIL - CTH V / SB USH 51	SHEET 72	E



PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	LAYOUT DETAIL - CTH V / NB USH 51	SHEET 73	E

POINT NO.	MAINLINE			ELEV.	NORTHING	EASTING	REMARKS
	STATION		OFFSET				
400	10+66.60	NB C	5.50 'RT	---	547,718.07	837,264.85	FRONT OF SIDEWALK
401	12+23.00	NB C	0.00 'LT	---	547,637.07	837,374.14	CURB RAMP OPENING
402	12+33.01	NB C	0.00 'LT	---	547,627.82	837,370.31	CURB RAMP OPENING
403	497+85.27	NX	0.00 'RT	---	547,624.56	837,401.06	CURB RAMP OPENING
404	497+75.26	NX	0.00 'RT	---	547,615.43	837,396.97	CURB RAMP OPENING
405	500+43.66	NX	6.43 'RT	---	547,685.08	837,640.06	FRONT OF SIDEWALK
406	500+37.15	NX	16.98 'RT	---	547,674.15	837,634.21	BACK OF SIDEWALK
407	498+95.40	NX	0.00 'RT	---	547,671.88	837,492.75	CURB RAMP OPENING
408	499+05.40	NX	0.00 'RT	---	547,673.28	837,502.66	CURB RAMP OPENING
409	32+79.46	CV	0.00 'RT	---	547,698.53	837,489.00	CURB RAMP OPENING
410	32+89.46	CV	0.00 'RT	---	547,699.59	837,498.95	CURB RAMP OPENING
411	32+99.96	CV	2.50 'LT	---	547,703.21	837,509.11	CCS-5 LIMITS
412	32+78.52	CV	26.83 'LT	---	547,725.11	837,485.25	---
413	32+88.68	CV	23.75 'LT	---	547,723.11	837,495.63	---
414	10+41.70	NB B	2.50 'RT	---	547,736.32	837,514.97	CCS-5 LIMITS
415	10+31.81	NB B	0.00 'RT	---	547,742.23	837,506.55	CURB RAMP OPENING
416	10+21.78	NB B	0.00 'RT	---	547,746.56	837,497.51	CURB RAMP OPENING
417	498+60.53	NB B	0.00 'RT	---	547,772.28	837,512.20	CURB RAMP OPENING
418	498+50.51	NB B	0.00 'RT	---	547,767.70	837,521.10	CURB RAMP OPENING
419	12+31.71	NB B	41.84 'LT	---	547,782.72	837,703.15	BACK OF SIDEWALK
420	12+21.71	NB B	41.61 'LT	---	547,782.10	837,693.16	BACK OF SIDEWALK
421	500+28.56	NB B	0.00 'RT	---	547,903.07	837,409.55	CURB RAMP OPENING
422	500+18.56	NB B	0.00 'RT	---	547,894.56	837,414.79	CURB RAMP OPENING
423	12+00.08	NB A	0.00 'RT	---	547,894.27	837,395.25	CURB RAMP OPENING
424	11+90.06	NB A	0.00 'RT	---	547,885.19	837,399.49	CURB RAMP OPENING
425	10+00.00	NB A	5.50 'LT	---	547,817.69	837,254.54	FRONT OF SIDEWALK
426	12+67.41	NB CIR	58.00 'RT	964.77	547,759.23	837,388.87	R=53'
427	12+20.39	NB CIR	63.99 'RT	965.10	547,763.19	837,384.36	R=47'
428	11+13.73	NB A	18.65 'LT	---	547,873.50	837,357.02	BACK OF SIDEWALK
429	13+02.22	NB CIR	24.00 'RT	---	547,713.28	837,391.04	R=7'
430	35+49.16	CV	24.00 'RT	---	547,710.65	837,760.13	EDGE OF PAVEMENT
431	14+00.41	NB C	0.00 'RT	---	547,463.91	837,387.69	---
432	495+77.31	NX	6.00 'RT	---	547,423.23	837,428.04	---
433	12+31.88	NB C	15.03 'RT	---	547,634.18	837,356.63	BACK OF SIDEWALK
434	34+88.72	CV	29.00 'RT	---	547,696.35	837,700.85	EDGE OF PAVEMENT
435	496+52.38	NX	0.00 'RT	---	547,495.13	837,405.63	---
436	13+75.33	NB C	0.00 'RT	---	547,488.67	837,383.73	---
437	12+39.26	NB B	32.00 'LT	---	547,773.19	837,711.07	FRONT OF SIDEWALK
438	12+17.38	NB B	229.77 'LT	---	547,969.96	837,681.56	MATCH EXISTING DRIVEWAY
439	12+27.40	NB B	214.52 'LT	---	547,955.11	837,692.16	MATCH EXISTING DRIVEWAY
440	30+00.00	CV	2.50 'LT	---	547,761.76	837,229.00	CCS-5 LIMITS
441	29+98.58	CV	16.43 'LT	---	547,775.63	837,227.02	CCS-5 LIMITS

CV LINE

CURVE V8
P.I. = 30+35.52 CV
Y = 547,766.71
X = 837,263.88
DELTA = 47° 22' 07.40" (RT)
D = 47° 03' 02.59"
T = 53.42
L = 100.68
R = 121.77
P.C. = 29+82.10 CV
Y = 547,757.47
X = 837,211.27
P.T. = 30+82.78 CV
Y = 547,734.25
X = 837,306.31

CURVE V9
P.I. = 31+80.29 CV
Y = 547,687.16
X = 837,367.87
DELTA = 42° 20' 31.07" (LT)
D = 81° 51' 04.01"
T = 27.11
L = 51.73
R = 70.00
P.C. = 31+33.18 CV
Y = 547,703.63
X = 837,346.34
P.T. = 31+84.91 CV
Y = 547,689.49
X = 837,394.88

CURVE V10
P.I. = 33+67.11 CV
Y = 547,705.14
X = 837,576.41
DELTA = 4° 17' 38.49" (LT)
D = 1° 10' 44.13"
T = 182.20
L = 364.23
R = 4,860.00
P.C. = 31+84.91 CV
Y = 547,689.49
X = 837,394.88
P.T. = 35+49.14 CV
Y = 547,734.34
X = 837,756.25

CURVE V11
P.I. = 43+16.68 CV
Y = 547,857.34
X = 838,513.87
DELTA = 81° 37' 18.88" (LT)
D = 8° 30' 00.00"
T = 582.06
L = 960.26
R = 674.07
P.C. = 37+34.61 CV
Y = 547,764.06
X = 837,939.33
P.T. = 46+94.87 CV
Y = 548,439.35
X = 838,505.30

NB A LINE

CURVE NBA1
P.I. = 10+46.55 NB A
Y = 547,827.52
X = 837,300.37
DELTA = 7° 36' 32.06" (LT)
D = 8° 11' 06.40"
T = 46.55
L = 92.96
R = 700.00
P.C. = 10+00.00 NB A
Y = 547,812.49
X = 837,256.32
P.T. = 10+92.96 NB A
Y = 547,848.25
X = 837,342.05

CURVE NBA2
P.I. = 11+25.40 NB A
Y = 547,862.70
X = 837,371.09
DELTA = 37° 42' 11.85" (RT)
D = 60° 18' 40.85"
T = 32.44
L = 62.51
R = 95.00
P.C. = 10+92.96 NB A
Y = 547,848.25
X = 837,342.05
P.T. = 11+55.47 NB A
Y = 547,856.36
X = 837,402.90

CURVE NBA3
P.I. = 11+64.42 NB A
Y = 547,854.62
X = 837,411.67
DELTA = 121° 34' 09.35" (LT)
D = 1145° 54' 56.12"
T = 8.94
L = 10.61
R = 5.00
P.C. = 11+55.47 NB A
Y = 547,856.36
X = 837,402.90
P.T. = 11+66.08 NB A
Y = 547,860.00
X = 837,408.57

CURVE NBA4
P.I. = 12+00.96 NB A
Y = 547,895.71
X = 837,396.46
DELTA = 11° 19' 02.10" (LT)
D = 16° 16' 37.96"
T = 34.88
L = 69.53
R = 352.00
P.C. = 11+66.08 NB A
Y = 547,863.00
X = 837,408.57
P.T. = 12+35.61 NB A
Y = 547,925.41
X = 837,378.17

NB B LINE

CURVE NBB1
P.I. = 10+48.46 NB B
Y = 547,728.62
X = 837,517.49
DELTA = 42° 22' 47.75" (LT)
D = 45° 50' 11.84"
T = 48.46
L = 92.46
R = 125.00
P.C. = 10+00.00 NB B
Y = 547,758.38
X = 837,479.24
P.T. = 10+92.46 NB B
Y = 547,732.43
X = 837,565.80

CURVE NBB2
P.I. = 11+70.22 NB B
Y = 547,738.53
X = 837,643.32
DELTA = 2° 17' 06.46" (RT)
D = 14° 15' 09.65"
T = 8.02
L = 16.03
R = 402.00
P.C. = 11+62.20 NB B
Y = 547,737.90
X = 837,635.32
P.T. = 11+78.23 NB B
Y = 547,738.84
X = 837,651.33

CURVE NBB3
P.I. = 13+54.09 NB B
Y = 547,745.65
X = 837,827.05
DELTA = 173° 07' 58.20" (RT)
D = 1145° 54' 56.12"
T = 83.33
L = 15.11
R = 5.00
P.C. = 12+70.75 NB B
Y = 547,742.42
X = 837,743.78
P.T. = 12+85.86 NB B
Y = 547,732.49
X = 837,744.76

NB C LINE

CURVE NBC1
P.I. = 10+48.83 NB C
Y = 547,739.94
X = 837,250.20
DELTA = 47° 52' 18.71" (RT)
D = 52° 05' 13.46"
T = 48.83
L = 91.91
R = 110.00
P.C. = 10+00.00 NB C
Y = 547,731.50
X = 837,202.10
P.T. = 10+91.91 NB C
Y = 547,709.93
X = 837,288.72

CURVE NBC2
P.I. = 11+15.10 NB C
Y = 547,695.68
X = 837,307.01
DELTA = 1° 19' 43.27" (RT)
D = 2° 51' 53.24"
T = 23.19
L = 46.38
R = 2,000.00
P.C. = 10+91.91 NB C
Y = 547,709.93
X = 837,288.72
P.T. = 11+38.29 NB C
Y = 547,681.01
X = 837,324.97

CURVE NBC3
P.I. = 11+68.37 NB C
Y = 547,661.98
X = 837,348.27
DELTA = 33° 10' 42.02" (LT)
D = 56° 44' 09.05"
T = 30.08
L = 58.48
R = 100.99
P.C. = 11+38.29 NB C
Y = 547,681.01
X = 837,324.97
P.T. = 11+96.77 NB C
Y = 547,658.80
X = 837,378.19

CURVE NBC4
P.I. = 12+04.87 NB C
Y = 547,657.94
X = 837,386.25
DELTA = 116° 38' 57.58" (RT)
D = 1145° 21' 51.66"
T = 8.11
L = 10.18
R = 5.00
P.C. = 11+96.77 NB C
Y = 547,658.80
X = 837,378.19
P.T. = 12+06.95 NB C
Y = 547,651.12
X = 837,381.87

CURVE NBC5
P.I. = 12+59.26 NB C
Y = 547,607.11
X = 837,353.60
DELTA = 47° 49' 26.75" (LT)
D = 48° 34' 02.21"
T = 52.31
L = 98.47
R = 117.97
P.C. = 12+06.95 NB C
Y = 547,651.12
X = 837,381.87
P.T. = 13+05.42 NB C
Y = 547,556.61
X = 837,367.23

P.I. = 13+75.33 NB C
Y = 547,488.67
X = 837,383.73

P.I. = 14+00.41 NB C
Y = 547,463.91
X = 837,387.69

NB CIR LINE

CURVE NBCIR1
P.I. = 10+36.11 NB CIR
Y = 547,778.54
X = 837,312.51
DELTA = 54° 34' 29.81" (RT)
D = 81° 51' 04.01"
T = 36.11
L = 66.68
R = 70.00
P.C. = 10+00.00 NB CIR
Y = 547,743.37
X = 837,320.69
P.T. = 10+66.68 NB CIR
Y = 547,805.59
X = 837,336.42

CURVE NBCIR2
P.I. = 11+32.64 NB CIR
Y = 547,855.02
X = 837,380.11
DELTA = 91° 44' 53.97" (RT)
D = 89° 32' 46.34"
T = 65.97
L = 102.46
R = 63.98
P.C. = 10+66.68 NB CIR
Y = 547,805.59
X = 837,336.42
P.T. = 11+69.14 NB CIR
Y = 547,809.84
X = 837,428.18

CURVE NBCIR3
P.I. = 12+35.13 NB CIR
Y = 547,764.64
X = 837,476.27
DELTA = 91° 44' 53.97" (RT)
D = 89° 30' 11.22"
T = 66.00
L = 102.51
R = 64.02
P.C. = 11+69.14 NB CIR
Y = 547,809.84
X = 837,428.18
P.T. = 12+71.64 NB CIR
Y = 547,717.95
X = 837,429.63

CURVE NBCIR4
P.I. = 13+10.63 NB CIR
Y = 547,690.37
X = 837,402.07
DELTA = 37° 30' 13.75" (RT)
D = 477° 27' 53.39"
T = 4.07
L = 7.85
R = 12.00
P.C. = 13+06.56 NB CIR
Y = 547,693.25
X = 837,404.95
P.T. = 13+14.41 NB CIR
Y = 547,689.83
X = 837,398.03

CURVE NBCIR5
P.I. = 13+77.91 NB CIR
Y = 547,681.52
X = 837,335.08
DELTA = 84° 25' 28.50" (RT)
D = 81° 51' 04.01"
T = 63.50
L = 103.14
R = 70.00
P.C. = 13+14.41 NB CIR
Y = 547,689.83
X = 837,398.03
P.T. = 14+17.56 NB CIR
Y = 547,743.37
X = 837,320.69

NX LINE

P.I. = 472+00.00 NX
Y = 545,051.17
X = 837,539.21

CURVE NX1
P.I. = 476+01.40 NX
Y = 545,452.28
X = 837,529.28
DELTA = 1° 30' 01.82" (LT)
D = 0° 29' 54.36"
T = 150.53
L = 301.05
R = 11,495.20
P.C. = 474+50.87 NX
Y = 545,302.03
X = 837,538.53
P.T. = 477+51.91 NX
Y = 545,602.23
X = 837,516.10

CURVE NX2
P.I. = 493+02.37 NX
Y = 547,152.34
X = 837,483.11
DELTA = 11° 31' 04.10" (LT)
D = 2° 43' 42.13"
T = 211.79
L = 422.15
R = 2,100.00
P.C. = 490+90.58 NX
Y = 546,940.60
X = 837,487.62
P.T. = 495+12.73 NX
Y = 547,358.92
X = 837,436.42

CURVE NX3
P.I. = 497+61.29 NX
Y = 547,601.36
X = 837,381.62
DELTA = 49° 38' 56.63" (RT)
D = 54° 34' 02.67"
T = 48.57
L = 90.99
R = 105.00
P.C. = 497+12.72 NX
Y = 547,553.98
X = 837,392.32
P.T. = 498+03.70 NX
Y = 547,640.19
X = 837,410.79

CURVE NX4
P.I. = 498+31.86 NX
Y = 547,662.71
X = 837,427.70
DELTA = 45° 03' 43.51" (RT)
D = 114° 35' 29.61"
T = 20.74
L = 39.32
R = 50.00
P.C. = 498+11.11 NX
Y = 547,646.12
X = 837,415.24
P.T. = 498+50.44 NX
Y = 547,665.60
X = 837,448.24

P.I. = 500+29.96 NX
Y = 547,690.67
X = 837,627.00

P.I. = 500+80.19 NX
Y = 547,693.72
X = 837,676.14

NN LINE

P.I. = 496+11.20 NN
Y = 547,767.62
X = 837,742.57

CURVE NN1
P.I. = 498+31.96 NN
Y = 547,754.00
X = 837,522.23
DELTA = 50° 29' 18.46" (RT)
D = 49° 49' 20.70"
T = 54.22
L = 101.34
R = 115.00
P.C. = 497+77.74 NN
Y = 547,757.35
X = 837,576.35
P.T. = 498+79.08 NN
Y = 547,793.63
X = 837,485.22

CURVE NN2
P.I. = 498+93.00 NN
Y = 547,803.81
X = 837,475.71
DELTA = 0° 47' 52.01" (RT)
D = 2° 51' 53.24"
T = 13.92
L = 27.85
R = 2,000.00
P.C. = 498+79.08 NN
Y = 547,793.63
X = 837,485.22
P.T. = 499+06.92 NN
Y = 547,814.11
X = 837,466.35

CURVE NN3
P.I. = 499+16.22 NN
Y = 547,820.99
X = 837,460.10
DELTA = 10° 37' 08.48" (RT)
D = 57° 17' 44.81"
T = 9.29
L = 18.53
R = 100.00
P.C. = 499+06.92 NN
Y = 547,814.11
X = 837,466.35
P.T. = 499+25.46 NN
Y = 547,828.90
X = 837,455.23

CURVE NN4
P.I. = 503+33.47 NN
Y = 548,176.31
X = 837,241.25
DELTA = 22° 47' 50.34" (RT)
D = 5° 43' 45.90"
T = 201.62
L = 397.90
R = 1,000.03
P.C. = 501+31.86 NN
Y = 548,004.64
X = 837,346.98
P.T. = 505+29.76 NN
Y = 548,375.53
X = 837,210.29

CURVE NN5
P.I. = 510+78.90 NN
Y = 548,918.16
X = 837,125.96
DELTA = 6° 34' 33.31" (RT)
D = 1° 29' 59.99"
T = 219.44
L = 438.40
R = 3,819.72
P.C. = 508+59.46 NN
Y = 548,701.32
X = 837,159.65
P.T. = 512+97.85 NN
Y = 549,137.43
X = 837,117.31

P.I. = 516+23.62 NN
Y = 549,462.94
X = 837,104.50

P.I. = 519+23.67 NN
Y = 549,762.76
X = 837,092.66

P.I. = 522+23.68 NN
Y = 550,062.71
X = 837,086.84

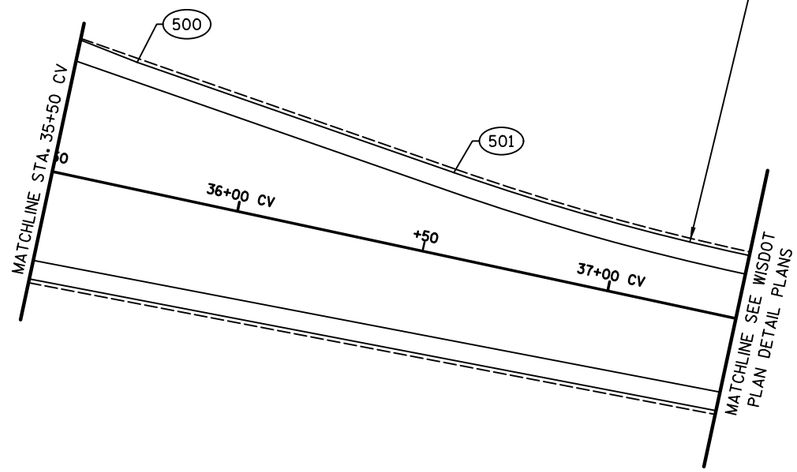
P.I. = 525+84.02 NN
Y = 550,422.55
X = 837,067.86

LEGEND

J	CONCRETE CURB TYPE J
18(R)	CONCRETE CURB AND GUTTER 18-INCH TYPE A (REJECT)
36(D)	CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE D
30(D)	CONCRETE CURB AND GUTTER 30-INCH TYPE D
R	CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE R
(10)	LAYOUT POINT NUMBER
	REVERSE SLOPE GUTTER
BAD	BASE AGGREGATE DENSE
CCS-5	CONCRETE SIDEWALK 5-INCH, COLORING CONCRETE RED
CRTA-8	CONCRETE ROUNDABOUT TRUCK APRON 8-INCH, COLORING CONCRETE RED
CS-5	CONCRETE SIDEWALK 5-INCH
CS-8	CONCRETE SIDEWALK 8-INCH
HMA	HMA PAVEMENT TYPE E-0.3, 2-INCH
ASPH-4 1/4	HMA PAVEMENT TYPE E-10, 4 1/4-INCH
	CURB RAMP DETECTABLE WARNING FIELD
////	SAWING ASPHALT REQ'D
XXXX	SAWING CONCRETE REQ'D

Ⓐ CONCRETE MEDIAN SLOPE NOSE TYPE 1

Ⓑ CONCRETE MEDIAN SLOPE NOSE TYPE 2



POINT NO.	MAINLINE STATION	MAINLINE OFFSET	ELEV.	NORTHING	EASTING	REMARKS
500	35+65.84 CV	32.90'LT	962.98	547,769.49	837,767.47	EDGE OF SHOULDER
501	36+53.71 CV	22.00'LT	963.60	547,772.81	837,855.95	EDGE OF SHOULDER
502	37+34.61 CV	674.07'LT	---	548,429.42	837,831.31	R=657.07'

NOTE:
ALL CURB AND GUTTER POINTS ARE TO FLANGE LINE UNLESS OTHERWISE NOTED

2

N

250 INT

C.T.H. G

120 TR1

125 TR1

130 TR1

50 TR3

140 TR2

140 TR1

145 TR2

525 NB

150 T

U.S.H. 51

DELINEATED WETLAND

MUELLER RD.

TANKS

U/C

CORN CRIB

QUARRY

WELL

POST

GUY

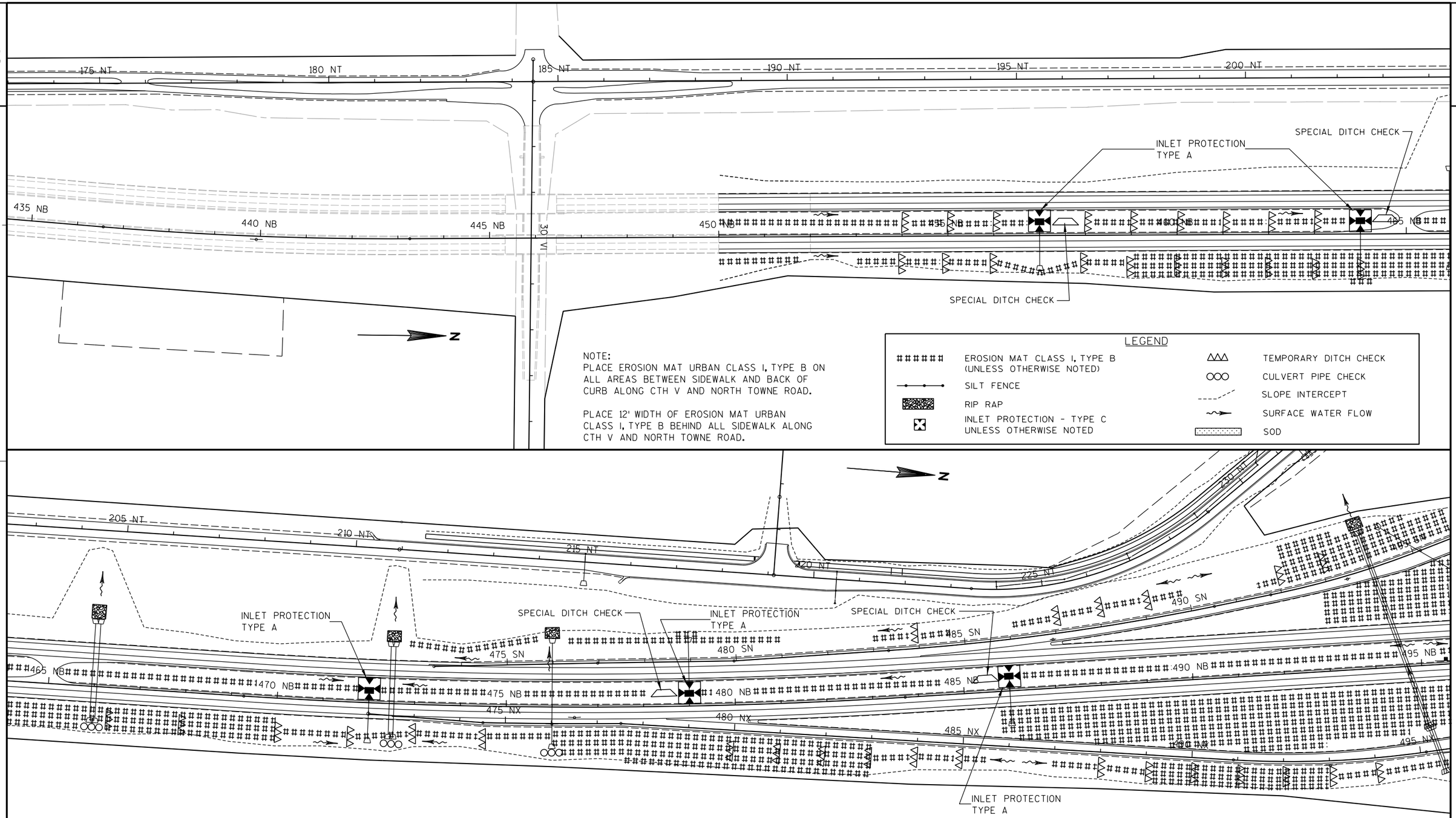
NOTE:
EROSION CONTROL ALONG TR1 ALIGNMENT IS TEMPORARY FOR STAGE 1

LEGEND

- EROSION MAT CLASS I, TYPE B (UNLESS OTHERWISE NOTED)
- SILT FENCE
- RIP RAP
- INLET PROTECTION - TYPE C UNLESS OTHERWISE NOTED
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SLOPE INTERCEPT
- SURFACE WATER FLOW
- SOD

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	STAGE 1 TEMPORARY EROSION CONTROL	SHEET 77	E

FILE NAME : P:\2011059 - US 51 WO\MicroStation\Planset\6020-02-72\022001_ec.dgn PLOT DATE : 6/5/2013 PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : 200.0000 sf / in.



NOTE:
PLACE EROSION MAT URBAN CLASS I, TYPE B ON ALL AREAS BETWEEN SIDEWALK AND BACK OF CURB ALONG CTH V AND NORTH TOWNE ROAD.

PLACE 12' WIDTH OF EROSION MAT URBAN CLASS I, TYPE B BEHIND ALL SIDEWALK ALONG CTH V AND NORTH TOWNE ROAD.

LEGEND

- EROSION MAT CLASS I, TYPE B (UNLESS OTHERWISE NOTED)
- SILT FENCE
- RIP RAP
- INLET PROTECTION - TYPE C UNLESS OTHERWISE NOTED
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SLOPE INTERCEPT
- SURFACE WATER FLOW
- SOD

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	EROSION CONTROL	SHEET 78	E

2

N

495 SW

505 SX

505 NB

510 NB

500 NB

495 NB

510 NN

505 NN

515 NB

520 NB

515 NN

520 NN

525 NB

525 NN

30 CY

500

SPECIAL DITCH CHECK

INLET PROTECTION
TYPE A

HEAVY RIPRAP

SPECIAL DITCH CHECK

INLET PROTECTION
TYPE A

LEGEND

- EROSION MAT CLASS I, TYPE B (UNLESS OTHERWISE NOTED)
- SILT FENCE
- RIP RAP
- INLET PROTECTION - TYPE C UNLESS OTHERWISE NOTED
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SLOPE INTERCEPT
- SURFACE WATER FLOW
- SOD

N

INLET PROTECTION
TYPE A

SPECIAL DITCH CHECK

SPECIAL DITCH CHECK

30 GI

10

525 NB

525 NN

530 NB

535 NB

540 NB

545 NB

550 NB

550 SB

555 SB

555 NB

INLET PROTECTION
TYPE A

35 GI

75 SW

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	EROSION CONTROL	SHEET 79	E

FILE NAME : P:\2011059 - US 51 WO\MicroStation\Planset\6020-02-72\022003_ec.dgn PLOT DATE : 6/5/2013 PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : 200.0000 sf / in.

2

LEGEND

- EROSION MAT CLASS I, TYPE B (UNLESS OTHERWISE NOTED)
- SILT FENCE
- RIP RAP
- INLET PROTECTION - TYPE C UNLESS OTHERWISE NOTED
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SLOPE INTERCEPT
- SURFACE WATER FLOW
- SOD

N

INLET PROTECTION TYPE A

15 D4

20 D4

25 D4

30 D4

555 SB

555 NB

560 SB

560 NB

565 SB

565 NB

570 NB

U.S.H. 51

USH 51

SPECIAL DITCH CHECK

NOTE:
PLACE EROSION MAT URBAN CLASS I, TYPE B ON ALL AREAS BETWEEN SIDEWALK AND BACK OF CURB ALONG CTH V AND NORTH TOWNE ROAD.

PLACE 12' WIDTH OF EROSION MAT URBAN CLASS I, TYPE B BEHIND ALL SIDEWALK ALONG CTH V AND NORTH TOWNE ROAD.

SLOPE INTERCEPT

SLOPE INTERCEPTS

STA. 221+80 NT, LT.
CONSTRUCT BAD C.E.

T.L.E.

R/W

215 NT

220 NT

225 NT

230 NT

235 NT

240 NT

245 NT

250 NT

490 SN

495 SN

495 NB

500 NB

505 NB

505 SX

505 NN

CTH V

25 CV

30 CV

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	EROSION CONTROL	SHEET 80	E

LEGEND

- EROSION MAT CLASS I, TYPE B (UNLESS OTHERWISE NOTED)
- SILT FENCE
- RIP RAP
- INLET PROTECTION - TYPE C UNLESS OTHERWISE NOTED
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SLOPE INTERCEPT
- SURFACE WATER FLOW
- SOD

N

INLET PROTECTION TYPE A

INLET PROTECTION TYPE A

INLET PROTECTION TYPE B

INLET PROTECTION TYPE B

INLET PROTECTION TYPE B

NOTE:
PLACE EROSION MAT URBAN CLASS I, TYPE B ON ALL AREAS BETWEEN SIDEWALK AND BACK OF CURB ALONG CTH V AND NORTH TOWNE ROAD.

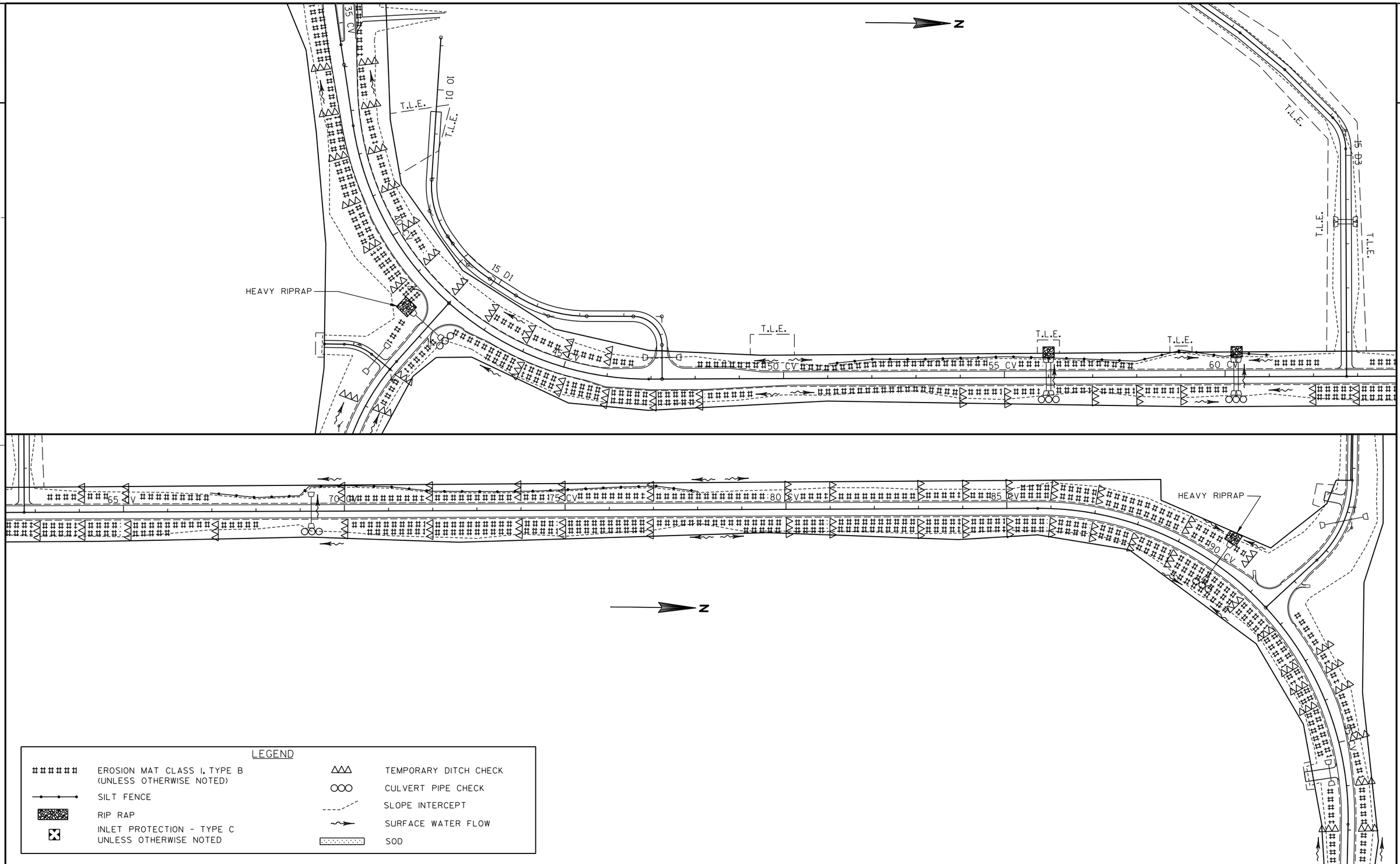
PLACE 12' WIDTH OF EROSION MAT URBAN CLASS I, TYPE B BEHIND ALL SIDEWALK ALONG CTH V AND NORTH TOWNE ROAD.

N

INLET PROTECTION TYPE B

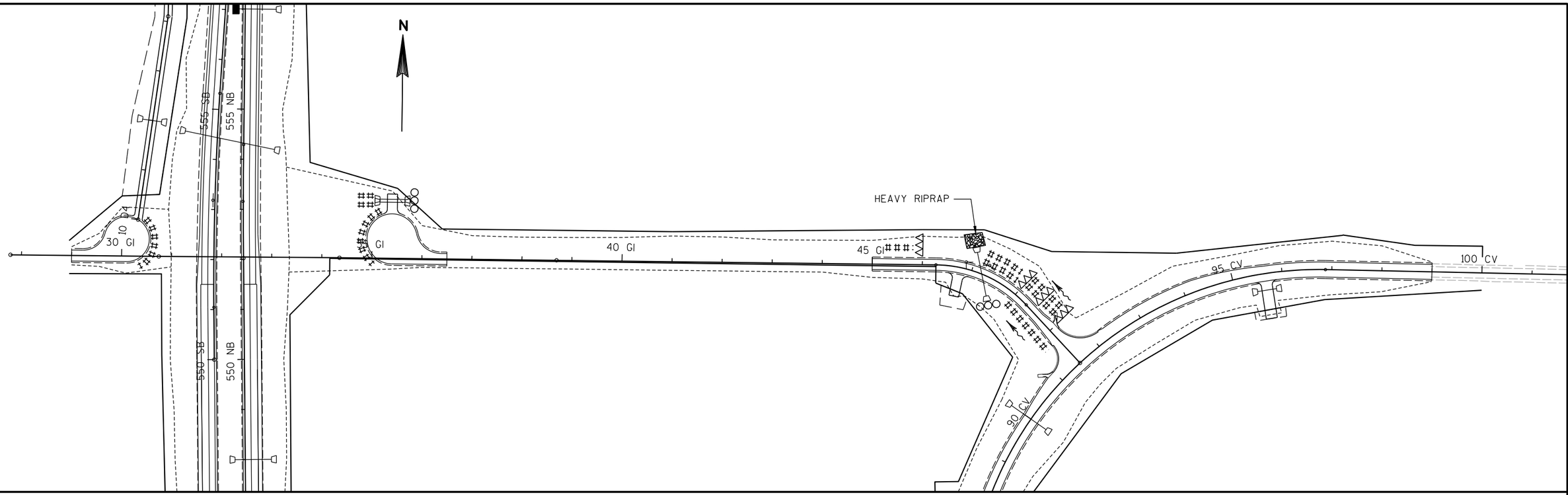
PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	EROSION CONTROL	SHEET 81	E

FILE NAME : P:\2011059 - US 51 WO\MicroStation\Planset\6020-02-72\022005_ec.dgn PLOT DATE : 6/5/2013 PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : 100.0000 sf / in.
WISDOT/CADDS SHEET 42



PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	EROSION CONTROL	SHEET 82	E

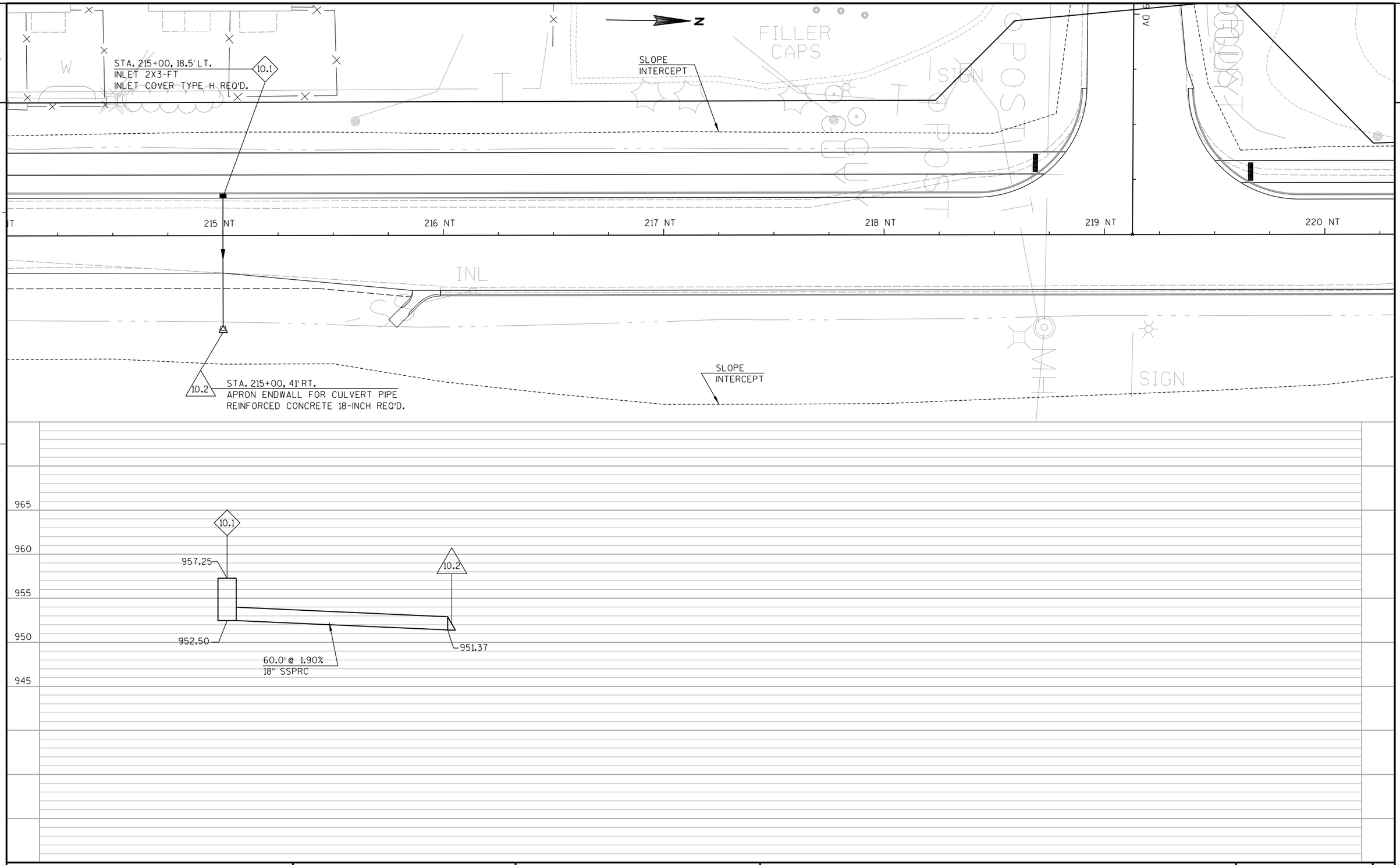
2



LEGEND

- EROSION MAT CLASS I, TYPE B (UNLESS OTHERWISE NOTED)
- SILT FENCE
- RIP RAP
- INLET PROTECTION - TYPE C UNLESS OTHERWISE NOTED
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SLOPE INTERCEPT
- SURFACE WATER FLOW
- SOD

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	EROSION CONTROL	SHEET 83	E


STA. 215+00, 18.5' LT.
INLET 2X3-FT
INLET COVER TYPE H REQ'D.
10.1
SLOPE
INTERCEPT
FILLER
CAPS
SIGN
POST
215 NT
216 NT
217 NT
218 NT
219 NT
220 NT
INL
10.2
STA. 215+00, 41' RT.
APRON ENDWALL FOR CULVERT PIPE
REINFORCED CONCRETE 18-INCH REQ'D.
SLOPE
INTERCEPT
SIGN
965
960
955
950
945
957.25
952.50
951.37
60.0' @ 1.90%
18" SSPRC

2

N

0.1 STA.220+50, 17.5' LT.
INLET 2X3-FT
INLET COVER TYPE H REQ'D.

SLOPE
INTERCEPT

STA.224+00, 17.5' LT. 1.1
INLET 2X3-FT
INLET COVER TYPE H REQ'D.

STA.225+50, 6' LT. 2.0
MANHOLE 3-FT DIAMETER
MANHOLE COVER TYPE J REQ'D.

T 221 NT 222 NT 223 NT 224 NT 225 NT 226 NT

SIGN

U.S.H. 51

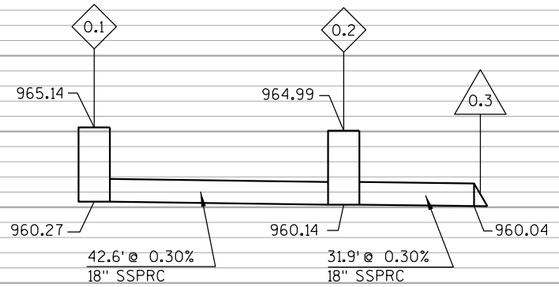
0.2 STA.220+50, 25.1' RT.
INLET 2X3-FT
INLET COVER TYPE H REQ'D.

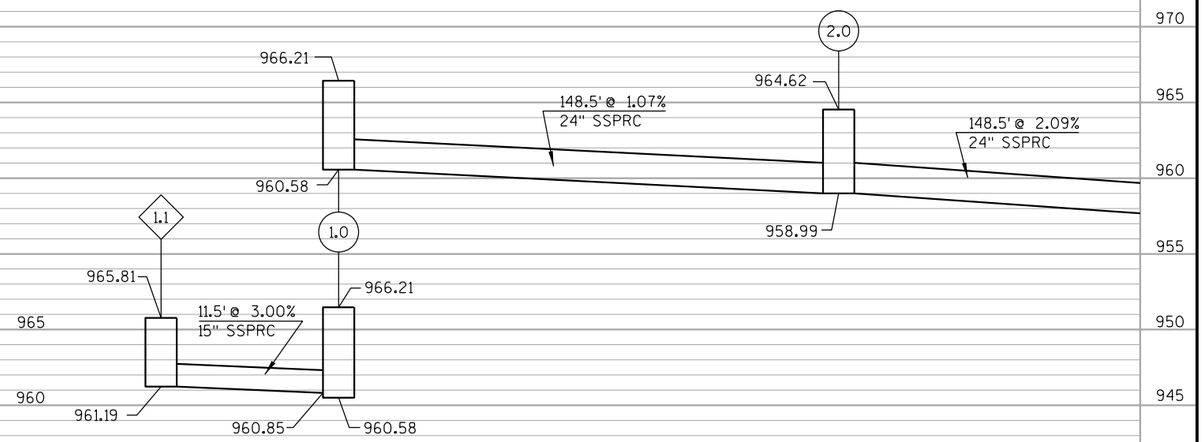
SLOPE
INTERCEPT

STA.224+00, 6' LT. 1.0
MANHOLE 5-FT DIAMETER
MANHOLE COVER TYPE J REQ'D.

0.3 STA.220+50, 57.0' RT.
APRON ENDWALL FOR CULVERT PIPE
REINFORCED CONCRETE 18-INCH REQ'D.

488 S





PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	STORM SEWER - NORTHTOWNE ROAD	SHEET 85	E

2

N

STA.227+00, 17.5'LT.
INLET 2x3-FT
INLET COVER TYPE H REQ'D.
3.1

STA.228+80, 17.5'LT.
INLET 2X3-FT
INLET COVER TYPE H REQ'D.
4.1

STA.230+50, 17.5'LT.
INLET 3-FT DIAMETER
INLET COVER TYPE A REQ'D.
5.1

STA.231+00, 69.8'LT.
APRON ENDWALL FOR CULVERT PIPE
REINFORCED CONCRETE 24-INCH REQ'D.
5.2

STA.232+00, 66.7'LT.
APRON ENDWALL FOR CULVERT PIPE
REINFORCED CONCRETE 30-INCH REQ'D.
6.1

227 NT

228 NT

229 NT

230 NT

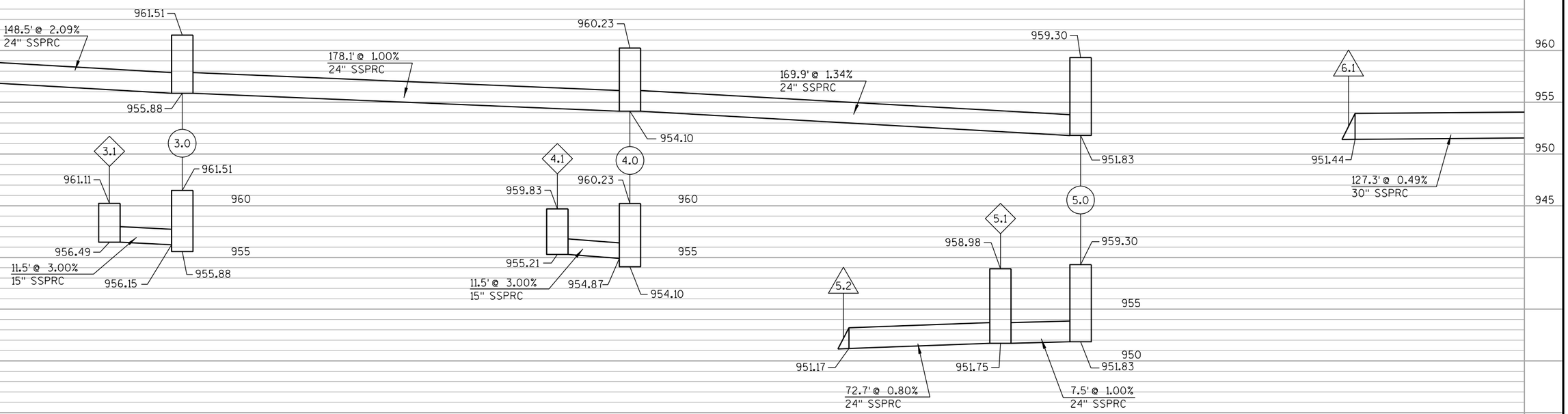
231 NT

232 NT

STA.227+00, 6'LT.
MANHOLE 5-FT DIAMETER
MANHOLE COVER TYPE J REQ'D.
3.0

STA.228+80, 6'LT.
MANHOLE 5-FT DIAMETER
MANHOLE COVER TYPE J REQ'D.
4.0

STA.230+50, 10'LT.
MANHOLE 5-FT DIAMETER
MANHOLE COVER TYPE J REQ'D.
5.0



PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	STORM SEWER - NORTHTOWNE ROAD	SHEET 86	E

2

STA.233+14, 17.5' LT.
INLET 2X3-FT
INLET COVER TYPE H REQ'D.

STA.233+14, 10' LT.
MANHOLE 6-FT DIAMETER
MANHOLE COVER TYPE J REQ'D.

STA.234+65, 10' LT.
MANHOLE 5-FT DIAMETER
MANHOLE COVER TYPE J REQ'D.

STA.234+65, 17.5' LT.
INLET 2X3-FT
INLET COVER TYPE H REQ'D.

SLOPE
INTERCEPT

STA.236+00, 10' LT.
MANHOLE 5-FT DIAMETER
MANHOLE COVER TYPE J REQ'D.

STA.237+50, 17.5' LT.
INLET 3-FT DIAMETER
INLET COVER TYPE A REQ'D.

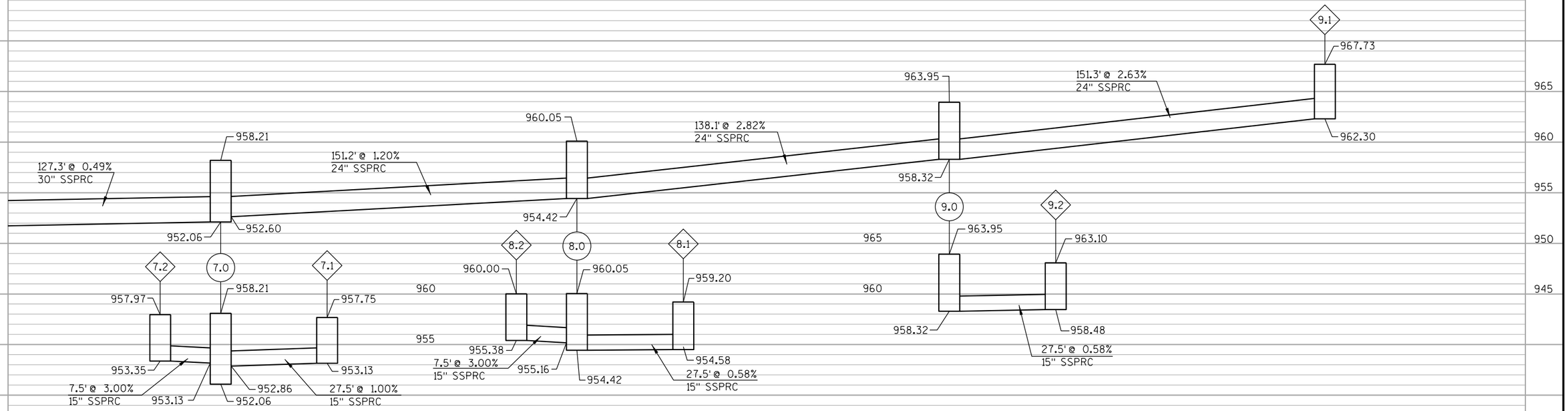
233 NT
234 NT
235 NT
236 NT
237 NT
238 NT

SLOPE
INTERCEPT

STA.234+65, 17.5' RT.
INLET 2X3-FT
INLET COVER TYPE H REQ'D.

STA.236+00, 17.5' RT.
INLET 2X3-FT
INLET COVER TYPE H REQ'D.

STA.233+14, 17.5' RT.
INLET 2X3-FT
INLET COVER TYPE H REQ'D.



PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	STORM SEWER - NORTHTOWNE ROAD	SHEET 87	E

FILE NAME : P:\2011059 - US 51 WO\MicroStation\Planset\6020-02-72\022505_ss.dgn
PLOT DATE : 5/13/2013
PLOT BY : $$...plotuser...$$ PLOT NAME :
PLOT SCALE : 40.0000 sf / in.
WISDOT/CADDS SHEET 41

STA.505+49 SX, 64.0' LT.
APRON ENDWALL FOR CULVERT PIPE
REINFORCED CONCRETE 24-INCH REQ'D.

50.1

506 SX

505 SX

STA.505+29 SX, 64.0' LT.
MANHOLE 8-FT DIAMETER
MANHOLE COVER TYPE J REQ'D.

50.0

MATCH EXISTING
34" X 53" RCHECP

51.0

506 NB

505 NB

506 NN

505 NN

STA.505+16 NN, 32.0' RT.
MANHOLE 8-FT DIAMETER
MANHOLE COVER TYPE J REQ'D.

52.0

N

2

50.1

20.0' @ 11%
24" SSPRC

960.0

956.5

954.3

50.0

960.0

EXISTING
MANHOLE

953.78

954.3

EXISTING 34" X 53" RCHECP

51.0

MATCH
EXISTING

170.0' @ 0.60%
34" X 53" RCHECP

52.0

963.00

956.00

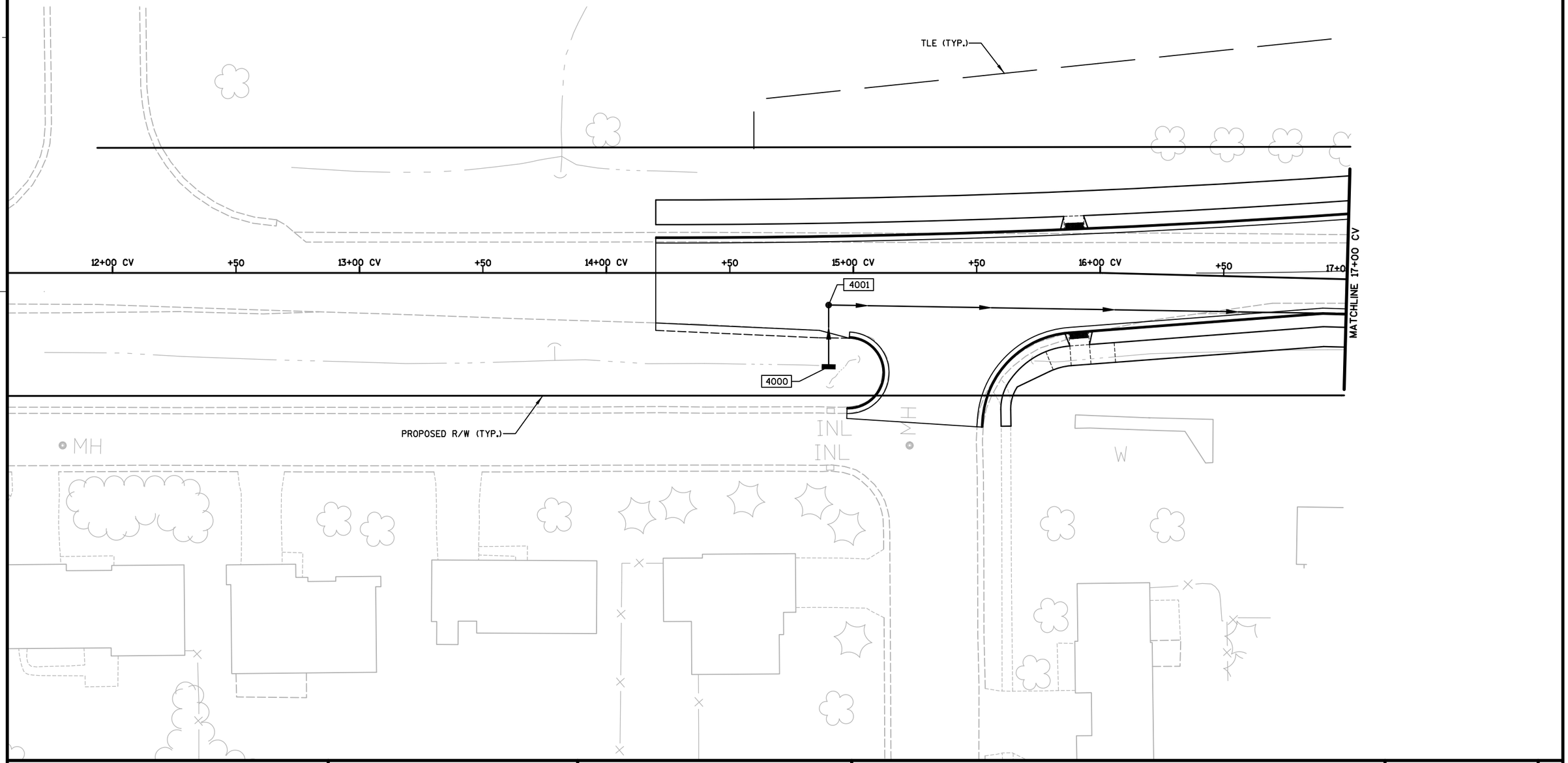
970
965
960
955
950
945
940

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	STORM SEWER	SHEET 88	E

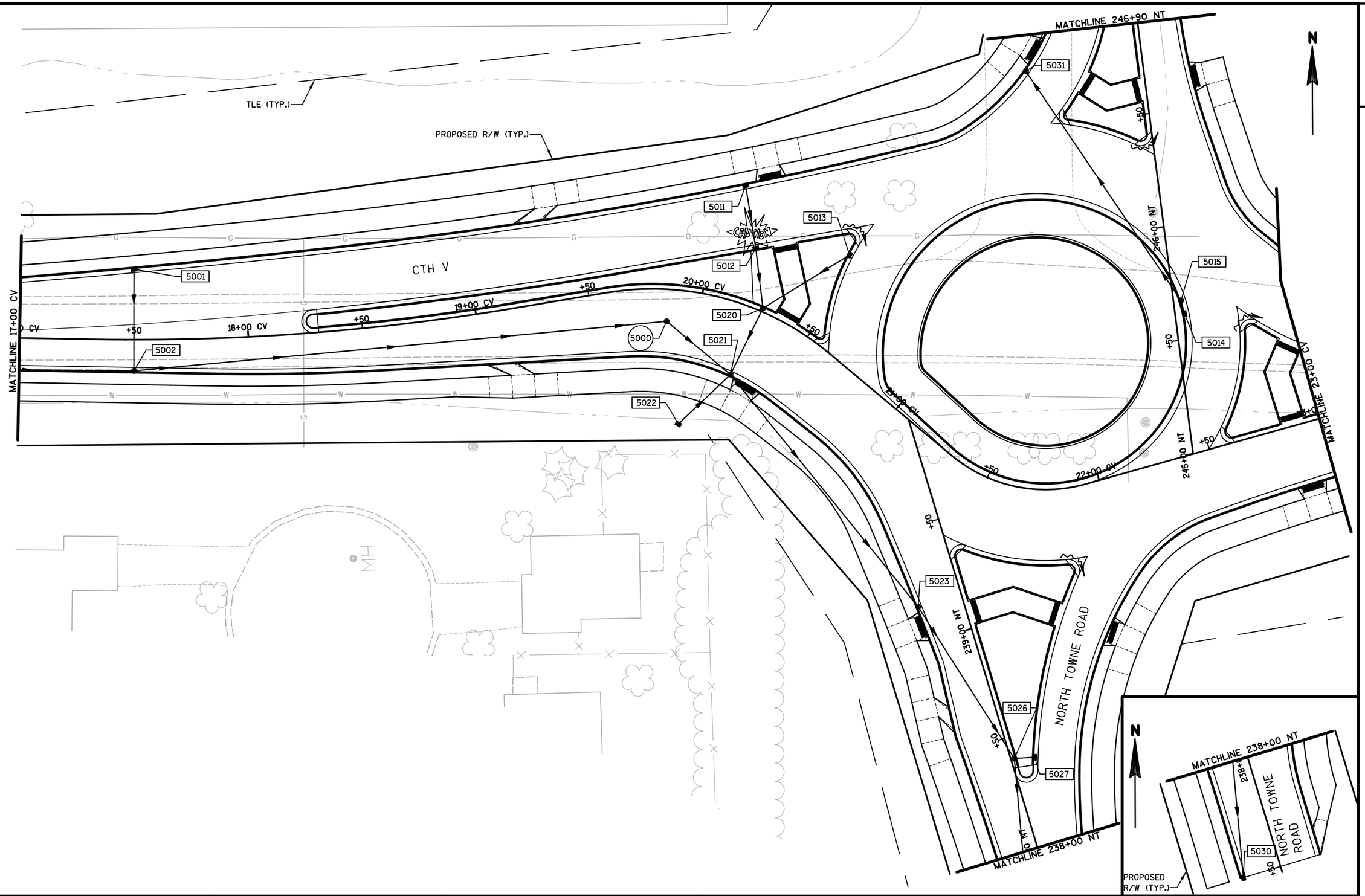
2

STRUCT NO.	STATION	OFFSET	C - C (FT)	TO STRUCT	INLET TYPE & COVER	MH TYPE & COVER	RIM / GRATE ELEV.	T.O.S. ELEV.	DEPTH (FT)	DISCHARGE PIPE SIZE (IN)	DISCHARGE PIPE INLET ELEV.	DISCHARGE PIPE DISCHARGE ELEV.	DISCHARGE PIPE LENGTH (FT)	DISCHARGE PIPE SLOPE (%)	REMARKS
0.1	220+50 'NT'	17.5' LT	42.6	0.2	2x3-H	---	965.14	964.31	4.04	18	960.27	960.14	42.6	0.30%	
0.2	220+50 'NT'	25.1' RT	31.9	0.3	2x3-H	---	964.99	964.16	4.02	18	960.14	960.04	31.9	0.30%	
0.3	220+50 'NT'	57.0' RT	---	---	---	---	---	---	---	18	960.04	---	---	---	18-INCH APRON ENDWALL
1.0	224+00 'NT'	6.0' LT	148.5	2.0	---	5-J	966.21	964.30	3.72	24	960.58	958.99	148.5	1.07%	
1.1	224+00 'NT'	17.5' LT	11.5	1.0	2x3-H	---	965.81	964.98	3.79	15	961.19	960.85	11.5	3.00%	
2.0	225+50 'NT'	6.0' LT	148.5	3.0	---	3-J	964.62	962.88	3.89	24	958.99	955.88	148.5	2.09%	
3.0	227+00 'NT'	6.0' LT	178.1	4.0	---	5-J	961.51	959.60	3.72	24	955.88	954.10	178.1	1.00%	
3.1	227+00 'NT'	17.5' LT	11.5	3.0	2x3-H	---	961.11	960.28	3.79	15	956.49	956.15	11.5	3.00%	
4.0	228+80 'NT'	6.0' LT	169.9	5.0	---	5-J	960.23	958.32	4.22	24	954.10	951.83	169.9	1.34%	
4.1	228+80 'NT'	17.5' LT	11.5	4.0	2x3-H	---	959.83	959.00	3.79	15	955.21	954.87	11.5	3.00%	
5.0	230+50 'NT'	10.0' LT	7.5	5.1	---	5-J	959.30	957.39	5.56	24	951.83	951.75	7.5	1.00%	
5.1	230+50 'NT'	17.5' LT	72.7	5.2	3-A	---	958.98	957.56	5.81	24	951.75	951.17	72.7	0.80%	
5.2	231+00 'NT'	69.8' LT	---	---	---	---	---	---	---	24	951.17	---	---	---	24-INCH APRON ENDWALL
6.1	232+00 'NT'	66.7' LT	---	---	---	---	---	---	---	30	951.44	---	---	---	30-INCH APRON ENDWALL
7.0	233+14 'NT'	10.0' LT	127.3	6.1	---	6-J	958.21	956.30	4.24	30	952.06	951.44	127.3	0.49%	
7.1	233+14 'NT'	17.5' RT	27.5	7.0	2x3-H	---	957.75	956.92	3.79	15	953.13	952.86	27.5	1.00%	
7.2	233+14 'NT'	17.5' LT	7.5	7.0	2x3-H	---	957.97	957.14	3.79	15	953.35	953.13	7.5	3.00%	
8.0	234+65 'NT'	10.0' LT	151.2	7.0	---	5-J	960.05	958.14	3.72	24	954.42	952.60	151.2	1.20%	
8.1	234+65 'NT'	17.5' RT	27.5	8.0	2x3-H	---	959.20	958.37	3.79	15	954.58	954.42	27.5	0.58%	
8.2	234+65 'NT'	17.5' LT	7.5	8.0	2x3-H	---	960.00	959.17	3.79	15	955.38	955.16	7.5	3.00%	
9.0	236+00 'NT'	10.0' LT	138.1	8.0	---	5-J	963.95	962.04	3.72	24	958.32	954.42	138.1	2.82%	
9.1	237+50 'NT'	17.5' LT	151.3	9.0	3-A	---	967.73	966.31	4.01	24	962.30	958.32	151.3	2.63%	
9.2	236+00 'NT'	17.5' RT	27.5	9.0	2x3-H	---	963.10	962.27	3.79	15	958.48	958.32	27.5	0.58%	
10.1	215+00 'NT'	18.5' LT	60.0	10.2	2x3-H	---	957.25	956.42	3.92	18	952.50	951.37	60.0	1.90%	
10.2	215+00 'NT'	41.0' RT	---	---	---	---	---	---	---	18	951.37	---	---	---	18-INCH APRON ENDWALL
50.0	505+29 'SX'	64.0' LT	---	---	---	8-J	960.00	958.09	3.79	---	954.30	---	---	---	TIE INTO EXISTING 34" X 53" RCHECP
50.1	505+49 'SX'	64.0' LT	20.0	50.0	---	---	---	---	---	24	956.50	954.30	20.0	11.00%	24-INCH APRON ENDWALL
51.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	MATCH EXISTING 34" X 53" RCHECP
52.0	505+16 'NN'	32.0' RT	170.0	51.0	---	8-J	963.00	961.09	5.09	34X53	956.00	954.98	170.0	0.60%	

STRUCT NO.	STATION	OFFSET	C-C (FT)	TO STRUCT	INLET TYPE & COVER	MH TYPE & COVER	RIM/ GRATE ELEV.	T.O.S. ELEV.	DEPTH (FT)	DISCHARGE PIPE SIZE (IN)	DISCHARGE PIPE INLET ELEV.	DISCHARGE PIPE DISCHARGE ELEV.	DISCHARGE PIPE LENGTH (FT)	DISCHARGE PIPE SLOPE (%)	REMARKS
4000	14+90.00 V	38.0' RT	25.0	4001	MEDIAN 2 GRATE MS	--	981.90	981.90	2.40	14X23	979.50	979.38	25	0.48%	2 MS GRATES REQ'D
4001	14+90.00 V	13.0' RT	259.9	5002	--	4-FOOT J	984.59	983.34	3.96	18	979.38	973.00	260	2.45%	



PROJECT NO: 6020-02-72 | HWY: USH 51 | COUNTY: DANE | STORM SEWER | SHEET 90 | E



PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	STORM SEWER	SHEET	E

FILE NAME : S:\MAD\1000--1099\1089\234\Micros\PLAN\0272\022501_ss.dgn PLOT DATE : 4/17/2013 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

2

TLE (TYP.)

PROPOSED R/W (TYP.)

MATCHLINE 246+90 NT

5040

5041

5042

5042

247+00 NT

+50

248+00 NT

+50

BALL COURT

249+00 NT

+50

250+00 NT

+50

251+00 NT

+50

252+00 NT

+50

1-PIPE ARCH CORRUGATED
STEEL 28X20-INCH REQ'D

1-PIPE ARCH CORRUGATED
STEEL 21X15-INCH REQ'D

2-CULVERT PIPE CORRUGATED
STEEL 12-INCH REQ'D

SIGN

SIGN

SAN

SS

E

MH

N

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	STORM SEWER	SHEET	E

FILE NAME : S:\MAD\1000--1099\1089\234\Micros\PLAN\0272\022501a_ss.dgn PLOT DATE : 4/17/2013 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

STRUCT NO.	STATION	OFFSET	C-C (FT)	TO STRUCT	INLET TYPE & COVER	MH TYPE & COVER	RIM/ GRATE ELEV.	T.O.S. ELEV.	DEPTH (FT)	DISCHARGE PIPE SIZE (IN)	DISCHARGE PIPE INLET ELEV.	DISCHARGE PIPE DISCHARGE ELEV.	DISCHARGE PIPE LENGTH (FT)	DISCHARGE PIPE SLOPE (%)	REMARKS
5000	19+85.00 V	14.0' RT	36.3	5021	--	4-F00T J	973.47	972.22	4.72	18	967.50	966.95	36	1.53%	
5001	17+50.00 V	30.7' LT	44.4	5002	2x3-FT H	--	979.00	978.17	4.17	12	974.00	973.00	44	2.27%	
5002	17+50.00 V	13.6' RT	233.8	5000	-H	4-F00T -	979.19	978.36	5.36	18	973.00	967.50	234	2.35%	FLAT TOP REQ'D
5011	20+07.00 V	50.1' LT	27.7	5012	2x3-FT H	--	971.95	971.12	3.17	12	967.95	967.80	28	0.54%	
5012	20+16.00 V	25.0' LT	26.5	5020	2x3-FT H	--	972.40	971.57	3.77	12	967.80	967.35	26	1.73%	
5013	20+46.25 V	40.0' LT	44.5	5020	2x3-FT H-S	--	971.30	970.47	3.17	12	967.30	967.10	45	0.44%	
5014	22+55.56 V	60.0' LT	6.0	5015	2x2.5-FT T	--	967.77	966.81	3.63	12	963.18	963.15	6	0.50%	
5015	22+55.66 V	66.0' LT	121.0	5031	-T	4-F00T -	967.77	966.81	3.66	15	963.15	962.70	121	0.37%	FLAT TOP REQ'D
5020	20+27.00 V	1.5' LT	32.2	5021	-H	4-F00T -	972.66	971.83	4.73	15	967.10	966.95	32	0.47%	FLAT TOP REQ'D
5021	20+25.00 V	30.7' RT	130.5	5023	-H	4-F00T -	972.24	971.41	4.46	18	966.95	964.95	131	1.53%	FLAT TOP REQ'D
5022	20+00.00 V	58.0' RT	31.4	5021	MEDIAN 1 GRATE MS	--	971.13	971.13	2.93	15	968.20	968.00	31	0.65%	
5023	21+47.39 V	64.0' RT	78.4	5026	-H	4-F00T -	970.17	969.34	4.39	18	964.95	964.59	78	0.46%	FLAT TOP REQ'D
5026	21+71.37 V	118.0' RT	92.2	5030	-H	4-F00T -	969.60	968.77	4.18	18	964.59	962.30	92	2.49%	FLAT TOP REQ'D, CONNECT TO PROPOSED STRUCTURE 9.1
5027	21+74.50 V	117.0' RT	8.9	5026	2x3-FT H	--	969.23	968.40	3.17	12	965.23	965.15	9	0.89%	
5030	21+74.95 V	209.3' RT	-	-	--	--	-	-	-	-	962.30	-	-	-	
5031	20+55.88 V	150.0' LT	98.6	5041	-H	4-F00T -	969.10	968.27	5.57	15	962.70	961.50	99	1.21%	FLAT TOP REQ'D
5040	20+38.75 V	277.9' LT	-	-	-H	5-F00T -	964.89	964.06	4.29	-	959.77	-	-	-	CONNECT TO PROPOSED STORM SEWER, FLAT TOP REQ'D
5041	20+48.54 V	246.7' LT	44.1	5040	-H	4-F00T -	966.25	965.42	3.92	15	961.50	959.77	44	3.93%	FLAT TOP REQ'D
5042	20+50.58 V	250.0' LT	7.0	5041	2x3-FT H	--	966.11	965.28	3.53	12	961.75	961.50	7	3.57%	
5043	23+26.49 V	295.3' LT	-	-	-H	5-F00T -	964.38	963.55	4.05	-	959.50	-	-	-	CONNECT TO PROPOSED STORM SEWER, FLAT TOP REQ'D

2

N

6012
6011
6013
6015
6010
6009
6008
6006
6007
6014
6003
6002
6004
6005
6001
6000

SOUTHBOUND OFF-RAMP

50+00 SV

+50

TLE (TYP.)

CTH V

24+00 CV

25+00 CV

26+00 CV

27+00 CV

28+00 CV

29+00 CV

MATCHLINE 23+00 CV

MATCHLINE 29+00 CV

NS 00+00

NS 00+50

NS

PROPOSED R/W (TYP.)

1 - 24" R.C.C.P REQ'D

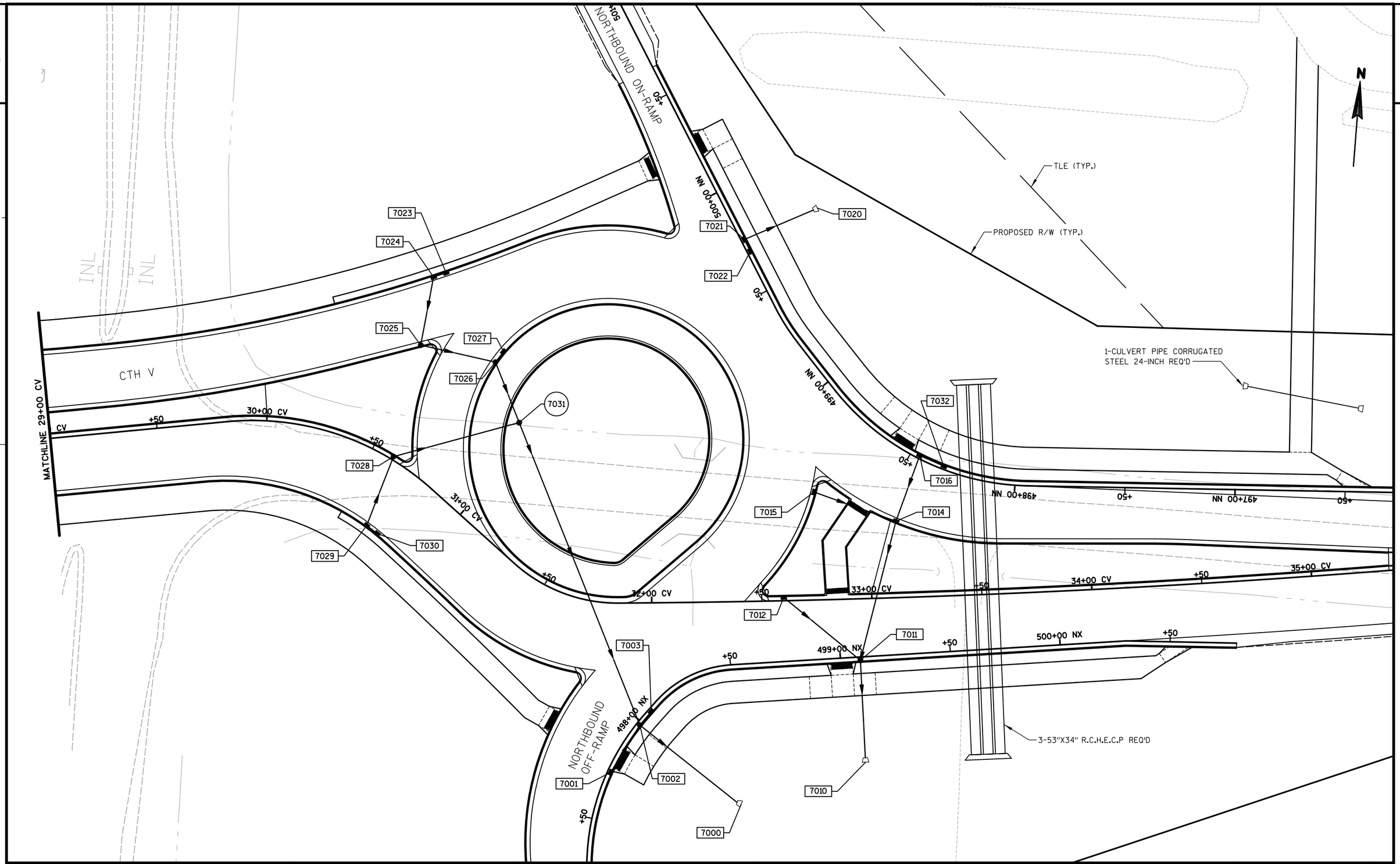
SOUTHBOUND ON-RAMP

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	STORM SEWER	SHEET	E

FILE NAME : S:\MAD\1000--1099\1089\234\Micros\PLAN\0272\022503_ss.dgn PLOT DATE : 4/17/2013 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

STRUCT NO.	STATION	OFFSET	C-C (FT)	TO STRUCT	INLET TYPE & COVER	MH TYPE & COVER	RIM/ GRATE ELEV.	T.O.S. ELEV.	DEPTH (FT)	DISCHARGE PIPE SIZE (IN)	DISCHARGE PIPE INLET ELEV.	DISCHARGE PIPE DISCHARGE ELEV.	DISCHARGE PIPE LENGTH (FT)	DISCHARGE PIPE SLOPE (%)	REMARKS
6000	26+84.07 V	88.5' RT	-	-	--	--	-	-	-	18	956.48	-	-	-	APRON ENDWALLS FOR CPRC 18-INCH REQ'D
6001	26+45.16 V	40.0' RT	79.1	6000	-H	4-FOOT -	963.85	963.02	6.27	18	956.75	956.48	79	0.34%	FLAT TOP REQ'D
6002	26+18.00 V	36.0' RT	39.1	6001	-H	6-FOOT -	963.75	962.92	5.97	18	956.95	956.75	39	0.51%	FLAT TOP REQ'D
6003	26+15.00 V	45.4' RT	9.9	6002	2x3-FT H	--	963.63	962.80	3.50	12	959.30	959.25	10	0.50%	
6004	26+14.00 V	64.5' RT	19.1	6003	2x3-FT HM-S	--	963.41	962.58	3.19	12	959.39	959.30	19	0.47%	
6005	26+19.90 V	65.5' RT	6.0	6004	2x3-FT HM-S	--	963.42	962.59	3.17	12	959.42	959.39	6	0.50%	
6006	27+36.00 V	38.0' LT	140.3	6002	-T	4-FOOT -	961.54	960.58	3.04	18	957.54	956.95	140	0.42%	FLAT TOP REQ'D
6007	27+38.33 V	43.5' LT	6.0	6006	2x2.5-FT T	--	961.57	960.61	3.04	12	957.57	957.54	6	0.50%	
6008	25+55.00 V	1.5' LT	72.8	6002	2x3-FT HM	--	964.95	964.12	4.42	12	959.70	959.38	73	0.44%	
6009	25+43.00 V	39.4' LT	40.3	6008	2x3-FT HM	--	965.23	964.40	4.50	12	959.90	959.70	40	0.50%	
6010	25+48.00 V	96.8' LT	58.0	6009	2x3-FT HM	--	964.17	963.34	3.17	12	960.17	959.90	58	0.47%	
6011	25+50.21 V	195.8' LT	6.0	6012	2x3-FT HM-S	--	963.04	962.21	3.17	12	959.04	959.00	6	0.67%	
6012	25+49.03 V	201.0' LT	18.5	6013	2x3-FT HM-S	--	963.04	962.21	3.21	12	959.00	958.90	18	0.56%	
6013	25+55.05 V	210.4' LT	20.0	6015	2x3-FT H	--	963.22	962.39	3.49	12	958.90	958.60	20	1.50%	
6014	27+59.00 V	28.8' LT	24.5	6006	2x3-FT H-S	--	961.96	961.13	3.48	12	957.65	957.54	25	0.44%	
6015	25+63.15 V	224.0' LT	-	-	--	--	-	-	-	12	958.60	-	-	-	APRON ENDWALLS FOR CPRC 12-INCH REQ'D

2



PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	STORM SEWER	SHEET	E

FILE NAME : S:\MAD\1000--1099\1089\234\Micros\PLAN\0272\022505_ss.dgn PLOT DATE : 4/17/2013 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$
WISDOT/CADDS SHEET 42

STRUCT NO.	STATION	OFFSET	C-C (FT)	TO STRUCT	INLET TYPE & COVER	MH TYPE & COVER	RIM/ GRATE ELEV.	T.O.S. ELEV.	DEPTH (FT)	DISCHARGE PIPE SIZE (IN)	DISCHARGE PIPE INLET ELEV.	DISCHARGE PIPE DISCHARGE ELEV.	DISCHARGE PIPE LENGTH (FT)	DISCHARGE PIPE SLOPE (%)	REMARKS
7000	32+39.06 V	91.9' RT	-	-	--	--	-	-	-	24	954.83	-	-	-	APRON ENDWALLS FOR CPRC 24-INCH REQ'D
7001	31+83.00 V	76.9' RT	25.2	7002	2x3-FT H	--	960.78	959.95	3.17	12	956.78	956.67	25	0.44%	
7002	31+94.13 V	55.5' RT	52.4	7000	-H-S	6-FOOT -	960.65	959.82	4.85	24	954.97	954.83	52	0.27%	FLAT TOP REQ'D
7003	31+99.32 V	49.5' RT	8.0	7002	2x3-FT H-S	--	960.63	959.80	3.17	12	956.63	956.60	8	0.37%	
7010	32+95.00 V	74.2' RT	-	-	--	--	-	-	-	15	956.60	-	-	-	APRON ENDWALLS FOR CPRC 15-INCH REQ'D
7011	32+94.00 V	27.9' RT	40.3	7010	-H	4-FOOT -	961.38	960.55	3.80	15	956.75	956.60	40	0.37%	FLAT TOP REQ'D
7012	32+60.00 V	1.5' LT	45.0	7011	2x3-FT H	--	961.74	960.91	3.71	12	957.20	956.75	45	1.00%	
7014	33+12.06 V	34.7' LT	65.2	7011	2x3-FT H	--	961.73	960.90	3.85	12	957.05	956.75	65	0.46%	
7015	32+75.00 V	49.0' LT	39.4	7014	2x3-FT H	--	961.43	960.60	3.17	12	957.43	957.05	39	0.97%	
7016	33+24.00 V	64.2' LT	31.8	7014	2x3-FT H	--	961.19	960.36	3.17	12	957.19	957.05	32	0.44%	
7020	32+79.85 V	177.9' LT	-	-	--	--	-	-	-	12	956.05	-	-	-	APRON ENDWALLS FOR CPRC 12-INCH REQ'D
7021	32+45.12 V	164.4' LT	30.1	7020	2x3-FT H-S	--	960.19	959.36	3.16	12	956.20	956.05	30	0.50%	
7022	32+47.84 V	159.0' LT	6.0	7021	2x3-FT H-S	--	960.24	959.41	3.17	12	956.24	956.20	6	0.67%	
7023	30+46.60 V	86.5' LT	6.0	7024	2x3-FT H-S	--	958.87	958.04	2.49	12	955.55	955.53	6	0.33%	
7024	30+44.00 V	82.4' LT	31.5	7025	2x3-FT H-S	--	958.82	957.99	2.46	12	955.53	955.46	31	0.23%	
7025	30+49.00 V	51.9' LT	34.8	7026	-H	4-FOOT -	959.49	958.66	3.20	15	955.46	955.38	35	0.23%	FLAT TOP REQ'D
7026	30+71.46 V	63.0' LT	29.5	7031	-T	4-FOOT -	958.90	957.94	2.56	15	955.38	955.31	29	0.24%	FLAT TOP REQ'D
7027	30+71.54 V	69.0' LT	6.0	7026	2x2.5-FT T	--	958.94	957.98	2.57	12	955.41	955.38	6	0.50%	
7028	30+60.00 V	1.5' LT	59.2	7031	-H	4-FOOT -	960.04	959.21	3.76	15	955.45	955.31	59	0.24%	FLAT TOP REQ'D
7029	30+67.89 V	31.4' RT	33.6	7028	2x3-FT H-S	--	959.58	958.75	3.20	12	955.55	955.45	34	0.29%	
7030	30+75.98 V	31.5' RT	6.0	7029	2x3-FT H-S	--	959.57	958.74	3.17	12	955.57	955.55	6	0.33%	
7031	30+92.00 V	49.0' LT	147.9	7002	--	4-FOOT J	960.80	959.55	4.24	24	955.31	954.97	148	0.23%	
7032	33+35.00 V	58.9' LT	12.1	7016	2x3-FT H	--	961.25	960.42	3.12	12	957.30	957.19	12	0.92%	

2

N

USH 51 SB

B-13-600

USH 51 NB

B-13-599

CTH CV

CTH CV

29 CV

30 CV

498 NB

499 NB

500 NB

501 NB

502 NB

503 NB

D12 STA.500+44.79 NB, 163.2' LT.
APRON ENDWALL FOR CULVERT
PIPE STEEL 12-INCH REQ'D.

D10 STA.500+41.66 NB, 93' LT.
INLET 2X2-FT
INLET COVER TYPE V REQ'D.

D11 STA.500+44.79 NB, 93' LT.
INLET 2X2-FT
INLET COVER TYPE V REQ'D.

D7 STA.500+42.94 NB, 55' LT.
INLET 2X2-FT
INLET COVER TYPE V REQ'D.

D8 STA.500+46.07 NB, 55' LT.
INLET 2X2-FT
INLET COVER TYPE V REQ'D.

D9 STA.500+46.07 NB, 30' LT.
APRON ENDWALL FOR CULVERT
PIPE STEEL 12-INCH REQ'D.

D6 STA.500+47.60 NB, 30' LT.
APRON ENDWALL FOR CULVERT
PIPE STEEL 12-INCH REQ'D.

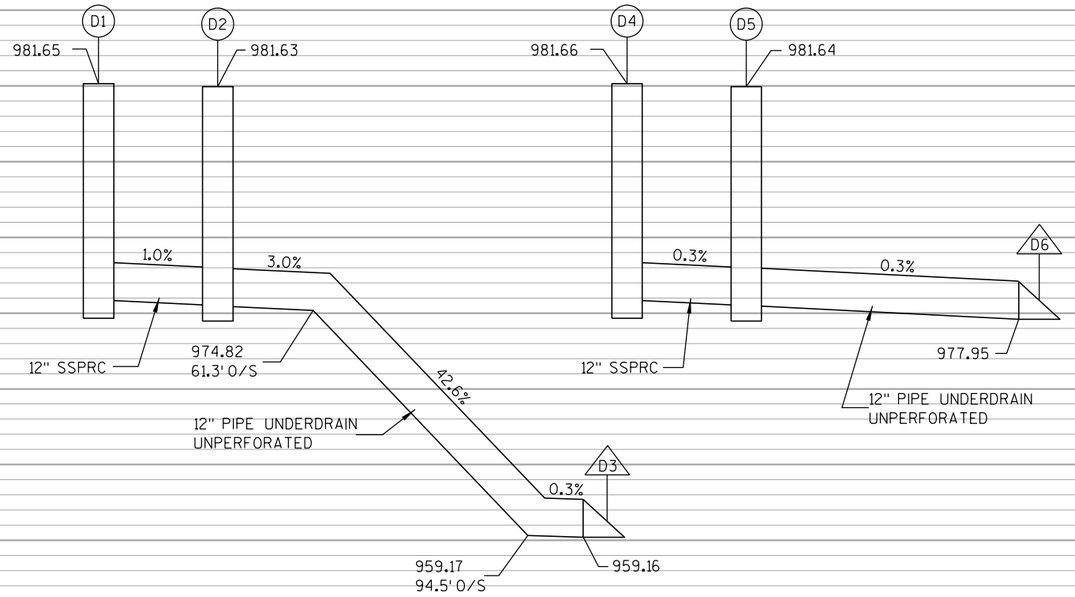
D4 STA.500+44.47 NB, 5' LT.
INLET 2X2-FT
INLET COVER TYPE V REQ'D.

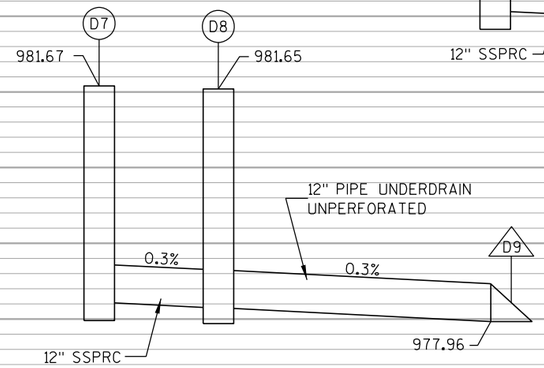
D5 STA.500+47.60 NB, 5' LT.
INLET 2X2-FT
INLET COVER TYPE V REQ'D.

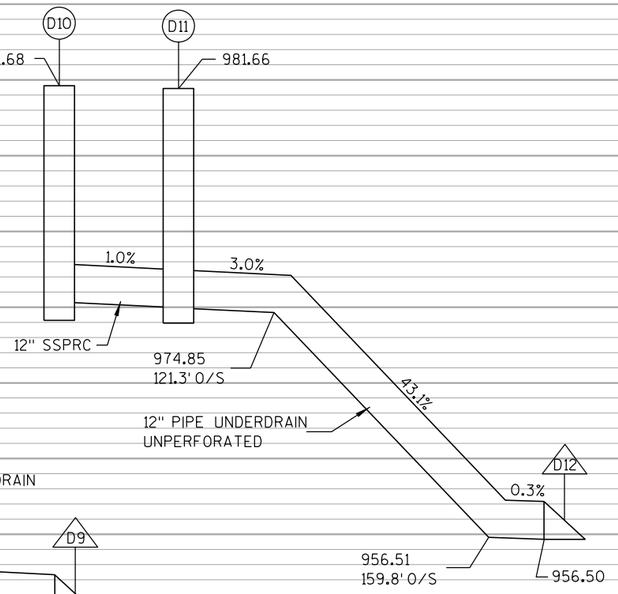
D1 STA.500+45.74 NB, 33' RT.
INLET 2X2-FT
INLET COVER TYPE V REQ'D.

D2 STA.500+48.87 NB, 33 RT.
INLET 2X2-FT
INLET COVER TYPE V REQ'D.

D3 STA.500+48.87 NB, 97.9' RT.
APRON ENDWALL FOR CULVERT
PIPE STEEL 12-INCH REQ'D.

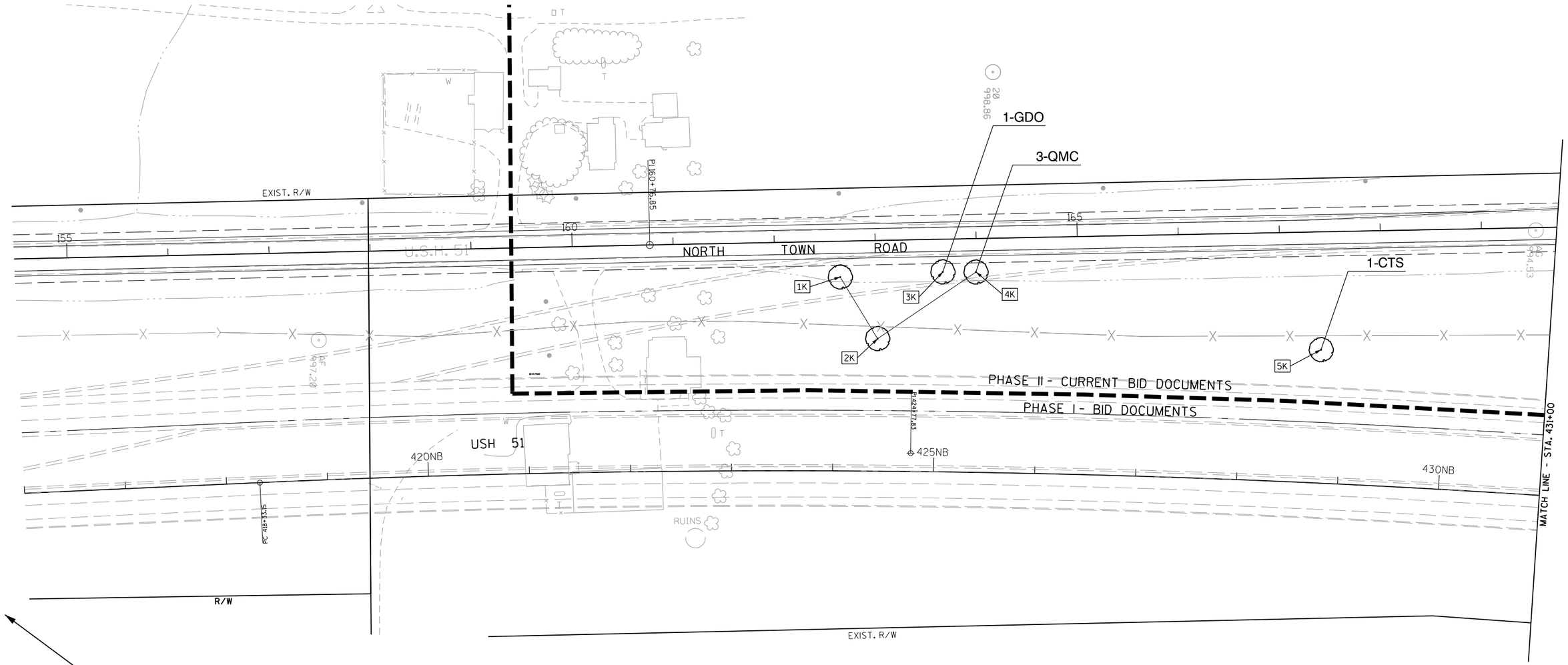






PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	STORM SEWER - DROP INLETS	SHEET 98	E

2



DECORATIVE STREET SIGNS ON TOP OF STOP SIGN AT SOUTHWEST CORNER OF NORTH TOWNE RD AND GRAY ROAD. SEE ROADWAY SIGNAGE PLANS. (FALLS WITHIN PHASE I LIMITS) (24)

DECORATIVE POLE FOR STOP SIGN AT NORTHEAST CORNER OF NORTH TOWNE RD AND VINBURN ROAD. SEE ROADWAY SIGNAGE PLANS. (FALLS WITHIN PHASE I LIMITS) (23)

PLANT KEY

SYMBOL	COMMON NAME
TXD	Baldcypress
CTS	Catalpa, Northern
GDO	Coffeetree, Kentucky
ULF	Elm, Frontier
COP	Hackberry, Prairie Pride
GTK	Honeylocust, Skyline
TTS	Linden, Silver
ASG	Maple, Green Mountain Sugar
AFS	Maple, Sienna Glen
QMC	Oak, Bur
QBC	Oak, Swamp White
ASS	Silver Maple, Cutleaf
CVW	Hawthorn, Winter King
AGA	Serviceberry, Autumn Brilliance
JVC	Juniper, Canaert
PGD	Spruce, Black Hills
PPG	Spruce, Green Colorado
PAB	Spruce, Norway

N

LEGEND

- PROPOSED FENCE SEE ROADWAY PLANS
- R/W PROPOSED R.O.W.
- SLOPE INTERCEPT LINE
- EXISTING TREES TO REMAIN
- PROPOSED SHADE TREE
- PROPOSED EVERGREEN TREE
- PROPOSED ORNAMENTAL TREE
- PROPOSED DECIDUOUS SHRUB
- PROPOSED EVERGREEN SHRUB
- 12-ABC / 31E PLANT QUANTITY AND SYMBOL
- STATIONING POINT
- PROPOSED ORNAMENTAL GRASSES
- PROPOSED PERENNIALS

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	LANDSCAPE PLAN - DETAIL K	SCALE, FEET 0 50 100	SHEET 99	E

2

15 LANDSCAPE ENLARGEMENT #15

14 LANDSCAPE ENLARGEMENT #14

25 DECORATIVE STREET SIGNS ON TOP OF STOP SIGN

8 LANDSCAPE ENLARGEMENT #8

16 LANDSCAPE ENLARGEMENT #16

1 LANDSCAPE ENLARGEMENT #1

R/W

NORTH TOWNE ROAD

BARK MULCH (TYP)

PI 26+10.02

PI 184+46.05

MATCH LINE - STA. 431+00

MATCH LINE - STA. 446+00

435NB

440NB

445NB

USH 51

PI 436+56.37

PI 431+91.36

PI 431+25.92

PI 431+21.15

CORN CRIB

VINBURN ROAD

PHASE II - CURRENT BID DOCUMENTS

PHASE I - BID DOCUMENTS

1-COP 1-ASG 2-QRA 3-PPG 3-QBC 1-ASG 3-PPG 1-QBC 3-PAB 1-GTK 2-GTK 1-TTS 3-ASG 2-PGD 3-ULF

PLANT KEY

SYMBOL	COMMON NAME
TXD	Baldcypress
CTS	Catalpa, Northern
GDO	Coffeetree, Kentucky
ULF	Elm, Frontier
COP	Hackberry, Prairie Pride
GTK	Honeylocust, Skyline
TTS	Linden, Silver
ASG	Maple, Green Mountain Sugar
AFS	Maple, Sienna Glen
QMC	Oak, Bur
QBC	Oak, Swamp White
ASS	Silver Maple, Cutleaf
CVW	Hawthorn, Winter King
AGA	Serviceberry, Autumn Brilliance
JVC	Juniper, Canaert
PGD	Spruce, Black Hills
PPG	Spruce, Green Colorado
PAB	Spruce, Norway

LEGEND

- PROPOSED FENCE SEE ROADWAY PLANS
- R/W PROPOSED R.O.W.
- SLOPE INTERCEPT LINE
- EXISTING TREES TO REMAIN
- PROPOSED SHADE TREE
- PROPOSED EVERGREEN TREE
- PROPOSED ORNAMENTAL TREE
- PROPOSED DECIDUOUS SHRUB
- PROPOSED EVERGREEN SHRUB
- 12-ABC 31E PLANT QUANTITY AND SYMBOL
- STATIONING POINT
- PROPOSED ORNAMENTAL GRASSES
- PROPOSED PERENNIALS

N

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	LANDSCAPE PLAN - DETAIL L	SCALE, FEET 0 50 100	SHEET 100	E

2

2

LANDSCAPE ENLARGEMENT #2 (2)

NORTH TOWNE ROAD

R/W

INL

SIGN

90-HRR
88-SPT
22-BAG
10-NWL
3-RAG
38-SPT
19-SPT
5-NWL
14-NWL
6-JSA
4-RAG
4-JSA
BARK MULCH (TYP)

2-ULF
6-PPG
3-QMC
3-PPG
3-ASG
3-QBC
1-PAB
3-PPG
1-QBC
2-QBC
3-JVC
2-PAB
1-QRA
3-AFS

USH 51

450NB
455NB
460NB

MATCH LINE - STA. 446+00

MATCH LINE - STA. 461+00

VINBURN ROAD

LANDSCAPE ENLARGEMENT #17 (17)

LANDSCAPE ENLARGEMENT #9 (9)

DECORATIVE POLE FOR STOP SIGN AT NW CORNER (23)

PLANT KEY

SYMBOL	COMMON NAME
TXD	Baldcypress
CTS	Catalpa, Northern
GDO	Coffeetree, Kentucky
ULF	Elm, Frontier
COP	Hackberry, Prairie Pride
GTK	Honeylocust, Skyline
TTS	Linden, Silver
ASG	Maple, Green Mountain Sugar
AFS	Maple, Sienna Glen
QMC	Oak, Bur
QBC	Oak, Swamp White
ASS	Silver Maple, Cutleaf
CVW	Hawthorn, Winter King
AGA	Serviceberry, Autumn Brilliance
JVC	Juniper, Canaert
PGD	Spruce, Black Hills
PPG	Spruce, Green Colorado
PAB	Spruce, Norway

N

LEGEND

- PROPOSED FENCE SEE ROADWAY PLANS
- R/W PROPOSED R.O.W.
- SLOPE INTERCEPT LINE
- EXISTING TREES TO REMAIN
- PROPOSED SHADE TREE
- PROPOSED EVERGREEN TREE
- PROPOSED ORNAMENTAL TREE
- PROPOSED DECIDUOUS SHRUB
- PROPOSED EVERGREEN SHRUB
- 12-ABC / 31E PLANT QUANTITY AND SYMBOL
- STATIONING POINT
- PROPOSED ORNAMENTAL GRASSES
- PROPOSED PERENNIALS

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	LANDSCAPE PLAN - DETAIL M	SCALE, FEET 0 50 100	SHEET 101	E

2

BLEACHERS

R/W

200 205 210

U.S.H. 51

NORTH TOWNE ROAD

PI 210+64.33

3-PAB
1N 3N 4N 5N 2N

3-QBC
7N

1-TTS
9N

16N 17N
4-PPG
1-TTS

1-QMC
12N 15N 13N 14N

18N 19N
2-ASG

6N
1-ASG

8N 11N
2-CTS

10N
1-PAB

475

USH 51

MATCH LINE - STA. 461+00

465NB

PC 469+27.02

470NB

PI 472+00.00

PI 473+40.00

PC 474+50.27

475NB

475

PI 476+01.40

MATCH LINE - STA. 476+00

R/W

PLANT KEY

SYMBOL	COMMON NAME
TXD	Baldcypress
CTS	Catalpa, Northern
GDO	Coffeetree, Kentucky
ULF	Elm, Frontier
COP	Hackberry, Prairie Pride
GTK	Honeylocust, Skyline
TTS	Linden, Silver
ASG	Maple, Green Mountain Sugar
AFS	Maple, Sienna Glen
QMC	Oak, Bur
QBC	Oak, Swamp White
ASS	Silver Maple, Cutleaf
CVW	Hawthorn, Winter King
AGA	Serviceberry, Autumn Brilliance
JVC	Juniper, Canaert
PGD	Spruce, Black Hills
PPG	Spruce, Green Colorado
PAB	Spruce, Norway

N

LEGEND

- PROPOSED FENCE SEE ROADWAY PLANS
- R/W PROPOSED R.O.W.
- SLOPE INTERCEPT LINE
- EXISTING TREES TO REMAIN
- PROPOSED SHADE TREE
- PROPOSED EVERGREEN TREE
- PROPOSED ORNAMENTAL TREE
- PROPOSED DECIDUOUS SHRUB
- PROPOSED EVERGREEN SHRUB
- 12-ABC / 31E PLANT QUANTITY AND SYMBOL
- STATIONING POINT
- PROPOSED ORNAMENTAL GRASSES
- PROPOSED PERENNIALS

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	LANDSCAPE PLAN - DETAIL N	SCALE, FEET 0 50 100	SHEET 102	E

DECORATIVE STREET SIGNS ON TOP OF STOP SIGN (26)

STREET TREES ALONG NORTH TOWNE RD. TO START AND END AT STATIONING NOTED ON THIS PLAN. SPACE AT 35' O.C. AND 2.5' OFF B.O.C. (TYP)

LANDSCAPE ENLARGEMENT #4 (4)

LANDSCAPE ENLARGEMENT #10 (10)

LANDSCAPE ENLARGEMENT #3 (3)

HOLUM STREET

NORTH TOWNE ROAD

USH 51

STA 220+1.5 STREET TREE

STA 220+0.5 STREET TREE

STA 230+31 STREET TREES

MATCH LINE STA. 230+51

MATCH LINE - STA. 476+00

MATCH LINE - STA. 491+00

2-QMC
2-ULF
3-COP
2-AGA
4-GTK
4-ULF
4-QBC
3-GDO
3-GTK
2-SRI
3-QMC
5-COP
3-SRI
3-AGA
3-GTK
5-ULF
3-AGA
6-QBC
1-GDO
4-PAB
1-COP
3-PPG
1-PAB
5-QBC
3-ASG
1-QMC
1-GDO
1-PPG
3-TXD

PLANT KEY

SYMBOL	COMMON NAME
TXD	Baldcypress
CTS	Catalpa, Northern
GDO	Coffeestree, Kentucky
ULF	Elm, Frontier
COP	Hackberry, Prairie Pride
GTK	Honeylocust, Skyline
TTS	Linden, Silver
ASG	Maple, Green Mountain Sugar
AFS	Maple, Sienna Glen
QMC	Oak, Bur
QBC	Oak, Swamp White
ASS	Silver Maple, Cutleaf
CVW	Hawthorn, Winter King
AGA	Serviceberry, Autumn Brilliance
JVC	Juniper, Canaert
PGD	Spruce, Black Hills
PPG	Spruce, Green Colorado
PAB	Spruce, Norway

LEGEND

- PROPOSED FENCE SEE ROADWAY PLANS
- R/W PROPOSED R.O.W.
- SLOPE INTERCEPT LINE
- EXISTING TREES TO REMAIN
- PROPOSED SHADE TREE
- PROPOSED EVERGREEN TREE
- PROPOSED ORNAMENTAL TREE
- PROPOSED DECIDUOUS SHRUB
- PROPOSED EVERGREEN SHRUB
- 12-ABC PLANT QUANTITY AND SYMBOL
- 31E STATIONING POINT
- PROPOSED ORNAMENTAL GRASSES
- PROPOSED PERENNIALS

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	LANDSCAPE PLAN - DETAIL O	SCALE, FEET 0 50 100	SHEET 103	E

MATCH LINE - STA. 27+45

MATCH LINE - STA. 491+00

MATCH LINE - STA. 506+00

7'-6" SOD LAWN PERIMETER (TYP)

7'-6" SOD LAWN PERIMETER (TYP)

7'-6" SOD LAWN PERIMETER (TYP)

BARK MULCH AND ALUM. EDGER AT TREES WITH 36-INCH SOD LAWN PERIMETER (TYP)

LANDSCAPE ENLARGEMENT #II (11)

6 LANDSCAPE ENLARGEMENT #6

USH 51

495NB

500NB

505NB

R/W

MIDDLETON

14P 15P 16P 17P 18P 19P 20P 1-ASS 1-GDO 3-PGD 3-PPG 3-ULF 66P 67P 68P 69P 70P 71P 72P 73P 74P 190-SPT 3-AFS

23P 24P 25P 26P 27P 28P 29P 30P 2-ASS 2-COP 2-TXD 160-SPT 1-GDO 1-ULF

1P 2P 3P 4P 5P 6P 7P 8P 9P 10P 11P 12P 13P 1-PAB 1-TTS 1-QBC 3-PPG 4-ASG 3-CVW 56P 57P 58P 59P 60P 61P 62P 63P 64P 65P

21P 22P 1-PPG 2-AFS 53P 88-SPT

40P EDGER 41P 42P 43P 44P 45P 3-SRI 3-PPG

46P 47P 48P 49P 50P 51P 52P 3-PAB 4-ASG 1-QBC

31P 32P 33P 34P 35P 36P 37P 38P 39P EDGER 1-GDO 3-TTS 1-PPG 1-QMC 1-ULF 3-AFS

54P P55 1-TXD

PLANT KEY	
SYMBOL	COMMON NAME
TXD	Baldcypress
CTS	Catalpa, Northern
GDO	Coffeetree, Kentucky
ULF	Elm, Frontier
COP	Hackberry, Prairie Pride
GTK	Honeylocust, Skyline
TTS	Linden, Silver
ASG	Maple, Green Mountain Sugar
AFS	Maple, Sienna Glen
QMC	Oak, Bur
QBC	Oak, Swamp White
ASS	Silver Maple, Cutleaf
CVW	Hawthorn, Winter King
AGA	Serviceberry, Autumn Brilliance
JVC	Juniper, Canaert
PGD	Spruce, Black Hills
PPG	Spruce, Green Colorado
PAB	Spruce, Norway

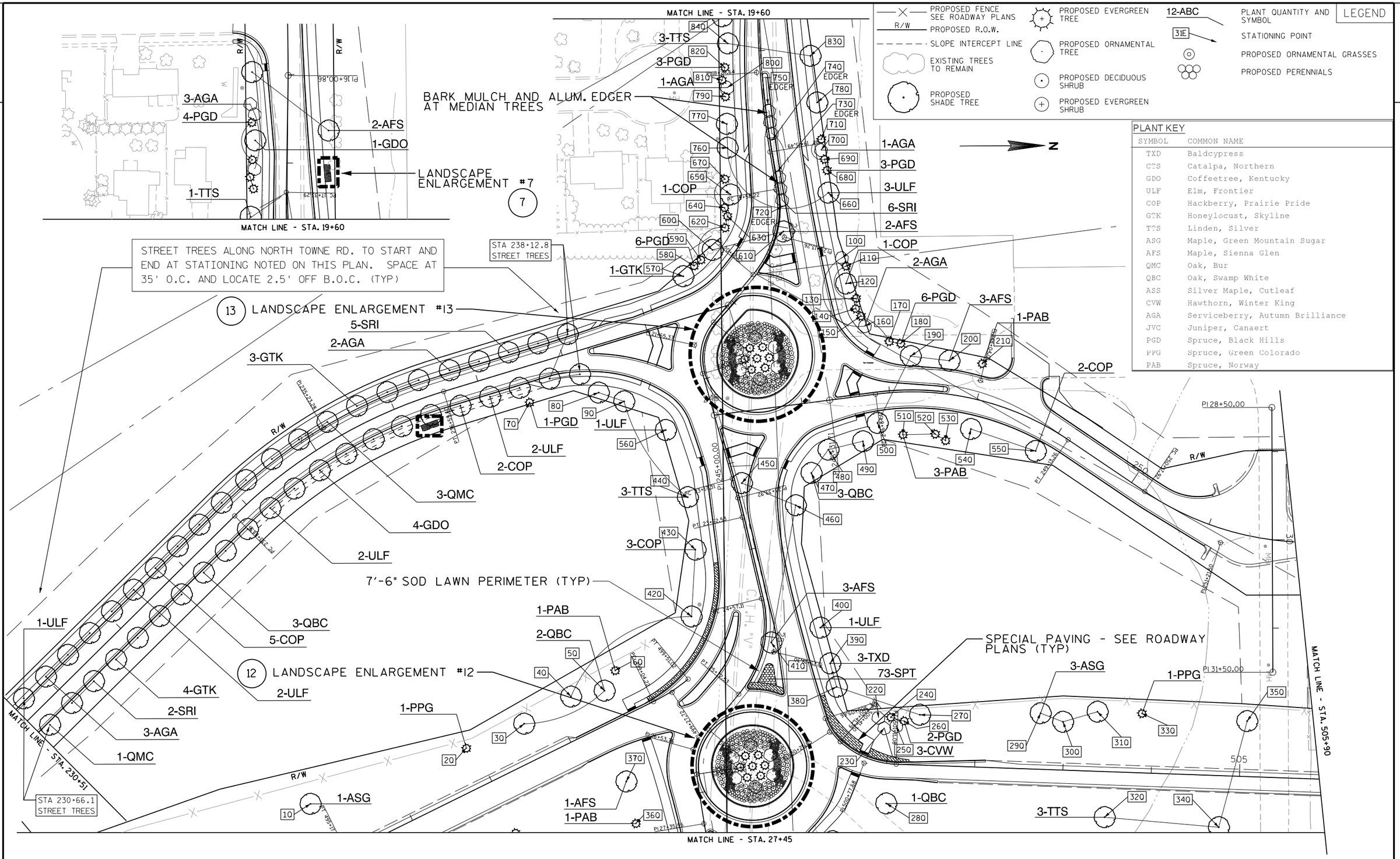
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LEGEND

- PROPOSED FENCE SEE ROADWAY PLANS
- R/W PROPOSED R.O.W.
- SLOPE INTERCEPT LINE
- EXISTING TREES TO REMAIN
- PROPOSED SHADE TREE
- PROPOSED EVERGREEN TREE
- PROPOSED ORNAMENTAL TREE
- PROPOSED DECIDUOUS SHRUB
- PROPOSED EVERGREEN SHRUB
- 12-ABC / 31E PLANT QUANTITY AND SYMBOL
- STATIONING POINT
- PROPOSED ORNAMENTAL GRASSES
- PROPOSED PERENNIALS

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	LANDSCAPE PLAN - DETAIL P	SCALE, FEET 0 50 100	SHEET 104	E

2



PLANT KEY

SYMBOL	COMMON NAME
TXD	Baldcypress
CTS	Catalpa, Northern
GDO	Coffeetree, Kentucky
ULF	Elm, Frontier
COP	Hackberry, Prairie Pride
GTK	Honeylocust, Skyline
TTS	Linden, Silver
ASG	Maple, Green Mountain Sugar
AFS	Maple, Sienna Glen
QMC	Oak, Bur
QBC	Oak, Swamp White
ASS	Silver Maple, Cutleaf
CVW	Hawthorn, Winter King
AGA	Serviceberry, Autumn Brilliance
JVC	Juniper, Canaert
PGD	Spruce, Black Hills
PPG	Spruce, Green Colorado
PAB	Spruce, Norway

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	LANDSCAPE PLAN - DETAIL Q	SCALE, FEET 0 50 100	SHEET 105	E

2

2

PI 252+69.74

5-PPG

1-PAB

2R
1R
4R
3R
5R
6R
7R
9R
8R

2-GDO

1-QRA

SIGN

510

515

520

R/W

PI 519+99.71

USH 51

PI 506+92.63

510NB

515NB

520NB

PI 516+99.71

PI 519+39.86

520

MATCH LINE - STA. 506+00

U.S.H. 51

510

515

PT 510+43.08

PI 508+94.88

PT 513+13.84

R/W

10R

11R

2-QRA

PI 508+15.44

W

TANKS

T

CORN CRIB

N

PLANT KEY

SYMBOL	COMMON NAME
TXD	Baldcypress
CTS	Catalpa, Northern
GDO	Coffeetree, Kentucky
ULF	Elm, Frontier
COP	Hackberry, Prairie Pride
GTK	Honeylocust, Skyline
TTS	Linden, Silver
ASG	Maple, Green Mountain Sugar
AFS	Maple, Sienna Glen
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ASS	Silver Maple, Cutleaf
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PGD	Spruce, Black Hills
PPG	Spruce, Green Colorado
PAB	Spruce, Norway

LEGEND

- PROPOSED FENCE SEE ROADWAY PLANS
- R/W PROPOSED R.O.W.
- SLOPE INTERCEPT LINE
- EXISTING TREES TO REMAIN
- PROPOSED SHADE TREE
- PROPOSED EVERGREEN TREE
- PROPOSED ORNAMENTAL TREE
- PROPOSED DECIDUOUS SHRUB
- PROPOSED EVERGREEN SHRUB
- 12-ABC / 31E PLANT QUANTITY AND SYMBOL
- STATIONING POINT
- PROPOSED ORNAMENTAL GRASSES
- PROPOSED PERENNIALS

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	LANDSCAPE PLAN - DETAIL R	SCALE, FEET 0 50 100	SHEET 106	E

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WISDOT/CADDS SHEET 42

DETAIL K

POINT	STATION	OFFSET
1K	162+64.69 'TOWNE'	35.42
2K	163+00.49 'TOWNE'	97.13
3K	163+66.32 'TOWNE'	32.30
4K	163+99.05 'TOWNE'	33.13
5K	167+39.09 'TOWNE'	116.65

DETAIL Q

POINT	STATION	OFFSET
10	495+04.07 'SB ON RAMP'	-67.91
20	496+90.62 'SB ON RAMP'	-46.61
30	497+61.71 'SB ON RAMP'	-42.28
40	498+22.92 'SB ON RAMP'	-46.38
50	498+59.90 'SB ON RAMP'	-35.56
60	498+80.73 'SB ON RAMP'	-50.90
70	237+49.05 'TOWNE'	40.04
80	238+27.24 'TOWNE'	52.21
90	238+51.89 'TOWNE'	70.10
100	246+66.34 'TOWNE'	-158.04
110	246+69.57 'TOWNE'	-148.39
120	246+67.19 'TOWNE'	-128.53
130	246+76.24 'TOWNE'	-110.59
140	246+74.12 'TOWNE'	-99.18
150	246+79.11 'TOWNE'	-90.01
160	246+82.16 'TOWNE'	-77.94
170	247+03.50 'TOWNE'	-58.03
180	247+14.43 'TOWNE'	-55.02
190	247+24.14 'TOWNE'	-40.38
200	247+63.30 'TOWNE'	-37.81
210	247+96.30 'TOWNE'	-40.97
220	500+68.25 'SB EXIT RAMP'	-47.33
230	500+86.51 'SB EXIT RAMP'	-38.63
240	500+93.66 'SB EXIT RAMP'	-52.33
250	501+08.73 'SB EXIT RAMP'	-43.18
260	501+18.13 'SB EXIT RAMP'	-49.38
270	501+35.86 'SB EXIT RAMP'	-56.93
280	501+04.31 'SB EXIT RAMP'	45.16
290	502+72.41 'SB EXIT RAMP'	-63.50
300	502+98.14 'SB EXIT RAMP'	-54.66
310	503+36.79 'SB EXIT RAMP'	-67.50
320	503+48.97 'SB EXIT RAMP'	51.66
330	503+86.97 'SB EXIT RAMP'	-67.39
340	504+78.65 'SB EXIT RAMP'	58.52
350	505+06.56 'SB EXIT RAMP'	-62.81
360	27+23.08 'CTH V'	76.59
370	26+77.39 'CTH V'	80.10
380	25+27.53 'CTH V'	-93.96
390	25+13.62 'CTH V'	-79.56
400	24+88.90 'CTH V'	-63.50
410	25+05.76 'CTH V'	-9.54
420	24+62.27 'CTH V'	81.61
430	23+86.18 'CTH V'	60.09
440	23+24.26 'CTH V'	54.21
450	23+25.10 'CTH V'	-9.08
460	23+63.20 'CTH V'	-62.12
470	23+34.03 'CTH V'	-88.07
480	23+15.28 'CTH V'	-113.67
490	23+16.86 'CTH V'	-153.87
500	23+01.32 'CTH V'	-175.49
510	23+20.98 'CTH V'	-199.40
520	23+28.41 'CTH V'	-234.85
530	23+36.63 'CTH V'	-244.22
540	23+32.55 'CTH V'	-275.54
550	23+65.46 'CTH V'	-340.64
560	22+43.88 'CTH V'	57.55
570	21+13.66 'CTH V'	59.60
580	20+96.78 'CTH V'	58.01
590	20+86.62 'CTH V'	56.33
600	20+69.53 'CTH V'	53.18

DETAIL L

POINT	STATION	OFFSET
1L	169+78.36 'TOWNE'	119.68
2L	170+19.70 'TOWNE'	40.86
3L	170+32.00 'TOWNE'	128.21
4L	170+71.32 'TOWNE'	127.74
5L	170+84.02 'TOWNE'	121.00
6L	171+08.15 'TOWNE'	122.69
7L	171+48.45 'TOWNE'	125.16
8L	173+24.00 'TOWNE'	161.15
9L	174+05.81 'TOWNE'	65.02
10L	174+24.78 'TOWNE'	160.07
11L	174+82.40 'TOWNE'	79.47
12L	175+15.96 'TOWNE'	80.82
13L	175+37.57 'TOWNE'	98.88
14L	175+52.29 'TOWNE'	92.84
15L	178+47.14 'TOWNE'	111.38
16L	179+00.38 'TOWNE'	88.67
17L	179+76.61 'TOWNE'	180.26
18L	180+24.56 'TOWNE'	100.02
19L	181+20.26 'TOWNE'	86.06
20L	181+77.27 'TOWNE'	179.70
21L	181+91.51 'TOWNE'	167.58
22L	182+14.87 'TOWNE'	179.94
23L	183+21.36 'TOWNE'	168.04
24L	183+26.95 'TOWNE'	65.62
25L	183+53.77 'TOWNE'	179.09
26L	183+64.44 'TOWNE'	107.87
27L	183+71.81 'TOWNE'	189.75
28L	183+82.02 'TOWNE'	169.67
29L	183+86.13 'TOWNE'	205.97
30L	183+96.23 'TOWNE'	118.94

DETAIL O

POINT	STATION	OFFSET
610	20+04.40 'CTH V'	-9.50
620	20+23.39 'CTH V'	55.35
630	19+98.20 'CTH V'	56.18
640	19+80.36 'CTH V'	60.40
650	19+55.60 'CTH V'	52.00
660	19+67.45 'CTH V'	-58.04
670	19+37.15 'CTH V'	55.57
680	19+46.38 'CTH V'	-60.11
690	19+33.79 'CTH V'	-59.38
700	19+22.94 'CTH V'	-57.39
710	19+10.42 'CTH V'	-59.60
*720	19+77.55 'CTH V'	-5.65
*730	19+38.38 'CTH V'	-4.86
*740	19+01.98 'CTH V'	-5.16
*750	18+61.77 'CTH V'	-5.24
760	19+03.44 'CTH V'	46.47
770	18+77.68 'CTH V'	43.79
780	18+66.04 'CTH V'	-60.89
790	18+47.96 'CTH V'	41.93
800	18+38.45 'CTH V'	38.62
810	18+29.72 'CTH V'	44.04
820	18+16.09 'CTH V'	39.85
830	18+09.34 'CTH V'	-57.94
840	17+90.36 'CTH V'	34.73

DETAIL M

POINT	STATION	OFFSET
1M	185+03.11 'TOWNE'	189.26
2M	185+22.73 'TOWNE'	104.61
3M	185+30.13 'TOWNE'	198.04
4M	185+45.42 'TOWNE'	111.51
5M	185+56.04 'TOWNE'	100.89
6M	186+09.76 'TOWNE'	183.90
7M	186+20.87 'TOWNE'	91.50
8M	186+48.23 'TOWNE'	109.65
9M	186+72.55 'TOWNE'	92.91
10M	187+31.30 'TOWNE'	100.11
11M	187+46.78 'TOWNE'	90.60
12M	187+75.20 'TOWNE'	198.93
13M	187+94.43 'TOWNE'	183.02
14M	188+07.00 'TOWNE'	200.88
15M	188+79.40 'TOWNE'	78.89
16M	189+40.70 'TOWNE'	57.28
17M	189+98.70 'TOWNE'	185.11
18M	190+13.21 'TOWNE'	192.65
19M	190+41.59 'TOWNE'	182.65
20M	190+78.05 'TOWNE'	85.63
21M	190+79.77 'TOWNE'	177.42
22M	191+08.54 'TOWNE'	76.81
23M	191+26.87 'TOWNE'	95.42
24M	191+79.82 'TOWNE'	84.77
25M	191+80.72 'TOWNE'	189.09
26M	192+03.98 'TOWNE'	57.47
27M	192+72.51 'TOWNE'	170.72
28M	193+21.69 'TOWNE'	79.29
29M	195+55.37 'TOWNE'	75.26
30M	195+71.70 'TOWNE'	186.20
31M	196+30.35 'TOWNE'	49.54
32M	196+32.93 'TOWNE'	192.41
33M	196+47.72 'TOWNE'	182.73
34M	196+51.86 'TOWNE'	66.99
35M	197+21.55 'TOWNE'	82.21
36M	198+09.49 'TOWNE'	173.78

DETAIL R

POINT	STATION	OFFSET
1R	506+34.98 'SB EXIT RAMP'	-49.80
2R	506+43.29 'SB EXIT RAMP'	-62.91
3R	506+64.40 'SB EXIT RAMP'	-54.60
4R	506+92.19 'SB EXIT RAMP'	-63.54
5R	508+01.12 'SB EXIT RAMP'	-48.29
6R	508+24.04 'SB EXIT RAMP'	-51.68
7R	508+38.97 'SB EXIT RAMP'	-57.85
8R	508+80.90 'SB EXIT RAMP'	-53.83
9R	509+07.40 'SB EXIT RAMP'	-48.12
10R	508+25.07 'NB ON RAMP'	39.65
11R	509+92.05 'NB ON RAMP'	42.56

DETAIL N

POINT	STATION	OFFSET
1N	200+06.93 'TOWNE'	88.89
2N	200+53.26 'TOWNE'	158.53
3N	200+74.04 'TOWNE'	74.81
4N	200+89.02 'TOWNE'	85.49
5N	201+18.76 'TOWNE'	81.25
6N	202+85.41 'TOWNE'	148.90
7N	204+10.89 'TOWNE'	57.88
8N	208+13.04 'TOWNE'	158.02
9N	208+87.48 'TOWNE'	71.95
10N	208+99.10 'TOWNE'	180.81
11N	209+41.48 'TOWNE'	163.97
12N	212+25.56 'TOWNE'	169.73
13N	212+59.00 'TOWNE'	164.68
14N	212+84.96 'TOWNE'	173.69
15N	213+01.30 'TOWNE'	161.88
16N	213+20.00 'TOWNE'	84.31
17N	213+44.98 'TOWNE'	80.32
18N	213+91.86 'TOWNE'	156.86
19N	214+22.26 'TOWNE'	170.54

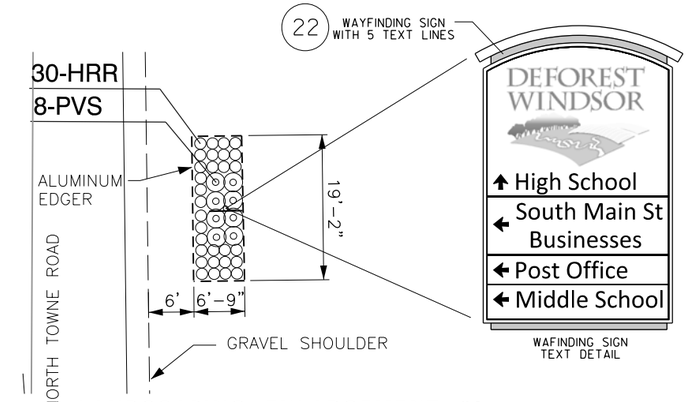
DETAIL O

POINT	STATION	OFFSET
10	215+12.66 'TOWNE'	63.01
20	215+25.54 'TOWNE'	78.30
30	215+45.69 'TOWNE'	57.88
40	215+68.43 'TOWNE'	74.12
50	216+13.56 'TOWNE'	148.77
60	216+24.51 'TOWNE'	85.46
70	216+49.70 'TOWNE'	83.59
80	216+75.48 'TOWNE'	147.95
90	217+19.99 'TOWNE'	70.10
100	217+85.34 'TOWNE'	66.19
110	218+66.95 'TOWNE'	57.99
120	219+02.37 'TOWNE'	133.24
130	219+23.58 'TOWNE'	119.62
140	219+75.57 'TOWNE'	54.46
150	219+97.50 'TOWNE'	56.35
160	220+09.29 'TOWNE'	50.42
170	220+87.31 'TOWNE'	60.51
180	221+44.87 'TOWNE'	62.19
190	221+65.29 'TOWNE'	49.96
200	487+41.03 'NB EXIT RAMP'	-65.60
210	488+16.94 'NB EXIT RAMP'	-59.17
220	489+38.85 'NB EXIT RAMP'	-59.39
230	489+84.65 'NB EXIT RAMP'	-79.80
240	490+12.37 'NB EXIT RAMP'	-61.42

DETAIL P

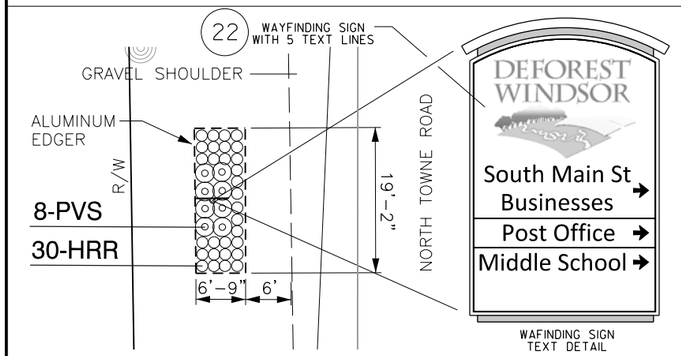
POINT	STATION	OFFSET
1P	491+75.99 'NB EXIT RAMP'	-66.96
2P	491+93.67 'NB EXIT RAMP'	-59.16
3P	492+06.62 'NB EXIT RAMP'	-71.54
4P	494+05.97 'NB EXIT RAMP'	-79.15
5P	494+19.27 'NB EXIT RAMP'	-61.79
6P	494+32.17 'NB EXIT RAMP'	-74.51
7P	494+54.31 'NB EXIT RAMP'	-64.73
8P	495+07.27 'NB EXIT RAMP'	-112.07
9P	495+66.07 'NB EXIT RAMP'	-69.26
10P	495+83.13 'NB EXIT RAMP'	-87.88
11P	496+12.35 'NB EXIT RAMP'	-75.30
12P	496+25.75 'NB EXIT RAMP'	-65.85
13P	497+00.90 'NB EXIT RAMP'	-75.72
14P	494+37.40 'SB ON RAMP'	-30.58
15P	495+08.41 '51 NB'	-147.22
16P	495+94.34 '51 NB'	-144.16
17P	496+67.15 '51 NB'	-228.55
18P	496+94.08 '51 NB'	-227.22
19P	497+04.46 '51 NB'	-245.21
20P	502+99.28 '51 NB'	-122.10
21P	499+59.54 'NB ON RAMP'	54.19
22P	499+78.44 'NB ON RAMP'	33.18
23P	500+55.24 'NB ON RAMP'	-136.49
24P	500+74.57 'NB ON RAMP'	-158.92
25P	500+61.42 'NB ON RAMP'	-81.79
26P	501+85.30 'NB ON RAMP'	-59.89
27P	502+49.84 'NB ON RAMP'	35.02
28P	503+11.63 'NB ON RAMP'	-65.35
29P	503+95.19 'NB ON RAMP'	33.96
30P	504+41.27 'NB ON RAMP'	33.71
31P	35+90.59 'CTH V'	-45.04
32P	35+63.96 'CTH V'	-65.58
33P	35+33.38 'CTH V'	50.43
34P	35+06.54 'CTH V'	66.79
35P	34+75.78 'CTH V'	73.36
36P	34+75.60 'CTH V'	-9.40
37P	34+46.50 'CTH V'	57.55
38P	34+68.12 'CTH V'	-99.57
*39P	34+42.54 'CTH V'	-10.33
*40P	34+02.46 'CTH V'	-11.45
41P	34+32.59 'CTH V'	-92.86
42P	34+17.02 'CTH V'	-87.23
43P	34+06.26 'CTH V'	-98.04
44P	33+78.09 'CTH V'	-11.55
45P	33+48.98 'CTH V'	-12.46
46P	33+08.59 'CTH V'	271.32
47P	33+12.73 'CTH V'	243.40
48P	33+18.43 'CTH V'	216.39
49P	33+12.49 'CTH V'	203.07
50P	33+07.51 'CTH V'	131.54
51P	33+26.70 'CTH V'	99.13
52P	32+99.92 'CTH V'	95.92
53P	33+10.15 'CTH V'	-139.56
54P	32+64.37 'CTH V'	168.49
55P	32+50.25 'CTH V'	57.28
56P	31+55.00 'CTH V'	116.57
57P	31+56.29 'CTH V'	102.78
58P	31+50.96 'CTH V'	109.41
59P	31+51.46 'CTH V'	96.82
60P	31+51.90 'CTH V'	83.63
61P	31+47.07 'CTH V'	80.83
62P	31+36.83 'CTH V'	62.53
63P	31+39.33 'CTH V'	116.86
64P	31+00.46 'CTH V'	62.09
65P	30+09.12 'CTH V'	-11.15
66P	28+17.70 'CTH V'	111.00
67P	28+11.91 'CTH V'	88.23
68P	28+02.74 'CTH V'	106.53
69P	27+94.92 'CTH V'	71.15
70P	28+25.76 'CTH V'	-10.08
71P	28+14.94 'CTH V'	-118.67
72P	27+66.57 'CTH V'	59.89
73P	27+80.46 'CTH V'	-139.99
74P	27+46.96 'CTH V'	77.79

NOTE:
* EDGE OF BARK MULCH BEDS.



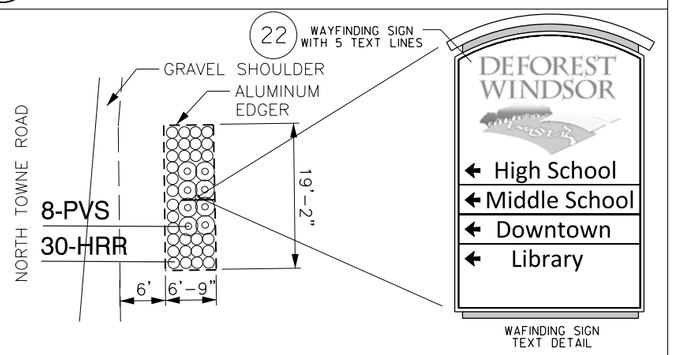
LANDSCAPING ENLARGEMENT #1
WAYFINDING AT VINBURN & NORTH TOWNE ROAD – STA 182+77.3

1



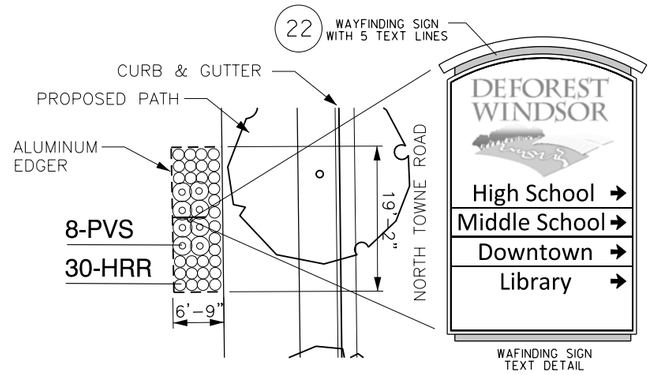
LANDSCAPING ENLARGEMENT #2
WAYFINDING AT VINBURN AND NORTH TOWNE ROAD – STA 187+69.3

2



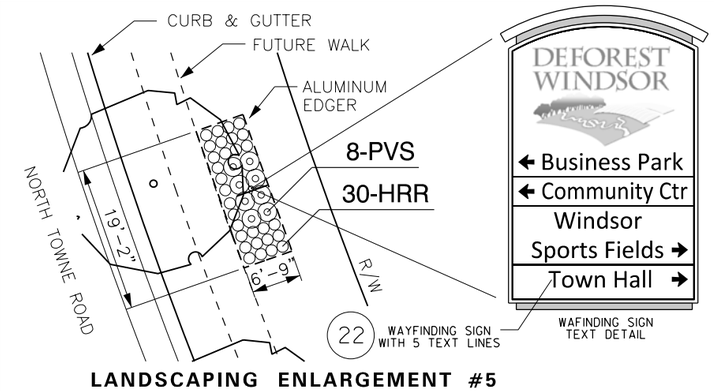
LANDSCAPING ENLARGEMENT #3
WAYFINDING AT HOLUM ST AND NORTH TOWNE ROAD – STA 215+34.0

3



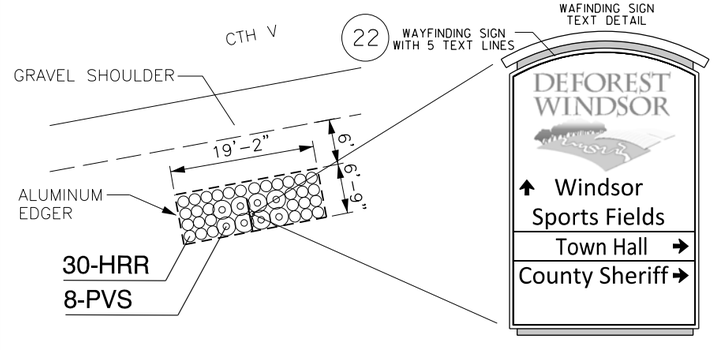
LANDSCAPING ENLARGEMENT #4
WAYFINDING AT HOLUM ST AND NORTH TOWNE ROAD – STA 222+40.4

4



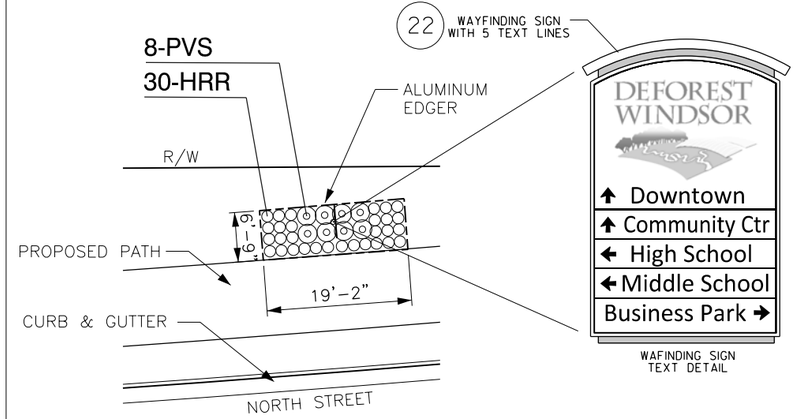
LANDSCAPING ENLARGEMENT #5
WAYFINDING AT NORTH ST AND NORTH TOWNE ROAD – STA 233+68

5



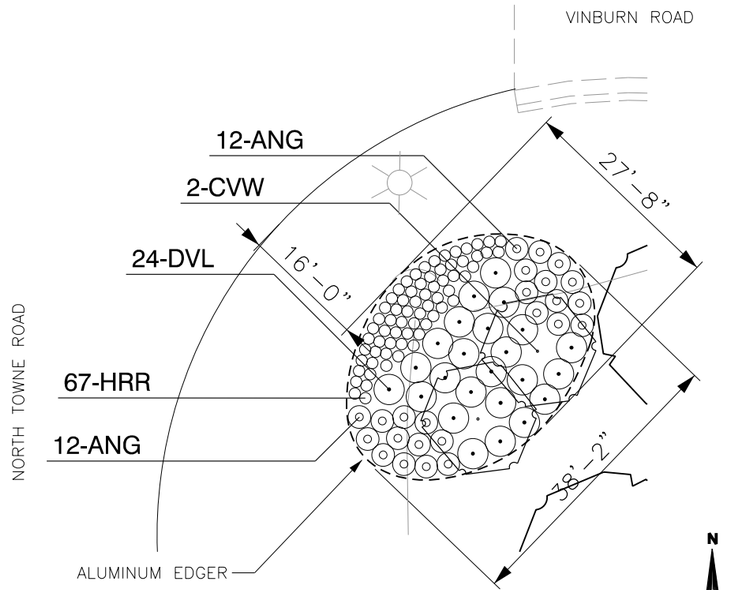
LANDSCAPING ENLARGEMENT #6
WAYFINDING AT CTH V AND LINDE FIELDS – STA 36+72.2

6



LANDSCAPING ENLARGEMENT #7
WAYFINDING AT NORTH AND HALSOR STREET – STA 17+12

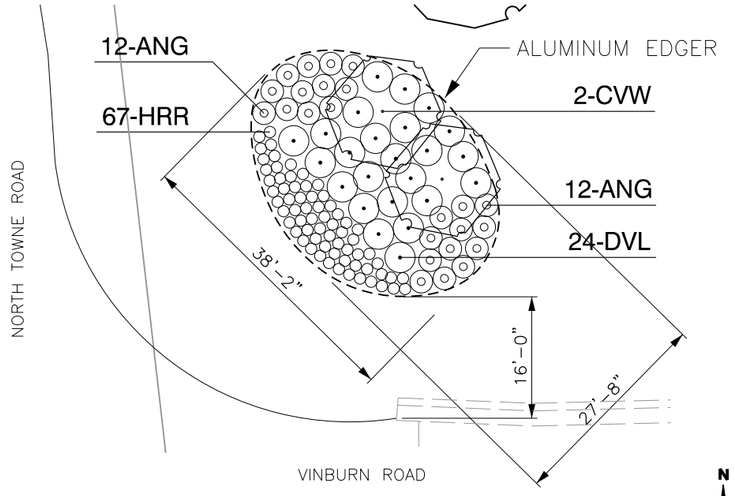
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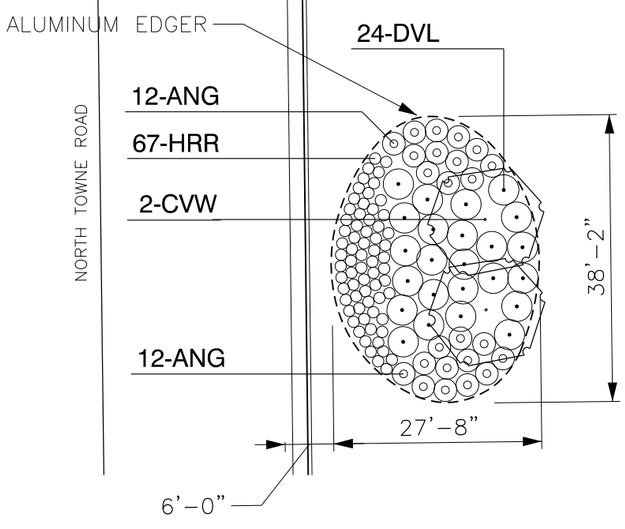
LANDSCAPING ENLARGEMENT #8
PLANT BED AT STA 184+00

8

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	LANDSCAPE ENLARGEMENTS	SCALE, FEET 0 10 20	SHEET 108	E

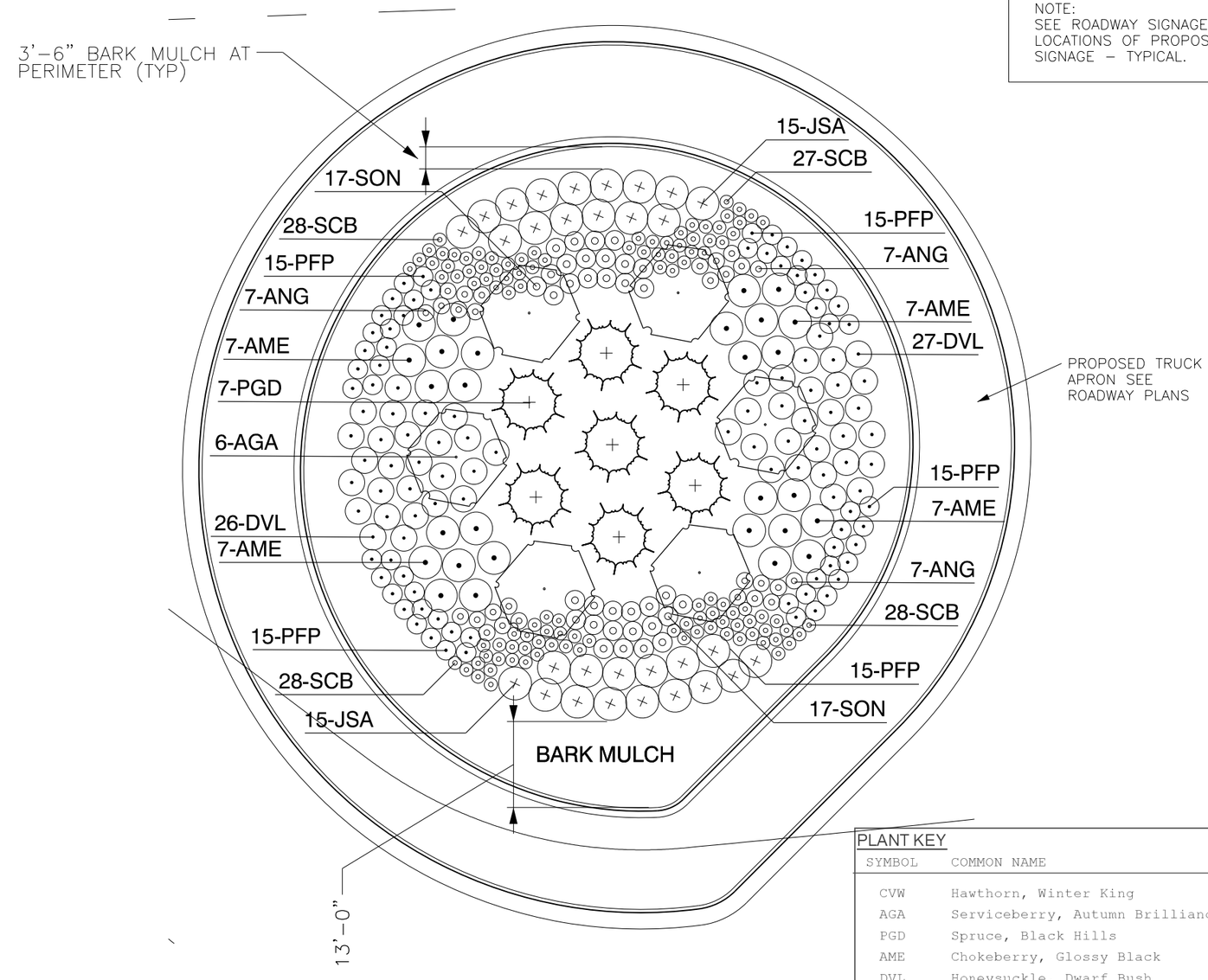


9 **LANDSCAPING ENLARGEMENT #9**
PLANT BED AT STA 185+00



10 **LANDSCAPING ENLARGEMENT #10**
PLANT BED AT STA 219+00

NOTE:
SEE ROADWAY SIGNAGE PLANS FOR LOCATIONS OF PROPOSED ROADWAY SIGNAGE – TYPICAL.

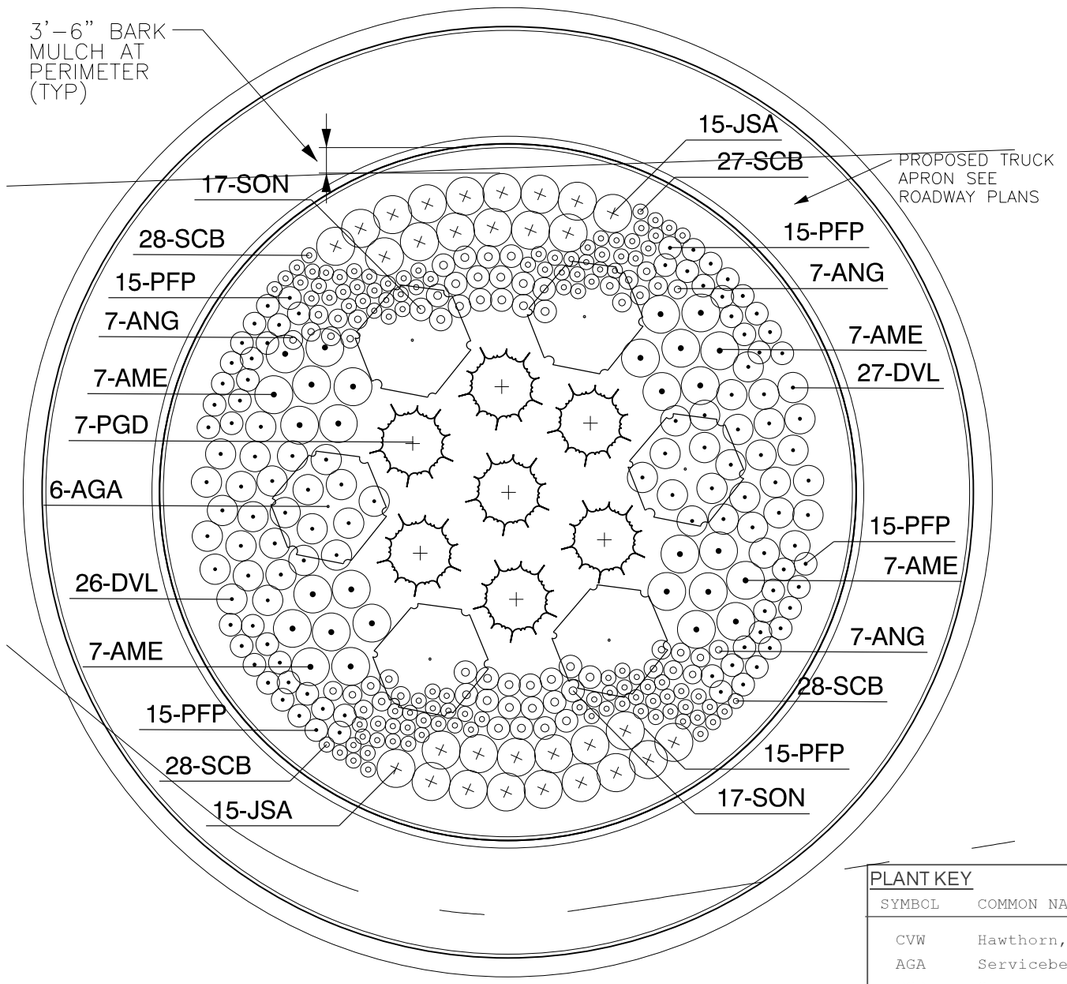


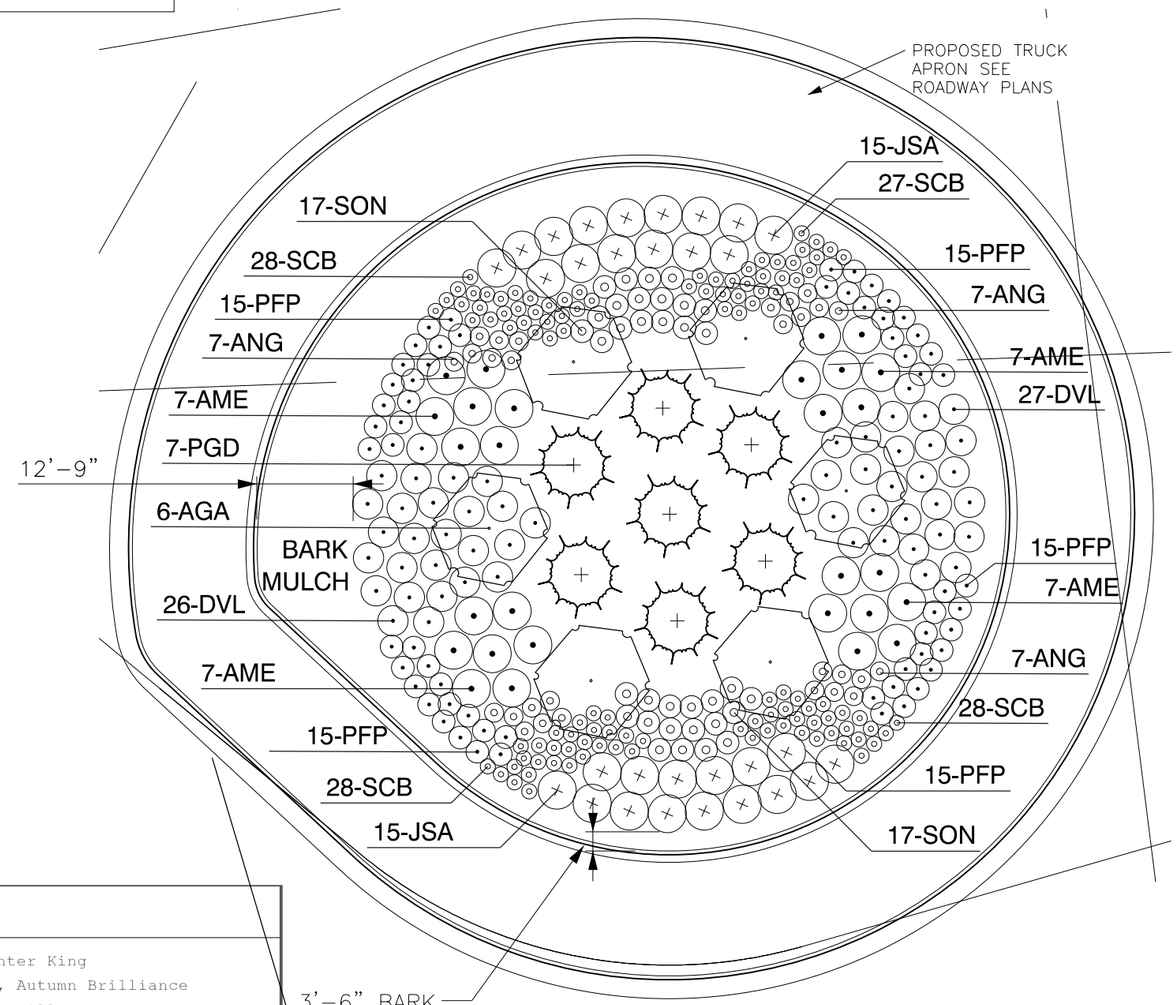
PLANT KEY

SYMBOL	COMMON NAME
CVW	Hawthorn, Winter King
AGA	Serviceberry, Autumn Brilliance
PGD	Spruce, Black Hills
AME	Chokeberry, Glossy Black
DVL	Honeysuckle, Dwarf Bush
PFP	Potentilla, Pink Beauty
JSA	Juniper, Arcadia
JCK	Juniper, Kallay's Compact Pfitzer
HRR	Daylily, Rosy Returns
ANG	Grass, Big Bluestem
SON	Grass, Indiangrass
SPH	Grass, Prairie Dropseed
PVS	Grass, Shenandoah Switch
SCB	Grass, The Blues Little Bluestem

11 **LANDSCAPING ENLARGEMENT #11 – EAST ROUNDABOUT AT STA 32+00**

NOTE:
SEE ROADWAY SIGNAGE PLANS FOR LOCATIONS OF PROPOSED WAYFINDING SIGNS – TYPICAL.





PLANT KEY

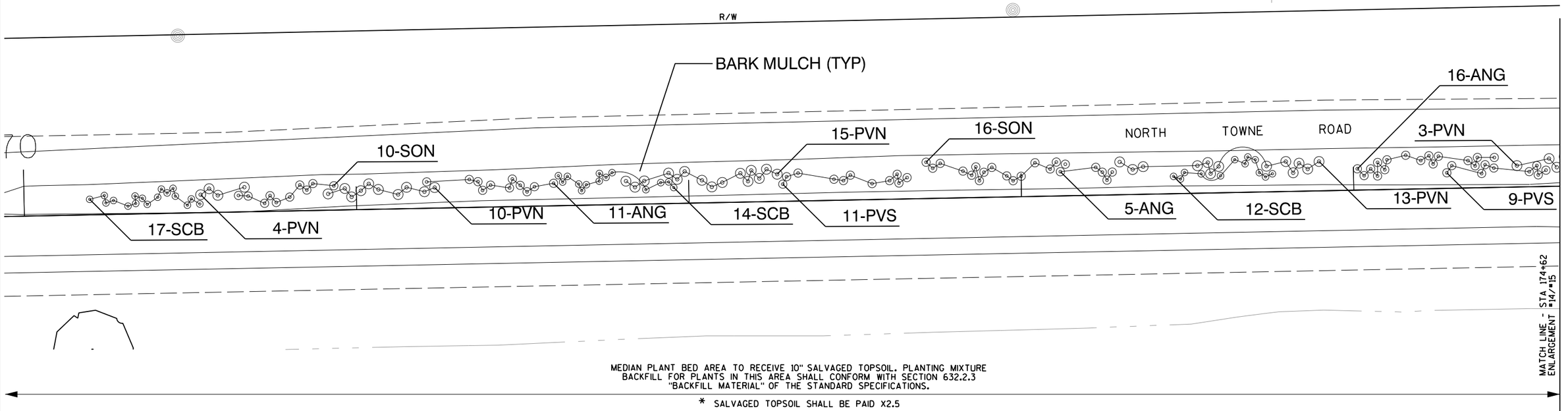
SYMBOL	COMMON NAME
CVW	Hawthorn, Winter King
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ANG	Grass, Big Bluestem
SON	Grass, Indiangrass
SPH	Grass, Prairie Dropseed
PVS	Grass, Shenandoah Switch
SCB	Grass, The Blues Little Bluestem

12 **LANDSCAPING ENLARGEMENT #12 – CENTER ROUNDABOUT AT STA 26+50**

13 **LANDSCAPING ENLARGEMENT #13 – CENTER ROUNDABOUT AT STA 22+00**

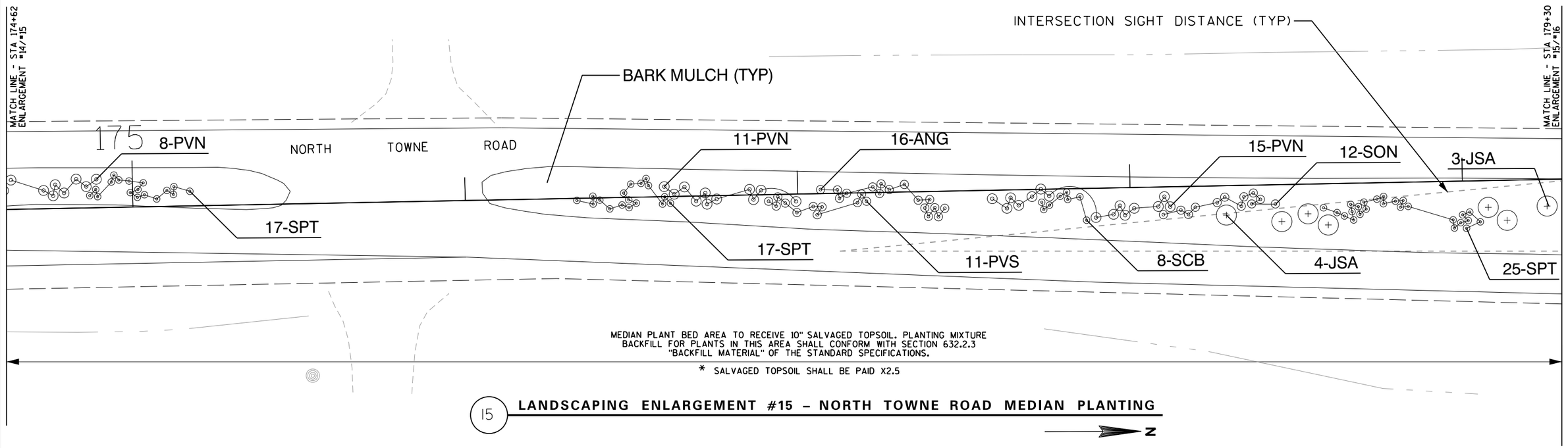
N

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	LANDSCAPE ENLARGEMENTS	SCALE, FEET 0 10 20	SHEET 110	E



14 **LANDSCAPING ENLARGEMENT #14 – NORTH TOWNE ROAD MEDIAN PLANTING**

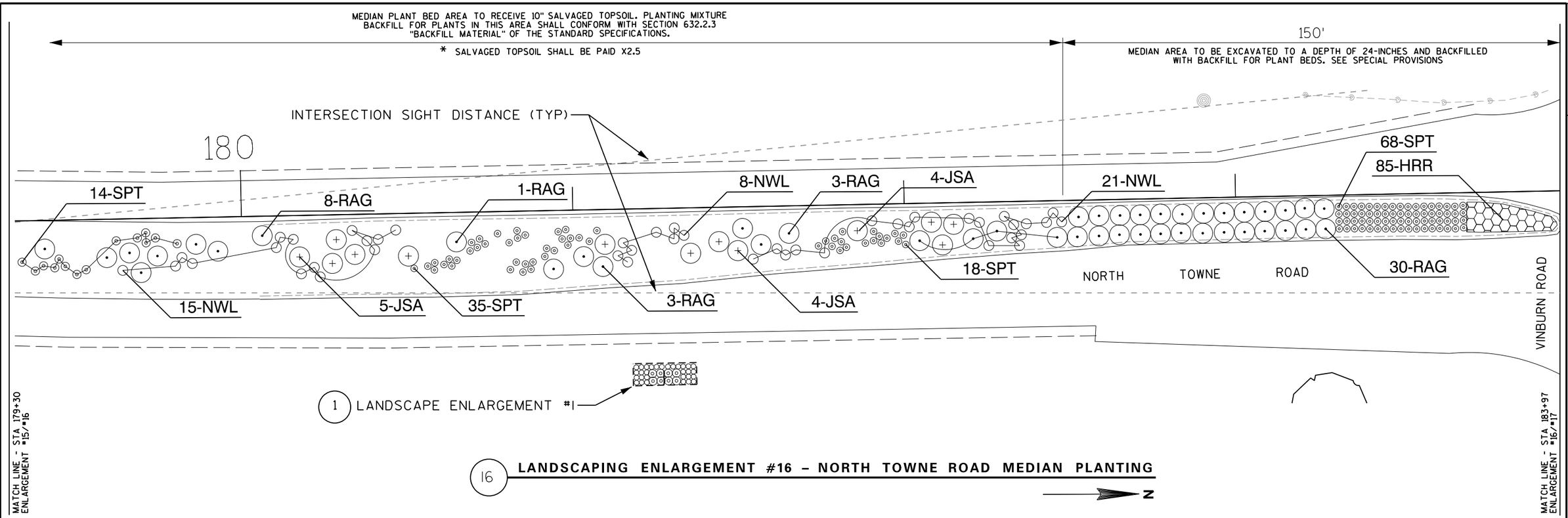
N



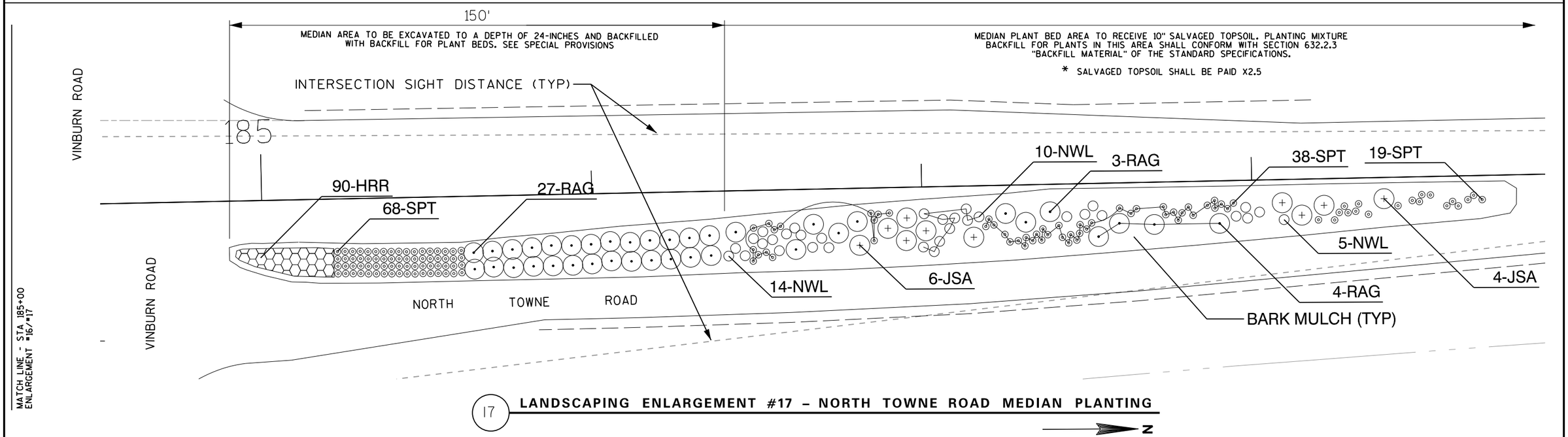
15 **LANDSCAPING ENLARGEMENT #15 – NORTH TOWNE ROAD MEDIAN PLANTING**

N

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	LANDSCAPE ENLARGEMENTS	SCALE, FEET 0 15 30	SHEET 111	E



16 **LANDSCAPING ENLARGEMENT #16 – NORTH TOWNE ROAD MEDIAN PLANTING**



17 **LANDSCAPING ENLARGEMENT #17 – NORTH TOWNE ROAD MEDIAN PLANTING**

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	LANDSCAPE ENLARGEMENTS	SCALE, FEET 0 15 30	SHEET 112	E

CONTRACTOR TO PLANT TWO DAFFODIL BULBS PER ORNAMENTAL GRASS (TYP.)

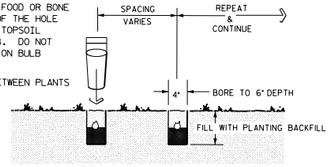
CONTRACTOR TO PLANT TWO TULIP BULBS PER PERENNIAL (TYP.)

LANDSCAPE CONTRACTOR TO PLANT BULBS IN FALL

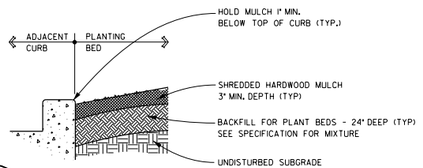
SET PERENNIAL BULBS @ DEPTH OF 2.5 TIMES THE HEIGHT OF THE BULB W/ GROWTH TIP POINTING UP.

PROVIDE EITHER BULB FOOD OR BONE MEAL IN THE BOTTOM OF THE HOLE AND THEN COVER WITH TOPSOIL BEFORE PLANTING BULB. DO NOT PLANT BULB DIRECTLY ON BULB FOOD/BONE MEAL.

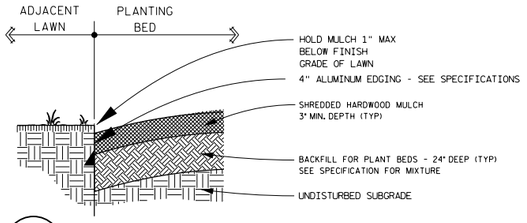
TRIANGULATE BULBS BETWEEN PLANTS



18 **BULB PLANTING DETAIL**

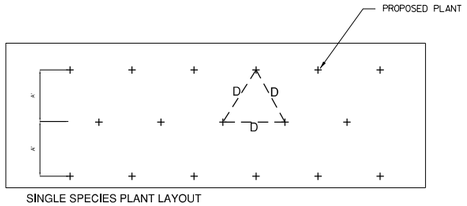


19 **PLANT BED EDGE AT CURB**



20 **ALUMINUM EDGING**

SPACING "D"	ROW "A"	NO. OF PLANTS
18"	15.6"	5.12
24"	20.8"	2.9
30"	26.0"	1.85
36"	30.0"	1.28

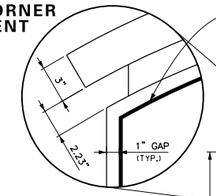


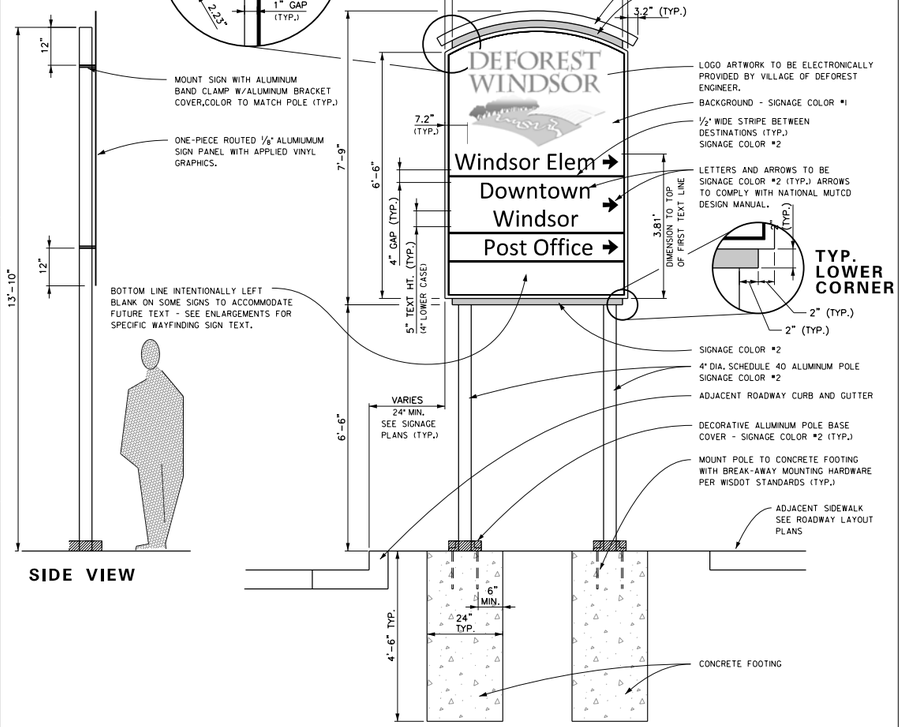
SINGLE SPECIES PLANT LAYOUT

21 **PLANT SPACING DIAGRAM FOR PERENNIALS**

ORNAMENTAL GRASSES SHALL BE LAID OUT AND INSTALLED AS INDICATED ON THE LANDSCAPE PLANS.

TYPICAL CORNER ENLARGEMENT



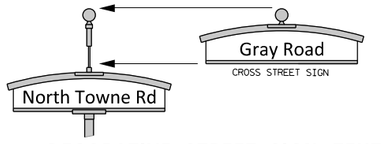


TYP. LOWER CORNER

SIDE VIEW

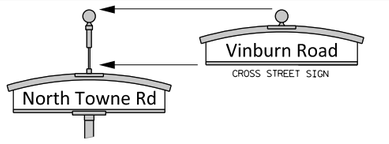
22 **TYPICAL WAYFINDING SIGN DETAIL WITH 5 TEXT LINES**

SEE LANDSCAPE PLANS FOR LOCATIONS



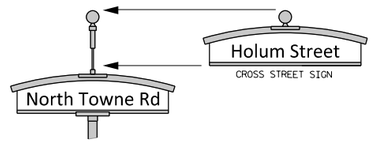
DECORATIVE STREET SIGN TEXT AT INTERSECTION OF NORTH TOWNE RD AND GRAY RD

24 THIS LOCATION FALLS WITHIN THE LIMITS OF THE PHASE I BID DOCUMENTS.



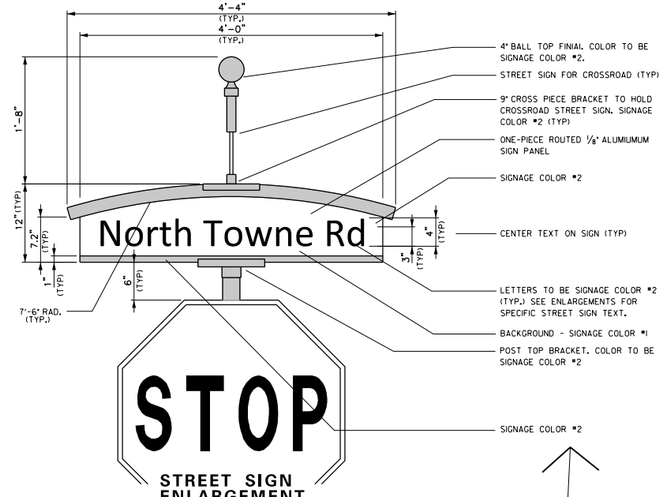
DECORATIVE STREET SIGN TEXT AT INTERSECTION OF NORTH TOWNE RD AND VINBURN ROAD

25

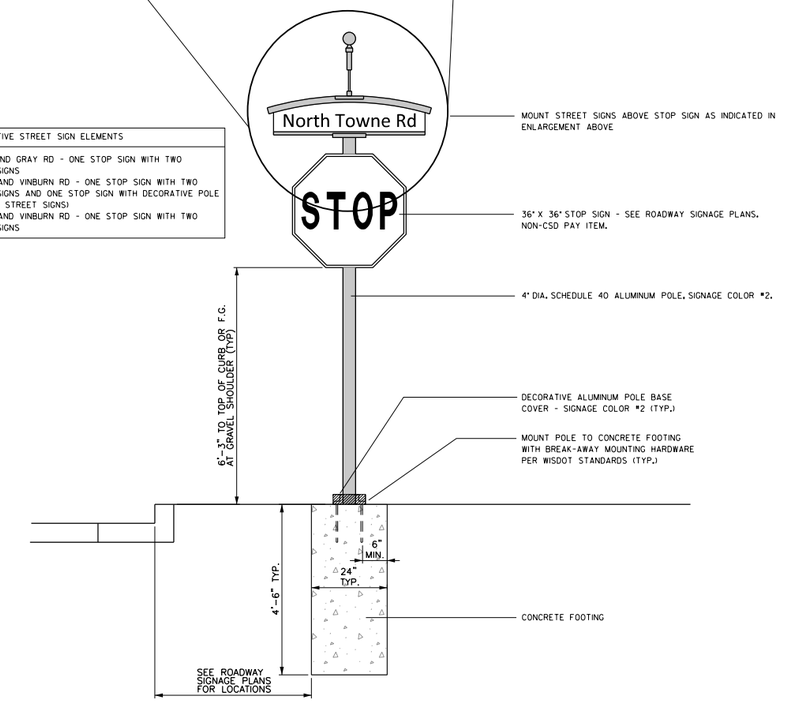


DECORATIVE STREET SIGN TEXT AT INTERSECTION OF NORTH TOWNE RD AND HOLUM ST

26



STREET SIGN ENLARGEMENT



SUMMARY OF DECORATIVE STREET SIGN ELEMENTS
1. NORTH TOWNE RD AND GRAY RD - ONE STOP SIGN WITH TWO DECORATIVE STREET SIGNS 2. NORTH TOWNE RD AND VINBURN RD - ONE STOP SIGN WITH TWO DECORATIVE STREET SIGNS AND ONE STOP SIGN WITH DECORATIVE POLE ONLY (NO DECORATIVE STREET SIGNS) 3. NORTH TOWNE RD AND VINBURN RD - ONE STOP SIGN WITH TWO DECORATIVE STREET SIGNS

23 **TYPICAL DECORATIVE STREET SIGN DETAIL**

SEE ROADWAY SIGNAGE PLANS FOR STOP SIGN LOCATIONS AND DETAILS. SEE LANDSCAPE PLANS FOR GENERAL LOCATIONS AND ENLARGEMENT DETAILS #24, #25 & #26 FOR SIGN TEXT (TYP.).

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	LANDSCAPE AND WAYFINDING SIGNAGE DETAILS		SHEET 113	E

PLANT DATA CHART

SYMBOL	COMMON NAME	SCIENTIFIC NAME	ANS TYPE	MATURE HEIGHT	SIZE WHEN PLANTED	ROOT CONDITION	MINIMUM SIZE BALL/POT ROOT DIAM.	MINIMUM SIZE BALL/POT ROOT DEPTH	MINIMUM SIZE PLANT HOLE DIAM.	MINIMUM SIZE PLANT HOLE DEPTH	BRACE OR GUY	FERTILIZER UNITS REQ'D	RODENT PROTECTION REQ'D	MULCH RING DIAM.	SPACING
	LARGE DECIDUOUS TREES														
TXD	BALDCYPRESS	TAXODIUM DISTICHUM	1T	60'	2.5"	B&B	28"	16"	52"	16"	NO	4	NO	64"*	AS SHOWN
CTS	CATALPA, NORTHERN	CATALPA SPECIOSA	1T	55'	2.5"	B&B	28"	16"	52"	16"	NO	4	NO	64"*	AS SHOWN
GDO	COFFEETREE, KENTUCKY	GYMNOCLADUS DIOICA	2T	50'	2.5"	B&B	28"	16"	52"	16"	NO	4	NO	64"*	AS SHOWN
ULF	ELM, FRONTIER	ULMUS 'FRONTIER'	1T	45'	2.5"	B&B	28"	16"	52"	16"	NO	4	NO	64"*	AS SHOWN
COP	HACKBERRY, PRAIRIE PRIDE	CELTIS OCCIDENTALIS 'PRAIRIE PRIDE'	2T	60'	2.5"	B&B	28"	16"	52"	16"	NO	4	NO	64"*	AS SHOWN
GTK	HONEYLOCUST, SKYLINE	GLEDITSIA TRIACANTHOS INERMIS 'SKYLINE'	1T	45'	2.5"	B&B	28"	16"	52"	16"	NO	4	NO	64"*	AS SHOWN
TTS	LINDEN, SILVER	TILIA TOMENTOSA 'STERLING'	1T	45'	2.5"	B&B	28"	16"	52"	16"	NO	4	NO	64"*	AS SHOWN
ASG	MAPLE, GREEN MOUNTAIN SUGAR	ACER SACCHARUM 'GREEN MOUNTAIN'	1T	45'	2.5"	B&B	28"	16"	52"	16"	NO	4	NO	64"*	AS SHOWN
AFS	MAPLE, SIENNA GLEN	ACER X FREEMANII 'SIENNA'	1T	60'	2.5"	B&B	28"	16"	52"	16"	NO	4	NO	64"*	AS SHOWN
QMC	OAK, BUR	QUERCUS MACROCARPA	1T	60'	2.0"	B&B	28"	16"	52"	16"	NO	4	NO	64"*	AS SHOWN
QBC	OAK, SWAMP WHITE	QUERCUS BICOLOR	1T	50'	2.0"	B&B	28"	16"	52"	16"	NO	4	NO	64"*	AS SHOWN
QRA	OAK, WHITE	QUERCUS ALBA	1T	60'	2.0"	B&B	28"	16"	52"	16"	NO	4	NO	64"*	AS SHOWN
ASS	SILVER MAPLE, CUTLEAF	ACER SACCHARINUM 'SKINNER'	2T	50'	2.5"	B&B	28"	16"	52"	16"	NO	4	NO	64"*	AS SHOWN
	SMALL DECIDUOUS TREES														
CVW	HAWTHORN, WINTER KING	CRATAEGUS VIRIDUS 'WINTER KING'	3T	20'	8'	B&B CLUMP	24"	14"	48"	14"	NO	3	NO	NONE	AS SHOWN
AGA	SERVICEBERRY, AUTUMN BRILLIANCE	AMELANCHIER X GRANDIFLORA 'AUTUMN BRILLIAN(	3T	20'	8'	B&B CLUMP	24"	14"	48"	14"	NO	3	NO	NONE	AS SHOWN
SRI	TREE LILAC, JAPANESE	SYRINGA RETICULATA 'IVORY SILK'	3T	25'	8'	B&B CLUMP	24"	14"	48	14"	no	3	NO	NONE	AS SHOWN
	LARGE EVERGREEN TREES														
JVC	JUNIPER, CANAERT	JUNIPERUS VIRGINIANA 'CANAERTI'	4E	25'	6'	B&B	27"	16"	51"	16"	NO	4	NO	NONE	AS SHOWN
PGD	SPRUCE, BLACK HILLS	PICEA GLAUCA VAR. DENSATA	4E	35'	6'	B&B	27"	16"	51"	16"	NO	4	NO	NONE	AS SHOWN
PPG	SPRUCE, GREEN COLORADO (NO BLUE COLOR)	PICEA PUNGENS	4E	55'	6'	B&B	27"	16"	51"	16"	NO	4	NO	NONE	AS SHOWN
PAB	SPRUCE, NORWAY	PICEA ABIES	4E	60'	6'	B&B	27"	16"	51"	16"	NO	4	NO	NONE	AS SHOWN
	DECIDUOUS SHRUBS														
AME	CHOKEBERRY, GLOSSY BLACK	ARONIA MELANOCARPA VAR. ELATA	3S	5'	30"	CG	18"	12"	38"	12"	NO	2	NO	NONE	5'
DVL	HONEYSUCKLE, DWARF BUSH	DIERVILLA LONICERA	3S	4'	18"	CG	14"	9"	36"	9"	NO	2	NO	NONE	4'
PFP	POTENTILLA, PINK BEAUTY	POTENTILLA FRUITICOSA 'PINK BEAUTY'	3S	3'	18"	CG	14"	9"	36"	9"	NO	2	NO	NONE	3'
RAG	SUMAC, GROW LOW	RHUS AROMATICA 'GROW LOW'	3S	2'	12"	CG	14"	9"	36"	9"	NO	2	NO	NONE	6'
	EVERGREEN SHRUBS														
JSA	JUNIPER, ARCADIA	JUNIPERUS SABINA 'ARCADIA'	1C	12"	24" wide	CG	14"	9"	36"	9"	NO	2	NO	NONE	5'
	PERENNIALS														
NWL	CATMINT, WALKER'S LOW	NEPETA 'WALKER'S LOW	1S	2'	12"	CG	8"	8"	18"	8"	NO	1	NO	NONE	3'
HRR	DAYLILY, ROSY RETURNS	HEMEROCALLIS 'ROSY RETURNS'	1S	20"	6"	CG	8"	8"	18"	8"	NO	1	NO	NONE	18"
	ORNAMENTAL GRASSES														
ANG	GRASS, BIG BLUESTEM	ANDROPOGON GERARDI	1S	7'	9"	CG	8"	8"	18"	8"	NO	1	NO	NONE	30"
SON	GRASS, INDIANGRASS	SORGHASTURM NUTANS	1S	6'	9"	CG	8"	8"	18"	8"	NO	1	NO	NONE	24"
PVN	GRASS, NORTHWIND SWITCH	PANICUM VIRGATUM 'NORTHWIND'	1S	6'	9"	CG	8"	8"	18"	8"	NO	1	NO	NONE	36"
SPT	GRASS, PRAIRIE DROPSEED, TARA DWARF	SPORABOLUS HETEROLEPSIS 'TARA'	1S	1.5'	6"	CG	8"	8"	18"	8"	NO	1	NO	NONE	24"
PVS	GRASS, SHENANDOAH SWITCH	PANICUM VIRGATUM 'SHENADOAH'	1S	3'	9"	CG	8"	8"	18"	8"	NO	1	NO	NONE	30"
SCB	GRASS, THE BLUES LITTLE BLUESTEM	SCHIZACHYRIUM SCOPARIUM 'THE BLUES'	1S	3'	6"	CG	8"	8"	18"	8"	NO	1	NO	NONE	24"

B&B: BALLED AND BURLAPED
CG: CONTAINER GROWN
HT: HEIGHT
BR: BARE ROOT
* MULCH RING ONLY APPLICABLE IF PLANTED OUTSIDE OF A PLANTING BED

N

SPEED LIMIT 45
R2-1
24" X 30"
1-1

SPEED LIMIT 45
R2-1
24" X 30"
1-3

DO NOT ENTER
REMOVE

DO NOT ENTER
R5-1
30" X 30"
1-7

SPEED LIMIT 45
R2-1
24" X 30"
1-8

WRONG WAY
REMOVE

WRONG WAY
R5-1A
36" X 24"
1-9

145 NT 150 NT 155 NT 160 NT 165 NT 170 NT

410 NB 415 NB 420 NB 425 NB 430 NB 435 NB

1-2

E1-5
108" X 30"
EXIT 65
V
DeForest
1 MILE

E1-1A
168" X 120"

1-4

NORTH 51 MILE 64 .5
D10-5
21" X 60"
(STA.428+60)

1-5

SOUTH 51 MILE 64 .5
D10-5
21" X 60"
(STA.428+60)

1-6

REMOVE

R4-7
24" X 30"

W5-54
18" X 18"

LEGEND

	EXISTING SIGN SINGLE/DOUBLE POSTS		PROPOSED SIGN SINGLE/DOUBLE POSTS
51	EXISTING SIGN		PROPOSED SIGN DOUBLE STEEL POSTS
ESTR	EXISTING SIGN TO REMAIN	51	NEW SIGN
1-X	SIGN NUMBER		

2

N

2-1 ONE WAY R6-2L 24" X 30"
2-2
2-3 R4-7 24" X 30"
2-4
2-5 LEFT TURN LANE REMOVE BEGIN LEFT TURN LANE R3-20L 24" X 36"
2-6 E1-5 108" X 30" EXIT 63 Windsor Rd 1 MILE E1-1A 216" X 84"
2-7 WRONG WAY REMOVE WRONG WAY R5-1A 36" X 24"
2-8 DO NOT ENTER REMOVE DO NOT ENTER R5-1 30" X 30"
2-9 REMOVE R4-7 24" X 30"
2-10 STOP REMOVE STOP R1-1 30" X 30"
2-11 STOP REMOVE STOP R1-1 30" X 30"
2-12 REMOVE R4-7 24" X 30"
2-13 DO NOT ENTER REMOVE DO NOT ENTER R5-1 30" X 30"
2-14 WRONG WAY REMOVE WRONG WAY R5-1A 36" X 24"
2-15 LEFT TURN LANE REMOVE BEGIN LEFT TURN LANE R3-20L 24" X 36"
2-16 WRONG WAY REMOVE WRONG WAY R5-1A 36" X 24"
2-17 SPEED LIMIT 45 R2-1 24" X 30"
2-18 DO NOT ENTER REMOVE DO NOT ENTER R5-1 30" X 30"
2-19 REMOVE R4-7 24" X 30" W5-54 18" X 18"
2-20 NORTH 51 MILE 65 0 D10-5 21" X 60" (STA.455+00)
2-21 SOUTH 51 MILE 65 0 D10-5 21" X 60" (STA.455+00)
2-22 2-23 SPEED LIMIT 55 R2-1 48" X 60"
2-24 W3-1 36" X 36"

ESTR NO PARKING ANY TIME
ESTR AHEAD FINES HIGHER
ESTR END SCHOOL ZONE
ESTR NO PASSING ZONE

175 NT 180 NT 185 NT 190 NT 195 NT 200 NT
435 NB 440 NB 445 NB 450 NB 455 NB 460 NB 465 NB
U.S.H. 51
VINBURN RD.
30 VI
35 VI
DeForest POPULATION 9,085

LEGEND

- EXISTING SIGN SINGLE/DOUBLE POSTS
- EXISTING SIGN
- ESTR — EXISTING SIGN TO REMAIN
- 1-X — SIGN NUMBER
- PROPOSED SIGN SINGLE/DOUBLE POSTS
- PROPOSED SIGN DOUBLE STEEL POSTS
- NEW SIGN

PROJECT NO: 6020-02-72	HWY: 51	COUNTY: DANE	PERMANENT SIGNING	SHEET 116	E

FILE NAME : P:\2011059 - US 51 WO\MicroStation\Planset\6020-02-72\023202_ps.dgn PLOT DATE : 4/25/2013 PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : 200.0000 sf / in.

2

N

205 NT
210 NT
215 NT
220 NT
225 NT
230 NT
235 NT
465 NB
470 NB
475 SN
475 NB
475 NX
480 SN
480 NB
480 NX
485 SN
485 NB
485 NX
490 SN
490 NB
490 NX
495 SN
495 NB
495 NX
USH 51

W3-5
36" X 36"
3-3

ESTR
NO PASSING ZONE

SPEED LIMIT 35
R2-1
24" X 30"
3-5

SPEED LIMIT 45
R2-1
24" X 30"
3-6

ESTR
NO PARKING ANY TIME

MOVE
NO PARKING ANY TIME

REMOVE
SPONSOR

SOUTH 51
REMOVE

MOVE
AHEAD
FINES HIGHER

STOP
REMOVE

STOP
R1-1
30" X 30"
3-8

ESTR
BUSINESS DISTRICT

REMOVE
DEFOREST

MOVE
BUSINESS DISTRICT

MOVE
NO PARKING ANY TIME

REMOVE

REMOVE
RED ONION
FRESH MARKET

DO NOT ENTER
REMOVE

WRONG WAY
REMOVE

JCT
COUNTY V
REMOVE

ALTERNATE
INTERSTATE
39
REMOVE

SPEED LIMIT 35
R2-1
24" X 30"
3-16

END SCHOOL ZONE
ESTR

NO PARKING ANY TIME
ESTR

NO PARKING ANY TIME
ESTR

NO PARKING ANY TIME
MOVE

3-1
3-2
R3-4B
36" X 48"

3-4
SOUTH ALTERNATE
51 INTERSTATE 39
J4-2
72" X 54"

3-7
EXIT 65
E1-5
108" X 30"
V
DeForest
E4-1A
204" X 90"

3-9
W1-7
48" X 24"

3-10
SOUTH 51
MILE 65 .5
D10-5
21" X 60"
(STA.481+40)

3-11
NORTH 51
MILE 65 .5
D10-5
21" X 60"
(STA.481+40)

3-12
EXIT
65
E5-1A
72" X 60"

SPONSOR
REMOVE

3-13
3-14
SPEED LIMIT 35
R2-1
24" X 30"

3-15
W4-1
48" X 48"

LEGEND

EXISTING SIGN SINGLE/DOUBLE POSTS	PROPOSED SIGN SINGLE/DOUBLE POSTS
51 EXISTING SIGN	PROPOSED SIGN DOUBLE STEEL POSTS
ESTR EXISTING SIGN TO REMAIN	51 NEW SIGN
1-X SIGN NUMBER	

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	PERMANENT SIGNING	SHEET 117	E

2

N

DEFOREST
BUSINESS PARK
REMOVE

W4-2L
36" X 36"
4-1
4-2

EXIT
65
E5-1A
72" X 60"
4-6

E1-5
108" X 30"
EXIT 65
V
DeForest
E4-1A
204" X 90"
4-8

LEFT TURN LANE
REMOVE

REMOVE

SOUTH 51
REMOVE

STOP
REMOVE

DO NOT ENTER
REMOVE

LEFT TURN LANE
REMOVE

NO PASSING ZONE
REMOVE

COUNTY V
REMOVE

WRONG WAY
REMOVE

DO NOT ENTER
REMOVE

STOP
REMOVE

COUNTY V
REMOVE

NORTH 51
REMOVE

WRONG WAY
REMOVE

DO NOT ENTER
REMOVE

REMOVE

4-3
NORTH 51
MILE 66 0
D10-5
21" X 60"
(STA.507+80)

4-4
SOUTH 51
MILE 66 0
D10-5
21" X 60"
(STA.507+80)

4-5
W4-1
48" X 48"

DeForest
POPULATION 9,085
REMOVE

4-7
NORTH ALTERNATE
51 39
INTERSTATE
J4-2
72" X 54"

COUNTY V
REMOVE

WHEELER RD

35 CV

30 CV

25 CV

20 CV

10 D1

10 D3

245 NT

235 NT

250 NT

495 SN

505 SX

510 SX

515 SX

520 SX

495 NB

500 NB

505 NB

510 NB

515 NB

520 NB

525 NB

495 NX

500 NN

505 NN

510 NN

515 NN

520 NN

525 NN

U.S.H. 51

LEGEND

	EXISTING SIGN SINGLE/DOUBLE POSTS		PROPOSED SIGN SINGLE/DOUBLE POSTS
51	EXISTING SIGN		PROPOSED SIGN DOUBLE STEEL POSTS
ESTR	EXISTING SIGN TO REMAIN	51	NEW SIGN
1-X	SIGN NUMBER		

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	PERMANENT SIGNING	SHEET 118 E

FILE NAME : P:\2011059 - US 51 WO\MicroStation\Planset\6020-02-72\023204_ps.dgn PLOT DATE : 4/25/2013 PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : 200.0000 sf / in.

WISDOT/CADDS SHEET 42

LEGEND

- EXISTING SIGN SINGLE/DOUBLE POSTS
- EXISTING SIGN
- ESTR — EXISTING SIGN TO REMAIN
- 1-X — SIGN NUMBER
- PROPOSED SIGN SINGLE/DOUBLE POSTS
- PROPOSED SIGN DOUBLE STEEL POSTS
- NEW SIGN

2

2

N

STOP AHEAD
REMOVE

5-15
DEAD END
W14-1
36" X 36"

(STA.534+20)
NORTH 51 MILE 66 .5
D10-5
21" X 60"
5-2

(STA.534+20)
SOUTH 51 MILE 66 .5
D10-5
21" X 60"
5-3

LANE ENDS MERGE RIGHT
W9-2R
48" X 48"
5-6

COUNTY V
REMOVE

W5-56
18" X 18"
5-12
5-13
5-14

CRANE RD

30 GI 10 04

525 NB
525 NN
530 NB
535 NB
540 NB
545 NB
550 SB
555 SB
555 NB

U.S.H. 51

5-1
SPEED LIMIT 55
R2-1
48" X 60"

5-4
5-5
EXCEPT MAINTENANCE AND POLICE AUTHORIZED VEHICLES
R3-4B
36" X 48"

COUNTY V
REMOVE

15 SW

NORTH 51
REMOVE

COUNTY V
REMOVE

5-7
W4-2L
48" X 48"

5-8
5-9
5-10
W5-56
18" X 18"

C1

DEAD END
W14-1
30" X 30"
5-11

40 GM

JCT 51
REMOVE

REMOVE

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	PERMANENT SIGNING	SHEET 119 E

FILE NAME : P:\2011059 - US 51 WO\MicroStation\Planset\6020-02-72\023205_ps.dgn
PLOT DATE : 4/25/2013
PLOT BY : $$...plotuser...$$ PLOT NAME :
PLOT SCALE : 200.0000 sf / in.

2

N

E1-5
108" X 30"
EXIT 65
V
DeForest
3/4 MILE

E1-1A
168" X 120"
6-3

(STA.560+60)
NORTH
51
MILE
67
0
D10-5
21" X 60"
6-4

(STA.560+60)
SOUTH
51
MILE
67
0
D10-5
21" X 60"
6-5

SEE SDD: SIGNING AND MARKING FOR TWO LANE
TO FOUR LANE DIVIDED TRANSITIONS

W6-1
36" X 36"
6-9

15 D4
20 D4
25 D4
30 D4
555 SB
555 NB
560 SB
560 NB
565 SB
565 NB
570 NB
USH 51

ALTERNATE
INTERSTATE
39
REMOVE

6-1
W6-2
36" X 36"

6-2
WRONG
WAY
R5-1A
36" X 24"

JCT
COUNTY
V
REMOVE

6-6
DO NOT
ENTER
R5-1
36" X 36"

6-7
R4-7
36" X 48"
W5-54
18" X 18"

6-8
W6-3
36" X 36"

LEGEND

EXISTING SIGN SINGLE/DOUBLE POSTS	PROPOSED SIGN SINGLE/DOUBLE POSTS
EXISTING SIGN	PROPOSED SIGN DOUBLE STEEL POSTS
ESTR EXISTING SIGN TO REMAIN	NEW SIGN
(1-X) SIGN NUMBER	

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	PERMANENT SIGNING	SHEET 120	E

2

N

35 CV

10 D1

STOP AHEAD
REMOVE

40 CV

15 D1

W1-7
48" X 24"
7-1

STOP
R1-1
30" X 30"
7-6

45 CV

50 CV

55 CV

SPEED LIMIT 35
R2-1
24" X 30"
7-9

60 CV

65 CV

15 D3

7-2

STOP
R1-1
30" X 30"

7-3

COUNTY V
J13-1
24" X 45"

7-7

NO PASSING ZONE
W14-3
48" X 36"

7-8

SPEED LIMIT 45
R2-1
24" X 30"

35 MU

7-4

W3-1
36" X 36"

7-5

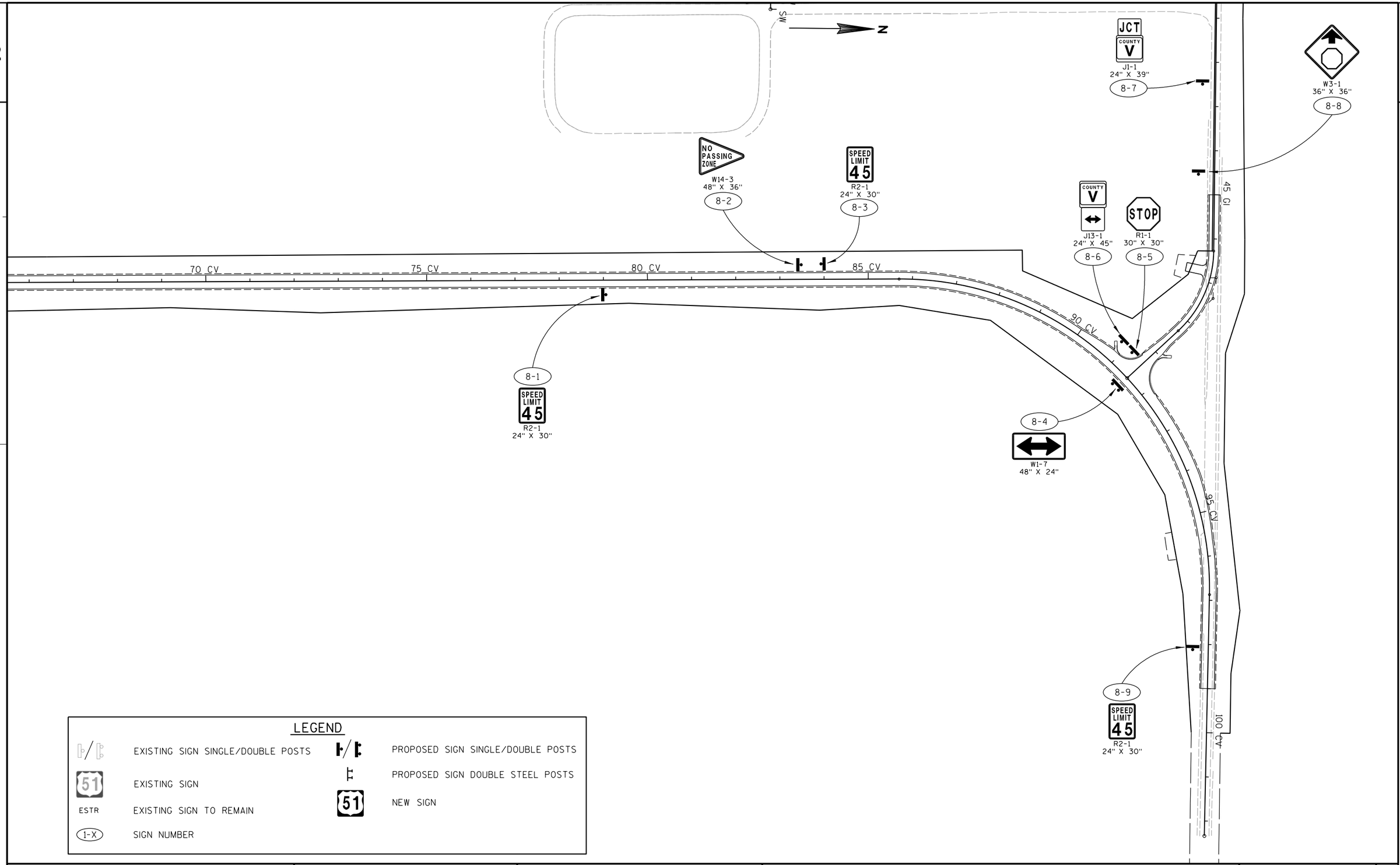
JCT COUNTY V
J1-1
24" X 39"

40 MU

LEGEND

	EXISTING SIGN SINGLE/DOUBLE POSTS		PROPOSED SIGN SINGLE/DOUBLE POSTS
51	EXISTING SIGN		PROPOSED SIGN DOUBLE STEEL POSTS
ESTR	EXISTING SIGN TO REMAIN	51	NEW SIGN
1-X	SIGN NUMBER		

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	PERMANENT SIGNING	SHEET 121	E



LEGEND

EXISTING SIGN SINGLE/DOUBLE POSTS	PROPOSED SIGN SINGLE/DOUBLE POSTS
51 EXISTING SIGN	PROPOSED SIGN DOUBLE STEEL POSTS
ESTR EXISTING SIGN TO REMAIN	51 NEW SIGN
(1-X) SIGN NUMBER	

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	PERMANENT SIGNING	SHEET 122	E

LEGEND

- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN(S) MOUNTED ON OVERHEAD SIGN SUPPORT
- PROPOSED SIGN(S) MOUNTED ON SIGN BRIDGE
- (x-xx) DENOTES SIGN NUMBER
- R REMOVABLE SIGN POST
- SIGN FLAGS PERMANENT TYPE II

N

CTH V

12+00 CV · 13+00 CV · 14+00 CV · 15+00 CV · 16+00 CV · 17+00 CV · 18+00 CV · 19+00 CV · 20+00 CV · 21+00 CV · 22+00 CV NT · 23+00 CV · 24+00

BALL COURT

249+00 NT · 248+00 NT · 247+00 NT · 246+00 NT · 245+00 NT · 239+00 NT · 238+00 NT · 237+00 NT · 236+00 NT

NORTH TOWNE ROAD

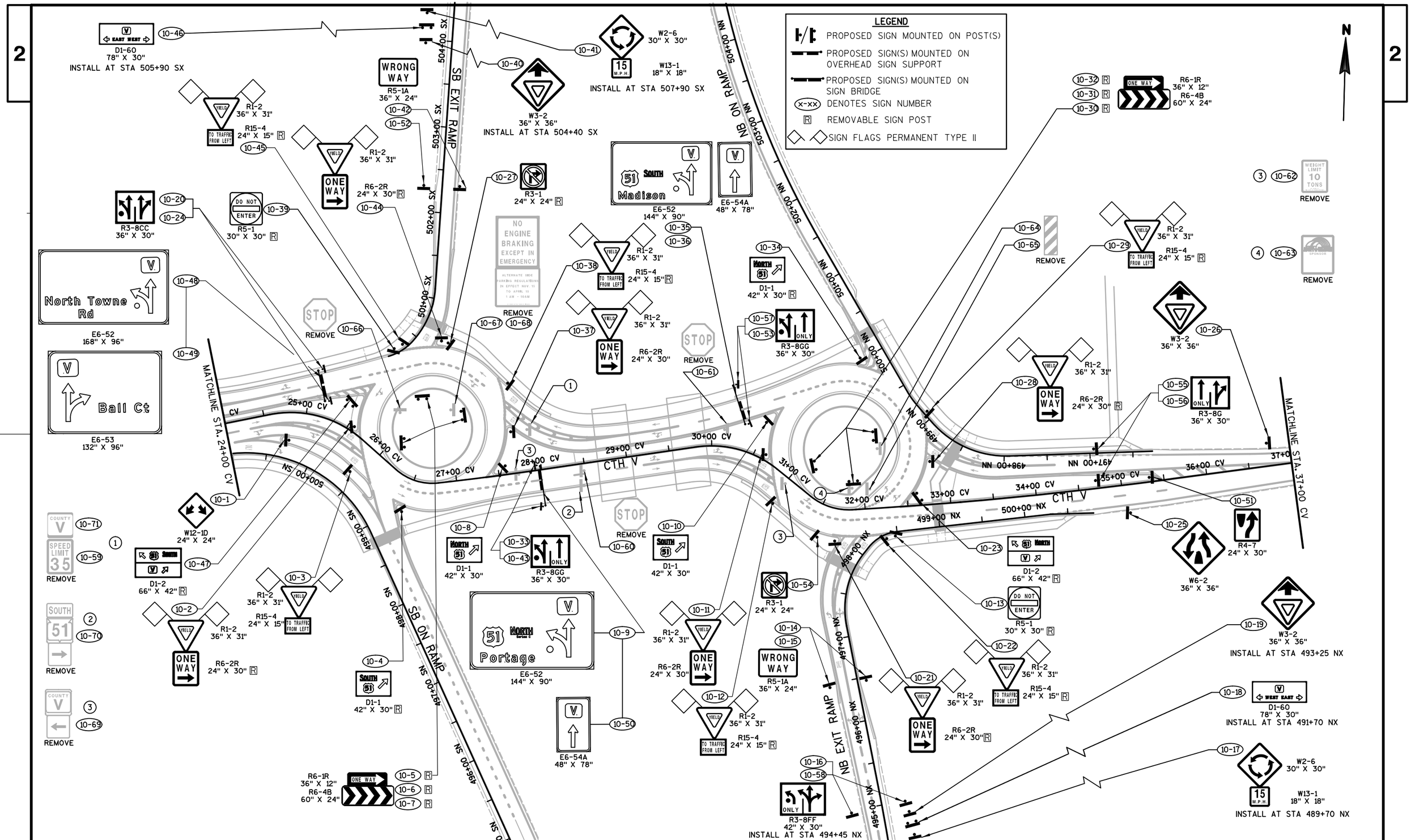
MATCHLINE STA. 24+00 CV

9-1 W2-6 30" X 30" / W13-1 18" X 18"
9-2 TO Ball Ct / North Towne Rd / 51 — D1-62 144" X 84"
9-3 W3-2 36" X 36"
9-4 R3-8CC 36" X 30"
9-5 JCT 51 — J1-1 24" X 39"
9-6 R1-2 36" X 31" / R6-2R 24" X 30" ONE WAY
9-7 R1-2 36" X 31" / R15-4 24" X 15" TO TRAFFIC FROM LEFT
9-8 COUNTY V — M1-5A 24" X 24"
9-9 Ball Ct TO 51 / North Towne Rd — D1-3 84" X 42"
9-10 R4-7 24" X 30"
9-11 R1-2 36" X 31" / R6-2R 24" X 30" ONE WAY
9-12 R3-8AAA 54" X 30"
9-13 R1-2 36" X 31" / R15-4 24" X 15" TO TRAFFIC FROM LEFT
9-14 Ball Ct TO 51 — D1-2 66" X 36"
9-15 R3-8AAA 54" X 30"
9-16 / 9-17 / 9-19
9-18 W2-6 30" X 30" / W13-1 18" X 18" — INSTALL AT STA 232+80 'NT'
9-20 R1-2 36" X 31" / R6-2R 24" X 30" ONE WAY
9-21 R1-2 36" X 31" / R15-4 24" X 15" TO TRAFFIC FROM LEFT
9-22 Ball Ct — D1-62 108" X 60" — INSTALL AT STA 234+80 'NT'
9-23 / 9-24 / 9-25 / 9-26
9-27 Ball Ct — D1-2 60" X 36"
9-28 R4-7 24" X 30"
9-29 W3-2 36" X 36"
9-30 W2-6 30" X 30" / W13-1 18" X 18" — INSTALL AT STA 251+50 'NT'
9-31 R1-2 36" X 31" / R6-2R 24" X 30" ONE WAY
9-32 North Towne Rd — D1-62 108" X 72"
9-33 R1-2 36" X 31" / R15-4 24" X 15" TO TRAFFIC FROM LEFT
9-34 North Towne Rd — D1-2 84" X 42"
9-35 / 9-36 W4-2R 36" X 36"
9-37 W6-2 36" X 36"
9-38 W3-2 36" X 36" — INSTALL AT STA 236+30 'NT'
9-39 SPEED LIMIT 35 — R2-1 24" X 30"
9-40 R4-7 24" X 30"
9-41 SOUTH 51 USE RIGHT LANE — J2-1 MOD 24" X 60"
9-42 STOP AHEAD — REMOVE
9-43 JCT 51 — REMOVE
9-44 SPEED LIMIT 35 — REMOVE
9-45 SPEED LIMIT 35 — REMOVE

51 NORTH Portage — E6-54A 84" X 90"
V — E6-54A 48" X 78"
51 SOUTH Madison — E6-54R 84" X 90"

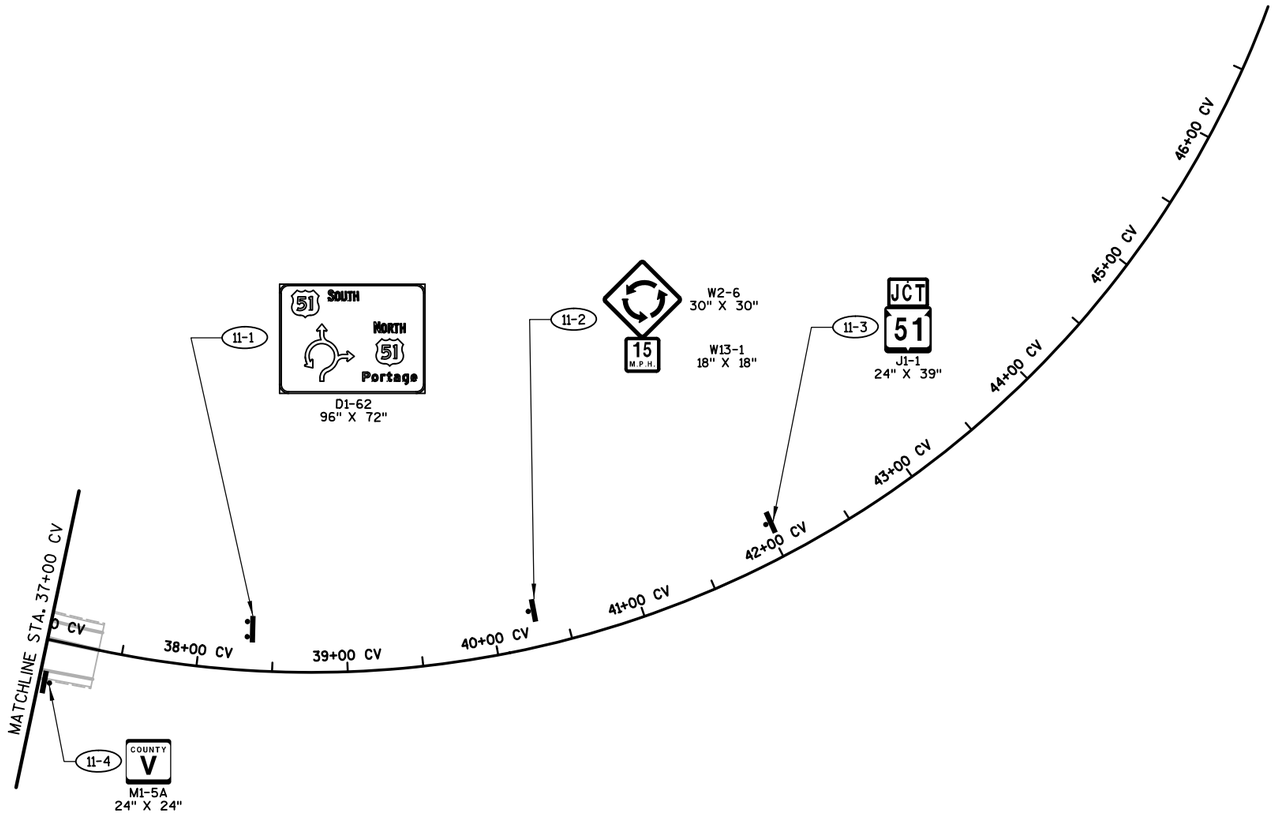
PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	PERMANENT SIGNING	SHEET E

FILE NAME : S:\MAD\1000--1099\1089\234\Micros\PLAN\0272\023201_ps.dgn PLOT DATE : 4/17/2013 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$



PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	PERMANENT SIGNING	SHEET 124	E

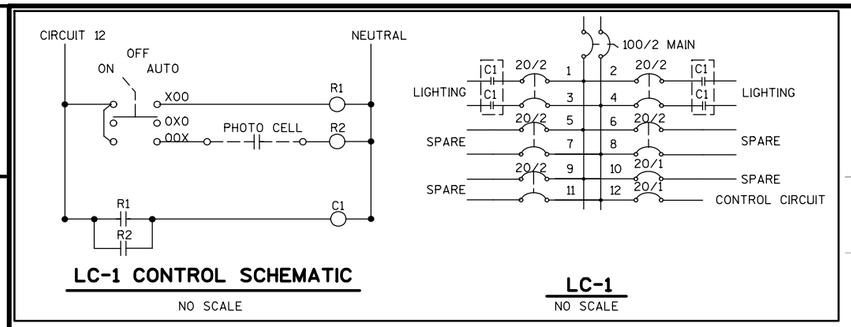
2



LEGEND

- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN(S) MOUNTED ON OVERHEAD SIGN SUPPORT
- PROPOSED SIGN(S) MOUNTED ON SIGN BRIDGE
- (X-XX) DENOTES SIGN NUMBER
- R REMOVABLE SIGN POST
- SIGN FLAGS PERMANENT TYPE II

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	PERMANENT SIGNING	SHEET 125	E

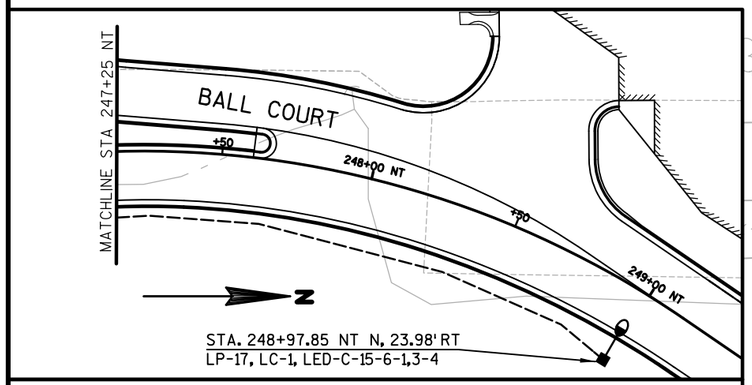


LC-1 CONTROL SCHEMATIC
NO SCALE

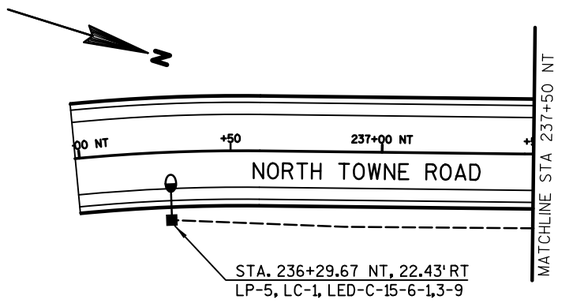
LC-1
NO SCALE

NOTES:

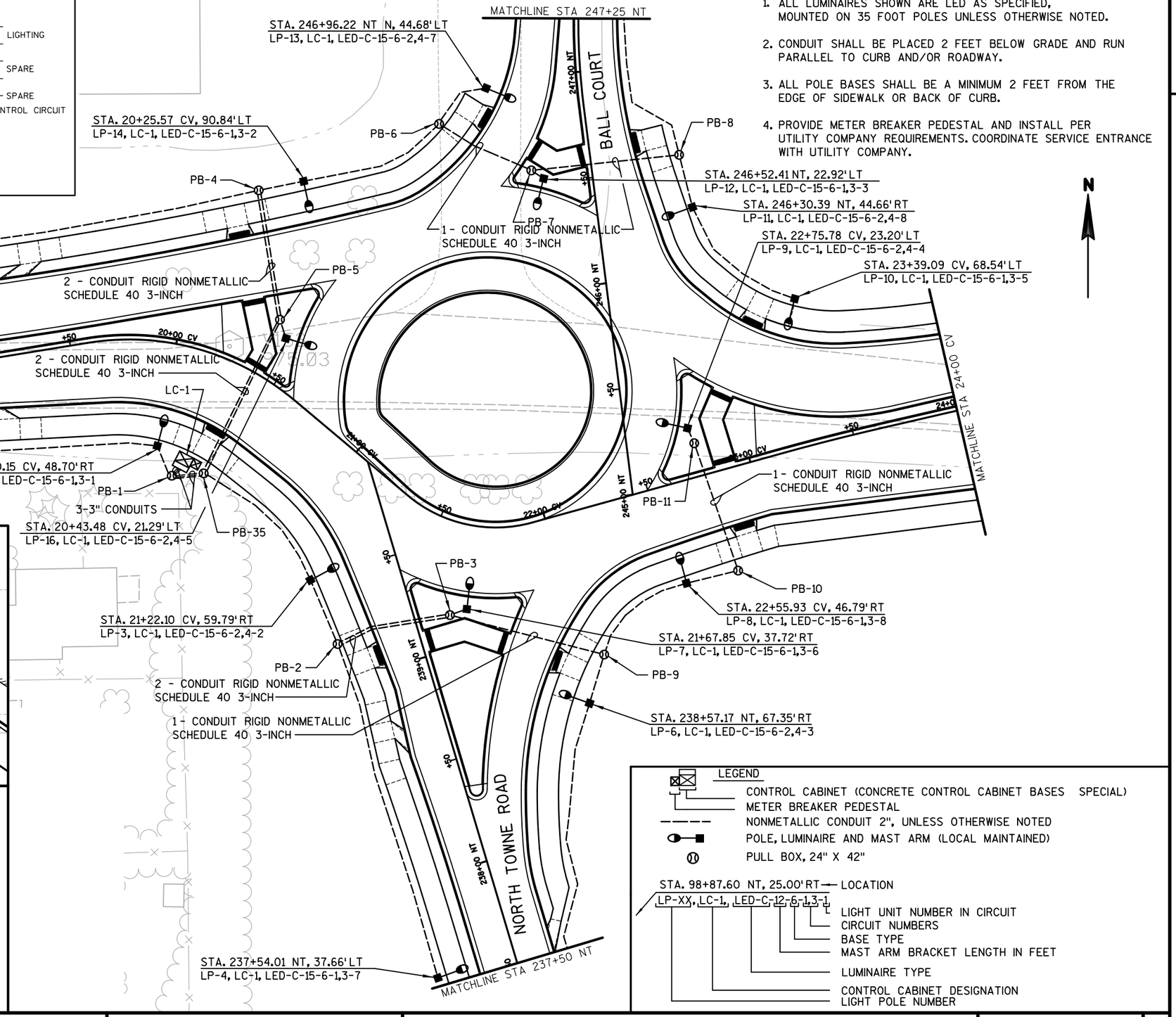
1. ALL LUMINAIRES SHOWN ARE LED AS SPECIFIED, MOUNTED ON 35 FOOT POLES UNLESS OTHERWISE NOTED.
2. CONDUIT SHALL BE PLACED 2 FEET BELOW GRADE AND RUN PARALLEL TO CURB AND/OR ROADWAY.
3. ALL POLE BASES SHALL BE A MINIMUM 2 FEET FROM THE EDGE OF SIDEWALK OR BACK OF CURB.
4. PROVIDE METER BREAKER PEDESTAL AND INSTALL PER UTILITY COMPANY REQUIREMENTS. COORDINATE SERVICE ENTRANCE WITH UTILITY COMPANY.



STA. 248+97.85 NT N, 23.98'RT
LP-17, LC-1, LED-C-15-6-1,3-4



STA. 236+29.67 NT, 22.43'RT
LP-5, LC-1, LED-C-15-6-1,3-9



STA. 246+96.22 NT N, 44.68'LT
LP-13, LC-1, LED-C-15-6-2,4-7

STA. 20+25.57 CV, 90.84'LT
LP-14, LC-1, LED-C-15-6-1,3-2

PB-6

PB-4

STA. 19+04.89 CV, 55.38'LT
LP-15, LC-1, LED-C-15-6-2,4-6

2 - CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH

PB-5

2 - CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH

LC-1

STA. 18+00.14 CV, 31.74'RT
LP-1, LC-1, LED-C-15-6-2,4-1

STA. 20+00.15 CV, 48.70'RT
LP-2, LC-1, LED-C-15-6-1,3-1

PB-1

3-3" CONDUITS

STA. 20+43.48 CV, 21.29'LT
LP-16, LC-1, LED-C-15-6-2,4-5

PB-35

STA. 21+22.10 CV, 59.79'RT
LP-3, LC-1, LED-C-15-6-2,4-2

PB-2

2 - CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH

1 - CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH

STA. 237+54.01 NT, 37.66'LT
LP-4, LC-1, LED-C-15-6-1,3-7

MATCHLINE STA 247+25 NT

PB-8

STA. 246+52.41 NT, 22.92'LT
LP-12, LC-1, LED-C-15-6-1,3-3

STA. 246+30.39 NT, 44.66'RT
LP-11, LC-1, LED-C-15-6-2,4-8

PB-7

1 - CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH

STA. 22+75.78 CV, 23.20'LT
LP-9, LC-1, LED-C-15-6-2,4-4

STA. 23+39.09 CV, 68.54'LT
LP-10, LC-1, LED-C-15-6-1,3-5

PB-11

1 - CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH

PB-3

PB-10

STA. 22+55.93 CV, 46.79'RT
LP-8, LC-1, LED-C-15-6-1,3-8

STA. 21+67.85 CV, 37.72'RT
LP-7, LC-1, LED-C-15-6-1,3-6

PB-9

STA. 238+57.17 NT, 67.35'RT
LP-6, LC-1, LED-C-15-6-2,4-3

LEGEND

- CONTROL CABINET (CONCRETE CONTROL CABINET BASES SPECIAL)
- METER BREAKER PEDESTAL
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- POLE, LUMINAIRE AND MAST ARM (LOCAL MAINTAINED)
- PULL BOX, 24" X 42"

STA. 98+87.60 NT, 25.00'RT — LOCATION
LP-XX, LC-1, LED-C-12-6-1,3-1

- LIGHT UNIT NUMBER IN CIRCUIT
- CIRCUIT NUMBERS
- BASE TYPE
- MAST ARM BRACKET LENGTH IN FEET
- LUMINAIRE TYPE
- CONTROL CABINET DESIGNATION
- LIGHT POLE NUMBER

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	LIGHTING DETAILS - CTH V/NORTH TOWNE ROAD/BALL COURT (LC-1)	SHEET	E

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PLOT BY : _username_
PLOT NAME :
PLOT SCALE : $$.....plotscale.....$$
WISDOT/CADDS SHEET 42

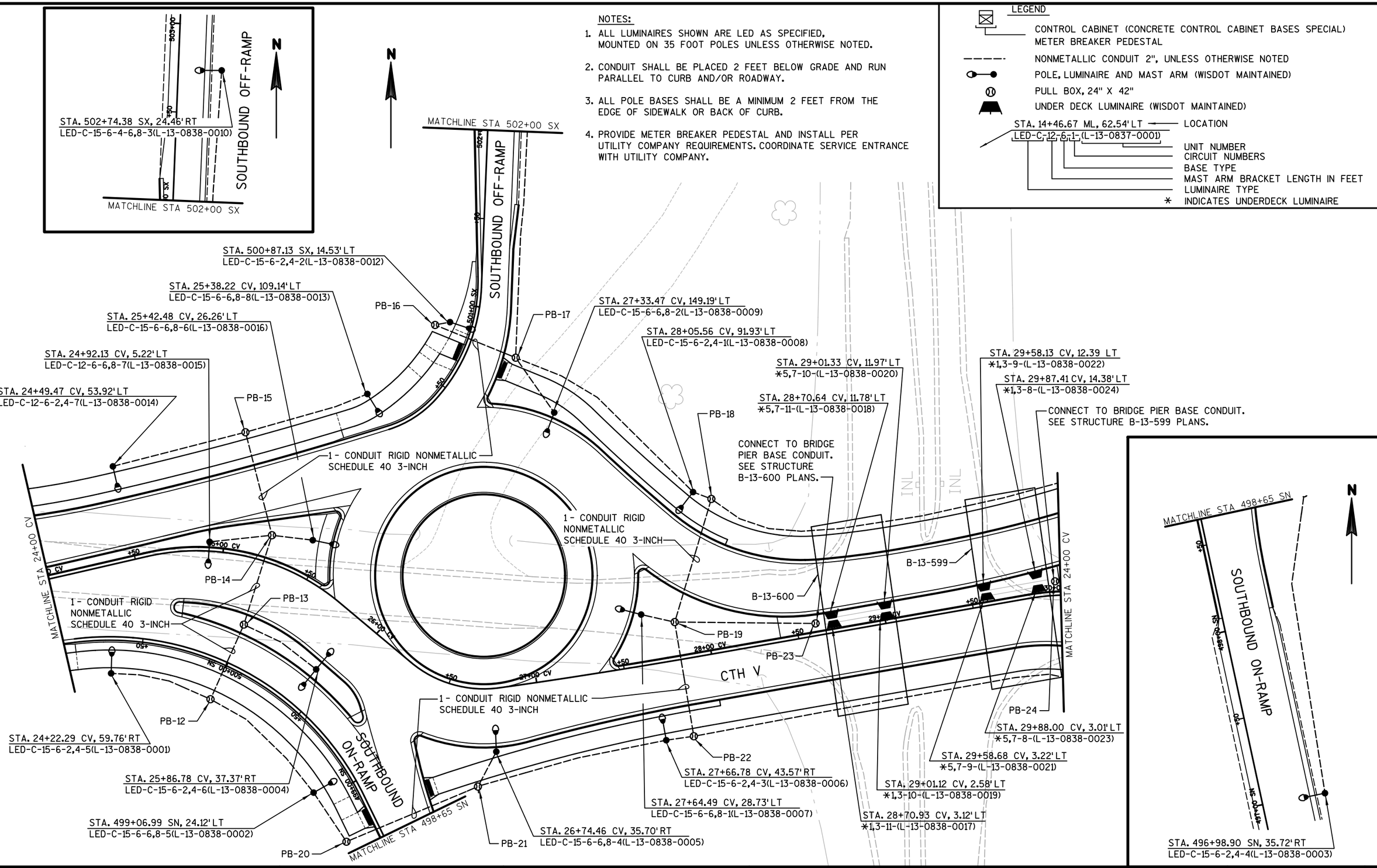
NOTES:

1. ALL LUMINAIRES SHOWN ARE LED AS SPECIFIED, MOUNTED ON 35 FOOT POLES UNLESS OTHERWISE NOTED.
2. CONDUIT SHALL BE PLACED 2 FEET BELOW GRADE AND RUN PARALLEL TO CURB AND/OR ROADWAY.
3. ALL POLE BASES SHALL BE A MINIMUM 2 FEET FROM THE EDGE OF SIDEWALK OR BACK OF CURB.
4. PROVIDE METER BREAKER PEDESTAL AND INSTALL PER UTILITY COMPANY REQUIREMENTS. COORDINATE SERVICE ENTRANCE WITH UTILITY COMPANY.

LEGEND

- CONTROL CABINET (CONCRETE CONTROL CABINET BASES SPECIAL)
  METER BREAKER PEDESTAL
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- POLE, LUMINAIRE AND MAST ARM (WISDOT MAINTAINED)
- PULL BOX, 24" X 42"
- UNDER DECK LUMINAIRE (WISDOT MAINTAINED)

STA. 14+46.67 ML, 62.54' LT — LOCATION
LED-C-12-6-1-(L-13-0837-0001)
- UNIT NUMBER
- CIRCUIT NUMBERS
- BASE TYPE
- MAST ARM BRACKET LENGTH IN FEET
- LUMINAIRE TYPE
- * INDICATES UNDERDECK LUMINAIRE



PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	LIGHTING DETAILS - CTH V / SB USH 51 (L0838)	SHEET	E

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NOTES:

1. ALL LUMINAIRES SHOWN ARE LED AS SPECIFIED, MOUNTED ON 35 FOOT POLES UNLESS OTHERWISE NOTED.
2. CONDUIT SHALL BE PLACED 2 FEET BELOW GRADE AND RUN PARALLEL TO CURB AND/OR ROADWAY.
3. ALL POLE BASES SHALL BE A MINIMUM 2 FEET FROM THE EDGE OF SIDEWALK OR BACK OF CURB.
4. PROVIDE METER BREAKER PEDESTAL AND INSTALL PER UTILITY COMPANY REQUIREMENTS. COORDINATE SERVICE ENTRANCE WITH UTILITY COMPANY.
5. INSTALL CONDUCTORS FOR BRANCH CIRCUITS 2-4 AND CIRCUITS 6-8 FROM L0838 IN SEPARATE 3-INCH CONDUITS AS SHOWN.

LEGEND

- CONTROL CABINET (CONCRETE CONTROL CABINET BASES SPECIAL)
  METER BREAKER PEDESTAL
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- POLE, LUMINAIRE AND MAST ARM (WISDOT MAINTAINED)
- PULL BOX, 24" X 42"
- UNDER DECK LUMINAIRE (WISDOT MAINTAINED)

STA. 14+46.67 ML, 62.54' LT — LOCATION
LED-C-12-6-1-(L-13-0837-0001)

- UNIT NUMBER
- CIRCUIT NUMBERS
- BASE TYPE
- MAST ARM BRACKET LENGTH IN FEET
- LUMINAIRE TYPE
- * INDICATES UNDERDECK LUMINAIRE

N

STA. 501+87.99 NN, 23.94' LT
LED-C-15-6-5,7-5(L-13-0838-0036)

NORTHBOUND ON-RAMP

1 - CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH

PB-33

PB-34

STA. 30+72.14 CV, 145.59' LT
LED-C-15-6-1,3-6(L-13-0838-0037)

STA. 30+45.04 CV, 108.81' LT
LED-C-15-6-5,7-4(L-13-0838-0038)

STA. 30+56.32 CV, 18.14' LT
LED-C-15-6-1,3-5(L-13-0838-0025)

PB-26

2 - CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH

STA. 499+97.62 NN, 18.62' RT
LED-C-15-6-5,7-6(L-13-0838-0035)

STA. 32+89.86 CV, 120.75' LT
LED-C-15-6-1,3-7(L-13-0838-0034)

STA. 32+70.66 CV, 25.34' LT
LED-C-15-6-5,7-2(L-13-0838-0031)

STA. 33+47.16 CV, 72.63' LT
LED-C-15-6-5,7-7(L-13-0838-0033)

STA. 34+70.55 CV, 8.87' LT
LED-C-15-6-1,3-4(L-13-0838-0032)

MATCHLINE STA 24+00 CV

PB-25

2 - CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH

PB-27

1 - CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH

3 - CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH

STA. 30+66.43 CV, 51.46' RT
LED-C-15-6-5,7-3(L-13-0838-0026)

PB-28

L-0838

STA. 31+56.54 CV, 38.33' RT
LED-C-15-6-1,3-1(L-13-0838-0027)

PB-29

1 - CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH

PB-32

1 - CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH

CTH V

NORTHBOUND OFF-RAMP

PB-31

STA. 32+50.25 CV, 49.29' RT
LED-C-15-6-1,3-3(L-13-0838-0030)

PB-30

STA. 497+60.31 NX, 9.82' RT
LED-C-15-6-5,7-1(L-13-0838-0029)

MATCHLINE STA 497+25.00 NX

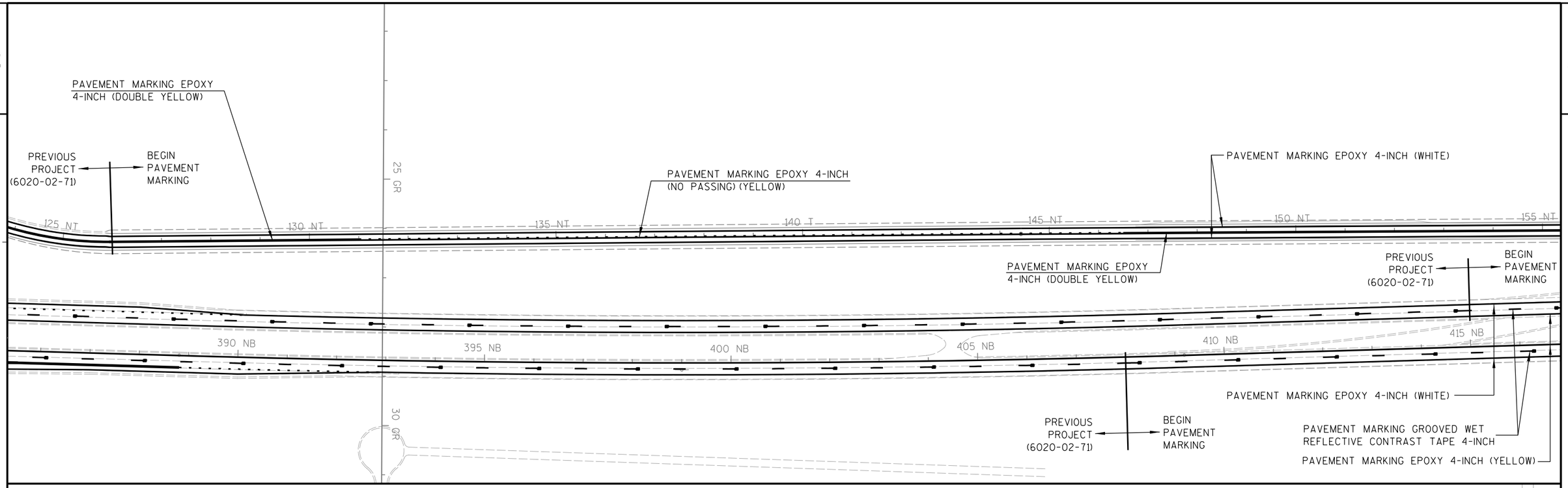
STA. 495+84.99 NX, 14.28' RT
LED-C-15-6-1,3-2(L-13-0838-0028)

MATCHLINE STA 497+25.00 NX

NORTHBOUND OFF-RAMP

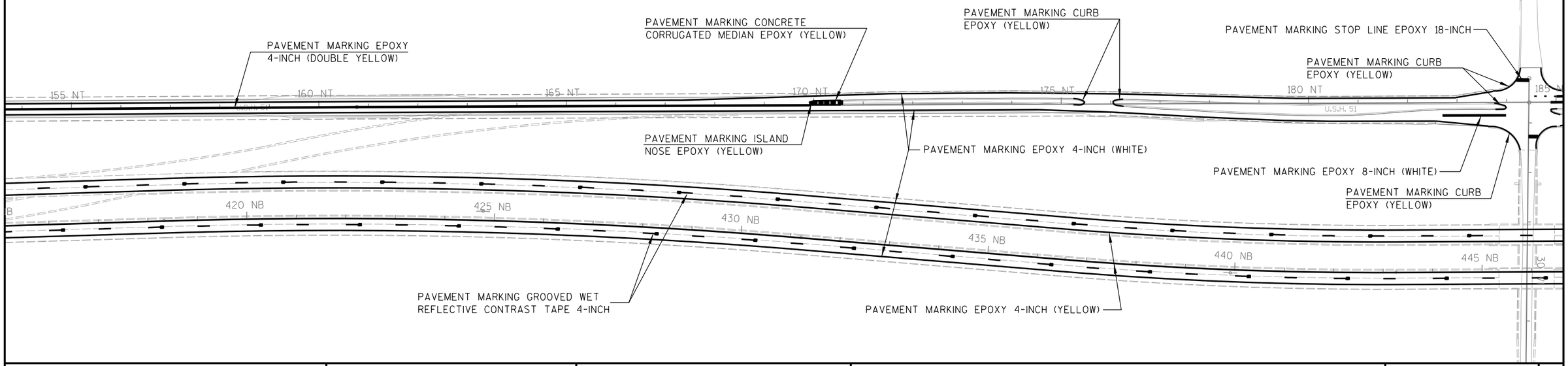
PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	LIGHTING DETAILS - CTH V / NB USH 51 (L0838)	SHEET 128	E

2

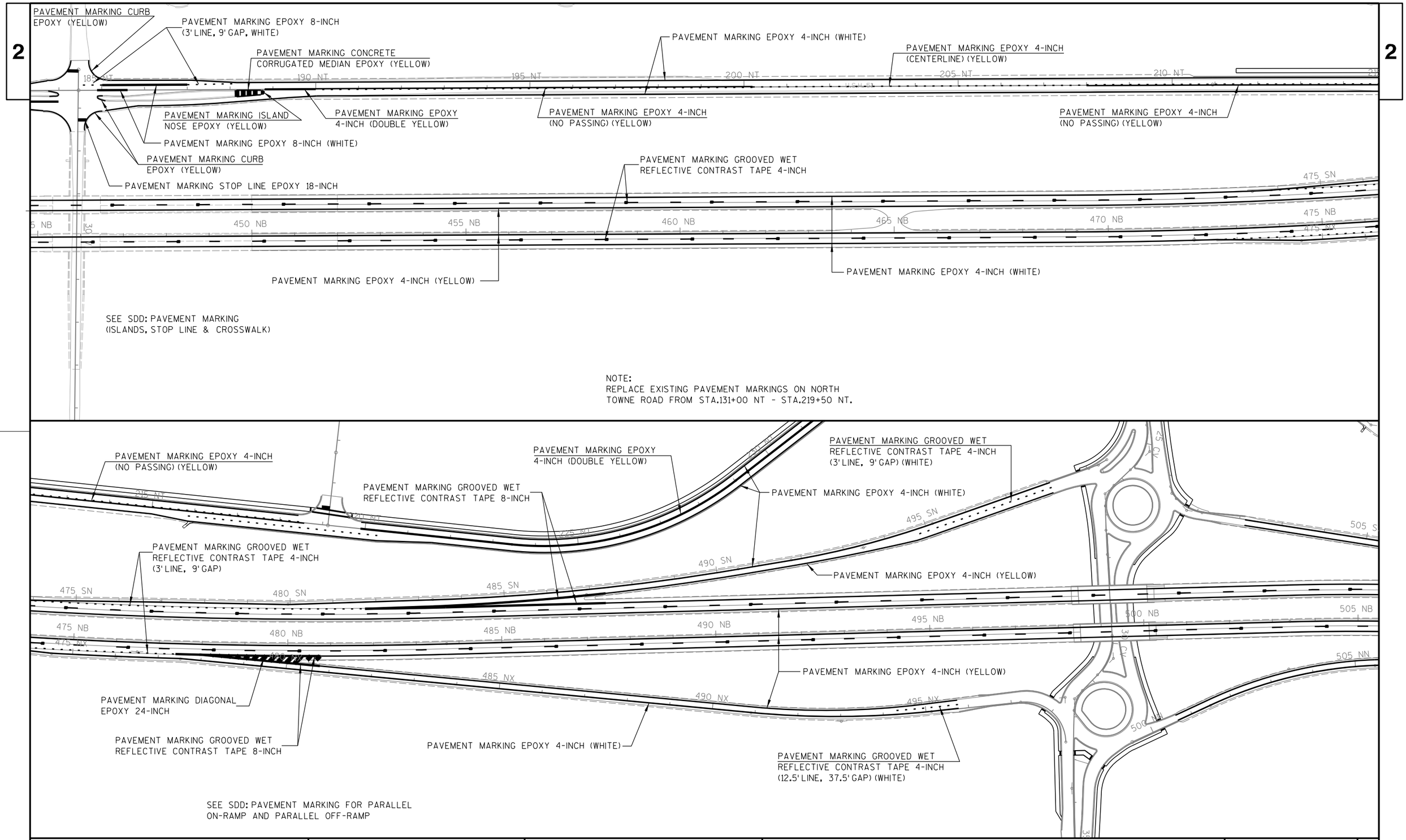


NOTE:
REPLACE EXISTING PAVEMENT MARKINGS ON NORTH TOWNE ROAD FROM STA.131+00 NT - STA.219+50 NT.

SEE SDD: PAVEMENT MARKING
(ISLANDS, STOP LINE & CROSSWALK)



PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	PAVEMENT MARKING	SHEET 129	E



PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	PAVEMENT MARKING	SHEET 130	E

2

SEE SDD: PAVEMENT MARKING FOR PARALLEL ON-RAMP AND PARALLEL OFF-RAMP

PAVEMENT MARKING EPOXY 4-INCH (WHITE)

PAVEMENT MARKING EPOXY 4-INCH (YELLOW)

PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 8-INCH

PAVEMENT MARKING DIAGONAL EPOXY 24-INCH

PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH

PAVEMENT MARKING EPOXY 4-INCH (WHITE)

505 SX

510 SX

515 SX

520 SX

505 NB

510 NB

515 NB

520 NB

525 NB

530 NB

535 N

505 NN

510 NN

515 NN

520 NN

525 NN

PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH (3' LINE, 9' GAP)

PAVEMENT MARKING EPOXY 4-INCH (YELLOW)

PAVEMENT MARKING EPOXY 4-INCH (WHITE)

PAVEMENT MARKING EPOXY 4-INCH (YELLOW)

PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 8-INCH

30 GI

10 D4

15 D4

20 D4

PAVEMENT MARKING EPOXY 4-INCH (WHITE)

PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH

535 NB

540 NB

545 NB

550 SB

550 NB

555 SB

555 NB

560 SB

560 NB

PAVEMENT MARKING EPOXY 4-INCH (YELLOW)

PAVEMENT MARKING EPOXY 4-INCH (DOUBLE YELLOW)

PAVEMENT MARKING DIAGONAL EPOXY (18" YELLOW AT 40' SPACING)

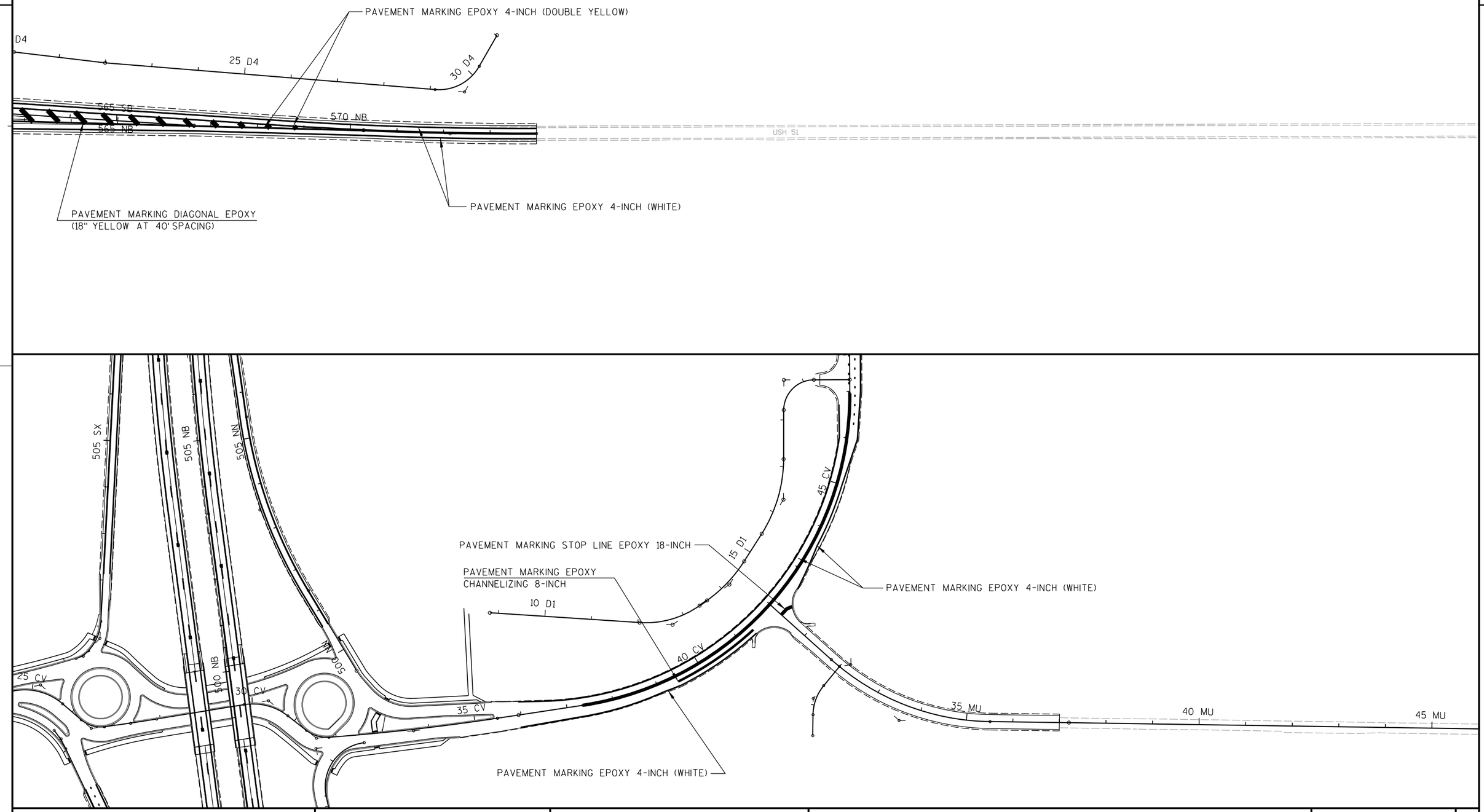
35 GI

15 SW

SEE SDD: SIGNING AND MARKING FOR TWO LANE TO FOUR LANE DIVIDED TRANSITIONS

PROJECT NO: 6020-02-72	HWY: STH 51	COUNTY: DANE	PAVEMENT MARKING	SHEET 131	E

SEE SDD: SIGNING AND MARKING FOR TWO LANE
TO FOUR LANE DIVIDED TRANSITIONS



PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	PAVEMENT MARKING	SHEET 132	E

2

2

40 CV

15 D1

45 CV

35 MU

15 D3

PAVEMENT MARKING EPOXY
8-INCH (WHITE)

PAVEMENT MARKING EPOXY 4-INCH
(CENTERLINE) (YELLOW)

50 CV

55 CV

60 CV

65 CV

70 CV

PAVEMENT MARKING EPOXY 4-INCH
(LANE LINE) (WHITE)

PAVEMENT MARKING EPOXY 4-INCH (DOUBLE YELLOW)

PAVEMENT MARKING EPOXY 4-INCH (WHITE)

45 CI

PAVEMENT MARKING EPOXY 4-INCH
(CENTERLINE) (YELLOW)

70 CV

75 CV

80 CV

85 CV

90 CV

95 CV

PAVEMENT MARKING EPOXY 4-INCH (WHITE)

PAVEMENT MARKING EPOXY 4-INCH (DOUBLE YELLOW)

PAVEMENT MARKING EPOXY
CHANNELIZING 8-INCH

PAVEMENT MARKING EPOXY 4-INCH (WHITE)

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	PAVEMENT MARKING	SHEET 133	E

2

2

PAVEMENT MARKING EPOXY 4-INCH (WHITE)

PAVEMENT MARKING EPOXY 4-INCH
(DOUBLE YELLOW)

PAVEMENT MARKING EPOXY
CHANNELIZING 8-INCH

PAVEMENT MARKING EPOXY 4-INCH
(CENTERLINE) (YELLOW)

PAVEMENT MARKING STOP LINE EPOXY 18-INCH

PAVEMENT MARKING EPOXY 4-INCH (WHITE)

PAVEMENT MARKING EPOXY 4-INCH (WHITE)

NOTE:
REPLACE EXISTING PAVEMENT MARKINGS ON NORTH
TOWNE ROAD FROM STA.131+00 NT - STA.219+50 NT.

SEE SDD: PAVEMENT MARKING
(ISLANDS, STOP LINE & CROSSWALK)

SEE SDD: PAVEMENT MARKING
(INTERSECTIONS)

PAVEMENT MARKING STOP LINE
EPOXY 18-INCH

PAVEMENT MARKING EPOXY 4-INCH (WHITE)

PAVEMENT MARKING CROSSWALK
EPOXY 6-INCH

PAVEMENT MARKING EPOXY 4-INCH
(DOUBLE YELLOW)

PAVEMENT MARKING EPOXY 4-INCH (WHITE)

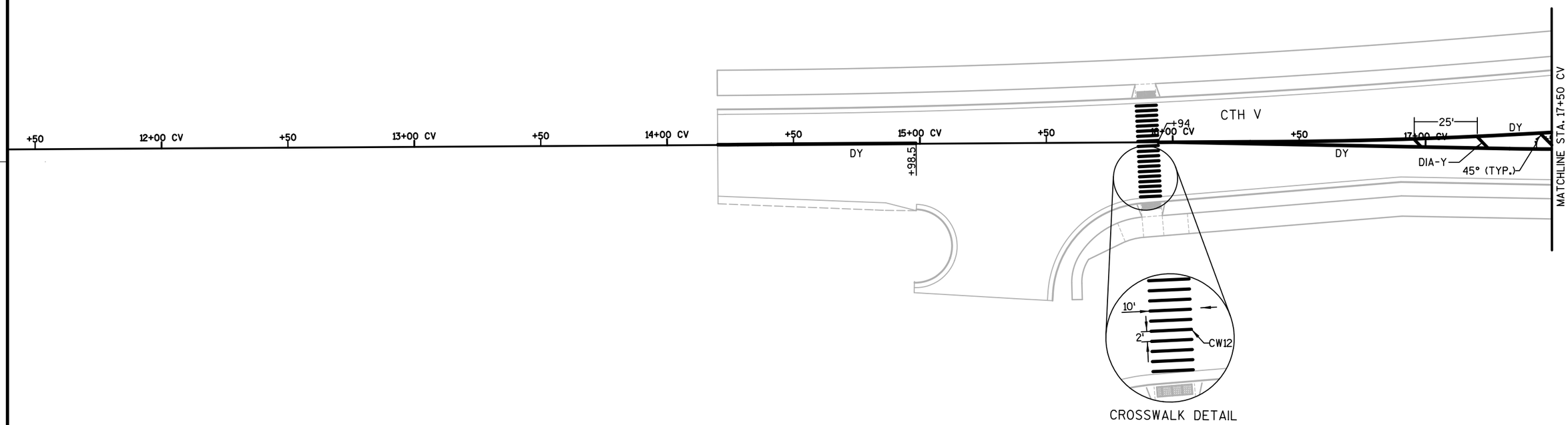
PAVEMENT MARKING EPOXY 4-INCH
(LANE LINE) (WHITE)

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	PAVEMENT MARKING	SHEET 134	E

2

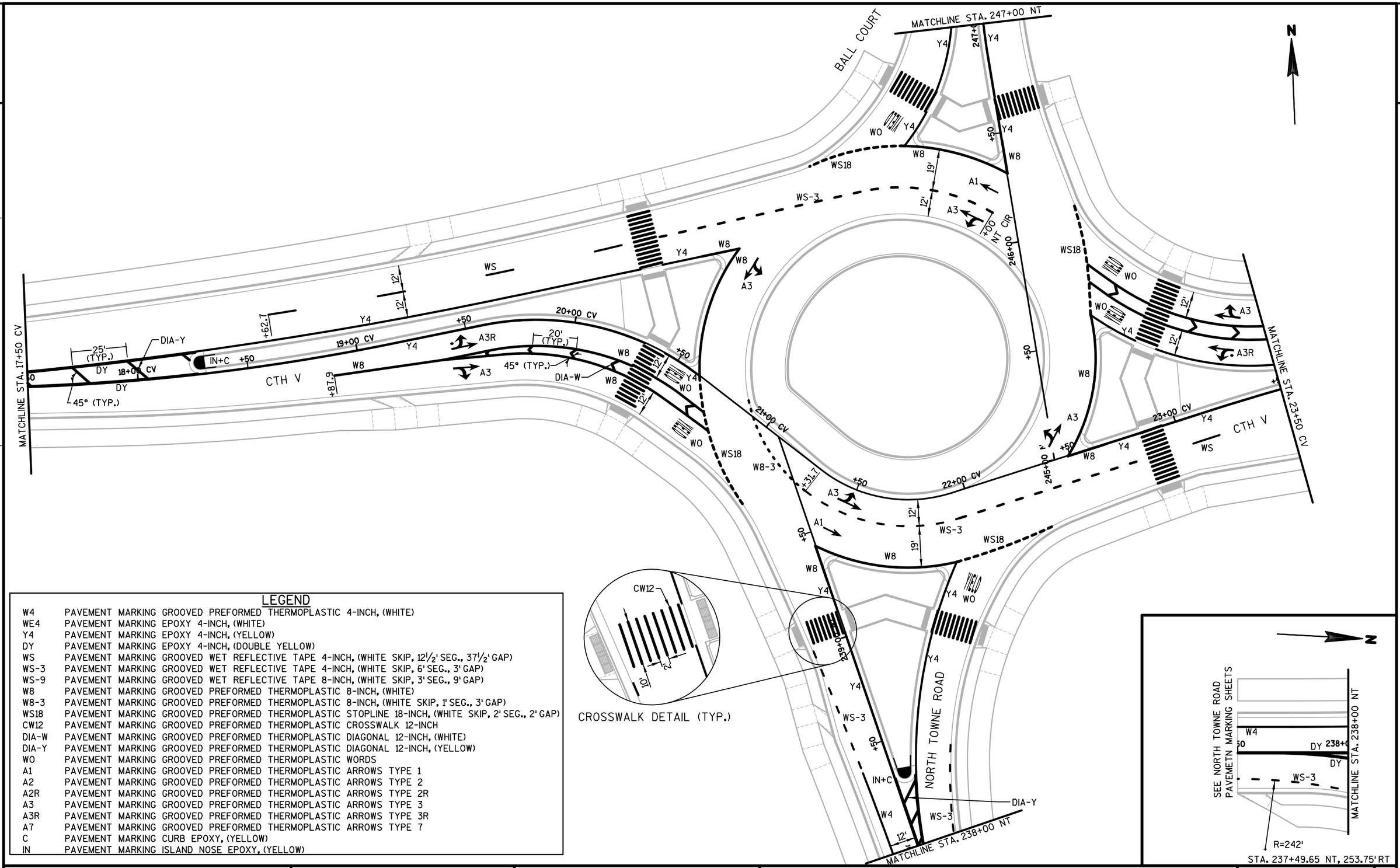
LEGEND

W4	PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC 4-INCH, (WHITE)
WE4	PAVEMENT MARKING EPOXY 4-INCH, (WHITE)
Y4	PAVEMENT MARKING EPOXY 4-INCH, (YELLOW)
DY	PAVEMENT MARKING EPOXY 4-INCH, (DOUBLE YELLOW)
WS	PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE 4-INCH, (WHITE SKIP, 12½' SEG., 37½' GAP)
WS-3	PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE 4-INCH, (WHITE SKIP, 6' SEG., 3' GAP)
WS-9	PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE 8-INCH, (WHITE SKIP, 3' SEG., 9' GAP)
W8	PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC 8-INCH, (WHITE)
W8-3	PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC 8-INCH, (WHITE SKIP, 1' SEG., 3' GAP)
WS18	PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC STOPLINE 18-INCH, (WHITE SKIP, 2' SEG., 2' GAP)
CW12	PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC CROSSWALK 12-INCH
DIA-W	PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC DIAGONAL 12-INCH, (WHITE)
DIA-Y	PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC DIAGONAL 12-INCH, (YELLOW)
WO	PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC WORDS
A1	PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 1
A2	PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 2
A2R	PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 2R
A3	PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 3
A3R	PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 3R
A7	PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 7
C	PAVEMENT MARKING CURB EPOXY, (YELLOW)
IN	PAVEMENT MARKING ISLAND NOSE EPOXY, (YELLOW)



CROSSWALK DETAIL

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	PAVEMENT MARKING - CTH V	SHEET 135 E



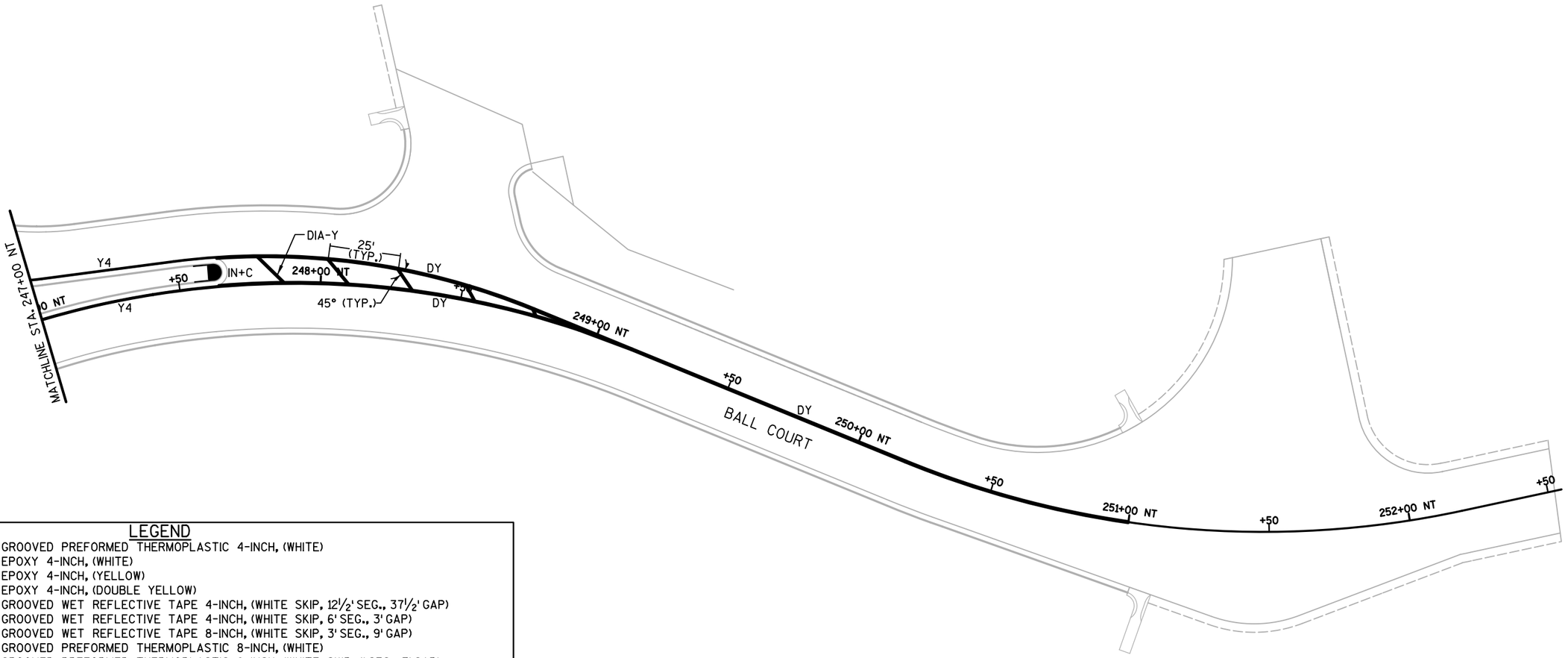
LEGEND

W4	PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC 4-INCH, (WHITE)
WE4	PAVEMENT MARKING EPOXY 4-INCH, (WHITE)
Y4	PAVEMENT MARKING EPOXY 4-INCH, (YELLOW)
DY	PAVEMENT MARKING EPOXY 4-INCH, (DOUBLE YELLOW)
WS	PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE 4-INCH, (WHITE SKIP, 12½' SEG., 37½' GAP)
WS-3	PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE 4-INCH, (WHITE SKIP, 6' SEG., 3' GAP)
WS-9	PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE 8-INCH, (WHITE SKIP, 3' SEG., 9' GAP)
W8	PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC 8-INCH, (WHITE)
W8-3	PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC 8-INCH, (WHITE SKIP, 1' SEG., 3' GAP)
WS18	PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC STOPLINE 18-INCH, (WHITE SKIP, 2' SEG., 2' GAP)
CW12	PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC CROSSWALK 12-INCH
DIA-W	PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC DIAGONAL 12-INCH, (WHITE)
DIA-Y	PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC DIAGONAL 12-INCH, (YELLOW)
WO	PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC WORDS
A1	PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 1
A2	PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 2
A2R	PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 2R
A3	PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 3
A3R	PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 3R
A7	PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 7
C	PAVEMENT MARKING CURB EPOXY, (YELLOW)
IN	PAVEMENT MARKING ISLAND NOSE EPOXY, (YELLOW)

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	PAVEMENT MARKING	SHEET	E

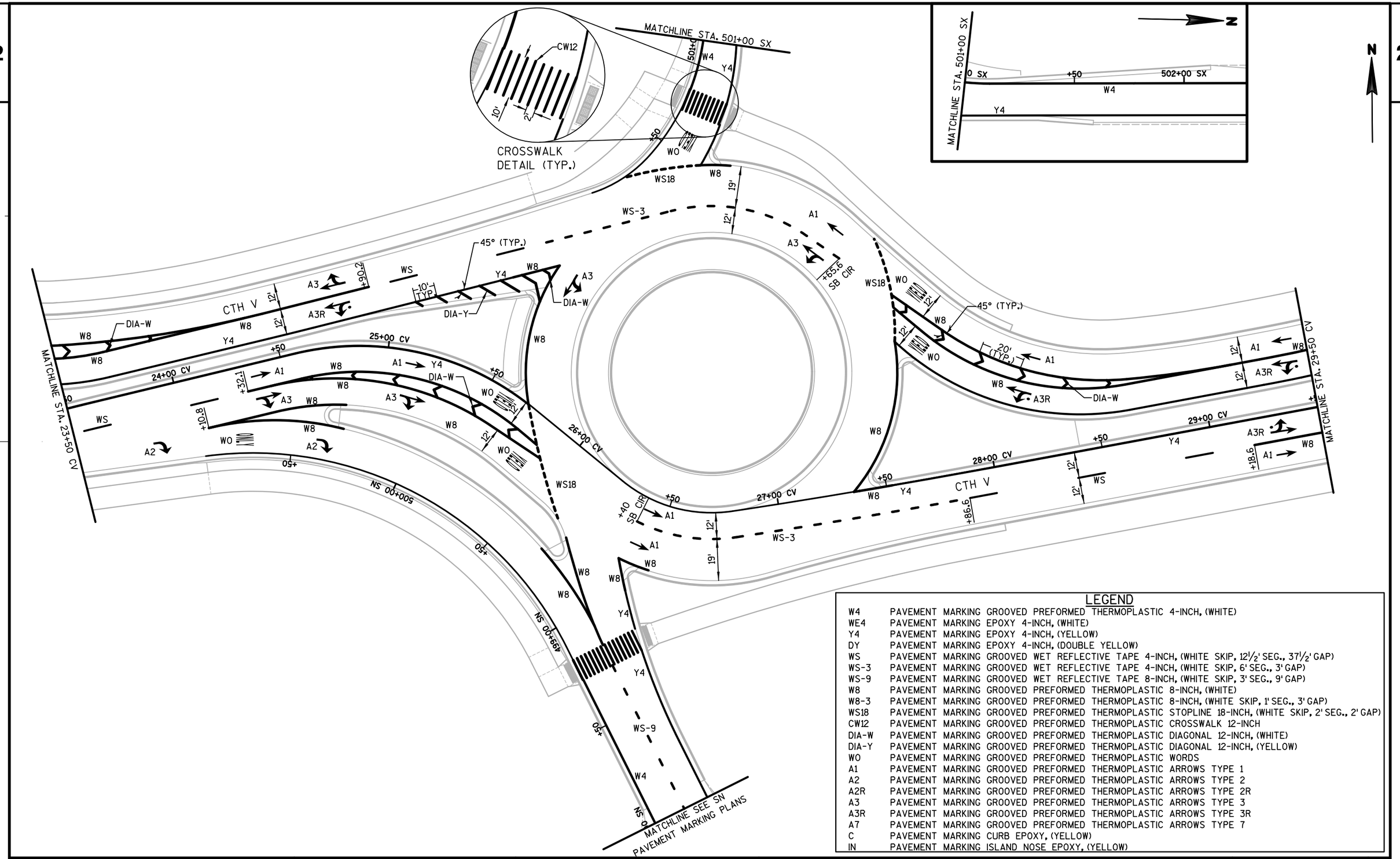
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2



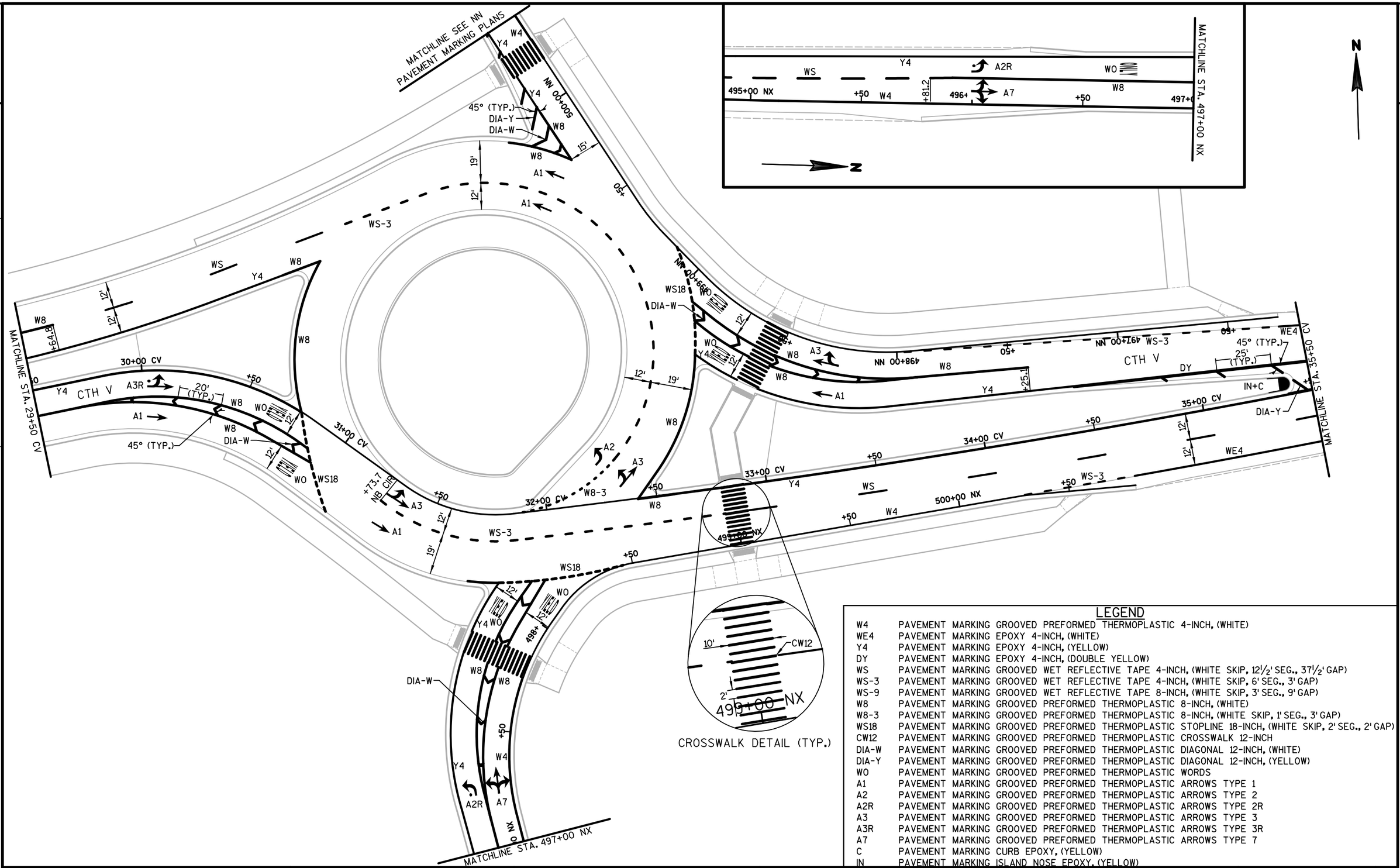
LEGEND

W4	PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC 4-INCH, (WHITE)
WE4	PAVEMENT MARKING EPOXY 4-INCH, (WHITE)
Y4	PAVEMENT MARKING EPOXY 4-INCH, (YELLOW)
DY	PAVEMENT MARKING EPOXY 4-INCH, (DOUBLE YELLOW)
WS	PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE 4-INCH, (WHITE SKIP, 12½' SEG., 37½' GAP)
WS-3	PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE 4-INCH, (WHITE SKIP, 6' SEG., 3' GAP)
WS-9	PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE 8-INCH, (WHITE SKIP, 3' SEG., 9' GAP)
W8	PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC 8-INCH, (WHITE)
W8-3	PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC 8-INCH, (WHITE SKIP, 1' SEG., 3' GAP)
WS18	PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC STOPLINE 18-INCH, (WHITE SKIP, 2' SEG., 2' GAP)
CW12	PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC CROSSWALK 12-INCH
DIA-W	PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC DIAGONAL 12-INCH, (WHITE)
DIA-Y	PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC DIAGONAL 12-INCH, (YELLOW)
WO	PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC WORDS
A1	PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 1
A2	PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 2
A2R	PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 2R
A3	PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 3
A3R	PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 3R
A7	PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 7
C	PAVEMENT MARKING CURB EPOXY, (YELLOW)
IN	PAVEMENT MARKING ISLAND NOSE EPOXY, (YELLOW)



LEGEND

W4	PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC 4-INCH, (WHITE)
WE4	PAVEMENT MARKING EPOXY 4-INCH, (WHITE)
Y4	PAVEMENT MARKING EPOXY 4-INCH, (YELLOW)
DY	PAVEMENT MARKING EPOXY 4-INCH, (DOUBLE YELLOW)
WS	PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE 4-INCH, (WHITE SKIP, 12½' SEG., 37½' GAP)
WS-3	PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE 4-INCH, (WHITE SKIP, 6' SEG., 3' GAP)
WS-9	PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE 8-INCH, (WHITE SKIP, 3' SEG., 9' GAP)
W8	PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC 8-INCH, (WHITE)
W8-3	PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC 8-INCH, (WHITE SKIP, 1' SEG., 3' GAP)
WS18	PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC STOPLINE 18-INCH, (WHITE SKIP, 2' SEG., 2' GAP)
CW12	PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC CROSSWALK 12-INCH
DIA-W	PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC DIAGONAL 12-INCH, (WHITE)
DIA-Y	PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC DIAGONAL 12-INCH, (YELLOW)
WO	PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC WORDS
A1	PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 1
A2	PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 2
A2R	PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 2R
A3	PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 3
A3R	PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 3R
A7	PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 7
C	PAVEMENT MARKING CURB EPOXY, (YELLOW)
IN	PAVEMENT MARKING ISLAND NOSE EPOXY, (YELLOW)



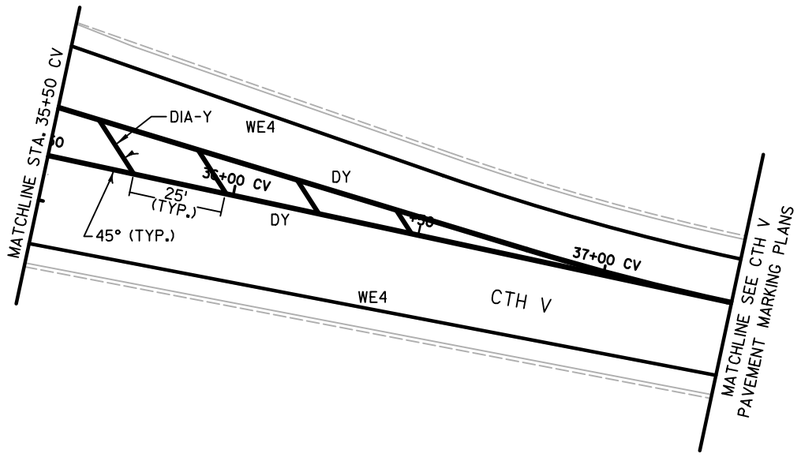
LEGEND

W4	PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC 4-INCH, (WHITE)
WE4	PAVEMENT MARKING EPOXY 4-INCH, (WHITE)
Y4	PAVEMENT MARKING EPOXY 4-INCH, (YELLOW)
DY	PAVEMENT MARKING EPOXY 4-INCH, (DOUBLE YELLOW)
WS	PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE 4-INCH, (WHITE SKIP, 12½' SEG., 37½' GAP)
WS-3	PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE 4-INCH, (WHITE SKIP, 6' SEG., 3' GAP)
WS-9	PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE 8-INCH, (WHITE SKIP, 3' SEG., 9' GAP)
W8	PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC 8-INCH, (WHITE)
W8-3	PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC 8-INCH, (WHITE SKIP, 1' SEG., 3' GAP)
WS18	PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC STOPLINE 18-INCH, (WHITE SKIP, 2' SEG., 2' GAP)
CW12	PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC CROSSWALK 12-INCH
DIA-W	PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC DIAGONAL 12-INCH, (WHITE)
DIA-Y	PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC DIAGONAL 12-INCH, (YELLOW)
WO	PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC WORDS
A1	PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 1
A2	PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 2
A2R	PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 2R
A3	PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 3
A3R	PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 3R
A7	PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 7
C	PAVEMENT MARKING CURB EPOXY, (YELLOW)
IN	PAVEMENT MARKING ISLAND NOSE EPOXY, (YELLOW)

2

LEGEND

W4	PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC 4-INCH, (WHITE)
WE4	PAVEMENT MARKING EPOXY 4-INCH, (WHITE)
Y4	PAVEMENT MARKING EPOXY 4-INCH, (YELLOW)
DY	PAVEMENT MARKING EPOXY 4-INCH, (DOUBLE YELLOW)
WS	PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE 4-INCH, (WHITE SKIP, 12½' SEG., 37½' GAP)
WS-3	PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE 4-INCH, (WHITE SKIP, 6' SEG., 3' GAP)
WS-9	PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE 8-INCH, (WHITE SKIP, 3' SEG., 9' GAP)
W8	PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC 8-INCH, (WHITE)
W8-3	PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC 8-INCH, (WHITE SKIP, 1' SEG., 3' GAP)
WS18	PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC STOPLINE 18-INCH, (WHITE SKIP, 2' SEG., 2' GAP)
CW12	PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC CROSSWALK 12-INCH
DIA-W	PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC DIAGONAL 12-INCH, (WHITE)
DIA-Y	PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC DIAGONAL 12-INCH, (YELLOW)
WO	PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC WORDS
A1	PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 1
A2	PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 2
A2R	PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 2R
A3	PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 3
A3R	PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 3R
A7	PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 7
C	PAVEMENT MARKING CURB EPOXY, (YELLOW)
IN	PAVEMENT MARKING ISLAND NOSE EPOXY, (YELLOW)



2

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- (A) TYPE A FLASHING LIGHT
- TEMPORARY DELINEATOR (STEEL POST WITH SINGLE DELINEATOR)
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN MOUNTED ON PORTABLE SIGN SUPPORT, 5' MINIMUM MOUNTING HEIGHT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY PAVEMENT
- WORK AREA

N

WINDSOR ROAD

20 ML

25 ML

30 ML

35 ML

DELINEATED WETLAND

DELINEATED WETLAND

500'

USH 51

345 NB

350 A

350 NB

350 C

355 A

355 NB

355 C

360 A

360 NB

360 C

365 A

365 NB

365 C

370 B

370 NB

370 D

375 N

375

ROAD WORK 1 MILE
W20-1

SPEED LIMIT 45
W3-5

LEFT LANE CLOSED 1/2 MILE
W20-5

SPEED LIMIT 45
R2-1
48" X 60"

NOTE:
ALL TRAFFIC CONTROL DEVICES SHOWN ON THIS PAGE
INSTALLED UNDER PREVIOUS PROJECT 6020-02-71

80 PE

85 PE

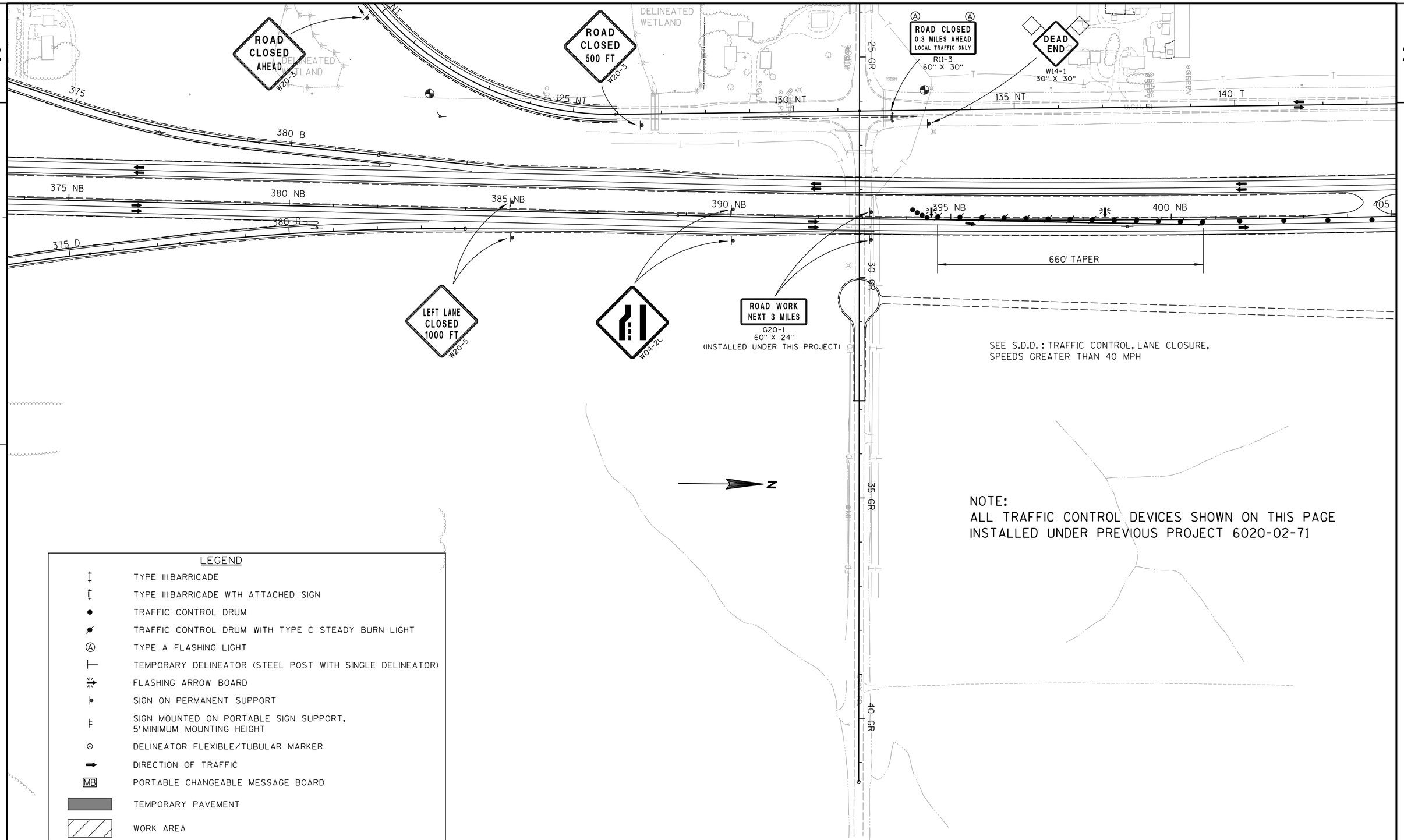
WINDSOR ROAD

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	STAGE CONSTRUCTION - STAGE 1,2 & 3A	SHEET 141	E

FILE NAME : P:\2011059 - US 51 WO\MicroStation\Planset\6020-02-72\026002_s1.DGN PLOT DATE : 5/13/2013 PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : 200.00 ft / in.

WISDOT/CADDS SHEET 42

2



LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- TYPE A FLASHING LIGHT
- TEMPORARY DELINEATOR (STEEL POST WITH SINGLE DELINEATOR)
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN MOUNTED ON PORTABLE SIGN SUPPORT, 5' MINIMUM MOUNTING HEIGHT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY PAVEMENT
- WORK AREA

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	STAGE CONSTRUCTION - STAGE 1,2 & 3A	SHEET 142	E

NOTE:
ALL TRAFFIC CONTROL DEVICES SHOWN ON THIS PAGE
INSTALLED UNDER PREVIOUS PROJECT 6020-02-71

N

ROAD CLOSED 1500 FT
W20-3

SPEED LIMIT 55
R2-1
48" X 60"

ROAD CLOSED 500 FT
W20-3

W01-6
48" X 24"

ROAD CLOSED
R11-2
48" X 30"

W01-6
48" X 24"

TEMPORARY PAVEMENT MARKING, 4-INCH (WHITE)

R4-7
24" X 30"

W5-52L
18" X 54"

W01-4L

END ROAD WORK
G20-2A
48" X 24"

DELINEATED WETLAND

U.S.H. 51

120 X3
115 X3
110 X3
105 X3
100 X3

405 NB
410 NB
415 NB
420 NB
425 NB
430 NB

END TEMPORARY BARRIER WALL
INSTALL TEMPORARY CRASH CUSHION

TEMPORARY PAVEMENT MARKING, 4-INCH (WHITE)

TEMPORARY PAVEMENT MARKING, 4-INCH (WHITE)

ROAD CLOSED
R11-2
48" X 30"

ROAD CLOSED
R11-2
48" X 30"

W01-4L

W01-6
48" X 24"

R4-7
24" X 30"

W5-52L
18" X 54"

BEGIN TEMPORARY BARRIER WALL
INSTALL TEMPORARY CRASH CUSHION

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- (A) TYPE A FLASHING LIGHT
- TEMPORARY DELINEATOR (STEEL POST WITH SINGLE DELINEATOR)
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN MOUNTED ON PORTABLE SIGN SUPPORT, 5' MINIMUM MOUNTING HEIGHT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY PAVEMENT
- WORK AREA

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	STAGE CONSTRUCTION - STAGE 1, 2 & 3A	SHEET 143	E

2

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- TYPE A FLASHING LIGHT
- TEMPORARY DELINEATOR (STEEL POST WITH SINGLE DELINEATOR)
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN MOUNTED ON PORTABLE SIGN SUPPORT, 5' MINIMUM MOUNTING HEIGHT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY PAVEMENT
- WORK AREA

N

ROAD WORK NEXT 2.5 MILES
G20-1
60" X 24"

ROAD WORK 500 FT
W20-1

ROAD WORK 1000 FT
W20-1

ROAD WORK AHEAD
W20-1

500' 500' 1000'

END ROAD WORK
G20-2A
48" X 24"

DELINEATED WETLAND

U.S.H. 51

USH 51

SEPTIC

RUINS

u/c

SIGN

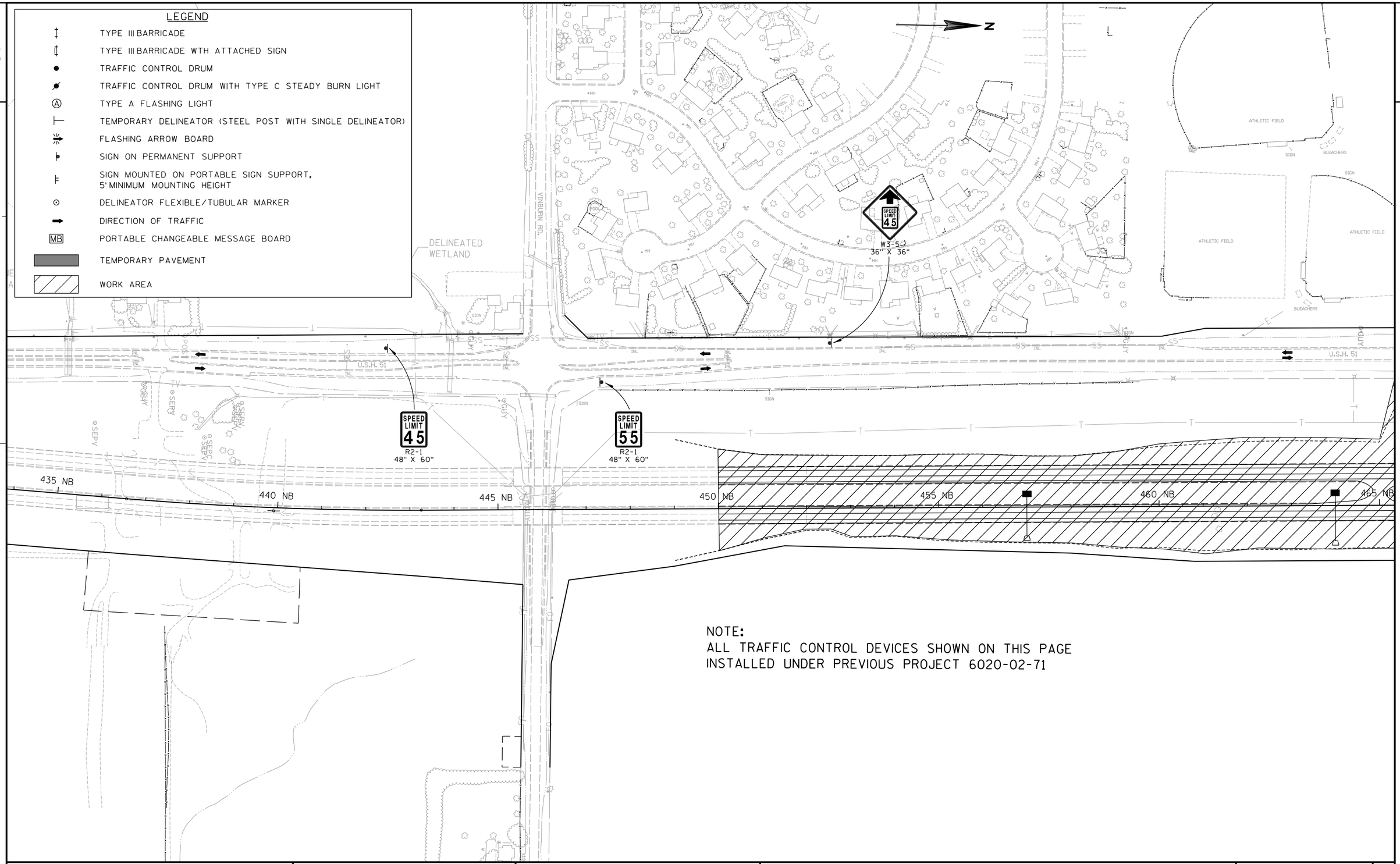
PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	STAGE CONSTRUCTION - STAGE 1,2 & 3A	SHEET 144 E

FILE NAME : P:\2011059 - US 51 WO\MicroStation\Planset\6020-02-72\026008_s1.dgn PLOT DATE : 5/13/2013 PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : 200.0000 sf / in.

WISDOT/CADDS SHEET 42

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- (A) TYPE A FLASHING LIGHT
- TEMPORARY DELINEATOR (STEEL POST WITH SINGLE DELINEATOR)
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN MOUNTED ON PORTABLE SIGN SUPPORT, 5' MINIMUM MOUNTING HEIGHT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY PAVEMENT
- WORK AREA



NOTE:
ALL TRAFFIC CONTROL DEVICES SHOWN ON THIS PAGE INSTALLED UNDER PREVIOUS PROJECT 6020-02-71

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	STAGE CONSTRUCTION - STAGE 1A	SHEET 145	E

2

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- TYPE A FLASHING LIGHT
- TEMPORARY DELINEATOR (STEEL POST WITH SINGLE DELINEATOR)
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN MOUNTED ON PORTABLE SIGN SUPPORT, 5' MINIMUM MOUNTING HEIGHT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY PAVEMENT
- WORK AREA

N

SEE SDD: TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY.

W5-52L 12" X 36"

W5-52R 12" X 36"

TEMPORARY CRASH CUSHION

TEMPORARY CRASH CUSHION

TEMPORARY PRECAST CONCRETE BARRIER

DELINEATED WETLAND

50'(TYP)

50'(TYP)

100 TR1

105 TR1

110 TR1

115 TR1

120

C.T.H. "DV"

U.S.H. 51

U.S.H. 51

CANOPY

FILLER CAPS

POST

SIGN

465 NB

470 NB

475 NB

475 NX

475 SN

480 NB

480 NX

480 SN

485 NB

485 NX

485 SN

490 NB

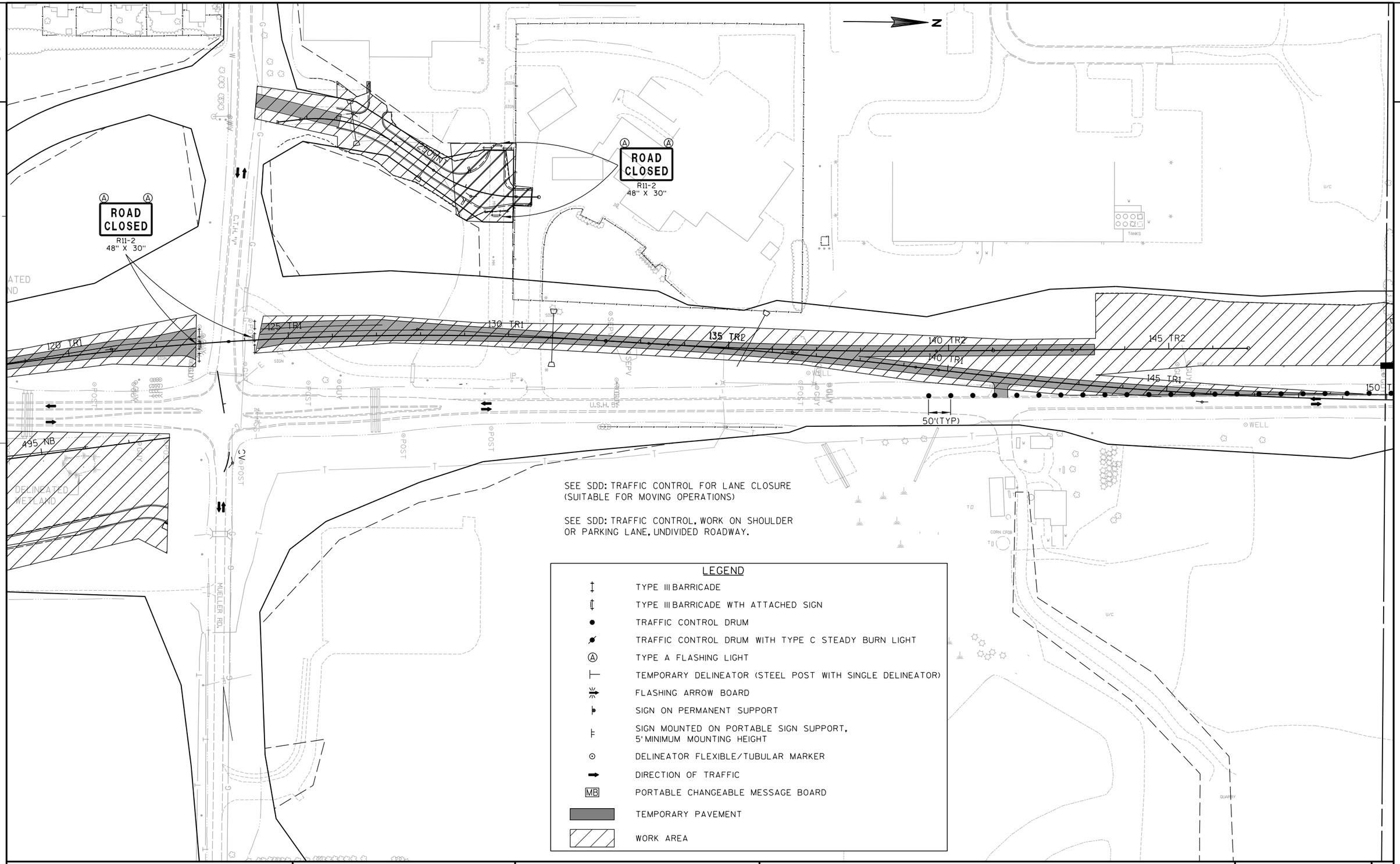
490 NX

495 NB

495 NX

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	STAGE CONSTRUCTION - STAGE 1A	SHEET 146	E

2



SEE SDD: TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)

SEE SDD: TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY.

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- Ⓐ TYPE A FLASHING LIGHT
- TEMPORARY DELINEATOR (STEEL POST WITH SINGLE DELINEATOR)
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN MOUNTED ON PORTABLE SIGN SUPPORT, 5' MINIMUM MOUNTING HEIGHT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY PAVEMENT
- WORK AREA

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	STAGE CONSTRUCTION - STAGE 1A	SHEET 147	E

2

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- TYPE A FLASHING LIGHT
- TEMPORARY DELINEATOR (STEEL POST WITH SINGLE DELINEATOR)
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN MOUNTED ON PORTABLE SIGN SUPPORT, 5' MINIMUM MOUNTING HEIGHT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY PAVEMENT
- WORK AREA

N

RIGHT SHOULDER CLOSED W21-5A

RIGHT SHOULDER CLOSED AHEAD W21-5B

SEE SDD: TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY

525 NB 530 NB 535 NB 540 NB 545 NB 550 NB 550 SB 555 SB 555 NB

U.S.H. 51

50'(TYP)

RUINS

GRINDE RD.

PROP

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	STAGE CONSTRUCTION - STAGE 1A	SHEET 148 E

FILE NAME : P:\2011059 - US 51 WO\MicroStation\Planset\6020-02-72\026014_s1A.dgn PLOT DATE : 5/13/2013 PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : 200.0000 sf / in.

2

2

N

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- TYPE A FLASHING LIGHT
- TEMPORARY DELINEATOR (STEEL POST WITH SINGLE DELINEATOR)
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN MOUNTED ON PORTABLE SIGN SUPPORT, 5' MINIMUM MOUNTING HEIGHT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY PAVEMENT
- WORK AREA

ROAD CLOSED
R11-2
48" X 30"

RIGHT SHOULDER CLOSED
W21-5A

RIGHT SHOULDER CLOSED AHEAD
W21-5B

SEE SDD: TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY

555 SB
555 NB
560 SB
560 NB
565 SB
565 NB
570 NB

U.S.H. 51
USH 51

1000'

DELINEATED WETLAND

RUINS

SEPTIC

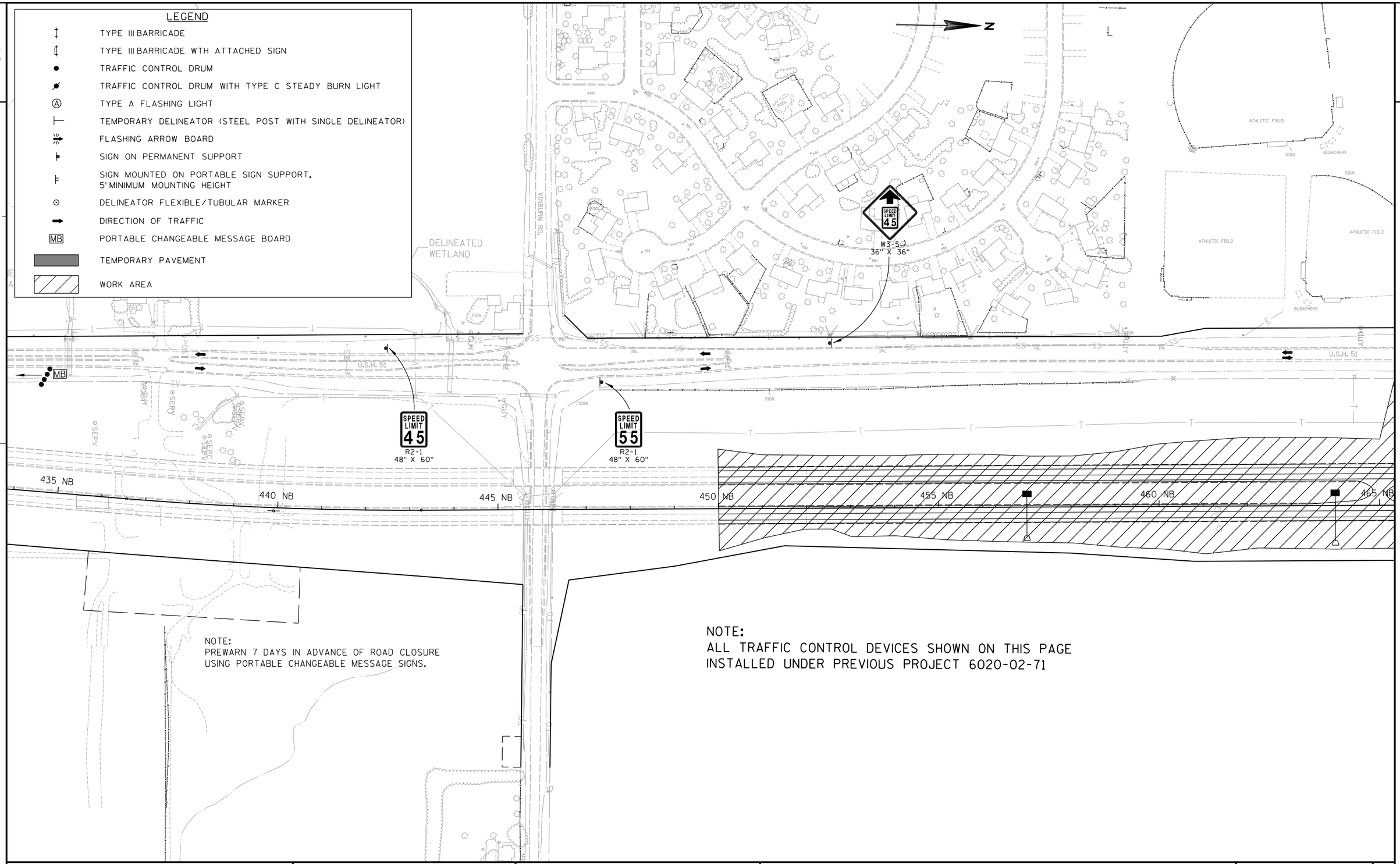
PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	STAGE CONSTRUCTION - STAGE 1A	SHEET 149	E

FILE NAME : P:\2011059 - US 51 WO\MicroStation\Planset\6020-02-72\026015_s1A.dgn PLOT DATE : 5/13/2013 PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : 200.0000 sf / in.

WISDOT/CADDS SHEET 42

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- (A) TYPE A FLASHING LIGHT
- TEMPORARY DELINEATOR (STEEL POST WITH SINGLE DELINEATOR)
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN MOUNTED ON PORTABLE SIGN SUPPORT, 5' MINIMUM MOUNTING HEIGHT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY PAVEMENT
- WORK AREA



NOTE:
PREWARN 7 DAYS IN ADVANCE OF ROAD CLOSURE USING PORTABLE CHANGEABLE MESSAGE SIGNS.

NOTE:
ALL TRAFFIC CONTROL DEVICES SHOWN ON THIS PAGE INSTALLED UNDER PREVIOUS PROJECT 6020-02-71

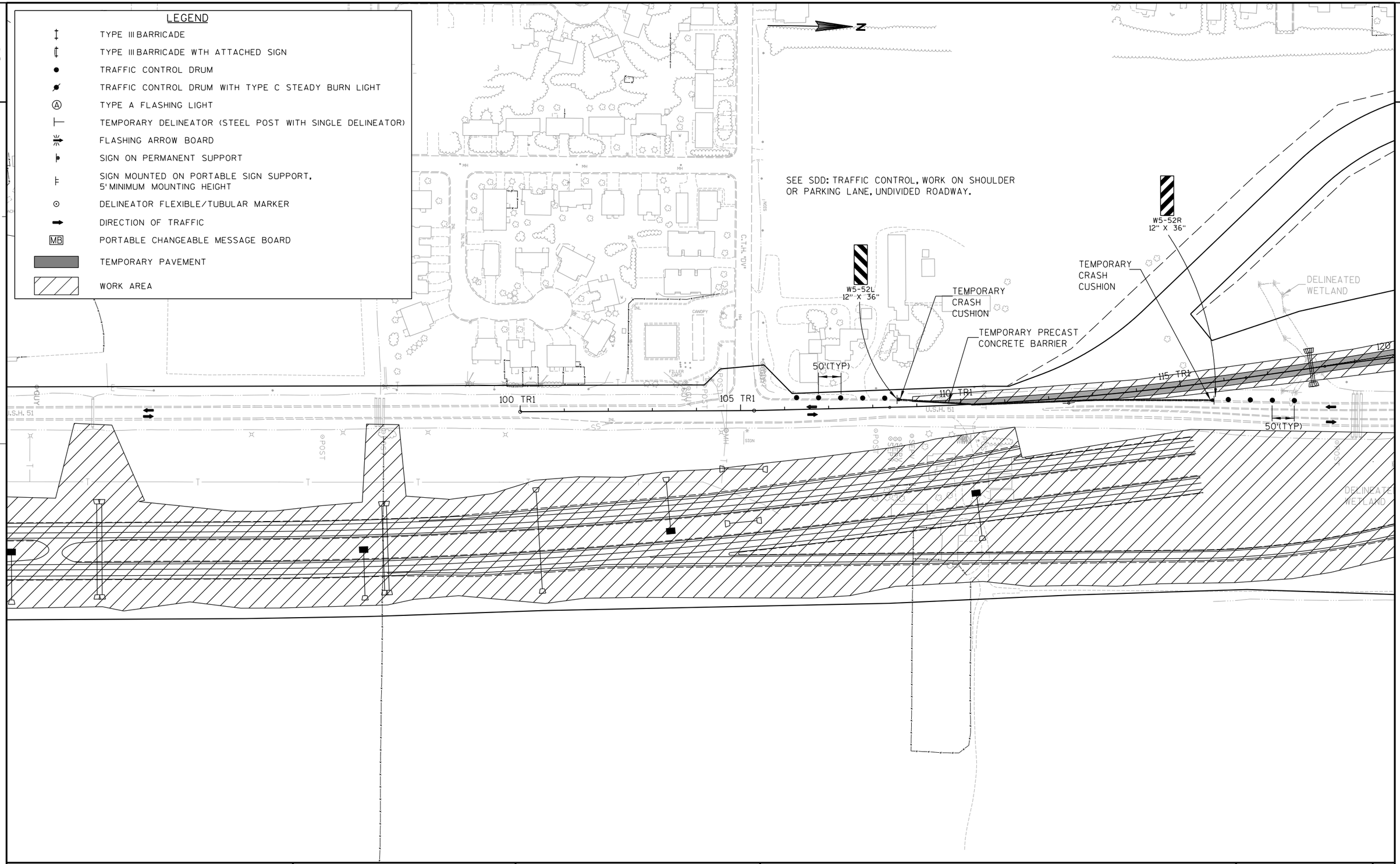
PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	STAGE CONSTRUCTION - STAGE 1B	SHEET 150	E

2

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- TYPE A FLASHING LIGHT
- TEMPORARY DELINEATOR (STEEL POST WITH SINGLE DELINEATOR)
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN MOUNTED ON PORTABLE SIGN SUPPORT, 5' MINIMUM MOUNTING HEIGHT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY PAVEMENT
- WORK AREA

SEE SDD: TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY.



PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	STAGE CONSTRUCTION - STAGE 1B	SHEET 151	E

NOTE:
PREWARN 7 DAYS IN ADVANCE OF ROAD CLOSURE
USING PORTABLE CHANGEABLE MESSAGE SIGNS.

N

ROAD CLOSED
R11-2
48" X 30"

ROAD CLOSED
R11-2
48" X 30"

250' TR1

120 TR1
125 TR1
130 TR1
135 TR2
140 TR2
140 TR1
145 TR2
145 TR1
525 NB
520 NB
150 T

50'(TYP)

U.S.H. 51

C.T.H. G

MUELLER RD.

495
495 NX

DELINEATED WETLAND

SEE SDD: TRAFFIC CONTROL FOR LANE CLOSURE
(SUITABLE FOR MOVING OPERATIONS)

SEE SDD: TRAFFIC CONTROL, WORK ON SHOULDER
OR PARKING LANE, UNDIVIDED ROADWAY.

MAINTAIN ACCESS AT ALL TIMES

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- TYPE A FLASHING LIGHT
- TEMPORARY DELINEATOR (STEEL POST WITH SINGLE DELINEATOR)
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN MOUNTED ON PORTABLE SIGN SUPPORT, 5' MINIMUM MOUNTING HEIGHT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY PAVEMENT
- WORK AREA

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	STAGE CONSTRUCTION - STAGE 1B	SHEET 152	E

FILE NAME : P:\2011059 - US 51 WO\MicroStation\Planset\6020-02-72\026023_s1B.dgn
PLOT DATE : 6/3/2013
PLOT BY : $$...plotuser...$$ PLOT NAME :
PLOT SCALE : 200.0000 sf / in.

2

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- TYPE A FLASHING LIGHT
- TEMPORARY DELINEATOR (STEEL POST WITH SINGLE DELINEATOR)
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN MOUNTED ON PORTABLE SIGN SUPPORT, 5' MINIMUM MOUNTING HEIGHT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY PAVEMENT
- WORK AREA

N

RIGHT SHOULDER CLOSED W21-5A

RIGHT SHOULDER CLOSED AHEAD W21-5B

SEE SDD: TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY

525 NB
525 NN
530 NB
535 NB
540 NB
545 NB
550 SB
550 NB
555 SB
555 NB

U.S.H. 51

50'(TYP)

RUINS
GRINDE RD.
PROP
©SEPV
©GUY
©65PRV
©ABBE
©GUY
©GUY

NOTE:
PREWARN 7 DAYS IN ADVANCE OF ROAD CLOSURE USING PORTABLE CHANGEABLE MESSAGE SIGNS.

MB

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	STAGE CONSTRUCTION - STAGE 1B	SHEET 153	E

FILE NAME : P:\2011059 - US 51 WO\MicroStation\Planset\6020-02-72\026024_s1B.dgn PLOT DATE : 5/13/2013 PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : 200.0000 sf / in.

2

N

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- TYPE A FLASHING LIGHT
- TEMPORARY DELINEATOR (STEEL POST WITH SINGLE DELINEATOR)
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN MOUNTED ON PORTABLE SIGN SUPPORT, 5' MINIMUM MOUNTING HEIGHT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY PAVEMENT
- WORK AREA

ROAD CLOSED
R11-2
48" X 30"

RIGHT SHOULDER CLOSED
W21-5A

RIGHT SHOULDER CLOSED AHEAD
W21-5B

SEE SDD: TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY

555 SB
555 NB
560 SB
560 NB
565 SB
565 NB
570 NB

U.S.H. 51
USH 51

1000'

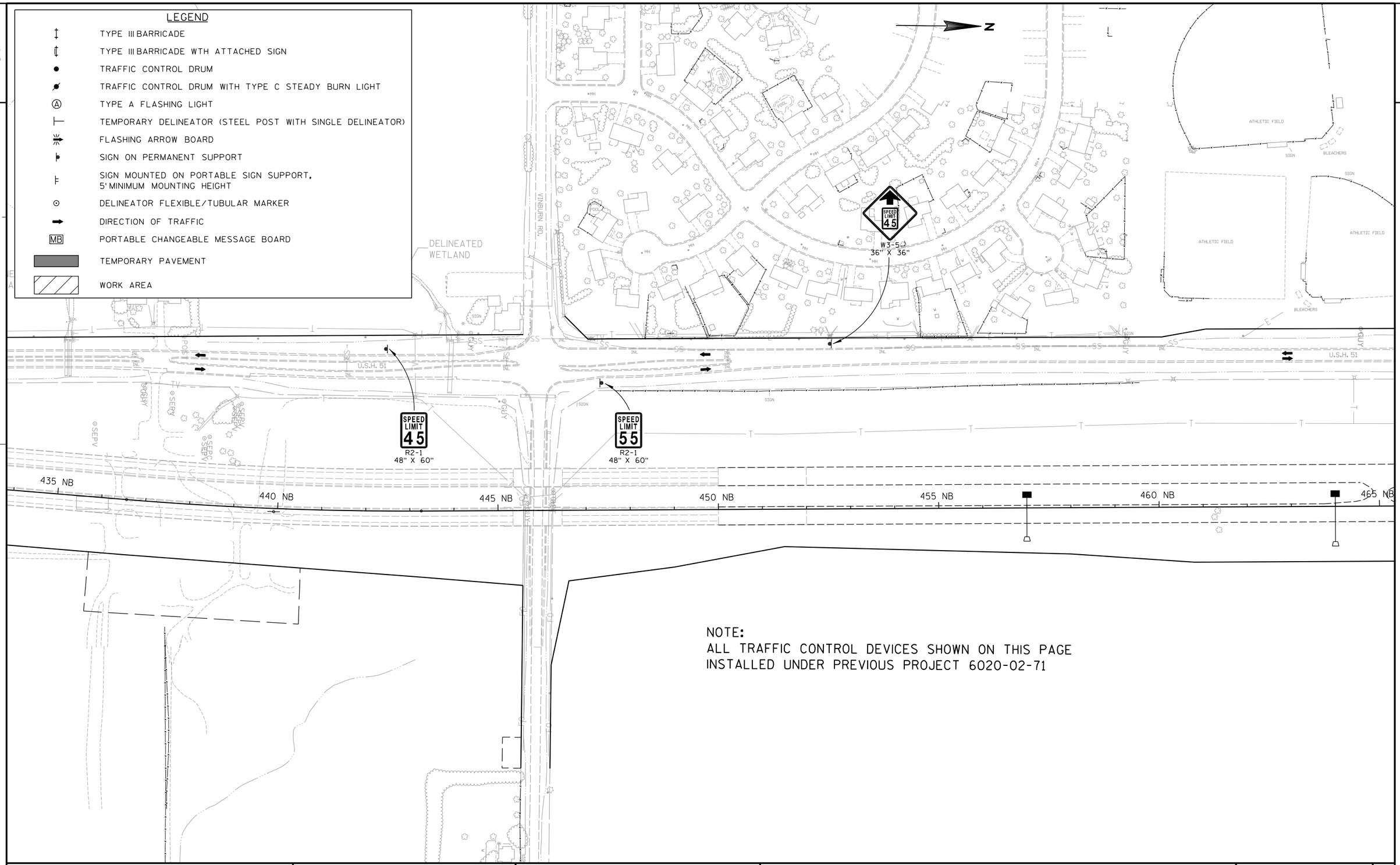
DELINEATED WETLAND

NOTE:
PREWARN 7 DAYS IN ADVANCE OF ROAD CLOSURE USING PORTABLE CANGEABLE MESSAGE SIGNS.

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	STAGE CONSTRUCTION - STAGE 1B	SHEET 154	E

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- TYPE A FLASHING LIGHT
- TEMPORARY DELINEATOR (STEEL POST WITH SINGLE DELINEATOR)
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN MOUNTED ON PORTABLE SIGN SUPPORT, 5' MINIMUM MOUNTING HEIGHT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY PAVEMENT
- WORK AREA



NOTE:
ALL TRAFFIC CONTROL DEVICES SHOWN ON THIS PAGE INSTALLED UNDER PREVIOUS PROJECT 6020-02-71

2

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- TYPE A FLASHING LIGHT
- TEMPORARY DELINEATOR (STEEL POST WITH SINGLE DELINEATOR)
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN MOUNTED ON PORTABLE SIGN SUPPORT, 5' MINIMUM MOUNTING HEIGHT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY PAVEMENT
- WORK AREA

N

C.T.H. "DV"

U.S.H. 51

ROAD CLOSED
R11-2
48" X 30"

50'(TYP)

PAVEMENT MARKING
EPOXY 4-INCH
(DOUBLE YELLOW)

DELINEATED WETLAND

PAVEMENT MARKING EPOXY
4-INCH (WHITE)

DELINEATE WETLAND

CANOPY

FILLER CAPS

SIGN

POST

SEEP

2

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	STAGE CONSTRUCTION - STAGE 1C	SHEET 156	E

2

N

250' INT

C.T.H. "V"

PAVEMENT MARKING
EPOXY 4-INCH (WHITE)

PAVEMENT MARKING EPOXY
4-INCH (DOUBLE YELLOW)

520 NB

50'(TYP)

525 NB

U.S.H. 51

495 NB

DELINEATED
WETLAND

495 NX

MUELLER RD.

SEE STAGE CONSTRUCTION - STAGE 1C
CTH V WINTER CONDITIONS SHEET

MAINTAIN ACCESS AT ALL TIMES

ROAD
CLOSED
R11-2
48" X 30"

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- (A) TYPE A FLASHING LIGHT
- TEMPORARY DELINEATOR (STEEL POST WITH SINGLE DELINEATOR)
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN MOUNTED ON PORTABLE SIGN SUPPORT, 5' MINIMUM MOUNTING HEIGHT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY PAVEMENT
- WORK AREA

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	STAGE CONSTRUCTION - STAGE 1C	SHEET 157	E

2

N

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- TYPE A FLASHING LIGHT
- TEMPORARY DELINEATOR (STEEL POST WITH SINGLE DELINEATOR)
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN MOUNTED ON PORTABLE SIGN SUPPORT, 5' MINIMUM MOUNTING HEIGHT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY PAVEMENT
- WORK AREA

ROAD CLOSED
R11-2
48" X 30"

555 SB
555 NB
560 SB
560 NB
565 SB
565 NB
570 NB

U.S.H. 51
USH 51

DELINEATED WETLAND
DELINEATED WETLAND
DELINEATED WETLAND
DELINEA WETLAND

RUINS
RUINS
u/c
u/c
u/c
SIGN
SEPTIC
T
CP POST
BRIDGE

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	STAGE CONSTRUCTION - STAGE 1C	SHEET 158	E

PAVEMENT MARKING EPOXY
4-INCH (WHITE)

NOTE:
REPLACE CTH V / NORTH STREET PAVEMENT MARKINGS ON TEMPORARY PAVEMENT, TIE INTO EXISTING TO WEST AND EAST OF TEMPORARY INTERSECTION.

PAVEMENT MARKING EPOXY
4-INCH (DOUBLE YELLOW)

DELINEATED WETLAND

ROAD CLOSED
R11-2
48" X 30"

50'(TYP)

PAVEMENT MARKING EPOXY 4-INCH
(3'LINE, 9'GAP) (WHITE)

PAVEMENT MARKING EPOXY
8-INCH (WHITE)

125 TR1

130 TR1

120 TR1

PAVEMENT MARKING EPOXY
4-INCH (DOUBLE YELLOW)

PAVEMENT MARKING EPOXY
4-INCH (WHITE)

STOP
R1-1
30" X 30"

PAVEMENT MARKING EPOXY
8-INCH (WHITE)

PAVEMENT MARKING EPOXY
4-INCH (WHITE)

PAVEMENT MARKING EPOXY 4-INCH
(3'LINE, 9'GAP) (WHITE)

PAVEMENT MARKING EPOXY
STOP LINE 18-INCH

DELINEATED WETLAND

C.T.H. "V"

MUELLER ST

GUY ST

POST

SIGN

MH

IP

INL

U.S.H.

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- TYPE A FLASHING LIGHT
- TEMPORARY DELINEATOR (STEEL POST WITH SINGLE DELINEATOR)
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN MOUNTED ON PORTABLE SIGN SUPPORT, 5' MINIMUM MOUNTING HEIGHT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY PAVEMENT
- WORK AREA

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	STAGE CONSTRUCTION-STAGE 1C - CTH V WINTER CONDITIONS	SHEET 159	E

2

N

C.T.H. "V"

U.S.H. 51

MUELLER RD.

DELINEATED WETLAND

U/C

TANKS

CORN CRIB

WELL

10 D1

15 D2

40

LEGEND

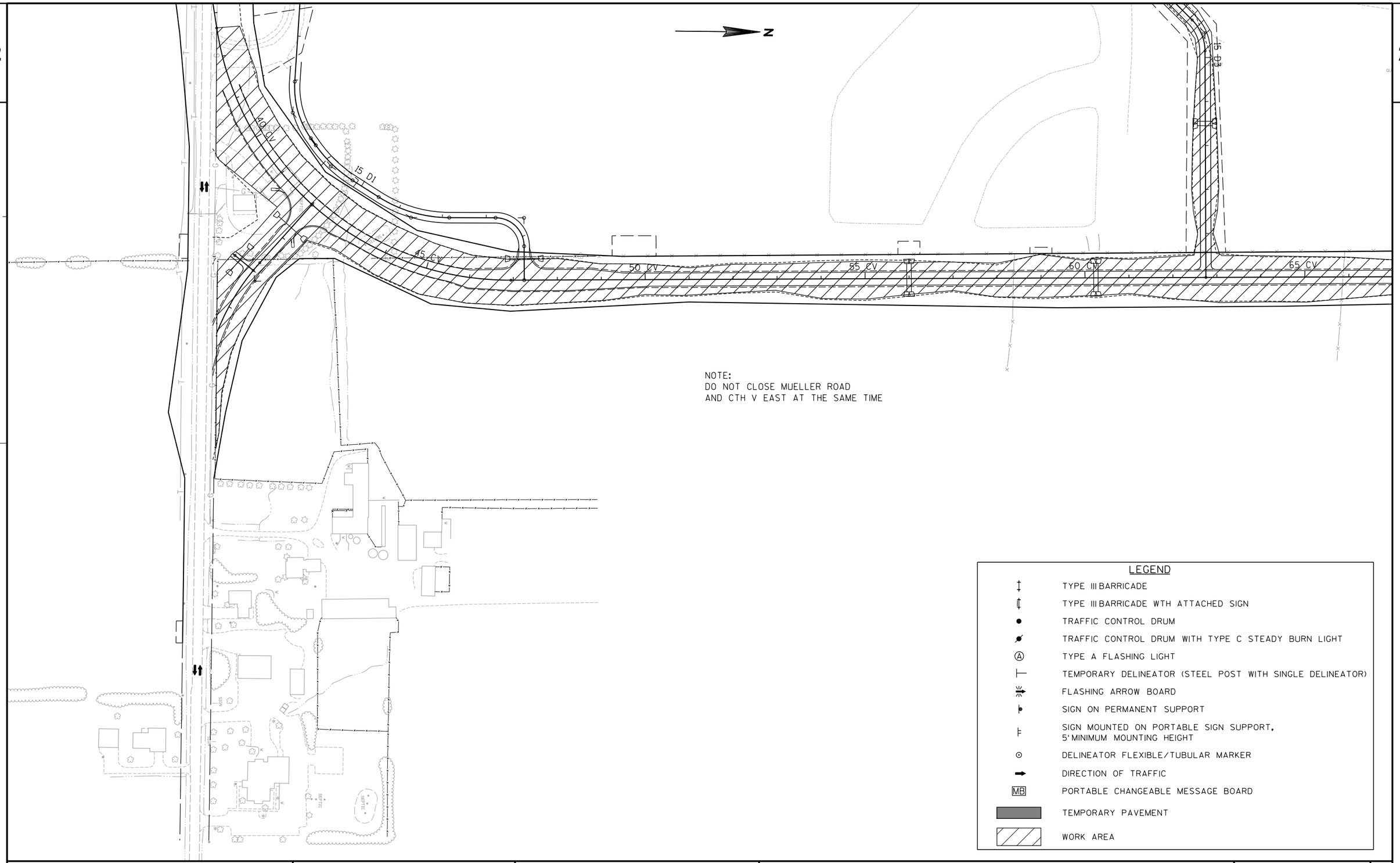
- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
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- SIGN MOUNTED ON PORTABLE SIGN SUPPORT, 5' MINIMUM MOUNTING HEIGHT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- DIRECTION OF TRAFFIC
- MB — PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY PAVEMENT
- WORK AREA

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	STAGE CONSTRUCTION - STAGE 1 - OPTIONAL WORK	SHEET 160	E

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WISDOT/CADDS SHEET 42

2

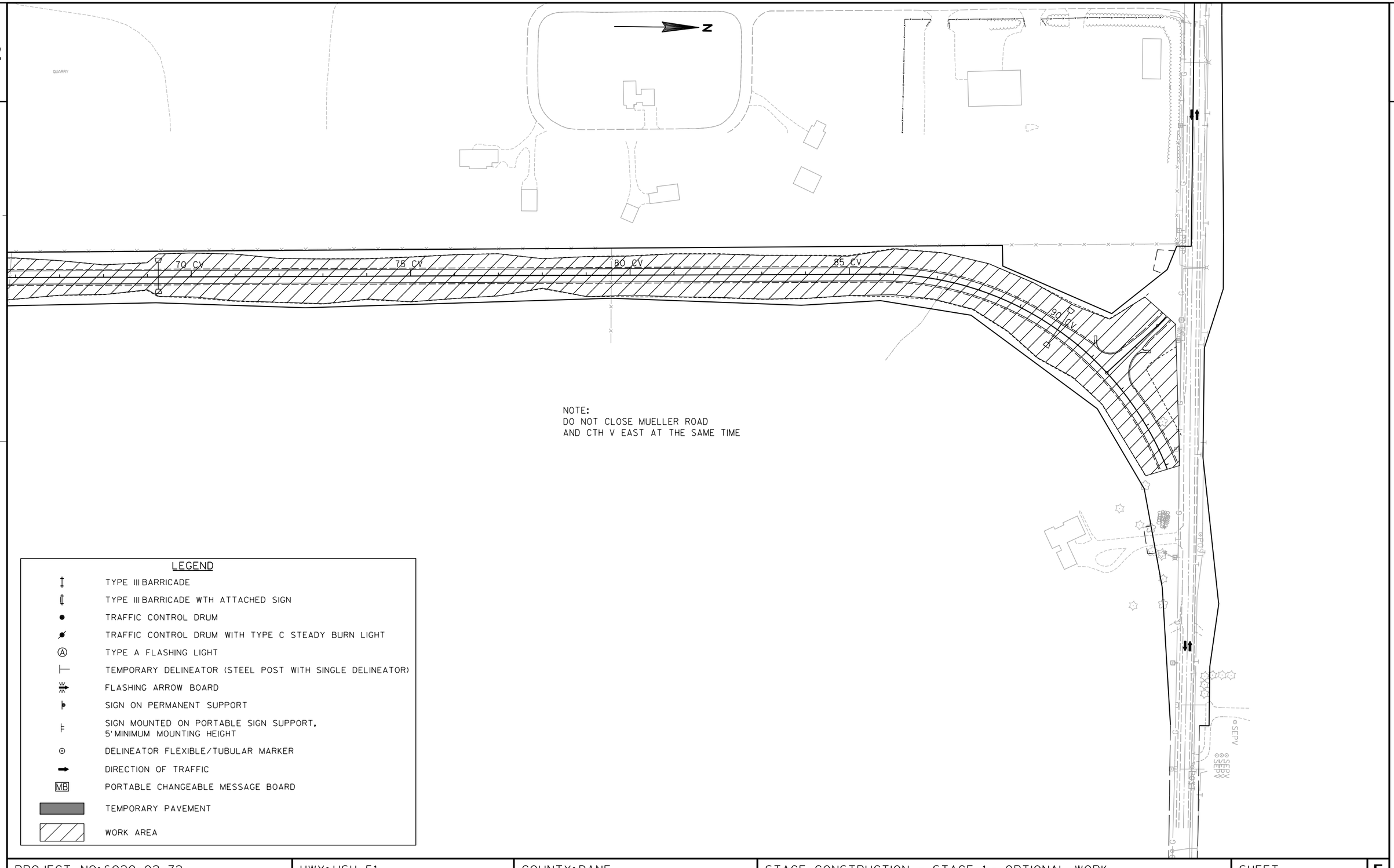


NOTE:
DO NOT CLOSE MUELLER ROAD
AND CTH V EAST AT THE SAME TIME

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- (A) TYPE A FLASHING LIGHT
- TEMPORARY DELINEATOR (STEEL POST WITH SINGLE DELINEATOR)
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN MOUNTED ON PORTABLE SIGN SUPPORT, 5' MINIMUM MOUNTING HEIGHT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY PAVEMENT
- WORK AREA

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	STAGE CONSTRUCTION - STAGE 1 - OPTIONAL WORK	SHEET 161	E



PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	STAGE CONSTRUCTION - STAGE 1 - OPTIONAL WORK	SHEET 162 E

2

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- TYPE A FLASHING LIGHT
- TEMPORARY DELINEATOR (STEEL POST WITH SINGLE DELINEATOR)
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN MOUNTED ON PORTABLE SIGN SUPPORT, 5' MINIMUM MOUNTING HEIGHT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY PAVEMENT
- WORK AREA

N

SPEED LIMIT 45
W3-5
36" X 36"

DELINEATED WETLAND

VINBURN RD.

U.S.H. 51

SPEED LIMIT 45
R2-1
48" X 60"

SPEED LIMIT 55
R2-1
48" X 60"

435 NB 440 NB 445 NB 450 NB 455 NB 460 NB 465 NB

ATHLETIC FIELD
SIGN
BLEACHERS

NOTE:
ALL TRAFFIC CONTROL DEVICES SHOWN ON THIS PAGE
INSTALLED UNDER PREVIOUS PROJECT 6020-02-71

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	STAGE CONSTRUCTION - STAGE 2	SHEET 163	E

2

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- (A) TYPE A FLASHING LIGHT
- TEMPORARY DELINEATOR (STEEL POST WITH SINGLE DELINEATOR)
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN MOUNTED ON PORTABLE SIGN SUPPORT, 5' MINIMUM MOUNTING HEIGHT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- DIRECTION OF TRAFFIC
- [MB] PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY PAVEMENT
- WORK AREA

N

W01-4L

W1-6
48" X 24"

(A) (A)
ROAD CLOSED
R11-2
48" X 30"

TEMPORARY PAVEMENT MARKING
4-INCH (WHITE)

TEMPORARY PAVEMENT MARKING
4-INCH (DOUBLE YELLOW)

DELINEATED WETLAND

C.T.H. "DV"

U.S.H. 51

50'(TYP)

25'(TYP)

465 NB
470 NB
475 NB
475 NX
475 SN
480 NB
480 NX
480 SN
485 NB
485 NX
485 SN
490 NB
490 NX
490 SN
495 NB
495 NX

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	STAGE CONSTRUCTION - STAGE 2	SHEET 164 E

2

N

W01-4R

ROAD CLOSED
R11-2
48" X 30"

50'(TYP)
25'(TYP)

510 NB
515 NB
520 NB
525 NB

505 NB
500 NB
495 NB
505 NN
500 NN
495 NN

TEMPORARY PRECAST CONCRETE BARRIER

DELINEATED WETLAND

C.T.H. "V"
MUELLER RD.
U.S.H. 51
SEPV
WELL
CORN CRIB
TANKS
U/C
T/O

TEMPORARY PAVEMENT MARKING
4-INCH (WHITE)

TEMPORARY PAVEMENT MARKING
4-INCH (DOUBLE YELLOW)

MUST MAINTAIN ACCESS
AT ALL TIMES

10 D3
15 D3
10 D1
40

SEE STAGE CONSTRUCTION - STAGE 2
CTH V TEMPORARY INTERSECTION SHEET

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- TYPE A FLASHING LIGHT
- TEMPORARY DELINEATOR (STEEL POST WITH SINGLE DELINEATOR)
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN MOUNTED ON PORTABLE SIGN SUPPORT, 5' MINIMUM MOUNTING HEIGHT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- DIRECTION OF TRAFFIC
- PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY PAVEMENT
- WORK AREA

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	STAGE CONSTRUCTION - STAGE 2	SHEET 165	E

FILE NAME : P:\2011059 - US 51 WO\MicroStation\Planset\6020-02-72\026204_s2.dgn
PLOT DATE : 6/5/2013
PLOT BY : $$...plotuser...$$ PLOT NAME :
PLOT SCALE : 200.0000 sf / in.
WISDOT/CADDS SHEET 42

2

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- (A) TYPE A FLASHING LIGHT
- TEMPORARY DELINEATOR (STEEL POST WITH SINGLE DELINEATOR)
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN MOUNTED ON PORTABLE SIGN SUPPORT, 5' MINIMUM MOUNTING HEIGHT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY PAVEMENT
- WORK AREA

N

(PLACE AT NEAREST INTERSECTION)

(A) (A) ROAD CLOSED TO THRU TRAFFIC
R11-4
60" X 30"

(A) (A) ROAD CLOSED
R11-2
48" X 30"

TEMPORARY ASPHALT WEDGE REQ'D.

525 NB
525 NN
530 NB
535 NB
540 NB
545 NB
550 SB
550 NB
555 SB
555 NB

U.S.H. 51

W01-4R

45' SW

35' GI

40' GI

SW

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	STAGE CONSTRUCTION - STAGE 2	SHEET 166	E

FILE NAME : P:\2011059 - US 51 WO\MicroStation\Planset\6020-02-72\026205_s2.dgn PLOT DATE : 6/5/2013 PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : 200.0000 sf / in.

WISDOT/CADDS SHEET 42

2

N

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- (A) TYPE A FLASHING LIGHT
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- SIGN MOUNTED ON PORTABLE SIGN SUPPORT, 5' MINIMUM MOUNTING HEIGHT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY PAVEMENT
- WORK AREA

(A) (A)
ROAD CLOSED
R11-2
48" X 30"

15 D4
20 D4
25 D4
30 D4
555 SB
555 NB
560 SB
560 NB
565 SB
565 NB
570 NB

U.S.H. 51

RIGHT SHOULDER CLOSED
W21-5A

RIGHT SHOULDER CLOSED AHEAD
W21-5B

SEE SDD: TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY

DELINEATED WETLAND

USH 51

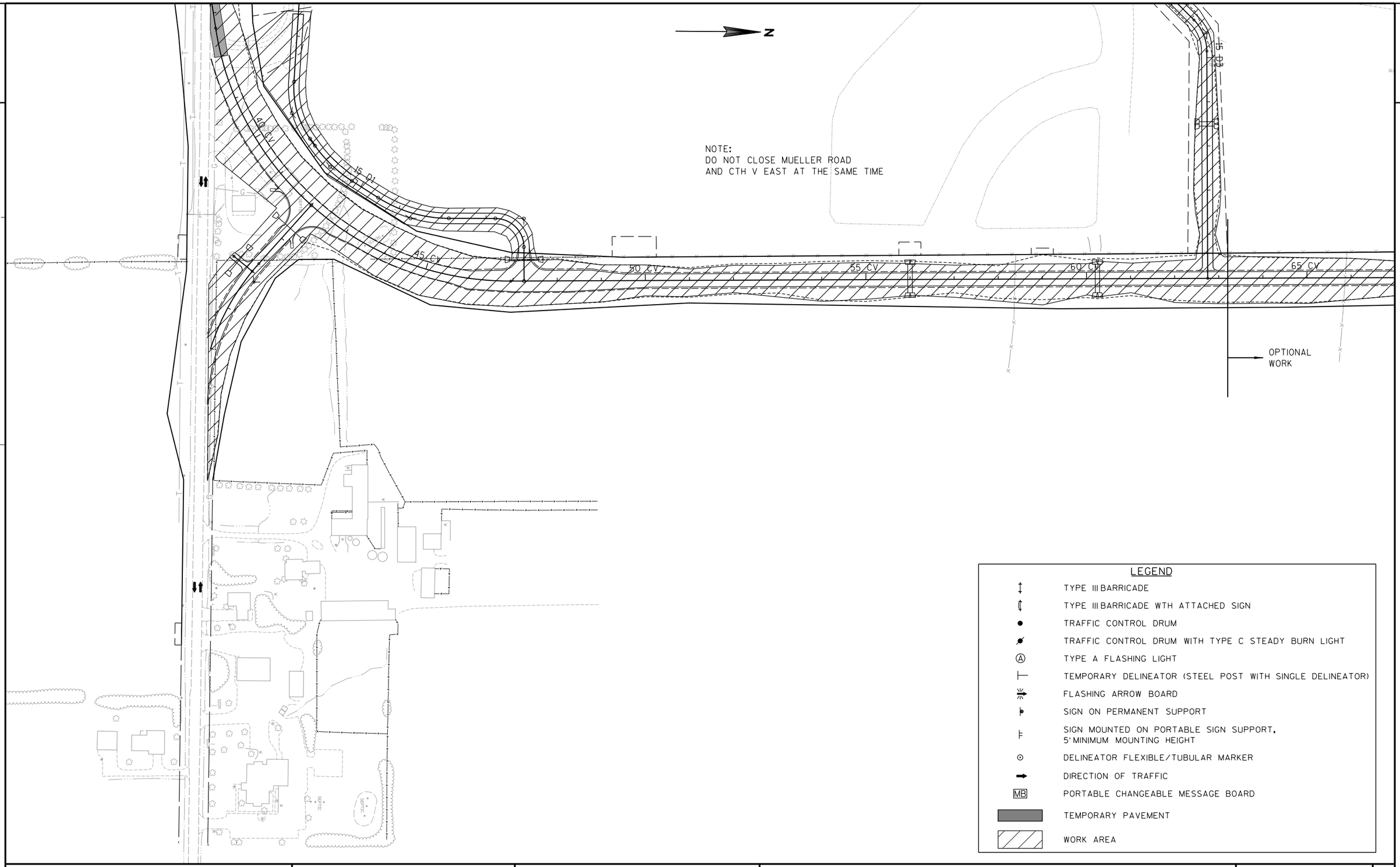
1000'

SEPTIC

SEE SDD: TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	STAGE CONSTRUCTION - STAGE 2	SHEET 167	E

2

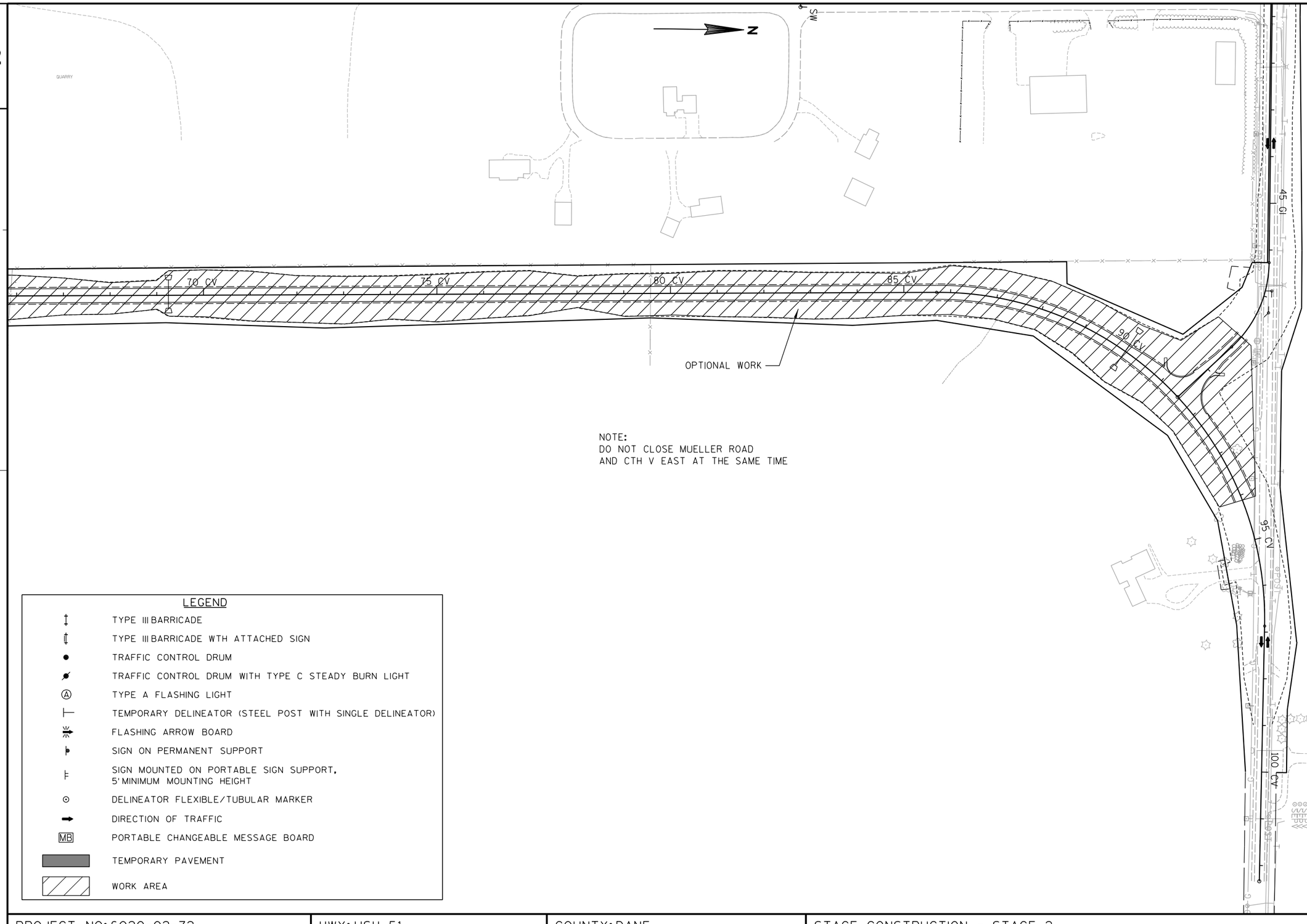


LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- TYPE A FLASHING LIGHT
- TEMPORARY DELINEATOR (STEEL POST WITH SINGLE DELINEATOR)
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN MOUNTED ON PORTABLE SIGN SUPPORT, 5' MINIMUM MOUNTING HEIGHT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- DIRECTION OF TRAFFIC
- MB — PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY PAVEMENT
- WORK AREA

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	STAGE CONSTRUCTION - STAGE 2	SHEET 168	E

2



NOTE:
DO NOT CLOSE MUELLER ROAD
AND CTH V EAST AT THE SAME TIME

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- TYPE A FLASHING LIGHT
- TEMPORARY DELINEATOR (STEEL POST WITH SINGLE DELINEATOR)
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN MOUNTED ON PORTABLE SIGN SUPPORT, 5' MINIMUM MOUNTING HEIGHT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY PAVEMENT
- WORK AREA

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	STAGE CONSTRUCTION - STAGE 2	SHEET 169 E

FLEXIBLE TUBULAR MARKER POST
50' SPACING(TYP)

NOTE:
PLACE FLEXIBLE TUBULAR MARKER POST FROM STA.117+00 TR1 - STA.132+00 TR1

TEMPORARY PAVEMENT MARKING
4-INCH (WHITE)

STOP
R1-1
36" X 36"

TEMPORARY PAVEMENT MARKING
4-INCH (DOUBLE YELLOW)

BEGIN LEFT TURN LANE
R3-20L
24" X 36"

W06-2

BEGIN RIGHT TURN LANE
R3-20R
24" X 36"

W01-4R

W01-4L

LEFT LANE MUST TURN LEFT
R3-7L
30" X 30"

DELINEATED WETLAND

TEMPORARY PAVEMENT MARKING
STOP LINE 12-INCH

STOP
R1-1
36" X 36"

120 TR1

125 TR1

130 TR1

505 SB

505 NB

500 NB

495 NB

495 NN

500 NN

TEMPORARY PAVEMENT MARKING
4-INCH (DOUBLE YELLOW)

TEMPORARY PAVEMENT MARKING
4-INCH (WHITE)

TEMPORARY PRECAST
CONCRETE BARRIER

C.T.H. V

U.S.H. 51

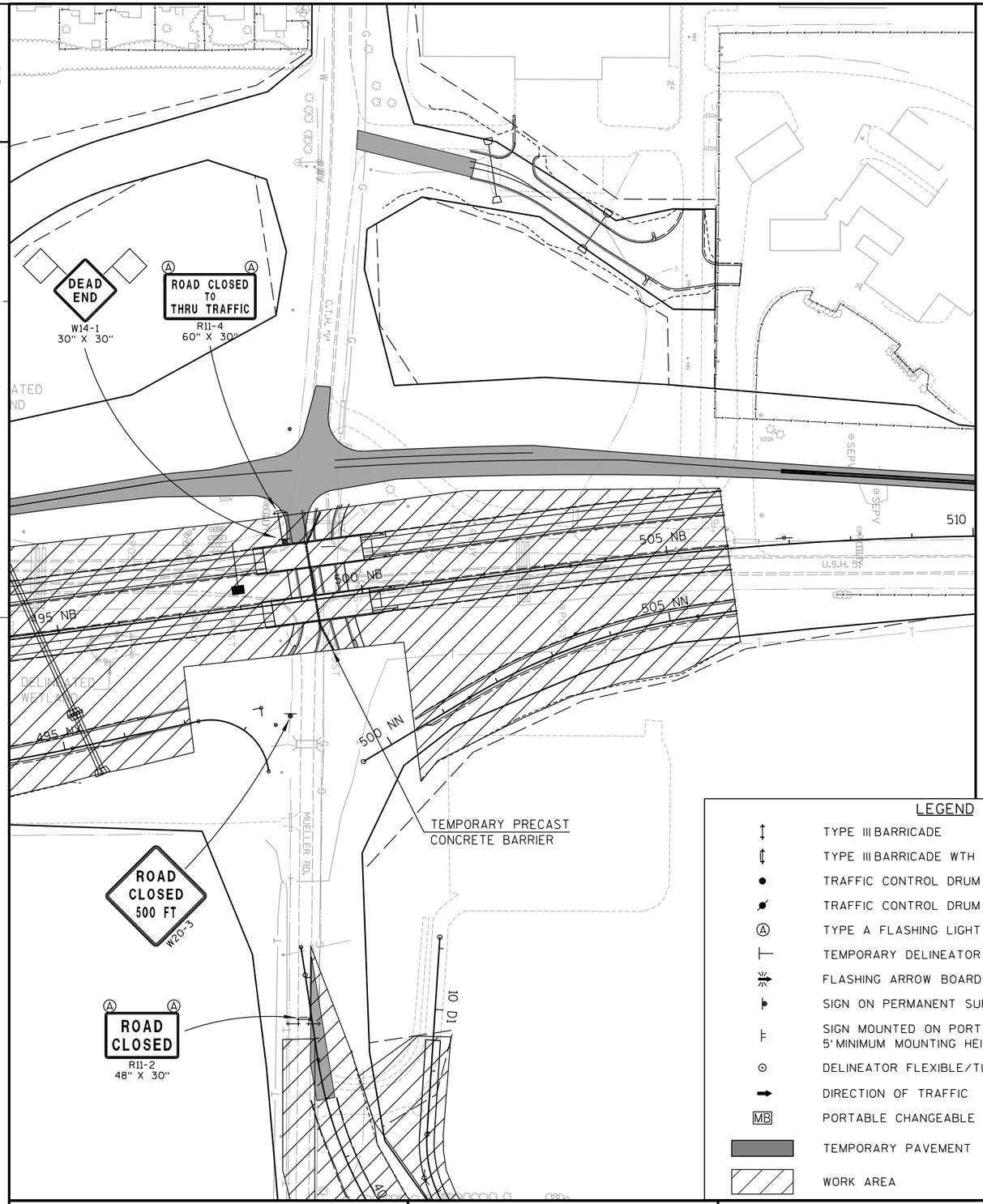
MUELLER ROAD

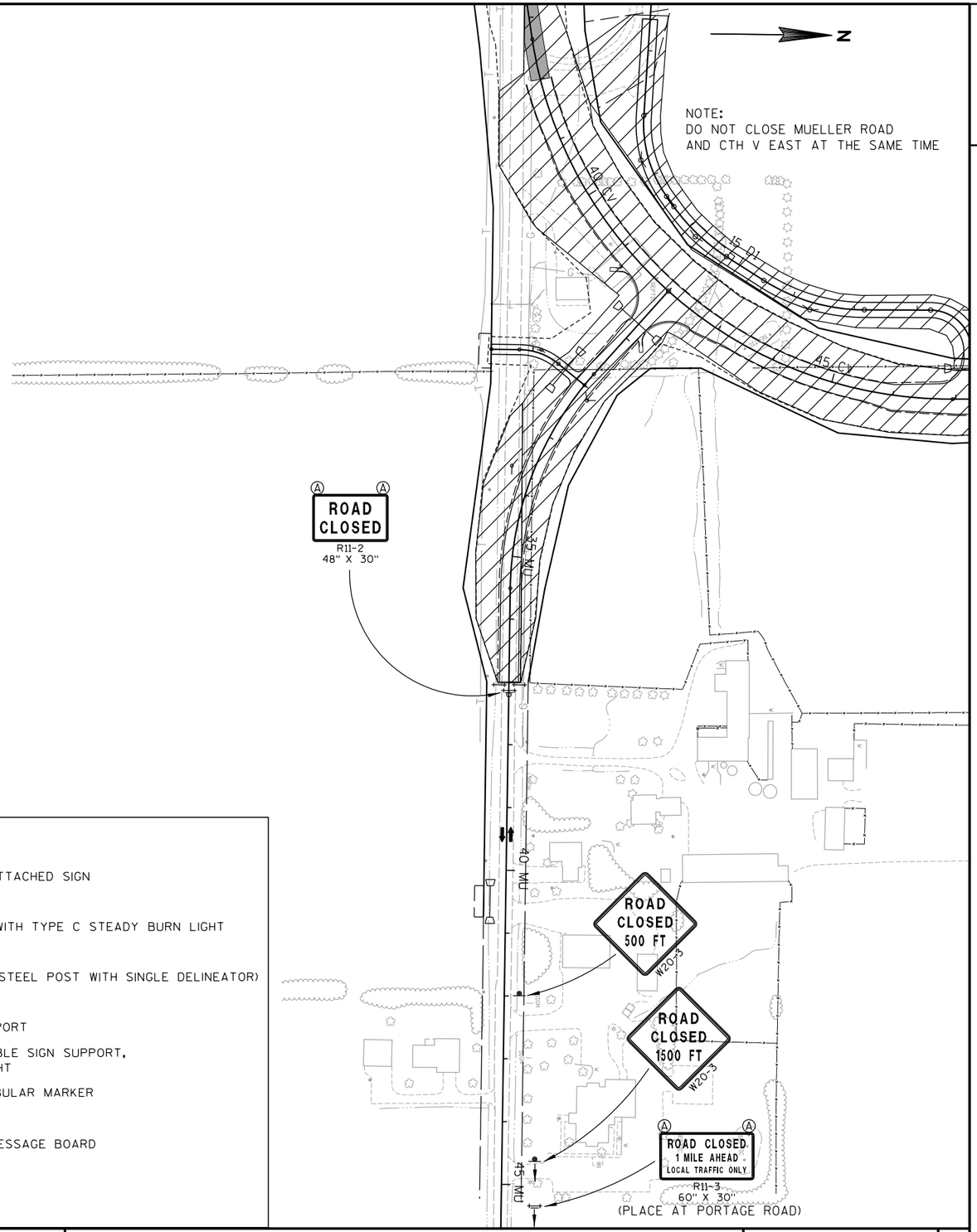
SIGN

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- (A) TYPE A FLASHING LIGHT
- TEMPORARY DELINEATOR (STEEL POST WITH SINGLE DELINEATOR)
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- SIGN ON PERMANENT SUPPORT
- SIGN MOUNTED ON PORTABLE SIGN SUPPORT, 5'MINIMUM MOUNTING HEIGHT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY PAVEMENT
- WORK AREA

PROJECT NO:6020-02-72	HWY:USH 51	COUNTY:DANE	STAGE CONSTRUCTION-STAGE 2 - CTH V TEMPORARY INTERSECTION	SHEET 170	E





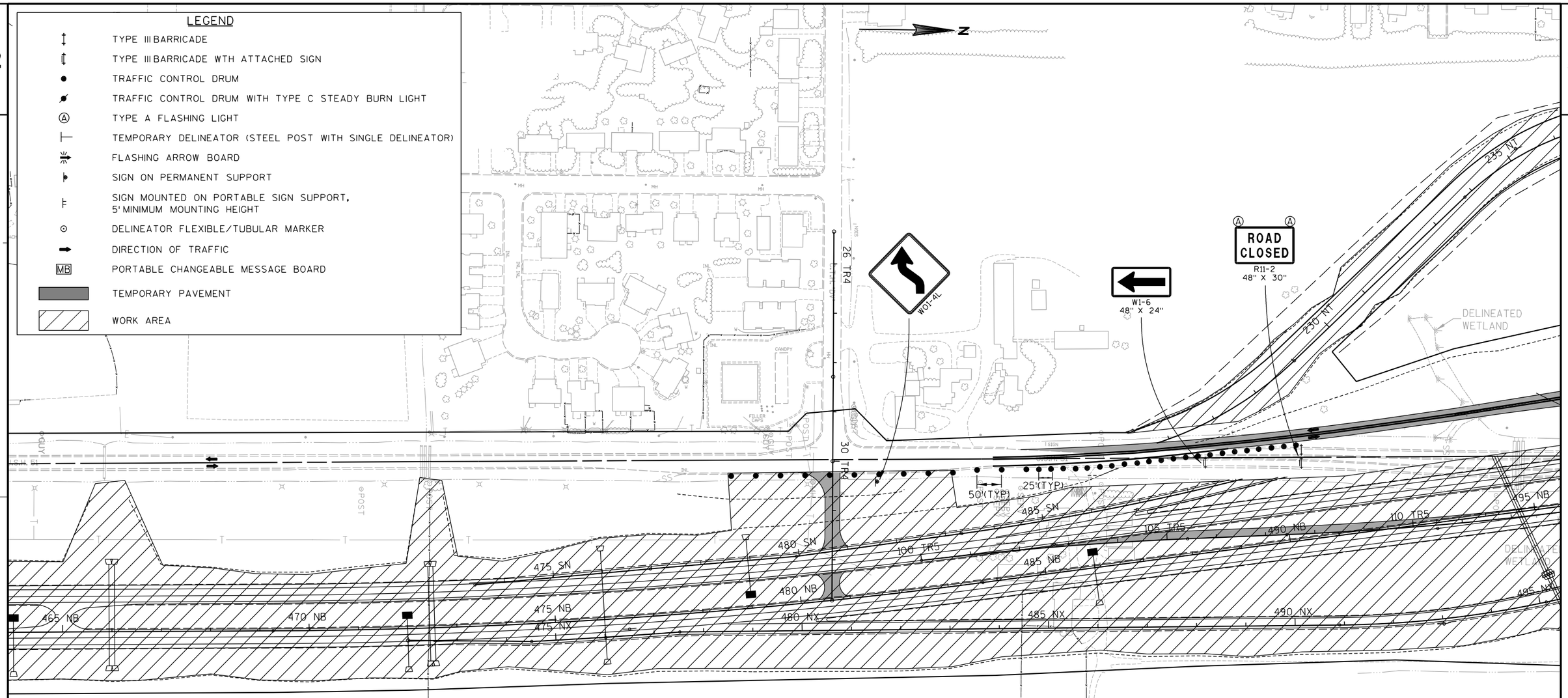
LEGEND

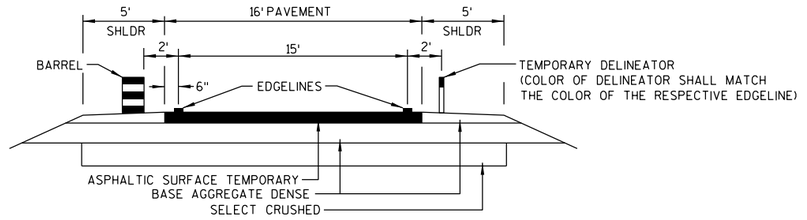
- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
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- DELINEATOR FLEXIBLE/TUBULAR MARKER
- DIRECTION OF TRAFFIC
- PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY PAVEMENT
- WORK AREA

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	STAGE CONSTRUCTION - STAGE 2 - MUELLER ROAD TIE-IN CLOSURE	SHEET 171	E

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- TYPE A FLASHING LIGHT
- TEMPORARY DELINEATOR (STEEL POST WITH SINGLE DELINEATOR)
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN MOUNTED ON PORTABLE SIGN SUPPORT, 5' MINIMUM MOUNTING HEIGHT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY PAVEMENT
- WORK AREA





TYPICAL RAMP CROSSOVER ROADWAY DIMENSIONS, SINGLE LANE

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	STAGE CONSTRUCTION - STAGE 3A	SHEET 172	E

2

ROAD CLOSED
R11-2
48" X 30"

ROAD CLOSED
R11-2
48" X 30"

ROAD CLOSED
R11-2
48" X 30"

ROAD CLOSED
R11-2
48" X 30"

W01-6
48" X 24"

TEMPORARY PRECAST
CONCRETE BARRIER

TEMPORARY PAVEMENT
MARKING 4-INCH (WHITE)

TEMPORARY PAVEMENT
MARKING 4-INCH
(DOUBLE YELLOW)

TEMPORARY PAVEMENT MARKING
REMOVABLE TAPE, 4-INCH (WHITE)
(STA.519+00 NB - STA.522+00 NB)

TEMPORARY PAVEMENT MARKING
REMOVABLE TAPE 4-INCH
(DOUBLE YELLOW)

PAVEMENT MARKING EPOXY
4-INCH (WHITE)

TEMPORARY PAVEMENT MARKING
REMOVABLE TAPE, 4-INCH (WHITE)

STRUCTURE
B-13-600

STRUCTURE
B-13-599

SEE STAGE CONSTRUCTION - STAGE 3A
CTH V DETOUR

25'(TYP)

520 SX

510 NB

510 NN

515 NB

515 NN

520 NB

520 NN

525 NB

525 NN

505 NB

505 NN

500 NB

500 NN

495 NB

495 NN

248' NT

250' NT

25 CY

30 CY

35 CY

40

10 D1

10 D3

15 D2

DELINEATED WETLAND

CORN CRIB

TANKS

U/C

T/D

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- TYPE A FLASHING LIGHT
- TEMPORARY DELINEATOR (STEEL POST WITH SINGLE DELINEATOR)
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN MOUNTED ON PORTABLE SIGN SUPPORT, 5' MINIMUM MOUNTING HEIGHT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- DIRECTION OF TRAFFIC
- MB — PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY PAVEMENT
- WORK AREA

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	STAGE CONSTRUCTION - STAGE 3A	SHEET 173	E

2

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- TYPE A FLASHING LIGHT
- TEMPORARY DELINEATOR (STEEL POST WITH SINGLE DELINEATOR)
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN MOUNTED ON PORTABLE SIGN SUPPORT, 5' MINIMUM MOUNTING HEIGHT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY PAVEMENT
- WORK AREA

N

NOTE:
PLACE TEMPORARY PAVEMENT MARKING, 4-INCH
ON THE BINDER FROM STA.551+50 NB - STA.573+00 NB

SEE SDD: TRAFFIC CONTROL,
WORK ON SHOULDER OR PARKING
LANE, UNDIVIDED ROADWAY

TEMPORARY PAVEMENT MARKING
4-INCH (WHITE)

TEMPORARY PAVEMENT MARKING
4-INCH (DOUBLE YELLOW)

RIGHT SHOULDER CLOSED
W21-5A

TEMPORARY PAVEMENT MARKING
REMOVABLE TAPE 4-INCH (WHITE)

TEMPORARY PAVEMENT MARKING
REMOVABLE TAPE 4-INCH
(DOUBLE YELLOW)

PAVEMENT MARKING EPOXY
4-INCH (WHITE)

RIGHT SHOULDER CLOSED AHEAD
W21-5B

TEMPORARY ASPHALT
WEDGE REQ'D.

525 NB
525 NB
530 NB
535 NB
540 NB
545 NB
550 SB
550 NB
555 SB
555 NB

U.S.H. 51

965FPV

ROAD CLOSED
R11-2
48" X 30"

15 SW
SW

35 GI
40 GI
30 GI
10 GI

PROP

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	STAGE CONSTRUCTION - STAGE 3A	SHEET 174	E

FILE NAME : P:\2011059 - US 51 WO\MicroStation\Planset\6020-02-72\026304_s3A.dgn PLOT DATE : 6/5/2013 PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : 200.0000 sf / in.

WISDOT/CADDS SHEET 42

2

NOTE:
PLACE TEMPORARY PAVEMENT MARKING, 4-INCH
ON THE BINDER FROM STA.551+50 NB - STA.573+00 NB

N

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- (A) TYPE A FLASHING LIGHT
- TEMPORARY DELINEATOR (STEEL POST WITH SINGLE DELINEATOR)
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN MOUNTED ON PORTABLE SIGN SUPPORT, 5' MINIMUM MOUNTING HEIGHT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY PAVEMENT
- WORK AREA

TEMPORARY PAVEMENT MARKING
4-INCH (WHITE)

TEMPORARY PAVEMENT MARKING
4-INCH (DOUBLE YELLOW)

15 D4
20 D4
25 D4
30 D4

555 SB
555 NB
560 SB
560 NB
565 SB
565 NB
570 NB

DELINEATED WETLAND

RUINS

SIGN

u/c

SEPTIC

USH 51

MB

NOTE:
PREWARN 7 DAYS IN ADVANCE OF ROAD CLOSURE
USING PORTABLE CHANGEABLE MESSAGE SIGNS.

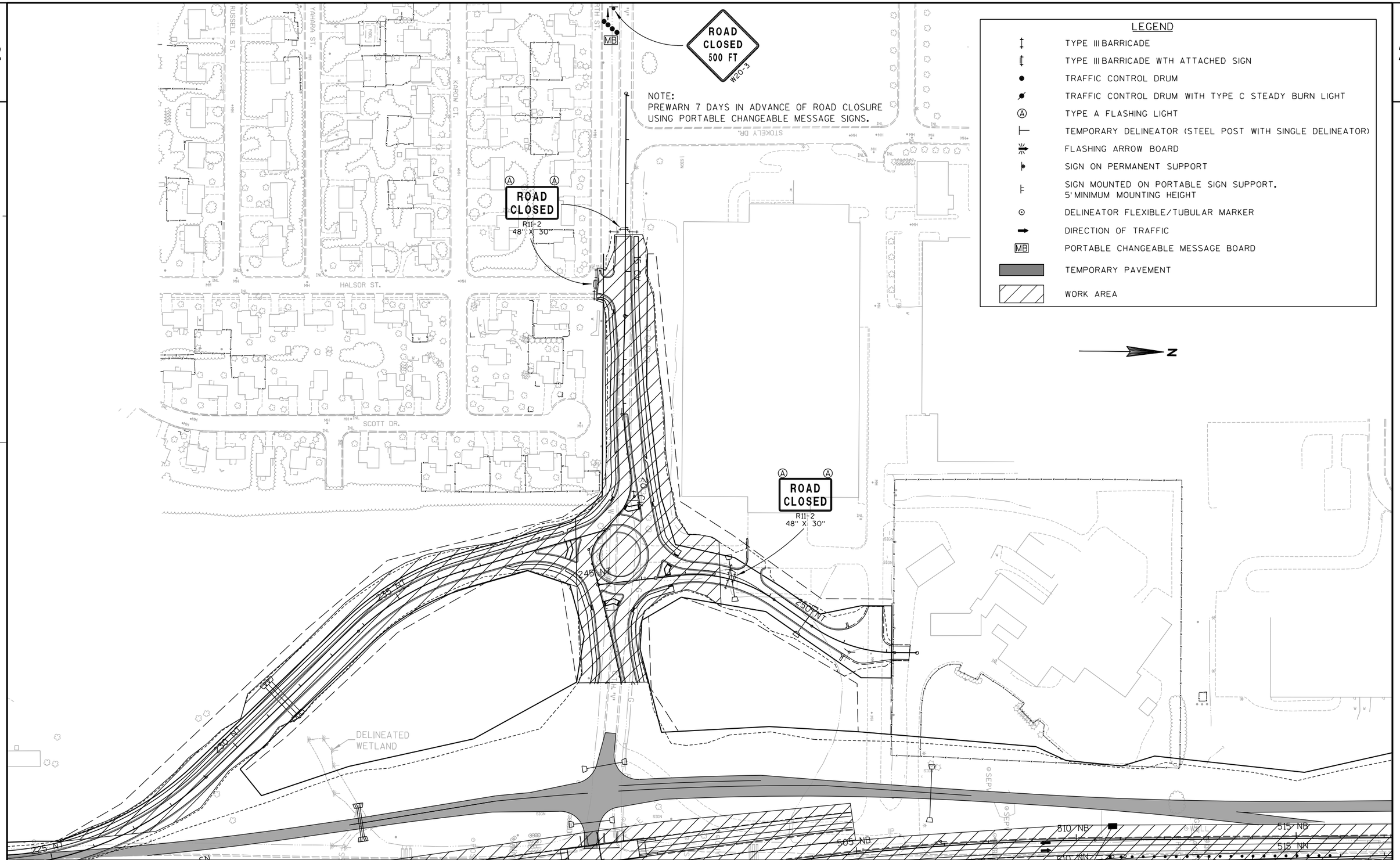
DELINEATED WETLAND

(A) (A)
ROAD CLOSED
R11-2
48" X 30"

MILLING LIMITS

PROJECT NO:6020-02-72	HWY:USH 51	COUNTY:DANE	STAGE CONSTRUCTION - STAGE 3A	SHEET 175 E

2



PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	STAGE CONSTRUCTION - STAGE 3A	SHEET 176 E

2

N

ROAD CLOSED AHEAD
W20-3

Ⓐ ROAD CLOSED Ⓐ
R11-2
48" X 30"

CONSTRUCTED TO GRAVEL IN STAGE 2

40 CV

15 D1

45 CV

50 CV

55 CV

60 CV

65 CV

15 DD

Ⓐ ROAD CLOSED TO THRU TRAFFIC Ⓐ
R11-4
60" X 30"

ROAD CLOSED 1500 FT
W20-3

NOTE:
DO NOT CLOSE MUELLER ROAD
AND CTH V EAST AT THE SAME TIME

ROAD CLOSED 500 FT
W20-3

Ⓐ ROAD CLOSED Ⓐ
R11-2
48" X 30"

35 MU

40 MU

45 MU

SIGN

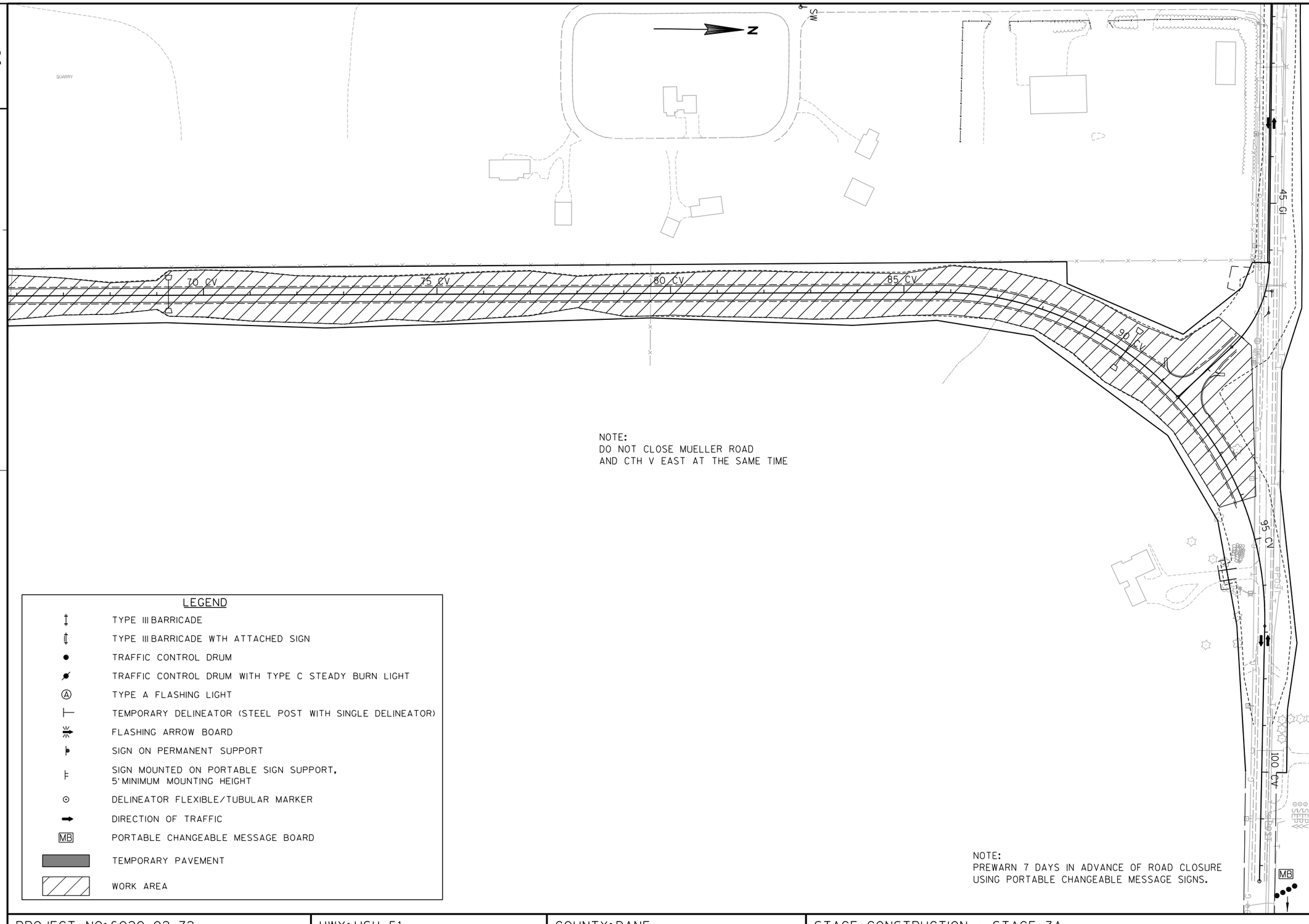
SEPTIC

SEPTIC

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- Ⓐ TYPE A FLASHING LIGHT
- TEMPORARY DELINEATOR (STEEL POST WITH SINGLE DELINEATOR)
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN MOUNTED ON PORTABLE SIGN SUPPORT, 5' MINIMUM MOUNTING HEIGHT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY PAVEMENT
- WORK AREA

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	STAGE CONSTRUCTION - STAGE 3A	SHEET 177	E



NOTE:
DO NOT CLOSE MUELLER ROAD
AND CTH V EAST AT THE SAME TIME

NOTE:
PREWARN 7 DAYS IN ADVANCE OF ROAD CLOSURE
USING PORTABLE CHANGEABLE MESSAGE SIGNS.

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- TYPE A FLASHING LIGHT
- TEMPORARY DELINEATOR (STEEL POST WITH SINGLE DELINEATOR)
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN MOUNTED ON PORTABLE SIGN SUPPORT, 5' MINIMUM MOUNTING HEIGHT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY PAVEMENT
- WORK AREA

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	STAGE CONSTRUCTION - STAGE 3A	SHEET 178	E

FLEXIBLE TUBULAR
MARKER POST
50' SPACING(TYP)

NOTE:
PLACE FLEXIBLE TUBULAR MARKER POST
FROM STA.117+00 TR1 - STA.132+00 TR1

W01-4L

W06-2

W01-4R

DELINEATED
WETLAND

LANE
CLOSED
R11-2(MOD)
48" X 30"

25'(TYP)

ROAD
CLOSED
R11-2
48" X 30"

LANE
CLOSED
R11-2(MOD)
48" X 30"

120 TR1

125 TR1

130 TR1

C.T.H. G

495 NB

500 NB

505 NB

495 NW

500 NW

505 NW

DELINEATED
WETLAND

U.S.H.

MUELLER

SIGN

MH

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- (A) TYPE A FLASHING LIGHT
- TEMPORARY DELINEATOR (STEEL POST WITH SINGLE DELINEATOR)
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN MOUNTED ON PORTABLE SIGN SUPPORT, 5'MINIMUM MOUNTING HEIGHT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY PAVEMENT
- WORK AREA

PROJECT NO:6020-02-72	HWY:USH 51	COUNTY:DANE	STAGE CONSTRUCTION-STAGE 3A - CTH V DETOUR	SHEET 179	E

2

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- (A) TYPE A FLASHING LIGHT
- TEMPORARY DELINEATOR (STEEL POST WITH SINGLE DELINEATOR)
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN MOUNTED ON PORTABLE SIGN SUPPORT, 5' MINIMUM MOUNTING HEIGHT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY PAVEMENT
- WORK AREA

N

WINDSOR ROAD

20 ML

25 ML

30 ML

35 ML

DELINEATED WETLAND

DELINEATED WETLAND

U.S.H. 51

345 NB

350 A

350 NB

350 C

355 A

355 NB

355 C

360 A

360 NB

360 C

365 A

365 NB

365 C

370 B

370 NB

370 D

375 N

375

80 PE

85 PE

ROAD WORK 1 MILE W20-1

LEFT LANE CLOSED 1/2 MILE W20-5

RUINS

WELL

CEMETERY

SHED

STEPS

FOOTBRIDGE

POST

SIGN

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	STAGE CONSTRUCTION - STAGE 3B	SHEET 180 E

FILE NAME : P:\2011059 - US 51 WO\MicroStation\Planset\6020-02-72\026322_s3B.DGN PLOT DATE : 5/13/2013 PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : 200.00 ft / in.

WISDOT/CADDS SHEET 42

2

DELINEATED WETLAND

DELINEATED WETLAND

375

125 NT

130 NT

135 NT

140 T

380 B

375 NB

380 NB

385 NB

390 NB

395 NB

400 NB

405

380 D

375 D

660' TAPER

100'(TYP)

LEFT LANE CLOSED 1000 FT
W20-5

W04-2L

ROAD WORK NEXT 3 MILES
G20-1
60" X 24"

SEE S.D.D.: TRAFFIC CONTROL, LANE CLOSURE, SPEEDS GREATER THAN 40 MPH

25 GR

30 GR

35 GR

40 GR

N

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- TYPE A FLASHING LIGHT
- TEMPORARY DELINEATOR (STEEL POST WITH SINGLE DELINEATOR)
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN MOUNTED ON PORTABLE SIGN SUPPORT, 5' MINIMUM MOUNTING HEIGHT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY PAVEMENT
- WORK AREA

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	STAGE CONSTRUCTION - STAGE 3B	SHEET 181	E

2

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- TYPE A FLASHING LIGHT
- TEMPORARY DELINEATOR (STEEL POST WITH SINGLE DELINEATOR)
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN MOUNTED ON PORTABLE SIGN SUPPORT, 5' MINIMUM MOUNTING HEIGHT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY PAVEMENT
- WORK AREA

N

CROSSOVER X3

145 NT 150 NT 155 NT 160 NT 165 NT 170 NT

5 NB 410 NB 415 NB 420 NB 425 NB 430 NB 435 NB

100'(TYP)

PAVEMENT MARKING EPOXY
4-INCH (WHITE)

PAVEMENT MARKING GROOVED WET
REFLECTIVE CONTRAST TAPE 4-INCH

PAVEMENT MARKING EPOXY
4-INCH (YELLOW)

SEE SDD: TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THEN 40 M.P.H.

SEE SDD: TRAFFIC CONTROL, LANE CLOSURE, SPEEDS GREATER THEN 40 M.P.H.

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	STAGE CONSTRUCTION - STAGE 3B	SHEET 182 E

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- TYPE A FLASHING LIGHT
- TEMPORARY DELINEATOR (STEEL POST WITH SINGLE DELINEATOR)
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN MOUNTED ON PORTABLE SIGN SUPPORT, 5' MINIMUM MOUNTING HEIGHT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY PAVEMENT
- WORK AREA

N

DELINEATED WETLAND

VINBURN RD.

ROAD CLOSED AHEAD W20-3

ATHLETIC FIELD

SIGN

BLEACHERS

175 NT 180 NT 185 NT 190 NT 195 NT 200 NT

U.S.H. 51

435 NB 440 NB 445 NB 450 NB 455 NB 460 NB 465 NB

30' VI

35' VI

PAVEMENT MARKING EPOXY
4-INCH (WHITE)

100'(TYP)

PAVEMENT MARKING EPOXY
4-INCH (YELLOW)

PAVEMENT MARKING GROOVED WET
REFLECTIVE CONTRAST TAPE 4-INCH

SEE S.D.D.: TRAFFIC CONTROL, LANE CLOSURE.
SPEEDS GREATER THAN 40 MPH.

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- TYPE A FLASHING LIGHT
- TEMPORARY DELINEATOR (STEEL POST WITH SINGLE DELINEATOR)
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN MOUNTED ON PORTABLE SIGN SUPPORT, 5' MINIMUM MOUNTING HEIGHT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY PAVEMENT
- WORK AREA

N

ROAD CLOSED 1500 FT W20-3

ROAD CLOSED 500 FT W20-3

ROAD CLOSED R11-2 48" X 30"

ROAD CLOSED R11-2 48" X 30"

SEE STAGE 3B HOLUM STREET TEMPORARY INTERSECTION DETAIL

DELINEATED WETLAND

205 NT 210 NT 215 NT 220 NT 225 NT 230 NT 235 NT

26' TR4

PAVEMENT MARKING EPOXY 4-INCH (WHITE)

660' TAPER

100'(TYP) 50'(TYP) 25'(TYP)

465 NB 470 NB 475 NB 475 NX 475 SN 480 NB 480 NX 480 SN 485 NB 485 NX 485 SN 490 NB 490 NX 490 SN 495 NB 495 NX 495 SN

100' TR2 105' TR5 110' TR5

TEMPORARY PAVEMENT MARKING 4-INCH (WHITE)

TEMPORARY PAVEMENT MARKING 4-INCH (YELLOW)

TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH (YELLOW)

PAVEMENT MARKING EPOXY 4-INCH (YELLOW)

PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH

PAVEMENT MARKING EPOXY 4-INCH (WHITE)

PAVEMENT MARKING EPOXY 4-INCH (YELLOW)

RAMP CLOSED R11-2(MOD) 48" X 30"

SEE SDD: TRAFFIC CONTROL, LANE CLOSURE, SPEEDS GREATER THAN 40 M.P.H.

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	STAGE CONSTRUCTION - STAGE 3B	SHEET 184 E

2

2

ROAD CLOSED
R11-2
48" X 30"

RAMP CLOSED
R11-2(MOD)
48" X 30"

W01-4R

STRUCTURE B-13-600

STRUCTURE B-13-599

PAVEMENT MARKING GROOVED WET
REFLECTIVE CONTRAST TAPE 4-INCH

PAVEMENT MARKING EPOXY
4-INCH (YELLOW)

PAVEMENT MARKING EPOXY
4-INCH (WHITE)

TEMPORARY PAVEMENT MARKING,
REMOVABLE TAPE, 4-INCH (DOUBLE YELLOW)

PAVEMENT MARKING EPOXY
4-INCH (YELLOW)

TEMPORARY PAVEMENT MARKING,
REMOVABLE TAPE 4-INCH (WHITE)

DELINEATED WETLAND

245 NN
250 NN
495 SN
505 SX
510 SX
515 SX
520 SX
495 NB
500 NB
505 NB
510 NB
515 NB
520 NB
525 NB
505 NN
510 NN
515 NN
520 NN
525 NN
495 NN
500 NN
35 D1
10 D1
40
10 D3
15 D3

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- TYPE A FLASHING LIGHT
- TEMPORARY DELINEATOR (STEEL POST WITH SINGLE DELINEATOR)
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN MOUNTED ON PORTABLE SIGN SUPPORT, 5' MINIMUM MOUNTING HEIGHT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- DIRECTION OF TRAFFIC
- PORTABLE CHANGEABLE MESSAGE BOARD (MB)
- TEMPORARY PAVEMENT
- WORK AREA

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	STAGE CONSTRUCTION - STAGE 3B	SHEET 185 E

2

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- TYPE A FLASHING LIGHT
- TEMPORARY DELINEATOR (STEEL POST WITH SINGLE DELINEATOR)
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN MOUNTED ON PORTABLE SIGN SUPPORT, 5' MINIMUM MOUNTING HEIGHT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY PAVEMENT
- WORK AREA

N

PAVEMENT MARKING EPOXY
4-INCH (YELLOW)

TEMPORARY PAVEMENT MARKING
REMOVABLE TAPE 4-INCH (WHITE)

PAVEMENT MARKING GROOVED WET
REFLECTIVE CONTRAST TAPE 4-INCH

525 NB
530 NB
535 NB
540 NB
545 NB
550 NB
550 SB
555 NB
555 SB

U.S.H. 51

TEMPORARY PAVEMENT MARKING,
REMOVABLE TAPE, 4-INCH (DOUBLE YELLOW)

PAVEMENT MARKING EPOXY
4-INCH (WHITE)

TEMPORARY PAVEMENT MARKING
STOP LINE, 12-INCH

STOP
R1-1
36" X 36"

RUINS
PROP
SEPA
GUY
30 GI
10
04
35 GI
40 GI
15 SW
SW

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	STAGE CONSTRUCTION - STAGE 3B	SHEET 186 E

FILE NAME : P:\2011059 - US 51 WO\MicroStation\Planset\6020-02-72\026328_s3B.dgn PLOT DATE : 5/13/2013 PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : 200.0000 sf / in.

WISDOT/CADDS SHEET 42

2

N

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- (A) TYPE A FLASHING LIGHT
- TEMPORARY DELINEATOR (STEEL POST WITH SINGLE DELINEATOR)
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN MOUNTED ON PORTABLE SIGN SUPPORT, 5' MINIMUM MOUNTING HEIGHT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY PAVEMENT
- WORK AREA

PAVEMENT MARKING EPOXY
4-INCH (YELLOW)

PAVEMENT MARKING GROOVED WET
REFLECTIVE CONTRAST TAPE 4-INCH

TEMPORARY PAVEMENT MARKING
REMOVABLE TAPE, 4-INCH (WHITE)

(A) (A) ROAD CLOSED
R11-2
48" X 30"

WO1-6
48" X 24"

ROAD WORK NEXT 2.5 MILES
G20-1
60" X 24"

ROAD WORK 500 FT
W20-1

ROAD WORK 1000 FT
W20-1

ROAD WORK AHEAD
W20-1

500' 500' 1000'

15 D4
20 D4
25 D4
30 D4

555 SB
555 NB
560 SB
560 NB
565 SB
565 NB
570 NB

50'(TYP)

U.S.H. 51
USH 51

DELINEATED WETLAND

PAVEMENT MARKING EPOXY
4-INCH (WHITE)

TEMPORARY PAVEMENT MARKING,
REMOVABLE TAPE, 4-INCH (DOUBLE YELLOW)

SEE SDD: TRAFFIC CONTROL FOR LANE CLOSURE
(SUITABLE FOR MOVING OPERATIONS)

END ROAD WORK
G20-2A
48" X 24"

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	STAGE CONSTRUCTION - STAGE 3B	SHEET 187 E

FILE NAME : P:\2011059 - US 51 WO\MicroStation\Planset\6020-02-72\026329_s3B.dgn PLOT DATE : 5/21/2013 PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : 200.0000 sf / in.

2

ROAD CLOSED 500 FT W20-3

ROAD CLOSED R11-2 48" X 30"

ROAD CLOSED R11-2 48" X 30"

RUSSELL ST.

YAHARA ST.

KARROW CT.

STOKELY DR.

HALSOR ST.

SCOTT DR.

DELINEATED WETLAND

245 NT

235 NT

250 NT

490 NT

495 SN

505 SX

510 SX

515 SX

505 NB

510 NB

515 NB

515 NN

510 NN

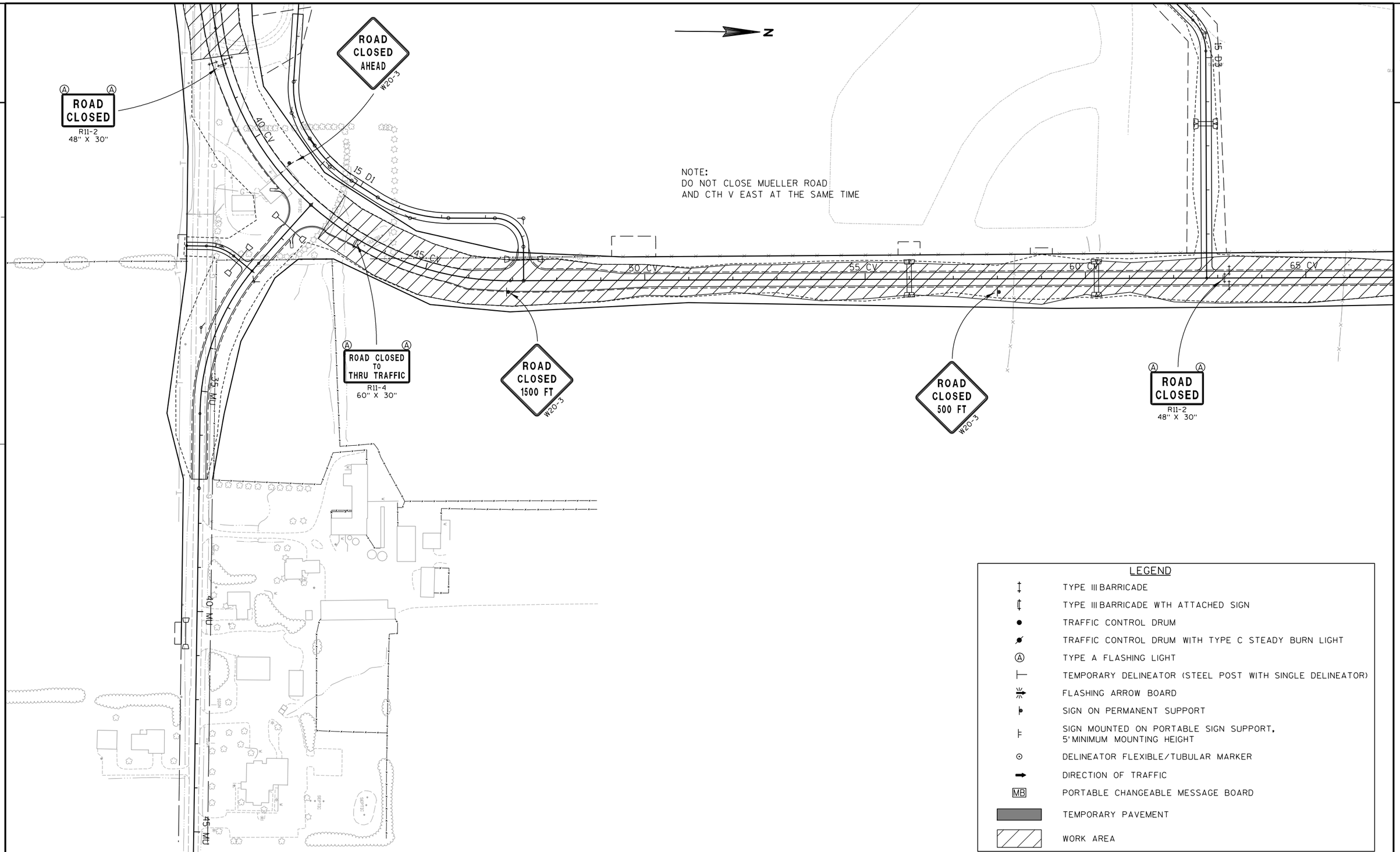
LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- (A) TYPE A FLASHING LIGHT
- TEMPORARY DELINEATOR (STEEL POST WITH SINGLE DELINEATOR)
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN MOUNTED ON PORTABLE SIGN SUPPORT, 5' MINIMUM MOUNTING HEIGHT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY PAVEMENT
- WORK AREA

N

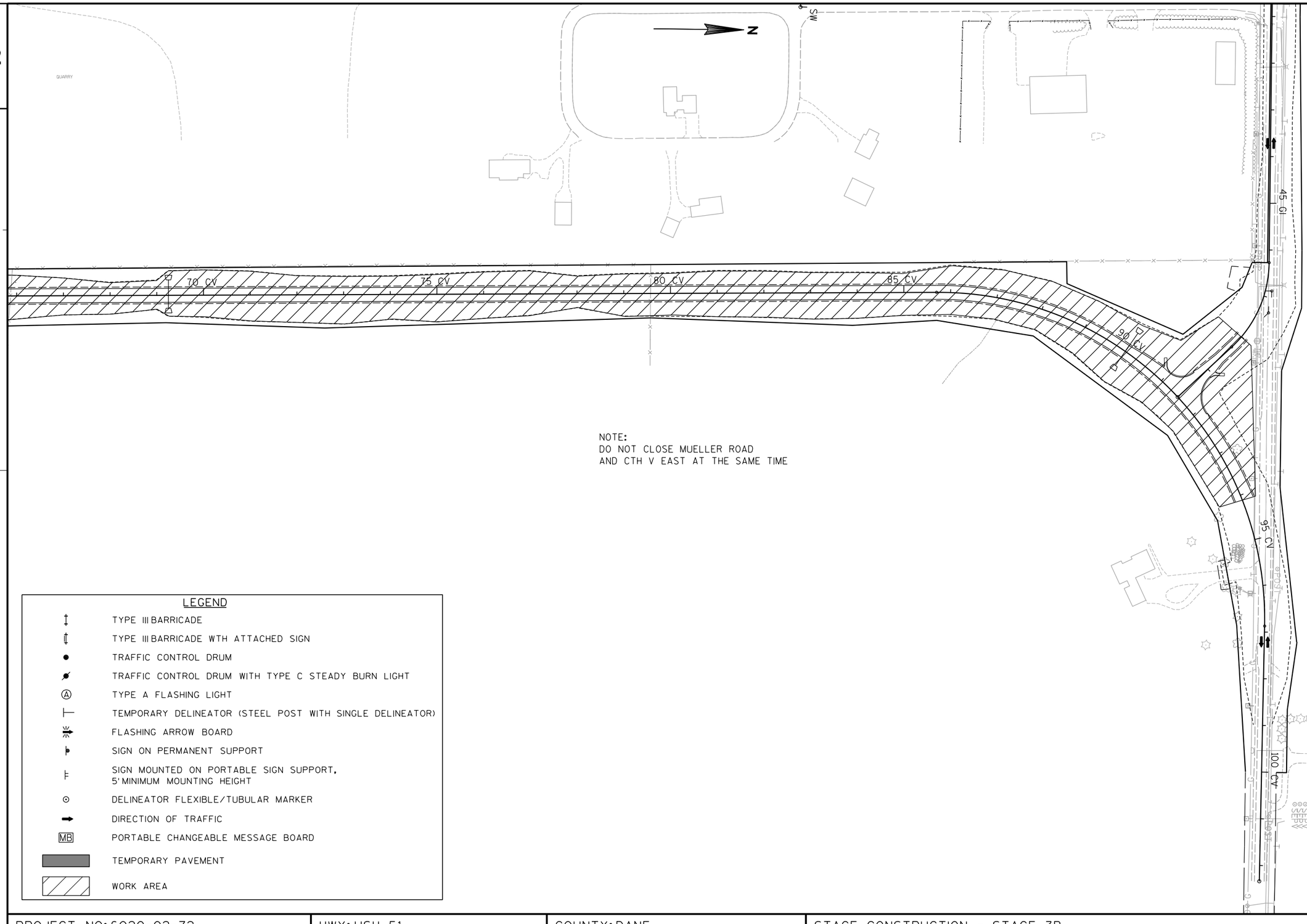
PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	STAGE CONSTRUCTION - STAGE 3B	SHEET 188 E

2



PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	STAGE CONSTRUCTION - STAGE 3B	SHEET 189	E

2



NOTE:
DO NOT CLOSE MUELLER ROAD
AND CTH V EAST AT THE SAME TIME

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- TYPE A FLASHING LIGHT
- TEMPORARY DELINEATOR (STEEL POST WITH SINGLE DELINEATOR)
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN MOUNTED ON PORTABLE SIGN SUPPORT, 5' MINIMUM MOUNTING HEIGHT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY PAVEMENT
- WORK AREA

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	STAGE CONSTRUCTION - STAGE 3B	SHEET 190	E

2

N

ROAD CLOSED 500 FT
W20-3

ROAD CLOSED
R11-2
48" X 30"

STOP
R1-1
36" X 36"

WRONG WAY
R5-1A
42" X 30"

ROAD CLOSED
R11-2
48" X 30"

215 NT

220 NT

225 NT

TEMPORARY PAVEMENT MARKING STOP LINE 12-INCH

TEMPORARY PAVEMENT MARKING 4-INCH (WHITE)

TEMPORARY PAVEMENT MARKING 4-INCH (DOUBLE YELLOW)

ONE WAY
R6-1R
54" X 18"

STOP
R1-1
36" X 36"

DIVIDED HIGHWAY
R6-3A
30" X 24"

DO NOT ENTER
R5-1
36" X 36"

50'(TYP)

485 SN

105 TR5

TEMPORARY PAVEMENT MARKING STOP LINE 12-INCH

480 SN

100 TR5

485 NB

475 SN

TEMPORARY PAVEMENT MARKING 4-INCH (WHITE)

480 NB

475 NB

480 NX

475 NX

50'(TYP)

25'(TYP)

TEMPORARY PAVEMENT MARKING 4-INCH (DOUBLE YELLOW)

SEE SDD: TRAFFIC CONTROL, LANE CLOSURE, SPEEDS GREATER THEN 40 M.P.H.

TEMPORARY PAVEMENT MARKING REMOVABLE TAPE, 4-INCH (WHITE)

TEMPORARY PAVEMENT MARKING REMOVABLE TAPE, 4-INCH (WHITE)

BEGIN LEFT TURN LANE
R3-20L
24" X 36"

WRONG WAY
R5-1A
42" X 30"

DO NOT ENTER
R5-1
36" X 36"

ONE WAY
R6-1L
54" X 18"

STOP
R1-1
36" X 36"

RAMP CLOSED
R11-2(MOD)
48" X 30"

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- TYPE A FLASHING LIGHT
- TEMPORARY DELINEATOR (STEEL POST WITH SINGLE DELINEATOR)
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN MOUNTED ON PORTABLE SIGN SUPPORT, 5' MINIMUM MOUNTING HEIGHT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY PAVEMENT
- WORK AREA

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	STAGE CONSTRUCTION-STAGE 3B HOLUM ST. TEMP. INTERSECTION	SHEET 191	E

2

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- (A) TYPE A FLASHING LIGHT
- TEMPORARY DELINEATOR (STEEL POST WITH SINGLE DELINEATOR)
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN MOUNTED ON PORTABLE SIGN SUPPORT, 5' MINIMUM MOUNTING HEIGHT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY PAVEMENT
- WORK AREA

N

NOTE:
PREWARN 7 DAYS IN ADVANCE OF ROAD CLOSURE USING PORTABLE CHANGEABLE MESSAGE SIGNS.

STOP
R1-1
36" X 36"

TEMPORARY PAVEMENT MARKING
STOP LINE, 12-INCH

ROAD CLOSED TO THRU TRAFFIC
R11-4
60" X 30"

ROAD CLOSED
R11-2
48" X 30"

ROAD CLOSED
R11-2
48" X 30"

ROAD CLOSED
1 MILE AHEAD
LOCAL TRAFFIC ONLY
R11-3
60" X 30"
(PLACE AT PORTAGE ROAD)

ROAD CLOSED 500 FT
W20-3

ROAD CLOSED 1500 FT
W20-3

DELINEATED WETLAND

I5-D4

560 SB

560 NB

555 SB

555 NB

550 SB

550 NB

545 NB

USH 51

30 CI

35 CI

40 CI

45 CI

100 CV

95 CV

90 CV

85 CV

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	STAGE CONSTRUCTION - STAGE 3B - CTH V TIE-IN CLOSURE	SHEET 192 E

2

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- TYPE A FLASHING LIGHT
- TEMPORARY DELINEATOR (STEEL POST WITH SINGLE DELINEATOR)
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN MOUNTED ON PORTABLE SIGN SUPPORT, 5' MINIMUM MOUNTING HEIGHT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY PAVEMENT
- WORK AREA

N

DELINEATED WETLAND

VINBURN RD.

ROAD CLOSED AHEAD
W20-3

ATHLETIC FIELD
SIGN
BLEACHERS
ATHLETIC FIELD
SIGN
ATHLETIC FIELD
BLEACHERS

175 NT | 180 NT | 185 NT | 190 NT | 195 NT | 200 NT

U.S.H. 51

END ROAD WORK
G20-2A
48" X 24"

435 NB | 440 NB | 445 NB | 450 NB | 455 NB | 460 NB | 465 NB

ROAD WORK AHEAD
W20-1

ROAD WORK 1000 FT
W20-1

ROAD WORK NEXT 2.5 MILES
G20-1
60" X 24"

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	STAGE CONSTRUCTION - STAGE 4	SHEET 193 E

FILE NAME : P:\2011059 - US 51 WO\MicroStation\Planset\6020-02-72\026401_s4.dgn PLOT DATE : 5/13/2013 PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : 200.0000 sf / in.

WISDOT/CADDS SHEET 42

2

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- TYPE A FLASHING LIGHT
- TEMPORARY DELINEATOR (STEEL POST WITH SINGLE DELINEATOR)
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN MOUNTED ON PORTABLE SIGN SUPPORT, 5' MINIMUM MOUNTING HEIGHT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY PAVEMENT
- WORK AREA

N

ROAD CLOSED 1500 FT W20-3

ROAD CLOSED 500 FT W20-3

ROAD CLOSED R11-2 48" X 30"

RAMP CLOSED R11-2(MOD) 48" X 30"

ROAD CLOSED R11-2 48" X 30"

RAMP CLOSED R11-2(MOD) 48" X 30"

SEE STAGE 4 HOLUM STREET TEMPORARY INTERSECTION DETAIL

26 TR4

PAVEMENT MARKING EPOXY 4-INCH (WHITE)

PAVEMENT MARKING EPOXY 4-INCH (YELLOW)

PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH

DELINEATED WETLAND

205 NT 210 NT 215 NT 220 NT 225 NT 230 NT

465 NB 470 NB 475 NB 475 NX 475 SN 480 NB 480 NX 480 SN 485 NB 485 NX 485 SN 490 NB 490 NX 490 SN 495 NB 495 NX 495 SN

25'(TYP)

SEE SDD: TRAFFIC CONTROL, LANE CLOSURE, SPEEDS GREATER THAN 40 M.P.H.

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	STAGE CONSTRUCTION - STAGE 4	SHEET 194	E

2

N

ROAD CLOSED
R11-2
48" X 30"

RAMP CLOSED
R11-2(MOD)
48" X 30"

RAMP CLOSED
R11-2(MOD)
48" X 30"

PAVEMENT MARKING EPOXY
4-INCH (YELLOW)

PAVEMENT MARKING EPOXY
4-INCH (WHITE)

SEE SDD: TRAFFIC CONTROL, LANE CLOSURE, SPEEDS GREATER THAN 40 M.P.H.

660' TAPER

25'(TYP)

50'(TYP)

50'(TYP)

PAVEMENT MARKING GROOVED WET
REFLECTIVE CONTRAST TAPE 4-INCH

245 NT

250 NT

495 SN

505 SX

510 SX

515 SX

520 SX

510 NB

505 NB

500 NB

495 NB

515 NB

520 NB

525 NB

515 NN

520 NN

525 NN

510 NN

505 NN

500 NN

495 NN

DELINEATED WETLAND

35 C2

10 D1

40

10 D3

15 D3

LEGEND

‡	TYPE III BARRICADE
‡	TYPE III BARRICADE WTH ATTACHED SIGN
●	TRAFFIC CONTROL DRUM
●	TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
Ⓐ	TYPE A FLASHING LIGHT
⊢	TEMPORARY DELINEATOR (STEEL POST WITH SINGLE DELINEATOR)
	FLASHING ARROW BOARD
	SIGN ON PERMANENT SUPPORT
⊢	SIGN MOUNTED ON PORTABLE SIGN SUPPORT, 5' MINIMUM MOUNTING HEIGHT
⊙	DELINEATOR FLEXIBLE/TUBULAR MARKER
➡	DIRECTION OF TRAFFIC
MB	PORTABLE CHANGEABLE MESSAGE BOARD
	TEMPORARY PAVEMENT
	WORK AREA

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	STAGE CONSTRUCTION - STAGE 4	SHEET 195	E

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- (A) TYPE A FLASHING LIGHT
- TEMPORARY DELINEATOR (STEEL POST WITH SINGLE DELINEATOR)
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN MOUNTED ON PORTABLE SIGN SUPPORT, 5' MINIMUM MOUNTING HEIGHT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY PAVEMENT
- WORK AREA

N

SEE SDD: TRAFFIC CONTROL, LANE CLOSURE, SPEEDS GREATER THAN 40 M.P.H.

660' TAPER

525 NB

530 NB

535 NB

540 NB

545 NB

550 NB

555 NB

550 SB

555 SB

U.S.H. 51

PAVEMENT MARKING EPOXY
4-INCH (YELLOW)

PAVEMENT MARKING GROOVED WET
REFLECTIVE CONTRAST TAPE 4-INCH

SEE SDD: TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)

(A) (A)
ROAD CLOSED
R11-2
48" X 30"

30 GI

10

4

15 SW

35 GI

40 GI

5 SW

PROP

RUINS

2

N

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- TYPE A FLASHING LIGHT
- TEMPORARY DELINEATOR (STEEL POST WITH SINGLE DELINEATOR)
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN MOUNTED ON PORTABLE SIGN SUPPORT, 5' MINIMUM MOUNTING HEIGHT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY PAVEMENT
- WORK AREA

PAVEMENT MARKING EPOXY
4-INCH (YELLOW)

SEE SDD: TRAFFIC CONTROL, LANE CLOSURE, SPEEDS GREATER THEN 40 M.P.H.

15 D4
20 D4
25 D4
30 D4

555 SB
555 NB
560 SB
560 NB
565 SB
565 NB
570 NB

U.S.H. 51
USH 51

DELINEATED WETLAND

ROAD WORK NEXT 2.5 MILES
G20-1
60" X 24"

ROAD WORK 500 FT
W20-1

ROAD WORK 1000 FT
W20-1

ROAD WORK AHEAD
W20-1

500'
500'
1000'

PAVEMENT MARKING GROOVED WET
REFLECTIVE CONTRAST TAPE 4-INCH

PAVEMENT MARKING EPOXY
4-INCH (DOUBLE YELLOW)

END ROAD WORK
G20-2A
48" X 24"

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	STAGE CONSTRUCTION - STAGE 4	SHEET 197	E

FILE NAME : P:\2011059 - US 51 WO\MicroStation\Planset\6020-02-72\026405_s4.dgn PLOT DATE : 5/21/2013 PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : 200.0000 sf / in.

2

ROAD CLOSED 500 FT W20-3

ROAD CLOSED R11-2 48" X 30"

ROAD CLOSED R11-2 48" X 30"

RAMP CLOSED R11-2(MOD) 48" X 30"

DELINEATED WETLAND

RUSSELL ST.

YAHARA ST.

KARROW CT.

STOKELY DR.

HALSOR ST.

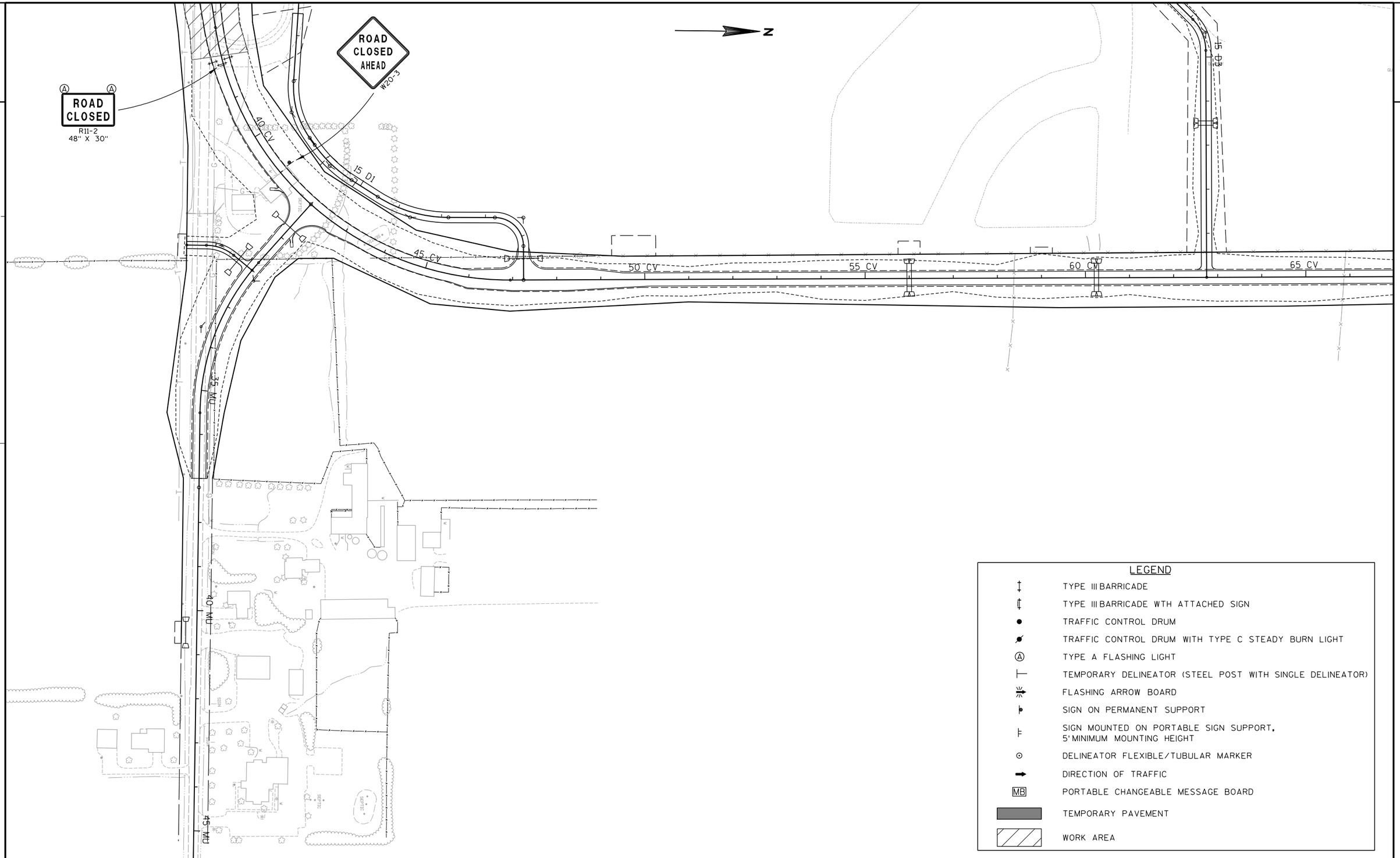
SCOTT DR.

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- (A) TYPE A FLASHING LIGHT
- TEMPORARY DELINEATOR (STEEL POST WITH SINGLE DELINEATOR)
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN MOUNTED ON PORTABLE SIGN SUPPORT, 5' MINIMUM MOUNTING HEIGHT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY PAVEMENT
- WORK AREA

N

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	STAGE CONSTRUCTION - STAGE 4	SHEET 198 E

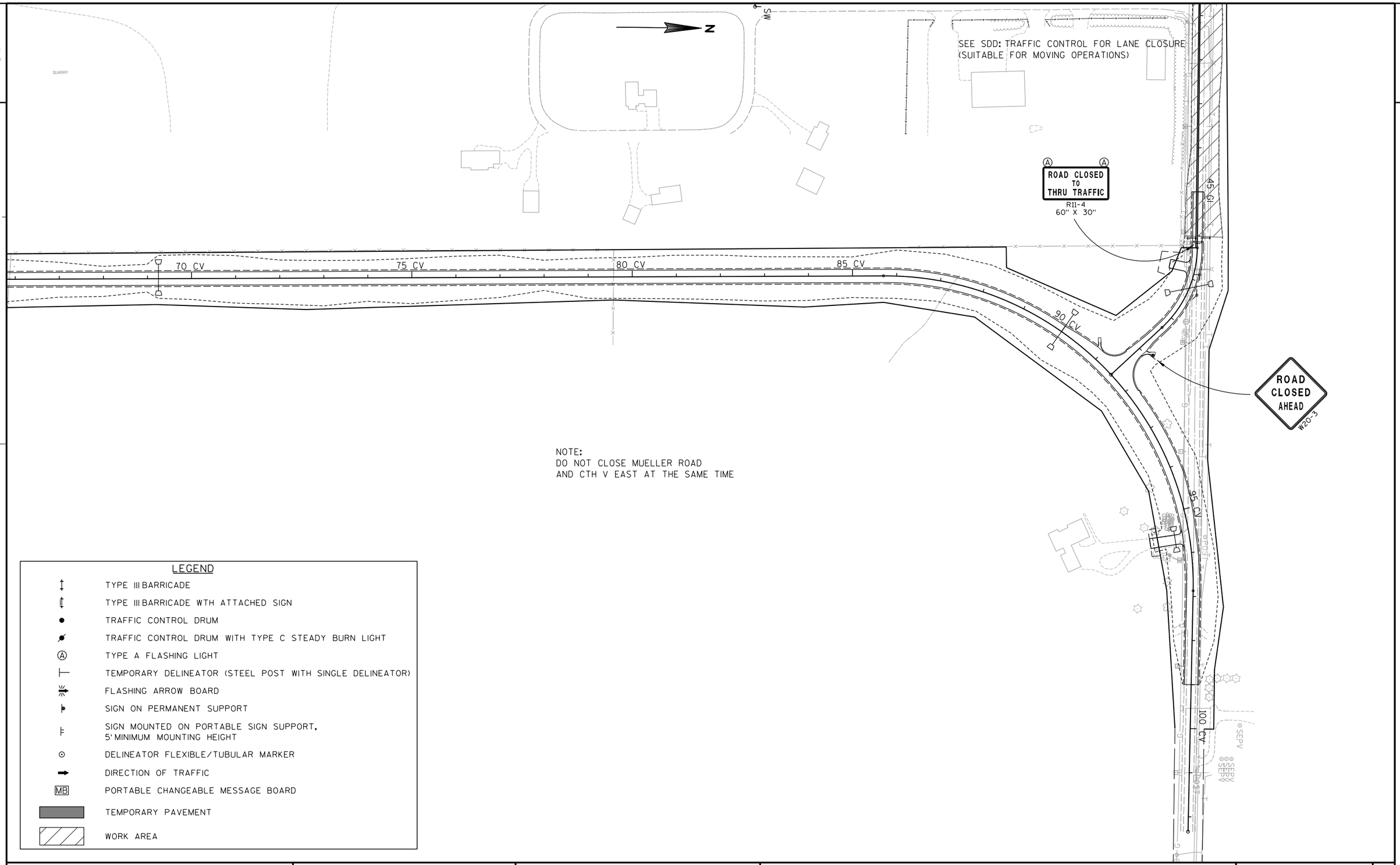


2

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- TYPE A FLASHING LIGHT
- TEMPORARY DELINEATOR (STEEL POST WITH SINGLE DELINEATOR)
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN MOUNTED ON PORTABLE SIGN SUPPORT, 5' MINIMUM MOUNTING HEIGHT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY PAVEMENT
- WORK AREA

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	STAGE CONSTRUCTION - STAGE 4	SHEET 199	E



NOTE:
DO NOT CLOSE MUELLER ROAD
AND CTH V EAST AT THE SAME TIME

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- Ⓐ TYPE A FLASHING LIGHT
- TEMPORARY DELINEATOR (STEEL POST WITH SINGLE DELINEATOR)
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN MOUNTED ON PORTABLE SIGN SUPPORT, 5' MINIMUM MOUNTING HEIGHT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY PAVEMENT
- WORK AREA

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	STAGE CONSTRUCTION - STAGE 4	SHEET 200	E

2

N

ROAD CLOSED 500 FT
W20-3

ROAD CLOSED
R11-2
48" X 30"

STOP
R1-1
36" X 36"

RAMP CLOSED
R11-2(MOD)
48" X 30"

ONE WAY
R6-1R
54" X 18"

STOP
R1-1
36" X 36"

DIVIDED HIGHWAY
R6-3A
30" X 24"

215 NT

220 NT

225 NT

485 SN

105 TR5

480 SN

100 TR5

485 NB

475 SN

480 NB

475 NB

480 NX

475 NX

50'(TYP)

100'(TYP)

25'(TYP)

USH 51

CANOPY

MH

POST

SEEP

SEEP

SEEP

2

N

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- TYPE A FLASHING LIGHT
- TEMPORARY DELINEATOR (STEEL POST WITH SINGLE DELINEATOR)
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN MOUNTED ON PORTABLE SIGN SUPPORT, 5' MINIMUM MOUNTING HEIGHT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY PAVEMENT
- WORK AREA

ROAD WORK AHEAD W20-1

15 ML

105 NT

110 NT

NORTHTOWNE ROAD

115 NT

120 NT

125 NT

20 ML

WINDSOR ROAD

25 ML

30 ML

360 A

365 A

370 B

375

380 B

360 NB

365 NB

370 NB

375 NB

USH 51

380 NB

385 NB

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	STAGE CONSTRUCTION - STAGE 5	SHEET 202 E

FILE NAME : P:\2011059 - US 51 WO\MicroStation\Planset\6020-02-72\026501_s5.dgn PLOT DATE : 5/13/2013 PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : 200.0000 sf / in.

2

2

ROAD WORK AHEAD W20-1

ROAD WORK 500 FT W20-1

ROAD CLOSED AHEAD W20-3

END ROAD WORK G20-2A 48" X 24"

ROAD CLOSED TO THRU TRAFFIC R11-4 60" X 30"

ROAD CLOSED 500 FT W20-3

SEE SDD: TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)

110 NT
115 NT
120 NT
125 NT
130 NT
135 NT
140 T
145 NT
380 B
380 N
380 D
385 NB
390 NB
395 NB
400 NB
405 NB
15 GR
20 GR
25 GR
30 GR

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- (A) TYPE A FLASHING LIGHT
- TEMPORARY DELINEATOR (STEEL POST WITH SINGLE DELINEATOR)
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN MOUNTED ON PORTABLE SIGN SUPPORT, 5' MINIMUM MOUNTING HEIGHT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY PAVEMENT
- WORK AREA

N

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	STAGE CONSTRUCTION - STAGE 5	SHEET 203	E

2

2

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- (A) TYPE A FLASHING LIGHT
- TEMPORARY DELINEATOR (STEEL POST WITH SINGLE DELINEATOR)
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN MOUNTED ON PORTABLE SIGN SUPPORT, 5' MINIMUM MOUNTING HEIGHT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY PAVEMENT
- WORK AREA

N

SEE SDD: TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)

(A) (A)
ROAD CLOSED
R11-2
48" X 30"

145 NT 150 NT 155 NT 160 NT 165 NT 170 NT

405 NB 410 NB 415 NB 420 NB 425 NB 430 NB 435 NB

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	STAGE CONSTRUCTION - STAGE 5	SHEET 204	E

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- TYPE A FLASHING LIGHT
- TEMPORARY DELINEATOR (STEEL POST WITH SINGLE DELINEATOR)
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN MOUNTED ON PORTABLE SIGN SUPPORT, 5' MINIMUM MOUNTING HEIGHT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY PAVEMENT
- WORK AREA

ROAD WORK AHEAD W20-1

ROAD WORK 500 FT W20-1

ROAD CLOSED R11-2 48" X 30"

ROAD WORK 500 FT W20-1

ROAD WORK AHEAD W20-1

VINBURN RD.

175 NT 180 NT 185 NT 190 NT 195 NT 200 NT

440 NB 445 NB 450 NB 455 NB 460 NB 465 NB

ATHLETIC FIELD SIGN BLEACHERS

ATHLETIC FIELD ATHLETIC FIELD SIGN BLEACHERS

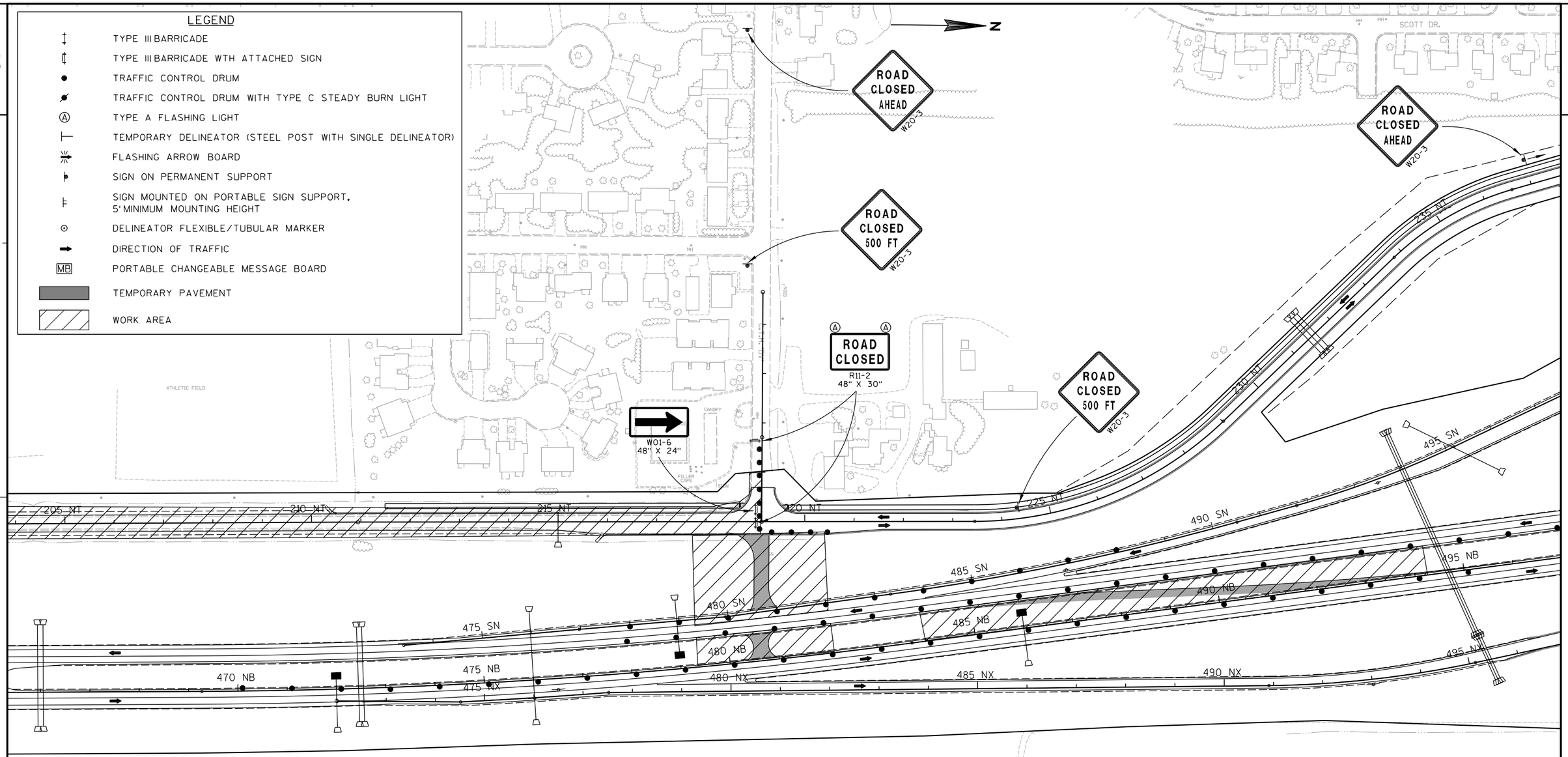
PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	STAGE CONSTRUCTION - STAGE 5	SHEET 205 E

FILE NAME : P:\2011059 - US 51 WO\MicroStation\Planset\6020-02-72\026504_s5.dgn PLOT DATE : 5/13/2013 PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : 200.0000 sf / in.

WISDOT/CADDS SHEET 42

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- (A) TYPE A FLASHING LIGHT
- TEMPORARY DELINEATOR (STEEL POST WITH SINGLE DELINEATOR)
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN MOUNTED ON PORTABLE SIGN SUPPORT, 5' MINIMUM MOUNTING HEIGHT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- DIRECTION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE BOARD
- TEMPORARY PAVEMENT
- WORK AREA



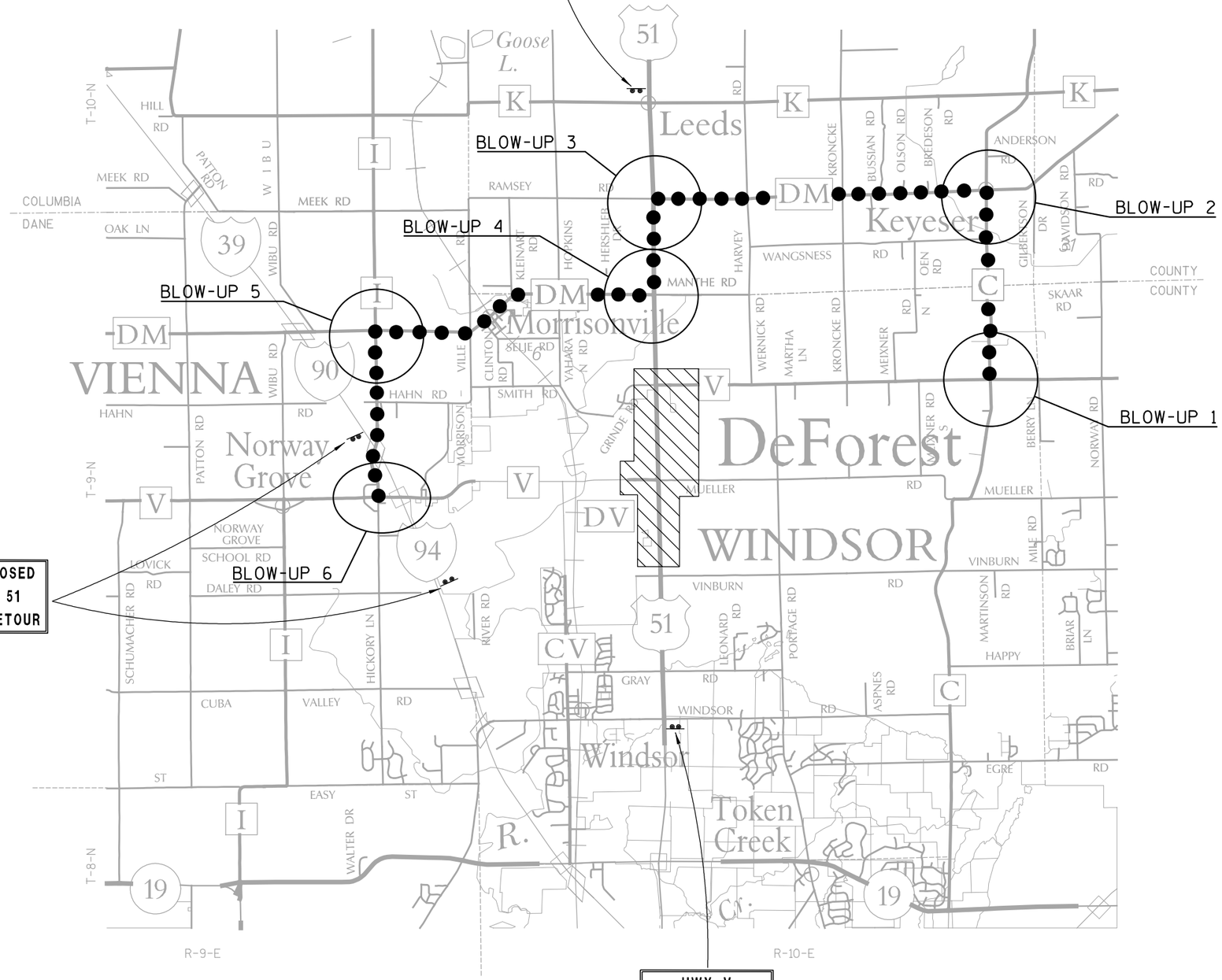
SEE SDD: TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THEN 40 M.P.H.

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	STAGE CONSTRUCTION - STAGE 5	SHEET 206	E

NOTE:
FIXED MESSAGE SIGNS SHOWN ON THIS SHEET WILL NOT BE INSTALLED DURING 2013 FOR THE STAGE 1B CLOSURE.

HWY V CLOSED USE HWY DM

N



HWY V CLOSED AT HWY 51 FOLLOW DETOUR

HWY V CLOSED USE HWY DM

NOTE:
SEE BLOW-UPS FOR DETAILS

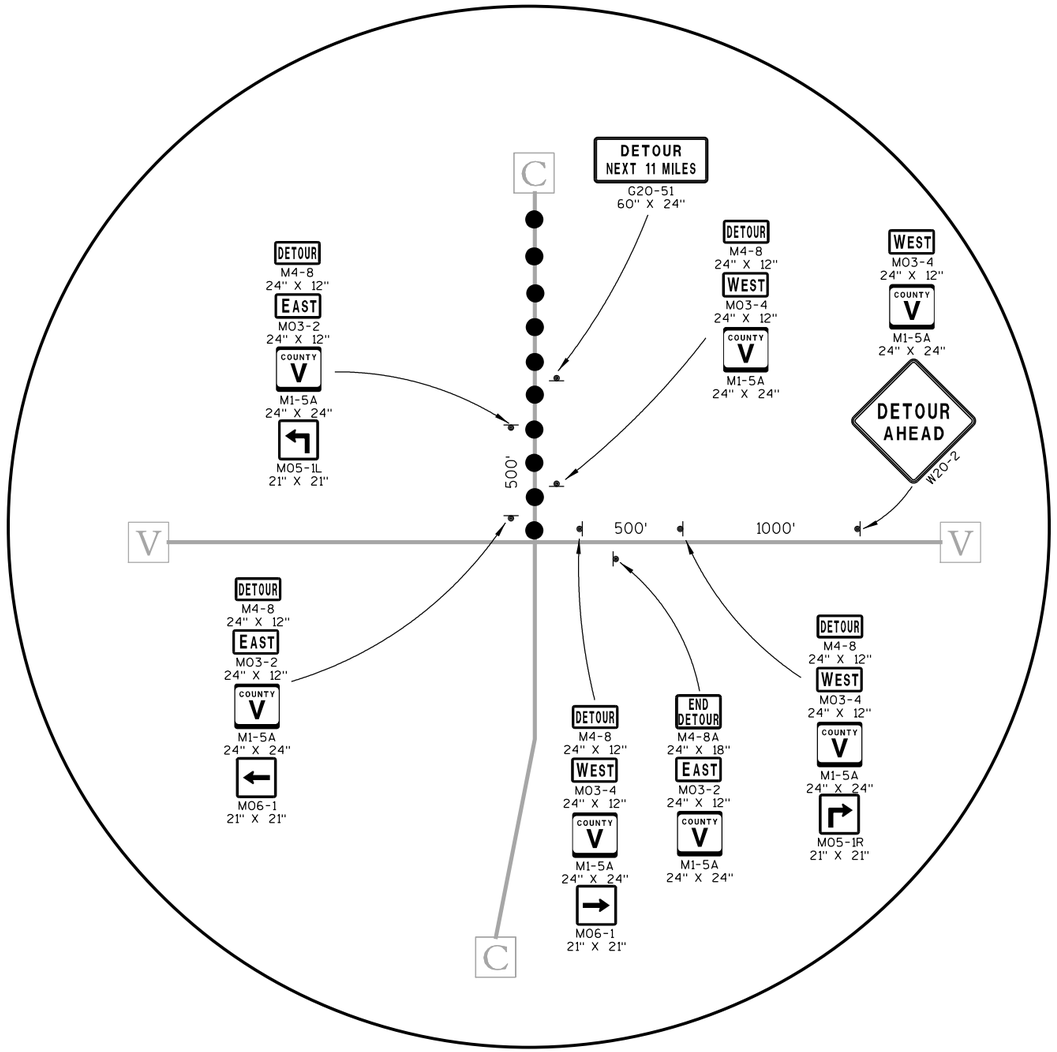
LEGEND

- SIGN ON PERMANENT SUPPORT
- DETOUR ROUTE
- WORK AREA

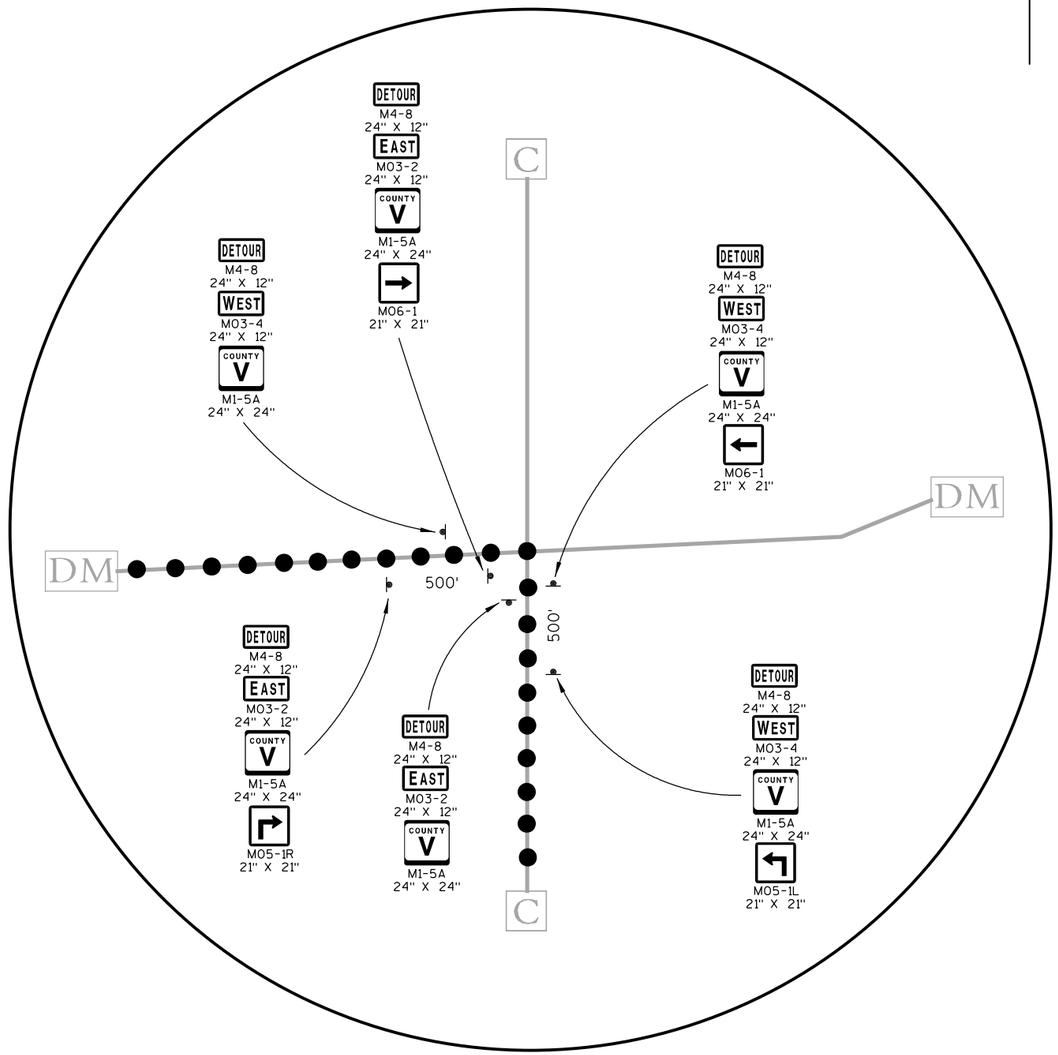
PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	DETOUR - CTH V	SHEET 207	E

2

N



BLOW-UP 1



BLOW-UP 2

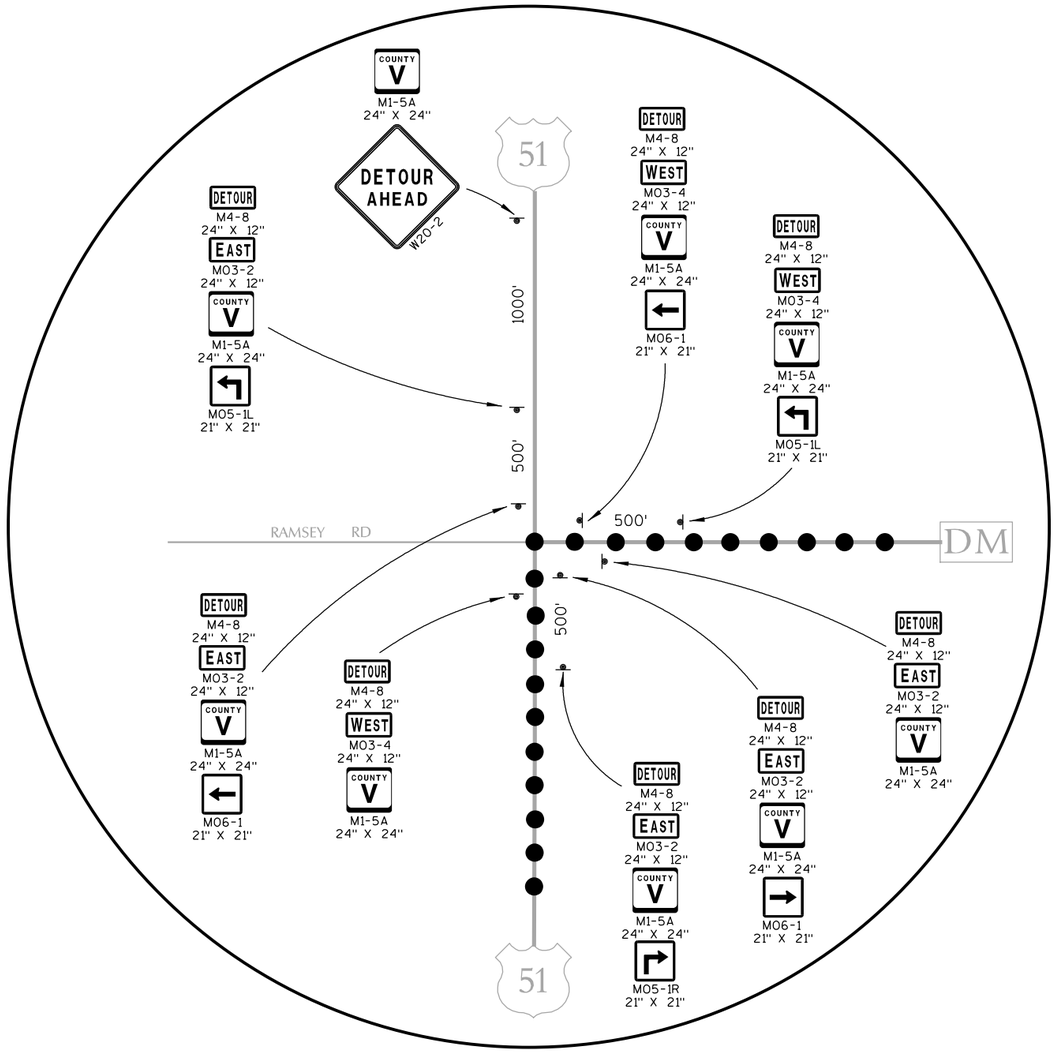
LEGEND

SIGN ON PERMANENT SUPPORT

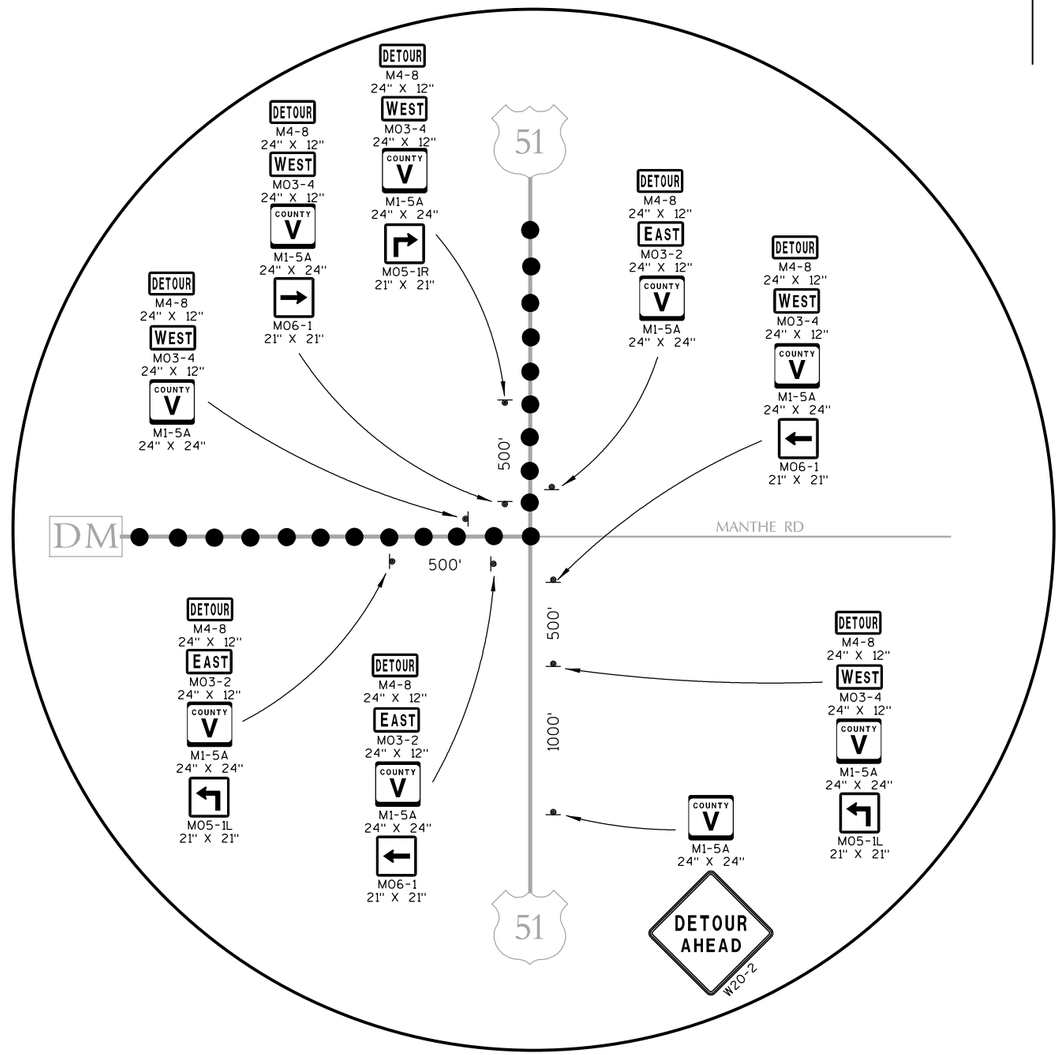
DETOUR ROUTE

WORK AREA

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	DETOUR - CTH V	SHEET 208	E



BLOW-UP 3



BLOW-UP 4

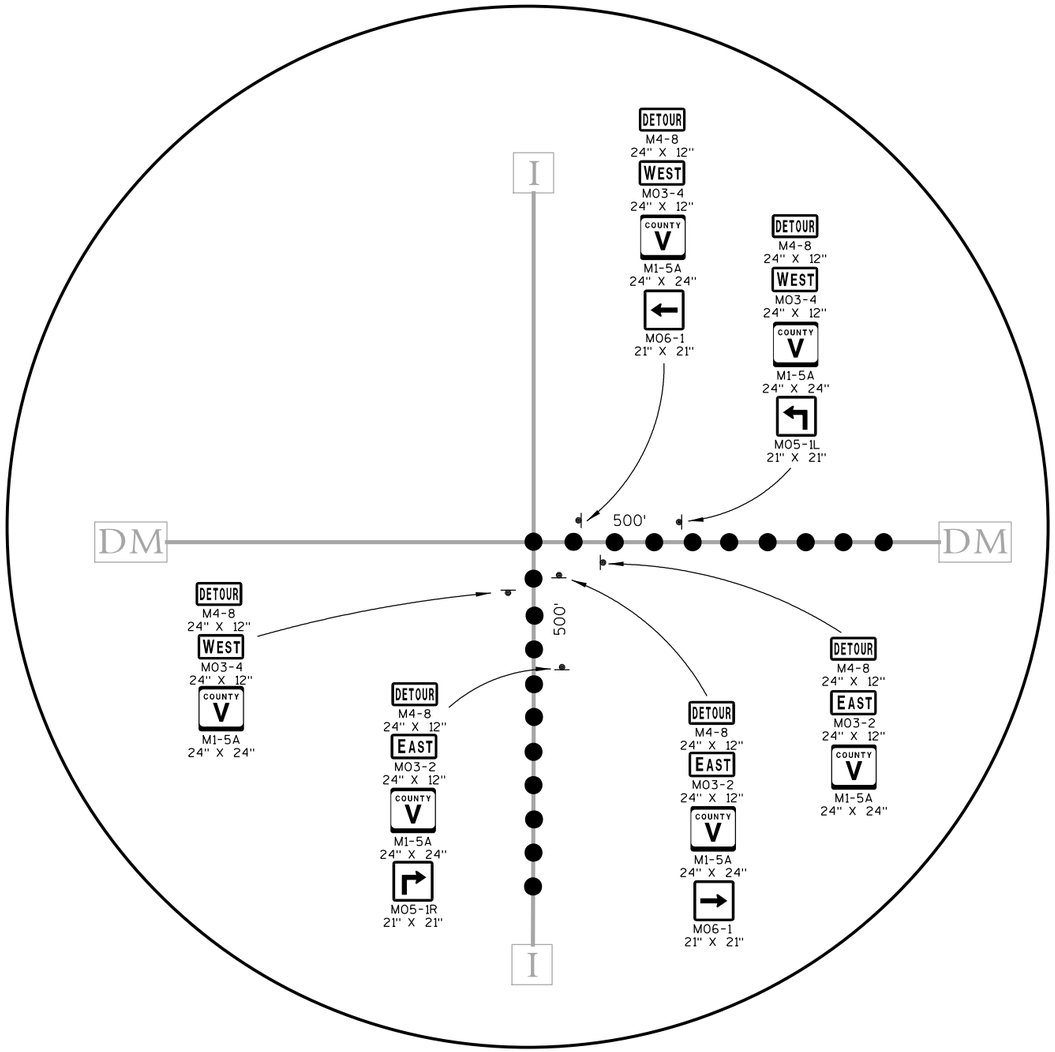
LEGEND

- SIGN ON PERMANENT SUPPORT
- DETOUR ROUTE
- WORK AREA

PROJECT NO:6020-02-72	HWY:USH 51	COUNTY:DANE	DETOUR - CTH V	SHEET 209	E

2

N



BLOW-UP 5

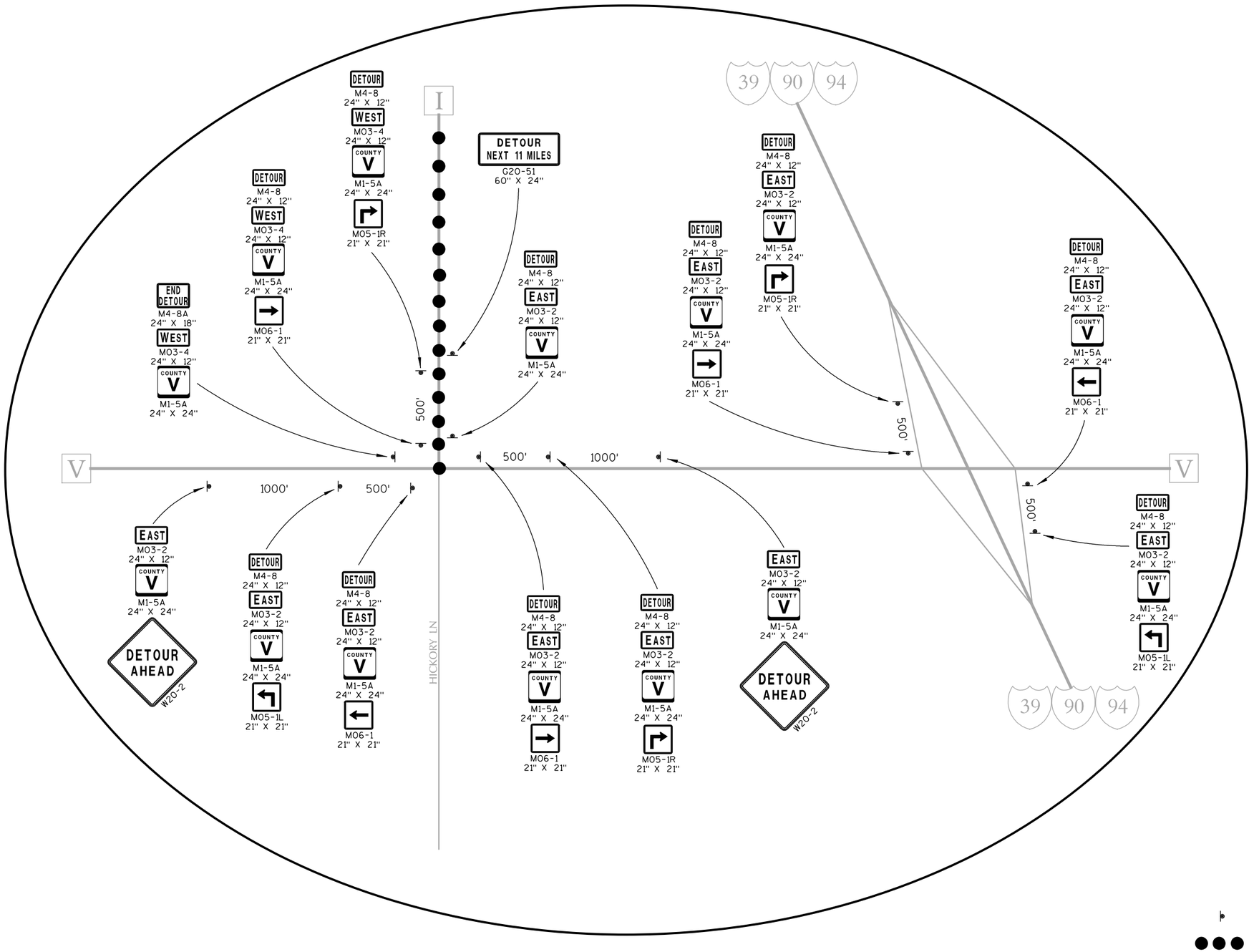
LEGEND

- SIGN ON PERMANENT SUPPORT
- DETOUR ROUTE
- WORK AREA

PROJECT NO:6020-02-72	HWY:USH 51	COUNTY:DANE	DETOUR - CTH V	SHEET 210	E

2

N



BLOW-UP 6

LEGEND

- SIGN ON PERMANENT SUPPORT
- DETOUR ROUTE
- WORK AREA

PROJECT NO:6020-02-72	HWY:USH 51	COUNTY:DANE	DETOUR - CTH V	SHEET 211	E

2

N

DELINEATOR REQUIRED AFTER
CROSSOVER IS REMOVED

STA.418+00 NB
152'LT.
BEGIN FENCING LT.

STA.420+00 NB
140'LT.

STA.422+00 NB
150'LT.

STA.423+00 NB
150'LT.

STA.427+00 NB
140'LT.

STA.432+00 NB
168'LT.

STA.435+50 NB
180'LT.

FENCING DONE UNDER
PREVIOUS CONTRACT
6020-02-71

145 NT 150 NT 155 NT 160 NT 165 NT 170 NT

FENCE

410 NB 415 NB 420 NB 425 NB 430 NB 435 NB

FENCING DONE UNDER
PREVIOUS CONTRACT
6020-02-71

NOTE:
ALL FENCING TO BE PLACED 3' INSIDE
R/W UNLESS OTHERWISE NOTED.

PROJECT NO:6020-02-72	HWY:USH 51	COUNTY:DANE	FENCING & DELINEATORS	SHEET 212	E

2

2

N

VINBURN RD.

175 NT

180 NT

185 NT

190 NT

195 NT

200 NT

U.S.H. 51

U.S.H. 51

STA.435+50 NB
180'LT.

STA.438+00 NB
150'LT.

FENCE

STA.444+00 NB
200'LT.

STA.445+00 NB
200'LT.

STA.445+34.15 NB
94.86'LT.

STA.446+47.62 NB
95.61'LT.

STA.447+00 NB
170'LT.

STA.451+10 NB
140'LT.

BEGIN DELINEATORS
400' SPACING (TYP)

FENCE

STA.458+00 NB
135'LT.

STA.462+00 NB
175'LT.

435 NB

440 NB

445 NB

450 NB

455 NB

460 NB

465 NB

30 VI

35 VI

FENCING DONE UNDER
PREVIOUS CONTRACT
6020-02-71

STA.447+23.90 NB
148.62'RT.

BEGIN FENCING RT.

BEGIN DELINEATORS
400' SPACING (TYP)

FENCE

NOTE:
ALL FENCING TO BE PLACED 3' INSIDE
R/W UNLESS OTHERWISE NOTED.

LEGEND

DELINEATOR SINGLE/DOUBLE

PROJECT NO: 6020-02-72	HWY: 51	COUNTY: DANE	FENCING & DELINEATORS	SHEET 213	E

2

N

205 NT
210 NT
215 NT
220 NT
225 NT
230 NT
235 NT

STA.466+00 NB
170'LT.

STA.469+50 NB
140'LT.

FENCE

100'(TYP) ALONG RAMP

STA.482+00 NB
190'LT.

STA.485+50 NB
175'LT.

STA.488+00 NB
210'LT.

STA.492+75 NB
315'LT.

465 NB
470 NB
475 NB
475 NX
480 NB
480 NX
485 SN
485 NB
485 NX
490 SN
490 NB
490 NX
495 SN
495 NB
495 NX

400'(TYP)

100'(TYP) ALONG RAMP

FENCE

NOTE:
ALL FENCING TO BE PLACED 3' INSIDE R/W UNLESS OTHERWISE NOTED.

LEGEND

⊢/H⊢ DELINEATOR SINGLE/DOUBLE

PROJECT NO:6020-02-72	HWY:USH 51	COUNTY:DANE	FENCING & DELINEATORS	SHEET 214	E

2

N

STA.498+90 NB
440'LT.

STA.496+70 NB
360'LT.

FENCE

STA.500+93.27 NB
326.11'LT.

STA.503+40.90 NB
307.02'LT.

STA.505+29.52 NB
272.04'LT.

STA.509+14.17 NB
212.08'LT.

STA.509+79.18 NB
179.53'LT.

STA.510+42.76 NB
171.89'LT.

STA.511+05.27 NB
164.95'LT.

STA.511+80.26 NB
186.95'LT.

STA.515.20.14 NB
146.96'LT.

STA.518+00.37 NB
207'LT.

STA.519+49.94 NB
212.00'LT.

STA.522+79.95 NB
186.99'LT.

STA.525+00 NB
197'LT.

FENCE

100'(TYP) ALONG RAMPS

400'(TYP)

100'(TYP) ALONG RAMPS

FENCE

FENCE

NOTE:
ALL FENCING TO BE PLACED 3' INSIDE R/W UNLESS OTHERWISE NOTED.

LEGEND

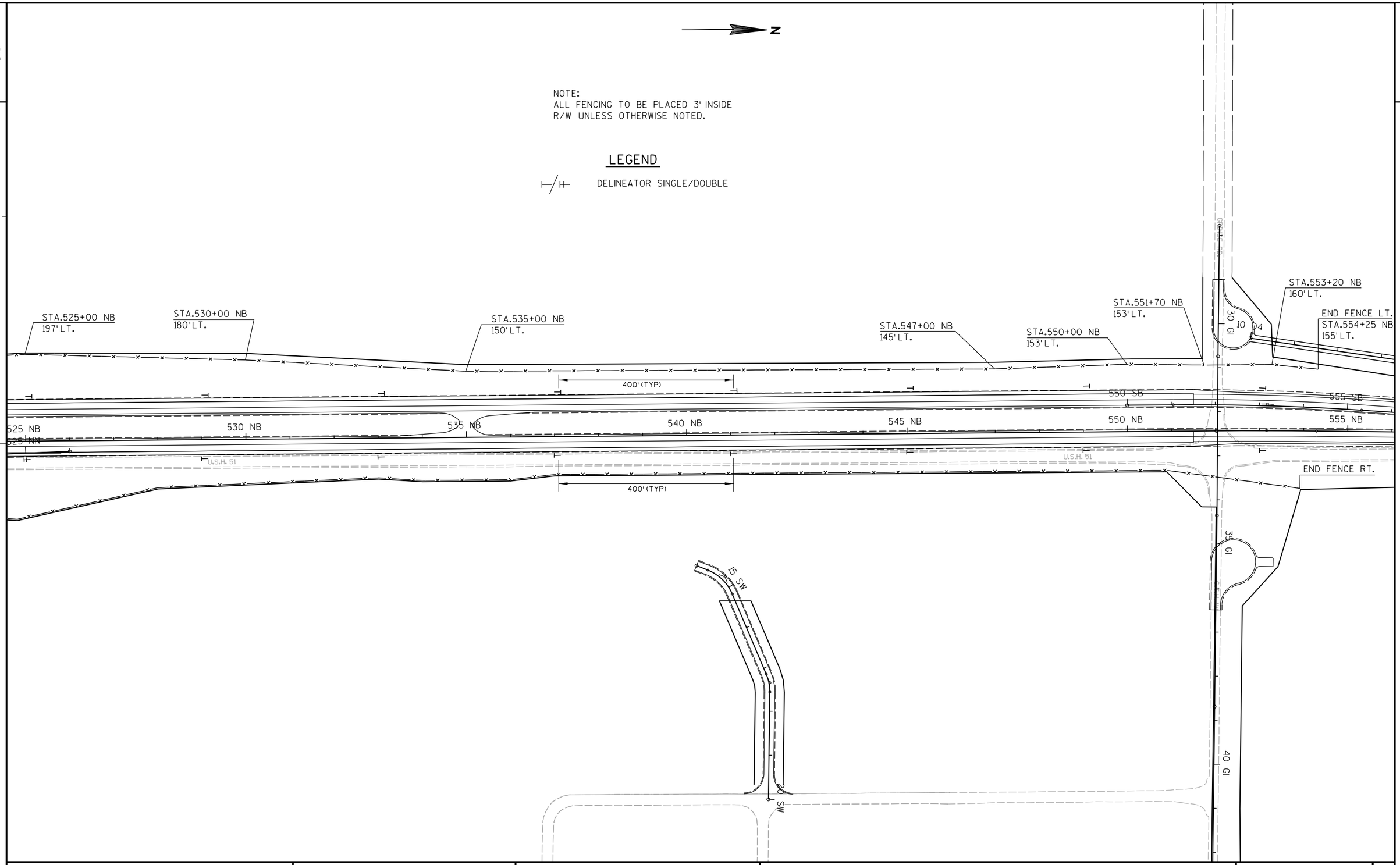
DELINEATOR SINGLE/DOUBLE

PROJECT NO:6020-02-72	HWY:USH 51	COUNTY:DANE	FENCING & DELINEATORS	SHEET 215	E

NOTE:
ALL FENCING TO BE PLACED 3' INSIDE
R/W UNLESS OTHERWISE NOTED.

LEGEND

DELINEATOR SINGLE/DOUBLE



PROJECT NO:6020-02-72	HWY:USH 51	COUNTY:DANE	FENCING & DELINEATORS	SHEET 216	E

2

N

15 D4

20 D4

25 D4

30 D4

555 SB

555 NB

560 SB

560 NB

565 SB

565 NB

570 NB

400' (TYP)

U.S.H. 51

USH 51

400' (TYP)

STA. 573+00
END DELINEATORS

LEGEND

DELINEATOR SINGLE/DOUBLE

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	FENCING & DELINEATORS	SHEET 217	E

FILE NAME : P:\2011059 - US 51 WO\MicroStation\Planset\6020-02-72\027106_fn.dgn PLOT DATE : 5/13/2013 PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : 200.0000 sf / in.

2

N

PI 26+10.02 VI

170 NT 175 NT 180 NT 185 NT 190 NT 195 NT

N 0° 50' 57" W

N 0° 54' 30" W

26+58.46 VI =
184+46.06 NT

430 NB 435 NB 440 NB 445 NB 450 NB 455 NB 460 NB

N 4° 06'048" E

N 0° 54' 30" W

PT 431+21.15 NB

PC 436+56.37 NB

PI 439+91.36 NB

PT 443+25.92 NB

30' VI

S 89°58'36" E

35' VI

BEGIN PROJECT
STA. 452+00 NB

P.I. = 439+91.36 NB
Y 541841.63
X 837569.36
Δ. = -5°01'18"
D. = 0°45'00"
T. = 334.99'
L. = 669.55'
R. = 7639.44'
S.E. = 2.6%

PI 38+32.10 VI

PROJECT NO: 6020-02-72	HWY: USH 1	COUNTY: DANE	ALIGNMENT LAYOUT DETAILS	SHEET 218	E

FILE NAME : P:\2011059 - US 51 WO\MicroStation\Planset\6020-02-72\027201_ad.dgn PLOT DATE : 5/21/2013 PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : 200.0000 sf / in.

2

P.I. = 476+97.25 SN
Y 545541.13
X 837388.85
Δ. = -0° 16' 29"

P.I. = 479+94.86 SN
Y 545837.36
X 837360.21
Δ. = 2° 96' 35"

P.I. = 486+92.29 SN
Y 546527.19
X 837257.53
Δ. = -7° 45' 35"
D. = 1° 04' 52"
T. = 359.45'
L. = 717.81'
R. = 5300.00'
S.E. = 2.8%

N

P.I. = 210+94.37 NT
Y 545090.23
X 837176.32
Δ. = -0° 13' 00"

P.I. = 226+37.84 NT
Y 546633.59
X 837157.69
Δ. = -43° 43' 58"
D. = 7° 50' 55"
T. = 292.96'
L. = 557.20'
R. = 730.00'
S.E. = RC

PI 25+34.63 DV

PI 210+94.37 NT

30+00.00 DV =
219+12.73 NT

N 89° 41' 54" E

PT 229+02.08 NT

PC 223+44.88 NT

200 NT
205 NT
210 NT
215 NT
220 NT
225 NT

N 0° 54' 30" W
N 0° 41' 30" W

PT 490+50.64 SN

PI 226+37.84 NT

490 SN

PI 473+40.00 SN

PI 476+97.25 SN

PI 479+94.86 SN

PC 483+32.84 SN

485 SN

PI 486+92.29 SN

475 SN
480 SN

N 5° 47' 52" W
N 5° 31' 23" W
N 8° 27' 58" W

460 NB
465 NB
470 NB
475 NB
480 NB
485 NB
490 NB

N 0° 54' 30" W
N 8° 07' 43" W

PC 469+27.02 NB

PI 472+00.00 NX

PI/PC 474+50.87 NX

PI 476+01.40 NX

PI 476+50.00 NB

PT/PI 477+51.91 NX

PT 483+71.07 NB

475 NX
480 NX
485 NX
490 NX

N 0° 09' 19" W
N 1° 13' 09" W

P.I. = 476+50.00 NB
Y 545500.24
X 837511.35
Δ. = -7° 13' 13"
D. = 0° 30' 00"
T. = 722.98'
L. = 1444.05'
R. = 11459.16'
S.E. = 2.05%

P.I. = 474+50.87 NX
Y 545302.03
X 837538.53
Δ. = -4° 07' 04"

P.I. = 476+01.40 NX
Y 545452.28
X 837529.28
Δ. = -1° 30' 02"
D. = 0° 29' 54"
T. = 150.53'
L. = 301.05'
R. = 11495.19'

P.I. = 477+51.91 NX
Y 545602.23
X 837516.10
Δ. = 3° 03' 14"

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	ALIGNMENT LAYOUT DETAILS	SHEET 219	E

2

N

P.I. = 500+25.85 SX
Y 547857.76
X 836865.23
Δ. = -30° 12' 38"
D. = 95° 29' 35"
T. = 16.20'
L. = 31.64'
R. = 60.00'

P.I. = 500+77.68 SX
Y 547896.67
X 836900.59
Δ. = -39° 58' 59"
D. = 57° 17' 45"
T. = 36.38'
L. = 69.78'
R. = 100.00'

P.I. = 516+99.71 SX
Y 549520.39
X 836965.34
Δ. = -1° 11' 01"

P.I. = 519+99.71 SX
Y 549820.33
X 836959.52
Δ. = 0° 32' 15"

P.I. = 493+47.02 SN
Y 547156.90
X 837074.27
Δ. = -9° 45' 54"
D. = 2° 51' 53"
T. = 170.85'
L. = 340.87'
R. = 2000.00'
S.E. = 2.8%

P.I. = 499+27.72 SN
Y 547679.61
X 836819.43
Δ. = -13° 24' 28"
D. = 28° 38' 52"
T. = 23.51'
L. = 46.80'
R. = 200.00'

P.I. = 235+23.29 NT
Y 547286.47
X 836517.80
Δ. = 27° 49' 27"
D. = 10° 00' 00"
T. = 141.92'
L. = 278.24'
R. = 572.96'
S.E. = 2.5%

P.I. = 493+02.37 NX
Y 547152.34
X 837483.11
Δ. = -11° 31' 04"
D. = 2° 43' 42"
T. = 211.79'
L. = 422.15'
R. = 2100.00'
S.E. = 2.75%

P.I. = 498+26.80 NX
Y 547665.26
X 837367.17
Δ. = 95° 21' 34"
D. = 60° 18' 41"
T. = 104.33'
L. = 158.11'
R. = 95.00'

P.I. = 506+92.63 NB
Y 548514.19
X 837080.86
Δ. = 7° 01' 04"
D. = 1° 00' 00"
T. = 351.33'
L. = 701.78'
R. = 5729.58'
S.E. = 3.33%

P.I. = 503+49.46 NN
Y 548176.31
X 837241.25
Δ. = 22° 47' 50"
D. = 5° 43' 46"
T. = 201.61'
L. = 397.88'
R. = 1000.00'
S.E. = 4.3%

P.I. = 510+94.88 NN
Y 548918.16
X 837125.96
Δ. = 6° 34' 33"
D. = 1° 30' 00"
T. = 219.44'
L. = 438.40'
R. = 3819.72'
S.E. = 3.7%

P.I. = 519+39.66 NN
Y 549762.76
X 837092.66
Δ. = 1° 09' 25"

P.I. = 8+78.81 D3
Y 549562.93
X 837564.60
Δ. = -54°48'24"
D. = 57°17'45"
T. = 51.84'
L. = 95.66'
R. = 100.00'

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	ALIGNMENT LAYOUT DETAILS	SHEET 220	E

2

N

PI 519+99.71 SX

PI 522+50.00 SX

520 SX

N 1° 38' 14" E

PI 550+00.00 SB

550 SB

550 NB

520 NB

525 NB

530 NB

535 NB

540 NB

545 NB

520 NN

525 NN

N 1° 06' 39" W

N 1° 06' 42" W

N 3° 01' 09" W

PI 519+39.66 NN

PI 522+39.66 NN

PI 526+00.00 NN

PI 14+10.01 SW

N 20° 52' 20" E

PI 14+79.46 SW

PC 14+37.51 SW

PT 15+16.95 SW

N 66° 23' 25" E

PI 17+35.98 SW

PC 17+14.98 SW

PT 17+56.38 SW

S 89° 53' 35" E

PI 20+00.00 SW

20 SW

P.I. = 522+39.66 NN
Y 550062.71
X 837086.84
Δ. = -2° 35' 07"

P.I. = 14+79.46 SW
Y 551912.19
X 837336.62
Δ. = 45° 31' 05"
D. = 57° 17' 45"
T. = 41.95'
L. = 79.44'
R. = 100.00'

P.I. = 17+35.98 SW
Y 552016.71
X 837575.76
Δ. = 23° 43' 00"
D. = 57° 17' 45"
T. = 21.00'
L. = 41.39'
R. = 100.00'

15 D3

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	ALIGNMENT LAYOUT DETAILS	SHEET 221	E

2

N

P.I. = 553+18.52 SB
Y 553138.93
X 836931.18
Δ. = 0°59'22"
D. = 4°13'54"
T. = 213.92'
L. = 427.64'
R. = 5790.00'

P.I. = 14+10.23 D4
Y 553505.07
X 836837.64
Δ. = -11° 25' 49"

P.I. = 20+01.94 D4
Y 554096.64
X 836850.29
Δ. = 1° 11' 14"

P.I. = 21+99.48 D4
Y 554293.05
X 836871.36
Δ. = 1° 11' 14"

P.I. = 29+74.10 D4
Y 555065.76
X 836925.74
Δ. = -64° 55' 13"
D. = 57° 17' 45"
T. = 63.61'
L. = 113.31'
R. = 100.00'

PI 27+78.01 GI

PI 10+00.00 D4

PI 14+10.23 D4

PI 20+01.94 D4

PI 21+99.48 D4

PC 29+10.49 D4

PT 30+23.79 D4

N 60°53'40" W

PI 31+00.48 D4

PI 29+74.10 D4

PI 550+00.00 SB

PC 551+04.60 SB

PI 30+74.32 GI

S 89° 59'14" E

30 GI

10 D4

N 7°46'59" E

15 D4

N 1°13'30" E

20 D4

N 6°07'20" E

25 D4

N 4°01'34" E

30 D4

PI 553+18.52 SB

550 SB

555 SB

PT 555+32.24 SB

560 SB

N 3°07'15" E

565 SB

570 NB

N 1°06'39" W

550 NB

555 NB

N 0°03'29" E

560 NB

N 0°53'45" E

565 NB

N 1°06'39" W

PC 552+02.19 NB

S 89° 47' 42" E

PI 553+15.66 NB

PT 554+29.13 NB

PI 558+43.00 NB

PI 566+66.69 SB =
PI 566+63.82 NB

PC 570+28.36 NB

PI 572+14.12 NB

PT 573+99.81 NB

PI 34+35.30 GI

35 GI

S 89° 55'56" E

P.I. = 30+74.32 GI
Y 553025.48
X 836824.16
Δ. = -0° 12' 12"

P.I. = 34+35.30 GI
Y 553026.77
X 837185.14
Δ. = 0° 08' 14"

PI 38+69.10 GI

P.I. = 38+69.10 GI
Y 553026.26
X 837618.94
Δ. = -0° 01' 11"

40 GI

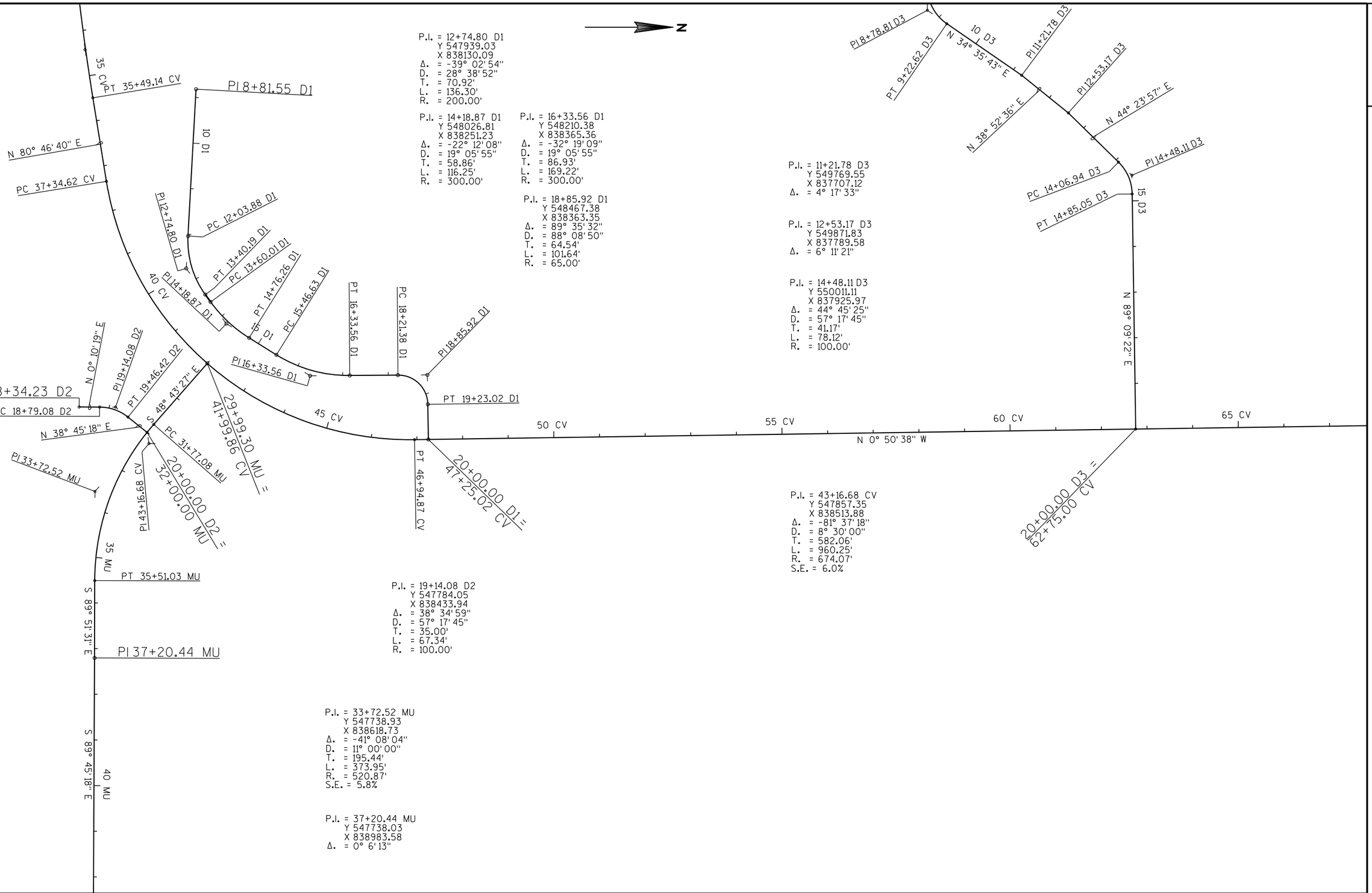
S 89° 56'27" E

P.I. = 553+15.66 NB
Y 553137.24
X 836991.22
Δ. = 1°10'08"
D. = 0°30'54"
T. = 113.47'
L. = 226.94'
R. = 11124.00'
S.E. = 2.05%

P.I. = 558+43.00 NB
Y 553664.58
X 836991.76
Δ. = 0°50'15"

P.I. = 572+14.12 NB
Y 555035.46
X 837016.13
Δ. = -2°38'26"
D. = 0°42'39"
T. = 185.76'
L. = 371.45'
R. = 8060.00'
S.E. = 2.5%

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	ALIGNMENT LAYOUT DETAILS	SHEET 222	E



P.I. = 12+74.80 D1
Y 547939.03
X 838130.09
Δ. = -39° 02' 54"
D. = 28° 38' 52"
T. = 70.92'
L. = 136.30'
R. = 200.00'

P.I. = 14+18.87 D1
Y 548026.81
X 838251.23
Δ. = -22° 12' 08"
D. = 19° 05' 55"
T. = 58.86'
L. = 116.25'
R. = 300.00'

P.I. = 16+33.56 D1
Y 548210.38
X 838365.36
Δ. = -32° 19' 09"
D. = 19° 05' 55"
T. = 86.93'
L. = 169.22'
R. = 300.00'

P.I. = 18+85.92 D1
Y 548467.38
X 838363.35
Δ. = 89° 35' 32"
D. = 88° 08' 50"
T. = 64.54'
L. = 101.64'
R. = 65.00'

P.I. = 11+21.78 D3
Y 549769.55
X 837707.12
Δ. = 4° 17' 33"

P.I. = 12+53.17 D3
Y 549871.83
X 837789.58
Δ. = 6° 11' 21"

P.I. = 14+48.11 D3
Y 550011.11
X 837925.97
Δ. = 44° 45' 25"
D. = 57° 17' 45"
T. = 41.17'
L. = 78.12'
R. = 100.00'

P.I. = 43+16.68 CV
Y 547857.35
X 838513.88
Δ. = -81° 37' 18"
D. = 8° 30' 00"
T. = 582.06'
L. = 960.25'
R. = 674.07'
S.E. = 6.0%

P.I. = 19+14.08 D2
Y 547784.05
X 838433.94
Δ. = 38° 34' 59"
D. = 57° 17' 45"
T. = 35.00'
L. = 67.34'
R. = 100.00'

P.I. = 33+72.52 MU
Y 547738.93
X 838618.73
Δ. = -41° 08' 04"
D. = 11° 00' 00"
T. = 195.44'
L. = 373.95'
R. = 520.87'
S.E. = 5.8%

P.I. = 37+20.44 MU
Y 547738.03
X 838983.58
Δ. = 0° 6' 13"

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	ALIGNMENT LAYOUT DETAILS	SHEET 223	E

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N

P.I. = 47+34.74 GI
Y 553025.37
X 838484.58
Δ. = 46° 30' 43"
D. = 22° 55' 06"
T. = 107.44'
L. = 202.95'
R. = 250.00'
S.E. = 5.7%

70 CV

75 CV

80 CV

85 CV

N 0° 50' 38" W

PC 85+69.99 CV

90 CV

PT 48+30.25 GI

S 43° 25' 44" E

49+88.08 GI =
91+49.28 CV

95 CV

PT 96+87.12 CV

P.I. = 92+87.78 CV
Y 553031.76
X 838437.66
Δ. = 91° 26' 16"
D. = 8° 11' 06"
T. = 717.79'
L. = 1117.12'
R. = 700.00'
S.E. = 6.0%

S 89° 24' 22" E

100 CV

PI 102+33.83 CV

S 89° 56' 27" E

45 GI

PC 46+27.30 GI

PI 92+87.78 CV

PI 47+34.74 GI

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	ALIGNMENT LAYOUT DETAILS	SHEET 224	E

DATE 11JUN13 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	6020-02-72 QUANTITY
0010	201.0105	CLEARING	STA	18.000	18.000
0020	201.0205	GRUBBING	STA	18.000	18.000
0030	203.0100	REMOVING SMALL PIPE CULVERTS	EACH	30.000	30.000
0040	204.0100	REMOVING PAVEMENT	SY	8,135.000	8,135.000
0050	204.0120	REMOVING ASPHALTIC SURFACE MILLING	SY	38,100.000	38,100.000
0060	204.0150	REMOVING CURB & GUTTER	LF	4,805.000	4,805.000
0070	204.0195	REMOVING CONCRETE BASES	EACH	2.000	2.000
0080	204.0220	REMOVING INLETS	EACH	5.000	5.000
0090	204.0225	REMOVING SEPTIC TANKS	EACH	3.000	3.000
0100	204.0235	REMOVING BUILDINGS (PARCEL) 01. PARCEL 28	LS	1.000	1.000
0110	204.0235	REMOVING BUILDINGS (PARCEL) 02. PARCEL 33	LS	1.000	1.000
0120	204.0235	REMOVING BUILDINGS (PARCEL) 03. PARCEL 42	LS	1.000	1.000
0130	204.0240	SITE CLEARANCE (PARCEL) 01. PARCEL 28	LS	1.000	1.000
0140	204.0240	SITE CLEARANCE (PARCEL) 02. PARCEL 33	LS	1.000	1.000
0150	204.0240	SITE CLEARANCE (PARCEL) 03. PARCEL 42	LS	1.000	1.000
0160	204.0245	REMOVING STORM SEWER (SIZE) 01. 12-INCH	LF	84.000	84.000
0170	204.0245	REMOVING STORM SEWER (SIZE) 02. 18-INCH	LF	10.000	10.000
0180	204.0245	REMOVING STORM SEWER (SIZE) 03. 34"X53" RCHECP	LF	8.000	8.000
0190	204.0265	ABANDONING WELLS	EACH	3.000	3.000
0200	204.9105.S	REMOVING (ITEM DESCRIPTION) 01. DEFOREST BUSINES PARK SIGN	LS	1.000	1.000
0210	204.9105.S	REMOVING (ITEM DESCRIPTION) 02. DEFOREST SIGN	LS	1.000	1.000
0220	204.9105.S	REMOVING (ITEM DESCRIPTION) 03. RED ONION FRESH MARKET SIGN	LS	1.000	1.000
0230	205.0100	EXCAVATION COMMON	CY	398,380.000	398,380.000
0240	206.1000	EXCAVATION FOR STRUCTURES BRIDGES (STRUCTURE) 01. B-13-599	LS	1.000	1.000
0250	206.1000	EXCAVATION FOR STRUCTURES BRIDGES (STRUCTURE) 02. B-13-600	LS	1.000	1.000
0260	206.6000.S	TEMPORARY SHORING	SF	750.000	750.000
0270	208.0100	BORROW	CY	735,566.000	735,566.000
0280	210.0100	BACKFILL STRUCTURE **P**	CY	960.000	960.000
0290	213.0100	FINISHING ROADWAY (PROJECT) 01. 6020-02-72	EACH	1.000	1.000
0300	214.0100	OBLITERATING OLD ROAD	STA	4.000	4.000
0310	305.0110	BASE AGGREGATE DENSE 3/4-INCH	TON	11,600.000	11,600.000
0320	305.0120	BASE AGGREGATE DENSE 1 1/4-INCH	TON	171,800.000	171,800.000
0330	305.0130	BASE AGGREGATE DENSE 3-INCH	TON	29,900.000	29,900.000
0340	305.0500	SHAPING SHOULDERS	STA	163.000	163.000
0350	312.0110	SELECT CRUSHED MATERIAL	TON	143,800.000	143,800.000
0360	405.0100	COLORING CONCRETE RED	CY	570.000	570.000
0370	415.0095	CONCRETE PAVEMENT 9 1/2-INCH	SY	71,235.000	71,235.000
0380	415.0410	CONCRETE PAVEMENT APPROACH SLAB	SY	188.000	188.000
0390	415.6000.S	ROUTE AND SEAL	LF	51,200.000	51,200.000
0400	416.0160	CONCRETE DRIVEWAY 6-INCH	SY	165.000	165.000
0410	416.0508	CONCRETE ROUNDABOUT TRUCK APRON 8-INCH	SY	1,895.000	1,895.000
0420	416.1010	CONCRETE SURFACE DRAINS **P**	CY	16.000	16.000
0430	416.1110	CONCRETE RUMBLE STRIPS SHOULDER	LF	23,500.000	23,500.000
0440	440.4410.S	INCENTIVE IRI RIDE	DOL	25,000.000	25,000.000
0450	455.0105	ASPHALTIC MATERIAL PG58-28	TON	1,697.000	1,697.000

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DATE 11JUN13 E S T I M A T E O F Q U A N T I T I E S

LINE 6020-02-72

NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL QUANTITY	6020-02-72 QUANTITY
0460	455.0120	ASPHALTIC MATERIAL PG64-28	TON	115.000	115.000
0470	455.0605	TACK COAT	GAL	4,915.000	4,915.000
0480	460.1100	HMA PAVEMENT TYPE E-0.3	TON	6,875.000	6,875.000
0490	460.1103	HMA PAVEMENT TYPE E-3	TON	15,490.000	15,490.000
0500	460.1110	HMA PAVEMENT TYPE E-10	TON	10,830.000	10,830.000
0510	460.2000	INCENTIVE DENSITY HMA PAVEMENT	DOL	21,200.000	21,200.000
0520	465.0125	ASPHALTIC SURFACE TEMPORARY	TON	4,525.000	4,525.000
0530	465.0315	ASPHALTIC FLUMES	SY	280.000	280.000
0540	465.0400	ASPHALTIC SHOULDER RUMBLE STRIP	LF	32,200.000	32,200.000
0550	502.0100	CONCRETE MASONRY BRIDGES	CY	1,093.000	1,093.000
0560	502.3200	PROTECTIVE SURFACE TREATMENT **P**	SY	1,820.000	1,820.000
0570	503.0137	PRESTRESSED GIRDER TYPE I 36W-INCH	LF	1,628.000	1,628.000
0580	504.0900	CONCRETE MASONRY ENDWALLS **P**	CY	74.600	74.600
0590	505.0405	BAR STEEL REINFORCEMENT HS BRIDGES	LB	15,470.000	15,470.000
0600	505.0605	BAR STEEL REINFORCEMENT HS COATED BRIDGES	LB	159,540.000	159,540.000
0610	506.2605	BEARING PADS ELASTOMERIC NON-LAMINATED	EACH	40.000	40.000
0620	506.4000	STEEL DIAPHRAGMS (STRUCTURE) 01. B-13-599	EACH	16.000	16.000
0630	506.4000	STEEL DIAPHRAGMS (STRUCTURE) 02. B-13-600	EACH	16.000	16.000
0640	516.0500	RUBBERIZED MEMBRANE WATERPROOFING **P**	SY	48.000	48.000
0650	517.1010.S	CONCRETE STAINING (STRUCTURE) 01. B-13-599	SF	2,175.000	2,175.000
0660	517.1010.S	CONCRETE STAINING (STRUCTURE) 02. B-13-600	SF	2,175.000	2,175.000
0670	517.1015.S	CONCRETE STAINING MULTI-COLOR (STRUCTURE) 01. B-13-599	SF	2,115.000	2,115.000
0680	517.1015.S	CONCRETE STAINING MULTI-COLOR (STRUCTURE) 02. B-13-600	SF	2,110.000	2,110.000
0690	517.1050.S	ARCHITECTURAL SURFACE TREATMENT (STRUCTURE) 01. B-13-599	SF	2,115.000	2,115.000
0700	517.1050.S	ARCHITECTURAL SURFACE TREATMENT (STRUCTURE) 02. B-13-600	SF	2,110.000	2,110.000
0710	520.0112	CULVERT PIPE CLASS III 12-INCH	LF	62.000	62.000
0720	520.0118	CULVERT PIPE CLASS III 18-INCH	LF	244.000	244.000
0730	520.0124	CULVERT PIPE CLASS III 24-INCH	LF	152.000	152.000
0740	520.0130	CULVERT PIPE CLASS III 30-INCH	LF	220.000	220.000
0750	520.0136	CULVERT PIPE CLASS III 36-INCH	LF	72.000	72.000
0760	520.0142	CULVERT PIPE CLASS III 42-INCH	LF	30.000	30.000
0770	520.0148	CULVERT PIPE CLASS III 48-INCH	LF	214.000	214.000
0780	520.1012	APRON ENDWALLS FOR CULVERT PIPE 12-INCH	EACH	4.000	4.000
0790	520.1018	APRON ENDWALLS FOR CULVERT PIPE 18-INCH	EACH	12.000	12.000
0800	520.1024	APRON ENDWALLS FOR CULVERT PIPE 24-INCH	EACH	16.000	16.000
0810	520.1030	APRON ENDWALLS FOR CULVERT PIPE 30-INCH	EACH	8.000	8.000
0820	520.1036	APRON ENDWALLS FOR CULVERT PIPE 36-INCH	EACH	8.000	8.000
0830	520.1042	APRON ENDWALLS FOR CULVERT PIPE 42-INCH	EACH	2.000	2.000
0840	520.1048	APRON ENDWALLS FOR CULVERT PIPE 48-INCH	EACH	6.000	6.000
0850	520.4018	CULVERT PIPE TEMPORARY 18-INCH	LF	142.000	142.000
0860	520.4024	CULVERT PIPE TEMPORARY 24-INCH	LF	366.000	366.000
0870	520.4036	CULVERT PIPE TEMPORARY 36-INCH	LF	204.000	204.000
0880	521.0721	PIPE ARCH CORRUGATED STEEL 21X15-INCH	LF	122.000	122.000
0890	521.0728	PIPE ARCH CORRUGATED STEEL 28X20-INCH	LF	88.000	88.000
0900	521.1221	APRON ENDWALLS FOR PIPE ARCH STEEL 21X15-INCH	EACH	4.000	4.000

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LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	6020-02-72 QUANTITY
0910	521.1228	APRON ENDWALLS FOR PIPE ARCH STEEL 28X20-INCH	EACH	2.000	2.000
0920	522.0118	CULVERT PIPE REINFORCED CONCRETE CLASS III 18-INCH	LF	780.000	780.000
0930	522.0124	CULVERT PIPE REINFORCED CONCRETE CLASS III 24-INCH	LF	274.000	274.000
0940	522.0130	CULVERT PIPE REINFORCED CONCRETE CLASS III 30-INCH	LF	502.000	502.000
0950	522.0136	CULVERT PIPE REINFORCED CONCRETE CLASS III 36-INCH	LF	214.000	214.000
0960	522.0142	CULVERT PIPE REINFORCED CONCRETE CLASS III 42-INCH	LF	128.000	128.000
0970	522.0148	CULVERT PIPE REINFORCED CONCRETE CLASS III 48-INCH	LF	404.000	404.000
0980	522.0154	CULVERT PIPE REINFORCED CONCRETE CLASS III 54-INCH	LF	564.000	564.000
0990	522.0548	CULVERT PIPE REINFORCED CONCRETE CLASS V 48-INCH	LF	1,290.000	1,290.000
1000	522.1012	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 12-INCH	EACH	2.000	2.000
1010	522.1015	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 15-INCH	EACH	1.000	1.000
1020	522.1018	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 18-INCH	EACH	11.000	11.000
1030	522.1024	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 24-INCH	EACH	8.000	8.000
1040	522.1030	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 30-INCH	EACH	5.000	5.000
1050	522.1036	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 36-INCH	EACH	2.000	2.000
1060	522.1042	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 42-INCH	EACH	2.000	2.000
1070	522.1054	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 54-INCH	EACH	2.000	2.000
1080	523.0134	CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-III 34X53-INCH	LF	734.000	734.000
1090	523.0143	CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-III 43X68-INCH	LF	176.000	176.000
1100	523.0148	CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-III 48X76-INCH	LF	124.000	124.000
1110	523.0543	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL 43X68-INCH	EACH	2.000	2.000
1120	550.1100	PILING STEEL HP 10-INCH X 42 LB	LF	2,590.000	2,590.000
1130	601.0120	CONCRETE CURB TYPE J	LF	365.000	365.000
1140	601.0405	CONCRETE CURB & GUTTER 18-INCH TYPE A	LF	895.000	895.000
1150	601.0411	CONCRETE CURB & GUTTER 30-INCH TYPE D	LF	13,950.000	13,950.000
1160	601.0553	CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE D	LF	425.000	425.000
1170	601.0580	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE R	LF	1,185.000	1,185.000
1180	602.0410	CONCRETE SIDEWALK 5-INCH	SF	48,700.000	48,700.000
1190	602.0505	CURB RAMP DETECTABLE WARNING FIELD YELLOW	SF	568.000	568.000
1200	603.8000	CONCRETE BARRIER TEMPORARY PRECAST DELIVERED	LF	876.000	876.000

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LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	6020-02-72 QUANTITY
1210	603.8125	CONCRETE BARRIER TEMPORARY PRECAST INSTALLED	LF	876.000	876.000
1220	604.0400	SLOPE PAVING CONCRETE	SY	665.000	665.000
1230	606.0200	RIPRAP MEDIUM	CY	405.000	405.000
1240	606.0300	RIPRAP HEAVY	CY	305.000	305.000
1250	608.0312	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 12-INCH	LF	16.000	16.000
1260	608.0315	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 15-INCH	LF	235.000	235.000
1270	608.0318	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 18-INCH	LF	295.000	295.000
1280	608.0324	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 24-INCH	LF	1,191.000	1,191.000
1290	608.0330	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 30-INCH	LF	128.000	128.000
1300	608.0412	STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 12-INCH	LF	803.000	803.000
1310	608.0415	STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 15-INCH	LF	397.000	397.000
1320	608.0418	STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 18-INCH	LF	675.000	675.000
1330	608.0424	STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 24-INCH	LF	206.000	206.000
1340	610.0114	STORM SEWER PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-III 14X23-INCH	LF	25.000	25.000
1350	611.0530	MANHOLE COVERS TYPE J	EACH	11.000	11.000
1360	611.0600	INLET COVERS TYPE A	EACH	2.000	2.000
1370	611.0624	INLET COVERS TYPE H	EACH	38.000	38.000
1380	611.0627	INLET COVERS TYPE HM	EACH	3.000	3.000
1390	611.0636	INLET COVERS TYPE HM-S	EACH	4.000	4.000
1400	611.0639	INLET COVERS TYPE H-S	EACH	10.000	10.000
1410	611.0642	INLET COVERS TYPE MS	EACH	25.000	25.000
1420	611.0652	INLET COVERS TYPE T	EACH	6.000	6.000
1430	611.0654	INLET COVERS TYPE V	EACH	8.000	8.000
1440	611.2003	MANHOLES 3-FT DIAMETER	EACH	1.000	1.000
1450	611.2004	MANHOLES 4-FT DIAMETER	EACH	17.000	17.000
1460	611.2005	MANHOLES 5-FT DIAMETER	EACH	8.000	8.000
1470	611.2006	MANHOLES 6-FT DIAMETER	EACH	3.000	3.000
1480	611.2008	MANHOLES 8-FT DIAMETER	EACH	2.000	2.000
1490	611.3003	INLETS 3-FT DIAMETER	EACH	2.000	2.000
1500	611.3220	INLETS 2X2-FT	EACH	8.000	8.000
1510	611.3225	INLETS 2X2.5-FT	EACH	3.000	3.000
1520	611.3230	INLETS 2X3-FT	EACH	40.000	40.000
1530	611.3901	INLETS MEDIAN 1 GRATE	EACH	1.000	1.000
1540	611.3902	INLETS MEDIAN 2 GRATE	EACH	7.000	7.000
1550	611.9800.S	PIPE GRATES	EACH	5.000	5.000
1560	612.0106	PIPE UNDERDRAIN 6-INCH	LF	2,025.000	2,025.000
1570	612.0212	PIPE UNDERDRAIN UNPERFORATED 12-INCH	LF	198.000	198.000
1580	612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	360.000	360.000
1600	614.0150	ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD	EACH	8.000	8.000
1610	614.0396	GUARDRAIL MOW STRIP ASPHALT	SY	785.000	785.000
1620	614.0905	CRASH CUSHIONS TEMPORARY	EACH	2.000	2.000
1630	614.2300	MGS GUARDRAIL 3 **P**	LF	1,425.000	1,425.000

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LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	6020-02-72 QUANTITY
1640	614.2500	MGS THRIE BEAM TRANSITION	LF	234.000	234.000
1650	614.2610	MGS GUARDRAIL TERMINAL EAT **P**	EACH	7.000	7.000
1660	616.0100	FENCE WOVEN WIRE (HEIGHT) 01. 4.5-FT	LF	24,000.000	24,000.000
1670	618.0100	MAINTENANCE AND REPAIR OF HAUL ROADS (PROJECT) 01. 6020-02-72	EACH	1.000	1.000
1680	619.1000	MOBILIZATION	EACH	1.000	1.000
1690	620.0300	CONCRETE MEDIAN SLOPED NOSE	SF	750.000	750.000
1700	623.0200	DUST CONTROL SURFACE TREATMENT	SY	39,500.000	39,500.000
1710	624.0100	WATER	MGAL	5,108.000	5,108.000
1720	625.0500	SALVAGED TOPSOIL	SY	404,564.000	404,564.000
1730	627.0200	MULCHING	SY	402,050.000	402,050.000
1740	628.1104	EROSION BALES	EACH	485.000	485.000
1750	628.1504	SILT FENCE	LF	11,000.000	11,000.000
1760	628.1520	SILT FENCE MAINTENANCE	LF	22,000.000	22,000.000
1770	628.1905	MOBILIZATIONS EROSION CONTROL	EACH	24.000	24.000
1780	628.1910	MOBILIZATIONS EMERGENCY EROSION CONTROL	EACH	15.000	15.000
1790	628.2004	EROSION MAT CLASS I TYPE B	SY	182,350.000	182,350.000
1800	628.2008	EROSION MAT URBAN CLASS I TYPE B	SY	11,900.000	11,900.000
1810	628.2023	EROSION MAT CLASS II TYPE B	SY	72.000	72.000
1820	628.7005	INLET PROTECTION TYPE A	EACH	16.000	16.000
1830	628.7010	INLET PROTECTION TYPE B	EACH	16.000	16.000
1840	628.7015	INLET PROTECTION TYPE C	EACH	63.000	63.000
1850	628.7504	TEMPORARY DITCH CHECKS	LF	3,110.000	3,110.000
1860	628.7555	CULVERT PIPE CHECKS	EACH	280.000	280.000
1870	629.0210	FERTILIZER TYPE B	CWT	429.000	429.000
1880	630.0120	SEEDING MIXTURE NO. 20	LB	705.000	705.000
1890	630.0130	SEEDING MIXTURE NO. 30	LB	17,280.000	17,280.000
1900	630.0140	SEEDING MIXTURE NO. 40	LB	615.000	615.000
1910	630.0200	SEEDING TEMPORARY	LB	9,355.000	9,355.000
1920	630.0300	SEEDING BORROW PIT	LB	350.000	350.000
1930	632.0101	TREES (SPECIES, ROOT, SIZE) 01. BALDCYPRESS, 2 1/2-INCH, B&B	EACH	9.000	9.000
1940	632.0101	TREES (SPECIES, ROOT, SIZE) 02. CATALPA, NORTHERN, 2 1/2-INCH, B&B	EACH	3.000	3.000
1950	632.0101	TREES (SPECIES, ROOT, SIZE) 03. COFFEETREE, KENTUCKY, 2 1/2-INC, B&B	EACH	17.000	17.000
1960	632.0101	TREES (SPECIES, ROOT, SIZE) 04. ELM, FRONTIER, 2 1/2-INCH, B&B	EACH	31.000	31.000
1970	632.0101	TREES (SPECIES, ROOT, SIZE) 05. HACKBERRY, PRAIRIE PRIDE, 2 1/2, B&B	EACH	26.000	26.000
1980	632.0101	TREES (SPECIES, ROOT, SIZE) 06. HONEYLOCUST, SKYLINE , 2 1/2-IN, B&B	EACH	21.000	21.000
1990	632.0101	TREES (SPECIES, ROOT, SIZE) 07. LINDEN, SILVER, 2 1/2-INCH, B&B	EACH	17.000	17.000
2000	632.0101	TREES (SPECIES, ROOT, SIZE) 08. MAPLE, GREEN MOUNTAIN SUGAR, 2 1/2-INCH, B&B	EACH	26.000	26.000
2010	632.0101	TREES (SPECIES, ROOT, SIZE) 09. MAPLE, SIENNA GLEN, 2 1/2-INCH, B&B	EACH	25.000	25.000
2020	632.0101	TREES (SPECIES, ROOT, SIZE) 10. OAK, BUR, 2-INCH, B&B	EACH	18.000	18.000
2030	632.0101	TREES (SPECIES, ROOT, SIZE) 11. OAK, SWAMP WHITE, 2-INCH, B&B	EACH	39.000	39.000
2040	632.0101	TREES (SPECIES, ROOT, SIZE) 12. OAK, WHITE, 2-INCH, B&B	EACH	6.000	6.000
2050	632.0101	TREES (SPECIES, ROOT, SIZE) 13. SILVER MAPLE, CUTLEAF, 2 1/2-INCH, B&B	EACH	4.000	4.000

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LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	6020-02-72 QUANTITY
2060	632.0101	TREES (SPECIES, ROOT, SIZE) 14. HAWTHORN, WINTER KING, 8', B&B CLUMP	EACH	12.000	12.000
2070	632.0101	TREES (SPECIES, ROOT, SIZE) 15. SERVICEBERRY, AUTUMN BRILLIANCE	EACH	38.000	38.000
2080	632.0101	TREES (SPECIES, ROOT, SIZE) 16. TREE LILAC, JAPANESE, 8', B&B CLUMP	EACH	21.000	21.000
2090	632.0101	TREES (SPECIES, ROOT, SIZE) 17. JUNIPER, CANAERT, 6', B&B	EACH	3.000	3.000
2100	632.0101	TREES (SPECIES, ROOT, SIZE) 18. SPRUCE, BLACK HILLS, 6', B&B	EACH	50.000	50.000
2110	632.0101	TREES (SPECIES, ROOT, SIZE) 19. SPRUCE, GREEN COLORADO-NO BLUE COLOR ,6', B&B	EACH	44.000	44.000
2120	632.0101	TREES (SPECIES, ROOT, SIZE) 20. SPRUCE, NORWAY, 6', B&B	EACH	27.000	27.000
2130	632.0201	SHRUBS (SPECIES, ROOT, SIZE) 01. CHOKEBERRY, GLOSSY BLACK, 30-INCH, CG	EACH	84.000	84.000
2140	632.0201	SHRUBS (SPECIES, ROOT, SIZE) 02. HONEYSUCKLE, DWARF BUSH, 18-INCH, CG	EACH	231.000	231.000
2150	632.0201	SHRUBS (SPECIES, ROOT, SIZE) 03. POTENTILLA, PINK BEAUTY, 18-INCH, CG	EACH	225.000	225.000
2160	632.0201	SHRUBS (SPECIES, ROOT, SIZE) 04. SUMAC, GROW LOW, 12-INCH, CG	EACH	79.000	79.000
2170	632.0201	SHRUBS (SPECIES, ROOT, SIZE) 05. JUNIPER, ARCADIA, 3', CG	EACH	123.000	123.000
2180	632.9101	LANDSCAPE PLANTING SURVEILLANCE AND CARE CYCLES	EACH	18.000	18.000
2190	633.0100	DELINEATOR POSTS STEEL	EACH	145.000	145.000
2200	633.0500	DELINEATOR REFLECTORS	EACH	173.000	173.000
2210	633.1000	DELINEATOR BRACKETS	EACH	173.000	173.000
2220	633.1100	DELINEATORS TEMPORARY	EACH	216.000	216.000
2230	633.5200	MARKERS CULVERT END	EACH	41.000	41.000
2240	634.0416	POSTS WOOD 4X4-INCH X 16-FT	EACH	69.000	69.000
2250	634.0614	POSTS WOOD 4X6-INCH X 14-FT	EACH	63.000	63.000
2260	634.0618	POSTS WOOD 4X6-INCH X 18-FT	EACH	39.000	39.000
2270	634.0620	POSTS WOOD 4X6-INCH X 20-FT	EACH	17.000	17.000
2280	634.0622	POSTS WOOD 4X6-INCH X 22-FT	EACH	1.000	1.000
2290	634.0811	POSTS TUBULAR STEEL 2X2-INCH X 11-FT	EACH	17.000	17.000
2300	634.0812	POSTS TUBULAR STEEL 2X2-INCH X 12-FT	EACH	6.000	6.000
2310	634.0814	POSTS TUBULAR STEEL 2X2-INCH X 14-FT	EACH	9.000	9.000
2320	635.0200	SIGN SUPPORTS STRUCTURAL STEEL HS	LB	3,380.000	3,380.000
2330	636.0100	SIGN SUPPORTS CONCRETE MASONRY **P**	CY	8.000	8.000
2340	636.0500	SIGN SUPPORTS STEEL REINFORCEMENT **P**	LB	490.000	490.000
2350	637.0101	SIGNS TYPE I	SF	1,337.000	1,337.000
2360	637.0202	SIGNS REFLECTIVE TYPE II	SF	1,851.000	1,851.000
2370	637.0620	SIGN FLAGS PERMANENT TYPE II	EACH	36.000	36.000
2380	638.2102	MOVING SIGNS TYPE II	EACH	1.000	1.000
2390	638.2602	REMOVING SIGNS TYPE II	EACH	81.000	81.000
2400	638.3000	REMOVING SMALL SIGN SUPPORTS	EACH	69.000	69.000
2410	638.4000	MOVING SMALL SIGN SUPPORTS	EACH	8.000	8.000
2420	641.8100	OVERHEAD SIGN SUPPORT (STRUCTURE) 01. S-13-324	LS	1.000	1.000
2430	641.8100	OVERHEAD SIGN SUPPORT (STRUCTURE) 02. S-13-329	LS	1.000	1.000
2440	641.8100	OVERHEAD SIGN SUPPORT (STRUCTURE) 03. S-13-330	LS	1.000	1.000

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LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	6020-02-72 QUANTITY
2450	641.8100	OVERHEAD SIGN SUPPORT (STRUCTURE) 04. S-13-331	LS	1.000	1.000
2460	642.5201	FIELD OFFICE TYPE C	EACH	1.000	1.000
2470	643.0100	TRAFFIC CONTROL (PROJECT) 01.6020-02-72	EACH	1.000	1.000
2480	643.0300	TRAFFIC CONTROL DRUMS	DAY	113,930.000	113,930.000
2490	643.0420	TRAFFIC CONTROL BARRICADES TYPE III	DAY	22,282.000	22,282.000
2500	643.0500	TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER POSTS	EACH	117.000	117.000
2510	643.0600	TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER BASES	EACH	117.000	117.000
2520	643.0705	TRAFFIC CONTROL WARNING LIGHTS TYPE A	DAY	18,196.000	18,196.000
2530	643.0715	TRAFFIC CONTROL WARNING LIGHTS TYPE C	DAY	21,848.000	21,848.000
2540	643.0800	TRAFFIC CONTROL ARROW BOARDS	DAY	1,544.000	1,544.000
2550	643.0900	TRAFFIC CONTROL SIGNS	DAY	33,840.000	33,840.000
2560	643.1000	TRAFFIC CONTROL SIGNS FIXED MESSAGE	SF	72.000	72.000
2570	643.1050	TRAFFIC CONTROL SIGNS PCMS	DAY	640.000	640.000
2580	643.2000	TRAFFIC CONTROL DETOUR (PROJECT) 01. 6020-02-72	EACH	1.000	1.000
2590	643.2000	TRAFFIC CONTROL DETOUR (PROJECT) 02. 6020-02-72	EACH	1.000	1.000
2600	643.3000	TRAFFIC CONTROL DETOUR SIGNS	DAY	22,627.000	22,627.000
2610	645.0112	GEOTEXTILE FABRIC TYPE DF SCHEDULE B	SY	1,125.000	1,125.000
2620	645.0120	GEOTEXTILE FABRIC TYPE HR	SY	1,100.000	1,100.000
2630	646.0106	PAVEMENT MARKING EPOXY 4-INCH	LF	159,585.000	159,585.000
2640	646.0126	PAVEMENT MARKING EPOXY 8-INCH	LF	1,580.000	1,580.000
2650	646.0600	REMOVING PAVEMENT MARKINGS	LF	5,960.000	5,960.000
2660	646.0841.S	PAVEMENT MARKING GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH	LF	8,290.000	8,290.000
2670	646.0881.S	PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE 4-INCH	LF	1,200.000	1,200.000
2680	646.0883.S	PAVEMENT MARKING GROOVED WET REFLECTIVE TAPE 8-INCH	LF	4,026.000	4,026.000
2690	647.0456	PAVEMENT MARKING CURB EPOXY	LF	520.000	520.000
2700	647.0566	PAVEMENT MARKING STOP LINE EPOXY 18-INCH	LF	130.000	130.000
2710	647.0606	PAVEMENT MARKING ISLAND NOSE EPOXY	EACH	6.000	6.000
2720	647.0736	PAVEMENT MARKING DIAGONAL EPOXY 18-INCH	LF	290.000	290.000
2730	647.0746	PAVEMENT MARKING DIAGONAL EPOXY 24-INCH	LF	285.000	285.000
2740	647.0766	PAVEMENT MARKING CROSSWALK EPOXY 6-INCH	LF	135.000	135.000
2750	647.0856	PAVEMENT MARKING CONCRETE CORRUGATED MEDIAN EPOXY **P**	SF	320.000	320.000
2760	648.0100	LOCATING NO-PASSING ZONES	MI	1.080	1.080
2770	649.0100	TEMPORARY PAVEMENT MARKING 4-INCH	LF	17,250.000	17,250.000
2780	649.0400	TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH	LF	34,900.000	34,900.000
2790	649.0900	TEMPORARY PAVEMENT MARKING STOP LINE 12-INCH	LF	130.000	130.000
2800	650.4000	CONSTRUCTION STAKING STORM SEWER	EACH	85.000	85.000
2810	650.4500	CONSTRUCTION STAKING SUBGRADE	LF	58,000.000	58,000.000
2820	650.5000	CONSTRUCTION STAKING BASE	LF	49,240.000	49,240.000
2830	650.5500	CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER	LF	17,585.000	17,585.000
2840	650.6000	CONSTRUCTION STAKING PIPE CULVERTS	EACH	65.000	65.000
2850	650.6500	CONSTRUCTION STAKING STRUCTURE LAYOUT (STRUCTURE) 01. B-13-599	LS	1.000	1.000
2860	650.6500	CONSTRUCTION STAKING STRUCTURE LAYOUT (STRUCTURE) 02. B-13-600	LS	1.000	1.000

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LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	6020-02-72 QUANTITY
2870	650.7000	CONSTRUCTION STAKING CONCRETE PAVEMENT	LF	29,550.000	29,550.000
2880	650.8000	CONSTRUCTION STAKING RESURFACING REFERENCE	LF	10,200.000	10,200.000
2890	650.8500	CONSTRUCTION STAKING ELECTRICAL INSTALLATIONS (PROJECT) 01. 6020-02-72	LS	1.000	1.000
2900	650.9910	CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (PROJECT) 01. 6020-02-72	LS	1.000	1.000
2910	650.9920	CONSTRUCTION STAKING SLOPE STAKES	LF	59,750.000	59,750.000
2920	652.0125	CONDUIT RIGID METALLIC 2-INCH	LF	26.000	26.000
2930	652.0225	CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH	LF	4,121.000	4,121.000
2940	652.0235	CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH	LF	2,019.000	2,019.000
2950	652.0310	CONDUIT RIGID NONMETALLIC SCHEDULE 80 1-INCH	LF	74.000	74.000
2960	652.0325	CONDUIT RIGID NONMETALLIC SCHEDULE 80 2-INCH	LF	40.000	40.000
2970	653.0140	PULL BOXES STEEL 24X42-INCH	EACH	35.000	35.000
2980	653.0208	JUNCTION BOXES 8X8X8-INCH	EACH	2.000	2.000
2990	654.0106	CONCRETE BASES TYPE 6	EACH	46.000	46.000
3000	655.0610	ELECTRICAL WIRE LIGHTING 12 AWG	LF	28,089.000	28,089.000
3010	655.0615	ELECTRICAL WIRE LIGHTING 10 AWG	LF	5,484.000	5,484.000
3020	655.0620	ELECTRICAL WIRE LIGHTING 8 AWG	LF	7,416.000	7,416.000
3030	656.0200	ELECTRICAL SERVICE METER BREAKER PEDESTAL (LOCATION) 01. BASE NO. LC-1	LS	1.000	1.000
3040	656.0200	ELECTRICAL SERVICE METER BREAKER PEDESTAL (LOCATION) 02. BASE NO. L0838	LS	1.000	1.000
3050	657.0255	TRANSFORMER BASES BREAKAWAY 11 1/2-INCH BOLT CIRCLE	EACH	46.000	46.000
3060	657.0327	POLES TYPE 6-ALUMINUM	EACH	46.000	46.000
3070	657.0710	LUMINAIRE ARMS TRUSS TYPE 4 1/2-INCH CLAMP 12-FT	EACH	2.000	2.000
3080	657.0715	LUMINAIRE ARMS TRUSS TYPE 4 1/2-INCH CLAMP 15-FT	EACH	44.000	44.000
3090	690.0150	SAWING ASPHALT	LF	3,450.000	3,450.000
3100	690.0250	SAWING CONCRETE	LF	36.000	36.000
3110	715.0415	INCENTIVE STRENGTH CONCRETE PAVEMENT	DOL	21,995.000	21,995.000
3120	715.0502	INCENTIVE STRENGTH CONCRETE STRUCTURES	DOL	6,560.000	6,560.000
3130	ASP.1T0A	ON-THE-JOB TRAINING APPRENTICE AT $5.00/HR	HRS	3,500.000	3,500.000
3140	ASP.1T0G	ON-THE-JOB TRAINING GRADUATE AT $5.00/HR	HRS	2,000.000	2,000.000
3150	SPV.0035	SPECIAL 01. BACKFILL FOR PLANT BEDS	CY	2,183.000	2,183.000
3170	SPV.0060	SPECIAL 01. LANDMARK REFERENCE MONUMENTS SPECIAL	EACH	7.000	7.000
3180	SPV.0060	SPECIAL 02. CONSTRUCTION STAKING CURB RAMP	EACH	33.000	33.000
3190	SPV.0060	SPECIAL 03. APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 18-INCH SPECIAL	EACH	2.000	2.000
3200	SPV.0060	SPECIAL 04. MEDAIN INLET 2 GRATE SPECIAL	EACH	5.000	5.000
3210	SPV.0060	SPECIAL 05. CATMINT, WALKER'S LOW, 12-INCH, CG	EACH	73.000	73.000
3220	SPV.0060	SPECIAL 06. DAYLILY, ROSY RETURNS, 6-INCH, CG	EACH	586.000	586.000
3230	SPV.0060	SPECIAL 07. GRASS, BIG BLUESTEM, 9-INCH, CG	EACH	183.000	183.000

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LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	6020-02-72 QUANTITY
3240	SPV.0060	SPECIAL 08. GRASS, INDIANGRASS, 9-INCH, CG	EACH	140.000	140.000
3250	SPV.0060	SPECIAL 09. GRASS, NORTHWIND SWITCH, 9-INCH, CG	EACH	79.000	79.000
3260	SPV.0060	SPECIAL 10. GRASS, PRAIRIE DROPSEED, TARA DWARF, 6-INCH, CG	EACH	830.000	830.000
3270	SPV.0060	SPECIAL 11. GRASS, SHENANDOAH SWITCH , 9-INCH, CG	EACH	87.000	87.000
3280	SPV.0060	SPECIAL 12. GRASS, THE BLUES LITTLE BLUESTEM 6-INCH, CG	EACH	384.000	384.000
3290	SPV.0060	SPECIAL 13. WAYFINDING SIGN AT VINBURN & N TOWN RD, STA 182+77.3	EACH	1.000	1.000
3300	SPV.0060	SPECIAL 14. WAYFINDING SIGN AT VINBURN & N TOWN RD, STA 187+69.3	EACH	1.000	1.000
3310	SPV.0060	SPECIAL 15. WAYFINDING SIGN AT HOLUM ST & N TOWN RD, STA 215+86.8	EACH	1.000	1.000
3320	SPV.0060	SPECIAL 16. WAYFINDING SIGN AT HOLUM ST & N TOWN RD, STA 222+40.4	EACH	1.000	1.000
3330	SPV.0060	SPECIAL 17. WAYFINDING SIGN AT N STREET & N TOWN RD, STA 233+68	EACH	1.000	1.000
3340	SPV.0060	SPECIAL 18. WAYFINDING SIGN AT CTH V & LINDE FIELDS, STA 36+72.2	EACH	1.000	1.000
3350	SPV.0060	SPECIAL 19. WAYFINDING SIGN AT N STREET & HALSOR ST, STA 17+12	EACH	1.000	1.000
3360	SPV.0060	SPECIAL 20. DECORATIVE STREET SIGNS AT N TOWNE RD & GRAY RD	EACH	2.000	2.000
3370	SPV.0060	SPECIAL 21. DECORATIVE STREET SIGNS AT N TOWNE RD & VINBURN RD	EACH	2.000	2.000
3380	SPV.0060	SPECIAL 22. DECORATIVE STREET SIGNS AT N TOWNE RD & HOLUM ST	EACH	2.000	2.000
3390	SPV.0060	SPECIAL 23. DECORATIVE STREET POLE	EACH	1.000	1.000
3400	SPV.0060	SPECIAL 24. SPECIAL DITCH CHECKS	EACH	9.000	9.000
3410	SPV.0060	SPECIAL 25. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 1	EACH	15.000	15.000
3420	SPV.0060	SPECIAL 26. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 2	EACH	3.000	3.000
3430	SPV.0060	SPECIAL 27. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 2R	EACH	2.000	2.000
3440	SPV.0060	SPECIAL 28. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 3	EACH	14.000	14.000
3450	SPV.0060	SPECIAL 29. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 3R	EACH	7.000	7.000
3460	SPV.0060	SPECIAL 30. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 7	EACH	2.000	2.000
3470	SPV.0060	SPECIAL 31. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC WORDS	EACH	19.000	19.000
3480	SPV.0060	SPECIAL 32. CONCRETE CONTROL CABINET BASES SPECIAL	EACH	2.000	2.000
3490	SPV.0060	SPECIAL 33. LIGHTING CONTROL CABINET	EACH	2.000	2.000
3500	SPV.0060	SPECIAL 34. LUMINAIRES UTILITY LED CATEGORY C	EACH	46.000	46.000
3510	SPV.0060	SPECIAL 35. LUMINAIRES WALLPACK LED	EACH	8.000	8.000
3580	SPV.0060	SPECIAL 42. 4X4X4-INCH FLUSH MOUNTED JUNCTION BOX	EACH	8.000	8.000
3590	SPV.0090	SPECIAL 01. ALUMINUM EDGER	LF	1,992.000	1,992.000
3600	SPV.0090	SPECIAL 02. REMOVING PAVEMENT MARKINGS WATER BLASTING	LF	7,000.000	7,000.000

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LINE NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	6020-02-72 QUANTITY
3610	SPV.0090	SPECIAL 03. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC 4-INCH	LF	525.000	525.000
3620	SPV.0090	SPECIAL 04. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC 8-INCH	LF	3,200.000	3,200.000
3630	SPV.0090	SPECIAL 05. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC DIAGONAL 12-INCH	LF	510.000	510.000
3640	SPV.0090	SPECIAL 06. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC CROSSWALK 12-IN	LF	1,870.000	1,870.000
3650	SPV.0090	SPECIAL 07. PAVEMENT MARKING GROOVED PREFORMED THERMOPLASTIC 18-INCH	LF	245.000	245.000
3720	SPV.0090	SPECIAL 14. CONCRETE CURB & GUTTER 32-INCH	LF	92.000	92.000
3730	SPV.0105	SPECIAL 01. REMOVING TEMPORARY CROSSOVER TR5	LS	1.000	1.000
3740	SPV.0105	SPECIAL 02. REMOVE TEMPORARY CROSSOVER X3	LS	1.000	1.000
3750	SPV.0105	SPECIAL 03. REMOVE TEMPORARY ACCESS HOLUM ST	LS	1.000	1.000
3760	SPV.0105	SPECIAL 04. CONSTRUCTION STAKING HMA ROUNDABOUT CTH V ROUNDABOUT	LS	1.000	1.000
3770	SPV.0105	SPECIAL 05. CONSTRUCTION STAKING HMA ROUNDABOUT SOUTHBOUND ROUNDABOUT	LS	1.000	1.000
3780	SPV.0105	SPECIAL 06. CONSTRUCTION STAKING HMA ROUNDABOUT NORTHBOUND ROUNDABOUT	LS	1.000	1.000
3790	SPV.0165	SPECIAL 01. CONCRETE SIDEWALK 8-INCH	SF	2,950.000	2,950.000
3800	SPV.0180	SPECIAL 01. GEOGRID REINFORCEMENT	SY	13,400.000	13,400.000
3810	SPV.0180	SPECIAL 02. SHREDDED HARDWOOD BARK MULCH	SY	5,888.000	5,888.000
3820	SPV.0195	SPECIAL 01. ASPHALT REPAIR	TON	122.000	122.000

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EARTHWORK SUMMARY

CATEGORY	DIVISION	STAGE	FROM/TO STATION	LOCATION	(1) COMMON EXCAVATION (ITEM #205.0100) CUT	(2) EBS EXCAVATION	(3) SALVAGED UNUSABLE PAVEMENT MATERIAL	(4) AVAILABLE MATERIAL	(5) UNEXPANDED EBS AREA	(6) UNEXPANDED FILL	(7) EXPANDED FILL & EBS FACTOR (1.3)	(8) MASS ORDINATE +/-
					CY	CY	CY	CY	CY	CY	CY	CY
0010	DIVISION 2	1A		TR1	15398	1852	0	17250	1852	41677	56588	-39338
	DIVISION 2	1A		TR2	21383	0	0	21383	0	2374	3086	18297
	DIVISION 2	1B		TR3	411	0	0	411	0	0	0	411
	DIVISION 2	1	248+03 'NT' - 252+15 'NT'	BALL CT	1921	2019	0	3940	2019	1129	4092	-152
	DIVISION 2	1	519+00+562+00	USH 51 SB	95092	1407	0	96499	1407	52214	69707	26792
	DIVISION 2	1	562+00 TW - 573+00 TW	USH 51 SB	1552	0	0	1552	0	7542	9805	-8253
				UNDISTRIBURED EBS	0	3000	0	3000	3000	0	3900	-900
				STAGE 1 TOTAL:	135757	8278	0	144035	8278	104936	147178	-3143
	DIVISION 1	2	30+50 MU - 37+00 MU	MUELLER RD	6407	1130	0	7537	1130	1530	3458	4079
	DIVISION 1	2	37+50 CV - 60+00 CV	CTH V	3492	4222	0	7714	4222	13888	23543	-15829
	DIVISION 1	2		SHAWN WILLIAMS TRAIL	317	1225	0	1542	1225	193	1843	-301
	DIVISION 1	2		DRIVEWAY D1	66	0	0	66	0	2027	2635	-2569
	DIVISION 1	2		DRIVEWAY D2	105	0	0	105	0	123	160	-55
	DIVISION 1	2		DRIVEWAY D3	683	0	0	683	0	1516	1971	-1288
	DIVISION 2	2		DRIVEWAY D4	189	0	0	189	0	4557	5924	-5735
				UNDISTRIBURED EBS		4000	0	4000	4000	0	5200	-1200
				STAGE 2 TOTAL:	11259	10577	0	21836	10577	23834	44734	-22898
	DIVISION 1	3A	452+00-506+00	USH 51 NB AND SB	6655	5740	0	12395	5740	424584	559421	-547026
	DIVISION 1	3A	506+00-572+00	USH 51 NB	77977	10189	5000	83166	10189	49773	77951	5215
	DIVISION 1	3A		RAMP NN	2216	296	0	2512	296	19873	26220	-23708
	DIVISION 1	3A		RAMP NX	1211	0	0	1211	0	32432	42162	-40951
	DIVISION 2	3A	29+00 GI - 30+32 GI	GRINDE RD	636	128	0	764	128	6	174	590
	DIVISION 1	3A		TR4	523	0	0	523	0	295	384	140
				UNDISTRIBURED EBS	0	8000	0	8000	8000	0	10400	-2400
				STAGE 3A TOTAL:	89218	24353	5000	108571	24353	526963	716711	-608140
	DIVISION 2	3B	506+00-519+00	USH 51 SB	6244	0	0	6244	0	8136	10577	-4333
	DIVISION 2	3B		RAMP SN	2436	150	0	2586	150	64267	83742	-81156
	DIVISION 2	3B		RAMP SX	1508	0	0	1508	0	17975	23368	-21860
	DIVISION 1	3B	60+00 CV - 102+00 CV	CTH V	29085	9037	0	38122	9037	8395	22662	15460
	DIVISION 1	3B	35+00 GI - 50+00 GI	WINDSOR WAY	4445	3354	0	7799	3354	2775	7968	-169
				UNDISTRIBURED EBS	0	6500	0	6500	6500	0	8450	-1950
				STAGE 3B TOTAL:	43718	19041	0	62759	19041	101548	156766	-94007
	DIVISION 2	4	14+00 CV -37+50 CV	CTH V	28440	8079	1000	35519	8079	18365	34377	1142
	DIVISION 2	4	210+00 NT - 220+00 NT	NORTHTOWNE RD RT	2986	0		2986	0	45	59	2928
	DIVISION 2	4	220+00 NT - 239+42 NT	NORTHTOWNE RD	5329	4130	0	9459	4130	9471	17681	-8222
				UNDISTRIBURED EBS	0	7000	0	7000	7000		9100	-2100
				STAGE 4 TOTAL:	36755	19209	1000	54964	19209	27881	61217	-6253
				CATEGORY 0010 SUBTOTAL	316707	81458	6000	392165	81458	785162	1126606	-734441
0040	DIVISION 2	5	210+00 NT - 220+00 NT	NORTHTOWNE RD LT	215	0	0	215	0	1031	1340	-1125
				STAGE 5 TOTAL:	215	0	0	215	0	1031	1340	-1125
				CATEGORY 0040 SUBTOTAL	215	0	0	215	0	1031	1340	-1125
				GRAND TOTAL	316922	81458	6000	392380	81458	786193	1127946	-735566

1) CUT IS THE SUM OF THE CUT AND INCLUDES REQUIRED EXCAVATION FOR 1' SELECT CRUSHED MATERIAL FOR SUBGRADE IMPROVEMENT. ITEM NUMBER 205.0100
2) SALVAGED/UNUSABLE PAVEMENT MATERIAL IS INCLUDED IN CUT.
3) EBS EXCAVATION TO BE BACKFILLED WITH SUITABLE BACKFILL MATERIAL AS DIRECTED BY THE ENGINEER IN THE FIELD.
EBS EXPECTED TO BE USED OUTSIDE THE 1:1'S
EBS WAS DETERMINED FOR CUT/FILL TRANSITION AREAS AND SHALLOW FILLS PER CONSTRUCTION DETAILS
4) AVAILABLE MATERIAL = (1) COMMON EXCAVATION(ITEM #205.0100) + (2) EBS - (3)SALVAGED/UNUSABLE PAVEMENT MATERIAL

3

CLEARING & GRUBBING

CATEGORY	STATION	TO STATION	LOCATION	(201.0105) CLEARING (STA)	(201.0205) GRUBBING (STA)	REMARKS
0010	549+00	551+00	LEFT	2	2	
			STAGE 2 TOTAL:	2	2	
	472+00	473+00	RIGHT	1	1	
	472+00	473+00	LEFT	1	1	
	484+00	487+00	RIGHT	3	3	
	484+00	487+00	LEFT	3	3	
			STAGE 3A TOTAL:	8	8	
	40+00 'CV'	44+00 'CV'	RIGHT	4	4	
	40+00 'CV'	44+00 'CV'	LEFT	4	4	
			STAGE 3B TOTAL:	8	8	
			PROJECT ID 6020-02-72 TOTAL:	18	18	

REMOVING PAVEMENT

CATEGORY	STATION	TO STATION	LOCATION	(204.0100) REMOVING PAVEMENT (SY)	REMARKS
0010	536+00	572+00	EXISTING USH 51	7825	
			STAGE 2 TOTAL	7825	
	502+95	504+00	EXISTING USH 51	85	
	95+70 'CV'		DRIVEWAY	155	
			STAGE 3A TOTAL	240	
	487+25	488+30	EXISTING USH 51	70	
			STAGE 3B TOTAL	70	
			PROJECT ID 6020-02-72 TOTAL:	8135	

3

REMOVING SMALL PIPE CULVERTS

CATEGORY	STATION	LOCATION	(203.0100) REMOVING SMALL PIPE CULVERTS (EACH)	DESCRIPTION	REMARKS
0010	506+50	LT	1	18" CP	CE
	506+50	LT	1	18" CP	CE
	517+00	LT	1	18" CP	FE
	552+00	LT	1	24" CP	
	32+00 'MU'	RT	1	18" CP	PE
		STAGE 2 TOTAL:	5		
	494+60	LT	3	34X53 RCHEP	
	502+50	CL	3	29X45" RCHEP	
	503+50	LT	1		CE
	517+00	RT	1	18" CP	PE
	531+90	RT	1	54" RCCP	
	542+10	RT	1	18" CP	PE
	543+00	RT	1	18" CP	PE
	552+00	NB	1	34X53 RCHEP	
	554+20	NB	1	48" RCCP	
	563+60	NB	1	42" RCCP	
	40+00 'CV'	RT	1	18" CP	PE
	96+65 'CV'	LT	1	18" CP	PE
		STAGE 3A TOTAL:	16		
	118+00'TR1'	CL	1	36" CP	
	131+00 'TR2'	CL	1	24" CP	
	49+24 'TR3'	CL	1	24" CP	
	50+56 'TR3'	CL	1	24" CP	
		STAGE 3A TOTAL:	4		
	15+25 'CV'	RT	1	18" CP	
	26+50 'CV'	LT	1	24" CP	CE
	28+50 'CV'	CL	1	24" CP	
	33+50 'CV'	RT	1	18" CP	FE
	224+00 'NT'	RT	1	18" CP	PE
	247+00 'NT'	LT	1	24" CP	
		STAGE 4 TOTAL:	5		
		PROJECT ID 6020-02-72 TOTAL:	30		

3

REMOVING ASPHALTIC SURFACE MILLINGS

CATEGORY	STATION	TO STATION	LOCATION	(204.0120) REMOVING ASPHALTIC SURFACE MILLINGS (SY)	REMARKS
0010	568+00	573+00	EXISTING USH 51	1670	
			STAGE 3A TOTAL	1670	
	36+50 'GI'	45+00 'GI'	WINDSOR WAY	2080	
			STAGE 3B TOTAL	2080	
	126+00 'NT'	219+50 'NT'	EXISTING USH 51	34350	
			STAGE 5 TOTAL	34350	
		PROJECT ID 6020-02-72 TOTAL:		38100	

REMOVING INLETS

CATEGORY	STATION	LOCATION	(204.0220) REMOVING INLETS (EACH)	REMARKS
0010	493+00	LT	2	
	500+00	LT	2	
		STAGE 3A TOTAL:	4	
	216+00 'NT'	RT	1	
		STAGE 4 TOTAL:	1	
		PROJECT ID 6020-02-72 TOTAL:	5	

3

REMOVING CURB & GUTTER

CATEGORY	STATION	TO STATION	LOCATION	(204.0150) REMOVING CURB & GUTTER (LF)	REMARKS
0010	488+00	498+50	LT - MEDIAN	2085	
	499+75	504+10	LT	910	
			STAGE 3A TOTAL:	2995	
	216+00 'NT'	221+00 'NT'	RT	500	
	219+50 'NT'	220+00 'NT'	LT	80	
	220+30 'NT'	222+60 'NT'	LT	360	
			USH 51/MUELLER RD SE	110	
			USH 51/MUELLER RD SW	90	
			USH 51/MUELLER RD NW	225	
			USH 51/MUELLER RD NE	80	
			STAGE 4 TOTAL:	1445	
	130+60 'NT'	131+30 'NT'	RT	90	
	131+60 'NT'	132+00 'NT'	RT	75	
	159+50 'NT'	161+50 'NT'	RT	200	
			STAGE 5 TOTAL:	365	
		PROJECT ID 6020-02-72 TOTAL:		4805	

REMOVING BUILDINGS

CATEGORY	STATION	PARCEL NO.	(204.0225) REMOVING SEPTIC TANKS (EA)	(204.0235) REMOVING BUILDINGS (PARCEL) (LS)	(204.0240) SITE CLEARANCE (PARCEL) (LS)	(204.0265) ABANDONING WELLS (EA)	REMARKS
0010	508+00 LT	38	1	--	--	--	
		STAGE 1 TOTAL:	1	0	0	0	
	41+00 "CV"	42	1	1	1	1	1 HOUSE, 1 GARAGE
		STAGE 2 TOTAL:	1	1	1	1	
	485+00	28	1	1	1	2	1 HOUSE, 2 BUILDINGS, 1 SHED
	485+00	33		1	1	--	2 BARNS, 2 SILOS
		STAGE 3A TOTAL:	1	2	2	2	
		PROJECT ID 6020-02-72 TOTAL:	3	3	3	3	

3

REMOVING STORM SEWER

CATEGORY	STATION	LOCATION	(204.0245) REMOVING STORM SEWER 01. 12-INCH (LF)	(204.0245) REMOVING STORM SEWER 02. 18-INCH (LF)	(204.0245) REMOVING STORM SEWER 03. 34"X53" RCHECP (LF)	REMARKS
	252+00 'NT'	LT	--	10	--	
	STAGE 1 TOTAL:		0	10	0	
0010	493+00	LT	50	--	--	
	500+00	LT	34	--	--	
	STAGE 3A TOTAL:		84	0	0	
	505+30 'SX'	LT			8	
	STAGE 3A TOTAL:		0	0	8	
PROJECT ID 6020-02-72 TOTAL:			84	10	8	

REMOVING TEMPORARY CROSSOVERS AND ACCESS

CATEGORY	STATION	LOCATION	(SPV.0105.01) REMOVE TEMPORARY CROSSOVER TR5 (LS)	(SPV.0105.02) REMOVE TEMPORARY CROSSOVER, X3 (LS)	(SPV.0105.03) REMOVE TEMPORARY ACCESS, HOLUM ST (LS)	REMARKS
0010		TR5	1	--	--	
		X3	--	1	--	
		TEMPORARY ACCESS HOLUM ST	--	--	1	
		STAGE 2 TOTAL:	1	1	1	
		PROJECT ID 6020-02-72 TOTAL:	1	1	1	

3

REMOVING BILLBOARD SIGNS

CATEGORY	STATION	LOCATION	SIGN MESSAGE	(204.0195) REMOVING CONCRETE BASES (EACH)	(204.9105.S.01) REMOVING DEFOREST BUSINESS PARK SIGN (EACH)	(204.9105.S.02) REMOVING DEFOREST SIGN (EACH)	(204.9105.S.03) REMOVING RED ONION FRESH MARKET SIGN (EACH)	REMARKS
0010	500+50	LT	DEFOREST BUSINESS PARK	1	1	--	--	
	219+50	RT	DEFOREST	1	--	1	--	
	490+00	LT	RED ONION FRESH MARKET	--	--	--	1	
			PROJECT ID 6020-02-72 TOTAL:	2	1	1	1	

TEMPORARY SHORING

CATEGORY	STATION	LOCATION	(206.6000.S) TEMPORARY SHORING (SF)	REMARKS
0010	50+00 TR3	LT	750	
		STAGE 1B TOTAL:	750	
		PROJECT ID 6020-02-72 TOTAL:	750	

OBLITERATING OLD ROAD

CATEGORY	STATION	TO STATION	LOCATION	(214.0100) OBLITERATING OLD ROAD (STA)	REMARKS
0010	33+00 'MU'	39+00 'CV'	MUELLER RD	4	
			STAGE 2 TOTAL:	4	
			PROJECT ID 6020-02-72 TOTAL:	4	

3

BASE COURSE ITEMS

CATEGORY	STATION	TO STATION	LOCATION	(305.0110) BASE AGGREGATE DENSE 3/4-INCH (TON)	(305.0120) BASE AGGREGATE DENSE 1 1/4-INCH (TON)	(305.0130) BASE AGGREGATE DENSE 3-INCH (TON)	(312.0110) SELECT CRUSHED MATERIAL FOR EBS (TON)	(SPV.0180.01) GEOGRID REINFORCEMENT (SY)	REMARKS
0010	111+00 'TR1'	141+00 'TR1	USH 51 TEMPORARY ROAD	710	14000	--	10600	--	
	135+00 'TR2'	145+00 'TR2'	USH 51 TEMPORARY ROAD	260	3550	--	3000	--	
	48+60 'TR3'	51+00 'TR3'	CTH V TEMPORARY INTERSECTION	30	650	--	450	--	
	248+03 'NT'	252+15 'NT'	BALL CT	50	2270	--	1710	--	
	519+00	551+50	SOUTHBOUND USH 51	--	--	--	9700	--	
	551+50	562+00	SOUTHBOUND USH 51	--	--	--	2650	--	
	562+00 "TW"	573+00 "TW"	SOUTHBOUND USH 51	--	--	--	2650		
			STAGE 1 TOTAL:	1050	20470	0	30760	0	
	519+00	551+50	SOUTHBOUND USH 51	410	10350	--	--	--	
	551+50	562+00	SOUTHBOUND USH 51	350	2000	3250	--	--	
	562+00 "TW"	573+00 "TW"	SOUTHBOUND USH 51	350	2000	3250	--		
	37+34 'CV'	60+00 'CV'	CTH V	830	9250	--	7900	--	
	30+00'MU'	37+20 'MU'	MUELLER RD	80	2950	--	2250	--	
	15+00 'SW'	20+00 'SW'	SHAWN WILLIAMS TRAIL	40	1400	--	--	--	
	10+00 'D1'	20+00 'D1'	DRIVEWAY D1	--	990	--	--	--	
	18+35 'D2'	20+00 'D2'	DRIVEWAY D2	--	150	--	--	--	
	6+00 'D3'	19+70 'D3'	DRIVEWAY D3	--	1400	--	--	--	
	10+00 'D4'	31+00 'D4'	DRIVEWAY D4	--	1790	--	--	--	
			UNDISTRIBUTED	--	--	--	--	2400	
			STAGE 2 TOTAL:	2060	32280	6500	10150	2400	
	452+00	498+49	NORTHBOUND USH 51	570	14800	--	13800	--	
	500+13	551+50	NORTHBOUND USH 51	600	16400	--	15300	--	
	551+50	569+00	NORTHBOUND USH 51	700	3700	6100	4800	--	
	452+00	498+47	SOUTHBOUND USH 51	540	14800	--	13800	--	
	472+78 'NX'	495+77 'NX'	RAMP 'NX' NORTHBOUND EXIT RAMP	330	5200	--	4400	--	
	500+64 'NN'	525+43 'NN'	RAMP 'NN' NORTHBOUND ON RAMP	310	5100	--	4500	--	
	29+00 'GI'	30+60 'GI'	GRINDE RD	45	950	--	750	--	
	30+50 'TR'4	32+75 'TR4'	HOLUM STREET TEMPORARY INTERSECTION	45	850	--	650	--	
	102+50 'TR5'	111+00 'TR5'	CROSSOVER	200	1500	--	1150	--	
	465+00		MAINTANENCE CROSSING	--	400	--	--	--	
	535+00		MAINTANENCE CROSSING	--	400	--	--	--	
			UNDISTRIBUTED	--	--	--	--	8800	
			STAGE 3A TOTAL:	3340	64100	6100	59150	8800	

CONTINUED

BASE COURSE ITEMS

CATEGORY	STATION	TO STATION	LOCATION	(305.0110) BASE AGGREGATE DENSE 3/4-INCH (TON)	(305.0120) BASE AGGREGATE DENSE 1 1/4-INCH (TON)	(305.0130) BASE AGGREGATE DENSE 3-INCH (TON)	(312.0110) SELECT CRUSHED MATERIAL FOR EBS (TON)	(SPV.0180.01) GEOGRID REINFORCEMENT (SY)	REMARKS
0010	500+11	519+00	SOUTHBOUND USH 51	220	6000	--	5600	--	
	473+81 'SN'	498+07 'SN'	RAMP 'SN' SOUTHBOUND ON RAMP	310	5000	--	4400	--	
	502+12 'SX'	522+06 'SX'	RAMP 'SX' SOUTHBOUND EXIT RAMP	260	4300	--	3700	--	
	60+00 'CV'	99+65 'CV'	CTH V	1450	15900	--	13300	--	
	36+50 'GI'	45+00 'GI'	WINDSOR WAY	160	--	--	--	--	
	45+00 'GI'	49+88 'GI'	WINDSOR WAY	80	1800	--	1350	--	
			UNDISTRIBUTED	--	--	--	--	2200	
			STAGE 3B TOTAL:	2480	33000	0	28350	2200	
	14+20 'CV'	37+35 'CV'	CTH V	70	11300	14900	15400	--	
	219+50 'NT'	237+50 'NT'	NORTHTOWNE RD	--	6100	--	500	--	
	34+90 'GI'	36+50 'GI'	WINDSOR WAY	50	1100	--	1000	--	
			STAGE 4 TOTAL:	120	18500	14900	16900	0	
	126+00 'NT'	219+50 'NT'	NORTHTOWNE RD	2550	--	--	--	--	
			STAGE 5 TOTAL:	2550	0	0	0	0	
			UNDISTRIBUTED	--	1800	--	--	--	
			CATEGORY 0010 TOTAL:	11600	170150	27500	145310	13400	
0040	14+20 'CV'	19+33 'CV'	CTH V - LT	--	240	--	--	--	
	15+75 'CV'	19+00 'CV'	CTH V - RT	--	95	--	--	--	
	35+00 'CV'		CTH V - LT	--	85	--	--	--	
			STAGE 3B TOTAL:	0	420	0	0	0	
	210+50 'NT'	219+50 'NT'	NORTHTOWNE ROAD BIKE PATH	--	370	--	--	--	
	219+50 'NT'	237+50 'NT'	NORTHTOWNE ROAD BIKE PATH	--	860	--	--	--	
			STAGE 5 TOTAL:	0	1230	0	0	0	
			CATEGORY 0040 TOTAL:	0	1650	0	0	0	
			PROJECT ID 6020-02-72 TOTAL:	11600	171800	27500	145310	13400	

***FRENCH DRAIN QUANTITY IS FOR THE ENTIRE PROJECT AND IS NOT BROKEN OUT BY STAGES OR MAINLINE/RAMPS.

3

CONCRETE ITEMS

CATEGORY	STATION	TO STATION	LOCATION	(415.0095) CONCRETE PAVEMENT, 9.5-INCH (SY)	(415.0410) CONCRETE PAVEMENT APPROACH SLAB (SY)	(416.0508) CONCRETE ROUNDABOUT TRUCK APRON 8-INCH (SY)	* (405.0100) COLORING CONCRETE RED (CY)	(416.1010) CONCRETE SURFACE DRAIN (CY)	(415.6000.S) ROUTE AND SEAL (LF)	REMARKS
0010	519+00	551+50	SOUTHBOUND MAINLINE	9390	--	--	--	--	6500	
			STAGE 2 TOTAL:	9390	0	0	0	0	6500	
	450+00	498+35.45	NORTHBOUND MAINLINE	13970	--	--	--	--	9000	
	450+00	498+32.70	SOUTHBOUND MAINLINE	13960	--	--	--	--	8600	
	500+28.12	551+50	NORTHBOUND MAINLINE	14800	--	--	--	--	9100	
	500+64 'NN'	525+43 'NN'	RAMP 'NN' NORTHBOUND ON RAMP	3630	--	--	--	--	3800	
	472+78 'NX'	495+77 'NX'	RAMP 'NX' NORTHBOUND EXIT RAMP	3490	--	--	--	--	4000	
	498+35.45	498+51.12	NB B-13-599 OVER CTH V SOUTH SLAB	25	47	--	--	--	--	
	500+12.45	500+28.12	NB B-13-599 OVER CTH V NORTH SLAB	32	47	--	--	8	--	
	498+32.70	498+49.20	SB B-13-600 OVER CTH V SOUTH SLAB	25	47	--	--	--	--	
	500+09.70	500+25.37	SB B-13-600 OVER CTH V NORTH SLAB	33	47	--	--	8	--	
			STAGE 3A TOTAL:	49965	188	0	0	16	34500	
	500+25.37	519+00	SOUTHBOUND MAINLINE	5420	--	--	--	--	3400	
	473+81 'SN'	498+07 'SN'	RAMP 'SN' SOUTHBOUND ON RAMP	3530	--	--	--	--	3800	
	502+12 'SX'	522+06 'SX'	RAMP 'SX' SOUTHBOUND EXIT RAMP	2930	--	--	--	--	3000	
			STAGE 3B TOTAL:	11880	0	0	0	0	10200	
	14+20 'CV'	37+35 'CV'	CTH V	--	--	1895	430	--	--	
			STAGE 4 TOTAL:	0	0	1895	430	0	0	
			CATEGORY 0010 TOTAL:	71235	188	1895	430	16	51200	
			PROJECT ID 6020-02-72 TOTAL:	71235	188	1895	430	16	51200	

* - ADDITIONAL QUANTITIES LISTED ELSEWHERE IN PLAN

SHAPING SHOULDERS

CATEGORY	STATION	TO STATION	(305.0500) SHAPING SHOULDERS (STA)	REMARKS
0010	36+50 'GI'	45+00 'GI'	17	
		STAGE 3B TOTAL:	17	
	126+00 'NT'	216+00 'NT'	146	
		STAGE 5 TOTAL:	146	
		PROJECT ID 6020-02-72 TOTAL:	163	

CONCRETE DRIVEWAY

CATEGORY	STATION	LOCATION	(416.0160) CONCRETE DRIVEWAY 6-INCH (SY)	REMARKS
0010	96+00 'CV'	RT	150	
		STAGE 3B TOTAL:	150	
		PROJECT ID 6020-02-72 TOTAL:	150	

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ASPHALTIC PAVEMENT ITEMS

CATEGORY	STATION	TO STATION	LOCATION	(455.0105) ASPHALTIC MATERIAL PG58-28 (TON)	(455.0120) ASPHALTIC MATERIAL PG64-28 (TON)	(455.0605) TACK COAT (GAL)	(460.1100) HMA PAVEMENT TYPE E-0.3 (TON)	(460.1103) HMA PAVEMENT TYPE E-3 (TON)	(460.1110) HMA PAVEMENT TYPE E-10 (TON)	(465.0125) ASPHALTIC SURFACE TEMPORARY (TON)	(SPV.0195.01) ASPHALT REPAIR (TON)	REMARKS
0010	111+00 'TR1'	141+00 'TR1	USH 51 TEMPORARY ROAD	--	--	--	--	--	--	2585	--	
	135+00 'TR2'	145+00 'TR2'	USH 51 TEMPORARY ROAD	--	--	--	--	--	--	710	--	
	48+60 'TR3'	51+00 'TR3'	CTH V TEMPORARY INTERSECTION	--	--	--	--	--	--	160	--	
	248+03 'NT'	252+15 'NT'	NORTHTOWNE RD/BALL CT	35	--	64	--	--	600	190	--	
			STAGE 1 TOTAL:	35	0	64	0	0	600	3645	0	
	519+00	551+50	SOUTHBOUND USH 51	46	--	110	835	--	--	--	--	
	551+50	571+00	SOUTHBOUND USH 51	125	--	340	--	--	2220	--	--	
	30+00'MU'	37+20 'MU'	MUELLER RD	20	--	39	--	365	--	--	--	
	15+00 'SW'	20+00 'SW'	SHAWN WILLIAMS TRAIL	14	--	33	--	260	--	--	--	
			STAGE 2 TOTAL:	205	0	522	835	625	2220	0	0	
	450+00	498+49	NORTHBOUND USH 51	62	--	145	1130	--	--	--	--	
	500+27	551+50	NORTHBOUND USH 51	62	--	145	1120	--	--	--	--	
	551+50	569+00	NORTHBOUND USH 51	105	--	290		--	1895	--	--	
	452+00	498+47	SOUTHBOUND USH 51	58	--	140	1055	--	--	--	--	
	472+78 'NX'	495+77 'NX'	RAMP 'NX' NORTHBOUND EXIT RAMP	20	--	45	360	--	--	--	--	
	500+64 'NN'	525+43 'NN'	RAMP 'NN' NORTHBOUND ON RAMP	19	--	46	350	--	--	--	--	
	29+00 'GI'	30+60 'GI'	GRINDE RD	10	--	24	185	--	--	--	--	
	37+35'CV'	45+50 'CV'	CTH V	48	--	89	--	880	--	175	--	
	30+50 'TR'4	32+75 'TR4'	HOLUM STREET TEMPORARY INTERSECTION	11	--	22	--	--	--	190	--	
	102+50 'TR5'	111+00 'TR5'	TEMPORARY CROSSOVER 'TR5'	12	--	24	--	--	--	215	--	
	465+00		MAINTANENCE CROSSING	5	--	--	91	--	--	--	--	
	535+00		MAINTANENCE CROSSING	5	--	--	91	--	--	--	--	
			STAGE 3A TOTAL:	417	0	970	4382	880	1895	580	0	
	500+11	519+00	SOUTHBOUND USH 51	23	--	54	415	--	--	--	--	
	473+81 'SN'	498+07 'SN'	RAMP 'SN' SOUTHBOUND ON RAMP	19	--	44	340	--	--	--	--	
	502+12 'SX'	522+06 'SX'	RAMP 'SX' SOUTHBOUND EXIT RAMP	15	--	34	265	--	--	--	--	
	45+50 'CV'	99+65 'CV'	CTH V	280	--	510	--	5065	--	--	--	
	36+50 'GI'	45+00 'GI'	WINDSOR WAY	16	--	--	--	290	--	--	2	
	45+00 'GI'	49+88 'GI'	WINDSOR WAY	14	--	34	--	260	--	--	--	
			STAGE 3B TOTAL:	367	0	676	1020	5615	0	0	2	
	14+20 'CV'	37+35 'CV'	CTH V	225	115	925	13	--	6115	--	--	
	219+50 'NT'	237+50 'NT'	NORTHTOWNE RD	83	--	160	220	1470	--	--	--	
	34+90 'GI'	36+50 'GI'	WINDSOR WAY	12	--	28	--	220	--	--	--	
			STAGE 4 TOTAL:	320	115	1113	233	1690	6115	0	0	

CONTINUED

ASPHALTIC PAVEMENT ITEMS

CATEGORY	STATION	TO STATION	LOCATION	(455.0105) ASPHALTIC MATERIAL PG58-28 (TON)	(455.0120) ASPHALTIC MATERIAL PG64-28 (TON)	(455.0605) TACK COAT (GAL)	(460.1100) HMA PAVEMENT TYPE E-0.3 (TON)	(460.1103) HMA PAVEMENT TYPE E-3 (TON)	(460.1110) HMA PAVEMENT TYPE E-10 (TON)	(465.0125) ASPHALTIC SURFACE TEMPORARY (TON)	(SPV.0195.01) ASPHALT REPAIR (TON)	REMARKS
	126+00 'NT'	219+50 'NT'	NORTHTOWNE RD	330	--	1570	--	6680	--	--	120	
			STAGE 5 TOTAL:	330	0	1570	0	6680	0	0	120	
			UNDISTIBUTED	--	--	--	--	--	--	300	--	
			CATEGORY 0010 TOTAL:	1674	115	4915	6470	15490	10830	4525	122	
0040	14+20 'CV'	19+33 'CV'	CTH V - LT	4	--	--	63	--	--	--	--	
	34+94 'CV'		CTH V - LT	1	--	--	22	--	--	--	--	
			STAGE 3B TOTAL:	5	0	0	85	0	0	0	0	
	210+50 'NT'	218+80 'NT'	NORTHTOWNE ROAD BIKE PATH	6	--	--	100	--	--	--	--	
	219+50 'NT'	237+50 'NT'	NORTHTOWNE ROAD BIKE PATH	12	--	--	220	--	--	--	--	
			STAGE 5 TOTAL:	18	0	0	320	0	0	0	0	
			CATEGORY 0040 TOTAL:	23	0	0	405	0	0	0	0	
			PROJECT 6020-02-72 TOTAL:	1697	115	4915	6875	15490	10830	4525	122	

ASPHALTIC FLUME

CATEGORY	STATION	LOCATION	(465.0315) ASPHALTIC FLUME (SY)	REMARKS
0010	248+19 'NT'	60.8' LT	10	
	250+96 'NT'	33.4' LT	10	
	251+08 'NT'	23.7' RT	15	
		STAGE 1 TOTAL:	35	
	41+35 'CV'	24' RT	50	
	42+65 'CV'	24' RT	40	
	91+00 'CV'	24' LT	40	
	92+15 'CV'	24' LT	40	
		STAGE 3A TOTAL:	170	
	216+00 'NT'	18' RT	35	
	210+40 'NT'	18' LT	40	
		STAGE 5 TOTAL:	75	
		PROJECT ID 6020-02-72 TOTAL:	280	

SHOULDER RUMBLE STRIPS

CATEGORY	STATION	TO STATION	LOCATION	(416.1110) CONCRETE RUMBLE STRIPS SHOULDER (LF)	(465.0400) ASPHALTIC SHOULDER RUMBLE STRIP (LF)	REMARKS
0010	519+00	551+50	SOUTHBOUND USH 51	2900	3300	
	551+50	571+00	SOUTHBOUND USH 51	--	2300	
			STAGE 2 TOTAL:	2900	5600	
	40800	498+49	NORTHBOUND USH 51	8250	8900	
	500+13	551+50	NORTHBOUND USH 51	3800	5100	
	551+50	569+00	NORTHBOUND USH 51	--	2300	
	41300	498+47	SOUTHBOUND USH 51	7200	8400	
			STAGE 3A TOTAL:	19250	24700	
	500+11	519+00	SOUTHBOUND USH 51	1350	1900	
			STAGE 3B TOTAL:	1350	1900	
			PROJECT ID 6020-02-72 TOTAL:	23500	32200	

CROSSDRAIN CULVERT PIPES

CATEGORY	STATION	LOCATION	(520.0112) 12-INCH (LF)	(520.0118) 18-INCH (LF)	(520.0124) 24-INCH (LF)	(520.0130) CULVERT PIPE CLASS III 30-INCH (LF)	(520.0136) 36-INCH (LF)	(520.0142) 42-INCH (LF)	(520.0148) 48-INCH (LF)	* (520.1018) 18-INCH (EACH)	* (520.1024) 24-INCH (EACH)	* (520.1030) APRON ENDWALLS FOR CULVERT PIPE 30-INCH (EACH)	* (520.1036) 36-INCH (EACH)	(520.1042) 42-INCH (EACH)	(520.1048) 48-INCH (EACH)	(521.0721) PIPE ARCH CORRUGATED STEEL 21X15-INCH (LF)	(521.0728) PIPE ARCH CORRUGATED STEEL 28X20-INCH (LF)	(521.1221) APRON ENDWALL FOR PIPE ARCH STEEL 21X15-INCH (EACH)	(521.1228) APRON ENDWALL FOR PIPE ARCH STEEL 28X20-INCH (EACH)	* (633.5200) MARKERS CULVERT END (EACH)	STEEL PIPE THICKNESS (IN)	ALUMINUM PIPE THICKNESS (IN)	REMARKS
	248+00 'NT'	NORTH TOWNE RD	--	--	--	--	--	--	--	--	--	--	--	--	--	--	88	--	2	--	0.064	0.06	
	250+00 'NT'	NORTH TOWNE RD	--	--	--	--	--	--	--	--	--	--	--	--	--	62	--	2	--	--	0.064	0.06	
	252+00 'NT'	DRIVEWAY	62	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	0.064	0.06	TWIN PIPE
		STAGE 1 TOTAL:	62	0	0	0	0	0	0	0	0	0	0	0	0	62	88	2	2	0			
	56+00 'CV'	CTH V	--	--	--	128	--	--	--	--	--	4	--	--	--	--	--	--	--	2	0.079	0.075	TWIN PIPE
	30+70 'MU'	MUELLER RD	--	--	--	--	72	--	--	2	--	--	--	--	--	--	--	--	--	2	0.064	0.06	
	19+72 'SW'	SHAWN WILLIAMS TRAIL	--	--	--	--	--	--	--	--	--	--	--	--	--	60	--	2	--	2	0.064	0.06	
	19+50 'D1'	DRIVEWAY D1	--	62	--	--	--	--	--	2	--	--	--	--	--	--	--	--	--	--	0.064	0.06	
	19+50 'D2'	DRIVEWAY D2	--	76	--	--	--	--	--	--	--	--	2	--	--	--	--	--	--	--	0.079	0.105	DRIVEWAY RT
	16+50 'D3'	DRIVEWAY D3	--	--	72	--	--	--	--	--	4	--	--	--	--	--	--	--	--	--	0.064	0.075	TWIN PIPE
	12+00 'D4'	DRIVEWAY D4	--	--	--	--	--	--	38	--	--	--	--	--	2	--	--	--	--	--	0.109	0.105	
	22+00 'D4'	DRIVEWAY D4	--	--	--	--	--	30	--	--	--	--	--	2	--	--	--	--	--	--	0.109	0.105	
	29+00 'D4'	DRIVEWAY D4	--	--	30	--	--	--	--	--	2	--	--	--	--	--	--	--	--	--	0.064	0.075	
		STAGE 2 TOTAL:	0	138	102	128	72	30	38	4	6	4	2	2	2	60	0	2	0	6			
	69+25 'CV'	CTH V	--	62	--	--	--	--	--	2	--	--	--	--	--	--	--	--	--	2	0.064	0.06	
	90+00 'CV'	CTH V	--	--	--	--	--	--	86	--	--	--	--	--	2	--	--	--	--	2	0.109	0.105	
	95+65 'CV'	CTH V	--	44	--	--	--	--	--	2	--	--	--	--	--	--	--	--	--	--	0.064	0.06	DRIVEWAY RT
		STAGE 3B TOTAL:	0	106	0	0	0	0	86	4	0	0	0	0	2	0	0	0	0	4			
	35+40 'GI	WINDSOR WAY	--	--	--	92	--	--	--	--	--	4	--	--	--	--	--	--	--	--	0.079	0.075	TWIN PIPE
	47+20 'GI'	WINDSOR WAY	--	--	--	--	--	--	90	--	--	--	--	--	2	--	--	--	--	2	0.109	0.105	
		STAGE 4 TOTAL:	0	0	0	92	0	0	90	0	0	4	0	0	2	0	0	0	0	2			
		CATEGORY 0010 TOTAL:	62	244	102	220	72	30	214	8	6	8	2	2	6	122	88	4	2	12			
0040	35+00 'CV'	CTH V - LT	--	--	50	--	--	--	--	--	2	--	--	--	--	--	--	--	--	--	0.064	0.075	
		STAGE 3B TOTAL:	0	0	50	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0			
		CATEGORY 0040 TOTAL:	0	0	50	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0			
		PROJECT ID 6020-02-72 TOTAL:	62	244	152	220	72	30	214	8	8	8	2	2	6	122	88	4	2	12			

* ADDITIONAL QUANTITIES LISTED ELSEWHERE IN PLAN.
** SAME PIPE

3

CROSSDRAIN CULVERT PIPES

CATEGORY	STATION	LOCATION	(522.0118) CULVERT PIPE REINFORCED CONCRETE CLASS III 18-INCH (LF)	(522.0124) 24-INCH (LF)	(522.0130) 30-INCH (LF)	(522.0136) 36-INCH (LF)	(522.0142) 42-INCH (LF)	(522.0148) 48-INCH (LF)	(522.0154) 54-INCH (LF)	(522.0548 CLASS V 48-INCH (LF)	* (523.0134) CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL 34 X 53-INCH (LF)	(523.0143) CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL 43 X 68-INCH (LF)	(523.0148) CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL 48 X 76-INCH (LF)	(523.0543) APRON ENDWALL FOR CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL 43 X 68-INCH (EACH)	(SPV.0060.03) APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 18-INCH, SPECIAL (EACH)	* (522.1018) APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 18-INCH (EACH)	* (522.1024) 24-INCH (EACH)	* (522.1030) 30-INCH (EACH)	(522.1036) 36-INCH (EACH)	(522.1042) 42-INCH (EACH)	(522.1054) 54-INCH (EACH)	(504.0900) CONCRETE MASONRY ENDWALLS (CY)	* (633.5200) MARKERS CULVERT END (EACH)	REMARKS
0010	525+80	NB LANE	--	94	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--	--	--	1	
	525+80	NB LANE	20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	531+00	SB LANE	--	--	--	--	--	--	96	--	--	--	--	--	--	--	--	--	--	--	1	--	1	
	536+00	NB LANE	108	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--	1	
	554+32	SB LANE	--	--	--	--	--	--	--	--	--	80	--	1	--	--	--	--	--	--	--	--	1	SKEW 11 LHF
	563+65	SB LANE	--	--	--	--	76	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--	1	
		STAGE 2 TOTAL:	128	94	0	0	76	0	96	0	0	80	0	1	0	1	1	0	0	1	1	0	5	
	457+00	NB LANE	92	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--	--	--	--	1	
	464+00	NB LANE	106	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--	--	--	--	1	
	466+00	NB & SB LANE	--	--	--	--	--	404	--	--	--	--	--	--	--	--	--	--	--	--	--	12.2	--	TWIN PIPE
	472+00	NB LANE	102	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--	--	--	--	1	
	472+50	NB & SB LANE	--	--	--	--	--	--	384	--	--	--	--	--	--	--	--	--	--	--	--	15.5	--	TWIN PIPE
	476+00	NB & SB LANE	--	--	--	214	--	--	--	--	--	--	--	--	--	--	--	--	2	--	--	--	2	
	479+00	NB LANE	116	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--	--	--	--	1	
	486+00	NB LANE	94	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--	--	--	--	1	
	494+69	NB & SB LANE	--	--	--	--	--	--	--	1290	--	--	--	--	--	--	--	--	--	--	--	10.3	--	THREE PIPES
	498+00	NB LANE	108	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--	--	--	--	1	
	511+00	NB LANE	--	--	158	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--	--	1	
	531+00	NB LANE	--	--	--	--	--	--	130	--	--	--	--	--	--	--	--	--	--	--	1	--	1	
	548+00	NB LANE	48	--	--	--	--	--	--	--	--	--	--	--	2	--	--	--	--	--	--	--	2	
	554+32	NB LANE	--	--	--	--	--	--	--	--	--	96	--	1	--	--	--	--	--	--	--	--	1	SKEW 11 LHF
	557+00	NB LANE	78	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--	--	--	--	1	
	563+65	NB LANE	--	--	--	--	52	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	1	SKEW 23 LHF
	502+00 'NN'	RAMP NN	--	76	--	--	--	--	--	--	--	--	--	--	--	--	2	--	--	--	--	--	2	
	495+40 'NX'	RAMP NX	--	--	--	--	--	--	--	--	270	--	--	--	--	--	--	--	--	--	--	10.3	--	THREE PIPES
		STAGE 3A TOTAL:	744	76	158	214	52	404	514	1290	270	96	0	1	2	7	2	1	2	1	1	48.3	17	

CONTINUED

3

CROSSDRAIN CULVERT PIPES

CATEGORY	STATION	LOCATION	(522.0118) CULVERT PIPE REINFORCED CONCRETE CLASS III 18-INCH (LF)	(522.0124) 24-INCH (LF)	(522.0130) 30-INCH (LF)	(522.0136) 36-INCH (LF)	(522.0142) 42-INCH (LF)	(522.0148) 48-INCH (LF)	(522.0154) 54-INCH (LF)	(522.0548) CLASS V 48-INCH (LF)	* (523.0134) CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL 34 X 53-INCH (LF)	(523.0143) CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL 43 X 68-INCH (LF)	(523.0148) CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL 48 X 76-INCH (LF)	(523.0543) APRON ENDWALL FOR CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL 43 X 68-INCH (EACH)	(SPV.0060.03) APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 18-INCH, SPECIAL (EACH)	* (522.1018) APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 18-INCH (EACH)	* (522.1024) 24-INCH (EACH)	* (522.1030) 30-INCH (EACH)	(522.1036) 36-INCH (EACH)	(522.1042) 42-INCH (EACH)	(522.1054) 54-INCH (EACH)	(504.0900) CONCRETE MASONRY ENDWALLS (CY)	* (633.5200) MARKERS CULVERT END (EACH)	REMARKS
	511+00	SB LANE	--	--	142	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--	--	--	
	495+15 'SN'	RAMP SN	--	--	202	--	--	--	--	--	--	--	--	--	--	--	2	--	--	--	--	--	
	502+58 'SX'	RAMP SX	--	104	--	--	--	--	--	--	--	--	--	--	--	2	--	--	--	--	--	2	
	60+25 'CV'	CTH V	--	--	--	--	--	--	--	--	--	--	132	--	--	--	--	--	--	--	16	--	TWIN PIPE
		STAGE 3B TOTAL:	0	104	344	0	0	0	0	0	0	0	132	0	0	0	2	3	0	0	16	2	
	28+00 'CV'	CTH V	--	206	--	--	--	--	--	--	--	--	--	--	--	2	--	--	--	--	--	--	
	33+50 'CV'	CTH V	--	--	--	--	--	--	--	--	432	--	--	--	--	--	--	--	--	--	10.3	--	THREE PIPES
	231+50 'NT'	NORTH TOWNE RD	--	--	--	--	--	--	--	--	264 **	--	--	--	--	--	--	--	--	--	10.3	--	THREE PIPES
		STAGE 4 TOTAL:	0	0	0	0	0	0	0	0	264	0	0	0	0	0	0	0	0	0	10.3	0	
		CATEGORY 0010 TOTAL:	872	274	502	214	128	404	610	1290	534	176	132	2	2	8	5	4	2	2	74.6	24	
0040	231+50 'NT'	NORTH TOWNE RD	--	--	--	--	--	--	--	--	30 **	--	--	--	--	--	--	--	--	--	--	--	
		STAGE 4 TOTAL:	0	0	0	0	0	0	0	0	30	0	0	0	0	0	0	0	0	0	0	0	
		CATEGORY 0040 TOTAL:	0	0	0	0	0	0	0	0	30	0	0	0	0	0	0	0	0	0	0	0	
		PROJECT ID 6020-02-72 TOTAL:	872	274	502	214	128	404	610	1290	564	176	132	2	2	8	5	4	2	2	74.6	24	

* ADDITIONAL QUANTITIES LISTED ELSEWHERE IN PLAN.
** SAME PIPE

3

TEMPORARY DRAINAGE AT CROSSOVERS

CATEGORY	STATION	LOCATION	(520.4018) CULVERT PIPE TEMPORARY 18-INCH (LF)	(520.4024) CULVERT PIPE TEMPORARY 24-INCH (LF)	(520.4036) CULVERT PIPE TEMPORARY 36-INCH (LF)	* (520.1018) APRON ENDWALLS CP 18-INCH (EACH)	* (520.1024) APRON ENDWALLS CP 24-INCH (EACH)	* (520.1036) APRON ENDWALLS CP 36-INCH (EACH)	REMARKS
0010	118+00 'TR1'	TEMPORARY ROAD	--	--	204	--	--	6	
	131+00 'TR2'	TEMPORARY ROAD	--	112	--	--	2	--	
	49+24 'TR3'	TEMPORARY ROAD	--	82	--	--	2	--	
	50+56 'TR3'	TEMPORARY ROAD	--	84	--	--	2	--	
		STAGE 1 TOTAL:	0	278	204	0	6	6	
	50+30 'TR8'	TEMPORARY ROAD	80	--	--	2	--	--	
		STAGE 2 TOTAL:	80	0	0	2	0	0	
	31+30 'TR4'	TEMPORARY ROAD	--	88	--	--	2	--	
	32+50 'TR4'	TEMPORARY ROAD	62	--	--	2		--	
		STAGE 3A TOTAL:	62	88	0	2	2	0	
		PROJECT ID 6020-02-72 TOTAL:	142	366	204	4	8	6	

* ADDITIONAL QUANTITIES LISTED ELSEWHERE IN PLAN.

3

CONCRETE CURB & GUTTER

CATEGORY	STATION	TO STATION	LOCATION	(601.0120) CONCRETE CURB TYPE J (LF)	(601.0405) CONCRETE CURB & GUTTER 18-INCH TYPE A (LF)	(601.0411) CONCRETE CURB & GUTTER 30-INCH TYPE D (LF)	(601.0553) CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE D (LF)	(601.0580) CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE R (LF)	(SPV.0090.14) CONCRETE CURB & GUTTER 32-INCH (LF)	REMARKS
0010	248+03 'NT'	252+15 'NT'	BALL CT	--	--	600	--	--	--	
			STAGE 1 TOTAL:	0	0	600	0	0	0	
	30+00'MU'	37+20 'MU'	MUELLER RD	--	--	165	--	--	--	
			STAGE 2 TOTAL:	0	0	165	0	0	0	
	500+27.43	500+50.60	B-13-599 WINGWALL3	--	--	--	--	--	23	
	500+28.70	500+51.87	B-13-599 WINGWALL4	--	--	--	--	--	23	
	500+25.60	500+48.77	B-13-600 WINGWALL3	--	--	--	--	--	23	
	500+25.90	500+49.07	B-13-600 WINGWALL4	--	--	--	--	--	23	
			STAGE 3A TOTAL:	0	0	0	0	0	92	
	45+00 'GI'	49+88 'GI'	WINDSOR WAY	--	--	150	--	--	--	
			STAGE 3B TOTAL:	0	0	150	0	0	0	
	14+20 'CV'	37+35 'CV'	CTH V	365	895	8405	425	1185	--	
	219+50 'NT'	237+50 'NT'	NORTHTOWNE RD	--	--	3650	--	--	--	
	248+030 'NT'	251+00 'NT'	NORTH TOWNE RD	--	--	20	--	--	--	
			STAGE 4 TOTAL:	365	895	12075	425	1185	0	
			CATEGORY 0010 TOTAL:	365	895	12990	425	1185	92	
0040	126+00 'NT'	219+50 'NT'	NORTHTOWNE RD	--	--	960	--	--	--	
			STAGE 5 TOTAL:	0	0	960	0	0	0	
			CATEGORY 0040 TOTAL:	0	0	960	0	0	0	
			PROJECT ID 6020-02-72 TOTAL:	365	895	13950	425	1185	92	

CONCRETE SIDEWALK

CATEGORY	STATION	TO STATION	LOCATION	(602.0410) CONCRETE SIDEWALK 5-INCH (SF)	(SPV.0165.01) CONCRETE SIDEWALK 8-INCH (SF)	* (405.0100) COLORING CONCRETE RED (CY)	REMARKS
0010	14+20 'CV'	37+35 'CV'	CTH V	42200	2950	140	
	UNDISTRIBUTED			3500			
			STAGE 3B TOTAL:	45700	2950	140	
0040	15+75 'CV'	19+00'CV	CTH V	3000	--	--	
			STAGE 3B TOTAL:	3000	0	0	
			PROJECT ID 6020-02-72 TOTAL:	48700	2950	140	

* - ADDITIONAL QUANTITIES LISTED ELSEWHERE IN PLAN

TEMPORARY CONCRETE BARRIER

CATEGORY	STATION	LOCATION	STAGES	(603.8000) CONCRETE BARRIER TEMPORARY PRECAST DELIVERED (LF)	(603.8125) CONCRETE BARRIER TEMPORARY PRECAST INSTALLED (LF)	(614.0905) CRASH CUSHIONS TEMPORARY (EACH)	REMARKS
0010	108+90 'TR1' - 115+40 'TR1'	EXISTING USH 51 (SB SHOULDER)	1A - 1B	648	648	2	
	50+60 'TR3 - 52+90 'TR3'	CTH V AT BRIDGE PIERS	2 - 3A	228	228	-	
		PROJECT ID 6020-02-72 TOTAL:		876	876	2	

CURB RAMP DETECTABLE WARNING FIELDS

CATEGORY	STATION	LOCATION	(602.0505) CURB RAMP DETECTABLE WARNING FIELD YELLOW SF	REMARKS
0010	20+36 CV	RT	18	
	20+38 CV	LT	18	
	20+26 CV	LT	18	
	20+14 CV	LT	18	
	21+50 CV	RT	18	
	21+60 CV	RT	18	
	21+79 CV	RT	18	
	21+90 CV	RT	18	
	20+55 CV	LT	18	
	20+73 CV	LT	18	
	22+62 CV	LT	18	
	22+88 CV	LT	18	
	22+89 CV	RT	18	
	22+88 CV	LT	18	
	22+95 CV	LT	18	
	23+18 CV	LT	18	
	26+41 CV	RT	18	
	26+54 CV	RT	18	
	25+55 CV	LT	18	
	25+66 CV	LT	18	
	31+68 CV	RT	18	
	31+86 CV	RT	18	
	30+73 CV	LT	18	
	30+77 CV	LT	18	
	32+86 CV	RT	18	
	32+84 CV	LT	18	
	32+95 CV	LT	18	
	33+17 CV	LT	18	
	218+57 NT	LT	18	
	219+89 NT	LT	18	
	CATEGORY 0010 TOTAL:		540	
40	15+90 CV	RT	14	
	15+91 CV	LT	14	
	CATEGORY 0040 TOTAL:		28	
	PROJECT ID 6020-02-72 TOTAL:		568	

3

TREATMENT AT CULVERT OUTFALLS

CATEGORY	STATION	LOCATION	(606.0200) RIPRAP MEDIUM (CY)	(606.0300) RIPRAP HEAVY (CY)	* (628.2004) EROSION MAT CLASS I TYPE B (SY)	(645.0120) GEOTEXTILE FABRIC TYPE HR (SY)	REMARKS
0010	525+80	SB, LT	-	-	40	-	USH 51
	531+00	SB, LT	48	-	-	50	USH 51
	536+00	SB, LT	-	-	15	-	USH 51
	30+70 'MU'	RT	-	52	-	85	MUELLER ROAD
	32+00 'MU'	RT	-	-	25	-	MUELLER ROAD
	56+00 'CV'	LT	20	-	-	40	CTH V
	STAGE 2 TOTAL:		68	52	80	175	
	464+00	NB, RT	-	-	20	-	USH 51
	466+00	SB, LT	23	-	-	50	USH 51
	472+50	SB, LT	26	-	-	55	USH 51
	476+00	SB, LT	28	-	-	-	USH 51
	479+00	SB, LT	-	-	20	-	USH 51
	494+69	SB, LT	30	-	-	65	USH 51
	498+00	SB, LT	-	-	20	-	USH 51
	531+00	SB, LT	48	-	-	50	USH 51
	536+00	SB, LT	-	-	15	-	USH 51
	554+32	SB, LT	28	-	-	50	USH 51
	563+65	SB, LT	-	-	30	-	USH 51
	502+00 'NN'	RT	-	-	15	-	RAMP
	510+00 'NN'	RT	-	75	-	110	RAMP
	STAGE 3A TOTAL:		183	75	120	380	
	502+58 'SX'	RT	-	-	15	-	RAMP
	60+25 'CV'	LT	44	-	-	85	CTH V
	90+00 'CV'	LT	-	56	-	90	CTH V
	35+40 'GI'	LT	-	-	25	-	WINDSOR WAY
	47+20 'GI'	LT	-	62	-	95	WINDSOR WAY
	STAGE 3B TOTAL:		44	118	40	270	
	28+00 'CV'	RT	-	-	20	-	CTH V
	33+50 'CV'	RT	-	-	20	-	CTH V
	231+50 'NT'	LT	30	-	-	65	NORTH TOWNE ROAD
	STAGE 3B TOTAL:		30	0	40	65	
	UNDISTRIBUTED		80	60	70	210	UNDISTRIBUTED
	CATEGORY 0010 TOTAL:		405	305	350	1,100	
	PROJECT ID 6020-02-72 TOTAL:		405	305	350	1,100	

* ADDITIONAL QUANTITIES LISTED ELSEWHERE IN PLAN.

STORM SEWER

CATEGORY	FROM STRUCTURE	TO STRUCTURE	* (523.0134) CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL 34 X 53-INCH (LF)	* (608.0315) STORM SEWER PIPE REINFORCED CONCRETE CLASS III 15-INCH (LF)	* (608.0318) 18-INCH (LF)	(608.0324) 24-INCH (LF)	(608.0330) 30-INCH (LF)	* (522.1018) APRON END WALLS FOR CULVERT PIPE REINFORCED CONCRETE 18-INCH (EACH)	(522.1024) 24-INCH (EACH)	(522.1030) 30-INCH (EACH)	* (633.5200) MARKERS CULVERT END (EACH)	REMARKS
0010	0.1	0.2	---	---	43	---	---	---	---	---	---	
	0.2	0.3	---	---	32	---	---	---	---	---	---	
	0.3	---	---	---	---	---	---	1	---	---	1	
	1.1	1.0	---	12	---	---	---	---	---	---	---	
	1.0	2.0	---	---	---	149	---	---	---	---	---	
	2.0	3.0	---	---	---	149	---	---	---	---	---	
	3.1	3.0	---	12	---	---	---	---	---	---	---	
	3.0	4.0	---	---	---	179	---	---	---	---	---	
	4.1	4.0	---	12	---	---	---	---	---	---	---	
	4.0	5.0	---	---	---	170	---	---	---	---	---	
	5.0	5.1	---	---	---	8	---	---	---	---	---	
	5.1	5.2	---	---	---	73	---	---	---	---	---	
	5.2	---	---	---	---	---	---	---	1	---	1	
	9.1	9.0	---	---	---	152	---	---	---	---	---	
	9.2	9.0	---	28	---	---	---	---	---	---	---	
	9.0	8.0	---	---	---	139	---	---	---	---	---	
	8.1	8.0	---	28	---	---	---	---	---	---	---	
	8.2	8.0	---	8	---	---	---	---	---	---	---	
	8.0	7.0	---	---	---	152	---	---	---	---	---	
	7.1	7.0	---	28	---	---	---	---	---	---	---	
	7.2	7.0	---	8	---	---	---	---	---	---	---	
	7.0	6.1	---	---	---	---	128	---	---	---	---	
	6.1	---	---	---	---	---	---	---	---	1	1	
	50.0	50.1	---	---	---	20	---	---	---	---	---	
	50.1	---	---	---	---	---	---	---	1	---	---	
	CATEGORY 0010 TOTAL:		0	136	75	1,191	128	1	2	1	3	
0040	10.1	10.2	---	---	60	---	---	---	---	---	---	
	10.2	---	---	---	---	---	---	1	---	---	1	
	CATEGORY 0040 TOTAL:		0	0	60	0	0	1	0	0	1	
0050	51.0	52.0	170	---	---	---	---	---	---	---	---	
	CATEGORY 0050 TOTAL:		170	0	0	0	0	0	0	0	0	
	PROJECT 6020-02-72 TOTAL:		170	136	135	1,191	128	2	2	1	4	

*ADDITIONAL QUANTITIES LISTED ELSEWHERE IN PLAN.

STORM SEWER

CATEGORY	FROM STRUCTURE	TO STRUCTURE	* (608.0315) 15-INCH LF	* (608.0318) 18-INCH LF	(608.0412) CLASS IV 12-INCH LF	(608.0415) 15-INCH LF	(608.0418) 18-INCH LF	(608.0424) 24-INCH LF	(610.0114) HORIZONTAL ELLIPTICAL CLASS HE-IV 14X23-INCH LF	(611.9800.S) PIPE GRATES EACH	(522.1012) APRON END WALLS FOR CULVERT PIPE REINFORCED CONCRETE 12-INCH EACH	(522.1015) 15-INCH EACH	* (522.1018) 18-INCH EACH	* (522.1024) 24-INCH EACH	* (633.5200) MARKERS CULVERT END EACH	REMARKS
0010	4000	4001	---	---	---	---	---	---	25	---	---	---	---	---	---	
	4001	5002	---	---	---	---	260	---	---	---	---	---	---	---	---	
	5000	5021	---	36	---	---	---	---	---	---	---	---	---	---	---	
	5001	5002	---	---	44	---	---	---	---	---	---	---	---	---	---	
	5002	5000	---	---	---	---	234	---	---	---	---	---	---	---	---	
	5011	5012	---	---	28	---	---	---	---	---	---	---	---	---	---	
	5012	5020	---	---	26	---	---	---	---	---	---	---	---	---	---	
	5013	5020	---	---	45	---	---	---	---	---	---	---	---	---	---	
	5014	5015	---	---	6	---	---	---	---	---	---	---	---	---	---	
	5015	5031	---	---	---	121	---	---	---	---	---	---	---	---	---	
	5020	5021	---	---	---	32	---	---	---	---	---	---	---	---	---	
	5021	5023	---	---	---	---	131	---	---	---	---	---	---	---	---	
	5022	5021	---	---	---	31	---	---	---	---	---	---	---	---	---	
	5023	5026	---	---	---	---	78	---	---	---	---	---	---	---	---	
	5026	5030	---	---	---	---	92	---	---	---	---	---	---	---	---	
	5027	5026	---	---	9	---	---	---	---	---	---	---	---	---	---	
	5030	-	---	---	---	---	---	---	---	---	---	---	---	---	---	
	5031	5041	99	---	---	---	---	---	---	---	---	---	---	---	---	
	5040	-	---	---	---	---	---	---	---	---	---	---	---	---	---	
	5041	5040	---	---	---	44	---	---	---	---	---	---	---	---	---	
	5042	5041	---	---	7	---	---	---	---	---	---	---	---	---	---	
	5043	-	---	---	---	---	---	---	---	---	---	---	---	---	---	
	6000	-	---	---	---	---	---	---	---	1	---	---	1	---	1	
	6001	6000	---	79	---	---	---	---	---	---	---	---	---	---	---	
	6002	6001	---	39	---	---	---	---	---	---	---	---	---	---	---	
	6003	6002	---	---	10	---	---	---	---	---	---	---	---	---	---	
	6004	6003	---	---	19	---	---	---	---	---	---	---	---	---	---	
	6005	6004	---	---	6	---	---	---	---	---	---	---	---	---	---	
	6006	6002	---	---	---	---	140	---	---	---	---	---	---	---	---	
	6007	6006	---	---	6	---	---	---	---	---	---	---	---	---	---	
	6008	6002	---	---	73	---	---	---	---	---	---	---	---	---	---	
	6009	6008	---	---	40	---	---	---	---	---	---	---	---	---	---	
	6010	6009	---	---	58	---	---	---	---	---	---	---	---	---	---	
	6011	6012	---	---	6	---	---	---	---	---	---	---	---	---	---	
	6012	6013	---	---	18	---	---	---	---	---	---	---	---	---	---	
	6013	6015	---	---	20	---	---	---	---	---	---	---	---	---	---	
	6014	6006	---	---	25	---	---	---	---	---	---	---	---	---	---	
	6015	-	---	---	---	---	---	---	---	1	1	---	---	---	1	
	7000	-	---	---	---	---	---	---	---	1	---	---	---	1	1	
	7001	7002	---	---	25	---	---	---	---	---	---	---	---	---	---	

CONTINUED

STORM SEWER

CATEGORY	FROM STRUCTURE	TO STRUCTURE	* (608.0315) 15-INCH LF	* (608.0318) 18-INCH LF	(608.0412) CLASS IV 12-INCH LF	(608.0415) 15-INCH LF	(608.0418) 18-INCH LF	(608.0424) 24-INCH LF	(610.0114) HORIZONTAL ELLIPTICAL CLASS HE-IV 14X23-INCH LF	(611.9800.S) PIPE GRATES EACH	(522.1012) APRON END WALLS FOR CULVERT PIPE REINFORCED CONCRETE 12-INCH EACH	(522.1015) 15-INCH EACH	* (522.1018) 18-INCH EACH	* (522.1024) 24-INCH EACH	* (633.5200) MARKERS CULVERT END EACH	REMARKS
	7002	7000	---	---	---	---	---	52	---	---	---	---	---	---	---	
	7003	7002	---	---	8	---	---	---	---	---	---	---	---	---	---	
	7010	-	---	---	---	---	---	---	---	1	---	1	---	---	1	
	7011	7010	---	---	---	40	---	---	---	---	---	---	---	---	---	
	7012	7011	---	---	45	---	---	---	---	---	---	---	---	---	---	
	7014	7011	---	---	65	---	---	---	---	---	---	---	---	---	---	
	7015	7014	---	---	39	---	---	---	---	---	---	---	---	---	---	
	7016	7014	---	---	32	---	---	---	---	---	---	---	---	---	---	
	7020	-	---	---	---	---	---	---	---	1	1	---	---	---	1	
	7021	7020	---	---	30	---	---	---	---	---	---	---	---	---	---	
	7022	7021	---	---	6	---	---	---	---	---	---	---	---	---	---	
	7023	7024	---	---	6	---	---	---	---	---	---	---	---	---	---	
	7024	7025	---	---	31	---	---	---	---	---	---	---	---	---	---	
	7025	7026	---	---	---	35	---	---	---	---	---	---	---	---	---	
	7026	7031	---	---	---	29	---	---	---	---	---	---	---	---	---	
	7027	7026	---	---	6	---	---	---	---	---	---	---	---	---	---	
	7028	7031	---	---	---	59	---	---	---	---	---	---	---	---	---	
	7029	7028	---	---	34	---	---	---	---	---	---	---	---	---	---	
	7030	7029	---	---	6	---	---	---	---	---	---	---	---	---	---	
	7031	7002	---	---	---	---	---	148	---	---	---	---	---	---	---	
	7032	7016	---	---	12	---	---	---	---	---	---	---	---	---	---	
PROJECT 6020-02-72 TOTAL:			99	160	803	397	675	206	25	5	2	1	1	1	5	

*ADDITIONAL QUANTITIES LISTED ELSEWHERE

STORM SEWER

CATEGORY	FROM STRUCTURE	TO STRUCTURE	(608.0312) STORM SEWER PIPE REINFORCED CONCRETE CLASS III 12-INCH (LF)	(612.0212) PIPE UNDERDRAIN UNPERFORATED 12-INCH (LF)	DISCHARGE PIPE INVERT ELEVATION	DISCHARGE PIPE OUTLET ELEVATION	SLOPE	(520.1012) STEEL APRON ENDWALLS FOR CULVERT PIPE 12-INCH (EACH)	REMARKS
0010	D1	D2	4	-	975.70	976.67	0.01	-	
	D2	D3	-	70	975.67	959.16	-	1	
	D4	D5	4	-	978.04	978.03	0.003	-	
	D5	D6	-	26	978.03	977.95	0.003	1	
	D7	D8	4	-	978.05	978.04	0.003	-	
	D8	D9	-	26	978.04	977.86	0.003	1	
	D10	D11	4	-	975.73	976.70	0.01	-	
	D11	D12	-	76	975.70	956.50	-	1	
STAGE 3A TOTAL:			16	198				4	
CATEGORY 0010 TOTAL:			16	198				4	
PROJECT ID 6020-02-72 TOTAL:			16	198				4	

3

INLETS, MANHOLES, MANHOLE COVERS, AND INLET COVERS

CATEGORY	STRUCT. ID#	STATION		OFFSET	MANHOLE COVERS TYPE J (EACH) * (611.0530)	INLET COVERS TYPE A (EACH) (611.0600)	INLET COVERS TYPE H (EACH) * (611.0624)	MANHOLES 3-FT DIAMETER (EACH) (611.2003)	MANHOLES 5-FT DIAMETER (EACH) * (611.2005)	MANHOLES 6-FT DIAMETER (EACH) * (611.2006)	MANHOLES 8-FT DIAMETER (EACH) (611.2008)	INLETS 3-FT DIAMETER (EACH) (611.3003)	INLETS 2x3-FT (EACH) * (611.3230)	REMARKS
0010	0.1	220+50	NT	17.5' LT.	---	---	1	---	---	---	---	---	1	
	0.2	220+50	NT	23.5' RT.	---	---	1	---	---	---	---	---	1	
	0.3	220+50	NT	57.0' RT.	---	---	---	---	---	---	---	---	---	
	1.0	224+00	NT	6.0' LT.	1	---	---	---	1	---	---	---	---	
	1.1	224+00	NT	17.5' LT.	---	---	1	---	---	---	---	---	1	
	2.0	225+50	NT	6.0' LT.	1	---	---	1	---	---	---	---	---	
	3.0	227+00	NT	6.0' LT.	1	---	---	---	1	---	---	---	---	
	3.1	227+00	NT	17.5' LT.	---	---	1	---	---	---	---	---	1	
	4.0	228+80	NT	6.0' LT.	1	---	---	---	1	---	---	---	---	
	4.1	228+80	NT	17.5' LT.	---	---	1	---	---	---	---	---	1	
	5.0	230+50	NT	10.0' LT.	1	---	---	---	1	---	---	---	---	
	5.1	230+50	NT	17.5' LT.	---	1	---	---	---	---	---	1	---	
	5.2	231+00	NT	69.8' LT.	---	---	---	---	---	---	---	---	---	
	6.1	232+00	NT	66.7' LT.	---	---	---	---	---	---	---	---	---	
	7.0	233+14	NT	10.0' LT.	1	---	---	---	---	1	---	---	---	
	7.1	233+14	NT	17.5' RT.	---	---	1	---	---	---	---	---	1	
	7.2	233+14	NT	17.5' LT.	---	---	1	---	---	---	---	---	1	
	8.0	234+65	NT	10.0' LT.	1	---	---	---	1	---	---	---	---	
	8.1	234+65	NT	17.5' RT.	---	---	1	---	---	---	---	---	1	
	8.2	234+65	NT	17.5' LT.	---	---	1	---	---	---	---	---	1	
	9.0	236+00	NT	10.0' LT.	1	---	---	---	1	---	---	---	---	
	9.1	236+00	NT	17.5' LT.	---	1	---	---	---	---	---	1	---	
	9.2	237+50	NT	17.5' RT.	---	---	1	---	---	---	---	---	1	
	50.0	505+29	SX	64.0' LT.	---	---	---	---	---	---	1	---	---	
		CATEGORY 0010 TOTAL:			8	2	10	1	6	1	1	2	10	
0040	10.1	215+00	NT	18.5' LT.	---	---	1	---	---	---	---	---	1	
	10.2	215+00	NT	41.0' RT.	---	---	---	---	---	---	---	---	---	
		CATEGORY 0040 TOTAL:			0	0	1	0	0	0	0	0	1	
0050	52.0	505+16	NN	32.0' RT.	---	---	---	---	---	---	1	---	---	
		CATEGORY 0050 TOTAL:			0	0	0	0	0	0	1	0	0	
		PROJECT ID 6020-02-72 TOTAL:			8	2	11	1	6	1	2	2	11	

* ADDITIONAL QUANTITIES LISTED ELSEWHERE IN PLAN.

INLETS, MANHOLES, MANHOLE COVERS, AND INLET COVERS

CATEGORY	STRUCT. ID#	STATION		OFFSET		* (611.0530) MANHOLE COVERS TYPE J EACH	* (611.0624) INLET COVERS TYPE H EACH	(611.0627) INLET COVERS TYPE HM EACH	(611.0636) INLET COVERS TYPE HM-S EACH	(611.0639) INLET COVERS TYPE H-S EACH	* (611.0642) INLET COVERS TYPE MS EACH	(611.0652) INLET COVERS TYPE T EACH	(611.2004) MANHOLES 4-FOOT EACH	* (611.2005) MANHOLES 5-FOOT EACH	* (611.2006) MANHOLES 6-FOOT EACH	(611.3225) INLETS 2x2.5-FT EACH	* (611.3230) INLETS 2x3-FT EACH	(611.3901) INLETS MEDIAN 1 EACH	* (611.3902) INLETS MEDIAN 2 EACH	REMARKS
0010	4000	14+90.00	V	14	'RT	---	---	---	---	---	2	---	---	---	---	---	---	---	1	
	4001	14+90.00	V	30.7258	'LT	1	---	---	---	---	---	---	1	---	---	---	---	---	---	
	5000	19+85.00	V	14	'RT	1	---	---	---	---	---	---	1	---	---	---	---	---	---	
	5001	17+50.00	V	30.7258	'LT	---	1	---	---	---	---	---	---	---	---	---	1	---	---	
	5002	17+50.00	V	13.6416	'RT	---	1	---	---	---	---	---	1	---	---	---	---	---	---	
	5011	20+07.00	V	50.0897	'LT	---	1	---	---	---	---	---	---	---	---	---	1	---	---	
	5012	20+16.00	V	24.9905	'LT	---	1	---	---	---	---	---	---	---	---	---	1	---	---	
	5013	20+46.25	V	40	'LT	---	---	---	---	1	---	---	---	---	---	---	1	---	---	
	5014	22+55.56	V	60	'LT	---	---	---	---	---	---	1	---	---	---	1	---	---	---	
	5015	22+55.66	V	65.9992	'LT	---	---	---	---	---	---	1	1	---	---	---	---	---	---	
	5020	20+27.00	V	1.5	'LT	---	1	---	---	---	---	---	1	---	---	---	---	---	---	
	5021	20+25.00	V	30.6772	'RT	---	1	---	---	---	---	---	1	---	---	---	---	---	---	
	5022	20+00.00	V	58	'RT	---	---	---	---	---	1	---	---	---	---	---	---	1	---	
	5023	21+47.39	V	64	'RT	---	1	---	---	---	---	---	1	---	---	---	---	---	---	
	5026	21+71.37	V	118	'RT	---	1	---	---	---	---	---	1	---	---	---	---	---	---	
	5027	21+74.50	V	117	'RT	---	1	---	---	---	---	---	---	---	---	---	1	---	---	
	5030	21+74.95	V	209.3495	'RT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
	5031	20+55.88	V	150	'LT	---	1	---	---	---	---	---	1	---	---	---	---	---	---	
	5040	20+38.75	V	277.8885	'LT	---	1	---	---	---	---	---	---	1	---	---	---	---	---	
	5041	20+48.54	V	246.7351	'LT	---	1	---	---	---	---	---	1	---	---	---	---	---	---	
	5042	20+50.58	V	250	'LT	---	1	---	---	---	---	---	---	---	---	---	1	---	---	
	5043	23+26.49	V	295.3068	'LT	---	1	---	---	---	---	---	---	1	---	---	---	---	---	
	6000	26+84.07	V	88.541	'RT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
	6001	26+45.16	V	40	'RT	---	1	---	---	---	---	---	1	---	---	---	---	---	---	
	6002	26+18.00	V	35.9633	'RT	---	1	---	---	---	---	---	---	---	1	---	---	---	---	
	6003	26+15.00	V	45.3808	'RT	---	1	---	---	---	---	---	---	---	---	---	1	---	---	
	6004	26+14.00	V	64.459	'RT	---	---	---	1	---	---	---	---	---	---	---	1	---	---	
	6005	26+19.90	V	65.5474	'RT	---	---	---	1	---	---	---	---	---	---	---	1	---	---	
	6006	27+36.00	V	37.9593	'LT	---	---	---	---	---	---	1	1	---	---	---	---	---	---	
	6007	27+38.33	V	43.4995	'LT	---	---	---	---	---	---	1	---	---	---	1	---	---	---	
	6008	25+55.00	V	1.5	'LT	---	---	1	---	---	---	---	---	---	---	---	1	---	---	
	6009	25+43.00	V	39.365	'LT	---	---	1	---	---	---	---	---	---	---	---	1	---	---	
	6010	25+48.00	V	96.8364	'LT	---	---	1	---	---	---	---	---	---	---	---	1	---	---	
	6011	25+50.21	V	195.8396	'LT	---	---	---	1	---	---	---	---	---	---	---	1	---	---	
	6012	25+49.03	V	201.022	'LT	---	---	---	1	---	---	---	---	---	---	---	1	---	---	
	6013	25+55.05	V	210.4256	'LT	---	1	---	---	---	---	---	---	---	---	---	1	---	---	
	6014	27+59.00	V	28.8068	'LT	---	---	---	---	1	---	---	---	---	---	---	1	---	---	
	6015	25+63.15	V	223.9999	'LT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
	7000	32+39.06	V	91.9246	'RT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
	7001	31+83.00	V	76.9194	'RT	---	1	---	---	---	---	---	---	---	---	---	1	---	---	
	7002	31+94.13	V	55.4899	'RT	---	---	---	---	1	---	---	---	---	1	---	---	---	---	
	7003	31+99.32	V	49.4544	'RT	---	---	---	---	1	---	---	---	---	---	---	1	---	---	
	7010	32+95.00	V	74.2439	'RT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
	7011	32+94.00	V	27.9436	'RT	---	1	---	---	---	---	---	1	---	---	---	---	---	---	
	7012	32+60.00	V	1.5	'LT	---	1	---	---	---	---	---	---	---	---	---	1	---	---	

CONTINUED

INLETS, MANHOLES, MANHOLE COVERS, AND INLET COVERS

CATEGORY	STRUCT. ID#	STATION	OFFSET		* (611.0530) MANHOLE COVERS TYPE J EACH	* (611.0624) INLET COVERS TYPE H EACH	(611.0627) INLET COVERS TYPE HM EACH	(611.0636) INLET COVERS TYPE HM-S EACH	(611.0639) INLET COVERS TYPE H-S EACH	* (611.0642) INLET COVERS TYPE MS EACH	(611.0652) INLET COVERS TYPE T EACH	(611.2004) MANHOLES 4-FOOT EACH	* (611.2005) MANHOLES 5-FOOT EACH	* (611.2006) MANHOLES 6-FOOT EACH	(611.3225) INLETS 2x2.5-FT EACH	* (611.3230) INLETS 2x3-FT EACH	(611.3901) INLETS MEDIAN 1 EACH	* (611.3902) INLETS MEDIAN 2 EACH	REMARKS
	7014	33+12.06 V	34.6786	' LT	---	1	---	---	---	---	---	---	---	---	---	1	---	---	
	7015	32+75.00 V	48.966	' LT	---	1	---	---	---	---	---	---	---	---	---	1	---	---	
	7016	33+24.00 V	64.2323	' LT	---	1	---	---	---	---	---	---	---	---	---	1	---	---	
	7020	32+79.85 V	177.8699	' LT	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
	7021	32+45.12 V	164.3721	' LT	---	---	---	---	1	---	---	---	---	---	---	1	---	---	
	7022	32+47.84 V	158.9783	' LT	---	---	---	---	1	---	---	---	---	---	---	1	---	---	
	7023	30+46.60 V	86.4806	' LT	---	---	---	---	1	---	---	---	---	---	---	1	---	---	
	7024	30+44.00 V	82.4125	' LT	---	---	---	---	1	---	---	---	---	---	---	1	---	---	
	7025	30+49.00 V	51.8938	' LT	---	1	---	---	---	---	---	1	---	---	---	---	---	---	
	7026	30+71.46 V	63	' LT	---	---	---	---	---	---	1	1	---	---	---	---	---	---	
	7027	30+71.54 V	68.9985	' LT	---	---	---	---	---	---	1	---	---	---	1	---	---	---	
	7028	30+60.00 V	1.5	' LT	---	1	---	---	---	---	---	1	---	---	---	---	---	---	
	7029	30+67.89 V	31.37	' RT	---	---	---	---	1	---	---	---	---	---	---	1	---	---	
	7030	30+75.98 V	31.4684	' RT	---	---	---	---	1	---	---	---	---	---	---	1	---	---	
	7031	30+92.00 V	49	' LT	1	---	---	---	---	---	---	1	---	---	---	---	---	---	
	7032	33+35.00 V	58.9294	' LT	---	1	---	---	---	---	---	---	---	---	---	1	---	---	
	PROJECT 6020-02-72 TOTAL:				3	27	3	4	10	3	6	17	2	2	3	29	1	1	

* ADDITIONAL QUANTITIES LISTED ELSEWHERE IN PLAN.

INLETS & INLET COVERS

CATEGORY	STRUCTURE NO.	STATION	OFFSET	LOCATION	* (611.0642) INLET COVERS TYPE MS (EACH)	* (611.3902) MEDIAN INLET 2 GRATE (EACH)	(SPV.0060.04) MEDIAN INLET 2 GRATE SPECIAL (EACH)	DEPTH (FT)	REMARKS
0010	20	457+00	30' LT	MEDIAN	2	1		3.2	
	21	464+00	30' LT	MEDIAN	2		1	8.0	
	22	472+00	28.3' LT	MEDIAN	2		1	4.6	
	23	479+00	28.3' LT	MEDIAN	2	1		3.9	
	24	486+00	30' LT	MEDIAN	2	1		4.0	
	25	498+00	31.7' LT	MEDIAN	2		1	9.3	
	26	510+83	31.5' LT	MEDIAN	2		1	9.2	
	27	525+60	30' LT	MEDIAN	2	1		2.9	
	28	525+80	30' LT	MEDIAN	2	1		3.2	
	29	536+00	30' LT	MEDIAN	2		1	7.6	
	30	557+00	19.8' LT	MEDIAN	2	1		3.7	
				STAGE 3A TOTAL:	22	6	5		
				PROJECT ID 6020-02-72 TOTAL:	22	6	5		

* ADDITIONAL QUANTITIES LISTED ELSEWHERE IN PLAN.

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INLETS & INLET COVERS

CATEGORY	STRUCTURE ID#	STATION	OFFSET	C-C (FT)	TO STRUCTURE	(611.0654) INLET COVERS TYPE V (EACH)	(611.3220) INLETS 2x2-FT (EACH)	RIM/GRATE ELEVATION (FT)	T.O.S. ELEVATION (FT)	STRUCTURE DEPTH (FT)	REMARKS
0010	D1	500+45.74	33' RT	3.13	D2	1	1	981.65	980.40	4.7	
	D2	500+48.87	33' RT	-	D3	1	1	981.63	980.38	4.7	
	D3	500+48.87	97.9' RT	-	-	-	-	959.16	-	-	
	D4	500+44.47	5' LT	3.13	D5	1	1	981.66	980.41	2.4	
	D5	500+47.60	5' LT	25	D6	1	1	981.64	980.39	2.4	
	D6	500+47.60	30' LT	-	-	-	-	977.95	-	-	
	D7	500+42.94	55' LT	3.13	D8	1	1	981.67	980.42	2.4	
	D8	500+46.07	55' LT	25	D9	1	1	981.65	980.40	2.4	
	D9	500+46.07	30' LT	-	-	-	-	977.96	-	-	
	D10	500+41.66	93' LT	3.13	D11	1	1	981.68	980.43	4.7	
	D11	500+44.79	93' LT	-	D12	1	1	981.66	980.41	4.7	
	D12	500+44.79	163.2' LT	-	-	-	-	956.50	-	-	
					STAGE 3A TOTAL:	8	8				
					CATEGORY 0010 TOTAL:	8	8				
					PROJECT 6020-02-72 TOTAL:	8	8				

STEEL PLATE BEAM GUARD

CATEGORY	STATION	TO STATION	LOCATION	(614.0396) GUARDRAIL MOW STRIP ASPHALT (SY)	(614.2300) MGS GUARDRAIL 3 (LF)	(614.2500) MGS THRIE BEAM TRANSITION (LF)	(614.2610) MGS GUARDRAIL TERMINAL EAT (EACH)	REMARKS
0010	495+68.7	498+36.2	B-13-599 RIGHT	100	175	39	1	
	495+29.3	498+34.3	B-13-599 LEFT	115	212.5	39	1	
	500+28.7	502+33.7	B-13-599 RIGHT	95	112.5	39	1	
	500+27.43	503+32.45	B-13-599 LEFT	115	212.5	39	1	
	500+25.9	503+30.9	B-13-600 RIGHT	115	212.5	39	1	
	500+25.6	502+92.1	B-13-600 LEFT	100	175	39	1	
			STAGE 3A TOTAL:	640	1100	234	6	
	509+50 'SX'	513+28 'SX'	LT	145	325		1	
			STAGE 3B TOTAL:	145	325	0	1	
			CATEGORY 0010 TOTAL:	785	1425	234	7	
			PROJECT ID 6020-02-72 TOTAL:	785	1425	234	7	

PIPE UNDERDRAIN ITEMS

CATEGORY	FROM STATION		TO STRUCTURE ID	(612.0106) PIPE UNDERDRAIN 6-INCH LF	* GEOTEXTILE FABRIC AREA SF	(645.0112) GEOTEXTILE FABRIC TYPE DF SCHEDULE B SY	REMARKS
0010	16+50 CV	LT	5001	100	500	56	
	16+50 CV	RT	5002	100	500	56	
	19+07 CV	LT	5011	100	500	56	
	19+25 CV	RT	5021	100	500	56	
	20+68 CV	RT	5023	100	500	56	
	20+50 CV	LT	5031	50	250	28	
	20+53 CV	LT	5040	100	500	56	
	22+50 CV	LT	5014	50	250	28	
	5014		5015	10	50	6	
	22+51 CV	LT	5015	50	250	28	
	24+92 CV	LT	6010	100	500	56	
	25+93 CV	RT	6004	50	250	28	
	6004		6005	10	50	6	
	26+32 CV	RT	6005	50	250	28	
	26+27 CV	RT	6002	10	50	6	
	25+53 CV	LT	6011	50	250	28	
	6011		6012	10	50	6	
	25+45 CV	LT	6012	50	250	28	
	27+25 CV	LT	6006	50	250	28	
	6006		6007	10	50	6	
	27+41 CV	LT	6007	50	250	28	
	30+41 CV	RT	7029	50	250	28	
	7029		7030	10	50	6	
	30+98 CV	RT	7030	50	250	28	
	30+34 CV	LT	7024	50	250	28	
	7024		7023	10	50	6	
	30+55 CV	LT	7023	50	250	28	
	30+73 CV	LT	7026	50	250	28	
	7026		7027	10	50	6	
	30+74 CV	LT	7027	50	250	28	
	32+36 CV	LT	7021	50	250	28	
	7021		7022	10	50	6	
	32+58 CV	LT	7022	50	250	28	
	31+81 CV	RT	7001	50	250	28	
	7001		7002	25	125	14	
	7002		7003	10	50	6	
	32+14 CV	RT	7003	50	250	28	
	32+71 CV	LT	7015	50	250	28	
	33+73 CV	LT	7016	50	250	28	
	33+93 CV	RT	7011	100	500	56	
	34+75 CV	LT	7032	50	250	28	
			STAGE 4 TOTAL:	2025	10125	1125	
			CATEGORY 0010 TOTAL:	2025	10125	1125	
			PROJECT ID 6020-02-72 TOTAL:	2025	10125	1125	

*FOR INFORMATION ONLY

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FENCE WOVEN WIRE (4.5'), FENCE SAFETY

CATEGORY	STATION	TO STATION	LOCATION	(616.0100) FENCE WOVEN WIRE (4.5') (LF)	REMARKS
0010	446+00	498+00	USH 51 RT	5145	
	500+00	554+00	USH 51 RT	5290	
	418+00	445+50	USH 51 LT	2850	
	446+50	498+00	USH 51 LT	5315	
	500+00	554+00	USH 51 LT	5400	
	PROJECT ID 6020-02-72 TOTAL:			24000	

CONCRETE MEDIAN SLOPED NOSE

CATEGORY	STATION	LOCATION	(620.0300) CONCRETE MEDIAN SLOPED NOSE SF	REMARKS
0010	18+31 CV	LT	60	TYPE 1
	20+55 CV	LT	15	TYPE 2
	20+44 CV	LT	20	TYPE 2
	21+51 CV	RT	20	TYPE 2
	21+73 CV	RT	60	TYPE 1
	21+84 CV	RT	20	TYPE 2
	20+75 CV	LT	15	TYPE 2
	20+49 CV	LT	60	TYPE 1
	22+59 CV	LT	20	TYPE 2
	22+60 CV	LT	20	TYPE 2
	22+81 CV	LT	20	TYPE 2
	24+75 CV	RT	60	TYPE 1
	25+60 CV	LT	20	TYPE 2
	25+48 CV	LT	20	TYPE 2
	26+20 CV	RT	60	TYPE 1
	26+45 CV	RT	20	TYPE 2
	25+69 CV	LT	20	TYPE 2
	27+45 CV	LT	20	TYPE 2
	27+69 CV	LT	20	TYPE 2
	30+66 CV	LT	20	TYPE 2
	30+53 CV	LT	20	TYPE 2
	31+73 CV	RT	20	TYPE 2
	30+85 CV	LT	20	TYPE 2
	32+51 CV	LT	20	TYPE 2
	32+79 CV	LT	20	TYPE 2
	25+36 CV	LT	60	TYPE 1
	PROJECT ID 6020-02-72 TOTAL:		750	

DUST CONTROL

CATEGORY	STATION	TO STATION	LOCATION	(623.0200) DUST CONTROL SURFACE TREATMENT SY	(624.0100) WATER (MGAL)	REMARKS
0010	111+00 'TR1'	141+00 'TR1	USH 51 TEMPORARY ROAD	--	280	
	135+00 'TR2'	145+00 'TR2'	USH 51 TEMPORARY ROAD	--	27	
	48+60 'TR3'	51+00 'TR3'	CTH V TEMPORARY INTERSECTION	--	3	
	248+03 'NT'	252+15 'NT'	BALL CT	3000	20	
			STAGE 1 TOTAL:	3000	330	
	519+00	562+00	SOUTHBOUND USH 51	--	300	
	562+00 TW	573+00 TW	SOUTHBOUND USH 51	--	60	
	37+34 'CV'	60+00 'CV'	CTH V	--	140	
	30+00'MU'	37+20 'MU'	MUELLER RD	--	28	
	15+00 'SW'	20+00 'SW'	SHAWN WILLIAMS TRAIL	--	13	
	10+00 'D1'	20+00 'D1'	DRIVEWAY D1	--	4	
	18+35 'D2'	20+00 'D2'	DRIVEWAY D2	--	1	
	6+00 'D3'	19+70 'D3'	DRIVEWAY D3	--	13	
	10+00 'D4'	31+00 'D4'	DRIVEWAY D4	--	31	
			STAGE 2 TOTAL:	0	590	
	452+00	498+49	NORTHBOUND USH 51	--	1170	
	500+13	551+50	NORTHBOUND USH 51	--	270	
	551+50	569+00	NORTHBOUND USH 51	--	160	
	452+00	498+47	SOUTHBOUND USH 51	--	1170	
	472+78 'NX'	495+77 'NX'	RAMP 'NX' NORTHBOUND EXIT RAMP	--	130	
	500+64 'NN'	525+43 'NN'	RAMP 'NN' NORTHBOUND ON RAMP	--	190	
	29+00 'GI'	30+60 'GI'	GRINDE RD	800	5	
	30+50 'TR'4	32+75 'TR4'	HOLUM STREET TEMPORARY INTERSECTION	--	5	
	102+50 'TR5'	111+00 'TR5'	CROSSOVER	--	8	
	465+00		MAINTANENCE CROSSING	--	3	
	535+00		MAINTANENCE CROSSING	--	3	
			STAGE 3A TOTAL:	800	3114	
	500+11	519+00	SOUTHBOUND USH 51	--	70	
	473+81 'SN'	498+07 'SN'	RAMP 'SN' SOUTHBOUND ON RAMP	--	360	
	502+12 'SX'	522+06 'SX'	RAMP 'SX' SOUTHBOUND EXIT RAMP	--	110	
	60+00 'CV'	99+65 'CV'	CTH V	--	160	
	36+50 'GI'	45+00 'GI'	WINDSOR WAY	4500	--	
	45+00 'GI'	49+88 'GI'	WINDSOR WAY	2200	40	
			STAGE 3B TOTAL:	6700	740	
	14+20 'CV'	37+35 'CV'	CTH V	25500	230	
	219+50 'NT'	237+50 'NT'	NORTHTOWNE RD	3500	90	
	34+90 'GI'	36+50 'GI'	WINDSOR WAY		6	
			STAGE 4 TOTAL:	29000	326	
			PROJECT ID 6020-02-72 TOTAL:	39500	5100	

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LANDSCAPE ITEMS

CATEGORY	STATION	TO STATION	LOCATION	* (625.0500) SALVAGED TOPSOIL (SY)	(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)	(630.0300) SEEDING BORROW PIT (LB)	REMARKS
0010	111+00 'TR1'	141+00 'TR1	USH 51 TEMPORARY ROAD	30700	30700	20	--	860	--	430	--	
	135+00 'TR2'	145+00 'TR2'	USH 51 TEMPORARY ROAD	2200	2200	2	--	60	--	30	--	
	251+00 'NT'	252+15 'NT'	BALL CT	3400	3400	2	95	--	--	50	--	
			STAGE 1 TOTAL:	36300	36300	24	95	920	0	510	0	
	519+00	573+00	SOUTHBOUND USH 51	34600	34600	26	--	1150	--	570	--	
	30+00'MU'	37+20 'MU'	MUELLER RD	7300	7300	6	--	250	--	120	--	
	15+00 'SW'	20+00 'SW'	SHAWN WILLIAMS TRAIL	700	700	1	--	50	--	25	--	
			STAGE 2 TOTAL:	42600	42600	33	0	1450	0	715	0	
	452+00	506+00	NB & SB USH 51	89000	89000	73	--	3200	--	1600	--	
	506+00	573+00	NOUTHBOUND USH 51	62700	62700	55	--	2400	--	1200	--	
	472+78 'NX'	495+77 'NX'	RAMP 'NX' NOUTHBOUND EXIT RAMP	21800	21800	17	--	730	--	370	--	
	500+64 'NN'	525+43 'NN'	RAMP 'NN' NOUTHBOUND ON RAMP	10900	10900	9	--	390	--	200	--	
	29+00 'GI'	30+60 'GI'	GRINDE RD	1300	1300	1	--	40	--	20	--	
			STAGE 3A TOTAL:	185700	185700	155	0	6760	0	3390	0	
	506+00	519+00	SOUTHBOUND USH 51	9500	9500	26	--	1150	--	570	--	
	473+81 'SN'	498+07 'SN'	RAMP 'SN' SOUTHBOUND ON RAMP	18800	18800	14	--	600	--	300	--	
	502+12 'SX'	522+06 'SX'	RAMP 'SX' SOUTHBOUND EXIT RAMP	11200	11200	9	--	400	--	200	--	
	37+34.6'CV'	99+65 'CV'	CTH V	49000	49000	41	--	1800	--	900	--	
	36+50 'GI'	49+88 'GI'	WINDSOR WAY	1900	1900	7	--	300	--	150	--	
			STAGE 3B TOTAL:	90400	90400	97	0	4250	0	2120	0	
	14+00 'CV'	37+34.6 'CV'	CTH V	27750	27750	18	--	290	490	390	--	
	219+50 'NT'	237+50 'NT'	NORTHTOWNE RD	12700	12700	8	360	--	--	180	--	
	34+90 'GI'	36+50 'GI'	WINDSOR WAY	250	250	4	--	160	--	80	--	
			STAGE 4 TOTAL:	40700	40700	30	360	450	490	650	0	
	211+00 'NT'	219+50 'NT'	NORTHTOWNE RD	6350	6350	5	200	--	--	100	--	
			STAGE 5 TOTAL:	6350	6350	5	200	0	0	100	0	
			UNDISTRIBUTED	0	0	85	50	3450	125	1870	350	
			CATEGORY 0010 TOTAL:	402050	402050	429	705	17280	615	9355	350	
			PROJECT ID 6020-02-72 TOTAL:	402050	402050	429	705	17280	615	9355	350	

* ADDITIONAL QUANTITIES LISTED ELSEWHERE IN PLAN.

3

LANDSCAPE QUANTITIES

CATEGORY	LANDSCAPE PLAN DETAIL NAME	(SPV. 0180.02) SHREDDED HARDWOOD BARK MULCH (SY)	(SPV.0090.01) ALUMINUM EDGER (LF)	(SPV.0035.01) BACKFILL FOR PLANT BEDS (CY)	* (625.0500) SALVAGED TOPSOIL - 10" (SY)	REMARKS
0040	DETAIL K	-	-	-	-	
	DETAIL L	2370	155	208	2058	
	DETAIL M	773	155	211	456	
	DETAIL N	-	-	-	-	
	DETAIL O	117	207	78	-	
	DETAIL P	1052	1347	666	-	
	DETAIL Q	1576	128	1020	-	
	DETAIL R	-	-	-	-	
	PROJECT ID 6020-02-72 TOTAL:	5888	1992	2183	2514	

* ADDITIONAL QUANTITIES LISTED ELSEWHERE IN PLAN.

EROSION CONTROL ITEMS

CATEGORY	STATION - STATION	LOCATION	(628.1504) SILT FENCE (LF)	(628.1520) SILT FENCE MAINTENANCE (LF)	REMARKS
0010	531+00 - 538+50	SB, LT	750	1,500	USH 51
	556+50 - 566+50	SB, LT	1,000	2,000	USH 51
	14+20 - 21+00 'CV'	LT	700	1,400	CTH V
	51+00 - 61+00 'CV'	LT	1,000	2,000	CTH V
	67+00 - 78+00 'CV'	LT	1,100	2,200	CTH V
	506+50 - 516+00 'NN'	RT	950	1,900	RAMP
	506+00 - 516+00 'SX'	LT	1,000	2,000	RAMP
	220+00 - 237+50 'NT'	LT	1,750	3,500	NORTH TOWNE ROAD
	232+00 - 237+50 'NT'	RT	550	1,100	NORTH TOWNE ROAD
	UNDISTRIBUTED		2,200	4,400	UNDISTRIBUTED
	CATEGORY 0010 TOTAL:		11,000	22,000	
	PROJECT ID 6020-02-72 TOTAL:		11,000	22,000	

EROSION CONTROL ITEMS

CATEGORY	STATION	LOCATION	(628.7504) TEMPORARY DITCH CHECKS (LF)	(628.1104) EROSION BALES (EACH)	REMARKS
0010	454+00	NB, RT, LT/ MED	30	-	USH 51
	455+00	NB, RT, LT/ MED	30	-	USH 51
	456+00	NB, RT, LT/ MED	30	-	USH 51
	458+00	NB, RT, LT/ MED	30	-	USH 51
	459+00	NB, RT, LT/ MED	30	-	USH 51
	460+00	NB, RT, LT/ MED	30	-	USH 51
	461+00	NB, RT, LT/ MED	30	-	USH 51
	462+00	NB, RT, LT/ MED	30	-	USH 51
	463+00	NB, RT, LT/ MED	30	-	USH 51
	466+00	NB, RT	15	-	USH 51
	468+00	NB, RT	15	-	USH 51
	470+00	NB, RT	15	-	USH 51
	471+50	NB, RT	15	-	USH 51
	473+00	NB, RT	15	-	USH 51
	474+50	NB, RT	15	-	USH 51
	517+00	NB, RT; SB, LT	30	-	USH 51
	519+00	NB, RT; SB, LT	30	-	USH 51
	521+00	NB, RT; SB, LT	30	-	USH 51
	523+00	NB, RT; SB, LT	30	-	USH 51
	525+00	NB, RT; SB, LT	30	-	USH 51
	534+00	NB, RT	15	-	USH 51
	535+00	NB, RT	15	-	USH 51
	536+00	NB, RT; SB, LT	30	-	USH 51
	537+00	NB, RT; SB, LT	30	-	USH 51
	538+00	SB, LT	15	-	USH 51
	539+00	NB, RT	15	-	USH 51
	540+00	NB, RT	15	-	USH 51
	542+00	NB, RT	15	-	USH 51
	544+00	SB, LT	15	-	USH 51
	546+00	SB, LT	15	-	USH 51
	547+00	NB, RT	15	-	USH 51
	548+00	NB, RT; SB, LT	30	-	USH 51
	550+00	NB, RT; SB, LT	30	-	USH 51
	551+00	NB, RT	15	-	USH 51
	552+00	NB, RT	15	-	USH 51
	553+00	NB, RT; SB, LT	30	-	USH 51
	554+00	SB, LT	15	-	USH 51
	555+00	NB, RT; SB, LT	30	-	USH 51
	557+00	NB, RT	15	-	USH 51
	558+00	NB, RT	15	-	USH 51
	559+00	NB, RT	15	-	USH 51
	560+00	NB, RT	15	-	USH 51
	561+00	NB, RT	15	-	USH 51
	563+00	NB, RT	15	-	USH 51
	565+00	NB, RT	15	-	USH 51

CONTINUED

EROSION CONTROL ITEMS

CATEGORY	STATION	LOCATION	(628.7504) TEMPORARY DITCH CHECKS (LF)	(628.1104) EROSION BALES (EACH)	REMARKS
	570+00	NB, RT	15	-	USH 51
	36+00 'CV'	LT, RT	30	-	CTH V
	37+00 'CV'	LT, RT	30	-	CTH V
	38+00 'CV'	LT, RT	30	-	CTH V
	39+00 'CV'	LT, RT	30	-	CTH V
	40+00 'CV'	LT, RT	30	-	CTH V
	41+00 'CV'	LT, RT	30	-	CTH V
	42+00 'CV'	LT	15	-	CTH V
	43+00 'CV'	LT	15	-	CTH V
	44+00 'CV'	LT, RT	30	-	CTH V
	45+00 'CV'	LT, RT	30	-	CTH V
	46+00 'CV'	LT, RT	30	-	CTH V
	47+00 'CV'	RT	15	-	CTH V
	48+00 'CV'	RT	15	-	CTH V
	54+00 'CV'	RT	15	-	CTH V
	55+00 'CV'	RT	15	-	CTH V
	57+00 'CV'	RT	15	-	CTH V
	58+00 'CV'	RT	15	-	CTH V
	59+00 'CV'	RT	15	-	CTH V
	62+00 'CV'	RT	15	-	CTH V
	63+00 'CV'	RT	15	-	CTH V
	64+00 'CV'	LT, RT	30	-	CTH V
	65+00 'CV'	LT, RT	30	-	CTH V
	67+00 'CV'	RT	15	-	CTH V
	70+00 'CV'	LT, RT	30	-	CTH V
	72+00 'CV'	LT, RT	30	-	CTH V
	74+00 'CV'	LT, RT	30	-	CTH V
	75+00 'CV'	LT, RT	30	-	CTH V
	77+00 'CV'	LT, RT	30	-	CTH V
	80+00 'CV'	LT, RT	30	-	CTH V
	81+00 'CV'	LT, RT	30	-	CTH V
	83+00 'CV'	LT, RT	30	-	CTH V
	84+00 'CV'	LT, RT	30	-	CTH V
	85+00 'CV'	LT, RT	30	-	CTH V
	86+00 'CV'	LT, RT	30	-	CTH V
	87+00 'CV'	LT, RT	30	-	CTH V
	88+00 'CV'	RT	15	-	CTH V
	89+00 'CV'	LT, RT	30	-	CTH V
	90+00 'CV'	LT	15	-	CTH V
	91+00 'CV'	RT	15	-	CTH V
	92+00 'CV'	RT	15	-	CTH V
	93+00 'CV'	LT, RT	30	-	CTH V
	93+50 'CV'	LT, RT	30	-	CTH V
	94+00 'CV'	LT, RT	30	-	CTH V
	95+00 'CV'	LT	15	-	CTH V

CONTINUED

3

EROSION CONTROL ITEMS

CATEGORY	STATION	LOCATION	(628.7504) TEMPORARY DITCH CHECKS (LF)	(628.1104) EROSION BALES (EACH)	REMARKS
	96+00 'CV'	LT	15	-	CTH V
	97+00 'CV'	LT, RT	30	-	CTH V
	480+00 'NX'	RT	15	-	RAMP
	481+00 'NX'	RT	15	-	RAMP
	482+00 'NX'	RT	15	-	RAMP
	483+00 'NX'	RT	15	-	RAMP
	484+00 'NX'	RT	15	-	RAMP
	485+00 'NX'	RT	15	-	RAMP
	488+00 'NX'	RT	15	-	RAMP
	489+00 'NX'	RT	15	-	RAMP
	490+00 'NX'	RT	15	-	RAMP
	491+00 'NX'	RT	15	-	RAMP
	492+00 'NX'	RT	15	-	RAMP
	493+00 'NX'	RT	15	-	RAMP
	494+00 'NX'	RT	15	-	RAMP
	495+00 'NX'	RT	15	-	RAMP
	497+00 'NX'	RT	15	-	RAMP
	499+00 'NX'	RT	15	-	RAMP
	500+00 'NX'	RT	15	-	RAMP
	501+00 'NN'	RT	15	-	RAMP
	503+00 'NN'	RT	15	-	RAMP
	505+00 'NN'	RT	15	-	RAMP
	484+00 'SN'	LT	15	-	RAMP
	487+00 'SN'	LT	15	-	RAMP
	488+00 'SN'	LT	15	-	RAMP
	489+00 'SN'	LT	15	-	RAMP
	492+00 'SN'	LT	15	-	RAMP
	493+00 'SN'	LT	15	-	RAMP
	495+00 'SN'	LT	15	-	RAMP
	496+00 'SN'	LT	15	-	RAMP
	497+00 'SN'	LT	15	-	RAMP
	498+00 'SN'	LT	15	-	RAMP
	UNDISTRIBUTED		560	485	
	CATEGORY 0010 TOTAL:		3,110	485	
	PROJECT ID 6020-02-72 TOTAL:		3,110	485	

EROSION CONTROL ITEMS

CATEGORY	STATION	LOCATION	(SPV.0060.24) SPECIAL DITCH CHECKS (EACH)	REMARKS
0010	457+00	30' LT	1	
	464+00	30' LT	1	
	479+00	28.3' LT	1	
	486+00	28.3' LT	1	
	498+00	31.7' LT	1	
	510+83	31.5' LT	1	
	536+00	30' LT	1	
	548+00	30' LT	1	
	557+00	19.8' LT	1	
PROJECT ID 6020-02-72 TOTAL:			9	

MOBILIZATIONS EROSION CONTROL

CATEGORY	STATION - STATION	LOCATION	(628.1905) MOBILIZATIONS EROSION CONTROL (EACH)	(628.1910) MOBILIZATIONS EMERGENCY EROSION CONTROL (EACH)	REMARKS
0010	452+00 - 572+00	PROJECT	24	15	
PROJECT ID 6020-02-72 TOTAL:			24	15	

EROSION MAT

CATEGORY	STATION	LOCATION	* (628.2004) EROSION MAT CLASS I TYPE B (SY)	(628.2008) EROSION MAT URBAN CLASS I TYPE B (SY)	(628.2023) EROSION MAT URBAN CLASS II TYPE B (SY)	REMARKS
0010	450+00 - 464+35	NB, LT/ MED	1,950	-	-	USH 51
	450+00 - 478+00	NB, RT	6,850	-	-	USH 51
	465+65 - 498+51	NB, LT/ MED	4,400	-	-	USH 51
	473+00 - 481+00	SB, LT	1,450	-	-	USH 51
	486+00 - 496+09	NB, RT	6,700	-	-	USH 51
	493+00 - 499+07	SB, LT	4,500	-	-	USH 51
	496+09 - 498+85	NB, RT	1,750	-	-	USH 51
	499+78 - 501+84	NB, RT	1,250	-	-	USH 51
	500+00 - 500+50	SB, LT	250	-	-	USH 51
	500+10 - 534+35	NB, LT/ MED	4,600	-	-	USH 51
	500+50 - 502+42	SB, LT	960	-	-	USH 51
	501+84 - 507+00	NB, RT	1,900	-	-	USH 51
	502+42 - 506+00	SB, LT	1,100	-	-	USH 51
	506+00 - 509+00	SB, LT	940	-	-	USH 51
	516+50 - 519+00	SB, LT	2,250	-	-	USH 51
	516+00 - 573+00	NB, RT	20,500	-	-	USH 51
	519+00 - 525+00	SB, LT	5,200	-	-	USH 51
	525+00 - 555+00	SB, LT	8,250	-	-	USH 51
	535+65 - 556+50	NB, LT/ MED	1,950	-	-	USH 51
	559+50 - 570+00	SB, LT	1,550	-	-	USH 51
	479+00 - 495+77 'NX'	RT	6,800	-	-	RAMP
	486+00 - 495+77 'NX'	LT	2,200	-	-	RAMP
	500+64 - 502+00 'NN'	LT	480	-	-	RAMP
	500+64 - 516+00 'NN'	RT	5,800	-	-	RAMP
	483+00 - 498+08 'SN'	LT	9,600	-	-	RAMP
	493+00 - 498+08 'SN'	RT	1,300	-	-	RAMP
	502+12 - 505+00 'SX'	RT	1,600	-	-	RAMP
	502+12 - 509+50 'SX'	LT	3,700	-	-	RAMP
	509+50 - 516+00 'SX'	LT	1,100	-	-	RAMP
	14+20 - 35+50 'CV'	LT	-	4,000	-	CTH V
	14+20 - 35+50 'CV'	RT	-	3,750	-	CTH V
	35+50 - 41+00 'CV'	LT	940	-	-	CTH V
	35+50 - 41+40 'CV'	RT	1,100	-	8	CTH V
	42+50 - 60+00 'CV'	RT	4,600	-	8	CTH V
	43+00 - 46+50 'CV'	LT	500	-	-	CTH V
	48+00 - 60+00 'CV'	LT	2,200	-	-	CTH V
	60+00 - 62+20 'CV'	LT	330	-	-	CTH V
	60+00 - 99+00 'CV'	RT	10,700	-	-	CTH V
	63+20 - 67+00 'CV'	LT	490	-	-	CTH V
	70+00 - 90+70 'CV'	LT	3,300	-	-	CTH V
	92+00 - 99+00 'CV'	LT	1,400	-	16	CTH V
	210+00 - 220+00 'NT'	LT	-	500	16	NORTH TOWNE ROAD
	220+00 - 238+50 'NT'	LT	-	1,300	-	NORTH TOWNE ROAD
	248+19 -251+08 'NT'	RT, LT	-	-	24	NORTH TOWNE ROAD
	30+50 - 36+00 'MU'	LT	720	-	-	MUELLER ROAD
	30+50 - 36+00 'MU'	RT	740	-	-	MUELLER ROAD

CONTINUED

EROSION MAT

CATEGORY	STATION	LOCATION	* (628.2004) EROSION MAT CLASS I TYPE B (SY)	(628.2008) EROSION MAT URBAN CLASS I TYPE B (SY)	(628.2023) EROSION MAT URBAN CLASS II TYPE B (SY)	REMARKS
	30+00 - 30+32 'GI'	LT	45	-	-	GRINDE ROAD
	30+00 - 30+32 'GI'	RT	45	-	-	GRINDE ROAD
	35+00 - 49+50 'GI'	LT	2,850	-	-	WINDSOR WAY
	47+00 - 49+50 'GI'	RT	560	-	-	WINDSOR WAY
		TOTAL:	141,400	9,550	72	
	133+00 - 136+00 'TR1'	LT	1,150	-	-	TEMPORARY ROAD
	133+00 - 136+00 'TR1'	RT	1,150	-	-	TEMPORARY ROAD
	144+00 - 148+00 'TR1'	LT	1,800	-	-	TEMPORARY ROAD
	STAGE 1 TEMPORARY ROAD TOTAL:		4,100	0	0	
	UNDISTRIBUTED		36,500	2,350	-	UNDISTRIBUTED
	CATEGORY 0010 TOTAL:		182,000	11,900	72	
	PROJECT ID 6020-02-72 TOTAL:		182,000	11,900	72	

* ADDITIONAL QUANTITIES LISTED ELSEWHERE IN PLAN.

INLET PROTECTION

CATEGORY	STATION	LOCATION	(628.7005) INLET PROTECTION TYPE A (EACH)	(628.7010) INLET PROTECTION TYPE B (EACH)	(628.7015) INLET PROTECTION TYPE C (EACH)	REMARKS
0010	457+00	MEDIAN	1	-	-	USH 51
	464+00	MEDIAN	1	-	-	USH 51
	472+00	MEDIAN	1	-	-	USH 51
	479+00	MEDIAN	1	-	-	USH 51
	486+00	MEDIAN	1	-	-	USH 51
	498+00	MEDIAN	1	-	-	USH 51
	510+85	MEDIAN	1	-	-	USH 51
	525+55	MEDIAN	1	-	-	USH 51
	525+90	MEDIAN	1	-	-	USH 51
	536+00	MEDIAN	1	-	-	USH 51
	557+00	MEDIAN	1	-	-	USH 51
	14+90 'CV'	RT	1	-	-	CTH V
	17+50 'CV'	RT	-	-	1	CTH V
	17+50 'CV'	LT	-	-	1	CTH V
	20+00 'CV'	RT	1	-	-	CTH V
	20+07 'CV'	LT	-	-	1	CTH V
	20+16 'CV'	LT	-	-	1	CTH V
	20+25 'CV'	RT	-	-	1	CTH V
	20+27 'CV'	LT	-	-	1	CTH V
	20+39 'CV'	LT	-	-	1	CTH V

CONTINUED

INLET PROTECTION

CATEGORY	STATION	LOCATION	(628.7005) INLET PROTECTION TYPE A (EACH)	(628.7010) INLET PROTECTION TYPE B (EACH)	(628.7015) INLET PROTECTION TYPE C (EACH)	REMARKS
	20+46 'CV'	LT	-	-	1	CTH V
	20+49 'CV'	LT	-	-	1	CTH V
	20+51 'CV'	LT	-	-	1	CTH V
	20+56 'CV'	LT	-	-	1	CTH V
	21+47 'CV'	RT	-	-	1	CTH V
	21+71 'CV'	RT	-	-	1	CTH V
	21+75 'CV'	RT	-	-	1	CTH V
	22+56 'CV'	LT	-	1	-	CTH V
	22+56 'CV'	LT	-	1	-	CTH V
	23+26 'CV'	LT	-	-	1	CTH V
	25+43 'CV'	LT	-	1	-	CTH V
	25+48 'CV'	LT	-	1	-	CTH V
	25+49 'CV'	LT	-	1	-	CTH V
	25+50 'CV'	LT	-	1	-	CTH V
	25+55 'CV'	LT	-	1	-	CTH V
	25+55 'CV'	LT	-	-	1	CTH V
	26+14 'CV'	RT	-	1	-	CTH V
	26+15 'CV'	RT	-	-	1	CTH V
	26+18 'CV'	RT	-	-	1	CTH V
	26+20 'CV'	RT	-	1	-	CTH V
	26+45 'CV'	RT	-	-	1	CTH V
	27+36 'CV'	LT	-	1	-	CTH V
	27+38 'CV'	LT	-	1	-	CTH V
	27+59 'CV'	LT	-	-	1	CTH V
	30+44 'CV'	LT	-	-	1	CTH V
	30+47 'CV'	LT	-	-	1	CTH V
	30+49 'CV'	LT	-	-	1	CTH V
	30+60 'CV'	LT	-	-	1	CTH V
	30+68 'CV'	RT	-	-	1	CTH V
	30+71 'CV'	LT	-	1	-	CTH V
	30+72 'CV'	LT	-	1	-	CTH V
	30+76 'CV'	RT	-	-	1	CTH V
	31+83 'CV'	RT	-	-	1	CTH V
	31+94 'CV'	RT	-	-	1	CTH V
	31+99 'CV'	RT	-	-	1	CTH V
	32+45 'CV'	LT	-	-	1	CTH V
	32+48 'CV'	LT	-	-	1	CTH V
	32+60 'CV'	LT	-	-	1	CTH V
	32+75 'CV'	LT	-	-	1	CTH V
	32+94 'CV'	RT	-	-	1	CTH V
	33+12 'CV'	LT	-	-	1	CTH V
	33+24 'CV'	LT	-	-	1	CTH V
	33+35 'CV'	LT	-	-	1	CTH V
	215+00 'NT'	LT	-	-	1	NORTH TOWNE ROAD
	220+50 'NT'	LT	-	-	1	NORTH TOWNE ROAD

CONTINUED

INLET PROTECTION

CATEGORY	STATION	LOCATION	(628.7005) INLET PROTECTION TYPE A (EACH)	(628.7010) INLET PROTECTION TYPE B (EACH)	(628.7015) INLET PROTECTION TYPE C (EACH)	REMARKS
	220+50 'NT'	RT	-	-	1	NORTH TOWNE ROAD
	224+00 'NT'	LT	-	-	1	NORTH TOWNE ROAD
	227+00 'NT'	LT	-	-	1	NORTH TOWNE ROAD
	228+80 'NT'	LT	-	-	1	NORTH TOWNE ROAD
	230+50 'NT'	LT	-	-	1	NORTH TOWNE ROAD
	233+14 'NT'	LT	-	-	1	NORTH TOWNE ROAD
	233+14 'NT'	RT	-	-	1	NORTH TOWNE ROAD
	234+65 'NT'	RT	-	-	1	NORTH TOWNE ROAD
	234+65 'NT'	LT	-	-	1	NORTH TOWNE ROAD
	236+00 'NT'	RT	-	-	1	NORTH TOWNE ROAD
	237+50 'NT'	LT	-	-	1	NORTH TOWNE ROAD
	UNDISTRIBUTED		3	3	13	UNDISTRIBUTED
	CATEGORY 0010 TOTAL:		16	16	63	
	PROJECT ID 6020-02-72 TOTAL:		16	16	63	

CULVERT PIPE CHECKS

GROUP CODE	STATION	LOCATION	(628.7555) CULVERT PIPE CHECKS (EACH)	REMARKS
0010	466+00	NB, RT	18	USH 51
	472+50	NB, RT	18	USH 51
	476+00	NB, RT	7	USH 51
	511+00	SB, LT	7	USH 51
	531+00	NB, RT	9	USH 51
	548+00	NB, LT/ MED	5	USH 51
	554+32	NB, RT	9	USH 51
	563+65	NB, RT	9	USH 51
	502+00 'NN'	LT	7	RAMP
	495+40 'NX'	RT	27	RAMP
	502+58 'SX'	LT	7	RAMP
	33+50 'CV'	LT	27	CTH V
	56+00 'CV'	RT	7	CTH V
	60+25 'CV'	RT	18	CTH V
	69+25 'CV'	RT	5	CTH V
	90+00 'CV'	RT	9	CTH V
	231+50 'NT'	RT	27	NORTH TOWNE ROAD
	30+70 'MU'	LT	7	MUELLER ROAD
	35+40 'GI'	LT	14	WINDSOR WAY
	47+20 'GI'	RT	9	WINDSOR WAY
	UNDISTRIBUTED		34	UNDISTRIBUTED
	CATEGORY 0010 TOTAL:		280	
	PROJECT ID 6020-02-72 TOTAL:		280	

DELINEATOR POSTS

CATEGORY	STATION	TO STATION	LOCATION	(633.0100) DELINEATOR POSTS STEEL (EACH)	(633.0500) DELINEATOR REFLECTORS WHITE (EACH)	(633.1000) DELINEATOR BRACKETS (EACH)	REMARKS
	450+00	492+00	USH 51 NORTHBOUND	33	33	33	
	450+00	485+00	USH 51 SOUTHBOUND	6	6	6	
	500+00 "NN"	525+00 "NN"	RAMP NN	26	26	26	
	473+00 "NX"	497+00 "NX"	RAMP NX	26	33	33	
			STAGE 3A TOTAL:	91	98	98	
	507+00	561+00	USH 51 SOUTHBOUND	12	12	12	
	485+00 "SN"	498+00 "SN"	RAMP SN	26	39	39	
	506+00 "SX"	522+00 "SX"	RAMP SX	16	24	24	
			STAGE 3B TOTAL:	54	75	75	
			CATEGORY 0010 TOTAL:	145	173	173	
			PROJECT ID 6020-02-72 TOTAL:	145	173	173	

PLANT QUANTITIES

CATEGORY 0040	BID ITEM NUMBER	SYMBOL	COMMON NAME	SIZE WHEN PLANTED	ROOT CONDITION	PLAN DETAIL SHEETS K	L	M	N	O	P	Q	R	ENLARGEMENT PLANS ENLRG 1	ENLRG 2	ENLRG 3	ENLRG 4	ENLRG 5	TOTAL	REMARKS
			LARGE DECIDUOUS TREES																	
	632.0101.01	TXD	BALDCYPRESS	2.5"	B&B	--	--	--	--	3	3	3	--	--	--	--	--	--	9	
	632.0101.02	CTS	CATALPA, NORTHERN	2.5"	B&B	1	--	--	2	--	--	--	--	--	--	--	--	--	3	
	632.0101.03	GDO	COFFEETREE, KENTUCKY	2.5"	B&B	1	--	--	--	5	4	5	2	--	--	--	--	--	17	
	632.0101.04	ULF	ELM, FRONTIER	2.5"	B&B	--	3	2	--	11	5	10	--	--	--	--	--	--	31	
	632.0101.05	COP	HACKBERRY, PRAIRIE PRIDE	2.5"	B&B	--	1	--	--	9	2	14	--	--	--	--	--	--	26	
	632.0101.06	GTK	HONEYLOCUST, SKYLINE	2.5"	B&B	--	3	--	--	10		8	--	--	--	--	--	--	21	
	632.0101.07	TTS	LINDEN, SILVER	2.5"	B&B	--	1	--	2		4	10	--	--	--	--	--	--	17	
	632.0101.08	ASG	MAPLE, GREEN MOUNTAIN SUGAR	2.5"	B&B	--	5	3	3	3	8	4	--	--	--	--	--	--	26	
	632.0101.09	AFS	MAPLE, SIENNA GLEN	2.5"	B&B	--	--	3			11	11	--	--	--	--	--	--	25	
	632.0101.10	QMC	OAK, BUR	2.0"	B&B	3	--	3	1	6	1	4	--	--	--	--	--	--	18	
	632.0101.11	QBC	OAK, SWAMP WHITE	2.0"	B&B	--	4	6	3	15	2	9	--	--	--	--	--	--	39	
	632.0101.12	QRA	OAK, WHITE	2.0"	B&B	--	2	1	--	--	--	--	3	--	--	--	--	--	6	
	632.0101.13	ASS	SILVER MAPLE, CUTLEAF	2.5"	B&B	--	--	--	--	--	4	--	--	--	--	--	--	--	4	
			SMALL DECIDUOUS TREES																	
	632.0101.14	CVW	HAWTHORN, WINTER KING	8'	B&B CLUMP	--	--	--	--	--	3	3	--	2	4	--	--	--	12	
	632.0101.15	AGA	SERVICEBERRY, AUTUMN BRILLIANCE	8'	B&B CLUMP	--	--	--	--	8	--	12	--	--	6	12	--	--	38	
	632.0101.16	SRI	TREE LILAC, JAPANESE	8'	B&B CLUMP	--	--	--	--	5	3	13	--	--	--	--	--	--	21	
			LARGE EVERGREEN TREES																	
	632.0101.17	JVC	JUNIPER, CANAERT	6'	B&B	--	--	3	--	--	--	--	--	--	--	--	--	--	3	
	632.0101.18	PGD	SPRUCE, BLACK HILLS	6'	B&B	--	2	--	--	--	3	24	--	--	7	14	--	--	50	
	632.0101.19	PPG	SPRUCE, GREEN COLORADO (NO BLUE COLOR)	6'	B&B	--	6	12	4	4	11	2	5	--	--	--	--	--	44	
	632.0101.20	PAB	SPRUCE, NORWAY	6'	B&B	--	3	3	4	5	5	6	1	--	--	--	--	--	27	
			DECIDUOUS SHRUBS																	
	632.0201.01	AME	CHOKEBERRY, GLOSSY BLACK	30"	CG	--	--	--	--	--	--	--	--	--	28	56	--	--	84	
	632.0201.02	DVL	HONEYSUCKLE, DWARF BUSH	18"	CG	--	--	--	--	--	--	--	--	24	101	106	--	--	231	
	632.0201.03	PFP	POTENTILLA, PINK BEAUTY	18"	CG	--	--	--	--	--	--	--	--	--	75	150	--	--	225	
	632.0201.04	RAG	SUMAC, GROW LOW	12"	CG	--	--	--	--	--	--	--	--	--	--	--	--	79	79	
			EVERGREEN SHRUBS																	
	632.0201.05	JSA	JUNIPER, ARCADIA	3'	CG	--	--	--	--	--	--	--	--	--	30	60	7	26	123	
			PERENNIALS																	
	SPV.0060.05	NWL	CATMINT, WALKER'S LOW	12"	CG	--	--	--	--	--	--	--	--	--	--	--	--	73	73	
	SPV.0060.06	HRR	DAYLILY, ROSY RETURNS	6"	CG	--	--	--	--	--	--	--	--	277	134	--	--	175	586	
			ORNAMENTAL GRASSES																	
	SPV.0060.07	ANG	GRASS, BIG BLUESTEM	9"	CG	--	--	--	--	--	--	--	--	24	69	42	48		183	
	SPV.0060.08	SON	GRASS, INDIANGRASS	9"	CG	--	--	--	--	--	--	--	--	--	34	68	38		140	
	SPV.0060.09	PVN	GRASS, NORTHWIND SWITCH	9"	CG	--	--	--	--	--	--	--	--	--	--	--	79		79	
	SPV.0060.10	SPT	GRASS, PRAIRIE DROPSEED, TARA DWARF	6"	CG	--	--	--	--	--	438	73	--	--	--	--	59	260	830	
	SPV.0060.11	PVS	GRASS, SHENANDOAH SWITCH	9"	CG	--	--	--	--	--	--	--	--	56	--	--	31		87	
	SPV.0060.12	SCB	GRASS, THE BLUES LITTLE BLUESTEM	6"	CG	--	--	--	--	--	--	--	--	--	111	222	51		384	

MISCELLANEOUS CSD QUANTITIES

CATEGORY	LOCATION	(632.9101) LANDSCAPE PLANTING SURVEILLANCE AND CARE CYCLES EACH	(SPV.0060.13) WAYFINDING SIGN AT VINBURN & N TOWN RD, STA 182+77.3 EA	(SPV.0060.14) WAYFINDING SIGN AT VINBURN & N TOWN RD, STA 187+69.3 EA	(SPV.0060.15) WAYFINDING SIGN AT HOLUM ST & N TOWN RD, STA 215+86.8 EA	(SPV.0060.16) WAYFINDING SIGN AT HOLUM ST & N TOWN RD, STA 222+40.4 EA	(SPV.0060.17) WAYFINDING SIGN AT N STREET & N TOWN RD, STA. 233+68 EA	(SPV.0060.18) WAYFINDING SIGN AT CTH V & LINDE FIELDS, STA 36+72.2 EA	(SPV.0060.19) WAYFINDING SIGN AT N STREET & HALSOR ST, STA 17+12 EA	(SPV.0060.20) DECORATIVE STREET SIGNS AT N TOWNE RD & GRAY RD EA	(SPV.0060.21) DECORATIVE STREET SIGNS AT N TOWNE RD & VINBURN RD EA	(SPV.0060.22) DECORATIVE STREET SIGNS AT N TOWNE RD & HOLUM ST EA	(SPV.0060.23) DECORATIVE STREET POLE EA	REMARKS
0040	USH 51	18	1	1	1	1	1	1	1	2	2	2	--	
	184+00 NT LT	--	--	--	--	--	--	--	--	--	--	--	1	STOP SIGN
PROJECT ID 6020-02-72 TOTAL:		18	1	1	1	1	1	1	1	2	2	2	1	

SIGNS TYPE I

CATEGORY	SIGN NUMBER	STATION	LOCATION	SIGN CODE	SIZE (IN)	(635.0200) SIGN SUPPORTS STRUCTURAL STEEL HS (LB)	(636.0100) SIGN SUPPORTS CONCRETE MASONRY (CY)	(636.0500) SIGN SUPPORTS STEEL REINFORCEMENT (LB)	(FOR INFORMATIONAL PURPOSES ONLY) K VALUE (STUB & PROJECTION WEIGHT) (LB)	POST 1 WEIGHT (LB)	POST 2 WEIGHT (LB)	(637.0101) SIGNS TYPE I (SF)	SIGN MESSAGE	REMARKS
0010	1-2	420+00 "NB"	1 MILE FROM CTH V NBX RAMP GORE	E1-1A	168" X 120"	720	1.6	98	146.5	340	372	140.00	CTH V DeForest 1 MILE	
		420+00 "NB"	-	E1-5	108" X 30"	--	--	--	--	--	--	22.50	EXIT 65	
	2-5	443+00 "NB"	1 MILE FROM WINDSOR RD NBX RAMP	E1-1A	216" X 84"	640	1.6	98	146.5	294	337	126.00	Windsor Rd 1 MILE	
		443+00"NB"	-	E1-5	108" X 30"	--	--	--	--	--	--	22.50	EXIT 63	
	3-7	472+00 "NB"	START OF CTH V NBX RAMP	E4-1A	204" X 90"	650	1.6	98	146.5	302	342	127.50	CTH V DeForest	
		472+00"NB"	-	E1-5	108" X 30"	--	--	--	--	--	--	22.50	EXIT 65	
	4-6	522+50 "NB"	START OF CTH V SBX RAMP	E4-1A	204" X 90"	650	1.6	98	146.5	302	342	127.50	CTH V DeForest	
		522+50"NB"	-	E1-5	108" X 30"	-	-	-	-	-	-	22.50	EXIT 65	
	6-3	560+00 "NB"	3/4 MILE FROM CTH V SBX RAMP GORE	E1-1A	168" X 120"	720	1.6	98	146.5	340	372	140.00	CTH V DeForest 3/4 MILE	
		560+00"NB"	-	E1-5	108" X 30"	--	--	--	--	--	--	22.50	EXIT 65	
	9-16	23+50 CV	RT	E6-54A	84" X 90"	--	--	--	--	--	--	52.5	OVERHEAD ROUNDABOUT GUIDE SIGN AHEAD ARROWS	MOUNT ON SIGN STRUCTURE
	9-17	23+50 CV	RT	E6-54A	48" X 78"	--	--	--	--	--	--	26	OVERHEAD ROUNDABOUT GUIDE SIGN AHEAD ARROWS	MOUNT ON SIGN STRUCTURE
	9-19	23+50 CV	RT	E6-54R	84" X 90"	--	--	--	--	--	--	52.5	OVERHEAD ROUNDABOUT GUIDE SIGN RIGHT ARROWS	MOUNT ON SIGN STRUCTURE
	10-9	27+97 CV	RT	E6-52	144" X 90"	--	--	--	--	--	--	90	OVERHEAD ROUNDABOUT GUIDE SIGN AHEAD ARROWS	MOUNT ON SIGN STRUCTURE
	10-35	30+29 CV	LT	E6-52	144" X 90"	--	--	--	--	--	--	90	OVERHEAD ROUNDABOUT GUIDE SIGN AHEAD ARROWS	MOUNT ON SIGN STRUCTURE
	10-36	30+29 CV	LT	E6-54A	48" X 78"	--	--	--	--	--	--	26	OVERHEAD ROUNDABOUT GUIDE SIGN AHEAD ARROWS	MOUNT ON SIGN STRUCTURE
	10-48	25+14 CV	LT	E6-52	168" X 96"	--	--	--	--	--	--	112	OVERHEAD ROUNDABOUT GUIDE SIGN AHEAD ARROWS	MOUNT ON SIGN STRUCTURE
	10-49	25+14 CV	LT	E6-53	132" X 96"	--	--	--	--	--	--	88	OVERHEAD ROUNDABOUT GUIDE SIGN AHEAD ARROWS	MOUNT ON SIGN STRUCTURE
	10-50	27+97 CV	RT	E6-54A	48" X 78"	--	--	--	--	--	--	26	OVERHEAD ROUNDABOUT GUIDE SIGN AHEAD ARROWS	MOUNT ON SIGN STRUCTURE
			PROJECT ID 6020-02-72 TOTAL:			3380	8	490	--	--	--	1337		

SIGNS TYPE II REFLECTIVE

CATEGORY	SIGN NUMBER	STATION	LOCATION	SIGN CODE	SIZE (IN)	(634.0614) POSTS WOOD 4"x6"x14' (EACH)	(634.0616) POSTS WOOD 4"x6"x16' (EACH)	(634.0618) POSTS WOOD 4"x6"x18' (EACH)	(634.0620) POSTS WOOD 4"x6"x20' (EACH)	(634.0622) POSTS WOOD 4"x6"x22' (EACH)	(634.0811) POSTS TUBULAR STEEL 2X2-INCH X 11 FT (EACH)	(634.0812) POSTS TUBULAR STEEL 2X2-INCH X 12 FT (EACH)	(634.0814) POSTS TUBULAR STEEL 2X2-INCH X 14FT (EACH)	(637.0620) SIGN FLAGS PERMANENT TYPE II EACH	(637.0202) SIGNS REFLECTIVE TYPE II (SF)	SIGN MESSAGE	REMARKS
0010	1-1	150+00 'NT'	LT	R2-1	24" X 30"	1	--	--	--	--	--	--	--	--	5.00	SPEED LIMIT 45	
	1-3	162+00 'NT'	RT	R2-1	24" X 30"	1	--	--	--	--	--	--	--	--	5.00	SPEED LIMIT 45	
	1-4	428+60	MEDIAN	D10-5	21" X 60"	--	--	1	--	--	--	--	--	--	8.75	MILE MARKER	
	1-5	428+60	MEDIAN	D10-5	21" X 60"	--	--	1	--	--	--	--	--	--	8.75	MILE MARKER	
	1-6	170+00 'NT'	MEDIAN	R4-7	24" X 30"	1	--	--	--	--	--	--	--	--	5.00	KEEP RIGHT SYMBOL	
		170+00 'NT'	MEDIAN	W5-54	18" X 18"	--	--	--	--	--	--	--	--	--	2.25	REFLECTIVE DOTS ON SQUARE	MOUNT BELOW R4-7
	1-7	170+00 'NT'	LT	R5-1	30" X 30"	1	--	--	--	--	--	--	--	--	6.25	DO NOT ENTER	
	1-8	170+00 'NT'	LT	R2-1	24" X 30"	--	--	--	--	--	--	--	--	--	5.00	SPEED LIMIT 45	ON SAME POST AS SIGN 1-7
	1-9	171+10 'NT'	LT	R5-1A	36" X 24"	1	--	--	--	--	--	--	--	--	6.00	WRONG WAY	
	2-1	175+50 'NT'	LT	R6-2L	24" X 30"	1	--	--	--	--	--	--	--	--	5.00	ONE WAY	
	2-2	176+00 'NT'	RT	R6-2L	24" X 30"	1	--	--	--	--	--	--	--	--	5.00	ONE WAY	
	2-3	175+20 'NT'	MEDIAN	R4-7	24" X 30"	1	--	--	--	--	--	--	--	--	5.00	KEEP RIGHT SYMBOL	
	2-4	176+20 'NT'	MEDIAN	R4-7	24" X 30"	1	--	--	--	--	--	--	--	--	5.00	KEEP RIGHT SYMBOL	
	2-5	181+20 'NT'	MEDIAN	R3-20L	24" X 36"	1	--	--	--	--	--	--	--	--	6.00	BEGIN LEFT TURN LANE WITH ARROW	
	2-7	181+50 'NT'	RT	R5-1A	36" X 24"	1	--	--	--	--	--	--	--	--	6.00	WRONG WAY	
	2-8	183+80 'NT'	RT	R5-1	30" X 30"	1	--	--	--	--	--	--	--	--	6.25	DO NOT ENTER	
	2-9	183+90 'NT'	MEDIAN	R4-7	24" X 30"	1	--	--	--	--	--	--	--	--	5.00	KEEP RIGHT SYMBOL	
	2-10	26+00 'VI'	RT	R1-1	30" X 30"	1	--	--	--	--	--	--	--	--	5.18	STOP	
	2-11	27+20 'VI'	LT	R1-1	30" X 30"	1	--	--	--	--	--	--	--	--	5.18	STOP	
	2-12	185+10 'NT'	MEDIAN	R4-7	24" X 30"	1	--	--	--	--	--	--	--	--	5.00	KEEP RIGHT SYMBOL	
	2-13	185+10 'NT'	LT	R5-1	30" X 30"	1	--	--	--	--	--	--	--	--	6.25	DO NOT ENTER	
	2-14	186+50 'NT'	LT	R5-1A	36" X 24"	1	--	--	--	--	--	--	--	--	6.00	WRONG WAY	
	2-15	187+10 'NT'	MEDIAN	R3-20L	24" X 36"	1	--	--	--	--	--	--	--	--	6.00	BEGIN LEFT TURN LANE WITH ARROW	
	2-16	187+20 'NT'	RT	R5-1A	36" X 24"	1	--	--	--	--	--	--	--	--	6.00	WRONG WAY	
	2-17	188+70 'NT'	RT	R2-1	24" X 30"	--	1	--	--	--	--	--	--	--	5.00	SPEED LIMIT 45	
	2-18	188+70 'NT'	RT	R5-1	30" X 30"	--	--	--	--	--	--	--	--	--	6.25	DO NOT ENTER	ON SAME POST AS SIGN 2-17
	2-19	188+70 'NT'	MEDIAN	R4-7	24" X 30"	1	--	--	--	--	--	--	--	--	5.00	KEEP RIGHT SYMBOL	
		188+70 'NT'	MEDIAN	W5-54	18" X 18"	--	--	--	--	--	--	--	--	--	2.25	REFLECTIVE DOTS ON SQUARE	MOUNT BELOW R4-7
	2-20	455+00	MEDIAN	D10-5	21" X 60"	--	--	1	--	--	--	--	--	--	8.75	MILE MARKER	
	2-21	455+00	MEDIAN	D10-5	21" X 60"	--	--	1	--	--	--	--	--	--	8.75	MILE MARKER	
	2-22	458+50	LT	R2-1	48" X 60"	--	--	--	2	--	--	--	--	--	20.00	SPEED LIMIT 55	
	2-23	458+50	RT	R2-1	48" X 60"	--	--	--	2	--	--	--	--	--	20.00	SPEED LIMIT 55	
	2-24	36+50 'VI'	LT	W3-1	36" X 36"	--	1	--	--	--	--	--	--	--	9.00	STOP AHEAD	
	3-1	464+50	MEDIAN	R3-4B	36" X 48"	--	--	1	--	--	--	--	--	--	12.00	NO U-TURN	
	3-2	465+50	MEDIAN	R3-4B	36" X 48"	--	--	1	--	--	--	--	--	--	12.00	NO U-TURN	
	3-3	203+00 'NT'	RT	W3-5	36" X 36"	--	1	--	--	--	--	--	--	--	9.00	SPEED REDUCTION 35	
	3-4	468+00	LT	J4-2	72" X 54"	--	--	--	2	--	--	--	--	--	27.00	ROUTE ASSEMBLY	
	3-5	209+00 'NT'	RT	R2-1	24" X 30"	1	--	--	--	--	--	--	--	--	5.00	SPEED LIMIT 35	
	3-6	209+00 'NT'	LT	R2-1	24" X 30"	1	--	--	--	--	--	--	--	--	5.00	SPEED LIMIT 45	
	3-8	218+80 'NT'	LT	R1-1	30" X 30"	1	--	--	--	--	--	--	--	--	5.18	STOP	
	3-9	219+00 'NT'	RT	W1-7	48" X 24"	2	--	--	--	--	--	--	--	--	8.00	TWO DIRECTION LARGE ARROW	
	3-10	481+40	MEDIAN	D10-5	21" X 60"	--	--	1	--	--	--	--	--	--	8.75	MILE MARKER	
	3-11	481+40	MEDIAN	D10-5	21" X 60"	--	--	1	--	--	--	--	--	--	8.75	MILE MARKER	
	3-12	482+00	GORE	E5-1A	72" X 60"	--	--	--	2	--	--	--	--	--	30.00	EXIT 65 WITH ARROW	
	3-13	223+00 'NT'	LT	R2-1	24" X 30"	1	--	--	--	--	--	--	--	--	5.00	SPEED LIMIT 35	
	3-14	225+00 'NT'	RT	R2-1	24" X 30"	1	--	--	--	--	--	--	--	--	5.00	SPEED LIMIT 35	
	3-15	491+00	LT	W4-1R	48" X 48"	--	--	2	--	--	--	--	--	--	16.00	MERGE SYMBOL	
	3-16	233+00 'NT'	LT	R2-1	24" X 30"	1	--	--	--	--	--	--	--	--	5.00	SPEED LIMIT 35	
	4-1	497+00 'SN'	LT	W4-2L	36" X 36"	1	--	--	--	--	--	--	--	--	9.00	LEFT LANE ENDS SYMBOL	
	4-2	497+00 'SN'	RT	W4-2L	36" X 36"	1	--	--	--	--	--	--	--	--	9.00	LEFT LANE ENDS SYMBOL	
	4-3	507+80	MEDIAN	D10-5	21" X 60"	--	--	1	--	--	--	--	--	--	8.75	MILE MARKER	
	4-4	507+80	MEDIAN	D10-5	21" X 60"	--	--	1	--	--	--	--	--	--	8.75	MILE MARKER	
	4-5	509+00	RT	W4-1R	48" X 48"	--	--	2	--	--	--	--	--	--	16.00	MERGE SYMBOL	
	4-6	510+50	GORE	E5-1A	72" X 60"	--	--	--	2	--	--	--	--	--	30.00	EXIT 65 WITH ARROW	
	4-7	522+20	RT	J4-2	72" X 54"	--	--	--	2	--	--	--	--	--	27.00	ROUTE ASSEMBLY	

CONTINUED

SIGNS TYPE II REFLECTIVE

CATEGORY	SIGN NUMBER	STATION	LOCATION	SIGN CODE	SIZE (IN)	(634.0614) POSTS WOOD 4"x6"x14' (EACH)	(634.0616) POSTS WOOD 4"x6"x16' (EACH)	(634.0618) POSTS WOOD 4"x6"x18' (EACH)	(634.0620) POSTS WOOD 4"x6"x20' (EACH)	(634.0622) POSTS WOOD 4"x6"x22' (EACH)	(634.0811) POSTS TUBULAR STEEL 2X2-INCH X 11 FT (EACH)	(634.0812) POSTS TUBULAR STEEL 2X2-INCH X 12 FT (EACH)	(634.0814) POSTS TUBULAR STEEL 2X2-INCH X 14FT (EACH)	(637.0620) SIGN FLAGS PERMANENT TYPE II EACH	(637.0202) SIGNS REFLECTIVE TYPE II (SF)	SIGN MESSAGE	REMARKS
	5-1	532+00	RT	R2-1	48" X 60"	--	--	2	--	--	--	--	--	--	20.00	SPEED LIMIT 55	
	5-2	534+20	MEDIAN	D10-5	21" X 60"	--	--	1	--	--	--	--	--	--	8.75	MILE MARKER	
	5-3	534+20	MEDIAN	D10-5	21" X 60"	--	--	1	--	--	--	--	--	--	8.75	MILE MARKER	
	5-4	534+50	MEDIAN	R3-4B	36" X 48"	--	--	1	--	--	--	--	--	--	12.00	NO U-TURN	
	5-5	535+50	MEDIAN	R3-4B	36" X 48"	--	--	1	--	--	--	--	--	--	12.00	NO U-TURN	
	5-6	549+50	LT	W9-2R	48" X 48"	--	2	--	--	--	--	--	--	--	16.00	LANE ENDS MERGE RIGHT	
	5-7	554+00	RT	W4-2L	48" X 48"	--	2	--	--	--	--	--	--	--	16.00	LEFT LANE ENDS SYMBOL	
	5-8	35+00 'GI'	END OF ROADWAY	W5-56	18" x 18"	--	1	--	--	--	--	--	--	--	2.25	REFLECTIVE DOTS ON SQUARE	
	5-9	35+00 'GI'	END OF ROADWAY	W5-56	18" x 18"	--	1	--	--	--	--	--	--	--	2.25	REFLECTIVE DOTS ON SQUARE	
	5-10	35+00 'GI'	END OF ROADWAY	W5-56	18" x 18"	--	1	--	--	--	--	--	--	--	2.25	REFLECTIVE DOTS ON SQUARE	
	5-11	40+10 'GI'	LT	W14-1	30" X 30"	--	1	--	--	--	--	--	--	--	6.25	DEAD END	
	5-12	30+50 'GI'	END OF ROADWAY	W5-56	18" x 18"	--	1	--	--	--	--	--	--	--	2.25	REFLECTIVE DOTS ON SQUARE	
	5-13	30+50 'GI'	END OF ROADWAY	W5-56	18" x 18"	--	1	--	--	--	--	--	--	--	2.25	REFLECTIVE DOTS ON SQUARE	
	5-14	30+50 'GI'	END OF ROADWAY	W5-56	18" x 18"	--	1	--	--	--	--	--	--	--	2.25	REFLECTIVE DOTS ON SQUARE	
	5-15	20+00 'GI'	RT	W14-1	30" X 30"	--	1	--	--	--	--	--	--	--	6.25	DEAD END	
	6-1	560+00	RT	W6-2	36" X 36"	--	1	--	--	--	--	--	--	--	9.00	DIVIDED TRAFFIC SYMBOL	
	6-2	560+00	RT	R5-1A	36" X 24"	--	--	--	--	--	--	--	--	--	6.00	WRONG WAY	ON SAME POST AS SIGN 6-1
	6-4	560+60	MEDIAN	D10-5	21" X 60"	--	1	--	--	--	--	--	--	--	8.75	MILE MARKER	
	6-5	560+60	MEDIAN	D10-5	21" X 60"	--	--	--	--	--	--	--	--	--	8.75	MILE MARKER	ON SAME POST AS SIGN 6-4
	6-6	562+00	RT	R5-1	36" X 36"	--	1	--	--	--	--	--	--	--	9.00	DO NOT ENTER	
	6-7	562+00	MEDIAN	R4-7	36" X 48"	--	1	--	--	--	--	--	--	--	12.00	KEEP RIGHT SYMBOL	
		562+00	MEDIAN	W5-54	18" X 18"	--	--	--	--	--	--	--	--	--	2.25	REFLECTIVE DOTS ON SQUARE	MOUNT BELOW R4-7
	6-8	571+00	RT	W6-3	36" X 36"	--	1	--	--	--	--	--	--	--	9.00	TWO WAY TRAFFIC SYMBOL	
	6-9	574+00	LT	W6-1	36" X 36"	--	1	--	--	--	--	--	--	--	9.00	DIVIDED TRAFFIC SYMBOL	
	7-1	42+00 'CV'	LT	W1-7	48" X 24"	2	--	--	--	--	--	--	--	--	8.00	TWO DIRECTION LARGE ARROW	
	7-2	30+50 'MU'	LT	R1-1	30" X 30"	--	1	--	--	--	--	--	--	--	5.18	STOP	
	7-3	30+50 'MU'	LT	J13-1	24" X 45"	--	1	--	--	--	--	--	--	--	7.50	ROUTE ASSEMBLY	
	7-4	35+50 'MU'	LT	W3-1	36" X 36"	--	1	--	--	--	--	--	--	--	9.00	STOP AHEAD	
	7-5	37+00 'MU'	LT	J1-1	24" X 39"	--	1	--	--	--	--	--	--	--	6.50	JUNCTION ASSEMBLY	
	7-6	47+00 'CV'	LT	R1-1	30" X 30"	--	1	--	--	--	--	--	--	--	5.18	STOP	
	7-7	50+50 'CV'	RT	W14-3	48" X 36"	--	1	--	--	--	--	--	--	--	6.00	NO PASSING ZONE	LOCATION TBD WITH LOCATING NO-PASSING ZONES ITEM
	7-8	54+00 'CV'	RT	R2-1	24" X 30"	--	1	--	--	--	--	--	--	--	5.00	SPEED LIMIT 45	
	7-9	59+00 'CV'	LT	R2-1	24" X 30"	--	1	--	--	--	--	--	--	--	5.00	SPEED LIMIT 35	
	8-1	79+00 'CV'	RT	R2-1	24" X 30"	--	1	--	--	--	--	--	--	--	5.00	SPEED LIMIT 45	
	8-2	83+50 'CV'	LT	W14-3	48" X 36"	--	1	--	--	--	--	--	--	--	6.00	NO PASSING ZONE	LOCATION TBD WITH LOCATING NO-PASSING ZONES ITEM
	8-3	84+00 'CV'	LT	R2-1	24" X 30"	--	1	--	--	--	--	--	--	--	5.00	SPEED LIMIT 45	
	8-4	91+50 'CV'	RT	W1-7	48" X 24"	2	-	--	--	--	--	--	--	--	8.00	TWO DIRECTION LARGE ARROW	
	8-5	49+50 'GI'	RT	R1-1	30" X 30"	--	1	--	--	--	--	--	--	--	5.18	STOP	
	8-6	49+50 'GI'	RT	J13-1	24" X 45"	--	1	--	--	--	--	--	--	--	7.50	ROUTE ASSEMBLY	
	8-7	42+50 'GI'	RT	J1-1	24" X 39"	--	1	--	--	--	--	--	--	--	6.50	JUNCTION ASSEMBLY	
	8-8	44+50 'GI'	RT	W3-1	36" X 36"	--	1	--	--	--	--	--	--	--	9.00	STOP AHEAD	
	8-9	98+00 'CV'	RT	R2-1	24" X 30"	--	1	--	--	--	--	--	--	--	5.00	SPEED LIMIT 45	
	9-1	13+14 CV	RT	W2-6	30" X 30"	--	1	--	--	--	--	--	--	--	6.25	CIRCULAR INTERSECTION SIGN	
		13+14 CV	RT	W13-1	18" X 18"	--	--	--	--	--	--	--	--	--	2.25	ADVISORY SPEED 15 (YELLOW BACK)	MOUNT BELOW W2-6
	9-2	16+30 CV	RT	D1-62	144" X 84"	--	--	--	1	--	--	--	--	--	84	DESTINATION SIGN	
	9-3	17+29 CV	RT	W3-2	36" X 36"	--	1	--	--	--	--	--	--	--	9	YIELD AHEAD	
	9-4	18+90 CV	RT	R3-8CC	36" X 30"	1	--	--	--	--	--	--	--	--	7.5	LEFT, AHEAD/AHEAD, RIGHT ARROWS (ROUNDABOUT)	
	9-5	11+75 CV	RT	J1-1	24" X 39"	--	1	--	--	--	--	--	--	--	6.5	JUNCTION ASSEMBLY	
	9-6	20+51 CV	LT	R1-2	36" X 31"	--	--	1	--	--	--	--	--	--	3.875	YIELD	
		20+51 CV	LT	R6-2R	24" X 30"	--	--	--	--	--	--	--	--	--	5	ONE WAY RIGHT ARROW	MOUNT BELOW R1-2
	9-7	20+95 CV	RT	R1-2	36" X 31"	--	1	--	--	--	--	--	--	2	3.875	YIELD	TWO 18" X 18" ORANGE FLAGS REQ'D
		20+95 CV	RT	R15-4	24" X 15"	--	--	--	--	--	--	--	--	--	2.5	TO TRAFFIC FROM LEFT	MOUNT BELOW R1-2
	9-8	16+75 CV	LT	M1-5A	24" X 24"	--	1	--	--	--	--	--	--	--	4	COUNTY MARKER	
	9-9	239+24 NT	ISL	D1-3	84" X 42"	--	2	--	--	--	--	--	--	--	24.5	DESTINATION SIGN	
	9-10	238+38 NT	ISL	R4-7	24" X 30"	1	--	--	--	--	--	--	--	--	5	KEEP RIGHT (SYMBOL)	

CONTINUED

SIGNS TYPE II REFLECTIVE

CATEGORY	SIGN NUMBER	STATION	LOCATION	SIGN CODE	SIZE (IN)	(634.0614) POSTS WOOD 4"x6"x14' (EACH)	(634.0616) POSTS WOOD 4"x6"x16' (EACH)	(634.0618) POSTS WOOD 4"x6"x18' (EACH)	(634.0620) POSTS WOOD 4"x6"x20' (EACH)	(634.0622) POSTS WOOD 4"x6"x22' (EACH)	(634.0811) POSTS TUBULAR STEEL 2X2-INCH X 11 FT (EACH)	(634.0812) POSTS TUBULAR STEEL 2X2-INCH X 12 FT (EACH)	(634.0814) POSTS TUBULAR STEEL 2X2-INCH X 14FT (EACH)	(637.0620) SIGN FLAGS PERMANENT TYPE II EACH	(637.0202) SIGNS REFLECTIVE TYPE II (SF)	SIGN MESSAGE	REMARKS
	9-11	239+12 NT	ISL	R1-2	36" X 31"	--	--	1	--	--	--	--	--	2	3.875	YIELD	TWO 18" X 18" ORANGE FLAGS REQ'D
		239+12 NT	ISL	R6-2R	24" X 30"	--	--	--	--	--	--	--	--	--	5	ONE WAY RIGHT ARROW	MOUNT BELOW R1-2
	9-12	23+50 CV	RT	R3-8AAA	54" X 30"	--	2	--	--	--	--	--	--	--	11.25	THROUGH ONLY, THROUGH RIGHT, RIGHT ONLY	
	9-13	22+25 CV	RT	R1-2	36" X 31"	--	1	--	--	--	--	--	--	2	3.875	YIELD	TWO 18" X 18" ORANGE FLAGS REQ'D
		22+25 CV	RT	R15-4	24" X 15"	--	--	--	--	--	--	--	--	--	2.5	TO TRAFFIC FROM LEFT	MOUNT BELOW R1-2
	9-14	22+69 CV	MED	D1-2	66" X 36"	--	2	--	--	--	--	--	--	--	16.5	DESTINATION SIGN	
	9-15	23+50 CV	MED	R3-8AAA	54" X 30"	2	--	--	--	--	--	--	--	--	11.25	THROUGH ONLY, THROUGH RIGHT, RIGHT ONLY	
	9-18	232+80 NT	RT	W2-6	30" X 30"	--	1	--	--	--	--	--	--	--	6.25	CIRCULAR INTERSECTION SIGN	
		232+80 NT	RT	W13-1	18" X 18"	--	--	--	--	--	--	--	--	--	2.25	ADVISORY SPEED 15 (YELLOW BACK)	MOUNT BELOW W2-6
	9-20	22+82 CV	MED	R1-2	36" X 31"	--	--	1	--	--	--	--	--	2	3.875	YIELD	TWO 18" X 18" ORANGE FLAGS REQ'D
		22+82 CV	MED	R6-2R	24" X 30"	--	--	--	--	--	--	--	--	--	5	ONE WAY RIGHT ARROW	MOUNT BELOW R1-2
	9-21	22+93 CV	LT	R1-2	36" X 31"	--	1	--	--	--	--	--	--	2	3.875	YIELD	TWO 18" X 18" ORANGE FLAGS REQ'D
		22+93 CV	LT	R15-4	24" X 15"	--	--	--	--	--	--	--	--	--	2.5	TO TRAFFIC FROM LEFT	MOUNT BELOW R1-2
	9-22	234+80 NT	RT	D1-62	108" X 60"	--	--	1	1	--	--	--	--	--	45	DESTINATION SIGN	
	9-23	22+32 CV	ISL	R6-1R	36" X 12"	2	--	--	--	--	--	--	--	--	3	ONE WAY RIGHT ARROW ROUNDABOUT	
		22+32 CV	ISL	R6-4B	60" X 24"	--	--	--	--	--	--	--	--	--	10	ROUNDABOUT CHEVRON	MOUNT BELOW R6-1R
	9-24	20+97 CV	ISL	R6-1R	36" X 12"	2	--	--	--	--	--	--	--	--	3	ONE WAY RIGHT ARROW ROUNDABOUT	
		20+97 CV	ISL	R6-4B	60" X 24"	--	--	--	--	--	--	--	--	--	10	ROUNDABOUT CHEVRON	MOUNT BELOW R6-1R
	9-25	21+01 CV	ISL	R6-1R	36" X 12"	2	--	--	--	--	--	--	--	--	3	ONE WAY RIGHT ARROW ROUNDABOUT	
		21+01 CV	ISL	R6-4B	60" X 24"	--	--	--	--	--	--	--	--	--	10	ROUNDABOUT CHEVRON	MOUNT BELOW R6-1R
	9-26	22+02 CV	ISL	R6-1R	36" X 12"	2	--	--	--	--	--	--	--	--	3	ONE WAY RIGHT ARROW ROUNDABOUT	
		22+02 CV	ISL	R6-4B	60" X 24"	--	--	--	--	--	--	--	--	--	10	ROUNDABOUT CHEVRON	MOUNT BELOW R6-1R
	9-27	246+56 NT	ISL	D1-2	60" X 36"	--	2	--	--	--	--	--	--	--	15	DESTINATION SIGN	
	9-28	247+57 NT	ISL	R4-7	24" X 30"	1	--	--	--	--	--	--	--	--	5	KEEP RIGHT (SYMBOL)	
	9-29	247+87 NT	LT	W3-2	36" X 36"	--	1	--	--	--	--	--	--	--	9	YIELD AHEAD	
	9-30	251+50 NT	LT	W2-6	30" X 30"	--	1	--	--	--	--	--	--	--	6.25	CIRCULAR INTERSECTION SIGN	
		251+50 NT	LT	W13-1	18" X 18"	--	--	--	--	--	--	--	--	--	2.25	ADVISORY SPEED 15 (YELLOW BACK)	MOUNT BELOW W2-6
	9-31	246+54 NT	LT	R1-2	36" X 31"	--	--	1	--	--	--	--	--	2	3.875	YIELD	TWO 18" X 18" ORANGE FLAGS REQ'D
		246+54 NT	LT	R6-2R	24" X 30"	--	--	--	--	--	--	--	--	--	5	ONE WAY RIGHT ARROW	MOUNT BELOW R1-2
	9-32	249+50 NT	LT	D1-62	108" X 72"	--	--	--	2	--	--	--	--	--	54	DESTINATION SIGN	
	9-33	246+58 NT	LT	R1-2	36" X 31"	--	1	--	--	--	--	--	--	--	3.875	YIELD	
		246+58 NT	LT	R15-4	24" X 15"	--	--	--	--	--	--	--	--	--	2.5	TO TRAFFIC FROM LEFT	MOUNT BELOW R1-2
	9-34	20+41 CV	LT	D1-2	84" X 42"	--	2	--	--	--	--	--	--	--	24.5	DESTINATION SIGN	
	9-35	19+54 CV	LT	W4-2R	36" X 36"	--	1	--	--	--	--	--	--	--	9	LANE ENDS	
	9-36	19+54 CV	ISL	W4-2R	36" X 36"	--	1	--	--	--	--	--	--	--	9	LANE ENDS	
	9-37	18+26 CV	LT	W6-2	36" X 36"	--	1	--	--	--	--	--	--	--	9	DIVIDED HIGHWAY	
	9-38	236+30 NT	RT	W3-2	36" X 36"	--	--	--	--	--	--	--	--	--	9	YIELD AHEAD	MOUNT ON LIGHT POLE
	9-39	14+37 CV	LT	R2-1	24" X 30"	1	--	--	--	--	--	--	--	--	5	SPEED LIMIT 35 MPH	
	9-40	18+33 CV	LT	R4-7	24" X 30"	1	--	--	--	--	--	--	--	--	5	KEEP RIGHT (SYMBOL)	
	9-41	18+05 CV	RT	J2-1 MOD	24" X 60"	--	--	1	--	--	--	--	--	--	10	ROUTE TURN ASSEMBLY (1 HEAD PANEL)	
	10-1	24+79 CV	ISL	W12-1D	24" X 24"	1	--	--	--	--	--	--	--	--	4	DOUBLE DOWN ARROW	
	10-2	25+57 CV	MED	R1-2	36" X 31"	--	--	--	--	--	--	--	1	2	3.875	YIELD	TWO 18" X 18" ORANGE FLAGS REQ'D (REMOVABLE POST)
		25+57 CV	MED	R6-2R	24" X 30"	--	--	--	--	--	--	--	--	--	5	ONE WAY RIGHT ARROW	MOUNT BELOW R1-2
	10-3	26+01 CV	ISL	R1-2	36" X 31"	--	--	--	--	--	--	--	--	2	3.875	YIELD	MOUNT ON LIGHT POLE
		26+01 CV	ISL	R15-4	24" X 15"	--	--	--	--	--	--	--	--	--	2.5	TO TRAFFIC FROM LEFT	MOUNT BELOW R1-2
	10-4	26+49 CV	RT	D1-1	42" X 30"	--	--	--	--	--	1	--	--	--	8.75	DESTINATION SIGN	(REMOVABLE POST)
	10-5	26+09 CV	ISL	R6-1R	36" X 12"	--	--	--	--	--	2	--	--	--	3	ONE WAY RIGHT ARROW ROUNDABOUT	(REMOVABLE POST)
		26+09 CV	ISL	R6-4B	60" X 24"	--	--	--	--	--	--	--	--	--	10	ROUNDABOUT CHEVRON	MOUNT BELOW R6-1R
	10-6	25+91 CV	ISL	R6-1R	36" X 12"	--	--	--	--	--	2	--	--	--	3	ONE WAY RIGHT ARROW ROUNDABOUT	(REMOVABLE POST)
		25+91 CV	ISL	R6-4B	60" X 24"	--	--	--	--	--	--	--	--	--	10	ROUNDABOUT CHEVRON	MOUNT BELOW R6-1R
	10-7	27+19 CV	ISL	R6-1R	36" X 12"	--	--	--	--	--	2	--	--	--	3	ONE WAY RIGHT ARROW ROUNDABOUT	(REMOVABLE POST)
		27+19 CV	ISL	R6-4B	60" X 24"	--	--	--	--	--	--	--	--	--	10	ROUNDABOUT CHEVRON	MOUNT BELOW R6-1R
	10-8	27+56 CV	ISL	D1-1	42" X 30"	1	--	--	--	--	--	--	--	--	8.75	DESTINATION SIGN	
	10-10	30+50 CV	MED	D1-1	42" X 30"	1	--	--	--	--	--	--	--	--	8.75	DESTINATION SIGN	
	10-11	30+63 CV	MED	R1-2	36" X 31"	--	--	1	--	--	--	--	--	2	3.875	YIELD	TWO 18" X 18" ORANGE FLAGS REQ'D

CONTINUED

SIGNS TYPE II REFLECTIVE

CATEGORY	SIGN NUMBER	STATION	LOCATION	SIGN CODE	SIZE (IN)	(634.0614) POSTS WOOD 4"x6"x14' (EACH)	(634.0616) POSTS WOOD 4"x6"x16' (EACH)	(634.0618) POSTS WOOD 4"x6"x18' (EACH)	(634.0620) POSTS WOOD 4"x6"x20' (EACH)	(634.0622) POSTS WOOD 4"x6"x22' (EACH)	(634.0811) POSTS TUBULAR STEEL 2X2-INCH X 11 FT (EACH)	(634.0812) POSTS TUBULAR STEEL 2X2-INCH X 12 FT (EACH)	(634.0814) POSTS TUBULAR STEEL 2X2-INCH X 14FT (EACH)	(637.0620) SIGN FLAGS PERMANENT TYPE II EACH	(637.0202) SIGNS REFLECTIVE TYPE II (SF)	SIGN MESSAGE	REMARKS
		30+63 CV	MED	R6-2R	24" X 30"	--	--	--	--	--	--	--	--	--	5	ONE WAY RIGHT ARROW	MOUNT BELOW R1-2
	10-12	31+04 CV	RT	R1-2	36" X 31"	--	--	--	--	--	--	--	1	2	3.875	YIELD	TWO 18" X 18" ORANGE FLAGS REQ'D (REMOVABLE POST)
		31+04 CV	RT	R15-4	24" X 15"	--	--	--	--	--	--	--	--	--	2.5	TO TRAFFIC FROM LEFT	MOUNT BELOW R1-2
	10-13	32+33 CV	RT	R5-1	30" X 30"	--	--	--	--	--	1	--	--	--	6.25	DO NOT ENTER	(REMOVABLE POST)
	10-14	496+46 NX	LT	R5-1A	36" X 24"	1	--	--	--	--	--	--	--	--	6	WRONG WAY	
	10-15	496+46 NX	RT	R5-1A	36" X 24"	1	--	--	--	--	--	--	--	--	6	WRONG WAY	
	10-16	494+45 NX	RT	R3-8FF	42" X 30"	--	1	--	--	--	--	--	--	--	8.75	LEFT, LEFT/AHEAD, RIGHT ARROWS (ROUNDABOUT)	
	10-17	489+70 NX	RT	W2-6	30" X 30"	--	--	1	--	--	--	--	--	--	6.25	CIRCULAR INTERSECTION SIGN	
		489+70 NX	RT	W13-1	18" X 18"	--	--	--	--	--	--	--	--	--	2.25	ADVISORY SPEED 15 (YELLOW BACK)	MOUNT BELOW W2-6
	10-18	491+70 NX	RT	D1-60	78" X 30"	--	1	1	--	--	--	--	--	--	16.25	DESTINATION SIGN	
	10-19	493+25 NX	RT	W3-2	36" X 36"	--	1	2	--	--	--	--	--	--	9	YIELD AHEAD	
	10-20	25+17 CV	LT	R3-8CC	36" X 30"	1	--	--	--	--	--	--	--	--	7.5	LEFT, AHEAD/AHEAD, RIGHT ARROWS (ROUNDABOUT)	
	10-21	497+95 NX	LT	R1-2	36" X 31"	--	--	--	--	--	--	--	1	2	3.875	YIELD	TWO 18" X 18" ORANGE FLAGS REQ'D (REMOVABLE POST)
		497+95 NX	LT	R6-2R	24" X 30"	--	--	--	--	--	--	--	--	--	5	ONE WAY RIGHT ARROW	MOUNT BELOW R1-2
	10-22	498+36 NX	RT	R1-2	36" X 31"	--	--	--	--	--	--	--	1	2	3.875	YIELD	TWO 18" X 18" ORANGE FLAGS REQ'D (REMOVABLE POST)
		498+36 NX	RT	R15-4	24" X 15"	--	--	--	--	--	--	--	--	--	2.5	TO TRAFFIC FROM LEFT	MOUNT BELOW R1-2
	10-23	32+61 CV	MED	D1-2	66" X 42"	--	--	--	--	--	--	3	--	--	19.25	DESTINATION SIGN	(REMOVABLE POST)
	10-24	25+05 CV	LT	R3-8CC	36" X 30"	1	--	--	--	--	--	--	--	--	7.5	LEFT, AHEAD/AHEAD, RIGHT ARROWS (ROUNDABOUT)	
	10-25	35+07 CV	RT	W6-2	36" X 36"	--	--	1	--	--	--	--	--	--	9	DIVIDED HIGHWAY	
	10-26	36+74 CV	LT	W3-2	36" X 36"	--	--	1	--	--	--	--	--	--	9	YIELD AHEAD	
	10-27	25+73 CV	LT	R3-1	24" X 24"	--	--	--	--	--	1	--	--	--	4	NO RIGHT TURN	(REMOVABLE POST)
	10-28	32+79 CV	LT	R1-2	36" X 31"	--	--	--	--	--	--	--	1	2	3.875	YIELD	TWO 18" X 18" ORANGE FLAGS REQ'D (REMOVABLE POST)
		32+79 CV	LT	R6-2R	24" X 30"	--	--	--	--	--	--	--	--	--	5	ONE WAY RIGHT ARROW	MOUNT BELOW R1-2
	10-29	32+81 CV	LT	R1-2	36" X 31"	--	--	--	--	--	--	--	1	2	3.875	YIELD	TWO 18" X 18" ORANGE FLAGS REQ'D (REMOVABLE POST)
		32+81 CV	LT	R15-4	24" X 15"	--	--	--	--	--	--	--	--	--	2.5	TO TRAFFIC FROM LEFT	MOUNT BELOW R1-2
	10-30	32+18 CV	ISL	R6-1R	36" X 12"	--	--	--	--	--	2	--	--	--	3	ONE WAY RIGHT ARROW ROUNDABOUT	(REMOVABLE POST)
		32+18 CV	ISL	R6-4B	60" X 24"	--	--	--	--	--	--	--	--	--	10	ROUNDABOUT CHEVRON	MOUNT BELOW R6-1R
	10-31	31+88 CV	ISL	R6-1R	36" X 12"	--	--	--	--	--	2	--	--	--	3	ONE WAY RIGHT ARROW ROUNDABOUT	(REMOVABLE POST)
		31+88 CV	ISL	R6-4B	60" X 24"	--	--	--	--	--	--	--	--	--	10	ROUNDABOUT CHEVRON	MOUNT BELOW R6-1R
	10-32	31+11 CV	ISL	R6-1R	36" X 12"	--	--	--	--	--	2	--	--	--	3	ONE WAY RIGHT ARROW ROUNDABOUT	(REMOVABLE POST)
		31+11 CV	ISL	R6-4B	60" X 24"	--	--	--	--	--	--	--	--	--	10	ROUNDABOUT CHEVRON	MOUNT BELOW R6-1R
	10-33	27+99 CV	MED	R3-8GG	36" X 30"	1	--	--	--	--	--	--	--	--	7.5	LEFT, AHEAD/AHEAD ONLY (ROUNDABOUT)	
	10-34	500+03 NN	LT	D1-1	42" X 30"	--	--	--	--	--	1	--	--	--	8.75	DESTINATION SIGN	(REMOVABLE POST)
	10-37	27+70 CV	MED	R1-2	36" X 31"	--	--	1	--	--	--	--	--	2	3.875	YIELD	TWO 18" X 18" ORANGE FLAGS REQ'D
		27+70 CV	MED	R6-2R	24" X 30"	--	--	--	--	--	--	--	--	--	5	ONE WAY RIGHT ARROW	MOUNT BELOW R1-2
	10-38	27+75 CV	LT	R1-2	36" X 31"	--	--	--	--	--	--	--	1	2	3.875	YIELD	TWO 18" X 18" ORANGE FLAGS REQ'D (REMOVABLE POST)
		27+75 CV	LT	R15-4	24" X 15"	--	--	--	--	--	--	--	--	--	2.5	TO TRAFFIC FROM LEFT	MOUNT BELOW R1-2
	10-39	25+50 CV	LT	R5-1	30" X 30"	--	--	--	--	--	1	--	--	--	6.25	DO NOT ENTER	(REMOVABLE POST)
	10-40	504+40 SX	LT	W3-2	36" X 36"	--	--	1	--	--	--	--	--	--	9	YIELD AHEAD	
	10-41	507+90 SX	LT	W2-6	30" X 30"	--	--	1	--	--	--	--	--	--	6.25	CIRCULAR INTERSECTION SIGN	
		507+90 SX	LT	W13-1	18" X 18"	--	--	--	--	--	--	--	--	--	2.25	ADVISORY SPEED 15 (YELLOW BACK)	MOUNT BELOW W2-6
	10-42	502+32 SX	RT	R5-1A	36" X 24"	--	1	--	--	--	--	--	--	--	6	WRONG WAY	
	10-43	27+99 CV	RT	R3-8GG	36" X 30"	1	--	--	--	--	--	--	--	--	7.5	LEFT, AHEAD/AHEAD ONLY (ROUNDABOUT)	
	10-44	500+62 SX	RT	R1-2	36" X 31"	--	--	--	--	--	--	--	1	2	3.875	YIELD	TWO 18" X 18" ORANGE FLAGS REQ'D (REMOVABLE POST)
		500+62 SX	RT	R6-2R	24" X 30"	--	--	--	--	--	--	--	--	--	5	ONE WAY RIGHT ARROW	MOUNT BELOW R1-2
	10-45	500+28 SX	LT	R1-2	36" X 31"	--	--	--	--	--	--	--	1	2	3.875	YIELD	TWO 18" X 18" ORANGE FLAGS REQ'D (REMOVABLE POST)
		500+28 SX	LT	R15-4	24" X 15"	--	--	--	--	--	--	--	--	--	2.5	TO TRAFFIC FROM LEFT	MOUNT BELOW R1-2
	10-46	505+90 SX	LT	D1-60	78" X 30"	--	1	1	--	--	--	--	--	--	16.25	DESTINATION SIGN	
	10-47	25+41 SX	MED	D1-2	66" X 42"	--	--	--	--	--	--	3	--	--	19.25	DESTINATION SIGN	(REMOVABLE POST)
	10-51	35+33 CV	ISL	R4-7	24" X 30"	1	--	--	--	--	--	--	--	--	5	KEEP RIGHT (SYMBOL)	
	10-52	502+30 SX	LT	R5-1A	36" X 24"	--	1	--	--	--	--	--	--	--	6	WRONG WAY	
	10-53	30+32 CV	MED	R3-8GG	36" X 30"	1	--	--	--	--	--	--	--	--	7.5	LEFT, AHEAD/AHEAD ONLY (ROUNDABOUT)	
	10-54	31+57 CV	RT	R3-1	24" X 24"	--	--	--	--	--	--	--	--	--	4	NO RIGHT TURN	MOUNT ON LIGHT POLE
	10-55	34+73 CV	LT	R3-8G	36" X 30"	1	--	--	--	--	--	--	--	--	7.5	AHEAD ONLY/AHEAD,RIGHT	
	10-56	34+71 CV	MED	R3-8G	36" X 30"	--	--	--	--	--	--	--	--	--	7.5	AHEAD ONLY/AHEAD,RIGHT	MOUNT ON LIGHT POLE
	10-57	30+16 CV	LT	R3-8GG	36" X 30"	1	--	--	--	--	--	--	--	--	7.5	LEFT, AHEAD/AHEAD ONLY (ROUNDABOUT)	
	10-58	494+45 NX	LT	R3-8FF	42" X 30"	--	1	--	--	--	--	--	--	--	8.75	LEFT, LEFT/AHEAD, RIGHT ARROWS (ROUNDABOUT)	
	11-1	38+34 CV	LT	D1-62	96" X 72"	--	--	--	1	1	--	--	--	--	48	DESTINATION SIGN	
	11-2	40+34 CV	LT	W2-6	30" X 30"	--	--	1	--	--	--	--	--	--	6.25	CIRCULAR INTERSECTION SIGN	
		40+34 CV	LT	W13-1	18" X 18"	--	--	--	--	--	--	--	--	--	2.25	ADVISORY SPEED 15 (YELLOW BACK)	MOUNT BELOW W2-6P
	11-3	42+00 CV	LT	J1-1	24" X 39"	--	--	1	--	--	--	--	--	--	6.5	JUNCTION ASSEMBLY	
	11-4	37+00 CV	RT	M1-5A	24" X 24"	--	1	--	--	--	--	--	--	--	4	COUNTY MARKER	
		PROJECT ID 6020-02-72 TOTAL:				63	69	39	17	1	17	6	9	36	1,851		

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REMOVING SIGNS AND SIGN SUPPORTS

CATEGORY	SIGN NUMBER	STATION	LOCATION	SIGN MESSAGE	(638.2602) REMOVING SIGNS TYPE II (EACH)	(638.3000) REMOVING SMALL SIGN SUPPORTS (EACH)	REMARKS
0010	1-6	170+00 'NT'	MEDIAN	KEEP RIGHT SYMBOL	1	1	
	1-7	170+00 'NT'	LT	DO NOT ENTER	1	1	
	1-9	171+10 'NT'	LT	WRONG WAY	1	1	
	2-5	181+20 'NT'	MEDIAN	LEFT TURN LANE	1	1	
	2-7	181+50 'NT'	RT	WRONG WAY	1	1	
	2-8	183+80 'NT'	RT	DO NOT ENTER	1	1	
	2-9	183+90 'NT'	MEDIAN	KEEP RIGHT SYMBOL	1	1	
	2-10	26+00 'VI'	RT	STOP	1	1	
	2-11	27+20 'VI'	LT	STOP	1	1	
	2-12	185+10 'NT'	MEDIAN	KEEP RIGHT SYMBOL	1	1	
	2-13	185+10 'NT'	LT	DO NOT ENTER	1	1	
	2-14	186+50 'NT'	LT	WRONG WAY	1	1	
	2-15	187+10 'NT'	MEDIAN	LEFT TURN LANE	1	1	
	2-16	187+20 'NT'	RT	WRONG WAY	1	1	
	2-18	188+70 'NT'	RT	DO NOT ENTER	1	1	
	2-19	188+70 'NT'	MEDIAN	KEEP RIGHT SYMBOL	1	1	
		215+90 'NT'	LT	ADOPT A HIGHWAY	1	1	
		216+50 'NT'	LT	SOUTH 51	1	1	
	3-8	218+80 'NT'	LT	STOP	1	1	
		221+00 'NT'	RT	ADOPT A HIGHWAY	1	1	
		226+00 'NT'	MEDIAN	KEEP RIGHT SYMBOL	1	1	
		226+00 'NT'	RT	DO NOT ENTER	1	1	
		490+00 'SN'	LT	WRONG WAY	1	1	
		490+50 'SN'	RT	JCT V	1	1	
		491+00 'SN'	LT	ALTERNATE I-39	1	1	
		495+50	LT	LEFT TURN LANE	1	1	
		497+00	LT	WRONG WAY	1	1	
		498+00	LT	CTH V/ARROW/DO NOT ENTER	3	1	
		498+50	LT	KEEP RIGHT SYMBOL	1	1	
	9-40				1	1	
	9-41				1	1	
	9-42				1	1	
	9-43				1	1	
	9-44				1	1	
	9-45				1	1	
	10-59				1	---	MOUNTED WITH SIGN 10-58
	10-60				1	1	
	10-61				1	1	
	10-62				1	1	
	10-63				1	1	
	10-64				1	1	
	10-65				1	1	
	10-66				1	1	
	10-67				1	1	
	10-68				1	---	MOUNTED WITH SIGN 10-67

CONTINUED

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REMOVING SIGNS AND SIGN SUPPORTS

CATEGORY	SIGN NUMBER	STATION	LOCATION	SIGN MESSAGE	(638.2602) REMOVING SIGNS TYPE II (EACH)	(638.3000) REMOVING SMALL SIGN SUPPORTS (EACH)	REMARKS
	10-69				1	1	
	10-70				1	1	
	10-71				1	1	
		28+40 "CV"	RT	STOP	1	1	
		28+40 "CV"	RT	SOUTH 51/ARROW	2	1	
		29+95 "CV"	LT	STOP	1	1	
		39+00 "CV"	RT	STOP AHEAD	1	1	
		499+90	LT	KEEP RIGHT SYMBOL	1	1	
		500+00	LT	CTH V/ARROW/DO NOT ENTER	3	1	
		501+40	RT	NORTH 51	1	1	
		501+50	LT	WRONG WAY	1	1	
		501+60	LT	LEFT TURN LANE	1	1	
		502+00	RT	WRONG WAY	1	1	
		503+50	RT	DO NOT ENTER	1	1	
		504+00	RT	KEEP RIGHT SYMBOL	1	1	
		505+00	LT	NO PASSING ZONE/CTH V/ARROW	3	1	
		508+50	RT	DEFOREST POPULATION SIGN	1	1	
		543+50	RT	CTH V/ARROW	2	1	
		549+50	RT	NORTH 51	1	1	
		551+00	RT	CTH V/RIGHT ARROW	2	1	
		553+00	LT	CTH V/LEFT, STRAIGHT ARROW	2	1	
		20+00 "GI"	LT	STOP AHEAD	1	1	
		41+00 "GI"	RT	USH 51 JUNCTION	1	1	
		42+00 "GI"	RT	STOP AHEAD SYMBOL	1	1	
		557+20	RT	ALTERNATE I-39	1	1	
		561+00	LT	CTH V JUNCTION	1	1	
				CATEGORY 0010 TOTAL:	81	69	
				PROJECT ID 6020-02-72 TOTAL:	81	69	

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MOVING SIGNS AND SIGN SUPPORTS

CATEGORY	STATION	LOCATION	SIGN MESSAGE	(638.2102) MOVING SIGNS TYPE II (EACH)	(638.4000) MOVING SMALL SIGN SUPPORTS (EACH)	REMARKS
0010	211+00 'NT'	LT	NO PARKING ANY TIME/ARROW	1	1	
	213+20 'NT'	LT	NO PARKING ANY TIME/ARROW	1	1	
	215+20 'NT'	LT	NO PARKING ANY TIME/ARROW	1	1	
	217+50 'NT'	LT	NO PARKING ANY TIME/ARROW	1	1	
	218+00 'NT'	LT	SCHOOL ZONE/AHEAD/FINES HIGHER	3	1	
	220+00 'NT'	RT	NO PARKING ANY TIME/ARROW	1	1	
	220+60 'NT'	LT	NO PARKING ANY TIME/ARROW	1	1	
	222+70 'NT'	LT	BUSINESS DISTRICT	1	1	
			CATEGORY 0010 TOTAL:	10	8	
			PROJECT ID 6020-02-72 TOTAL:	10	8	

OVERHEAD SIGN SUPPORT

CATEGORY	ROADWAY	LOCATION	STRUCTURE #	641.8100.01 OVERHEAD SIGN SUPPORT LS	641.8100.02 OVERHEAD SIGN SUPPORT LS	641.8100.03 OVERHEAD SIGN SUPPORT LS	641.8100.04 OVERHEAD SIGN SUPPORT LS	REMARKS
0010	CTH CV	28+00 'CV'	S-13-324	1				
	CTH CV	23+50 'CV'	S-13-329		1			
	CTH CV	14+75 'NT' E	S-13-330			1		
	CTH CV	10+00 'NB' A	S-13-331				1	
			PROJECT ID 6020-02-72 TOTAL:	1	1	1	1	

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TRAFFIC CONTROL ITEMS

CATEGORY	STAGE	LENGTH CALENDAR DAYS	(643.0300) TRAFFIC CONTROL DRUMS (DAY)	(643.0420) TRAFFIC CONTROL BARRICADES TYPE III (DAY)	(643.0500) TRAFFIC CONTROL FLEXIBLE TUBE MARKER POST (EACH)	(643.0600) TRAFFIC CONTROL FLEXIBLE TUBE MARKER BASES (EACH)	(643.0705) TRAFFIC CONTROL WARNING LIGHTS TYPE A (DAY)	(643.0715) TRAFFIC CONTROL WARNING LIGHTS TYPE C (DAY)	(643.0800) TRAFFIC CONTROL ARROW BOARDS (DAY)	(643.0900) TRAFFIC CONTROL SIGNS (DAY)	(643.1050) TRAFFIC CONTROL SIGNS PORTABLE CHANGEABLE MESSAGE (DAY)	(633.1100) DELINEATORS TEMPORARY (EACH)	REMARKS
0010	PREWARNING *	7	315	--	--	--	--	--	--	--	63	--	
	STAGE 1A	45	5310	765	--	--	1080	1980	90	2520	--	27	
	STAGE 1B	5	670	130	--	--	110	220	10	275	20	27	
	STAGE 1C	128	12288	3968	--	--	3584	5632	256	6784	--	27	
	STAGE 2	47	7520	1598	39	39	1316	2068	94	3055	--	27	
	STAGE 2 TIE IN	5	800	210	39	39	180	220	10	365	--	27	
	STAGE 3A	138	27462	8142	39	39	6072	6072	276	10074	552	27	
	STAGE 3B	116	32132	3828	--	--	2784	3248	464	5800	--	27	
	STAGE 3B TIE IN	5	1385	205	--	--	160	140	20	280	5	27	
	STAGE 4	81	23328	2916	--	--	2430	2268	324	3807	--	--	
	STAGE 5	40	2720	520	--	--	480	0	0	880	--	--	
PROJECT ID 6020-02-72 TOTAL:			113930	22282	117	117	18196	21848	1544	33840	640	216	

* PREWARNING IS FOR THE ENTIRE PROJECT AND IS NOT BROKEN OUT BY STAGES

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TRAFFIC CONTROL DETOUR

CATEGORY	PROJECT	LOCATION	STAGE	(643.2000) TRAFFIC CONTROL DETOUR (PROJECT) (EACH)	(643.3000) TRAFFIC CONTROL DETOUR SIGNS (DAYS)	(643.1000) TRAFFIC CONTROL SIGNS FIXED MESSAGE (SF)	REMARKS
0010	6020-02-72	CTH V	1B	1	935	--	
	6020-02-72	CTH V	3A - 4	1	21692	72	
PROJECT ID 6020-02-72 TOTAL:				2	22627	72	

PAVEMENT MARKING

CATEGORY	STATION	STATION	LOCATION	* (646.0106) EPOXY 4-INCH YELLOW (LF)	* (646.0106) EPOXY 4-INCH WHITE (LF)	(646.0126) EPOXY 8-INCH WHITE (LF)	(646.0600) REMOVING PAVEMENT MARKING (LF)	(646.0841.S) GROOVED WET REFLECTIVE CONTRAST TAPE 4-INCH WHITE (LF)	* (646.0883.S) GROOVED WET REFLECTIVE CONTRAST TAPE 8-INCH WHITE (LF)	* (647.0456) CURB EPOXY YELLOW (LF)	(647.0566) STOP LINE EPOXY 18-INCH WHITE (LF)	* (647.0606) ISLAND NOSE EPOXY YELLOW (EACH)	(647.0736) DIAGONAL EPOXY 18-INCH (LF)	(647.0746) DIAGONAL EPOXY 24-INCH (LF)	(647.0766) CROSSWALK EPOXY 6-INCH (LF)	(647.0856) CONCRETE CORRUGATED MEDIAN EPOXY (SF)	(648.0100) LOCATING NO-PASSING ZONES (MI)	(SPV.0090.02) REMOVING PAVEMENT MARKINGS WATER BLASTING (LF)	REMARKS
0010	111+00 'TR1'	147+00 'TR1'	USH 51 TEMPORARY ROAD	6,650	6,700	675	-	-	-	-	-	-	-	-	-	-	-	-	
	47+64 'TR3'	51+10 'TR3'	CTH V TEMPORARY INTERSECTION	520	430	-	-	-	-	-	26	-	-	-	-	-	-	-	
			STAGE 1 TOTAL:	7,170	7,130	675	0	0	0	0	26	0	0	0	0	0	0	0	
	48+60 'TR3'	51+00 'TR3'	CTH V TEMPORARY INTERSECTION	-	-	-	960	-	-	-	-	-	-	-	-	-	-	-	
	522+00	551+50	SOUTHBOUND USH 51	-	2,950	-	-	-	-	-	-	-	-	-	-	-	-	-	
	37+34.6 'CV'	42+50 'CV'	CTH V	1,030	940	200	-	-	-	-	-	-	-	-	-	-	-	-	
	30+00 'MU'	37+20 'MU'	MUELLER RD	-	-	-	-	-	-	-	32	-	-	-	-	-	-	-	
			STAGE 2 TOTAL:	1,030	3,890	200	960	0	0	0	32	0	0	0	0	0	0	0	
	415+00	569+00	NORTHBOUND USH 51	-	13,650	-	-	305	1,070	-	-	-	-	-	-	-	-	-	
	472+78 'NX'	495+77 'NX'	RAMP 'NX' NORTHBOUND EXIT RAMP	1,510	2,300	-	-	35	325	-	-	-	-	125	-	-	-	-	
	500+64 'NN'	525+43 'NN'	RAMP 'NN' NORTHBOUND ON RAMP	1,000	2,480	-	-	-	735	-	-	-	-	-	-	-	-	-	
			STAGE 3A TOTAL:	2,510	18,430	0	0	340	2,130	0	0	0	0	125	0	0	0	0	
	394+80	401+40	NORTHBOUND USH 51	-	-	-	-	-	-	-	-	-	-	-	-	-	-	700	INSTALLED UNDER 6020-02-71
	408+00	476+00	NORTHBOUND USH 51	6,800	700	-	-	1,700	-	-	-	-	-	-	-	-	-	-	
	412+00	470+00	SOUTHBOUND USH 51	5,800	-	-	-	1,450	-	-	-	-	-	-	-	-	-	-	
	487+00	573+00	SOUTHBOUND USH 51	7,500	4,700	-	-	2,020	375	-	-	-	-	-	-	-	-	700	
	502+12 'SX'	522+06 'SX'	RAMP 'SX' SOUTHBOUND EXIT RAMP	1,070	2,000	-	-	-	375	-	-	-	-	160	-	-	-	-	
	42+50 'CV'	99+65 'CV'	CTH V	9,270	11,250	305	-	-	-	-	-	-	-	-	-	-	1.08	-	
	45+00 'GI'	49+88 'GI'	WINDSOR WAY	-	-	-	-	-	-	-	27	-	-	-	-	-	-	-	
			STAGE 3B TOTAL:	30,440	18,650	305	0	5,170	750	0	27	0	0	160	0	0	1	1,400	
	476+00	574+00	NORTHBOUND USH 51	11,000	-	-	-	2,070	-	-	-	-	290	-	-	-	-	300	
	412+00	487+00	SOUTHBOUND USH 51	1,700	6,200	-	-	630	565	-	-	-	-	-	-	-	-	300	
	562+00	570+00	SOUTHBOUND USH 51	1,600	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	473+81 'SN'	498+07 'SN'	RAMP 'SN' SOUTHBOUND ON RAMP	1,070	2,430	-	-	80	565	-	-	-	-	-	-	-	-	-	
	219+50 'NT'	237+50 'NT'	NORTH TOWNE ROAD	3,600	3,550	-	-	-	-	-	-	-	-	-	-	-	-	-	
			STAGE 4 TOTAL:	18,970	12,180	0	0	2,780	1,130	0	0	0	290	0	0	0	0	600	
	126+00 'NT'	219+50 'NT'	NORTH TOWNE ROAD	14,050	18,450	400	-	-	-	480	45	2	-	-	135	320	-	-	
			STAGE 5 TOTAL:	14,050	18,450	400	0	0	0	480	45	2	0	0	135	320	0	0	
			UNDISTRIBUTED	-	-		5,000	-	-	-	-	-	-	-	-	-	-	5,000	
			CATEGORY 0010 TOTAL:	152,900		1,580	5,960	8,290	4,010	480	130	2	290	285	135	320	1.08	7,000	
			PROJECT ID 6020-02-72 TOTAL:	152,900		1,580	5,960	8,290	4,010	480	130	2	290	285	135	320	1.08	7,000	

* ADDITIONAL QUANTITIES LISTED ELSEWHERE IN PLAN

ROUNDABOUT PAVEMENT MARKING

CATEGORY	STATION - STATION	LOCATION	* 646.0106 EPOXY 4-INCH (WHITE) LF	* 646.0106 EPOXY 4-INCH (YELLOW) LF	* 646.0106 EPOXY 4-INCH (DOUBLE YELLOW) LF	646.0881.S GROOVED WET REFLECTIVE TAPE 4-INCH (WHITE SKIP 12.5' SEG. 37.5' GAP LF	646.0881.S GROOVED WET REFLECTIVE TAPE 4-INCH (WHITE SKIP 6' SEG. 3' GAP EACH	* (646.0883.S) GROOVED WET REFLECTIVE TAPE 8-INCH (WHITE SKIP) 3' SEG. 9' GAP EACH	SPV.0090.03 GROOVED PREFORMED THERMOPLASTIC 4-INCH (WHITE) LF	SPV.0090.04 GROOVED PREFORMED THERMOPLASTIC 8-INCH (WHITE) LF	SPV.0090.04 GROOVED PREFORMED THERMOPLASTIC 8-INCH (WHITE SKIP) 1' SEG. 4' GAP LF	SPV.0090.07 GROOVED PREFORMED THERMOPLASTIC 18-INCH (WHITE SKIP) 2' SEG. 2' GAP LF	REMARKS
0010	14+20'CV - 19+50'CV	LT/RT		240	1,050	25	---	---		75	---	---	
	19+50'CV - 24+00'CV	LT/RT		845	425	50	315	---	90	775	12	100	
	24+00'CV - 29+50'CV	LT/RT		975	---	75	205	16	200	1,250	---	69	
	29+50'CV - 34+00'CV	LT/RT		800	---	75	290	---	235	1,050	13	76	
	34+00'CV - 37+35'CV	LT/RT	465	185	920	40	125	---		25	---	---	
	248+03'NT - 252+15'NT	LT/RT		---	780	---	---	---		---	---	---	
		TOTAL	465	3,045	3,175	265	935	16	525	3,175	25	245	
	PROJECT ID 6020-02-72 TOTAL:			6,685		1,200		16	525	3,200		245	

* ADDITIONAL QUANTITIES LISTED ELSEWHERE IN PLAN

ROUNDABOUT PAVEMENT MARKING

CATEGORY	STATION - STATION	LOCATION	SPV.0060.25 GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 1 EACH	SPV.0060.26 GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 2 EACH	SPV.0060.27 GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 2R EACH	SPV.0060.28 GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 3 EACH	SPV.0060.29 GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 3R EACH	SPV.0060.30 GROOVED PREFORMED THERMOPLASTIC ARROWS TYPE 7 EACH	SPV.0060.31 GROOVED PREFORMED THERMOPLASTIC WORDS EACH	* 647.0456 CURB EPOXY LF	* 647.0606 ISLAND NOSE EPOXY EACH	SPV.0090.05 GROOVED PREFORMED THERMOPLASTIC DIAGONAL 12-INCH (WHITE) LF	SPV.0090.05 GROOVED PREFORMED THERMOPLASTIC DIAGONAL 12-INCH (YELLOW) LF	SPV.0090.06 GROOVED PREFORMED THERMOPLASTIC CROSSWALK 12-INCH (WHITE) LF
0010	14+20'CV - 19+50'CV	LT & RT	---	---	---	1	1	---	---	10	1	---	44	150
	19+50'CV - 24+00'CV	LT & RT	2	1	---	5	1	---	6	20	2	72	37	930
	24+00'CV - 29+50'CV	LT & RT	8	1	---	5	4	---	6	---	---	100	33	260
	29+50'CV - 34+00'CV	LT & RT	5	1	2	3	1	2	7	---	---	110	21	530
	34+00'CV - 37+35'CV	LT & RT	---	---	---	---	---	---	---	10	1	---	67	---
	248+03'NT - 252+15'NT	LT & RT	---	---	---	---	---	---	---	---	---	---	26	---
		TOTALS	15	3	2	14	7	2	19	40	4	282	228	1,870
	PROJECT ID 6020-02-72 TOTAL:		15	3	2	14	7	2	19	40	4	510		1,870

* ADDITIONAL QUANTITIES LISTED ELSEWHERE IN PLAN

3

TEMPORARY PAVEMENT MARKING

CATEGORY	STAGE	(649.0100) TEMPORARY PAVEMENT MARKING 4-INCH WHITE EDGELINE (LF)	(649.0100) TEMPORARY PAVEMENT MARKING 4-INCH YELLOW EDGELINE (LF)	(649.0400) TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH WHITE EDGELINE (LF)	(649.0400) TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH YELLOW EDGELINE (LF)	(649.0900) TEMPORARY PAVEMENT MARKING STOP LINE 12-INCH (LF)	REMARKS
0010	STAGE 2	7,430	7,700	3,550	6,500	52	
	STAGE 3A	1,100	1,020	8,750	16,100	78	
	CATEGORY 0010 SUBTOTAL:	8,530	8,720	12,300	22,600	130	
PROJECT ID 6020-02-72 TOTAL:		17,250		34,900		130	

CONSTRUCTION STAKING

CATEGORY	STATION	TO STATION	LOCATION	(650.4000) CONSTRUCTION STAKING STORM SEWER (EACH)	(650.4500) CONSTRUCTION STAKING SUBGRADE (LF)	(650.5000) CONSTRUCTION STAKING BASE (LF)	(650.5500) CONSTRUCTION STAKING CURB AND GUTTER (LF)	(650.6000) CONSTRUCTION STAKING PIPE CULVERTS (EACH)	(650.7000) CONSTRUCTION STAKING CONCRETE PAVEMENT (LF)	(650.8000) CONSTRUCTION STAKING RESURFACING REFERENCE (LF)	(650.9920) CONSTRUCTION STAKING SLOPE STAKES (LF)	(SPV.0060.02) CONSTRUCTION STAKING CURB RAMP (EACH)	(SPV.0105.04) CONSTRUCTION STAKING HMA, NORTHTOWNE RD ROUNDABOUT (LS)	(SPV.0105.05) CONSTRUCTION STAKING HMA, SOUTHBOUND ROUNDABOUT (LS)	(SPV.0105.06) CONSTRUCTION STAKING HMA, NORTHBOUND ROUNDABOUT (LS)	REMARKS
0010	111+00 'TR1'	141+00 'TR1	USH 51 TEMPORARY ROAD	--	3000	3000	--	3	--	--	3000	--	--	--	--	
	135+00 'TR2'	145+00 'TR2'	USH 51 TEMPORARY ROAD	--	1000	1000	--	1	--	--	1000	--	--	--	--	
	48+60 'TR3'	51+00 'TR3'	CTH V TEMPORARY INTERSECTION	--	240	240	--	2	--	--	240	--	--	--	--	
	248+03 'NT'	252+15 'NT'	BALL CT		750	750	595				750					
			STAGE 1 TOTAL:	0	4990	4990	595	6	0	0	4990	0	0	0	0	
	519+00	562+00	SOUTHBOUND USH 51	--	4300	--	--	4	3250	--	4300	--	--	--	--	
	562+00 'TW'	573+00 'TW'	SOUTHBOUND USH 51	--	1100	1100	--	2	--	--	1950	--	--	--	--	
	37+34.6'CV'	60+00 'CV'	CTH V	--	2270	2270	--	4	--	--	2270	--	--	--	--	
	30+00'MU'	37+20 'MU'	MUELLER RD	--	720	720	165	2	--	--	720	--	--	--	--	
	15+00 'SW'	20+00 'SW'	SHAWN WILLIAMS TRAIL	--	500	500	--	1	--	--	500	--	--	--	--	
	10+00 'D1'	20+00 'D1'	DRIVEWAY D1	--	1000	--	--	1	--	--	1000	--	--	--	--	
	18+35 'D2'	20+00 'D2'	DRIVEWAY D2	--	160	--	--	1	--	--	160	--	--	--	--	
	6+00 'D3'	20+00 'D3'	DRIVEWAY D3	--	1400	--	--	1	--	--	1400	--	--	--	--	
	10+00 'D4'	31+00 'D4'	DRIVEWAY D4	--	2100	--	--	3	--	--	2100	--	--	--	--	
			STAGE 2 TOTAL:	0	13550	4590	165	19	3250	0	14400	0	0	0	0	

CONTINUED

CONSTRUCTION STAKING

CATEGORY	STATION	TO STATION	LOCATION	(650.4000) CONSTRUCTION STAKING STORM SEWER (EACH)	(650.4500) CONSTRUCTION STAKING SUBGRADE (LF)	(650.5000) CONSTRUCTION STAKING BASE (LF)	(650.5500) CONSTRUCTION STAKING CURB AND GUTTER (LF)	(650.6000) CONSTRUCTION STAKING PIPE CULVERTS (EACH)	(650.7000) CONSTRUCTION STAKING CONCRETE PAVEMENT (LF)	(650.8000) CONSTRUCTION STAKING RESURFACING REFERENCE (LF)	(650.9920) CONSTRUCTION STAKING SLOPE STAKES (LF)	(SPV.0060.02) CONSTRUCTION STAKING CURB RAMP (EACH)	(SPV.0105.04) CONSTRUCTION STAKING HMA, NORTHTOWNE RD ROUNDABOUT (LS)	(SPV.0105.05) CONSTRUCTION STAKING HMA, SOUTHBOUND ROUNDABOUT (LS)	(SPV.0105.06) CONSTRUCTION STAKING HMA, NORTHBOUND ROUNDABOUT (LS)	REMARKS
	452+00	498+49	NOUTHBOUND USH 51	--	4650	4650	--	14	4650	--	4650	--	--	--	--	
	500+13	551+50	NOUTHBOUND USH 51	4	5150	5150	--	3	5150	--	5150	--	--	--	--	
	551+50	569+00	NOUTHBOUND USH 51	--	1750	1750	--	3	--	--	1750	--	--	--	--	
	452+00	498+47	SOUTHBOUND USH 51	--	4650	4650	--	--	4650	--	4650	--	--	--	--	
	499+84 'NN'	525+43 'NN'	RAMP 'NN' NOUTHBOUND ON RAMP	--	2700	2500	--	1	2700	--	2700	--	--	--	--	
	472+78 'NX'	498+00 'NX'	RAMP 'NX' NOUTHBOUND EXIT RAMP	--	2600	2300	--	3	2600	--	2600	--	--	--	--	
	29+00 'GI'	30+60 'GI'	GRINDE RD	--	160	160	--	--	--	--	160	--	--	--	--	
	30+50 'TR4	32+75 'TR4'	HOLUM STREET TEMPORARY INTERSECTION	--	240	240	--	--	--	--	240	--	--	--	--	
	102+50 'TR5'	111+00 'TR5'	CROSSOVER	--	850	850	--	--	--	--	850	--	--	--	--	
			STAGE 3A TOTAL:	4	22750	22250	0	24	19750	0	22750	0	0	0	0	
	500+11	519+00	SOUTHBOUND USH 51	4	1900	1900	--	1	1900	--	1900	--	--	--	--	
	473+81 'SN'	500+50 'SN'	RAMP 'SN' SOUTHBOUND ON RAMP	--	2700	2700	--	1	2450	--	2700	--	--	--	--	
	500+17 'SX'	522+06 'SX'	RAMP 'SX' SOUTHBOUND EXIT RAMP	--	2200	2000	--	1	2200	--	2200	--	--	--	--	
	60+00 'CV'	99+65 'CV'	CTH V	--	4000	4000	--	5	--	--	4000	--	--	--	--	
	36+50 'GI'	45+00 'GI'	WINDSOR WAY	--	--	--	--	--	--	850	--	--	--	--	--	
	45+00 'GI'	49+88 'GI'	WINDSOR WAY	--	500	500	150	1	--	--	500	--	--	--	--	
			STAGE 3B TOTAL:	4	11300	11100	150	9	6550	850	11300	0	0	0	0	
	14+00 'CV'	37+34.6 'CV'	CTH V	55	2300	2300	11275	2	--	--	2300	28	1	1	1	
	219+50 'NT'	239+95 'NT'	NORTHTOWNE RD	21	2050	2050	3600	3	--	--	2050	--	--	--	--	
	34+90 'GI'	36+50 'GI'	WINDSOR WAY	--	160	160	--	2	--	--	160	--	--	--	--	
			STAGE 4 TOTAL:	76	4510	4510	14875	7	0	0	4510	28	1	1	1	
	126+00 'NT'	219+50 'NT'	NORTHTOWNE RD	--	--	--	60	--	--	9350	--	--	--	--	--	
			STAGE 5 TOTAL:	0	0	0	60	0	0	9350	0	0	0	0	0	
			CATEGORY 0010 TOTAL:	84	57100	47440	15845	65	29550	10200	57950	28	1	1	1	
	14+00 'CV'	37+34.6 'CV'	CTH V	--	--	--	--	--	--	--	--	2	--	--	--	
			STAGE 4 TOTAL:	0	0	0	0	0	0	0	0	2	0	0	0	
	210+50 'NT'	219+50 'NT'	NORTHTOWNE RD - BIKEPATH	1	900	900	870	--	--	--	900	2	--	--	--	
			STAGE 5 TOTAL:	1	900	900	870	0	0	0	900	2	0	0	0	
			CATEGORY 0040 TOTAL:	1	900	900	870	0	0	0	900	4	0	0	0	
			PROJECT ID 6020-02-72 TOTAL:	85	58000	48340	16715	65	29550	10200	58850	32	1	1	1	

3

CONSTRUCTION STAKING STRUCTURE LAYOUT

CATEGORY	STATION	TO STATION	LOCATION	(650.6500.1) CONSTRUCTION STAKING STRUCTURE LAYOUT (LS)	(650.6500.2) CONSTRUCTION STAKING STRUCTURE LAYOUT (LS)	REMARKS
0020	498+49.12	500+13.62	B-13-599	1	--	
0030	498+49.20	500+09.70	B-13-600	--	1	
			STAGE 3A TOTAL:	1	1	
			PROJECT ID 6020-02-72 TOTAL:	1	1	

LANDMARK REFERENCE MONUMENTS

CATEGORY	STATION	LOCATION	DESCRIPTION	(SPV.0060.01) LANDMARK REFERENCE MONUMENTS SPECIAL (EACH)	REMARKS
0010	392+93	248' LT	T9N, R10E, SECTION 29, NE CORNER	1	
	419+49	225' LT	T9N, R10E, SECTION 20, EAST CORNER	1	
	445+98	340' LT	T9N, R10E, SECTION 20, NE CORNER	1	
	472+55	337' LT	T9N, R10E, SECTION 17, EAST CORNER	1	
	499+18	47' LT	T9N, R10E, SECTION 17, NE CORNER	1	
	525+65	51' RT	T9N, R10E, SECTION 8, EAST CORNER	1	
	552+03	54' RT	T9N, R10E, SECTION 8, NE CORNER	1	
			PROJECT ID 6020-02-72 TOTAL:	7	

SAWING PAVEMENT

CATEGORY	STATION	TO STATION	ROADWAY	LOCATION	(690.0150) SAWING ASPHALT (LF)	(690.0250) SAWING CONCRETE (LF)	REMARKS
0010	109+00 'TR1'	113+50 'TR1'		LT	450	--	
	144+00 'TR1'	149+00 'TR1'		RT	400	--	
	48+50 'TR3'		TEMPORARY ROAD	CL	25	--	
	51+17 'TR3'		TEMPORARY ROAD	CL	80	--	
	30+25 'TR4'		TEMPORARY ROAD	LT	--	3	
	30+25 'TR4'		TEMPORARY ROAD	RT	--	3	
	248+14 'NT'	249+39 'NT'	CTH V	LT	180	--	
	251+33 'NT'	251+77 'NT'	CTH V	LT	30	--	
			DRIVEWAYS	BALL CORPORATION	100	--	
				STAGE 1 TOTAL:	1265	6	
	37+00 'MU'		MUELLER RD	CL	25	--	
	568+00	573+00		LT	500	--	
				STAGE 2 TOTAL:	525	0	
	517+00			RT	40	--	
	95+60		CTH V	RT	--	25	
	99+00 'CV'		CTH V	CL	25	--	
	29+00 'GI'		GRINDE RD	CL	25	--	
				STAGE 3A TOTAL:	90	25	
	35+90 'GI'		WINDSOR WAY	RT	24	--	
	36+40 'GI'		WINDSOR WAY	RT	35	--	
	36+50 'GI'		WINDSOR WAY	CL	22	--	
	40+75 'GI'		WINDSOR WAY	RT	52	--	
	45+00 'GI'		WINDSOR WAY	CL	22	--	
	219+50 'NT'		NORTH TOWNE RD	CL	70	--	
				STAGE 3B TOTAL:	225	0	
	562+00	572+00	SOUTHBOUND	LT	1000	--	
	14+20 'CV'		CTH V	CL	35	--	
	14+97 'CV'	15+50 'CV'	CTH V	RT	55	5	
				STAGE 4 TOTAL:	1090	5	
	131+50 'NT'		NORTH TOWNE RD	LT	50	--	
	131+50 'NT'		NORTH TOWNE RD	RT	50	--	
	149+00 'NT'		NORTH TOWNE RD	LT	25	--	
	176+00 'NT'		NORTH TOWNE RD	LT	30	--	
	184+50 'NT'		NORTH TOWNE RD	RT	50	--	
	184+50 'NT'		NORTH TOWNE RD	LT	50	--	
				STAGE 5 TOTAL:	255	0	
				PROJECT ID 6020-02-72 TOTAL:	3450	36	

3

3

LIGHTING PULL BOXES

CATEGORY	BASE NO.	STATION	EQUIP. LOCATION	(653.0140) PULL BOXES STEEL 24x42-INCH EACH	REMARKS
0010	PB-1	20+18.96 CV	60.44' RT	1	
	PB-2	239+17.59 NT	38.01' LT	1	
	PB-3	239+15.54 NT	16.41' RT	1	
	PB-4	20+14.87 CV	79.51' LT	1	
	PB-5	20+40.04 CV	24.00' LT	1	
	PB-6	246+83.96 NT	68.38' LT	1	
	PB-7	246+56.95 NT	28.18' LT	1	
	PB-8	246+55.50 NT	41.56' RT	1	
	PB-9	238+77.13 NT	80.48' RT	1	
	PB-10	22+80.85 CV	47.55' RT	1	
	PB-11	22+76.95 CV	15.55' LT	1	
	PB-12	25+07.88 CV	83.14' RT	1	
	PB-13	25+23.68 CV	37.63' RT	1	
	PB-14	25+23.62 CV	15.28' LT	1	
	PB-15	25+03.02 CV	68.83' LT	1	
	PB-16	500+82.21 SX	22.07' LT	1	
	PB-17	500+79.98 SX	26.99' RT	1	
	PB-18	28+15.07 CV	86.31' LT	1	
	PB-19	27+82.59 CV	21.38' LT	1	
	PB-20	498+71.39 SN	20.35' LT	1	
	PB-21	498+66.85 SN	60.02' RT	1	
	PB-22	27+82.29 CV	43.96' RT	1	
	PB-23	29+10.47 CV	6.90' LT	1	
	PB-24	29+97.18 CV	7.96' LT	1	
	PB-25	30+44.41 CV	18.32' LT	1	
	PB-26	30+21.28 CV	77.79' LT	1	
	PB-27	30+44.16 CV	54.79' RT	1	
	PB-28	30+92.58 CV	60.38' RT	1	
	PB-29	497+73.55 NX	48.30' LT	1	
	PB-30	497+68.02 NX	21.28' RT	1	
	PB-31	32+77.18 CV	50.60' RT	1	
	PB-32	32+73.12 CV	17.89' LT	1	
	PB-33	500+31.34 NN	22.74' RT	1	
	PB-34	500+34.08 NN	24.69' LT	1	
	PB-35	20+43.63 CV	52.92' RT	1	
			PROJECT ID 6020-02-72 TOTAL:	35	

* ADDITIONAL QUANTITIES LISTED ELSEWHERE

LIGHTING CONTROL CABINETS

CATEGORY	BASE NO.	STATION	EQUIP. LOCATION	(SPV.0060.32) CONCRETE CONTROL CABINET BASES SPECIAL EACH	(SPV.0060.33) LIGHTING CONTROL CABINET EACH	(656.0200) ELECTRICAL SERVICE METER BREAKER PEDESTAL LS	REMARKS
0010	LC-1	20+24 CV	39.16'LT	1	1	1	
	L0838	31+92 CV	39.12'RT	1	1	1	
			PROJECT ID 6020-02-72 TOTAL:	2	2	2	

CONDUIT RIGID SUMMARY

CATEGORY	EQUIP. LOCATION FROM	TO	652.0225 NONMETALLIC SCHEDULE 40 2-INCH LF	652.0235 NONMETALLIC SCHEDULE 40 3-INCH LF	REMARKS
0010	LC-1	PB-1	---	30	
	LC-1	PB-35	---	30	
	PB-1	LP-2	15	---	
	PB-1	LP-3	83	---	
	LP-2	LP-1	193	---	
	LP-3	PB-2	32	---	
	PB-2	LP-4	164	---	
	PB-2	PB-3	---	112	
	PB-3	LP-7	8	---	
	PB-3	PB-9	---	75	
	PB-9	LP-6	23	---	
	LP-6	LP-5	233	---	
	PB-9	LP-8	53	---	
	LP-8	PB-10	25	---	
	PB-10	PB-11	---	63	
	PB-11	LP-9	8	---	
	PB-35	PB-5	---	202	
	PB-5	LP-16	10	---	
	PB-5	PB-4	---	132	
	PB-4	LP-15	143	---	
	PB-4	LP-14	21	---	
	LP-14	PB-6	90	---	
	PB-6	LP-13	29	---	
	PB-6	PB-7	---	53	
	PB-7	LP-12	7	---	
	PB-7	PB-8	---	70	
	PB-8	LP-17	240	---	
	PB-8	LP-11	23	---	
	LP-11	LP-10	66	---	
	L-0838	PB-28	---	21	
	L-0838	PB-27	---	86	
	PB-28	PB-22	---	230	
	PB-28	PB-27	---	30	
	PB-27	L-13-0838-0026	15	---	
	PB-27	PB-25	---	146	
	PB-25	L-13-0838-0025	12	---	
	PB-25	PB-26	---	134	
	PB-26	L-13-0838-0038	52	---	
	L-13-0838-0038	PB-34	86	---	
	PB-34	L-13-0838-0037	33	---	
	PB-34	L-130838-0036	155	---	
	PB-34	PB-33	---	46	
	PB-33	L-13-088-0035	33	---	
	L-13-088-0035	L-13-0838-0034	80	---	
	L-13-0838-0034	L-13-0838-0033	74	---	

CONTINUED

CONDUIT RIGID SUMMARY

CATEGORY	EQUIP. LOCATION FROM	TO	652.0225 NONMETALLIC SCHEDULE 40 2-INCH LF	652.0235 NONMETALLIC SCHEDULE 40 3-INCH LF	REMARKS
	PB-28	PB-29	89	---	
	PB-29	L-13-0838-0027	27	---	
	PB-29	PB-30	---	70	
	PB-30	L-13-0838-0029	13	---	
	PB-30	L-13-0838-0028	195	---	
	PB-30	L-13-0838-0030	73	---	
	L-13-0838-0030	PB-31	27	---	
	PB-31	PB-32	---	68	
	PB-32	L-13-0838-0031	8	---	
	PB-32	L-13-0838-0032	196	---	
	PB-22	L-13-0838-0006	16	---	
	L-13-0838-0006	PB-21	109	---	
	PB-21	L-13-0838-0005	22	---	
	PB-21	L-13-0838-0003	172	---	
	PB-21	PB-20	---	82	
	PB-20	L-13-0838-0002	32	---	
	L-13-0838-0002	PB-12	77	---	
	PB-12	L-13-0838-0001	57	---	
	PB-12	PB-13	---	44	
	PB-13	L-13-0838-0004	48	---	
	PB-13	PB-14	---	53	
	PB-14	L-13-0838-0015	35	---	
	PB-14	L-13-0838-0016	24	---	
	PB-14	PB-15	---	57	
	PB-15	L-13-0838-0014	79	---	
	PB-15	L-13-0838-0013	72	---	
	PB-22	PB-19	---	63	
	PB-19	L-13-0838-0007	20	---	
	PB-19	PB-18	---	73	
	PB-18	L-13-0838-0008	10	---	
	L-13-0838-0008	PB-17	127	---	
	PB-17	L-13-0838-0009	36	---	
	PB-17	PB-16	---	49	
	PB-16	L-13-0838-0012	9	---	
	PB-17	L-13-0838-0010	200	---	
	PB-25	PB-24	52	---	
	PB-24	L-13-0838-0024	20	---	
	L-13-0838-0024	L-13-0838-0022	30	---	
	PB-24	L-13-0838-0023	20	---	
	L-13-0838-0023	L-130838-0021	30	---	
	PB-24	PB-23	90	---	
	PB-23	L-13-0838-0020	20	---	
	L-13-0838-0020	L-13-0838-0018	30	---	
	PB-23	L-13-0838-0019	20	---	
	L-13-0838-0019	L-13-0838-0017	30	---	
	PROJECT ID 6020-02-72 TOTAL:		4121	2019	

ELECTRICAL WIRE LIGHTING

CATEGORY	EQUIP. LOCATION FROM	TO	(655.0610)* 12 AWG LF	(655.0610)* 12 AWG (GROUND) LF	(655.0615) 10 AWG LF	(655.0615) 10 AWG (GROUND) LF	(655.0620) 8 AWG LF	(655.0620) 8 AWG (GROUND) LF	REMARKS
0010	LC-1	LP-2	70	35	---	---	---	---	
	LP-2	LP-14	386	193	---	---	---	---	
	LP-14	LP-12	300	150	---	---	---	---	
	LP-12	LP-17	654	327	---	---	---	---	
	LP-17	LP-10	354	177	---	---	---	---	
	LC-1	LP-7	464	232	---	---	---	---	
	LP-7	LP-4	498	249	---	---	---	---	
	LP-7	LP-8	300	150	---	---	---	---	
	LP-8	LP-5	644	322	---	---	---	---	
	LC-1	LP-1	436	218	---	---	---	---	
	LC-1	LP-3	198	99	---	---	---	---	
	LP-3	LP-6	418	209	---	---	---	---	
	LP-6	LP-9	388	194	---	---	---	---	
	LC-1	LP-16	292	146	---	---	---	---	
	LP-16	LP-15	446	223	---	---	---	---	
	LP-15	LP-13	560	280	---	---	---	---	
	LP-13	LP-11	396	198	---	---	---	---	
	L0838	L-13-0838-0027	---	---	280	140	---	---	
	L-13-0838-0027	L-13-0838-0028	---	---	576	288	---	---	
	L-13-0838-0027	L-13-0838-0030	---	---	356	178	---	---	
	L-13-0838-0030	L-13-0838-0032	---	---	606	303	---	---	
	L0838	L-13-0838-0025	302	151	---	---	---	---	
	L-13-0838-0025	L-13-0838-0037	468	234	---	---	---	---	
	L-13-0838-0037	L-13-0838-0034	400	200	---	---	---	---	
	L0838	PB-24	366	183	---	---	---	---	
	PB-24	L-13-0838-0024	48	24	---	---	---	---	
	L-13-0838-0024	L-13-0838-0022	48	24	---	---	---	---	
	L0838	PB-23	522	261	---	---	---	---	
	PB-23	L-13-0838-0019	48	24	---	---	---	---	
	L-13-0838-0019	L-13-0838-0017	48	24	---	---	---	---	
	L0838	L-13-0838-0029	402	201	---	---	---	---	
	L-13-0838-0029	L-13-0838-0031	432	216	---	---	---	---	
	L0838	L-13-0838-0026	134	67	---	---	---	---	
	L-13-0838-0026	L-13-0838-0038	412	206	---	---	---	---	
	L-13-0838-0038	L-13-0838-0036	490	245	---	---	---	---	
	L-13-0838-0038	L-13-0838-0035	352	176	---	---	---	---	
	L-13-0838-0035	L-13-0838-0033	302	151	---	---	---	---	
	L0838	PB-24	366	183	---	---	---	---	
	PB-24	L-13-0838-0023	48	24	---	---	---	---	
	L-13-0838-0023	L-13-0838-0021	48	24	---	---	---	---	
	L0838	PB-23	928	464	---	---	---	---	
	PB-23	L-13-0838-0020	48	24	---	---	---	---	
	L-13-0838-0020	L-13-0838-0018	48	24	---	---	---	---	
	L0838	L-13-0838-0008	952	476	---	---	---	---	
	L-13-0838-0008	L-13-0838-0012	386	193	---	---	---	---	

CONTINUED

ELECTRICAL WIRE LIGHTING

CATEGORY	EQUIP. LOCATION FROM	TO	(655.0610)* 12 AWG LF	(655.0610)* 12 AWG (GROUND) LF	(655.0615) 10 AWG LF	(655.0615) 10 AWG (GROUND) LF	(655.0620) 8 AWG LF	(655.0620) 8 AWG (GROUND) LF	REMARKS
	L0838	L-13-0838-0006	0		---	---	608	304	
	L-13-0838-0006	L-13-0838-0003	---	---	---	---	578	289	
	L-13-0838-0006	L-13-0838-0001	---	---	---	---	764	382	
	L-13-0838-0001	L-13-0838-0004	---	---	---	---	342	171	
	L-13-0838-0004	L-13-0838-0014	---	---	---	---	526	263	
	L0838	L-13-0838-0007	---	---	788	394	---	---	
	L-13-0838-0007	L-13-0838-0009	---	---	562	281	---	---	
	L-13-0838-0009	L-13-0838-0010	---	---	488	244	---	---	
	L0838	L-13-0838-0005	---	---	---	---	876	438	
	L-13-0838-0005	L-13-0838-0002	---	---	---	---	300	150	
	L-13-0838-0002	L-13-0838-0016	---	---	---	---	448	224	
	L-13-0838-0016	L-13-0838-0015	---	---	---	---	138	69	
	L-13-0838-0015	L-13-0838-0013	---	---	---	---	364	182	
		TOTAL	14402	7201	3656	1828	4944	2472	
	PROJECT ID 6020-02-72 TOTAL:			21603		5484		7416	

* ADDITIONAL QUANTITIES LISTED ELSEWHERE

STREET LIGHTING SUMMARY (POLE LUMINAIRE)

CATEGORY	BASE NO.	STATION	EQUIP. LOCATION	(654.0106) CONCRETE BASES TYPE 6 EACH	(655.0610)* ELECTRICAL WIRE LIGHTING 12 AWG LF	(655.0610)* ELECTRICAL WIRE LIGHTING 12 AWG (GROUND) LF	(657.0255) TRANSFORMER BASES BREAKAWAY 11 1/2-INCH BOLT CIRCLE EACH	(657.0327) POLES TYPE 6 - ALUMINUM EACH	(657.0710) LUMINAIRE ARMS TRUSS TYPE 4 1/2-INCH CLAMP 12 FT EACH	(657.0715) LUMINAIRE ARMS TRUSS TYPE 4 1/2-INCH CLAMP 15 FT EACH	(SPV.0060.34) LUMINAIRES UTILITY LED CATEGORY C EACH	(SPV.0060.35) LUMINAIRES WALLPACK LED EACH	REMARKS
0010	LP-1	18+00.14	31.74' RT	1	94	47	1	1	---	1	1	---	
	LP-2	20+00.15	48.70' RT	1	94	47	1	1	---	1	1	---	
	LP-3	21+22.10	59.79' RT	1	94	47	1	1	---	1	1	---	
	LP-4	237+54.01 NT	37.66' RT	1	94	47	1	1	---	1	1	---	
	LP-5	236+29.67 NT	22.43' RT	1	94	47	1	1	---	1	1	---	
	LP-6	238+57.17 NT	67.35' RT	1	94	47	1	1	---	1	1	---	
	LP-7	21+67.85	37.72' RT	1	94	47	1	1	---	1	1	---	
	LP-8	22+55.93	46.79' RT	1	94	47	1	1	---	1	1	---	
	LP-9	22+75.78	23.20' LT	1	94	47	1	1	---	1	1	---	
	LP-10	23+39.09	68.54' LT	1	94	47	1	1	---	1	1	---	
	LP-11	246+30.39	44.66' LT	1	94	47	1	1	---	1	1	---	
	LP-12	246+53.09 NT	24.67' LT	1	94	47	1	1	---	1	1	---	
	LP-13	246+96.22 NT	44.68' LT	1	94	47	1	1	---	1	1	---	
	LP-14	20+25.57	90.84' LT	1	94	47	1	1	---	1	1	---	
	LP-15	19+04.89	55.38' LT	1	94	47	1	1	---	1	1	---	
	LP-16	22+44.51	22.04' LT	1	94	47	1	1	---	1	1	---	
	LP-17	248+97.85 NT	23.98' RT	1	94	47	1	1	---	1	1	---	
	L-13-0838-0001	24+22.29	59.76' RT	1	94	47	1	1	---	1	1	---	
	L-13-0838-0002	499+06.99 SN	24.12' LT	1	94	47	1	1	---	1	1	---	
	L-13-0838-0003	496+98.90 SN	35.72' RT	1	94	47	1	1	---	1	1	---	

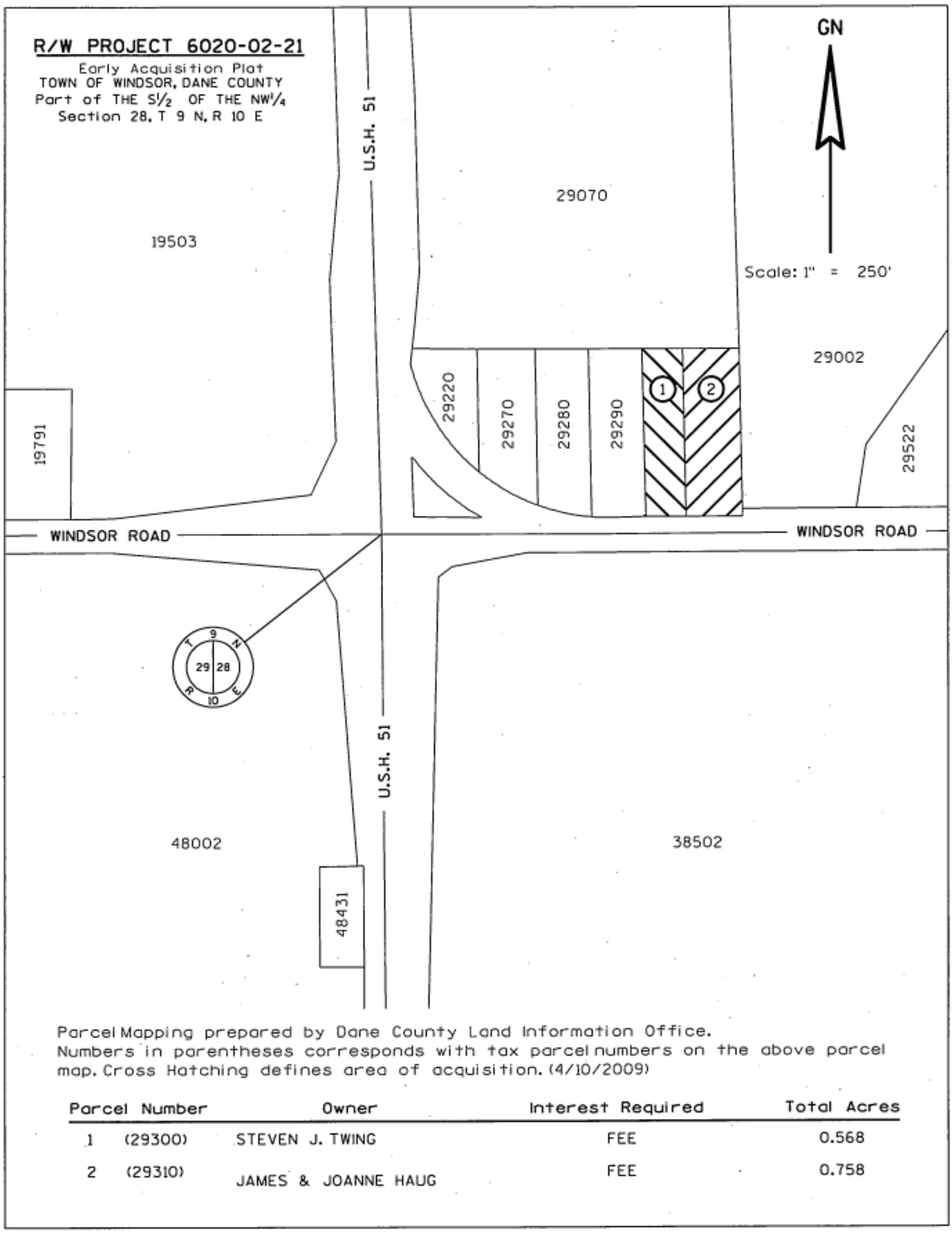
CONTINUED

3

STREET LIGHTING SUMMARY (POLE LUMINAIRE)

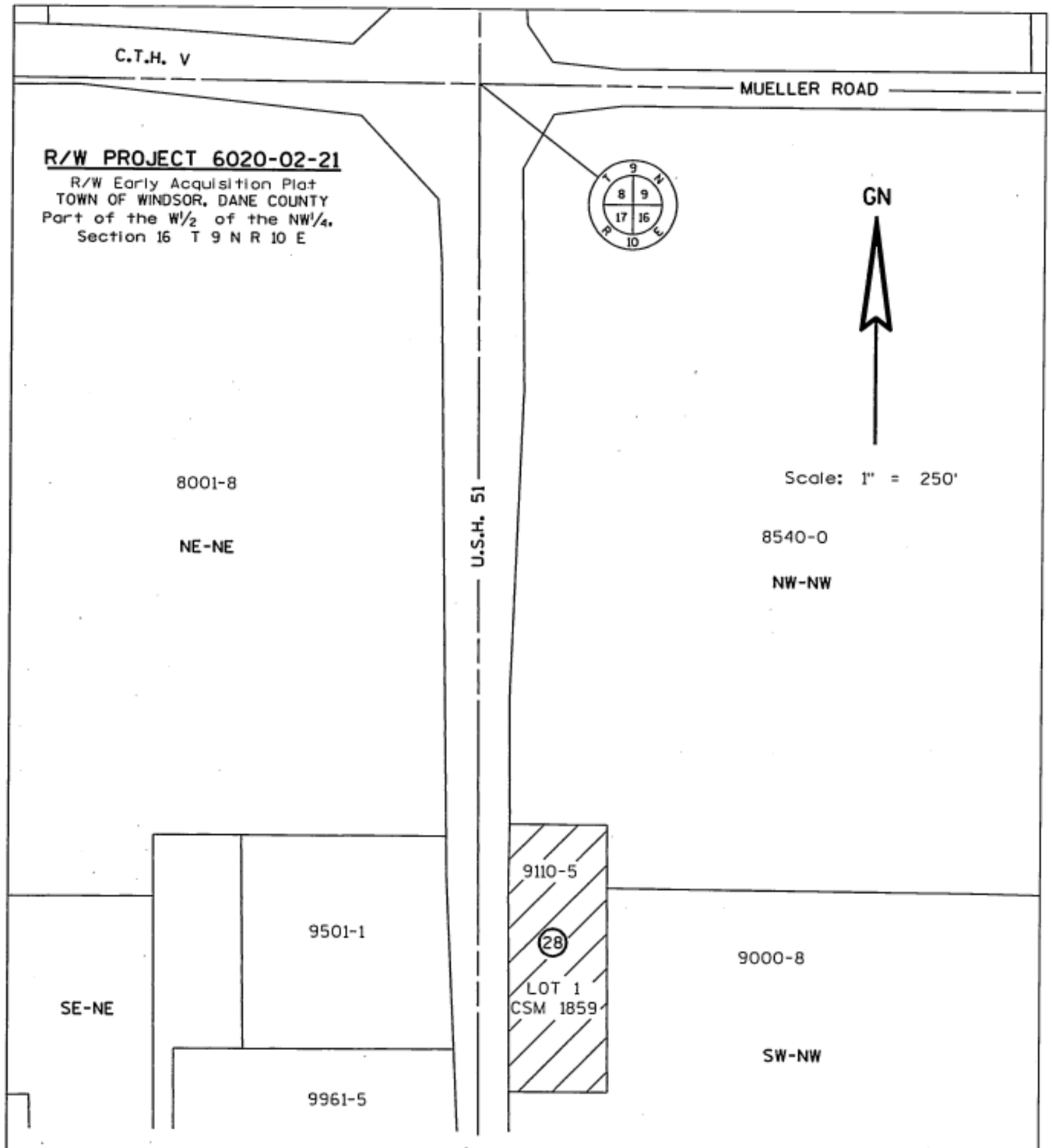
CATEGORY	BASE NO.	STATION	EQUIP. LOCATION	(654.0106) CONCRETE BASES TYPE 6 EACH	* (655.0610) ELECTRICAL WIRE LIGHTING 12 AWG LF	12 AWG (GROUND) LF	(657.0255) TRANSFORMER BASES BREAKAWAY 11 1/2-INCH BOLT CIRCLE EACH	(657.0322) POLES TYPE 6 - ALUMINUM EACH	(657.0710) LUMINAIRE ARMS TRUSS TYPE 4 1/2-INCH CLAMP 12 FT EACH	(657.0715) LUMINAIRE ARMS TRUSS TYPE 4 1/2-INCH CLAMP 15 FT EACH	(SPV.0060.34) LUMINAIRES UTILITY LED CATEGORY C EACH	(SPV.0060.35) LUMINAIRES WALLPACK LED EACH	REMARKS
0010	L-13-0838-0004	25+86.78	37.37' RT	1	94	47	1	1	---	1	1	---	
	L-13-0838-0005	26+74.46	35.70' RT	1	94	47	1	1	---	1	1	---	
	L-13-0838-0006	27+66.78	43.57' RT	1	94	47	1	1	---	1	1	---	
	L-13-0838-0007	27+64.49	28.73' LT	1	94	47	1	1	---	1	1	---	
	L-13-0838-0008	28+05.56	91.93' LT	1	94	47	1	1	---	1	1	---	
	L-13-0838-0009	27+33.47	149.19' LT	1	94	47	1	1	---	1	1	---	
	L-13-0838-0010	502+74.38 SX	21.84' RT	1	94	47	1	1	---	1	1	---	
	L-13-0838-0012	500+87.13 SX	14.53' LT	1	94	47	1	1	---	1	1	---	
	L-13-0838-0013	25+38.22	109.14' LT	1	94	47	1	1	---	1	1	---	
	L-13-0838-0014	24+49.47	53.92' LT	1	94	47	1	1	1	---	1	---	
	L-13-0838-0015	24+92.13	5.22' LT	1	94	47	1	1	1	---	1	---	
	L-13-0838-0016	25+42.48	26.26' LT	1	94	47	1	1	---	1	1	---	
	L-13-0838-0017	28+70.93	3.12'LT	---	---	---	---	---	---	---	---	1	
	L-13-0838-0018	28+70.64	11.78'LT	---	---	---	---	---	---	---	---	1	
	L-13-0838-0019	29+01.12	2.58'LT	---	---	---	---	---	---	---	---	1	
	L-13-0838-0020	29+01.33	11.97'LT	---	---	---	---	---	---	---	---	1	
	L-13-0838-0021	29+58.68	3.22'LT	---	---	---	---	---	---	---	---	1	
	L-13-0838-0022	29+58.13	12.39'LT	---	---	---	---	---	---	---	---	1	
	L-13-0838-0023	29+88.00	3.01'LT	---	---	---	---	---	---	---	---	1	
	L-13-0838-0024	29+87.41	14.38'LT	---	---	---	---	---	---	---	---	1	
	L-13-0838-0025	30+56.32	18.14' LT	1	94	47	1	1	---	1	1	---	
	L-13-0838-0026	30+66.43	51.46' RT	1	94	47	1	1	---	1	1	---	
	L-13-0838-0027	31+56.54	38.33' RT	1	94	47	1	1	---	1	1	---	
	L-13-0838-0028	495+84.99 NX	11.81' RT	1	94	47	1	1	---	1	1	---	
	L-13-0838-0029	497+69.34 NX	8.78' RT	1	94	47	1	1	---	1	1	---	
	L-13-0838-0030	32+50.35	48.24' RT	1	94	47	1	1	---	1	1	---	
	L-13-0838-0031	32+70.66	25.34' LT	1	94	47	1	1	---	1	1	---	
	L-13-0838-0032	34+70.55	8.87' LT	1	94	47	1	1	---	1	1	---	
	L-13-0838-0033	33+47.03	71.53' LT	1	94	47	1	1	---	1	1	---	
	L-13-0838-0034	32+89.86	120.75' LT	1	94	47	1	1	---	1	1	---	
	L-13-0838-0035	499+97.62 NN	18.62' RT	1	94	47	1	1	---	1	1	---	
	L-13-0838-0036	501+88.27 NN	22.77' LT	1	94	47	1	1	---	1	1	---	
	L-13-0838-0037	30+72.14	145.59' LT	1	94	47	1	1	---	1	1	---	
	L-13-0838-0038	30+45.04	108.81' LT	1	94	47	1	1	---	1	1	---	
			TOTAL	46	4324	2162	46	46	2	44	46	8	
		PROJECT ID 6020-02-72 TOTAL:		46		6486	46	46	2	44	46	8	

* ADDITIONAL QUANTITIES LISTED ELSEWHERE



Parcel Mapping prepared by Dane County Land Information Office.
Numbers in parentheses corresponds with tax parcel numbers on the above parcel map. Cross Hatching defines area of acquisition. (4/10/2009)

Parcel Number		Owner	Interest Required	Total Acres
1	(29300)	STEVEN J. TWING	FEE	0.568
2	(29310)	JAMES & JOANNE HAUG	FEE	0.758



Parcel Mapping prepared by Dane County Land Information Office.
Numbers in parentheses corresponds with Dane County tax parcel numbers on the above parcel map. Hatching defines area of acquisition. (11/15/2010)

Parcel Number	Owner	Interest Required	Total Acres
28 (068/0910-162-9110-5)	ROBERT I. & ARLYCE E. BLIEFERNICHT	FEE	1.626

TRANSPORTATION PROJECT PLAT NO: 6020-02-21 - 4.01 AMENDMENT NO. 1

AMENDS PARCEL 3 AND ADDS ACCESS CONTROL TO TRANSPORTATION PROJECT PLAT 6020-02-21 - 4.01 RECORDED AS DOCUMENT NO: 4607894 IN VOL. 59-074A OF PLATS, PAGE 339

THAT PART OF THE NW¼ - NW¼ AND THE SW¼ - NW¼ OF SECTION 21, T 9 N, R 10 E,
TOWN OF WINDSOR, DANE COUNTY, WISCONSIN.

RELOCATION ORDER U.S.H. 51, MADISON - DEFOREST ROAD (REARDON - CTH V)

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 TRANSFER OF LAND AND INTERESTS TO DOT.

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W ACRES OR S.F. REQUIRED NEW	EXISTING	TOTAL	T.L.E. ACRES OR S.F.
3	MERLIN R. BLIEFERNICHT	FEE & T.L.E.	11.80	0.48	12.28	1.53
81	CENTURYTEL / TELEVIEW OF WISCONSIN, INC	RELEASE OF RIGHTS				
82	ALLIANT ENERGY	RELEASE OF RIGHTS				

ALL AREAS SHOWN IN ACRES UNLESS OTHERWISE NOTED

Station & Offset Table

Point Number	Station	Offset
101	419+49.01'NB'	278.46'
102	422+21.88'NB'	278.06'
103	445+59.16'NB'	399.02'
108	35+85.00'VI'	32.49'
109	445+55.58'NB'	170.00'
110	443+25.92'NB'	150.00'
111	436+56.37'NB'	125.00'
112	431+21.15'NB'	125.00'
113	430+00.00'NB'	123.78'
114	419+36.45'NB'	157.61'

CENTURYTEL / TELEVIEW OF WISCONSIN, INC EASEMENT RELEASE
V. 396 / P. 144 / DOC. 1347570 - PARCEL 3
V. 87 / P. 157 / DOC. 503266 - PARCEL 3

ALLIANT ENERGY EASEMENT RELEASE
V. 1092 / P. 3056 / DOC. 1637177 - PARCEL 3

CONVENTIONAL SIGNS AND ABBREVIATIONS

SECTION LINE
QUARTER LINE
SIXTEENTH LINE
NEW REFERENCE LINE
NEW R/W LINE
EXISTING R/W LINE
PROPERTY LINE
LOT, TIE AND OTHER MINOR LINES
CORPORATE LIMITS
UNDERGROUND FACILITY (COMMUNICATIONS, ELECTRIC, ETC.)
FEE ACQUISITION AREA (HATCHING VARIES BY OWNER)
TEMPORARY LIMITED EASEMENT AREA
EASEMENT (HIGHWAY, PERMANENT LIMITED OR RESTRICTED DEVELOPMENT) AREAS
TRANSMISSION STRUCTURES (LINE OPTIONAL)
BUILDING

SECTION CORNER
NOTATION FOR COMBUSTABLE FLUIDS
NOTATION FOR HIGH VOLTAGE TRANSMISSION LINES
R/W MONUMENT
NON-MONUMENTED R/W POINT
IRON PIN
VALVE (GAS, WATER, ETC.)
SIGN
OFF-PREMISE SIGN

	COMPENSABLE	NON-COMPENSABLE
ELECTRIC POLE	■	⊠
TELEPHONE POLE	■	⊠
PEDESTAL (LABEL TYPE - (COMMUNICATIONS, ELECTRIC)	■	⊠

NO ACCESS (BY PARCEL ACQUISITION)
NO ACCESS (BY STATUTORY AUTHORITY)
ACCESS RESTRICTED (BY PREVIOUS PROJECT/CONTROL)
BRIDGE
PARCEL NUMBER (102)

ACRES	AC.
ALUMINUM	ALUM.
CERTIFIED SURVEY MAP	C.S.M.
DOCUMENT NUMBER	DOC.
MONUMENT	MON.
PAGE	P.
PROPERTY LINE	P.L.
REFERENCE LINE	R/L
SECTION	SEC.
SEPTIC VENT	SEPV.
STATION	STA.
VOLUME	V.

CURVE DATA

LONG CHORD	L.C.
LONG CHORD BEARING	L.C.B.
RADIUS	R.
DEGREE OF CURVE	D.
CENTRAL ANGLE OR DELTA	△.
LENGTH OF CURVE	L.
TANGENT	T.
DIRECTION AHEAD	DA.
DIRECTION BACK	DB.

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

NOTES:

COORDINATES AND BEARINGS SHOWN ON THIS PLAT ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM, DANE COUNTY ZONE, NAD83 (91) ADJUSTMENT. THE COORDINATES SHOWN ARE GRID COORDINATES AND ARE TO BE USED AS GRID OR GROUND VALUES ON THIS PLAT.

ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY ¾" X 24" IRON REBARS), UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT BY OTHERS.

ALL RIGHT-OF-WAY LINES DEPICTED IN NON ACQUISITION AREAS ARE INTENDED TO RE-ESTABLISH EXISTING RIGHT-OF-WAY LINES AS DETERMINED FROM PREVIOUS PROJECTS, OTHER RECORDED DOCUMENTS, OR FROM CENTERLINE OF EXISTING PAVEMENTS.

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".

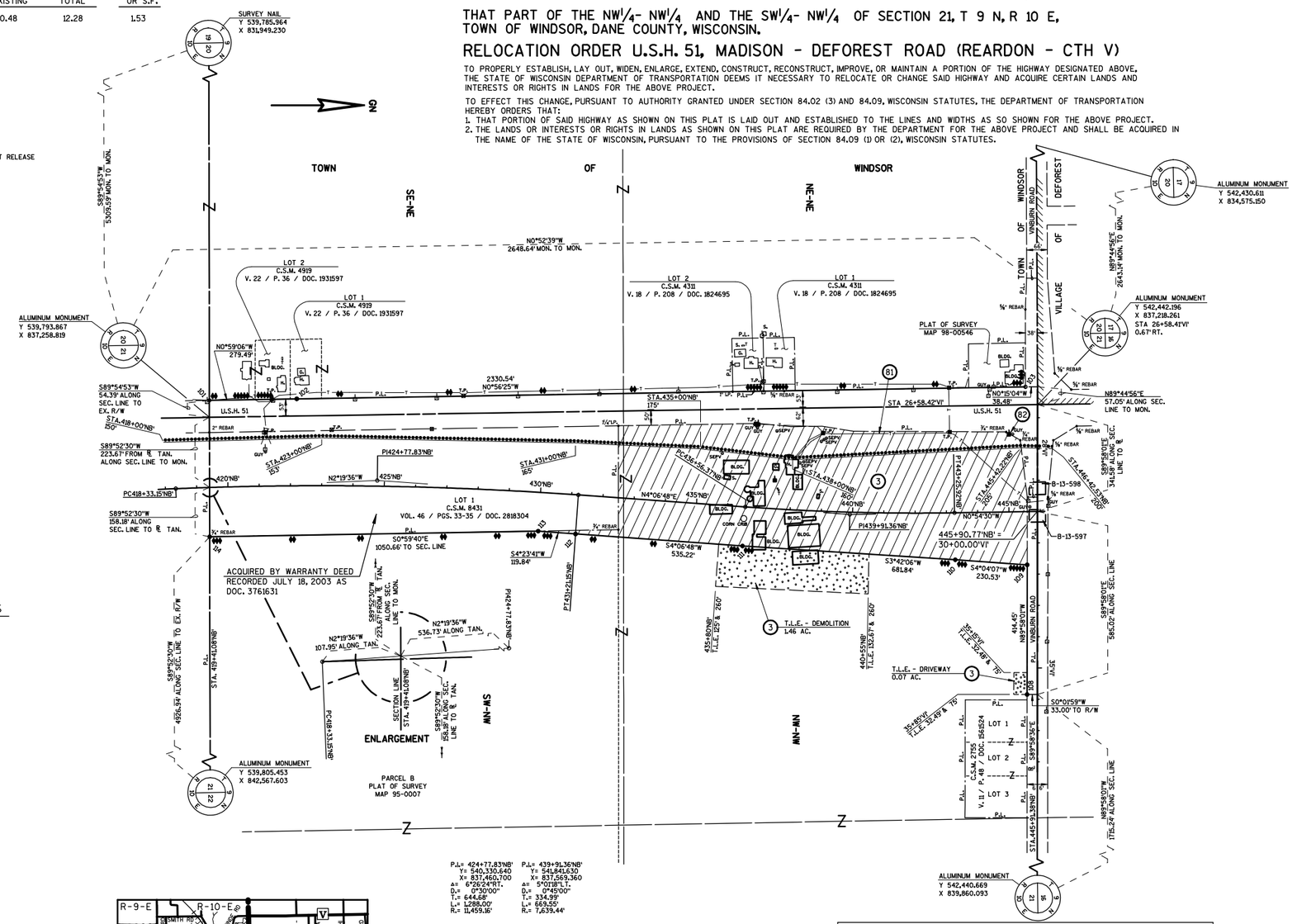
PROPERTY LINES SHOWN ON THIS PLAT ARE DRAWN FROM DATA DERIVED FROM MAPS AND DOCUMENTS OF PUBLIC RECORD AND/OR EXISTING OCCUPATIONAL LINES. THIS PLAT MAY NOT BE A TRUE REPRESENTATION OF EXISTING PROPERTY LINES, EXCLUDING RIGHT-OF-WAY LINES, AND SHOULD NOT BE USED AS A SUBSTITUTE FOR AN ACCURATE FIELD SURVEY.

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:
EXISTING HIGHWAY R/W FOR S.T.H. 51 ESTABLISHED FROM PREVIOUS PROJECT 6030-00-21.
EXISTING HIGHWAY R/W FOR VINBURN ROAD ESTABLISHED FROM PREVIOUS PROJECT 6030-00-21 & SECTION LINE.

EXISTING ACCESS CONTROL ALONG S.T.H. 51 ESTABLISHED FROM C.A. PROJECT CA 05-1(2) & PROJECT 6030-00-21.

A **TEMPORARY LIMITED EASEMENT** (TLE) IS A RIGHT FOR DRIVEWAYS & DEMOLITION 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 ARE TO TERMINATE ON MAY 18, 2014 OR THE DATE THE CONSTRUCTION OF THIS PROJECT IS COMPLETED, WHICHEVER OCCURS FIRST.

DIMENSIONING FOR THE NEW RIGHT-OF-WAY IS MEASURED ALONG AND PERPENDICULAR TO NEW REFERENCE LINES.


SURVEY NAIL
Y 539,785.964
X 831,949.230
ALUMINUM MONUMENT
Y 539,793.867
X 837,258.819
ALUMINUM MONUMENT
Y 542,430.611
X 834,575.150
ALUMINUM MONUMENT
Y 542,442.196
X 837,218.261
STA 26+58.41'VI'
0.67'RT.
ALUMINUM MONUMENT
Y 539,805.453
X 842,567.603
ALUMINUM MONUMENT
Y 542,440.669
X 839,860.093
TOWN OF WINDSOR
SE-NE
NE-NE
MN-MN
MN-SW
S89°54'53"W 5305.59' MON. TO MON.
N89°44'56"E 2643.19' MON. TO MON.
N0°52'39"W 2648.64' MON. TO MON.
LOT 2 C.S.M. 4919 V. 22 / P. 36 / DOC. 1931597
LOT 1 C.S.M. 4919 V. 22 / P. 36 / DOC. 1931597
LOT 2 C.S.M. 4311 V. 18 / P. 208 / DOC. 1824695
LOT 1 C.S.M. 4311 V. 18 / P. 208 / DOC. 1824695
PLAT OF SURVEY MAP 98-00546
U.S.H. 51
VINBURN ROAD
DEFOREST
VILLAGE OF WINDSOR
TOWN OF WINDSOR
N0°59'06"W 279.49'
S89°54'53"W 54.39' ALONG SEC. LINE TO EX. R/W
S89°52'30"W 223.67' FROM ℄ TAN. ALONG SEC. LINE TO MON.
S89°52'30"W 158.18' ALONG SEC. LINE TO ℄ TAN.
2330.54' N0°56'25"W
STA.418+00'NB'
STA.423+00'NB'
STA.431+00'NB'
STA.435+00'NB'
STA.438+00'NB'
STA.445+42.57'NB'
STA.446+42.57'NB'
STA 26+58.42'VI'
N0°15'04"W 38.48'
N89°44'56"E 57.05' ALONG SEC. LINE TO MON.
S89°45'04"E 341.95' ALONG SEC. LINE TO ℄
PC418+33.15'NB'
P1424+77.83'NB'
P1439+91.36'NB'
P1431+42.57'NB'
P1453+21.15'NB'
PC436+56.37'NB'
420'NB'
425'NB'
430'NB'
435'NB'
440'NB'
445'NB'
N2°19'36"W
N4°06'48"E
S4°06'48"W 535.22'
S4°23'41"W 119.84'
S0°59'40"E 1050.66' TO SEC. LINE
S3°42'06"W 681.84'
S4°04'07"W 230.53'
N0°54'30"W
445+90.77'NB' = 30+00.00'VI'
S0°01'59"W 33.00' TO R/W
ACQUIRED BY WARRANTY DEED RECORDED JULY 18, 2003 AS DOC. 3761631
N2°19'36"W 107.95' ALONG TAN.
N2°19'36"W 536.73' ALONG TAN.
SECTION LINE STA. 419+43.08'NB'
PC418+33.15'NB'
P1424+77.83'NB'
ENLARGEMENT
PARCEL B PLAT OF SURVEY MAP 95-0007
T.L.E. - DEMOLITION 1.46 AC.
T.L.E. - DRIVEWAY 0.07 AC.
435'NB' T.L.E. 125' & 260'
440'NB' T.L.E. 132.67' & 260'
35'RT @ 75° T.L.E. 82.49' & 75'
35'RT @ 75° T.L.E. 82.49' & 75'
LOT 1
LOT 2
LOT 3
C.S.M. 2755 V. 11 / P. 48 / DOC. 1561524
B-13-598
B-13-597
P.L.: P.I. STA. 445+90.77'NB' = STA. 30+00.00'VI'
P.L.: P.I. STA. 445+42.57'NB' = STA. 446+42.57'NB'
P.L.: P.I. STA. 419+49.01'NB' = STA. 422+21.88'NB'
P.L.: P.I. STA. 435+00'NB' = STA. 438+00'NB'
P.L.: P.I. STA. 445+42.57'NB' = STA. 446+42.57'NB'
P.L.: P.I. STA. 445+90.77'NB' = STA. 30+00.00'VI

TRANSPORTATION PROJECT PLAT NO: 6020-02-21 - 4.02 AMENDMENT NO. 1

AMENDS PARCELS 6, 9, & 11, REMOVES PARCEL 7 AND ADDS PARCEL 29 TO TRANSPORTATION PROJECT PLAT 6020-02-21 - 4.02 RECORDED AS DOCUMENT NO: 4682659 IN VOL. 59-081A OF PLATS, PAGE 373

THAT PART OF LOTS 1, 2, & 3 OF C.S.M. 13019 V. 83, P. 139-141, DOC. 4718648, AND PART OF LOT 1 OF C.S.M. 5012, V. 22, P. 215, DOC. 1957085, THE SW¼- NW¼ AND THE NW¼- NW¼ OF SECTION 33, AND THE THE NE¼- SE¼, THE SE¼- NE¼ AND NE¼- NE¼ OF SECTION 32, ALL IN THE VILLAGE OF DEFOREST, T 9 N, R 10 E, DANE COUNTY, WISCONSIN.

RELOCATION ORDER U.S.H. 51, MADISON - DEFOREST ROAD (REARDON - CTH V)

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 TRANSFER OF LAND AND INTERESTS TO DOT.

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W ACRES OR S.F. REQUIRED NEW	EXISTING	TOTAL	T.L.E. ACRES OR S.F.
6	VILLAGE OF DEFOREST	FEE	0.35	---	0.35	---
8	PLEASANT HILL ESTATES, LLC	T.L.E.	---	---	---	1.76
9	GEORGE C. & PAMELA J. ANNEN	FEE	0.39	---	0.39	---
11	A+ STORAGE DEFOREST, LLC	FEE	0.16	---	0.16	---
29	A & L BUCHNER, LLC	FEE	0.07	---	0.07	---
81	CENTURYTEL / TELEVIEW OF WISCONSIN, INC	RELEASE OF RIGHTS				
83	AMERICAN TRANSMISSION COMPANY LLC	RELEASE OF RIGHTS				

ALL AREAS SHOWN IN ACRES UNLESS OTHERWISE NOTED

Station & Offset Table

Point Number	Station	Offset
201	313+32.76'NB'	171.84'
202	316+21.71'NB'	177.04'
203	318+93.33'NB'	157.05'
204	319+22.48'NB'	158.72'
205	319+95.98'NB'	162.45'
206	322+40.45'NB'	169.88'
207	326+84.35'NB'	164.24'
208	326+84.38'NB'	161.14'
209	328+49.12'NB'	160.09'
210	334+39.38'NB'	160.65'
211	340+04.30'NB'	201.19'
214	340+06.55'NB'	118.81'
215	334+60.00'NB'	119.33'
216	12+10.00'RE'	100.00'
217	12+60.00'RE'	32.51'
219	12+60.00'RE'	33.49'
220	11+64.59'RE'	33.81'
221	332+55.76'NB'	109.52'
222	328+49.38'NB'	109.91'
223	325+87.00'NB'	115.00'
224	323+35.00'NB'	115.00'
225	320+23.94'NB'	120.22'
226	319+45.18'NB'	123.59'
227	318+30.00'NB'	130.00'
228	316+21.86'NB'	135.00'
229	313+74.63'NB'	108.70'
230	313+32.76'NB'	110.70'

CONVENTIONAL SIGNS AND ABBREVIATIONS

SECTION LINE, QUARTER LINE, SIXTEENTH LINE, NEW REFERENCE LINE, NEW R/W LINE, EXISTING R/W LINE, PROPERTY LINE, LOT, TIE AND OTHER MINOR LINES, CORPORATE LIMITS, UNDERGROUND FACILITY (COMMUNICATIONS, ELECTRIC, ETC.), FEE ACQUISITION AREA (HATCHING VARIES BY OWNER), TEMPORARY LIMITED EASEMENT AREA, EASEMENT (HIGHWAY, PERMANENT LIMITED OR RESTRICTED DEVELOPMENT) AREAS, TRANSMISSION STRUCTURES (LINE OPTIONAL), BUILDING

SECTION CORNER; NOTATION FOR COMBUSTABLE FLUIDS; NOTATION FOR HIGH VOLTAGE TRANSMISSION LINES; ELECTRIC POLE; TELEPHONE POLE; PEDESTAL (LABEL TYPE - (COMMUNICATIONS, ELECTRIC); NO ACCESS (BY PARCEL ACQUISITION); NO ACCESS (BY STATUTORY AUTHORITY); ACCESS RESTRICTED (BY PREVIOUS PROJECT/CONTROL); BRIDGE

R/W MONUMENT; NON-MONUMENTED R/W POINT; IRON PIN; VALVE (GAS, WATER, ETC.); SIGN; OFF-PREMISE SIGN; COMPENSABLE; NON-COMPENSABLE; PARCEL NUMBER; UTILITY PARCEL NUMBER

ACRES	AC.
ALUMINUM	ALUM.
CERTIFIED SURVEY MAP	C.S.M.
DOCUMENT NUMBER	DOC.
MONUMENT	MON.
PAGE	P.
PROPERTY LINE	P.L.
REFERENCE LINE	R/L
SECTION	SEC.
SEPTIC VENT	SEPV.
STATION	STA.
VOLUME	V.

CURVE DATA

LONG CHORD	L.C.
LONG CHORD BEARING	L.C.B.
RADIUS	R.
DEGREE OF CURVE	D.
CENTRAL ANGLE OR DELTA	△.
LENGTH OF CURVE	L.
TANGENT	T.
DIRECTION AHEAD	DA.
DIRECTION BACK	DB.

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

NOTES:

COORDINATES AND BEARINGS SHOWN ON THIS PLAT ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM, DANE COUNTY ZONE, NAD83 (91) ADJUSTMENT. THE COORDINATES SHOWN ARE GRID COORDINATES AND ARE TO BE USED AS GRID OR GROUND VALUES ON THIS PLAT.

ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY ¾" X 24" IRON REBARS), UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT BY OTHERS.

ALL RIGHT-OF-WAY LINES DEPICTED IN NON ACQUISITION AREAS ARE INTENDED TO RE-ESTABLISH EXISTING RIGHT-OF-WAY LINES AS DETERMINED FROM PREVIOUS PROJECTS, OTHER RECORDED DOCUMENTS, OR FROM CENTERLINE OF EXISTING PAVEMENTS.

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".

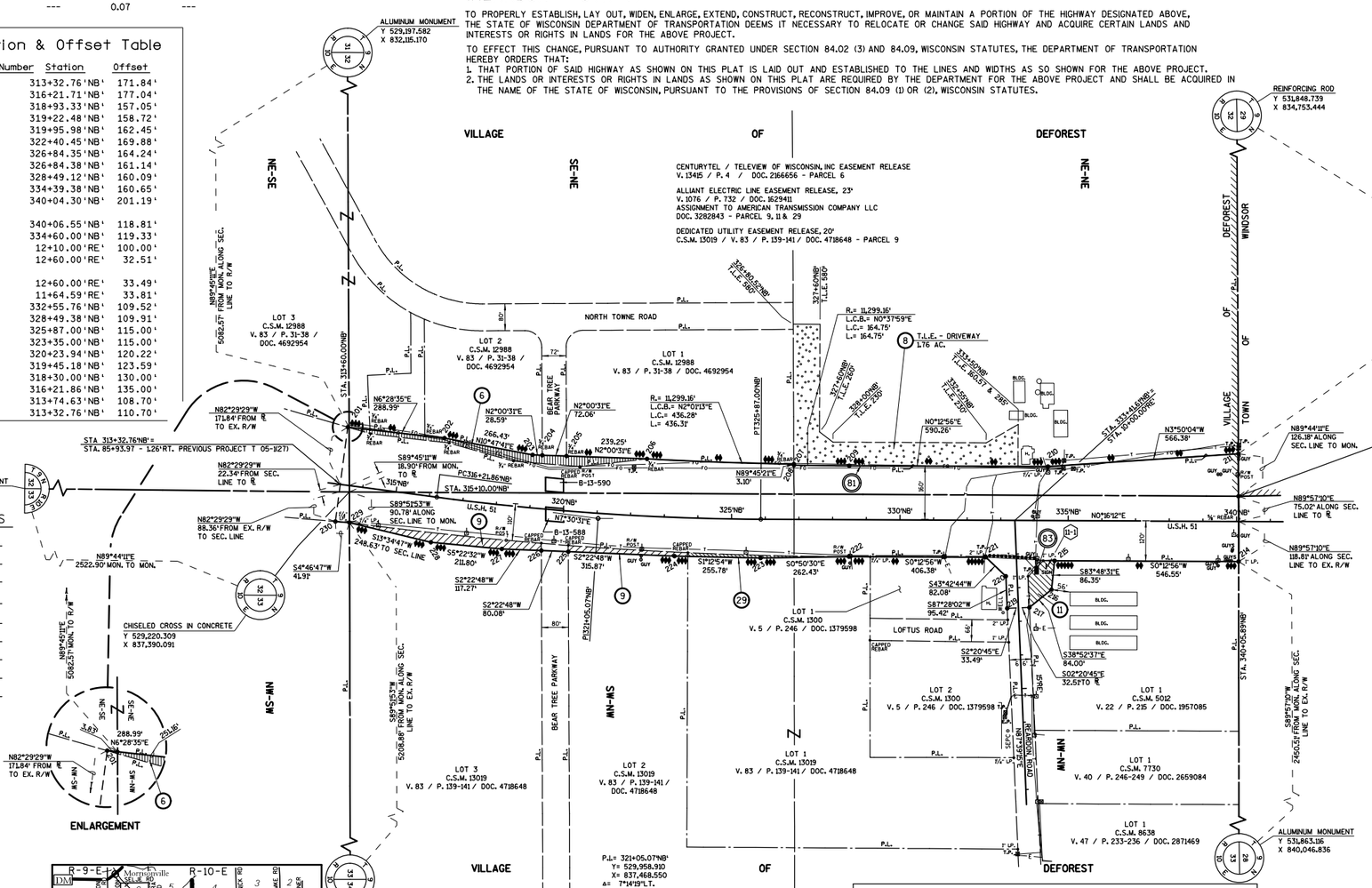
PROPERTY LINES SHOWN ON THIS PLAT ARE DRAWN FROM DATA DERIVED FROM MAPS AND DOCUMENTS OF PUBLIC RECORD AND/OR EXISTING OCCUPATIONAL LINES. THIS PLAT MAY NOT BE A TRUE REPRESENTATION OF EXISTING PROPERTY LINES, EXCLUDING RIGHT-OF-WAY LINES, AND SHOULD NOT BE USED AS A SUBSTITUTE FOR AN ACCURATE FIELD SURVEY.

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE: EXISTING HIGHWAY R/W FOR S.T.H. 51 ESTABLISHED FROM PREVIOUS PROJECT T 05-1(27) & C.S.M. 12988. EXISTING HIGHWAY R/W FOR REARDON ROAD ESTABLISHED FROM C.S.M. 1300, C.S.M. 5012 & C.S.M. 13019. EXISTING HIGHWAY R/W FOR BEAR TREE PARKWAY ESTABLISHED FROM C.S.M. 12988 & C.S.M. 13019.

EXISTING ACCESS CONTROL ALONG S.T.H. 51 ESTABLISHED FROM C.A. PROJECT CA 05-1(2), C.S.M. 12988, C.S.M. 1300, C.S.M. 5012 & C.S.M. 13019.

A **TEMPORARY LIMITED EASEMENT** (TLE) IS A RIGHT FOR DRIVEWAY 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 TLE'S ON THIS PLAT EXPIRE AT THE COMPLETION OF THE CONSTRUCTION PROJECT FOR WHICH THIS INSTRUMENT IS GIVEN.

DIMENSIONING FOR THE NEW RIGHT-OF-WAY IS MEASURED ALONG AND PERPENDICULAR TO NEW REFERENCE LINES.



SIGN NUMBER	SIGN OWNER
11-1	AG SYSTEMS, INC.

AYRES ASSOCIATES
Engineers/Planners
Environmental Scientists
1802 Pankratz Street
Madison, Wisconsin 53704-4069

I, JAMEY REID, 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 AND MAPPED TRANSPORTATION PROJECT PLAT 6020-02-21 - 4.02 AMENDMENT 1 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

(SIGNATURE) _____ DATE: May 3,2011

(PRINTED NAME) JAMEY L. REID

(REGISTRATION NUMBER) S-2559

WISCONSIN JAMEY L. REID S-2559 PROFESSIONAL LAND SURVEYOR

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

(SIGNATURE) _____ DATE: _____

(PRINTED NAME) _____

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 6020-02-21 - 4.02
AMENDMENT NO: 1

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN _____ COUNTY, WISCONSIN AT __:__ _M ON _____ AS DOCUMENT #_____ AND FILED IN _____

_____
SIGNATURE OF REGISTER OF DEEDS

TRANSPORTATION PROJECT PLAT NO: 6020-02-21 - 4.03 AMENDMENT NO. 1

AMENDS PARCEL 13 & 17, REMOVES PARCEL 16 AND ADDS PARCEL 31 TO TRANSPORTATION PROJECT PLAT 6020-02-21 - 4.03 RECORDED AS DOCUMENT NO: 4682660 IN VOL. 59-081A OF PLATS, PAGE 374

THAT PART OF LOT 1, C.S.M. 13076, V.83, PGS. 331-333, THE SW¼- SW¼, AND THE NW¼- SW¼ OF SECTION 28, THE VILLAGE OF DEFOREST AND THAT PART OF LOT 1, C.S.M. 1257, V. 5, P. 179, THE NE¼- SW¼ OF SECTION 28, TOWN OF WINDSOR, AND THAT PART OF OUTLOT 2 OF WOLF HOLLOW, V. 58-079B, PGS. 401-405, LOT 1, C.S.M. 8659, V. 47, P. 288, DOC. 2876836, UNITS 1, 2, & 10-15 OF WINDSOR CROSSING CONDOMINIUM NORTH, V. 6-084A, PGS. 1-3, THE SE¼- SE¼, THE NE¼- SE¼, AND THE NW¼- SE¼ OF SECTION 29, TOWN OF WINDSOR, ALL IN T 9 N, R 10 E, DANE COUNTY, WISCONSIN.

RELOCATION ORDER U.S.H. 51, MADISON - DEFOREST ROAD (REARDON - CTH V)

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 TRANSFER OF LAND AND INTERESTS TO DOT.

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W ACRES OR S.F. REQUIRED NEW	EXISTING	TOTAL	T.L.E. ACRES OR S.F.
12	COMMUNITY DEVELOPMENT AUTHORITY OF THE TOWN OF WINDSOR, A COMMUNITY DEVELOPMENT AUTHORITY CRETAED PURSUANT TO WIS. STATS. SEC. 66.1335	FEE, T.L.E. & ACCESS RIGHTS	6.35	0.76	7.11	1.04
13	TOWN OF WINDSOR	FEE, T.L.E. & ACCESS RIGHTS	46 S.F.	---	46 S.F.	0.06
14	RONALD D. & SUSAN K. MARKS	TLE	---	---	---	0.01
17	PC FARM HOLDINGS II, LLC, DAVID W. & ROSALIND H. HASWELL, LIFE ESTATE	FEE & T.L.E.	14.59	---	14.59	0.36
31	DAVID M. & JUNE E. LECKWEE	FEE & T.L.E.	---	0.03	0.03	0.08
81	CENTURYTEL / TELEVIEW OF WISCONSIN, INC	RELEASE OF RIGHTS				
82	ALLIANT ENERGY	RELEASE OF RIGHTS				
83	AMERICAN TRANSMISSION COMPANY LLC	RELEASE OF RIGHTS				
84	MADISON GAS & ELECTRIC	RELEASE OF RIGHTS				

ALL AREAS SHOWN IN ACRES UNLESS OTHERWISE NOTED

Station & Offset Table

Point Number	Station	Offset
300	340+04.30'NB'	201.19'
301	342+00.00'NB'	155.00'
302	353+59.93'NB'	205.00'
303	356+00.00'NB'	255.00'
304	357+00.00'NB'	260.00'
305	358+40.06'NB'	240.00'
306	362+75.00'NB'	340.00'
307	364+50.00'NB'	420.00'
308	195+20.00'W'	110.00'
309	194+45.00'W'	80.00'
310	187+75.00'W'	105.00'
311	99+25.00'NTS'	75.00'
312	97+95.00'NTS'	40.00'
313	97+15.00'NTS'	40.00'
314	97+20.00'NTS'	40.00'
315	97+55.00'NTS'	40.00'
316	99+70.00'NTS'	80.00'
317	184+95.00'W'	75.00'
318	183+35.00'W'	33.43'
319	179+80.00'W'	33.23'
323	212+20.00'W'	35.74'
324	211+77.45'W'	35.70'
325	98+62.00'PCB'	53.63'
328	98+62.00'PCB'	40.00'
329	98+74.47'PCB'	40.00'
330	210+09.29'W'	47.06'
331	206+58.98'W'	42.14'
332	204+80.00'W'	82.00'
333	204+20.00'W'	135.00'
334	364+55.00'NB'	370.00'
335	362+55.00'NB'	315.00'
336	358+40.06'NB'	295.00'
337	353+59.93'NB'	160.00'
338	351+85.00'NB'	160.00'
339	348+00.00'NB'	135.00'
340	346+00.00'NB'	115.00'
341	343+25.00'NB'	130.00'
342	340+06.55'NB'	118.81'

DEDICATED UTILITY EASEMENT RELEASE, 50' WINDSOR SANITARY DISTRICT NO. 1 DOC. 4257807 - PARCEL 12

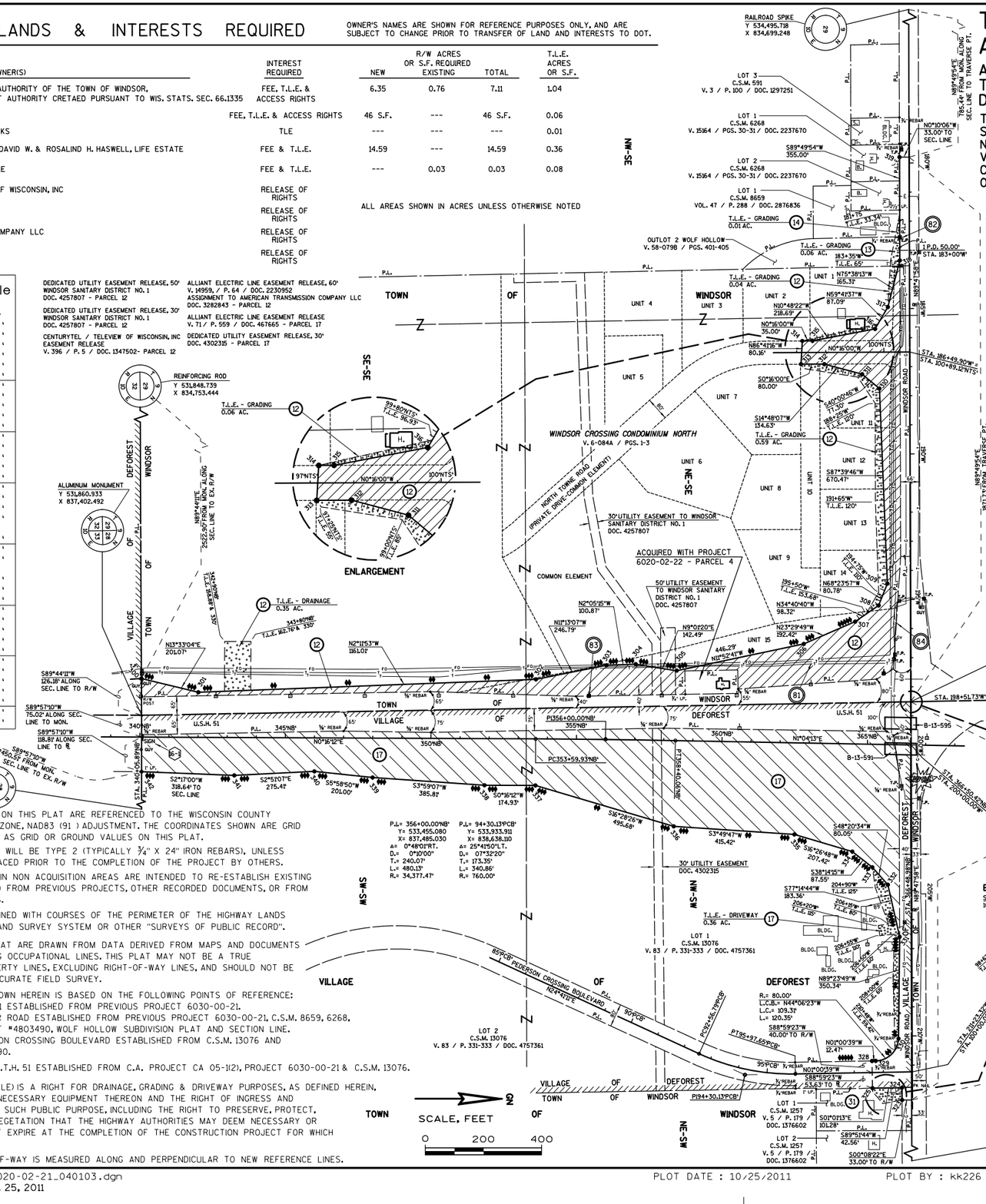
DEDICATED UTILITY EASEMENT RELEASE, 30' WINDSOR SANITARY DISTRICT NO. 1 DOC. 4257807 - PARCEL 12

CENTURYTEL / TELEVIEW OF WISCONSIN, INC EASEMENT RELEASE V. 396 / P. 5 / DOC. 1347502- PARCEL 12

ALLIANT ELECTRIC LINE EASEMENT RELEASE, 60' V. 14959, / P. 64 / DOC. 2230952 ASSIGNMENT TO AMERICAN TRANSMISSION COMPANY LLC DOC. 3282843 - PARCEL 12

ALLIANT ELECTRIC LINE EASEMENT RELEASE V. 71 / P. 559 / DOC. 467665 - PARCEL 17

DEDICATED UTILITY EASEMENT RELEASE, 30' DOC. 4302315 - PARCEL 17



CONVENTIONAL SIGNS AND ABBREVIATIONS

SECTION LINE
QUARTER LINE
SIXTEENTH LINE
NEW REFERENCE LINE
NEW R/W LINE
EXISTING R/W LINE
PROPERTY LINE
LOT, TIE AND OTHER MINOR LINES
CORPORATE LIMITS
UNDERGROUND FACILITY (COMMUNICATIONS, ELECTRIC, ETC.)
FEE ACQUISITION AREA (HATCHING VARIES BY OWNER)
TEMPORARY LIMITED EASEMENT AREA
EASEMENT (HIGHWAY, PERMANENT LIMITED OR RESTRICTED DEVELOPMENT) AREAS
TRANSMISSION STRUCTURES (LINE OPTIONAL)
BUILDING

SECTION CORNER
NOTATION FOR COMBUSTABLE FLUIDS
NOTATION FOR HIGH VOLTAGE TRANSMISSION LINES
ELECTRIC POLE
TELEPHONE POLE
PEDESTAL (LABEL TYPE - (COMMUNICATIONS, ELECTRIC)
BRIDGE

R/W MONUMENT
NON-MONUMENTED R/W POINT
IRON PIN
VALVE (GAS, WATER, ETC.)
SIGN
OFF-PREMISE SIGN

	COMPENSABLE	NON-COMPENSABLE
ELECTRIC POLE	■	⊠
TELEPHONE POLE	■	⊠
PEDESTAL (LABEL TYPE - (COMMUNICATIONS, ELECTRIC)	■	⊠

NO ACCESS (BY PARCEL ACQUISITION)
NO ACCESS (BY STATUTORY AUTHORITY)
ACCESS RESTRICTED (BY PREVIOUS PROJECT/CONTROL)

PARCEL NUMBER 6
UTILITY PARCEL NUMBER 83

ACRES
ALUMINUM
CERTIFIED SURVEY MAP
DOCUMENT NUMBER
MONUMENT
PAGE / PAGES
PROPERTY LINE
REFERENCE LINE
SECTION
SEPTIC VENT
STATION
VOLUME

AC.
ALUM.
C.S.M.
DOC.
MON.
P. / PGS.
P.L.
R/L
SEC.
SEPV.
STA.
V.

CURVE DATA

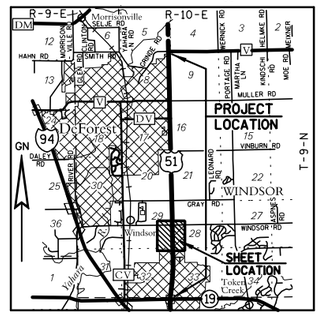
LONG CHORD
LONG CHORD BEARING
RADIUS
DEGREE OF CURVE
CENTRAL ANGLE OR DELTA
LENGTH OF CURVE
TANGENT
DIRECTION AHEAD
DIRECTION BACK

L.C.
L.C.B.
R.
D.
Δ.
L.
T.
DA.
DB.

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 —

SIGN NUMBER	SIGN OWNER
16-1	VACATIONLAND SIGNS



NOTES:

COORDINATES AND BEARINGS SHOWN ON THIS PLAT ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM, DANE COUNTY ZONE, NAD83 (91) ADJUSTMENT. THE COORDINATES SHOWN ARE GRID COORDINATES AND ARE TO BE USED AS GRID OR GROUND VALUES ON THIS PLAT.

ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY ¾" X 24" IRON REBARS), UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT BY OTHERS.

ALL RIGHT-OF-WAY LINES DEPICTED IN NON ACQUISITION AREAS ARE INTENDED TO RE-ESTABLISH EXISTING RIGHT-OF-WAY LINES AS DETERMINED FROM PREVIOUS PROJECTS, OTHER RECORDED DOCUMENTS, OR FROM CENTERLINE OF EXISTING PAVEMENTS.

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 R/W FOR S.T.H. 51 ESTABLISHED FROM PREVIOUS PROJECT 6030-00-21. EXISTING HIGHWAY R/W FOR WINDSOR ROAD ESTABLISHED FROM PREVIOUS PROJECT 6030-00-21, C.S.M. 8659, 6268, & 13076, WARRANTY DEED DOCUMENT #4803490, WOLF HOLLOW SUBDIVISION PLAT AND SECTION LINE. EXISTING HIGHWAY R/W FOR PEDERSON CROSSING BOULEVARD ESTABLISHED FROM C.S.M. 13076 AND WARRANTY DEED DOCUMENT #4803490.

EXISTING ACCESS CONTROL ALONG S.T.H. 51 ESTABLISHED FROM C.A. PROJECT CA 05-1(2), PROJECT 6030-00-21 & C.S.M. 13076.

A **TEMPORARY LIMITED EASEMENT** (TLE) IS A RIGHT FOR DRAINAGE, GRADING & DRIVEWAY 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 TLE'S ON THIS PLAT EXPIRE AT THE COMPLETION OF THE CONSTRUCTION PROJECT FOR WHICH THIS INSTRUMENT IS GIVEN.

DIMENSIONING FOR THE NEW RIGHT-OF-WAY IS MEASURED ALONG AND PERPENDICULAR TO NEW REFERENCE LINES.

AYRES ASSOCIATES
Engineers/Planners
Environmental Scientists
1802 Pankratz Street
Madison, Wisconsin 53704-4069

I, JAMEY REID, 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 AND MAPPED TRANSPORTATION PROJECT PLAT 6020-02-21 - 4.03 AMENDMENT 1 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN JAMEY L. REID Briggsville, WI S-2559 PROFESSIONAL LAND SURVEYOR

(SIGNATURE) Jamey L. Reid DATE: Oct. 25, 2011

(PRINTED NAME) JAMEY L. REID

(REGISTRATION NUMBER) S-2559

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

(SIGNATURE) _____ DATE: _____

(PRINTED NAME) _____

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 6020-02-21 - 4.03
AMENDMENT NO: 1

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN _____ COUNTY, WISCONSIN AT ___:___ M ON _____ AS DOCUMENT #_____ AND FILED IN _____

_____
SIGNATURE OF REGISTER OF DEEDS

FILE NAME : N:\450224\DGN\6020-02-21_040103.dgn
APPRAISAL PLAT DATE : OCT. 25, 2011
PLOT DATE : 10/25/2011 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:400

4.03

TRANSPORTATION PROJECT PLAT NO: 6020-02-21 - 4.04 AMENDMENT NO. 2

AMENDS PARCEL 19 OF TRANSPORTATION PROJECT PLAT 6020-02-21 - 4.04 AMENDMENT NO. 1 RECORDED AS DOCUMENT NO: 4771966 IN VOL. 59-091B OF PLATS, PAGE 422

THAT PART OF LOT 1 & 2, C.S.M. 8582, V. 47, P. 101, DOC. 2856484, LOT 1, C.S.M. 7359, V. 37, PGS. 306-308, DOC. 2574538, THE SW¼- NW¼ AND THE NW¼- NW¼ OF SECTION 28, AND THE SE¼- NE¼, THE NE¼- NE¼, AND THE SW¼- NE¼, OF SECTION 29, ALL IN THE TOWN OF WINDSOR, T 9 N, R 10 E, DANE COUNTY, WISCONSIN.

RELOCATION ORDER U.S.H. 51, MADISON - DEFOREST ROAD (REARDON - CTH V)

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 TRANSFER OF LAND AND INTERESTS TO DOT.

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W ACRES OR S.F. REQUIRED NEW	EXISTING	TOTAL	T.L.E. ACRES OR S.F.
18	DEFOREST AREA SCHOOL DISTRICT	FEE & ACCESS RIGHTS	1.69	0.32	2.01	---
19	ZINGG FARMS, INC., A WISCONSIN CORPORATION	FEE, T.L.E. & ACCESS RIGHTS	9.50	0.74	10.24	1.01
21	WINDSOR CONGREGATIONAL CEMETERY	ACCESS RIGHTS	---	---	---	---
22	DAVID L. & DENISE S. JUVE	FEE & ACCESS RIGHTS	0.13	---	0.13	---
23	MERLIN R. & SHERRIE A. BLIEFERNICHT, TRUSTEES OF BLIEFERNICHT LIVING TRUST, DATED JANUARY 18, 2006	FEE & ACCESS RIGHTS	0.17	---	0.17	---
24	TAMELA P. SMITHSON	FEE	11.69	0.38	12.07	---
26	TAMELA P. SMITHSON, TILLA A. QUAM LIFE ESTATE	FEE	3.86	---	3.86	---
81	CENTURYTEL / TELEVIEW OF WISCONSIN, INC	RELEASE OF RIGHTS				
83	AMERICAN TRANSMISSION COMPANY LLC	RELEASE OF RIGHTS				

ALL AREAS SHOWN IN ACRES UNLESS OTHERWISE NOTED

CONVENTIONAL SIGNS AND ABBREVIATIONS

SECTION LINE
QUARTER LINE
SIXTEENTH LINE
NEW REFERENCE LINE
NEW R/W LINE
EXISTING R/W LINE
PROPERTY LINE
LOT, TIE AND OTHER MINOR LINES
CORPORATE LIMITS
UNDERGROUND FACILITY (COMMUNICATIONS, ELECTRIC, ETC.)
FEE ACQUISITION AREA (HATCHING VARIES BY OWNER)
TEMPORARY LIMITED EASEMENT AREA
EASEMENT (HIGHWAY, PERMANENT LIMITED OR RESTRICTED DEVELOPMENT) AREAS
TRANSMISSION STRUCTURES (LINE OPTIONAL)
BUILDING

SECTION CORNER
NOTATION FOR COMBUSTABLE FLUIDS
NOTATION FOR HIGH VOLTAGE TRANSMISSION LINES
R/W MONUMENT
NON-MONUMENTED R/W POINT
IRON PIN
VALVE (GAS, WATER, ETC.)
SIGN
OFF-PREMISE SIGN

	COMPENSABLE	NON-COMPENSABLE
ELECTRIC POLE	■	⊘
TELEPHONE POLE	■	⊘
PEDESTAL (LABEL TYPE - (COMMUNICATIONS, ELECTRIC)	■	⊠

NO ACCESS (BY PARCEL ACQUISITION)
NO ACCESS (BY STATUTORY AUTHORITY)
ACCESS RESTRICTED (BY PREVIOUS PROJECT/CONTROL)
BRIDGE
PARCEL NUMBER (6)
UTILITY PARCEL NUMBER (83)

ACRES	AC.
ALUMINUM	ALUM.
ACCESS POINT	A.P.
CERTIFIED SURVEY MAP	C.S.M.
DOCUMENT NUMBER	DOC.
MONUMENT	MON.
PAGE / PAGES	P. / PGS.
PRIVATE DRIVE	P.D.
PROPERTY LINE	P.L.
REFERENCE LINE	R/L
SECTION	SEC.
SEPTIC VENT	SEPV.
STATION	STA.
VOLUME	V.

CURVE DATA

LONG CHORD	L.C.
LONG CHORD BEARING	L.C.B.
RADIUS	R.
DEGREE OF CURVE	D.
CENTRAL ANGLE OR DELTA	Δ.
LENGTH OF CURVE	L.
TANGENT	T.
DIRECTION AHEAD	DA.
DIRECTION BACK	DB.

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

NOTES:

COORDINATES AND BEARINGS SHOWN ON THIS PLAT ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM, DANE COUNTY ZONE, NAD83 (91) ADJUSTMENT. THE COORDINATES SHOWN ARE GRID COORDINATES AND ARE TO BE USED AS GRID OR GROUND VALUES ON THIS PLAT.

ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY ¾" X 24" IRON REBARS), UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT BY OTHERS.

ALL RIGHT-OF-WAY LINES DEPICTED IN NON ACQUISITION AREAS ARE INTENDED TO RE-ESTABLISH EXISTING RIGHT-OF-WAY LINES AS DETERMINED FROM PREVIOUS PROJECTS, OTHER RECORDED DOCUMENTS, OR FROM CENTERLINE OF EXISTING PAVEMENTS.

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 R/W FOR S.T.H. 51 ESTABLISHED FROM PREVIOUS PROJECT 6030-00-21.
EXISTING HIGHWAY R/W FOR WINDSOR ROAD ESTABLISHED FROM PREVIOUS PROJECT 6030-00-21, SECTION LINE & C.S.M. 8582.
EXISTING HIGHWAY R/W FOR GRAY ROAD ESTABLISHED FROM PREVIOUS PROJECT 6030-00-21 & SECTION LINE.

EXISTING ACCESS CONTROL ALONG S.T.H. 51 ESTABLISHED FROM C.A. PROJECT CA 05-1(2) & PROJECT 6030-00-21.

ACCESS TO BE CONSTRUCTED WITHIN THE LOCATION SPECIFIED, THE LOCATION SHOWN IS THE CENTER POINT OF THE DEFINED WIDTH, AND NOT NECESSARILY THE WIDTH OF THE PHYSICAL DRIVEWAY.

A **TEMPORARY LIMITED EASEMENT** (TLE) IS A RIGHT FOR DRIVEWAY 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 TLE'S ON THIS PLAT EXPIRE AT THE COMPLETION OF THE CONSTRUCTION PROJECT FOR WHICH THIS INSTRUMENT IS GIVEN.

DIMENSIONING FOR THE NEW RIGHT-OF-WAY IS MEASURED ALONG AND PERPENDICULAR TO NEW REFERENCE LINES.

AYRES ASSOCIATES
Engineers/Planners
Environmental Scientists
1802 Pankratz Street
Madison, Wisconsin 53704-4069

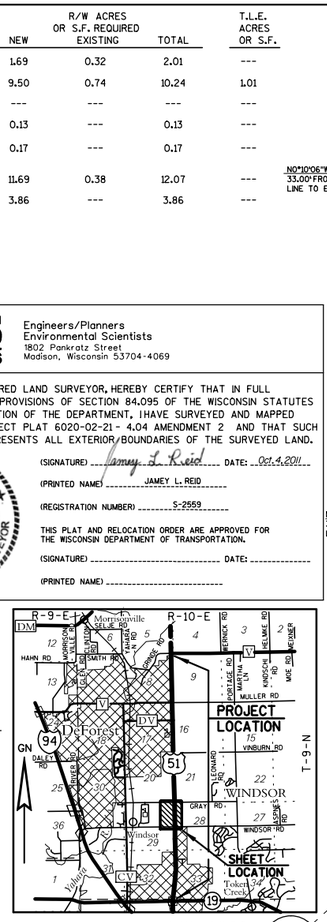
I, JAMEY REID, REGISTERED LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT, I HAVE SURVEYED AND MAPPED TRANSPORTATION PROJECT PLAT 6020-02-21 - 4.04 AMENDMENT 2 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

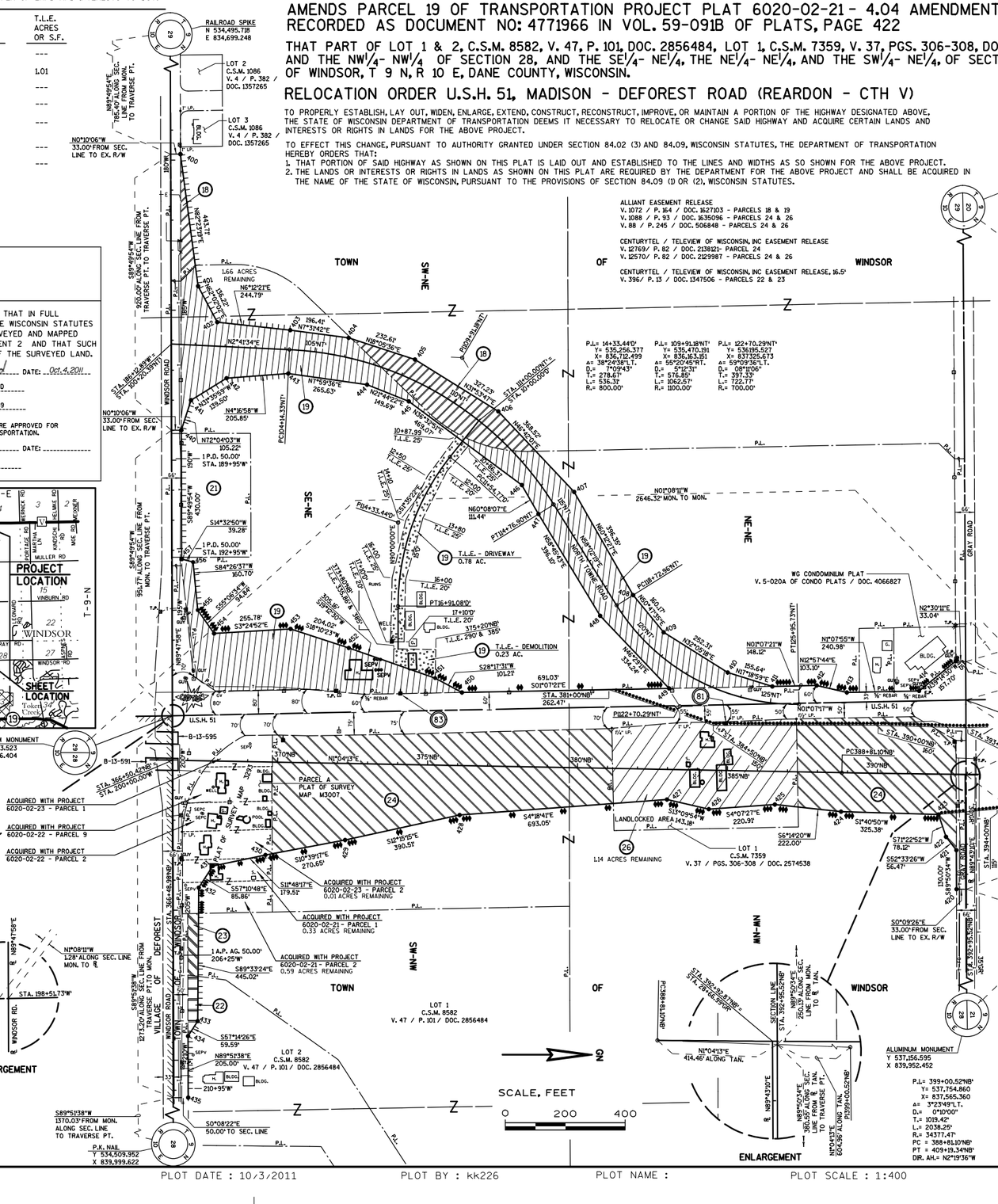
WISCONSIN JAMEY L. REID Brigsville, WI S-2559 PROFESSIONAL LAND SURVEYOR

(SIGNATURE) Jamey L. Reid DATE: Oct. 4, 2011
(PRINTED NAME) JAMEY L. REID
(REGISTRATION NUMBER) S-2559

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

(SIGNATURE) _____ DATE: _____
(PRINTED NAME) _____





Station & Offset Table

Point Number	Station	Offset
400	179+80.00'W'	32.77'
401	184+20.00'W'	90.00'
402	101+70.00'NT'	80.00'
403	104+14.33'NT'	65.00'
404	106+00.00'NT'	65.00'
405	108+20.00'NT'	65.00'
406	111+30.00'NT'	65.00'
407	114+76.89'NT'	80.00'
408	118+72.96'NB'	65.00'
409	120+50.00'NB'	65.00'
410	123+30.00'NB'	65.00'
411	125+00.30'NB'	55.00'
412	387+92.10'NB'	288.97'
413	388+93.08'NB'	267.72'
414	391+35.84'NB'	276.05'
415	392+58.19'NB'	376.96'
420	32+50.00 'GR'	31.17'
421	31+20.00 'GR'	30.89'
422	30+75.00 'GR'	65.00'
423	392+05.19'NB'	135.00'
424	388+81.10'NB'	130.00'
425	386+60.00'NB'	110.00'
426	384+40.00'NB'	265.00'
427	383+00.00'NB'	100.00'
428	376+10.00'NB'	165.00'
429	372+30.00'NB'	265.00'
430	369+65.00'NB'	310.00'
431	367+90.00'NB'	350.00'
432	204+25.00'W'	85.00'
433	208+70.00'W'	80.00'
434	209+20.00'W'	47.58'
435	211+25.00'W'	47.36'
440	189+00.00'W'	32.25'
441	188+00.00'W'	65.00'
442	102+10.00'NT'	105.00'
443	104+14.33'NT'	80.00'
444	107+00.00'NT'	70.00'
445	108+60.00'NT'	70.00'
446	113+60.00'NT'	50.00'
447	114+76.89'NT'	60.00'
448	118+72.96'NB'	65.00'
449	121+80.00'NB'	71.06'
450	376+10.00'NB'	243.70'
451	375+20.00'NB'	290.00'
452	372+30.00'NB'	385.00'
453	370+35.00'NB'	445.00'
454	367+80.00'NB'	425.00'
455	195+00.00'W'	85.00'
456	193+40.00'W'	70.00'
457	193+30.00'W'	32.01'

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 6020-02-21 - 4.04
AMENDMENT NO: 2

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN _____ COUNTY, WISCONSIN AT __:__ _M ON _____ AS DOCUMENT #_____ AND FILED IN _____

_____
SIGNATURE OF REGISTER OF DEEDS

FILE NAME : N:\450224\DGN\6020-02-21_040104.dgn
APPRAISAL PLAT DATE : October 4, 2011
PLOT DATE : 10/3/2011 PLOT BY : kk226 PLOT NAME : PLOT SCALE : 1:400

TRANSPORTATION PROJECT PLAT NO: 6020-02-21 - 4.05 AMENDMENT NO. 1

AMENDS PARCEL 4 AND ADDS ACCESS CONTROL TO TRANSPORTATION PROJECT PLAT 6020-02-21 - 4.05 RECORDED AS DOCUMENT NO: 4650889 IN VOL. 59-077B OF PLATS, PAGE 359

THAT PART OF THE SW¼ - SW¼ AND THE NW¼ - SW¼ OF SECTION 21, T 9 N, R 10 E, TOWN OF WINDSOR, DANE COUNTY, WISCONSIN.

RELOCATION ORDER U.S.H. 51, MADISON - DEFOREST ROAD (REARDON - CTH V)

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.
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SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND AND INTERESTS TO DOT.

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W ACRES OR S.F. REQUIRED NEW	R/W ACRES OR S.F. REQUIRED EXISTING	R/W ACRES OR S.F. REQUIRED TOTAL	T.L.E. ACRES OR S.F.
4	ANITA AND JAMES TREINEN REVOCABLE TRUST OF FEBUARY 15, 2006	FEE & T.L.E.	18.62	0.38	19.00	3.55
81	CENTURYTEL / TELEVIEW OF WISCONSIN, INC	RELEASE OF RIGHTS				
82	ALLIANT ENERGY	RELEASE OF RIGHTS				

ALL AREAS SHOWN IN ACRES UNLESS OTHERWISE NOTED

CENTURYTEL / TELEVIEW OF WISCONSIN, INC EASEMENT RELEASE
V. 2143 / P. 78 / DOC. 1675881 - PARCEL 4

ALLIANT ENERGY EASEMENT RELEASE
V. 1086 / P. 710 / DOC. 1634465 - PARCEL 4

Station & Offset Table

Point Number	Station	Offset
502	393+24.95'NB'	374.52'
503	394+56.65'NB'	299.44'
504	405+94.62'NB'	305.05'
505	407+08.25'NB'	306.30'
506	419+49.01'NB'	278.46'
510	419+37.78'NB'	112.64'
511	418+33.15'NB'	110.00'
512	415+00.00'NB'	100.00'
513	413+00.00'NB'	67.00'
514	409+19.34'NB'	120.00'
515	403+00.00'NB'	125.00'
516	401+00.00'NB'	150.00'
517	396+55.00'NB'	110.00'
518	394+00.00'NB'	115.00'
519	30+75.00'GR'	95.00'
520	32+50.00'GR'	34.83'
523	419+36.45'NB'	157.61'

CONVENTIONAL SIGNS AND ABBREVIATIONS

SECTION LINE
QUARTER LINE
SIXTEENTH LINE
NEW REFERENCE LINE
NEW R/W LINE
EXISTING R/W LINE
PROPERTY LINE
LOT, TIE AND OTHER MINOR LINES
CORPORATE LIMITS
UNDERGROUND FACILITY (COMMUNICATIONS, ELECTRIC, ETC.)
FEE ACQUISITION AREA (HATCHING VARIES BY OWNER)
TEMPORARY LIMITED EASEMENT AREA
EASEMENT (HIGHWAY, PERMANENT LIMITED OR RESTRICTED DEVELOPMENT) AREAS
TRANSMISSION STRUCTURES (LINE OPTIONAL)
BUILDING

SECTION CORNER
NOTATION FOR COMBUSTABLE FLUIDS
NOTATION FOR HIGH VOLTAGE TRANSMISSION LINES
R/W MONUMENT
NON-MONUMENTED R/W POINT
IRON PIN
VALVE (GAS, WATER, ETC.)
SIGN
OFF-PREMISE SIGN

	COMPENSABLE	NON-COMPENSABLE
ELECTRIC POLE	■	□
TELEPHONE POLE	■	⊘
PEDESTAL (LABEL TYPE - (COMMUNICATIONS, ELECTRIC)	■	⊠

NO ACCESS (BY PARCEL ACQUISITION)
NO ACCESS (BY STATUTORY AUTHORITY)
ACCESS RESTRICTED (BY PREVIOUS PROJECT/CONTROL)

BRIDGE
PARCEL NUMBER (102)

ACRES	AC.
ALUMINUM	ALUM.
CERTIFIED SURVEY MAP	C.S.M.
DOCUMENT NUMBER	DOC.
MONUMENT	MON.
PAGE	P.
PROPERTY LINE	P.L.
REFERENCE LINE	R/L
SECTION	SEC.
SEPTIC VENT	SEPV.
STATION	STA.
VOLUME	V.

CURVE DATA

LONG CHORD	L.C.
LONG CHORD BEARING	L.C.B.
RADIUS	R.
DEGREE OF CURVE	D.
CENTRAL ANGLE OR DELTA	Δ.
LENGTH OF CURVE	L.
TANGENT	T.
DIRECTION AHEAD	DA.
DIRECTION BACK	DB.

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

NOTES:

COORDINATES AND BEARINGS SHOWN ON THIS PLAT ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM, DANE COUNTY ZONE, NAD83 (91) ADJUSTMENT. THE COORDINATES SHOWN ARE GRID COORDINATES AND ARE TO BE USED AS GRID OR GROUND VALUES ON THIS PLAT.

ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY ¾" X 24" IRON REBARS), UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT BY OTHERS.

ALL RIGHT-OF-WAY LINES DEPICTED IN NON ACQUISITION AREAS ARE INTENDED TO RE-ESTABLISH EXISTING RIGHT-OF-WAY LINES AS DETERMINED FROM PREVIOUS PROJECTS, OTHER RECORDED DOCUMENTS, OR FROM CENTERLINE OF EXISTING PAVEMENTS.

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".

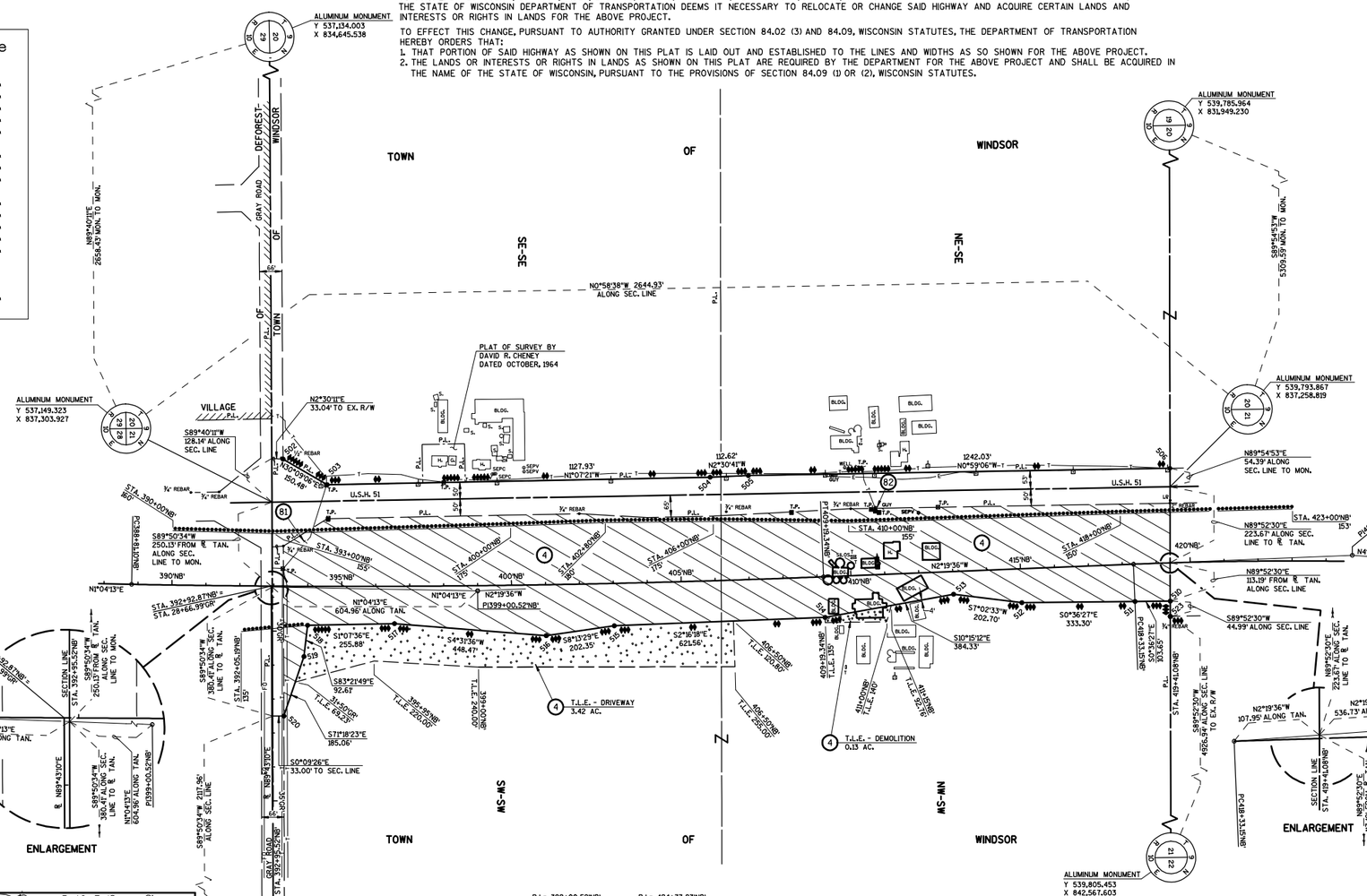
PROPERTY LINES SHOWN ON THIS PLAT ARE DRAWN FROM DATA DERIVED FROM MAPS AND DOCUMENTS OF PUBLIC RECORD AND/OR EXISTING OCCUPATIONAL LINES. THIS PLAT MAY NOT BE A TRUE REPRESENTATION OF EXISTING PROPERTY LINES, EXCLUDING RIGHT-OF-WAY LINES, AND SHOULD NOT BE USED AS A SUBSTITUTE FOR AN ACCURATE FIELD SURVEY.

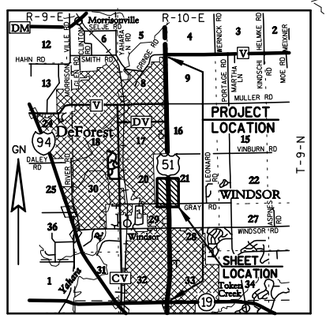
EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:
EXISTING HIGHWAY R/W FOR S.T.H. 51 ESTABLISHED FROM PREVIOUS PROJECT 6030-00-21.
EXISTING HIGHWAY R/W FOR GRAY ROAD ESTABLISHED FROM PREVIOUS PROJECT 6030-00-21 & SECTION LINE.

EXISTING ACCESS CONTROL ALONG S.T.H. 51 ESTABLISHED FROM C.A. PROJECT CA 05-1(2) & PROJECT 6030-00-21.

A **TEMPORARY LIMITED EASEMENT** (TLE) IS A RIGHT FOR DRIVEWAY & DEMOLITION 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 TLE'S ON THIS PLAT EXPIRE AT THE COMPLETION OF THE CONSTRUCTION PROJECT FOR WHICH THIS INSTRUMENT IS GIVEN.

DIMENSIONING FOR THE NEW RIGHT-OF-WAY IS MEASURED ALONG AND PERPENDICULAR TO NEW REFERENCE LINES.





AYRES ASSOCIATES
Engineers/Planners
Environmental Scientists
1802 Pankratz Street
Madison, Wisconsin 53704-4069

I, JAMEY REID, 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 AND MAPPED TRANSPORTATION PROJECT PLAT 6020-02-21 - 4.05 AMENDMENT 1 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN JAMEY L. REID Brigasville, WI S-2559 PROFESSIONAL LAND SURVEYOR

(SIGNATURE) Jamey L. Reid DATE: July 24,2010

(PRINTED NAME) JAMEY L. REID

(REGISTRATION NUMBER) S-2559

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

(SIGNATURE) _____ DATE: _____

(PRINTED NAME) _____

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 6020-02-21 - 4.05
AMENDMENT NO: 1

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN _____ COUNTY, WISCONSIN AT ___:___ M ON _____ AS DOCUMENT # _____ AND FILED IN _____

_____
SIGNATURE OF REGISTER OF DEEDS

FILE NAME : N:\450224\DGN\6020-02-21_040105.dgn
APPRAISAL PLAT DATE : MAY 10, 2010
PLOT DATE : 8/3/2010 PLOT BY : Ayres-kdk PLOT NAME : PLOT SCALE : 1:400

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND AND INTERESTS TO DOT.

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W ACRES OR S.F. REQUIRED NEW	EXISTING	TOTAL	T.L.E. ACRES OR S.F.
27	STANLEY W. & JUDITH E. RAULS	FEE	23.92	0.48	24.40	---
81	CENTURYTEL / TELEVIEW OF WISCONSIN, INC	RELEASE OF RIGHTS				
83	AMERICAN TRANSMISSION COMPANY LLC	RELEASE OF RIGHTS				

ALL AREAS SHOWN IN ACRES UNLESS OTHERWISE NOTED

CONVENTIONAL SIGNS AND ABBREVIATIONS

SECTION LINE
QUARTER LINE
SIXTEENTH LINE
NEW REFERENCE LINE
NEW R/W LINE
EXISTING R/W LINE
PROPERTY LINE
LOT, TIE AND OTHER MINOR LINES
CORPORATE LIMITS
UNDERGROUND FACILITY (COMMUNICATIONS, ELECTRIC, ETC.)
FEE ACQUISITION AREA (HATCHING VARIES BY OWNER)
TEMPORARY LIMITED EASEMENT AREA
EASEMENT (HIGHWAY, PERMANENT LIMITED OR RESTRICTED DEVELOPMENT) AREAS
TRANSMISSION STRUCTURES (LINE OPTIONAL)
BUILDING

SECTION CORNER
NOTATION FOR COMBUSTABLE FLUIDS
NOTATION FOR HIGH VOLTAGE TRANSMISSION LINES
BRIDGE

R/W MONUMENT
NON-MONUMENTED R/W POINT
IRON PIN
VALVE (GAS, WATER, ETC.)
SIGN
OFF-PREMISE SIGN

	COMPENSABLE	NON-COMPENSABLE
ELECTRIC POLE		
TELEPHONE POLE		
PEDESTAL (LABEL TYPE - (COMMUNICATIONS, ELECTRIC)		

NO ACCESS (BY PARCEL ACQUISITION)
NO ACCESS (BY STATUTORY AUTHORITY)
ACCESS RESTRICTED (BY PREVIOUS PROJECT/CONTROL)

PARCEL NUMBER (6)
UTILITY PARCEL NUMBER (83)

ACRES	AC.
ALUMINUM	ALUM.
CERTIFIED SURVEY MAP	C.S.M.
DOCUMENT NUMBER	DOC.
MONUMENT	MON.
PAGE / PAGES	P. / PGS.
PROPERTY LINE	P.L.
REFERENCE LINE	R/L
SECTION	SEC.
SEPTIC VENT	SEPV.
STATION	STA.
VOLUME	V.

CURVE DATA

LONG CHORD	L.C.
LONG CHORD BEARING	L.C.B.
RADIUS	R.
DEGREE OF CURVE	D.
CENTRAL ANGLE OR DELTA	Δ.
LENGTH OF CURVE	L.
TANGENT	T.
DIRECTION AHEAD	DA.
DIRECTION BACK	DB.

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

Station & Offset Table

Point Number	Station	Offset
600	446+53.46'NB'	440.91'
601	447+05.37'NB'	388.10'
602	450+29.62'NB'	388.28'
603	460+07.88'NB'	386.11'
604	461+07.92'NB'	403.89'
605	472+57.57'NB'	396.77'
608	472+34.60'NB'	124.87'
609	472+00.00'NB'	125.00'
610	469+27.02'NB'	125.00'
611	460+80.00'NB'	125.00'
612	458+00.00'NB'	105.00'
613	451+50.00'NB'	85.00'
614	449+00.00'NB'	130.00'
615	446+60.00'NB'	160.00'
616	33+50.00'VI'	33.55'
617	35+85.01'VI'	33.51'

NOTES:

COORDINATES AND BEARINGS SHOWN ON THIS PLAT ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM, DANE COUNTY ZONE, NAD83 (91) ADJUSTMENT. THE COORDINATES SHOWN ARE GRID COORDINATES AND ARE TO BE USED AS GRID OR GROUND VALUES ON THIS PLAT.

ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY ¾" X 24" IRON REBARS), UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT BY OTHERS.

ALL RIGHT-OF-WAY LINES DEPICTED IN NON ACQUISITION AREAS ARE INTENDED TO RE-ESTABLISH EXISTING RIGHT-OF-WAY LINES AS DETERMINED FROM PREVIOUS PROJECTS, OTHER RECORDED DOCUMENTS, OR FROM CENTERLINE OF EXISTING PAVEMENTS.

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.

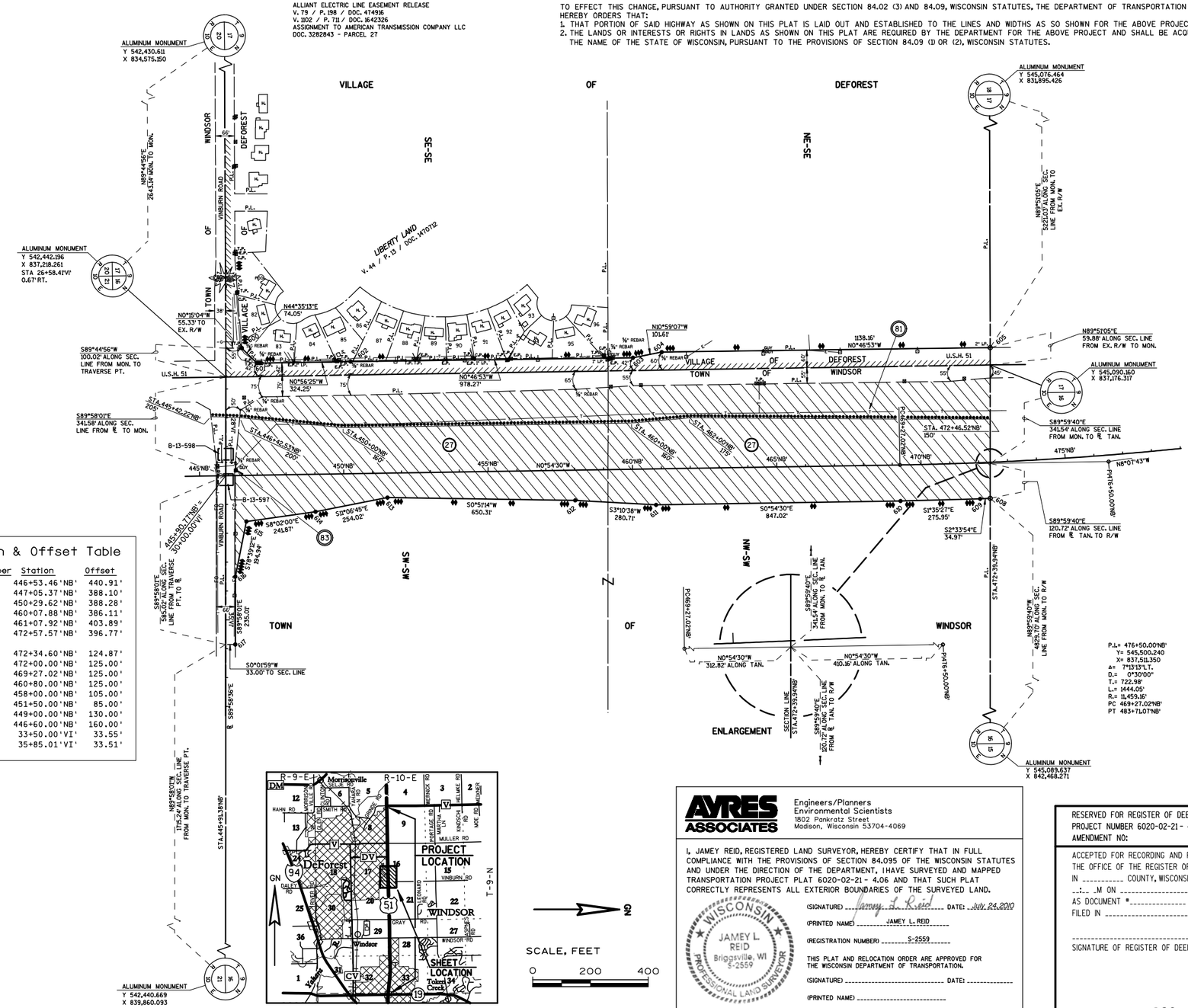
EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:
EXISTING HIGHWAY R/W FOR S.T.H. 51 ESTABLISHED FROM PREVIOUS PROJECT 6030-00-21.
EXISTING HIGHWAY R/W FOR VINBURN ROAD ESTABLISHED FROM PREVIOUS PROJECT 6030-00-21 & SECTION LINE.

EXISTING ACCESS CONTROL ALONG S.T.H. 51 ESTABLISHED FROM C.A. PROJECT CA 05-1(2) & LIBERTY LAND SUBDIVISION.

DIMENSIONING FOR THE NEW RIGHT-OF-WAY IS MEASURED ALONG AND PERPENDICULAR TO NEW REFERENCE LINES.

CENTURYTEL / TELEVIEW OF WISCONSIN, INC EASEMENT RELEASE
V. 12570 / P. 85 / DOC. 2129990 - PARCEL 27

ALLIANT ELECTRIC LINE EASEMENT RELEASE
V. 79 / P. 198 / DOC. 474936
V. 1102 / P. 711 / DOC. 1642326
ASSIGNMENT TO AMERICAN TRANSMISSION COMPANY LLC
DOC. 3282843 - PARCEL 27



TRANSPORTATION PROJECT PLAT NO: 6020-02-21 - 4.06

THAT PART OF THE SW¼ - SW¼ AND THE NW¼ - SW¼ OF SECTION 16, T 9 N, R 10 E, TOWN OF WINDSOR, DANE COUNTY, WISCONSIN.

RELOCATION ORDER U.S.H. 51, MADISON - DEFOREST ROAD (REARDON - CTH V)

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.

AYRES ASSOCIATES
Engineers/Planners
Environmental Scientists
1802 Pankrotz Street
Madison, Wisconsin 53704-4069

I, JAMEY REID, 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 AND MAPPED TRANSPORTATION PROJECT PLAT 6020-02-21 - 4.06 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN JAMEY L. REID Briggsville, WI S-2559 PROFESSIONAL LAND SURVEYOR

(SIGNATURE) Jamey L. Reid DATE: July 24, 2010

(PRINTED NAME) JAMEY L. REID

(REGISTRATION NUMBER) S-2559

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

(SIGNATURE) _____ DATE: _____

(PRINTED NAME) _____

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 6020-02-21 - 4.06
AMENDMENT NO:

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN _____ COUNTY, WISCONSIN AT ___:___ .M ON _____ AS DOCUMENT #_____ AND FILED IN _____

_____
SIGNATURE OF REGISTER OF DEEDS

FILE NAME : N:\450224\DGN\6020-02-21_040106.dgn
APPRAISAL PLAT DATE : MAY 6, 2010
PLOT DATE : 7/21/2010 PLOT BY : Ayres-kdk PLOT NAME : PLOT SCALE : 1:400

TRANSPORTATION PROJECT PLAT NO: 6020-02-21 - 4.07 AMENDMENT NO. 1

AMENDS PARCEL 32 OF TRANSPORTATION PROJECT PLAT 6020-02-21 - 4.07 RECORDED AS DOCUMENT NO: 4859775

THAT PART OF LOT 1, C.S.M. 2052, V. 8, P. 231, DOC. 1473173, LOT 1, C.S.M. 10759, V. 64, P. 74-76, DOC. 3720418 AND THE SW¼- NW¼, THE NE¼- NW¼ AND THE NW¼- NW¼ OF SECTION 16, TOWN OF WINDSOR, AND PART OF THE NE¼- NE¼ OF SECTION 17, VILLAGE OF DEFOREST, ALL IN T 9 N, R 10 E, DANE COUNTY, WISCONSIN.

RELOCATION ORDER U.S.H. 51, MADISON - DEFOREST ROAD (REARDON - CTH V)

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 SUBSECTION 84.02 (3) AND SECTION 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 NAMED 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 SUBSECTION 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 TRANSFER OF LAND AND INTERESTS TO DOT.

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W ACRES OR S.F. REQUIRED NEW	EXISTING	TOTAL	T.L.E. ACRES OR S.F
32	KAROW LAND, LLC	FEE ,T.L.E. & ACCESS RIGHTS	6.76	---	6.76	1.57
33	LAURA R. WERNICK, LINDA V. BLIEFERNICHT, & ENID J. OLSON	FEE ,T.L.E. & ACCESS RIGHTS	21.86	1.36	23.22	0.02
34	ROBERT I. & ARLYCE E. BLIEFERNICHT	T.L.E. & ACCESS RIGHTS	---	---	---	0.03
81	CENTURYLINK	RELEASE OF RIGHTS				
83	AMERICAN TRANSMISSION COMPANY LLC	RELEASE OF RIGHTS				

ALL AREAS SHOWN IN ACRES UNLESS OTHERWISE NOTED

CONVENTIONAL SIGNS AND ABBREVIATIONS

SECTION LINE
QUARTER LINE
SIXTEENTH LINE
NEW REFERENCE LINE
NEW R/W LINE
EXISTING R/W LINE
PROPERTY LINE
LOT, TIE AND OTHER MINOR LINES
CORPORATE LIMITS
UNDERGROUND FACILITY (COMMUNICATIONS, ELECTRIC, ETC.)
FEE ACQUISITION AREA (HATCHING VARIES BY OWNER)
TEMPORARY LIMITED EASEMENT AREA
EASEMENT (HIGHWAY, PERMANENT LIMITED OR RESTRICTED DEVELOPMENT) AREAS
DISTANCE AS RECORDED (XXX.XX')
TRANSMISSION STRUCTURES (LINE OPTIONAL)
BUILDING

SECTION CORNER
NOTATION FOR COMBUSTABLE FLUIDS
NOTATION FOR HIGH VOLTAGE TRANSMISSION LINES
BRIDGE

R/W MONUMENT
NON-MONUMENTED R/W POINT
IRON PIN
VALVE (GAS, WATER, ETC.)
SIGN
OFF-PREMISE SIGN

	COMPENSABLE	NON-COMPENSABLE
ELECTRIC POLE		
TELEPHONE POLE		
PEDESTAL (LABEL TYPE - (COMMUNICATIONS, ELECTRIC)		

NO ACCESS (BY PARCEL ACQUISITION)
NO ACCESS (BY STATUTORY AUTHORITY)
ACCESS RESTRICTED (BY PREVIOUS PROJECT/CONTROL)

PARCEL NUMBER
UTILITY PARCEL NUMBER

ACRES	AC.
ALUMINUM	ALUM.
CERTIFIED SURVEY MAP	C.S.M.
DOCUMENT NUMBER	DOC.
MONUMENT	MON.
PAGE / PAGES	P. / PGS.
PROPERTY LINE	P.L.
REFERENCE LINE	R/L
SECTION	SEC.
SEPTIC VENT	SEPV.
STATION	STA.
VOLUME	V.

CONVENTIONAL UTILITY SYMBOLS

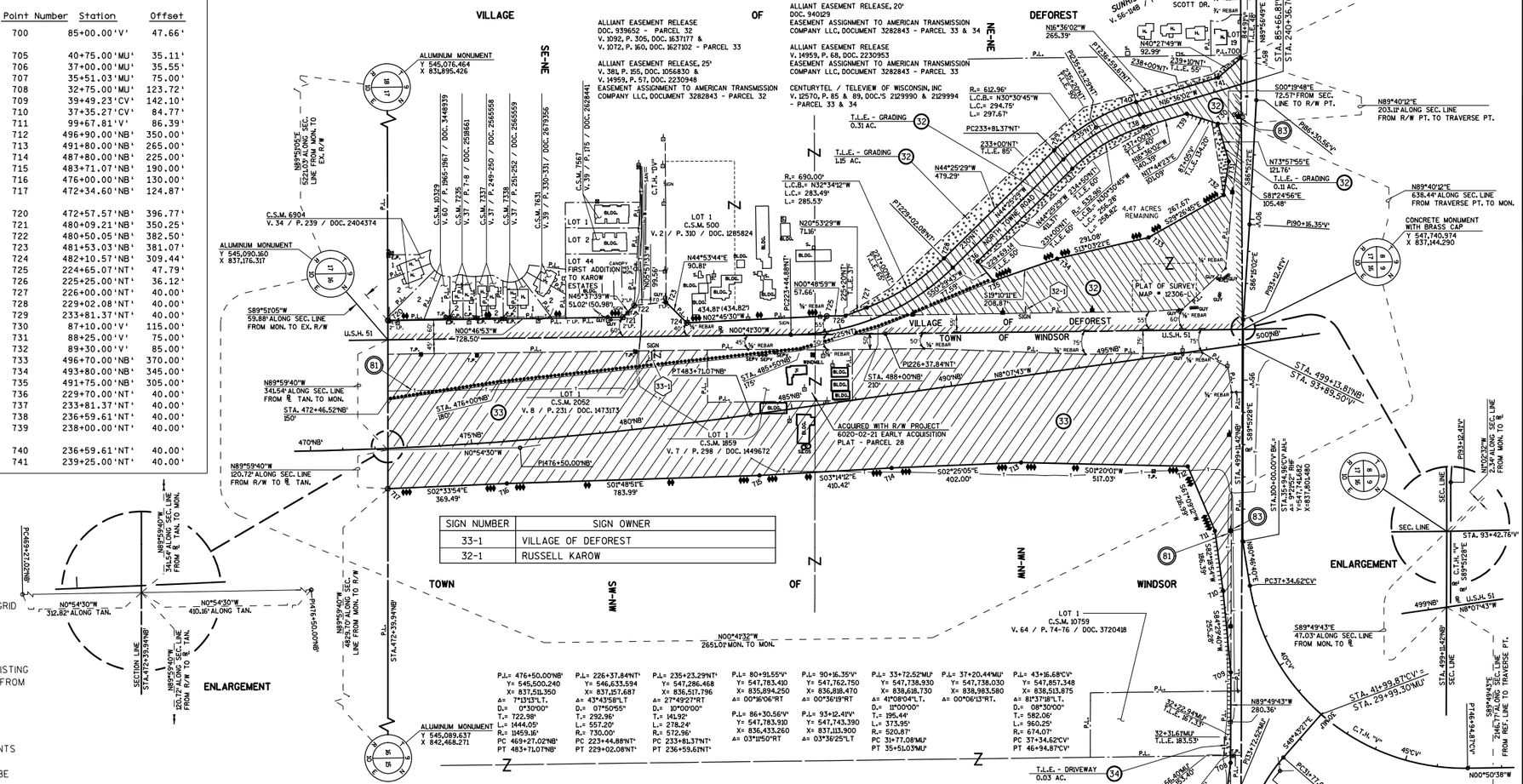
WATER	W
GAS	G
TELEPHONE	T
OVERHEAD TRANSMISSION LINES	OH
ELECTRIC	E
CABLE TELEVISION	TV
FIBER OPTIC	FO
SANITARY SEWER	SAN
STORM SEWER	SS

CURVE DATA

LONG CHORD	L.C.
LONG CHORD BEARING	L.C.B.
RADIUS	R.
DEGREE OF CURVE	D.
CENTRAL ANGLE OR DELTA	△.
LENGTH OF CURVE	L.
TANGENT	T.
DIRECTION AHEAD	DA.
DIRECTION BACK	DB.

Station & Offset Table

Point Number	Station	Offset
700	85+00.00'V'	47.66'
705	40+75.00'MU'	35.11'
706	37+00.00'MU'	35.55'
707	35+51.03'MU'	75.00'
708	32+75.00'MU'	123.72'
709	39+49.23'CV'	142.10'
710	37+35.27'CV'	84.77'
711	99+67.81'V'	86.39'
712	496+90.00'NB'	350.00'
713	491+80.00'NB'	265.00'
714	487+80.00'NB'	225.00'
715	483+71.07'NB'	190.00'
716	476+00.00'NB'	130.00'
717	472+34.60'NB'	124.87'
720	472+57.57'NB'	396.77'
721	480+09.21'NB'	350.25'
722	480+50.05'NB'	382.50'
723	481+53.03'NB'	381.07'
724	482+10.57'NB'	309.44'
725	224+65.07'NT'	47.79'
726	225+25.00'NT'	36.12'
727	226+00.00'NT'	40.00'
728	229+02.08'NT'	40.00'
729	233+81.37'NT'	40.00'
730	87+10.00'V'	115.00'
731	88+25.00'V'	75.00'
732	89+30.00'V'	85.00'
733	496+70.00'NB'	370.00'
734	493+80.00'NB'	345.00'
735	491+75.00'NB'	305.00'
736	229+70.00'NT'	40.00'
737	233+81.37'NT'	40.00'
738	236+59.61'NT'	40.00'
739	238+00.00'NT'	40.00'
740	236+59.61'NT'	40.00'
741	239+25.00'NT'	40.00'


VILLAGE OF DEFOREST
TOWN OF WINDSOR
ALUMINUM MONUMENT Y 545,076.464 X 851,895.426
ALUMINUM MONUMENT Y 545,090.160 X 837,176.317
ALUMINUM MONUMENT Y 547,740.374 X 837,144.290
ALUMINUM MONUMENT Y 547,733.067 X 839,786.630
ALUMINUM MONUMENT Y 547,725.661 X 834,484.831
CONCRETE MONUMENT WITH BRASS CAP Y 545,089.637 X 842,468.271
C.S.M. 6904 V. 54 / P. 239 / DOC. 2404374
C.S.M. 10329 V. 60 / P. 296-298 / DOC. 2965-10961 / DOC. 3448939
C.S.M. 7235 V. 37 / P. 7-8 / DOC. 2518661
C.S.M. 7237 V. 37 / P. 249-250 / DOC. 2565558
C.S.M. 7238 V. 37 / P. 251-252 / DOC. 2565559
C.S.M. 7631 V. 39 / P. 330-331 / DOC. 2679356
C.S.M. 7567 V. 39 / P. 175 / DOC. 2628441
C.S.M. 2052 V. 8 / P. 231 / DOC. 1473173
C.S.M. 1859 V. 7 / P. 298 / DOC. 1449672
C.S.M. 10759 V. 64 / P. 74-76 / DOC. 3720418
LOT 1 C.S.M. 500 V. 2 / P. 310 / DOC. 1285824
LOT 44 FIRST ADDITION TO KAROW ESTATES
SUNRISE ESTATES V. 66-148 / PGS. 332-333
ALLIANT EASEMENT RELEASE DOC. 939652 - PARCEL 32 V. 1092, P. 305, DOC. 1637177 & V. 1072, P. 160, DOC. 1627302 - PARCEL 33
ALLIANT EASEMENT RELEASE, 25' V. 381, P. 155, DOC. 1056830 & V. 14959, P. 57, DOC. 2230948
EASEMENT ASSIGNMENT TO AMERICAN TRANSMISSION COMPANY LLC, DOCUMENT 3282843 - PARCEL 32
ALLIANT EASEMENT RELEASE, 20' DOC. 940129
EASEMENT ASSIGNMENT TO AMERICAN TRANSMISSION COMPANY LLC, DOCUMENT 3282843 - PARCEL 33 & 34
ALLIANT EASEMENT RELEASE V. 14959, P. 68, DOC. 2230953
EASEMENT ASSIGNMENT TO AMERICAN TRANSMISSION COMPANY LLC, DOCUMENT 3282843 - PARCEL 33
CENTURYTEL / TELEVIEW OF WISCONSIN, INC V. 12570, P. 85 & 89, DOC.'S 2129990 & 2129994 - PARCEL 33 & 34
T.L.E. - GRADING 0.31 AC.
T.L.E. - GRADING 1.15 AC.
T.L.E. - DRIVEWAY 0.03 AC.
T.L.E. - DRIVEWAY 0.02 AC.
ACQUIRED WITH R/W PROJECT 6020-02-21 EARLY ACQUISITION PLAT - PARCEL 28
PLAT OF SURVEY, MAP # 12306-1
SCOTT DR.
NORTH TOWNE ROAD
MUELLER ROAD
VINBURN RD.
GRAY RD.
WINDSOR RD
U.S.H. 51
C.T.H. "V"
C.T.H. "DV"
N 89°40'12" E 1268.19' ALONG SEC. LINE TO TRAVERSE PT.
N 89°40'12" E 549.76' ALONG SEC. LINE FROM TRAVERSE PT. TO R/W PT.
N 89°40'12" E 638.44' ALONG SEC. LINE FROM TRAVERSE PT. TO MON.
N 89°40'12" E 203.11' ALONG SEC. LINE FROM R/W PT. TO TRAVERSE PT.
N89°59'40"W 341.54' ALONG SEC. LINE FROM R/W TO ℄ TAN.
N89°59'40"W 120.72' ALONG SEC. LINE FROM R/W TO ℄ TAN.
N89°59'40"W 482.70' ALONG SEC. LINE FROM MON. TO R/W
N89°59'40"W 120.72' ALONG SEC. LINE FROM R/W TO ℄ TAN.
N89°59'40"W 341.54' ALONG SEC. LINE FROM ℄ TAN. TO MON.
N89°59'40"W 120.72' ALONG SEC. LINE FROM ℄ TAN. TO MON.
N89°59'40"W 120.72' ALONG SEC. LINE FROM R/W TO ℄ TAN.
N89°59'40"W 482.70' ALONG SEC. LINE FROM MON. TO R/W
N89°59'40"W 341.54' ALONG SEC. LINE FROM ℄ TAN. TO MON.
N89°59'40"W 120.72' ALONG SEC. LINE FROM R/W TO ℄ TAN.
N89°59'40"W 120.72' ALONG SEC. LINE FROM MON. TO R/W
N89°59'40"W 341.54' ALONG SEC. LINE FROM ℄ TAN. TO MON.
N89°59'40"W 120.72' ALONG SEC. LINE FROM R/W TO ℄ TAN.
N89°59'40"W 482.70

TRANSPORTATION PROJECT PLAT NO: 6020-02-21 - 4.08 AMENDMENT NO. 2

AMENDS PARCEL 42 AND ADDS PARCEL 141 TO TRANSPORTATION PROJECT PLAT 6020-02-21 - 4.08 AMENDMENT NO. 1 RECORDED AS DOCUMENT NO: 4901408 IN VOL. 60-007A OF PLATS, PAGE 35.

THAT PART OF LOTS 1 & 2, C.S.M. 9999, V. 58, P. 180-183, DOC. 3302230, LOT 1, C.S.M. 6388, V. 31, P. 73, DOC. 2260962 AND THE SW¼- SW¼, THE NW¼- SW¼, THE SE¼- SW¼, AND THE NE¼- SW¼ OF SECTION 9, TOWN OF WINDSOR, AND PART OF THE LOTS 1 & 2, C.S.M. 10957, V. 65, P. 293-295, DOC. 3857793 AND LOT 1, C.S.M. 13186, V. 84, P. 338-339, DOC. 4808418, LOTS 1 & 2, C.S.M. 13162, V. 84, P. 261-262, DOC. 4790256 AND THE SE¼- SE¼, THE SW¼- SE¼, AND THE NE¼- SE¼ OF SECTION 8, VILLAGE OF DEFOREST, ALL IN T 9 N, R 10 E, DANE COUNTY, WISCONSIN.

RELOCATION ORDER U.S.H. 51, MADISON - DEFOREST ROAD (REARDON - CTH V)

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 SUBSECTION 84.02 (3) AND SECTION 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 NAMED 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 SUBSECTION 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 TRANSFER OF LAND AND INTERESTS TO DOT.

PARCEL NUMBER	ALL AREAS SHOWN IN ACRES UNLESS OTHERWISE NOTED OWNER(S)	INTEREST REQUIRED	R/W ACRES OR S.F. REQUIRED NEW	EXISTING	TOTAL	T.L.E. ACRES OR S.F
36	JAY PROPERTIES, LLP	FEE, T.L.E. & ACCESS RIGHTS	0.32	---	0.32	0.94
37	TOKEN INVESTMENT, LLC	FEE, T.L.E. & ACCESS RIGHTS	4.65	---	4.65	0.71
38	HEEKIN CAN, INC., A DELAWARE CORPORATION	FEE	3.06	---	3.06	---
39	NEESVIG'S FULFILLMENT, LLC, A WISCONSIN LIMITED LIABILITY COMPANY	FEE	3.50	---	3.50	---
40	M.A. HANNA COMPANY, A DELAWARE CORPORATION	FEE	1.50	---	1.50	---
41	TOWN OF WINDSOR	FEE, T.L.E. & ACCESS RIGHTS	3.82	---	3.82	1.20
42	GERGORY A. & LOU A. SCHWEPPE	FEE	2.78	0.23	3.01	---
43	VERNON E. & VICKIL. TRIENEN, TRUSTEES, AND ANY SUCCESSOR TRUSTEE(S), OF THE VERNON E. & VICKIE L. TREINEN REVOCABLE LIVING TRUST DATED MARCH 17, 2006	FEE	6.66	0.38	7.04	---
44	CHARLES LINDE & EVONNE LINDE	FEE & T.L.E.	0.17	---	0.17	2.10
46	THE VILLAGE OF DEFOREST, A WISCONSIN MUNICIPALITY	T.L.E.	---	---	---	0.05
141	TOWN OF WINDSOR	T.L.E. & ACCESS RIGHTS	---	---	---	0.11
81	CENTURYLINK	RELEASE OF RIGHTS				
82	ALLIANT ENERGY	RELEASE OF RIGHTS				
83	AMERICAN TRANSMISSION COMPANY LLC	RELEASE OF RIGHTS				

CONVENTIONAL SIGNS AND ABBREVIATIONS

SECTION LINE, QUARTER LINE, SIXTEENTH LINE, NEW REFERENCE LINE, NEW R/W LINE, EXISTING R/W LINE, PROPERTY LINE, LOT, TIE AND OTHER MINOR LINES, CORPORATE LIMITS, UNDERGROUND FACILITY (COMMUNICATIONS, ELECTRIC, ETC.), FEE ACQUISITION AREA (HATCHING VARIES BY OWNER), TEMPORARY LIMITED EASEMENT AREA, EASEMENT (HIGHWAY, PERMANENT LIMITED OR RESTRICTED DEVELOPMENT) AREAS, TRANSMISSION STRUCTURES (LINE OPTIONAL), BUILDING

SECTION CORNER; R/W MONUMENT; NON-MONUMENTED R/W POINT; IRON PIN; NOTATION FOR COMBUSTABLE FLUIDS; VALVE (GAS, WATER, ETC.); SIGN; NOTATION FOR HIGH VOLTAGE TRANSMISSION LINES; OFF-PREMISE SIGN

	COMPENSABLE	NON-COMPENSABLE
ELECTRIC POLE	■	□
TELEPHONE POLE	●	⊠
PEDESTAL (LABEL TYPE - (COMMUNICATIONS, ELECTRIC)	■	⊠

NO ACCESS (BY PARCEL ACQUISITION); NO ACCESS (BY STATUTORY AUTHORITY); ACCESS RESTRICTED (BY PREVIOUS PROJECT/CONTROL); BRIDGE; PARCEL NUMBER (6); UTILITY PARCEL NUMBER (83)

ACRES	AC.
ALUMINUM	ALUM.
CERTIFIED SURVEY MAP	C.S.M.
DOCUMENT NUMBER	DOC.
MONUMENT	MON.
PAGE / PAGES	P. / PGS.
PROPERTY LINE	P.L.
REFERENCE LINE	R/L
SECTION	SEC.
SEPTIC VENT	SEPV.
STATION	STA.
VOLUME	V.

CURVE DATA

L.C. LONG CHORD
L.C.B. LONG CHORD BEARING
R. RADIUS
D. DEGREE OF CURVE
Δ CENTRAL ANGLE OR DELTA
L. LENGTH OF CURVE
T. TANGENT
DA. DIRECTION AHEAD
DB. DIRECTION BACK

COURSE TABLE

COURSE	BEARING	DISTANCE
859-860	N 72°17'48" E	115.43'
860-861	N 11°47'46" E	137.60'
861-862	N 31°34'11" E	128.54'
862-863	N 34°21'36" E	104.66'
863-864	N 12°05'12" W	95.32'
864-865	N 00°22'42" W	69.89'
865-866	N 89°54'49" E	106.04'
866-867	N 89°54'49" E	58.01'
867-868	S 00°08'40" W	68.65'
868-869	S 33°59'33" W	159.15'
869-800	S 34°21'36" W	104.67'
800-801	S 08°58'49" W	194.65'
801-802	S 30°49'39" E	104.01'

CONVENTIONAL UTILITY SYMBOLS

WATER	W	ELECTRIC	E
GAS	G	CABLE TELEVISION	TV
TELEPHONE	T	FIBER OPTIC	FO
OVERHEAD TRANSMISSION LINES	OH	SANITARY SEWER	SAN
		STORM SEWER	SS

AYRES ASSOCIATES
Engineers/Planners
Environmental Scientists
1802 Pankratz Street
Madison, Wisconsin 53704-4069

I, JAMEY REID, 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 AND MAPPED TRANSPORTATION PROJECT PLAT 6020-02-21 - 4.08 AMENDMENT 2 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN — JAMEY L. REID — Portage, WI — S-2559 — PROFESSIONAL LAND SURVEYOR

(SIGNATURE) Jamey L. Reid DATE: March 6,2013

(PRINTED NAME) JAMEY L. REID

(REGISTRATION NUMBER) S-2559

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

(SIGNATURE) _____ DATE: _____

(PRINTED NAME) _____

NOTES:

COORDINATES AND BEARINGS SHOWN ON THIS PLAT ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM, DANE COUNTY ZONE, NAD83 (91) ADJUSTMENT. THE COORDINATES SHOWN ARE GRID COORDINATES AND ARE TO BE USED AS GRID OR GROUND VALUES ON THIS PLAT.

ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY ¾" X 24" IRON REBARS), UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT BY OTHERS.

ALL RIGHT-OF-WAY LINES DEPICTED IN NON ACQUISITION AREAS ARE INTENDED TO RE-ESTABLISH EXISTING RIGHT-OF-WAY LINES AS DETERMINED FROM PREVIOUS PROJECTS, OTHER RECORDED DOCUMENTS, OR FROM CENTERLINE OF EXISTING PAVEMENTS.

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.

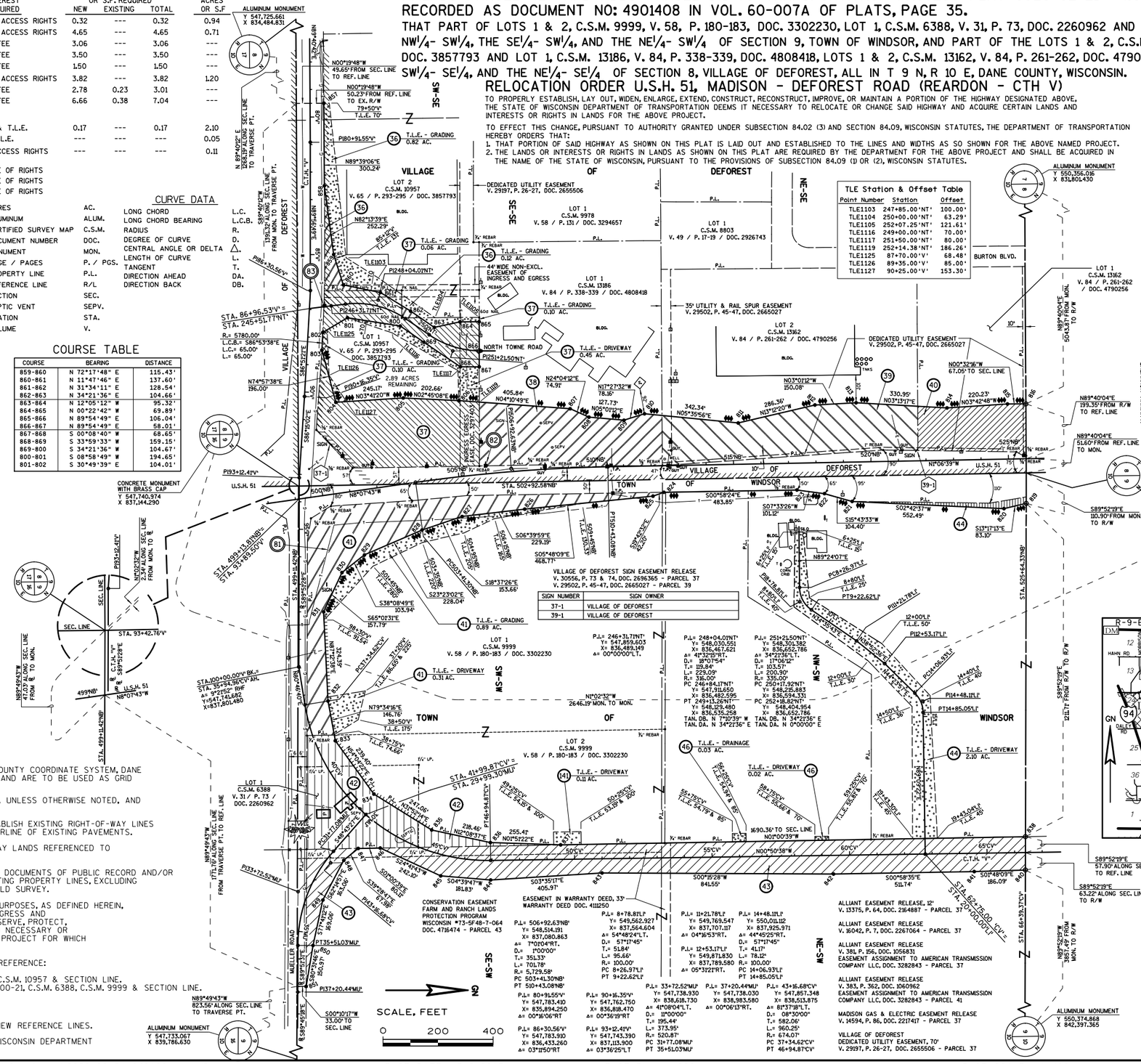
A **TEMPORARY LIMITED EASEMENT** (TLE) IS A RIGHT FOR DRIVEWAY, DRAINAGE & GRADING PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON AND THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM NECESSARY OR DESIRABLE. ALL TLE'S ON THIS PLAT EXPIRE AT THE COMPLETION OF THE CONSTRUCTION PROJECT FOR WHICH THIS INSTRUMENT IS GIVEN.

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:
EXISTING HIGHWAY R/W FOR S.T.H. 51 ESTABLISHED FROM PREVIOUS PROJECT 6030-00-21.
EXISTING HIGHWAY R/W FOR C.T.H. V ESTABLISHED FROM PREVIOUS PROJECT 6030-00-21, C.S.M. 10957 & SECTION LINE.
EXISTING HIGHWAY R/W FOR MUELLER ROAD ESTABLISHED FROM PREVIOUS PROJECT 6030-00-21, C.S.M. 6388, C.S.M. 9999 & SECTION LINE.

EXISTING ACCESS CONTROL ALONG S.T.H. 51 ESTABLISHED FROM C.A. PROJECT CA 05-1(2).
EXISTING ACCESS CONTROL ALONG C.T.H. V ESTABLISHED FROM C.S.M. 10957

DIMENSIONING FOR THE NEW RIGHT-OF-WAY IS MEASURED ALONG AND PERPENDICULAR TO NEW REFERENCE LINES.

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN MADISON.


ALUMINUM MONUMENT Y 547,725.661 X 834,484.831
N00°19'48"W 49.65' FROM SEC. LINE TO REF. LINE
N00°19'48"W 50.23' FROM REF. LINE TO EX. R/W
T.L.E. 70'
P180+91.55"V'
N89°39'06"E 300.24'
VILLAGE OF DEFOREST
LOT 2 C.S.M. 10957 V. 65 / P. 293-295 / DOC. 3857793
DEDICATED UTILITY EASEMENT V. 29197, P. 26-27, DOC. 2655506
LOT 1 C.S.M. 9998 V. 58 / P. 131 / DOC. 3294657
N82°13'39"E 252.29'
T.L.E. - GRADING 0.06 AC.
T.L.E. - GRADING 0.32 AC.
T.L.E. - GRADING 0.10 AC.
T.L.E. - DRIVEWAY 0.45 AC.
T.L.E. - GRADING 0.10 AC.
P248+04.01"NT'
44' WIDE NON-EXCL. EASEMENT OF INGRESS AND EGRESS
LOT 1 C.S.M. 13186 V. 84 / P. 338-339 / DOC. 4808418
35' UTILITY & RAIL SPUR EASEMENT V. 29502, P. 45-47, DOC. 2665027
LOT 2 C.S.M. 13162 V. 84 / P. 261-262 / DOC. 4790256
DEDICATED UTILITY EASEMENT V. 29502, P. 45-47, DOC. 2665027
TLE Station & Offset Table
Point Number Station Offset
TLE1103 247+85.00'NT' 100.00'
TLE1104 250+00.00'NT' 63.29'
TLE1105 252+07.25'NT' 121.61'
TLE1116 249+00.00'NT' 70.00'
TLE1117 251+50.00'NT' 80.00'
TLE1119 252+14.38'NT' 186.26'
TLE1125 87+70.00'V' 68.48'
TLE1126 89+35.00'V' 85.00'
TLE1127 90+25.00'V' 153.30'
BURTON BLVD.
ALUMINUM MONUMENT Y 550,356.016 X 831,801.430
N89°40'04"E 504.00' FROM MON. TO R/W
LOT 1 C.S.M. 13162 V. 84 / P. 261-262 / DOC. 4790256
NORTH TOWNE ROAD
STA. 86+96.53'V' = STA. 245+51.77'NT'
R.= 5780.00'
L.C.B.= S86°53'38"E
L.C.= 65.00'
L.= 65.00'
TLE1125
TLE1126
TLE1127
TLE1103
TLE1104
TLE1105
TLE1116
TLE1117
TLE1119
P180+36.35'V'
245.17'
2.89 ACRES REMAINING
202.66'
N74°57'38"E 196.00'
N03°40'20"W
N02°45'08"E
N24°04'12"E 74.91'
N17°27'32"W 78.16'
P125+21.50'NT'
127.73'
N05°09'12"E
405.84'
N04°30'49"E
342.34'
N05°35'56"E
286.36'
N03°22'09"E
N03°01'12"W 150.08'
330.95'
N03°13'17"E
220.23'
N03°42'48"W
67.05' TO SEC. LINE
N00°32'16"W
525'NB'
520'NB'
515'NB'
510'NB'
505'NB'
500'NB'
N89°40'04"E 199.35' FROM R/W TO REF. LINE
N89°40'04"E 51.60' FROM REF. LINE TO MON.
N89°52'19"E 110.90' FROM MON. TO R/W
N89°52'19"E 57.90' ALONG SEC. LINE TO REF. LINE
S89°52'19"E 63.22' ALONG SEC. LINE TO R/W
ALUMINUM MONUMENT Y 550,374.868 X 842,397.365
ALUMINUM MONUMENT Y 547,733.067 X 839,786.630
CONCRETE MONUMENT WITH BRASS CAP Y 547,740.974 X 837,144.290
U.S.H. 51
STA. 502+92.58'NB'
N8°01'43"W
S88°15'02"E
S86°55'02"E
S87°28'58"E
S88°58'51"E
S89°49'43"W
S00°10'17"W 33.00' TO SEC. LINE
N89°49'43"W 823.56' ALONG SEC. LINE TO TRAVERSE PT.
N89°40'04"E 1317.71' ALONG SEC. LINE FROM TRAVERSE PT. TO REF. LINE
N89°40'04"E 1317.71' ALONG SEC. LINE FROM TRAVERSE PT. TO MON.
N89°49'43"W 47.03' ALONG SEC. LINE FROM R/ TO MON.
N89°40'04"E 1317.71' ALONG SEC. LINE FROM TRAVERSE PT. TO MON.
SEC. LINE
STA. 93+42.76'V'
STA. 499+13.87'NB'
STA. 499+14.42'NB'
N8°01'43"W
N89°40'04"E 1317.71' ALONG SEC. LINE TO TRAVERSE PT.
N89°40'04"E 1317.71' ALONG SEC. LINE TO MON.
N89°40'04"E 1317.71' ALONG SEC. LINE FROM TRAVERSE PT. TO MON.
N89°40'04"E 1317.71' ALONG SEC. LINE TO TRAVERSE PT.
N89°40'04"E 1317.71' ALONG SEC. LINE FROM MON. TO R/
S89°40'04"W 1317.71' ALONG SEC. LINE FROM TRAVERSE PT. TO MON.
S89°40'04"W 1317.71' ALONG SEC. LINE TO TRAVERSE PT.
S89°40'04"W 1317.71' ALONG SEC. LINE FROM TRAVERSE PT. TO MON.
S89°40'04"W 1317.71' ALONG SEC. LINE TO TRAVERSE PT.
S89°40'04"W 1317.71' ALONG SEC. LINE FROM TRAVERSE PT. TO MON.
S89°40'04"W 1317.71' ALONG SEC. LINE FROM MON. TO R/
P133+72.52'MU'
P137+20.44'MU'
P137+51.03'MU'
P143+58.62'V'
P133+12.42'V'
P133+12.42'V'
P137+34.62'V'
P137+34.62'V'
P137+34.62

TRANSPORTATION PROJECT PLAT NO: 6020-02-21 - 4.09

THAT PART OF LOT 1, C.S.M. 3776, V. 15, P. 271, DOC. 1718597, LOT 2, C.S.M. 6796, V. 33, P. 398-400, DOC. 2370936 AND THE SW¼- NW¼, THE NW¼- NW¼, THE SE¼- NW¼, AND THE NE¼- NW¼ OF SECTION 9, AND PART OF THE LOT 2, C.S.M. 2383, V. 9, P. 266, DOC. 1516970 AND THE NE¼- NE¼ OF SECTION 8, TOWN OF WINDSOR, AND THE SE¼- NE¼ AND THE NE¼- NE¼ OF SECTION 8, VILLAGE OF DEFOREST, ALL IN T 9 N, R 10 E, DANE COUNTY, WISCONSIN.

RELOCATION ORDER U.S.H. 51, MADISON - DEFOREST ROAD (REARDON - CTH V)

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 SUBSECTION 84.02 (3) AND SECTION 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 NAMED 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 SUBSECTION 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 TRANSFER OF LAND AND INTERESTS TO DOT.

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W ACRES OR S.F. REQUIRED NEW	EXISTING	TOTAL	T.L.E. ACRES OR S.F
43	VERNON E. & VICKIL. TRIENEN, TRUSTEES, AND ANY SUCCESSOR TRUSTEE(S), OF THE VERNON E. & VICKIE L. TREINEN REVOCABLE LIVING TRUST DATED MARCH 17, 2006	FEE	3.70	---	3.70	---
44	CHARLES LINDE & EVONNE LINDE	FEE & T.L.E.	0.08	---	0.08	0.05
47	VILLAGE OF DEFOREST, A MUNICIPAL CORPORATION	FEE	2.82	---	2.82	---
48	WINFIELD ESTATES DEVELOPMENT, LLC. A WISCONSIN LIMITED LIABILITY COMPANY	FEE	6.93	---	6.93	---
49	SER VUE & JENG TONG VUE	FEE	0.80	0.21	1.01	---
51	RICHARD NOOYEN	FEE & T.L.E.	0.08	---	0.08	0.51
52	ROGER S. MANTHE	FEE & T.L.E.	5.41	0.66	6.07	0.04
53	KEVIN G. & NICOLE L. MANTHE	FEE & T.L.E.	0.22	0.16	0.38	0.03
82	ALLIANT ENERGY	RELEASE OF RIGHTS				

ALL AREAS SHOWN IN ACRES UNLESS OTHERWISE NOTED

ALLIANT EASEMENT RELEASE
V. 97, P. 446, DOC. 533005 - PARCEL 44

AYRES ASSOCIATES
Engineers/Planners
Environmental Scientists
1802 Pankratz Street
Madison, Wisconsin 53704-4069

I, JAMEY REID, 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 AND MAPPED TRANSPORTATION PROJECT PLAT 6020-02-21- 4.09 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN — JAMEY L. REID — Portage, WI — S-2559 — PROFESSIONAL LAND SURVEYOR

(SIGNATURE) Jamey L. Reid DATE: March 28,2012

(PRINTED NAME) JAMEY L. REID

(REGISTRATION NUMBER) S-2559

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

(SIGNATURE) ---------- DATE: ----------

(PRINTED NAME) ----------

CONVENTIONAL SIGNS AND ABBREVIATIONS

SECTION LINE, QUARTER LINE, SIXTEENTH LINE, NEW REFERENCE LINE, NEW R/W LINE, EXISTING R/W LINE, PROPERTY LINE, LOT, TIE AND OTHER MINOR LINES, CORPORATE LIMITS, UNDERGROUND FACILITY (COMMUNICATIONS, ELECTRIC, ETC.), FEE ACQUISITION AREA (HATCHING VARIES BY OWNER), TEMPORARY LIMITED EASEMENT AREA, EASEMENT (HIGHWAY, PERMANENT LIMITED OR RESTRICTED DEVELOPMENT) AREAS, DISTANCE AS RECORDED (XXX.XX'), TRANSMISSION STRUCTURES (LINE OPTIONAL), BUILDING

SECTION CORNER

R/W MONUMENT ●
NON-MONUMENTED R/W POINT ○
IRON PIN ⌀ UP
VALVE (GAS, WATER, ETC.) ⊘ (TYPE)
SIGN ▮ SIGN
OFF-PREMISE SIGN 31-1 SIGN

NOTATION FOR COMBUSTABLE FLUIDS — CAUTION
NOTATION FOR HIGH VOLTAGE TRANSMISSION LINES — CAUTION

	COMPENSABLE	NON-COMPENSABLE
ELECTRIC POLE	●	⊗
TELEPHONE POLE	■	⊠
PEDESTAL (LABEL TYPE - (COMMUNICATIONS, ELECTRIC)		

NO ACCESS (BY PARCEL ACQUISITION)
NO ACCESS (BY STATUTORY AUTHORITY)
ACCESS RESTRICTED (BY PREVIOUS PROJECT/CONTROL)

BRIDGE
PARCEL NUMBER 6
UTILITY PARCEL NUMBER 83

Station & Offset Table

Point Number	Station	Offset
904	34+16.02'GI'	34.52'
905	550+90.09'NB'	90.54'
906	542+78.89'NB'	90.19'
907	537+00.00'NB'	88.96'
908	536+00.00'NB'	100.00'
909	534+00.00'NB'	100.00'
910	533+00.00'NB'	93.01'
911	528+00.00'NB'	110.95'
912	525+61.23'NB'	162.47'
915	525+67.04'NB'	199.33'
916	530+00.00'NB'	195.00'
917	535+00.00'NB'	165.00'
918	547+00.00'NB'	160.00'
919	550+10.00'NB'	165.00'
920	30+80.00'GI'	34.77'
921	28+95.54'GI'	36.26'
950	66+40.36'CV'	57.89'
951	88+15.00'CV'	113.66'
952	88+30.00'CV'	70.00'
953	90+70.00'CV'	105.00'
954	46+95.00'GI'	50.00'
955	46+27.30'GI'	36.31'
960	100+00.00'CV'	34.63'
961	96+87.12'CV'	60.00'
962	94+35.00'CV'	65.00'
963	92+00.00'CV'	70.00'
964	88+00.00'CV'	60.00'
965	85+69.99'CV'	60.00'
966	83+90.00'CV'	70.00'
967	79+57.83'CV'	52.49'
968	72+59.59'CV'	71.45'
969	69+19.52'CV'	58.51'
970	66+38.30'CV'	63.21'

ACRES	AC.
ALUMINUM	ALUM.
CERTIFIED SURVEY MAP	C.S.M.
DOCUMENT NUMBER	DOC.
MONUMENT	MON.
PAGE / PAGES	P. / PGS.
PROPERTY LINE	P.L.
REFERENCE LINE	R/L
SECTION	SEC.
SEPTIC VENT	SEPV.
STATION	STA.
VOLUME	V.

CURVE DATA

LONG CHORD	L.C.
LONG CHORD BEARING	L.C.B.
RADIUS	R.
DEGREE OF CURVE	D.
CENTRAL ANGLE OR DELTA	Δ.
LENGTH OF CURVE	L.
TANGENT	T.
DIRECTION AHEAD	DA.
DIRECTION BACK	DB.

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

NOTES:

COORDINATES AND BEARINGS SHOWN ON THIS PLAT ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM, DANE COUNTY ZONE, NAD83 (91) ADJUSTMENT. THE COORDINATES SHOWN ARE GRID COORDINATES AND ARE TO BE USED AS GRID OR GROUND VALUES ON THIS PLAT.

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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".

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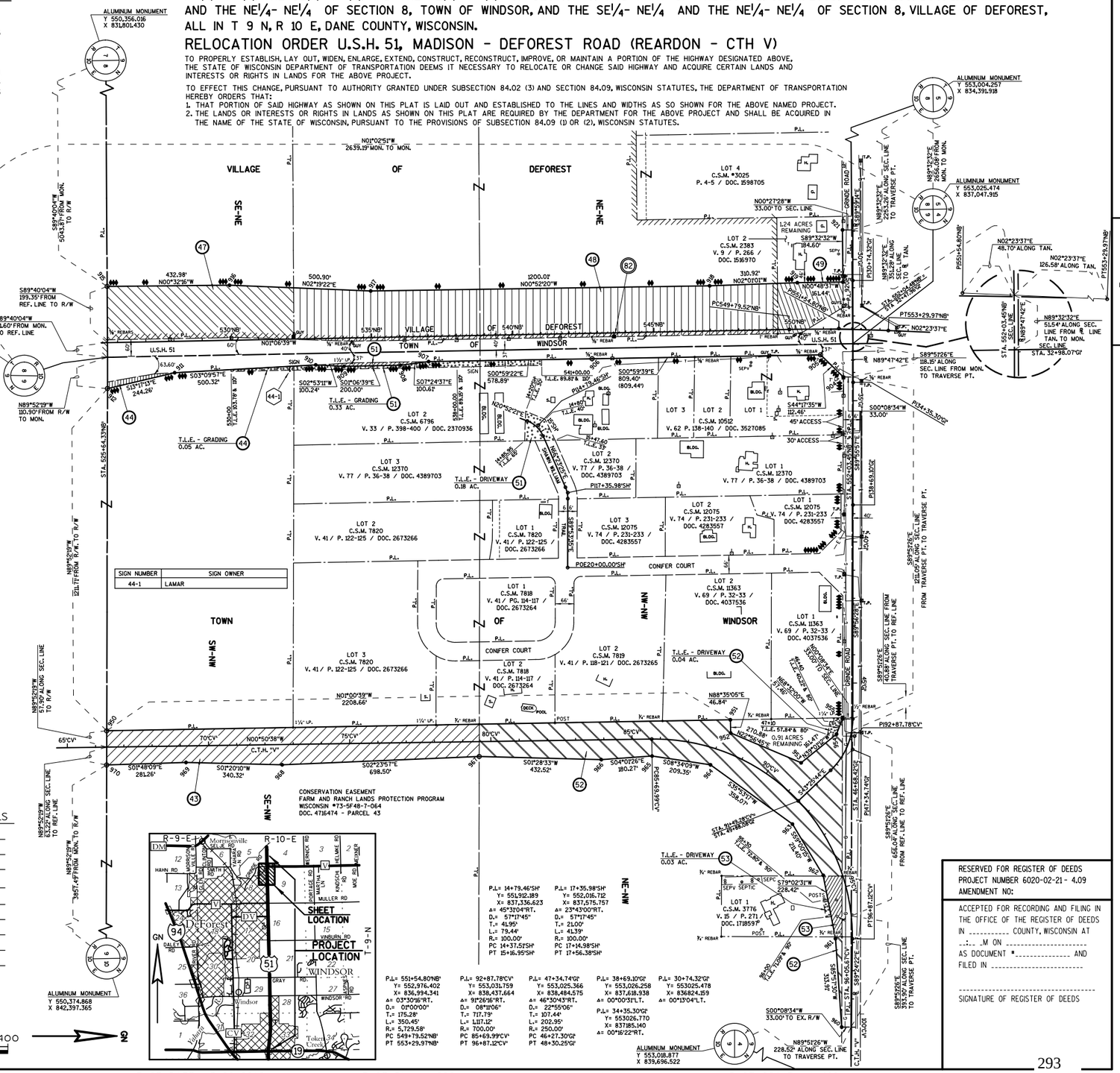
A **TEMPORARY LIMITED EASEMENT** (TLE) IS A RIGHT FOR DRIVEWAY & GRADING PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON AND THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM NECESSARY OR DESIRABLE. ALL TLE'S ON THIS PLAT EXPIRE AT THE COMPLETION OF THE CONSTRUCTION PROJECT FOR WHICH THIS INSTRUMENT IS GIVEN.

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:
EXISTING HIGHWAY R/W FOR S.T.H. 51 ESTABLISHED FROM PREVIOUS PROJECT 6030-00-21.
EXISTING HIGHWAY R/W FOR C.T.H. V AND GRINDE ROAD ESTABLISHED FROM PREVIOUS PROJECT 6030-00-21, C.S.M. 12370, 12075, 11363 & SECTION LINE.
EXISTING HIGHWAY R/W FOR CONIFER COURT ESTABLISHED FROM C.S.M. 12075, 11363, & 7819.
EXISTING HIGHWAY R/W FOR SHAWN WILLIAM TRAIL ESTABLISHED FROM C.S.M. 12370, 7820, & 12075.

EXISTING ACCESS CONTROL ALONG S.T.H. 51 ESTABLISHED FROM C.A. PROJECT CA 05-1(2).
EXISTING ACCESS CONTROL ALONG GRINDE ROAD ESTABLISHED FROM C.S.M. 2383, 7800, 10512, 12370, 12075, & 11363.

DIMENSIONING FOR THE NEW RIGHT-OF-WAY IS MEASURED ALONG AND PERPENDICULAR TO NEW REFERENCE LINES.

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION IN MADISON.


ALUMINUM MONUMENT Y 550,356.018 X 831,801.430
ALUMINUM MONUMENT Y 553,004.257 X 834,391.918
ALUMINUM MONUMENT Y 553,025.474 X 837,047.915
ALUMINUM MONUMENT Y 550,386.723 X 837,096.161
ALUMINUM MONUMENT Y 550,374.868 X 842,397.365
ALUMINUM MONUMENT Y 553,018.877 X 839,636.522
VILLAGE OF DEFOREST
TOWN OF WINDSOR
SE-NE
NE-NE
MN-NW
MN-SW
MN-SE
MN-NE
U.S.H. 51
CONIFER COURT
GRINDE ROAD
LOT 4 C.S.M. #3025 P. 4-5 / DOC. 3598705
LOT 2 C.S.M. 2383 V. 9 / P. 266 / DOC. 1516970
LOT 2 C.S.M. 6796 V. 33 / P. 398-400 / DOC. 2370936
LOT 3 C.S.M. 12370 V. 77 / P. 36-38 / DOC. 4389703
LOT 2 C.S.M. 12370 V. 77 / P. 36-38 / DOC. 4389703
LOT 1 C.S.M. 12370 V. 77 / P. 36-38 / DOC. 4389703
LOT 2 C.S.M. 10512 V. 62 P. 138-140 / DOC. 3527085
LOT 3 C.S.M. 10512
LOT 1 C.S.M. 3776 V. 15 / P. 271 / DOC. 1718597
LOT 2 C.S.M. 7820 V. 41 / P. 122-125 / DOC. 2673266
LOT 3 C.S.M. 7820 V. 41 / P. 122-125 / DOC. 2673266
LOT 1 C.S.M. 7820 V. 41 / P. 122-125 / DOC. 2673266
LOT 1 C.S.M. 7818 V. 41 / PG. 114-117 / DOC. 2673264
LOT 2 C.S.M. 7818 V. 41 / P. 114-117 / DOC. 2673264
LOT 2 C.S.M. 7819 V. 41 / P. 118-121 / DOC. 2673265
LOT 2 C.S.M. 12075 V. 74 / P. 231-233 / DOC. 4283557
LOT 3 C.S.M. 12075 V. 74 / P. 231-233 / DOC. 4283557
LOT 1 C.S.M. 12075 V. 74 / P. 231-233 / DOC. 4283557
LOT 2 C.S.M. 11363 V. 69 / P. 32-33 / DOC. 4037536
LOT 1 C.S.M. 11363 V. 69 / P. 32-33 / DOC. 4037536
1.24 ACRES REMAINING
0.91 ACRES REMAINING
CONSERVATION EASEMENT FARM AND RANCH LANDS PROTECTION PROGRAM WISCONSIN #73-5F48-7-064 DOC. 4716474 - PARCEL 43
T.L.E. - GRADING 0.33 AC.
T.L.E. - GRADING 0.05 AC.
T.L.E. - DRIVEWAY 0.18 AC.
T.L.E. - DRIVEWAY 0.04 AC.
T.L.E. - DRIVEWAY 0.03 AC.
30' ACCESS
45' ACCESS
SIGN NUMBER 44-1 SIGN OWNER LAMAR
SHEET LOCATION
PROJECT LOCATION
N01°02'51"W 2639.19' MON. TO MON.
S89°40'04"W 1993.87' FROM MON. TO R/W
S89°40'04"W 199.35' FROM REF. LINE TO R/W
S89°40'04"W 51.60' FROM MON. TO REF. LINE
N89°52'19"W 130.90' FROM R/W TO MON.
N89°52'19"W 121.17' FROM R/W TO R/W
N89°52'19"W 51.50' ALONG SEC. LINE TO R/W
N89°52'19"W 63.22' ALONG SEC. LINE TO REF. LINE
N89°52'19"W 3651.49' FROM MON. TO R/W
N89°32'32"E 2656.08' FROM MON. TO MON.
N89°32'32"E 2253.26' ALONG SEC. LINE TO TRAVERSE PT.
N89°32'32"E 351.28' ALONG SEC. LINE TO R/W & TAN.
N89°32'32"E 51.54' ALONG SEC. LINE FROM R/W LINE TAN. TO MON. SEC. LINE STA. 32+98.07'GI'
N89°32'32"E 118.15' ALONG SEC. LINE FROM MON. TO TRAVERSE PT.
S89°52'26"E 211.05' ALONG SEC. LINE FROM TRAVERSE PT. TO TRAVERSE PT.
S89°52'26"E 40.88' ALONG SEC. LINE FROM TRAVERSE PT. TO REF. LINE
S89°52'26"E 656.04' ALONG SEC. LINE FROM REF. LINE TO REF. LINE
S89°52'26"E 393.50' ALONG SEC. LINE TO TRAVERSE PT.
N89°52'26"E 228.52' ALONG SEC. LINE TO TRAVERSE PT.
N00°23'37"E 48.70' ALONG TAN.
N00°23'37"E 126.58' ALONG TAN.
S00°08'34"W 33.00'
S00°08'34"W 33.00' TO EX. R/W
N01°06'39"W 2208.66'
N00°52'20"W 1200.01'
N02°01'01"W 310.92'
N00°27'28"W 33.00' TO SEC. LINE
S89°32'32"W 184.60'
N00°48'37"W 161.44'
N02°23'37"E 48.70' ALONG TAN.
N02°23'37"E 126.58' ALONG TAN.
N89°47'42"E
S89°52'26"E 118.15' ALONG SEC. LINE FROM MON. TO TRAVERSE PT.
S00°08'34"W 33.00'
S44°17'35"W 112.46'
S79°02'31"W 228.42'
N88°35'05"E 46.84'
S01°48'09"E 281.26'
S01°20'10"W 340.32'
S02°23'51"E 698.50'
S01°28'33"W 432.52'
S04°01'26"E 180.27'
S08°34'09"W 209.35'
S35°50'17"W 358.01'
S00°08'34"W 214.00'
S89°52'26"E 210.00'
S00°08'34"W 33.00' TO EX. R/W
S89°52'26"E 228.52' ALONG SEC. LINE TO TRAVERSE PT.
S13°11'13"E 244.26'
S03°09'57"E 500.32'
S02°53'11"W 100.24'
S01°06'39"E 200.00'
S07°24'37"E 100.61'
S00°59'22"E 578.89'
S00°59'39"E 809.40' (809.44')
S20°52'21"E
S20°52'21"E
S89°40'04"W 432.98' N00°32'56"W
N02°19'22"E 500.90'
N00°52'20"W 1200.01'
N02°01'01"W 310.92'
N01°06'39"W
N00°50'38"W
N00°00'39"W 2208.66'
N88°35'05"E 46.84'
N89°32'32"E 270.88'
N89°32'32"E 184.60'
N00°48'37"W 161.44'
N02°23'37"E 48.70' ALONG TAN.
N02°23'37"E 126.58' ALONG TAN.
N89°47'42"E
N89°32'32"E 51.54' ALONG SEC. LINE FROM R/W LINE TAN. TO MON. SEC. LINE STA. 32+98.07'GI'
P.I. STA. 525+64.33'NB'
P.I. STA. 553+03.45'NB'
P.I. STA. 552+03.45'NB'
P.I. STA. 32+98.07'GI'
P.I. STA. 46+68.42'CV'
P.I. STA. 47+34.74'GI'
P.I. STA. 47+10
P.I. STA. 47+80
P.I. STA. 48+00
P.I. STA. 48+30
P.I. STA. 48+50
P.I. STA. 48+70
P.I. STA. 49+00
P.I. STA. 49+30
P.I. STA. 49+50
P.I. STA. 49+70
P.I. STA. 50+00
P.I. STA. 50+30
P.I. STA. 50+50
P.I. STA. 50+70
P.I. STA.

TRANSPORTATION PROJECT PLAT NO: 6020-02-21 - 4.10 AMENDMENT NO. 1

AMENDS PARCEL 56 OF TRANSPORTATION PROJECT PLAT 6020-02-21 - 4.10 RECORDED AS DOCUMENT NO: 4859779

THAT PART OF LOT 1, C.S.M. 12852, V. 81, P. 250-252, DOC. 4633916 AND THE SW¼ - SW¼, THE SE¼ - SW¼, AND THE NW¼ - SW¼ OF SECTION 4, AND PART OF THE SE¼ - SE¼, AND THE NE¼ - SE¼ OF SECTION 5, ALL IN THE TOWN OF WINDSOR, T 9 N, R 10 E, DANE COUNTY, WISCONSIN.

RELOCATION ORDER U.S.H. 51, MADISON - DEFOREST ROAD (REARDON - CTH V)

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 SUBSECTION 84.02 (3) AND SECTION 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 NAMED 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 SUBSECTION 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 TRANSFER OF LAND AND INTERESTS TO DOT.

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W ACRES OR S.F. REQUIRED NEW	EXISTING	TOTAL	T.L.E. ACRES OR S.F
54	ROGER S. MANTHE	FEE & T.L.E.	4.58	0.21	4.79	3.05
56	ROBERT D. & LORNA M. MUTCH	FEE	3.18	---	3.18	---
57	LLOYD A. MANTHE, JR. & SHERRI L. MANTHE	FEE	1.12	---	1.12	---
81	CENTURYTEL / TELEVIEW OF WISCONSIN, INC	RELEASE OF RIGHTS				
82	ALLIANT ENERGY	RELEASE OF RIGHTS				
84	MADISON GAS & ELECTRIC	RELEASE OF RIGHTS				

ALL AREAS SHOWN IN ACRES UNLESS OTHERWISE NOTED

MADISON GAS & ELECTRIC EASEMENT RELEASE DOC. 4232260 - PARCEL 56

CONVENTIONAL SIGNS AND ABBREVIATIONS

SECTION LINE
QUARTER LINE
SIXTEENTH LINE
NEW REFERENCE LINE
NEW R/W LINE
EXISTING R/W LINE
PROPERTY LINE
LOT, TIE AND OTHER MINOR LINES
CORPORATE LIMITS
UNDERGROUND FACILITY (COMMUNICATIONS, ELECTRIC, ETC.)
FEE ACQUISITION AREA (HATCHING VARIES BY OWNER)
TEMPORARY LIMITED EASEMENT AREA
EASEMENT (HIGHWAY, PERMANENT LIMITED OR RESTRICTED DEVELOPMENT) AREAS
TRANSMISSION STRUCTURES (LINE OPTIONAL)
BUILDING

SECTION CORNER
NOTATION FOR COMBUSTABLE FLUIDS
NOTATION FOR HIGH VOLTAGE TRANSMISSION LINES
R/W MONUMENT
NON-MONUMENTED R/W POINT
IRON PIN
VALVE (GAS, WATER, ETC.)
SIGN
OFF-PREMISE SIGN
BRIDGE
PARCEL NUMBER
UTILITY PARCEL NUMBER

	COMPENSABLE	NON-COMPENSABLE
ELECTRIC POLE	■	⊠
TELEPHONE POLE	●	⊗
PEDESTAL (LABEL TYPE - (COMMUNICATIONS, ELECTRIC)	■	⊠

NO ACCESS (BY PARCEL ACQUISITION)
NO ACCESS (BY STATUTORY AUTHORITY)
ACCESS RESTRICTED (BY PREVIOUS PROJECT/CONTROL)

ACRES	AC.
ALUMINUM	ALUM.
CERTIFIED SURVEY MAP	C.S.M.
DOCUMENT NUMBER	DOC.
MONUMENT	MON.
PAGE / PAGES	P. / PGS.
PROPERTY LINE	P.L.
REFERENCE LINE	R/L
SECTION	SEC.
SEPTIC VENT	SEPV.
STATION	STA.
VOLUME	V.

CURVE DATA

LONG CHORD		L.C.
LONG CHORD BEARING		L.C.B.
RADIUS		R.
DEGREE OF CURVE		D.
CENTRAL ANGLE OR DELTA	△	
LENGTH OF CURVE		L.
TANGENT		T.
DIRECTION AHEAD		DA.
DIRECTION BACK		DB.

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

NOTES:

COORDINATES AND BEARINGS SHOWN ON THIS PLAT ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM, DANE COUNTY ZONE, NAD83 (91)) ADJUSTMENT. THE COORDINATES SHOWN ARE GRID COORDINATES AND ARE TO BE USED AS GRID OR GROUND VALUES ON THIS PLAT.

ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY ¾" X 24" IRON REBARS), UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT BY OTHERS.

ALL RIGHT-OF-WAY LINES DEPICTED IN NON ACQUISITION AREAS ARE INTENDED TO RE-ESTABLISH EXISTING RIGHT-OF-WAY LINES AS DETERMINED FROM PREVIOUS PROJECTS, OTHER RECORDED DOCUMENTS, OR FROM CENTERLINE OF EXISTING PAVEMENTS.

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.

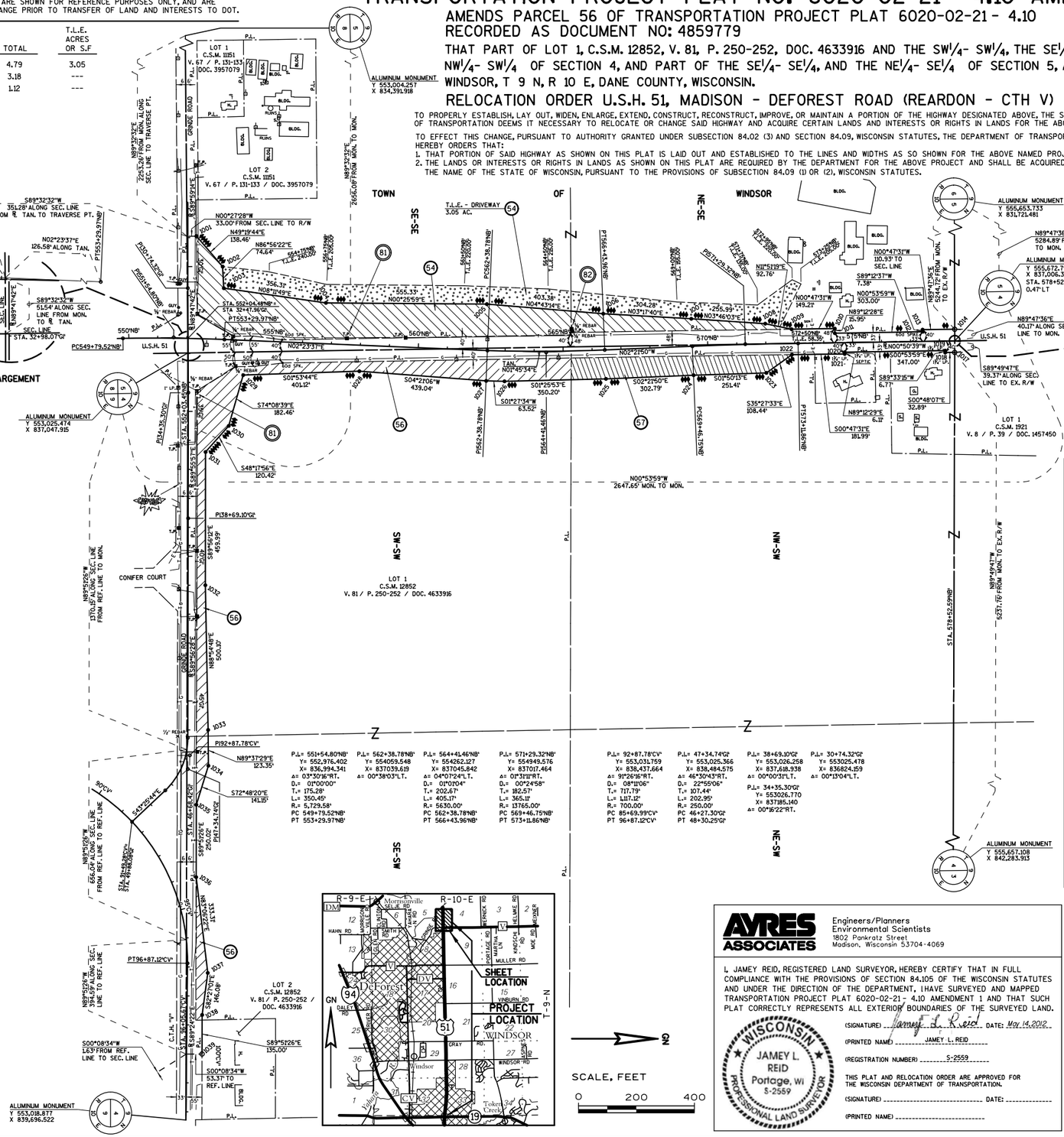
EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE: EXISTING HIGHWAY R/W FOR S.T.H. 51 ESTABLISHED FROM PREVIOUS PROJECT 6030-00-21. EXISTING HIGHWAY R/W FOR C.T.H. V AND GRINDE ROAD ESTABLISHED FROM PREVIOUS PROJECT 6030-00-21, C.S.M. 11151, 12852 & SECTION LINE.

EXISTING ACCESS CONTROL ALONG S.T.H. 51 ESTABLISHED FROM C.A. PROJECT CA 05-1(2).

A **TEMPORARY LIMITED EASEMENT** (TLE) IS A RIGHT FOR DRIVEWAY 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 TLE'S ON THIS PLAT EXPIRE AT THE COMPLETION OF THE CONSTRUCTION PROJECT FOR WHICH THIS INSTRUMENT IS GIVEN.

DIMENSIONING FOR THE NEW RIGHT-OF-WAY IS MEASURED ALONG AND PERPENDICULAR TO NEW REFERENCE LINES.

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN MADISON.


ENLARGEMENT
ENLARGEMENT
U.S.H. 51
LOT 1 C.S.M. 11151 V. 67 / P. 131-133 / DOC. 3957079
LOT 2 C.S.M. 11151 V. 67 / P. 131-133 / DOC. 3957079
LOT 1 C.S.M. 12852 V. 81 / P. 250-252 / DOC. 4633916
LOT 2 C.S.M. 12852 V. 81 / P. 250-252 / DOC. 4633916
LOT 1 C.S.M. 1921 V. 8 / P. 39 / DOC. 1457450
ALUMINUM MONUMENT Y 553,004.257 X 834,391.918
ALUMINUM MONUMENT Y 555,653.733 X 831,721.481
ALUMINUM MONUMENT Y 555,672.798 X 837,006.341 STA. 578+52.60'NB' 0.47'LT
ALUMINUM MONUMENT Y 553,025.478 X 836824.159
ALUMINUM MONUMENT Y 555,657.108 X 842,283.913
ALUMINUM MONUMENT Y 553,018.877 X 839,696.522
CONIFER COURT
GRINDE ROAD
TOWN OF WINDSOR
MS-MS
MS-MN
MS-SE
MS-NE
SE-SE
NE-SE
T.L.E. - DRIVEWAY 3.05 AC.
N89°47'36"E 5284.89'FROM MON. TO MON.
N89°47'36"E 5284.72'FROM MON. TO EX. R/W
N89°49'47"E 0.47'FROM MON. TO REF. LINE
N89°47'36"E 40.17'ALONG SEC. LINE TO MON.
N89°49'47"E 39.37'ALONG SEC. LINE TO EX.R/W
N00°53'59"W 2647.65' MON. TO MON.
N89°47'36"E 5237.76'FROM MON. TO EX. R/W
S89°32'32"W 351.28' ALONG SEC. LINE FROM ℄ TAN. TO TRAVERSE PT.
N89°32'32"E 2656.09'FROM MON. TO MON.
N89°32'32"E 2656.09'ALONG SEC. LINE TO TRAVERSE PT.
N00°27'28"W 33.00'FROM SEC. LINE TO R/W
N02°23'37"E 48.70'ALONG TAN.
N02°23'37"E 126.58'ALONG TAN.
S89°32'32"W 515.4'ALONG SEC. LINE FROM MON. TO ℄ TAN.
N89°47'47"E 1320.08'ALONG SEC. LINE FROM REF. LINE TO MON.
N89°51'26"W 656.64'ALONG SEC. LINE FROM REF. LINE TO REF. LINE
N89°51'26"W 394.69'ALONG SEC. LINE TO REF. LINE
S00°08'34"W 1.63'FROM REF. LINE TO SEC. LINE
S00°08'34"W 53.37' TO REF. LINE
S89°51'26"E 135.00'
N89°37'29"E 123.35'
S72°48'20"E 141.15'
S45°25'49"E
S89°51'26"E 250.02'
N02°23'37"E
N02°21'50"W
N01°46'54"E
S01°53'44"E 401.12'
S74°08'39"E 182.46'
S48°17'56"E 120.42'
S04°21'06"W 439.04'
S01°25'53"E 350.20'
S01°27'34"W 63.52'
S02°21'50"E 302.79'
S01°50'13"E 251.41'
S35°27'33"E 108.44'
N00°47'31"W 110.93' TO SEC. LINE
N00°47'31"W 149.21'
N89°12'28"E 15.95'
S89°12'37"W 7.38'
N00°53'59"W 303.00'
N00°50'39"W 347.00'
S89°33'35"W 6.71'
S00°48'07"E 32.89'
N89°12'29"E 6.11'
S00°47'31"E 181.99'
N31°51'19"E 92.76'
S72°50'06"E 48.39'
N03°17'40"E 304.28'
N03°46'03"E 265.99'
N89°47'47"E 555.33'
N00°25'59"E 403.38'
N04°43'16"E
N89°47'47"E 356.37'
N08°11'49"E
N86°56'22"E 74.64'
N69°19'44"E 138.46'
S89°32'32"W 1320.08'
S00°08'34"W 1319.31'
S00°08'34"W 1319.31'
S00°08'34"W 1319.31

DATE: August 3, 2012

REVISION DATE

TRANSPORTATION PROJECT PLAT NO: 6020-02-21 - 4.11

RELOCATION ORDER U.S.H. 51, MADISON - DEFOREST ROAD (REARDON - CTH V)

R/W MONUMENT POINT NUMBER AND COORDINATE TABLE

4

R/W MONUMENT POINT NUMBER AND COORDINATE TABLE		
POINT	Y	X
101	539793.786	837204.429
102	540073.235	837199.624
103	542403.461	837161.380
108	542408.660	838144.837
109	542408.900	837730.386
110	542178.952	837714.030
111	541498.537	837670.010
112	540964.694	837631.620
113	540845.206	837622.437
114	539794.700	837640.671

R/W MONUMENT POINT NUMBER AND COORDINATE TABLE		
POINT	Y	X
201	529215.676	837197.265
202	529502.822	837229.860
203	529764.537	837279.760
204	529793.110	837280.762
205	529865.122	837283.287
206	530104.228	837291.673
207	530540.237	837307.062
208	530540.250	837310.152
209	530704.988	837311.973
210	531295.239	837314.193
211	531860.352	837276.318
214	531861.093	837596.323
215	531314.544	837594.268
216	531306.231	837680.119
217	531239.840	837732.839
219	531173.895	837735.541
220	531169.678	837640.219
221	531110.351	837583.500
222	530703.972	837581.971
223	530441.574	837585.826
224	530185.850	837580.403
225	529870.250	837567.286
226	529790.237	837563.960
227	529673.069	837559.091
228	529462.203	837539.249
229	529220.523	837480.872
230	529178.755	837477.379

R/W MONUMENT POINT NUMBER AND COORDINATE TABLE		
POINT	Y	X
300	531860.352	837276.318
301	532056.829	837323.433
302	533215.982	837278.901
303	533458.060	837230.886
304	533558.866	837227.211
305	533699.592	837249.556
306	534136.324	837157.698
307	534312.788	837080.981
308	534393.645	837025.039
309	534423.382	836949.934
310	534396.039	836280.026
311	534336.831	836230.322
312	534206.670	836195.928
313	534126.671	836196.300
314	534131.302	836116.277
315	534166.301	836116.115
316	534381.109	836075.114
317	534425.059	835999.923
318	534466.068	835839.775
319	534465.025	835484.780
323	534473.850	838724.770
324	534473.748	838682.212
325	534372.487	838684.015
328	534370.836	838590.395
329	534383.303	838590.175
330	534461.797	838514.093
331	534465.484	838163.770
332	534425.003	837984.932
333	534371.794	837925.121
334	534303.030	837870.936
335	534104.093	837812.210
336	533689.598	837784.463
337	533214.261	837643.897
338	533039.333	837643.072
339	532854.456	837616.258
340	532454.552	837595.315
341	532179.484	837609.019
342	531861.093	837596.323

R/W MONUMENT POINT NUMBER AND COORDINATE TABLE		
POINT	Y	X
400	534631.025	835484.546
401	534589.796	835924.346
402	534653.677	836044.661
403	534897.031	836071.122
404	535091.747	836086.855
405	535312.857	836169.096
406	535590.679	836342.001
407	535843.415	836610.201
408	536040.347	836954.168
409	536141.596	837078.281
410	536355.360	837212.315
411	536503.942	837258.640
412	536652.034	837255.738
413	536752.506	837278.864
414	536993.440	837274.103
415	537115.676	837174.344
420	537118.055	837934.701
421	537117.698	837804.701
422	537083.368	837759.868
423	537058.427	837685.839
424	536733.190	837676.295
425	536512.502	837652.169
426	536292.167	837668.056
427	536152.752	837635.446
428	535461.658	837687.546
429	535080.043	837770.433
430	534814.062	837820.473
431	534638.345	837867.197
432	534591.810	837929.351
433	534588.367	836374.363
434	534556.121	838424.476
435	534556.620	838629.478
440	534533.727	836404.542
441	534586.125	836304.431
442	534684.941	836231.335
443	534890.219	836215.962
444	535153.269	836252.900
445	535292.310	836308.342
446	535669.146	836587.669
447	535724.639	836684.311
448	535930.064	837022.983
449	536160.186	837265.376
450	535469.292	837278.914
451	535380.173	837230.945
452	535091.998	837130.544
453	534898.153	837066.912
454	534642.824	837082.146
455	534588.574	837004.353
456	534573.014	836844.407
457	534534.990	836834.540

R/W MONUMENT POINT NUMBER AND COORDINATE TABLE		
POINT	Y	X
502	537181.593	837177.229
503	537311.713	837252.814
504	538439.427	837230.717
505	538551.939	837225.782
506	539793.786	837204.429
510	539794.602	837595.684
511	539690.960	837596.782
512	539357.678	837600.316
513	539156.504	837575.463
514	538778.309	837643.874
515	538157.239	837668.510
516	537956.970	837697.457
517	537509.902	837662.063
518	537254.069	837667.094
519	537243.366	837759.085
520	537184.054	837934.378
523	539794.700	837640.671

R/W MONUMENT POINT NUMBER AND COORDINATE TABLE		
POINT	Y	X
600	542497.087	837118.000
601	542549.822	837169.980
602	542874.027	837164.659
603	543852.204	837151.319
604	543951.949	837131.957
605	545090.005	837116.437
608	545090.114	837638.570
609	545065.175	837640.135
610	544779.330	837647.796
611	543932.416	837661.225
612	543652.134	837645.666
613	543001.899	837635.974
614	542752.644	837684.932
615	542513.150	837718.733
616	542474.796	837909.864
617	542474.660	838144.875

R/W MONUMENT POINT NUMBER AND COORDINATE TABLE		
POINT	Y	X
706	547701.409	839337.988
706	547702.531	838963.050
707	547663.448	838813.986
708	547703.952	838488.256
709	547704.791	838207.897
710	547680.299	837963.795
711	547655.374	837769.079
712	547571.125	837569.115
713	547054.230	837557.081
714	546652.593	837574.041
715	546242.825	837597.214
716	545459.230	837622.034
717	545090.114	837638.570
720	545090.005	837116.437
721	545818.435	837106.503
722	545854.114	837070.034
723	545963.133	837059.698
724	546017.460	837123.791
725	546451.768	837102.867
726	546509.424	837102.045
727	546575.910	837076.868
728	546814.820	836924.056
729	547157.113	836588.570
730	547664.726	836606.275
731	547698.358	836623.295
732	547682.614	836727.589
733	547449.521	836859.177
734	547165.969	836924.930
735	546968.685	836993.515
736	546919.325	836933.647
737	547213.111	836645.703
738	547433.902	836515.583
739	547568.443	836475.473
740	547411.046	836438.917
741	547665.377	836363.096

R/W MONUMENT POINT NUMBER AND COORDINATE TABLE		
POINT	Y	X
800	548110.855	836562.500
801	547918.592	836532.116
802	547829.274	836585.419
803	547825.752	836650.324
804	547876.611	836839.612
805	548121.273	836823.838
806	548323.704	836833.569
807	548728.466	836863.154
808	548796.864	836893.706
809	548924.107	836904.884
810	548998.666	836881.434
811	549339.378	836914.835
812	549618.162	836849.418
813	549768.037	836841.511
814	550098.460	836860.109
815	550318.225	836845.846
816	550385.268	836845.216
819	550386.475	837207.062
820	550305.595	837226.162
821	549753.724	837200.036
822	549653.228	837171.739
823	549552.987	837158.440
824	549069.209	837166.660
825	549029.478	837180.893
826	548563.111	837228.285
827	548335.467	837254.892
828	548189.850	837303.965
829	547980.544	837394.470
830	547898.801	837458.673
831	547832.179	837601.709
832	547847.965	837925.715
833	547874.531	838070.046
834	548015.002	838263.905
835	548224.817	838394.353
836	548436.390	838440.310
837	548693.665	838448.583
838	550383.765	838418.786
840	550383.495	838539.889
841	550197.493	838545.742
842	549685.827	838554.463
843	548844.285	838550.676
844	548439.111	838576.083
845	548257.883	838561.301
846	548037.920	838460.151
847	547957.818	838461.585
848	547905.351	838504.784
849	547829.425	838649.089
850	547793.372	838814.260
851	547768.531	838963.174
857	547832.844	835752.423
858	547834.669	836052.655
859	547868.789	836302.623
860	547903.891	836412.590
861	548038.588	836440.721
862	548148.107	836508.017
863	548234.508	836567.089
864	548327.717	836547.130
865	548397.607	836546.668
866	548397.767	836652.709
867	548397.855	836710.722
868	548329.208	836710.549
869	548197.258	836621.573

R/W MONUMENT POINT NUMBER AND COORDINATE TABLE		
POINT	Y	X
904	552992.180	837165.978
905	552911.686	837087.446
906	552102.406	837101.491
907	551523.601	837111.489
908	551423.834	837124.464
909	551223.871	837128.341
910	551123.755	837123.293
911	550624.196	837150.924
912	550386.475	837207.062
915	550385.268	836845.216
916	550818.227	836841.151
917	551318.715	836861.453
918	552518.587	836843.188
919	552829.310	836832.246
920	552990.732	836829.962
921	552989.257	836645.372
950	550383.765	838418.786
951	552592.077	838379.806
952	552593.234	838426.629
953	552842.684	838532.236
954	552968.133	838430.577
955	552989.163	838377.098
960	552986.446	839467.922
961	552964.321	839154.793
962	552920.900	838930.537
963	552812.034	838749.323
964	552521.939	838539.422
965	552314.930	838508.228
966	552135.103	838520.878
967	551702.726	838509.738
968	551004.839	838538.978
969	550664.611	838531.042
970	550383.495	838539.889

R/W MONUMENT POINT NUMBER AND COORDINATE TABLE		
POINT	Y	X
1001	553055.255	836644.845
1002	553145.495	836749.865
1003	553149.480	836824.394
1004	553502.147	836875.195
1005	554057.456	836879.392
1006	554459.473	836912.589
1007	554763.246	836930.075
1008	555018.682	836946.895
1009	555109.462	836965.951
1010	555258.655	836963.889
1011	555258.875	836979.837
1012	555561.838	836975.079
1013	555561.737	836967.700
1014	555672.653	836966.167
1017	555672.680	837046.174
1018	555639.794	837046.635
1019	555639.741	837039.864
1020	555292.784	837045.313
1021	555292.868	837051.424
1022	555110.898	837053.939
1023	555022.568	837116.850
1024	554771.289	837124.909
1025	554468.753	837137.398
1026	554118.664	837146.146
1027	554055.163	837144.528
1028	553617.390	837111.215
1029	553216.486	837124.482
1030	553166.635	837300.001
1031	553086.528	837389.906
1032	553086.020	837849.897
1033	553095.505	838349.907
1034	553096.313	838473.259
1035	553054.588	838608.097
1036	553053.965	838858.119
1037	553093.973	839189.021
1038	553074.781	839333.830
1039	553074.444	839468.834

4

FILE NAME : \\Mad31zp1\w3dtdd1\PDS\Support\CADDS\Projects\d1_60200200\040411.dgn
APPRAISAL PLAT DATE : August 3, 2012

PLOT DATE : 20-AUG-2012 11:15 PLOT BY : data4c PLOT NAME : PLOT SCALE : 200.000000:1.000000

TIFFANY R. UGALDE F.N. 7083

DENISE M. SADOSKI & PAUL A. WARNER F.N. 7087

MALINDA E. HAAKENSON

B.M. 822

B.M. 823

B.M. 824

175 NT | 180 NT | 185 NT | 190 NT | 195 NT | 200 NT

U.S.H. 51

R/W

B-13-598

B-13-597

435 NB | 440 NB | 445 NB | 450 NB | 455 NB | 460 NB | 465 NB

STA.457+00 NB, 30' LT.
INLET MEDIAN 2 GRATE
INLET COVER TYPE MS REQ'D.

20

SLOPE INTERCEPT

BEGIN CONSTRUCTION
STA.450+00 NB
MATCH EXISTING

STANLEY W. & JUDITH E. RAULS

STA.464+00 NB, 30' LT.
INLET MEDIAN 2 GRATE, SPECIAL
INLET COVER TYPE MS REQ'D.

21

MERLIN R. BLIEFERNICHT

BENCH MARKS

NO.	STATION	DESCRIPTION	OFFSET	ELEV.
822	436+79 NB	R.R. SPIKE IN POWER POLE	266' LT	991.64
823	447+20 NB	R.R. SPIKE IN POWER POLE	359' LT	984.68
824	459+33 NB	R.R. SPIKE IN POWER POLE	382' LT	969.02

BEGIN PROJECT
STA. 452+00 NB

STA.465+00 NB, LT.
MAINTENANCE CROSSOVER REQ'D.
SEE CONSTRUCTION DETAIL

VPI STA 445+40.00
VPI EL 020.70

441+05.27
008.95

K = 579.22
VCL 2490.00

EXISTING GROUND

PROPOSED GROUND

VPT STA 457+85.00
VPT EL 984.59

-2.90%

VPC STA 458+60.00
VPC EL 982.42

SPECIAL DITCH RT.

STA.457+00 NB
1-18" X 92' RCCP REQ'D

STA.464+00 NB
1-18" X 106' RCCP REQ'D

EXISTING GROUND ELEVATION | PROPOSED GROUND ELEVATION

1010 | 1000 | 990 | 980 | 970 | 960 | 950

990.94 005.78	993.65 006.74	995.26 007.53	001.05 008.14	001.86 008.58	996.62 008.85	991.38 008.95	988.46 008.87	985.66 008.62	982.55 008.20	982.58 007.60	985.84 006.83	987.54 005.89	991.39 004.78	995.57 003.49	997.99 002.04	996.82 000.40	995.18 998.60	993.65 996.62	991.50 994.48	987.28 992.15	984.20 989.66	981.98 986.99	980.06 984.16	975.08 981.27	970.49 978.56	966.33 976.06	961.38 973.76	958.04 971.68	956.93 969.81	956.27 968.14
NB 435	436	437	438	439	440	441	442	443	444	445	446	447	448	449	450	451	452	453	454	455	456	457	458	459	460	461	462	463	464	465 NB

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	PLAN & PROFILE - MAINLINE	SHEET 296	E

JOINT SCHOOL DISTRICT NO. 10
VILLAGE OF DEFOREST, TOWNS OF
VIENNA, WINDSOR, BURKE, BRISTOL,
DANE COUNTY, WISCONSIN

ERKAN RESAD &
EDIP RESAD

KAROW LAND, LLC

DELINEATED WETLAND

DELINEATED WETLAND

STANLEY W. & JUDITH E. RAULS

LAURA R. WERNICK, LINDA V. BLIEFERNICHT,
& ENID J. OLSON

DRAINAGE SWALE

DRAINAGE SWALE

STA.472+00 NB, 28.3' LT.
INLET MEDIAN 2 GRATE
INLET COVER TYPE MS REQ'D.

22

SLOPE INTERCEPTS

SLOPE INTERCEPT

BM 825

STA.479+00 NB, 28.3' LT.
INLET MEDIAN 2 GRATE
INLET COVER TYPE MS REQ'D.

23

STA.486+00 NB, 28.3' LT.
INLET MEDIAN 2 GRATE
INLET COVER TYPE MS REQ'D.

24

BENCH MARKS

NO.	STATION	DESCRIPTION	OFFSET	ELEV.
825	480+96.21 NB	RR SPIKE IN LIGHT POLE	238.11' LT.	964.23

STA.494+60 NB
EXISTING INLET
2 EXISTING 12" RCCP
TO BE REMOVED

STA.494+60 NB
3 EXISTING RCCP
TO BE REMOVED

TOP OF BANK
4:1
4:1
20' CHANNEL
DRAINAGE SWALE

VCL 2150.00
K = 477.96

472+46.10
962.32

PROPOSED GROUND

EXISTING GROUND

+1.60 %

VPC STA 484+70.00
VPC EL975.77

VPI STA 492+20.00
VPI EL987.76

494+95.32
983.97

K = 641.53
VCL 1500.00

VPT STA 480+70.00
VPT EL968.42

VPI STA 469+35.00
VPI EL951.24

SPECIAL DITCH LT.

SPECIAL DITCH RT.

SPECIAL DITCH LT.

SPECIAL DITCH RT.

STA.466+00 NB
2 - 48" X 202' RCCP REQ'D.

STA.472+00 NB
1 - 18" X 102' RCCP REQ'D.

STA.472+50 NB
2 - 54" X 192' RCCP REQ'D.

STA.476+00 NB
1 - 36" X 214' RCCP REQ'D.

STA.479+00 NB, LT.
1 - 18" X 116' RCCP REQ'D.

STA.486+00 NB
1 - 18" X 94' RCCP REQ'D.

STA.494+69 NB
3 - 48" X 430' RCCP REQ'D.
SKEW 17° RHF

EXISTING GROUND ELEVATION — PROPOSED GROUND ELEVATION

NB	465	466	467	468	469	470	471	472	473	474	475	476	477	478	479	480	481	482	483	484	485	486	487	488	489	490	491	492	493	494	495	NB
	956.27	955.84	956.20	959.18	961.84	960.90	957.52	954.98	954.47	954.65	954.06	953.95	954.31	954.88	957.65	957.67	957.95	958.91	961.31	965.95	968.26	967.30	964.85	961.45	959.49	958.56	957.48	956.91	956.09	955.29	954.65	
	968.14	966.68	965.44	964.40	963.57	962.95	962.54	962.34	962.35	962.56	962.99	963.63	964.47	965.53	966.79	968.26	969.86	971.46	973.06	974.65	976.25	977.72	979.04	980.20	981.20	982.05	982.75	983.29	983.67	983.90	983.97	

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	PLAN & PROFILE - MAINLINE	SHEET 297 E

25 STA.498+00 NB, 31.7' LT.
INLET MEDIAN 2 GRATE, SPECIAL
INLET COVER TYPE MS REQ'D.

KAROW LAND, LLC

TOKEN INVESTMENTS, LLC

STA. 499+29.45 NB, LT.
STRUCTURE B-13-600 REQ'D.
SINGLE SPAN - 36" W
PRESTRESSED GIRDERS
SEE STRUCTURE DRAWINGS

HEEKIN CAN INC.,
A DELAWARE CORPORATION

NEESVIG'S FULLFILLMENT, LLC
A WISCONSIN LIMITED LIABILITY COMPANY

M.A. HANNA COMPANY,
A DELAWARE CORPORATION

SLOPE INTERCEPT

B-13-600

B-13-599

BM 826

BM 827

DELINEATED WETLAND

CHARLES J. & EVONNE E. LINDE, VENDORS
TOWN OF WINDSOR, PURCHASER

26 STA.510+83 NB, 31.5' LT.
INLET MEDIAN 2 GRATE, SPECIAL
INLET COVER TYPE MS REQ'D.

THE VILLAGE OF DEFOREST,
A WISCONSIN MUNICIPALITY

CHARLES LINDE & EVONNE LINDE

STA.502+37 NB
3 EXISTING 29"X45" RCHEP
TO BE REMOVED

STA.502+37 NB
EXISTING INLET
2 EXISTING 12" RCCP
TO BE REMOVED

STA.506+10 NB, LT.
EXISTING 18" PE
TO BE REMOVED

STA.499+00 NB, LT.
EXISTING 24" CP
TO BE REMOVED

LAURA R. WERNICK,
LINDA V. BLIEFERNICHT,
& ENID J. OLSON

BENCH MARKS

NO.	STATION	DESCRIPTION	OFFSET	ELEV.
826	498+56.98 NB	RR SPIKE IN POWER POLE	59.22'RT	959.48
827	510+41.43 NB	RR SPIKE IN POWER POLE	1.15'LT	960.10

STA. 499+31.37 NB
STRUCTURE B-13-599 REQ'D.
SINGLE SPAN - 36" W
PRESTRESSED GIRDERS
SEE STRUCTURE DRAWINGS

VPT STA 499+70.00
VPT EL982.21

PROPOSED GROUND

ORIGINAL GROUND

-0.74 %

-0.74 %

VCL 2510.00
K = 2022.51

VPC STA 510+65.00
VPC EL974.11

VPI STA 523+20.00
VPI EL964.82

SPECIAL DITCH RT.

SPECIAL DITCH LT.

SPECIAL DITCH RT.

SPECIAL DITCH LT.

SPECIAL DITCH LT.

STA.498+00 NB, LT.
1 - 18" X 108' RCCP REQ'D.

STA.511+00 NB
1 - 30" X 300' RCCP REQ'D.
SKEW 29° LHF

990 980 970 960 950 940

EXISTING GROUND ELEVATION — PROPOSED GROUND ELEVATION

| | | |

BENCH MARKS

NO.	STATION	DESCRIPTION	OFFSET	ELEV.
828	525+57.34 NB	RR SPIKE IN POWER POLE	11.64' LT.	981.60
829	538+00.61 NB	RR SPIKE IN POWER POLE	14.24' RT.	961.01
8301	551+73.48 NB	CHISLED "□" S END RCCP	112.37' RT.	959.45
8302	552+30.64 NB	RE-BAR PROPERTY PIN, SE CORNER	477.84' LT.	959.01

N

STA.536+00 NB, 30' LT.
INLET MEDIAN 2 GRATE, SPECIAL
INLET COVER TYPE MS REQ'D.
29

SLOPE INTERCEPT

VILLAGE OF DEFOREST

WINFIELD ESTATES DEVELOPEMENT, LLC
A WISCONSIN LIMITED LIABILITY COMPANY

STA.552+00 NB, LT.
EXISTING 24" CP
TO BE REMOVED

BM 8302
ROGER S. MANTHE

STA.552+00 NB
EXISTING 34"X53" RCHEP
TO BE REMOVED

SER VUE &
JENG TONG VUE

R/W

BM 828

525 NB
525 NN
530 NB
535 NB
540 NB
545 NB
550 SB
550 NB
555 SB
555 NB

U.S.H. 51

28 STA.525+80 NB, 30' LT.
INLET MEDIAN 2 GRATE
INLET COVER TYPE MS REQ'D.

27 STA.525+60 NB, 30' LT.
INLET MEDIAN 2 GRATE
INLET COVER TYPE MS REQ'D.

T.L.E.

SLOPE INTERCEPT

BM 829

RICHARD NOOYEN

GRINDE
VENTURES II,
LLC

BM 8302

CAUTION

ROBERT D. &
LORNA M. MUTCH

DAVID D. & SANDRA L. GRINDE

STA.542+10 NB, RT.
EXISTING 18" PE
TO BE REMOVED

STA.543+00 NB, RT.
EXISTING 18" PE
TO BE REMOVED

STA.531+90 NB, RT.
EXISTING 54" RCCP
TO BE REMOVED

CHARLES LINDE & EVONNE LINDE

GREGG A. CHAPMAN

GREGG A. CHAPMAN

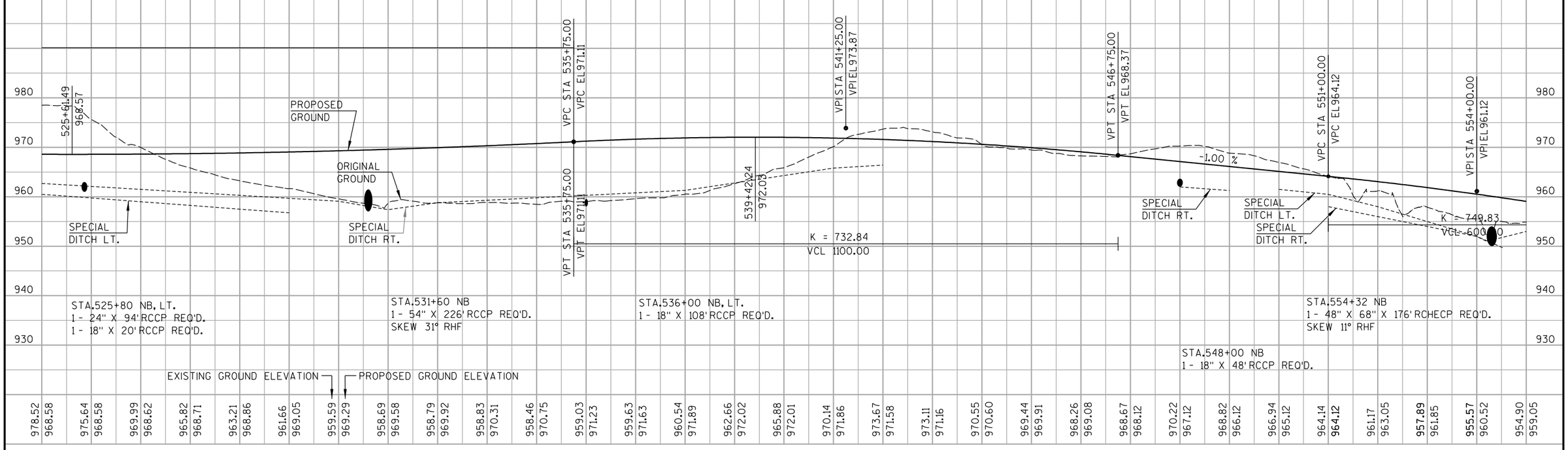
J & J HARBORT, LLC

EDWARD P. & CAROL A. BROGAN

STA.554+20 NB
EXISTING 48" RCCP
TO BE REMOVED

5

5



PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	PLAN & PROFILE - MAINLINE	SHEET 299	E

ROGER S. MANTHE

ROGER S. MANTHE

ROGER S. MANTHE

30 STA.557+00 NB, 19.8'LT.
INLET MEDIAN 2 GRATE
INLET COVER TYPE MS REQ'D.

SLOPE INTERCEPTS
15 D4
20 D4
25 D4
30 D4

R/W
555 SB
555 NB
560 SB
560 NB
565 SB
565 NB
570 NB

DELINEATED WETLAND

CAUTION

BM 831

SLOPE INTERCEPT

BM 832

R/W

USH 51

SEPTIC

DELINEATED WETLAND

ROBERT D. & LORNA M. MUTCH

DELINEATED WETLAND

PHILIP V. SCANLAN
& VICTORIA J. MARTINELLI

WILLIAM D. PAYNTER

LLOYD A. MANTHE, JR.
& SHERRIE L. MANTHE

LLOYD A. MANTHE, JR.
& SHERRIE L. MANTHE

P.L.

BENCH MARKS

NO.	STATION	DESCRIPTION	OFFSET	ELEV.
831	563+64.64 NB	CHISLED "□" W END RCCP	39.16'LT.	942.33
832	573+69.00 NB	RR SPIKE IN POWER POLE	35.78'RT.	944.99

STA.563+66 NB
EXISTING 42" RCCP
TO BE REMOVED

END PROJECT
STA. 573+99.81 NB

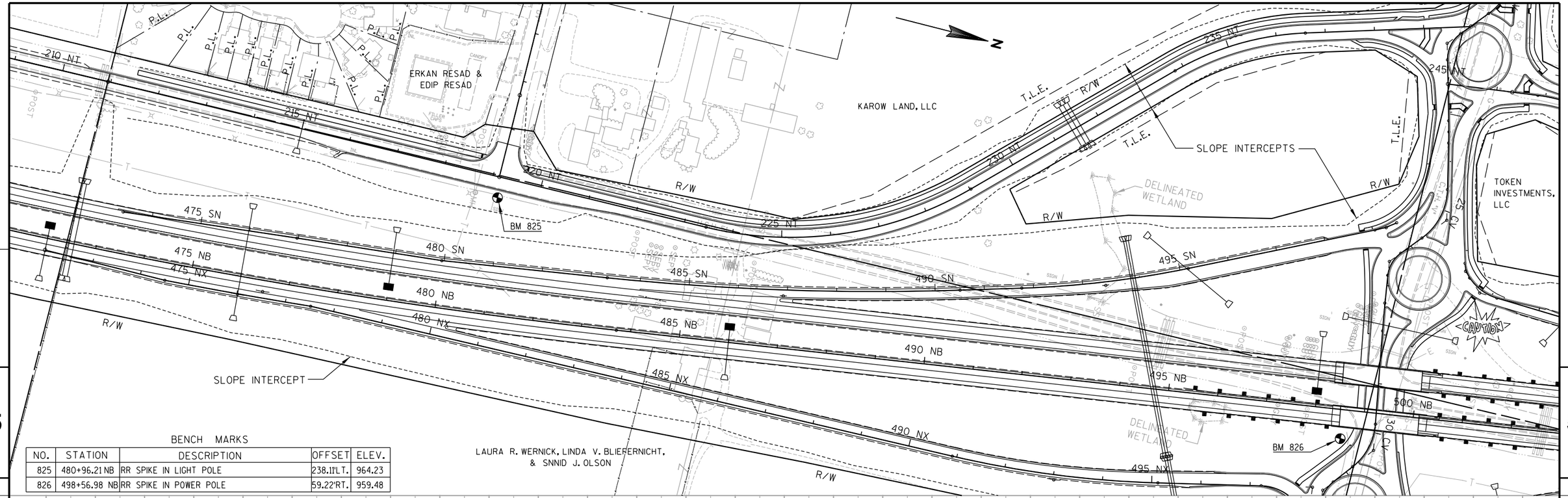
VPT STA 557+00.00
VPT EL955.72
VCL 700.00
K = 311.41
563+80.54
948.52
VPC STA 565+85.00
VPC EL949.12
VPI STA 568+60.00
VPI EL950.35
VPT STA 571+35.00
VPT EL948.43
VPOT STA 573+99.81
VPOT EL947.11
PROPOSED GROUND
-1.80 %
+0.45 %
-0.70 %
-0.55 %
-0.37 %
-0.18 %
VPC STA 558+20.00
VPC EL953.56
ORIGINAL GROUND
SPECIAL DITCH RT.
SPECIAL DITCH LT.
VPI STA 561+70.00
VPI EL947.26
VPT STA 565+20.00
VPT EL948.83
567+99.58
949.60
SPECIAL DITCH LT.
K = 479.17
VCL 550.00
VPI STA 572+00.00
VPI EL947.97
VPI STA 572+84.00
VPI EL947.51
VPI STA 573+85.66
VPI EL947.14

STA.557+00 NB
1 - 18" X 78'RCCP REQ'D.

STA.563+65 NB
1 - 42" X 128'RCCP REQ'D.

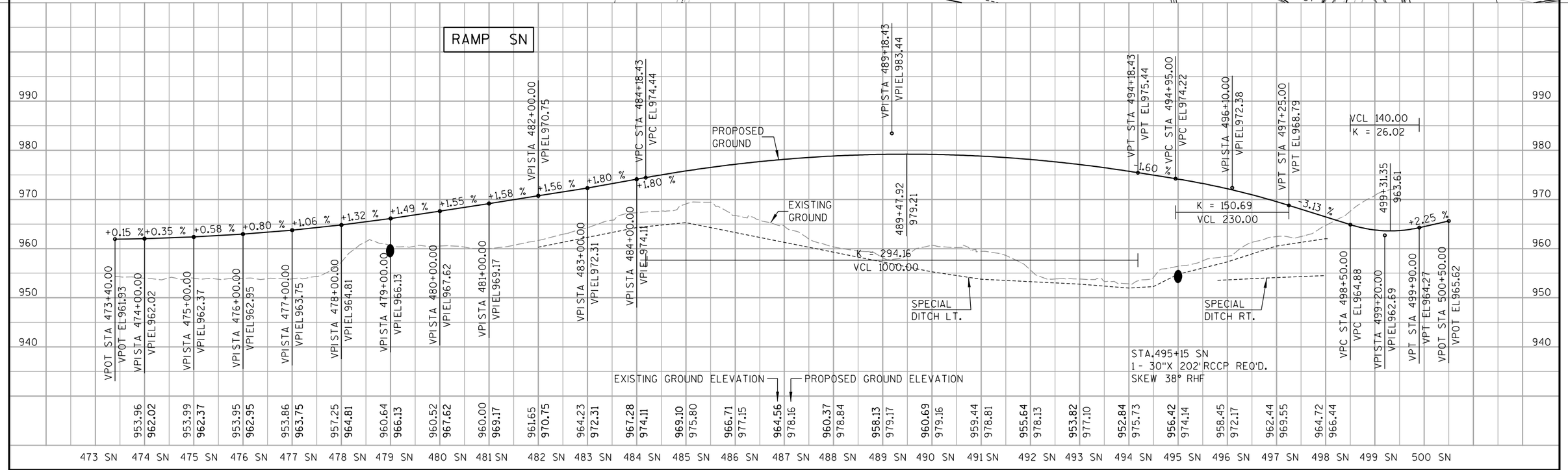
EXISTING GROUND ELEVATION
PROPOSED GROUND ELEVATION

| | | |



BENCH MARKS

NO.	STATION	DESCRIPTION	OFFSET	ELEV.
825	480+96.21 NB	RR SPIKE IN LIGHT POLE	238.11'LT.	964.23
826	498+56.98 NB	RR SPIKE IN POWER POLE	59.22'RT.	959.48



PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	PLAN & PROFILE - RAMP SN	SHEET 301	E

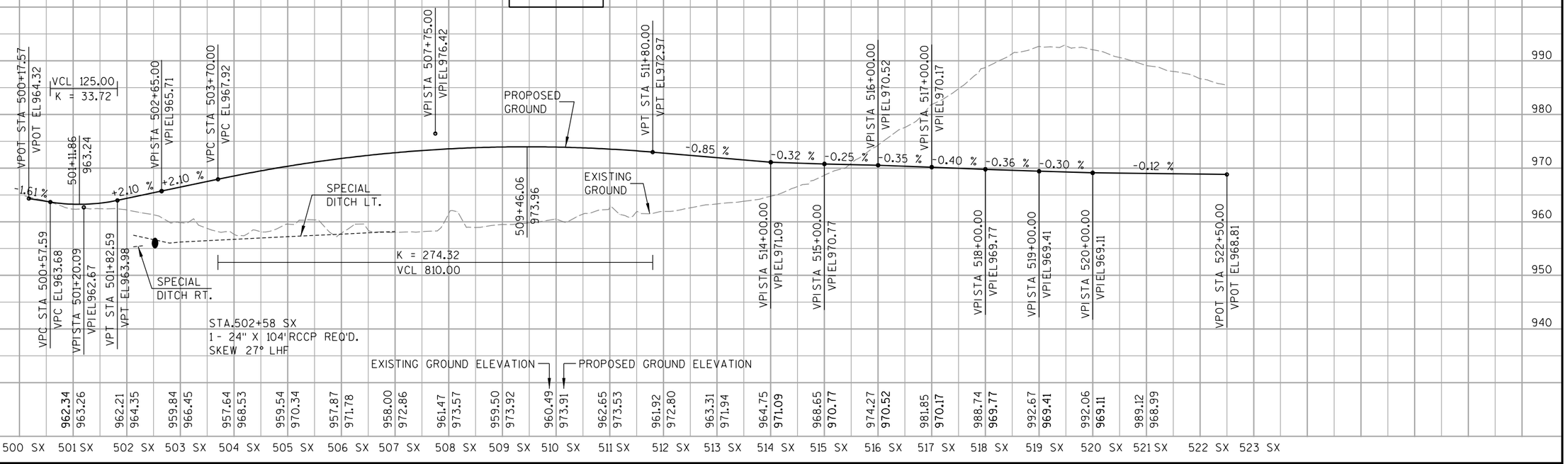
BENCH MARKS

NO.	STATION	DESCRIPTION	OFFSET	ELEV.
826	498+56.98 NB	RR SPIKE IN POWER POLE	59.22'RT	959.48
827	510+41.43 NB	RR SPIKE IN POWER POLE	1.15'LT.	960.10
828	525+57.34 NB	RR SPIKE IN POWER POLE	11.61'LT	981.60

TOKEN INVESTMENTS, LLC
HEEKIN CAN INC., A DELAWARE CORPORATION
NEESVIG'S SXULLFILLMENT, LLC A WISCONSIN LIMITED LIABILITY COMPANY
M.A. HANNA COMPANY, A DELAWARE CORPORATION
VILLAGE OF DEFOREST
CHARLES J. & EVONNE E. LINDE, VENDORS TOWN OF WINDSOR, PURCHASER
THE VILLAGE OF DEFOREST, A WISCONSIN MUNICIPALITY
CHARLES LINDE & EVONNE LINDE

BM 826 BM 827 BM 828

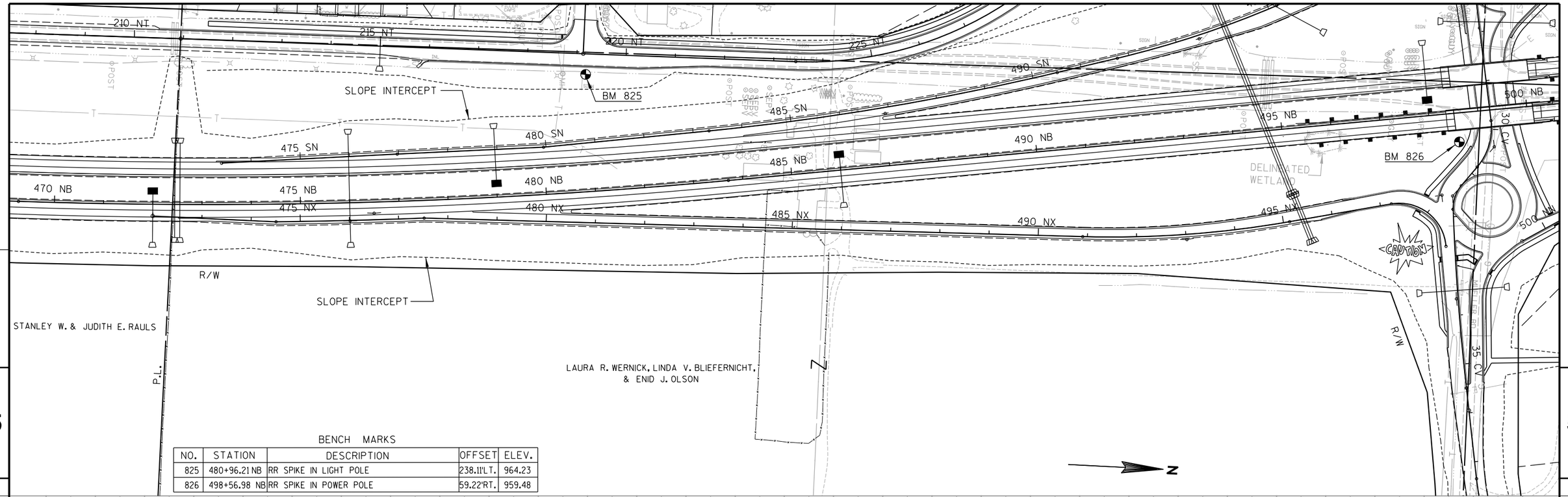
RAMP SX



PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	PLAN & PROFILE - RAMP SX	SHEET 302	E

FILE NAME : P:\2011059 - US 51 WO\MicroStation\Planset\6020-02-72\050107_pp.DGN PLOT DATE : 4/26/2013 PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : 200.0000 sf / in.

WISDOT/CADDS SHEET 40

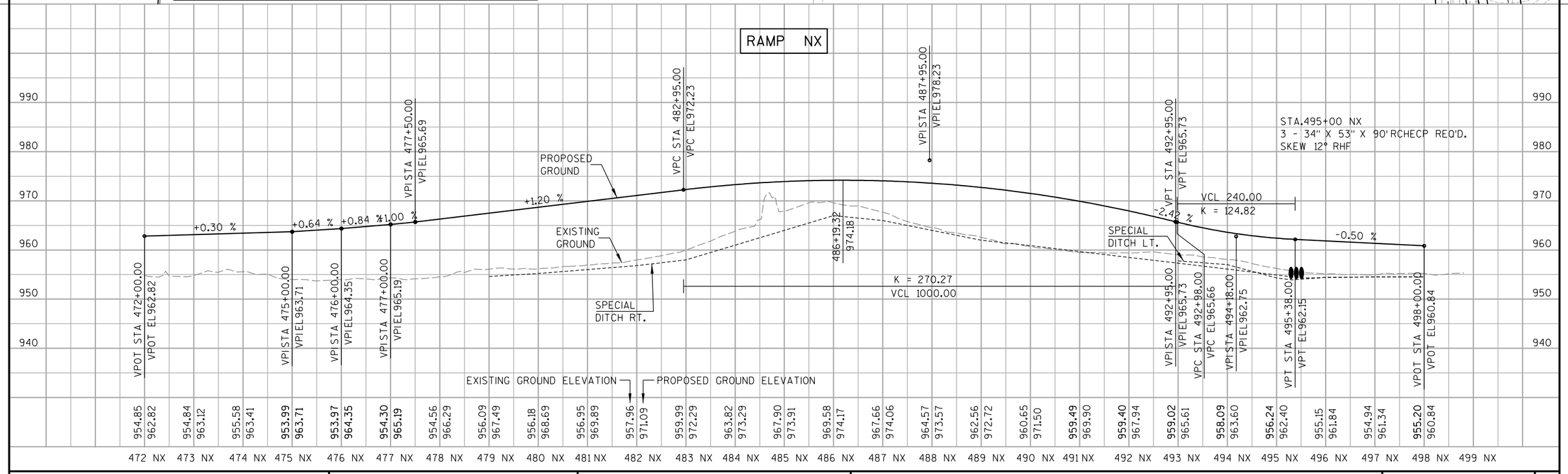


5

5

BENCH MARKS

NO.	STATION	DESCRIPTION	OFFSET	ELEV.
825	480+96.21 NB	RR SPIKE IN LIGHT POLE	238.11'LT.	964.23
826	498+56.98 NB	RR SPIKE IN POWER POLE	59.22'RT.	959.48



PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	PLAN & PROFILE - RAMP NX	SHEET 303	E

HEEKIN CAN INC.,
A DELAWARE CORPORATION

NEESVIG'S FULLFILLMENT, LLC
A WISCONSIN LIMITED LIABILITY COMPANY

M.A. NNANNA COMPANY,
A DELAWARE CORPORATION

VILLAGE OF DEFOREST

CHARLES J. & EVONNE E. LINDE, VENDORS
TOWN OF WINDSOR, PURCHASER

THE VILLAGE OF DEFOREST,
A WISCONSIN MUNICIPALITY

CHARLES LINDE & EVONNE LINDE

505 SX
510 SX
515 SX
520 SX
500 NB
505 NB
510 NB
515 NB
520 NB
525 NB
505 NN
510 NN
515 NN
520 NN
525 NN
500 NN
BM 826
BM 827
BM 828
SLOPE INTERCEPT
SLOPE INTERCEPT
CAUTION
30 CV
35 CV
R/W
T.L.E.
P.L.
WELL
CORN CRIB
TANKS
SIGN
U/C
T/D
N
N

BENCH MARKS

NO.	STATION	DESCRIPTION	OFFSET	ELEV.
826	498+56.98 NB	RR SPIKE IN POWER POLE	59.22'RT	959.48
827	510+41.43 NB	RR SPIKE IN POWER POLE	1.15'LT.	960.10
828	525+57.34 NB	RR SPIKE IN POWER POLE	11.61'LT	981.60

RAMP NN

VPOT STA 499+84.01
VPOT EL960.64
+1.94 %
VPC STA 502+00.00
VPC EL964.83
VPI STA 503+25.00
VPI EL967.25
VPT STA 504+50.00
VPT EL968.49
+0.99 %
VPC STA 506+16.17
VPC EL970.14
PROPOSED GROUND
VPI STA 509+66.17
VPI EL973.61
VPT STA 513+16.17
VPT EL971.86
-0.50 %
-0.44 %
-0.43 %
-0.36 %
-0.32 %
-0.25 %
-0.30 %
-0.25 %
-0.20 %
-0.18 %
-0.08 %
-0.03 %
+0.00 %
+0.07 %
VPI STA 519+40.00
VPI EL969.29
VPI STA 522+40.00
VPI EL968.59
K = 264.08
VCL 250.00
EXISTING GROUND
510+81.55
972.45
SPECIAL DITCH RT.
SPECIAL DITCH RT.
K = 469.23
VCL 700.00
VPI STA 515+00.00
VPI EL970.94
VPI STA 516+00.00
VPI EL970.50
VPI STA 517+00.00
VPI EL970.07
VPI STA 518+00.00
VPI EL969.71
VPI STA 519+00.00
VPI EL969.39
VPI STA 520+00.00
VPI EL969.11
VPI STA 521+00.00
VPI EL968.86
VPI STA 522+00.00
VPI EL968.66
VPI STA 523+00.00
VPI EL968.54
VPI STA 524+00.00
VPI EL968.51
VPI STA 525+00.00
VPI EL968.51
VPOT STA 526+00.00
VPOT EL968.58
STA.502+00 NN
1 - 24" X 76' RCCP REQ'D.
EXISTING GROUND ELEVATION
PROPOSED GROUND ELEVATION

990 980 970 960 950 940

| | | |

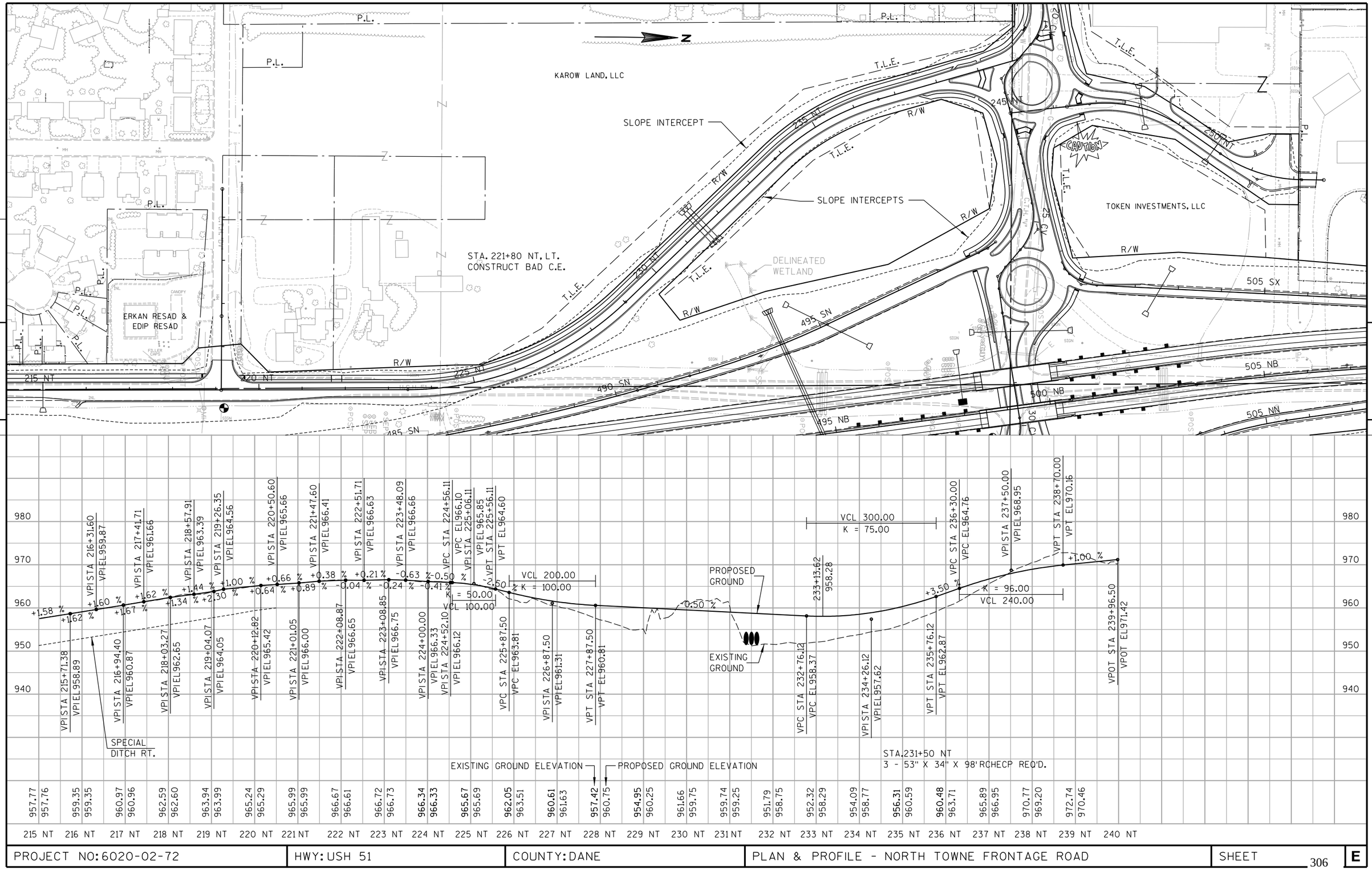
JOINT SCHOOL DISTRICT NO. 10
VILLAGE OF DEFOREST, TOWNS OF
VIENNA, WINDSOR, BURKE, BRISTOL,
DANE COUNTY, WISCONSIN

N

ATHLETIC FIELD
ATHLETIC FIELD
ATHLETIC FIELD
BLEACHERS
BLEACHERS
SIGN
SIGN
POOL
R/W
R/W
R/W
R/W
185 NT
190 NT
195 NT
200 NT
205 NT
210 NT
215 NT
SLOPE INTERCEPTS
450 NB
455 NB
460 NB
465 NB
470 NB
475 NB
475 NX
475 SN
30TH ST
5
5

VPOT STA 210+01.25
VPOT EL953.95
VPI STA 210+45.89
VPI EL954.02
VPI STA 210+84.92
VPI EL954.03
VPI STA 211+33.24
VPI EL954.09
VPI STA 211+90.35
VPI EL954.29
VPI STA 212+24.00
VPI EL954.38
VPI STA 212+61.90
VPI EL954.64
VPI STA 212+99.51
VPI EL954.94
VPI STA 213+47.17
VPI EL955.52
VPI STA 213+99.46
VPI EL956.27
VPI STA 214+55.62
VPI EL957.19
VPI STA 214+94.50
VPI EL957.67
+0.16 % +0.12 % +0.27 % +0.79 % +1.44 % +1.25 %
+0.02 % +0.36 % +0.70 % +1.22 % +1.63 %
SPECIAL
DITCH RT.
970
960
950
940
930
954.04
954.05
954.32
954.32
954.95
954.95
956.28
956.28
957.77
957.76
205 NT 206 NT 207 NT 208 NT 209 NT 210 NT 211 NT 212 NT 213 NT 214 NT 215 NT

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	PLAN & PROFILE - NORTH TOWNE FRONTAGE ROAD	SHEET 305	E



PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	PLAN & PROFILE - NORTH TOWNE FRONTAGE ROAD	SHEET 306	E

FILE NAME : P:\2011059 - US 51 WO\MicroStation\Planset\6020-02-72\050111_pp.dgn PLOT DATE : 6/3/2013 PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : 200.0000 sf / in.

WISDOT/CADDS SHEET 40

JAY PROPERTIES LLP

STOKELY DRIVE

SIGN

SLOPE INTERCEPT (TYP.)

TLE (TYP.)

MG&E

CATCH BASIN 24" NYLOPLAST

CTH V

BALL COURT

WISDOT

N

11+00 CV | 12+00 CV | 13+00 CV | 14+00 CV | 15+00 CV | 16+00 CV | 17+00 CV | 18+00 CV | 19+00 CV | 20+00 CV | 21+00 CV | 22+00 CV | 23+00 CV | 24+00 CV | 25+00 CV

241+00 NT | 245+00 NT | 246+00 NT | 248± | 25+00 CV | MATCHLINE

ATC (OVERHEAD)

BEGIN CONSTRUCTION
STA. 14+20 CV
N = 547,782.23
E = 835,712.93

VILLAGE OF DEFOREST (WATER)

HALSOR STREET

PROPOSED R/W (TYP.)

B.M. 8261

ANDREW CAMPBELL

STA. 15+40 CV RT
EXISTING 18"
CULVERT PIPE
TO BE REMOVED

NORTH TOWNE ROAD

BENCH MARK

NO.	STATION	DESCRIPTION	OFFSET	ELEVATION
8261	18+64 CV	CHISELED "X" HYDRANT FLANGE	55'RT	978.77

VPI 14+20.00 CV
EL 985.74

-1.30%

VPI 14+75.06 CV
EL 985.02

-1.13%

VPI 15+72.44 CV
EL 983.92

-1.98%

VPI 16+29.91 CV
EL 982.78

-2.61%

K = 284
L = 150'

VPC 18+70.00 CV
EL 976.52

PROPOSED PROFILE

-2.61%

VPI 19+45.00 CV
EL 974.57

-2.08%

VPT 20+20.00 CV
EL 973.01

2.08%

VPI 20+61.59 CV
EL 972.14

PROFILE FOR INFORMATION ONLY
SEE ROUNDABOUT DETAILS AND
PROFILES FOR ELEVATIONS THROUGH RAB

EXISTING PROFILE

-1.50%

VPI 22+49.63 CV
EL 969.32

-1.50%

-1.37%

995 | 990 | 985 | 980 | 975 | 970 | 965 | 960

986.36 | 986.55 | 986.67 | 986.47 | 986.48 | 986.34 | 985.86 | 985.46 | 985.35 | 984.78 | 984.74 | 984.01 | 984.17 | 983.22 | 983.37 | 982.36 | 982.26 | 981.54 | 980.95 | 980.36 | 979.65 | 979.44 | 978.35 | 978.32 | 977.04 | 977.25 | 975.75 | 976.17 | 974.55 | 975.23 | 973.43 | 974.31 | 972.38 | 970.62 | 971.57 | 970.68 | 970.82 | 971.54 | 970.06 | 971.40 | 969.31 | 967.97 | 968.63 | 968.76 | 967.95 | 968.70 | 967.27 | 967.73 | 966.58 | 966.52 | 965.90

11+00 CV | 12+00 CV | 13+00 CV | 14+00 CV | 15+00 CV | 16+00 CV | 17+00 CV | 18+00 CV | 19+00 CV | 20+00 CV | 21+00 CV | 22+00 CV | 23+00 CV | 24+00 CV | 25+00 CV

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	PLAN AND PROFILE - CTH V	SHEET	E

FILE NAME : S:\MAD\1000--1099\1089\234\Micros\PLAN\0272\050101_pp.dgn | PLOT DATE : 4/25/2013 | PLOT BY : _username_ | PLOT NAME : | PLOT SCALE : $$.....plotscale.....$$

BENCH MARK

NO.	STATION	DESCRIPTION	OFFSET	ELEVATION
826	30+53 CV	RR SPIKE IN LIGHT POLE	58' RT	959.48

STA. 35+00 CV LT
1 - 24" C.P. REQ'D

TOWN OF WINDSOR

SOUTHBOUND OFF-RAMP

SB US 51

NB US 51

NORTHBOUND ON-RAMP

EXISTING BOX CULVERT TO BE REMOVED

TLE (TYP.)

SLOPE INTERCEPT (TYP.)

ALLIANT ENERGY (ELECTRIC)

CTH V

MATCHLINE SEE CTH V PLAN AND PROFILE SHEETS

MATCHLINE 25+00 CV

ATC (OVERHEAD)

B.M. 826

SOUTHBOUND ON-RAMP

NORTHBOUND OFF-RAMP

STA. 26+20 CV LT
EXISTING 24" CULVERT PIPE TO BE REMOVED

STA. 33+50 CV LT
EXISTING 24" CULVERT PIPE TO BE REMOVED

CENTRYLINK (TELEPHONE)

PROPOSED R/W (TYP.)

BLIEFERNICHT LIVING TRUST

N

5

5

PROFILE FOR INFORMATION ONLY
SEE ROUNDABOUT DETAILS AND
PROFILES FOR ELEVATIONS THROUGH RAB

PROFILE FOR INFORMATION ONLY
SEE ROUNDABOUT DETAILS AND
PROFILES FOR ELEVATIONS THROUGH RAB

K = 210
L = 400'

SEE CTH V PLAN AND PROFILE SHEETS

VPI 25+69.41 CV
EL 964.95

VPI 27+35.34 CV
EL 962.54

VPI 28+50.00 CV
EL 961.29

VPI 30+75.30 CV
EL 960.16

VPI 32+40.31 CV
EL 961.84

VPC 36+10.00 CV
EL 963.70

PROPOSED PROFILE

EXISTING PROFILE

STA. 27+80 CV
1-24" RCCP REQ'D

STA. 33+50 CV
3-53"X34" RCHECP REQ'D

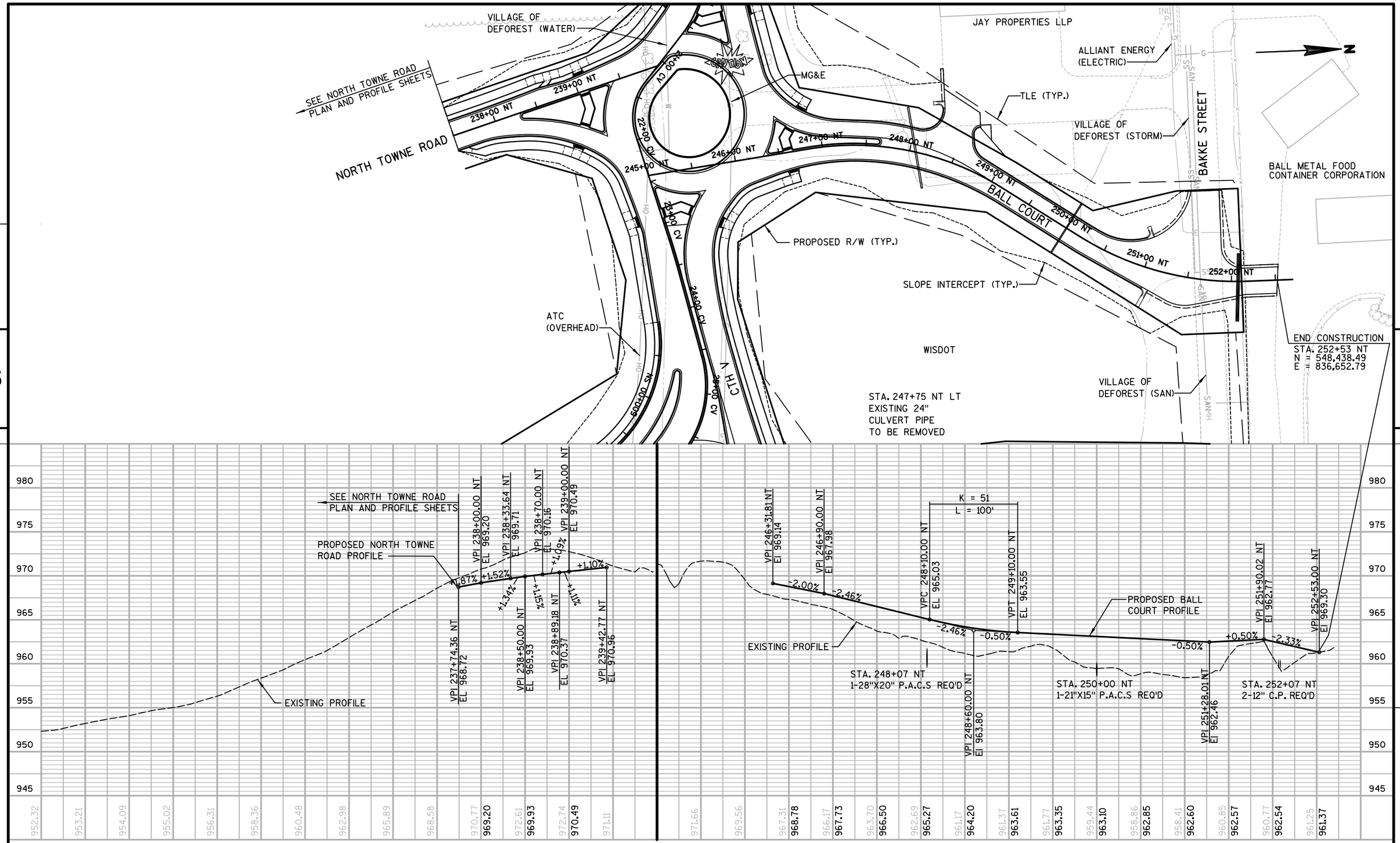
-1.37% -1.45% -1.45% -1.09% -1.09% -0.50% -0.50% +1.02% +1.02% +0.50%

980 975 970 965 960 955 950 945

25+00 CV	26+00 CV	27+00 CV	28+00 CV	29+00 CV	30+00 CV	31+00 CV	32+00 CV	33+00 CV	34+00 CV	35+00 CV	36+00 CV	37+00 CV	38+00 CV	39+00 CV	40+00 CV
966.52	965.92	963.91	967.32	964.52	959.56	960.43	960.20	960.06	960.11	959.64	959.53	958.00	956.13	955.08	955.73	955.96	957.78	956.93	957.08	958.79	960.18	960.68	960.82	960.95	961.09	960.98	961.52	961.67	961.95	963.78
965.90	965.22	964.51	963.78	963.05	962.38	961.84	961.29	961.04	960.79	960.54	960.29	960.41	960.92	961.43	961.89	962.14	962.39	962.65	962.90	963.15	963.40	963.65	963.94	964.35	964.87	965.52	966.28	967.16	968.16	969.28

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	PLAN AND PROFILE - CTH V	SHEET	E

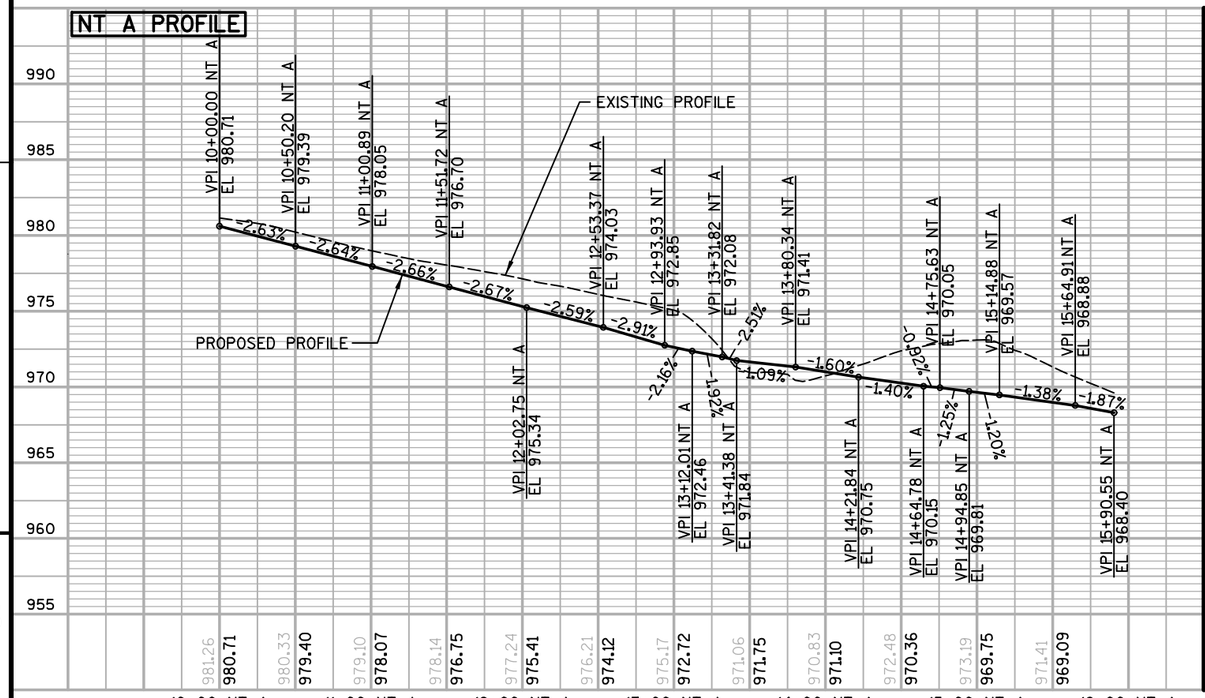
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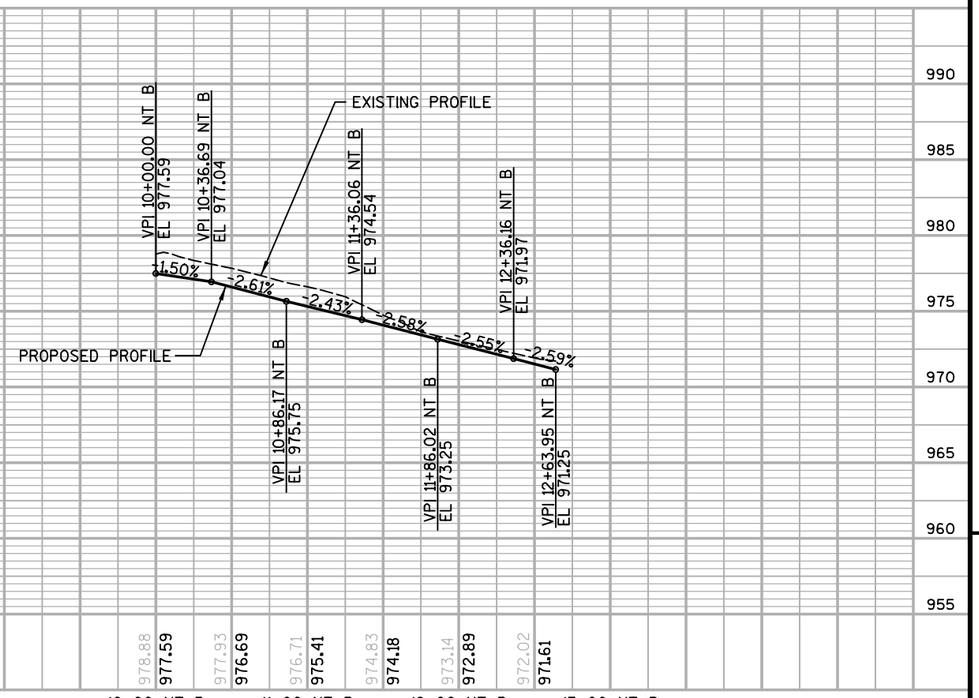
PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	PLAN AND PROFILE - NORTH TOWNE ROAD / BALL COURT	SHEET	E

FILE NAME : S:\MAD\1000--1099\1089\234\Micros\PLAN\0272\050103_pp.dgn PLOT DATE : 4/25/2013 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 40

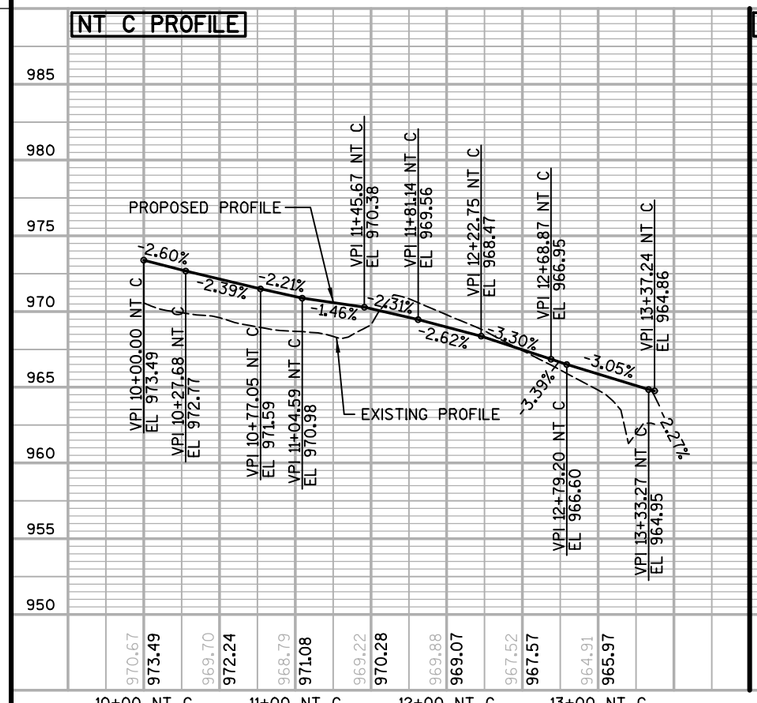
NT A PROFILE



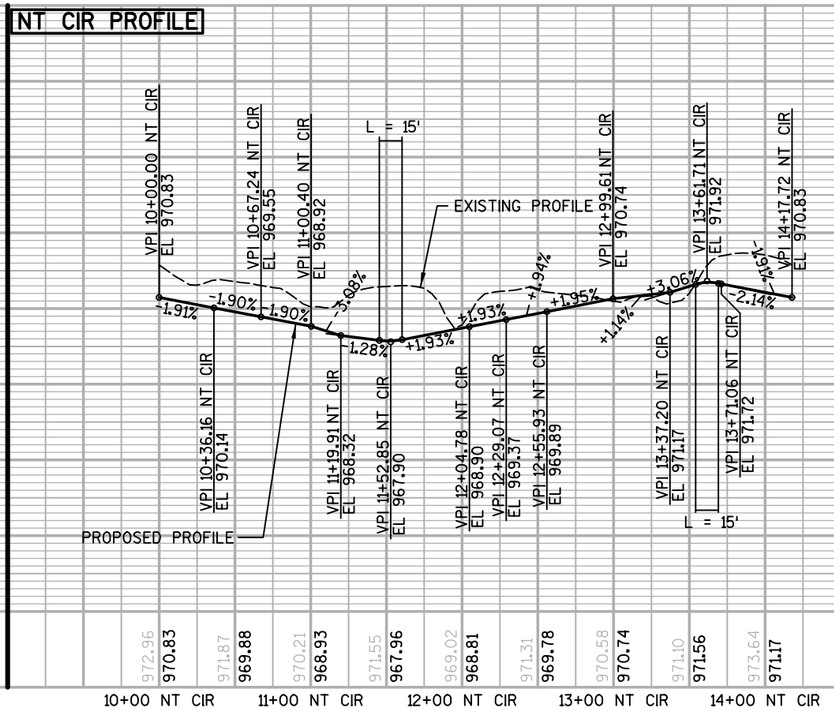
NT B PROFILE



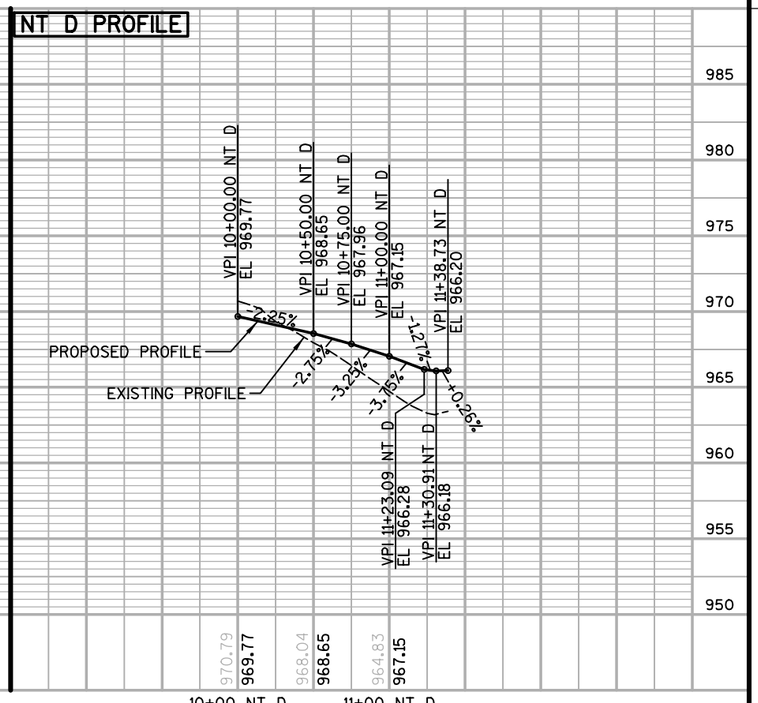
NT C PROFILE



NT CIR PROFILE



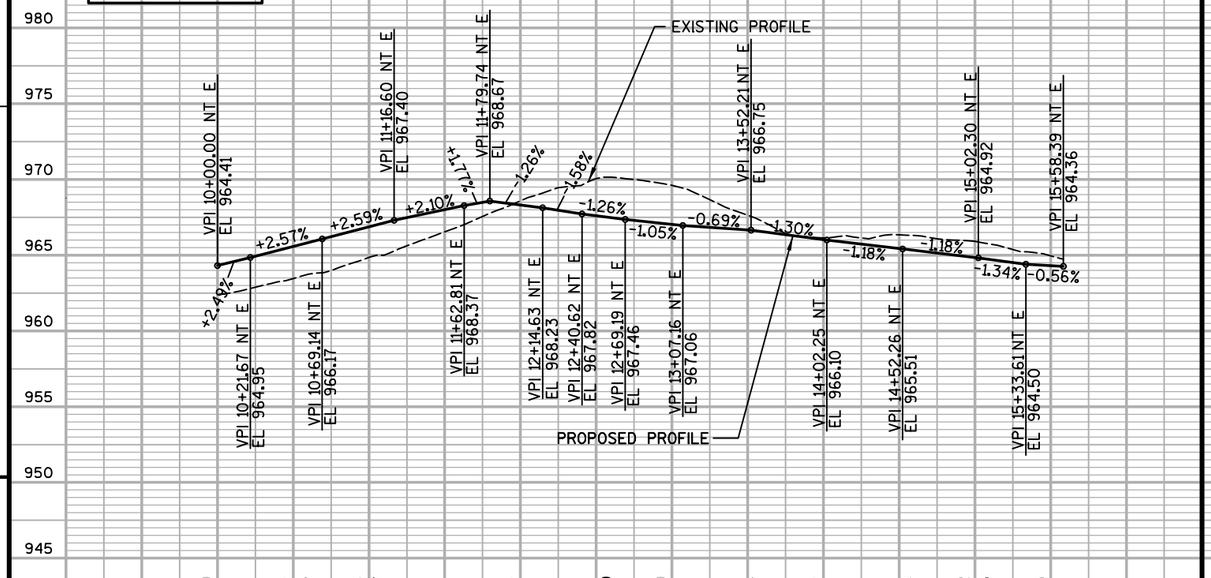
NT D PROFILE



PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	PROFILE - NT RAB	SHEET E

FILE NAME : S:\MAD\1000--1099\1089\234\Micros\PLAN\0272\050104_pp.dgn PLOT DATE : 4/11/2013 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 46

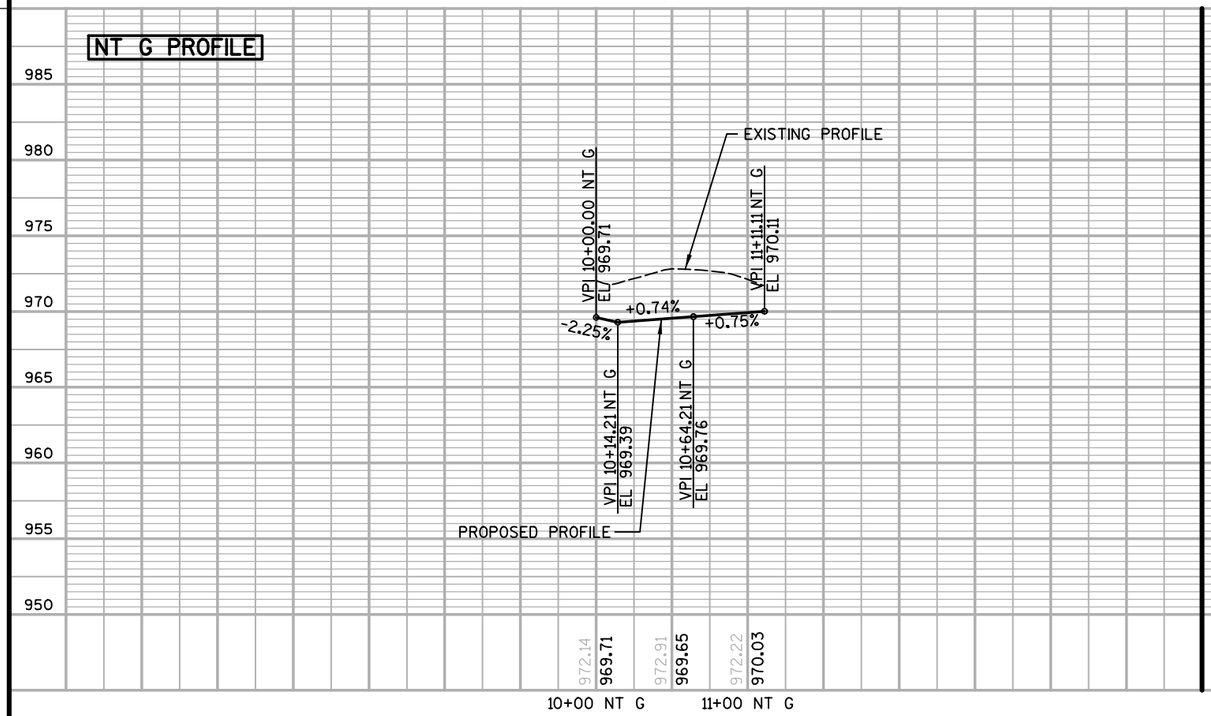
NT E PROFILE



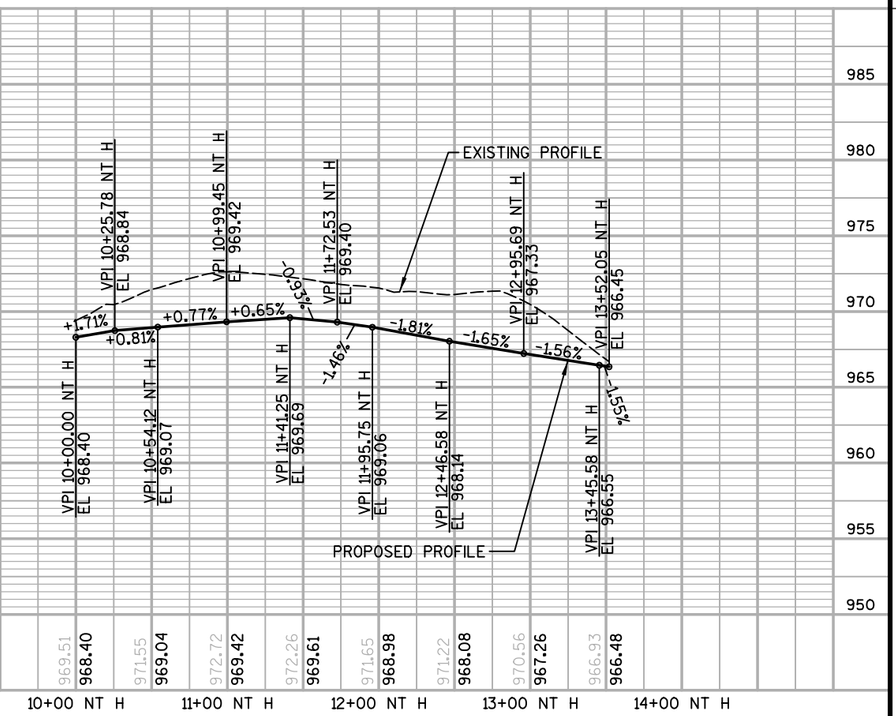
NT F PROFILE



NT G PROFILE



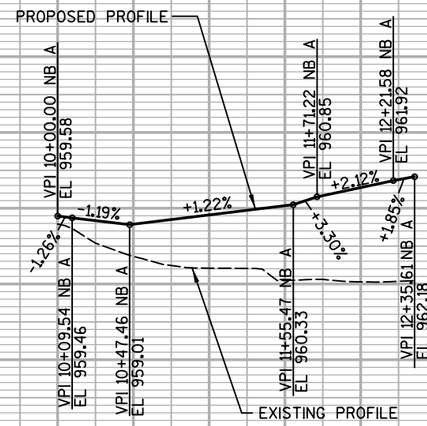
NT H PROFILE



PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	PROFILE - NT RAB	SHEET 311 E

FILE NAME : S:\MAD\1000--1099\1089\234\Micros\PLAN\0272\050105_pp.dgn PLOT DATE : 4/11/2013 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 46

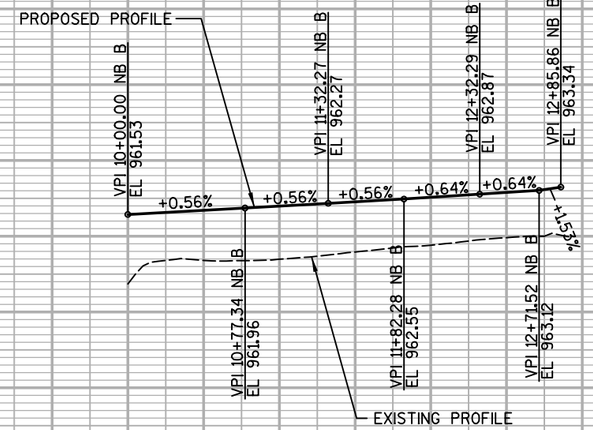
NB A PROFILE



959.06 959.58 | 956.92 959.04 | 956.14 959.65 | 955.33 960.26 | 955.24 961.46

10+00 NB A | 11+00 NB A | 12+00 NB A

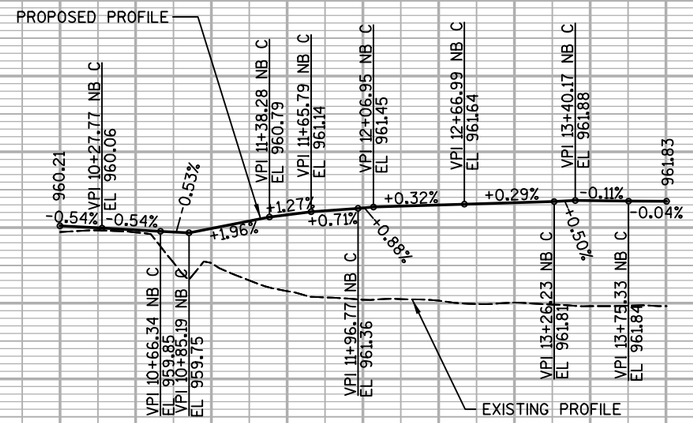
NB B PROFILE



956.95 961.53 | 958.50 961.81 | 958.58 962.09 | 959.06 962.37 | 959.50 962.66 | 960.00 962.98

10+00 NB B | 11+00 NB B | 12+00 NB B | 13+00 NB B

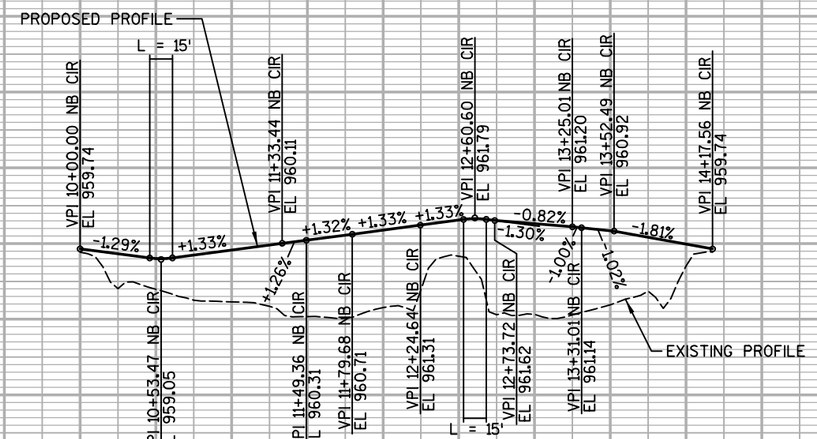
NB C PROFILE



959.80 960.21 | 959.77 959.94 | 957.75 960.04 | 955.91 960.94 | 955.33 961.39 | 955.27 961.59 | 955.15 961.73 | 954.91 961.87 | 954.91 961.83

10+00 NB C | 11+00 NB C | 12+00 NB C | 13+00 NB C | 14+00 NB C

NB CIR PROFILE



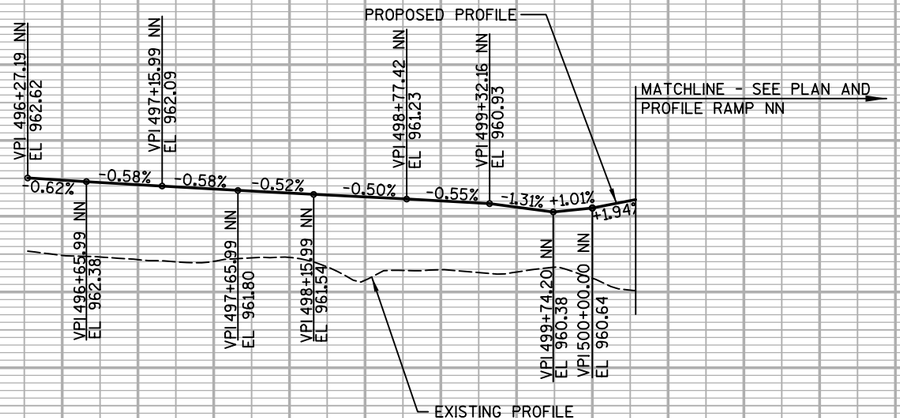
959.52 959.74 | 957.08 959.11 | 956.25 959.67 | 955.28 960.32 | 955.87 960.98 | 959.25 961.65 | 955.42 961.40 | 956.05 960.95 | 958.60 960.06

10+00 NB CIR | 11+00 NB CIR | 12+00 NB CIR | 13+00 NB CIR | 14+00 NB CIR

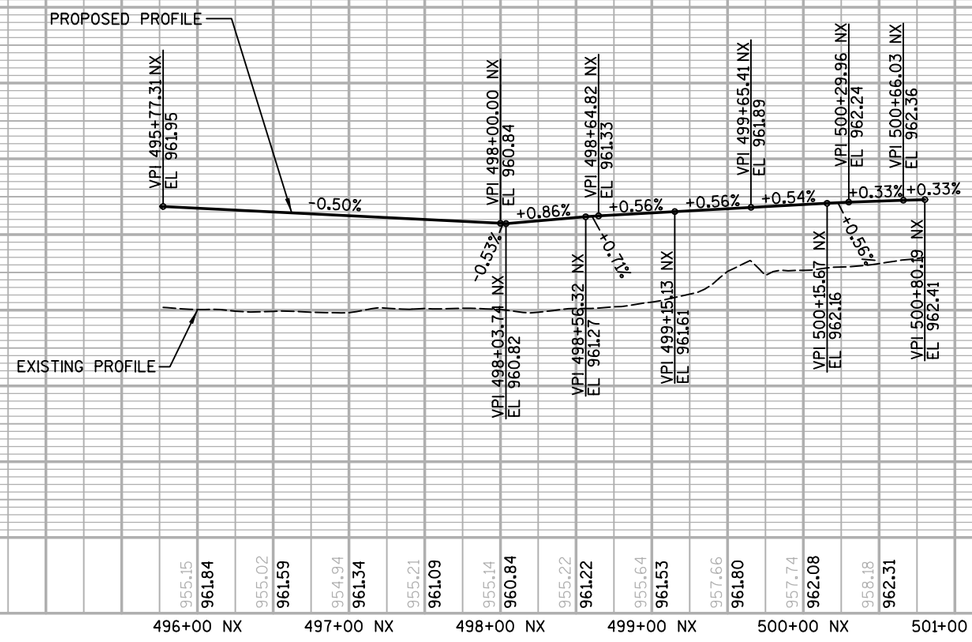
PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	PROFILE - NB RAB	SHEET	E

FILE NAME : S:\MAD\1000--1099\1089\234\Micros\PLAN\0272\050106_pp.dgn | PLOT DATE : 4/11/2013 | PLOT BY : _username_ | PLOT NAME : | PLOT SCALE : $$.....plotscale.....$$ | WISDOT/CADDS SHEET 46

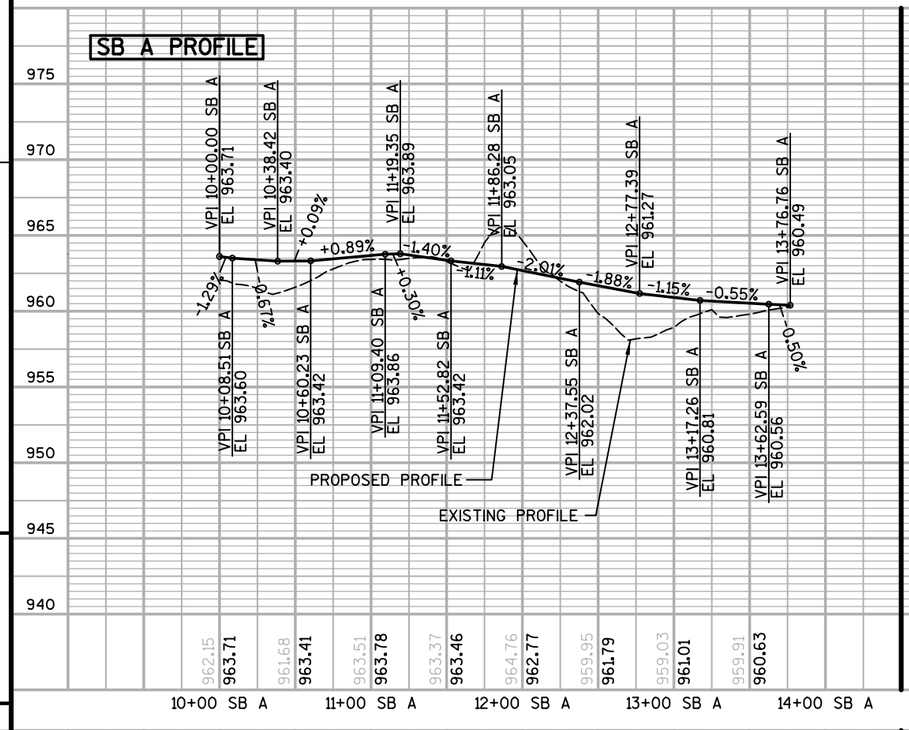
NN PROFILE



NX PROFILE



PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	PROFILE - NB RAB	SHEET 313	E



PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	PROFILE - SB RAB	SHEET 314 E

LAURA R. WERNICK, LINDA V. BLIEFERNICHT, & ENID J. OLSON

CHARLES J. & EVONNE E. LINDE, VENDORS
TOWN OF WINDSOR, PURCHASER

CHARLES LINDE & EVONNE LINDE

THE VILLAGE OF DEFOREST, A WISCONSIN MUNICIPALITY

GERGORY A. & LOU A. SCHWEPPE

ROBERT I. & ARLYCE E. BLIEFERNICHT

ROBERT I. & ARLYCE E. BLIEFERNICHT

VERNON E. & VICKI L. TRIENEN, TRUSTEES, AND ANY SUCCESSOR TRUSTEE(S), OF THE VERNON E. & VICKIE L. TREINEN REVOCABLE LIVING TRUST

N

R/W

T.L.E.

P.L.

35 CV

10 DI

15 DI

40 CV

45 CV

50 CV

55 CV

60 CV

15 DI

CAUTION

SLOPE INTERCEPT

SLOPE INTERCEPT

5

5

990
980
970
960
950

VCL 400.00
K = 210.43

+0.50 %

+2.40 %

VPC STA 36+10.00
VPC EL963.71

VPI STA 38+10.00
VPI EL964.71

VPT STA 40+10.00
VPT EL969.58

VPC STA 42+95.00
VPC EL976.36

PROPOSED GROUND

SPECIAL DITCH LT.

SPECIAL DITCH RT.

SPECIAL DITCH RT.

VPI STA 47+95.00
VPI EL988.37

49+90.77
984.71

K = 289.74
VCL 1000.00

EXISTING GROUND

VPT STA 52+95.00
VPT EL983.12

-1.05 %

SPECIAL DITCH RT.

VPC STA 56+95.00
VPC EL978.92

VCL 610.00
K = 214.56

59+20.29
977.73

VPI STA 60+00.00
VPI EL975.72

SPECIAL DITCH LT.

STA.56+00 CV
2 - 30" X 64' CP REQ'D.

STA.60+25 CV
2 - 76" X 48" X 66' RCHECP REQ'D.

EXISTING GROUND ELEVATION — PROPOSED GROUND ELEVATION

33 CV	34 CV	35 CV	36 CV	37 CV	38 CV	39 CV	40 CV	41 CV	42 CV	43 CV	44 CV	45 CV	46 CV	47 CV	48 CV	49 CV	50 CV	51 CV	52 CV	53 CV	54 CV	55 CV	56 CV	57 CV	58 CV	59 CV	60 CV	61 CV	62 CV	63 CV
955.96	956.93	958.79	960.70	961.11	963.79	961.57	963.78	967.65	965.96	968.19	973.39	976.94	977.05	978.23	980.16	982.31	982.56	981.64	979.55	978.99	979.37	974.74	973.38	974.36	975.38	975.73	970.60	971.96	979.54	982.87
962.16	962.66	963.16	963.66	964.36	965.52	967.16	969.28	971.68	974.08	976.48	978.69	980.56	982.08	983.26	984.09	984.57	984.71	984.51	983.96	983.07	982.02	980.97	979.92	978.87	978.07	977.74	977.88	978.49	979.56	981.09

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	PLAN & PROFILE - CTH V	SHEET 315	E

CHARLES LINDE & EVONNE LINDE

MARK G. & MICHELE A. CLARKE

MICHAEL J. DAHMEN & KATHY A. HUNTER

RANDALL J. ESSER & KELLY A. MAIER

WILLIAM R. CLEMENS & WILLIAM J. KIPPLEY

WILLIAM R. CLEMENS & WILLIAM J. KIPPLEY

VERNON E. & VICKI L. TRIENEN, TRUSTEES, AND ANY SUCCESSOR TRUSTEE(S), OF THE VERNON E. & VICKIE L. TREINEN REVOCABLE LIVING TRUST

ROGER S. MANTHE

KEVIN G. & NICOLE L. MANTHE

SLOPE INTERCEPT

SLOPE INTERCEPT

65 CV 70 CV 75 CV 80 CV 85 CV 90 CV

R/W

P.L.

45 (R)

CAUTION

5

5

VPC STA 63+05.00
VPC EL981.18

VPI STA 65+05.00
VPI EL984.77

VPT STA 67+05.00
VPT EL985.97

VPC STA 71+30.00
VPC EL988.52

VPI STA 73+35.00
VPI EL989.75

VPT STA 75+40.00
VPT EL994.06

VPC STA 75+50.00
VPC EL994.27

VPI STA 77+90.00
VPI EL999.31

VPT STA 80+30.00
VPT EL996.55

VPC STA 86+70.00
VPC EL989.19

VPI STA 89+70.00
VPI EL985.74

VPC STA 92+70.00
VPC EL999.99

VPT STA 92+70.00
VPT EL999.99

VPT STA 63+05.00
VPT EL981.18

VCL 400.00
K = 335.27

VCL 410.00
K = 273.13

VCL 480.00
K = 147.64

VCL 600.00
K = 101.70

+0.60 %

+2.10 %

-1.15 %

78+60.21
997.53

87+86.95
988.52

EXISTING GROUND

PROPOSED GROUND

SPECIAL DITCH RT.

SPECIAL DITCH LT.

SPECIAL DITCH LT.

SPECIAL DITCH LT.

SPECIAL DITCH RT.

STA.69+25 CV
1 - 18" X 62' CP REQ'D.

STA.90+00 CV
1 - 48" X 86' CP REQ'D.

EXISTING GROUND ELEVATION

PROPOSED GROUND ELEVATION

1010
1000
990
980
970

| | | |

ROBERT D. & LORNA M. MUTCH

P.L.

P.L.

P.L.

P.L.

P.L.

P.L.

JAMES E. &
JACQUELINE A.
CRITCHFIELD

SLOPE INTERCEPTS

R/W

R/W

95 CV

100 CV

SEPV

POST

R/W

END CONSTRUCTION
STA.99+00 CV
MATCH EXISTING
SAW CUT REQ'D.

CAUTION

ROGER S. MANTHE

P.L.

P.L.

KEVIN G. &
NICOLE L. MANTHE

R/W

ROGER S. MANTHE

P.L.

STA.95+65 CV, RT.
CONSTRUCT CONCRETE P.E.
1 - 18" CP REQ'D.

N

5

5

VPI STA 96+15.00
VPI EL 016.38

VPT STA 99+60.00
VPT EL 016.51

VPI STA 99+64.80
VPI EL 016.51

VPI STA 100+56.24
VPI EL 016.42

VPI STA 101+11.48
VPI EL 016.35

VPI STA 101+57.41
VPI EL 016.09

VPI STA 102+44.34
VPI EL 015.44

1020

1010

1000

990

EXISTING
GROUND

PROPOSED
GROUND

K = 146.44
VCL 690.00

SPECIAL
DITCH LT.

VPI STA 100+13.22
VPI EL 016.36

VPI STA 102+01.66
VPI EL 015.75

VPOT STA 102+60.00
VPOT EL 015.33

EXISTING GROUND ELEVATION

PROPOSED GROUND ELEVATION

| | | |

GERGORY A. &
LOU A. SCHWEPPE

ROBERT I. &
ARLYCE E.
BLIEFERNICHT

CHARLES J. & EVONNE E. LINDE, VENDORS
TOWN OF WINDSOR, PURCHASER

VERNON E. & VICKI L. TRIENEN, TRUSTEES,
AND ANY SUCCESSOR TRUSTEE(S),
OF THE VERNON E. & VICKIE L. TREINEN
REVOCABLE LIVING TRUST

N

10 D1

15 D1

40 CV

35 CV

45 CV

R/W

SLOPE INTERCEPTS

CAUTION

35 MU

40 MU

45 MU

MUELLER RD.

END CONSTRUCTION
STA.37+00 MU
MATCH EXISTING
SAW CUT REQ'D.

STA.32+00 MU, RT.
CONSTRUCT BAD P.E.
1 - 18" CP REQ'D.

LAURA R. WERNICK, LINDA V. BLIEFERNICHT,
& ENID J. OLSON

ROBERT I. &
ARLYCE E.
BLIEFERNICHT

LAURA R. WERNICK, LINDA V. BLIEFERNICHT,
& ENID J. OLSON

SEPTIC

SIGN

5

5

PROPOSED GROUND

EXISTING GROUND

VPOT STA 30+00.00
VPOT EL974.09

VPI STA 30+15.00
VPI EL974.99

+6.00 %

+1.50 %

VPC STA 30+82.36
VPC EL976.00

VPI STA 32+07.16
VPI EL977.87

VPT STA 33+32.16
VPT EL983.50

VCL 250.00
K = 83.33

+4.50 %

SPECIAL
DITCH LT.

SPECIAL
DITCH RT.

VPC STA 35+54.94
VPC EL993.52

VPI STA 36+29.94
VPI EL996.90

K = 74.44
VCL 150.00

VPT STA 37+04.94
VPT EL998.76

+2.49 %

VPI STA 37+72.45
VPI EL000.44

+1.91 %

VPI STA 38+36.90
VPI EL001.67

+1.05 %

VPI STA 39+11.90
VPI EL002.46

+1.29 %

VPI STA 39+86.89
VPI EL003.42

+1.50 %

VPI STA 40+67.79
VPI EL004.63

+1.69 %

SPECIAL
DITCH RT.

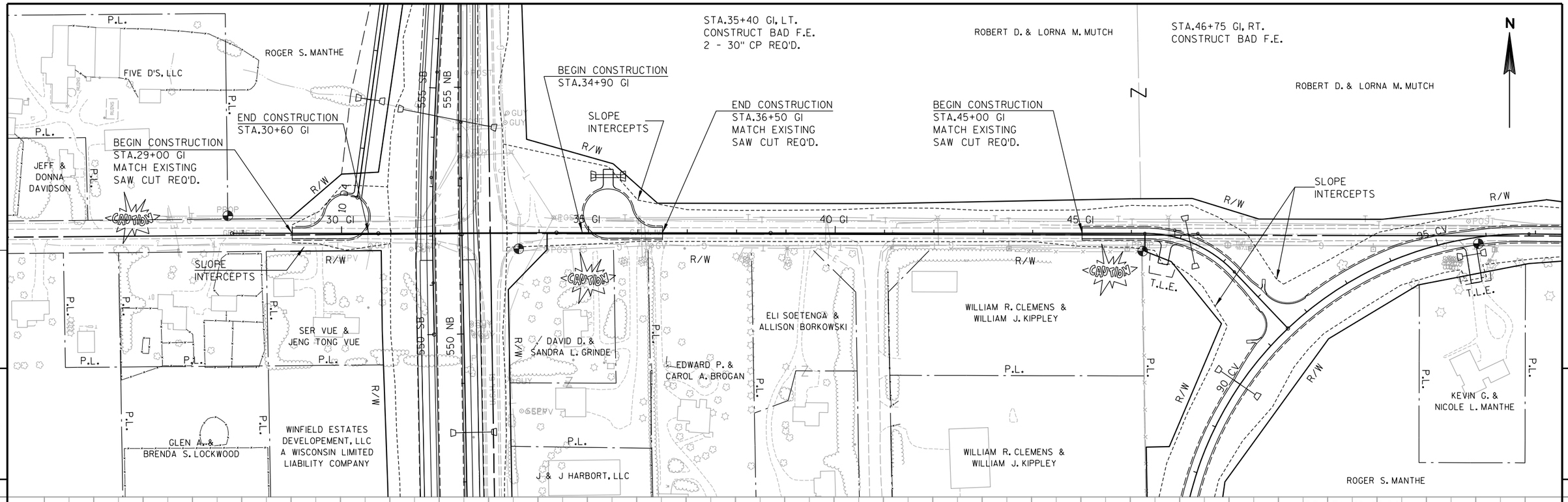
VPOT STA 41+42.13
VPOT EL005.89

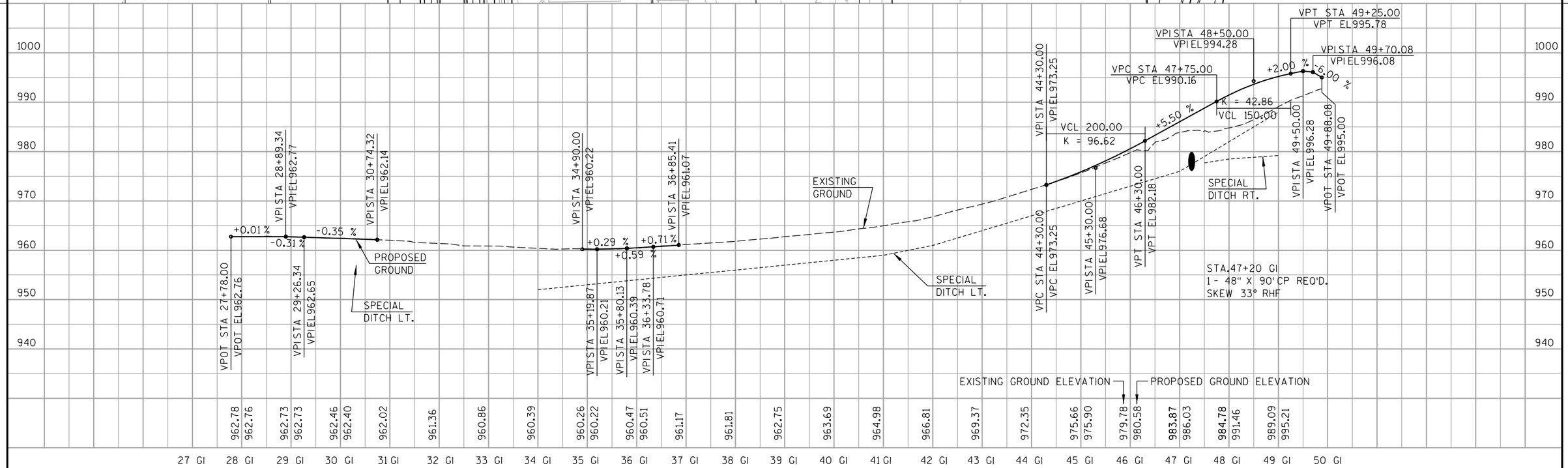
STA.30+70 MU
1 - 36" X 72" CP REQ'D.

EXISTING GROUND ELEVATION

PROPOSED GROUND ELEVATION

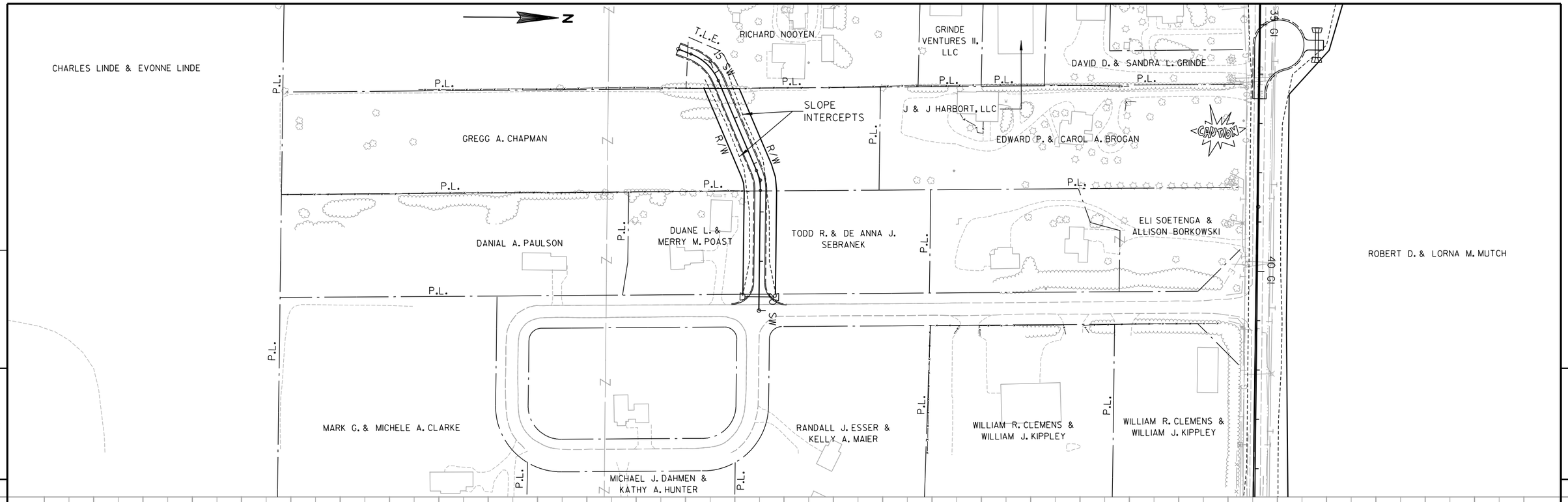
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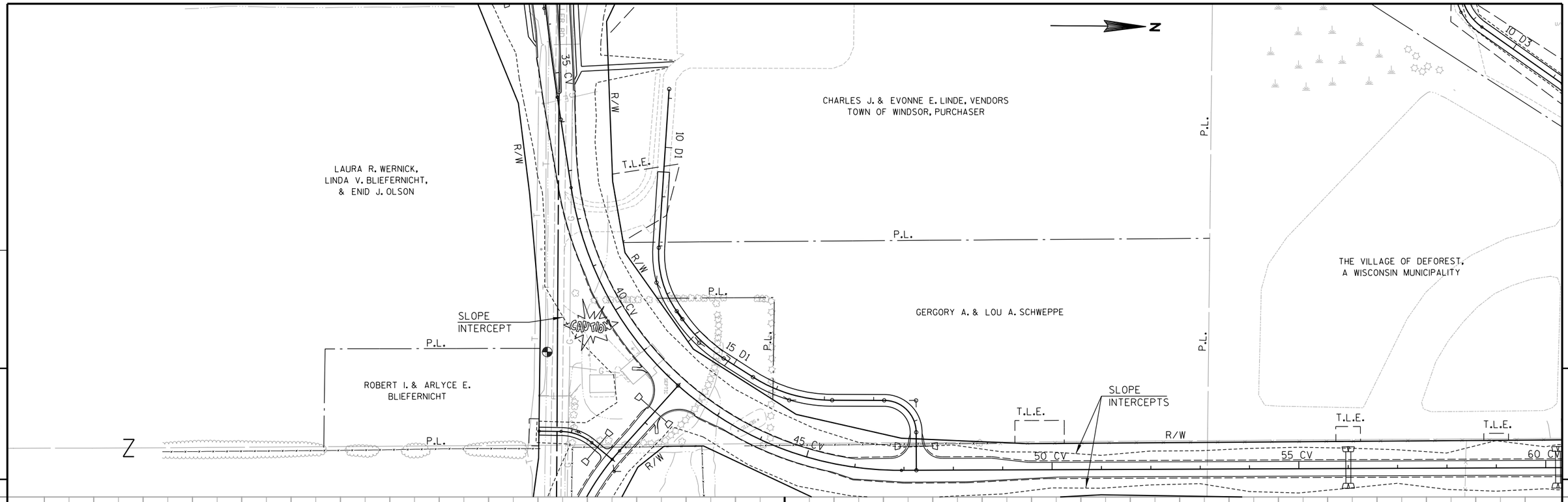


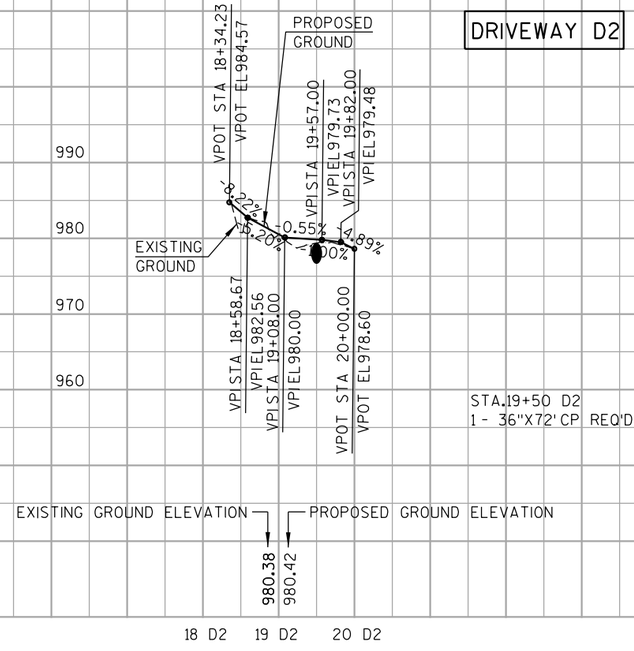
PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	PLAN & PROFILE - GRINDE ROAD	SHEET 319	E

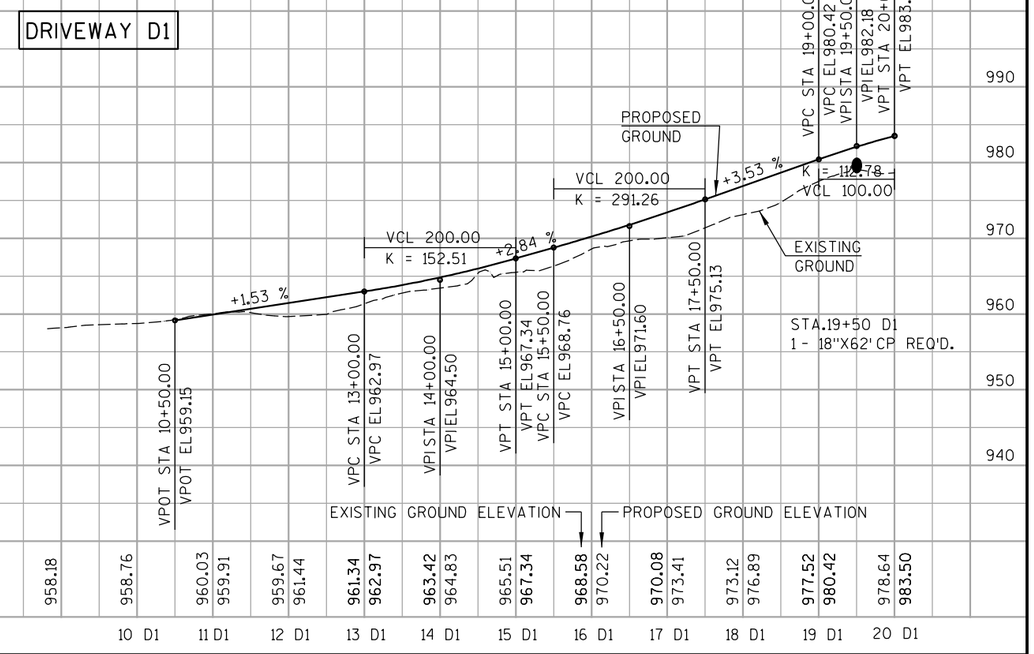
FILE NAME : P:\2011059 - US 51 WO\MicroStation\Planset\6020-02-72\050116_pp.dgn
PLOT DATE : 6/5/2013
PLOT BY : $$...plotuser...$$ PLOT NAME :
PLOT SCALE : 200.0000 sf / in.
WISDOT/CADDS SHEET 40



PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	PLAN & PROFILE - SW - SHAWN WILLIAMS TRAIL	SHEET 320	E







PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	PLAN & PROFILE - DRIVEWAYS D1 & D2	SHEET 321	E

M.A. HANNA COMPANY,
A DELAWARE CORPORATION

CHARLES LINDE & EVONNE LINDE

VERNON E. & VICKIL. TRIENEN, TRUSTEES,
AND ANY SUCCESSOR TRUSTEE(S),
OF THE VERNON E. & VICKIE L. TREINEN
REVOCABLE LIVING TRUST

NEESVIG'S FULLFILLMENT, LLC
A WISCONSIN LIMITED LIABILITY COMPANY

THE VILLAGE OF DEFOREST,
A WISCONSIN MUNICIPALITY

P.L.

R/W

520 SX

520 NB

520 NN

515 SX

515 NB

515 NN

T.L.E.

15 D3

10 D3

SLOPE
INTERCEPTS

20+00.00 D3 =
62+75.00 CV

65 CV

60 CV

N

5

5

DRIVEWAY D3

VPOT STA 6+06.04
VPOT EL973.48

VPI STA 6+32.76
VPI EL973.35
-0.52 %

VPI STA 6+73.09
VPI EL971.20
-1.06 %

VPI STA 7+54.45
VPI EL970.34
-0.15 %

VPI STA 8+07.45
VPI EL970.26
VPI STA 8+55.78
VPI EL969.24
+0.10 %

VPI STA 9+00.00
VPI EL967.92
-5.00 %

VPI STA 9+30.65
VPI EL967.88
-0.11 %

VPI STA 9+74.61
VPI EL967.40
VPI STA 10+18.54
VPI EL967.35
+0.11 %
+1.40 %

VPI STA 10+61.90
VPI EL967.96
+1.08 %

VPI STA 11+14.39
VPI EL968.52
-0.24 %

VPI STA 11+56.73
VPI EL968.42
+0.42 %

VPI STA 12+55.00
VPI EL968.83
+1.00 %

VPI STA 14+35.00
VPI EL970.63

PROPOSED
GROUND
+1.59 %

EXISTING
GROUND

VPI STA 19+82.00
VPI EL979.34
+2.00 %

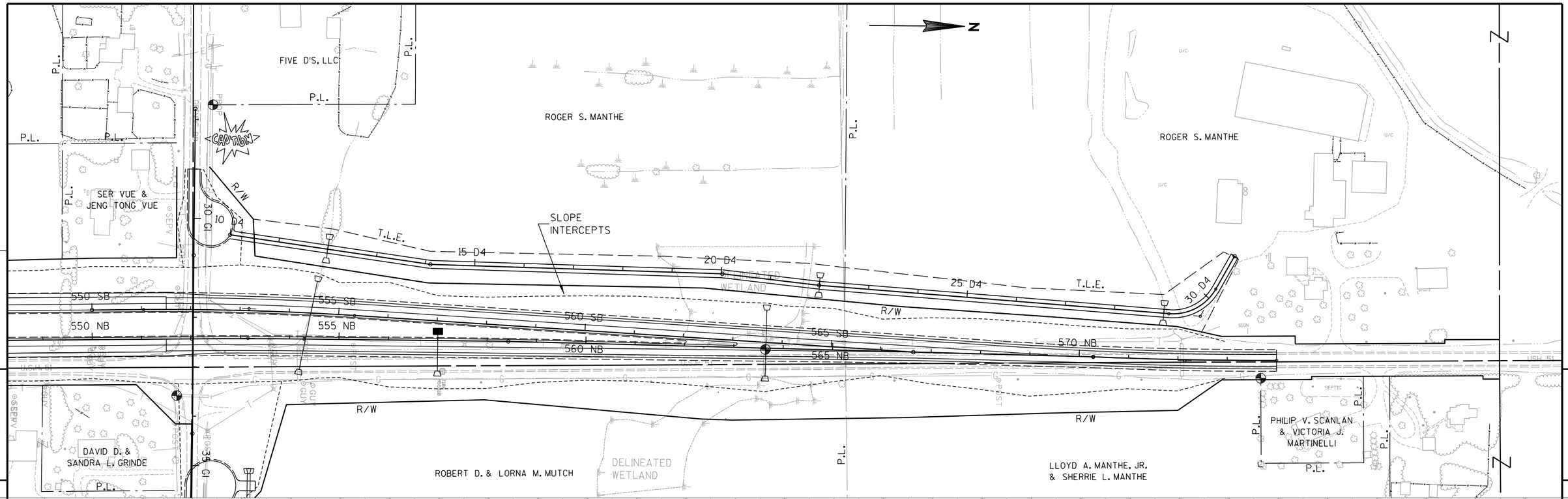
VPOT STA 20+00.00
VPOT EL979.70

STA.16+50 D3
2 - 24"X36' CP REQ'D.

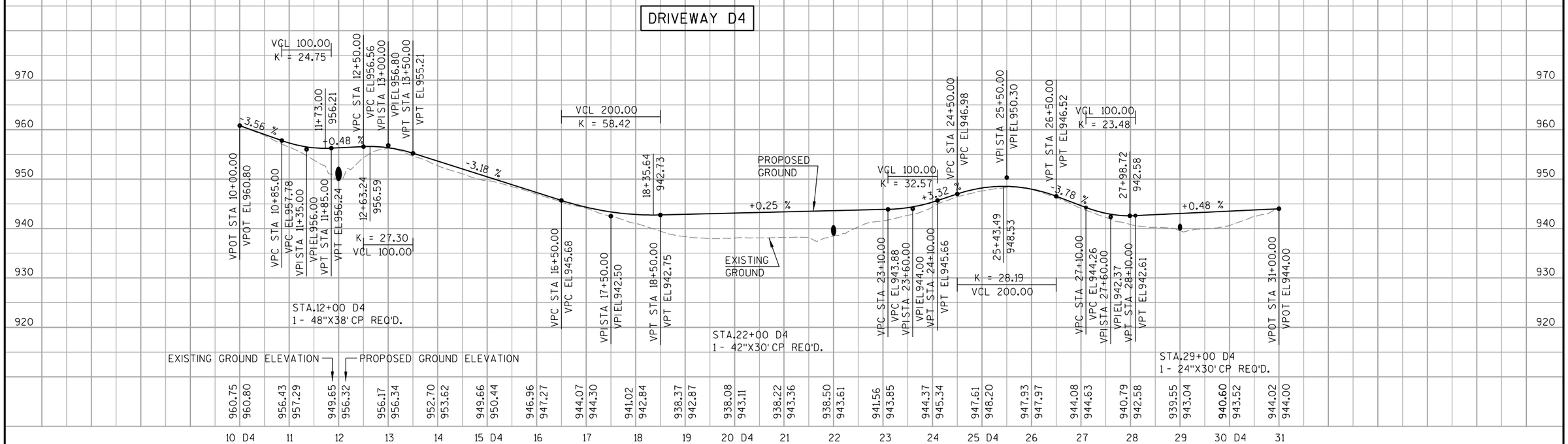
990
980
970
960
950

	6 D3	7	8	9	10 D3	11	12	13	14	15 D3	16	17	18	19	20 D3
EXISTING GROUND ELEVATION		971.14	970.26	967.92	967.31	968.24	968.36	969.36	970.18	970.41	970.30	970.72	971.68	976.73	
PROPOSED GROUND ELEVATION		970.91	970.27	967.92	967.37	968.37	968.60	969.28	970.28	971.67	973.26	974.85	976.44	978.03	

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	PLAN & PROFILE - DRIVEWAY D3	SHEET 322	E



DRIVEWAY D4



PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	PLAN & PROFILE - DRIVEWAY D4	SHEET 323	E

N

BEGIN CONSTRUCTION
STA. 108+89 TR1
MATCH EXISTING

PC 108+38.50 TR1

DELINEATED WETLAND

PI 120+97.05 TR1

N 4°19'21" W

CAUTION

SLOPE INTERCEPTS

PI 127+93.65 TR1

125 TR1

130 TR1

120 TR1

115 TR1

N 8°47'34" W

110 TR1

105 TR1

100 TR1

N 0°54'12" W

N 1°58'16" W

U.S.H. 51

PI 100+00.00 TR1

BM 825

PI 105+30.61 TR1

PI 112+44.98 TR1

PT 116+50.49 TR1

PC 118+30.86 TR1

PT 123+62.96 TR1

PC 123+65.07 TR1

BM 826

DELINEATED WETLAND

MUELLER RD.

5

5

P.I. = 105+30.61 TR1
Y 545931.60
X 837163.53
Δ. = -1°04'04"

P.I. = 112+44.98 TR1
Y 546645.55
X 837138.96
Δ. = -6°49'18"
D. = 0°50'24"
T. = 406.47'
L. = 811.99'
R. = 6820.00'

P.I. = 120+97.05 TR1
Y 547488.55
X 837008.56
Δ. = 4°28'13"
D. = 0°50'24"
T. = 266.18'
L. = 532.09'
R. = 6820.00'

P.I. = 127+93.65 TR1
Y 548183.44
X 836956.04
Δ. = 7°11'30"
D. = 0°50'24"
T. = 428.59'
L. = 856.05'
R. = 6820.00'

BENCH MARKS

NO.	STATION	DESCRIPTION	OFFSET	ELEV.
825	480+96.21 NB	RR SPIKE IN LIGHT POLE	238.11'LT.	964.23
826	498+56.98 NB	RR SPIKE IN POWER POLE	59.22'RT	959.48

980
970
960
950
940

VPOT STA 100+00.00
VPOT EL956.38

+1.54 %

VPC STA 104+40.00
VPC EL963.17

VPI STA 108+40.00
VPI EL969.34

108+74.07
966.52

K = 281.34
VCL 800.00

VPT STA 112+40.00
VPT EL964.14

-1.30 %

PROPOSED GROUND

VCL 400.00
K = 222.19

116+83.99
960.24

VPC STA 113+95.00
VPC EL962.12

VPI STA 115+95.00
VPI EL959.52

VPT STA 117+95.00
VPT EL960.52

EXISTING GROUND

+0.50 %

SPECIAL DITCH LT.

SPECIAL DITCH RT.

VCL 400.00
K = 399.84

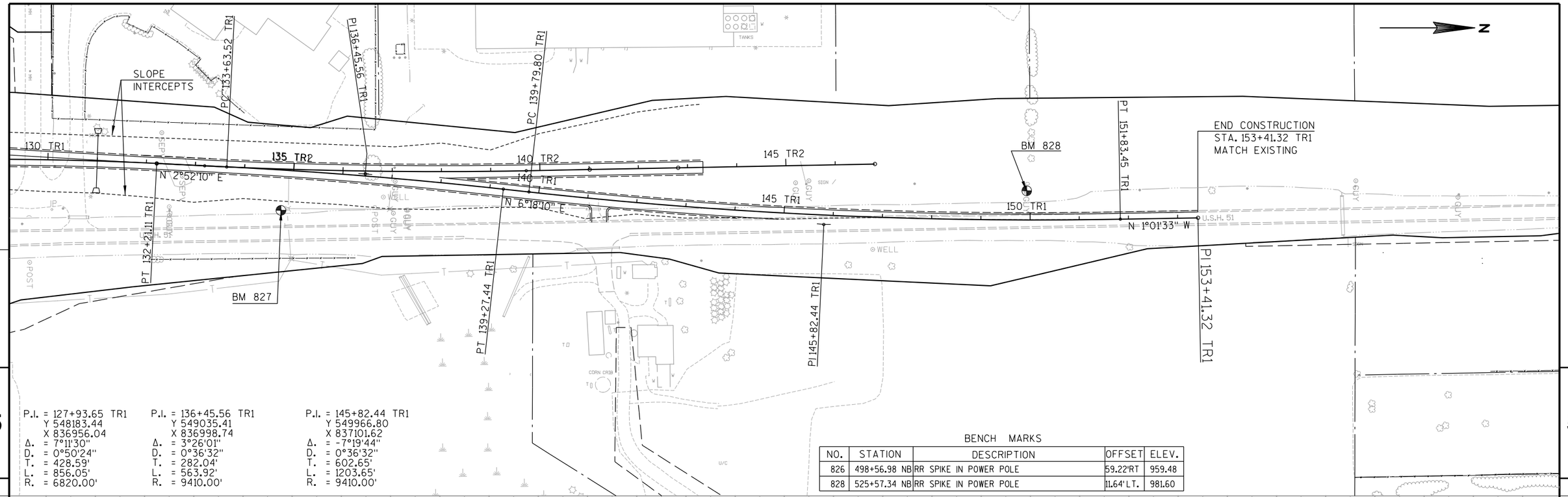
VPC STA 126+50.00
VPC EL964.79

VPI STA 128+50.00
VPI EL965.79

STA.118+00 TR1
3 - 36" X 68' TEMPORARY CP REQ'D.

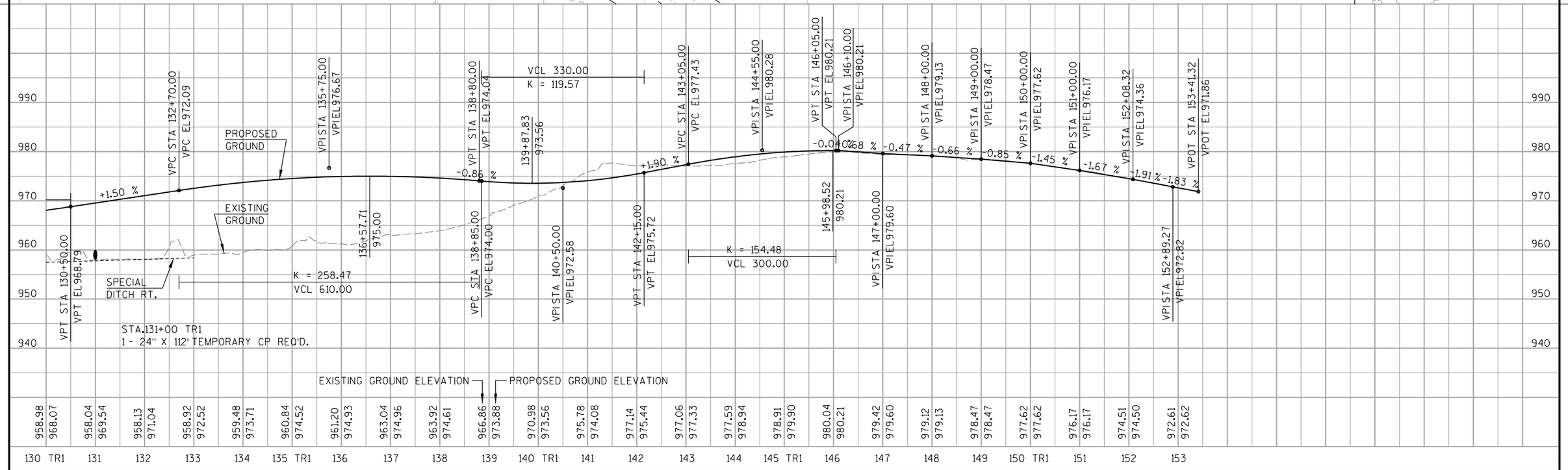
EXISTING GROUND ELEVATION
PROPOSED GROUND ELEVATION

| | | |

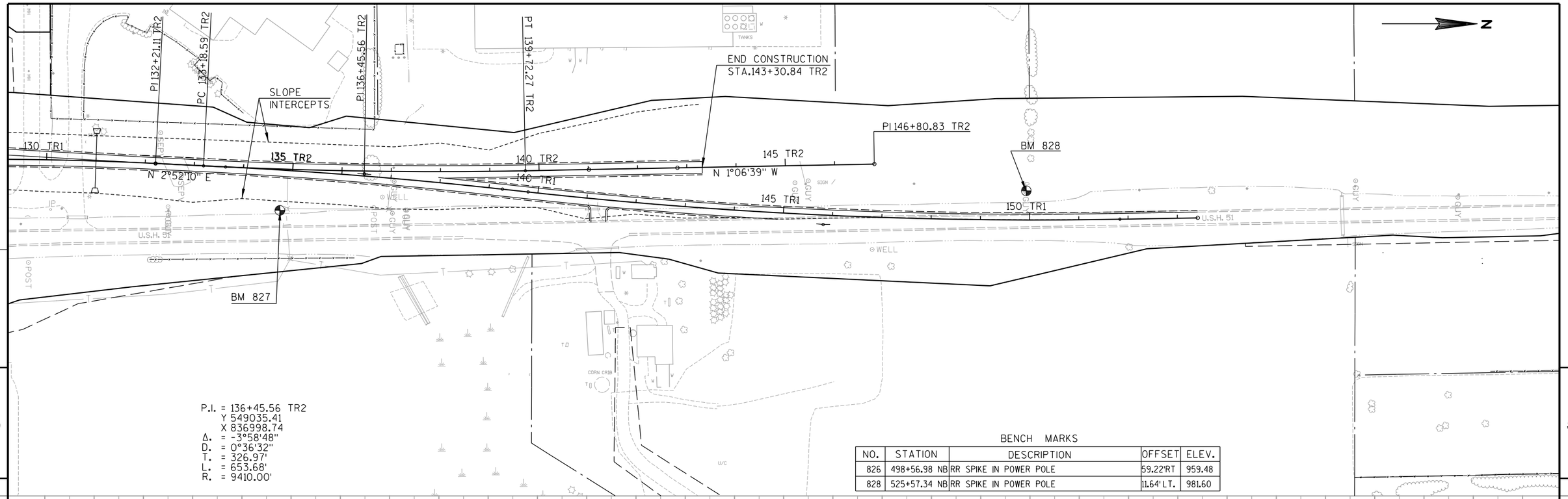


BENCH MARKS

NO.	STATION	DESCRIPTION	OFFSET	ELEV.
826	498+56.98 NB	RR SPIKE IN POWER POLE	59.22'RT	959.48
828	525+57.34 NB	RR SPIKE IN POWER POLE	11.64'LT.	981.60



PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	PLAN & PROFILE - TEMPORARY ROAD TR1	SHEET 325	E



PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	PLAN & PROFILE - TEMPORARY ROAD TR2	SHEET 326 E

BEGIN CONSTRUCTION
STA.48+50 TR3
MATCH EXISTING
SAW CUT REQ'D.

PI 47+64.37 TR3

PI 48+63.36 TR3

SLOPE
INTERCEPTS

DELINEATED
WETLAND

S 85°51'11" E

S 79°18'11" E
50 TR3

PC 50+70.74 TR3

PI 51+03.61 TR3

PT 51+35.89 TR3

N 82°01'42" E

END CONSTRUCTION
STA.51+17 TR3
MATCH EXISTING
SAW CUT REQ'D.

BM 826

BM 827

DELINEATED
WETLAND

PI 53+10.66 TR3

U.S.H. 51

CAUTION

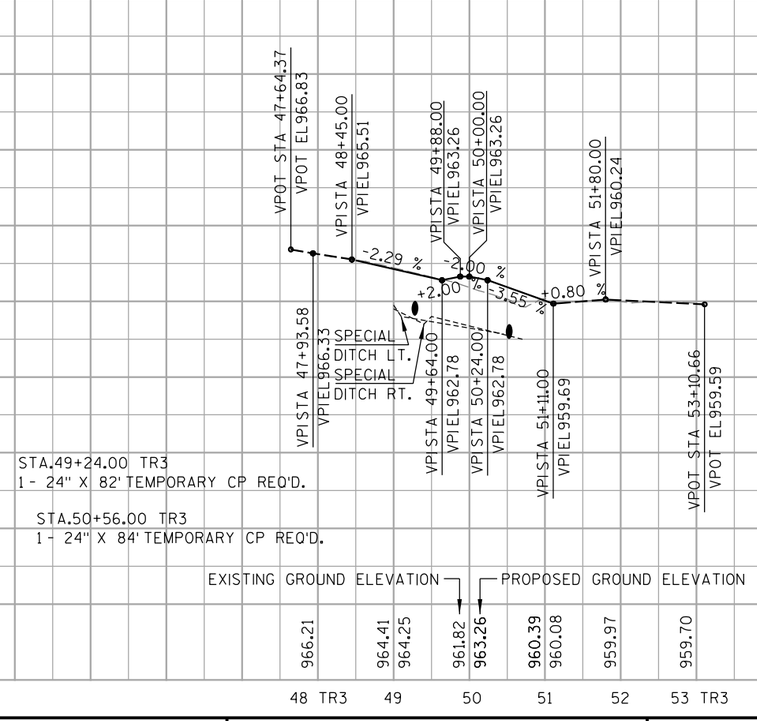
N

P.I. = 48+63.36 TR3
Y 547759.98
X 836855.70
Δ. = 6°32'54"

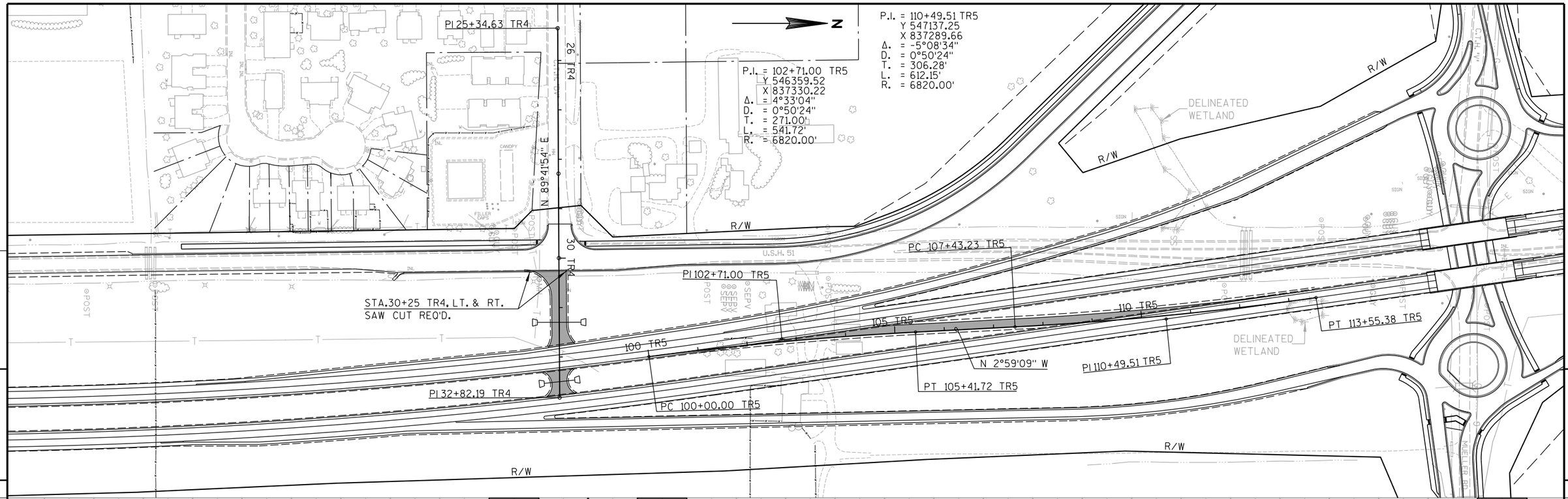
P.I. = 51+03.61 TR3
Y 547715.39
X 837091.77
Δ. = -18°40'00"
D. = 28°38'52"
T. = 32.87'
L. = 65.16'
R. = 200.00'

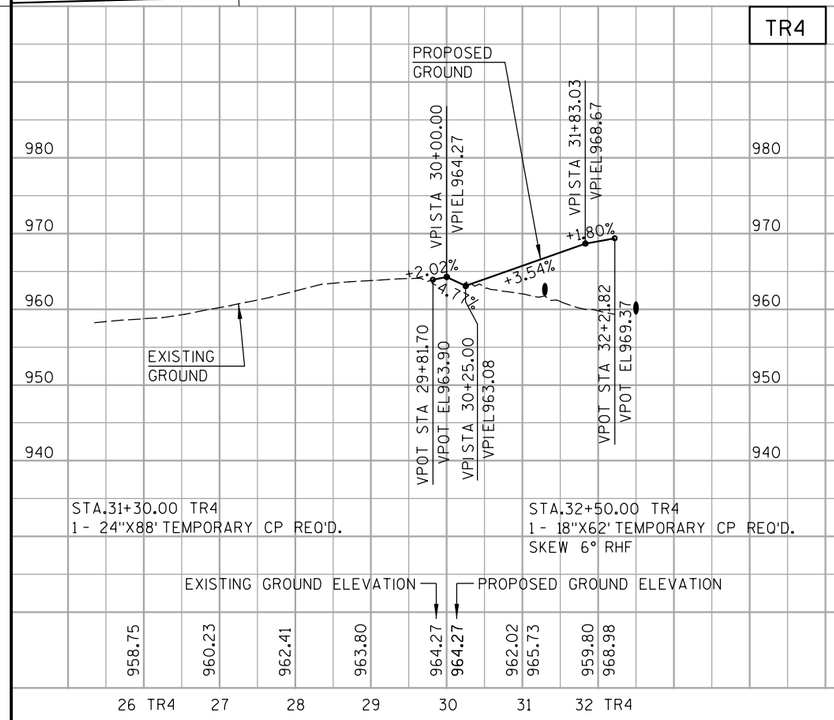
BENCH MARKS

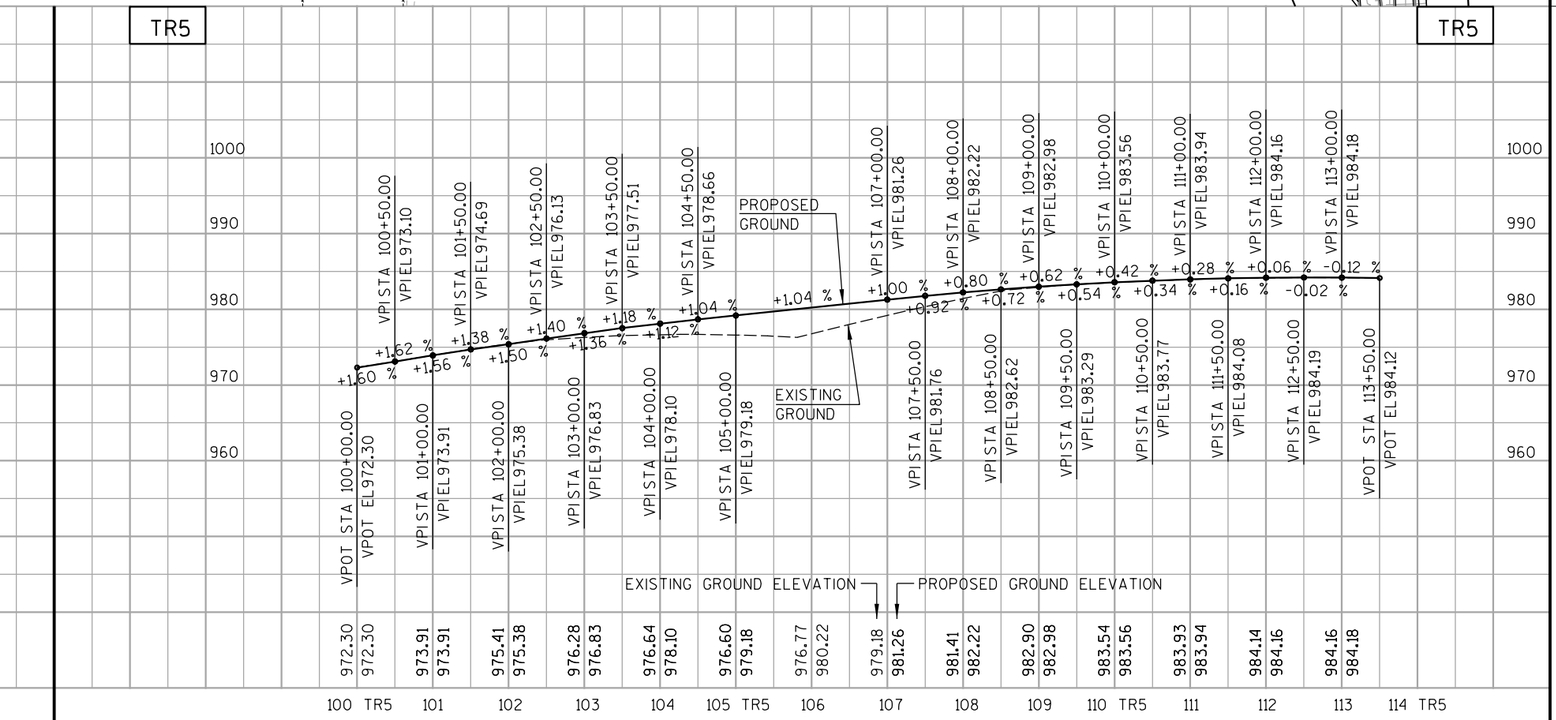
NO.	STATION	DESCRIPTION	OFFSET	ELEV.
826	498+56.98 NB	RR SPIKE IN POWER POLE	59.22'RT	959.48
827	510+41.43 NB	RR SPIKE IN POWER POLE	1.15'LT	960.10



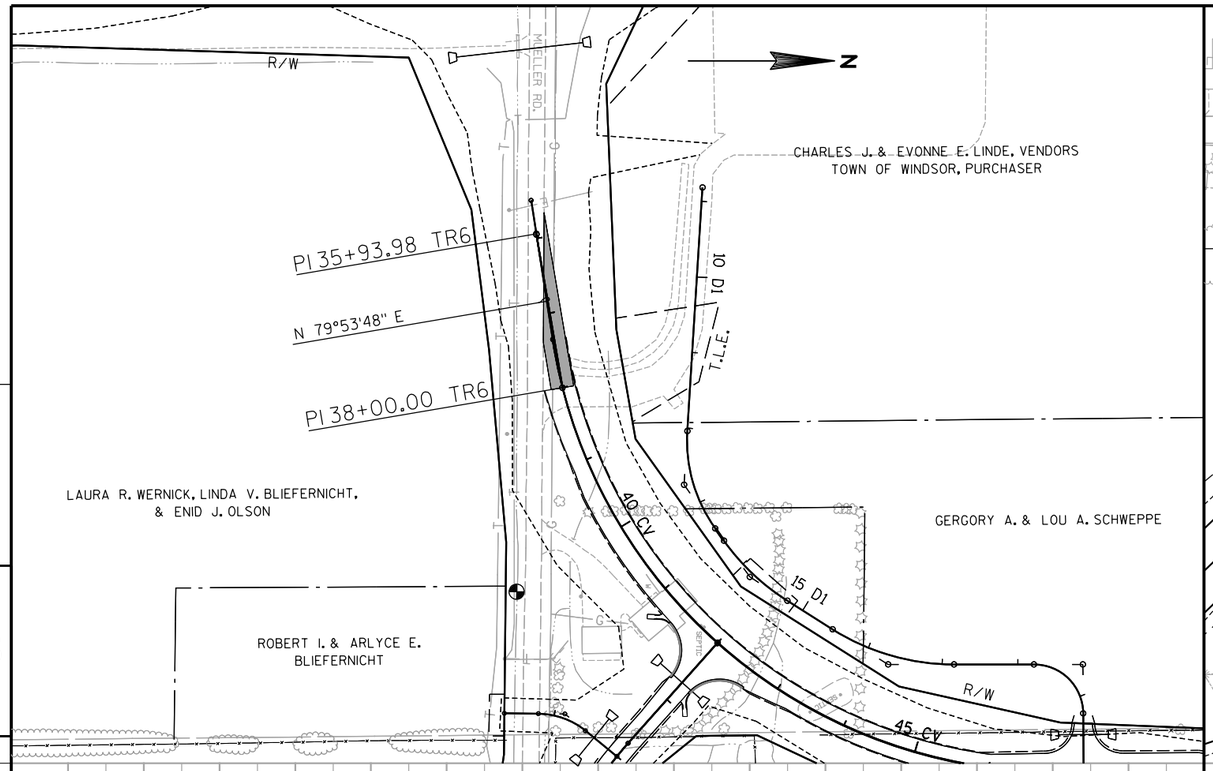
PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	PLAN & PROFILE - TEMPORARY ROAD TR3	SHEET 327	E

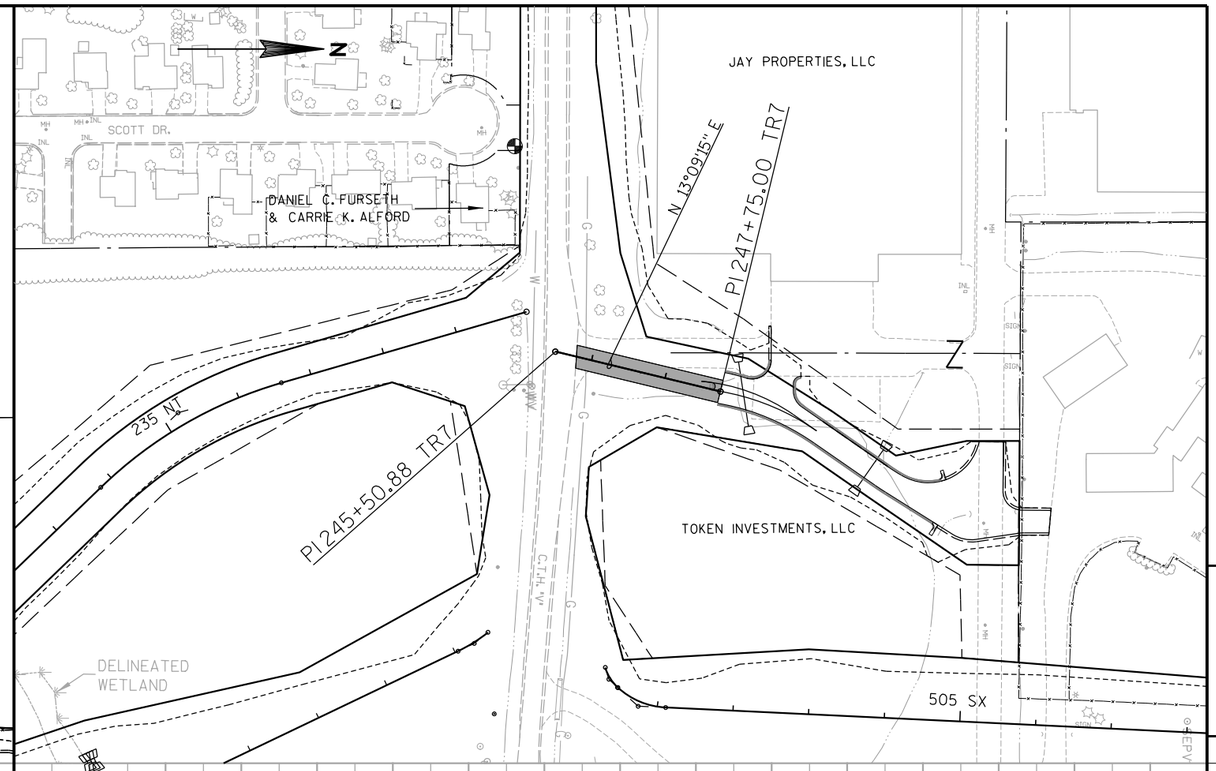




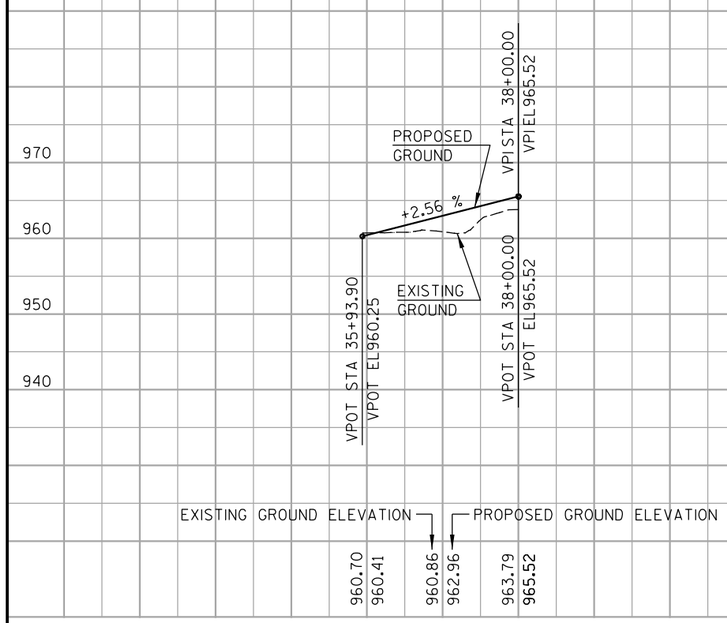


PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	PLAN & PROFILE - TEMPORARY ROADS TR4 & TR5	SHEET 328 E

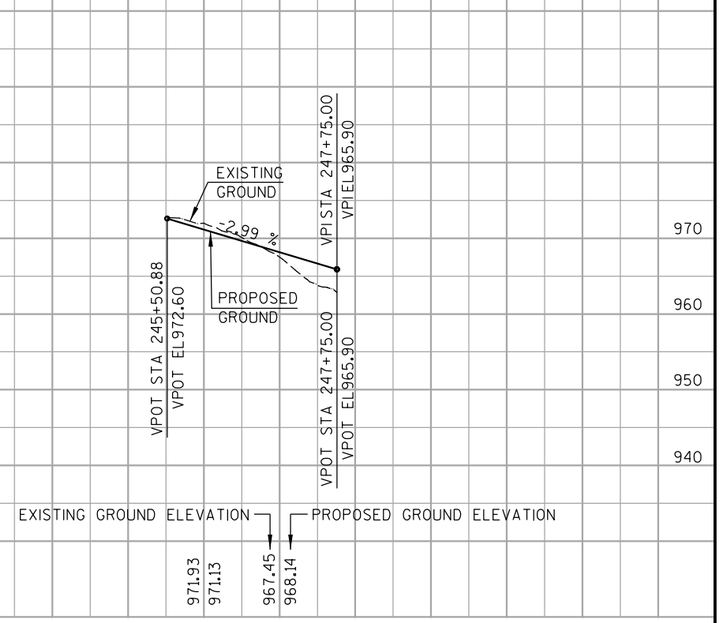




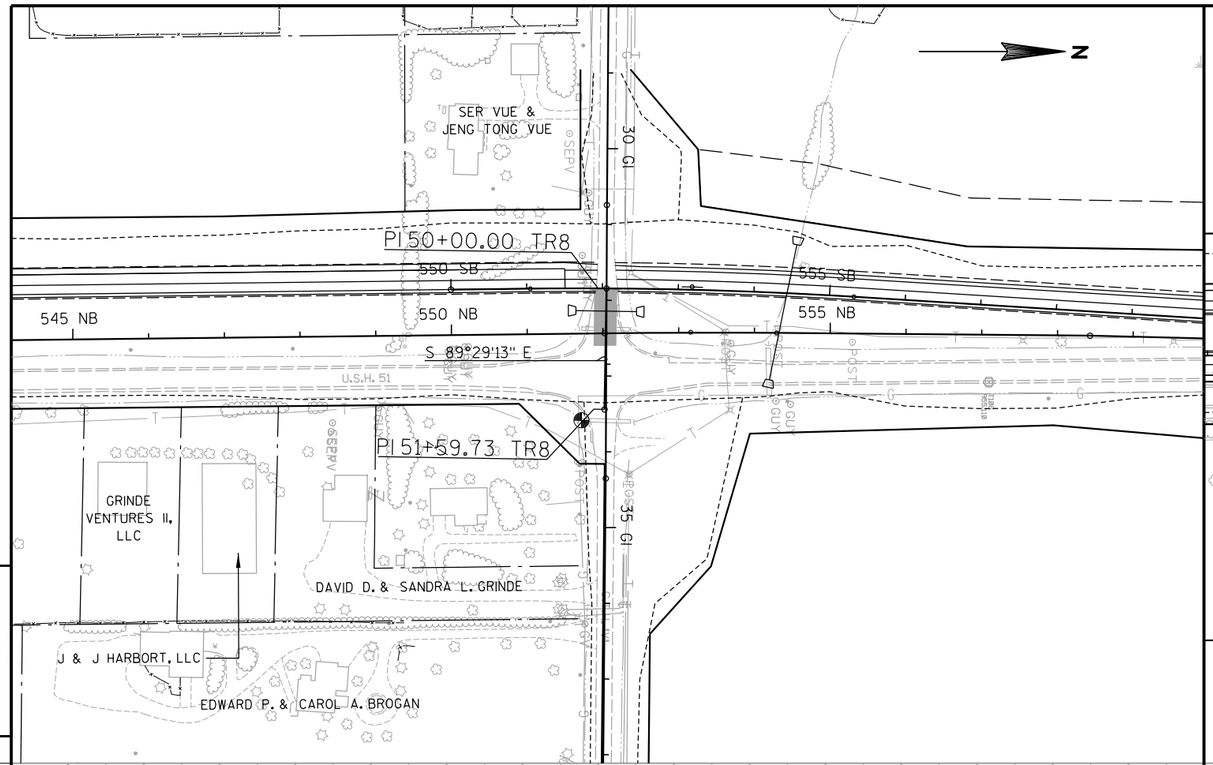
TR6

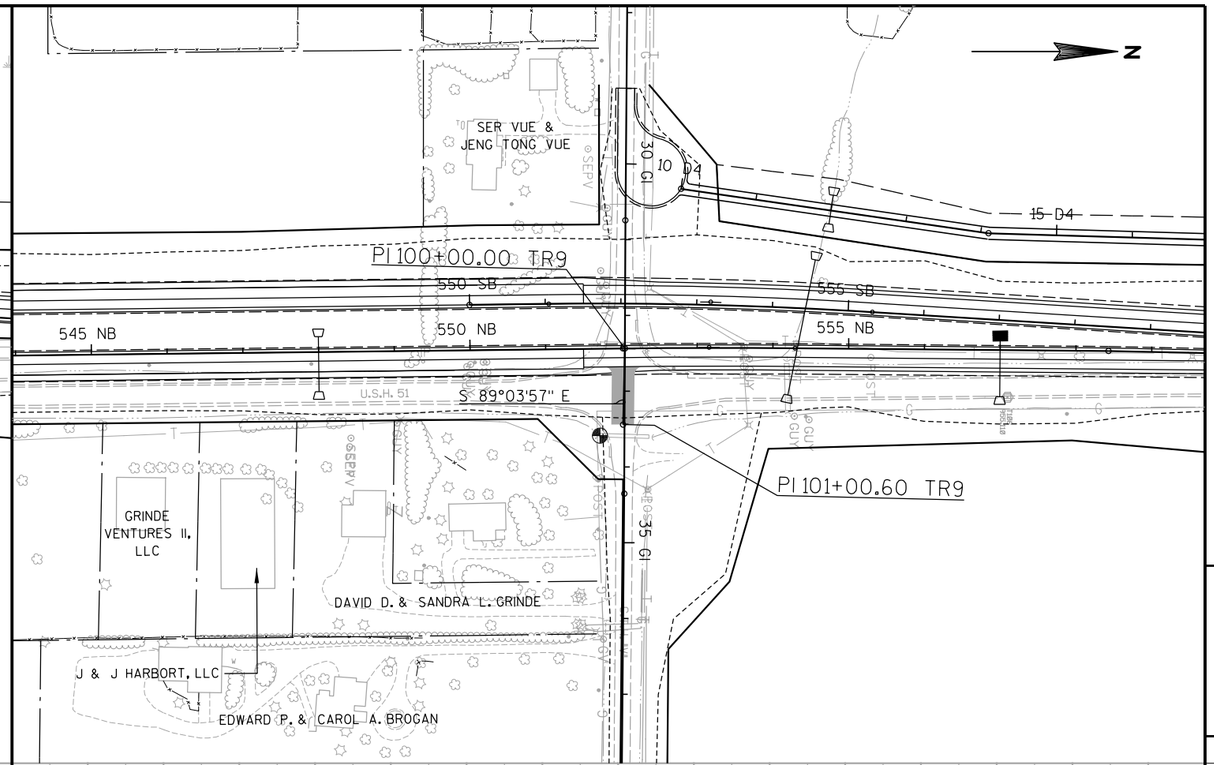


TR7



PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	PLAN & PROFILE - TEMPORARY ROADS TR6 & TR7	SHEET 329	E

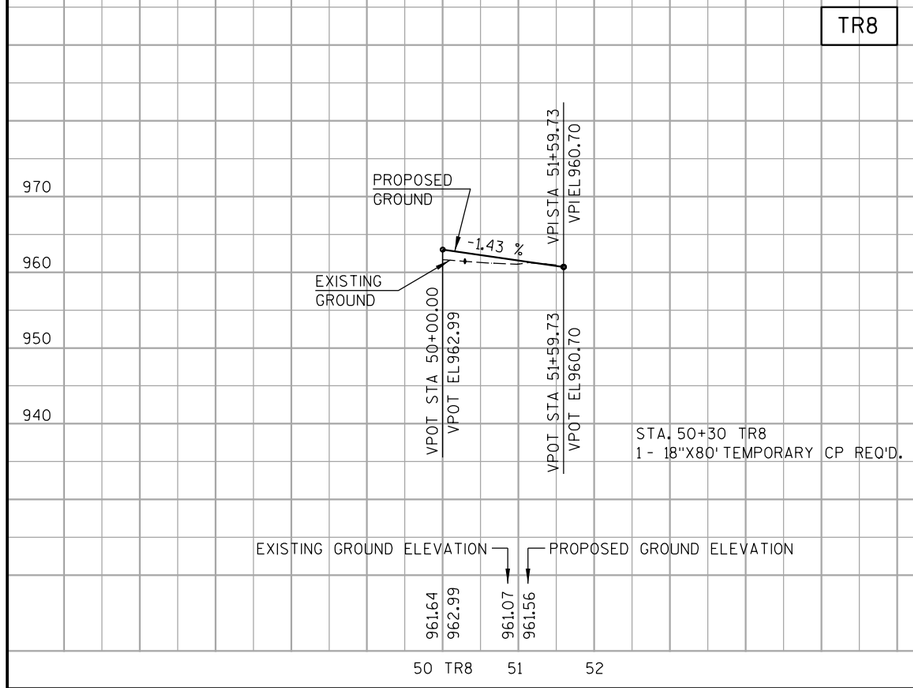




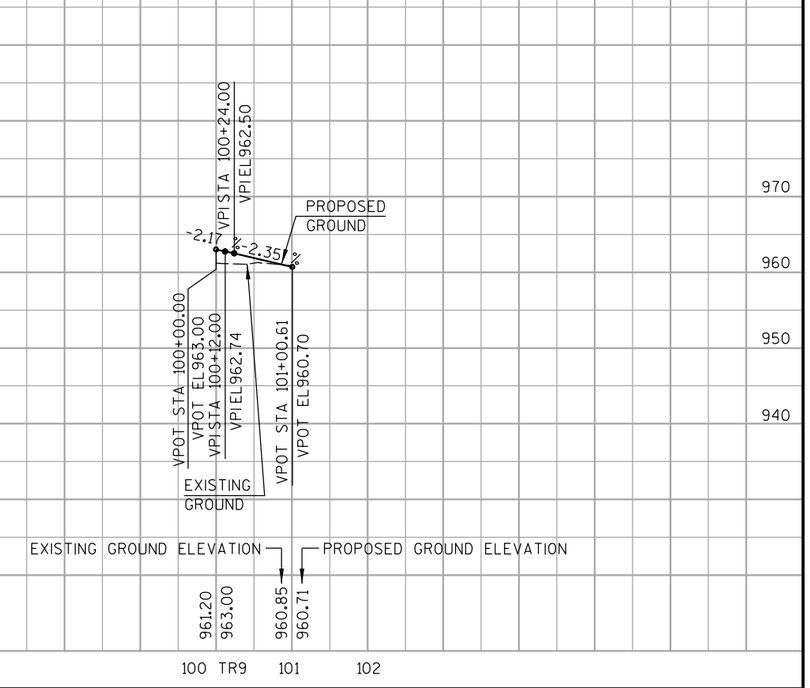
5

5

TR8



TR9



PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	PLAN & PROFILE - TEMPORARY ROADS TR8 & TR9	SHEET 330	E

P.I. = 564+00.01 TW
Y 554222.01
X 836968.47
Δ. = 1°09'25"

P.I. = 565+00.01 TW
Y 554321.98
X 836971.03
Δ. = 1°08'43"

P.I. = 566+00.06 TW
Y 554421.93
X 836975.59
Δ. = -0°34'21"

P.I. = 567+00.08 TW
Y 554521.88
X 836979.16
Δ. = 1°43'39"

P.I. = 568+00.20 TW
Y 554621.79
X 836985.72
Δ. = 1°14'16"

P.I. = 569+00.38 TW
Y 554721.59
X 836993.28
Δ. = -1°43'39"

P.I. = 570+00.51 TW
Y 554821.60
X 836999.84
Δ. = -0°41'22"

P.I. = 571+00.63 TW
Y 554921.57
X 837005.22
Δ. = -1°05'21"

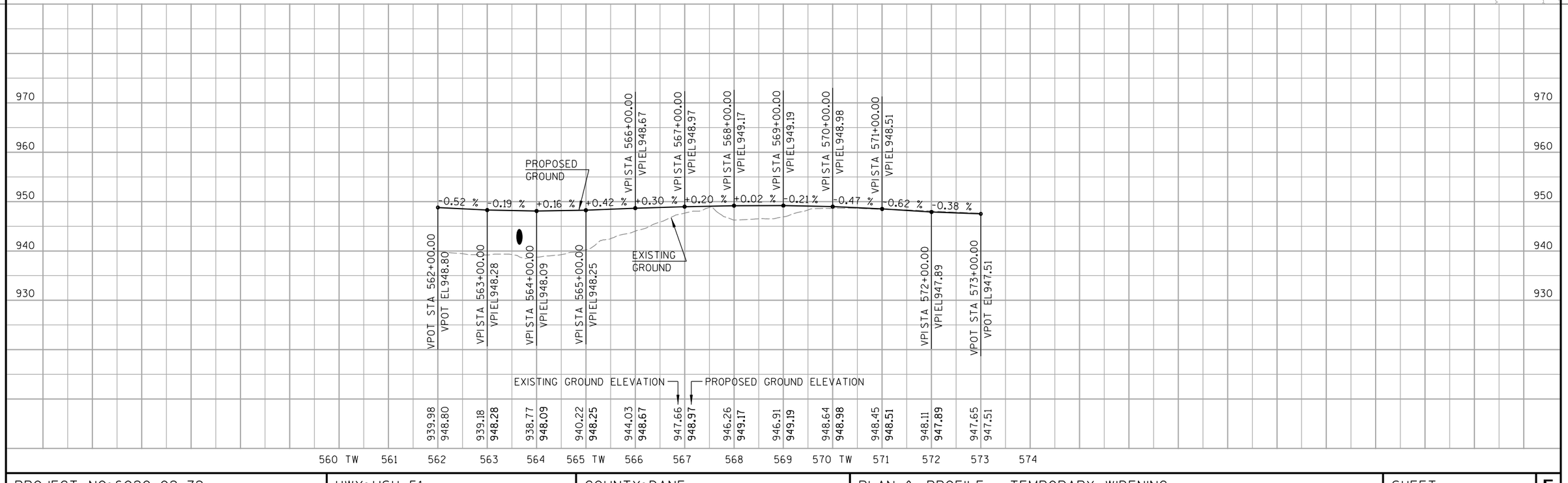
P.I. = 572+00.60 TW
Y 555021.44
X 837009.86
Δ. = -1°17'03"

P.I. 564+00.01 TW N 1°28'07" E
P.I. 565+00.01 TW N 2°36'51" E
P.I. 567+00.08 TW N 2°02'29" E
P.I. 568+00.20 TW N 3°45'29" E
P.I. 562+00.00 TW N 0°19'22" E
P.I. 566+00.06 TW N 3°45'29" E
P.I. 569+00.38 TW N 3°45'29" E
P.I. 570+00.51 TW N 3°14'47" E
P.I. 571+00.63 TW N 2°39'25" E
P.I. 572+00.60 TW N 1°22'22" E
P.I. 573+00.58 TW

15 D4
20 D4
25 D4
30 D4

555 SB
555 NB
560 SB
560 NB
565 TW
565 SB
565 NB
570 TW
570 NB

DELINEATED WETLAND
DELINEATED WETLAND
USH 51
USH 51
CAUTION
SEPTIC
SIGN
U/C



PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	PLAN & PROFILE - TEMPORARY WIDENING	SHEET 331	E

FILE NAME : P:\2011059 - US 51 WO\MicroStation\Planset\6020-02-72\050135_pp.dgn
PLOT DATE : 4/26/2013
PLOT BY : $$...plotuser...$$ PLOT NAME :
PLOT SCALE : 200.0000 sf / in.

Standard Detail Drawing List

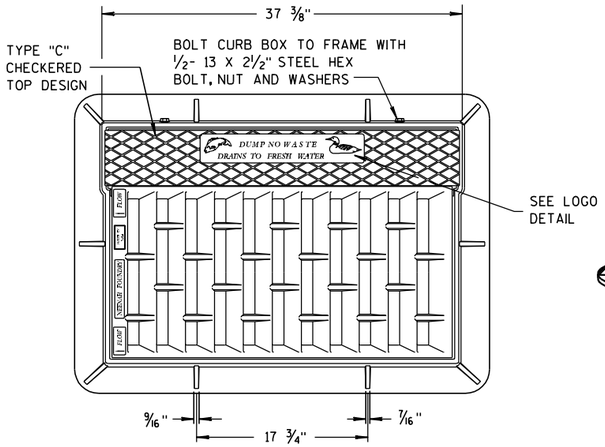
08A05-18A	INLET COVERS TYPE A, H, A-S, & H-S
08A05-18B	INLET COVERS TYPE B, B-A, C, MS, MS-A, & WM
08A05-18C	INLET COVERS TYPE F, HM, HM-S, S, T, V, HM-GJ, & HM-GJ-S
08A05-18D	INLET COVER, TYPE BW, Z MANHOLE COVERS, TYPE K, J, J-S, L & M
08B09-01	MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER
08C06-01	INLETS 3-FT AND 4-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
08D03-06	CONCRETE SURFACE DRAINS DROP INLET TYPE AT STRUCTURES
08D04-05	CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES
08D05-15A	CURB RAMPS TYPES 1 AND 1-A
08D05-15B	CURB RAMPS TYPES 2 AND 3
08D05-15C	CURB RAMPS TYPES 4A AND 4A1
08D05-15D	CURB RAMPS TYPE 4B AND 4B1
08D05-15E	CURB RAMPS TYPES 5, 6, 7A, 7B & 8
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
08F02-01	APRON ENDWALLS FOR PIPE ARCH AND ELLIPTICAL PIPE
08F04-07	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
08F07-05	STEEL APRON ENDWALLS FOR CULVERT PIPE AND PIPE ARCH SLOPED SIDE DRAINS
08F10-01	CONCRETE MASONRY ENDWALLS FOR CULVERT PIPE AND PIPE ARCH
09A01-13A	AT-GRADE SIDE ROAD INTERSECTION, TYPES "B1", "B2", "C" AND D AND TEE INTERSECTION BYPASS LANE
09B02-07	CONDUIT
09B04-10	PULL BOX
09C03-03	TRANSFORMER/PEDESTAL BASES
09C06-05	CONCRETE CONTROL CABINET BASE, TYPE 9, SPECIAL
09C07-04	CONCRETE BASE, TYPE 6
09D01-04	CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)
09D02-02	SIGNAL OR LIGHTING CONTROL CABINET
09E01-12E	POLE MOUNTINGS FOR LIGHTING UNITS, TYPE 6 (35 FEET)
09E01-12G	HARDWARE DETAILS FOR POLE MOUNTINGS
09E03-04	NON-FREEWAY LIGHTING UNIT POLE WIRING
11A01-04	MAINTENANCE CROSSOVER FOR FREEWAYS
11B01-05	CONCRETE CORRUGATED MEDIAN
11B02-02	CONCRETE MEDIAN NOSE
12A03-10	NAME PLATE (STRUCTURES)
12A04-03	STRUCTURE IDENTIFICATION PLAQUES, RAMP GATES, SIGN BRIDGES & OVERHEAD SIGN SUPPORTS & TRAFFIC SIGNALS
13A05-05A	SHOULDER RUMBLE STRIP, MILLING
13A05-05B	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
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
13C18-01C	CONCRETE PAVEMENT JOINT TIES
14A02-01	TREE PLANTING DETAIL
14B07-13A	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-13B	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-13C	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-13D	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-13E	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-13F	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-13G	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-13H	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B08-01A	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B08-01B	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B08-01C	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B08-01D	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B08-01E	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B28-02	GUARDRAIL MOW STRIP
14B42-02A	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-02B	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

6

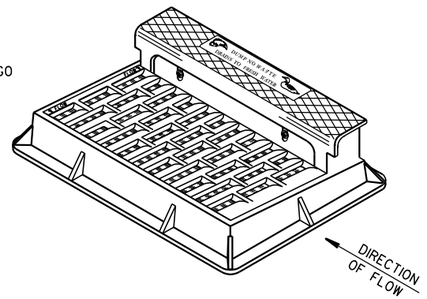
Standard Detail Drawing List

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)
14B45-03A	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03B	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03C	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03D	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03E	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03F	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-03G	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
15A02-07	DELINEATOR POST, DELINEATOR BRACKET AND DELINEATOR
15A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
15A03-02B	FLEXIBLE MARKER POST FOR CULVERT END
15A04-02	FLEXIBLE DELINEATOR POST
15A06-02	DELINEATOR LAYOUT
15B01-08A	FENCE WOVEN WIRE
15B01-08B	FENCE WOVEN WIRE
15C02-04A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-04B	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C03-01	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C04-01	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C07-12A	PAVEMENT MARKING SYMBOLS
15C07-12B	PAVEMENT MARKING WORDS
15C07-12C	PAVEMENT MARKING ARROWS
15C07-12D	ROUNDABOUT ARROWS
15C08-15A	PAVEMENT MARKING (MAINLINE)
15C08-15B	PAVEMENT MARKING (INTERSECTIONS)
15C08-15F	PAVEMENT MARKING (ISLANDS, STOP LINE & CROSS WALK)
15C11-05	FLEXIBLE TUBULAR MARKER POST, ANCHOR & BASES
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
15C20-01	YIELD 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
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
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
15D27-01	TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH
15D28-01	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY
16A01-06	LANDMARK REFERENCE MONUMENTS AND COVERS

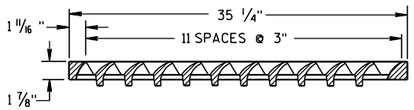
6

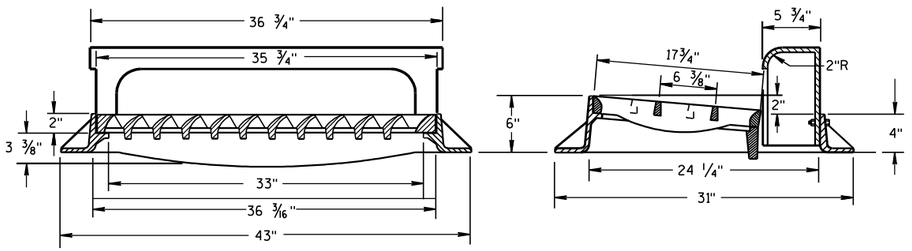


NOTE:
GRATE IS REVERSIBLE.



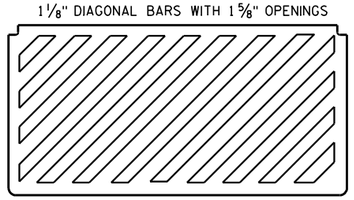
NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"





TYPE "H"

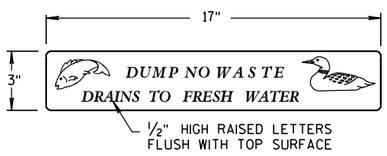
(APPROXIMATE WEIGHT 441 LBS.)
FRAME..... 181 LBS.
GRATE..... 146 LBS.
CURB BOX..... 114 LBS.



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

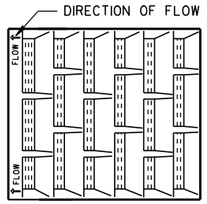
GENERAL NOTES

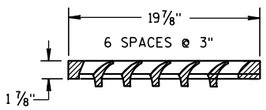
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

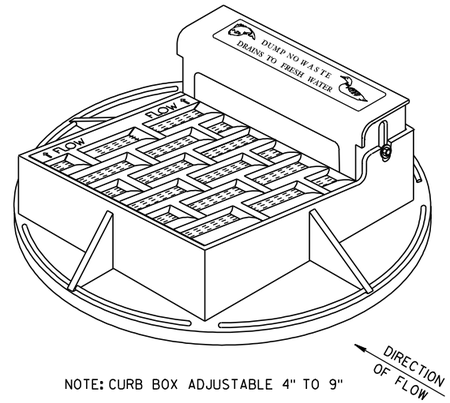
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.

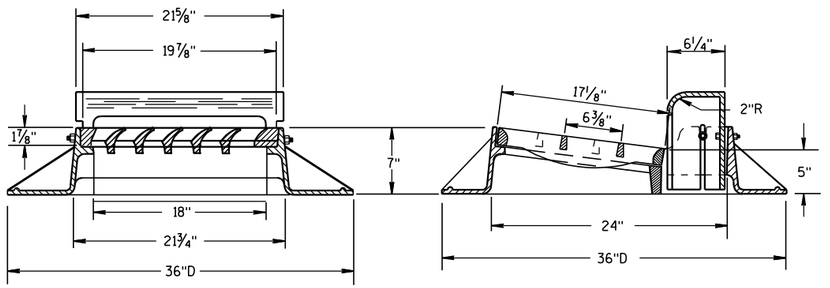
THE ACTUAL WEIGHT OF COVERS MAY VARY WITHIN 5 PERCENT, PLUS OR MINUS, OF THE APPROXIMATE WEIGHT.





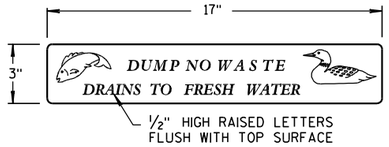


NOTE: CURB BOX ADJUSTABLE 4" TO 9"



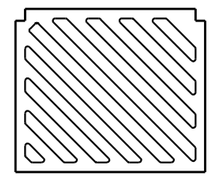
TYPE "A"

(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

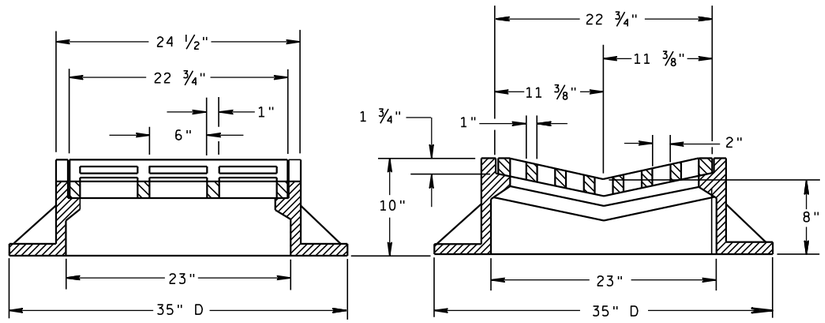
APPROVED
6/5/2012 DATE
/S/ Jerry H. [illegible] ROADWAY STANDARDS ENGINEER
334
FHWA

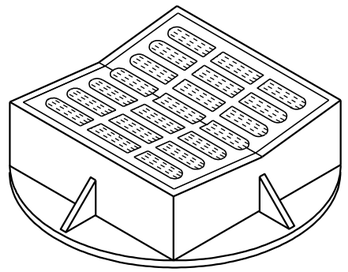
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S.D.D. 8 A 5-18a

6

S.D.D. 8 A 5-18a

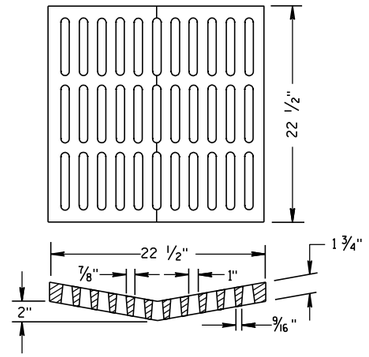




TYPE "B"

(APPROXIMATE WEIGHT 405 LBS.)

FRAME..... 294 LBS.
GRATE..... 111 LBS.

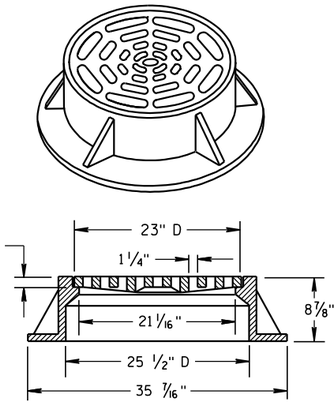


ALTERNATIVE GRATE FOR TYPE "B" COVER

(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.

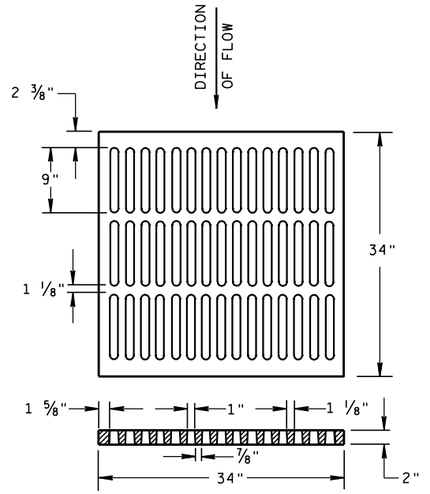
GENERAL NOTES

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 WITHIN 5 PERCENT, PLUS OR MINUS, OF THE APPROXIMATE WEIGHT.

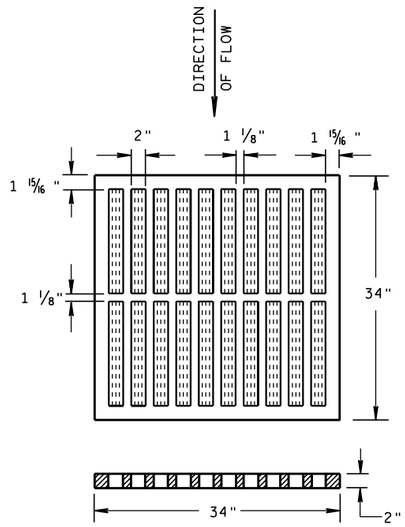


ALTERNATIVE TYPE "MS"

(APPROXIMATE GRATE WEIGHT 329 LBS.)

USE WHERE PEDESTRIAN OR BICYCLE TRAFFIC IS PERMITTED

NOTED AS TYPE MS-A ON THE DRAINAGE TABLE

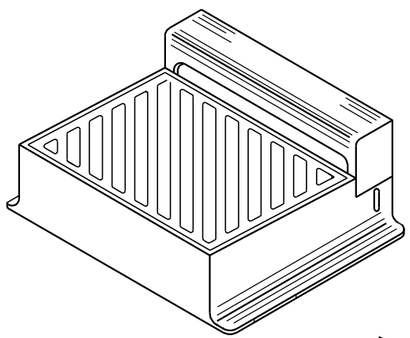


TYPE "MS"

(APPROXIMATE GRATE WEIGHT 268 LBS.)

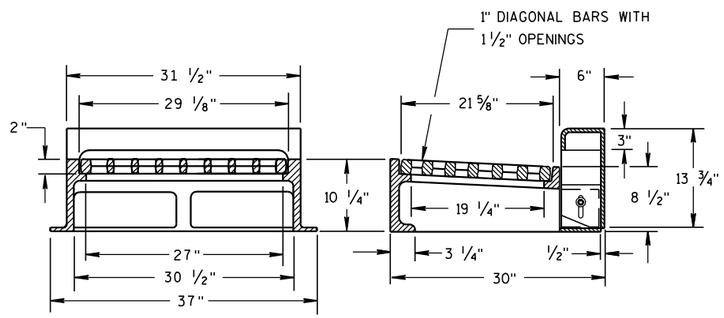
USE ON FREEWAYS AND EXPRESSWAYS

NOTED AS TYPE MS ON DRAINAGE TABLE



DIRECTION OF FLOW

DIAGONAL SLOTS, SHALL BE ORIENTED TO THE DIRECTION OF FLOW AS ILLUSTRATED. GRATES ARE MANUFACTURED TO BE REVERSIBLE.



NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

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

335 ENT

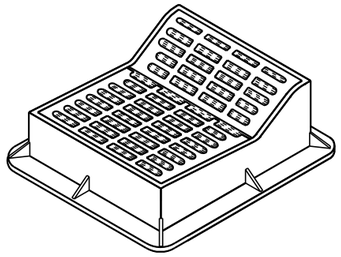
FHWA

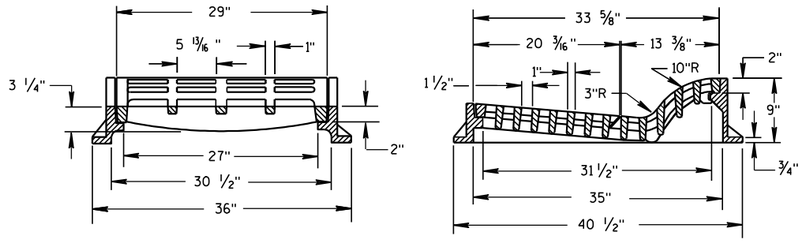
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S.D.D. 8 A 5-18b

6

S.D.D. 8 A 5-18b



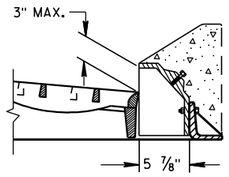


TYPE "F"

(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

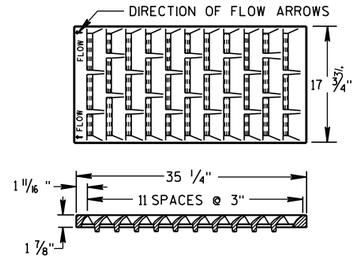
NOTE:
SPECIAL GRATE FOR THE
TYPE "H" COVER MAY ALSO BE
USED FOR THE TYPE "HM-GJ" COVER
NOTED AS TYPE HM-GJ-S ON DRAINAGE TABLE

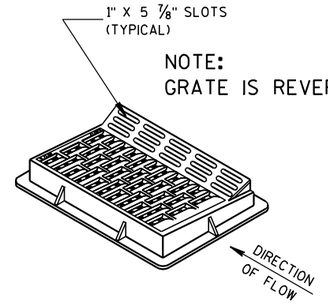
GENERAL NOTES

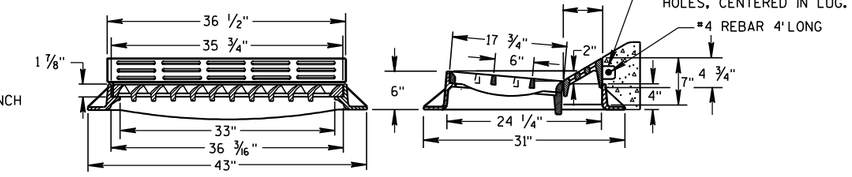
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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.





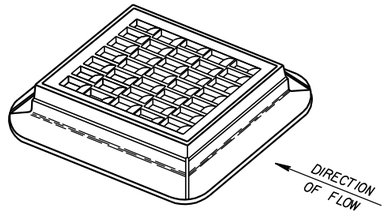


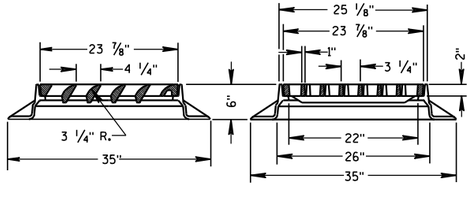
TYPE "HM"

(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

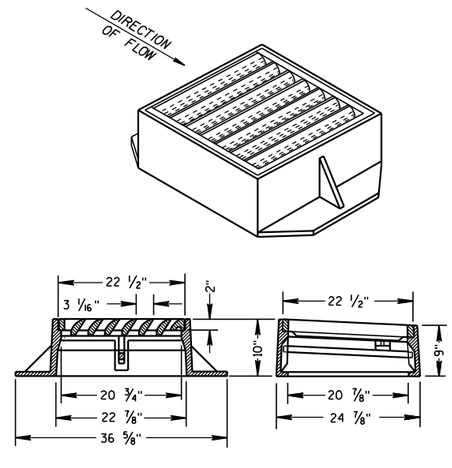




TYPE "S"

(APPROXIMATE WEIGHT 333 LBS.)

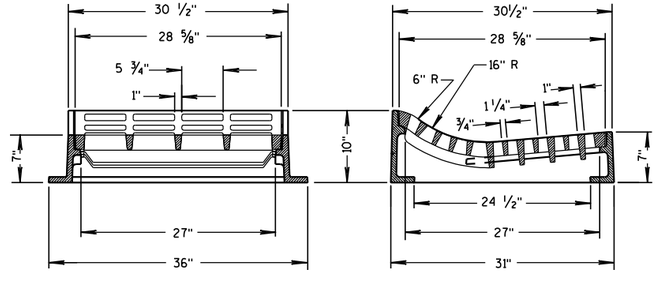
FRAME.....164 LBS.
GRATE..... 169 LBS.



TYPE "V"

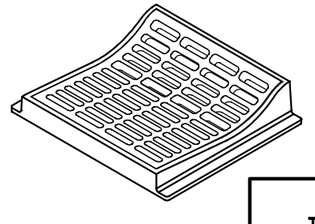
(APPROXIMATE WEIGHT 410 LBS.)

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

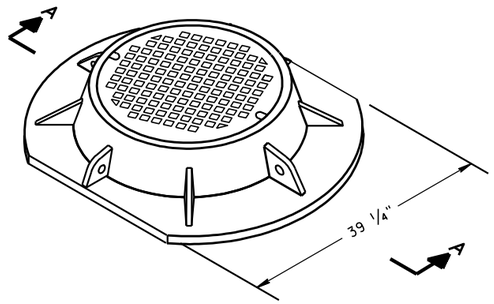
APPROVED
6/5/2012 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
336
FHWA

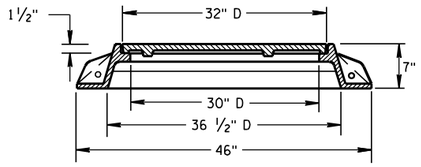
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S.D.D. 8 A 5-18c

6

S.D.D. 8 A 5-18c



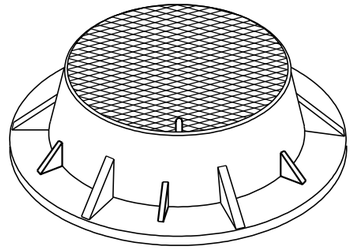


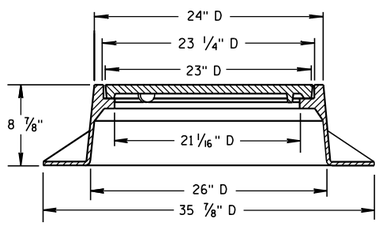
SECTION A-A

TYPE "K"

(APPROXIMATE WEIGHT 439 LBS.)

FRAME.....216 LBS.
LID.....223 LBS.

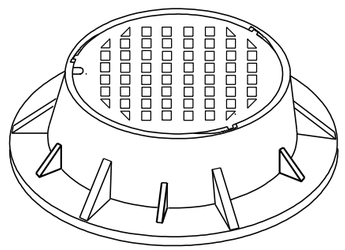


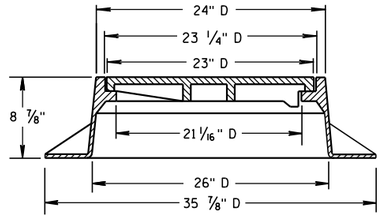


TYPE "J"

(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)

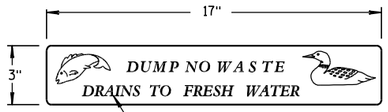
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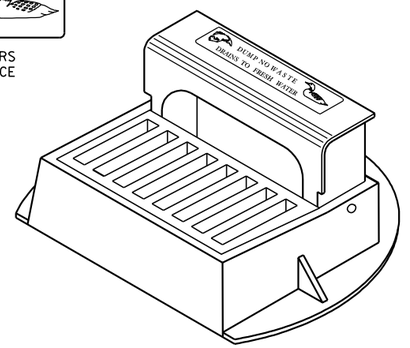
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR MANHOLE COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

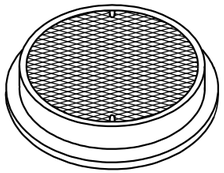
ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.

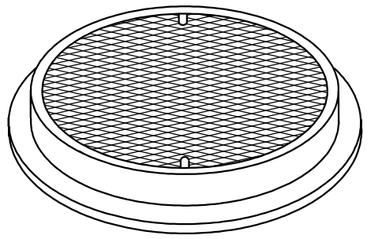
THE ACTUAL WEIGHT OF COVERS MAY VARY WITH 5 PERCENT, PLUS OR MINUS, OF THE APPROXIMATE WEIGHT.

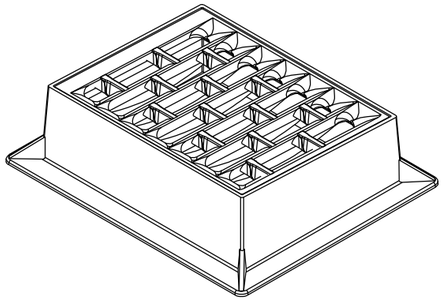


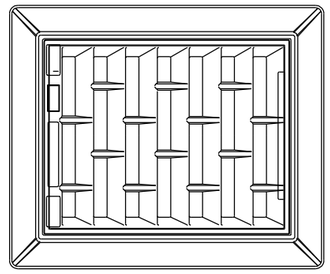
LOGO DETAIL

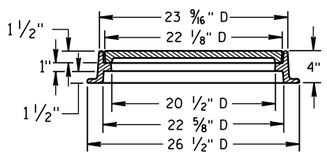








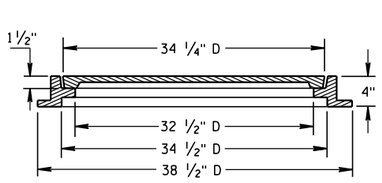




TYPE "L"

(APPROXIMATE WEIGHT 158 LBS.)

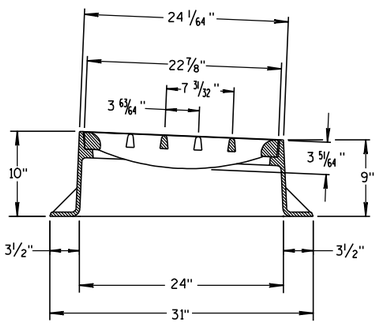
FRAME.....81 LBS.
LID.....77 LBS.

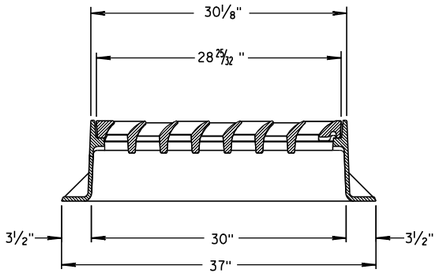


TYPE "M"

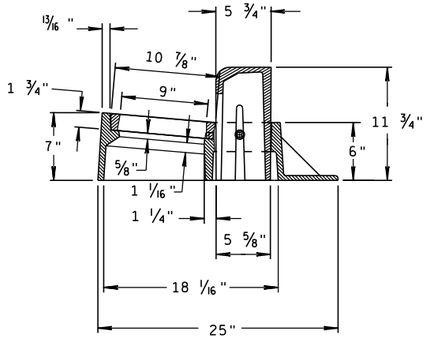
(APPROXIMATE WEIGHT 377 LBS.)

FRAME..... 125 LBS.
LID..... 252 LBS.





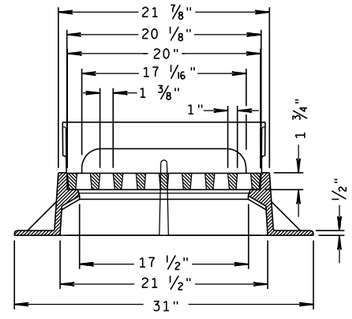
INLET COVER TYPE "BW"



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

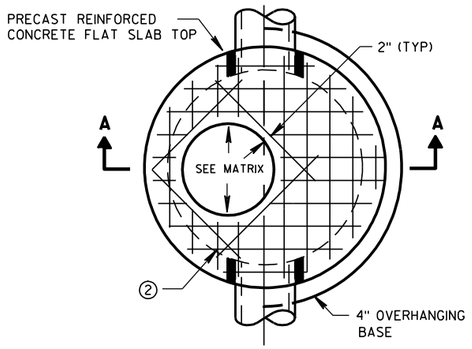
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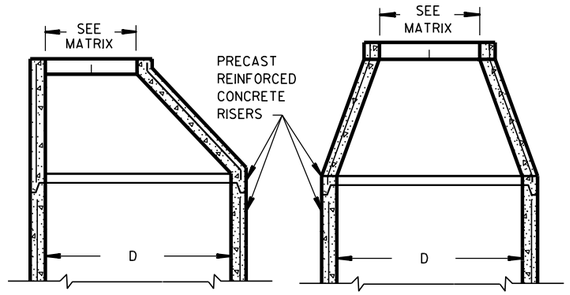
S.D.D. 8 A 5-18d

6

S.D.D. 8 A 5-18d

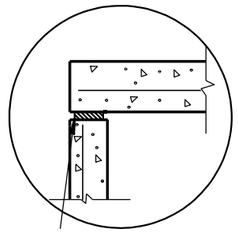


PLAN VIEW CIRCULAR OPENING

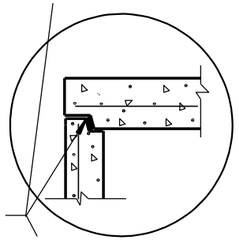


OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP

OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP

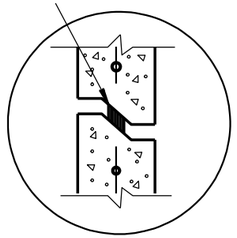


TOP WITH PLAIN END JOINT



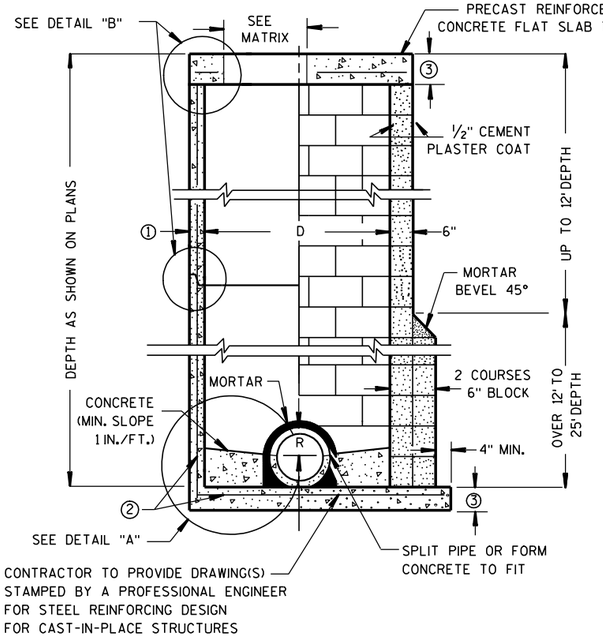
JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C990 (TYP)

TOP WITH TONGUE AND GROOVE JOINT



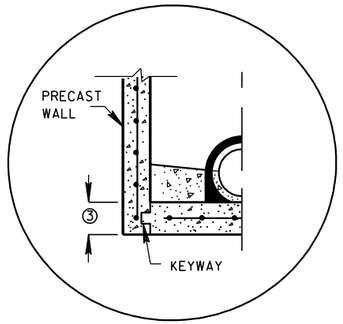
RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B"

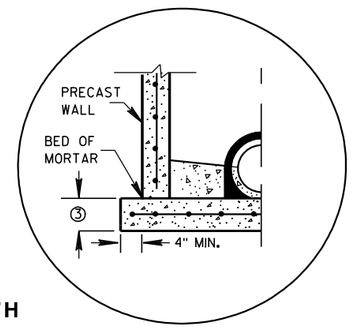


PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

CONCRETE BLOCK WITH CAST-IN-PLACE OR PRECAST REINFORCED CONCRETE BASE ②

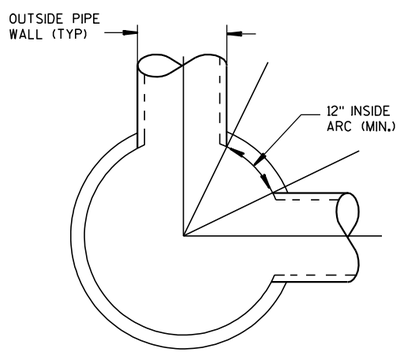


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION



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

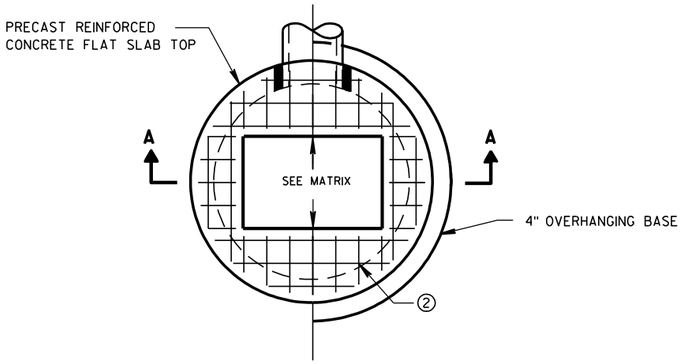
6/5/2012
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER

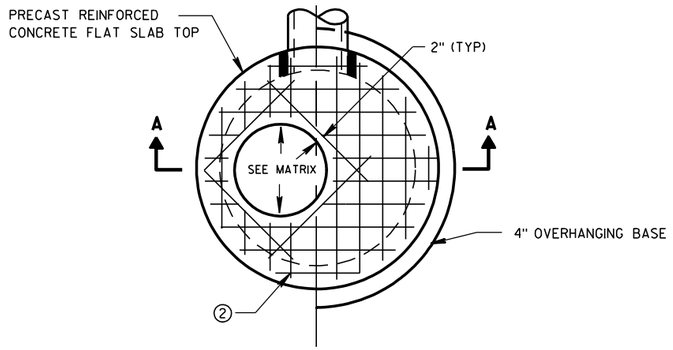
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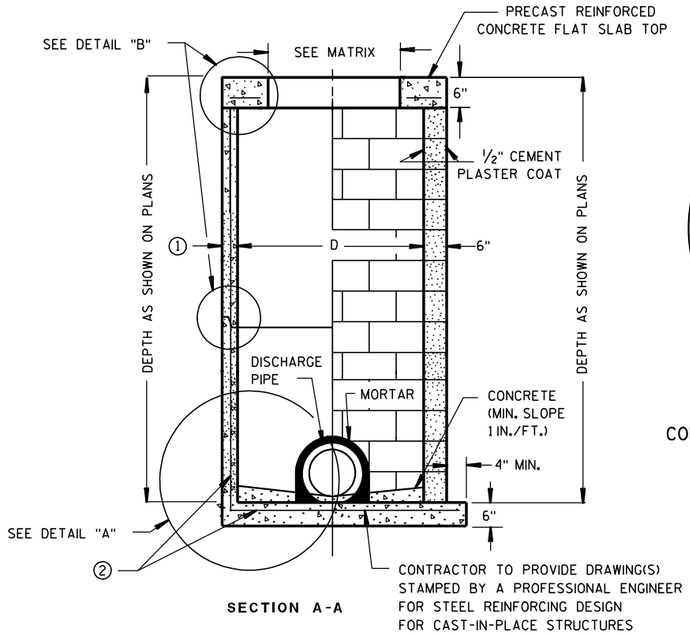
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PLAN VIEW RECTANGULAR OPENING



PLAN VIEW CIRCULAR OPENING

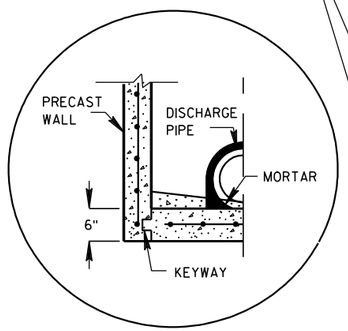


SECTION A-A

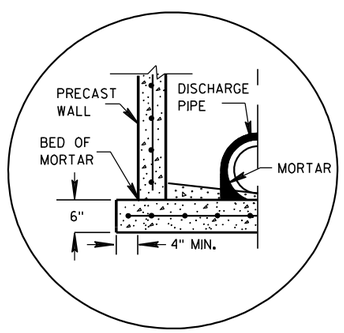
PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

CONCRETE BLOCK WITH CAST-IN-PLACE OR PRECAST REINFORCED CONCRETE BASE ②

CIRCULAR INLETS W/ FLAT TOP

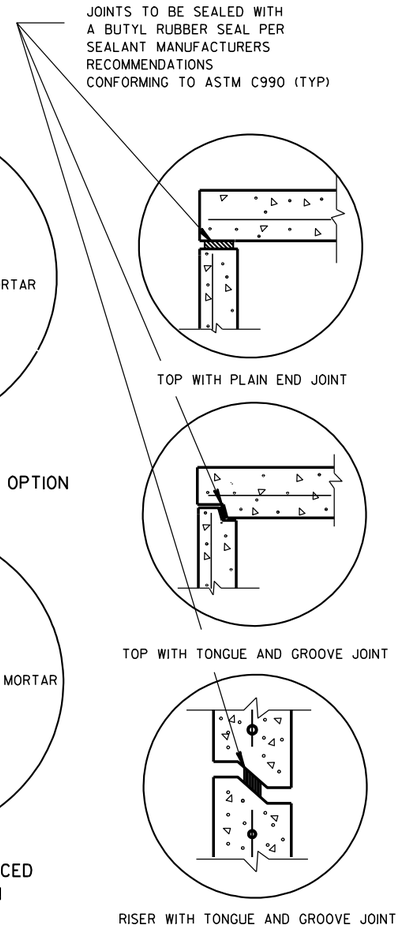


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION



SEPERATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"



DETAIL "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.

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.

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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.

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M199.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

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.

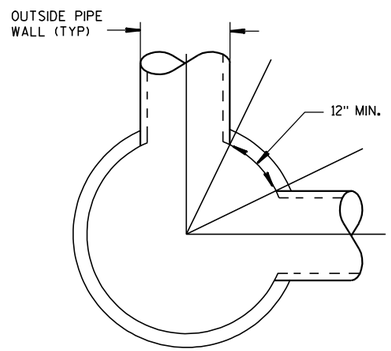
FOR ADDITIONAL CONFIGURATIONS, MAINTAIN A MINIMUM OF 12 INCHES AS MEASURED FROM THE INSIDE OF THE STRUCTURE WALL BETWEEN THE OUTSIDE PIPE WALLS OF ADJACENT PIPES. SEE DETAIL "C".

① MINIMUM WALL THICKNESS SHALL BE 4-IN FOR 3-FT DIAMETER AND 5-IN FOR 4-FT DIAMETER PRECAST INLETS.

② FOR PRECAST CATCH BASINS PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

INLET COVER OPENING MATRIX

	INLET COVER TYPE	ALL A'S	ALL B'S	BW	C	F	ALL H'S	S	T	V	WM	Z
INLET SIZE	OPENING SIZE (FT)											
3-FT	2 DIA.				X							X
	2X2	X	X					X		X		
4-FT	2 DIA.				X							X
	2X2	X	X					X		X		
	2X2.5			X				X	X	X	X	
	2X3						X					
	2.5X3					X						



DETAIL "C"

PIPE MATRIX

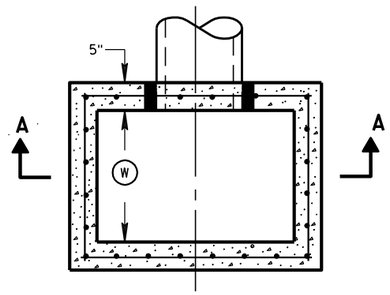
INLET SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	180° SEPARATION (IN)	90° SEPARATION (IN)
3-FT	15	12
4-FT	24	18

INLETS 3-FT AND 4-FT DIAMETER

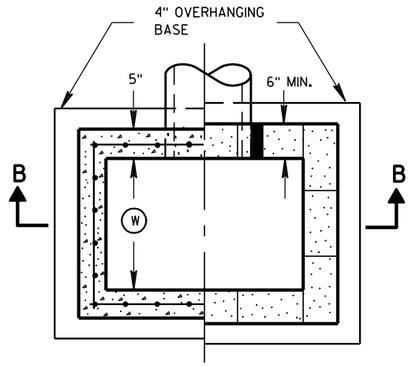
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/5/2012 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
FHWA

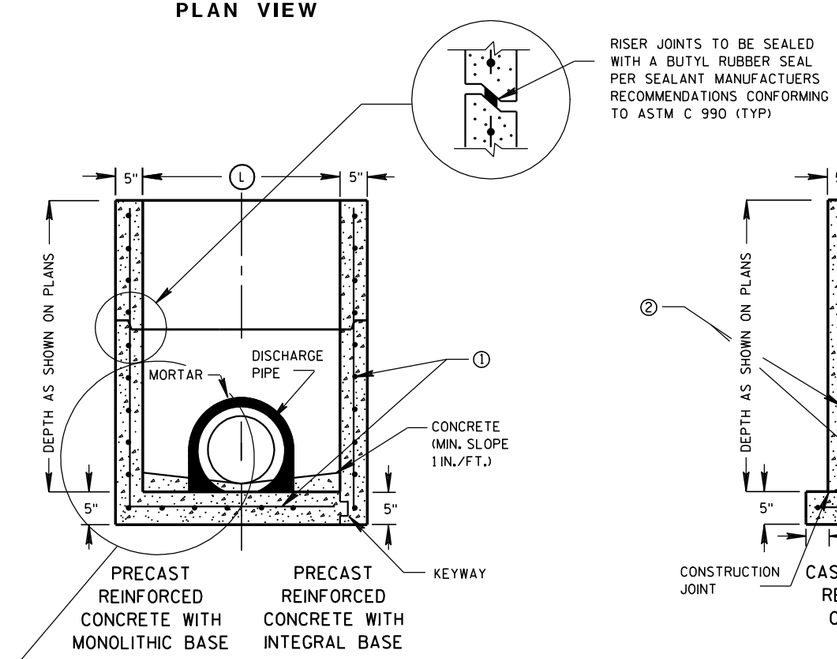
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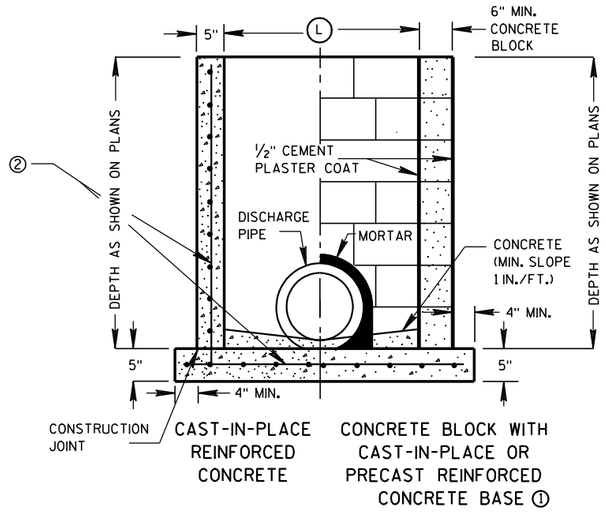
PLAN VIEW



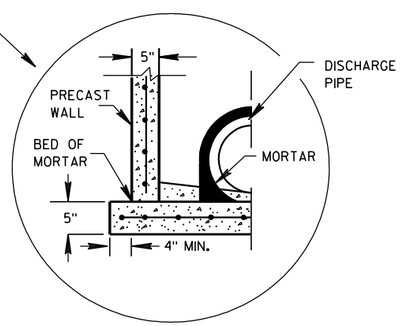
PLAN VIEW



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.

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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.

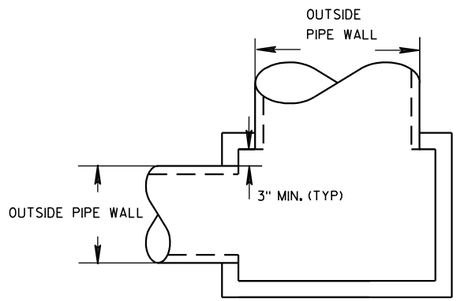
② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

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

INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

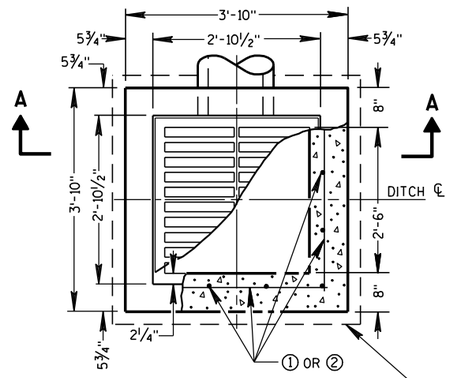
APPROVED
6/5/2012 DATE
/S/ Jerry H. Zoda
ROADWAY STANDARDS D 340 IT
ENGINEER
FHWA

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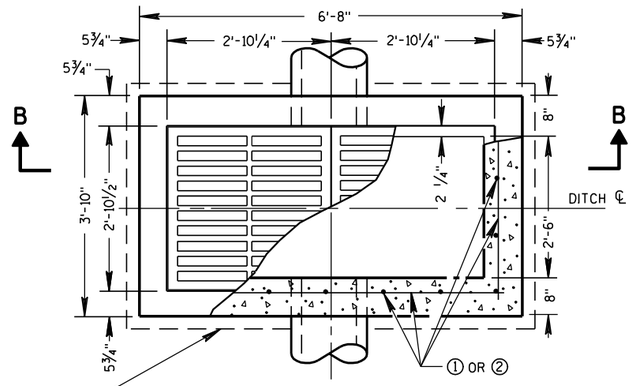
S.D.D. 8 C 7-1

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S.D.D. 8 C 7-1

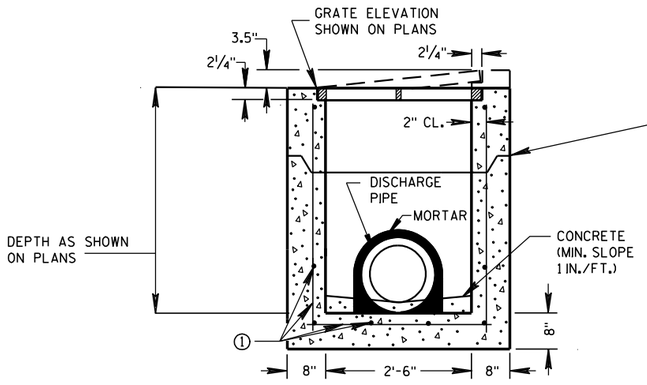


PLAN VIEW

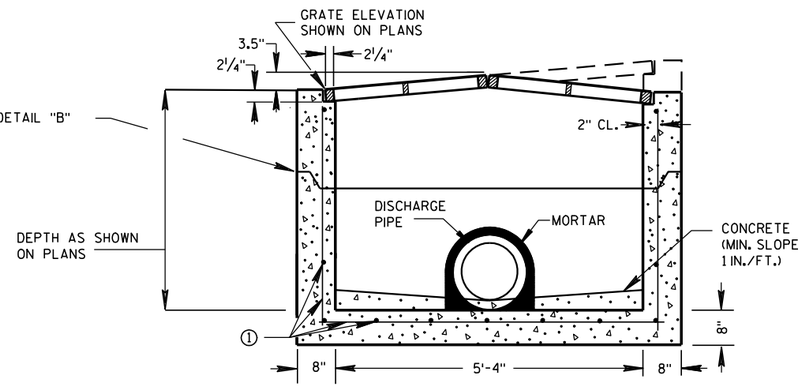


PLAN VIEW

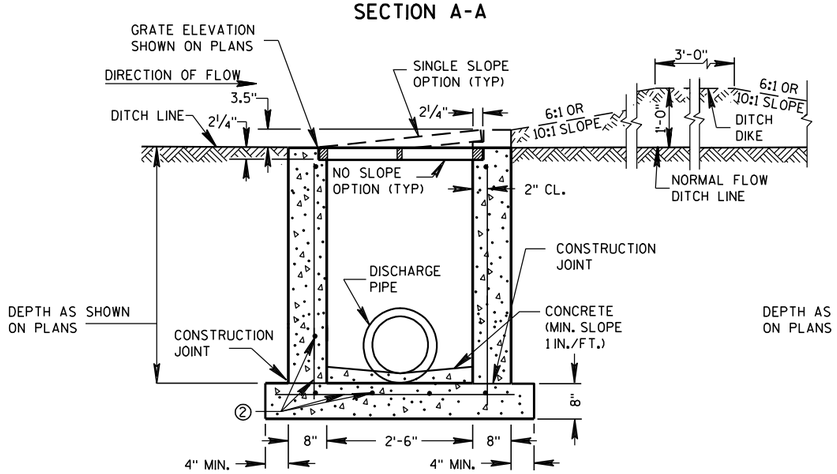
4" OVERHANGING BASE ON REINFORCED CAST-IN-PLACE CONCRETE INLETS



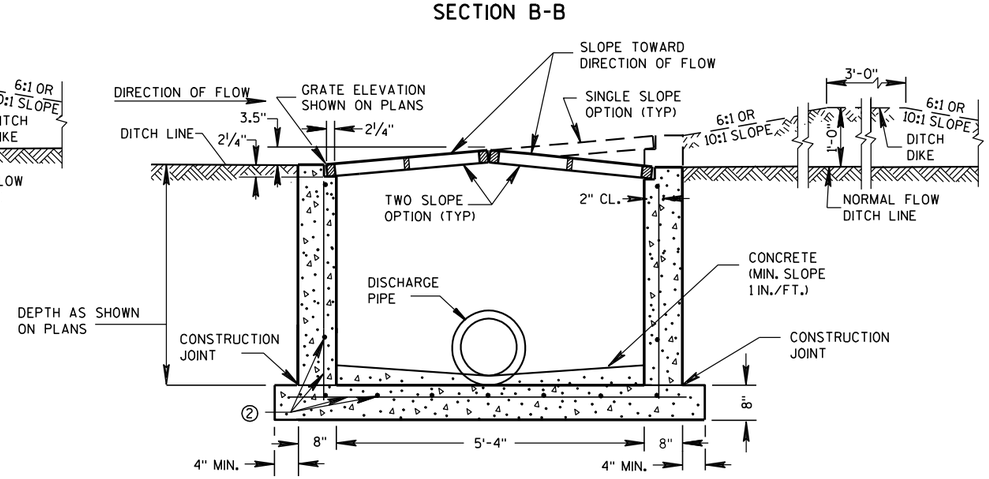
PRECAST REINFORCED CONCRETE SECTION A-A



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

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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.

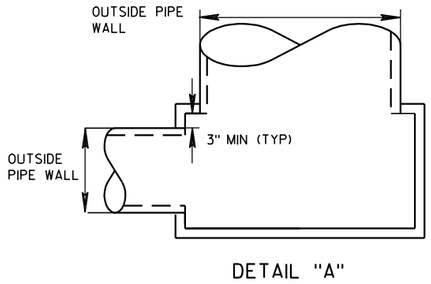
MAXIMUM INSIDE PIPE DIAMETER DETERMINED BY 3" CLEARANCE ON EACH SIDE OF THE OUTSIDE WALL OF THE PIPE. SEE DETAIL "A". ASSUMES PIPE ENTERS PERPENDICULAR TO THE STRUCTURE.

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.

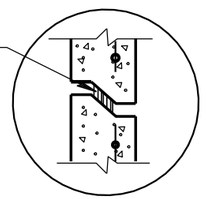
PIPE MATRIX

	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)



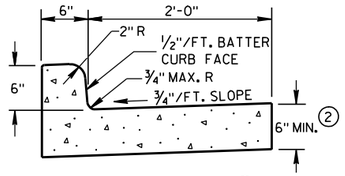
DETAIL "B"

INLETS MEDIAN 1 AND 2 GRATE

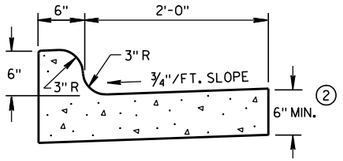
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/5/2012 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

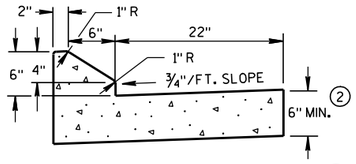
6
S.D.D. 8 C 8-1
6
S.D.D. 8 C 8-1



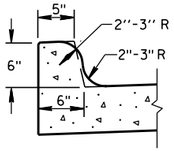
TYPES A & D (1)



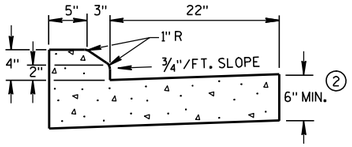
TYPES K & L (1)



6" SLOPED CURB TYPES G & J (1)

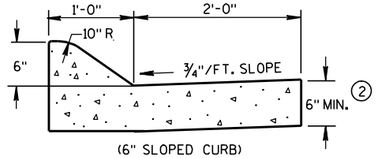


OPTIONAL CURB SHAPE FOR TYPES K & L (1)

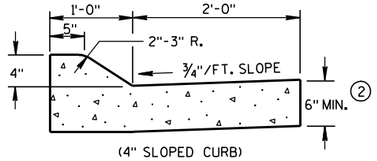


4" SLOPED CURB TYPES G & J (1)

CONCRETE CURB & GUTTER 30"

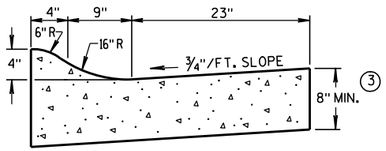


(6" SLOPED CURB)



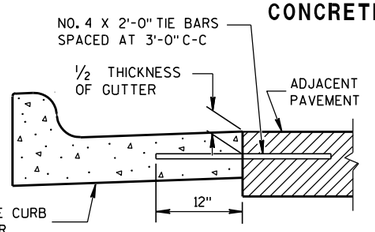
(4" SLOPED CURB)

TYPES A & D (1)

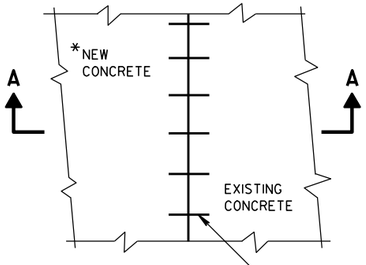


4" SLOPED CURB TYPES R & T (1) (4)

CONCRETE CURB & GUTTER 36"

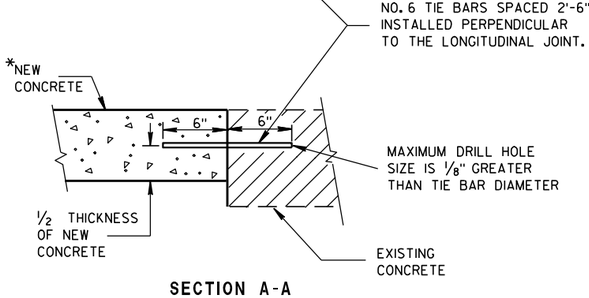


TYPICAL TIE BAR LOCATION (1)



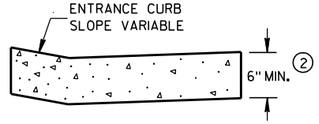
*NEW CURB & GUTTER, SURFACE DRAINS, CONCRETE PAVEMENT OR OTHER NEW CONCRETE.

PLAN VIEW



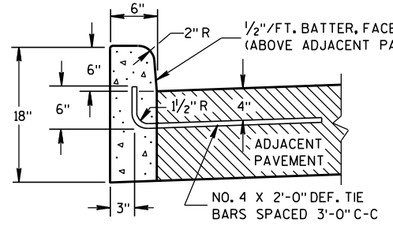
SECTION A-A

TIE BARS DRILLED INTO EXISTING PAVEMENT



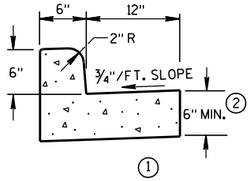
DRIVEWAY ENTRANCE CURB

(WHEN DIRECTED BY THE ENGINEER)



(1)

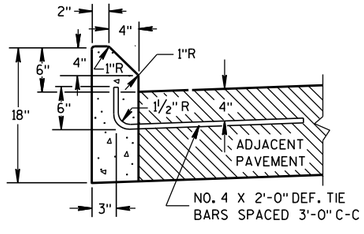
TYPES A & D



(1)

TYPES A & D

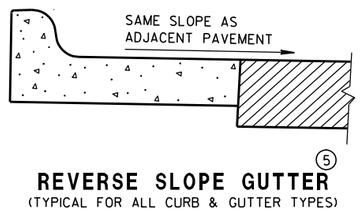
CONCRETE CURB & GUTTER 18"



(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.

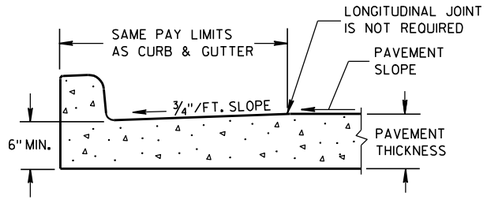
(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G, K AND R.

(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.

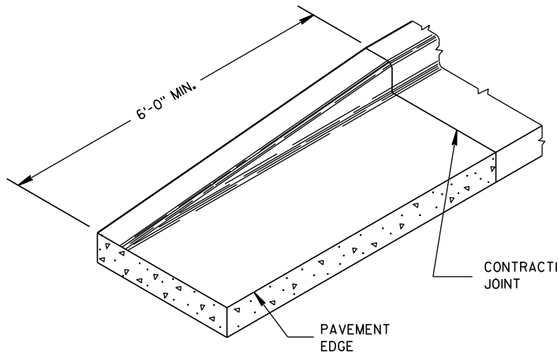
(3) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 8" MINIMUM GUTTER THICKNESS IS MAINTAINED.

(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

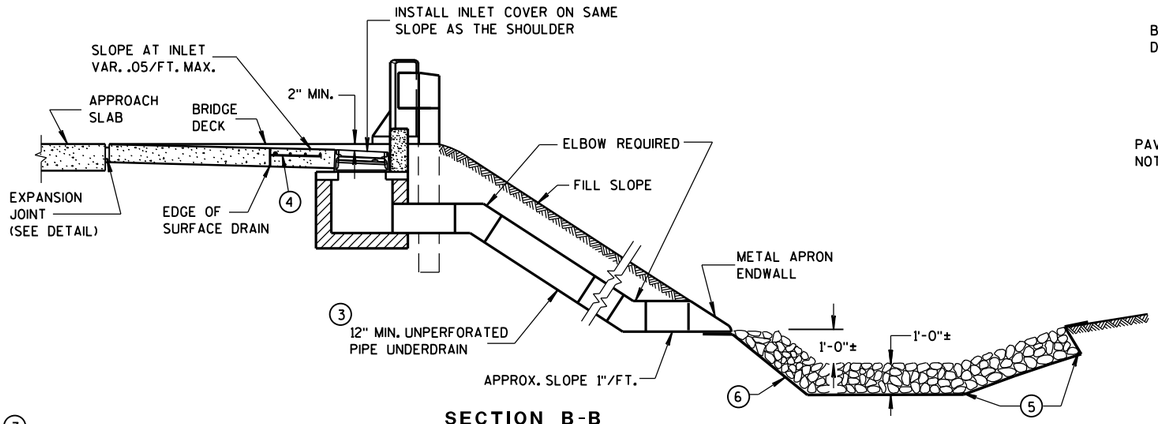
CONCRETE CURB, CONCRETE CURB & GUTTER AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

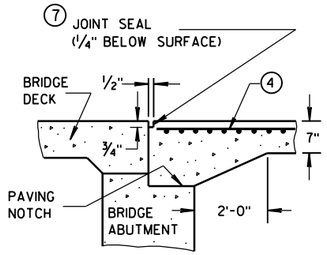
APPROVED
9/4/08 DATE
/S/ Jerry H. [illegible]
ROADWAY STANDARDS ENGINEER
FHWA

6

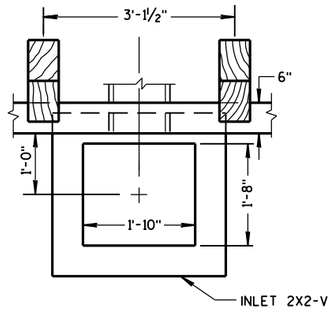
S.D.D. 8 D 1-17



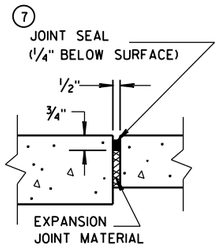
SECTION B-B



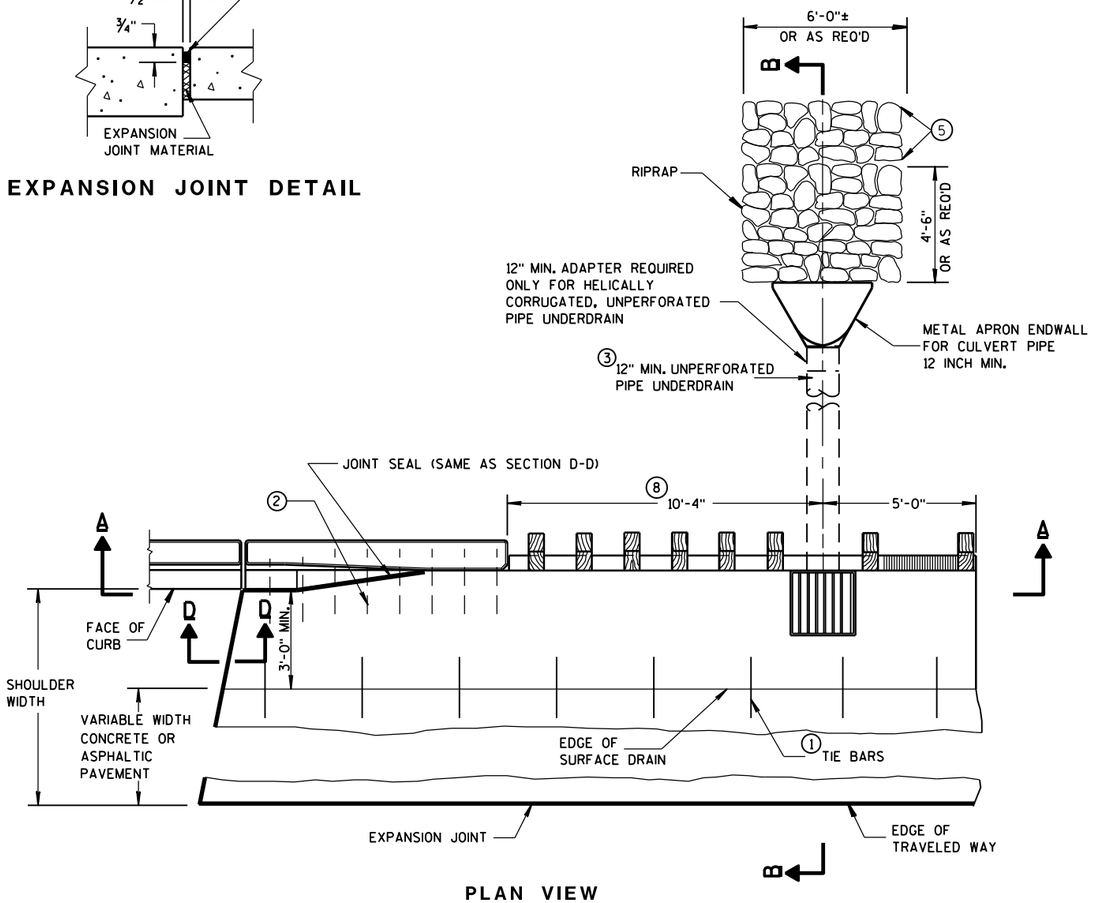
SECTION D-D



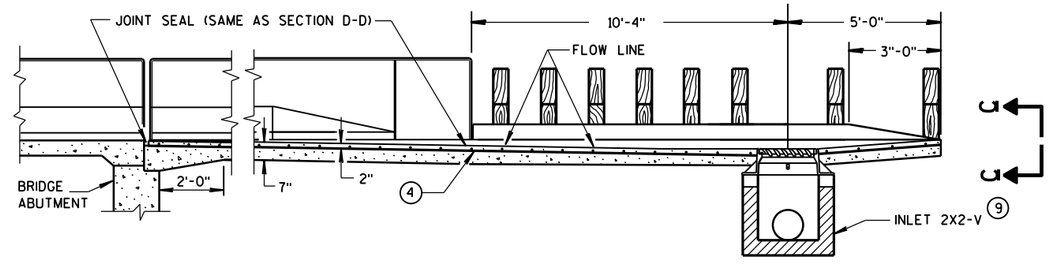
PLAN VIEW



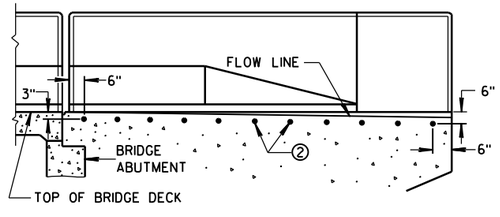
EXPANSION JOINT DETAIL



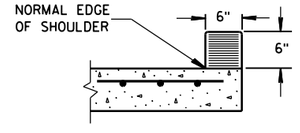
PLAN VIEW



SECTION A-A



LOCATION OF TIE BARS IN WINGWALL



SECTION C-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.

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) THE PIPE UNDERDRAIN MAY BE ANY ONE OF THE SIX MATERIALS LISTED IN THE STANDARD SPECIFICATIONS SECTION 612.2 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".

(9) SEE CURRENT STANDARD DETAIL DRAWINGS 8A5 AND 8C7 FOR DETAILS.

CONCRETE SURFACE DRAINS DROP INLET TYPE AT STRUCTURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
9/4/08 DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER
FHWA

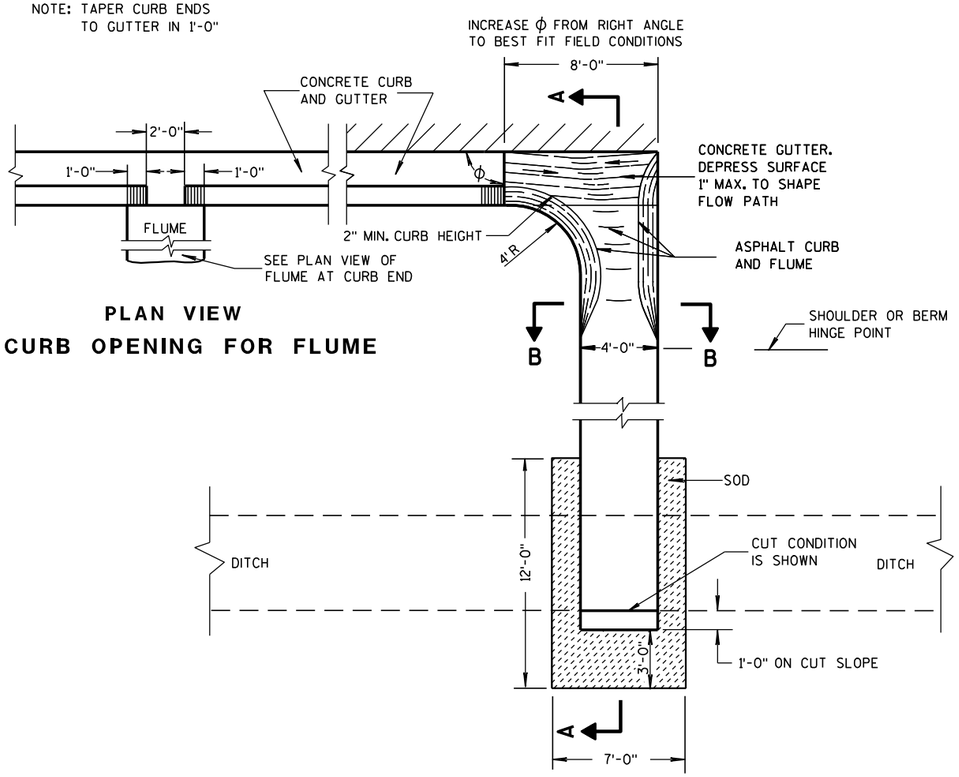
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S.D.D. 8 D 3-6

6

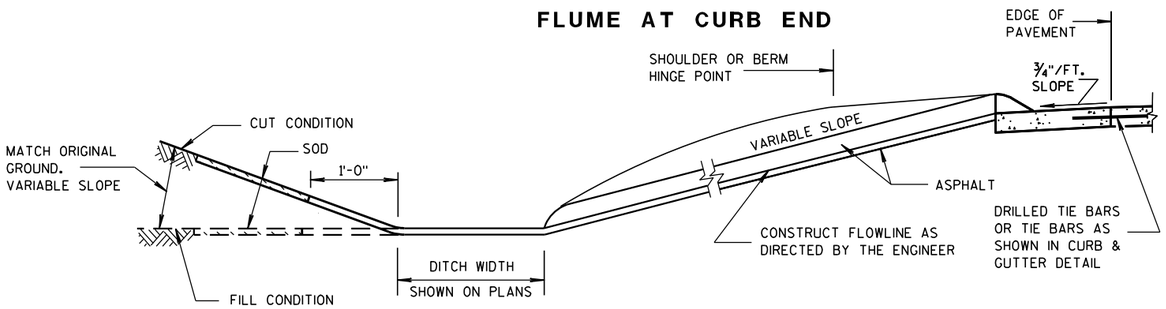
S.D.D. 8 D 3-6

ASPHALTIC FLUME

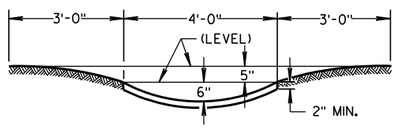


PLAN VIEW
CURB OPENING FOR FLUME

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.

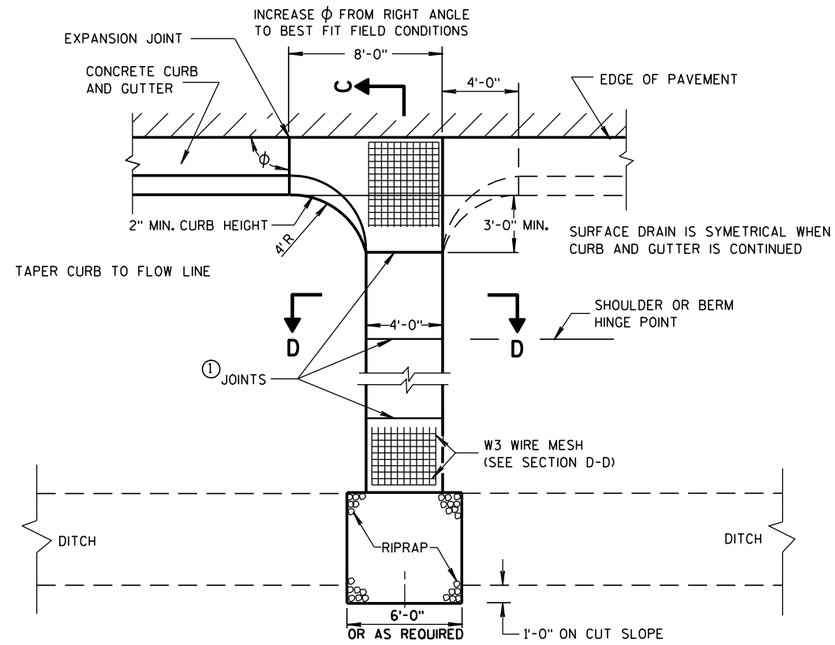
WELDED STEEL WIRE FABRIC SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

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.

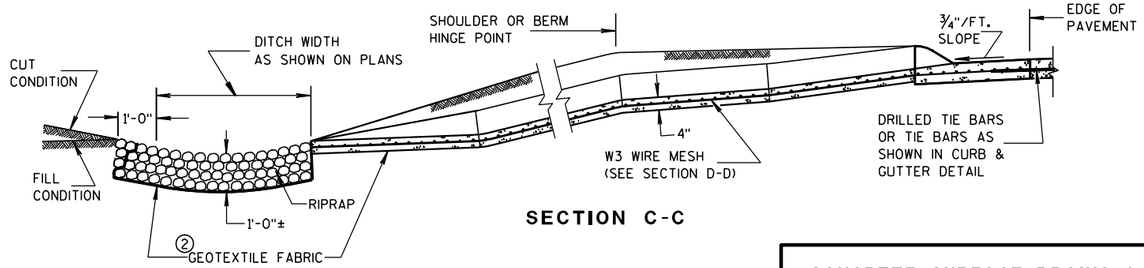
② GEOTEXTILE FABRIC TYPE "R" SHALL UNDERLAY THE FULL LENGTH AND WIDTH OF THE CONCRETE SURFACE DRAIN AND RIPRAP.

③ CONCRETE SURFACE DRAIN WITHOUT CURB AND GUTTER MAY BE USED ON BACKSLOPES WHEN SPECIFIED

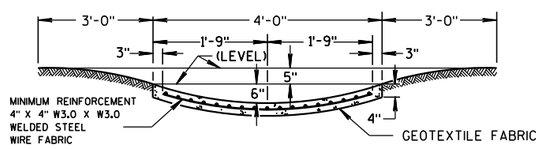
③ CONCRETE SURFACE DRAIN



PLAN VIEW



SECTION C-C



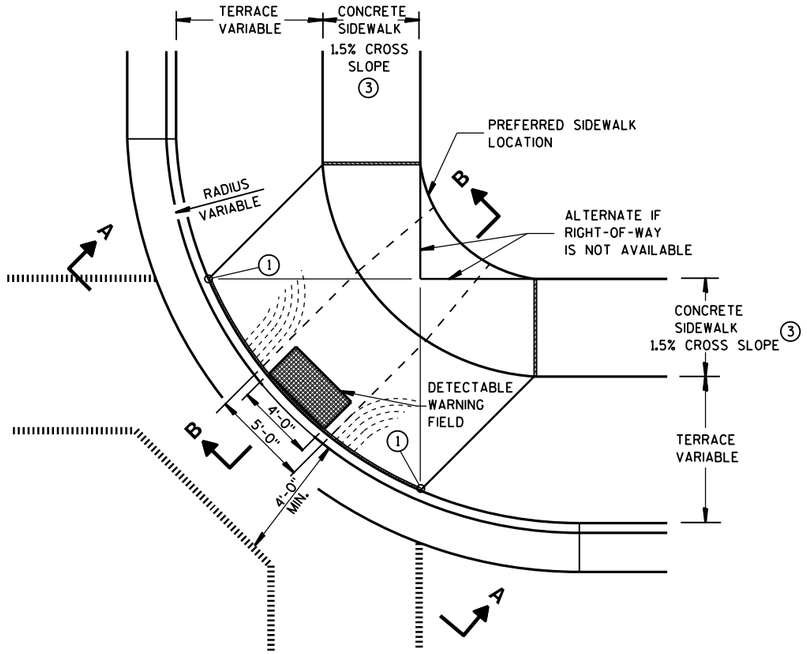
SECTION D-D

CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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9-4-08 DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER
MENT
FHWA

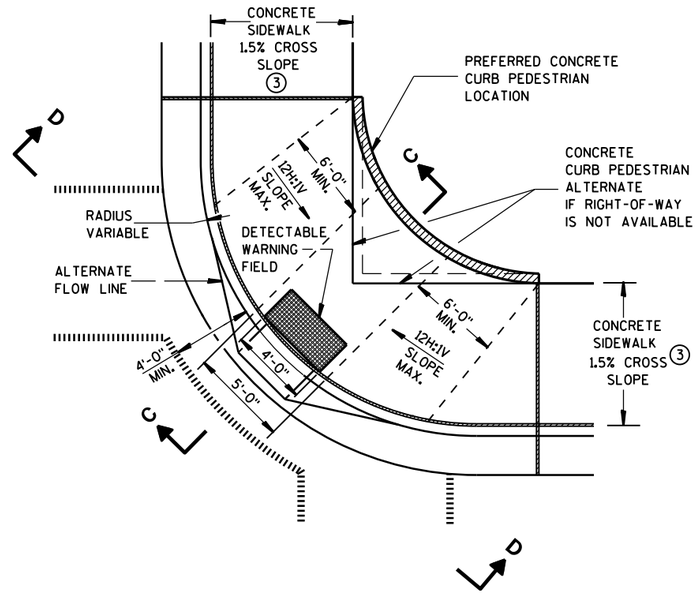
6
S.D.D. 8 D 4-5



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".

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

SURFACE TEXTURE OF THE RAMP SHALL BE OBTAINED BY COARSE BROOMING TRANSVERSE TO THE SLOPE OF THE RAMP.

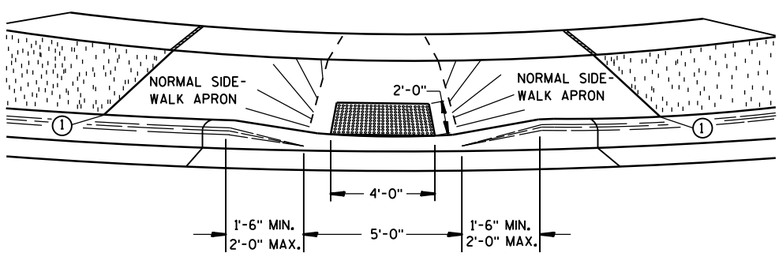
① THIS POINT IS AN EXTENSION OF OUTSIDE EDGE OF APPROACHING SIDEWALK WHERE IT MEETS THE BACK OF CONCRETE CURB.

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.

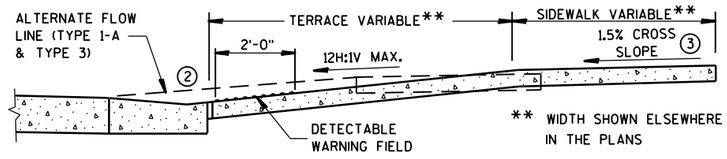
③ ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

LEGEND

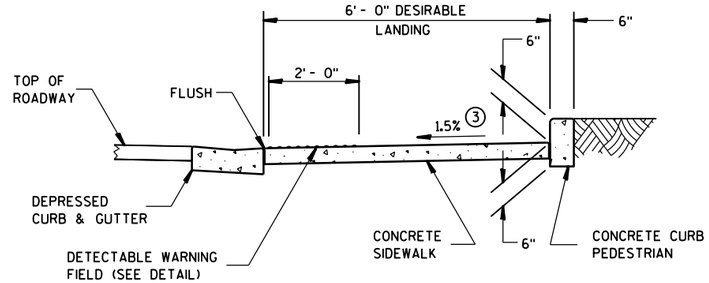
- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT



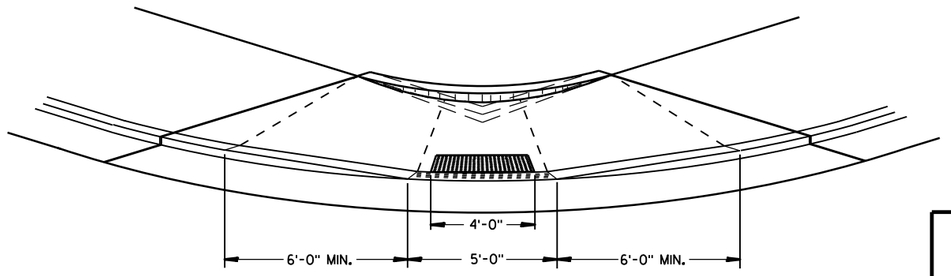
VIEW A-A



SECTION B-B



SECTION C-C



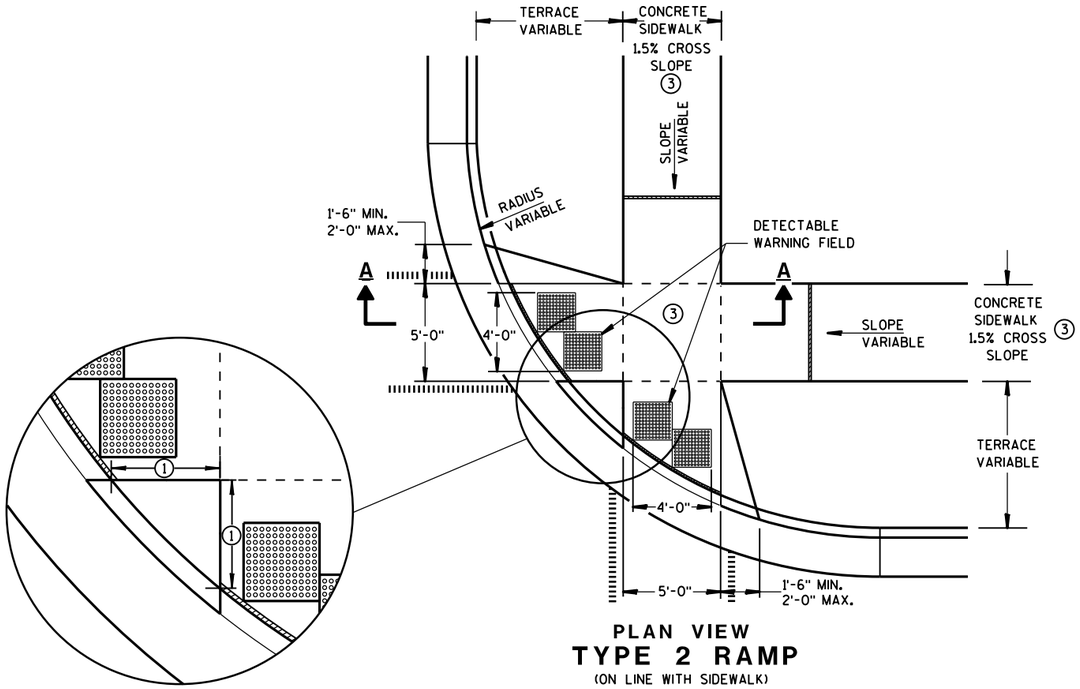
VIEW D-D

CURB RAMPS TYPES 1 AND 1-A

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

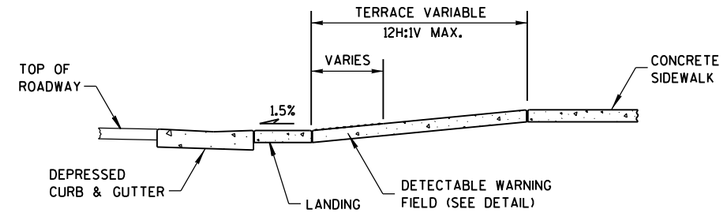
S.D.D. 8 D 5-15a



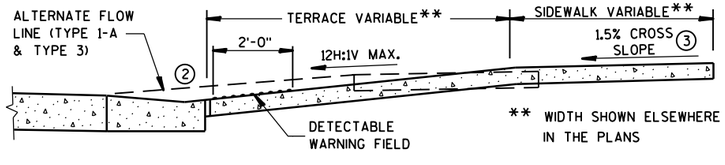
PLAN VIEW

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.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

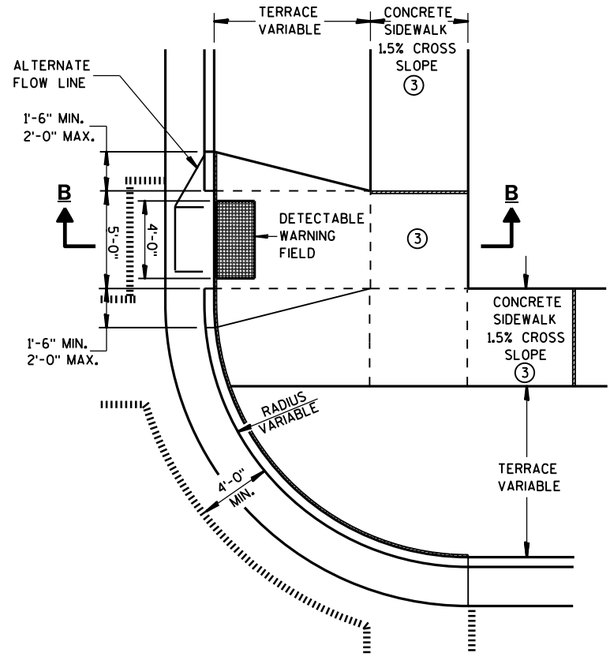
① WHEN THIS DISTANCE IS LESS THAN 6'-0" IT MAY BE DIFFICULT TO ACHIEVE A 12H:1V SLOPE, OR FLATTER, ON THE RAMP. REDUCE CURB HEIGHT IN TRIANGLE AREA TO ACHIEVE 12H:1V SLOPE, OR FLATTER, ON RAMP. 2" MINIMUM CURB HEIGHT.

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 ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

LEGEND

- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT



PLAN VIEW

TYPE 3 RAMP

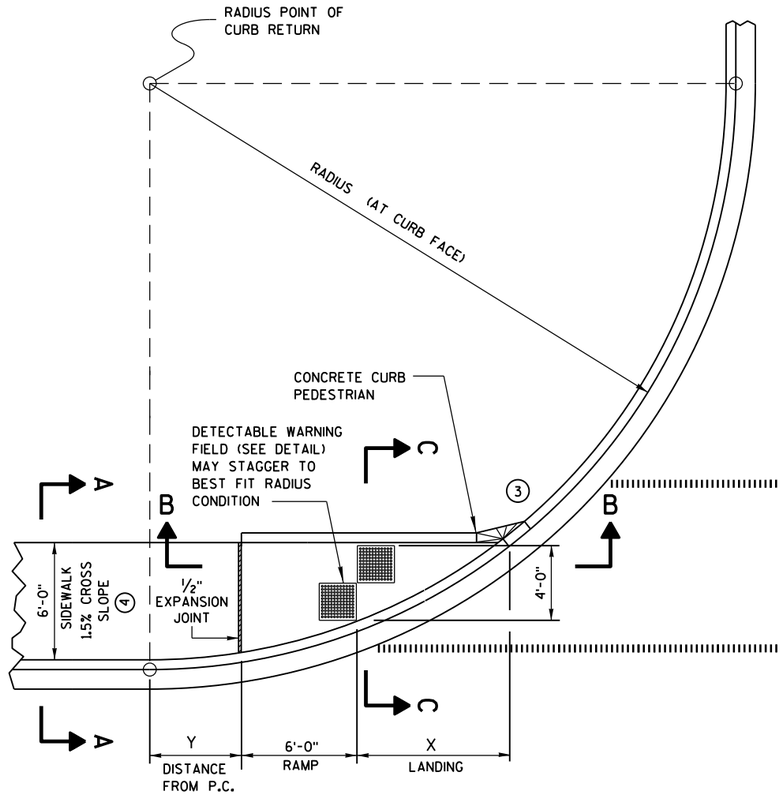
(OUTSIDE OF CROSSWALK AREA)

CURB RAMPS TYPES 2 AND 3

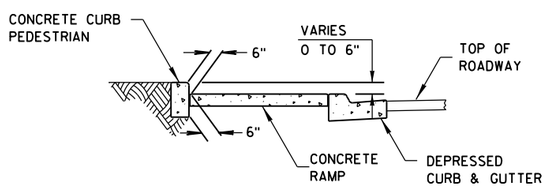
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

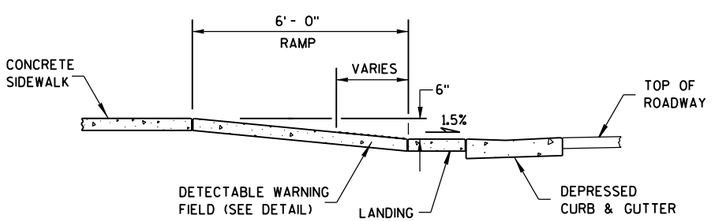
S.D.D. 8 D 5-15b



CURB RAMP TYPE 4A
PLAN VIEW



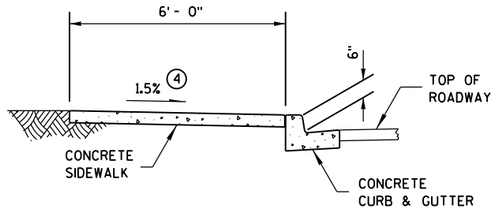
SECTION C-C FOR TYPE 4A



SECTION B-B FOR TYPE 4A

RADIUS (AT CURB FACE)	X	Y
20 FEET	6'-1¾"	2'-7¼"
30 FEET	7'-11¾"	4'-8¼"
40 FEET	9'-5¼"	6'-5"
50 FEET	10'-8¾"	7'-11¼"
60 FEET	11'-10¼"	9'-3½"

INTERMEDIATE RADII CAN BE INTERPOLATED



SECTION A-A FOR TYPE 4A

GENERAL NOTES

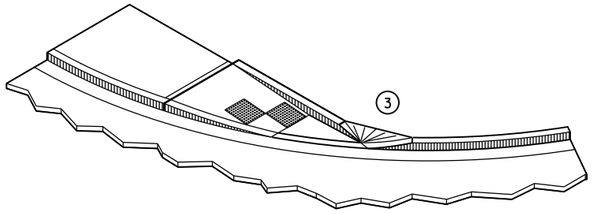
AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

RAMP SLOPES SHALL NOT BE STEEPER THAN 12:1.

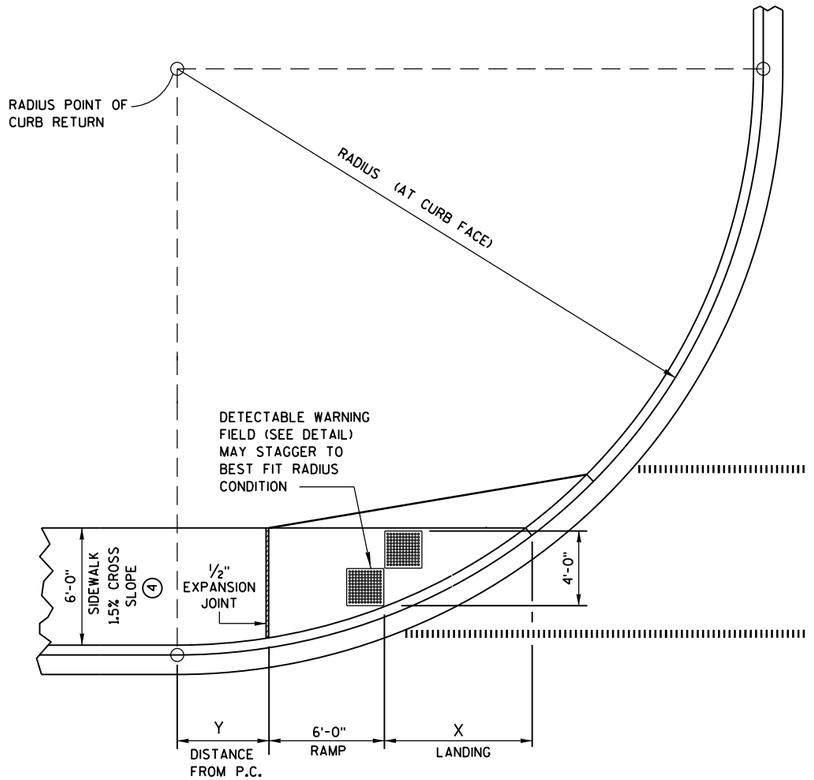
DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(3) INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS.) DO NOT MARK TRANSITION NOSE.

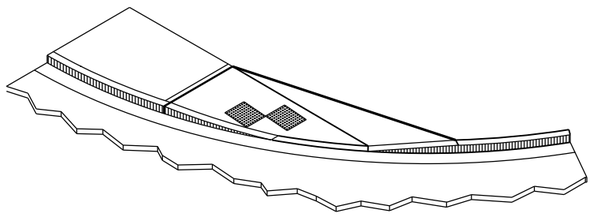
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.



ISOMETRIC VIEW FOR TYPE 4A



CURB RAMP TYPE 4A1
PLAN VIEW



ISOMETRIC VIEW FOR TYPE 4A1

LEGEND

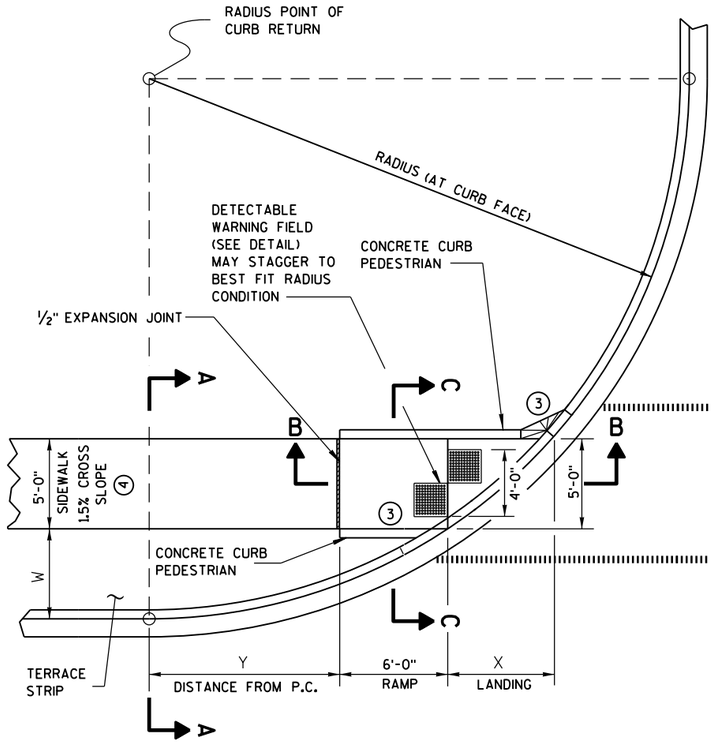
- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS
TYPES 4A AND 4A1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

S.D.D. 8 D 5-15c



CURB RAMP TYPE 4B
PLAN VIEW

LEGEND

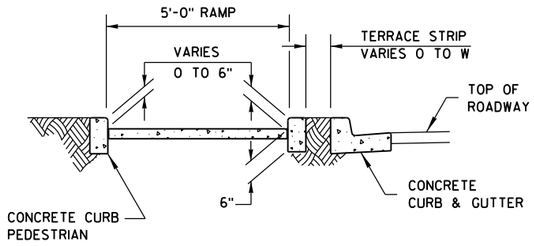
½" EXPANSION JOINT-SIDEWALK

CONTRACTION JOINT FIELD LOCATED

PAVEMENT MARKING CROSSWALK (WHITE)

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"

INTERMEDIATE RADII CAN BE INTERPOLATED



SECTION C-C FOR TYPE 4B

GENERAL NOTES

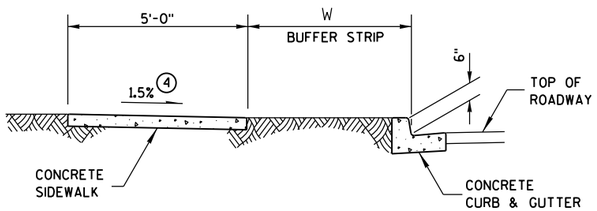
AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

RAMP SLOPES SHALL NOT BE STEEPER THAN 12:1.

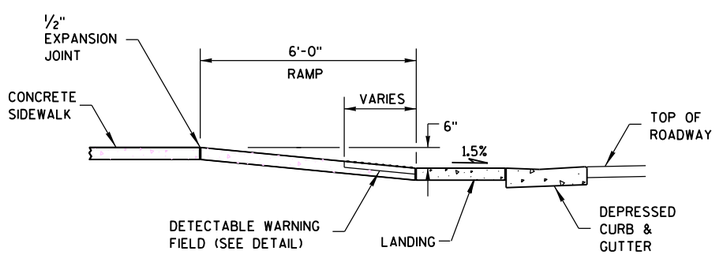
DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(3) INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS.) DO NOT MARK TRANSITION NOSE.

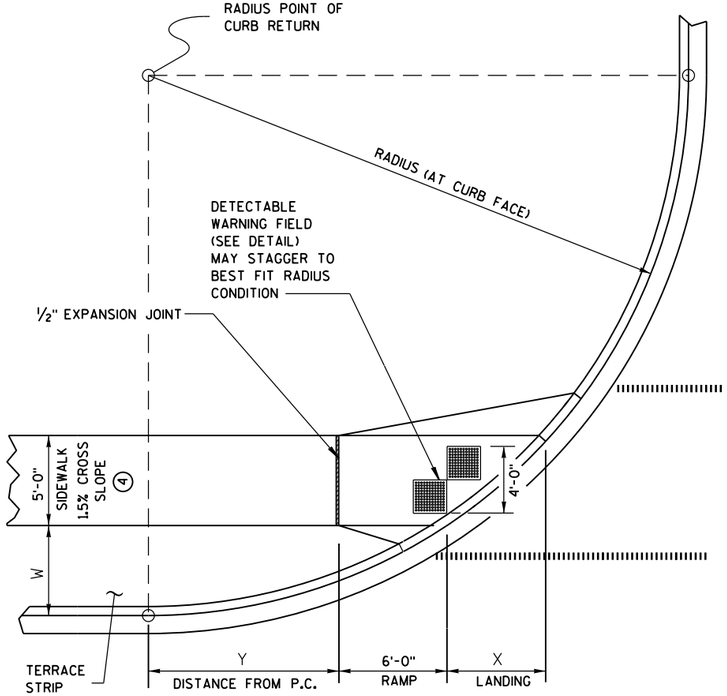
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.



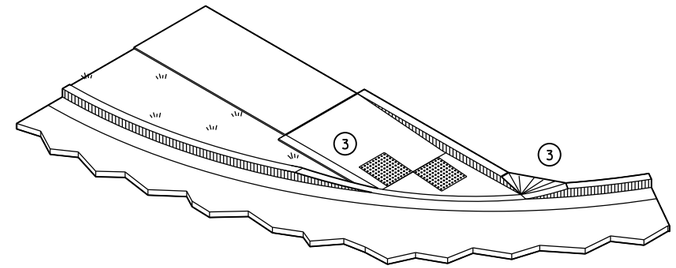
SECTION A-A FOR TYPE 4B



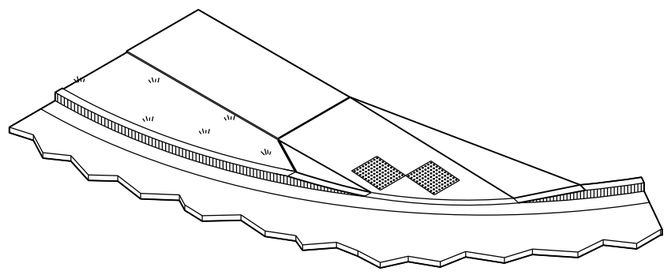
SECTION B-B FOR TYPE 4B



CURB RAMP TYPE 4B1
PLAN VIEW



ISOMETRIC VIEW FOR TYPE 4B



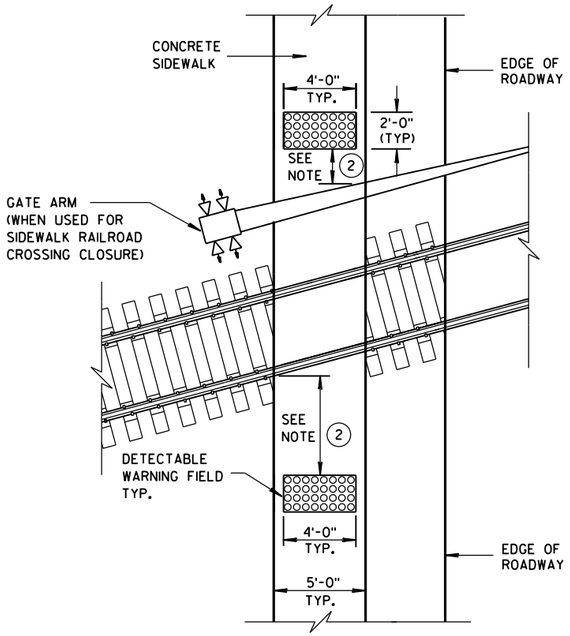
ISOMETRIC VIEW FOR TYPE 4B1

CURB RAMPS TYPE 4B AND 4B1

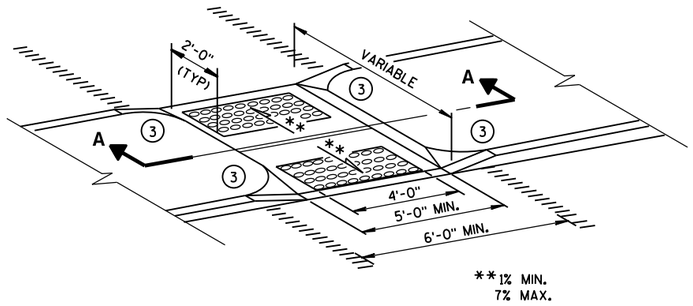
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

S.D.D. 8 D 5-15d



TYPE 8
DETECTABLE WARNINGS AT RAILROAD CROSSING



MEDIAN ISLAND
NON-ELEVATED CROSSING
TYPE 5

GENERAL NOTES

SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

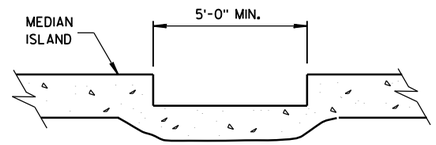
DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(1) SLOPE SIDEWALK TOWARD LANDING AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.

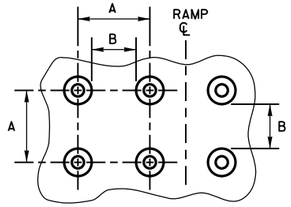
(2) THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO A RAILROAD CROSSING SHALL BE 1.5 FEET ± 0.1' FROM THE FACE OF THE GATE ARM IF THE GATE ARM EXTENDS ACROSS THE SIDEWALK. WHERE THERE IS NO PEDESTRIAN GATE, THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO THE RAILROAD CROSSING SHALL BE 15 FEET FROM THE NEAREST RAIL.

(3) INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS.) DO NOT MARK TRANSITION NOSE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.



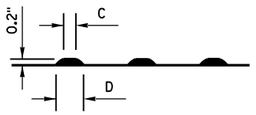
SECTION A-A



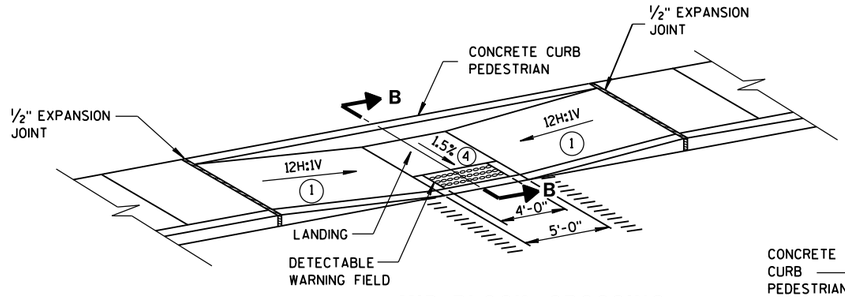
PLAN VIEW

	MIN.	MAX.
A	1.6"	2.4"
B	0.65"	1.5"
C	*	*
D	0.9"	1.4"

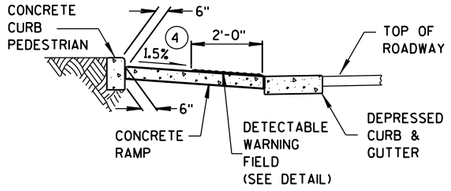
* THE C DIMENSION IS 50% TO 65% OF THE D DIMENSION.



ELEVATION VIEW

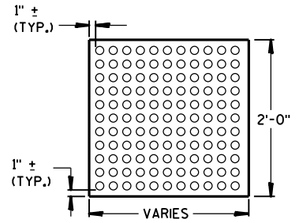


MID-BLOCK CROSSING
TYPE 7A



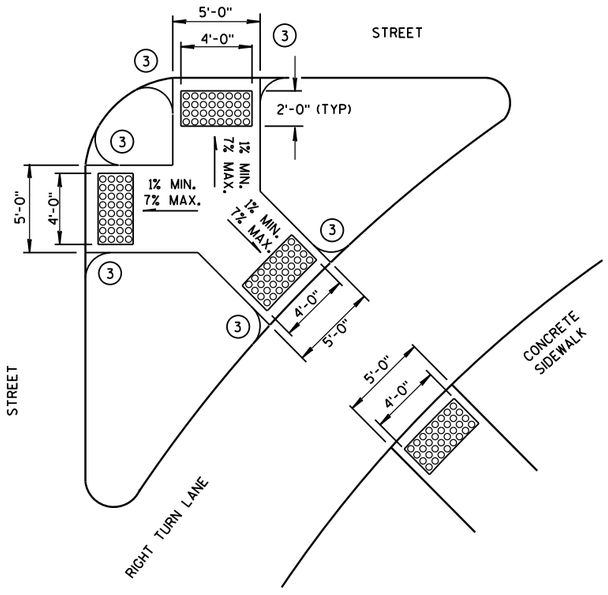
SECTION B-B

TRUNCATED DOMES
DETECTABLE WARNING PATTERN DETAIL

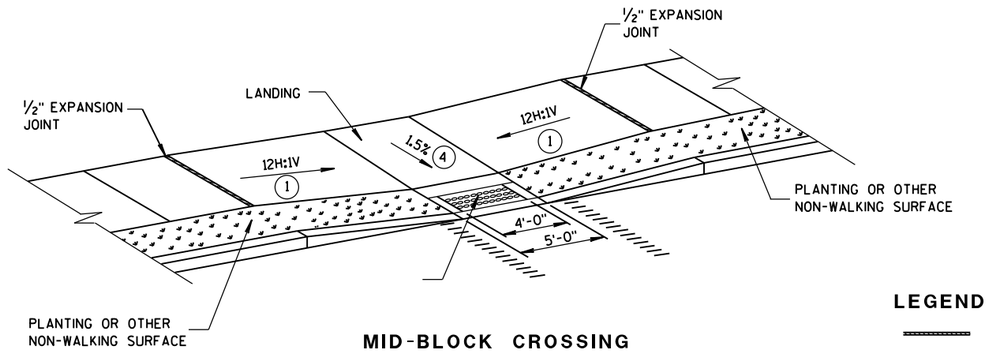


PLAN VIEW

DETECTABLE WARNING FIELD (TYPICAL)



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.

LEGEND

- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

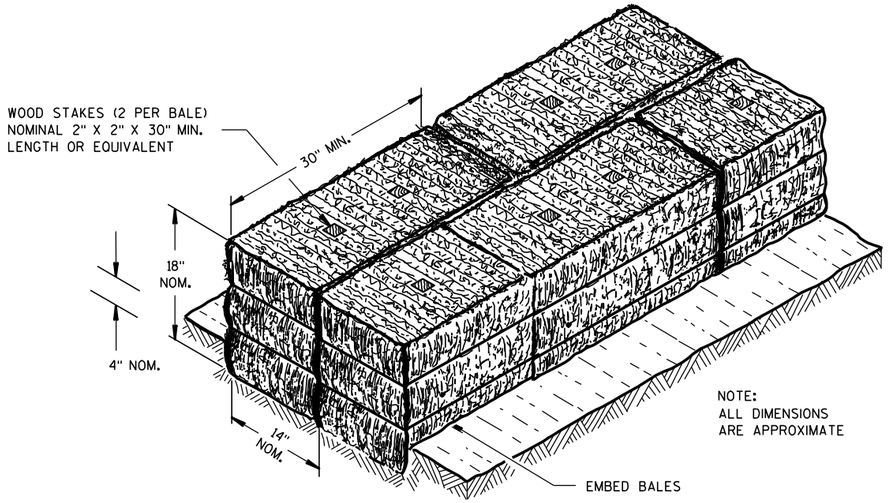
CURB RAMPS
TYPES 5, 6, 7A, 7B & 8

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

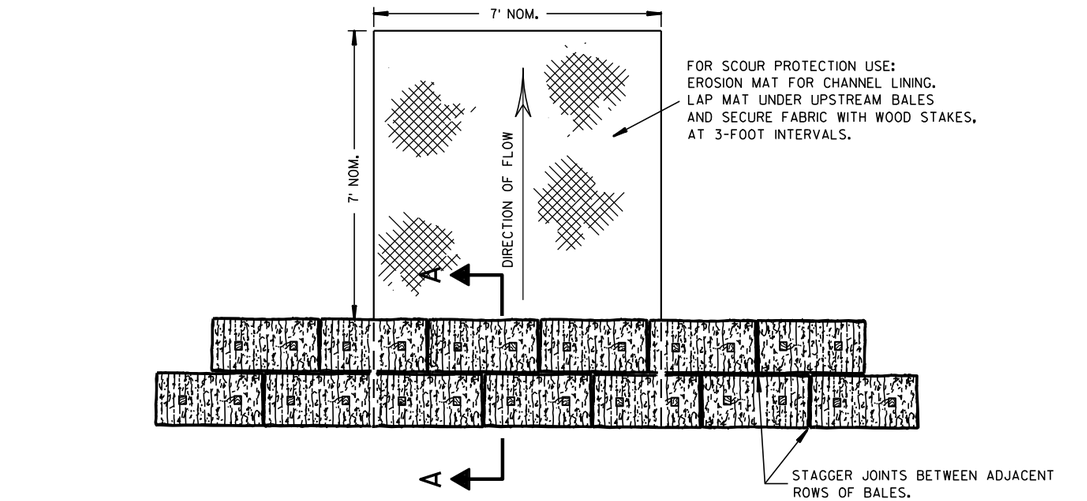
APPROVED
2-6-2013 DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

6

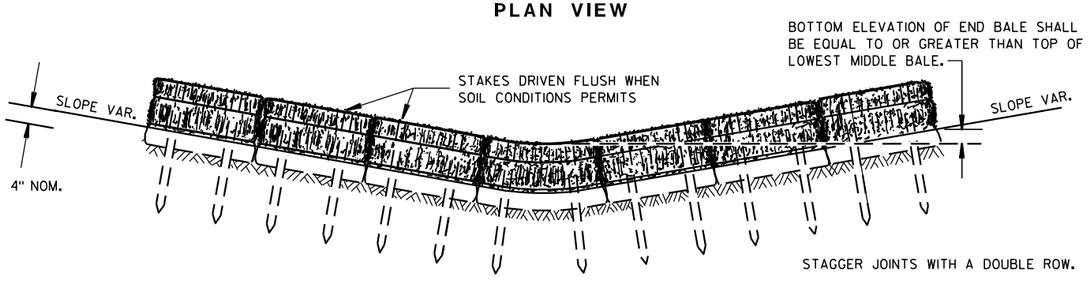
S.D.D. 8 D 5-15e



SECTION A-A



PLAN VIEW



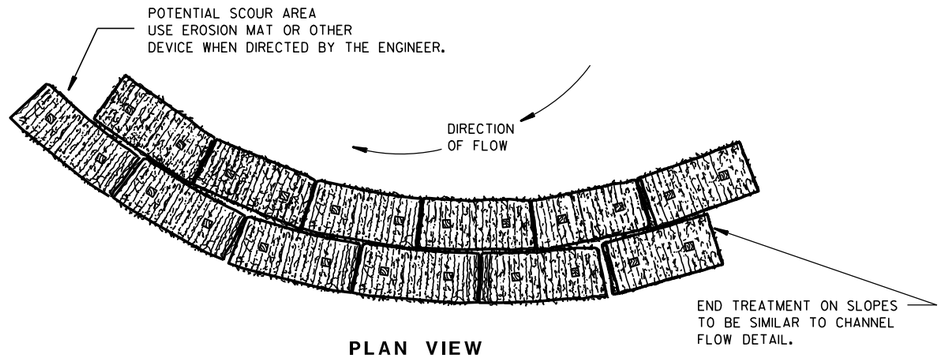
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES (1)

GENERAL NOTES

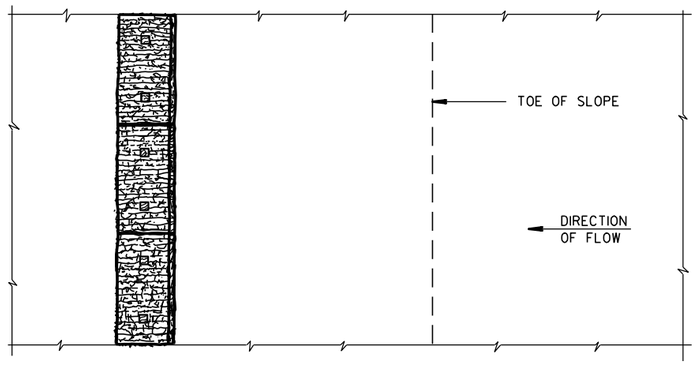
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

(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.

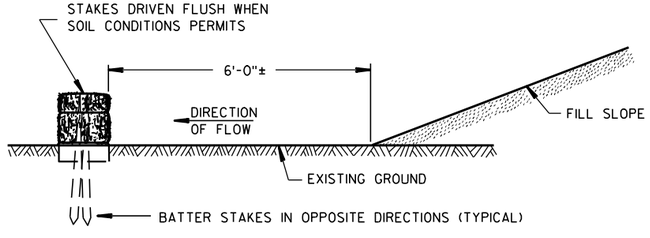


PLAN VIEW

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

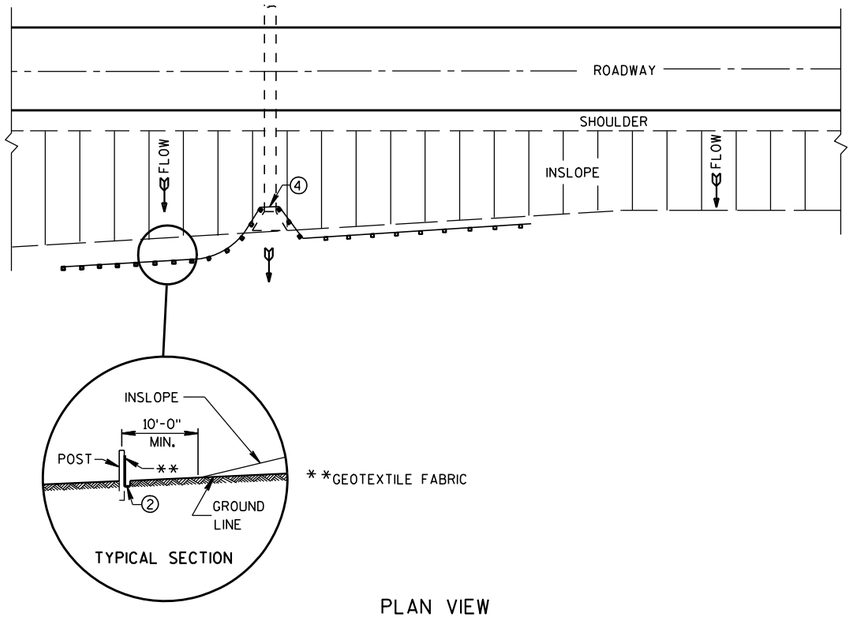
6/04/02 — DATE

/S/ Beth Cannestra — CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

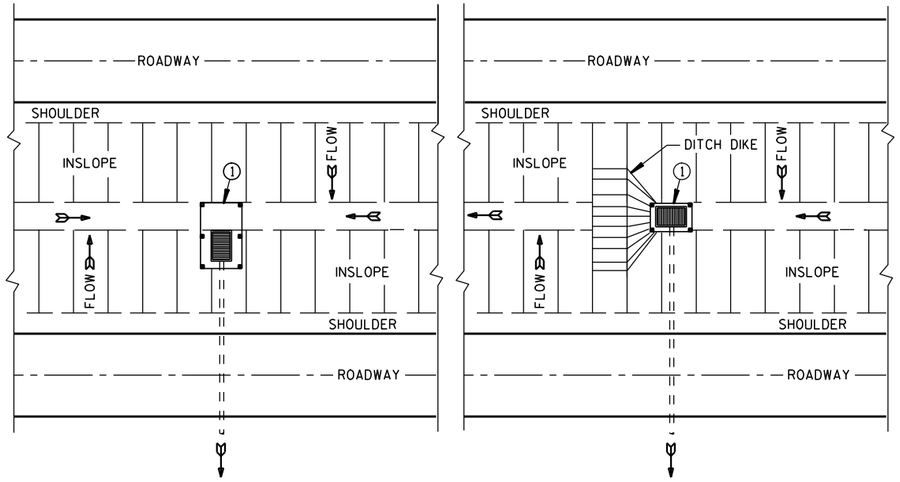
6

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.

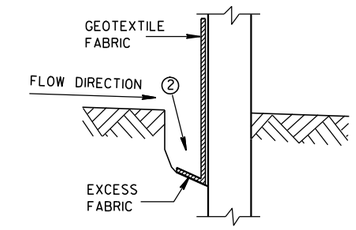
① HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.

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.

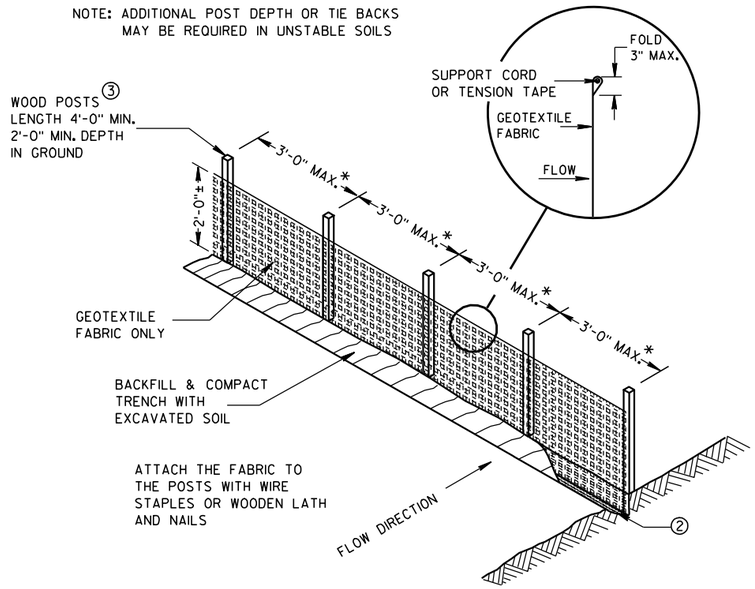
③ WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OF OAK OR HICKORY.

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.

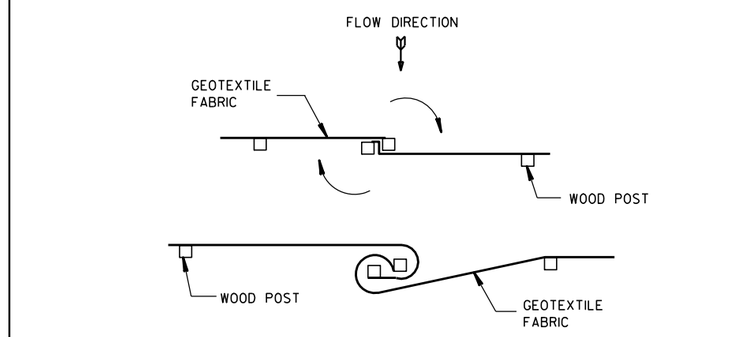


TRENCH DETAIL

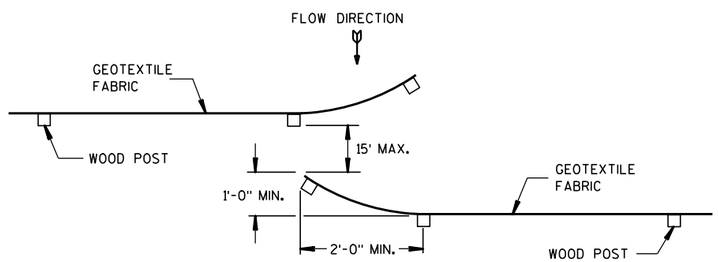


*NOTE: 8'-0" POST SPACING ALLOWED IF A WOVEN GEOTEXTILE FABRIC IS USED.

SILT FENCE

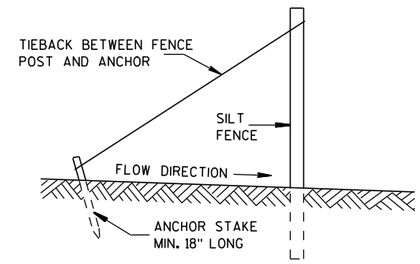


TWIST METHOD



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

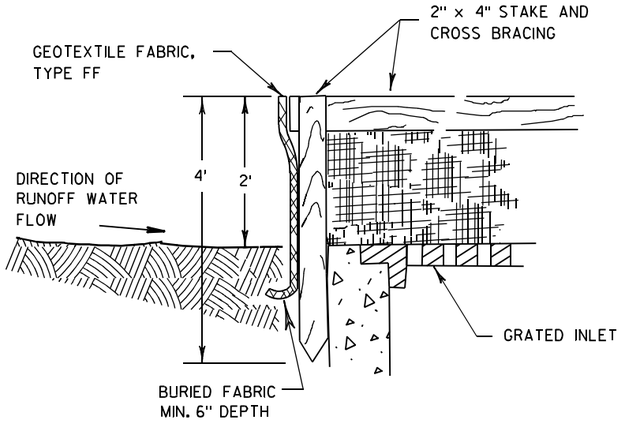
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

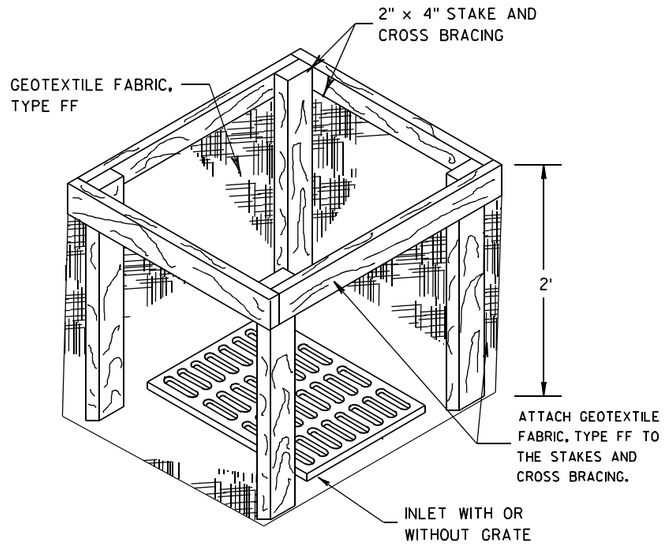
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S.D.D. 8 E 9-6

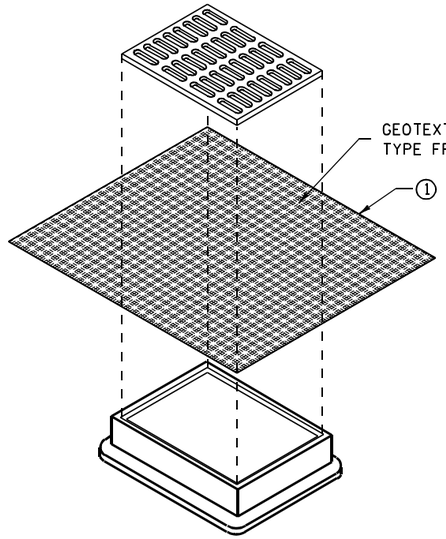
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S.D.D. 8 E 9-6



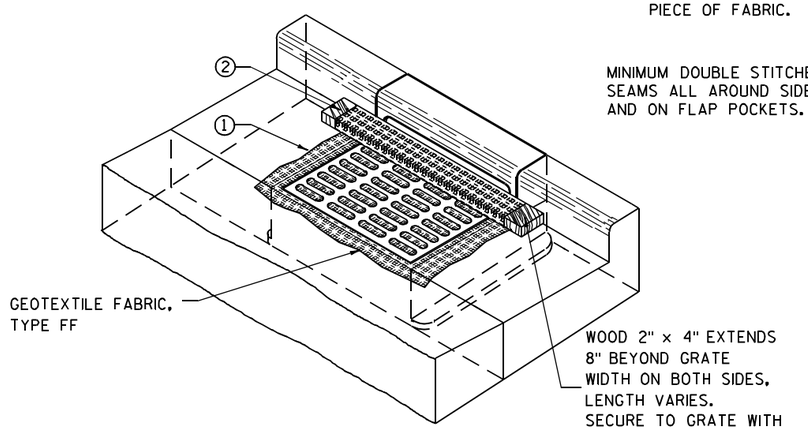


INLET PROTECTION, TYPE A

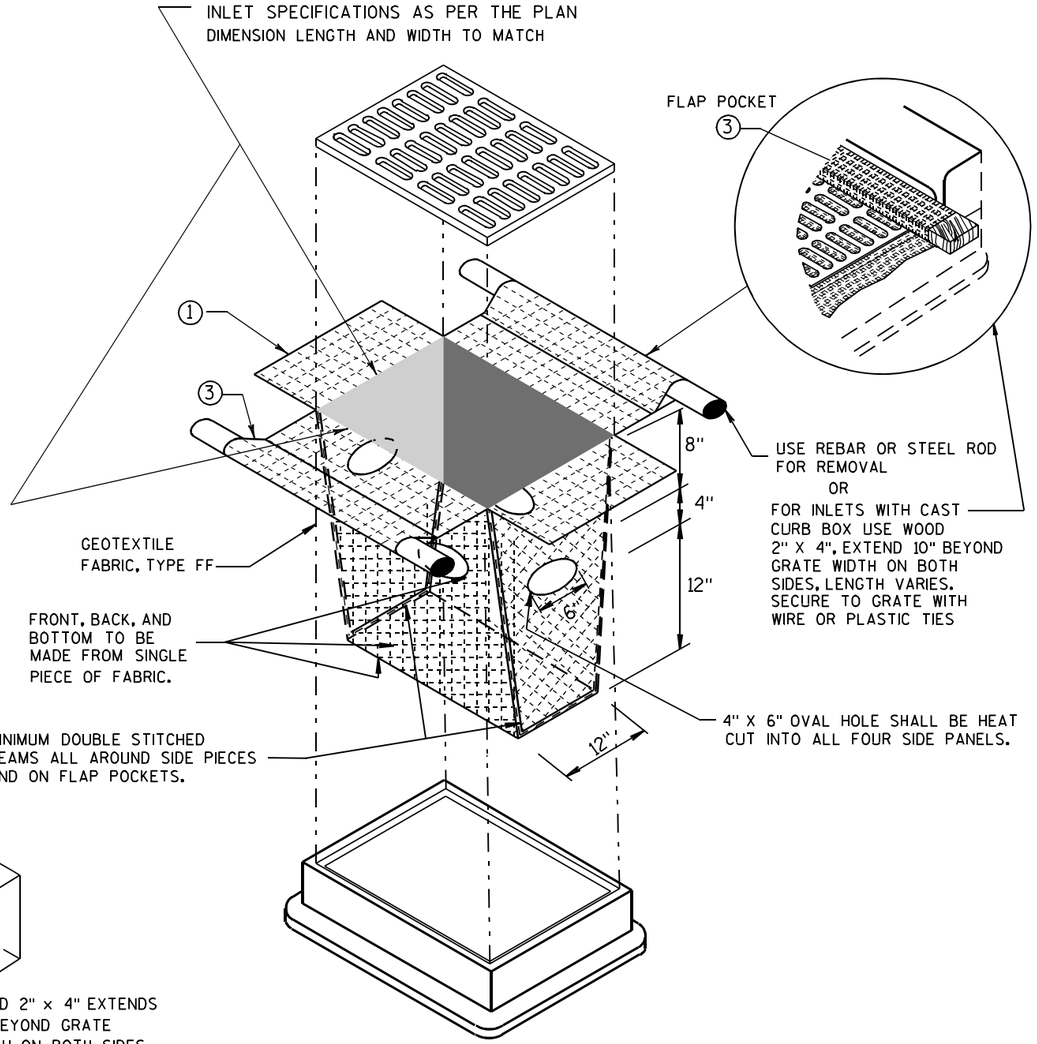


INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

(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

6

S.D.D. 8 E 10-2

6

S.D.D. 8 E 10-2

METAL APRON ENDWALLS

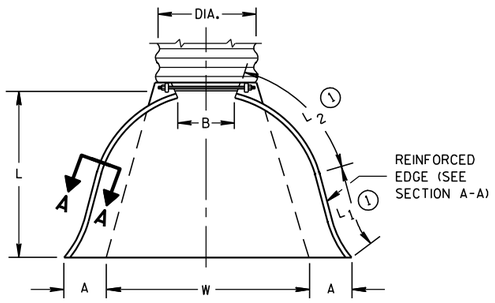
PIPE DIA. (IN.)	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4	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

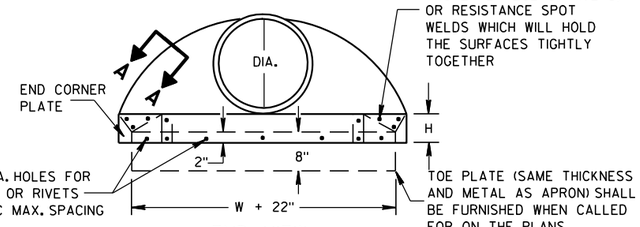
REINFORCED CONCRETE APRON ENDWALLS

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

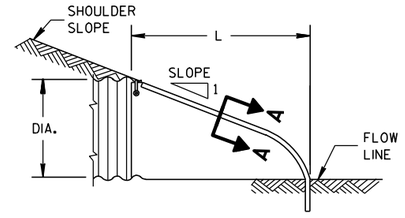
*MINIMUM
**MAXIMUM



PLAN VIEW

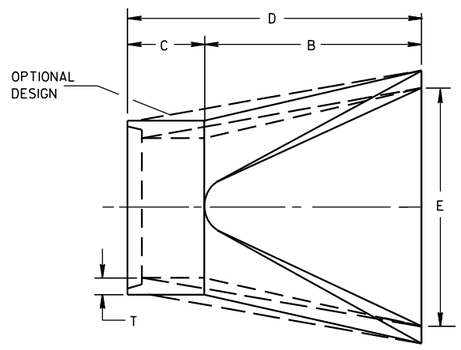


END VIEW

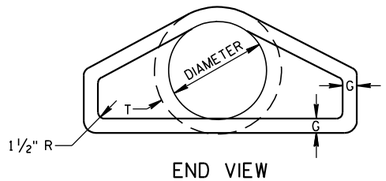


SIDE ELEVATION

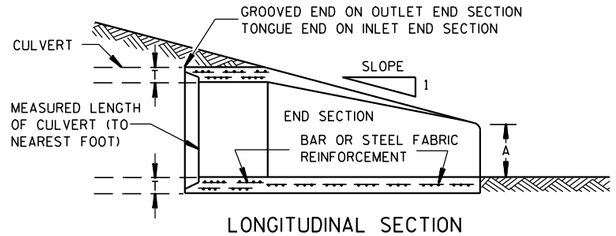
METAL ENDWALLS



PLAN

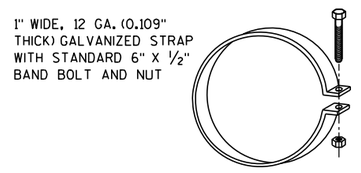


END VIEW



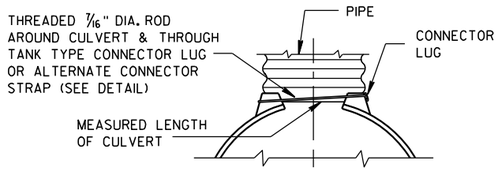
LONGITUDINAL SECTION

CONCRETE ENDWALLS

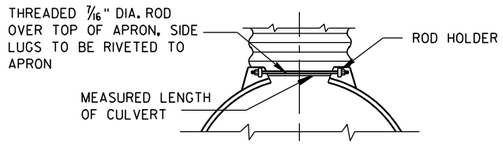


ALTERNATE FOR TYPE 1 CONNECTION

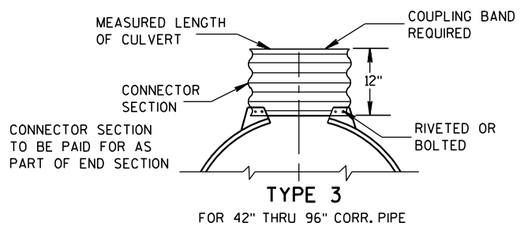
END SECTION CONNECTOR STRAP



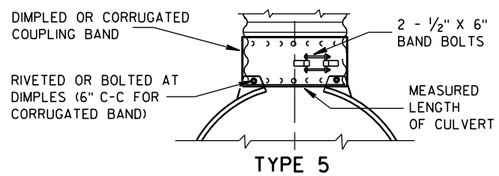
TYPE 1
FOR 12" THRU 24" CORR. PIPE



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

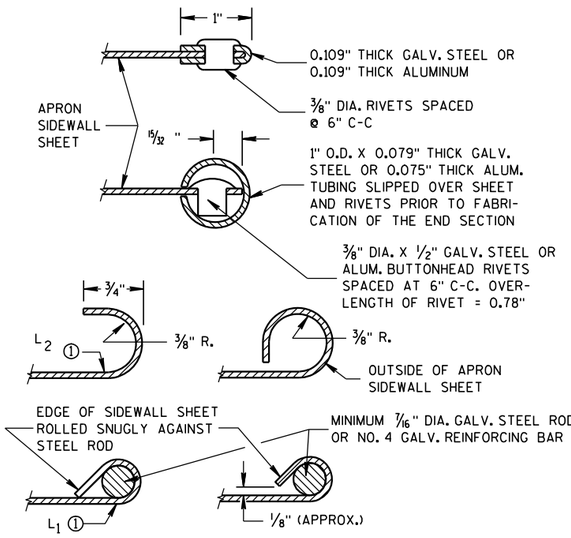
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

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.

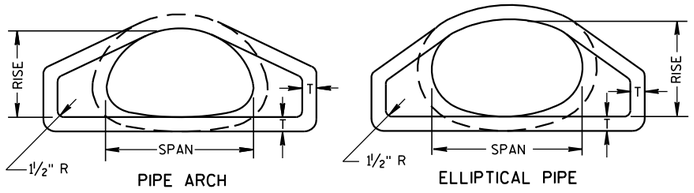
WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

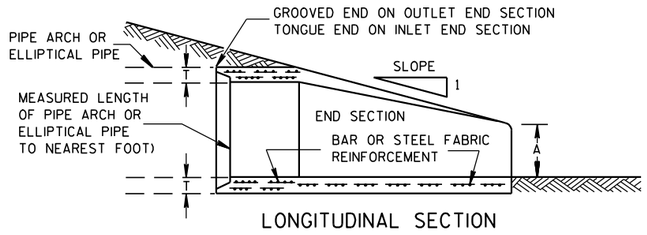
APRON ENDWALLS FOR CULVERT PIPE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

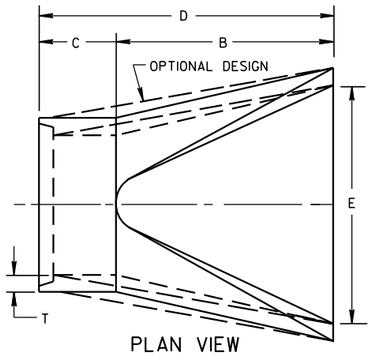
APPROVED
11/30/94 DATE
/S/ Rory L. Rhinesmith
CHIEF ROADWAY DEVELOP 353 NEER
FHWA



END VIEW

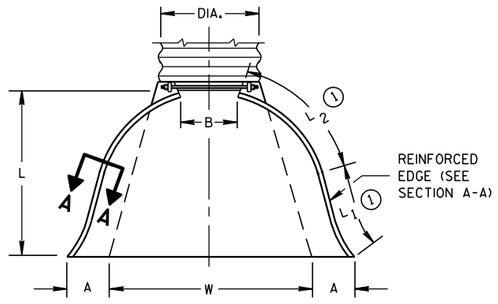


LONGITUDINAL SECTION

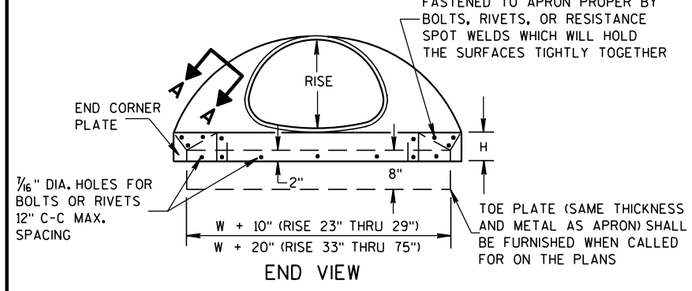


PLAN VIEW

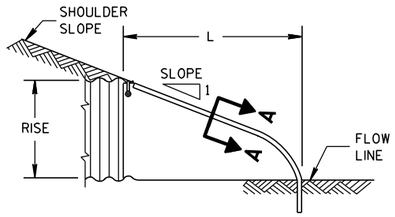
CONCRETE ENDWALLS



PLAN VIEW

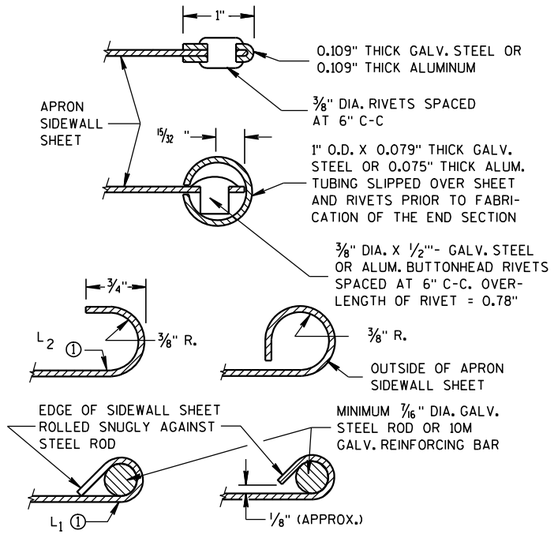


END VIEW



SIDE ELEVATION

METAL ENDWALLS



SECTION A-A

2- 2/3" X 1/2" CORRUGATIONS

EQUIV. DIA. (Inches)	(Inches) SPAN	(Inches) RISE	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
15	17	13	.064	.060	7	9	6	19	14	16	30	2½ to 1	1 Pc.
18	21	15	.064	.060	7	10	6	23	14	19⅜	36	2½ to 1	1 Pc.
21	24	18	.064	.060	8	12	6	28	18	21¾	42	2½ to 1	1 Pc.
24	28	20	.064	.060	9	14	6	32	18	27½	48	2½ to 1	1 Pc.
30	35	24	.079	.075	10	16	6	39	18	37⅝	60	2½ to 1	1 Pc.
36	42	29	.079	.075	12	18	8	46	24	45⅜	75	2½ to 1	1 Pc.
42	49	33	.109	.105	13	21	9	53	24	54¾	85	2½ to 1	2 Pc.
48	57	38	.109	.105	18	26	12	63	24	68	90	2½ to 1	3 Pc.
54	64	43	.109	.105	18	30	12	70	24	72¾	102	2¼ to 1	3 Pc.
60	71	47	.109*	.105*	18	33	12	77	30	82¼	114	2¼ to 1	3 Pc.
66	77	52	.109*	.105*	18	36	12	77	—	—	126	2 to 1	3 Pc.
72	83	57	.109*	.105*	18	39	12	77	—	—	138	2 to 1	3 Pc.

3" X 1" CORRUGATIONS

EQUIV. DIA. (Inches)	(Inches) SPAN	(Inches) RISE	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
48	53	41	.109	.105	18	26	12	63	24	72¾	90	2½ to 1	2 Pc.
54	60	46	.109	.105	18	30	12	70	30	82¼	102	2 to 1	2 Pc.
60	66	51	.109*	.105*	18	33	12	77	—	—	114	1½ to 1	3 Pc.
66	73	55	.109*	.105*	18	36	12	77	—	—	126	1½ to 1	3 Pc.
72	81	59	.109*	.105*	18	39	12	77	—	—	138	2 to 1	3 Pc.
78	87	63	.109*	.105*	22	38	12	77	—	—	148	1½ to 1	3 Pc.
84	95	67	.109*	.105*	22	34	12	77	—	—	162	1½ to 1	3 Pc.
90	103	71	.109*	.105*	22	38	12	77	—	—	174	1½ to 1	3 Pc.
96	112	75	.109*	.105*	24	40	12	77	—	—	174	1½ to 1	3 Pc.

NOTE: ALL SPLICES TO BE LAP RIVETED OR BOLTED.

* EXCEPT CENTER PANEL SEE GENERAL NOTES

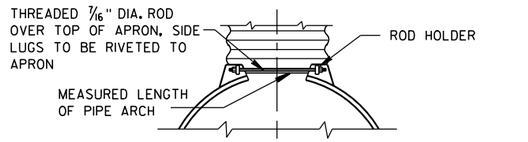
REINFORCED CONCRETE PIPE ARCH

EQUIV. DIA. (Inches)	DIMENSIONS (Inches) ** SPAN	** RISE	T	A	B	C	D	E	APPROX. SLOPE
24	29	18	3	8½	39	33	72	48	3 to 1
30	36	22	3½	9½	50	46	96	60	3 to 1
36	44	27	4	11⅛	60	36	96	72	3 to 1
42	51	31	4½	15 13/16	60	36	96	78	3 to 1
48	58	36	5	21	60	36	96	84	3 to 1
54	65	40	5½	25½	60	36	96	90	3 to 1
60	73	45	6	31	60	36	96	96	3 to 1
72	88	54	7	31	60	39	99	120	2 to 1
84	102	62	8	28½	83	19	102	144	2 to 1

REINFORCED CONCRETE ELLIPTICAL PIPE

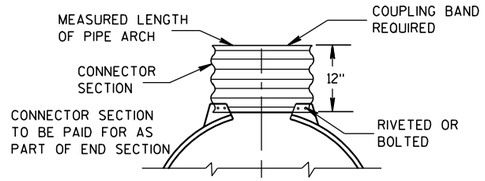
EQUIV. DIA. (Inches)	DIMENSIONS (Inches) ** SPAN	** RISE	T	A	B	C	D	E	APPROX. SLOPE
24	30	19	3¼	8½	39	33	72	48	3 to 1
30	38	24	3¾	9½	54	18	72	60	3 to 1
36	45	29	4½	11⅛	60	24	84	72	2½ to 1
42	53	34	5	15¾	60	36	96	78	2½ to 1
48	60	38	5½	21	60	36	96	84	2½ to 1
54	68	43	6	25½	60	36	96	90	2½ to 1
60	76	48	6½	30	60	36	96	96	2½ to 1

**NOMINAL SIZE



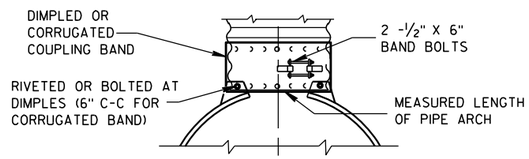
TYPE 2

FOR 17" X 13" THRU 112" X 75" PIPE ARCH



TYPE 3

FOR 64" X 43" THRU 112" X 75" PIPE ARCH



TYPE 5

ALTERNATE FOR:

ALL SIZES CORRUGATED PIPE ARCHES

NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL, AND CORRUGATED BAND FITS INSIDE ENDWALL.

CONNECTION DETAILS

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 APRON ENDWALLS MAY NOT BE USED WITH GALVANIZED STEEL OR ALUMINUM CULVERT PIPE OR VISE VERSA. GALVANIZED STEEL OR ALUMINUM APRON ENDWALLS SHALL NORMALLY BE INSTALLED ON CULVERT PIPE OF THE SAME METAL.

ALL THREE PIECE STEEL APRON ENDWALLS FOR 66" X 51" PIPE ARCH AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 66" X 51" PIPE ARCH 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 ARCH 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 77" X 52" THROUGH 112" X 75" 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 ARCH SIZES UP TO 73" X 55" A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR PIPE ARCH AND ELLIPTICAL PIPE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

11/30/94 — DATE

/S/ Rory L. Rhinesmith — CHIEF ROADWAY DEVELOPMENT ENGINEER

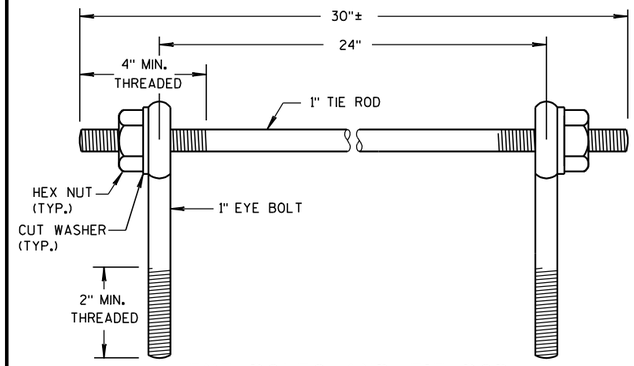
FHWA

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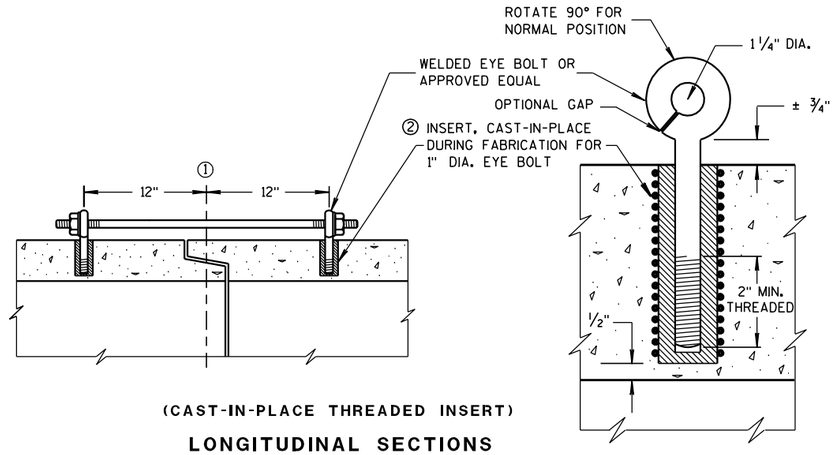
S.D.D. 8 F 2-1

6

S.D.D. 8 F 2-1



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.

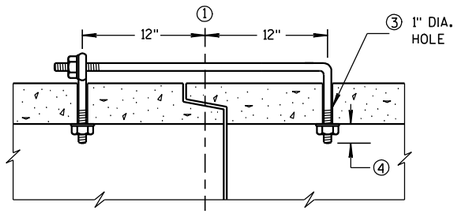
② THE INSIDE OF THE THREADED INSERTS SHALL BE CLEAN TO ALLOW THE INSERTION OF THREADED EYE BOLTS.

③ HOLES SHALL BE CAST-IN-PLACE OR DRILLED 12 INCHES FROM ℄ OF TONGUE AND GROOVE.

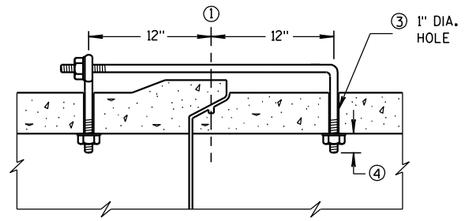
④ BOLT PROJECTION INSIDE OF PIPE SHALL NOT EXCEED 2 INCHES.

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)

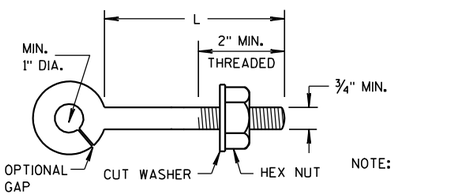


(MODIFIED BELL PIPE)

LONGITUDINAL SECTION

EYE BOLT DIMENSION TABLE

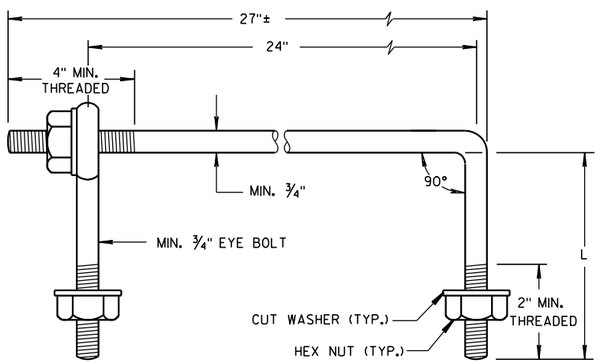
PIPE SIZE	L = LENGTH	
	TONGUE & GROOVE PIPE	MODIFIED BELL PIPE
18" TO 24"	4 1/2"	6 1/4"
30"	5"	7"
36"	5 1/2"	7"
42"	6"	
48"	6 1/2"	
60"	7 1/2"	
66"	8"	



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

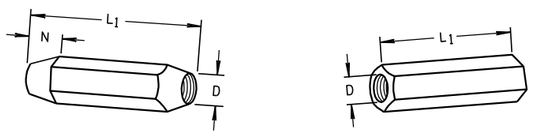
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

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

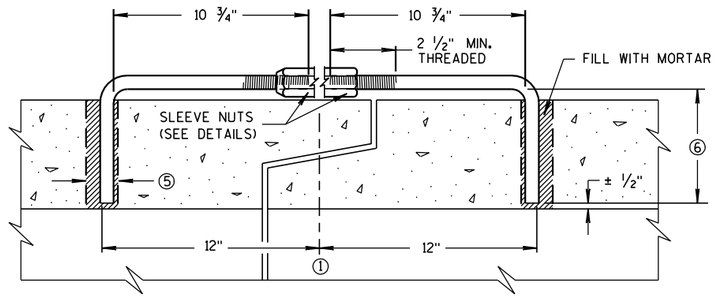
DIMENSIONS SHOWN ARE IN INCHES



TAPERED PLAIN

RIGHT AND LEFT THREADS

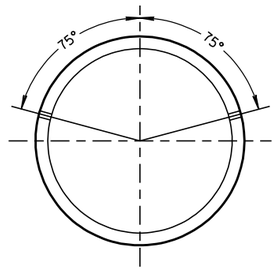
SLEEVE NUTS



LONGITUDINAL SECTION

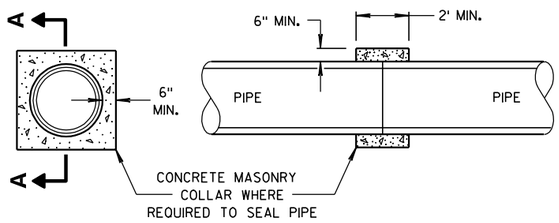
(JOINT TIES FOR 12" TO 108" DIA. CONCRETE PIPE)

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

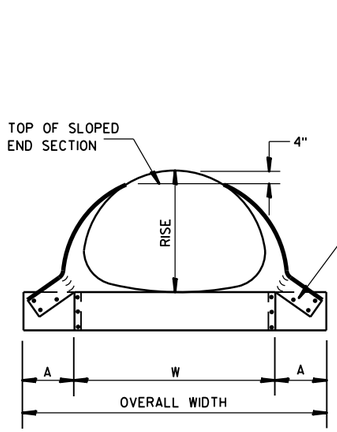
APPROVED
6/5/2012 DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER
355 'MENT
FHWA

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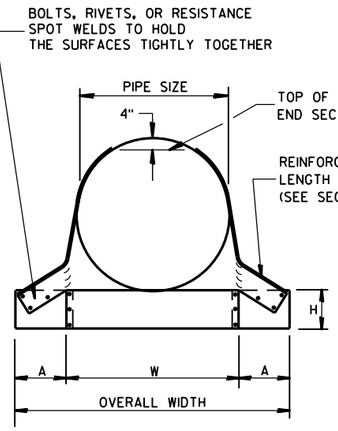
S.D.D. 8 F 4-7

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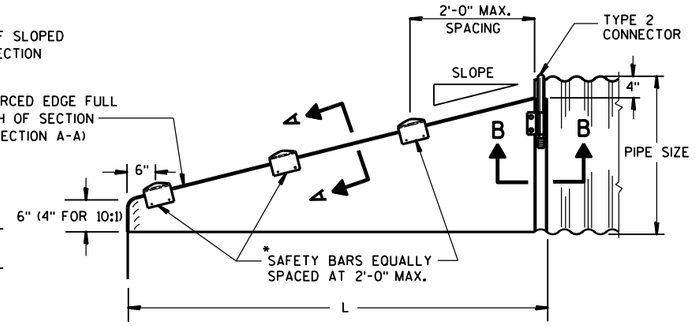
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FRONT VIEW



FRONT VIEW



SIDE VIEW

GENERAL NOTES

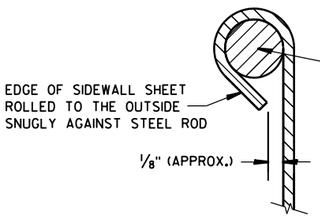
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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

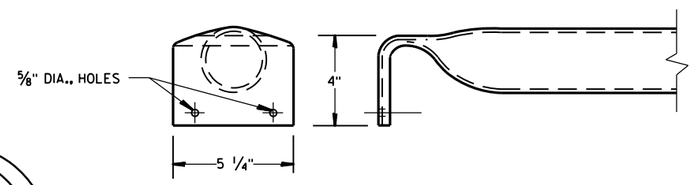
PIPE DIA. (IN.)	MIN. THICK. (Inches)	DIMENSIONS (Inches)				L DIMENSIONS					
		A	H	W	OVERALL WIDTH	SLOPE	LENGTH INCHES	SLOPE	LENGTH INCHES	SLOPE	LENGTH INCHES
15	.064	8	6	21	37	4:1	20	6:1	30	10:1	70
18	.064	8	6	24	40	4:1	32	6:1	48	10:1	100
21	.064	8	6	27	43	4:1	44	6:1	66	10:1	130
24	.064	8	6	30	46	4:1	56	6:1	84	10:1	160
30	.109	12	9	36	60	4:1	80	6:1	120	10:1	220
36	.109	12	9	42	66	4:1	104	6:1	156	10:1	280
42	.109	16	12	48	80	4:1	128	6:1	192	——	——
48	.109	16	12	54	86	4:1	152	6:1	228	——	——
54	.109	16	12	60	92	4:1	176	6:1	264	——	——
60	.109	16	12	66	98	4:1	200	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.

3" GALVANIZED PIPE. FLATTEN ENDS, THEN BEND OUTSIDE 4" TO MATCH END SECTION SIDES.

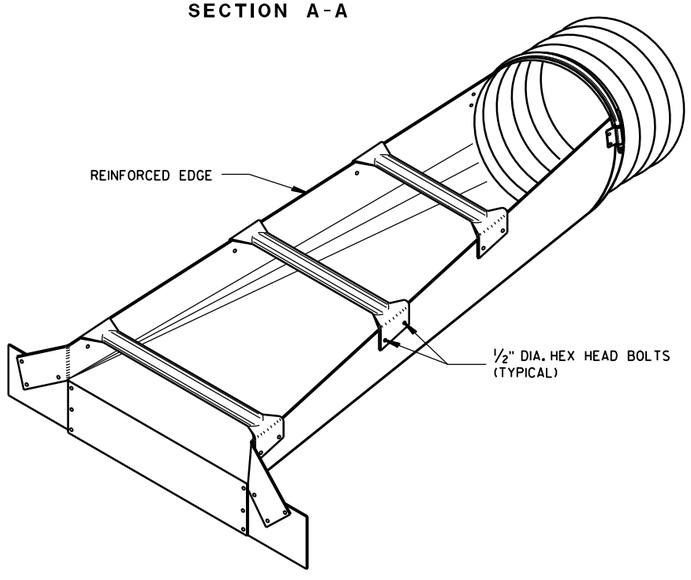


DETAIL OF SAFETY BAR

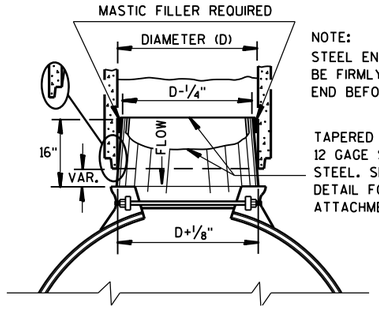
STEEL APRON ENDWALLS FOR PIPE ARCH
SLOPED SIDE DRAINS

EQUIV. DIA. (Inches)	(Inches) SPAN	(Inches) RISE	MIN. THICK. (Inches) ①	DIMENSIONS (Inches) A	H	W	OVERALL WIDTH	L DIMENSIONS SLOPE	LENGTH INCHES	SLOPE	LENGTH INCHES	SLOPE	LENGTH INCHES
15	17	13	.064 *	7	6	30	44	4:1	19	6:1	30	10:1 ②	70
18	21	15	.064 *	8	6	27	43	4:1	20	6:1	30	10:1	70
21	24	18	.064 *	8	6	30	46	4:1	32	6:1	48	10:1	100
24	28	20	.064 *	8	6	34	50	4:1	40	6:1	60	10:1	120
30	35	24	.079 *	12	9	41	65	4:1	56	6:1	84	10:1	160
36	42	29	.109 *	12	9	48	72	4:1	76	6:1	114	10:1	210
42	49	33	.109	16	12	55	87	4:1	92	6:1	138	——	——
48	57	38	.109	16	12	63	95	4:1	112	6:1	168	——	——
54	64	43	.109	16	12	70	102	4:1	132	6:1	198	——	——

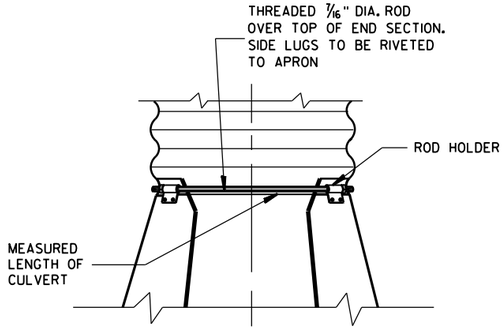
① * MINIMUM THICKNESS OF ALL 10:1 SLOPED SIDE DRAINS IS 0.109".
② ACTUAL SLOPE GREATER THAN 10:1.



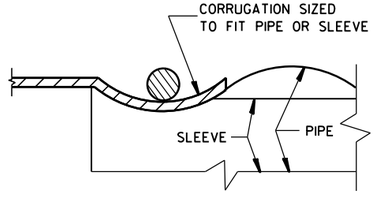
ISOMETRIC VIEW



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

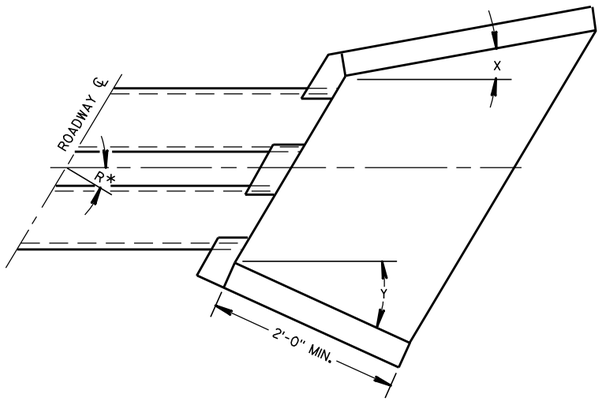
APPROVED
9/14/2012 — DATE
/S/ Jerry H. Zoda — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

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S.D.D. 8 F 7-5



WINGWALL ANGLE DETAILS

INLET			OUTLET		
R*	X	Y	R*	X	Y
0 - 7°	30°	30°	0 - 15°	15°	15°
8 - 22°	25°	"	16 - 45°	10°	"
23 - 37°	20°	"	46 - 75°	5°	"
38 - 52°	15°	"	OVER 75°	0°	"
53 - 67°	10°	"			
68 - 82°	5°	"			
OVER 82°	0°	"			

*R = NUMBER OF DEGREES RIGHT OR LEFT HAND FORWARD

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.

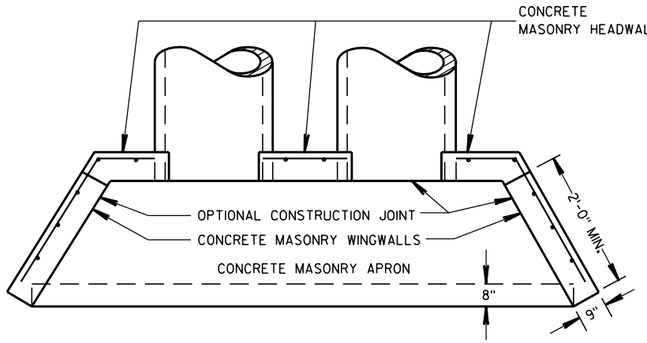
FILL SLOPES FLATTER THAN 2 ½:1 SHALL BE WARPED TO MEET THE TOP OF THE WINGWALLS.

ALL STEEL REINFORCEMENT AND WELDED STEEL WIRE FABRIC SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE NOTED.

(1) MINIMUM REINFORCEMENT SHALL BE 6" X 6" - W4.0 X W4.0 OR NO. 3 BARS SPACED 12" C-C IN BOTH DIRECTIONS.

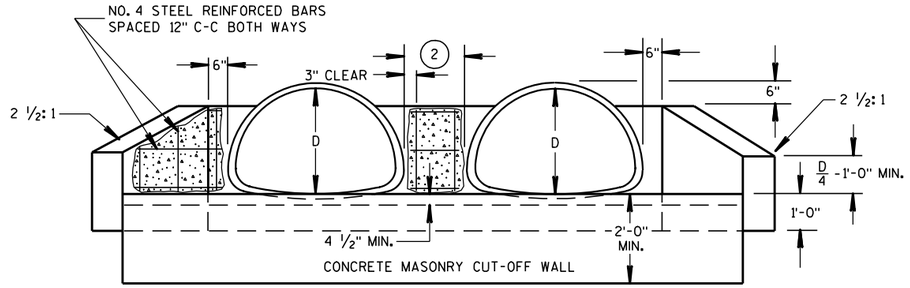
(2) THE SPACE BETWEEN PIPES SHALL BE AS FOLLOWS:

DIAMETER OR SPAN	SPACE
UP TO AND INCLUDING 48"	2'-0"
OVER 48" TO 72"	½ DIA. OR SPAN
OVER 72"	3'-0"



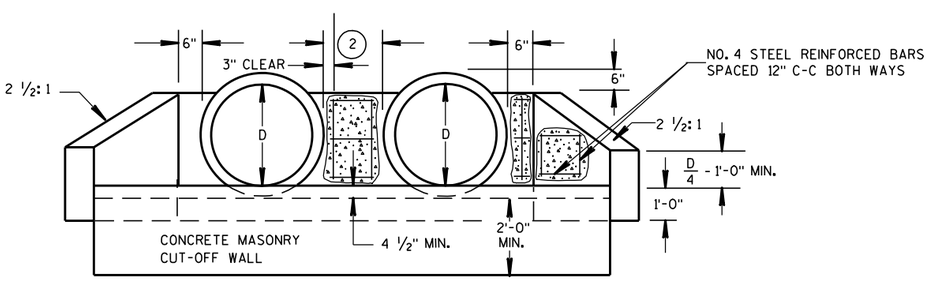
PLAN VIEW

CULVERT PIPE AND PIPE ARCH



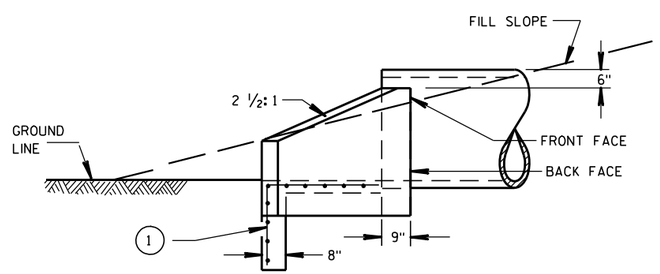
END ELEVATION

PIPE ARCH



END ELEVATION

CULVERT PIPE



SIDE ELEVATION

CULVERT PIPE AND PIPE ARCH

CONCRETE MASONRY ENDWALLS FOR CULVERT PIPE AND PIPE ARCH

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

9/14/98 — DATE

/S/ Rory L. Rhinesmith — CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

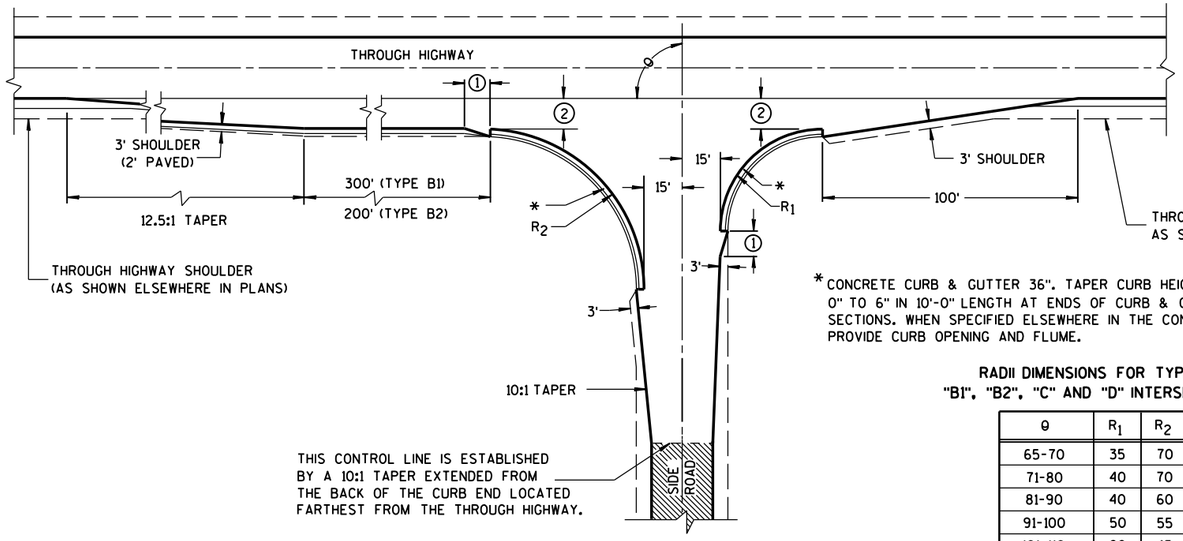
357

6

S.D.D. 8 F 10-1

6

S.D.D. 8 F 10-1

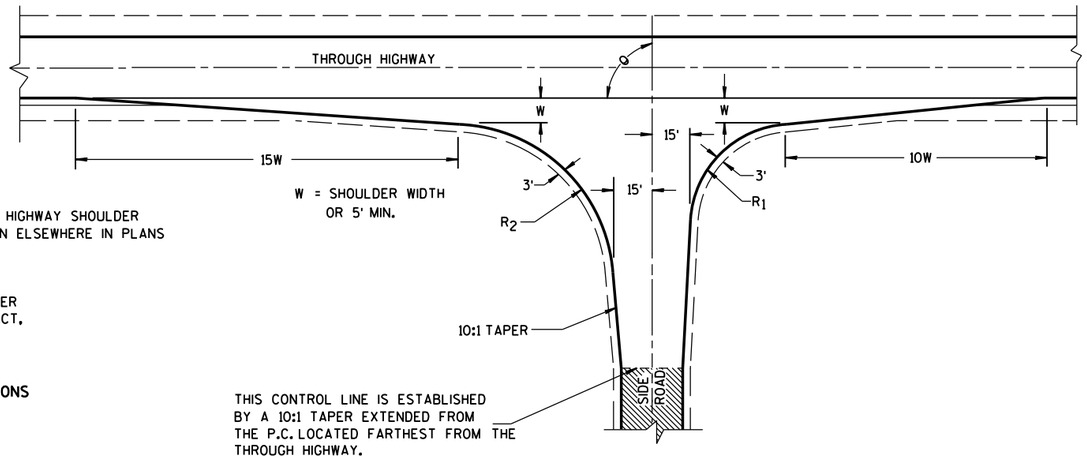


TYPE "B1" AND "B2"

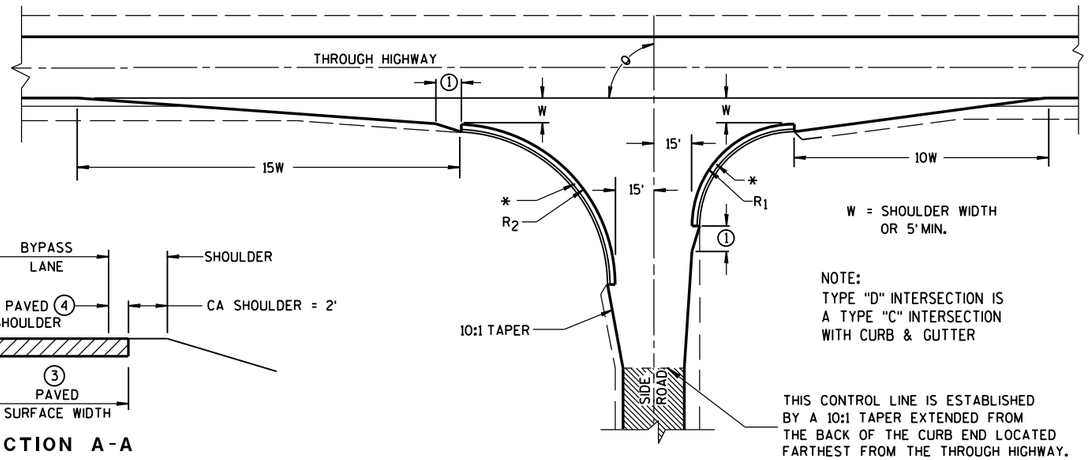
*CONCRETE CURB & GUTTER 36". TAPER CURB HEIGHT 0" TO 6" IN 10'-0" LENGTH AT ENDS OF CURB & GUTTER SECTIONS. WHEN SPECIFIED ELSEWHERE IN THE CONTRACT, PROVIDE CURB OPENING AND FLUME.

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"

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 PAVED SURFACE

BYPASS LANE

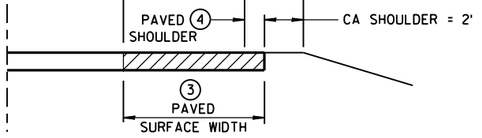
(1) 10-FT TYPICAL.

(2) 12-FT** PLUS ADDITIONAL WIDTH FOR BIKE LANE IF SHOWN ELSEWHERE IN THE PLAN.

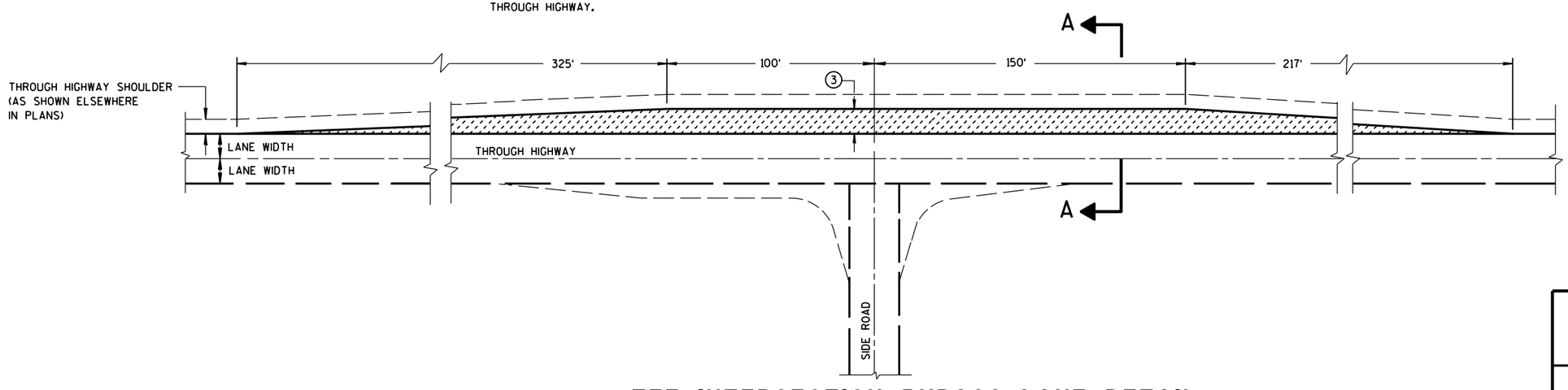
**10-FT MAY BE USED ON TYPE B2 ON RESURFACING PROJECTS IF SPECIFIED IN THE CONTRACT.

(3) BYPASS LANE PAVED SURFACE WIDTH OUTSIDE OF TRAVEL LANE
-ASPHALT = 12-FT PLUS PAVED SHOULDER WIDTH.
-PC CPNCRETE = 13-FT PLUS PAVED SHOULDER WIDTH.

(4) BYPASS LANE PAVED SHOULDER WIDTH = THE GREATER OF 1-FT OR THE PAVED SHOULDER WIDTH OF THE THROUGH HIGHWAY.



SECTION A-A
(SHOWING BYPASS LANE AND SHOULDER)



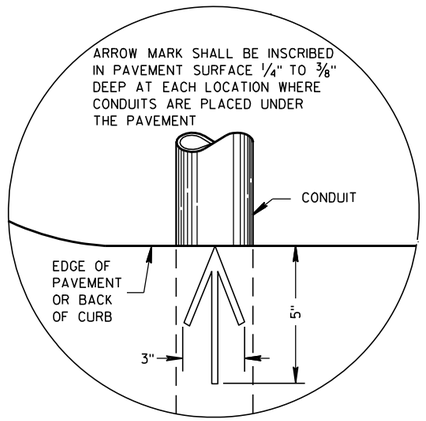
TEE INTERSECTION BYPASS LANE DETAIL

AT-GRADE SIDE ROAD INTERSECTION, TYPES "B1", "B2", "C" AND "D" AND TEE INTERSECTION BYPASS LANE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

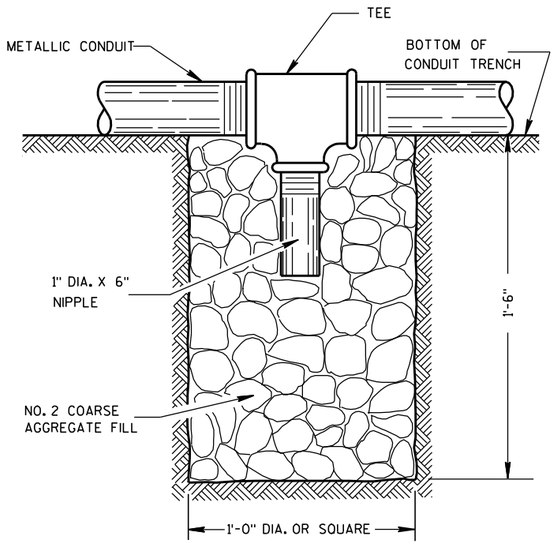
6

S.D.D. 9 A 1-13a



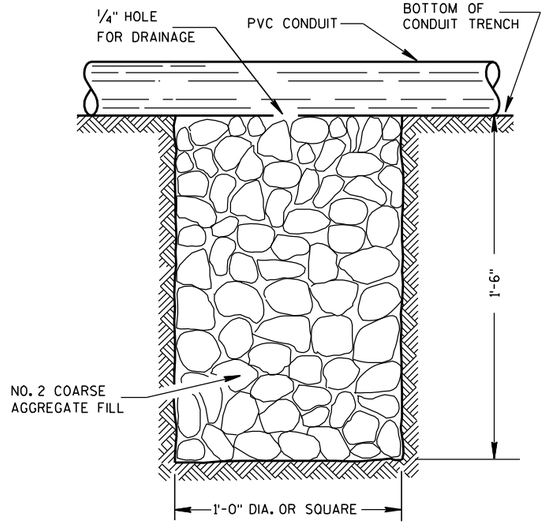
PLAN VIEW

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.

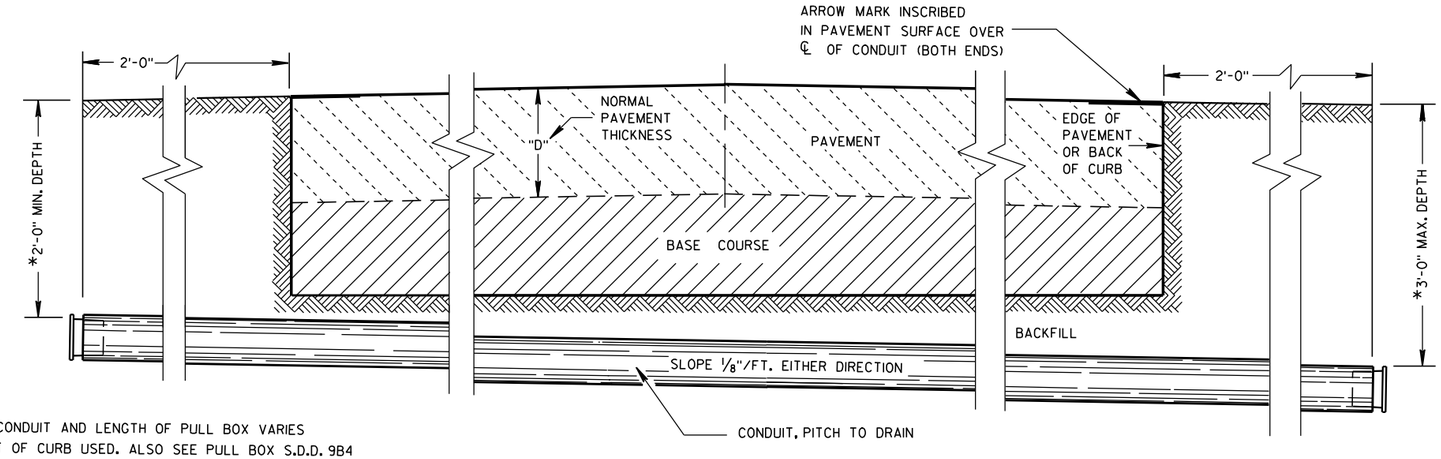
PRIOR TO CONDUIT ACCEPTANCE, CONDUIT CAPS OR PLUGS SHALL BE REMOVED, AND THE CAPS, PLUGS AND CONDUIT ENDS SHALL BE THOROUGHLY CLEANED AND THEN THE CAPS OR PLUGS REINSTALLED TO ENSURE THAT THE CAPS OR PLUGS CAN BE EASILY REMOVED IN THE FUTURE.

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 359 HWYS

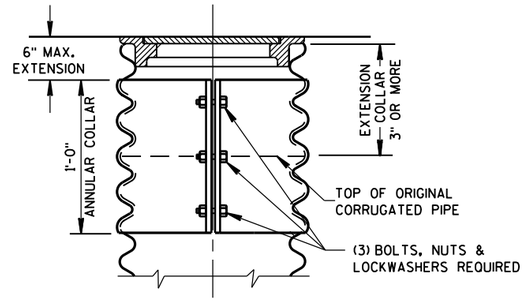
FHWA

TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

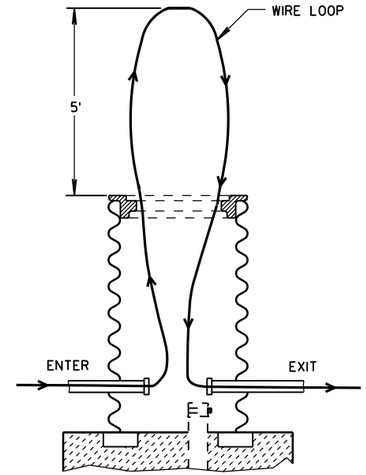
DIMENSION IN INCHES		CORRUGATED STEEL PIPE								
PIPE DIAMETER (INSIDE)	A	12	12	12	18	18	18	24	24	24
PIPE LENGTH **	B	24	30	36	24	30	36	36	42	48
WALL THICKNESS	C	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064
COVER	D	10 1/4	10 1/4	10 1/4	16 1/4	16 1/4	16 1/4	22 1/4	22 1/4	22 1/4
FRAME	E	14 1/2	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.

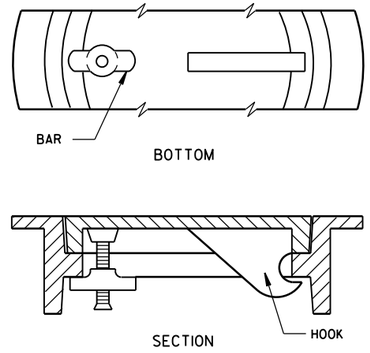
** NORMALLY USED LENGTHS. THE PROJECT ENGINEER SHALL DETERMINE IF PIPE LENGTHS, OTHER THAN THOSE SPECIFIED, SHALL BE USED, TO A MAXIMUM OF 48" (CONTINUOUS LENGTH, NON-SPLICED). THE ADDITIONAL LENGTH SHALL BE INCIDENTAL TO THE PULL BOX BID PRICE.



CORRUGATED PIPE EXTENDER

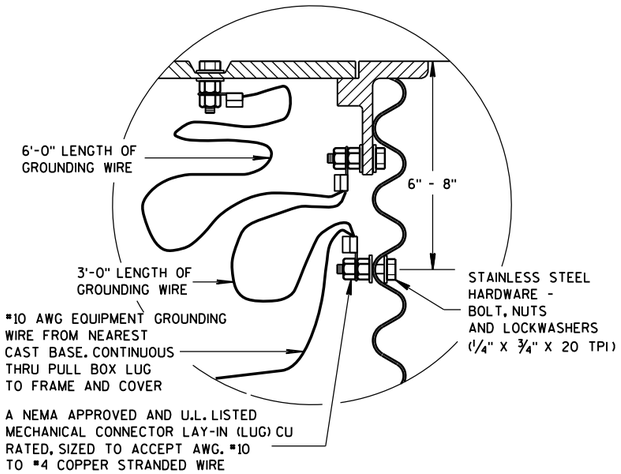


MEASUREMENT DETAIL FOR WIRE/CABLE IN THE PULL BOX

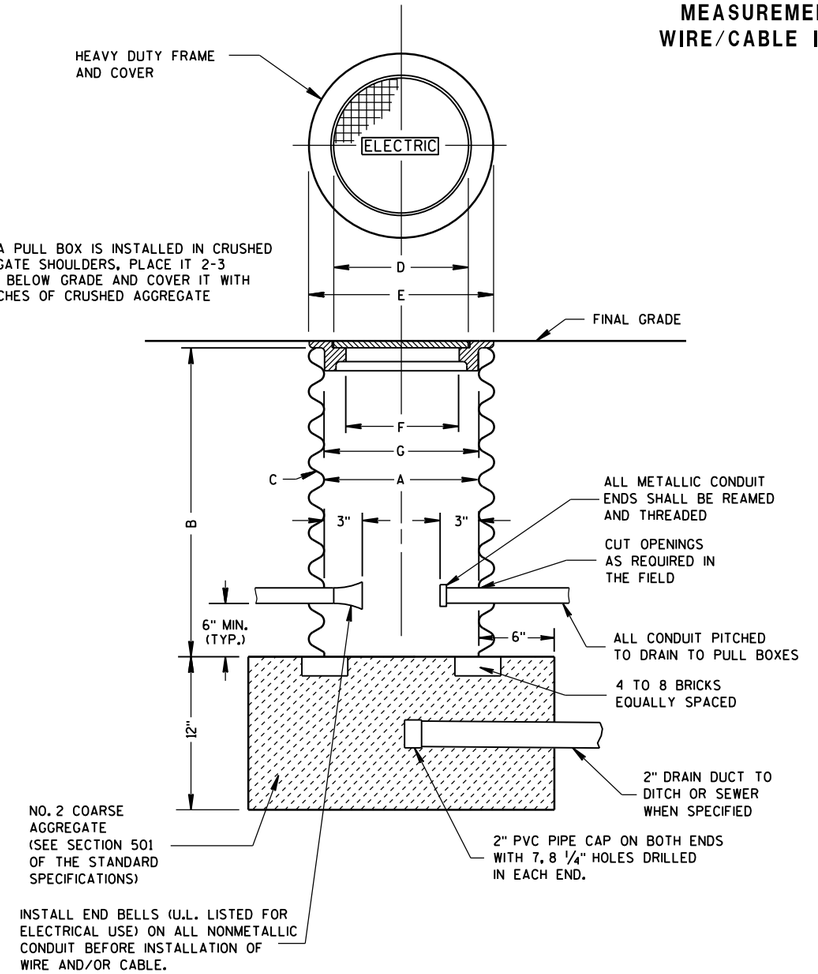


ALTERNATE COVER (LOCKING)

TIGHTENING BAR TYPE



EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES



PULL BOX

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.

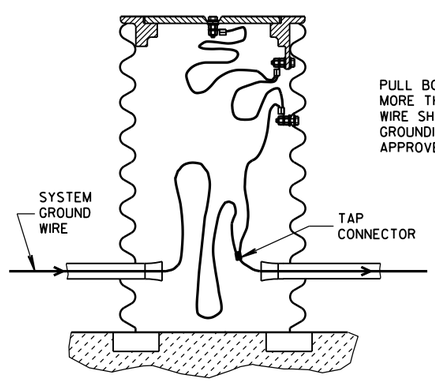
GROUNDING LUGS (MECHANICAL CONNECTORS) SHALL BE U.L. LISTED AND APPROVED FOR USE WITH COPPER WIRE.

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.



PULL BOX TO NEAREST BASE DISTANCE MORE THAN 20 FEET. PULL BOX GROUND WIRE SHALL CONNECT AT SYSTEM GROUNDING WIRE. USE DEPARTMENT APPROVED TAP CONNECTOR.

EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES

PULL BOX

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

2-7-2013
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL 360

FHWA

6

S.D.D. 9 B 4-10

6

S.D.D. 9 B 4-10

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.

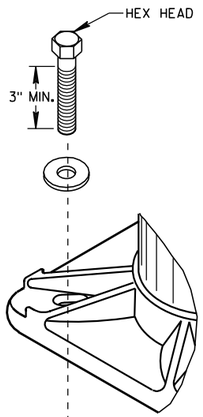
THE MECHANICAL CONNECTOR SHALL BE INSTALLED USING A 1/4" - 20 (TPI) STAINLESS STEEL HEX HEAD BOLT OF SUFFICIENT LENGTH TO FIRMLY ATTACH THE LUG TO THE BASE.

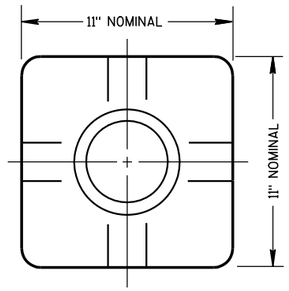
SHOULD THE MANNER OF ATTACHMENT OF THE LUG REQUIRE WASHERS, HEX NUTS, LOCK WASHER - THEY SHALL BE STAINLESS STEEL AS IS THE BOLT. THE MANNER OF ATTACHMENT SHALL NOT BLOCK ACCESSIBILITY TO WIRE PLACEMENT IN THE CONNECTOR.

PEDESTAL BASE COLLAR THREADING SHALL BE TAPERED AND IN ACCORDANCE WITH NATIONAL PIPE THREADING DIMENSIONS.

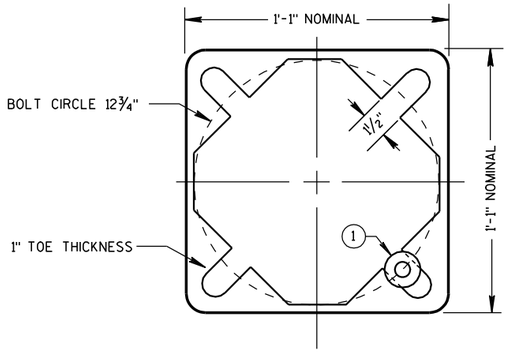
BASE COLLAR THREADING SHALL EXTEND INTO THE BASE COLLAR WITH SUFFICIENT DEPTH TO ACCEPT THE INSTALLATION OF TRAFFIC SIGNAL STANDARDS TO A DEPTH OF 1½", THEN TIGHTENING TO A POINT OF BEING IMMOVABLE.

THE ACCESS DOOR SHALL BE OF THE SAME MATERIAL AS THE BASE.

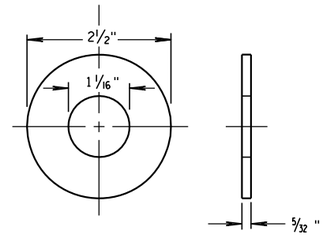




TOP VIEW
(PEDESTAL BASE)

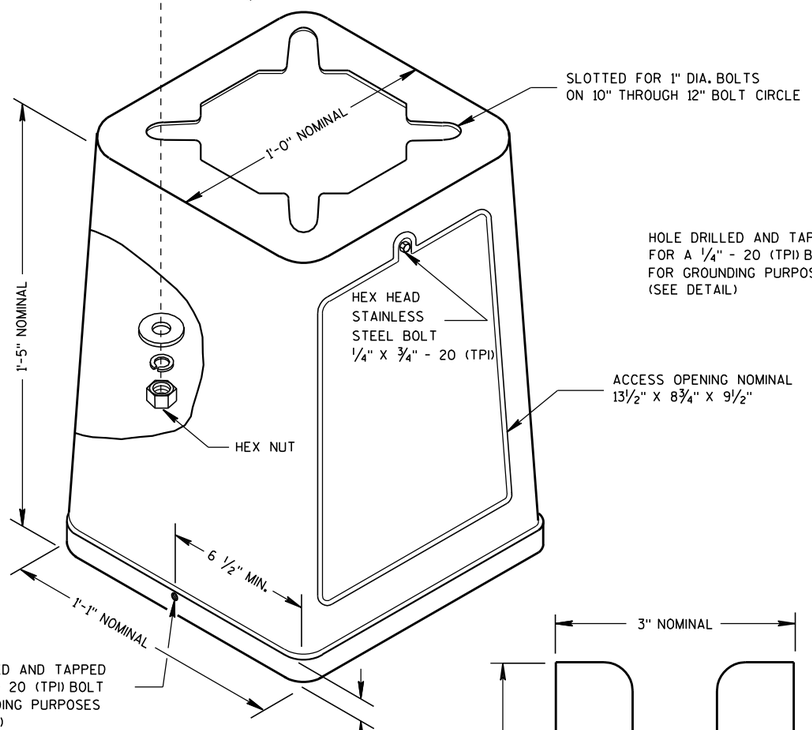


BOTTOM VIEW
(PEDESTAL BASE)

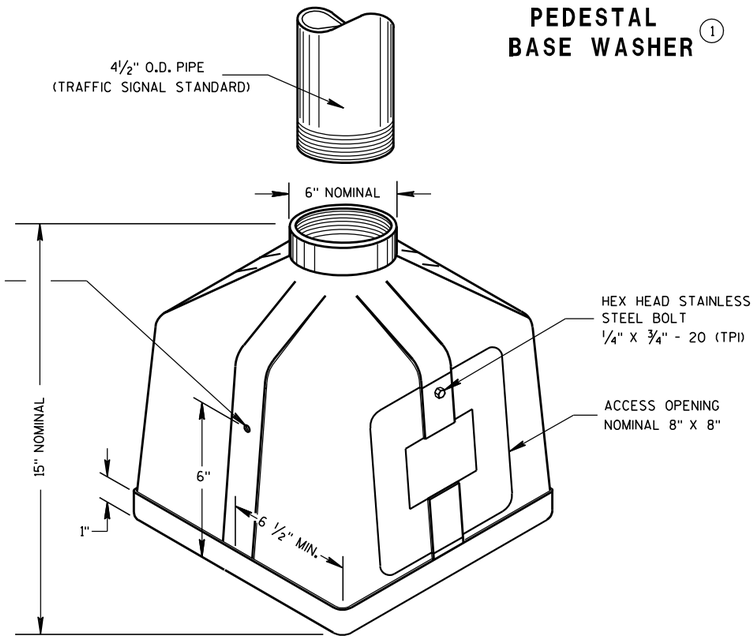


ZINC COATED STEEL WASHER
TO BE PROVIDED BY THE CONTRACTOR

PEDESTAL BASE WASHER (1)

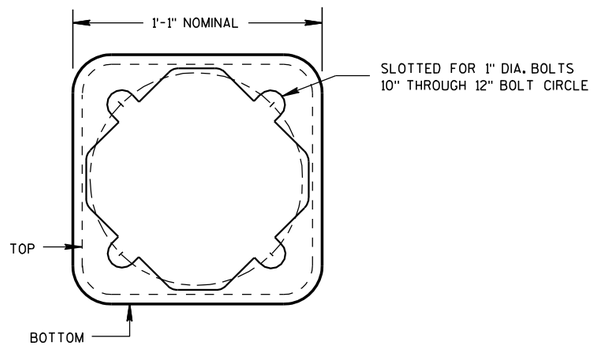


ISOMETRIC VIEW

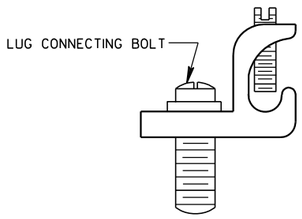


ISOMETRIC VIEW

PEDESTAL BASE



BOTTOM VIEW
(TRANSFORMER BASE)

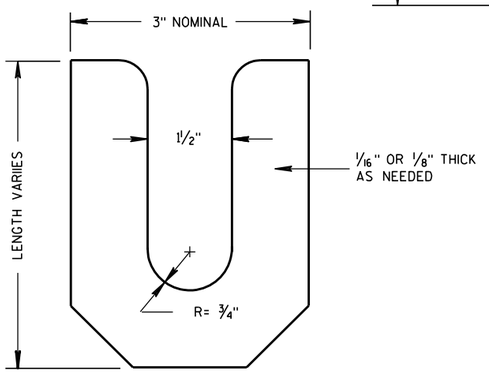


TYPICAL MECHANICAL CONNECTOR LUG

TO BE FURNISHED WITH EACH BASE

TRANSFORMER BASE

INTENDED FOR USE WITH TYPE 2, 3, 4, 5 & 6 POLES



LEVELING SHIM

TRANSFORMER/PEDESTAL BASES

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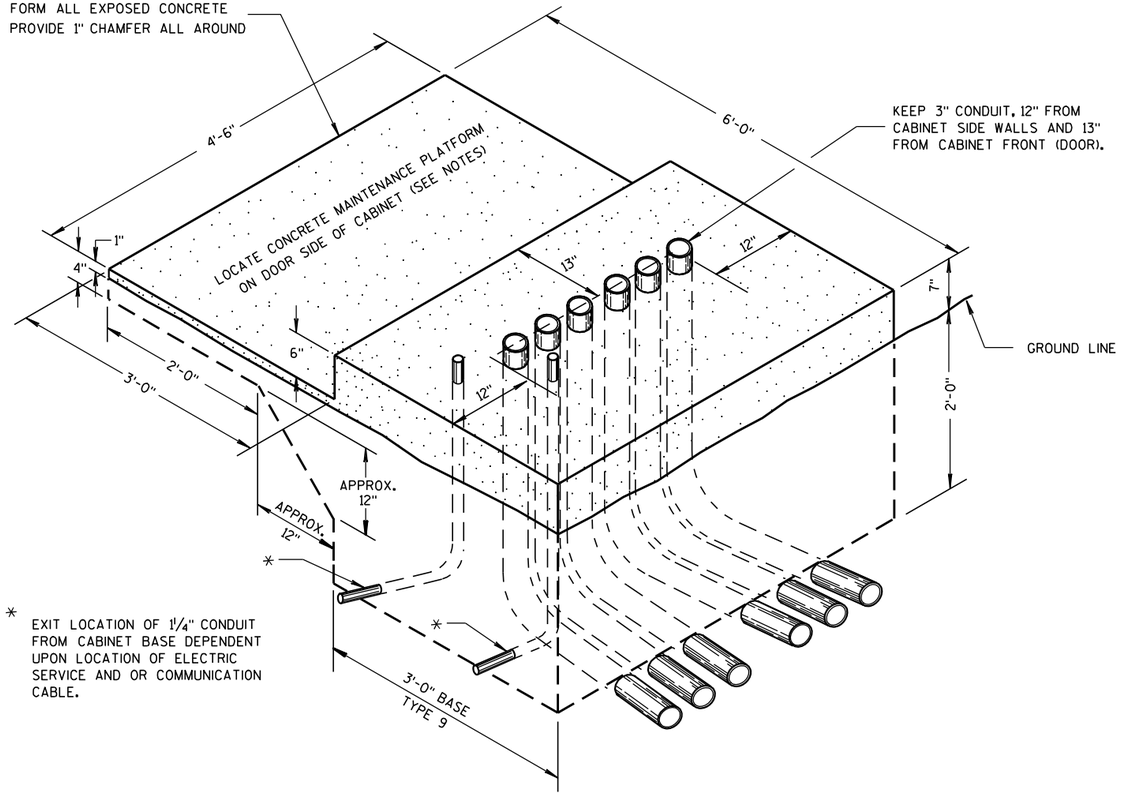
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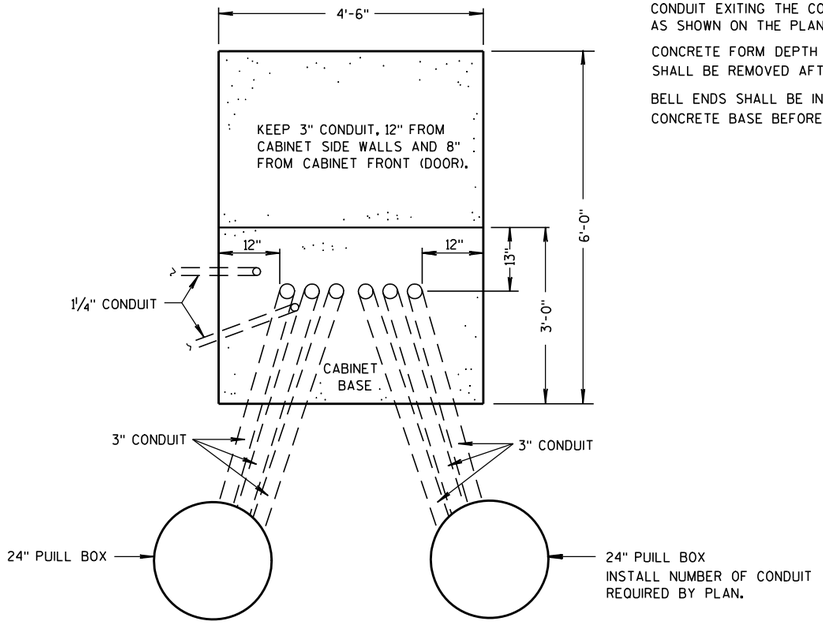


* EXIT LOCATION OF 1¼" CONDUIT FROM CABINET BASE DEPENDENT UPON LOCATION OF ELECTRIC SERVICE AND OR COMMUNICATION CABLE.

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

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2/27/07 — DATE

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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 3'-6".

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.

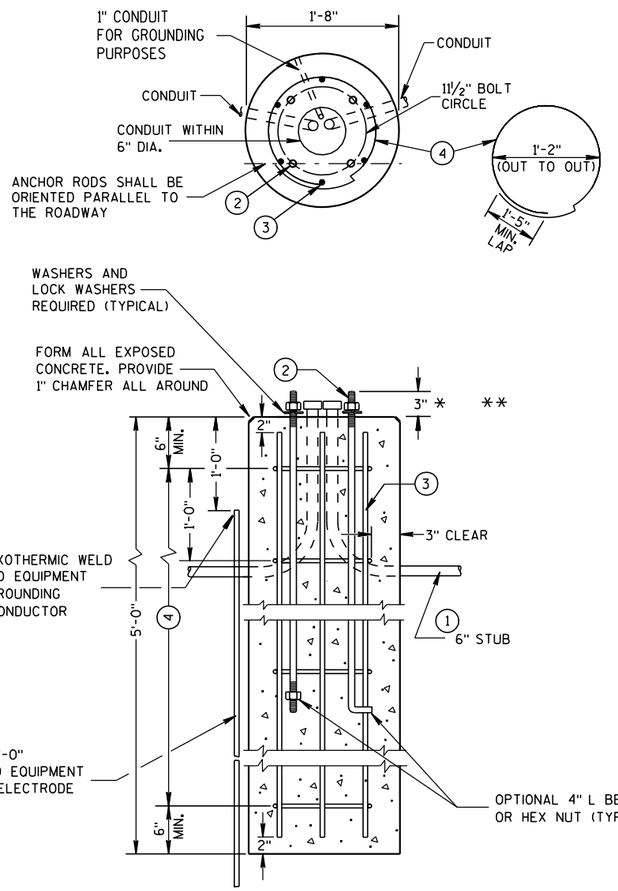
BAR STEEL REINFORCEMENT SHALL BE COATED WITH POWDERED EPOXY RESIN IN ACCORDANCE WITH SECTION 505 OF THE STANDARD SPECIFICATIONS (LATEST EDITION).

(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 3'-6" ANCHOR RODS

(3) (6) NO. 4 X 4'-8" BAR STEEL REINFORCEMENT.

(4) (5) NO. 4 X 5'-1" BAR STEEL REINFORCEMENT @ 1'-0" C-C.

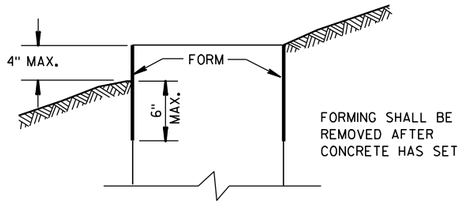


CONCRETE BASE, TYPE 6 (FOR 35' LIGHT POLES)

* 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 NONBREAKAWY 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	0.4
LBS. OF HOOP BAR STEEL	16
LBS. OF VERTICAL BAR STEEL	18

CONCRETE BASE, TYPE 6

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3/3/10 DATE — /S/ Joanna L. Pinch STATE ELECTRICAL ENGI — HWYS

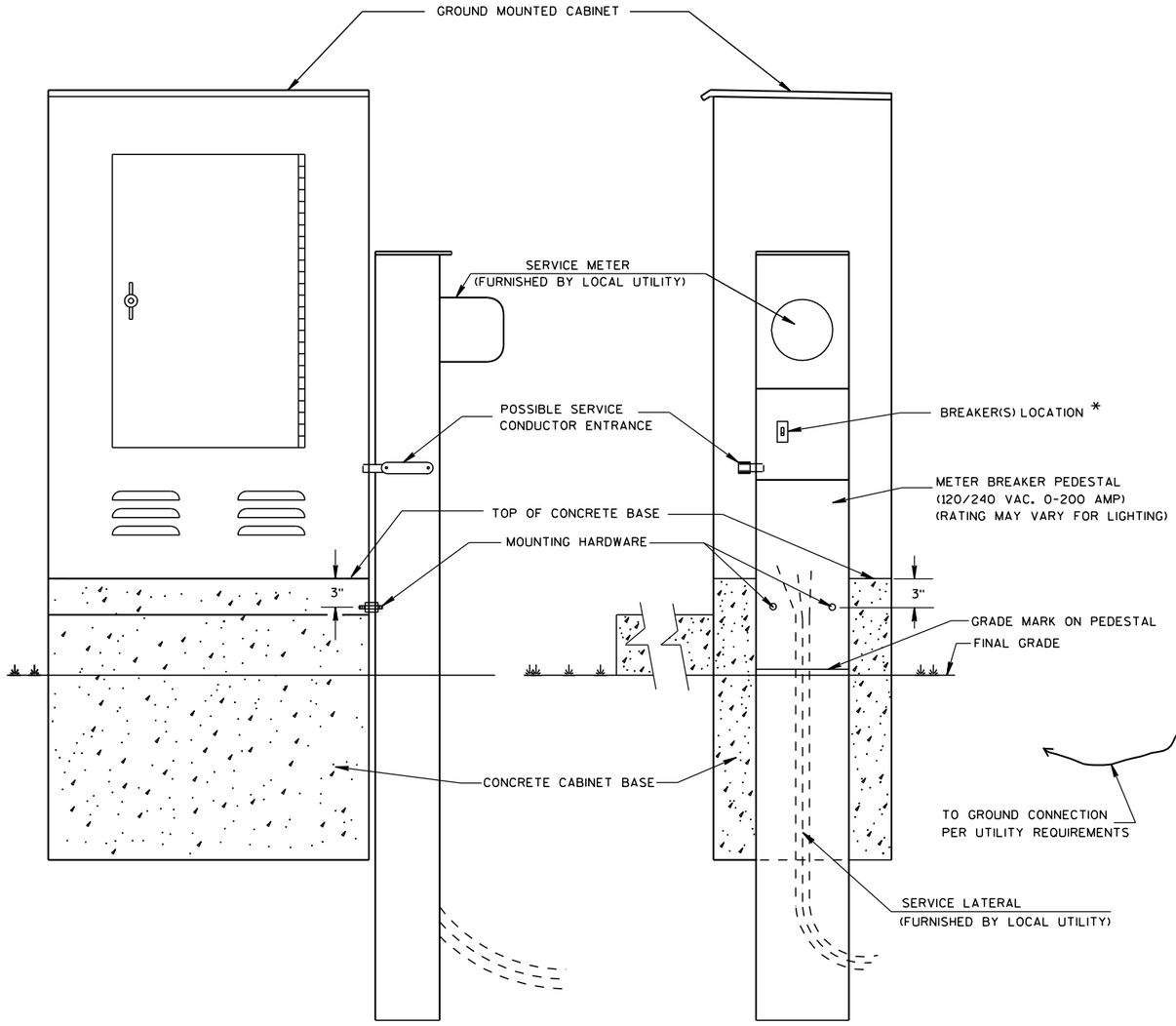
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TYPICAL CABINET SERVICE INSTALLATION

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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CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)

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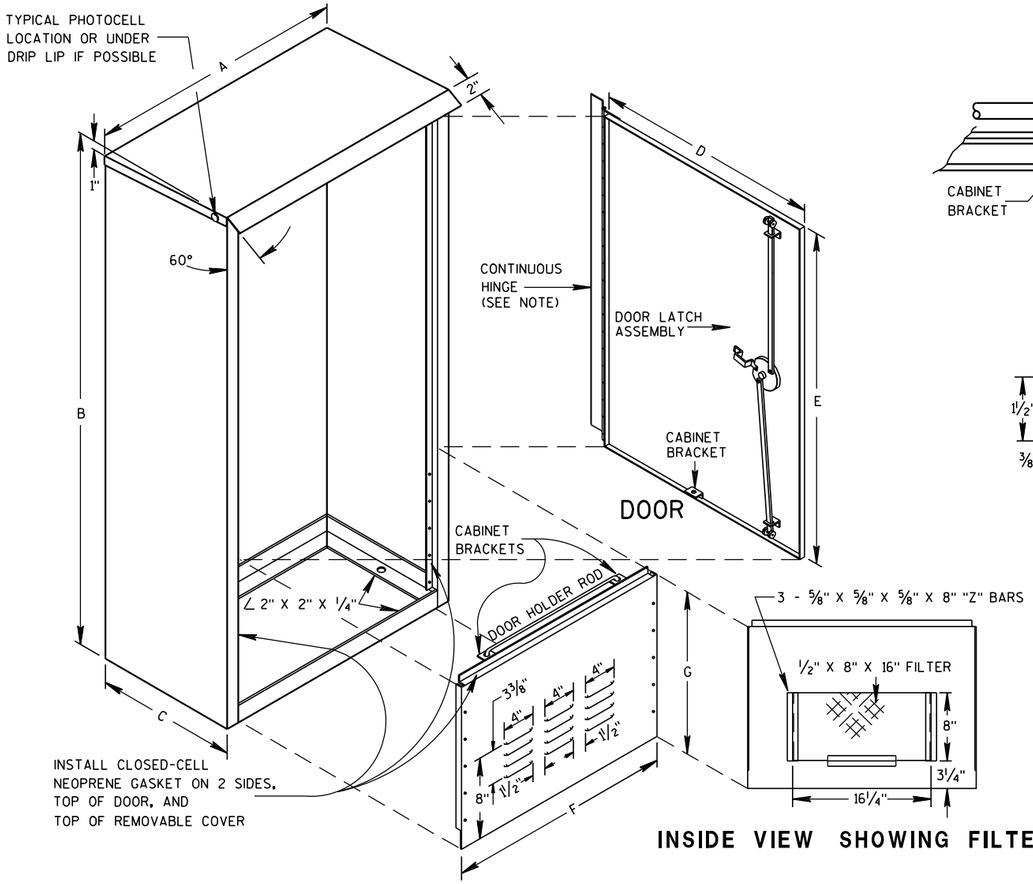
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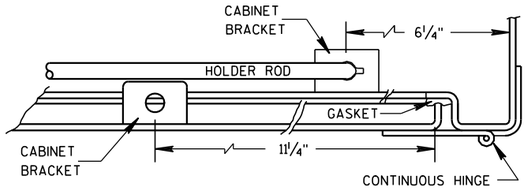
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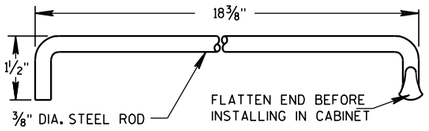
DOOR

REMOVABLE COVER

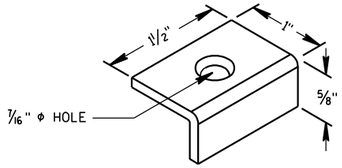
INSIDE VIEW SHOWING FILTER



HINGE & DOOR HOLDER



HOLDER ROD

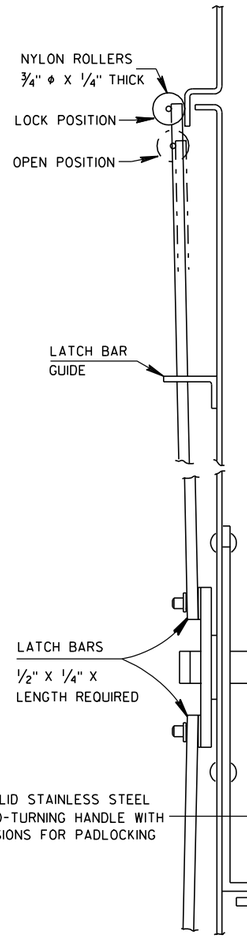


CABINET BRACKET

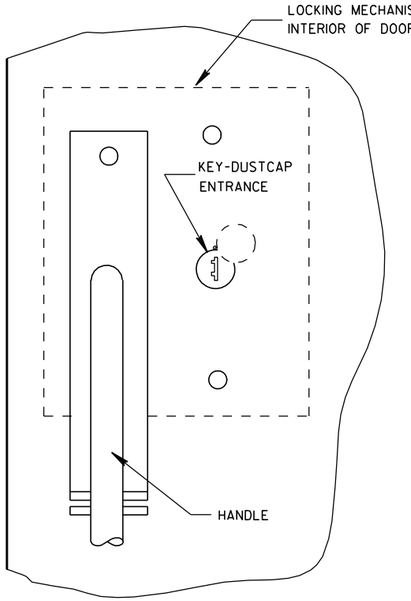
MOUNTING BASE

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

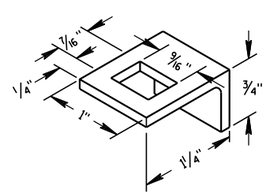


SIDE VIEW



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.

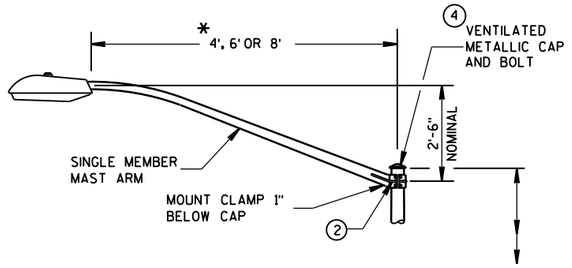
SIGNAL OR LIGHTING CONTROL CABINET

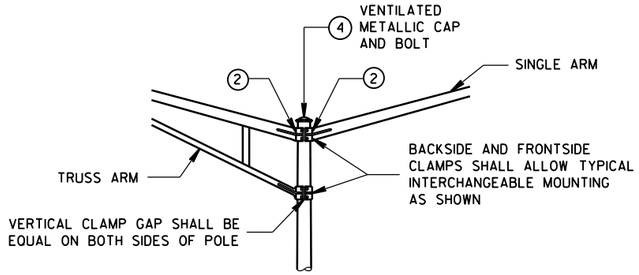
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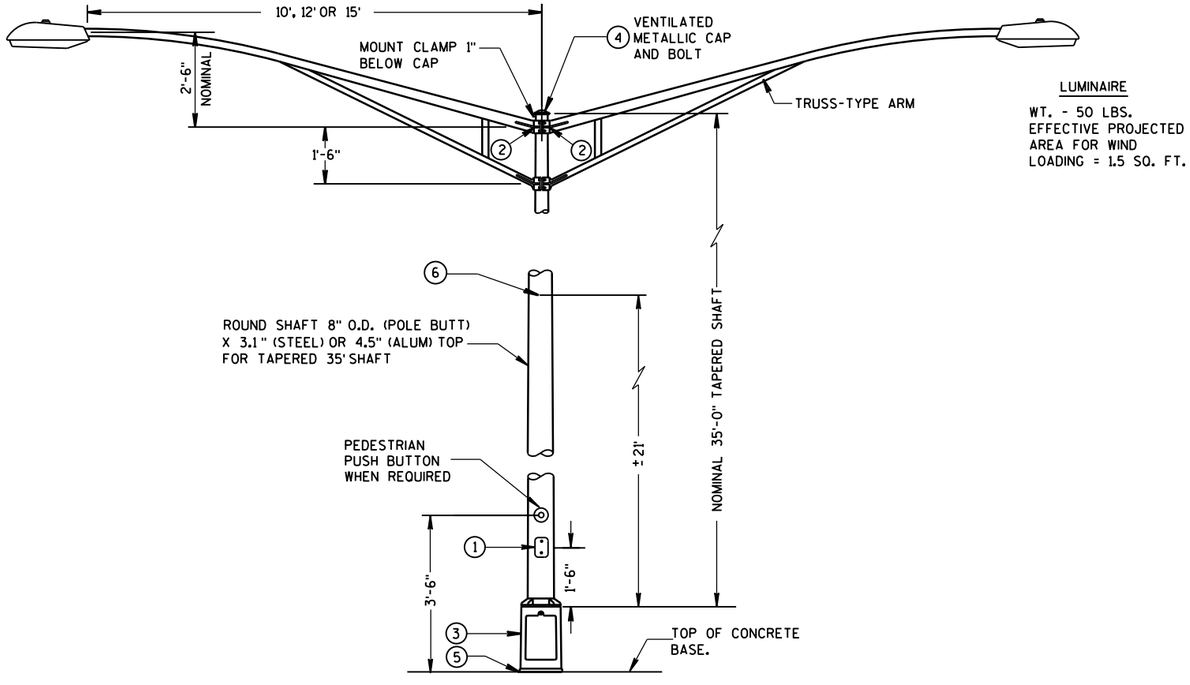
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* RISE FOR 4' ARM SHALL BE 2'-0".





INTERCHANGEABLE MOUNTING DETAIL



TYPE 6 POLE MOUNTING CONFIGURATION

(MAXIMUM LOAD)

LIGHTING ONLY

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM ~~TO THE PERTINENT~~ REQUIREMENTS OF THE CONTRACT.

ALL TYPE 6 POLE MOUNTINGS SHALL BE DESIGNED TO INCLUDE TWIN 15' ARMS WITH LUMINAIRES.

POLES SHALL BE EITHER GALVANIZED STEEL OR ALUMINUM, AS CALLED FOR IN THE CONTRACT.

TYPE 6 ALUMINUM POLES, SHALL BE CONSTRUCTED OF 6063-T6 ALUMINUM ALLOY. SLEEVING INSIDE THE POLE IS NOT ACCEPTABLE.

THE TYPE 6 ALUMINUM POLES SHALL HAVE MINIMUM WALL THICKNESS OF 0.219".

TYPE 6 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 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 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.

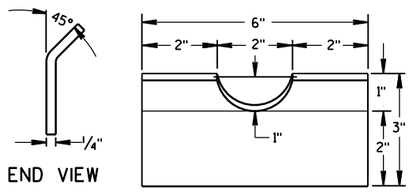
(5) SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND THE TRANSFORMER BASE.

(6) INTERNAL DUMBBELL-TYPE VIBRATION DAMPER.

POLE MOUNTINGS FOR LIGHTING UNITS, TYPE 6 (35 FEET)

STATE OF WISCONSIN
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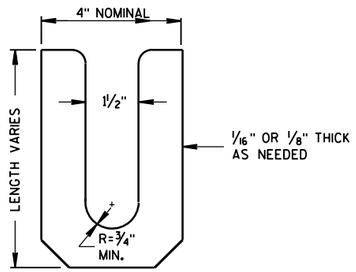


END VIEW

FRONT VIEW

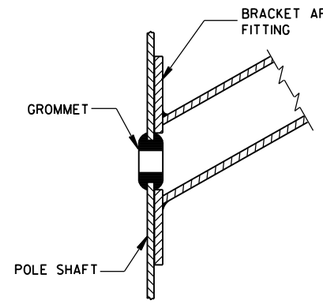
RECTANGULAR CLAMP SHIM

(4 TO A SET)

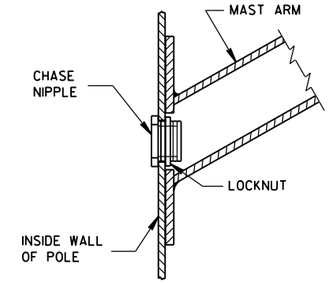


LEVELING SHIM (15)

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".

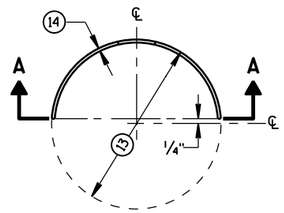
SHIM MATERIAL SHALL BE ALUMINUM ALLOY.

SHIM THICKNESS SHALL BE IMPRESSED INTO EACH SHIM. NUMERALS SHALL BE 1/4" HIGH AND LEGIBLE.

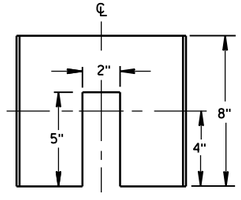
THE CONTRACTOR SHALL SUBMIT TWO COPIES OF ALL SHIM SHOP DRAWINGS TO THE ENGINEER FOR APPROVAL.

(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.



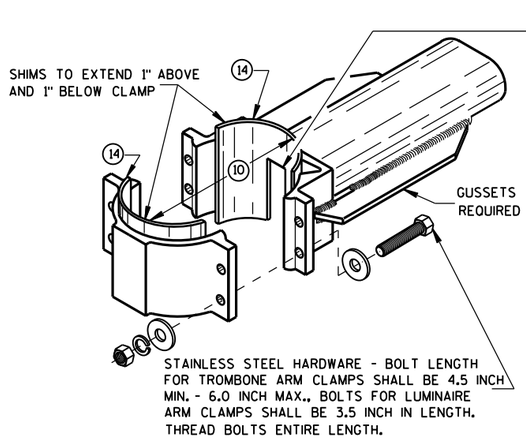
PLAN VIEW



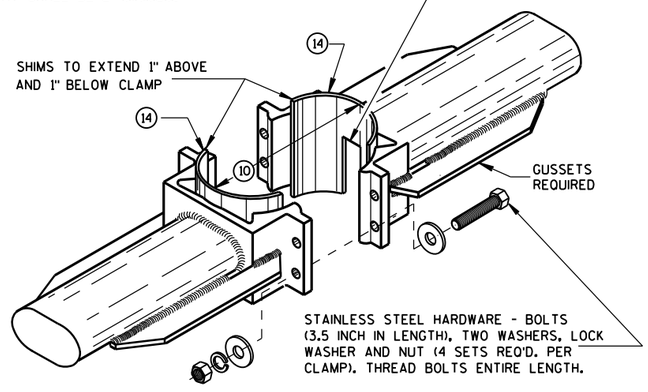
SECTION A-A

CIRCULAR CLAMP SHIM

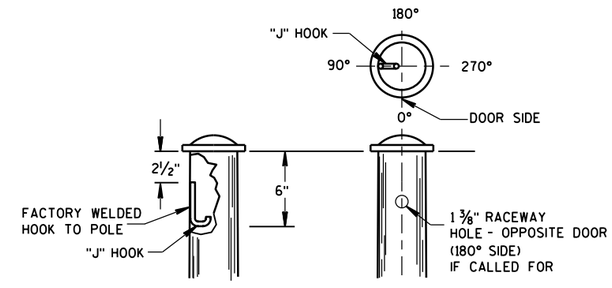
(2 TO A SET)



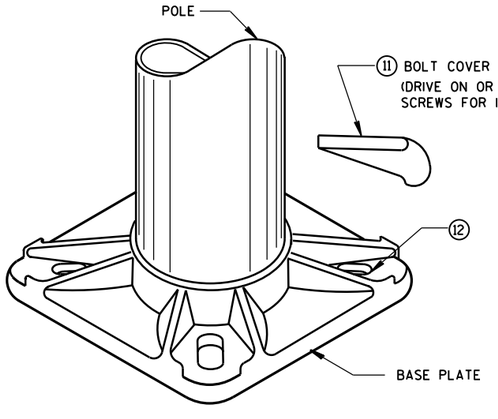
TYPICAL TROMBONE MAST ARM AND SINGLE LUMINAIRE MAST ARM MOUNTING CLAMP



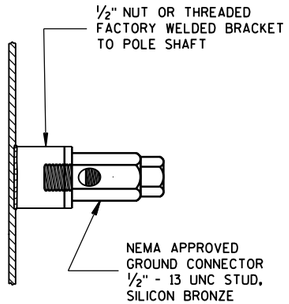
TYPICAL LUMINAIRE MAST ARM (DOUBLE) MOUNTING BRACKETS

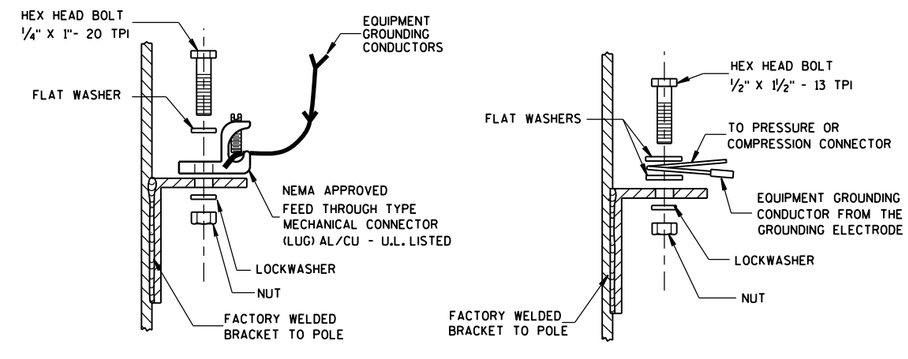


TYPICAL "J" HOOK LOCATION



BASE PLATE





TYPICAL GROUNDING CONNECTIONS

NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL

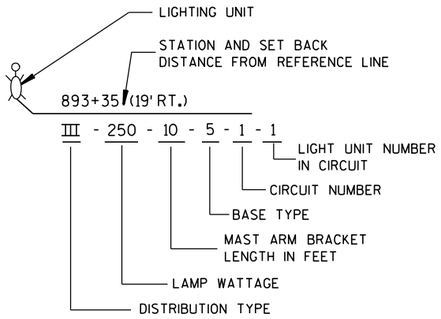
HARDWARE DETAILS FOR POLE MOUNTINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

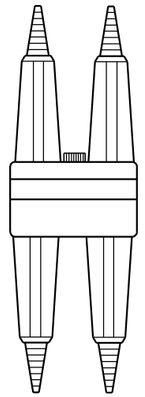
APPROVED
2/7/2013 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

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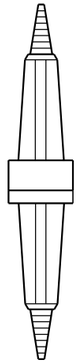
S.D.D. 9 E 1-12g



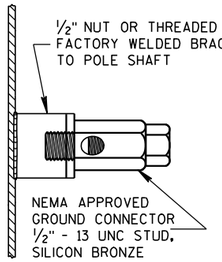
LIGHTING UNIT CODE
(TYPICAL)

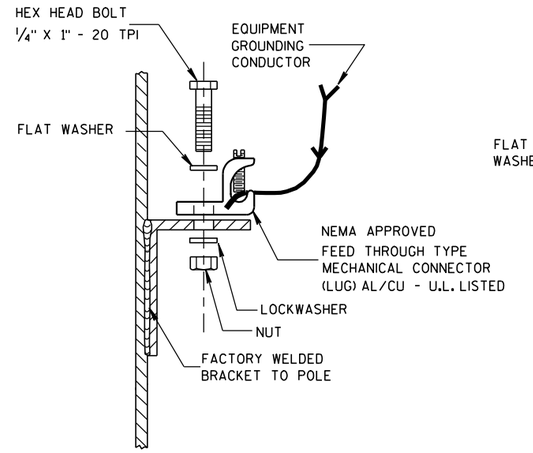


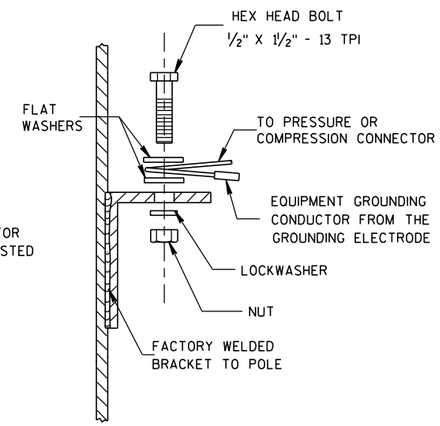
DETAIL "A"
BREAKAWY
DOUBLE POLE WITH
WATERPROOF
INSULATING BOOT



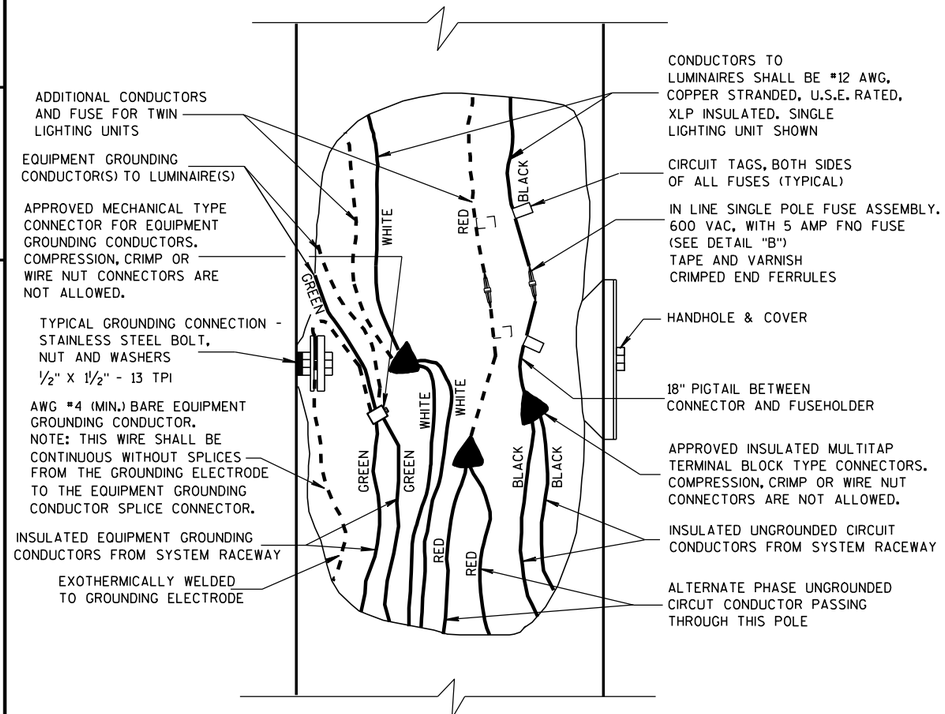
DETAIL "B"
BREAKAWY
SINGLE POLE WITH
WATERPROOF
INSULATING BOOT



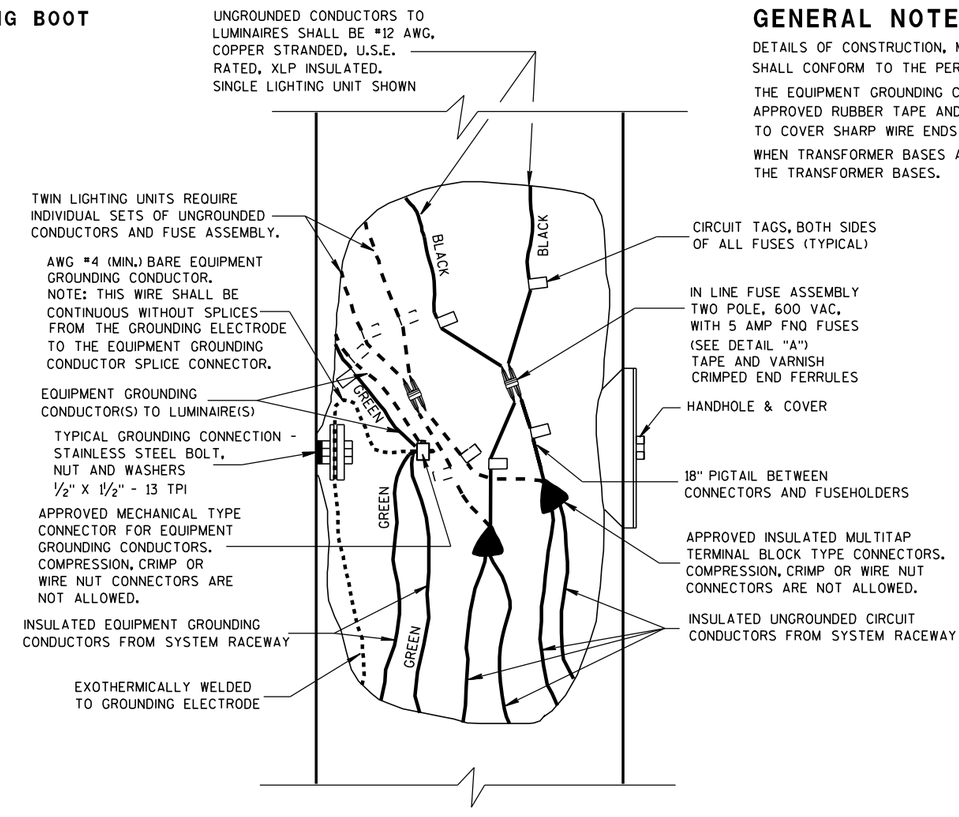




TYPICAL GROUNDING CONNECTIONS
NUT, BOLT, WASHERS AND LOCKWASHERS SHALL BE STAINLESS STEEL



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

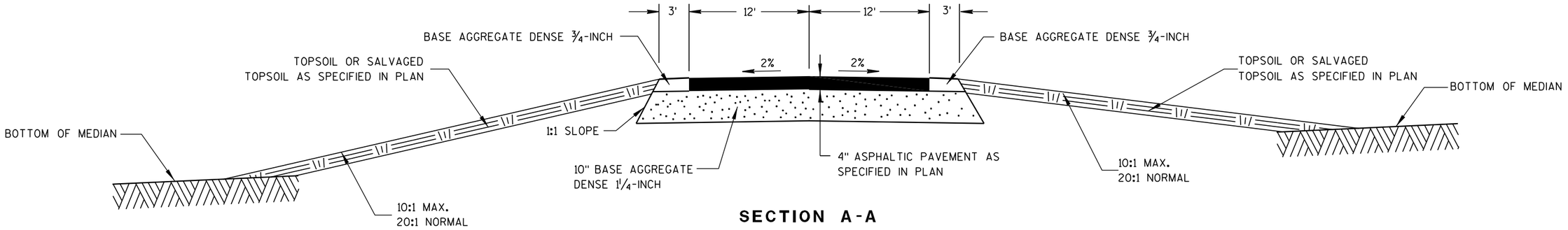
3/2/2011
DATE

/S/ Thomas J. Gosnell
STATE ELECTRICAL ENGI

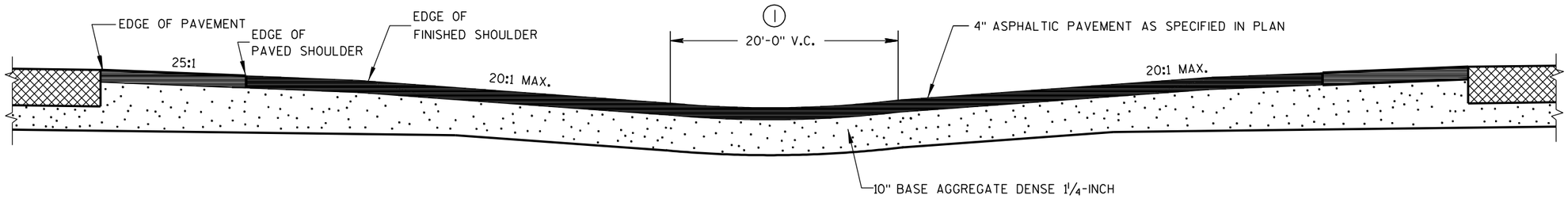
368

HWYS

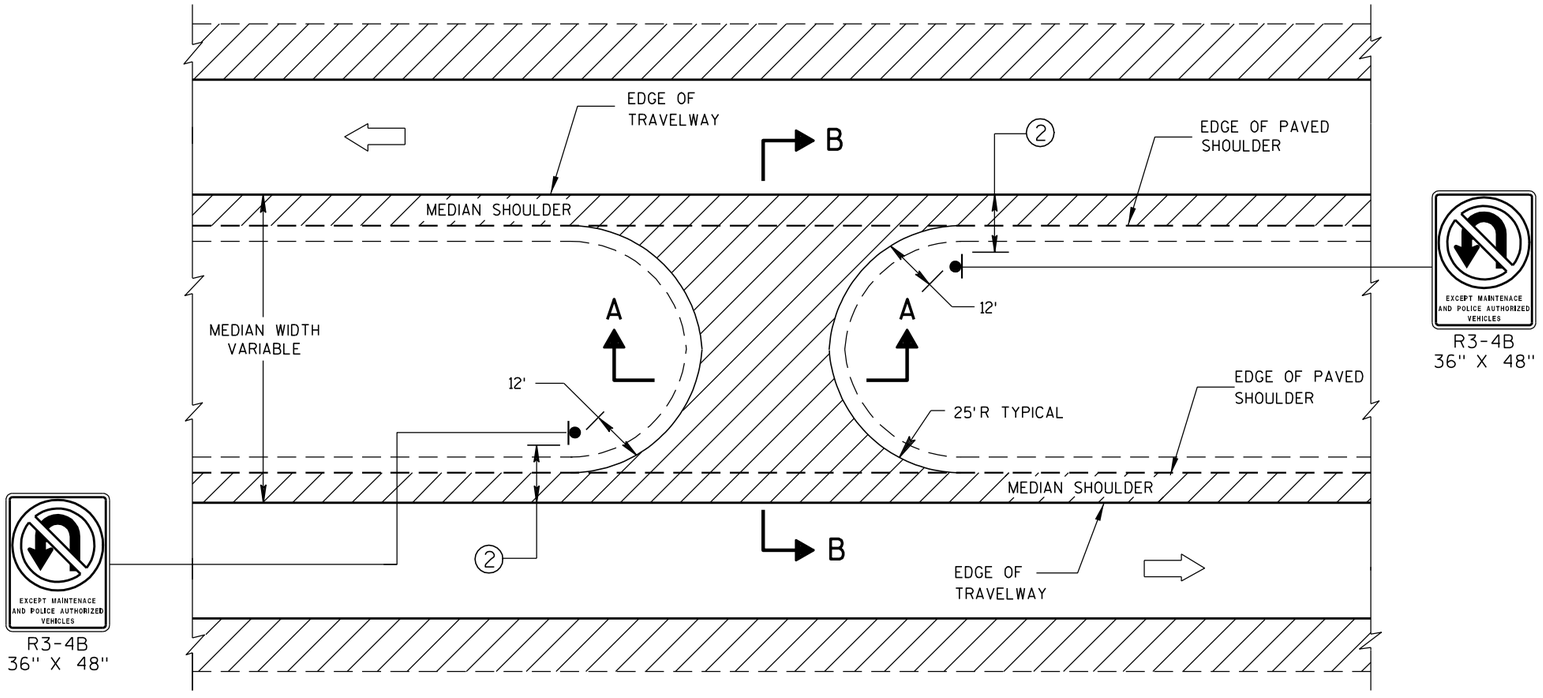
FHWA



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.

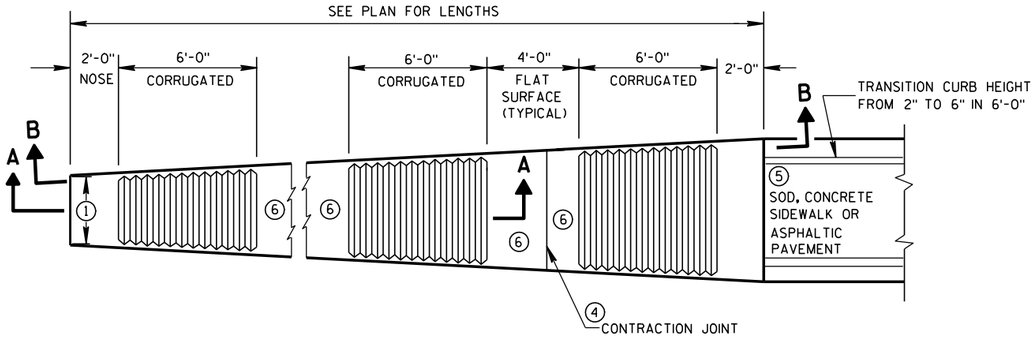
MAINTENANCE CROSSOVER FOR FREEWAYS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/01/2011
DATE
/S/ Jerry H. [illegible]
ROADWAY STANDARDS ENGINEER
FHWA

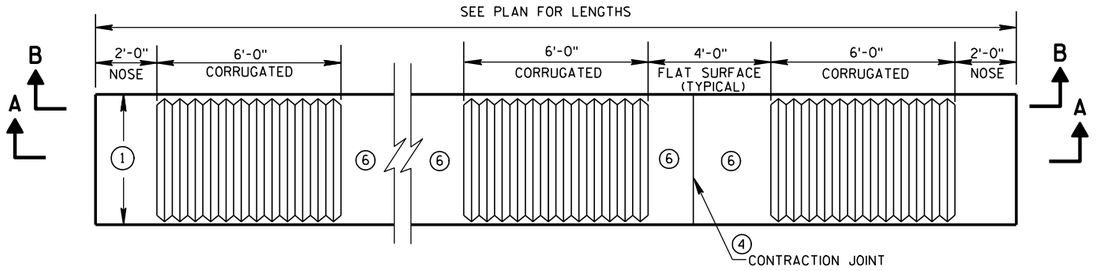
6

S.D.D. 11 A 1-4



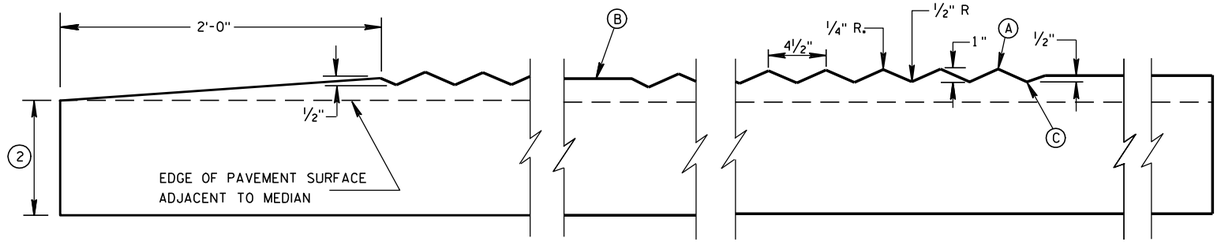
PLAN VIEW

VARIABLE WIDTH CONCRETE CORRUGATED MEDIAN



PLAN VIEW

UNIFORM WIDTH CONCRETE CORRUGATED MEDIAN



SECTION A-A

LONGITUDINAL SECTION

GENERAL NOTES

(1) SEE PLANS FOR CONSTANT OR VARIABLE WIDTH.

(2) THE DEPTH OF THE CONCRETE CORRUGATED MEDIAN SHALL BE 9-INCHES UNLESS SHOWN OTHERWISE IN THE PLAN.

ADJACENT PAVEMENT STRUCTURE DETAILS ARE SHOWN IN THE PLAN. TYPICAL OPTIONS ARE:

(1) NEW OR EXISTING CONCRETE PAVEMENT.

(2) ASPHALTIC CONCRETE OVER NEW OR EXISTING CONCRETE BASE COURSE, OR PAVEMENT.

(3) ASPHALTIC PAVEMENT OVER BASE AGGREGATE DENSE.

(3) 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.

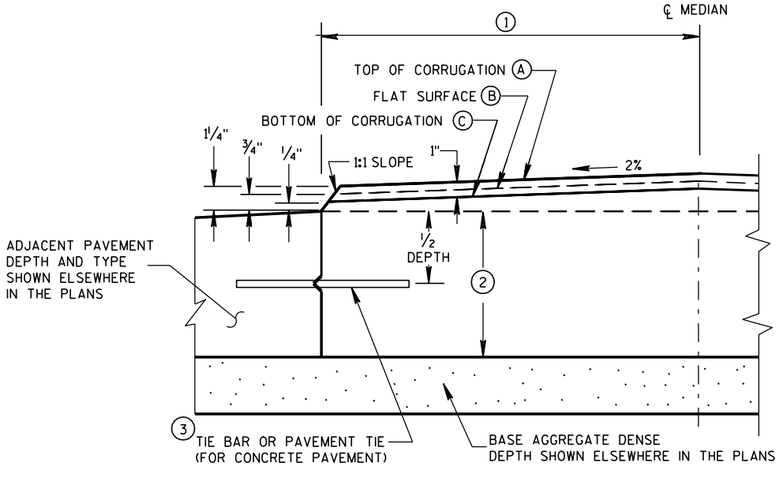
INSTALL TIE BARS TO MAINTAIN A MINIMUM OF 3-INCHES OF COVER BETWEEN THE TIE BAR AND THE CONCRETE SURFACE (BOTTOM AND TOP).

PAVEMENT TIES REQUIRED IN EXISTING CONCRETE PAVEMENT OR 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.

(4) CONCRETE CORRUGATED MEDIAN CONTRACTION JOINTS SHALL BE CONSTRUCTED TO MATCH THE JOINTS IN ADJACENT CONCRETE PAVEMENT. WHERE ADJACENT PAVEMENT IS ASPHALT WITH BASE AGGREGATE DENSE. TRANSVERSE CONTRACTION JOINTS SHALL BE PROVIDED AT 20 FOOT INTERVALS.

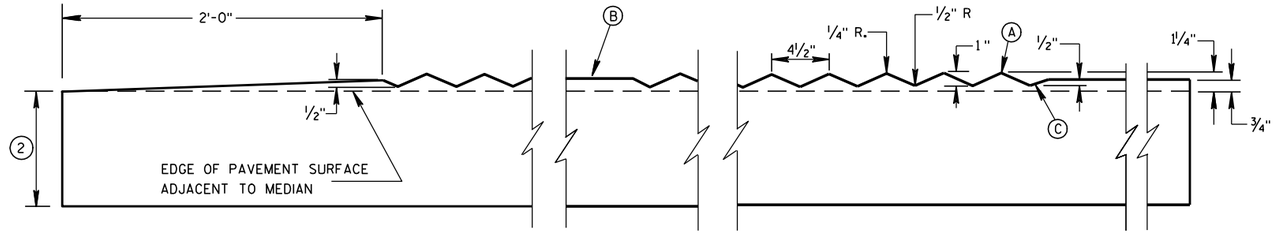
(5) SURFACE TYPE AND DETAILS ARE DEFINED ELSEWHERE IN THE PLAN.

(6) YELLOW MARKING ON FLAT SURFACE WHEN MEDIAN SEPARATES OPPOSING TRAFFIC.



HALF CROSS SECTION

(2) CONCRETE CORRUGATED MEDIAN AND ADJACENT PAVEMENT



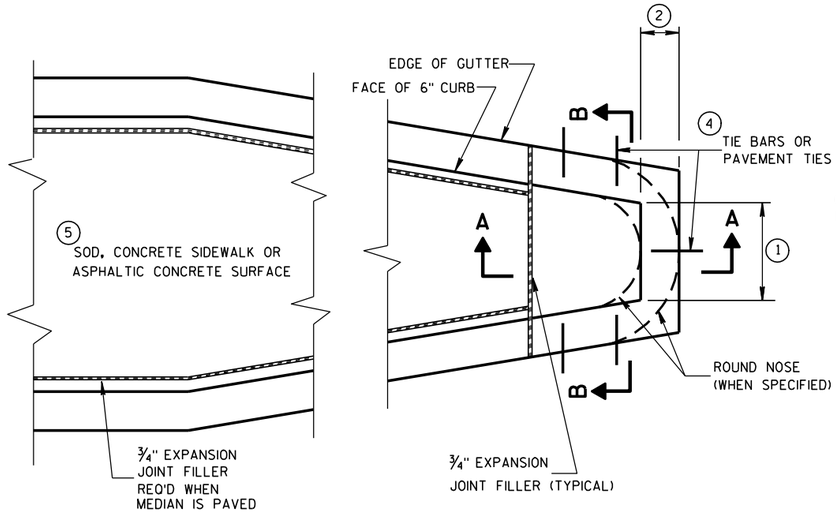
SECTION B-B

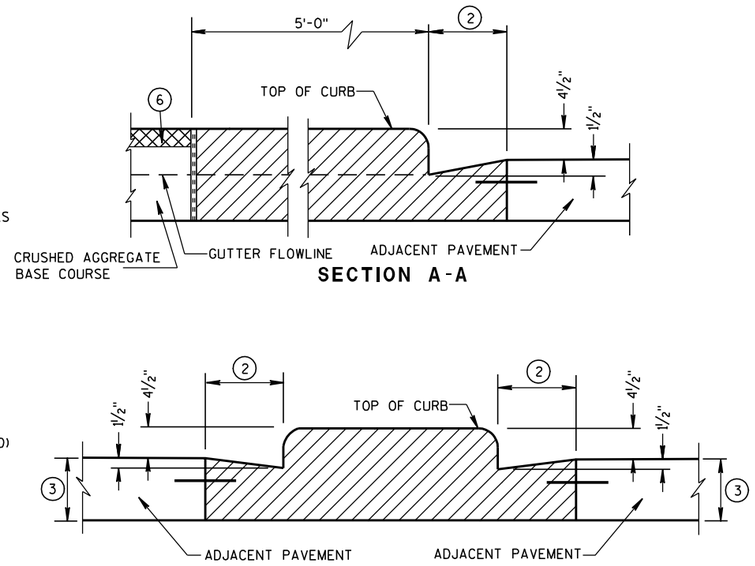
LONGITUDINAL SECTION

CONCRETE CORRUGATED MEDIAN	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	
12/17/07 DATE	/S/ Jerry H. Zogg ROADWAY STANDARDS ENGINEER
FHWA	370

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S.D.D. 11 B 1-5





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.

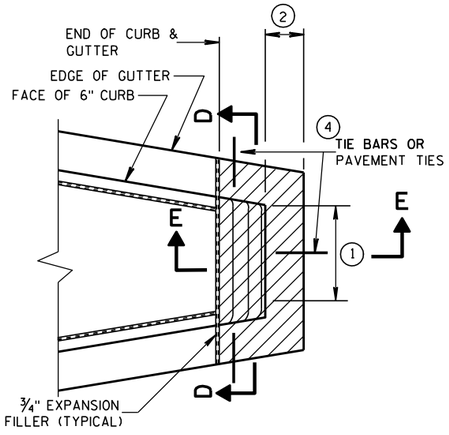
(2) ASPHALTIC CONCRETE PAVEMENT OVER NEW OR EXISTING CONCRETE BASE COURSE.

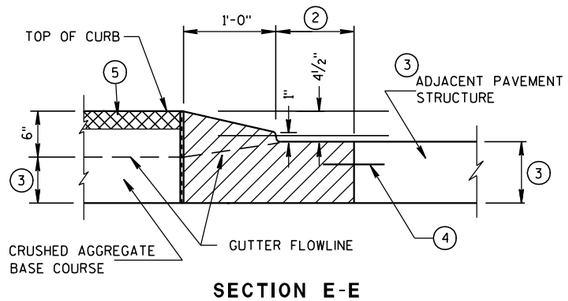
(3) ASPHALTIC CONCRETE PAVEMENT OVER CRUSHED AGGREGATE BASE COURSE.

(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.

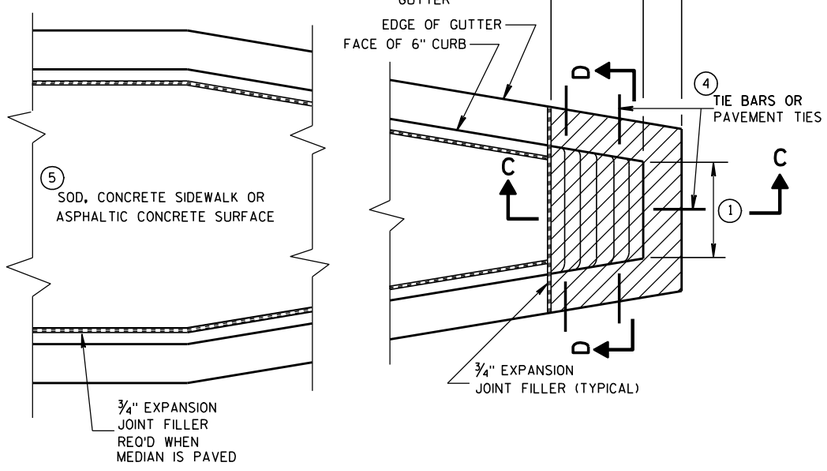
(5) SURFACE TYPE AND DETAILS ARE SHOWN ELSEWHERE IN THE PLAN.

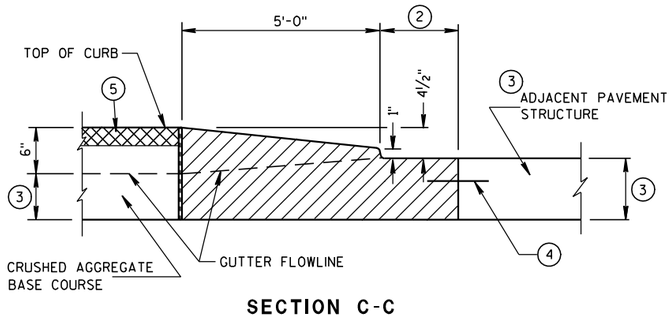




SECTION E-E

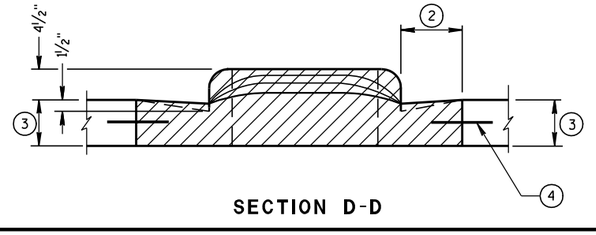
CONCRETE MEDIAN SLOPED NOSE TYPE 2





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

1371

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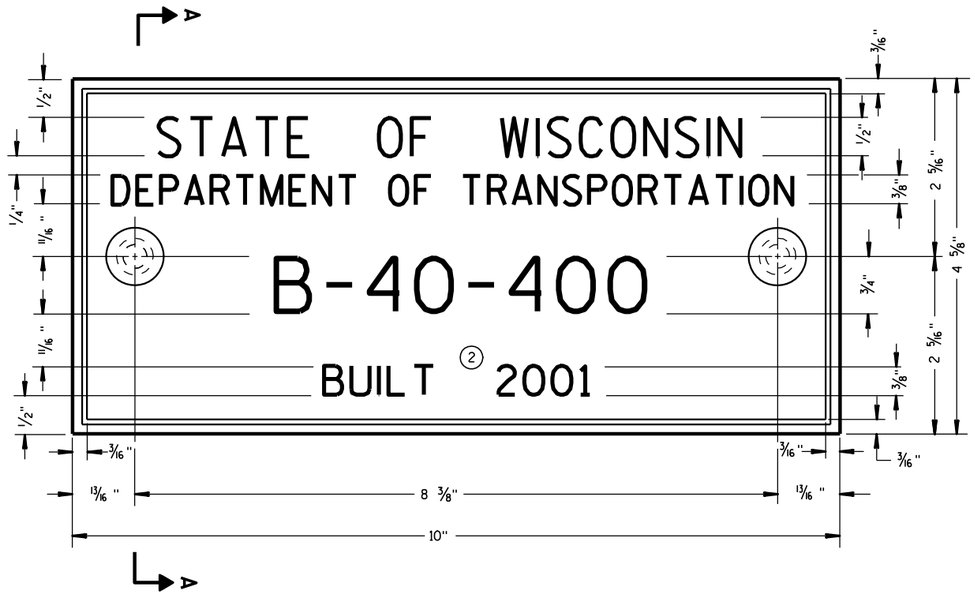
FHWA

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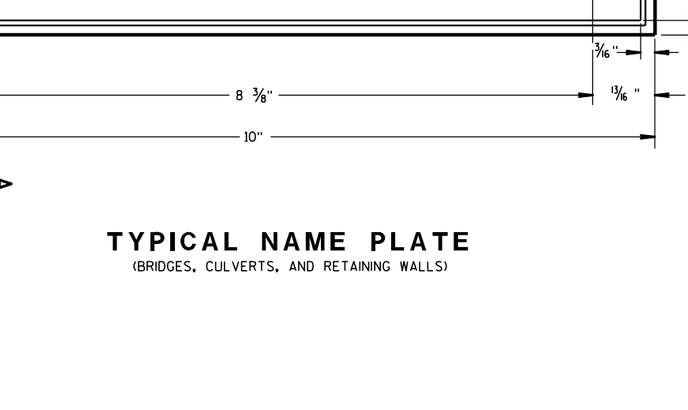
S.D.D. 11 B 2-2

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S.D.D. 11 B 2-2



TYPICAL NAME PLATE
(BRIDGES, CULVERTS, AND RETAINING WALLS)



NUMBERING DESIGNATION
MULTI-UNIT STRUCTURES

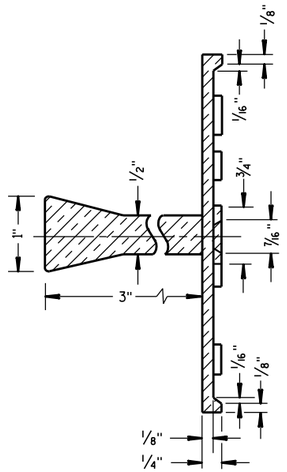
GENERAL NOTES

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.

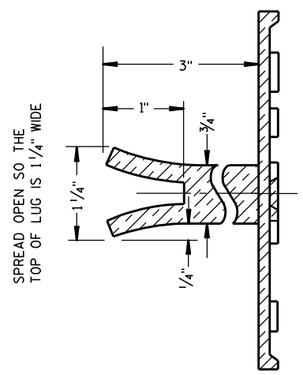
THE BRIDGE NUMBER AND YEAR BUILT SHOWN ON THIS DRAWING ARE EXAMPLES ONLY. SEE CONSTRUCTION PLANS FOR INDIVIDUAL NUMBERING AND YEAR BUILT.

(1) EPOXY RESIN SHALL BE FROM AN APPROVED MANUFACTURER AND USED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

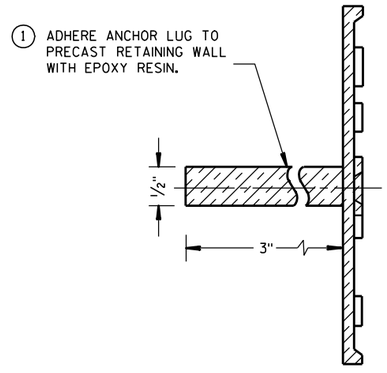
(2) REHABILITATION OF AN EXISTING STRUCTURE SHOULD USE THE DATE OF ORIGINAL STRUCTURE CONSTRUCTION.



SECTION A-A



ALTERNATE LUG



ALTERNATE LUG
(FOR ATTACHMENT TO PRECAST STRUCTURES)

NAME PLATE (STRUCTURES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

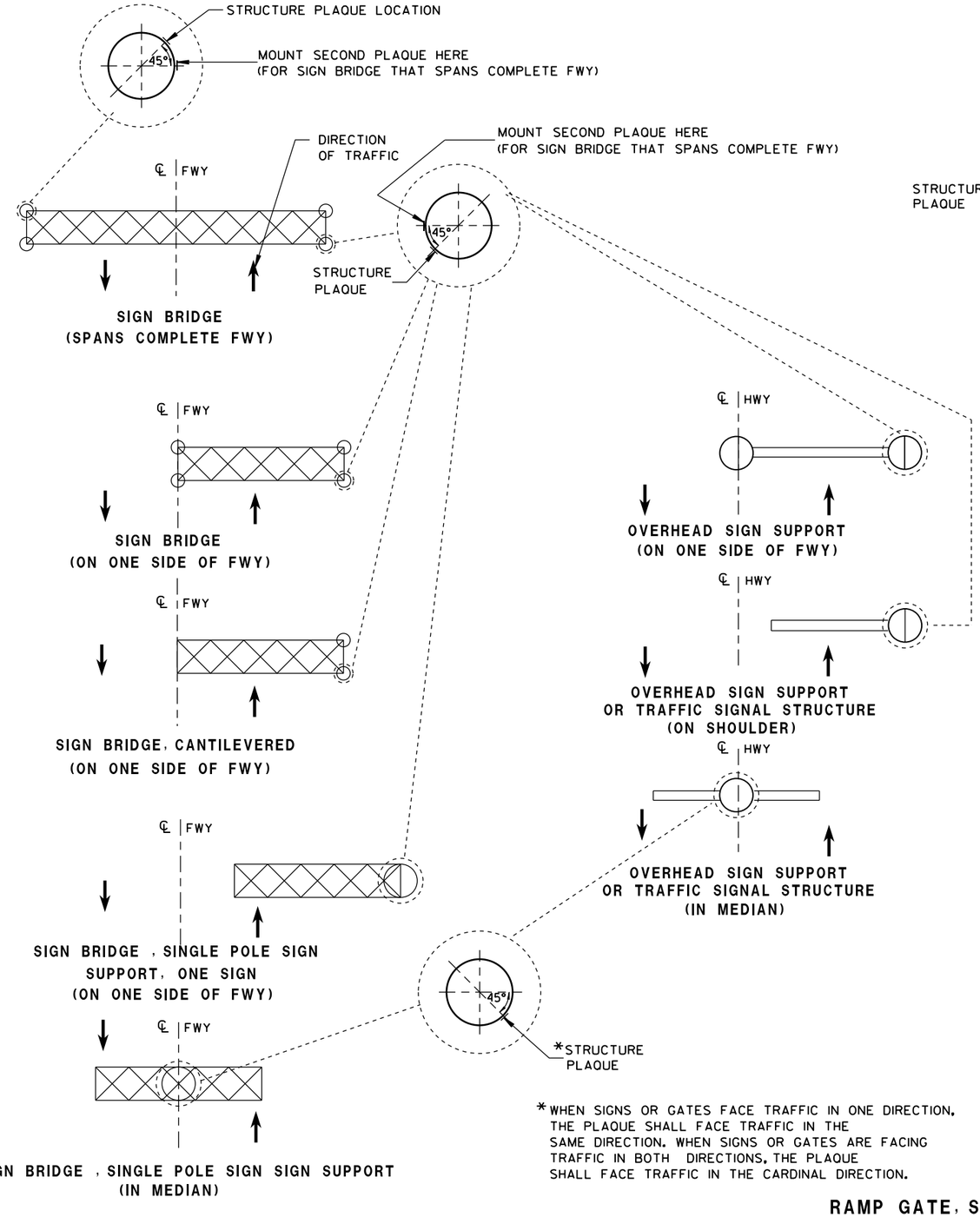
APPROVED

3/26/10 DATE — /S/ Scot Beck — CHIEF STRUCTURAL DEVELOPMENT ENGINEER

FHWA

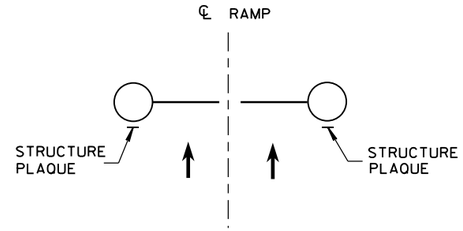
6

S.D.D. 12 A 3-10

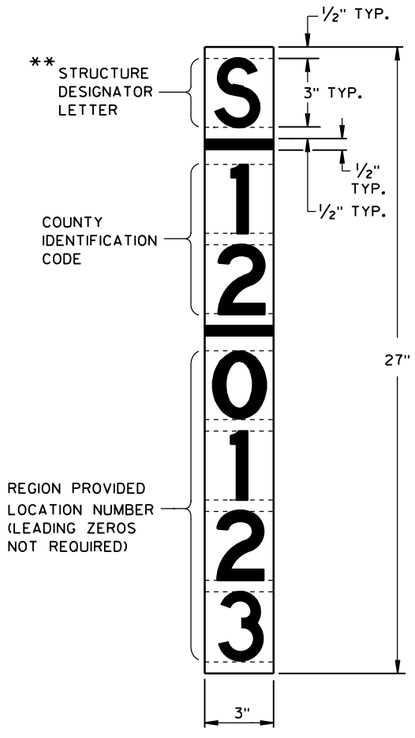


* WHEN SIGNS OR GATES FACE TRAFFIC IN ONE DIRECTION, THE PLAQUE SHALL FACE TRAFFIC IN THE SAME DIRECTION. WHEN SIGNS OR GATES ARE FACING TRAFFIC IN BOTH DIRECTIONS, THE PLAQUE SHALL FACE TRAFFIC IN THE CARDINAL DIRECTION.

LOCATION OF RAMP GATE, SIGN BRIDGE, OVERHEAD SIGN SUPPORT & TRAFFIC SIGNAL STRUCTURE PLAQUES



RAMP GATE
(ACROSS FWY ON-RAMP)



** LETTER "G" UTILIZED FOR RAMP GATES. LETTER "S" UTILIZED FOR SIGN BRIDGES, OVERHEAD SIGN SUPPORTS, AND TRAFFIC SIGNALS.

RAMP GATE, SIGN BRIDGE, OVERHEAD SIGN SUPPORT AND TRAFFIC SIGNAL 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.

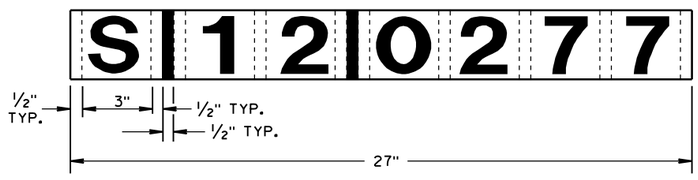
FACE - WHITE, SELF-ADHESIVE VINYL SHEETING, NON-RETROREFLECTIVE

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 SUPPORTS, & TRAFFIC SIGNALS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

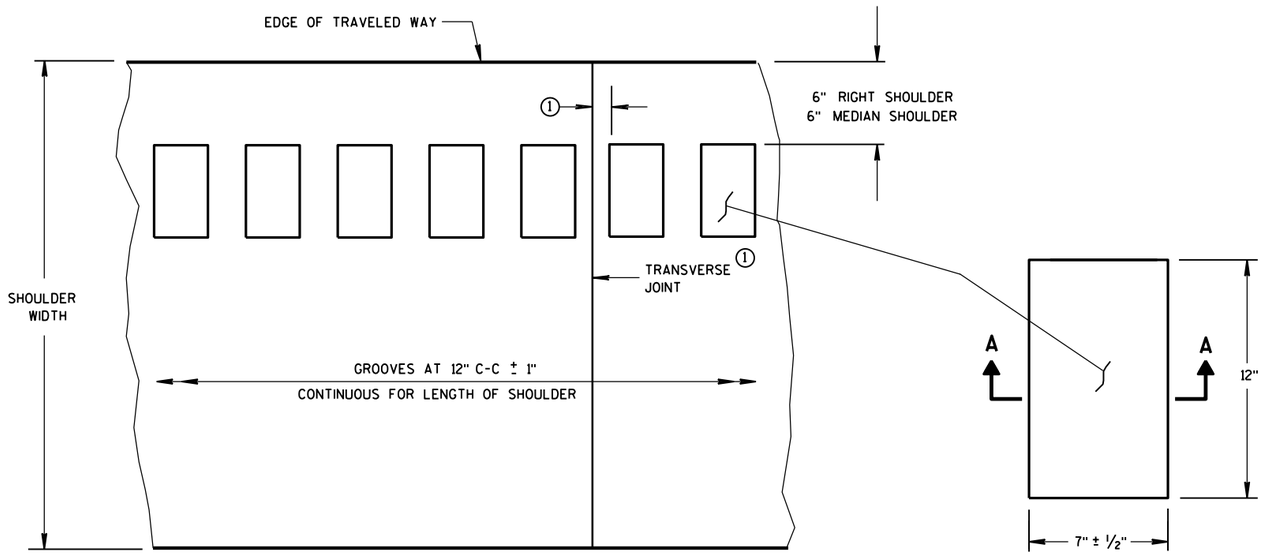
APPROVED
12/4/2012 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

6

S.D.D. 12 A 4-3

6

S.D.D. 12 A 4-3



PLAN VIEW
SHOULDER WITH GROOVES

PLAN VIEW
(SINGLE GROOVE)

PLACEMENT DETAIL FOR MILLED RUMBLE STRIP

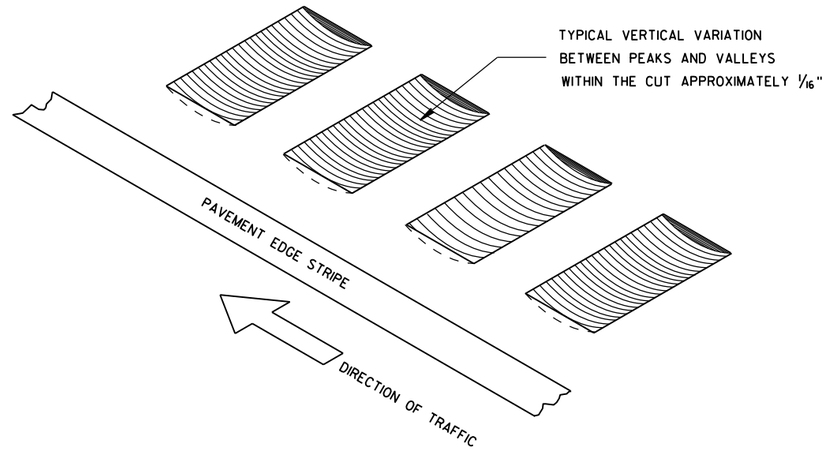
GENERAL NOTES

DETAILS OF CONSTRUCTION SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

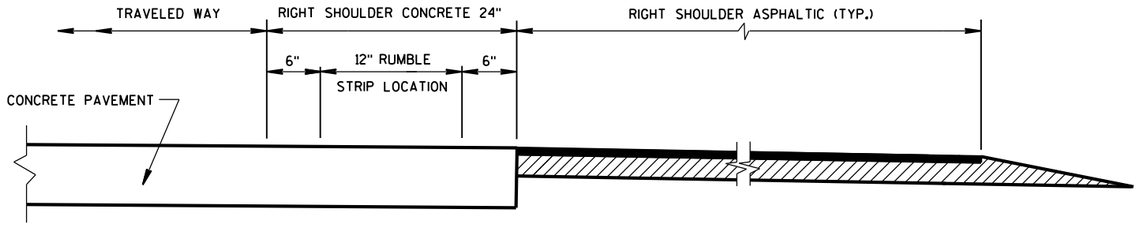
RUMBLE STRIPS ON EXPRESSWAYS

DO NOT INSTALL RUMBLE STRIPS ACROSS SIDE ROAD INTERSECTIONS, COMMERCIAL DRIVEWAYS, PRIVATE DRIVEWAYS OR ADJACENT TO RIGHT TURN LANES, LEFT TURN LANES, TURN LANE TAPERS, BRIDGE DECKS, BRIDGE APPROACHES, OR 100 FEET IN ADVANCE OF RAILROAD CROSSING. THE ATTACHED STANDARD DETAIL DRAWING SHOWS THE LOCATION OF THE RUMBLE STRIPS AT INTERCHANGE AREAS.

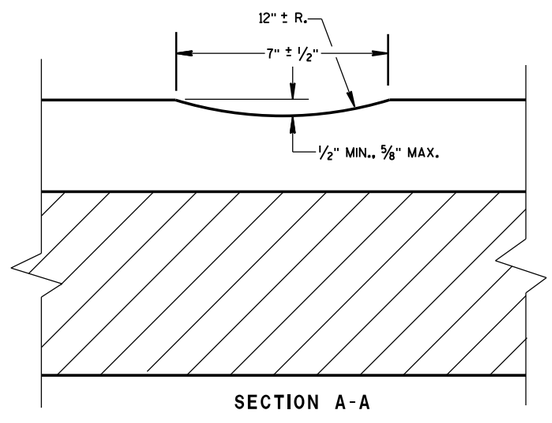
(1) CONCRETE PAVEMENT - RUMBLE STRIPS SHALL BE A MINIMUM OF 6" AWAY FROM TRANSVERSE JOINTS.



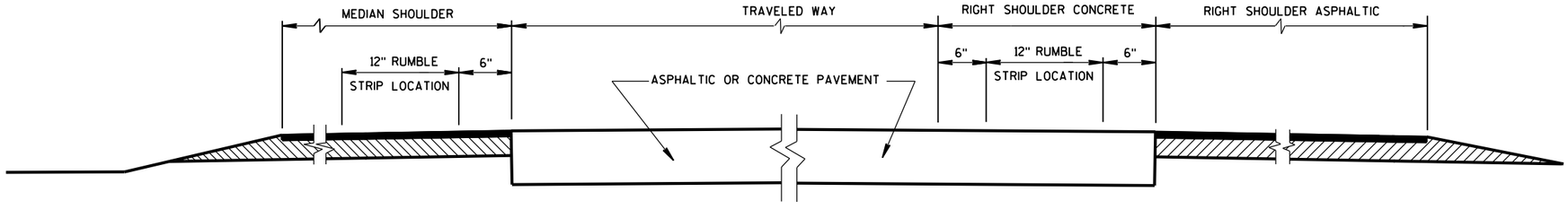
ISOMETRIC



SECTION VIEW
CONCRETE PAVEMENT EXTENDS INTO RIGHT SHOULDER)



SECTION A-A



SECTION VIEW

TYPICAL LOCATIONS OF SHOULDER RUMBLE STRIPS IN RURAL DIVIDED HIGHWAYS

(ONE ROADWAY IS SHOWN)

SHOULDER RUMBLE STRIP, MILLING

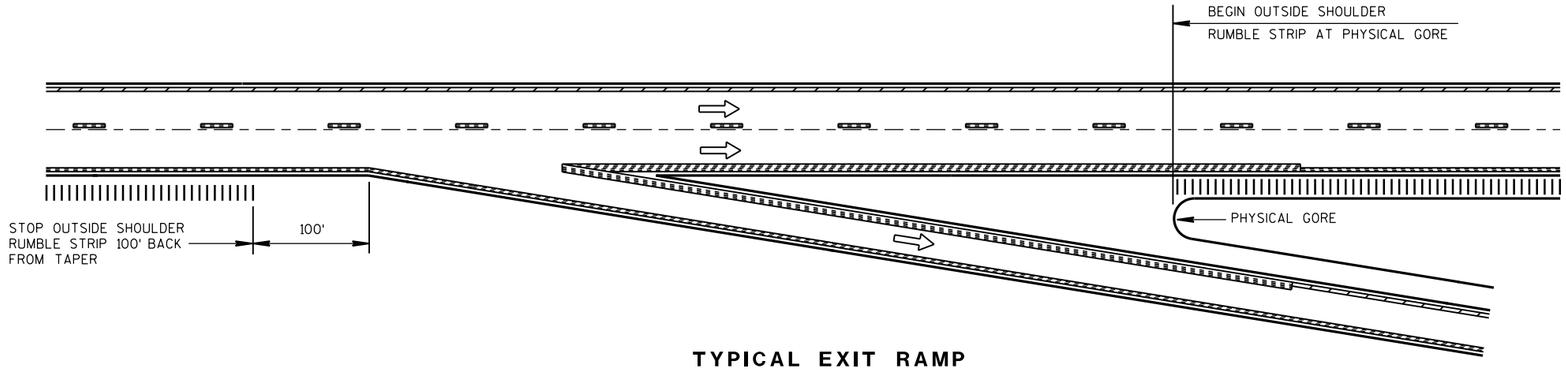
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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S.D.D. 13 A 5-5a

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S.D.D. 13 A 5-5a



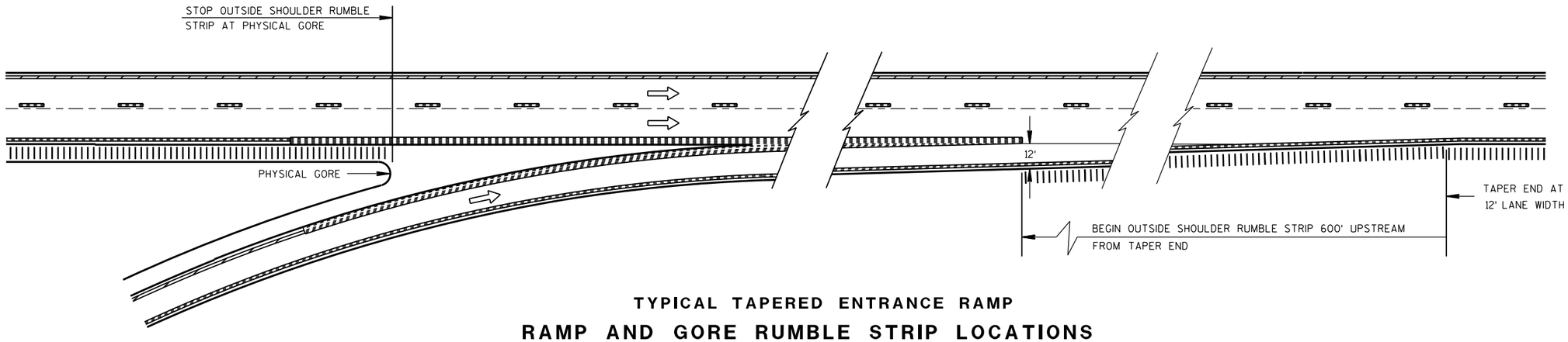
TYPICAL EXIT RAMP

NOTES:

NO RUMBLE STRIP ON EXIT, DIRECTIONAL, OR ENTRANCE RAMPS, EXCEPT NEAR THE ENTRANCE TAPER END AND ALONG THE PARALLEL RAMP AREA AS SHOWN.

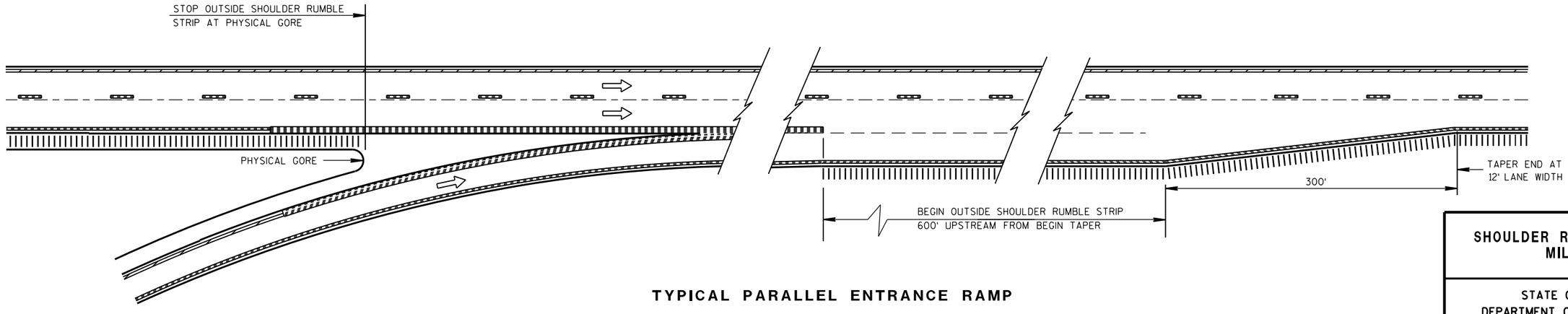
PAVEMENT MARKING DETAILS AND SPECIFICATIONS ARE PROVIDED ELSEWHERE IN THE CONTRACT.

NOTE:
ARROW SYMBOL (⇨)
SHOWS DIRECTION OF TRAVEL



TYPICAL TAPERED ENTRANCE RAMP

RAMP AND GORE RUMBLE STRIP LOCATIONS



TYPICAL PARALLEL ENTRANCE RAMP

RAMP AND GORE RUMBLE STRIP LOCATIONS

SHOULDER RUMBLE STRIP, MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

12/17/2012
DATE

/S/ Jerry H. Zoga
ROADWAY STANDARDS ENGINEER

FHWA

375

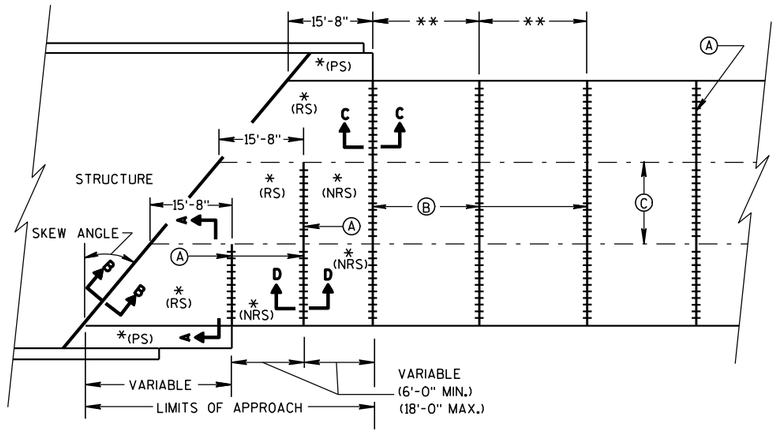
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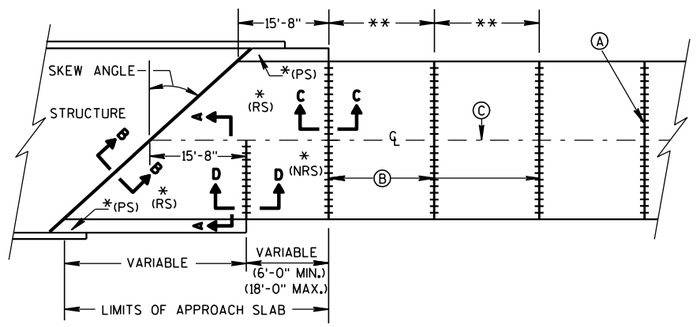
S.D.D. 13 A 5-5b

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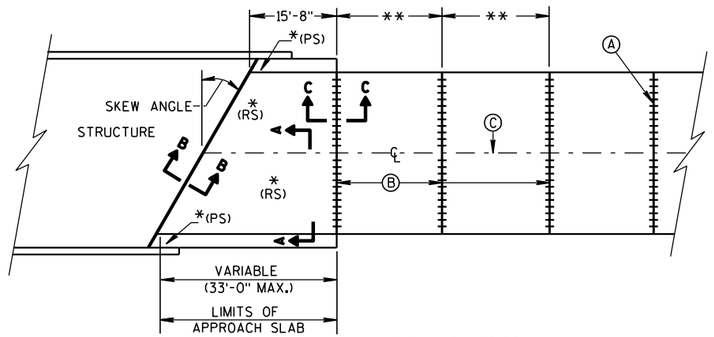
S.D.D. 13 A 5-5b



SKEWED APPROACH
(PAVEMENT MORE THAN 2 LANES)



SKEWS >30°
(PAVEMENT WIDTH ≤30')



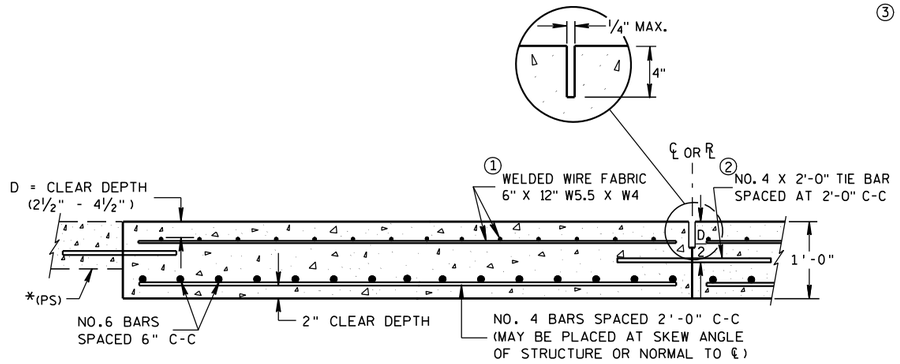
SKEWS ≤30°
(PAVEMENT WIDTH ≤30')

APPROACH SLAB AND ADJACENT PAVEMENT

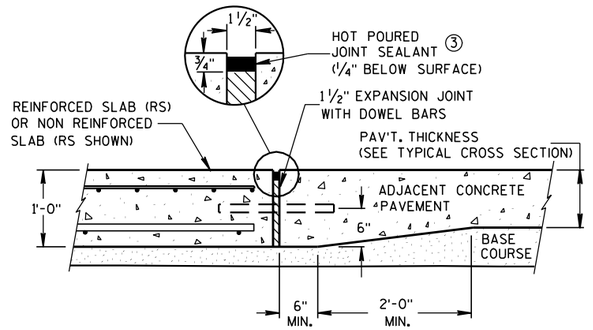
*(RS) = REINFORCED CONCRETE SLAB
*(PS) = PAVED CONCRETE SHOULDER: CONCRETE PAVEMENT, OR CONCRETE SURFACE DRAIN
(SEE DETAILS ELSEWHERE IN THE PLAN)
*(NRS) = NON-REINFORCED CONCRETE SLAB

**STANDARD TRANSVERSE JOINT SPACING
(SEE SDD 13C4, SDD 13C11, & SDD 13C13)

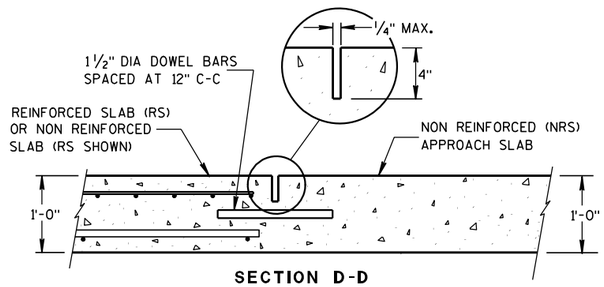
(A) STANDARD CONTRACTION JOINT NORMAL TO ℄ OR ℄
(B) 1½" EXPANSION JOINT WITH DOWEL BARS NORMAL TO ℄ OR ℄
(C) STANDARD LONGITUDINAL JOINT AND TIE BARS.



SECTION A-A
REINFORCEMENT POSITIONING DETAIL



SECTION C-C
TRANSITION DETAIL
APPROACH SLAB TO ADJACENT PAVEMENT



SECTION D-D
CONTRACTION JOINT

GENERAL NOTES

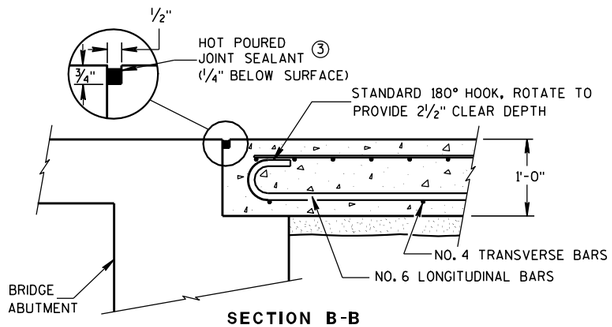
APPROACH SLABS ABUTTING AN HMA PAVEMENT OVER BASE COURSE DO NOT NEED TO BE DOWELED.

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.

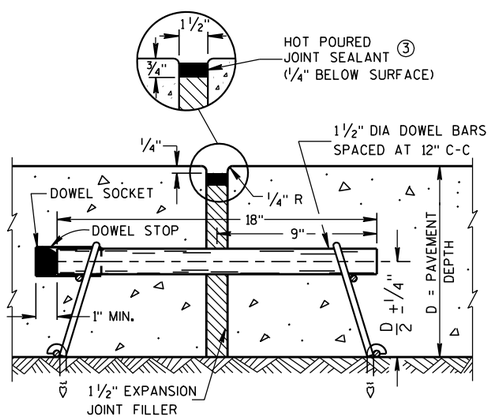
(1) THE CONTRACTOR MAY USE NO. 4 BARS SPACED AT 2'-0" C-C IN BOTH THE LONGITUDINAL AND TRANSVERSE DIRECTIONS FOR TOP REINFORCEMENT AS AN ALTERNATIVE TO THE WELDED WIRE FABRIC.

(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

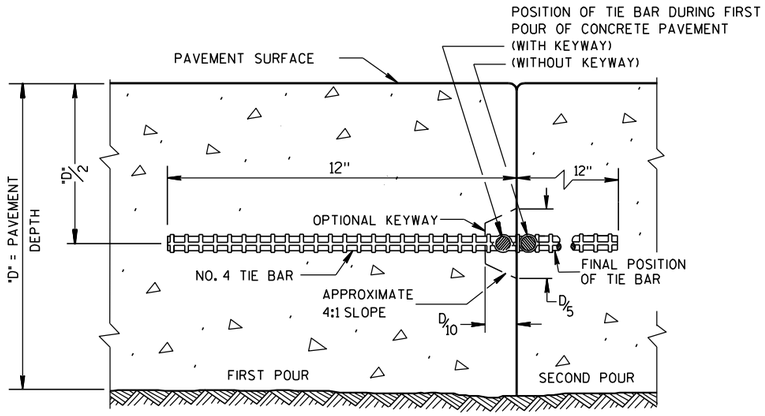
APPROVED
12/11/2009
DATE
/S/ Deb Bischoff
PAVEMENT POLICY & DE 376 NEER
FHWA

6

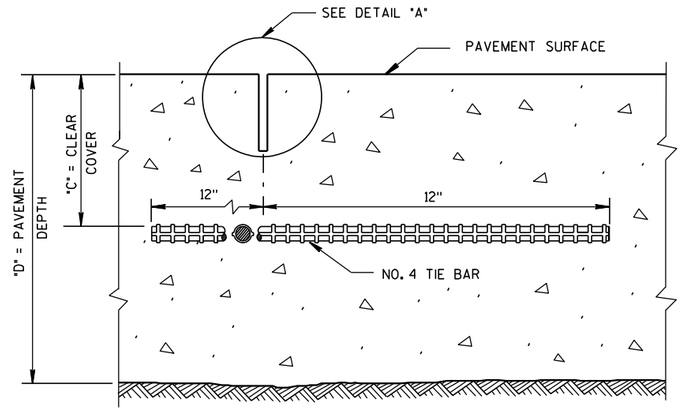
S.D.D. 13 B 2-6

6

S.D.D. 13 B 2-6



CONSTRUCTION JOINT



SAWED JOINT

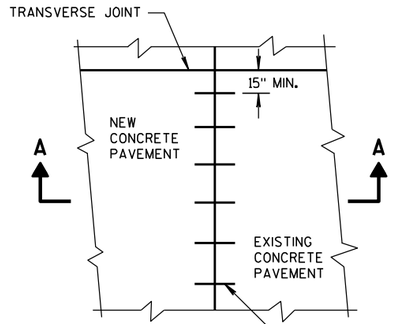
GENERAL NOTES

DO NOT SEAL OR FILL LONGITUDINAL JOINTS.

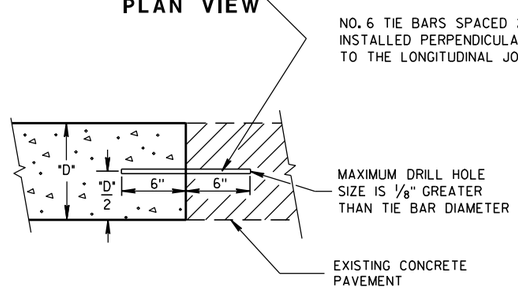
CREATE A LONGITUDINAL JOINT FOR PAVEMENT WIDTHS GREATER THAN 15 FEET.

CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

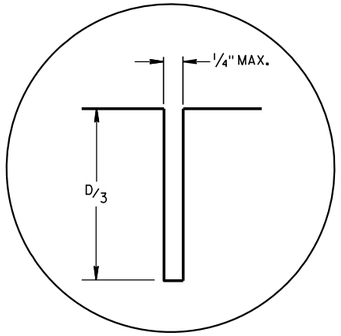
(1) ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.



PLAN VIEW

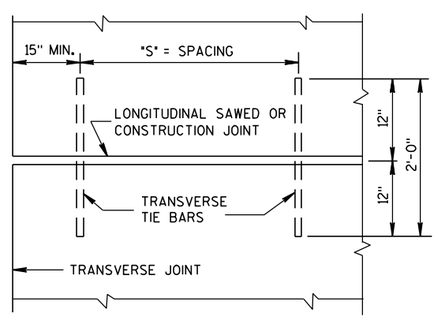


SECTION A-A
LONGITUDINAL CONSTRUCTION JOINT TIE BARS ANCHORED INTO EXISTING PAVEMENT



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 377 INEER

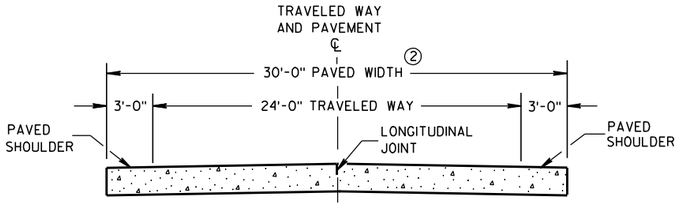
FHWA

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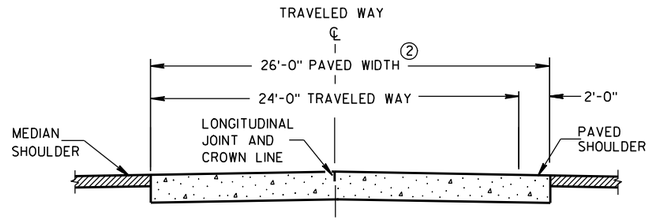
S.D.D. 13 C 1-15

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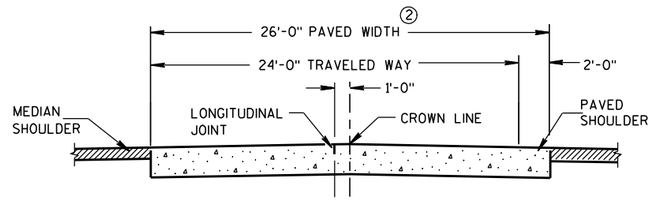
S.D.D. 13 C 1-15



SECTION A-A
TWO-LANE TWO-WAY HIGHWAY ①



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.

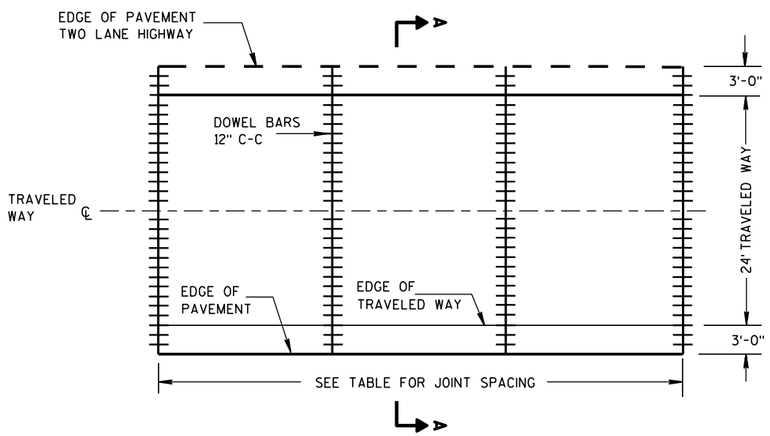
THE CONTRACTOR MAY INSERT TIE BARS THROUGH THE HEADER BOARD AFTER THE CONCRETE HAS BEEN PLACED.

① REFER TO TYPICAL CROSS SECTIONS FOR ADDITIONAL DETAILS.

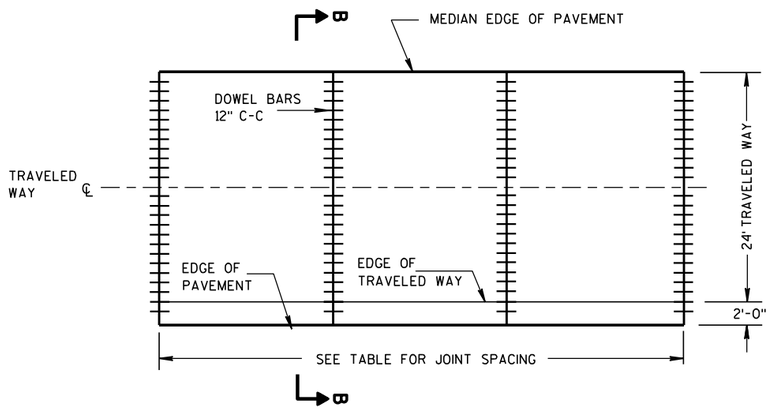
② MEASURE THE ENTIRE PAVED WIDTH INCLUDING THE PORTION(S) LABELED PAVED SHOULDER AS CONCRETE PAVEMENT.

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



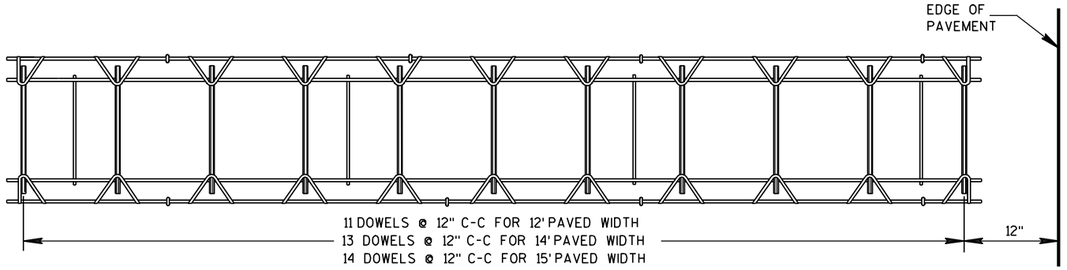
CONTRACTION JOINT LAYOUT
FOR DIVIDED HIGHWAY

RURAL DOWELED
CONCRETE PAVEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

S.D.D. 13 C 11-10a
S.D.D. 13 C 11-10a



PLAN VIEW

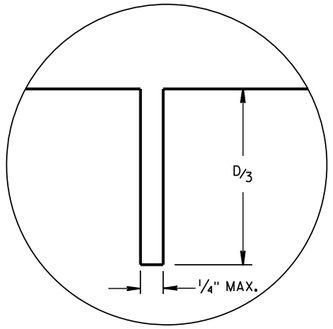


⑤

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.

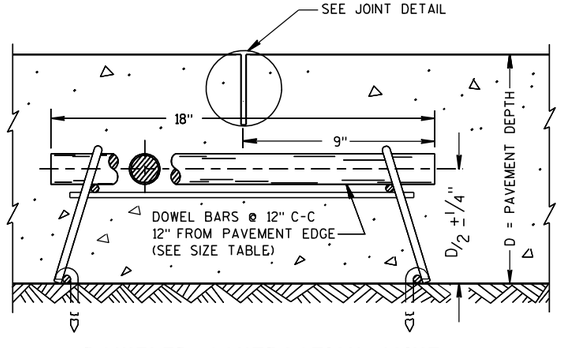
② ANCHOR DOWEL BARS INTO DRILLED HOLES WITH AN EPOXY.

③ APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.

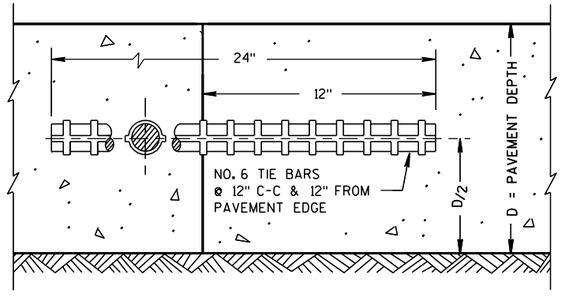
④ SPACE DOWEL BARS INSTALLED BY DRILLING 1'-3" ON CENTER. CENTER THE GROUPING OF DOWEL BARS INSIDE THE SLAB BASED ON ALL THE FOLLOWING SITUATIONS:

BETWEEN THE EDGES OF PAVEMENTS WITHOUT LONGITUDINAL JOINTS OR BETWEEN THE EDGE OF PAVEMENT AND NEAREST LONGITUDINAL JOINT OR BETWEEN TWO ADJACENT LONGITUDINAL JOINTS.

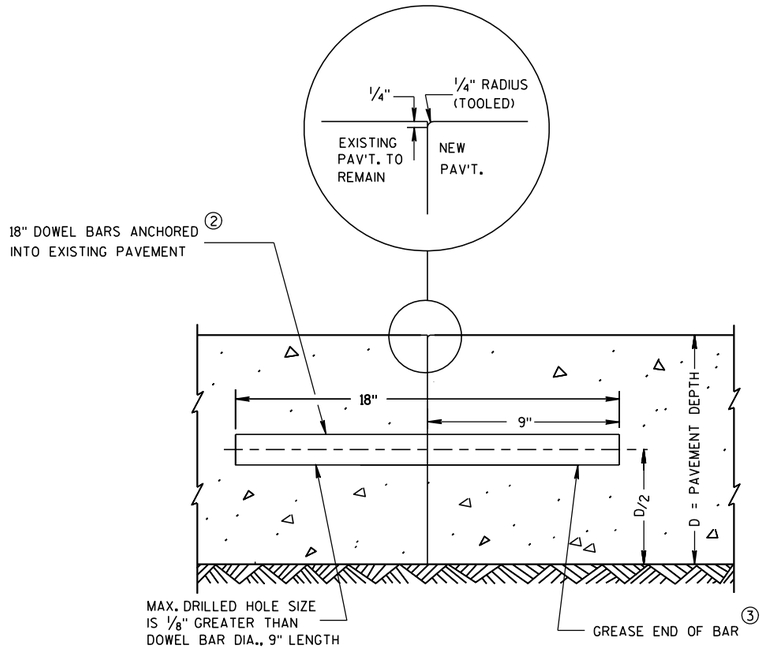
⑤ SECURE BASKETS WITH ANCHORS TO HOLD DOWEL BARS IN THE CORRECT POSITION AND ALIGNMENT. TYPE, LOCATION, NUMBER AND LENGTH OF ANCHORS ARE DEPENDENT UPON FIELD CONDITIONS.



DOWELED CONTRACTION JOINT



CONSTRUCTION JOINT



TRANSVERSE CONTRACTION JOINTS ABUTTING EXISTING PAVEMENT

④ **DOWEL BAR DETAIL**

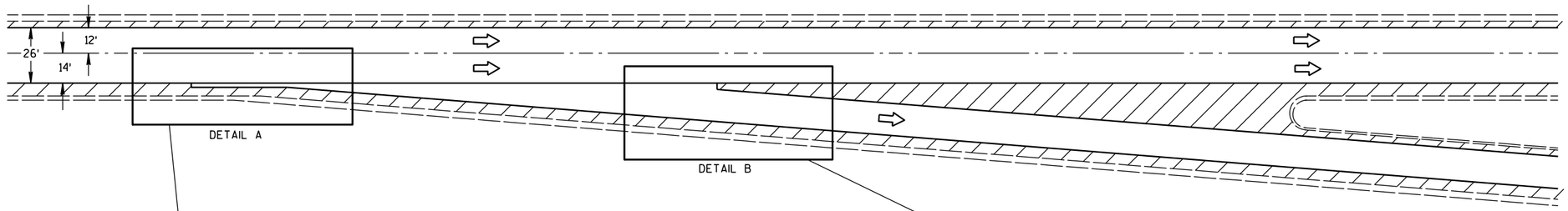
RIRAL DOWELED CONCRETE PAVEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

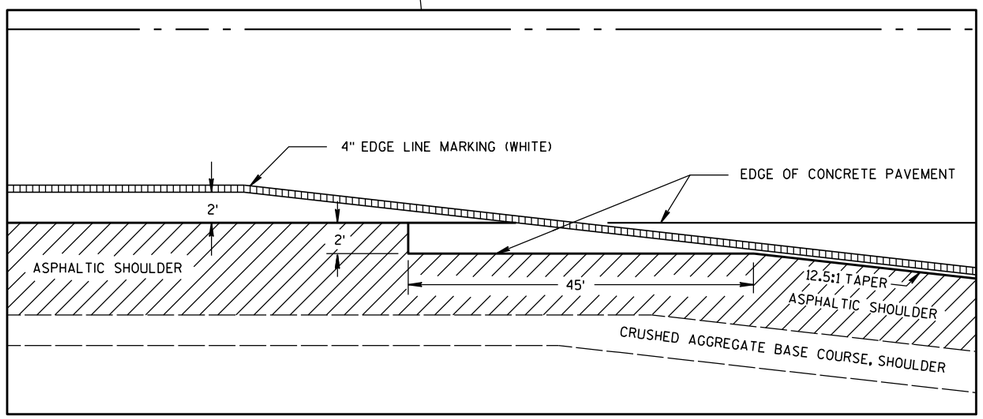
APPROVED
12/11/09 — DATE
/S/ Deb Bischoff — PAVEMENT POLICY & DESIGNER
FHWA

6

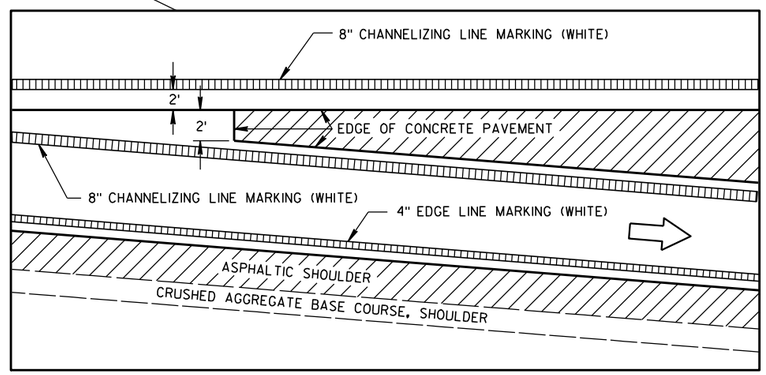
S.D.D. 13 C 11-10b



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

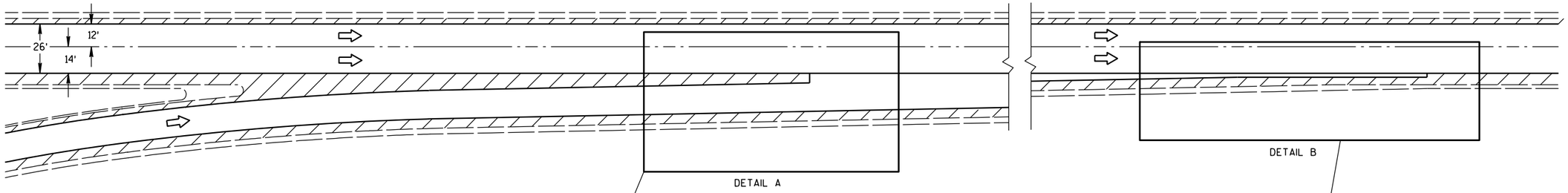
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

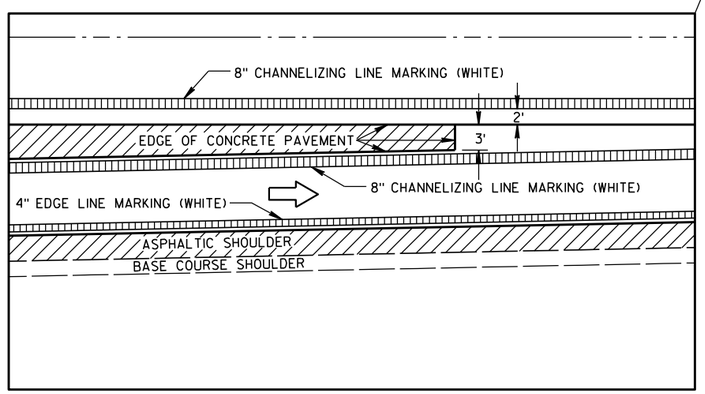
S.D.D. 13 C 17-1a

6

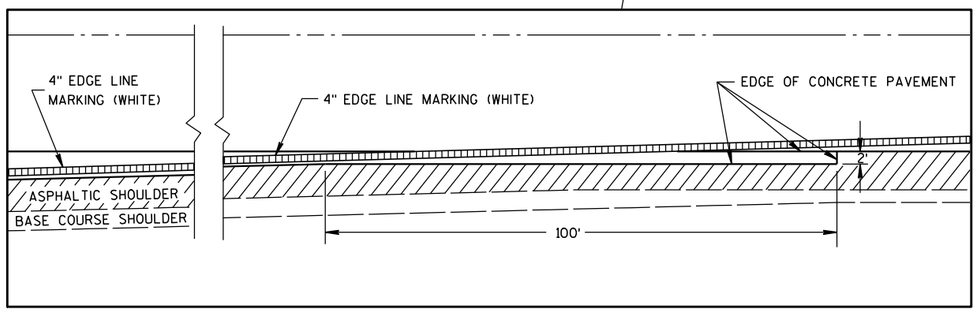
S.D.D. 13 C 17-1a



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

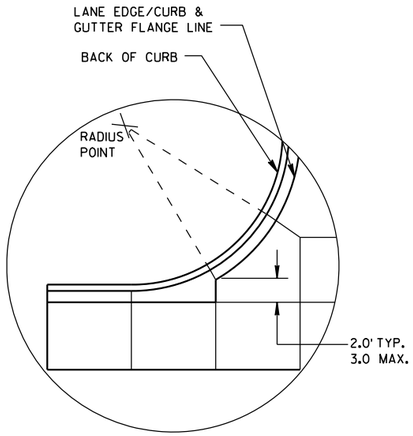
5/27/98
DATE

/S/ Rory L. Rhinesmith
CHIEF ROADWAY DEVELOPMENT ENGINEER

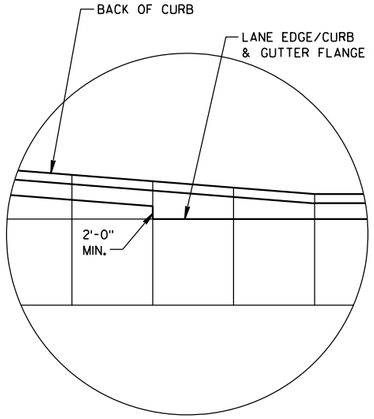
FHWA

6

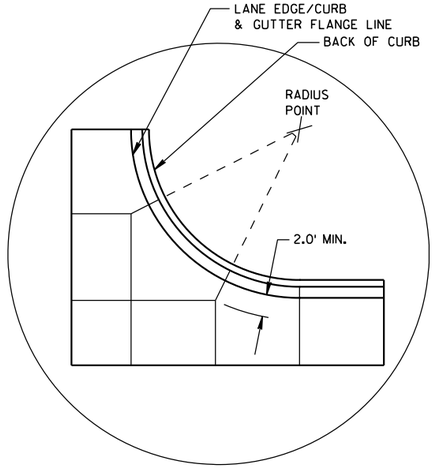
S.D.D. 13 C 17-1b



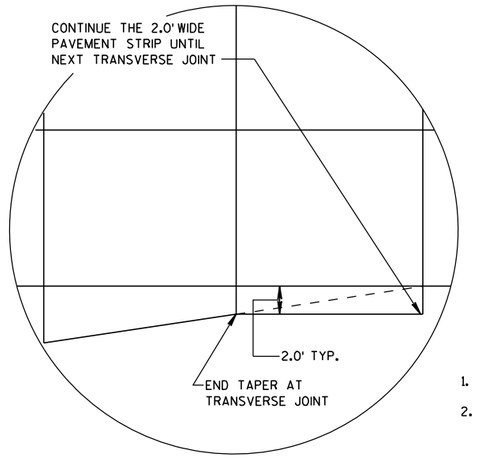
DETAIL "A"



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.

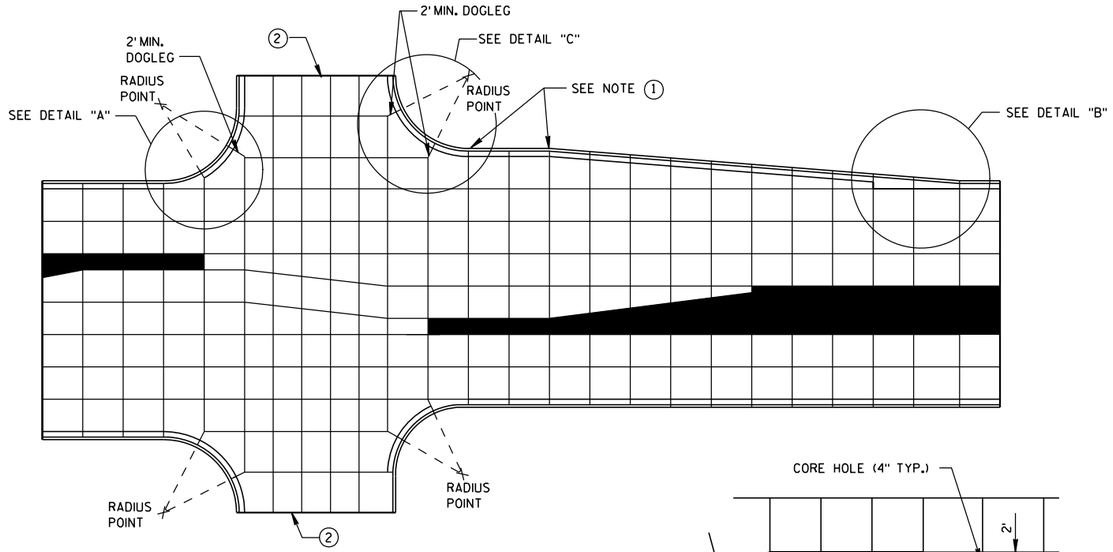
AVOID SLABS LESS THAN 2 FEET WIDE OR GREATER THAN 15 FEET WIDE.

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.

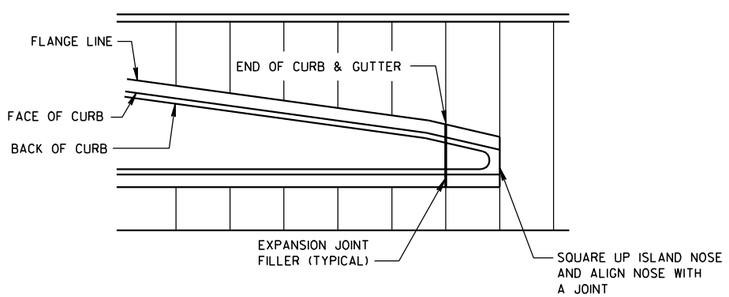
1. PROVIDE TRANSVERSE JOINTS AT ALL PAVEMENT WIDTH CHANGES.
2. CONSTRUCT DOWELED EXPANSION JOINT ON THE SIDE ROAD OF AN INTERSECTION IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH. ALIGN EXPANSION JOINT WITH EDGE OF RADIUS.
3. THE ENGINEER MAY APPROVE SLIGHT VARIATIONS FROM THESE JOINTING DETAILS.



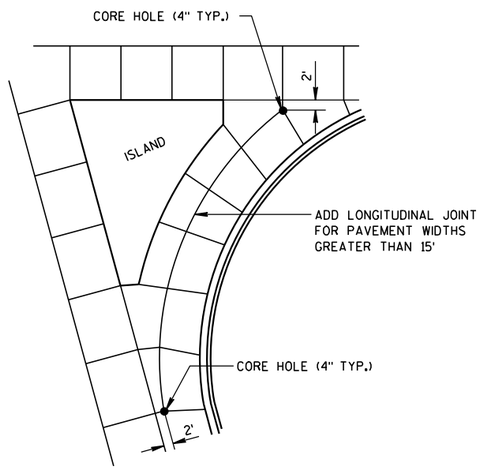
STANDARD INTERSECTION

PAVEMENT DEPTH AND JOINT SPACING TABLE

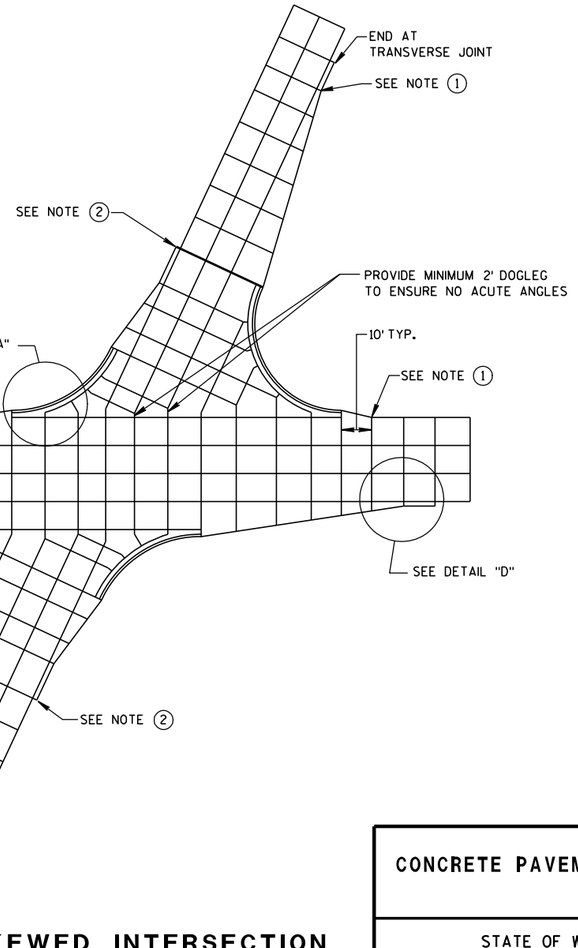
PAVEMENT DEPTH (D)	CONTRACTION JOINT SPACING
6", 6½"	12'
7", 7½"	14'
8" & ABOVE	15'



APPROACH TO MEDIAN



LARGE RIGHT TURN



SKEWED INTERSECTION

CONCRETE PAVEMENT JOINTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

S.D.D. 13 C 18-1a

6

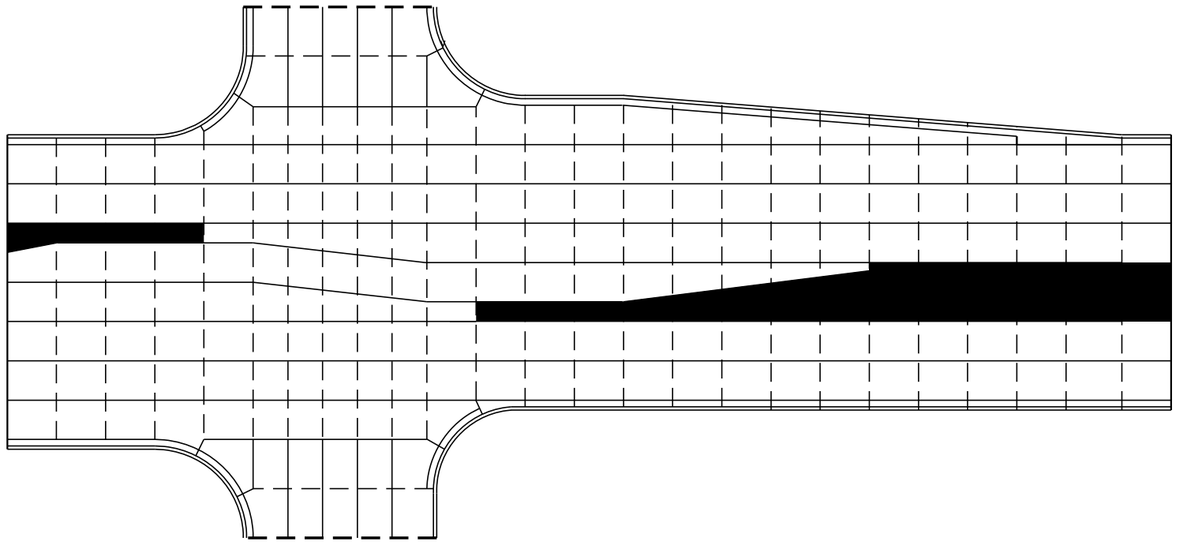
S.D.D. 13 C 18-1a

LEGEND

POTENTIAL DOWELED EXPANSION JOINT

DOWELED JOINT

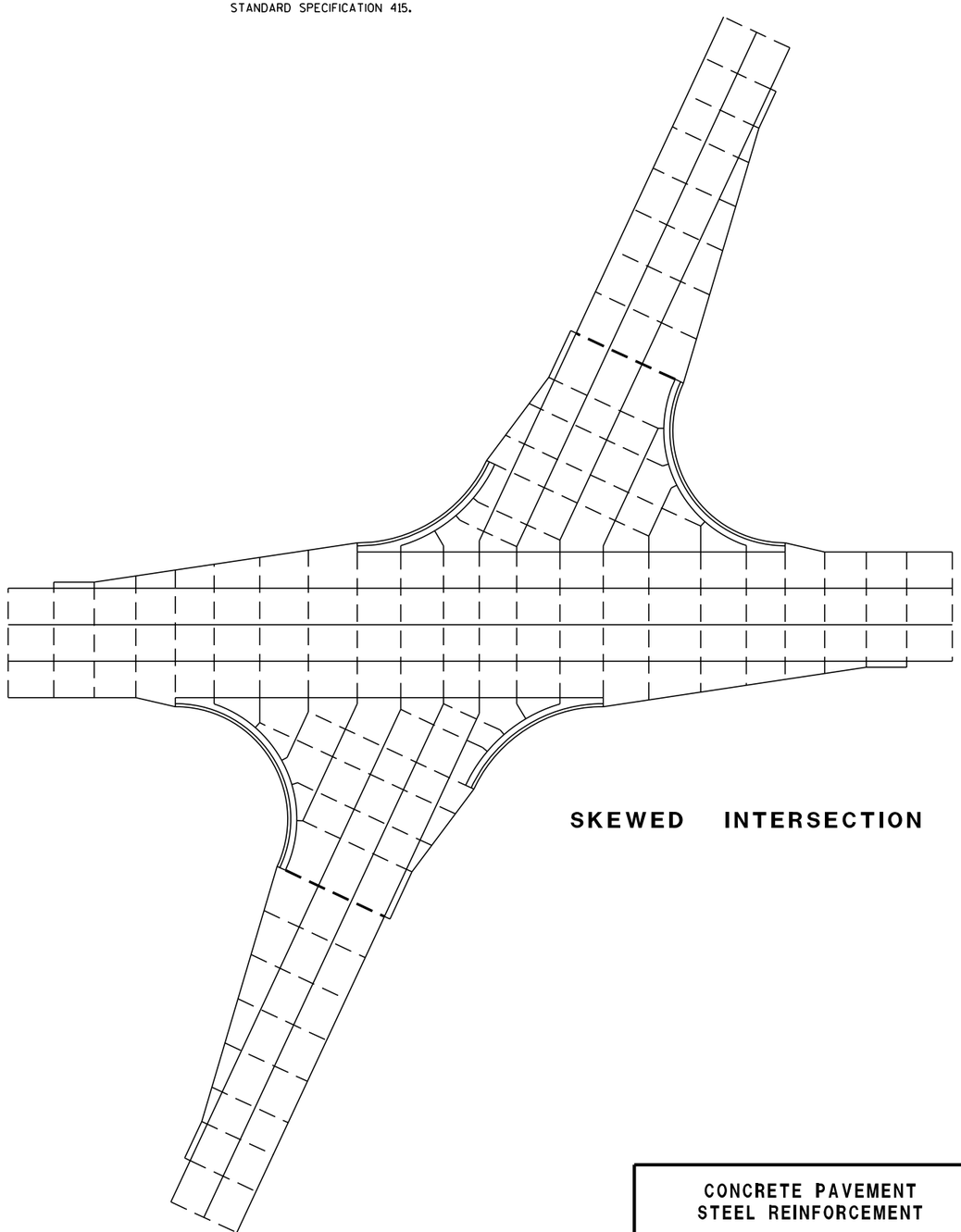
TIED JOINT



STANDARD INTERSECTION

GENERAL NOTES

USE AN EXPANSION JOINT FILLER MEETING THE REQUIREMENTS OF STANDARD SPECIFICATION 415.



SKEWED INTERSECTION

6

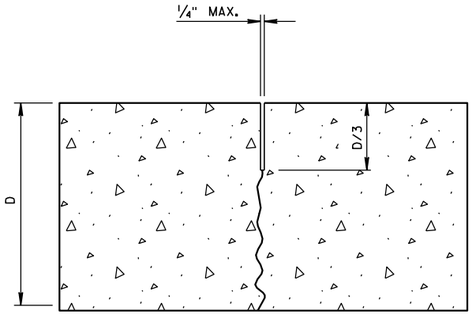
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S.D.D. 13 C 18-1b

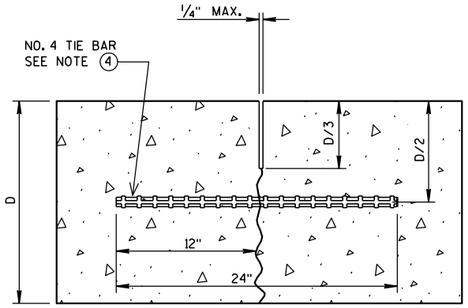
S.D.D. 13 C 18-1b

CONCRETE PAVEMENT
STEEL REINFORCEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



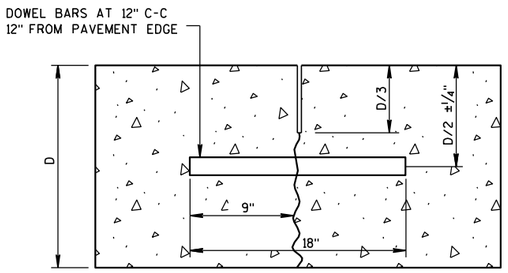
UNDOWELED-TRANSVERSE



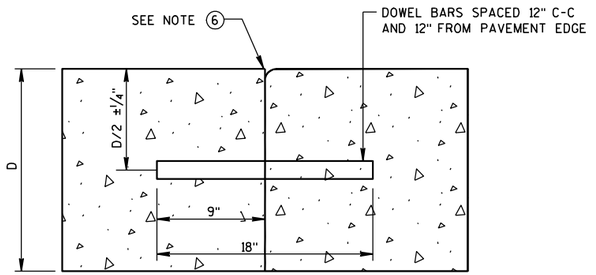
TIED LONGITUDINAL

GENERAL NOTES

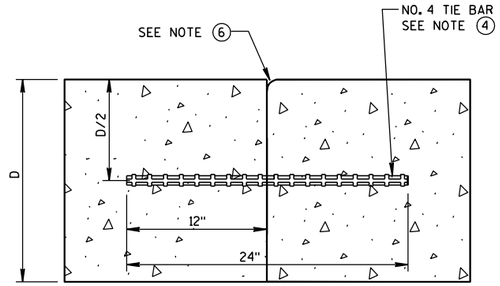
1. USE DOWELED EXPANSION JOINTS ON SIDE ROADS AT INTERSECTIONS (TO ISOLATE THE SIDE ROAD FROM THE THROUGH STREET) IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH.
2. SPACE CONTRACTION JOINTS IN ACCORDANCE WITH 13C4, 13C11 OR 13C13.
3. LOCATE CONSTRUCTION JOINTS A MINIMUM OF 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



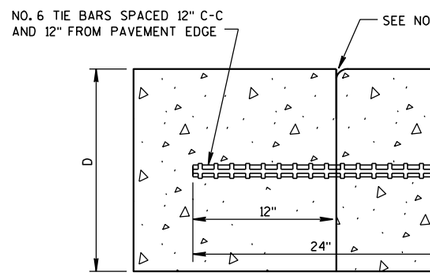
DOWELED TRANSVERSE



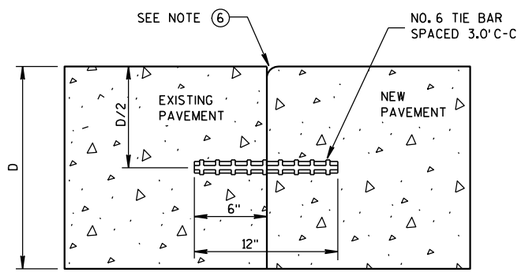
TIED LONGITUDINAL

CONTRACTION JOINTS

SEE NOTE (2)



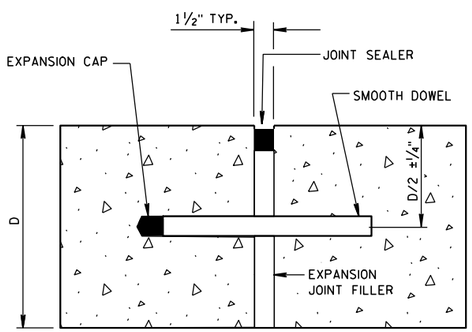
TIED TRANSVERSE
SEE NOTE (3)



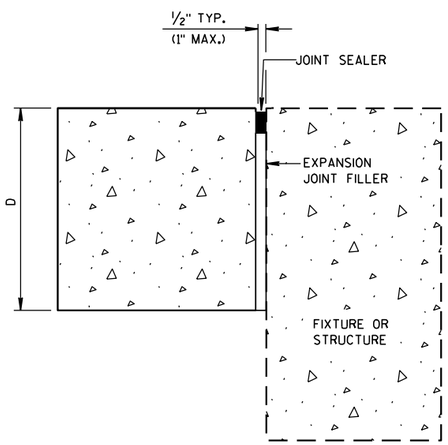
TIED LONGITUDINAL TO EXISTING

CONSTRUCTION JOINTS

SEE NOTE (5)



DOWELED-TRANSVERSE
SEE NOTE (1)



UNTIED-LONGITUDINAL

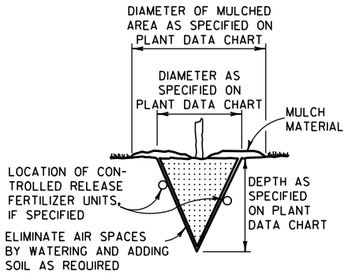
EXPANSION JOINTS

CONCRETE PAVEMENT
JOINT TYPES

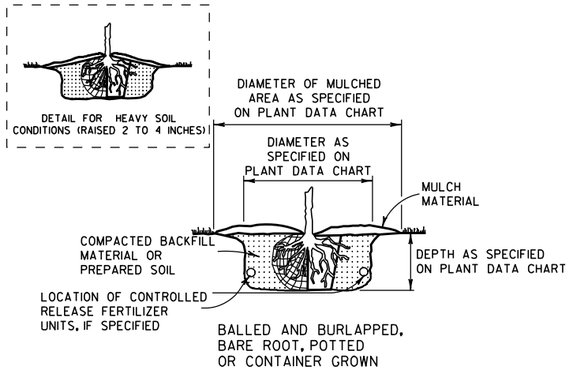
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

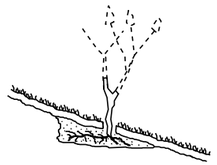
S.D.D. 13 C 18-1c



MACHINE MOVED

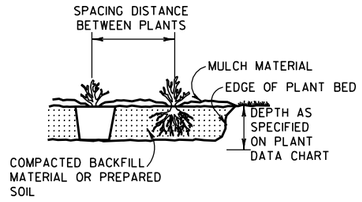


BALLED AND BURLAPPED, BARE ROOT, POTTED OR CONTAINER GROWN



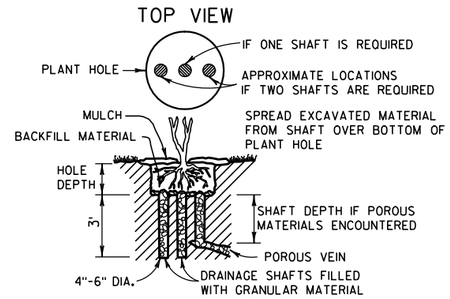
ACCOMMODATE ROOTS (SMOOTH AND STAGHORN SUMAC)

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



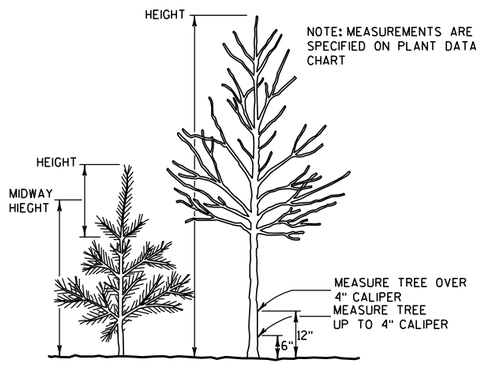
PREPARED BED (BARE ROOT AND POTTED)

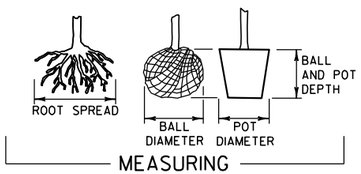
PLANTING



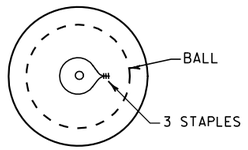
NOTE:
DRAINAGE SHAFT AS SPECIFIED ON PLANT DATA CHART

DRAINING

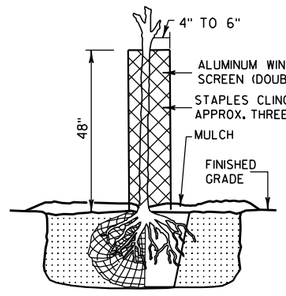




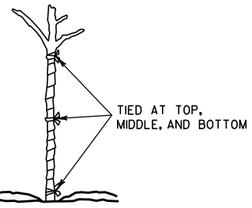
MEASURING



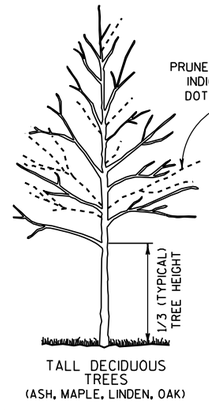
TOP VIEW



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)

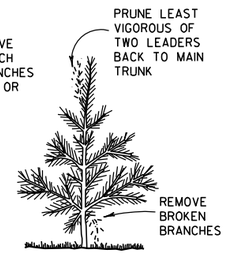
NOTE: WHEN PRUNING, PRESERVE CHARACTER AND SHAPE OF TREE. AVOID LEAVING STUBS - REMOVE BRANCH OR TWIG BACK TO THE NEAREST CROTCH
1) PRUNE TO REMOVE DEAD AND BROKEN BRANCHES
2) PRUNE TO REMOVE BRANCHES THAT TOUCH OR ARE TOO CLOSE TO OTHER BRANCHES



SHRUBS (GRAY DOGWOOD ARROWWOOD VIBURNUM)

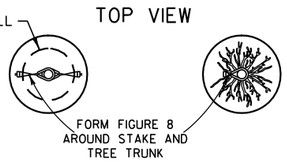


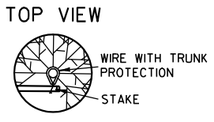
SUMAC

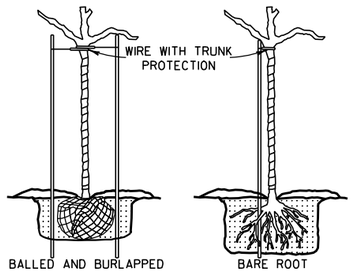


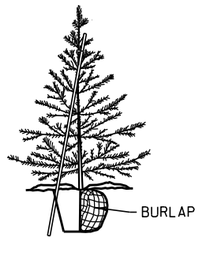
TREE TYPE EVERGREENS (PINE, SPRUCE, FIR) EVERGREENS USUALLY ARE NOT PRUNED

PRUNING



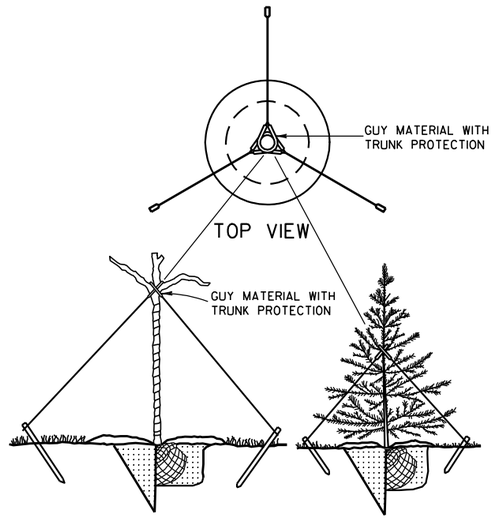






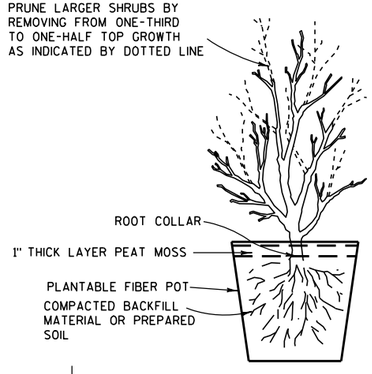
NOTE: BRACING STAKE
1) SHALL BE DRIVEN INTO THE GROUND AS CLOSE TO THE TREE AS POSSIBLE WITHOUT DAMAGING THE BRANCHES.
2) MAY BE DRIVEN AT SUCH AN ANGLE THAT IT DOES NOT PENETRATE THE BALL OR POT.
3) SHALL NOT PROTRUDE ABOVE THE TOP OF THE TREE; AND
4) SHALL HAVE A HOLE NEAR THE TOP TO HOLD THE WIRE IN PLACE.

BRACING



GUYING

PRUNE LARGER SHRUBS BY REMOVING FROM ONE-THIRD TO ONE-HALF TOP GROWTH AS INDICATED BY DOTTED LINE



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.

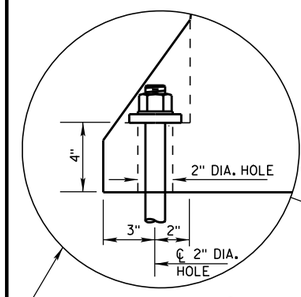
TREE PLANTING DETAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

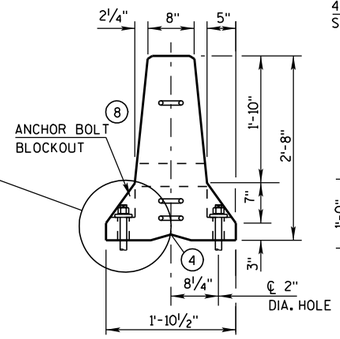
APPROVED
4/11/94
DATE
/S/ Rory L. Rhinesmith
CHIEF METHODS DEVELOPMENT ENGINEER
FHWA

S.D.D. 14 A 2-1

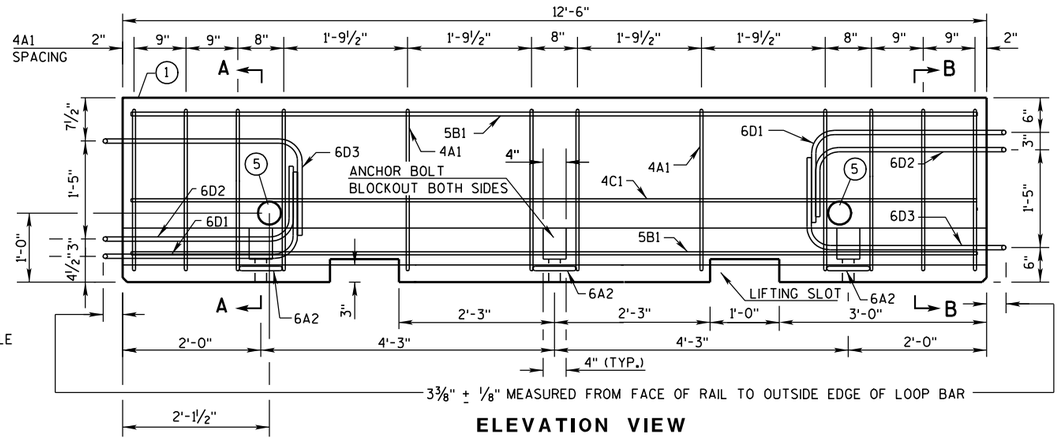
S.D.D. 14 A 2-1



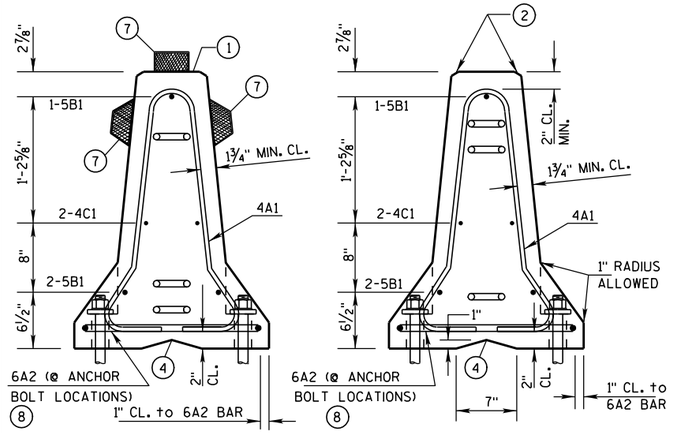
ANCHOR ON TRAFFIC SIDE (8) ONLY WHEN REQUIRED (SEE SHEET D FOR ADDITIONAL ANCHOR DETAIL)



END VIEW

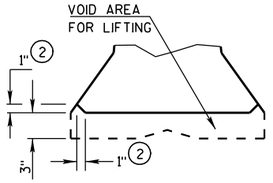


ELEVATION VIEW

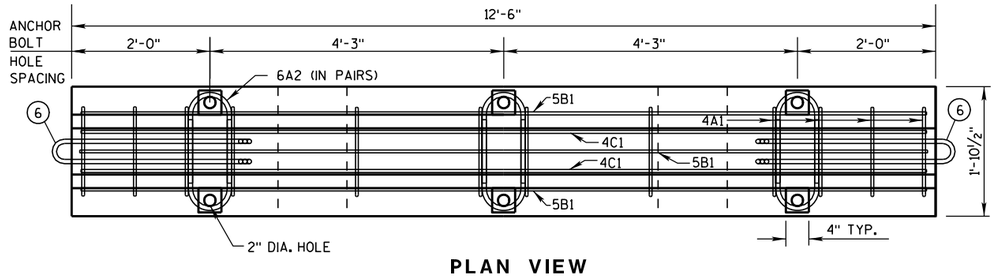


SECTION A-A
(STIRRUP PLACEMENT)

SECTION B-B
(STIRRUP PLACEMENT)

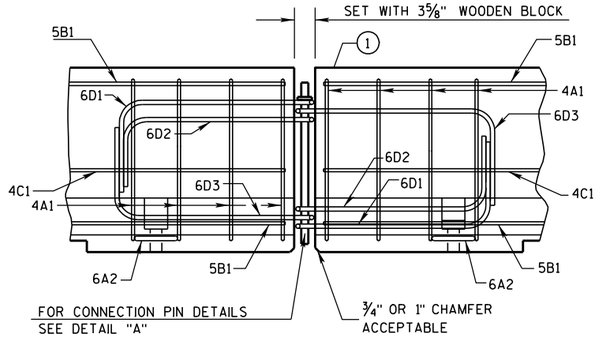


DETAIL "B"
LIFTING SLOT DETAIL

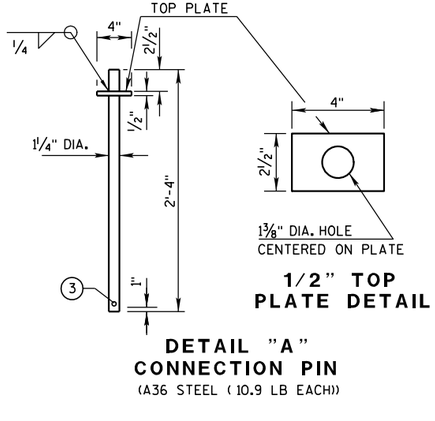


PLAN VIEW

DETAILS OF BARRIER SECTION

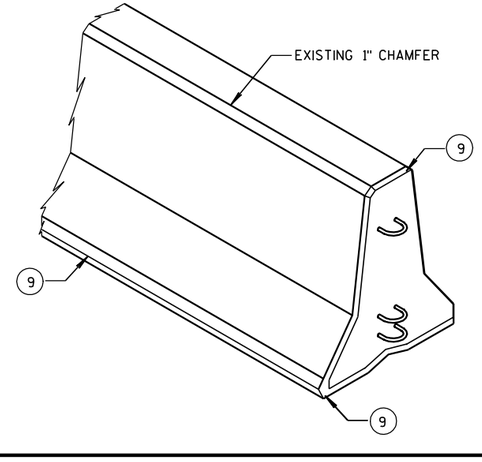


DETAILS OF BARRIER CONNECTION



1/2" TOP PLATE DETAIL

DETAIL "A"
CONNECTION PIN
(A36 STEEL (10.9 LB EACH))



GENERAL NOTES

THESE GENERAL NOTES APPLY TO SHEETS 14B7-13(a) THRU 14B7-13(h).

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.

INSTALL MECHANICAL OR EPOXY ANCHORS PER MANUFACTURER'S RECOMMENDATIONS. PROVIDE MANUFACTURER'S INFORMATION TO PROJECT ENGINEER.

(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) 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.

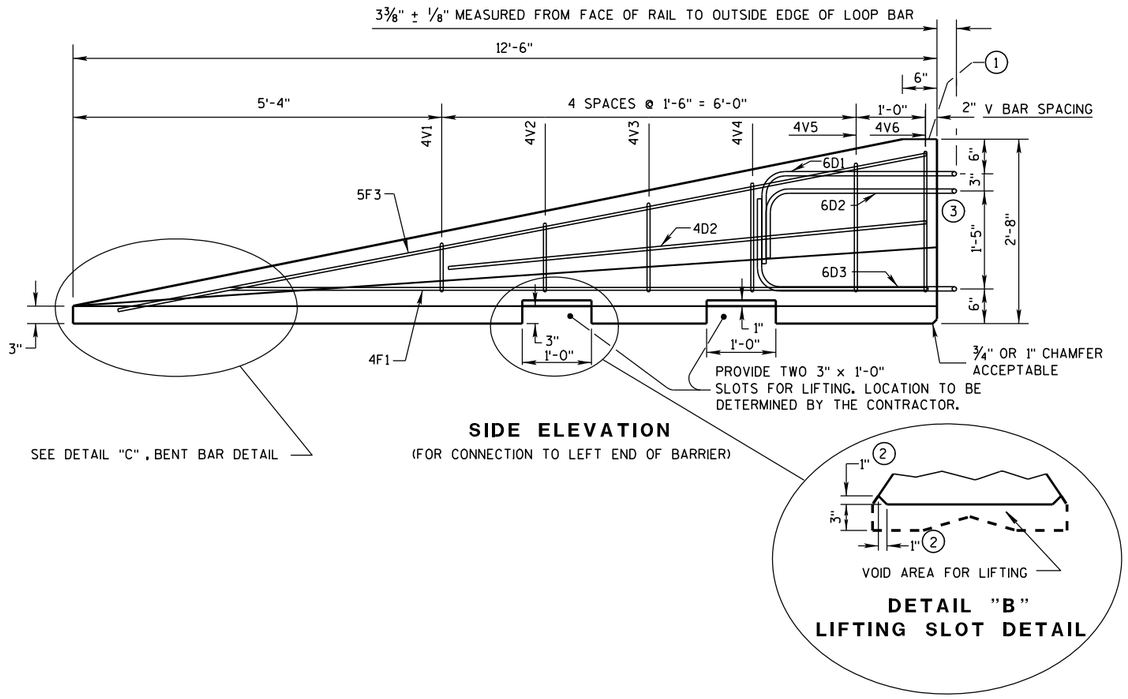
(7) USE DELINEATORS CONFORMING TO SECTION 633 OF THE STANDARD SPECIFICATIONS. CONTRACTOR MAY USE ALTERNATE SHAPES AND HOUSING. INSTALL DELINEATORS ACCORDING TO MANUFACTURES INSTRUCTION. INSTALL YELLOW REFLECTORS WHEN BARRIER IS LOCATED TO THE LEFT OF TRAFFIC AND WHITE REFLECTORS WHEN BARRIER IS LOCATED 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.

(9) 1" CHAMFER OPTIONAL.

CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"

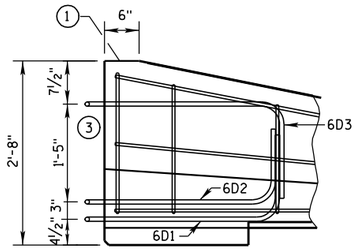
STATE OF WISCONSIN
DEPARTMENT OF TRANSPO...



SIDE ELEVATION

(FOR CONNECTION TO LEFT END OF BARRIER)

DETAIL "B"
LIFTING SLOT DETAIL

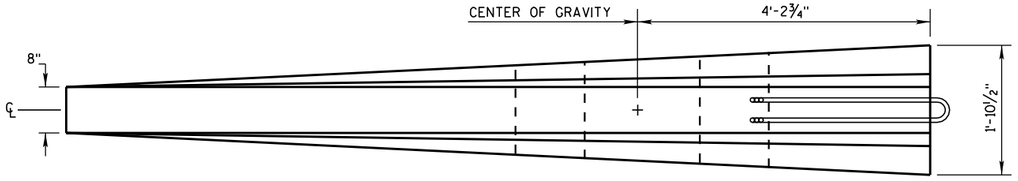


SIDE ELEVATION

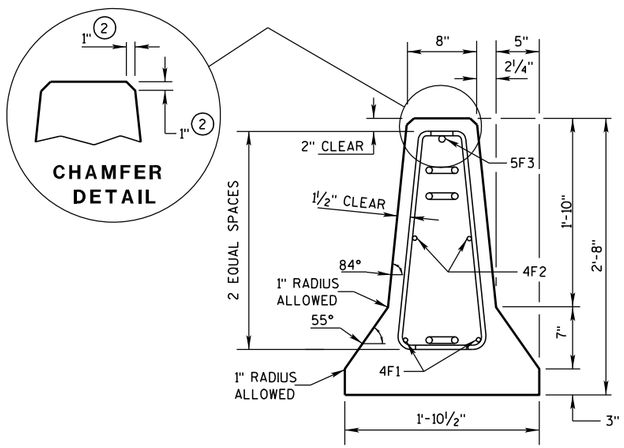
LOOP BAR ASSEMBLY INVERTED
FOR OPPOSITE END.
(FOR CONNECTION TO RIGHT END OF BARRIER)

GENERAL NOTES

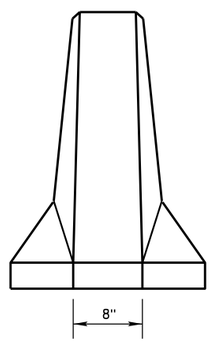
1. MARK ONE END OF EACH BARRIER PERMANENTLY BY FORMING INTO THE BARRIER THE FOLLOWING INFORMATION:
   a. TYPE WICBTP
   b. MANUFACTURER
   c. DATE MANUFACTURED (MONTH AND YEAR)
2. 1" CHAMFER TO PREVENT SPALLING.
3. NEVER USE LOOP BARS (6D1, 6D2 OR 6D3) TO LIFT, MOVE OR REPOSITION THE BARRIER.



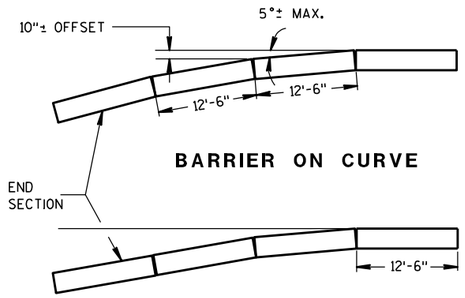
PLAN VIEW



END SECTION



FRONT ELEVATION



BARRIER ON CURVE

FLARE AT BARRIER END

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

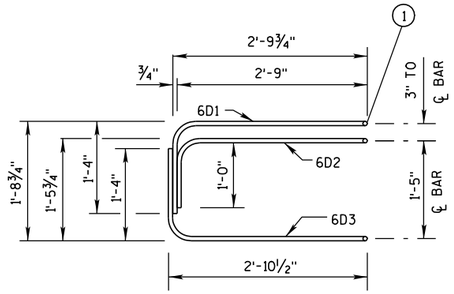
6

S.D.D. 14 B 7-13b

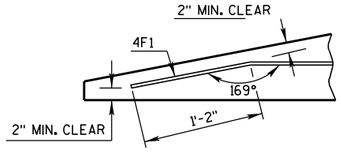
BARRIER TAPER SECTION BILL OF MATERIALS

(PER 12'-6" BARRIER TAPER SECTION)

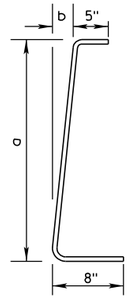
BAR	BAR SIZE	NO. OF BARS	LENGTH FT.
4V1	4	2	1'-11"
4V2	4	2	2'-2"
4V3	4	2	2'-6"
4V4	4	2	2'-9"
4V5	4	2	3'-2"
4V6	4	2	3'-4"
4F1	4	2	12'-0"
4F2	4	2	7'-6"
5F3	5	1	11'-9"
LOOP ASSEMBLY			
6D1	6	1	8'-5"
6D2	6	1	7'-7"
6D3	6	1	8'-6"



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

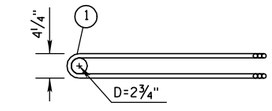
GENERAL NOTES

(1) NEVER USE LOOP BARS (6D1, 6D2 OR 6D3) TO LIFT, MOVE OR REPOSITION THE BARRIER.

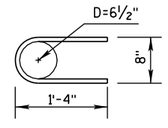
BARRIER SECTION BILL OF MATERIALS

(PER 12'-6" BARRIER SECTION)

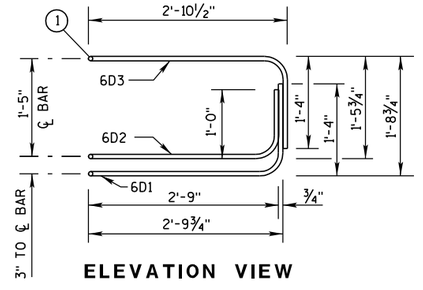
BAR	BAR SIZE	NO. OF BARS	LENGTH FT.
4A1	4	12	6'-0"
6A2	6	6	2'-11"
5B1	5	3	12'-2"
4C1	4	2	12'-2"
LOOP ASSEMBLY			
6D1	6	2	8'-5"
6D2	6	2	7'-7"
6D3	6	2	8'-6"



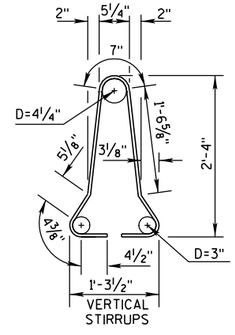
PLAN VIEW
LOOP BAR ASSEMBLY
(MARKED END SHOWN, INVERT FOR OTHER END)



6A2



ELEVATION VIEW



4A1

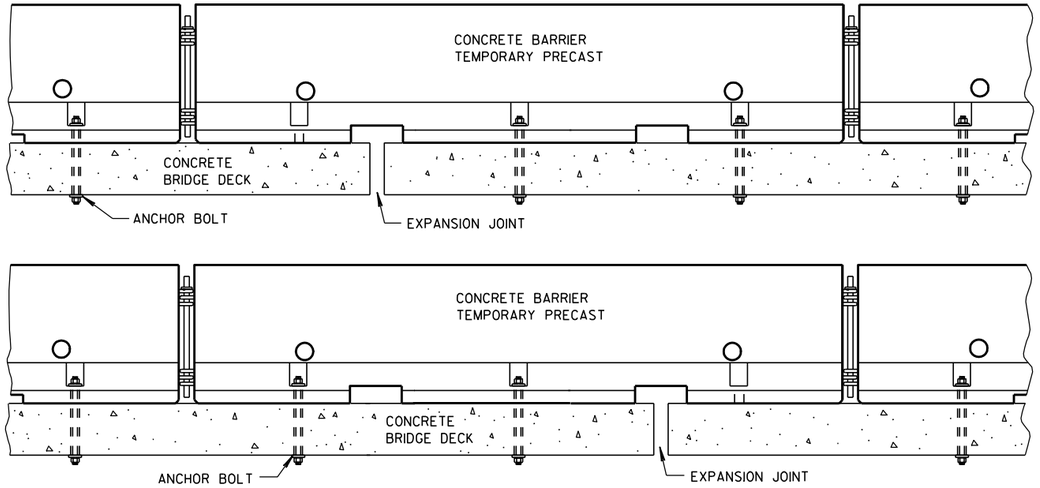
BARRIER SECTION

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

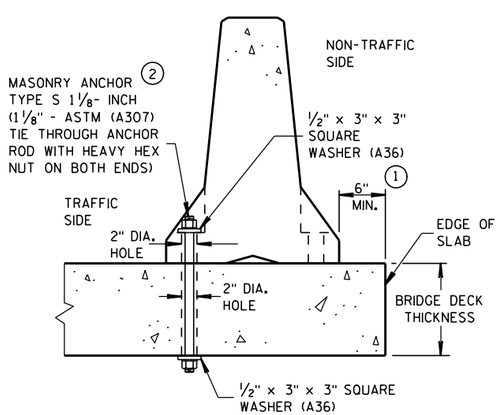
6

S.D.D. 14 B 7-13c



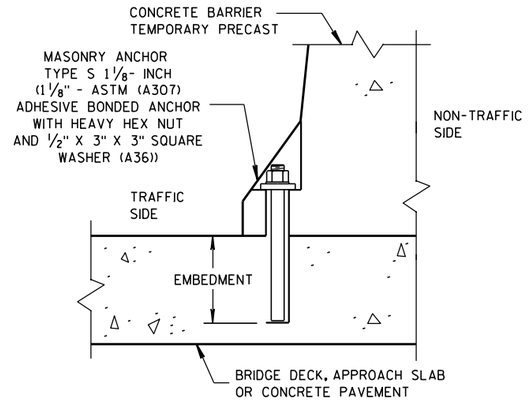
TREATMENT AT BRIDGE DECK EXPANSION JOINTS

(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 INSTALLATION ON CONCRETE BRIDGE DECK, CONCRETE APPROACH SLAB, OR CONCRETE PAVEMENT

2

(DO NOT USE ON CONCRETE WITH AN ASPHALTIC OVERLAY)

GENERAL NOTES

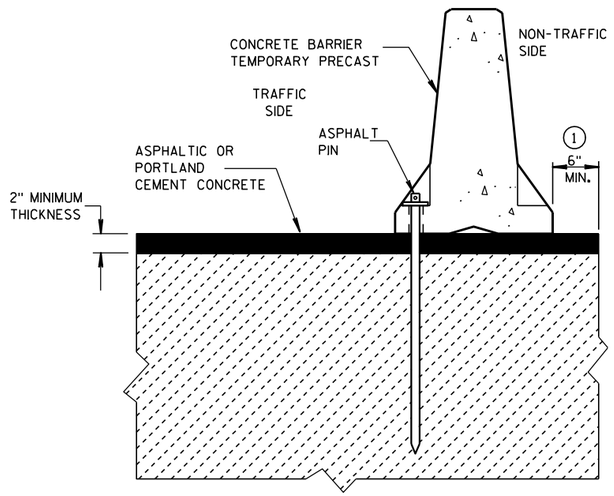
1. CONCRETE BARRIER TEMPORARY PRECAST, 12'-6" SHALL BE ANCHORED IF:
   THE DISTANCE TO A 2 FOOT OR GREATER DROPOFF THAT IS STEEPER THAN 3H : 1V, FOR EXAMPLE THE EDGE OF A BRIDGE DECK OR A DROPOFF AT THE EDGE OF PAVEMENT, IS LESS THAN 4 FEET FROM THE SIDE OF THE BARRIER CLOSEST TO THE DROPOFF AND THE 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.

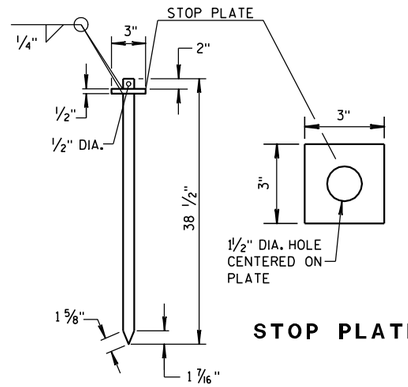
   WITH THE APPROVAL OF THE ENGINEER, REMOVABLE ADHESIVE BONDED (EPOXY) ANCHOR BOLT INSTALLATION MAY BE USED IN LIEU OF THROUGH BOLTED ANCHOR INSTALLATION. THE ADHESIVE BONDED ANCHOR BOLT MUST BE REMOVABLE. USE ASTM (A307) MASONRY ANCHORS TYPE S 1⅛-INCH, EMBEDDED TO A DEPTH SUFFICIENT TO DEVELOP THE ULTIMATE 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

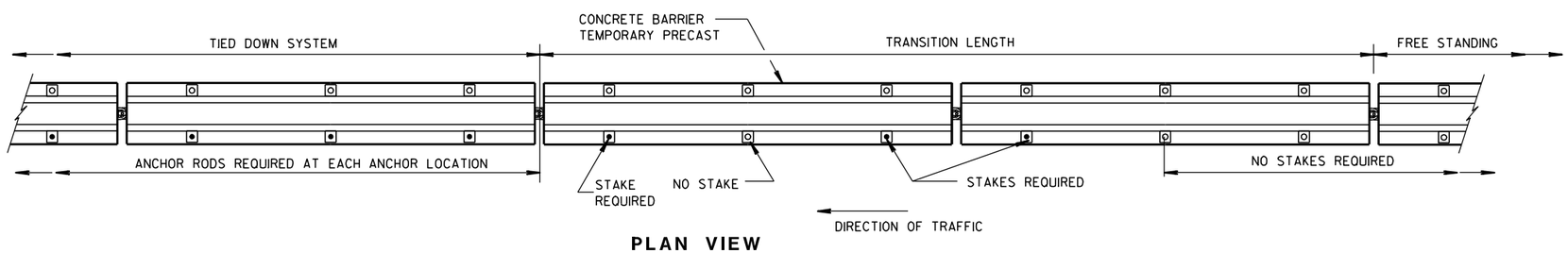
(STAKING IS INCIDENTAL TO CONCRETE BARRIER TEMPORARY PRECAST)



STOP PLATE

ASPHALT PIN

(ASTM A36 STEEL)



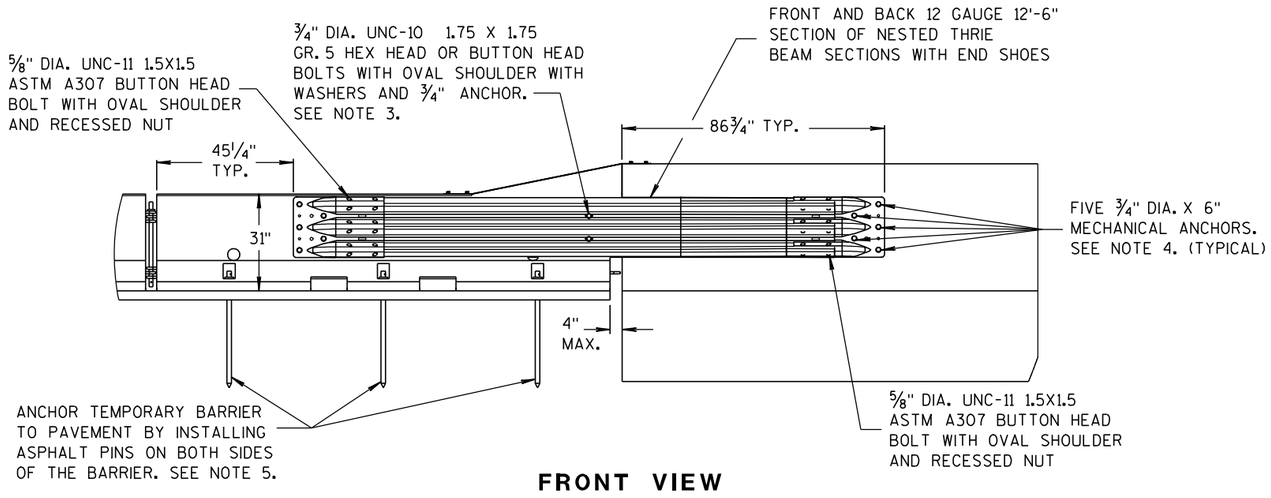
PLAN VIEW

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"

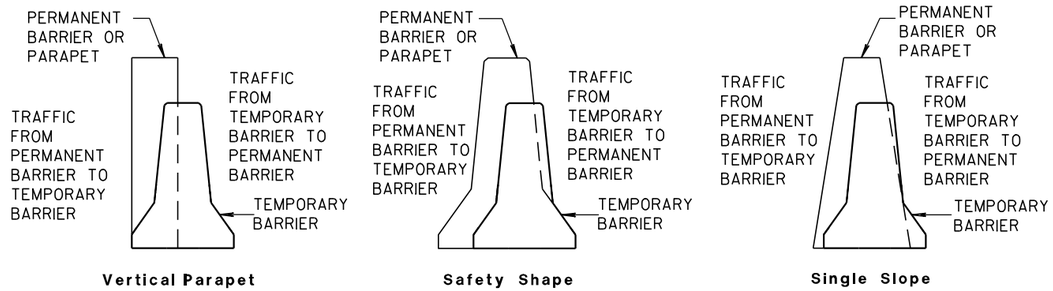
STATE OF WISCONSIN
DEPARTMENT OF TRANSPO...

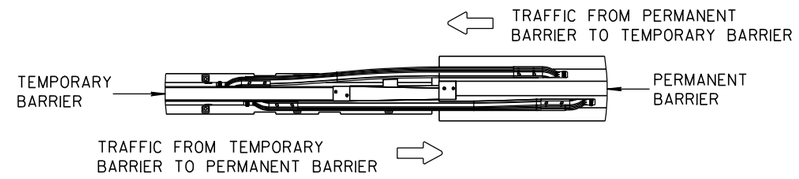


FRONT VIEW

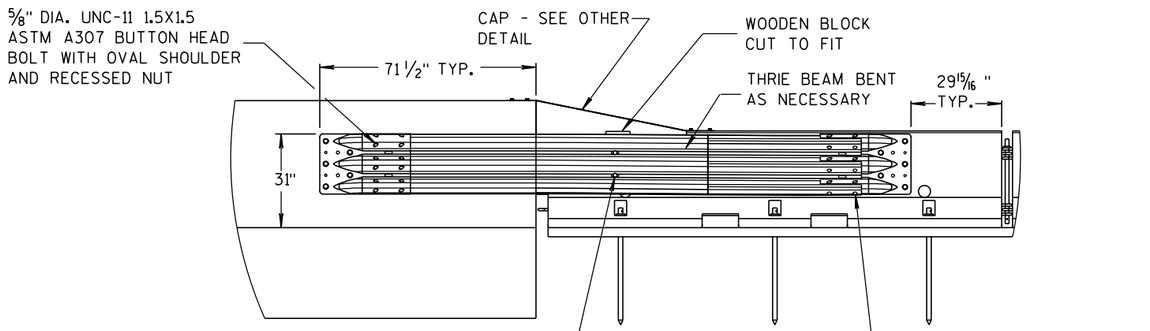
NOTES

1. CAP END PLATE PLACED FLUSH WITH UPSTREAM END OF PERMANENT BARRIER OR PARAPET.
2. THRIE BEAM PIECES ARE OFFSET 15 1/4" TO PREVENT INTERFERENCE FROM THE ANCHORS ON OPPOSING SIDES.
3. MINIMUM MECHANICAL OR EPOXY ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 9.48 KIPS AND ULTIMATE SHEAR LOAD 10.48 KIPS.
4. MINIMUM MECHANICAL OR EPOXY ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 17.9 KIPS AND ULTIMATE SHEAR LOAD 21.96 KIPS.
5. MAY BE USED ON CONCRETE OR ASPHALT PAVEMENTS. ASPHALT OPTION SHOWN. FOR CONCRETE OPTION SEE OTHER DETAILS.
6. MINIMUM MECHANICAL OR EPOXY ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 12.14 KIPS AND ULTIMATE SHEAR LOAD 17.5 KIPS.

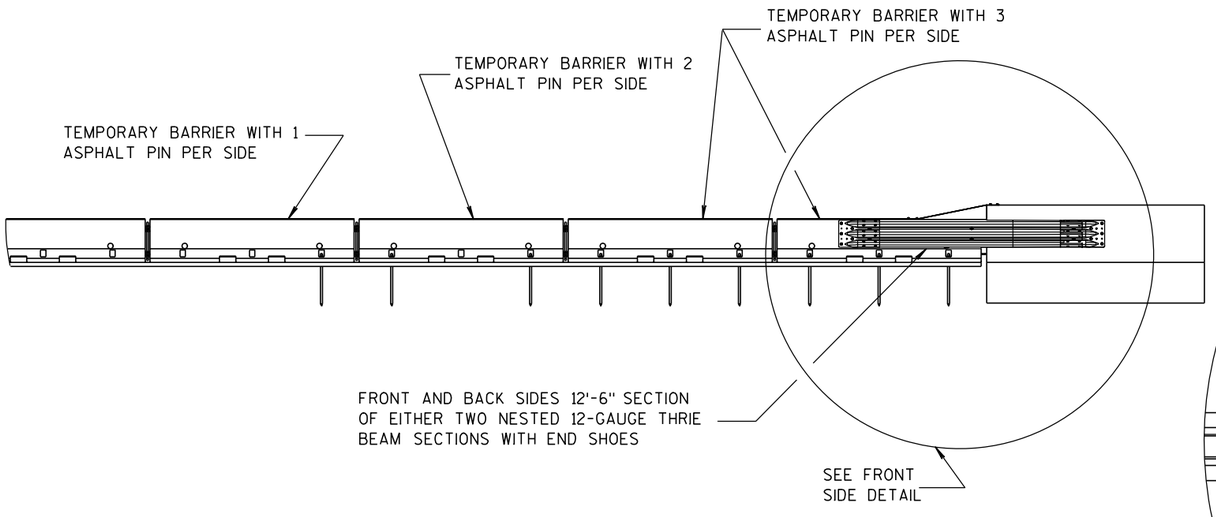




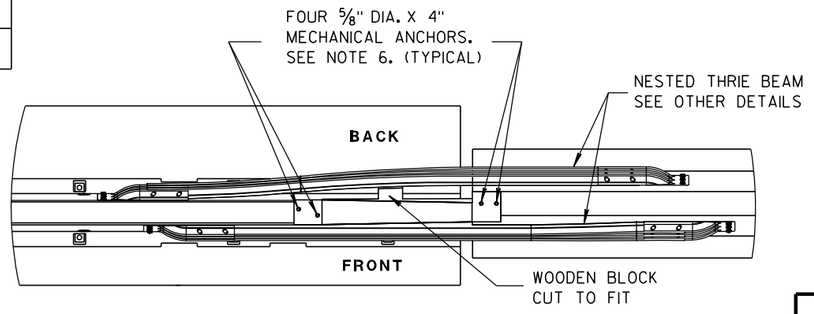
TEMPORARY BARRIER PLACEMENT FOR BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM



BACK VIEW



FRONT VIEW



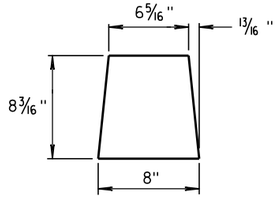
PLAN VIEW

BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM

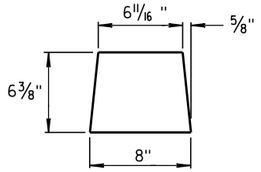
CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

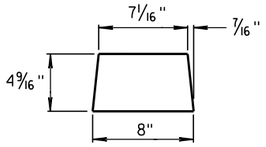
6
S.D.D. 14 B 7-13e



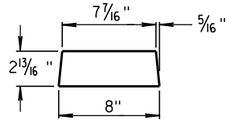
GUSSET 1



GUSSET 2

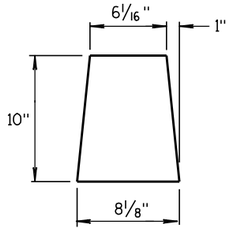


GUSSET 3

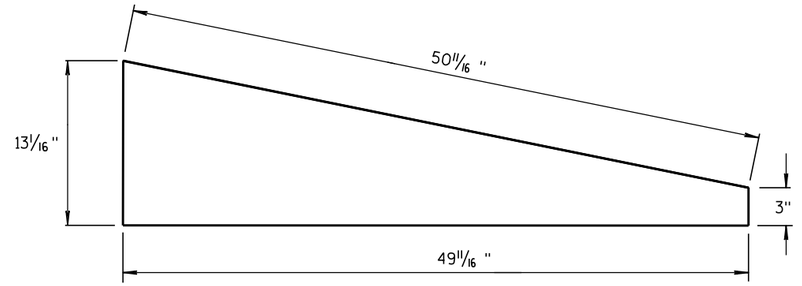


GUSSET 4

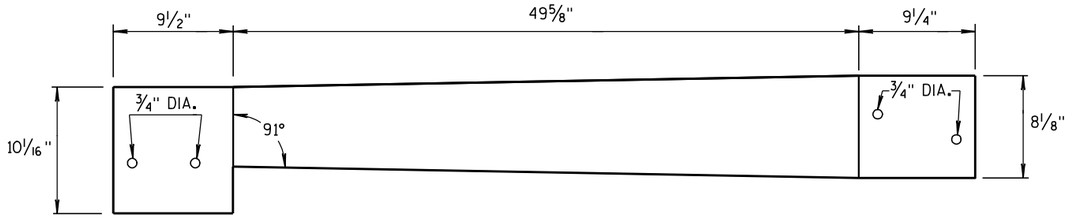
GUSSETS

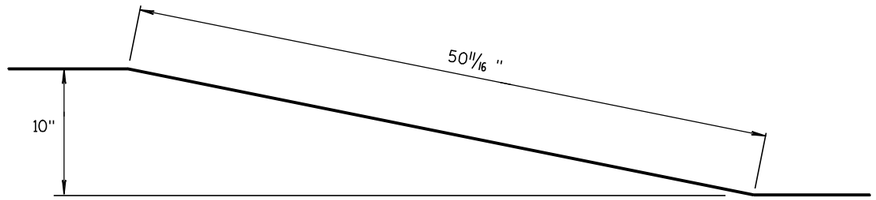


END PLATE

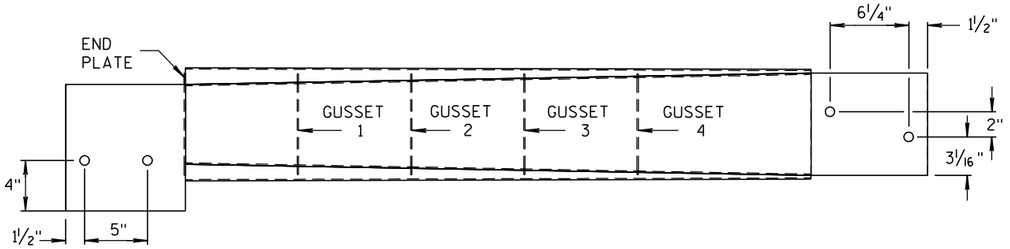


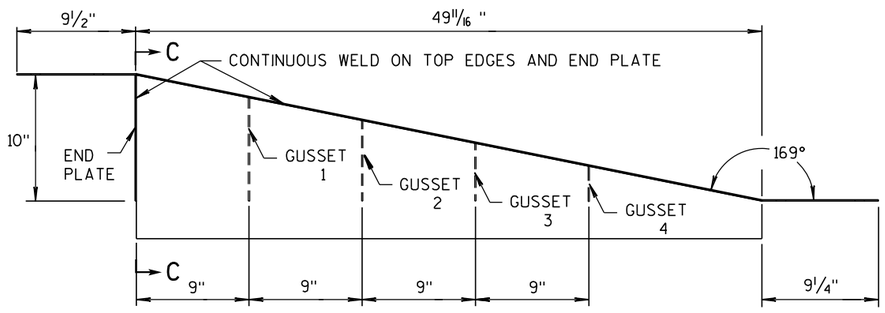
SIDE PLATE

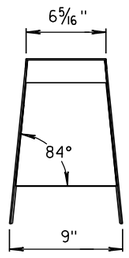




TOP PLATE







SECTION C-C

NOTES

1. FOUR GUSSETS AND END PLATE ARE STITCH WELDED ON THREE SIDES.
2. TWO TRIANGULAR SIDE PLATES ARE STITCH WELDED TO TOP PLATE, END PLATE, AND GUSSETS.

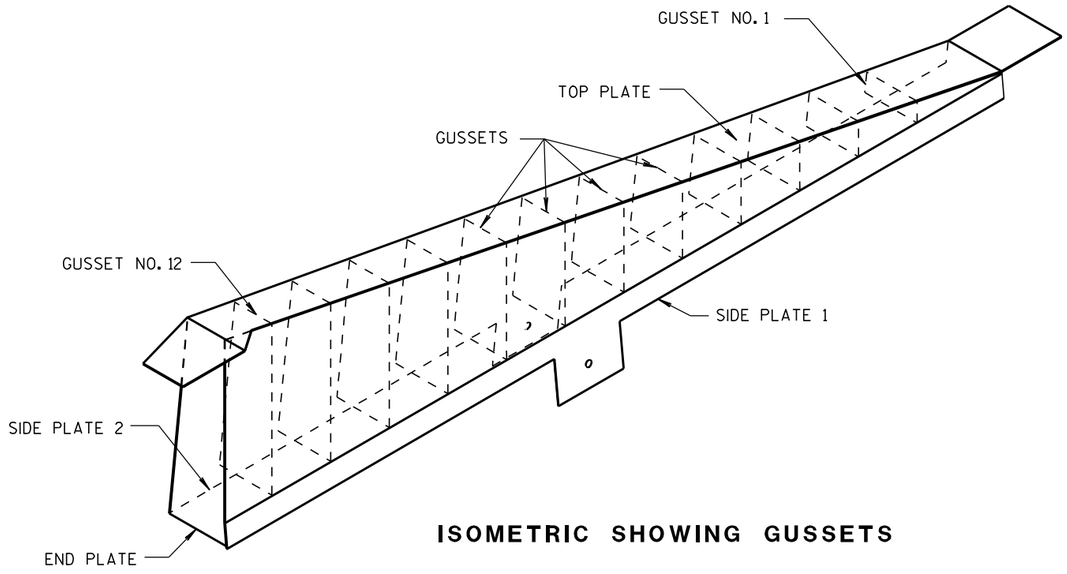
CAP DETAILS FOR TEMPORARY CONCRETE BARRIER TO 42" PERMANENT CONCRETE BARRIER

SIDE, TOP AND END PLATES FOR CAP FROM TEMPORARY CONCRETE BARRIER TO 42" PERMANENT CONCRETE BARRIER

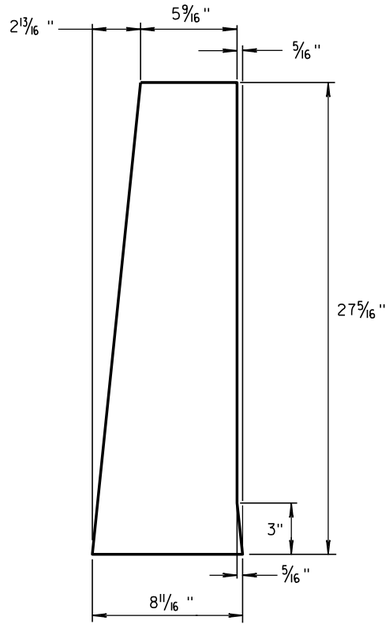
SIDE PLATES, TOP PLATE, END PLATE AND GUSSETS ARE 12 GAUGE ASTM A36 GALVANIZED STEEL.

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO...

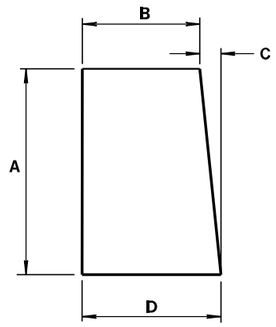


ISOMETRIC SHOWING GUSSETS



END PLATE

1/8" STEEL PLATE



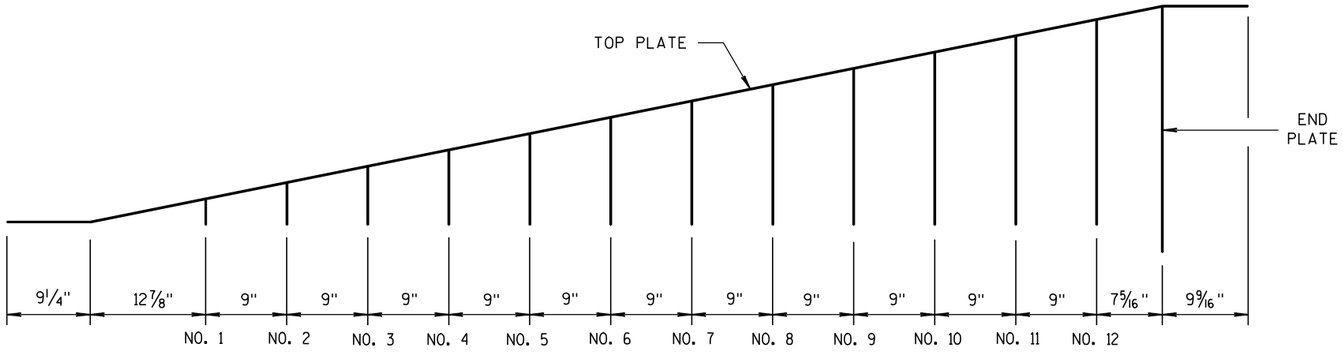
GUSSETS 1 - 12

ALL GUSSETS 1/8" STEEL PLATE

GUSSET DIMENSIONS				
GUSSET NO.	A	B	C	D
1	2 7/8"	7 3/4"	1/4"	8
2	4 11/16 "	7 9/16 "	1/2"	8
3	6 1/2"	7 3/8"	11/16 "	8 1/16 "
4	8 5/16 "	7 3/16 "	7/8"	8 1/16 "
5	10 1/8"	7"	1 1/16 "	8 1/16 "
6	11 15/16 "	6 13/16 "	1 1/4"	8 1/16 "
7	13 3/4"	6 5/8"	1 7/16 "	8 1/16 "
8	15 9/16 "	6 7/16 "	1 9/16 "	8 1/16 "
9	17 3/8"	6 1/4"	1 13/16 "	8 1/16 "
10	19 3/16 "	6 1/16 "	1 15/16 "	8 1/16 "
11	21"	5 7/8"	2 3/16 "	8 1/16 "
12	22 13/16 "	5 11/16 "	2 5/16 "	8 1/16 "

SIDE PLATES, TOP PLATE, END PLATE AND GUSSETS ARE 12 GAUGE ASTM A36 STEEL AND GALVANIZED.

GUSSETS AND END PLATE ARE STITCH WELDED ON 3 SIDES. TWO TRIANGULAR SIDE PLATES ARE STITCH WELDED TO TOP PLATE, END PLATE AND GUSSETS.



GUSSET LOCATION

CAP DETAILS FOR TEMPORARY CONCRETE BARRIER TO 56" PERMANENT CONCRETE BARRIER

CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"

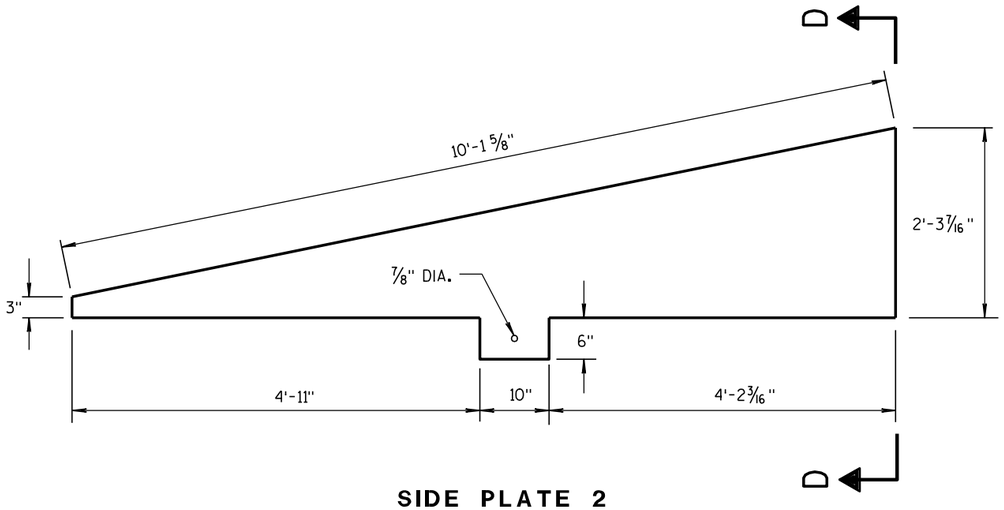
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

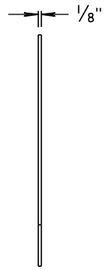
S.D.D. 14 B 7-13g

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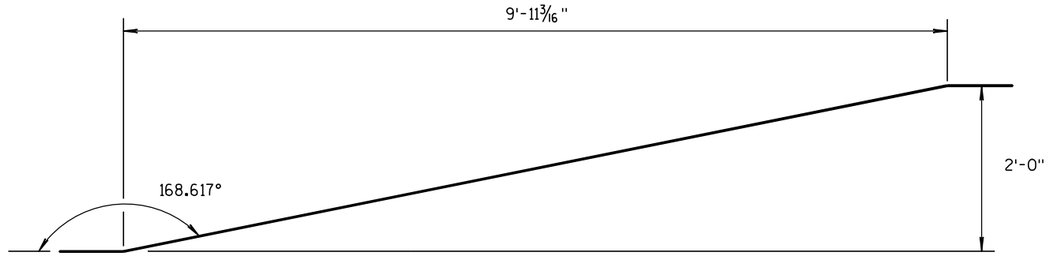
S.D.D. 14 B 7-13g



SIDE PLATE 2

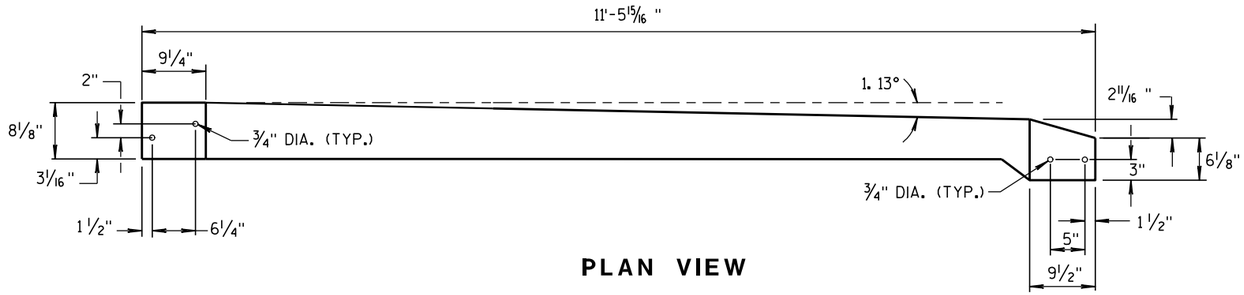


END VIEW



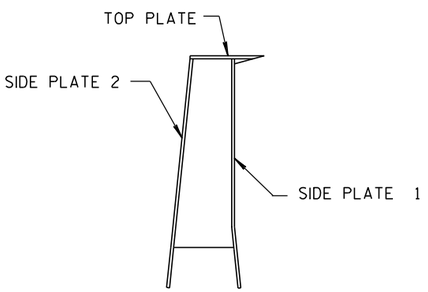
SIDE VIEW

TOP PLATE

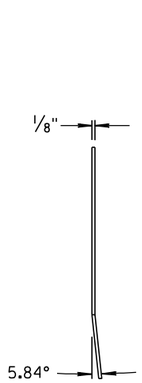


PLAN VIEW

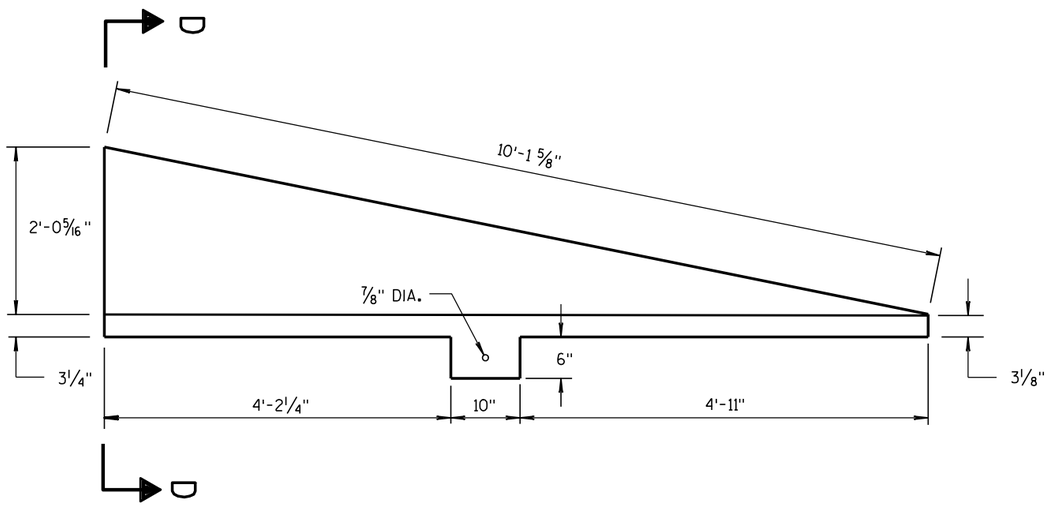
TOP PLATE



SECTION D-D



END VIEW



SIDE PLATE 1

CAP DETAILS FOR TEMPORARY CONCRETE BARRIER TO 56" PERMANENT CONCRETE BARRIER

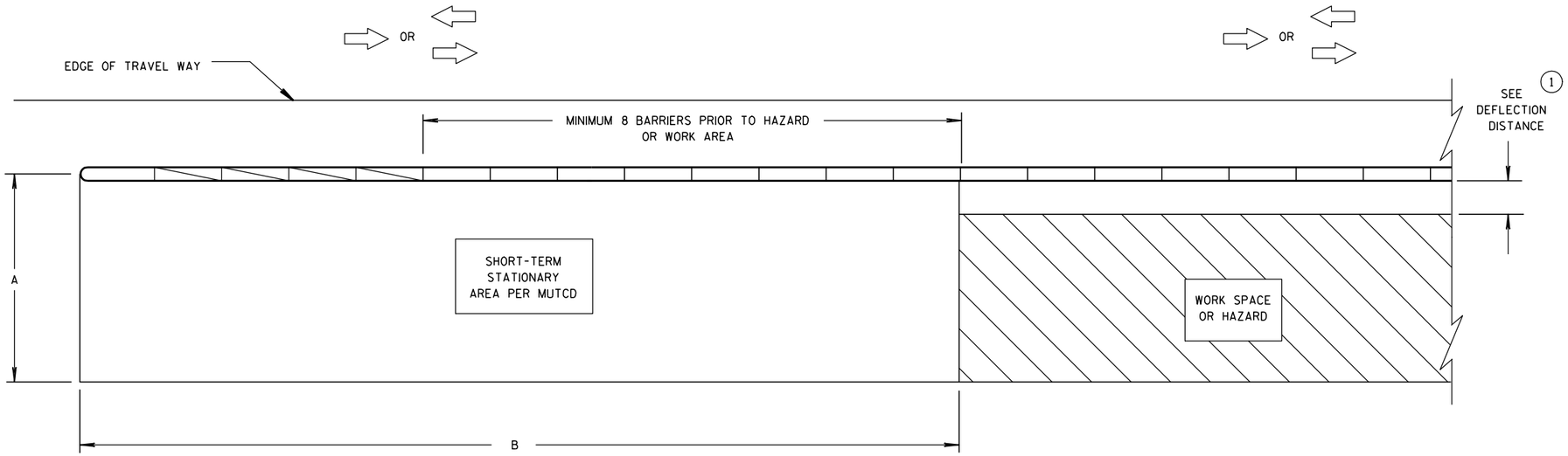
CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	
8/31/2012 DATE	/S/ Jerry H. ---- ROADWAY STANDARDS ENGINEER
FHWA	393 ENT

6

S.D.D. 14 B 7-13h

6

S.D.D. 14 B 7-13h



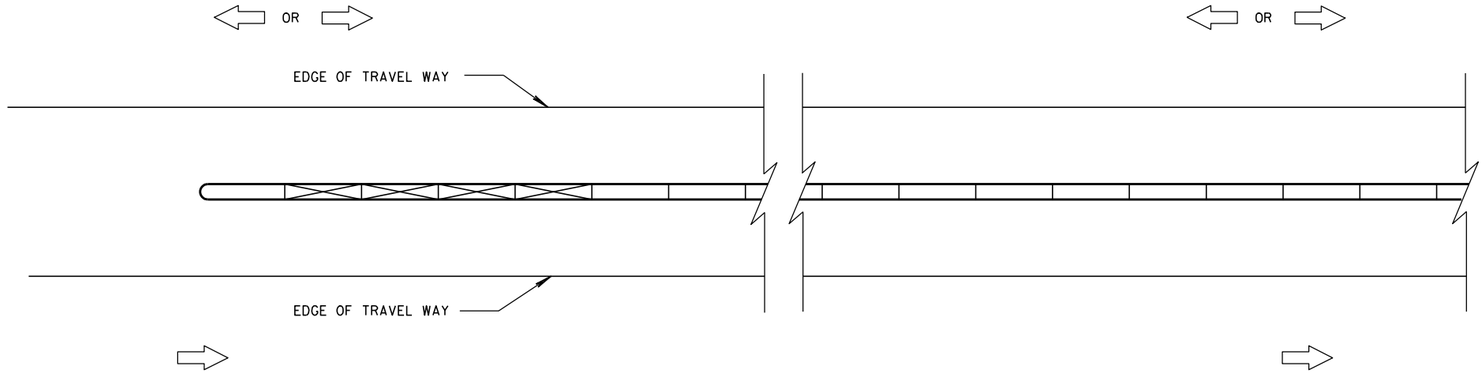
CRASH CUSHION/SAND BARREL ARRAY AND TEMPORARY BARRIER INSTALLATION FOR TRAFFIC ON ONE SIDE OF BARRIER

DIMENSION A TABLE (2)

FACILITY	POSTED SPEED MPH	DIMENSION A	
		MIN. FT	MAX. FT
FREEWAY/EXPRESSWAY	ALL	15	20
NON-FREEWAY/EXPRESSWAY	GREATER THAN OR EQUAL TO 45	10	15
NON-FREEWAY/EXPRESSWAY	LESS THAN 45	8	10
AADT LESS THAN 1,500	ALL	8	10

DIMENSION B TABLE (2)

POSTED SPEEDS MPH	DIMENSION B FT
20	115
25	155
30	200
35	250
40	305
45	360
50	425
55	495
60	570
65	645



CRASH CUSHION/SAND BARREL ARRAY AND TEMPORARY BARRIER INSTALLATION FOR TRAFFIC ON BOTH SIDES OF BARRIER

LEGEND

DIRECTION OF TRAVEL

CRASH CUSHION OR SAND BARREL ARRAY

SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS

SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS

3 PINS PLACED ON TRAFFIC SIDE OF BARRIER

PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET

FREE STANDING TEMPORARY BARRIER

GENERAL NOTES

SEE STANDARD DETAIL DRAWING 14B7 FOR MORE INFORMATION.

DETAILS PROVIDE A GENERAL LAYOUT OF TEMPORARY CONCRETE BARRIER, CRASH CUSHIONS, SAND BARREL ARRAYS AND TIE DOWN TRANSITIONS. DETAILS PROVIDED MAY NOT FIT ALL POSSIBLE SITUATIONS OR SITE CONDITIONS. SEE OTHER SECTIONS OF THE CONTRACT OR PROJECT ENGINEER FOR MORE DETAILS.

ADDITIONAL TEMPORARY BARRIER MAY BE REQUIRED TO PROTECT TRAVELING PUBLIC FROM HAZARDS, CONTRACTOR'S OPERATIONS OR TO CONTROL TRAFFIC.

TEMPORARY BARRIER MAY BE REQUIRED TO BE ANCHORED TO PAVEMENT OR BRIDGE DECK.

FOR DETAILS ON CRASH CUSHION OR SAND BARREL ARRAYS SEE OTHER SECTIONS OF THE PLAN AND MANUFACTURE'S DETAILS.

SLOPES LEADING TO TEMPORARY BARRIER, CRASH CUSHION OR SAND BARREL ARRAY ARE 10:1 OR LESS.

(1) FOR DEFLECTION INFORMATION SEE STANDARD DETAIL DRAWING 14B7.

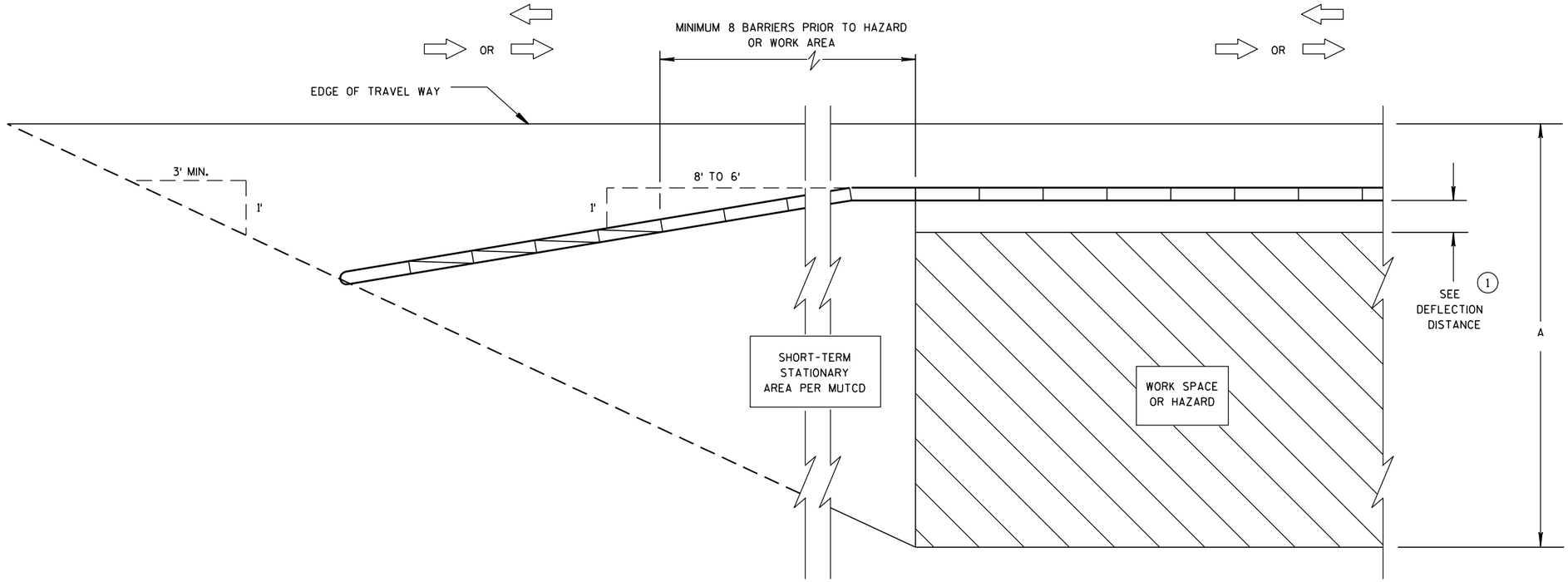
(2) VALUES PROVIDED MAY NOT FIT ALL POSSIBLE SITUATIONS OR SITE CONDITIONS. SEE OTHER SECTIONS OF THE CONTRACT OR PROJECT ENGINEER FOR MORE DETAILS.

CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS

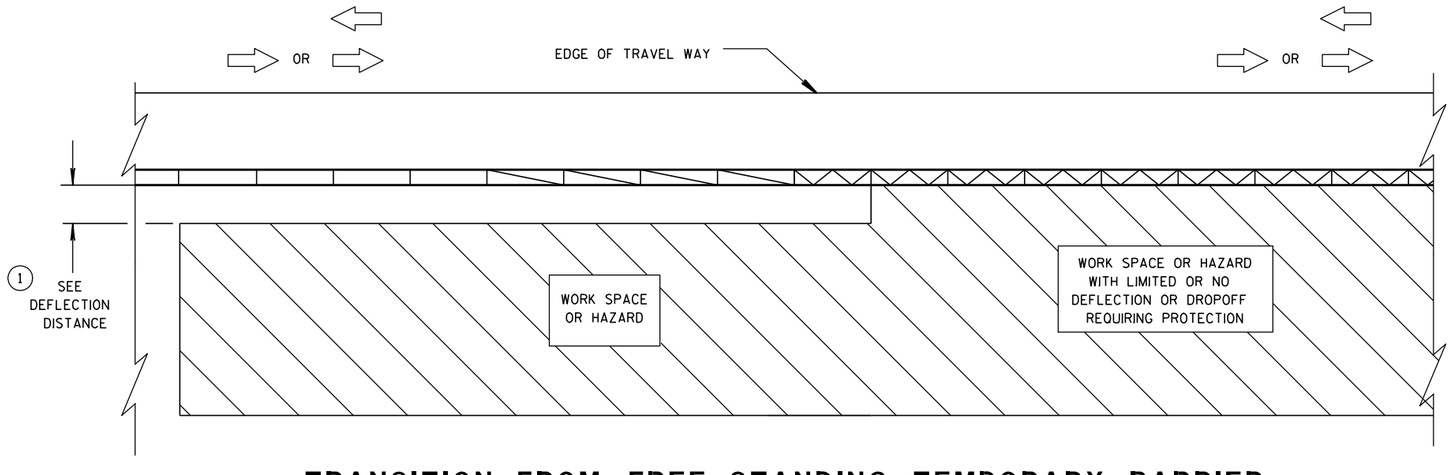
STATE OF WISCONSIN
DEPARTMENT OF TRANSPO...

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S.D.D. 14 B 8-1a



CRASH CUSHION/SAND BARREL ARRAY AND TEMPORARY BARRIER INSTALLATION FOR TRAFFIC ON ONE SIDE - FLARED INSTALLATION



TRANSITION FROM FREE STANDING TEMPORARY BARRIER TO ANCHORED BARRIER

LEGEND

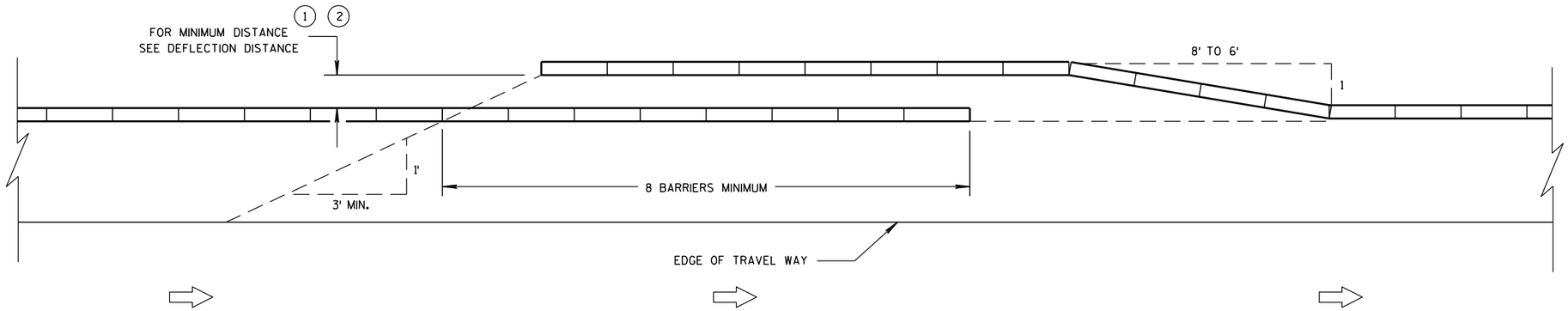
- DIRECTION OF TRAVEL
- CRASH CUSHION OR SAND BARREL ARRAY
- SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS
- SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS
- 3 PINS PLACED ON TRAFFIC SIDE OF BARRIER
- PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET
- FREE STANDING TEMPORARY BARRIER

CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS

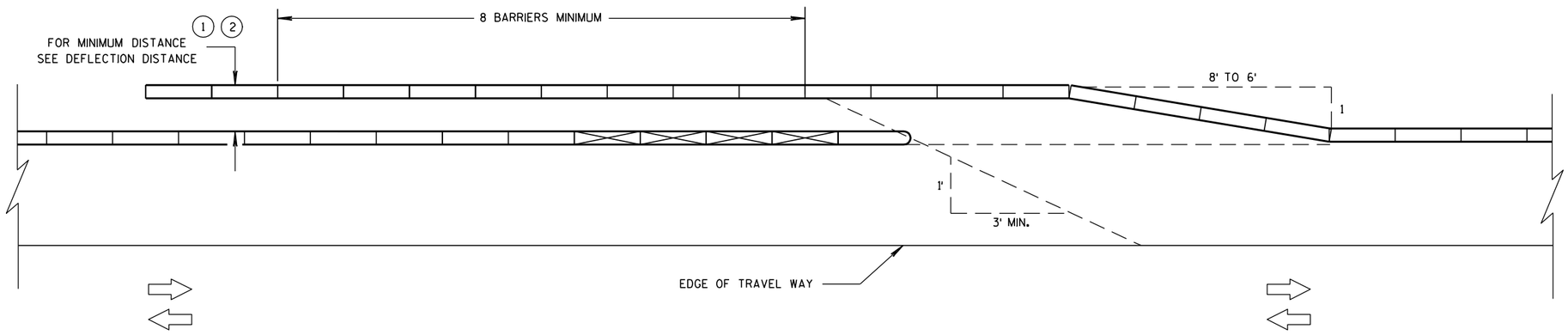
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

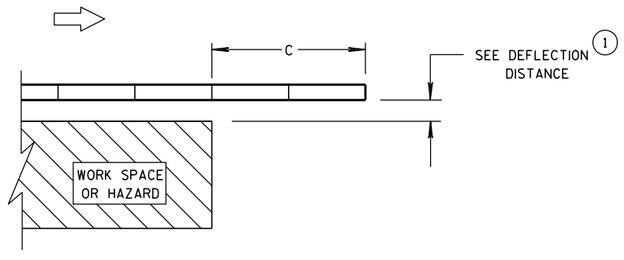
S.D.D. 14 B 8-1b



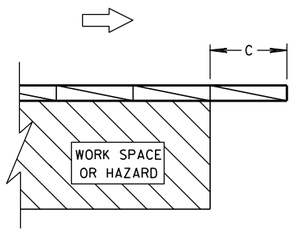
TEMPORARY BARRIER OVERLAP - ONE-WAY TRAFFIC



TEMPORARY BARRIER OVERLAP - TWO-WAY TRAFFIC



ENDING TEMPORARY BARRIER DOWNSTREAM - UNANCHORED



ENDING TEMPORARY BARRIER DOWNSTREAM - ANCHORED

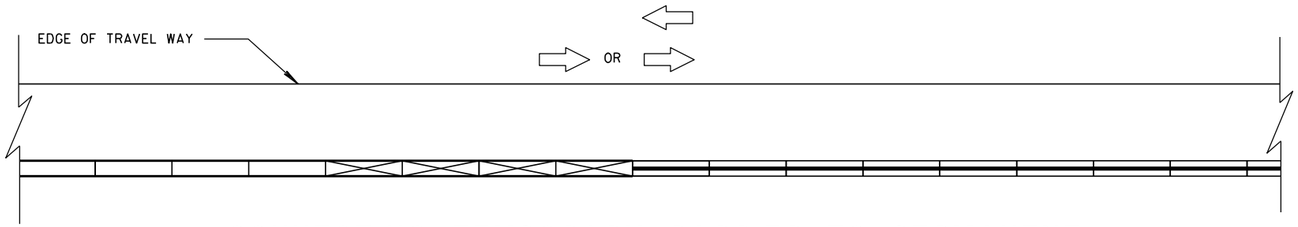
LEGEND

- DIRECTION OF TRAVEL
- CRASH CUSHION OR SAND BARREL ARRAY
- SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS
- SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS
- 3 PINS PLACED ON TRAFFIC SIDE OF BARRIER
- PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET
- FREE STANDING TEMPORARY BARRIER

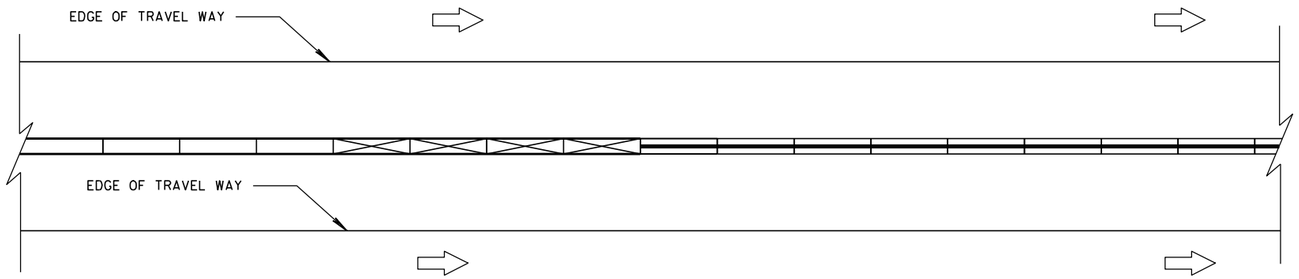
CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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CONNECTING TEMPORARY BARRIER TO PERMANENT CONCRETE BARRIER-TRAFFIC ON ONE SIDE



CONNECTING TEMPORARY BARRIER TO PERMANENT CONCRETE BARRIER-TRAFFIC ON BOTH SIDES

LEGEND

DIRECTION OF TRAVEL

CRASH CUSHION OR SAND BARREL ARRAY

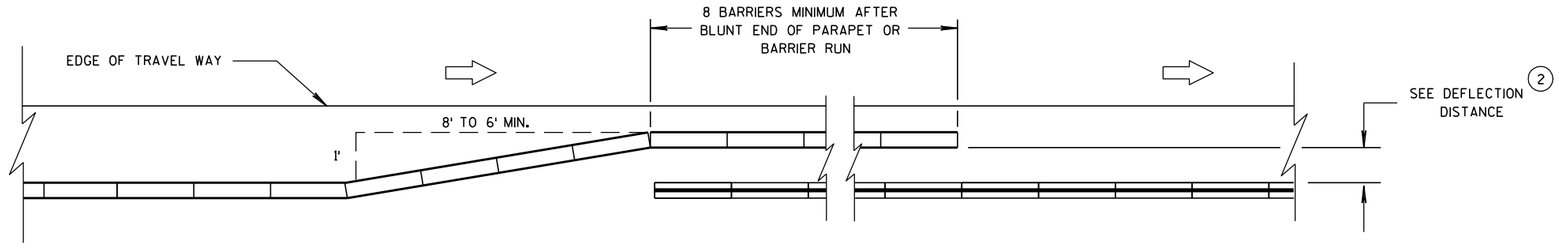
SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS

SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS

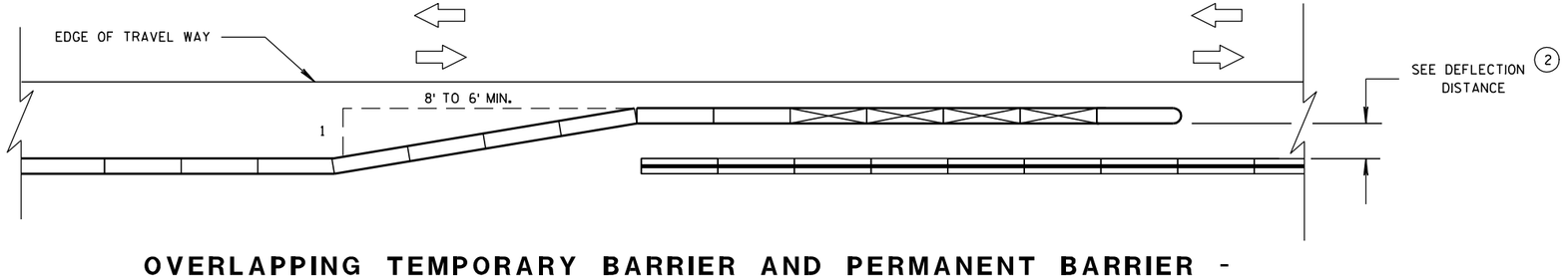
3 PINS PLACED ON TRAFFIC SIDE OF BARRIER

PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET

FREE STANDING TEMPORARY BARRIER



OVERLAPPING TEMPORARY BARRIER AND PERMANENT BARRIER - ONE WAY TRAFFIC



OVERLAPPING TEMPORARY BARRIER AND PERMANENT BARRIER - TWO WAY TRAFFIC

CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS

STATE OF WISCONSIN
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LEGEND

DIRECTION OF TRAVEL

CRASH CUSHION OR SAND BARREL ARRAY

SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS

SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS

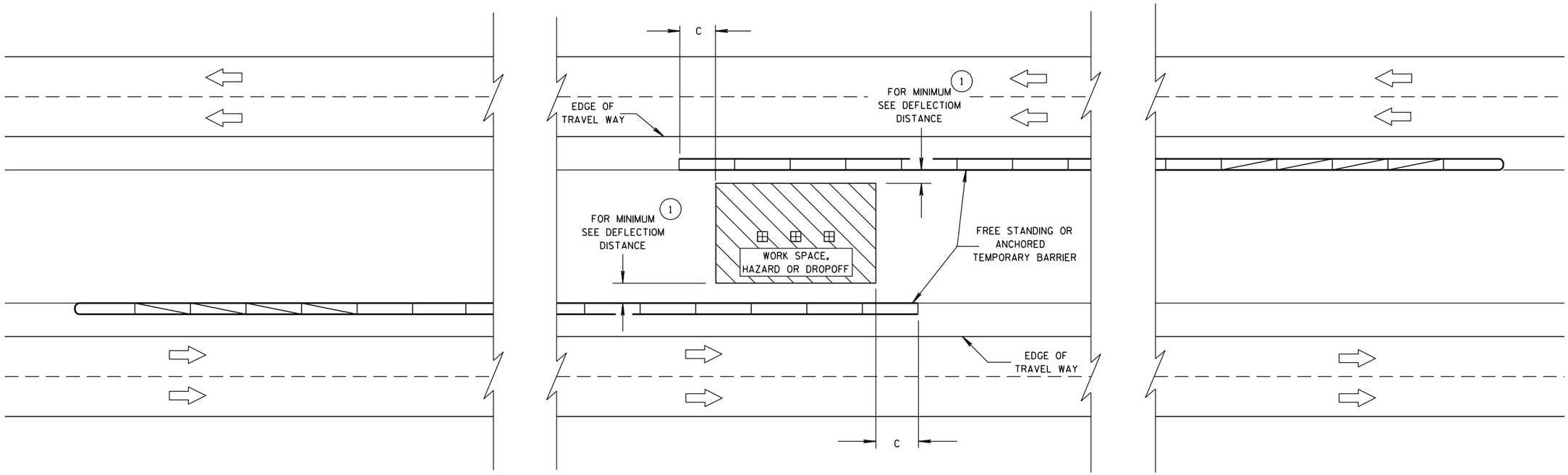
3 PINS PLACED ON TRAFFIC SIDE OF BARRIER

PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET

FREE STANDING TEMPORARY BARRIER

DIMENSION C TABLE (2)

AVAILABLE DEFLECTION DISTANCE	MINIMUM LENGTH OF BARRIER BEYOND HAZARD FT
GREATER THAN 8'	12.5
LESS THAN OR EQUAL TO 8' BUT GREATER THAN 4'	50
LESS THAN OR EQUAL TO 4'	100



CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

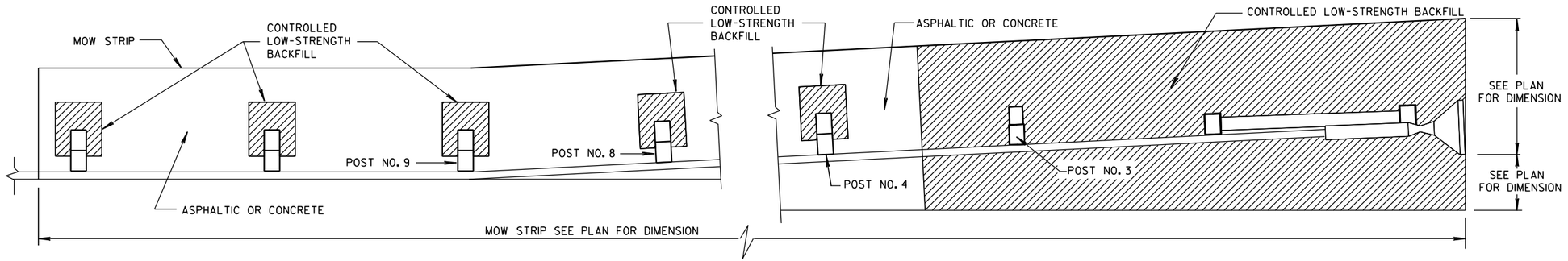
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8/31/2012
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINNER

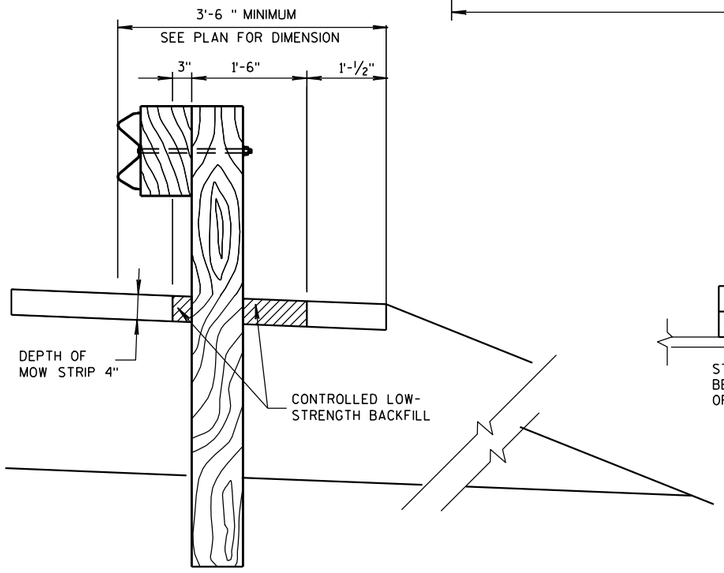
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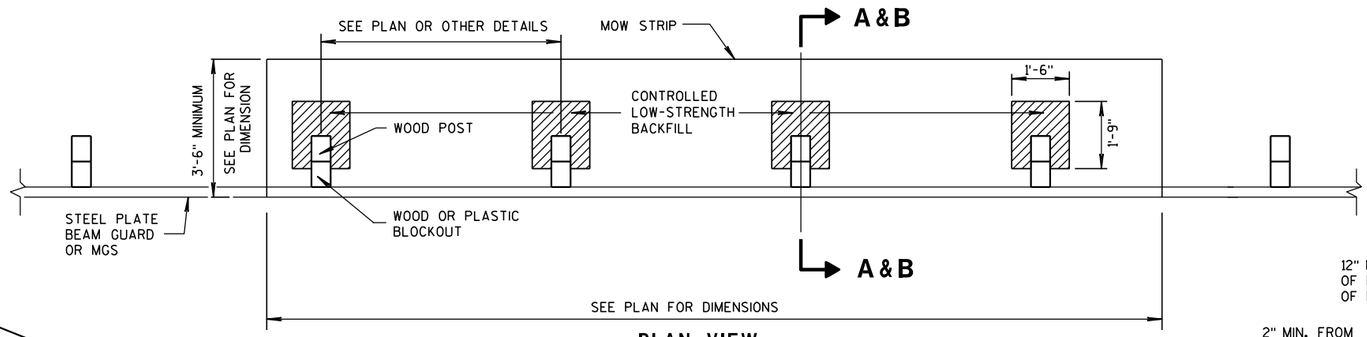


PLAN VIEW

MOW STRIP FOR STEEL PLATE BEAM GUARD ENERGY ABORBING TERMINAL

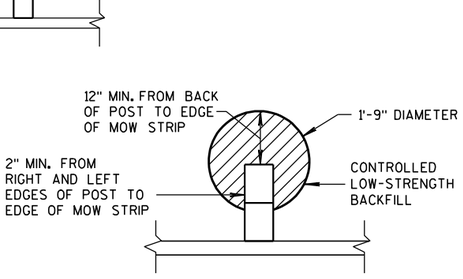


SECTION A-A

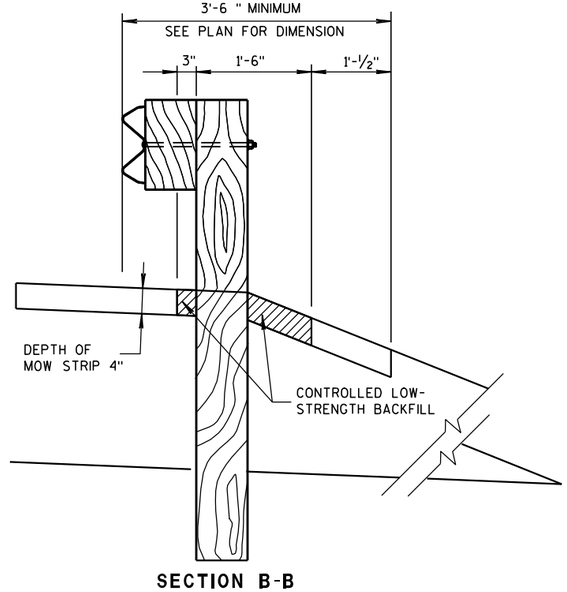


PLAN VIEW

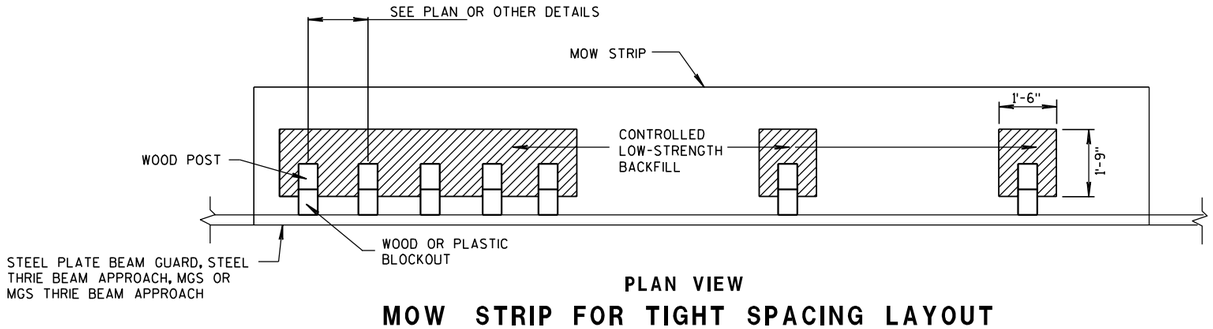
MOW STRIP FOR TYPICAL BLOCKOUT LAYOUT



ALTERNATIVE HMA MOW STRIP DESIGN

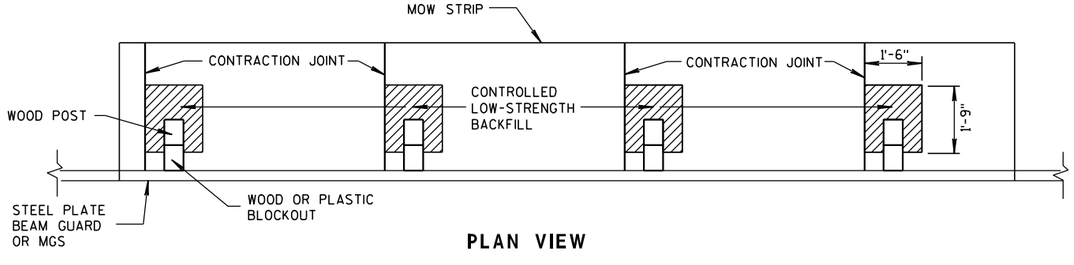


SECTION B-B



PLAN VIEW

MOW STRIP FOR TIGHT SPACING LAYOUT



PLAN VIEW

JOINT PLACEMENT FOR CONCRETE MOW STRIP

GUARDRAIL MOW STRIP

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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1/27/12
DATE

/S/ Jerry H. Zaas
ROADWAY STANDARDS 1399 ENGINEER

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GENERAL NOTES

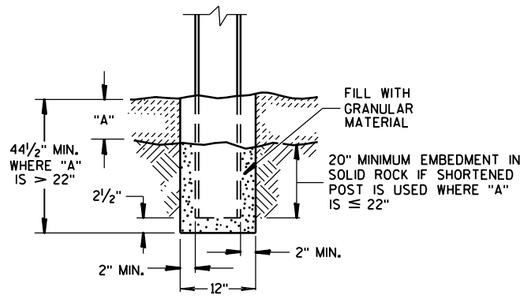
1. WOOD OR STEEL POSTS (w6X9 OR w6X8.5) MAY BE USED. DO NOT INTERMIX WOOD AND STEEL POSTS. INSTALL STEEL POSTS WITH HOLES ON APPROACHING TRAFFIC SIDE.

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.

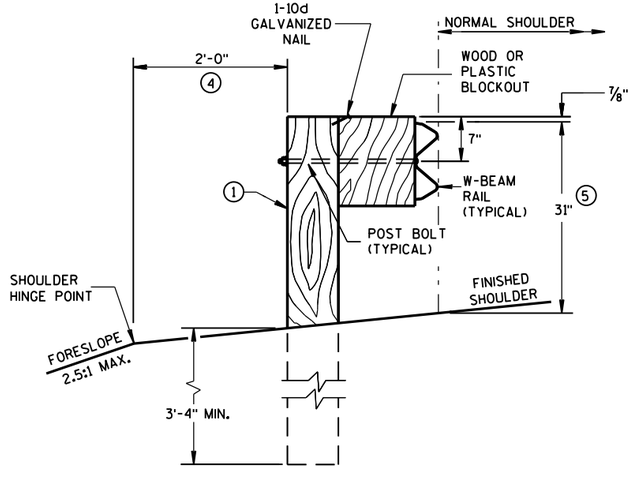
3. IF ROCK IS ENCOUNTERED DURING EXCAVATION, PROVIDE A HOLE 12 INCHES IN DIAMETER EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE APPROXIMATELY 2½ INCHES OF GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE. CUT THE POSTS THE TO LENGTH AMD INSTALL. BACKFILL WITH EXCAVATED MATERIAL AND COMPACT. BACKFILL IS TO 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".

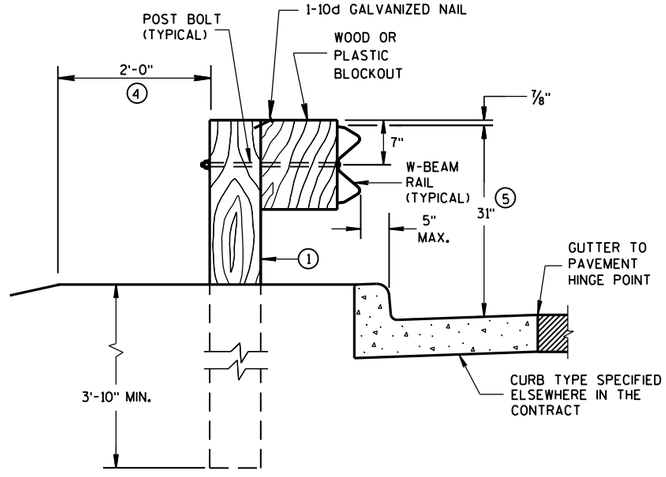


END VIEW
SETTING STEEL OR WOOD POST IN ROCK ③



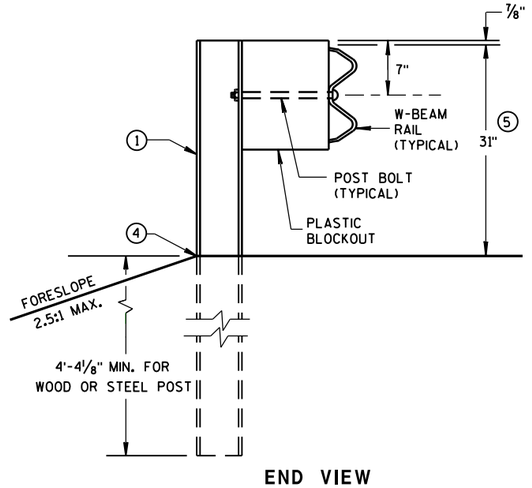
END VIEW

LOCATED ALONG A ROADWAY SHOULDER
STANDARD INSTALLATION



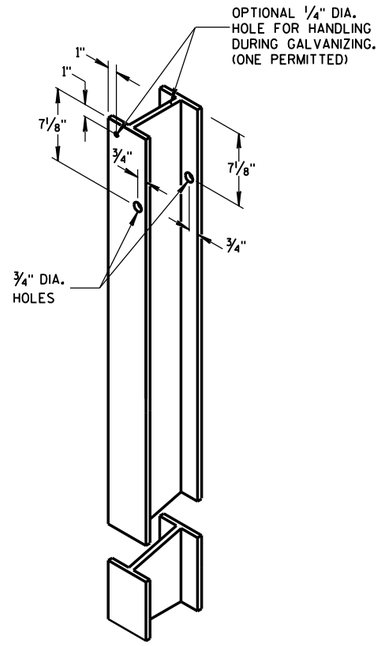
END VIEW

LOCATED ALONG A CURBED ROADWAY

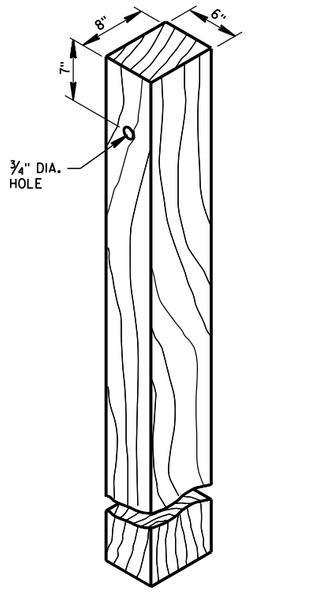


END VIEW

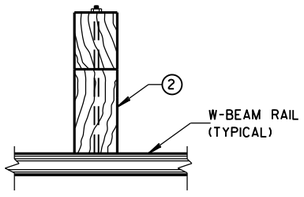
MGS LONGER POST AT HALFPOST SPACING W BEAM (K)



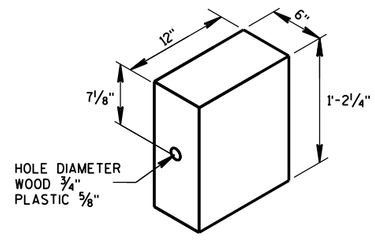
STEEL POST &
HOLE PUNCHING DETAIL
(w6X9) ①



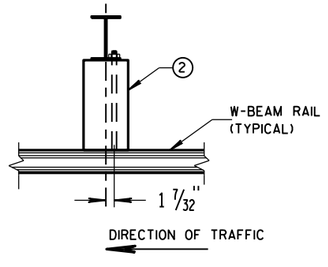
WOOD POST
(6" X 8") NOMINAL ①



PLAN VIEW
WOOD POST,
BLOCKOUT & BEAM



WOOD OR
PLASTIC BLOCKOUT ②

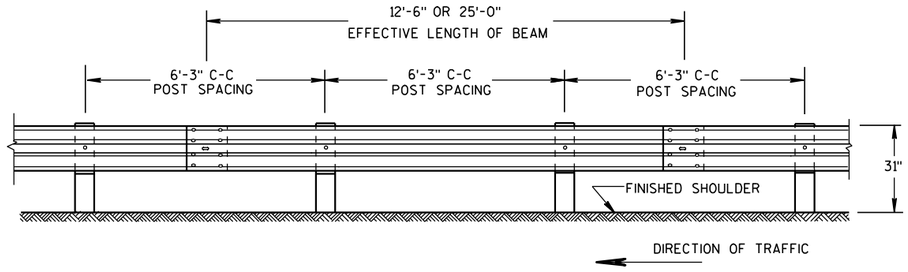


PLAN VIEW
STEEL POST,
PLASTIC BLOCKOUT & BEAM

MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

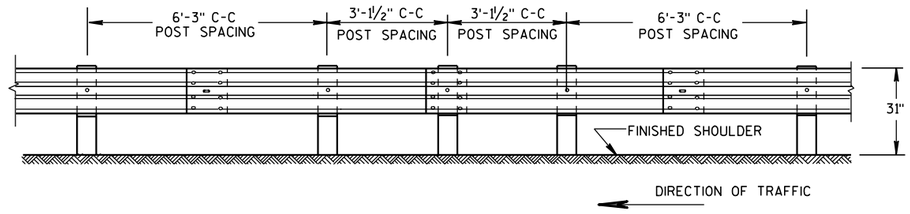
STATE OF WISCONSIN
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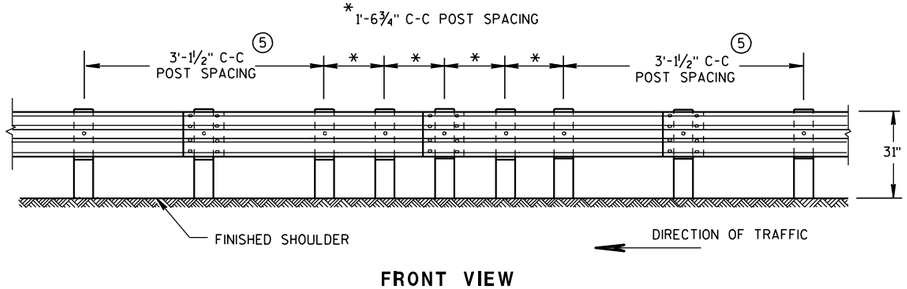
FRONT VIEW

POST SPACING STANDARD INSTALLATION



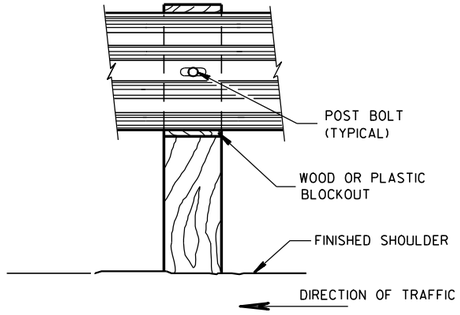
FRONT VIEW

HALF POST SPACING (HS) AND HALF POST SPACING WITH LONGER POSTS (K)

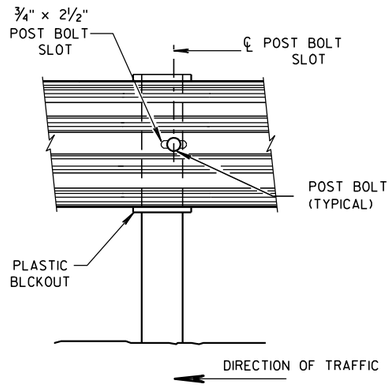


FRONT VIEW

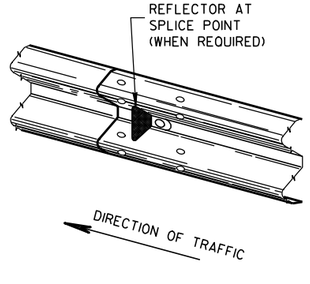
QUARTER POST SPACING (QS)

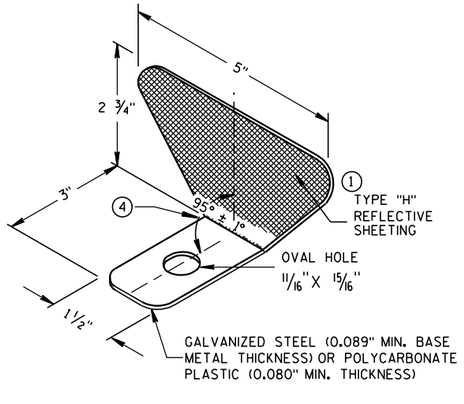


FRONT VIEW AT WOOD POST

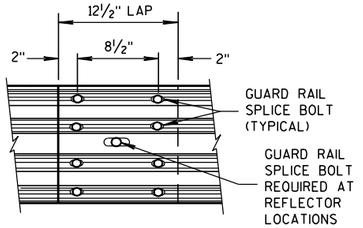


FRONT VIEW AT STEEL POST



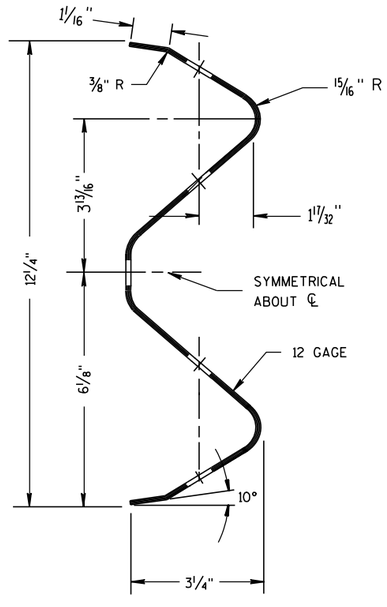


ONE SIDED REFLECTOR DETAIL AND TYPICAL INSTALLATION ①



FRONT VIEW

MID-SPAN BEAM SPLICE



SECTION THRU W-BEAM RAIL

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

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.

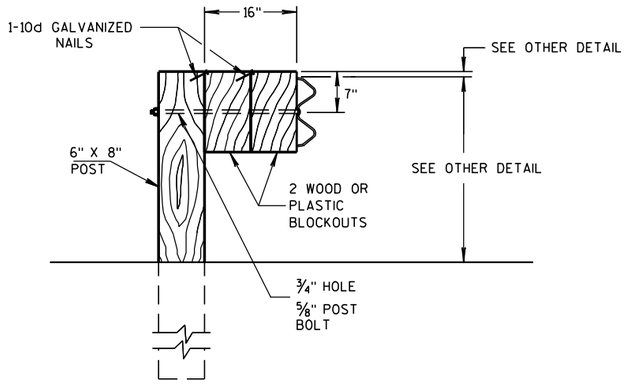
POST BOLTS ARE A ⅝" DIAMETER ASTM A307 GUARDRAIL BOLT. A POST BOLT REQUIRES ⅝" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT AND ⅝" DIAMETER F844 FLAT WASHER. POST BOLTS MAY BE LONGER IF MULTIPLE BLOCKOUTS ARE BEING USED.

GUARD RAIL SPLICE BOLTS ARE A ⅝" DIAMETER ASTM A307 GUARDRAIL HEAD BOLT. A GUARDRAIL SPLICE BOLT REQUIRES ⅝" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT.

MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

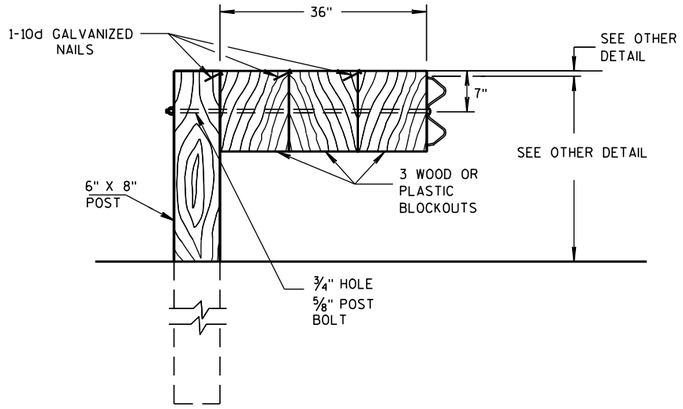
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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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.

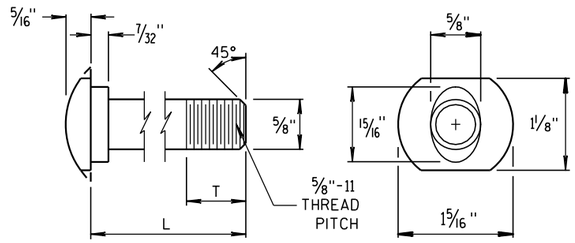


DETAIL FOR 36" BLOCKOUT DEPTH

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.

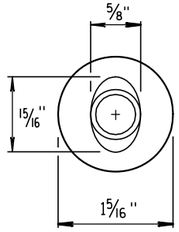
DO NOT USE 16" OR 36" BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION DISTANCE OF THE BARRIER.

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.

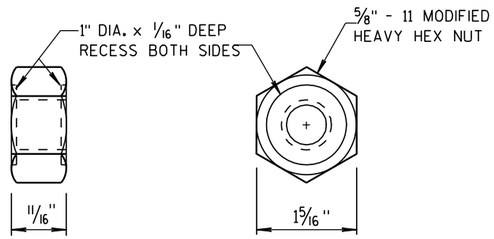


POST BOLT TABLE

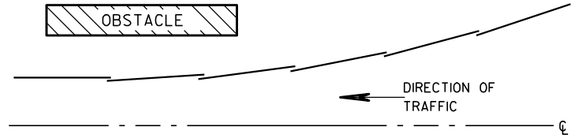
L	T (MIN.)
1 1/4"	1 1/8"
2"	1 3/4"
10"	4"
14"	4 1/16"
18"	4"
21"	4 1/16"
25"	4"



ALTERNATE BOLT HEAD

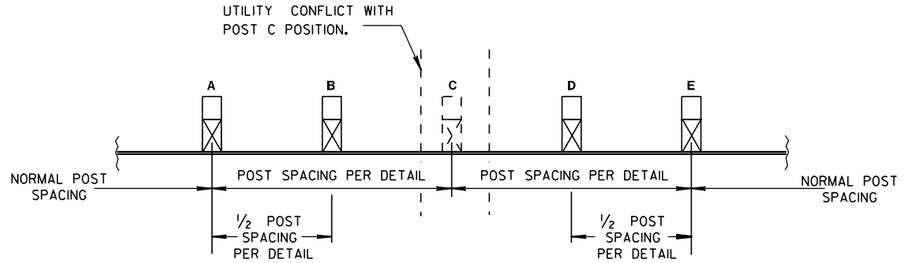


POST BOLT AND RECESS NUT

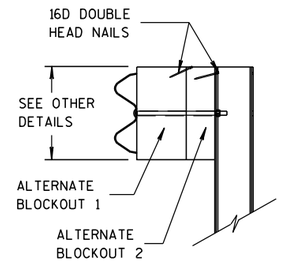


PLAN VIEW

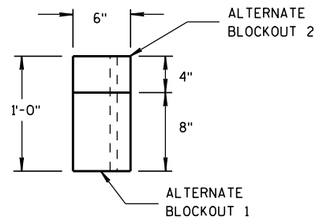
BEAM LAPPING DETAIL



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

FHWA

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S.D.D. 14 B 42-2c

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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.

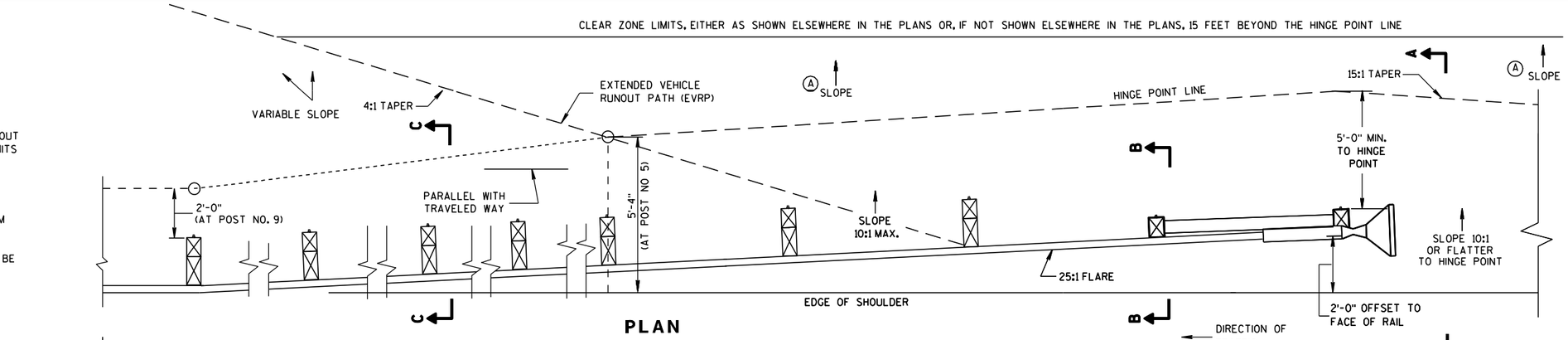
* DO NOT ATTACH BLOCKOUTS TO POSTS 1 AND 2.

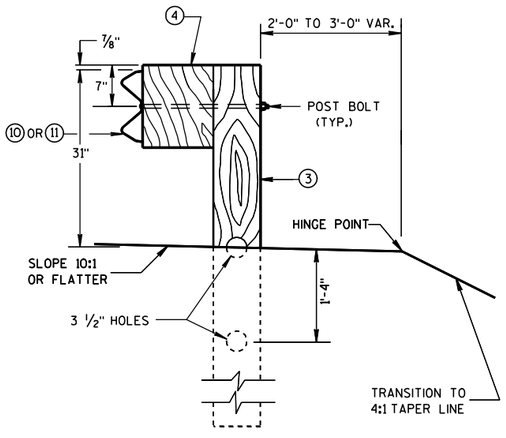
DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

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.

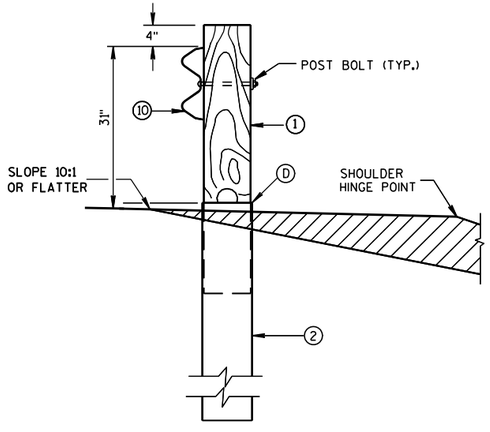
PATTERN AND COLORS ON REFLECTIVE SHEETING TYPE H ARE TO CONFORM TO OM3-L OR OM3-R OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

THE CENTER OF THE UPPER 3½" DIAMETER HOLE ON POST NUMBER 3 THROUGH POST 9 IS TO BE FLUSH WITH THE GROUND LINE (± ¾")

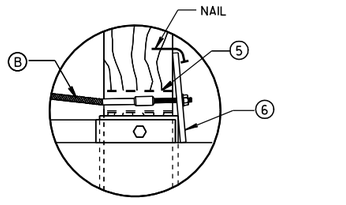


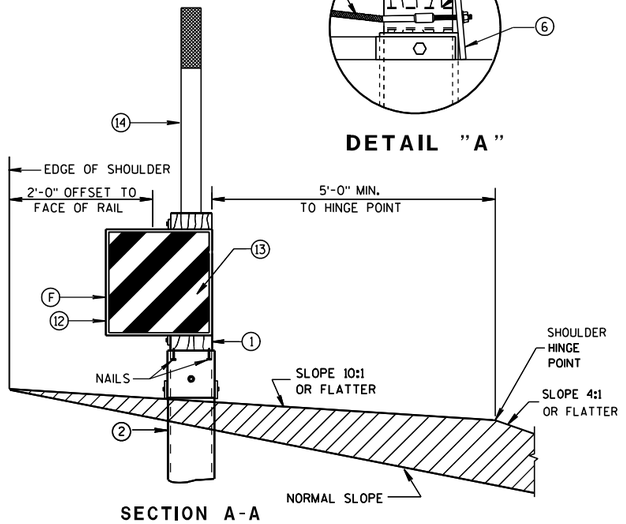


SECTION C-C
TYPICAL AT POST NOS. 3-9

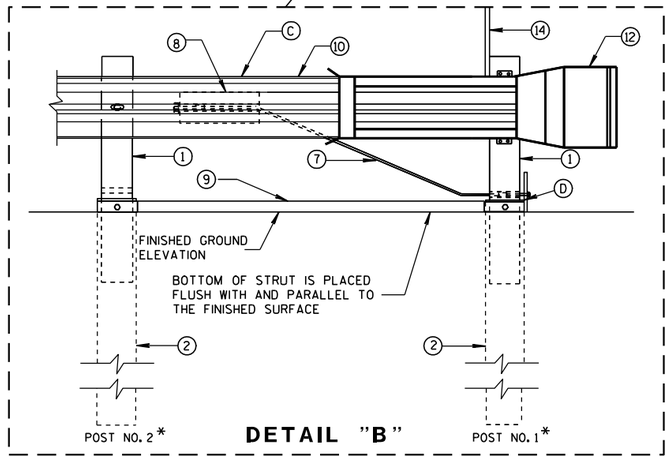


SECTION B-B
TYPICAL AT POST NO. 2*





SECTION A-A
TYPICAL AT POST NO. 1*

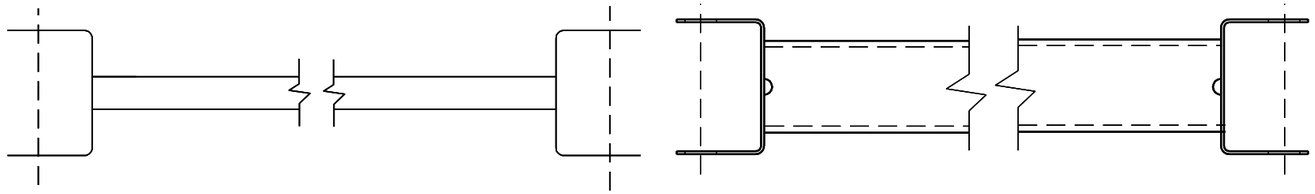


DETAIL "B"

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

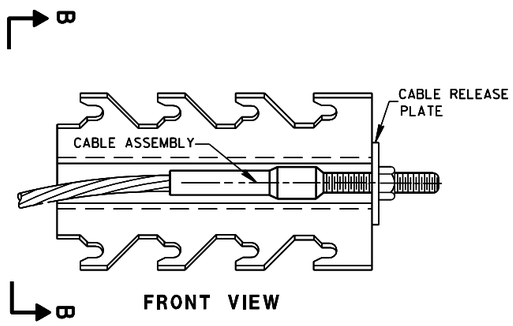
6
S.D.D. 14 B 44-1a



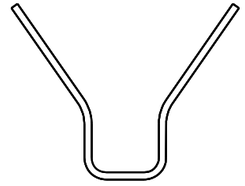
GENERIC GROUND STRUT (9) (H)

BILL OF MATERIALS

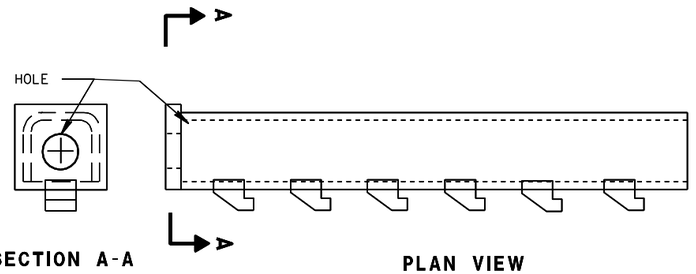
PART NO.	DESCRIPTION MATERIALS PROVIDED BY MGS EAT MANUFACTURER. SEE MANUFACTURER'S DETAILS FOR MORE INFORMATION.
(1)	WOOD BREAKAWAY POST
(2)	6" X 8" X 0.188", 6'-0" LONG FOUNDATION TUBE AT POSTS 1 AND 2
(3)	WOOD CRT
(4)	WOOD BLOCKOUT
(5)	PIPE SLEEVE
(6)	BEARING PLATE
(7)	BCT CABLE ASSEMBLY
(8)	ANCHOR 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



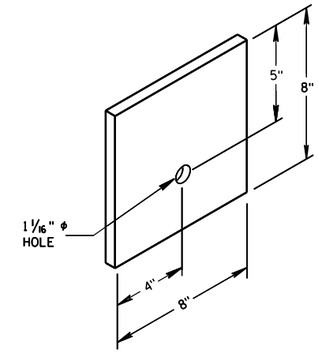
SECTION B-B



SECTION A-A

PLAN VIEW

GENERIC ANCHOR CABLE BOX (8) (H)



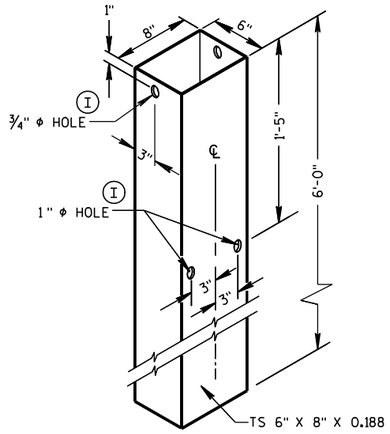
BEARING PLATE (6)

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

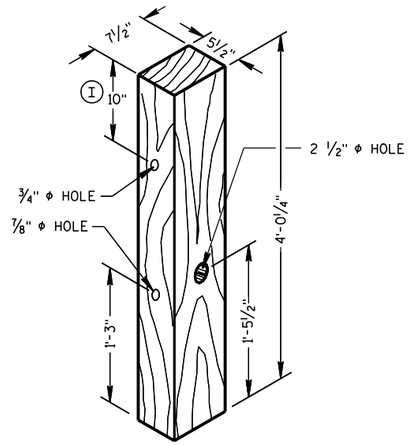
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

S.D.D. 14 B 44-1b

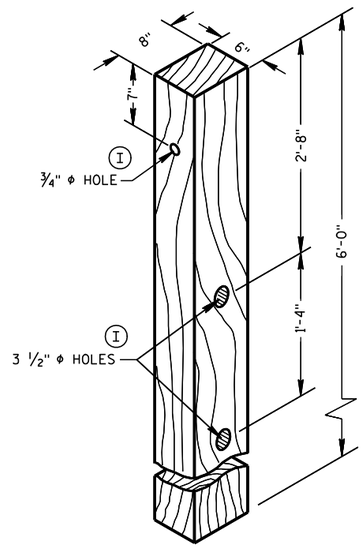


FOUNDATION TUBE (2)



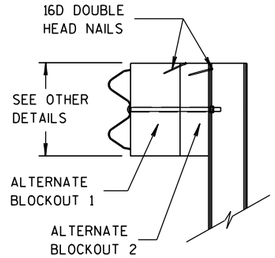
POSTS NUMBER 1 AND 2

WOOD BREAKAWAY POST (1)

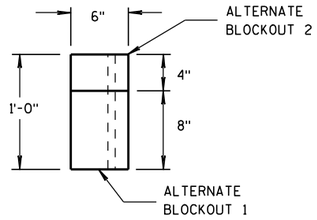


POSTS NUMBER 3-9

WOOD CRT POST (3)

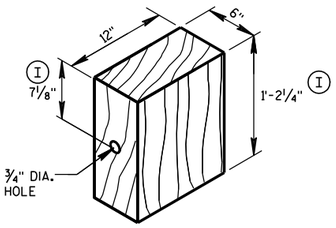


SIDE VIEW



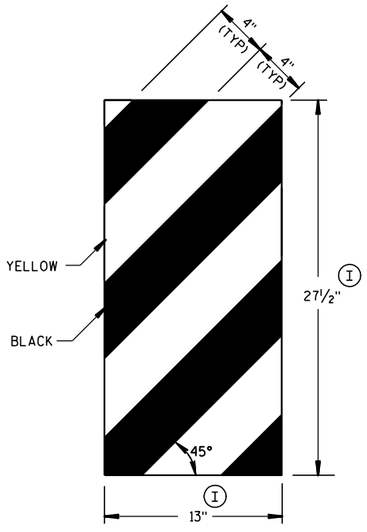
TOP VIEW

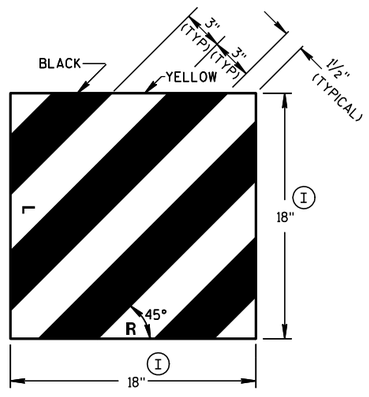
ALTERNATE WOOD BLOCKOUT DETAIL



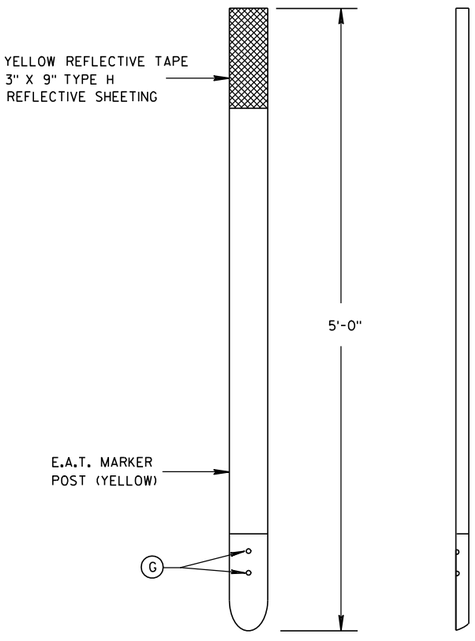
WOOD BLOCKOUT (4)

REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2





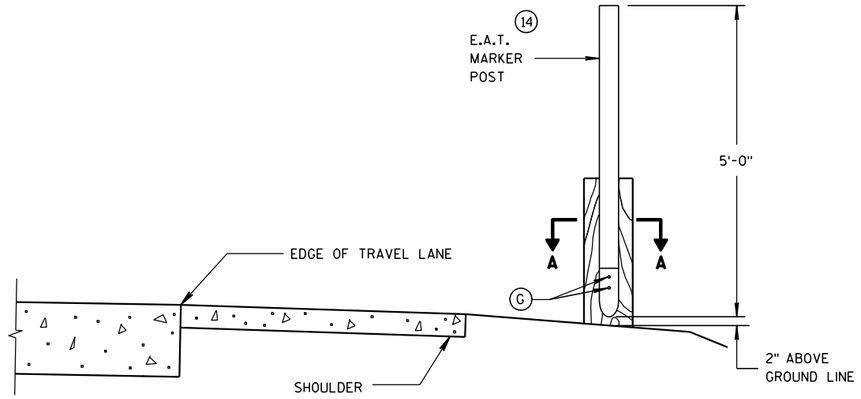
GENERIC REFLECTIVE SHEETING (13) (H)



FRONT VIEW

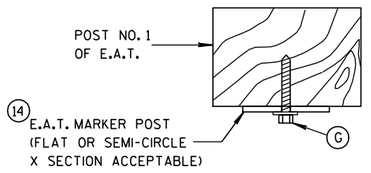
SIDE VIEW

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

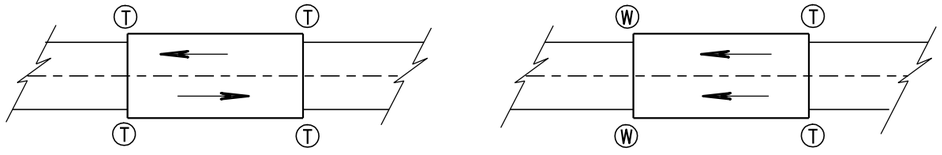
MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
5/23/2011
DATE
/S/ Jerry H. [illegible]
ROADWAY STANDARDS 405 tENT
ENGINEER
FHWA

6

S.D.D. 14 B 44-1c



TWO WAY TRAFFIC

ONE WAY TRAFFIC

Ⓣ THRIE BEAM CONNECTION

Ⓦ W-BEAM CONNECTION WHEN REQUIRED

TYPICAL LOCATIONS OF THRIE BEAM AND W-BEAM CONNECTIONS TO BRIDGE

GENERAL NOTES

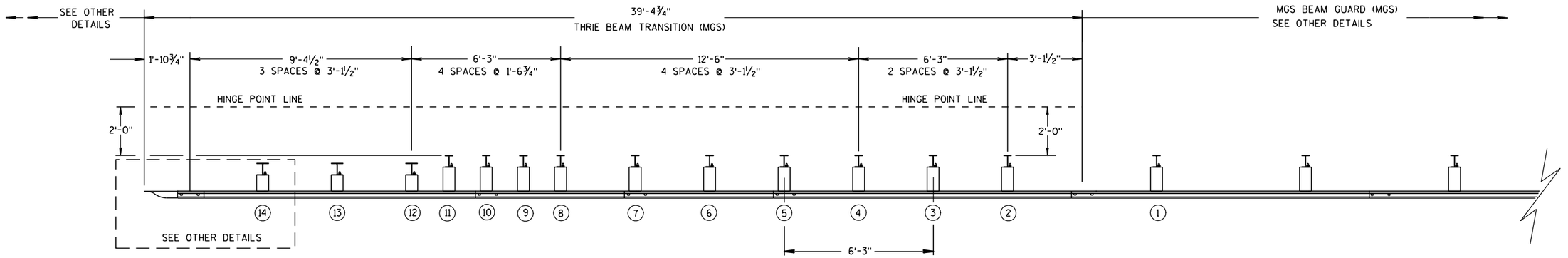
BOLT THE THRIE BEAM TO ALL POSTS AND BLOCKOUTS. DRILL OR PUNCH BOLT HOLES IN THE BEAM IF THE POST SPACING IS LESS THAN 6'-3.

IF ROCK IS ENCOUNTERED, REMOVE ROCK TO FULL DEPTH OF POST PLUS 2½", AND 12" DIAMETER AROUND POST. SEE 14B42 FOR MORE DETAILS.

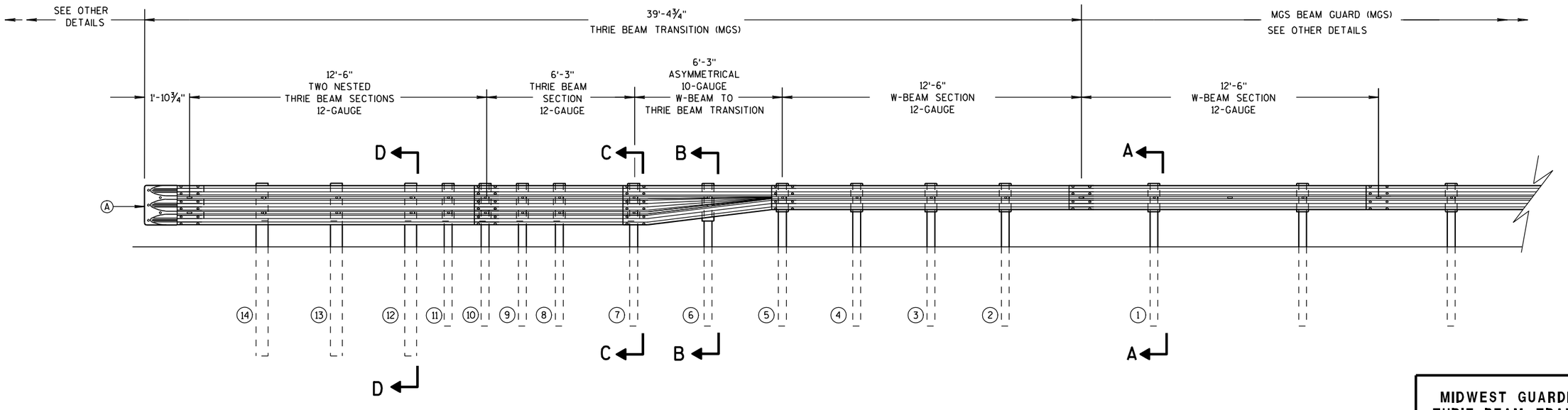
TRANSITION USES STEEL POSTS ONLY.

SEE STANDARD DETAIL DRAWING 14 B 42 FOR MORE INFORMATION.

Ⓐ 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

406

6

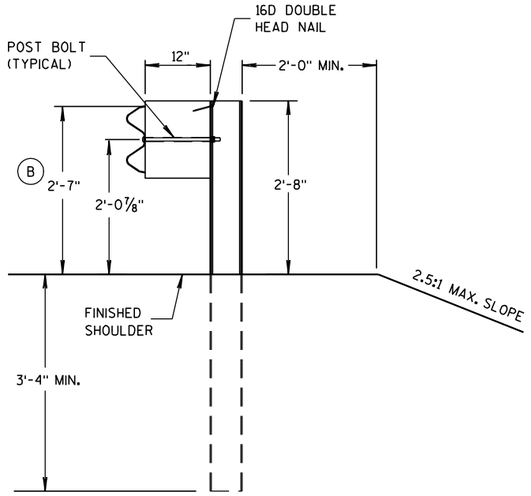
S.D.D. 14 B 45-3a

6

S.D.D. 14 B 45-3a

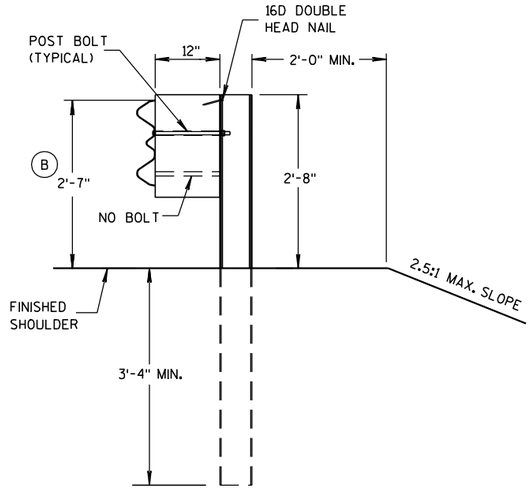
GENERAL NOTES

(B) TOLERANCE FOR TOP OF W-BEAM RAIL IS ± 1".



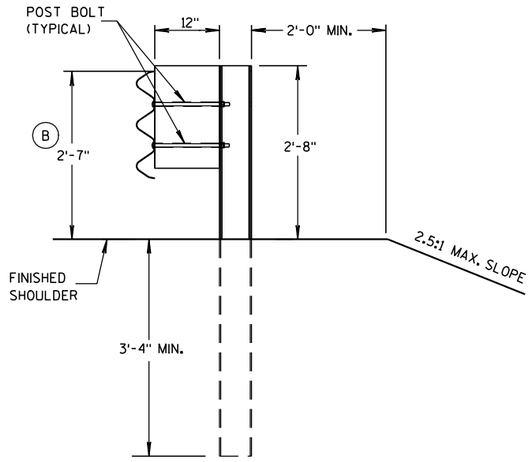
SECTION A-A

POSTS 1-5



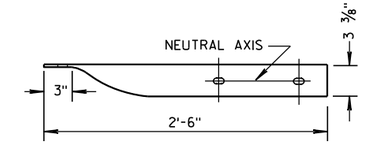
SECTION B-B

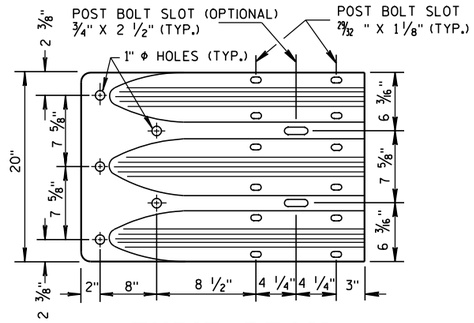
POST 6



SECTION C-C

POSTS 7-11





THRIE BEAM TERMINAL CONNECTOR

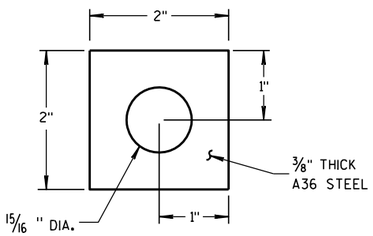
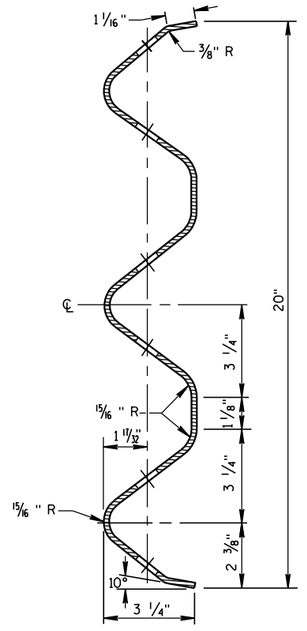
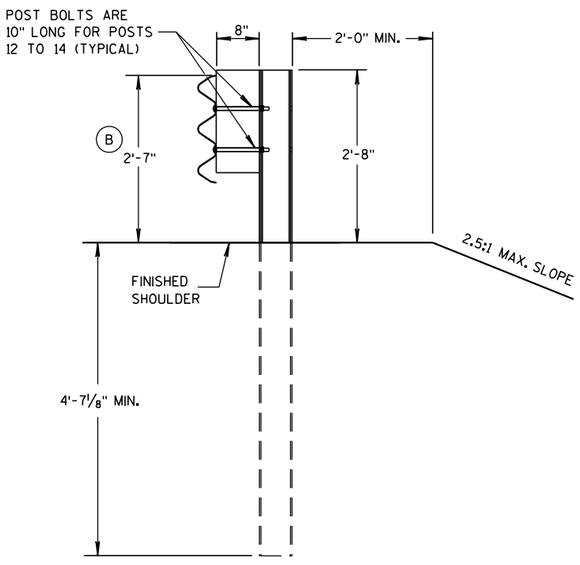


PLATE WASHER DETAIL

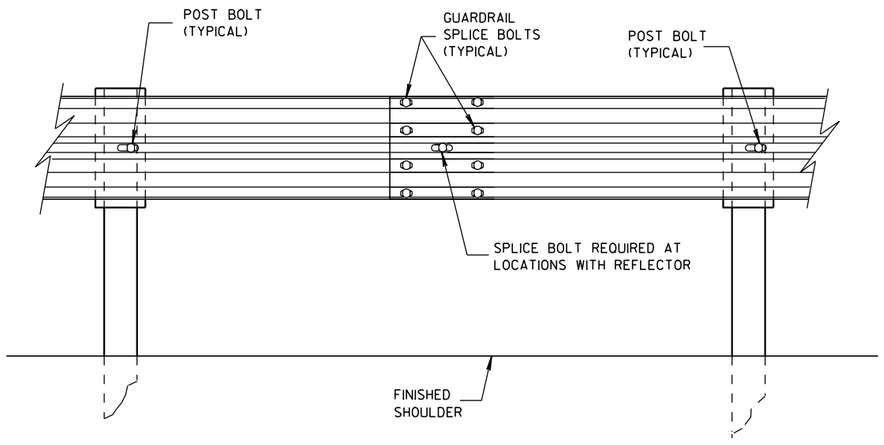


SECTION THRU THRIE BEAM RAIL ELEMENT



SECTION D-D

POSTS 12-14



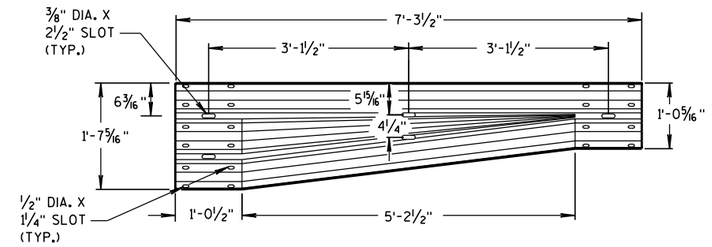
SPLICE DETAIL

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

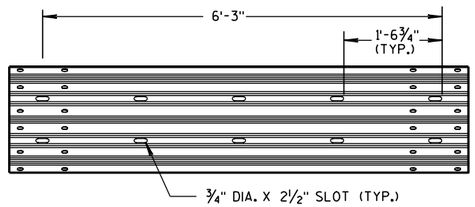
STATE OF WISCONSIN
DEPARTMENT OF TRANSPO...

6

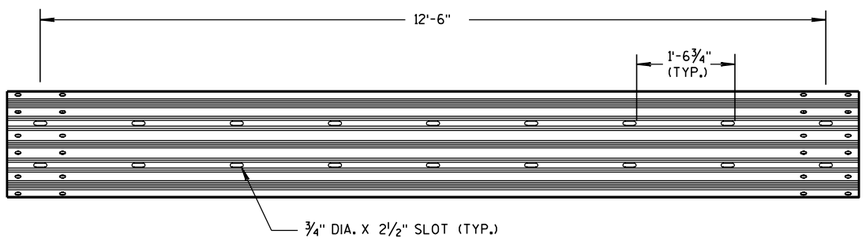
S.D.D. 14 B 45-3b



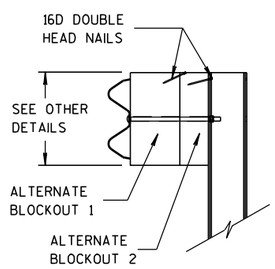
W-BEAM TO THRIE BEAM TRANSITION SECTION



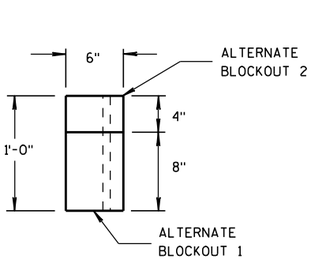
6'-3" THRIE BEAM SECTION



12'-6" THRIE BEAM SECTION

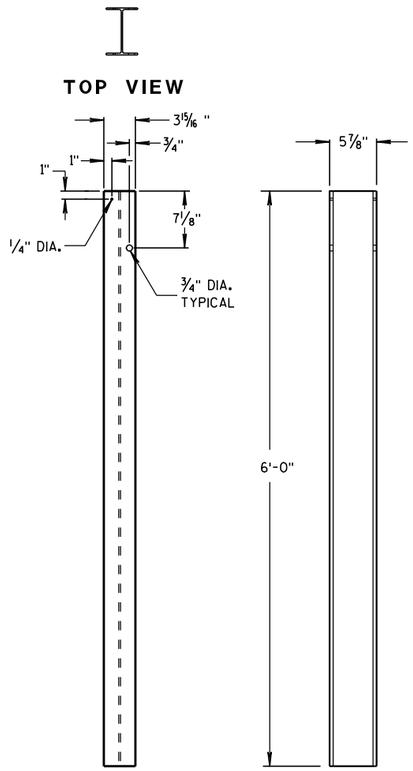


SIDE VIEW



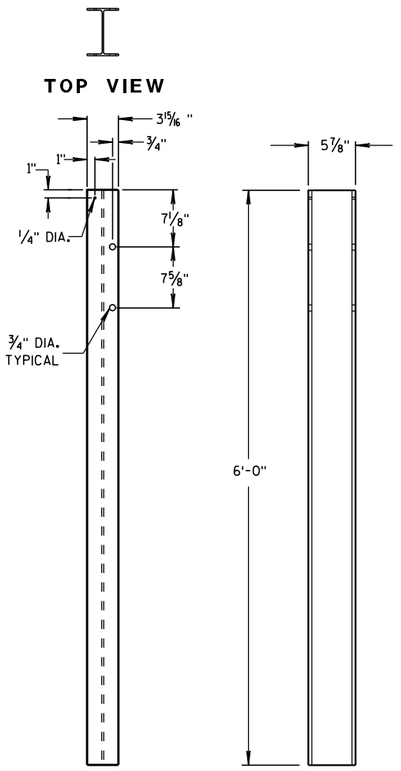
TOP VIEW

ALTERNATE WOOD BLOCKOUT DETAIL



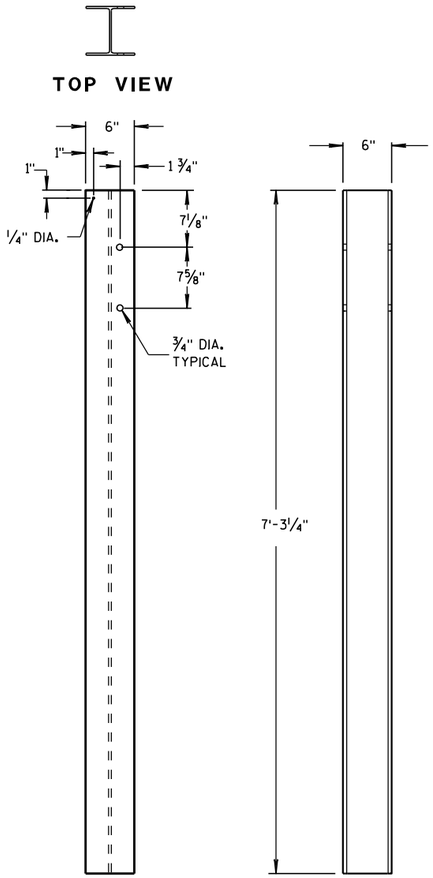
FRONT VIEW SIDE VIEW

STEEL POSTS 1-5



FRONT VIEW SIDE VIEW

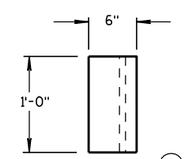
STEEL POSTS 6-11



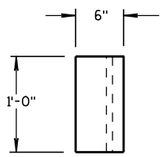
FRONT VIEW SIDE VIEW

STEEL POSTS 12-14

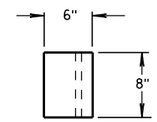
(1) WOOD BLOCKS MAY BE CONSTRUCTED OUT OF 2 WOOD BLOCKS. SEE ALTERNATE WOOD BLOCK DETAIL.



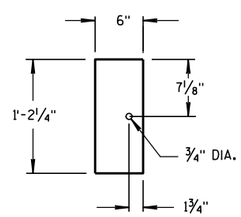
TOP VIEW (1)



TOP VIEW (1)

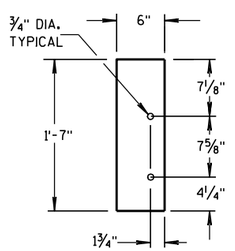


TOP VIEW



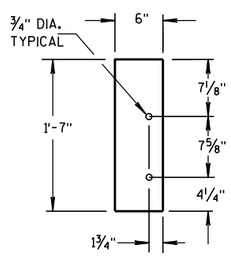
FRONT VIEW

BLOCKOUT POSTS 1-5



FRONT VIEW

BLOCKOUT POSTS 6-11



FRONT VIEW

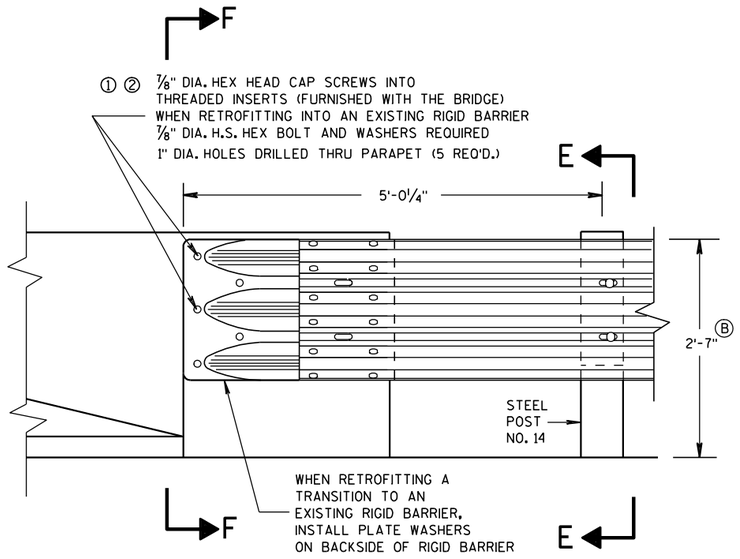
BLOCKOUT POSTS 12-14

STEEL POST SIZES

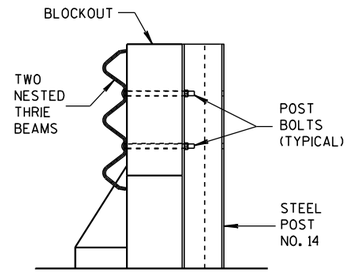
POST NUMBER	SECTION TYPE	LENGTH
1	W6x9	72"
2	W6x9	72"
3	W6x9	72"
4	W6x9	72"
5	W6x9	72"
6	W6x9	72"
7	W6x9	72"
8	W6x9	72"
9	W6x9	72"
10	W6x9	72"
11	W6x9	72"
12	W6x15	87 1/8"
13	W6x15	87 1/8"
14	W6x15	87 1/8"

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



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.

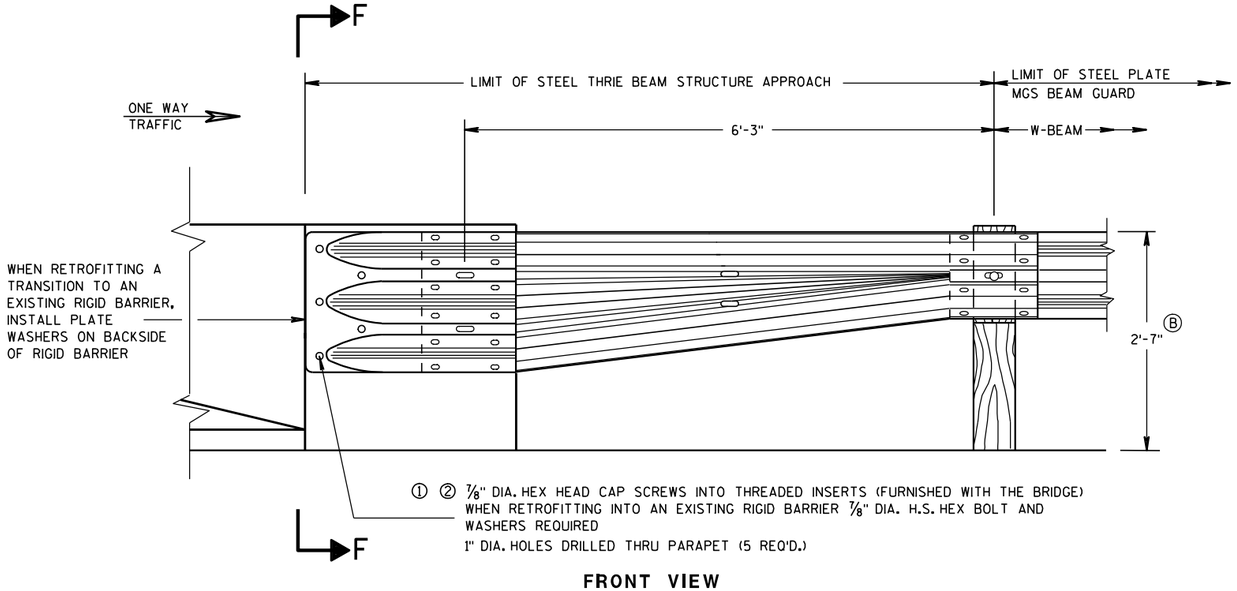
① DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

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.

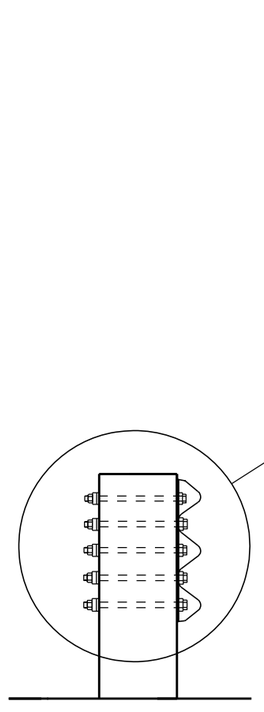
③ THE RECESS FOR A W-BEAM CONNECTION, WHICH EXISTS ON SOME PARAPETS OF THIS TYPE, SHALL BE FILLED WITH A TREATED TIMBER BLOCKOUT. BLOCKOUT SIZE IS 1'-6" X 2'-0" X 3 1/2".

Ⓑ TOLERANCE FOR TOP OF BEAM IS ± 1".

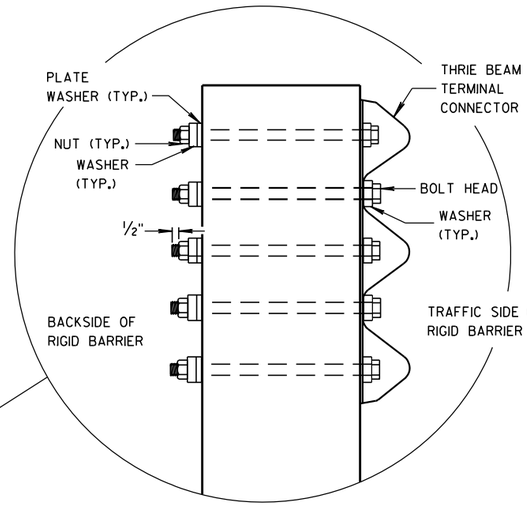
THRIE BEAM CONNECTION TO BRIDGE PARAPET WITH SQUARE ENDS



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

8/31/2012 — DATE

/S/ Jerry H. [illegible] — ROADWAY STANDARDS [illegible] ENGINEER

FHWA

6

S.D.D. 14 B 45-3d

6

S.D.D. 14 B 45-3d

GENERAL NOTES

THESE ARE TYPICAL CONNECTION DETAILS. ADJUST THE POSTION OF CONNECTIONS TO EXISTING BRIDGES TO FIT THE ACTUAL BRIDGE AND SITE DIMENSIONS.

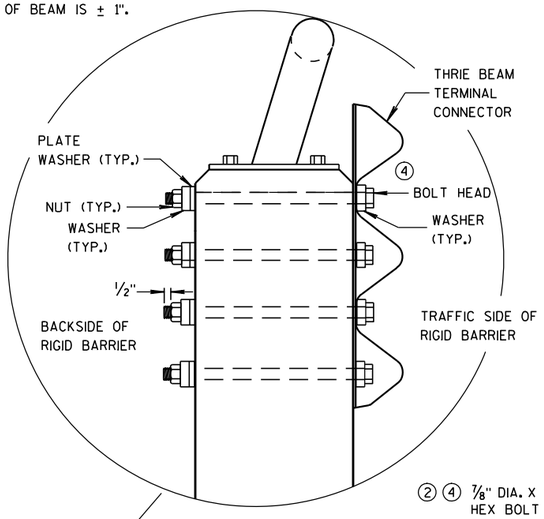
① DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

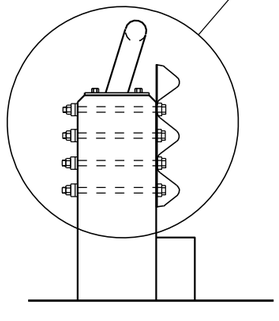
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③ THE RECESS FOR A W-BEAM CONNECTION, WHICH EXISTS ON SOME PARAPETS OF THIS TYPE, SHALL BE FILLED WITH A TREATED TIMBER BLOCKOUT. BLOCKOUT SIZE IS 1'-6" X 2'-0" X 3 1/2". BLOCK IS INCIDENTAL TO THE CONTRACT.

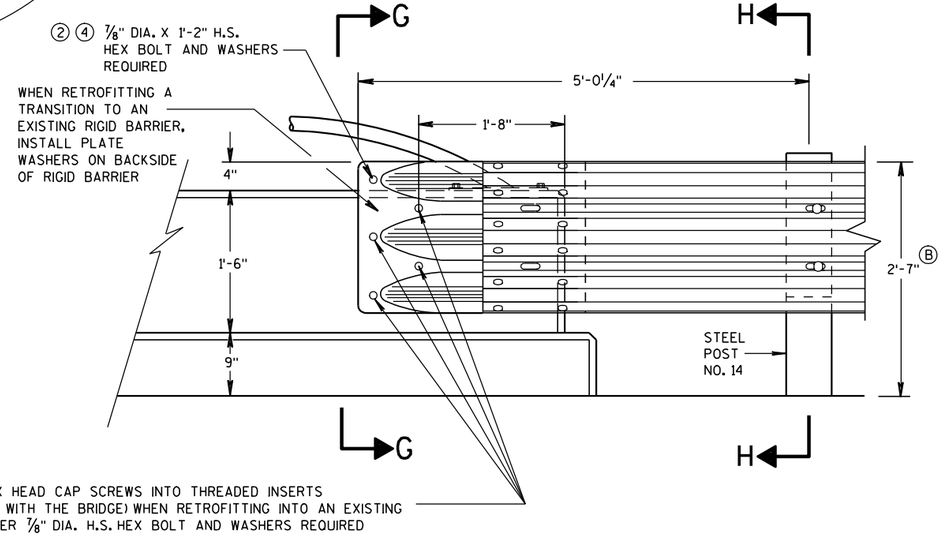
④ BOLT, NUT AND WASHERS NOT REQUIRED FOR THIS LOCATION WHEN RETROFITTING AN EXISTING PAPAPET AND THE HOLE IS EITHER ABOVE PARAPET OR WITHIN 4 INCHES OF THE EDGE OF PARAPET.

Ⓑ TOLERANCE FOR TOP OF BEAM IS ± 1".

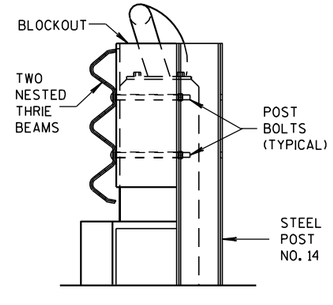




SECTION G-G

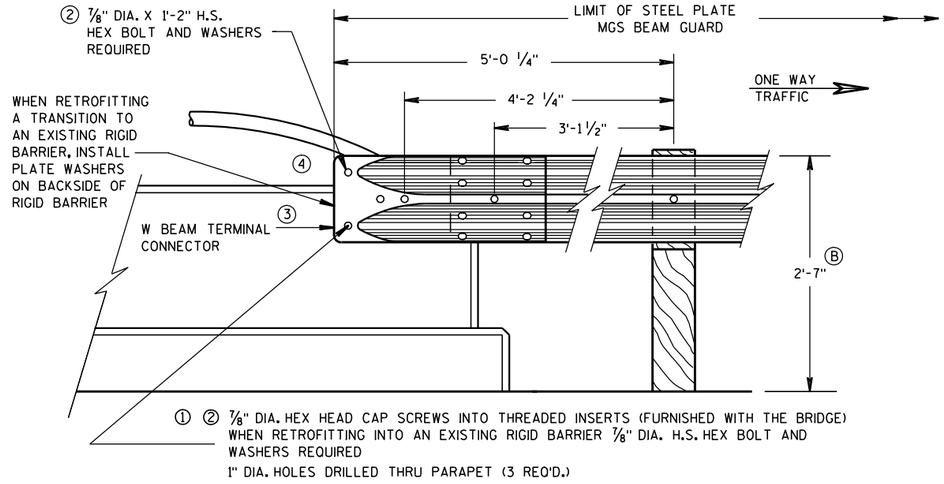


FRONT VIEW



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)

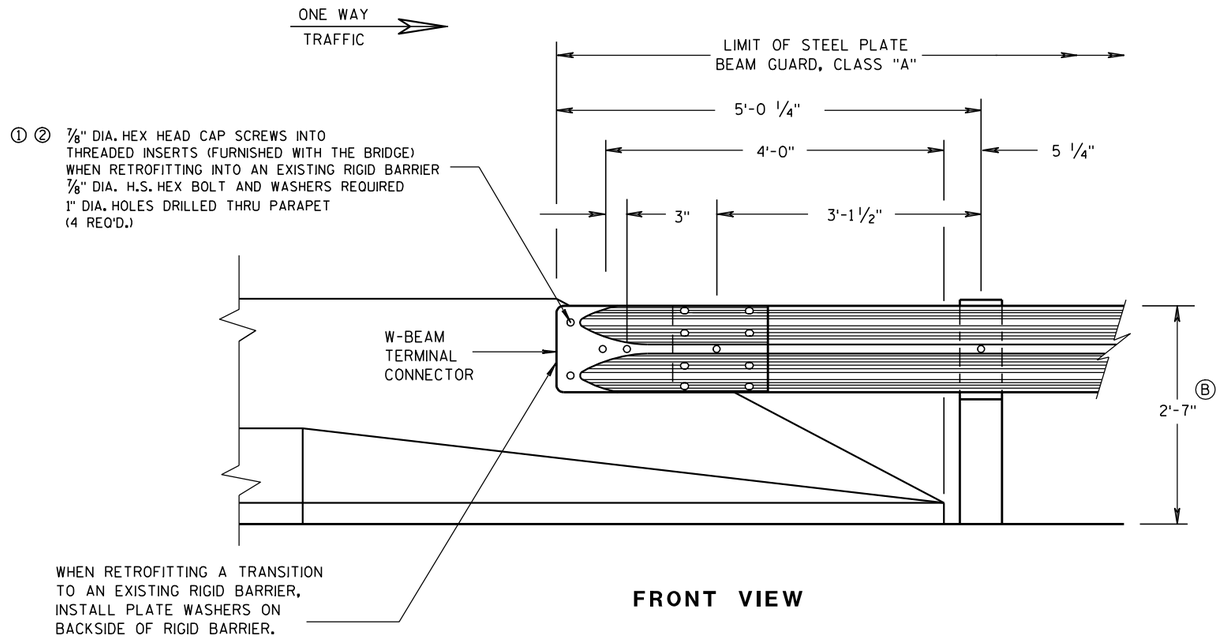
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

8-31-2012
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER

FHWA



FRONT VIEW

W BEAM CONNECTION TO PARAPETS WITH SLOPED ENDS

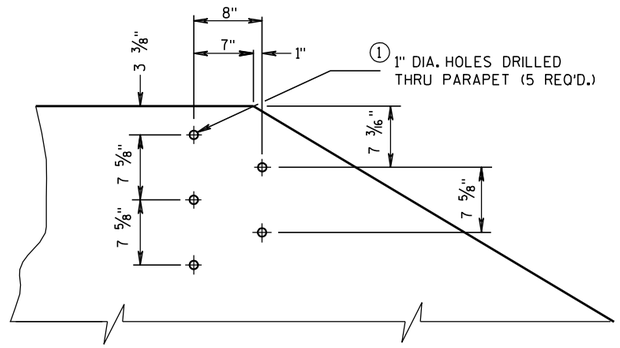
(USE ONLY AT TRAFFIC EXIT END OF ONE WAY BRIDGE)

GENERAL NOTES

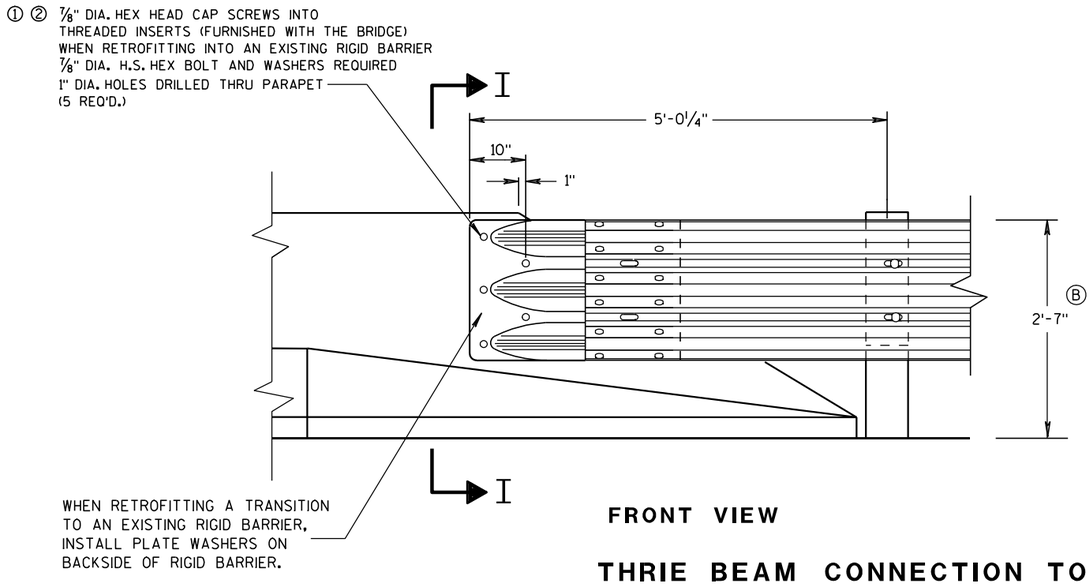
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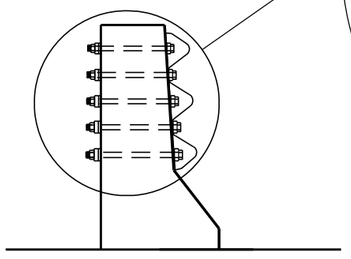
Ⓑ TOLERANCE FOR TOP OF BEAM IS ± 1".



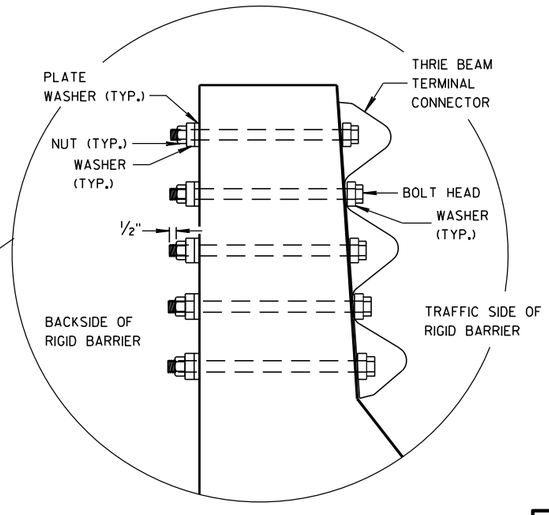
DRILL HOLE LOCATION AND PATTERN FOR THRIE BEAM CONNECTION



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

8/31/2012
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER

411

ENT

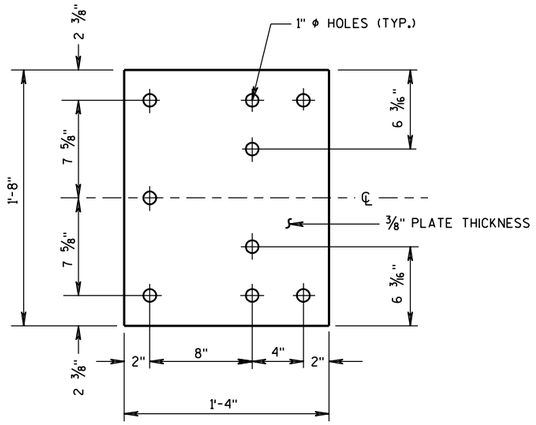
FHWA

6

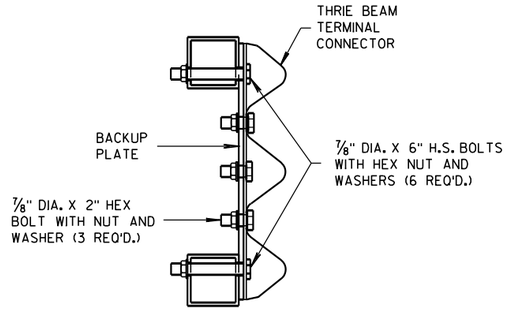
S.D.D. 14 B 45-3f

6

S.D.D. 14 B 45-3f



BACK-UP PLATE DETAIL

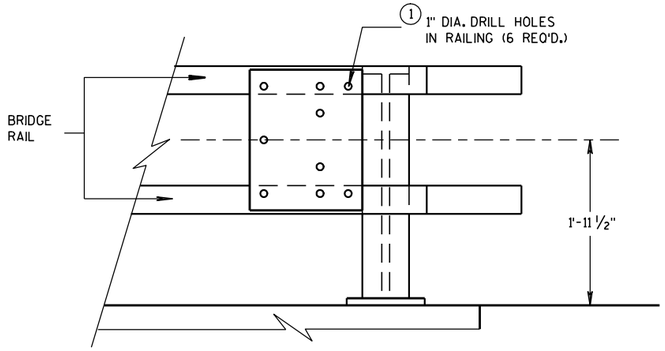


SECTION J-J

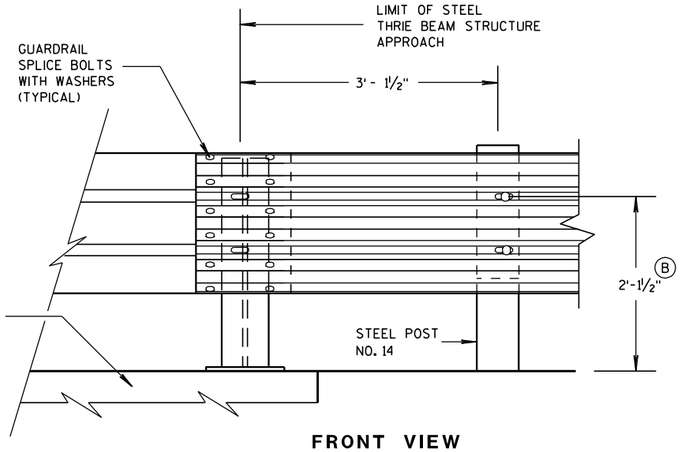
GENERAL NOTES

(1) DRILLING HOLES THROUGH THE PAPRPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

(B) TOLERANCE FOR TOP OF BEAM IS ± 1".

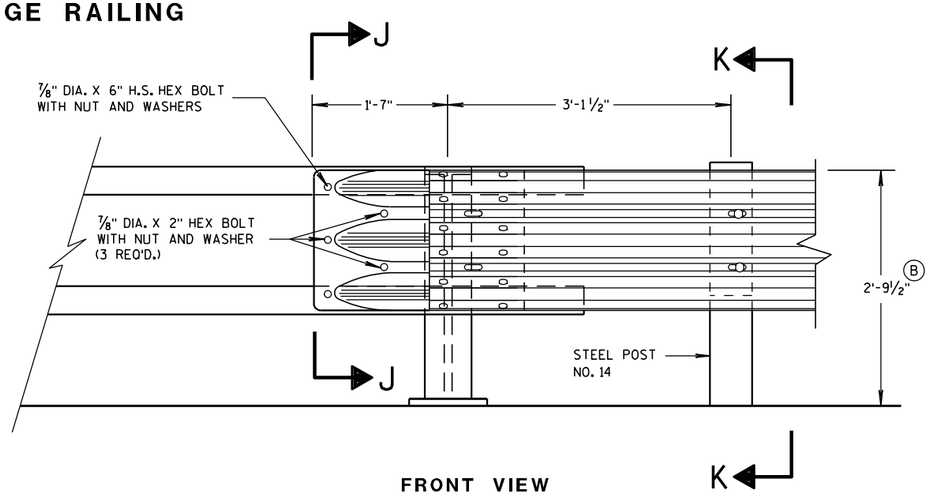


BACK-UP PLATE MOUNTING ONTO BRIDGE RAILING

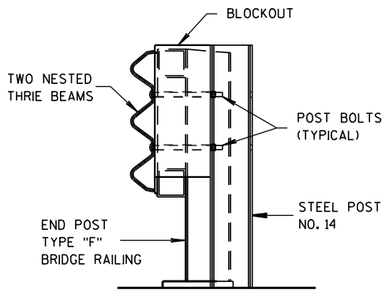


FRONT VIEW

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

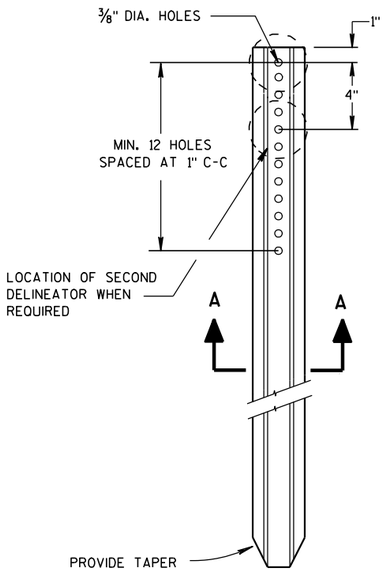
APPROVED
8/31/2012 DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

6

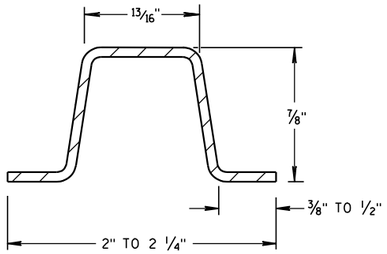
S.D.D. 14 B 45-3g

6

S.D.D. 14 B 45-3g

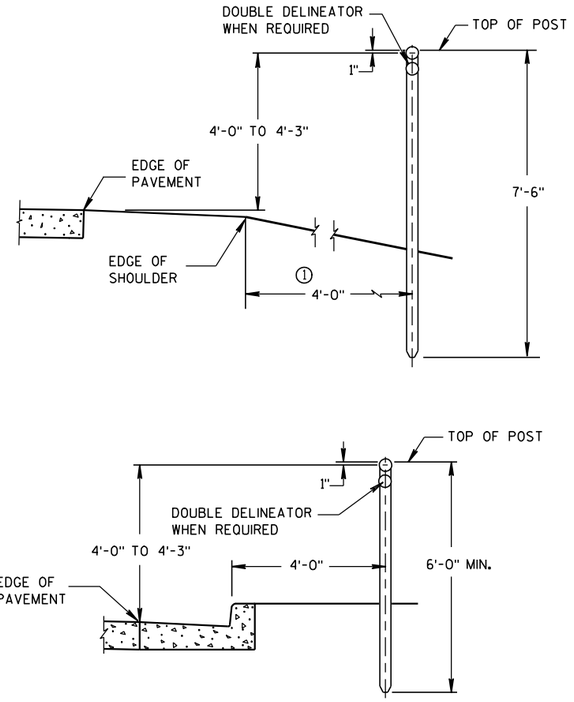


DELINEATOR POST



SECTION A-A

WEIGHT 1.12 LBS PER FT. ± 0.1 LB.

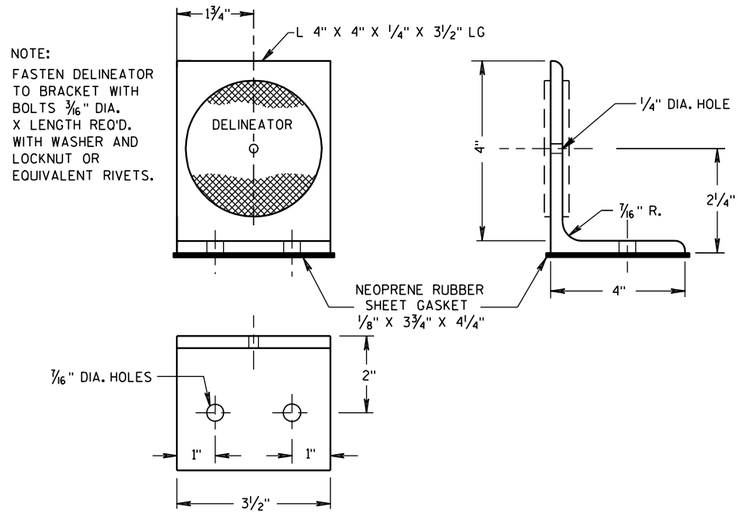


TYPICAL INSTALLATIONS OF DELINEATOR POSTS

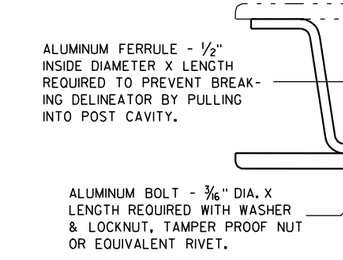
GENERAL NOTES

DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

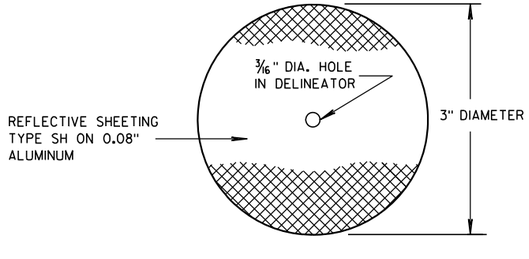
① DELINEATORS SHALL BE PLACED AT A CONSTANT DISTANCE FROM THE EDGE OF THE SHOULDER FOR THE LENGTH OF THE INSTALLATION.



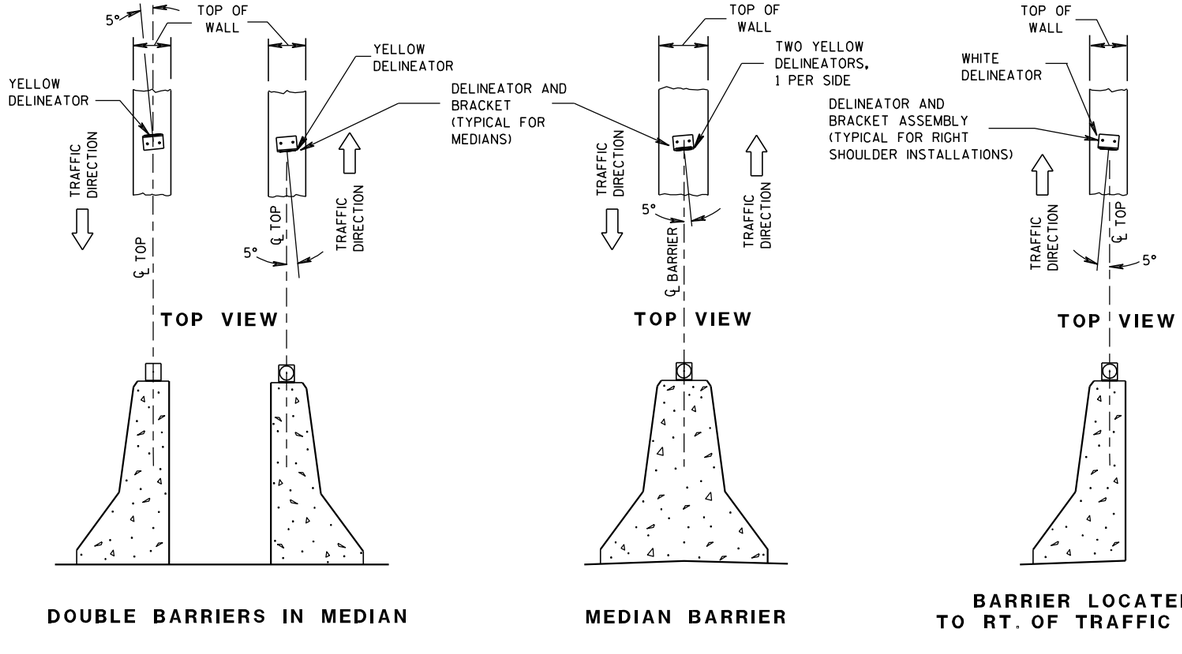
DELINEATOR BRACKET



MOUNTING DETAIL FOR DELINEATOR



DELINEATOR

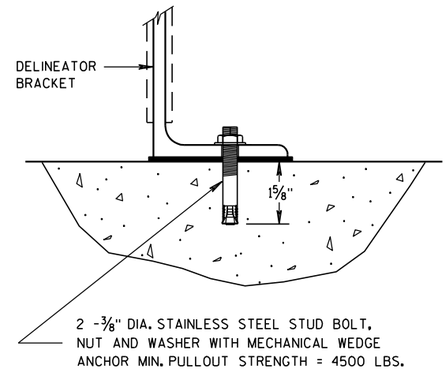


DOUBLE BARRIERS IN MEDIAN

MEDIAN BARRIER

BARRIER LOCATED TO RT. OF TRAFFIC FLOW

LOCATION AND AIMING DETAILS FOR DELINEATORS MOUNTED ON CONCRETE BARRIERS



DELINEATOR BRACKET MOUNTING DETAIL

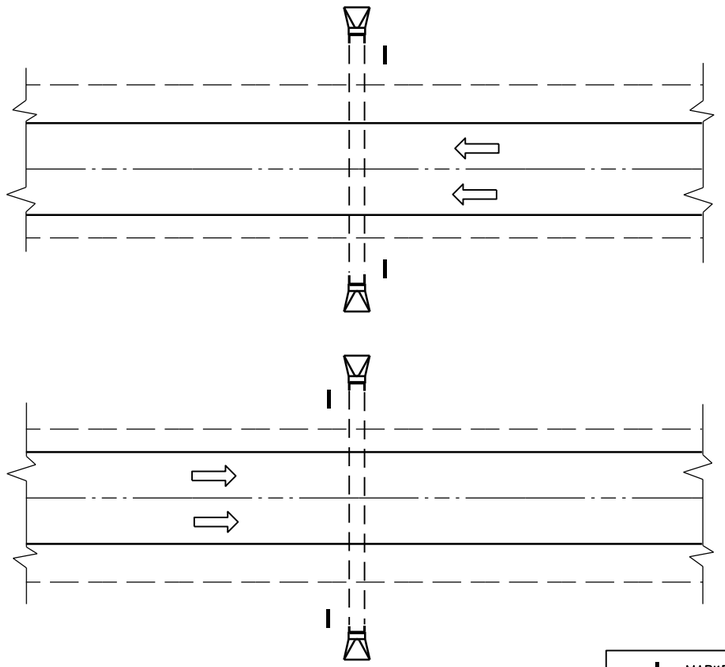
DELINEATOR POST, DELINEATOR BRACKET AND DELINEATOR

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
1/25/2011 — DATE
/S/ Thomas N. Nothdurft — STATE TRAFFIC ENGINEER — DESIGN
FHWA

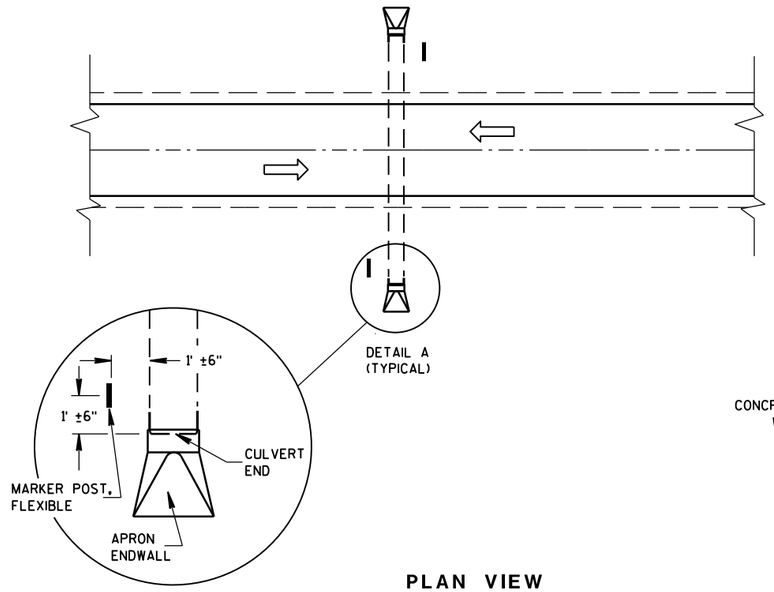
6

S.D.D. 15 A 2-7



PLAN VIEW

DIVIDED HIGHWAY



DETAIL A
(TYPICAL)

PLAN VIEW

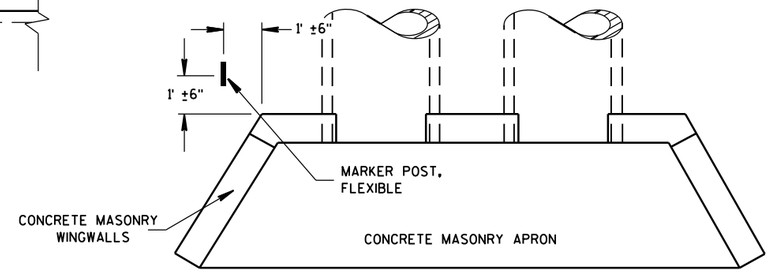
UNDIVIDED HIGHWAY

MARKER POST, FLEXIBLE

DIRECTION OF TRAFFIC FLOW

GENERAL NOTES

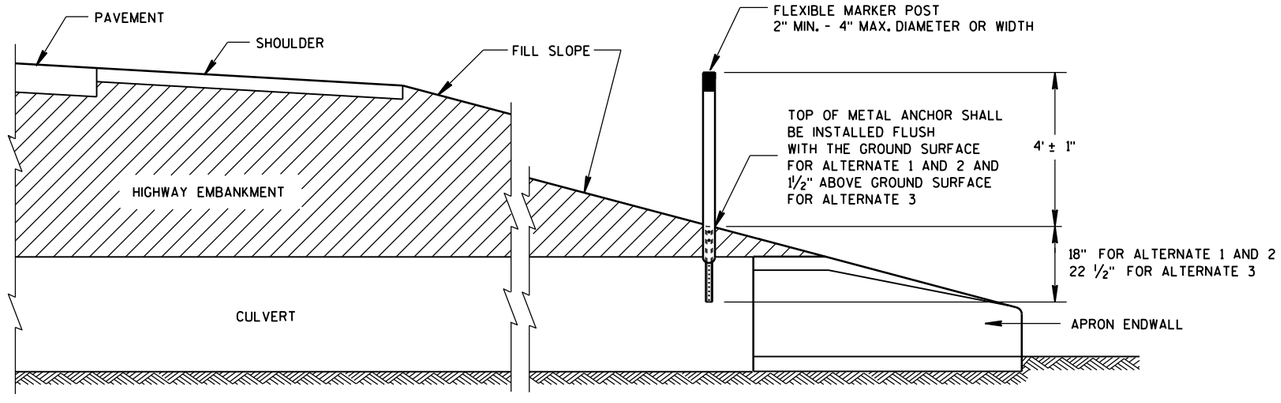
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.



PLAN VIEW

CONCRETE MASONRY ENDWALLS FOR CULVERT PIPE AND PIPE ARCH

FLEXIBLE MARKER POST LOCATION



CROSS SECTION

FLEXIBLE MARKER POST

FLEXIBLE MARKER POST FOR CULVERT END

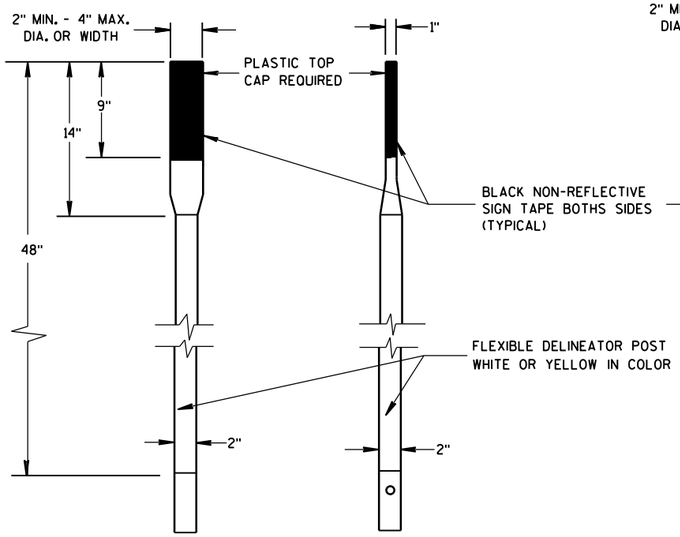
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

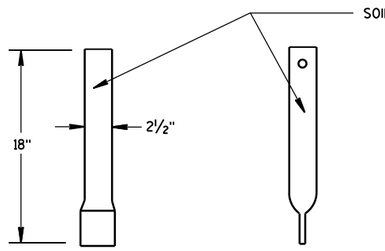
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S.D.D. 15 A 3-2a

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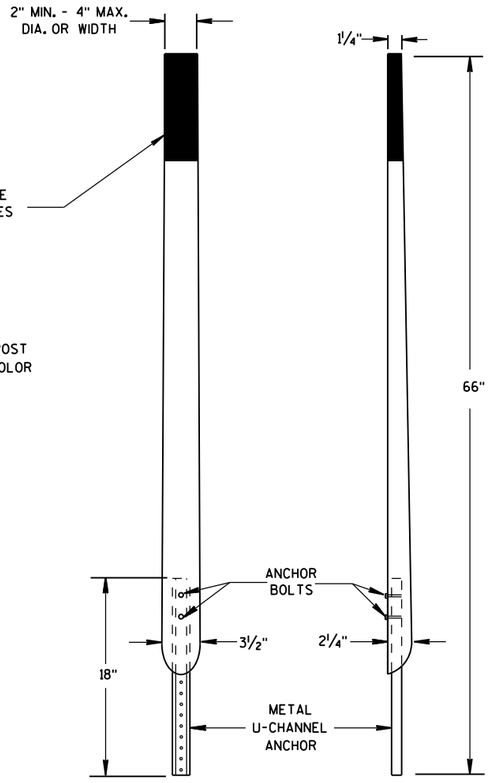
S.D.D. 15 A 3-2a





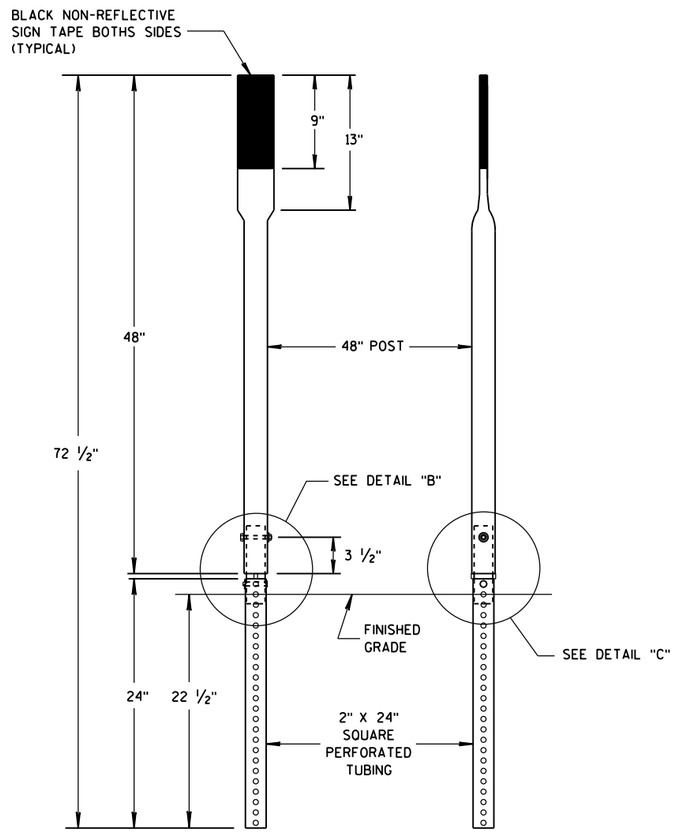
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

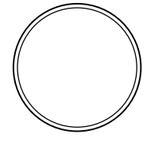
ALTERNATE 2



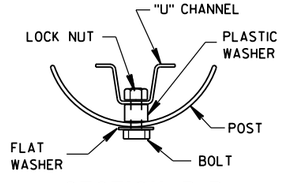
FRONT VIEW SIDE VIEW

ALTERNATE 3

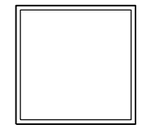
FLEXIBLE MARKER POSTS



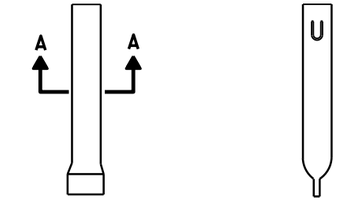
SECTION A-A



SECTION B-B

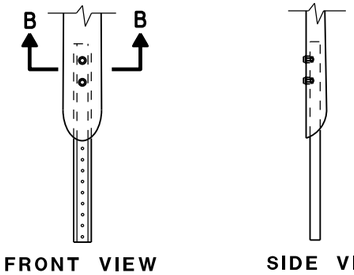


SECTION C-C



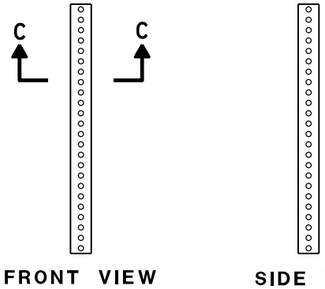
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

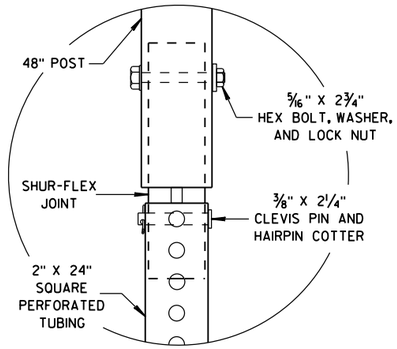
ALTERNATE 2



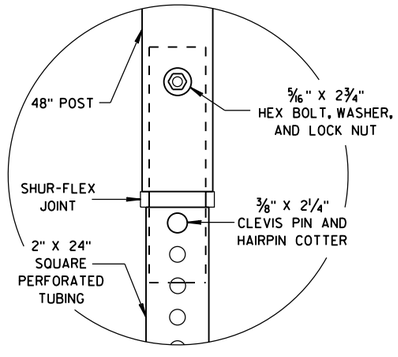
FRONT VIEW SIDE VIEW

ALTERNATE 3

FLEXIBLE MARKER POST ANCHORS



DETAIL B



DETAIL C

FLEXIBLE MARKER POST
FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

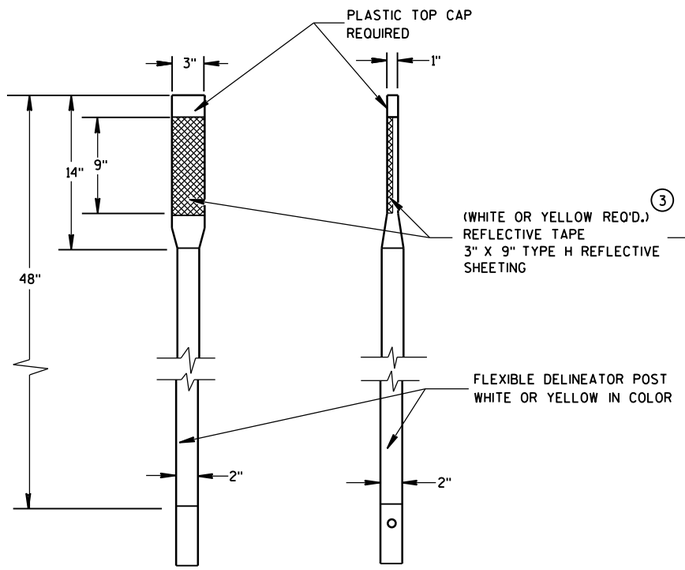
APPROVED
10/1/2012 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

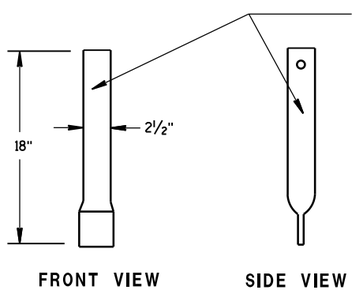
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S.D.D. 15 A 3-2b

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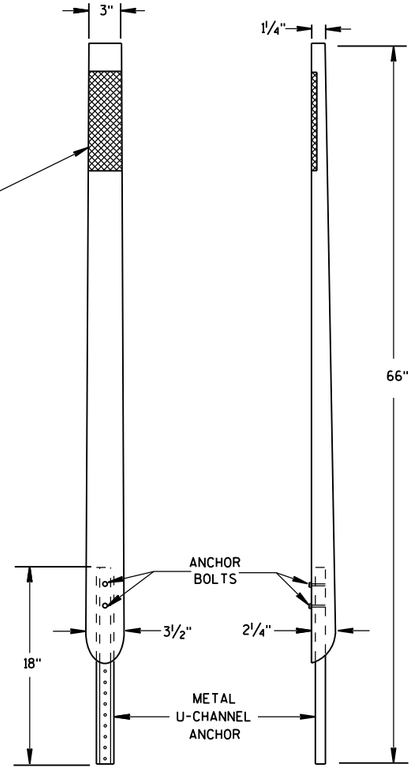
S.D.D. 15 A 3-2b





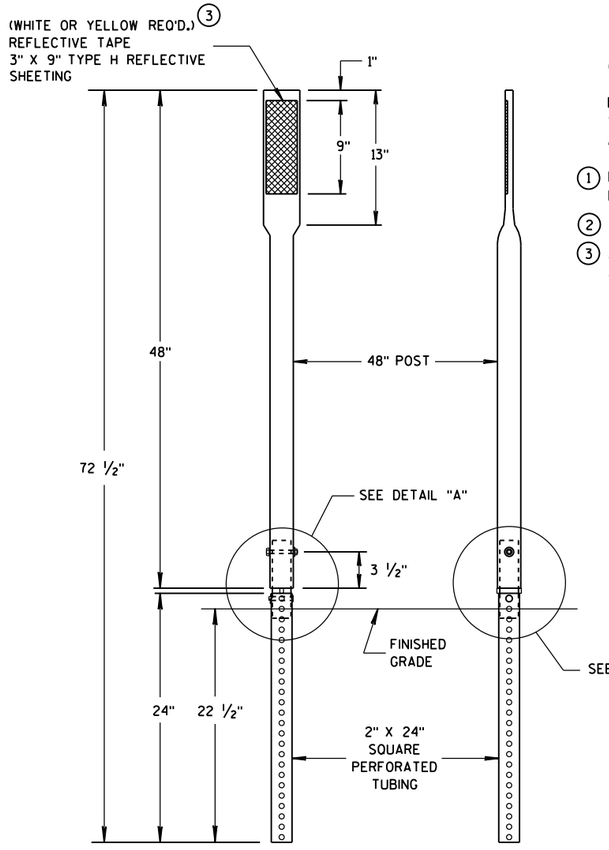
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

ALTERNATE 2



FRONT VIEW SIDE VIEW

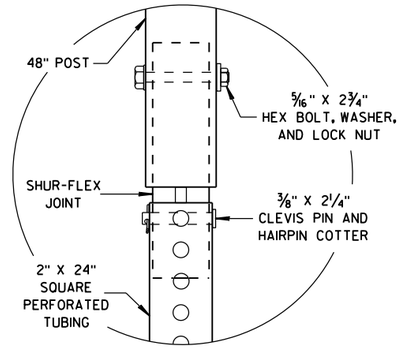
ALTERNATE 3

FLEXIBLE DELINEATOR POSTS

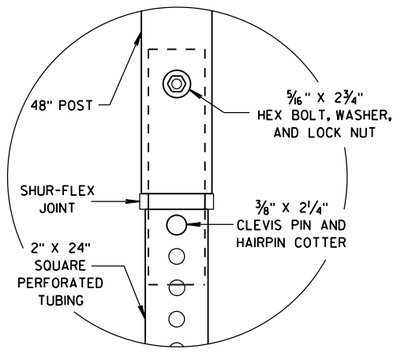
GENERAL NOTES

DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDATRD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

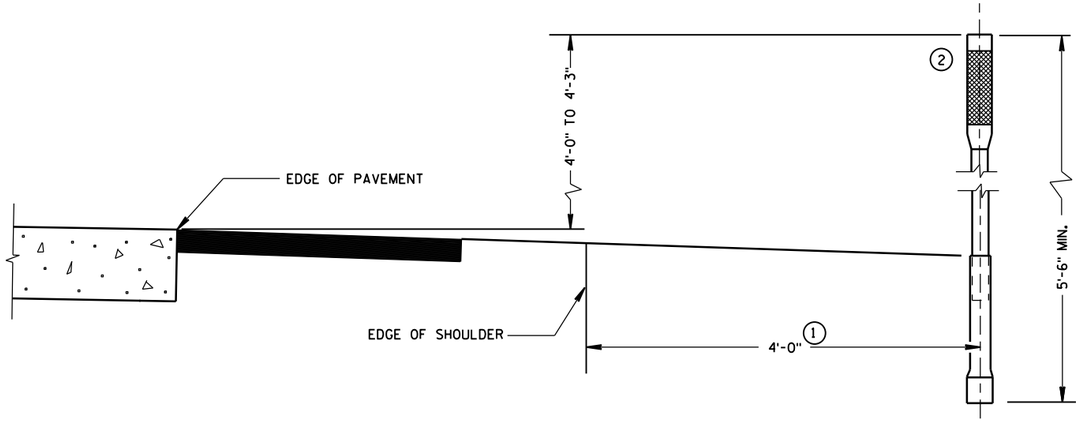
1. DELINEATORS SHALL BE PLACED AT A CONSTANT DISTANCE FROM THE EDGE OF THE SHOULDER FOR THE LENGTH OF THE INSTALLATION.
2. EITHER ALTERNATE NO. 1, NO. 2 OR NO. 3 MAY BE FURNISHED.
3. AS PER SECTION 637.2.2.2. OF THE STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION.

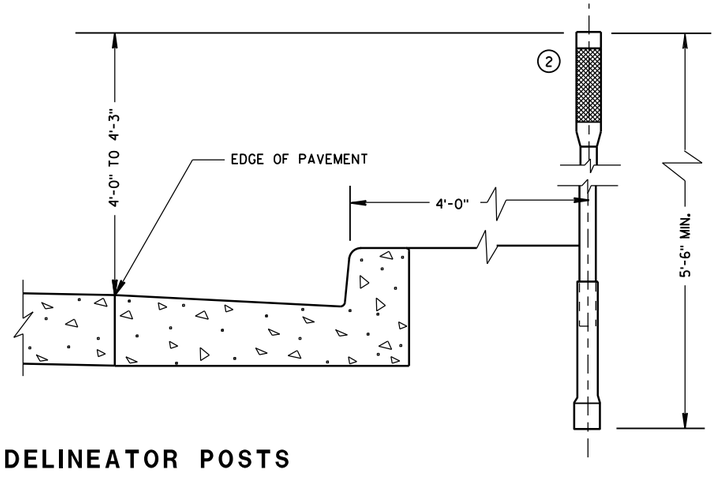


DETAIL A



DETAIL B





TYPICAL INSTALLATIONS OF FLEXIBLE DELINEATOR POSTS

FLEXIBLE DELINEATOR POST

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
9-26-2012 DATE
/S/ Travis Feltes
STATE TRAFFIC ENGINEER

FHWA

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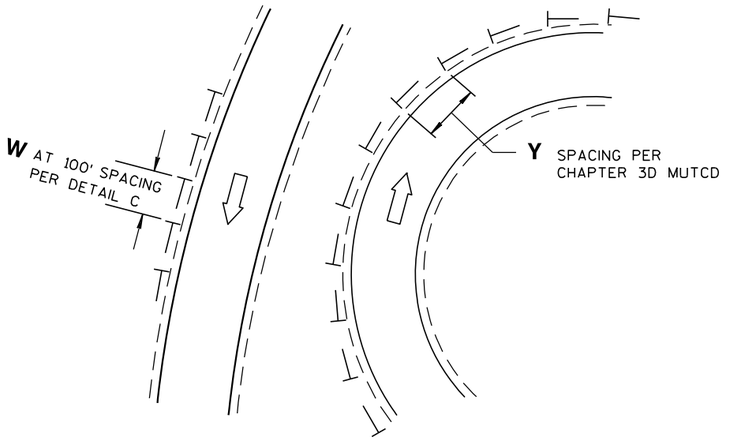
S.D.D. 15 A 4-2

6

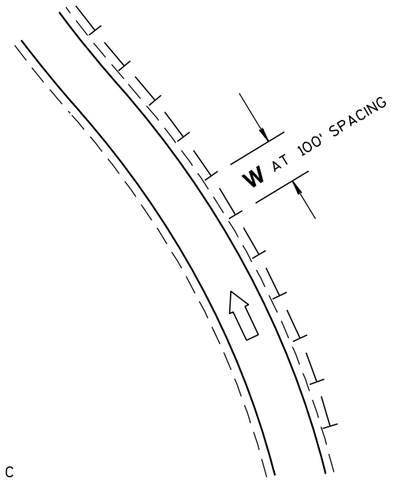
S.D.D. 15 A 4-2

GENERAL NOTES

* USE DOUBLE DELINEATOR ALONG ACCELERATION-DECELERATION LANES AND TAPERS. USE SINGLE DELINEATOR WHEN RAMP PAVEMENT IS FULL WIDTH.



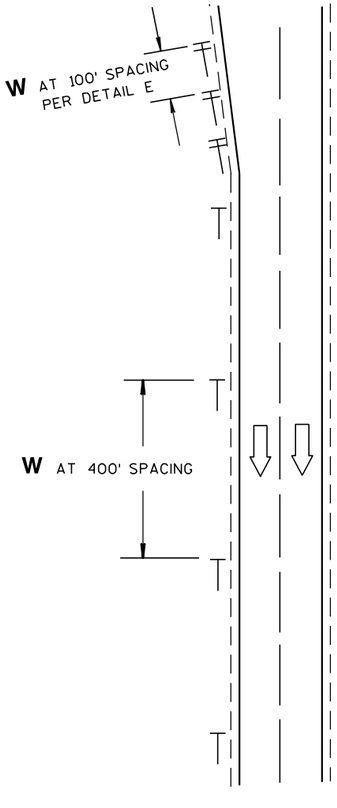
DETAIL A
DELINEATOR LAYOUT AT CURVED RAMP



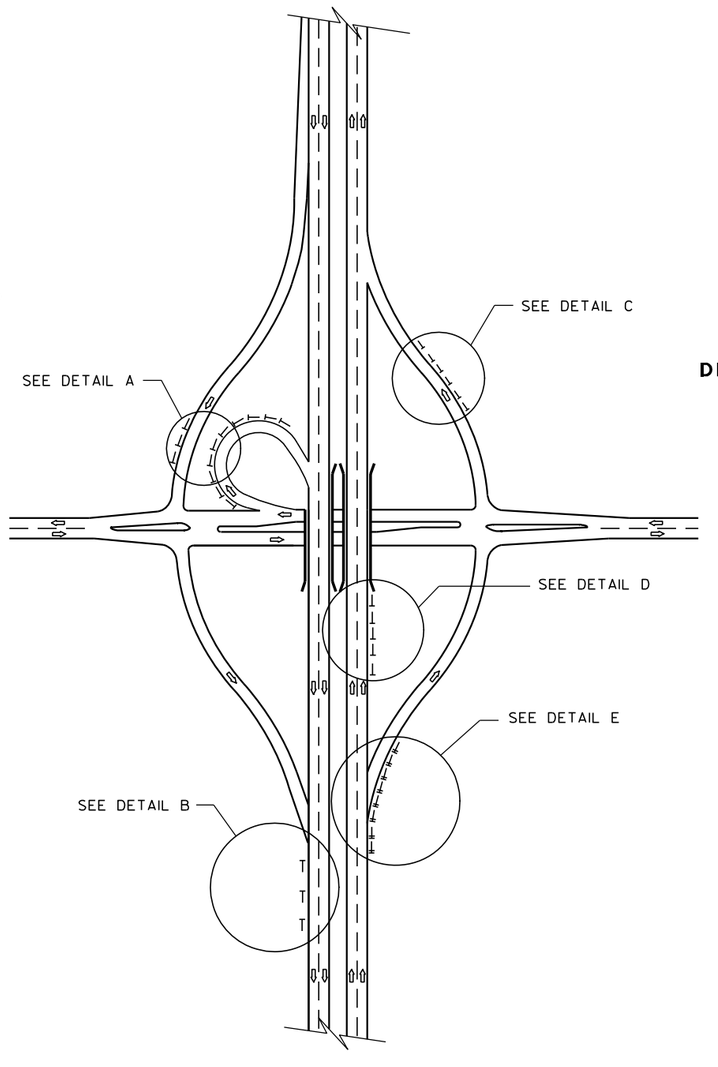
DETAIL C
DELINEATOR LAYOUT ALONG RAMP

LEGEND

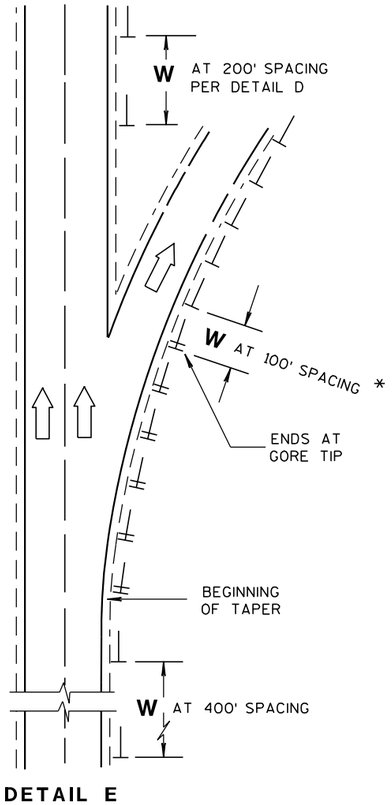
- DIRECTION OF TRAFFIC FLOW
- SINGLE DELINEATOR
- DOUBLE DELINEATOR
- W — WHITE
- Y — YELLOW



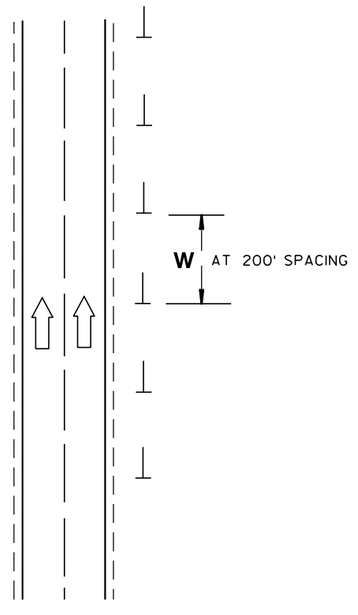
DETAIL B
DELINEATOR LAYOUT ALONG MAINLINE



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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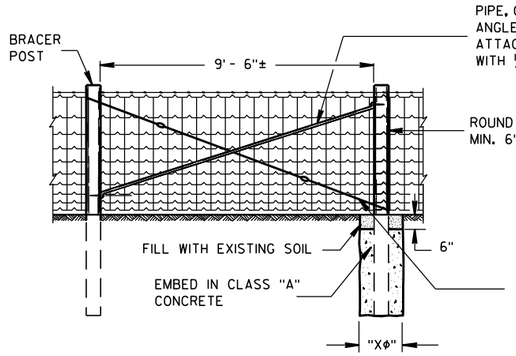
S.D.D. 15 A 6-2

6

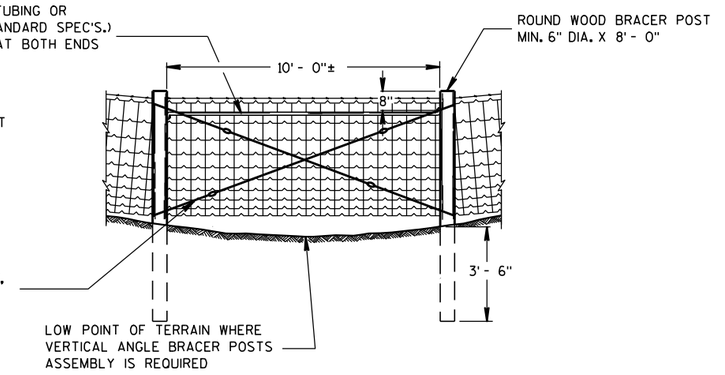
S.D.D. 15 A 6-2

NOTE: PULL OR STRETCHER POST ASSEMBLIES SHALL BE PLACED MIDWAY BETWEEN END POSTS AND CORNER POSTS WHERE A RUN OF FENCE EXCEEDS 660' BUT IS LESS THAN 1,320'. FOR RUNS OF FENCE IN EXCESS OF 1,320' MAXIMUM SPACING OF PULL OR STRETCHER POST ASSEMBLIES SHALL BE 660'± C-C.

ILLUSTRATION SHOWS POSITION OF STANDARD STEEL BRACE, DOUBLE STRAND GALVANIZED WIRE, AND THE POST TO BE EMBEDDED IN CONCRETE WHEN WIRE FENCE IS INSTALLED FROM LEFT TO RIGHT. THE BRACES SHALL BE POSITIONED ON THE OPPOSITE DIAGONALS AND THE OPPOSITE POST SHALL BE EMBEDDED IN CONCRETE WHEN WIRE FENCE IS INSTALLED FROM RIGHT TO LEFT.



PULL OR STRETCHER POSTS ASSEMBLY



VERTICAL ANGLE BRACER POSTS ASSEMBLY

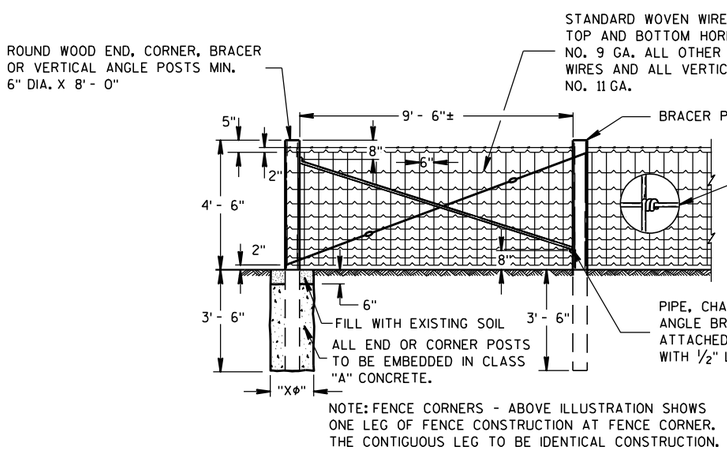
GENERAL NOTES

"XΦ" = DIAMETER OF THE POST PLUS 12".

FENCE STAPLES SHOULD NEVER BE DRIVEN VERTICALLY INTO WOOD POSTS (WITH BOTH LEGS PARALLEL WITH THE WOOD GRAIN). DOING SO CAN SEPARATE THE GRAIN AND SIGNIFICANTLY REDUCE THE HOLDING POWER. ROTATING THE STAPLES SLIGHTLY OFF VERTICAL STRADDLES THE GRAIN AND PROVIDES MORE RESISTANCE TO PULL-OUT.

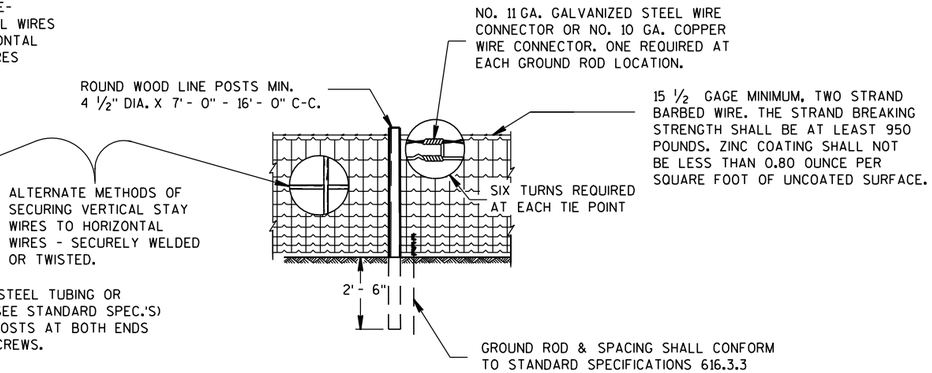
DO NOT STAPLE WIRE TIGHT TO THE LINE POSTS. ALLOW MOVEMENT OF WIRE FOR EXPANSION AND CONTRACTION. STAPLE ARRANGEMENT SHALL BE THE SAME FOR ALL OTHER POSTS EXCEPT THAT THEY SHALL BE DRIVEN TIGHT TO POSTS. ALL STAPLES SHALL BE 2" X 9 GAGE AND SHALL BE MANUFACTURED FROM GALVANIZED WIRE OR HOT DIP GALVANIZED AFTER FORMING. STAPLES SHALL HAVE SLASH-CUT POINTS.

FENCE SHALL BE LOCATED 3'-0" INSIDE THE RIGHT OF WAY LINE UNLESS OTHERWISE INDICATED ON THE PLANS.



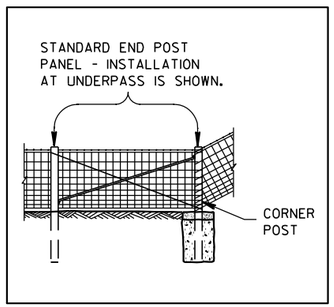
NOTE: FENCE CORNERS - ABOVE ILLUSTRATION SHOWS ONE LEG OF FENCE CONSTRUCTION AT FENCE CORNER. THE CONTIGUOUS LEG TO BE IDENTICAL CONSTRUCTION.

END OR CORNER POSTS ASSEMBLY

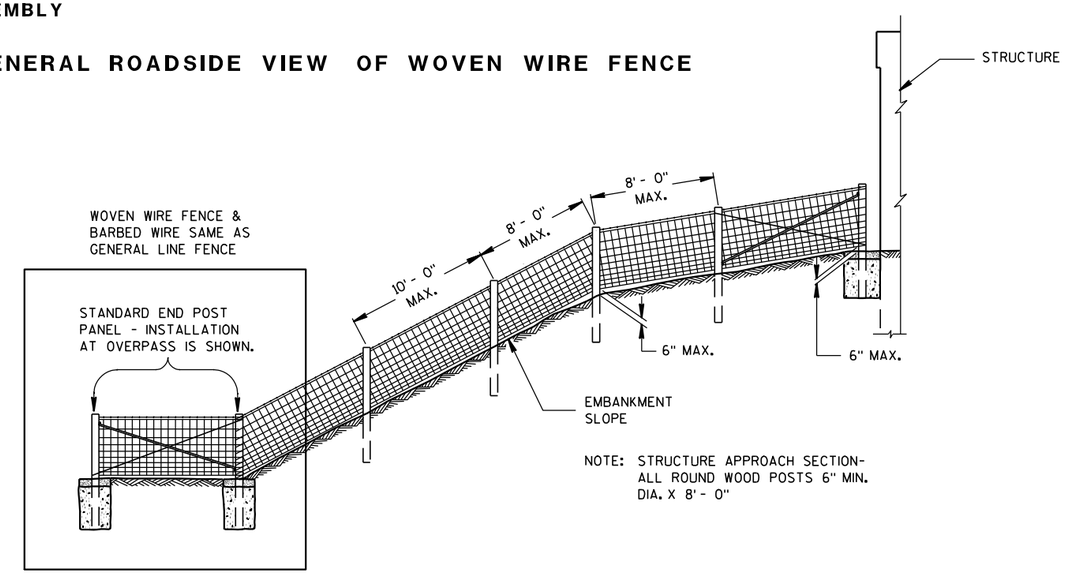


LINE FENCE CONSTRUCTION

GENERAL ROADSIDE VIEW OF WOVEN WIRE FENCE



ALTERNATE FENCE DESIGN AT STRUCTURE



NOTE: STRUCTURE APPROACH SECTION- ALL ROUND WOOD POSTS 6" MIN. DIA. X 8' - 0"

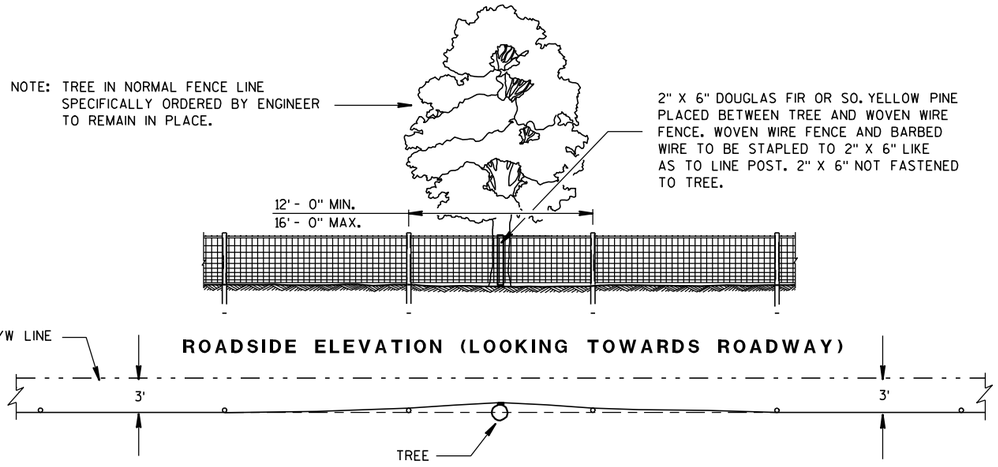
FENCE DESIGN AT STRUCTURE APPROACH

FENCE WOVEN WIRE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

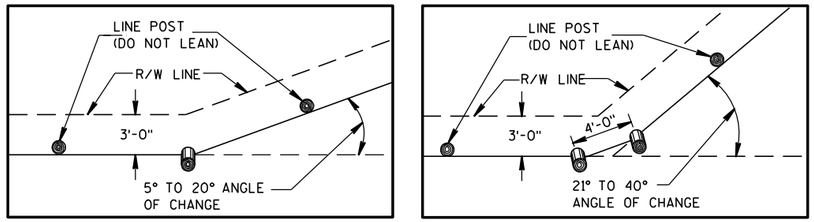
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S.D.D. 15 B 1-8a



PLAN VIEW

FENCE DESIGN AT TREES REMAINING IN NORMAL FENCE LINE



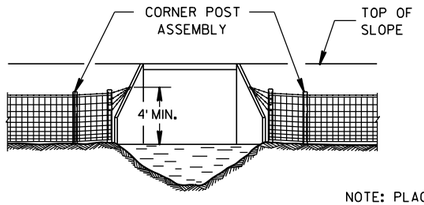
PLAN VIEW
SINGLE POST CORNER

PLAN VIEW
DOUBLE POST CORNER

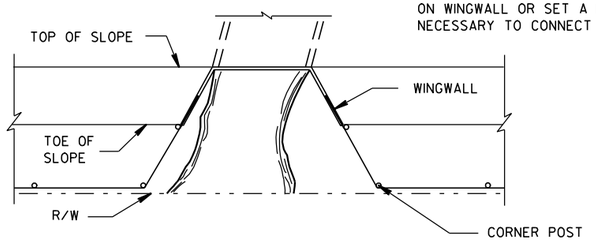
RIGHT OF WAY LINE CHANGE 40° AND LESS

NOTE: SINGLE AND DOUBLE POSTS SHALL BE A MIN. 6" DIA. X 8'-0" WITH A LEAN OF 4" TOWARD THE OUTSIDE OF THE CURVE.

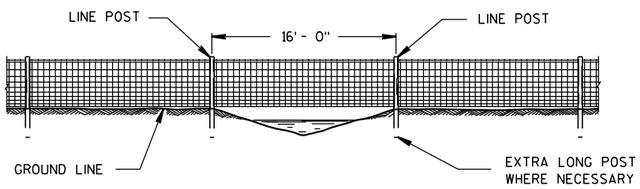
WHEN THE RIGHT OF WAY LINE CHANGE IS MORE THAN 40° USE THE CORNER OR STRETCHER POSTS ASSEMBLY.



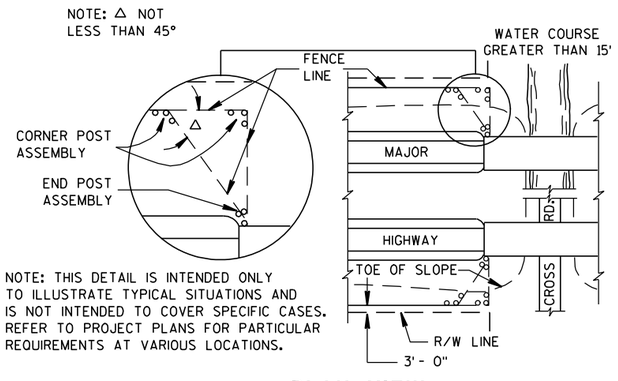
NOTE: PLACE A MINIMUM OF 4 STRANDS OF BARBED WIRE, 6" MAXIMUM CENTERS IN FAN SHAPE CONNECTED TO AN EYE BOLT ON WINGWALL OR SET A LONE POST WHEN NECESSARY TO CONNECT BARBED WIRE.



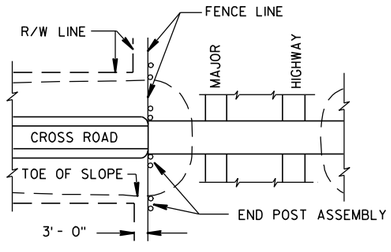
FENCE INSTALLATION TO WINGWALLS



FENCE CONSTRUCTION OVER STREAM COURSES OF 15 FT. OR LESS IN WIDTH

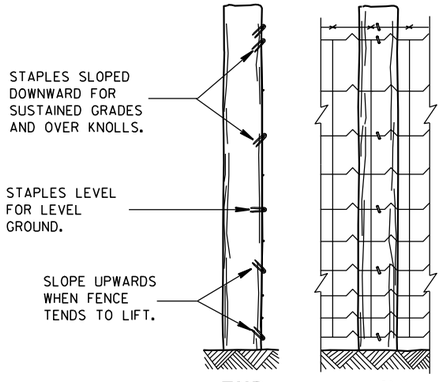


PLAN VIEW
MAJOR HIGHWAY OVERPASS OR STREAM COURSE CROSSING OF GREATER THAN 15 FT. IN WIDTH



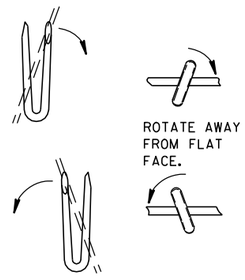
PLAN VIEW
MAJOR HIGHWAY UNDERPASS

NOTE: WHEN POSTS ARE DRIVEN THE SMALL END SHALL BE DOWN.



END ELEVATION **FARM SIDE ELEVATION**

FENCE MOUNTING DETAIL



LINE POST

FENCE LOCATION AT STRUCTURES

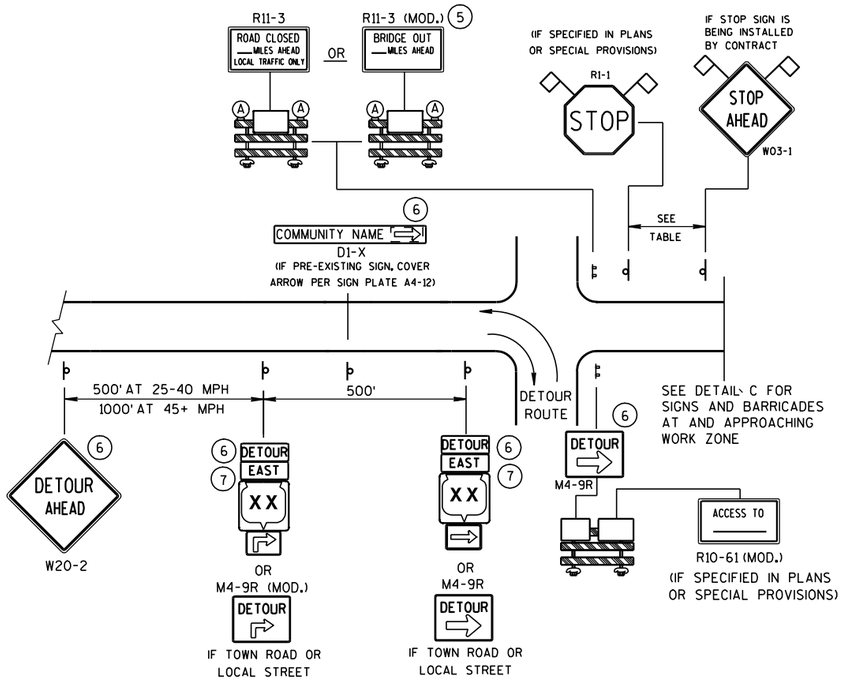
FENCE WOVEN WIRE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
4/4/2008
DATE
/S/ Jerry H. [illegible]
ROADWAY STANDARDS [illegible]
ENGINEER
FHWA

6

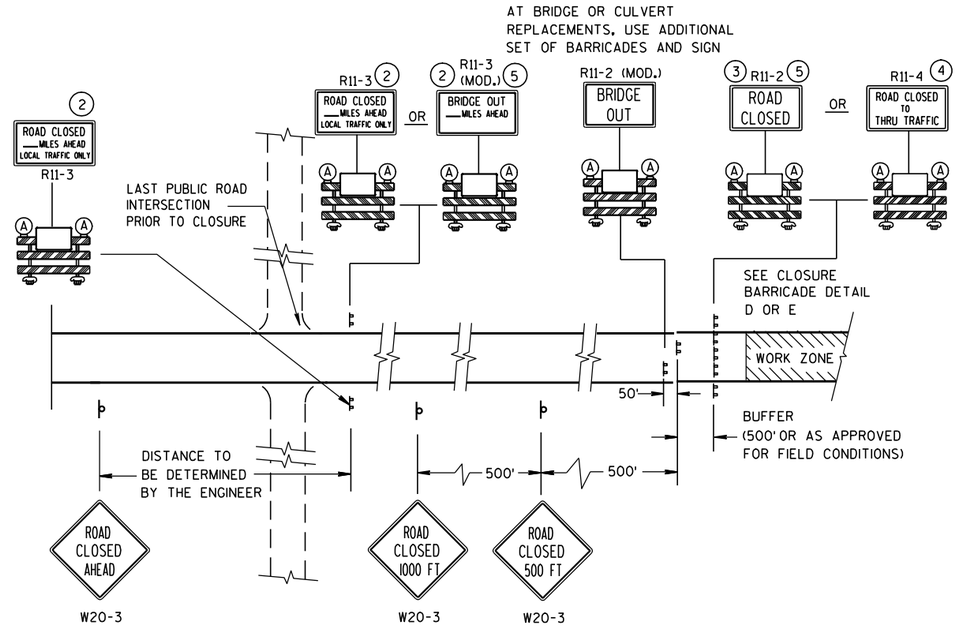
S.D.D. 15 B 1-8b



DETAIL A

MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE GREATER THAN ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)

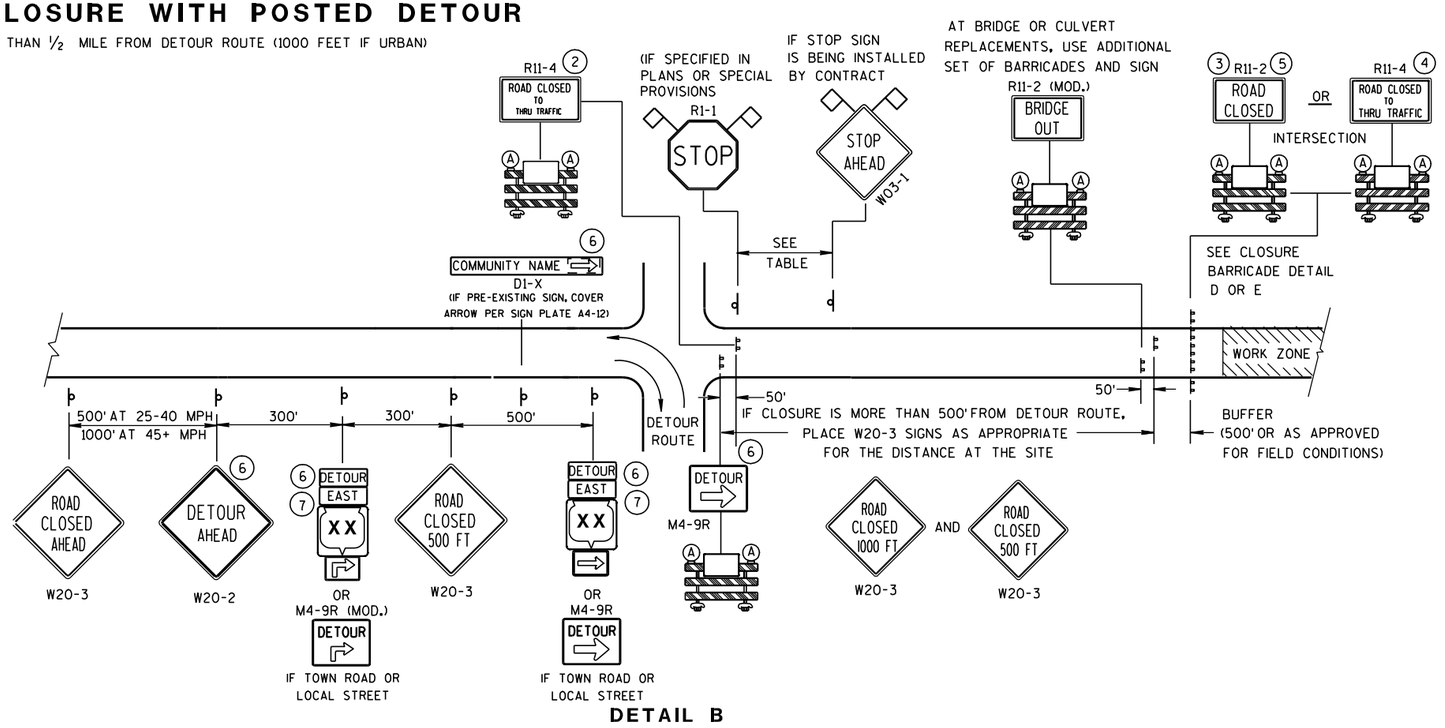


DETAIL C

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

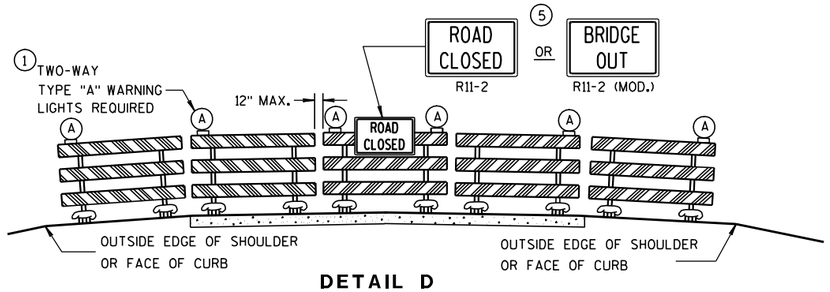
- POST MOUNTED SIGN
- TYPE III BARRICADES
- (A) TYPE "A" LOW INTENSITY FLASHING WARNING LIGHT (FOR NIGHT USE)
- WORK ZONE
- DETOUR / EAST — M4-8 / M3-X
- XX — M1-4; COUNTY XX — M1-5A; XX — M1-6
- M05-1; M06-1
- FLAGS, 16" X 16" MIN., (ORANGE)

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

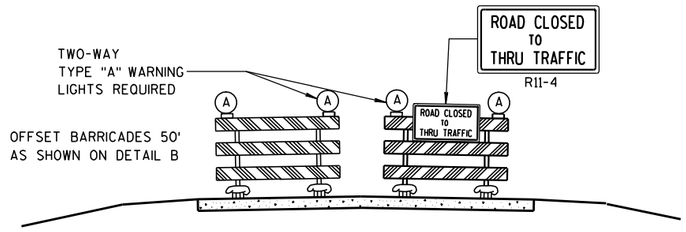
S.D.D. 15 C 2-4a



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

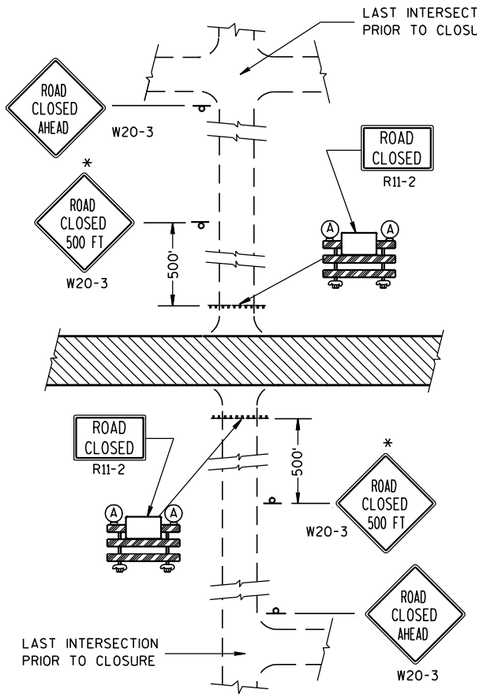
9/16/03
DATE

/S/ Thomas N. N[illegible]
CHIEF SIGNS AND MARKING ENGINEER

FHWA

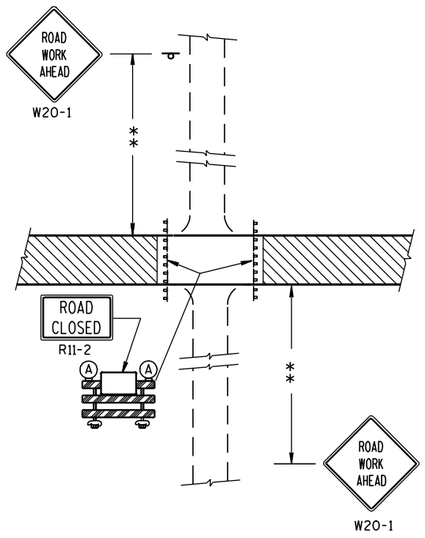
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S.D.D. 15 C 2-4b



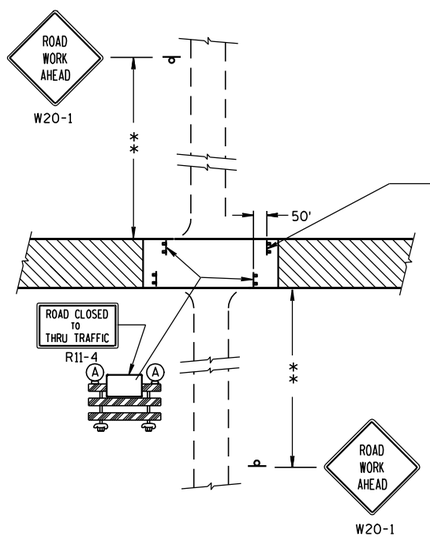
DETAIL 1

(NO ACCESS TO PROJECT)



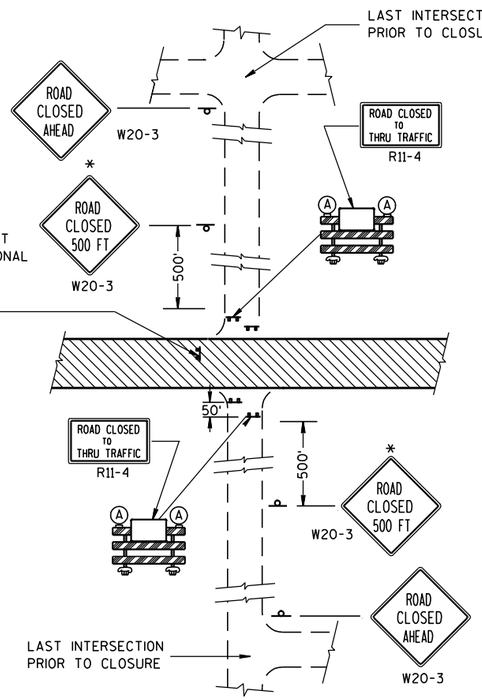
DETAIL 2

(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

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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.

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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]
CHIEF SIGNS AND MAR[illegible] INEER

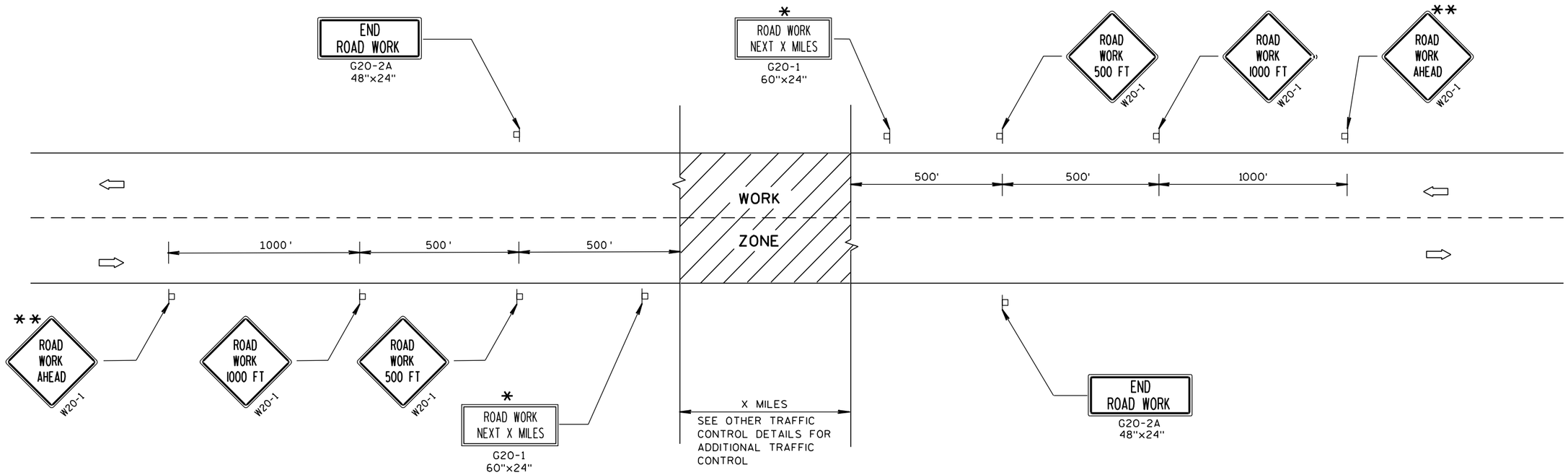
FHWA

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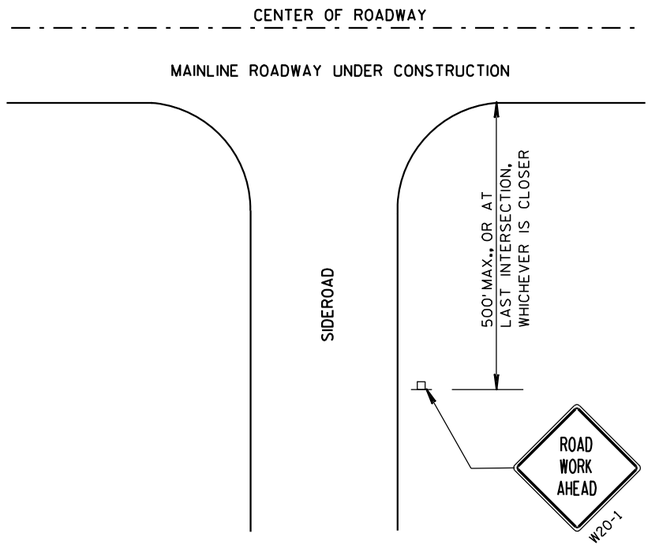
S.D.D. 15 C 3-1

6

S.D.D. 15 C 3-1



TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL



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 MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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.

* OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS.

** PLACE ADDITIONAL W20-1 "ROAD WORK AHEAD" SIGN IF WORK AREA WITHIN THE PROJECT IS SEPARATED BY MORE THAN 2 MILES FROM PREVIOUS WORK AREA OR SIGNING.

LEGEND

POST MOUNTED SIGN

DIRECTION OF TRAFFIC FLOW

TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

5/23/00 DATE

/S/ Chester J. [illegible] 423 NEER
CHIEF SIGNS AND MARK

FHWA

6

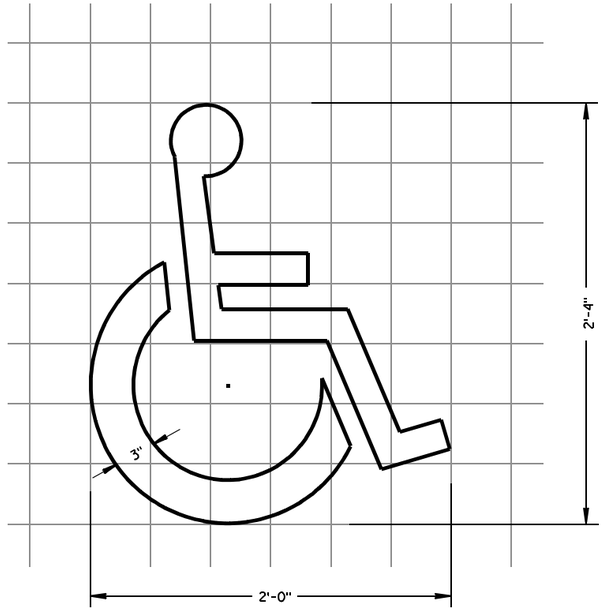
S.D.D. 15 C 4-1

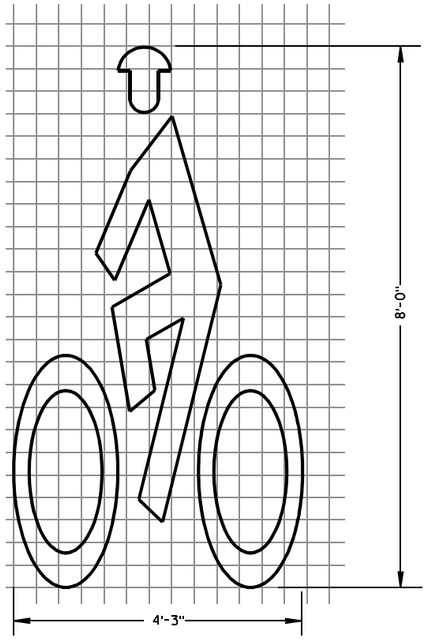
GENERAL NOTES

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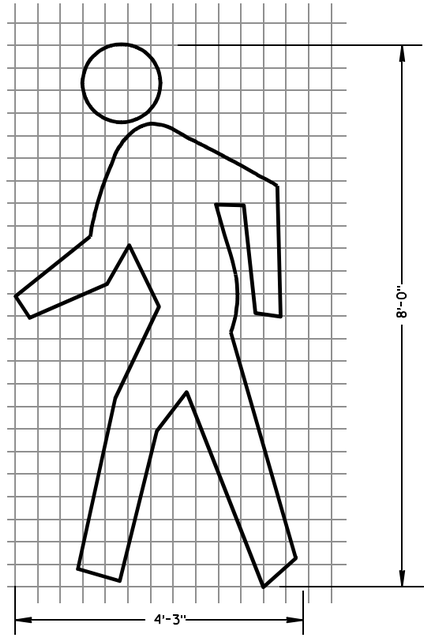
ALL LETTERS, ARROWS AND SYMBOLS SHALL BE IN CONFORMANCE WITH REQUIREMENTS INCLUDED IN "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKING" BOOK BY THE FEDERAL HIGHWAY ADMINISTRATION. ALL LETTERS, ARROWS AND SYMBOLS SHALL BE WHITE AND REFLECTORIZED. SMALL DIFFERENCES IN DIMENSIONS WITHIN THE TOLERANCES OF THAT BOOK ARE ACCEPTABLE.

A DETAILED DRAWING OF THE HANDICAPPED PARKING SYMBOL IS ILLUSTRATED IN THE "STANDARD HIGHWAY SIGNS MANUAL" BY THE FEDERAL HIGHWAY ADMINISTRATION.

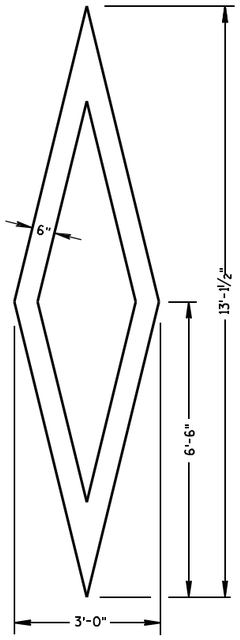




BIKE CROSSING SYMBOL



PEDESTRIAN SYMBOL



PREFERENTIAL LANE SYMBOL

PAVEMENT MARKING SYMBOLS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7/1/11 DATE

/S/ Thomas N Nathan
STATE TRAFFIC ENGINEER

FHWA

6

S.D.D. 15 C 7-12a

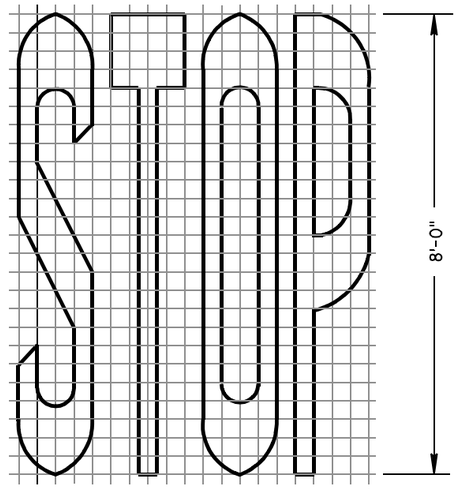
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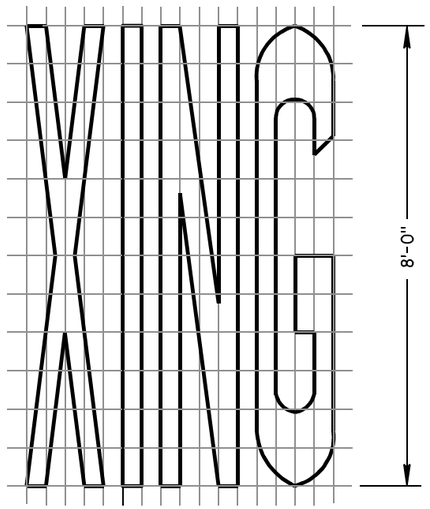
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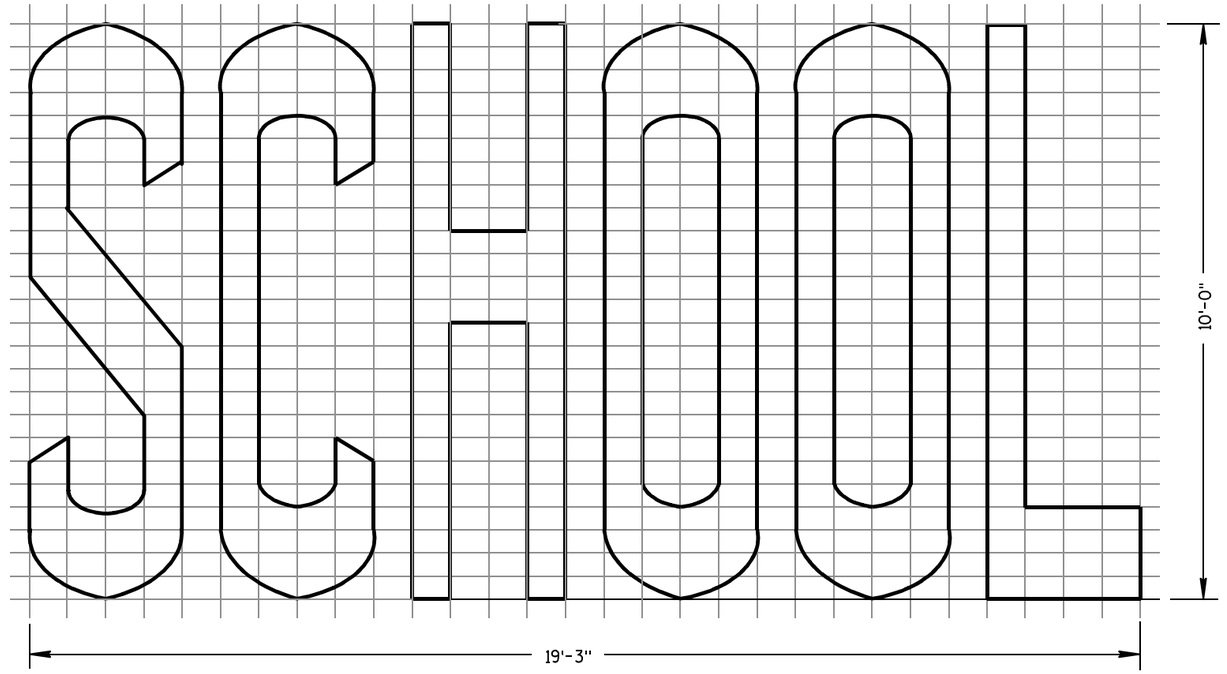
GENERAL NOTES

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.

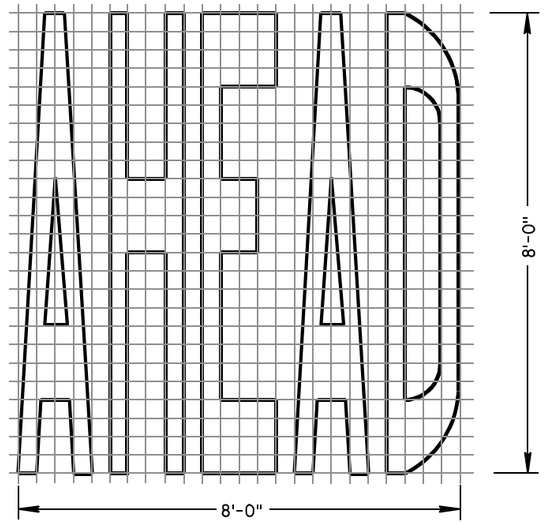
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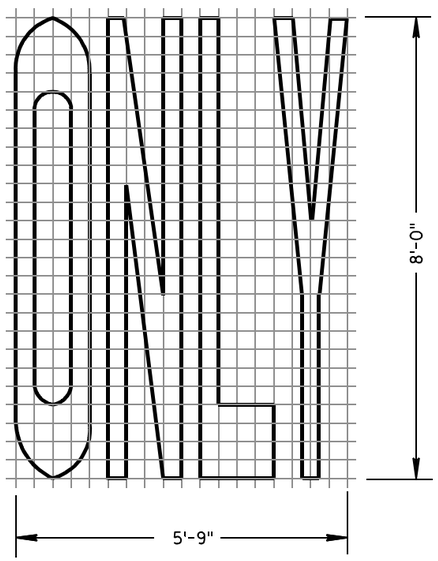


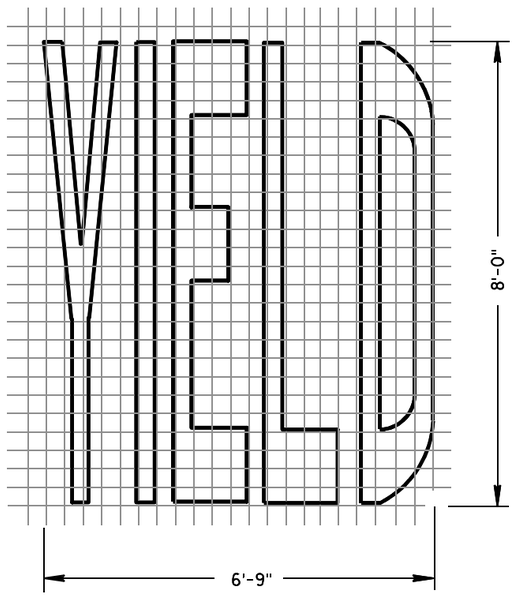


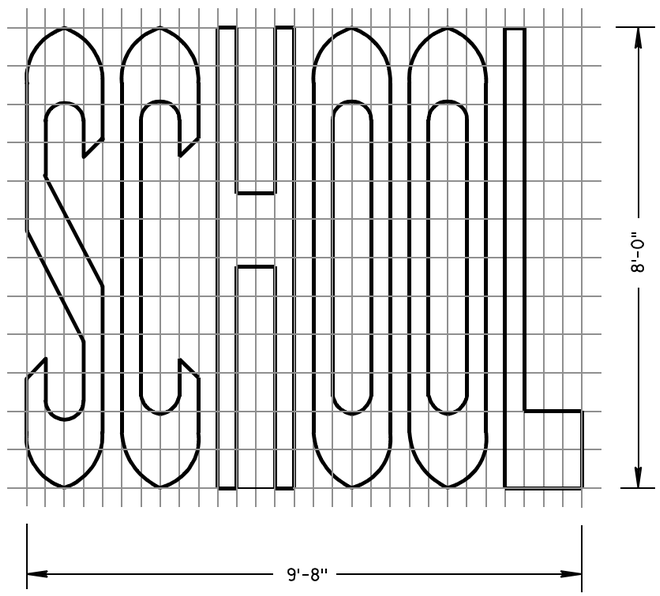


TWO-LANE









SINGLE-LANE

PAVEMENT MARKING WORDS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7-1-11 DATE

/S/ Thomas N. Nothohm
STATE TRAFFIC ENGINEER

425 IGN

FHWA

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S.D.D. 15 C 7-12b

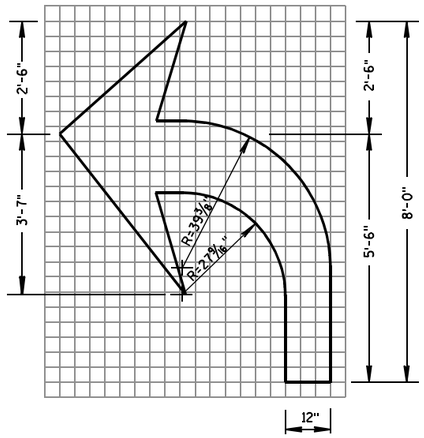
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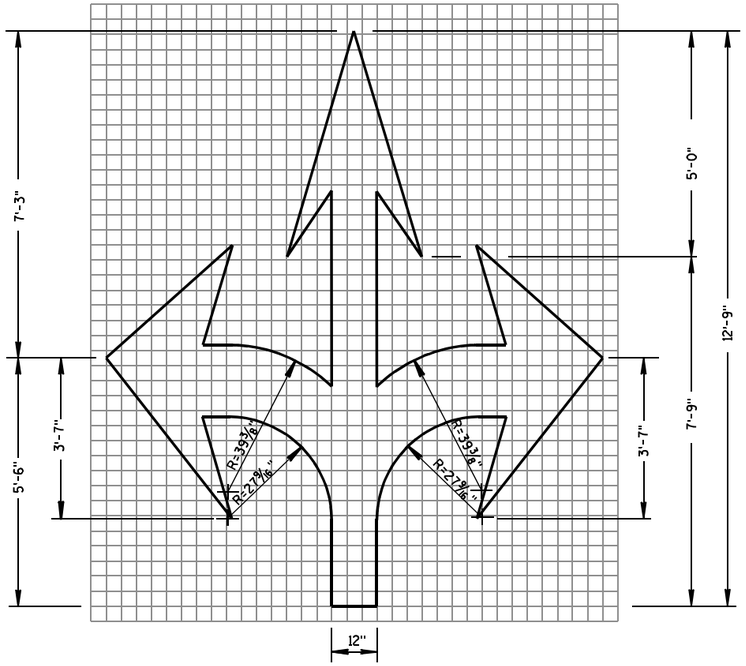
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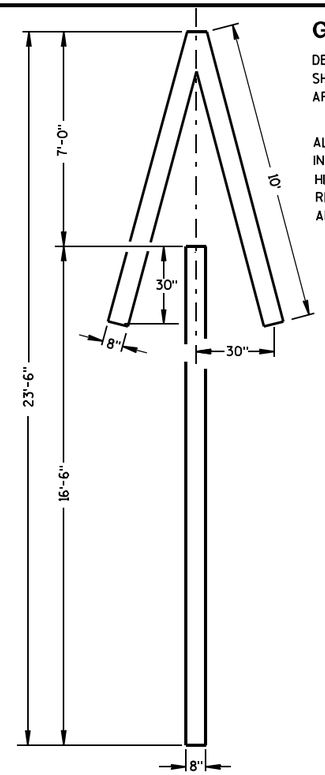
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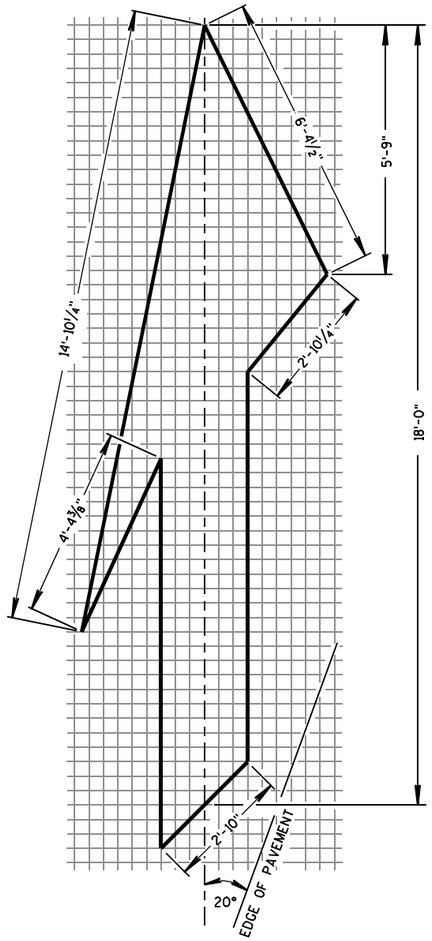
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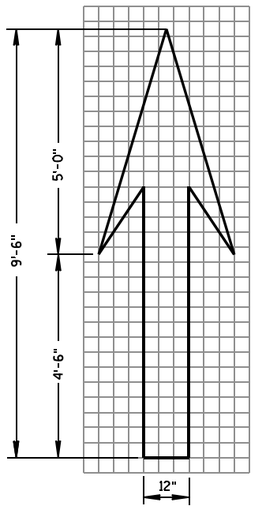
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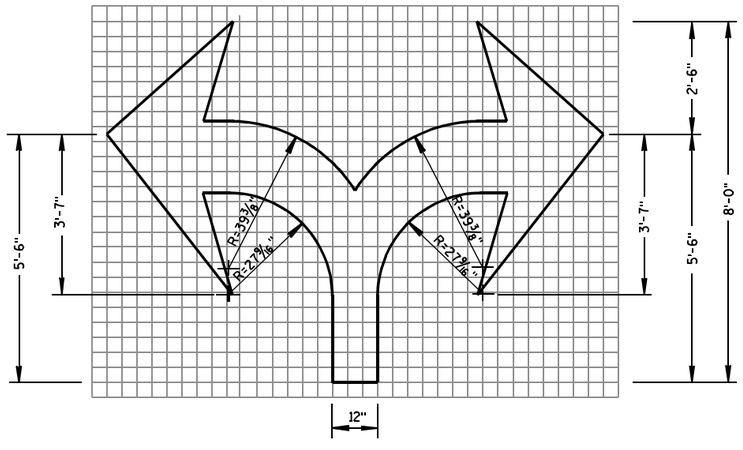
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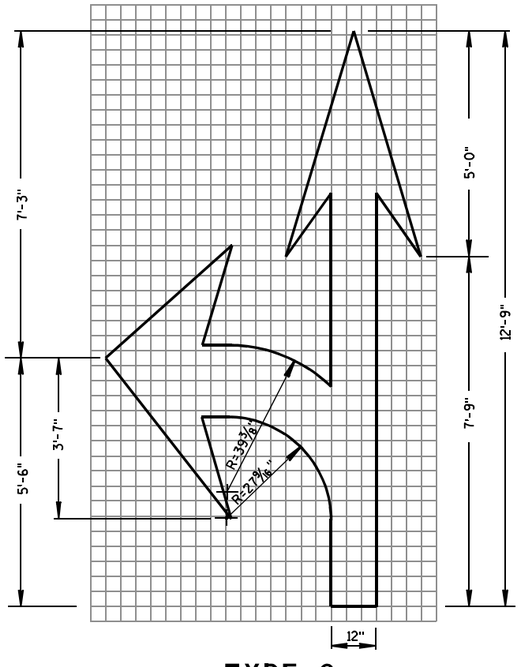
TYPE 5 LANE DROP ARROW



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

6

S.D.D. 15 C 7-12c

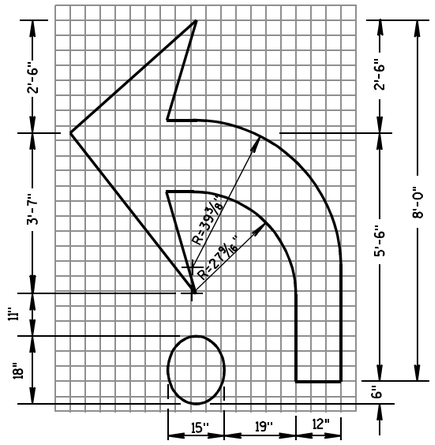
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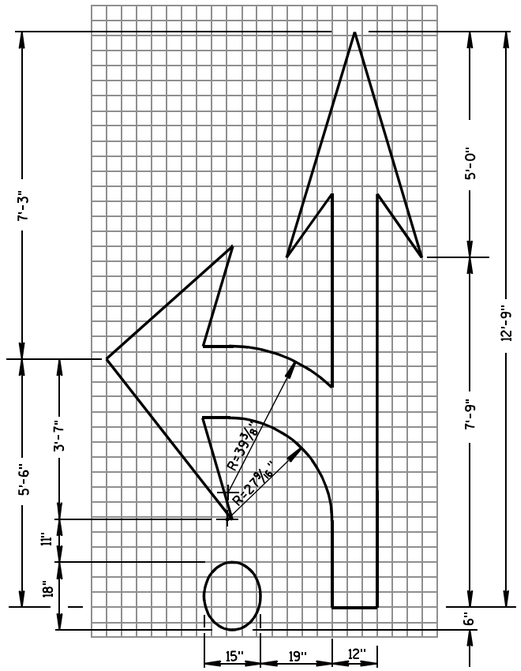
GENERAL NOTES

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.

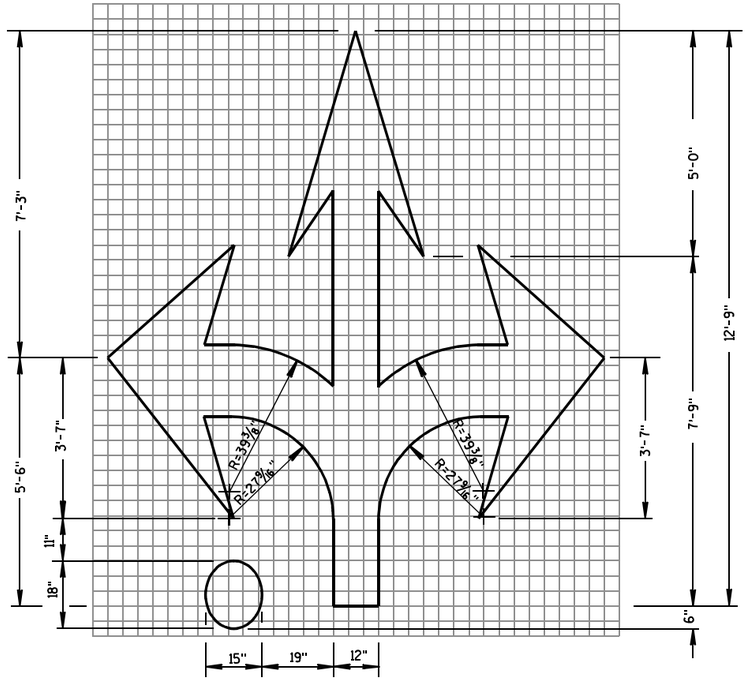
ALL LETTERS, ARROWS AND SYMBOLS SHALL BE IN CONFORMANCE WITH REQUIREMENTS INCLUDED IN "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKING" BOOK BY THE FEDERAL HIGHWAY ADMINISTRATION. ALL LETTERS, ARROWS AND SYMBOLS SHALL BE WHITE AND REFLECTORIZED. SMALL DIFFERENCES IN DIMENSIONS WITHIN THE TOLERANCES OF THAT BOOK ARE ACCEPTABLE.



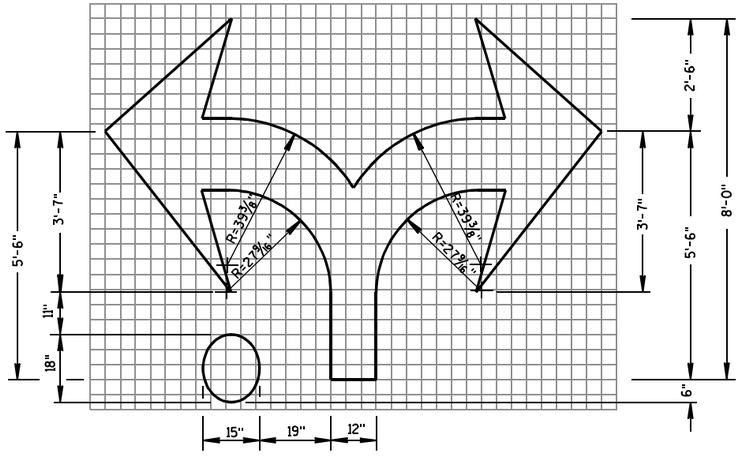
TYPE 2R



TYPE 3R



TYPE 6R



TYPE 7R

ROUNDABOUT ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

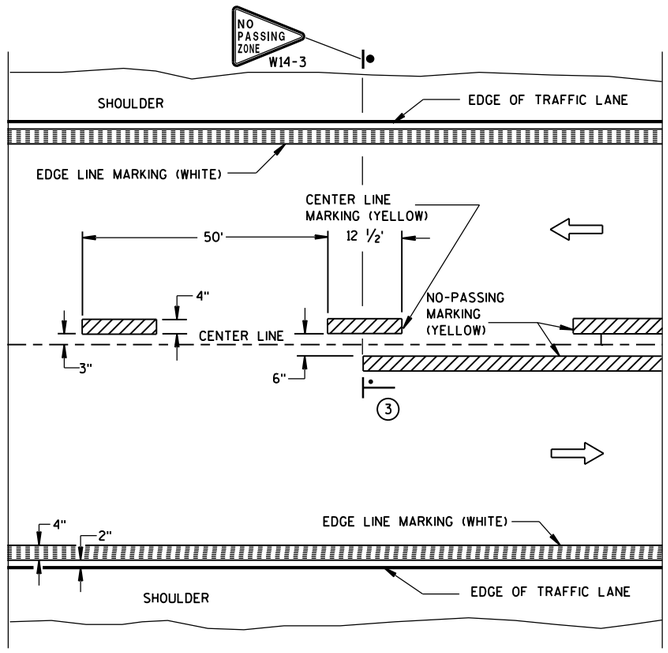
7/1/11 — DATE

/S/ Thomas N. Nothdurm — STATE TRAFFIC ENGINEER — SIGN

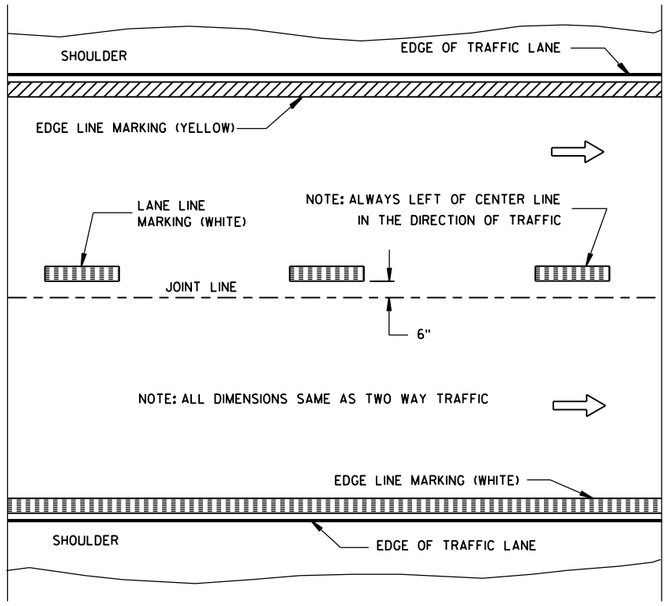
FHWA

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S.D.D. 15 C 7-12d

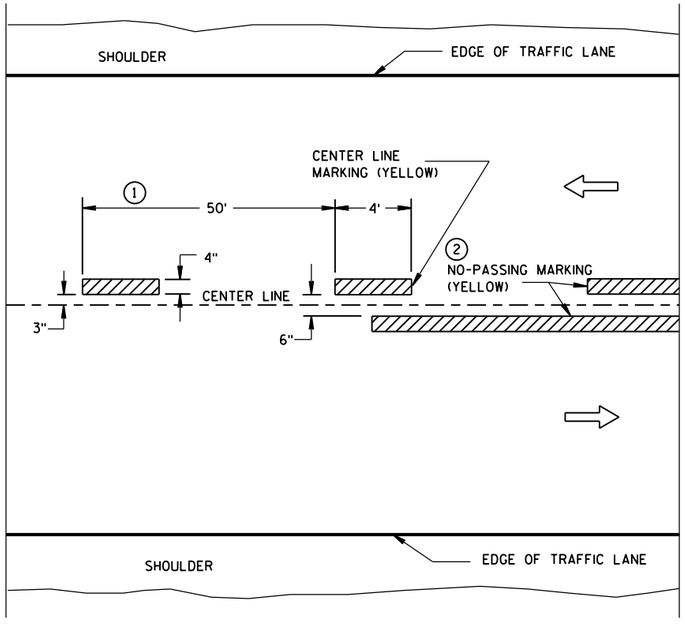


TWO WAY TRAFFIC

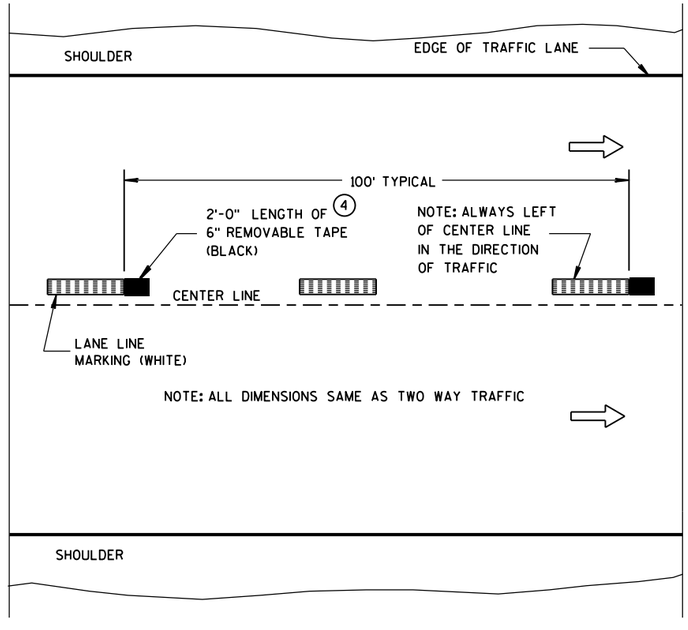


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY (INTERMEDIATE) PAVEMENT MARKING

(SHOWS CYCLE FOR TEMPORARY CENTER LINE OR TEMPORARY LANE LINE MARKING)

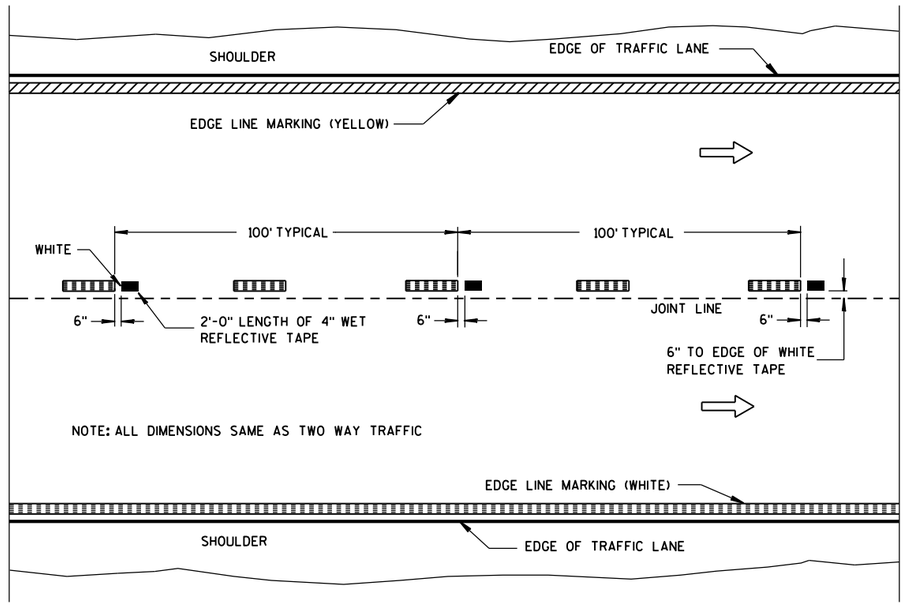
GENERAL NOTES

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.
4. CONCRETE ONLY.

NOTE

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL



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

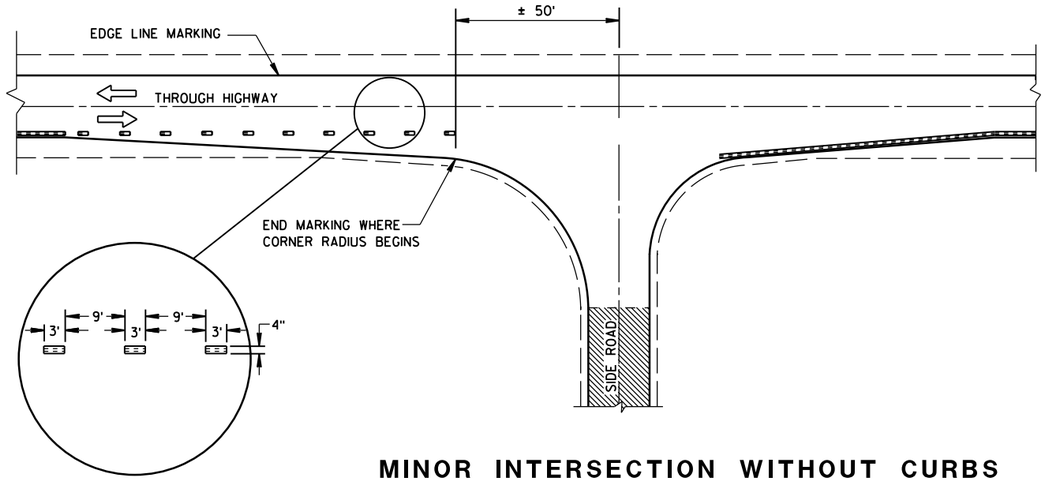
APPROVED
10-1-2012 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
428
SIGN
FHWA

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S.D.D. 15 C 8-15a

6

S.D.D. 15 C 8-15a



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.

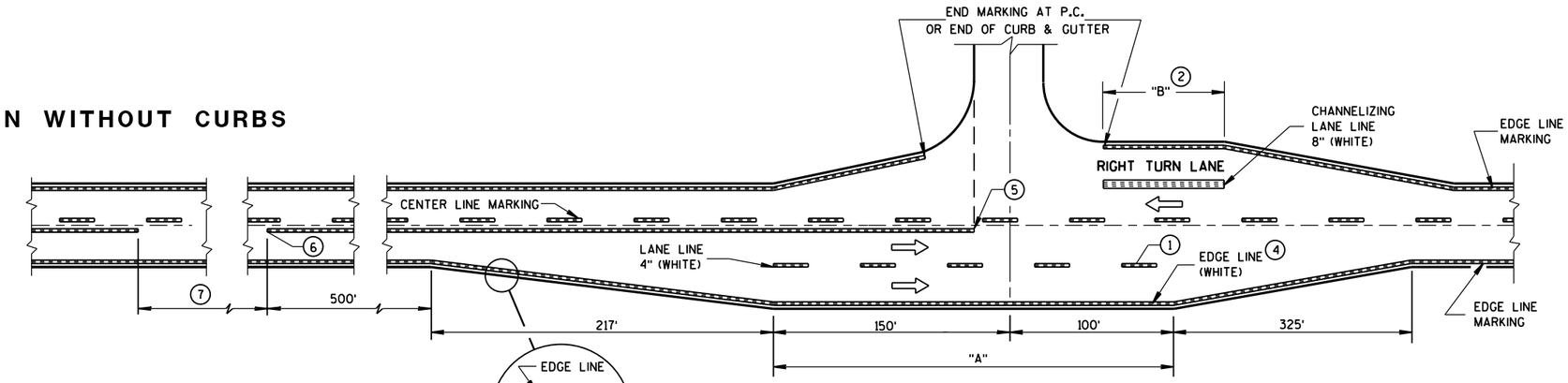
(7) IF THE DISTANCE BETWEEN 2 SUCCESSIVE NO-PASSING ZONES IS LESS THAN THE MINIMUM DISTANCE BETWEEN ZONES, CONNECT THE 2 ZONES.

(8) 3' LINE 9' GAP, EXCEPT RETRACE THE EXISTING LINE - GAP PATTERN WHERE EXISTING MARKINGS ARE IN PLACE.

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL

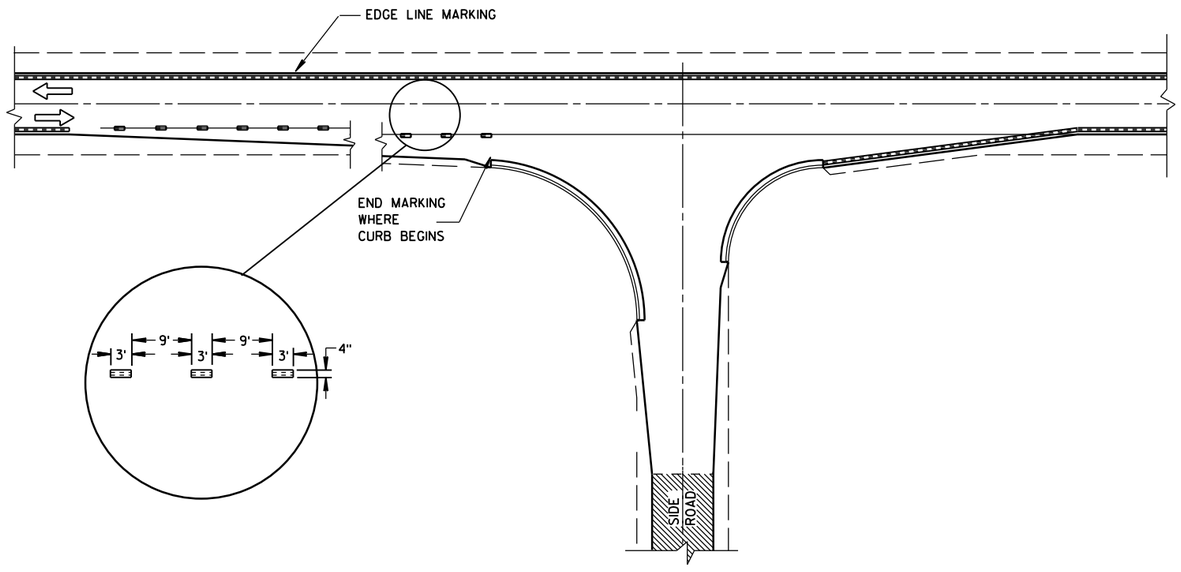
(7)

POSTED SPEED (MPH)	MINIMUM DISTANCE BETWEEN ZONES (FEET)
25 - 30	528
35 - 40	528
45 - 50	686
55	792



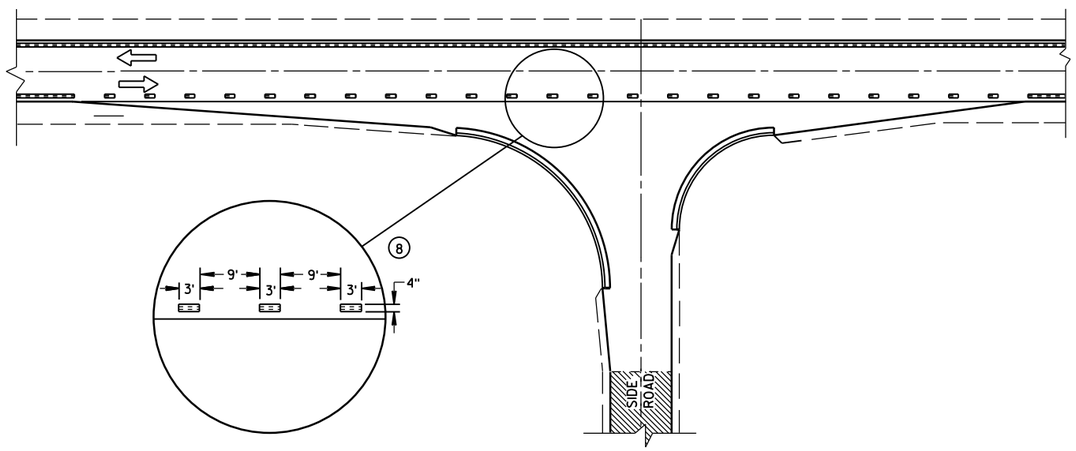
MAJOR INTERSECTIONS

(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)

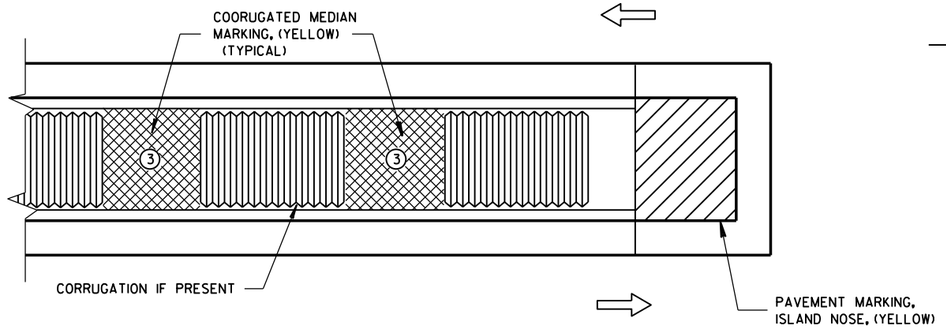
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

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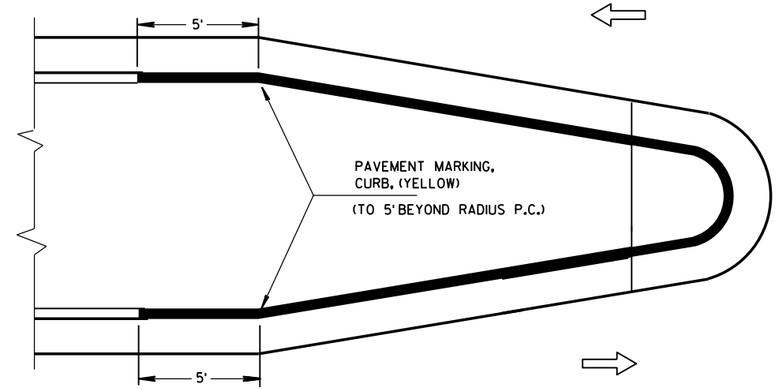
S.D.D. 15 C 8-15b

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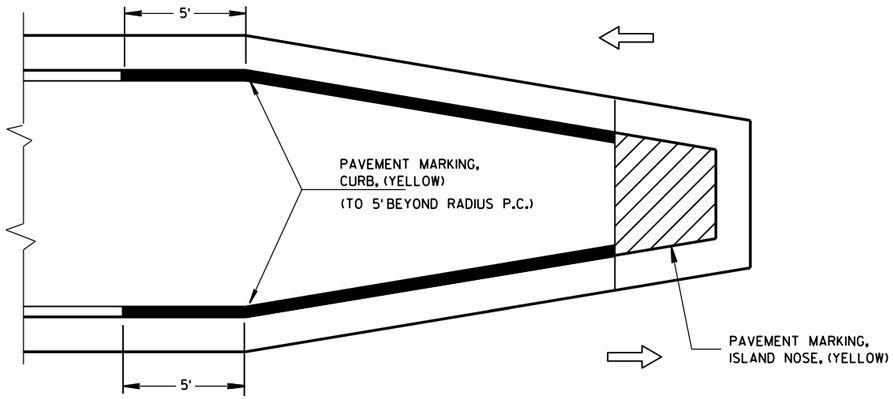
S.D.D. 15 C 8-15b



MEDIAN ISLAND WITH SQUARE BLUNT NOSE

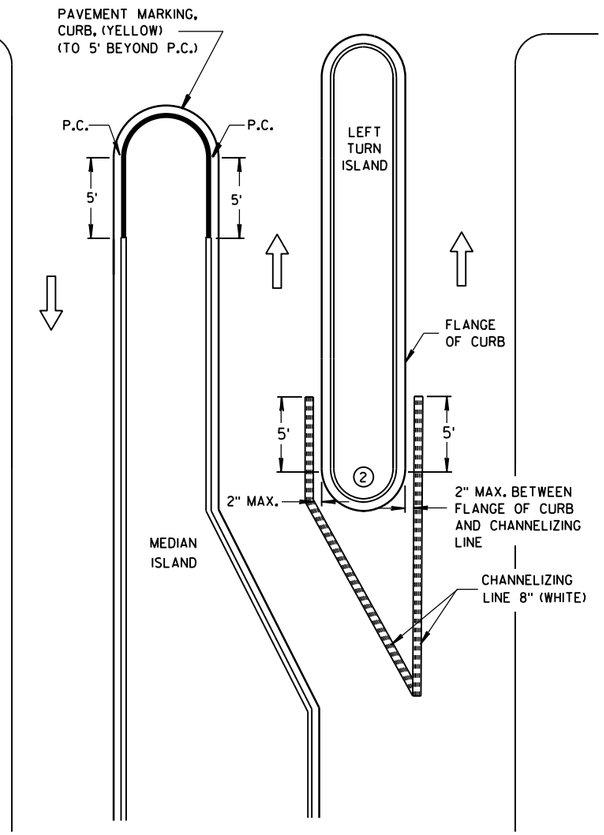


MEDIAN ISLAND WITH ROUND BLUNT NOSE



MEDIAN ISLAND WITH SLOPED NOSE

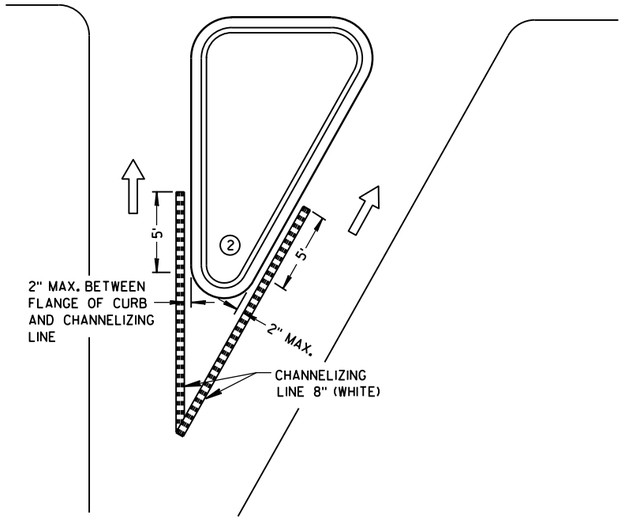
TYPICAL PLACEMENT OF PAVEMENT MARKING ON MEDIAN ISLANDS



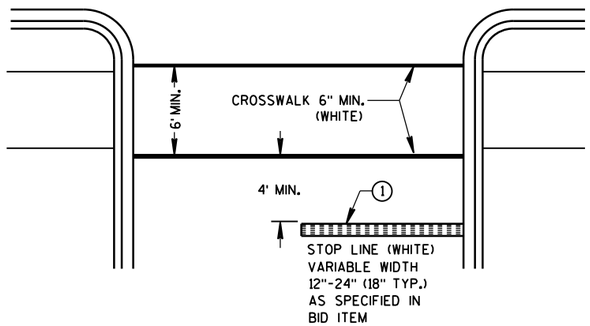
LEFT TURN & MEDIAN ISLAND

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 MARKING
- CORRUGATED MEDIAN MARKING
- DIRECTION OF TRAVEL

PAVEMENT MARKING (ISLANDS, STOP LINE & CROSS WALK)

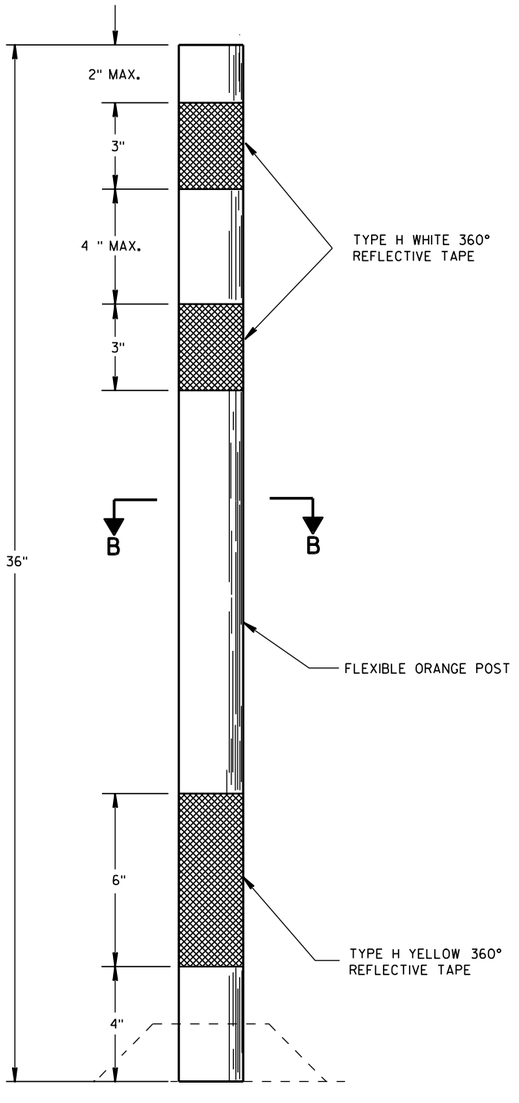
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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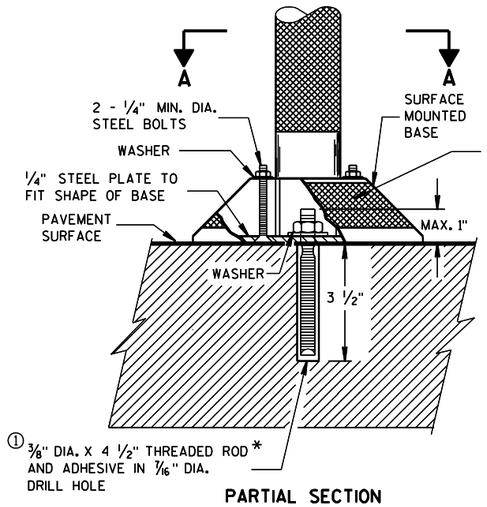
S.D.D. 15 C 8-15f

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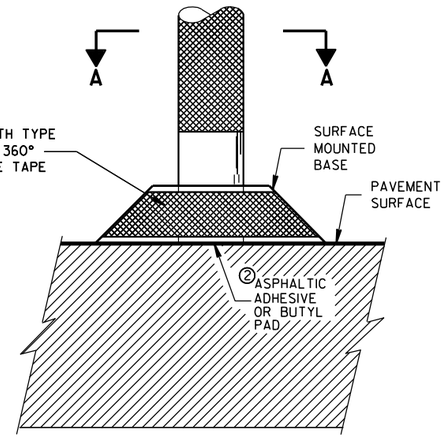
S.D.D. 15 C 8-15f



FLEXIBLE TUBULAR MARKER POST



PARTIAL SECTION TO SHOW BOLTS



POST BASES ON NEW OR EXISTING PAVEMENT

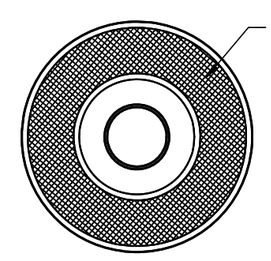
GENERAL NOTES

DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

SURFACE MOUNTED BASES SHALL BE FURNISHED IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS TO BE COMPATIBLE WITH FLEXIBLE TUBULAR MARKER POSTS TO A SIZE AND SHAPE THAT WILL PROVIDE A STABLE POST FOUNDATION WHEN SECURED TO THE PAVEMENT.

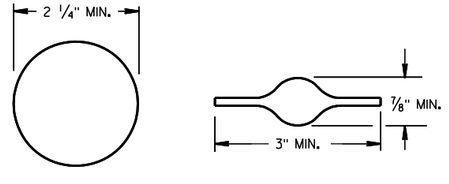
① THREADED ROD SHALL BE MACHINED DOWN TO 0.280 INCH DIA. 1 1/4 INCHES FROM THE TOP.

② THE ASPHALTIC ADHESIVE OR BUTYL PAD FURNISHED SHALL BE IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.



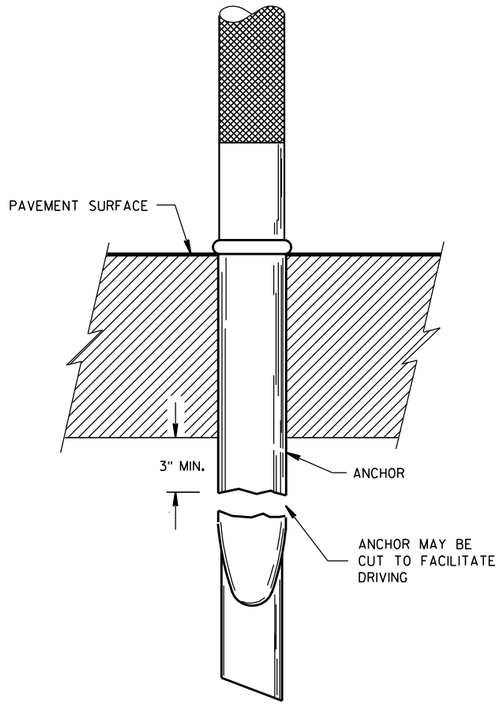
SECTION A-A

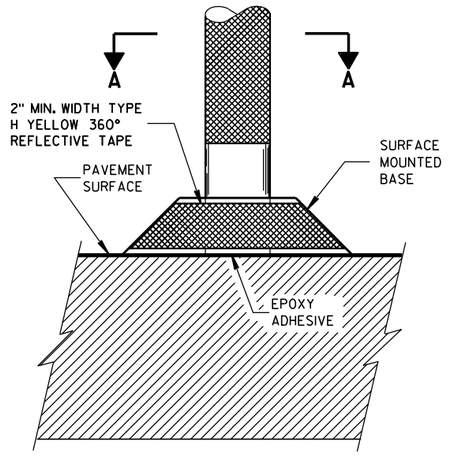
SURFACE MOUNTED BASE



SECTION B-B

ALTERNATIVE SHAPES





POST ANCHOR AND BASE ON PAVEMENT WHICH WILL BE REMOVED

FLEXIBLE TUBULAR MARKER POST, ANCHOR & BASES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

2/17/94 DATE

/S/ Chester J. [illegible] DIRECTOR, OFFICE O

FHWA

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S.D.D. 15 C 11-5

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S.D.D. 15 C 11-5

TWO-LANE ROADWAY

SYMBOLS

WORK AREA

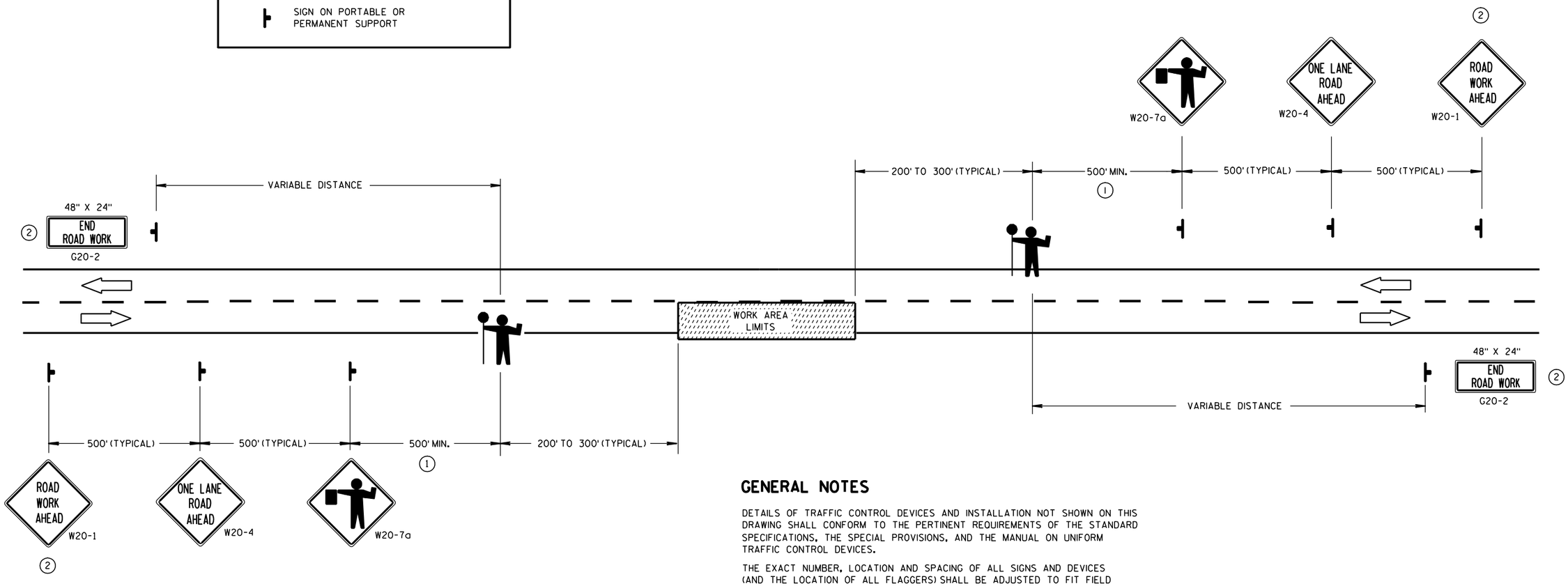
FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF

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

FHWA

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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.

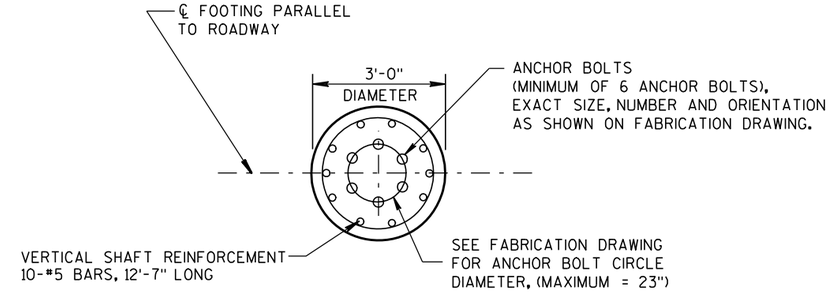
IF THE DRILLED HOLE CONTAINS STANDING WATER, THE CONCRETE SHALL BE PLACED USING A TREMIE TO DISPLACE THE WATER.

THE REINFORCEMENT AND ANCHOR BOLTS SHALL BE ADEQUATELY SUPPORTED IN THE PROPER POSITIONS SO NO MOVEMENT OCCURS DURING CONCRETE PLACEMENT.

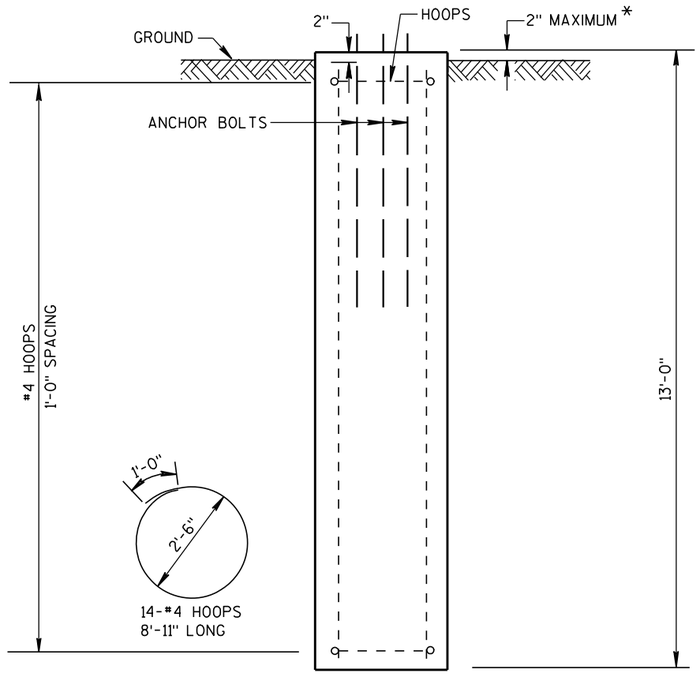
ANY DAMAGE TO THE CONCRETE BASE DURING CONSTRUCTION OPERATIONS SHALL BE REPAIRED AT THE ENGINEER'S DIRECTION, AT THE EXPENSE OF THE CONTRACTOR.

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

APPROVED

4/17/09 — DATE

/S/ Thomas N. Nothdurm — STATE TRAFFIC ENGINEER

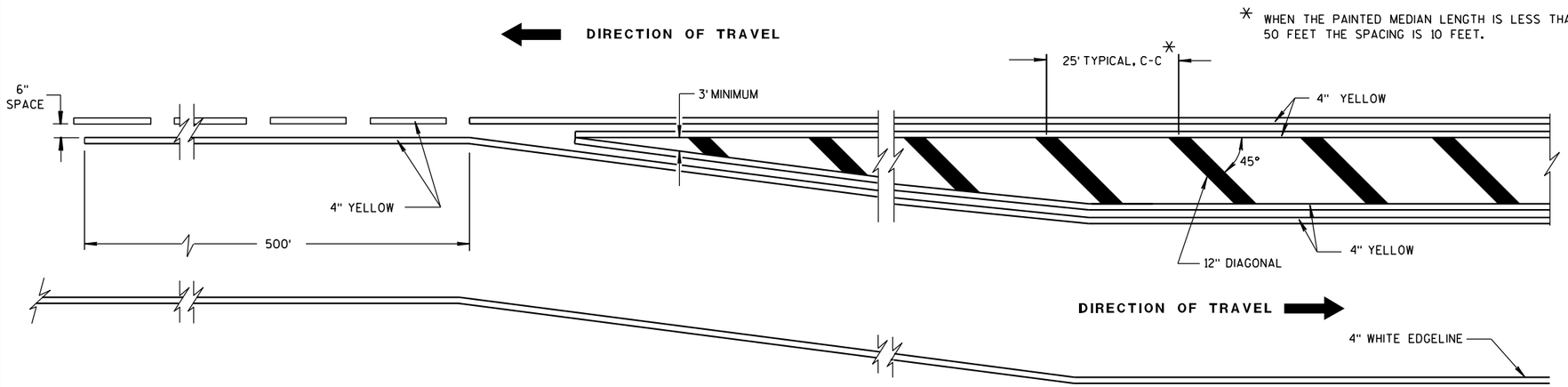
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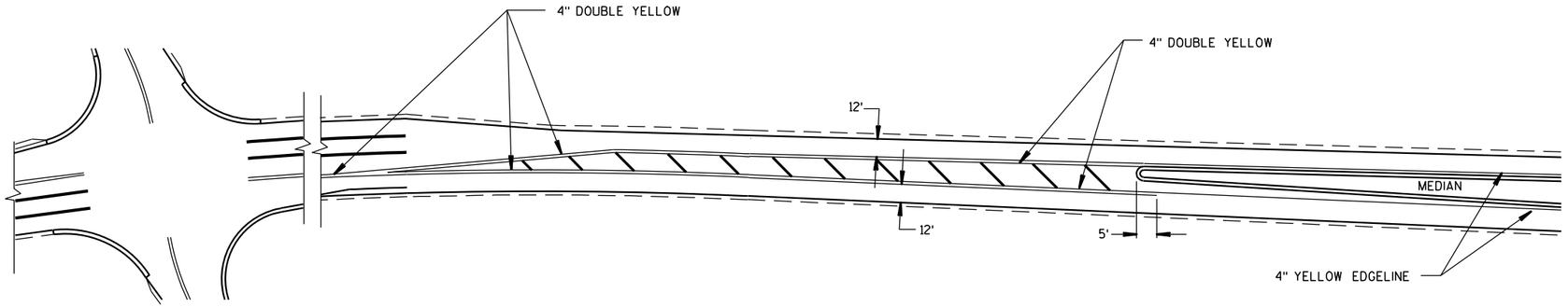
S.D.D. 15 C 15-3



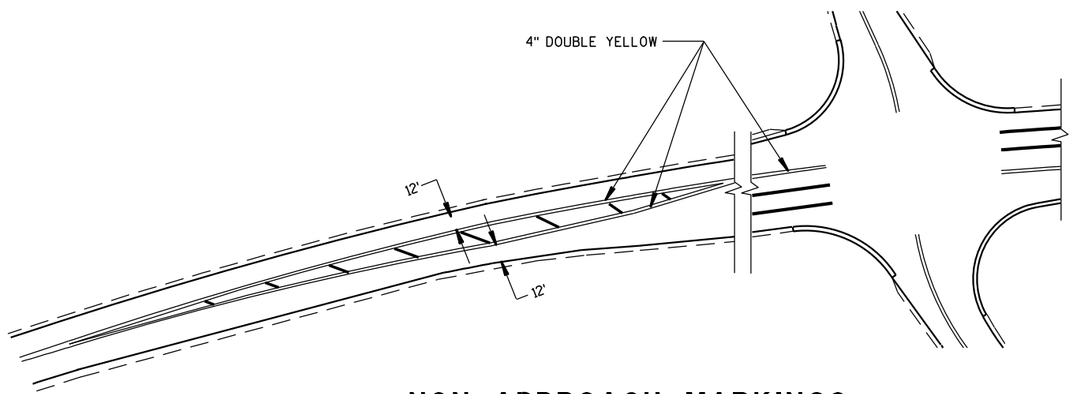
MEDIAN ISLAND DETAIL

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

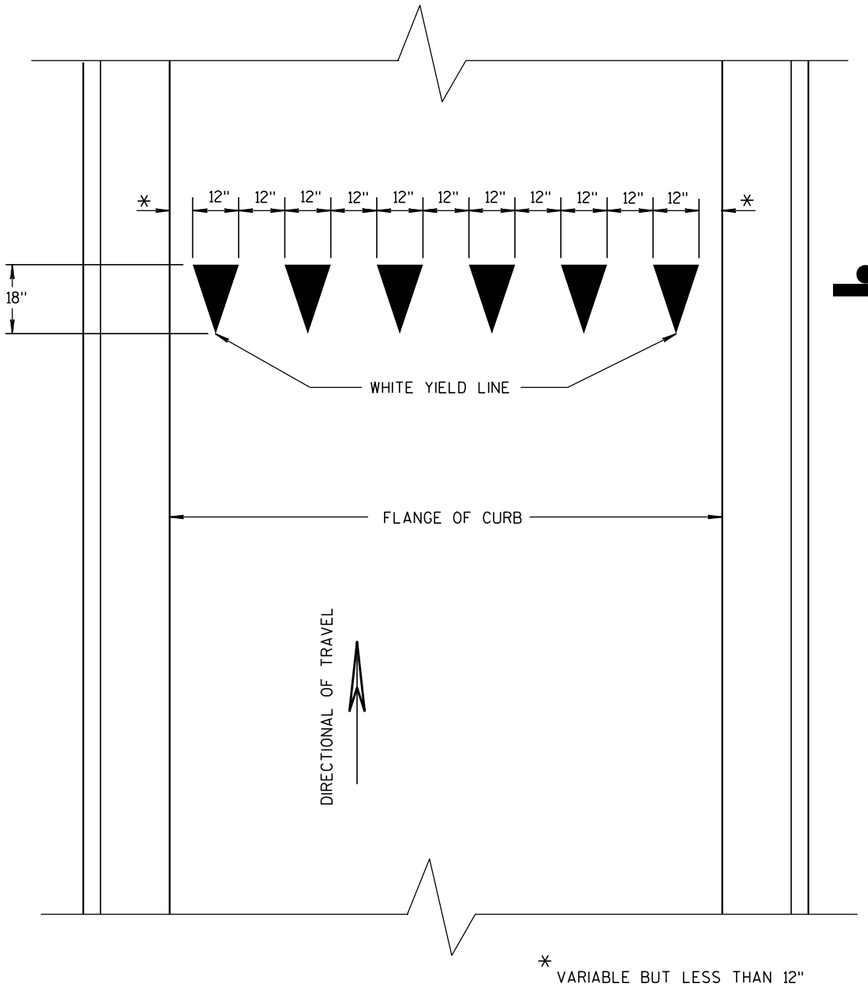
MEDIAN ISLAND MARKING	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 2-5-09 DATE	/S/ Thomas N. Nothohm STATE TRAFFIC ENGINEER
FHWA	434 IGN

6

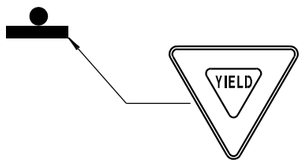
S.D.D. 15 C 18-3

6

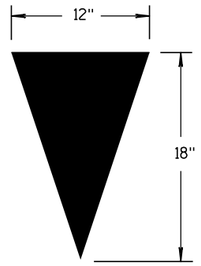
S.D.D. 15 C 18-3



YIELD LINE



R1-2
36" X 31"



YIELD TRIANGLE

6

6

S.D.D. 15 C 20-1

S.D.D. 15 C 20-1

YIELD MARKINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

1/28/05
DATE

/S/ Thomas N. Nothdurft
STATE TRAFFIC ENGINEER

435

FHWA

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

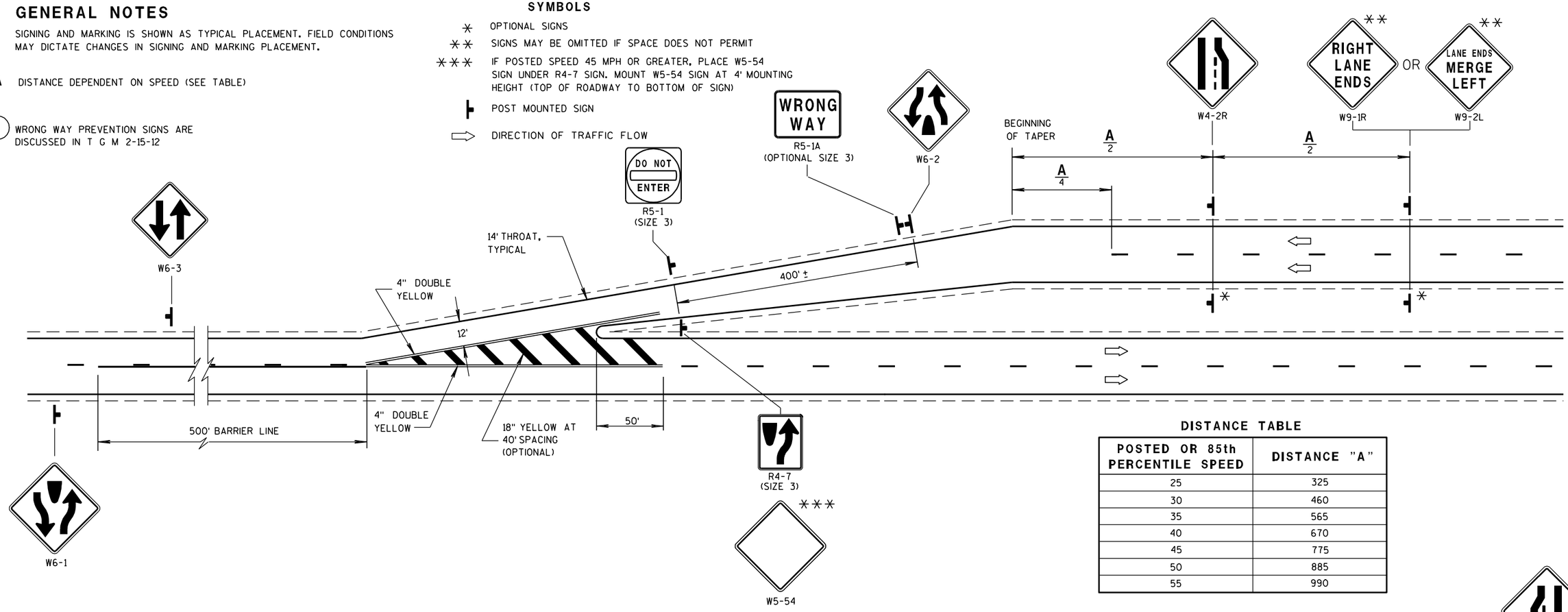
* OPTIONAL SIGNS

** 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

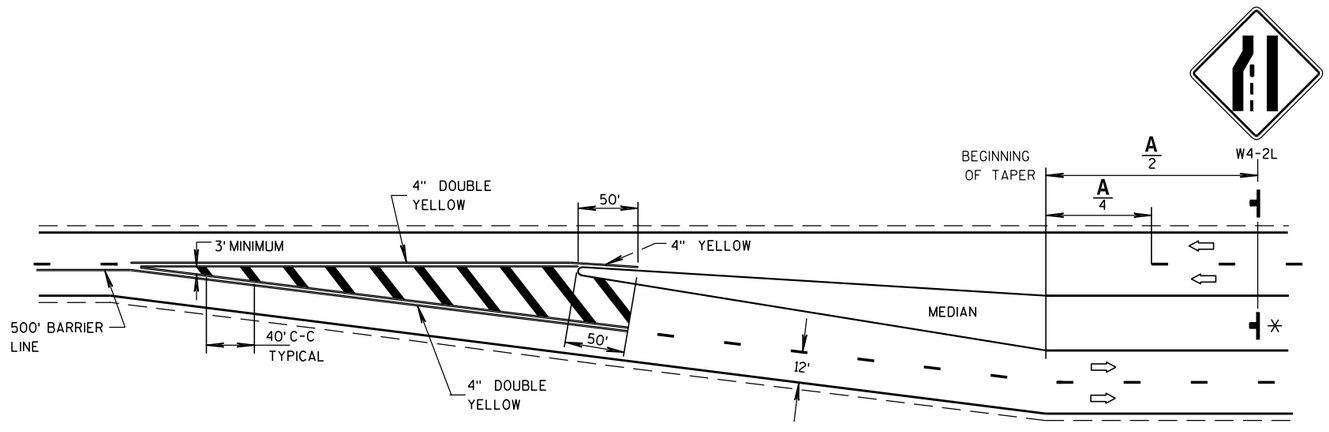
POSTED OR 85th PERCENTILE SPEED	DISTANCE "A"
25	325
30	460
35	565
40	670
45	775
50	885
55	990

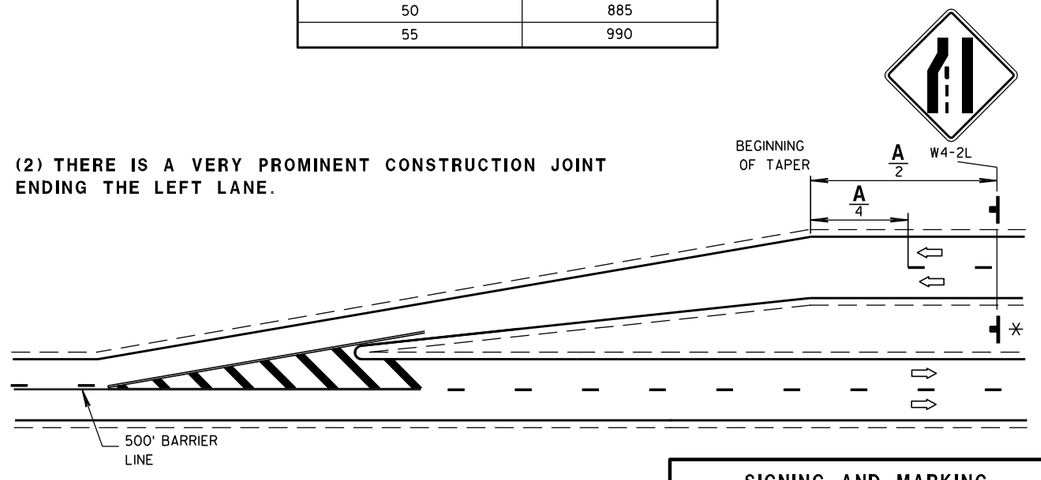
USE W4-2L IF :

(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

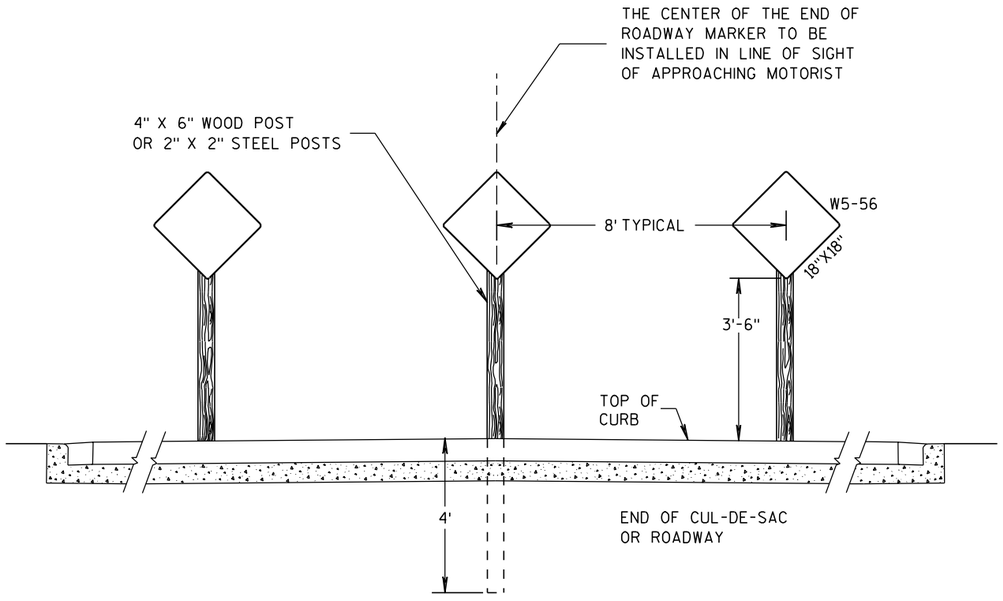
6
S.D.D. 15 C 21-4

GENERAL NOTES

SIGN LOCATIONS SHOWN ARE TYPICAL PLACEMENT AND MAY BE ADJUSTED BY THE ENGINEER AS FIELD CONDITIONS DICTATE.

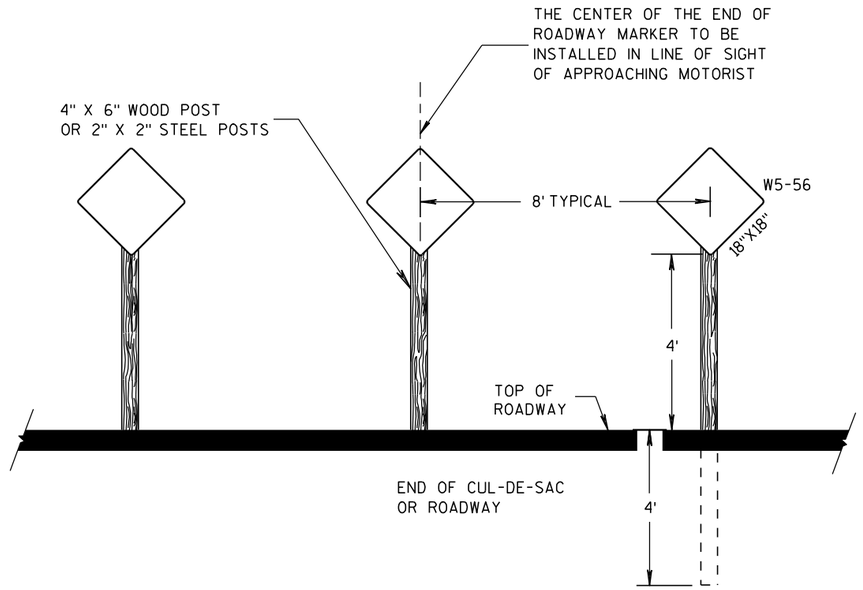
THE MINIMUM NUMBER OF END-OF-ROADWAY SIGNS ARE THREE (AS SHOWN). ADDITIONAL END-OF-ROADWAY SIGNS MAY BE INSTALLED AS FIELD CONDITIONS DICTATE. (SEE SIGNING PLAN).

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

FHWA

6

S.D.D. 15 C 26-2

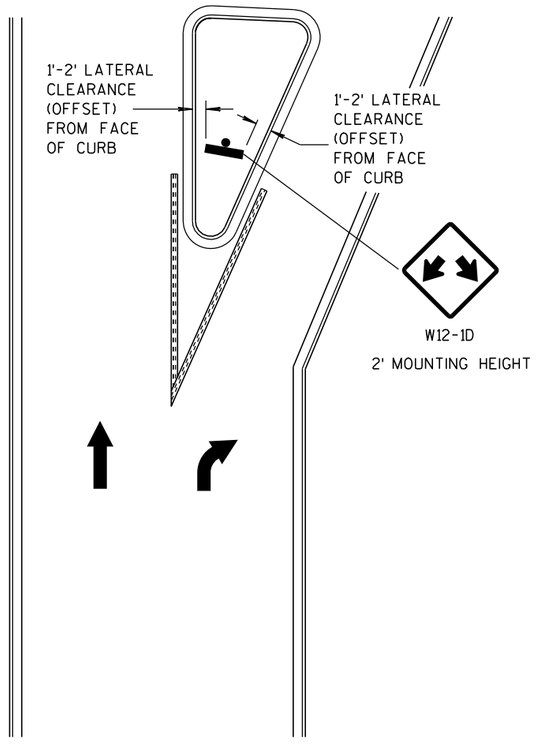
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S.D.D. 15 C 26-2

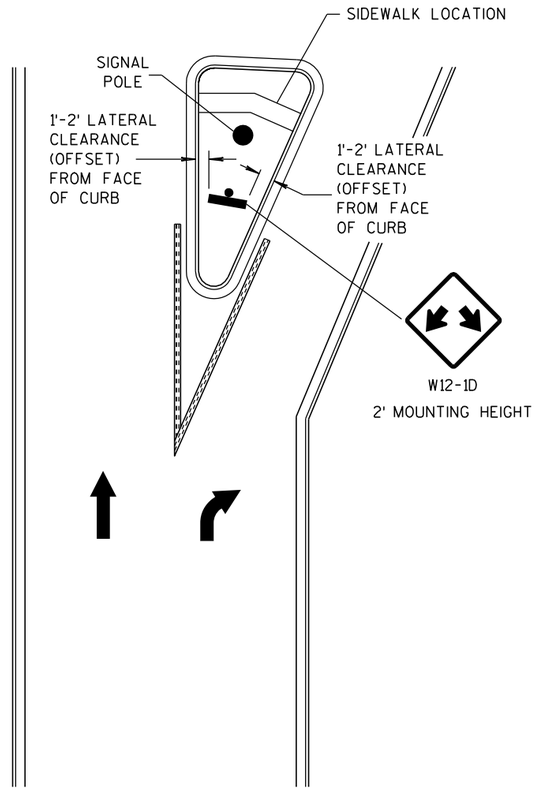
GENERAL NOTE

APPLIES TO ISLANDS AT LEFT TURNS AT ONE WAY ROADWAYS AS WELL.

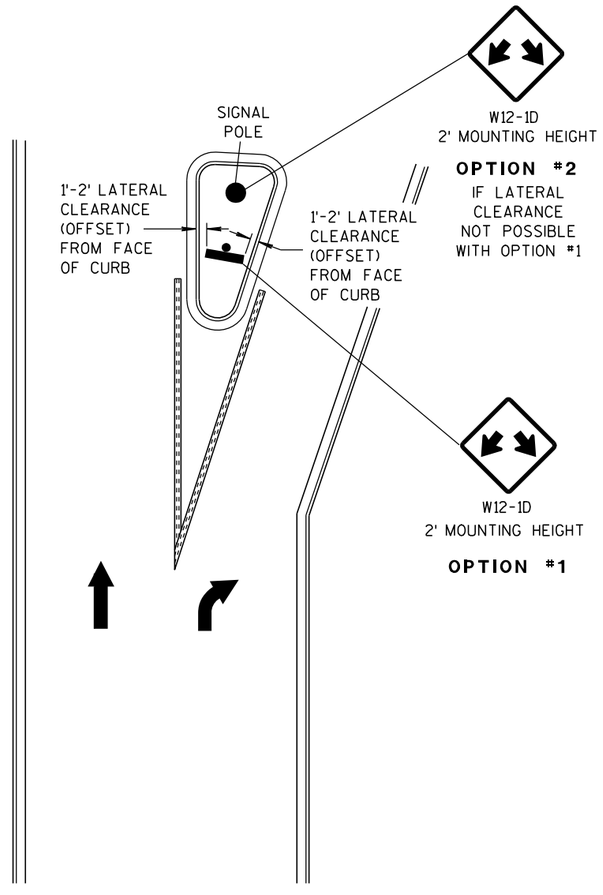
SEE MISCELLANEOUS QUANTITIES FOR SIGN SIZE.



LARGE RIGHT TURN ISLAND



LARGE RIGHT TURN ISLAND
WITH SIGNAL POLE



SMALL RIGHT TURN ISLAND

DOUBLE ARROW WARNING SIGN PLACEMENT

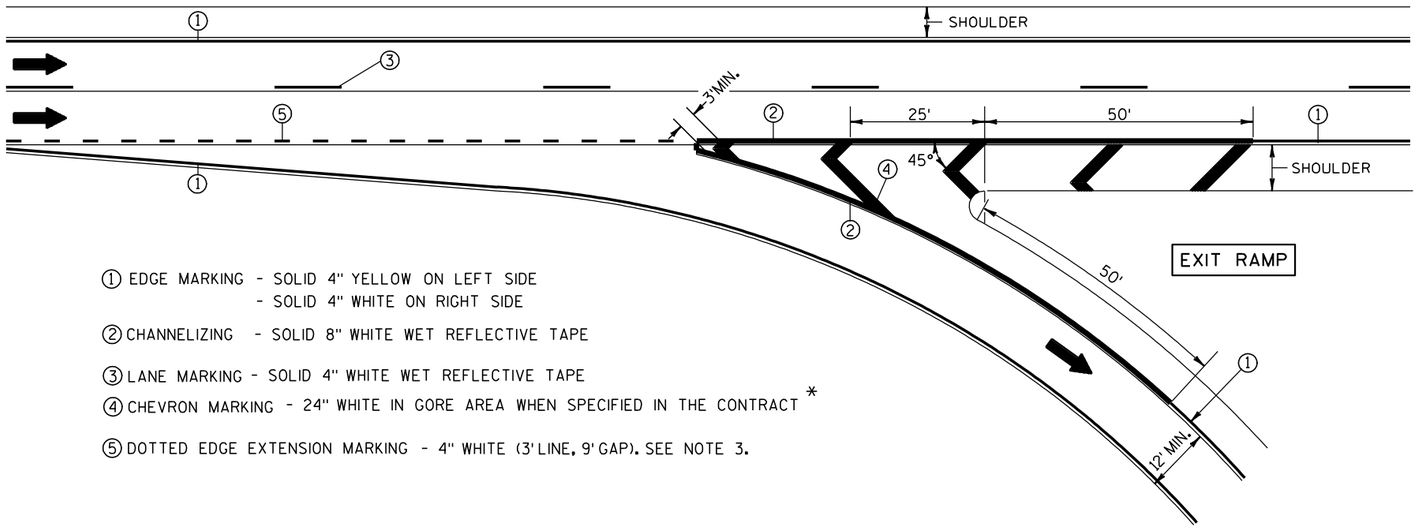
DOUBLE ARROW WARNING SIGN PLACEMENT	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	
10-22-08 DATE	/S/ Thomas N. Nothdurft STATE TRAFFIC ENGINEER
FHWA	438 IGN

6

S.D.D. 15 C 27-1

6

S.D.D. 15 C 27-1



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:

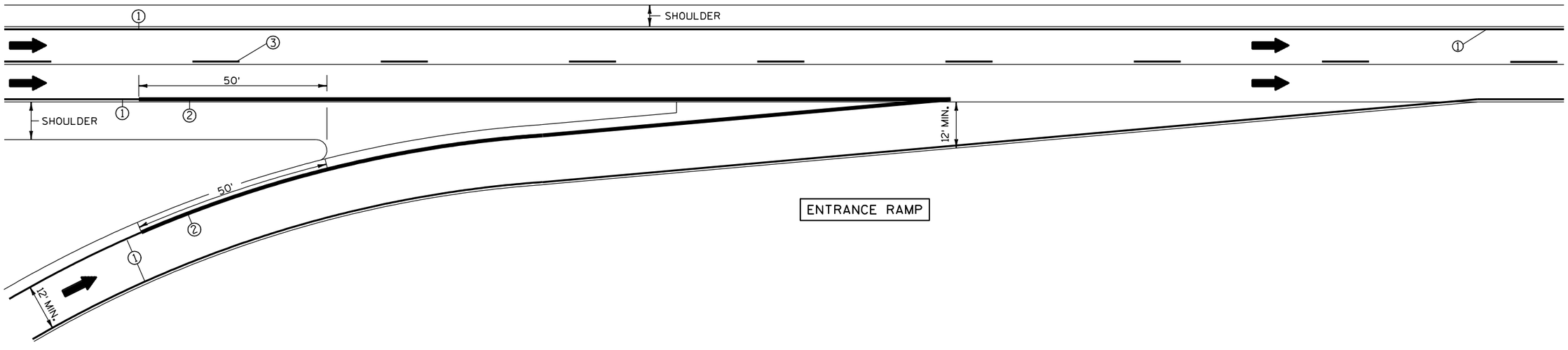
1. ARROWS SHOWN ON THIS MARKING PLAN DESIGNATE TRAFFIC FLOW, AND SHALL NOT BE TAKEN AS PROPOSED PAVEMENT MARKINGS.

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

S.D.D. 15 C 31-1a

PAVEMENT MARKING
(RAMPS AND GORES)

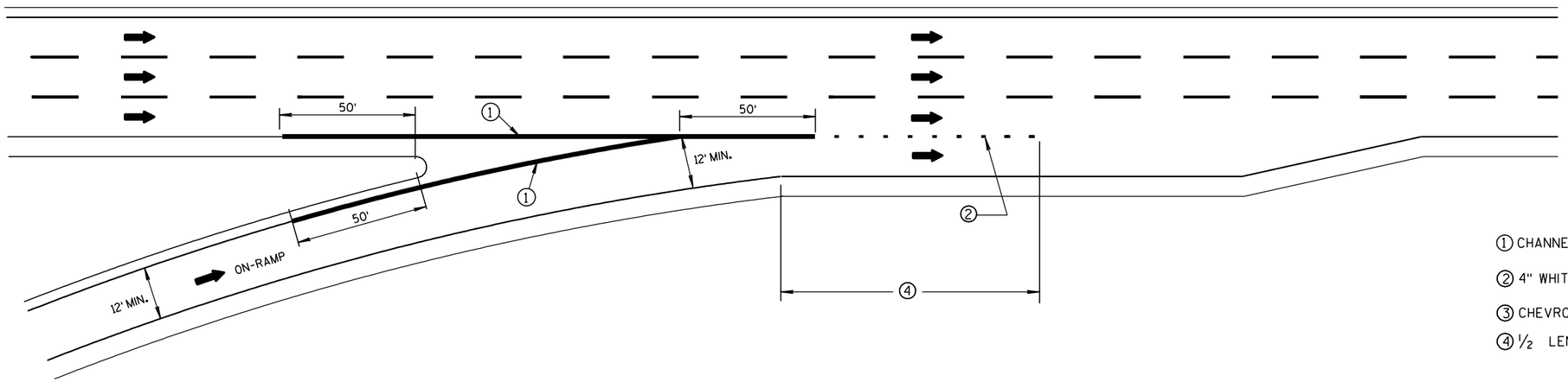
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

S.D.D. 15 C 31-1a

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.



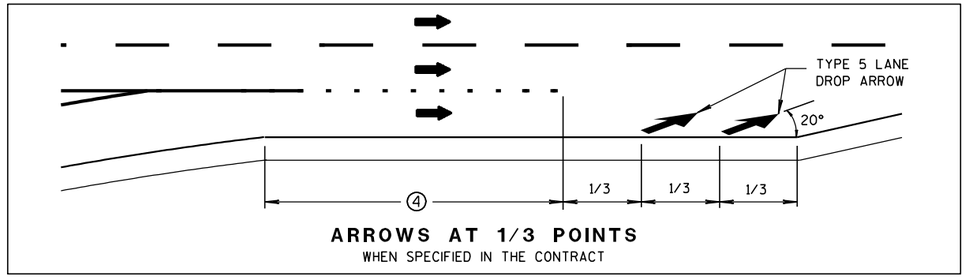
① CHANNELIZING - SOLID 8" WHITE WET REFLECTIVE TAPE IN GORE AREA.

② 4" WHITE (3' LINE, 9' GAP).

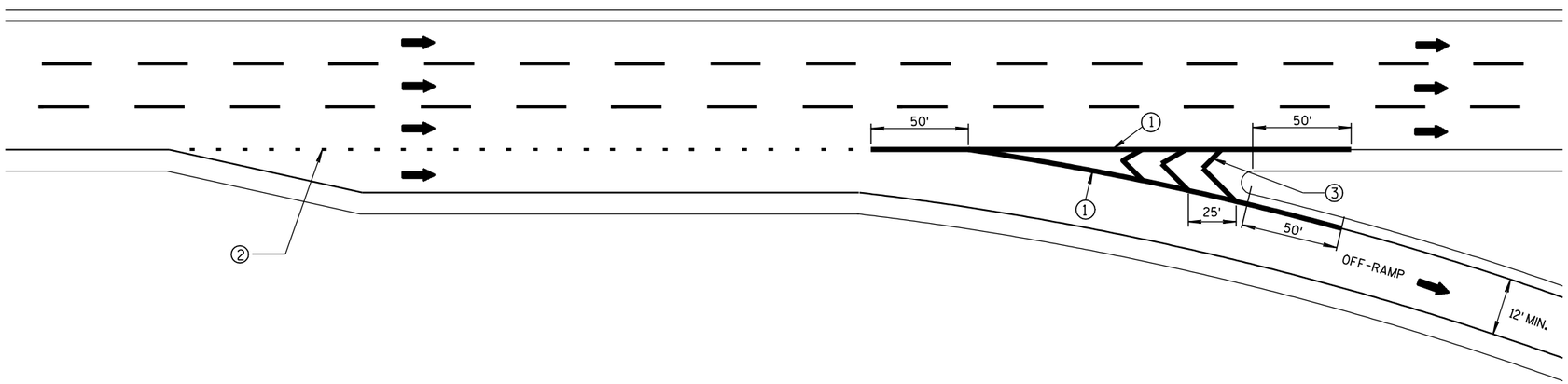
③ CHEVRON MARKING - 24" WHITE WHEN SPECIFIED IN THE CONTRACT.

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

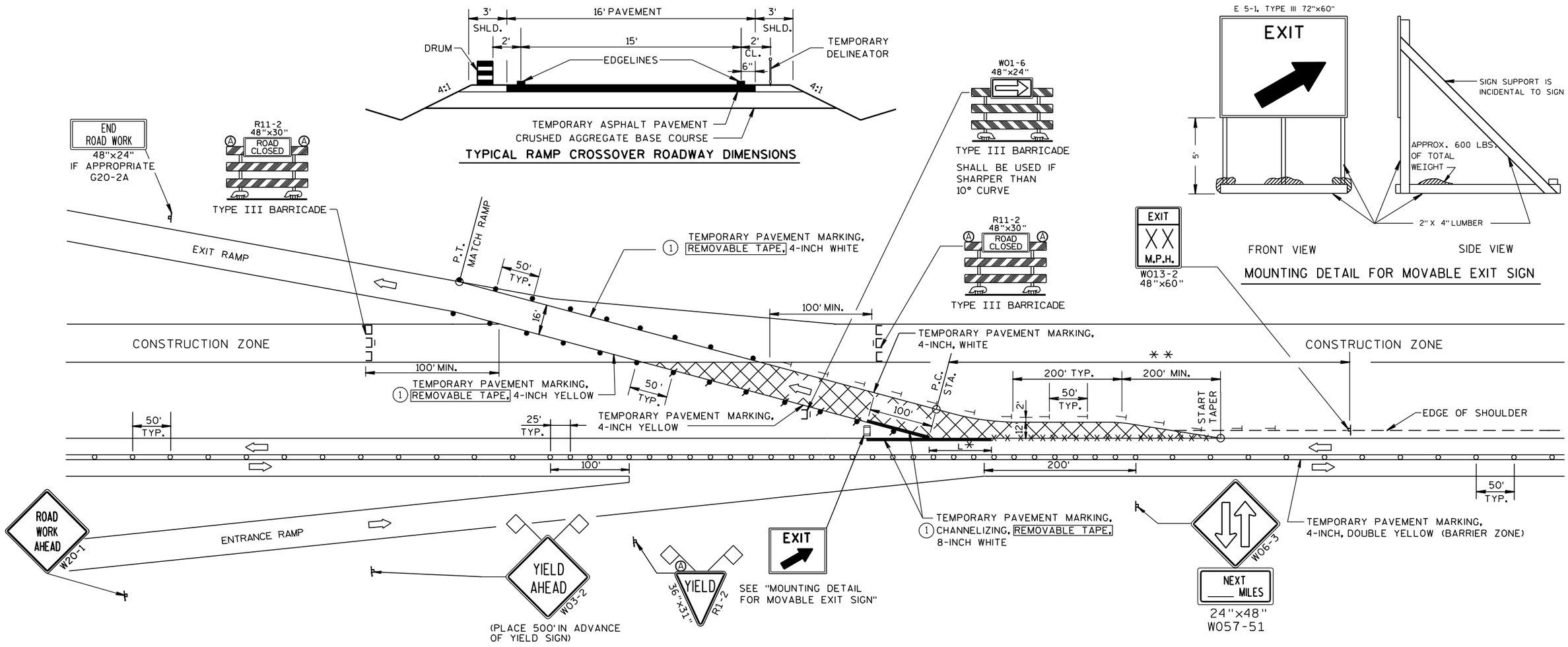
APPROVED
6/23/2011 DATE
/S/ Thomas N. Nothem
STATE TRAFFIC ENGINE 440 SIGN
FHWA

6

S.D.D. 15 C 31-1d

6

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

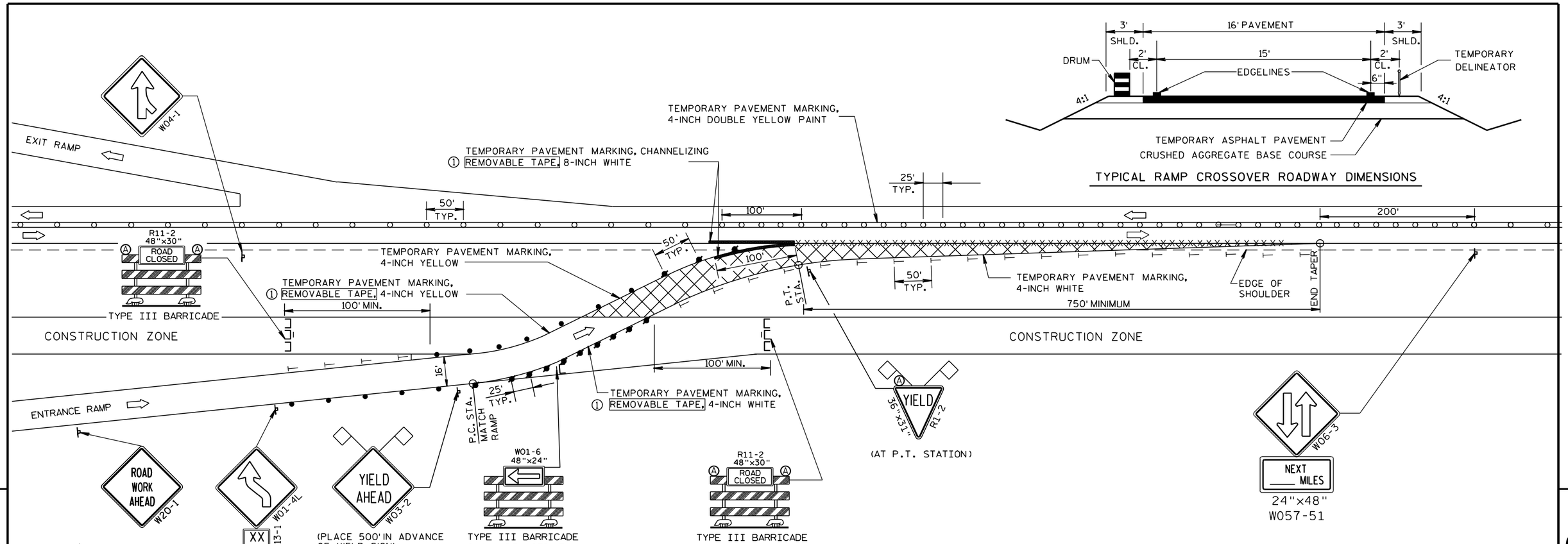
APPROVED
12-4-95 DATE
/S/ Chester J. [illegible] DIRECTOR, OFFICE O 441 C
FHWA

6

S.D.D. 15 D 7-3

6

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

6
S.D.D. 15 D 8-3

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.

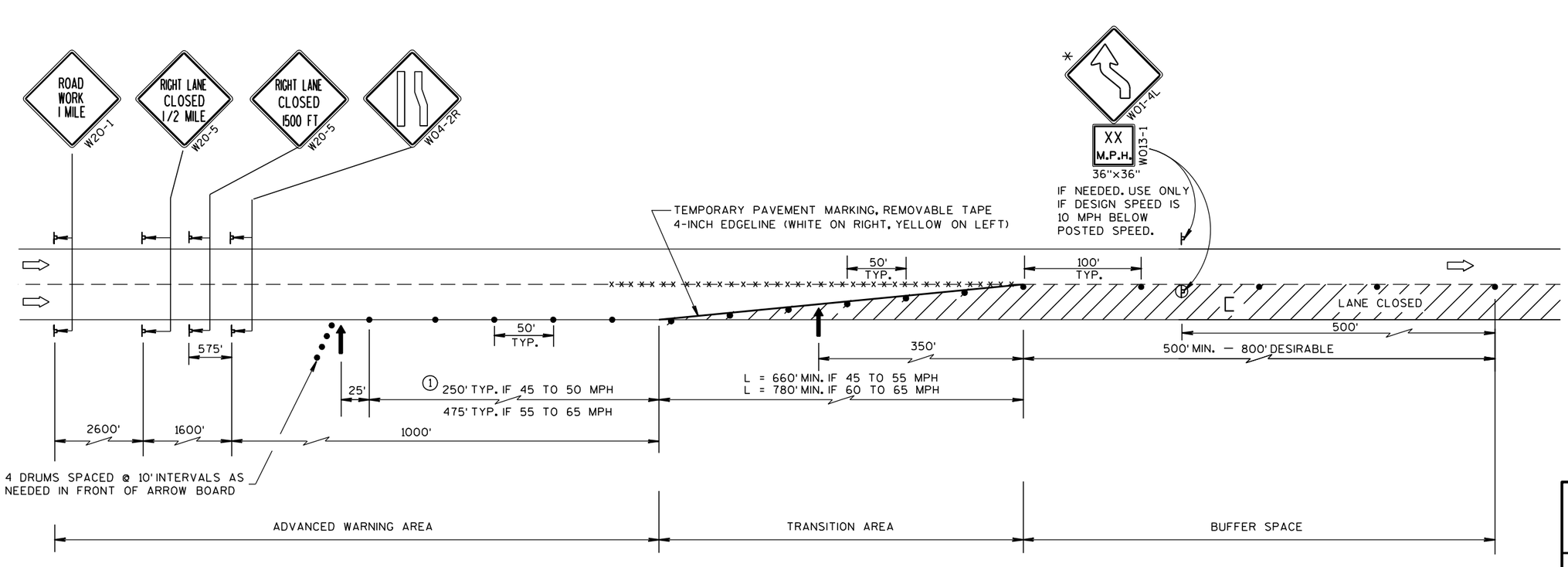
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

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

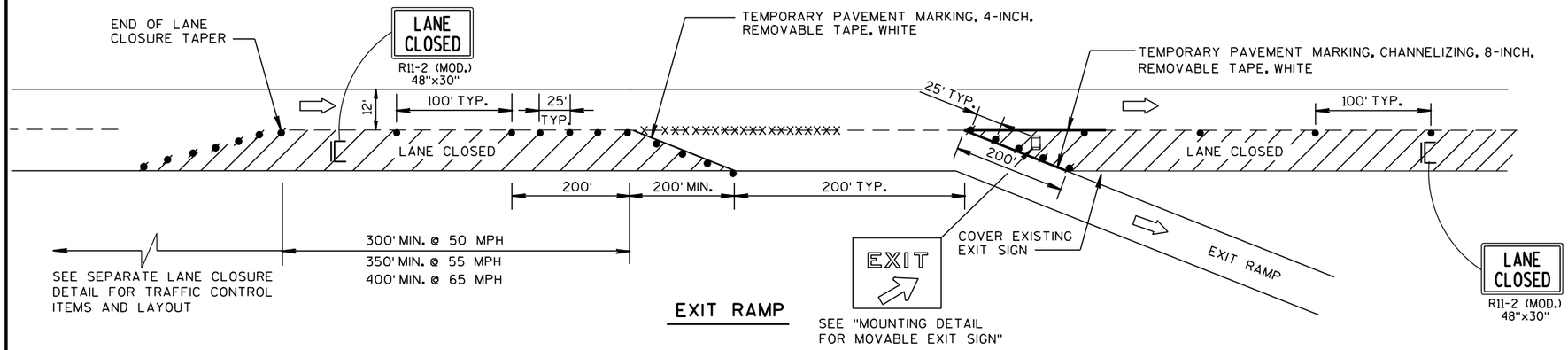
APPROVED
8-7-95 DATE
/S/ Chester J. [illegible]
DIRECTOR, OFFICE O 443 C
FHWA

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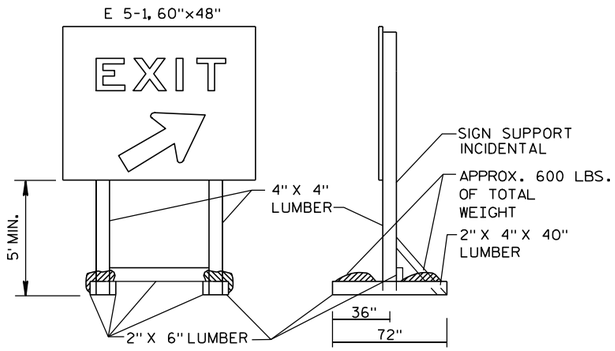
S.D.D. 15 D 12-2

6

S.D.D. 15 D 12-2

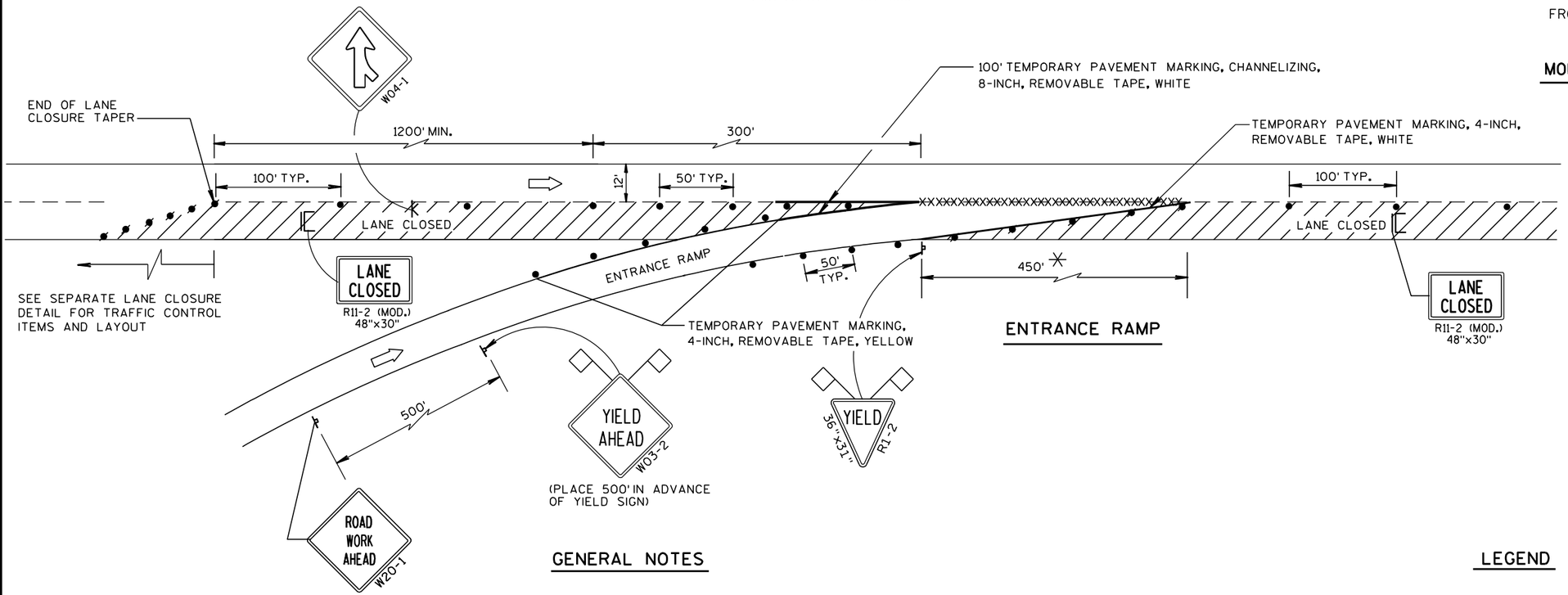


EXIT RAMP



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 MARKING 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.

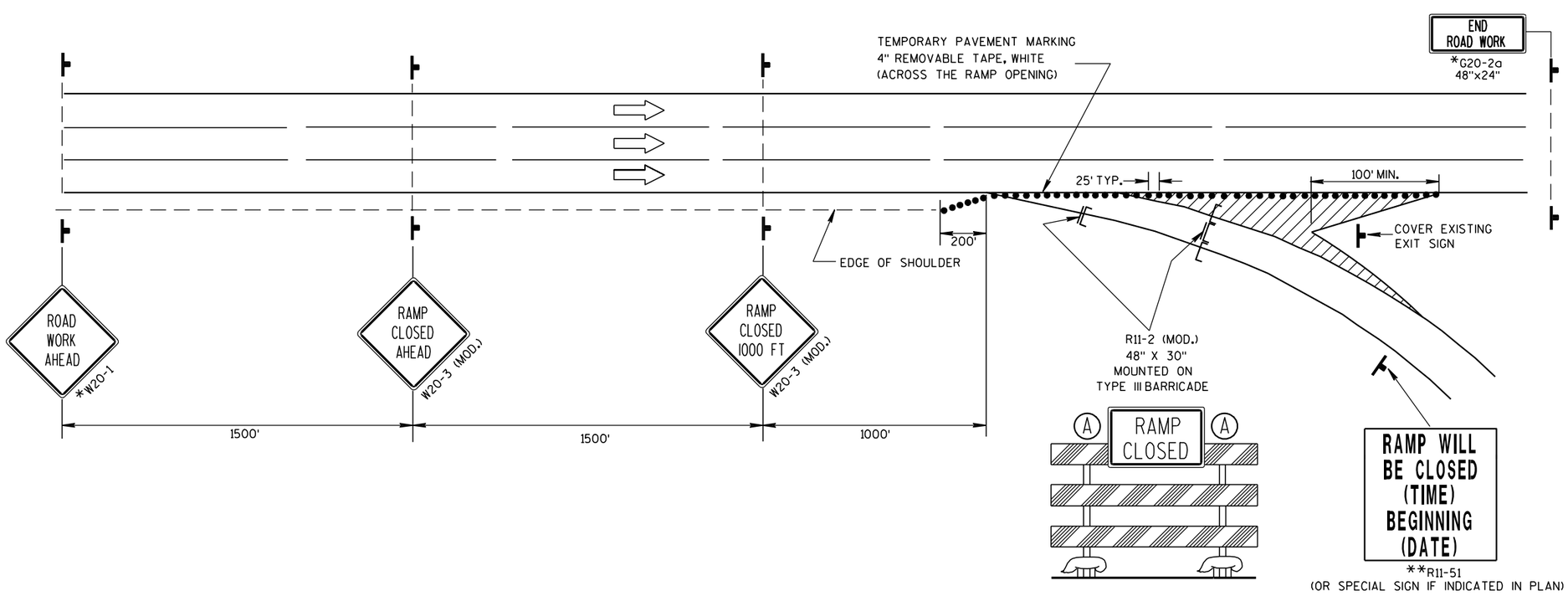
PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF RAMP CLOSURE IS TO BE IN PLACE FOR 7 OR MORE CONTINUOUS DAYS AND NIGHTS.

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.



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S.D.D. 15 D 16-1

6

S.D.D. 15 D 16-1

TRAFFIC CONTROL, EXIT RAMP CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

5/23/2000
DATE

/S/ Chester J. [illegible]
CHIEF SIGNS AND MAR 445 INEER

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.

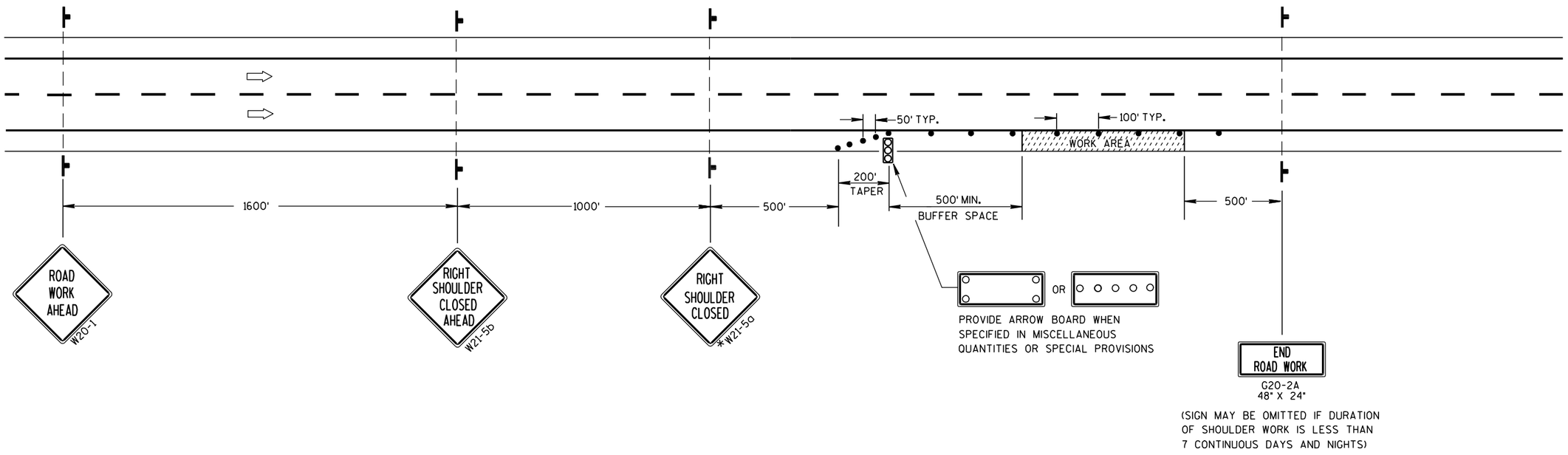
SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

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 Spaan
CHIEF SIGNS AND MARKING ENGINEER

FHWA

6

S.D.D. 15 D 27-1

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.

ALL SIGNS ARE 48" X 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.

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.

W20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE WORK AREA IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT. G20-2A SIGNS MAY ALSO BE OMITTED IF DURATION OF WORK IS LESS THAN 7 CONTINUOUS DAYS AND NIGHTS.

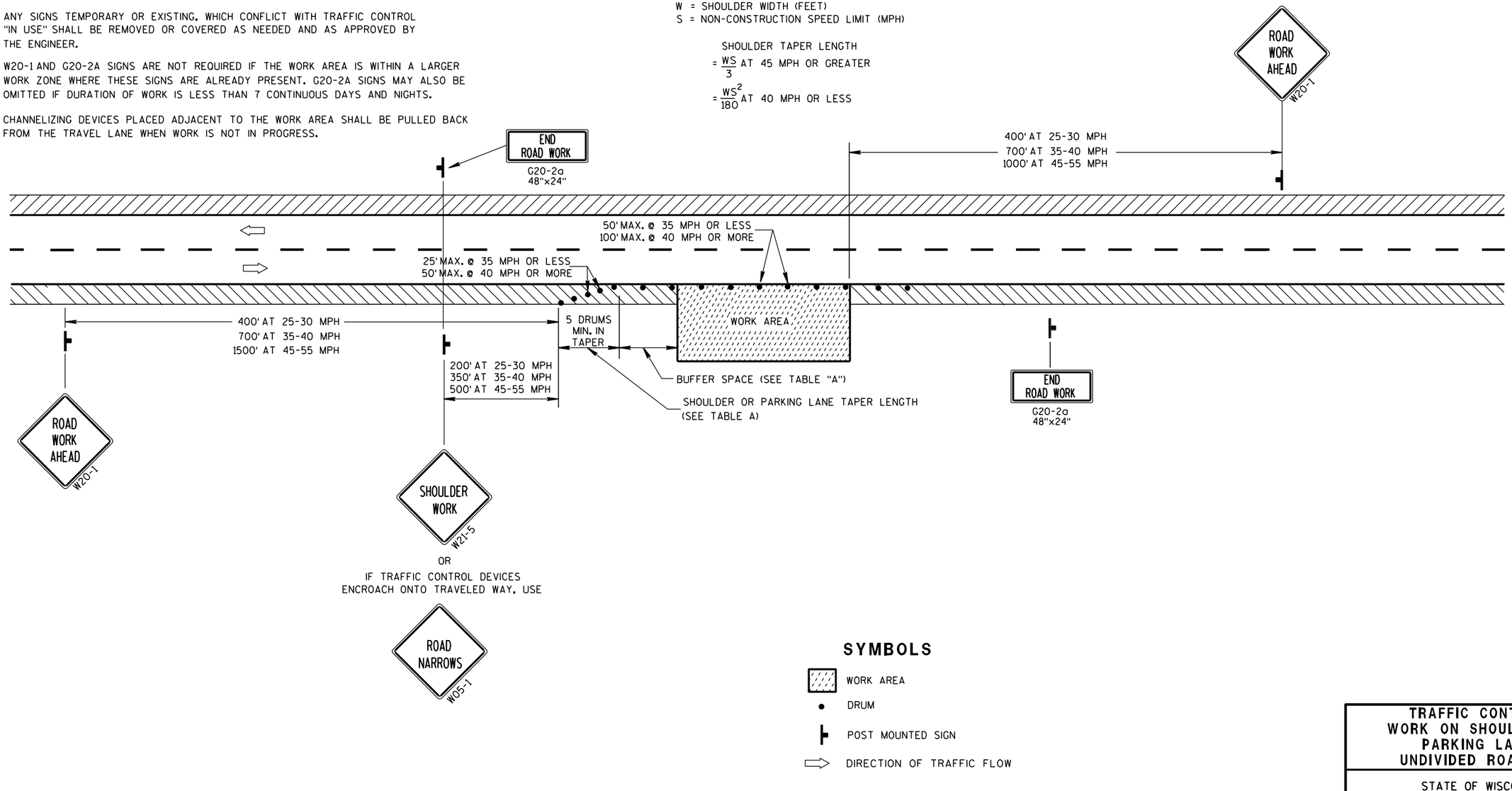
CHANNELIZING DEVICES PLACED ADJACENT TO THE WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

TABLE A

S \ W	SHOULDER TAPER LENGTH (FEET) 4	6	8	10	BUFFER SPACE (FEET)
30	20	30	40	50	85
35	30	45	55	70	120
40	40	55	75	90	170
45	60	90	120	150	220
50	70	100	135	170	280
55	75	110	150	185	335

W = SHOULDER WIDTH (FEET)
S = NON-CONSTRUCTION SPEED LIMIT (MPH)

SHOULDER TAPER LENGTH
$= \frac{WS}{3}$ AT 45 MPH OR GREATER
$= \frac{WS^2}{180}$ AT 40 MPH OR LESS



SYMBOLS

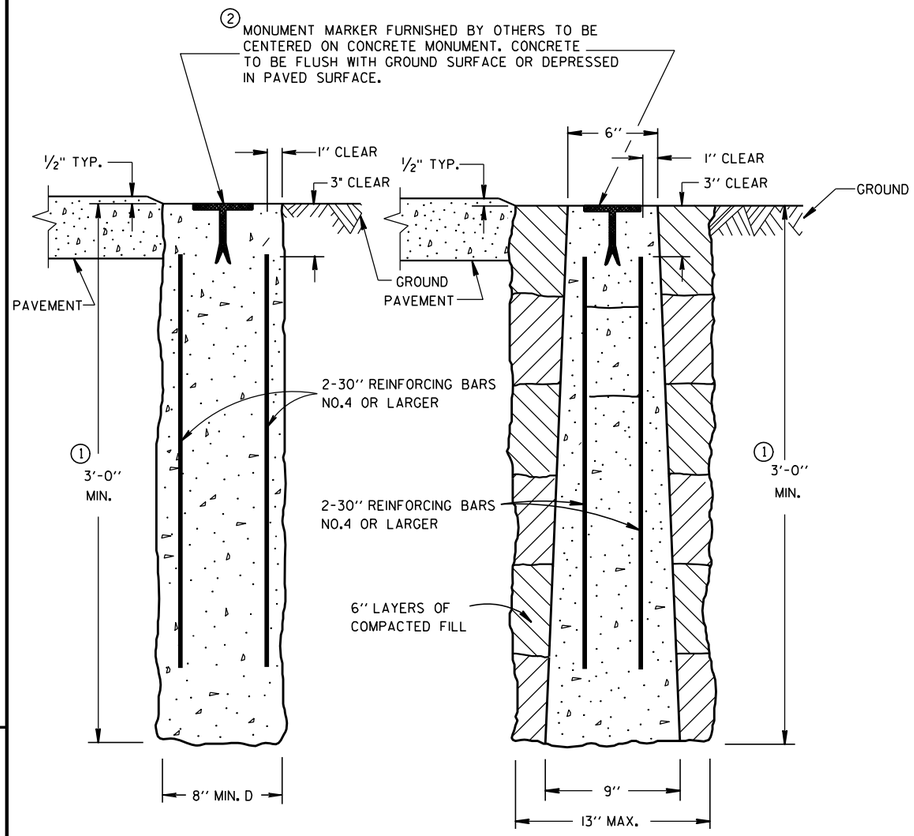
- WORK AREA
- DRUM
- POST MOUNTED SIGN
- DIRECTION OF TRAFFIC FLOW

TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
5/23/00 DATE
/S/ Chester J. [illegible]
CHIEF SIGNS AND MARK[illegible] ENGINEER
FHWA

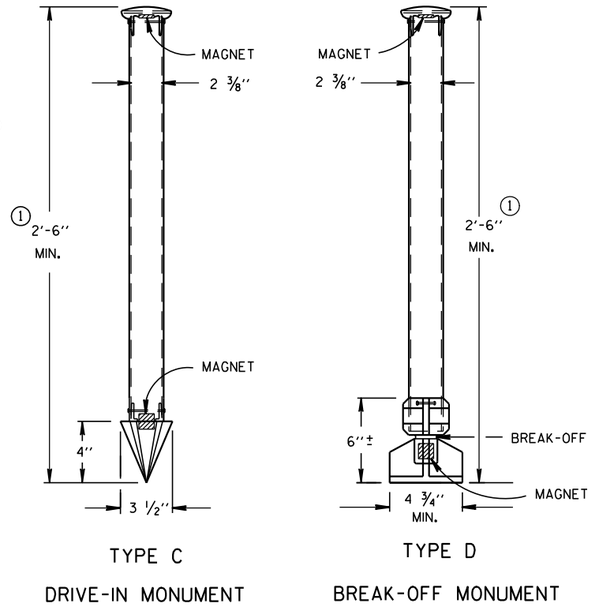
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S.D.D. 15 D 28-1



CAST-IN-PLACE PRECAST

CONCRETE MONUMENTS

TYPE A



TYPE C DRIVE-IN MONUMENT

TYPE D BREAK-OFF MONUMENT

ALUMINUM MONUMENTS

(INCLUDES MARKER)

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.

DETAILED DRAWINGS OF PROPOSED ALTERNATE DESIGNS FOR METAL MONUMENTS OR MONUMENT COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

INSTALLED METAL MONUMENTS MUST BE EASILY DETECTED WITH A DIP NEEDLE. INSERT PERMANENT MAGNETS SHALL BE ATTACHED NEAR THE TOP AND BOTTOM OF THOSE MONUMENTS CONSTRUCTED OF A METAL ALLOY WHICH IS NOT ATTRACTIVE TO A DIP NEEDLE.

THE CAST IRON MONUMENT COVER SHALL BE A "NON-ROCKING" TYPE. ADJUSTMENT OF THE COVER TO GRADE MAY BE ACCOMPLISHED BY THE USE OF MORTAR AND BRICK, OR BY EITHER PRECAST OR CAST-IN-PLACE REINFORCED CONCRETE GRADE RINGS.

MONUMENTS SHALL BE LOCATED AND PLACED AT THE DIRECTION OF THE ENGINEER.

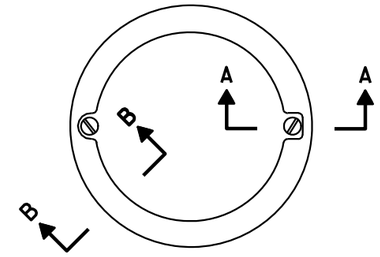
ALUMINUM MONUMENTS AND MONUMENT COVERS SHALL BE MADE FROM AN ALUMINUM AND MAGNESIUM ALLOY AS DETERMINED BY THE MANUFACTURER.

THE MONUMENT COVERS DETAILED ON THIS DRAWING ARE NOT EQUAL ALTERNATES. MONUMENT COVERS SHALL BE CAST IRON UNLESS ALUMINUM IS SPECIFIED ELSEWHERE IN THE CONTRACT.

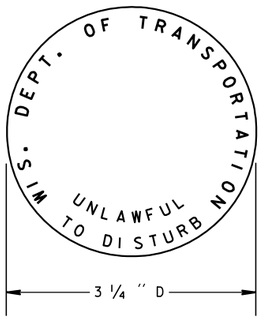
MONUMENT SHALL BE CAST-IN-PLACE CONCRETE UNLESS PRECAST CONCRETE OR ALUMINUM MONUMENTS ARE SPECIFIED IN THE CONTRACT OR PERMITTED BY THE ENGINEER.

① MINIMUM LENGTH SHALL BE 4'-0" FOR MONUMENTS INSTALLED IN PAVED AREAS.

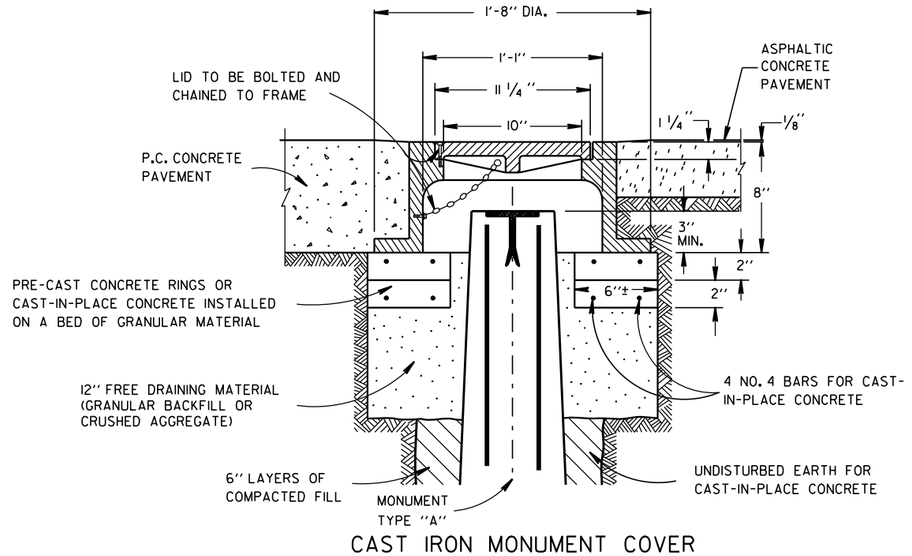
② AN OFFICIAL COUNTY MONUMENT MARKER SUPPLIED BY A COUNTY MAY BE REQUIRED FOR SOME SECTION CORNERS AND WITNESS MONUMENTS INSTEAD OF THIS WIS DOT MARKER.



TOP VIEW

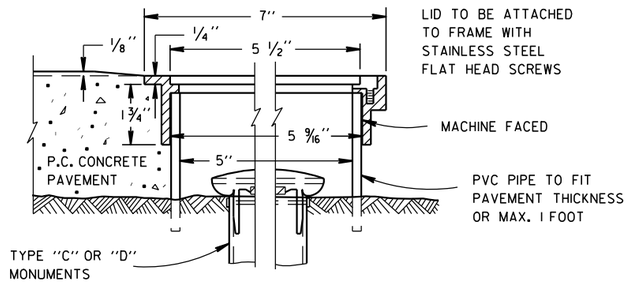


② WIS DOT MONUMENT MARKER LOGO FOR TYPES "A", "C" & "D"



CAST IRON MONUMENT COVER

(APPROXIMATE WEIGHT - 95 LBS.)



SECTION B-B SECTION A-A

ALUMINUM MONUMENT COVER

(APPROXIMATE WEIGHT 2 LBS)

(FOR CONCRETE PAVEMENT ONLY)

LANDMARK REFERENCE MOUNMENTS AND COVERS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

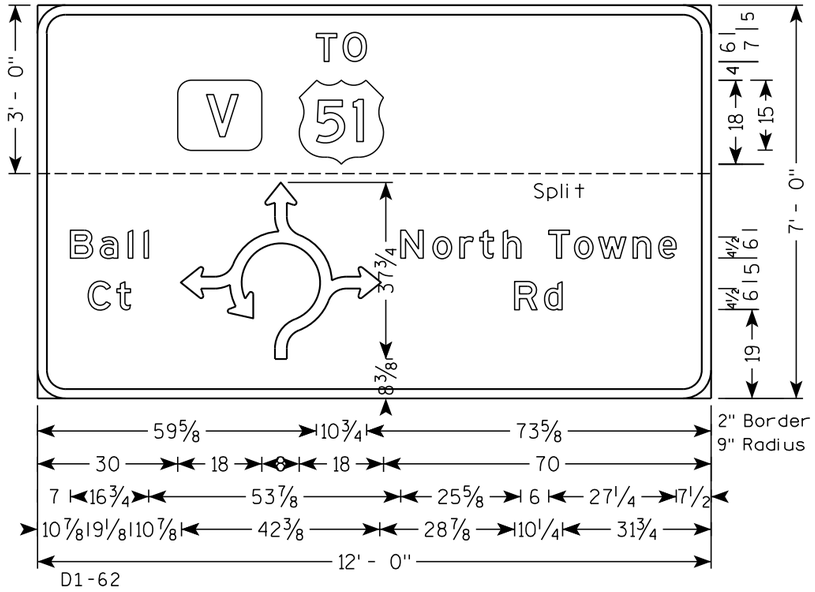
9/22/1999 DATE

/S/ Rory L. Rhinesmith
CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

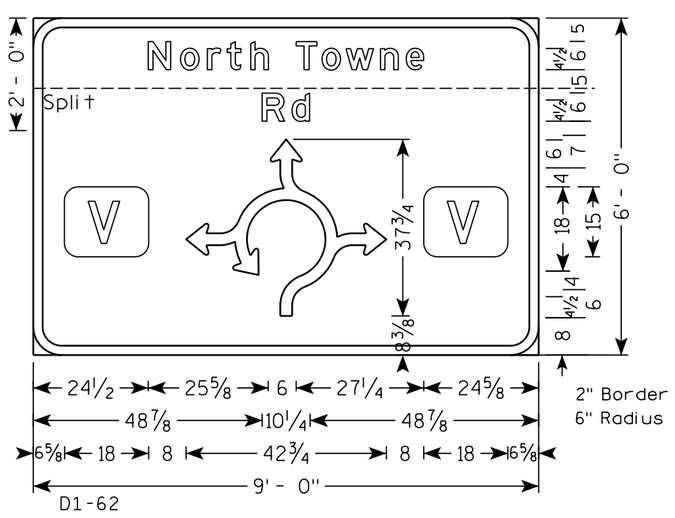
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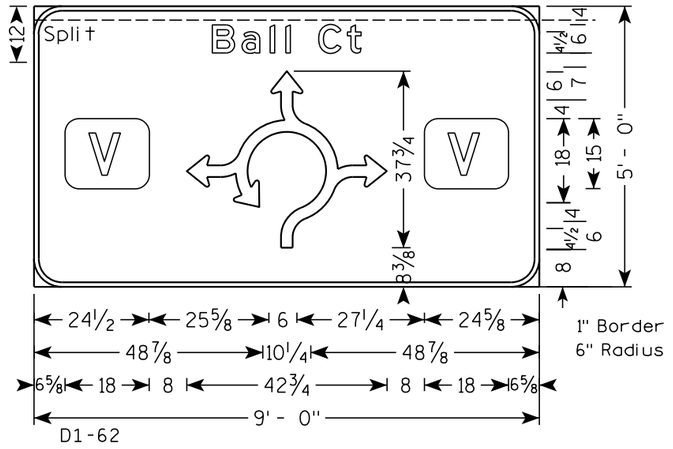
S.D.D. 16 A 1-6



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
4. Colors for shields and cardinals shall be according to the applicable route marker specifications.
5. Refer to Standard Plate A11-12 for Roundabout Arrow Detail Dimensions.





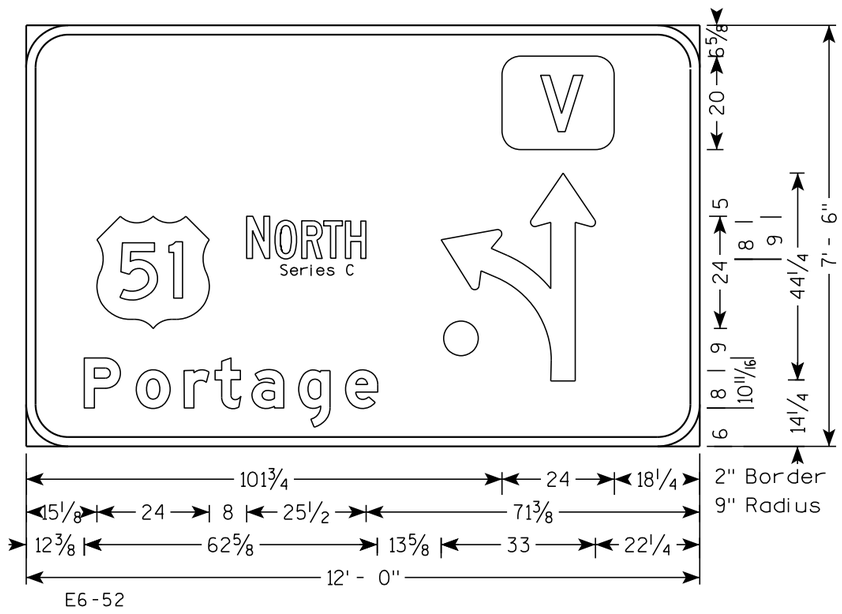
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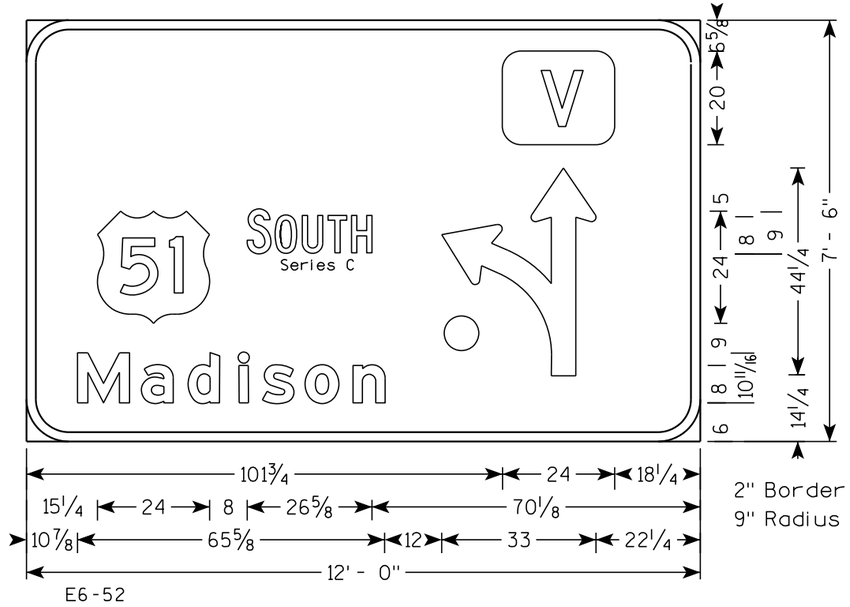
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PROJECT NO: 6020-02-71/72	HWY: USH 51	COUNTY: DANE	PERMANENT SIGNING	SHEET NO: 449	E

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
   Message - White
3. Message Series - E Modified except as noted
4. Colors for shields and cardinals shall be according to the applicable route marker specifications.

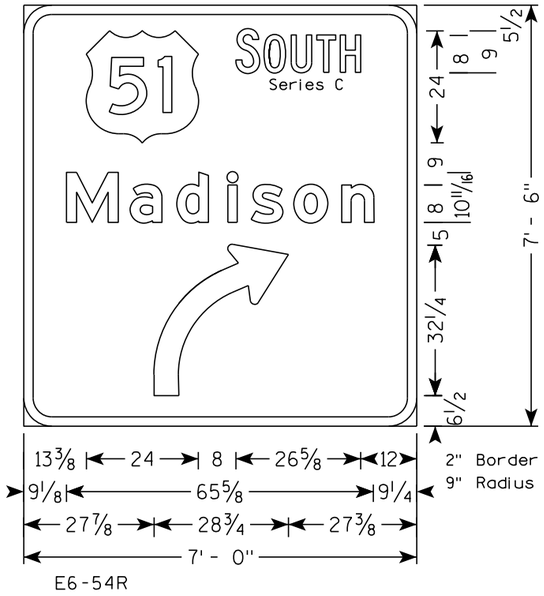




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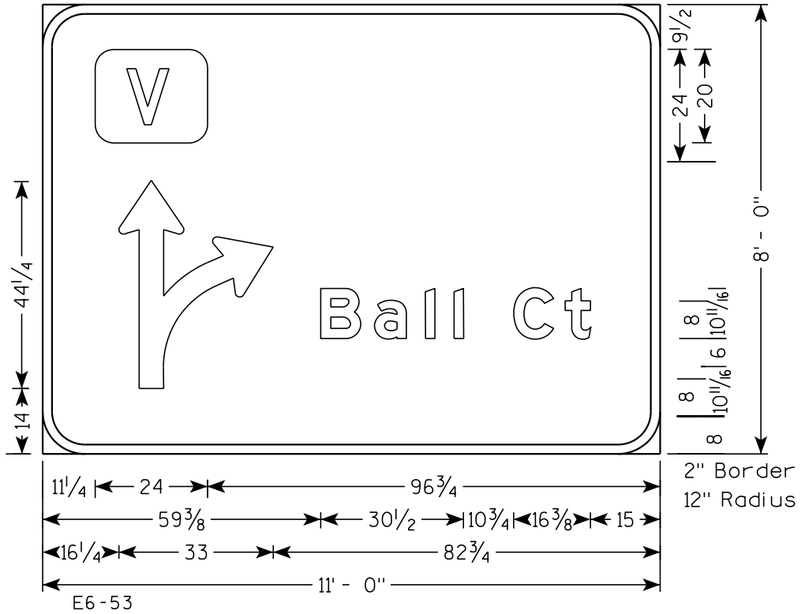
PROJECT NO: 6020-02-71/72	HWY: USH 51	COUNTY: DANE	PERMANENT SIGNING	SHEET NO: 450	E



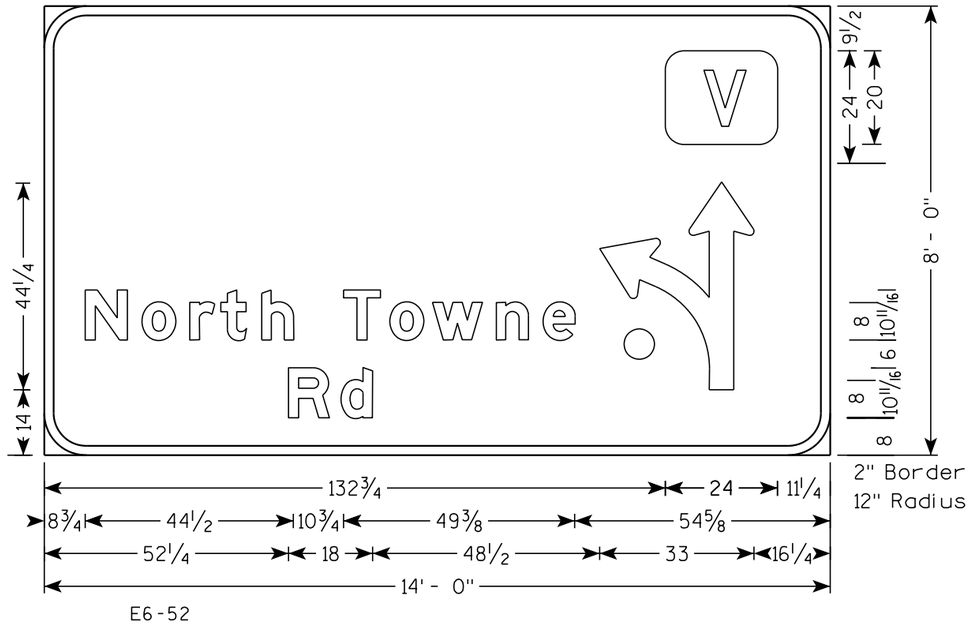
E6-54R

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
   Message - White
3. Message Series - E Modified except as noted
4. Colors for shields and cardinals shall be according to the applicable route marker specifications.



E6-53



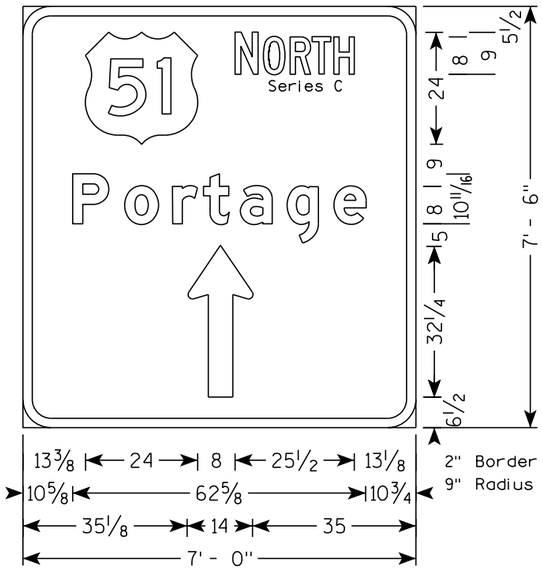
E6-52

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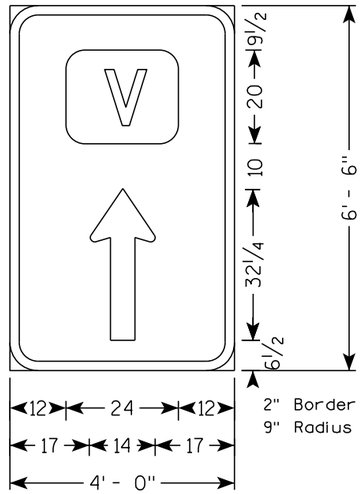
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NOTES

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
   Message - White
3. Message Series - E Modified except as noted
4. Colors for shields and cardinals shall be according to the applicable route marker specifications.



E6-54A



E6-54A

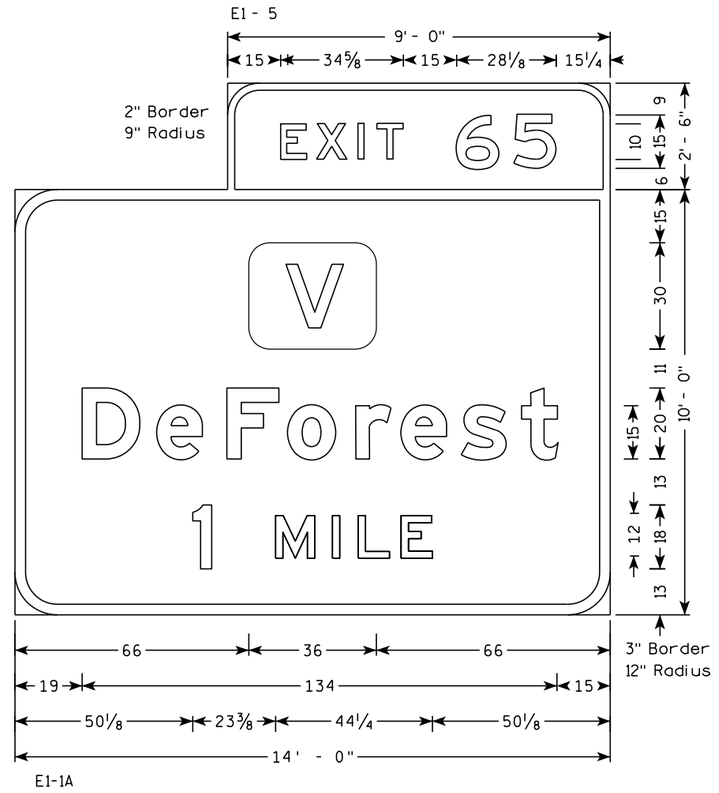
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7

PROJECT NO: 6020-02-71/72	HWY: USH 51	COUNTY: DANE	PERMANENT SIGNING	SHEET NO: 452	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
   Message - White
3. Message Series - E Modified except all Cap WORDS are Series E

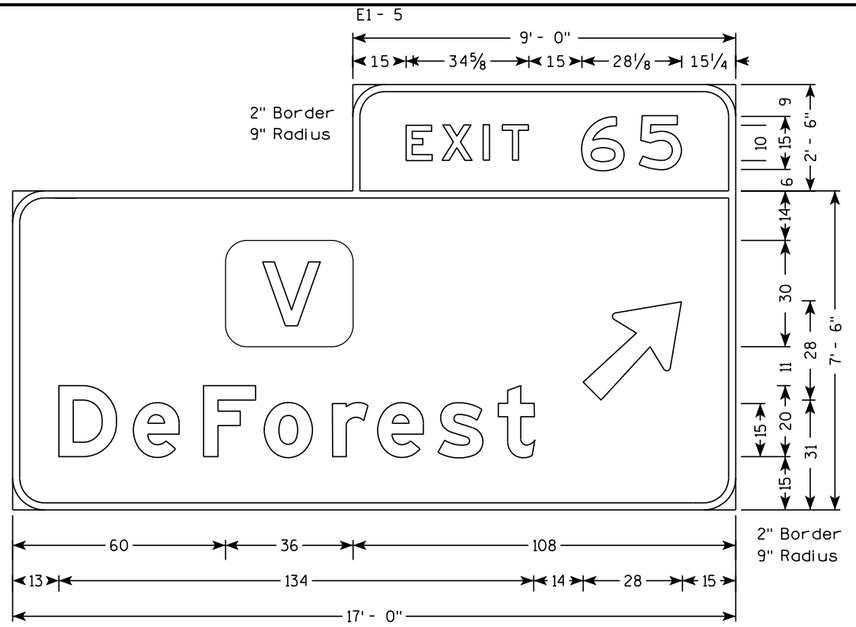


E1-1A

7

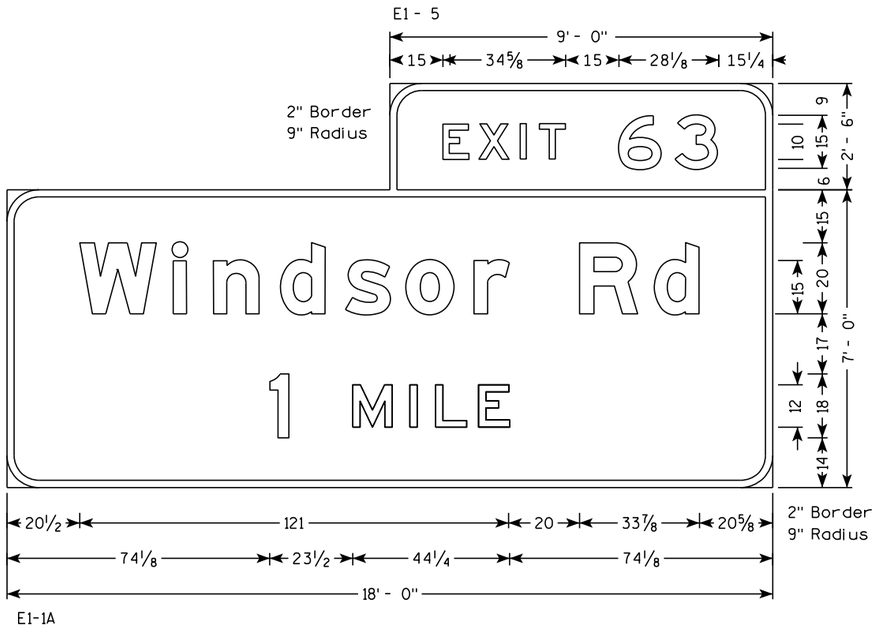
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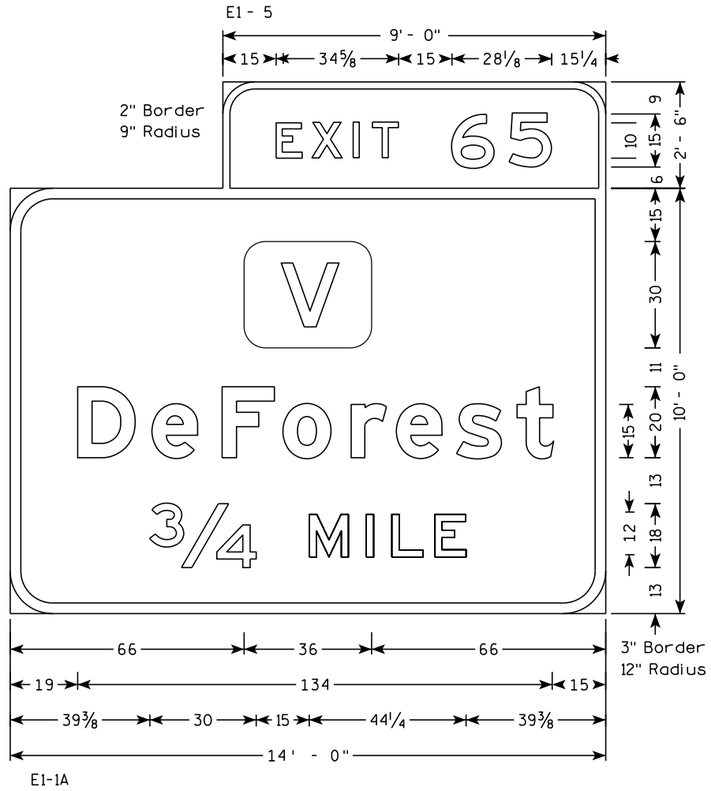
PROJECT NO: 6020-02-71	HWY: USH 51	COUNTY: DANE	PERMANENT SIGNING	SHEET NO: 453	E

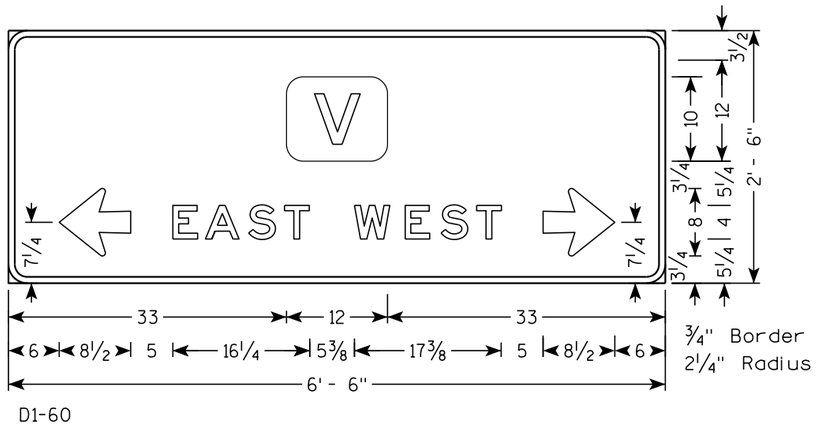


NOTES

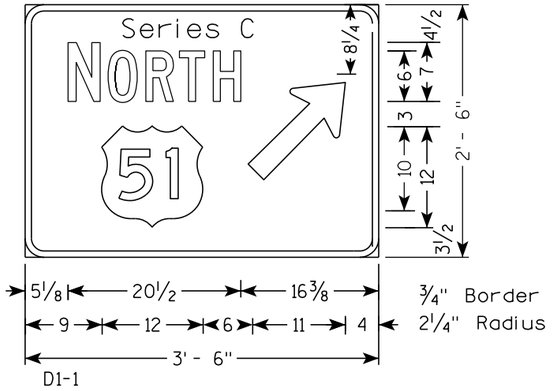
1. All Signs are Type I - Type SH Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Green
   Message - White
3. Message Series - E Modified except all Cap WORDS are Series E







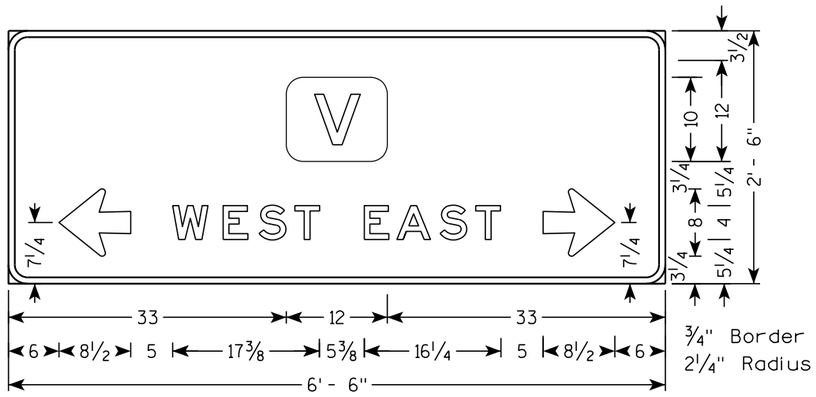
D1-60



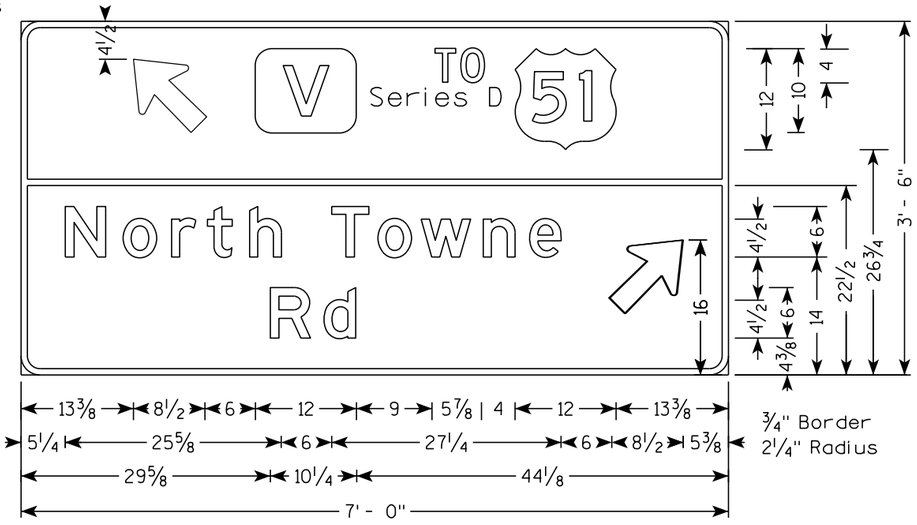
D1-1

NOTES

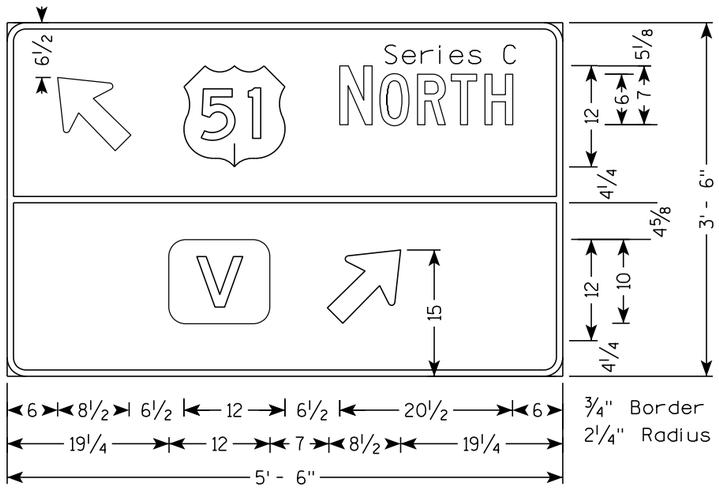
1. All Signs Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - GREEN
   Message - WHITE
3. Message Series - E except as noted



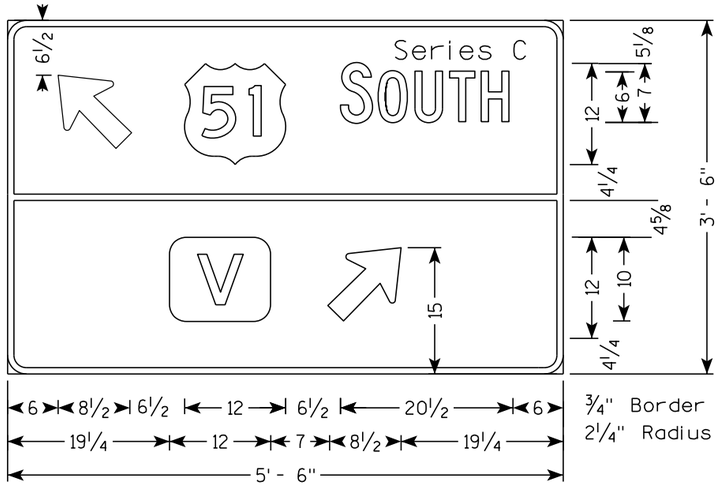
D1-60



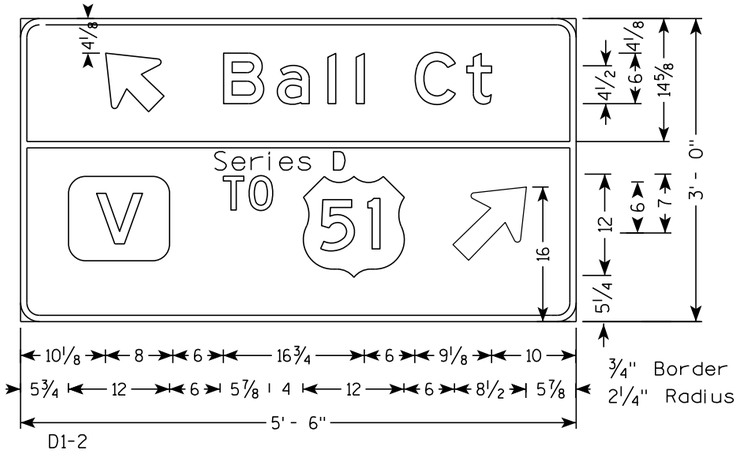
D1-3



D1-2



D1-2



D1-2

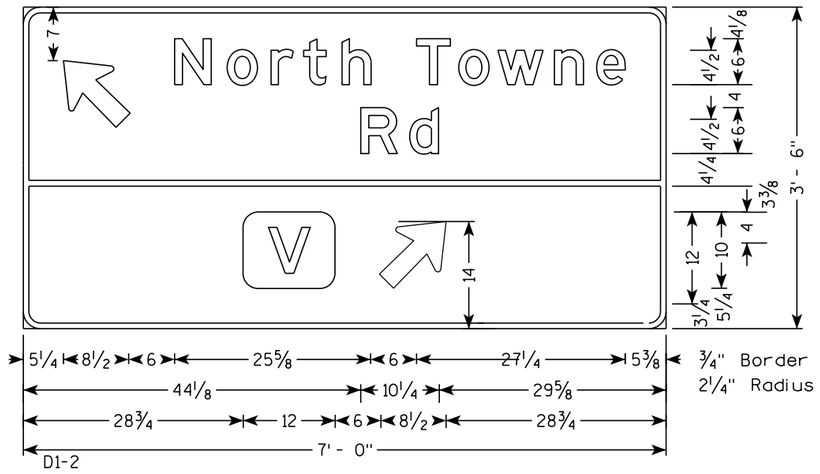
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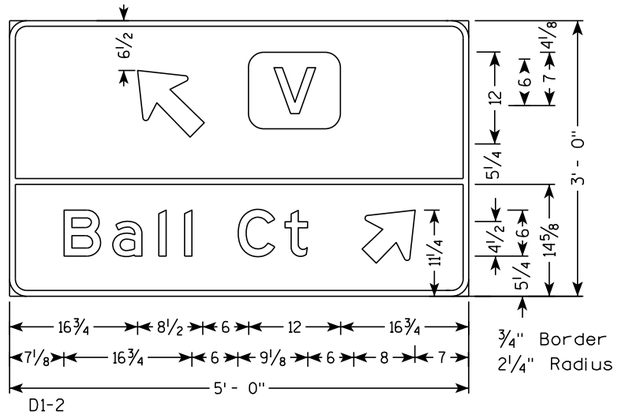
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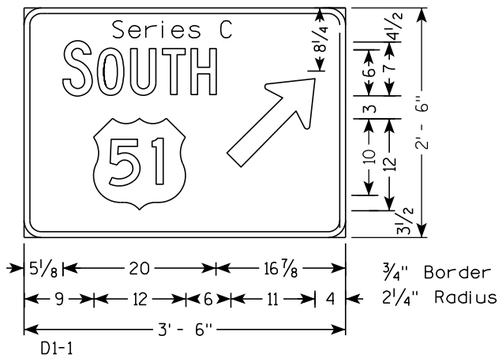
PROJECT NO: 6020-02-71/72	HWY: USH 51	COUNTY: DANE	PERMANENT SIGNING	SHEET NO: 455	E

NOTES

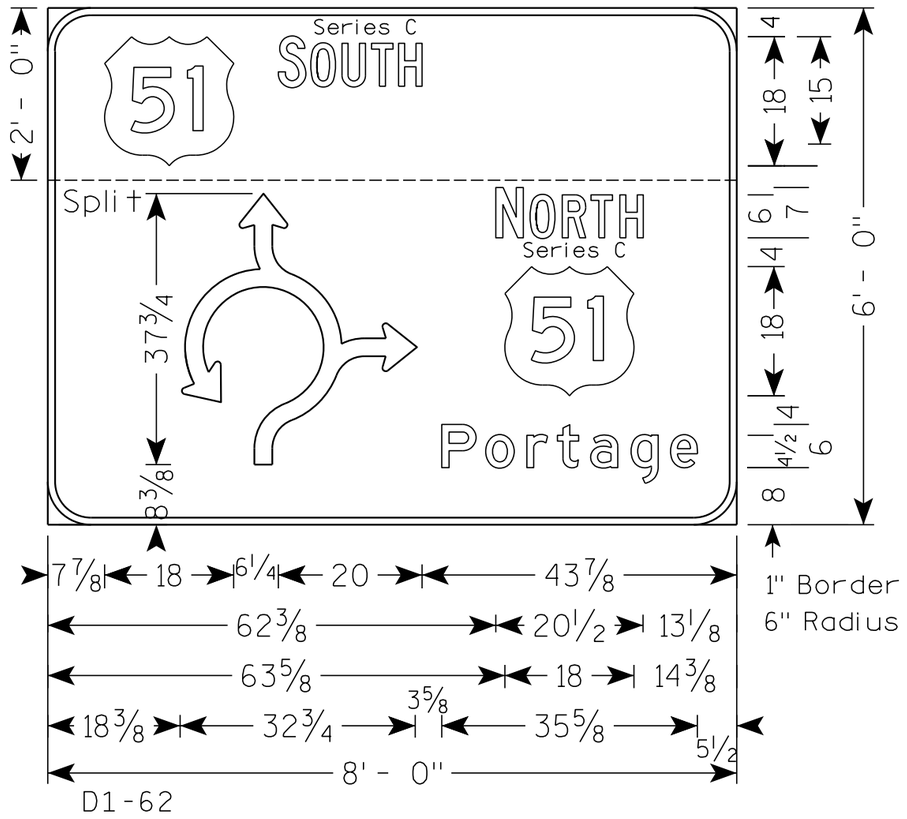
1. All Signs Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - GREEN
   Message - WHITE
3. Message Series - E except as noted







PROJECT NO: 6020-02-71/72	HWY: USH 51	COUNTY: DANE	PERMANENT SIGNING	SHEET NO: 456	E



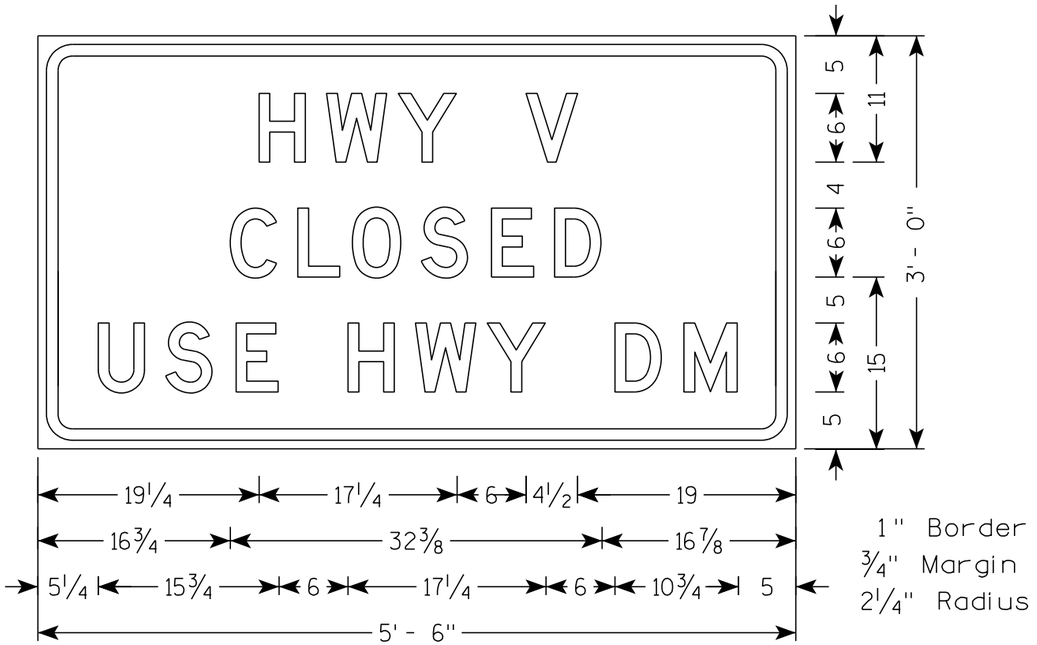
NOTES

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
4. Colors for shields and cardinals shall be according to the applicable route marker specifications.
5. Refer to Standard Plate A11-12 for Roundabout Arrow Detail Dimensions.

7

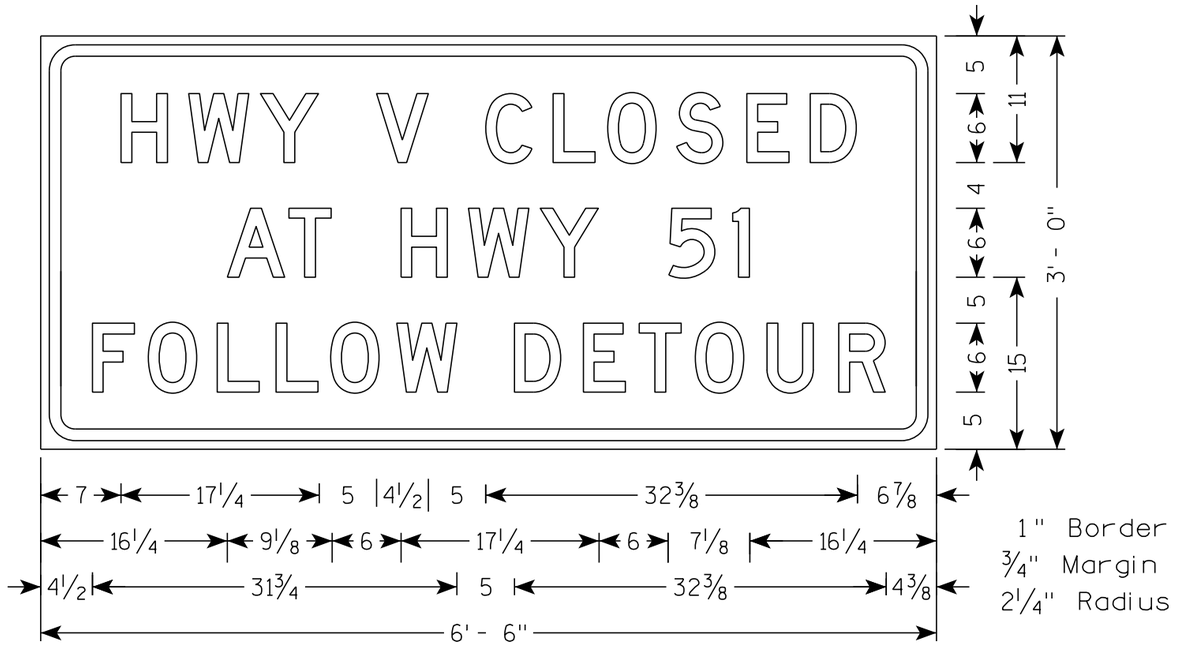
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PROJECT NO: 6020-02-71/72	HWY: USH 51	COUNTY: DANE	PERMANENT SIGNING	SHEET NO: 457	E



NOTES

1. Signs are Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - ORANGE
   Message - BLACK
3. Message Series - D



7

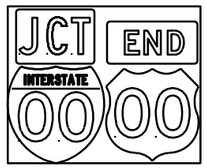
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PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	TEMPORARYY SIGNING	SHEET NO: 458	E

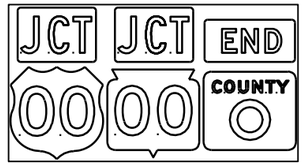
TYPICAL ASSEMBLIES



J1-1



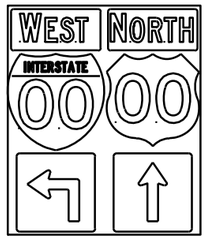
J1-2



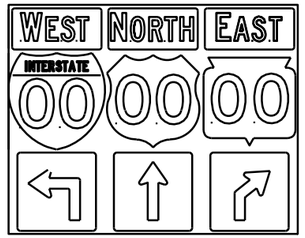
J1-3



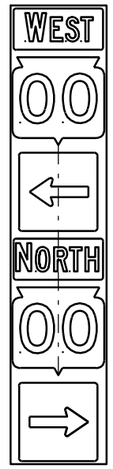
J2-1



J2-2

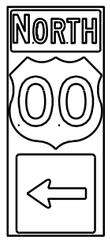


J2-3

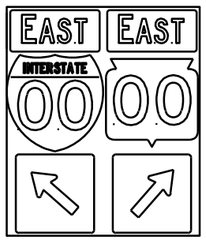


JV

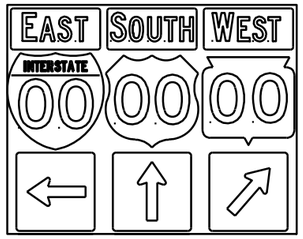
(Typical Vertical J-Assembly
See Note 10 and 11)



J3-1



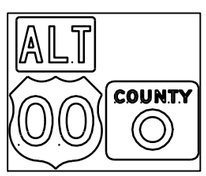
J3-2



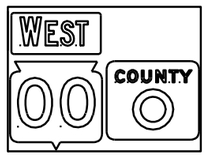
J3-3



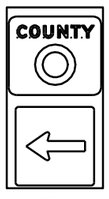
J4-1



J4-2



J4-2



J13-1



J12-1



J32-1



J33-1



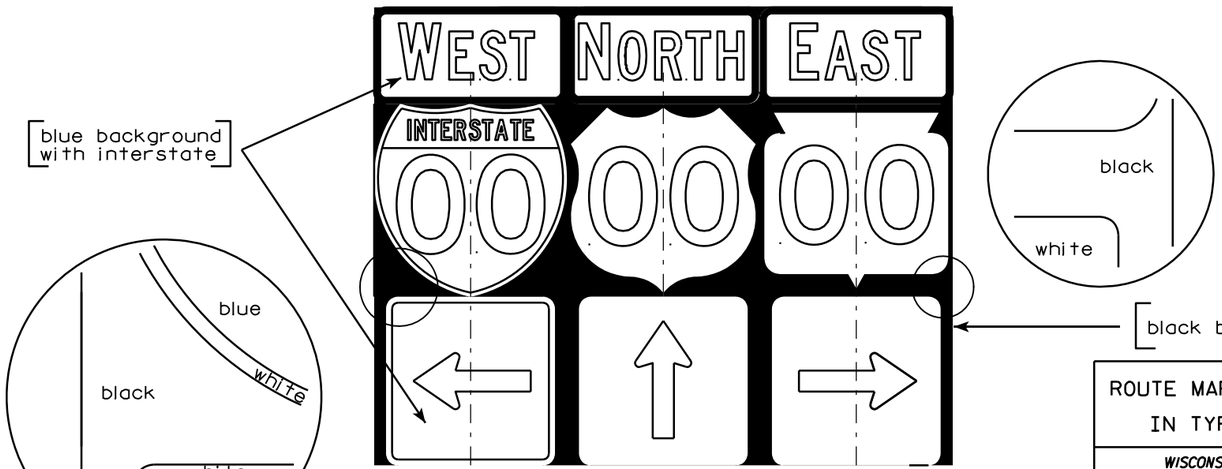
J23-1



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 or rounded if base material is plywood. If base material is metal the corners shall be rounded.
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.
10. All Vertical J Assemblies are given a Sign Code of JV
11. For JV Assemblies that have a mixture of interstate and non interstate shields, arrows and cardinals shall be white on blue.



ROUTE MARKERS & COMPONENTS IN TYPICAL ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/25/13 PLATE NO. A2-1S.7

PROJECT NO:

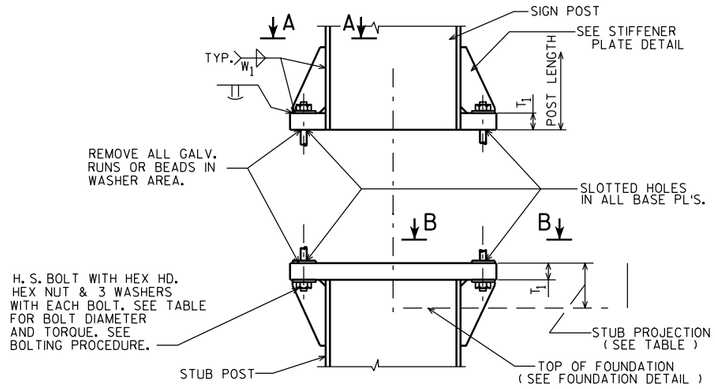
SHEET NO: 459 E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A21S.DGN PLOT DATE : 25-MAR-2013 11:33 PLOT BY : mscsja PLOT NAME :

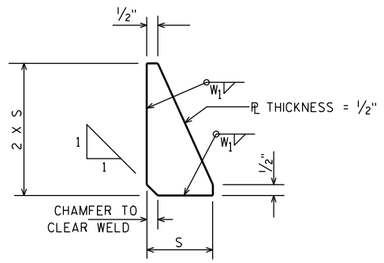
WISDOT/CADDS SHEET 42

7

7

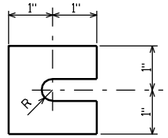


SIGN POST AND STUB POST ELEVATION



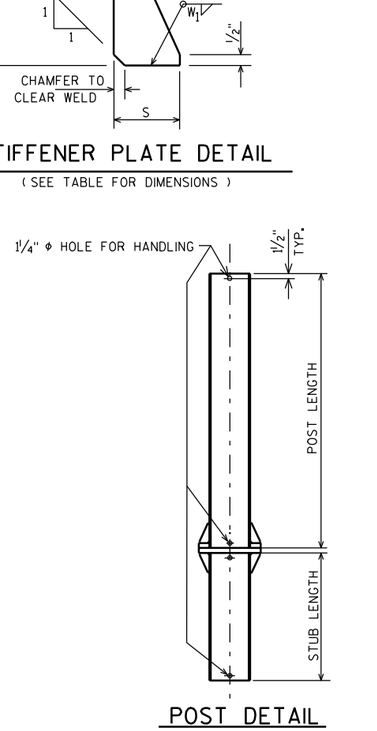
STIFFENER PLATE DETAIL

(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



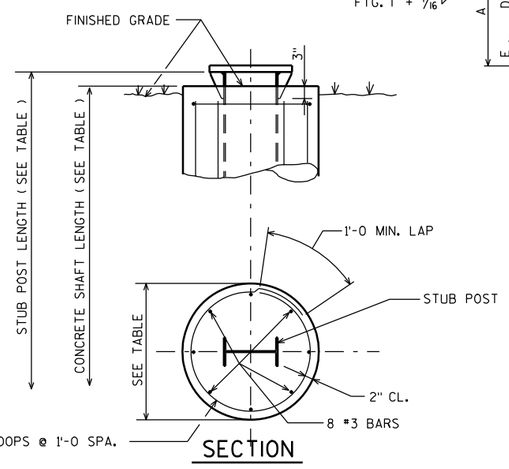
POST DETAIL

	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

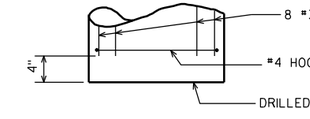
⑦

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

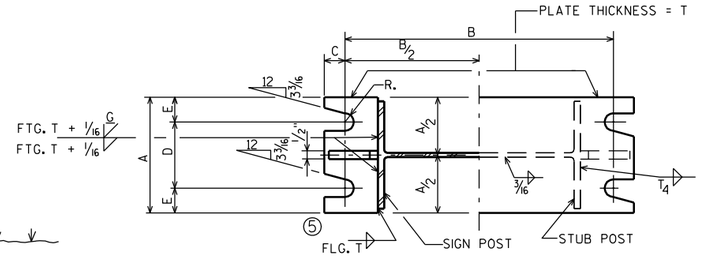
⑦



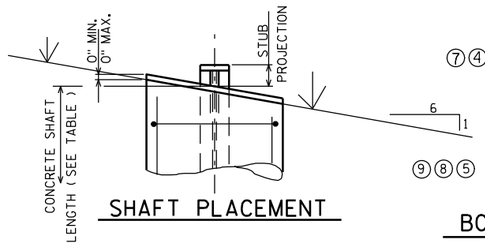
SECTION



FOUNDATION DETAIL



SECTION A-A SECTION B-B



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.

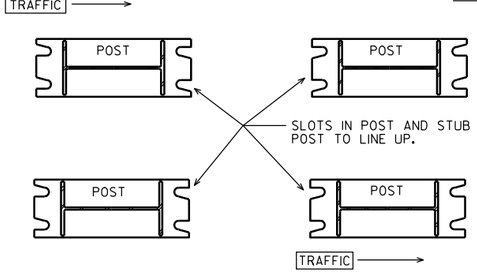
GENERAL NOTES

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: 460 | E

VERTICAL DIMENSION ⇨

HORIZONTAL DIMENSION ⇩

Type "A" (2 Posts) 1.2 CY Conc. 68 LBs Bar Steel

⇩ \ ⇨	2.5 ft.	3 ft.	3.5 ft.	4 ft.	4.5 ft.	5 ft.	5.5 ft.	6 ft.	6.5 ft.	7 ft.	7.5 ft.	8 ft.	8.5 ft.	9 ft.	9.5 ft.	10 ft.	10.5 ft.	11 ft.	11.5 ft.	12 ft.	12.5 ft.	13 ft.	13.5 ft.	14 ft.	14.5 ft.	15 ft.	15.5 ft.	16 ft.
22 ft.	55 Sq. Ft	66 Sq. Ft	77 Sq. Ft	88 Sq. Ft	99 Sq. Ft	110 Sq. Ft	121 Sq. Ft	132 Sq. Ft	143 Sq. Ft	154 Sq. Ft	165 Sq. Ft	176 Sq. Ft	187 Sq. Ft	198 Sq. Ft	209 Sq. Ft	220 Sq. Ft	231 Sq. Ft	242 Sq. Ft	253 Sq. Ft	264 Sq. Ft	275 Sq. Ft	286 Sq. Ft	297 Sq. Ft	308 Sq. Ft	319 Sq. Ft	330 Sq. Ft	341 Sq. Ft	352 Sq. Ft
23 ft.	57.5 Sq. Ft	69 Sq. Ft	80.5 Sq. Ft	92 Sq. Ft	103.5 Sq. Ft	115 Sq. Ft	126.5 Sq. Ft	138 Sq. Ft	149.5 Sq. Ft	161 Sq. Ft	172.5 Sq. Ft	184 Sq. Ft	195.5 Sq. Ft	207 Sq. Ft	218.5 Sq. Ft	230 Sq. Ft	241.5 Sq. Ft	253 Sq. Ft	264.5 Sq. Ft	276 Sq. Ft	287.5 Sq. Ft	299 Sq. Ft	310.5 Sq. Ft	322 Sq. Ft	333.5 Sq. Ft	345 Sq. Ft	356.5 Sq. Ft	368 Sq. Ft
24 ft.	60 Sq. Ft	72 Sq. Ft	84 Sq. Ft	96 Sq. Ft	108 Sq. Ft	120 Sq. Ft	132 Sq. Ft	144 Sq. Ft	156 Sq. Ft	168 Sq. Ft	180 Sq. Ft	192 Sq. Ft	204 Sq. Ft	216 Sq. Ft	228 Sq. Ft	240 Sq. Ft	252 Sq. Ft	264 Sq. Ft	276 Sq. Ft	288 Sq. Ft	300 Sq. Ft	312 Sq. Ft	324 Sq. Ft	336 Sq. Ft	348 Sq. Ft	360 Sq. Ft	372 Sq. Ft	384 Sq. Ft
25 ft.	62.5 Sq. Ft	75 Sq. Ft	87.5 Sq. Ft	100 Sq. Ft	112.5 Sq. Ft	125 Sq. Ft	137.5 Sq. Ft	150 Sq. Ft	162.5 Sq. Ft	175 Sq. Ft	187.5 Sq. Ft	200 Sq. Ft	212.5 Sq. Ft	225 Sq. Ft	237.5 Sq. Ft	250 Sq. Ft	262.5 Sq. Ft	275 Sq. Ft	287.5 Sq. Ft	300 Sq. Ft	312.5 Sq. Ft	325 Sq. Ft	337.5 Sq. Ft	350 Sq. Ft	362.5 Sq. Ft	375 Sq. Ft	387.5 Sq. Ft	400 Sq. Ft
26 ft.	65 Sq. Ft	78 Sq. Ft	91 Sq. Ft	104 Sq. Ft	117 Sq. Ft	130 Sq. Ft	143 Sq. Ft	156 Sq. Ft	169 Sq. Ft	182 Sq. Ft	195 Sq. Ft	208 Sq. Ft	221 Sq. Ft	234 Sq. Ft	247 Sq. Ft	260 Sq. Ft	273 Sq. Ft	286 Sq. Ft	299 Sq. Ft	312 Sq. Ft	325 Sq. Ft	338 Sq. Ft	351 Sq. Ft	364 Sq. Ft	377 Sq. Ft	390 Sq. Ft	403 Sq. Ft	416 Sq. Ft
27 ft.	67.5 Sq. Ft	81 Sq. Ft	94.5 Sq. Ft	108 Sq. Ft	121.5 Sq. Ft	135 Sq. Ft	148.5 Sq. Ft	162 Sq. Ft	175.5 Sq. Ft	189 Sq. Ft	202.5 Sq. Ft	216 Sq. Ft	229.5 Sq. Ft	243 Sq. Ft	256.5 Sq. Ft	270 Sq. Ft	283.5 Sq. Ft	297 Sq. Ft	310.5 Sq. Ft	324 Sq. Ft	337.5 Sq. Ft	351 Sq. Ft	364.5 Sq. Ft	378 Sq. Ft	391.5 Sq. Ft	405 Sq. Ft	418.5 Sq. Ft	432 Sq. Ft
28 ft.	70 Sq. Ft	84 Sq. Ft	98 Sq. Ft	112 Sq. Ft	126 Sq. Ft	140 Sq. Ft	154 Sq. Ft	168 Sq. Ft	182 Sq. Ft	196 Sq. Ft	210 Sq. Ft	224 Sq. Ft	238 Sq. Ft	252 Sq. Ft	266 Sq. Ft	280 Sq. Ft	294 Sq. Ft	308 Sq. Ft	322 Sq. Ft	336 Sq. Ft	350 Sq. Ft	364 Sq. Ft	378 Sq. Ft	392 Sq. Ft	406 Sq. Ft	420 Sq. Ft	434 Sq. Ft	448 Sq. Ft
29 ft.	72.5 Sq. Ft	87 Sq. Ft	101.5 Sq. Ft	116 Sq. Ft	130.5 Sq. Ft	145 Sq. Ft	159.5 Sq. Ft	174 Sq. Ft	188.5 Sq. Ft	203 Sq. Ft	217.5 Sq. Ft	232 Sq. Ft	246.5 Sq. Ft	261 Sq. Ft	275.5 Sq. Ft	290 Sq. Ft	304.5 Sq. Ft	319 Sq. Ft	333.5 Sq. Ft	348 Sq. Ft	362.5 Sq. Ft	377 Sq. Ft	391.5 Sq. Ft	406 Sq. Ft	420.5 Sq. Ft	435 Sq. Ft	449.5 Sq. Ft	464 Sq. Ft
30 ft.	75 Sq. Ft	90 Sq. Ft	105 Sq. Ft	120 Sq. Ft	135 Sq. Ft	150 Sq. Ft	165 Sq. Ft	180 Sq. Ft	195 Sq. Ft	210 Sq. Ft	225 Sq. Ft	240 Sq. Ft	255 Sq. Ft	270 Sq. Ft	285 Sq. Ft	300 Sq. Ft	315 Sq. Ft	330 Sq. Ft	345 Sq. Ft	360 Sq. Ft	375 Sq. Ft	390 Sq. Ft	405 Sq. Ft	420 Sq. Ft	435 Sq. Ft	450 Sq. Ft	465 Sq. Ft	480 Sq. Ft
31 ft.	77.5 Sq. Ft	93 Sq. Ft	108.5 Sq. Ft	124 Sq. Ft	139.5 Sq. Ft	155 Sq. Ft	170.5 Sq. Ft	186 Sq. Ft	201.5 Sq. Ft	217 Sq. Ft	232.5 Sq. Ft	248 Sq. Ft	263.5 Sq. Ft	279 Sq. Ft	294.5 Sq. Ft	310 Sq. Ft	325.5 Sq. Ft	341 Sq. Ft	356.5 Sq. Ft	372 Sq. Ft	387.5 Sq. Ft	403 Sq. Ft	418.5 Sq. Ft	434 Sq. Ft	449.5 Sq. Ft	465 Sq. Ft	480.5 Sq. Ft	496 Sq. Ft
32 ft.	80 Sq. Ft	96 Sq. Ft	112 Sq. Ft	128 Sq. Ft	144 Sq. Ft	160 Sq. Ft	176 Sq. Ft	192 Sq. Ft	208 Sq. Ft	224 Sq. Ft	240 Sq. Ft	256 Sq. Ft	272 Sq. Ft	288 Sq. Ft	304 Sq. Ft	320 Sq. Ft	336 Sq. Ft	352 Sq. Ft	368 Sq. Ft	384 Sq. Ft	400 Sq. Ft	416 Sq. Ft	432 Sq. Ft	448 Sq. Ft	464 Sq. Ft	480 Sq. Ft	496 Sq. Ft	512 Sq. Ft
33 ft.	82.5 Sq. Ft	99 Sq. Ft	115.5 Sq. Ft	132 Sq. Ft	148.5 Sq. Ft	165 Sq. Ft	181.5 Sq. Ft	198 Sq. Ft	214.5 Sq. Ft	231 Sq. Ft	247.5 Sq. Ft	264 Sq. Ft	280.5 Sq. Ft	297 Sq. Ft	313.5 Sq. Ft	330 Sq. Ft	346.5 Sq. Ft	363 Sq. Ft	379.5 Sq. Ft	396 Sq. Ft	412.5 Sq. Ft	429 Sq. Ft	445.5 Sq. Ft	462 Sq. Ft	478.5 Sq. Ft	495 Sq. Ft	511.5 Sq. Ft	528 Sq. Ft
34 ft.	85 Sq. Ft	102 Sq. Ft	119 Sq. Ft	136 Sq. Ft	153 Sq. Ft	170 Sq. Ft	187 Sq. Ft	204 Sq. Ft	221 Sq. Ft	238 Sq. Ft	255 Sq. Ft	272 Sq. Ft	289 Sq. Ft	306 Sq. Ft	323 Sq. Ft	340 Sq. Ft	357 Sq. Ft	374 Sq. Ft	391 Sq. Ft	408 Sq. Ft	425 Sq. Ft	442 Sq. Ft	459 Sq. Ft	476 Sq. Ft	493 Sq. Ft	510 Sq. Ft	527 Sq. Ft	544 Sq. Ft
35 ft.	87.5 Sq. Ft	105 Sq. Ft	122.5 Sq. Ft	140 Sq. Ft	157.5 Sq. Ft	175 Sq. Ft	192.5 Sq. Ft	210 Sq. Ft	227.5 Sq. Ft	245 Sq. Ft	262.5 Sq. Ft	280 Sq. Ft	297.5 Sq. Ft	315 Sq. Ft	332.5 Sq. Ft	350 Sq. Ft	367.5 Sq. Ft	385 Sq. Ft	402.5 Sq. Ft	420 Sq. Ft	437.5 Sq. Ft	455 Sq. Ft	472.5 Sq. Ft	490 Sq. Ft	507.5 Sq. Ft	525 Sq. Ft	542.5 Sq. Ft	560 Sq. Ft
36 ft.	90 Sq. Ft	108 Sq. Ft	126 Sq. Ft	144 Sq. Ft	162 Sq. Ft	180 Sq. Ft	198 Sq. Ft	216 Sq. Ft	234 Sq. Ft	252 Sq. Ft	270 Sq. Ft	288 Sq. Ft	306 Sq. Ft	324 Sq. Ft	342 Sq. Ft	360 Sq. Ft	378 Sq. Ft	396 Sq. Ft	414 Sq. Ft	432 Sq. Ft	450 Sq. Ft	468 Sq. Ft	486 Sq. Ft	504 Sq. Ft	522 Sq. Ft	540 Sq. Ft	558 Sq. Ft	576 Sq. Ft

Type "B" (2 Posts)
1.6 CY Conc.
98 LBs Bar Steel

Type "C" (2 Posts)
1.8 CY Conc.
100 LBs Bar Steel

Type "D" (2 Posts)
1.8 CY Conc.
112 LBs Bar Steel

Type "C" (3 Posts)
2.7 CY Conc.
150 LBs Bar Steel

Type "D" (3 Posts)
2.7 CY Conc.
168 LBs Bar Steel

STEEL POST SIZE

"A" - W10" x 12"
"B" - W12" x 16"
"C" - W12" x 19"
"D" - W12 x 22"

DETERMINATION OF HIGH STRENGTH STRUCTURAL STEEL SIGN SUPPORT TYPE

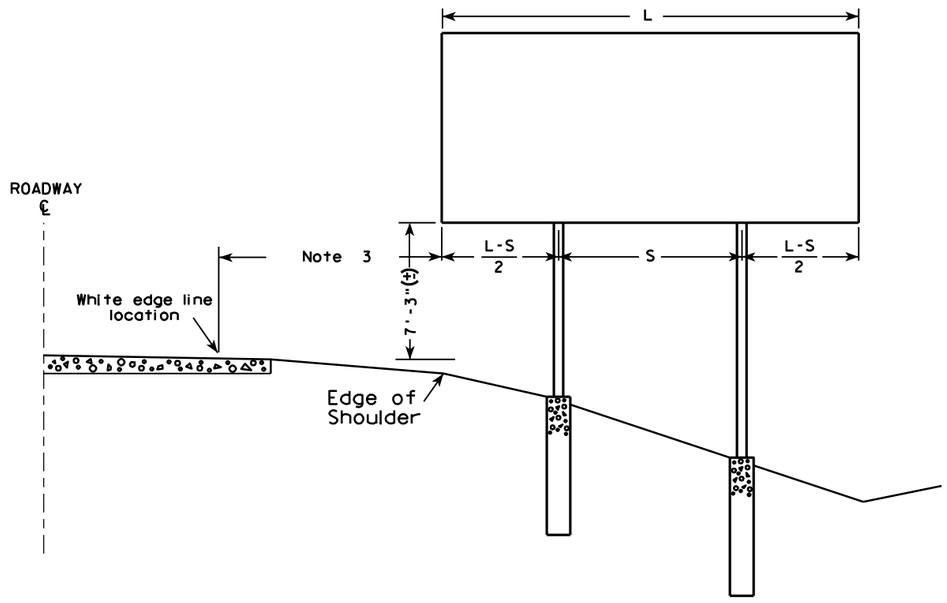
WISCONSIN DEPT OF TRANSPORTATION

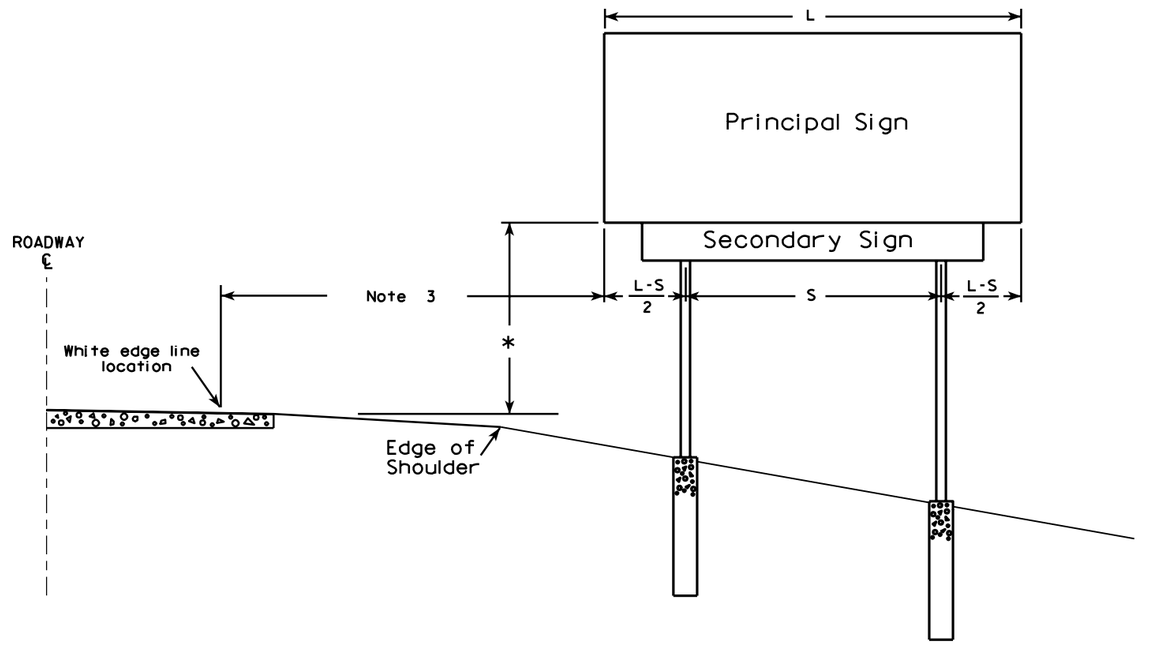
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/5/10 PLATE NO. A3-3.2

PROJECT NO: | SHEET NO: E

FILE NAME : C:\users\PROJECTS\tr_stdplate\A33.DGN PLOT DATE : 05-MAR-2010 10:07 PLOT BY : ditjph





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"(±).

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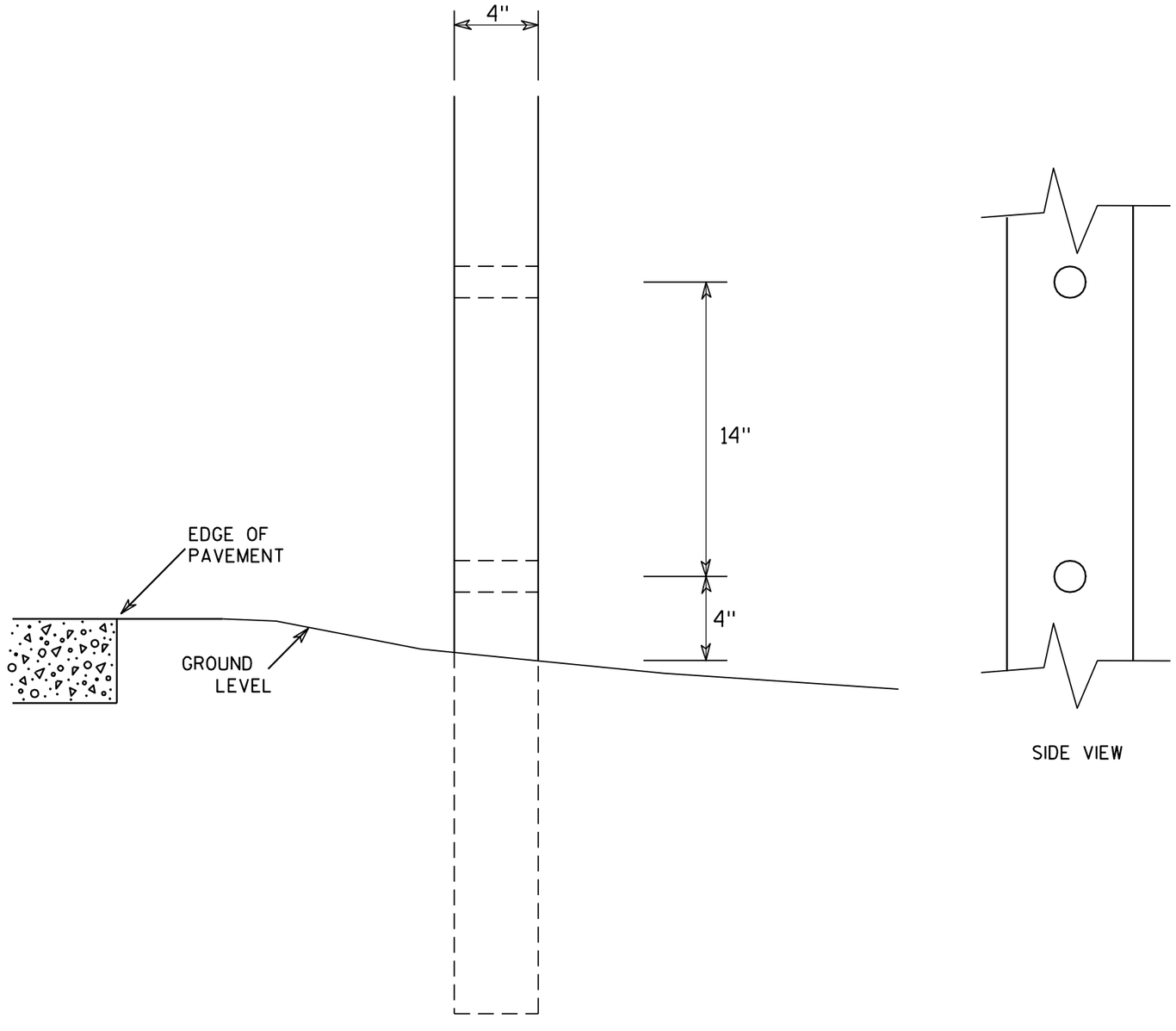
TYPICAL INSTALLATION
OF TYPE I SIGNS

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: 462	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.

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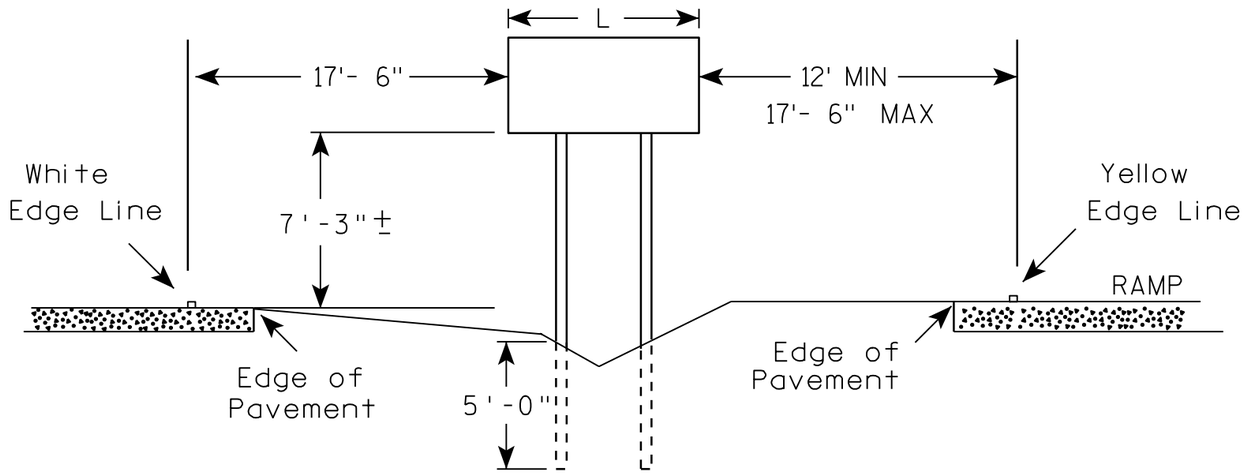
4 X 6 WOOD POST MODIFICATIONS

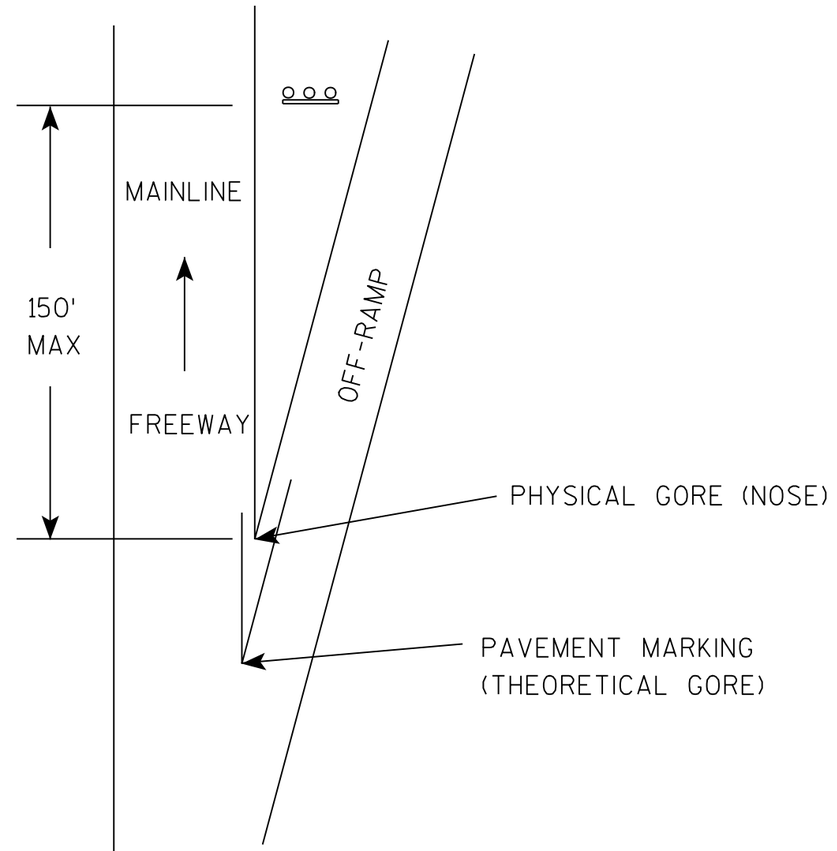
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang for State Traffic Engineer

DATE 3/27/97 PLATE NO. A4-11.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 463	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

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TYPICAL INSTALLATION
OF TYPE II SIGNS ON
WOOD POSTS IN GORE

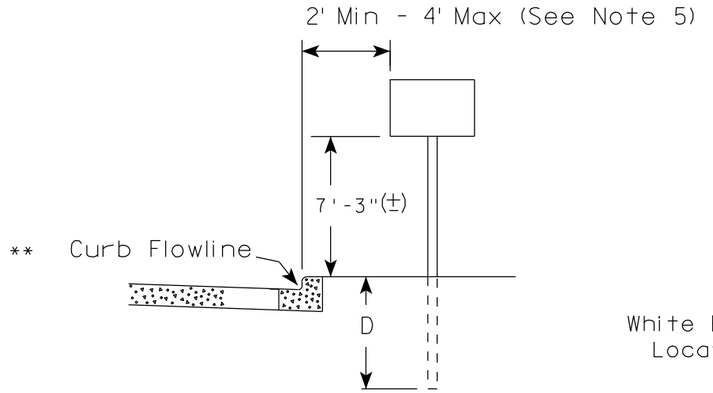
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang
for State Traffic Engineer

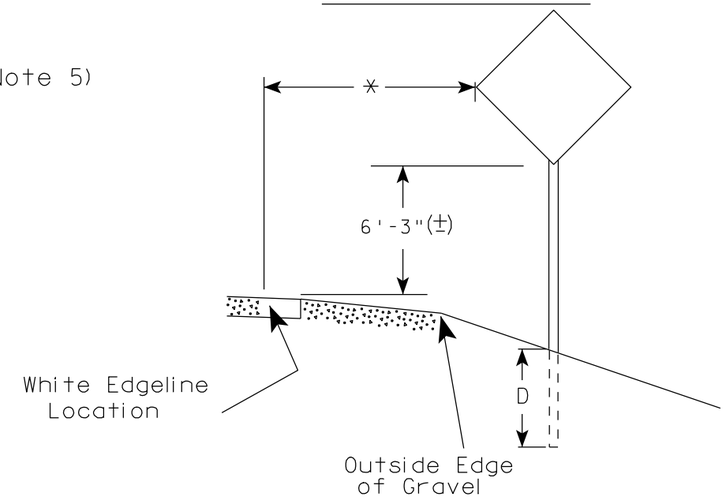
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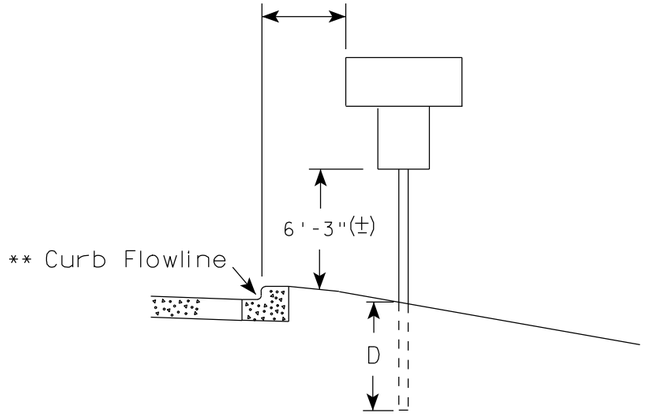
PROJECT NO:				SHEET NO: 464	E

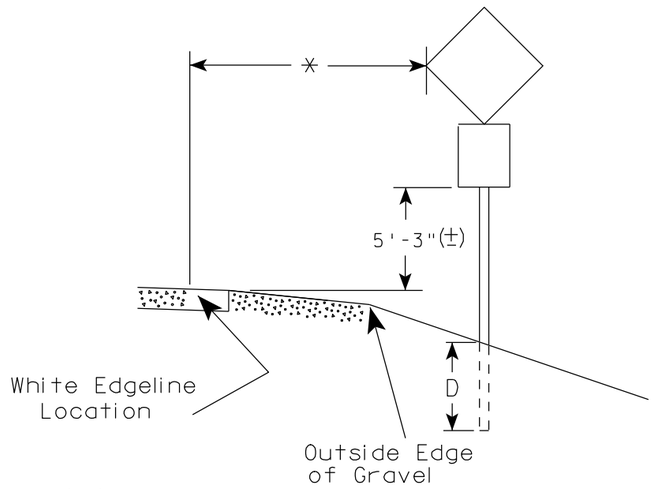
URBAN AREA



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

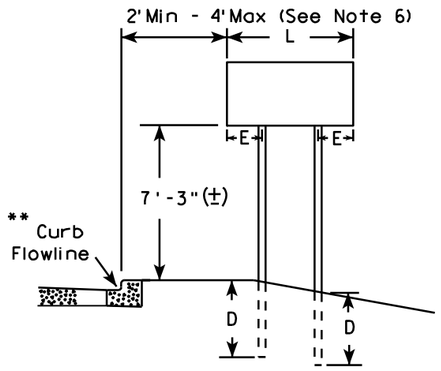
DATE 9/21/2011 PLATE NO. A4-3.16

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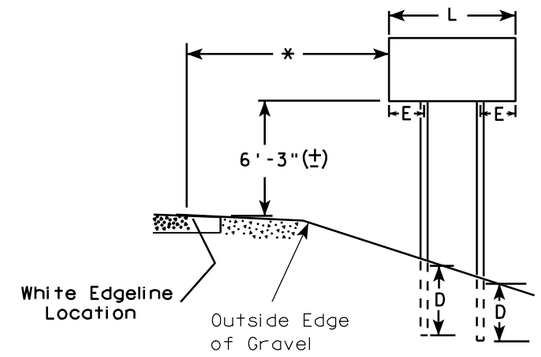
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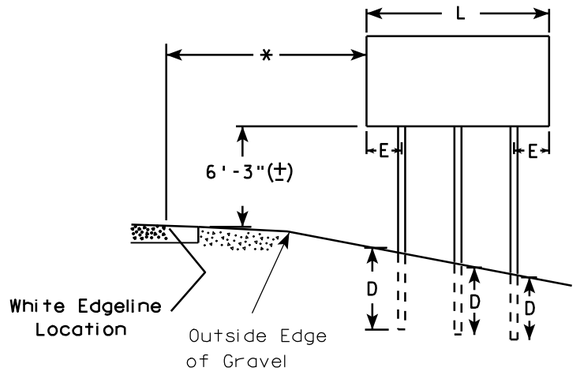
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 465	E

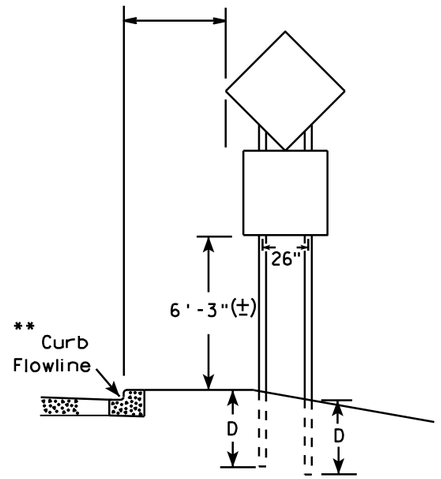
URBAN AREA



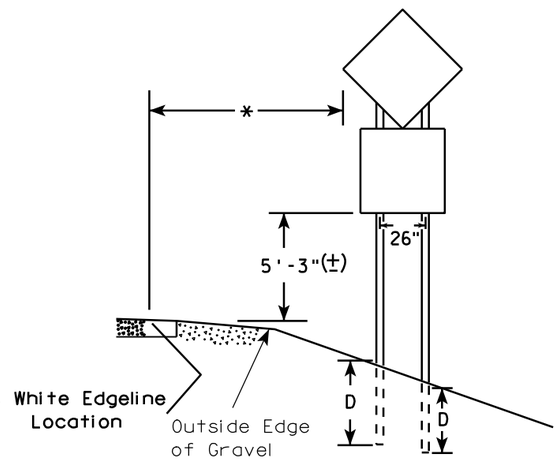
RURAL AREA (See Note 3)







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

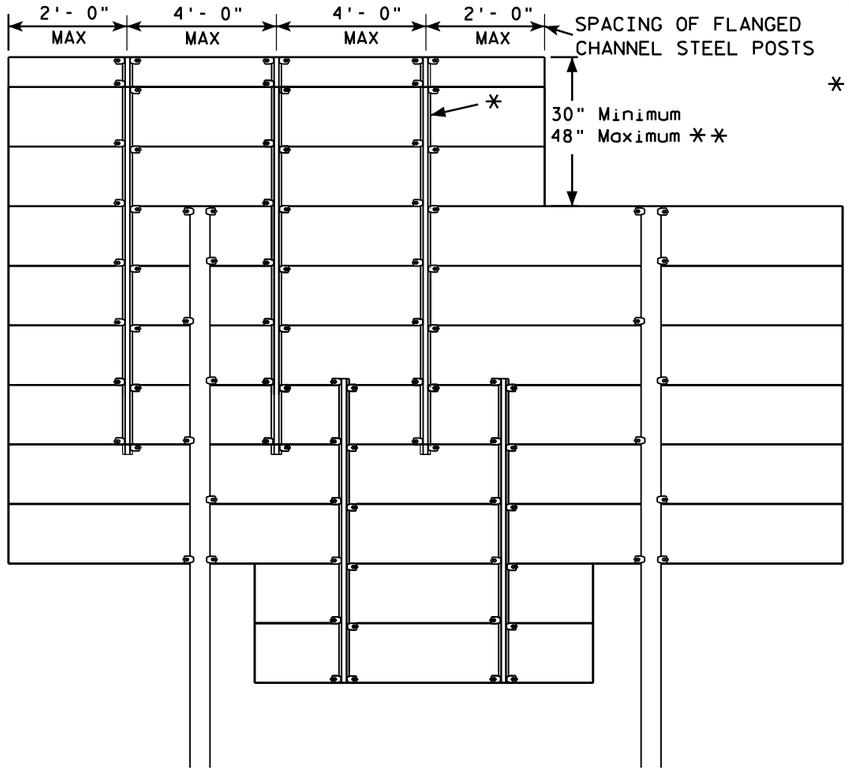
DATE 9/21/2011 PLATE NO. A4-4.11

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 466	E

7

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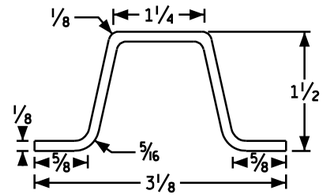
GROUND MOUNTED SIGN



*=2.00 lb/ft FLANGED CHANNEL, MIN. YIELD STRENGTH = 60,000 PSI (GRADE 60) GALVANIZED

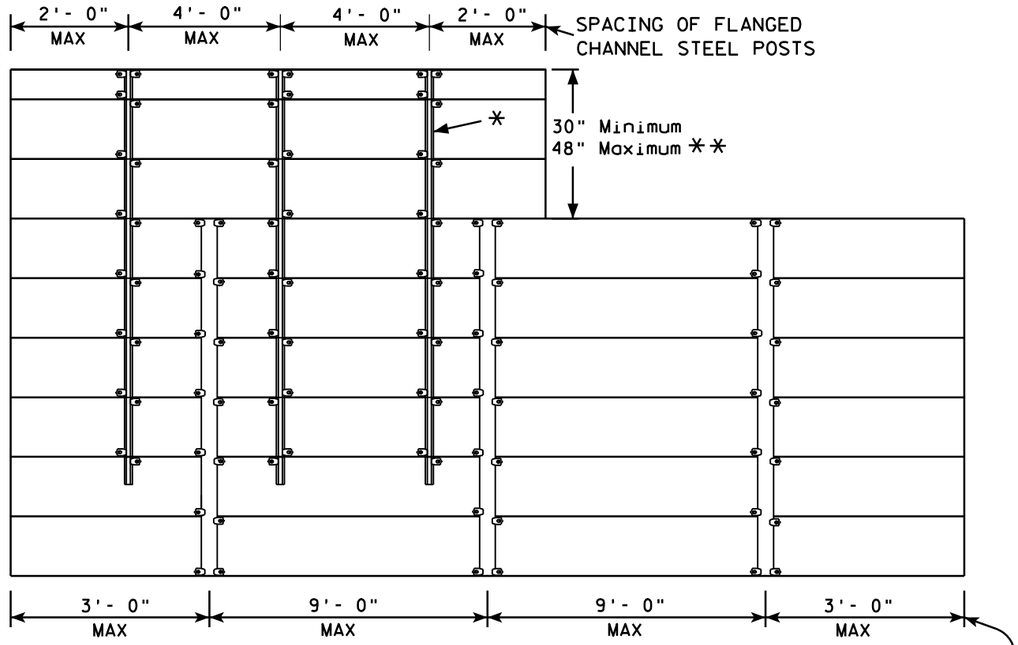
**=FOR 48" HEIGHT PANELS ON OVERHEAD STRUCTURES, ENTIRE SIGN SHALL BE CENTERED VERTICALLY ABOUT THE DEPTH OF THE TRUSS.

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

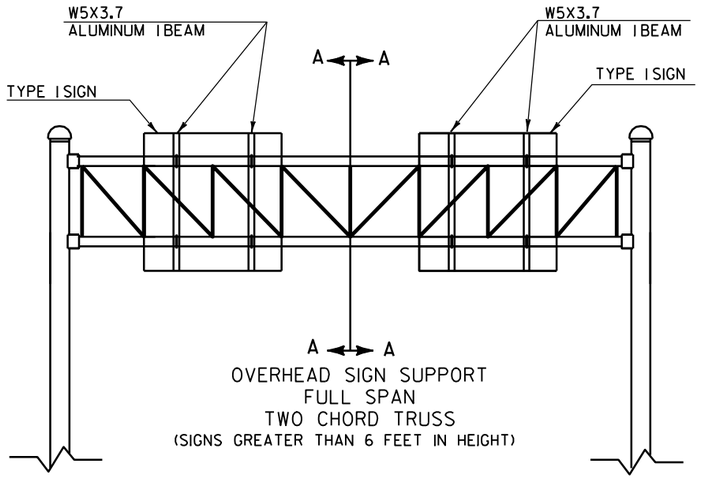
ATTACHMENT OF GUIDE SIGNS TO SUPPORTS

WISCONSIN DEPT OF TRANSPORTATION

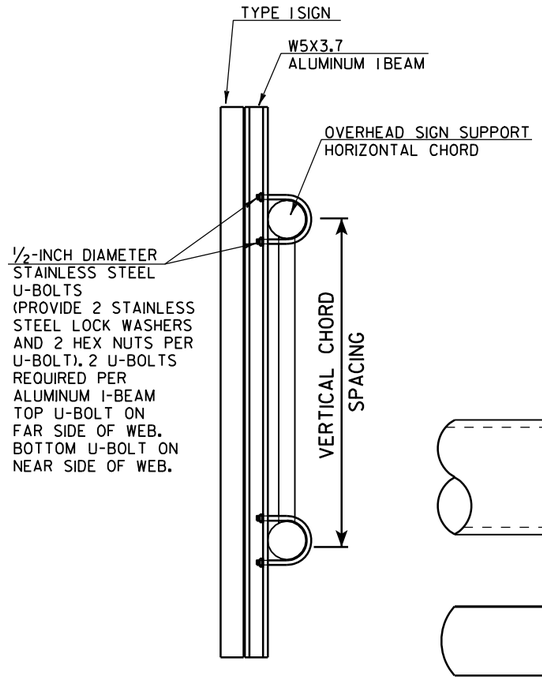
APPROVED Matthew R Rauch for State Traffic Engineer

DATE 6/7/10 PLATE NO. A4-6.11

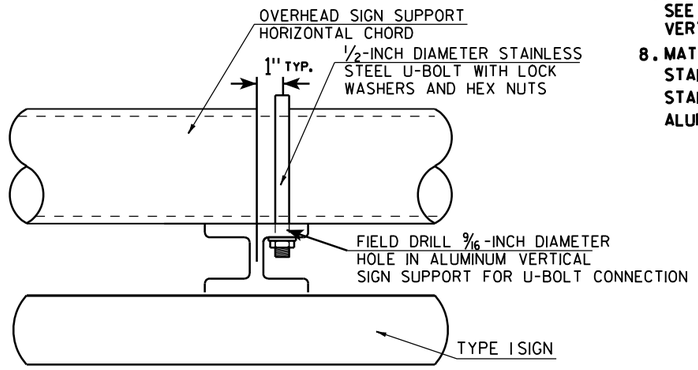
PROJECT NO:				SHEET NO: 467	E



OVERHEAD SIGN SUPPORT
FULL SPAN
TWO CHORD TRUSS
(SIGNS GREATER THAN 6 FEET IN HEIGHT)



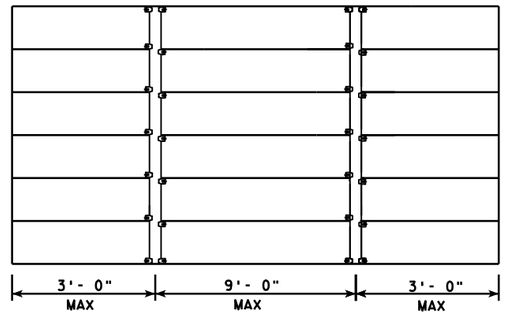
CUT SECTION A-A



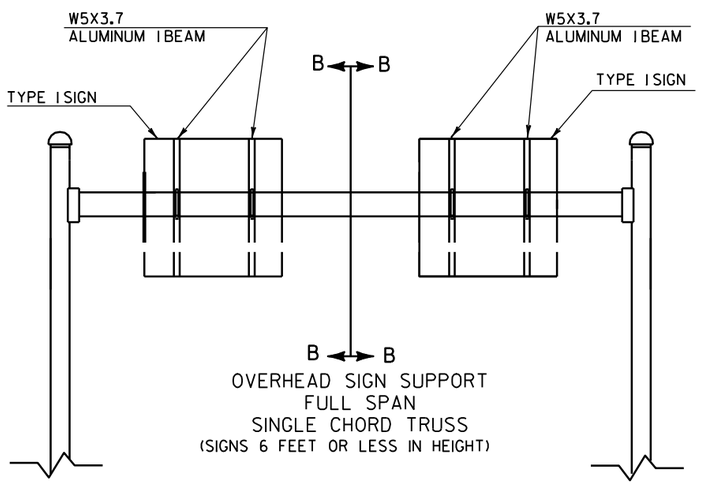
TYPICAL SIGN CONNECTION FOR
TWO CHORD TRUSS
PLAN VIEW

GENERAL NOTES

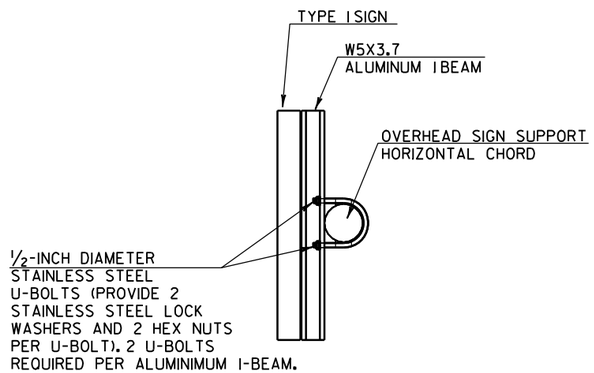
1. USE STAINLESS STEEL U-BOLTS, WASHERS, AND NUTS.
2. USE CLIPS ON EVERY EXTRUDED PANEL JOINT PER SIGN PLATE A4-6.
3. USE ALUMINUM VERTICAL SIGN SUPPORT BEAMS HAVING A 5 INCH BEAM DEPTH AND WEIGHT OF 3.7 LBS PER FOOT.
4. U-BOLTS SHALL BE STAINLESS STEEL AND MANUFACTURED TO THE PROPER SIZE TO FIT THE 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.



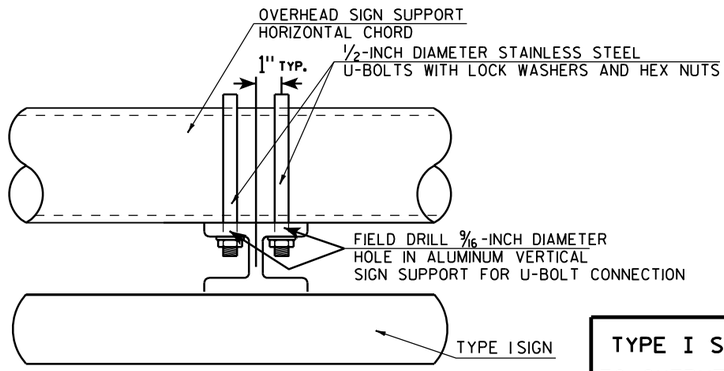
SPACING OF W5X3.7 ALUMINUM
VERTICAL SIGN SUPPORT



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

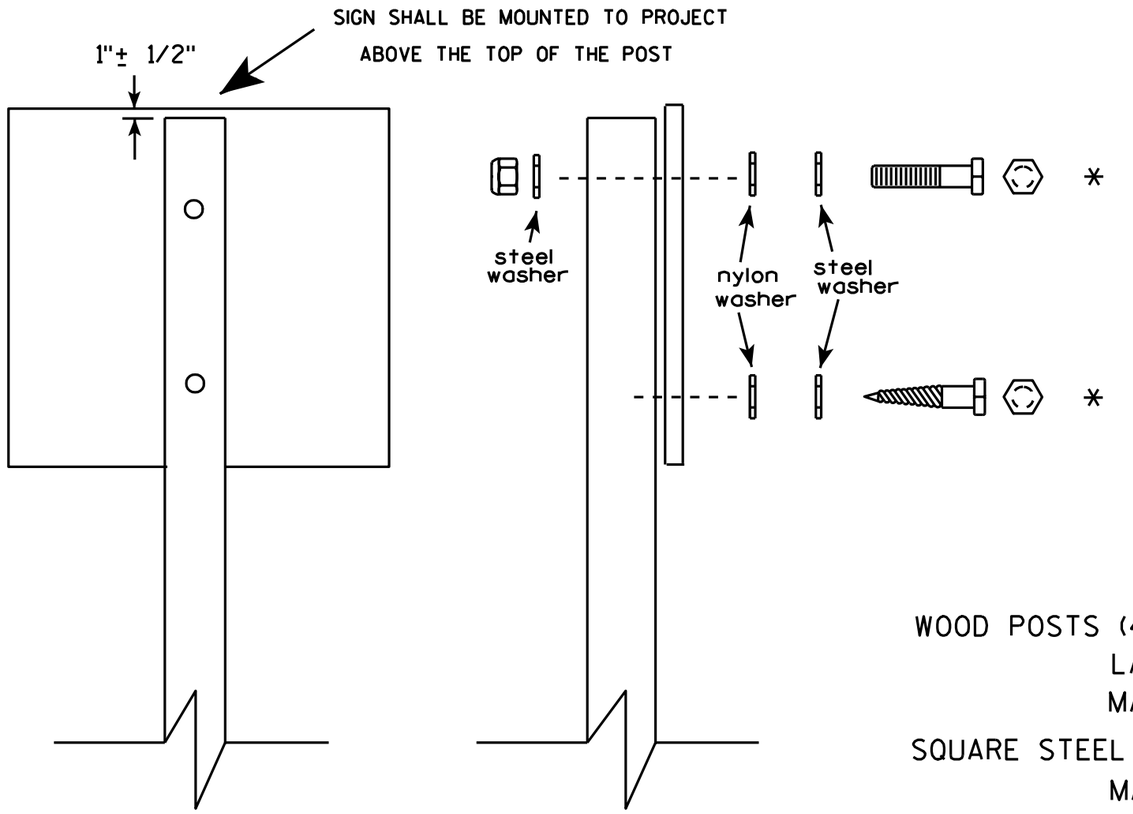
TYPE I SIGN CONNECTION TO OVERHEAD SIGN SUPPORT

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 11/12/12 PLATE NO. A4-7.3

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 468	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

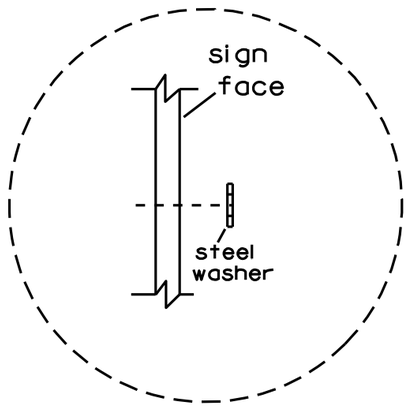
b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

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

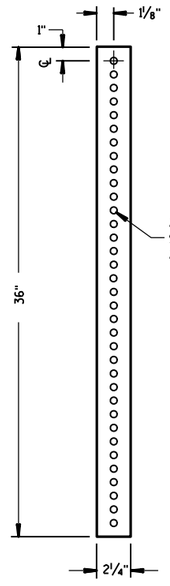
7

PROJECT NO:

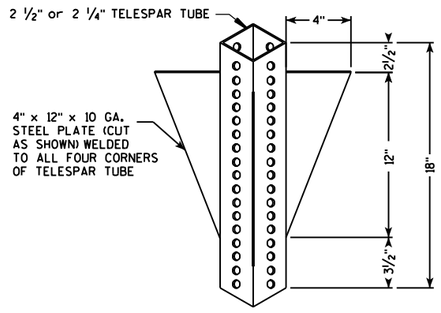
SHEET NO: 469 E

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

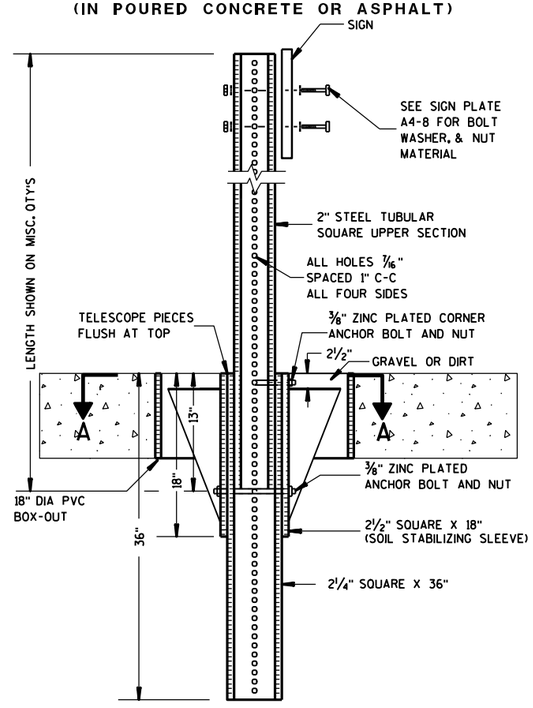
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



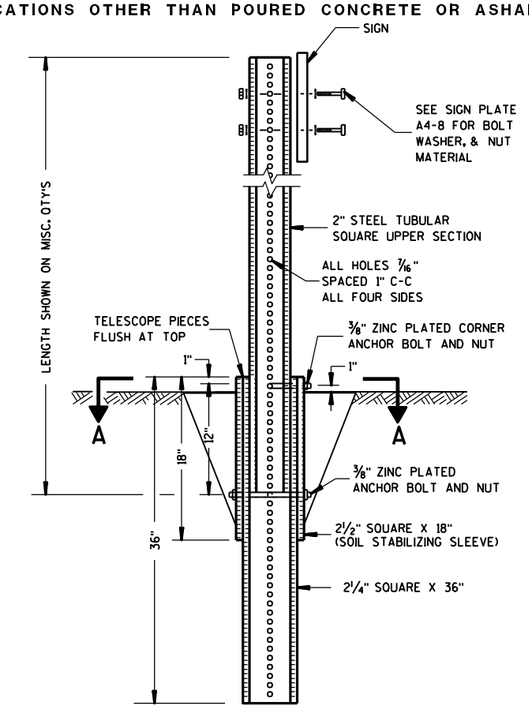
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

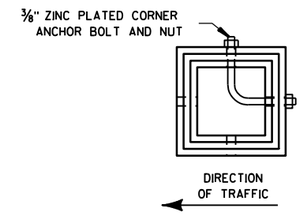


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



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

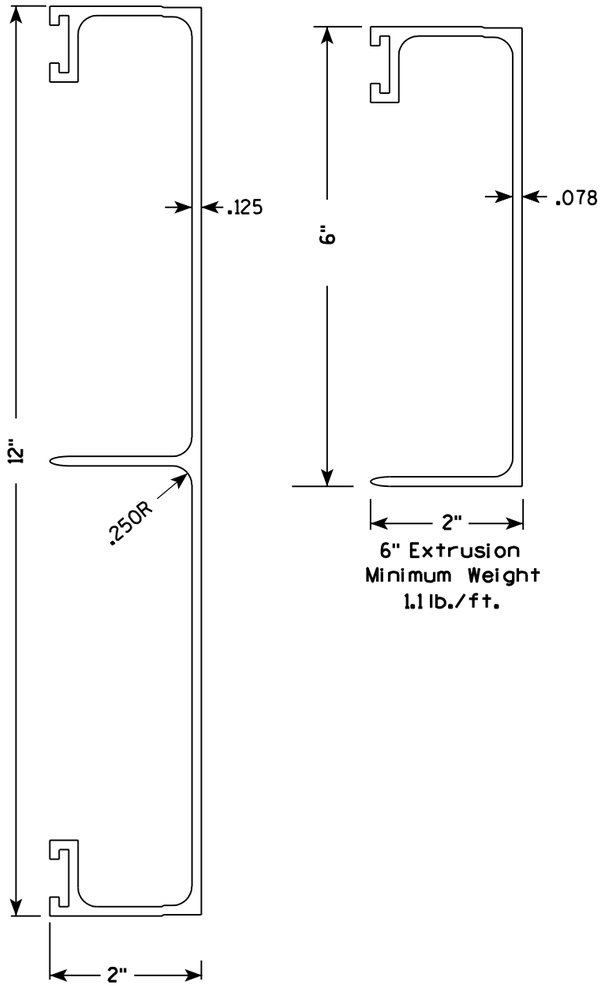
WISCONSIN DEPT OF TRANSPORTATION

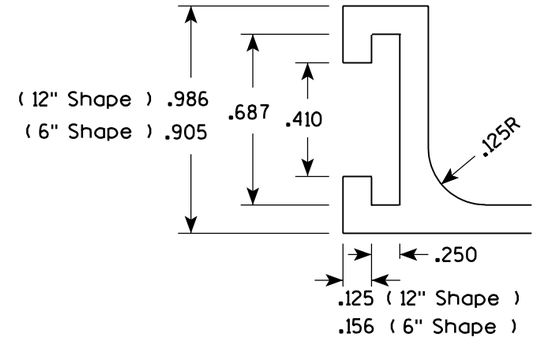
APPROVED Matthew R Rauch
for State Traffic Engineer

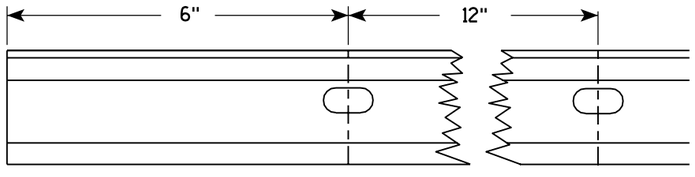
DATE 5/30/12 PLATE NO. A4-9.7

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 470	E

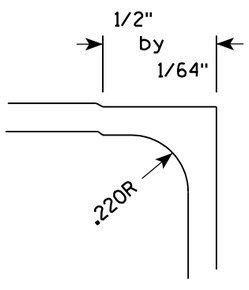
Extruded Shape







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.

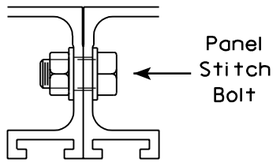


Hardware

STITCH BOLT, WASHER & NUT

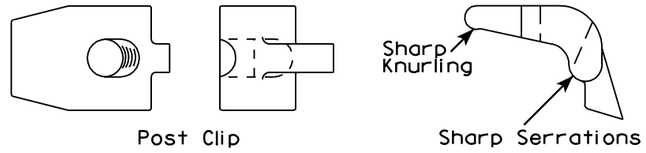
The hardware includes:

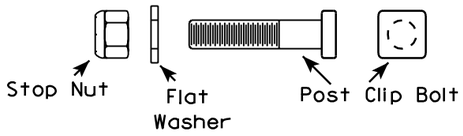
3/8 " - 16 X 3/4 " Economy Bolt 2024-T4 alloy
3/8 " - Stainless steel stop nut
3/8" X .064 Flat Washers, Alclad 2024-T4 alloy



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.

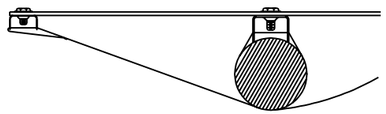
ALUMINUM EXTRUSIONS FOR TYPE I SIGNS

WISCONSIN DEPT OF TRANSPORTATION

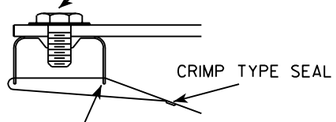
APPROVED Chester J Spang
for State Traffic Engineer

DATE 11/18/99 PLATE NO. A5-2.9

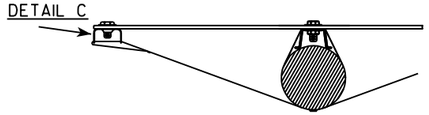
BRACE BANDING

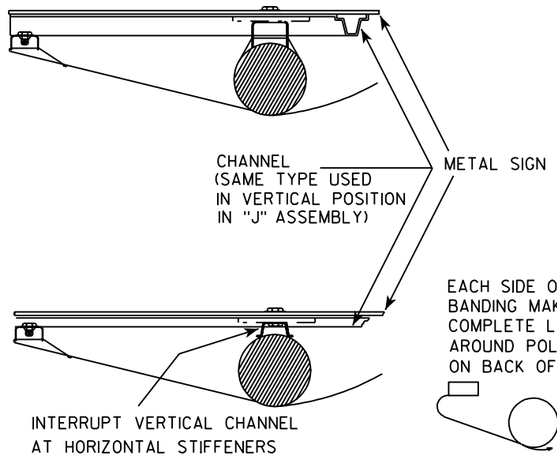


DETAIL C
CADMIUM PLATED STEEL BOLT
THROUGH BLACK BORDER



DETAIL C

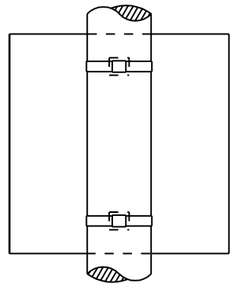


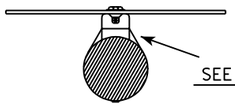


EACH SIDE OF BRACE
BANDING MAKES ONE
COMPLETE LOOP
AROUND POLE-SEAL
ON BACK OF POLE

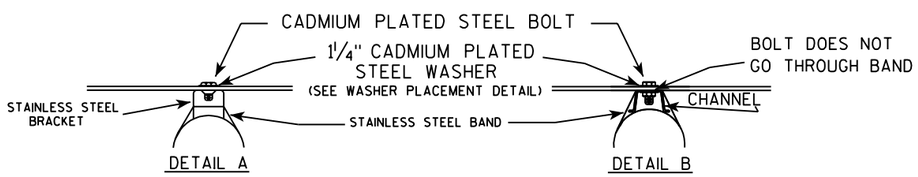
BRACKET BANDING

SINGLE SIGN





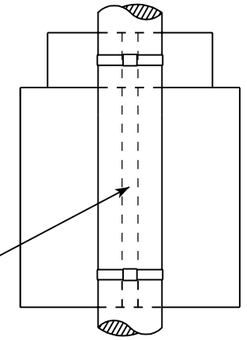
SEE DETAIL A



DETAIL A

DETAIL B

"J" ASSEMBLY

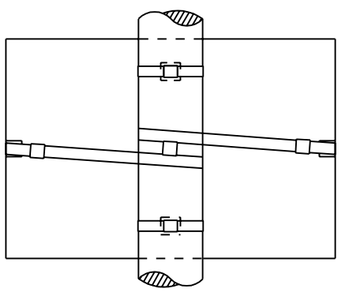


CHANNEL
SEE TYPICAL PANEL
INSTALLATION SHEET

SEE DETAIL B

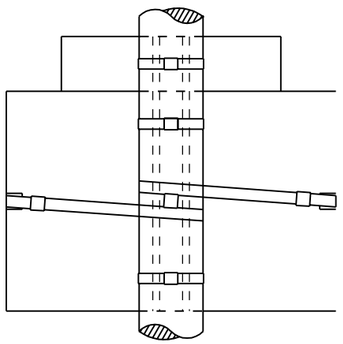
GENERAL NOTES

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.

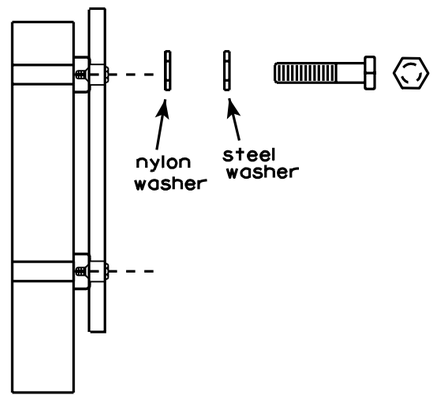


BRACE BANDING

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

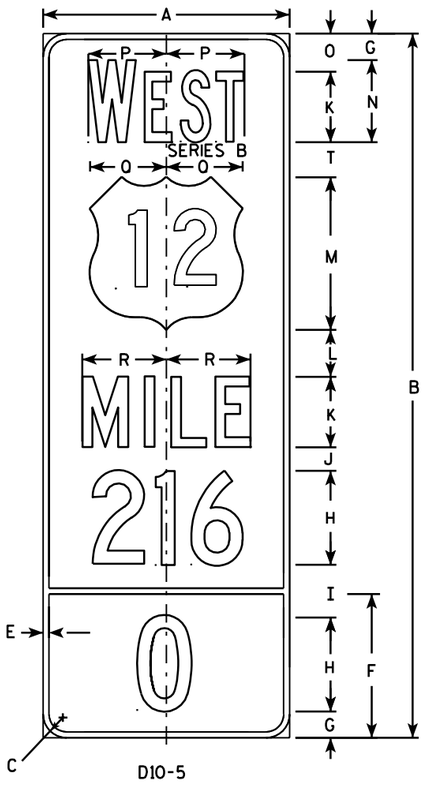
STANDARD SIGN
SIGN BANDING DETAILS

WISCONSIN DEPT OF TRANSPORTATION

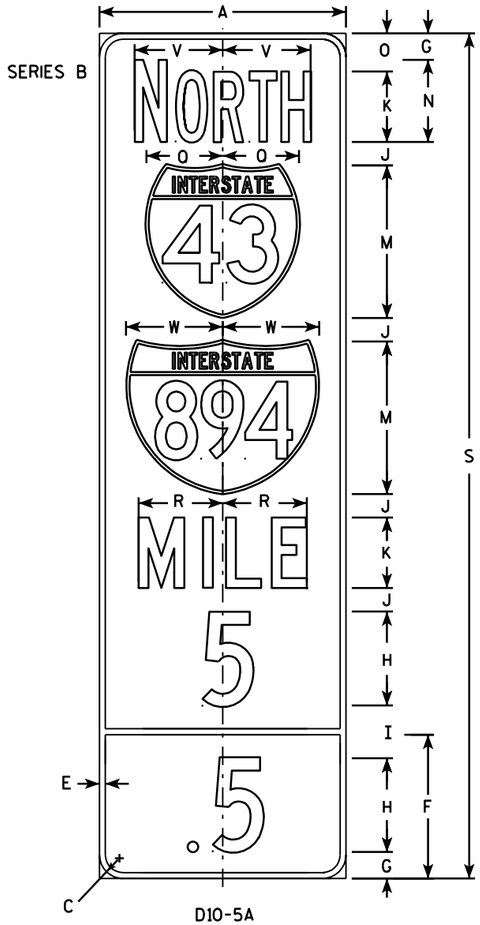
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/08/05 PLATE NO. A5-9.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 472	E



D10-5



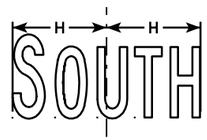
D10-5A

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

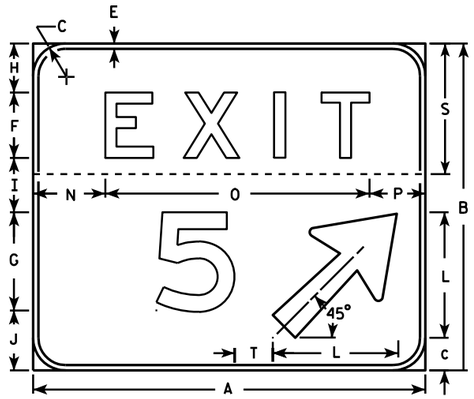
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

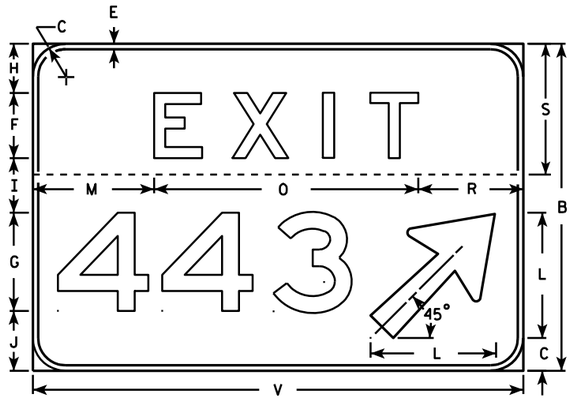
DATE 3/09/05 PLATE NO. D10-5.1

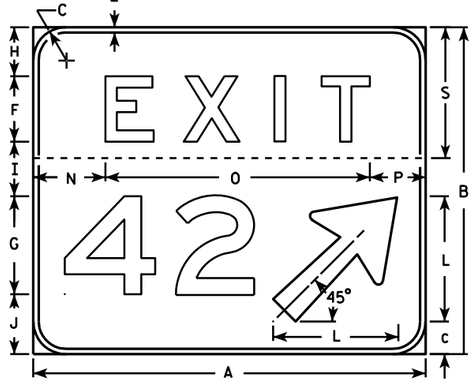
PROJECT NO:

SHEET NO: 473 E

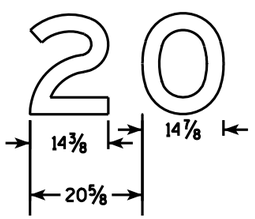


NOTE: T diminision shall be measured from the back of the number to the front of the arrow





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. 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			
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

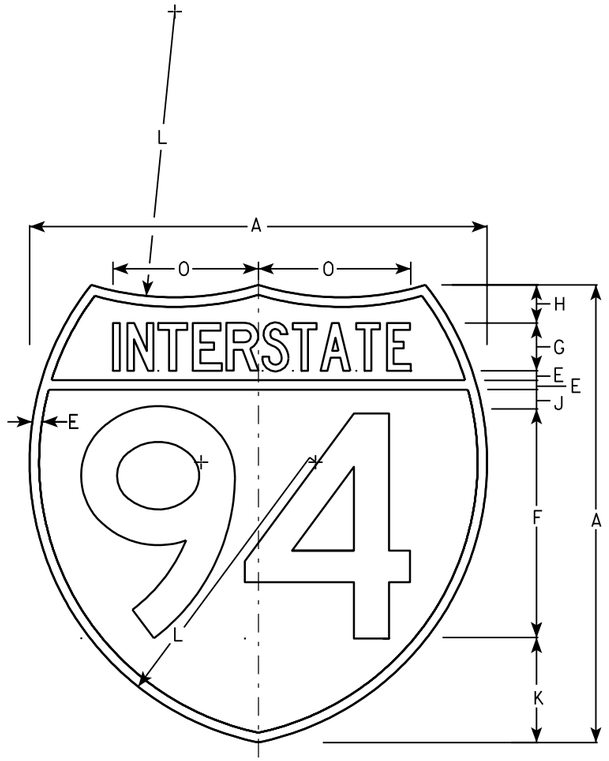
STANDARD SIGN
E5-1A

WISCONSIN DEPT OF TRANSPORTATION

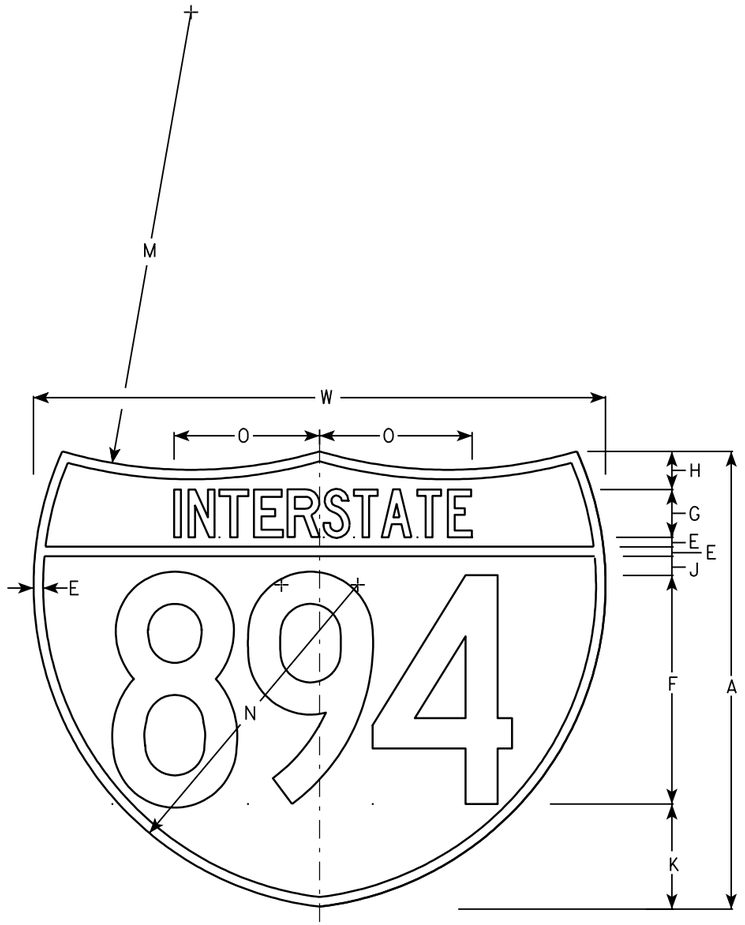
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/11/10 PLATE NO. E5-1A.12

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 474 | E



M1-1



M1-1A

NOTES

1. Sign is Type II - See Note 6 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Top Red - Bottom Blue (See Note 6)
   Message - White - See Note 6
3. Message Series - See note 5
4. Substitute appropriate numerals & ajust spacing as per plate A10-1.
5. M1-1 - Numerals - D
   Interstate - C
   M1-1A - All copy - C
6. Permanent Signs
   Message - Type H Reflective
   Detour or other temporary signs
   Background - Reflective
   Message - Reflective

Metric equivalent for these signs are:

SIZE	M1-1	SIZE	M1-1A
1			
2	600 mm X 600 mm	2	600 mm X 750 mm
3	900 mm X 900 mm	3	900 mm X 1125 mm
4	900 mm X 900 mm	4	900 mm X 1125 mm
5	900 mm X 900 mm	5	900 mm X 1125 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	M1-1 Area sq. ft.	M1-1A Area sq. ft.	M1-1 Area m2	M1-1A Area m2
1																													
2	24				1/2	12	2 1/2	2		1	5 1/2	15	24	17	7 7/8								30			3.13	3.91	.36	.46
3	36				3/4	18	3 3/4	3		1 1/2	8 1/4	22 1/2	36	25 1/2	11 3/4								45			7.03	8.79	.81	1.05
4	36				3/4	18	3 3/4	3		1 1/2	8 1/4	22 1/2	36	25 1/2	11 3/4								45			7.03	8.79	.81	1.05
5	36				3/4	18	3 3/4	3		1 1/2	8 1/4	22 1/2	36	25 1/2	11 3/4								45			7.03	8.79	.81	1.05

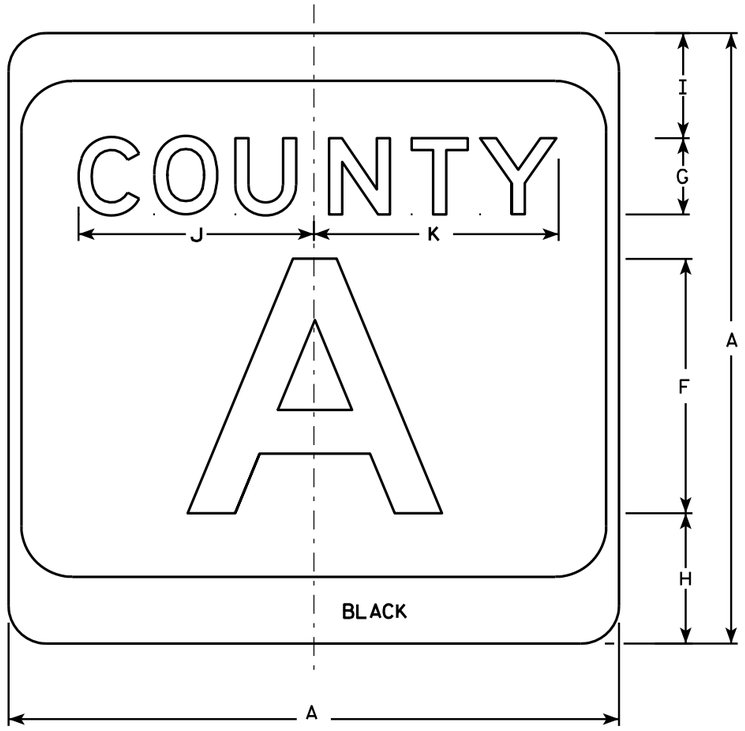
INTERSTATE ROUTE MARKER
M1-1 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

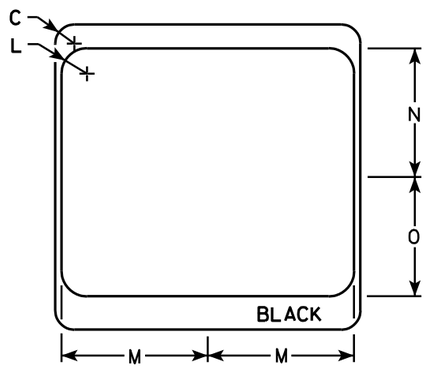
APPROVED Matthew R Rauch
for State Traffic Engineer

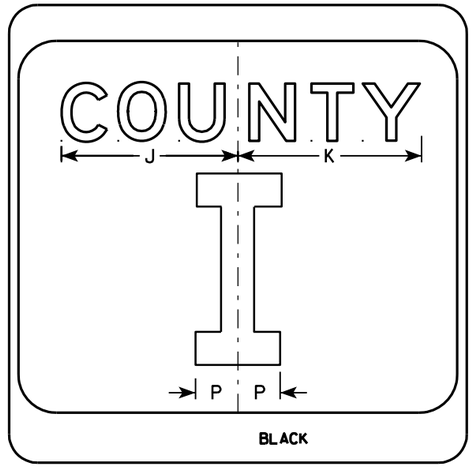
DATE 08/23/05 PLATE NO. M1-1.8

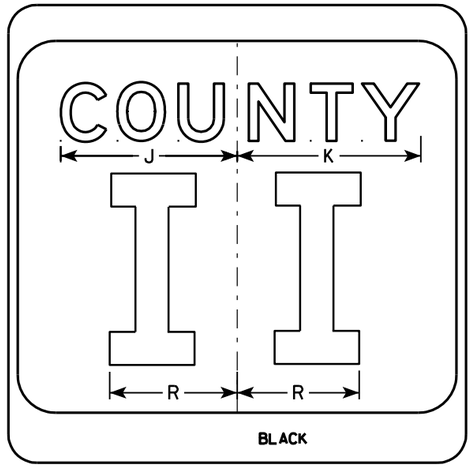
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 475	E



M1-5A







NOTES

1. Sign is Type II - see Note 7 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White & Black - See Note 7
   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. Message Series E for 1 letter.
   Message Series D for 2 letters unless message is too big then Series C.
   Message Series C for 3 letters unless message is too big then Series B.
6. Substitute appropriate letters & optically center to achieve proper balance.
7. Permanent Signs
   Background - Type H Reflective
   Detour or temporary Signs
   Background - Reflective

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	24		1 1/2			10	3	5 1/8	4 1/8	9 1/4	9 5/8	2	11 1/2	10 1/8	9 3/8	2 1/4		6 5/8									4.0
3	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0
4	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0
5	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0

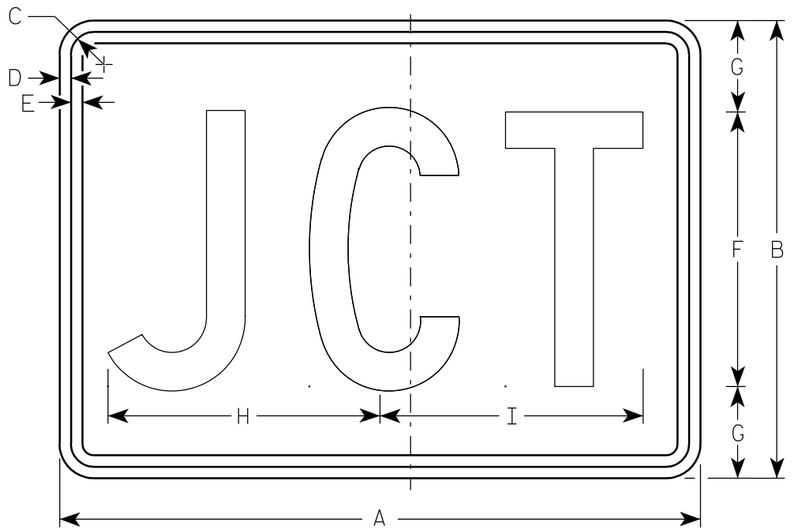
CTH MARKER
M1-5A FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

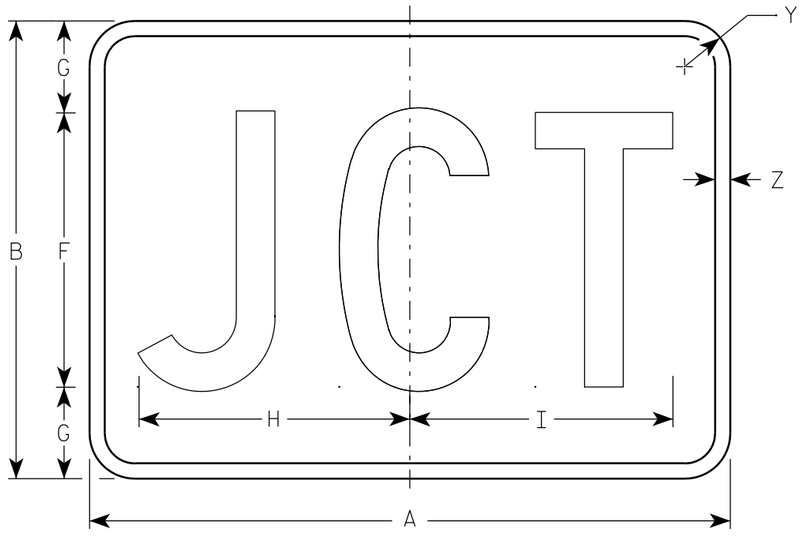
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/27/11 PLATE NO. M1-5A.8

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 476 | E



M2-1
MK2-1
MM2-1
MR2-1



MB2-1
MG2-1
MN2-1

NOTES

1. Sign is Type II - See Note 5 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - See note 5
   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. M2-1 Background - White - Type H Reflective
   (Detour or temporary Signs - Reflective)
   Message - Black
   MB2-1 Background - Blue
   Message - White - Type H Reflective
   (Detour or temporary Signs - Reflective)
   MG2-1 Background - Green
   Message - White - Type H Reflective
   MK2-1 Background - Green
   Message - White - Type H Reflective
   MM2-1 Background - White - Type H Reflective
   Message - Green
   MN2-1 Background - Brown
   Message - White - Type H Reflective
   MR2-1 Background - Brown
   Message - Yellow - Type H Reflective

Metric equivalent for this sign is:

SIZE	
1	
2	525 mm X 375 mm
3	750 mm X 525 mm
4	750 mm X 525 mm
5	750 mm X 525 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	15	1 1/8	3/8	3/8	9	3	8 7/8	8 5/8																1 1/2	1/2	2.20	0.20
3	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40	0.20
4	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40	0.20
5	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40	0.20

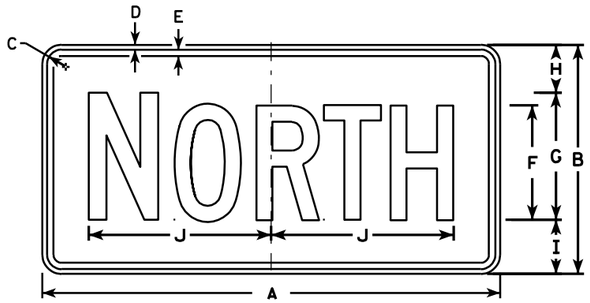
STANDARD SIGN
M2-1

WISCONSIN DEPT OF TRANSPORTATION

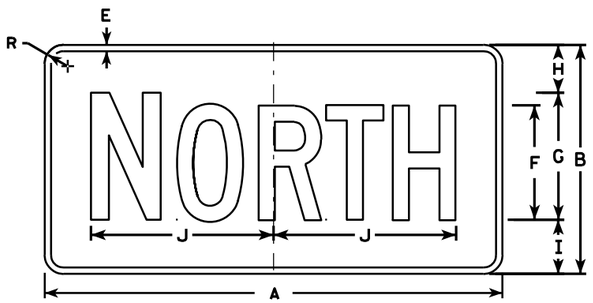
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/16/10 PLATE NO. M2-1.10

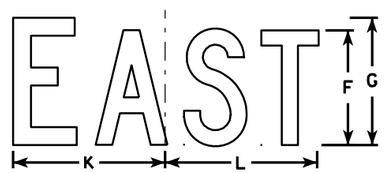
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 477	E



M3-1
MK3-1
MO3-1



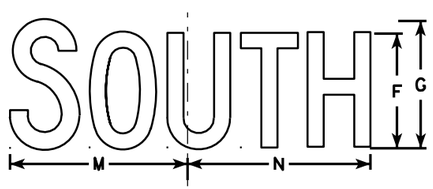
MB3-1
MG3-1
MM3-1
MN3-1



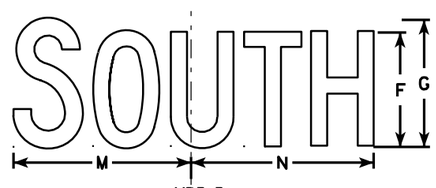
M3-2
MK3-2
MO3-2



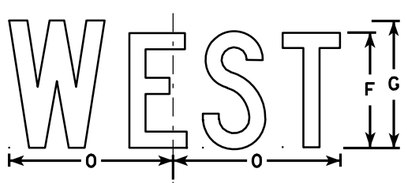
MB3-2
MG3-2
MM3-2
MN3-2



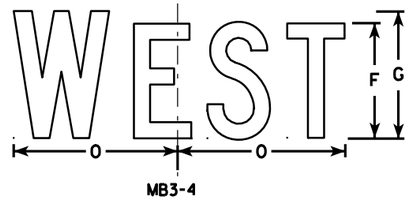
M3-3
MK3-3
MO3-3



MB3-3
MG3-3
MM3-3
MN3-3



M3-4
MK3-4
MO3-4



MB3-4
MG3-4
MM3-4
MN3-4

NOTES

1. All Signs Type II - See Note 5 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - See note 5
   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. M3-1 thru M3-4 Background - White - Type H Reflective
   (Detour or temporary signs - Reflective)
   Message - Black
   MB3-1 thru MB3-4 Background - Blue
   Message - White - Type H Reflective
   (Detour or temporary signs - Reflective)
   MG3-1 thru MG3-4 Background - Green
   Message - White - Type H Reflective
   MK3-1 thru MK3-4 Background - Green
   Message - White - Type H Reflective
   MM3-1 thru MM3-4 Background - White - Type H Reflective
   Message - Green
   MN3-1 thru MN3-4 Background - Brown
   Message - White - Type H Reflective
   MO3-1 thru MO3-4 Background - Orange - Reflective
   Message - Black
6. Note the first letter of each direction is larger than the remainder of the message.

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	24	12	1 1/8	3/8	3/8	6	7	2 1/4	2 3/4	10 1/4	7 7/8	8 3/8	10 1/4	9 3/4	8 3/4			1 1/2									2.00
3	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5
4	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5
5	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5

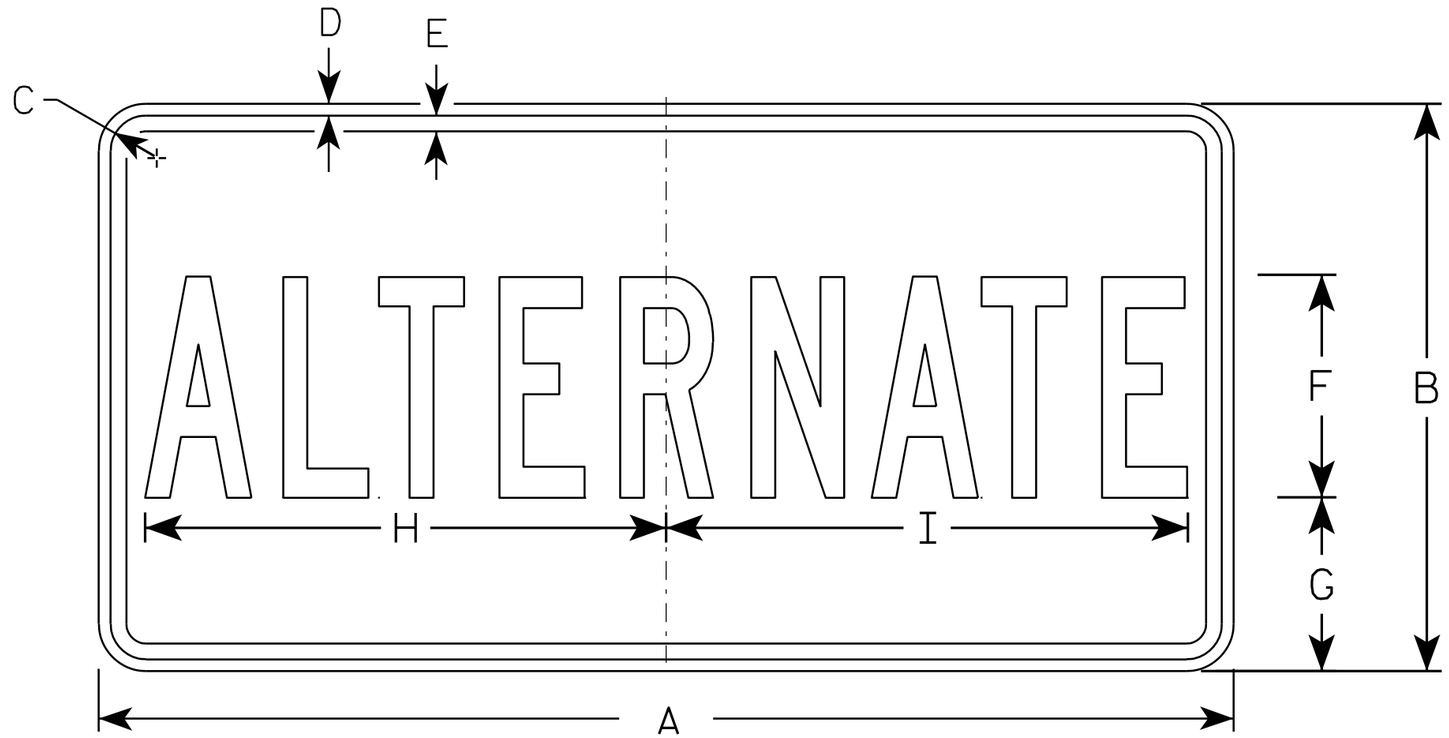
STANDARD SIGNS
M3-1 thur M3-4
SERIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 11/10/10 PLATE NO. M3-1.12

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 478	E



M4 - 1

NOTES

1. Sign is Type II - See Note 5 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - See Note 5
   Message - See note 5
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.
5. M4-1 Background - White - Type H Reflective
   Message - Black

   MB4-1 Background - Blue
   Message - White - Type H Reflective

   M04-1 Background - Orange - Reflective
   Message - Black

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	24	12	1 ½	⅜	⅜	4	4	9 ¾	9 ½																		2.00
3	36	18	1 ½	⅜	½	7	5 ½	16 ⅜	16 ½																		4.5
4	36	18	1 ½	⅜	½	7	5 ½	16 ⅜	16 ½																		4.5
5	36	18	1 ½	⅜	½	7	5 ½	16 ⅜	16 ½																		4.5

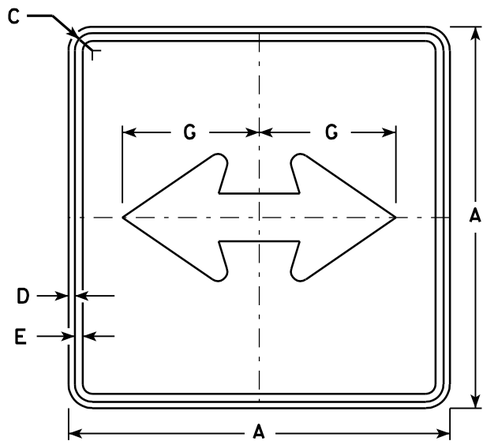
STANDARD SIGN
M4 - 1

WISCONSIN DEPT OF TRANSPORTATION

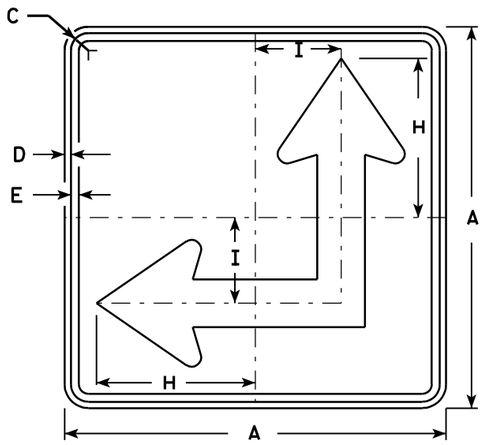
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/10/10 PLATE NO. M4-1.7

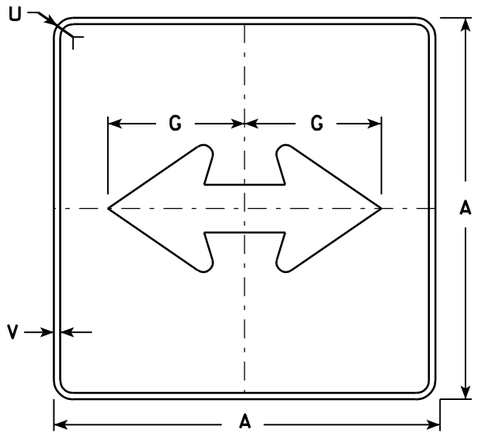
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 479	E



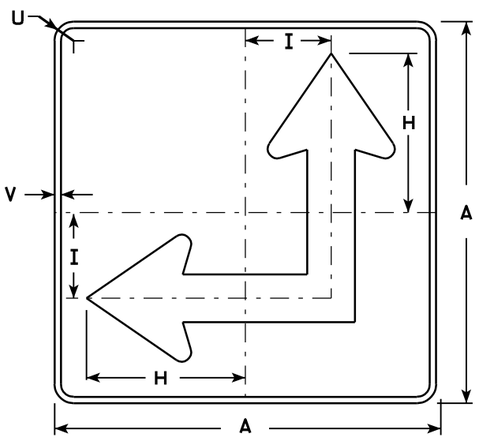
M6-4
MK6-4
MM6-4
MO6-4
MR6-4



M6-6
MK6-6
MM6-6
MO6-6
MR6-6



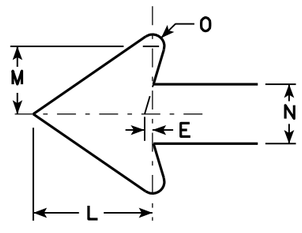
MB6-4
MG6-4
MN6-4



MB6-6
MG6-6
MN6-6

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. M6-4 and M6-6 Background - White - Type H Reflective
   (Detour or temporary Signs - Reflective)
   Message - Black
   MB6-4 and MB6-6 Background - Blue
   Message - White - Type H Reflective
   (Detour or temporary Signs - Reflective)
   MG6-4 and MG6-6 Background - Green
   Message - White - Type H Reflective
   MK6-4 and MK6-6 Background - Green
   Message - White - Type H Reflective
   MM6-4 and MM6-6 Background - White - Type H Reflective
   Message - Green
   MN6-4 and MN6-6 Background - Brown
   Message - White - Type H Reflective
   MO6-4 and MO6-6 Background - Orange - Reflective
   Message - Black
   MR6-4 and MR6-6 Background - Brown
   Message - Yellow - Type H Reflective
5. M6-6R same as M6-6L except arrow points ahead and right.



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	8 3/4	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	12 1/2	6 3/4			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	12 1/2	6 3/4			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	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25	0.56

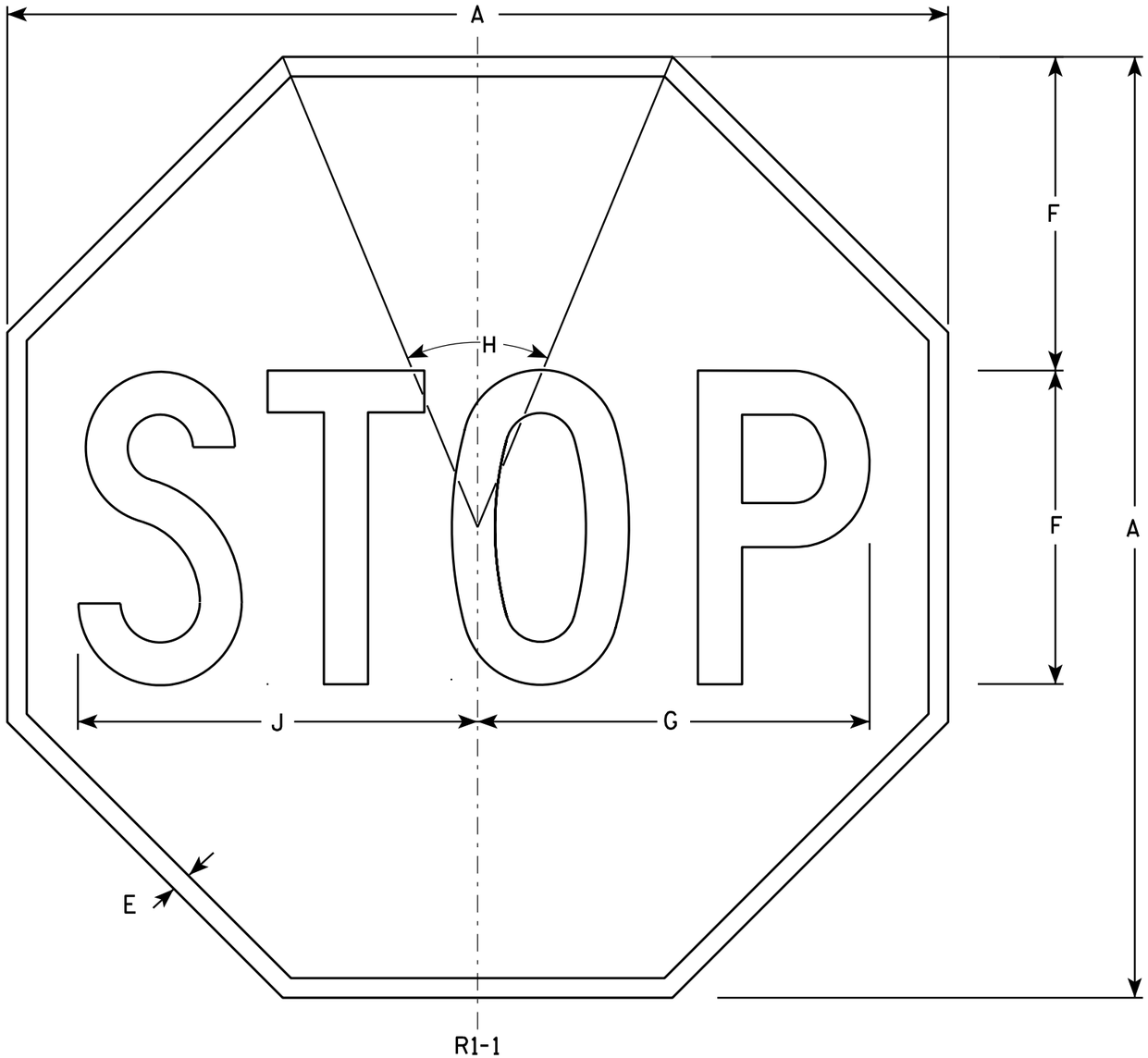
STANDARD SIGN M6-4 & M6-6 SERIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 3/16/10 PLATE NO. M6-4.7

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 480	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

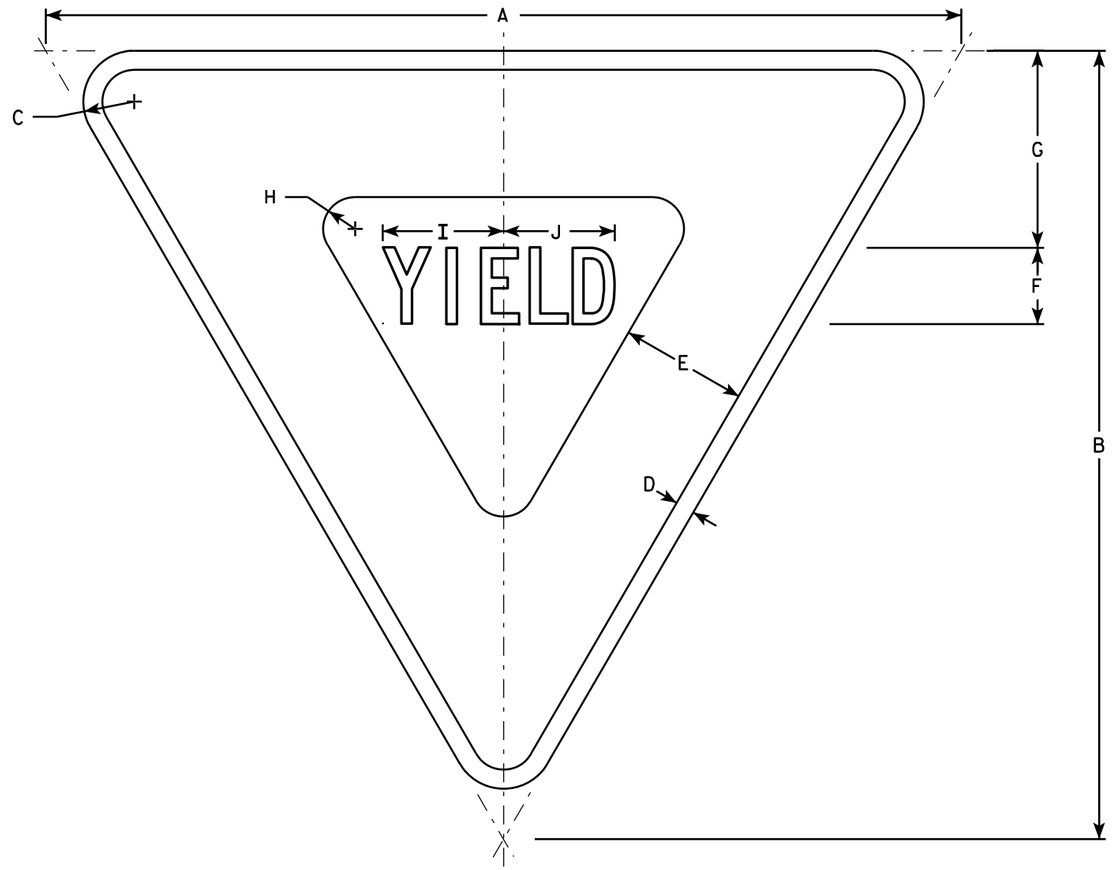
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 481	E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R11.DGN PLOT DATE : 02-DEC-2010 15:09 PLOT BY : dotsja PLOT NAME : PLOT SCALE : 4.469282:1.000000

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

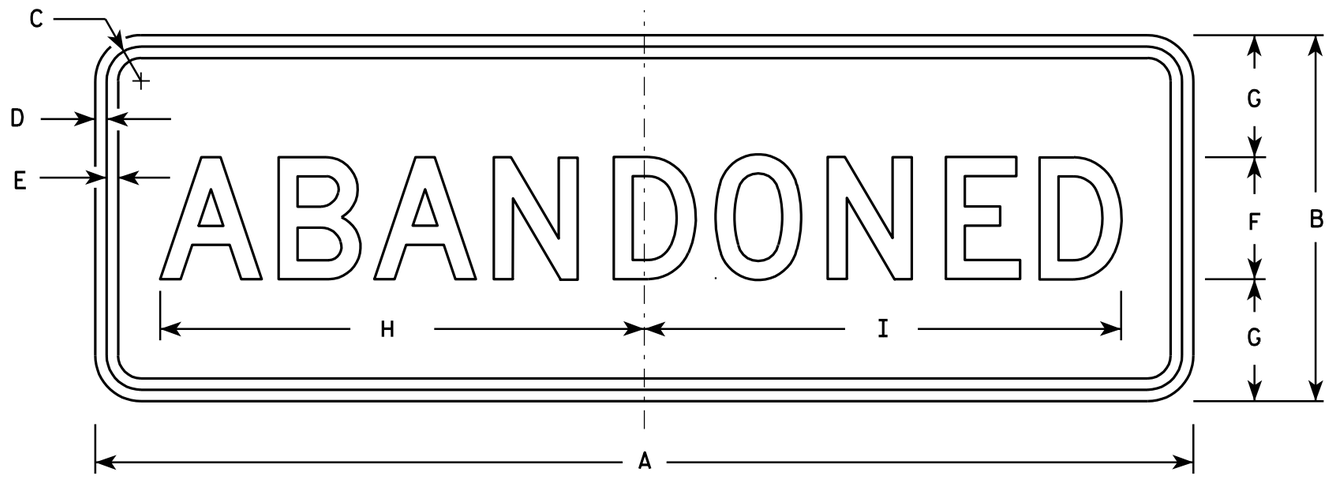
STANDARD SIGN
R1-2

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: 482 | E



R15-4

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 - 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.

7

7

Metric equivalent for this sign is:

SIZE	
1	
2	900 mm X 300 mm
3	
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	36	12	1 1/8	3/8	3/8	4	4	15 7/8	15 5/8																		3.0	.27
3																												
4																												
5																												

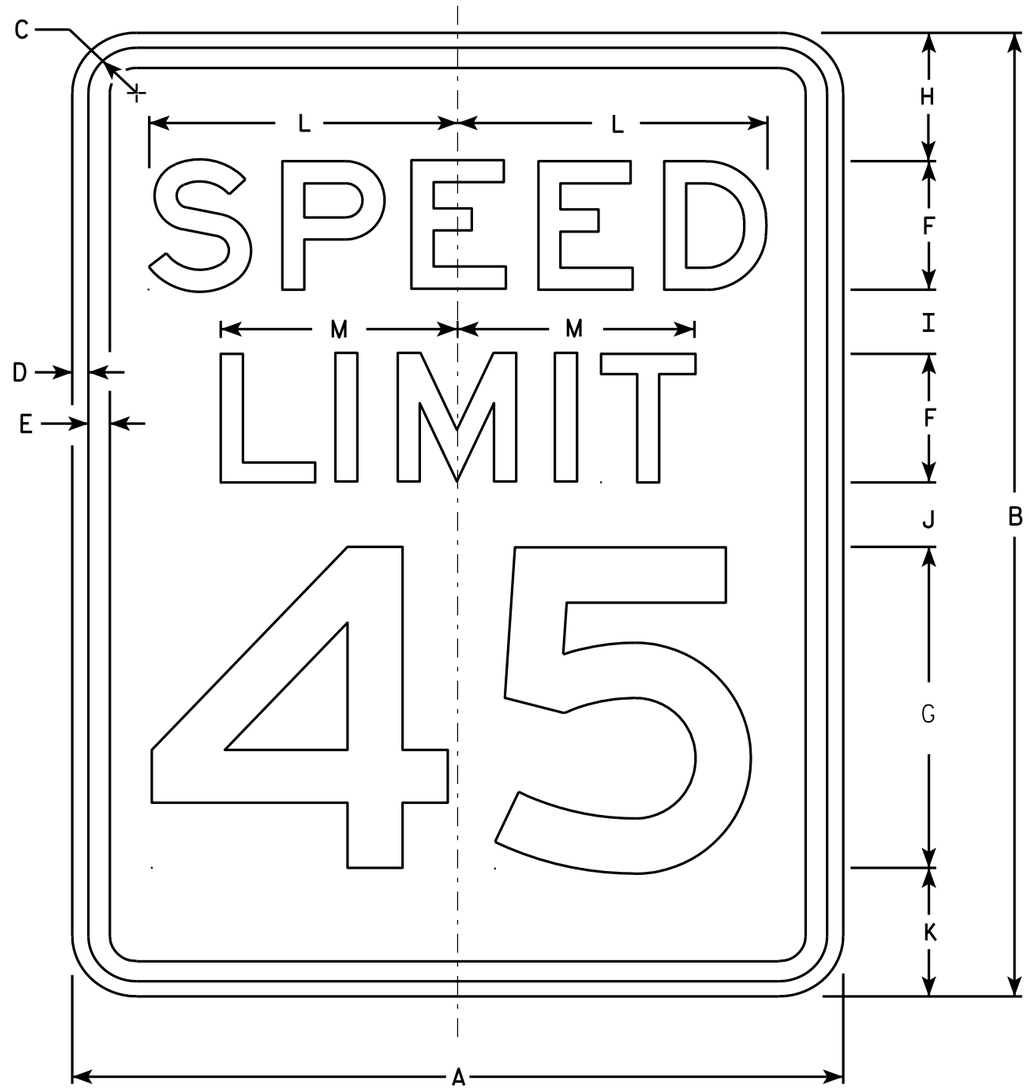
STANDARD SIGN
R15-4

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spagg for State Traffic Engineer

DATE 1/25/02 PLATE NO. R15-4.3

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 483	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

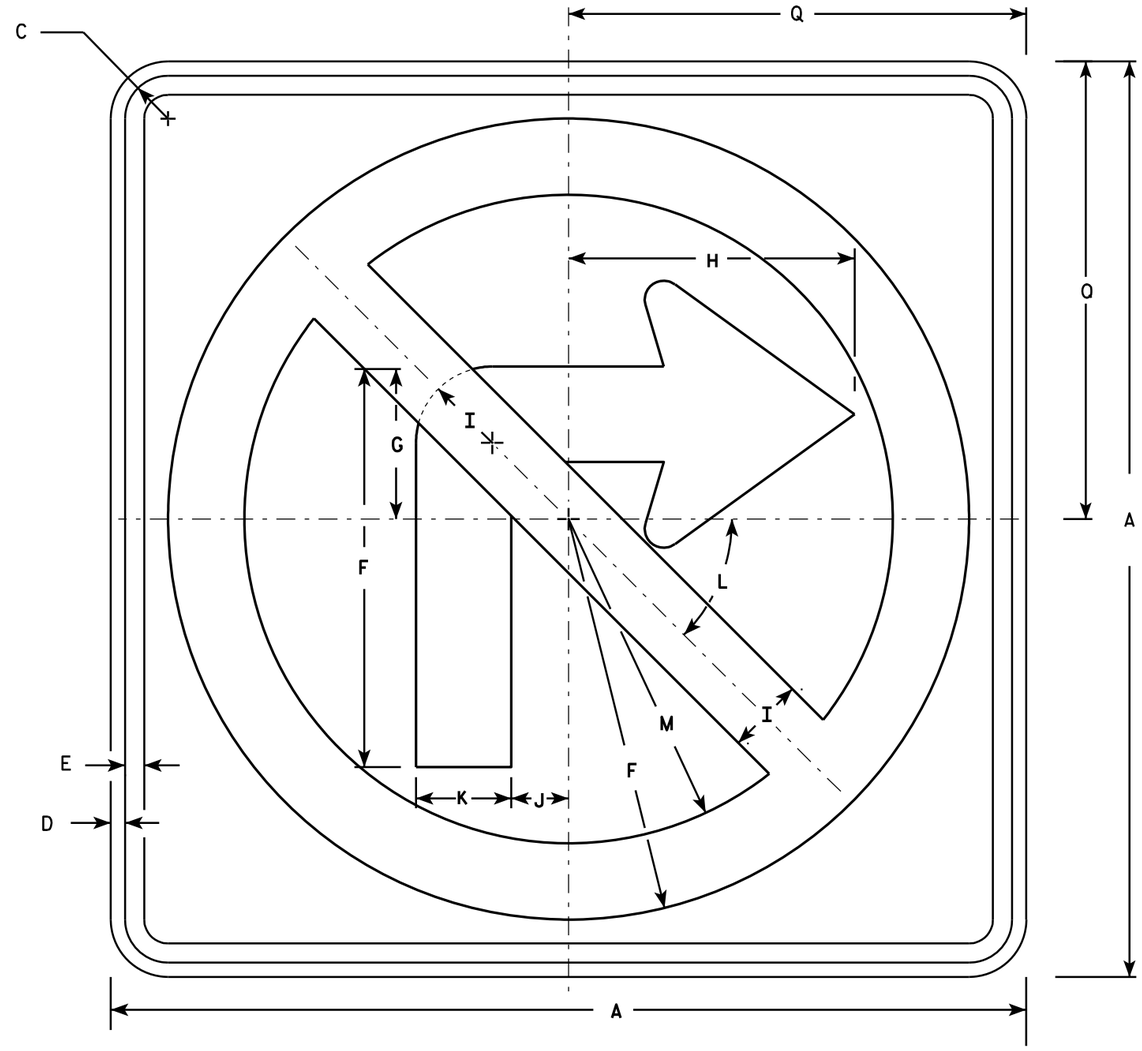
STANDARD SIGN
R2-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/26/10 PLATE NO. R2-1.13

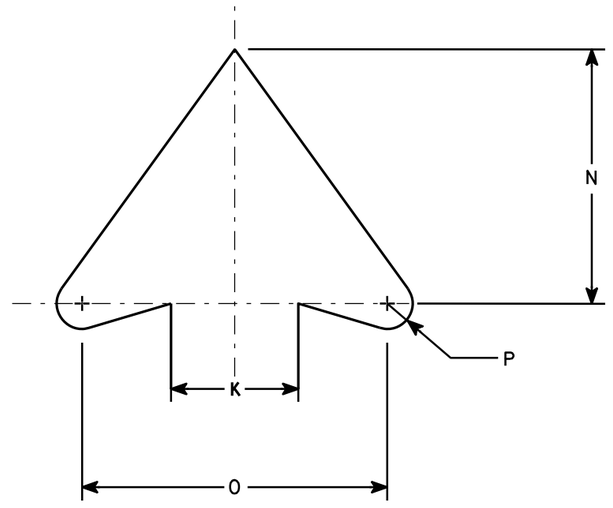
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 484	E



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

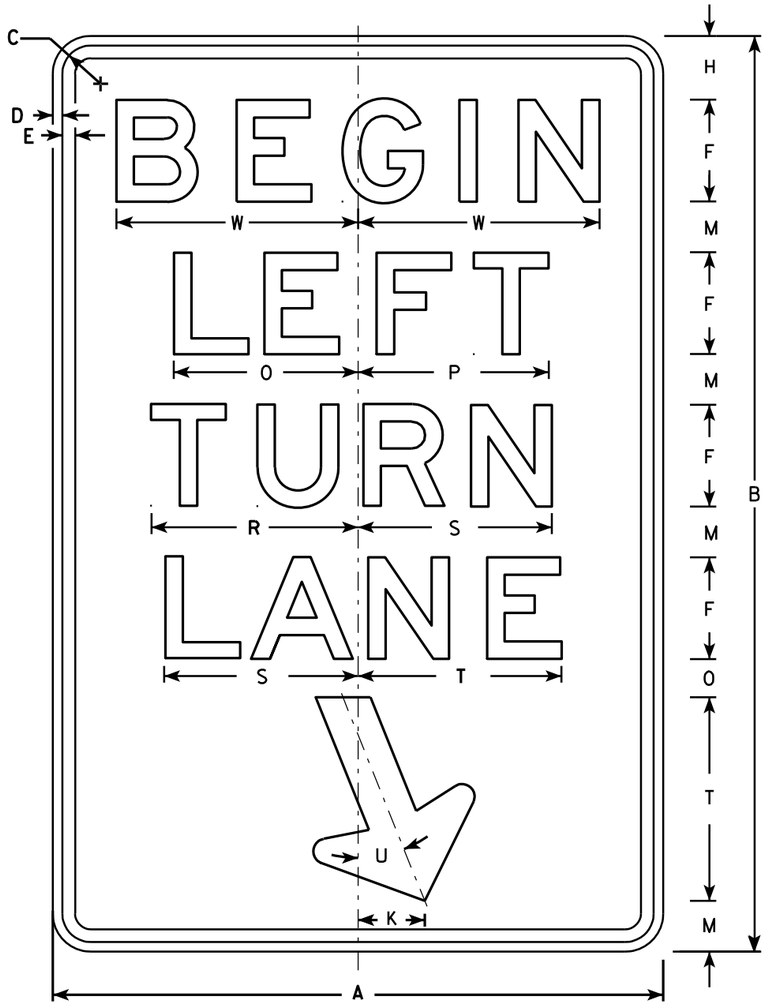
STANDARD SIGN
R3-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/08/10 PLATE NO. R3-1.5

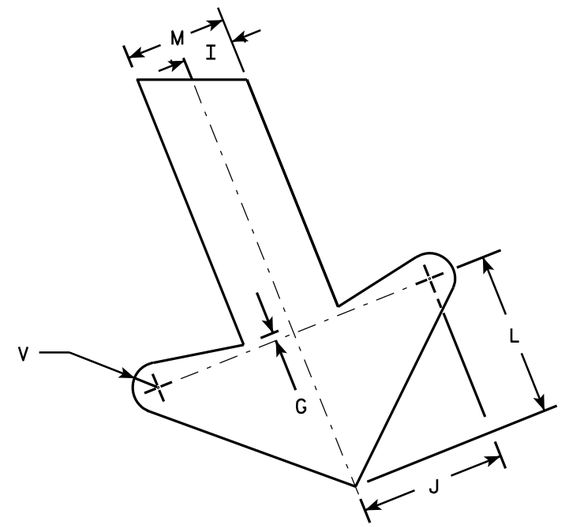
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 485	E



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

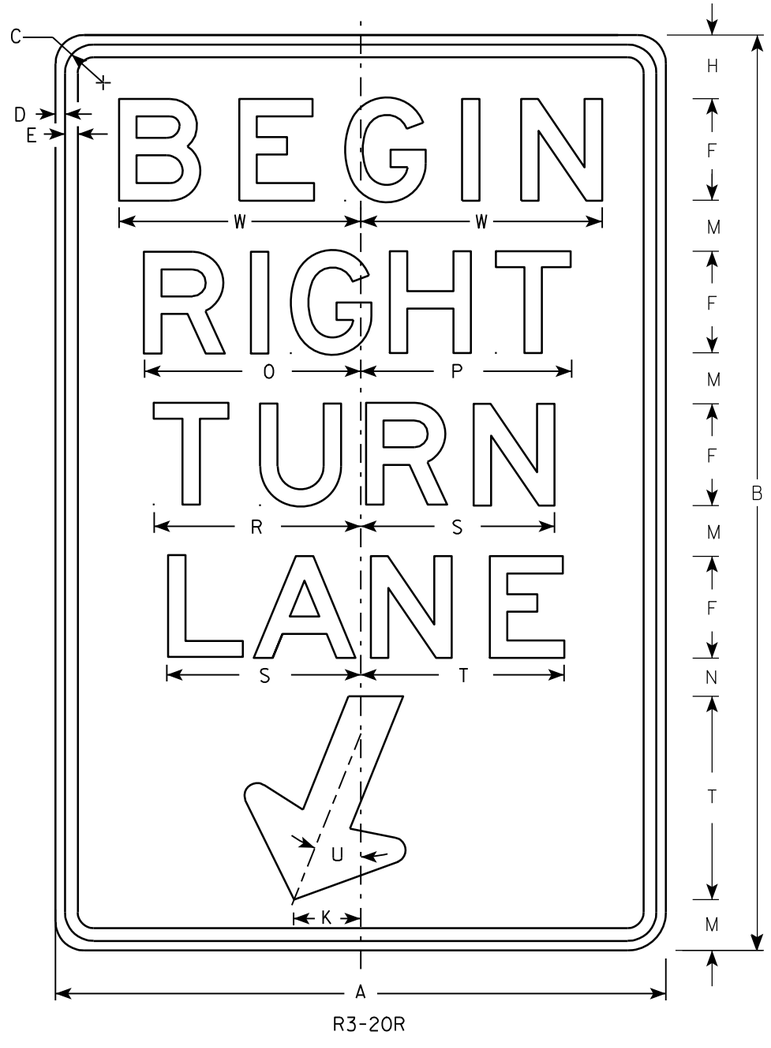
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 486	E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R320L.DGN PLOT DATE : 15-OCT-2010 14:45 PLOT BY : dotsja PLOT NAME : PLOT SCALE : 5.959043:1.000000

WISDOT/CADDS SHEET 42

7

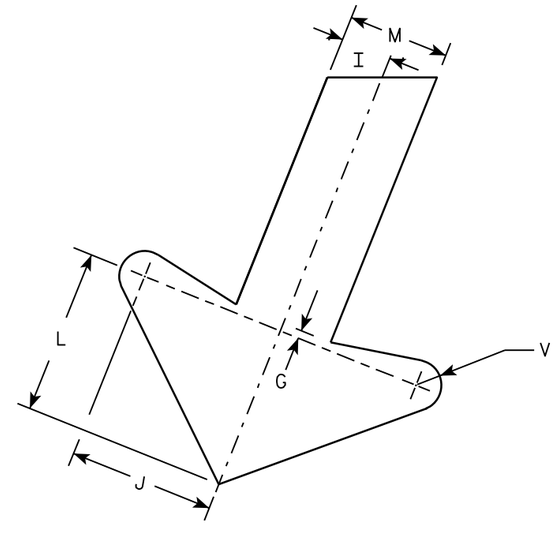
7



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																											

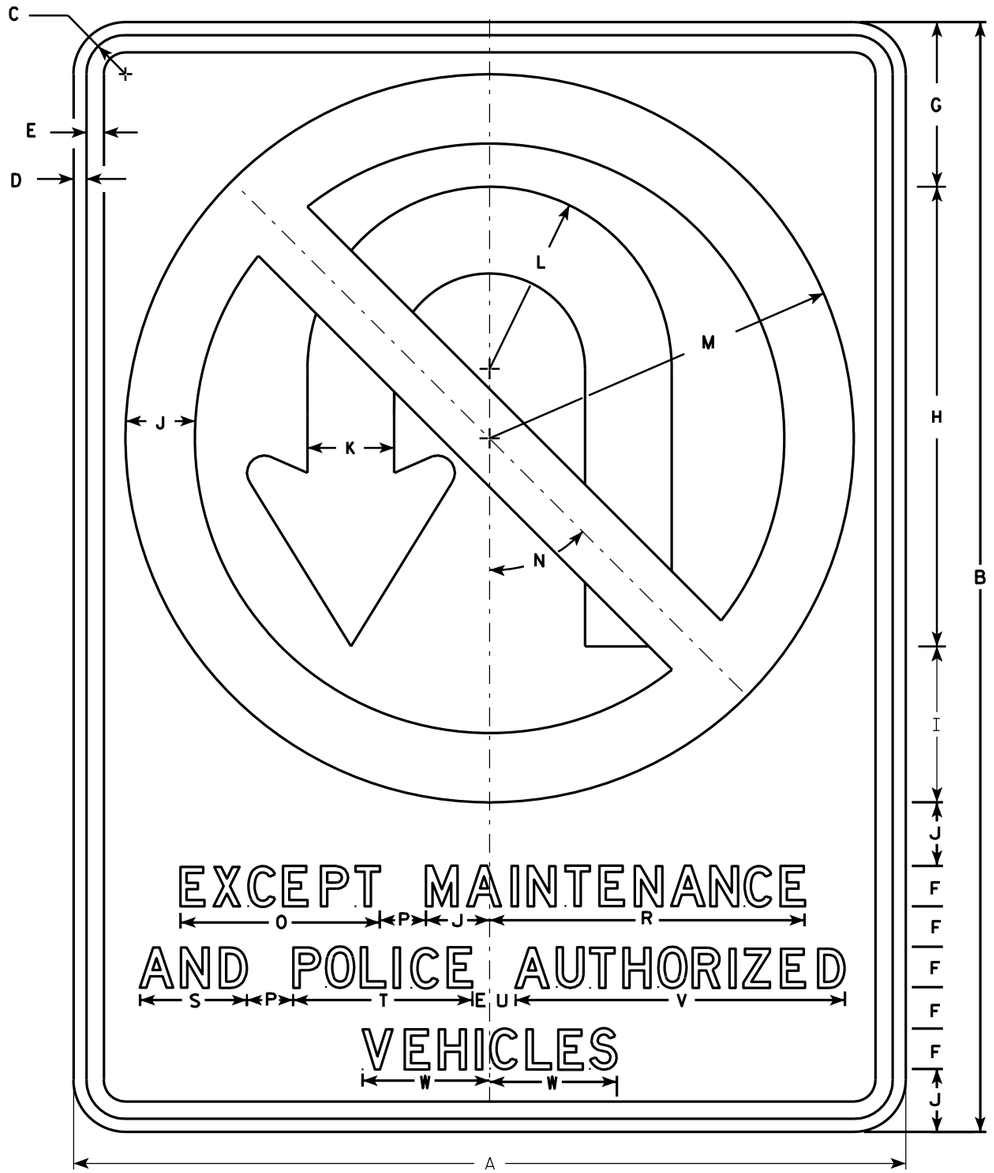
STANDARD SIGN
R3-20R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/18/10 PLATE NO. R3-20R.6

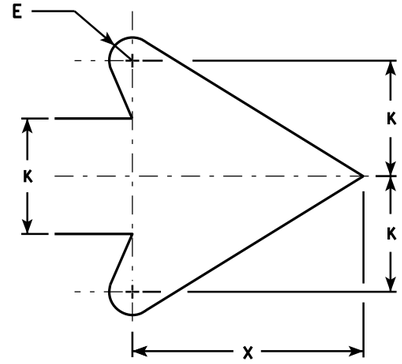
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 487 | E



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

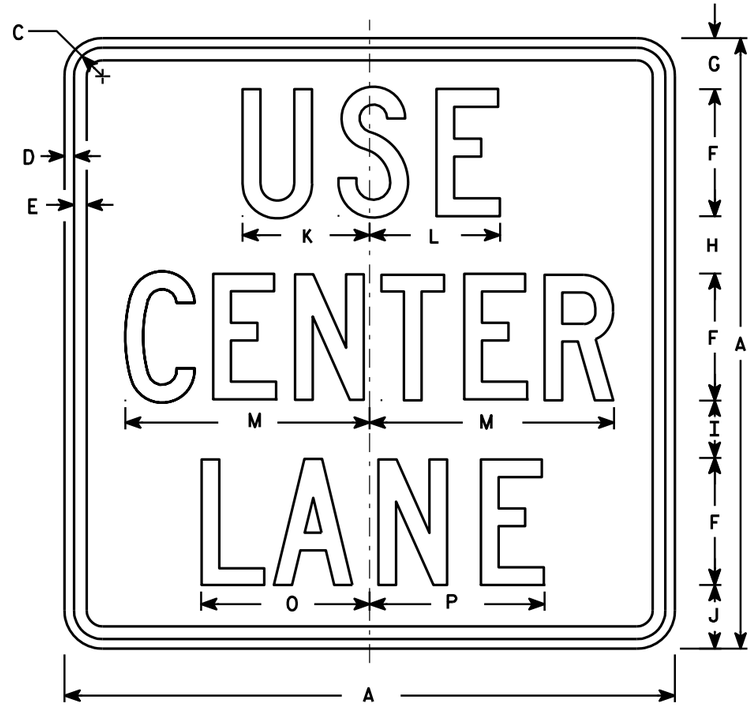
STANDARD SIGN
R3-4B

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/17/2011 PLATE NO. R3-4B.2

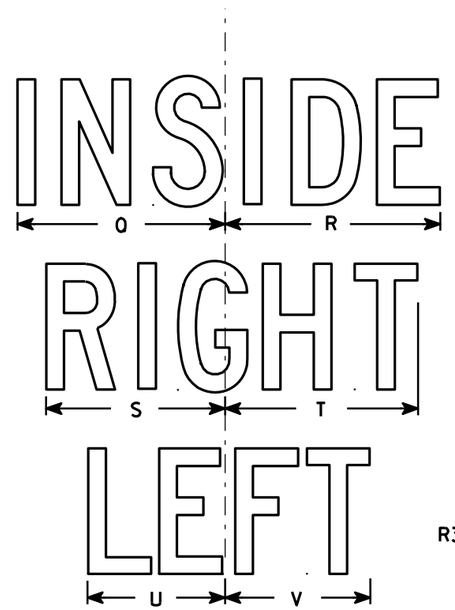
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 488	E



R3-54C

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.



R3-54I

R3-54R

R3-54L

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	5	2	2 1/4	2 1/4	2 1/2	5	5 1/8	9 5/8		6 5/8	6 7/8	8 1/8	8 1/2	7	7 5/8	5 3/8	5 3/4					4.0
2M	24		1 1/8	3/8	1/2	5	2	2 1/4	2 1/4	2 1/2	5	5 1/8	9 5/8		6 5/8	6 7/8	8 1/8	8 1/2	7	7 5/8	5 3/8	5 3/4					4.0
3	36		1 5/8	5/8	3/4	7	4	3	3 1/2	4 1/2	7 1/2	7 3/4	14 3/8		9 7/8	10 1/4	12 1/8	12 3/4	10 3/8	11 3/8	8	8 5/8					9.0
4																											
5																											

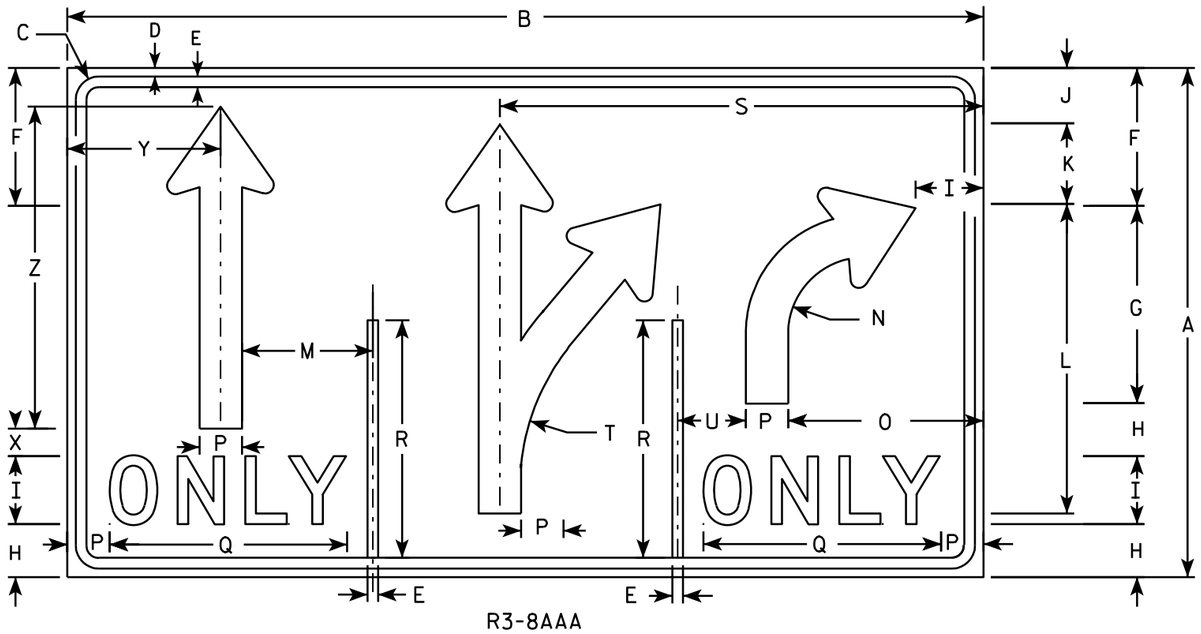
STANDARD SIGN
R3-54C, I ,L & R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/24/2011 PLATE NO. R3-54.8

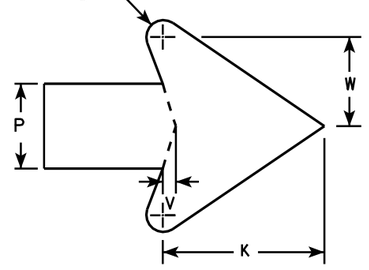
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 489 | E



R3-8AAA

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	54	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	7 3/4	4 1/2	11 1/2	2 1/2	14	14	28 1/2	13 1/4	4	3/8	2 5/8	1 5/8	9	19	11.25
2M	30	54	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	7 3/4	4 1/2	11 1/2	2 1/2	14	14	28 1/2	13 1/4	4	3/8	2 5/8	1 5/8	9	19	11.25
3																											
4	48	84	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	12	7 1/4	17 1/4	3 3/4	20 5/8	22 3/8	43 1/2	21 7/8	7	5/8	4	2 1/4	14	30 5/8	28.0
5	48	84	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	12	7 1/4	17 1/4	3 3/4	20 5/8	22 3/8	43 1/2	21 7/8	7	5/8	4	2 1/4	14	30 5/8	28.0

STANDARD SIGN
R3-8AAA

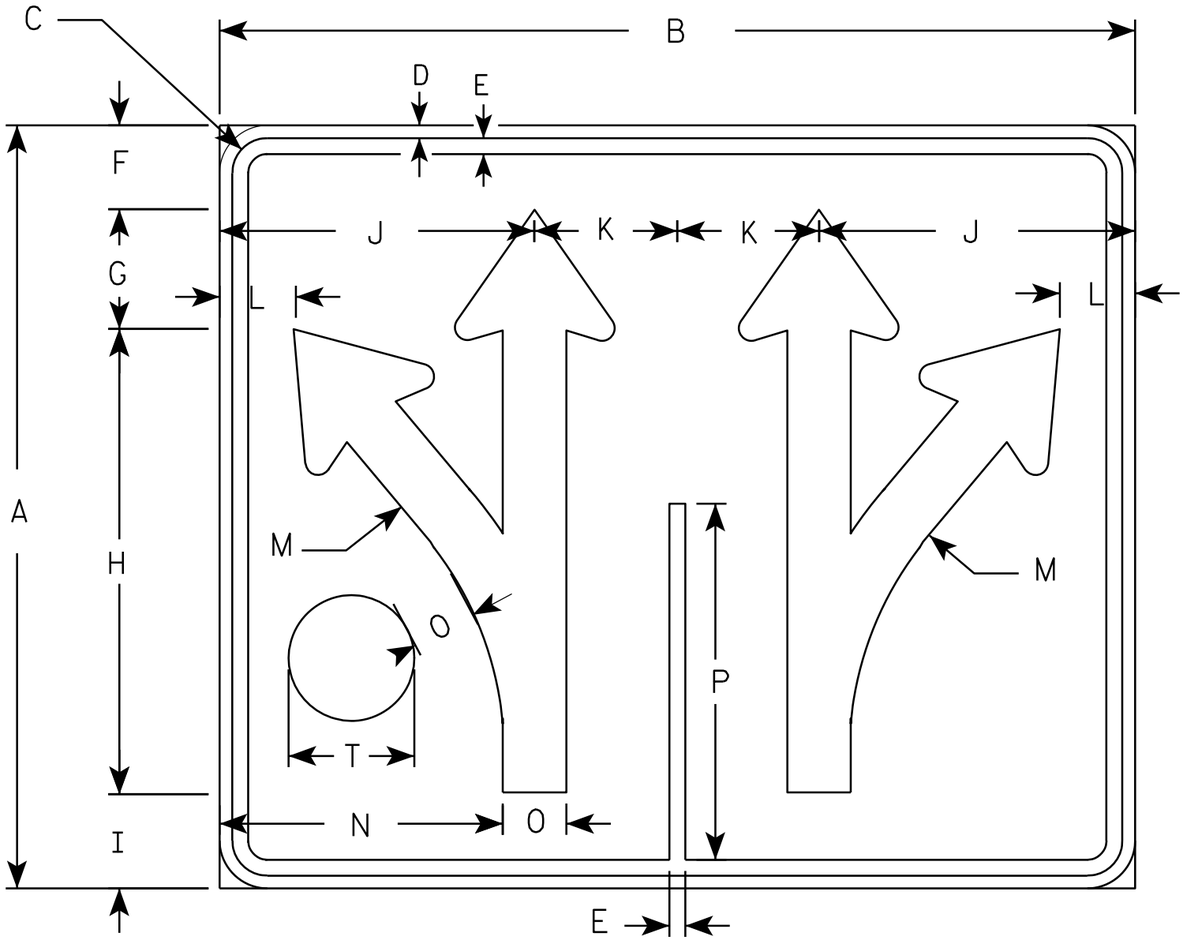
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 03/25/13 PLATE NO. R3-8AAA.1

PROJECT NO:

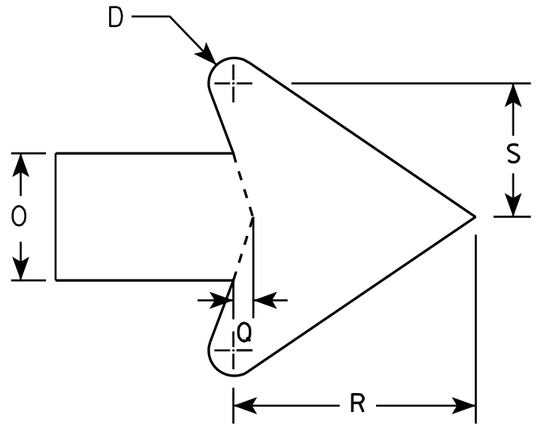
SHEET NO: 490 E



R3-8CC

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	3 1/4	4 3/4	18 1/4	3 3/4	12 3/8	5 5/8	3	13 1/4	11 1/8	2 1/2	14	3/8	4 3/4	2 5/8	5							7.5
2M	30	36	1 3/8	1/2	5/8	3 1/4	4 3/4	18 1/4	3 3/4	12 3/8	5 5/8	3	13 1/4	11 1/8	2 1/2	14	3/8	4 3/4	2 5/8	5							7.5
3																											
4																											

STANDARD SIGN
R3-8CC

WISCONSIN DEPT OF TRANSPORTATION

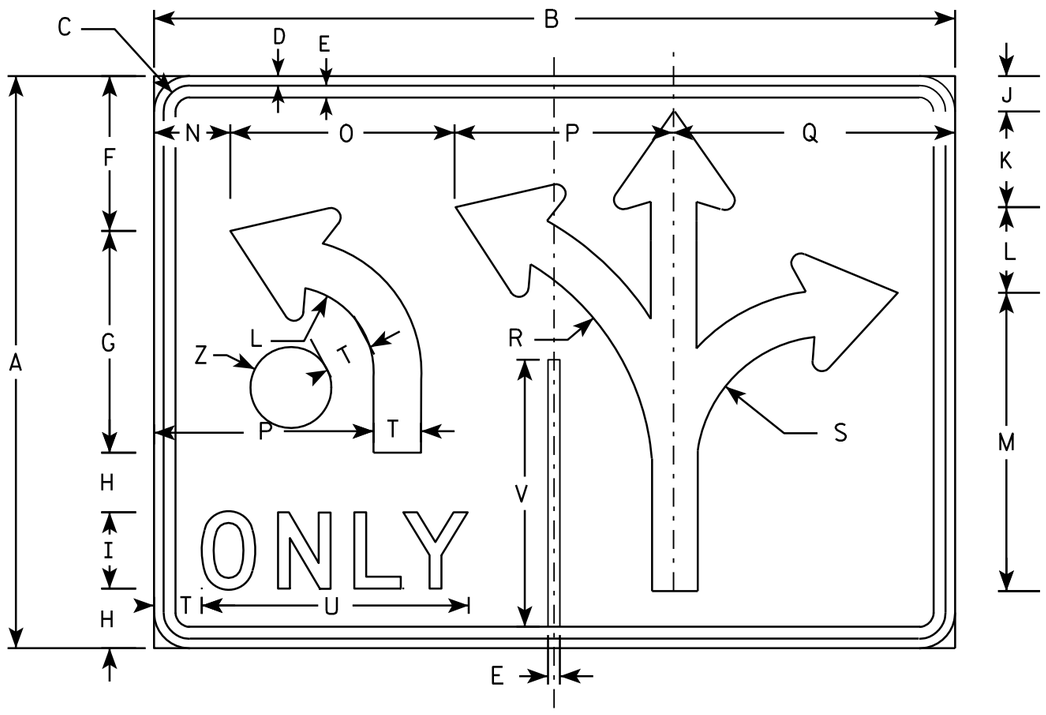
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/2011 PLATE NO. R3-8CC.2

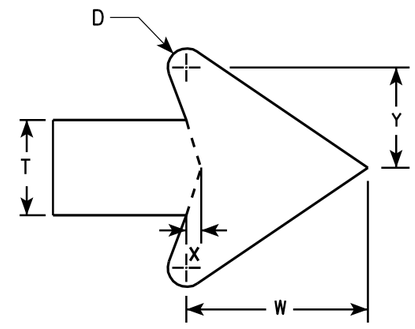
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 491	E

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. 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.



R3-8FF



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	42	1 3/8	1/2	5/8	8 1/8	11 5/8	3 1/8	4	1 7/8	5	4 1/2	15 5/8	4	11 3/4	11 1/2	14 3/4	13 1/4	7	2 1/2	14	14	4 3/4	3/8	2 5/8	4 1/4	8.75
2M	30	42	1 3/8	1/2	5/8	8 1/8	11 5/8	3 1/8	4	1 7/8	5	4 1/2	15 5/8	4	11 3/4	11 1/2	14 3/4	13 1/4	7	2 1/2	14	14	4 3/4	3/8	2 5/8	4 1/4	8.75
3																											
4																											
5																											

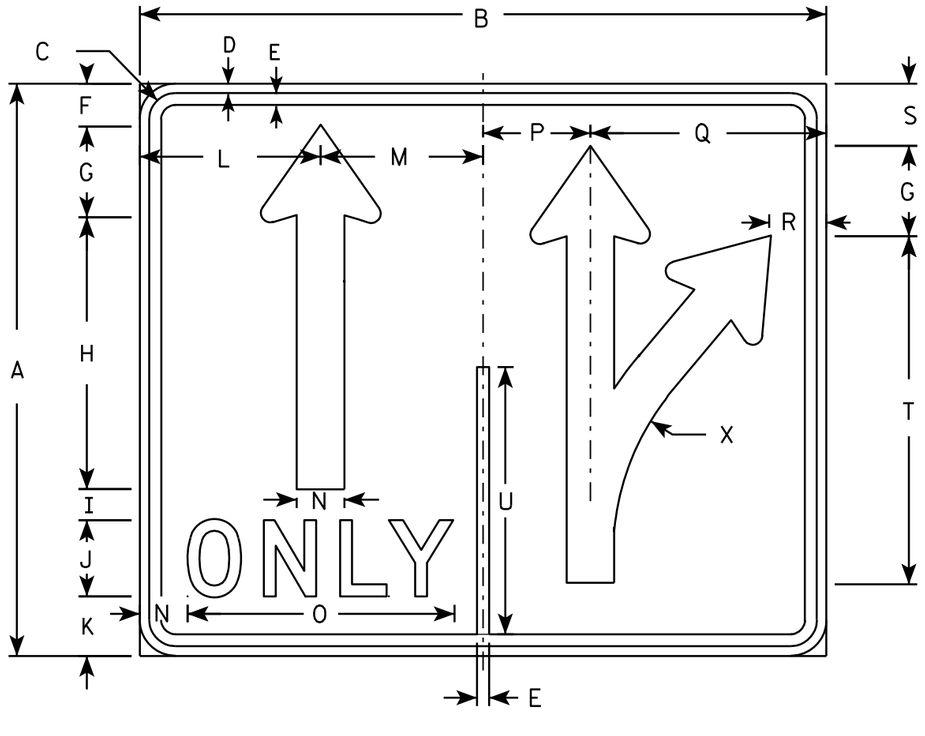
STANDARD SIGN
R3-8FF

WISCONSIN DEPT OF TRANSPORTATION

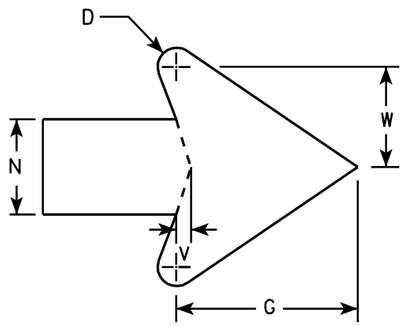
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/2011 PLATE NO. R3-8FF.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 492	E



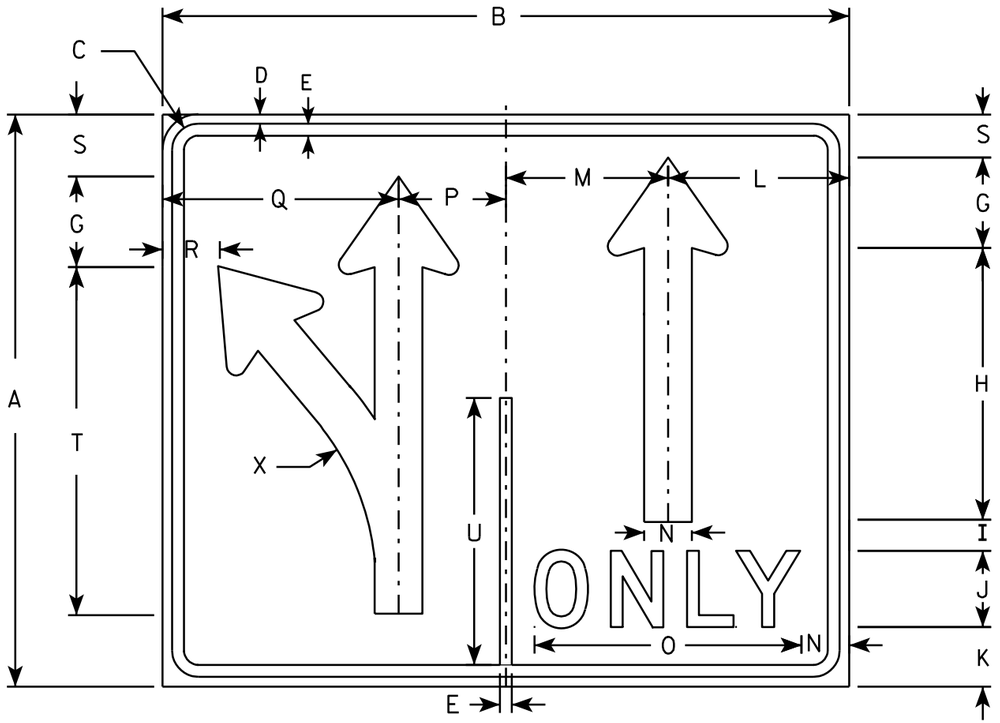
R3-8G



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

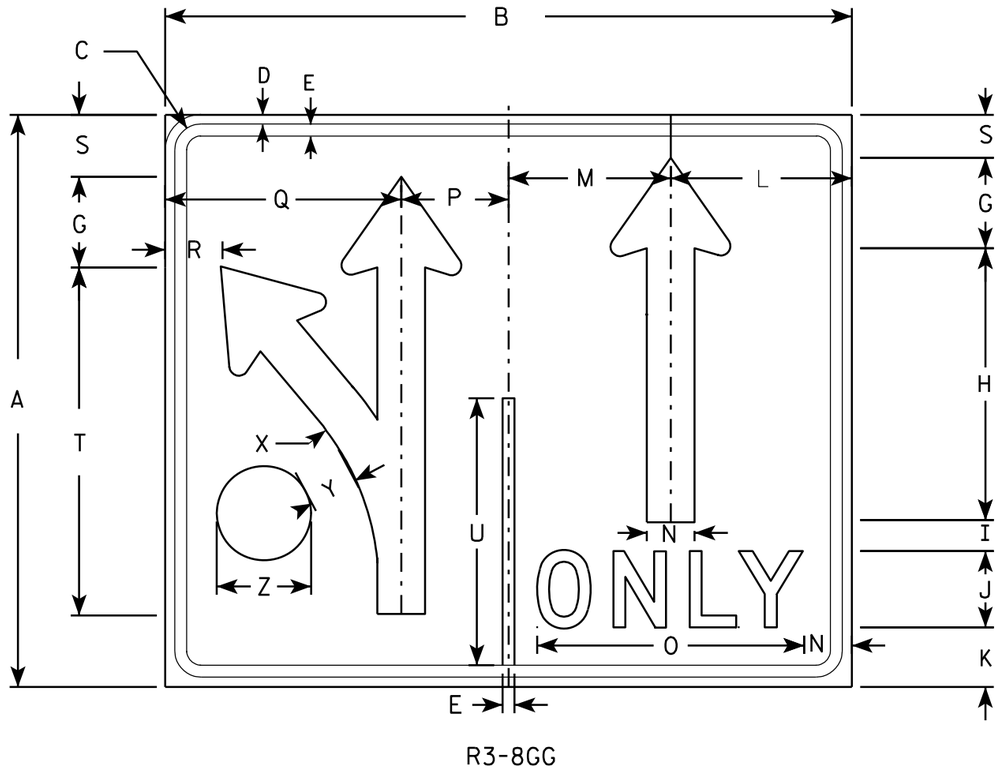
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/2011 PLATE NO. R3-8G.2

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 493 | 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

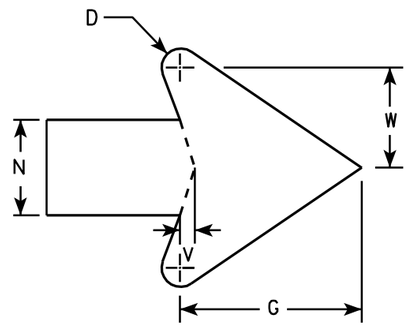
WISDOT/CADDS SHEET 42



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	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	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																											

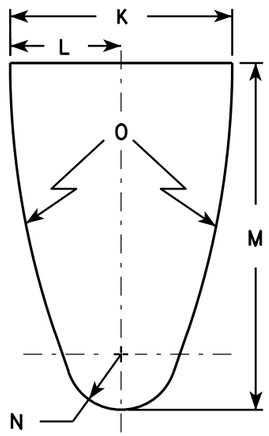
STANDARD SIGN
R3-8GG

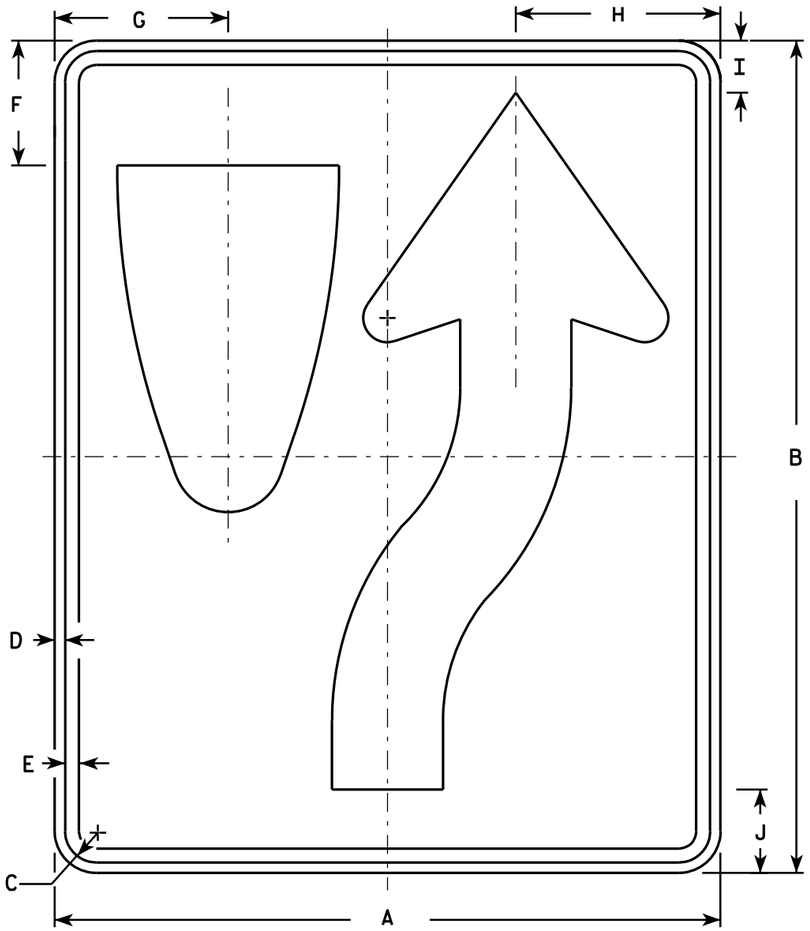
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/2011 PLATE NO R3-8GG.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 494	E

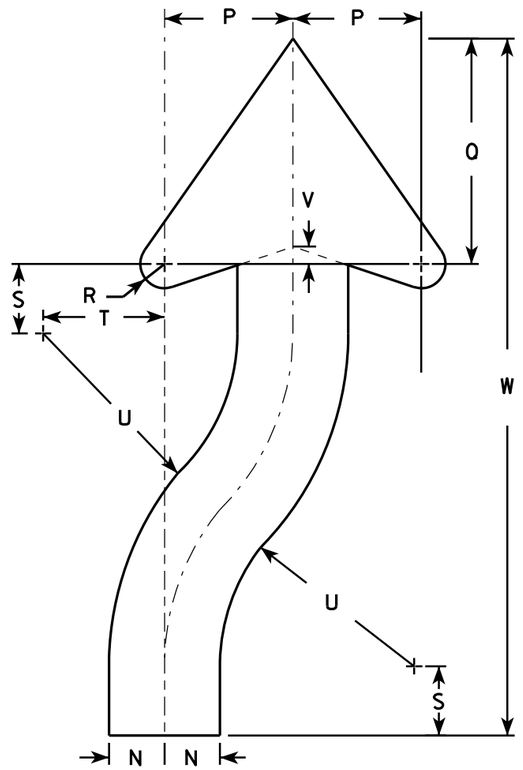




R4-7

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

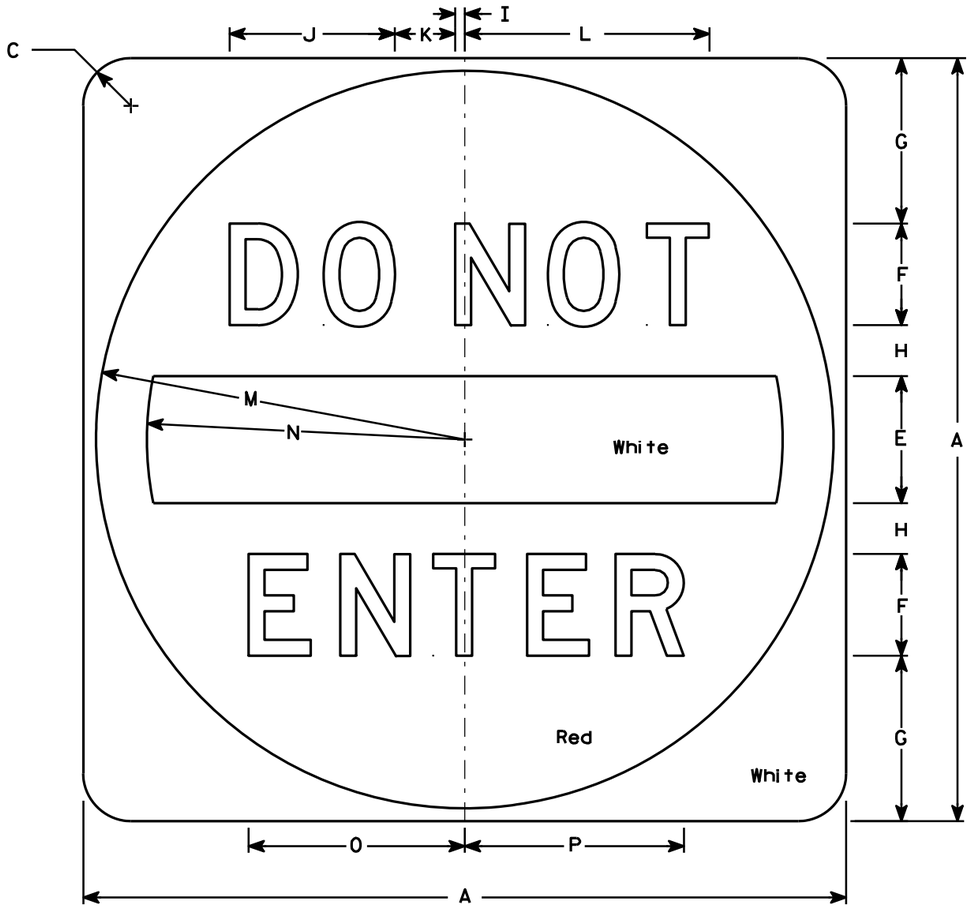
STANDARD SIGN
R4-7 & R4-8

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: 495	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

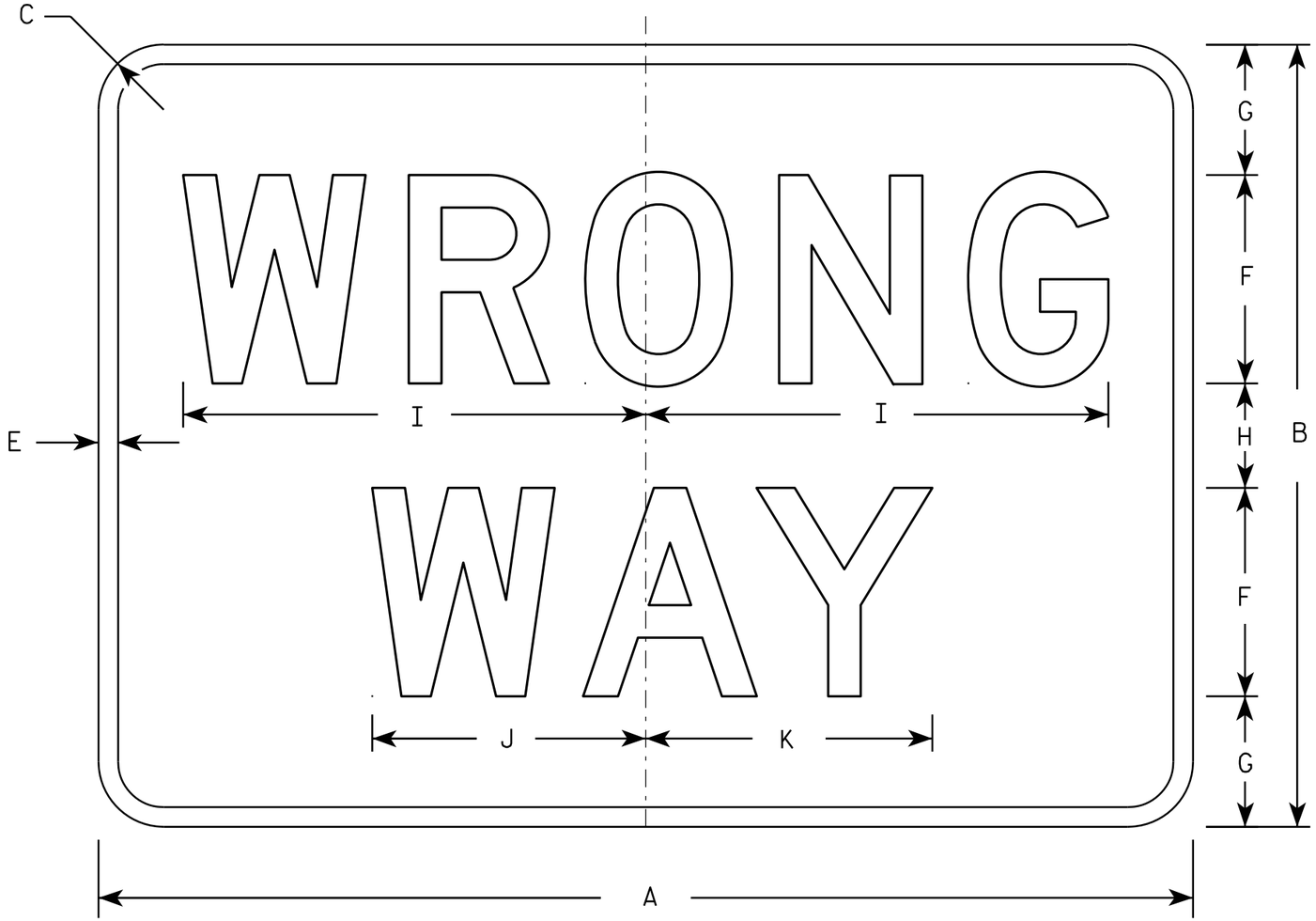
STANDARD SIGN
R5-1

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: 496 | 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

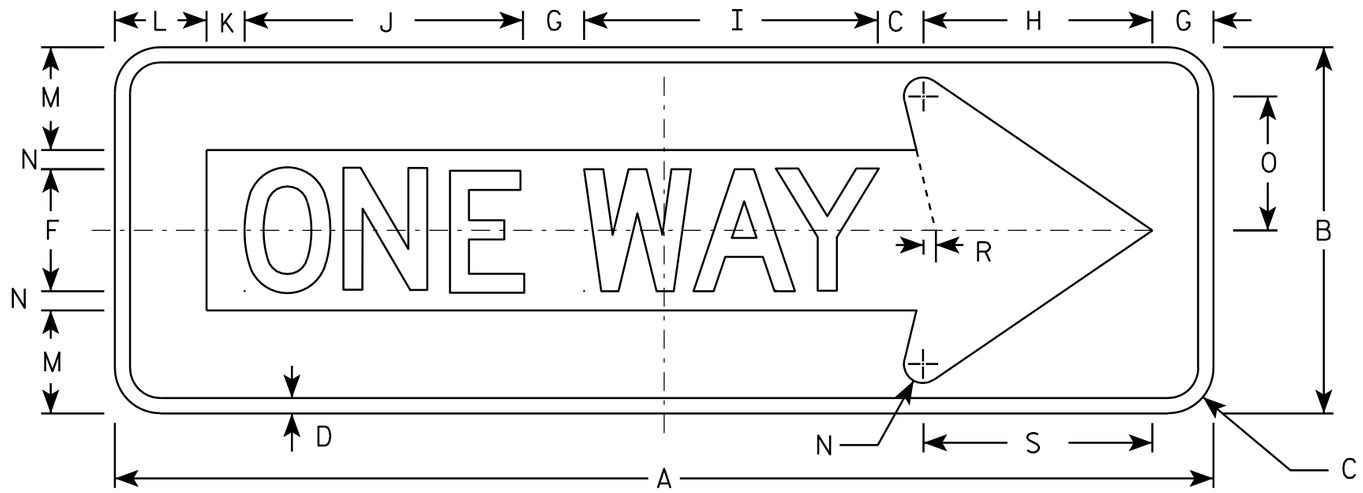
STANDARD SIGN
R5-1A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/17/10 PLATE NO. R5-1A.2

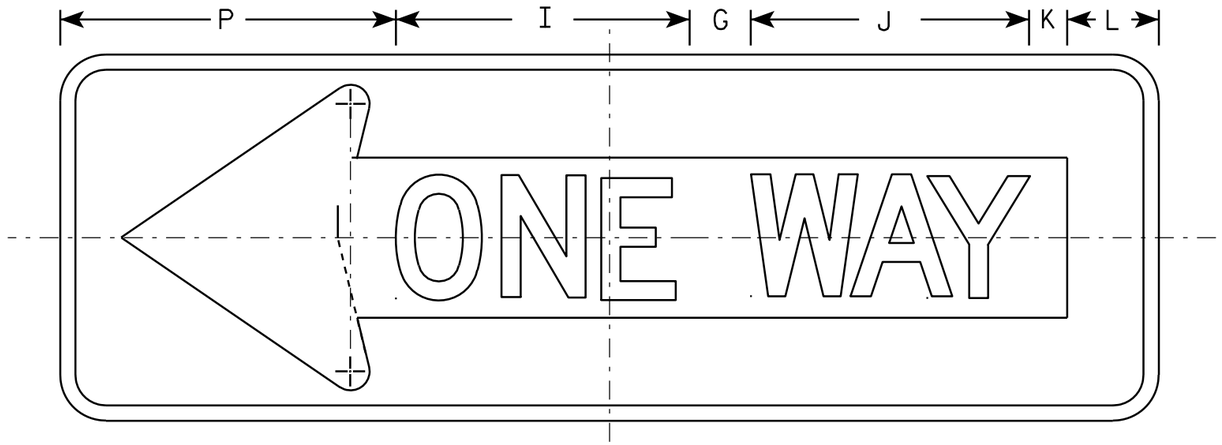
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 497	E



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:

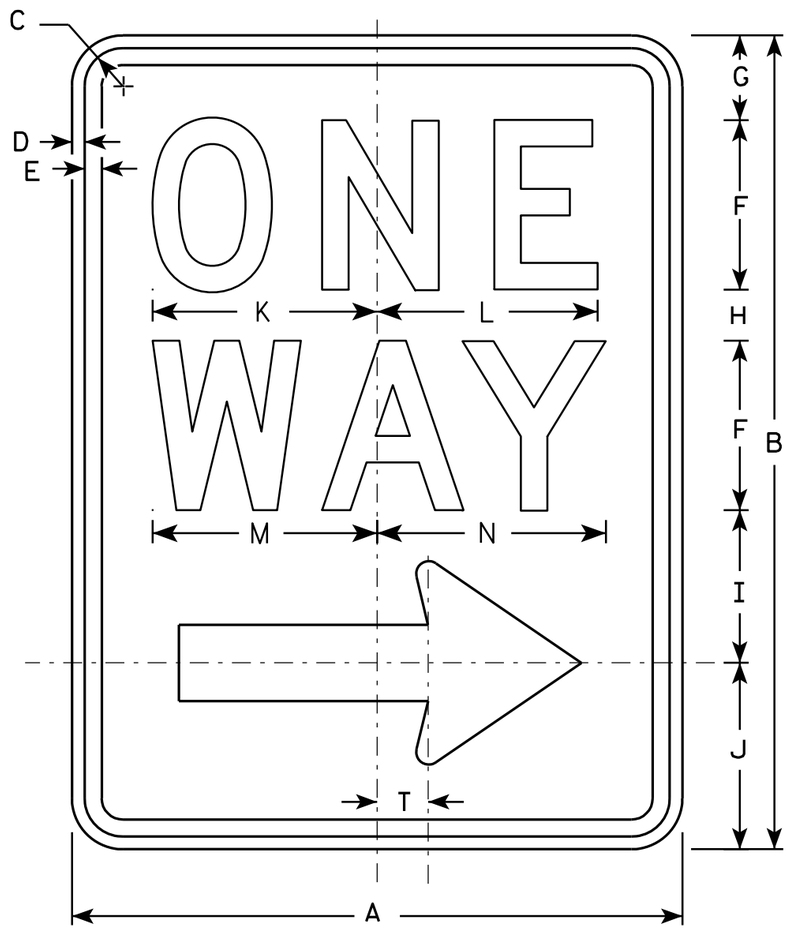
SHEET NO: 498 E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R61.DGN PLOT DATE : 17-DEC-2010 14:11 PLOT BY : dotsja

WISDOT/CADDS SHEET 42

7

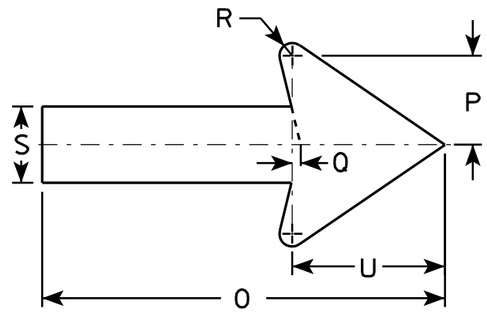
7



R6-2R

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - 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.
5. R6-2L same as R6-2R except arrow points to the left.



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
1	18	24	1 1/8	3/8	1/2	5	2 1/2	1 1/2	4 1/2	5 1/2	6 5/8	6 1/2	6 5/8	6 3/4	11 7/8	2 5/8	1/4	3/8	2 1/4	1 1/2	4 1/2					
2S	24	30	1 1/8	3/8	1/2	6	3	2 1/2	5 1/2	7	8 1/8	8 1/8	8 1/2	8 5/8	16	3 1/2	3/8	1/2	3	2	6					
2M	30	36	1 3/8	1/2	5/8	8	2 1/2	2 5/8	6 7/8	8	10 1/2	10 1/2	11 1/4	11 1/4	20	4 3/8	1/2	5/8	3 3/4	2 1/2	7 1/2					
3	36	48	1 7/8	1/2	5/8	10	5 1/4	3 1/4	9	10 1/2	12 3/4	12 3/4	13 1/4	13 1/2	24	5 5/8	1/2	3/4	4 3/4	3	9					
4	36	48	1 7/8	1/2	5/8	10	5 1/4	3 1/4	9	10 1/2	12 3/4	12 3/4	13 1/4	13 1/2	24	5 5/8	1/2	3/4	4 3/4	3	9					
5																										

STANDARD SIGN
R6-2 R&L

WISCONSIN DEPT OF TRANSPORTATION

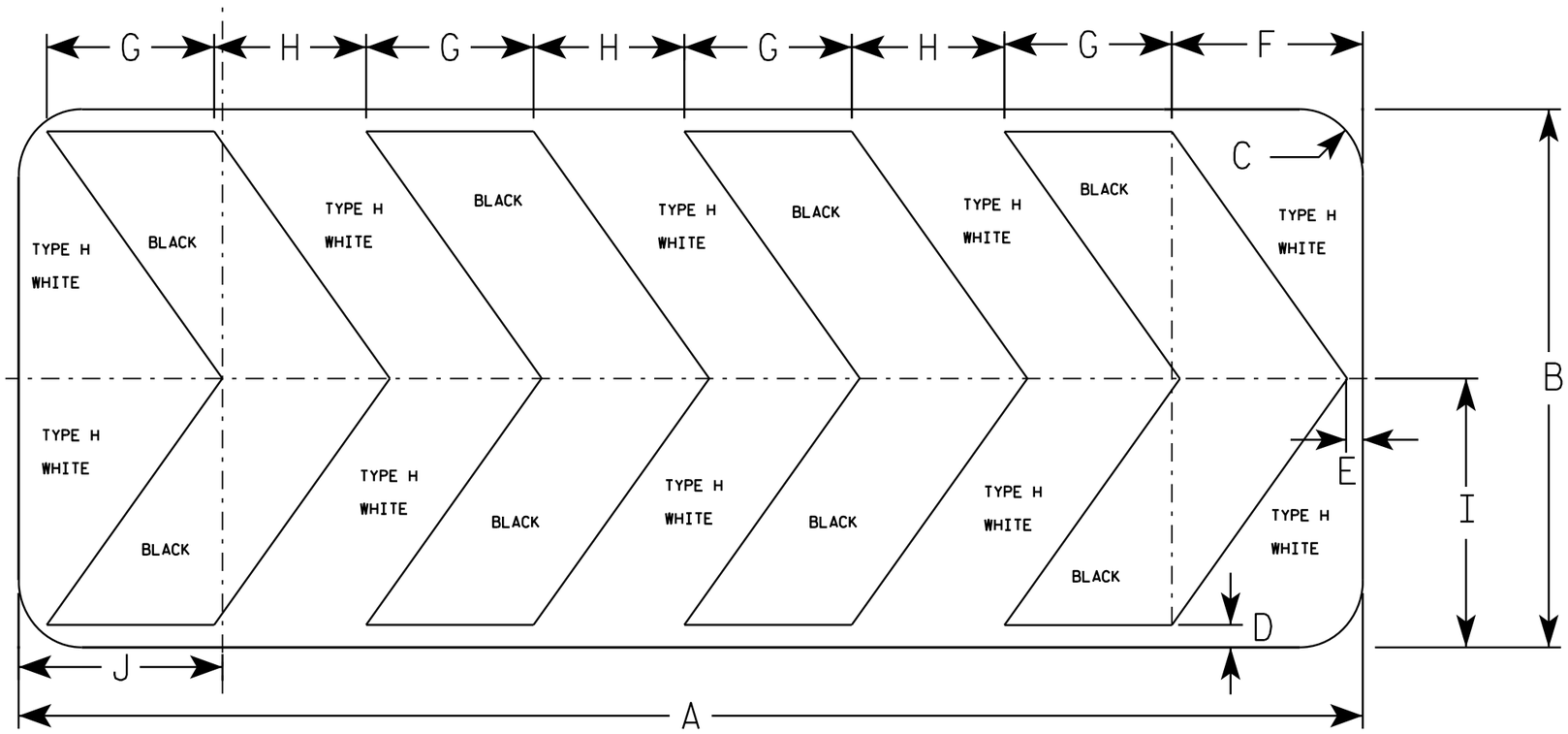
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/2/10 PLATE NO. R6-2.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 499	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:

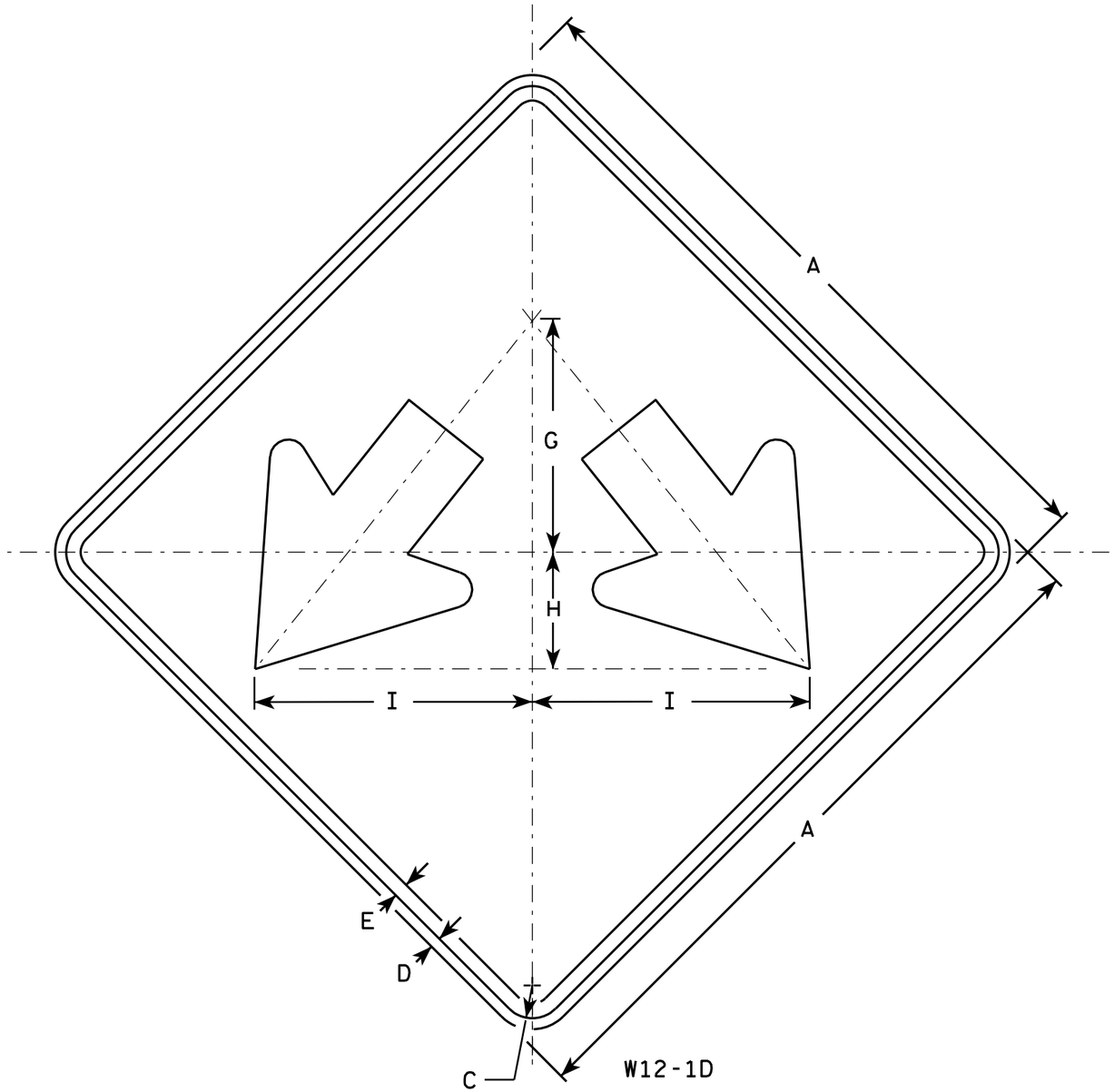
SHEET NO: 500 E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R64B.DGN PLOT DATE : 03-JAN-2011 14:30 PLOT BY : dotsja

WISDOT/CADDS SHEET 42

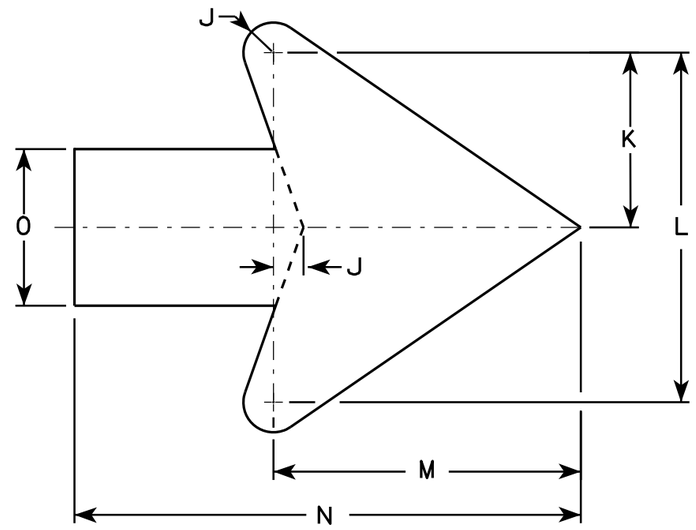
7

7



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.



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

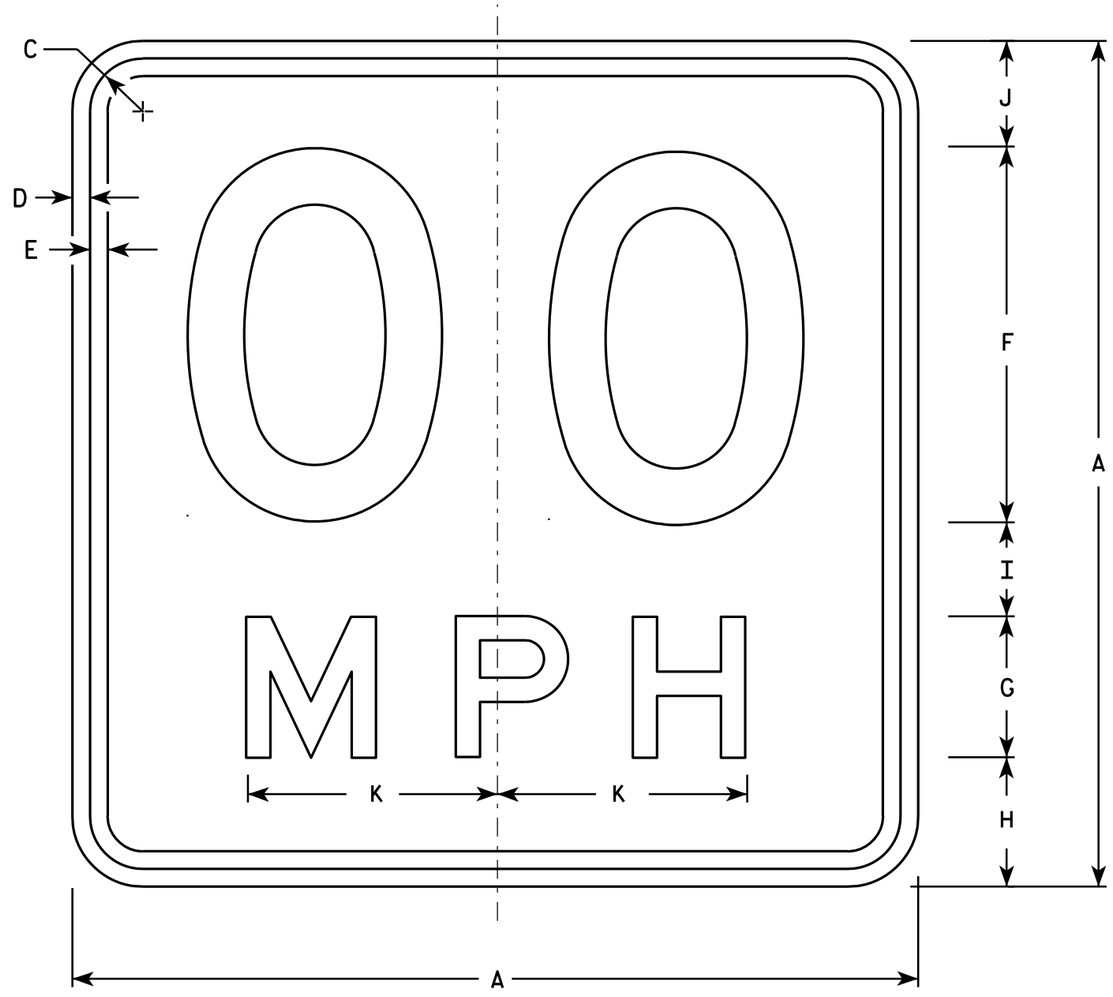
STANDARD SIGN
W12-1D

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/13/13 PLATE NO. W12-1D.15

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 501	E



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

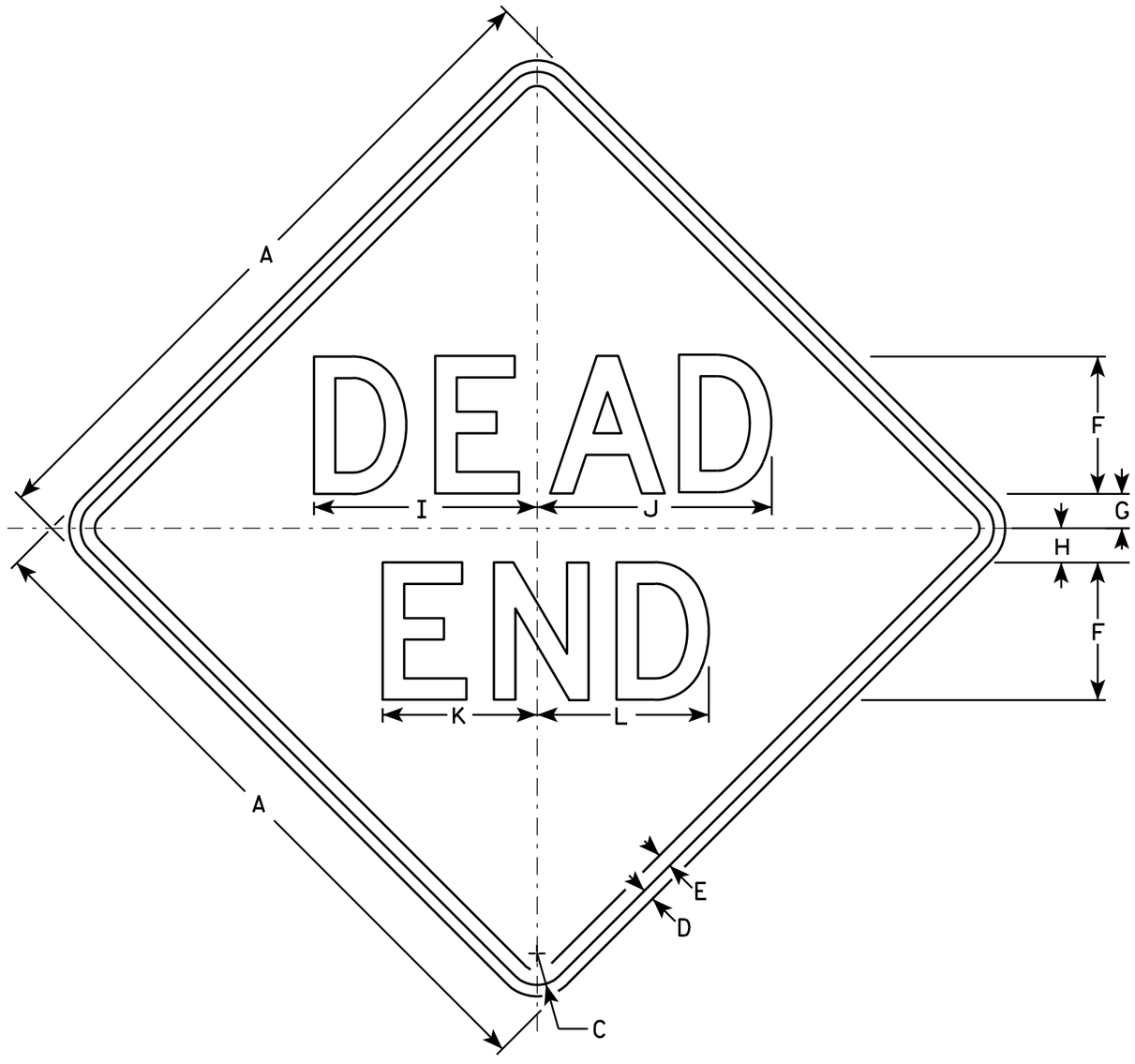
STANDARD SIGN
W13-1

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: 502 | E



W14-1

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 - 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

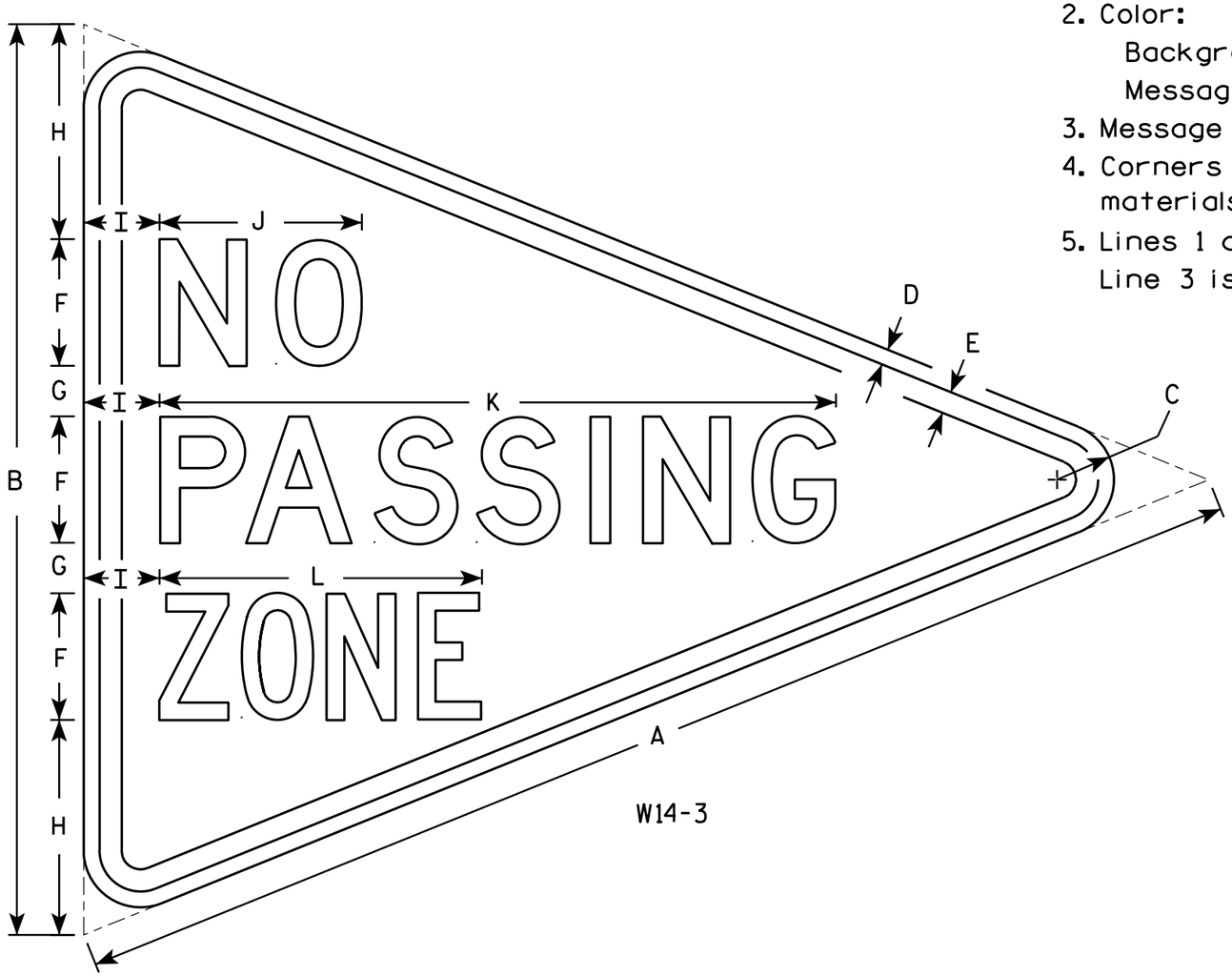
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/13/13 PLATE NO. W14-1.7

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 503	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 - Black
3. Message Series - See note 5
4. Corners and borders shall be rounded on all base materials for this sign.
5. Lines 1 and 2 are Series D.
   Line 3 is series C.



W14-3

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	48	36	2 1/4	5/8	7/8	5	2	8 1/2	3	8	26 3/4	12 3/4															6.0
2M	48	36	2 1/4	5/8	7/8	5	2	8 1/2	3	8	26 3/4	12 3/4															6.0
3	64	48	3	3/4	1 1/4	6	3	12	4	10 3/4	33 5/8	16 1/2															10.7
4																											
5																											

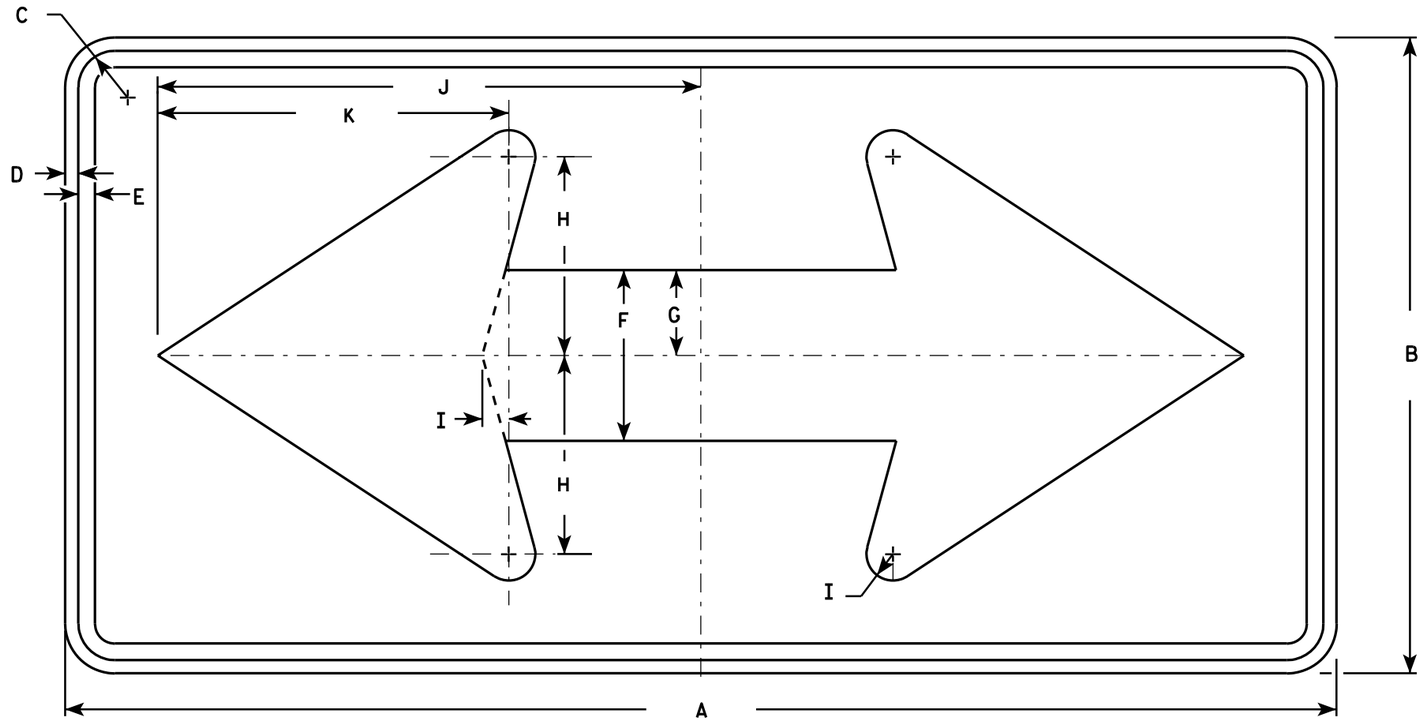
STANDARD SIGN
W14-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W14-3.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 504	E



W1-7

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	36	18	1 1/8	3/8	1/2	5	2 1/2	5 3/4	3/4	15 5/8	10 1/8																4.5
2S	48	24	1 3/8	1/2	5/8	6 1/2	3 1/4	7 1/2	1	20 1/2	13 1/4																8.0
2M	48	24	1 3/8	1/2	5/8	6 1/2	3 1/4	7 1/2	1	20 1/2	13 1/4																8.0
3	60	30	1 3/8	1/2	5/8	8	4	9 1/4	1 1/4	25 3/8	16 1/4																12.5
4	60	30	1 3/8	1/2	5/8	8	4	9 1/4	1 1/4	25 3/8	16 1/4																12.5
5	96	48	2 1/4	3/4	1	13	6 1/2	15	2	41	26 1/2																32.0

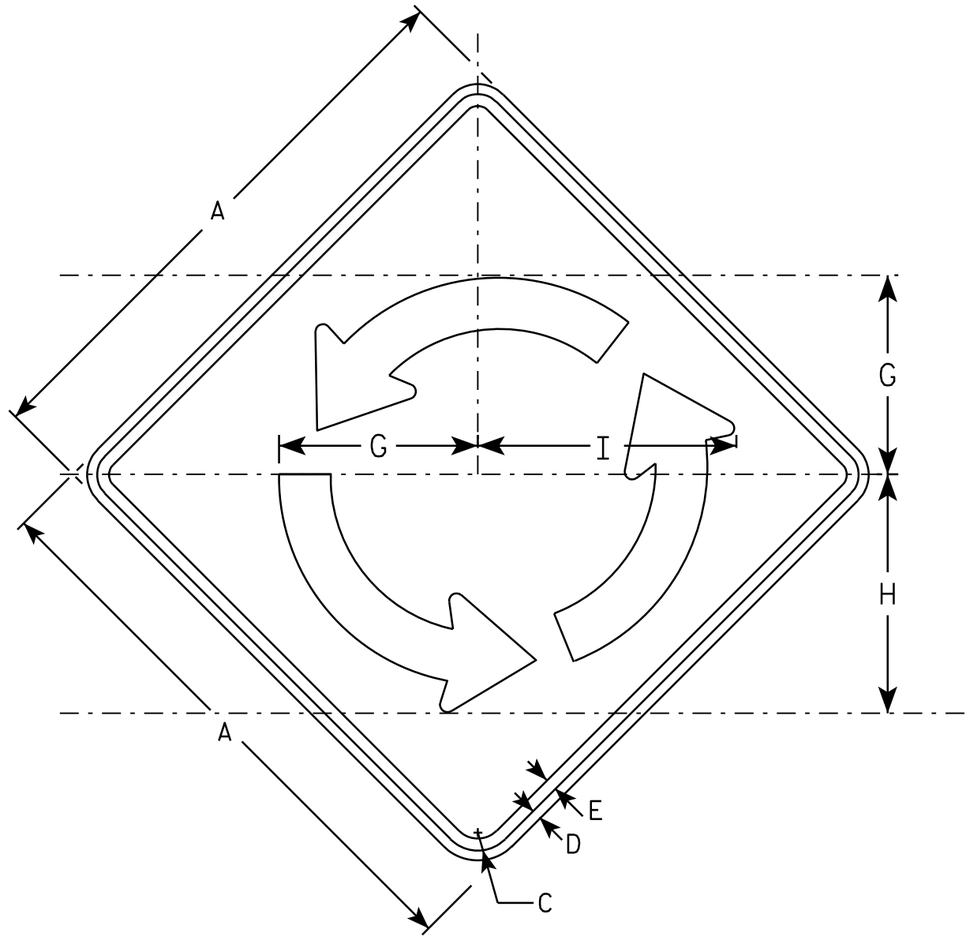
STANDARD SIGN
W1-7

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W1-7.7

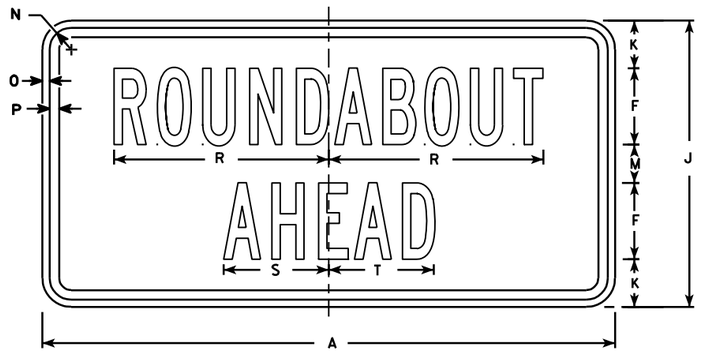
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 505 | E



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:

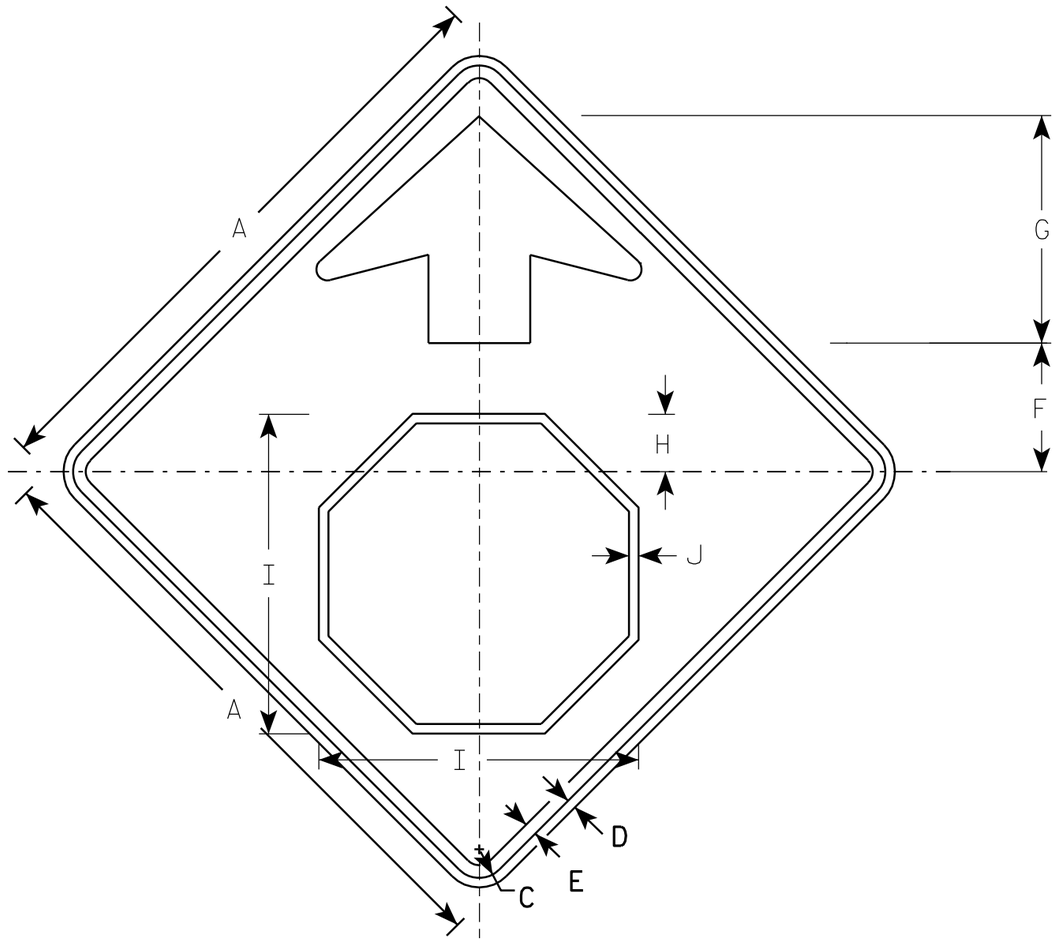
SHEET NO: 506 E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W26.DGN PLOT DATE : 29-JUN-2012 10:15 PLOT BY : mscsja

WISDOT/CADDS SHEET 42

7

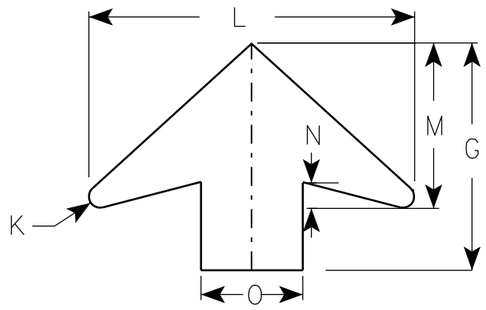
7



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

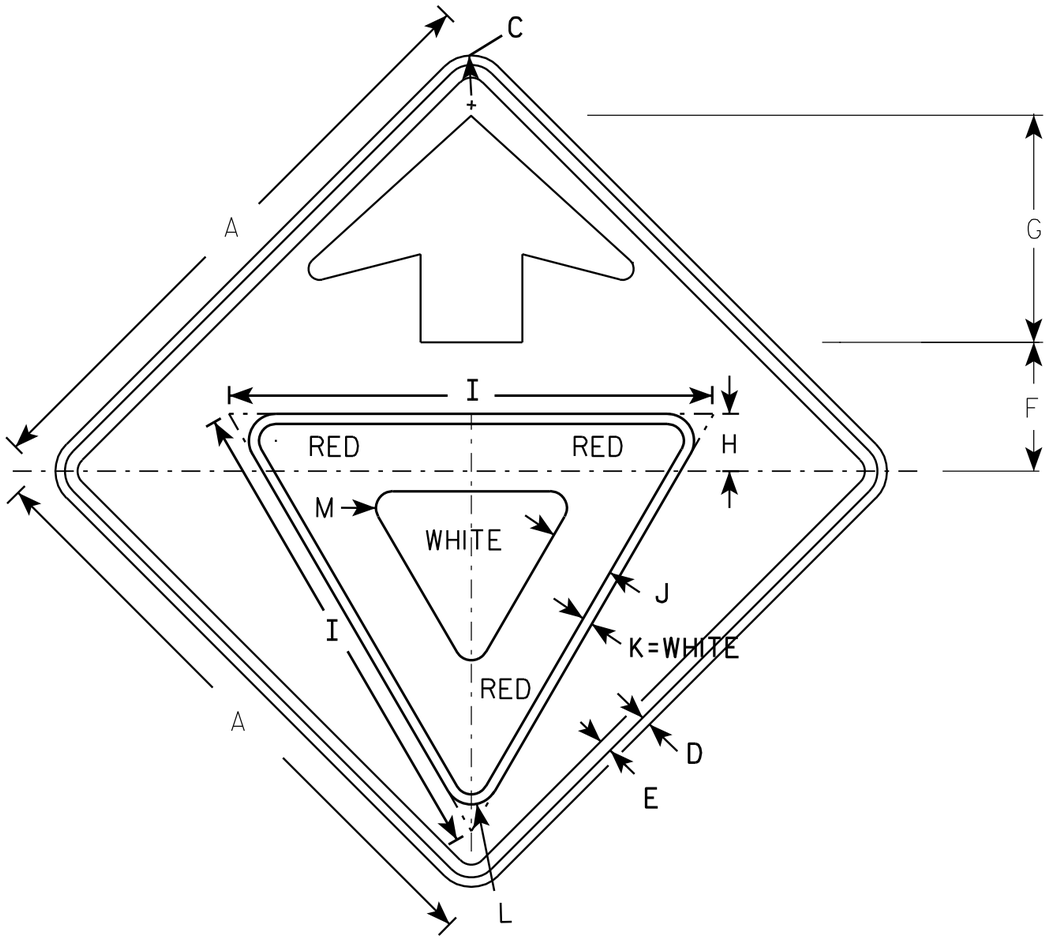
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W3-1.12

PROJECT NO:

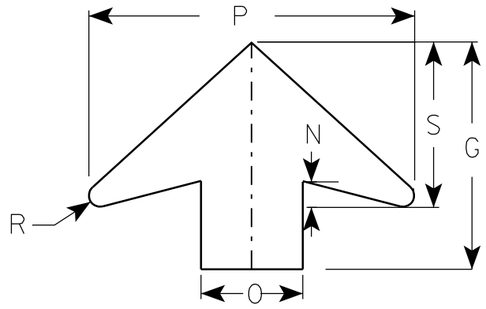
SHEET NO: 507 E



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:

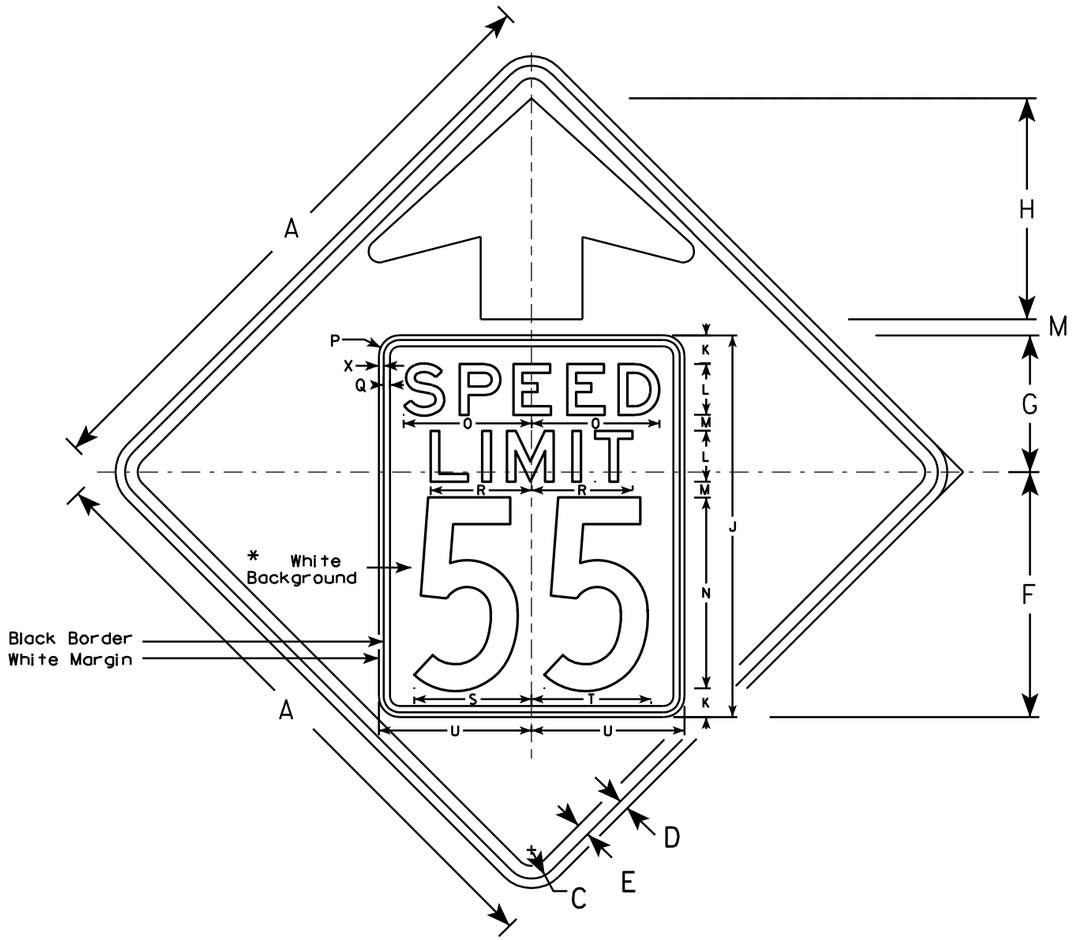
SHEET NO: 508 E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\W32.DGN PLOT DATE : 07-JUN-2010 13:03 PLOT BY : ditjph

WISDOT/CADDS SHEET 42

7

7

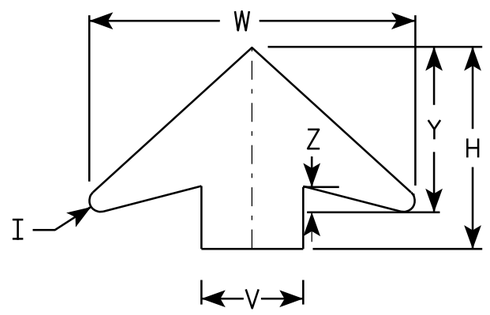


W3-5

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 for numbers Series E for wording
4. Substitute appropriate numerals and optically adjust spacing to achieve proper balance

*Speed Limit Sign shall have a White 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																											
2S	36		1 5/8	5/8	3/4	14 1/2	9 1/2	11 1/2	5/8	24	2	3	1	12	7 1/8	1 1/2	3/8	5 3/4	7 1/4	7 1/8	9	6	19 1/4	3/8	9 3/4	1 5/8	9.0
2M	36		1 5/8	5/8	3/4	14 1/2	9 1/2	11 1/2	5/8	24	2	3	1	12	7 1/8	1 1/2	3/8	5 3/4	7 1/4	7 1/8	9	6	19 1/4	3/8	9 3/4	1 5/8	9.0
3	36		1 5/8	5/8	3/4	14 1/2	9 1/2	11 1/2	5/8	24	2	3	1	12	7 1/8	1 1/2	3/8	5 3/4	7 1/4	7 1/8	9	6	19 1/4	3/8	9 3/4	1 5/8	9.0
4	48		2 1/4	3/4	1	19 1/4	10 3/4	17 3/8	7/8	30	2 1/4	4	1 1/4	15	10	1 5/8	1/2	8	9 1/4	9 3/8	12	8	25 5/8	3/8	13	2	16.0
5	48		2 1/4	3/4	1	19 1/4	10 3/4	17 3/8	7/8	30	2 1/4	4	1 1/4	15	10	1 5/8	1/2	8	9 1/4	9 3/8	12	8	25 5/8	3/8	13	2	16.0

STANDARD SIGN
W3-5

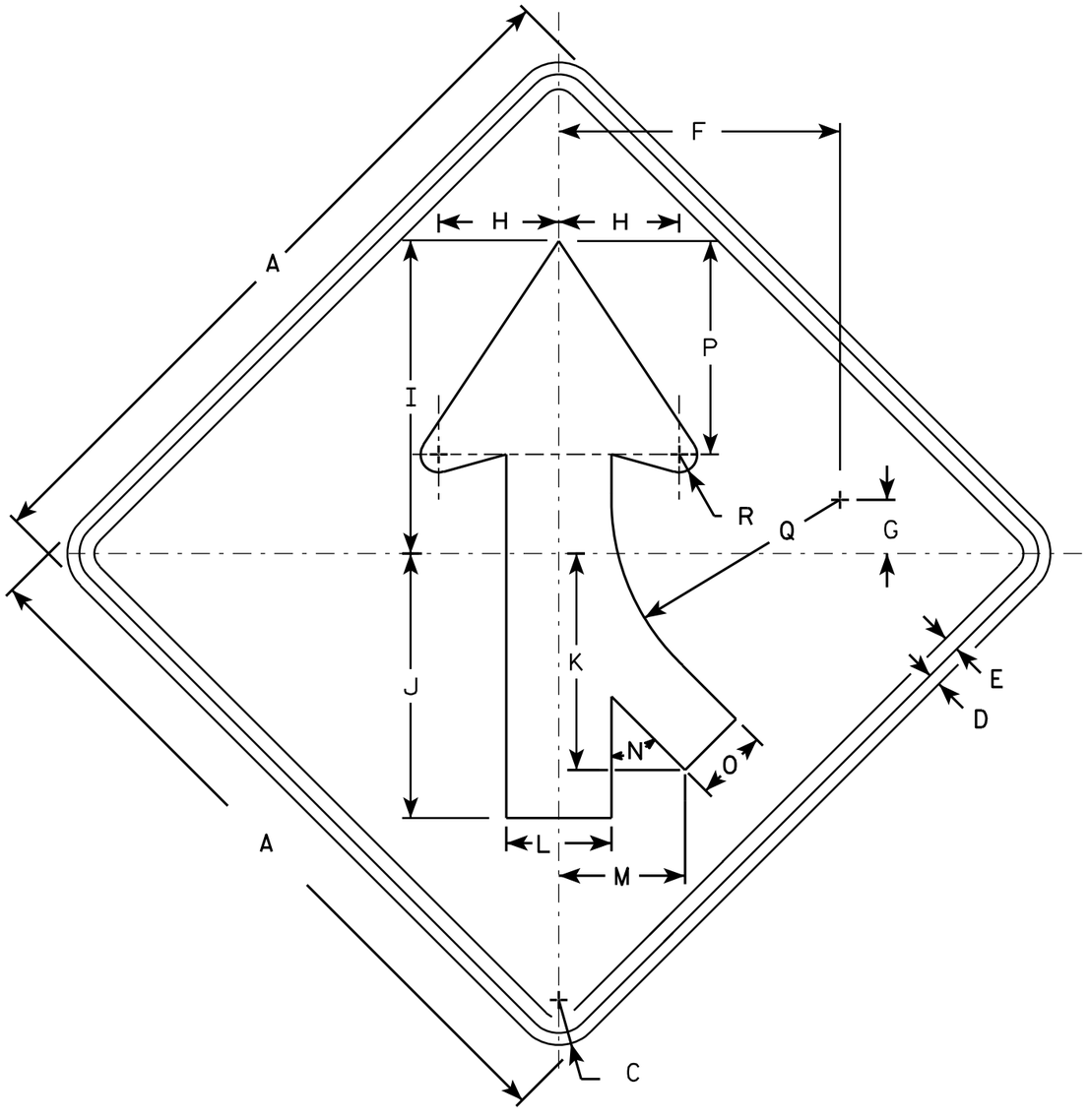
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/29/12 PLATE NO. W3-5.5

PROJECT NO:

SHEET NO: 509 E



W4-1 R

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. 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

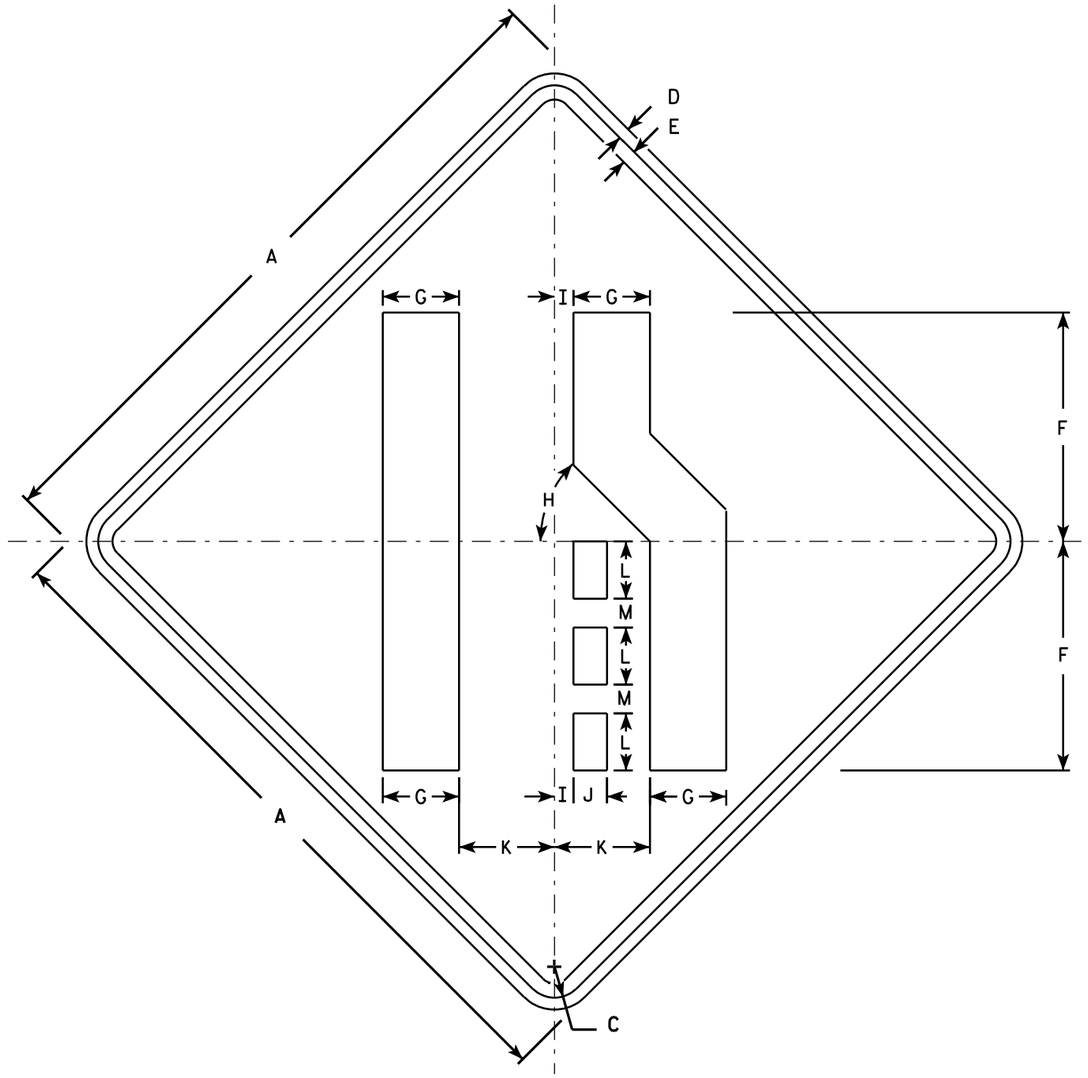
STANDARD SIGN
W4-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rausch for State Traffic Engineer

DATE 03/12/13 PLATE NO. W4-1.14

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 510 | E



W4-2R

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. 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

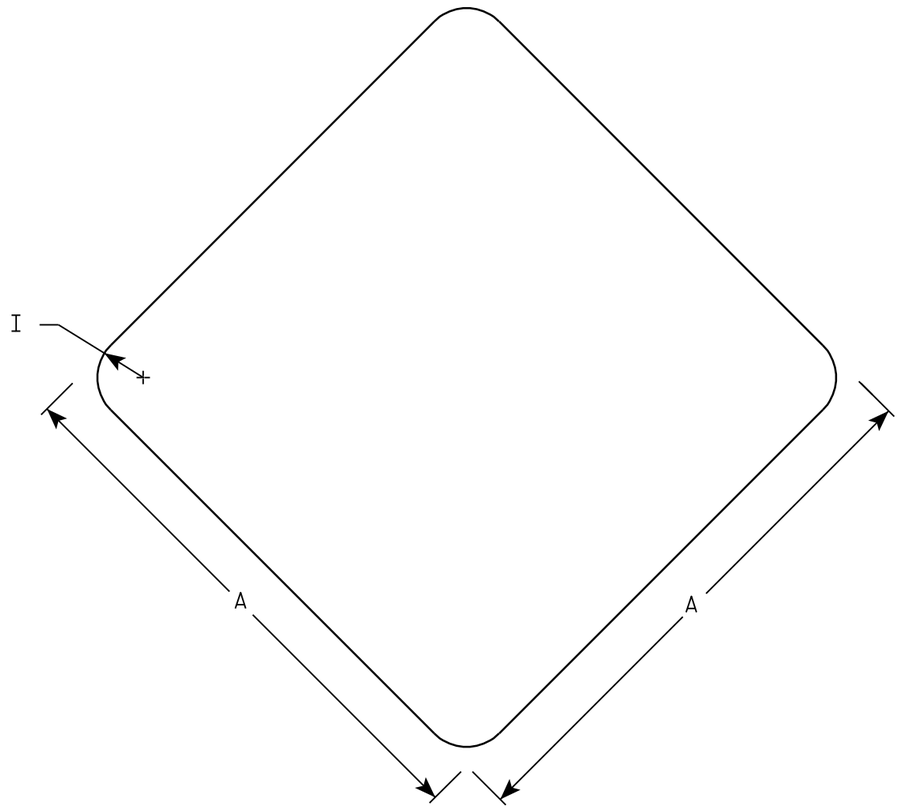
DATE 3/12/13 PLATE NO. W4-2.14

PROJECT NO:

SHEET NO: 511 E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W42.DGN PLOT DATE : 12-MAR-2013 11:09 PLOT BY : mscsja

WISDOT/CADDS SHEET 42



W5-54

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
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																											

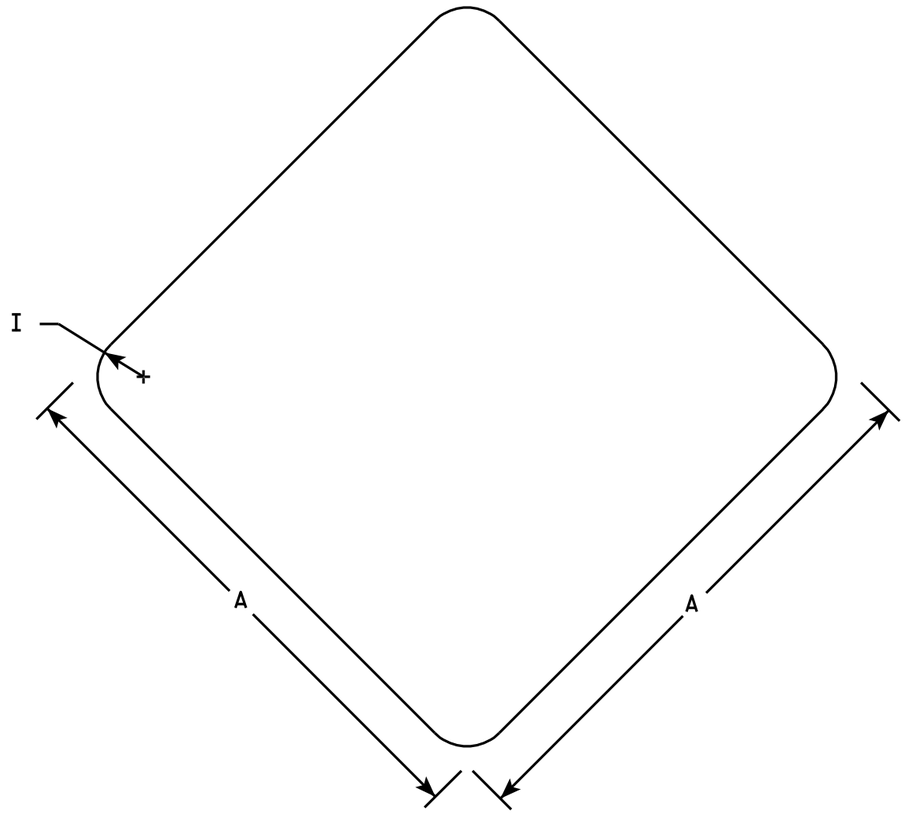
STANDARD SIGN
W5-54

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/3/10 PLATE NO. W5-54.8

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 512 | 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																											

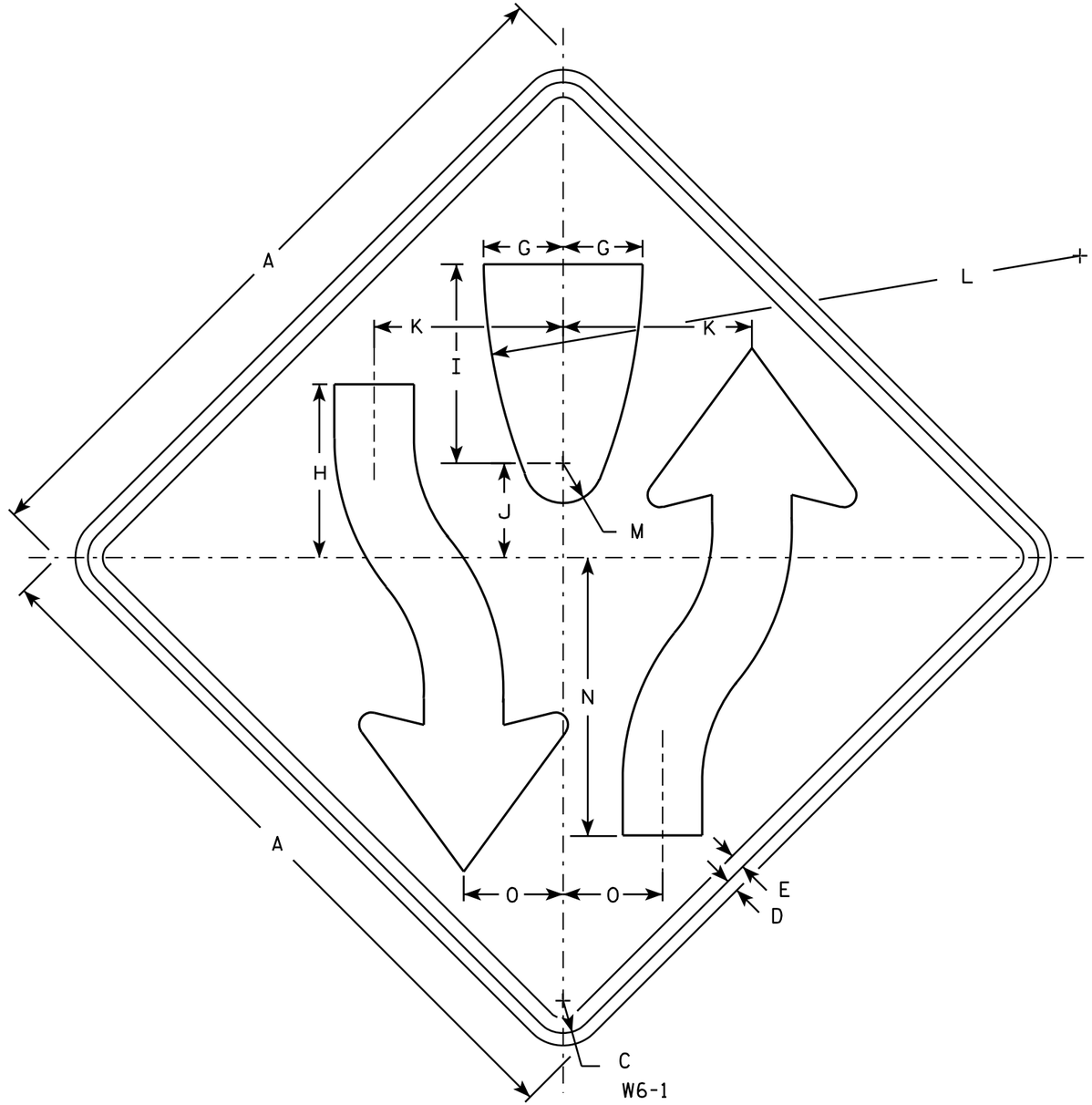
STANDARD SIGN
W5-56

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

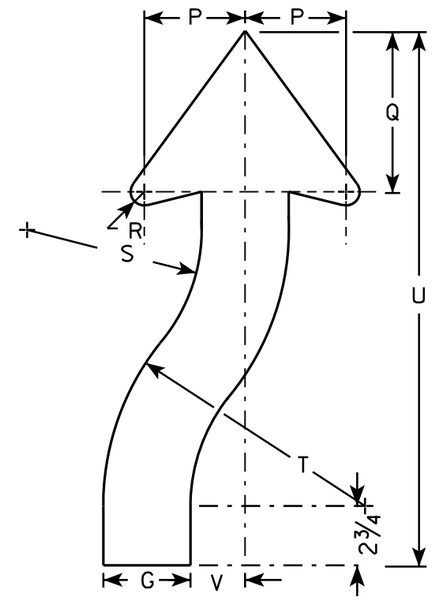
DATE 11/2/10 PLATE NO. W5-56.6

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 513	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 - 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

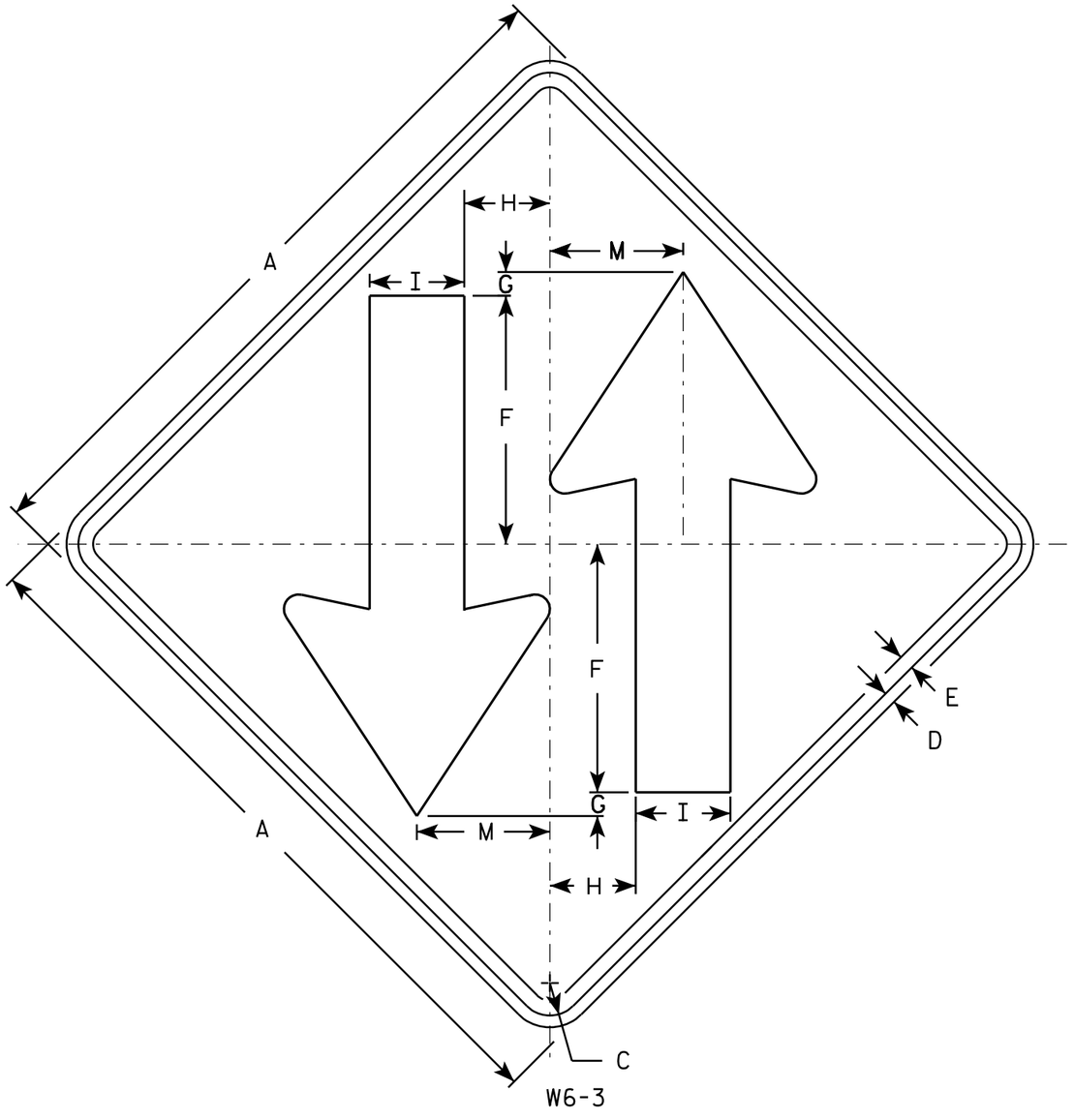
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 03/12/13 PLATE NO. W6-1.14

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 514	E

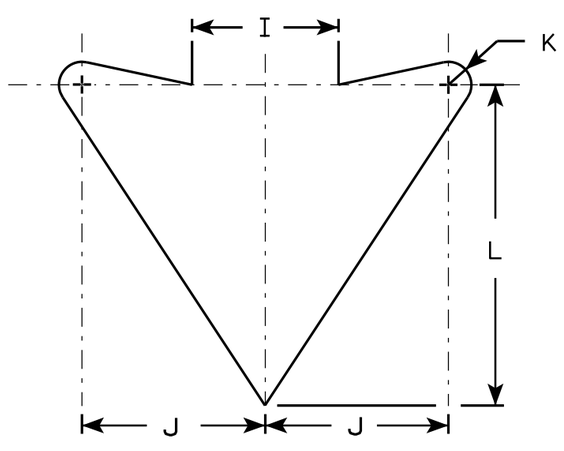
7

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W61.DGN PLOT DATE : 12-MAR-2013 14:02 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 6.946657:1.000000
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.



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

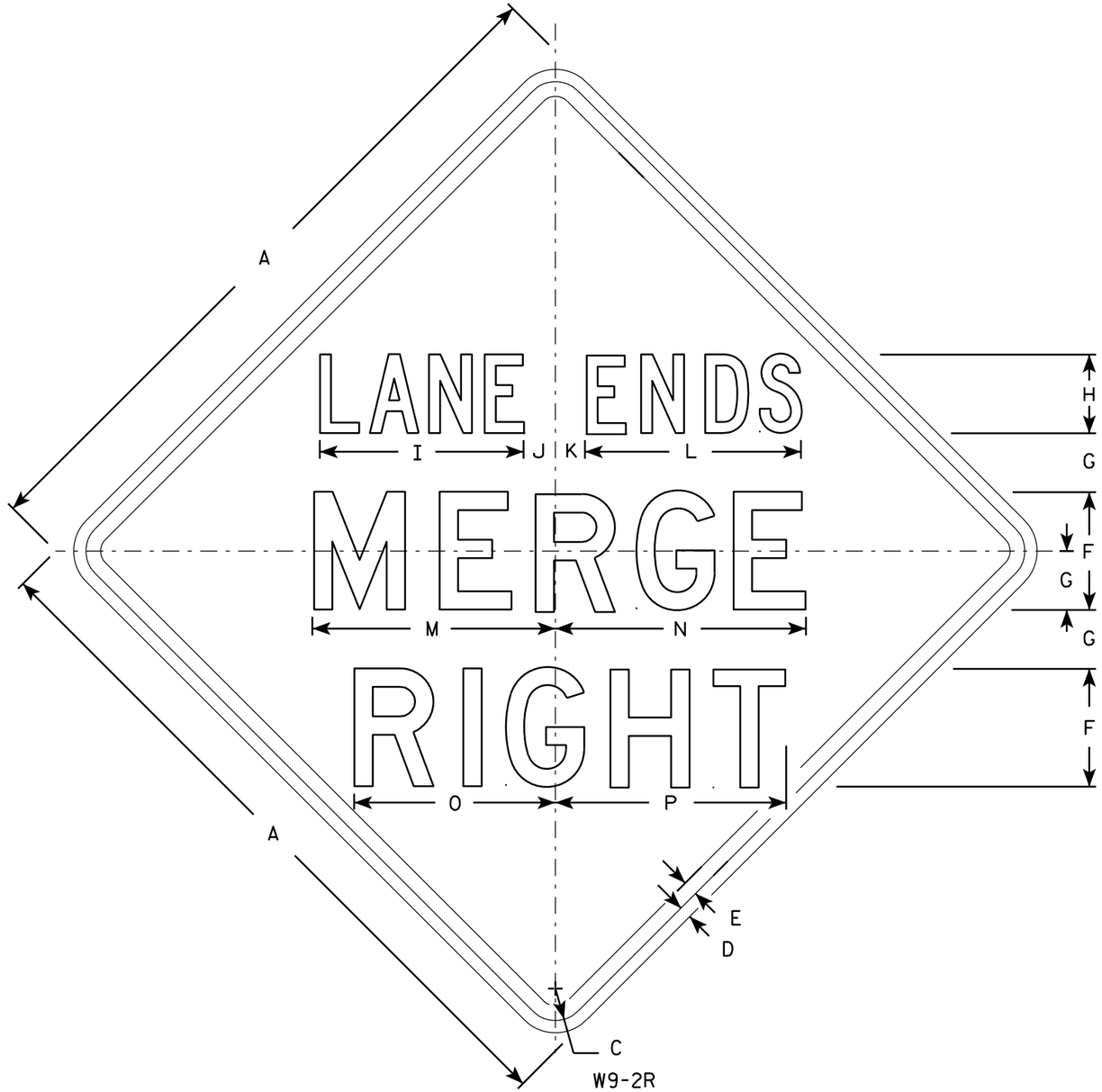
STANDARD SIGN
W6-3

WISCONSIN DEPT OF TRANSPORTATION

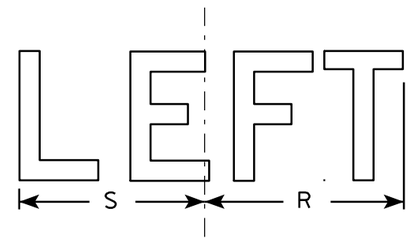
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 03/12/13 PLATE NO. W6-3.10

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 515 | E



W9-2R



W9-2L

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 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 C, lines 2 & 3 are Series D.
6. W9-1L is the same as W9-2R except the word LEFT replaces RIGHT.

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 R Rauch
for State Traffic Engineer

DATE 03/18/13 PLATE NO. W9-2.10

PROJECT NO:

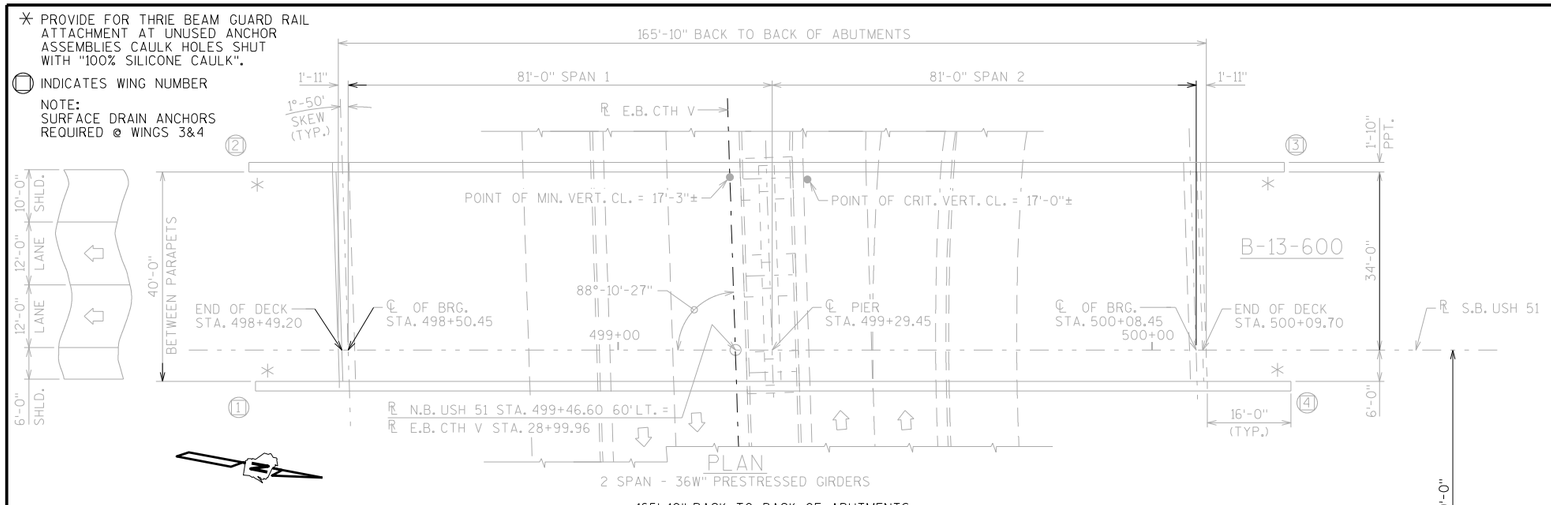
SHEET NO: 516 E

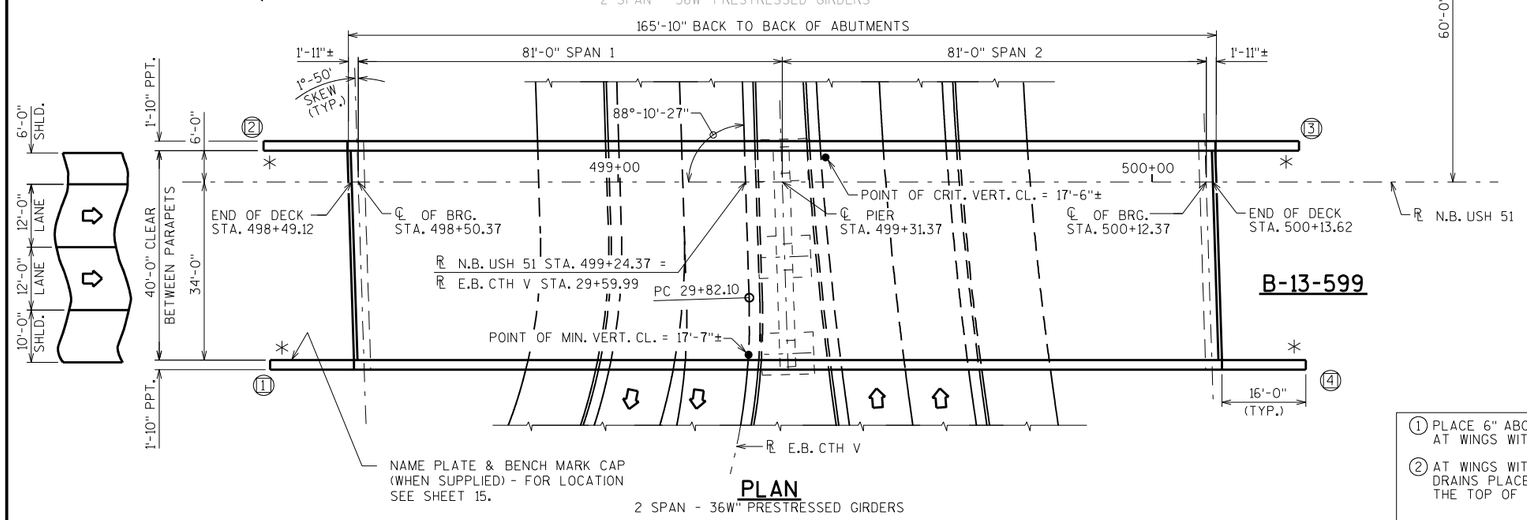
STATE PROJECT NUMBER
6020-02-72

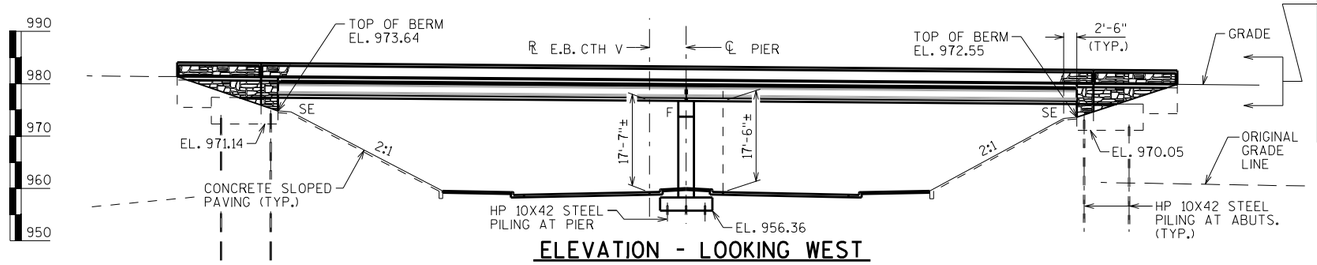
✳ PROVIDE FOR THRIE BEAM GUARD RAIL ATTACHMENT AT UNUSED ANCHOR ASSEMBLIES CAULK HOLES SHUT WITH "100% SILICONE CAULK".

(1) INDICATES WING NUMBER

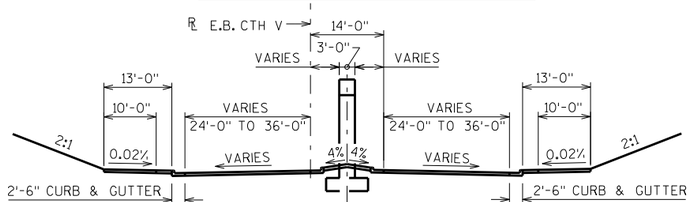
NOTE:
SURFACE DRAIN ANCHORS REQUIRED @ WINGS 3&4







ELEVATION - LOOKING WEST



TYPICAL SECTION THRU CTH V
LOOKING WEST

DESIGN DATA

LIVE LOAD:

DESIGN LOADING; HL-93
INVENTORY RATING FACTOR: RF = 1.10
OPERATING RATING FACTOR: RF = 1.43
WISCONSIN STANDARD PERMIT VEHICLE (WIS.-SPV): 250 (KIPS)

STRUCTURE IS DESIGNED FOR A FUTURE WEARING SURFACE OF 20 POUNDS PER SQUARE FOOT.

ULTIMATE DESIGN STRESSES:

CONCRETE MASONRY SLAB — f'c = 4,000 P.S.I. ALL OTHER — f'c = 3,500 P.S.I.
BAR STEEL REINFORCEMENT, GRADE 60 — fy = 60,000 P.S.I.
36W" PRESTRESSED GIRDERS, CONCRETE MASONRY — f'c = 8,000 P.S.I.
STRANDS- 0.6" DIA. WITH ULTIMATE TENSILE STRENGTH OF 270,000 P.S.I.

FOUNDATION DATA

ABUTMENTS TO BE SUPPORTED ON HP 10X42 STEEL PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 180 TONS ✱✱PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA.
ESTIMATED 50'-0" LONG (S. ABUT.).
ESTIMATED 35'-0" LONG (N. ABUT.).

PIER TO BE SUPPORTED ON HP 10X42 STEEL PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 165 TONS ✱✱PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA.
ESTIMATED 30'-0" LONG.

✱✱ 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 VOLUME

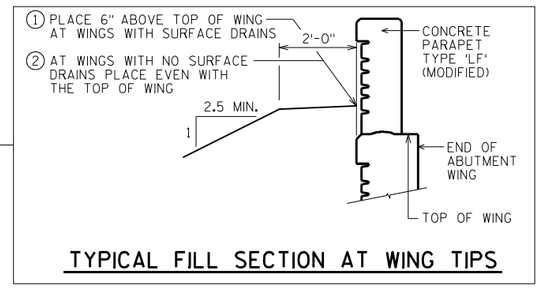
N.B. USH 51	CTH V
A.D.T.=28800 (2030)	A.D.T.=16985 (2030)
R.D.S.=70 M.P.H.	R.D.S.=35 M.P.H.

CURVE DATA

E.B. CTH V

P.I. = 30+35.52
Δ = 47°-22'-07"
D = 47°-03'-03"
T = 53.42'
L = 100.68'
R = 121.77'
P.C. = 29+82.10
P.T. = 30+82.78

℄ S.B. USH 51 IS AN AUXILARY ℄ CREATED FOR BRIDGE LAYOUT ONLY.



TYPICAL FILL SECTION AT WING TIPS

LIST OF DRAWINGS

1. GENERAL PLAN
2. CROSS SECTION & QUANTITIES
3. SUBSURFACE EXPLORATION
4. SOUTH ABUTMENT
5. SOUTH ABUTMENT DETAILS
6. NORTH ABUTMENT
7. NORTH ABUTMENT DETAILS
8. PIER
9. PIER DETAILS
10. 36W" PRESTRESSED GIRDER DETAILS
11. 36W" PRESTRESSED GIRDER DETAILS
12. STEEL DIAPHRAGM
13. SUPERSTRUCTURE
14. SUPERSTRUCTURE DETAILS
15. SLOPED FACE PARAPET TYPE 'LF'(MODIFIED)
16. SLOPED PAVING (CONCRETE CAST-IN-PLACE)

STRUCTURES DESIGN CONTACTS:
VU THAO (608) 267-2869
DAVID KIEKBUSCH (608) 266-5084

NO.	DATE	REVISION	BY

Plans Prepared By WISDOT
BUREAU OF STRUCTURES

ACCEPTED William C. Dreher JUK 6/6/13
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE B-13-599

NORTHBOUND U.S.H. 51 OVER C.T.H. V

COUNTY: DANE — TOWN/~~CITY/VILLAGE~~: WINDSOR

DESIGN SPEC.: AASHTO LRFD DESIGN SPEC. 5th EDITION

DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
VT	MWL	DDS	MWL

GENERAL PLAN

SHEET 1 OF 16

517

I.D. 6020-02-00H

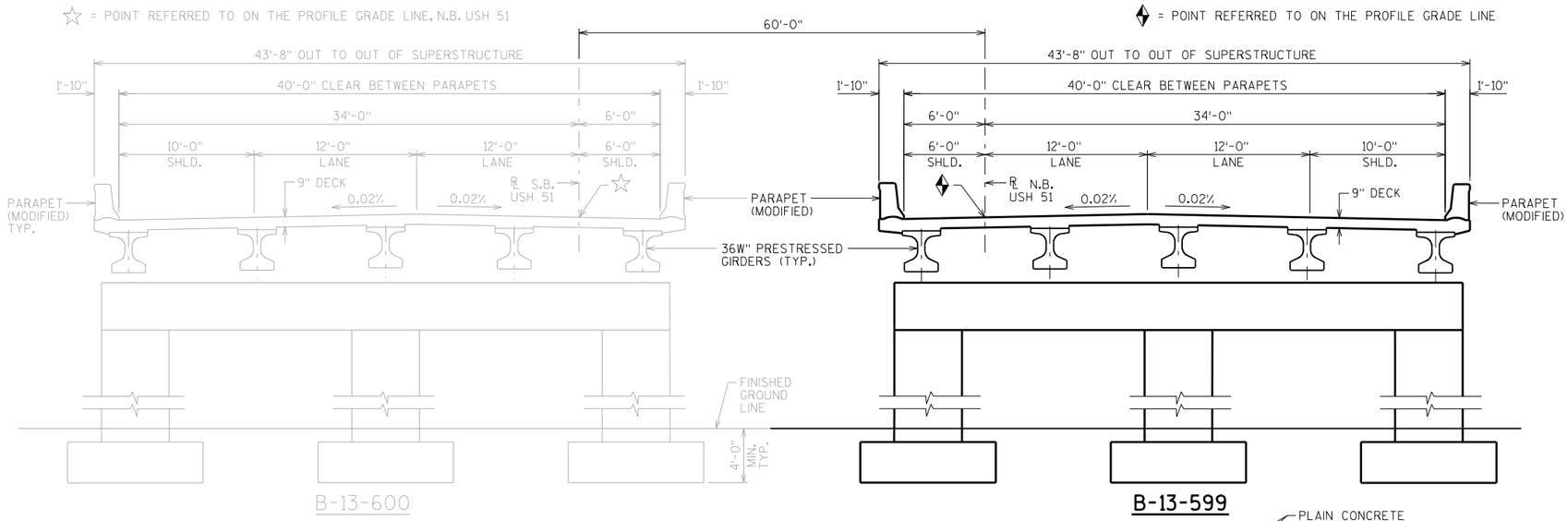
DATE: JUNE 2013

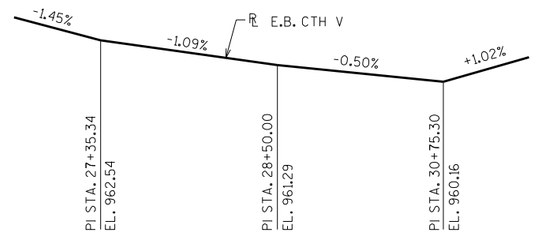
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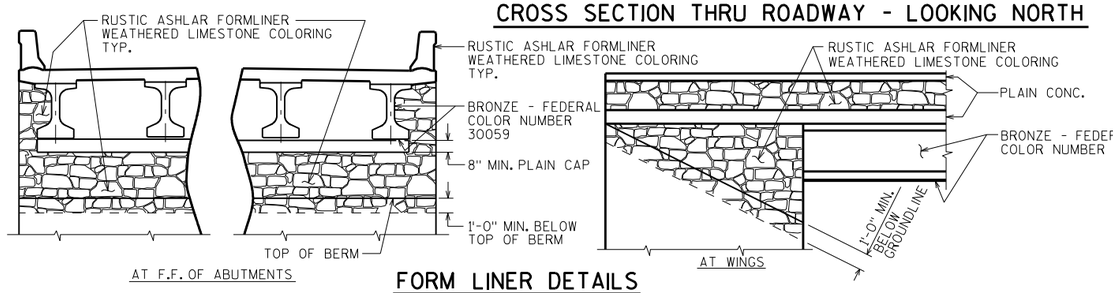
STATE PROJECT NUMBER
6020-02-72



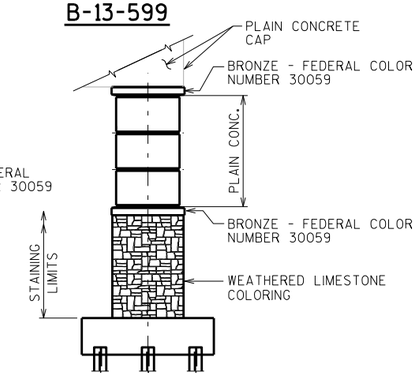


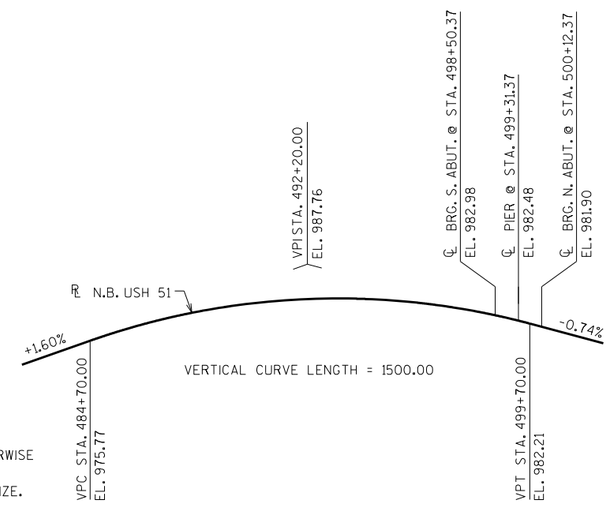
PROFILE GRADE LINE - E.B. CTH V

CROSS SECTION THRU ROADWAY - LOOKING NORTH



FORM LINER DETAILS





PROFILE GRADE LINE - N.B. USH 51

TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEMS	UNIT	SUPER.	SOUTH ABUT.	NORTH ABUT.	PIER	TOTALS
206.1000	EXCAVATION FOR STRUCTURES BRIDGES B-13-599	LS	———	———	———	———	1
210.0100	BACKFILL STRUCTURE	CY	———	240	240	———	480
502.0100	CONCRETE MASONRY BRIDGES	CY	310	81	80	76	547
502.3200	PROTECTIVE SURFACE TREATMENT	SY	910	———	———	———	910
503.0137	PRESTRESSED GIRDER TYPE I 36W-INCH	LF	814	———	———	———	814
505.0405	BAR STEEL REINFORCEMENT HS BRIDGES	LB	———	3020	3200	1425	7645
505.0605	BAR STEEL REINFORCEMENT HS COATED BRIDGES	LB	57565	3125	3145	16110	79945
506.2605	BEARING PADS ELASTOMERIC NON-LAMINATED	EACH	———	5	5	10	20
506.4000	STEEL DIAPHRAGMS B-13-599	EACH	16	———	———	———	16
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	———	12	12	———	24
517.1010.S	CONCRETE STAINING B-13-599	SF	2100	———	———	75	2175
517.1015.S	CONCRETE STAINING MULTI-COLOR B-13-599	SF	715	510	510	380	2115
517.1050.S	ARCHITECTURAL SURFACE TREATMENT B-13-599	SF	715	510	510	380	2115
550.1100	PILING STEEL HP 10-INCH X 42 LB	LF	———	500	350	540	1390
604.0400	SLOPE PAVING CONCRETE	SY	———	170	160	———	330
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	———	90	90	———	180
614.0150	ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD	EACH	———	2	2	———	4
652.0125	CONDUIT RIGID METALLIC 2-INCH	LF	———	———	———	13	13
652.0310	CONDUIT RIGID NONMETALLIC SCHEDULE 80 1-INCH	LF	———	———	———	37	37
652.0325	CONDUIT RIGID NONMETALLIC SCHEDULE 80 2-INCH	LF	———	———	———	20	20
653.0208	JUNCTION BOXES 8X8X8-INCH	EACH	———	———	———	1	1
SPV.0060	4X4X4-INCH FLUSH MOUNTED JUNCTION BOX B-13-599	EACH	———	———	———	4	4
	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 OTHERWISE SHOWN OR NOTED.

THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

AT THE BACKFACE OF ABUTMENT ALL VOLUME WHICH CANNOT BE PLACED BEFORE ABUTMENT CONSTRUCTION AND IS NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH STRUCTURE BACKFILL.

ELASTOMERIC BEARING PADS NEED NOT BE INDIVIDUALLY MOLDED PROVIDED THE CUT EDGES ARE SMOOTH AND TRUE.

CONCRETE FOR ABUTMENT AND PIER DIAPHRAGMS SHALL BE PLACED WITH THE DECK CONCRETE. NO OPTIONAL CONSTRUCTION JOINT WILL BE PERMITTED.

THE GRADATION OF THE STRUCTURE BACKFILL SHALL MEET THE REQUIREMENTS OF SECTION 209.2.2 OF THE STANDARD SPECIFICATIONS FOR GRADE 1 MATERIAL.

PROTECTIVE SURFACE TREATMENT TO BE APPLIED TO THE ENTIRE TOP OF DECK SURFACE AND THE FRONT FACE AND THE TOP OF THE PARAPET, INCLUDING PARAPETS ON ABUTMENT WINGS.

THE EXISTING GROUND LINE SHALL BE USED AS THE UPPER LIMITS OF EXCAVATION AT THE PIERS.

FORMLINER ON EXPOSED VERTICAL FACES OF THE WINGWALLS, ABUTMENT BODY, THE BACK SIDE OF THE PARAPETS AND THE PIER (WHERE DESIGNATED) TO BE A RUSTIC ASHLAR FINISH.

STAIN ARCHITECTURAL TREATMENT SURFACES TO RESEMBLE WEATHERED LIMESTONE UNDER BID ITEM "CONCRETE STAINING MULTI-COLOR B-13-599".

STAIN ALL EXPOSED OUTSIDE FACES AND THE UNDERSIDE OF THE EXTERIOR GIRDERS AND CAPS ON THE PIER COLUMNS. STAIN COLOR TO BE BRONZE (FEDERAL COLOR #30059). PAID FOR UNDER SEE BID ITEM "CONCRETE STAINING B-13-599".

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-13-599

DRAWN BY DDS | PLANS CK'D. MWL

CROSS SECTION & QUANTITIES

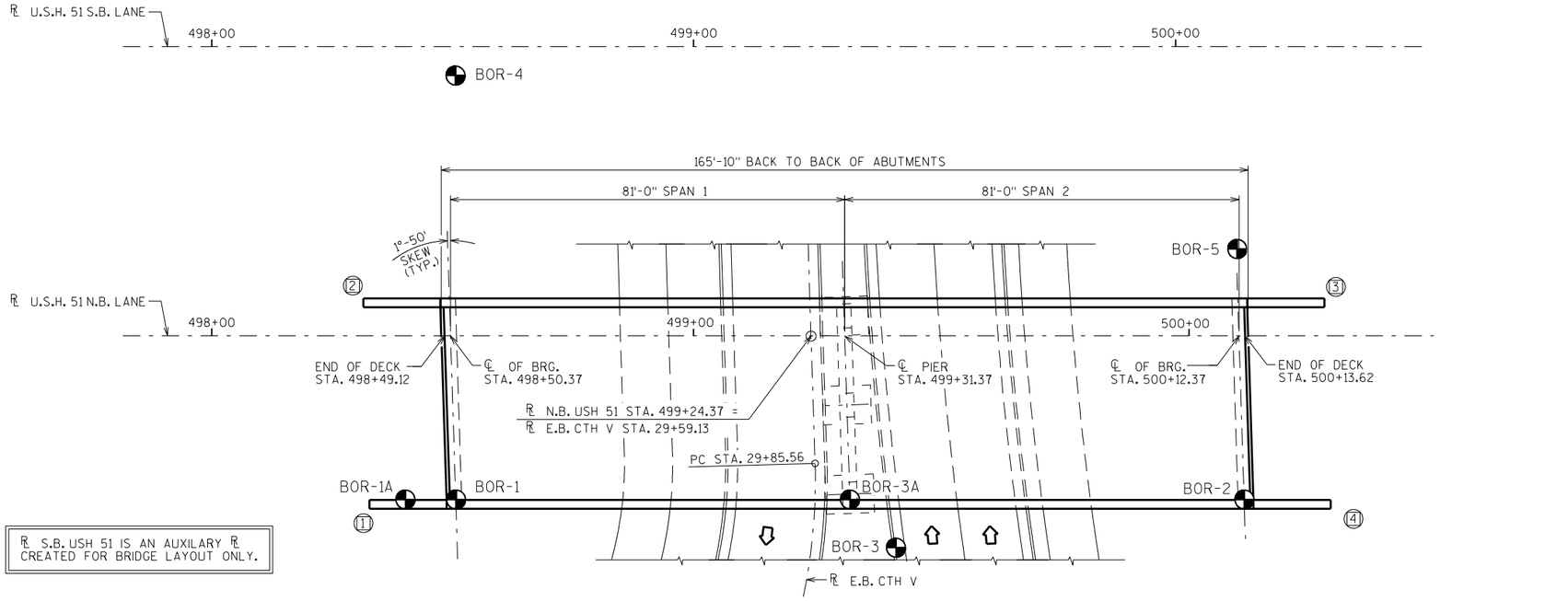
SHEET 2

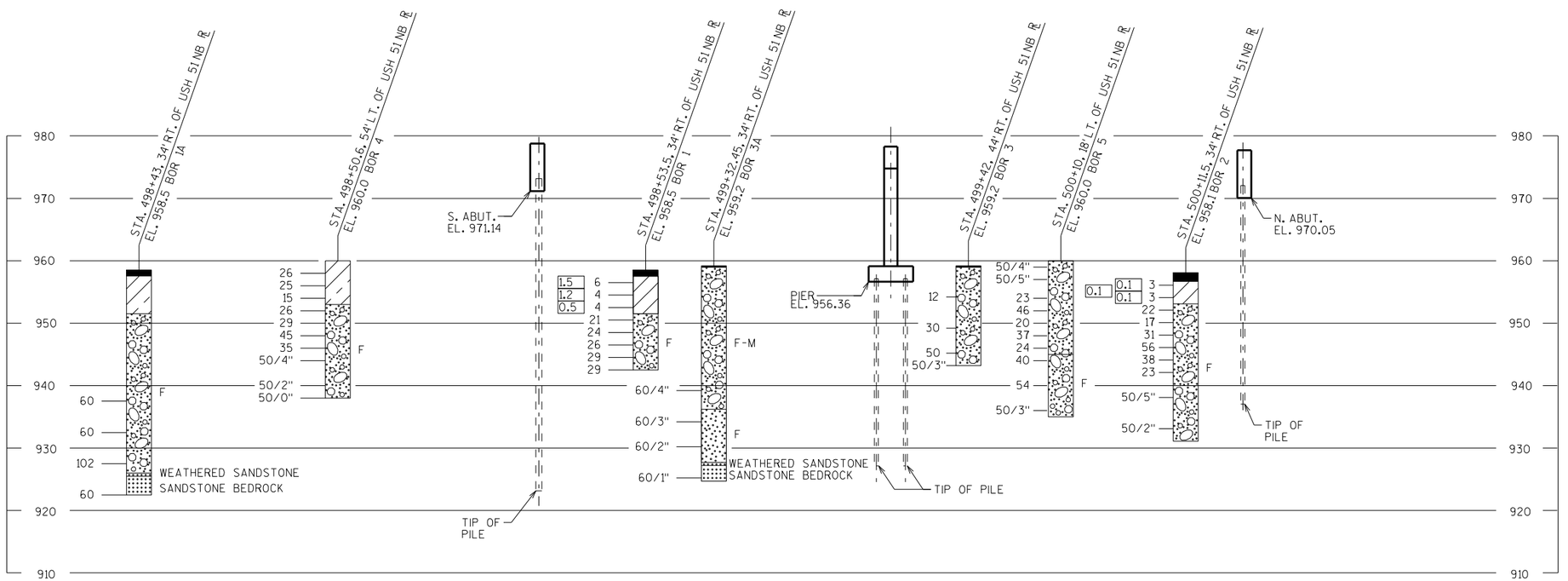
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STATE PROJECT NUMBER

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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

PROBING NO.
STA.
ELEVATION
7 AVERAGE BLOWS PER FOOT
REFUSAL 95/6

95/6=95 BLOWS FOR 6" PENETRATION
PROBING TAKEN WITH A 350# WT. FALLING 18" ON A 2" O.D. POINT.

LEGEND OF BORING

BORING NO.
ELEV.
STA.
UNCONFINED STRENGTH → 7.7 7
BLOWS PER FT. USING 140# WT. FALLING 30"
WASH SAMPLE
SHELBY TUBE — S.T.
GROUND WATER ELEVATION
NO GROUND WATER OBSERVED ABOVE THIS ELEVATION
SANDY GRAVEL
F. BOULDERS OR COBBLES
SAND
SILTY CLAY
SO LIMESTONE

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-13-599

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SUBSURFACE EXPLORATION

SHEET 3

519

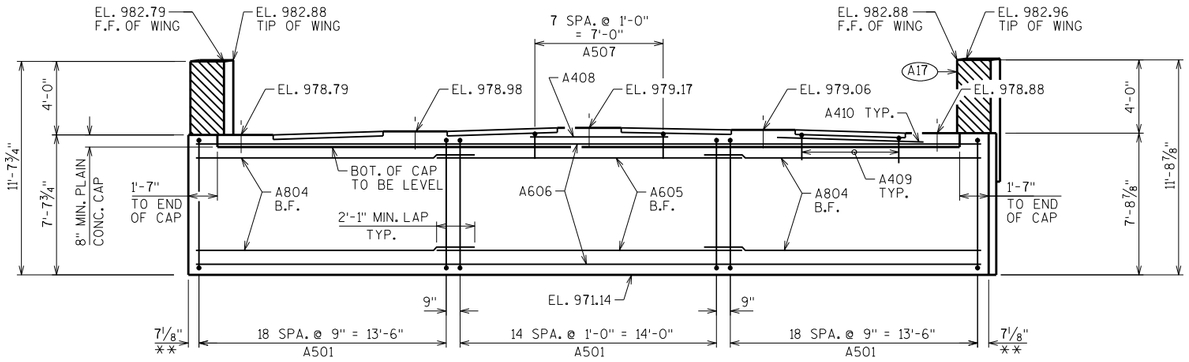
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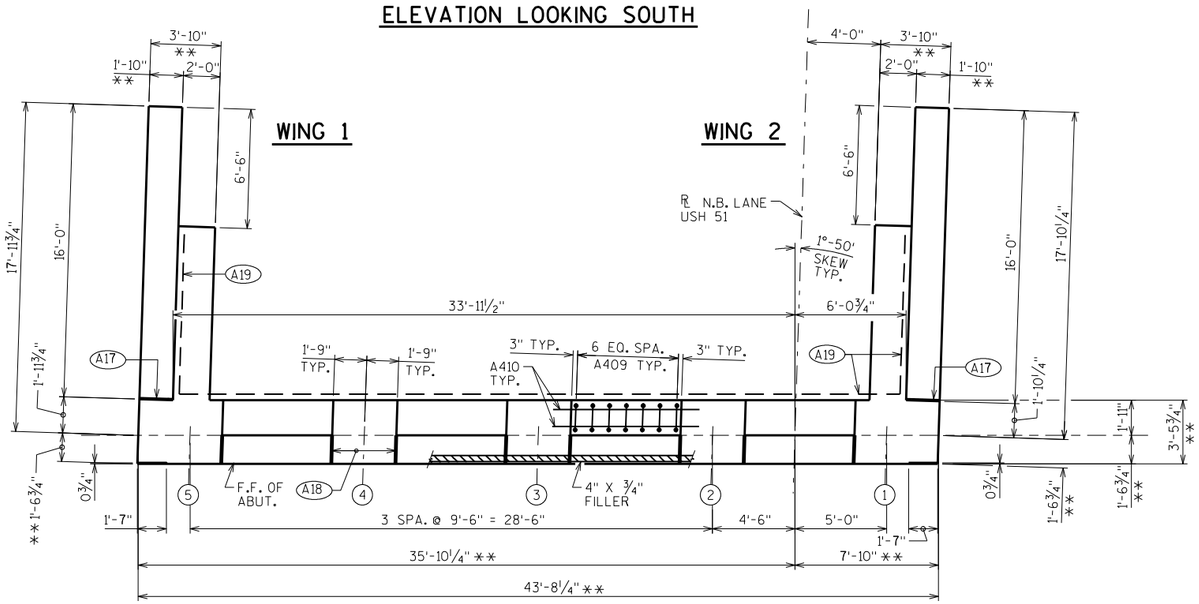
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STATE PROJECT NUMBER

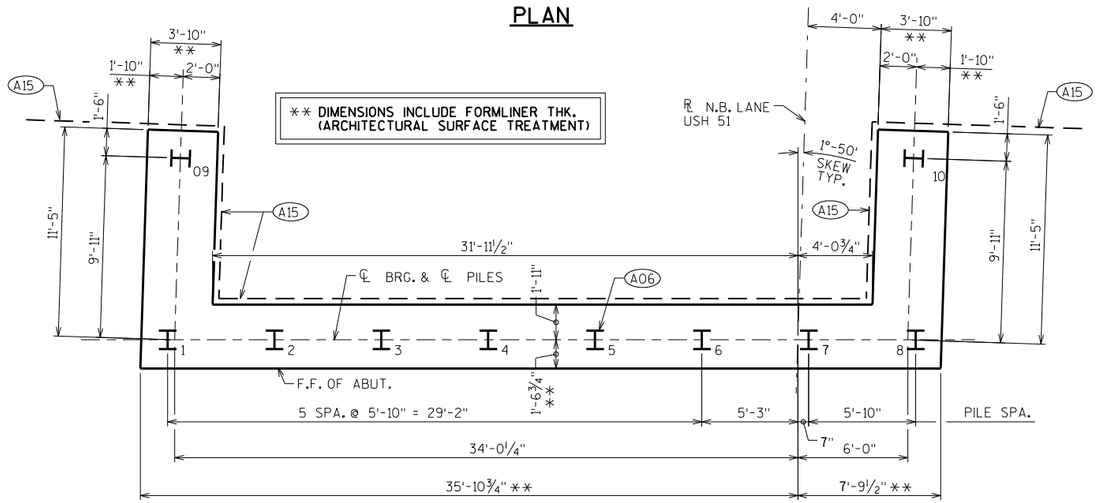
6020-02-72



ELEVATION LOOKING SOUTH

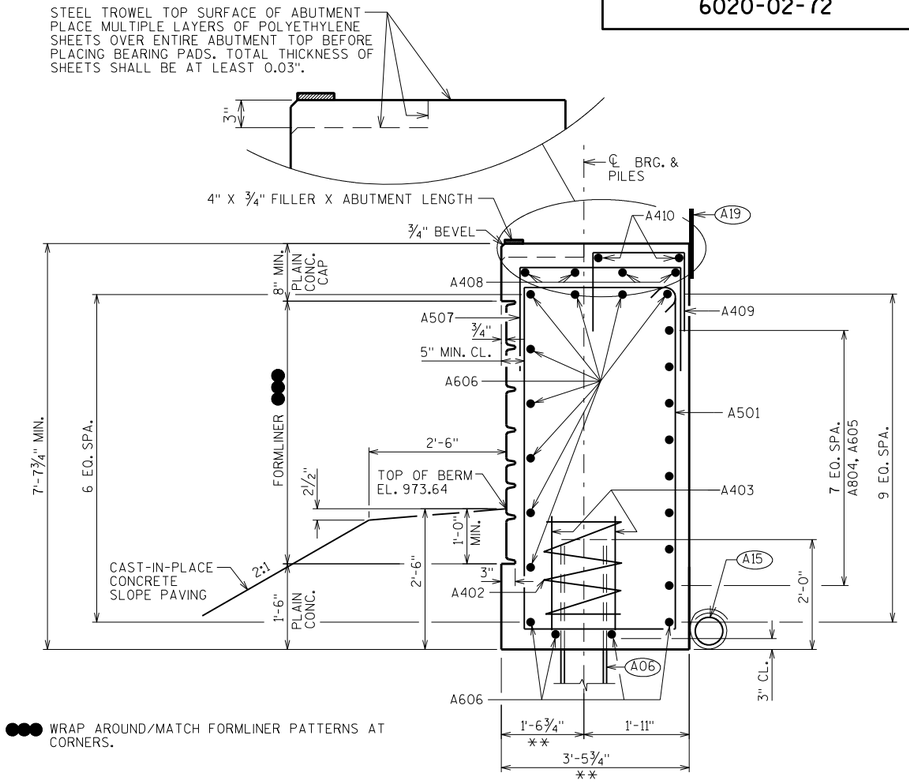


PLAN



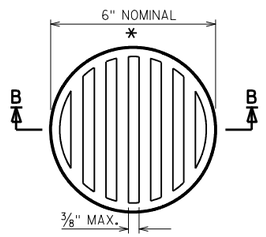
PILE PLAN

STEEL TROWEL TOP SURFACE OF ABUTMENT PLACE MULTIPLE LAYERS OF POLYETHYLENE SHEETS OVER ENTIRE ABUTMENT TOP BEFORE PLACING BEARING PADS. TOTAL THICKNESS OF SHEETS SHALL BE AT LEAST 0.03".

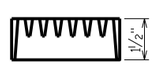


SECTION THRU BODY

●●● WRAP AROUND/MATCH FORMLINER PATTERNS AT CORNERS.



RODENT SCREEN DETAIL



SECTION B-B

* DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING. ORIENT SO SLOTS ARE VERTICAL.

THE RODENT SCREEN, PIPE COUPLING AND SCREWS SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".

THE RODENT SCREEN SHALL BE A 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 SCREEN SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH SHEET METAL SCREWS.

(A06) SUPPORT ABUTMENT ON HP 10 x 42 STEEL PILING, ESTIMATED 50'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 180 TONS PER PILE.

(A15) PIPE UNDERDRAIN WRAPPED 6-INCH. SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SCREEN REQUIRED.

(A17) 1/2" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

(A18) 3/4" CORK FILLER UP VERT. BEAM SEAT FACES THAT RUN PARALLEL WITH GIRDER.

(A19) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-13-599

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SOUTH ABUTMENT

SHEET 4

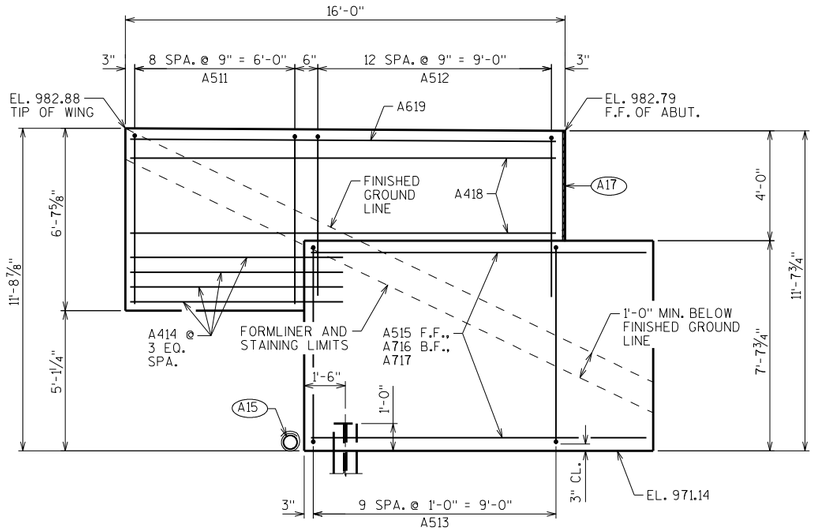
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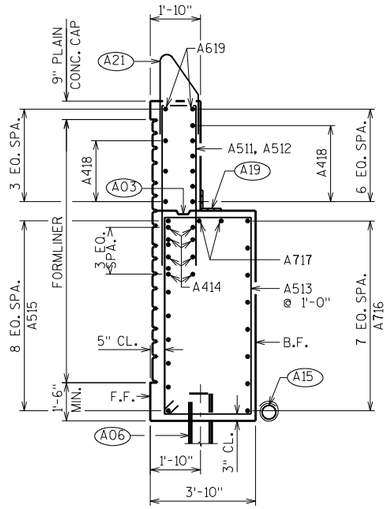
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WING 1 ELEVATION



SECTION THRU WING 1

(A03) OPTIONAL CONST. JOINT: KEYWAY FORMED BY BEVELED 2 X 6. (18" R.M.W. @ B.F. IF JOINT IS USED).

(A06) SUPPORT ABUTMENT ON HP 10 X 42 STEEL PILING, ESTIMATED 50'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 180 TONS PER PILE.

(A15) PIPE UNDERDRAIN WRAPPED 6-INCH. SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SCREEN REQUIRED.

(A17) 1/2" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

(A19) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

(A21) FOR PPT. BARS & DIMENSION SEE PARAPET SHEET 15.

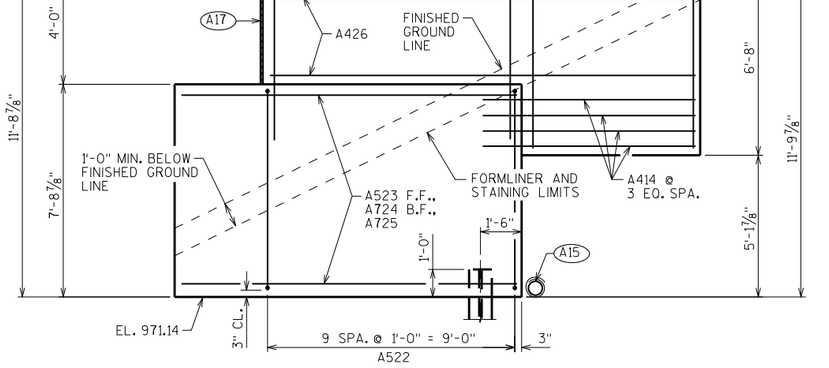
STATE PROJECT NUMBER

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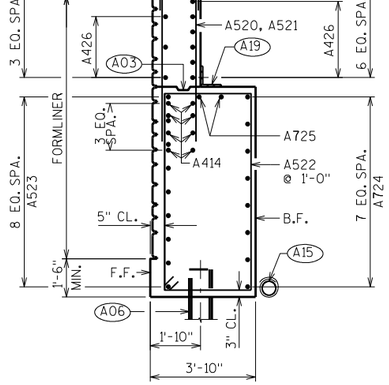
BILL OF BARS

▲ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

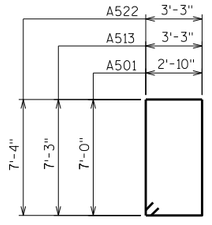
BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
A501		53	20'-4"	X		BODY-STIRRUPS
A402		8	28'-0"	X		PILES - 1 PER BODY PILE
A403		16	2'-3"			PILES - 2 PER BODY PILE
A804		16	16'-0"			BODY - HORIZONTAL - B.F.
A605		8	15'-0"			BODY - HORIZONTAL - B.F.
A606		13	42'-10"			BODY - HORIZONTAL
A507		8	5'-11"	X		BODY - VERTICAL - TOP OVER GIRDER 3
A408		4	7'-6"			BODY - HORIZONTAL - TOP
A409		28	4'-11"	X		BODY - VERTICAL - BETWEEN BEAM SEATS
A410		8	8'-0"			BODY - HORIZONTAL - BETWEEN BEAM SEATS
A511	X	9	13'-4"	X		WING 1 - VERTICAL
A512	X	13	12'-10"	X		WING 1 - VERTICAL
A513	X	10	21'-8"	X		WING 1 - STIRRUP
A414	X	16	7'-9"			WING 1 - HORIZONTAL
A515	X	9	11'-10"			WING 1 - HORIZONTAL
A716	X	8	12'-2"			WING 1 - HORIZONTAL
A717	X	2	12'-2"			WING 1 - HORIZONTAL
A418	X	9	15'-8"			WING 1 - HORIZONTAL - B.F. & F.F.
A619	X	2	15'-8"			WING 1 - TOP
A520	X	9	13'-4"	X		WING 2 - HORIZONTAL
A521	X	13	12'-10"	X		WING 2 - VERTICAL
A522	X	10	21'-10"	X		WING 2 - STIRRUP
A523	X	9	11'-9"			WING 2 - HORIZONTAL
A724	X	8	12'-2"			WING 2 - HORIZONTAL
A725	X	2	12'-2"			WING 2 - HORIZONTAL
A426	X	9	15'-8"			WING 2 - HORIZONTAL
A627	X	2	15'-8"			WING 2 - HORIZONTAL



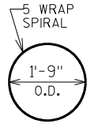
WING 2 ELEVATION



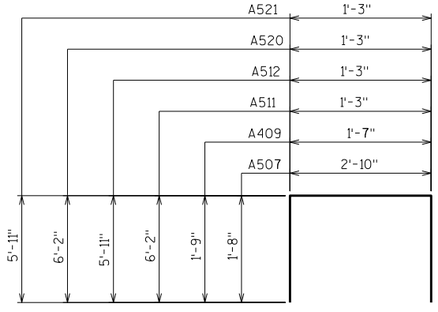
SECTION THRU WING 2



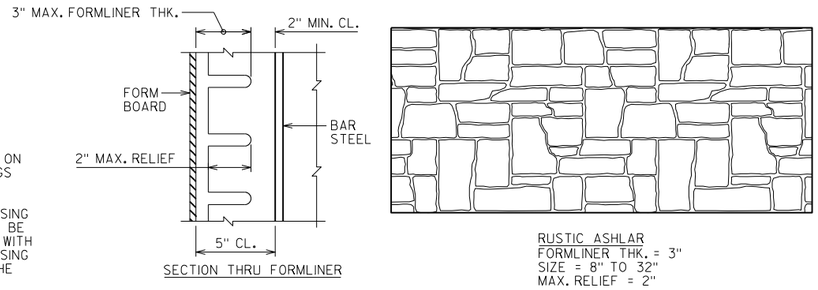
A501, A513, A522



A402



A507, A409, A511, A512, A520, A521



RUSTIC ASHLAR
FORMLINER THK. = 3"
SIZE = 8" TO 32"
MAX. RELIEF = 2"

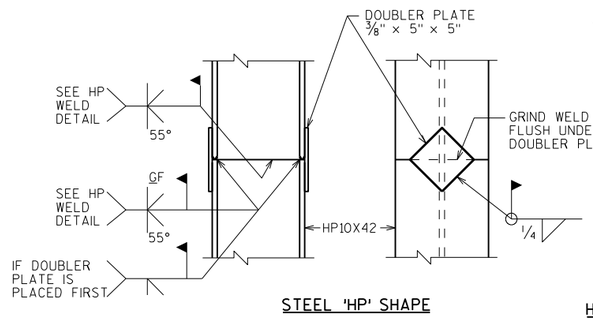
NOTES:
FORMLINER COURSING ON ABUTMENTS AND WINGS SHALL BE LEVEL.

THE FORMLINER COURSING ON THE WINGS SHALL BE VERTICALLY ALIGNED WITH THE FORMLINER COURSING ON THE FRONT OF THE ABUTMENT.

THE FORMLINER PATTERN SHALL REMAIN CONTINUOUS ACROSS CONSTRUCTION JOINTS

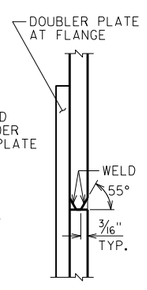
FORMLINER DETAILS

WRAP AROUND/MATCH FORMLINER PATTERNS AT CORNERS.



STEEL 'HP' SHAPE

PILE DETAILS



HP WELD DETAIL
FLANGE SHOWN, WEB SIMILAR

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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-13-599

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SOUTH ABUTMENT DETAILS

SHEET 5

521

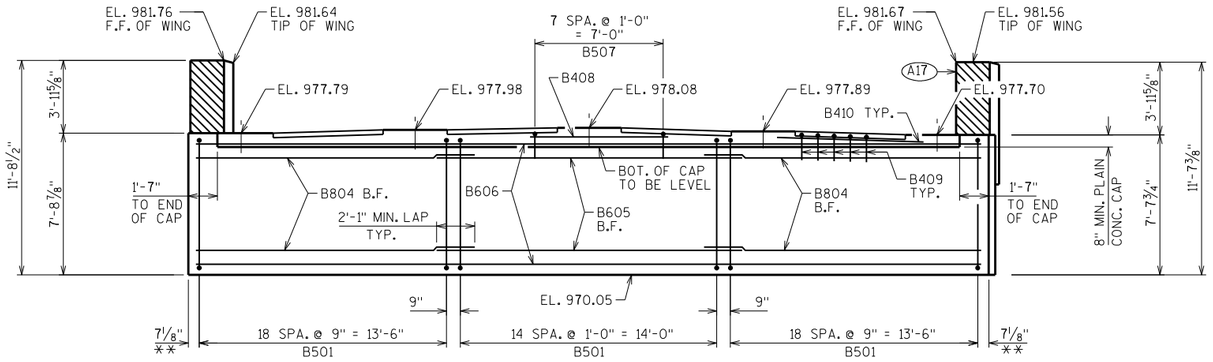
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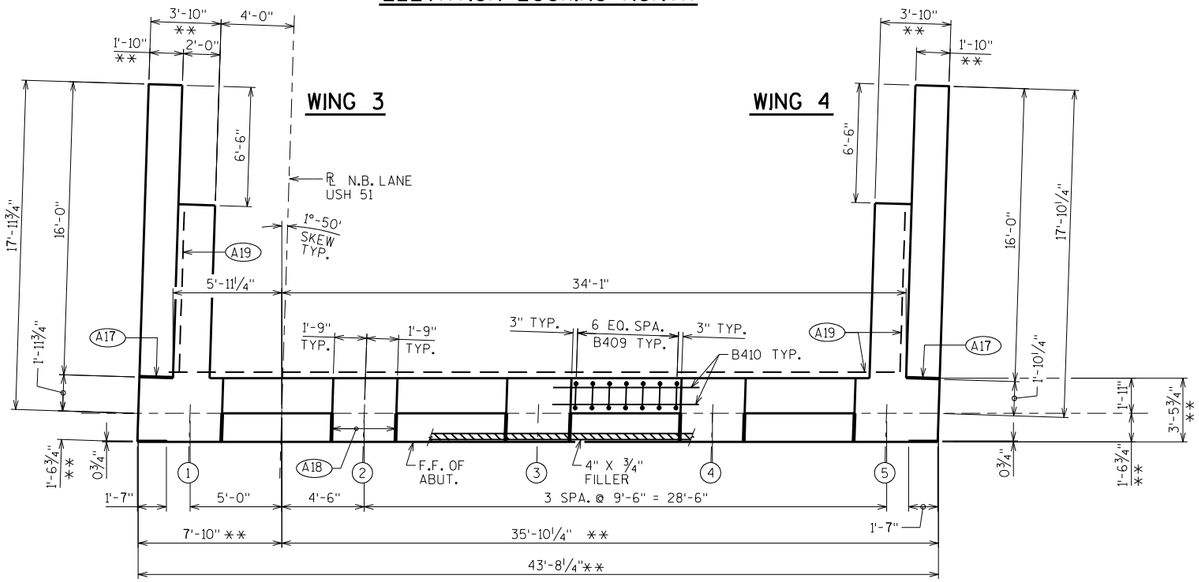
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STATE PROJECT NUMBER

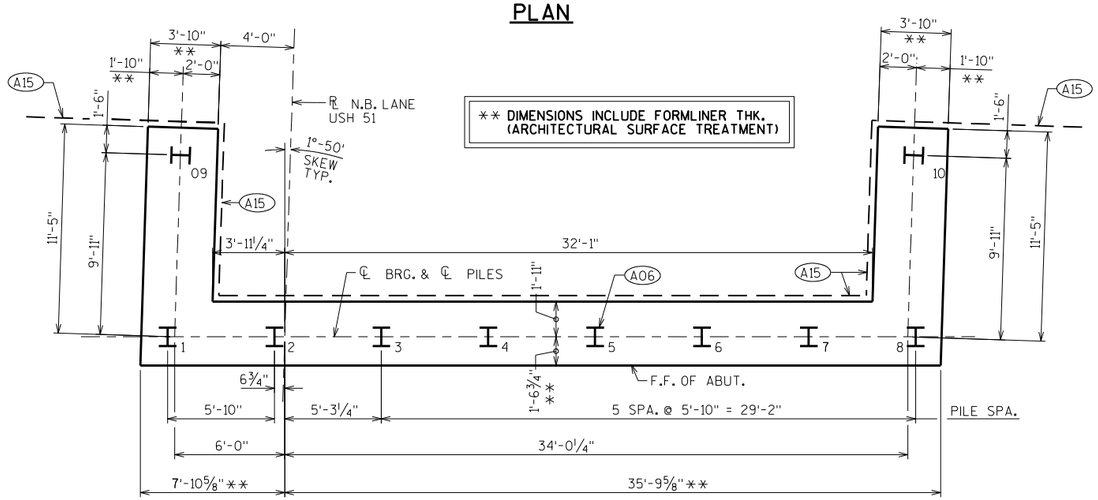
6020-02-72



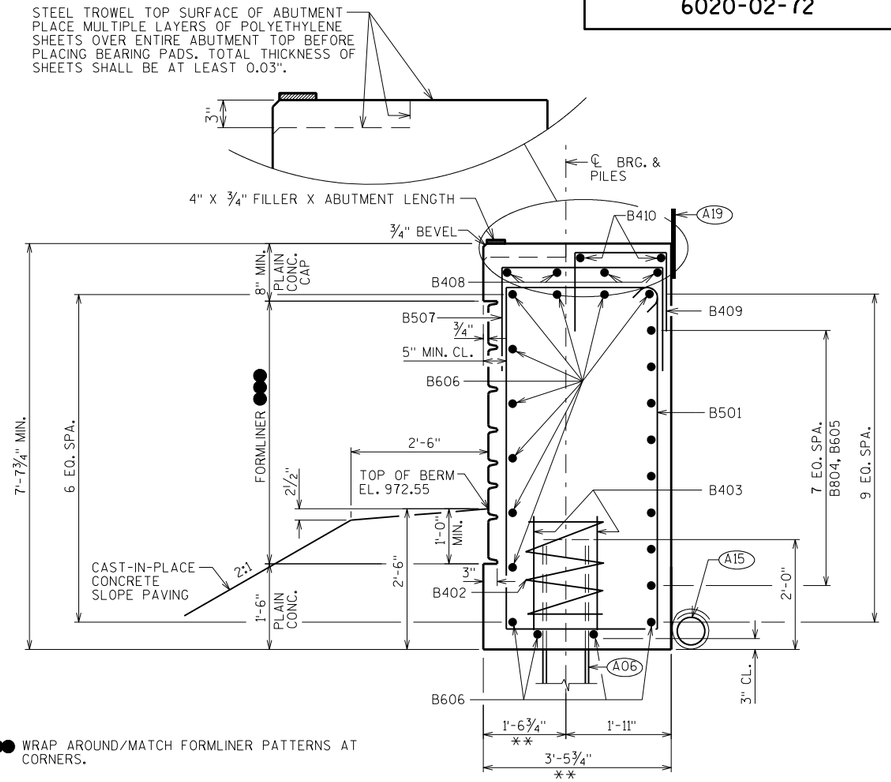
ELEVATION LOOKING NORTH



PLAN

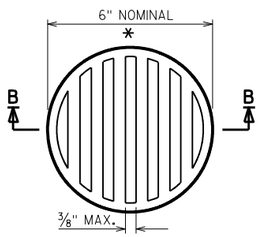


PILE PLAN

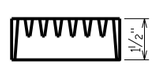


SECTION THRU BODY

●●● WRAP AROUND/MATCH FORMLINER PATTERNS AT CORNERS.



RODENT SCREEN DETAIL



SECTION B-B

* DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING. ORIENT SO SLOTS ARE VERTICAL.

THE RODENT SCREEN, PIPE COUPLING AND SCREWS SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".

THE RODENT SCREEN SHALL BE A 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 SCREEN SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH SHEET METAL SCREWS.

(A06) SUPPORT ABUTMENT ON HP 10 x 42 STEEL PILING, ESTIMATED 35'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 180 TONS PER PILE.

(A15) PIPE UNDERDRAIN WRAPPED 6-INCH. SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SCREEN REQUIRED.

(A17) 1/2" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

(A18) 3/4" CORK FILLER UP VERT. BEAM SEAT FACES THAT RUN PARALLEL WITH GIRDER.

(A19) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

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STRUCTURE B-13-599

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NORTH ABUTMENT

SHEET 6

522

THU MAR 24 09:44:15 2011

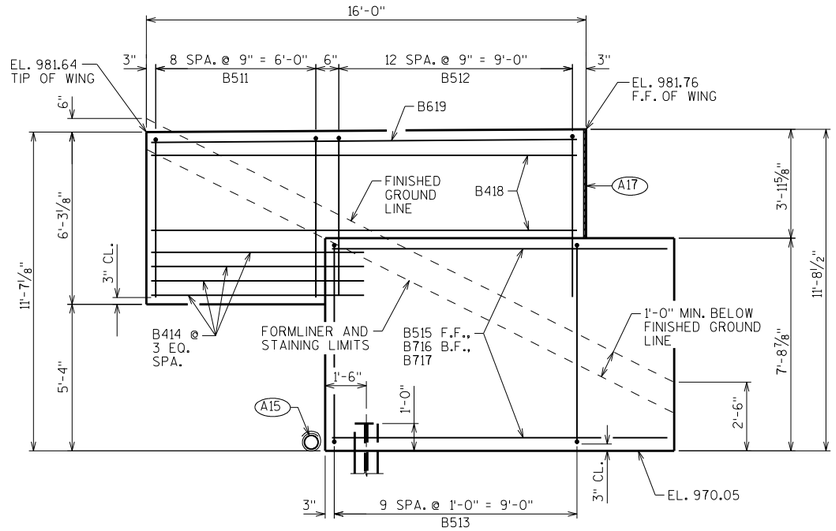
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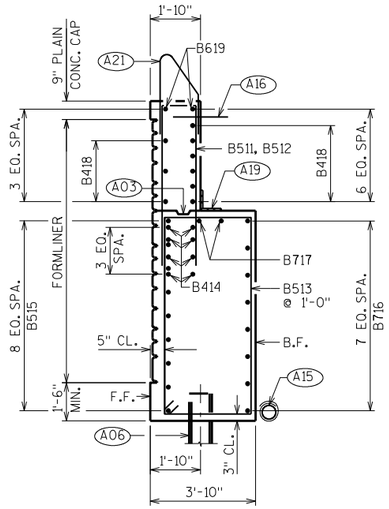
8

STATE PROJECT NUMBER

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WING 3 ELEVATION



SECTION THRU WING 3

(A03) OPTIONAL CONST. JOINT: KEYWAY FORMED BY BEVELED 2 X 6. (18" R.M.W. @ B.F. IF JOINT IS USED).

(A06) SUPPORT ABUTMENT ON HP 10 X 42 STEEL PILING, ESTIMATED 35'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 180 TONS PER PILE.

(A15) PIPE UNDERDRAIN WRAPPED 6-INCH. SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SCREEN REQUIRED.

(A16) B428 BARS SPACED @ 1'-0" CTRS. EMBED 1'-0" INTO WING CONC. LOCATE 3" DOWN FROM TOP OF WING @ BACKFACE TO 6" DOWN @ WING TIP. (DRILLED IN EPOXY ANCHORED #4 BARS 2'-0" LONG MAY BE USED.) COST INCIDENTAL TO BID ITEM "BAR STEEL REINFORCEMENT HS COATED BRIDGES".

(A17) 1/2" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

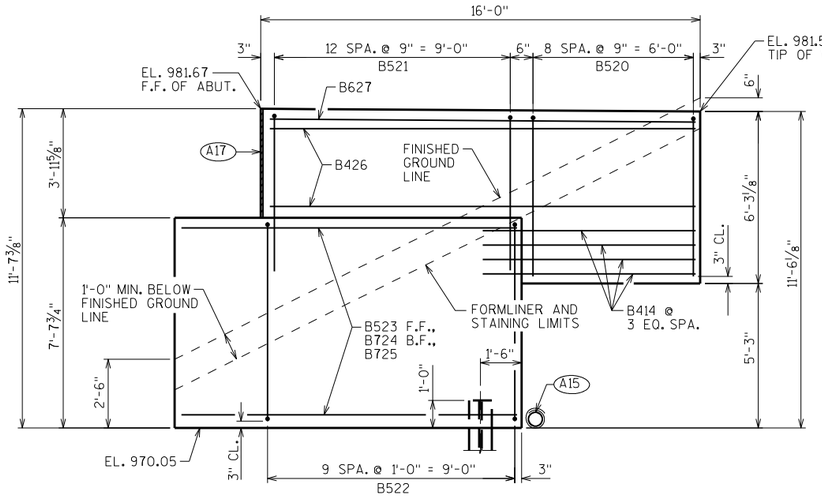
(A19) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

(A21) FOR PPT. BARS & DIMENSION SEE PARAPET SHEET 15.

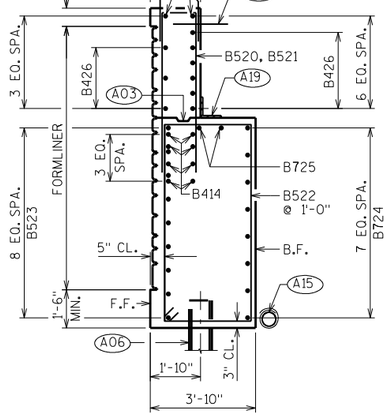
BILL OF BARS

▲ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

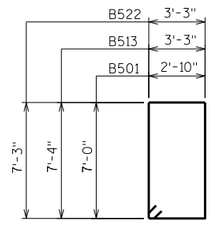
BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
B501		53	20'-4"	X		BODY-STIRRUPS
B402		8	28'-0"	X		PILES - 1 PER BODY PILE
B403		16	2'-3"			PILES - 2 PER BODY PILE
B804		16	16'-0"			BODY - HORIZONTAL - B.F.
B605		8	15'-0"			BODY - HORIZONTAL - B.F.
B606		13	42'-10"			BODY - HORIZONTAL
B507		8	5'-11"	X		BODY - VERTICAL - TOP OVER GIRDER 3
B408		4	7'-6"			BODY - HORIZONTAL - TOP
B409		28	4'-11"	X		BODY - VERTICAL - BETWEEN BEAM SEATS
B410		8	8'-0"			BODY - HORIZONTAL - BETWEEN BEAM SEATS
B511	X	9	12'-8"	X		WING 3 - VERTICAL
B512	X	13	12'-6"	X		WING 3 - VERTICAL
B513	X	10	21'-10"	X		WING 3 - STIRRUP
B414	X	16	7'-9"			WING 3 - HORIZONTAL
B515	X	9	11'-10"			WING 3 - HORIZONTAL
B716	X	8	12'-2"			WING 3 - HORIZONTAL
B717	X	2	12'-2"			WING 3 - HORIZONTAL
B418	X	9	15'-8"			WING 3 - HORIZONTAL - B.F. & F.F.
B619	X	2	15'-8"			WING 3 - TOP
B520	X	9	12'-8"	X		WING 4 - HORIZONTAL
B521	X	13	12'-6"	X		WING 4 - VERTICAL
B522	X	10	21'-8"	X		WING 4 - STIRRUP
B523	X	9	11'-9"			WING 4 - HORIZONTAL
B724	X	8	12'-2"			WING 4 - HORIZONTAL
B725	X	2	12'-2"			WING 4 - HORIZONTAL
B426	X	9	15'-8"			WING 4 - HORIZONTAL
B627	X	2	15'-8"			WING 4 - HORIZONTAL
B428	X	32	2'-0"			WINGS 3&4 - SURFACE DRAIN ANCHORS



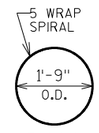
WING 4 ELEVATION



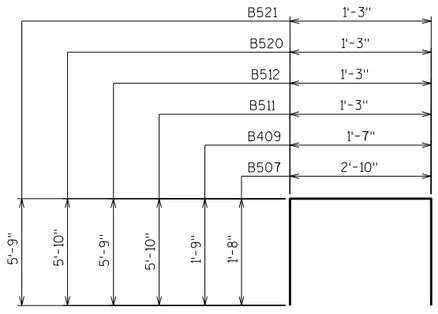
SECTION THRU WING 4



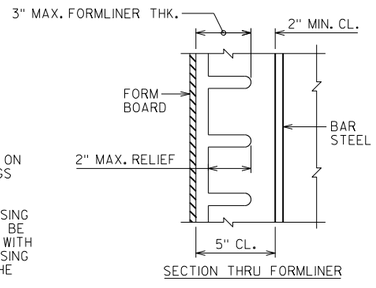
B501, B513, B522



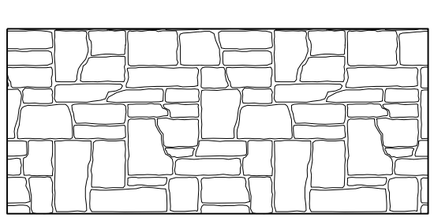
B402



B507, B409, B511, B512, B520, B521



SECTION THRU FORMLINER



RUSTIC ASHLAR
FORMLINER THK. = 3"
SIZE = 8" TO 32"
MAX. RELIEF = 2"

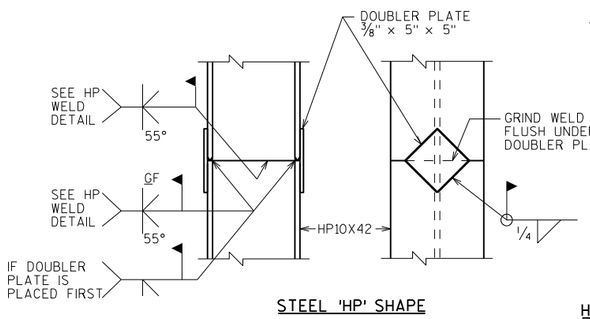
NOTES:
FORMLINER COURSING ON ABUTMENTS AND WINGS SHALL BE LEVEL.

THE FORMLINER COURSING ON THE WINGS SHALL BE VERTICALLY ALIGNED WITH THE FORMLINER COURSING ON THE FRONT OF THE ABUTMENT.

THE FORMLINER PATTERN SHALL REMAIN CONTINUOUS ACROSS CONSTRUCTION JOINTS

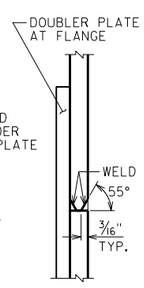
FORMLINER DETAILS

WRAP AROUND/MATCH FORMLINER PATTERNS AT CORNERS.



STEEL 'HP' SHAPE

PILE DETAILS



HP WELD DETAIL
FLANGE SHOWN, WEB SIMILAR

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STRUCTURES DESIGN SECTION

STRUCTURE B-13-599

DRAWN BY DDS | PLANS CK'D. MWL

NORTH ABUTMENT DETAILS

SHEET 7

523

SCALE = 2.667

8

8

STATE PROJECT NUMBER

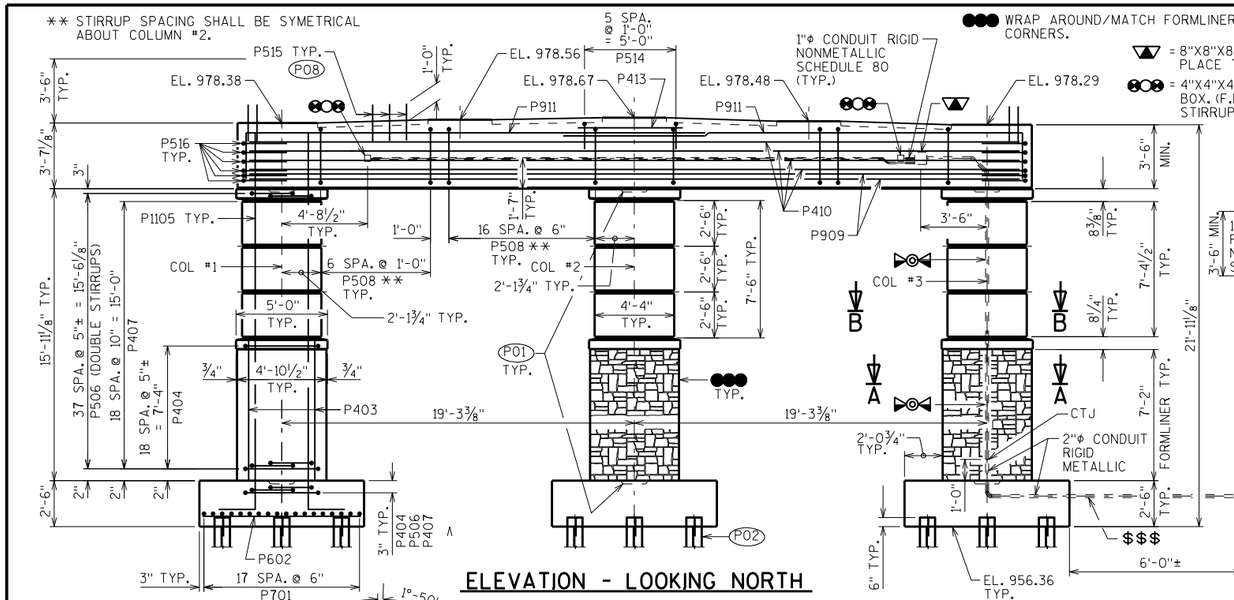
6020-02-72

** STIRRUP SPACING SHALL BE SYMETRICAL ABOUT COLUMN #2.

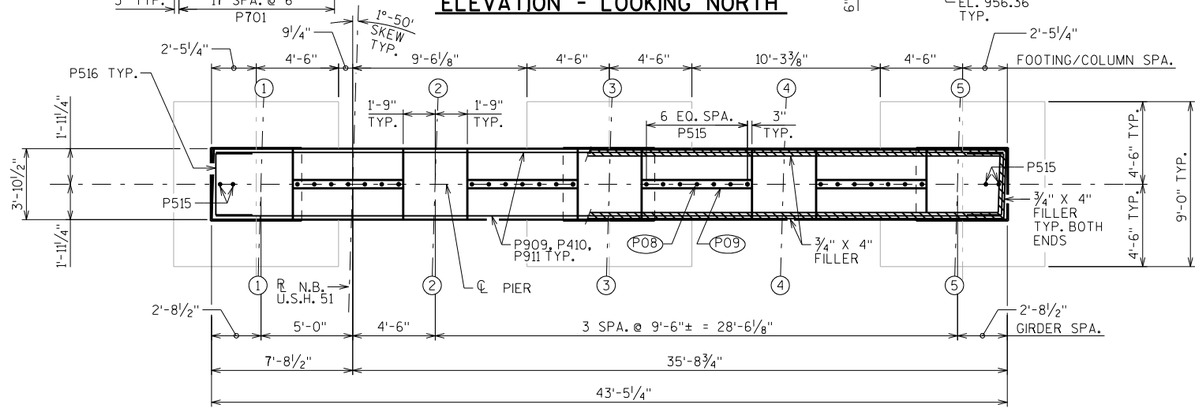
●●● WRAP AROUND/MATCH FORMLINER PATTERNS AT CORNERS.

▽ = 8"X8"X8" DEEP JUNCTION BOX (SOUTH SIDE ONLY) PLACE TO MISS STIRRUPS

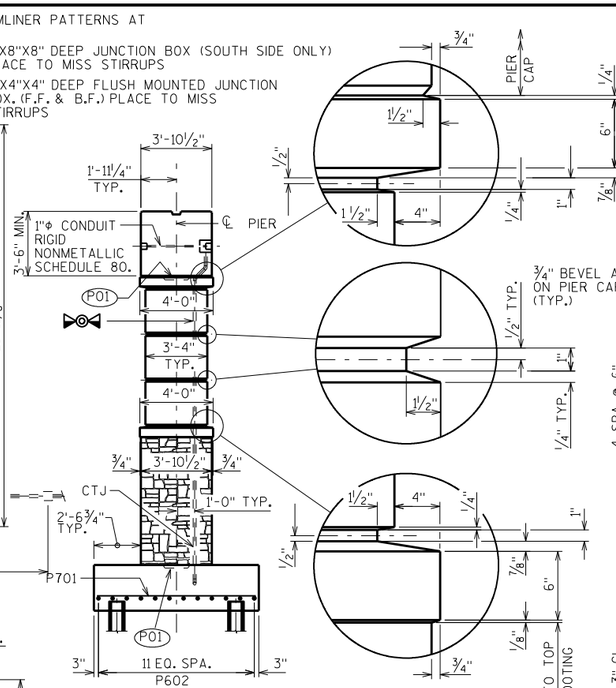
●●● = 4"X4"X4" DEEP FLUSH MOUNTED JUNCTION BOX. (F.F. & B.F.) PLACE TO MISS STIRRUPS



ELEVATION - LOOKING NORTH



PLAN



END VIEW

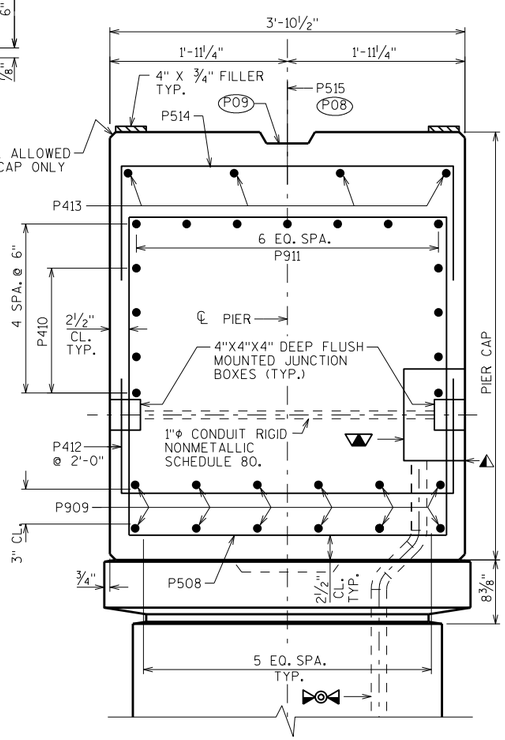
$$$ CONTINUE 2"Φ RIGID METALLIC CONDUIT TO FIRST PULL BOX OFF OF STRUCTURE. SEE ELECTRICAL PLAN.

CTJ = CONDUIT TRANSITION JOINT

NOTE:

FOR NOTES CONCERNING THE ELECTRICAL WORK SEE SHEET 9.

45° BEND IN 2"Φ CONDUIT. USE MIN. BENDING RADIUS PER WISCONSINSIN ELECTRIC CODE TYP.



SECTION THRU PIER CAP

▲ CUT OUT ± 1" OF GASKET AT BOTTOM OF JUNCTION BOX COVER TO ALLOW FOR DRAINAGE.

2"Φ CONDUIT RIGID NONMETALLIC SCHEDULE 80

ALTERNATE THE POSITION OF THE 90° AND 180° HOOKS AT EACH VERTICAL LAYER OF TIES. TIES ARE TO BE SPACED VERTICALLY AT 10" MAXIMUM SPACING.

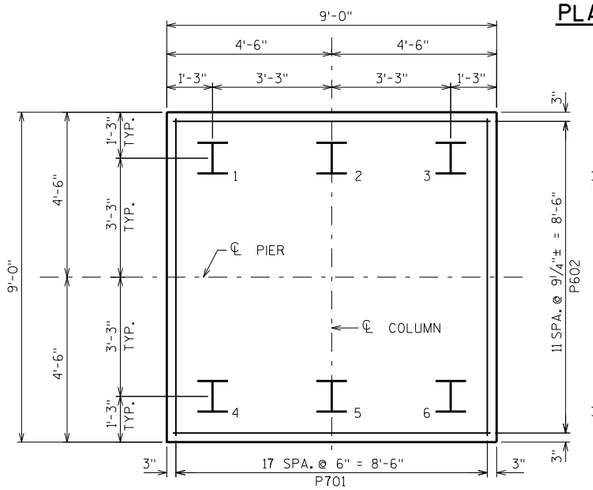
P506 DOUBLE STIRRUPS AT 5" MAX. VERTICAL SPACING

(P01) 1'-3" x 1'-3" x 2" CONSTRUCTION JOINT FORMED BY BEVELED KEYWAY FOR ALL COLUMNS AND FOOTINGS.

(P02) SUPPORT PIER ON HP 10 x 42 STEEL PILING, ESTIMATED 30'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 165 TONS PER PILE.

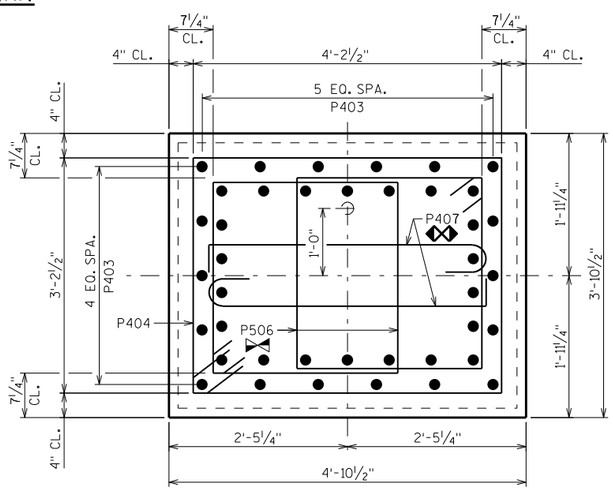
(P08) P515 BARS @ 1'-0" CTRS. BETWEEN BEAM SEATS. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 1'-0" INTO CONC.)

(P09) KEYED CONSTRUCTION JOINT-FORMED BY BEVELED 2 x 6 BETWEEN BEAM SEATS.

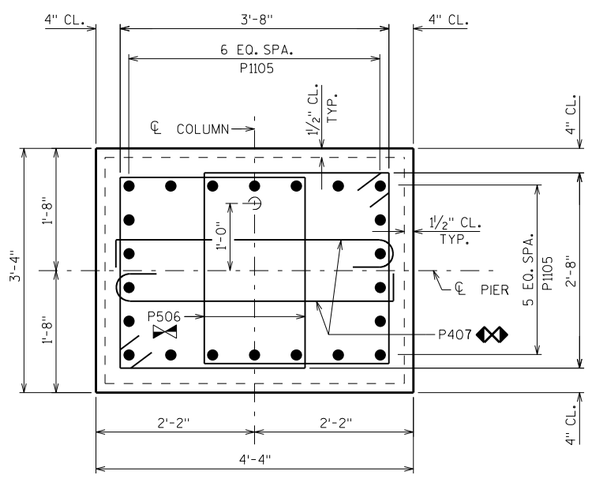


PILE/FOOTING DETAIL

TYP.



SECTION A-A



SECTION B-B

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-13-599

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PIER

SHEET 8

524

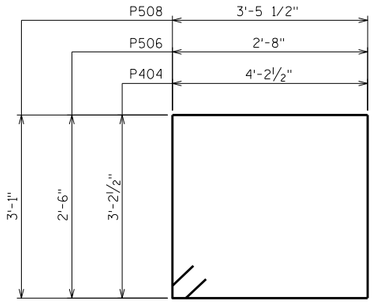
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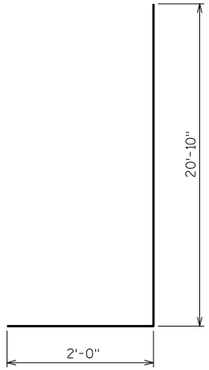
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STATE PROJECT NUMBER

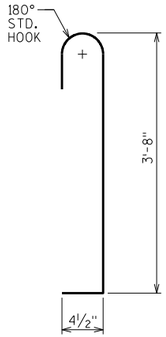
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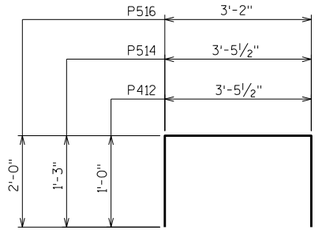
P404, P506, P508



P1105



P407

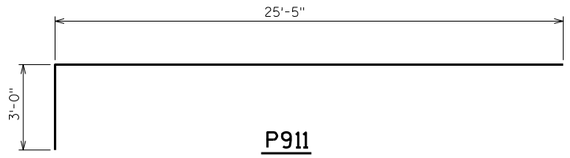


P412, P514, P516

BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
P701		54	8'-8"			FOOTING - HORIZ.
P602		36	8'-8"			FOOTING - HORIZ.
P403	X	54	7'-4"			COLUMN - VERT.
P404	X	60	15'-4"	X		FOOTING/COLUMN - STIRRUPS
P1105	X	66	22'-6"	X		FOOTING/COLUMN - VERT.
P506	X	234	11'-0"	X		FOOTING/COLUMN - STIRRUPS
P407	X	120	4'-6"	X		COLUMN - HORIZ. - TIE BARS
P508	X	48	13'-9"	X		CAP - STIRRUPS
P909	X	12	43'-0"			CAP - HORIZ. - BOTTOM
P410	X	8	43'-0"			CAP - HORIZ. - SIDES
P911	X	14	28'-2"	X		CAP - HORIZ. - TOP
P412	X	22	5'-4"	X		CAP - VERT. - BOTTOM
P413	X	4	5'-9"			CAP - HORIZ. - TOP
P514	X	6	5'-9"	X		CAP - VERT. - TOP
P515	X	32	2'-0"			CAP - DOWEL BARS
P516	X	12	6'-11"	X		CAP - HORIZ. - ENDS



P911

NOTES

BID ITEMS SHALL BE:
"JUNCTION BOXES 8X8X8-INCH", EACH.
"4x4x4 FLUSH MOUNTED JUNCTION BOX", EACH.
"CONDUIT RIGID METALLIC 2-INCH", LF.
"CONDUIT RIGID NONMETALLIC SCHEDULE 80 1-INCH", LF.
"CONDUIT RIGID NONMETALLIC SCHEDULE 80 2-INCH", LF.

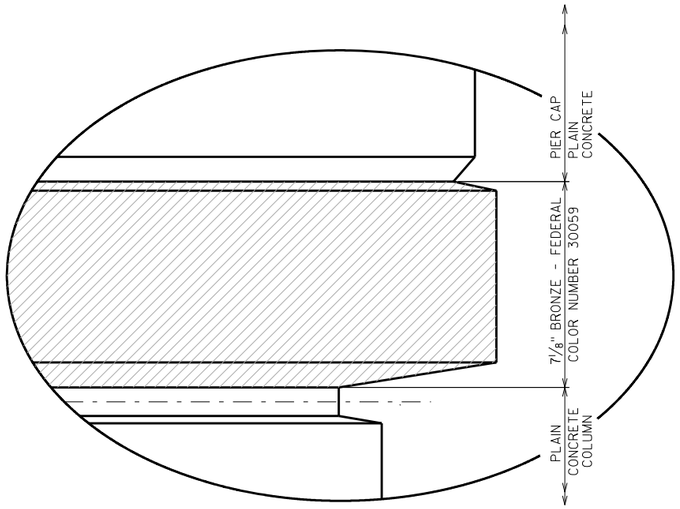
APPROVED MANUFACTURERS - JUNCTION BOXES:
SEE APPROVED MATERIAL LIST.

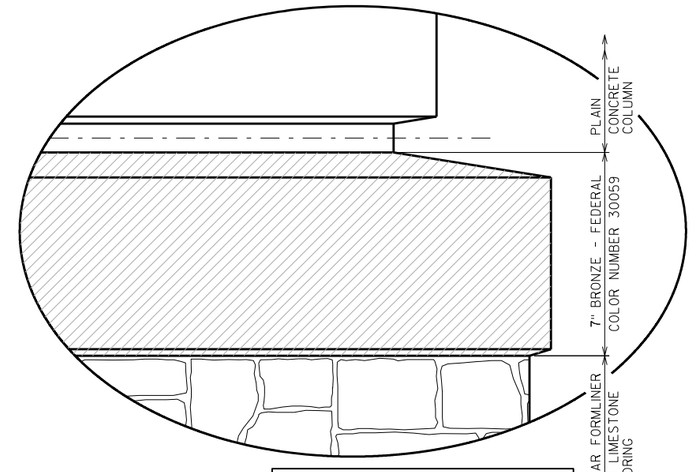
EXPANSION FITTINGS, ANGLES AND ADAPTER FITTINGS TO BE INCIDENTAL TO "CONDUIT RIGID METALLIC 2-INCH".

EXPANSION FITTINGS, ANGLES AND ADAPTER FITTINGS TO BE INCIDENTAL TO "CONDUIT RIGID NONMETALLIC SCHEDULE 80 1-INCH".

EXPANSION FITTINGS, ANGLES AND ADAPTER FITTINGS TO BE INCIDENTAL TO "CONDUIT RIGID NONMETALLIC SCHEDULE 80 2-INCH".

WHEN CONNECTING NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS U.L. LISTED FOR ELECTRICAL USE SHALL BE USED.



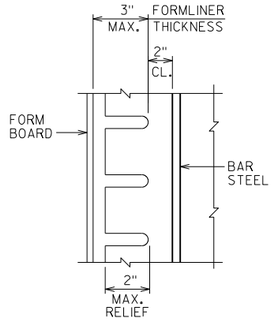


RUSTIC ASHLAR FORMLINER/WEATHERED LIMESTONE COLORING IS NOT DRAWN TO SCALE

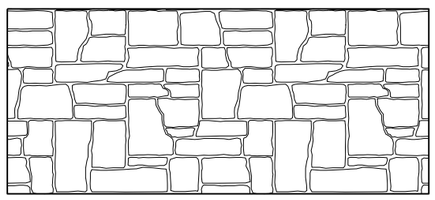
NOTE:
FORMLINER COURSING ON PIER SHALL BE LEVEL.

THE FORMLINER COURSING ON ALL FACES OF EACH COLUMN SHALL BE VERTICALLY ALIGNED.

THE FORMLINER PATTERN SHALL BE CONTINUOUS ACROSS CONSTRUCTION JOINTS.



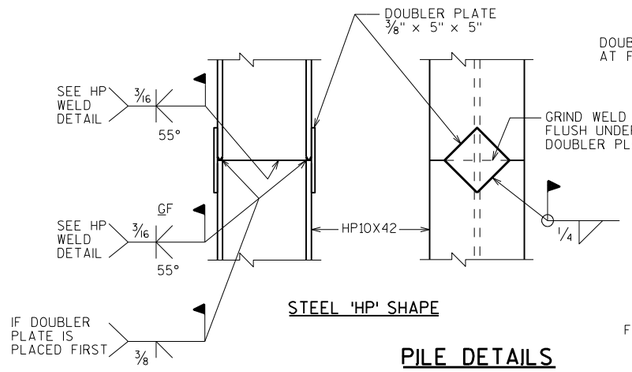
SECTION THRU FORMLINER



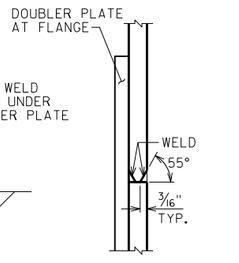
RUSTIC ASHLAR
SIZE = 8" TO 32"
RELIEF = 2" MAX.

FORMLINER DETAILS

WRAP AROUND/MATCH FORMLINER PATTERNS AT CORNERS



STEEL 'HP' SHAPE



HP WELD DETAIL
FLANGE SHOWN, WEB SIMILAR

PILE DETAILS

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-13-599

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PIER DETAILS

SHEET 9

525

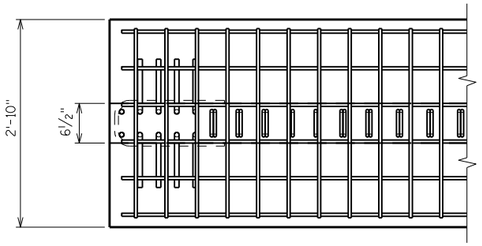
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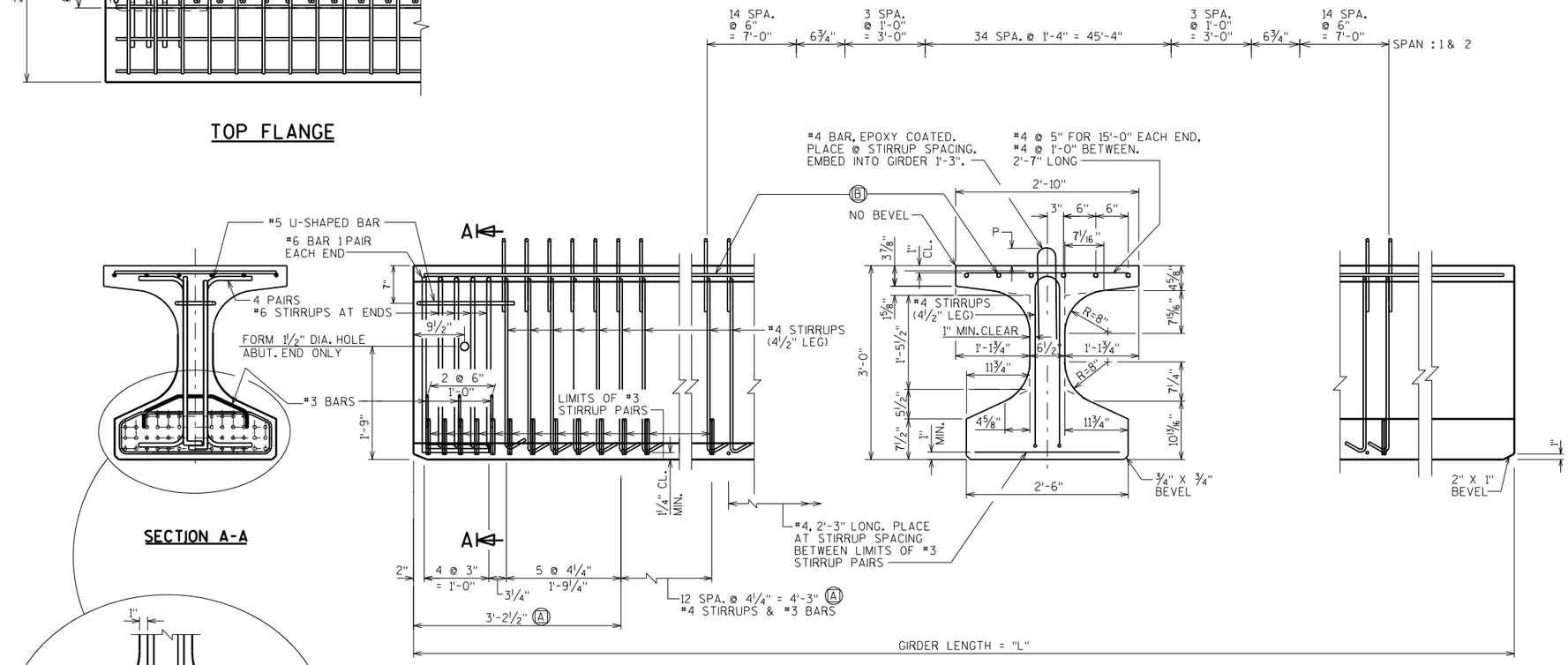
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STATE PROJECT NUMBER

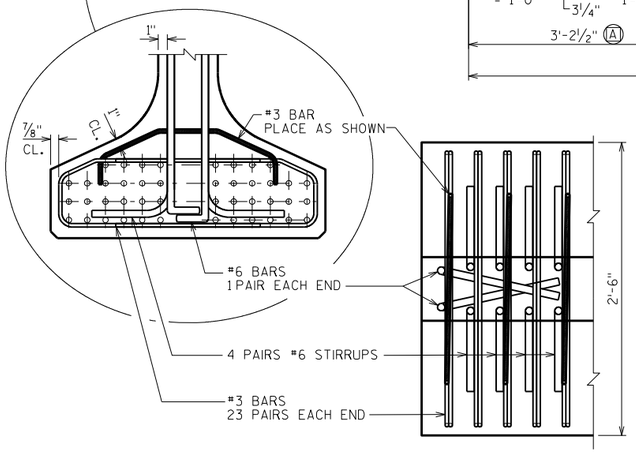
6020-02-72



TOP FLANGE



SECTION A-A



BOTTOM FLANGE

SIDE VIEW & TYP. SECTION IN SPAN

Ⓐ DETAIL TYP. AT EACH END

Ⓑ 6 - #4 BARS, FULL LENGTH, MIN. LAP = 1'-11"

(SPAN 1) 6 #4, 1'-11" MIN. LAP
(SPAN 2) 6 #4, 1'-11" MIN. LAP

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 8" 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.

PRESTRESSING STRANDS SHALL BE 0.6"Φ - 7 WIRE LOW-RELAXATION STRANDS WITH AN ULTIMATE STRENGTH OF 270,000 psi.

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.

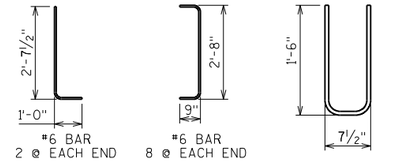
FOR DIAPHRAGM INSERT & CONNECTION DETAILS SEE "STEEL DIAPHRAGM" SHEET.

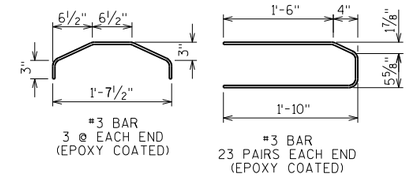
ALL GIRDERS SHALL BE CAST FULL LENGTH AS SHOWN.

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, 1 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.





✳ 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	1-5	81.38	0.6	1.1	1.5	1.7	1.8	1.7	1.5	1.1	0.6	8000	7"	7"	7"	0.60	28	6400	32.0	11.0	14.0	4.0		
2	1-5	81.38	0.6	1.1	1.5	1.7	1.8	1.7	1.5	1.1	0.6	8000	7"	7"	7"	0.60	28	6400	32.0	11.0	14.0	4.0		

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
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STRUCTURES DESIGN SECTION

STRUCTURE B-13-599

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36W" PRESTRESSED GIRDER DETAILS

SHEET 10

526

8

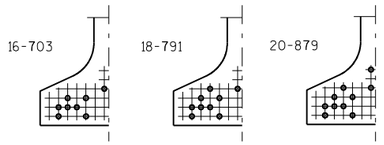
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G36W

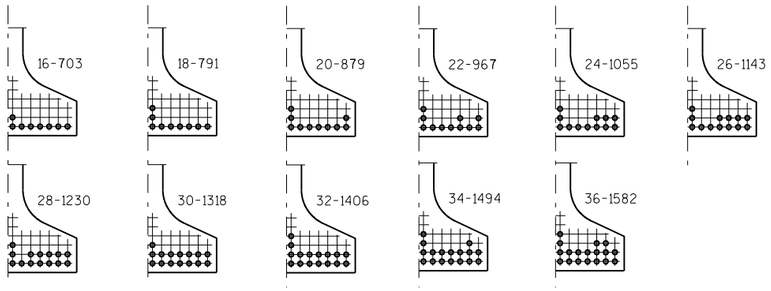
STATE PROJECT NUMBER

6020-02-72



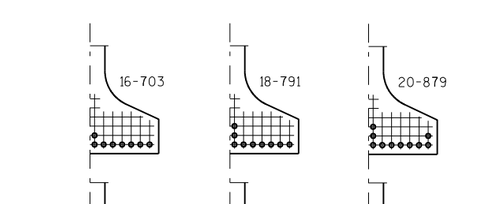
STANDARD ARRANGEMENTS TO RAISE CENTER OF GRAVITY TO AVOID DRAPING OF STRANDS

0.6"Φ STRANDS



ARRANGEMENT AT ℄ SPAN - FOR GIRDERS WITH DRAPED STRANDS

0.6"Φ STRANDS

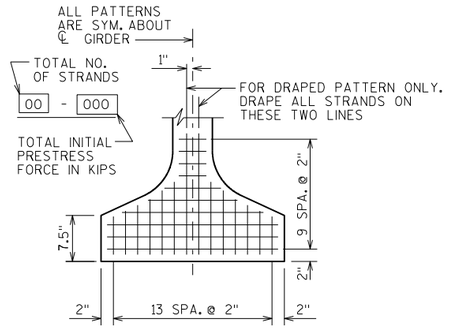


DRAPED STRAND PROFILE

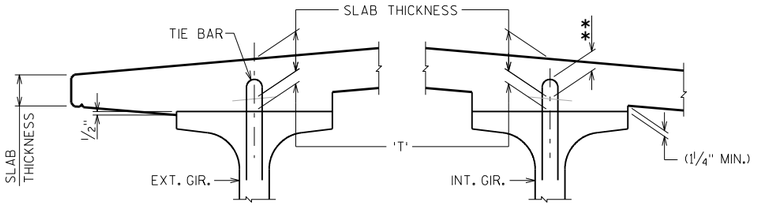
THE THEORETICAL INITIAL CAMBER VALUE AT THE TIME OF STRAND RELEASE AT MIDSPAN

SPAN	CAMBER (IN.)
1	2.12
2	2.12

THESE VALUES ARE NOT TO BE USED IN DETERMINING 'T'. USE ACTUAL GIRDER SHOTS.
THESE VALUES ARE FOR INFORMATIONAL PURPOSES ONLY.



TYP. STRAND PATTERN



SLAB HAUNCH DETAIL

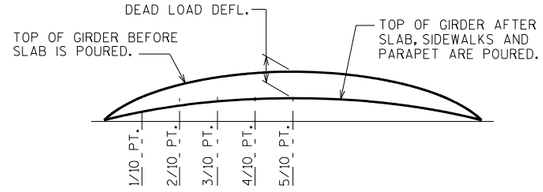
IF 1¼" MINIMUM HAUNCH HEIGHT AT EDGE OF GIRDER CANNOT BE MAINTAINED, THE GRADE LINE MAY BE REVISED BY THE ENGINEER AT THE OPTION OF THE CONTRACTOR. THE PLAN SLAB THICKNESS SHALL BE HELD. NOTIFY THE STRUCTURES SECTION IF THE GRADE LINE IS RAISED FROM THE PLAN PROFILE BY MORE THAN ½" OR,

** IF 3" MINIMUM DECK EMBEDMENT OF TIE BAR CANNOT BE OBTAINED.

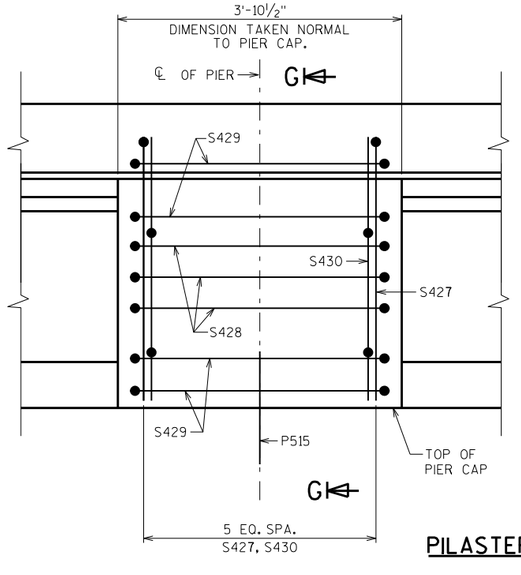
TO DETERMINE 'T', ELEV. OF TOP OF GIR'S. AT ℄ OF SUBSTRUCTURE UNITS & AT 1/10 POINTS OF EACH SPAN SHALL BE TAKEN. THEN FOLLOW THIS PROCESS:

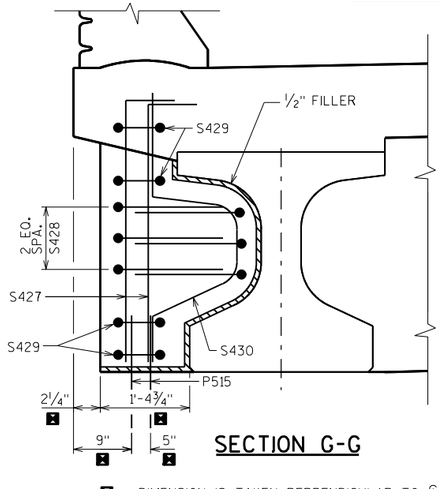
TOP OF DECK ELEV. AT FINAL GRADE
\- TOP OF GIRDER ELEVATION
\+ DEAD LOAD DEFLECTION
\- SLAB THICKNESS
= HAUNCH HEIGHT 'T'

NOTE: AN AVERAGE HAUNCH ('T') OF 2½" WAS USED IN THE QUANTITY "CONCRETE MASONRY BRIDGES".



DEAD LOAD DEFLECTION DIAGRAM





SECTION G-G

PILASTER DETAILS

■ = DIMENSION IS TAKEN PERPENDICULAR TO ℄ OF GIRDER

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-13-599

DRAWN BY DDS | PLANS CK'D. MWL

36W" PRESTRESSED GIRDER DETAILS

SHEET 11

527

SCALE =

TUE MAR 22 14:54:23 2017

8

8

STATE PROJECT NUMBER
6020-02-72

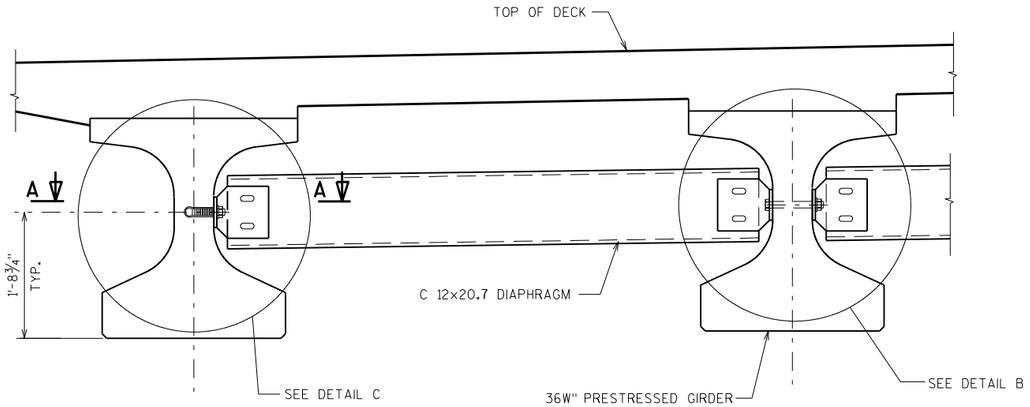
NOTES

ALL DIAPHRAGM MATERIAL NOT EMBEDDED IN THE CONCRETE GIRDER SHALL BE PAID FOR AT THE UNIT PRICE BID FOR "STEEL DIAPHRAGMS B-13-599", 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.

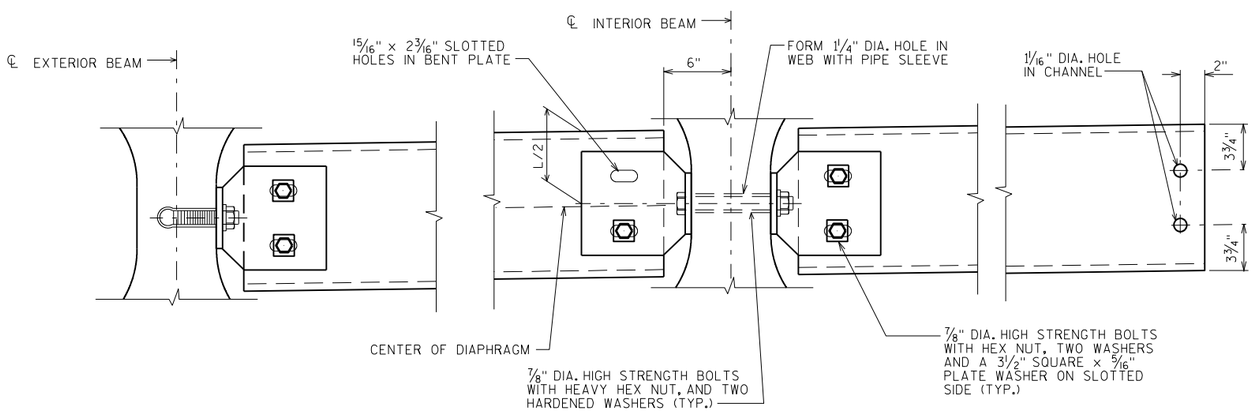
ALL DIAPHRAGM STRUCTURAL STEEL SHOWN SHALL BE HOT-DIPPED GALVANIZED. ALL BOLTS, NUTS AND WASHERS SHALL BE HOT-DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A153 CLASS C. GALVANIZED NUTS SHALL BE TAPPED OVERSIZE IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM A563 AND SHALL MEET THE REQUIREMENTS OF SUPPLEMENTARY REQUIREMENT S1 OF ASTM A563. LUBRICANT AND TEST FOR COATED NUTS.



EXTERIOR GIRDER

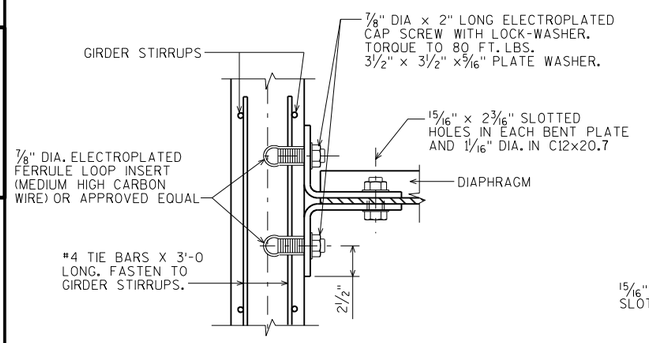
INTERIOR GIRDER

PART TRANSVERSE SECTION AT DIAPHRAGM

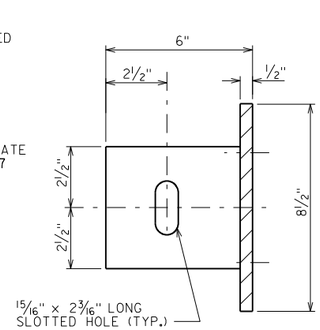


DETAIL C

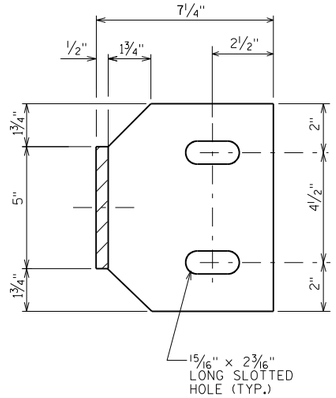
DETAIL B



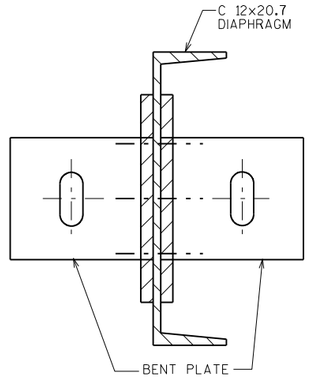
SECTION A-A
(FOR EXTERIOR ATTACHMENT)



BEAM FACE



DIAPHRAGM FACE



ATTACHMENT TO CHANNEL

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-13-599

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STEEL DIAPHRAGM

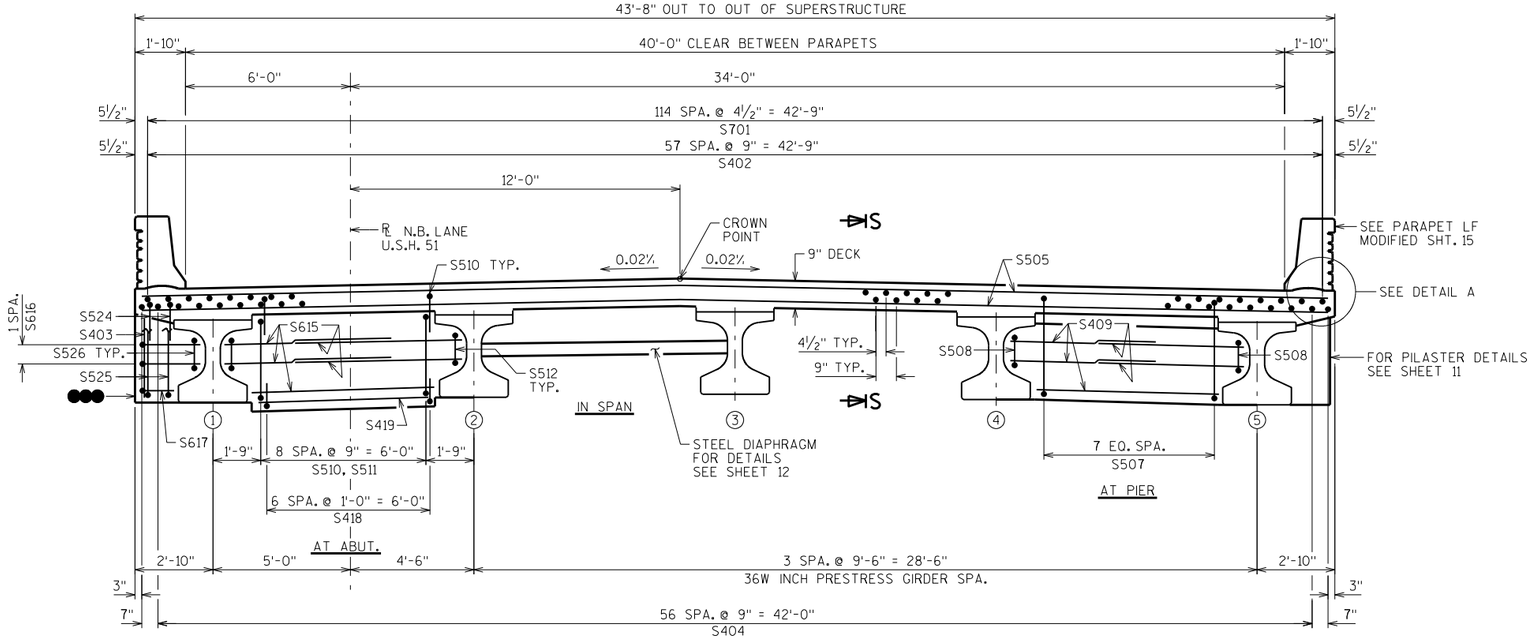
SHEET 12

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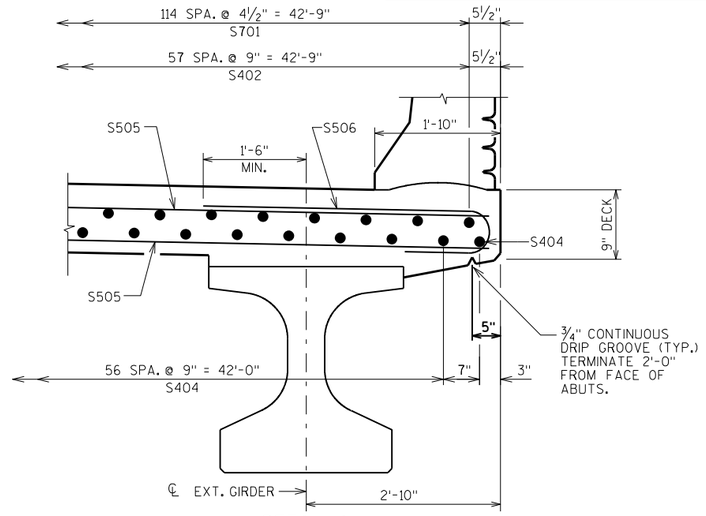
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STATE PROJECT NUMBER
6020-02-72

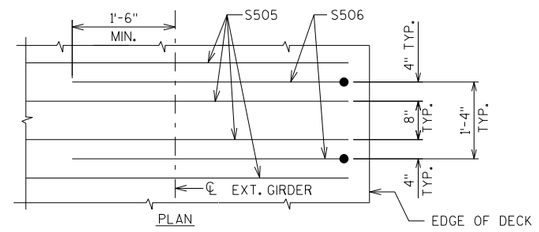


●●● WRAP AROUND/MATCH FORMLINER PATTERNS AT CORNERS.

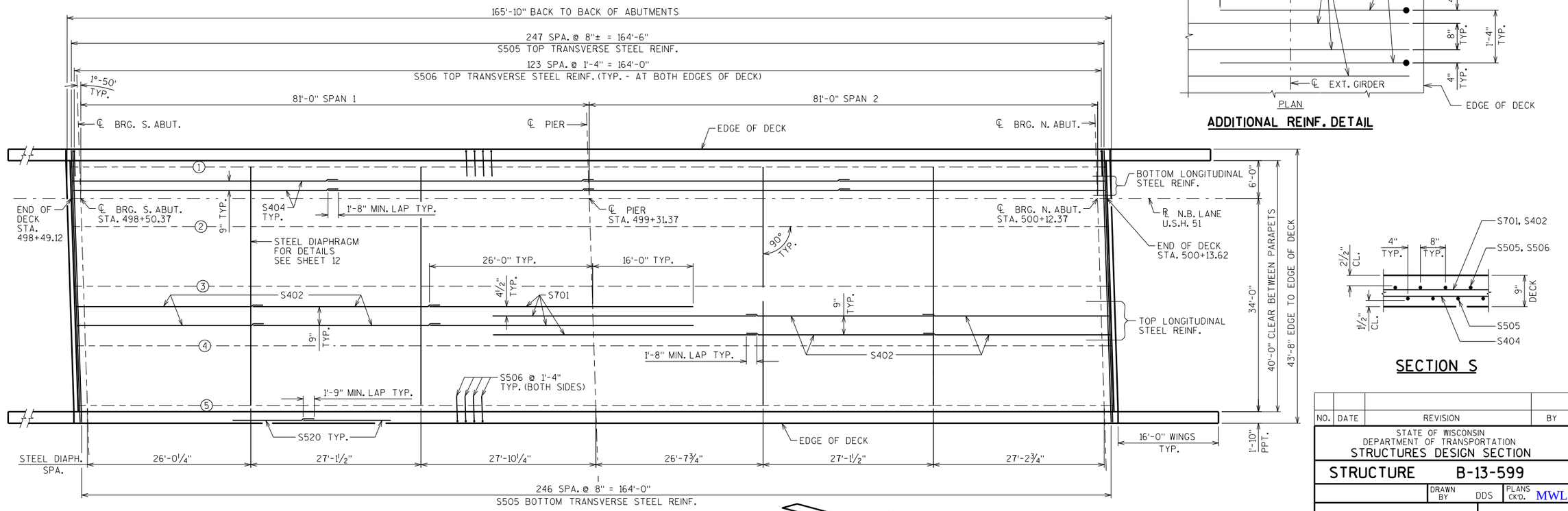
CROSS SECTION THRU ROADWAY
(LOOKING NORTH)



DETAIL A
NOTE: SPECIAL DRIP GROOVE LOCATION TYP.



ADDITIONAL REINF. DETAIL



PLAN

SECTION S

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-13-599

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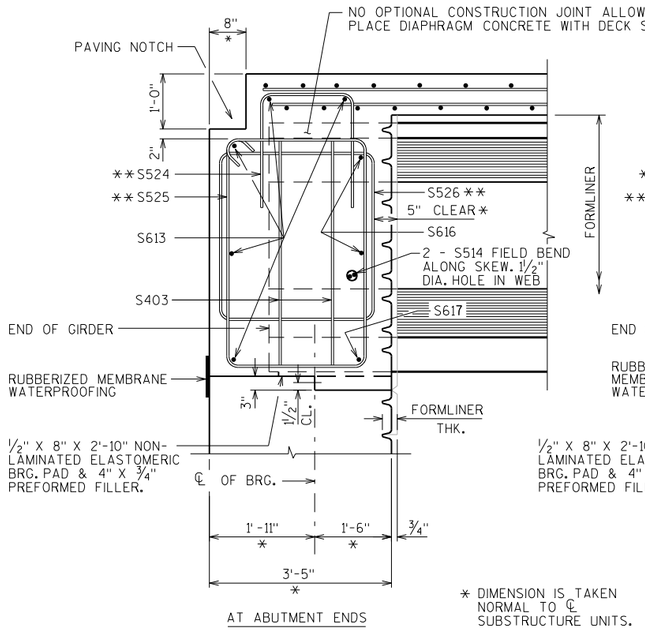
SUPERSTRUCTURE | SHEET 13 | 529

TUE MAR 22 14:54:27 2011*

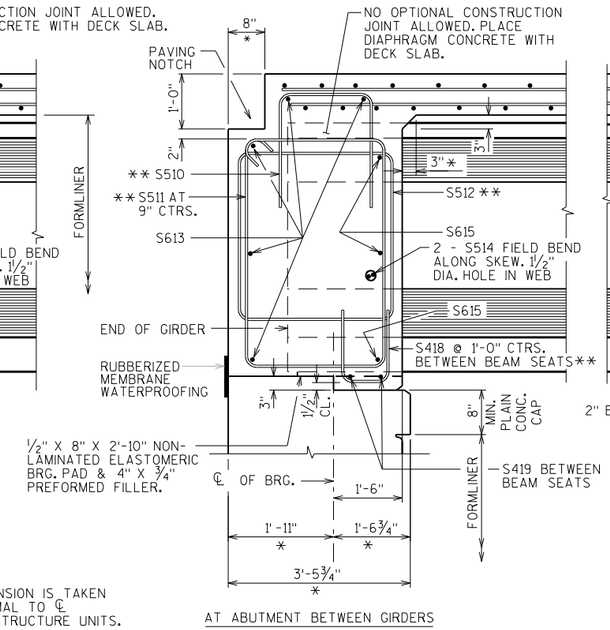
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STATE PROJECT NUMBER

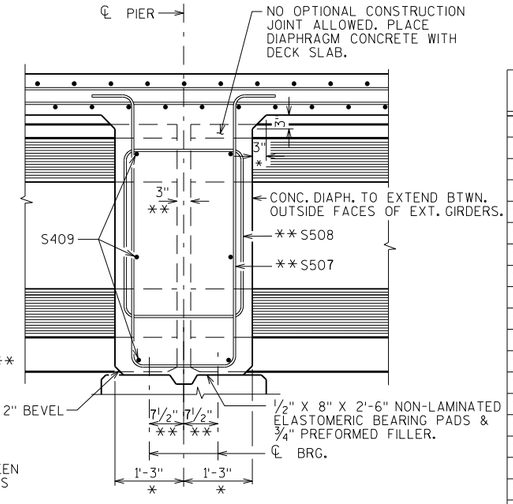
6020-02-72



PART LONGIT. SECTION



PART LONGIT. SECTION



AT PIER DIAPHRAGM

* DIMENSION IS TAKEN NORMAL TO ℄ SUBSTRUCTURE UNITS.

** DIMENSION IS TAKEN PARALLEL TO ℄ OF GIRDER.

TOP OF DECK ELEVATIONS

	S. ABUT.	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	PIER 1
LEFT EDGE OF DECK	982.87	982.82	982.77	982.73	982.68	982.63	982.58	982.53	982.47	982.42	982.37
GIRDER 1	982.88	982.84	982.79	982.75	982.70	982.65	982.60	982.55	982.49	982.44	982.39
GIRDER 2	983.07	983.03	982.98	982.93	982.89	982.84	982.79	982.73	982.68	982.63	982.57
GIRDER 3	983.18	983.14	983.09	983.04	982.99	982.94	982.89	982.84	982.79	982.74	982.68
GIRDER 4	982.99	982.94	982.90	982.85	982.80	982.75	982.70	982.65	982.60	982.54	982.49
GIRDER 5	982.80	982.75	982.71	982.66	982.61	982.56	982.51	982.46	982.41	982.35	982.30
RIGHT EDGE OF DECK	982.78	982.73	982.69	982.64	982.59	982.54	982.49	982.44	982.39	982.33	982.28

	PIER 1	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	N. ABUT.
LEFT EDGE OF DECK	982.37	982.31	982.25	982.20	982.14	982.08	982.02	981.96	981.90	981.84	981.78
GIRDER 1	982.39	982.33	982.27	982.22	982.16	982.10	982.04	981.98	981.92	981.86	981.80
GIRDER 2	982.57	982.52	982.46	982.40	982.34	982.29	982.23	982.17	982.11	982.05	981.99
GIRDER 3	982.68	982.63	982.57	982.51	982.45	982.39	982.33	982.27	982.21	982.15	982.09
GIRDER 4	982.49	982.43	982.38	982.32	982.26	982.20	982.14	982.08	982.02	981.96	981.90
GIRDER 5	982.30	982.24	982.18	982.13	982.07	982.01	981.95	981.89	981.83	981.77	981.71
RIGHT EDGE OF DECK	982.28	982.22	982.16	982.11	982.05	981.99	981.93	981.87	981.81	981.75	981.69

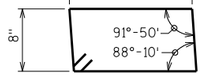
BILL OF BARS

▲ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

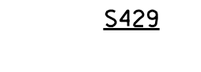
BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
S701	X	115	42'-0"			LONGITUDINAL CONTINUITY
S402	X	232	29'-9"			LONGITUDINAL TOP
S403	X	8	3'-6"			ABUT. DIAPH. - VERT. - ENDS
S404	X	236	42'-5"			LONGITUDINAL BOTTOM
S505	X	495	43'-4"			TRANSVERSE TOP AND BOTTOM
S506	X	248	4'-9"	X		TRANSVERSE TOP - EDGES OF DECK
S507	X	32	10'-2"	X		PIER DIAPHRAGM - VERTICAL
S508	X	8	7'-10"	X		PIER DIAPHRAGM - STIRRUP (AT GIRDERS)
S409	X	40	6'-8"			PIER DIAPHRAGM - HORIZONTAL
S510	X	72	6'-3"	X		ABUT. DIAPHRAGM - VERTICAL (BETWEEN GIRDERS)
S511	X	72	12'-2"	X		ABUT. DIAPHRAGM - STIRRUPS (BETWEEN GIRDERS)
S512	X	16	9'-8"	X		ABUT. DIAPHRAGM - STIRRUPS (AT GIRDERS)
S613	X	10	43'-4"			ABUT. DIAPHRAGM - HORIZONTAL - B.F.
S514	X	20	6'-0"			ABUT. DIAPHRAGM - HORIZONTAL (THRU GIRDER)
S615	X	40	6'-8"			ABUT. DIAPHRAGM - HORIZONTAL - (BETWEEN GIRDERS)
S616	X	8	6'-9"	X		ABUT. DIAPHRAGM - HORIZONTAL - ENDS
S617	X	4	4'-11"	X		ABUT. DIAPHRAGM - HORIZONTAL - ENDS
S418	X	56	3'-5"	X		ABUT. DIAPHRAGM - VERTICAL (BETWEEN GIRDERS)
S419	X	16	5'-8"			ABUT. DIAPHRAGM - HORIZONTAL - (BETWEEN GIRDERS)
S520	X	40	42'-10"			PARAPET LF - HORIZONTAL
S521	X	498	4'-10"	X		PARAPET LF - VERTICAL
S522	X	490	4'-2"	X		PARAPET LF - VERTICAL
S523	X	8	4'-7"	X		PARAPET LF - VERTICAL (AT PAVING NOTCH)
S524	X	8	6'-0"	X		ABUT. DIAPHRAGM - VERTICAL - ENDS
S525	X	8	11'-8"	X		ABUT. DIAPHRAGM - STIRRUPS - ENDS
S526	X	4	9'-2"	X		ABUT. DIAPHRAGM - STIRRUPS - ENDS (AT GIRDERS)
S427	X	12	3'-10"	X		PIER PILASTER - VERT.
S428	X	12	6'-10"	X		PIER PILASTER - HORIZ. - STIRRUPS
S429	X	8	8'-10"	X		PIER PILASTER - HORIZ. - STIRRUPS
S430	X	12	4'-8"	X		PIER PILASTER - VERT.
S431	X	498	3'-10"	X		PARAPET LF - VERTICAL
S532	X	24	42'-10"			PARAPET LF - HORIZONTAL



S427

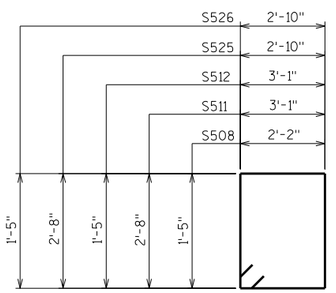


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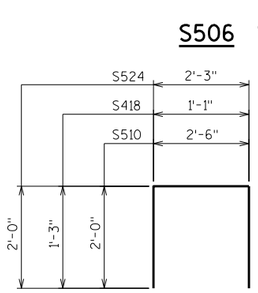


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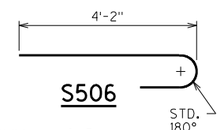
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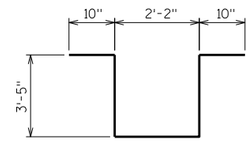
S508,S511,S512,S525,S526



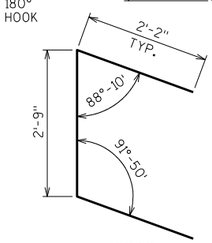
S510,S418,S524



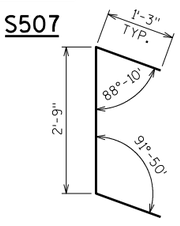
S506



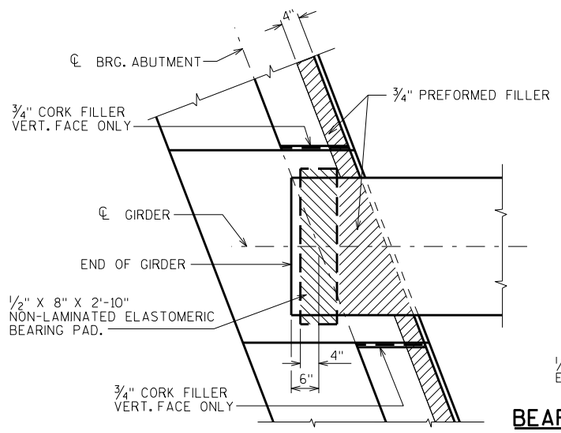
S507

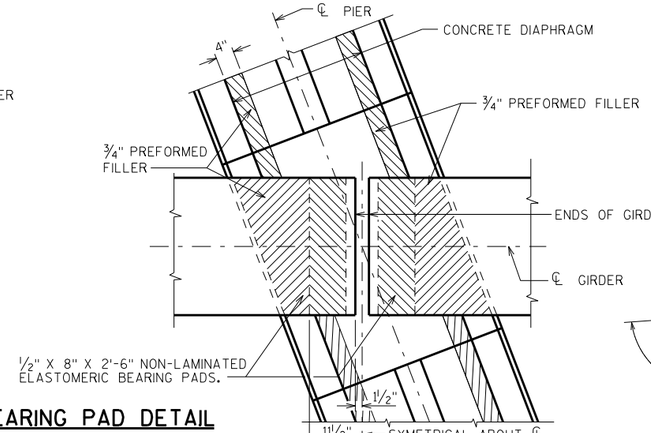


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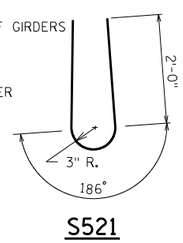


S617

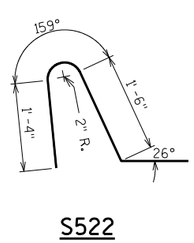




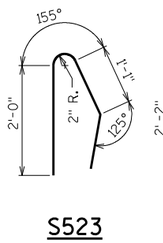
BEARING PAD DETAIL



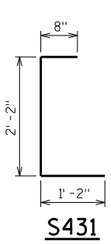
S521



S522



S523



S431

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-13-599

DRAWN BY DDS | PLANS CK'D. MWL

SUPERSTRUCTURE DETAILS

SHEET 14

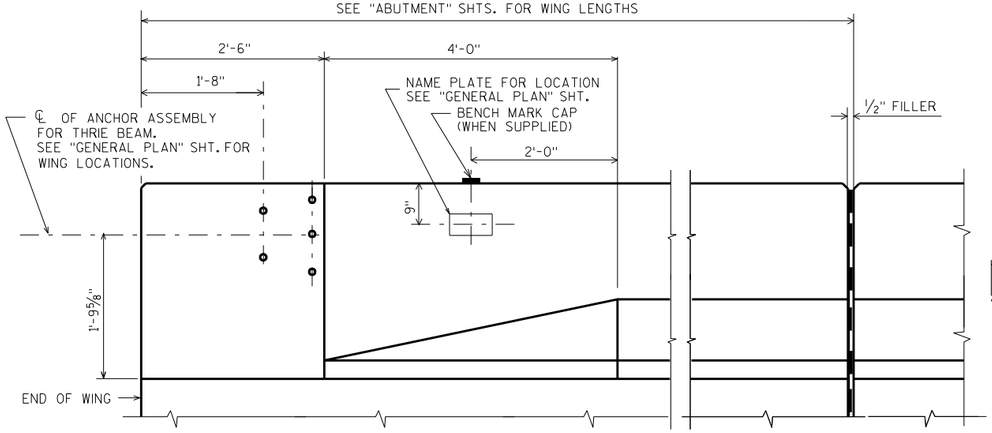
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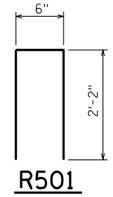
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STATE PROJECT NUMBER

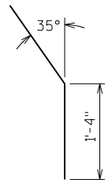
6020-02-72



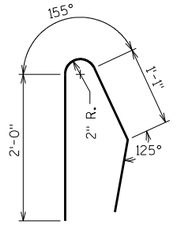
INSIDE ELEVATION



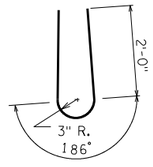
R501



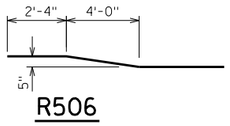
R502



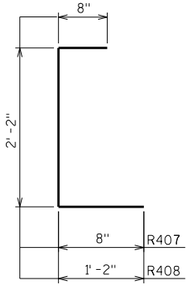
R503



R505



R506

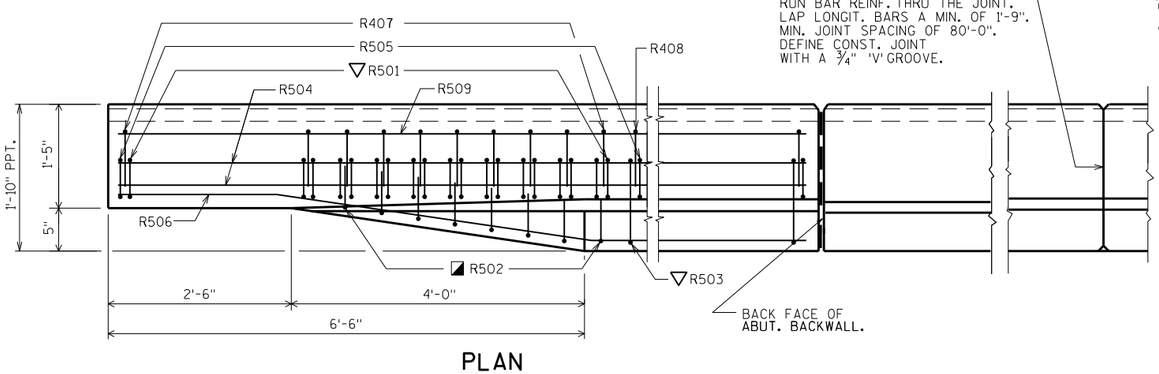


R407, R408

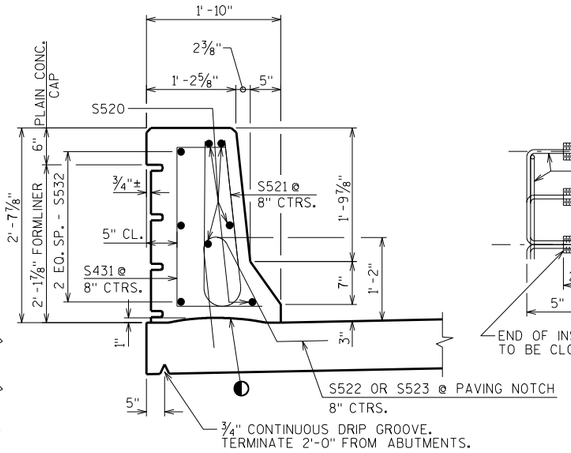
BILL OF BARS

FOR ABUTMENT PARAPETS

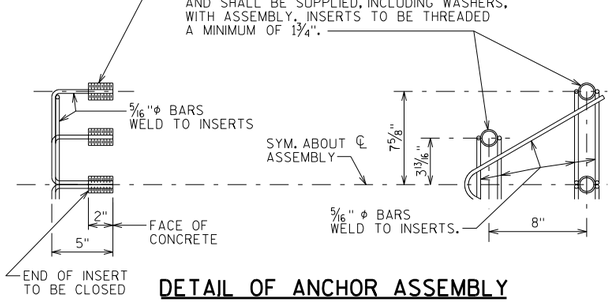
BAR MARK	COAT	S. ABUT.	N. ABUT.	LENGTH	BENT	LOCATION
R501	X	28	28	4-7	X	PARAPET VERT.
R502	X	16	16	2-4	X	PARAPET VERT.
R503	X	28	28	4-7	X	PARAPET VERT.
R504	X	8	8	15-8		PARAPET HORIZ.
R505	X	56	56	4-10	X	PARAPET VERT.
R506	X	2	2	15-8	X	PARAPET HORIZ.
R407	X	28	28	3-4	X	PARAPET VERT.
R408	X	28	28	3-10	X	PARAPET VERT.
R509	X	6	6	15-8		PARAPET HORIZ.



PLAN



SECTION THRU PARAPET ON BRIDGE

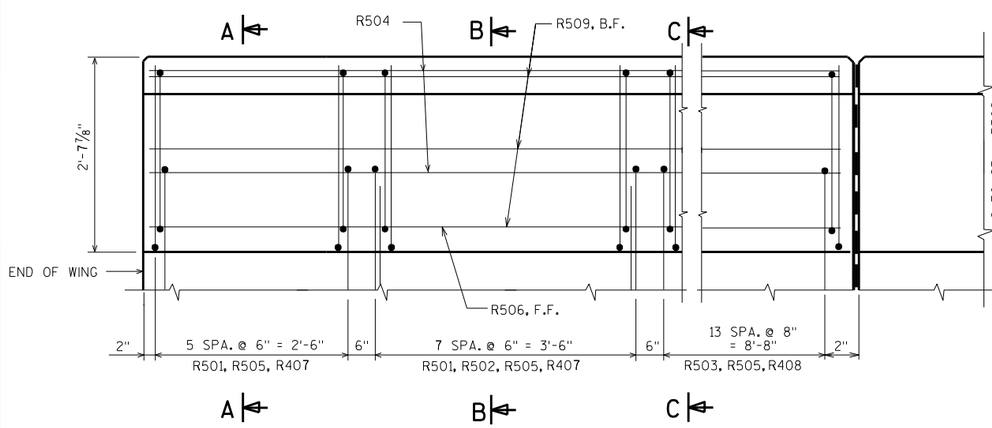


DETAIL OF ANCHOR ASSEMBLY

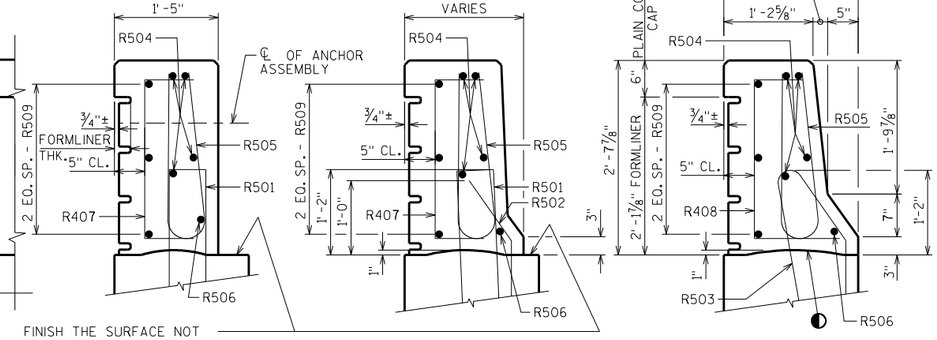
NOTE: HEX HEAD CAP SCREWS & WASHERS TO BE GALVANIZED IN ACCORDANCE WITH AASHTO M232 CLASS C.

ASSEMBLY SHALL BE BID ITEM "ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD", EACH.

FORMLINER COURSING ON PARAPETS SHALL BE PARALLEL TO TOP OF PARAPET.



OUTSIDE ELEVATION



SECTION A

SECTION B

SECTION C

◐ CONST. JOINT - STRIKE OFF AS SHOWN.

◪ 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.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-13-599

DRAWN BY DDS/NAR | PLANS CK'D. MWL

SLOPED FACE PARAPET TYPE 'LF' (MODIFIED)

SHEET 15

531

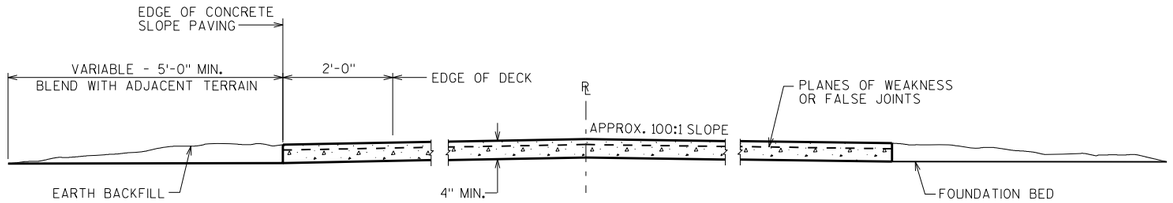
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8

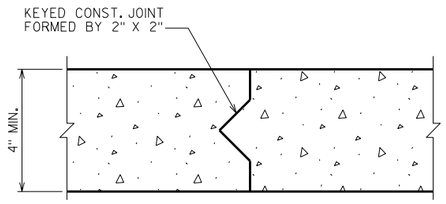
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12 7 12

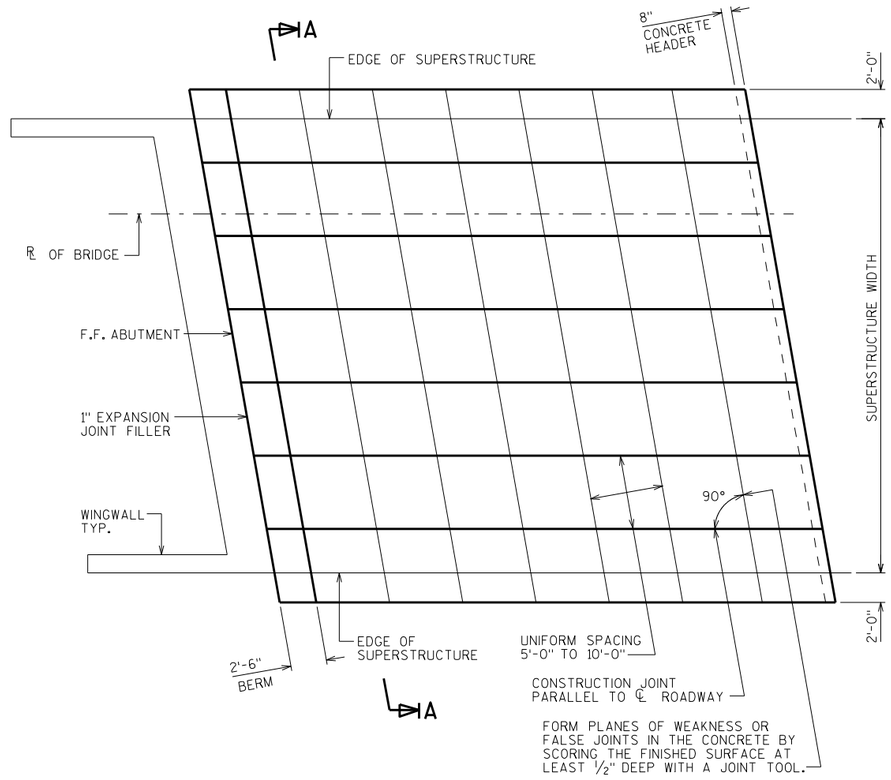
STATE PROJECT NUMBER
6020-02-72



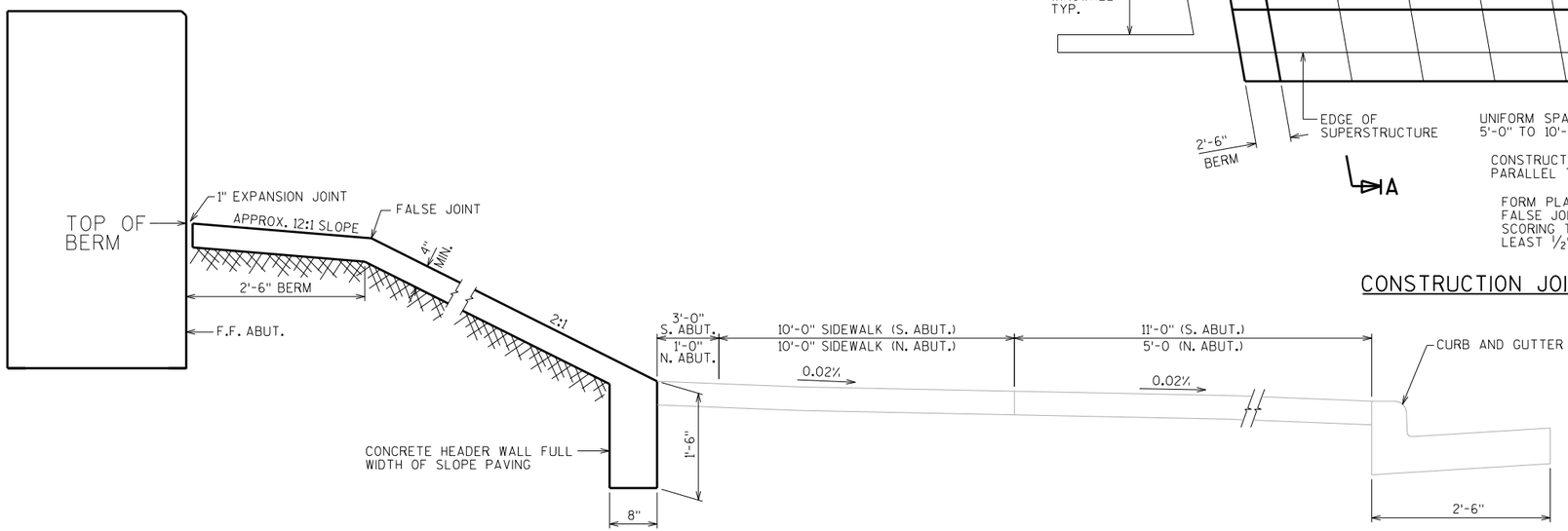
SECTION A-A



CONSTRUCTION JOINT



CONSTRUCTION JOINT DESIGN



TYPICAL SECTION

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
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-13-599

DRAWN BY DDS | PLANS CK'D. MWL

SLOPE PAVING (CONCRETE CAST-IN-PLACE)

SHEET 16

532

SCALE = 1.00

SLPPAVCIP
4-06

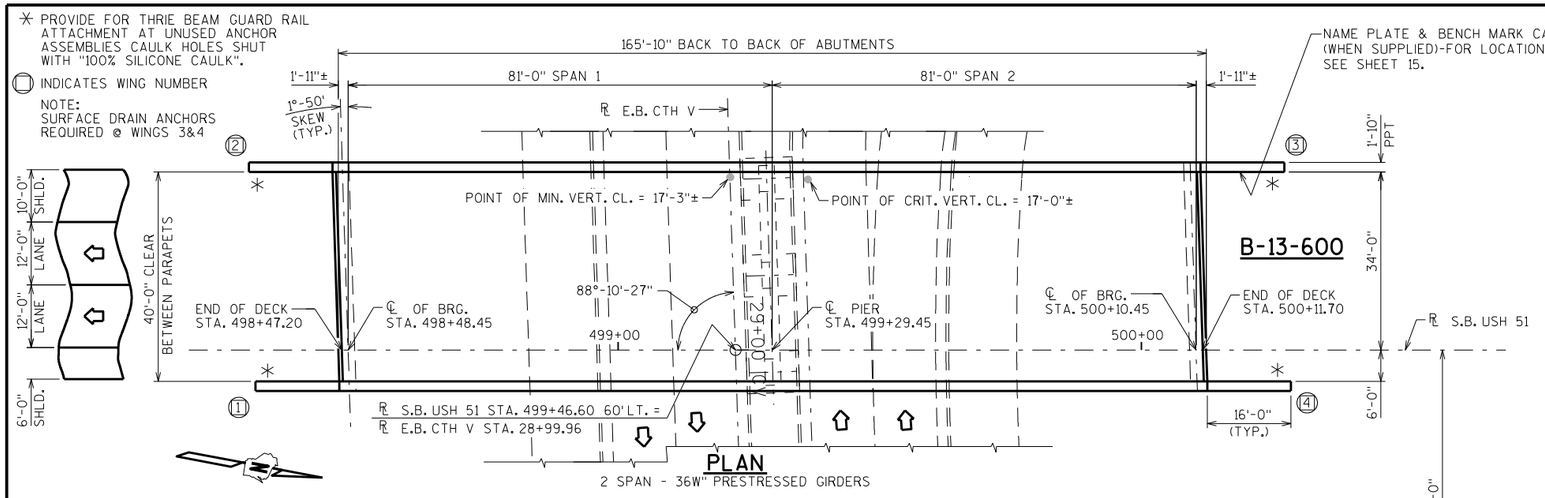
8 7 6 5 4 3 2 1

8

✳ PROVIDE FOR THRIE BEAM GUARD RAIL ATTACHMENT AT UNUSED ANCHOR ASSEMBLIES CAULK HOLES SHUT WITH "100% SILICONE CAULK".

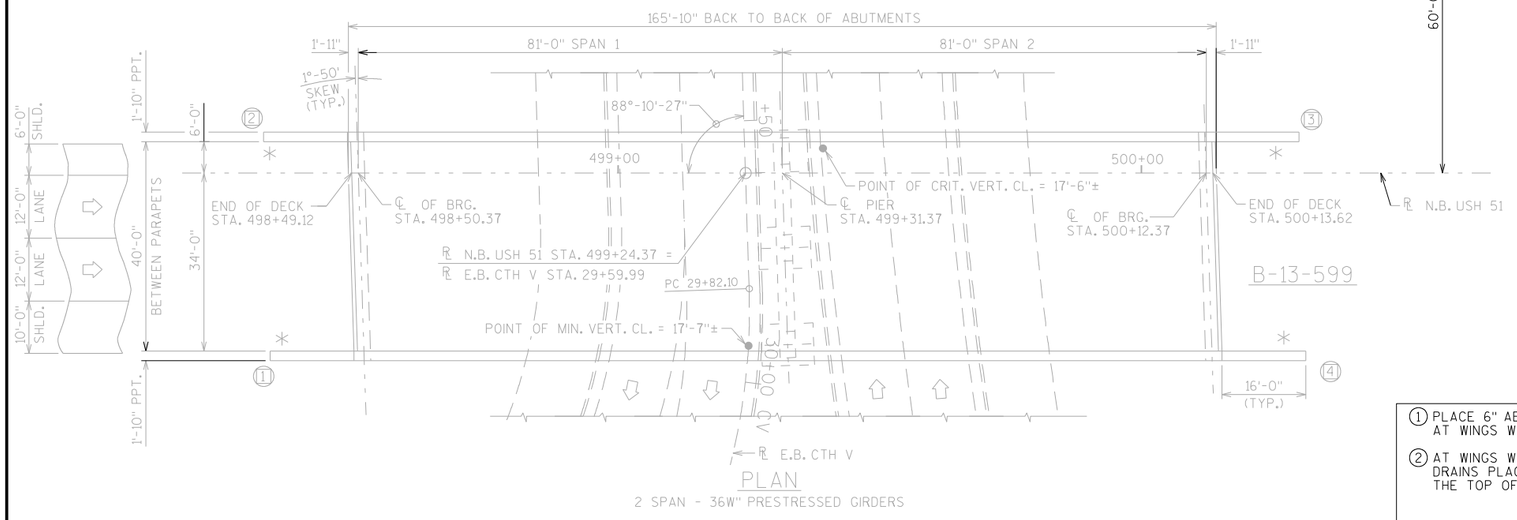
(1) INDICATES WING NUMBER

NOTE:
SURFACE DRAIN ANCHORS REQUIRED @ WINGS 3&4



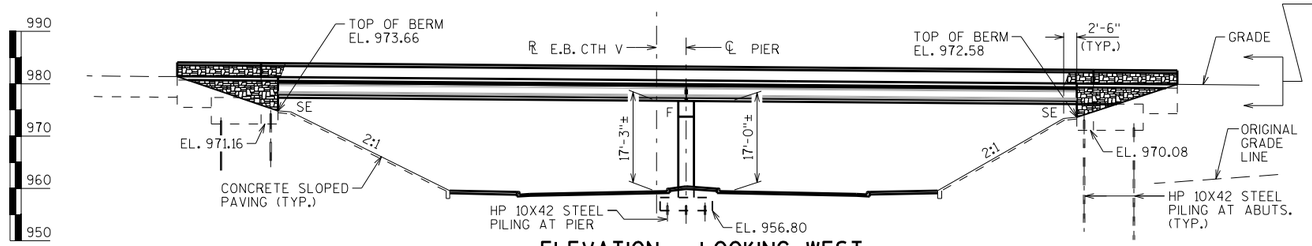
PLAN

2 SPAN - 36W" PRESTRESSED GIRDERS

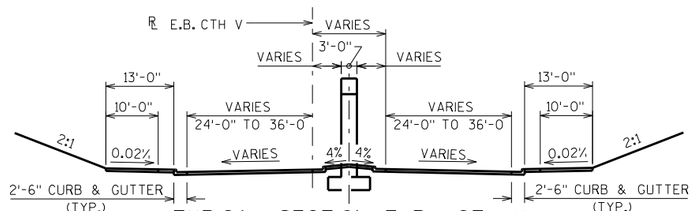


PLAN

2 SPAN - 36W" PRESTRESSED GIRDERS

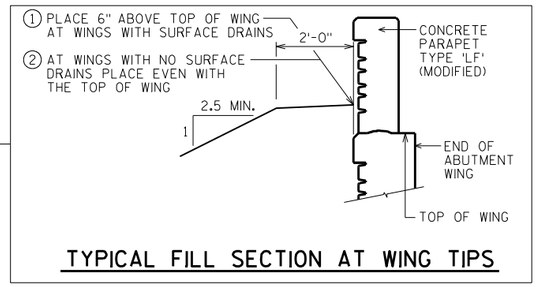


ELEVATION - LOOKING WEST



TYPICAL SECTION THRU CTH V

LOOKING WEST



TYPICAL FILL SECTION AT WING TIPS

LIST OF DRAWINGS

1. GENERAL PLAN
2. CROSS SECTION & QUANTITIES
3. SUBSURFACE EXPLORATION
4. SOUTH ABUTMENT
5. SOUTH ABUTMENT DETAILS
6. NORTH ABUTMENT
7. NORTH ABUTMENT DETAILS
8. PIER
9. PIER DETAILS
10. 36W" PRESTRESSED GIRDER DETAIL
11. 36W" PRESTRESSED GIRDER DETAIL
12. STEEL DIAPHRAGM
13. SUPERSTRUCTURE
14. SUPERSTRUCTURE
15. SLOPE FACED PARAPET TYPE LF (MODIFIED)
16. SLOPE PAVING (CONCRETE CAST-IN-PLACE)

STATE PROJECT NUMBER

6020-02-72

DESIGN DATA

LIVE LOAD:

DESIGN LOADING; HL-93
INVENTORY RATING FACTOR: RF=1.10
OPERATING RATING FACTOR: RF=1.43
WISCONSIN STANDARD PERMIT VEHICLE (WIS.-SPV): 250 (KIPS)

STRUCTURE IS DESIGNED FOR A FUTURE WEARING SURFACE OF 20 POUNDS PER SQUARE FOOT.

ULTIMATE DESIGN STRESSES:

CONCRETE MASONRY SLAB — f'c = 4,000 P.S.I. ALL OTHER — f'c = 3,500 P.S.I.

BAR STEEL REINFORCEMENT, GRADE 60 — fy = 60,000 P.S.I.

36W" PRESTRESSED GIRDERS, CONCRETE MASONRY — f'c = 8,000 P.S.I.
STRANDS - 0.6" DIA. WITH ULTIMATE TENSILE STRENGTH OF 270,000 P.S.I.

FOUNDATION DATA

ABUTMENTS TO BE SUPPORTED ON HP 10X42 STEEL PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 180 TONS ✱✱ PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA.
ESTIMATED 40'-0" LONG (S. ABUT).
ESTIMATED 35'-0" LONG (N. ABUT.).

PIER TO BE SUPPORTED ON HP 10X42 STEEL PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 165 TONS ✱✱ PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA.
ESTIMATED 25'-0" LONG.

✱✱ 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 VOLUME

S.B. USH 51	CTH V
A.D.T.=28800 (2030)	A.D.T.=16985 (2030)
R.D.S.=70 M.P.H.	R.D.S.=35 M.P.H.

CURVE DATA

E.B. CTH V

P.I. = 30+35.52
Δ = 47°-22'-07"
D = 47°-03'-03"
T = 53.42'
L = 100.68'
R = 121.77'
P.C. = 29+82.10
P.T. = 30+82.78

℄ S.B. USH 51 IS AN AUXILARY ℄ CREATED FOR BRIDGE LAYOUT ONLY.

STRUCTURES DESIGN CONTACTS:
VU THAO (608) 267-2869
DAVID KIEKBUSCH (608) 266-5084

NO.	DATE	REVISION	BY

Plans Prepared By WISDOT
BUREAU OF STRUCTURES

ACCEPTED William C. Dreher 6/6/13
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE B-13-600

SOUTHBOUND U.S.H. 51 OVER C.T.H. V

COUNTY	TOWN/~~CITY/VILLAGE~~
DANE	WINDSOR

DESIGN SPEC. AASHTO LRFD DESIGN SPEC. 5th EDITION

DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
VT	MWL	DDS	MWL

GENERAL PLAN

SHEET 1 OF 16

533

I.D. 6020-02-00H

DATE: JUNE 2013

SCALE = 14.00

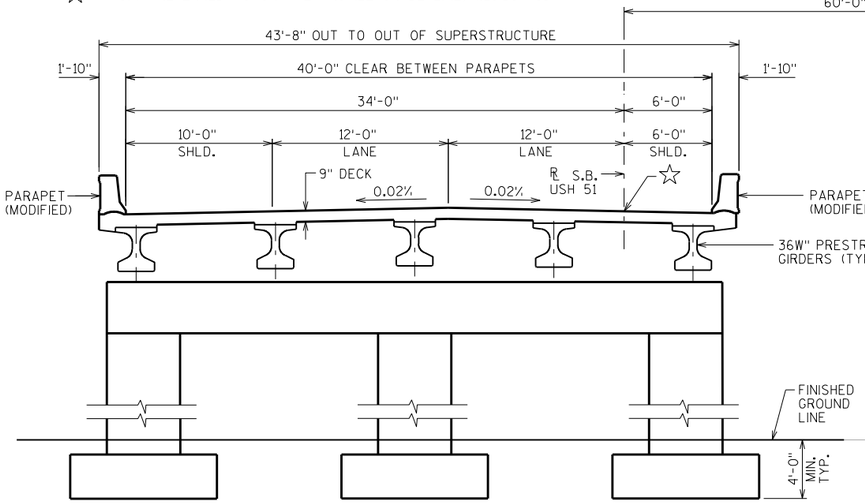
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STATE PROJECT NUMBER

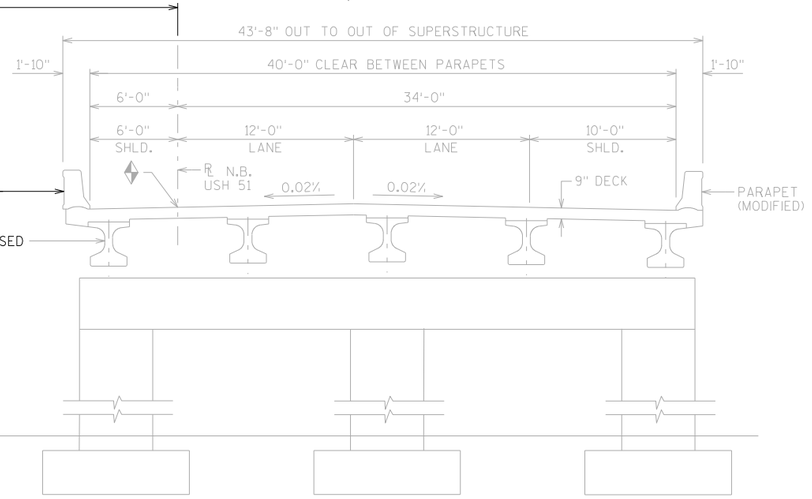
6020-02-72

☆ = POINT REFERRED TO ON THE PROFILE GRADE LINE, N.B. USH 51



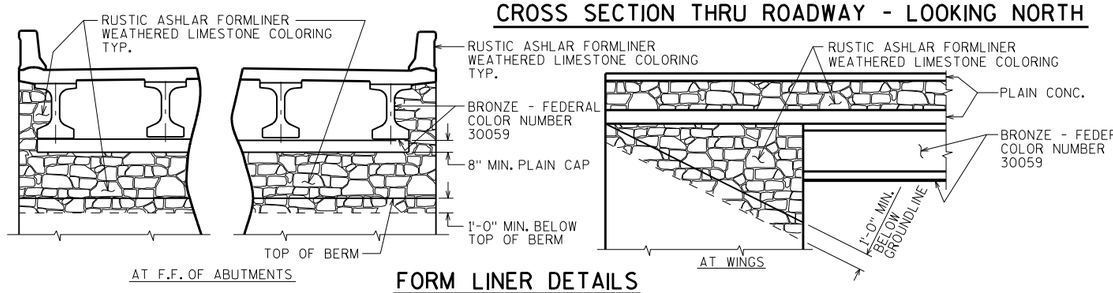
B-13-600

◆ = POINT REFERRED TO ON THE PROFILE GRADE LINE

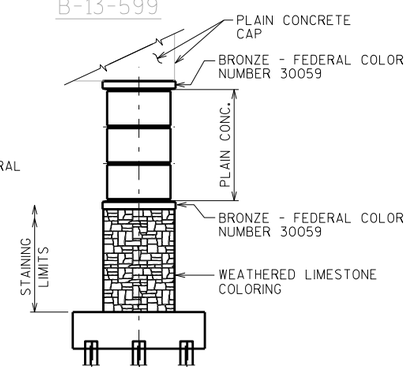


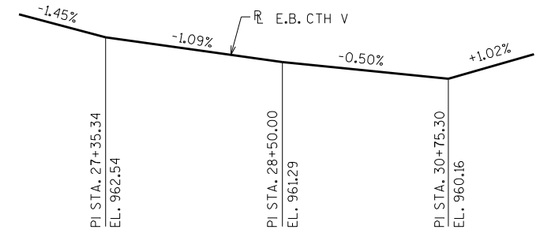
B-13-599

CROSS SECTION THRU ROADWAY - LOOKING NORTH

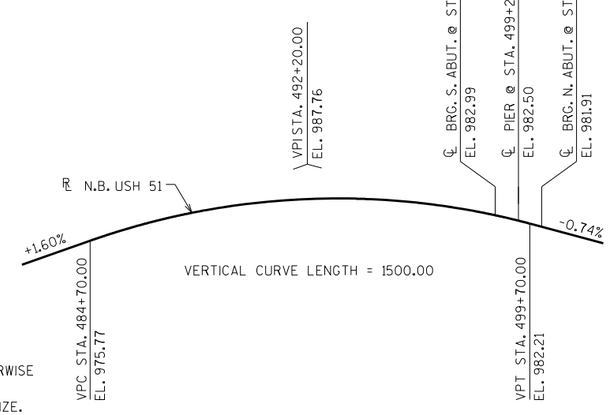


FORM LINER DETAILS





PROFILE GRADE LINE - E.B. CTH V



PROFILE GRADE LINE - N.B. USH 51

TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEMS	UNIT	SUPER.	SOUTH ABUT.	NORTH ABUT.	PIER	TOTALS
206.1000	EXCAVATION FOR STRUCTURES BRIDGES B-13-600	LS	———	———	———	———	1
210.0100	BACKFILL STRUCTURE	CY	———	240	240	———	480
502.0100	CONCRETE MASONRY BRIDGES	CY	310	81	80	75	546
502.3200	PROTECTIVE SURFACE TREATMENT	SY	910	———	———	———	910
503.0137	PRESTRESSED GIRDER TYPE I 36W-INCH	LF	814	———	———	———	814
505.0405	BAR STEEL REINFORCEMENT HS BRIDGES	LB	———	3200	3200	1425	7825
505.0605	BAR STEEL REINFORCEMENT HS COATED BRIDGES	LB	57475	3125	3145	15850	79595
506.2605	BEARING PADS ELASTOMERIC NON-LAMINATED	EACH	———	5	5	10	20
506.4000	STEEL DIAPHRAGMS B-13-600	EACH	16	———	———	———	16
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	———	12	12	———	24
517.1010.S	CONCRETE STAINING B-13-600	SF	2100	———	———	75	2175
517.1015.S	CONCRETE STAINING MULTI-COLOR B-13-600	SF	715	525	515	355	2110
517.1050.S	ARCHITECTURAL SURFACE TREATMENT B-13-600	SF	715	525	515	355	2110
550.1100	PILING STEEL HP 10-INCH X 42 LB	LF	———	400	350	450	1200
604.0400	SLOPE PAVING CONCRETE	SY	———	175	160	———	335
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	———	90	90	———	180
614.0150	ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD	EACH	———	2	2	———	4
652.0125	CONDUIT RIGID METALLIC 2-INCH	LF	———	———	———	13	13
652.0310	CONDUIT RIGID NONMETALLIC SCHEDULE 80 1-INCH	LF	———	———	———	37	37
652.0325	CONDUIT RIGID NONMETALLIC SCHEDULE 80 2-INCH	LF	———	———	———	20	20
653.0208	JUNCTION BOXES 8X8X8-INCH	EACH	———	———	———	1	1
SPV.0060	4X4X4-INCH FLUSH MOUNTED JUNCTION BOX B-13-600	EACH	———	———	———	4	4
	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 OTHERWISE SHOWN OR NOTED.

THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

AT THE BACKFACE OF ABUTMENT ALL VOLUME WHICH CANNOT BE PLACED BEFORE ABUTMENT CONSTRUCTION AND IS NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH STRUCTURE BACKFILL.

ELASTOMERIC BEARING PADS NEED NOT BE INDIVIDUALLY MOLDED PROVIDED THE CUT EDGES ARE SMOOTH AND TRUE.

CONCRETE FOR ABUTMENT AND PIER DIAPHRAGMS SHALL BE PLACED WITH THE DECK CONCRETE. NO OPTIONAL CONSTRUCTION JOINT WILL BE PERMITTED.

THE GRADATION OF THE STRUCTURE BACKFILL SHALL MEET THE REQUIREMENTS OF SECTION 209.2.2 OF THE STANDARD SPECIFICATIONS FOR GRADE 1 MATERIAL.

PROTECTIVE SURFACE TREATMENT TO BE APPLIED TO THE ENTIRE TOP OF DECK SURFACE AND THE FRONT FACE AND THE TOP OF THE PARAPET, INCLUDING PARAPETS ON ABUTMENT WINGS.

THE EXISTING GROUND LINE SHALL BE USED AS THE UPPER LIMITS OF EXCAVATION AT THE PIERS.

FORMLINER ON EXPOSED VERTICAL FACES OF THE WINGWALLS, ABUTMENT BODY, THE BACK SIDE OF THE PARAPETS AND THE PIER (WHERE DESIGNATED) TO BE A RUSTIC ASHLAR FINISH.

STAIN ARCHITECTURAL TREATMENT SURFACES TO RESEMBLE WEATHERED LIMESTONE UNDER BID ITEM "CONCRETE STAINING MULTI-COLOR B-13-600".

STAIN ALL EXPOSED OUTSIDE FACES AND THE UNDERSIDE OF THE EXTERIOR GIRDERS AND CAPS ON THE PIER COLUMNS. STAIN COLOR TO BE BRONZE (FEDERAL COLOR #30059). PAID FOR UNDER SEE BID ITEM "CONCRETE STAINING B-13-600".

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-13-600

DRAWN BY DDS | PLANS CK'D. MWL

CROSS SECTION & QUANTITIES

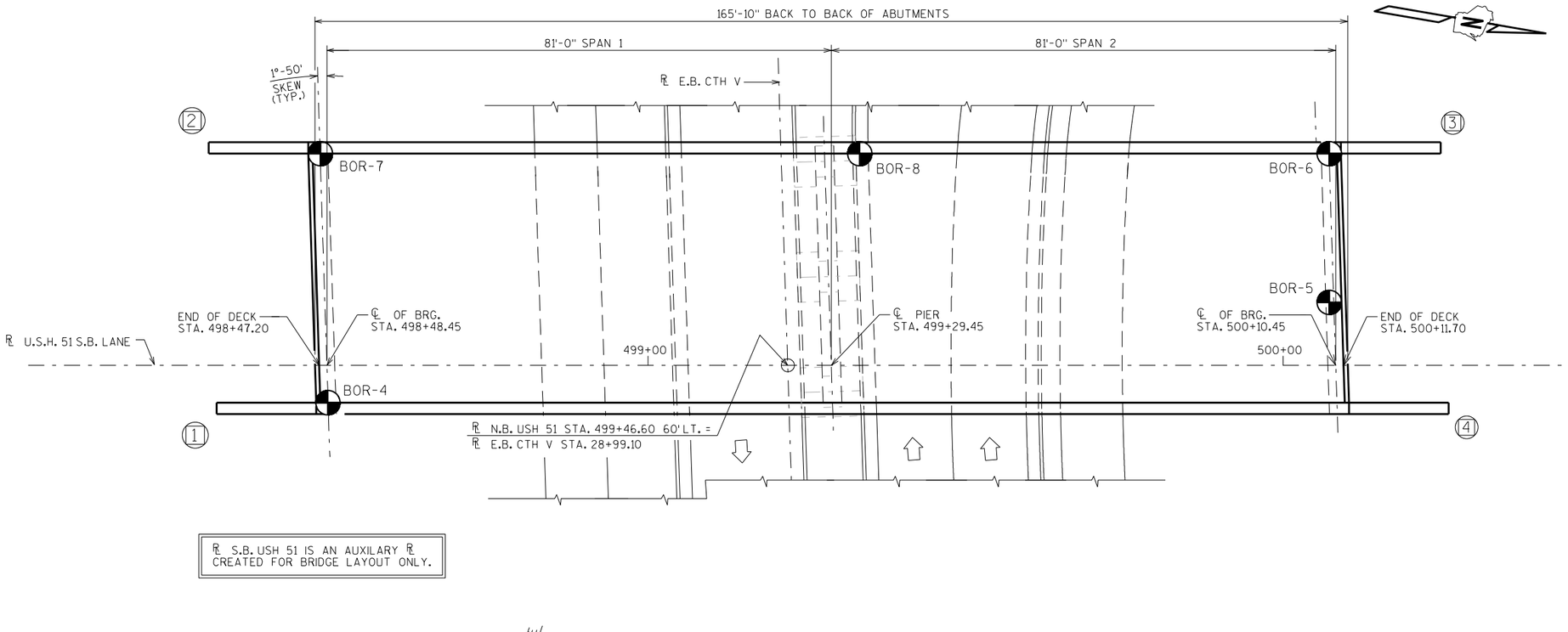
SHEET 2

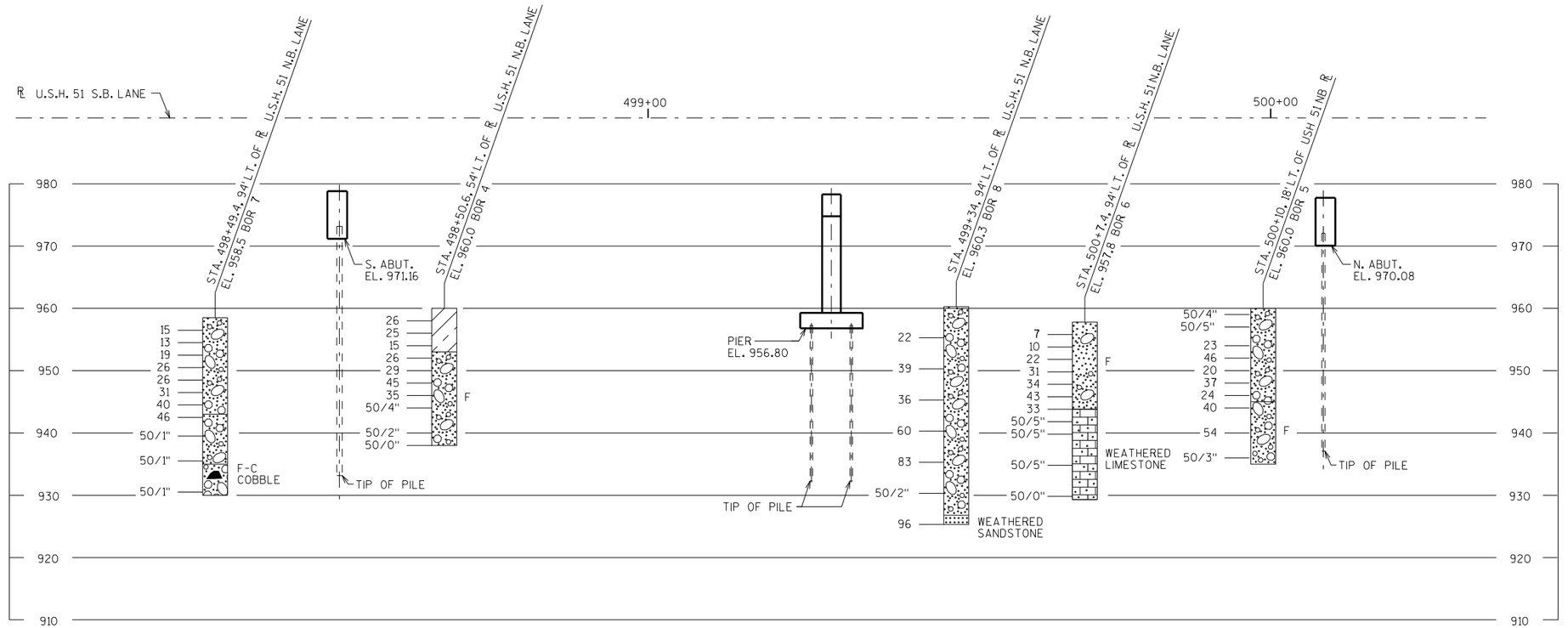
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SCALE = 5.0

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STATE PROJECT NUMBER

6020-02-72

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

PROBING NO.
STA.
ELEVATION
7 AVERAGE BLOWS PER FOOT
REFUSAL 95/6

95/6=95 BLOWS FOR 6" PENETRATION
PROBING TAKEN WITH A 350# WT. FALLING 18" ON A 2" O.D. POINT.

LEGEND OF BORING

BORING NO.
ELEV.
STA.
UNCONFINED STRENGTH → 7.7 7
BLOWS PER FT. USING 140# WT. FALLING 30"
WASH SAMPLE
SHELBY TUBE — S.T.
GROUND WATER ELEVATION
NO GROUND WATER OBSERVED ABOVE THIS ELEVATION
SANDY GRAVEL
F. BOULDERS OR COBBLES
SAND
SILTY CLAY
SO LIMESTONE

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-13-600

DRAWN BY PR | PLANS CK'D. MWL

SUBSURFACE EXPLORATION

SHEET 3

535

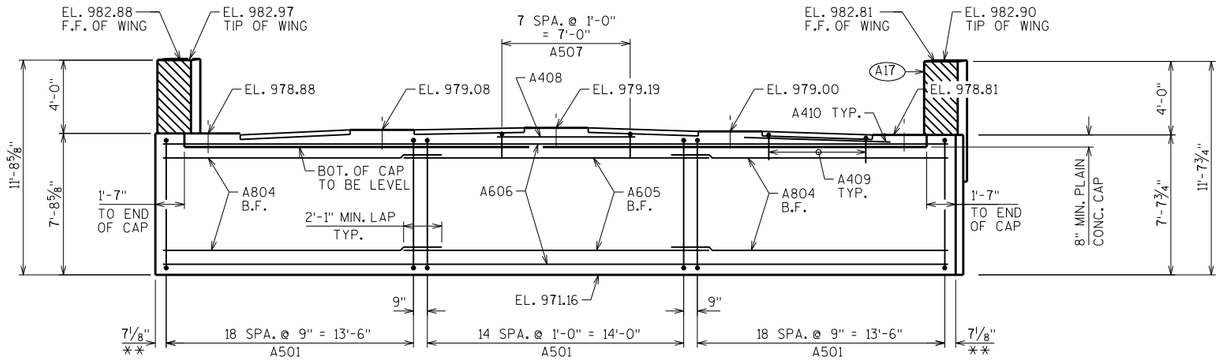
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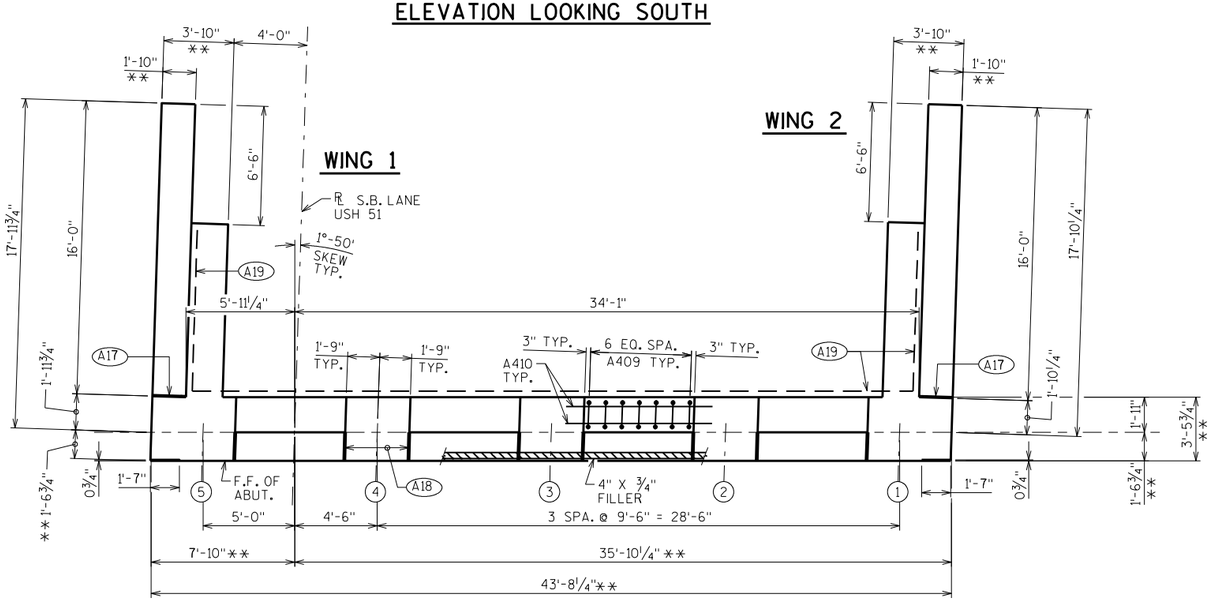
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STATE PROJECT NUMBER

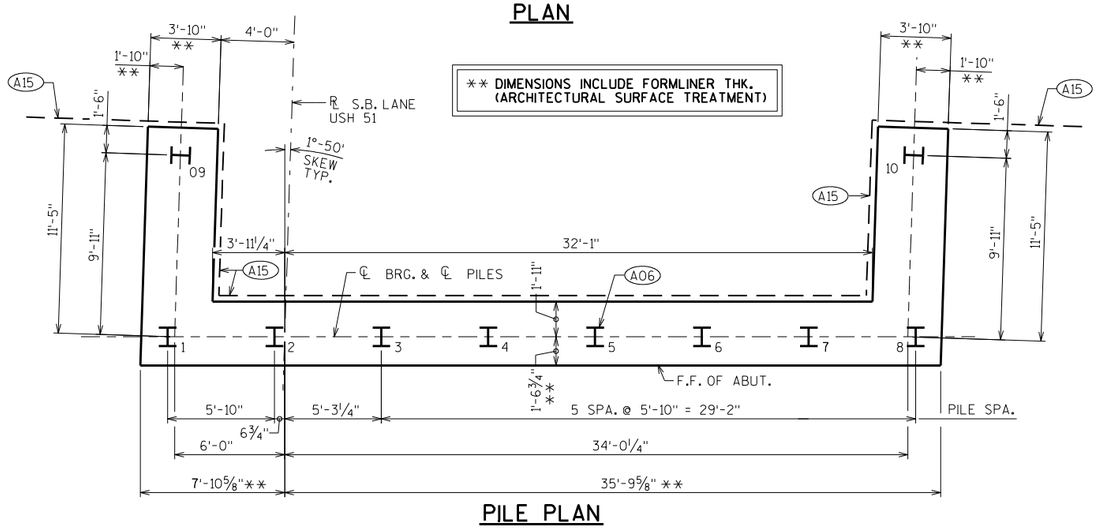
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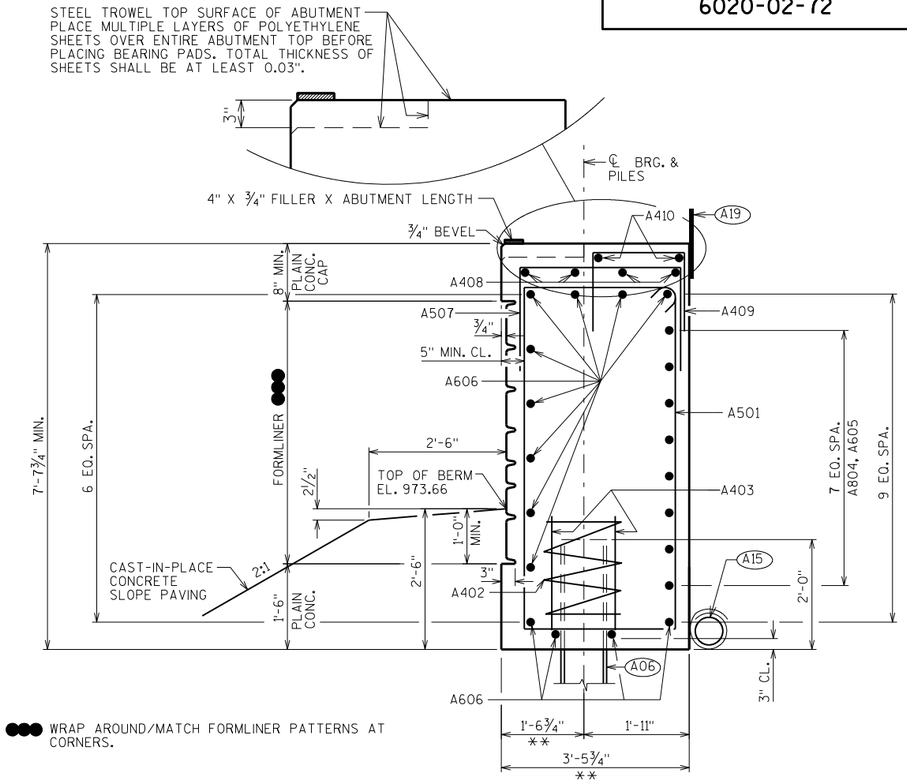
ELEVATION LOOKING SOUTH



PLAN

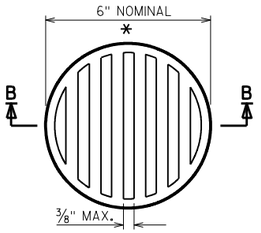


PILE PLAN

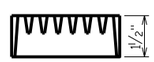


SECTION THRU BODY

●●● WRAP AROUND/MATCH FORMLINER PATTERNS AT CORNERS.



RODENT SCREEN DETAIL



SECTION B-B

* DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING. ORIENT SO SLOTS ARE VERTICAL.

THE RODENT SCREEN, PIPE COUPLING AND SCREWS SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".

THE RODENT SCREEN SHALL BE A 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 SCREEN SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH SHEET METAL SCREWS.

(A06) SUPPORT ABUTMENT ON HP 10 x 42 STEEL PILING, ESTIMATED 40'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 180 TONS PER PILE.

(A15) PIPE UNDERDRAIN WRAPPED 6-INCH. SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SCREEN REQUIRED.

(A17) 1/2" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

(A18) 3/4" CORK FILLER UP VERT. BEAM SEAT FACES THAT RUN PARALLEL WITH GIRDER.

(A19) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-13-600

DRAWN BY DDS | PLANS CK'D. MWL

SOUTH ABUTMENT

SHEET 4

536

SCALE = 4.00

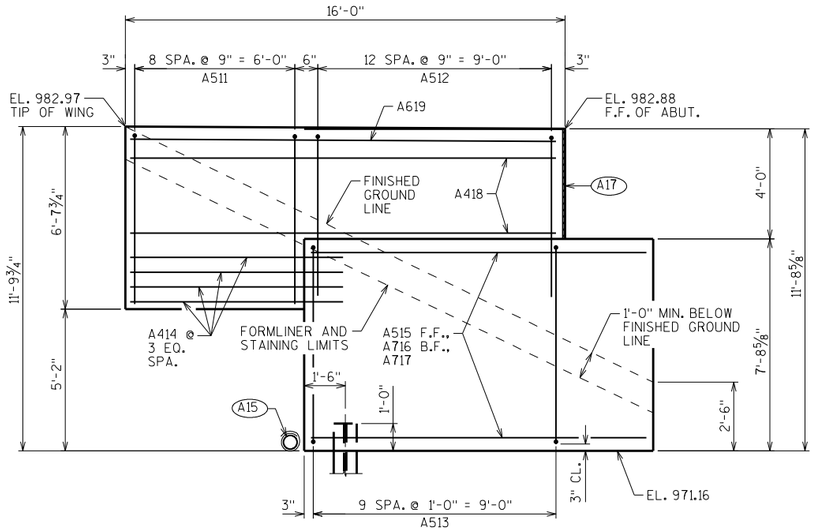
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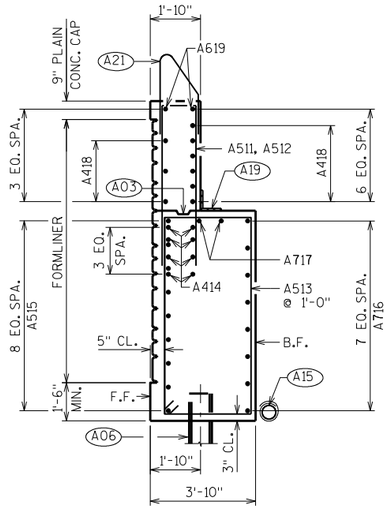
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STATE PROJECT NUMBER

6020-02-72



WING 1 ELEVATION



SECTION THRU WING 1

(A03) OPTIONAL CONST. JOINT: KEYWAY FORMED BY BEVELED 2 X 6. (18" R.M.W. @ B.F. IF JOINT IS USED).

(A06) SUPPORT ABUTMENT ON HP 10 X 42 STEEL PILING, ESTIMATED 40'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 180 TONS PER PILE.

(A15) PIPE UNDERDRAIN WRAPPED 6-INCH. SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SCREEN REQUIRED.

(A17) 1/2" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

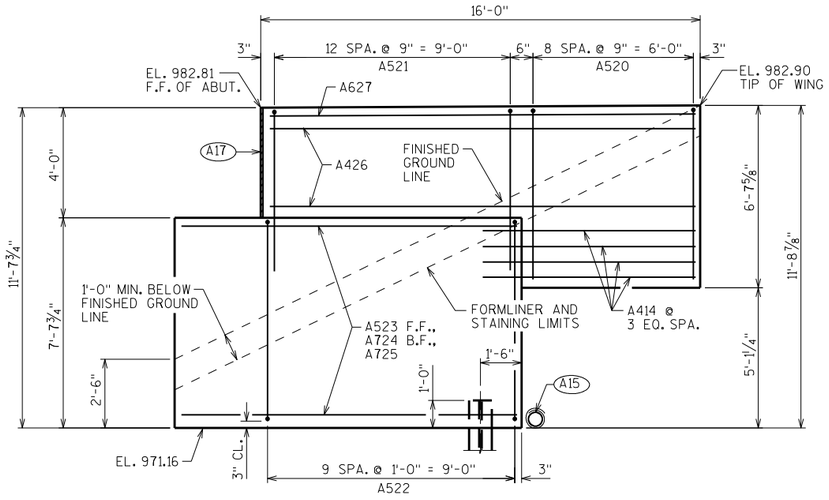
(A19) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

(A21) FOR PPT. BARS & DIMENSION SEE PARAPET SHEET 15.

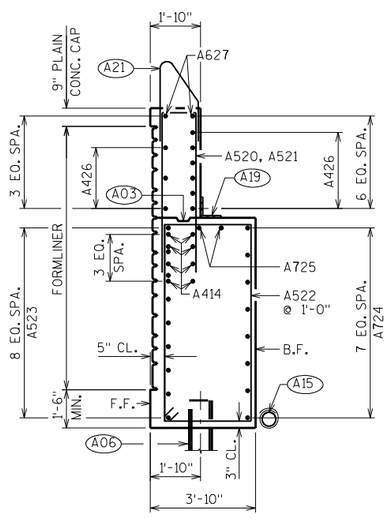
BILL OF BARS

▲ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

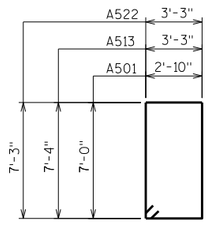
BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
A501		53	20'-4"	X		BODY-STIRRUPS
A402		8	28'-0"	X		PILES - 1 PER BODY PILE
A403		16	2'-3"			PILES - 2 PER BODY PILE
A804		16	16'-0"			BODY - HORIZONTAL - B.F.
A605		8	15'-0"			BODY - HORIZONTAL - B.F.
A606		13	42'-10"			BODY - HORIZONTAL
A507		8	5'-11"	X		BODY - VERTICAL - TOP OVER GIRDER 3
A408		4	7'-6"			BODY - HORIZONTAL - TOP
A409		28	4'-11"	X		BODY - VERTICAL - BETWEEN BEAM SEATS
A410		8	8'-0"			BODY - HORIZONTAL - BETWEEN BEAM SEATS
A511	X	9	13'-4"	X		WING 1 - VERTICAL
A512	X	13	12'-10"	X		WING 1 - VERTICAL
A513	X	10	21'-10"	X		WING 1 - STIRRUP
A414	X	16	7'-9"			WING 1 - HORIZONTAL
A515	X	9	11'-10"			WING 1 - HORIZONTAL
A716	X	8	12'-2"			WING 1 - HORIZONTAL
A717	X	2	12'-2"			WING 1 - HORIZONTAL
A418	X	9	15'-8"			WING 1 - HORIZONTAL - B.F. & F.F.
A619	X	2	15'-8"			WING 1 - TOP
A520	X	9	13'-4"	X		WING 2 - HORIZONTAL
A521	X	13	12'-10"	X		WING 2 - VERTICAL
A522	X	10	21'-8"	X		WING 2 - STIRRUP
A523	X	9	11'-9"			WING 2 - HORIZONTAL
A724	X	8	12'-2"			WING 2 - HORIZONTAL
A725	X	2	12'-2"			WING 2 - HORIZONTAL
A426	X	9	15'-8"			WING 2 - HORIZONTAL
A627	X	2	15'-8"			WING 2 - HORIZONTAL



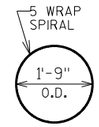
WING 2 ELEVATION



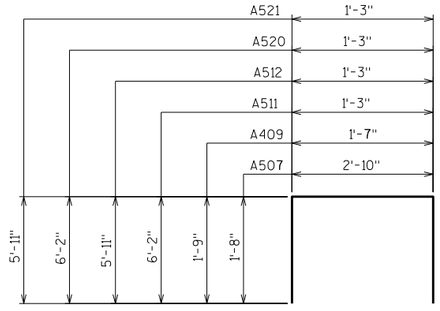
SECTION THRU WING 2



A501, A513, A522



A402

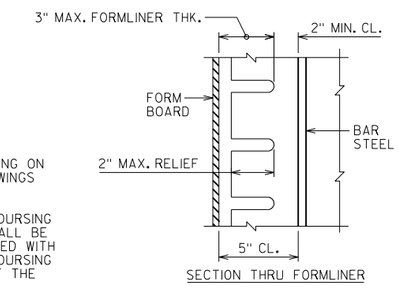


A507, A409, A511, A512, A520, A521

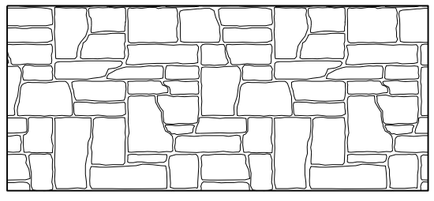
NOTES:
FORMLINER COURSING ON ABUTMENTS AND WINGS SHALL BE LEVEL.

THE FORMLINER COURSING ON THE WINGS SHALL BE VERTICALLY ALIGNED WITH THE FORMLINER COURSING ON THE FRONT OF THE ABUTMENT.

THE FORMLINER PATTERN SHALL REMAIN CONTINUOUS ACROSS CONSTRUCTION JOINTS

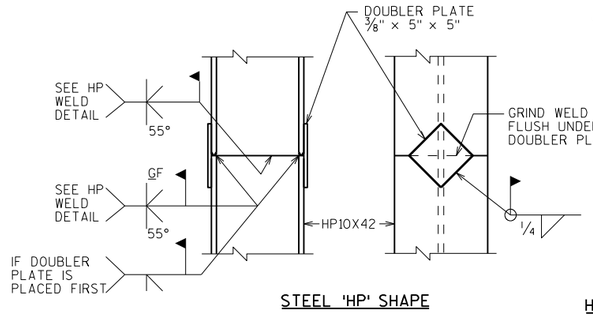


SECTION THRU FORMLINER



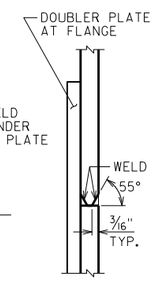
RUSTIC ASHLAR
FORMLINER THK. = 3"
SIZE = 8" TO 32"
MAX. RELIEF = 2"

FORMLINER DETAILS
WRAP AROUND/MATCH FORMLINER PATTERNS AT CORRECTS.



STEEL 'HP' SHAPE

PILE DETAILS



HP WELD DETAIL
FLANGE SHOWN, WEB SIMILAR

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-13-600

DRAWN BY DDS | PLANS CK'D. MWL

SOUTH ABUTMENT DETAILS

SHEET 5

537

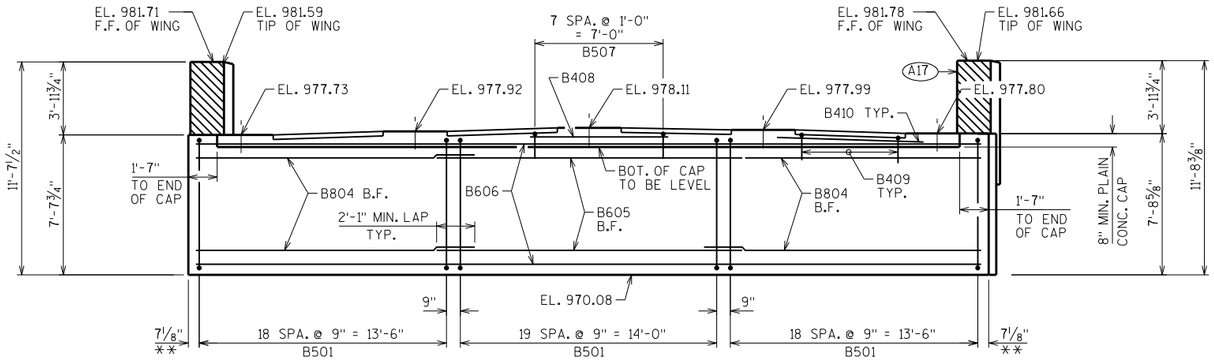
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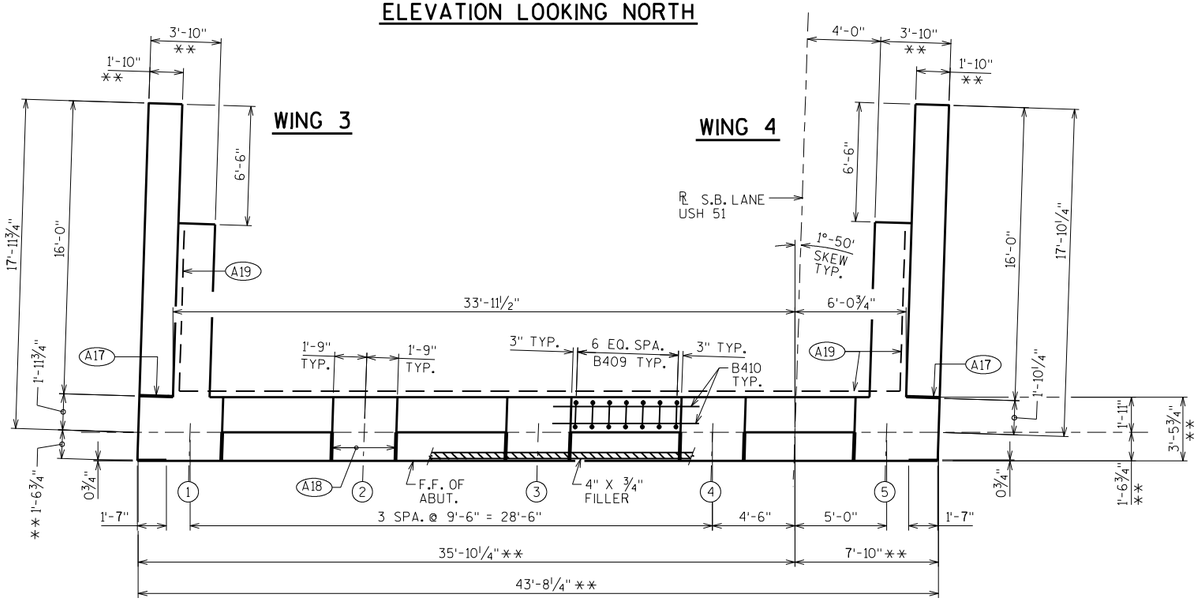
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STATE PROJECT NUMBER

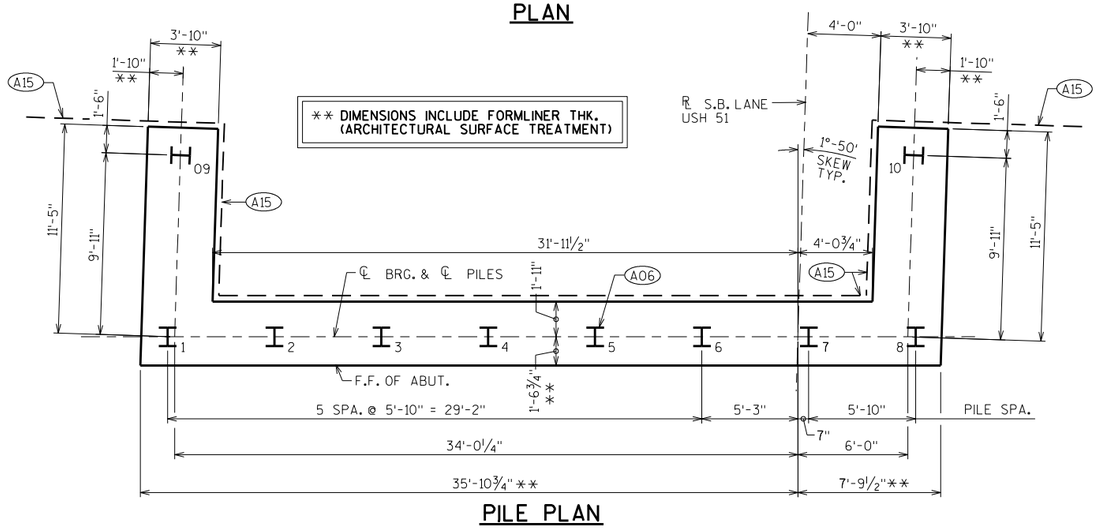
6020-02-72



ELEVATION LOOKING NORTH

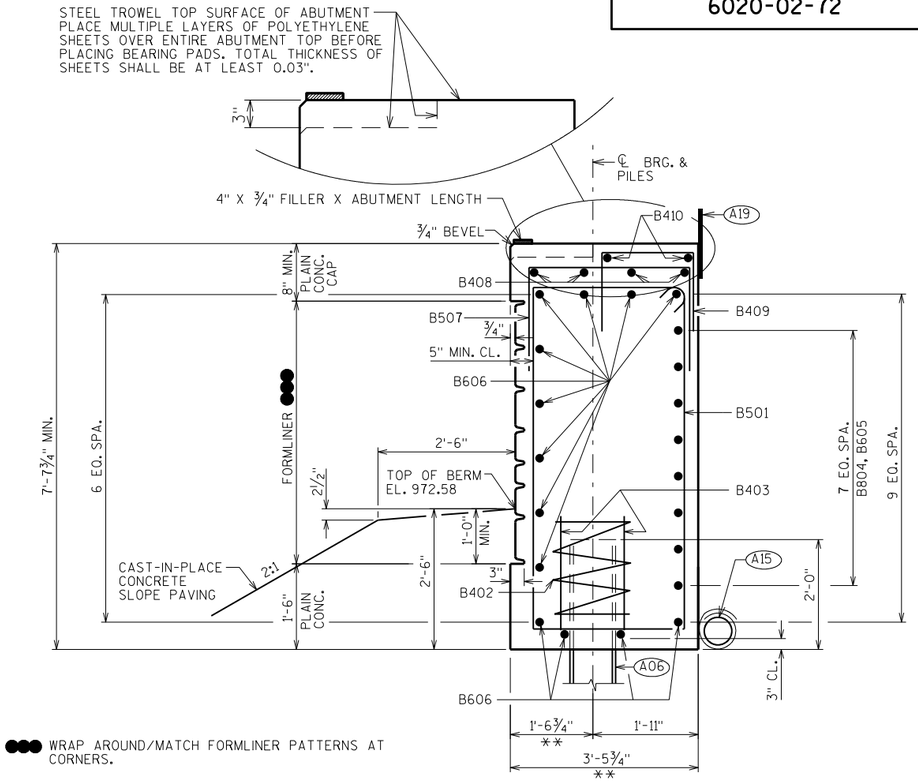


PLAN



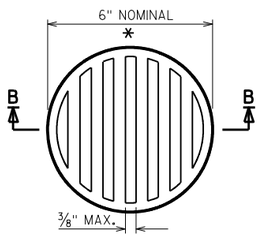
PILE PLAN

STEEL TROWEL TOP SURFACE OF ABUTMENT PLACE MULTIPLE LAYERS OF POLYETHYLENE SHEETS OVER ENTIRE ABUTMENT TOP BEFORE PLACING BEARING PADS. TOTAL THICKNESS OF SHEETS SHALL BE AT LEAST 0.03".

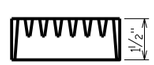


SECTION THRU BODY

●●● WRAP AROUND/MATCH FORMLINER PATTERNS AT CORNERS.



RODENT SCREEN DETAIL



SECTION B-B

* DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING. ORIENT SO SLOTS ARE VERTICAL.

THE RODENT SCREEN, PIPE COUPLING AND SCREWS SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".

THE RODENT SCREEN SHALL BE A 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 SCREEN SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH SHEET METAL SCREWS.

(A06) SUPPORT ABUTMENT ON HP 10 x 42 STEEL PILING, ESTIMATED 35'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 180 TONS PER PILE.

(A15) PIPE UNDERDRAIN WRAPPED 6-INCH. SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SCREEN REQUIRED.

(A17) 1/2" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

(A18) 3/4" CORK FILLER UP VERT. BEAM SEAT FACES THAT RUN PARALLEL WITH GIRDER.

(A19) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-13-600

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NORTH ABUTMENT

SHEET 6

538

SCALE = 4.00

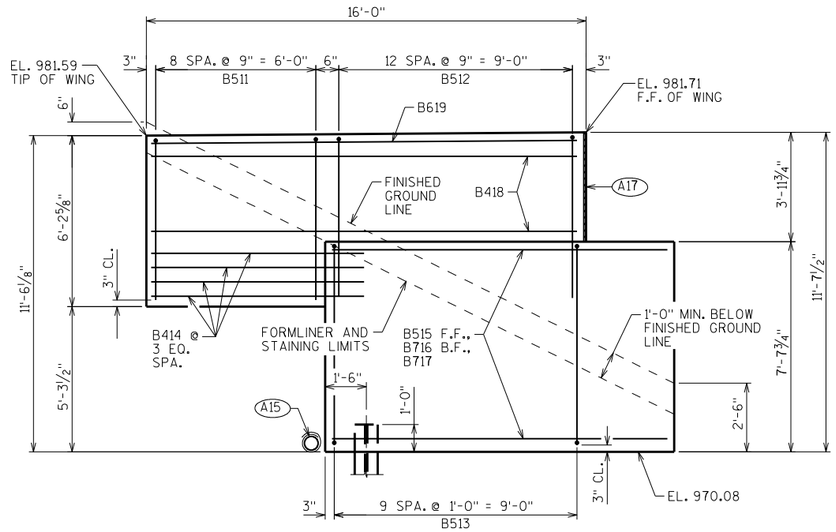
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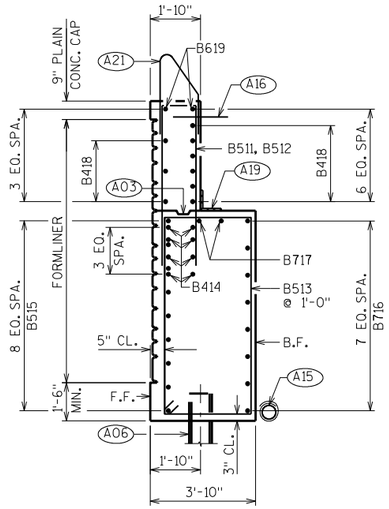
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STATE PROJECT NUMBER

6020-02-72



WING 3 ELEVATION



SECTION THRU WING 3

A03 OPTIONAL CONST. JOINT: KEYWAY FORMED BY BEVELED 2 X 6. (18" R.M.W. @ B.F. IF JOINT IS USED).

A06 SUPPORT ABUTMENT ON HP 10 X 42 STEEL PILING, ESTIMATED 35'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 180 TONS PER PILE.

A15 PIPE UNDERDRAIN WRAPPED 6-INCH. SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SCREEN REQUIRED.

A16 B428 BARS SPACED @ 1'-0" CTRS. EMBED 1'-0" INTO WING CONC. LOCATE 3" DOWN FROM TOP OF WING @ BACKFACE TO 6" DOWN @ WING TIP. (DRILLED IN EPOXY ANCHORED #4 BARS 2'-0" LONG MAY BE USED.) COST INCIDENTAL TO BID ITEM "BAR STEEL REINFORCEMENT HS COATED BRIDGES".

A17 1/2" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF 1/2" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD 1/8" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

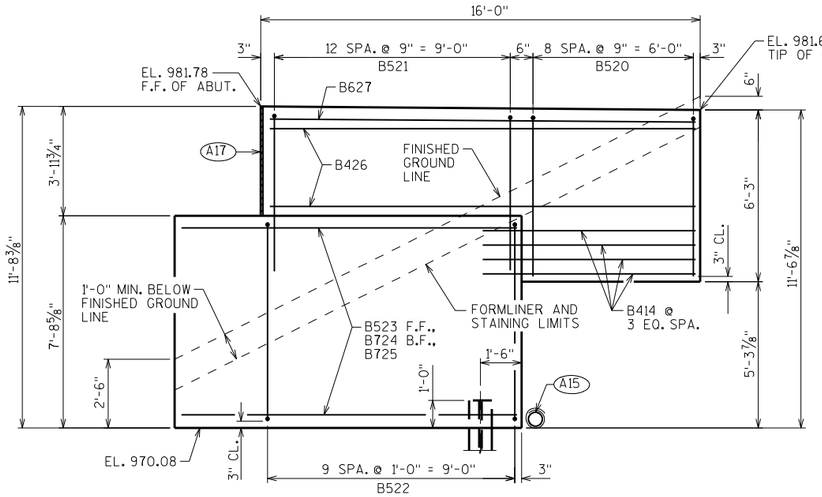
A19 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

A21 FOR PPT. BARS & DIMENSION SEE PARAPET SHEET 15.

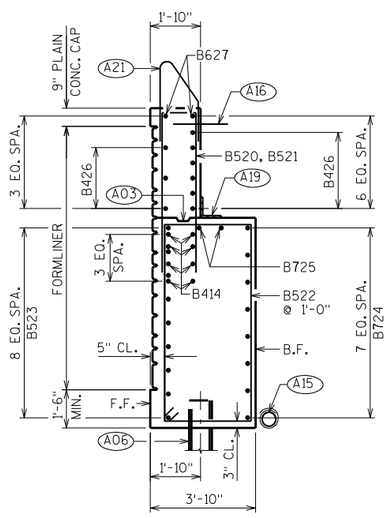
BILL OF BARS

▲ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

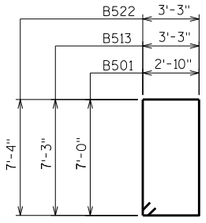
BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
B501		53	20'-4"	X		BODY-STIRRUPS
B402		8	28'-0"	X		PILES - 1 PER BODY PILE
B403		16	2'-3"			PILES - 2 PER BODY PILE
B804		16	16'-0"			BODY - HORIZONTAL - B.F.
B605		8	15'-0"			BODY - HORIZONTAL - B.F.
B606		13	42'-10"			BODY - HORIZONTAL
B507		8	5'-11"	X		BODY - VERTICAL - TOP OVER GIRDER 3
B408		4	7'-6"			BODY - HORIZONTAL - TOP
B409		28	4'-11"	X		BODY - VERTICAL - BETWEEN BEAM SEATS
B410		8	8'-0"			BODY - HORIZONTAL - BETWEEN BEAM SEATS
B511	X	9	12'-8"	X		WING 3 - VERTICAL
B512	X	13	12'-6"	X		WING 3 - VERTICAL
B513	X	10	21'-8"	X		WING 3 - STIRRUP
B414	X	16	7'-9"			WING 3 - HORIZONTAL
B515	X	9	11'-10"			WING 3 - HORIZONTAL
B716	X	8	12'-2"			WING 3 - HORIZONTAL
B717	X	2	12'-2"			WING 3 - HORIZONTAL
B418	X	9	15'-8"			WING 3 - HORIZONTAL - B.F. & F.F.
B619	X	2	15'-8"			WING 3 - TOP
B520	X	9	12'-8"	X		WING 4 - HORIZONTAL
B521	X	13	12'-6"	X		WING 4 - VERTICAL
B522	X	10	21'-10"	X		WING 4 - STIRRUP
B523	X	9	11'-9"			WING 4 - HORIZONTAL
B724	X	8	12'-2"			WING 4 - HORIZONTAL
B725	X	2	12'-2"			WING 4 - HORIZONTAL
B426	X	9	15'-8"			WING 4 - HORIZONTAL
B627	X	2	15'-8"			WING 4 - HORIZONTAL
B428	X	32	2'-0"			WINGS 3&4 - SURFACE DRAIN ANCHORS



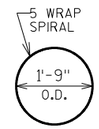
WING 4 ELEVATION



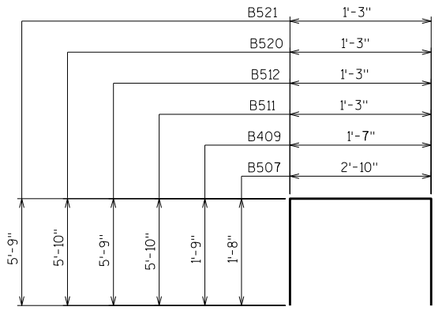
SECTION THRU WING 4



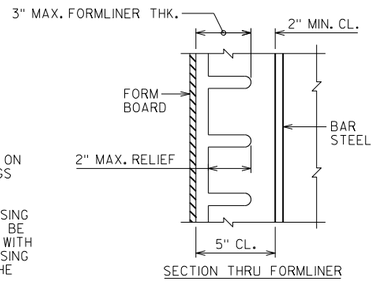
B501, B513, B522



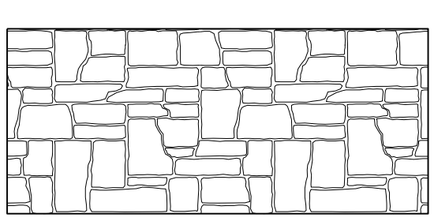
B402



B507, B409, B511, B512, B520, B521



SECTION THRU FORMLINER



RUSTIC ASHLAR
FORMLINER THK. = 3"
SIZE = 8" TO 32"
MAX. RELIEF = 2"

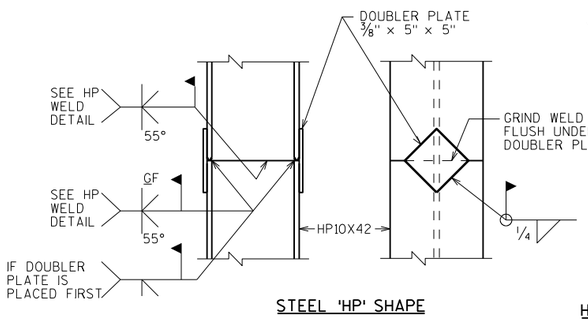
NOTES:
FORMLINER COURSING ON ABUTMENTS AND WINGS SHALL BE LEVEL.

THE FORMLINER COURSING ON THE WINGS SHALL BE VERTICALLY ALIGNED WITH THE FORMLINER COURSING ON THE FRONT OF THE ABUTMENT.

THE FORMLINER PATTERN SHALL REMAIN CONTINUOUS ACROSS CONSTRUCTION JOINTS

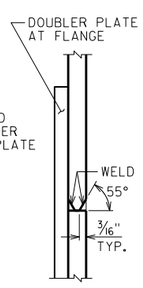
FORMLINER DETAILS

WRAP AROUND/MATCH FORMLINER PATTERNS AT CORNERS.



STEEL 'HP' SHAPE

PILE DETAILS



HP WELD DETAIL
FLANGE SHOWN, WEB SIMILAR

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-13-600

DRAWN BY DDS | PLANS CK'D. MWL

NORTH ABUTMENT DETAILS

SHEET 7

539

SCALE = 2.667

8

8

STATE PROJECT NUMBER

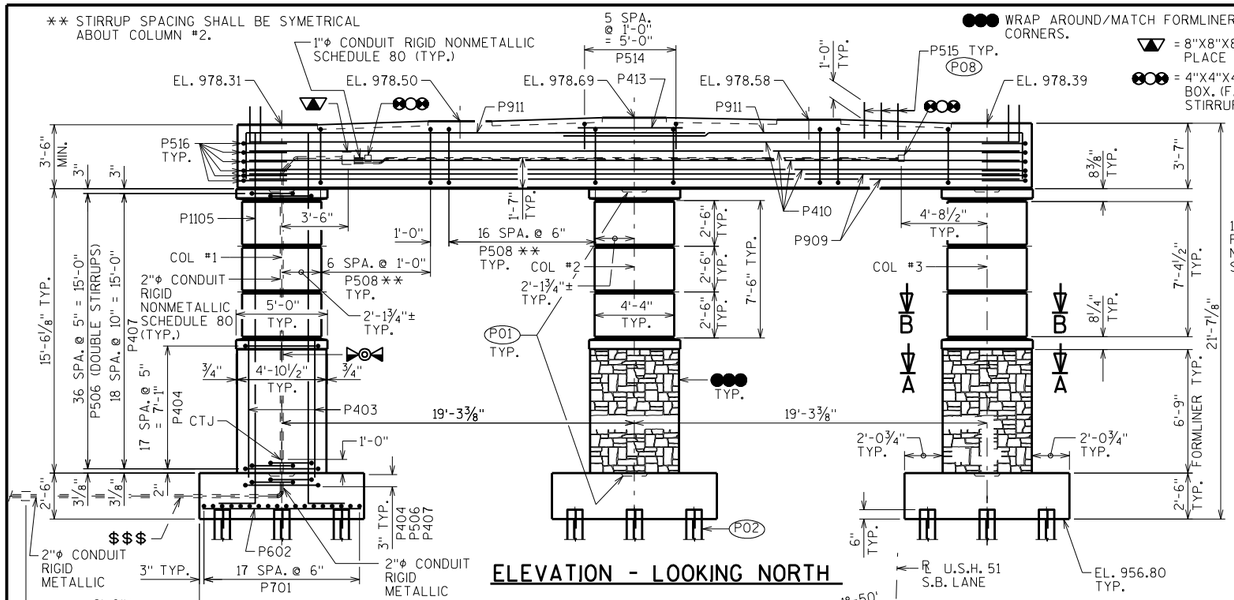
6020-02-72

** STIRRUP SPACING SHALL BE SYMETRICAL ABOUT COLUMN #2.

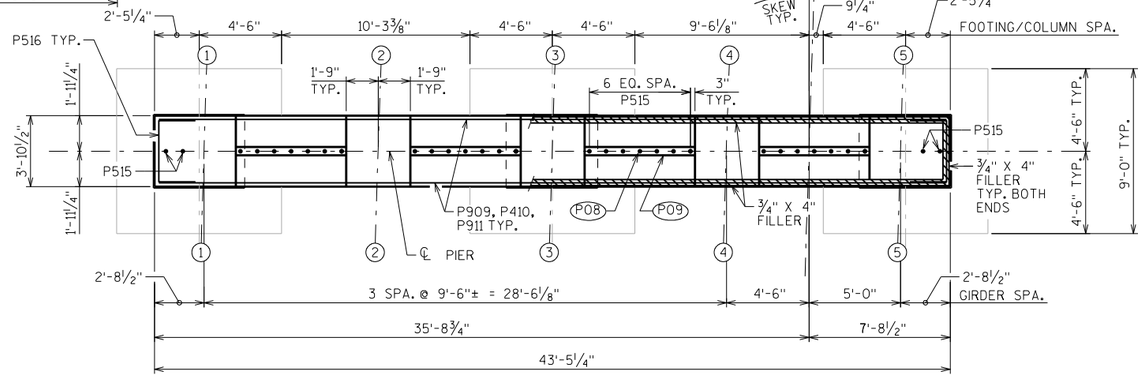
WRAP AROUND/MATCH FORMLINER PATTERNS AT CORNERS.

= 8"X8"X8" DEEP JUNCTION BOX (SOUTH SIDE ONLY) PLACE TO MISS STIRRUPS

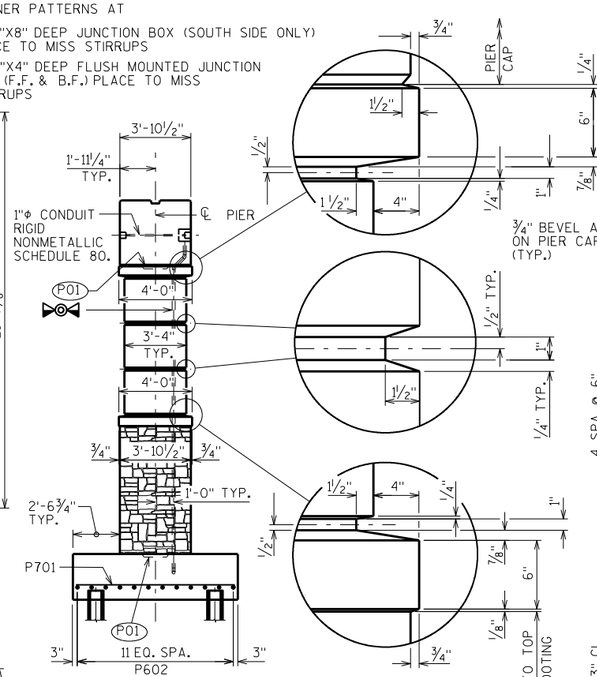
= 4"X4"X4" DEEP FLUSH MOUNTED JUNCTION BOX. (F.F. & B.F.) PLACE TO MISS STIRRUPS



ELEVATION - LOOKING NORTH



PLAN



END VIEW

$$$ CONTINUE 2"Φ RIGID METALLIC CONDUIT TO FIRST PULL BOX OFF OF STRUCTURE. SEE ELECTRICAL PLAN.

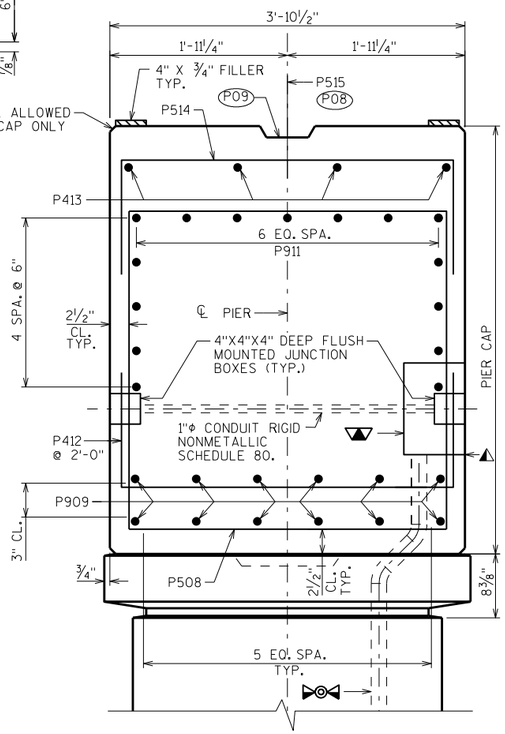
CTJ = CONDUIT TRANSITION JOINT

NOTE:

FOR NOTES CONCERNING THE ELECTRICAL WORK SEE SHEET 9.

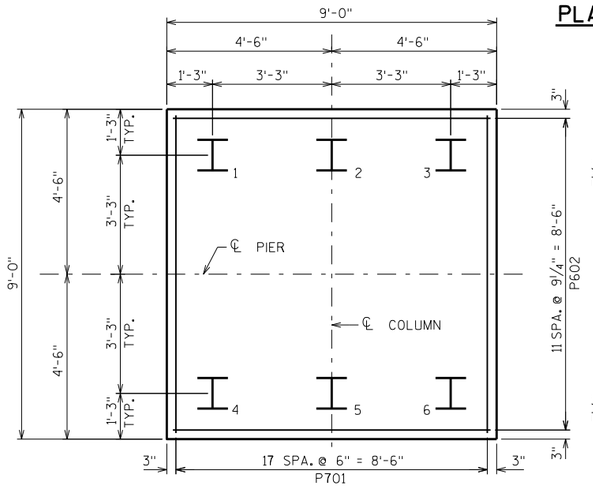
45° BEND IN 2"Φ CONDUIT. USE MIN. BENDING RADIUS PER WISCONSINSIN ELECTRIC CODE TYP.

⚠ CUT OUT ± 1" OF GASKET AT BOTTOM OF JUNCTION BOX COVER TO ALLOW FOR DRAINAGE.



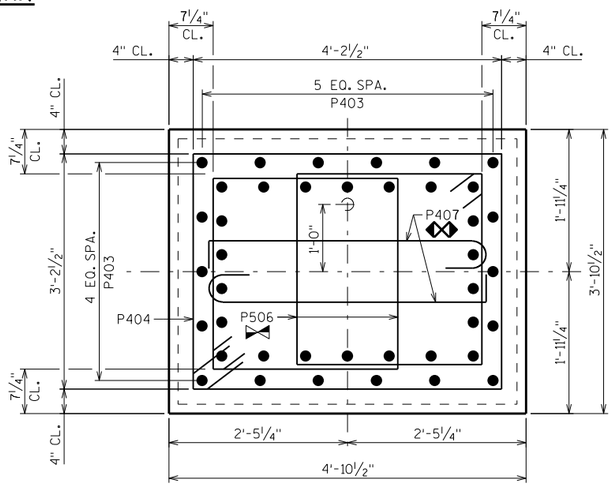
SECTION THRU PIER CAP

- 2"Φ CONDUIT RIGID NONMETALLIC SCHEDULE 80
- ALTERNATE THE POSITION OF THE 90° AND 180° HOOKS AT EACH VERTICAL LAYER OF TIES. TIES ARE TO BE SPACED VERTICALLY AT 10" MAXIMUM SPACING.
- P506 DOUBLE STIRRUPS AT 5" MAX. VERTICAL SPACING
- (P01) 1'-3" x 1'-3" x 2" CONSTRUCTION JOINT FORMED BY BEVELED KEYWAY FOR ALL COLUMNS AND FOOTINGS.
- (P02) SUPPORT PIER ON HP 10 x 42 STEEL PILING, ESTIMATED 25'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 165 TONS PER PILE.
- (P08) P515 BARS @ 1'-0" CTRS. BETWEEN BEAM SEATS. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 1'-0" INTO CONC.)
- (P09) KEYED CONSTRUCTION JOINT-FORMED BY BEVELED 2 x 6 BETWEEN BEAM SEATS.

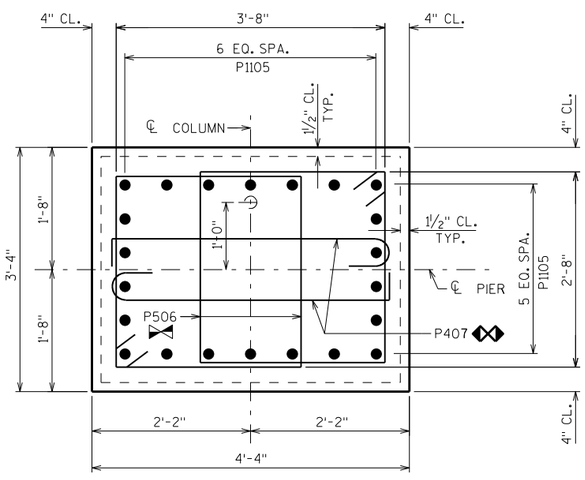


PILE/FOOTING DETAIL

TYP.



SECTION A-A



SECTION B-B

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-13-600

DRAWN BY DDS | PLANS CK'D. MWL

PIER

SHEET 8

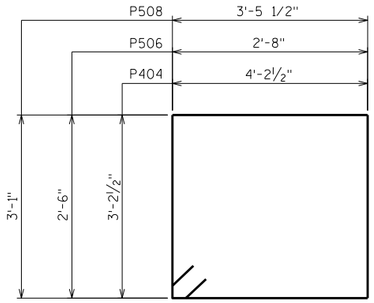
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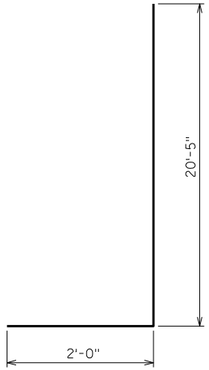
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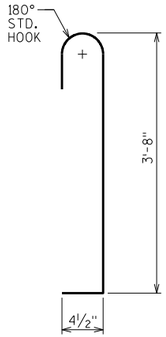
STATE PROJECT NUMBER
6020-02-72



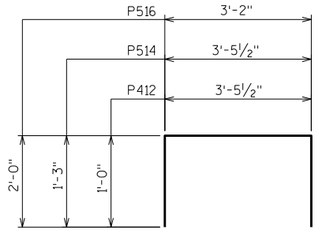
P404, P506, P508



P1105



P407

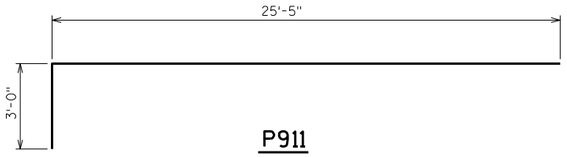


P412, P514, P516

BILL OF BARS

NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
P701		54	8'-8"			FOOTING - HORIZ.
P602		36	8'-8"			FOOTING - HORIZ.
P403	X	54	7'-1"			COLUMN - VERT.
P404	X	57	15'-4"	X		FOOTING/COLUMN - STIRRUPS
P1105	X	66	22'-1"	X		FOOTING/COLUMN - VERT.
P506	X	228	11'-0"	X		FOOTING/COLUMN - STIRRUPS
P407	X	120	4'-6"	X		COLUMN - HORIZ. - TIE BARS
P508	X	48	13'-9"	X		CAP - STIRRUPS
P909	X	12	42'-10"			CAP - HORIZ. - BOTTOM
P410	X	8	42'-10"			CAP - HORIZ. - SIDES
P911	X	14	28'-2"	X		CAP - HORIZ. - TOP
P412	X	22	5'-4"	X		CAP - VERT.
P413	X	4	5'-9"			CAP - HORIZ. - TOP
P514	X	6	5'-9"	X		CAP - VERT. - TOP
P515	X	32	2'-0"			CAP - DOWEL BARS
P516	X	12	6'-11"	X		CAP - HORIZ. - ENDS



P911

NOTES

BID ITEMS SHALL BE:
"JUNCTION BOXES 8X8X8-INCH", EACH.
"4x4x4 FLUSH MOUNTED JUNCTION BOX", EACH.
"CONDUIT RIGID METALLIC 2-INCH", LF.
"CONDUIT RIGID NONMETALLIC SCHEDULE 80 1-INCH", LF.
"CONDUIT RIGID NONMETALLIC SCHEDULE 80 2-INCH", LF.

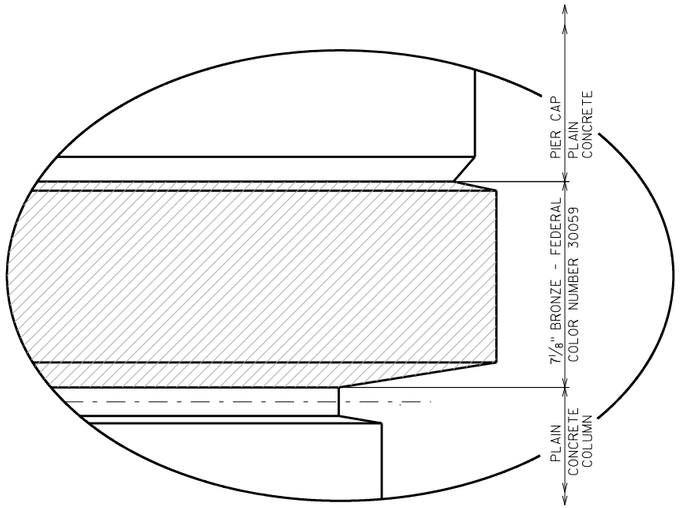
APPROVED MANUFACTURERS - JUNCTION BOXES:
SEE APPROVED MATERIAL LIST.

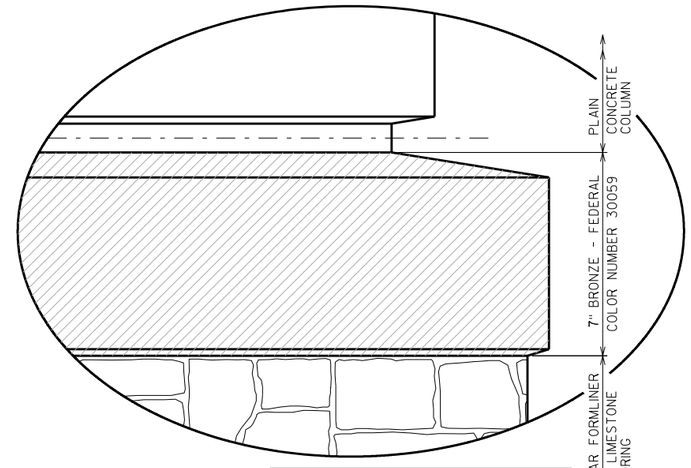
EXPANSION FITTINGS, ANGLES AND ADAPTER FITTINGS TO BE INCIDENTAL TO "CONDUIT RIGID METALLIC 2-INCH".

EXPANSION FITTINGS, ANGLES AND ADAPTER FITTINGS TO BE INCIDENTAL TO "CONDUIT RIGID NONMETALLIC SCHEDULE 80 1-INCH".

EXPANSION FITTINGS, ANGLES AND ADAPTER FITTINGS TO BE INCIDENTAL TO "CONDUIT RIGID NONMETALLIC SCHEDULE 80 2-INCH".

WHEN CONNECTING NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS U.L. LISTED FOR ELECTRICAL USE SHALL BE USED.



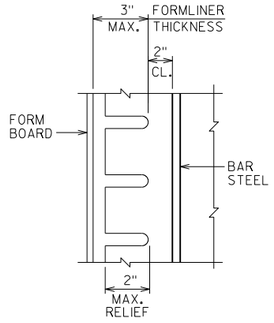


RUSTIC ASHLAR FORMLINER/WEATHERED LIMESTONE COLORING IS NOT DRAWN TO SCALE

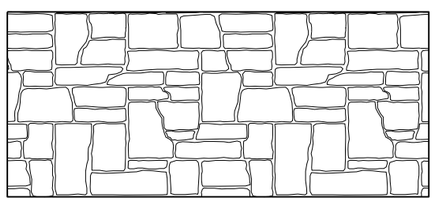
NOTE:
FORMLINER COURSING ON PIER SHALL BE LEVEL.

THE FORMLINER COURSING ON ALL FACES OF EACH COLUMN SHALL BE VERTICALLY ALIGNED.

THE FORMLINER PATTERN SHALL BE CONTINUOUS ACROSS CONSTRUCTION JOINTS.

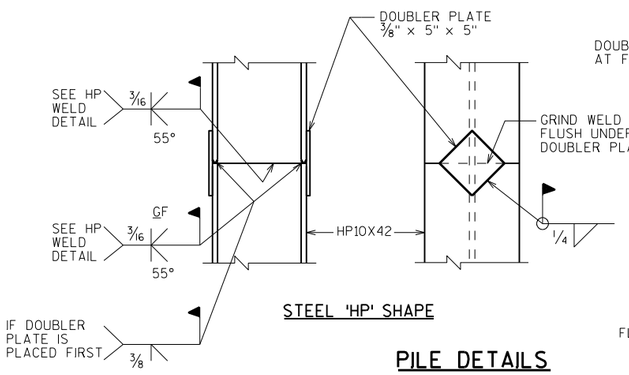


SECTION THRU FORMLINER

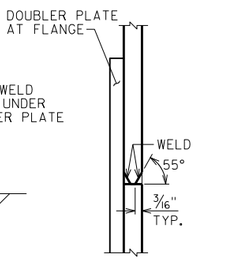


RUSTIC ASHLAR
SIZE = 8" TO 32"
RELIEF = 2" MAX.

FORMLINER DETAILS
WRAP AROUND/MATCH FORMLINER PATTERNS AT CORNERS.



STEEL 'HP' SHAPE



HP WELD DETAIL
FLANGE SHOWN, WEB SIMILAR

PILE DETAILS

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-13-600

DRAWN BY DDS | PLANS CK'D. MWL

PIER DETAILS

SHEET 9

541

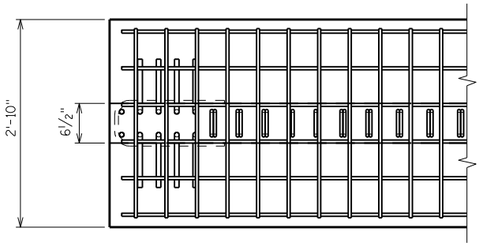
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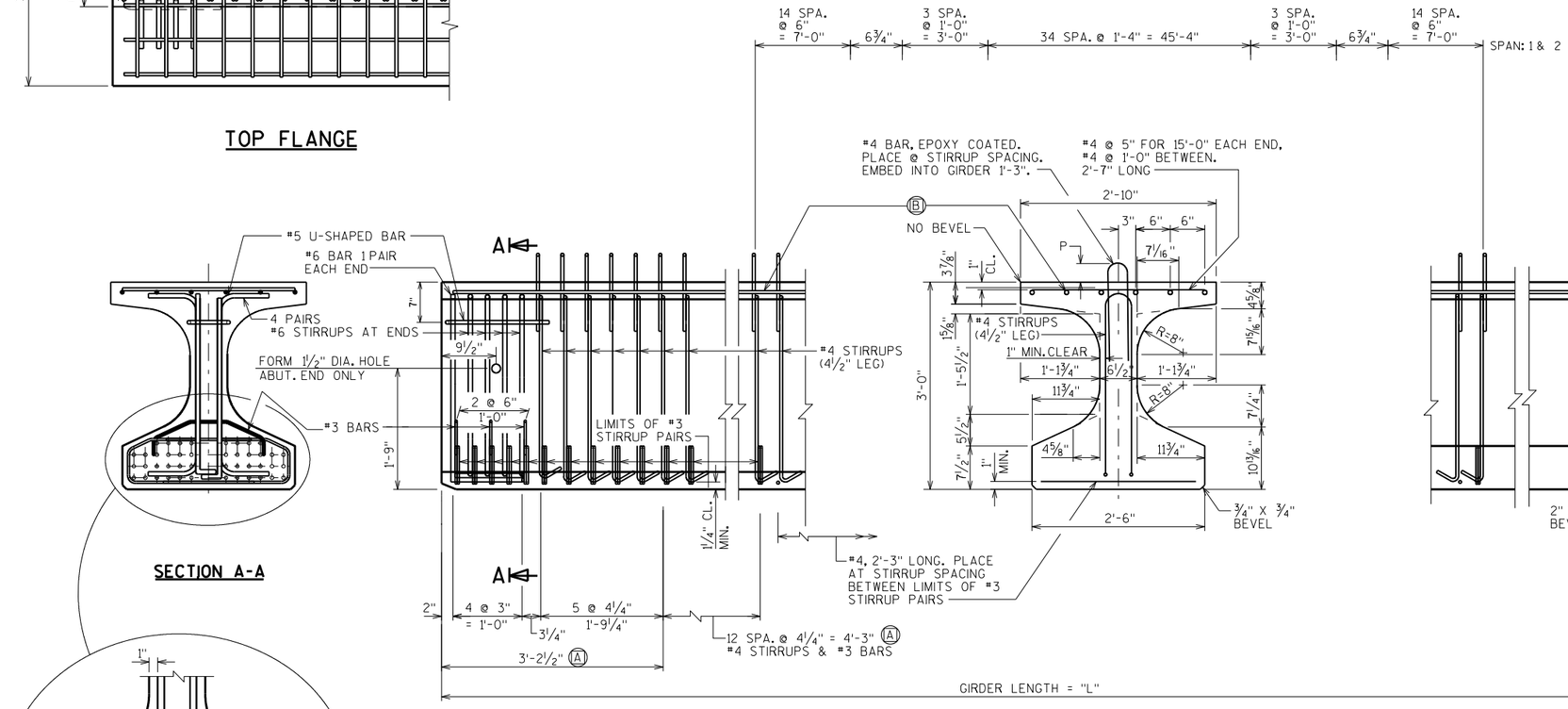
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STATE PROJECT NUMBER

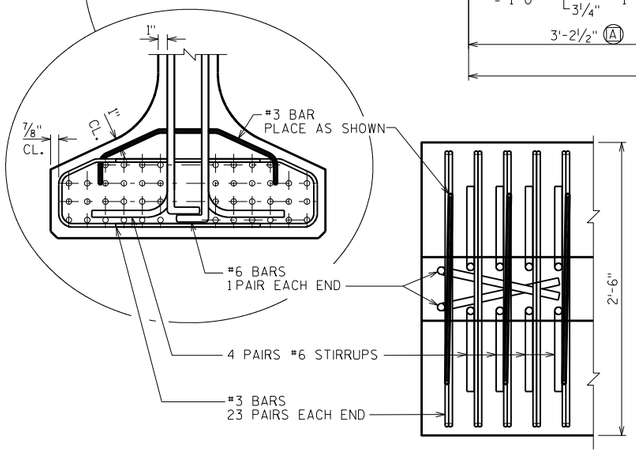
6020-02-72



TOP FLANGE



SECTION A-A



BOTTOM FLANGE

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 8" 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.

PRESTRESSING STRANDS SHALL BE 0.6"Φ - 7 WIRE LOW-RELAXATION STRANDS WITH AN ULTIMATE STRENGTH OF 270,000 psi.

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.

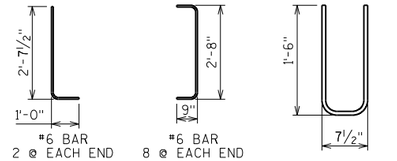
FOR DIAPHRAGM INSERT & CONNECTION DETAILS SEE "STEEL DIAPHRAGM" SHEET.

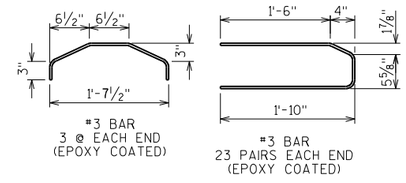
ALL GIRDERS SHALL BE CAST FULL LENGTH AS SHOWN.

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, 1 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.





SIDE VIEW & TYP. SECTION IN SPAN

Ⓐ DETAIL TYP. AT EACH END

Ⓑ 6 - #4 BARS, FULL LENGTH, MIN. LAP = 1'-11"

(SPAN 1) 6 #4, 1'-11" MIN. LAP
(SPAN 2) 6 #4, 1'-11" MIN. LAP

* 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" IST 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	1-5	81.38	0.6	1.1	1.5	1.7	1.8	1.7	1.5	1.1	0.6	8000	7"	7"	7"	0.60	28	6400	32.0	11.0	14.0	4.0		
2	1-5	81.38	0.6	1.1	1.5	1.7	1.8	1.7	1.5	1.1	0.6	8000	7"	7"	7"	0.60	28	6400	32.0	11.0	14.0	4.0		

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-13-600

DRAWN BY DDS | PLANS CK'D. MWL

36W" PRESTRESSED GIRDER DETAILS

SHEET 10

542

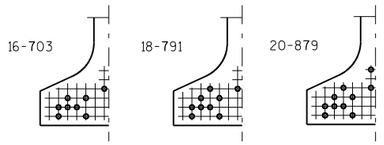
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TUE MAR 22 14:54:21 2011 *1-11 G36W

8

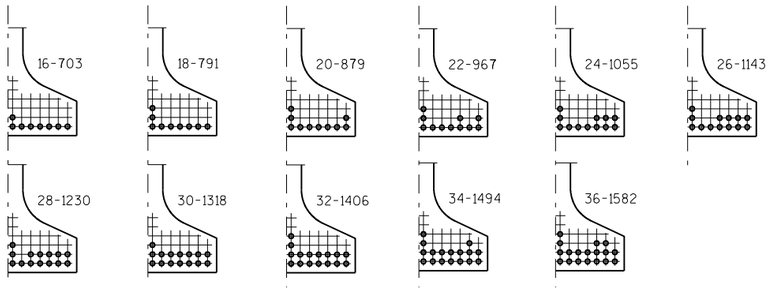
STATE PROJECT NUMBER

6020-02-72



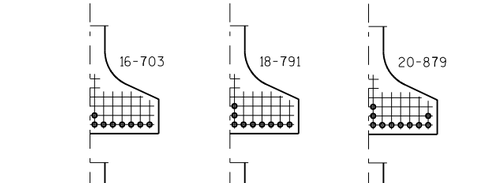
STANDARD ARRANGEMENTS TO RAISE CENTER OF GRAVITY TO AVOID DRAPING OF STRANDS

0.6"Φ STRANDS



ARRANGEMENT AT ℄ SPAN - FOR GIRDERS WITH DRAPED STRANDS

0.6"Φ STRANDS

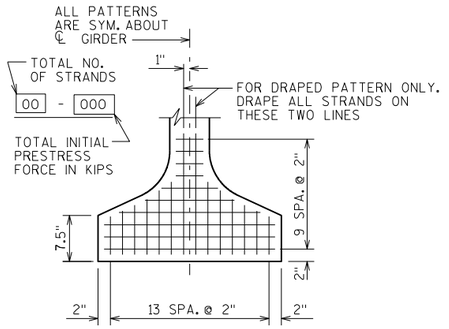


DRAPED STRAND PROFILE

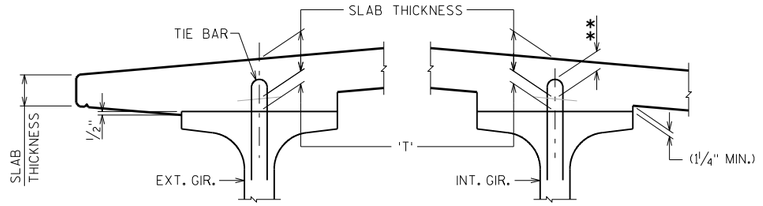
THE THEORETICAL INITIAL CAMBER VALUE AT THE TIME OF STRAND RELEASE AT MIDSPAN

SPAN	CAMBER (IN.)
1	2.12
2	2.12

THESE VALUES ARE NOT TO BE USED IN DETERMINING 'T'. USE ACTUAL GIRDER SHOTS.
THESE VALUES ARE FOR INFORMATIONAL PURPOSES ONLY.



TYP. STRAND PATTERN



SLAB HAUNCH DETAIL

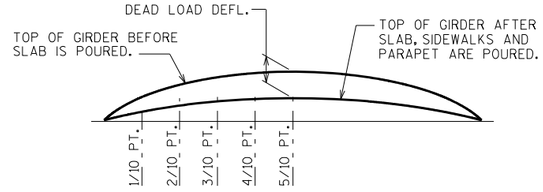
IF 1¼" MINIMUM HAUNCH HEIGHT AT EDGE OF GIRDER CANNOT BE MAINTAINED, THE GRADE LINE MAY BE REVISED BY THE ENGINEER AT THE OPTION OF THE CONTRACTOR. THE PLAN SLAB THICKNESS SHALL BE HELD. NOTIFY THE STRUCTURES SECTION IF THE GRADE LINE IS RAISED FROM THE PLAN PROFILE BY MORE THAN ½" OR,

** IF 3" MINIMUM DECK EMBEDMENT OF TIE BAR CANNOT BE OBTAINED.

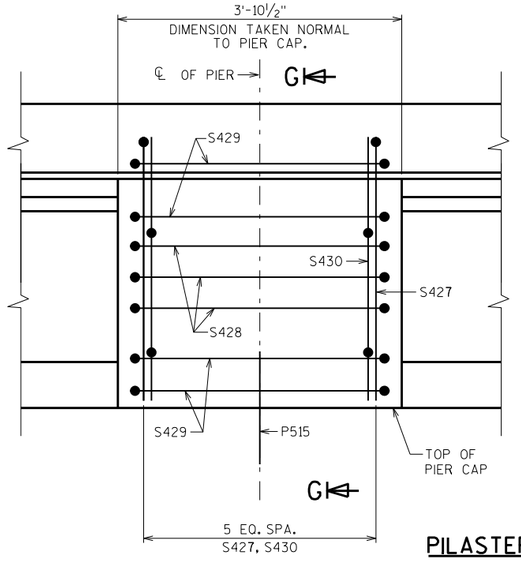
TO DETERMINE 'T', ELEV. OF TOP OF GIR'S. AT ℄ OF SUBSTRUCTURE UNITS & AT 1/10 POINTS OF EACH SPAN SHALL BE TAKEN. THEN FOLLOW THIS PROCESS:

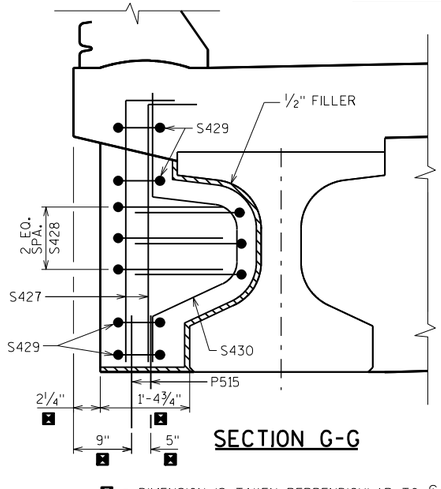
TOP OF DECK ELEV. AT FINAL GRADE
\- TOP OF GIRDER ELEVATION
\+ DEAD LOAD DEFLECTION
\- SLAB THICKNESS
= HAUNCH HEIGHT 'T'

NOTE: AN AVERAGE HAUNCH ('T') OF 2½" WAS USED IN THE QUANTITY "CONCRETE MASONRY BRIDGES".



DEAD LOAD DEFLECTION DIAGRAM





SECTION G-G

PILASTER DETAILS

■ = DIMENSION IS TAKEN PERPENDICULAR TO ℄ OF GIRDER

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-13-600

DRAWN BY DDS | PLANS CK'D. MWL

36W" PRESTRESSED GIRDER DETAILS

SHEET 11

543

SCALE =

TUE MAR 22 14:54:23 2017

G:36W

8

STATE PROJECT NUMBER
6020-02-72

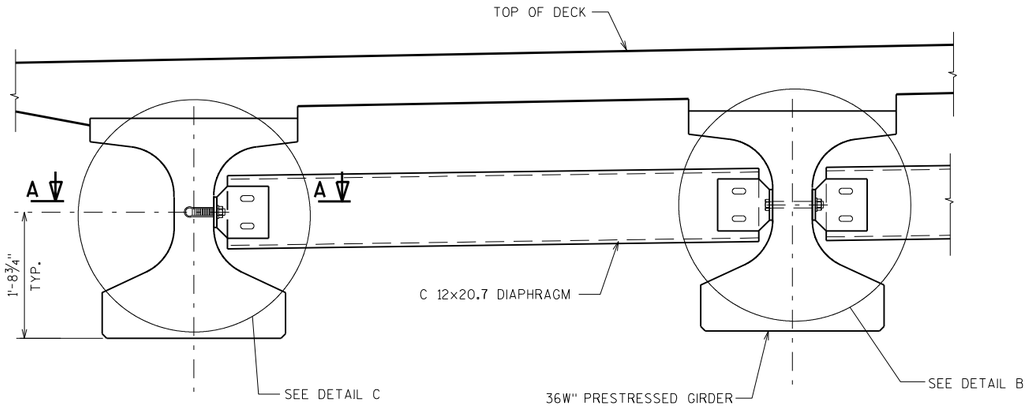
NOTES

ALL DIAPHRAGM MATERIAL NOT EMBEDDED IN THE CONCRETE GIRDER SHALL BE PAID FOR AT THE UNIT PRICE BID FOR "STEEL DIAPHRAGMS B-13-600", 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.

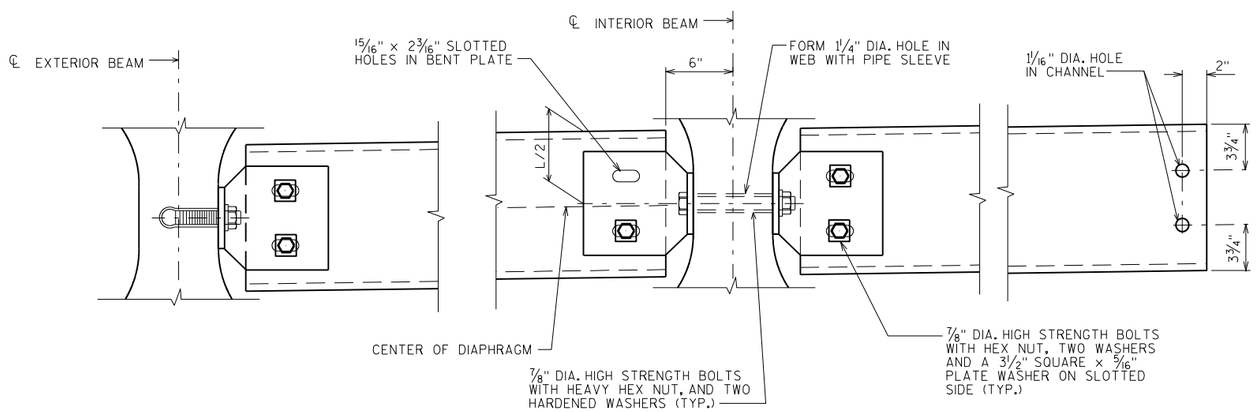
ALL DIAPHRAGM STRUCTURAL STEEL SHOWN SHALL BE HOT-DIPPED GALVANIZED. ALL BOLTS, NUTS AND WASHERS SHALL BE HOT-DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A153 CLASS C. GALVANIZED NUTS SHALL BE TAPPED OVERSIZE IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM A563 AND SHALL MEET THE REQUIREMENTS OF SUPPLEMENTARY REQUIREMENT S1 OF ASTM A563, LUBRICANT AND TEST FOR COATED NUTS.



EXTERIOR GIRDER

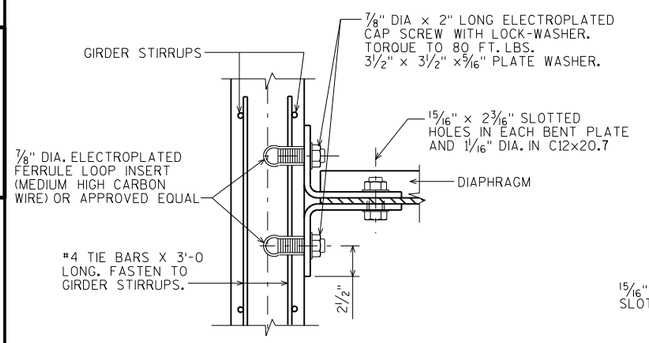
INTERIOR GIRDER

PART TRANSVERSE SECTION AT DIAPHRAGM

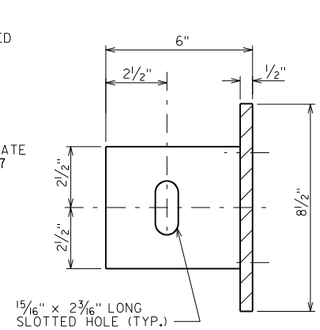


DETAIL C

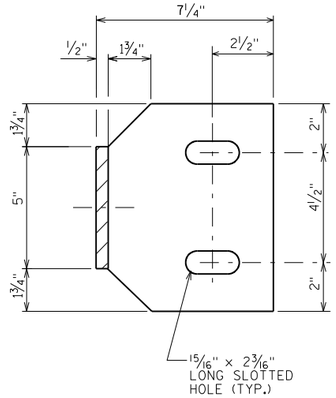
DETAIL B



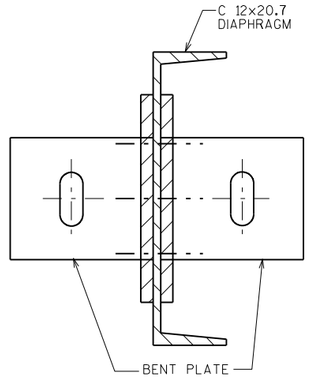
SECTION A-A
(FOR EXTERIOR ATTACHMENT)



BEAM FACE



DIAPHRAGM FACE



ATTACHMENT TO CHANNEL

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-13-600

DRAWN BY DDS | PLANS CK'D. MWL

STEEL DIAPHRAGM

SHEET 12

544

8

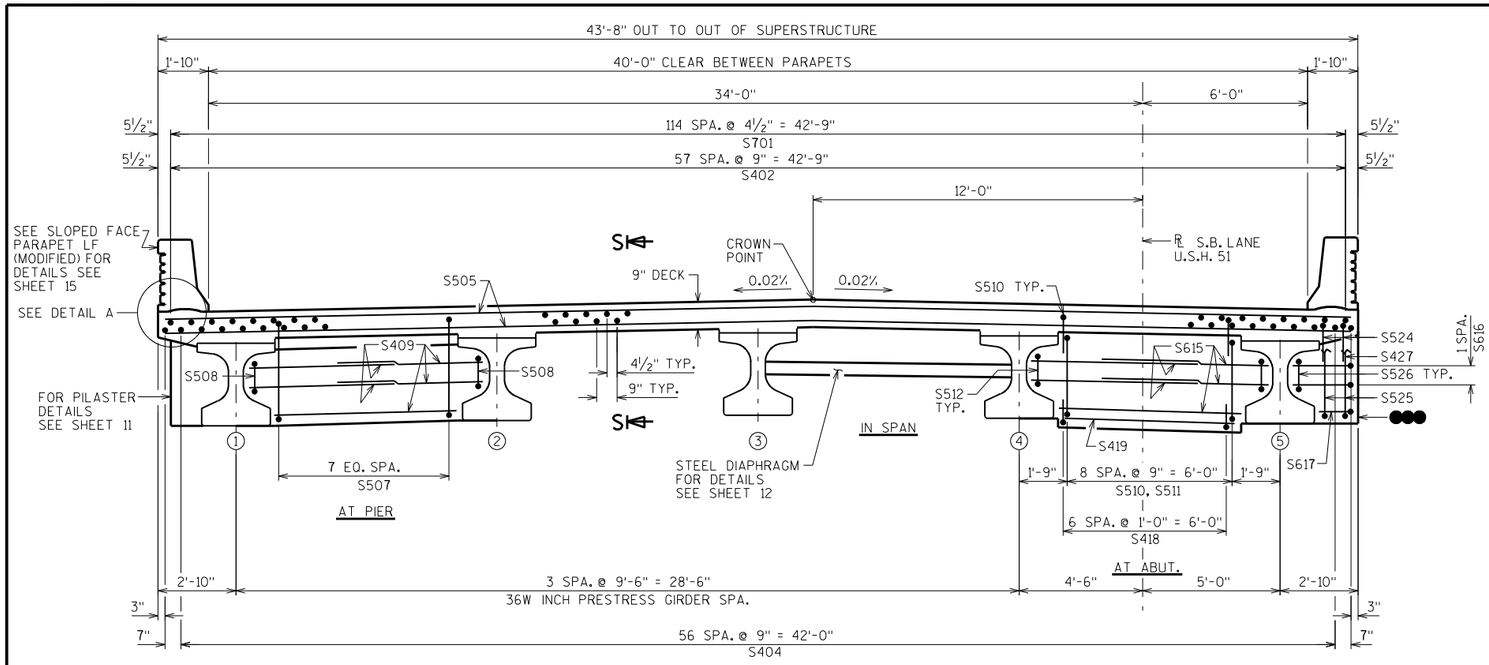
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SCALE =

SCALE = 8.000000 /IN

STATE PROJECT NUMBER

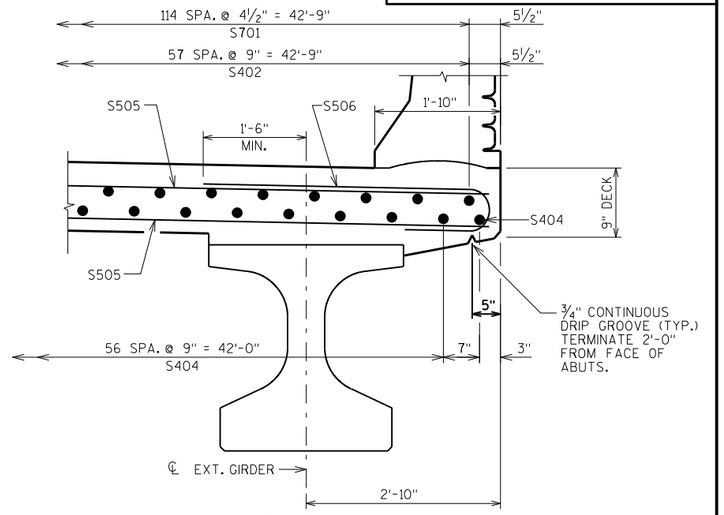
6020-02-72



CROSS SECTION THRU ROADWAY

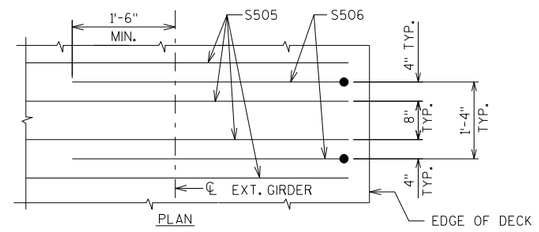
(LOOKING NORTH)

●●● WRAP AROUND/MATCH FORMLINER PATTERNS AT CORNERS.

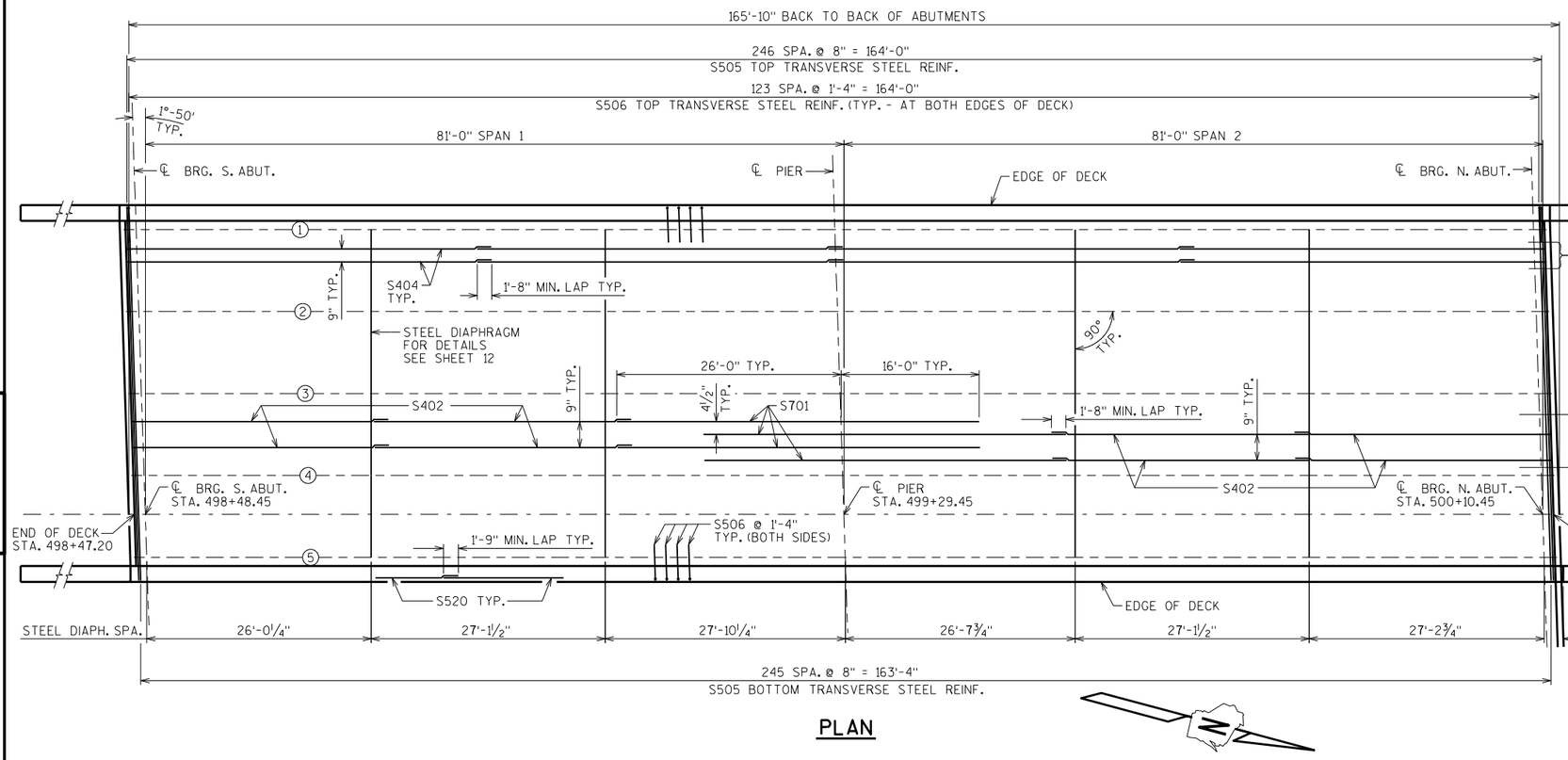


DETAIL A

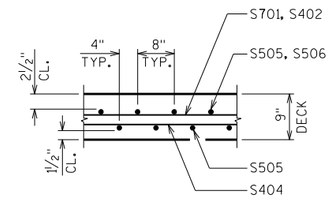
NOTE: SPECIAL DRIP GROOVE LOCATION TYP.



ADDITIONAL REINF. DETAIL



PLAN



SECTION S

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-13-600

DRAWN BY DDS | PLANS CK'D. MWL

SUPERSTRUCTURE

SHEET 13

545

8

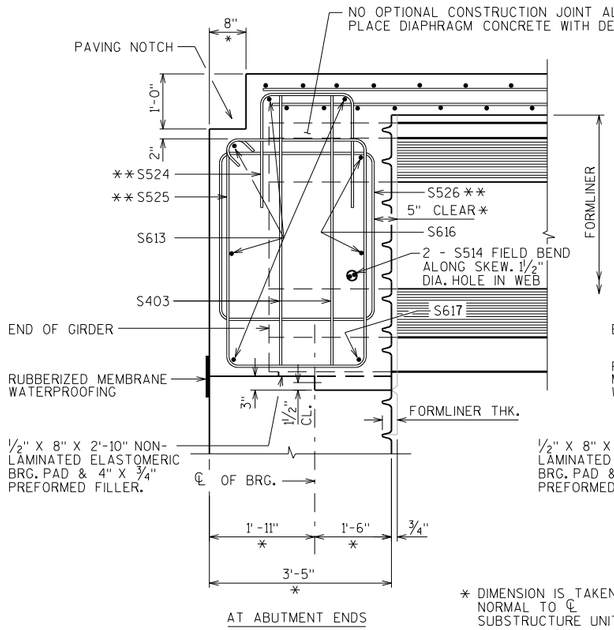
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TUE MAR 22 14:54:27 2011

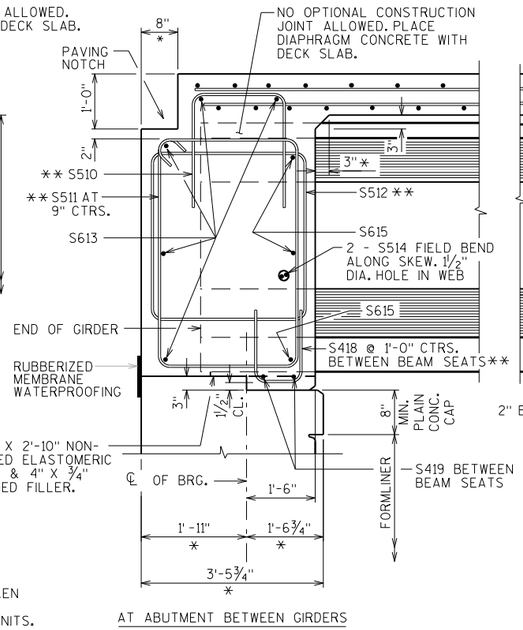
STATE PROJECT NUMBER

6020-02-72



AT ABUTMENT ENDS

PART LONGIT. SECTION



AT ABUTMENT BETWEEN GIRDERS

PART LONGIT. SECTION

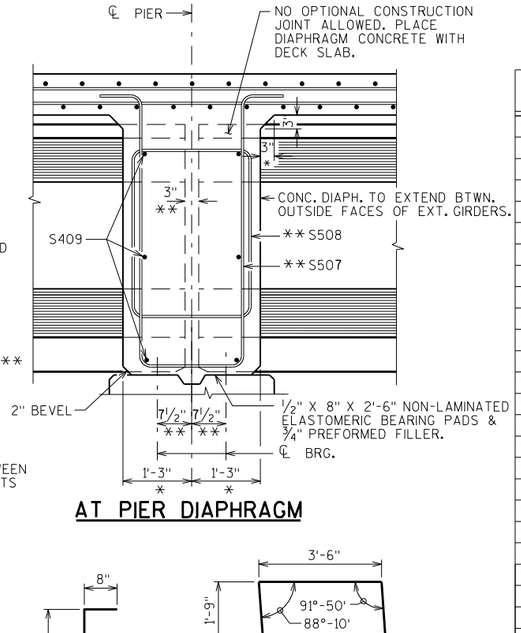
* DIMENSION IS TAKEN NORMAL TO ℄ SUBSTRUCTURE UNITS.

** DIMENSION IS TAKEN PARALLEL TO ℄ OF GIRDER.

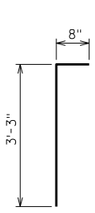
TOP OF DECK ELEVATIONS

	S. ABUT.	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	PIER 1
LEFT EDGE OF DECK	982.80	982.76	982.71	982.66	982.61	982.57	982.52	982.46	982.41	982.36	982.31
GIRDER 1	982.82	982.78	982.73	982.68	982.63	982.59	982.53	982.48	982.43	982.38	982.32
GIRDER 2	983.01	982.96	982.92	982.87	982.82	982.77	982.72	982.67	982.62	982.57	982.51
GIRDER 3	983.20	983.15	983.11	983.06	983.01	982.96	982.91	982.86	982.81	982.75	982.70
GIRDER 4	983.09	983.04	982.99	982.95	982.90	982.85	982.80	982.75	982.70	982.64	982.59
GIRDER 5	982.89	982.85	982.80	982.75	982.71	982.66	982.61	982.56	982.50	982.45	982.40
RIGHT EDGE OF DECK	982.87	982.83	982.78	982.74	982.69	982.64	982.59	982.54	982.48	982.43	982.38

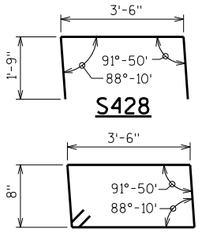
	PIER 1	1/10	2/10	3/10	4/10	5/10	6/10	7/10	8/10	9/10	N. ABUT.
LEFT EDGE OF DECK	982.31	982.25	982.19	982.14	982.08	982.02	981.96	981.90	981.84	981.78	981.72
GIRDER 1	982.32	982.27	982.21	982.16	982.10	982.04	981.98	981.92	981.86	981.80	981.74
GIRDER 2	982.51	982.46	982.40	982.34	982.29	982.23	982.17	982.11	982.05	982.99	981.93
GIRDER 3	982.70	982.64	982.59	982.53	982.47	982.41	982.35	982.29	982.23	982.17	982.11
GIRDER 4	982.59	982.53	982.48	982.42	982.36	982.30	982.24	982.18	982.12	982.06	982.00
GIRDER 5	982.40	982.34	982.28	982.23	982.17	982.11	982.05	981.99	981.93	981.87	981.81
RIGHT EDGE OF DECK	982.38	982.32	982.26	982.21	982.15	982.09	982.03	981.97	981.91	981.85	981.79



AT PIER DIAPHRAGM

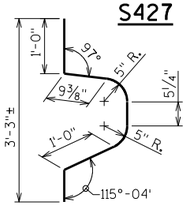


S427



S428

S429

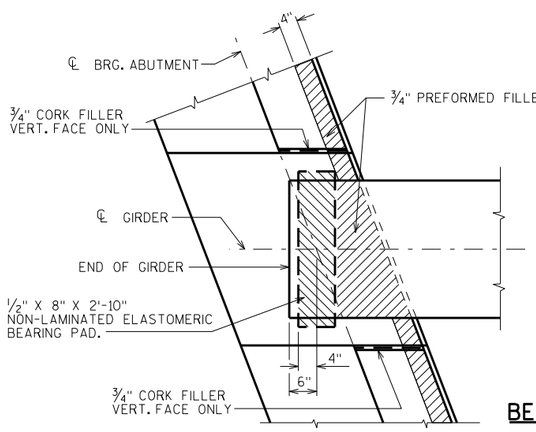


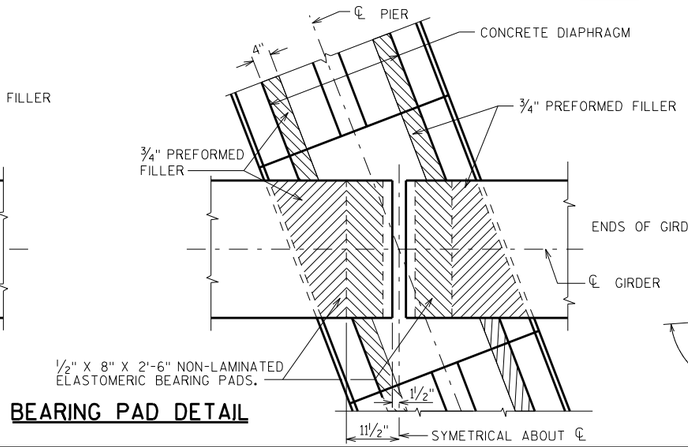
S430

BILL OF BARS

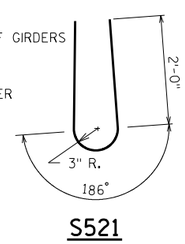
▲ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
S701	X	115	42'-0"			LONGITUDINAL CONTINUITY
S402	X	232	29'-9"			LONGITUDINAL TOP
S403	X	8	3'-4"			ABUT. DIAPHRAGM - VERT. - ENDS
S404	X	236	42'-5"			LONGITUDINAL BOTTOM
S505	X	493	43'-4"			TRANSVERSE TOP AND BOTTOM
S506	X	248	4'-9"	X		TRANSVERSE TOP - EDGES OF DECK
S507	X	32	10'-2"	X		PIER DIAPHRAGM - VERTICAL
S508	X	8	7'-10"	X		PIER DIAPHRAGM - STIRRUP (AT GIRDERS)
S409	X	40	6'-8"			PIER DIAPHRAGM - HORIZONTAL
S510	X	72	6'-3"	X		ABUT. DIAPHRAGM - VERTICAL (BETWEEN GIRDERS)
S511	X	72	12'-2"	X		ABUT. DIAPHRAGM - STIRRUPS (BETWEEN GIRDERS)
S512	X	16	9'-8"	X		ABUT. DIAPHRAGM - STIRRUPS (AT GIRDERS)
S613	X	10	43'-4"			ABUT. DIAPHRAGM - HORIZONTAL - B.F.
S514	X	20	6'-0"			ABUT. DIAPHRAGM - HORIZONTAL (THRU GIRDER)
S615	X	40	6'-8"			ABUT. DIAPHRAGM - HORIZONTAL - (BETWEEN GIRDERS)
S616	X	8	6'-9"	X		ABUT. DIAPHRAGM - HORIZONTAL - ENDS
S617	X	4	4'-11"	X		ABUT. DIAPHRAGM - HORIZONTAL - ENDS
S418	X	56	3'-5"	X		ABUT. DIAPHRAGM - VERTICAL (BETWEEN GIRDERS)
S419	X	16	5'-8"			ABUT. DIAPHRAGM - HORIZONTAL - (BETWEEN GIRDERS)
S520	X	40	42'-10"			PARAPET LF - HORIZONTAL
S521	X	498	4'-10"	X		PARAPET LF - VERTICAL
S522	X	490	4'-2"	X		PARAPET LF - VERTICAL
S523	X	8	4'-7"	X		PARAPET LF - VERTICAL (AT PAVING NOTCH)
S524	X	8	6'-0"	X		ABUT. DIAPHRAGM - VERTICAL - ENDS
S525	X	8	11'-8"	X		ABUT. DIAPHRAGM - STIRRUPS - ENDS
S526	X	4	9'-2"	X		ABUT. DIAPHRAGM - STIRRUPS - ENDS (AT GIRDERS)
S427	X	12	3'-10"	X		PIER PILASTER - VERT.
S428	X	12	6'-10"	X		PIER PILASTER - HORIZ. - STIRRUPS
S429	X	8	8'-10"	X		PIER PILASTER - HORIZ. - STIRRUPS
S430	X	12	4'-8"	X		PIER PILASTER - VERT.
S431	X	498	3'-10"	X		PARAPET LF - VERTICAL
S532	X	24	42'-10"			PARAPET LF - HORIZONTAL

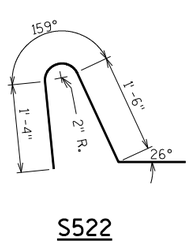




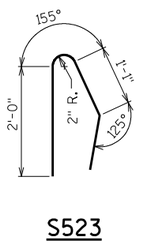
BEARING PAD DETAIL



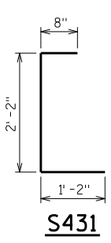
S521



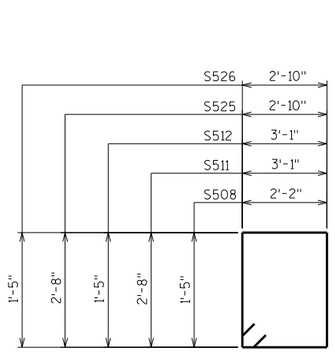
S522



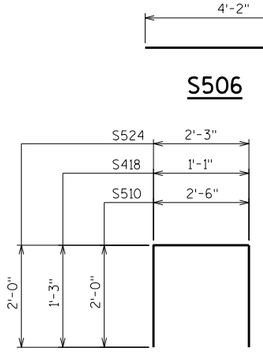
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S431

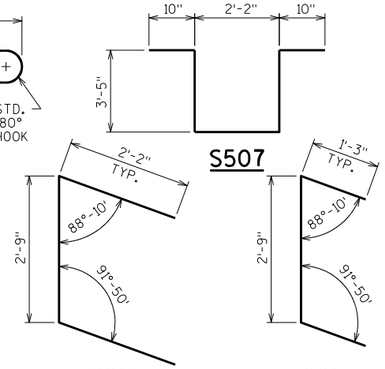


S508,S511,S512,S525,S526



S510,S418,S524

S506



S507

S616

S617

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-13-600

DRAWN BY DDS | PLANS CK'D. MWL

SUPERSTRUCTURE DETAILS

SHEET 14

546

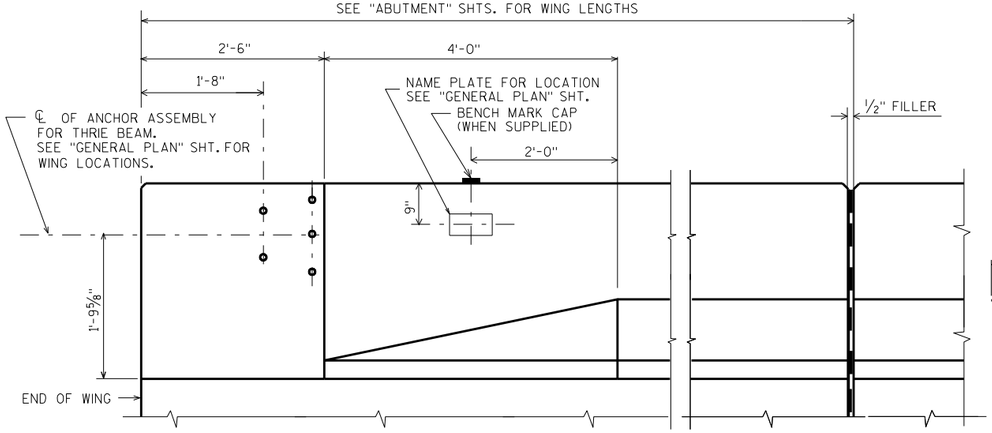
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TUE MAR 22 14:54:18 2011

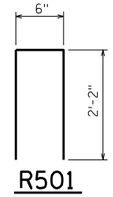
8 13 | 35 17 | 1 2 4 6 7 | 8

STATE PROJECT NUMBER

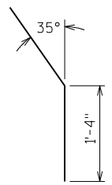
6020-02-72



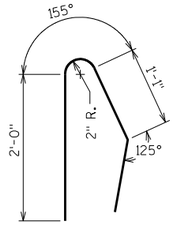
INSIDE ELEVATION



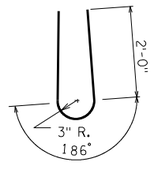
R501



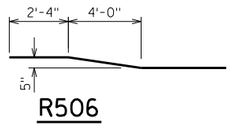
R502



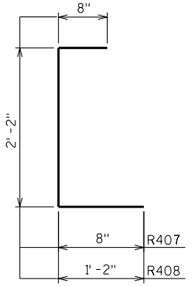
R503



R505



R506

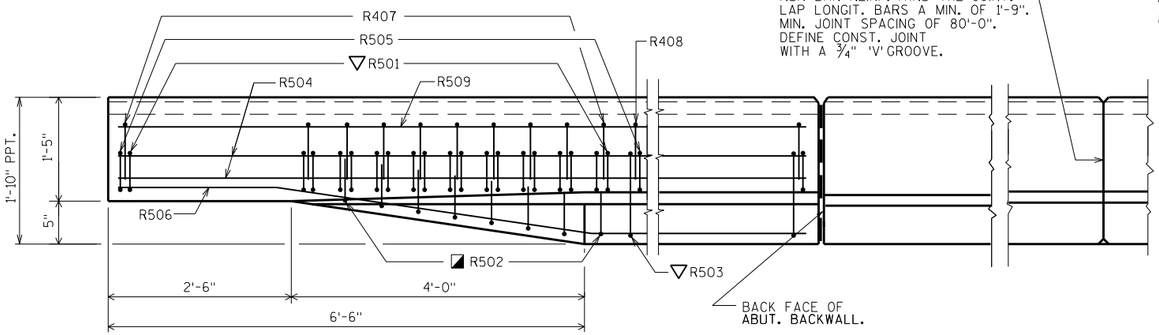


R407, R408

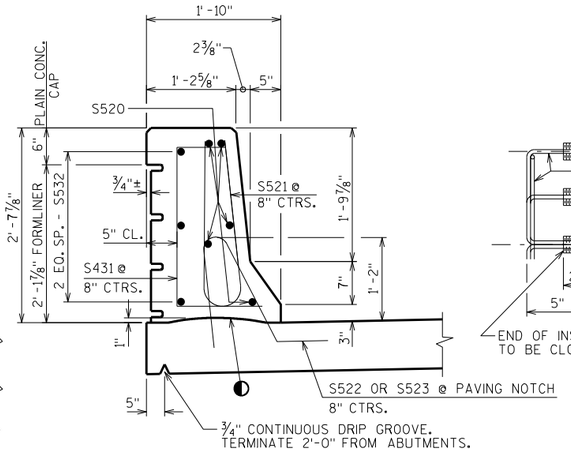
BILL OF BARS

FOR ABUTMENT PARAPETS

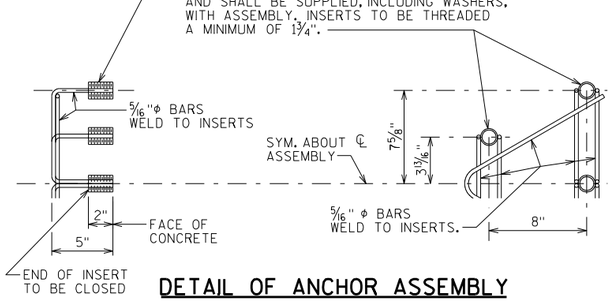
BAR MARK	COAT	S. ABUT.	N. ABUT.	LENGTH	BENT	LOCATION
R501	X	28	28	4-7	X	PARAPET VERT.
R502	X	16	16	2-4	X	PARAPET VERT.
R503	X	28	28	4-7	X	PARAPET VERT.
R504	X	8	8	15-8		PARAPET HORIZ.
R505	X	56	56	4-10	X	PARAPET VERT.
R506	X	2	2	15-8	X	PARAPET HORIZ.
R407	X	28	28	3-4	X	PARAPET VERT.
R408	X	28	28	3-10	X	PARAPET VERT.
R509	X	6	6	15-8		PARAPET HORIZ.



PLAN



SECTION THRU PARAPET ON BRIDGE

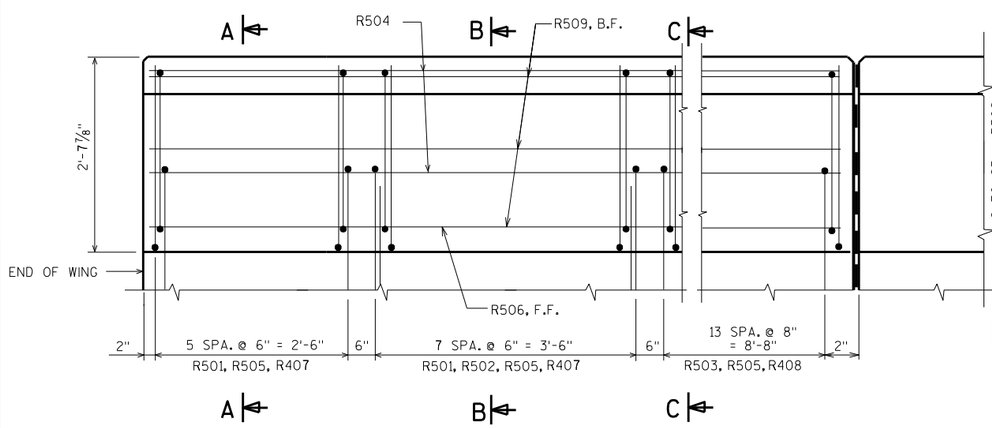


DETAIL OF ANCHOR ASSEMBLY

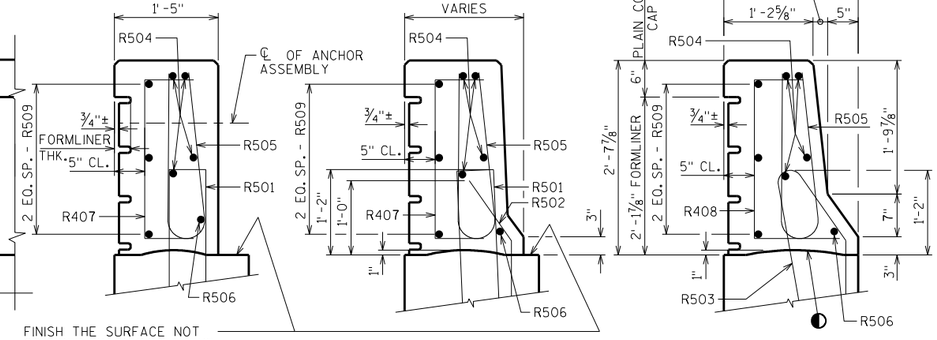
NOTE: HEX HEAD CAP SCREWS & WASHERS TO BE GALVANIZED IN ACCORDANCE WITH AASHTO M232 CLASS C.

ASSEMBLY SHALL BE BID ITEM "ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD", EACH.

FORMLINER COURSING ON PARAPETS SHALL BE PARALLEL TO TOP OF PARAPET.



OUTSIDE ELEVATION



SECTION A

SECTION B

SECTION C

◐ CONST. JOINT - STRIKE OFF AS SHOWN.

◪ 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.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-13-600

DRAWN BY DDS/NAR | PLANS CK'D. MWL

SLOPED FACE PARAPET TYPE 'LF' (MODIFIED)

SHEET 15

547

SCALE = 1

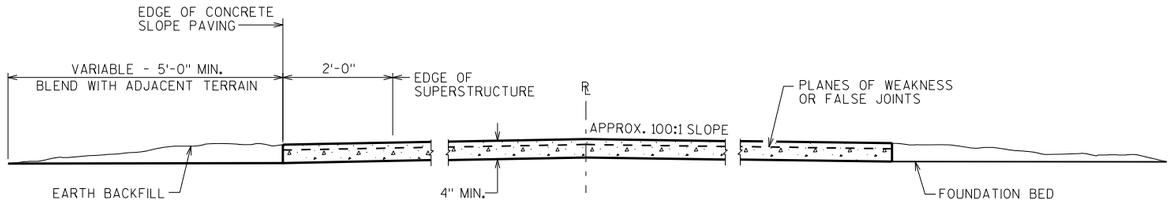
8

8

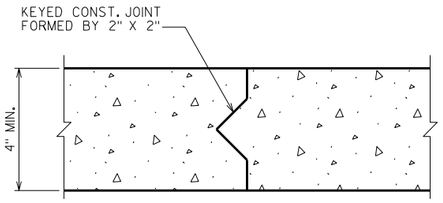
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STATE PROJECT NUMBER

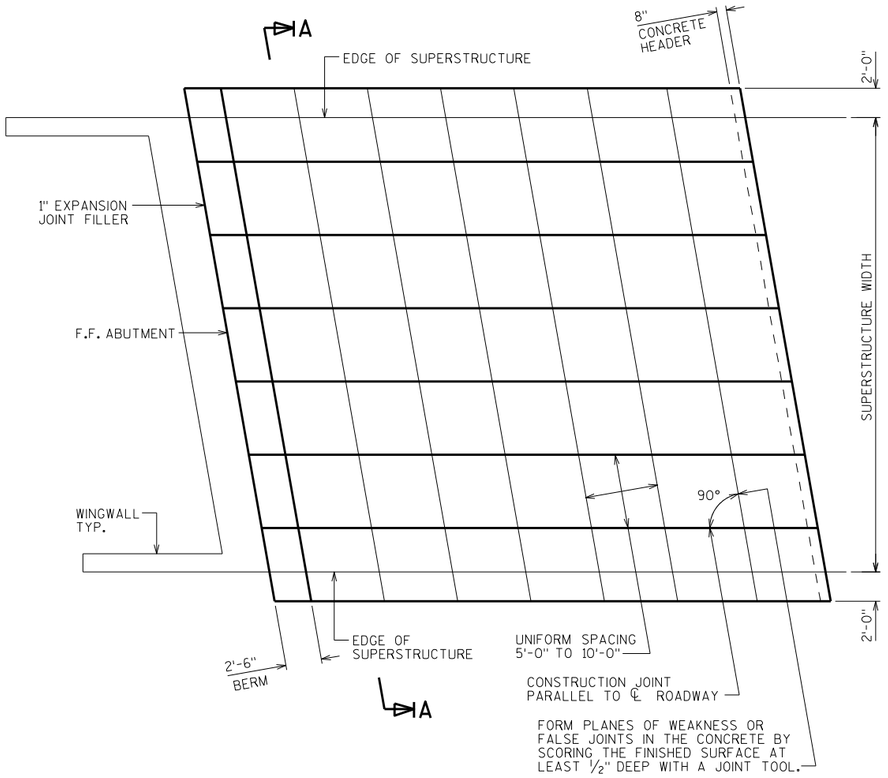
6020-02-72



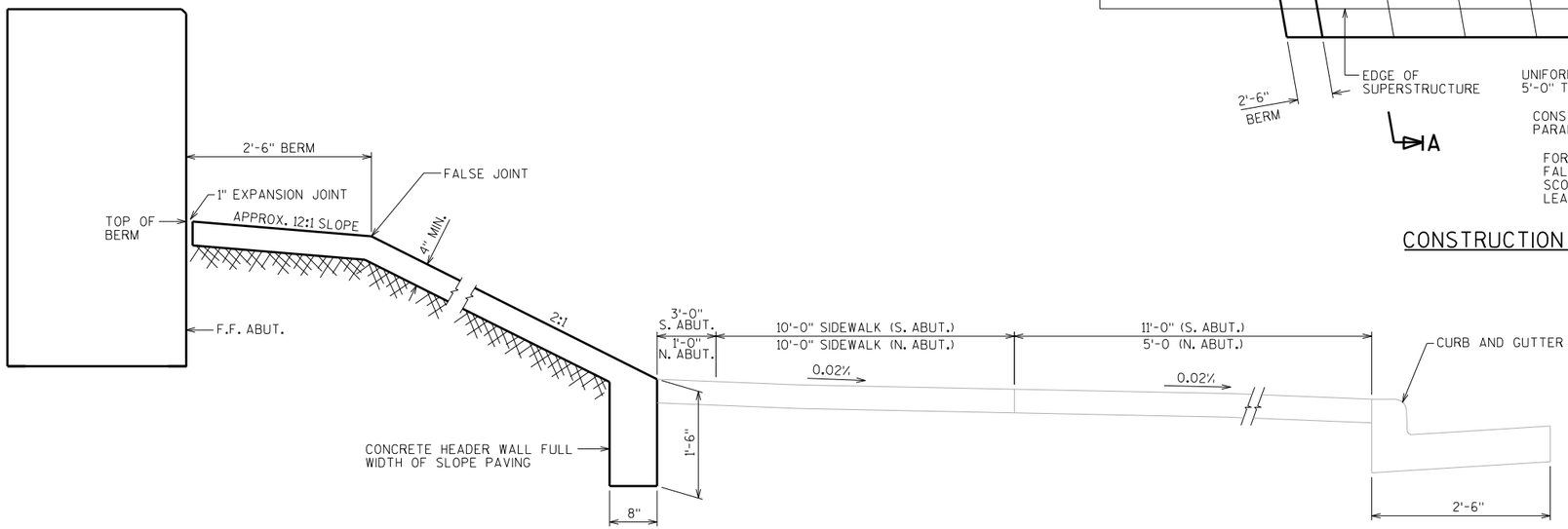
SECTION A-A



CONSTRUCTION JOINT



CONSTRUCTION JOINT DESIGN



TYPICAL SECTION

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
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-13-600

DRAWN BY DDS | PLANS CK'D. MWL

SLOPE PAVING (CONCRETE CAST-IN-PLACE)

SHEET 16

548

SCALE = 1.00

SLPPAVCIP
4-06

8

1 2 3 7

DIVISION 1

STATION	DISTANCE	AREA (SF)			INCREMENTAL VOLUME (CY) (UNADJUSTED)			CUMULATIVE VOLUME (CY)					MASS ORDINATE
		CUT	FILL	EBS	CUT	FILL	EBS	CUT/ COMMON	UNEXPANDED FILL	EXPANDED FILL 1.30	UNEXPANDED EBS	EXPANDED EBS BACKFILL 1.30	
DIVISION 1 - STAGE 2													
CTH V													
38+00.00		186	25	100	0	0	0	0	0	0	0	0	0
39+00.00	100	88	259	0	508	526	185	508	526	684	185	241	-231
40+00.00	100	70	249	0	292	940	0	800	1,466	1,906	185	241	-1,161
41+00.00	100	107	135	110	327	711	204	1,127	2,177	2,830	389	506	-1,820
42+00.00	100	18	525	0	231	1,223	204	1,358	3,399	4,419	593	770	-3,239
43+00.00	100	15	480	0	61	1,862	0	1,419	5,261	6,840	593	770	-5,598
44+00.00	100	64	184	30	147	1,231	56	1,567	6,492	8,440	648	843	-7,068
45+00.00	100	72	98	90	252	524	222	1,818	7,016	9,121	870	1,131	-7,563
46+00.00	100	39	237	0	204	621	167	2,022	7,636	9,927	1,037	1,348	-8,216
47+00.00	100	30	256	50	126	913	93	2,148	8,549	11,114	1,130	1,469	-9,304
48+00.00	100	42	122	90	133	701	259	2,281	9,250	12,024	1,389	1,806	-10,160
49+00.00	100	57	6	90	183	238	333	2,464	9,487	12,333	1,722	2,239	-10,386
50+00.00	100	35	3	90	170	17	333	2,634	9,504	12,355	2,056	2,672	-10,338
51+00.00	100	4	27	90	73	56	333	2,707	9,560	12,428	2,389	3,106	-10,438
52+00.00	100	0	122	90	8	276	333	2,715	9,836	12,787	2,722	3,539	-10,889
53+00.00	100	0	105	90	0	420	333	2,715	10,256	13,333	3,056	3,972	-11,535
54+00.00	100	61	67	90	113	317	333	2,828	10,574	13,746	3,389	4,406	-11,935
55+00.00	100	9	246	30	130	579	222	2,958	11,153	14,499	3,611	4,694	-12,624
56+00.00	100	0	279	0	17	972	56	2,975	12,125	15,763	3,667	4,767	-13,887
57+00.00	100	0	128	60	0	753	111	2,975	12,878	16,742	3,778	4,911	-14,900
58+00.00	100	47	25	90	87	282	278	3,062	13,161	17,109	4,056	5,272	-15,263
59+00.00	100	93	14	0	259	73	167	3,321	13,233	17,203	4,222	5,489	-15,149
60+00.00	100	0	339	0	171	655	0	3,492	13,888	18,055	4,222	5,489	-15,829
						CTH V - STAGE 2 SUBTOTAL:		3,492	13,888	18,055	4,222	5,489	-15,829

CONTINUED ON NEXT PAGE

DIVISION 1

STATION	DISTANCE	AREA (SF)			INCREMENTAL VOLUME (CY) (UNADJUSTED)			CUMULATIVE VOLUME (CY)					MASS ORDINATE
		CUT	FILL	EBS	CUT	FILL	EBS	CUT/ COMMON	UNEXPANDED FILL	EXPANDED FILL 1.30	UNEXPANDED EBS	EXPANDED EBS BACKFILL 1.30	
DIVISION 1 - STAGE 2													
MUELLER ROAD													
30+50.00		12	543	0	0	0	0	0	0	0	0	0	0
31+00.00	50	3	337	0	14	815	0	14	815	1,059	0	0	-1,045
32+00.00	100	138	19	90	261	660	167	276	1,475	1,918	167	217	-1,692
33+00.00	100	542	0	0	1,260	36	167	1,535	1,511	1,964	333	433	-529
34+00.00	100	465	0	0	1,866	0	0	3,401	1,511	1,964	333	433	1,337
35+00.00	100	315	1	90	1,445	2	167	4,846	1,513	1,967	500	650	2,729
36+00.00	100	189	4	90	934	10	333	5,780	1,523	1,980	833	1,083	3,550
37+00.00	100	75	0	70	488	7	296	6,268	1,531	1,990	1,130	1,469	3,940
38+00.00	100	0	0	0	138	0	0	6,407	1,531	1,990	1,130	1,469	4,078
39+00.00	100	0	0	0	0	0	0	6,407	1,531	1,990	1,130	1,469	4,078
40+00.00	100	0	0	0	0	0	0	6,407	1,531	1,990	1,130	1,469	4,078
					MUELLER ROAD - STAGE 2 SUBTOTAL:			6,407	1,531	1,990	1,130	1,469	4,078
SHAWN WILLIAMS TRAIL													
15+00.00		88	0	70	0	0	0	0	0	0	0	0	0
16+00.00	100	20	2	70	202	4	259	202	4	5	259	337	118
17+00.00	100	0	11	70	39	24	259	240	29	37	519	674	48
18+00.00	100	4	11	70	8	41	259	248	69	90	778	1,011	-76
19+00.00	100	20	2	70	43	25	259	291	94	122	1,037	1,348	-142
19+72.00	72	0	72	70	26	99	187	317	193	251	1,224	1,591	-301
					SHAWN WILLIAMS TRAIL - STAGE 2 SUBTOTAL:			317	193	251	1,224	1,591	-301

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DIVISION 1

STATION	DISTANCE	AREA (SF)			INCREMENTAL VOLUME (CY) (UNADJUSTED)			CUMULATIVE VOLUME (CY)					
		CUT	FILL	EBS	CUT	FILL	EBS	CUT/ COMMON	UNEXPANDED FILL	EXPANDED FILL 1.30	UNEXPANDED EBS	EXPANDED EBS BACKFILL 1.30	MASS ORDINATE
DIVISION 1 - STAGE 2													
DRIVEWAY 'D1'													
10+50.00		18	0	0	0	0	0	0	0	0	0	0	0
11+00.00	50	18	0	0	33	0	0	33	0	0	0	0	33
12+00.00	100	0	35	0	33	64	0	66	64	84	0	0	-18
13+00.00	100	0	31	0	0	123	0	66	187	243	0	0	-177
14+00.00	100	0	24	0	0	102	0	66	289	376	0	0	-310
15+00.00	100	0	42	0	0	121	0	66	410	533	0	0	-468
16+00.00	100	0	34	0	0	141	0	66	551	716	0	0	-651
17+00.00	100	0	104	0	0	257	0	66	808	1050	0	0	-984
18+00.00	100	0	130	0	0	433	0	66	1241	1613	0	0	-1548
19+00.00	100	0	84	0	0	396	0	66	1638	2129	0	0	-2063
19+85.00	85	0	163	0	0	389	0	66	2027	2635	0	0	-2569
						DRIVEWAY 'D1' - STAGE 2 SUBTOTAL:		66	2027	2635	0	0	-2569
DRIVEWAY 'D2'													
18+35.00		35	0	0	0	0	0	0	0	0	0	0	0
18+50.00	15	0	76	0	10	21	0	10	21	28	0	0	-18
19+00.00	50	17	0	0	15	71	0	25	92	119	0	0	-94
19+50.00	50	39	24	0	51	22	0	77	114	148	0	0	-72
19+60.00	10	116	21	0	29	8	0	105	123	159	0	0	-54
						DRIVEWAY 'D2' - STAGE 2 SUBTOTAL:		105	123	159	0	0	-54

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DIVISION 1

STATION	DISTANCE	AREA (SF)			INCREMENTAL VOLUME (CY) (UNADJUSTED)			CUMULATIVE VOLUME (CY)					
		CUT	FILL	EBS	CUT	FILL	EBS	CUT/ COMMON	UNEXPANDED FILL	EXPANDED FILL 1.30	UNEXPANDED EBS	EXPANDED EBS BACKFILL 1.30	MASS ORDINATE
DIVISION 1 - STAGE 2													
DRIVEWAY 'D3'													
6+10.00		16.62	5.01	0	0.00	0.00	0	0	0	0	0	0	0
7+00.00	90.00	25.56	0.01	0	70.30	8.36	0	70	8	11	0	0	59
8+00.00	100.00	18.09	0.00	0	80.82	0.01	0	151	8	11	0	0	140
9+00.00	100.00	25.98	0.00	0	81.60	0.00	0	233	8	11	0	0	222
10+00.00	100.00	23.81	0.00	0	92.20	0.00	0	325	8	11	0	0	314
11+00.00	100.00	16.00	0.00	0	73.71	0.00	0	399	8	11	0	0	388
12+00.00	100.00	20.97	0.00	0	68.45	0.00	0	467	8	11	0	0	456
13+00.00	100.00	25.40	0.00	0	85.86	0.00	0	553	8	11	0	0	542
14+00.00	100.00	22.18	0.00	0	88.11	0.00	0	641	8	11	0	0	630
15+00.00	100.00	0.24	10.75	0	41.52	19.91	0	683	28	37	0	0	646
16+00.00	100.00	0.00	76.55	0	0.45	161.67	0	683	190	247	0	0	436
17+00.00	100.00	0.00	135.58	0	0.00	392.84	0	683	583	758	0	0	-75
18+00.00	100.00	0.00	171.00	0	0.00	567.74	0	683	1,151	1,496	0	0	-813
19+00.00	100.00	0.00	14.26	0	0.00	343.07	0	683	1,494	1,942	0	0	-1,259
19+85.00	85.00	0.00	0.00	0	0.00	22.45	0	683	1,516	1,971	0	0	-1,288
						DRIVEWAY 'D3' - STAGE 2 SUBTOTAL:		683	1,516	1,971	0	0	-1,288
						DIVISION 1 - STAGE 2 TOTAL:		**11,071**	**19,277**	**25,061**	**6,576**	**8,548**	**-15,962**

DIVISION 1

STATION	DISTANCE	AREA (SF)			INCREMENTAL VOLUME (CY) (UNADJUSTED)			CUMULATIVE VOLUME (CY)					MASS ORDINATE
		CUT	FILL	EBS	CUT	FILL	EBS	CUT/ COMMON	UNEXPANDED FILL	EXPANDED FILL 1.30	UNEXPANDED EBS	EXPANDED EBS BACKFILL 1.30	
DIVISION 1 - STAGE 3A													
USH 51 NB AND SB													
452+00.00		2	238	280	0	0	0	0	0	0	0	0	0
452+50.00	50	5	198	280	6	403	519	6	403	524	519	674	-673
453+00.00	50	35	146	280	36	318	519	43	721	937	1,037	1,348	-1,206
454+00.00	100	20	187	280	101	615	1,037	144	1,336	1,737	2,074	2,696	-2,215
455+00.00	100	16	442	0	66	1,164	519	210	2,500	3,251	2,593	3,370	-3,818
456+00.00	100	18	523	0	62	1,787	0	272	4,288	5,574	2,593	3,370	-6,080
457+00.00	100	18	396	0	65	1,702	0	337	5,989	7,786	2,593	3,370	-8,227
458+00.00	100	21	280	280	73	1,251	519	410	7,240	9,412	3,111	4,044	-9,936
459+00.00	100	50	675	0	132	1,769	519	542	9,009	11,712	3,630	4,719	-12,258
460+00.00	100	26	1,215	0	141	3,500	0	683	12,509	16,261	3,630	4,719	-16,667
461+00.00	100	60	1,502	0	161	5,030	0	844	17,539	22,801	3,630	4,719	-23,046
462+00.00	100	14	2,047	0	138	6,571	0	982	24,111	31,344	3,630	4,719	-31,451
463+00.00	100	15	2,239	0	53	7,937	0	1,035	32,047	41,662	3,630	4,719	-41,715
464+00.00	100	12	2,109	0	49	8,052	0	1,084	40,099	52,129	3,630	4,719	-52,134
465+00.00	100	12	1,897	0	44	7,418	0	1,127	47,517	61,772	3,630	4,719	-61,733
466+00.00	100	392	1,679	0	748	6,621	0	1,875	54,138	70,380	3,630	4,719	-69,594
467+00.00	100	24	1,351	0	771	5,611	0	2,646	59,750	77,675	3,630	4,719	-76,118
468+00.00	100	50	617	0	138	3,646	0	2,783	63,395	82,414	3,630	4,719	-80,719
469+00.00	100	230	102	280	519	1,332	519	3,302	64,727	84,145	4,148	5,393	-82,087
470+00.00	100	190	69	290	779	317	1,056	4,081	65,044	84,557	5,204	6,765	-82,037
471+00.00	100	71	582	0	484	1,207	537	4,565	66,250	86,125	5,741	7,463	-83,282
472+00.00	100	47	1,063	0	219	3,047	0	4,784	69,297	90,086	5,741	7,463	-87,024
473+00.00	100	29	1,035	0	141	3,885	0	4,925	73,181	95,136	5,741	7,463	-91,933
474+00.00	100	11	1,090	0	74	3,934	0	5,000	77,116	100,251	5,741	7,463	-96,973
475+00.00	100	21	1,338	0	59	4,495	0	5,059	81,611	106,095	5,741	7,463	-102,758
476+00.00	100	56	1,542	0	143	5,333	0	5,202	86,944	113,027	5,741	7,463	-109,548
477+00.00	100	24	1,731	0	149	6,060	0	5,350	93,004	120,905	5,741	7,463	-117,277
478+00.00	100	25	1,679	0	91	6,315	0	5,441	99,319	129,115	5,741	7,463	-125,397
479+00.00	100	73	830	0	182	4,646	0	5,623	103,965	135,155	5,741	7,463	-131,254
480+00.00	100	46	1,155	0	220	3,675	0	5,843	107,641	139,933	5,741	7,463	-135,812

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DIVISION 1

STATION	DISTANCE	AREA (SF)			INCREMENTAL VOLUME (CY) (UNADJUSTED)			CUMULATIVE VOLUME (CY)					MASS ORDINATE
		CUT	FILL	EBS	CUT	FILL	EBS	CUT/ COMMON	UNEXPANDED FILL	EXPANDED FILL 1.30	UNEXPANDED EBS	EXPANDED EBS BACKFILL 1.30	
DIVISION 1 - STAGE 3A													
481+00.00	100	25	1,585	0	131	5,074	0	5,975	112,715	146,530	5,741	7,463	-142,277
482+00.00	100	0	1,334	0	47	5,406	0	6,022	118,121	153,557	5,741	7,463	-149,258
483+00.00	100	0	1,306	0	0	4,890	0	6,022	123,011	159,914	5,741	7,463	-155,615
484+00.00	100	0	966	0	0	4,208	0	6,022	127,219	165,385	5,741	7,463	-161,086
485+00.00	100	0	856	0	0	3,375	0	6,022	130,594	169,772	5,741	7,463	-165,473
486+00.00	100	0	1,306	0	0	4,004	0	6,022	134,598	174,978	5,741	7,463	-170,678
487+00.00	100	0	1,988	0	0	6,100	0	6,022	140,698	182,908	5,741	7,463	-178,608
488+00.00	100	0	3,067	0	0	9,361	0	6,022	150,059	195,077	5,741	7,463	-190,777
489+00.00	100	0	3,666	0	0	12,467	0	6,022	162,526	211,284	5,741	7,463	-206,985
490+00.00	100	0	4,343	0	0	14,831	0	6,022	177,357	230,565	5,741	7,463	-226,265
491+00.00	100	0	4,843	0	0	17,011	0	6,022	194,368	252,679	5,741	7,463	-248,379
492+00.00	100	0	5,154	0	0	18,512	0	6,022	212,880	276,744	5,741	7,463	-272,445
493+00.00	100	0	5,506	0	0	19,740	0	6,022	232,620	302,405	5,741	7,463	-298,106
494+00.00	100	0	5,853	0	0	21,034	0	6,022	253,654	329,750	5,741	7,463	-325,451
495+00.00	100	1	6,169	0	3	22,263	0	6,024	275,917	358,693	5,741	7,463	-354,390
496+00.00	100	2	6,402	0	7	23,281	0	6,032	299,198	388,957	5,741	7,463	-384,648
497+00.00	100	33	5,974	0	66	22,918	0	6,097	322,116	418,751	5,741	7,463	-414,376
498+00.00	100	79	5,462	0	207	21,177	0	6,304	343,294	446,282	5,741	7,463	-441,700
498+50.00	50	0	0	0	73	5,058	0	6,377	348,351	452,857	5,741	7,463	-448,202
500+13.00	163	0	0	0	0	0	0	6,377	348,351	452,857	5,741	7,463	-448,202
501+00.00	87	55	3,975	0	89	6,405	0	6,466	354,756	461,183	5,741	7,463	-456,440
502+00.00	100	24	4,125	0	146	15,000	0	6,612	369,756	480,683	5,741	7,463	-475,794
503+00.00	100	0	3,950	0	44	14,954	0	6,656	384,710	500,123	5,741	7,463	-495,189
504+00.00	100	0	3,801	0	0	14,355	0	6,656	399,065	518,784	5,741	7,463	-513,851
505+00.00	100	0	3,437	0	0	13,404	0	6,656	412,469	536,209	5,741	7,463	-531,276
506+00.00	100	0	3,105	0	0	12,115	0	6,656	424,584	551,959	5,741	7,463	-547,026
					USH 51 NB AND SB - STAGE 3A SUBTOTAL:			6,656	424,584	551,959	5,741	7,463	-547,026

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DIVISION 1

STATION	DISTANCE	AREA (SF)			INCREMENTAL VOLUME (CY) (UNADJUSTED)			CUMULATIVE VOLUME (CY)					MASS ORDINATE
		CUT	FILL	EBS	CUT	FILL	EBS	CUT/ COMMON	UNEXPANDED FILL	EXPANDED FILL 1.30	UNEXPANDED EBS	EXPANDED EBS BACKFILL 1.30	
DIVISION 1 - STAGE 3A													
USH 51 NB													
506+00.00		0	1,706	0	0	0	0	0	0	0	0	0	0
507+00.00	100	0	1,584	0	0	6,093	0	0	6,093	7,920	0	0	-7,920
508+00.00	100	0	1,384	0	0	5,496	0	0	11,589	15,066	0	0	-15,066
509+00.00	100	0	1,125	0	0	4,647	0	0	16,236	21,106	0	0	-21,106
510+00.00	100	0	979	0	0	3,897	0	0	20,132	26,172	0	0	-26,172
511+00.00	100	0	680	0	0	3,073	0	0	23,205	30,166	0	0	-30,166
512+00.00	100	0	434	0	0	2,064	0	0	25,269	32,850	0	0	-32,850
513+00.00	100	22	193	30	40	1,162	56	40	26,431	34,361	56	72	-34,338
514+00.00	100	88	65	40	203	477	130	243	26,909	34,981	185	241	-34,794
515+00.00	100	188	0	80	511	120	222	754	27,029	35,137	407	530	-34,506
516+00.00	100	328	0	30	957	0	204	1,711	27,029	35,138	611	794	-33,611
517+00.00	100	840	0	0	2,163	0	56	3,874	27,029	35,138	667	867	-31,464
518+00.00	100	1,004	0	0	3,415	0	0	7,289	27,029	35,138	667	867	-28,049
519+00.00	100	1,111	0	0	3,918	0	0	11,207	27,029	35,138	667	867	-24,131
520+00.00	100	1,240	0	0	4,353	0	0	15,560	27,029	35,138	667	867	-19,778
521+00.00	100	1,304	0	0	4,709	0	0	20,269	27,029	35,138	667	867	-15,069
522+00.00	100	1,339	0	0	4,895	0	0	25,164	27,029	35,138	667	867	-10,174
523+00.00	100	1,359	0	0	4,997	0	0	30,161	27,029	35,138	667	867	-5,177
524+00.00	100	1,348	0	0	5,014	0	0	35,175	27,029	35,138	667	867	-163
525+00.00	100	1,281	0	0	4,869	0	0	40,044	27,029	35,138	667	867	4,706
526+00.00	100	1,063	0	0	4,342	0	0	44,386	27,029	35,138	667	867	9,049
527+00.00	100	823	0	0	3,493	0	0	47,879	27,029	35,138	667	867	12,541
528+00.00	100	649	103	40	2,725	192	74	50,604	27,221	35,387	741	963	14,994
529+00.00	100	489	149	50	2,106	468	167	52,710	27,689	35,996	907	1,180	16,442
530+00.00	100	303	195	40	1,466	638	167	54,176	28,327	36,825	1,074	1,396	17,029
531+00.00	100	160	278	40	857	875	148	55,033	29,202	37,963	1,222	1,589	16,704
532+00.00	100	105	408	30	490	1,270	130	55,523	30,472	39,614	1,352	1,757	15,504
533+00.00	100	28	522	0	246	1,723	56	55,769	32,195	41,854	1,407	1,830	13,494
534+00.00	100	15	597	0	79	2,072	0	55,849	34,267	44,548	1,407	1,830	10,879
535+00.00	100	7	657	0	40	2,322	0	55,889	36,589	47,566	1,407	1,830	7,900

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DIVISION 1

STATION	DISTANCE	AREA (SF)			INCREMENTAL VOLUME (CY) (UNADJUSTED)			CUMULATIVE VOLUME (CY)					MASS ORDINATE
		CUT	FILL	EBS	CUT	FILL	EBS	CUT/ COMMON	UNEXPANDED FILL	EXPANDED FILL 1.30	UNEXPANDED EBS	EXPANDED EBS BACKFILL 1.30	
DIVISION 1 - STAGE 3A													
536+00.00	100	11	627	0	33	2,378	0	55,921	38,967	50,658	1,407	1,830	4,841
537+00.00	100	3	646	0	25	2,358	0	55,946	41,325	53,723	1,407	1,830	1,801
538+00.00	100	7	602	0	19	2,312	0	55,965	43,637	56,728	1,407	1,830	-1,186
539+00.00	100	20	482	0	51	2,008	0	56,016	45,645	59,339	1,407	1,830	-3,745
540+00.00	100	53	257	20	136	1,368	37	56,152	47,013	61,117	1,444	1,878	-5,398
541+00.00	100	170	3	100	413	480	222	56,565	47,493	61,741	1,667	2,167	-5,676
542+00.00	100	394	0	100	1,044	5	370	57,609	47,498	61,748	2,037	2,648	-4,750
543+00.00	100	433	0	100	1,533	0	370	59,142	47,498	61,748	2,407	3,130	-3,328
544+00.00	100	375	0	100	1,497	0	370	60,639	47,498	61,748	2,778	3,611	-1,942
545+00.00	100	347	0	100	1,337	0	370	61,976	47,498	61,748	3,148	4,093	-716
546+00.00	100	301	0	100	1,200	0	370	63,176	47,498	61,748	3,519	4,574	373
547+00.00	100	346	0	100	1,197	0	370	64,373	47,498	61,748	3,889	5,056	1,459
548+00.00	100	484	0	100	1,537	0	370	65,910	47,498	61,748	4,259	5,537	2,884
549+00.00	100	438	0	100	1,708	0	370	67,617	47,498	61,748	4,630	6,019	4,481
550+00.00	100	314	0	100	1,392	0	370	69,010	47,498	61,748	5,000	6,500	5,762
551+00.00	100	236	3	100	1,019	5	370	70,029	47,504	61,755	5,370	6,981	6,663
552+00.00	100	194	1	110	797	8	389	70,826	47,511	61,765	5,759	7,487	7,333
553+00.00	100	151	116	30	639	217	259	71,465	47,728	62,047	6,019	7,824	7,612
554+00.00	100	168	144	30	591	480	111	72,055	48,208	62,671	6,130	7,969	7,546
555+00.00	100	137	77	102	564	409	244	72,620	48,617	63,202	6,374	8,286	7,505
556+00.00	100	214	9	125	649	159	420	73,269	48,776	63,409	6,794	8,833	7,821
557+00.00	100	250	7	100	860	29	417	74,129	48,805	63,447	7,211	9,374	8,518
558+00.00	100	194	8	100	824	27	370	74,952	48,832	63,482	7,581	9,856	9,196
559+00.00	100	144	22	104	627	54	378	75,579	48,887	63,553	7,959	10,347	9,639
560+00.00	100	101	18	40	455	74	267	76,033	48,961	63,649	8,226	10,694	9,917
561+00.00	100	63	12	50	304	56	167	76,337	49,017	63,722	8,393	10,910	10,098
562+00.00	100	22	23	50	157	64	185	76,495	49,080	63,805	8,578	11,151	10,117
563+00.00	100	68	48	50	167	132	185	76,662	49,212	63,976	8,763	11,392	10,057
564+00.00	100	60	64	40	237	208	167	76,899	49,420	64,247	8,930	11,609	9,974
565+00.00	100	32	48	50	170	208	167	77,069	49,628	64,517	9,096	11,825	9,823
566+00.00	100	22	15	70	100	117	222	77,169	49,746	64,669	9,319	12,114	9,704
567+00.00	100	101	0	140	229	28	389	77,398	49,773	64,705	9,707	12,620	9,780
568+00.00	100	211	0	120	579	0	481	77,977	49,773	64,705	10,189	13,246	10,215
						USH 51 NB - STAGE 3A SUBTOTAL:		77,977	49,773	64,705	10,189	13,246	10,215

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DIVISION 1

STATION	DISTANCE	AREA (SF)			INCREMENTAL VOLUME (CY) (UNADJUSTED)			CUMULATIVE VOLUME (CY)					MASS ORDINATE
		CUT	FILL	EBS	CUT	FILL	EBS	CUT/ COMMON	UNEXPANDED FILL	EXPANDED FILL 1.30	UNEXPANDED EBS	EXPANDED EBS BACKFILL 1.30	
DIVISION 1 - STAGE 3A													
RAMP 'NN'													
500+64.03		56	297	0	0	0	0	0	0	0	0	0	0
501+00.00	36	52	362	0	72	439	0	72	439	570	0	0	-498
502+00.00	100	14	477	0	122	1,554	0	194	1,993	2,591	0	0	-2,397
503+00.00	100	4	517	0	33	1,842	0	227	3,835	4,986	0	0	-4,759
504+00.00	100	17	478	0	40	1,844	0	267	5,679	7,383	0	0	-7,116
505+00.00	100	31	466	0	90	1,748	0	357	7,427	9,655	0	0	-9,298
506+00.00	100	0	489	0	58	1,768	0	415	9,196	11,954	0	0	-11,539
507+00.00	100	0	577	0	0	1,974	0	415	11,170	14,521	0	0	-14,106
508+00.00	100	0	578	0	0	2,138	0	415	13,308	17,300	0	0	-16,885
509+00.00	100	0	561	0	0	2,108	0	415	15,416	20,040	0	0	-19,625
510+00.00	100	0	422	0	0	1,820	0	415	17,235	22,406	0	0	-21,991
511+00.00	100	0	298	0	0	1,334	0	415	18,569	24,140	0	0	-23,725
512+00.00	100	0	170	0	0	866	0	415	19,436	25,266	0	0	-24,851
513+00.00	100	0	33	40	0	376	74	415	19,812	25,755	74	96	-25,362
514+00.00	100	111	0	40	205	62	148	620	19,874	25,836	222	289	-25,282
515+00.00	100	206	0	0	586	0	74	1,206	19,874	25,836	296	385	-24,718
516+00.00	100	339	0	0	1,010	0	0	2,216	19,874	25,836	296	385	-23,709
					RAMP 'NN' - STAGE 3A SUBTOTAL:			2,216	19,874	25,836	296	385	-23,709

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DIVISION 1

STATION	DISTANCE	AREA (SF)			INCREMENTAL VOLUME (CY) (UNADJUSTED)			CUMULATIVE VOLUME (CY)					
		CUT	FILL	EBS	CUT	FILL	EBS	CUT/ COMMON	UNEXPANDED FILL	EXPANDED FILL 1.30	UNEXPANDED EBS	EXPANDED EBS BACKFILL 1.30	MASS ORDINATE
DIVISION 1 - STAGE 3A													
RAMP 'NX'													
479+00.00		2	567	0	0	0	0	0	0	0	0	0	0
480+00.00	100	2	613	0	7	2,185	0	7	2,185	2,841	0	0	-2,834
481+00.00	100	1	646	0	5	2,331	0	11	4,516	5,871	0	0	-5,860
482+00.00	100	5	785	0	11	2,650	0	22	7,166	9,316	0	0	-9,295
483+00.00	100	19	749	0	45	2,841	0	67	10,008	13,010	0	0	-12,943
484+00.00	100	13	561	0	61	2,426	0	128	12,434	16,164	0	0	-16,036
485+00.00	100	25	303	0	71	1,599	0	199	14,032	18,242	0	0	-18,043
486+00.00	100	21	200	0	85	930	0	285	14,962	19,451	0	0	-19,166
487+00.00	100	33	353	0	100	1,023	0	385	15,986	20,781	0	0	-20,396
488+00.00	100	22	608	0	102	1,779	0	487	17,765	23,094	0	0	-22,607
489+00.00	100	26	733	0	88	2,483	0	575	20,248	26,322	0	0	-25,747
490+00.00	100	10	753	0	67	2,753	0	643	23,001	29,901	0	0	-29,258
491+00.00	100	7	704	0	32	2,698	0	675	25,699	33,409	0	0	-32,734
492+00.00	100	21	510	0	52	2,249	0	728	27,948	36,332	0	0	-35,604
493+00.00	100	46	328	0	124	1,551	0	851	29,499	38,349	0	0	-37,497
494+00.00	100	44	247	0	166	1,064	0	1,017	30,563	39,732	0	0	-38,714
495+00.00	100	31	285	0	138	984	0	1,155	31,547	41,011	0	0	-39,856
495+77.31	77	8	333	0	56	884	0	1,211	32,432	42,161	0	0	-40,950
						RAMP 'NX' - STAGE 3A SUBTOTAL:		1,211	32,432	42,161	0	0	-40,950
TEMPORARY ROAD 'TR4'													
30+25.00		357	0	0	0	0	0	0	0	0	0	0	0
30+50.00	25	161	0	0	240	0	0	240	0	0	0	0	240
31+00.00	50	69	72	0	213	67	0	453	67	87	0	0	366
31+50.00	50	3	87	0	67	147	0	520	214	279	0	0	241
32+00.00	50	0	0	0	3	81	0	523	295	383	0	0	139
						TEMPORARY ROAD 'TR4' - STAGE 3A SUBTOTAL:		523	295	383	0	0	139
						DIVISION 1 - STAGE 3A TOTAL:		**88,582**	**526,957**	**685,044**	**16,226**	**21,094**	**-601,330**

DIVISION 1

STATION	DISTANCE	AREA (SF)			INCREMENTAL VOLUME (CY) (UNADJUSTED)			CUMULATIVE VOLUME (CY)					MASS ORDINATE
		CUT	FILL	EBS	CUT	FILL	EBS	CUT/ COMMON	UNEXPANDED FILL	EXPANDED FILL 1.30	UNEXPANDED EBS	EXPANDED EBS BACKFILL 1.30	
DIVISION 1 - STAGE 3B													
CTH V													
60+00.00		0	339	0	0	0	0	0	0	0	0	0	0
61+00.00	100	0	280	0	0	1,147	0	0	1,147	1,491	0	0	-1,491
62+00.00	100	230	0	90	425	518	167	425	1,665	2,165	167	217	-1,789
63+00.00	100	408	0	30	1,182	0	222	1,607	1,665	2,165	389	506	-674
64+00.00	100	354	0	90	1,412	0	222	3,019	1,665	2,165	611	794	671
65+00.00	100	358	0	90	1,319	0	333	4,337	1,665	2,165	944	1,228	1,889
66+00.00	100	258	0	90	1,141	0	333	5,479	1,665	2,165	1,278	1,661	2,930
67+00.00	100	55	1	90	579	2	333	6,058	1,667	2,167	1,611	2,094	3,408
68+00.00	100	5	36	90	112	68	333	6,169	1,734	2,255	1,944	2,528	3,331
69+00.00	100	0	88	90	10	228	333	6,179	1,963	2,551	2,278	2,961	2,945
70+00.00	100	20	97	90	37	342	333	6,217	2,304	2,996	2,611	3,394	2,438
71+00.00	100	115	30	90	250	234	333	6,467	2,539	3,300	2,944	3,828	2,283
72+00.00	100	249	1	90	673	56	333	7,140	2,595	3,373	3,278	4,261	2,784
73+00.00	100	339	1	60	1,089	2	278	8,229	2,597	3,376	3,556	4,622	3,786
74+00.00	100	255	0	90	1,100	1	278	9,329	2,599	3,378	3,833	4,983	4,801
75+00.00	100	296	0	70	1,020	1	296	10,349	2,600	3,380	4,130	5,369	5,730
76+00.00	100	169	2	90	861	5	296	11,210	2,604	3,386	4,426	5,754	6,497
77+00.00	100	18	54	90	346	104	333	11,557	2,709	3,521	4,759	6,187	6,608
78+00.00	100	4	39	90	41	172	333	11,598	2,880	3,744	5,093	6,620	6,326
79+00.00	100	202	0	90	382	72	333	11,979	2,952	3,837	5,426	7,054	6,514
80+00.00	100	266	0	90	867	0	333	12,847	2,952	3,837	5,759	7,487	7,282
81+00.00	100	305	0	90	1,057	0	333	13,904	2,952	3,837	6,093	7,920	8,239
82+00.00	100	347	0	70	1,206	0	296	15,110	2,952	3,837	6,389	8,306	9,356
83+00.00	100	340	0	50	1,272	0	222	16,382	2,952	3,837	6,611	8,594	10,561
84+00.00	100	354	0	50	1,285	0	185	17,667	2,952	3,837	6,796	8,835	11,791
85+00.00	100	172	10	90	974	18	259	18,641	2,970	3,861	7,056	9,172	12,664
86+00.00	100	64	158	70	438	311	296	19,079	3,280	4,265	7,352	9,557	12,609
87+00.00	100	2	346	0	122	933	130	19,201	4,214	5,478	7,481	9,726	11,479
88+00.00	100	11	334	0	24	1,259	0	19,225	5,473	7,115	7,481	9,726	9,865
89+00.00	100	97	184	70	200	960	130	19,425	6,433	8,363	7,611	9,894	8,779

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DIVISION 1

STATION	DISTANCE	AREA (SF)			INCREMENTAL VOLUME (CY) (UNADJUSTED)			CUMULATIVE VOLUME (CY)					MASS ORDINATE
		CUT	FILL	EBS	CUT	FILL	EBS	CUT/ COMMON	UNEXPANDED FILL	EXPANDED FILL 1.30	UNEXPANDED EBS	EXPANDED EBS BACKFILL 1.30	
DIVISION 1 - STAGE 3B													
90+00.00	100	260	159	60	662	636	241	20,087	7,069	9,190	7,852	10,207	8,542
91+00.00	100	124	133	0	712	542	111	20,799	7,611	9,894	7,963	10,352	8,516
92+00.00	100	151	120	110	509	469	204	21,308	8,080	10,504	8,167	10,617	8,354
93+00.00	100	190	25	100	630	269	389	21,938	8,349	10,853	8,556	11,122	8,518
94+00.00	100	307	0	80	919	46	333	22,858	8,395	10,914	8,889	11,556	9,277
95+00.00	100	380	0	0	1,273	0	148	24,130	8,395	10,914	9,037	11,748	10,505
96+00.00	100	451	0	0	1,539	0	0	25,669	8,395	10,914	9,037	11,748	12,044
97+00.00	100	420	0	0	1,613	0	0	27,282	8,395	10,914	9,037	11,748	13,657
98+00.00	100	277	0	0	1,291	0	0	28,573	8,395	10,914	9,037	11,748	14,948
99+00.00	100	0	0	0	512	0	0	29,085	8,395	10,914	9,037	11,748	15,460
						CTH V - STAGE 3B SUBTOTAL:		29,085	8,395	10,914	9,037	11,748	15,460
WINDSOR WAY													
35+00.00		102	45	50	0	0	0	0	0	0	0	0	0
35+40.00	40	115	88	80	160	99	96	160	99	128	96	125	3
36+00.00	60	95	18	110	234	118	211	394	217	282	307	400	20
37+00.00	100	50	1	70	270	35	333	664	252	327	641	833	144
38+00.00	100	42	2	70	172	4	259	835	256	333	900	1,170	232
39+00.00	100	46	1	70	164	5	259	999	261	339	1,159	1,507	313
40+00.00	100	55	0	70	188	2	259	1,187	263	342	1,419	1,844	420
41+00.00	100	79	0	70	249	1	259	1,436	263	342	1,678	2,181	591
42+00.00	100	73	2	70	282	3	259	1,718	267	347	1,937	2,518	791
43+00.00	100	53	1	70	233	6	259	1,951	273	354	2,196	2,855	938
44+00.00	100	69	1	70	224	4	259	2,176	276	359	2,456	3,192	1,080
45+00.00	100	64	11	70	246	22	259	2,422	298	388	2,715	3,529	1,219
46+00.00	100	61	40	60	232	96	241	2,654	394	513	2,956	3,842	1,254
47+00.00	100	128	55	70	350	177	241	3,003	571	742	3,196	4,155	1,302
48+00.00	100	204	300	0	614	656	130	3,617	1,227	1,596	3,326	4,324	1,024
49+00.00	100	162	292	0	678	1,095	0	4,295	2,322	3,019	3,326	4,324	278
49+50.00	50	0	198	30	150	453	28	4,445	2,776	3,608	3,354	4,360	-169
						WINDSOR WAY - STAGE 3B SUBTOTAL:		4,445	2,776	3,608	3,354	4,360	-169
						DIVISION 1 - STAGE 3B TOTAL:		**33,530**	**11,171**	**14,522**	**12,391**	**16,108**	**15,291**

DIVISION 2

STATION	DISTANCE	AREA (SF)			INCREMENTAL VOLUME (CY) (UNADJUSTED)			CUMULATIVE VOLUME (CY)					MASS ORDINATE
		CUT	FILL	EBS	CUT	FILL	EBS	CUT/ COMMON	UNEXPANDED FILL	EXPANDED FILL 1.30	UNEXPANDED EBS	EXPANDED EBS BACKFILL 1.30	
DIVISION 2 - STAGE 1													
USH 51 SB													
519+00.00		3,637	0	0	0	0	0	0	0	0	0	0	0
520+00.00	100	3,814	0	0	13,798	0	0	13,798	0	0	0	0	13,798
521+00.00	100	3,403	0	0	13,365	0	0	27,163	0	0	0	0	27,163
522+00.00	100	3,017	0	0	11,889	0	0	39,052	0	0	0	0	39,052
523+00.00	100	2,741	0	0	10,663	0	0	49,715	0	0	0	0	49,715
524+00.00	100	2,592	0	0	9,877	0	0	59,592	0	0	0	0	59,592
525+00.00	100	2,080	0	0	8,652	0	0	68,245	0	0	0	0	68,245
526+00.00	100	1,128	0	0	5,941	0	0	74,185	0	0	0	0	74,185
527+00.00	100	115	64	0	2,302	119	0	76,487	119	155	0	0	76,332
528+00.00	100	14	546	0	239	1,130	0	76,725	1,249	1,624	0	0	75,102
529+00.00	100	0	880	0	26	2,640	0	76,752	3,888	5,055	0	0	71,697
530+00.00	100	0	1,057	0	0	3,587	0	76,752	7,476	9,719	0	0	67,033
531+00.00	100	0	1,108	0	0	4,010	0	76,752	11,486	14,932	0	0	61,820
532+00.00	100	0	1,020	0	0	3,941	0	76,752	15,428	20,056	0	0	56,696
533+00.00	100	0	1,094	0	0	3,914	0	76,752	19,342	25,145	0	0	51,607
534+00.00	100	0	1,109	0	0	4,079	0	76,752	23,421	30,447	0	0	46,305
535+00.00	100	0	1,161	0	0	4,204	0	76,752	27,625	35,912	0	0	40,840
536+00.00	100	0	1,244	0	0	4,455	0	76,752	32,080	41,703	0	0	35,048
537+00.00	100	0	1,155	0	0	4,443	0	76,752	36,523	47,480	0	0	29,272
538+00.00	100	0	1,020	0	0	4,028	0	76,752	40,550	52,716	0	0	24,036
539+00.00	100	0	651	0	0	3,094	0	76,752	43,644	56,738	0	0	20,014
540+00.00	100	0	288	0	0	1,739	0	76,752	45,383	58,998	0	0	17,754
541+00.00	100	247	0	0	458	534	0	77,210	45,917	59,692	0	0	17,518
542+00.00	100	530	0	0	1,441	0	0	78,651	45,917	59,692	0	0	18,959
543+00.00	100	476	0	0	1,864	0	0	80,515	45,917	59,692	0	0	20,823
544+00.00	100	213	0	0	1,275	0	0	81,790	45,917	59,692	0	0	22,098
545+00.00	100	168	0	0	705	0	0	82,495	45,917	59,692	0	0	22,803
546+00.00	100	156	0	0	599	0	0	83,094	45,917	59,692	0	0	23,402
547+00.00	100	362	0	0	959	0	0	84,053	45,917	59,692	0	0	24,361
548+00.00	100	665	0	0	1,902	0	0	85,955	45,917	59,692	0	0	26,263

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DIVISION 2

STATION	DISTANCE	AREA (SF)			INCREMENTAL VOLUME (CY) (UNADJUSTED)			CUMULATIVE VOLUME (CY)					MASS ORDINATE
		CUT	FILL	EBS	CUT	FILL	EBS	CUT/ COMMON	UNEXPANDED FILL	EXPANDED FILL 1.30	UNEXPANDED EBS	EXPANDED EBS BACKFILL 1.30	
DIVISION 2 - STAGE 1													
549+00.00	100	668	0	0	2,468	0	0	88,423	45,917	59,692	0	0	28,731
550+00.00	100	738	0	0	2,603	0	0	91,026	45,917	59,692	0	0	31,334
551+00.00	100	364	0	0	2,041	0	0	93,067	45,917	59,692	0	0	33,375
552+00.00	100	132	11	110	918	20	0	93,985	45,937	59,718	0	0	34,267
553+00.00	100	71	119	0	375	241	204	94,361	46,178	60,031	204	265	34,269
554+00.00	100	31	264	0	190	709	0	94,550	46,886	60,952	204	265	33,537
555+00.00	100	0	200	0	58	859	0	94,608	47,745	62,069	204	265	32,478
556+00.00	100	100	0	125	186	370	231	94,794	48,115	62,550	435	566	32,113
557+00.00	100	19	12	100	221	23	417	95,015	48,138	62,580	852	1,107	32,180
558+00.00	100	11	37	100	56	91	370	95,071	48,229	62,698	1,222	1,589	32,007
559+00.00	100	0	123	0	21	296	185	95,092	48,525	63,082	1,407	1,830	31,588
560+00.00	100	0	250	0	0	689	0	95,092	49,214	63,978	1,407	1,830	30,691
561+00.00	100	0	401	0	0	1,205	0	95,092	50,419	65,544	1,407	1,830	29,125
562+00.00	100	0	569	0	0	1,795	0	95,092	52,214	67,878	1,407	1,830	26,791
						USH 51 SB - STAGE 1 SUBTOTAL:		95,092	52,214	67,878	1,407	1,830	26,791

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DIVISION 2

STATION	DISTANCE	AREA (SF)			INCREMENTAL VOLUME (CY) (UNADJUSTED)			CUMULATIVE VOLUME (CY)					MASS ORDINATE
		CUT	FILL	EBS	CUT	FILL	EBS	CUT/ COMMON	UNEXPANDED FILL	EXPANDED FILL 1.30	UNEXPANDED EBS	EXPANDED EBS BACKFILL 1.30	
DIVISION 2 - STAGE 1													
USH 51 WIDENING													
562+00.00	100	0	525										
563+00.00	100	0	532	0	0	1,958	0	0	1,958	2,546	0	0	-2,546
564+00.00	100	0	503	0	0	1,917	0	0	3,875	5,038	0	0	-5,038
565+00.00	100	0	368	0	0	1,614	0	0	5,489	7,136	0	0	-7,136
566+00.00	100	0	125	0	0	914	0	0	6,403	8,323	0	0	-8,323
567+00.00	100	82	11	0	152	251	0	152	6,654	8,650	0	0	-8,497
568+00.00	100	165	2	0	458	24	0	610	6,677	8,681	0	0	-8,071
569+00.00	100	91	0	0	474	4	0	1,084	6,682	8,687	0	0	-7,602
570+00.00	100	35	43	0	234	80	0	1,319	6,762	8,791	0	0	-7,472
571+00.00	100	22	96	0	107	258	0	1,426	7,021	9,127	0	0	-7,701
572+00.00	100	23	93	0	84	350	0	1,510	7,370	9,581	0	0	-8,072
573+00.00	100	0	0	0	42	171	0	1,552	7,542	9,804	0	0	-8,252
					USH 51 SB - STAGE 1 SUBTOTAL:			1,552	7,542	9,804	0	0	-8,252
NORTH TOWNE ROAD													
246+31.71	0	37	21	0	0	0	0	0	0	0	0	0	0
246+50.00	18	37	21	60	25	14	0	25	14	19	0	0	7
247+00.00	50	23	24	60	56	42	111	81	56	73	111	144	-26
247+50.00	50	250	30	170	252	50	213	333	107	139	324	421	97
247+90.00	40	160	44	170	303	55	252	637	162	210	576	749	254
248+00.00	10	162	38	170	60	15	63	696	177	230	639	831	275
248+25.00	25	162	28	170	150	30	157	847	207	269	796	1,035	338
248+50.00	25	133	23	170	137	24	157	983	231	300	954	1,240	397
249+00.00	50	124	42	170	238	61	315	1,221	291	379	1,269	1,649	462
249+50.00	50	138	43	90	243	79	241	1,464	371	482	1,509	1,962	529
250+00.00	50	19	103	90	146	136	167	1,609	506	658	1,676	2,179	449
250+50.00	50	16	97	90	33	185	167	1,642	692	899	1,843	2,395	191
251+00.00	50	64	124	50	75	205	130	1,717	896	1,165	1,972	2,564	-40
252+00.00	100	35	1	0	184	232	46	1,901	1,128	1,467	2,019	2,624	-171
252+15.05	15	35	1	0	20	1	0	1,921	1,129	1,467	2,019	2,624	-152
					NORTH TOWNE ROAD - STAGE 1 SUBTOTAL:			1,921	1,129	1,467	2,019	2,624	-152

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DIVISION 2

STATION	DISTANCE	AREA (SF)			INCREMENTAL VOLUME (CY) (UNADJUSTED)			CUMULATIVE VOLUME (CY)					MASS ORDINATE
		CUT	FILL	EBS	CUT	FILL	EBS	CUT/ COMMON	UNEXPANDED FILL	EXPANDED FILL 1.30	UNEXPANDED EBS	EXPANDED EBS BACKFILL 1.30	
DIVISION 2 - STAGE 1													
TEMPORARY ROAD 'TR1'													
108+00.00		0	0	0	0	0	0	0	0	0	0	0	0
109+00.00	100	20	2	0	37	3	0	37	3	4	0	0	32
110+00.00	100	13	7	0	60	17	0	97	20	26	0	0	70
111+00.00	100	49	10	0	114	32	0	211	53	69	0	0	143
112+00.00	100	48	7	0	179	32	0	390	85	110	0	0	280
113+00.00	100	52	7	0	184	27	0	574	111	145	0	0	430
114+00.00	100	20	63	0	133	131	0	707	242	314	0	0	393
115+00.00	100	1	150	0	38	395	0	745	637	828	0	0	-83
116+00.00	100	0	225	0	1	695	0	746	1,332	1,732	0	0	-986
117+00.00	100	10	174	0	19	739	0	765	2,071	2,693	0	0	-1,927
118+00.00	100	0	365	0	19	998	0	785	3,070	3,990	0	0	-3,206
119+00.00	100	32	271	100	59	1,179	185	844	4,248	5,523	185	241	-4,735
120+00.00	100	48	156	100	148	791	370	992	5,039	6,551	556	722	-5,726
121+00.00	100	208	16	100	475	318	370	1,467	5,357	6,965	926	1,204	-5,776
122+00.00	100	426	0	100	1,174	29	370	2,641	5,386	7,002	1,296	1,685	-4,750
123+00.00	100	647	93	100	1,987	172	370	4,628	5,559	7,226	1,667	2,167	-3,098
124+00.00	100	126	92	0	1,431	343	185	6,059	5,902	7,673	1,852	2,407	-2,169
125+00.00	100	374	0	0	925	171	0	6,985	6,073	7,895	1,852	2,407	-1,466
126+00.00	100	104	132	0	886	245	0	7,870	6,319	8,214	1,852	2,407	-900
127+00.00	100	22	244	0	233	698	0	8,103	7,016	9,121	1,852	2,407	-1,574
128+00.00	100	10	485	0	59	1,351	0	8,162	8,368	10,878	1,852	2,407	-3,271
129+00.00	100	8	542	0	33	1,902	0	8,195	10,269	13,350	1,852	2,407	-5,711
130+00.00	100	8	560	0	29	2,040	0	8,225	12,309	16,002	1,852	2,407	-8,333
131+00.00	100	1	812	0	18	2,541	0	8,242	14,850	19,305	1,852	2,407	-11,618
132+00.00	100	0	955	0	3	3,273	0	8,245	18,123	23,560	1,852	2,407	-15,871
133+00.00	100	1	1,027	0	3	3,670	0	8,248	21,793	28,332	1,852	2,407	-20,639
134+00.00	100	0	1,026	0	2	3,802	0	8,251	25,596	33,274	1,852	2,407	-25,579
135+00.00	100	0	1,042	0	0	3,830	0	8,251	29,425	38,253	1,852	2,407	-30,558
136+00.00	100	0	1,073	0	0	3,917	0	8,251	33,342	43,344	1,852	2,407	-35,649
137+00.00	100	0	991	0	0	3,822	0	8,251	37,164	48,313	1,852	2,407	-40,617

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DIVISION 2

STATION	DISTANCE	AREA (SF)			INCREMENTAL VOLUME (CY) (UNADJUSTED)			CUMULATIVE VOLUME (CY)					MASS ORDINATE
		CUT	FILL	EBS	CUT	FILL	EBS	CUT/ COMMON	UNEXPANDED FILL	EXPANDED FILL 1.30	UNEXPANDED EBS	EXPANDED EBS BACKFILL 1.30	
DIVISION 2 - STAGE 1													
138+00.00	100	0	468	0	0	2,701	0	8,251	39,865	51,824	1,852	2,407	-44,129
139+00.00	100	0	228	0	0	1,289	0	8,251	41,154	53,500	1,852	2,407	-45,805
140+00.00	100	3	20	0	5	460	0	8,256	41,614	54,098	1,852	2,407	-46,398
141+00.00	100	277	0	0	518	37	0	8,773	41,651	54,146	1,852	2,407	-45,928
142+00.00	100	541	0	0	1,514	0	0	10,287	41,651	54,146	1,852	2,407	-44,414
143+00.00	100	693	0	0	2,284	0	0	12,572	41,651	54,146	1,852	2,407	-42,130
144+00.00	100	158	0	0	1,576	0	0	14,147	41,651	54,146	1,852	2,407	-40,554
145+00.00	100	71	0	0	424	0	0	14,571	41,651	54,146	1,852	2,407	-40,131
146+00.00	100	33	3	0	192	6	0	14,763	41,657	54,154	1,852	2,407	-39,947
147+00.00	100	36	2	0	127	10	0	14,890	41,667	54,167	1,852	2,407	-39,833
148+00.00	100	34	1	0	130	6	0	15,020	41,674	54,176	1,852	2,407	-39,712
149+00.00	100	28	0	0	116	3	0	15,135	41,677	54,179	1,852	2,407	-39,600
150+00.00	100	28	0	0	104	0	0	15,239	41,677	54,179	1,852	2,407	-39,496
151+00.00	100	29	0	0	105	0	0	15,344	41,677	54,179	1,852	2,407	-39,391
152+00.00	100	0	0	0	53	0	0	15,398	41,677	54,179	1,852	2,407	-39,337
153+00.00	100	0	0	0	0	0	0	15,398	41,677	54,179	1,852	2,407	-39,337
						TEMPORARY ROAD 'TR1' - STAGE 1 SUBTOTAL:		15,398	41,677	54,179	1,852	2,407	-39,337

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DIVISION 2

STATION	DISTANCE	AREA (SF)			INCREMENTAL VOLUME (CY) (UNADJUSTED)			CUMULATIVE VOLUME (CY)					
		CUT	FILL	EBS	CUT	FILL	EBS	CUT/ COMMON	UNEXPANDED FILL	EXPANDED FILL 1.30	UNEXPANDED EBS	EXPANDED EBS BACKFILL 1.30	MASS ORDINATE
DIVISION 2 - STAGE 1													
TEMPORARY ROAD 'TR2'													
135+00.00		0	0	0	0	0	0	0	0	0	0	0	0
136+00.00	100	0	0	0	0	0	0	0	0	0	0	0	0
137+00.00	100	0	0	0	0	0	0	0	0	0	0	0	0
138+00.00	100	0	406	0	0	752	0	0	752	978	0	0	-978
139+00.00	100	0	235	0	0	1,187	0	0	1,939	2,521	0	0	-2,521
140+00.00	100	209	0	0	388	435	0	388	2,374	3,086	0	0	-2,698
141+00.00	100	993	0	0	2,226	0	0	2,614	2,374	3,086	0	0	-472
142+00.00	100	2,101	0	0	5,730	0	0	8,344	2,374	3,086	0	0	5,258
143+00.00	100	3,026	0	0	9,495	0	0	17,839	2,374	3,086	0	0	14,753
143+30.83	31	3,181	0	0	3,544	0	0	21,383	2,374	3,086	0	0	18,297
					TEMPORARY ROAD 'TR2' - STAGE 1 SUBTOTAL:			21,383	2,374	3,086	0	0	18,297
TEMPORARY ROAD 'TR3'													
48+50.00		0	0	0	0	0	0	0	0	0	0	0	0
49+00.00	50	92	0	0	85	0	0	85	0	0	0	0	85
49+50.00	50	90	0	0	169	0	0	254	0	0	0	0	254
50+00.00	50	0	0	0	83	0	0	337	0	0	0	0	337
50+50.00	50	40	0	0	37	0	0	374	0	0	0	0	374
51+00.00	50	0	0	0	37	0	0	411	0	0	0	0	411
					TEMPORARY ROAD 'TR3' - STAGE 1 SUBTOTAL:			411	0	0	0	0	411
					DIVISION 2 - STAGE 1 TOTAL:			**135,757**	**104,935**	**136,416**	**5,278**	**6,861**	**-2,242**

DIVISION 2

STATION	DISTANCE	AREA (SF)			INCREMENTAL VOLUME (CY) (UNADJUSTED)			CUMULATIVE VOLUME (CY)					MASS ORDINATE
		CUT	FILL	EBS	CUT	FILL	EBS	CUT/ COMMON	UNEXPANDED FILL	EXPANDED FILL 1.30	UNEXPANDED EBS	EXPANDED EBS BACKFILL 1.30	
DIVISION 2 - STAGE 2													
GRINDE ROAD													
29+00.00		63	0	0	0	0	0	0	0	0	0	0	0
29+55.00	55	96	0	0	162	0	0	162	0	0	0	0	162
30+00.00	45	191	0	90	240	0	92	402	0	0	92	119	374
30+10.00	10	197	0	0	72	0	17	474	0	0	108	141	441
30+32.00	22	200	14	90	162	6	20	636	6	7	128	167	590
					GRINDE ROAD - STAGE 2 SUBTOTAL:			636	6	7	128	167	590
DRIVEWAY 'D4'													
10+00.00		11	0	0	0	0	0	0	0	0	0	0	0
11+00.00	100	0	5	0	20	10	0	20	10	13	0	0	7
12+00.00	100	0	272	0	0	514	0	20	524	681	0	0	-661
13+00.00	100	11	0	0	21	504	0	41	1,027	1,335	0	0	-1,294
14+00.00	100	1	9	0	22	16	0	64	1,044	1,357	0	0	-1,293
15+00.00	100	0	6	0	2	27	0	66	1,070	1,392	0	0	-1,326
16+00.00	100	5	0	0	11	10	0	76	1,081	1,405	0	0	-1,329
17+00.00	100	7	0	0	23	0	0	100	1,081	1,405	0	0	-1,305
18+00.00	100	0	35	0	13	65	0	113	1,146	1,489	0	0	-1,376
19+00.00	100	0	135	0	0	315	0	113	1,461	1,899	0	0	-1,786
20+00.00	100	0	167	0	0	560	0	113	2,021	2,627	0	0	-2,514
21+00.00	100	0	168	0	0	621	0	113	2,641	3,434	0	0	-3,321
22+00.00	100	0	170	0	0	627	0	113	3,268	4,248	0	0	-4,135
23+00.00	100	0	51	0	0	409	0	113	3,677	4,780	0	0	-4,667
24+00.00	100	0	8	0	0	109	0	113	3,786	4,922	0	0	-4,809
25+00.00	100	2	2	0	3	19	0	117	3,805	4,947	0	0	-4,831
26+00.00	100	11	0	0	24	4	0	140	3,809	4,952	0	0	-4,812
27+00.00	100	1	2	0	23	3	0	163	3,813	4,957	0	0	-4,794
28+00.00	100	0	32	0	3	62	0	166	3,875	5,038	0	0	-4,872
29+00.00	100	0	100	0	0	244	0	166	4,119	5,355	0	0	-5,189
30+00.00	100	0	69	0	0	311	0	166	4,430	5,759	0	0	-5,594
31+00.00	100	12	0	0	23	127	0	189	4,557	5,924	0	0	-5,736
					DRIVEWAY 'D4' - STAGE 2 SUBTOTAL:			189	4,557	5,924	0	0	-5,736
					DIVISION 2 - STAGE 2 TOTAL:			**824**	**4,563**	**5,932**	**128**	**167**	**-5,146**

DIVISION 2

STATION	DISTANCE	AREA (SF)			INCREMENTAL VOLUME (CY) (UNADJUSTED)			CUMULATIVE VOLUME (CY)					MASS ORDINATE
		CUT	FILL	EBS	CUT	FILL	EBS	CUT/ COMMON	UNEXPANDED FILL	EXPANDED FILL 1.30	UNEXPANDED EBS	EXPANDED EBS BACKFILL 1.30	
DIVISION 2 - STAGE 3B													
USH 51 SB													
506+00.00		0	1,021	0	0	0	0	0	0	0	0	0	0
507+00.00	100	0	718	0	0	3,220	0	0	3,220	4,186	0	0	-4,186
508+00.00	100	0	478	0	0	2,215	0	0	5,435	7,065	0	0	-7,065
509+00.00	100	0	272	0	0	1,390	0	0	6,825	8,872	0	0	-8,872
510+00.00	100	22	104	0	42	696	0	42	7,521	9,777	0	0	-9,735
511+00.00	100	118	45	0	261	275	0	302	7,796	10,134	0	0	-9,832
512+00.00	100	226	0	0	638	83	0	940	7,879	10,243	0	0	-9,302
513+00.00	100	296	0	0	967	0	0	1,907	7,879	10,243	0	0	-8,336
514+00.00	100	286	0	0	1,078	0	0	2,985	7,879	10,243	0	0	-7,258
515+00.00	100	274	0	0	1,037	0	0	4,022	7,879	10,243	0	0	-6,221
516+00.00	100	136	0	0	758	0	0	4,780	7,879	10,243	0	0	-5,463
517+00.00	100	127	28	0	486	52	0	5,266	7,931	10,310	0	0	-5,044
518+00.00	100	142	41	0	498	129	0	5,764	8,060	10,478	0	0	-4,714
519+00.00	100	117	0	0	480	77	0	6,244	8,136	10,577	0	0	-4,334
						USH 51 SB - STAGE 3B SUBTOTAL:		6,244	8,136	10,577	0	0	-4,334
RAMP 'SN'													
482+00.00		14	324	0	0	0	0	0	0	0	0	0	0
483+00.00	100	15	272	0	54	1,104	0	54	1,104	1,435	0	0	-1,381
484+00.00	100	15	215	0	56	903	0	111	2,007	2,609	0	0	-2,498
485+00.00	100	15	218	0	57	803	0	168	2,809	3,652	0	0	-3,484
486+00.00	100	7	450	0	41	1,238	0	209	4,047	5,262	0	0	-5,053
487+00.00	100	29	691	0	67	2,113	0	275	6,160	8,008	0	0	-7,733
488+00.00	100	68	938	0	181	3,016	0	456	9,176	11,929	0	0	-11,473
489+00.00	100	73	1,251	0	261	4,054	0	718	13,231	17,200	0	0	-16,482
490+00.00	100	9	1,468	0	152	5,037	0	870	18,267	23,747	0	0	-22,877
491+00.00	100	0	1,836	0	18	6,118	0	888	24,385	31,701	0	0	-30,813

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DIVISION 2

STATION	DISTANCE	AREA (SF)			INCREMENTAL VOLUME (CY) (UNADJUSTED)			CUMULATIVE VOLUME (CY)					MASS ORDINATE
		CUT	FILL	EBS	CUT	FILL	EBS	CUT/ COMMON	UNEXPANDED FILL	EXPANDED FILL 1.30	UNEXPANDED EBS	EXPANDED EBS BACKFILL 1.30	
DIVISION 2 - STAGE 3B													
492+00.00	100	88	2,057	0	164	7,209	0	1,052	31,594	41,072	0	0	-40,020
493+00.00	100	111	2,022	0	369	7,554	0	1,421	39,148	50,892	0	0	-49,471
494+00.00	100	0	2,372	0	206	8,138	0	1,626	47,285	61,471	0	0	-59,845
495+00.00	100	27	1,818	0	50	7,760	0	1,677	55,046	71,559	0	0	-69,883
496+00.00	100	11	1,146	0	70	5,489	0	1,747	60,534	78,695	0	0	-76,948
497+00.00	100	65	429	0	140	2,916	0	1,887	63,450	82,485	0	0	-80,598
498+00.00	100	206	11	70	502	815	130	2,390	64,266	83,545	130	169	-81,194
498+07.69	8	124	3	70	47	2	21	2,437	64,268	83,548	150	195	-81,156
					RAMP 'SN' - STAGE 3B SUBTOTAL:			2,437	64,268	83,548	150	195	-81,156
RAMP 'SX'													
502+12.18		417	32	0	0	0	0	0	0	0	0	0	0
503+00.00	88	105	180	0	849	345	0	849	345	449	0	0	400
504+00.00	100	31	388	0	251	1,052	0	1,100	1,397	1,816	0	0	-717
505+00.00	100	10	516	0	75	1,675	0	1,175	3,072	3,994	0	0	-2,819
506+00.00	100	7	592	0	32	2,052	0	1,207	5,125	6,662	0	0	-5,455
507+00.00	100	1	646	0	16	2,294	0	1,223	7,418	9,644	0	0	-8,421
508+00.00	100	0	674	0	2	2,445	0	1,225	9,863	12,822	0	0	-11,597
509+00.00	100	0	633	0	0	2,420	0	1,225	12,283	15,968	0	0	-14,743
510+00.00	100	0	380	0	0	1,877	0	1,225	14,160	18,408	0	0	-17,184
511+00.00	100	0	249	0	1	1,165	0	1,225	15,325	19,923	0	0	-18,698
512+00.00	100	0	263	0	1	947	0	1,226	16,272	21,153	0	0	-19,927
513+00.00	100	5	203	0	9	861	0	1,235	17,133	22,273	0	0	-21,038
514+00.00	100	18	95	0	43	550	0	1,278	17,683	22,988	0	0	-21,710
515+00.00	100	32	24	0	93	220	0	1,371	17,903	23,274	0	0	-21,902
516+00.00	100	42	15	0	137	72	0	1,508	17,975	23,367	0	0	-21,858
					RAMP 'SX' - STAGE 3B SUBTOTAL:			1,508	17,975	23,367	0	0	-21,858
					DIVISION 2 - STAGE 3B TOTAL:			**10,189**	**90,379**	**117,492**	**150**	**195**	**-107,348**

DIVISION 2

STATION	DISTANCE	AREA (SF)			INCREMENTAL VOLUME (CY) (UNADJUSTED)			CUMULATIVE VOLUME (CY)					MASS ORDINATE
		CUT	FILL	EBS	CUT	FILL	EBS	CUT/ COMMON	UNEXPANDED FILL	EXPANDED FILL 1.30	UNEXPANDED EBS	EXPANDED EBS BACKFILL 1.30	
DIVISION 2 - STAGE 4													
NORTH TOWNE ROAD													
220+00.00	50	174	5	80	0	0	0	0	0	0	0	0	0
220+50.00	50	160	7	80	310	11	148	310	11	14	148	193	251
221+00.00	50	102	9	80	243	15	148	553	26	34	296	385	430
221+50.00	50	94	17	80	181	24	148	733	50	65	444	578	535
222+00.00	50	92	19	80	172	33	148	905	84	109	593	770	619
222+50.00	50	91	27	80	170	43	148	1,075	127	164	741	963	688
223+00.00	50	88	44	80	166	66	148	1,241	192	250	889	1,156	724
223+50.00	50	87	45	80	162	83	148	1,403	275	357	1,037	1,348	734
224+00.00	50	89	39	80	163	78	148	1,565	353	459	1,185	1,541	750
224+50.00	50	90	46	80	166	79	148	1,731	433	562	1,333	1,733	769
225+00.00	50	82	38	80	159	78	148	1,891	511	664	1,481	1,926	782
225+50.00	50	67	15	80	138	49	148	2,029	560	728	1,630	2,119	812
226+00.00	50	77	21	80	134	34	148	2,162	594	772	1,778	2,311	857
226+50.00	50	61	25	80	128	43	148	2,290	637	828	1,926	2,504	884
227+00.00	50	55	28	80	108	50	148	2,399	687	893	2,074	2,696	884
227+50.00	50	21	56	80	71	78	148	2,470	765	994	2,222	2,889	809
228+00.00	50	0	153	80	20	193	148	2,490	958	1,246	2,370	3,081	533
228+50.00	50	0	273	0	0	394	74	2,490	1,353	1,758	2,444	3,178	-2
229+00.00	50	0	290	0	0	521	0	2,490	1,874	2,436	2,444	3,178	-680
229+50.00	50	16	77	80	15	339	74	2,504	2,213	2,877	2,519	3,274	-1,128
230+00.00	50	196	24	0	196	93	74	2,700	2,306	2,997	2,593	3,370	-1,075
230+50.00	50	309	0	80	467	22	74	3,167	2,328	3,026	2,667	3,467	-659
231+00.00	50	133	227	80	409	210	148	3,576	2,537	3,299	2,815	3,659	-567
231+50.00	50	0	553	0	123	722	74	3,699	3,260	4,238	2,889	3,756	-1,405
232+00.00	50	0	488	0	0	964	0	3,699	4,224	5,491	2,889	3,756	-2,658
232+50.00	50	0	445	0	0	864	0	3,699	5,087	6,614	2,889	3,756	-3,781
233+00.00	50	0	403	0	0	785	0	3,699	5,872	7,634	2,889	3,756	-4,801
233+50.00	50	0	346	0	0	693	0	3,699	6,565	8,535	2,889	3,756	-5,702
234+00.00	50	0	316	50	0	613	46	3,699	7,178	9,332	2,935	3,816	-6,513
234+50.00	50	0	287	70	0	558	111	3,699	7,737	10,058	3,046	3,960	-7,272

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DIVISION 2

STATION	DISTANCE	AREA (SF)			INCREMENTAL VOLUME (CY) (UNADJUSTED)			CUMULATIVE VOLUME (CY)					MASS ORDINATE
		CUT	FILL	EBS	CUT	FILL	EBS	CUT/ COMMON	UNEXPANDED FILL	EXPANDED FILL 1.30	UNEXPANDED EBS	EXPANDED EBS BACKFILL 1.30	
DIVISION 2 - STAGE 4													
235+00.00	50	0	261	100	0	507	157	3,699	8,244	10,717	3,204	4,165	-7,979
235+50.00	50	0	224	90	0	449	176	3,699	8,693	11,301	3,380	4,394	-8,615
236+00.00	50	0	181	90	0	375	167	3,699	9,068	11,789	3,546	4,610	-9,153
236+50.00	50	5	92	90	4	253	167	3,704	9,321	12,117	3,713	4,827	-9,527
237+00.00	50	57	35	90	57	118	167	3,761	9,439	12,270	3,880	5,044	-9,673
237+50.00	50	194	0	90	233	33	167	3,994	9,471	12,313	4,046	5,260	-9,533
238+00.00	50	125	0	0	232	0	83	4,225	9,471	12,313	4,130	5,369	-9,326
238+50.00	50	242	0	0	340	0	0	4,566	9,471	12,313	4,130	5,369	-8,986
239+00.00	50	215	0	0	423	0	0	4,989	9,471	12,313	4,130	5,369	-8,563
239+42.77	43	215	0	0	340	0	0	5,329	9,471	12,313	4,130	5,369	-8,223
					NORTH TOWNE RD - STAGE 4 SUBTOTAL:			5,329	9,471	12,313	4,130	5,369	-8,223
CTH V													
14+20.00		116	52	100	0	0	0	0	0	0	0	0	0
14+50.00	30	125	38	130	134	50	128	134	50	65	128	166	30
15+00.00	50	151	47	210	255	79	315	389	129	168	443	575	88
15+50.00	50	219	56	140	343	96	324	732	225	292	767	997	209
16+00.00	50	122	110	150	317	154	269	1,048	379	493	1,035	1,346	245
16+50.00	50	122	137	110	227	229	241	1,275	609	791	1,276	1,659	101
17+00.00	50	143	117	180	245	236	269	1,520	845	1,098	1,544	2,008	-41
17+50.00	50	165	131	170	285	230	324	1,806	1,075	1,397	1,869	2,429	-152
18+00.00	50	190	144	170	308	243	315	2,113	1,318	1,713	2,183	2,838	-255
18+50.00	50	199	156	170	360	278	315	2,474	1,596	2,074	2,498	3,248	-350
19+00.00	50	217	148	150	385	282	296	2,858	1,878	2,441	2,794	3,633	-421
19+50.00	50	236	156	150	419	282	278	3,278	2,160	2,808	3,072	3,994	-451
20+00.00	50	210	6	0	413	150	139	3,691	2,310	3,003	3,211	4,174	-276
20+50.00	50	168	18	0	350	22	0	4,041	2,332	3,032	3,211	4,174	46
20+61.59	12	168	18	0	72	8	0	4,113	2,340	3,042	3,211	4,174	108

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DIVISION 2

STATION	DISTANCE	AREA (SF)			INCREMENTAL VOLUME (CY) (UNADJUSTED)			CUMULATIVE VOLUME (CY)					MASS ORDINATE
		CUT	FILL	EBS	CUT	FILL	EBS	CUT/ COMMON	UNEXPANDED FILL	EXPANDED FILL 1.30	UNEXPANDED EBS	EXPANDED EBS BACKFILL 1.30	
DIVISION 2 - STAGE 4													
22+50.00		218	0	0	0	0	0	4,113	2,340	3,042	3,211	4,174	108
23+00.00	50	255	4	50	437	4	46	4,551	2,344	3,047	3,257	4,235	527
23+50.00	50	258	0	80	474	4	120	5,025	2,348	3,052	3,378	4,391	960
24+00.00	50	271	0	110	490	0	176	5,515	2,348	3,052	3,554	4,620	1,397
24+50.00	50	402	0	120	623	0	213	6,138	2,348	3,052	3,767	4,897	1,956
25+00.00	50	141	10	100	503	9	204	6,641	2,357	3,064	3,970	5,161	2,386
25+50.00	50	138	0	90	258	9	176	6,899	2,366	3,075	4,146	5,390	2,580
25+69.41	19	138	0	0	99	0	83	6,998	2,366	3,075	4,230	5,499	2,654
27+35.34		293	5	0	0	0	0	6,998	2,366	3,075	4,230	5,499	2,654
27+50.00	15	293	5	80	159	3	22	7,157	2,368	3,079	4,251	5,527	2,803
28+00.00	50	11	68	0	281	67	74	7,439	2,435	3,166	4,325	5,623	2,975
28+50.00	50	55	24	80	61	85	74	7,499	2,520	3,276	4,399	5,719	2,904
29+00.00	50	65	7	100	111	28	167	7,611	2,548	3,313	4,566	5,936	2,928
29+50.00	50	74	4	100	129	10	185	7,739	2,558	3,326	4,751	6,177	2,988
30+00.00	50	77	7	100	140	10	185	7,879	2,568	3,339	4,937	6,417	3,060
30+50.00	50	87	39	100	152	43	185	8,032	2,611	3,394	5,122	6,658	3,101
30+75.30	25	87	39	0	82	37	47	8,113	2,648	3,442	5,169	6,719	3,121
32+40.35		0	335	0	0	0	0	8,113	2,648	3,442	5,169	6,719	3,121
32+50.00	10	0	335	0	0	120	0	8,113	2,767	3,597	5,169	6,719	2,965
33+00.00	50	0	379	0	0	661	0	8,113	3,428	4,456	5,169	6,719	2,107
33+50.00	50	151	411	0	140	732	0	8,253	4,159	5,407	5,169	6,719	1,296
34+00.00	50	56	449	180	192	797	167	8,446	4,956	6,443	5,335	6,936	402
34+50.00	50	38	354	180	88	743	333	8,533	5,699	7,409	5,669	7,369	-576
35+00.00	50	32	370	160	65	670	315	8,599	6,369	8,280	5,983	7,778	-1,476
35+50.00	50	41	134	160	68	466	296	8,666	6,836	8,887	6,280	8,164	-2,104
36+00.00	50	41	128	150	76	243	287	8,742	7,078	9,202	6,567	8,537	-2,430
36+50.00	50	39	121	130	73	230	259	8,815	7,308	9,501	6,826	8,874	-2,733
37+00.00	50	41	108	120	74	211	231	8,889	7,519	9,775	7,057	9,175	-3,003
37+34.61	35	41	108	0	53	138	77	8,942	7,657	9,954	7,134	9,275	-3,152
						CTH V - STAGE 4 SUBTOTAL:		8,942	7,657	9,954	7,134	9,275	-3,152

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DIVISION 2

STATION	DISTANCE	AREA (SF)			INCREMENTAL VOLUME (CY) (UNADJUSTED)			CUMULATIVE VOLUME (CY)					
		CUT	FILL	EBS	CUT	FILL	EBS	CUT/ COMMON	UNEXPANDED FILL	EXPANDED FILL 1.30	UNEXPANDED EBS	EXPANDED EBS BACKFILL 1.30	MASS ORDINATE
DIVISION 2 - STAGE 4													
NT C CHAIN													
10+00.00		54	139	3	0	0	0	0	0	0	0	0	0
10+50.00	50	61	132	3	106	251	6	106	251	327	6	7	-222
11+00.00	50	57	127	3	109	240	6	215	492	639	11	14	-427
11+04.59	5	57	127	3	10	22	1	225	513	667	12	15	-446
11+81.14		214	0	11	0	0	0	225	513	667	12	15	-446
12+00.00	19	214	0	11	150	0	8	375	513	667	19	25	-298
12+50.00	50	274	12	14	452	11	23	827	524	681	42	55	133
12+79.23	29	274	12	14	297	13	15	1,124	537	698	58	75	409
						NT C CHAIN - STAGE 4 SUBTOTAL:		1,124	537	698	58	75	409
NT E CHAIN													
12+40.62	0	244	0	12	0	0	0	0	0	0	0	0	0
12+50.00	9	244	0	12	85	0	4	85	0	0	4	5	84
13+00.00	50	237	0	12	446	0	22	531	0	0	26	34	523
13+50.00	50	162	0	8	369	0	19	900	0	0	45	58	886
14+00.00	50	113	0	6	254	0	13	1,154	0	0	58	75	1,137
14+50.00	50	108	0	5	205	0	10	1,359	0	0	68	88	1,338
15+00.00	50	141	0	7	230	0	11	1,589	0	0	79	103	1,565
15+33.61	34	141	0	7	165	0	9	1,755	0	0	88	114	1,728
						NT C CHAIN - STAGE 4 SUBTOTAL:		1,755	0	0	88	114	1,728
NT H CHAIN													
10+00.00	0	194	0	10	0	0	0	0	0	0	0	0	0
10+50.00	50	168	0	8	335	0	17	335	0	0	17	22	330
11+00.00	50	238	0	12	376	0	19	711	0	0	35	46	701
11+41.25	41	238	0	12	364	0	18	1,075	0	0	54	70	1,059
						NT C CHAIN - STAGE 4 SUBTOTAL:		1,075	0	0	54	70	1,059

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DIVISION 2

STATION	DISTANCE	AREA (SF)			INCREMENTAL VOLUME (CY) (UNADJUSTED)			CUMULATIVE VOLUME (CY)					
		CUT	FILL	EBS	CUT	FILL	EBS	CUT/ COMMON	UNEXPANDED FILL	EXPANDED FILL 1.30	UNEXPANDED EBS	EXPANDED EBS BACKFILL 1.30	MASS ORDINATE
DIVISION 2 - STAGE 4													
NT CIRCLE CHAIN													
10+00.00	0	176	7	9	0	0	0	0	0	0	0	0	0
10+50.00	50	288	5	14	430	11	21	430	11	15	21	28	409
11+00.00	50	165	5	8	420	10	20	850	21	27	42	54	810
11+50.00	50	250	5	13	385	9	19	1,235	31	40	61	79	1,177
12+00.00	50	131	8	7	354	12	19	1,589	42	55	80	104	1,510
12+50.00	50	215	28	11	321	33	17	1,909	75	97	96	125	1,783
13+00.00	50	175	65	9	361	86	19	2,270	160	208	115	149	2,027
13+50.00	50	125	37	6	277	94	14	2,547	254	331	129	167	2,178
14+00.00	50	200	8	10	301	42	15	2,848	296	385	144	187	2,420
14+17.72	18	200	8	10	131	5	7	2,979	301	392	150	195	2,542
					NT C CHAIN - STAGE 4 SUBTOTAL:			2,979	301	392	150	195	2,542
SB B CHAIN													
10+00.00	0	27	19	1	0	0	0	0	0	0	0	0	0
10+50.00	50	57	34	3	78	49	4	78	49	63	4	5	14
11+00.00	50	65	32	3	113	61	6	191	109	142	9	12	46
11+50.00	50	68	5	3	123	34	6	314	143	186	15	19	124
12+00.00	50	75	4	4	133	8	6	447	151	196	21	28	245
12+50.00	50	36	25	2	103	27	6	551	178	231	27	35	312
13+00.00	50	60	28	3	89	50	5	640	227	296	31	41	335
13+39.02	39	60	28	3	86	41	4	726	268	349	36	47	366
					NT C CHAIN - STAGE 4 SUBTOTAL:			726	268	349	36	47	366
SB D CHAIN													
10+31.64	0	93	2	5	0	0	0	0	0	0	0	0	0
10+50.00	18	93	2	5	63	2	3	63	2	2	3	4	60
11+00.00	50	515	19	26	563	20	29	626	22	28	32	42	588
11+50.00	50	267	24	13	724	40	36	1,350	62	81	68	89	1,249
12+00.00	50	220	41	11	451	60	22	1,802	122	159	90	118	1,615
12+02.71	3	220	41	11	22	4	1	1,824	126	164	92	119	1,632
					NT C CHAIN - STAGE 4 SUBTOTAL:			1,824	126	164	92	119	1,632

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DIVISION 2

STATION	DISTANCE	AREA (SF)			INCREMENTAL VOLUME (CY) (UNADJUSTED)			CUMULATIVE VOLUME (CY)					
		CUT	FILL	EBS	CUT	FILL	EBS	CUT/ COMMON	UNEXPANDED FILL	EXPANDED FILL 1.30	UNEXPANDED EBS	EXPANDED EBS BACKFILL 1.30	MASS ORDINATE
DIVISION 2 - STAGE 4													
SB ON RAMP CHAIN													
498+07.70	0	421	0	21	0	0	0	0	0	0	0	0	0
498+50.00	42	421	0	21	660	0	6	660	0	0	6	8	658
499+00.00	50	596	0	30	942	0	47	1,602	0	0	53	69	1,586
499+50.00	50	571	0	29	1081	0	55	2,683	0	0	108	140	2,650
500+00.00	50	326	4	16	831	3	42	3,514	3	4	150	194	3,465
500+50.00	50	172	0	9	461	3	23	3,975	7	9	173	224	3,914
500+88.83	39	172	0	9	248	0	17	4,223	7	9	189	246	4,157
					NT C CHAIN - STAGE 4 SUBTOTAL:			4,223	7	9	189	246	4,157
SB CIRLCE CHAIN													
10+00.00	0	39	52	2	0	0	0	0	0	0	0	0	0
10+50.00	50	73	36	4	103	81	6	103	81	106	6	7	-4
11+00.00	50	962	46	48	958	76	48	1,061	157	204	54	70	841
11+50.00	50	339	43	17	1205	82	60	2,266	239	311	114	148	1,921
12+00.00	50	134	44	7	439	81	22	2,704	320	416	136	177	2,247
12+50.00	50	203	59	10	312	95	16	3,016	416	540	152	197	2,430
13+00.00	50	167	108	8	342	154	17	3,358	570	740	169	219	2,567
13+50.00	50	575	69	29	687	164	34	4,045	733	953	203	264	3,031
14+00.00	50	27	56	1	558	115	28	4,602	848	1,103	231	300	3,430
14+02.12	2	27	56	1	2	4	0	4,605	853	1,109	231	300	3,427
					NT C CHAIN - STAGE 4 SUBTOTAL:			4,605	853	1,109	231	300	3,427
NB ON RAMP CHAIN													
498+50.00	0	33	221	2	0	0	0	0	0	0	0	0	0
499+74.20	124	78	116	4	256	776	3	256	776	1,009	3	3	-754
500+00.00	26	90	162	4	80	133	4	336	909	1,182	7	8	-848
500+50.00	50	77	275	4	154	405	7	490	1,314	1,708	14	18	-1,222
500+64.03	14	77	275	4	40	143	2	530	1,457	1,893	16	21	-1,368
					NT C CHAIN - STAGE 4 SUBTOTAL:			530	1,457	1,893	16	21	-1,368

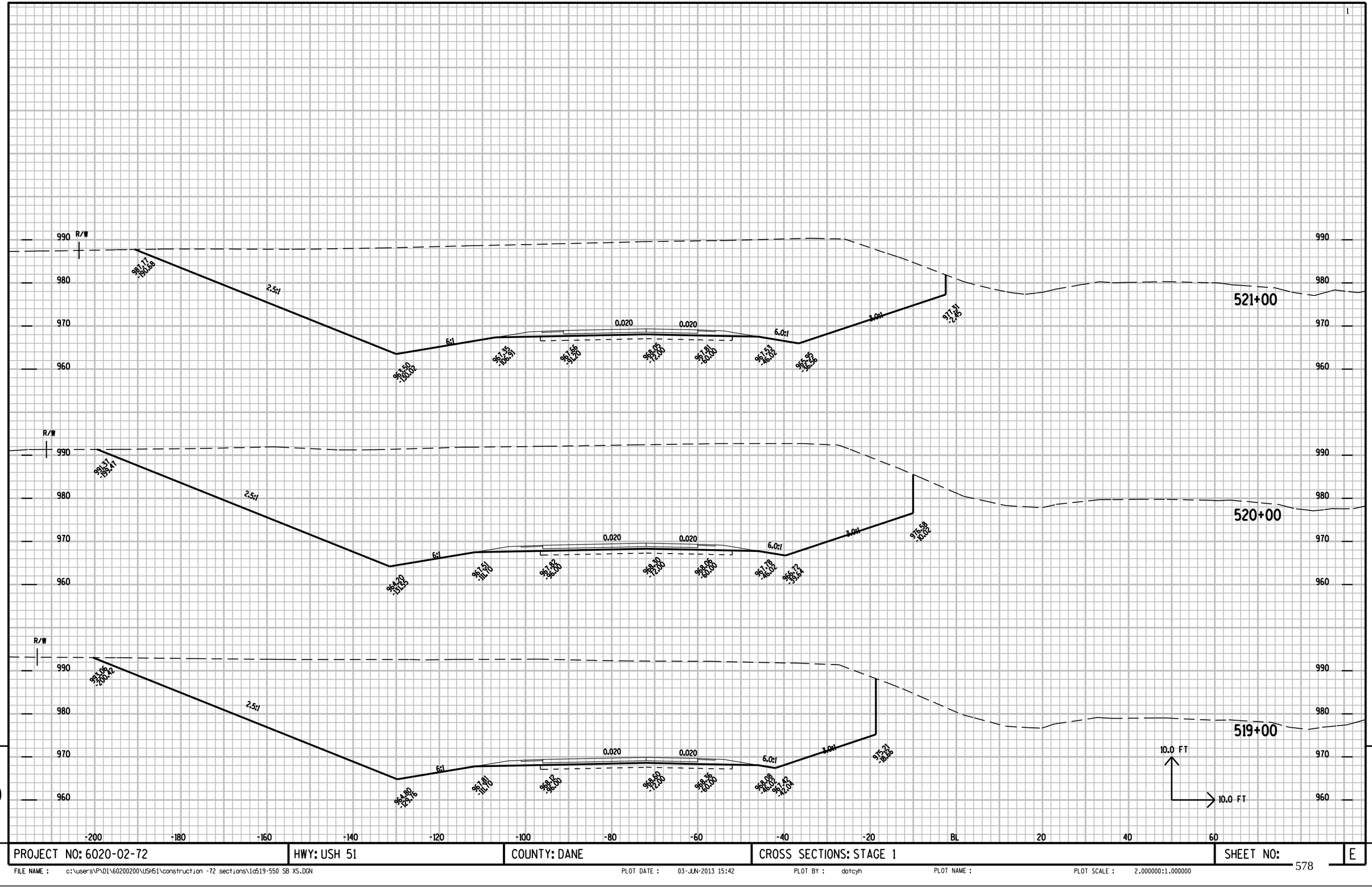
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DIVISION 2

STATION	DISTANCE	AREA (SF)			INCREMENTAL VOLUME (CY) (UNADJUSTED)			CUMULATIVE VOLUME (CY)					
		CUT	FILL	EBS	CUT	FILL	EBS	CUT/ COMMON	UNEXPANDED FILL	EXPANDED FILL 1.30	UNEXPANDED EBS	EXPANDED EBS BACKFILL 1.30	MASS ORDINATE
DIVISION 2 - STAGE 4													
NB OFF RAMP CHAIN													
495+77.31	0	25	395	1	0	0	0	0	0	0	0	0	0
496+00.00	23	25	395	1	21	332	1	21	332	432	1	1	-411
496+50.00	50	35	403	2	56	739	3	77	1,071	1,392	4	5	-1,317
497+00.00	50	72	402	4	100	746	6	176	1,816	2,361	9	12	-2,188
497+50.00	50	62	395	3	125	739	6	301	2,555	3,322	16	20	-3,026
498+00.00	50	82	323	4	134	665	6	435	3,221	4,187	22	29	-3,759
498+03.75	4	82	323	4	11	45	1	446	3,265	4,245	23	29	-3,806
					NT C CHAIN - STAGE 4 SUBTOTAL:			446	3,265	4,245	23	29	-3,806
NB CIRCLE CHAIN													
10+00.00	0	91	79	5	0	0	0	0	0	0	0	0	0
10+50.00	50	26	127	1	109	191	6	109	191	248	6	7	-141
11+00.00	50	0	255	0	24	354	1	133	545	708	6	8	-577
11+50.00	50	0	272	0	0	487	0	133	1,032	1,342	6	8	-1,211
12+00.00	50	0	315	0	0	543	0	133	1,575	2,047	6	8	-1,916
12+50.00	50	8	135	0	8	416	0	141	1,991	2,589	6	8	-2,450
13+00.00	50	0	441	0	8	533	0	148	2,525	3,282	6	8	-3,136
13+50.00	50	0	417	0	0	794	0	148	3,319	4,315	6	8	-4,169
14+00.00	50	40	119	2	37	496	2	186	3,815	4,960	8	11	-4,777
14+17.56	18	40	119	2	26	78	1	212	3,893	5,061	10	13	-4,852
						NT C CHAIN - STAGE 4 SUBTOTAL:		212	3,893	5,061	10	13	-4,852
					CTH V ROUNDABOUT - STAGE 4 SUBTOTAL:			28,440	18,365	23,875	8,079	10,503	2,142
					DIVISION 2 - STAGE 4 TOTAL:			**33,769**	**27,837**	**36,188**	**12,209**	**15,871**	**-6,081**

DIVISION 2

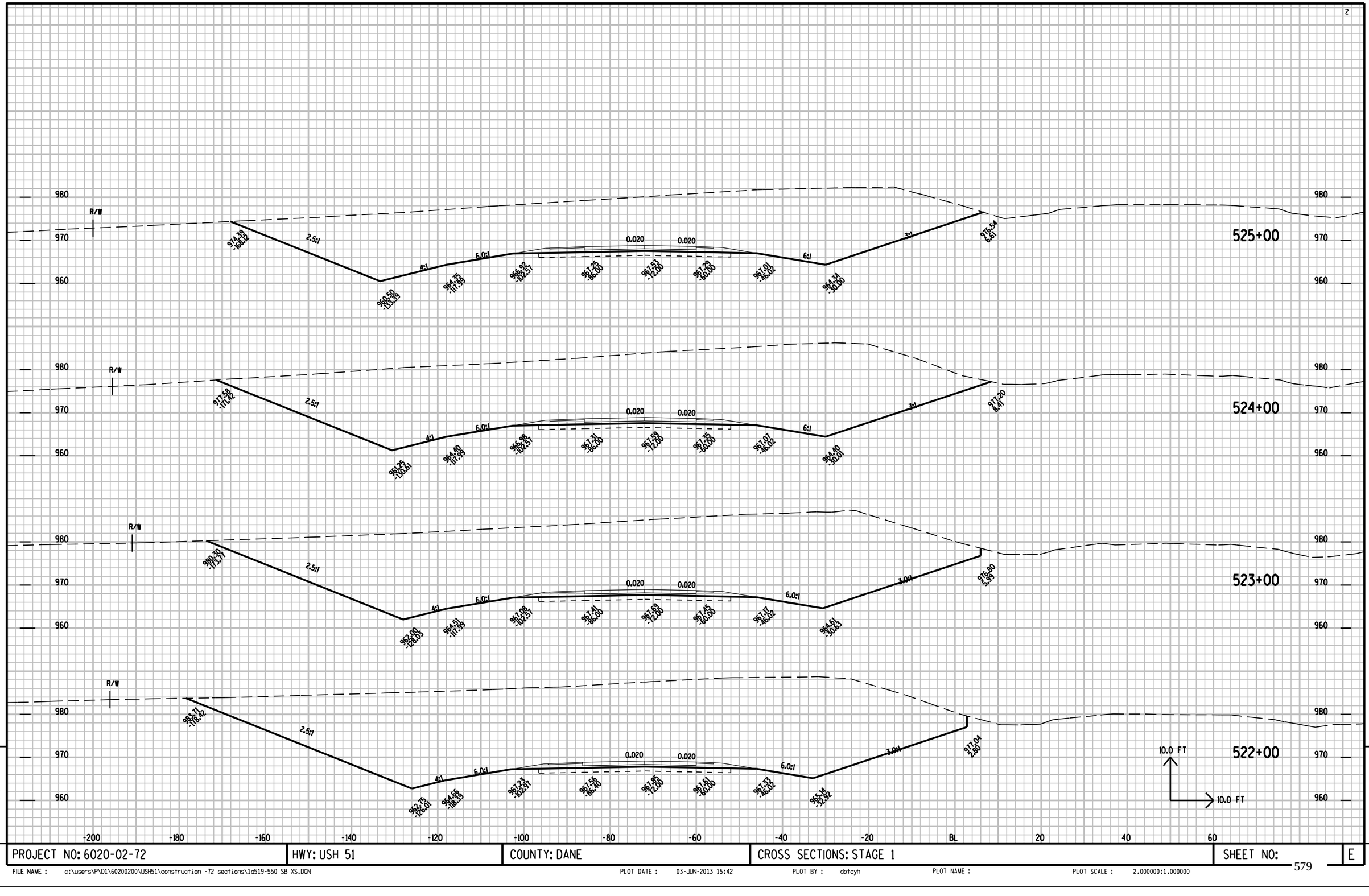
STATION	DISTANCE	AREA (SF)			INCREMENTAL VOLUME (CY) (UNADJUSTED)			CUMULATIVE VOLUME (CY)					MASS ORDINATE
		CUT	FILL	EBS	CUT	FILL	EBS	CUT/ COMMON	UNEXPANDED FILL	EXPANDED FILL 1.30	UNEXPANDED EBS	EXPANDED EBS BACKFILL 1.30	
DIVISION 2 - STAGE 5													
NORTH TOWNE ROAD													
211+00.00		0	0	0	0	0	0	0	0	0	0	0	0
211+50.00	50	94	9	0	87	8	0	87	8	10	0	0	77
212+00.00	50	84	25	0	165	31	0	253	39	51	0	0	202
212+50.00	50	76	39	0	148	59	0	401	99	128	0	0	272
213+00.00	50	64	38	0	130	72	0	530	170	222	0	0	309
213+50.00	50	55	41	0	110	73	0	640	244	317	0	0	323
214+00.00	50	44	42	0	91	77	0	731	321	417	0	0	314
214+50.00	50	42	45	0	80	81	0	811	402	522	0	0	289
215+00.00	50	50	44	0	85	83	0	896	485	630	0	0	266
215+50.00	50	47	50	0	89	87	0	985	572	743	0	0	242
216+00.00	50	60	52	0	99	94	0	1,084	666	865	0	0	219
216+50.00	50	107	45	0	155	89	0	1,239	755	982	0	0	257
217+00.00	50	145	42	0	233	80	0	1,472	835	1,086	0	0	387
217+50.00	50	165	40	0	287	76	0	1,759	911	1,184	0	0	575
218+00.00	50	140	36	0	283	71	0	2,042	982	1,276	0	0	766
218+50.00	50	138	23	0	258	55	0	2,300	1,037	1,347	0	0	952
219+00.00	50	110	7	0	230	28	0	2,530	1,065	1,384	0	0	1,146
219+50.00	50	221	3	0	306	9	0	2,836	1,074	1,396	0	0	1,440
220+00.00	50	174	0	0	365	2	0	3,201	1,076	1,399	0	0	1,802
						CTH V - STAGE 4 SUBTOTAL:		3,201	1,076	1,399	0	0	1,802
						DIVISION 2 - STAGE 5 TOTAL:		**3,201**	**1,076**	**1,399**	**0**	**0**	**1,802**
						DIVISION 2 TOTAL:		**183,741**	**228,789**	**297,426**	**17,765**	**23,095**	**-119,015**



9

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: STAGE 1	SHEET NO:	E

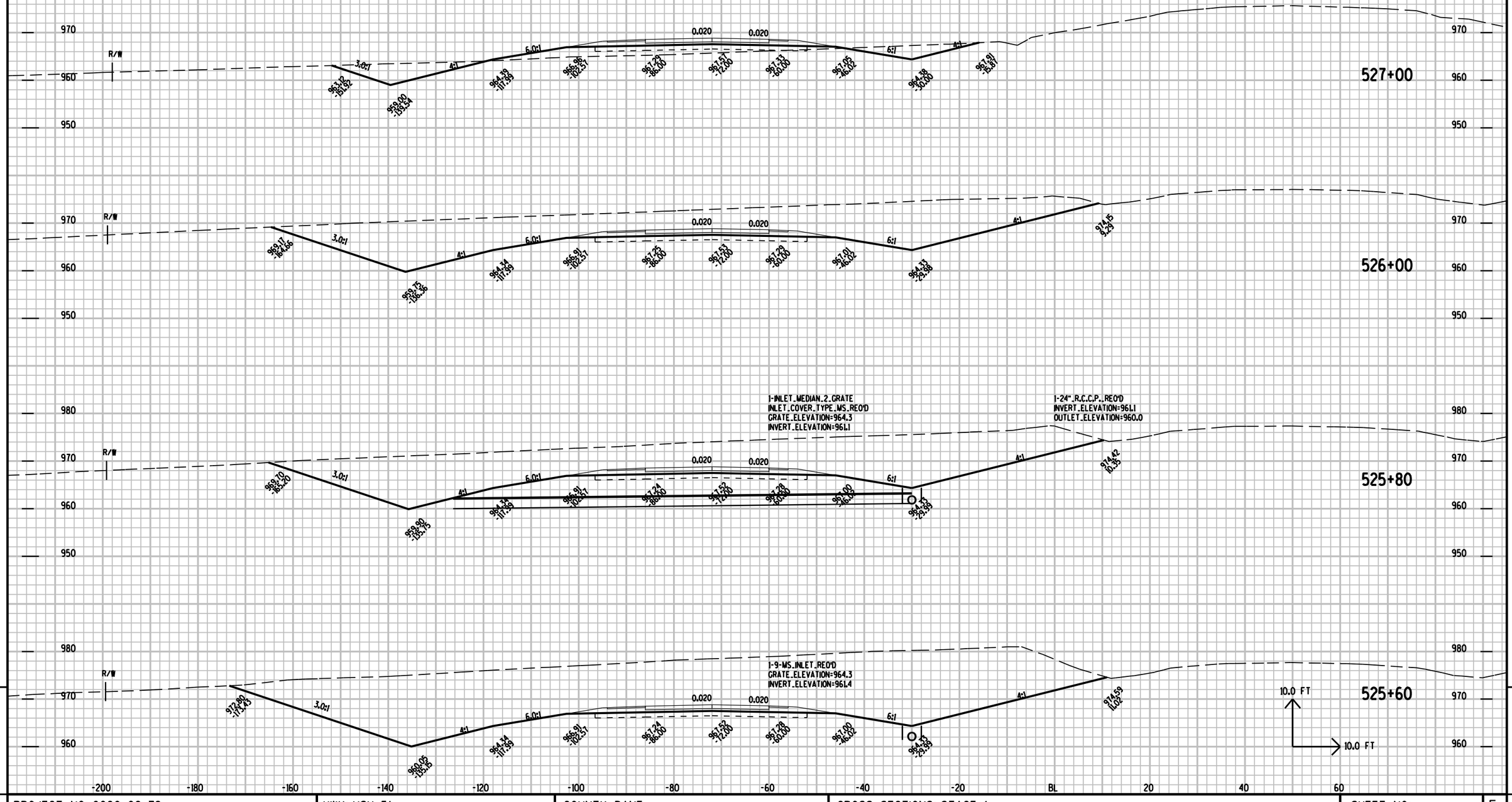
FILE NAME : c:\users\P\D1\60200200\USH51\construction -72 sections\1d519-550 SB XS.DGN PLOT DATE : 03-JUN-2013 15:42 PLOT BY : dotcyh PLOT NAME : PLOT SCALE : 2.000000:1.000000



9

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: STAGE 1	SHEET NO:	E

FILE NAME : c:\users\P\D1\60200200\USH51\construction -72 sections\1a519-550 SB XS.DGN PLOT DATE : 03-JUN-2013 15:42 PLOT BY : dotcyh PLOT NAME : PLOT SCALE : 2.000000:1.000000



PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: STAGE 1	SHEET NO:	E

FILE NAME : c:\users\P\D1\60200200\USH51\construction -72 sections\1a519-550 SB XS.DGN PLOT DATE : 03-JUN-2013 15:42 PLOT BY : dotcyh PLOT NAME : PLOT SCALE : 2.000000:1.000000

1-54"_R.C.C.P._REV'D
STA._531+48_17.3_LT
INLET_ELEVATION=956.75
STA._530+80_130.2_LT
OUTLET_ELEVATION=956.0
SKEW_31_DEGREES_RHF

530+80

530+00

529+00

528+00

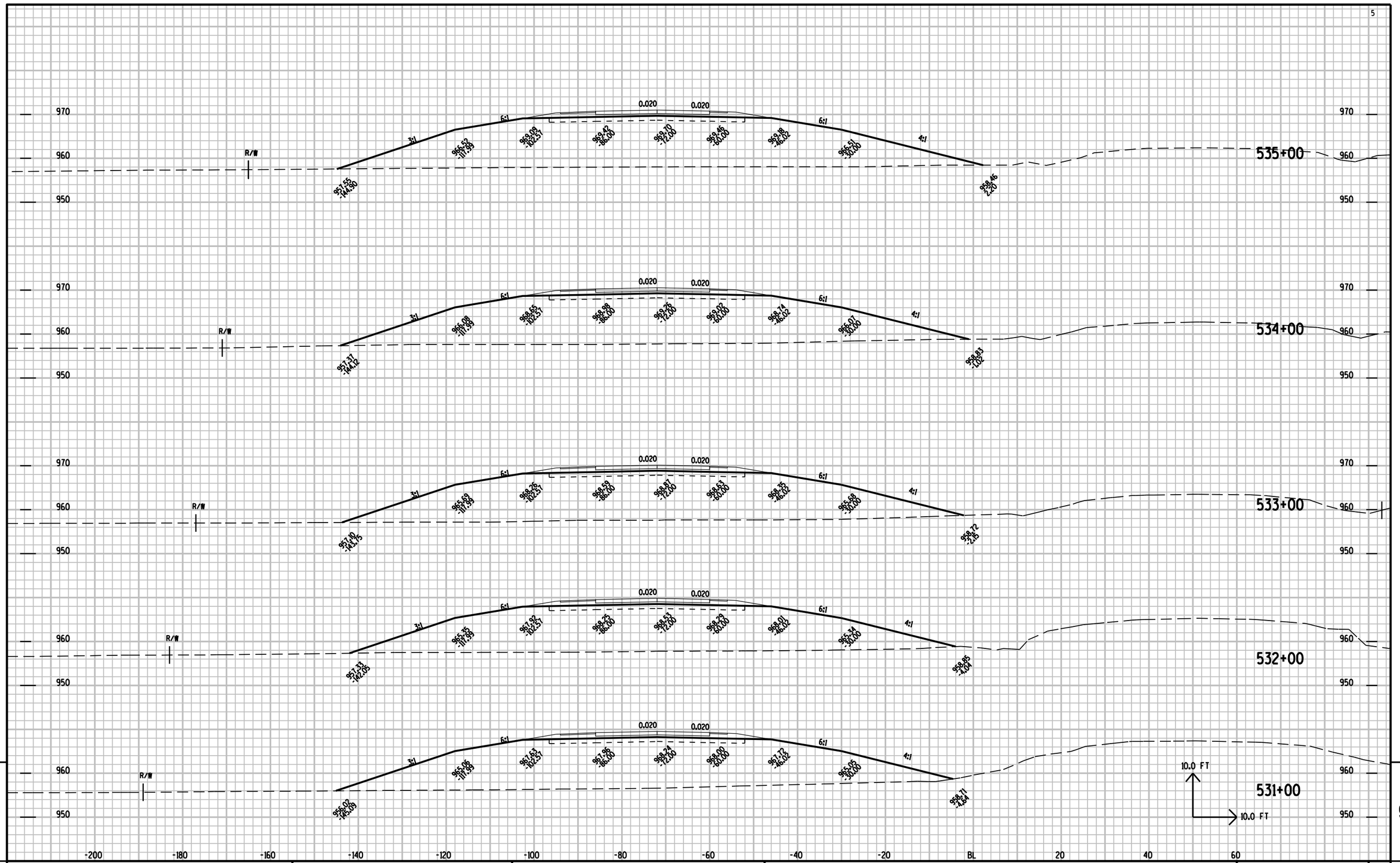
10.0 FT
10.0 FT

9

9

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: STAGE 1	SHEET NO:	E

FILE NAME : c:\users\P\D1\60200200\USH51\construction -72 sections\1a519-550 SB XS.DGN PLOT DATE : 03-JUN-2013 15:42 PLOT BY : dotcyh PLOT NAME : PLOT SCALE : 2.000000:1.000000

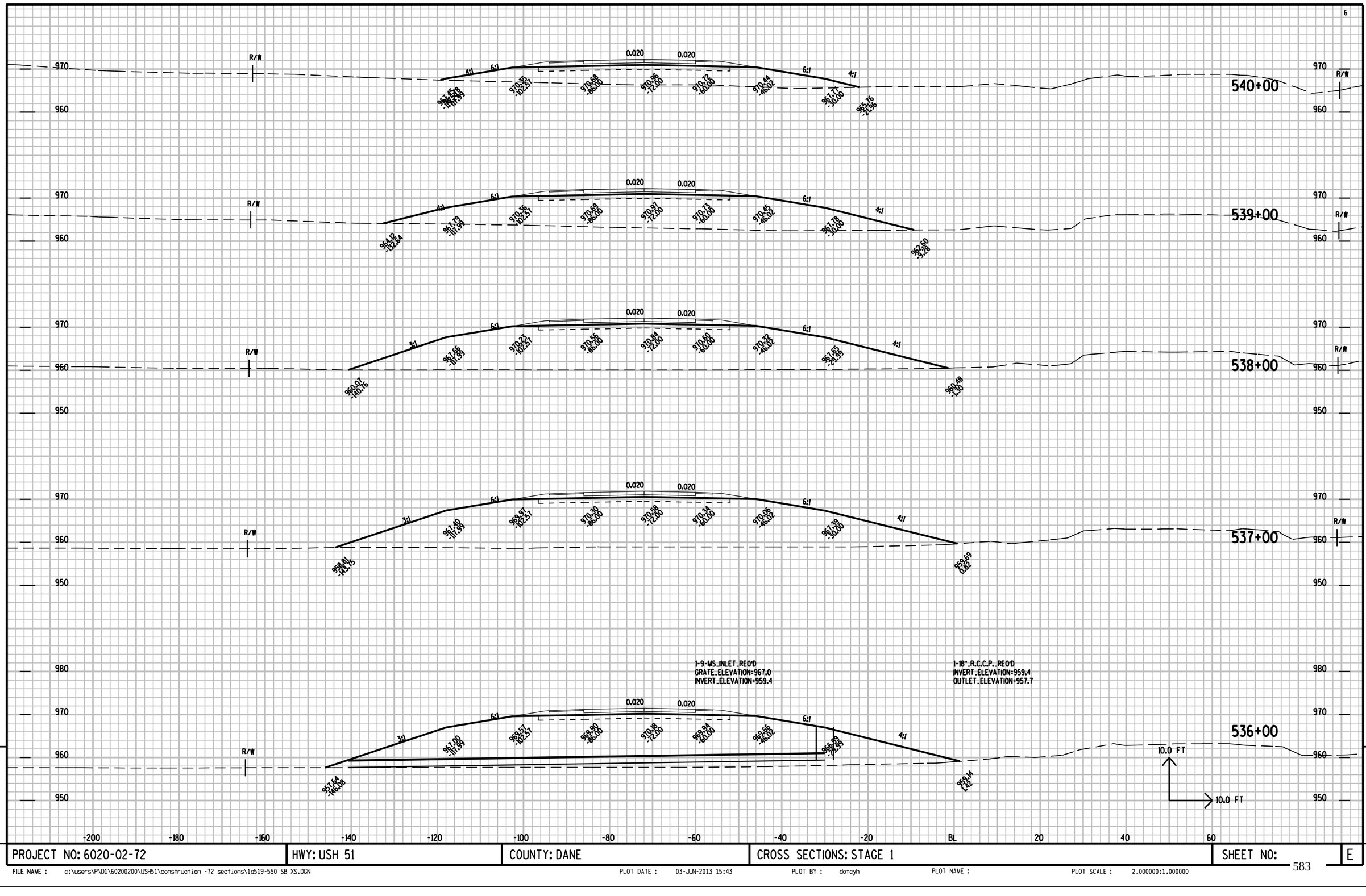


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9

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: STAGE 1	SHEET NO:	E

FILE NAME : c:\users\P\D1\60200200\USH51\construction -72 sections\1d519-550 SB XS.DGN PLOT DATE : 03-JUN-2013 15:43 PLOT BY : dotcyh PLOT NAME : PLOT SCALE : 2.000000:1.000000

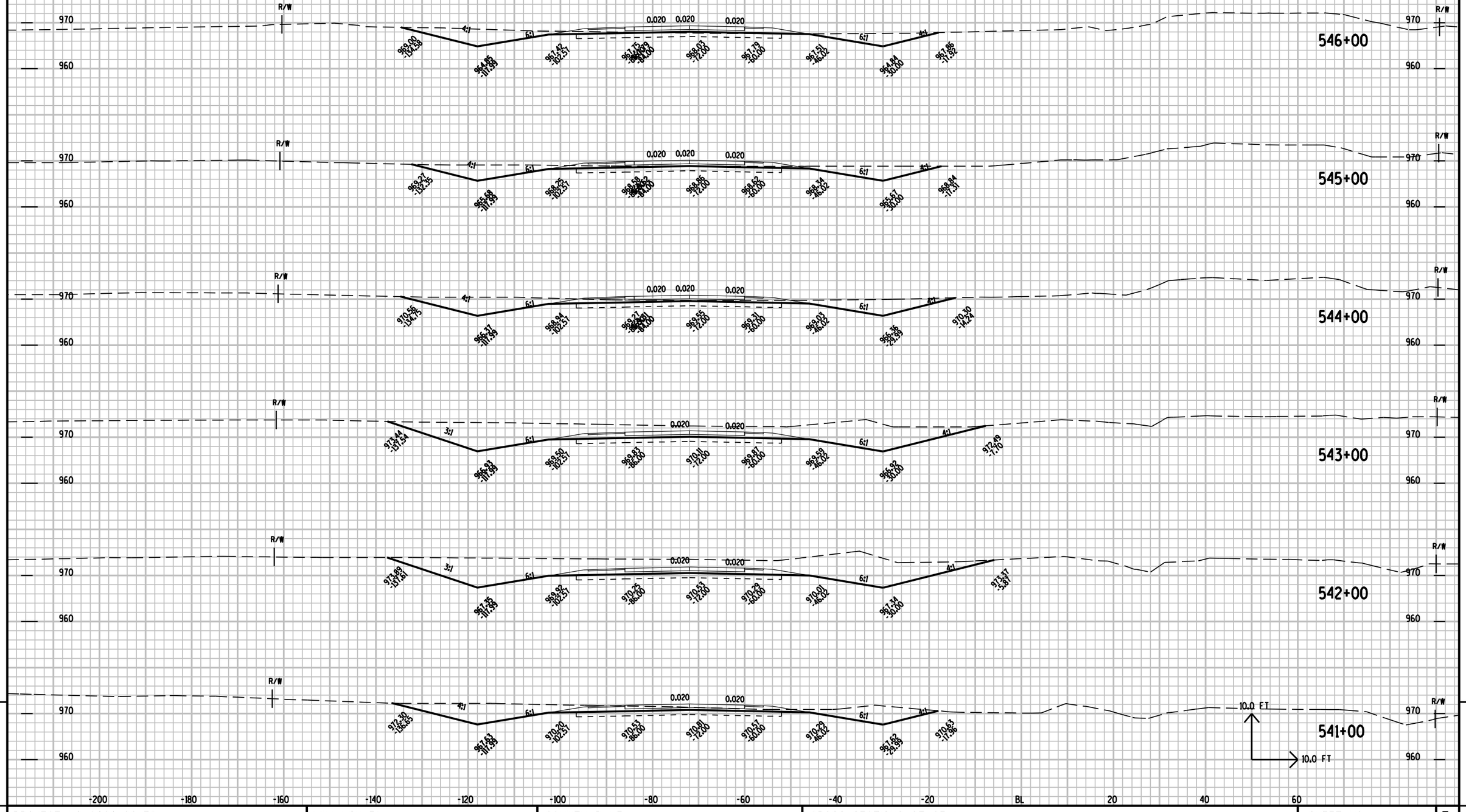


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PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: STAGE 1	SHEET NO:	E

FILE NAME : c:\users\P\D1\60200200\USH51\construction -72 sections\1a519-550 SB XS.DGN PLOT DATE : 03-JUN-2013 15:43 PLOT BY : dotcyh PLOT NAME : PLOT SCALE : 2.000000:1.000000

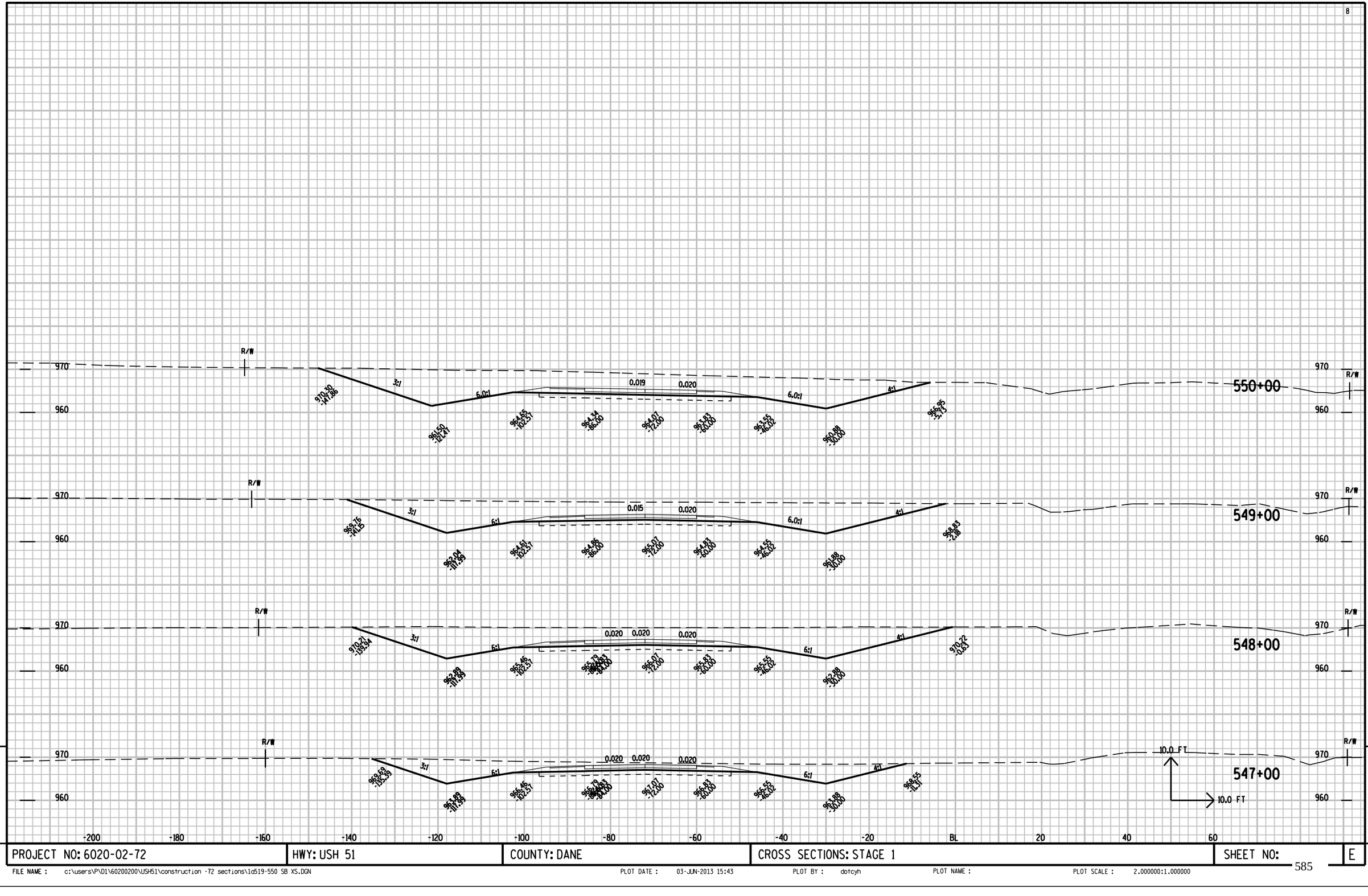


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PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: STAGE 1	SHEET NO:	E

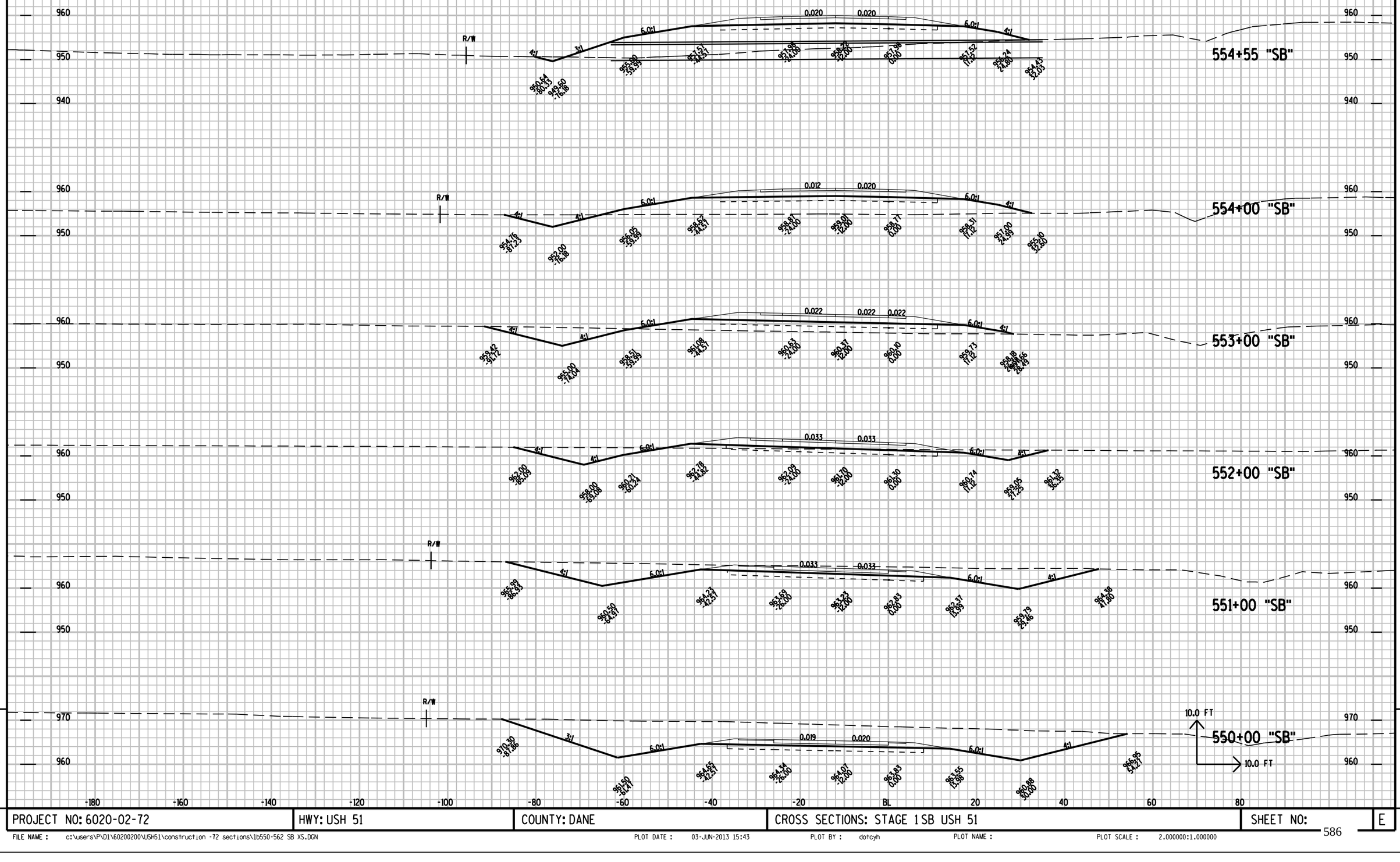
FILE NAME : c:\users\P\D1\60200200\USH51\construction -72 sections\1d519-550 SB XS.DGN PLOT DATE : 03-JUN-2013 15:43 PLOT BY : dotcyh PLOT NAME : PLOT SCALE : 2.000000:1.000000



PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: STAGE 1	SHEET NO:	E

FILE NAME : c:\users\P\D1\60200200\USH51\construction -72 sections\1d519-550 SB XS.DGN PLOT DATE : 03-JUN-2013 15:43 PLOT BY : dotcyh PLOT NAME : PLOT SCALE : 2.000000:1.000000

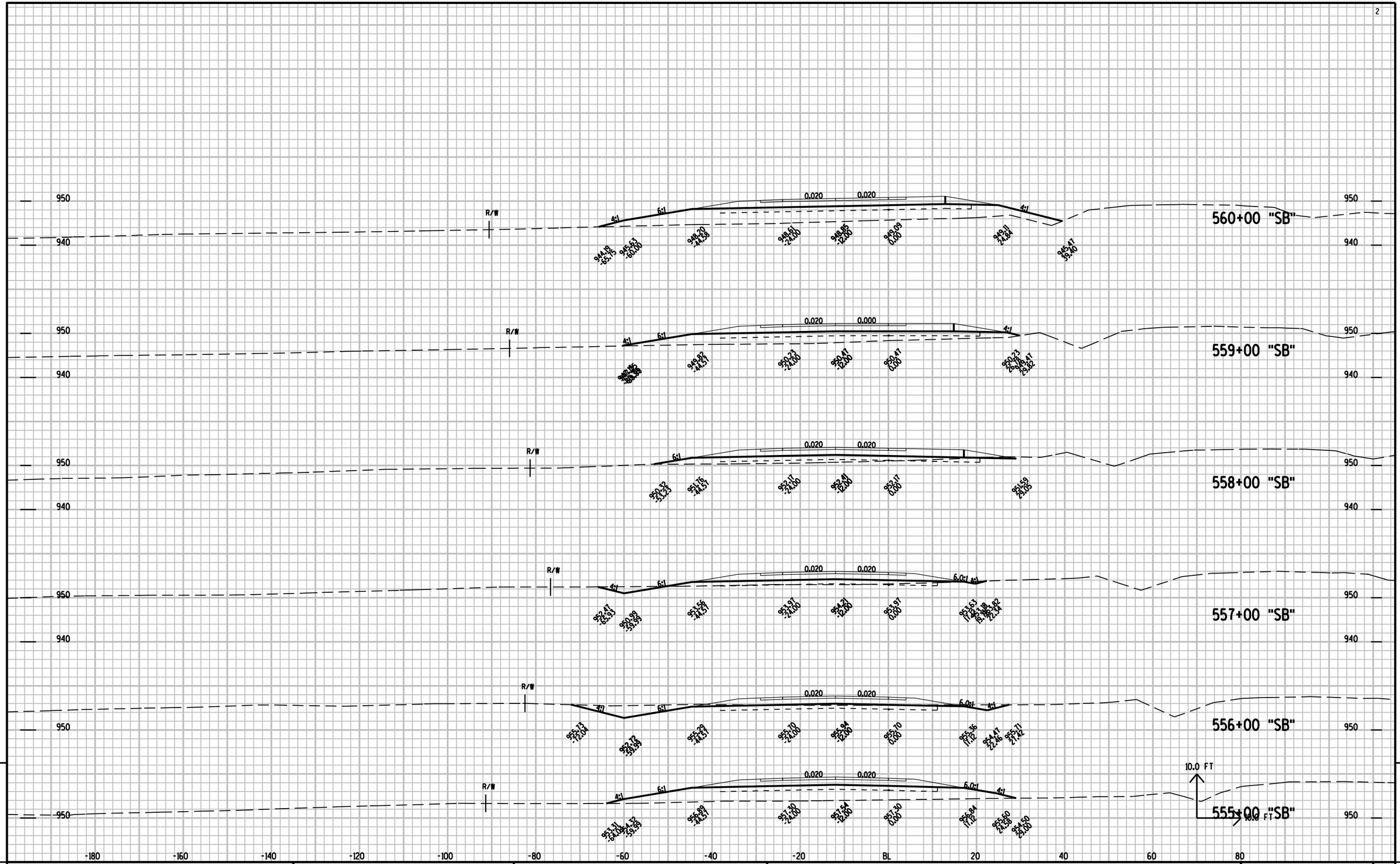
1-68"_X_43"_R.C.H.E.C.P._REQ'D
STA._554+55._115.9_LT
OUTLET_ELEVATION=949.7
SKEW_11_DEGREES_LHF



9

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: STAGE 1 SB USH 51	SHEET NO:	E

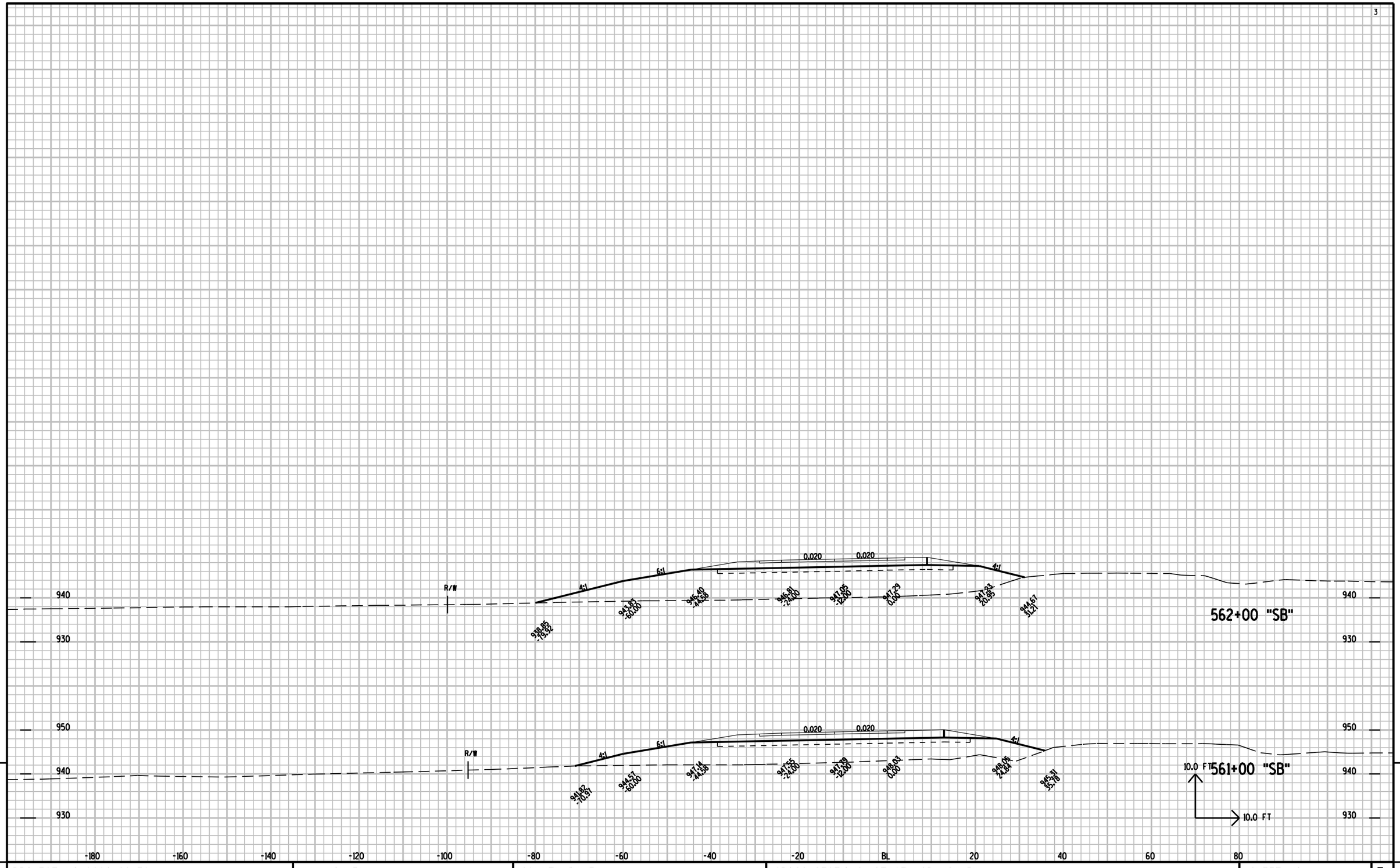
FILE NAME : c:\users\P\D1\60200200\USH51\construction -T2 sections\1b550-562 SB XS.DGN PLOT DATE : 03-JUN-2013 15:43 PLOT BY : dotcyh PLOT NAME : PLOT SCALE : 2.000000:1.000000



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PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: STAGE 1 SB USH 51	SHEET NO:	E

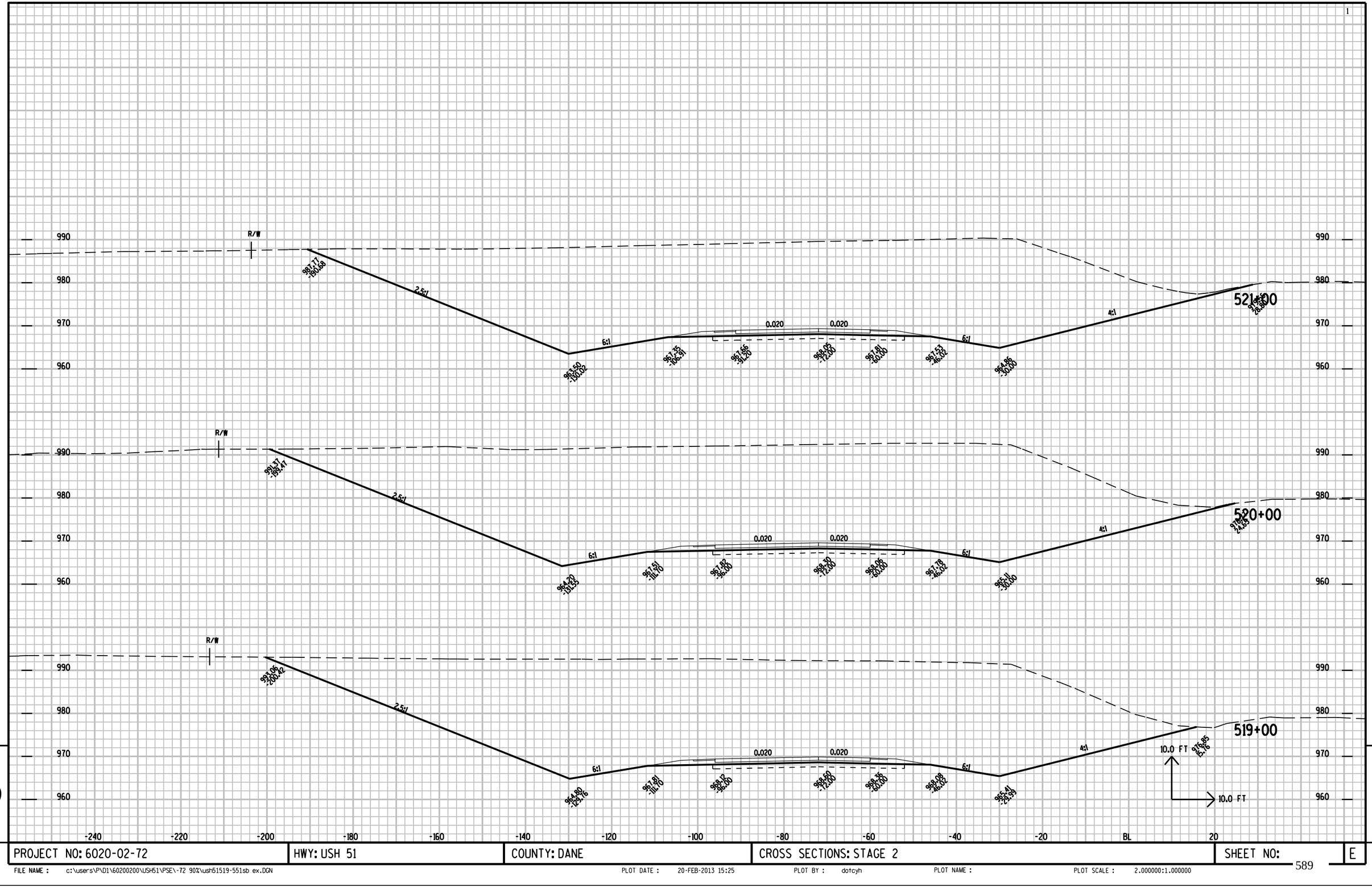


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PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: STAGE 1 SB USH 51	SHEET NO:	E

FILE NAME : c:\users\P\D1\60200200\USH51\construction -T2 sections\1b550-562 SB XS.DGN PLOT DATE : 03-JUN-2013 15:43 PLOT BY : dotcyh PLOT NAME : PLOT SCALE : 2.000000:1.000000

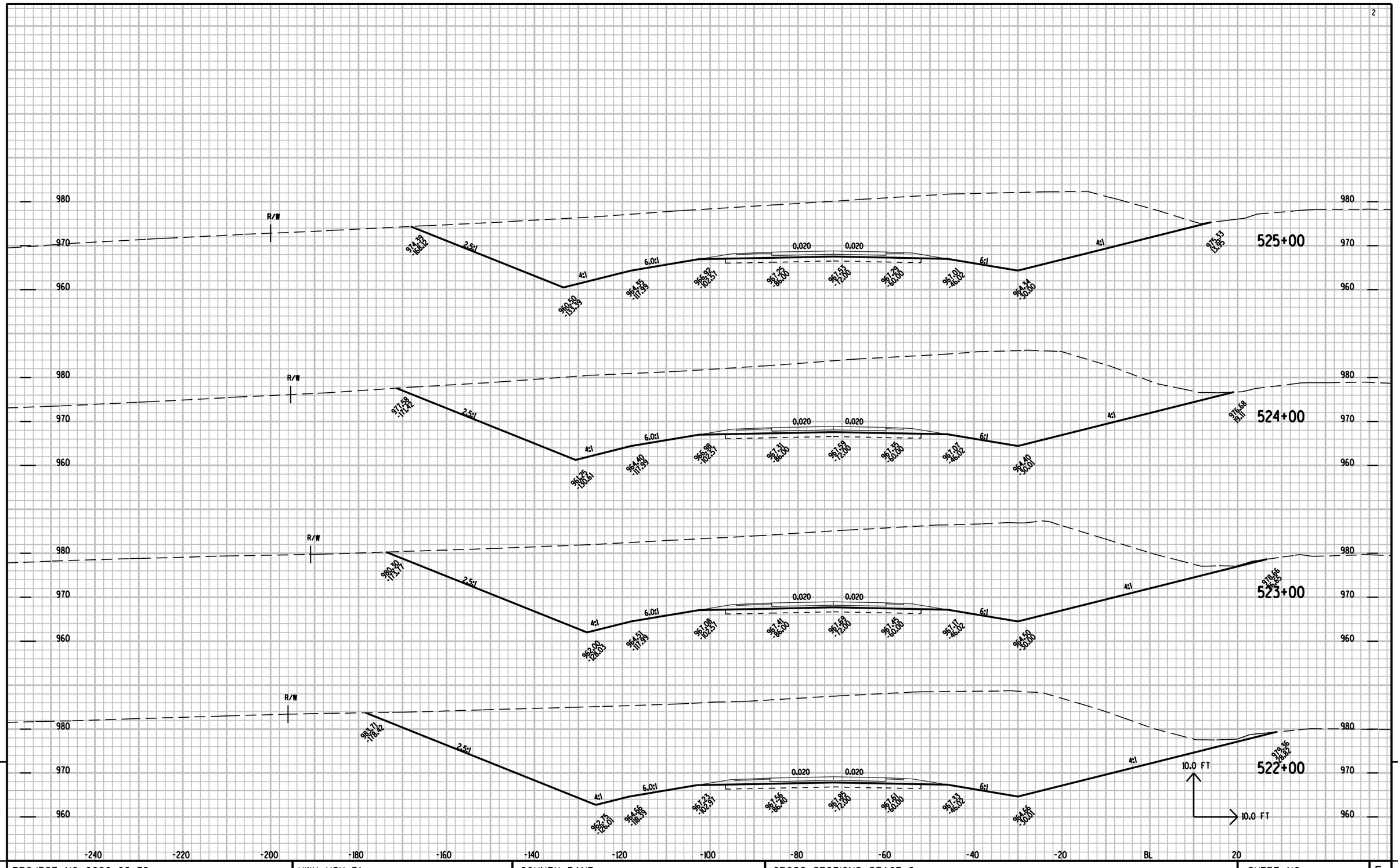


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9

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: STAGE 2	SHEET NO:	E

FILE NAME : c:\users\PVDI\60200200\USH51\PSE\-72 90%\ush51519-551sb ex.DGN PLOT DATE : 20-FEB-2013 15:25 PLOT BY : dotcyh PLOT NAME : PLOT SCALE : 2.000000:1.000000

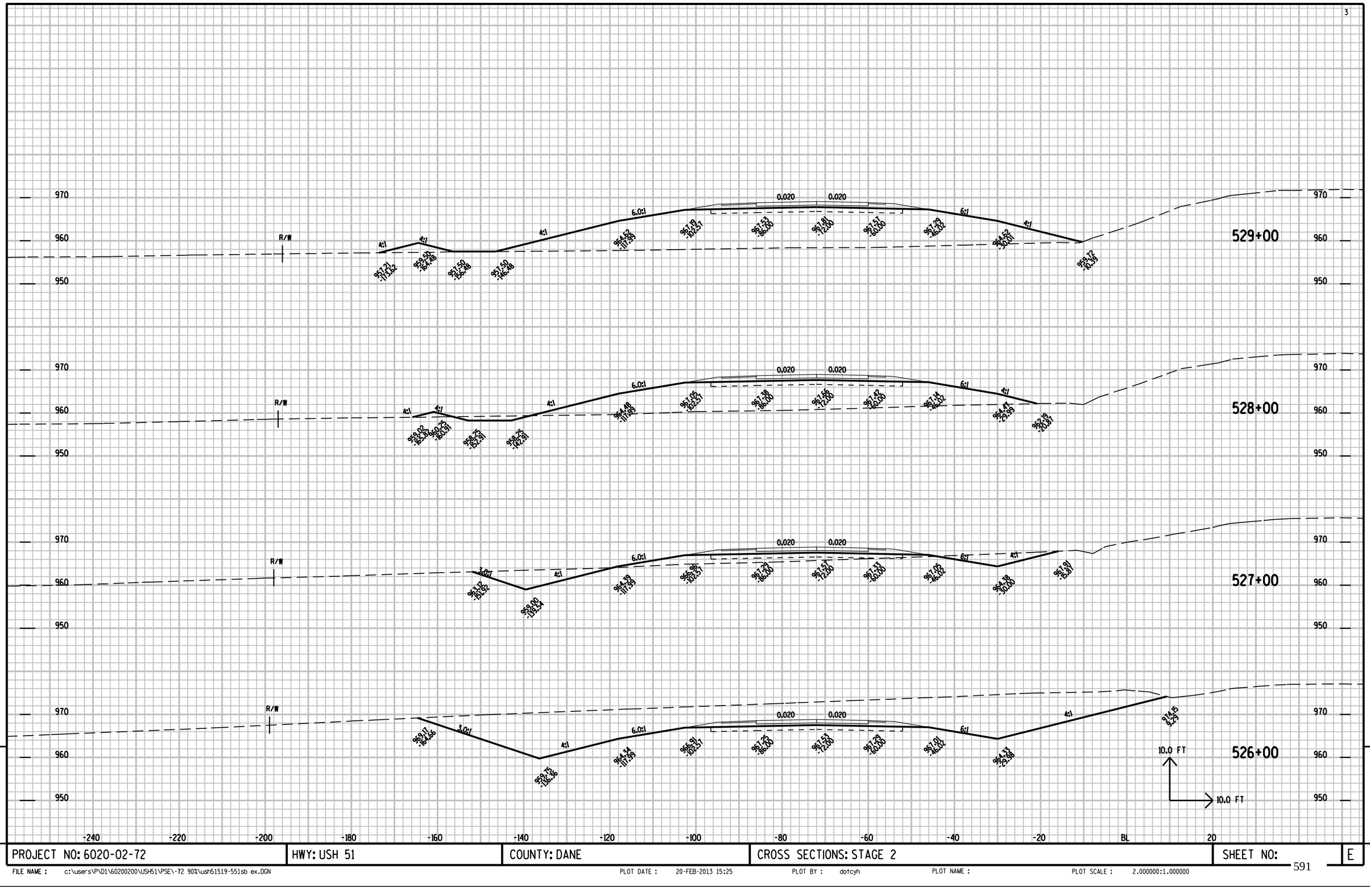


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PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: STAGE 2	SHEET NO:	E

FILE NAME : c:\users\P\D1\60200200\USH51\PSE\-72 90%\ush51519-551sb ex.DGN PLOT DATE : 20-FEB-2013 15:25 PLOT BY : dotcyh PLOT NAME : PLOT SCALE : 2.000000:1.000000

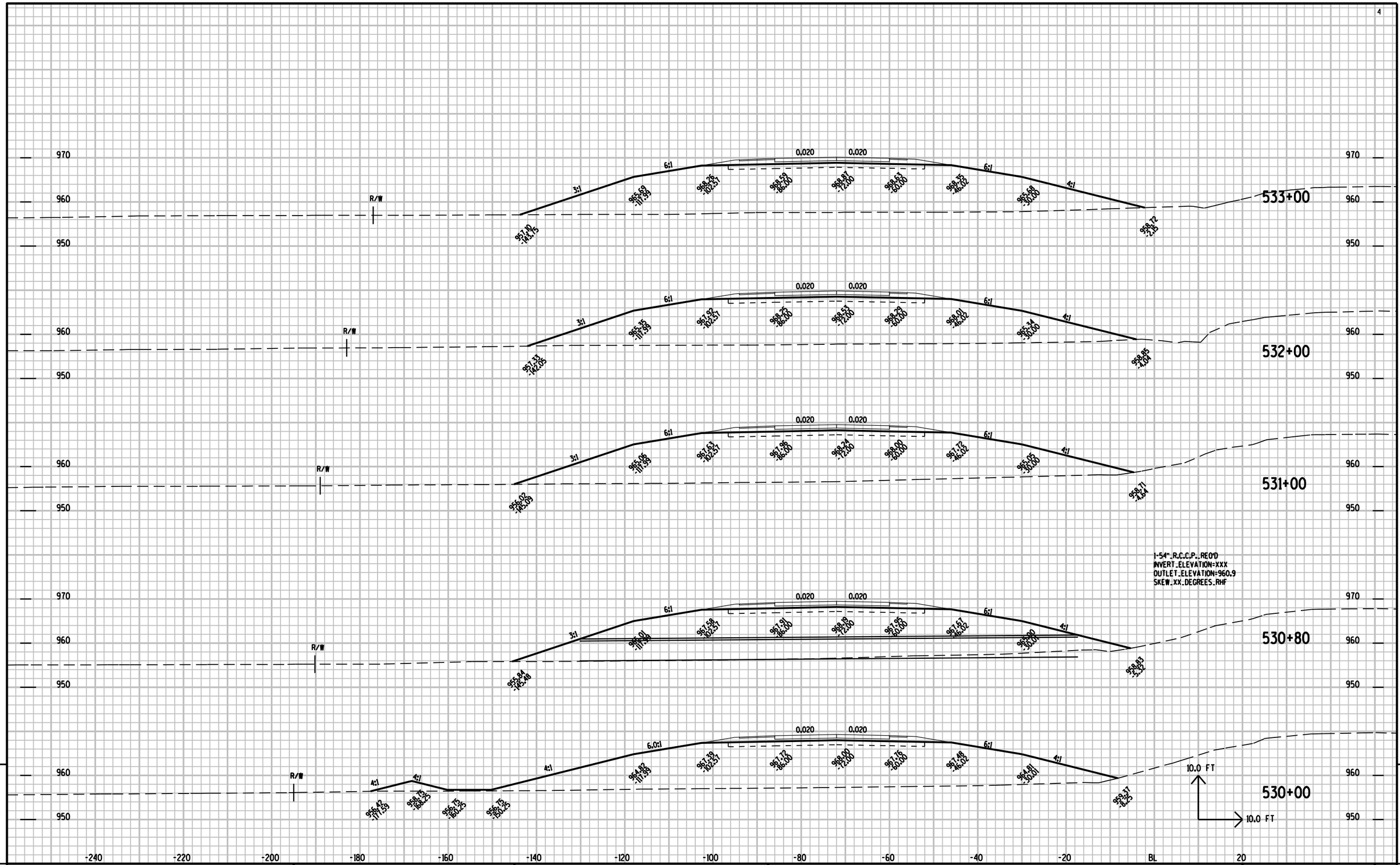


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PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: STAGE 2	SHEET NO:	E

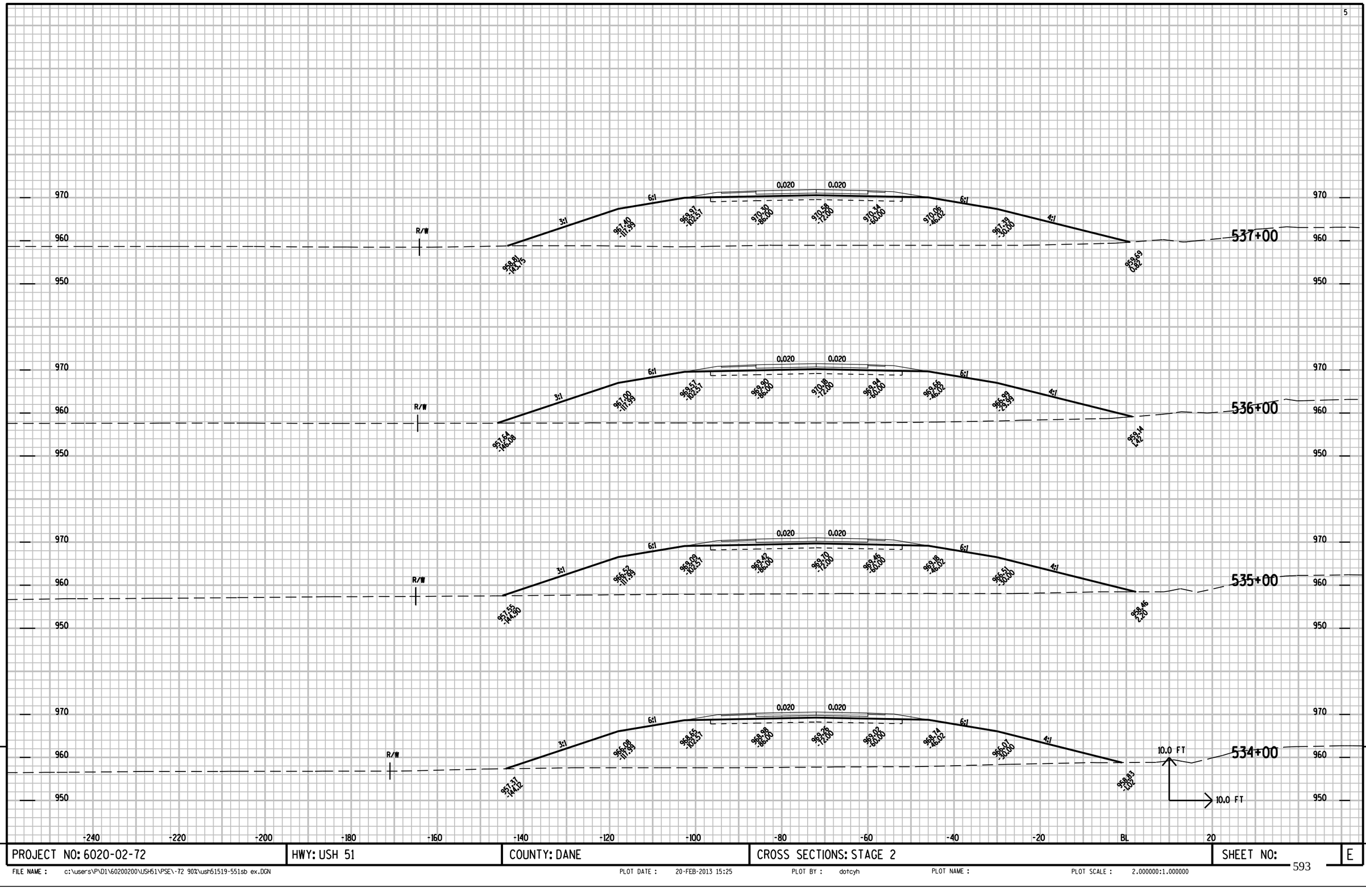
FILE NAME : c:\users\P\D1\60200200\USH51\PSE\-72 90%\ush51519-551sb ex.DGN PLOT DATE : 20-FEB-2013 15:25 PLOT BY : dotcyh PLOT NAME : PLOT SCALE : 2.000000:1.000000



9

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: STAGE 2	SHEET NO:	E

FILE NAME : c:\users\P\D1\60200200\USH51\PSE\-72 90%\ush51519-551sb ex.DGN PLOT DATE : 20-FEB-2013 15:25 PLOT BY : dotcyh PLOT NAME : PLOT SCALE : 2.000000:1.000000

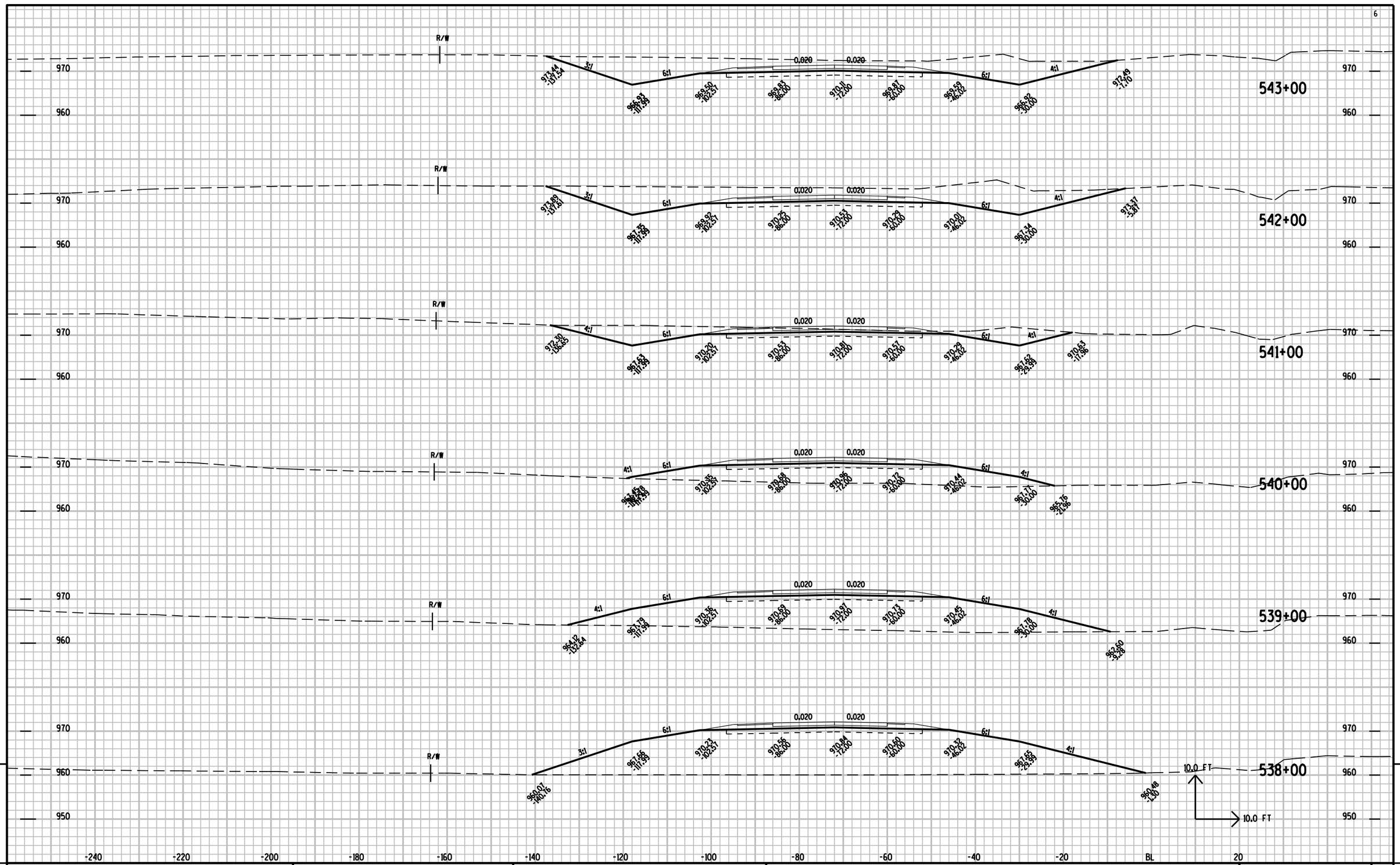


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PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: STAGE 2	SHEET NO:	E

FILE NAME : c:\users\P\D1\60200200\USH51\PSE\-72 90%\ush51519-551sb ex.DGN PLOT DATE : 20-FEB-2013 15:25 PLOT BY : dotcyh PLOT NAME : PLOT SCALE : 2.000000:1.000000

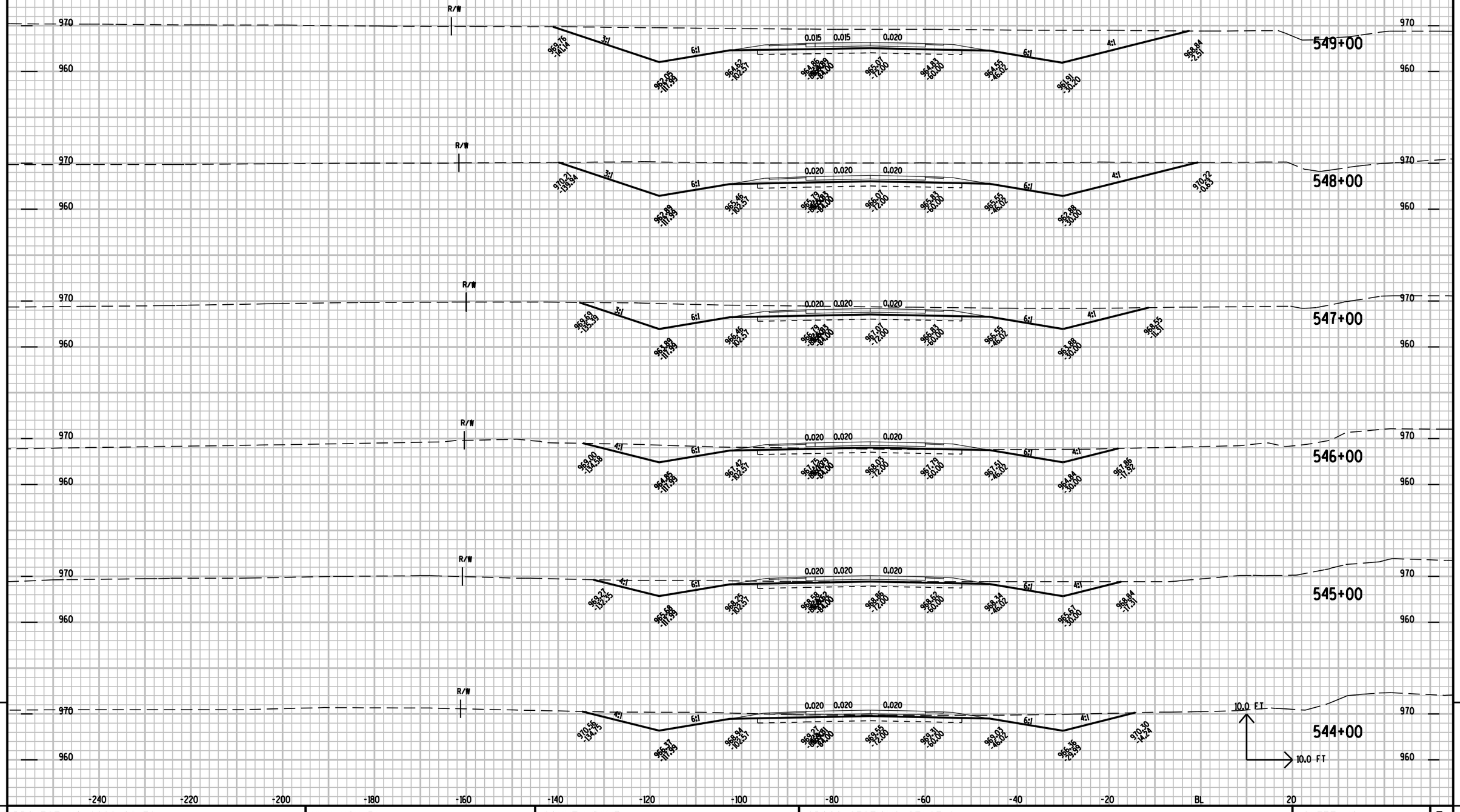


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PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: STAGE 2	SHEET NO:	E

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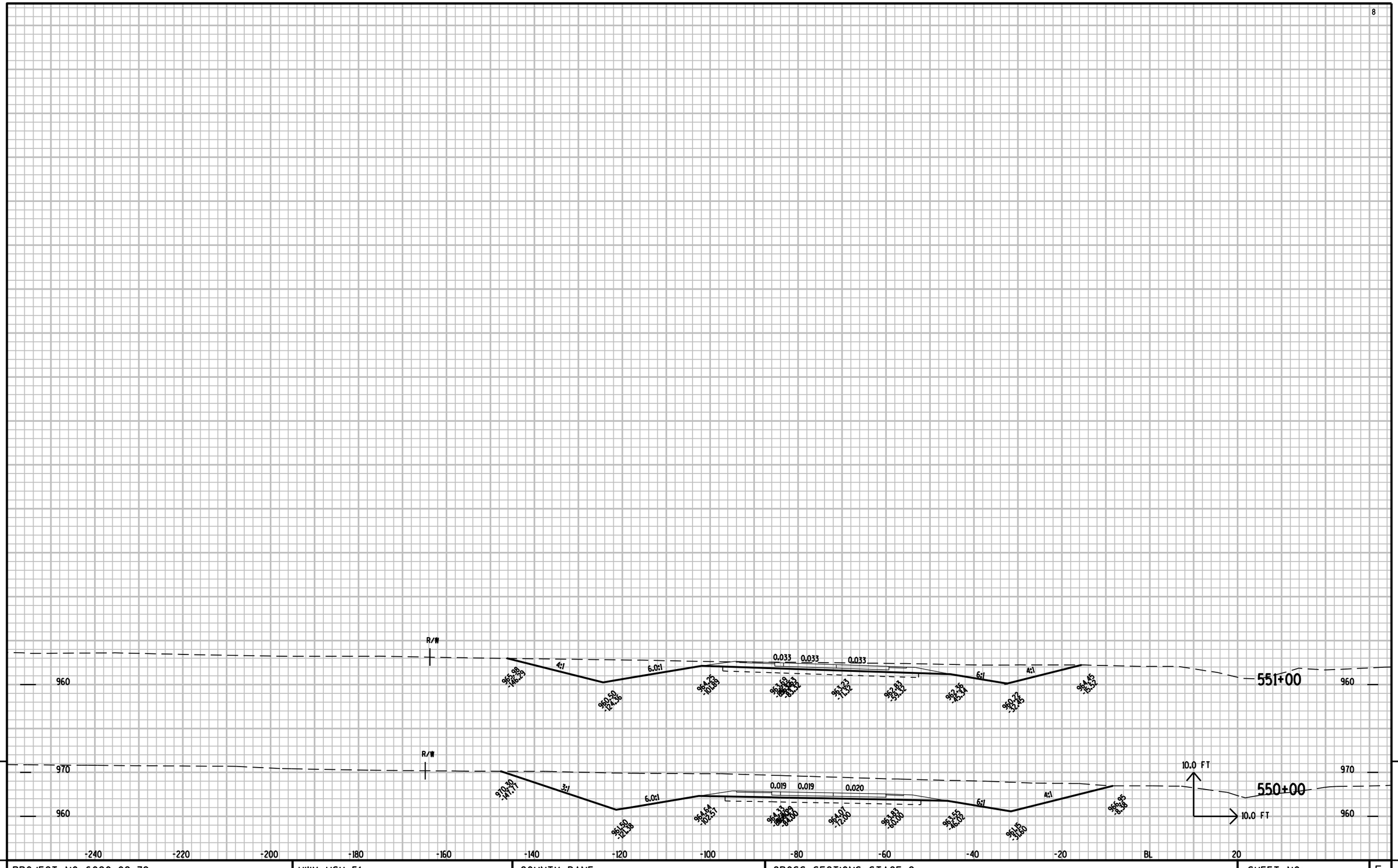


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PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: STAGE 2	SHEET NO:	E

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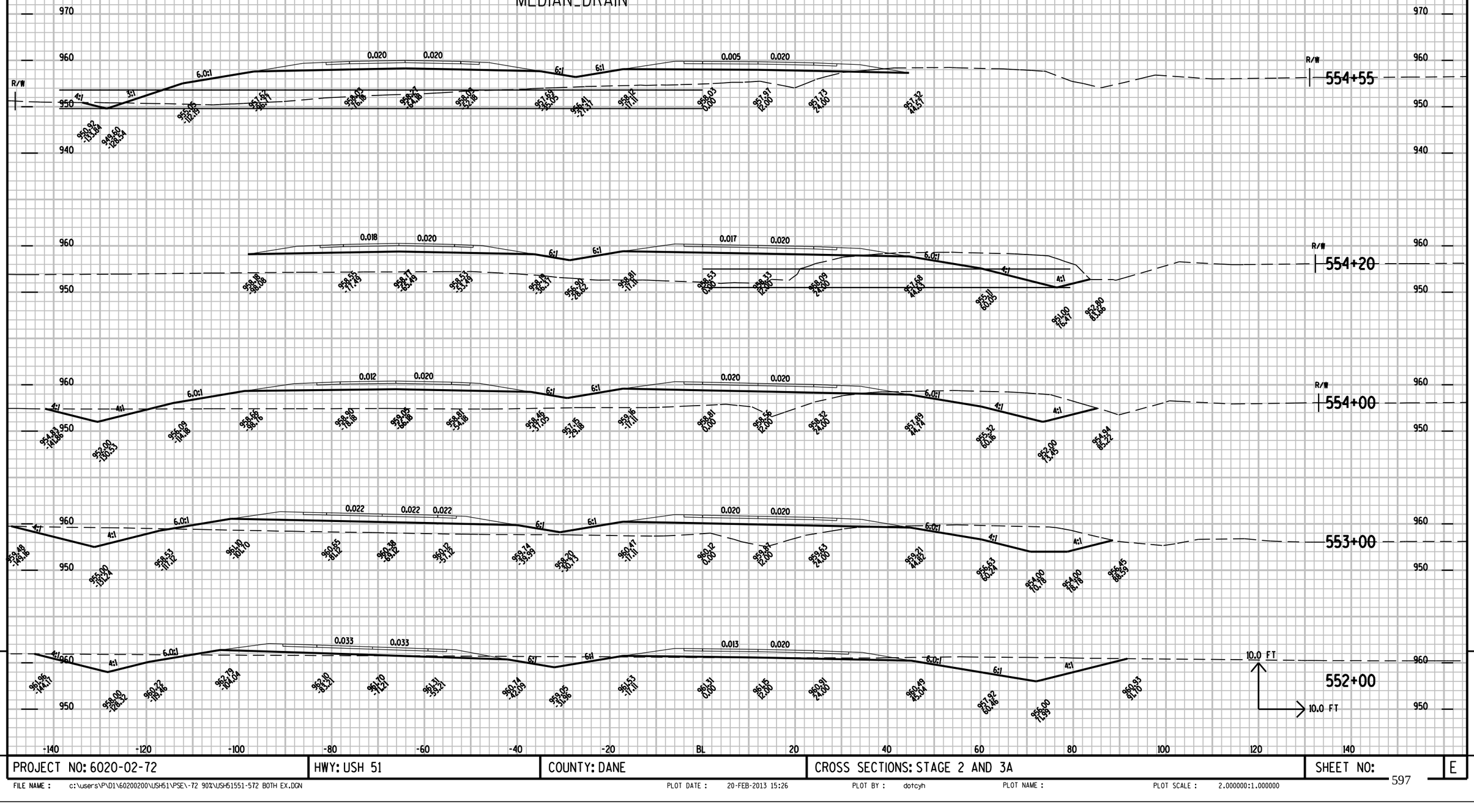
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PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: STAGE 2	SHEET NO:	E

FILE NAME : c:\users\P\D1\60200200\USH51\PSE\-72 90%\ush51519-551sb ex.DGN PLOT DATE : 20-FEB-2013 15:26 PLOT BY : dotcyh PLOT NAME : PLOT SCALE : 2.000000:1.000000

MEDIAN_DRAIN



9

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: STAGE 2 AND 3A	SHEET NO:	E

FILE NAME : c:\users\PJD1\60200200\USH51\PSE\-72 90%\USH51551-572 BOTH EX.DGN PLOT DATE : 20-FEB-2013 15:26 PLOT BY : dotcyh PLOT NAME : PLOT SCALE : 2.000000:1.000000

17+32.96 'EB'

16+32.93 'EB'

15+31.00 'EB'

14+31.00 'EB'

560+00

559+00

558+00

557+00

556+00

555+00

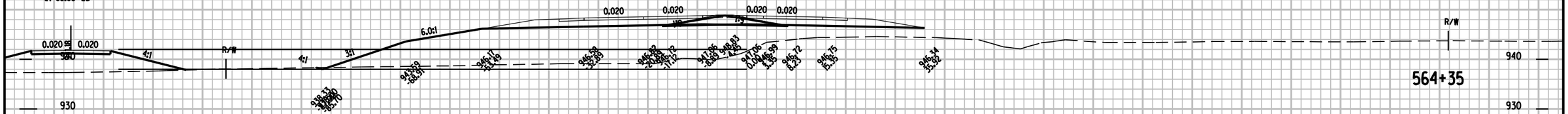
R/W

10.0 FT

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: STAGE 2 AND 3A	SHEET NO:	E

FILE NAME : c:\users\PD1\60200200\USH51\PSE\-72 90%\USH51551-572 BOTH EX.DGN PLOT DATE : 20-FEB-2013 15:26 PLOT BY : dotcyh PLOT NAME : PLOT SCALE : 2.000000:1.000000

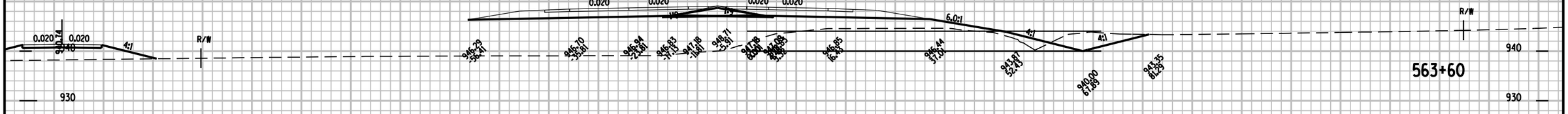
21+68.08 'EB'



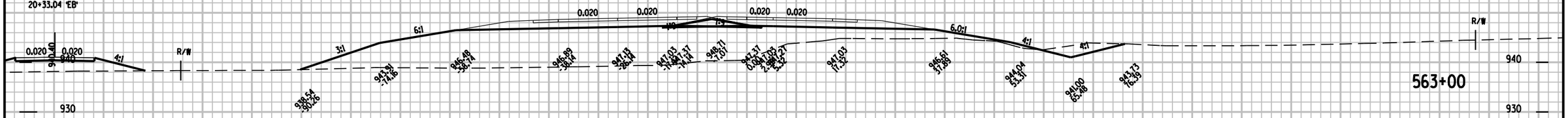
21+33.07 'EB'



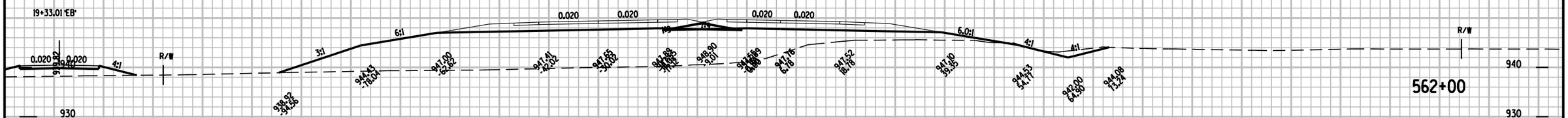
20+93.06 'EB'



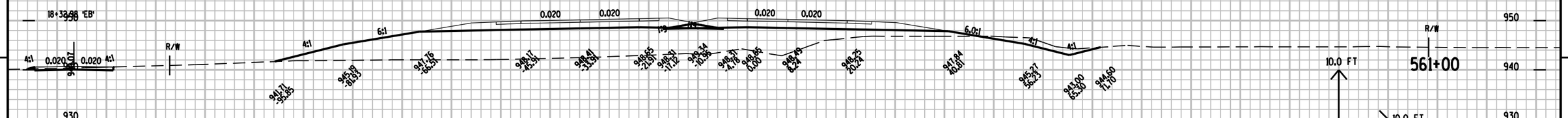
20+33.04 'EB'



19+33.01 'EB'



18+32.98 'EB'



-140 -120 -100 -80 -60 -40 -20 BL 20 40 60 80 100 120 140

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: STAGE 2 AND 3A	SHEET NO:	E

FILE NAME : c:\users\P\D1\60200200\USH51\PSE\-72 90%\USH51551-572 BOTH EX.DGN PLOT DATE : 20-FEB-2013 15:26 PLOT BY : dotcyh PLOT NAME : PLOT SCALE : 2.000000:1.000000

27+33.24 'EB'

26+33.21 'EB'

25+33.18 'EB'

24+33.15 'EB'

23+33.13 'EB'

22+33.10 'EB'

570+00

569+00

568+00

567+00

566+00

565+00

10.0 FT

10.0 FT

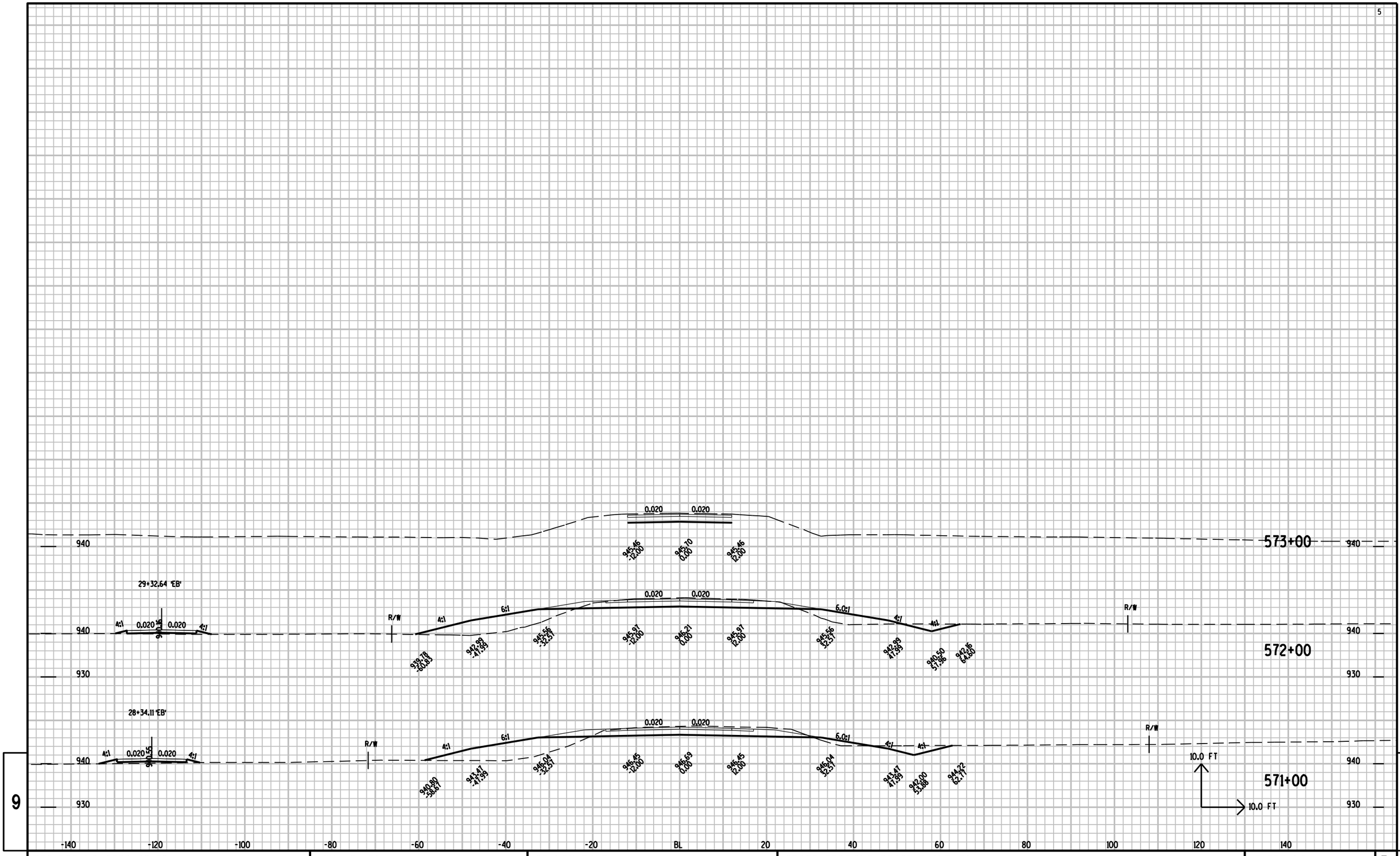
-140 -120 -100 -80 -60 -40 -20 BL 20 40 60 80 100 120 140

9

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PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: STAGE 2 AND 3A	SHEET NO:	E

FILE NAME : c:\users\PD1\60200200\USH51\PSE\-72 90%\USH51551-572 BOTH EX.DGN PLOT DATE : 20-FEB-2013 15:26 PLOT BY : dotcyh PLOT NAME : PLOT SCALE : 2.000000:1.000000



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PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: STAGE 2 AND 3A	SHEET NO:	E

FILE NAME : c:\users\PYD1\60200200\USH51\PSE\-72 90%\USH51551-572 BOTH EX.DGN PLOT DATE : 20-FEB-2013 15:26 PLOT BY : dotcyh PLOT NAME : PLOT SCALE : 2.000000:1.000000

STA. 457+00. 30.0 LT
1-9-MS. INLET. REQ'D
GRATE. ELEVATION=982.7
INVERT. ELEVATION=979.5

1-18". R.C.C.P.. REQ'D
INVERT. ELEVATION=980.5
OUTLET. ELEVATION=979.2

PROPOSED. R/W
457+00

PROPOSED. R/W
456+00

PROPOSED. R/W
455+00

PROPOSED. R/W
454+00

PROPOSED. R/W
453+00

PROPOSED. R/W
452+50

10.0 FT
PROPOSED. R/W
452+00

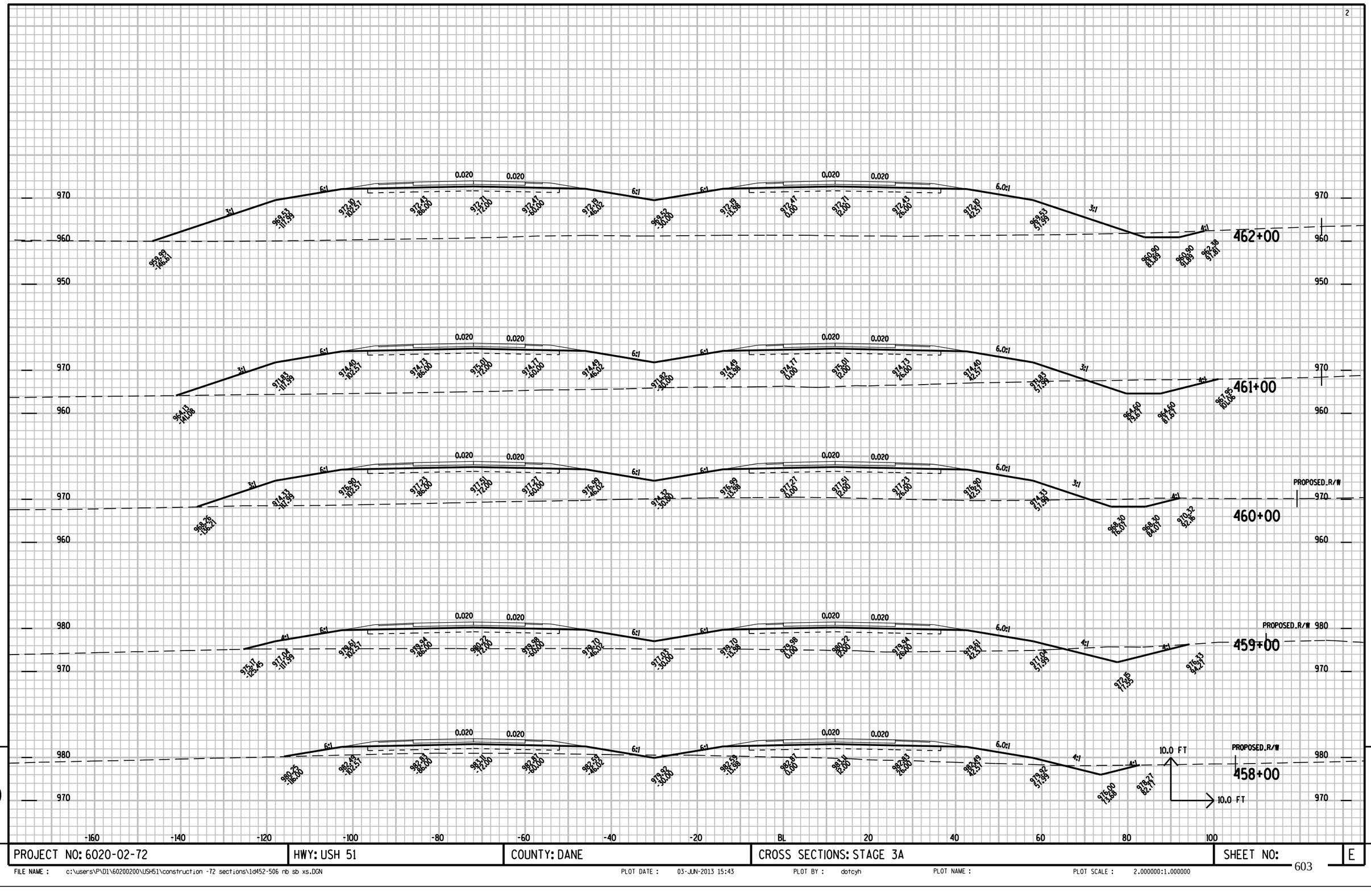
990
980
970

-160 -140 -120 -100 -80 -60 -40 -20 BL 20 40 60 80 100

9

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: STAGE 3A	SHEET NO:	E

FILE NAME : c:\users\P\D1\60200200\USH51\construction -72 sections\1d452-506 nb sb xs.DGN PLOT DATE : 03-JUN-2013 15:43 PLOT BY : dotcyh PLOT NAME : PLOT SCALE : 2.000000:1.000000

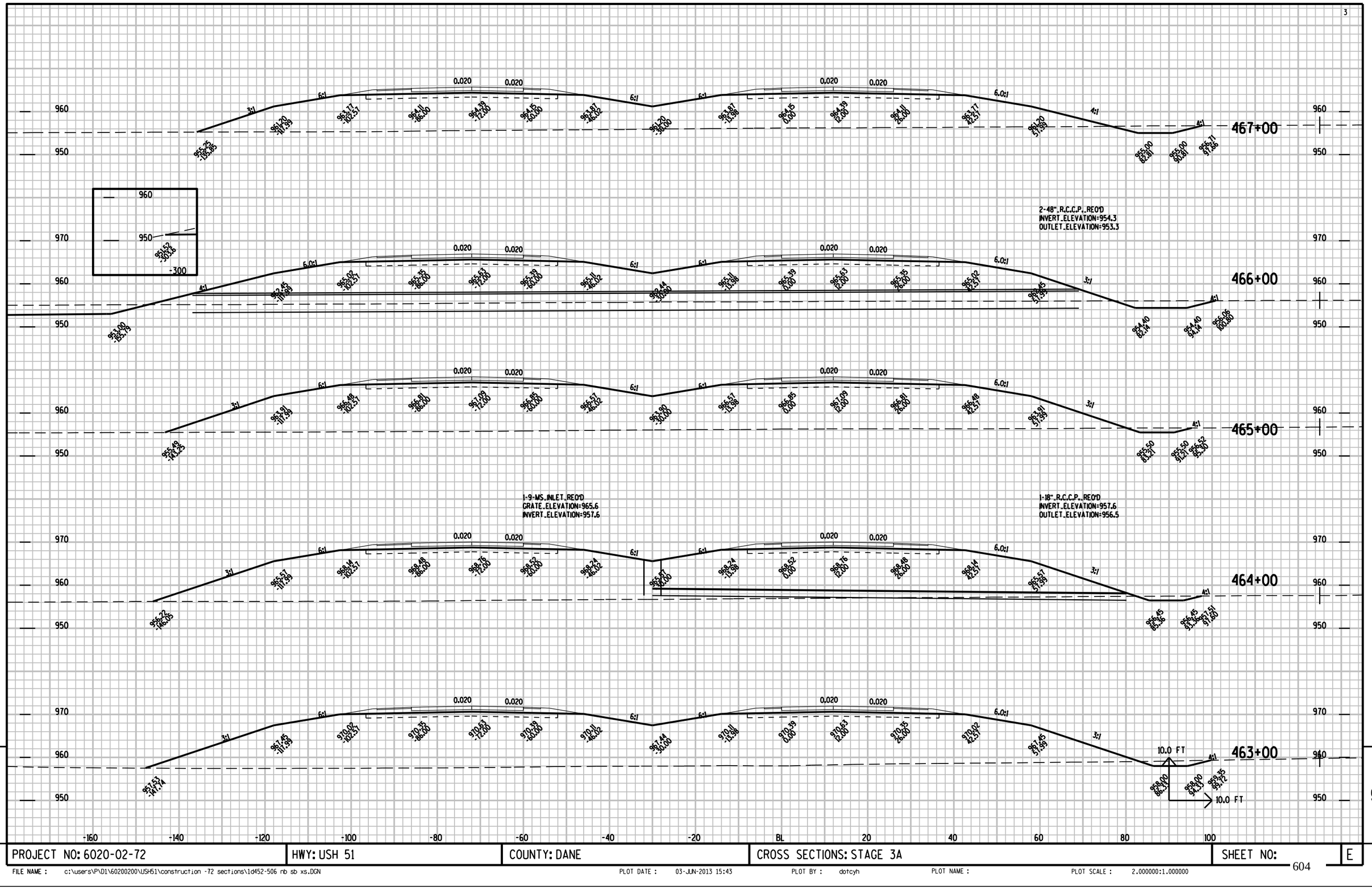


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PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: STAGE 3A	SHEET NO:	E

FILE NAME : c:\users\P\D1\60200200\USH51\construction -72 sections\1d452-506 nb sb xs.DGN PLOT DATE : 03-JUN-2013 15:43 PLOT BY : dotcyh PLOT NAME : PLOT SCALE : 2.000000:1.000000



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9

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: STAGE 3A	SHEET NO:	E

FILE NAME : c:\users\P\D1\60200200\USH51\construction -72 sections\1d452-506 nb sb xs.DGN PLOT DATE : 03-JUN-2013 15:43 PLOT BY : dotcyh PLOT NAME : PLOT SCALE : 2.000000:1.000000

I-9-MS_INLET_REO'D
GRATE_ELEVATION=958.4
INVERT_ELEVATION=953.85

I-18"_R.C.C.P._REO'D
INVERT_ELEVATION=953.85
OUTLET_ELEVATION=952.8

472+00

471+00

470+00

469+00

468+00

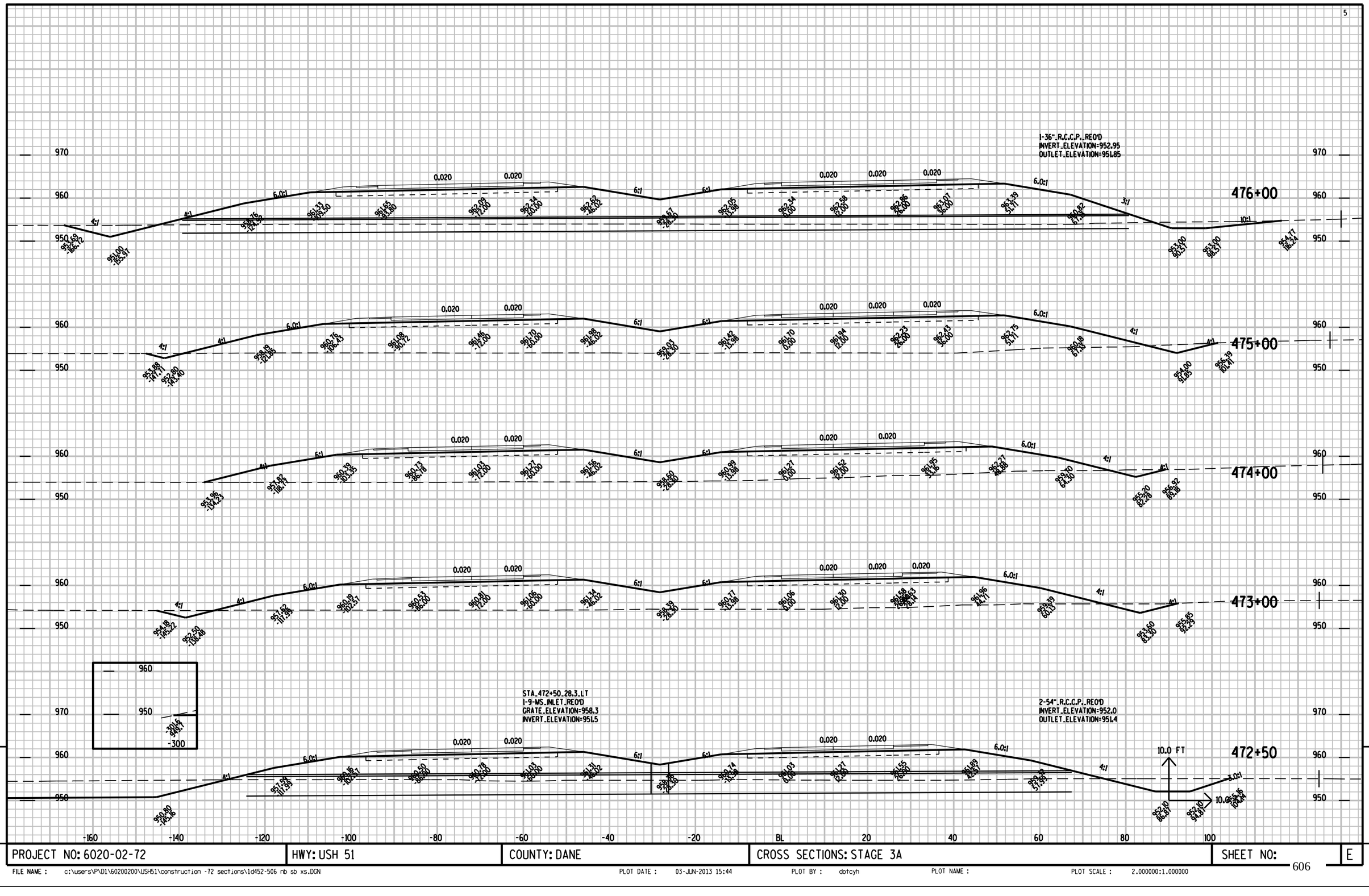
10.0 FT

10.0 FT

-160 -140 -120 -100 -80 -60 -40 -20 BL 20 40 60 80 100

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: STAGE 3A	SHEET NO:	E

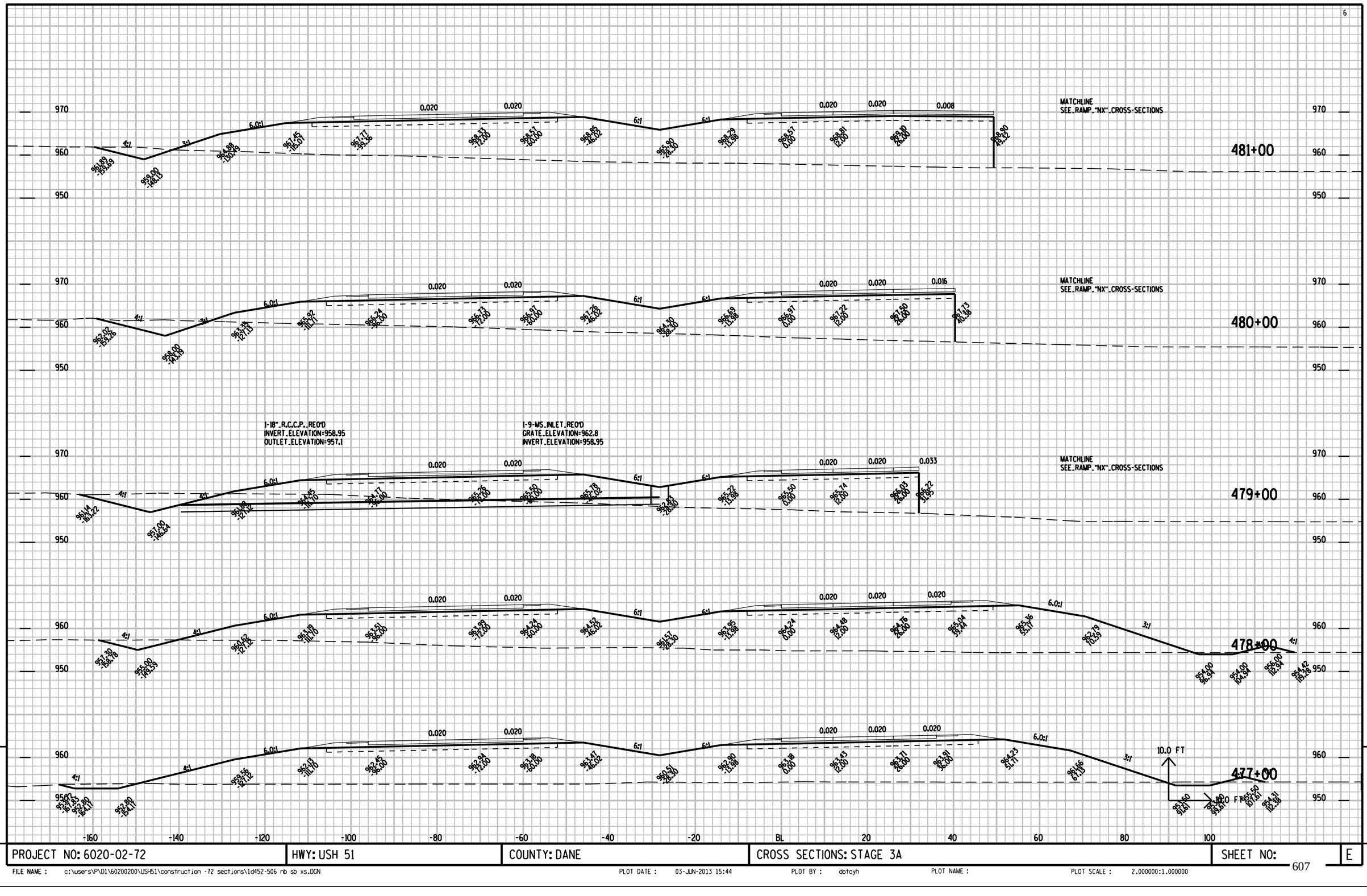
FILE NAME : c:\users\P\D1\60200200\USH51\construction -72 sections\1d452-506 nb sb xs.DGN PLOT DATE : 03-JUN-2013 15:44 PLOT BY : dotcyh PLOT NAME : PLOT SCALE : 2.000000:1.000000



9

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: STAGE 3A	SHEET NO:	E

FILE NAME : c:\users\P\D1\60200200\USH51\construction -72 sections\1d452-506 nb sb xs.DGN PLOT DATE : 03-JUN-2013 15:44 PLOT BY : dotcyh PLOT NAME : PLOT SCALE : 2.000000:1.000000



PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: STAGE 3A	SHEET NO:	E

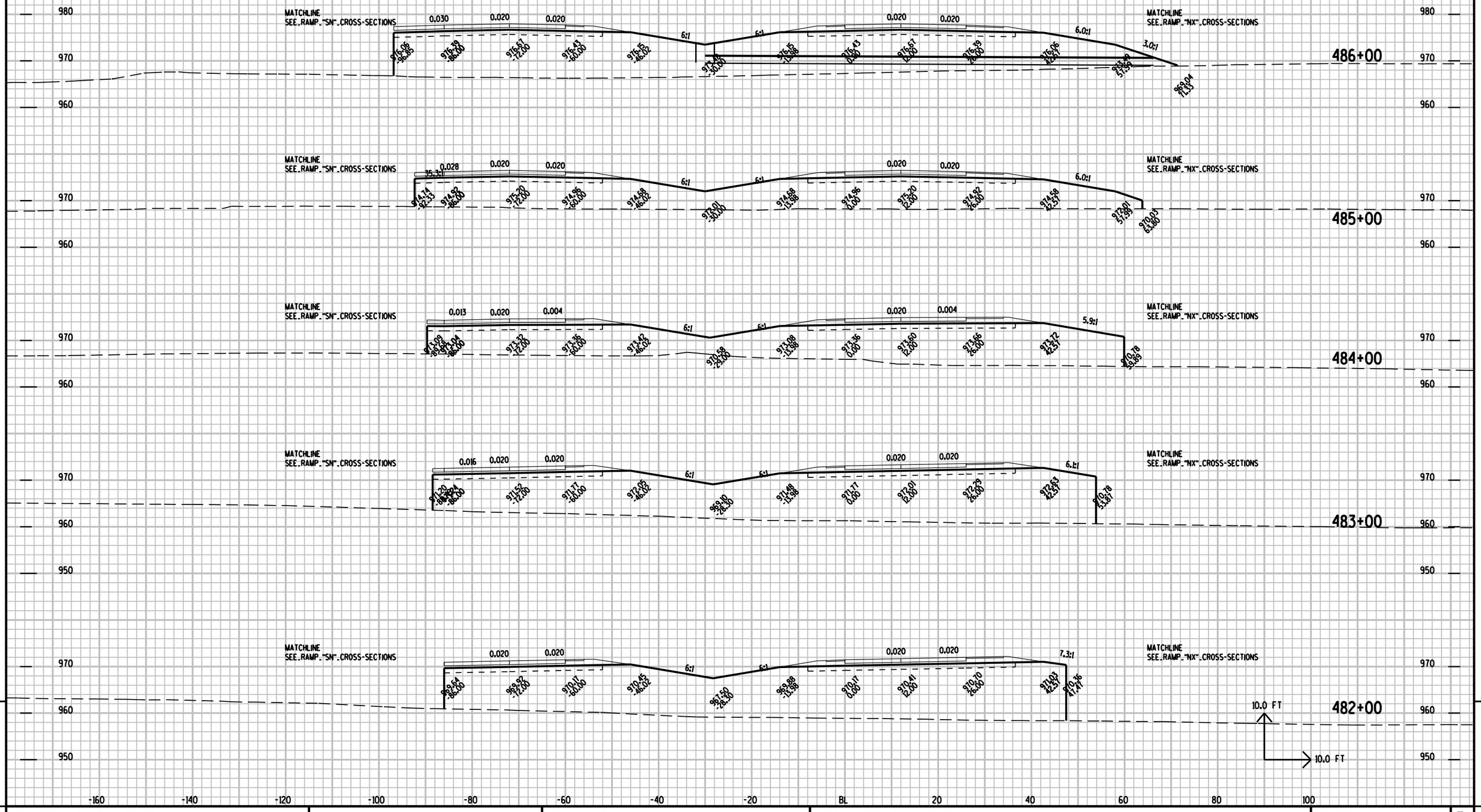
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STA 486+00 30.0 LT
I-9-MS INLET REQ'D
GRATE ELEVATION=973.5
INVERT ELEVATION=969.5

I-18" R.C.C.P. REQ'D
INVERT ELEVATION=970.7
OUTLET ELEVATION=969.0

MATCHLINE
SEE RAMP "SN" CROSS-SECTIONS

MATCHLINE
SEE RAMP "NX" CROSS-SECTIONS

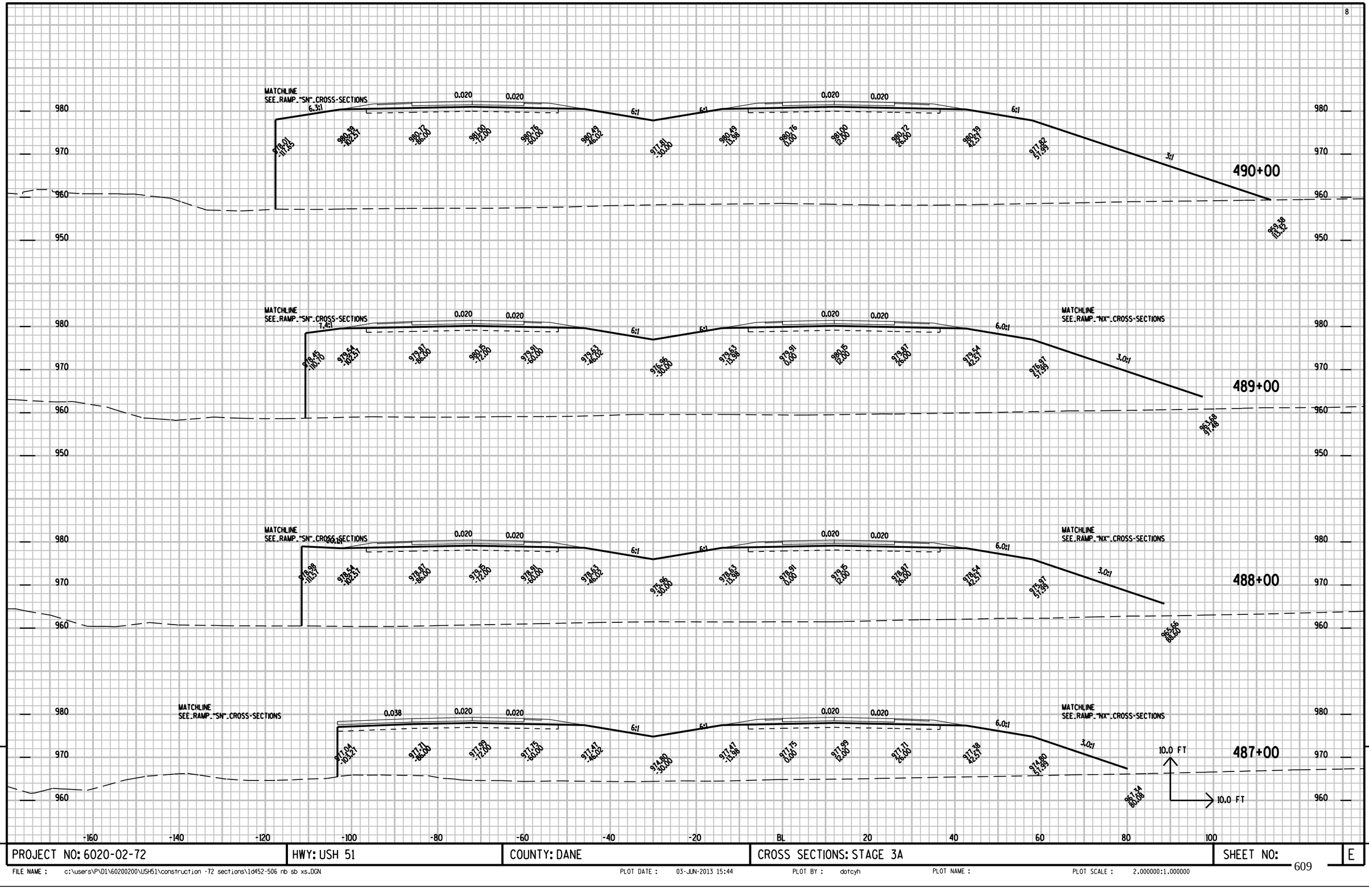


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PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: STAGE 3A	SHEET NO:	E

FILE NAME : c:\users\P\D1\60200200\USH51\construction -72 sections\1d452-506 nb sb xs.DGN PLOT DATE : 03-JUN-2013 15:44 PLOT BY : dotcyh PLOT NAME : PLOT SCALE : 2.000000:1.000000

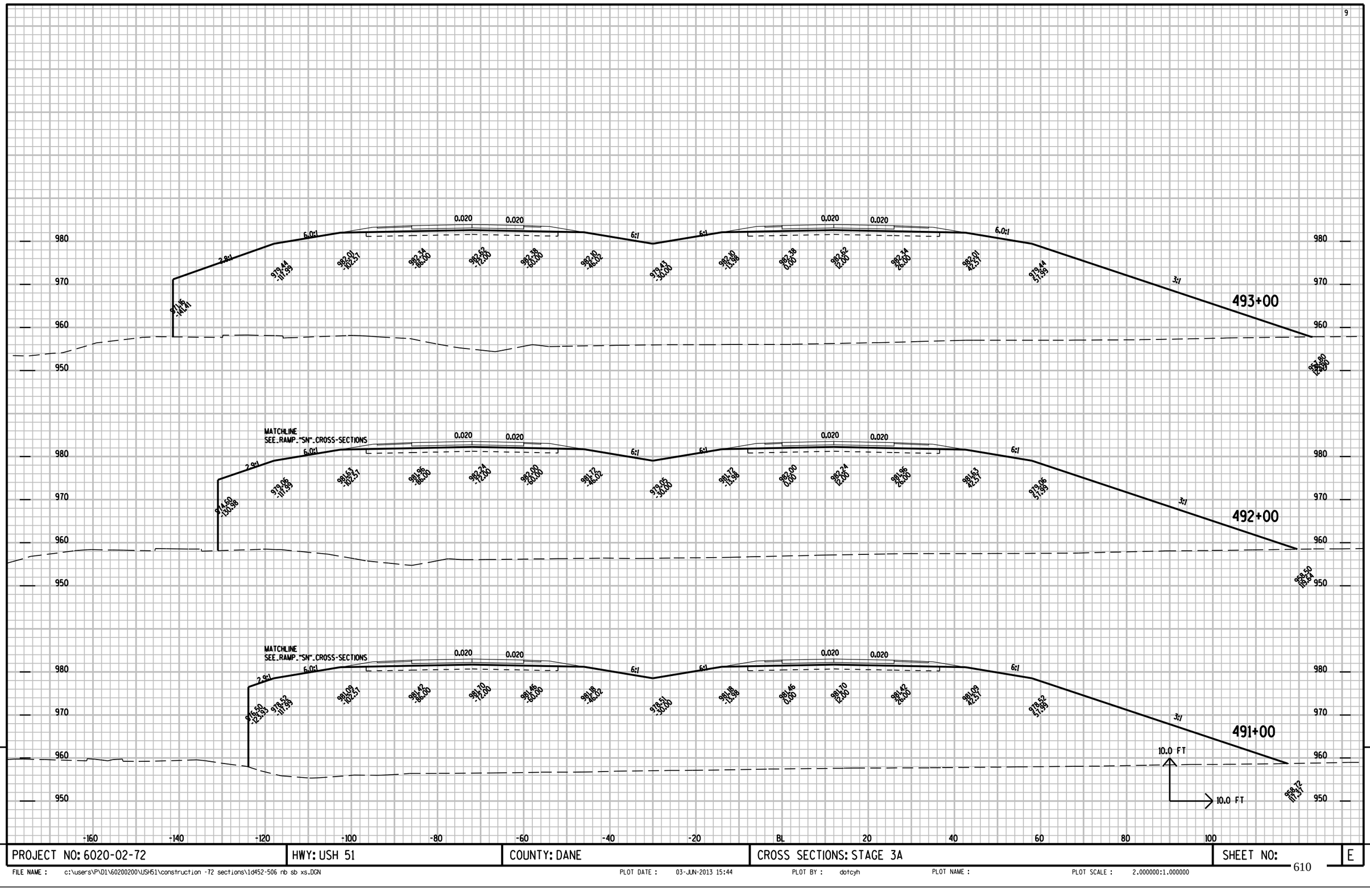


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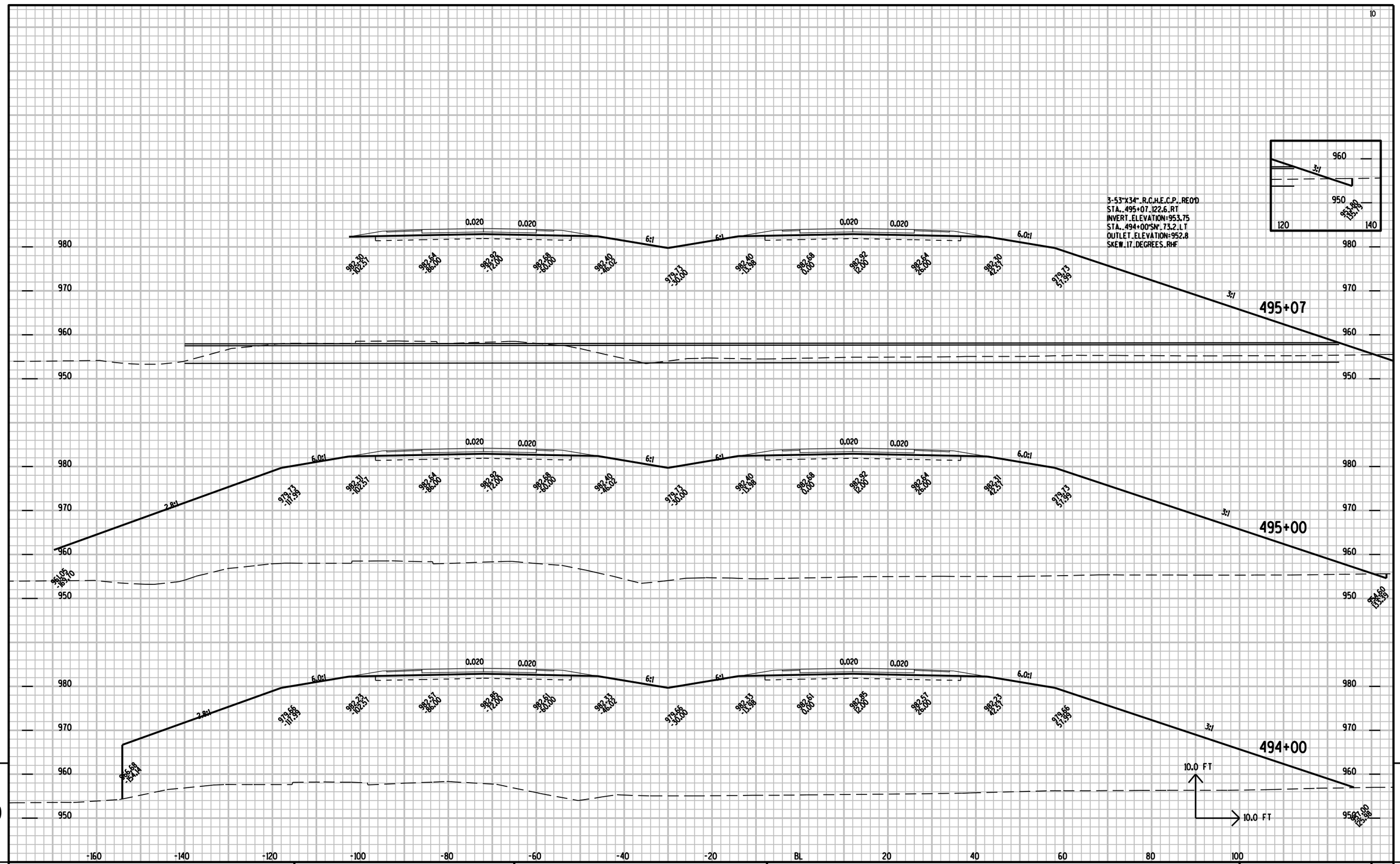
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PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: STAGE 3A	SHEET NO:	E

FILE NAME : c:\users\P\D1\60200200\USH51\construction -72 sections\1d452-506 nb sb xs.DGN PLOT DATE : 03-JUN-2013 15:44 PLOT BY : dotcyh PLOT NAME : PLOT SCALE : 2.000000:1.000000



PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: STAGE 3A	SHEET NO:	E

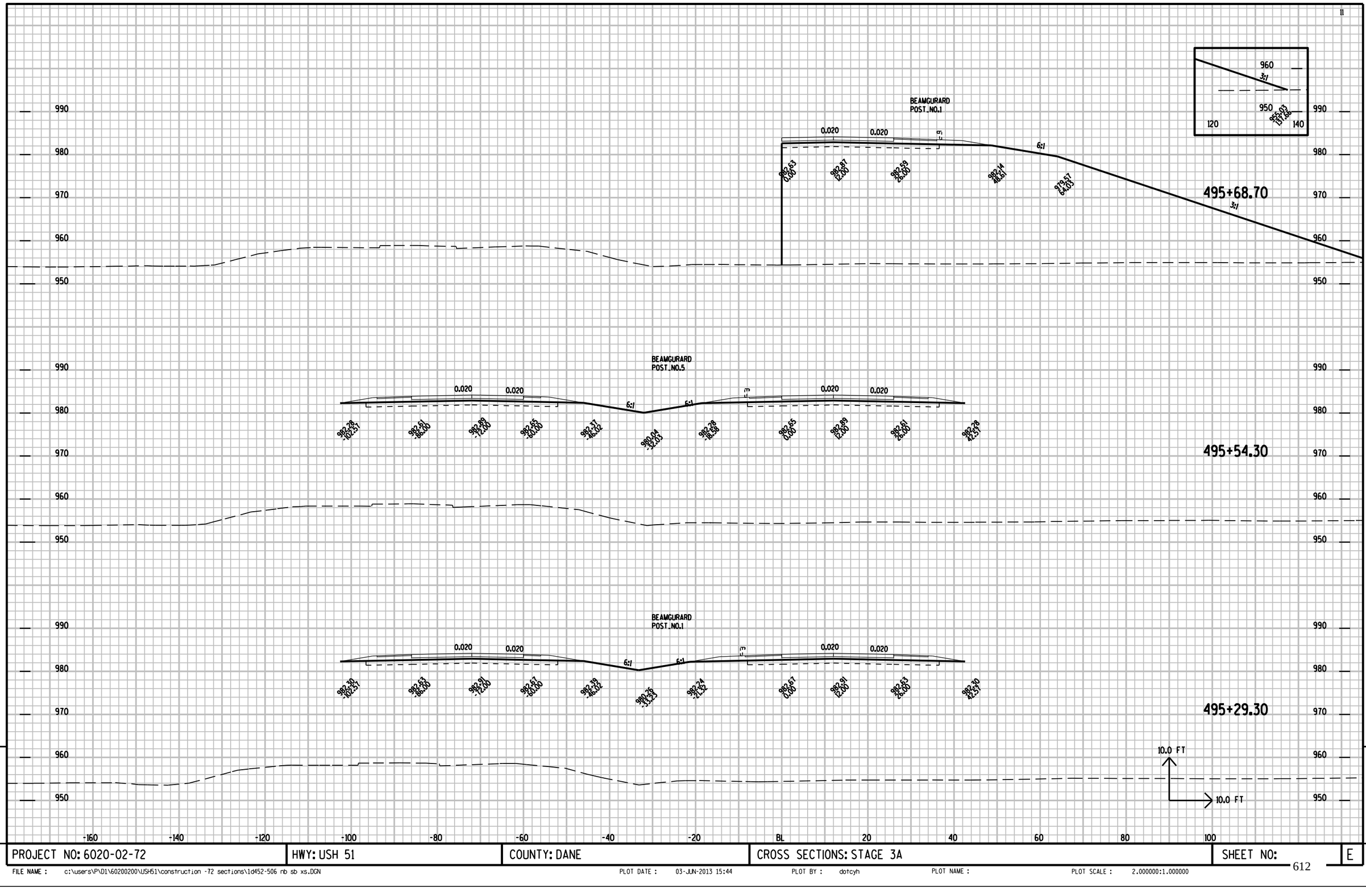


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PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: STAGE 3A	SHEET NO:	E

FILE NAME : c:\users\P\D1\60200200\USH51\construction -72 sections\ld452-506 nb sb xs.DGN PLOT DATE : 03-JUN-2013 15:44 PLOT BY : dotcyh PLOT NAME : PLOT SCALE : 2.000000:1.000000



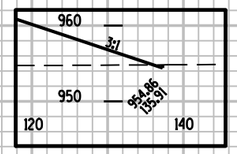
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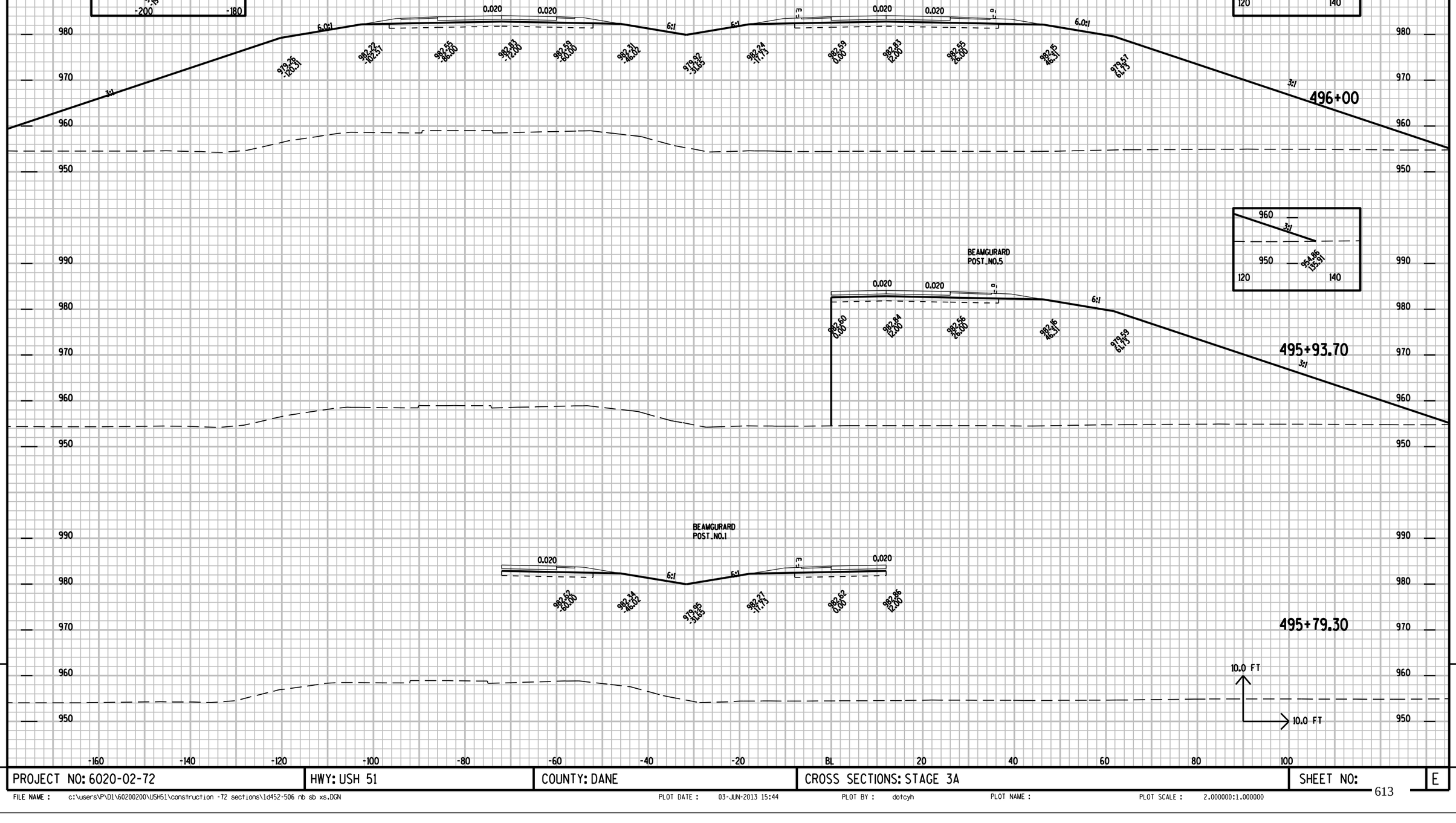
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PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: STAGE 3A	SHEET NO:	E

FILE NAME : c:\users\P\D1\60200200\USH51\construction -72 sections\1d452-506 nb sb xs.DGN PLOT DATE : 03-JUN-2013 15:44 PLOT BY : dotcyh PLOT NAME : PLOT SCALE : 2.000000:1.000000







PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: STAGE 3A	SHEET NO:	E

FILE NAME : c:\users\P\D1\60200200\USH51\construction -72 sections\1d452-506 nb sb xs.DGN PLOT DATE : 03-JUN-2013 15:44 PLOT BY : dotcyh PLOT NAME : PLOT SCALE : 2.000000:1.000000

1-18"_R.C.C.P._REQ'D
INVERT_ELEVATION=970.0
OUTLET_ELEVATION=968.9

STA_498+00_31.7_LT
1-9-WS_INLET_SPECIAL_REQ'D
GRATE_ELEVATION=979.3
INVERT_ELEVATION=970.0

498+00

497+00

BEAMGURARD
POST_NO.9

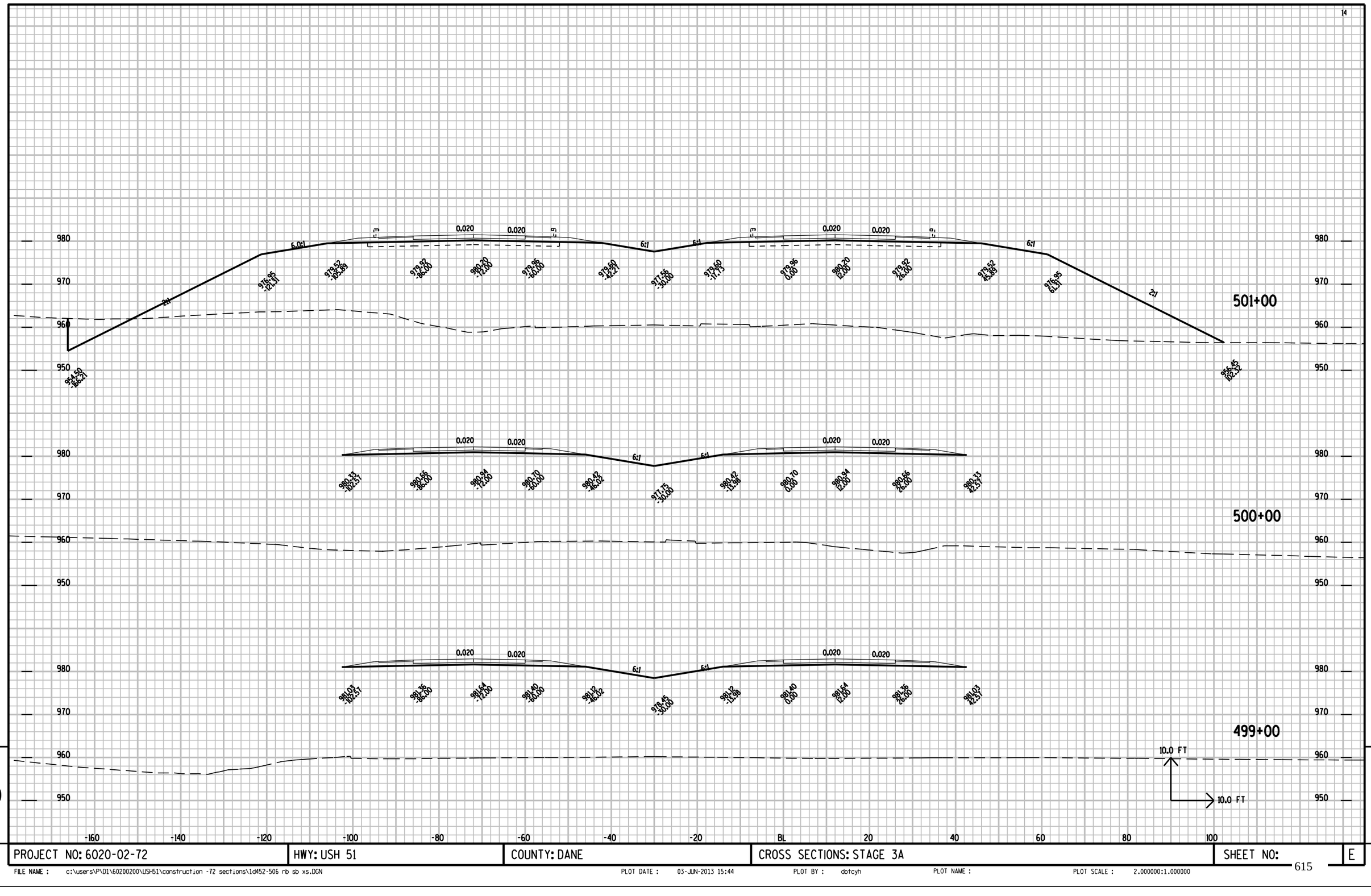
496+18.70

10.0 FT

10.0 FT

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: STAGE 3A	SHEET NO:	E

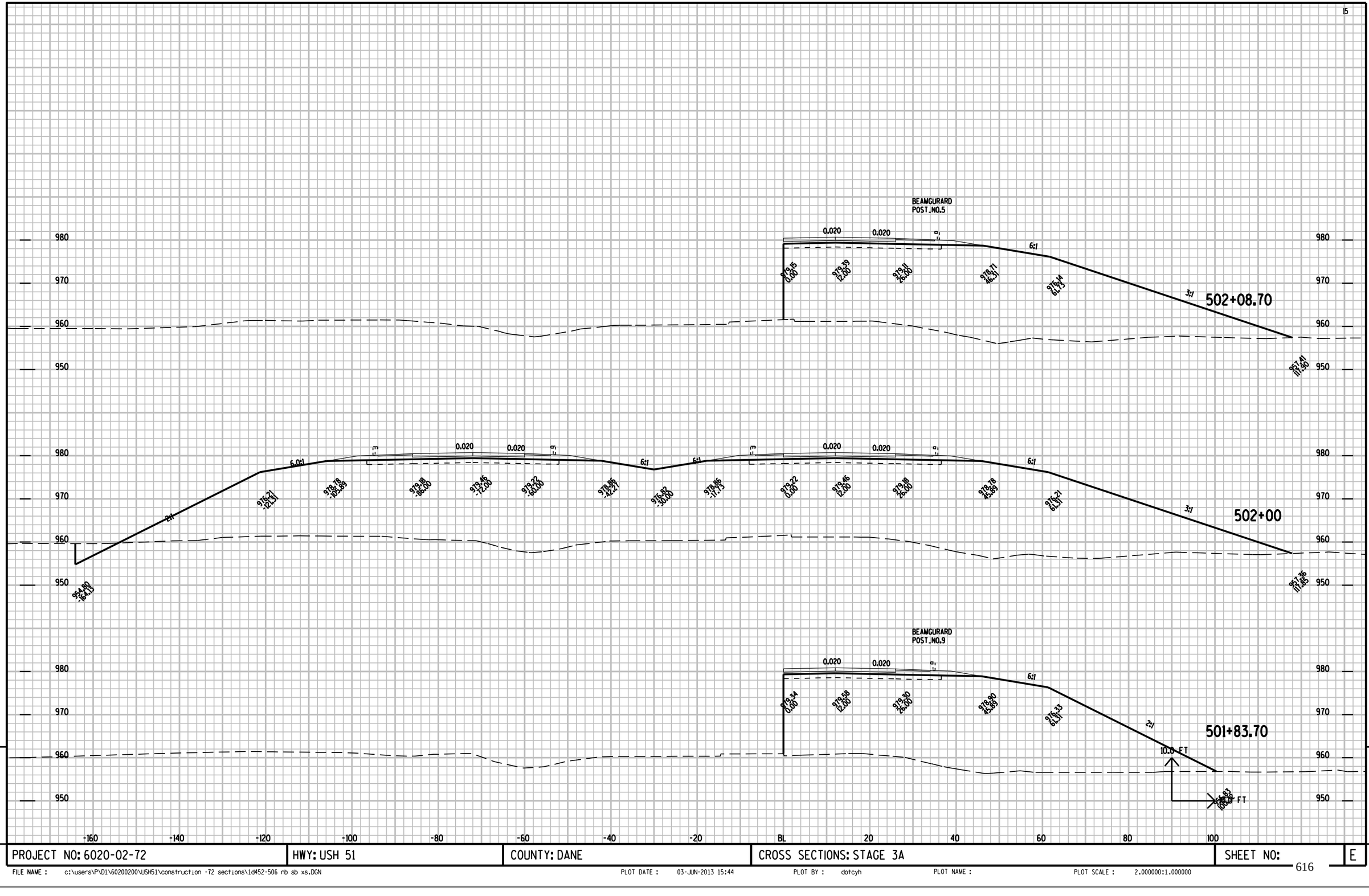
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9

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: STAGE 3A	SHEET NO:	E

FILE NAME : c:\users\P\D1\60200200\USH51\construction -72 sections\ld452-506 nb sb xs.DGN PLOT DATE : 03-JUN-2013 15:44 PLOT BY : dotcyh PLOT NAME : PLOT SCALE : 2.000000:1.000000



9

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: STAGE 3A	SHEET NO:	E

FILE NAME : c:\users\P\D1\60200200\USH51\construction -72 sections\ld452-506 nb sb xs.DGN PLOT DATE : 03-JUN-2013 15:44 PLOT BY : dotcyh PLOT NAME : PLOT SCALE : 2.000000:1.000000

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0.003

6:1

3:1

976+11
-121.13

978.88
-106.31

978.93
-86.00

978.96
-12.00

959.53
-172.06

502+67.10

BEAMGUARRD
POST_NO.9

0.011

6.0:1

2:1

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-121.51

978.78
-105.89

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979.15
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954.89
-164.13

502+42.10

BEAMGUARRD
POST_NO.1

0.014

0.020

6:1

3:1

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978.85
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978.40
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975.83
64.03

502+33.70

10.0 FT

10.0 FT

957.74
186.12

980
970
960
950

-160 -140 -120 -100 -80 -60 -40 -20 BL 20 40 60 80 100

9

9

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: STAGE 3A	SHEET NO:	E

FILE NAME : c:\users\P\D1\60200200\USH51\construction -72 sections\ld452-506 nb sb xs.DGN PLOT DATE : 03-JUN-2013 15:45 PLOT BY : dotcyh PLOT NAME : PLOT SCALE : 2.000000:1.000000

BEAMGURARD
POST_NO.1

980
970
960
950

3:1
6:1
0.006
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-124.03
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-86.00
978.78
-12.00
959.95
-173.46

502+92.10

BEAMGURARD
POST_NO.9

0.003
0.020
978.88
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978.25
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976.41
-31.20
978.66
-17.73
978.61
0.00
978.58
12.00
978.20
26.00

502+82.45

BEAMGURARD
POST_NO.9

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-31.18
978.66
-17.73
978.62
0.00
978.60
12.00
978.32
26.00

502+80.90

10.0 FT
10.0 FT

-160 -140 -120 -100 -80 -60 -40 -20 BL 20 40 60 80 100

9

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: STAGE 3A	SHEET NO:	E

FILE NAME : c:\users\P\D1\60200200\USH51\construction -72 sections\ld452-506 nb sb xs.DGN PLOT DATE : 03-JUN-2013 15:45 PLOT BY : dotcyh PLOT NAME : PLOT SCALE : 2.000000:1.000000

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POST_NO.5

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980 970 960 950

503+07.45

BEAMGURARD
POST_NO.5

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980 970 960 950

503+05.90

0.008 0.020 6:1 6:1 0.008 0.020 6.0:1 2.8:1

MATCHLINE
SEE_RAMP_"NN"_CROSS-SECTIONS

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10.0 FT 10.0 FT

980 970 960 950

503+00

-160 -140 -120 -100 -80 -60 -40 -20 BL 20 40 60 80 100

9 9

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: STAGE 3A	SHEET NO:	E

FILE NAME : c:\users\P\D1\60200200\USH51\construction -72 sections\ld452-506 nb sb xs.DGN PLOT DATE : 03-JUN-2013 15:45 PLOT BY : dotcyh PLOT NAME : PLOT SCALE : 2.000000:1.000000

MATCHLINE
SEE: RAMP_"NN"_CROSS-SECTIONS

504+00

980 / 970 / 960 / 950

3:1 6:1 6:1 6:1 6.0:1 2.9:1

0.033 0.033 0.033 0.033

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BEAMGURARD
POST_NO.1

503+32.45

980 / 970 / 960 / 950

0.019 0.020 0.019 0.020

6:1 6:1

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BEAMGURARD
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503+30.90

980 / 970 / 960 / 950

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10.0 FT
10.0 FT

-160 -140 -120 -100 -80 -60 -40 -20 BL 20 40 60 80 100

9 9

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: STAGE 3A	SHEET NO:	E

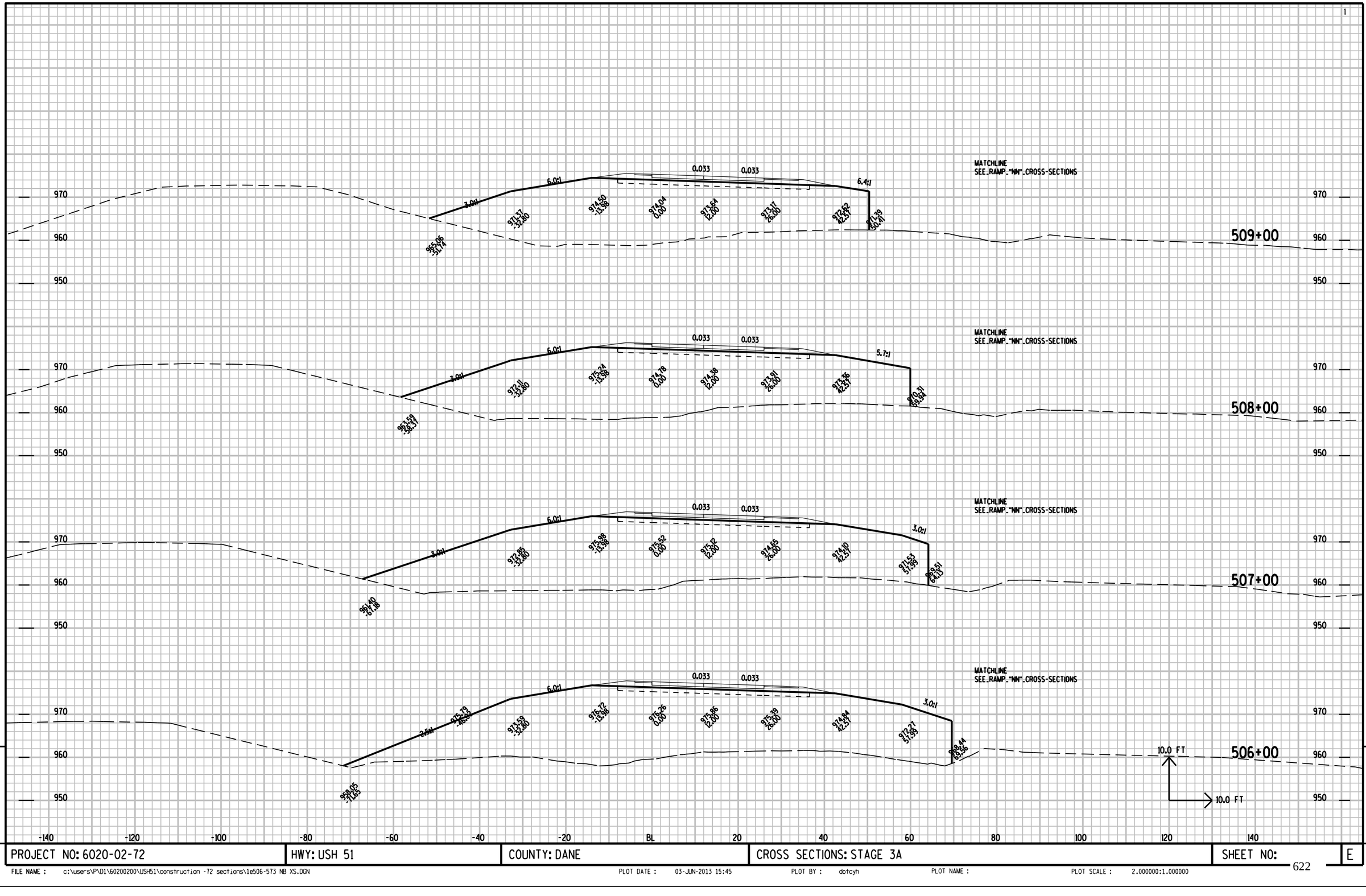
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PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: STAGE 3A	SHEET NO:	E

FILE NAME : c:\users\P\D1\60200200\USH51\construction -72 sections\1d452-506 nb sb xs.DGN PLOT DATE : 03-JUN-2013 15:45 PLOT BY : dotcyh PLOT NAME : PLOT SCALE : 2.000000:1.000000

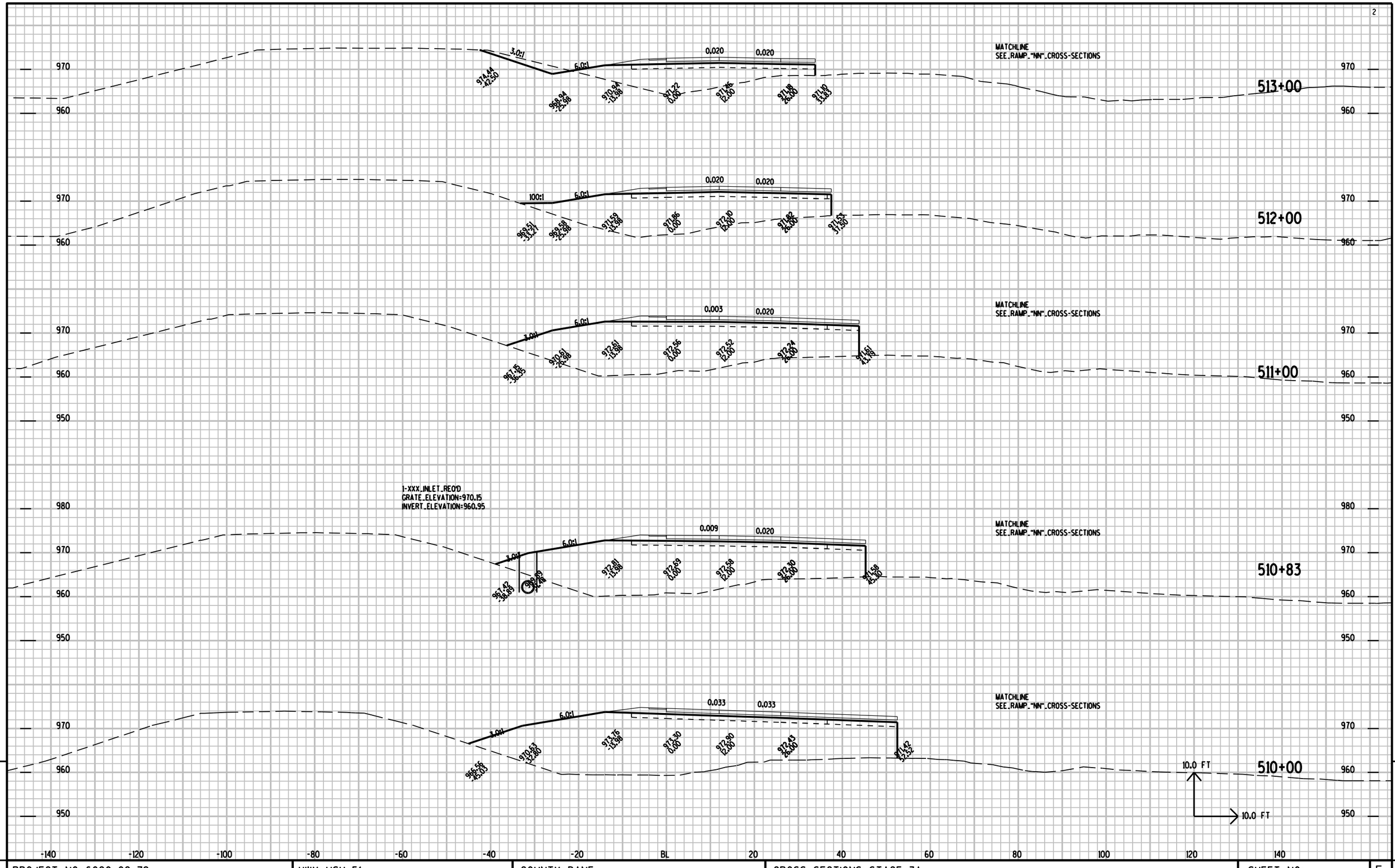


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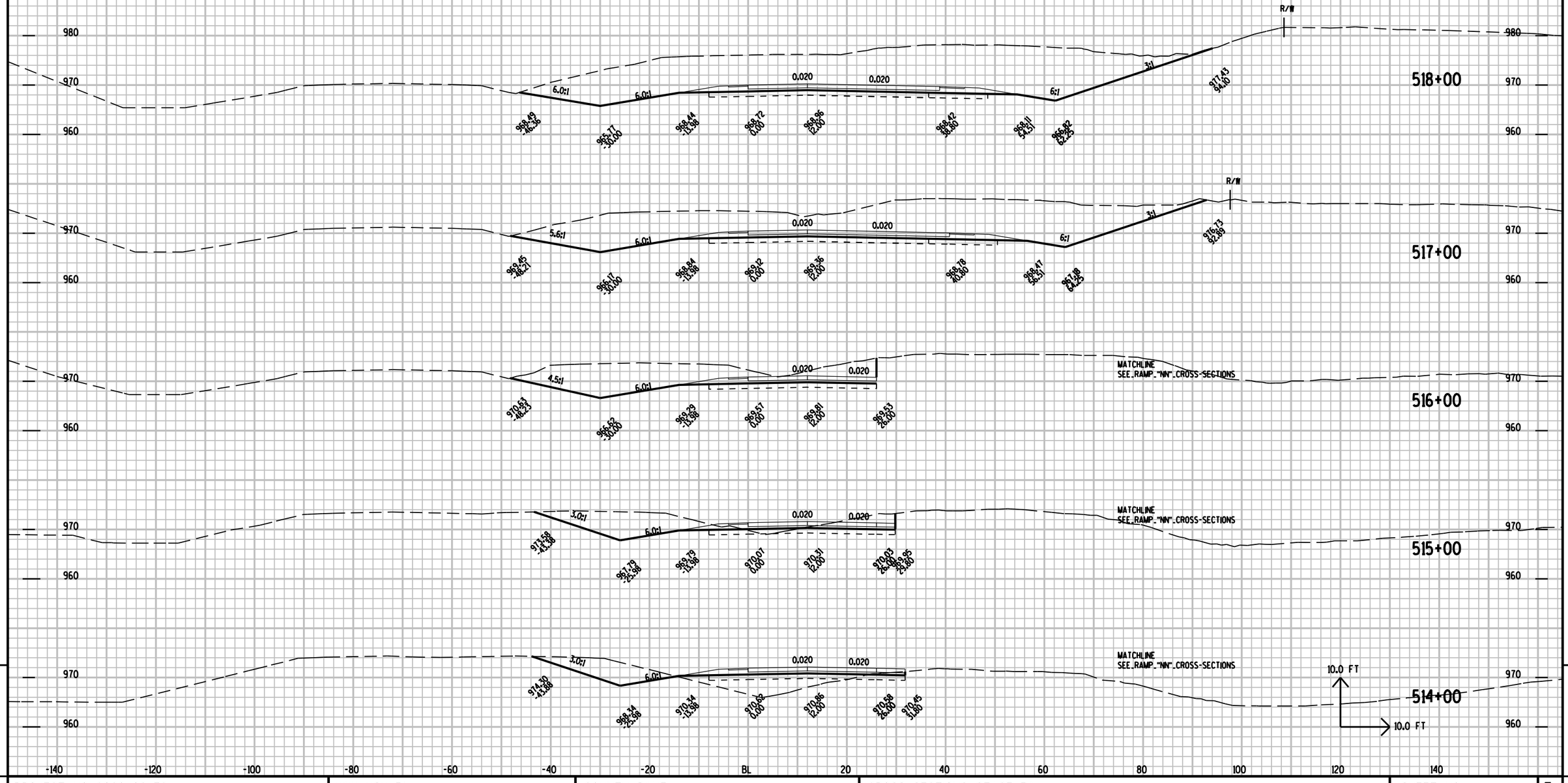
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FILE NAME : c:\users\P\D1\60200200\USH51\construction -72 sections\1e506-573 NB XS.DGN PLOT DATE : 03-JUN-2013 15:45 PLOT BY : dotcyh PLOT NAME : PLOT SCALE : 2.000000:1.000000



PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: STAGE 3A	SHEET NO:	E

FILE NAME : c:\users\P\D1\60200200\USH51\construction -72 sections\1e506-573 NB XS.DGN PLOT DATE : 03-JUN-2013 15:45 PLOT BY : dotcyh PLOT NAME : PLOT SCALE : 2.000000:1.000000

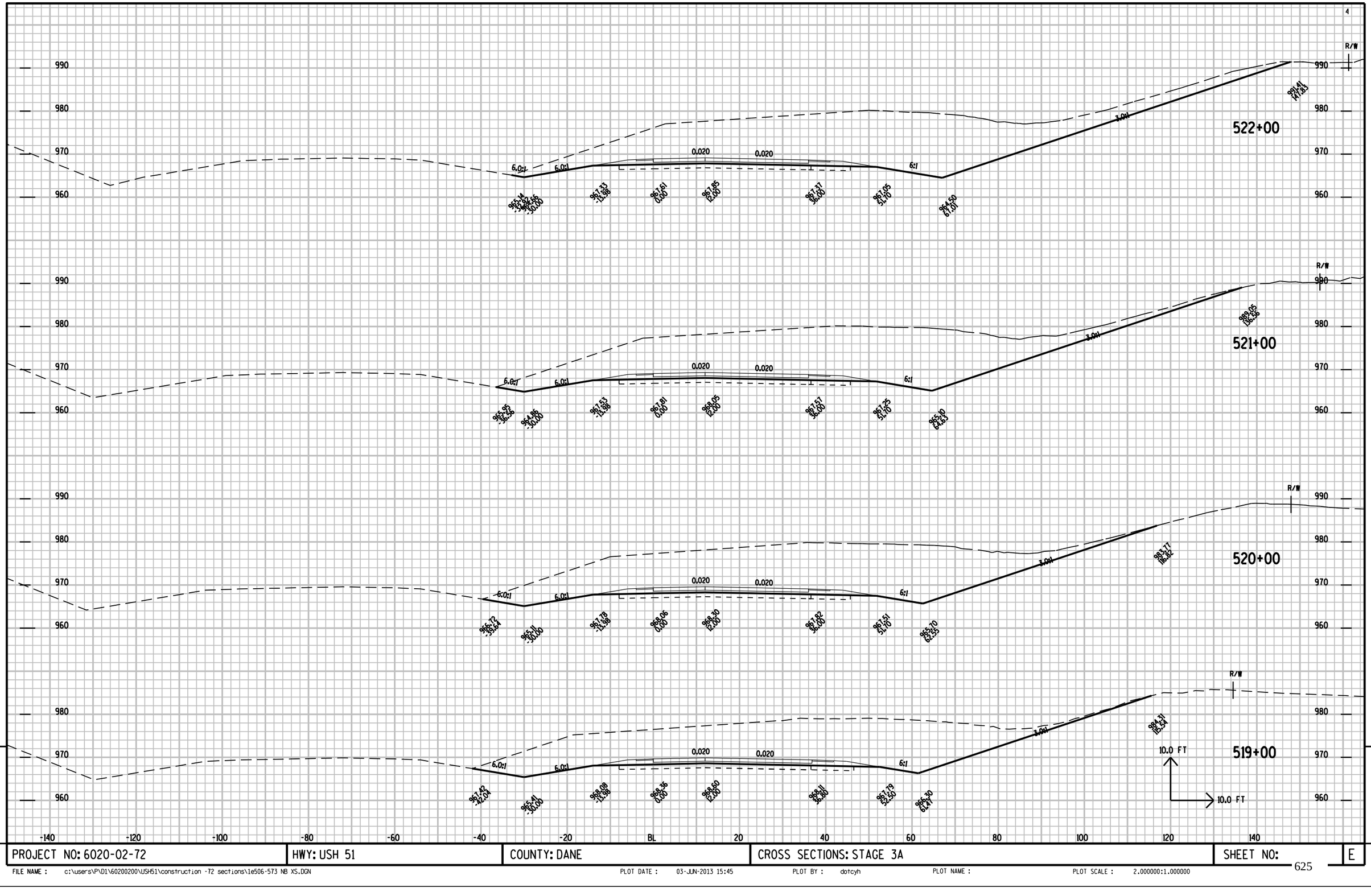


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PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: STAGE 3A	SHEET NO:	E

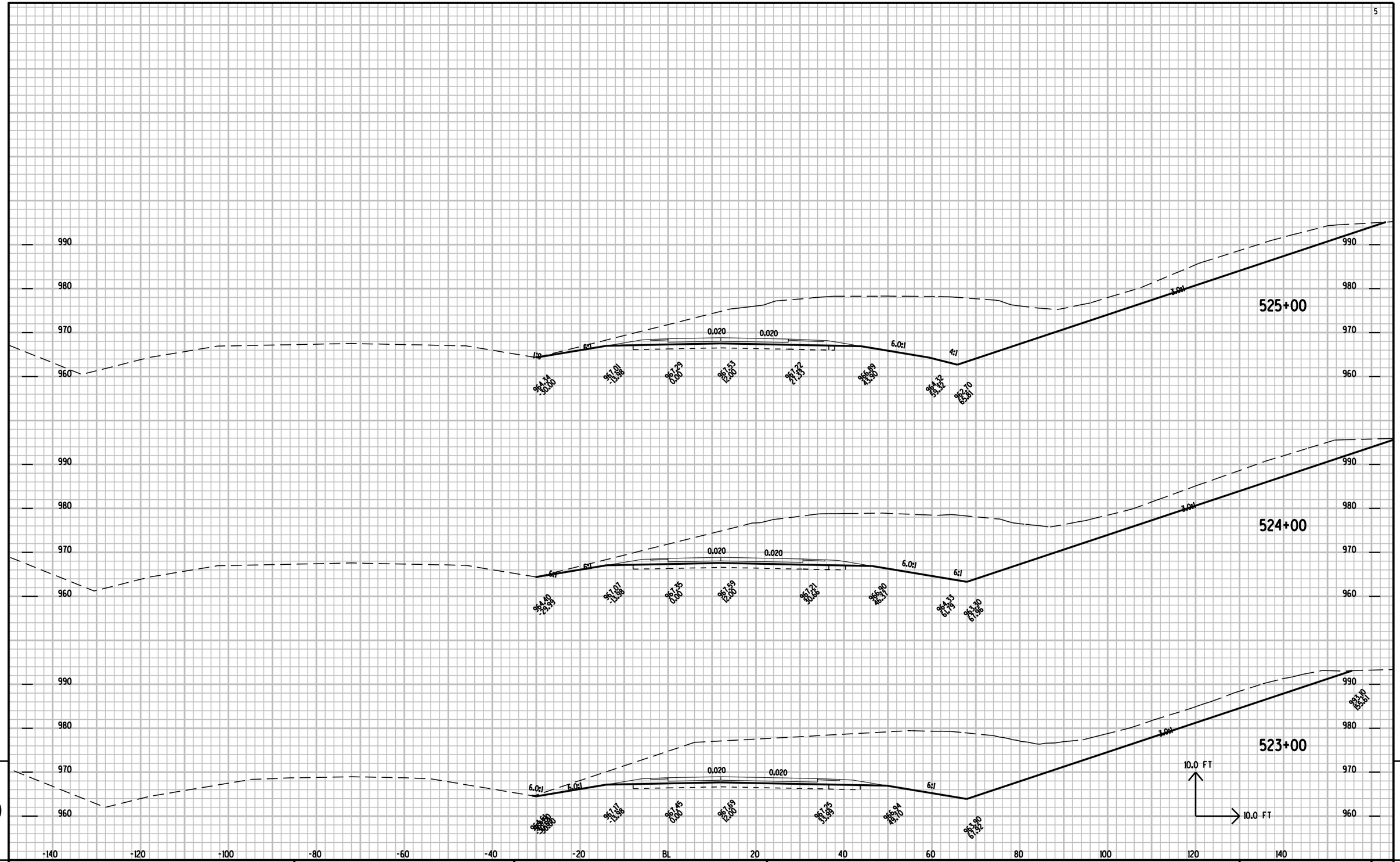
FILE NAME : c:\users\P\D1\60200200\USH51\construction -72 sections\1e506-573 NB XS.DGN PLOT DATE : 03-JUN-2013 15:45 PLOT BY : dotcyh PLOT NAME : PLOT SCALE : 2.000000:1.000000



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PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: STAGE 3A	SHEET NO:	E

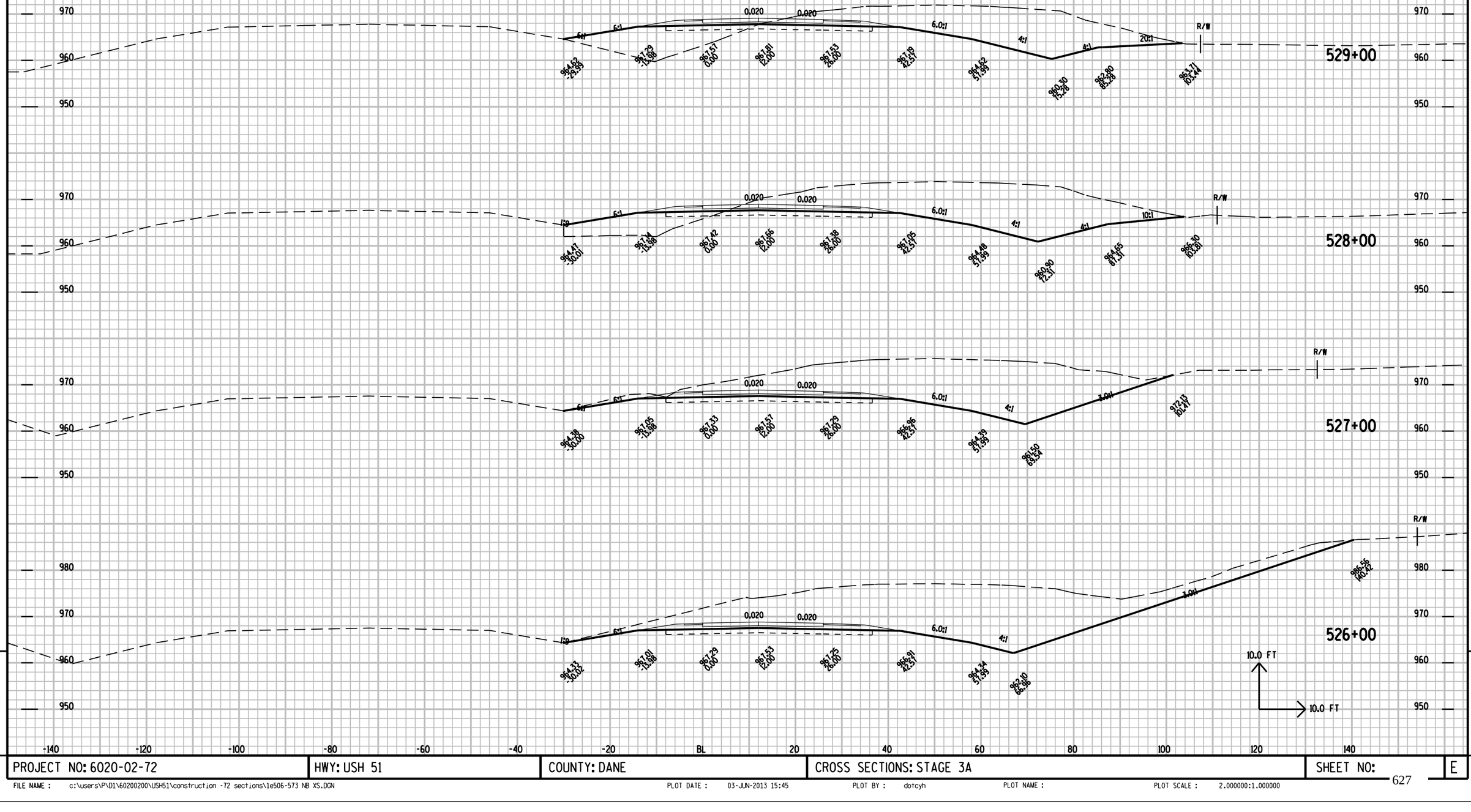
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9

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: STAGE 3A	SHEET NO:	E

FILE NAME : c:\users\P\D1\60200200\USH51\construction -72 sections\1e506-573 NB XS.DGN PLOT DATE : 03-JUN-2013 15:45 PLOT BY : dotcyh PLOT NAME : PLOT SCALE : 2.000000:1.000000

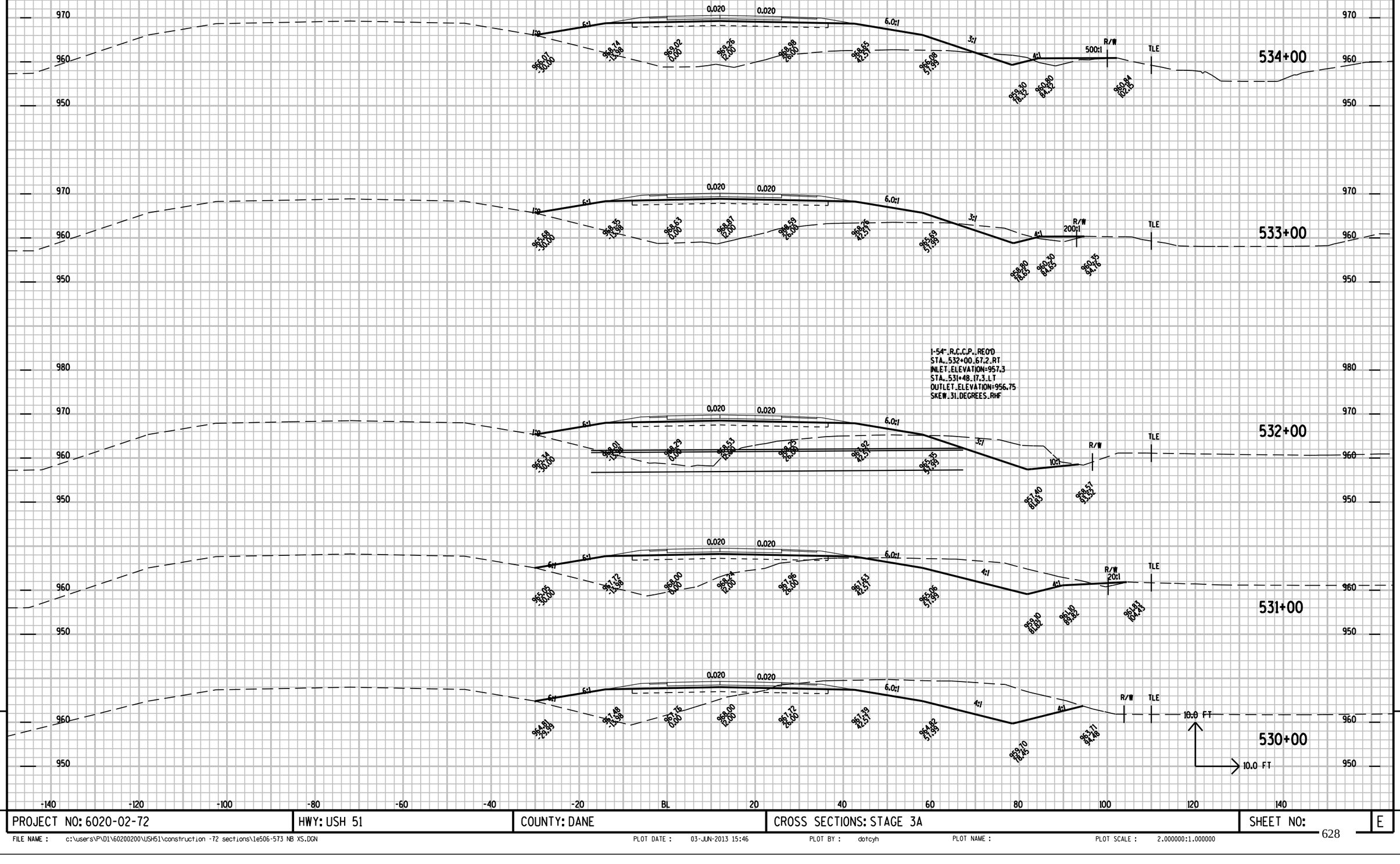


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PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: STAGE 3A	SHEET NO:	E

FILE NAME : c:\users\P\D1\60200200\USH51\construction -72 sections\1e506-573 NB XS.DGN PLOT DATE : 03-JUN-2013 15:45 PLOT BY : dotcyh PLOT NAME : PLOT SCALE : 2.000000:1.000000

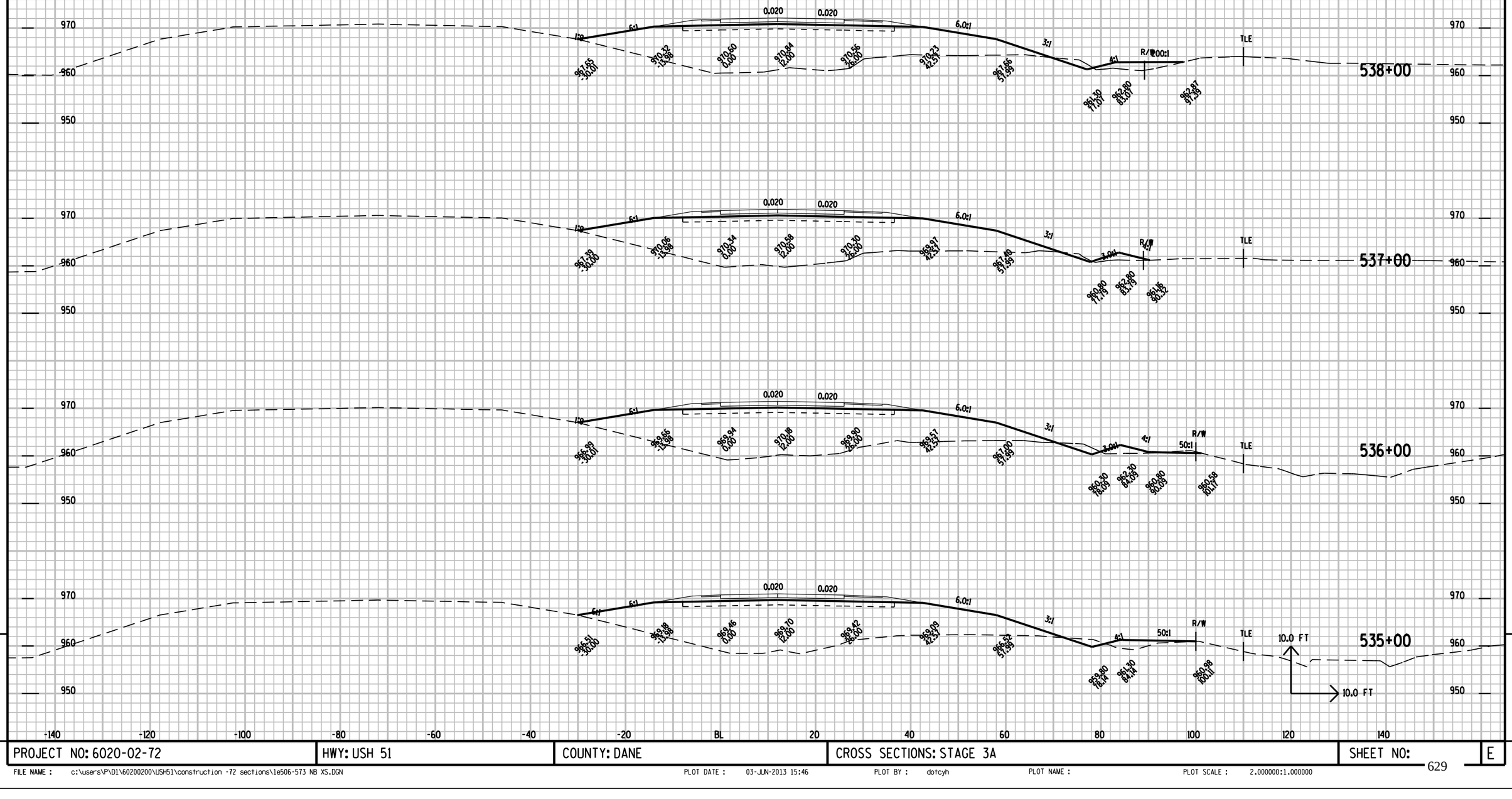


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PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: STAGE 3A	SHEET NO:	E

FILE NAME : c:\users\P\D1\60200200\USH51\construction -72 sections\1e506-573 NB XS.DGN PLOT DATE : 03-JUN-2013 15:46 PLOT BY : dotcyh PLOT NAME : PLOT SCALE : 2.000000:1.000000

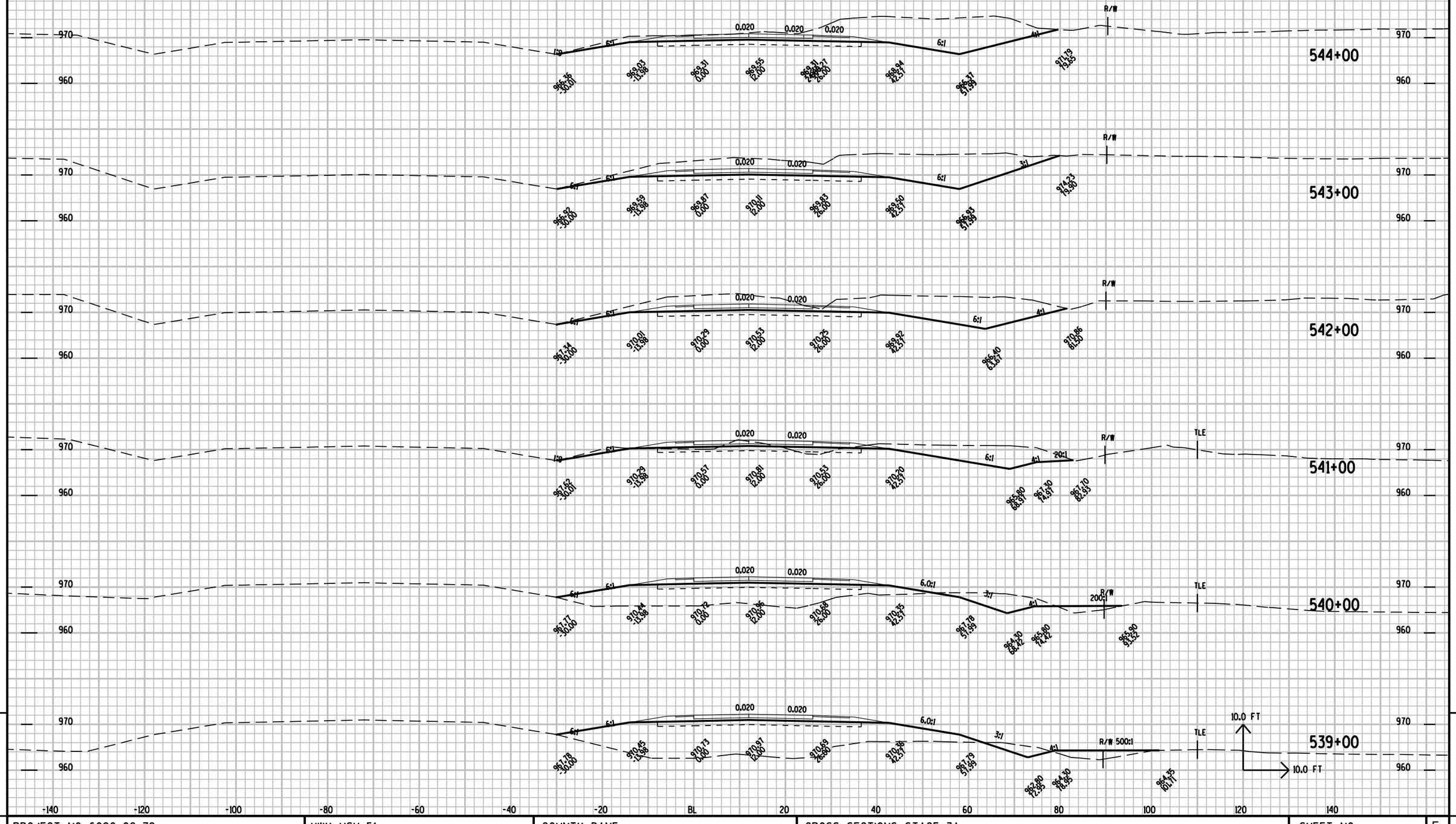


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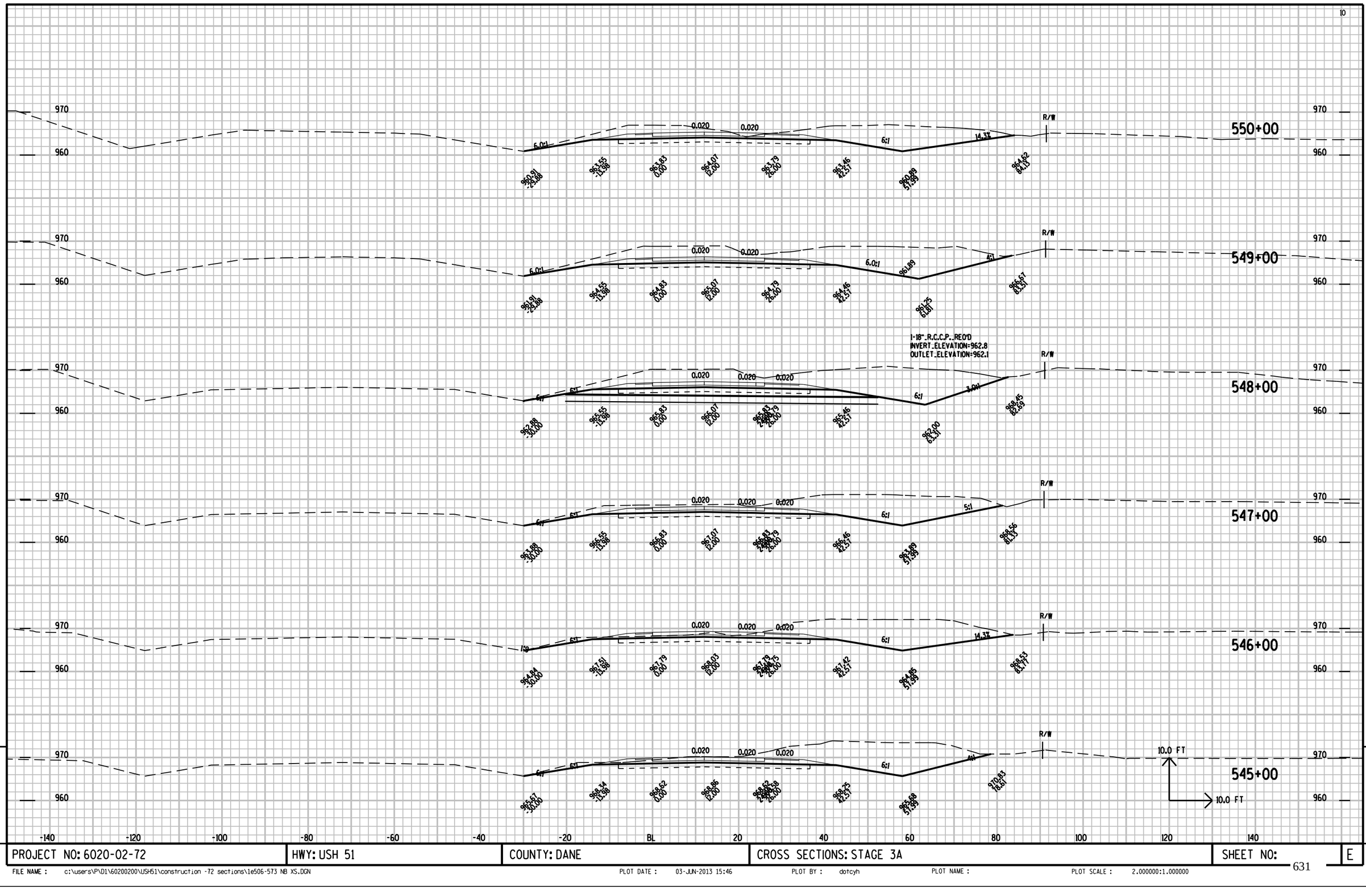
PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: STAGE 3A	SHEET NO:	E

FILE NAME : c:\users\P\D1\60200200\USH51\construction -72 sections\1e506-573 NB XS.DGN PLOT DATE : 03-JUN-2013 15:46 PLOT BY : dotcyh PLOT NAME : PLOT SCALE : 2.000000:1.000000



PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: STAGE 3A	SHEET NO:	E

FILE NAME : c:\users\P\D1\60200200\USH51\construction -72 sections\1e506-573 NB XS.DGN PLOT DATE : 03-JUN-2013 15:46 PLOT BY : dotcyh PLOT NAME : PLOT SCALE : 2.000000:1.000000



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PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: STAGE 3A	SHEET NO:	E

FILE NAME : c:\users\P\D1\60200200\USH51\construction -72 sections\1e506-573 NB XS.DGN PLOT DATE : 03-JUN-2013 15:46 PLOT BY : dotcyh PLOT NAME : PLOT SCALE : 2.000000:1.000000

1-68"_X_43"_R.C.H.E.C.P._REQ'D
STA._554+20_60.8_RT
INVERT_ELEVATION=950.85
SKEW_11_DEGREES_LHF

554+20

554+00

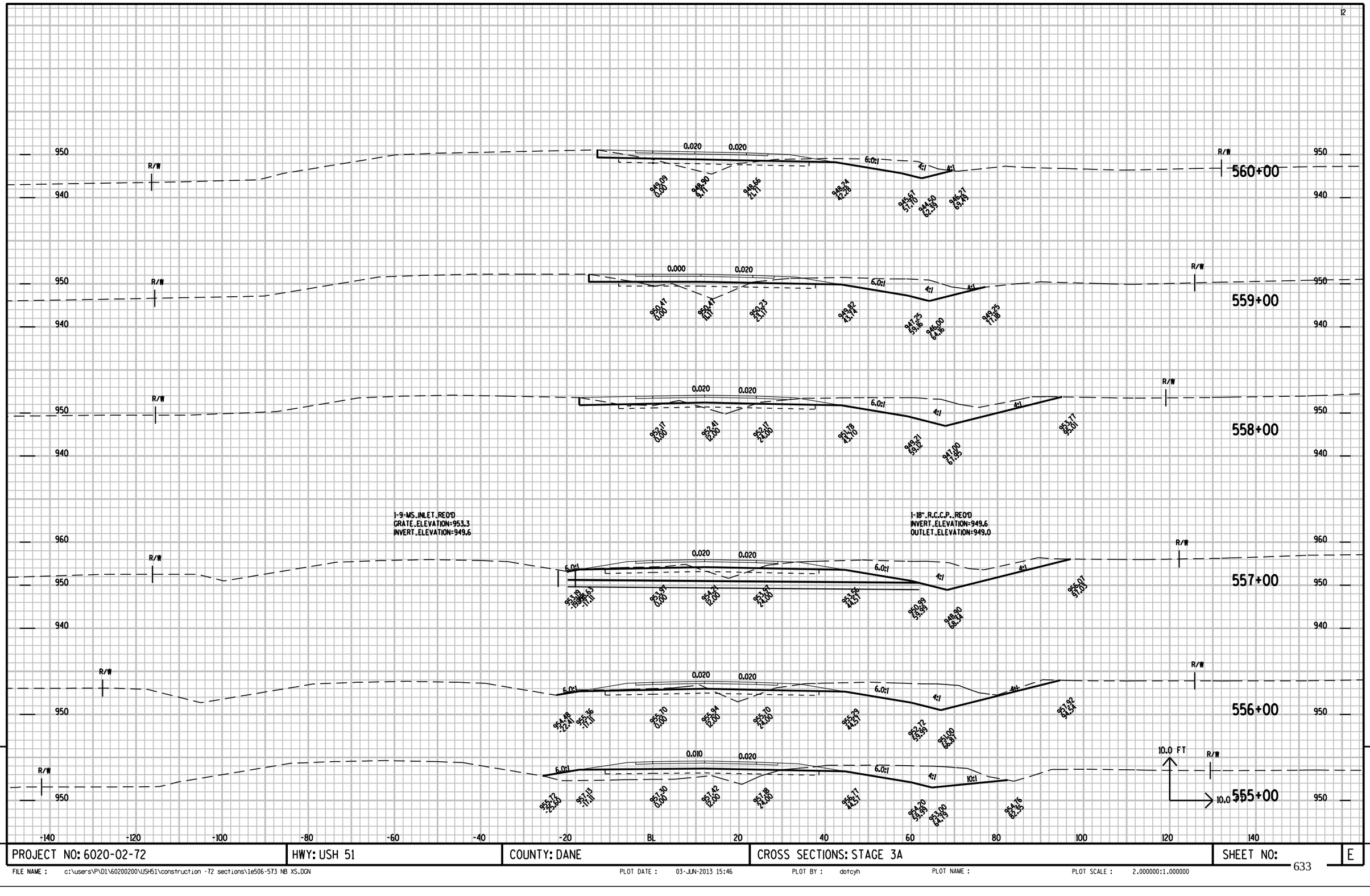
553+00

552+00

551+00

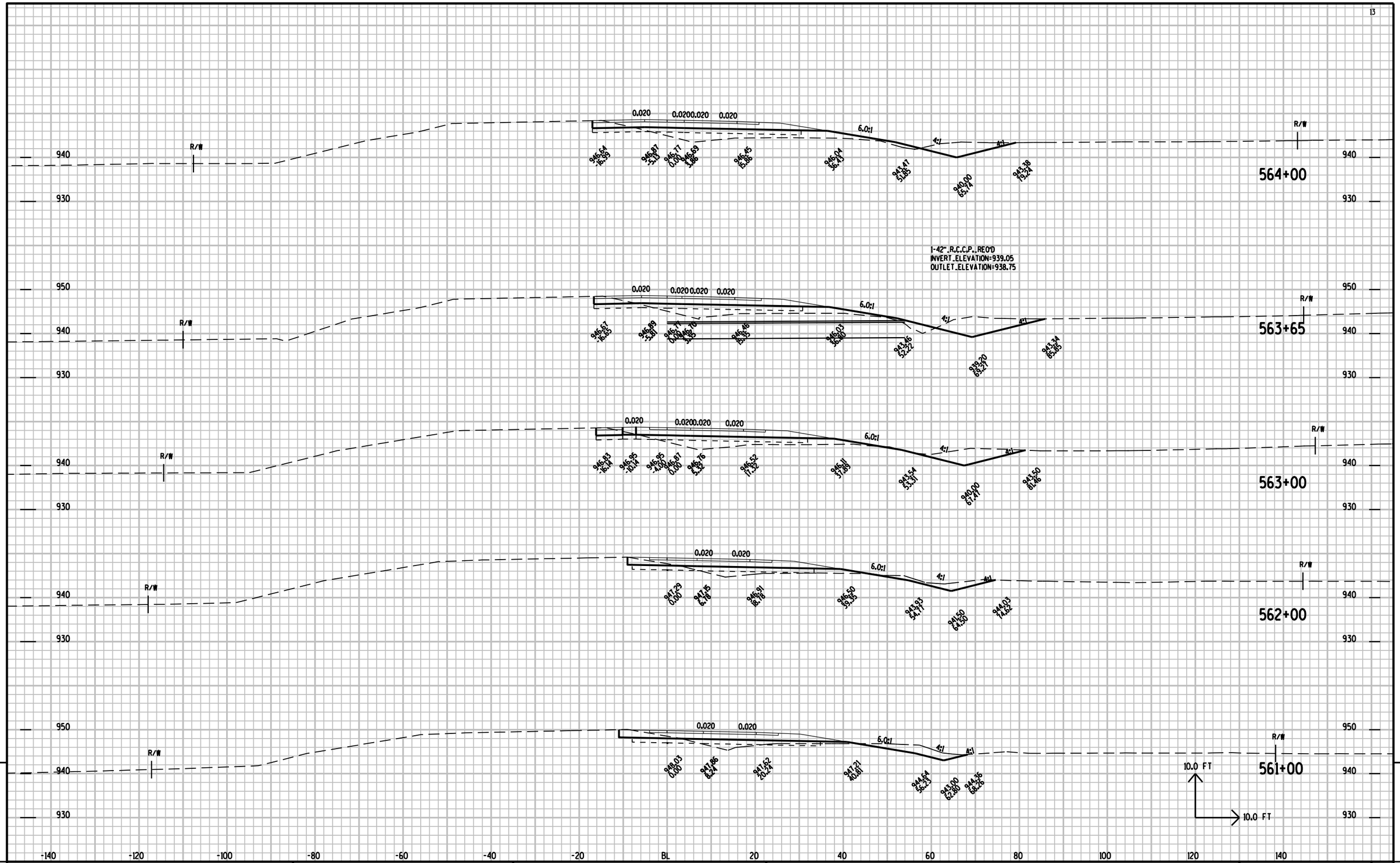
PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: STAGE 3A	SHEET NO:	E

FILE NAME : c:\users\P\D1\60200200\USH51\construction -72 sections\1e506-573 NB XS.DGN PLOT DATE : 03-JUN-2013 15:46 PLOT BY : dotcyh PLOT NAME : PLOT SCALE : 2.000000:1.000000



PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: STAGE 3A	SHEET NO:	E

FILE NAME : c:\users\P\D1\60200200\USH51\construction -72 sections\1e506-573 NB XS.DGN PLOT DATE : 03-JUN-2013 15:46 PLOT BY : dotcyh PLOT NAME : PLOT SCALE : 2.000000:1.000000

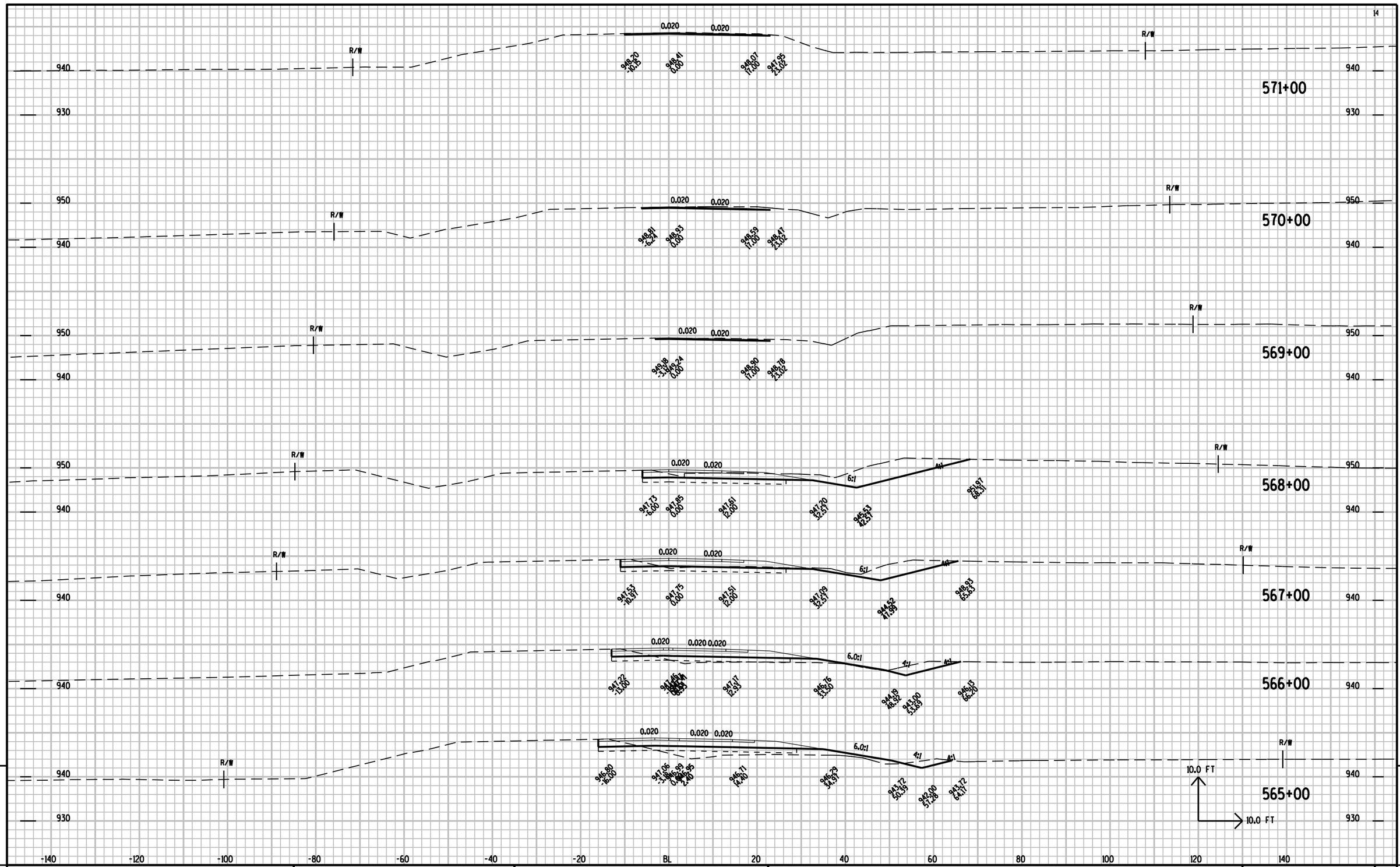


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PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: STAGE 3A	SHEET NO:	E

FILE NAME : c:\users\P\D1\60200200\USH51\construction -72 sections\1e506-573 NB XS.DGN PLOT DATE : 03-JUN-2013 15:46 PLOT BY : dotcyh PLOT NAME : PLOT SCALE : 2.000000:1.000000

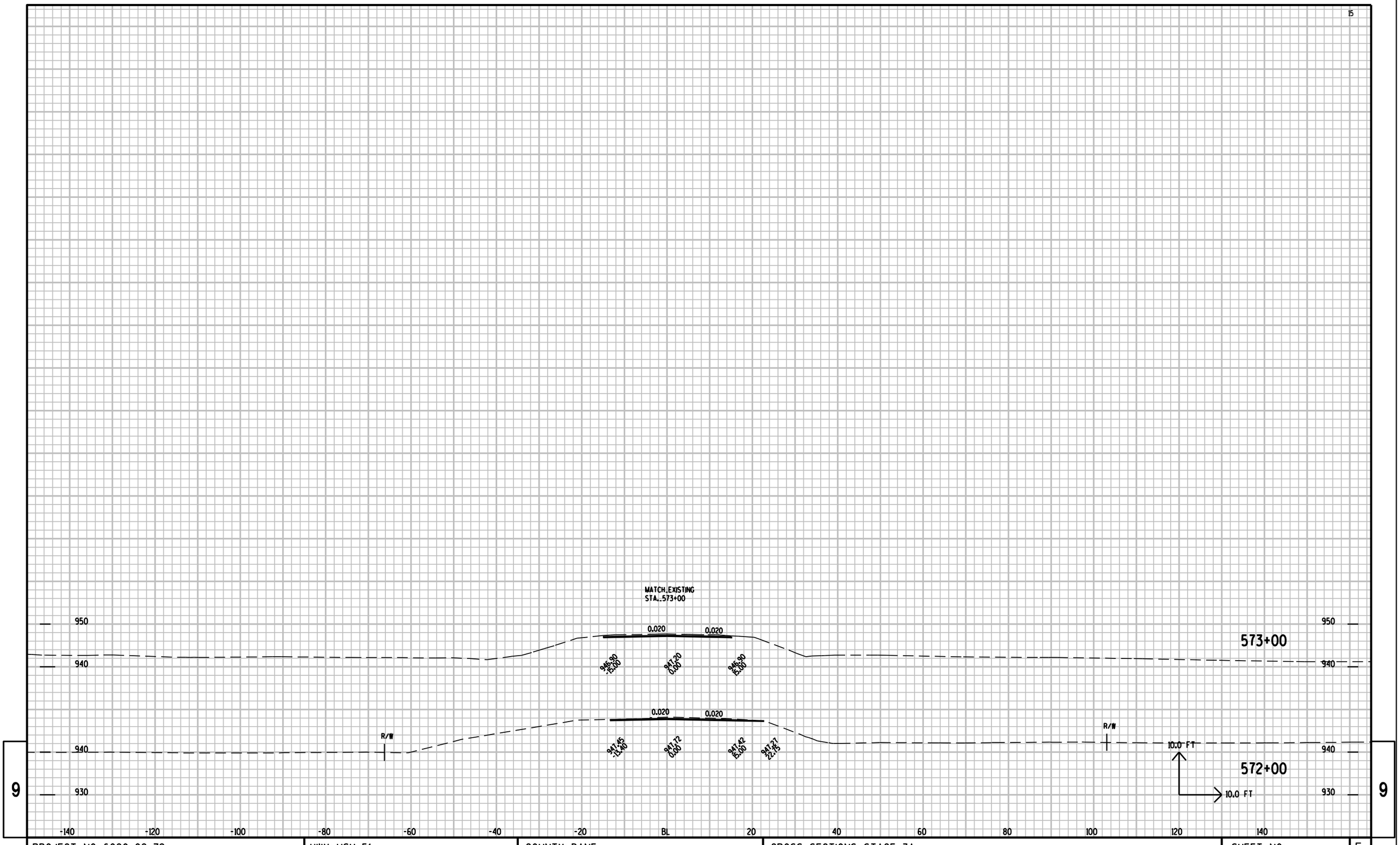


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PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: STAGE 3A	SHEET NO:	E

FILE NAME : c:\users\P\D1\60200200\USH51\construction -72 sections\1e506-573 NB XS.DGN PLOT DATE : 03-JUN-2013 15:46 PLOT BY : dotcyh PLOT NAME : PLOT SCALE : 2.000000:1.000000

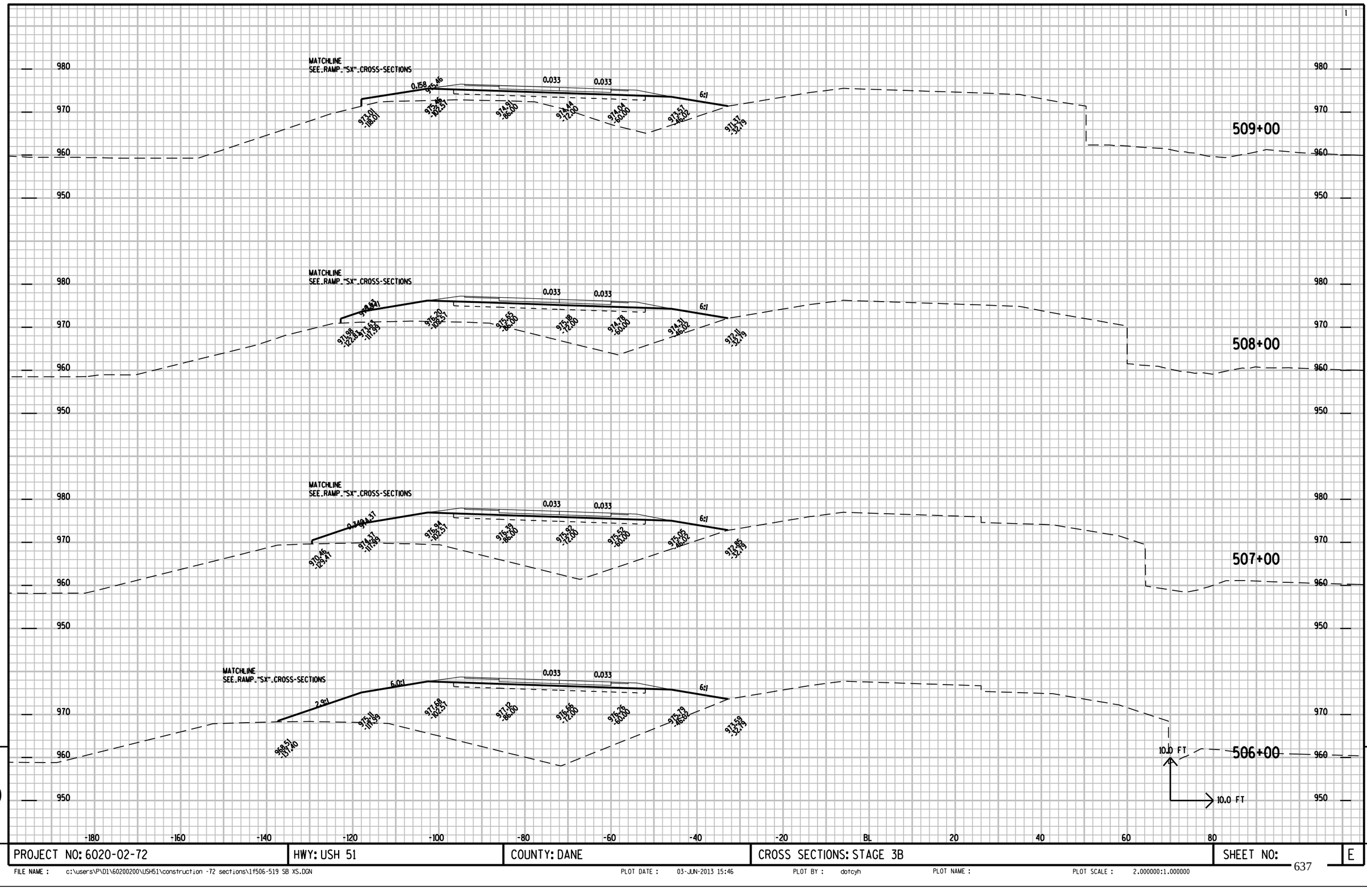


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PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: STAGE 3A	SHEET NO:	E

FILE NAME : c:\users\P\D1\60200200\USH51\construction -72 sections\1e506-573 NB XS.DGN PLOT DATE : 03-JUN-2013 15:46 PLOT BY : dotcyh PLOT NAME : PLOT SCALE : 2.000000:1.000000



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PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: STAGE 3B	SHEET NO:	E

FILE NAME : c:\users\P\D1\60200200\USH51\construction -72 sections\1f506-519 SB XS.DGN PLOT DATE : 03-JUN-2013 15:46 PLOT BY : dotcyh PLOT NAME : PLOT SCALE : 2.000000:1.000000

MATCHLINE
SEE_RAMP_"SX"_CROSS-SECTIONS

515+00

514+00

513+00

512+00

511+00

510+00

MATCHLINE
SEE_RAMP_"SX"_CROSS-SECTIONS

970
960
980

0.036 0.020 0.020 6.0:1 6.0:1
969.78 -52.84
970.03 -40.00 -86.00
970.21 -12.00
970.07 -60.00
969.73 -46.02
967.42 -30.00 -46.02
967.73 -25.98

0.037 0.020 0.020 6.0:1 6.0:1
970.10 -106.77
970.58 -40.58 -86.00
970.85 -12.00
970.62 -60.00
970.34 -46.02
967.67 -30.00 -46.02
968.34 -25.98

0.012 0.020 0.020 6.0:1 6.0:1
970.95 -104.70
971.18 -40.18 -86.00
971.46 -12.00
971.22 -60.00
970.94 -46.02
968.27 -30.00 -46.02
968.94 -25.98

0.001 0.020 0.020 6.0:1 6.0:1
971.91 -110.59
971.82 -40.82 -86.00
972.10 -12.00
971.86 -60.00
971.59 -46.02
969.91 -30.00 -46.02
969.58 -25.98

973.90
0.069 0.003 0.020 6:1
972.78 -104.51
972.85 -86.00
972.80 -12.00
972.56 -60.00
972.28 -46.02
969.50 -25.31

0.204 0.033 0.033 6:1
973.01 -110.43
974.72 -102.51
974.17 -86.00
973.70 -12.00
973.30 -60.00
972.83 -46.02
970.67 -32.19

10.0 FT
10.0 FT

-180 -160 -140 -120 -100 -80 -60 -40 -20 BL 20 40 60 80

9

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: STAGE 3B	SHEET NO:	E

FILE NAME : c:\users\P\D1\60200200\USH51\construction -72 sections\1f506-519 SB XS.DGN PLOT DATE : 03-JUN-2013 15:46 PLOT BY : dotcyh PLOT NAME : PLOT SCALE : 2.000000:1.000000

519+00

1-42"_R.C.C.P._RED'D
STA._564+35._115.0_LT

518+00

R/W

517+00

R/W

MATCHLINE
SEE_RAMP_"SX"_CROSS-SECTIONS

516+00

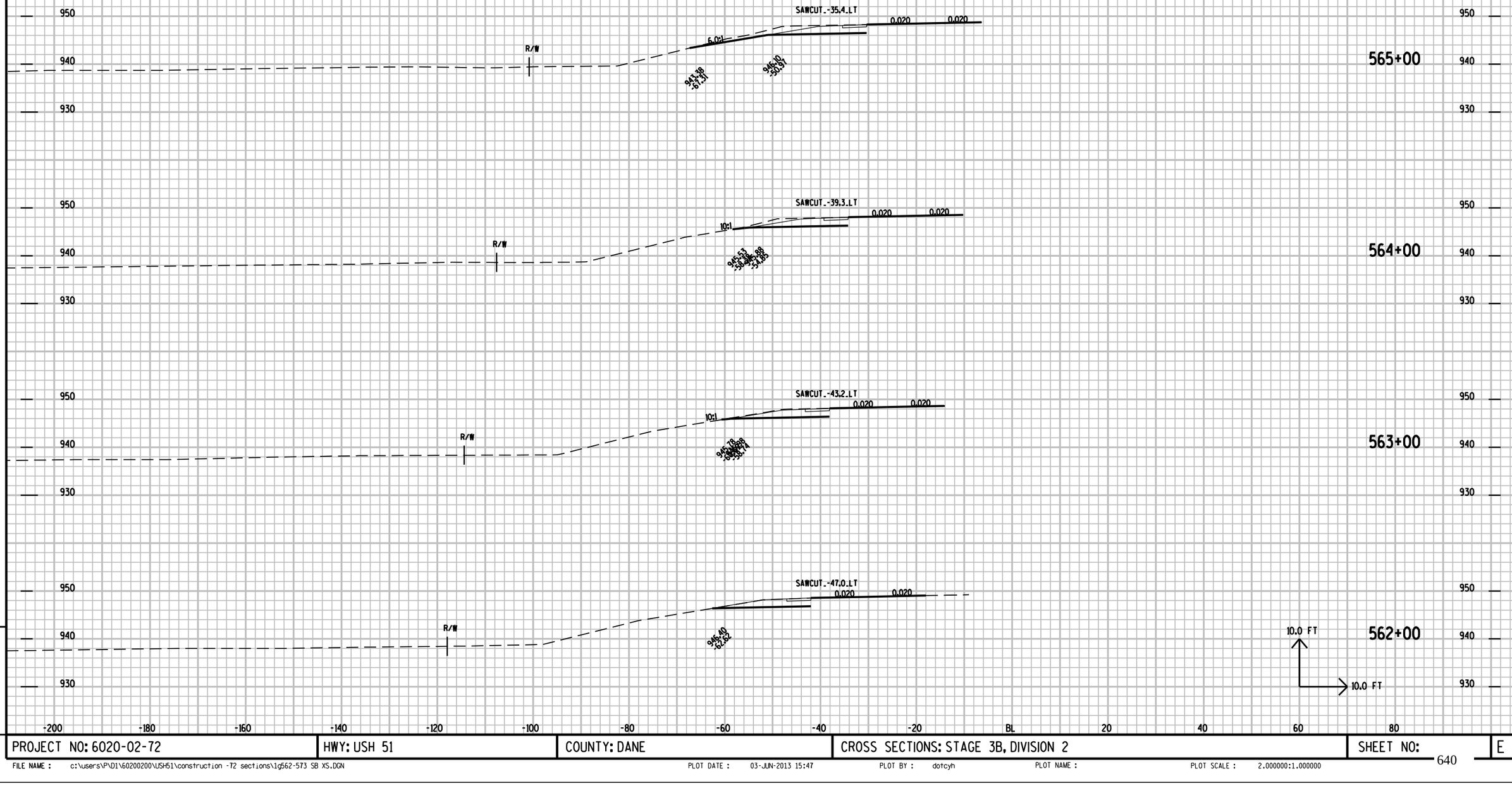
10.0 FT

10.0 FT

9

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PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: STAGE 3B	SHEET NO:	E

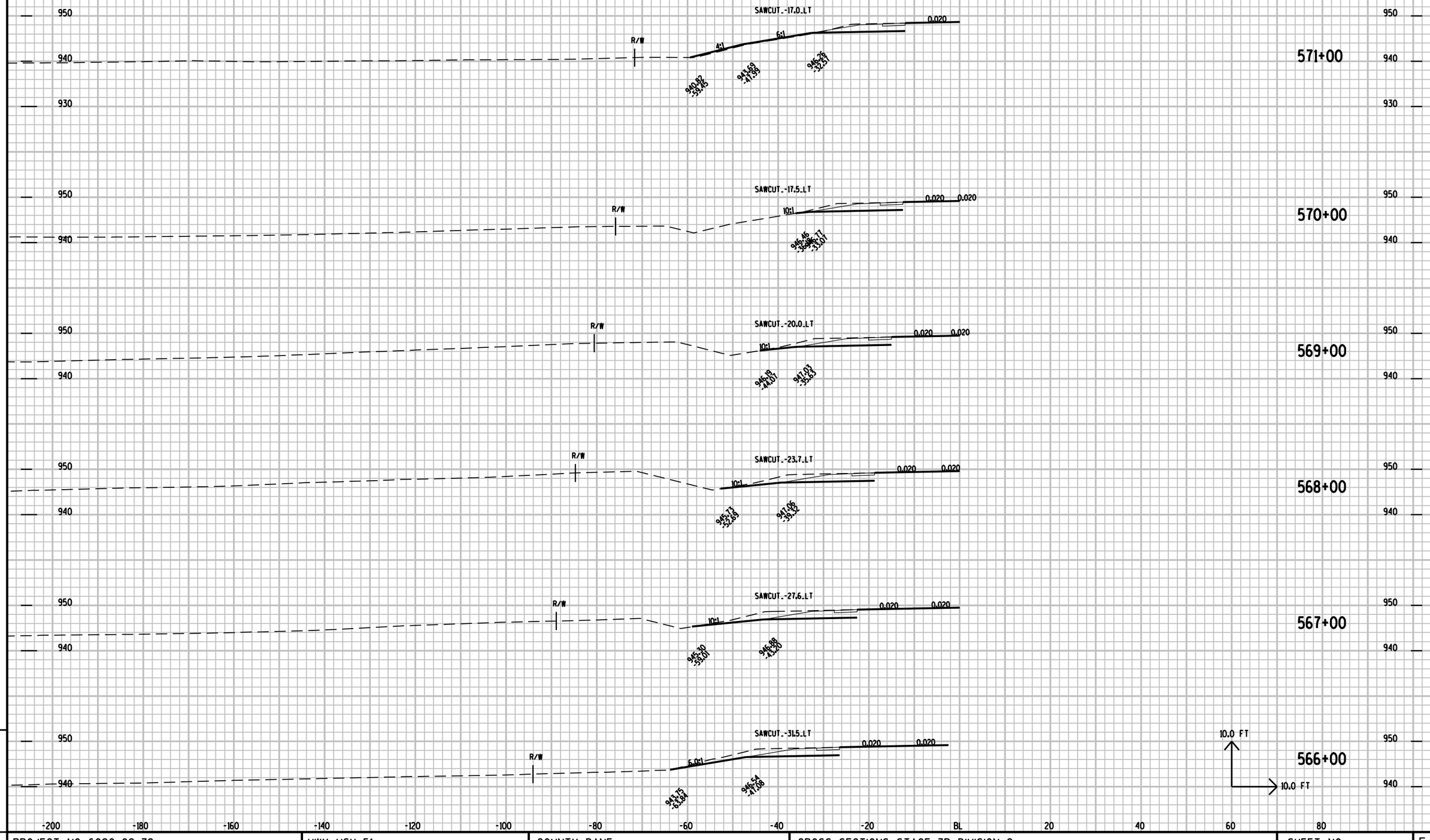


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PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: STAGE 3B, DIVISION 2	SHEET NO:	E

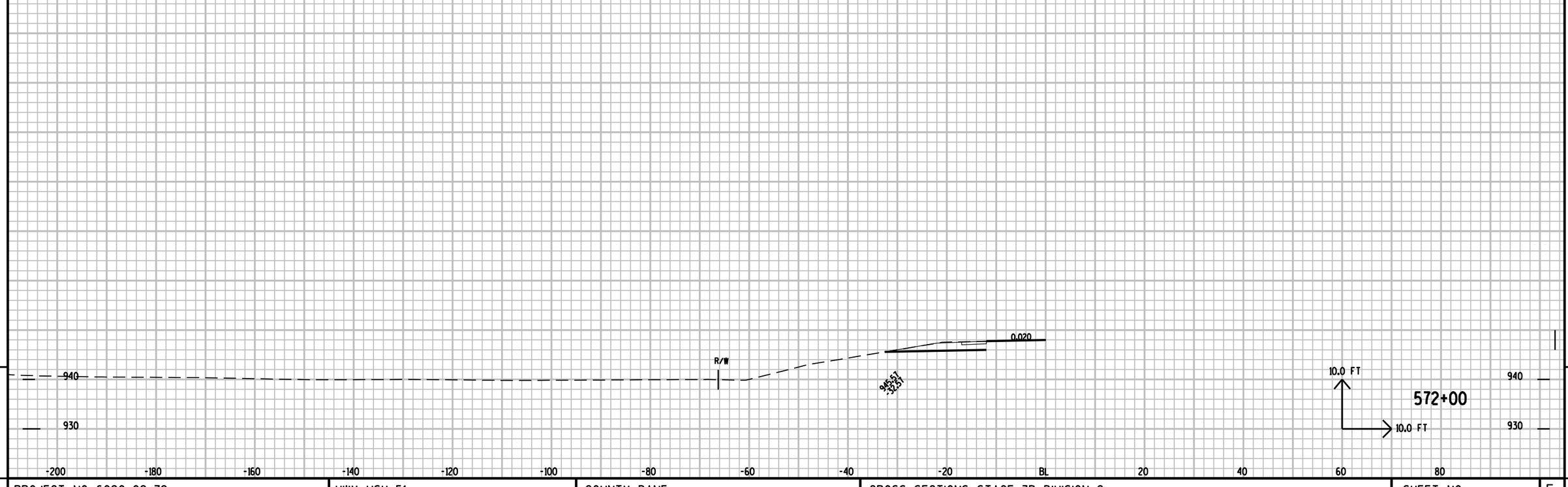
FILE NAME : c:\users\PD1\60200200\USH51\construction -72 sections\1g562-573 SB XS.DGN PLOT DATE : 03-JUN-2013 15:47 PLOT BY : dotcyh PLOT NAME : PLOT SCALE : 2.000000:1.000000



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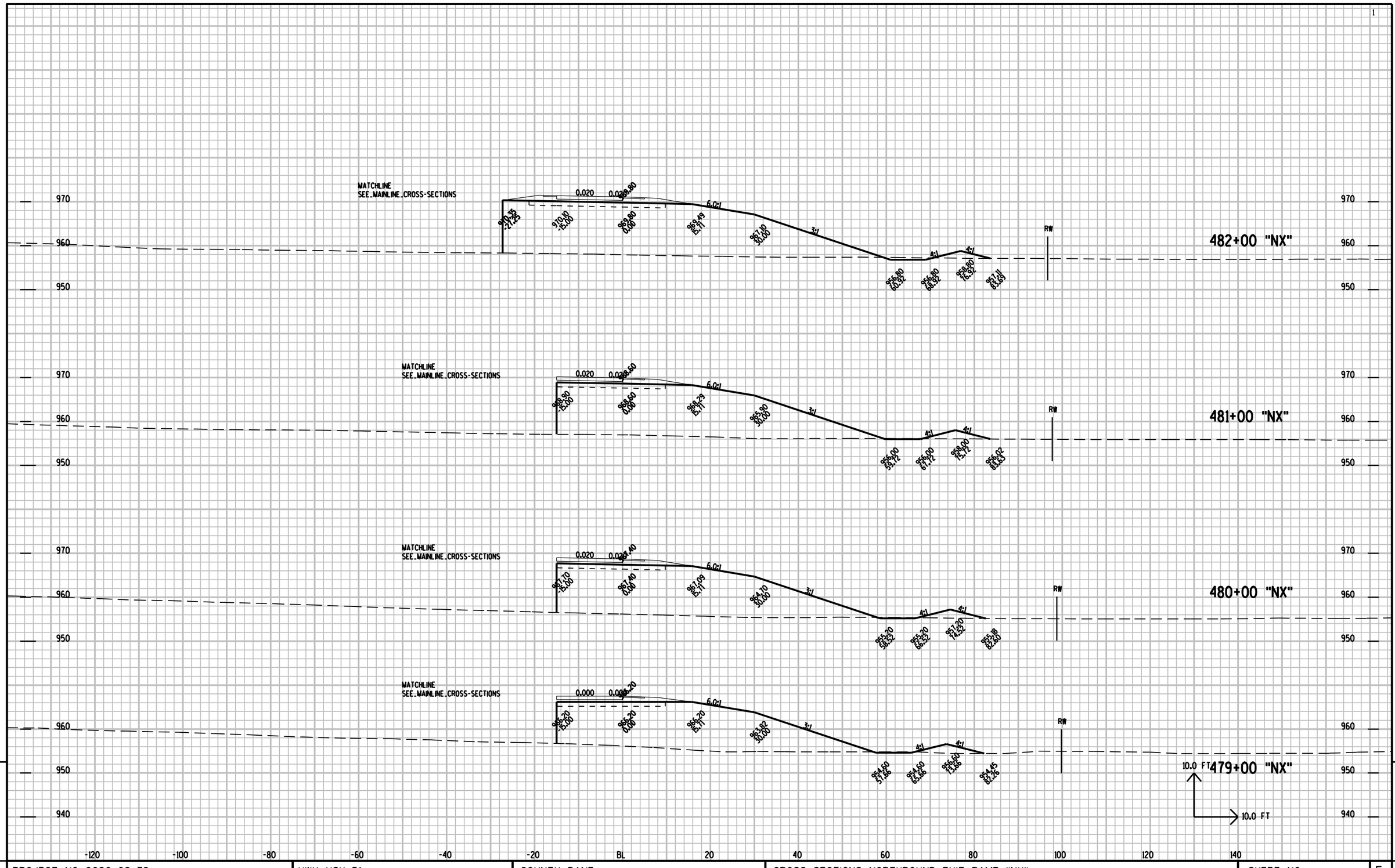
PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: STAGE 3B, DIVISION 2	SHEET NO:	E

FILE NAME : c:\users\P\D1\60200200\USH51\construction -72 sections\lg562-573 SB XS.DGN PLOT DATE : 03-JUN-2013 15:47 PLOT BY : dotcyh PLOT NAME : PLOT SCALE : 2.000000:1.000000



PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: STAGE 3B, DIVISION 2	SHEET NO:	E

FILE NAME : c:\users\P\D1\60200200\USH51\construction -72 sections\1g562-573 SB XS.DGN PLOT DATE : 03-JUN-2013 15:47 PLOT BY : dotcyh PLOT NAME : PLOT SCALE : 2.000000:1.000000

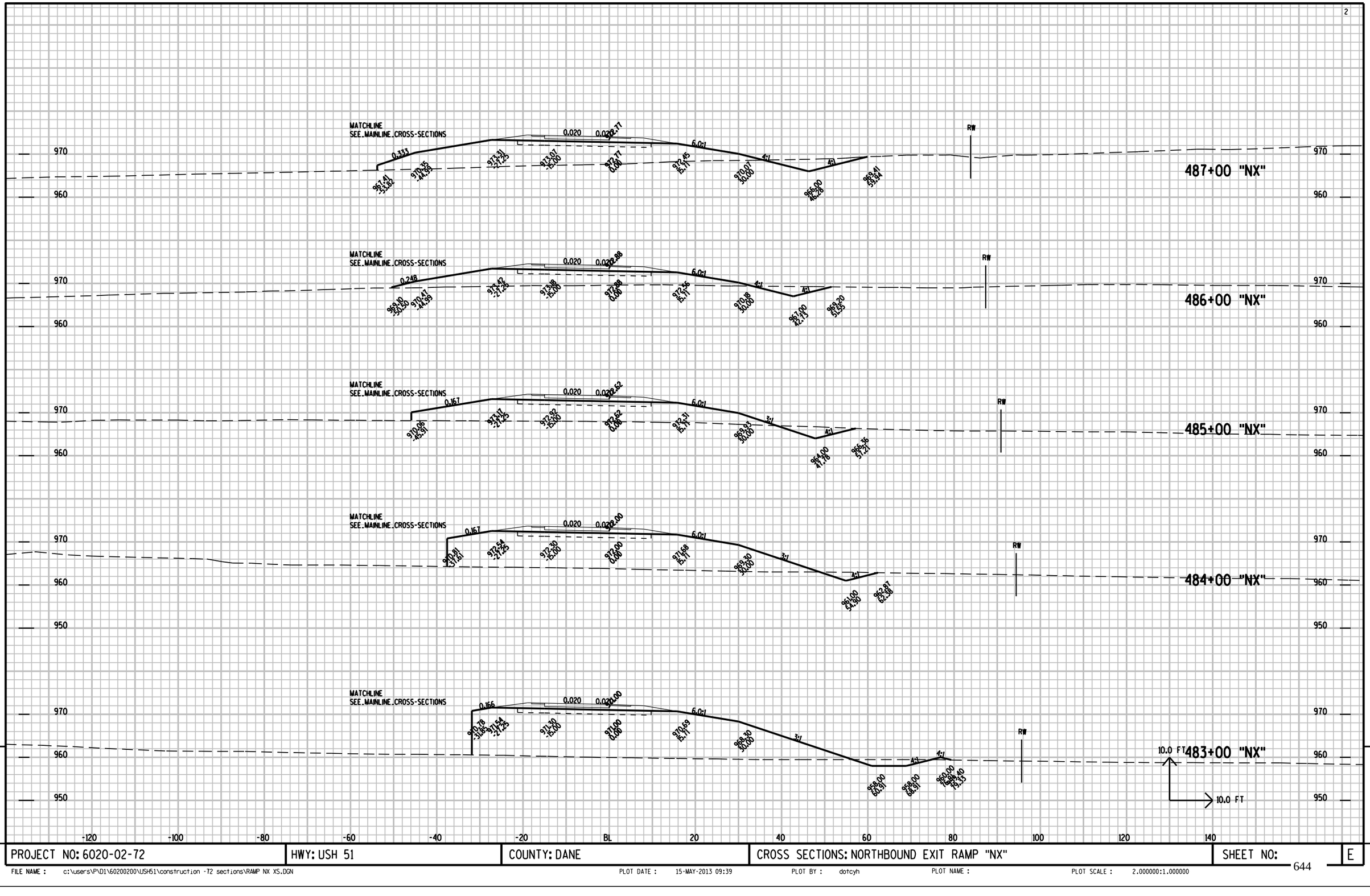


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PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: NORTHBOUND EXIT RAMP "NX"	SHEET NO:	E

FILE NAME : c:\users\PVD1\60200200\USH51\construction -72 sections\RAMP NX XS.DGN PLOT DATE : 15-MAY-2013 09:38 PLOT BY : dotcyh PLOT NAME : PLOT SCALE : 2.000000:1.000000

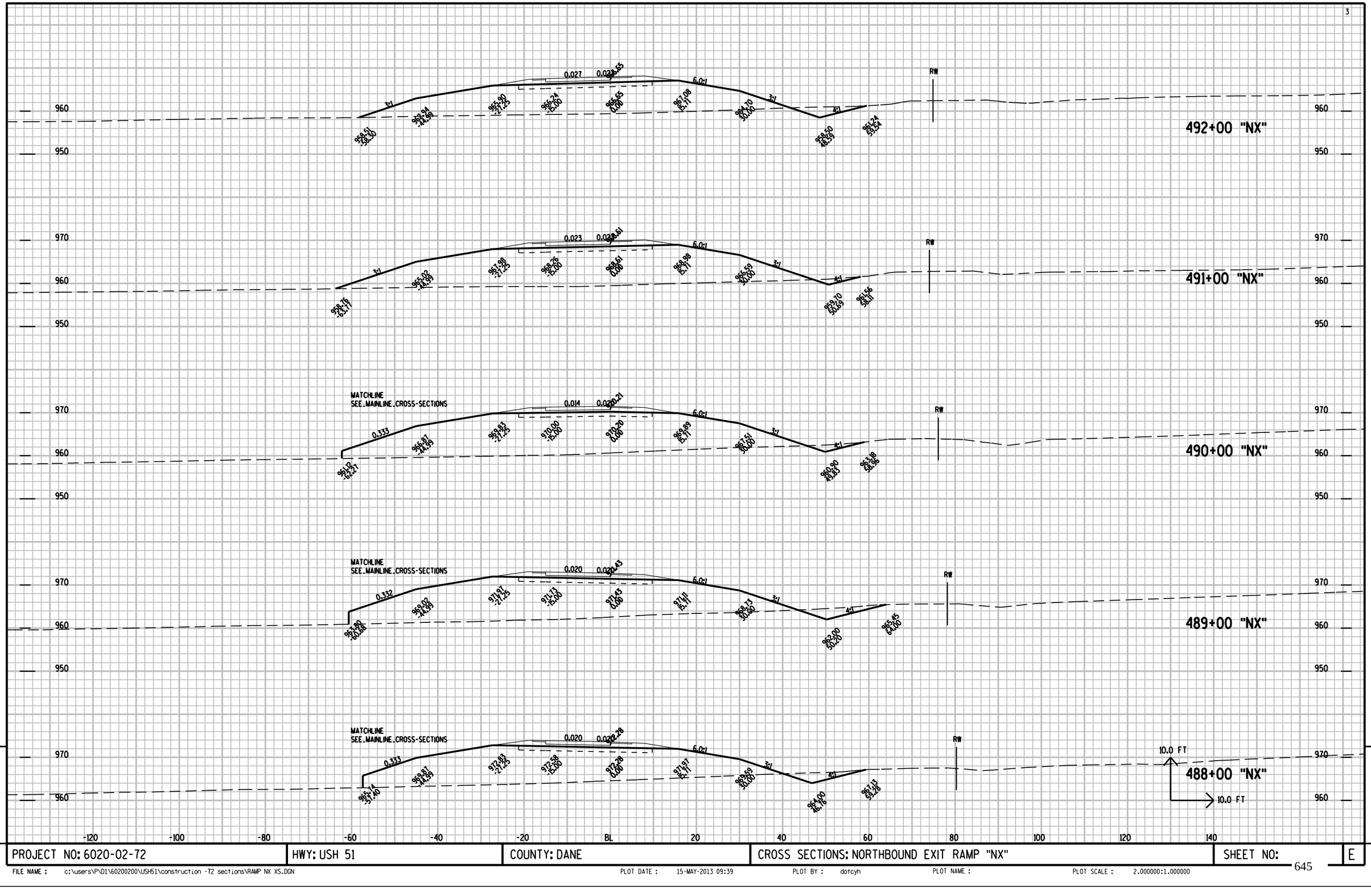


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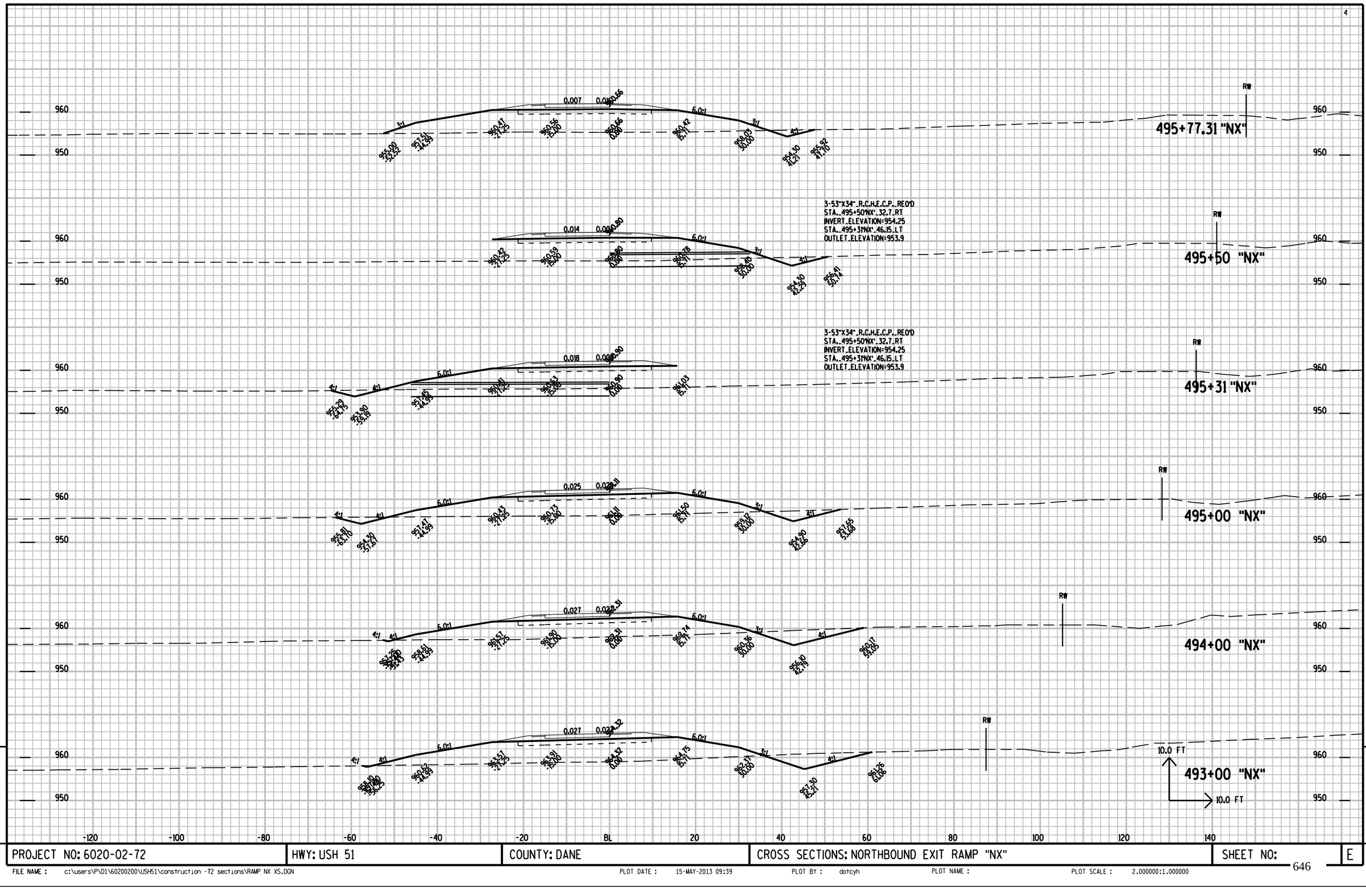
PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: NORTHBOUND EXIT RAMP "NX"	SHEET NO:	E

FILE NAME : c:\users\P\D1\60200200\USH51\construction -T2 sections\RAMP NX XS.DGN PLOT DATE : 15-MAY-2013 09:39 PLOT BY : dotcyh PLOT NAME : PLOT SCALE : 2.000000:1.000000



PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: NORTHBOUND EXIT RAMP "NX"	SHEET NO:	E

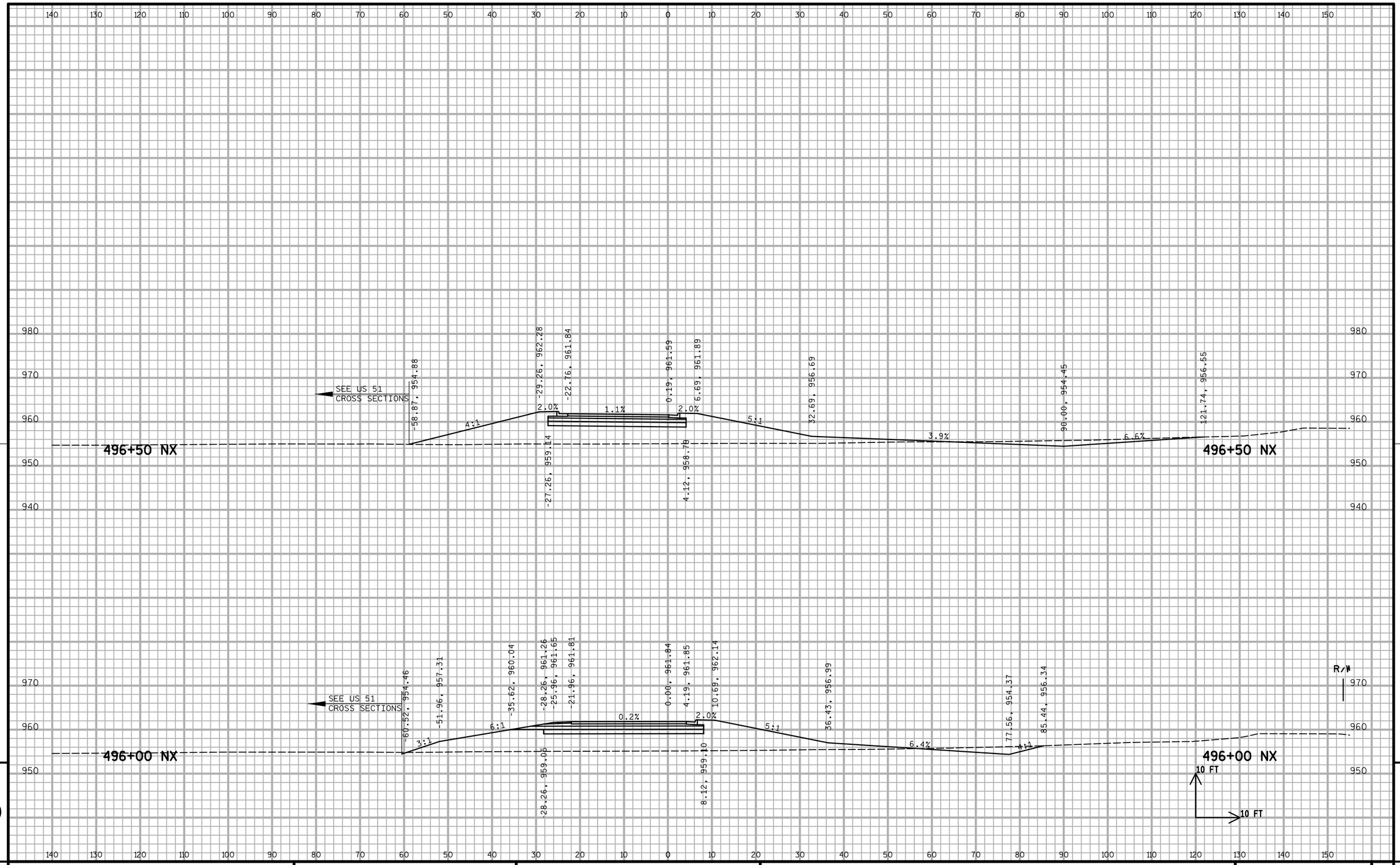
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PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: NORTHBOUND EXIT RAMP "NX"	SHEET NO:	E

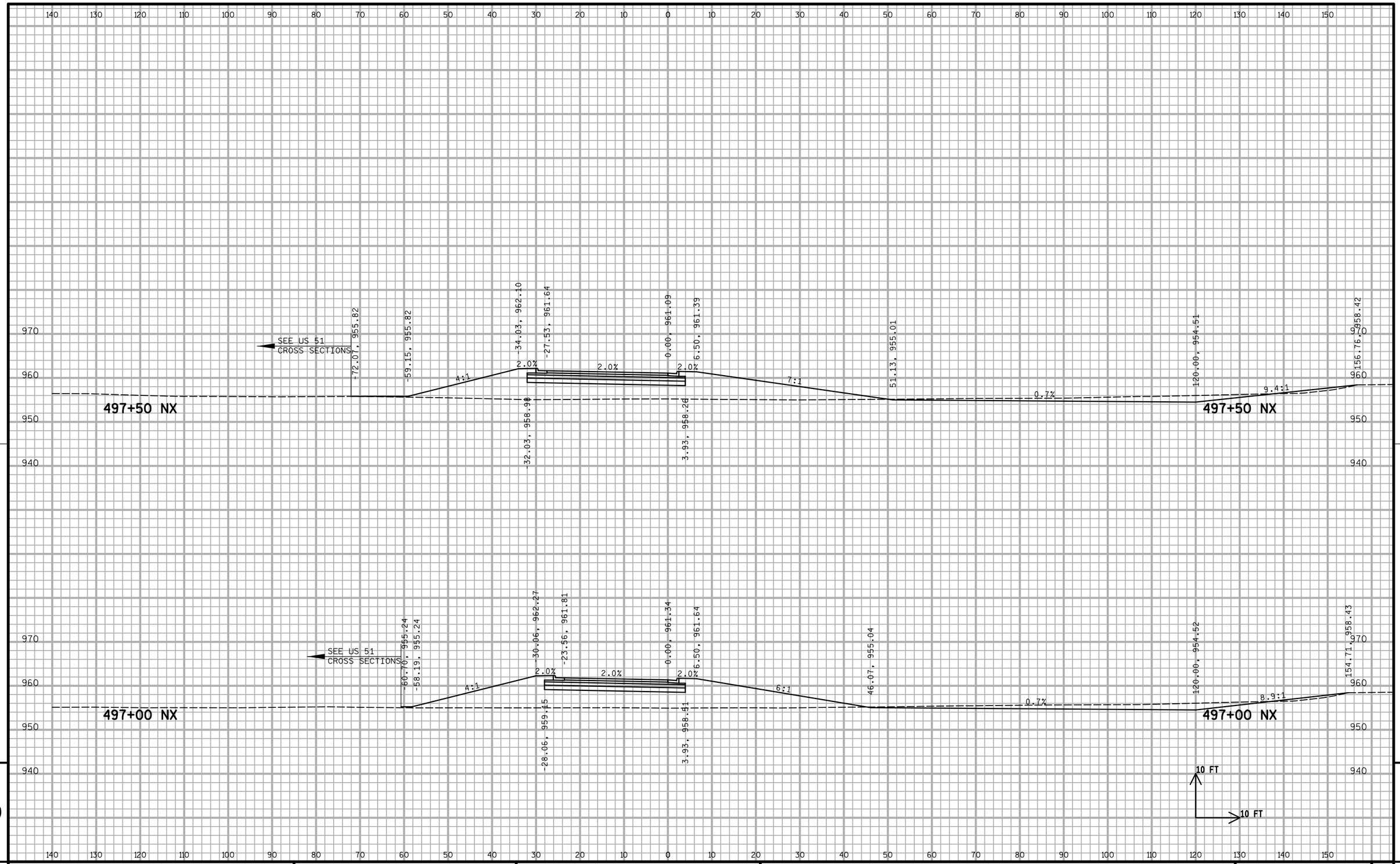
FILE NAME : c:\users\P\D1\60200200\USH51\construction -T2 sections\RAMP NX XS.DGN PLOT DATE : 15-MAY-2013 09:39 PLOT BY : dotcyh PLOT NAME : PLOT SCALE : 2.000000:1.000000



PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS - NX	SHEET 647	E

FILE NAME : S:\MAD\1000--1099\1089\234\Micros\PLAN\0272\xs_nb off ramp.DGN PLOT DATE : 4/11/2013 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

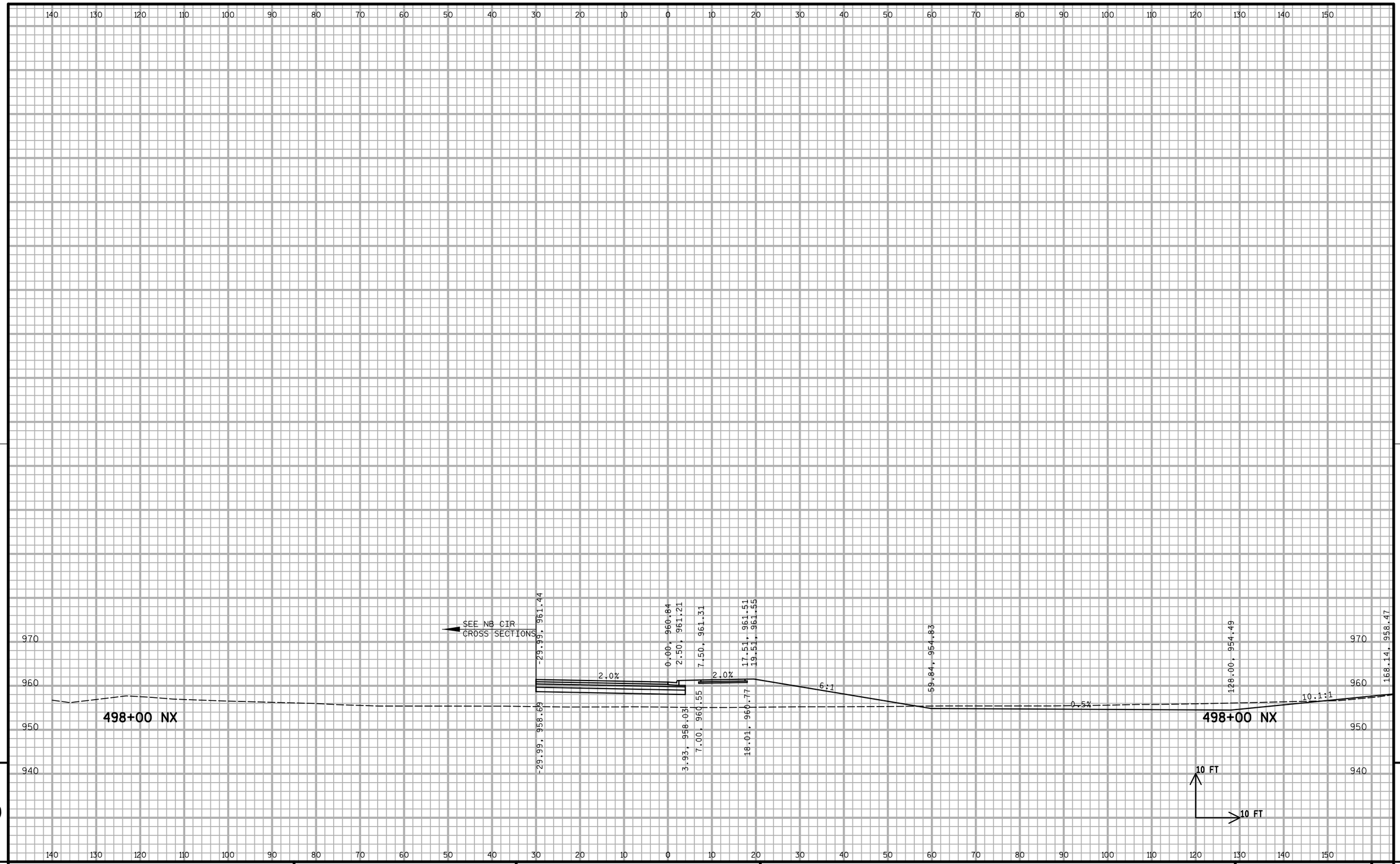
WISDOT/CADDS SHEET 21



PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS - NX	SHEET 648	E

FILE NAME : S:\MAD\1000--1099\1089\234\Micros\PLAN\0272\xs_nb off ramp.DGN PLOT DATE : 4/11/2013 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 21



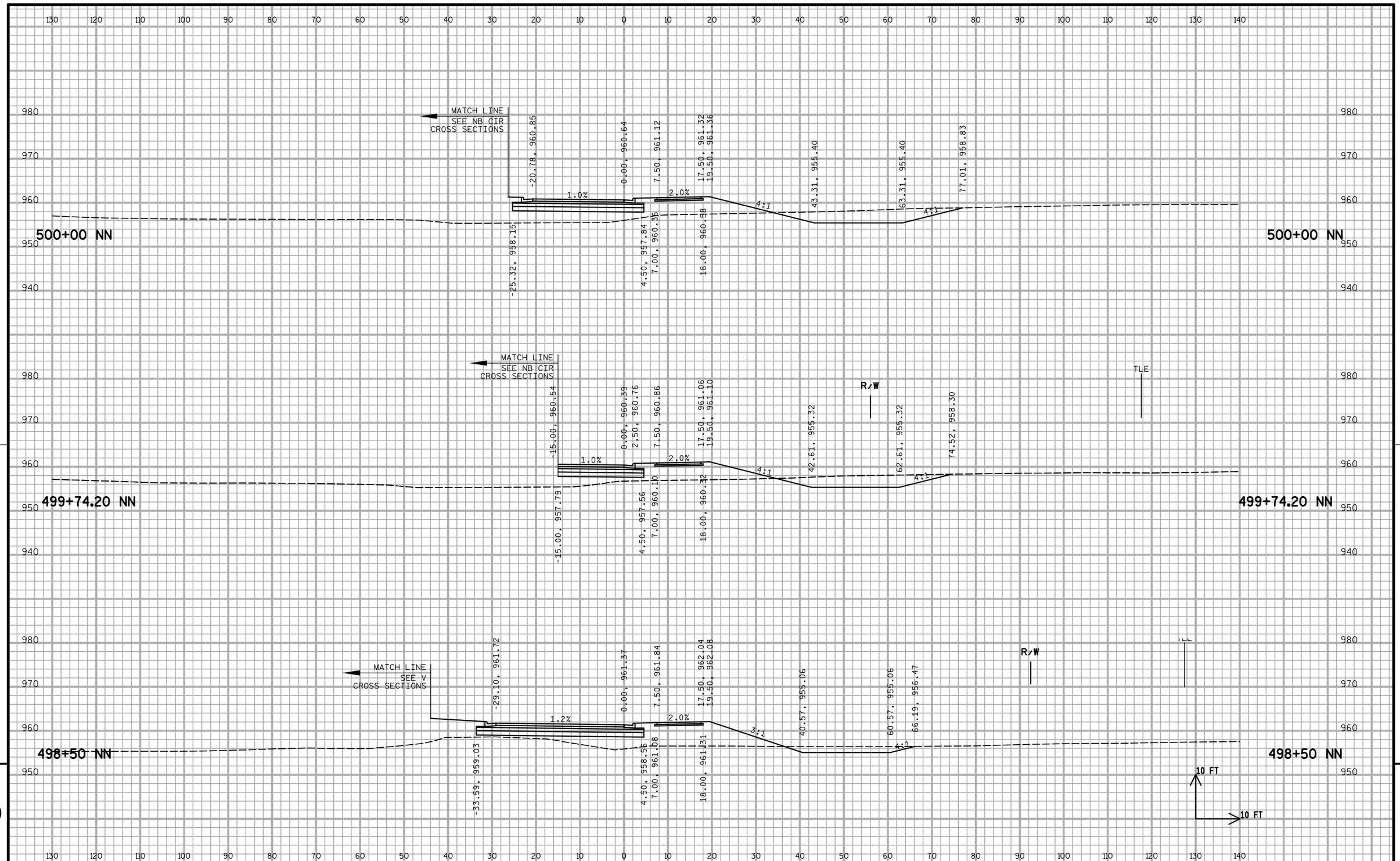
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9

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS - NX	SHEET 649	E

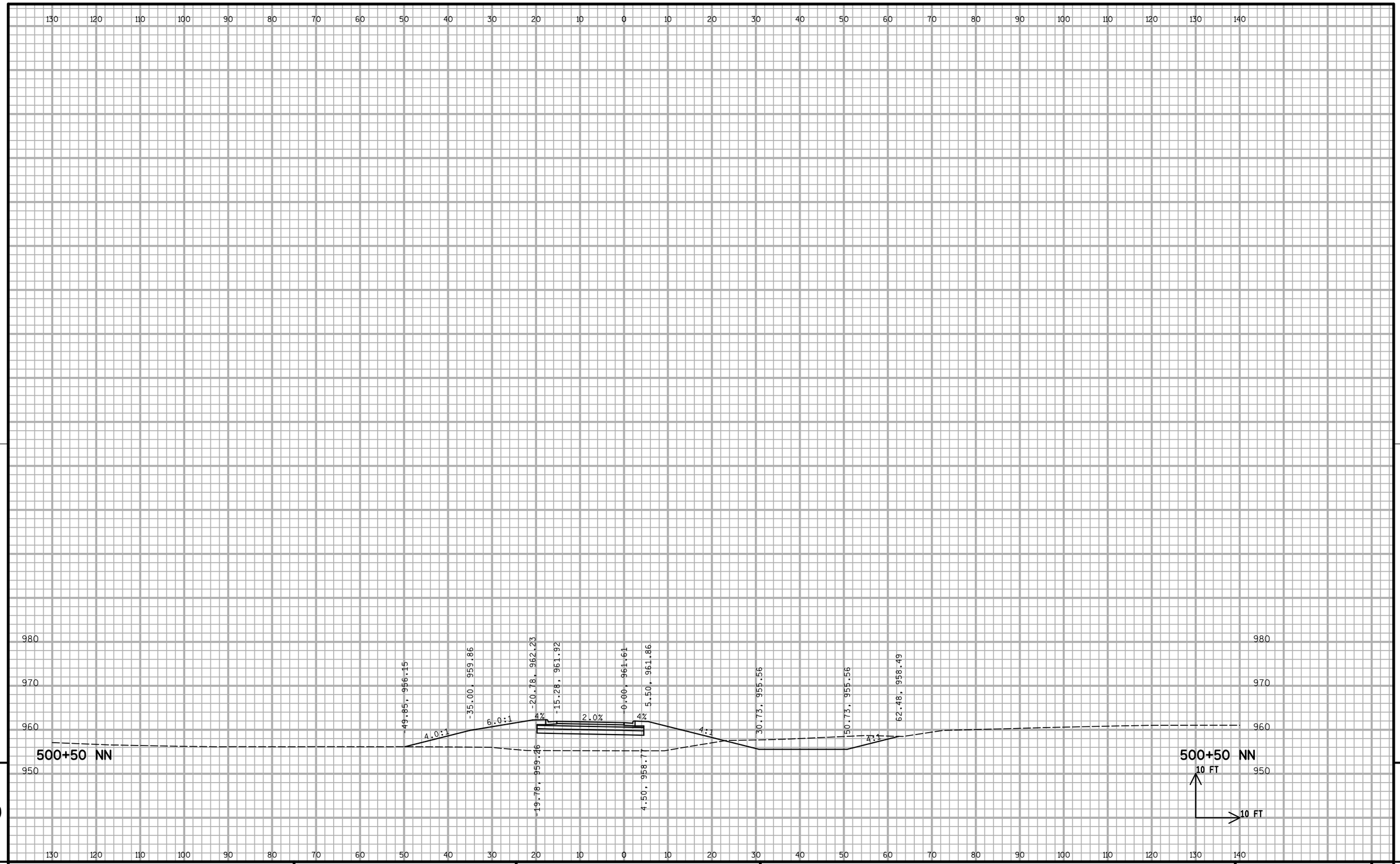
FILE NAME : S:\MAD\1000--1099\1089\234\Micros\PLAN\0272\xs_nb off ramp.DGN PLOT DATE : 4/11/2013 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 21



PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS - NN	SHEET 650	E

FILE NAME : S:\MAD\1000--1099\1089\234\Micros\PLAN\0272\xs_h ramp (nb on ramp).DGN PLOT DATE : 4/11/2013 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21



9

9

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS - NN	SHEET 651	E

FILE NAME : S:\MAD\1000--1099\1089\234\Micros\PLAN\0272\xs_h ramp (nb on ramp).DGN PLOT DATE : 4/11/2013 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

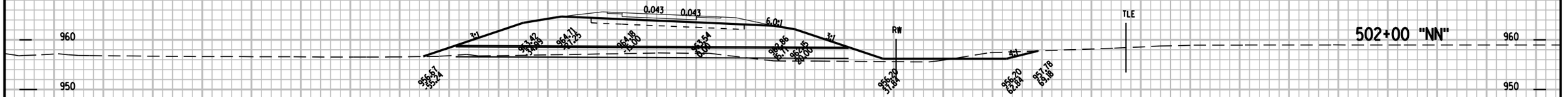
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SEE_MAINLINE_CROSS-SECTIONS

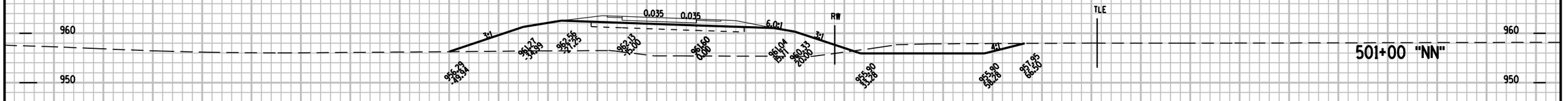


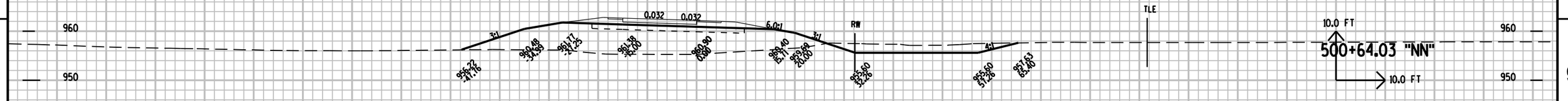
MATCHLINE
SEE_MAINLINE_CROSS-SECTIONS



I-24"_R.C.C.P._REQ'D
INVERT_ELEVATION=956.6
OUTLET_ELEVATION=956.25







-120 -100 -80 -60 -40 -20 BL 20 40 60 80 100 120 140

9 9

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: NORTHBOUND ENTRANCE RAMP "NN"	SHEET NO:	E

FILE NAME : c:\users\PYD1\60200200\USH51\construction -T2 sections\RAMP NN XS.DGN PLOT DATE : 15-MAY-2013 09:38 PLOT BY : dotcyh PLOT NAME : PLOT SCALE : 2.000000:1.000000

MATCHLINE
SEE_MAINLINE_CROSS-SECTIONS

970
960
950

0.020 0.020
970.86 -21.25
970.61 -15.00
970.31 0.00
970.00 15.71
969.28 20.00
3:1
RW
TLE
959.38 45.72

508+00 "NN"

MATCHLINE
SEE_MAINLINE_CROSS-SECTIONS

970
960
950

0.020 0.020
969.47 -31.54
970.45 -21.25
968.90 -15.00
968.60 0.00
969.29 15.71
968.58 20.00
3:1
RW
TLE
957.84 52.71

507+00 "NN"

MATCHLINE
SEE_MAINLINE_CROSS-SECTIONS

970
960
950

0.020 0.020
968.36 -32.51
969.23 -21.25
968.59 -15.00
968.69 0.00
969.37 15.71
967.66 20.00
3:1
RW
TLE
956.97 52.71

506+00 "NN"

MATCHLINE
SEE_MAINLINE_CROSS-SECTIONS

970
960
950

0.043 0.043
967.73 -34.24
968.87 -21.25
968.34 -15.00
967.70 0.00
967.02 15.71
965.30 20.00
6.0:1
3:1
RW
TLE
4:1
10.0 FT
956.90 46.32
956.90 73.42
960.97 85.48

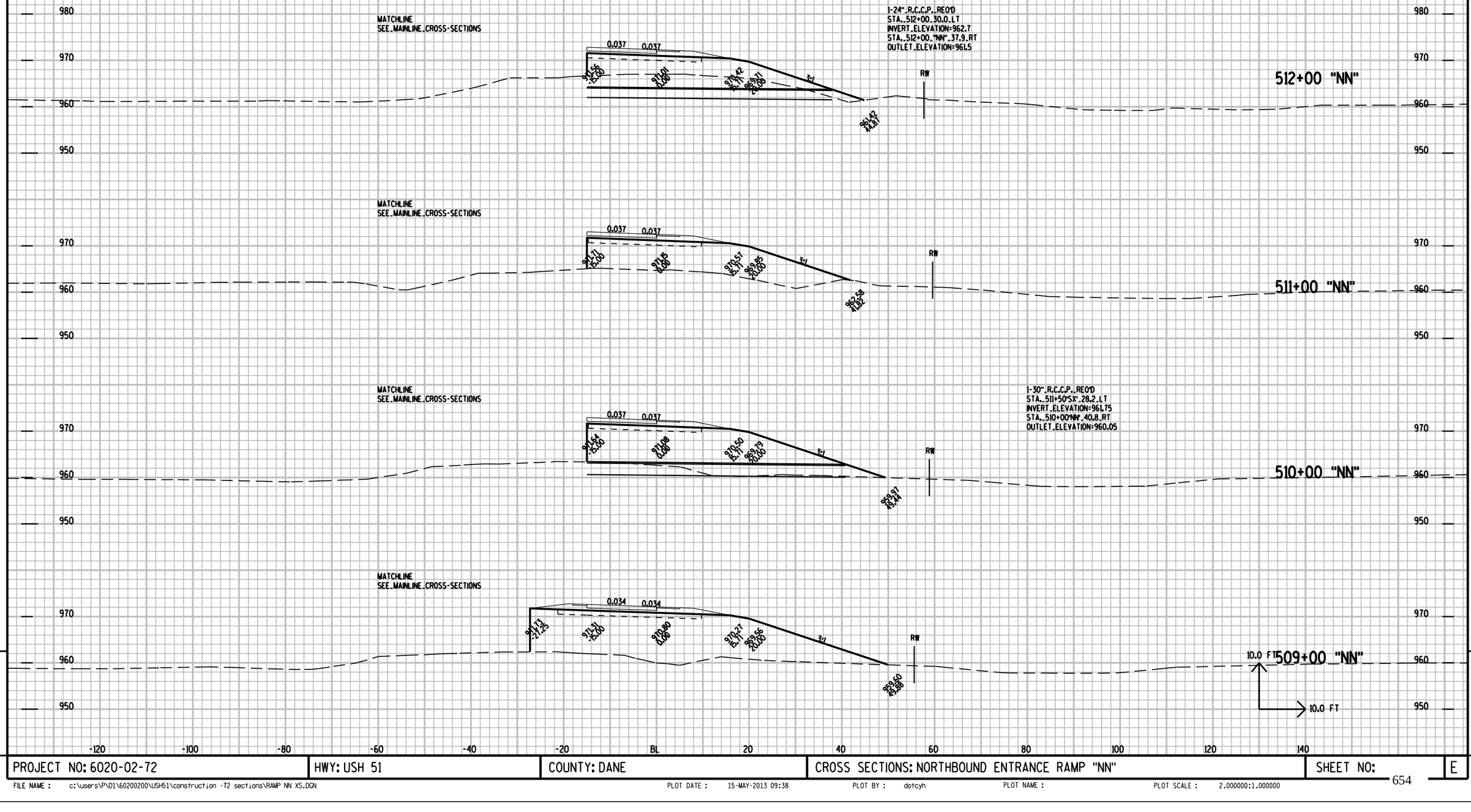
505+00 "NN"

-120 -100 -80 -60 -40 -20 BL 20 40 60 80 100 120 140

9 9

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: NORTHBOUND ENTRANCE RAMP "NN"	SHEET NO:	E

FILE NAME : c:\users\PD1\60200200\USH51\construction -72 sections\RAMP NN XS.DGN PLOT DATE : 15-MAY-2013 09:38 PLOT BY : dotcyh PLOT NAME : PLOT SCALE : 2.000000:1.000000

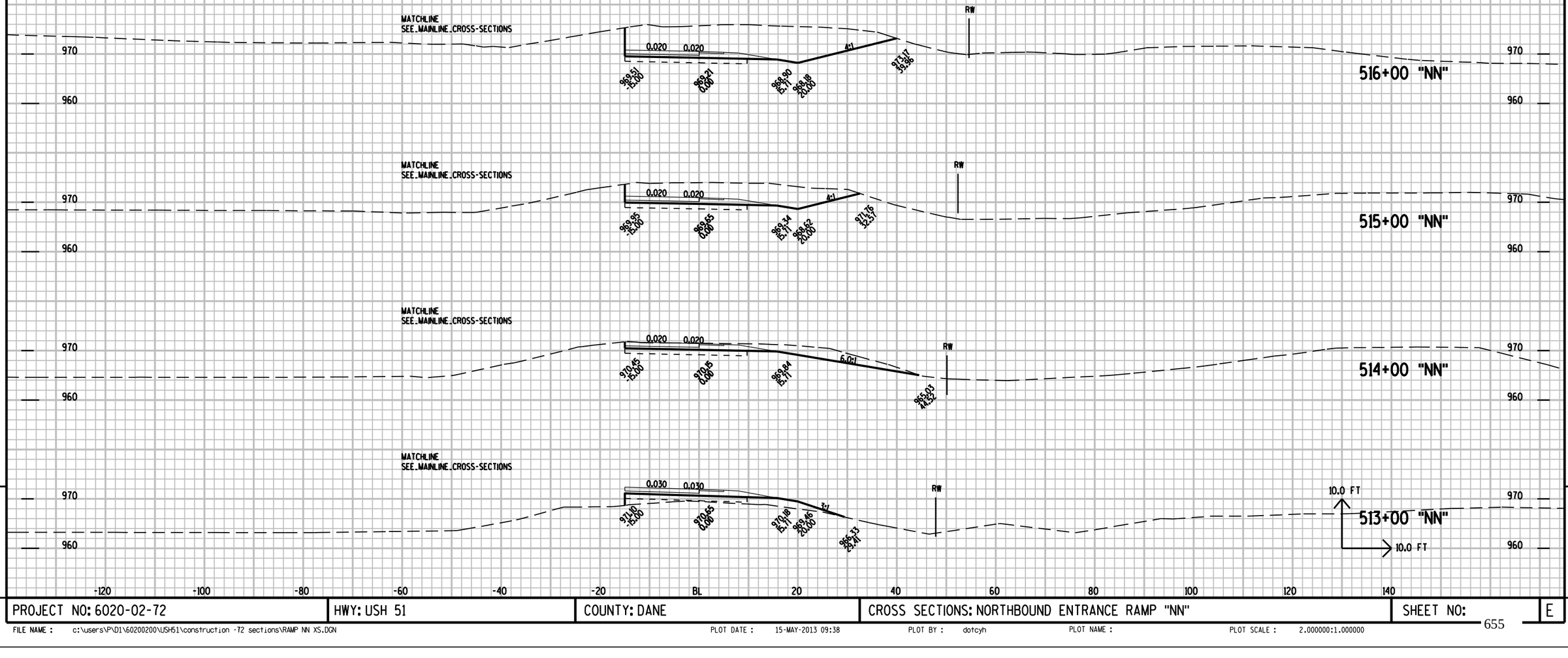


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PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: NORTHBOUND ENTRANCE RAMP "NN"	SHEET NO:	E

FILE NAME : c:\users\P\D1\60200200\USH51\construction -T2 sections\RAMP NN XS.DGN PLOT DATE : 15-MAY-2013 09:38 PLOT BY : dotcyh PLOT NAME : PLOT SCALE : 2.000000:1.000000

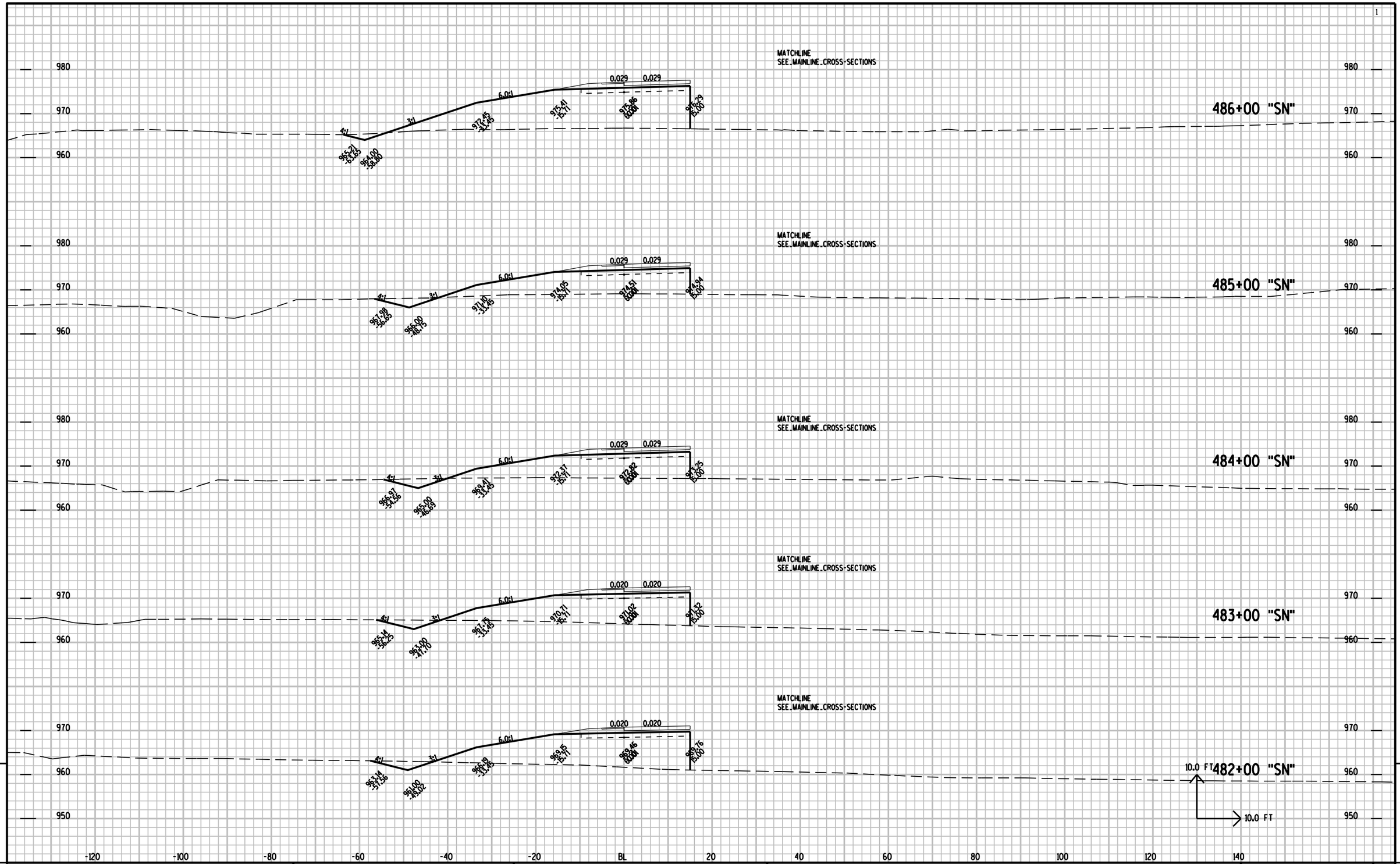


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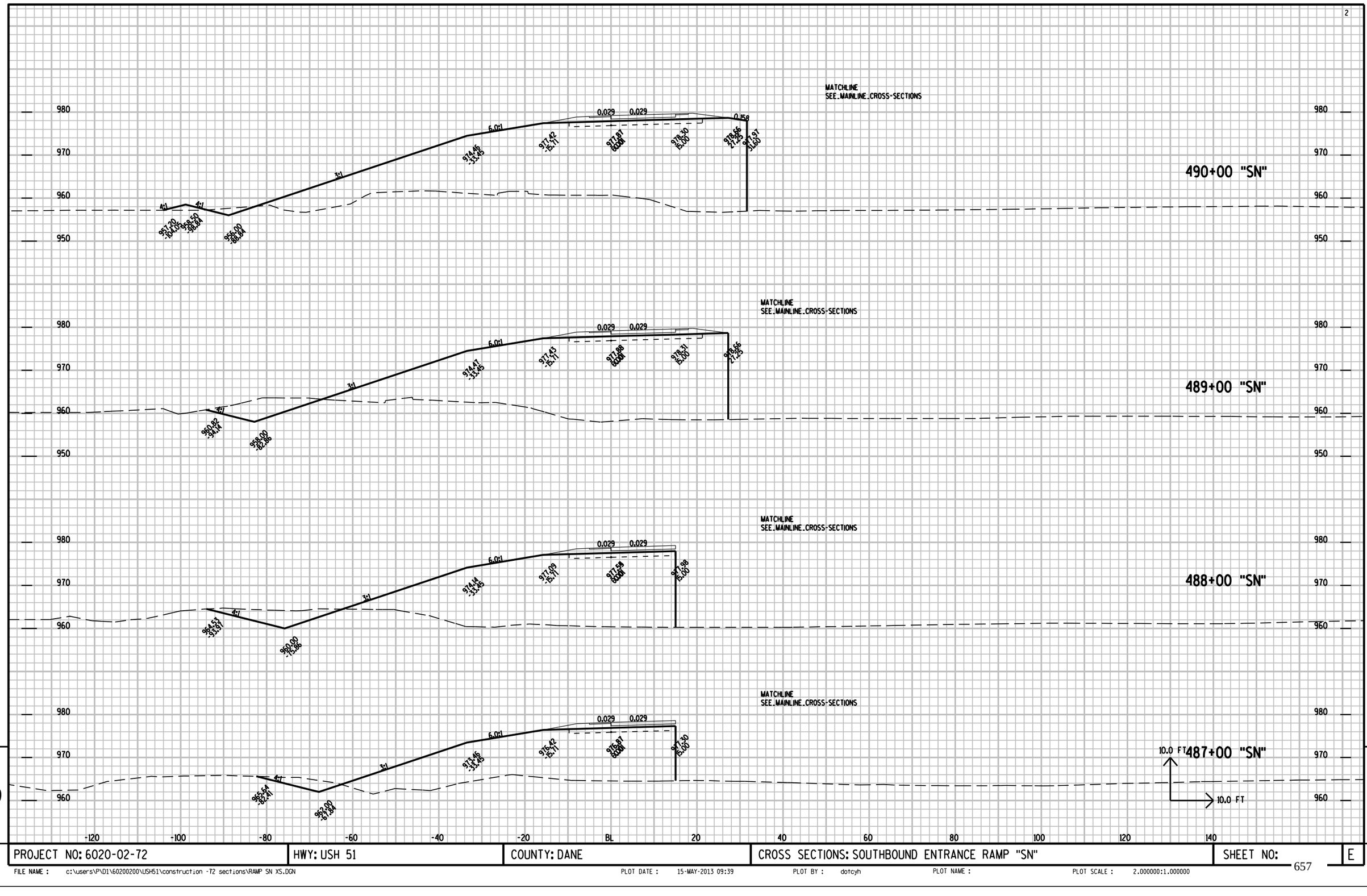
PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: NORTHBOUND ENTRANCE RAMP "NN"	SHEET NO:	E

FILE NAME : c:\users\P\D1\60200200\USH51\construction -T2 sections\RAMP NN XS.DGN PLOT DATE : 15-MAY-2013 09:38 PLOT BY : dotcyh PLOT NAME : PLOT SCALE : 2.000000:1.000000



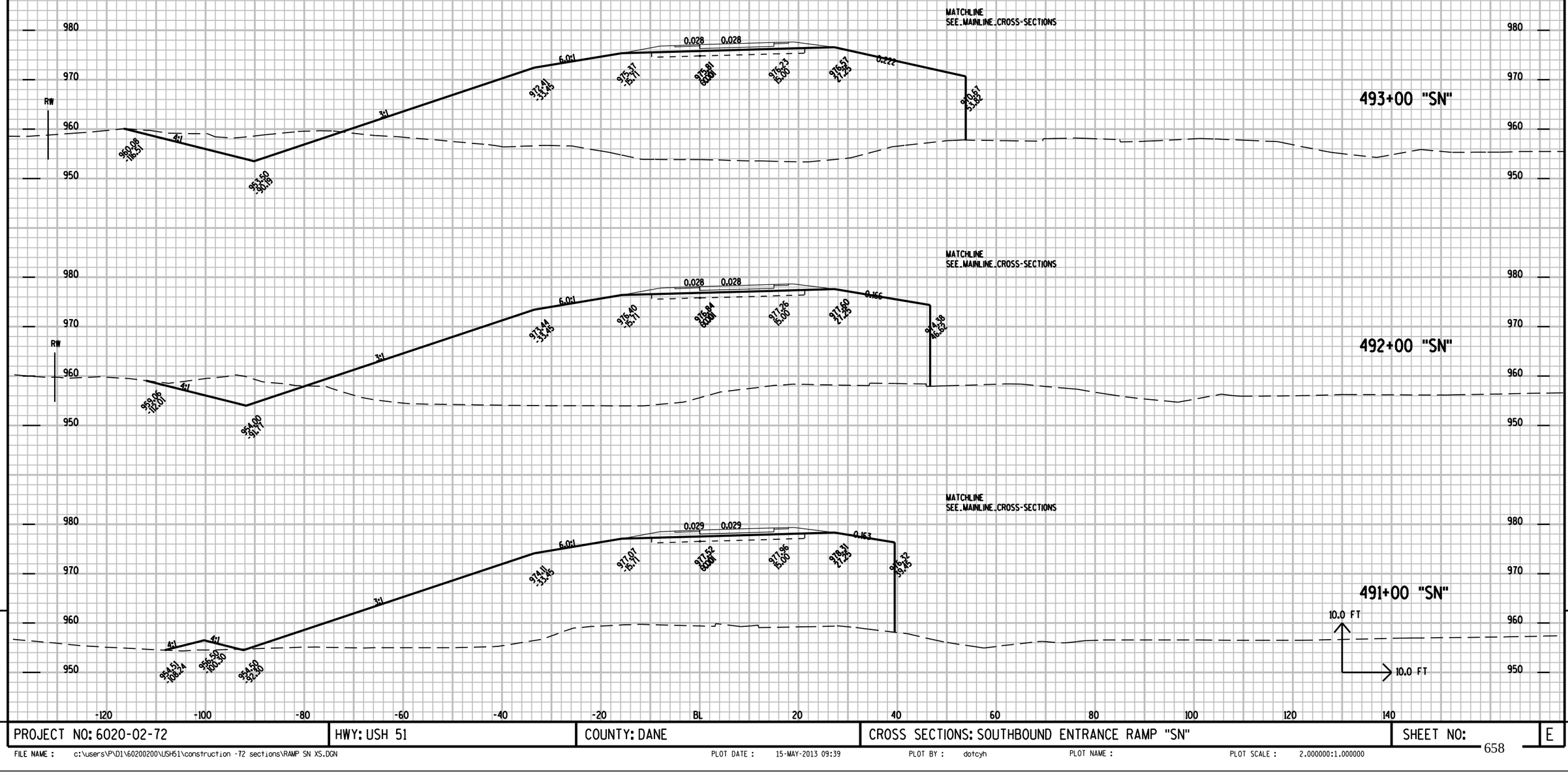
PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: SOUTHBOUND ENTRANCE RAMP "SN"	SHEET NO:	E

FILE NAME : c:\users\PYD1\60200200\USH51\construction -72 sections\RAMP SN XS.DGN PLOT DATE : 15-MAY-2013 09:39 PLOT BY : dotcyh PLOT NAME : PLOT SCALE : 2.000000:1.000000



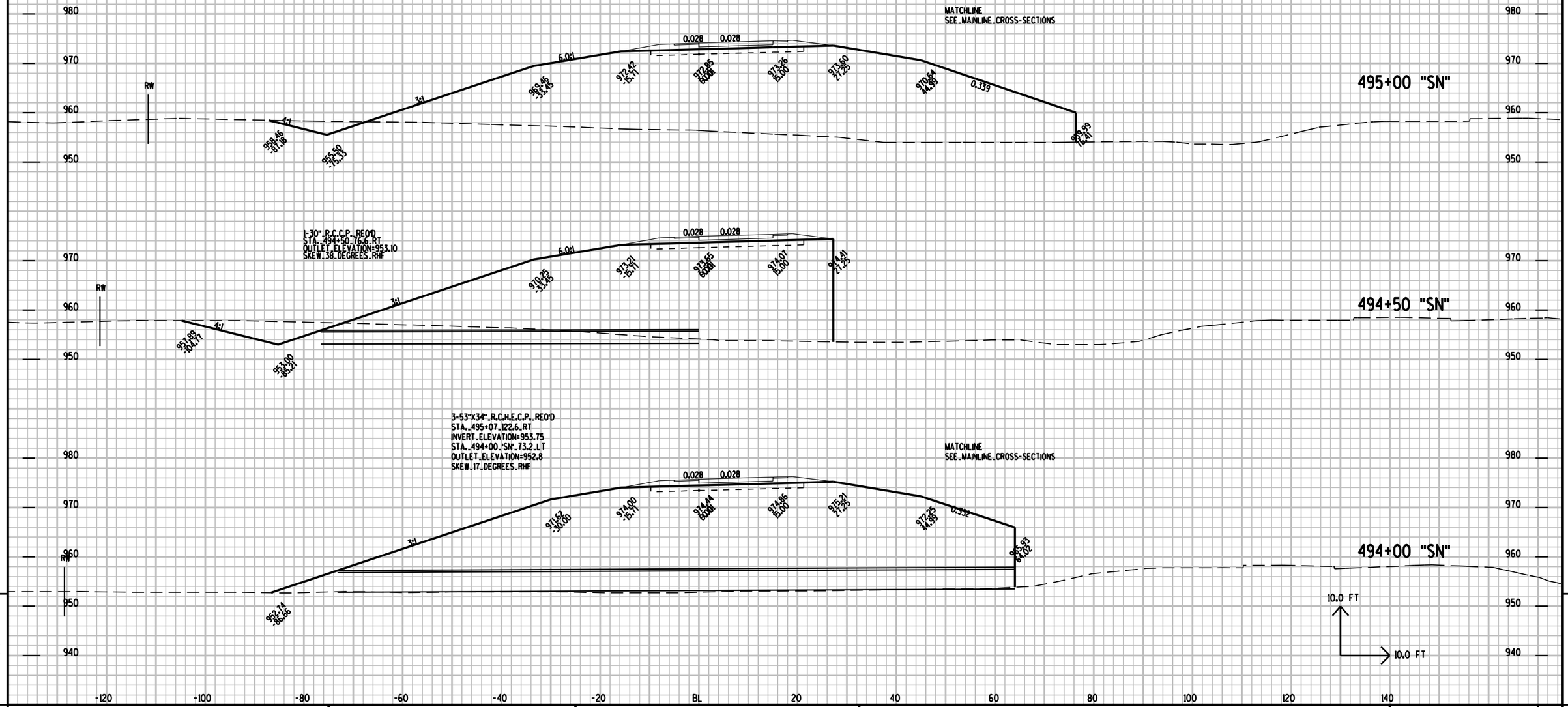
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FILE NAME : c:\users\P\D1\60200200\USH51\construction -72 sections\RAMP SN XS.DGN PLOT DATE : 15-MAY-2013 09:39 PLOT BY : dotcyh PLOT NAME : PLOT SCALE : 2.000000:1.000000



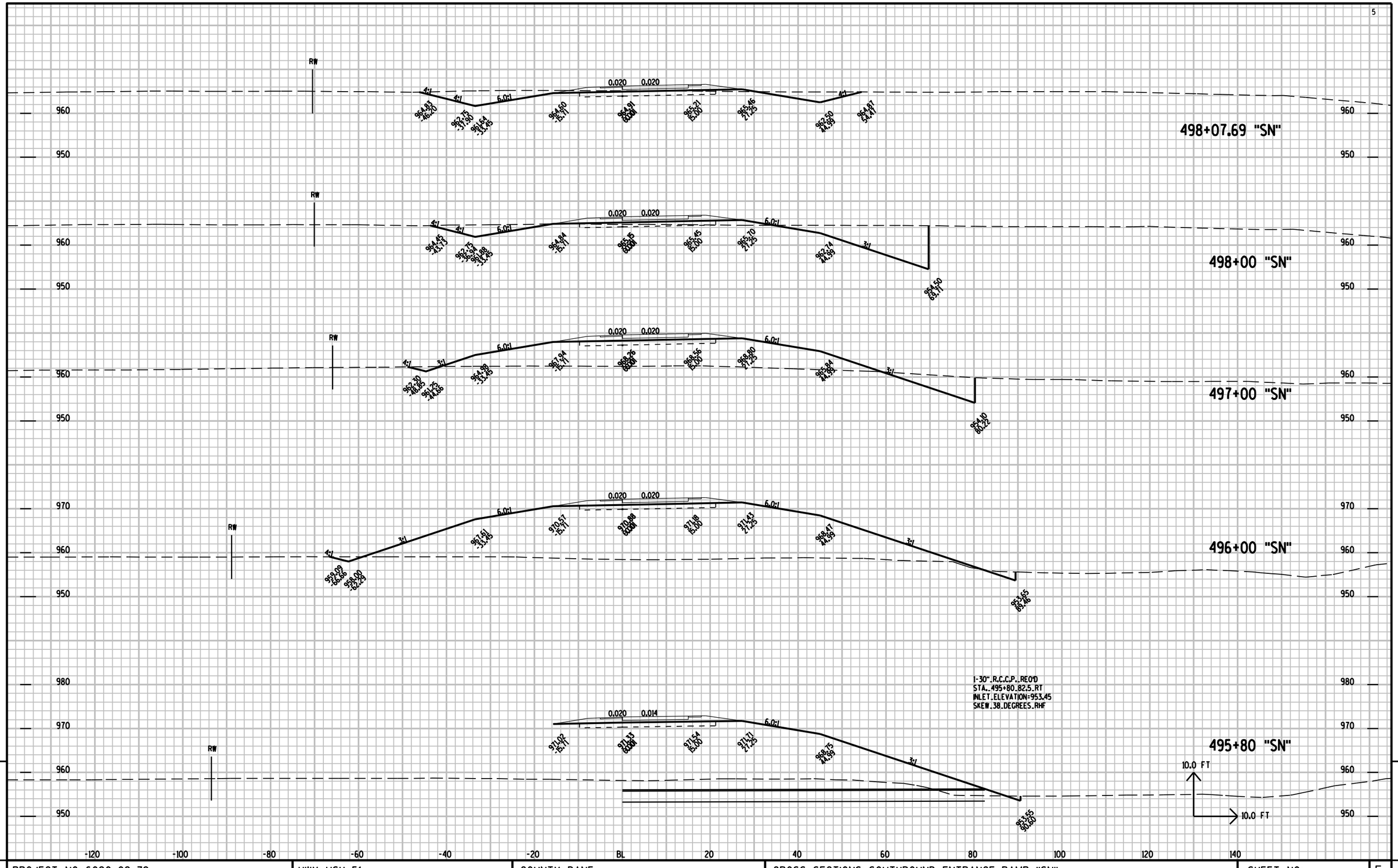
PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: SOUTHBOUND ENTRANCE RAMP "SN"	SHEET NO:	E

FILE NAME : c:\users\PYD1\60200200\USH51\construction -T2 sections\RAMP SN XS.DGN PLOT DATE : 15-MAY-2013 09:39 PLOT BY : dotcyh PLOT NAME : PLOT SCALE : 2.000000:1.000000



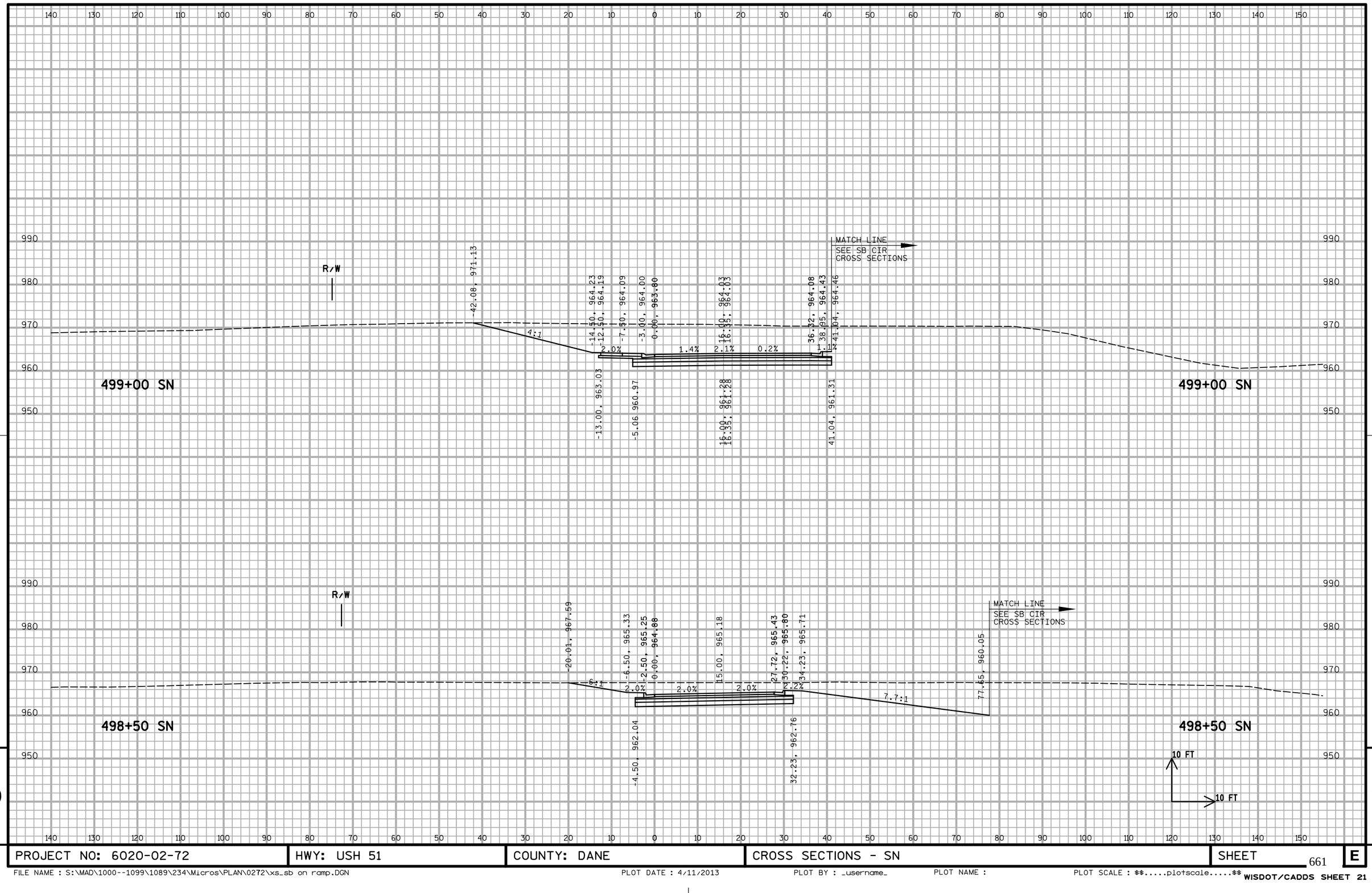
PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: SOUTHBOUND ENTRANCE RAMP "SN"	SHEET NO: E

FILE NAME : c:\users\PYD1\60200200\USH51\construction -T2 sections\RAMP SN XS.DGN PLOT DATE : 15-MAY-2013 09:39 PLOT BY : dotcyh PLOT NAME : PLOT SCALE : 2.000000:1.000000

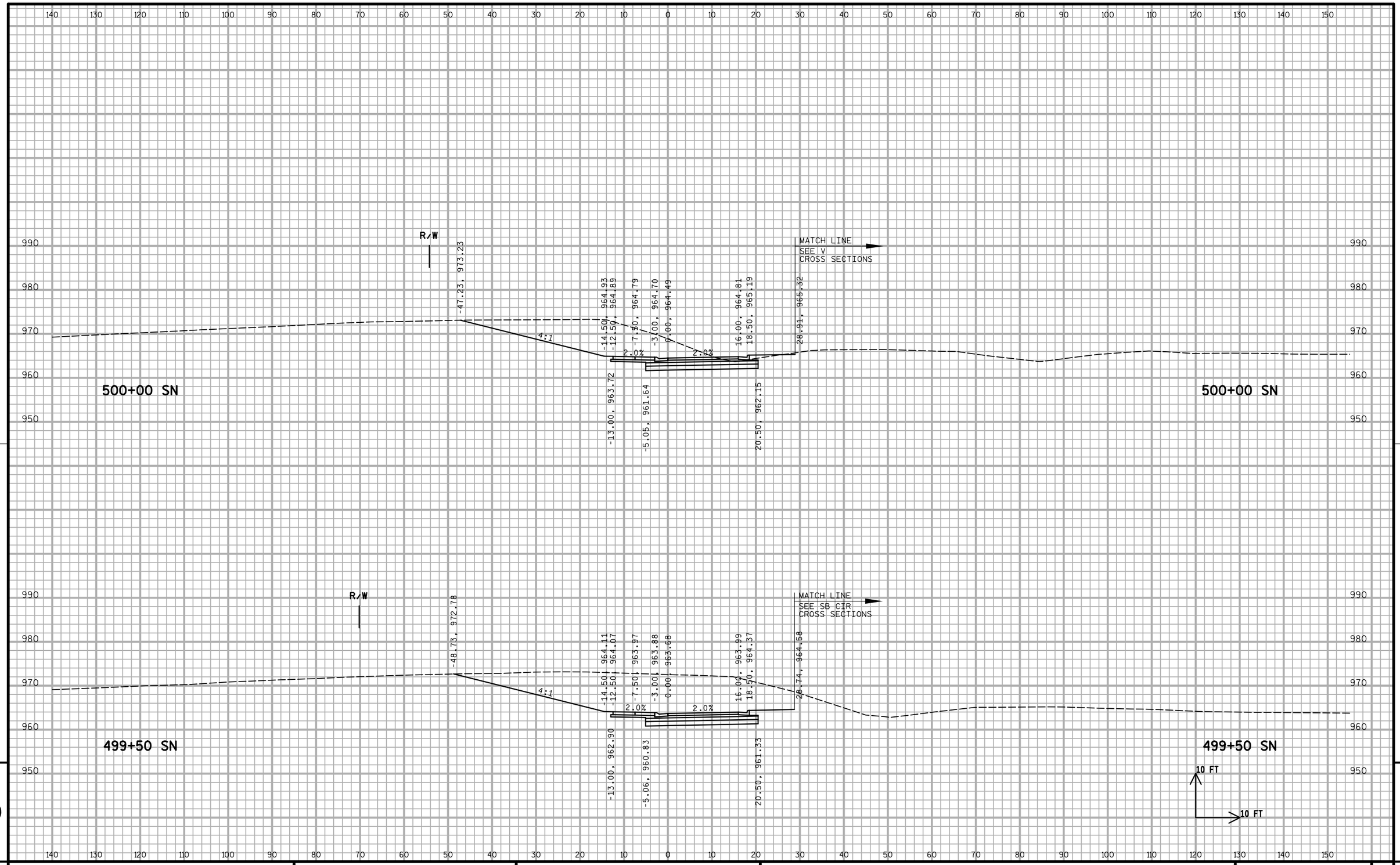


PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: SOUTHBOUND ENTRANCE RAMP "SN"	SHEET NO: E

FILE NAME : c:\users\P\D1\60200200\USH51\construction -T2 sections\RAMP SN XS.DGN PLOT DATE : 15-MAY-2013 09:39 PLOT BY : dotcyh PLOT NAME : PLOT SCALE : 2.000000:1.000000

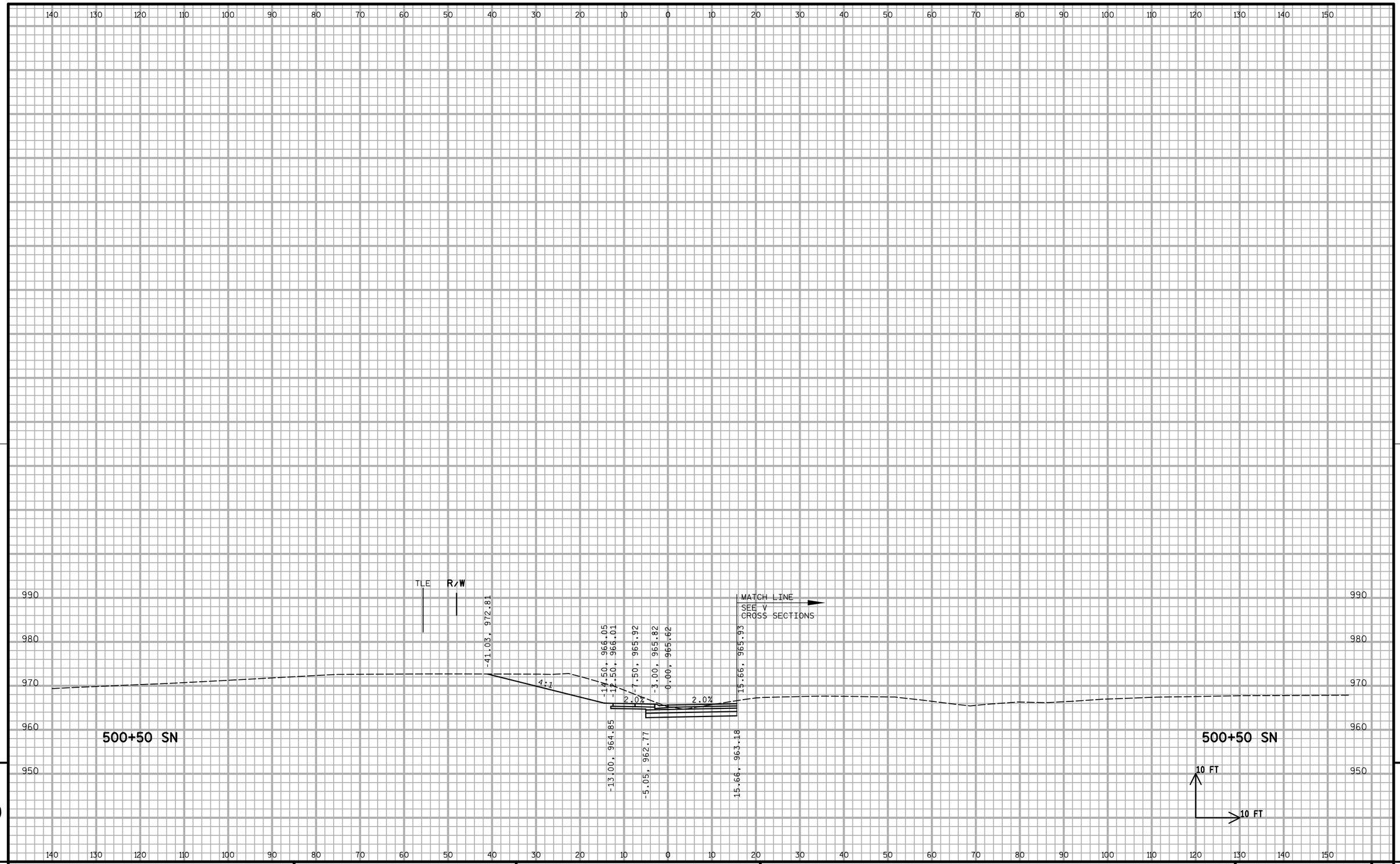


PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS - SN	SHEET 661	E



PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS - SN	SHEET 662	E

FILE NAME : S:\MAD\1000--1099\1089\234\Micros\PLAN\0272\xs_sb on ramp.DGN PLOT DATE : 4/11/2013 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$



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PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS - SN	SHEET	E

FILE NAME : S:\MAD\1000--1099\1089\234\Micros\PLAN\0272\xs_sb on ramp.DGN PLOT DATE : 4/11/2013 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 21

MATCHLINE
SEE MAINLINE CROSS-SECTIONS

504+00 "SX"

503+00 "SX"

1-24" R.C.C.P. REQ'D
STA. 502+80"SX" 41.6 LT
INLET ELEVATION=955.9
SKEW 27 DEGREES LHF

502+80 "SX"

1-24" R.C.C.P. REQ'D
STA. 502+30"SX" 55.35 RT
OUTLET ELEVATION=955.6
SKEW 27 DEGREES LHF

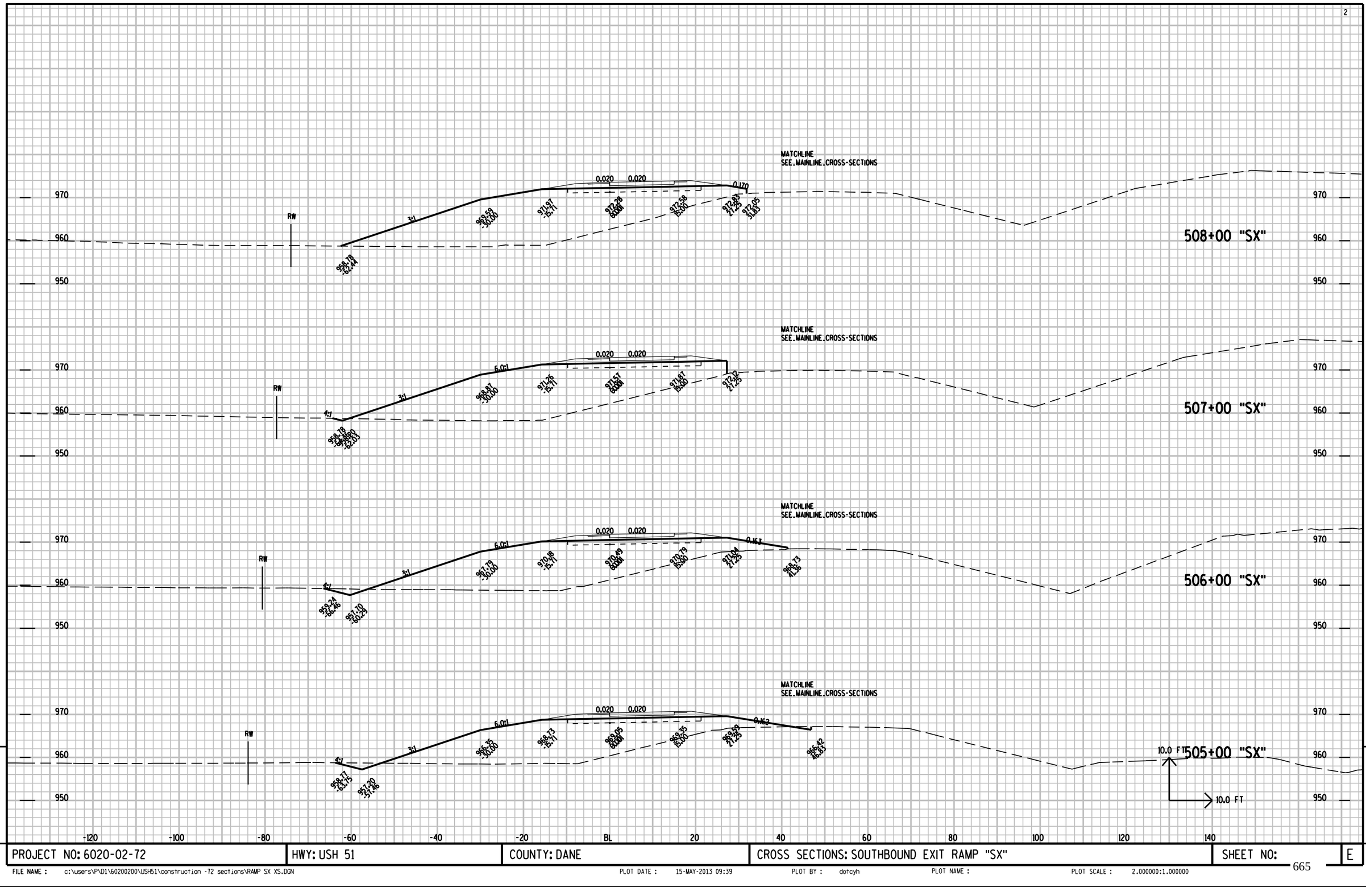
502+30 "SX"

502+12.18 "SX"
10.0 FT
10.0 FT

970
960
950
RW
-120 -100 -80 -60 -40 -20 BL 20 40 60 80 100 120 140

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: SOUTHBOUND EXIT RAMP "SX"	SHEET NO:	E

FILE NAME : c:\users\PD1\60200200\USH51\construction -T2 sections\RAMP SX XS.DGN PLOT DATE : 15-MAY-2013 09:39 PLOT BY : dotcyh PLOT NAME : PLOT SCALE : 2.000000:1.000000



PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: SOUTHBOUND EXIT RAMP "SX"	SHEET NO: E

FILE NAME : c:\users\PD1\60200200\USH51\construction -72 sections\RAMP SX XS.DGN PLOT DATE : 15-MAY-2013 09:39 PLOT BY : dotcyh PLOT NAME : PLOT SCALE : 2.000000:1.000000

1-30"_R.C.C.P._RED
STA._511+50'SX'_28.2_LT
INVERT_ELEVATION=961.75
STA._511+00'NW'_40.8_RT
OUTLET_ELEVATION=960.05

RW

2:1

0.020 0.020

E.P.

971.54 -15.95

971.92 6.00

972.22 15.00

972.46 21.25

962.28 -32.85

MATCHLINE
SEE_MAINLINE_CROSS-SECTIONS

511+50 "SX"

RW

2:1

0.020 0.020

E.P.

971.96 -15.95

972.14 6.00

972.34 15.00

972.79 21.25

962.50 -32.67

MATCHLINE
SEE_MAINLINE_CROSS-SECTIONS

511+00 "SX"

RW

2:1

0.020 0.020

E.P.

972.34 -15.95

972.62 6.00

972.82 15.00

973.17 21.25

961.03 -30.57

MATCHLINE
SEE_MAINLINE_CROSS-SECTIONS

510+00 "SX"

RW

2:1

0.020 0.020

969.94 -30.00

972.32 -15.71

972.63 6.00

972.83 15.00

973.18 21.25

959.99 -29.67

MATCHLINE
SEE_MAINLINE_CROSS-SECTIONS

509+00 "SX"

10.0 FT

10.0 FT

970
960
950

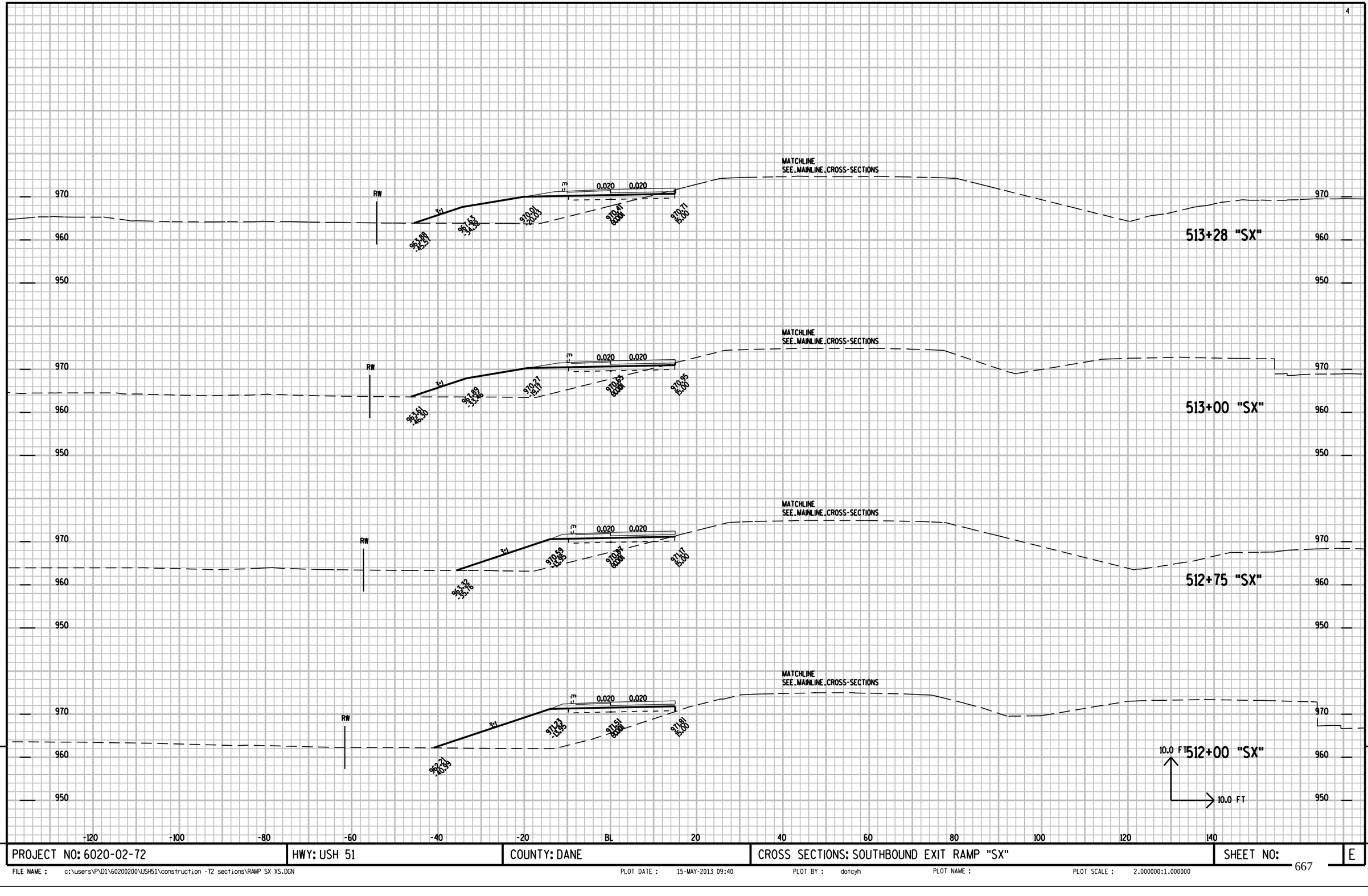
-120 -100 -80 -60 -40 -20 BL 20 40 60 80 100 120 140

9

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PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: SOUTHBOUND EXIT RAMP "SX"	SHEET NO:	E

FILE NAME : c:\users\P\D1\60200200\USH51\construction -72 sections\RAMP SX XS.DGN PLOT DATE : 15-MAY-2013 09:40 PLOT BY : dotcyh PLOT NAME : PLOT SCALE : 2.000000:1.000000

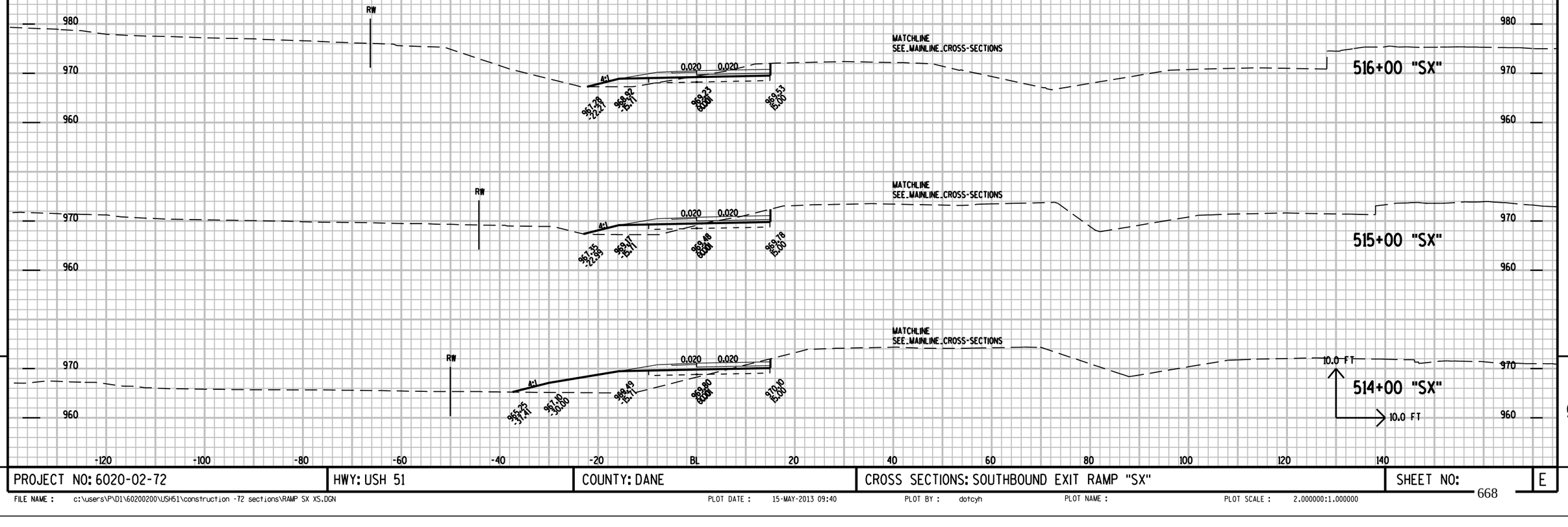


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PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: SOUTHBOUND EXIT RAMP "SX"	SHEET NO:	E

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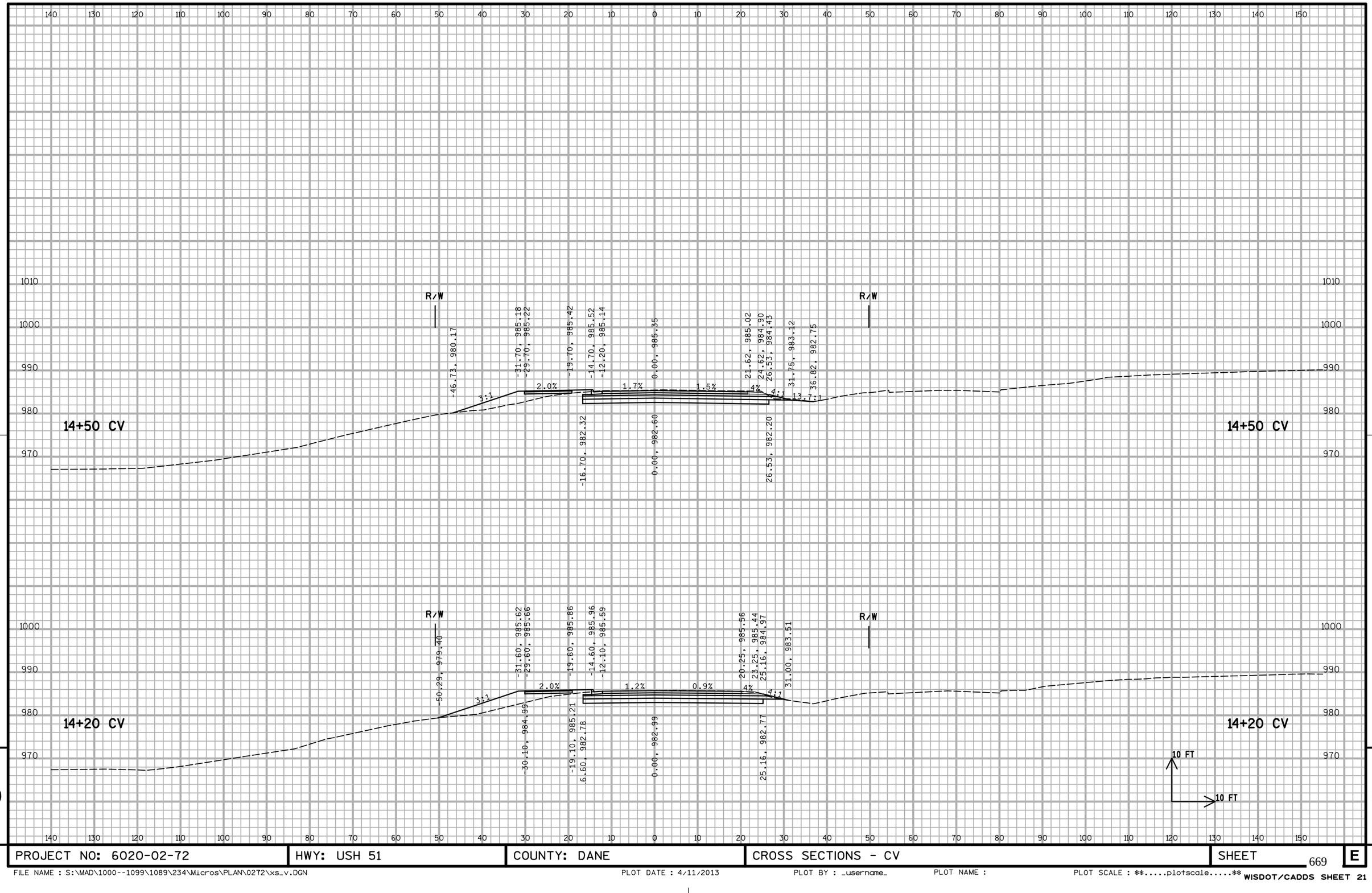


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PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: SOUTHBOUND EXIT RAMP "SX"	SHEET NO:	E

FILE NAME : c:\users\P\D1\60200200\USH51\construction -T2 sections\RAMP SX XS.DGN PLOT DATE : 15-MAY-2013 09:40 PLOT BY : dotcyh PLOT NAME : PLOT SCALE : 2.000000:1.000000

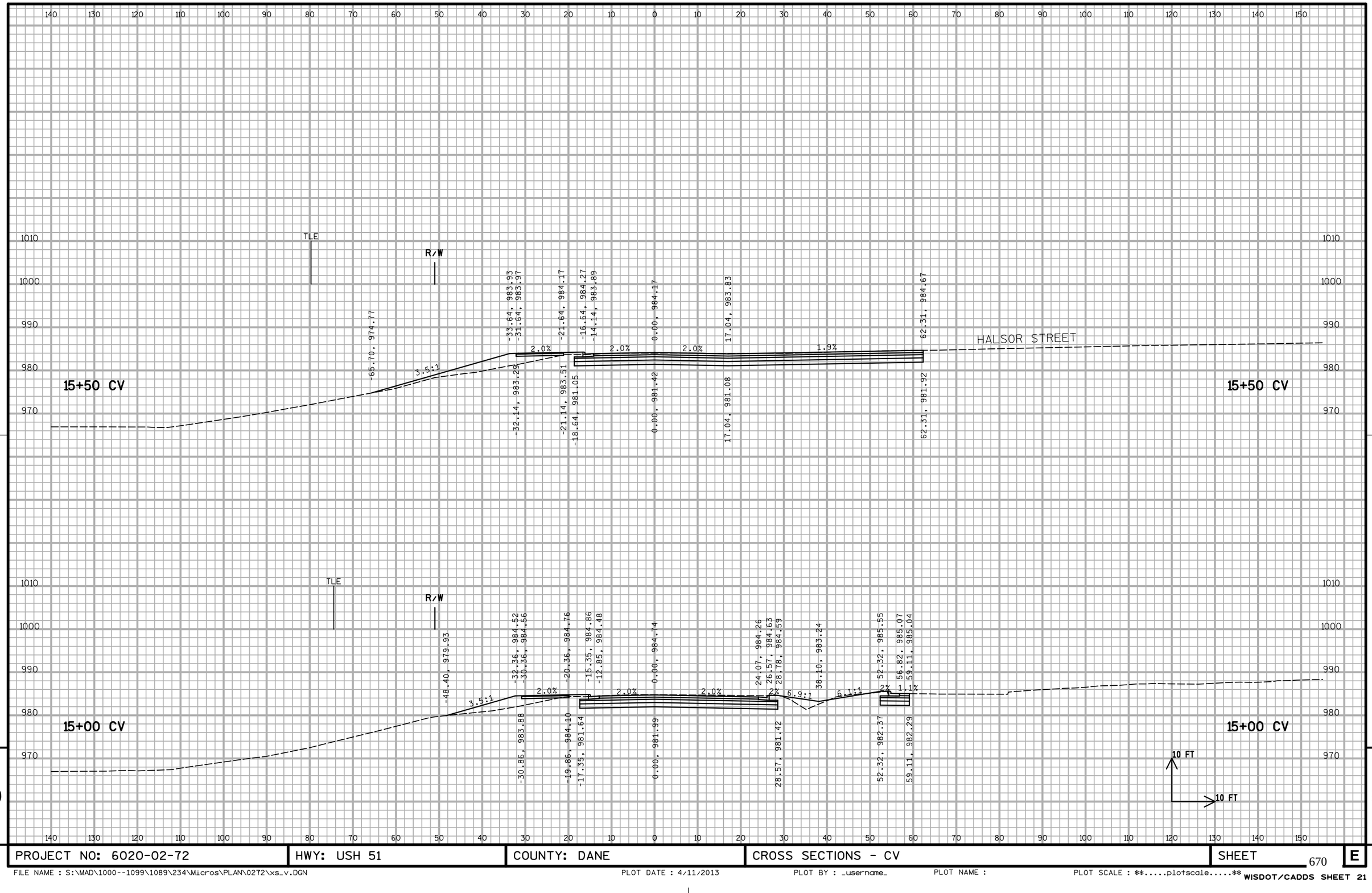


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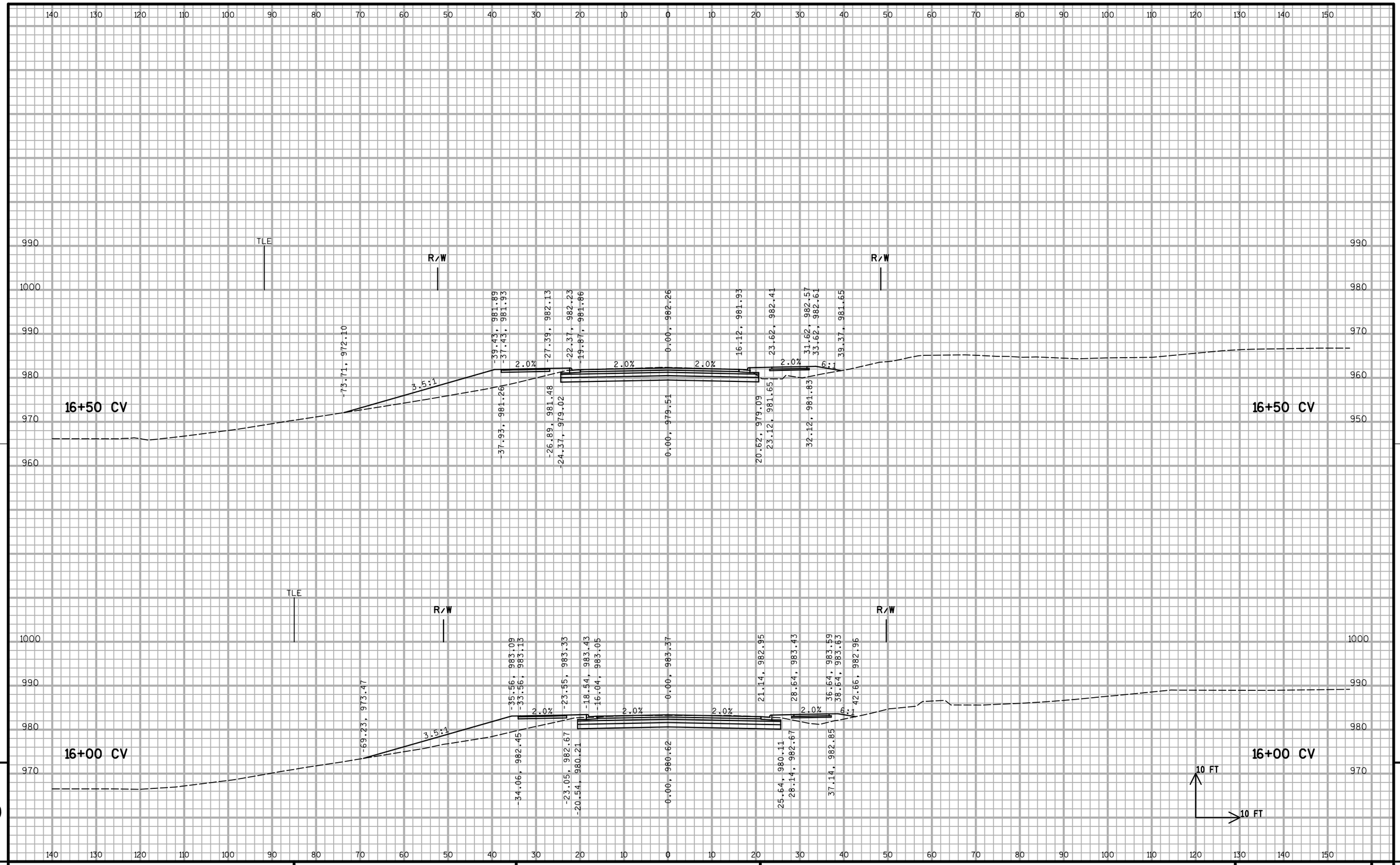
PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS - CV	SHEET 669	E

FILE NAME : S:\MAD\1000--1099\1089\234\Micros\PLAN\0272\xs_v.DGN PLOT DATE : 4/11/2013 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21



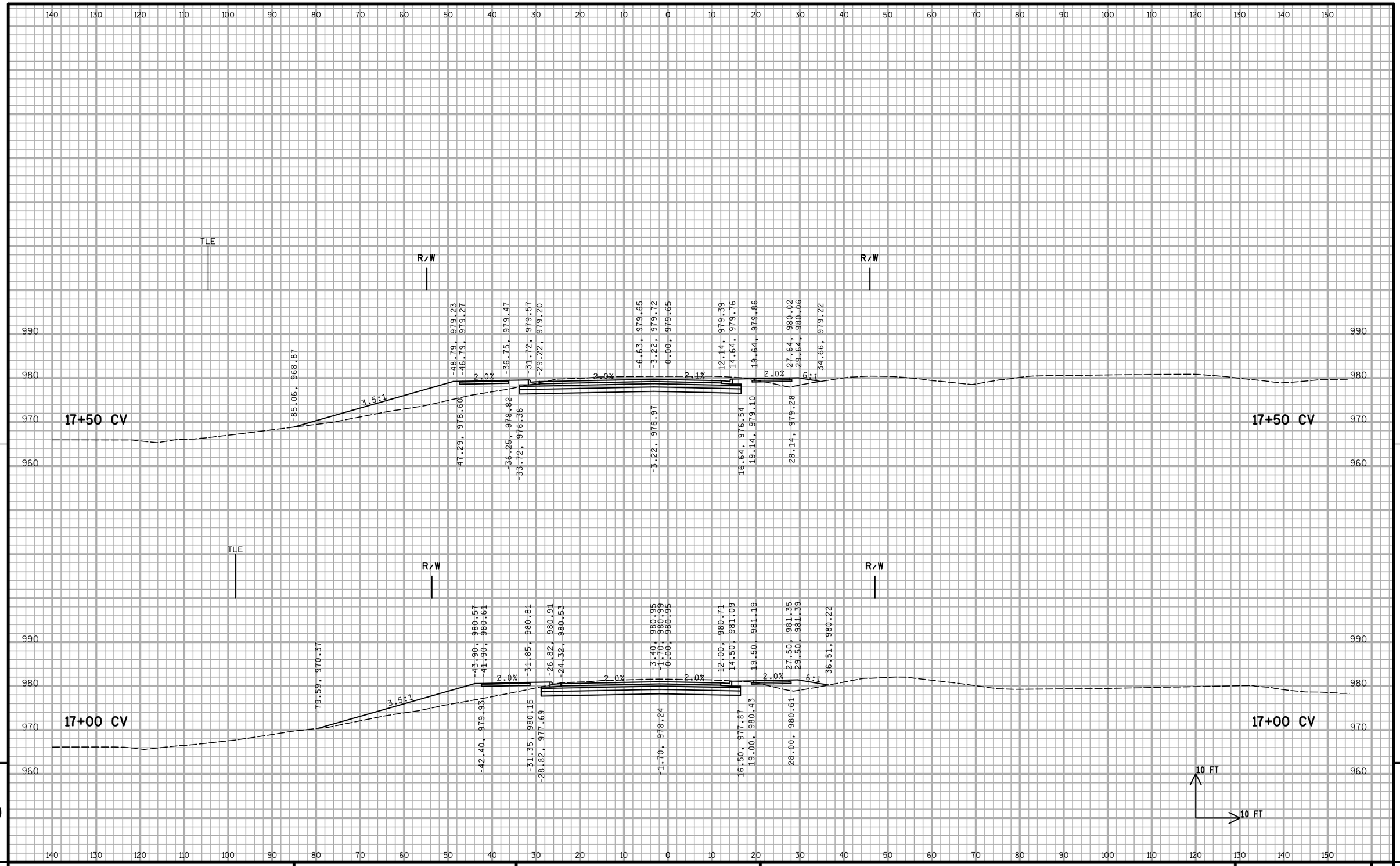
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PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS - CV	SHEET 671	E

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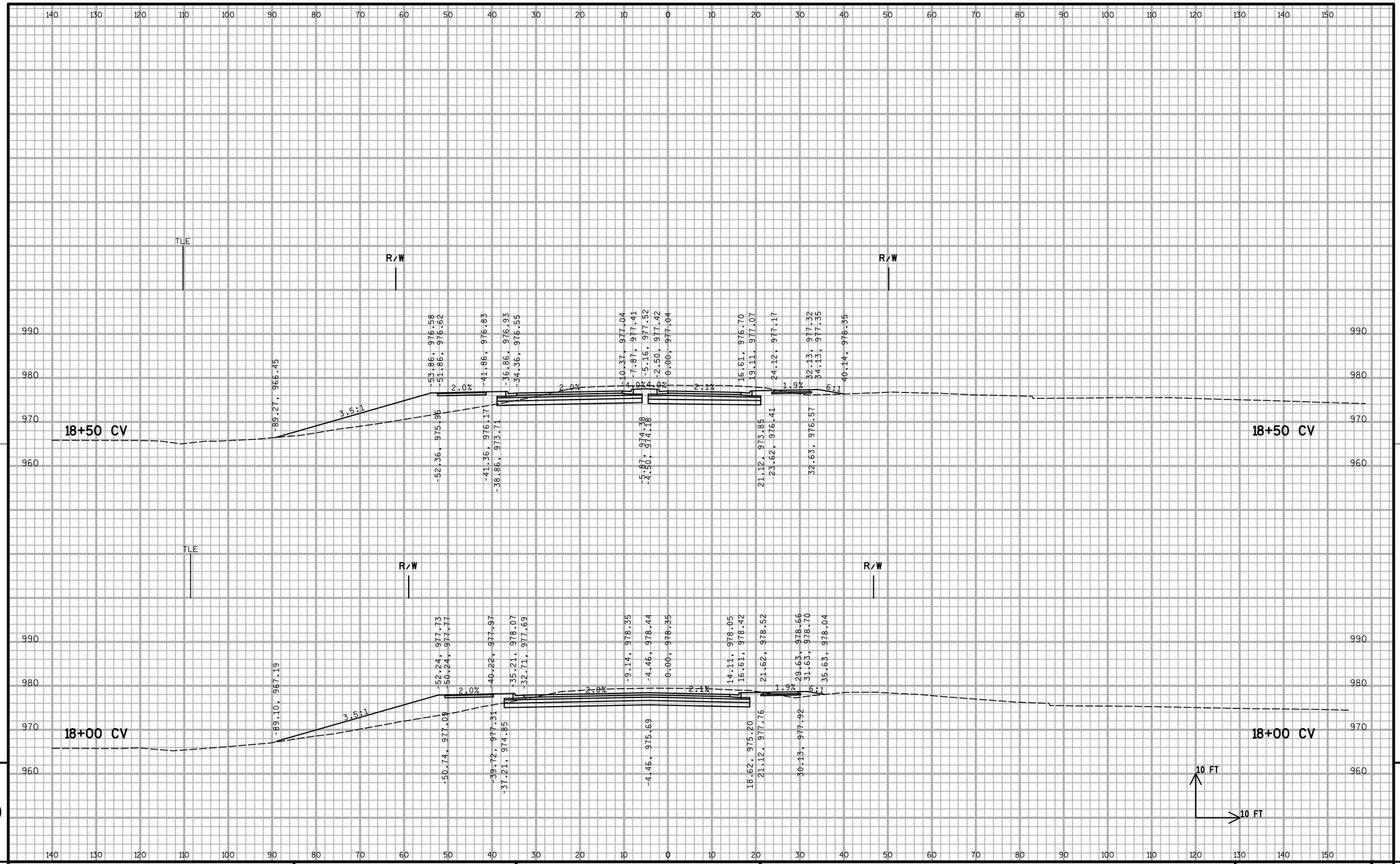


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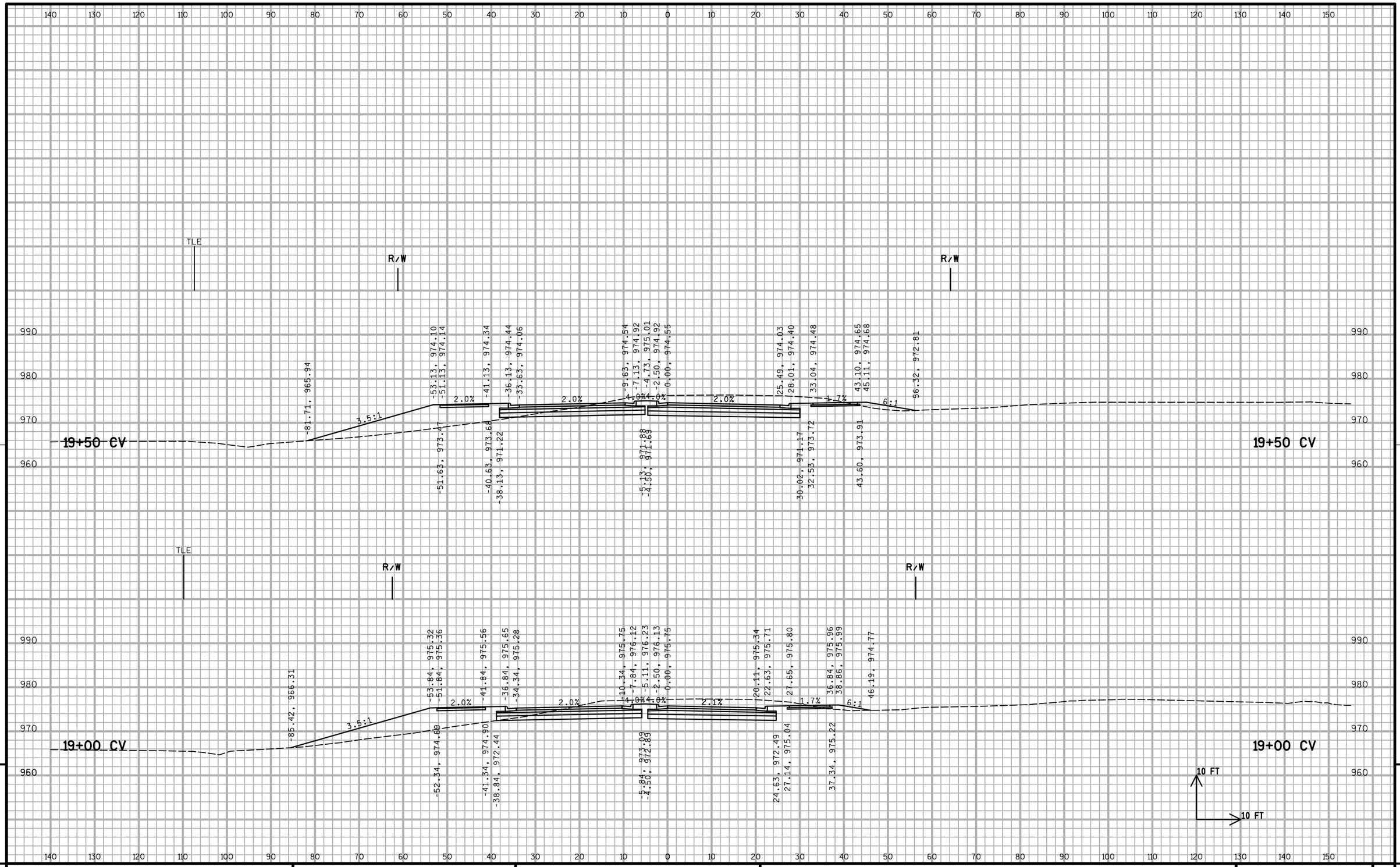
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PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS - CV	SHEET 673	E

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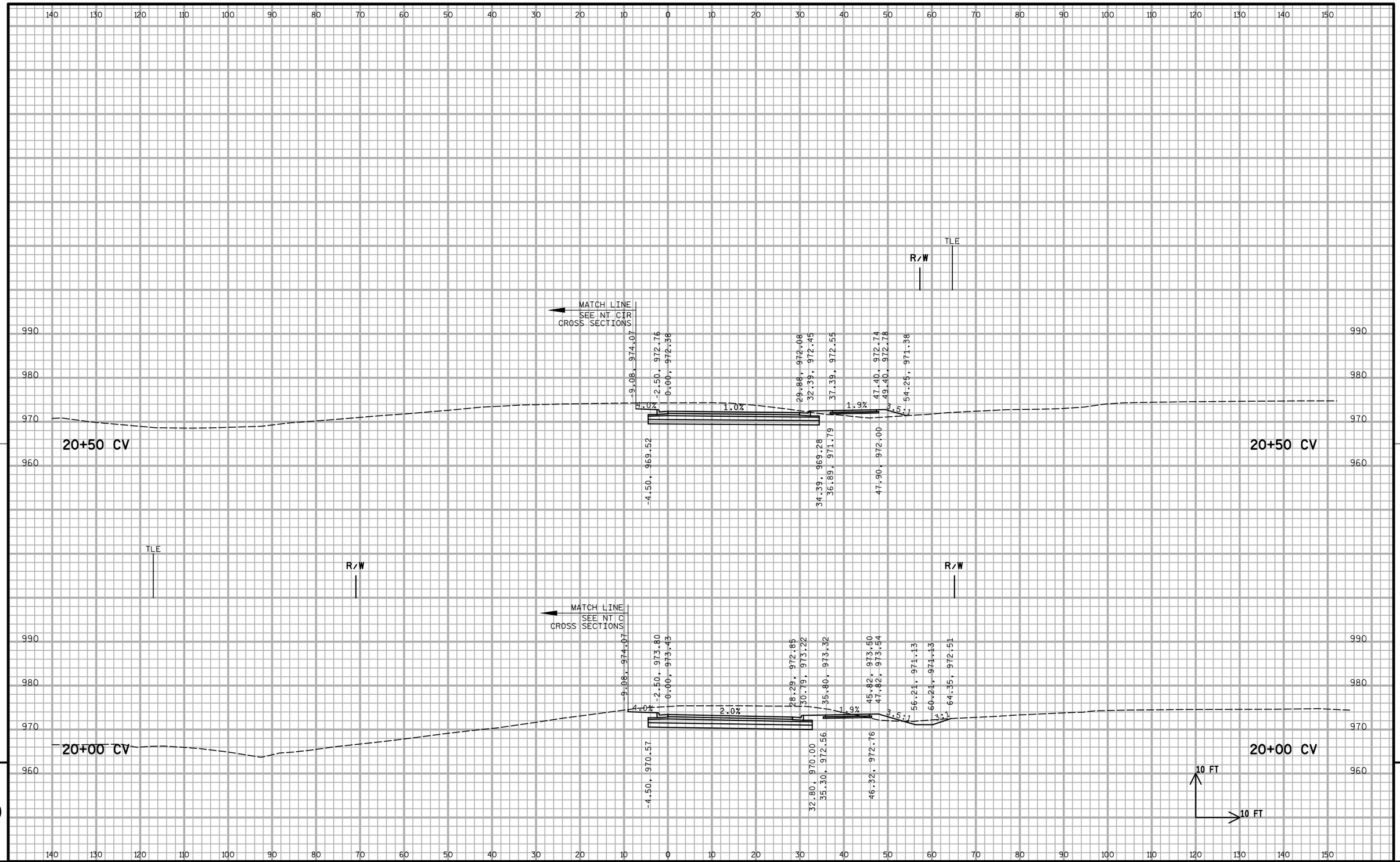
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PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS - CV	SHEET 674	E

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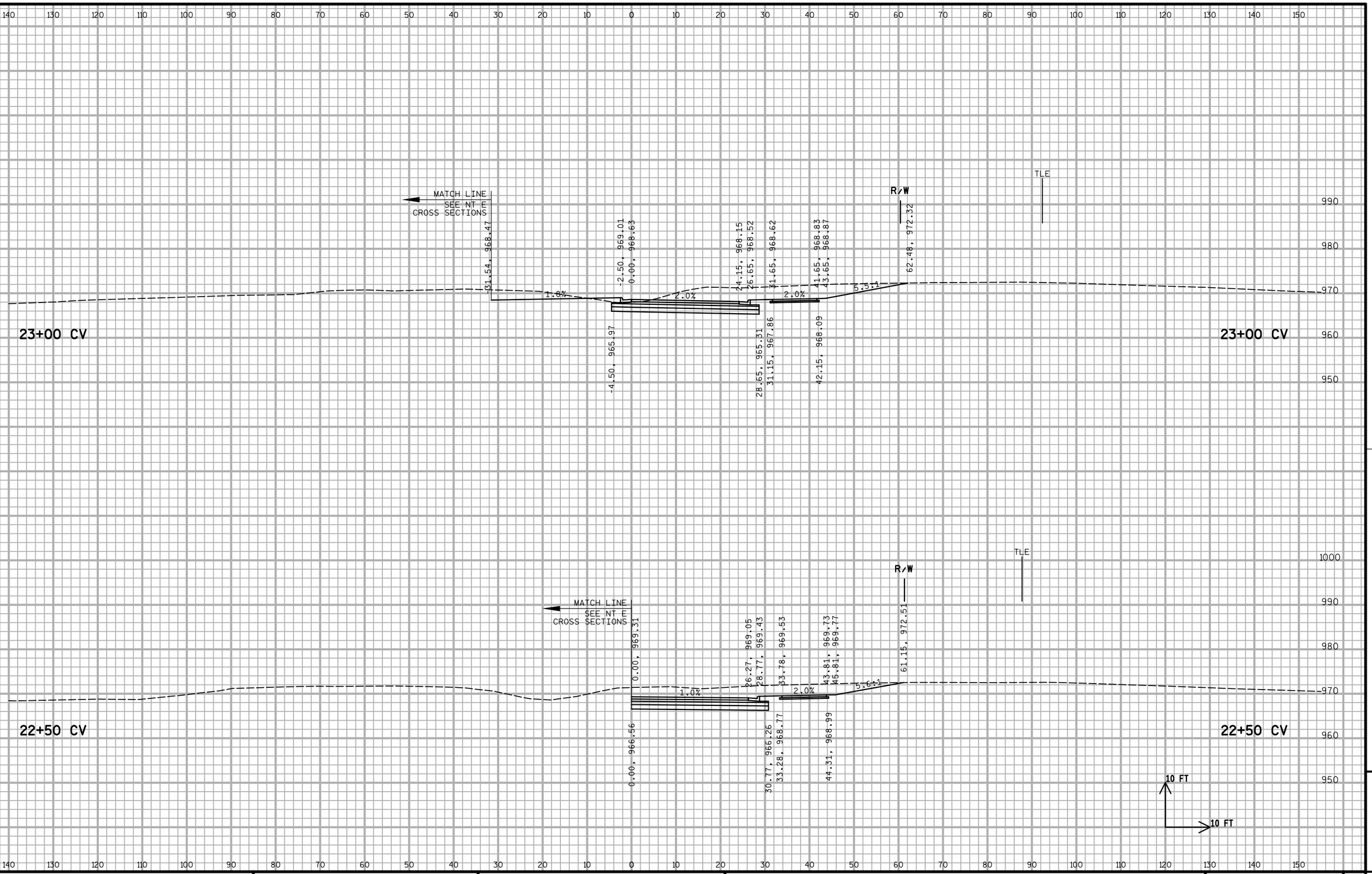
WISDOT/CADDS SHEET 21



PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS - CV	SHEET	E

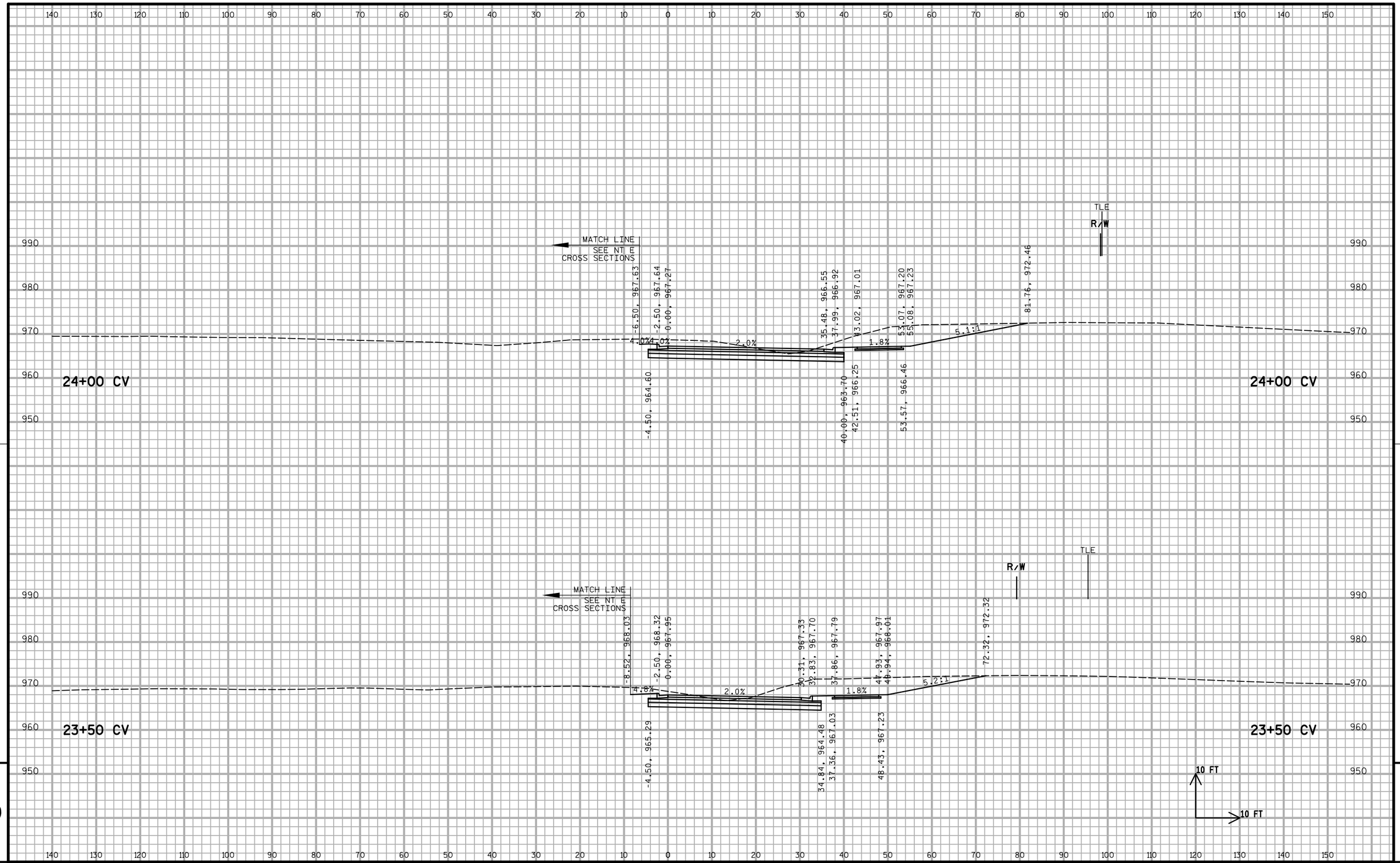
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WISDOT/CADDS SHEET 21



PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS - CV	SHEET 676	E

FILE NAME : S:\MAD\1000--1099\1089\234\Micros\PLAN\0272\xs_v_a.DGN PLOT DATE : 4/11/2013 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21

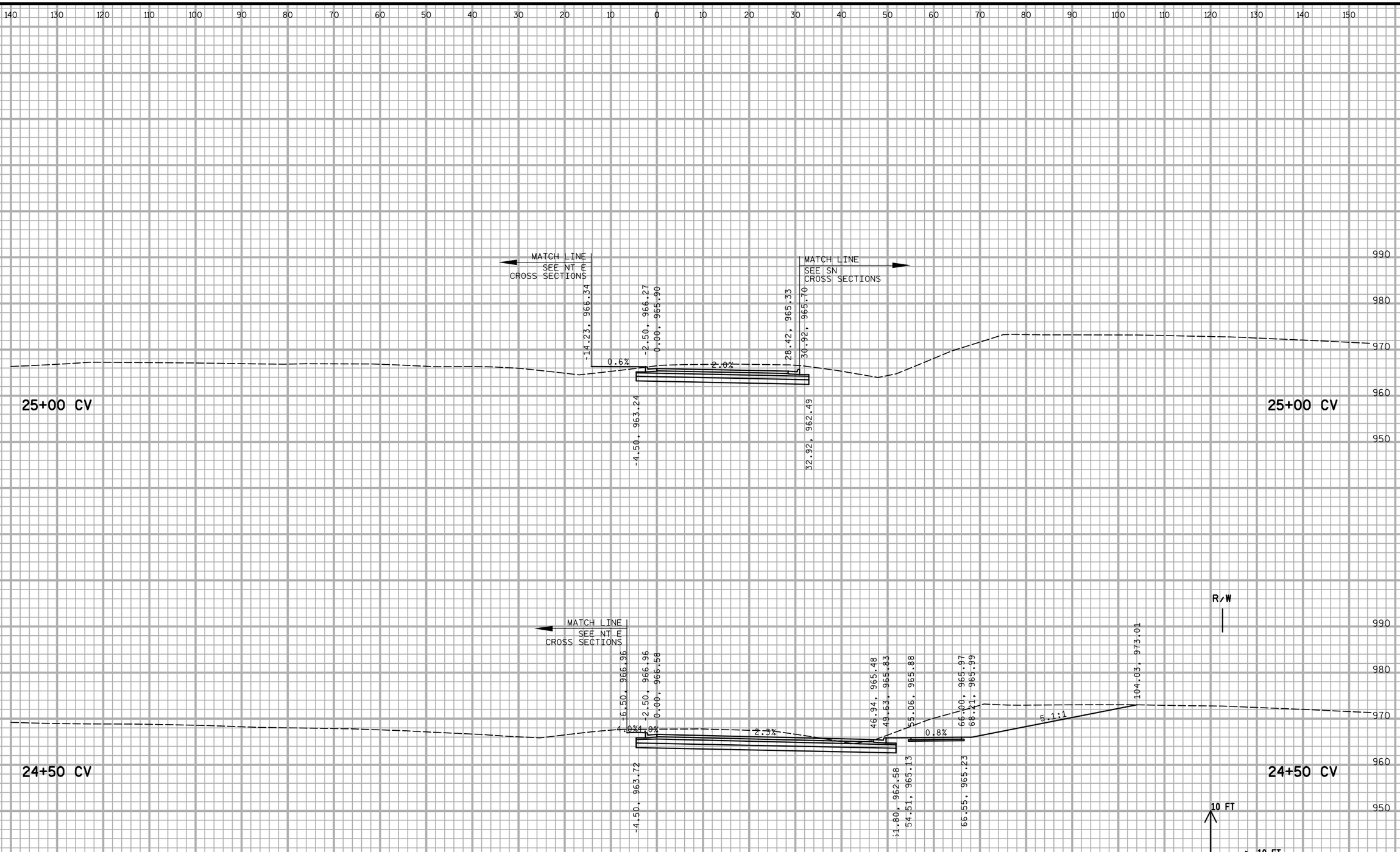


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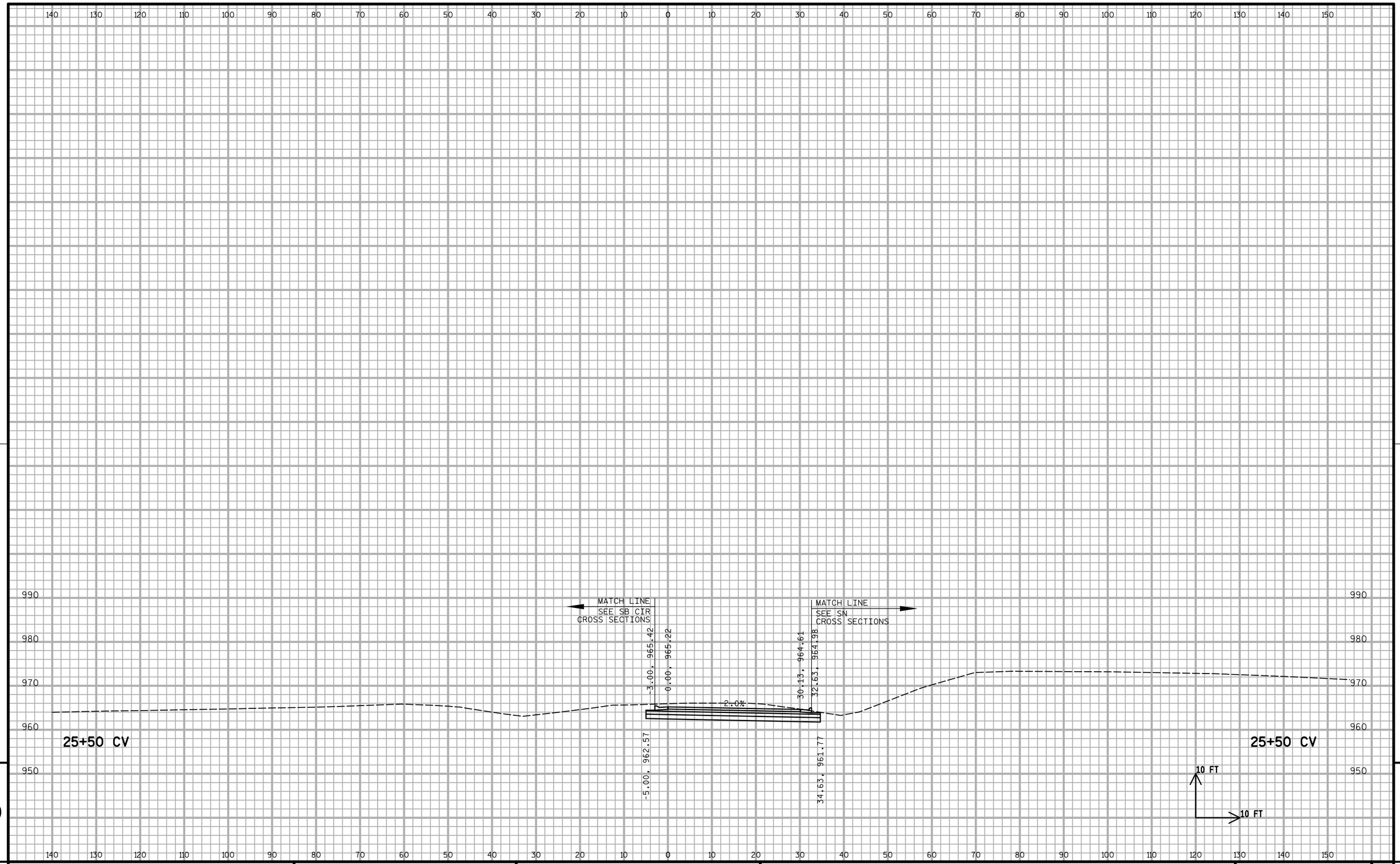
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PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS - CV	SHEET 678	E

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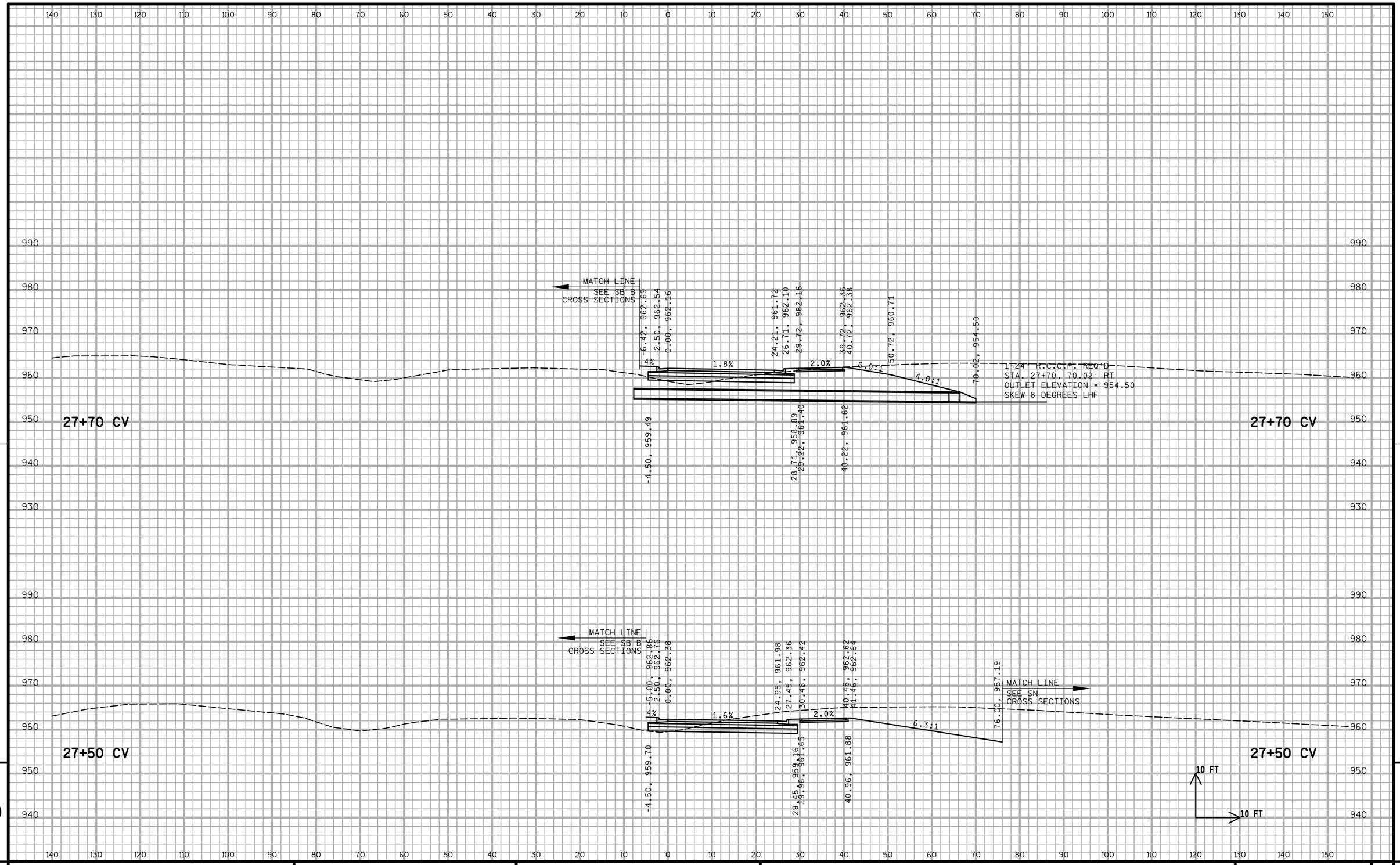
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PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS - CV	SHEET	E

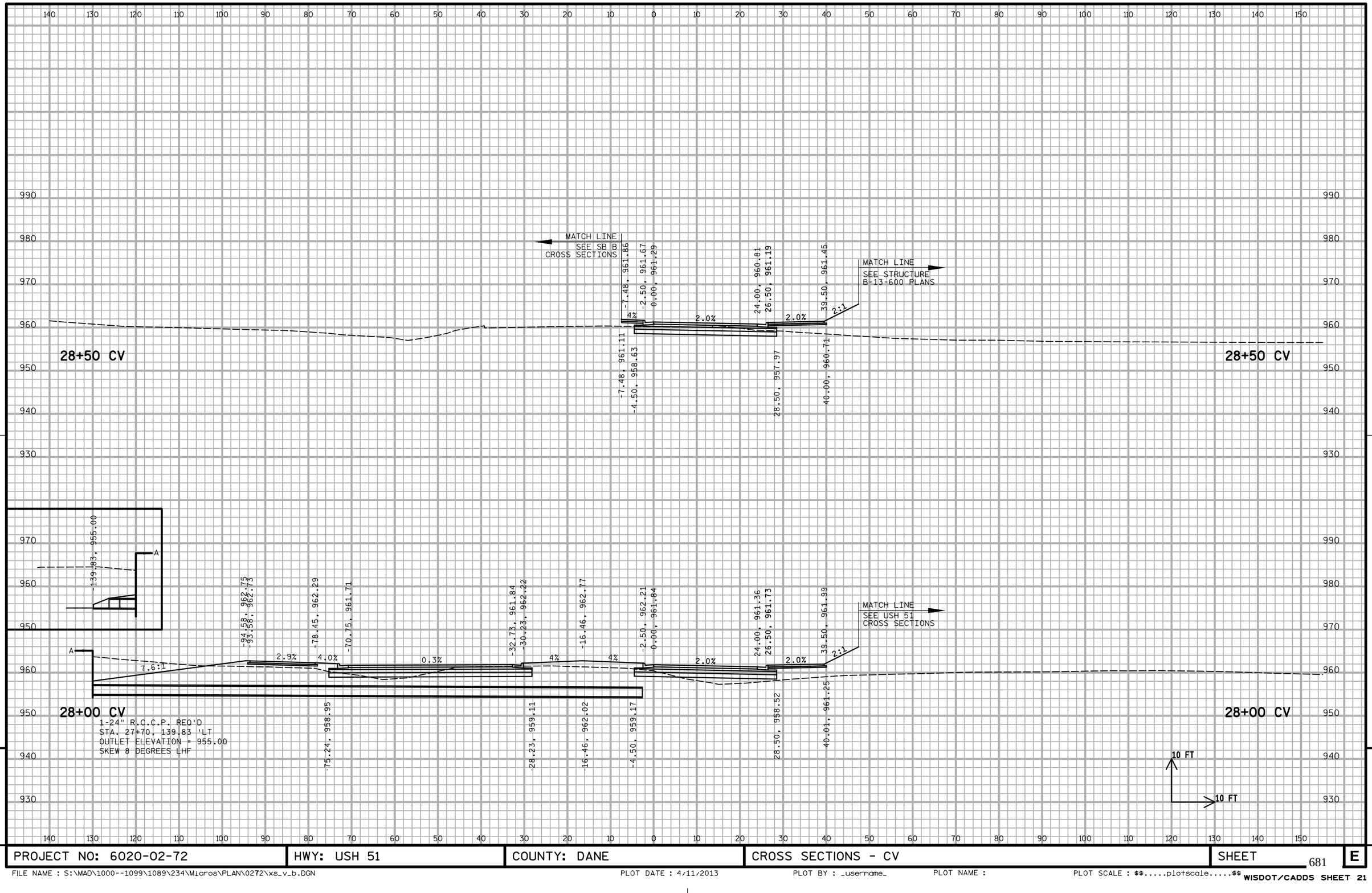
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WISDOT/CADDS SHEET 21



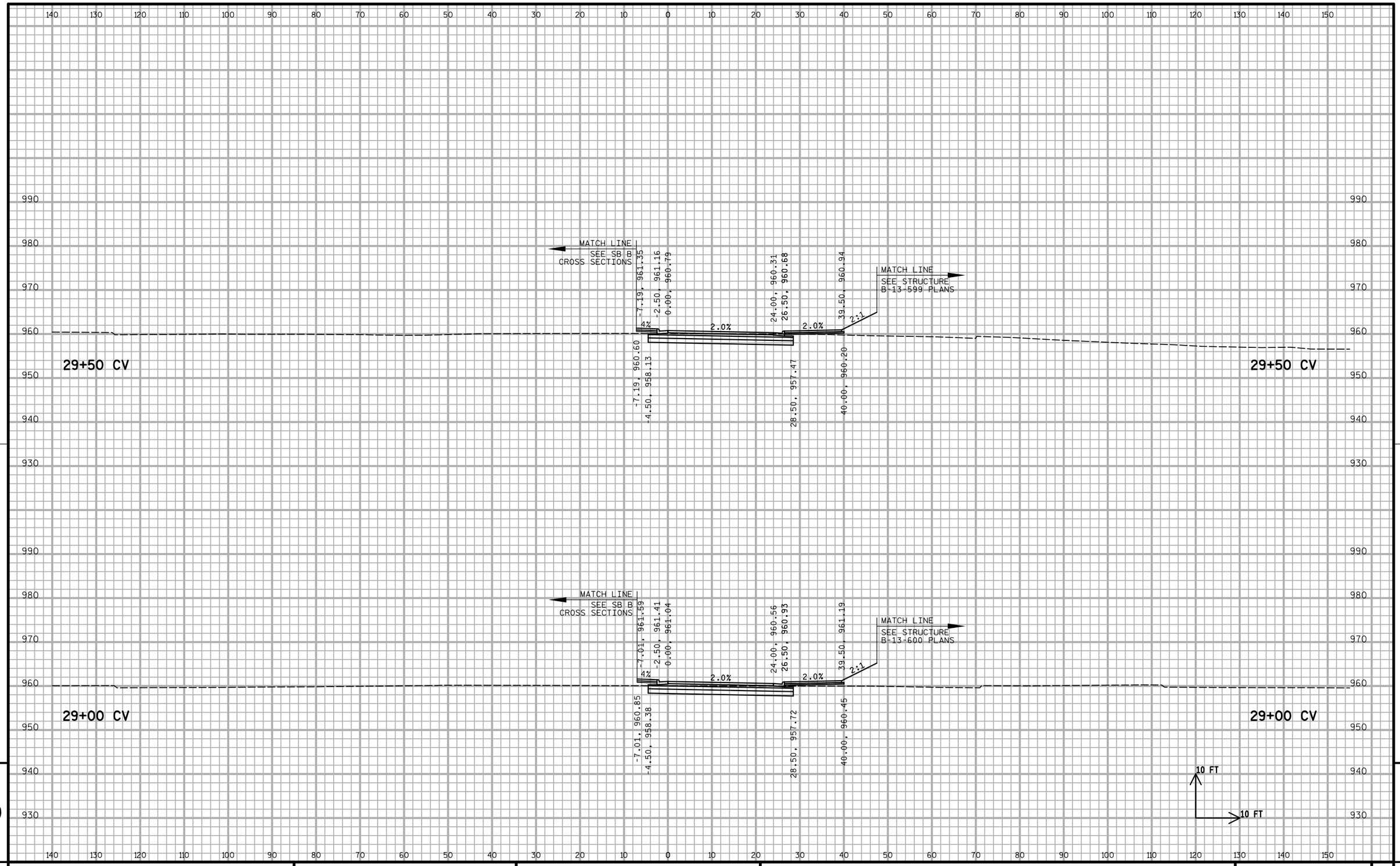
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PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS - CV	SHEET	E

FILE NAME : S:\MAD\1000--1099\1089\234\Micros\PLAN\0272\xs_v_b.DGN PLOT DATE : 4/11/2013 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21



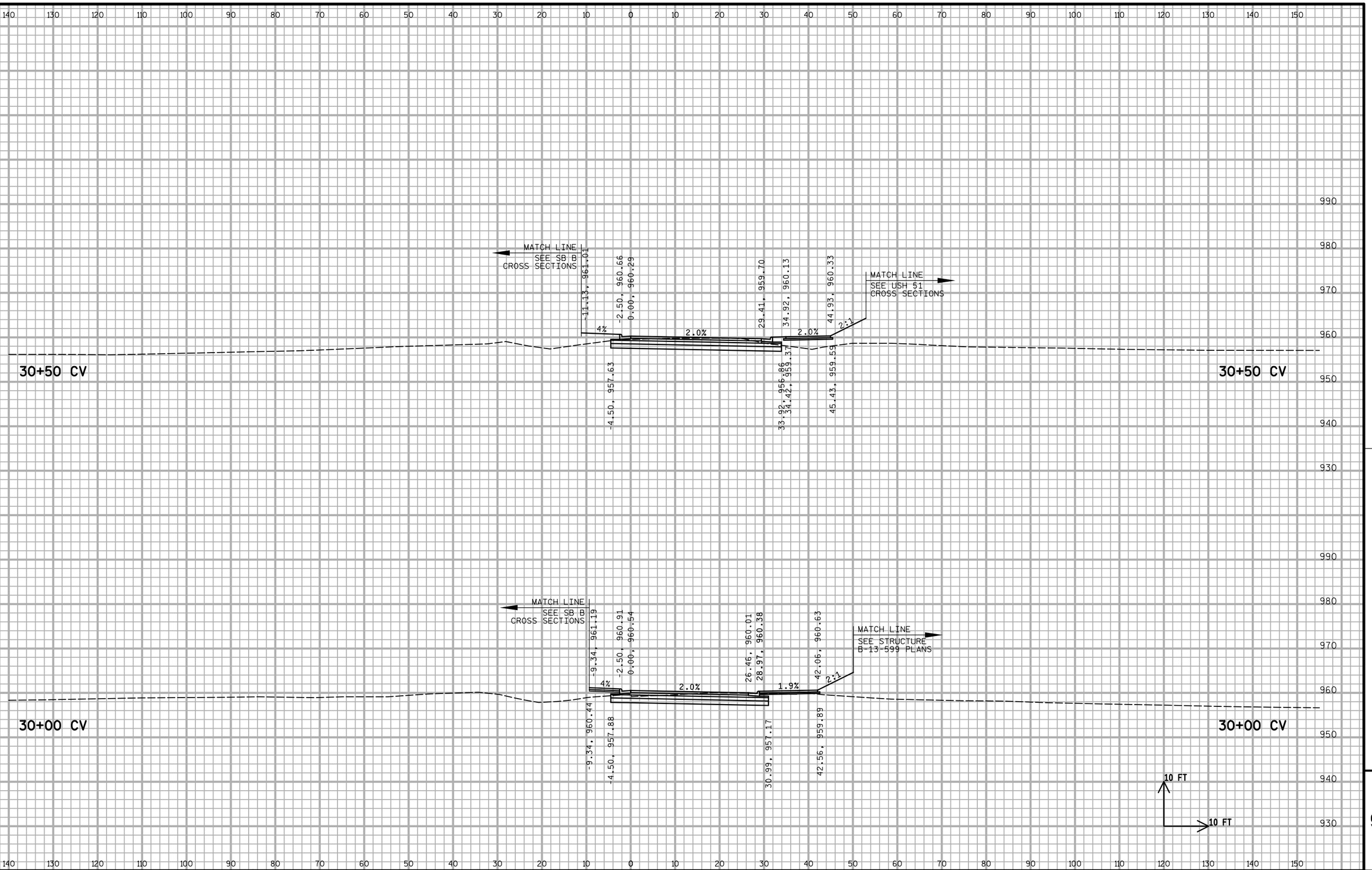
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PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS - CV	SHEET	E

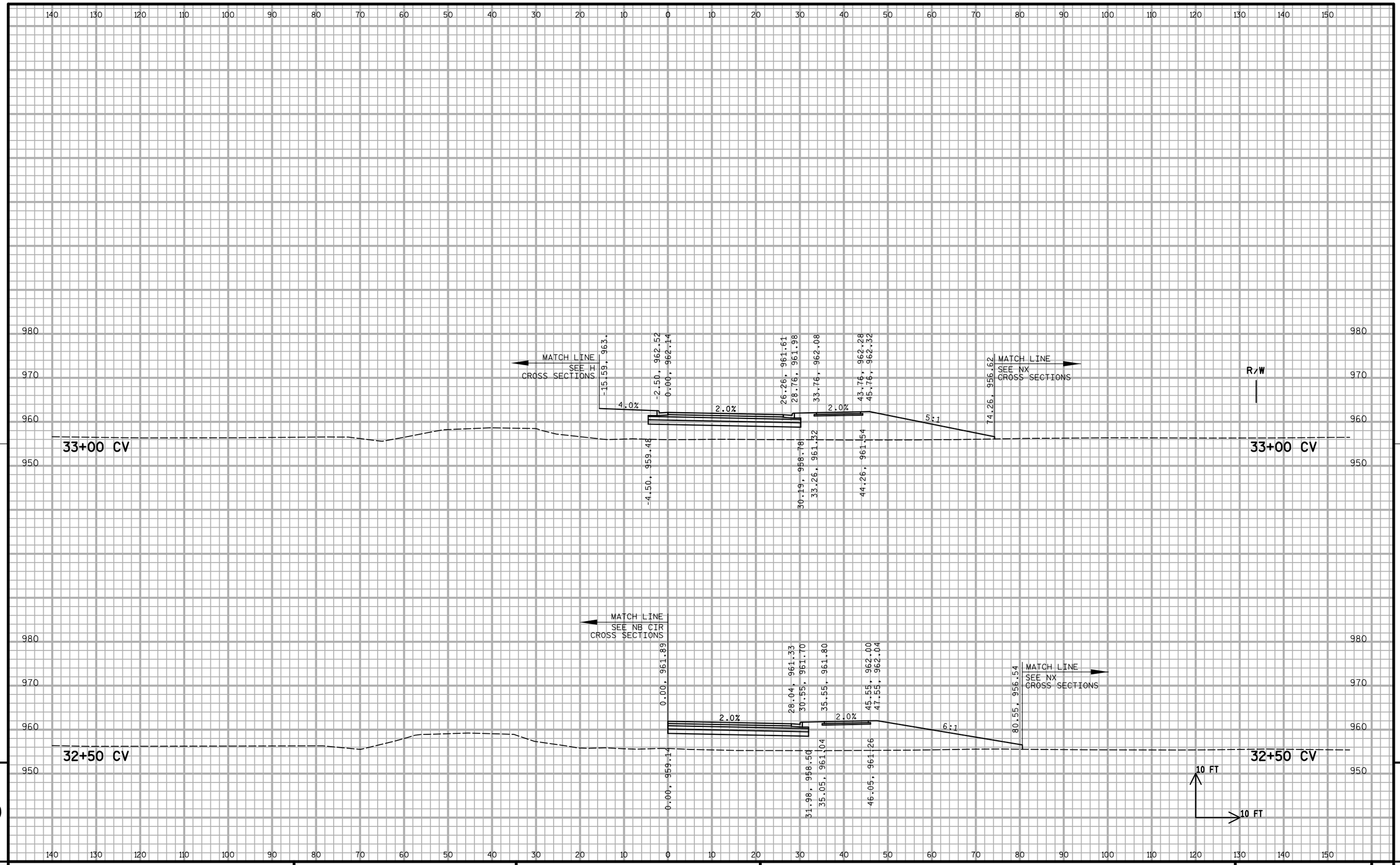
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WISDOT/CADDS SHEET 21



PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS - CV	SHEET	E

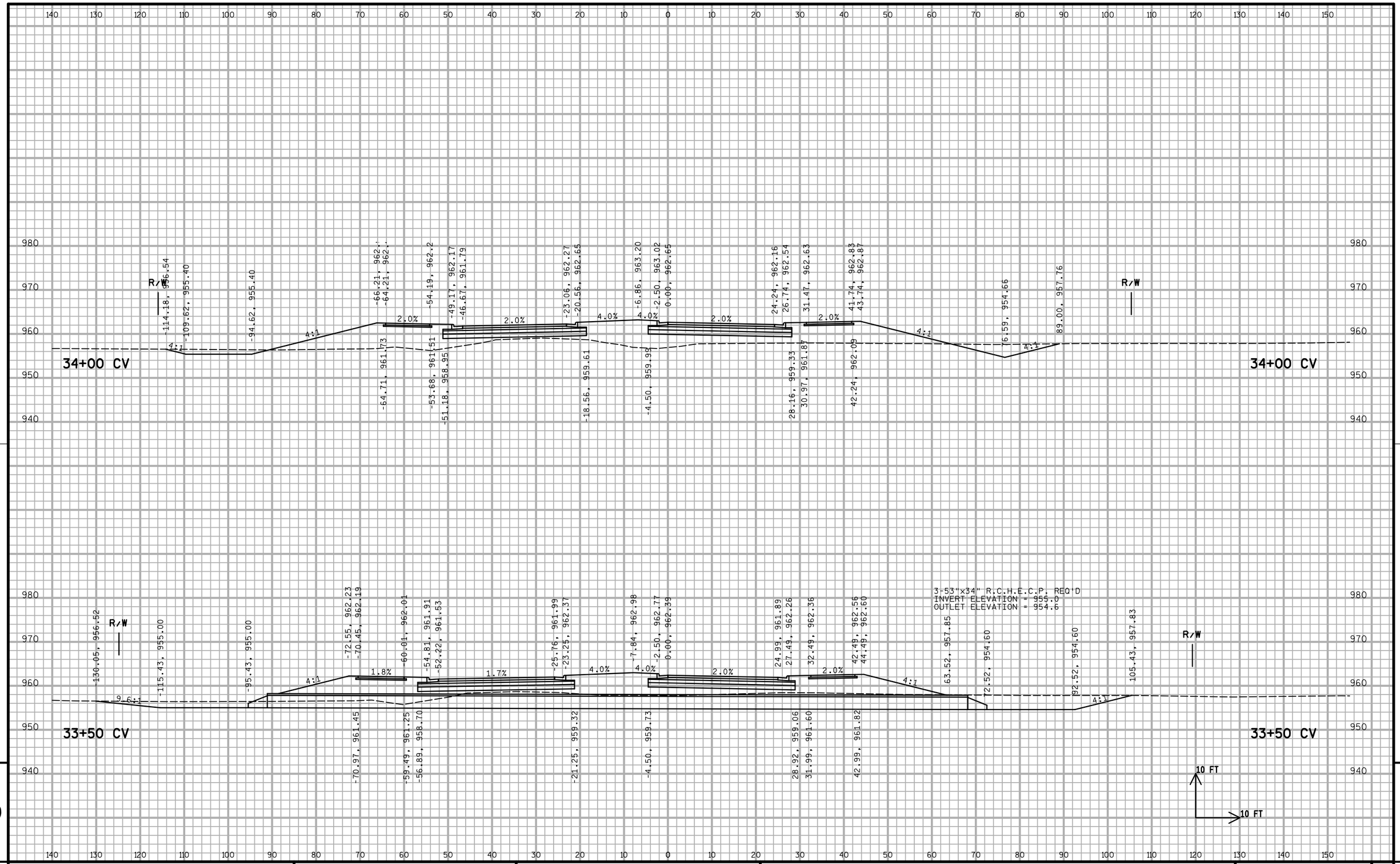
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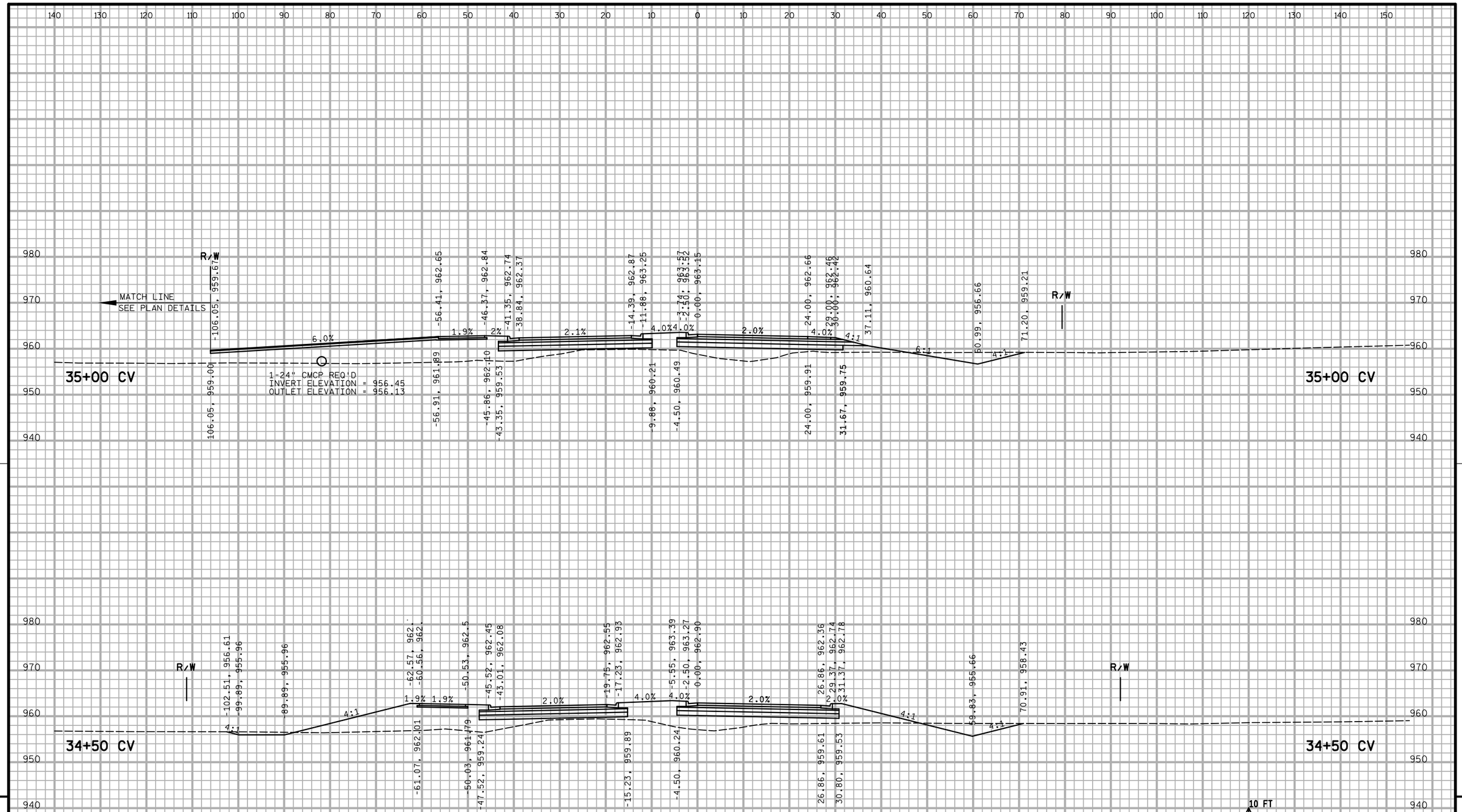
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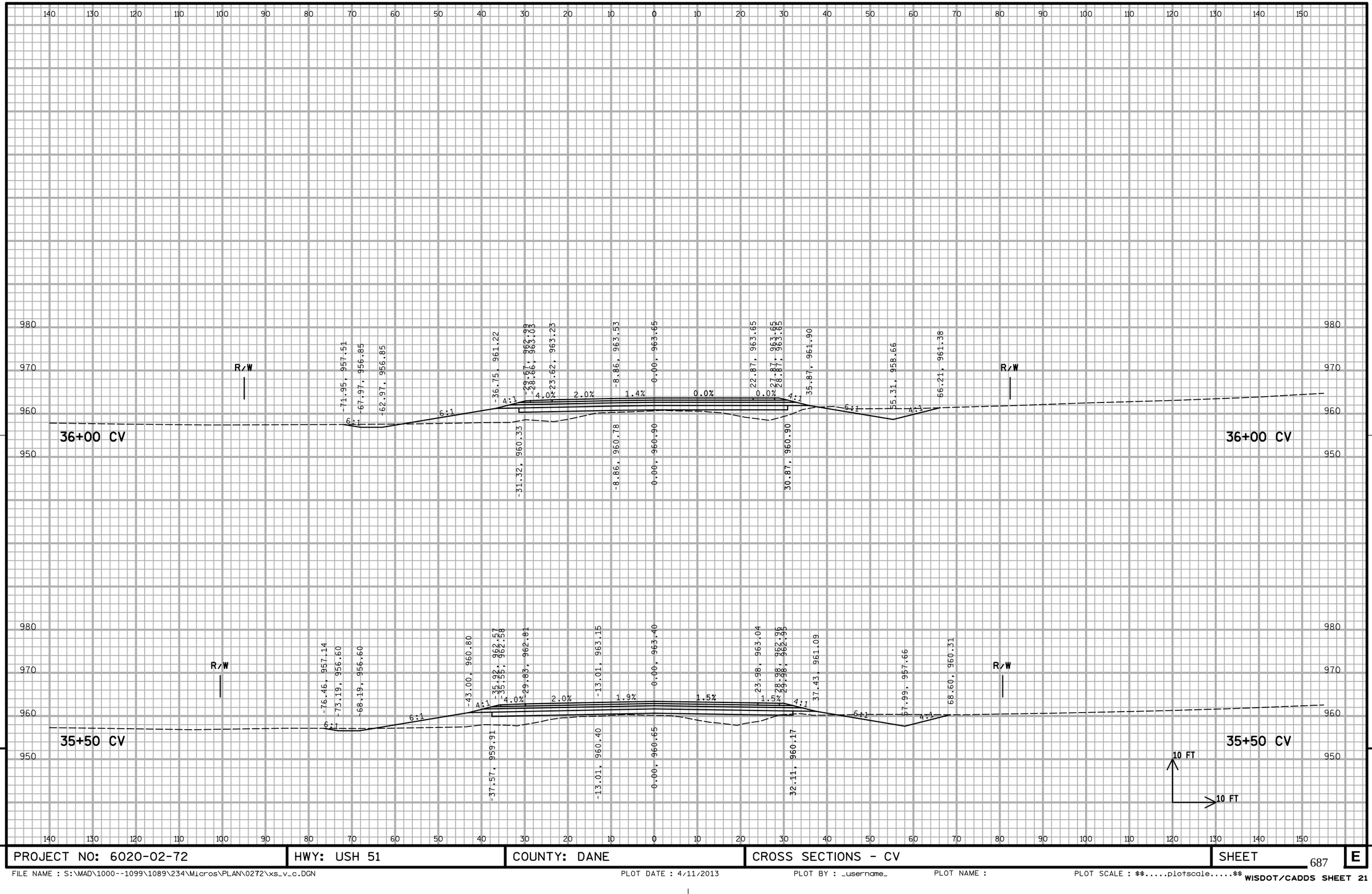


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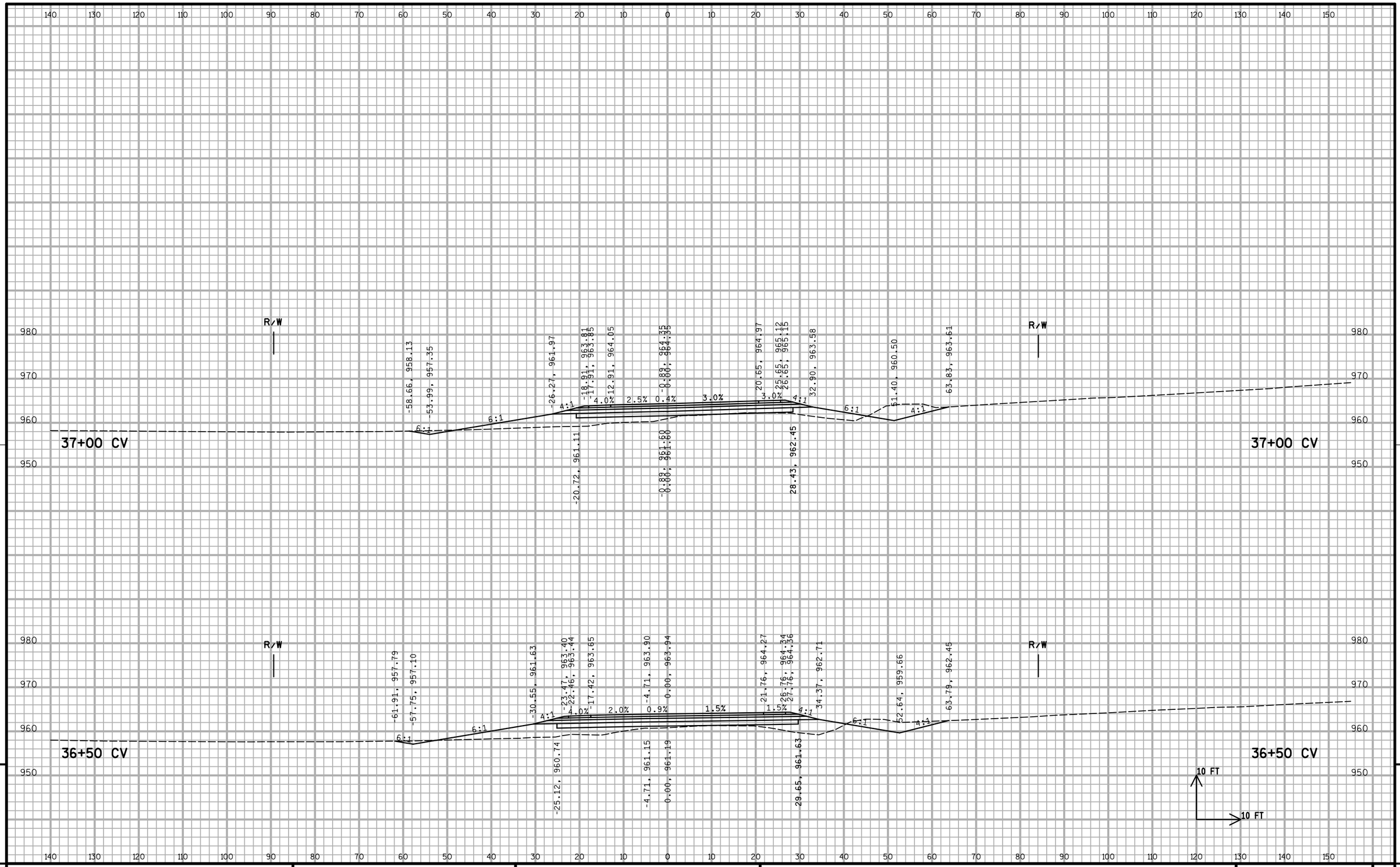
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PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS - CV	SHEET 686	E

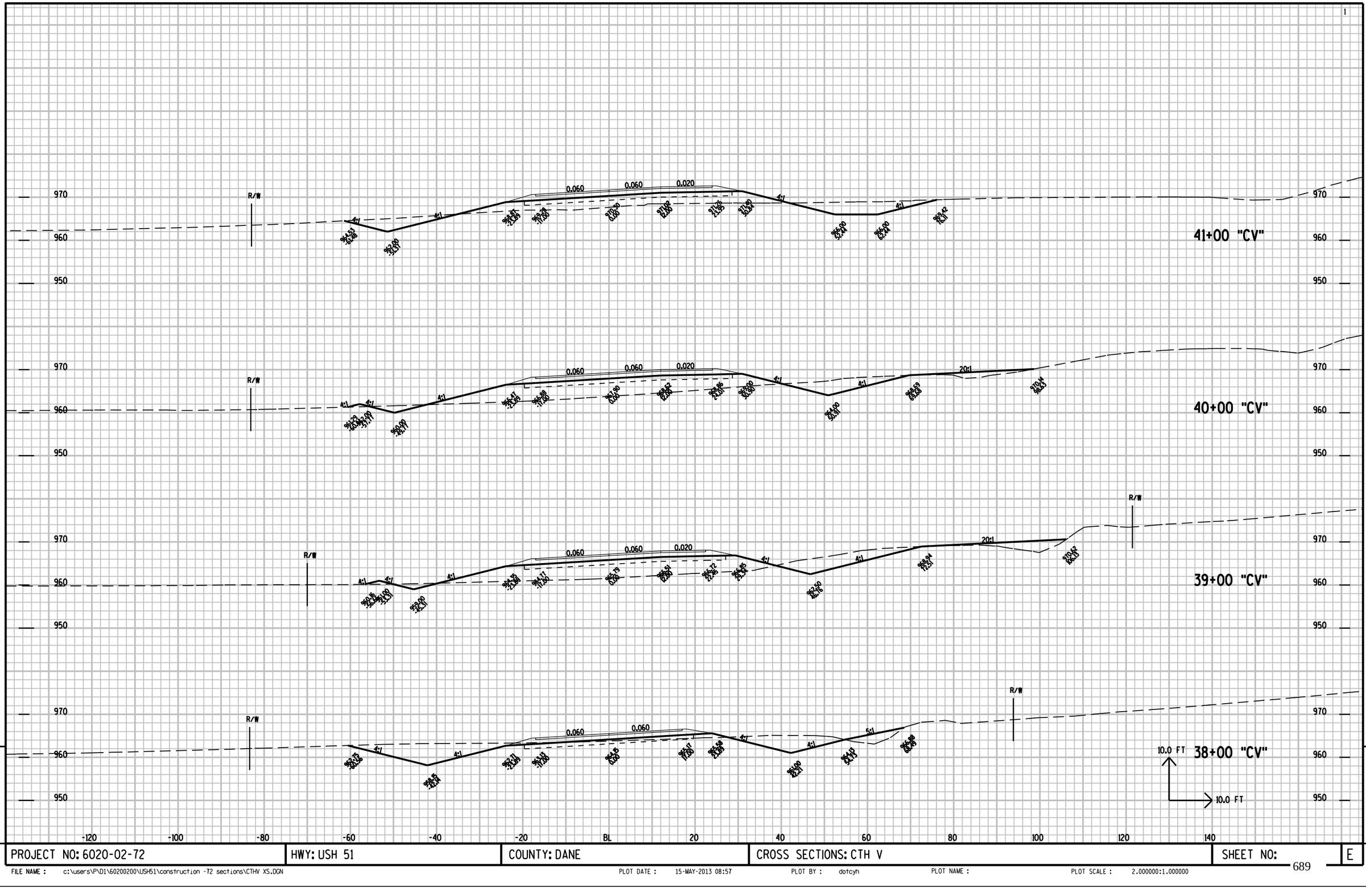


PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS - CV	SHEET 687	E



PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS - CV	SHEET 688 E

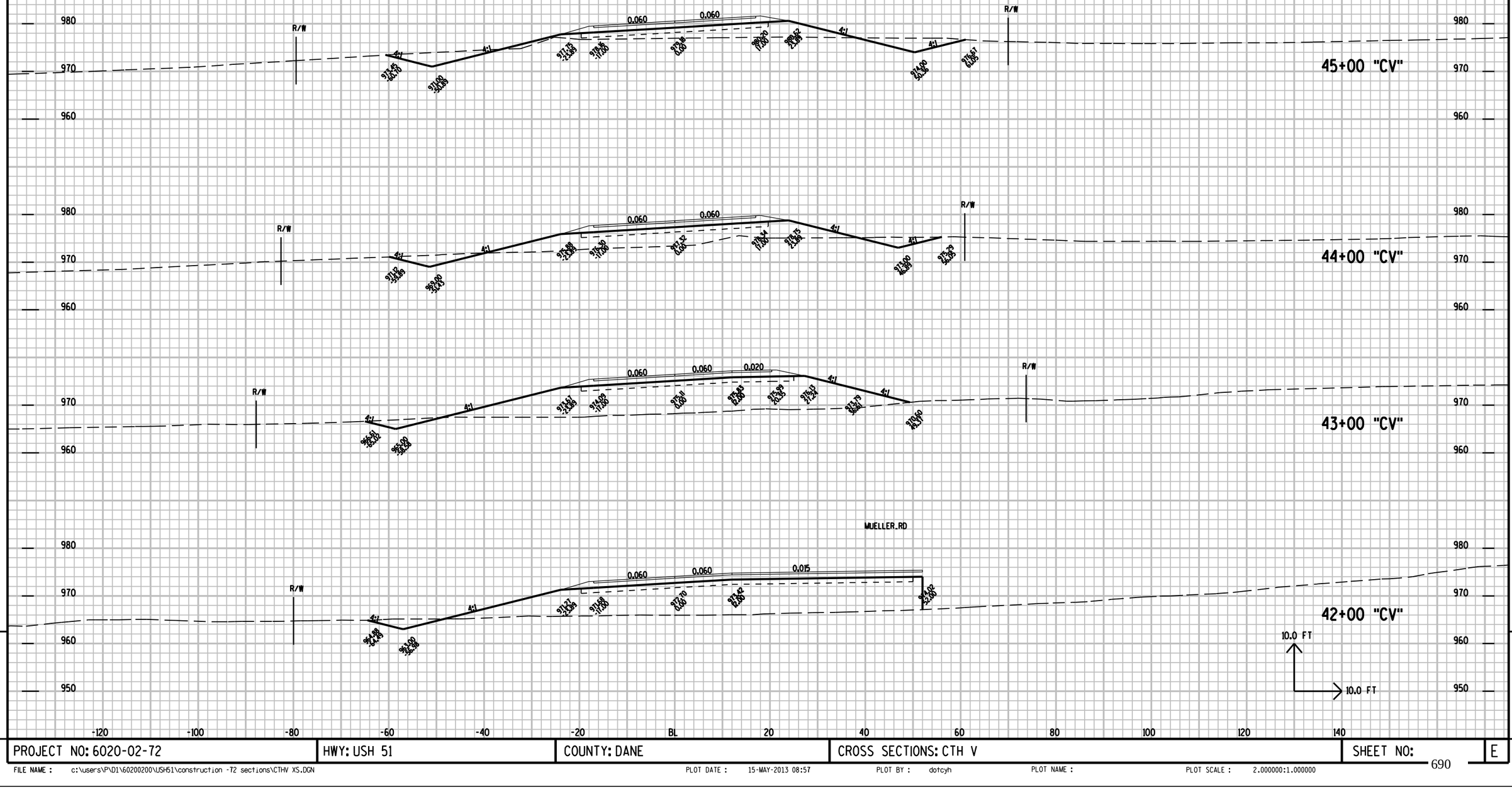
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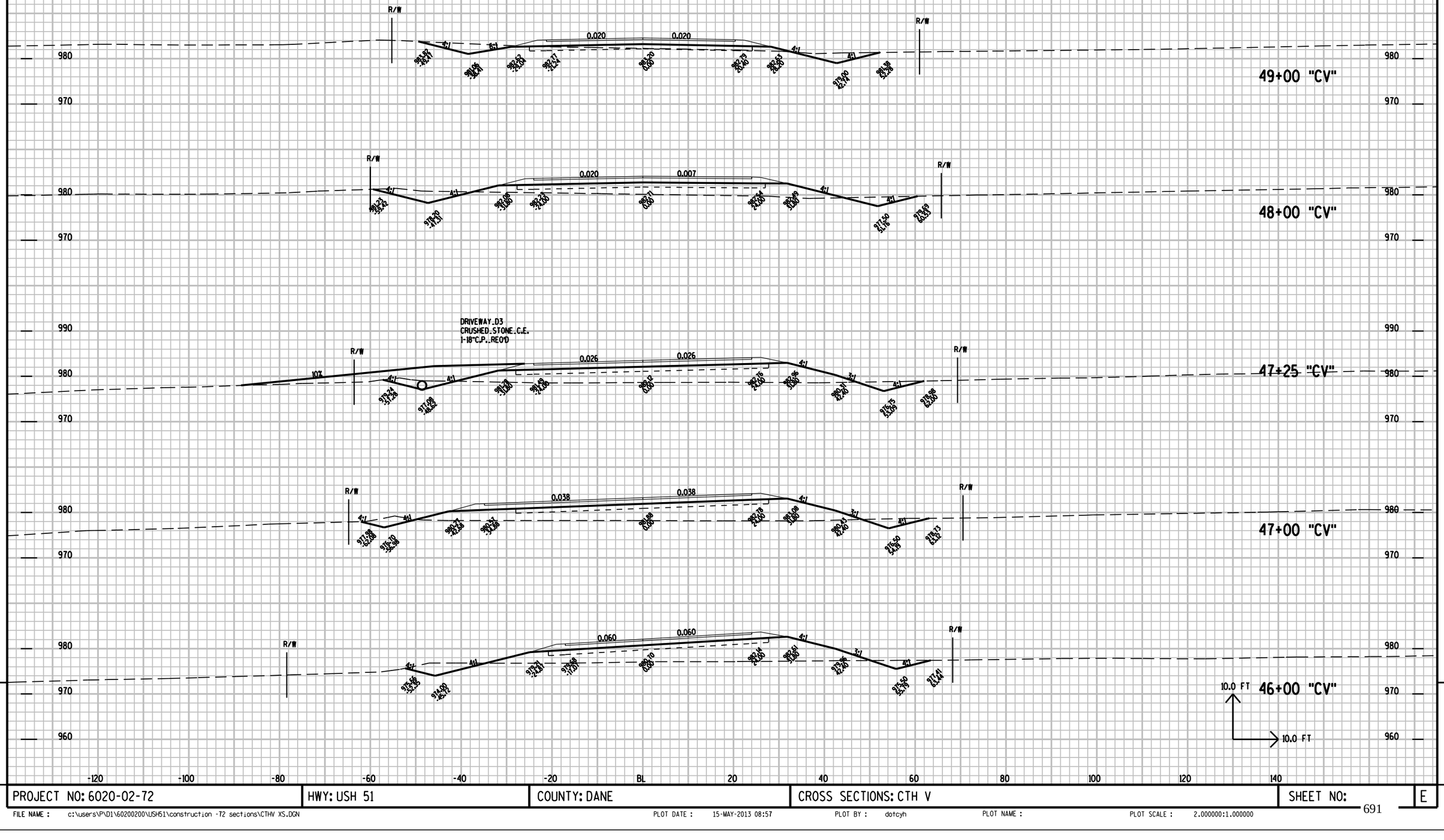
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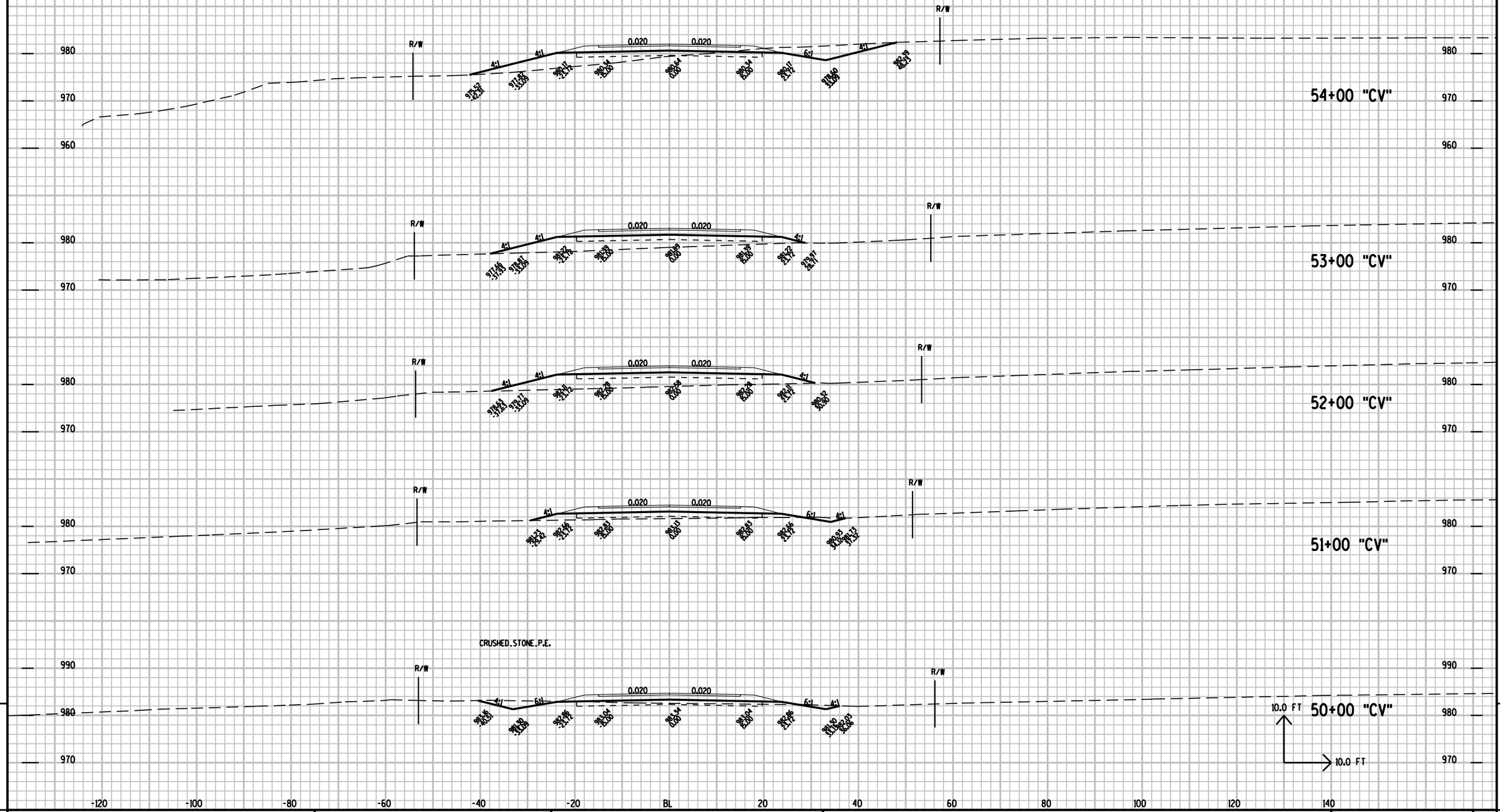
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PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: CTH V	SHEET NO:	E

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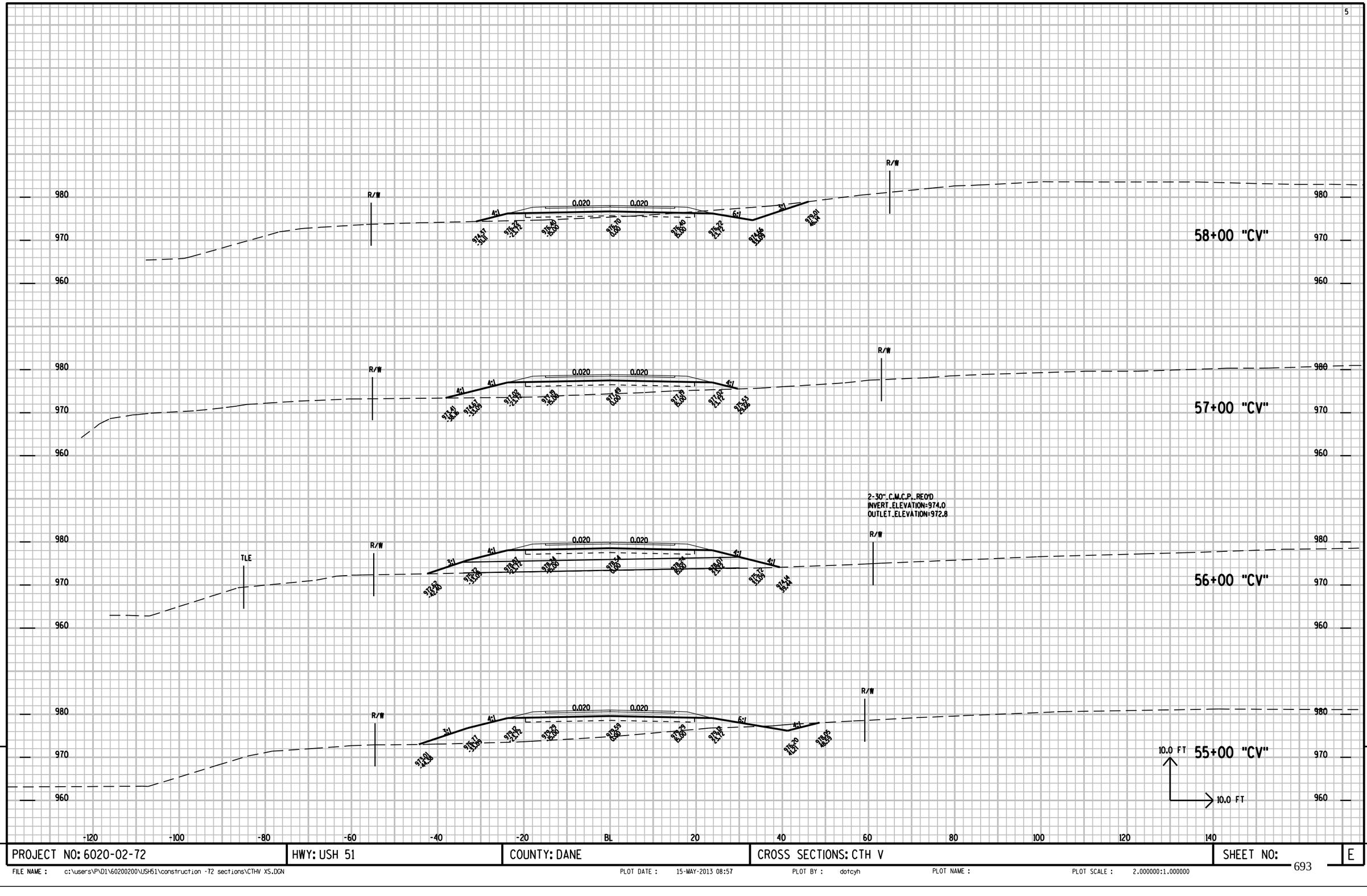


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PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: CTH V	SHEET NO:	E

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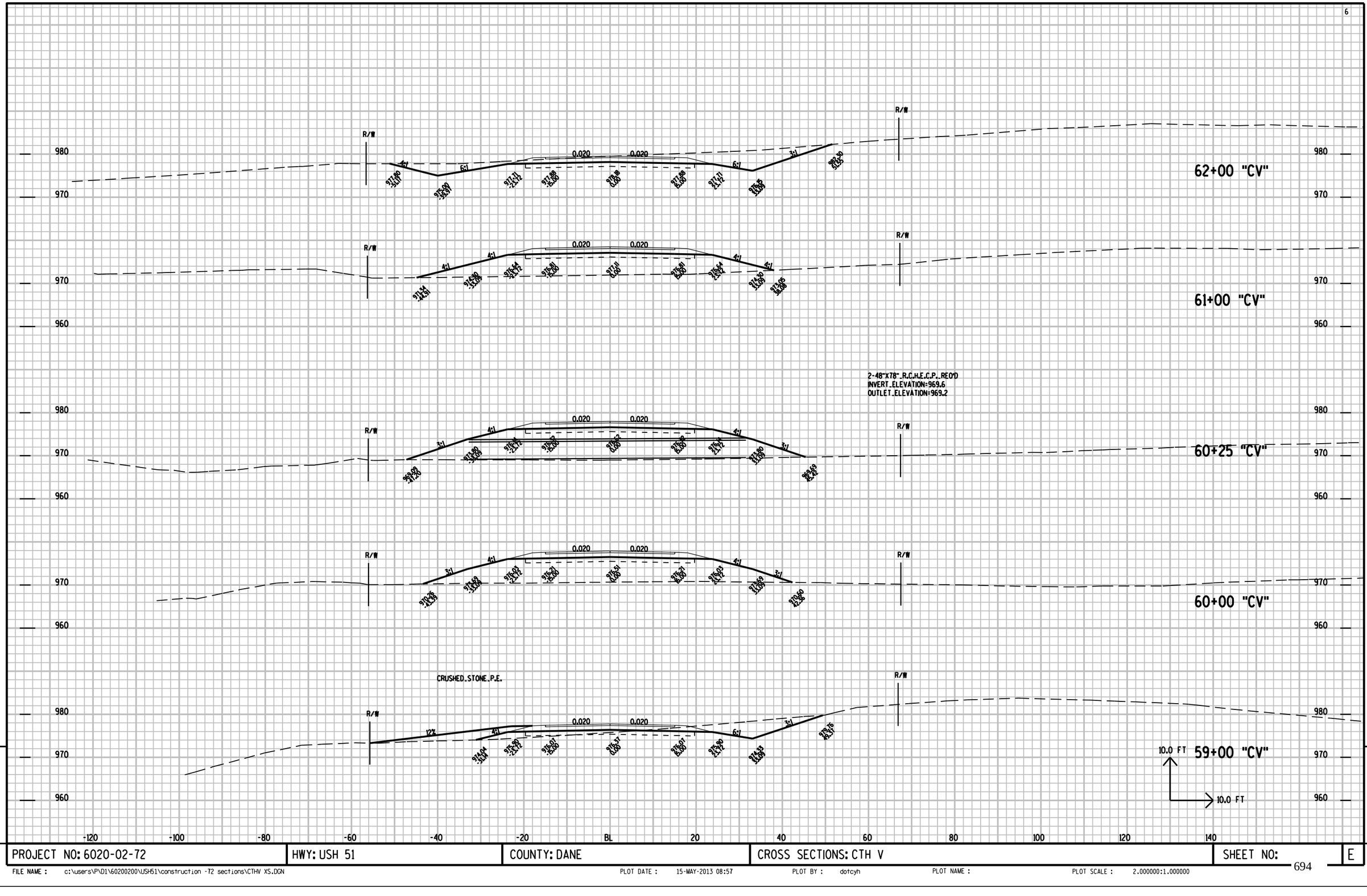


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PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: CTH V	SHEET NO:	E

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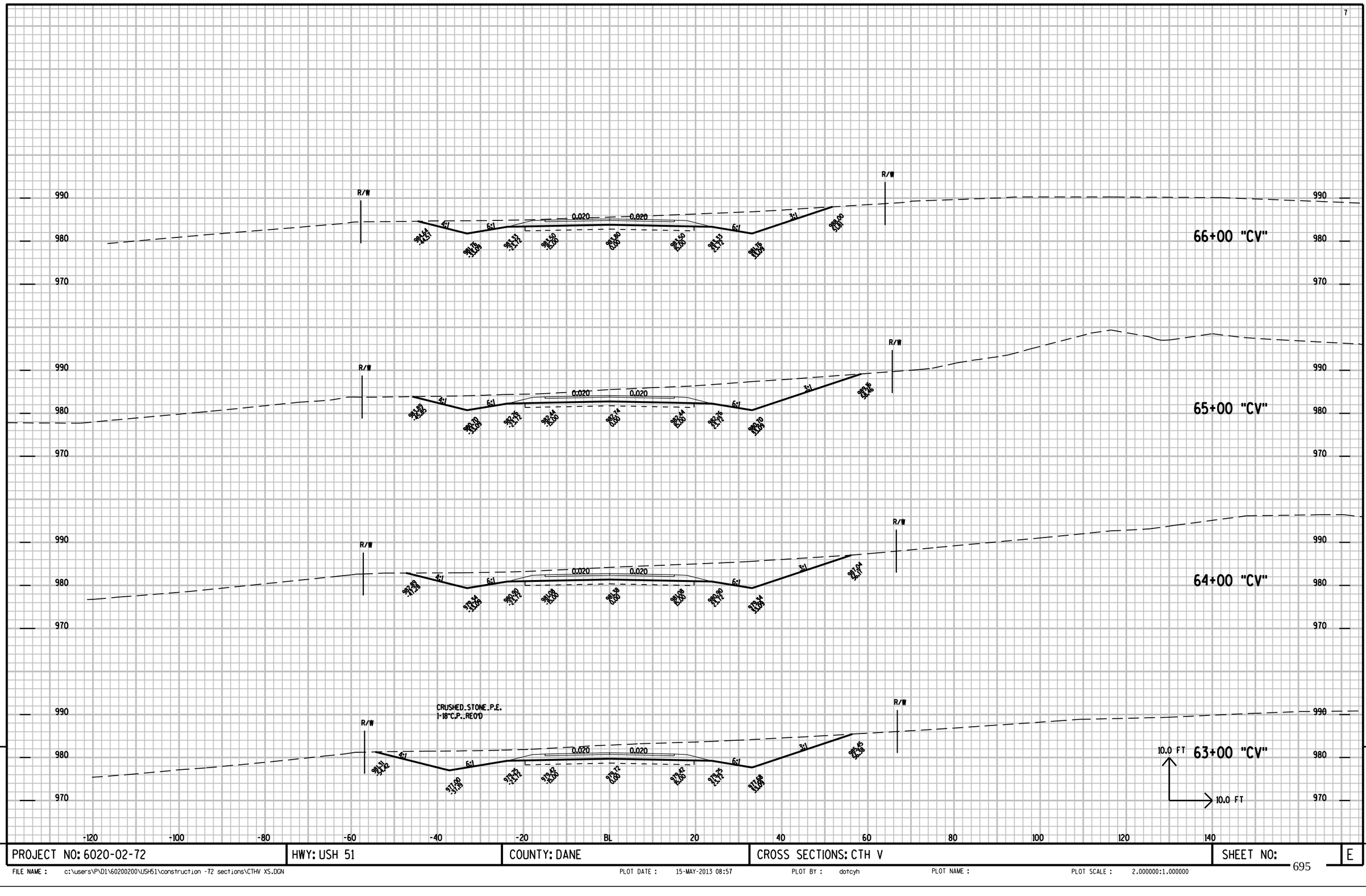


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PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: CTH V	SHEET NO:	E

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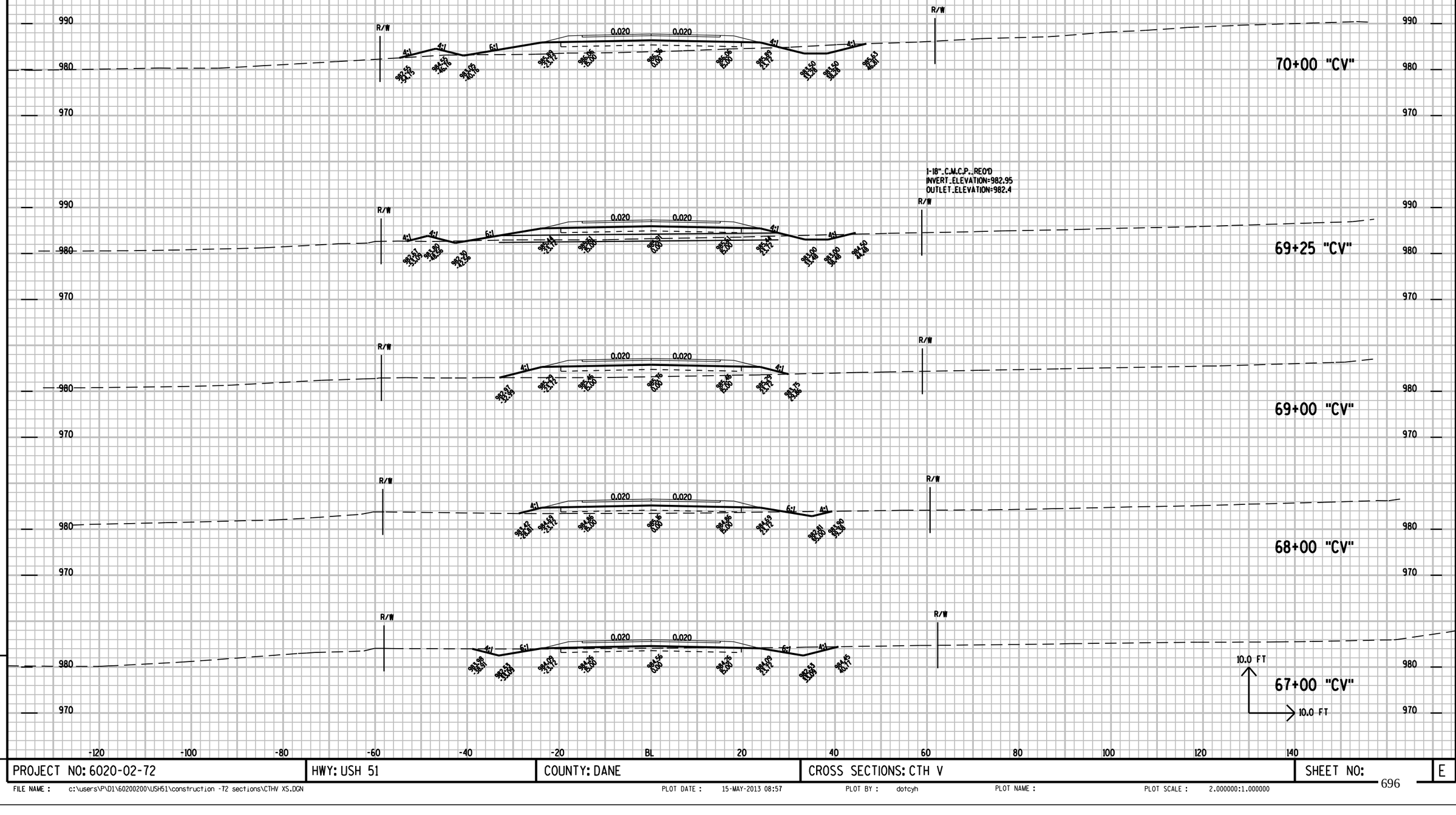


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PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: CTH V	SHEET NO:	E

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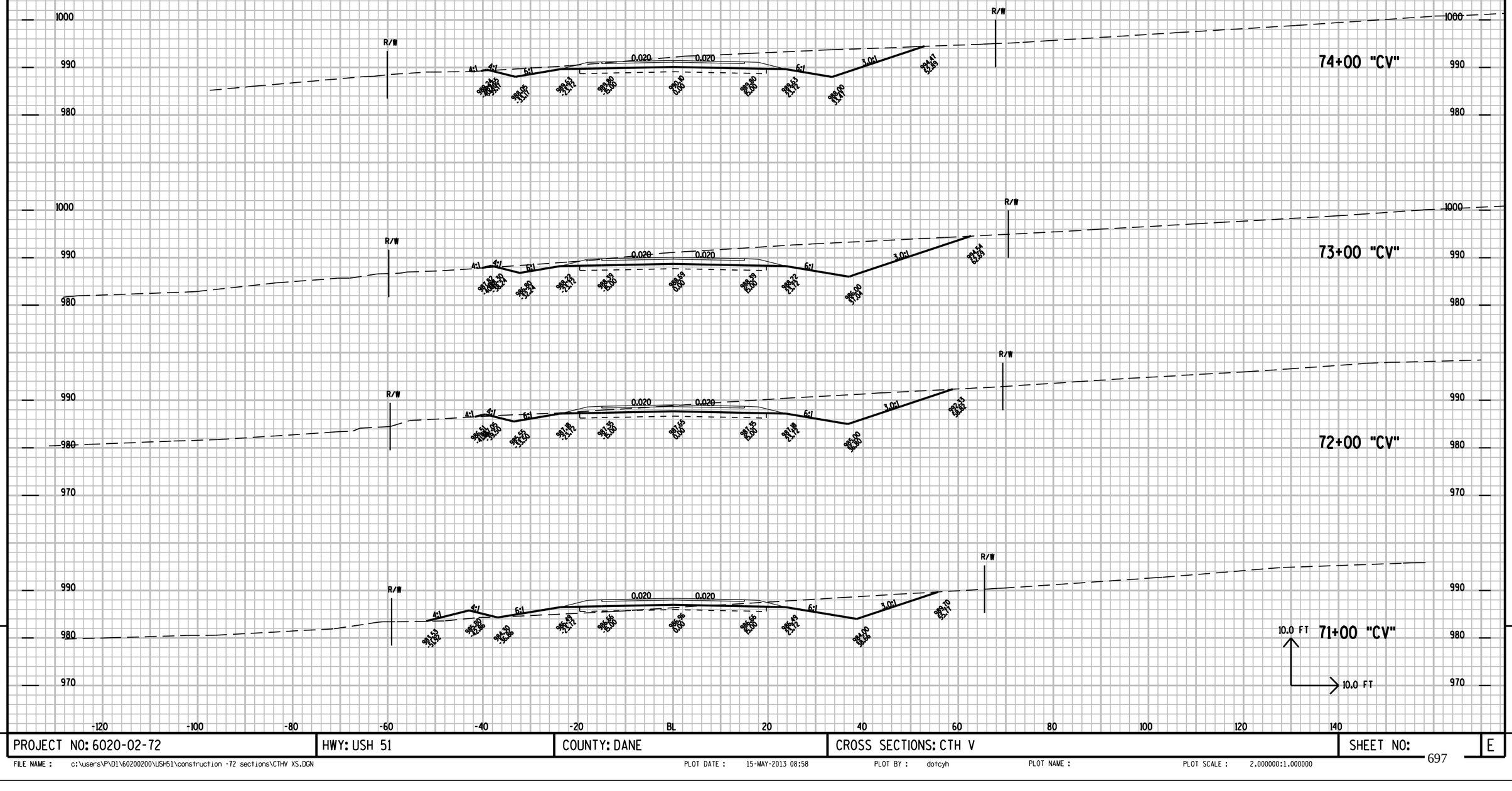


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PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: CTH V	SHEET NO:	E

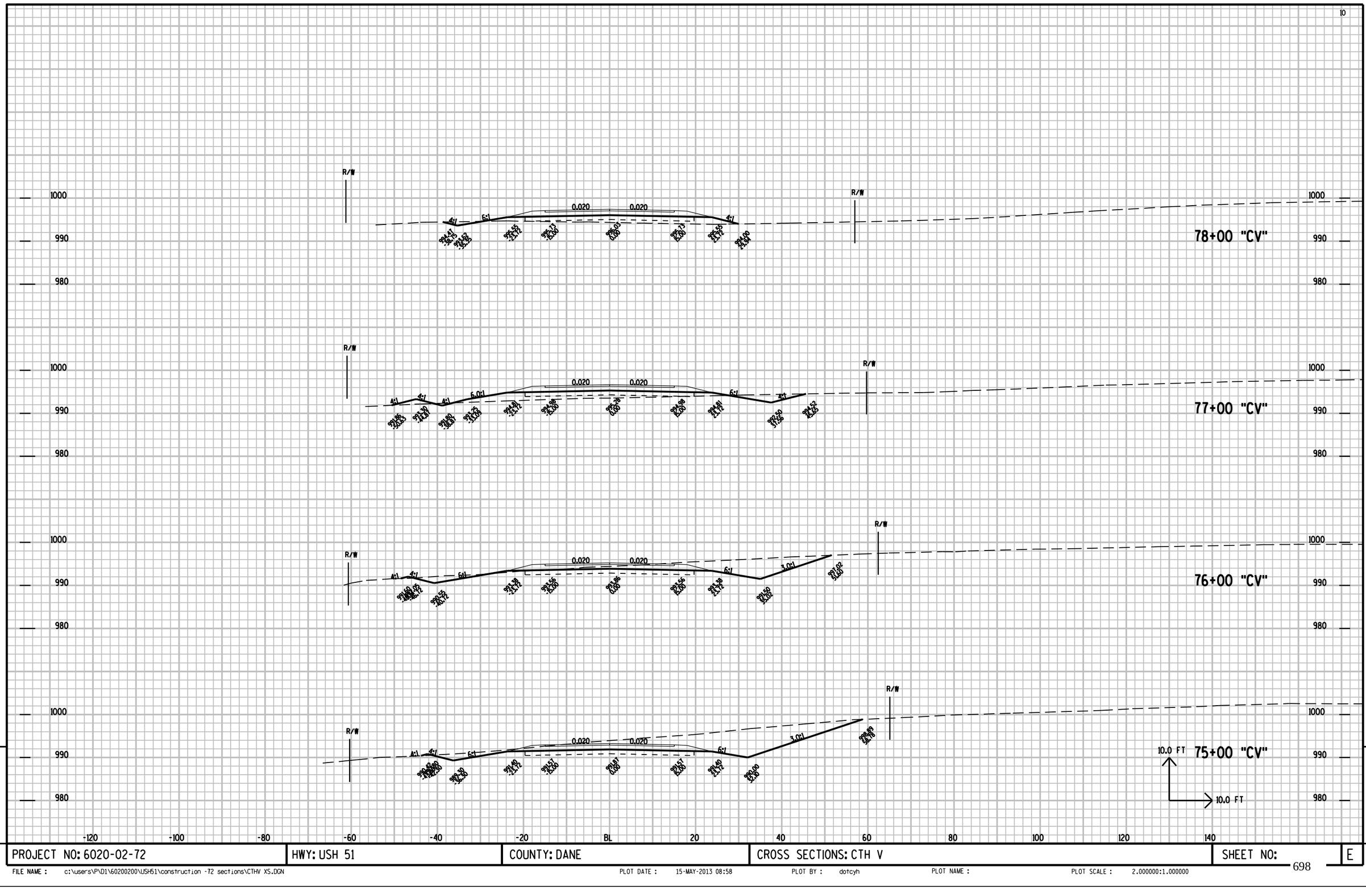
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PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: CTH V	SHEET NO:	E

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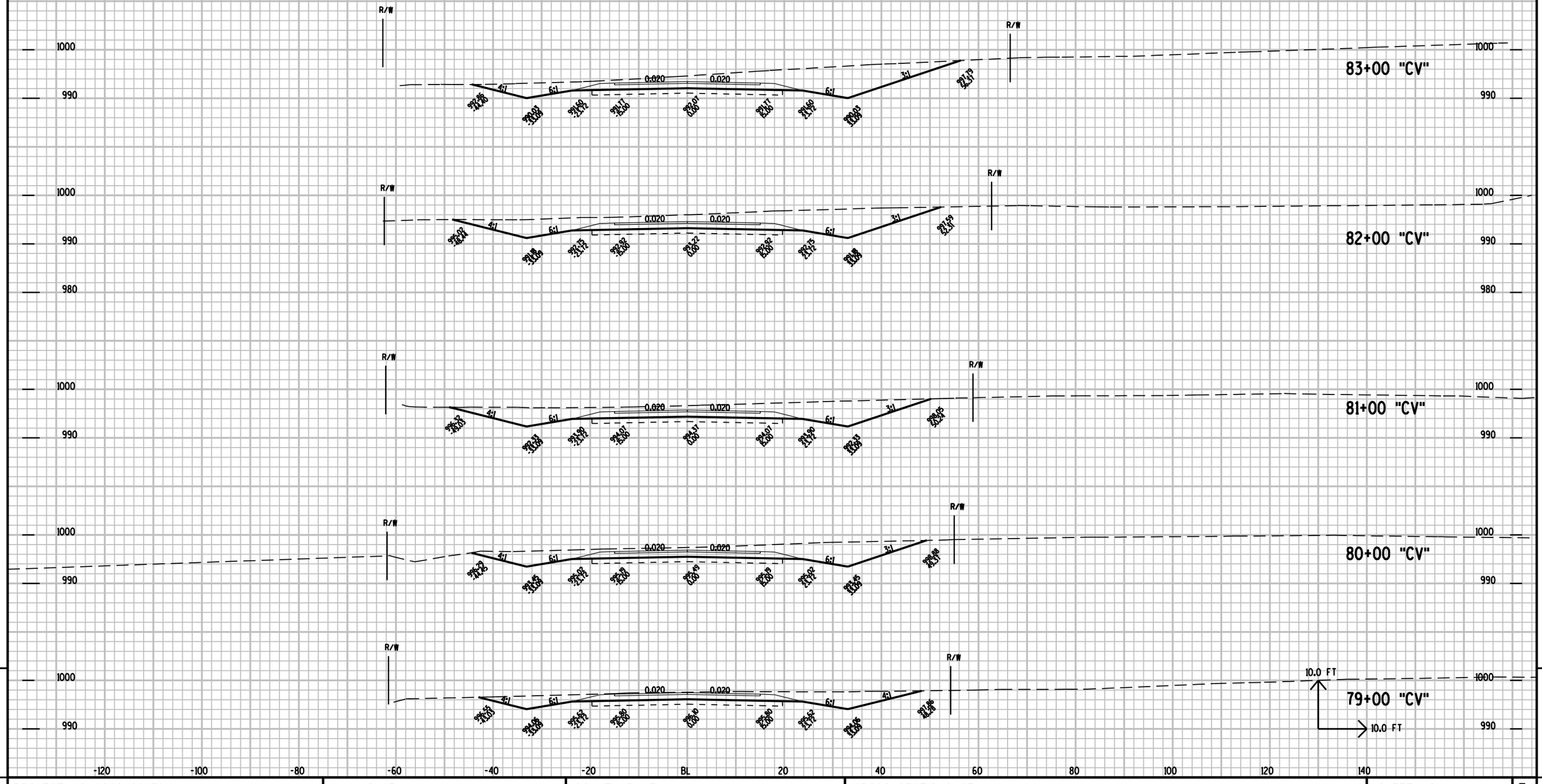


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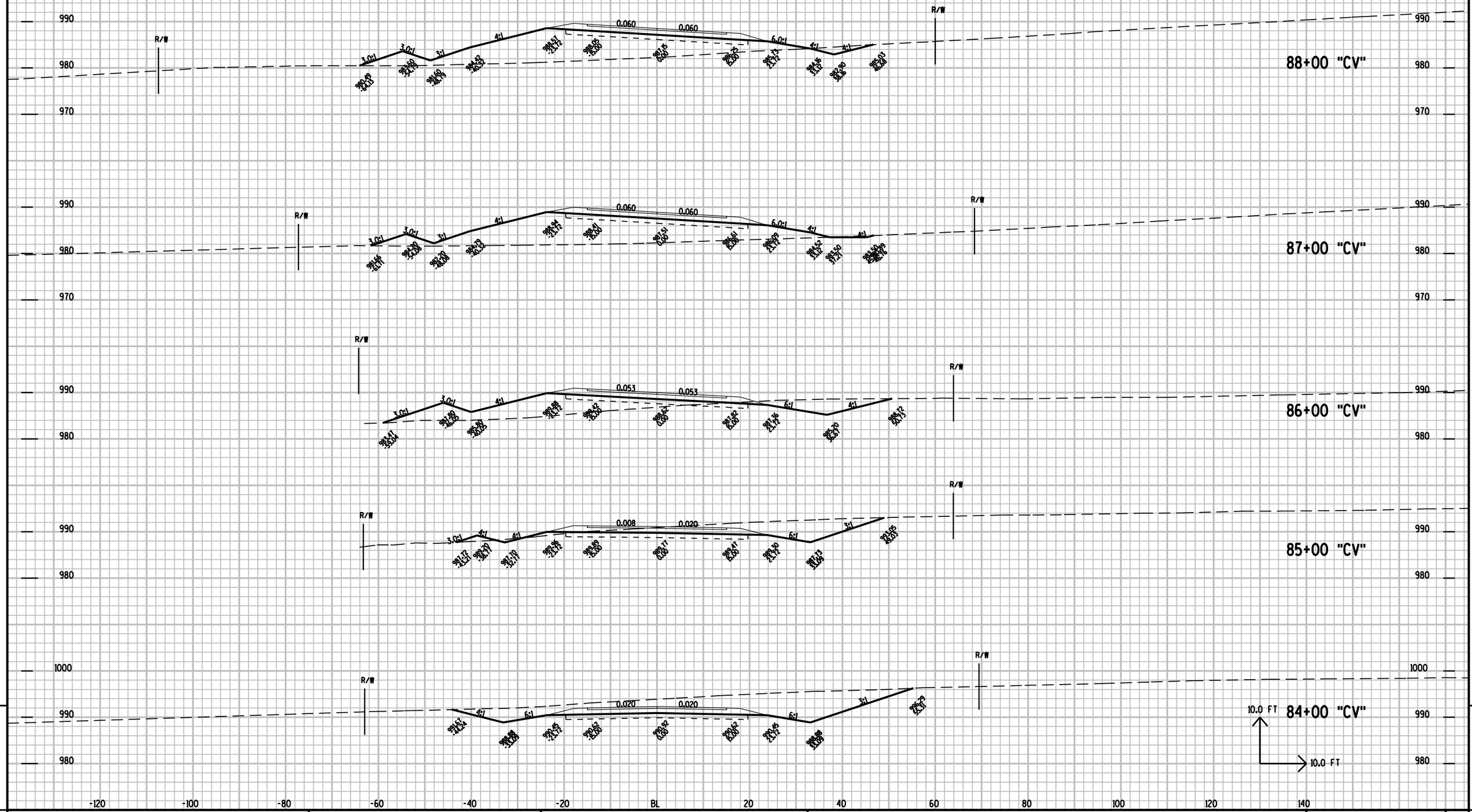


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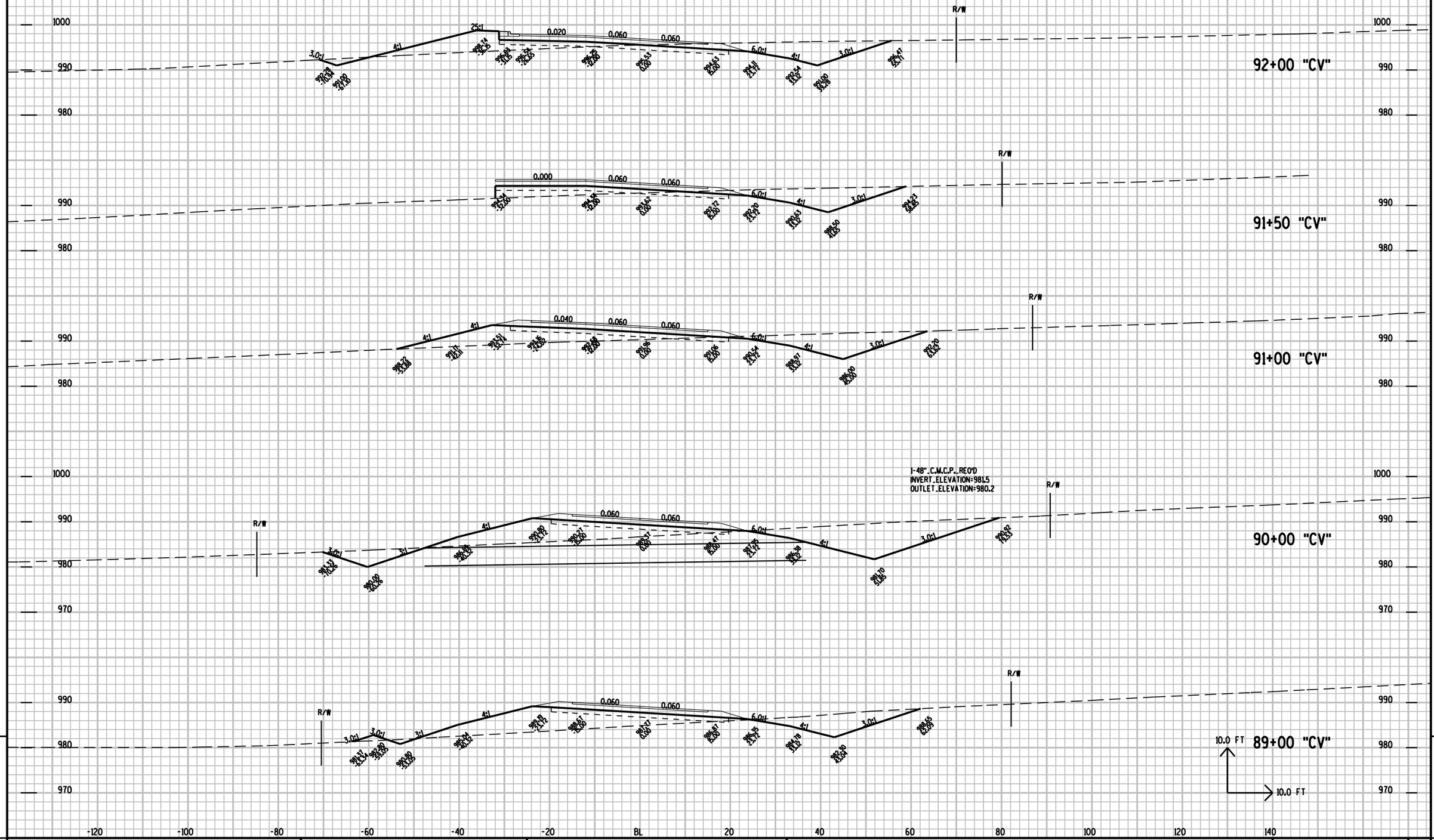
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PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: CTH V	SHEET NO:	E

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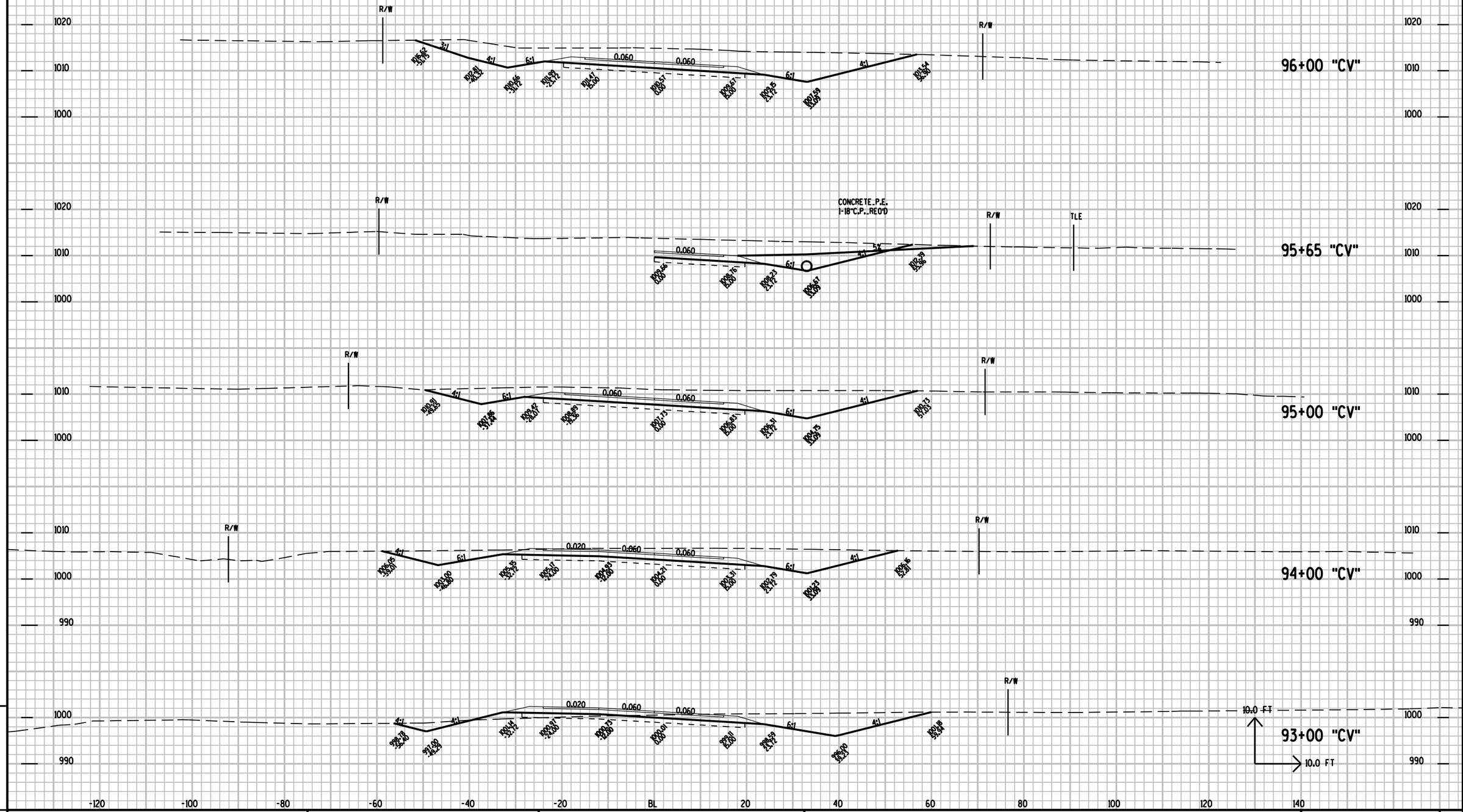


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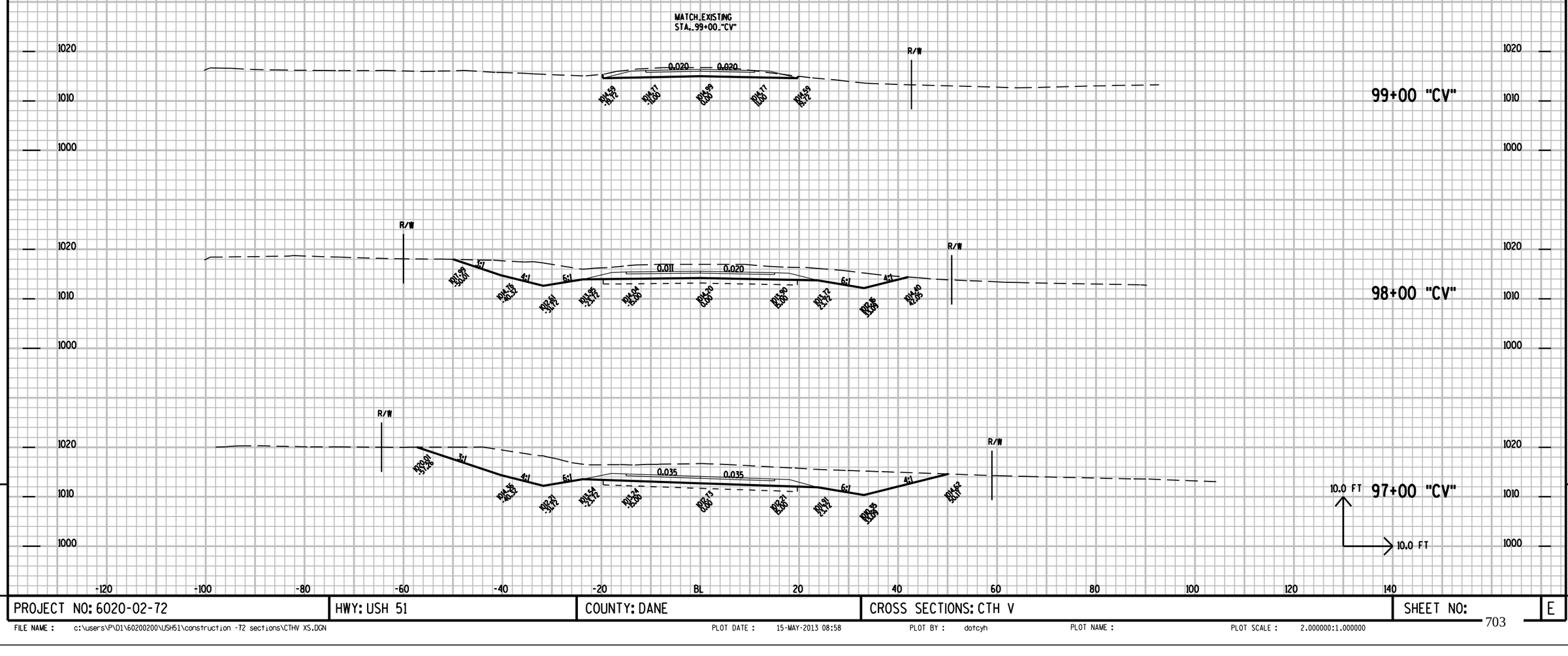
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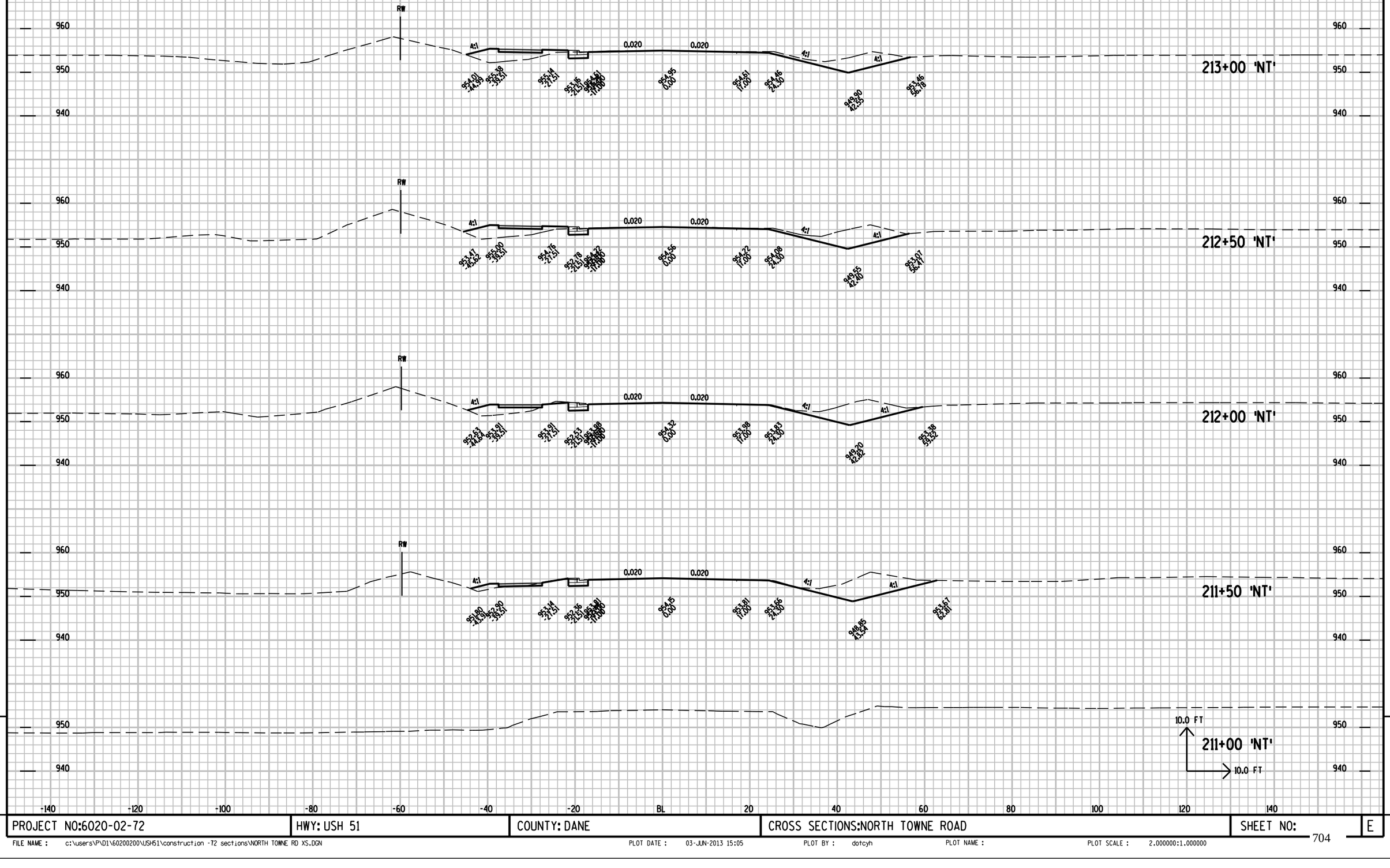
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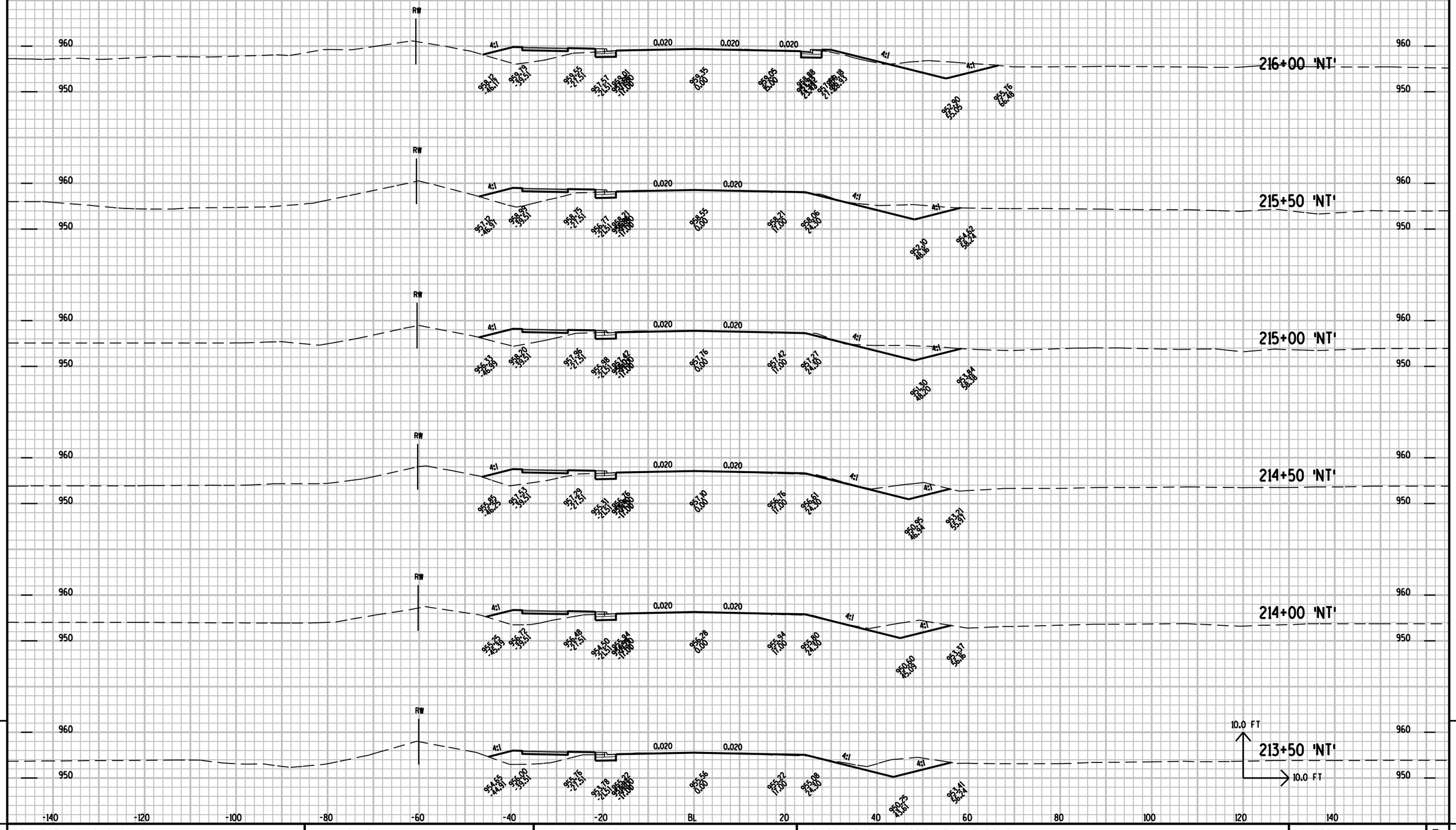


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PROJECT NO:6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS:NORTH TOWNE ROAD	SHEET NO:	E

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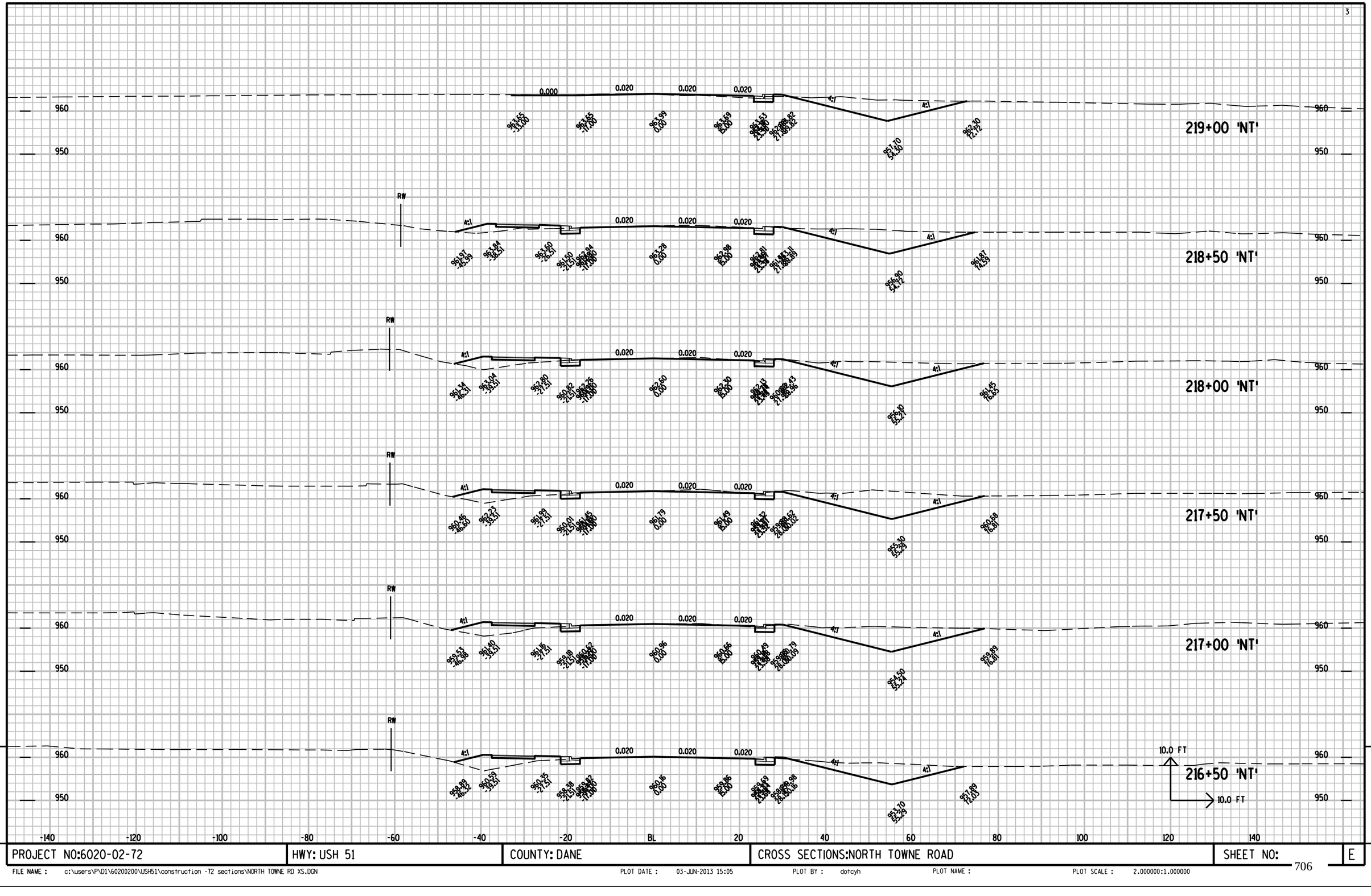


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PROJECT NO:6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS:NORTH TOWNE ROAD	SHEET NO:	E

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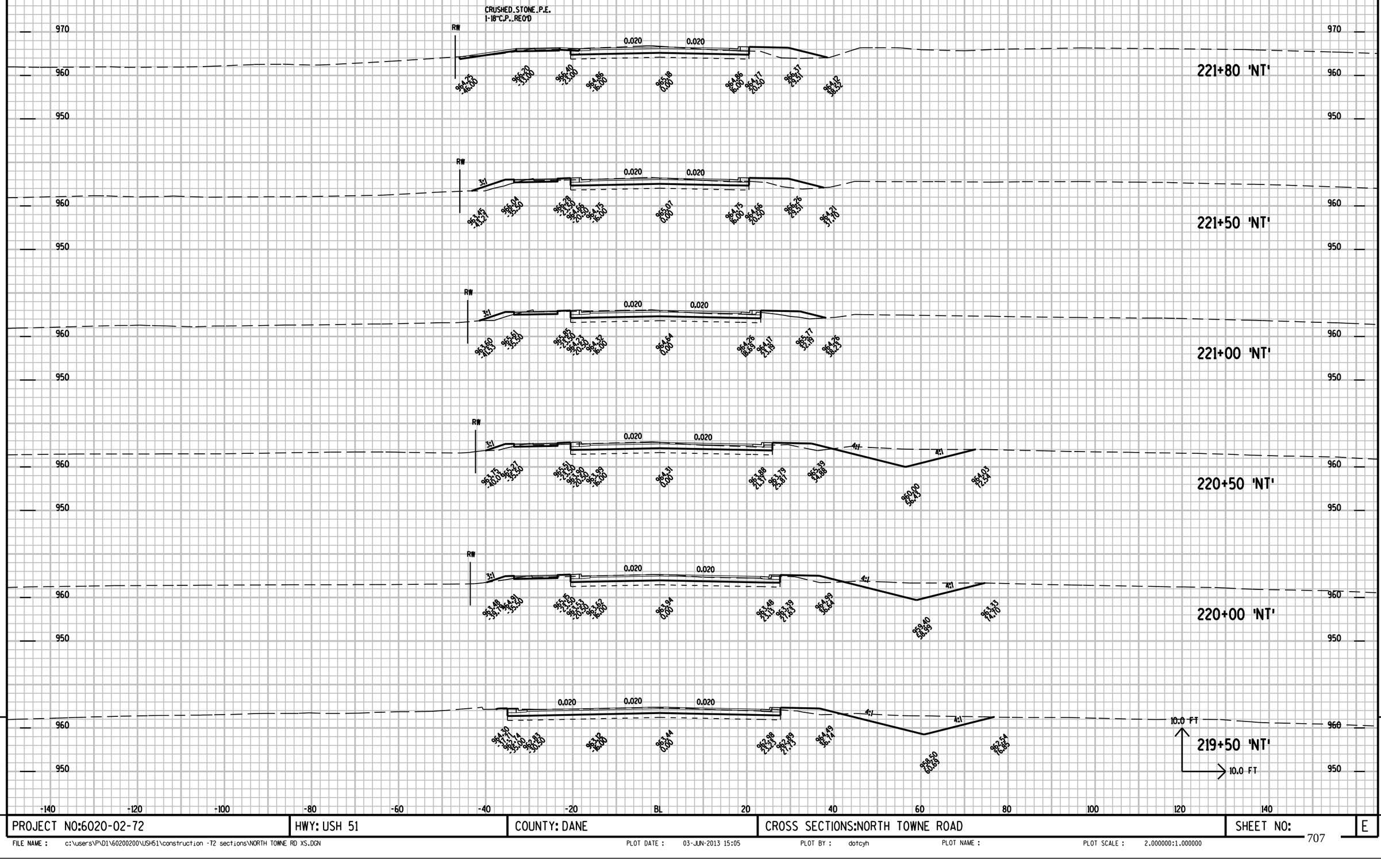


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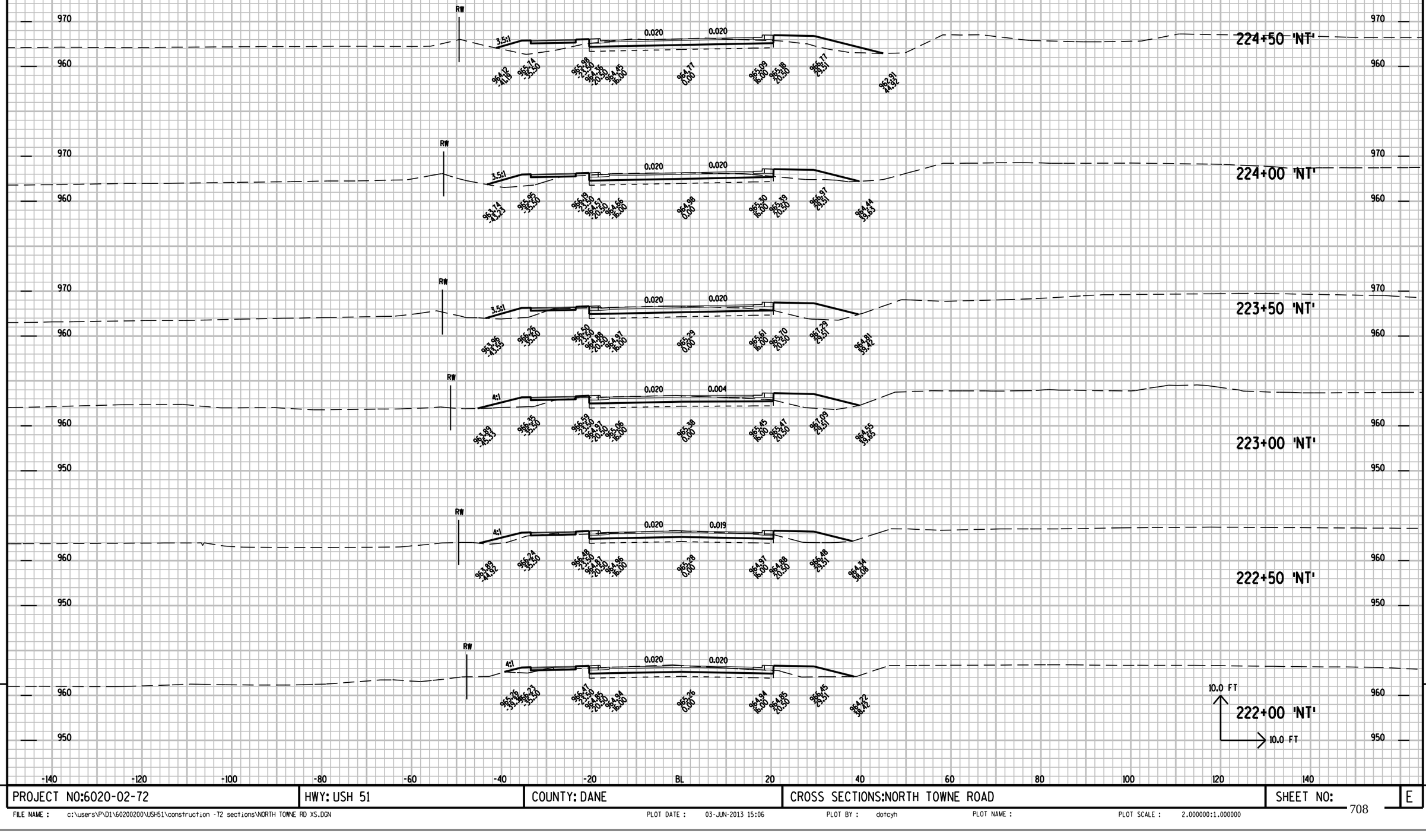
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PROJECT NO:6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS:NORTH TOWNE ROAD	SHEET NO:	E

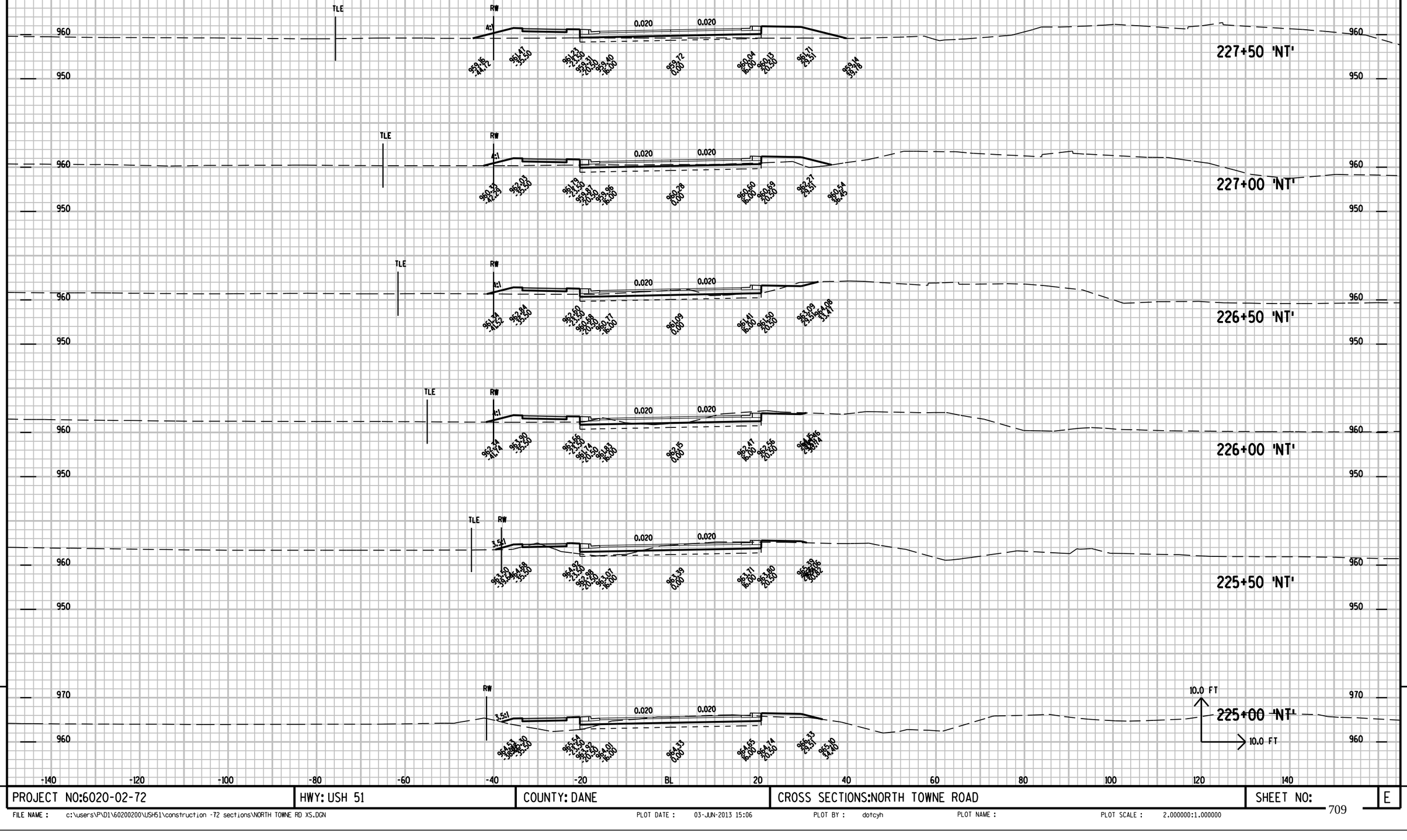
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PROJECT NO:6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS:NORTH TOWNE ROAD	SHEET NO:	E

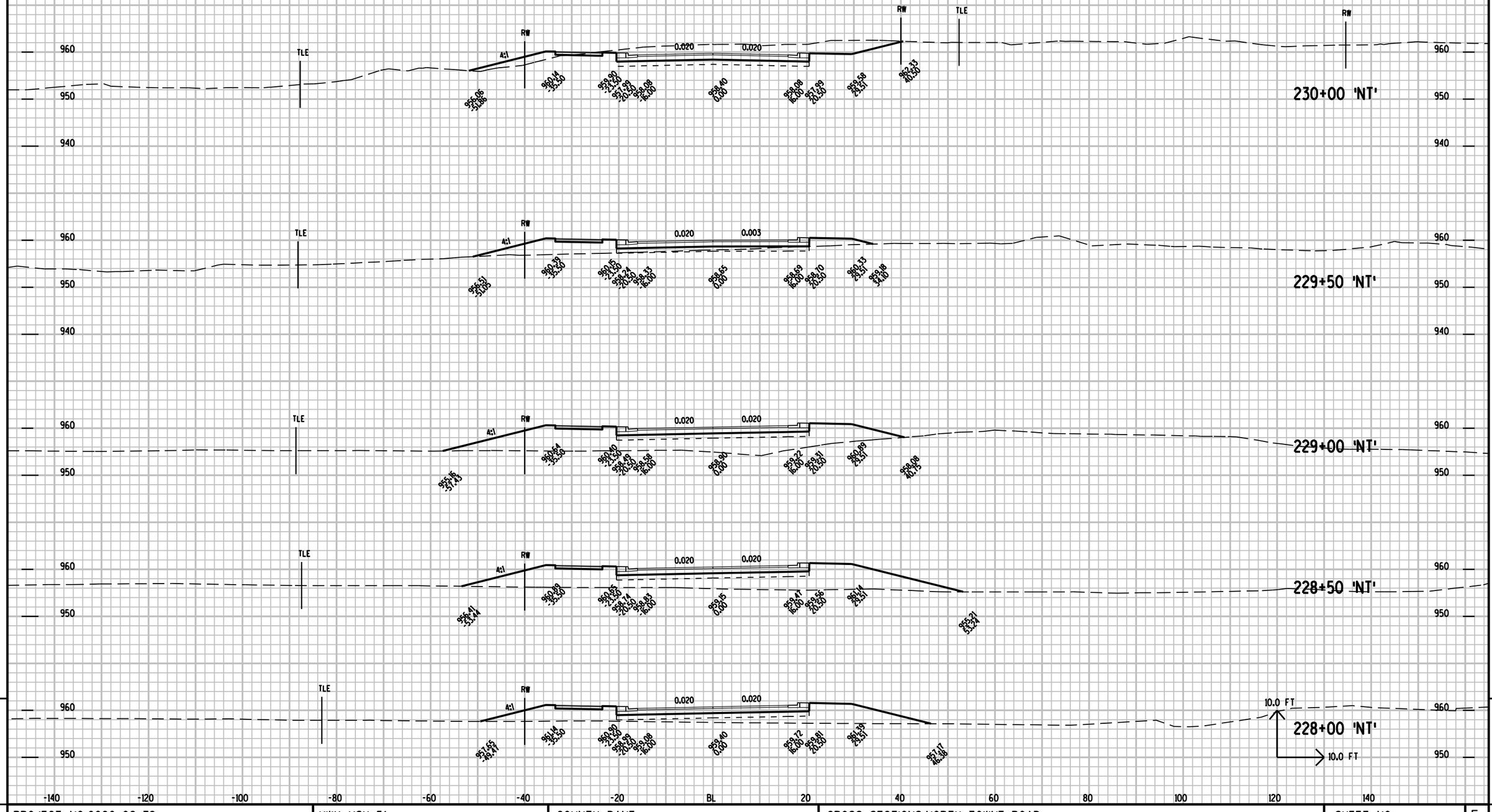


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PROJECT NO:6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS:NORTH TOWNE ROAD	SHEET NO:	E

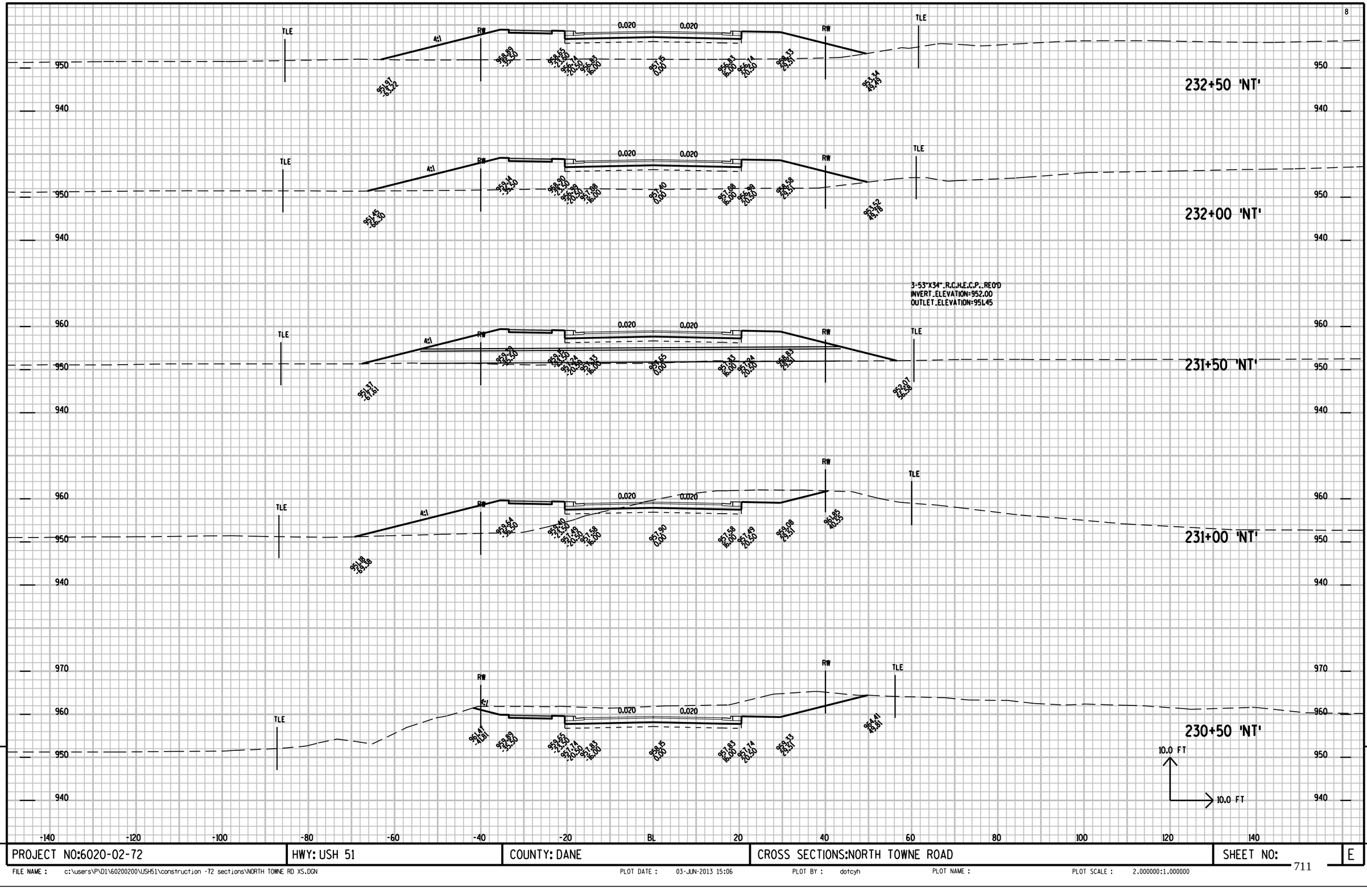
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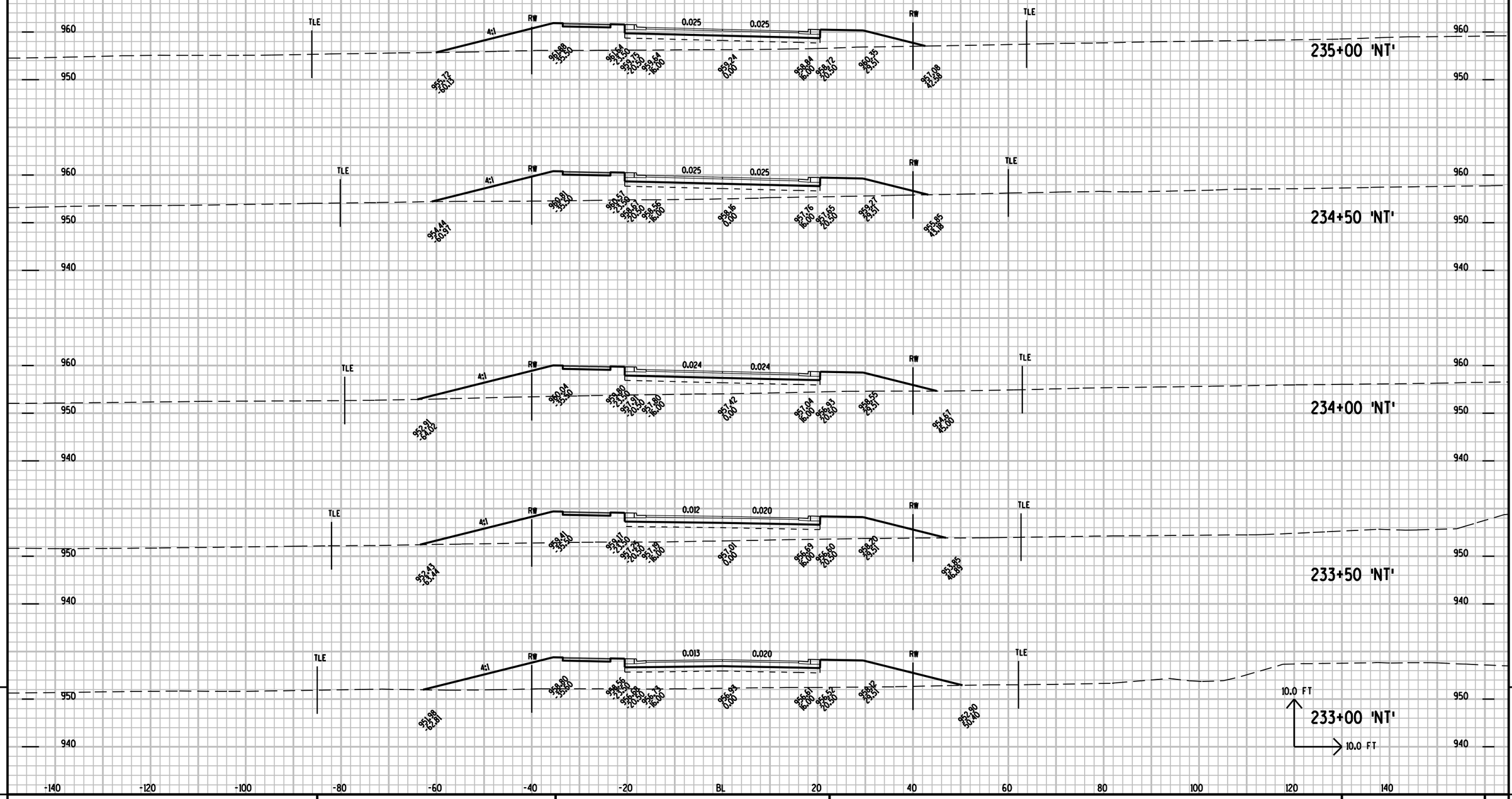
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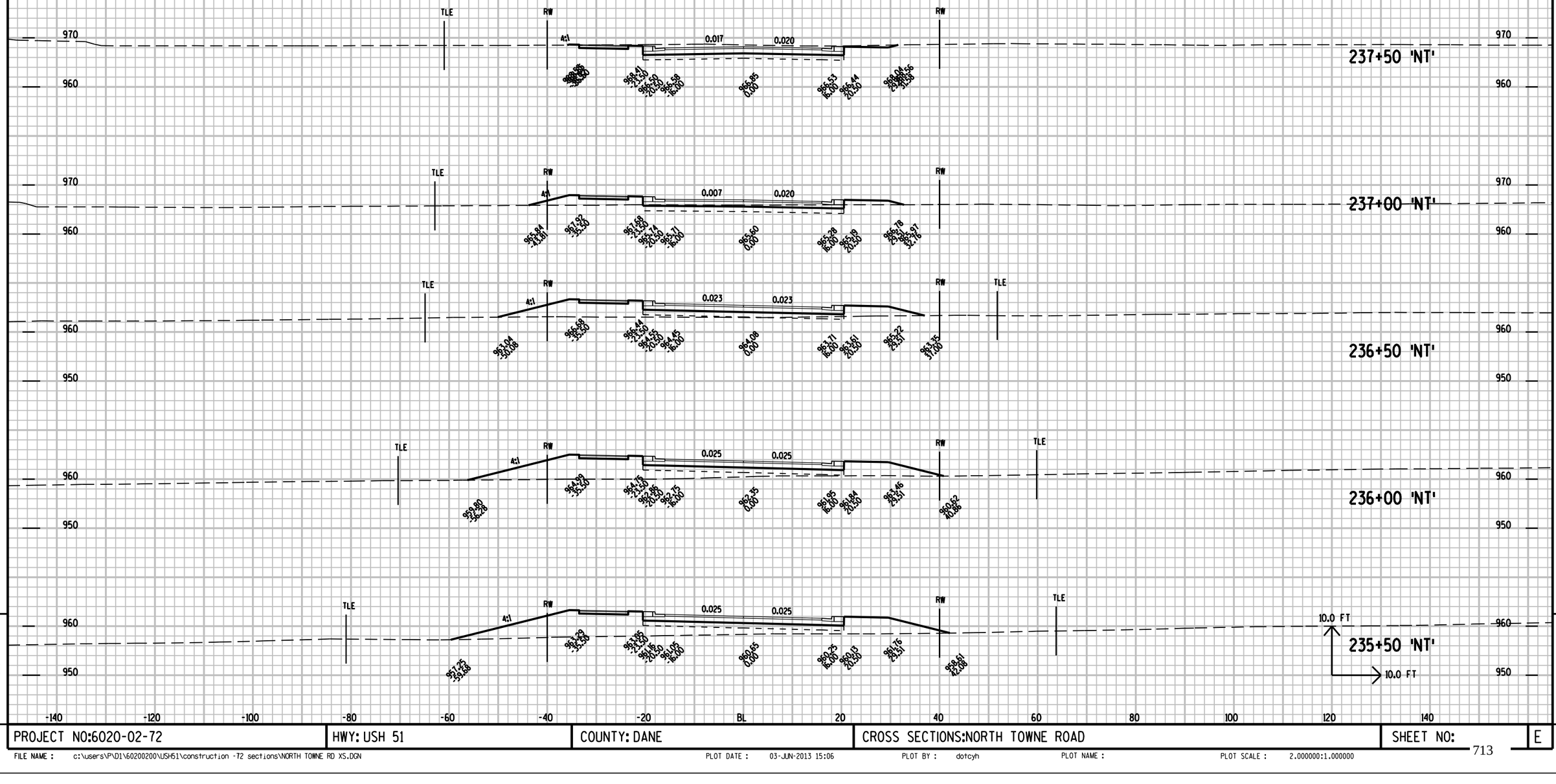
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PROJECT NO:6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS:NORTH TOWNE ROAD	SHEET NO:	E

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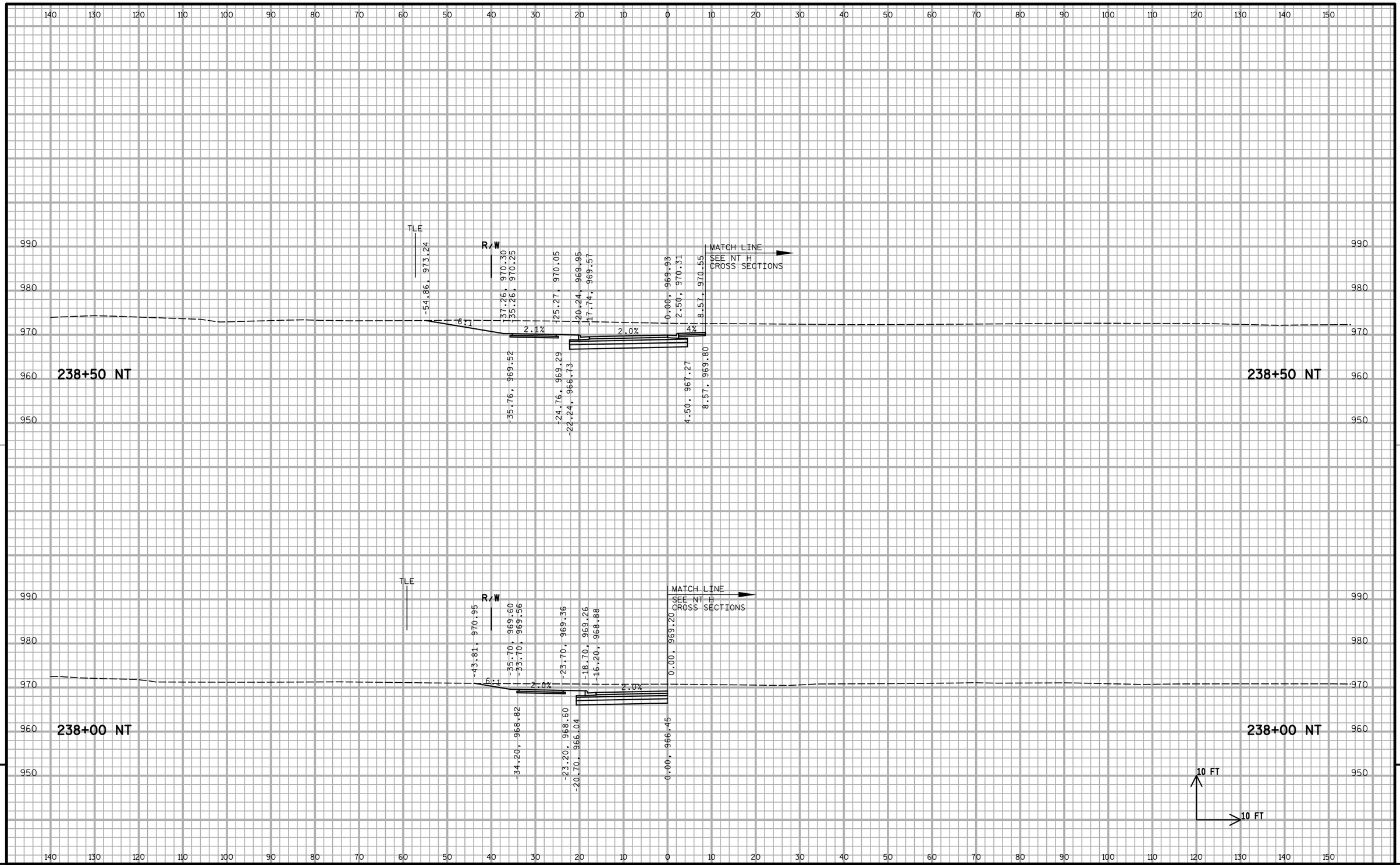


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PROJECT NO:6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS:NORTH TOWNE ROAD	SHEET NO:	E

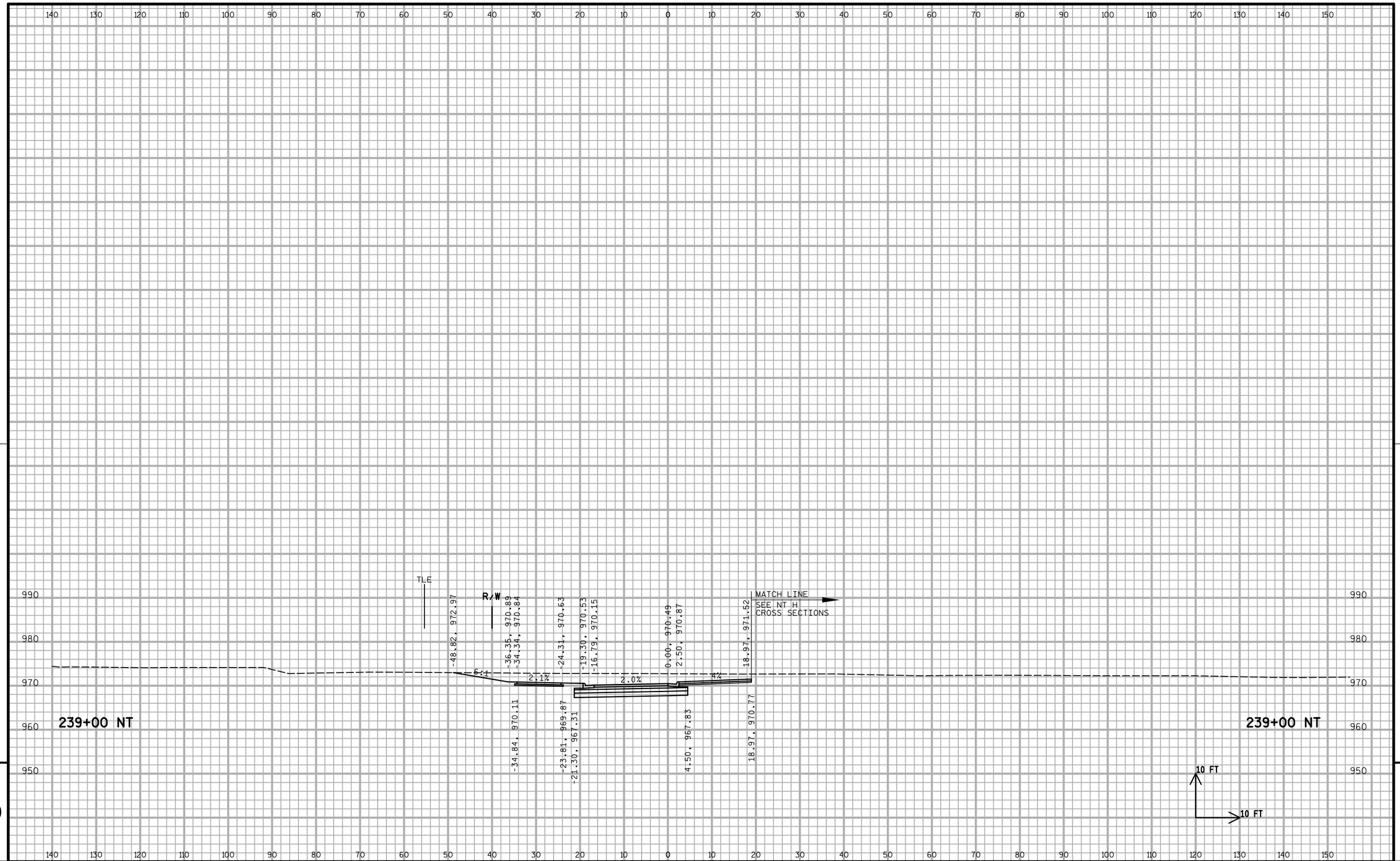
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PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS - NT	SHEET 714	E

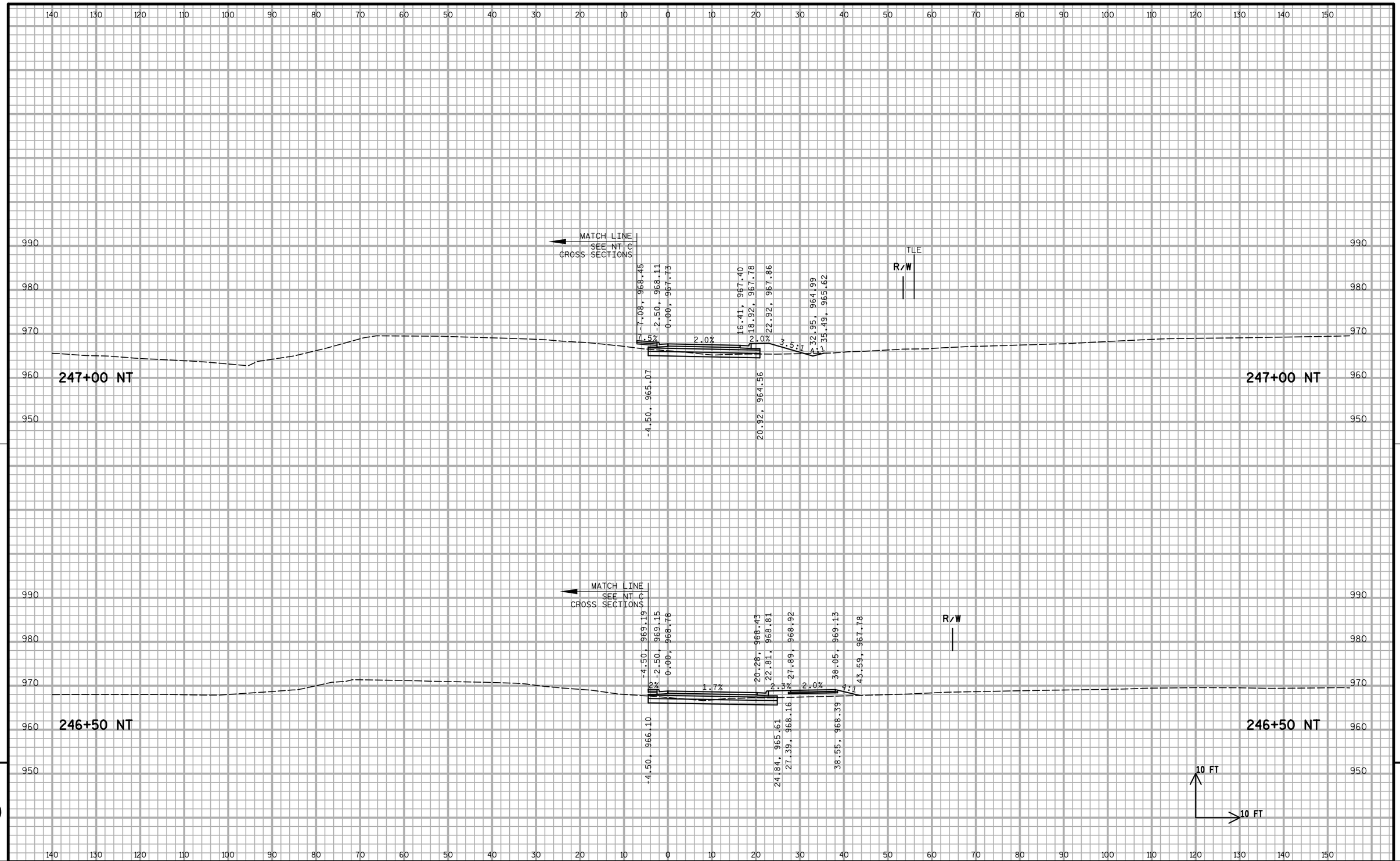
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PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS - NT	SHEET 715	E

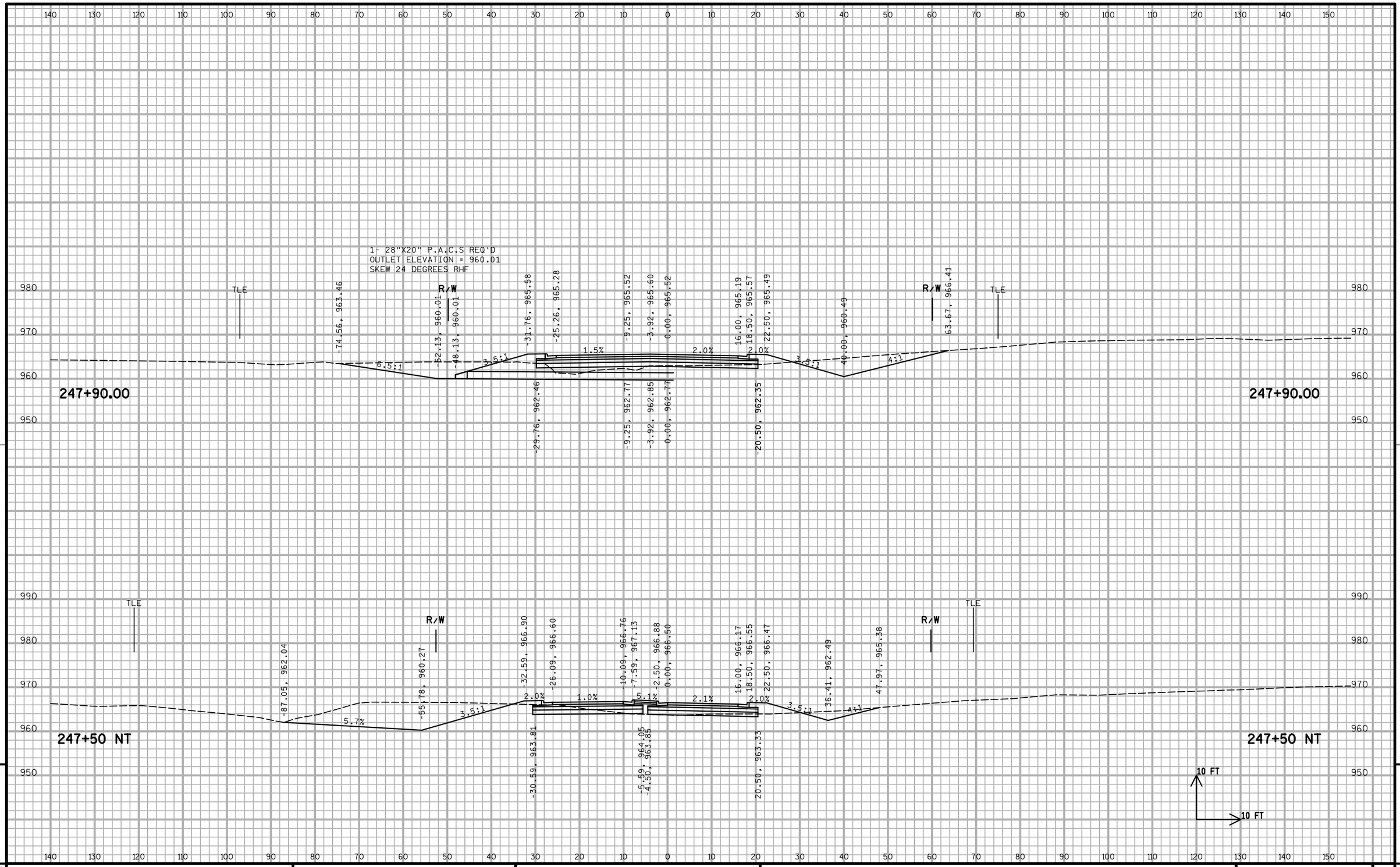


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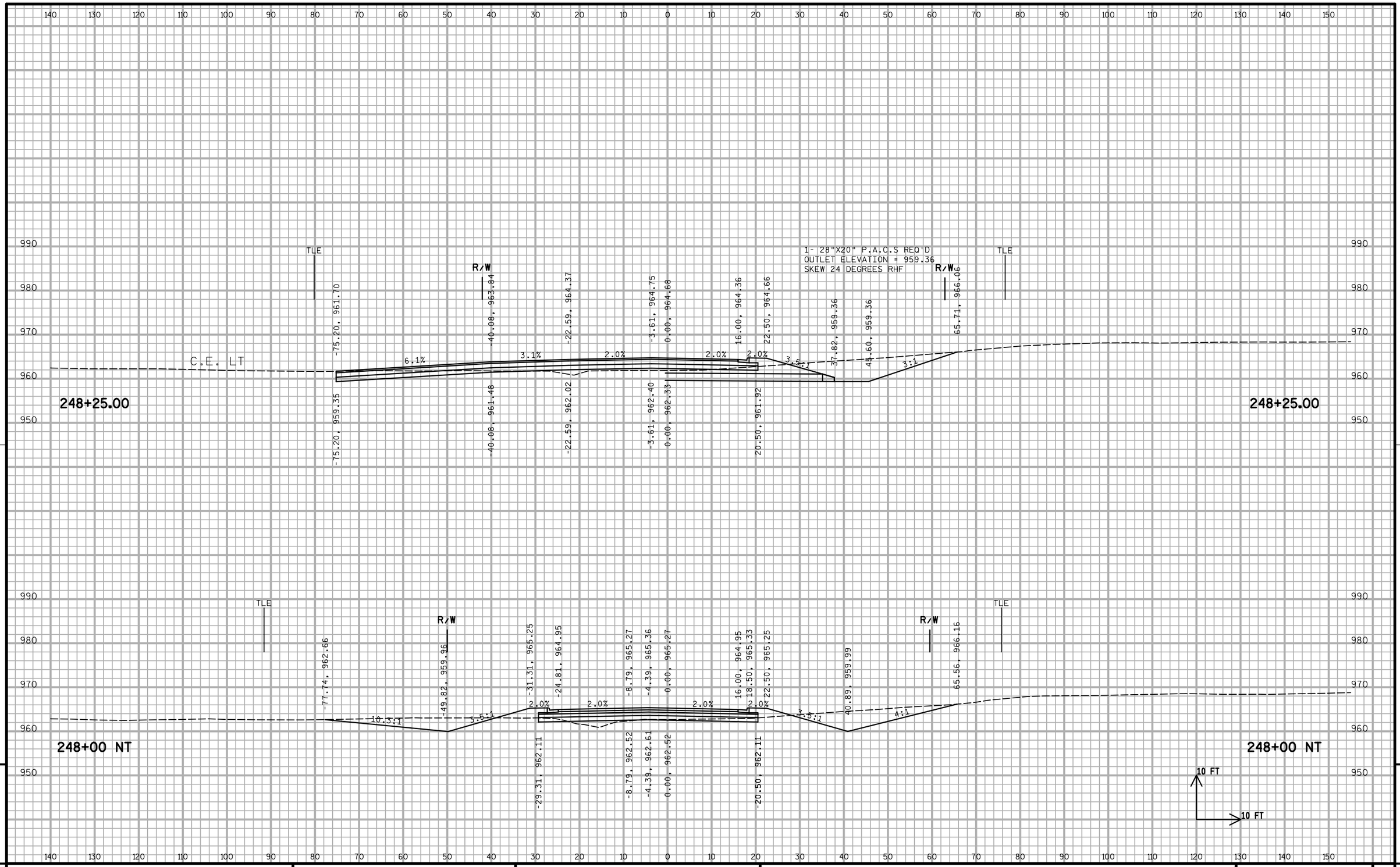
PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS - NT	SHEET 716	E

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PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS - NT	SHEET 717	E

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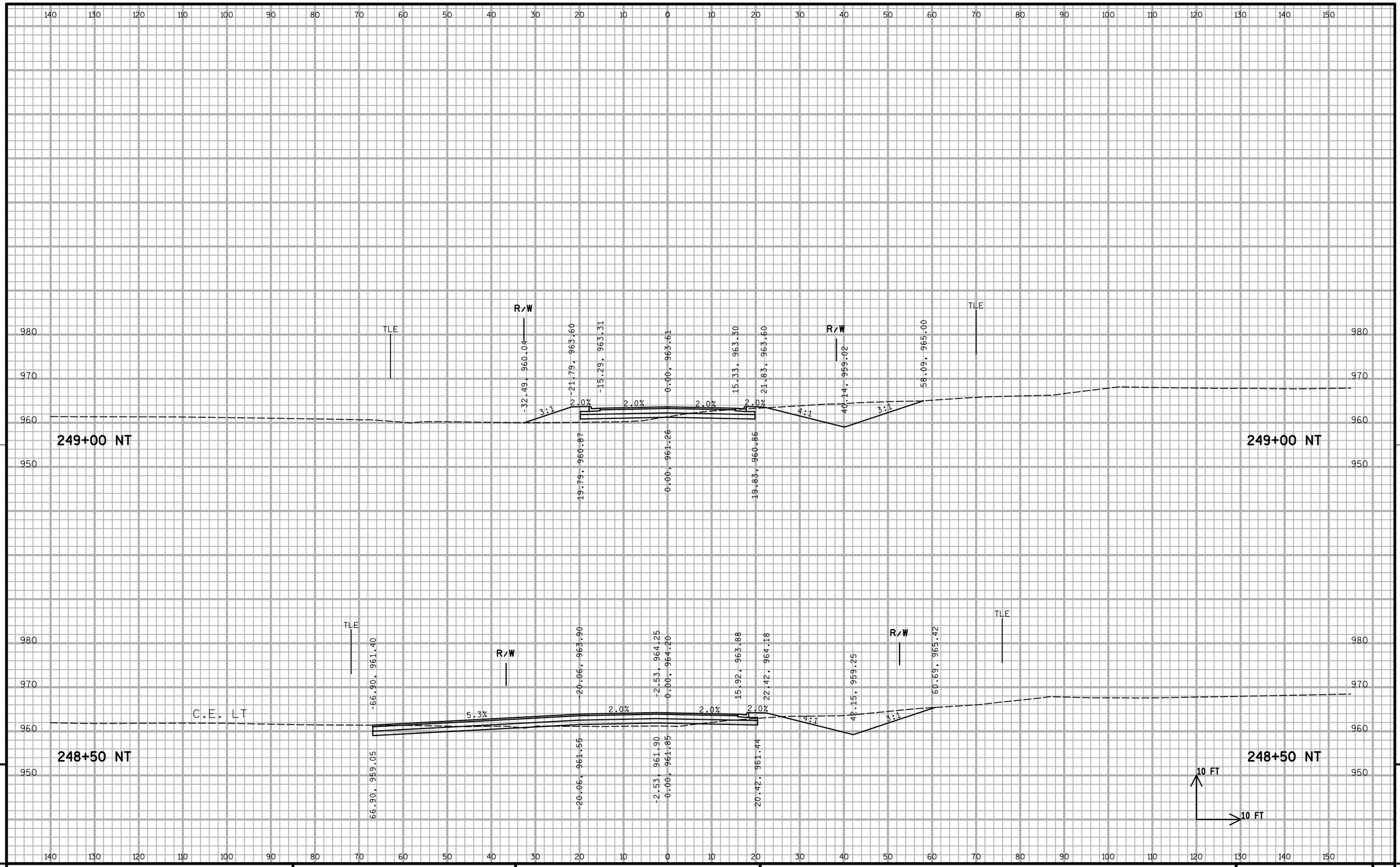


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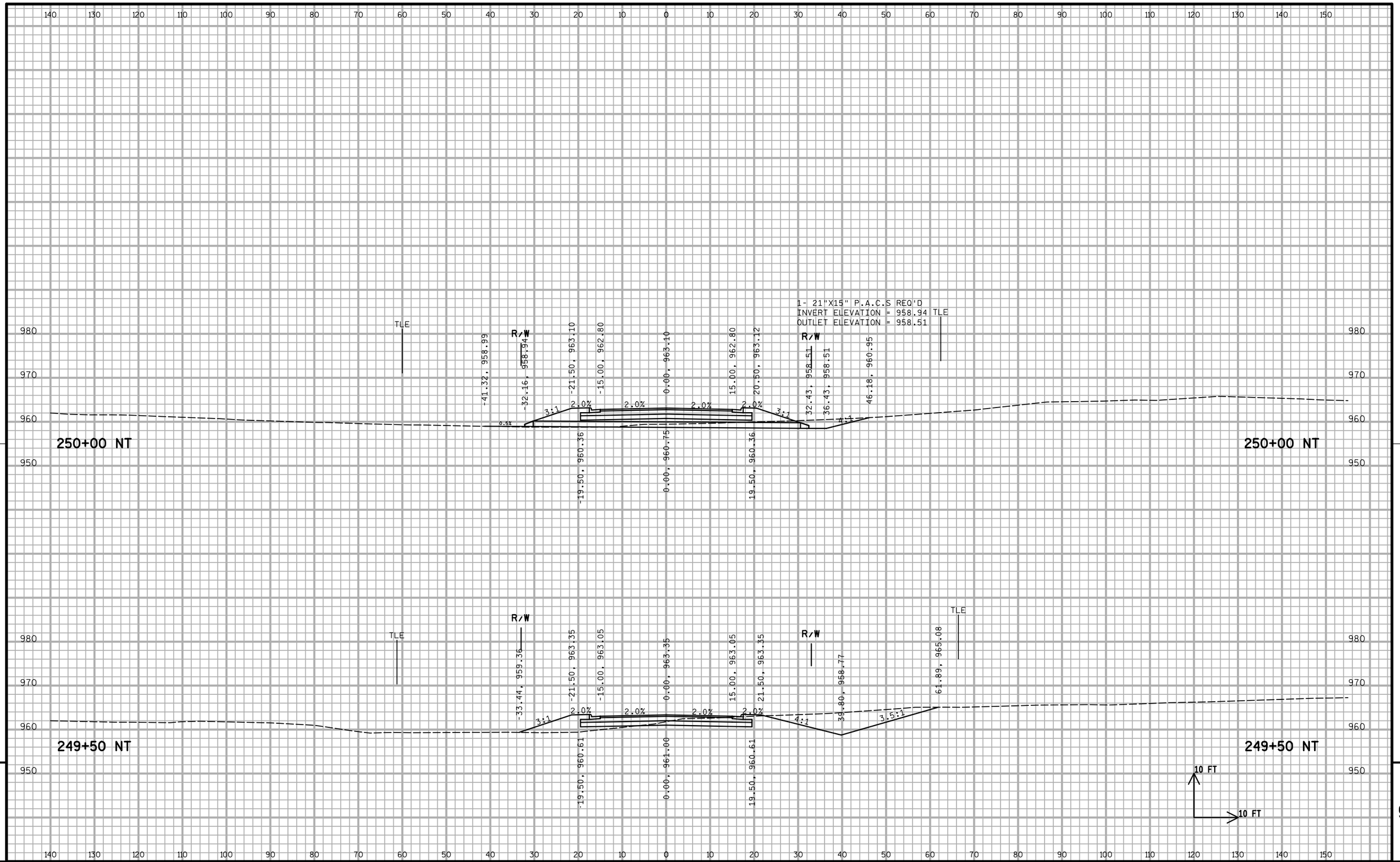
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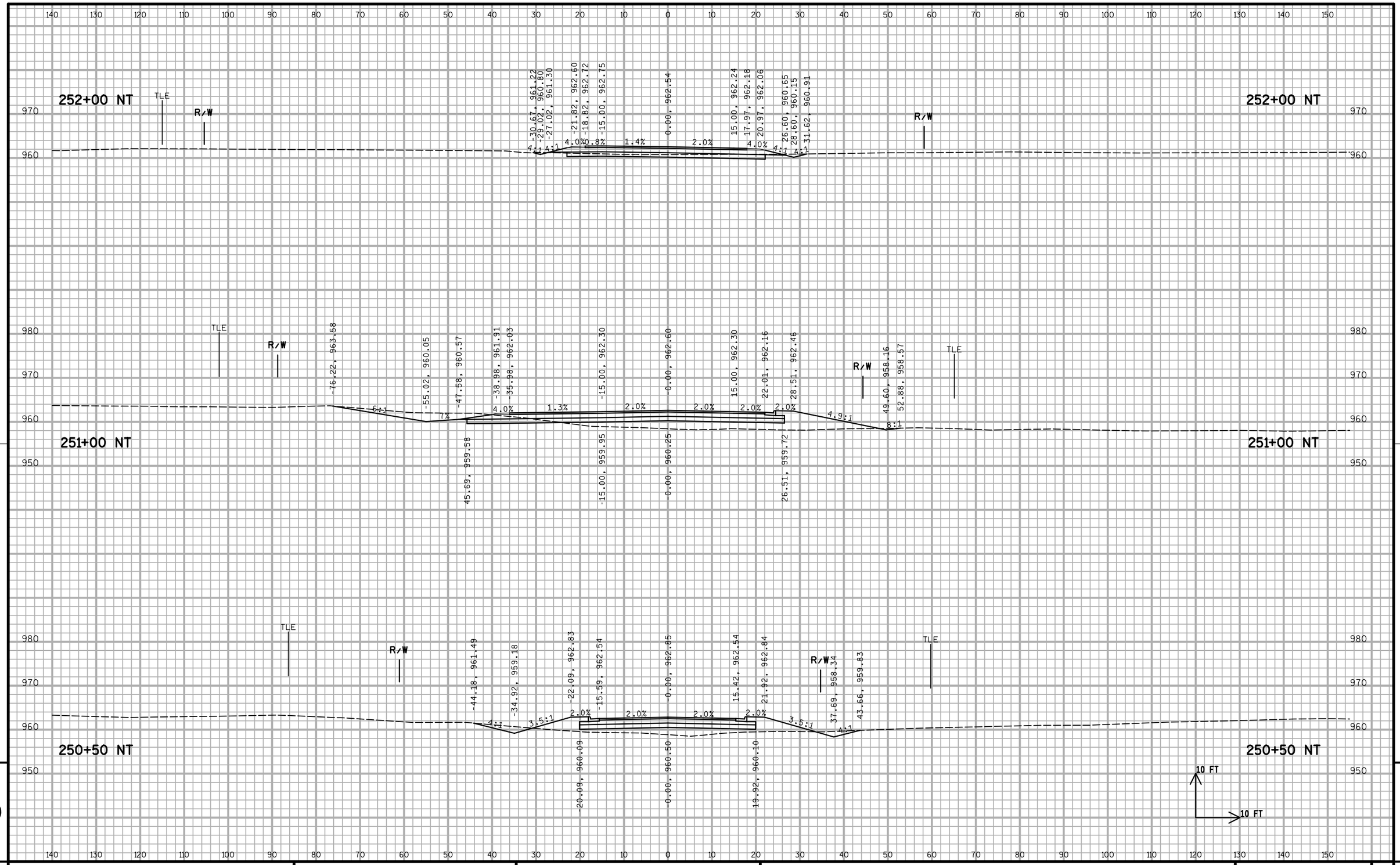
PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS - NT	SHEET 719	E

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PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS - NT	SHEET 720	E

FILE NAME : S:\MAD\1000--1099\1089\234\Micros\PLAN\0272\xs_nt n.DGN PLOT DATE : 4/11/2013 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21

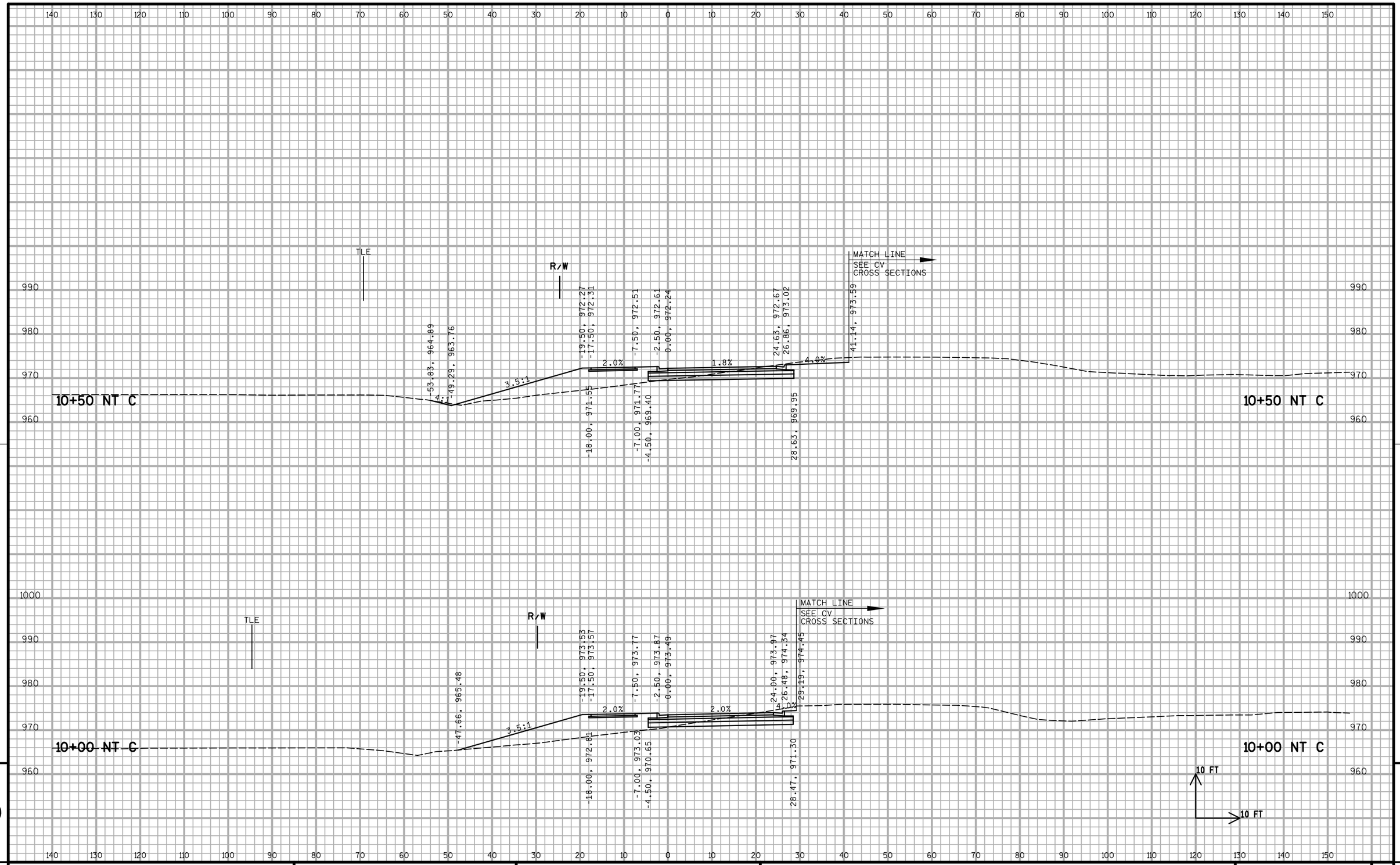


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PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS - NT	SHEET 721	E

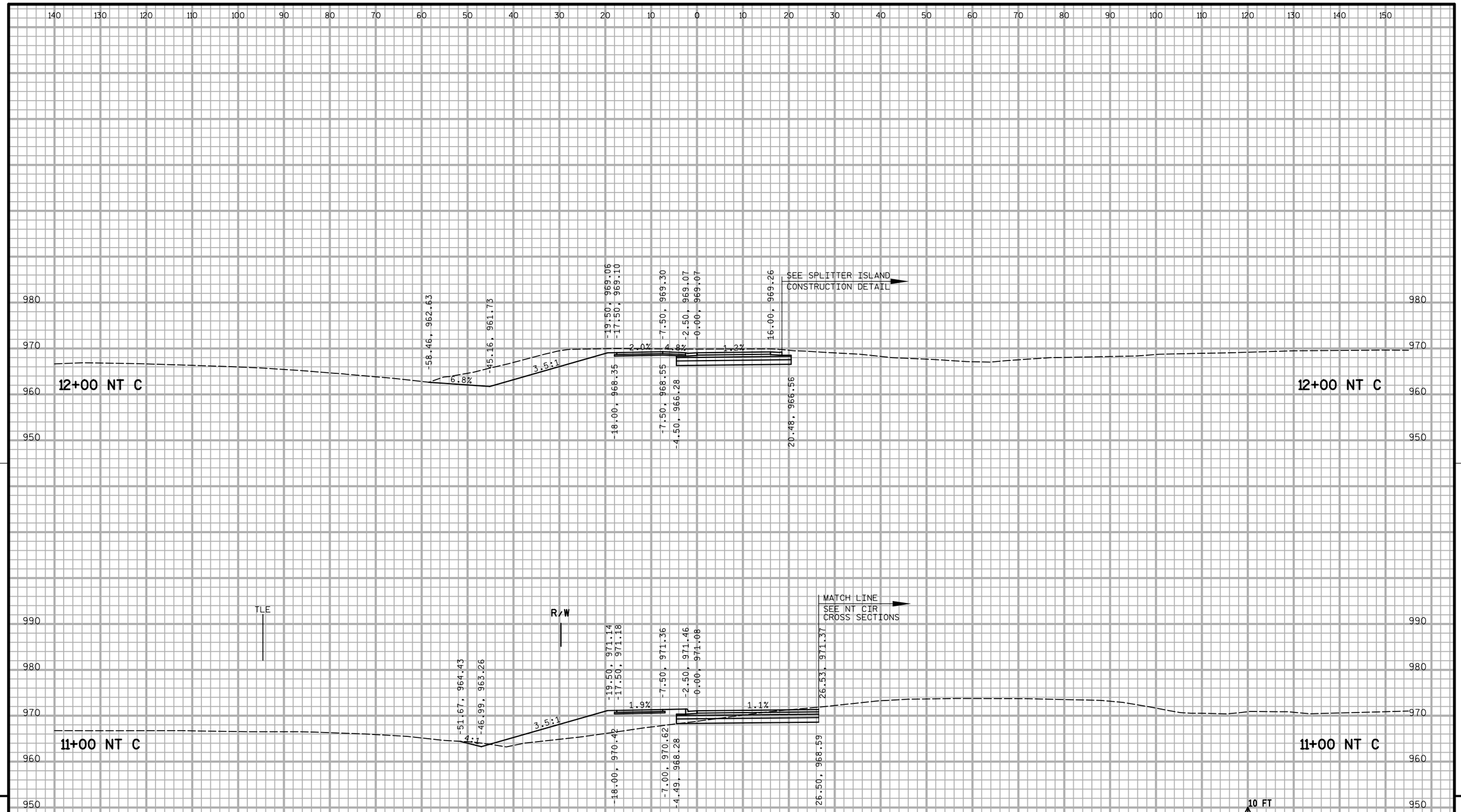
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PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS - NT C	SHEET 722	E

FILE NAME : S:\MAD\1000--1099\1089\234\Micros\PLAN\0272\xs_nt c.DGN PLOT DATE : 4/11/2013 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21

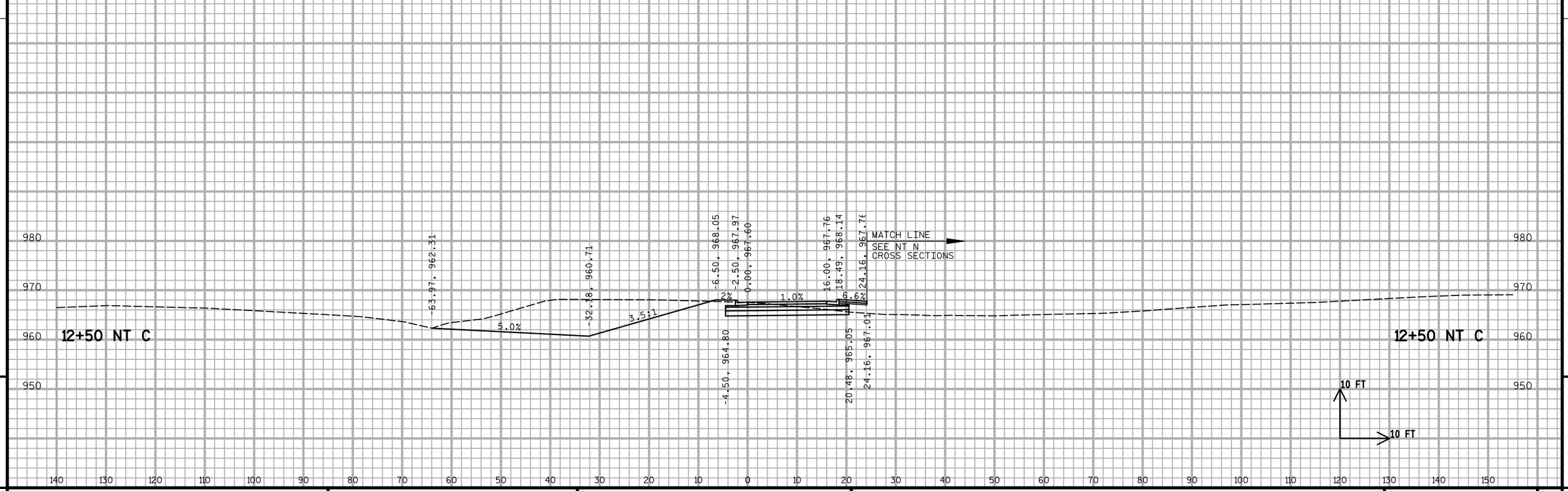


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PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS - NT C	SHEET 723	E

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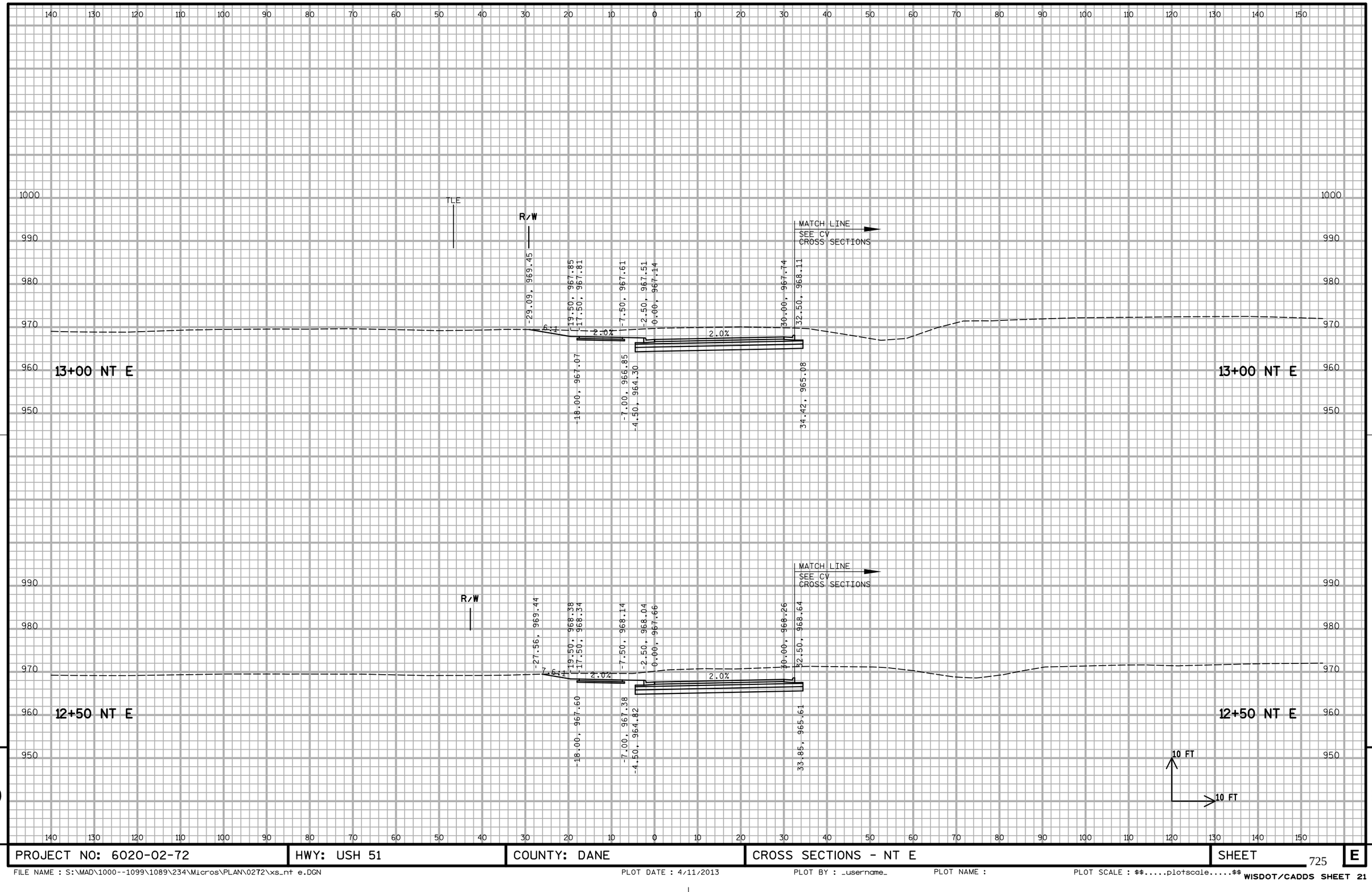


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PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS - NT C	SHEET 724	E

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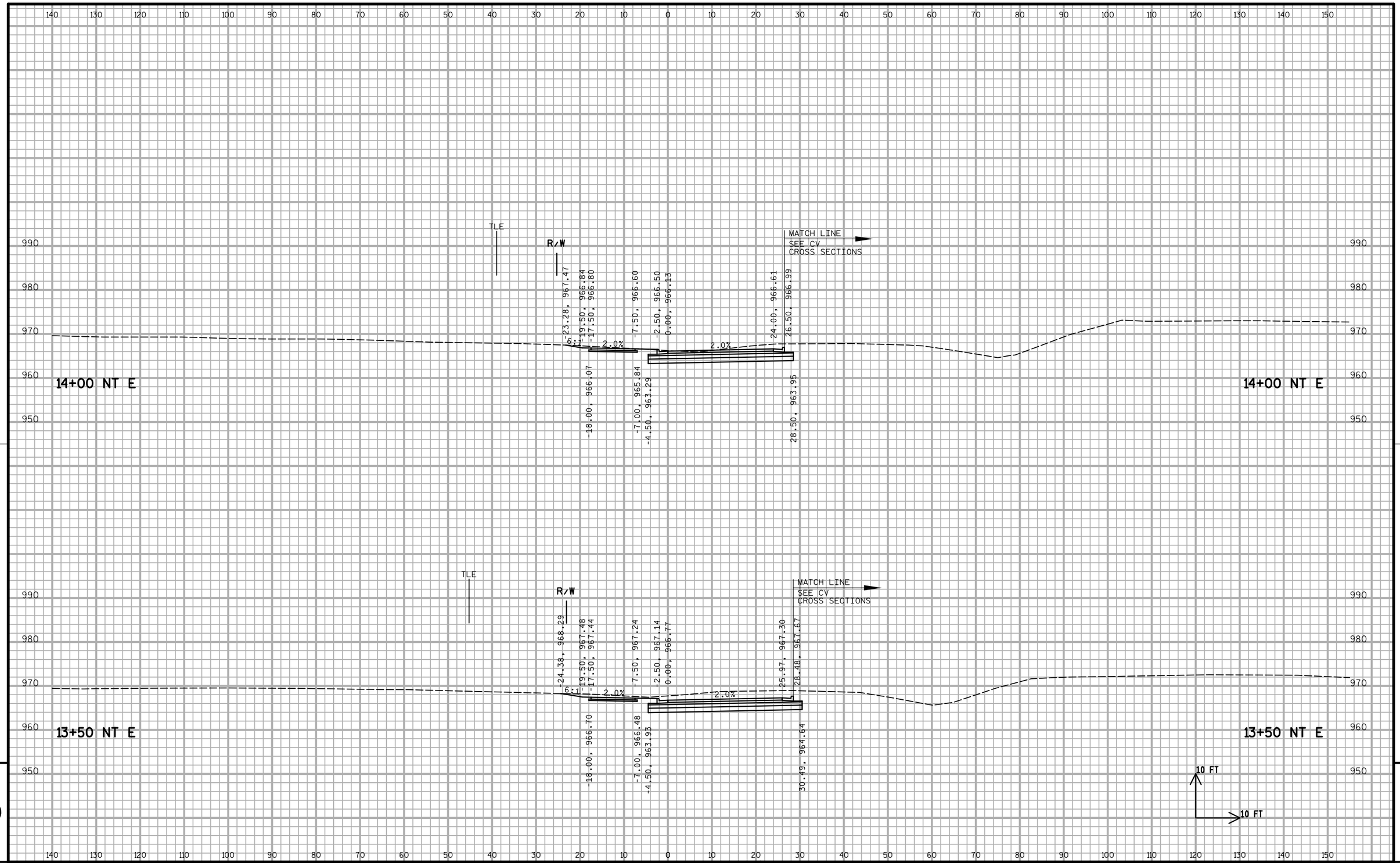


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PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS - NT E	SHEET 725	E

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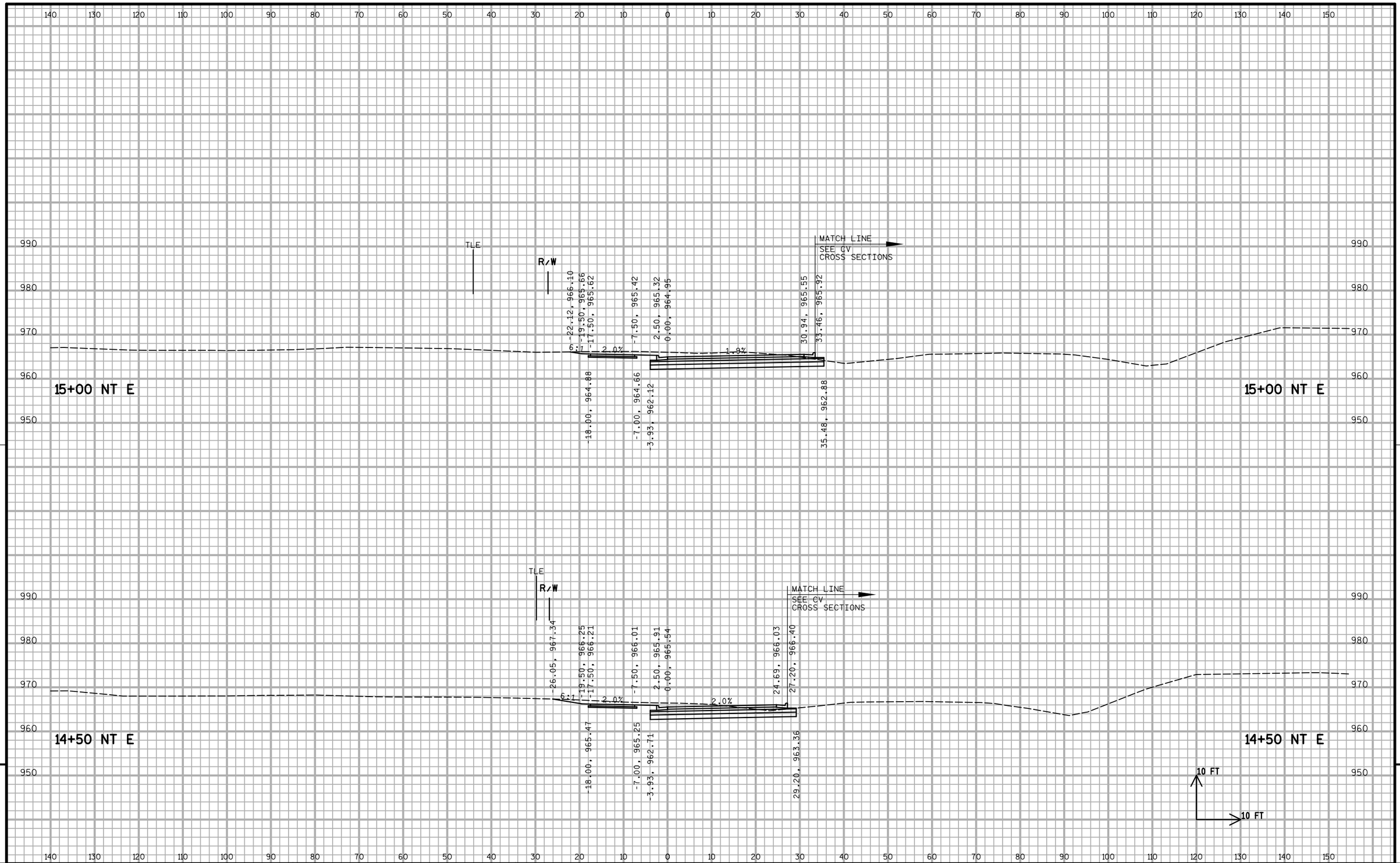


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PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS - NT E	SHEET	E

FILE NAME : S:\MAD\1000--1099\1089\234\Micros\PLAN\0272\xs_nt e.DGN PLOT DATE : 4/11/2013 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21

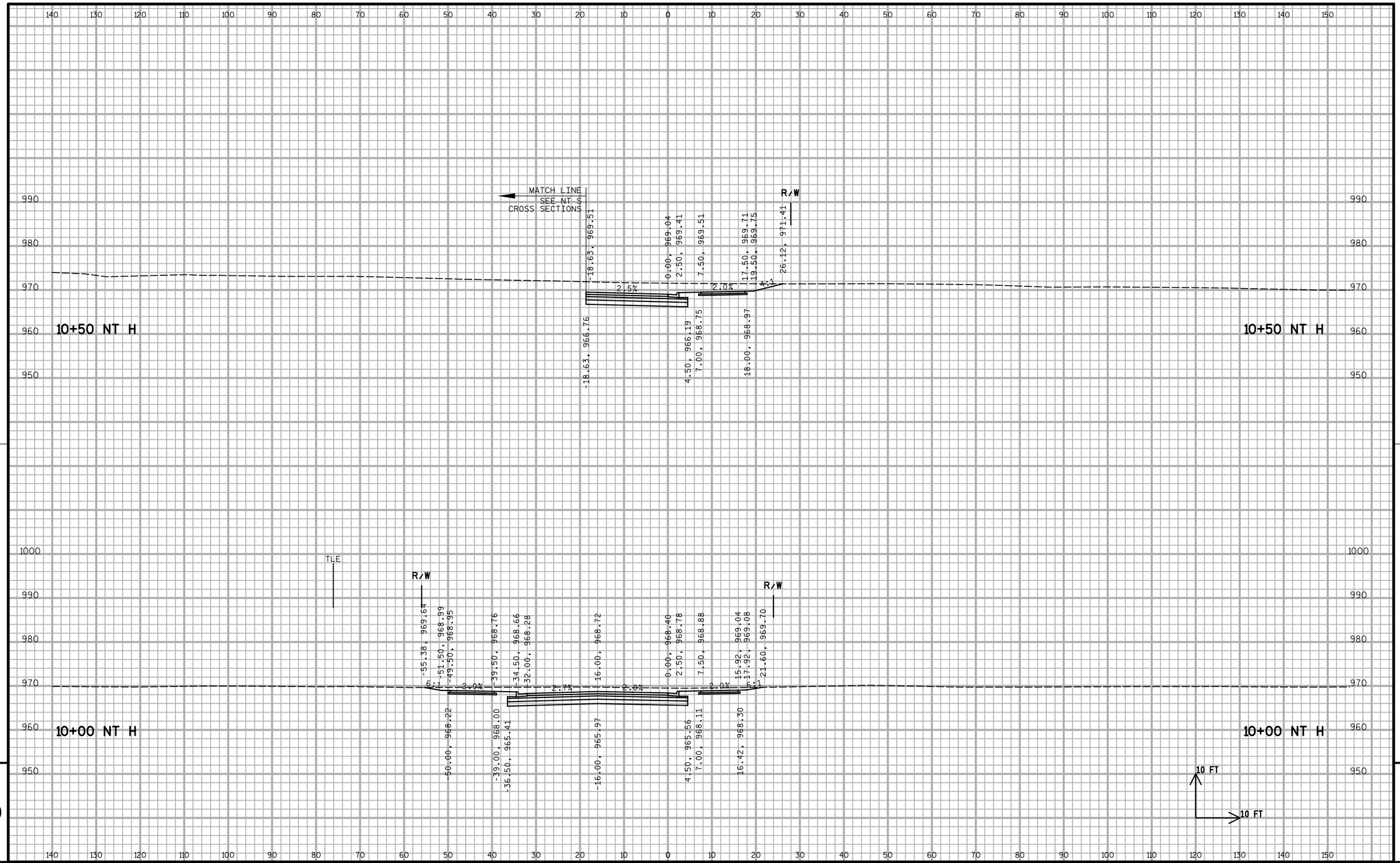


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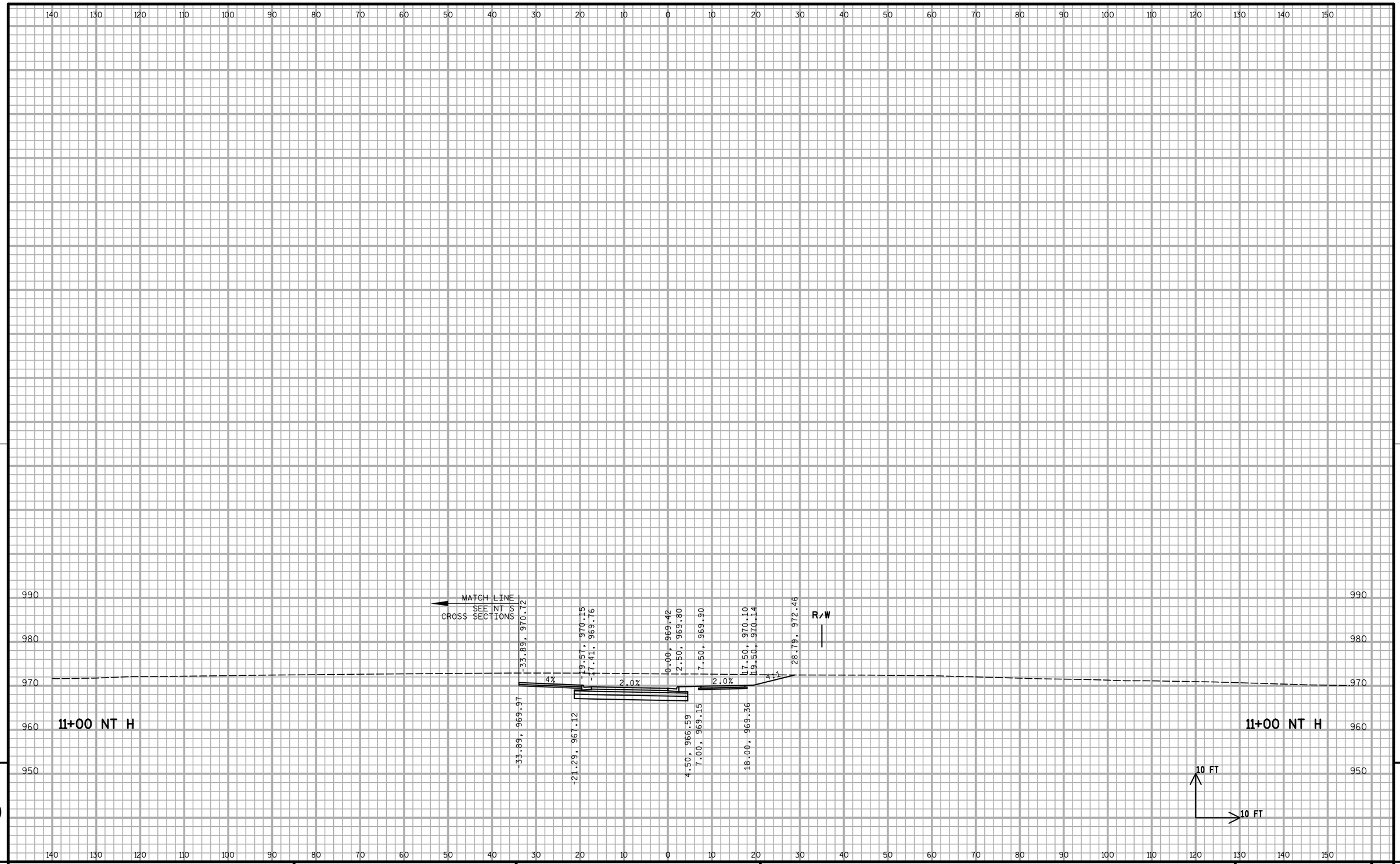
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PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS - NT H	SHEET 728	E

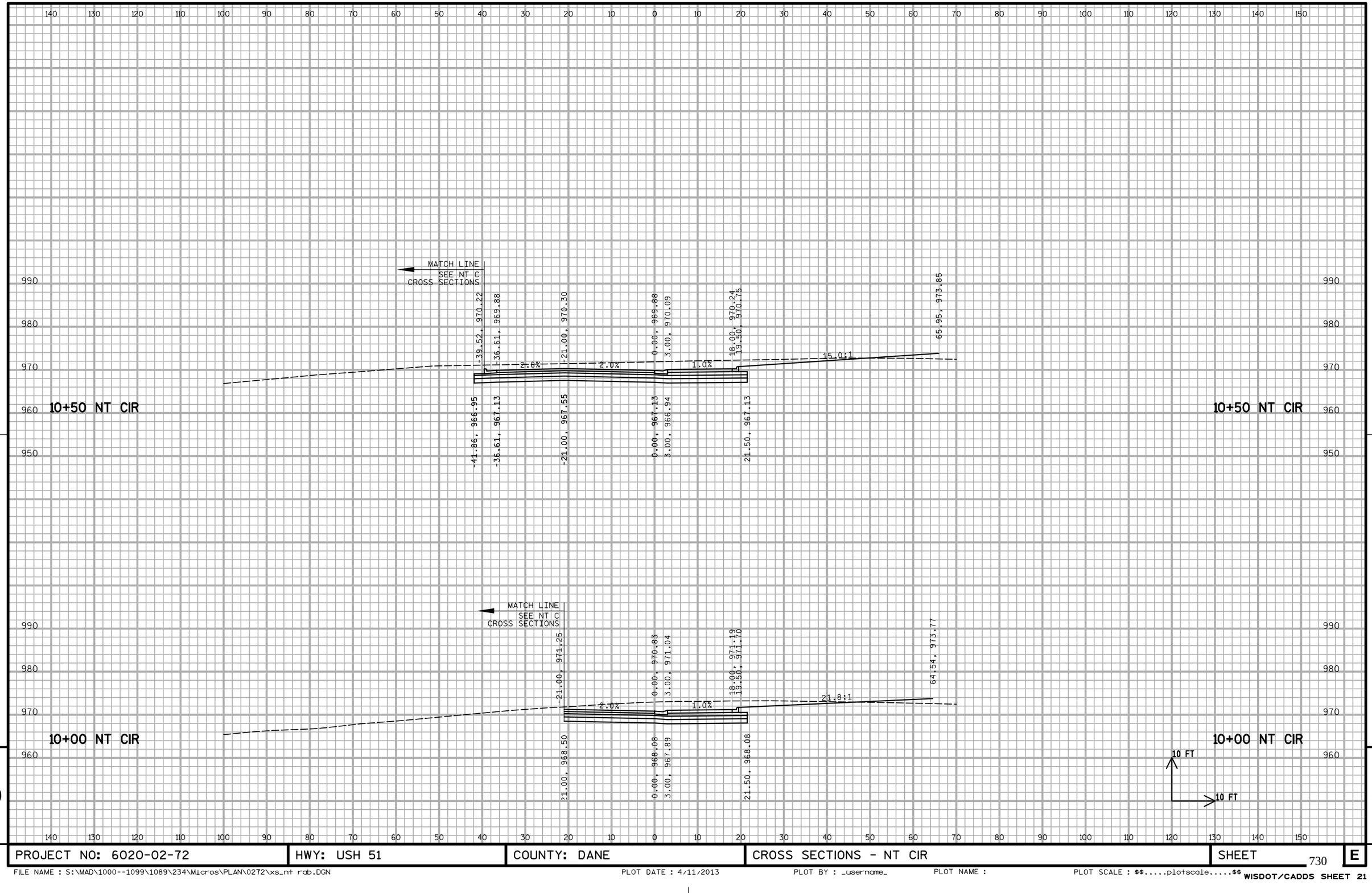


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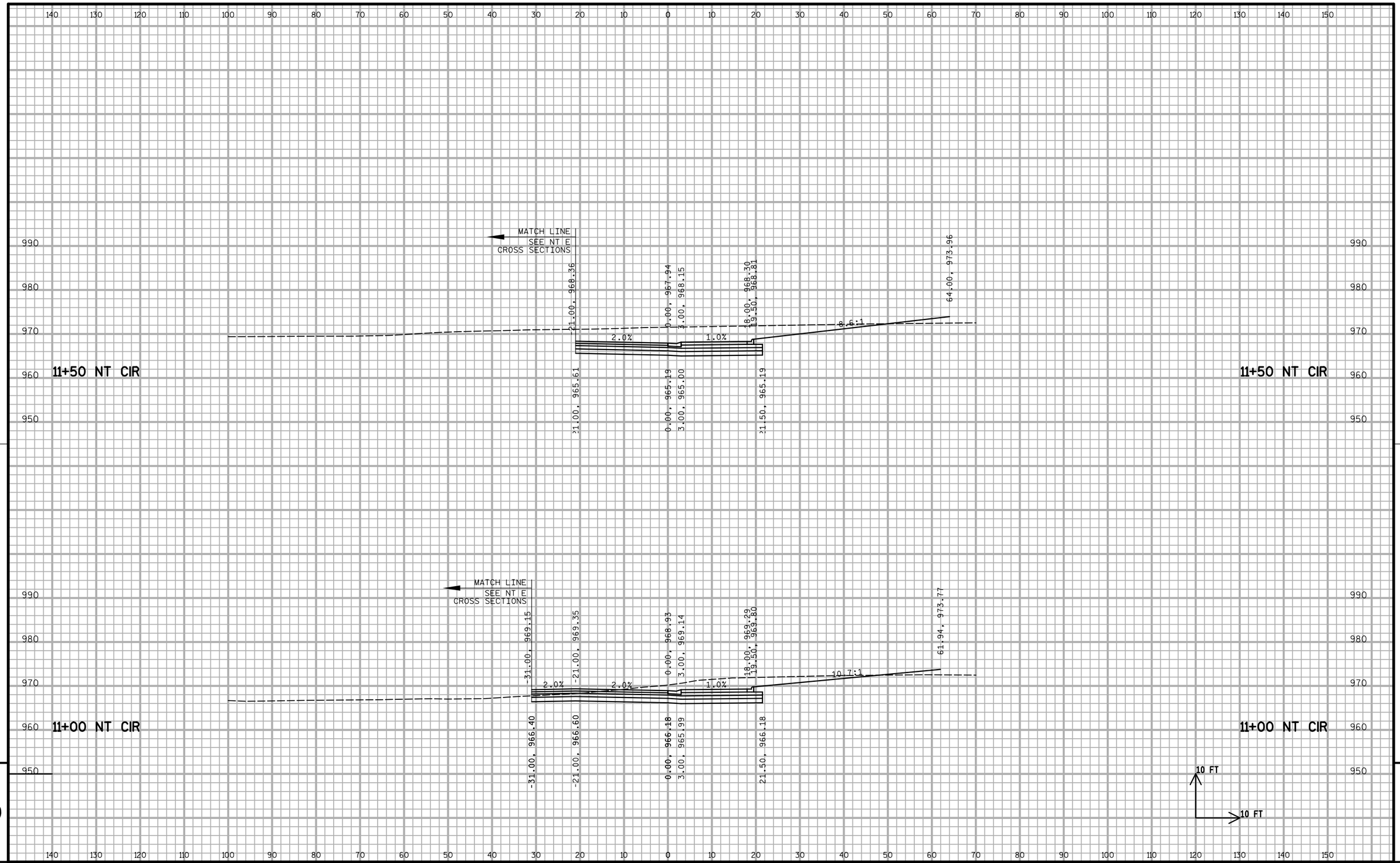
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FILE NAME : S:\MAD\1000--1099\1089\234\Micros\PLAN\0272\xs_nt h.DGN PLOT DATE : 4/11/2013 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21



PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS - NT CIR	SHEET 730	E

FILE NAME : S:\MAD\1000--1099\1089\234\Micros\PLAN\0272\xs_nt rab.DGN PLOT DATE : 4/11/2013 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21

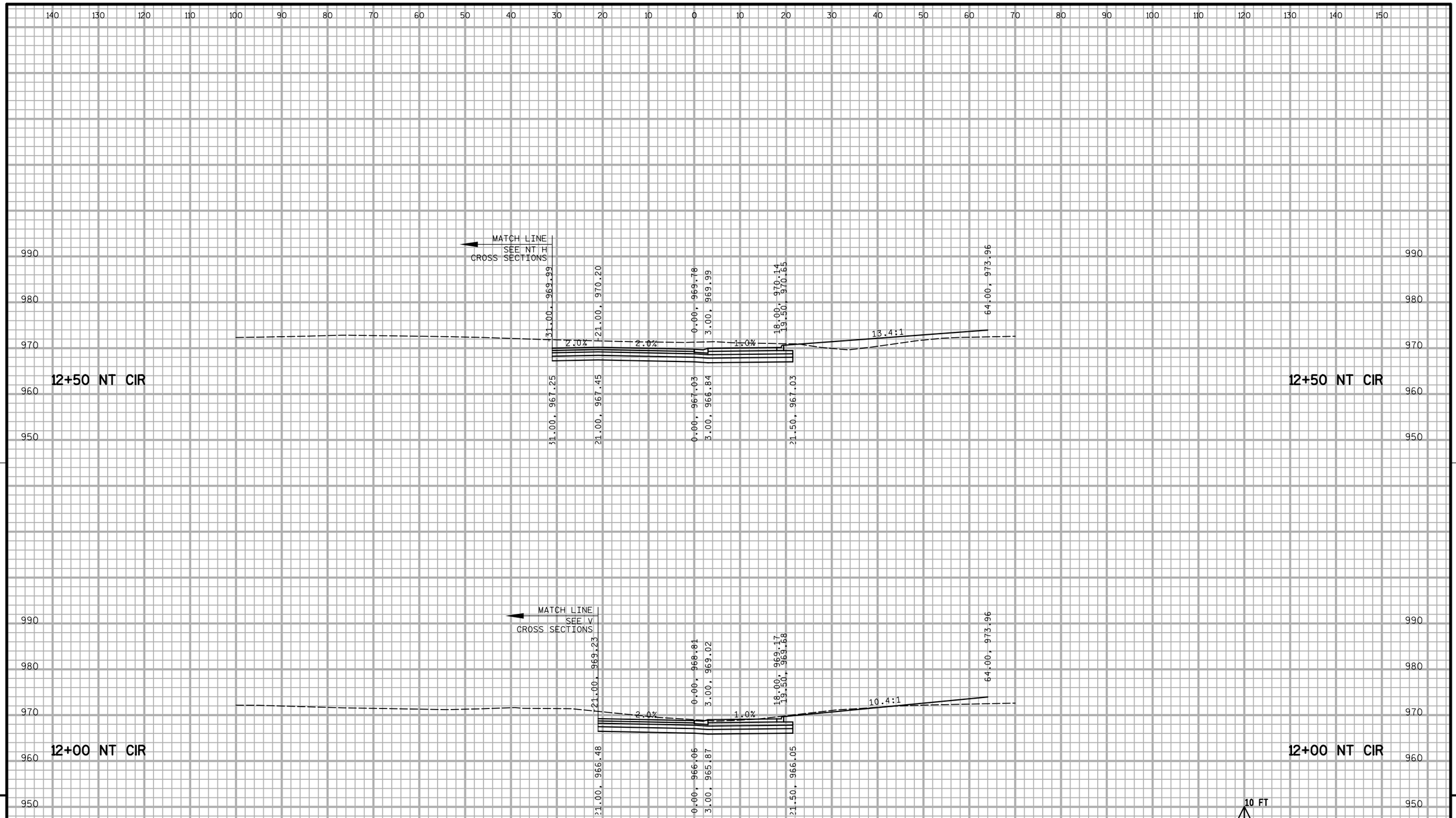


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PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS - NT CIR	SHEET 731	E

FILE NAME : S:\MAD\1000--1099\1089\234\Micros\PLAN\0272\xs_nt rab.DGN PLOT DATE : 4/11/2013 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21

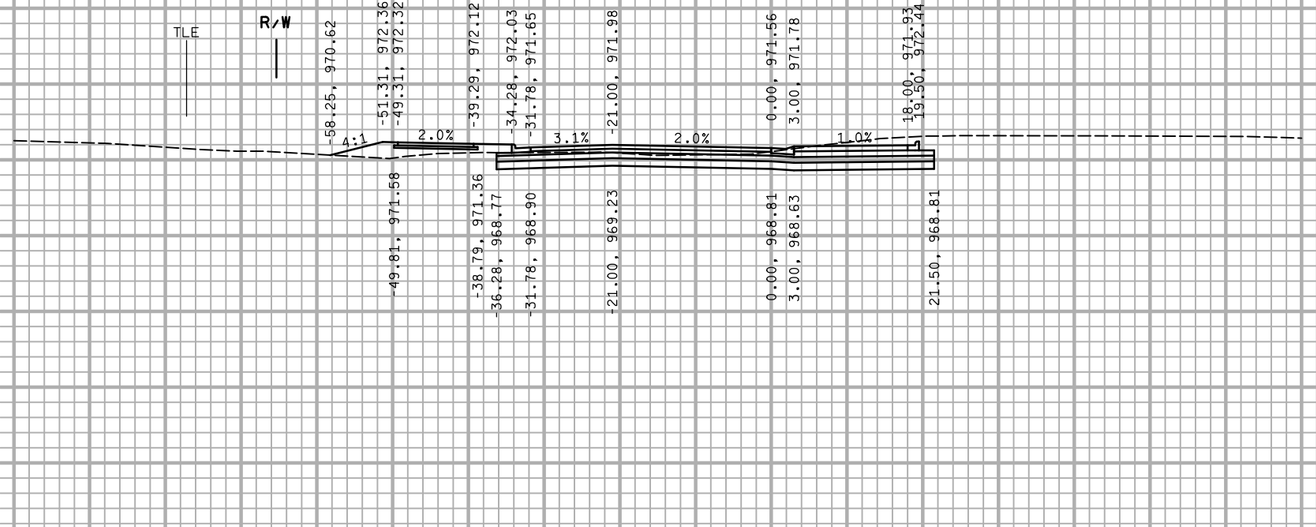


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PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS - NT CIR	SHEET 732	E

FILE NAME : S:\MAD\1000--1099\1089\234\Micros\PLAN\0272\xs_nt rab.DGN PLOT DATE : 4/11/2013 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21



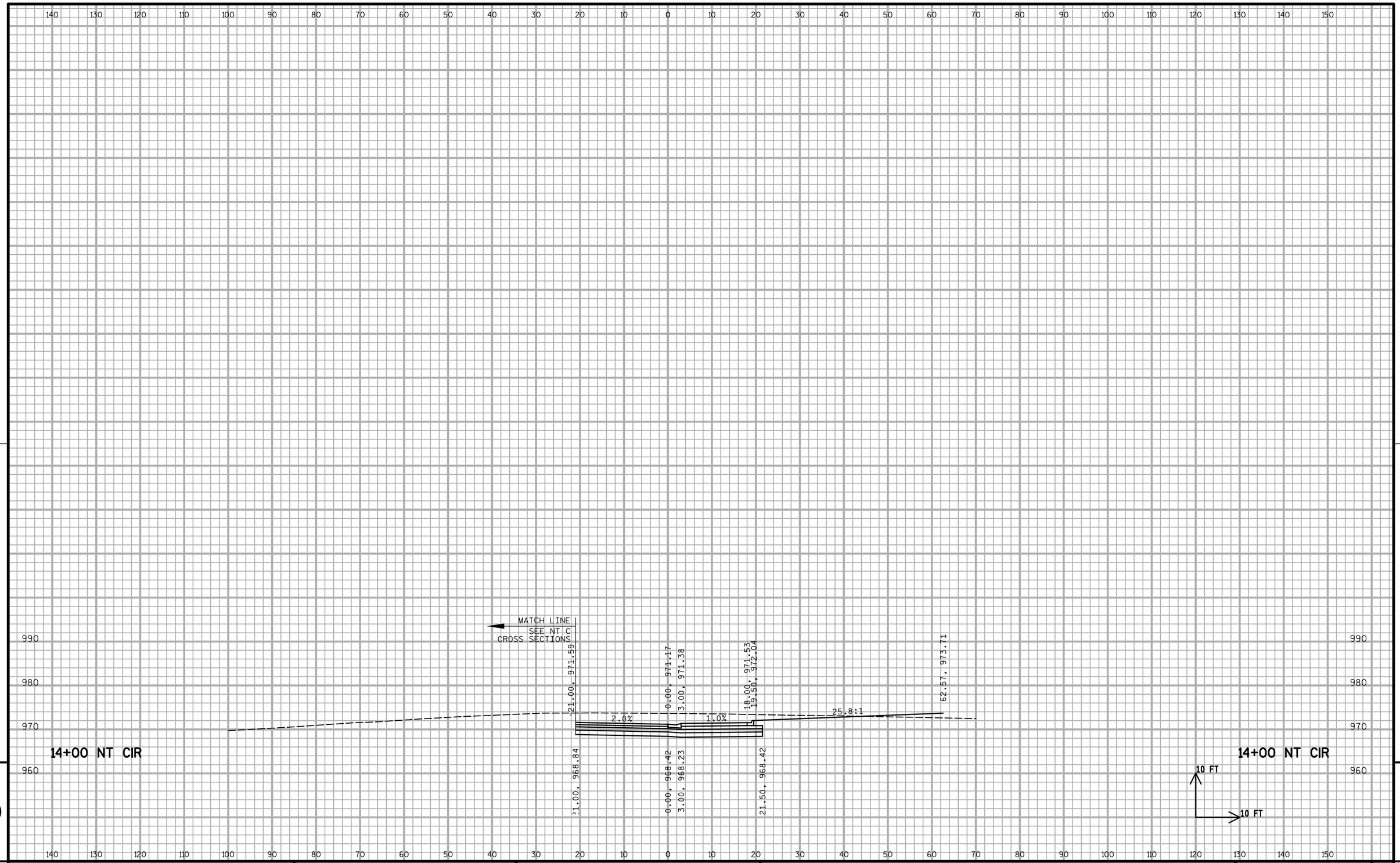
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PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS - NT CIR	SHEET 733	E

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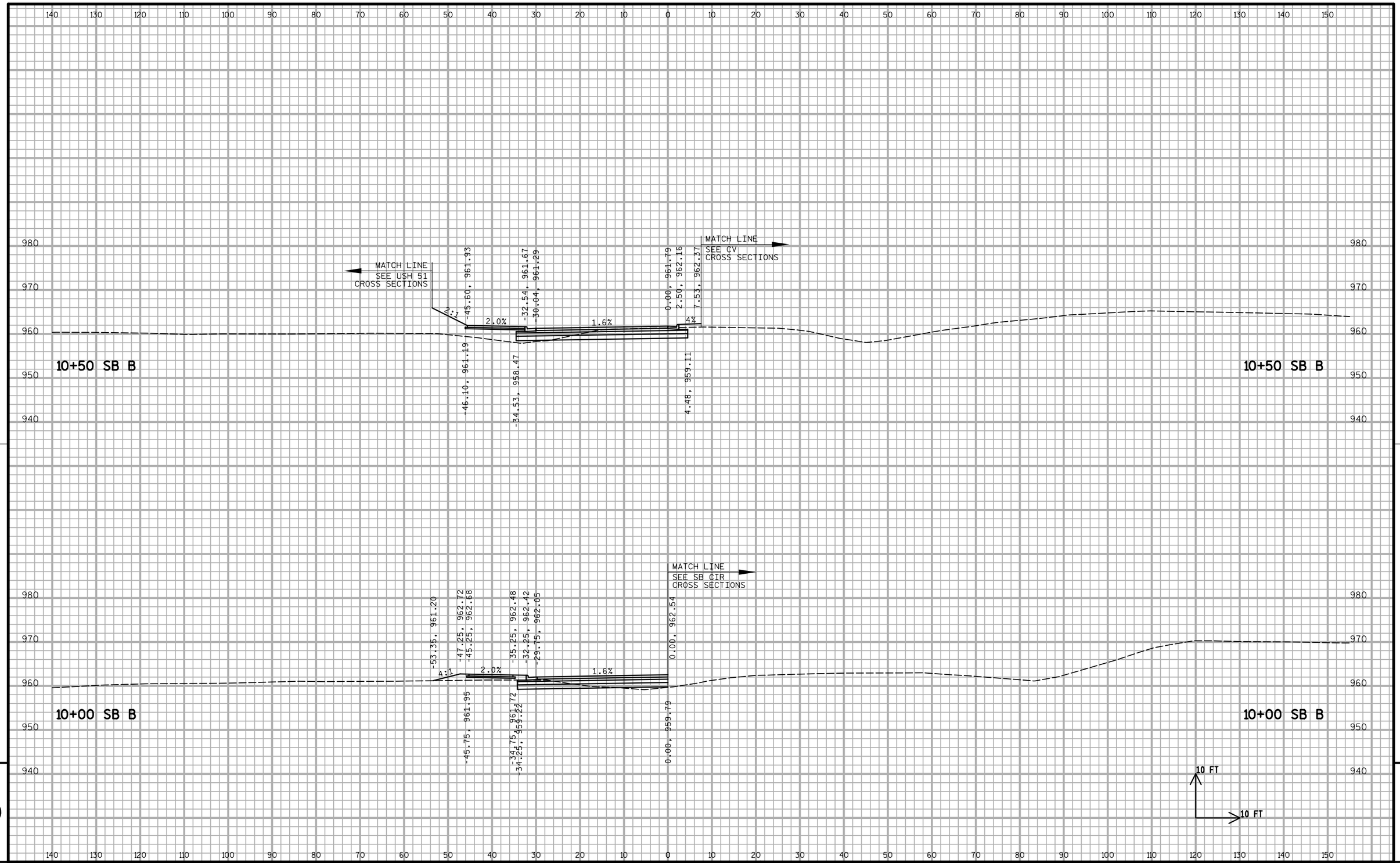
WISDOT/CADDS SHEET 21



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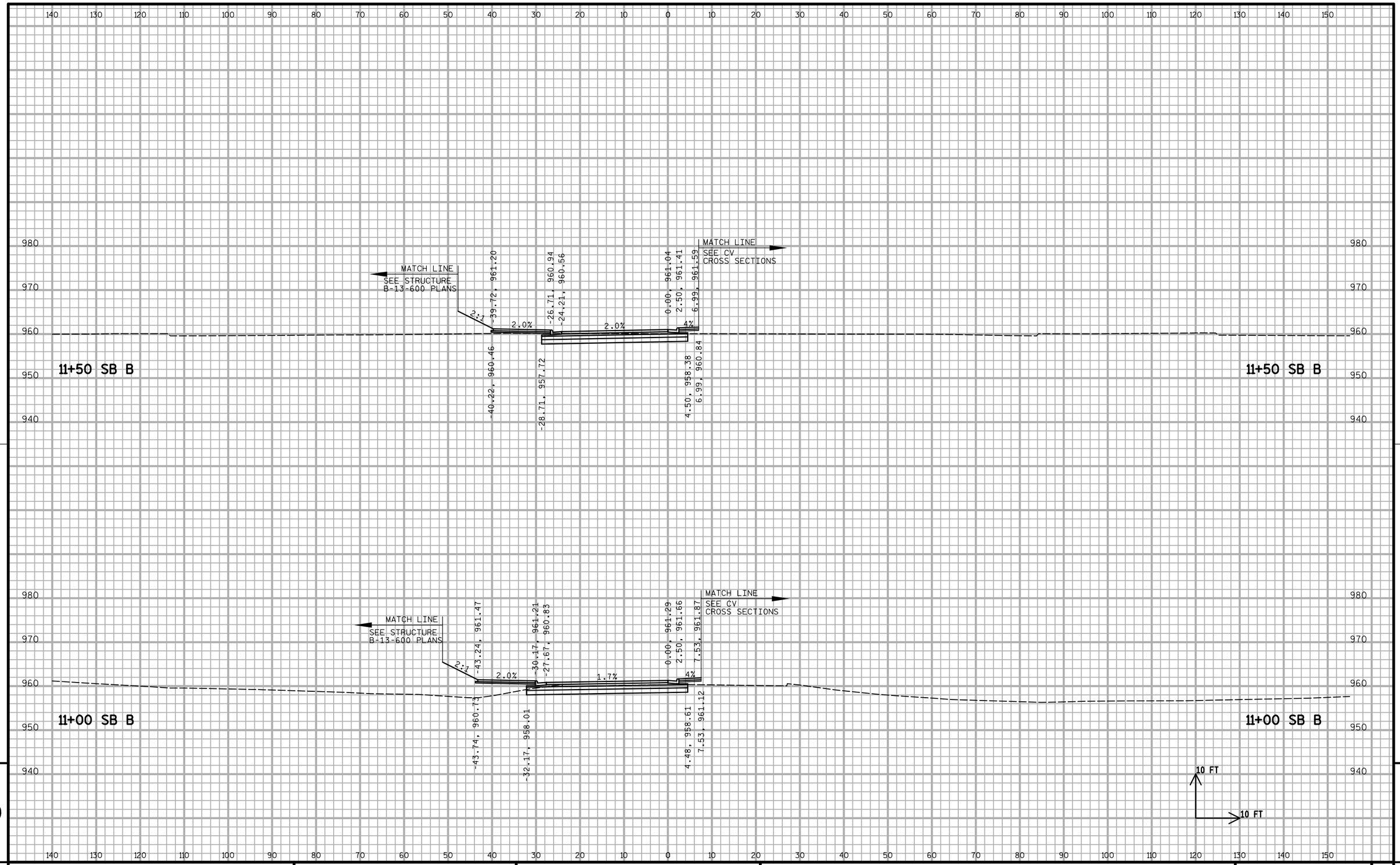
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PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS - NT CIR	SHEET 734	E



PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS - SB B	SHEET 735	E

FILE NAME : S:\MAD\1000--1099\1089\234\Micros\PLAN\0272\xs_sb b.DGN PLOT DATE : 4/11/2013 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21

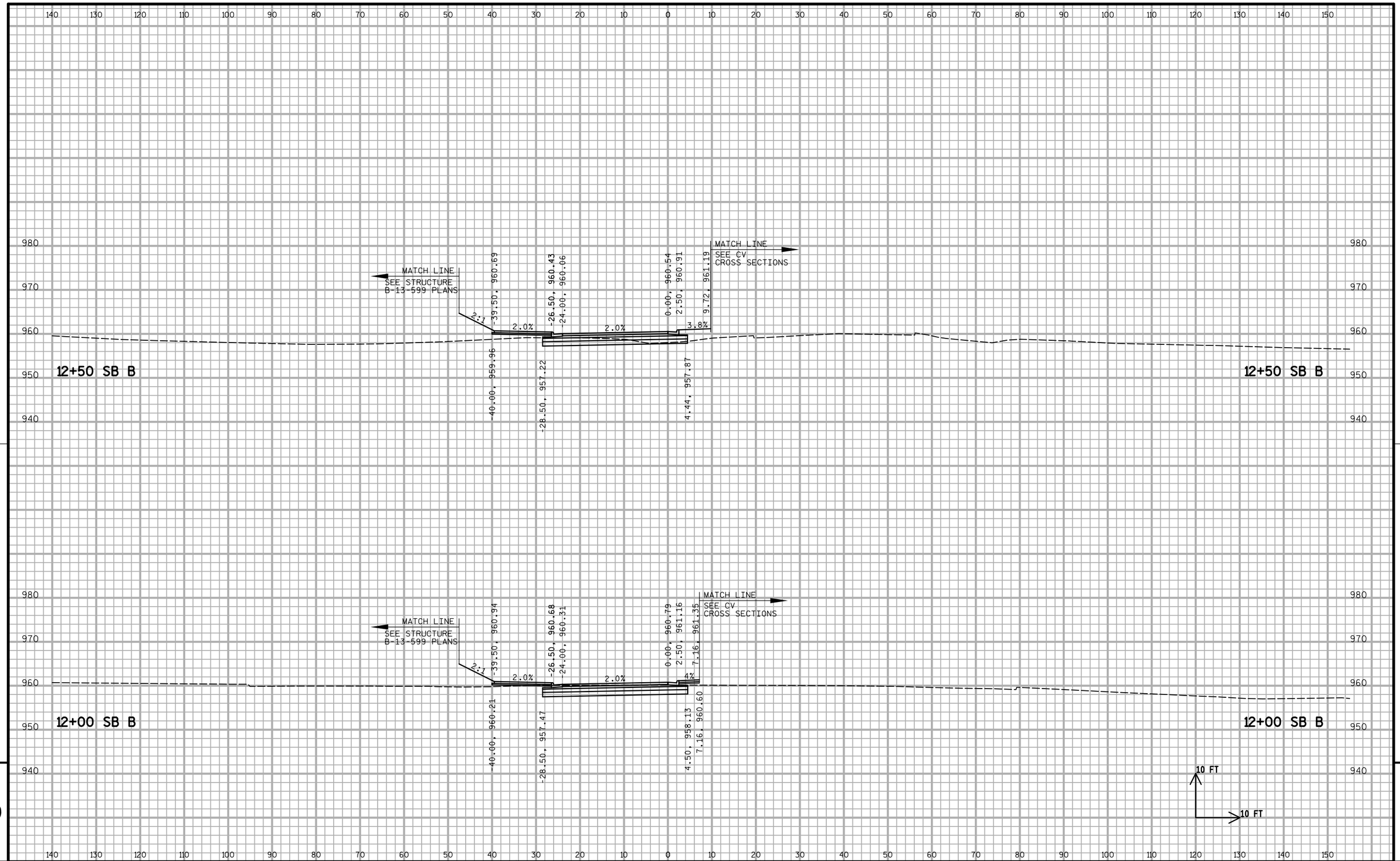


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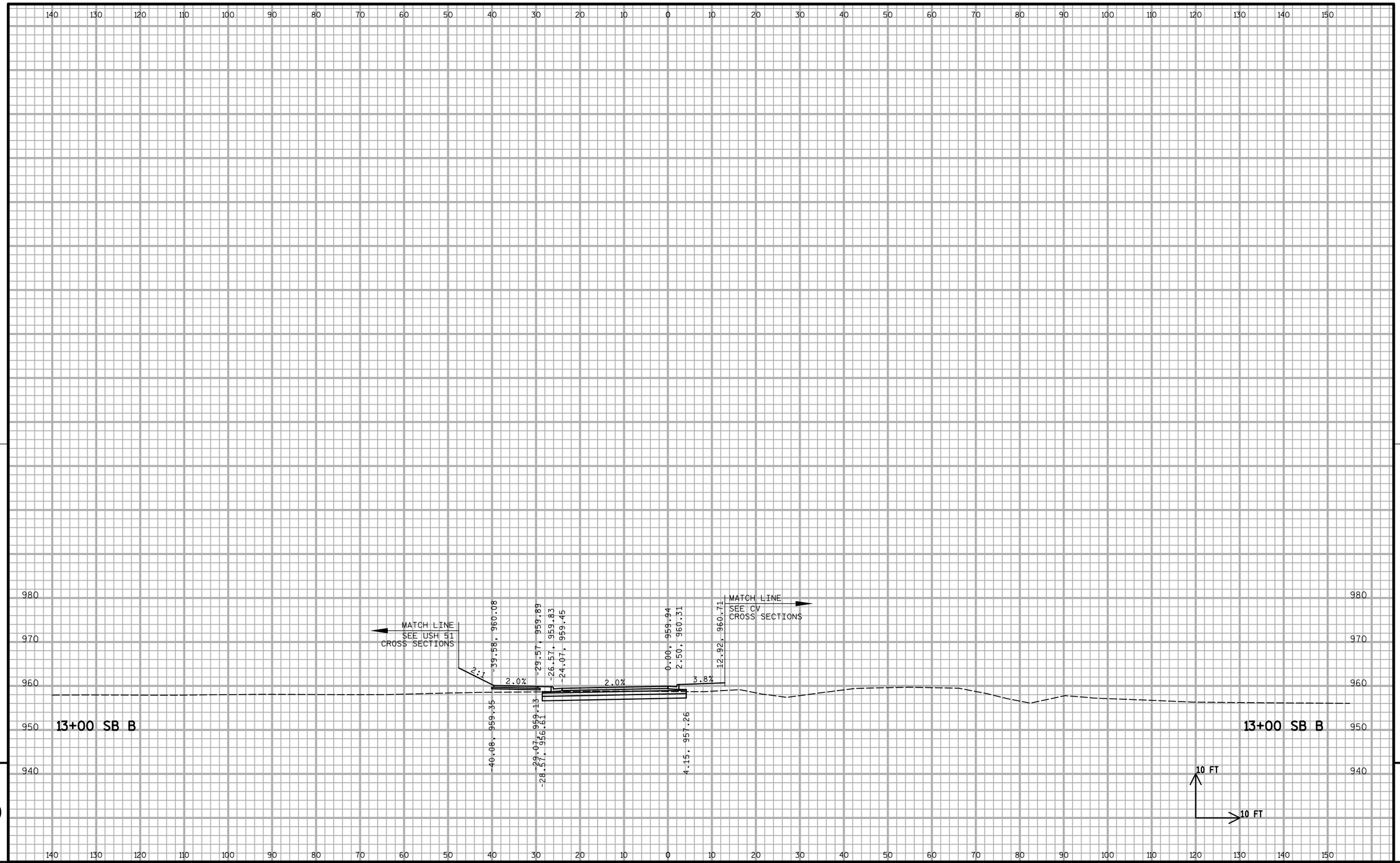
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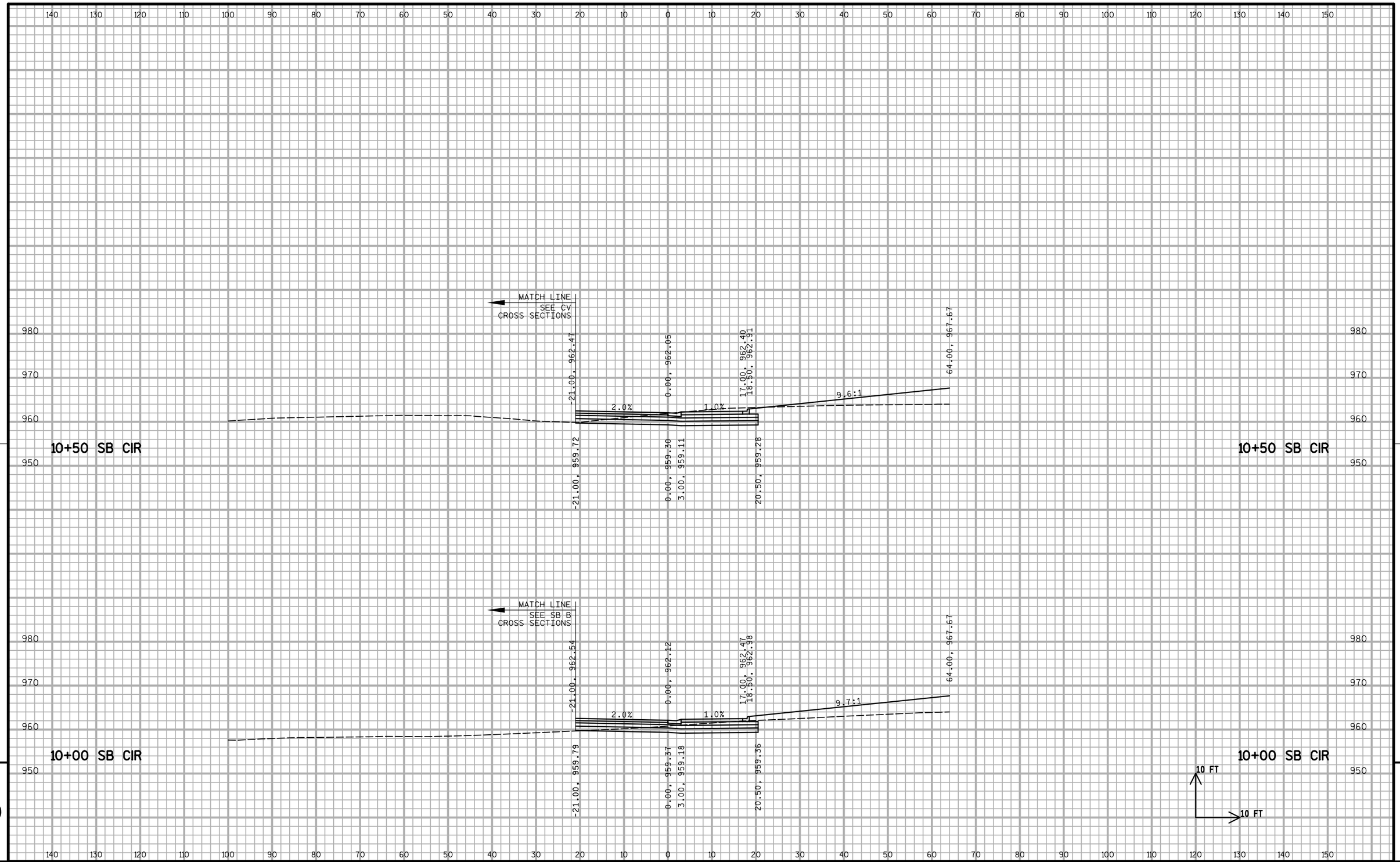
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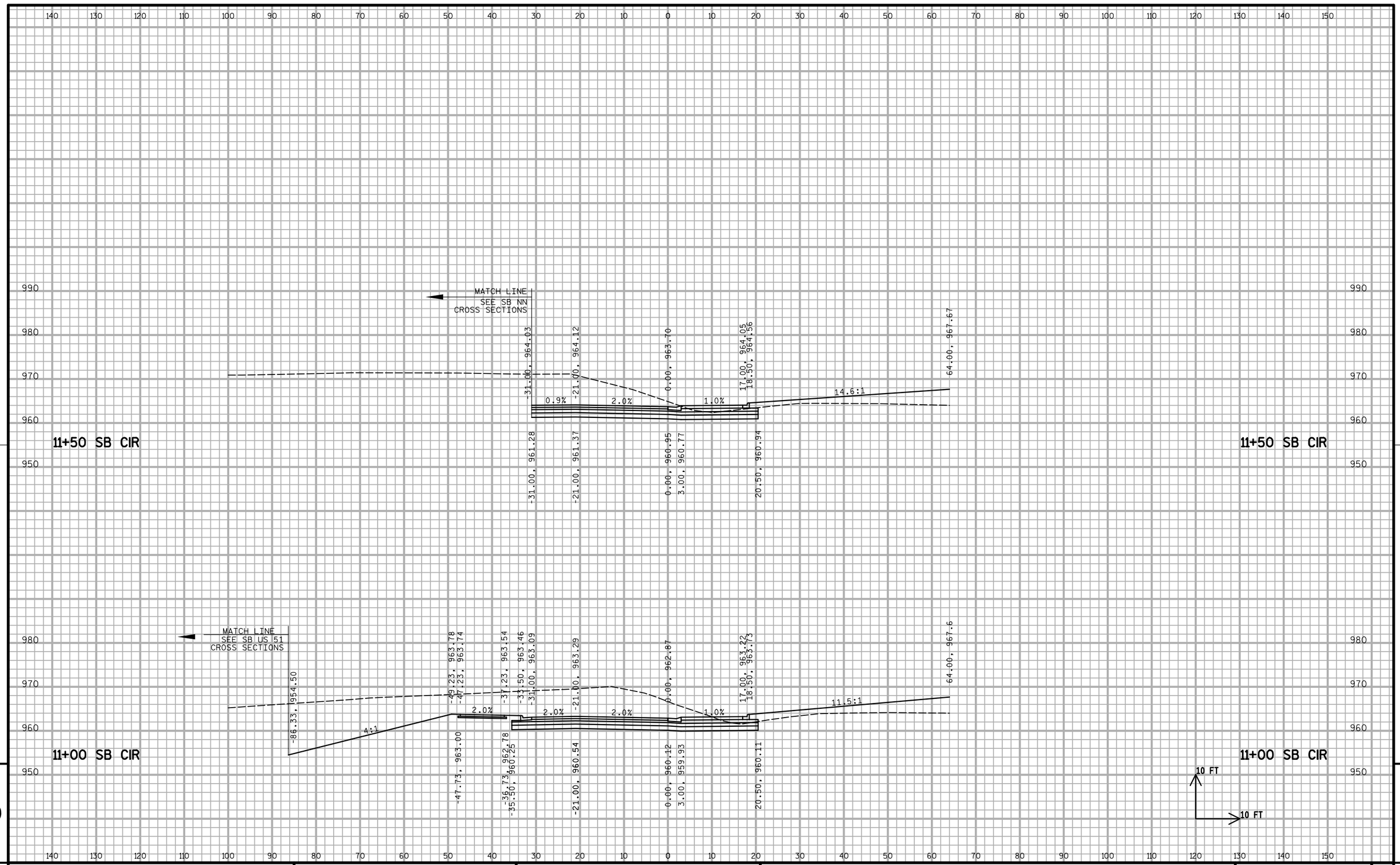
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PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS - SB B	SHEET 738	E



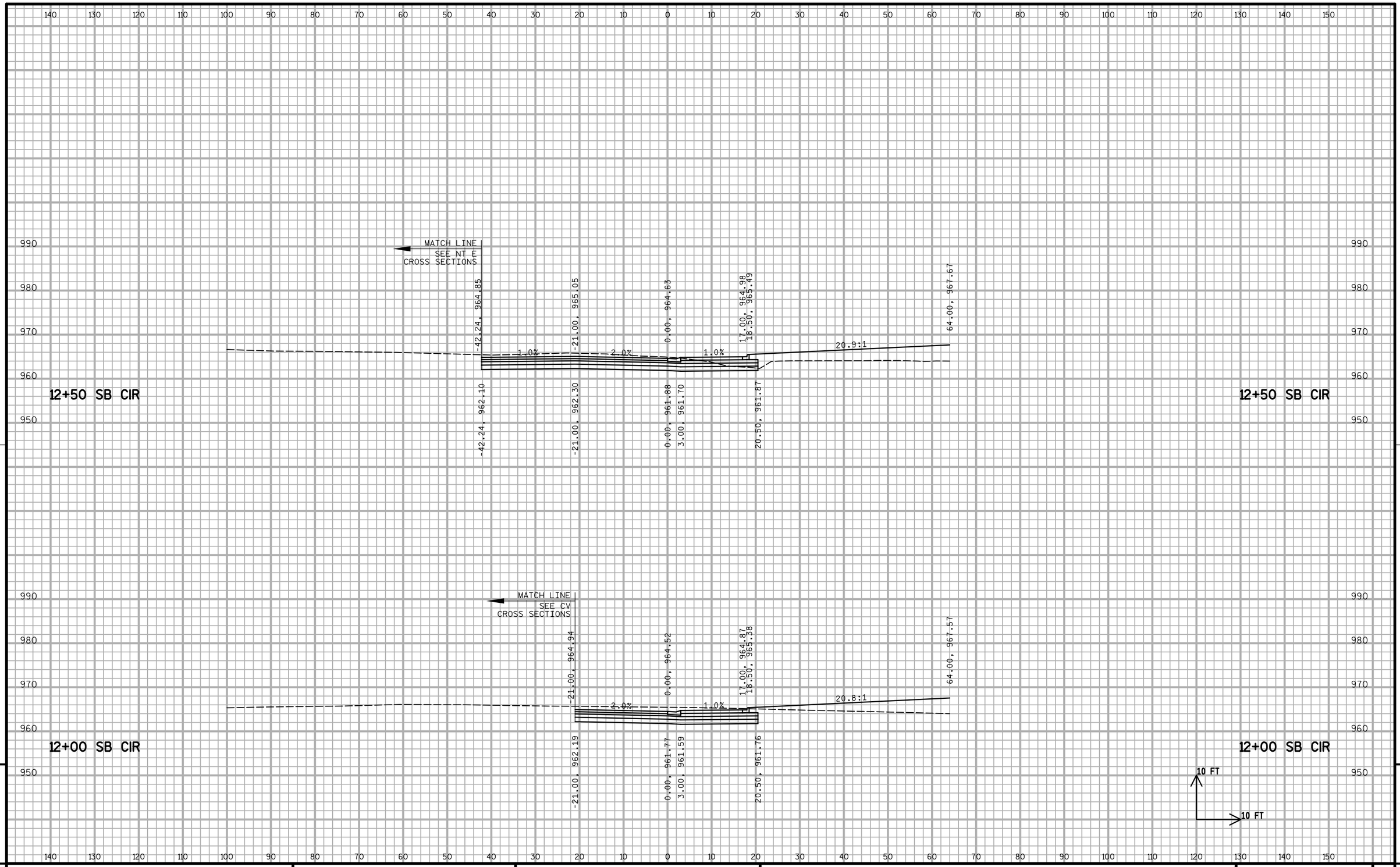
PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS - SB CIR	SHEET 739	E

FILE NAME : S:\MAD\1000--1099\1089\234\Micros\PLAN\0272\xs_sb rab.DGN PLOT DATE : 4/11/2013 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21



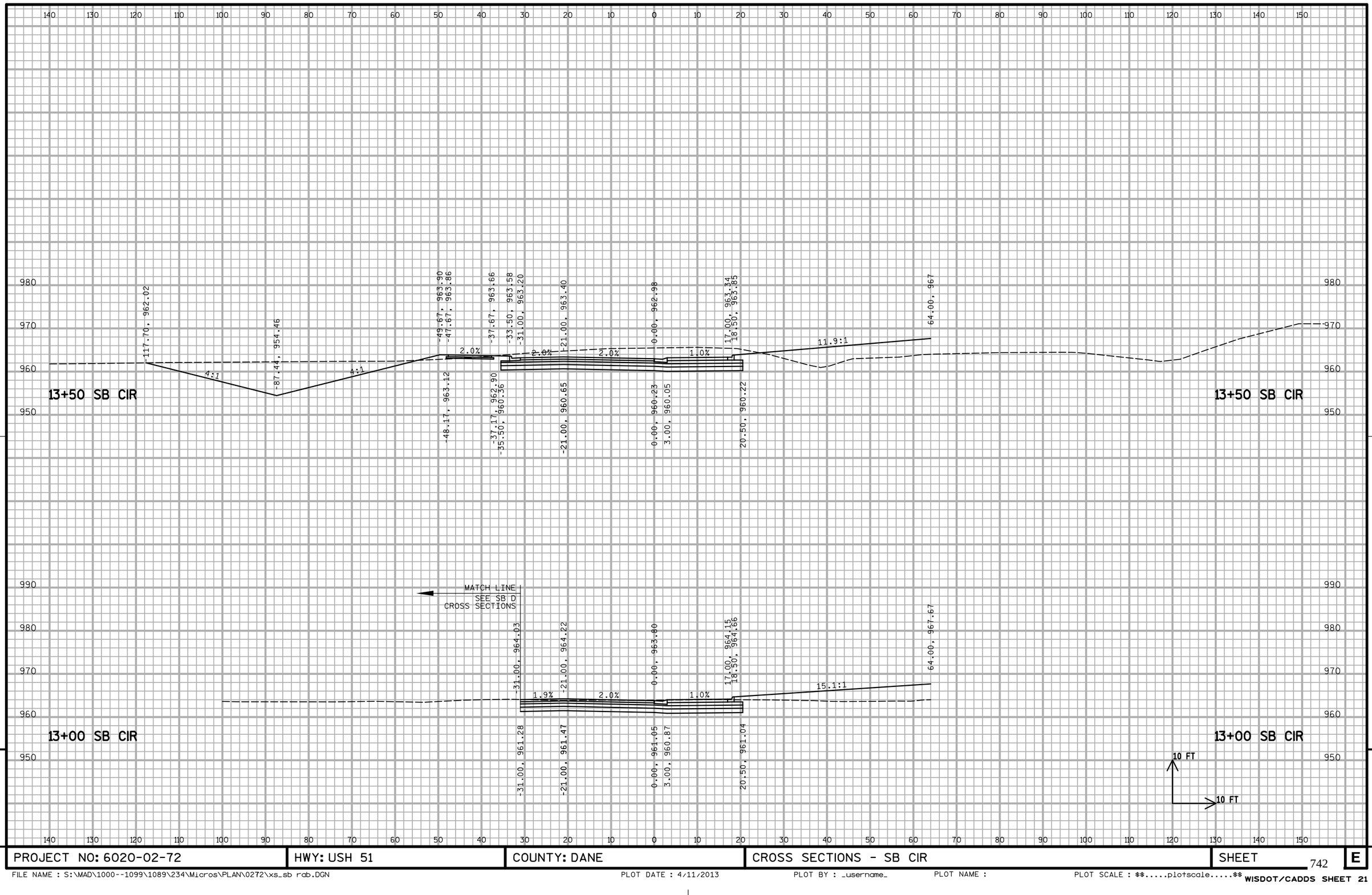
PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS - SB CIR	SHEET 740	E

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PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS - SB CIR	SHEET 741 E

FILE NAME : S:\MAD\1000--1099\1089\234\Micros\PLAN\0272\xs_sb rab.DGN PLOT DATE : 4/11/2013 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21



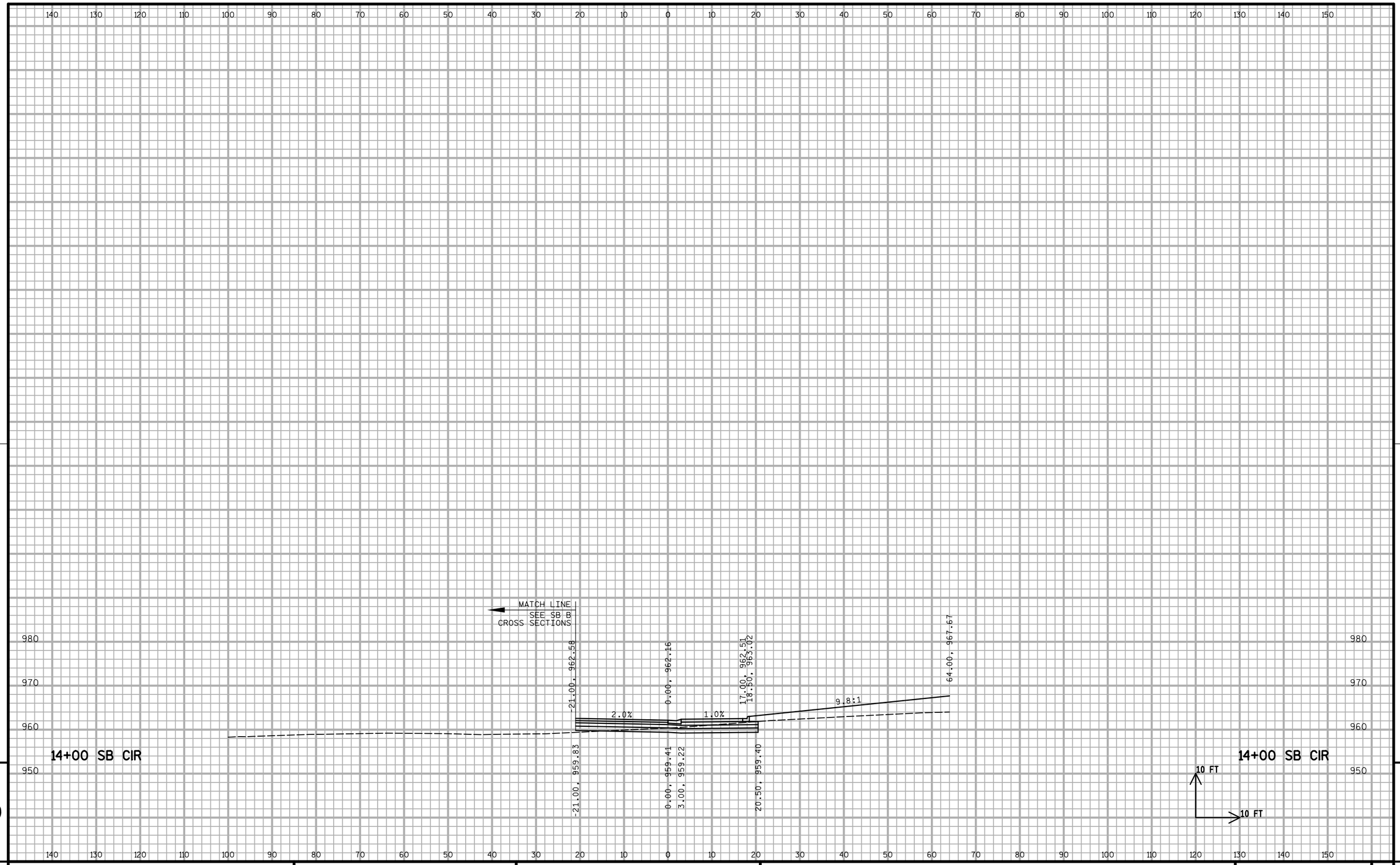
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PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS - SB CIR	SHEET 742	E

FILE NAME : S:\MAD\1000--1099\1089\234\Micros\PLAN\0272\xs_sb rab.DGN PLOT DATE : 4/11/2013 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 21

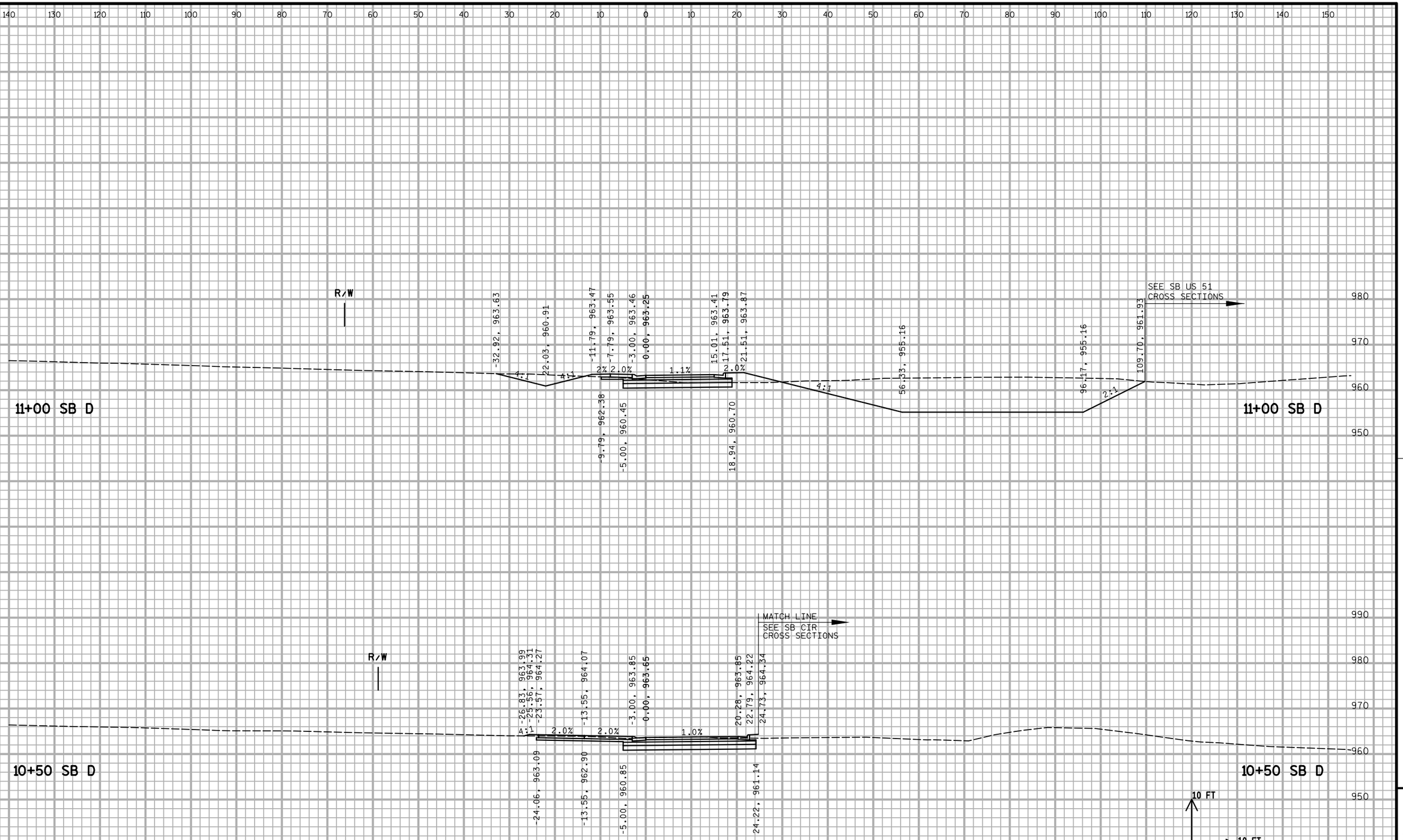


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PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS - SB CIR	SHEET 743	E

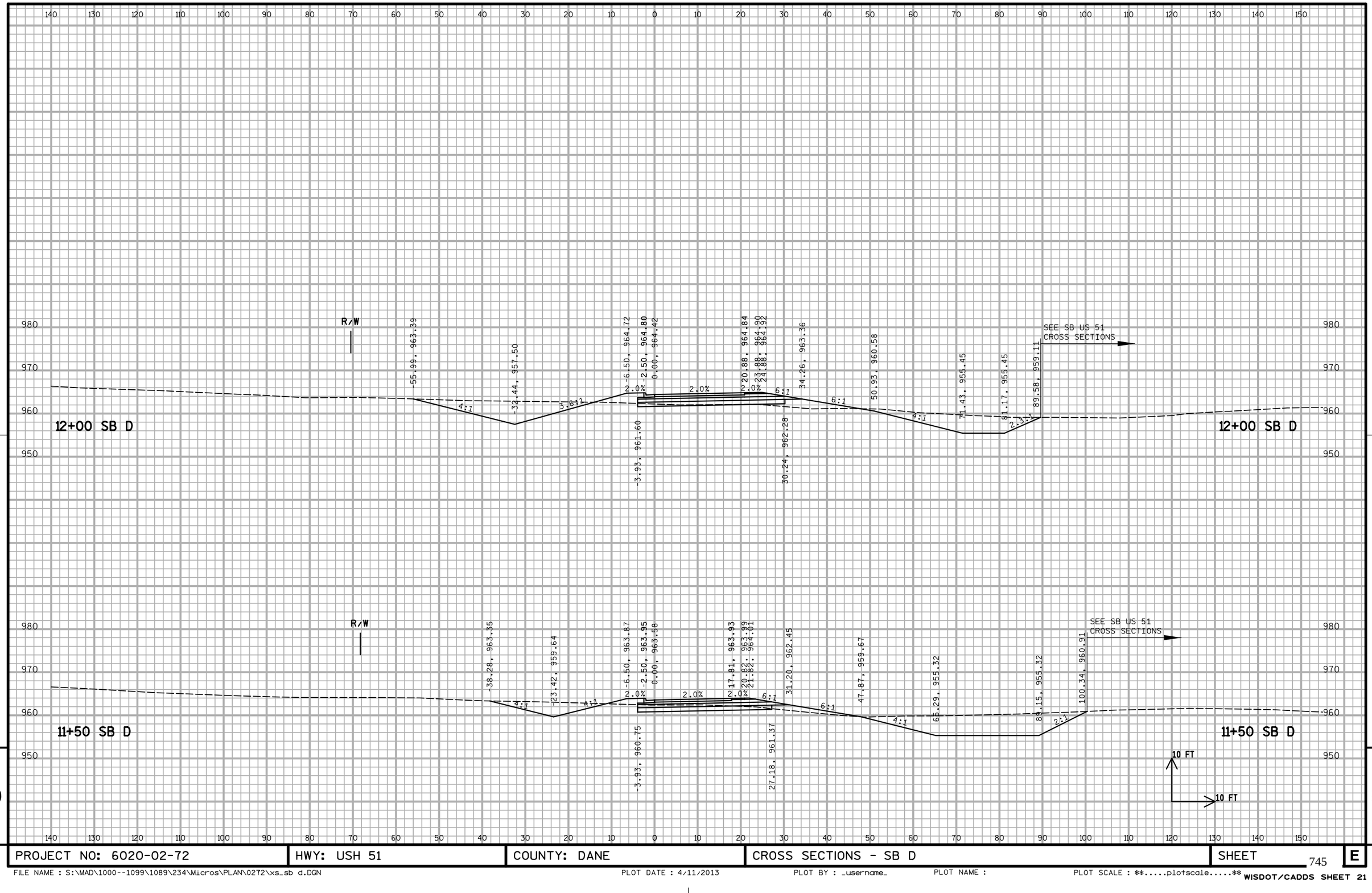
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PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS - SB D	SHEET 744	E

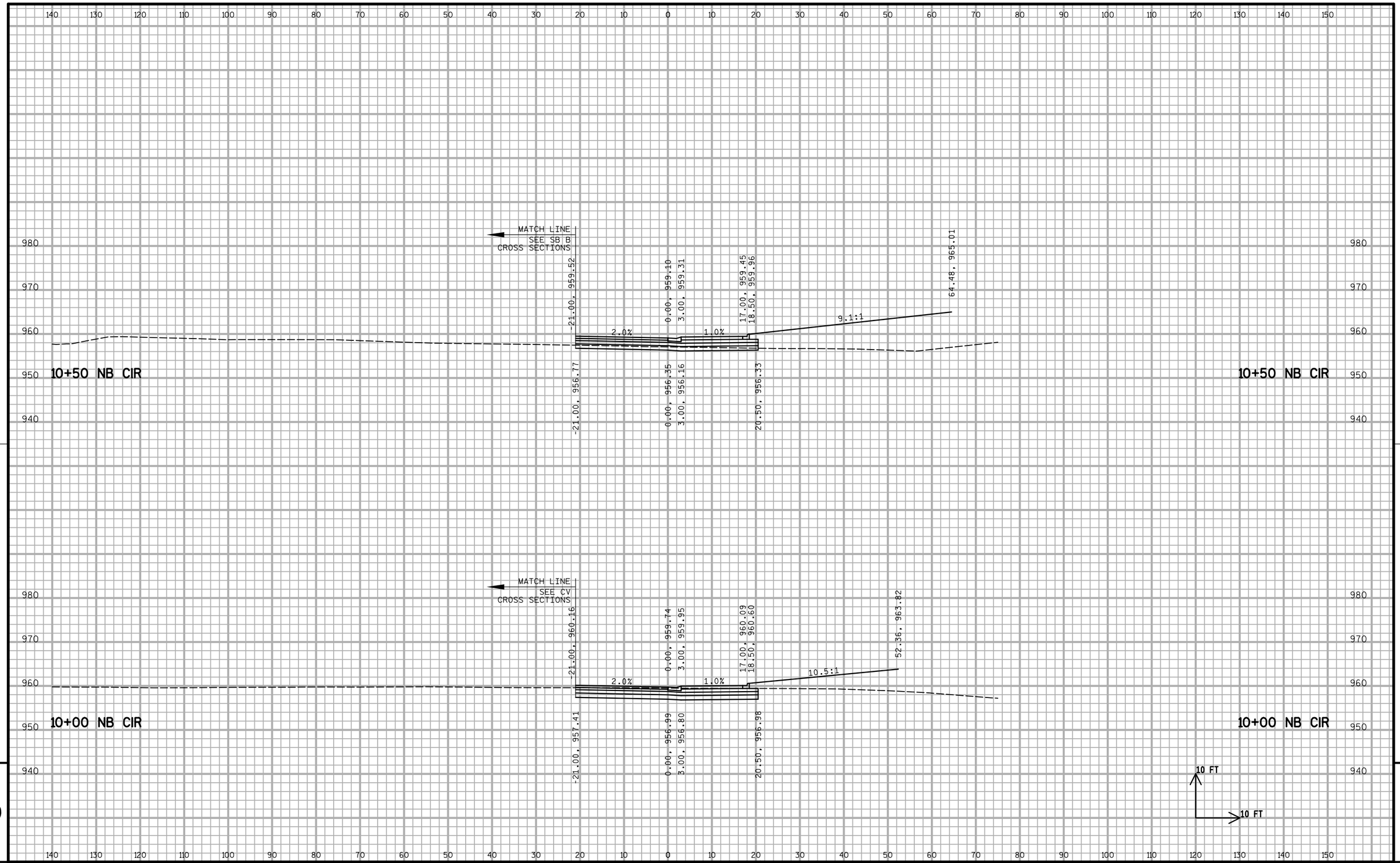


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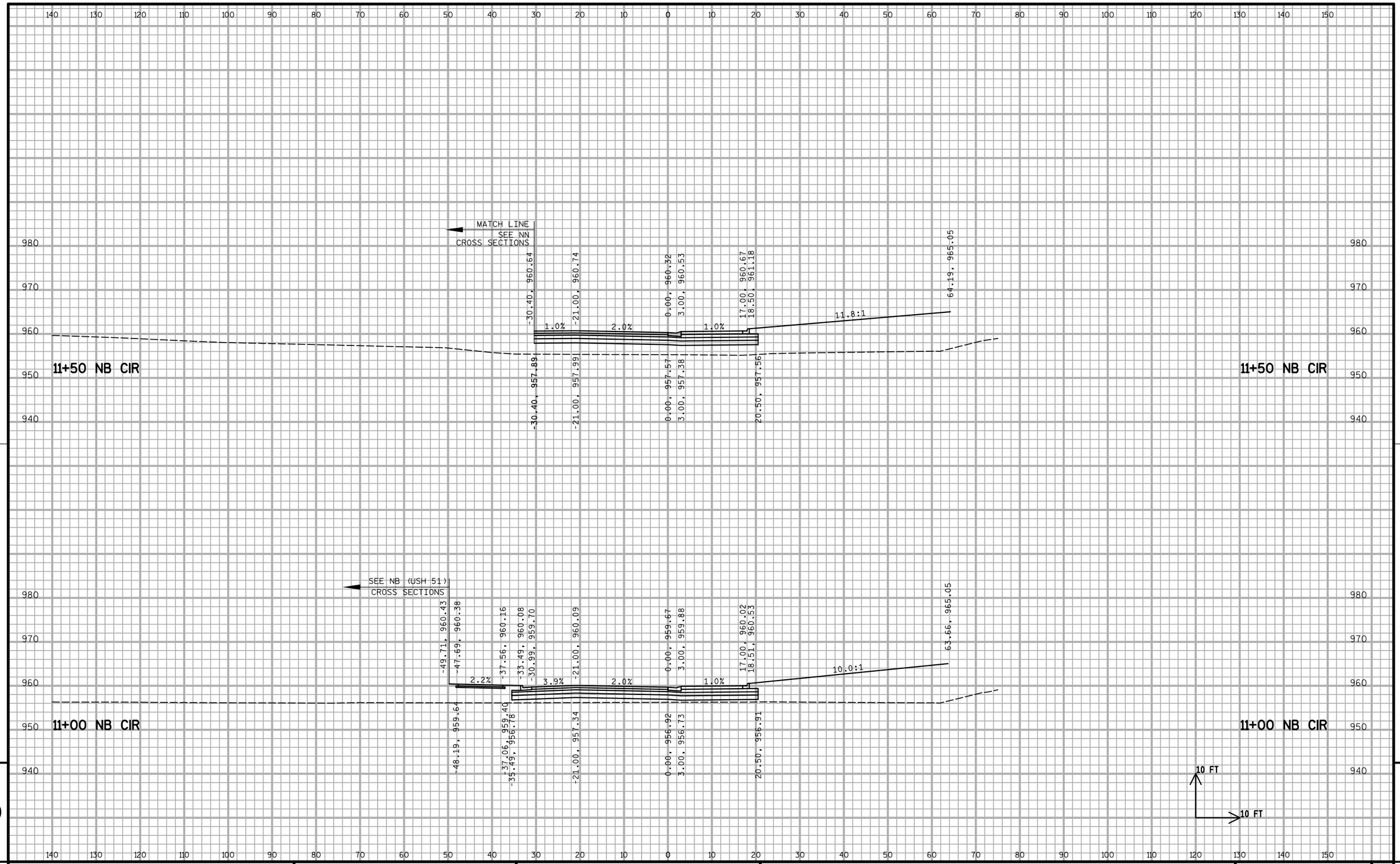
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FILE NAME : S:\MAD\1000--1099\1089\234\Micros\PLAN\0272\xs_sb d.DGN PLOT DATE : 4/11/2013 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21



PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS - NB CIR	SHEET 746	E

FILE NAME : S:\MAD\1000--1099\1089\234\Micros\PLAN\0272\xs_nb rab.DGN PLOT DATE : 4/11/2013 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21



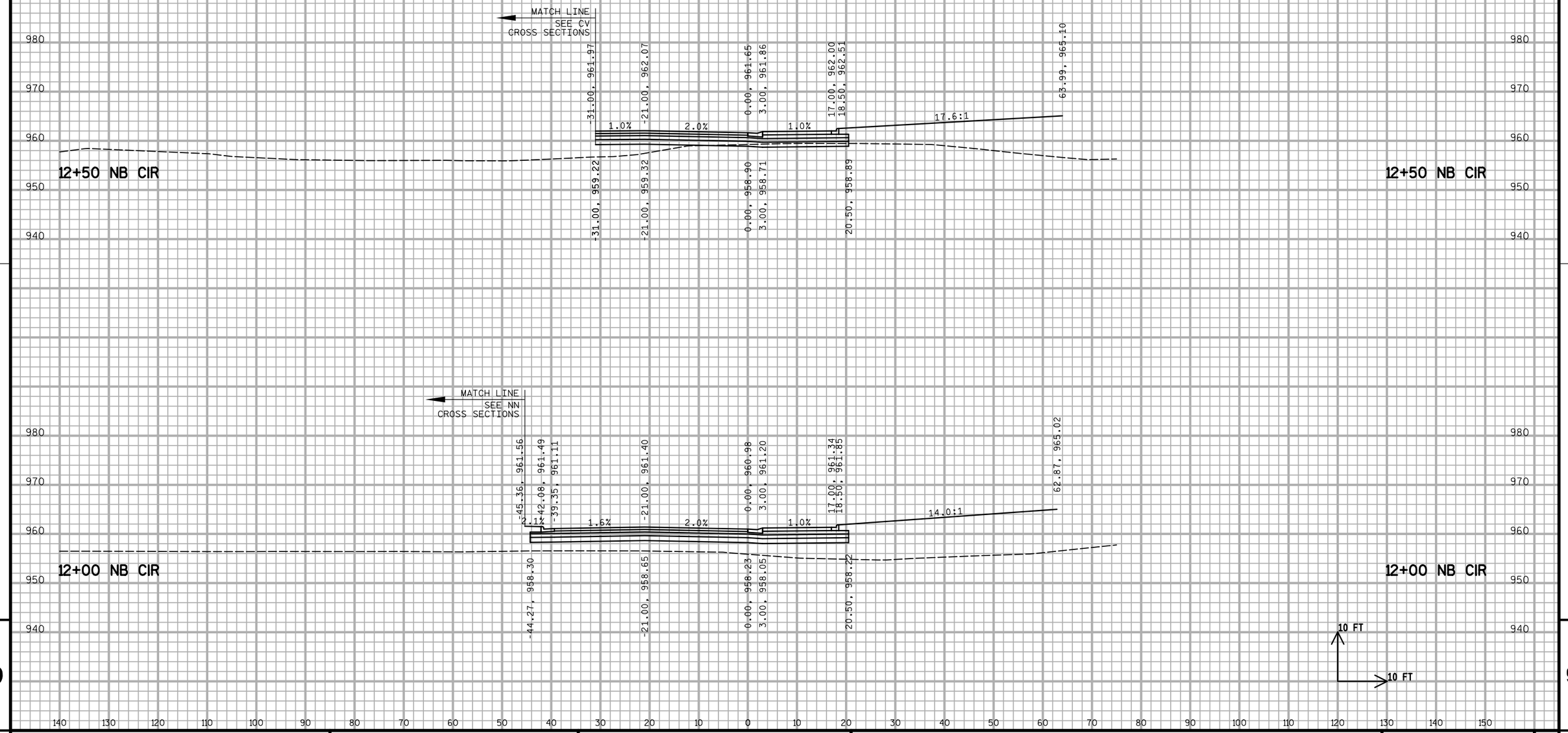
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PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS - NB CIR	SHEET 747	E

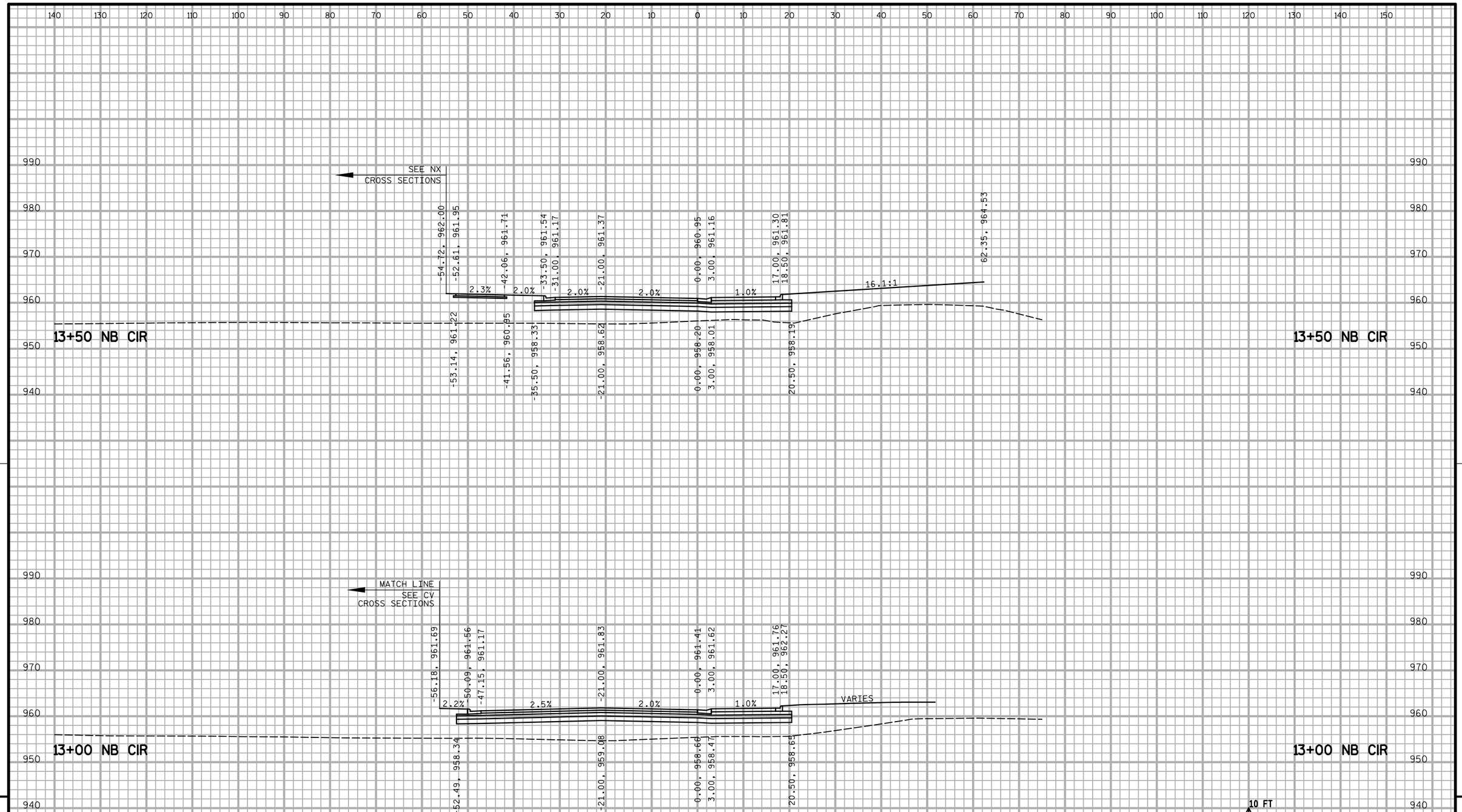
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WISDOT/CADDS SHEET 21

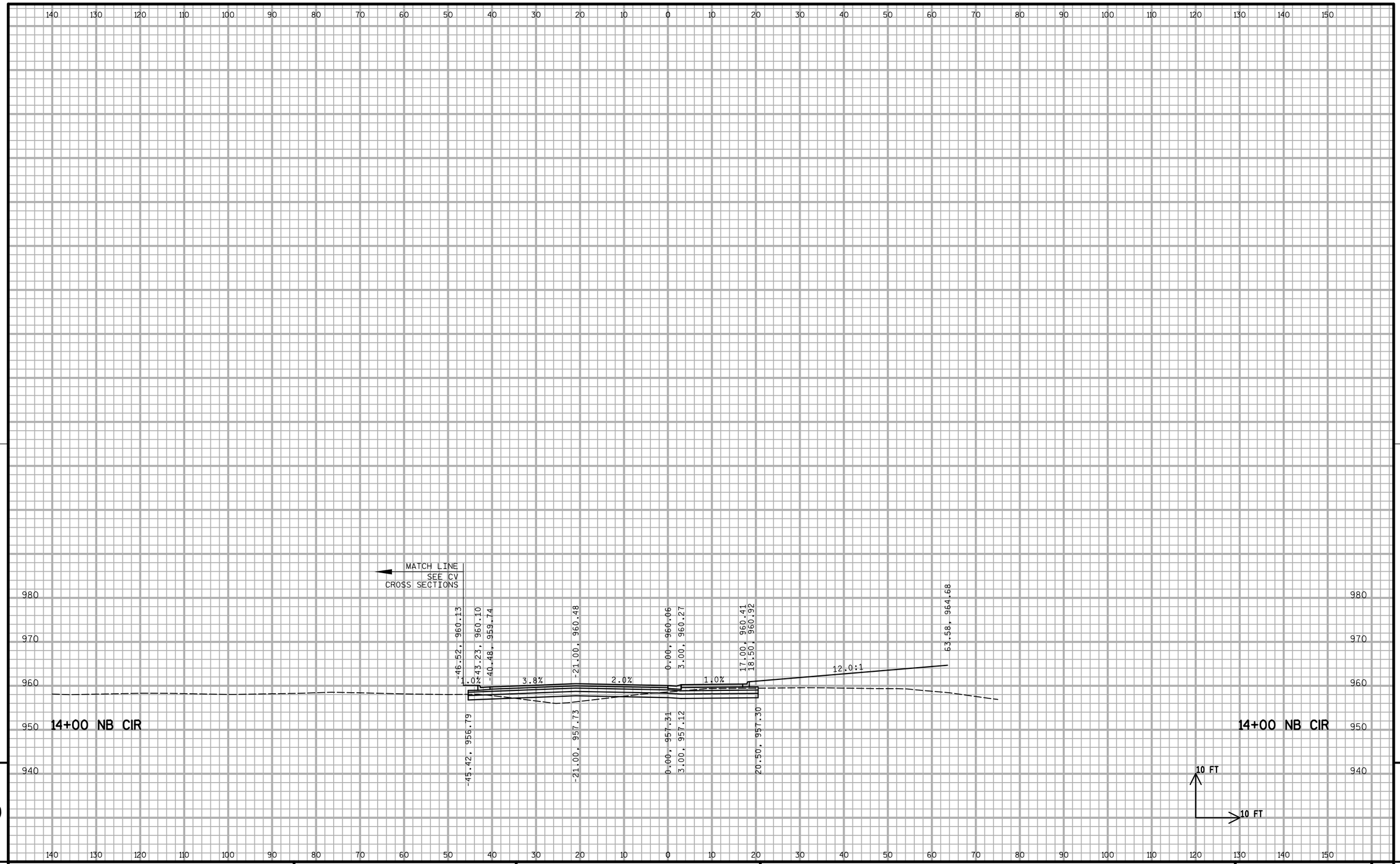


PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS - NB CIR	SHEET 748	E

FILE NAME : S:\MAD\1000--1099\1089\234\Micros\PLAN\0272\xs_nb rab.DGN PLOT DATE : 4/11/2013 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21



PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS - NB CIR	SHEET 749	E

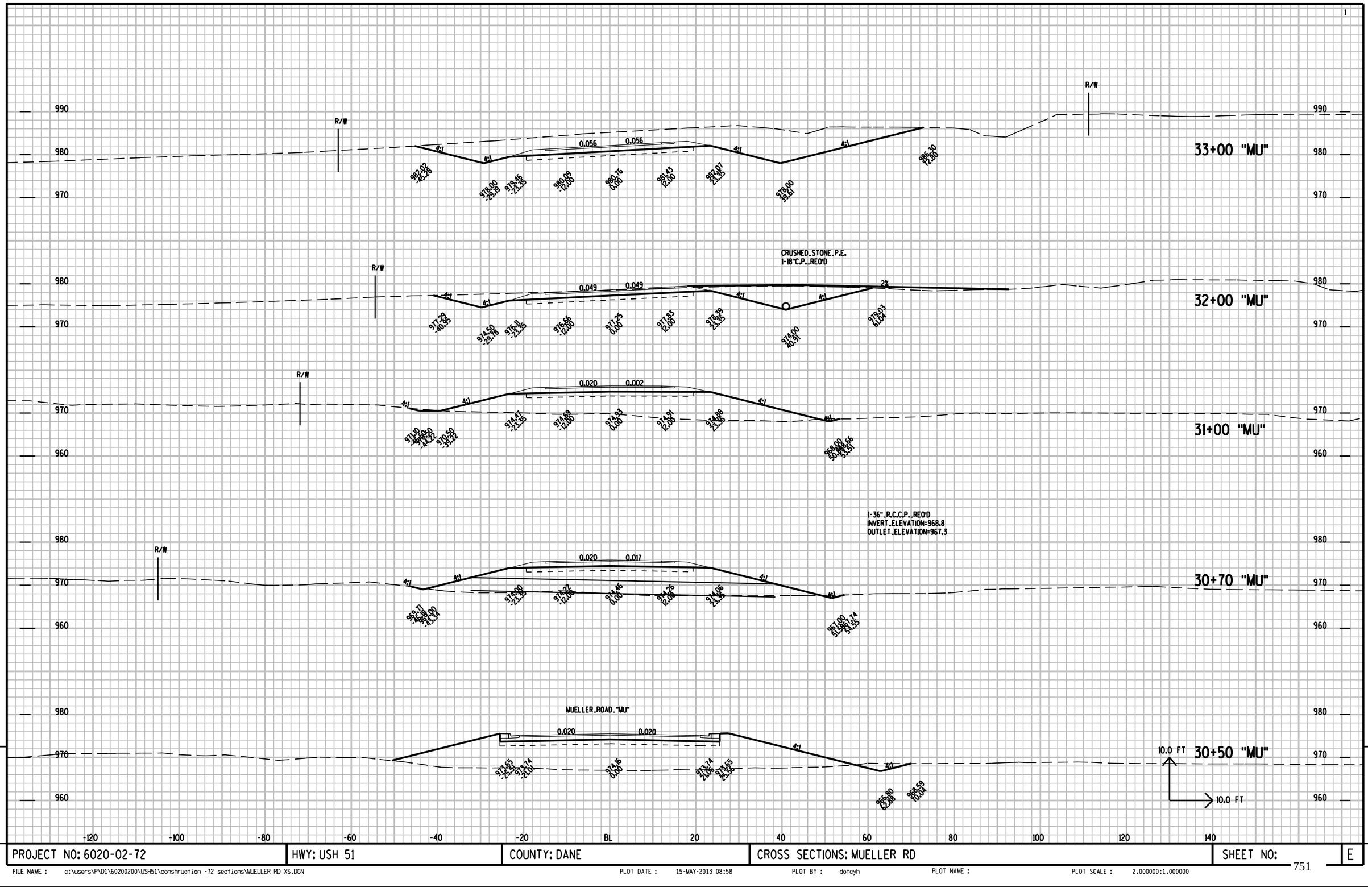


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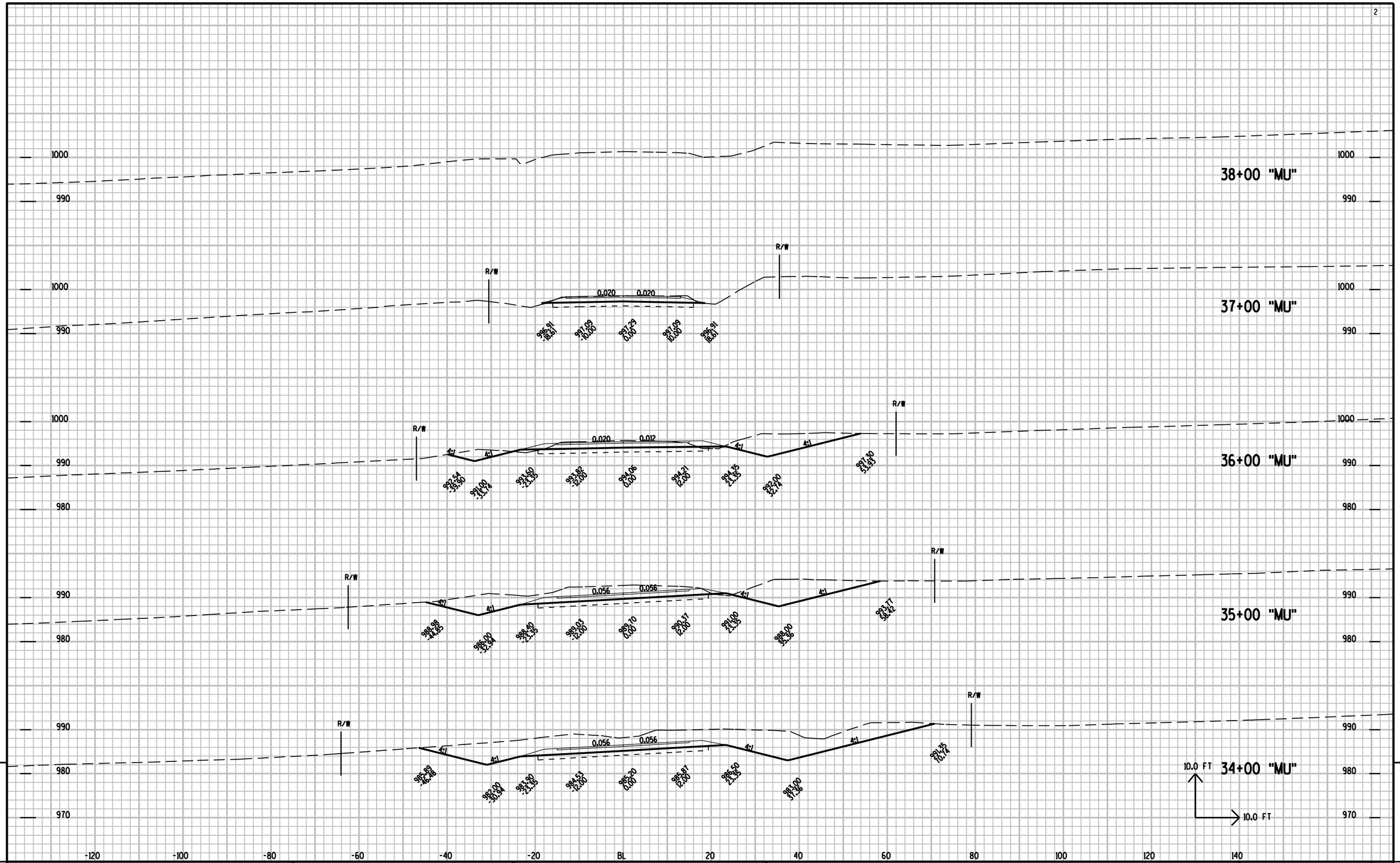
PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS - NB CIR	SHEET 750	E

FILE NAME : S:\MAD\1000--1099\1089\234\Micros\PLAN\0272\xs_nb rab.DGN PLOT DATE : 4/11/2013 PLOT BY : _username_ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 21



PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: MUELLER RD	SHEET NO: E

FILE NAME : c:\users\P\D1\60200200\USH51\construction -72 sections\MUELLER RD XS.DGN PLOT DATE : 15-MAY-2013 08:58 PLOT BY : dotcyh PLOT NAME : PLOT SCALE : 2.000000:1.000000

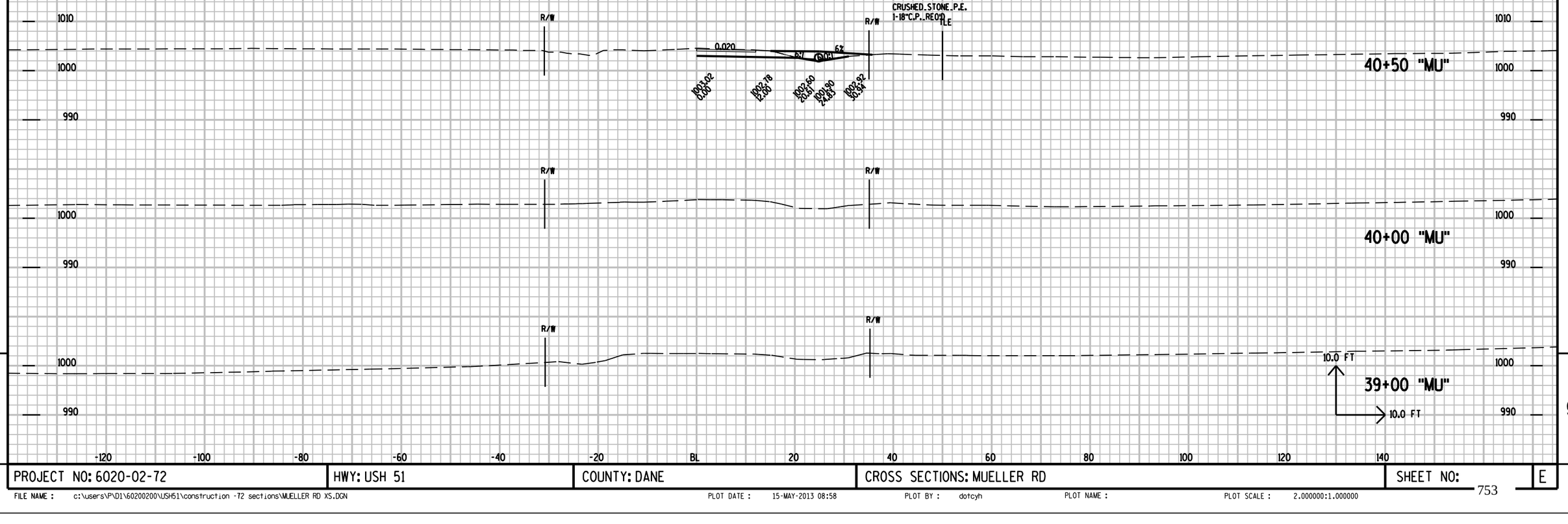


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PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: MUELLER RD	SHEET NO:	E

FILE NAME : c:\users\P\D1\60200200\USH51\construction -72 sections\MUELLER RD XS.DGN PLOT DATE : 15-MAY-2013 08:58 PLOT BY : dotcyh PLOT NAME : PLOT SCALE : 2.000000:1.000000



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PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: MUELLER RD	SHEET NO:	E

FILE NAME : c:\users\P\D1\60200200\USH51\construction -T2 sections\MUELLER RD XS.DGN PLOT DATE : 15-MAY-2013 08:58 PLOT BY : dotcyh PLOT NAME : PLOT SCALE : 2.000000:1.000000

CRUSHED STONE P.E.
1-18"C.P. REQ'D

30+32 GI

30+10 GI

30+00 GI

CRUSHED STONE P.E.

29+55 GI

29+00 GI

10.0 FT
10.0 FT

970
960
950

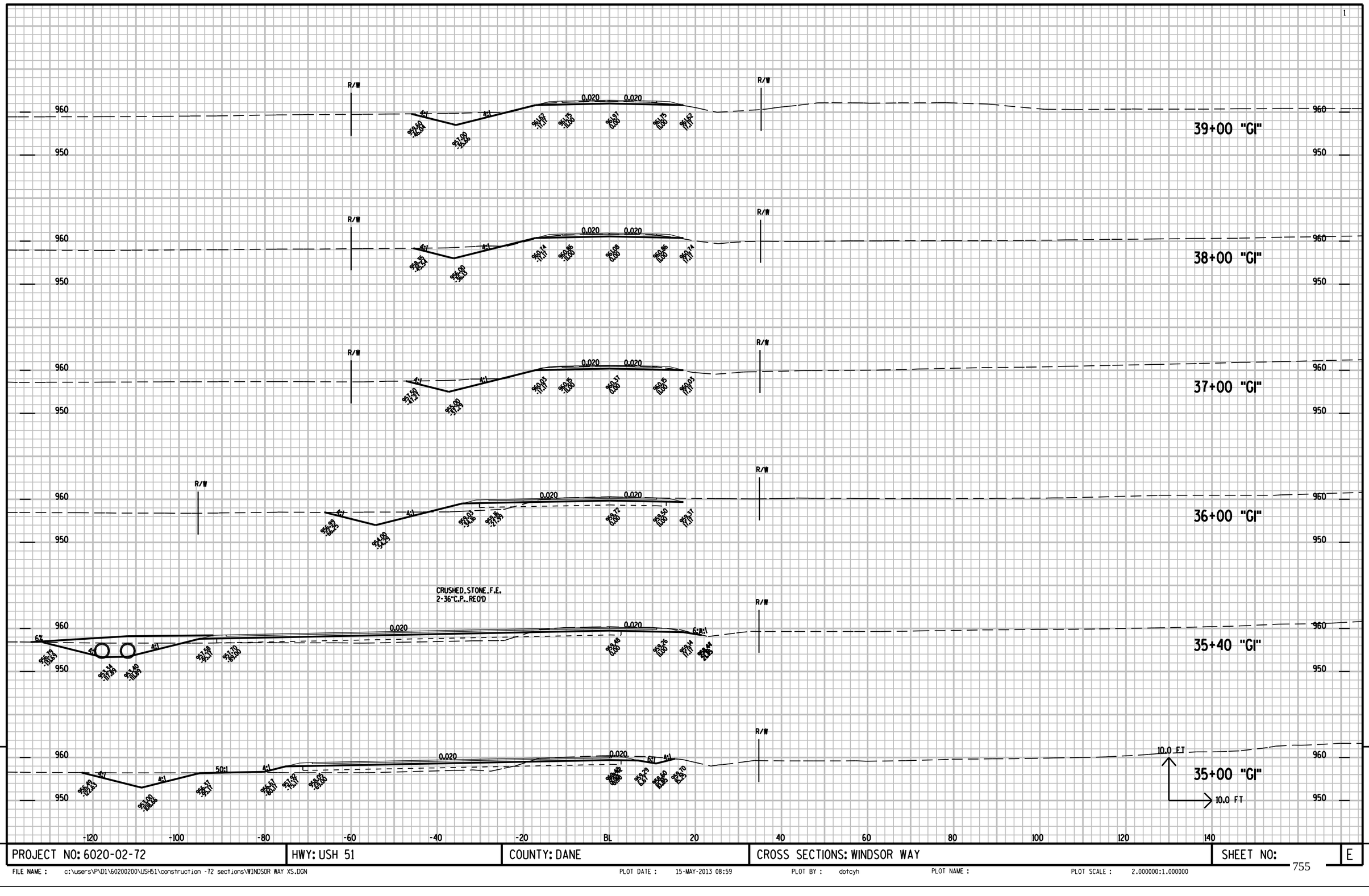
R/W
6%
4:1
6:1
0.020
5.5%

-140 -120 -100 -80 -60 -40 -20 BL 20 40 60 80 100 120 140

9

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: GRINDE RD "GI"	SHEET NO:	E

FILE NAME : c:\users\P\D1\60200200\USH51\PSE\-72 90%\GRINDE XS.DGN PLOT DATE : 20-FEB-2013 15:46 PLOT BY : dotcyh PLOT NAME : PLOT SCALE : 2.000000:1.000000

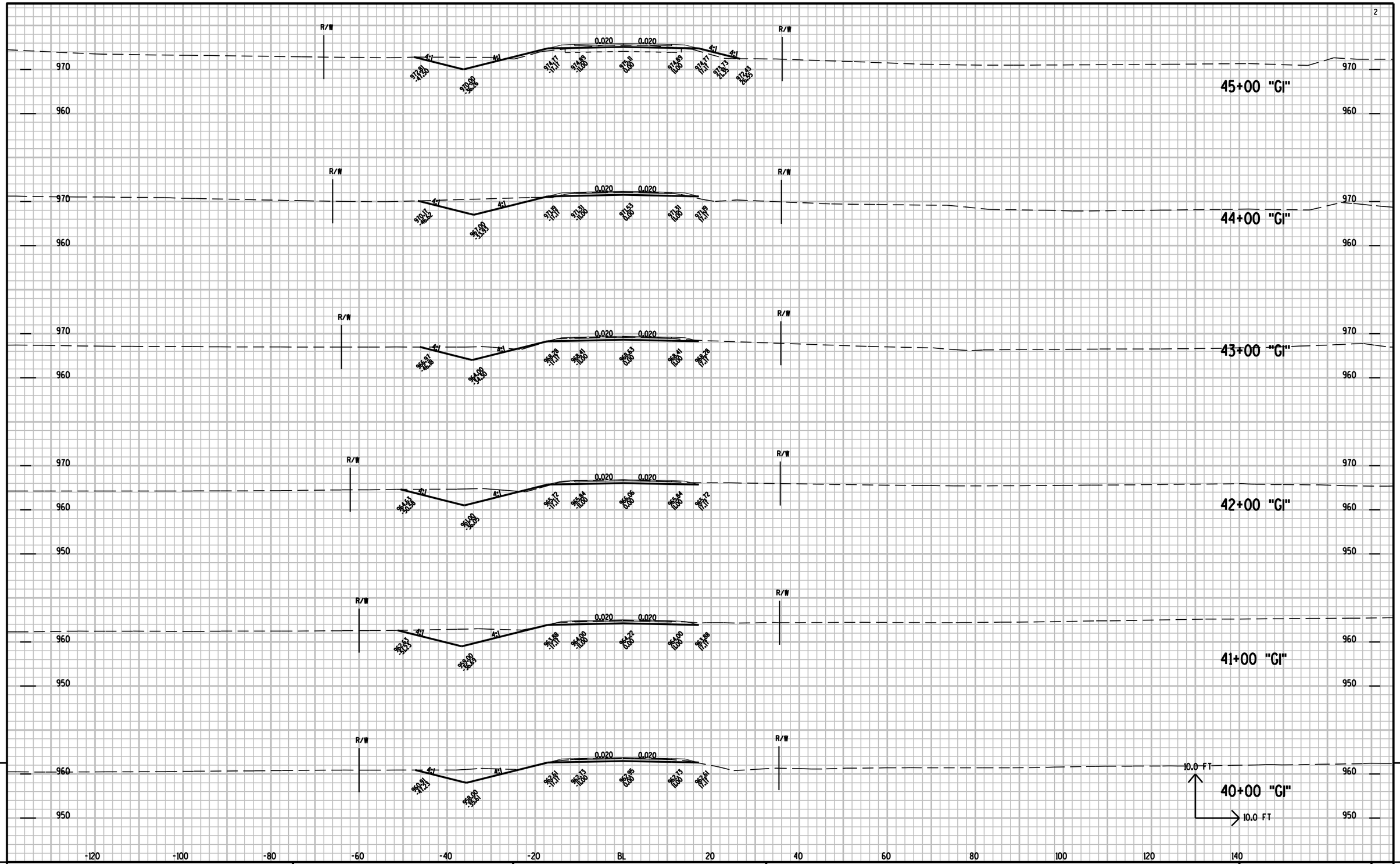


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PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: WINDSOR WAY	SHEET NO:	E

FILE NAME : c:\users\P\D1\60200200\USH51\construction -T2 sections\WINDSOR WAY XS.DGN PLOT DATE : 15-MAY-2013 08:59 PLOT BY : dotcyh PLOT NAME : PLOT SCALE : 2.000000:1.000000



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PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: WINDSOR WAY	SHEET NO:	E

FILE NAME : c:\users\PD1\60200200\USH51\construction -72 sections\WINDSOR WAY XS.DGN PLOT DATE : 15-MAY-2013 09:00 PLOT BY : dotcyh PLOT NAME : PLOT SCALE : 2.000000:1.000000

1-48" R.C.C.P. REQ'D
STA. 47+50.36.0 RT
INVERT ELEVATION=977.6
SKEW XX DEGREES RHF

47+50 "CL"

1-48" R.C.C.P. REQ'D
STA. 47+00.38.0 LT
OUTLET ELEVATION=976.1
SKEW 33 DEGREES RHF

47+00 "CL"

CRUSHED STONE F.E.

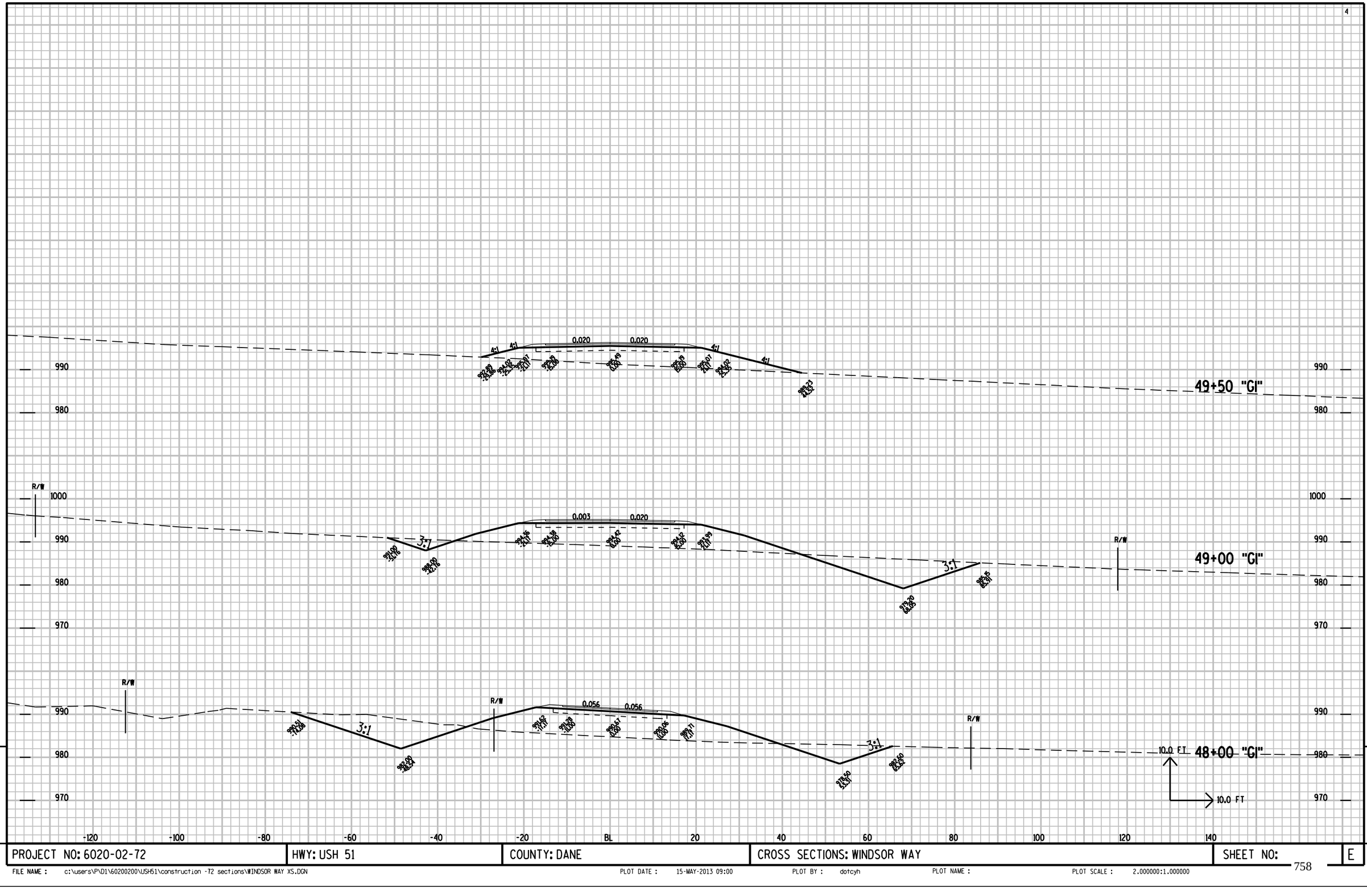
46+75 "CL"

46+00 "CL"

10.0 FT
10.0 FT

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: WINDSOR WAY	SHEET NO:	E

FILE NAME : c:\users\PD1\60200200\USH51\construction -T2 sections\WINDSOR WAY XS.DGN PLOT DATE : 15-MAY-2013 09:00 PLOT BY : dotcyh PLOT NAME : PLOT SCALE : 2.000000:1.000000

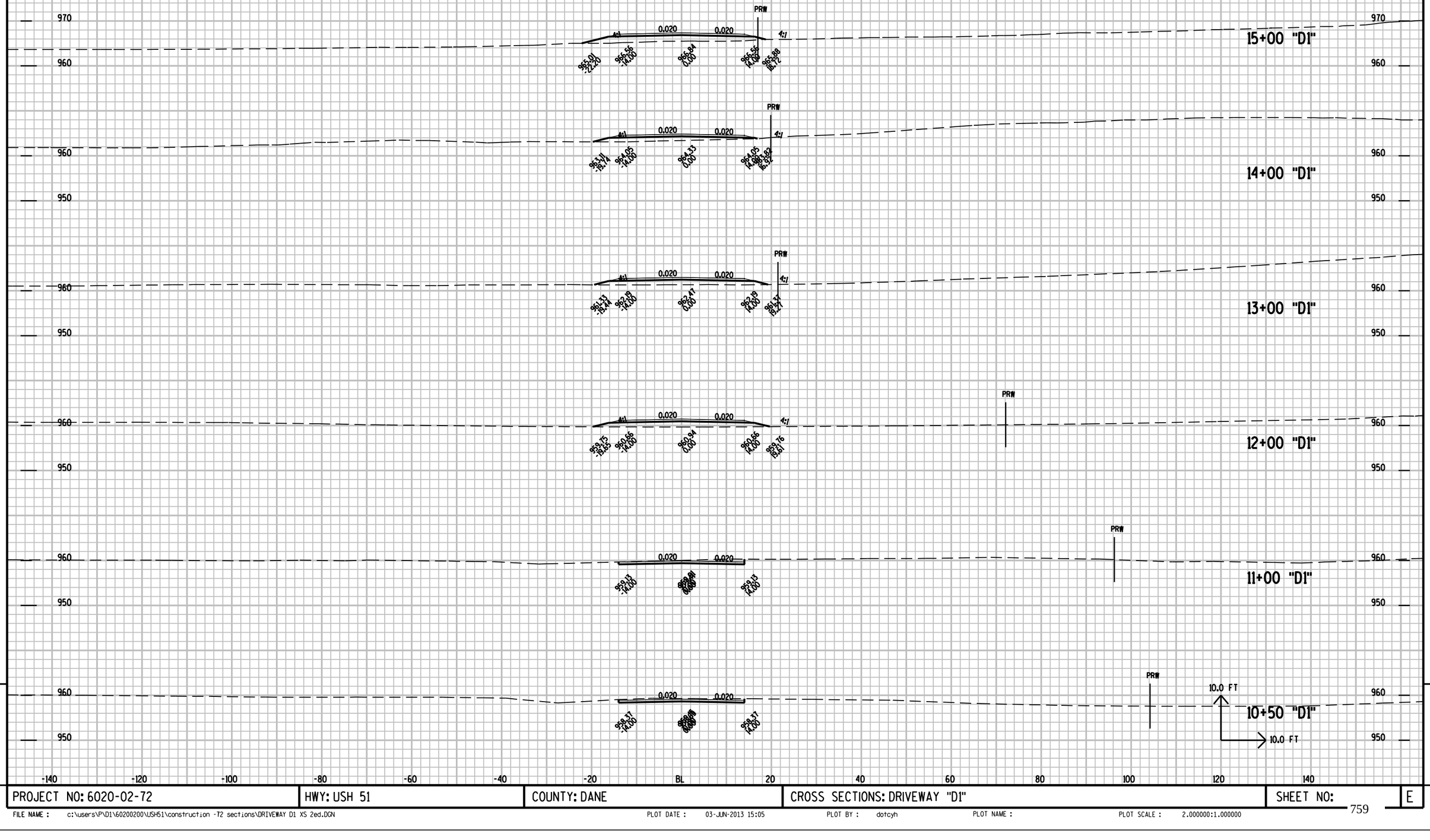


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PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: WINDSOR WAY	SHEET NO:	E

FILE NAME : c:\users\P\D1\60200200\USH51\construction -T2 sections\WINDSOR WAY XS.DGN PLOT DATE : 15-MAY-2013 09:00 PLOT BY : dotcyh PLOT NAME : PLOT SCALE : 2.000000:1.000000



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PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: DRIVEWAY "D1"	SHEET NO:	E

FILE NAME : c:\users\P\D1\60200200\USH51\construction -T2 sections\DRIVEWAY D1 XS 2ed.DGN PLOT DATE : 03-JUN-2013 15:05 PLOT BY : dotcyh PLOT NAME : PLOT SCALE : 2.000000:1.000000

MATCH LINE
SEE CTH V

19+85 "D1"

0.020 0.020 4:1 4:1

979.29 -28.11 | 982.31 -14.00 | 985.53 0.00 | 982.31 14.00 | 978.12 32.19

19+00 "D1"

PRW

978.05 -22.35 | 979.64 -14.00 | 979.92 0.00 | 979.64 14.00 | 975.91 26.52

18+00 "D1"

PRW

971.71 -31.59 | 976.11 -14.00 | 976.39 0.00 | 976.11 14.00 | 974.08 24.40

17+00 "D1"

PRW

968.07 -30.22 | 972.63 -14.00 | 972.91 0.00 | 972.63 14.00 | 971.09 22.15

16+00 "D1"

PRW

10.0 FT
10.0 FT

961.85 -24.18 | 968.44 -14.00 | 968.72 0.00 | 968.44 14.00 | 965.23 16.07

990 980 970 960

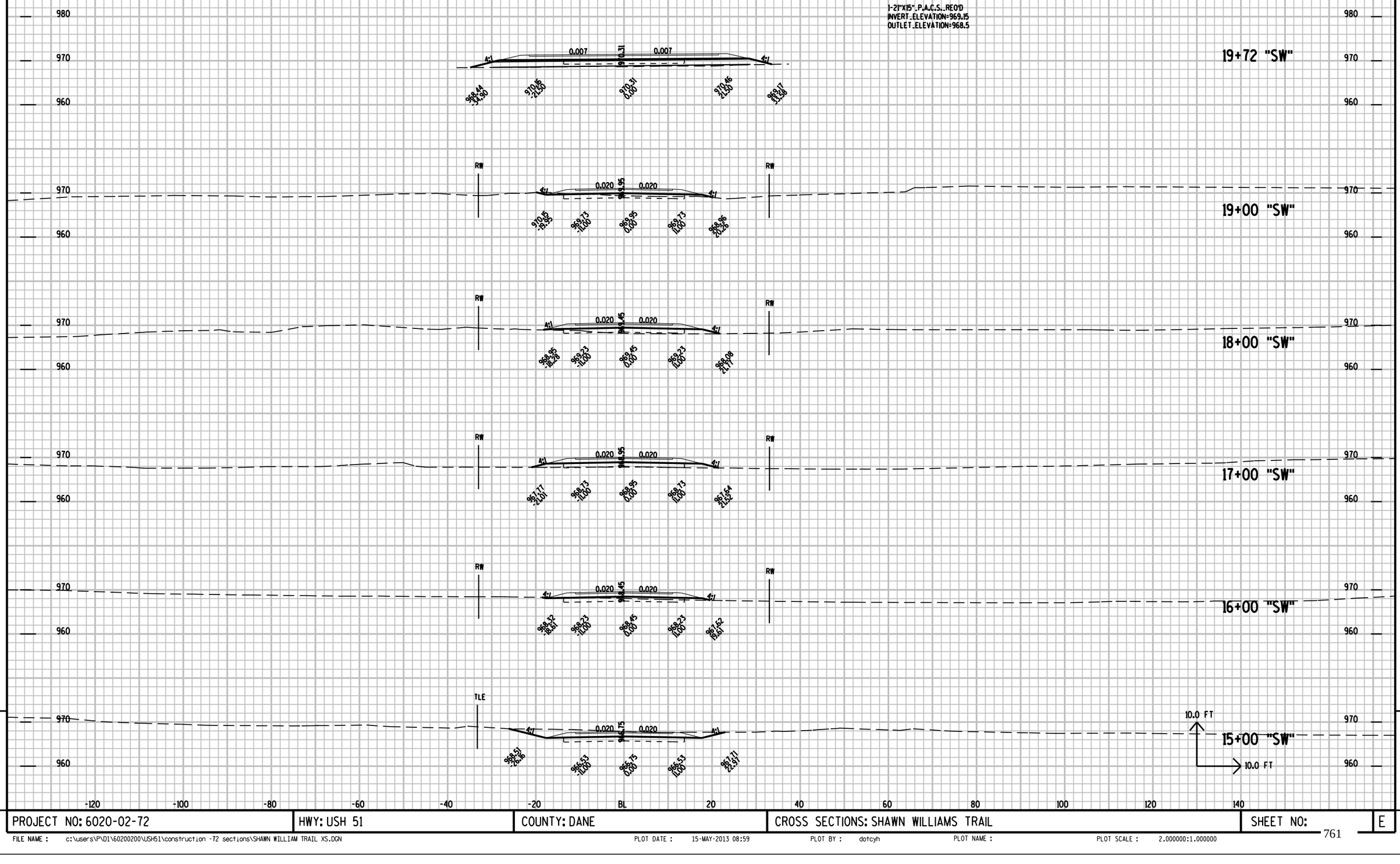
-140 -120 -100 -80 -60 -40 -20 BL 20 40 60 80 100 120 140

9

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: DRIVEWAY "D1"	SHEET NO:	E

FILE NAME : c:\users\PD1\60200200\USH51\construction -T2 sections\DRIVEWAY D1 XS 2ed.DGN PLOT DATE : 03-JUN-2013 15:05 PLOT BY : dotcyh PLOT NAME : PLOT SCALE : 2.000000:1.000000

1-21"X15"_P.A.C.S._REQ'D
INVERT_ELEVATION=969.15
OUTLET_ELEVATION=968.5



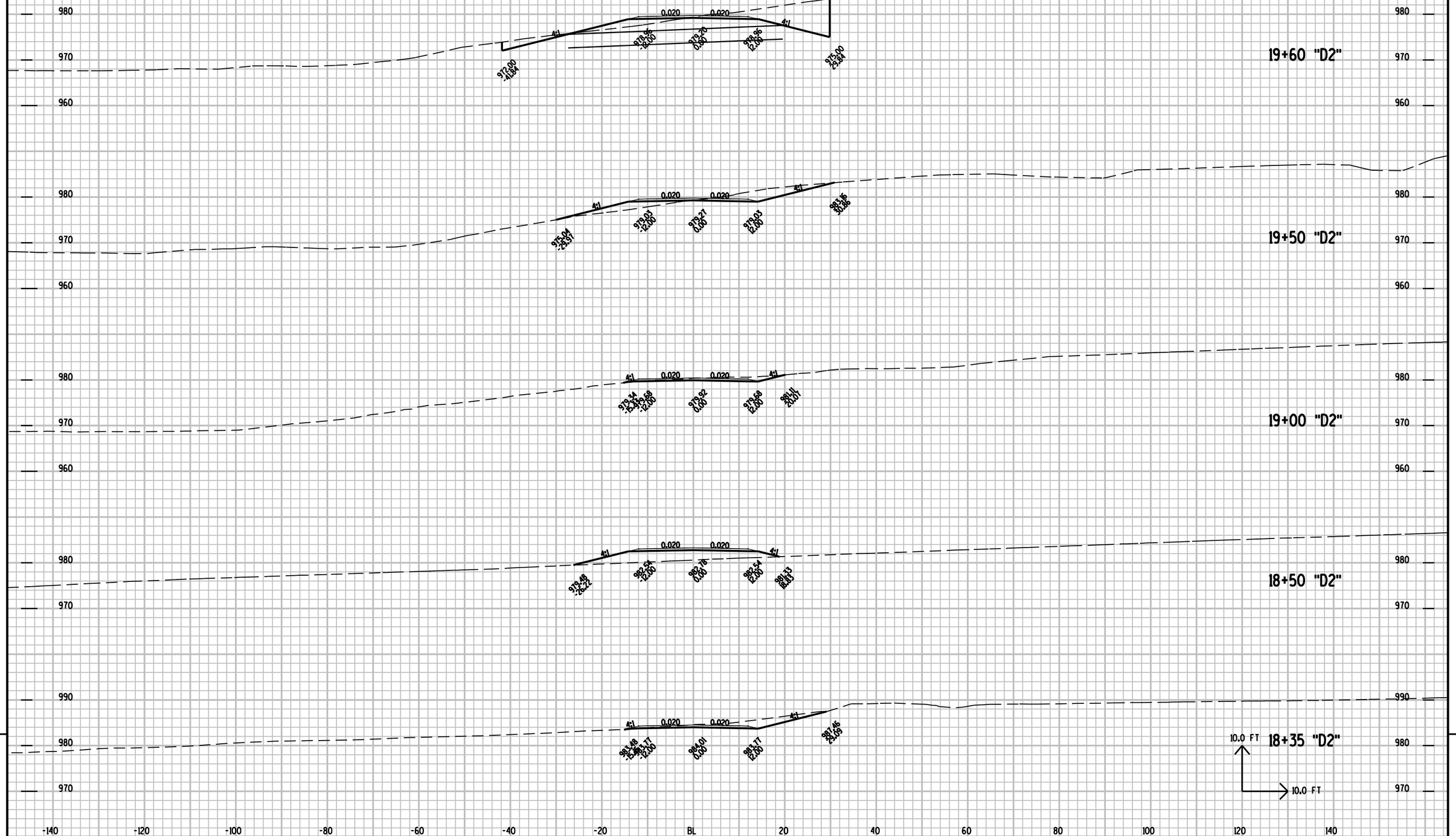
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PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: SHAWN WILLIAMS TRAIL	SHEET NO:	E

FILE NAME : c:\users\P\D1\60200200\USH51\construction -72 sections\SHAWN WILLIAM TRAIL XS.DGN PLOT DATE : 15-MAY-2013 08:59 PLOT BY : dotcyh PLOT NAME : PLOT SCALE : 2.000000:1.000000

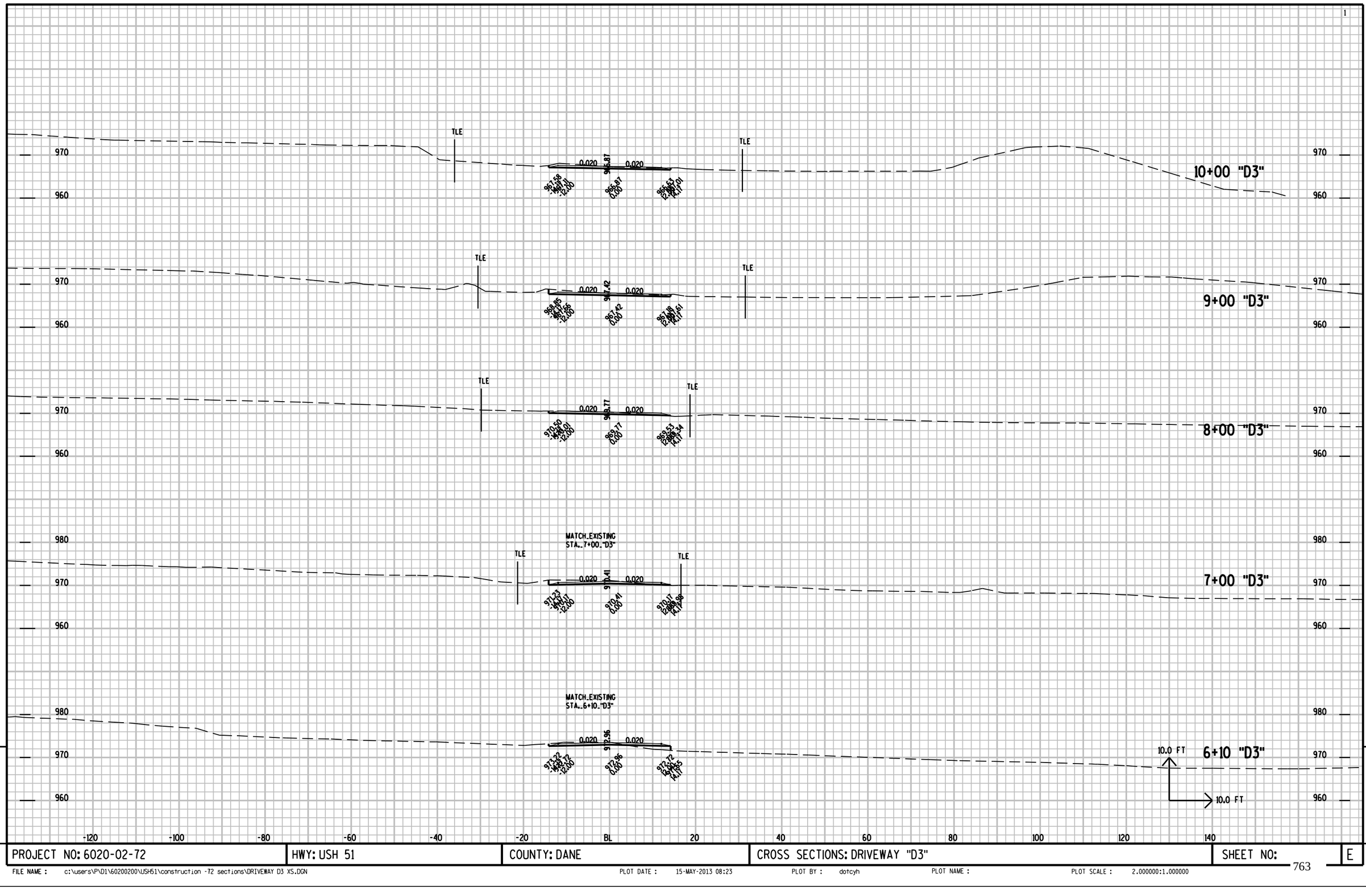
1-36"_C.P._RE'D
INVERT_ELEVATION=974.6
OUTLET_ELEVATION=972.6



9

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: DRIVEWAY "D2"	SHEET NO:	E

FILE NAME : c:\users\P\D1\60200200\USH51\construction -72 sections\DRIVEWAY D2 XS.DGN PLOT DATE : 15-MAY-2013 08:23 PLOT BY : dotcyh PLOT NAME : PLOT SCALE : 2.000000:1.000000

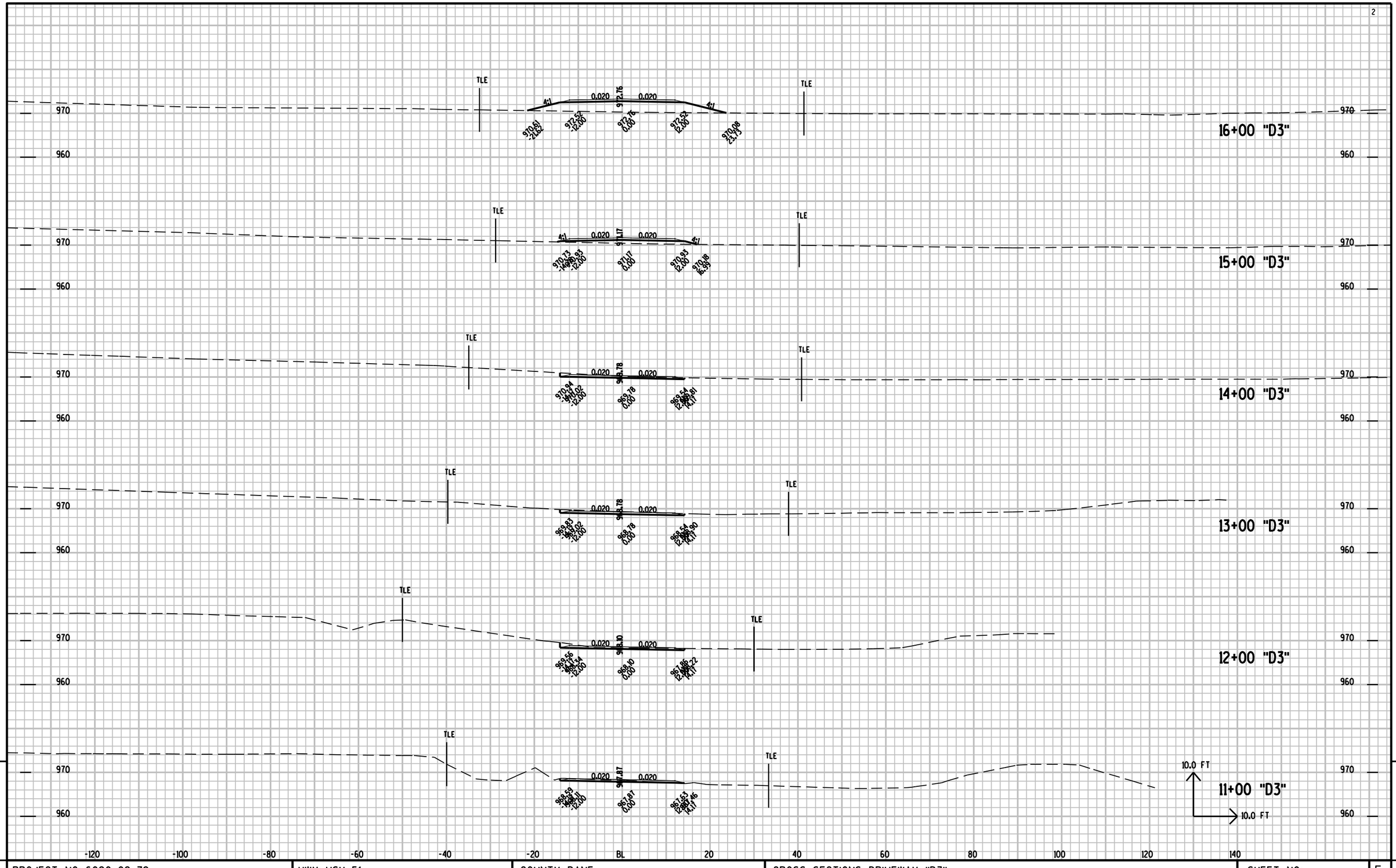


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9

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: DRIVEWAY "D3"	SHEET NO:	E

FILE NAME : c:\users\P\D1\60200200\USH51\construction -72 sections\DRIVEWAY D3 XS.DGN PLOT DATE : 15-MAY-2013 08:23 PLOT BY : dotcyh PLOT NAME : PLOT SCALE : 2.000000:1.000000



9

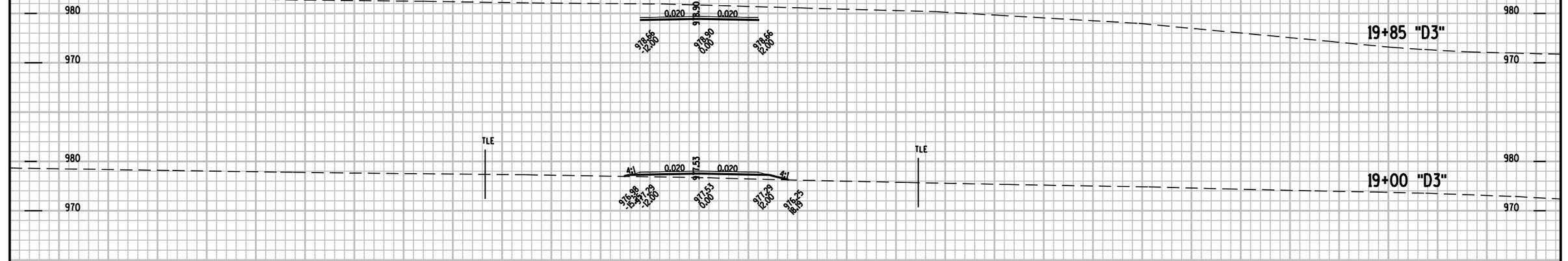
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PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: DRIVEWAY "D3"	SHEET NO:	E

FILE NAME : c:\users\P\D1\60200200\USH51\construction -T2 sections\DRIVEWAY D3 XS.DGN PLOT DATE : 15-MAY-2013 08:23 PLOT BY : dotcyh PLOT NAME : PLOT SCALE : 2.000000:1.000000

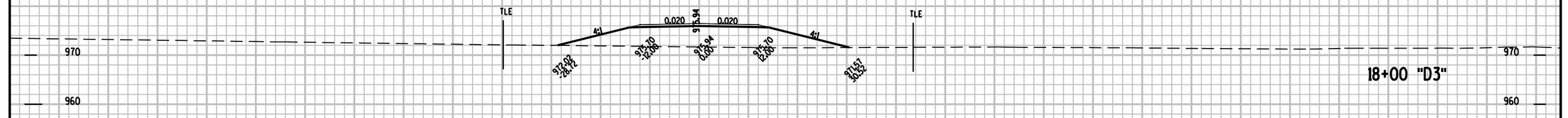
MATCH LINE
SEE CTH V

19+85 "D3"

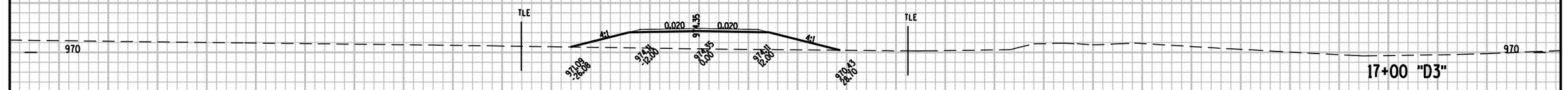


19+00 "D3"

18+00 "D3"



17+00 "D3"



2-24" C.M.C.P. REQ'D
INVERT ELEVATION=972.8
OUTLET ELEVATION=972.3

16+50 "D3"



-120 -100 -80 -60 -40 -20 BL 20 40 60 80 100 120 140

9

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PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: DRIVEWAY "D3"	SHEET NO:	E

FILE NAME : c:\users\PD1\60200200\USH51\construction -T2 sections\DRIVEWAY D3 XS.DGN PLOT DATE : 15-MAY-2013 08:23 PLOT BY : dotcyh PLOT NAME : PLOT SCALE : 2.000000:1.000000

15+00 "D4"

14+00 "D4"

13+00 "D4"

1-48" C.P. RCP'D
INVERT ELEVATION=950.1
OUTLET ELEVATION=949.6

12+00 "D4"

11+00 "D4"

10+00 "D4"

10.0 FT

10.0 FT

9

9

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: DRIVEWAY "D4"	SHEET NO:	E

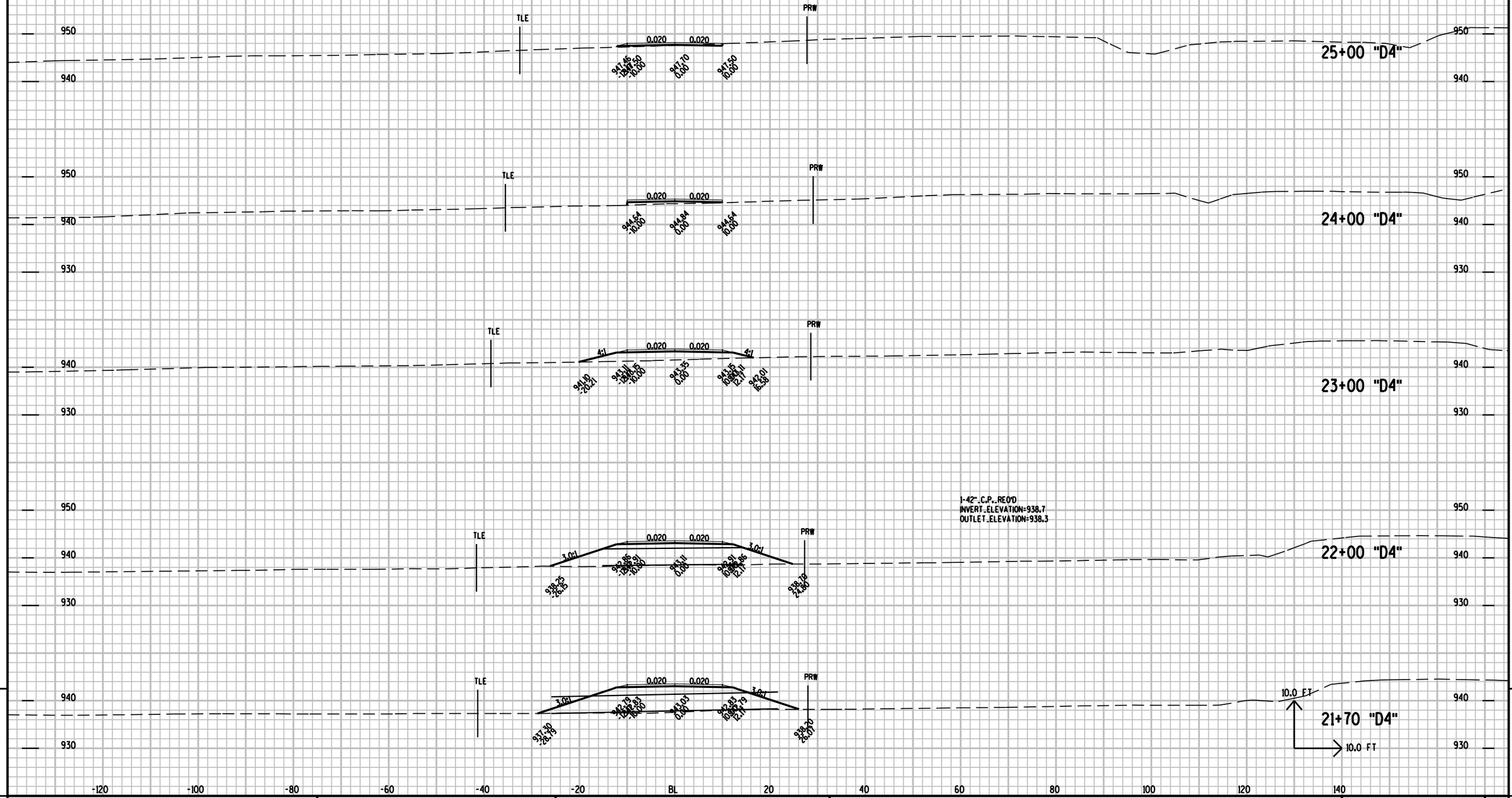


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PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: DRIVEWAY "D4"	SHEET NO:	E

FILE NAME : c:\users\P\D1\60200200\USH51\construction -T2 sections\DRIVEWAY D4 XS.DGN PLOT DATE : 15-MAY-2013 08:24 PLOT BY : dotcyh PLOT NAME : PLOT SCALE : 2.000000:1.000000

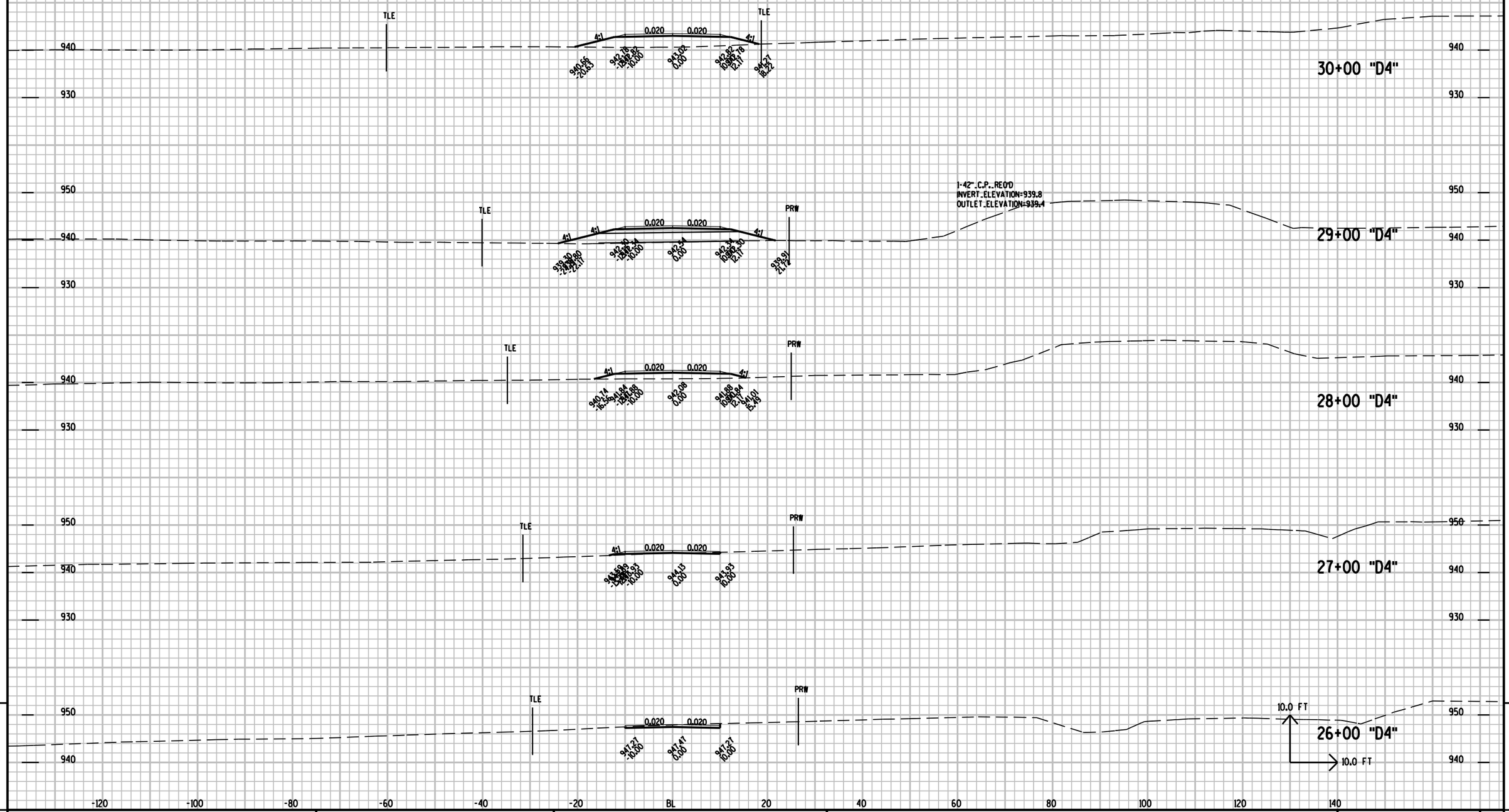


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PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: DRIVEWAY "D4"	SHEET NO:	E

FILE NAME : c:\users\PD1\60200200\USH51\construction -T2 sections\DRIVEWAY D4 XS.DGN PLOT DATE : 15-MAY-2013 08:24 PLOT BY : dotcyh PLOT NAME : PLOT SCALE : 2.000000:1.000000

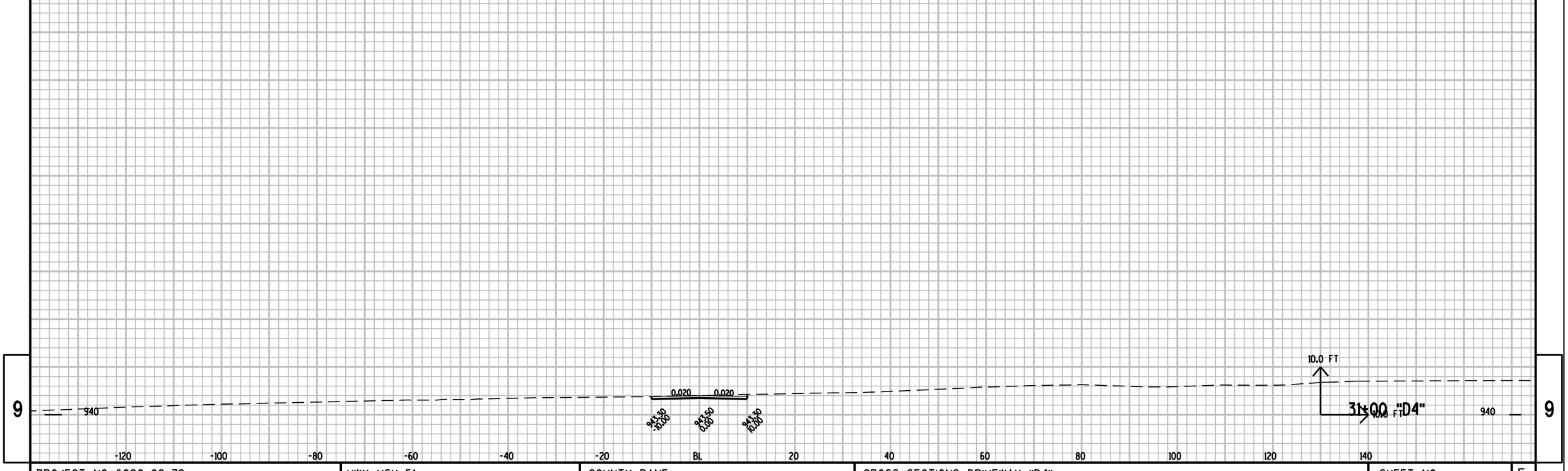


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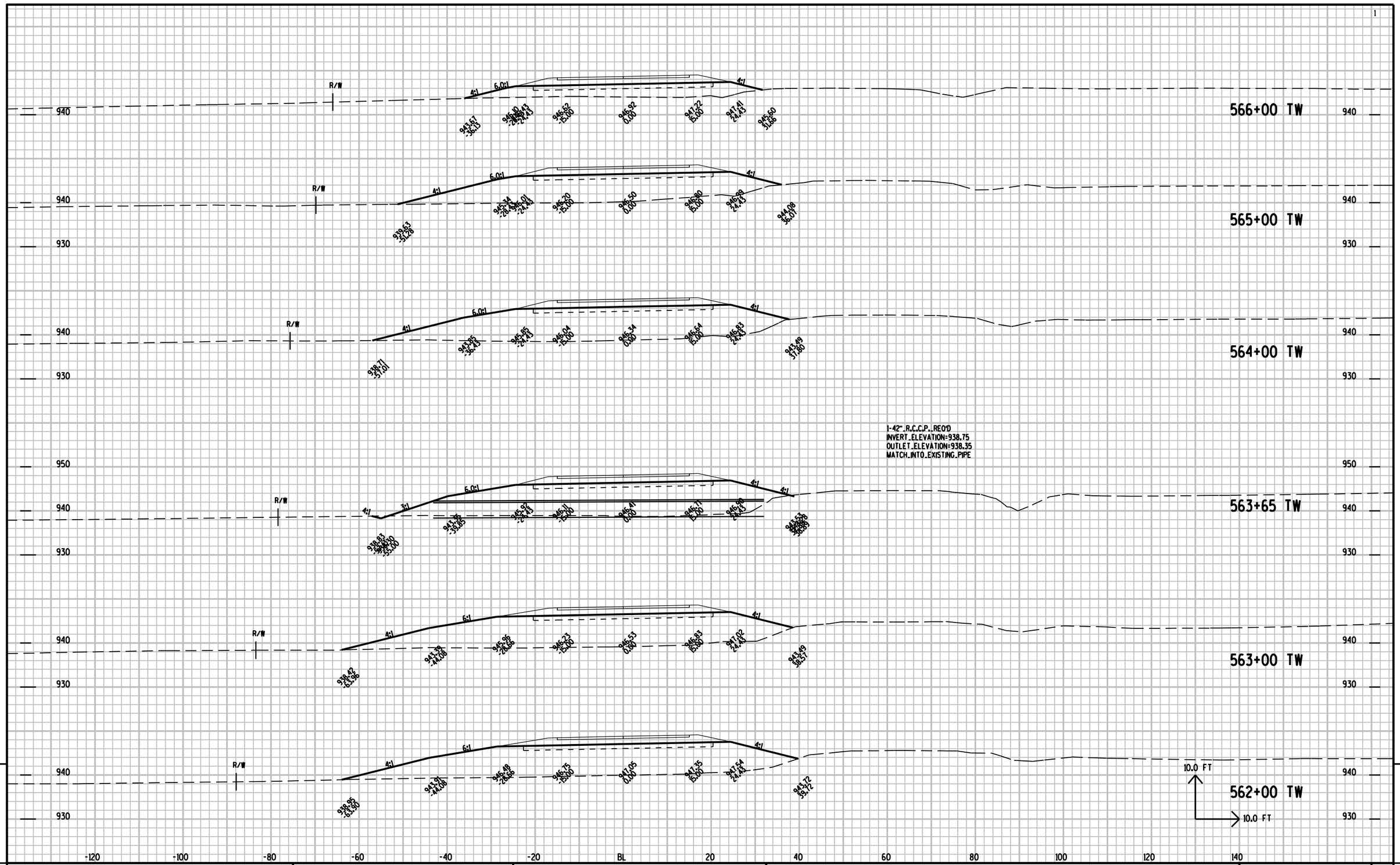
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PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: DRIVEWAY "D4"	SHEET NO:	E

FILE NAME : c:\users\PYDI\60200200\USH51\construction -T2 sections\DRIVEWAY D4 XS.DGN PLOT DATE : 15-MAY-2013 08:24 PLOT BY : dotcyh PLOT NAME : PLOT SCALE : 2.000000:1.000000



PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: DRIVEWAY "D4"	SHEET NO:	E

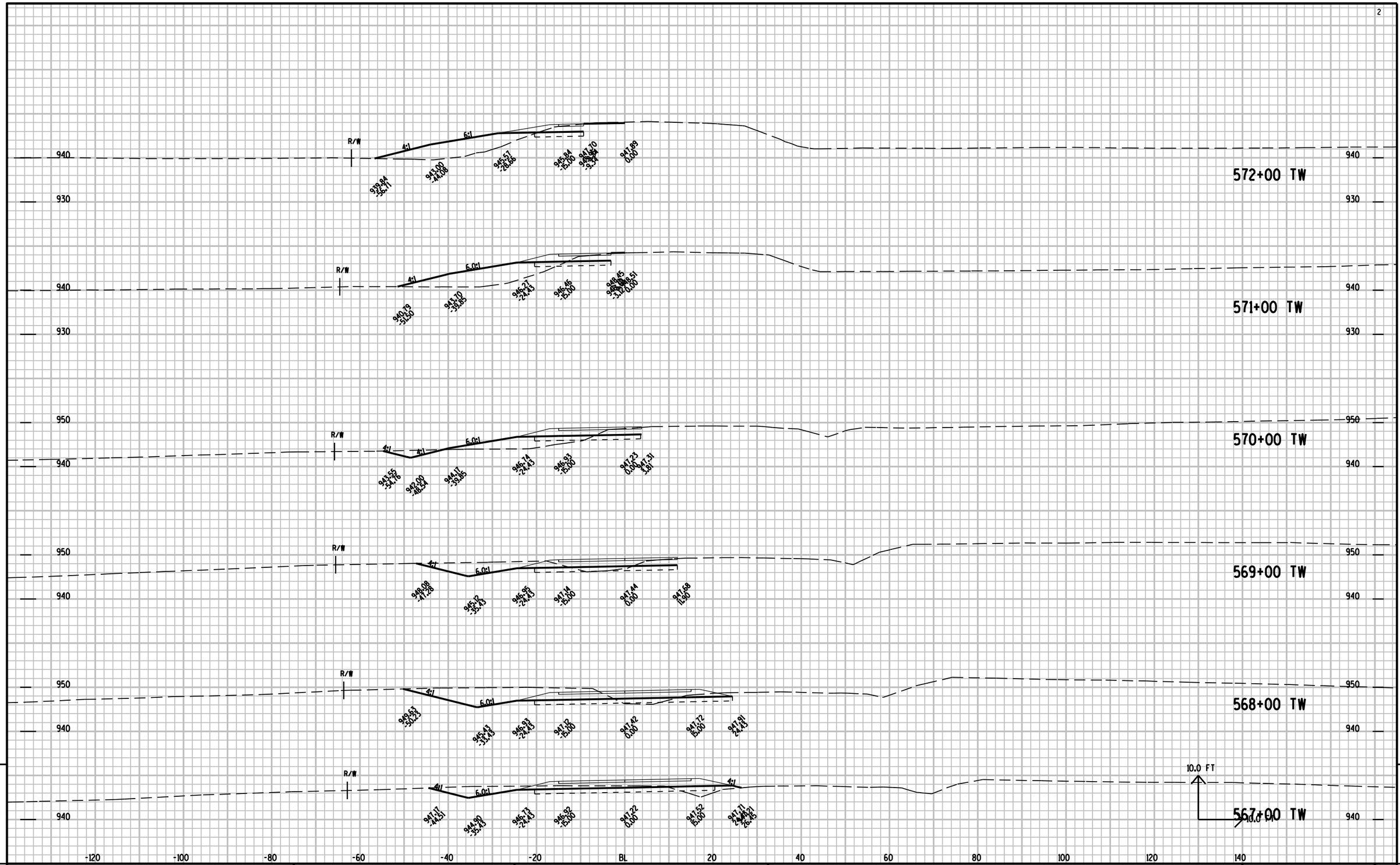


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PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: STAGE 2, DIVISION 2	SHEET NO:	E

FILE NAME : c:\users\P\D1\60200200\USH51\construction -T2 sections\1c562-573 TW XS.DGN PLOT DATE : 03-JUN-2013 15:43 PLOT BY : dotcyh PLOT NAME : PLOT SCALE : 2.000000:1.000000

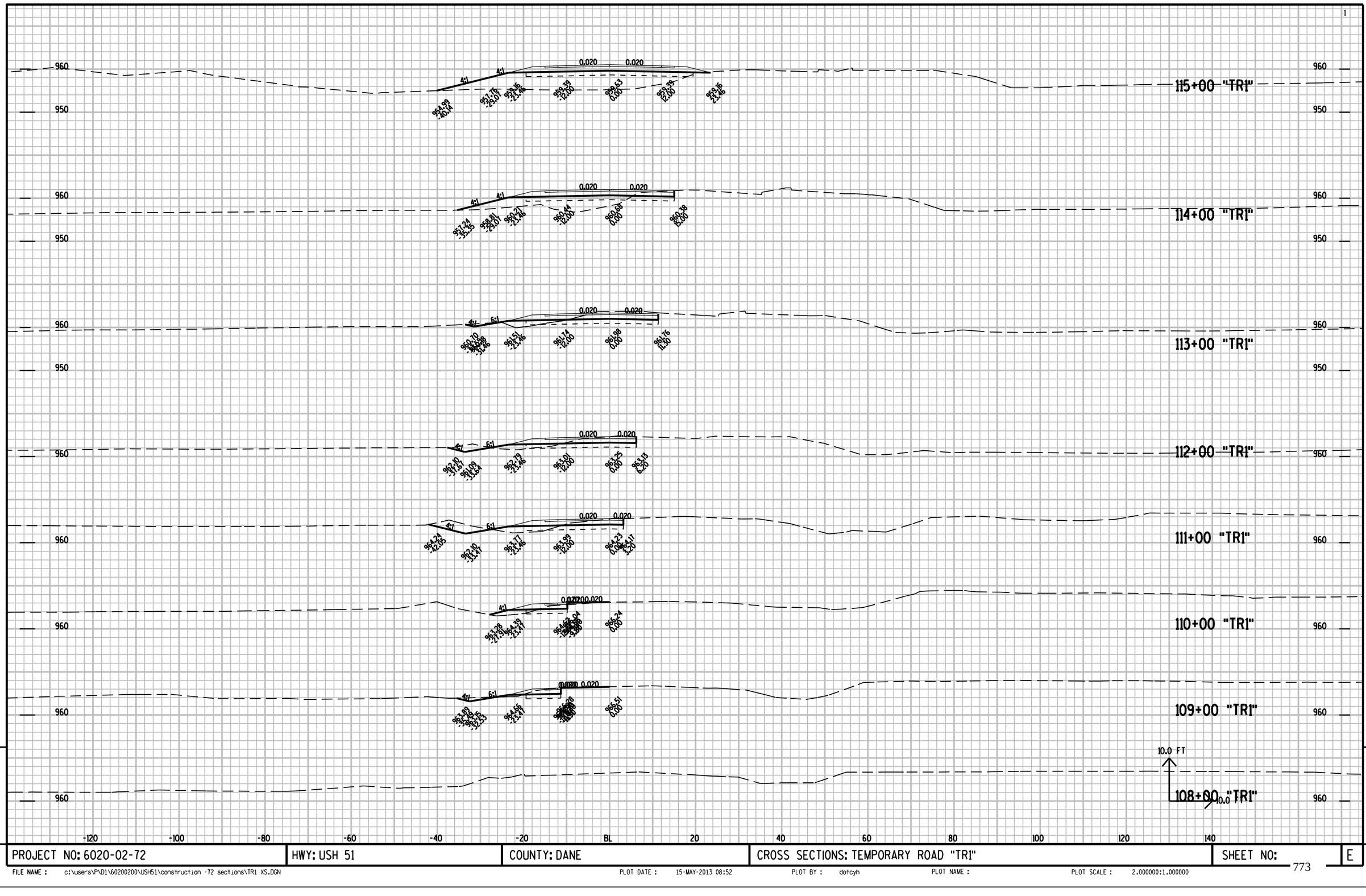


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PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: STAGE 2, DIVISION 2	SHEET NO:	E

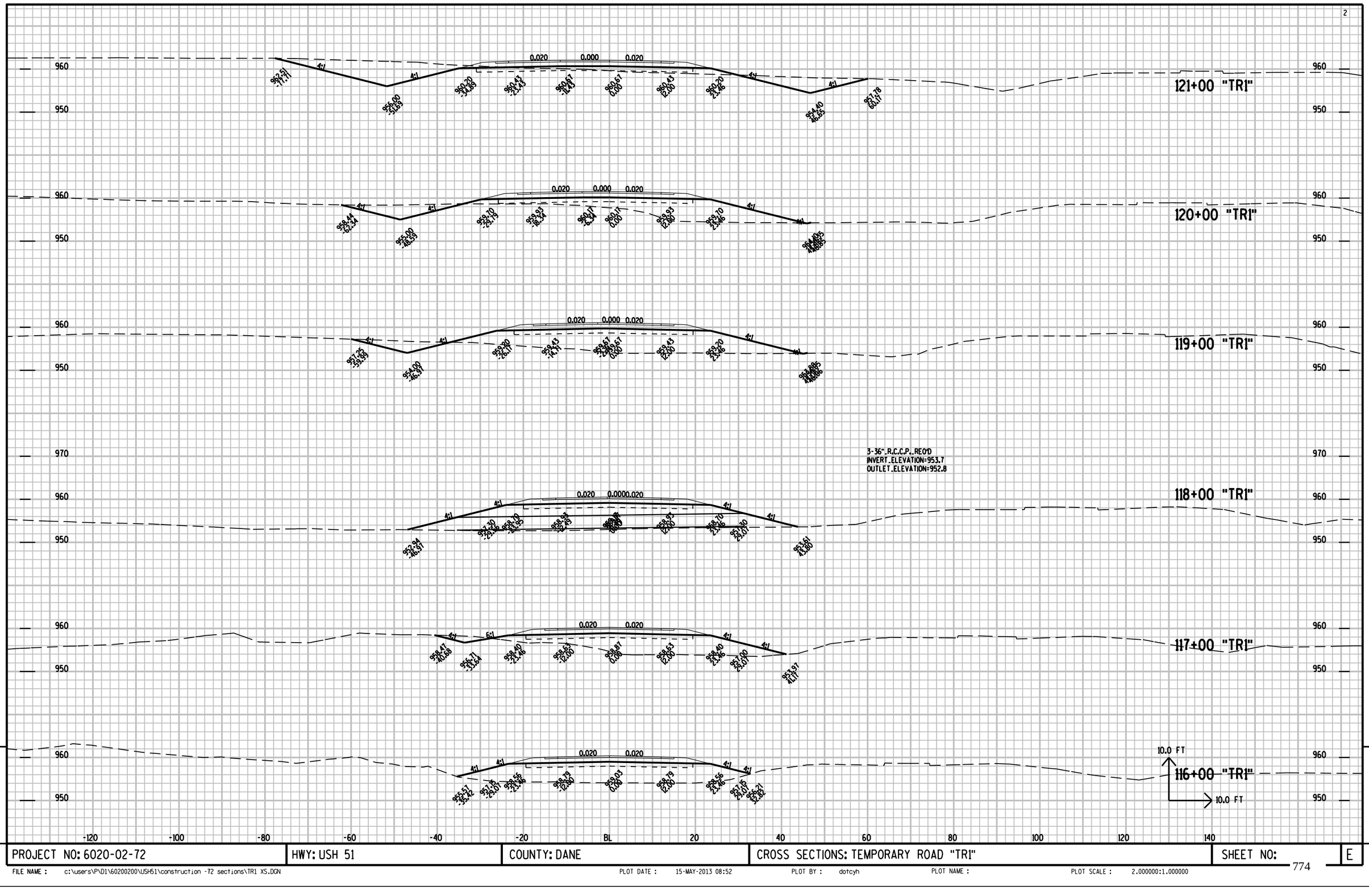
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PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: TEMPORARY ROAD "TR1"	SHEET NO:	E

FILE NAME : c:\users\PYD1\60200200\USH51\construction -T2 sections\TR1 XS.DGN PLOT DATE : 15-MAY-2013 08:52 PLOT BY : dotcyh PLOT NAME : PLOT SCALE : 2.000000:1.000000

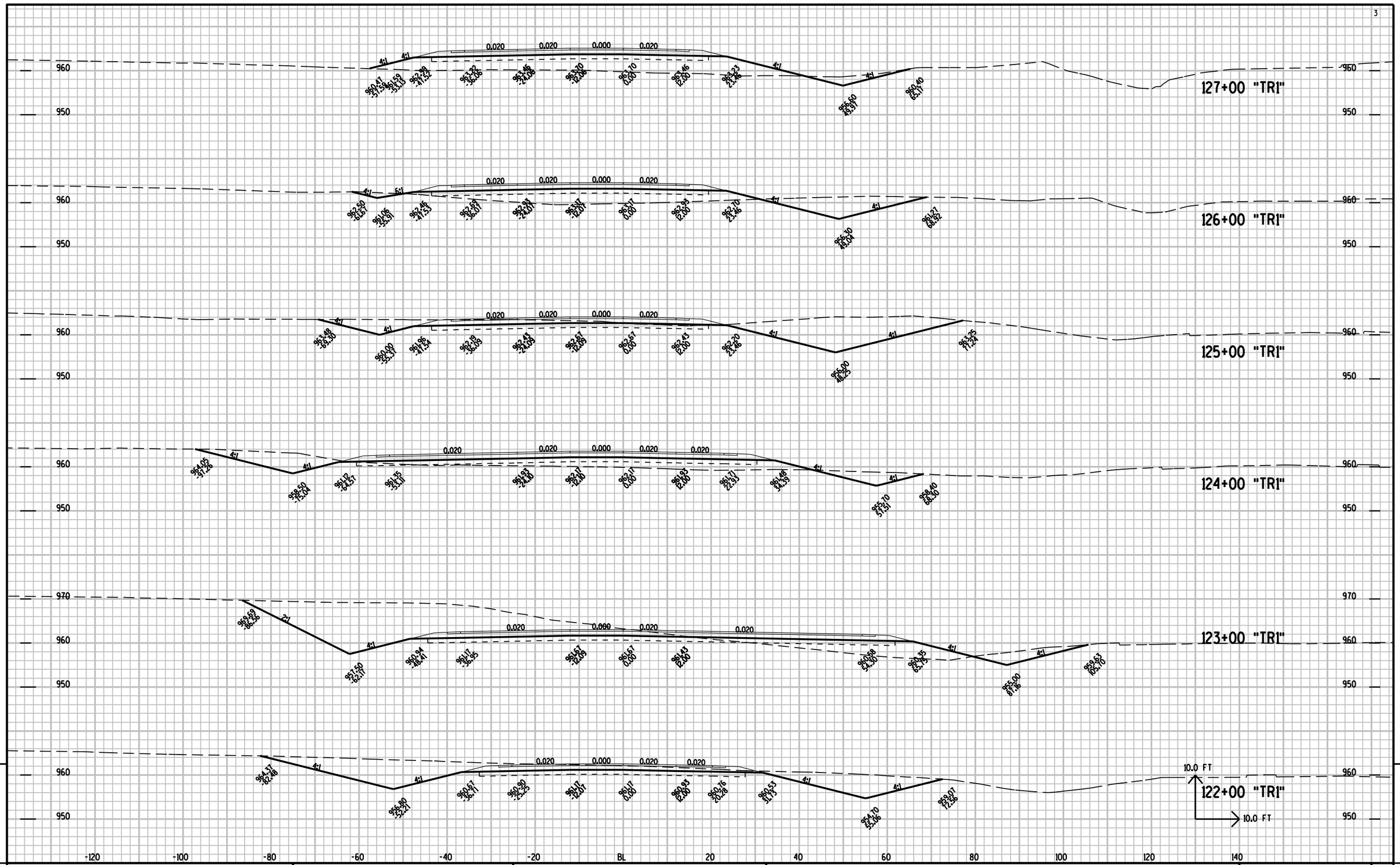


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PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: TEMPORARY ROAD "TR1"	SHEET NO:	E

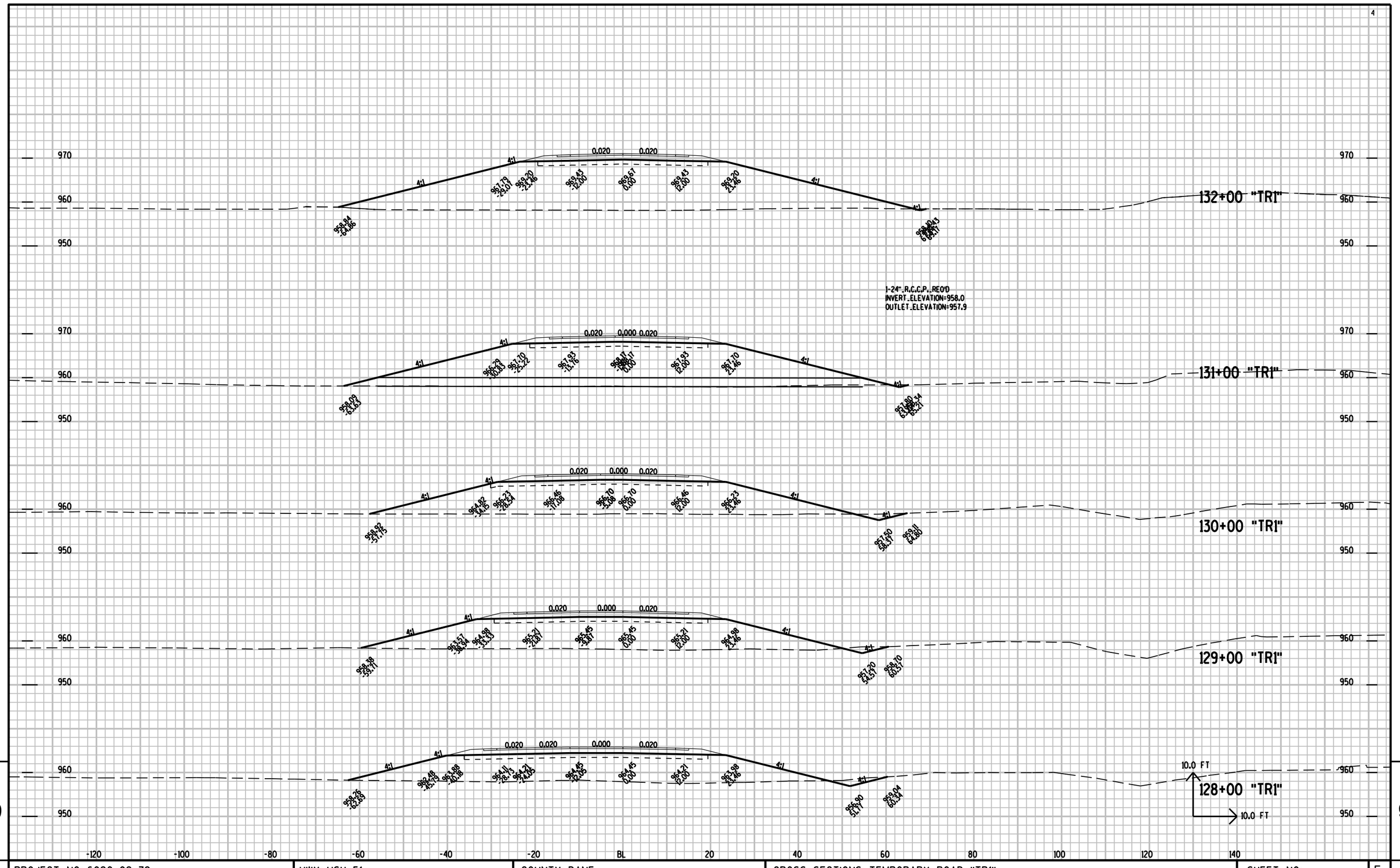
FILE NAME : c:\users\P\D1\60200200\USH51\construction -T2 sections\TR1 XS.DGN PLOT DATE : 15-MAY-2013 08:52 PLOT BY : dotcyh PLOT NAME : PLOT SCALE : 2.000000:1.000000



9

PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: TEMPORARY ROAD "TRI"	SHEET NO:	E

FILE NAME : c:\users\PVDI\60200200\USH51\construction -T2 sections\TR1 XS.DGN PLOT DATE : 15-MAY-2013 08:52 PLOT BY : dotcyh PLOT NAME : PLOT SCALE : 2.000000:1.000000

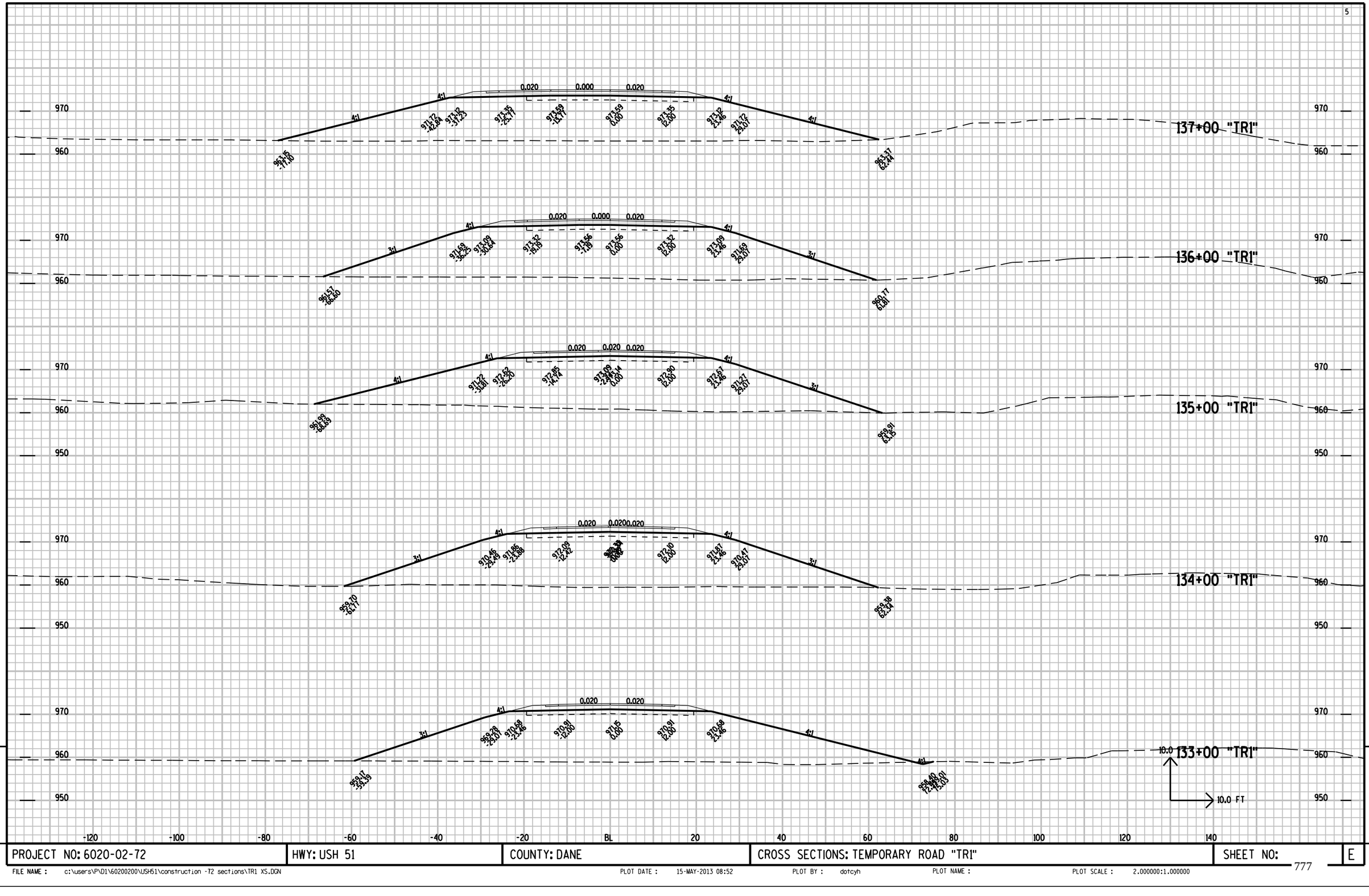


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PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: TEMPORARY ROAD "TRI"	SHEET NO:	E

FILE NAME : c:\users\P\D1\60200200\USH51\construction -T2 sections\TR1 XS.DGN PLOT DATE : 15-MAY-2013 08:52 PLOT BY : dotcyh PLOT NAME : PLOT SCALE : 2.000000:1.000000

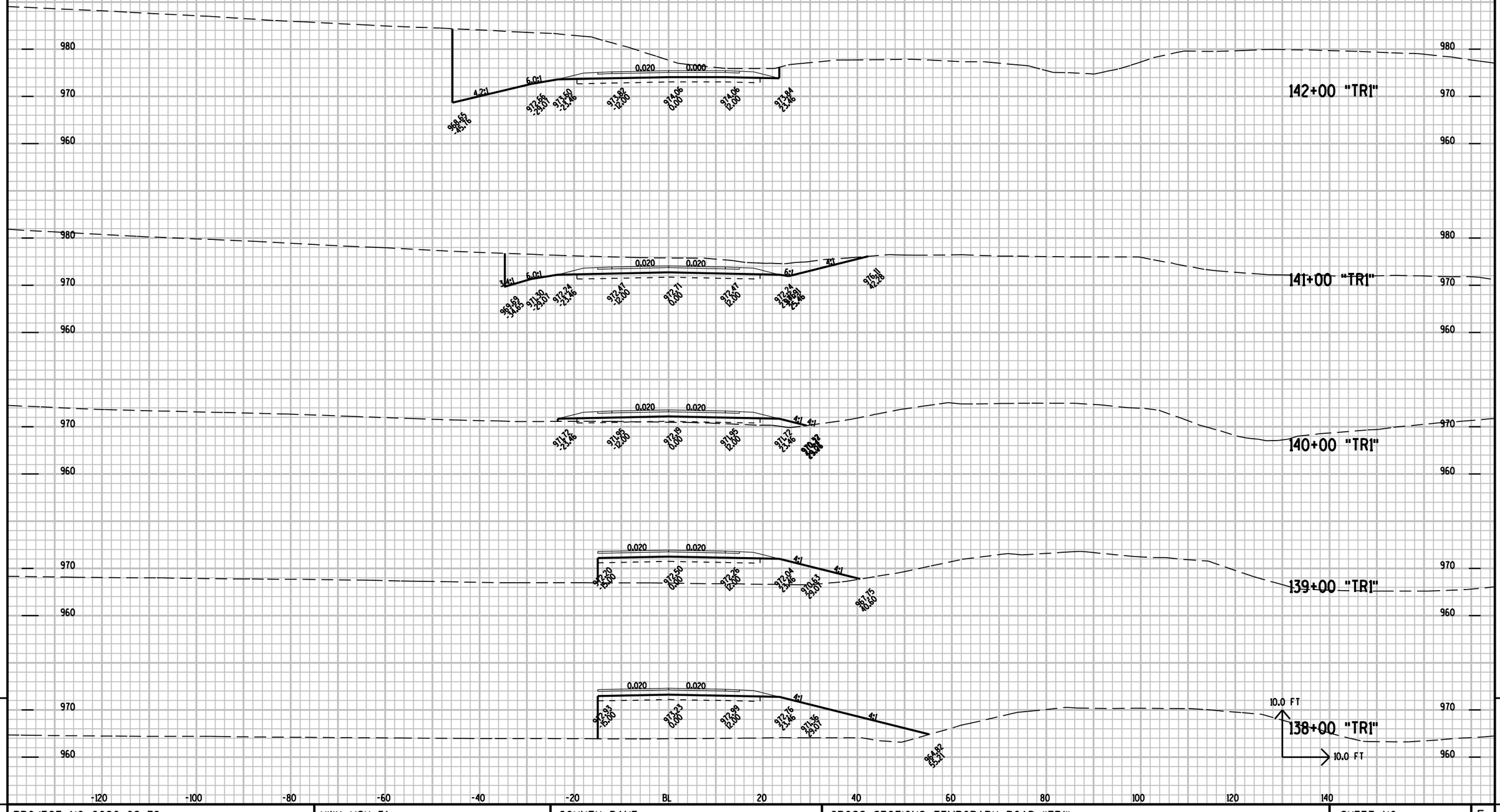


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PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: TEMPORARY ROAD "TRI"	SHEET NO:	E

FILE NAME : c:\users\P\D1\60200200\USH51\construction -T2 sections\TR1 XS.DGN PLOT DATE : 15-MAY-2013 08:52 PLOT BY : dotcyh PLOT NAME : PLOT SCALE : 2.000000:1.000000

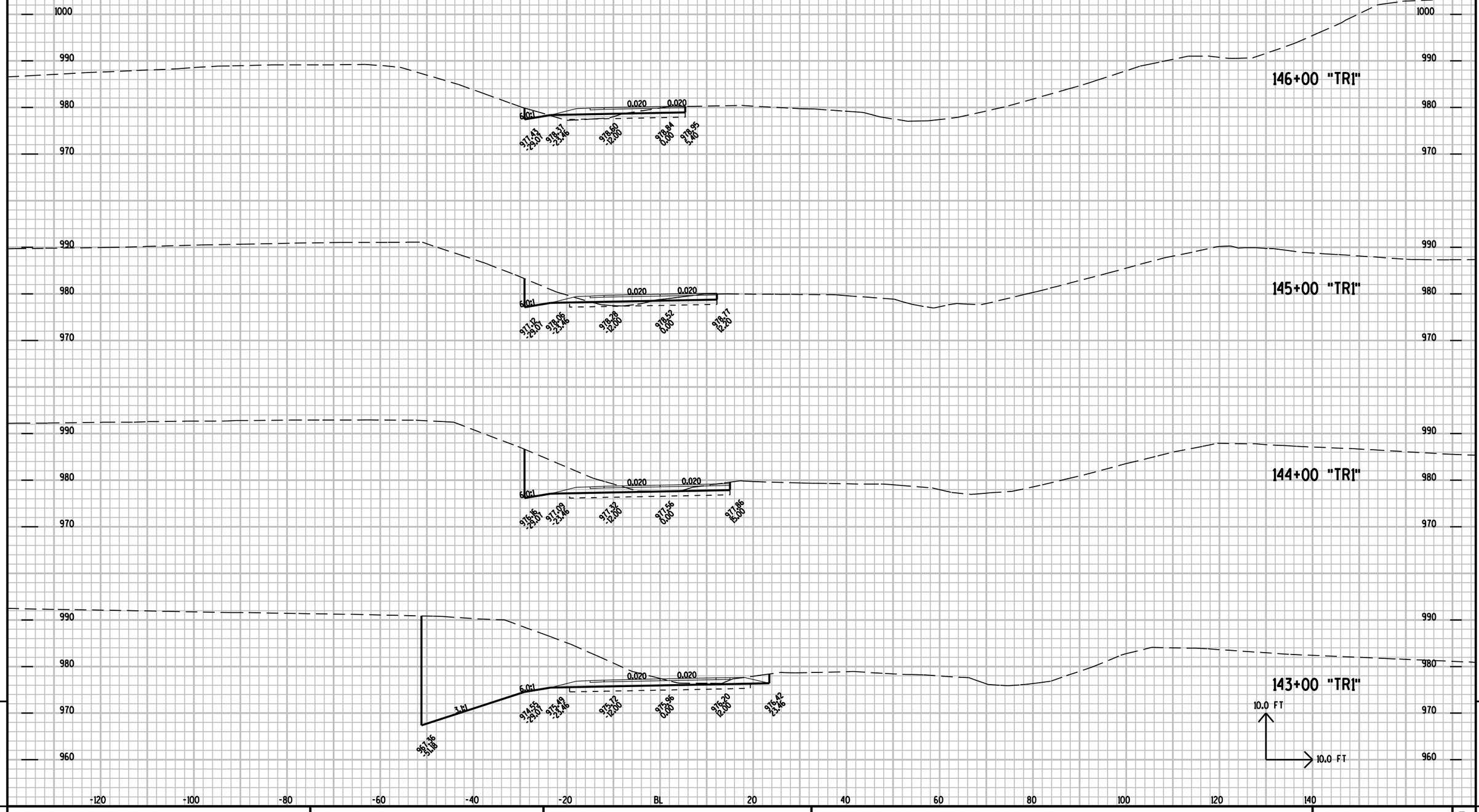


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PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: TEMPORARY ROAD "TRI"	SHEET NO:	E

FILE NAME : c:\users\P\D1\60200200\USH51\construction -T2 sections\TR1 XS.DGN PLOT DATE : 15-MAY-2013 08:52 PLOT BY : dotcyh PLOT NAME : PLOT SCALE : 2.000000:1.000000

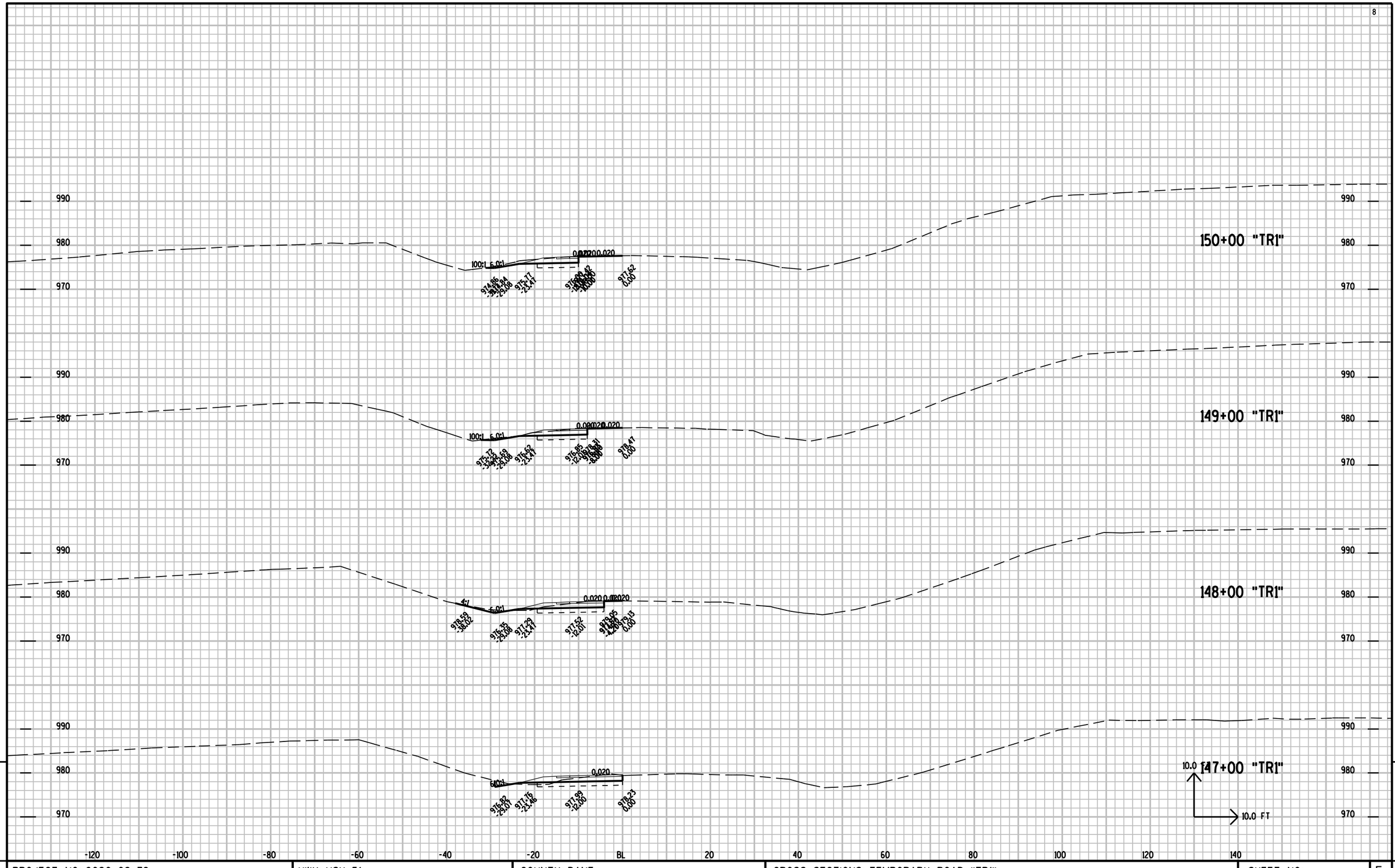


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PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: TEMPORARY ROAD "TR1"	SHEET NO:	E

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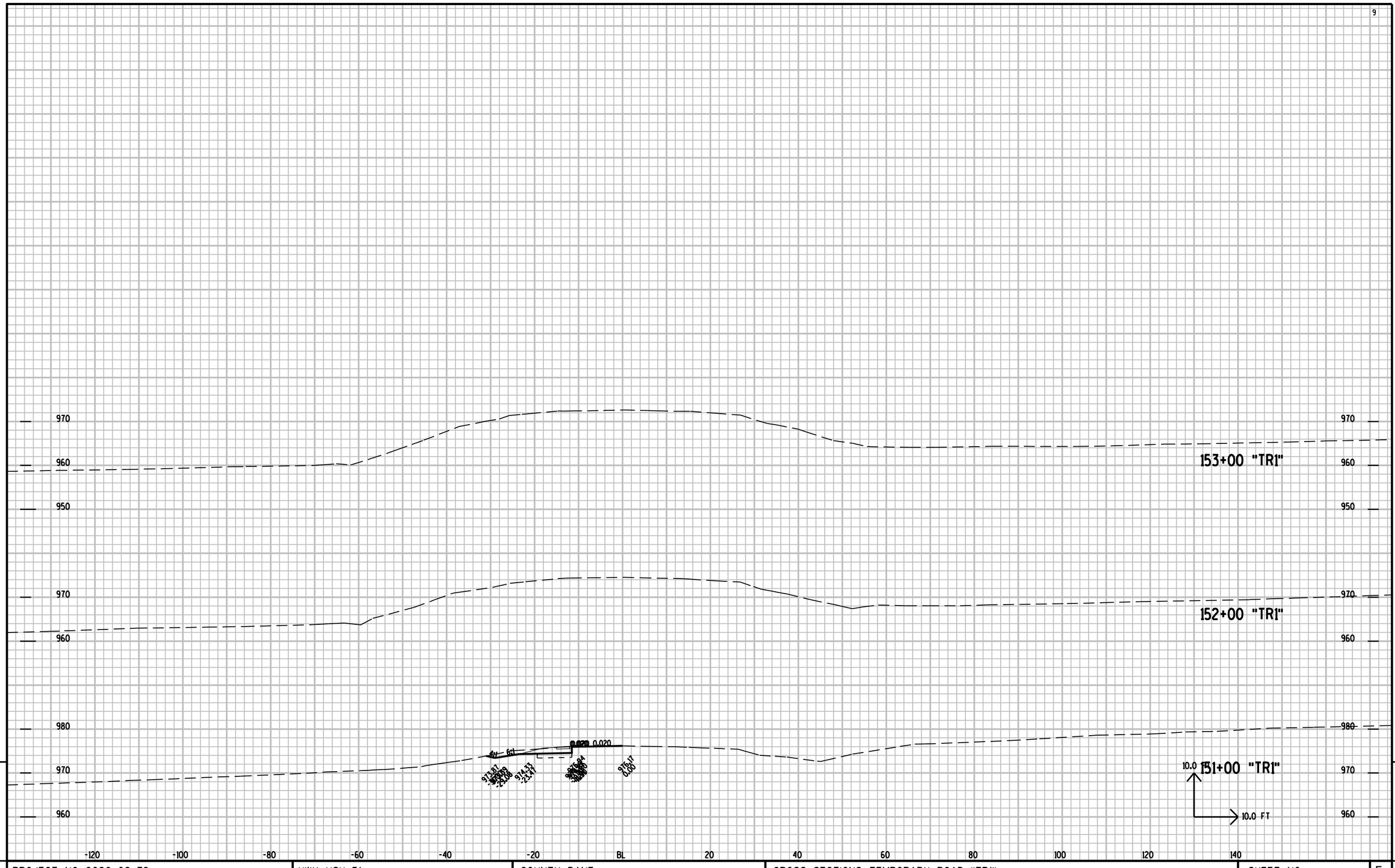


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PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: TEMPORARY ROAD "TR1"	SHEET NO:	E

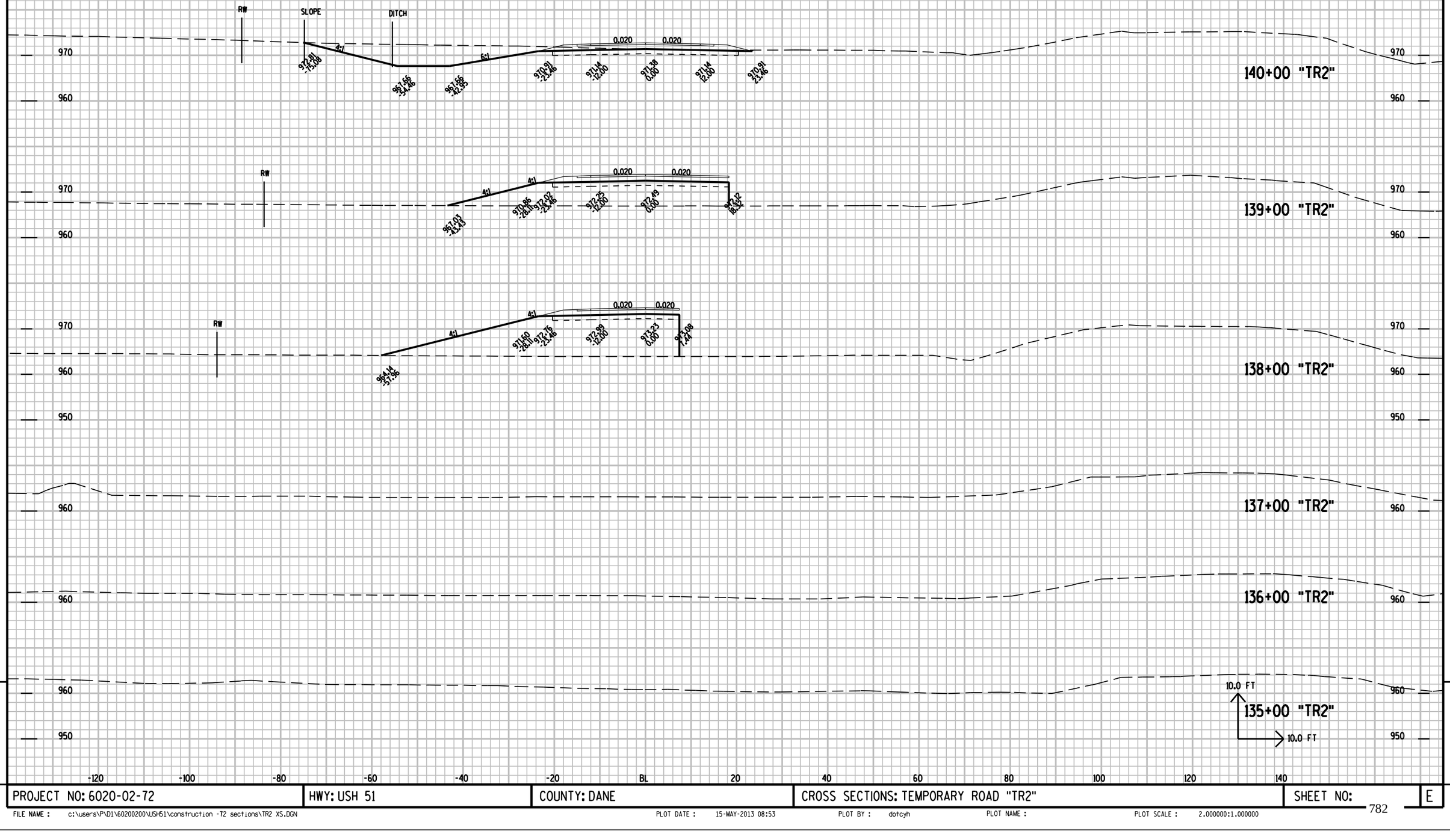
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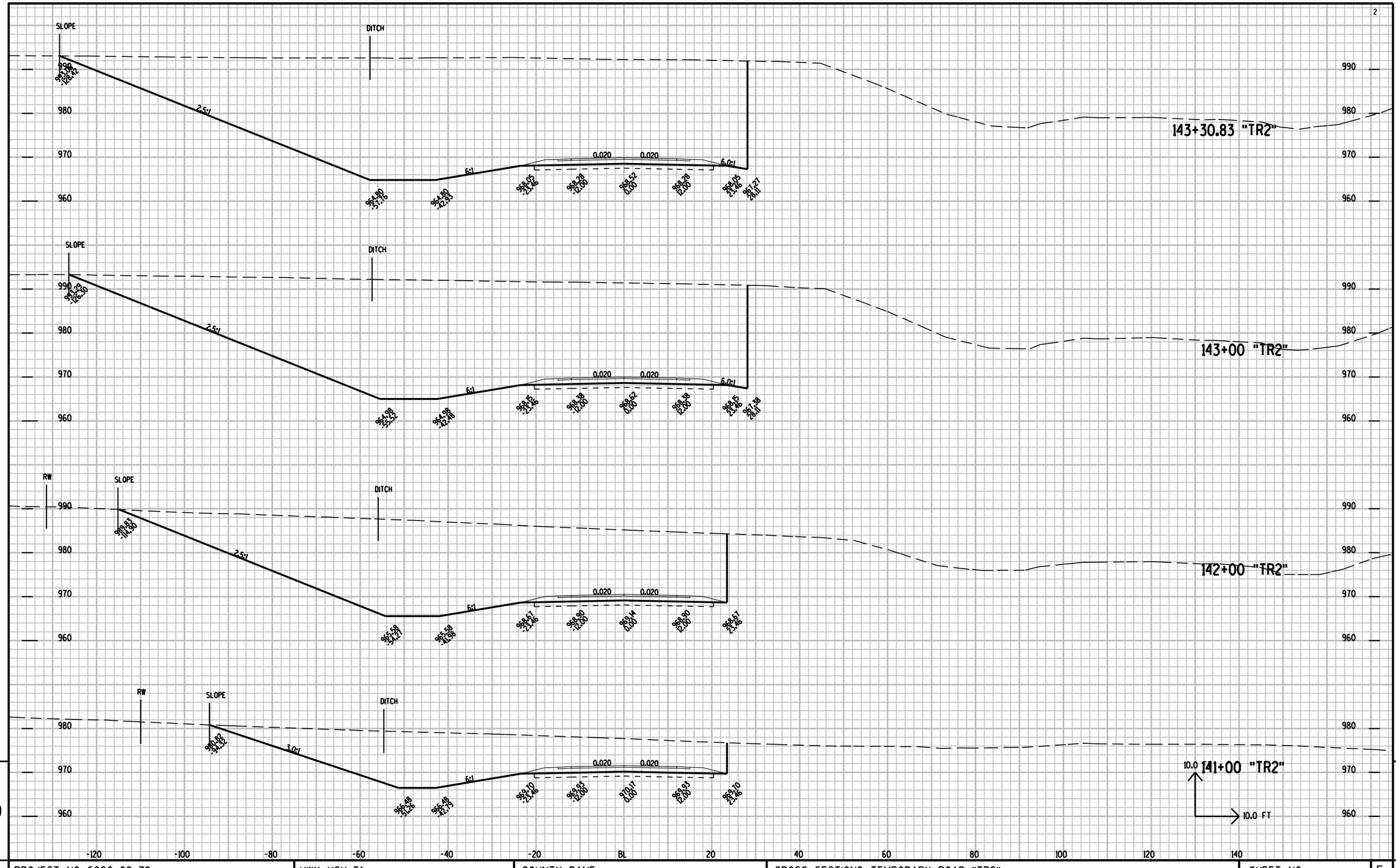
PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: TEMPORARY ROAD "TR1"	SHEET NO:	E

FILE NAME : c:\users\PVD1\60200200\USH51\construction -72 sections\TR1 XS.DGN PLOT DATE : 15-MAY-2013 08:53 PLOT BY : dotcyh PLOT NAME : PLOT SCALE : 2.000000:1.000000



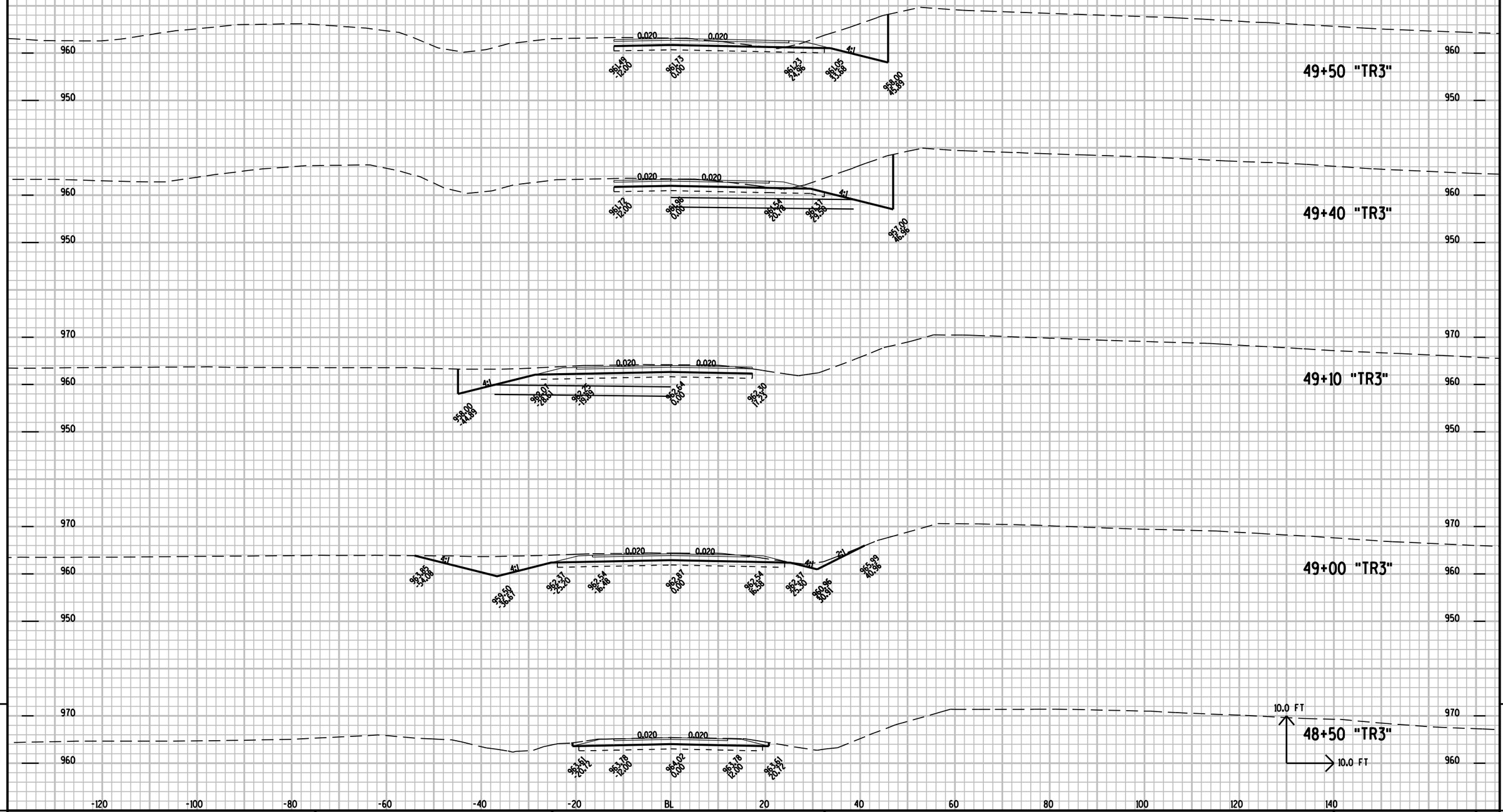
PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: TEMPORARY ROAD "TR2"	SHEET NO: E

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PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: TEMPORARY ROAD "TR2"	SHEET NO: E

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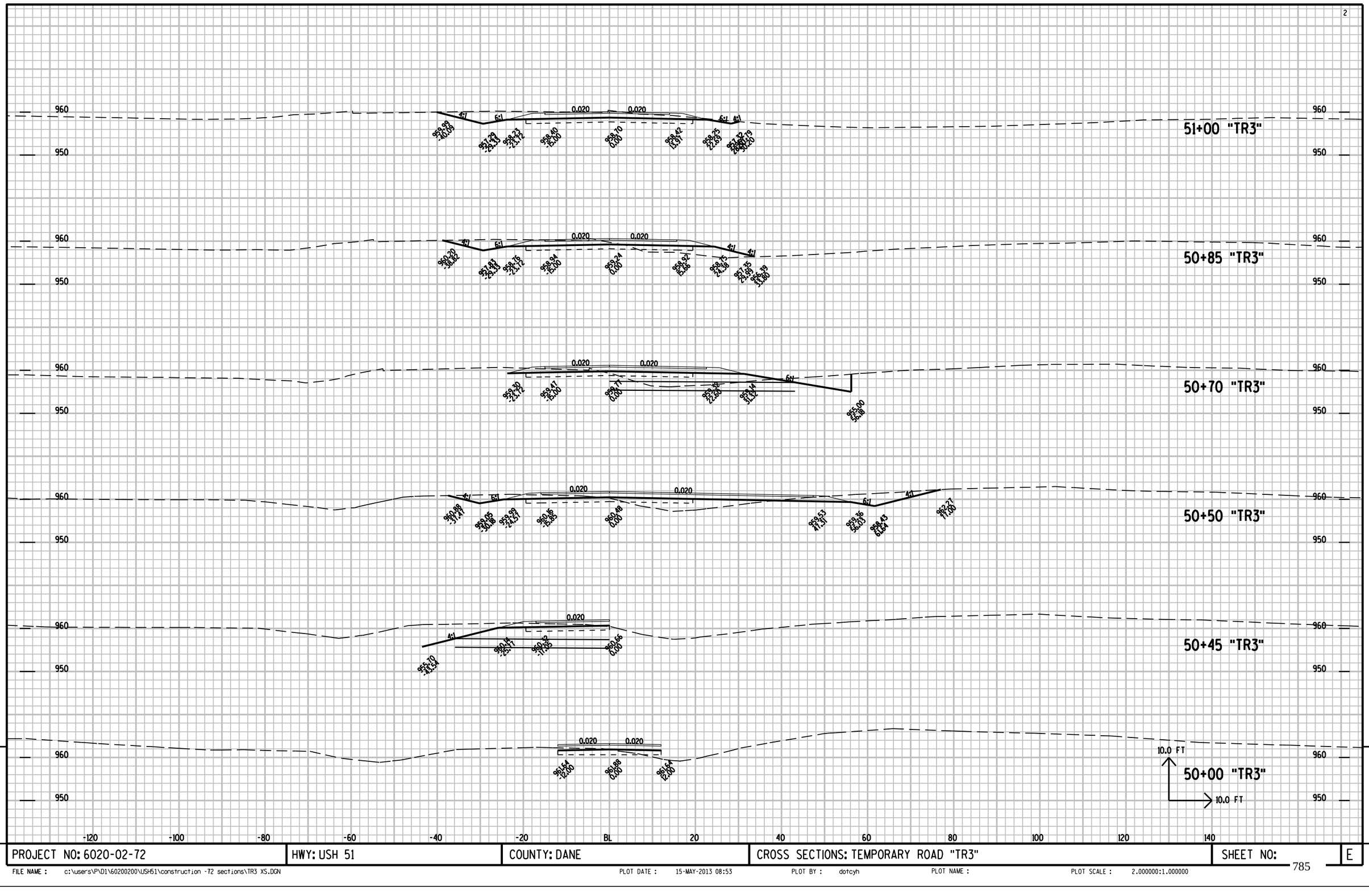


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PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: TEMPORARY ROAD "TR3"	SHEET NO:	E

FILE NAME : c:\users\P\D1\60200200\USH51\construction -T2 sections\TR3 XS.DGN PLOT DATE : 15-MAY-2013 08:53 PLOT BY : dotcyh PLOT NAME : PLOT SCALE : 2.000000:1.000000



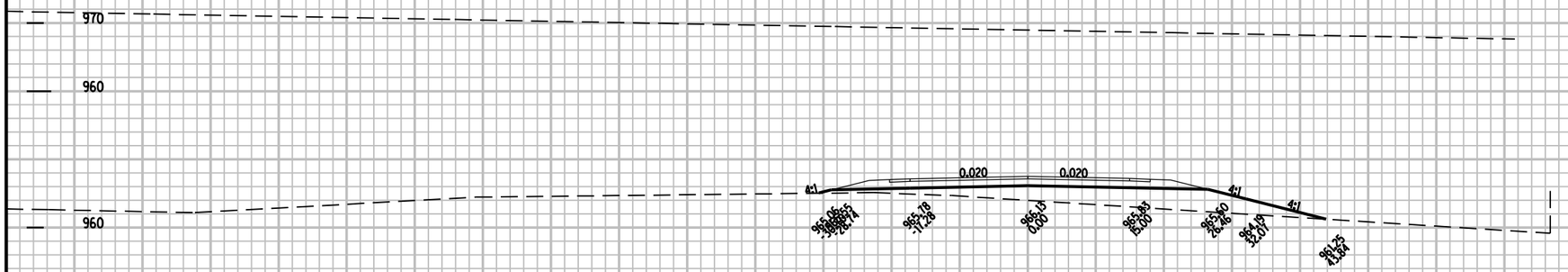
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PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: TEMPORARY ROAD "TR3"	SHEET NO:	E

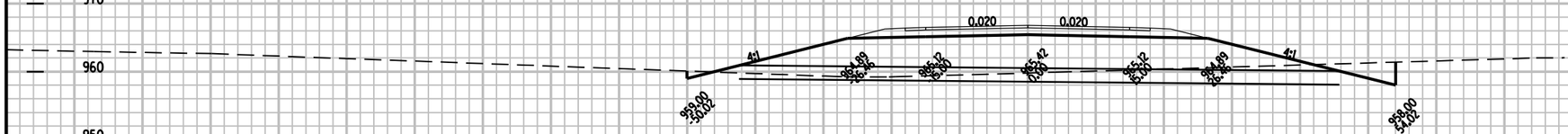
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32+00 "TR4"

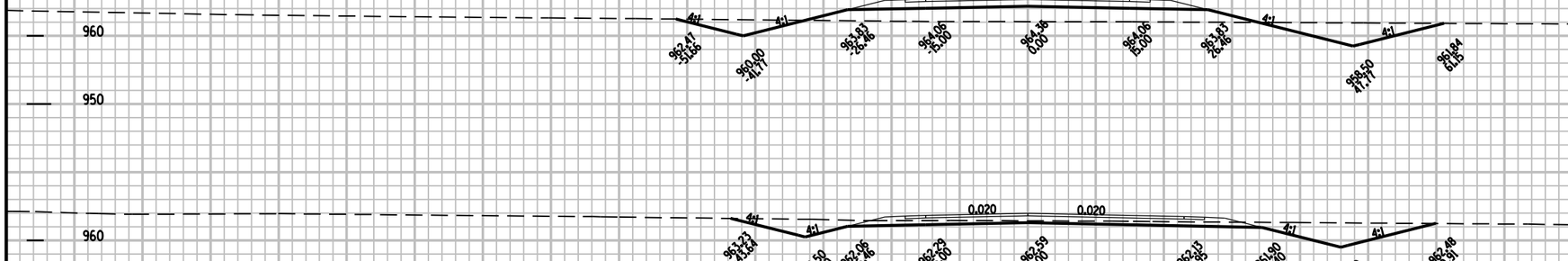


31+50 "TR4"

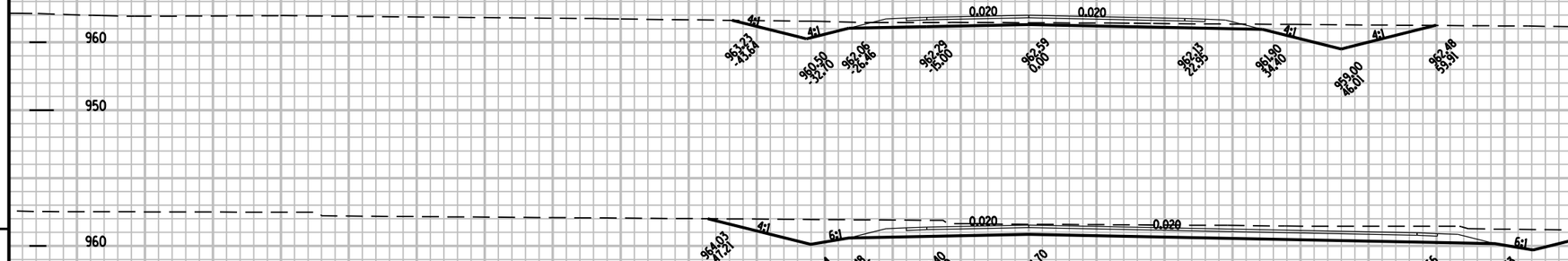
1-24" TEMPORARY C.P. REQ'D
INVERT ELEVATION=958.9
OUTLET ELEVATION=958.1



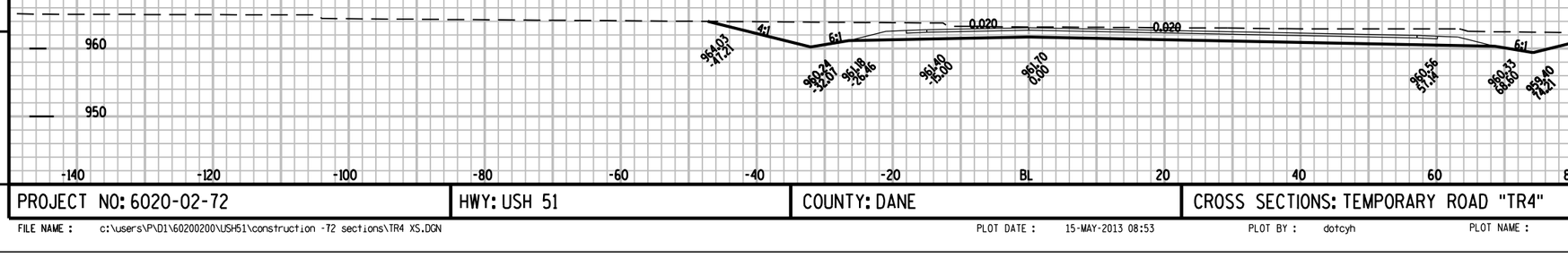
31+30 "TR4"



31+00 "TR4"



30+50 "TR4"



30+25 "TR4"

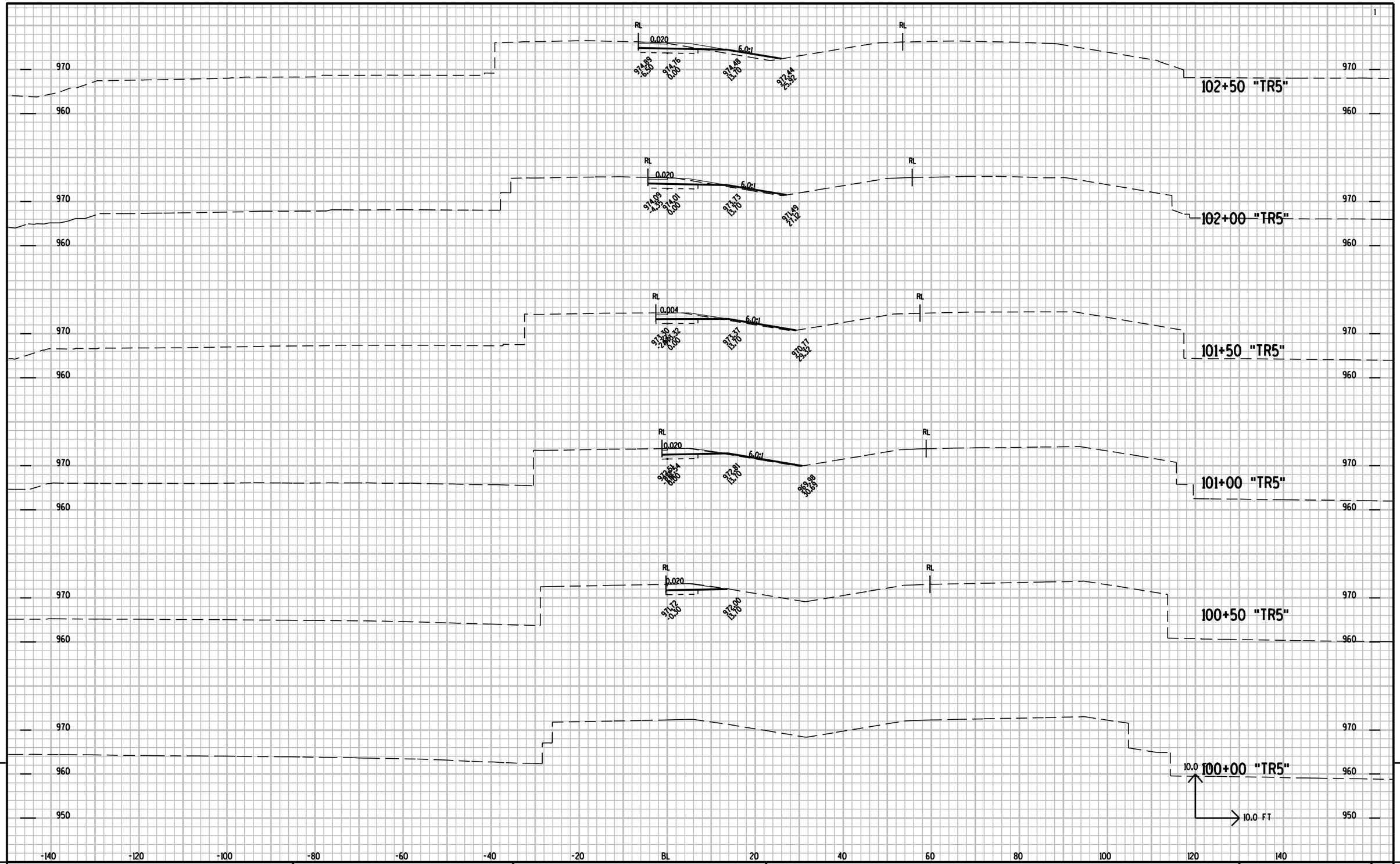
10.0 FT
10.0 FT

9

-140 -120 -100 -80 -60 -40 -20 BL 20 40 60 80 100 120 140

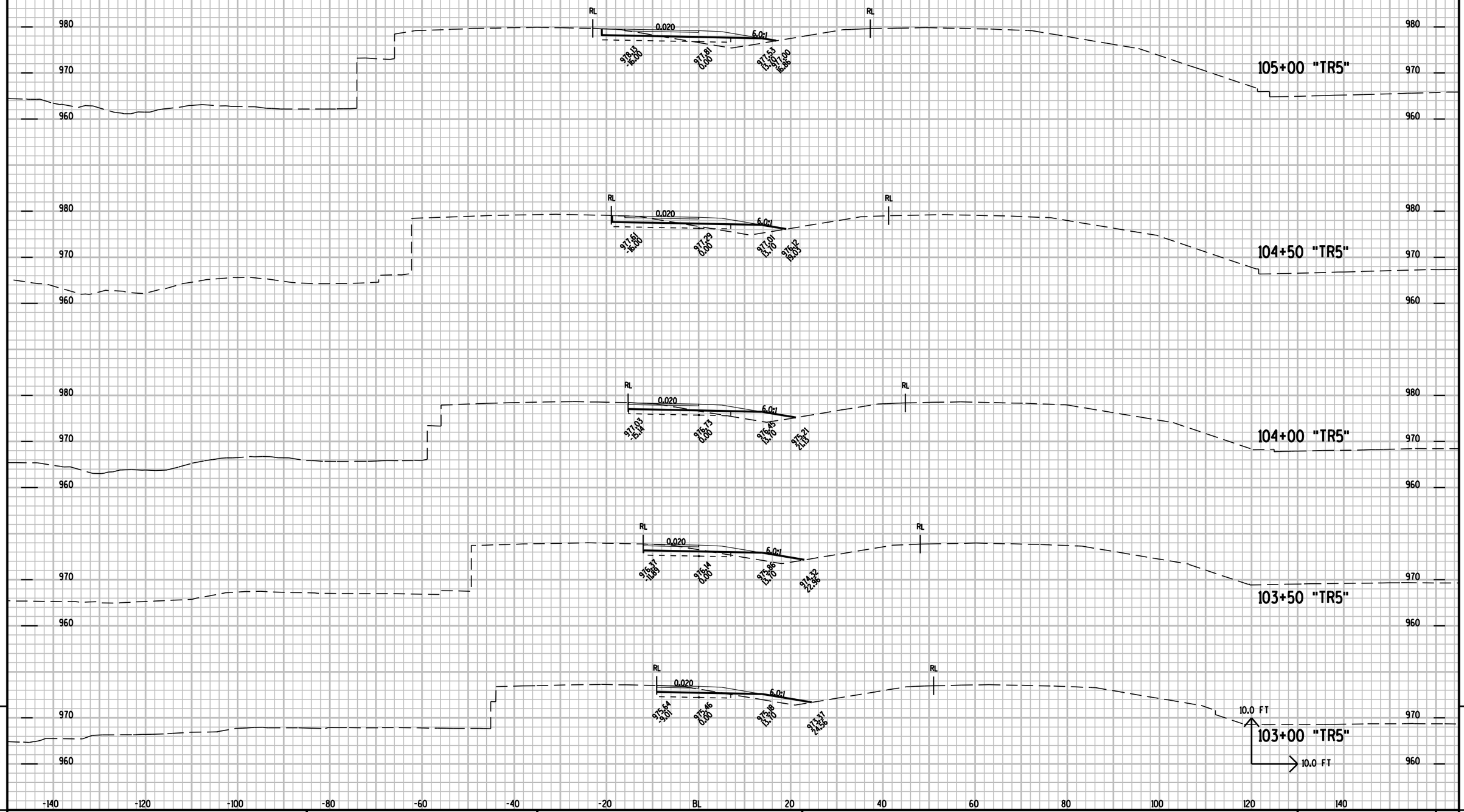
PROJECT NO: 6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: TEMPORARY ROAD "TR4"	SHEET NO:	E

FILE NAME : c:\users\P\D1\60200200\USH51\construction -T2 sections\TR4 XS.DGN PLOT DATE : 15-MAY-2013 08:53 PLOT BY : dotcyh PLOT NAME : PLOT SCALE : 2.000000:1.000000



PROJECT NO: 6020-02-71	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: TEMPORARY ROAD "TR5"	SHEET NO: E

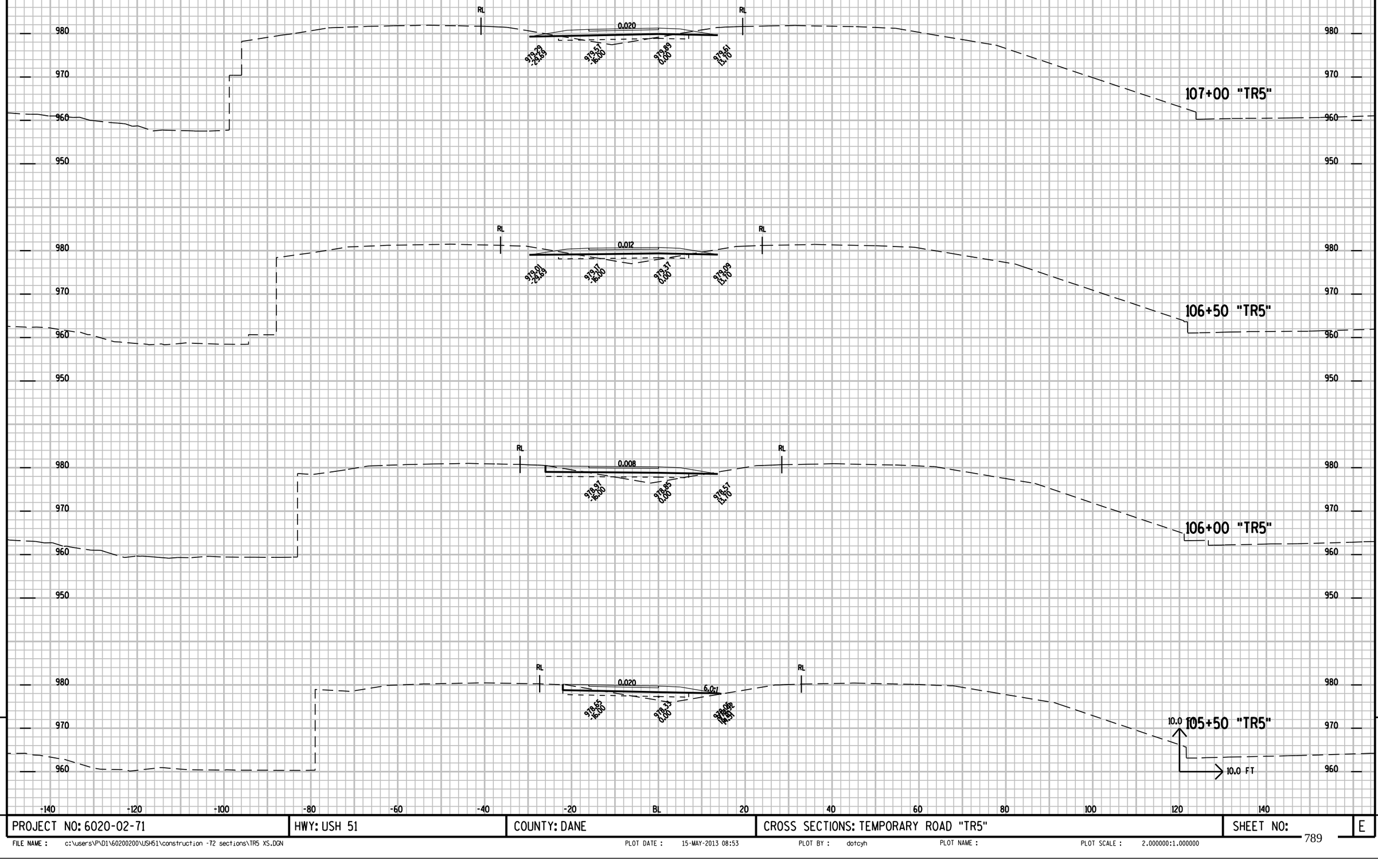
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PROJECT NO: 6020-02-71	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: TEMPORARY ROAD "TR5"	SHEET NO:	E

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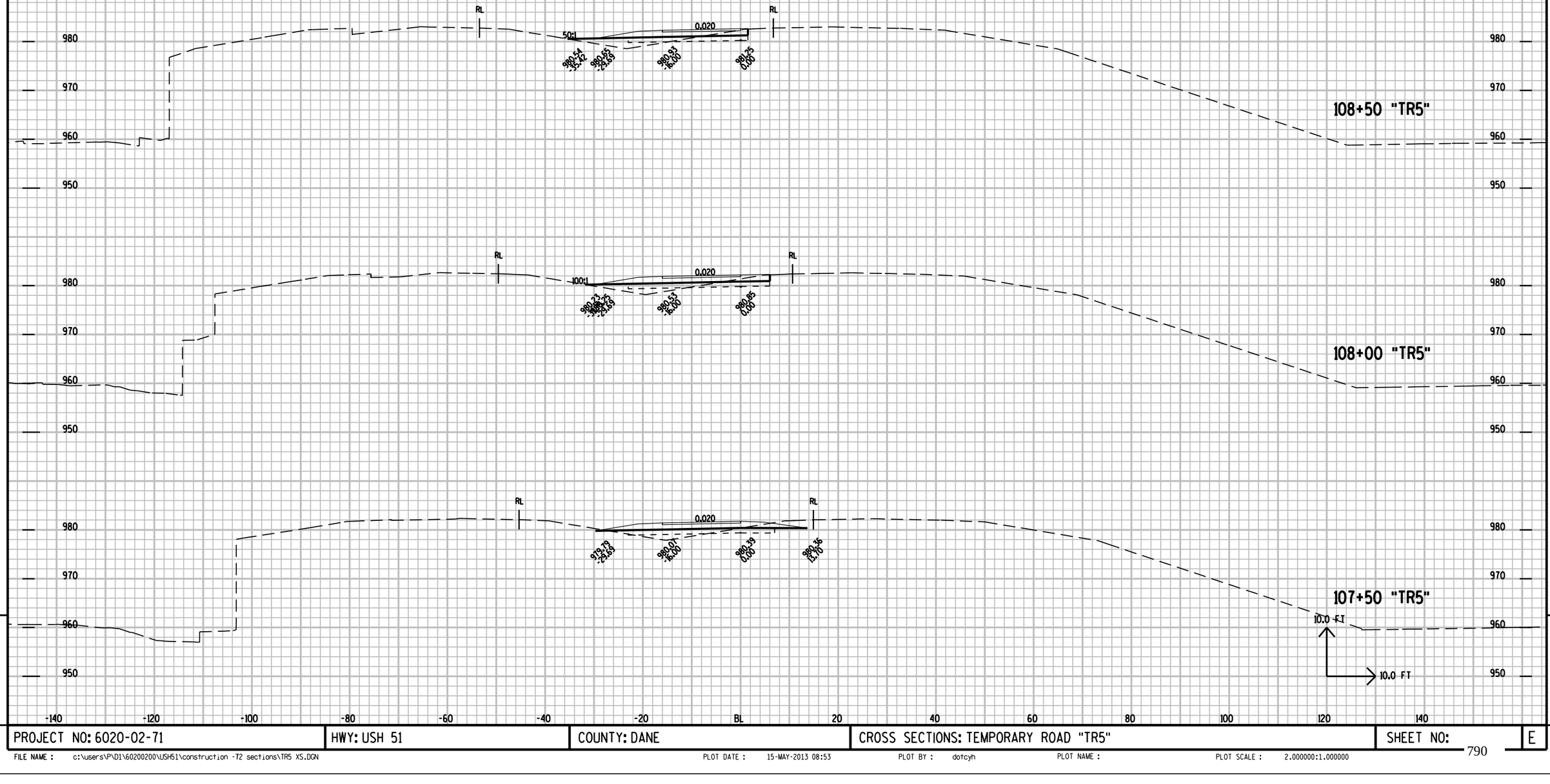


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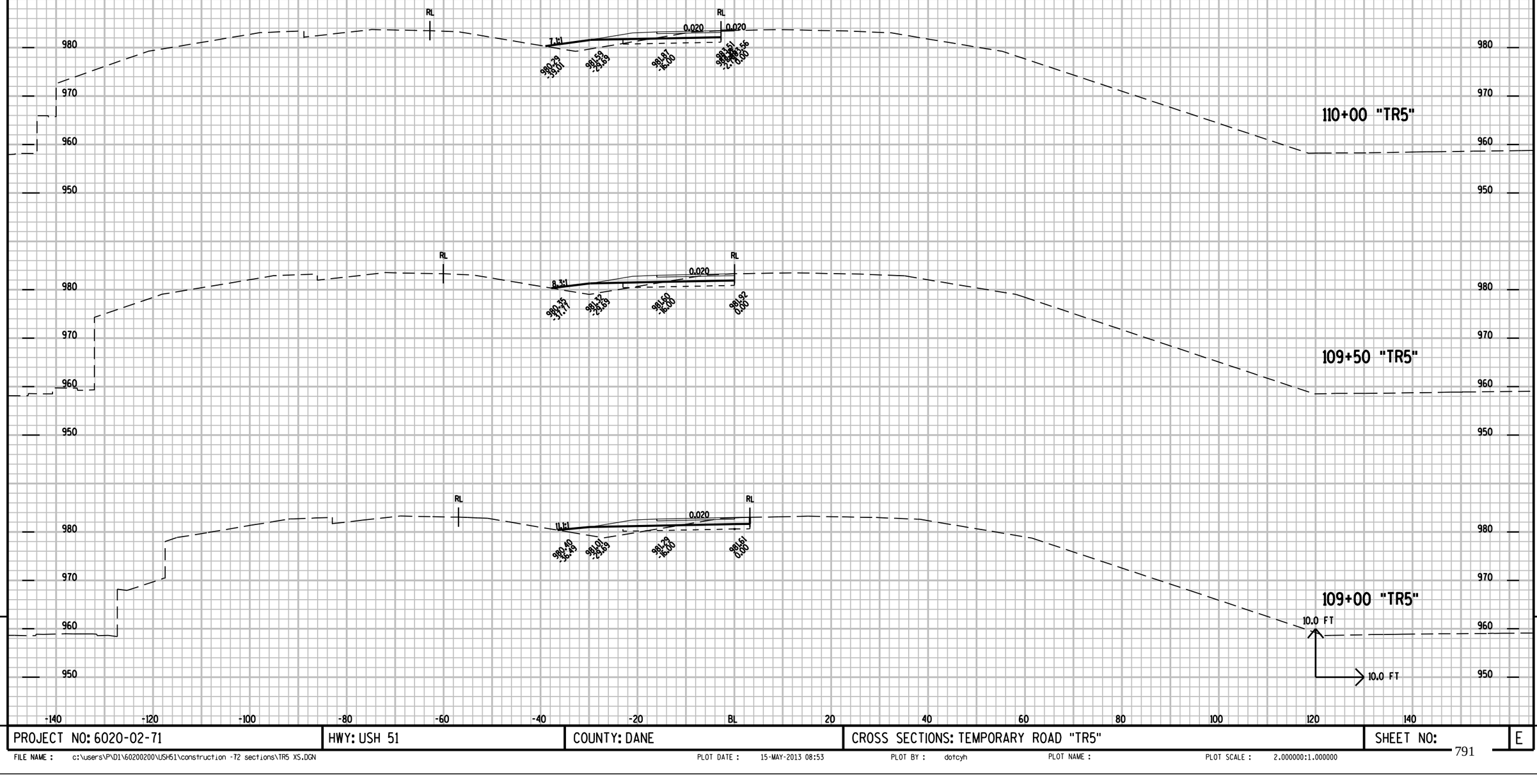
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PROJECT NO: 6020-02-71	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: TEMPORARY ROAD "TR5"	SHEET NO:	E

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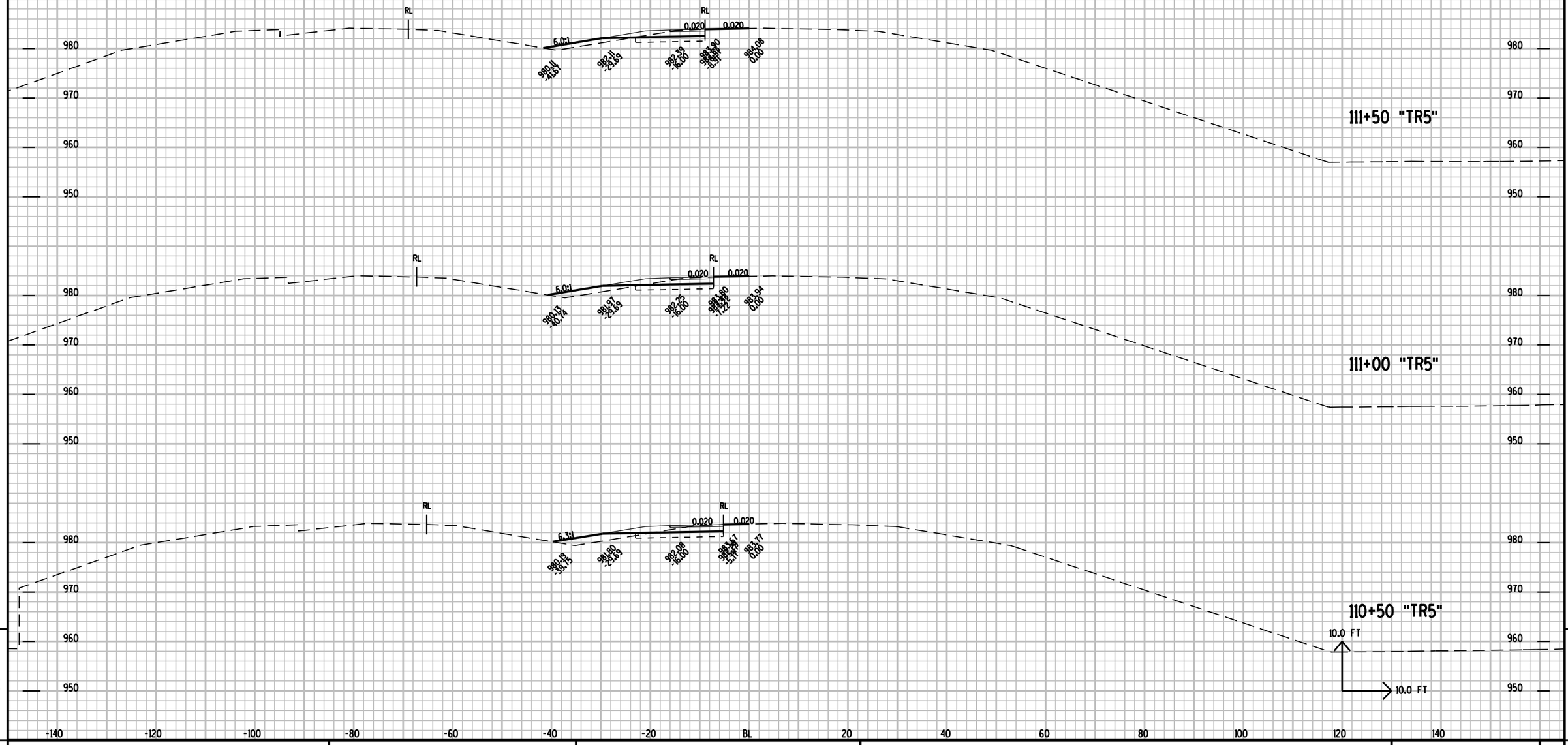


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PROJECT NO: 6020-02-71	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: TEMPORARY ROAD "TR5"	SHEET NO:	E

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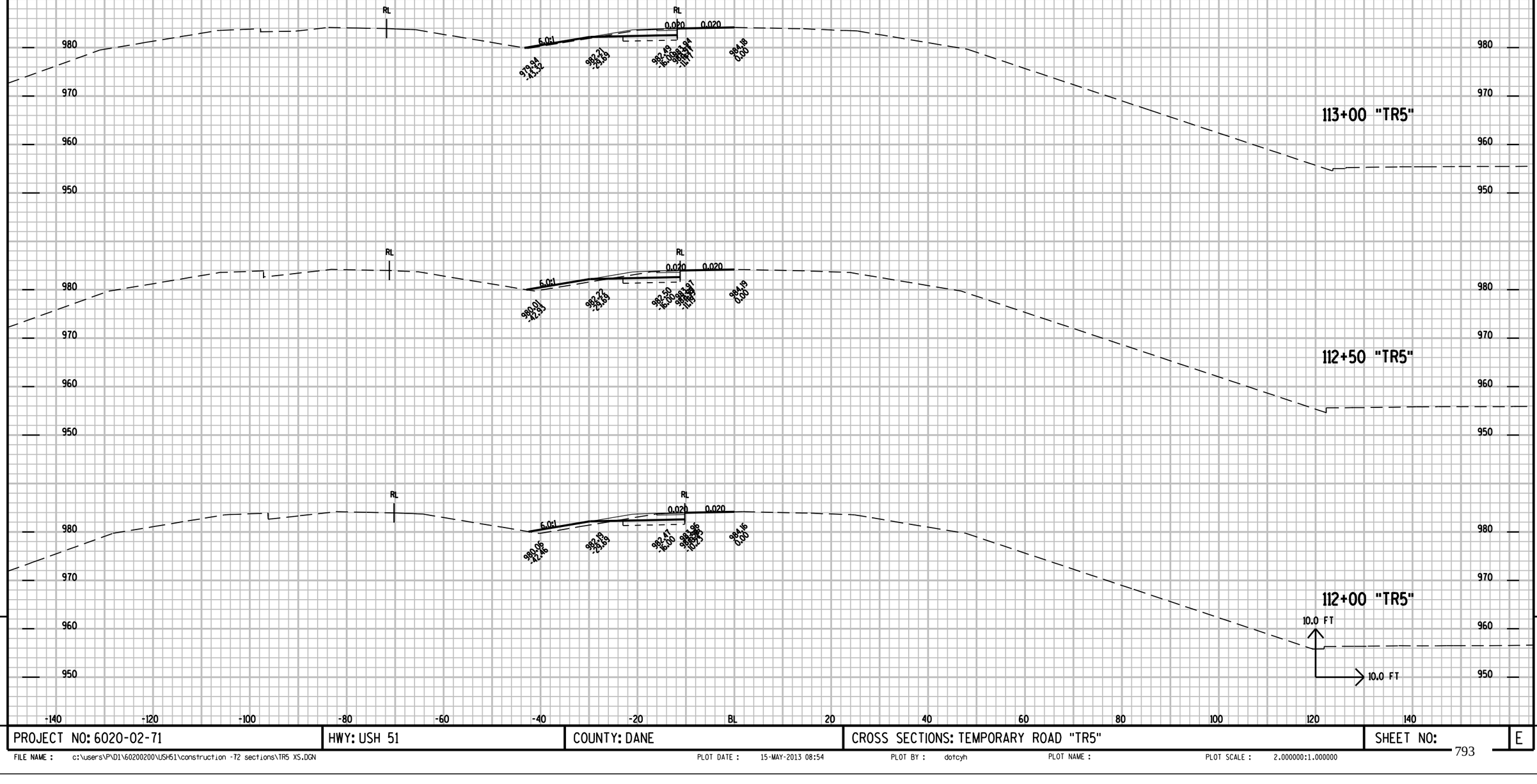


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PROJECT NO: 6020-02-71	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: TEMPORARY ROAD "TR5"	SHEET NO:	E

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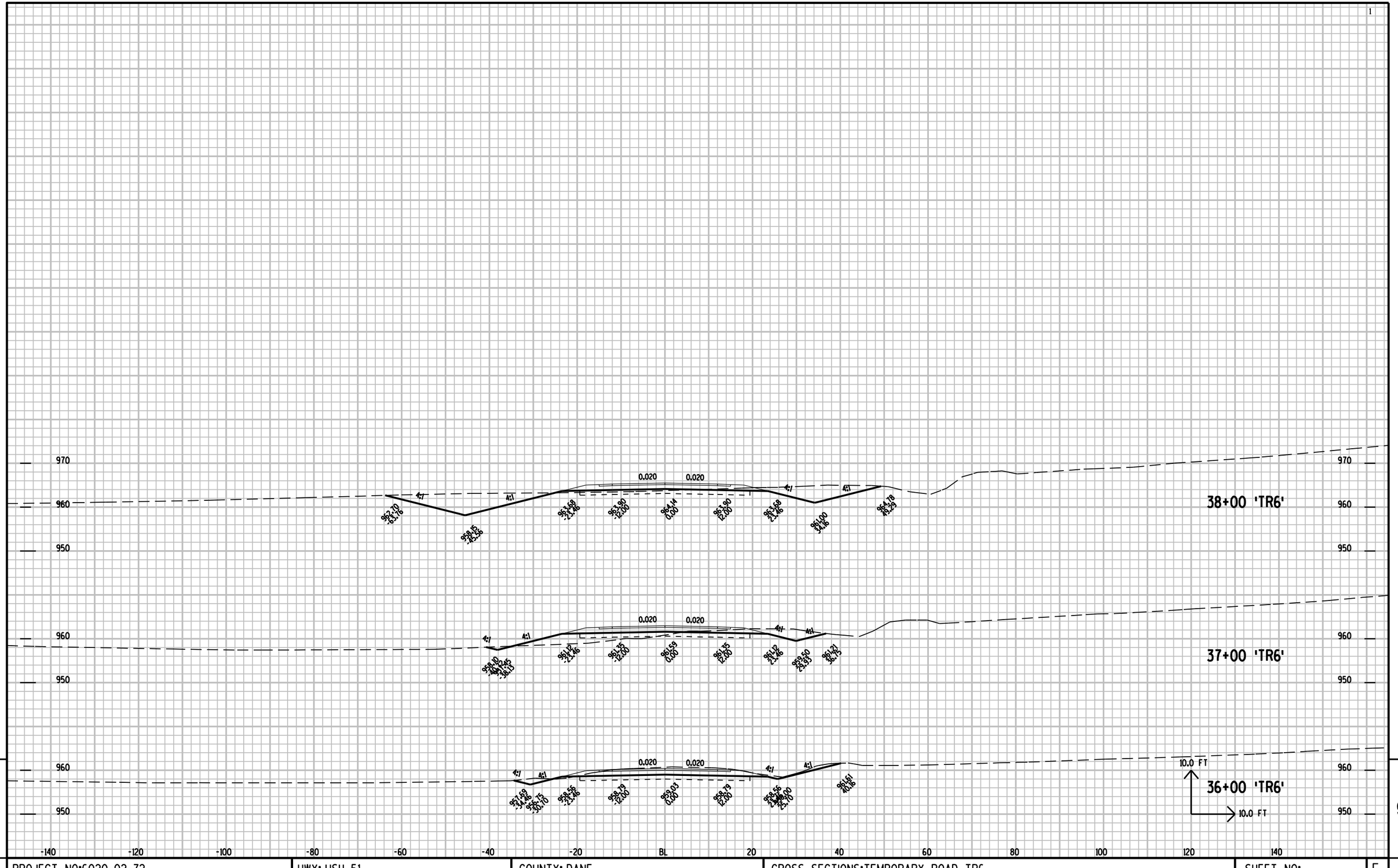


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PROJECT NO: 6020-02-71	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS: TEMPORARY ROAD "TR5"	SHEET NO:	E

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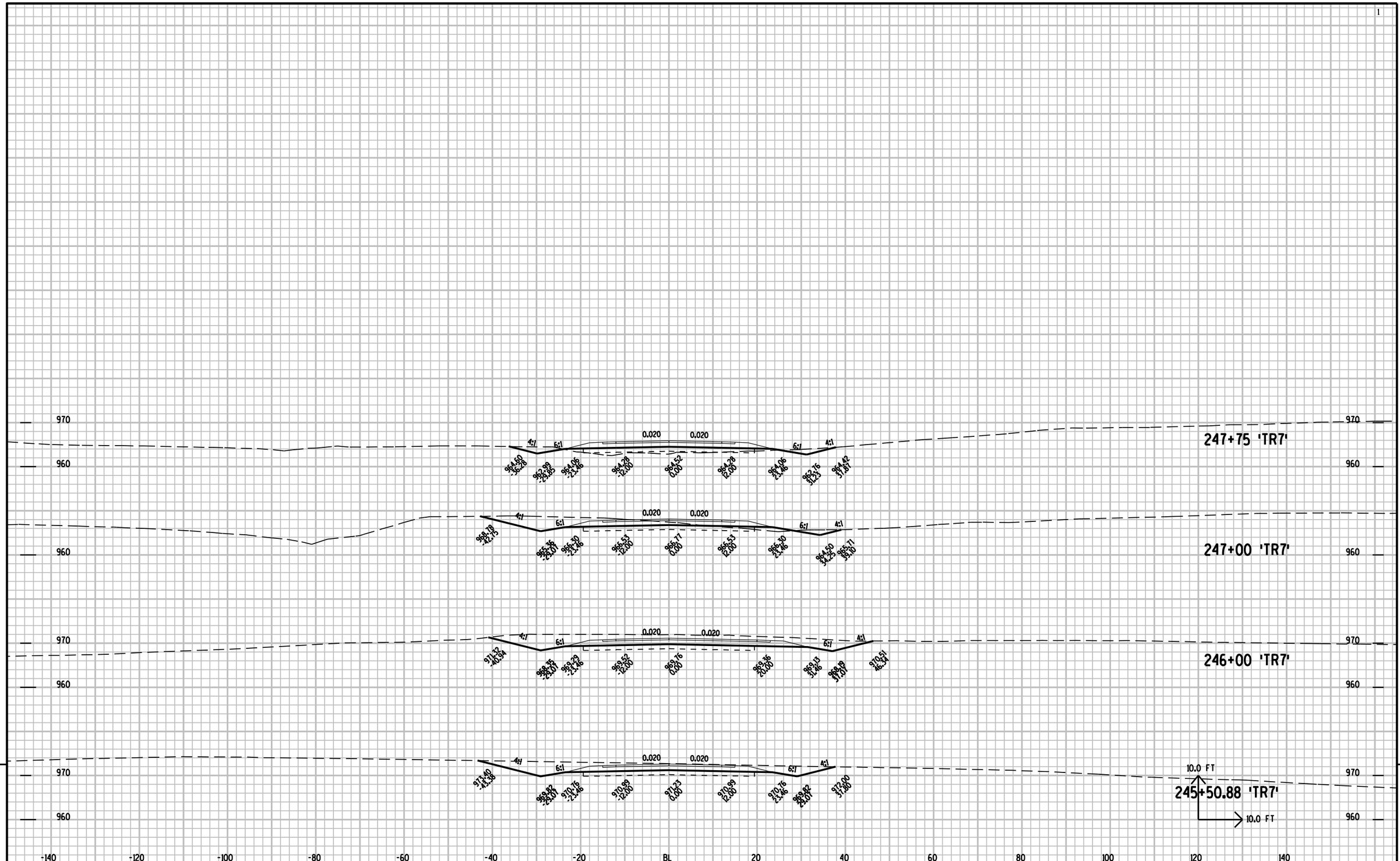


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PROJECT NO:6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS:TEMPORARY ROAD TR6	SHEET NO:	E

FILE NAME : c:\users\P\D1\60200200\USH51\construction -T2 sections\TR6 XS.DGN PLOT DATE : 03-JUN-2013 15:07 PLOT BY : dotcyh PLOT NAME : PLOT SCALE : 2.000000:1.000000



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PROJECT NO:6020-02-72	HWY: USH 51	COUNTY: DANE	CROSS SECTIONS:TEMPORARY ROAD TR7	SHEET NO:	E

FILE NAME : c:\users\P\D1\60200200\USH51\construction -72 sections\TR7 XS.DGN PLOT DATE : 03-JUN-2013 15:07 PLOT BY : dotcyh PLOT NAME : PLOT SCALE : 2.000000:1.000000

Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

http://www.dot.wisconsin.gov

MAD

AUGUST 2013

PROJECT ID: 6020-02-74

COUNTY: DANE

ORDER OF SHEETS

Section No.	1	Title
Section No.	2	Typical Sections and Details
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 = 14



N

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

MADISON – DEFOREST
(VINBURN ROAD – CTH V)

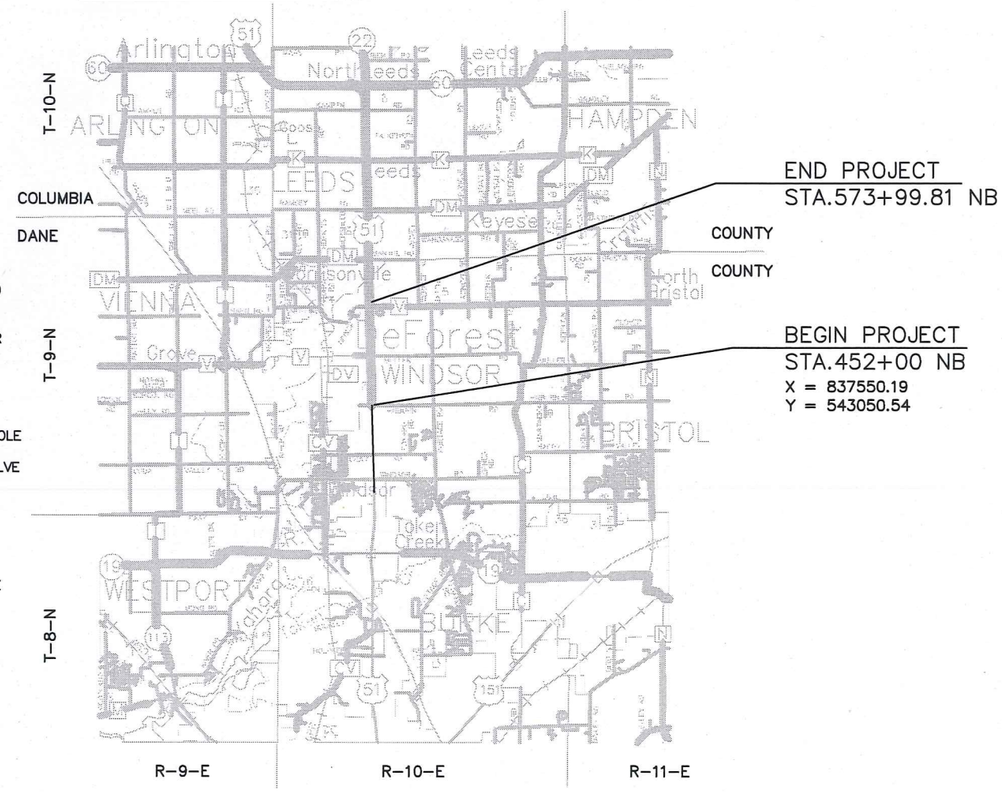
SANITARY SEWER AND WATER MAIN
USH 51
DANE

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
6020-02-74	———	—

STATE PROJECT NUMBER
6020-02-74

DESIGN DESIGNATION

A.A.D.T. 2006	=	16865
A.A.D.T. 2030	=	28800
D.H.V.	=	3139 (BIDIRECTIONAL)
D.D.	=	60-40
T.	=	8.1%
DESIGN SPEED	=	70 MPH
ESALS	=	9,059,300



END PROJECT
STA.573+99.81 NB

COUNTY
COUNTY

BEGIN PROJECT
STA.452+00 NB
X = 837550.19
Y = 543050.54

LAYOUT
SCALE 0 1.5 MI.

TOTAL NET LENGTH OF CENTERLINE = 2.23 MI.

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

EXISTING TOPOGRAPHIC LEGEND

- SAN — EXISTING SANITARY SEWER (SIZE NOTED)
- WM — EXISTING WATER MAIN (SIZE NOTED)
- ST — EXISTING STORM SEWER (SIZE NOTED)
- EXISTING SANITARY MANHOLE
- EXISTING WATER MAIN VALVE
- EXISTING CURB STOP
- EXISTING FIRE HYDRANT
- EXISTING CURB INLET
- EXISTING FIELD INLET
- EXISTING STORM MANHOLE
- EXISTING ENDWALL
- EXISTING GAS VALVE
- LIMITS OF VEGETATION
- EXISTING SHRUB
- EXISTING CONIFEROUS TREE
- EXISTING DECIDUOUS TREE
- 100 EXISTING MAJOR CONTOUR
- 100 EXISTING MINOR CONTOUR

PROPOSED LEGEND

- SAN — PROPOSED SANITARY SEWER
- WM — PROPOSED WATER MAIN
- PROPOSED STORM SEWER
- PROPOSED SANITARY MANHOLE
- PROPOSED WATER MAIN VALVE
- PROPOSED CURB STOP
- PROPOSED FIRE HYDRANT
- PROPOSED CURB INLET
- PROPOSED STORM MANHOLE
- PROPOSED ENDWALL

ORIGINAL PLANS PREPARED BY

vierbicher
planners | engineers | advisors
REEDSBURG - MADISON - PRAIRIE DU CHIEN
126 West Blackhawk Avenue Prairie du Chien, Wisconsin 53821
Phone: (608) 326-1051 Fax: (608) 326-1052

WISCONSIN
CRAIG E. MATHEWS
E-37661
REEDSBURG, WI
PROFESSIONAL ENGINEER

4/17/13 (Date)

Craig E Mathews (Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	WISDOT
Designer	CHRIS HAZARD
Project Manager	ROBERT LEX
Regional Examiner	
Regional Supervisor	CHRISTOPHER HODGES
C.O. Examiner	

APPROVED FOR THE DEPARTMENT

DATE: 5/1/13 CHRIS A. HAZARD (Signature)

E

FILE NAME : $$....designfile....$$ PLOT DATE : $$...plottingdate...$$ PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 10

GENERAL NOTES

MISCELLANEOUS

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

THE LOCATIONS OF THE 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. THE CONTRACTOR SHALL COORDINATE HIS CONSTRUCTION ACTIVITIES WITH A CALL TO DIGGERS HOTLINE AND/OR A DIRECT CALL TO THE UTILITIES, WHICH HAVE FACILITIES IN THE AREA. NOT ALL UTILITIES ARE MEMBERS OF DIGGERS HOTLINE.

RADIUS DIMENSIONS FOR THE CURB AND GUTTER ARE TO THE FLAG OF CURB, UNLESS OTHERWISE NOTED.

CURVE DATA BASED ON ARC DEFINITION.

BEARINGS ON THE PLAN ARE GRID BEARINGS TO THE NEAREST SECOND. DISTANCES SHOWN ON THE PLAN ARE GROUND DISTANCES.

WETLANDS ARE PRESENT IN AREAS ADJACENT TO THE PROJECT. DO NOT OPERATE OR STORE EQUIPMENT OUTSIDE OF THE SLOPE INTERCEPTS IN WETLAND AREAS.

PURSUANT TO CHAPTER 59 OF THE WISCONSIN STATUTES, THE CONTRACTOR SHALL CAREFULLY MAKE A SEARCH FOR EVIDENCE OF A LANDMARK IN ALL AREAS WHERE SUCH A LANDMARK MAY EXIST.

EXISTING DRIVEWAYS SHALL BE RESTORED IN KIND, UNLESS SHOWN OTHERWISE IN THE PLAN, AS DIRECTED BY THE ENGINEER IN THE FIELD AND AT THE LOCATION DETERMINED BY THE ENGINEER.

FINISHING ROADWAY SHALL INCLUDE CLEANOUT OF ALL EXISTING DRAINAGE STRUCTURES INSTALLED UNDER THIS CONTRACT, AS DIRECTED BY THE ENGINEER, AND SHALL INCLUDE REMOVAL OF ALL EXISTING SILT FENCE THAT IS NO LONGER NEEDED FOR EROSION CONTROL.

HMA PAVEMENT WEIGHT CALCULATIONS ARE BASED ON 110 LB/SY/IN.

PLACE ASPHALTIC SURFACE TEMPORARY IN ONE LAYER.

PLACE 2" HMA PAVEMENT IN ONE LAYER.

3.5" HMA PAVEMENT FOR PAVED SHOULDERS MAY BE PLACED IN ONE LAYER.

PLACE THE 3.5" AND 4.25" HMA PAVEMENT IN TWO LAYERS. THE 12.5 mm MIX GRADATION MAY BE USED FOR BOTH LAYERS.

PLACE THE 6" HMA PAVEMENT IN THREE LAYERS. THE 12.5 mm MIX GRADATION MAY BE USED FOR ALL LAYERS.

USE ASPHALTIC MATERIAL PG58-28 WITH ALL HMA PAVEMENT TYPES EXCEPT THE UPPER LAYER OF HMA PAVEMENT E-10 USED ON CTH V.

THE CONTRACTOR'S PAVING OPERATIONS SHALL BE CONSISTENT WITH THE PLAN TYPICAL SECTIONS AND CONSTRUCTED TO PREVENT HMA LONGITUDINAL JOINTS FROM BEING LOCATED WITHIN A DRIVING, TURNING, PASSING OR PARKING LANE.

GRADING/EROSION CONTROL

THE EROSION CONTROL DEVICES AS SHOWN ON THE EROSION CONTROL SHEETS ARE AT SUGGESTED LOCATIONS. EXACT LOCATION WILL BE DETERMINED BY THE ENGINEER.

PLACE SILT FENCE AT LOCATIONS DIRECTED BY THE ENGINEER PRIOR TO THE START OF CONSTRUCTION.

DIMENSIONS OF RIPRAP PLACEMENT SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

DISTURBED AREAS WITHIN THE RIGHT OF WAY, EXCEPT AREAS WITHIN THE FINISHED SHOULDER POINTS, SHALL BE TOPSOILED OR SALVAGED TOPSOILED, FERTILIZED AND SEEDED AS DIRECTED BY THE ENGINEER.

FILLS AS SHOWN ON THE PLANS PERTAINS TO EMBANKMENTS CONSTRUCTED FROM COMMON EXCAVATION MATERIAL. THE EXPANSION FACTOR USED TO COMPUTE THE VOLUME OF MATERIAL NECESSARY FOR THE FILL IS 25% - 30% FOR COMMON EXCAVATION BASED ON ITS ORIGINAL POSITION.

EXCAVATION BELOW SUBGRADE (EBS) IS PAID FOR AS COMMON EXCAVATION. THE EXACT LOCATIONS FOR EBS WILL BE DETERMINED BY THE PROJECT ENGINEER.

REMOVALS

NO TREE OR SHRUBS SHALL BE REMOVED WITHOUT THE APPROVAL OF THE ENGINEER.

DO NOT REMOVE ANY APPLE OR PEAR TREES WITHOUT APPROVAL OF THE ENGINEER.

MISCELLANEOUS REMOVAL ITEMS REQUIRING RESTORATION OF CONCRETE OR ASPHALTIC CONCRETE, SUCH AS DRIVEWAYS, SIDEWALKS, PEDESTRIAN RAMPS, SIDE STREETS OR INLETS SHALL BE REMOVED TO AN EXISTING JOINT OR SAWED AS DETERMINED BY THE PROJECT ENGINEER, OR AS SHOWN ON THE PLANS.

UTILITY/MUNICIPALITY	ADDRESS	CONTACT	UTILITY TYPE
* ALLIANT ENERGY CORPORATION	4902 N BILTMORE LANE SUITE 1000 MADISON, WI 53707-1007	JASON HOGAN (608) 458-4871	ELECTRIC
* ATC MANAGEMENT, INC	801 O'KEEFE RD PO BOX 6113 DE PERE, WI 54115-6113	MIKE OLSEN (920) 338-6582	ELECTRIC
* CENTURYTEL OF MIDWEST-WISCONSIN, LLC	333 N FRONT ST PO BOX 4800 LACROSSE, WI 54602	STEVE BLADO (608) 796-5543	COMMUNICATION
* CHARTER COMMUNICATIONS	2701 DANIELS ST MADISON, WI 53718	BRANDON STORM (608) 274-3822	COMMUNICATION
* MADISON GAS AND ELECTRIC	PO BOX 1231 MADISON, WI 53701-1231	TIM STATZ (608) 252-4727	GAS/PETROLEUM
* VILLAGE OF DEFOREST	306 DEFOREST ST DEFOREST, WI 53532	DEANE BAKER (608) 846-6751	WATER / SEWER

*

* DENOTES DIGGERS HOTLINE MEMBER

AGENCIES

DEFOREST FIRE DEPARTMENT
DAVID ARNOLD
DEFOREST, WI 53532
(608) 846-4364 NON-EMERGENCY

EMERGENCY - FIRE, RESCUE, AMBULANCE, POLICE
DIAL 911

UNITED STATES POST OFFICE
619 SOUTH MAIN STREET
DEFOREST, WI 53532 (608) 846-5910

DEFOREST POLICE DEPARTMENT
306 DEFOREST ST
DEFOREST, WI 53532
(608) 846-6755 NON-EMERGENCY

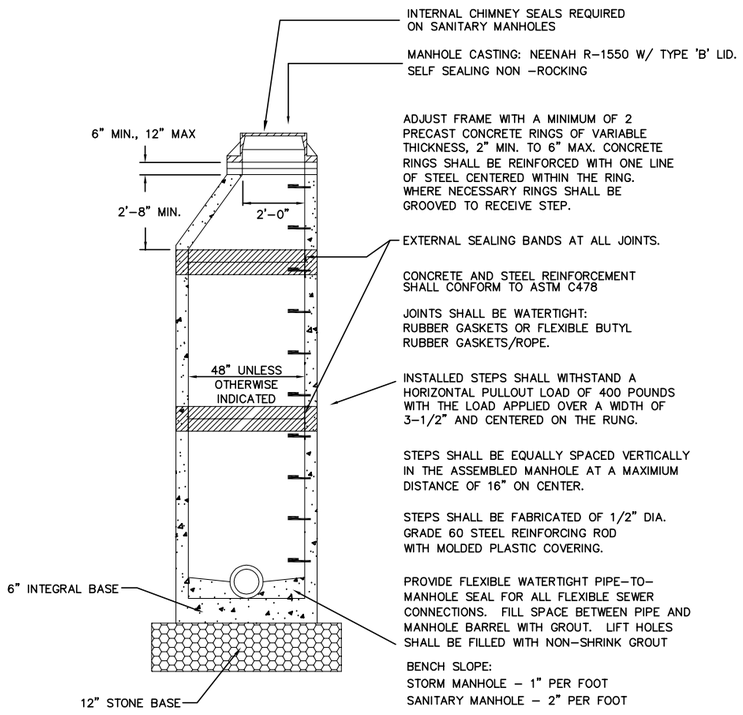
VILLAGE OF DEFOREST -VILLAGE HALL
306 DEFOREST STREET
DEFOREST(608) 846-6751

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

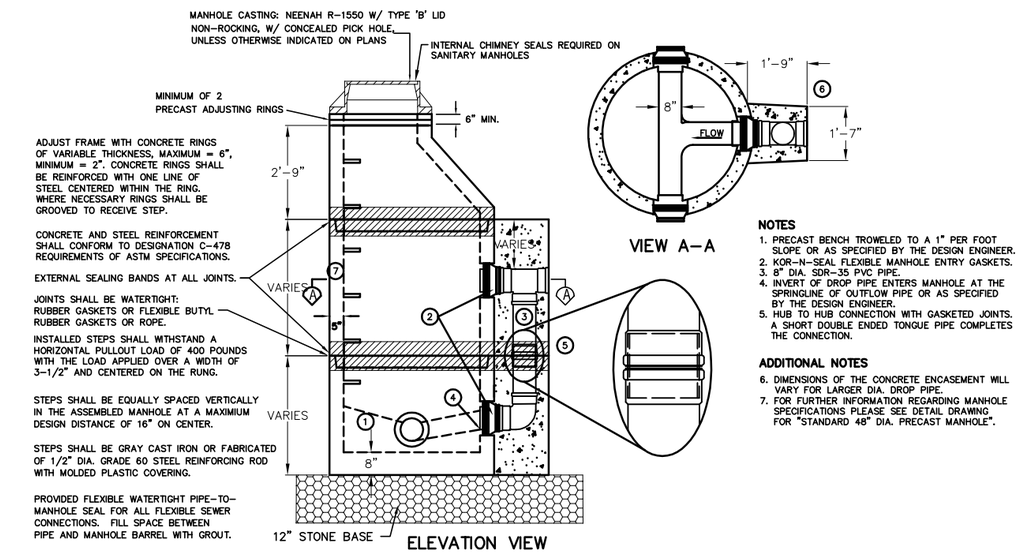
DEPARTMENT OF NATURAL RESOURCES

AMANDA CUSHMAN
3911 FISH HATCHERY ROAD
FITCHBURG, WI 53711
608-275-3485



PRECAST CONCRETE MANHOLE

NOT TO SCALE



NOTES

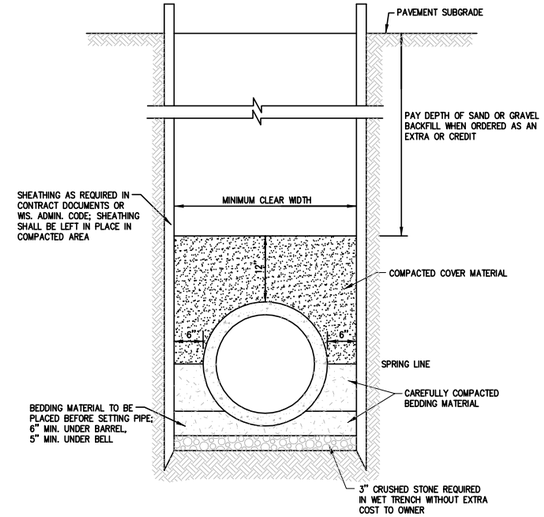
1. PRECAST BENCH TROWELED TO A 1" PER FOOT SLOPE OR AS SPECIFIED BY THE DESIGN ENGINEER.
2. KOR-N-SEAL FLEXIBLE MANHOLE ENTRY GASKETS.
3. 8" DIA. SDR-35 PVC PIPE.
4. INVERT OF DROP PIPE ENTERS MANHOLE AT THE SPRINGLINE OF OUTFLOW PIPE OR AS SPECIFIED BY THE DESIGN ENGINEER.
5. HUB TO HUB CONNECTION WITH GASKETED JOINTS. A SHORT DOUBLE ENDED TONGUE PIPE COMPLETES THE CONNECTION.

ADDITIONAL NOTES

6. DIMENSIONS OF THE CONCRETE ENCASEMENT WILL VARY FOR LARGER DIA. DROP PIPE.
7. FOR FURTHER INFORMATION REGARDING MANHOLE SPECIFICATIONS PLEASE SEE DETAIL DRAWING FOR "STANDARD 48" DIA. PRECAST MANHOLE".

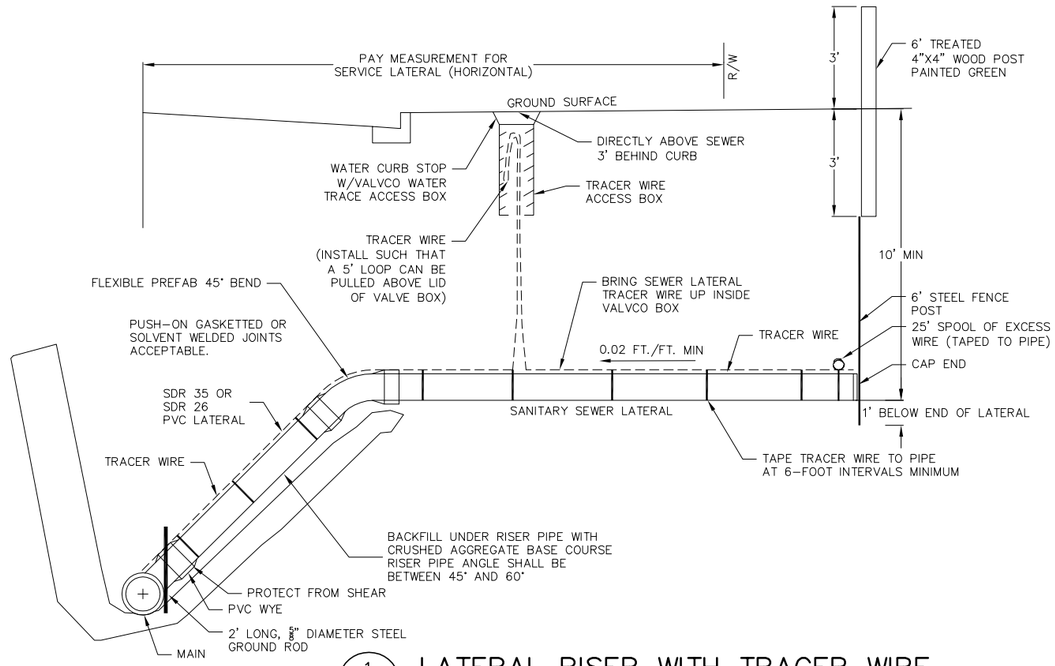
PRECAST CONCRETE DROP MANHOLE

NOT TO SCALE



COMPACTED SECTION (CLASS 'B' BEDDING)

NOT TO SCALE

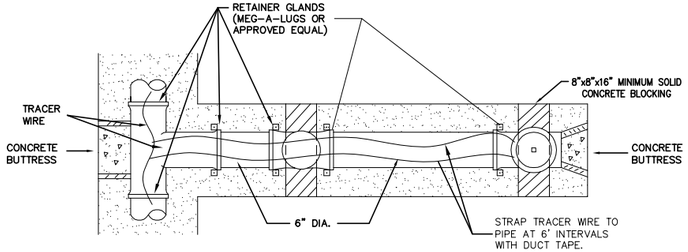


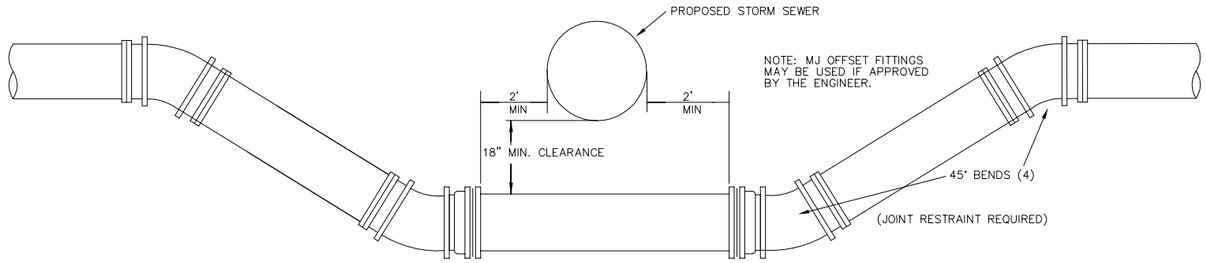
1/1 LATERAL RISER WITH TRACER WIRE

NOT TO SCALE

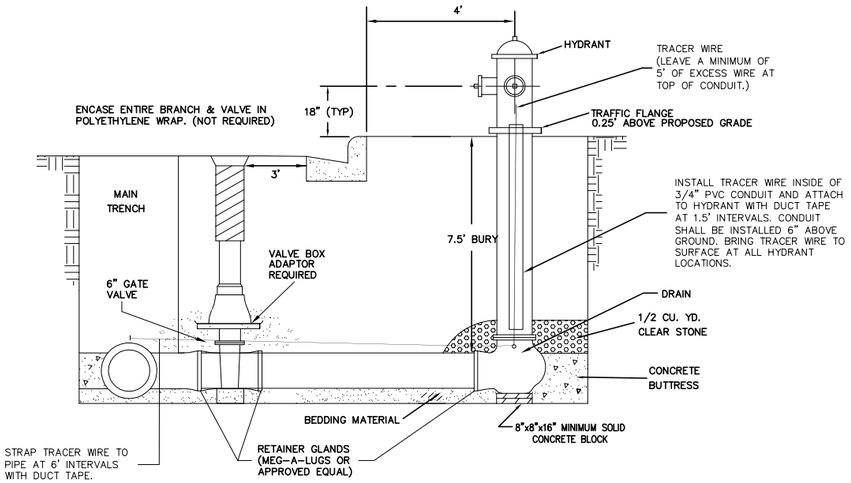
PROJECT NO:6020-02-74	HWY:USH 51	COUNTY:DANE	SANITARY SEWER DETAILS

FILE NAME : R:\DEFOREST 013076392 USH 51 EXPANSION\ENGINEERING_USH 51\TASK 3 - USH 51 EXPANSION PHASE 2\CIVIL 3D\DEFO USH 51 PH 2 DETAILS.DWG PLOT DATE: 3/11/11
PLOT BY : MARK MATHEWS



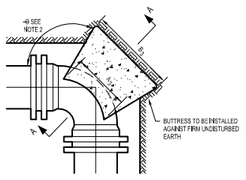


WATER MAIN AT STORM SEWER CROSSINGS

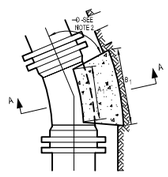


STANDARD HYDRANT SETTING

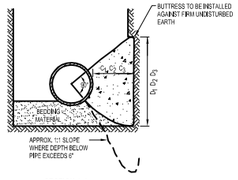
NOT TO SCALE



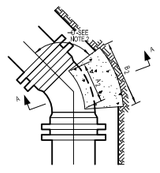
PLAN - 90° BEND



PLAN - 22 °BEND



SECTION A-A



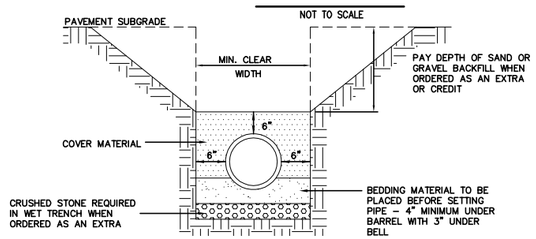
PLAN - 45° BEND

BUTTRESS DIMENSIONS						
PIPE SIZE	22½ BENDS		45° BENDS		90° BENDS	
	B_1	D_1	B_2	D_2	B_3	D_3
6"	1'-3"	1'-0"	1'-3"	1'-3"	1'-4"	1'-2"
8"	1'-3"	1'-0"	1'-4"	1'-3"	1'-11"	1'-8"
12"	1'-4"	1'-4"	1'-10"	1'-10"	2'-8"	2'-3"
16"	1'-10"	1'-6"	2'-6"	2'-4"	3'-10"	3'-10"
20"	2'-4"	2'-0"	3'-3"	2'-10"	5'-0"	3'-4"
24"	2'-10"	2'-4"	4'-0"	3'-3"	6'-4"	3'-10"
30"	3'-8"	3'-0"	5'-4"	3'-10"	8'-0"	4'-8"

NOTES
1. DIMENSIONS IN TABLE ARE BASED ON A WATER PRESSURE OF 150 psi AND ON EARTH RESISTANCE OF 2 TONS PER SQUARE FOOT.
2. DIMENSION C1 C2 C3 SHOULD BE LARGE ENOUGH TO MAKE ANGLE Ø EQUAL TO OR LARGER THAN 45°
3. DIMENSION A1 A2 A3 SHOULD BE AS LARGE AS POSSIBLE WITHOUT INTERFERRING WITH M.J. BOLTS.
4. SHAPE OF BACK OF BUTTRESS MAY VARY AS LONG AS PLACEMENT IS AGAINST FIRM UNDISTURBED EARTH.

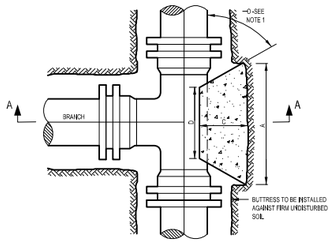
BUTTRESS FOR BENDS

NOT TO SCALE

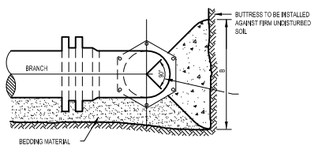


CLASS "C" BEDDING

NOT TO SCALE



PLAN



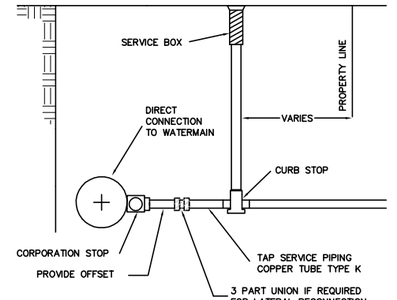
SECTION A-A

BUTTRESS DIMENSIONS				
B.D.	A	B	C	D
6"	1'-3"	1'-0"	SEE NOTE NO. 1	SEE NOTE NO. 3
8"	1'-6"	1'-4"		
12"	2'-3"	2'-0"		
16"	3'-2"	2'-8"		
20"	4'-0"	3'-0"		
24"	5'-3"	3'-4"		
30"	6'-3"	4'-3"		

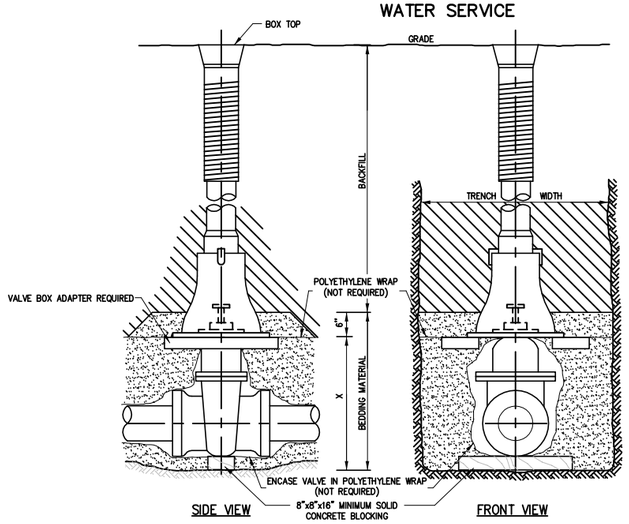
B.D. = BRANCH DIAMETER

NOTES
1. DIMENSION 'C' SHOULD BE LARGE ENOUGH TO MAKE ANGLE EQUAL TO OR LARGER THAN 45°.
2. DIMENSION 'D' SHOULD BE AS LARGE AS POSSIBLE BUT SHOULD NOT INTERFERE WITH MECHANICAL JOINTS.
3. BUTTRESS DIMENSIONS ARE BASED ON A SOIL RESISTANCE OF TWO TONS PER SQ. FT. AND A WATER PRESSURE OF 150 psi.

BUTTRESS FOR TEES



WATER SERVICE



PIPE DIA. INCHES	X=SETTING INCHES
2	6
3	7
4	8
6	12
8	13
12	21
16	30

STANDARD GATE VALVE BOX SETTING

Christopher Street

Future Walk

Future Curb

Future Sanitary

Future Curb

Future Storm Sewer

Future Water Main

Future Walk

SAN

STM

WM

SS

7+50 8+00 8+50 9+00 9+50 10+00 10+50 11+00 11+50 12+00 230+50

SMH 9

SMH 10

66'

40'

PT 8+34.03

PC 10+13.21

PT 11+80.73

SMH 9
8+34.0 0.0' LT
Rim = 957.74
IE = 945.91 S
IE = 946.01 N

SMH 10
10+76.4, 5.0' LT
Rim = 956.53
IE = 947.22 S
IE = 947.32 N

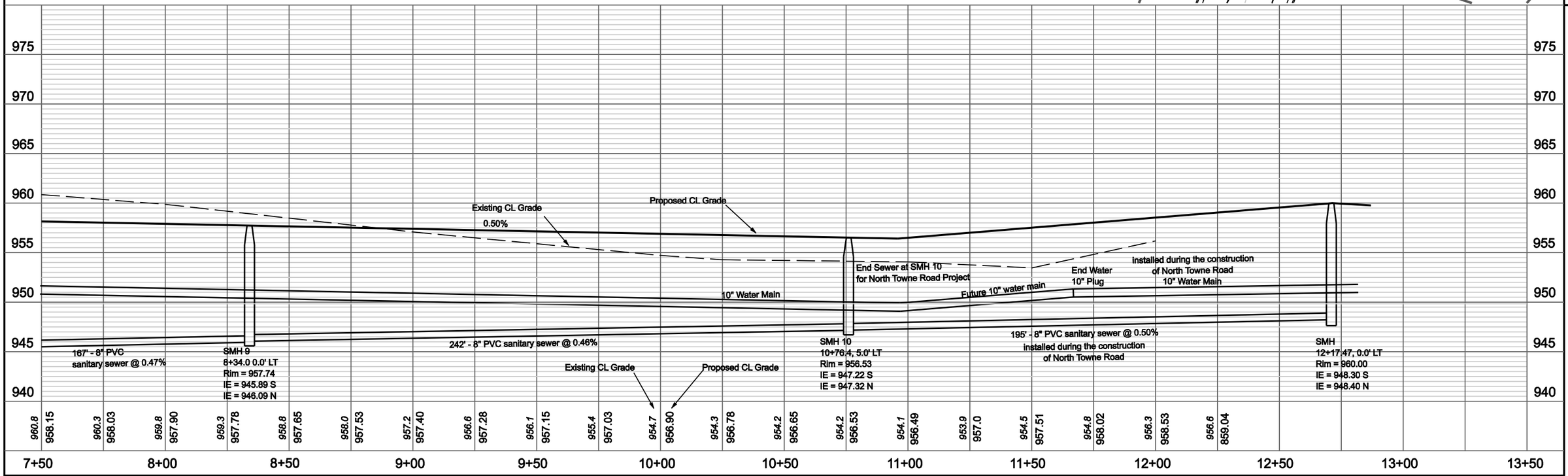
Sanitary Sewer installed during the construction of North Towne Road

35' Wide Sanitary Sewer and Water Main Easement

Sta 12+22.0 CS
Temp Hydrant, 10.0' RT

Water Main installed during the construction of North Towne Road

North Towne Road



PROJECT NO: 6020 - 02 - 74	Road USH 51	COUNTY: Dane	Sanitary Sewer and Water Main	SHEET	E

FILE NAME ss....DESIGNFILE....ss PLOT DATE ‹ss...PLOTTINGDATE...ss PLOT BY ‹ss...PLOTUSER...ssPLOT NAME ‹ ----------PLOT SCALE ‹ss.....PLOTSCALE.....ss WISDOT/CADDS SHEET 41A

2

North Towne Road

SS 225+00 225+50 226+00 226+50 227+00 227+50 228+00 228+50 229+00 229+50 230+00

38

N

0 20 40

SAN 11+50 12+00

Possible Future Right-of-Way

Future Water Main

STM

WM

SAN

Sta 227+63.8 NT
Hydrant, 23.5' RT
10" - 6" Reducer, 21.0' RT

Sta. 227+74.1 NT
10" Valve, 21.5' RT

Sta. 229+31.1 NT
10" Valve, 10.0" RT

PC 229+02.08

975 970 965 960 955 950 945 940

IE 960.58
24" Storm Sewer
IE 958.99
24" Storm Sewer
IE 955.88
0.50%
Existing CL Grade
Finished CL Grade
24" Storm Sewer
IE 954.10
10" Water Main
End
24" Storm Sewer
275' - 8" sanitary sewer @ 0.40%
SMH 1
229+50.6, 0.0' RT
Rim = 960.00
IE = 948.40 N
IE = 948.30 W

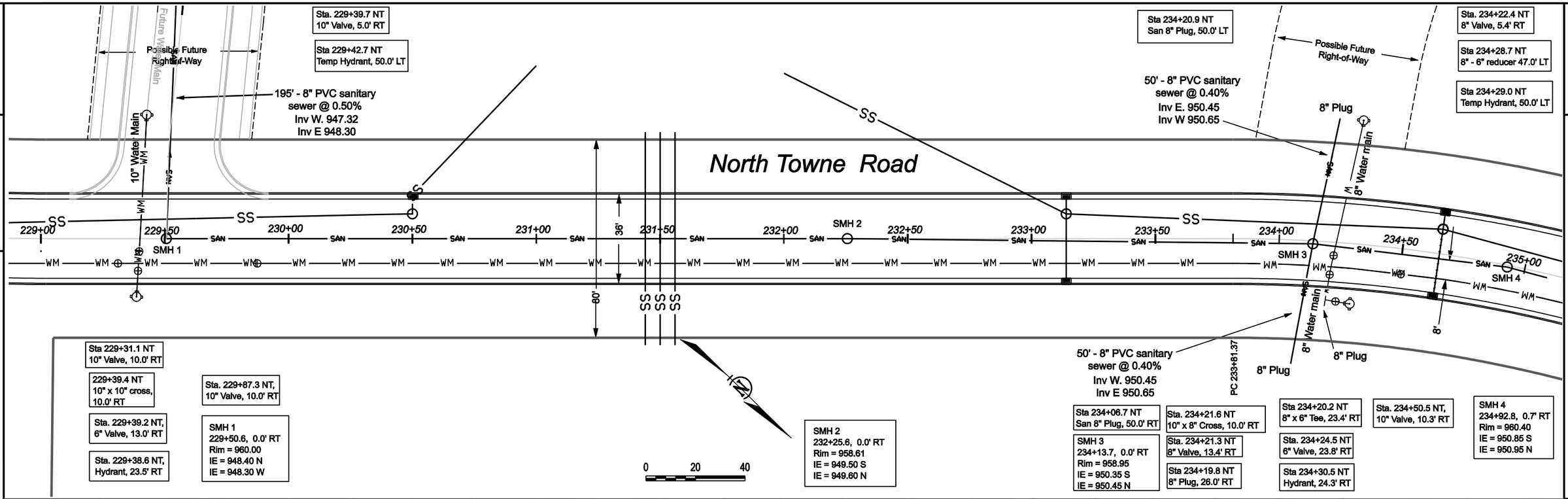
Existing CL Grade
Finished CL Grade

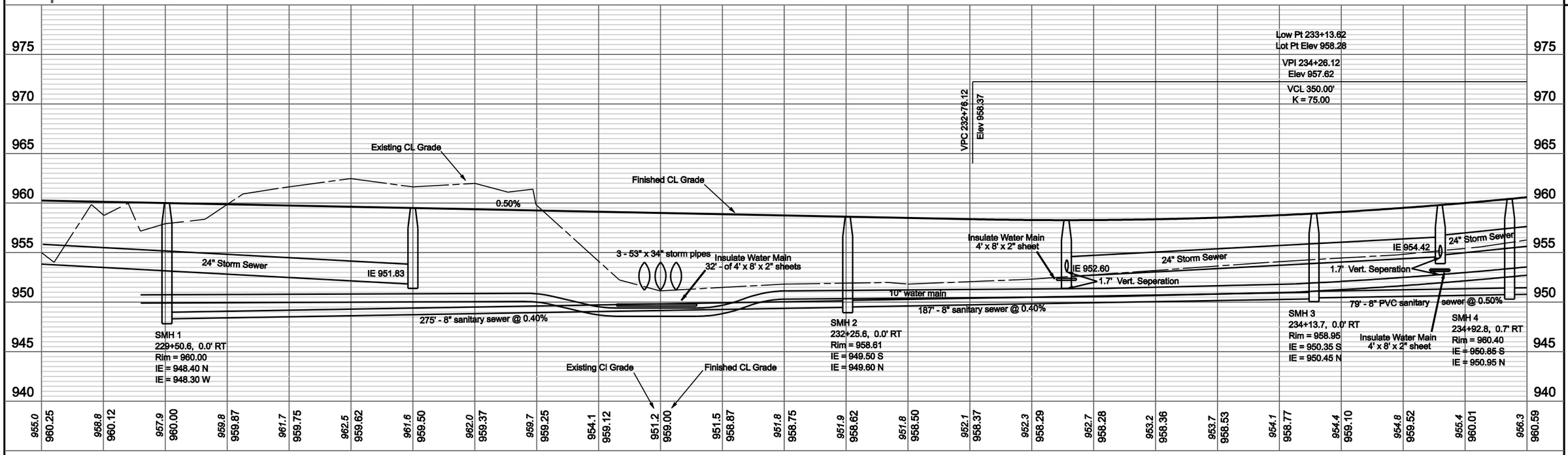
966.4 966.33 966.2 966.23 966.0 966.13 965.7 965.97 965.7 965.69 964.7 956.28 963.7 964.75 962.9 964.12 962.1 963.51 961.0 962.94 962.5 962.44 961.5 962.01 960.6 961.63 959.8 961.32 959.0 961.07 958.1 960.88 957.4 960.75 956.5 960.63 955.7 960.50 955.1 960.37 955.0 960.25 958.8 960.12 957.9 960.00 959.8 959.87 961.7 959.75

224+00 224+50 225+00 225+50 226+00 226+50 227+00 227+50 228+00 228+50 229+00 229+50 230+00

PROJECT NO: 6020 - 02 - 74	HWY: USH 51	COUNTY: Dane	Sanitary Sewer and Water Main	SHEET	E

FILE NAME ss....DESIGNFILE....ss PLOT DATE ‹ss...PLOTTINGDATE...ss PLOT BY ‹ss...PLOTUSER...ssPLOT NAME ‹ ----------PLOT SCALE ‹ss.....PLOTSCALE.....ss WISDOT/CADDS SHEET 41A





PROJECT NO: 6020 - 02 -74	HWY: USH 51	COUNTY: Dane	Sanitary Sewer and Water Main	SHEET 7	E

Sta. 235+79.4 NT
1.5" water, 10.0' RT

Sta. 235+85.2 NT
1.5" valve, 22.0' LT

Sta. 235+90.8 NT
End Water Lateral 50.0' LT

Sta. 235+84.0 NT
4" San Lateral

Sta 235+90.3 NT
End 4" Lateral, 50.0' LT

Sta. 236+84.0 NT
4" San Lateral
End Lateral, 50.0' LT

Sta. 236+87.0 NT
1.5" water Lateral
1.5" Valve, 22.0' LT
End Lateral, 50.0' LT

0 20 40

SMH 4
234+92.8, 0.7' RT
Rim = 960.40
IE = 950.85 S
IE = 950.95 N

SMH 5

SMH 6

North Towne Road

PT 236+59.61

Sta. 234+41.7 NT,
Hydrant, 23.5' RT
6" Valve, 13.5' RT
10" x 6" Tee, 10.0' RT

Sta. 234+50.5 NT,
10" Valve, 10.3' RT

SMH 5
235+92.0, 1.0' LT
Rim = 963.43
IE = 952.93 S
IE = 953.03 N

SMH 6
237+50.0, 0.0' RT
Rim = 968.20
IE = 957.74 S

Sta. 237+50.0 NT
1.5" water Lateral
1.5" Valve, 22.0' RT
End Lateral, 50.0' RT

Sta. 237+45.0 NT
4" San Lateral
End Lateral, 50.0' RT

Sta. 238+01.4 NT,
Hydrant, 23.5' RT
6" Valve, 13.5' RT
10" x 6" Tee, 10.0' RT

PVI 237+50.00
Elev 968.95
VCL 240.00'
K = 96.00

VPC 236+30.00
Elev 964.76

Elev 970.16
VPT 238+70.00

VCL 350.00'
K = 75.00

Elev 962.87
VPT 235+76.12

Existing CL Grades

Finished CL Grades

Min. 6.5'

3.50%

962.30

24" Storm Sewer

10" water main

958.32

1.7' Vert
Seperation

Insulate Water Main
4' x 8' x 2" sheet

157' - 8" PVC sanitary sewer @ 3.00%

99' - 8" PVC sanitary sewer @ 2.00%

IE 954.42

Insulate Water Main
4' x 8' x 2" sheet

SMH 4
234+92.8, 0.7' RT
Rim = 960.40
IE = 950.85 S
IE = 950.95 N

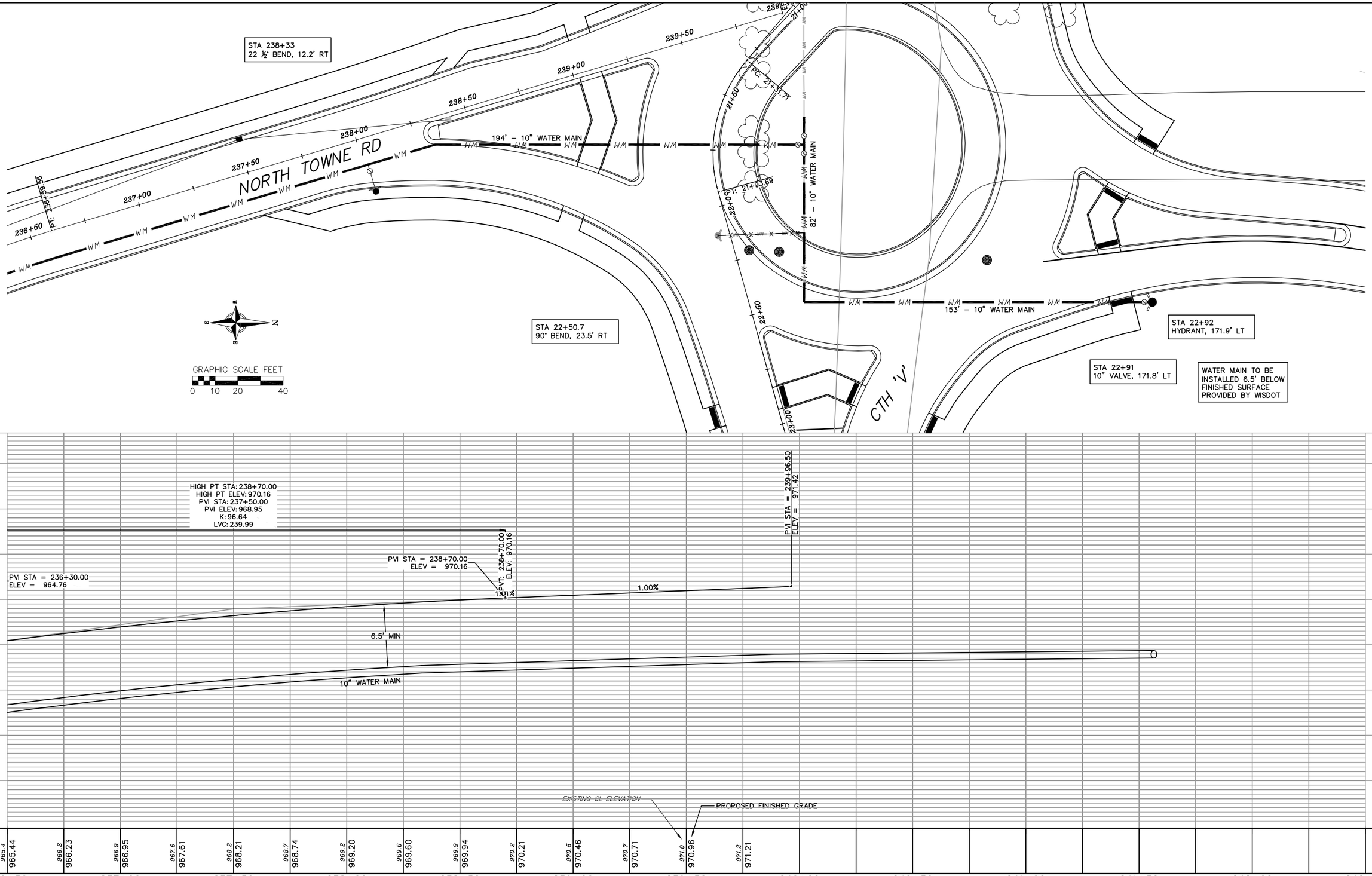
SMH 5
235+92.0, 1.0' LT
Rim = 963.43
IE = 952.93 S
IE = 953.03 N

SMH 6
237+50.0, 0.0' RT
Rim = 968.20
IE = 957.74 S

Existing CL Grades

Finished CL Grades

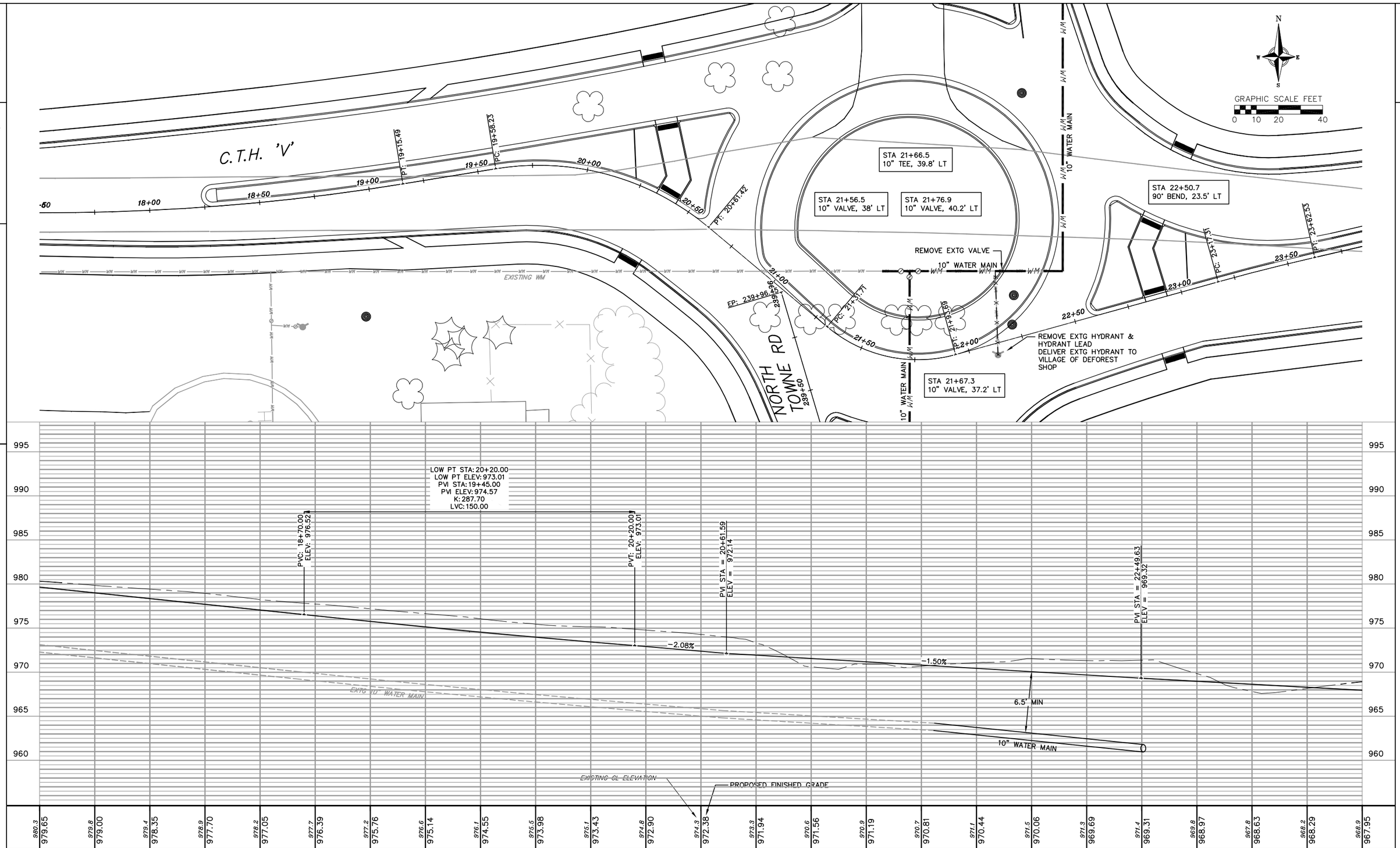
| | | |



PROJECT NO: 6020–02–74	HWY: USH 51	COUNTY: DANE	SANITARY SEWER AND WATER MAIN

FILE NAME : R:\DEFOREST 013076392 USH 51 EXPANSION\ENGINEERING_USH 51\TASK 3 – USH 51 EXPANSION PHASE 2\CIVIL 3D\USH 51 PH 2 BASE MAP.DWG PLOT DATE: 11/11

PLOT BY : MARK MATHEWS



PROJECT NO: 6020-02-74	HWY: USH 51	COUNTY: DANE	SANITARY SEWER AND WATER MAIN

FILE NAME : R:\DEFOREST 013076392 USH 51 EXPANSION\ENGINEERING_USH 51\TASK 3 – USH 51 EXPANSION PHASE 2\CIVIL 3D\USH 51 PH 2 BASE MAPPING.DWG PLOT DATE: 11/11

PLOT BY : MARK MATHEWS

DATE 11JUN13 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	6020-02-74 QUANTITY
1590	612.0902.S	INSULATION BOARD POLYSTYRENE (INCH) 01. 2-INCH	SY	36.000	36.000
3160	SPV.0035	SPECIAL 02. SELECT GRANULAR BACKFILL	CY	4,000.000	4,000.000
3520	SPV.0060	SPECIAL 36. SANITARY SEWER MANHOLE, 48-INCH PRECAST CONCRETE, W/ CASTING	EACH	7.000	7.000
3530	SPV.0060	SPECIAL 37. SANITARY SEWER, PVC, SDR 35 8-INCH X 4-INCH WYE	EACH	3.000	3.000
3540	SPV.0060	SPECIAL 38. GATE VALVE W/ BOX 6-INCH	EACH	3.000	3.000
3550	SPV.0060	SPECIAL 39. GATE VALVE W/ BOX 8-INCH	EACH	2.000	2.000
3560	SPV.0060	SPECIAL 40. GATE VALVE W/ BOX 10-INCH	EACH	9.000	9.000
3570	SPV.0060	SPECIAL 41. HYDRANT	EACH	7.000	7.000
3660	SPV.0090	SPECIAL 08. SANITARY LATERAL, 4-INCH PVC, SPR 35, W/ 10 AWG TRACER WIRE	LF	153.000	153.000
3670	SPV.0090	SPECIAL 09. SANITARY SEWER MAIN, 8-INCH PVC, SDR 35	LF	1,092.000	1,092.000
3680	SPV.0090	SPECIAL 10. WATER SERVICE 1.5-INCH COPPER INCLUDING FITTINGS	LF	162.000	162.000
3690	SPV.0090	SPECIAL 11. WATERMAIN, 6-INCH DI CLASS 52 INCLUDING FITTINGS	LF	42.000	42.000
3700	SPV.0090	SPECIAL 12. WATERMAIN, 8-INCH DI CLASS 52 INCLUDING FITTINGS	LF	76.000	76.000
3710	SPV.0090	SPECIAL 13. WATERMAIN, 10-INCH DI CLASS 52 INCLUDING FITTINGS	LF	1,525.000	1,525.000

3

WATERMAIN INSULATION

CATEGORY	STATION	LOCATION	612.0902.S INSULATION BOARD POLYSTYRENE, 2-INCH SY
0010	231+50	NORTHT TOWNE ROAD	16
0010	233+12	NORTHT TOWNE ROAD	4
0010	234+62	NORTHT TOWNE ROAD	4
0010	236+00	NORTHT TOWNE ROAD	4
0010	TBD	CTH V	4
0010	TBD	CTH V	4
PROJECT ID 6020-02-75 TOTAL:			36

SELECT GRANULAR BACKFILL

CATEGORY	LOCATION	SPV.0035.02 SELECT GRANULAR BACKFILL CY
0010	SANITARY SEWER	2000
	WATER DISTRIBUTION	2000
PROJECT ID 6020-02-75 TOTAL:		4000

SANITARY SEWER PIPE SUMMARY

CATEGORY	FROM STR.	TO STR.	SPV.0090.09 SANITARY SEWER MAIN, 8-INCH PVC, SDR 35 LF
0010	SMH 10	SMH 1	195
0010	SMH 1	SMH 2	275
0010	SMH 2	SMH 3	187
0010	SMH3	SMH 4	79
0010	SMH 4	SMH 5	99
0010	SMH 5	SMH 6	157
0010	SMH 3	STUB	50
0010	SMH 3	STUB	50
PROJECT ID 6020-02-75 TOTAL:			1092

MANHOLES

CATEGORY	STATION	LOCATION	STRUCTURE I.D.	SPV.0060.36 SANITARY SEWER MANHOLE, 48-INCH, PRECAST CONCRETE, W/ CASTING EACH
0010	10+76.4, 5.0' LT	CHRISTOPHER ST	SMH 10	1
0010	229+50.6, 0.0	NORTH TOWNE ROAD	SMH 1	1
0010	232+25.6, 0.0' RT	NORTH TOWNE ROAD	SMH 2	1
0010	234+13.7, 0.0' RT	NORTH TOWNE ROAD	SMH 3	1
0010	234+92.8, 0.7' RT	NORTH TOWNE ROAD	SMH 4	1
0010	235+92.0, 1.0' LT	NORTH TOWNE ROAD	SMH 5	1
0010	237+50.0, 0.0' RT	NORTH TOWNE ROAD	SMH 6	1
PROJECT ID 6020-02-75 TOTAL:				7

SANITARY LATERALS

CATEGORY	STATION	LOCATION	SPV.0090.08 SANITARY LATERAL, 4-INCH PVC, SDR 35, W/ 10 AWG TRACER WIRE LF	SPV.0060.37 SANITARY SEWER, PVC, SPR 35, 8-INCH X 4-INCH, PVC EA
0010	235+84	NORTH TOWNE ROAD	51	1
0010	236+84	NORTH TOWNE ROAD	51	1
0010	237+45	NORTH TOWNE ROAD	51	1
PROJECT ID 6020-02-75 TOTAL:			153	3

WATER MAIN SUMMARY

CATEGORY	STATION	LOCATION	SPV.0090.11 WATERMAIN, 6-INCH DI CLASS 52, INCLUDING FITTINGS LF	SPV.0090.12 WATERMAIN, 8-INCH DI CLASS 52, INCLUDING FITTINGS LF	SPV.0090.13 WATERMAIN, 10-INCH DI CLASS 52, INCLUDING FITTINGS LF	SPV.0060.41 HYDRANT EA
0010	12+22 - 12+80	CHRISTOPHER ST	---	---	58	---
0010	12+22	CHRISTOPHER ST	---	---	---	1
0010	227+63.8	NORTH TOWNE ROAD	---	---	---	1
0010	227+63.8-239+96	NORTH TOWNE ROAD	---	---	1232	---
0010	229+38.6	NORTH TOWNE ROAD	15	---	---	1
0010	234+21.6	NORTH TOWNE ROAD	---	76	---	---
0010	234+30.5	NORTH TOWNE ROAD	12	---	---	1
0010	234+29	NORTH TOWNE ROAD	---	---	---	1
0010	238+01.4	NORTH TOWNE ROAD	15	---	---	1
0010	21+35.09 - 22+50.7	CTH V	---	---	82	---
0010	22+50.7	CTH V	---	---	153	1
PROJECT ID 6020-02-75 TOTAL:			42	76	1525	7

WATER VALVE SUMMARY

CATEGORY	STATION	LOCATION	SPV.0060.38 GATE VALVE W/ BOX, 6-INCH EA	SPV.0060.39 GATE VALVE W/ BOX, 8-INCH EA	SPV.0060.40 GATE VALVE W/ BOX, 10-INCH EA
0010	227+74.1	NORTH TOWNE ROAD			1
0010	229+31.1	NORTH TOWNE ROAD			1
0010	229+39.2	NORTH TOWNE ROAD	1		
0010	229+39.2	NORTH TOWNE ROAD			1
0010	229+87.3	NORTH TOWNE ROAD			1
0010	234+19.8	NORTH TOWNE ROAD		1	
0010	234+21.3	NORTH TOWNE ROAD		1	
0010	234+24.5	NORTH TOWNE ROAD	1		
0010	234+50.5	NORTH TOWNE ROAD			1
0010	238+01.4	NORTH TOWNE ROAD	1		
0010	21+56.5	CTH V			1
0010	21+67.3	CTH V			1
0010	21+76.9	CTH V			1
0010	22+91	CTH V			1
PROJECT ID 6020-02-75 TOTAL:			3	2	9

WATER LATERALS

CATEGORY	STATION	LOCATION	SPV.0090.10 WATER SERVICE, 1.5-INCH COPPER LF
0010	235+79.4	NORTH TOWNE ROAD	59
0010	236+87.0	NORTH TOWNE ROAD	59
0010	237+50.0	NORTH TOWNE ROAD	44
PROJECT ID 6020-02-75 TOTAL:			162

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