EAU FEB 13

PROJECT ID: 7080-00-73

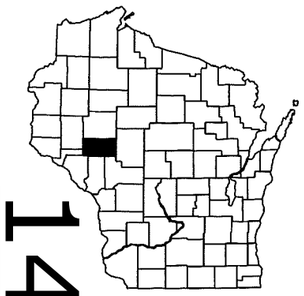
WITH: N/A

COUNTY: EAU CLAIRE

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 = 262



14

N

DESIGN DESIGNATION

		USH 12	MAYER RD
A.A.D.T. (2011)	=	10,300	2,800
A.A.D.T. (2013)	=	11,500	3,000
A.A.D.T. (2033)	=	16,500	3,700
D.H.V.	=	743 (4.5%)	
D.D.	=	58/42	
T.	=	5.6%	
DESIGN SPEED	=	55 MPH	50 MPH
ESALS	=	2,014,800	481,800

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 (955.36)
- 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

EAU CLAIRE - FAIRCHILD

(C ALTOONA, CTH AA INTERSECTION)

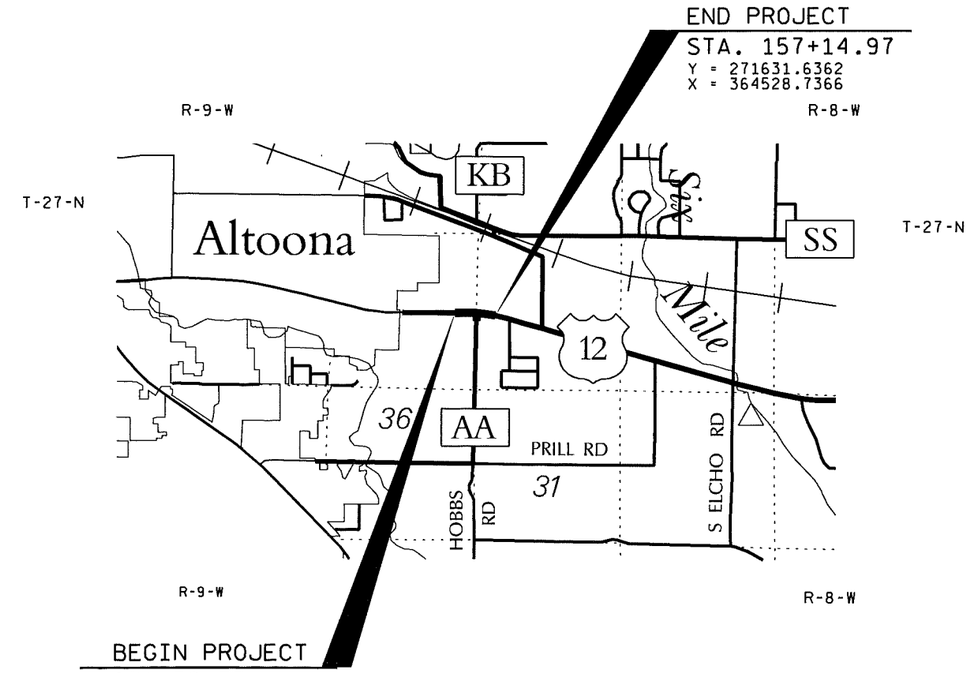
USH 12

EAU CLAIRE COUNTY

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
7080-00-73	WISC 2013053	1

STATE PROJECT NUMBER

7080-00-73



LAYOUT SCALE 0 0.5 MI.

TOTAL NET LENGTH OF CENTERLINE = 0.488 MI.

ELEVATIONS ON THIS PLAN ARE REFERENCED TO THE NGVD 29 DATUM.

COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM (WCCS), EAU CLAIRE COUNTY NAD 83 (1991).

ACCEPTED FOR CITY OF ALTOONA

8/6/12 David A. Walter

DATE (CITY ENGINEER)

ORIGINAL PLANS PREPARED BY

KL Engineering [A] Better Experience

WISCONSIN MIKE D. SCARMON 37613-006 EVANSVILLE, WI PROFESSIONAL ENGINEER

DATE: 08/06/2012 (Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	KL ENGINEERING, INC.
Designer	KL ENGINEERING, INC.
Project Manager	STACEY RUSCH
Regional Examiner	DANIEL OJIBWAY
Regional Supervisor	RICHARD SHERMO
C.O. Examiner	JE

APPROVED FOR THE DEPARTMENT

DATE: 8/2/12 (Signature)

E

2

ABBREVIATIONS

ASPH	ASPHALT PAVEMENT
BAD	BASE AGGREGATE DENSE
BL	BASELINE
BLDG	BUILDING
BOC	BACK OF CURB
CONC	CONCRETE
COR	CORNER
CP	CULVERT PIPE
CPRC	CULVERT PIPE REINFORCED CONCRETE
CSCP	CORRUGATED STEEL CULVERT PIPE
C.E.	COMMERCIAL ENTRANCE
CSW	CONCRETE SIDEWALK
DHV	DESIGN HOURLY VOLUME
V	DESIGN SPEED
DIA	DIAMETER
DIM	DIMENSION
E	EAST
ECIP	EROSION CONTROL IMPLEMENTATION PLAN
EL OR ELEV	ELEVATION
ESAL	EQUIVALENT SINGLE AXLE LOAD
EOP	EDGE OF PAVEMENT
FE	FIELD ENTRANCE
FL	FLOW LINE
FO	FIBER OPTIC
FOC	FACE OF CURB
G	GARAGE
H	HOUSE
HMA	HOT MIX ASPHALT
I.E.	INVERT ELEVATION
D	LANE DISTRIBUTION
L	LENGTH (OF CURVE)
LHF	LEFT HAND FORWARD
LC	LONG CHORD
LP	LOW POINT
LT	LEFT
MAR	WETLAND BOUNDARY
NOR	NORMAL
N	NORTH
NB	NORTHBOUND
NC	NORMAL CROWN
OH	OVERHEAD ELECTRIC
T	PERCENT OF TRUCKS
P.E.	PRIVATE ENTRANCE
PL	PROPERTY LINE
R	RADIUS
RC	REVERSE CROWN
REQ'D	REQUIRED
RHF	RIGHT HAND FORWARD
RD	ROAD
RL	REFERENCE LINE
RT	RIGHT
S	SHED
SB	SOUTHBOUND
SD	SPECIAL DITCH
SE	SUPERELEVATION
SHLD	SHOULDER
SS	STORM SEWER
SSPRC	STORM SEWER PIPE REINFORCED
TEL	TELEPHONE
T.L.E.	TEMPORARY LIMITED EASEMENT
TYP	TYPICAL
ULO	UTILITY LINE OPENING
VOL	VOLUME
W	WEST

ORDER OF SECTION 2 SHEETS

PROJECT OVERVIEW
TYPICAL SECTIONS
CONSTRUCTION DETAILS
PLAN DETAILS
EROSION CONTROL
STORM SEWER
SIGN REMOVALS
PERMANENT SIGNING AND MARKING
TRAFFIC SIGNALS
TRAFFIC CONTROL
ALIGNMENT DIAGRAM
CONTROL POINT DETAIL

GENERAL NOTES

ELEVATIONS ON THIS PLAN ARE REFERENCED TO THE NGVD 29 DATUM.

COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM (WCCS), EAU CLAIRE COUNTY NAD 83 (1991).

ALL HIGHWAY CURVES ARE BASED ON THE ARC DEFINITION.

NO TREES OR SHRUBS ARE TO BE REMOVED WITHOUT THE APPROVAL OF THE ENGINEER.

THE LOCATION OF EXISTING OR PROPOSED UTILITIES AS NOTED ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN. UTILITY SERVICES ARE NOT SHOWN.

DISTURBED AREAS WITHIN THE RIGHT-OF-WAY ARE TO BE RESTORED AS DIRECTED BY THE ENGINEER AND AS SHOWN ON THE PLANS.

7.5" HMA PAVEMENT, TYPE E-10 SHALL BE CONSTRUCTED WITH 2.75" AND 2.75" LOWER LAYERS (19.0mm NOMINAL SIZE AGGREGATE) AND PG58-34P ASPHALTIC MATERIAL: AND ONE 2.00" UPPER LAYER (12.5mm NOMINAL SIZE AGGREGATE) AND PG64-28P ASPHALTIC MATERIAL. SEE TYPICAL SECTIONS FOR USH 12 FOR ADDITIONAL DETAIL.

6.0" HMA PAVEMENT, TYPE E-10 SHALL BE CONSTRUCTED WITH ONE 4.00" LOWER LAYER (19.0mm NOMINAL SIZE AGGREGATE) AND PG58-34P ASPHALTIC MATERIAL: AND ONE 2.00" UPPER LAYER (12.5mm NOMINAL SIZE AGGREGATE) AND PG64-28P ASPHALTIC MATERIAL. SEE TYPICAL SECTION FOR CTH AA/MAYER ROAD FOR ADDITIONAL DETAIL.

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

LOCATIONS SHOWN ON THE STORM SEWER SHEETS FOR CATCH BASINS AND MANHOLES ARE BY STATION AND OFFSET TO THE CENTER OF THE STRUCTURE. (SEE DETAILS)

STORM SEWER PIPE ELEVATIONS, LENGTHS, AND LOCATIONS AS SHOWN ON THE PLANS, MAY BE ADJUSTED TO FIT EXISTING FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ALL CONCRETE PIPE SHALL HAVE THE APRON ENDWALL AND THE FIRST TWO PIPE JOINTS TIED AT THE JOINTS (3 JOINTS TOTAL). JOINT TIES SHALL BE INCIDENTAL TO THE ITEM OF SSPRC.

SEE EXCAVATION SUMMARY FOR EARTHWORK ADJUSTMENT FACTORS.

THE LIMITS OF PAVEMENT REMOVAL ON SIDE ROADS IS APPROXIMATE AND SHALL BE VERIFIED IN THE FIELD BY THE ENGINEER.

INLET PROTECTION TYPE A & C IS REQUIRED AT ALL INLETS DURING CONSTRUCTION. SEE CONSTRUCTION DETAILS & STANDARD DETAIL DRAWINGS.

EXPANSION JOINTS ARE TO BE CONSTRUCTED AT ALL RADIUS POINTS IN CURB AND GUTTER OR AT LOCATIONS SHOWN ON THE PLAN.

THE EXACT LOCATION AND WIDTH OF DRIVEWAYS SHALL BE CONFIRMED BY THE ENGINEER IN THE FIELD.

WHEN THE QUANTITY OF THE ITEMS OF HMA PAVEMENT AND BASE AGGREGATE DENSE ARE MEASURED FOR PAYMENT BY THE TON, THE DEPTH OR THICKNESS OF THE COURSE IS APPROXIMATE AND THE ACTUAL THICKNESS WILL DEPEND ON DISTRIBUTION OF MATERIAL AS DIRECTED BY THE ENGINEER.

MISCELLANEOUS REMOVAL ITEMS SHALL BE REMOVED TO AN EXISTING JOINT OR SAWCUT WHERE SHOWN ON THE PLANS.

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.

UTILITY REFERENCE LINES ON THE CROSS SECTIONS ARE FOR HORIZONTAL REFERENCE ONLY.

EROSION CONTROL FEATURES AS SHOWN IN THE PLANS ARE AT SUGGESTED LOCATIONS, EXACT LOCATIONS WILL BE DETERMINED BY THE CONTRACTOR'S E.C.I.P. AND APPROVED BY THE ENGINEER IN THE FIELD.

ALL EROSION CONTROL MEASURES SHALL BE MAINTAINED UNTIL SUCH TIME AS THE ENGINEER DETERMINES THE MEASURE IS NO LONGER NEEDED.

SEE PLAN AND PROFILES FOR LOCATIONS OF VARIABLE DEPTH MILLING AND RESURFACING. INCREASE MILLING DEPTH IN AREAS WHEN REQUIRED TO FOLLOW THE PROPOSED PROFILE. LOCATING AND STAKING OF THE VARIABLE DEPTH MILLING AND RESURFACING SHALL BE CONSIDERED INCIDENTAL TO THE "CONSTRUCTION STAKING RESURFACING REFERENCE" BID ITEM.

ALL RADII DIMENSIONS WITH CURB AND GUTTER ARE MEASURED TO THE EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.

UTILITIES

COMMUNICATION
AT&T WI DESIGN ENGINEERING
RICK PODOLAK
304 S. DEWEY STREET
EAU CLAIRE, WI 54701
(715) 839-5565
rp4514@att.com

COMMUNICATION
CHARTER COMMUNICATIONS
SHANE YODER
1201 MCCANN DRIVE
ALTOONA, WI 54720
(715) 831-8490 *619
shane.yoder@chartercom.com

SANITARY & WATER
ALTOONA MUNICIPAL WATER AND SEWER UTILITY
CURT CAREY
PO BOX 8
ALTOONA, WI 54720
(715) 839-6092
curtc@ci.altoona.wi.us

GAS/PETROLEUM
XCEL ENERGY
SCOTT J SEAHOLM
PO BOX 8, WESTERN AVENUE SC
EAU CLAIRE, WI 54702
(715) 737-2584
(715) 577-3381 (MOBILE)
scott.j.seaholm@xcelenergy.com

ELECTRICAL
EAU CLAIRE ENERGY COOPERATIVE
DON DRAEGER
PO BOX 368, 8214 US HIGHWAY 12
FALL CREEK, WI 54742
(715) 836-6479
(715) 210-4983 (MOBILE)
ddraeger@ecec.com

FIBER OPTIC
CCI SYSTEMS
RANDY SIMMS
PO BOX 190
IRON MOUNTAIN, MI 49801
(906) 282-3802
randy.simms@ccisystems.com

DESIGN CONTACT

MIKE SCARMON, P.E.
KL ENGINEERING, INC.
5950 SEMINOLE CENTRE COURT
SUITE 200
MADISON, WI 53711
(608) 663-1218

DNR CONTACT

NICK SCHAFF
WISDNR-WEST CENTRAL REGION
1300 W. CLAIRMONT AVE.
P.O. BOX 4001
EAU CLAIRE, WI 54702
(715) 839-2786

* DENOTES DIGGERS HOTLINE MEMBER

DIGGERS HOTLINE
Toll Free (800) 242-8511
Milwaukee Area (414) 259-1181
Hearing Impaired TDD (800) 542-2289
www.DiggersHotline.com

PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	GENERAL NOTES	SHEET 2	E

2

N

SCALE: 1":200'

CITY OF ALTOONA PROJECT (BY OTHERS)

MAYER RD

INDUSTRIAL DR

BEGIN PROJECT
STA. 131+39.77

END CONSTRUCTION
STA. 39+68.00

130+00

135+00

140+00

145+00

150+00

155+00

USH 12

END PROJECT
STA. 157+14.97

END CONSTRUCTION
STA. 70+02.01

SHORT RD

BEGIN CONSTRUCTION
STA. 33+90.93

CTH AA/MAYER RD

PLEASANT VIEW ST

40+00

38+00

42+00

80

35+00

30+00

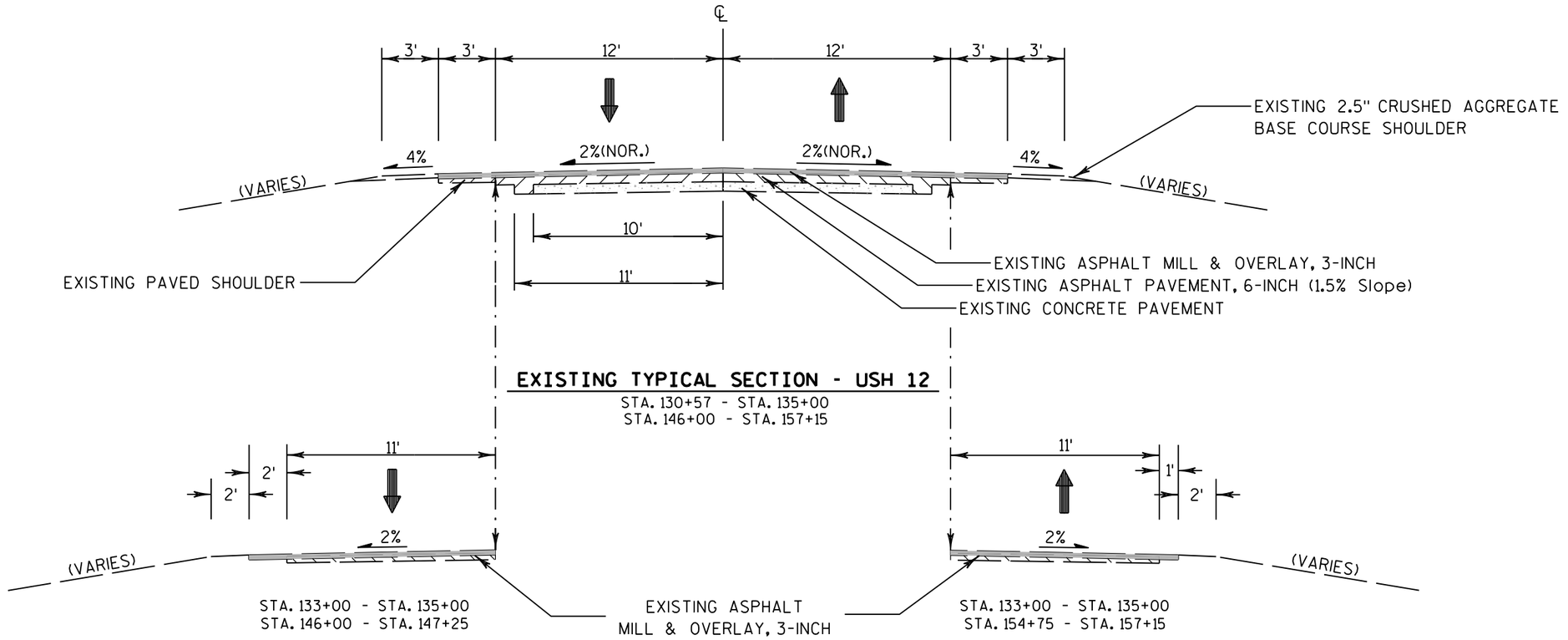
PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	PROJECT OVERVIEW	SHEET 3	E

FILE NAME : G:\WDOTCO\10033 (DESIGN WORK ORDERS)\WO 5 & 6 USH 12 & MAYER ROAD\CIVIL 3D\SHEETSPLAN\PROJECT OVERVIEW\020201_PO.DWG PLOT DATE : 12/3/2012 PLOT BY : KL ENGINEERING PLOT NAME : ---------- PLOT SCALE : 1" = 200'_XREF

SOIL BORINGS INDICATED THE FOLLOWING PAVEMENT DEPTHS				
LOCATION	TOTAL HMA DEPTH (A)	AGGREGATE DEPTH (B)	CONCRETE DEPTH (C)*	TOTAL DEPTH (A+B+C)
141+00 15'RT	N/A	16"	N/A	16"
145+00 15'LT	9"	16"	N/A	25"
155+00 15'LT	8"	12"	N/A	20"

*NOTE: SOIL BORINGS WERE TAKEN ALONG ROADWAY EDGES. THE EXISTING CONCRETE PAVEMENT IS LOCATED BENEATH THE DRIVING LANES FROM STA 130+57 TO STA 135+00 AND FROM STA 146+00 TO STA 157+15

SUPERELEVATION				
PISTA	PC STA	PT STA	RUNOFF	MAX S.E.
147+83.40	144+20.07	151+46.73	175'	4.4%



EXISTING TYPICAL SECTION - USH 12

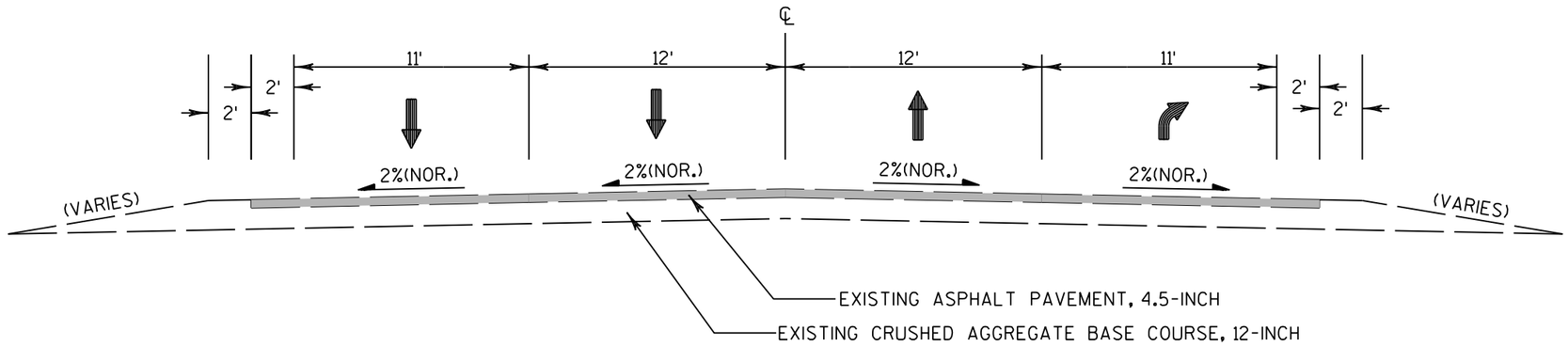
STA. 130+57 - STA. 135+00
STA. 146+00 - STA. 157+15

PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	EXISTING TYPICAL SECTIONS - USH 12	SHEET 4	E

SOIL BORINGS INDICATED THE FOLLOWING PAVEMENT DEPTHS				
LOCATION	TOTAL HMA DEPTH (A)	AGGREGATE DEPTH (B)	CONCRETE DEPTH (C)*	TOTAL DEPTH (A+B+C)
141+00 15'RT	N/A	16"	N/A	16"
145+00 15'LT	9"	16"	N/A	25"
155+00 15'LT	8"	12"	N/A	20"

*NOTE: SOIL BORINGS WERE TAKEN ALONG ROADWAY EDGES. THE EXISTING CONCRETE PAVEMENT IS LOCATED BENEATH THE DRIVING LANES FROM STA 130+57 TO STA 135+00 AND FROM STA 146+00 TO STA 157+15

SUPERELEVATION				
PI STA	PC STA	PT STA	RUNOFF	MAX S.E.
147+83.40	144+20.07	151+46.73	175'	4.4%



EXISTING TYPICAL SECTION - USH 12 BYPASS LANE

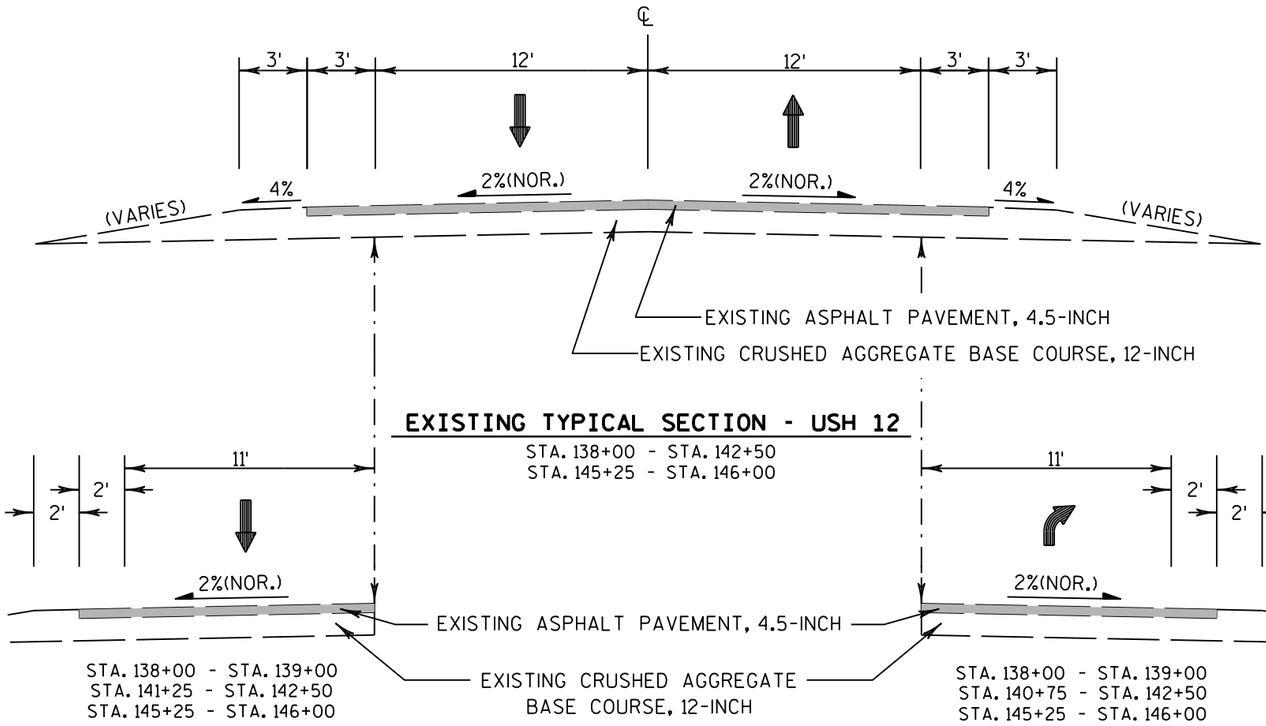
STA. 135+00 - STA. 138+00
STA. 142+50 - STA. 145+25

PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	EXISTING TYPICAL SECTIONS - USH 12	SHEET 5	E

SOIL BORINGS INDICATED THE FOLLOWING PAVEMENT DEPTHS				
LOCATION	TOTAL HMA DEPTH (A)	AGGREGATE DEPTH (B)	CONCRETE DEPTH (C)*	TOTAL DEPTH (A+B+C)
141+00 15'RT	N/A	16"	N/A	16"
145+00 15'LT	9"	16"	N/A	25"
155+00 15'LT	8"	12"	N/A	20"

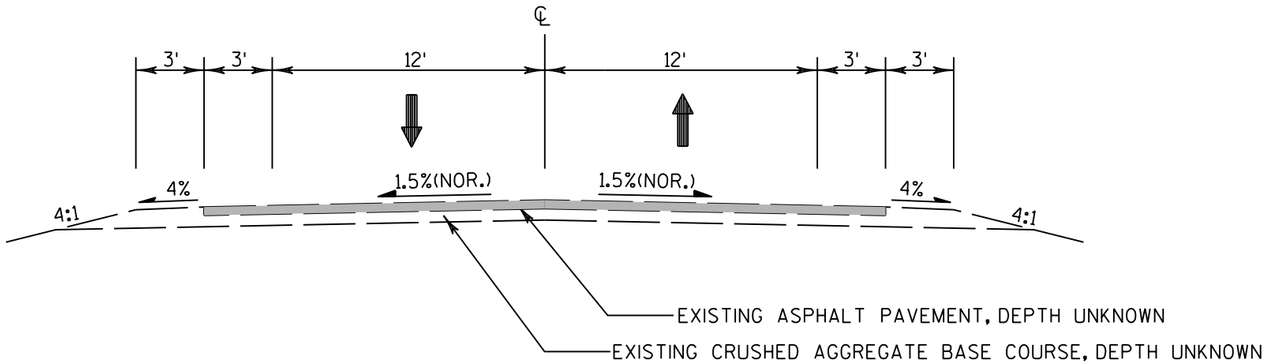
*NOTE: SOIL BORINGS WERE TAKEN ALONG ROADWAY EDGES. THE EXISTING CONCRETE PAVEMENT IS LOCATED BENEATH THE DRIVING LANES FROM STA 130+57 TO STA 135+00 AND FROM STA 146+00 TO STA 157+15

SUPERELEVATION				
PI STA	PC STA	PT STA	RUNOFF	MAX S.E.
147+83.40	144+20.07	151+46.73	175'	4.4%



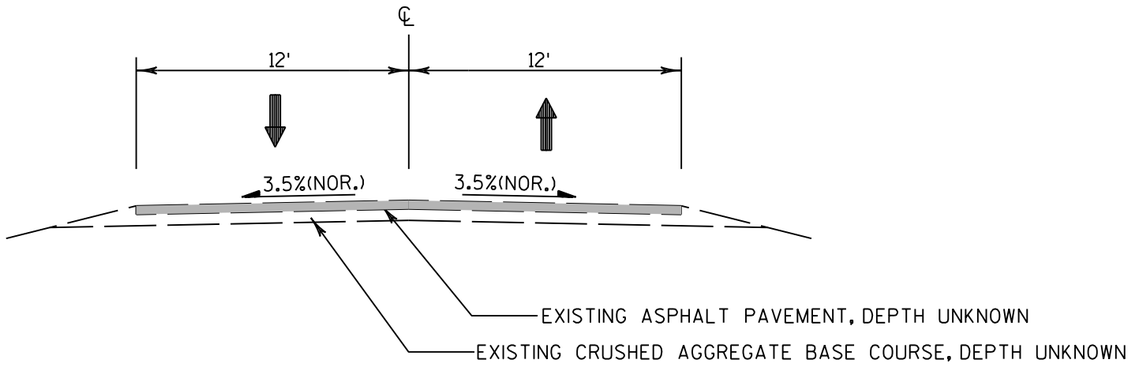
PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	EXISTING TYPICAL SECTIONS - USH 12	SHEET 6	E

SOIL BORINGS INDICATED THE FOLLOWING PAVEMENT DEPTHS				
LOCATION	TOTAL HMA DEPTH (A)	AGGREGATE DEPTH (B)	CONCRETE DEPTH (C)	TOTAL DEPTH (A+B+C)
13+00 15' LT	0.5"	10"	N/A	10.5"



EXISTING TYPICAL SECTION - CTH AA

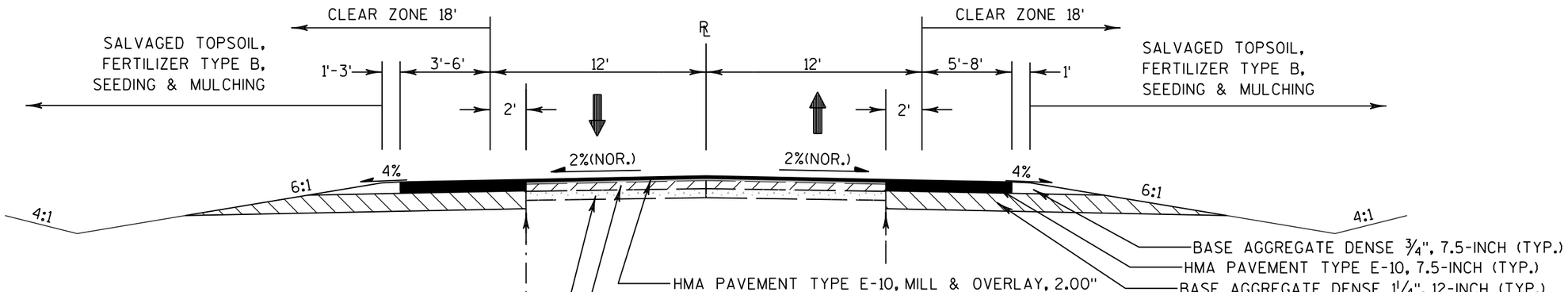
STA. 33+91 - STA. 38+00



EXISTING TYPICAL SECTION - SHORT ROAD

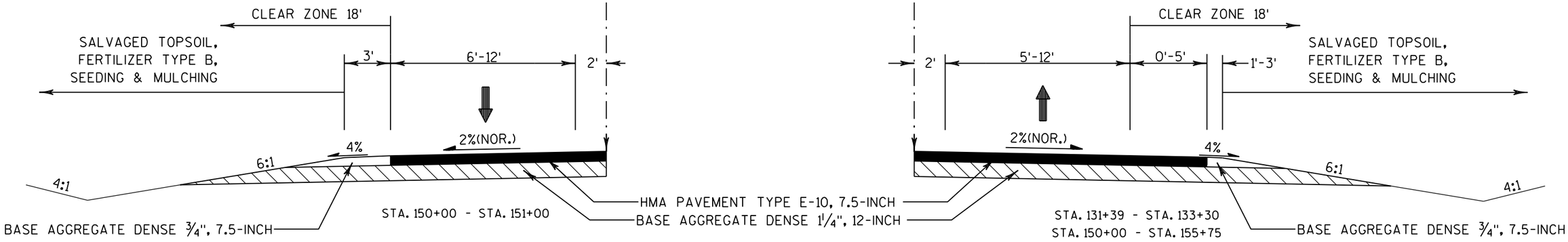
STA. 70+71 - STA. 71+04

SUPERELEVATION				
PI STA	PC STA	PT STA	RUNOFF	MAX S.E.
147+83.40	144+20.07	151+46.73	175'	4.4%



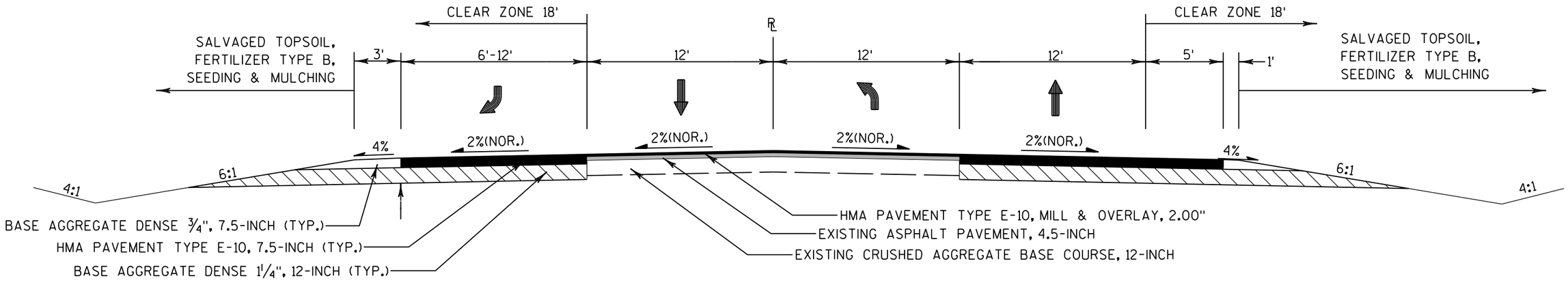
FINISHED TYPICAL SECTION - USH 12

STA. 131+39 - STA. 135+00
STA. 150+00 - STA. 157+15



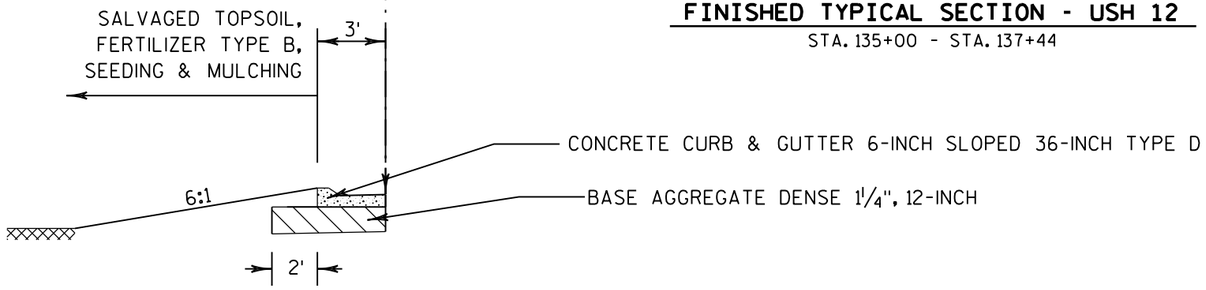
PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	PROPOSED TYPICAL SECTIONS - USH 12	SHEET 8	E

SUPERELEVATION				
PI STA	PC STA	PT STA	RUNOFF	MAX S.E.
147+83.40	144+20.07	151+46.73	175'	4.4%



FINISHED TYPICAL SECTION - USH 12

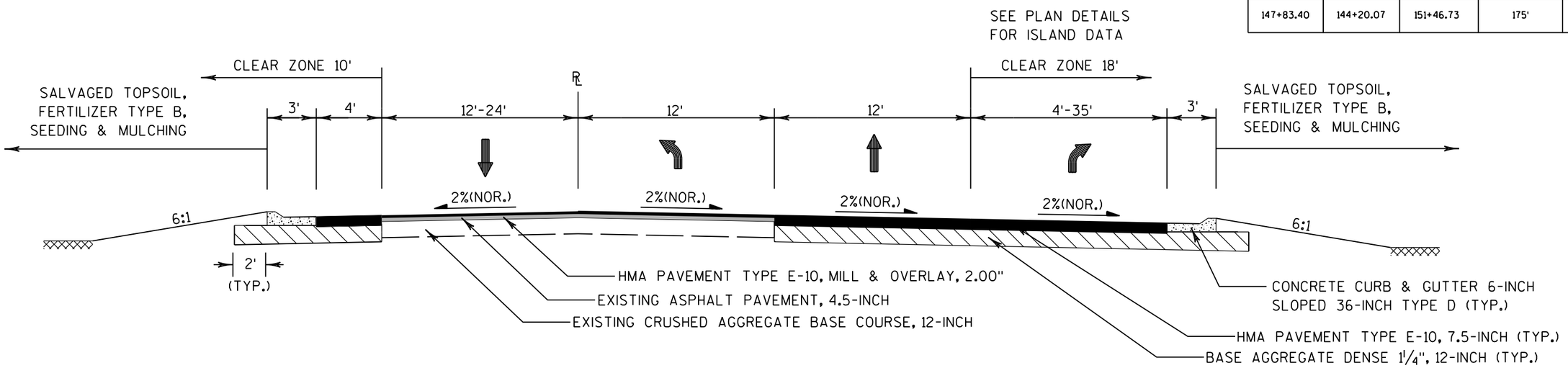
STA. 135+00 - STA. 137+44



STA. 136+10 - STA. 137+44

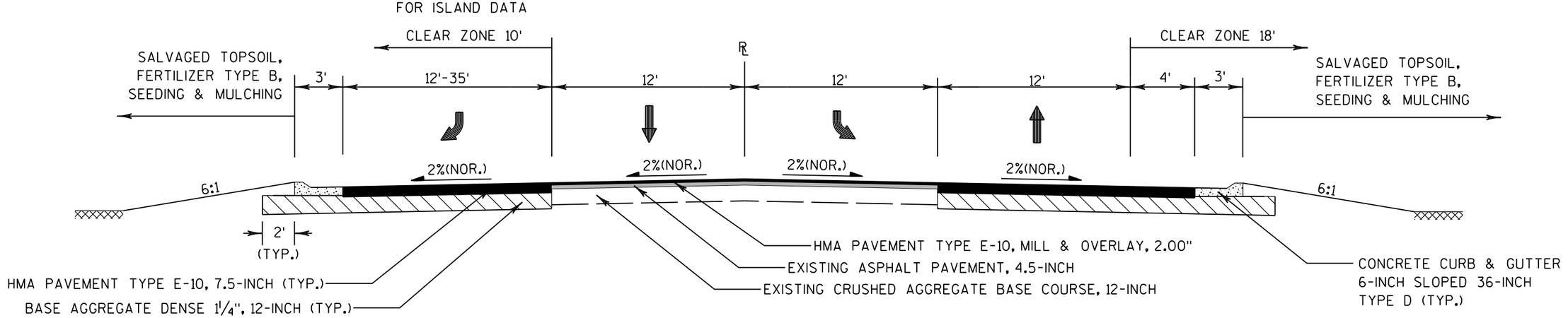
PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	PROPOSED TYPICAL SECTIONS - USH 12	SHEET 9	E

SUPERELEVATION				
PI STA	PC STA	PT STA	RUNOFF	MAX S.E.
147+83.40	144+20.07	151+46.73	175'	4.4%



FINISHED TYPICAL SECTION - USH 12

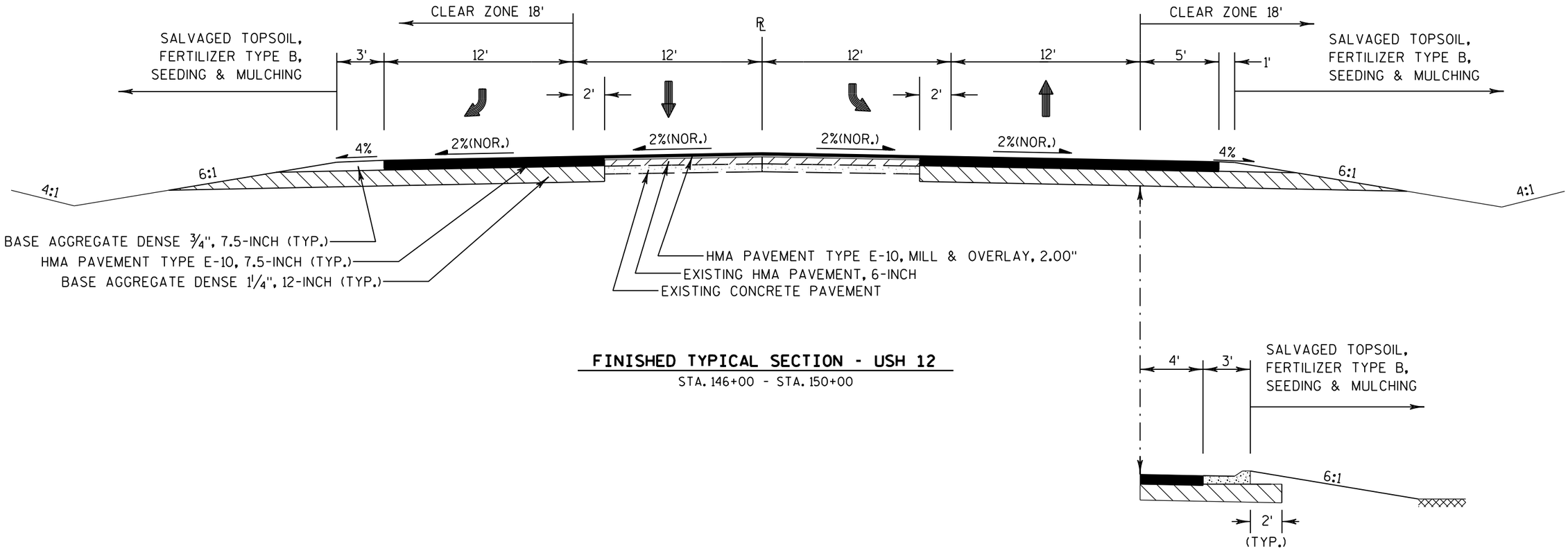
STA. 137+44 - STA. 144+53



FINISHED TYPICAL SECTION - USH 12

STA. 144+53 - STA. 146+00

SUPERELEVATION				
PI STA	PC STA	PT STA	RUNOFF	MAX S.E.
147+83.40	144+20.07	151+46.73	175'	4.4%

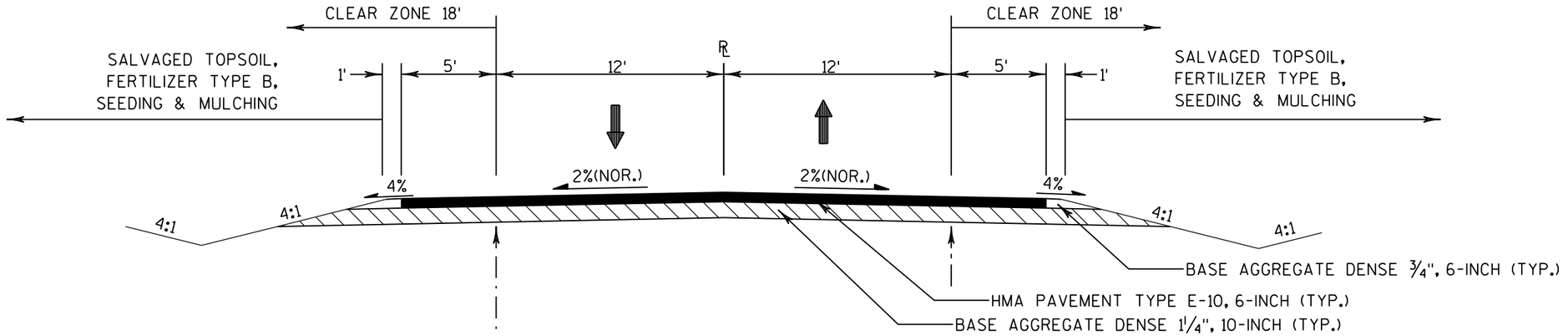


FINISHED TYPICAL SECTION - USH 12

STA. 146+00 - STA. 150+00

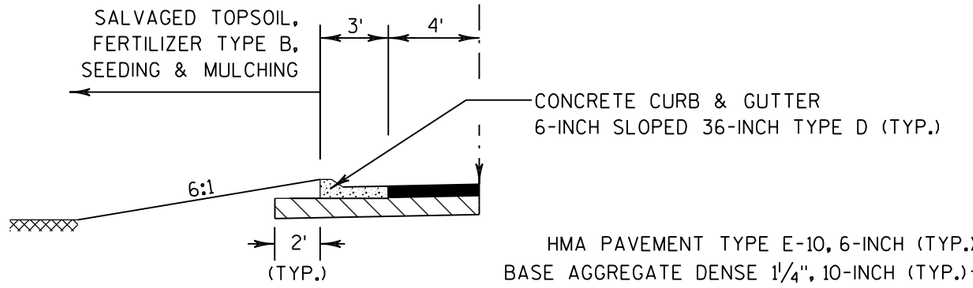
STA. 146+00 - STA. 146+95

PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	PROPOSED TYPICAL SECTIONS - USH 12	SHEET 11	E



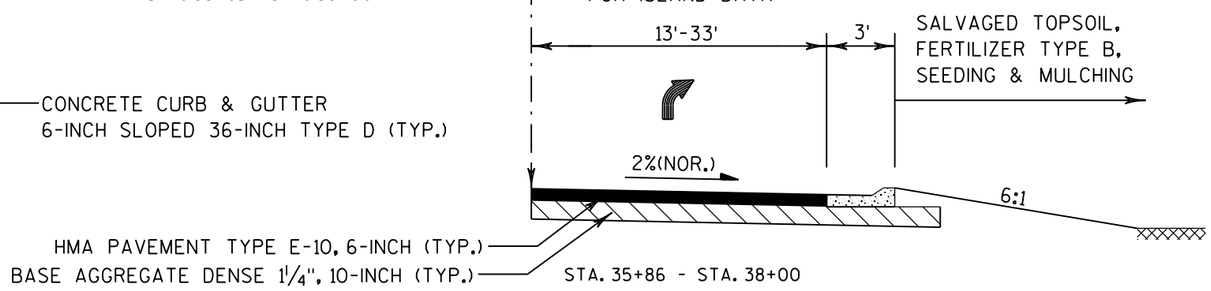
FINISHED TYPICAL SECTION - CTH AA

STA. 33+91 - STA. 38+00



STA. 34+96 - STA. 38+00

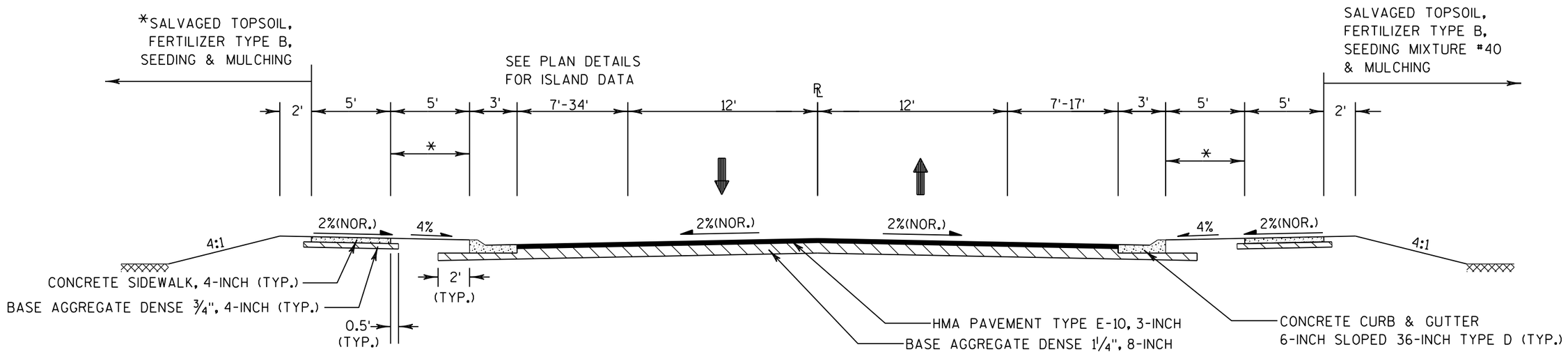
SEE PLAN DETAILS FOR ISLAND DATA



STA. 35+86 - STA. 38+00

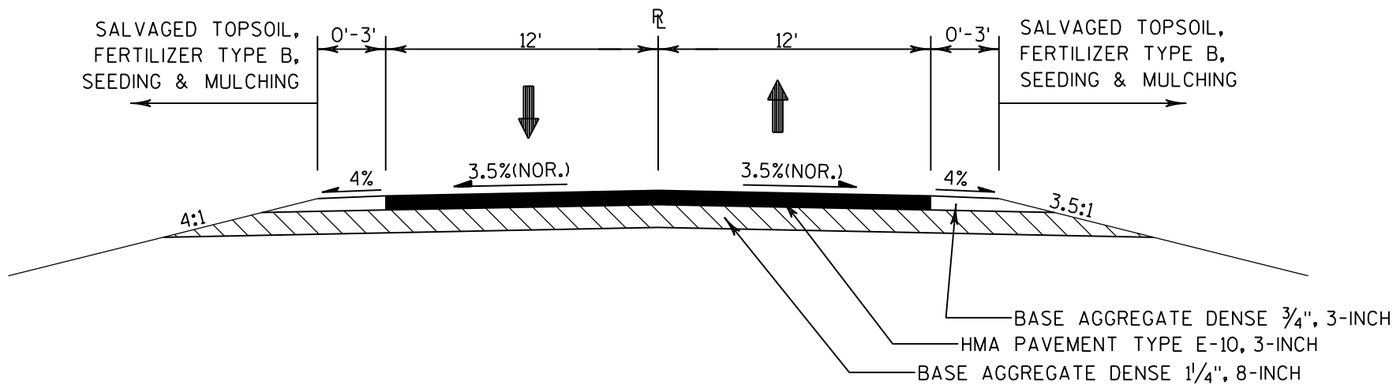
PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	PROPOSED TYPICAL SECTIONS - CTH AA	SHEET 12	E

2



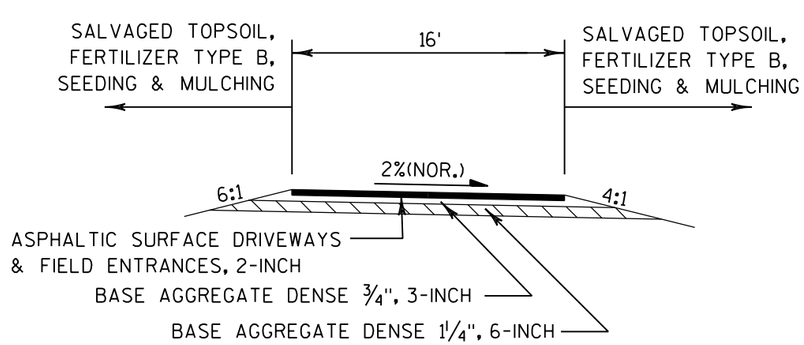
FINISHED TYPICAL SECTION - MAYER ROAD

STA. 38+00 - STA. 39+68



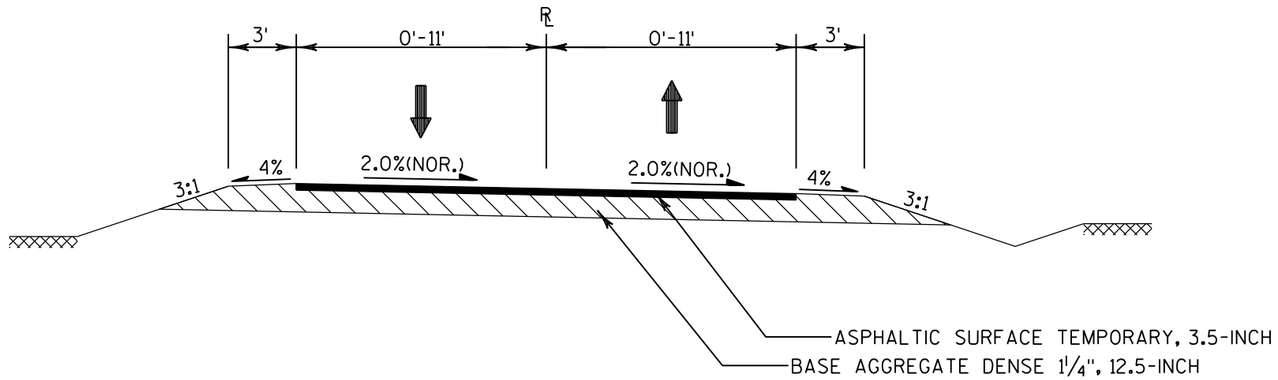
FINISHED TYPICAL SECTION - SHORT ROAD

STA. 70+02 - 70+85



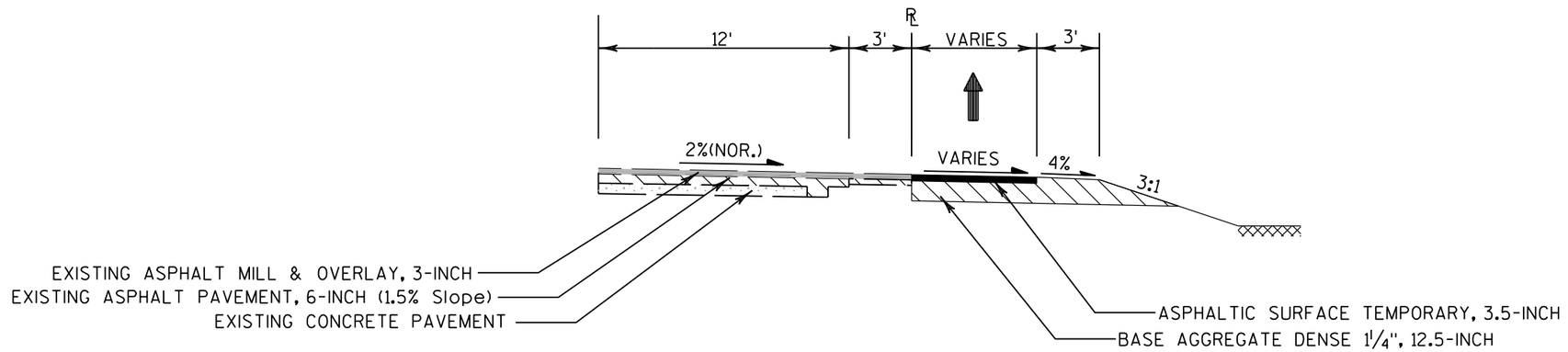
FINISHED TYPICAL SECTION BOHN DRIVEWAY (SEE CONSTRUCTION DETAILS FOR OTHER DRIVEWAYS)

STA. 80+28 - 81+17



PROPOSED TYPICAL SECTION - CTH AA TEMPORARY ROADWAY

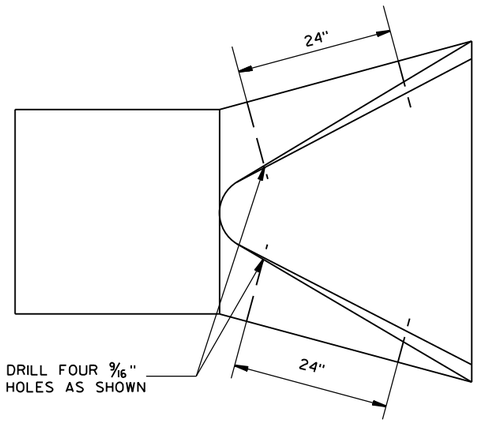
STA. 31+56 - STA. 37+76

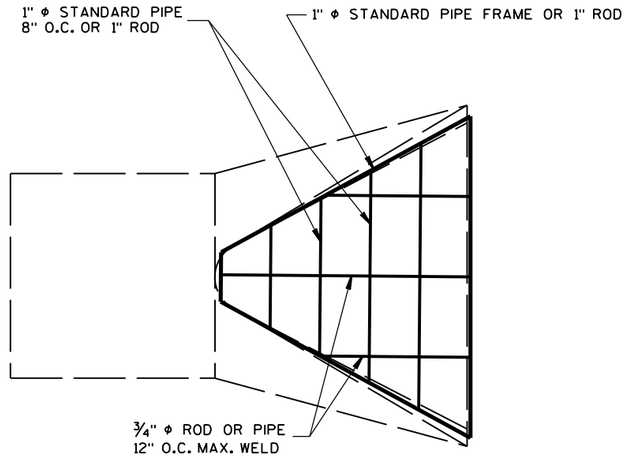


PROPOSED TYPICAL SECTION - USH 12 TEMPORARY WIDENING

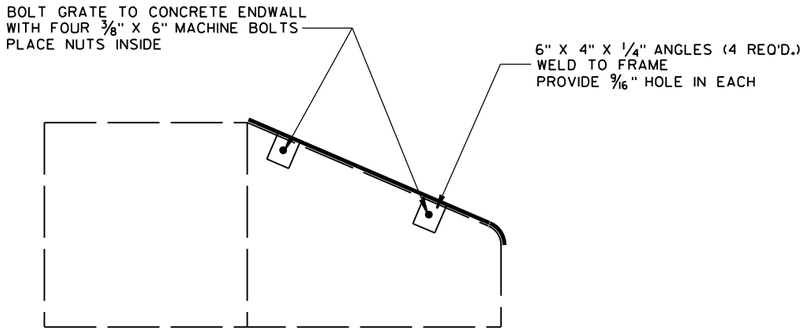
USH 12 NORTH: STA. 145+97 - STA. 158+28
UHS 12 SOUTH: STA. 145+75 - STA. 161+20

PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	PROPOSED TYPICAL SECTIONS - TEMPORARY ROADWAY & WIDENING	SHEET 14	E



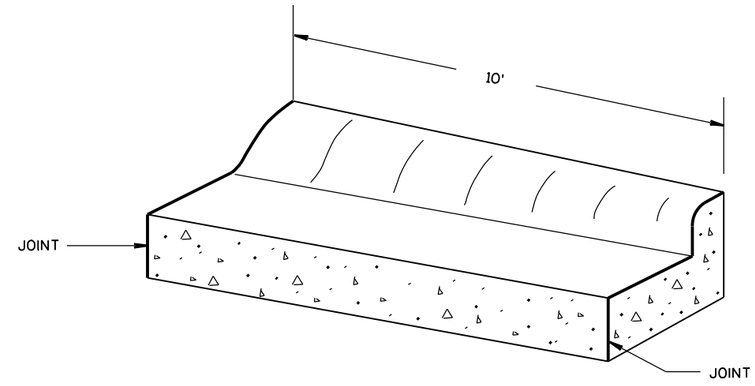


AT EACH PIPE



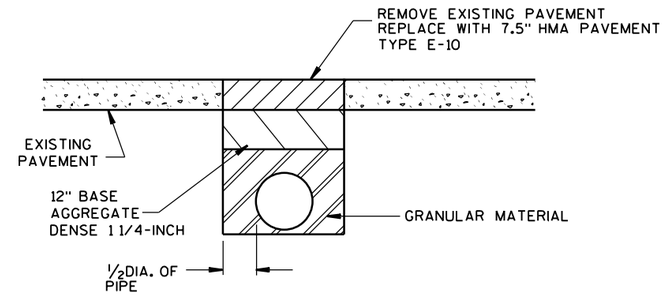
PIPE GRATE

(SEE "CULVERT PIPE & ENDWALLS" FOR LOCATIONS)



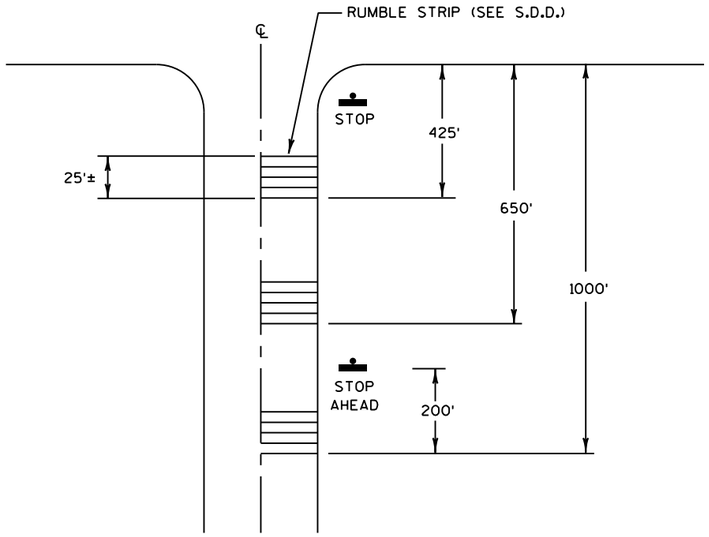
CURB & GUTTER TRANSITION

36" CURB & GUTTER TO 30" CURB & GUTTER
(TO BE MEASURED & PAID FOR AS 30" CONC. C&G)



PIPE INSTALLATION IN AREAS OF EXISTING PAVEMENT

(SEE REMOVAL PLAN FOR LOCATIONS)

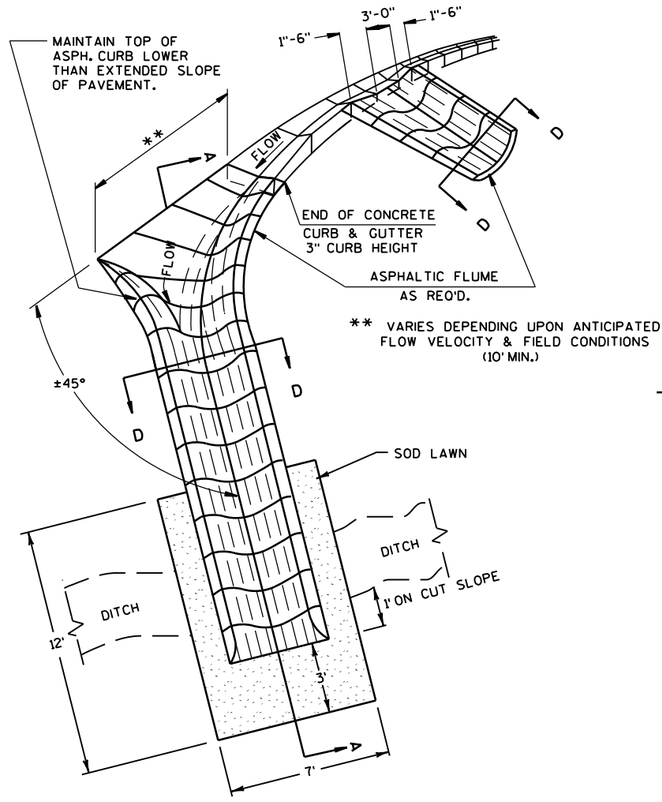


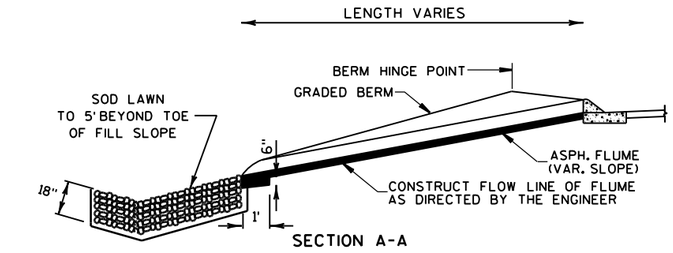
(STOPPING APPROACH SHOWN)

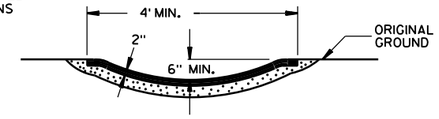
TEMPORARY RUMBLE STRIP LAYOUT

SEE TRAFFIC CONTROL
PLANS FOR LOCATIONS

NOTE:
ALL WORK TO MAINTAIN, INSTALL AND REMOVE RUMBLE STRIPS TO BE INCIDENTAL TO THE BID ITEM "TEMPORARY RUMBLE STRIPS INTERSECTION".

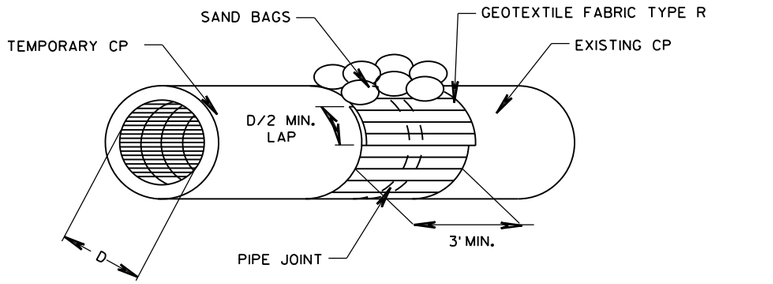






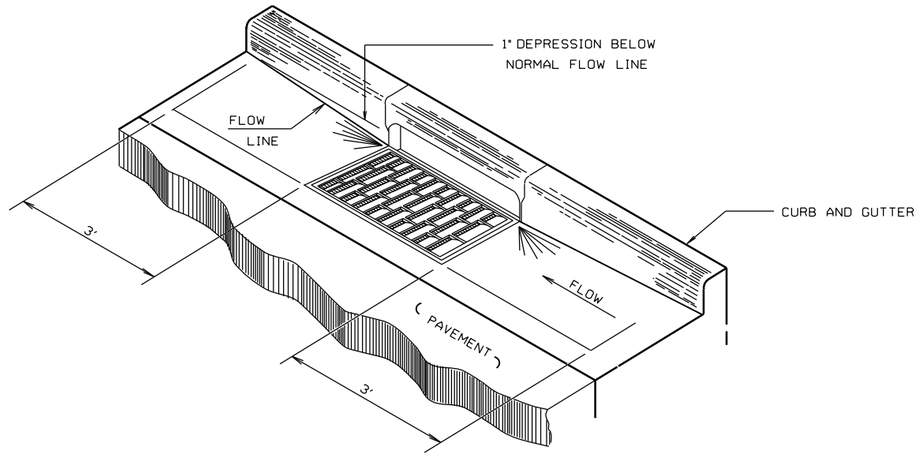
SECTION D-D

ASPHALTIC FLUME
AT RURAL INTERSECTIONS



NOTE: ALL LABOR AND MATERIALS TO BE INCLUDED IN THE COST OF TEMPORARY CULVERT PIPE

TEMPORARY PIPE CONNECTION TO EXISTING PIPE



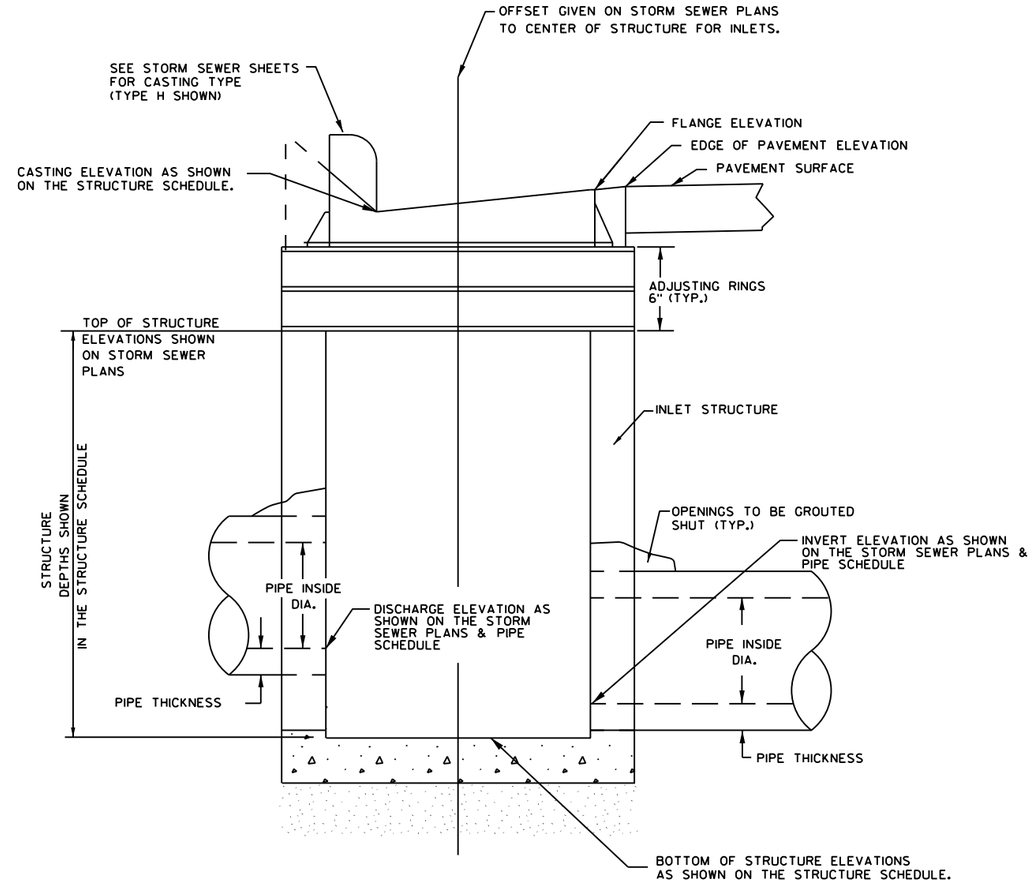
INLET FLOW LINE (TYPE H COVER SHOWN)

PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	CONSTRUCTION DETAILS	SHEET 16	E

GENERAL NOTES:

GRANULAR BACKFILL REQUIRED AROUND INLET
(INCIDENTAL TO CONSTRUCTION OF INLET)

DETAILS OF CONSTRUCTION, MATERIALS, AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, APPLICABLE SPECIAL PROVISIONS, AND S.D.D. FOR INLETS 2x2-FT, 2x2.5-FT, 2x3-FT, & 2.5x3-FT and Inlets Median 1& 2 Grate.

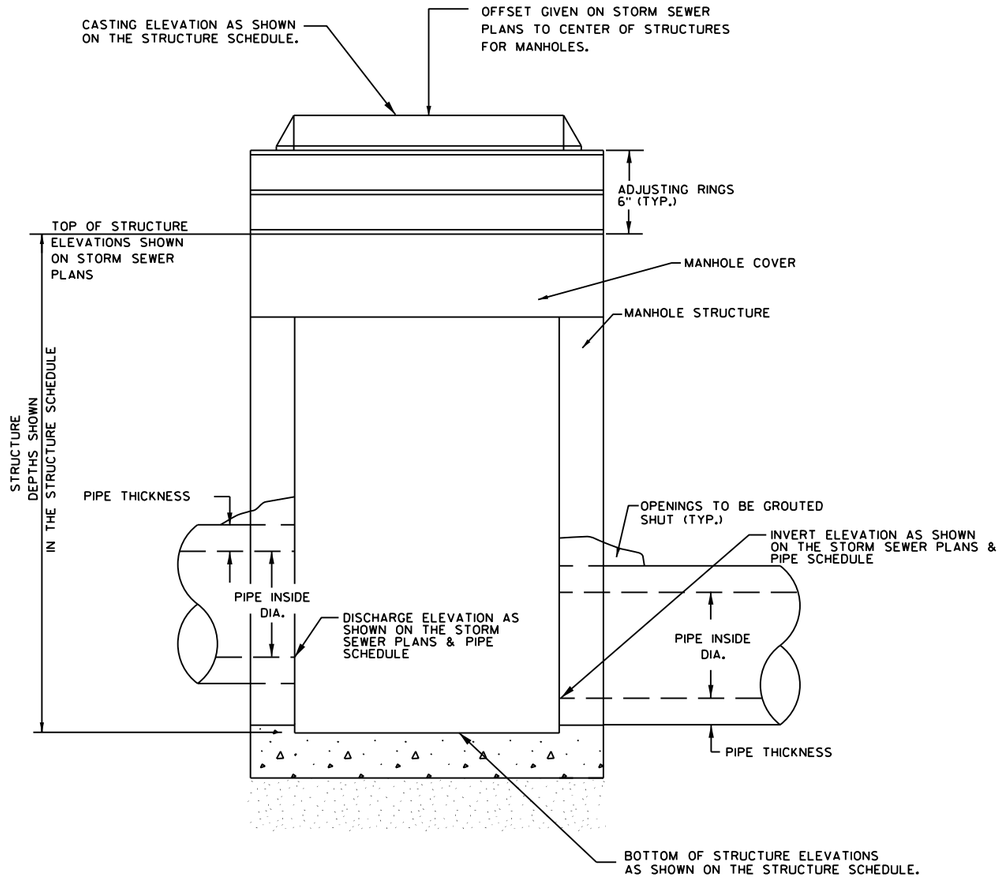


INLET W/CASTING

GENERAL NOTES:

GRANULAR BACKFILL REQUIRED AROUND MANHOLE
(INCIDENTAL TO CONSTRUCTION OF MANHOLE)

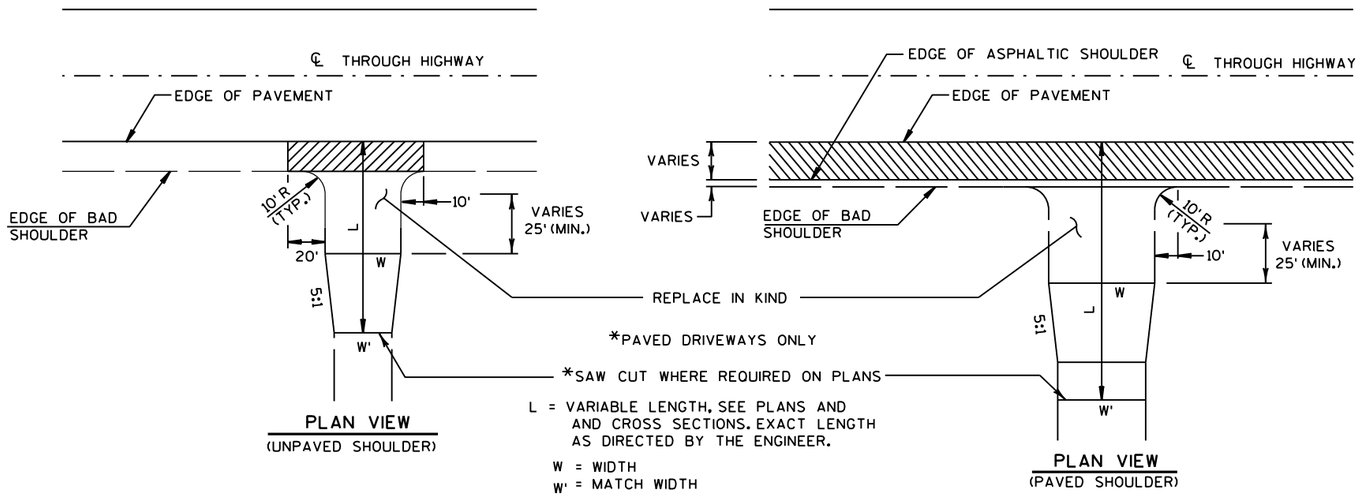
DETAILS OF CONSTRUCTION, MATERIALS, AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, APPLICABLE SPECIAL PROVISIONS, AND S.D.D. FOR MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT, & 8-FT Diameter.

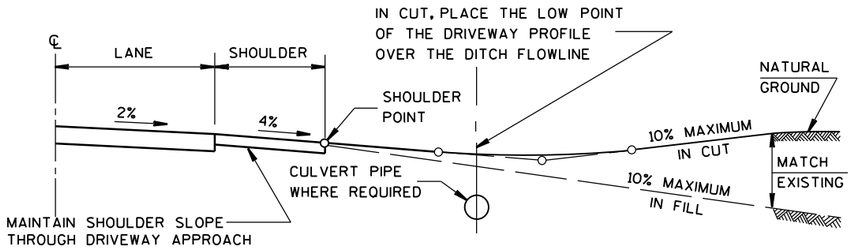


MANHOLE W/CASTING

2

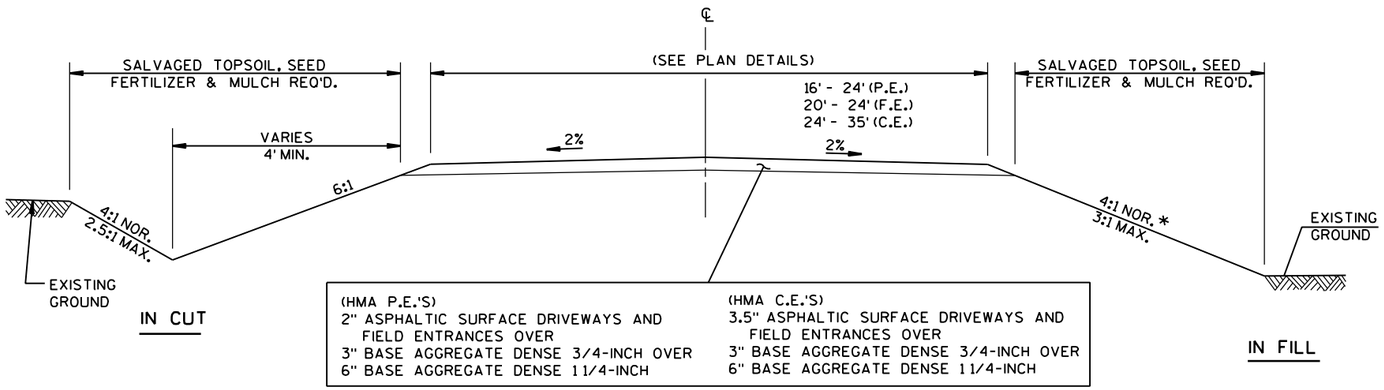
PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	CONSTRUCTION DETAILS	SHEET 17	E





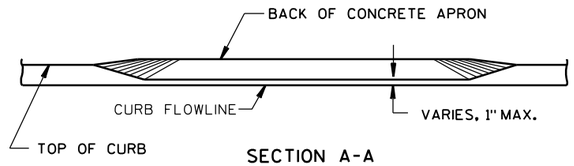
PROFILE VIEW

TYPICAL DRIVEWAY DETAILS

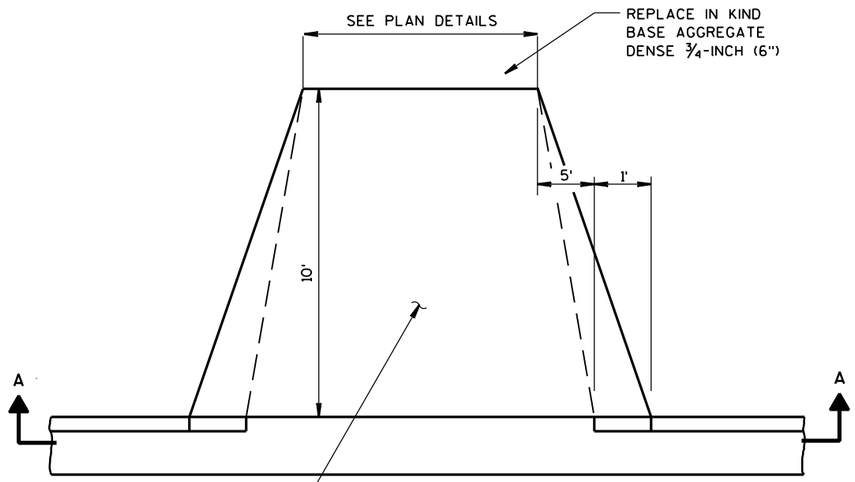


DRIVEWAY TYPICAL SECTION AT SHOULDER

*NOTE: USE 6:1 FORESLOPES INSIDE MAINLINE CLEAR ZONE.

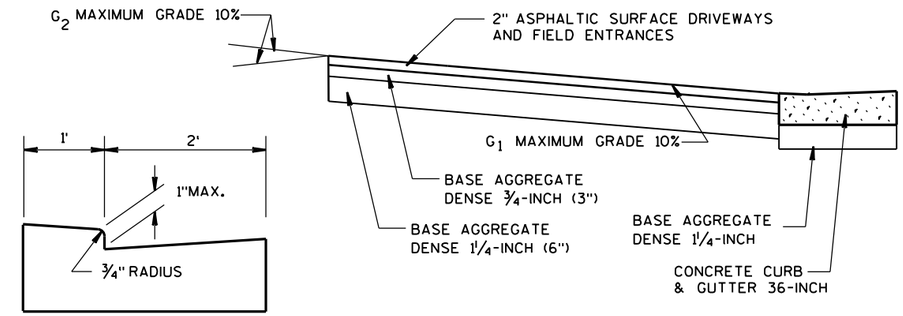


SECTION A-A



PLAN VIEW

NOTE: ALGEBRAIC DIFFERENCE BETWEEN TANGENT GRADES G1 & G2 IS, MAXIMUM 10%

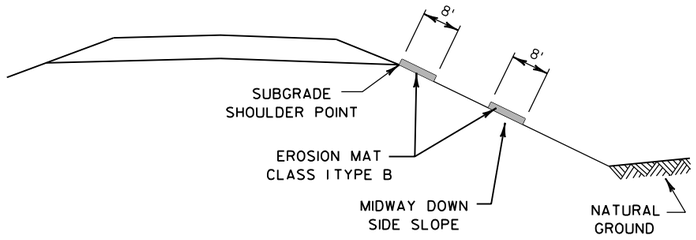


OPTIONAL METHOD FOR CONCRETE CURB AND GUTTER

PROFILE

DRIVEWAY TYPICAL SECTION AT CURB & GUTTER

PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	CONSTRUCTION DETAILS	SHEET 18	E

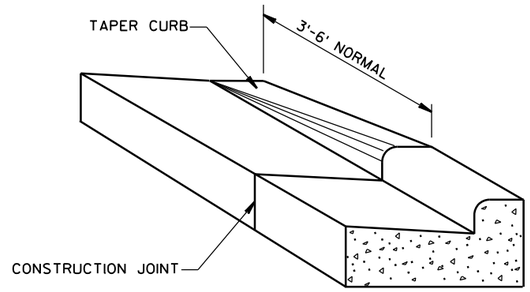


EROSION MAT FOR SLOPES

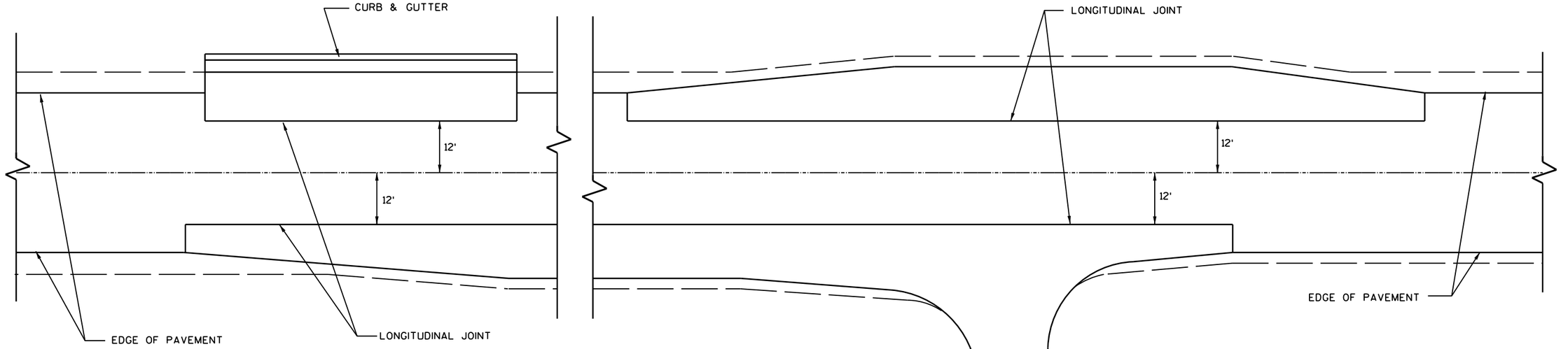
(SEE EROSION CONTROL PLAN FOR LOCATIONS)

NOTE:

TOP OF EACH ROW OF EROSION MAT SHALL BE KEYED INTO THE GROUND 1-FOOT MINIMUM DEPTH.



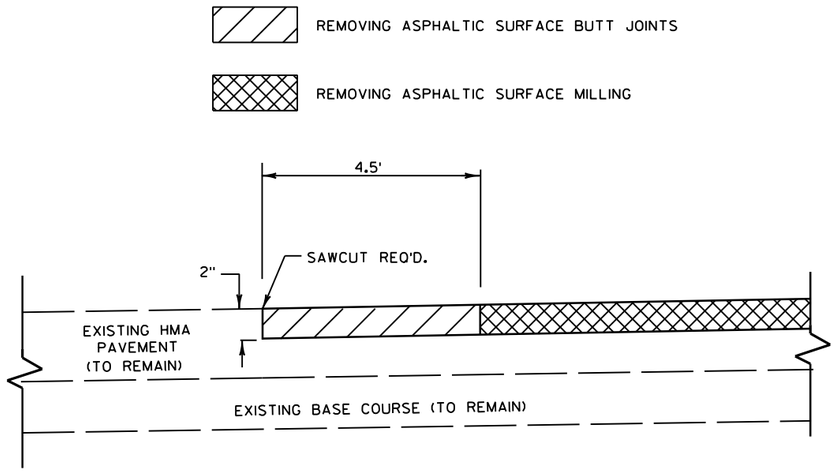
CURB & GUTTER TERMINI



HMA LONGITUDINAL JOINT

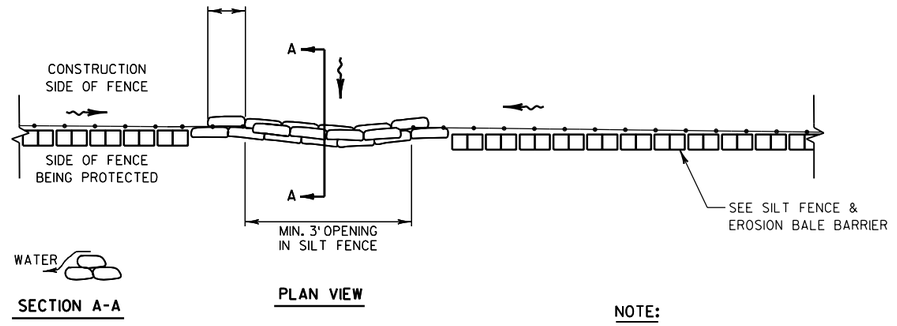
TO BE USED AT ALL INTERSECTIONS, BYPASS AND PASSING LANES, AND RURAL CURB SECTIONS

PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	CONSTRUCTION DETAILS	SHEET 19	E



CONSTRUCTION JOINT (MILL/OVERLAY MATCH POINT)

SEE REMOVAL SHEETS FOR LOCATIONS

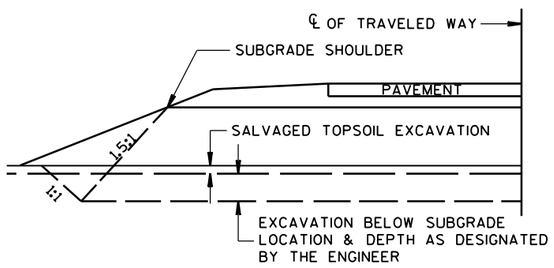


NOTE:

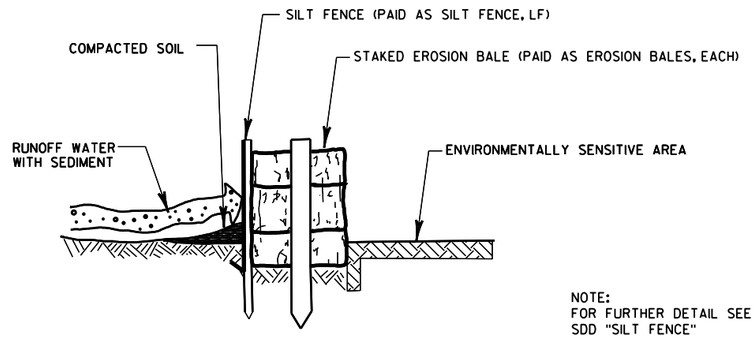
DIMENSIONS AND LOCATIONS MAY BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY ENGINEER

NOTE:
FOR FURTHER DETAIL SEE SDD "SILT FENCE"

SILT FENCE DRAINAGE OUTLET

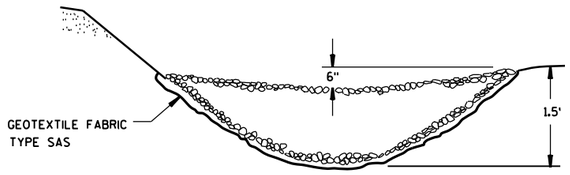


EXCAVATION BELOW SUBGRADE

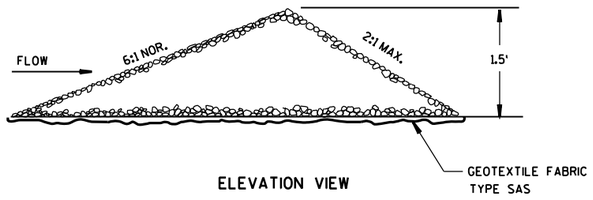


NOTE:
FOR FURTHER DETAIL SEE SDD "SILT FENCE"

SILT FENCE & EROSION BALE BARRIER



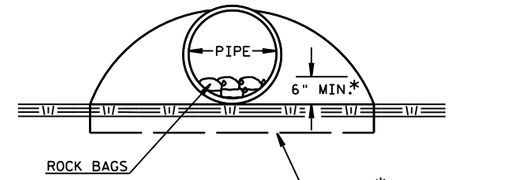
CROSS SECTIONAL VIEW



ELEVATION VIEW

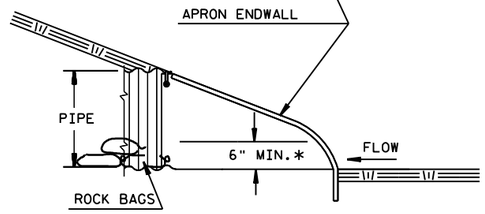
STONE OR ROCK DITCH CHECKS

SEE EROSION CONTROL PLANS FOR LOCATIONS



END VIEW

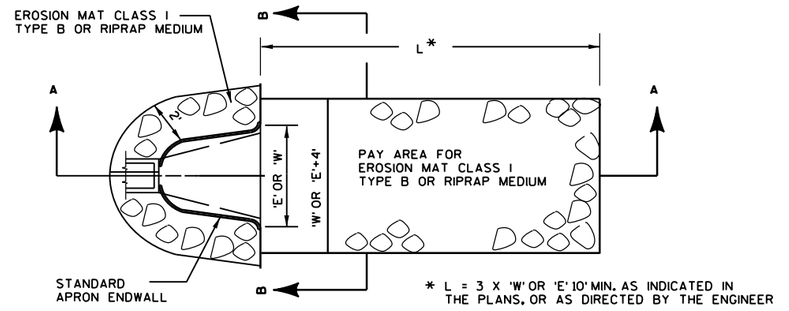
* OR AS DIRECTED BY THE ENGINEER



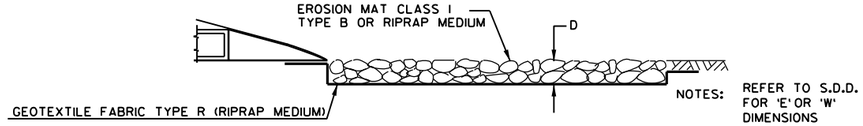
SIDE VIEW

CULVERT PIPE CHECK

SEE EROSION CONTROL PLANS FOR LOCATIONS

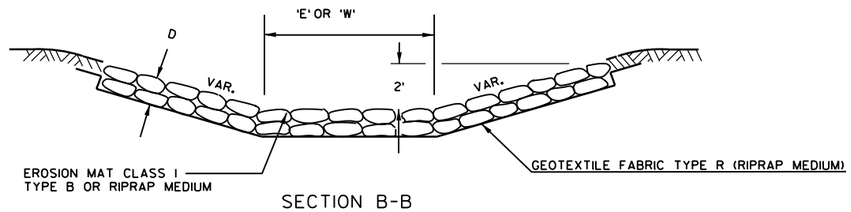


* L = 3 X 'W' OR 'E' 10' MIN. AS INDICATED IN THE PLANS, OR AS DIRECTED BY THE ENGINEER



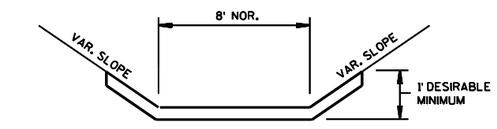
SECTION A-A

D = 18" (RIPRAP MEDIUM)

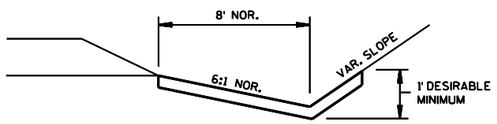


SECTION B-B

EROSION CONTROL TREATMENT AT PIPE ENDWALLS

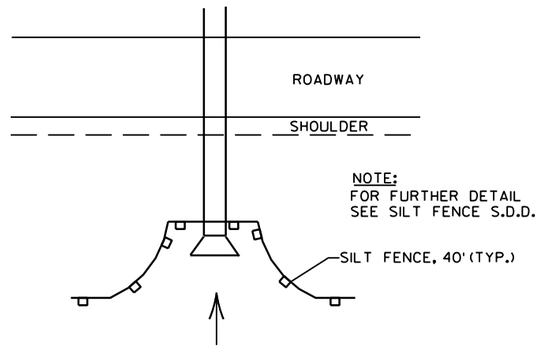


FLAT BOTTOM DITCHES



V-DITCHES

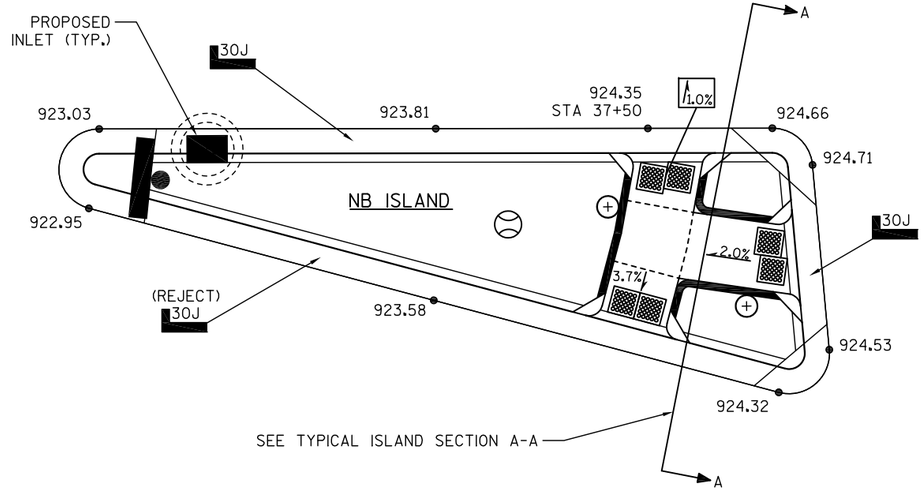
EROSION MAT FOR DITCHES

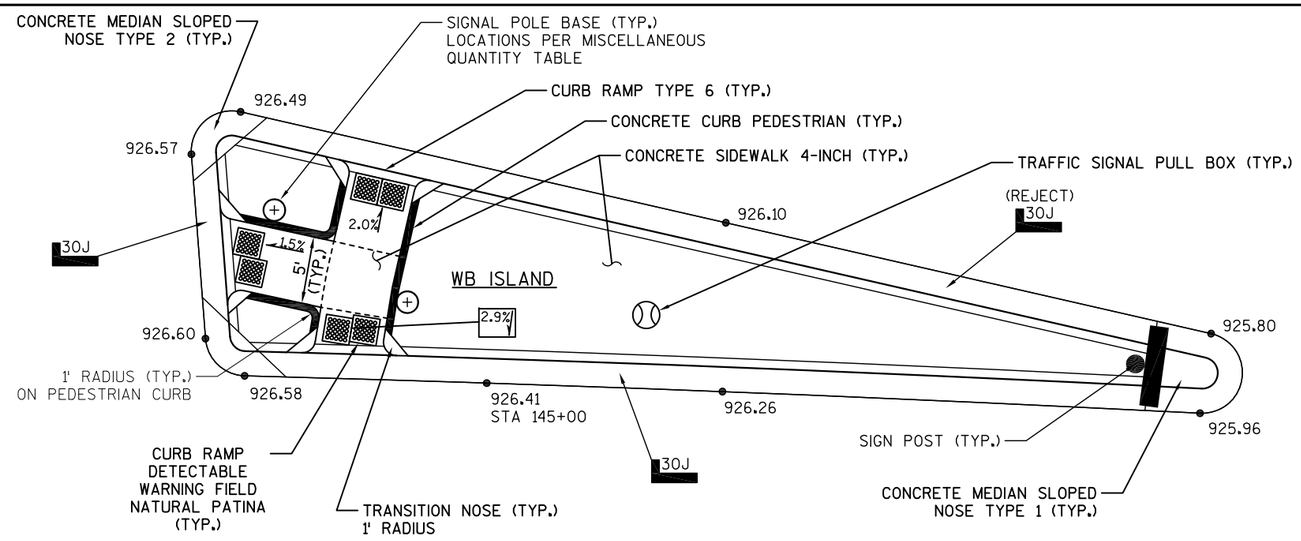


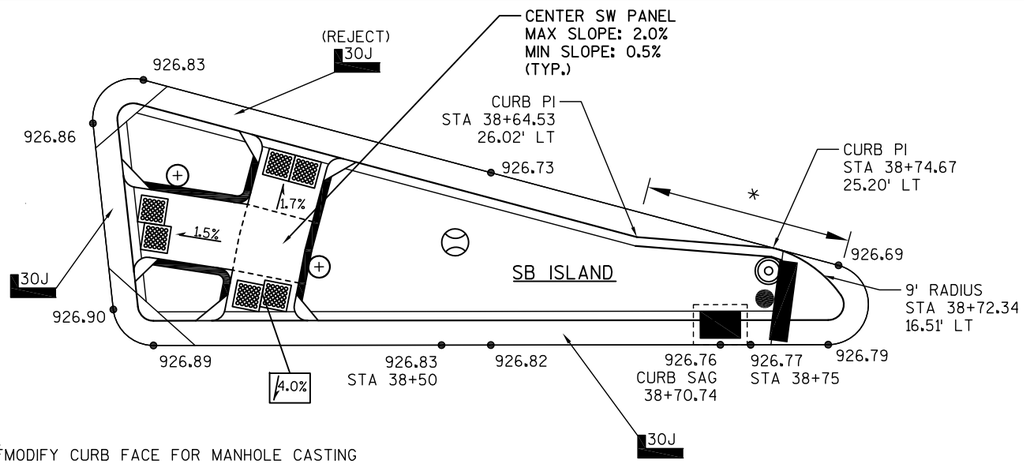
SILT FENCE AT PIPE INLET

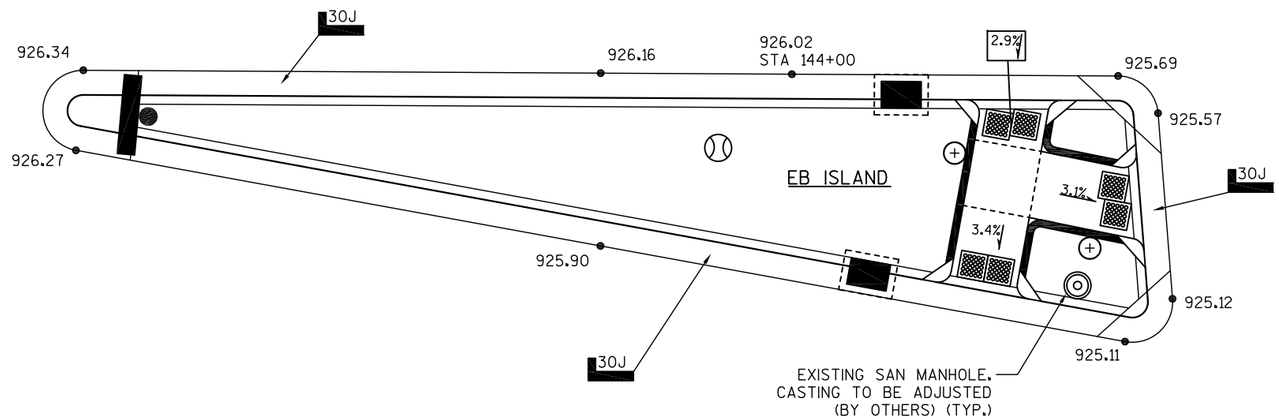
SEE EROSION CONTROL PLAN FOR LOCATIONS

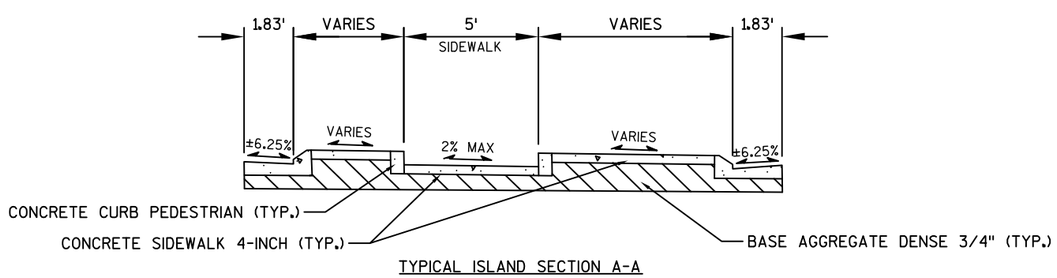
PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	CONSTRUCTION DETAILS	SHEET 21	E









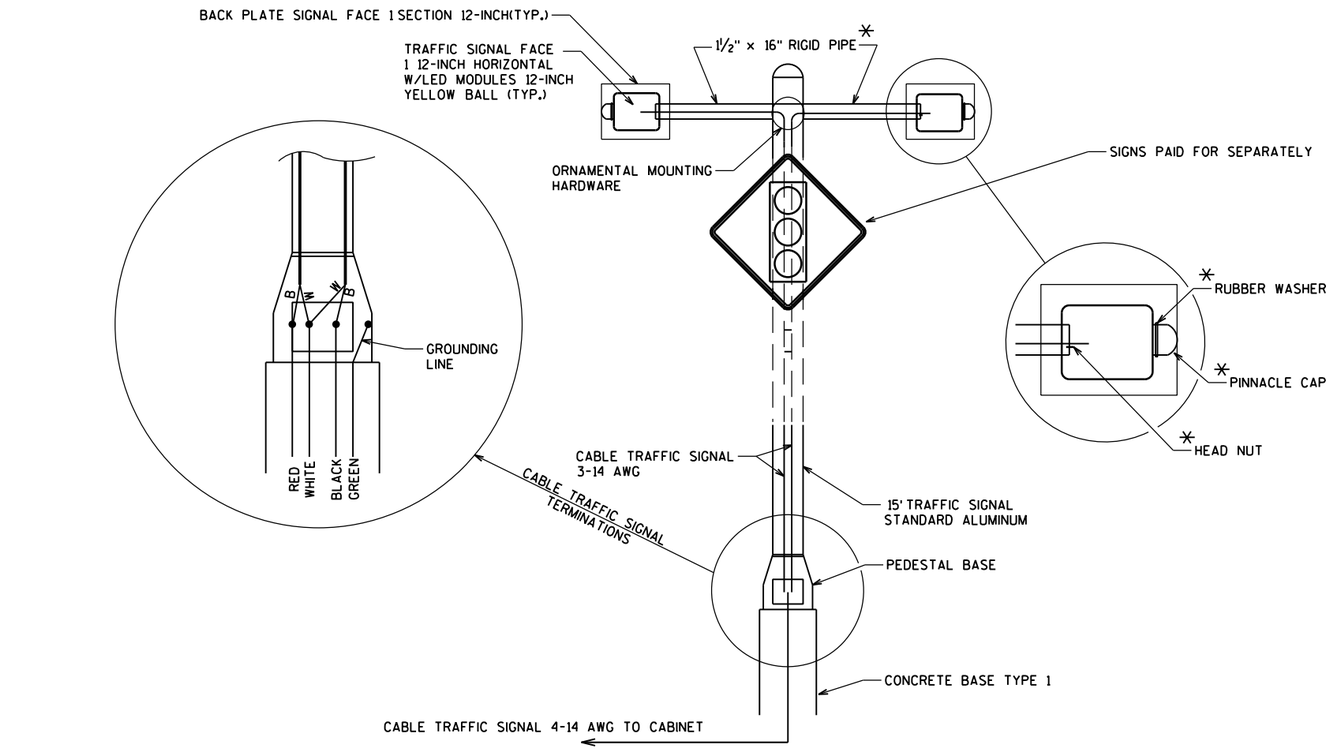


TYPICAL ISLAND SECTION A-A

CONCRETE ISLAND DETAILS

PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	CONSTRUCTION DETAILS	SHEET 22	E

2



* INCIDENTAL TO TRAFFIC SIGNAL MOUNTING HARDWARE BID ITEM

FLASHING BEACON ASSEMBLY

NO SCALE

2

2

N

LEGEND

- SAWCUT
- (X") CLEARING & GRUBBING (INCH DIAMETER)
- REMOVING CULVERT PIPE
- REMOVE ASPHALTIC SURFACE MILLING (2-INCH)
- ASPHALTIC PAVEMENT REMOVAL INCIDENTAL TO COMMON EXCAVATION
- REMOVE ASPHALTIC SURFACE

BUTT JOINT REQ'D
STA 131+73.0

EXISTING CULVERT TO REMAIN

STA 132+03.8
17.0' LT

STA 131+42.3
17.0' LT

EXISTING BOX CULVERT TO REMAIN

BEGIN FULL DEPTH
CONSTRUCTION OF
USH 12 STA 132+03.76

+00'12' 130+00'12' 131+00'12' 132+00'12' 133+00'12' 134+00'12' 135+

USH 12

BUTT JOINT REQ'D
STA 131+39.8

MATCH LINE 135+00

ROW (TYP.)

SLOPE INTERCEPTS (TYP.)

ROW (TYP.)

TLE (TYP.)

PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	REMOVAL PLANS	SHEET 24	E

FILE NAME : G:\WDOTCO\10033 (DESIGN WORK ORDERS)\WO 5 & 6 USH 12 & MAYER ROAD\CIVIL 3D\SHEETSPLAN\REMOVALS\021201_PD_REM.DWG PLOT DATE : 12/3/2012 PLOT BY : KL ENGINEERING PLOT NAME : _____ PLOT SCALE : 1:40_XREF

WISDOT/CADDS SHEET 42

2

LEGEND

- SAWCUT
- (X") CLEARING & GROUBBING (INCH DIAMETER)
- REMOVING CULVERT PIPE
- REMOVE ASPHALTIC SURFACE MILLING (2-INCH)
- ASPHALTIC PAVEMENT REMOVAL INCIDENTAL TO COMMON EXCAVATION
- REMOVE ASPHALTIC SURFACE

N

INDUSTRIAL DR

STA 135+62.8
53.6' LT

BUTT JOINT REQ'D
STA 135+85.6

STA 136+08.5
54.5' LT

ROW (TYP.)

60" X 18" CMP

MATCH LINE 135+00

END EXISTING UNDERLYING CONCRETE
PAVEMENT STA 135+00

SLOPE INTERCEPTS (TYP.)

ROW (TYP.)

TLE (TYP.)

USH 12

136+00'12"

137+00'12"

138+00'12"

139+00'12"

140+00'12"

MATCH LINE 141+00

2

PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	REMOVAL PLANS	SHEET 25	E

FILE NAME : G:\WDOTCO\10033 (DESIGN WORK ORDERS)\WO 5 & 6 USH 12 & MAYER ROAD\CIVIL 3D\SHEETSPLAN\REMOVALS\021201_PD_REM.DWG PLOT DATE : 12/3/2012 PLOT BY : KL ENGINEERING PLOT NAME : _____ PLOT SCALE : 1:40_XREF

2

N

MAYER RD

BEGIN EXISTING UNDERLYING CONCRETE PAVEMENT STA 146+00

MATCH LINE 141+00

MATCH LINE 147+00

MATCH LINE 37+00

USH 12

ROW (TYP.)

SLOPE INTERCEPTS (TYP.)

TLE (TYP.)

BORE

GUY

GUY POLE

MH

SIGN

(2")

(3")

(3")

(3")

39+00'NW'

39+00'MR'

38+00'MR'

38+00'AA'

37+00'SE'

37+37'SE'

143+13'SW'

144+00'SW'

144+37'SW'

144+69'NE'

145+00'NE'

145+88'NE'

142+00'12'

143+00'12'

144+00'12'

145+00'12'

146+00'12'

147+

10'12'

LEGEND

- SAWCUT
- (X") CLEARING & GRUBBING (INCH DIAMETER)
- REMOVING CULVERT PIPE
- REMOVE ASPHALTIC SURFACE MILLING (2-INCH)
- ASPHALTIC PAVEMENT REMOVAL INCIDENTAL TO COMMON EXCAVATION
- REMOVE ASPHALTIC SURFACE

CTH AA/
MAYER ROAD

PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	REMOVAL PLANS	SHEET 26	E

FILE NAME : G:\WDOTCO\10033 (DESIGN WORK ORDERS)\WO 5 & 6 USH 12 & MAYER ROAD\CIVIL 3D\SHEETSPLAN\REMOVALS\021201_PD_REM.DWG PLOT DATE : 12/3/2012 PLOT BY : KL ENGINEERING PLOT NAME : _____ PLOT SCALE : 1:40_XREF

WISDOT/CADDS SHEET 42

2

2

N

ROW (TYP.)

STA 147+30.6
15.0' LT

STA 147+40.7
14.9' LT

ABANDONING CULVERT PIPE

22" X 18" CMP

(3")

(3")

(3")

148+00'12"

149+00'12"

150+00'12"

151+00'12"

152+00'12"

10'

10'

USH 12

MATCH LINE 147+00

MATCH LINE 153+00

STA 147+45.3
15.1' RT

STA 147+35.2
15.1' RT

SLOPE INTERCEPTS (TYP.)

(7")

ROW (TYP.)

TLE (TYP.)

STA 152+87.0
59.7' RT

STA 152+97.4
58.5' RT

LEGEND

- SAWCUT
- (X") CLEARING & GRUBBING (INCH DIAMETER)
- REMOVING CULVERT PIPE
- REMOVE ASPHALTIC SURFACE MILLING (2-INCH)
- ASPHALTIC PAVEMENT REMOVAL INCIDENTAL TO COMMON EXCAVATION
- REMOVE ASPHALTIC SURFACE

PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	REMOVAL PLANS	SHEET 27	E

FILE NAME : G:\WDOTCO\10033 (DESIGN WORK ORDERS)\WO 5 & 6 USH 12 & MAYER ROAD\CIVIL 3D\SHEETSPLAN\REMOVALS\021201_PD_REM.DWG PLOT DATE : 12/3/2012 PLOT BY : KL ENGINEERING PLOT NAME : _____ PLOT SCALE : 1:40_XREF

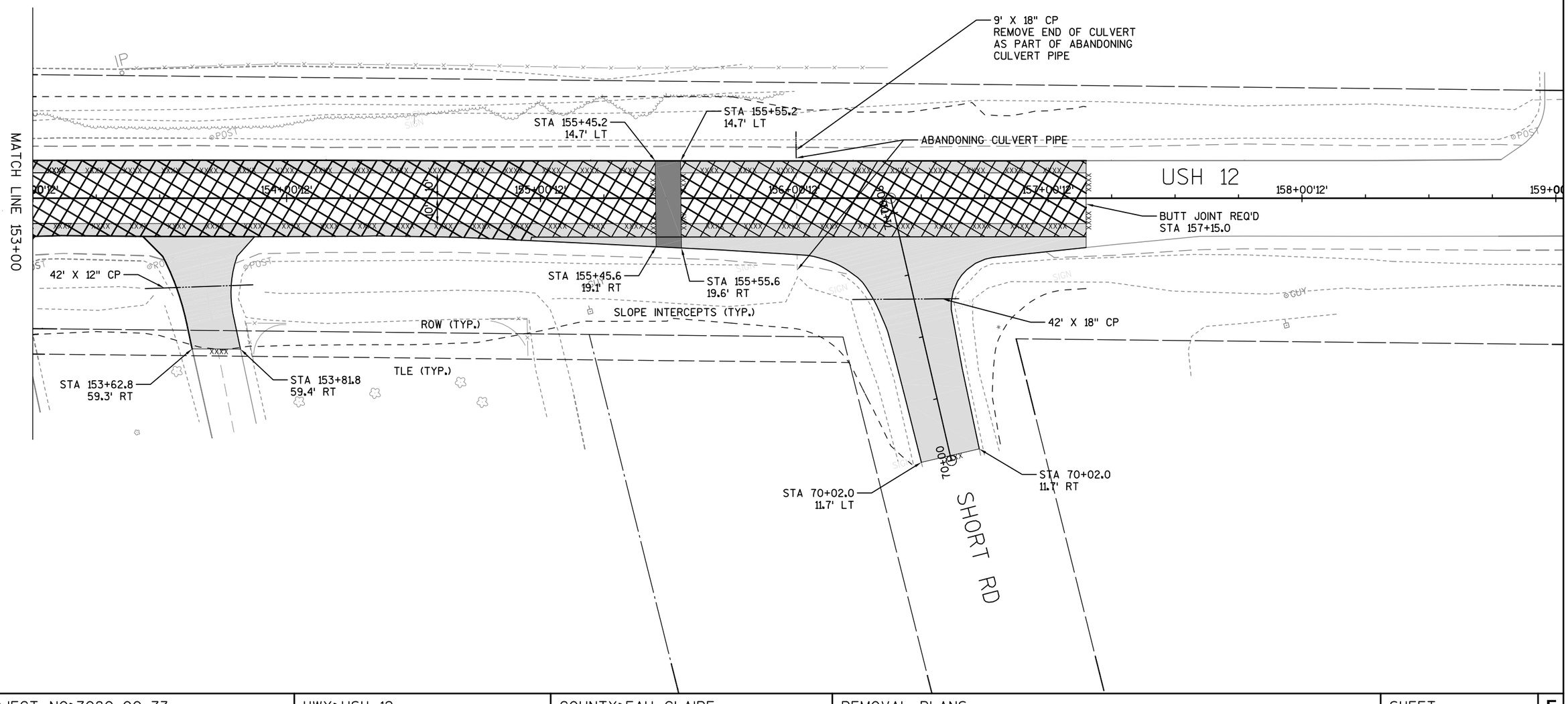
WISDOT/CADDS SHEET 42

2

2

LEGEND

- SAWCUT
- (X") CLEARING & GRUBBING (INCH DIAMETER)
- REMOVING CULVERT PIPE
- REMOVE ASPHALTIC SURFACE MILLING (2-INCH)
- ASPHALTIC PAVEMENT REMOVAL INCIDENTAL TO COMMON EXCAVATION
- REMOVE ASPHALTIC SURFACE



PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	REMOVAL PLANS	SHEET 28	E

2

2

N

ROW (TYP.)

TLE (TYP.)

SLOPE INTERCEPTS (TYP.)

60' X 12" CMP

STA 33+90.9
15.8' LT

STA 31+04.4
23.1' RT

36' X 12" CMP

STA 32+57.1
15.2' RT

STA 32+96.5
15.3' RT

STA 31+35.5
22.4' RT

42' X 12" CMP

STA 33+90.9
15.1' RT

44' X 18" PVC

ROW (TYP.)

STA 31+31.5
32.5' RT

STA 31+09.3
33.0' RT

STA 32+48.1
45.7' RT

STA 33+02.3
53.7' RT

STA 34+82.4
49.7' RT

STA 35+09.9
55.1' RT

STA 36+63.5
59.5' RT

STA 36+81.1
64.2' RT

CTH AA/MAYER ROAD

PLEASANT VIEW ST

MATCH LINE 37+00

(4")

(4")

(4")

(5")

(2")

81+00

81+17

LEGEND

- SAWCUT
- (X") CLEARING & GRUBBING (INCH DIAMETER)
- REMOVING CULVERT PIPE
- REMOVE ASPHALTIC SURFACE MILLING (2-INCH)
- ASPHALTIC PAVEMENT REMOVAL INCIDENTAL TO COMMON EXCAVATION
- REMOVE ASPHALTIC SURFACE

PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	REMOVAL PLANS	SHEET 29	E

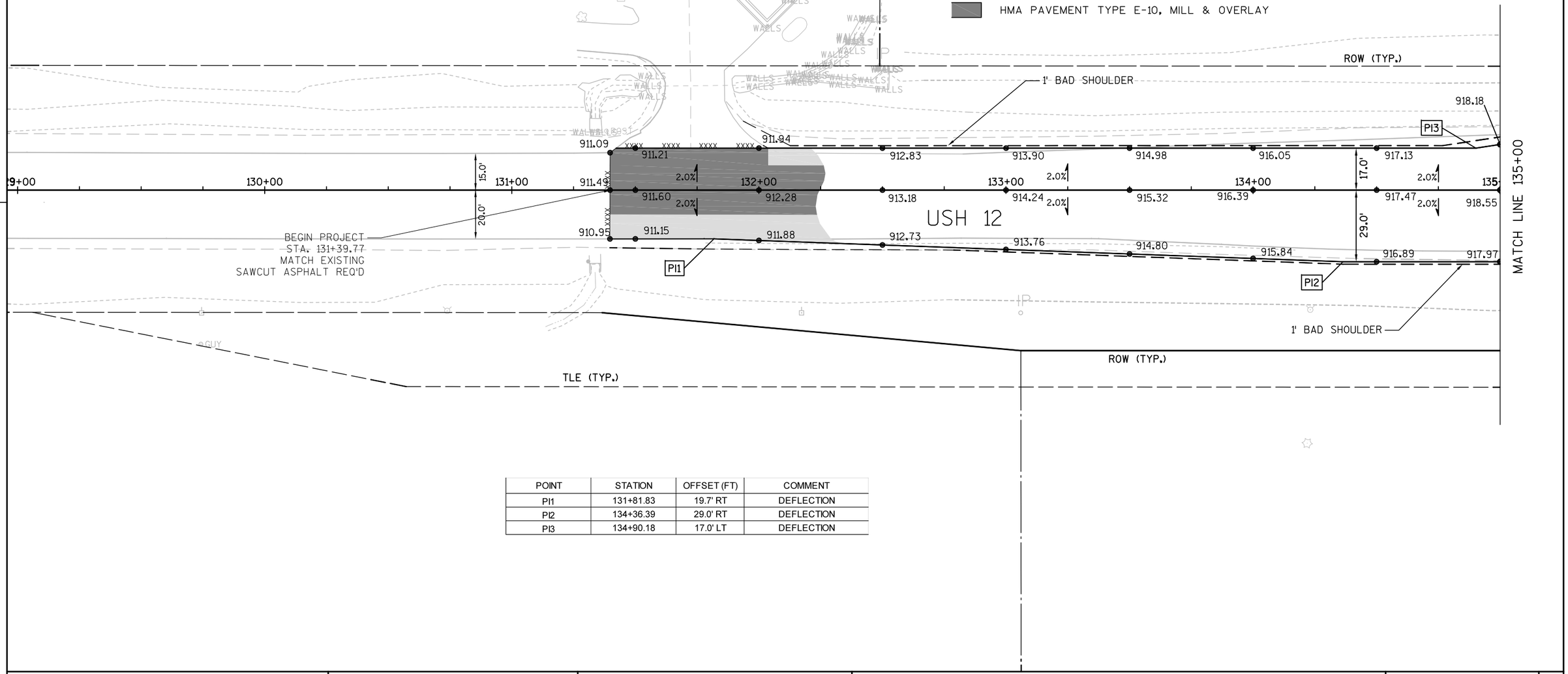
FILE NAME : G:\WDOTCO\10033 (DESIGN WORK ORDERS)\WO 5 & 6 USH 12 & MAYER ROAD\CIVIL 3D\SHEETSPLAN\REMOVALS\021201_PD_REM.DWG PLOT DATE : 12/3/2012 PLOT BY : KL ENGINEERING PLOT NAME : ---------- PLOT SCALE : 1:40_XREF

2

LEGEND

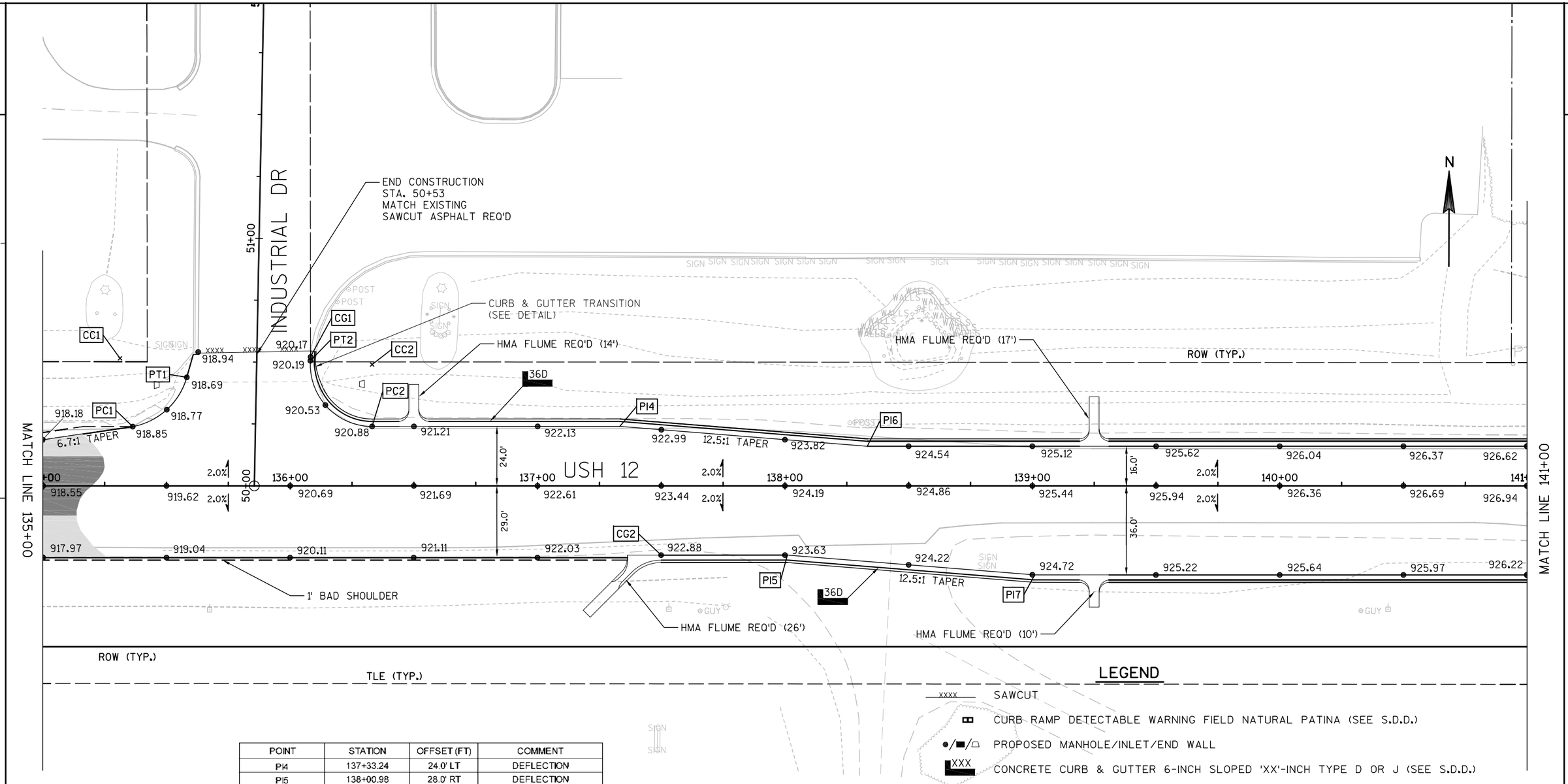
- SAWCUT
- CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA (SEE S.D.D.)
- PROPOSED MANHOLE/INLET/END WALL
- CONCRETE CURB & GUTTER 6-INCH SLOPED 'XX'-INCH TYPE D OR J (SEE S.D.D.)
- CURB RAMP TYPE 'X' (SEE DETAIL)
- CONCRETE MEDIAN SLOPED NOSE, TYPE 1 (SEE S.D.D.)
- CONCRETE MEDIAN SLOPED NOSE, TYPE 2 (SEE S.D.D.)
- HMA PAVEMENT TYPE E-10, FULL DEPTH
- ASPHALTIC SURFACE DRIVEWAYS & FIELD ENTRANCES
- CONCRETE SIDEWALK 4-INCH
- HMA PAVEMENT TYPE E-10, MILL & OVERLAY

N



POINT	STATION	OFFSET (FT)	COMMENT
PI1	131+81.83	19.7' RT	DEFLECTION
PI2	134+36.39	29.0' RT	DEFLECTION
PI3	134+90.18	17.0' LT	DEFLECTION

PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	PLAN DETAILS	SHEET 30	E



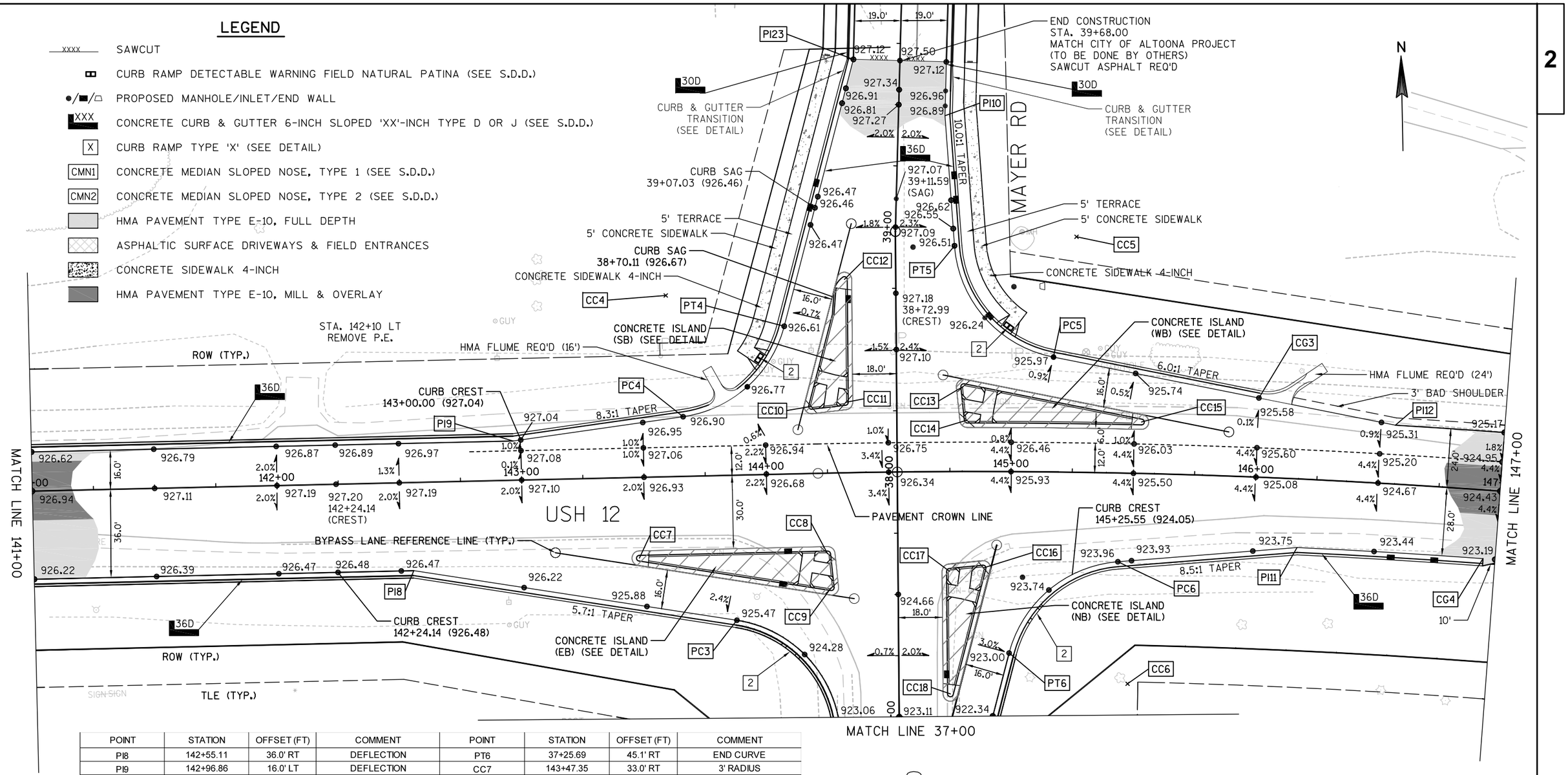
POINT	STATION	OFFSET (FT)	COMMENT
PI4	137+33.24	24.0' LT	DEFLECTION
PI5	138+00.98	28.0' RT	DEFLECTION
PI6	138+33.28	16.0' LT	DEFLECTION
PI7	139+00.98	36.0' RT	DEFLECTION
PC1	135+36.37	24.0' LT	BEGIN CURVE
CC1	135+31.23	51.5' LT	28' RADIUS
PT1	135+58.22	43.8' LT	END CURVE
PC2	136+33.13	24.0' LT	BEGIN CURVE
CC2	136+33.13	49.0' LT	25' RADIUS
PT2	136+08.18	50.5' LT	END CURVE
CG1	136+08.27	52.1' LT	BEGIN CURB & GUTTER
CG2	137+50.00	28.0' RT	BEGIN CURB & GUTTER

LEGEND

- xxxx — SAWCUT
- CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA (SEE S.D.D.)
- ●/■/□ — PROPOSED MANHOLE/INLET/END WALL
- XXX — CONCRETE CURB & GUTTER 6-INCH SLOPED 'XX'-INCH TYPE D OR J (SEE S.D.D.)
- [X] — CURB RAMP TYPE 'X' (SEE DETAIL)
- [CMN1] — CONCRETE MEDIAN SLOPED NOSE, TYPE 1 (SEE S.D.D.)
- [CMN2] — CONCRETE MEDIAN SLOPED NOSE, TYPE 2 (SEE S.D.D.)
- HMA PAVEMENT TYPE E-10, FULL DEPTH
- ASPHALTIC SURFACE DRIVEWAYS & FIELD ENTRANCES
- CONCRETE SIDEWALK 4-INCH
- HMA PAVEMENT TYPE E-10, MILL & OVERLAY

LEGEND

- SAWCUT
- CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA (SEE S.D.D.)
- PROPOSED MANHOLE/INLET/END WALL
- CONCRETE CURB & GUTTER 6-INCH SLOPED 'XX'-INCH TYPE D OR J (SEE S.D.D.)
- CURB RAMP TYPE 'X' (SEE DETAIL)
- CMN1 CONCRETE MEDIAN SLOPED NOSE, TYPE 1 (SEE S.D.D.)
- CMN2 CONCRETE MEDIAN SLOPED NOSE, TYPE 2 (SEE S.D.D.)
- HMA PAVEMENT TYPE E-10, FULL DEPTH
- ASPHALTIC SURFACE DRIVEWAYS & FIELD ENTRANCES
- CONCRETE SIDEWALK 4-INCH
- HMA PAVEMENT TYPE E-10, MILL & OVERLAY

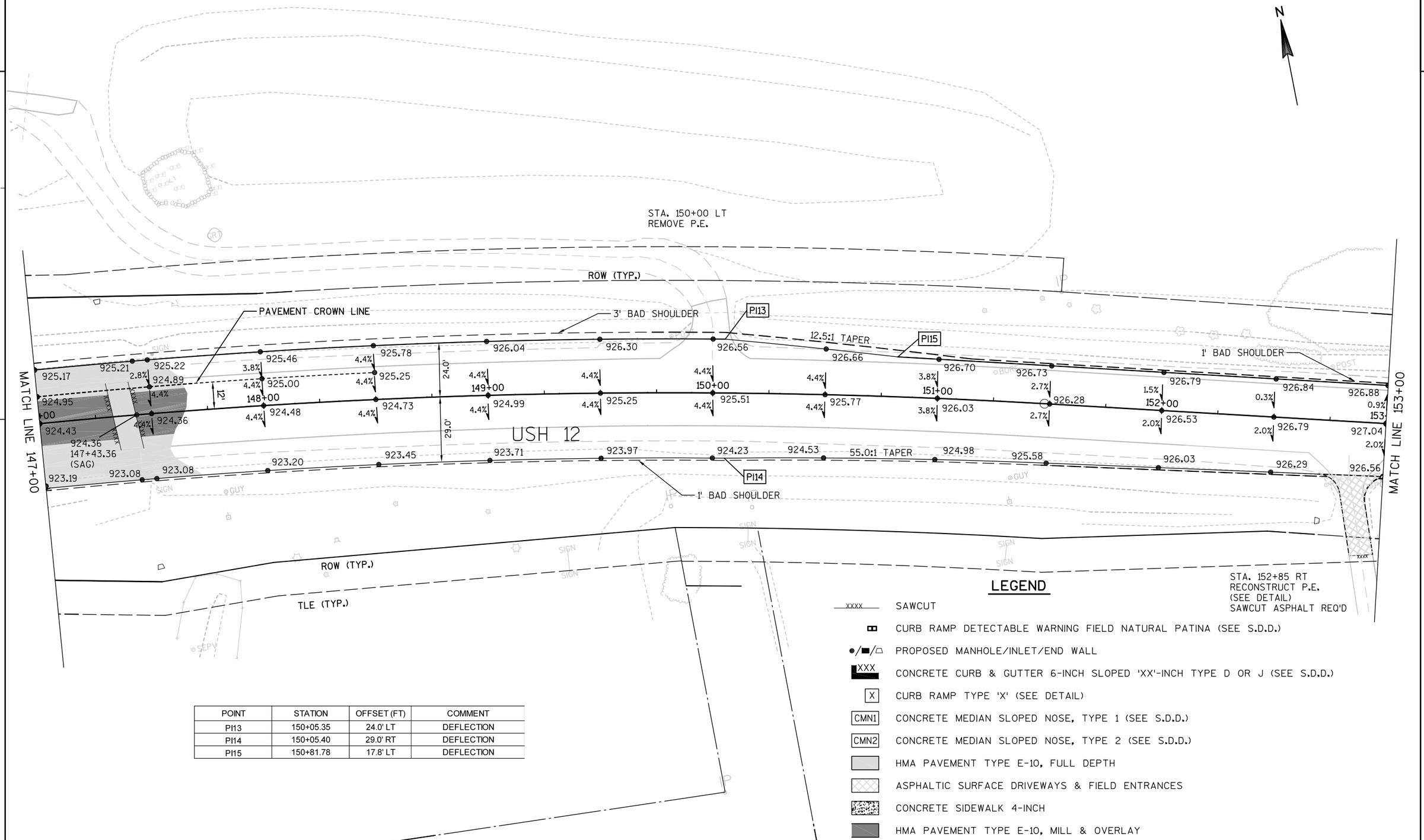


POINT	STATION	OFFSET (FT)	COMMENT	POINT	STATION	OFFSET (FT)	COMMENT
PI8	142+55.11	36.0' RT	DEFLECTION	PT6	37+25.69	45.1' RT	END CURVE
PI9	142+96.86	16.0' LT	DEFLECTION	CC7	143+47.35	33.0' RT	3' RADIUS
PI10	39+46.00	19.0' RT	DEFLECTION	CC8	144+24.35	33.0' RT	3' RADIUS
PI11	146+18.20	28.0' RT	DEFLECTION	CC9	144+25.53	46.8' RT	3' RADIUS
PI12	146+55.71	24.0' LT	DEFLECTION	CC10	144+19.06	27.4' LT	3' RADIUS
PI23	39+68.00	19.0' RT	DEFLECTION	CC11	144+32.82	28.7' LT	3' RADIUS
PC3	143+86.62	59.2' RT	BEGIN CURVE	CC12	38+78.76	21.0' LT	3' RADIUS
PC4	143+66.52	24.4' LT	BEGIN CURVE	CC13	144+80.70	34.7' LT	3' RADIUS
CC4	143+60.56	74.0' LT	50' RADIUS	CC14	144+82.10	21.0' LT	3' RADIUS
PT4	38+59.87	45.7' LT	END CURVE	CC15	145+52.77	21.0' LT	3' RADIUS
PC5	145+16.49	47.0' LT	BEGIN CURVE	CC16	144+88.61	40.7' RT	3' RADIUS
CC5	145+25.42	96.1' LT	50' RADIUS	CC17	144+74.68	39.4' RT	3' RADIUS
PT5	38+92.18	24.1' RT	END CURVE	CC18	37+09.19	21.0' RT	3' RADIUS
PC6	145+44.38	36.3' RT	BEGIN CURVE	CG3	146+00.00	32.3' LT	END CURB & GUTTER
CC6	145+49.51	86.0' RT	50' RADIUS	CG4	146+95.05	28.0' RT	END CURB & GUTTER

CTH AA/
MAYER ROAD

PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	PLAN DETAILS	SHEET 32	E

2



POINT	STATION	OFFSET (FT)	COMMENT
PI13	150+05.35	24.0' LT	DEFLECTION
PI14	150+05.40	29.0' RT	DEFLECTION
PI15	150+81.78	17.8' LT	DEFLECTION

LEGEND

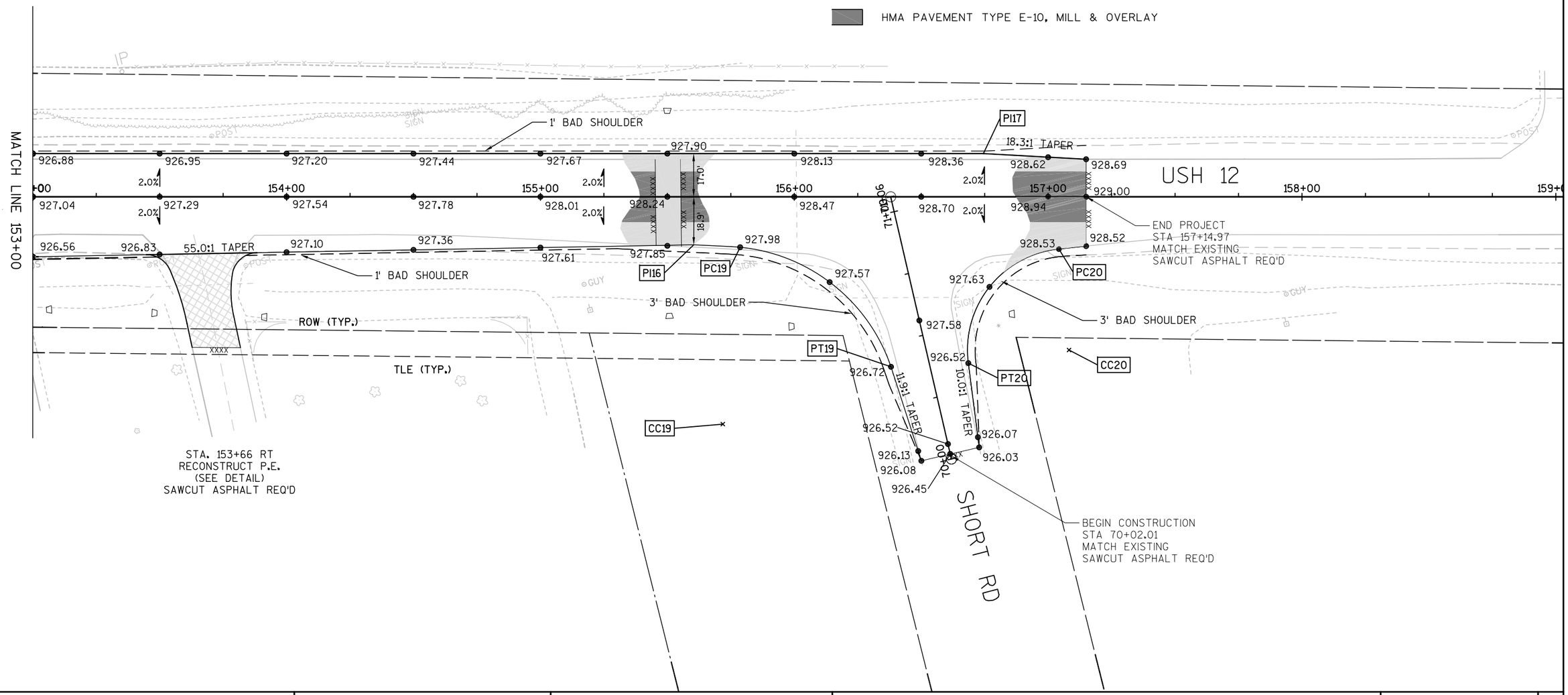
- XXXX — SAWCUT
- CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA (SEE S.D.D.)
- ●/■/⌓ — PROPOSED MANHOLE/INLET/END WALL
- XXX — CONCRETE CURB & GUTTER 6-INCH SLOPED 'XX'-INCH TYPE D OR J (SEE S.D.D.)
- X — CURB RAMP TYPE 'X' (SEE DETAIL)
- CMN1 — CONCRETE MEDIAN SLOPED NOSE, TYPE 1 (SEE S.D.D.)
- CMN2 — CONCRETE MEDIAN SLOPED NOSE, TYPE 2 (SEE S.D.D.)
- HMA PAVEMENT TYPE E-10, FULL DEPTH
- ASPHALTIC SURFACE DRIVEWAYS & FIELD ENTRANCES
- CONCRETE SIDEWALK 4-INCH
- HMA PAVEMENT TYPE E-10, MILL & OVERLAY

PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	PLAN DETAILS	SHEET 33	E

POINT	STATION	OFFSET (FT)	COMMENT
PI16	155+60.42	18.9' RT	DEFLECTION
PI17	156+74.50	17.0' LT	DEFLECTION
PC19	155+78.69	19.9' RT	BEGIN CURVE
CC19	155+71.85	89.5' RT	70' RADIUS
PT19	156+38.11	66.9' RT	END CURVE
PC20	157+04.25	20.6' RT	BEGIN CURVE
CC20	157+08.24	60.4' RT	40' RADIUS
PT20	156+68.57	65.5' RT	END CURVE

LEGEND

- SAWCUT
- CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA (SEE S.D.D.)
- PROPOSED MANHOLE/INLET/END WALL
- XXX CONCRETE CURB & GUTTER 6-INCH SLOPED 'XX'-INCH TYPE D OR J (SEE S.D.D.)
- X CURB RAMP TYPE 'X' (SEE DETAIL)
- CMN1 CONCRETE MEDIAN SLOPED NOSE, TYPE 1 (SEE S.D.D.)
- CMN2 CONCRETE MEDIAN SLOPED NOSE, TYPE 2 (SEE S.D.D.)
- HMA PAVEMENT TYPE E-10, FULL DEPTH
- ASPHALTIC SURFACE DRIVEWAYS & FIELD ENTRANCES
- CONCRETE SIDEWALK 4-INCH
- HMA PAVEMENT TYPE E-10, MILL & OVERLAY



PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	PLAN DETAILS	SHEET 34	E

LEGEND

- SAWCUT
- CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA (SEE S.D.D.)
- PROPOSED MANHOLE/INLET/END WALL
- XXX — CONCRETE CURB & GUTTER 6-INCH SLOPED 'XX'-INCH TYPE D OR J (SEE S.D.D.)
- X — CURB RAMP TYPE 'X' (SEE DETAIL)
- CMN1 — CONCRETE MEDIAN SLOPED NOSE, TYPE 1 (SEE S.D.D.)
- CMN2 — CONCRETE MEDIAN SLOPED NOSE, TYPE 2 (SEE S.D.D.)
- HMA PAVEMENT TYPE E-10, FULL DEPTH
- ASPHALTIC SURFACE DRIVEWAYS & FIELD ENTRANCES
- CONCRETE SIDEWALK 4-INCH
- HMA PAVEMENT TYPE E-10, MILL & OVERLAY

N

CTH AA/MAYER ROAD

PLEASANT VIEW ST

MATCH LINE

+00 | 32+00 | 33+00 | 34+00 | 35+00 | 36+00 | 37+00

914.88 | 915.10 | 916.23 | 917.35 | 918.52 | 919.83 | 921.41 | 923.06

915.22 | 915.43 | 916.55 | 917.67 | 918.84 | 920.14 | 921.57 | 923.11

914.93 | 915.11 | 916.21 | 917.28 | 918.36 | 919.66 | 919.65 | 921.07 | 922.34

BEGIN CONSTRUCTION
STA. 33+90.93
MATCH EXISTING
SAWCUT ASPHALT REQ'D

HMA FLUME REQ'D (8')

10.0:1 TAPER

1' BAD SHOULDER

12.5:1 TAPER

3' BAD SHOULDER

3.7:1 TAPER

6.7:1 TAPER

ROW (TYP.)

TLE (TYP.)

CC3

CG5

CG6

PI18

PI19

PI20

PI21

PI22

PT3

36D

10'

14.8'

16.0'

17.0'

24.0'

2%

1.4%

0.4%

STA. 35+73 LT
RECONSTRUCT C.E.
(SEE DETAIL)
SAWCUT ASPHALT REQ'D

STA 35+46.13

STA 35+99.99

STA 35+89.95

STA 36+17.95

STA 36+63.9
51.4' RT

STA 36+81.4
51.8' RT

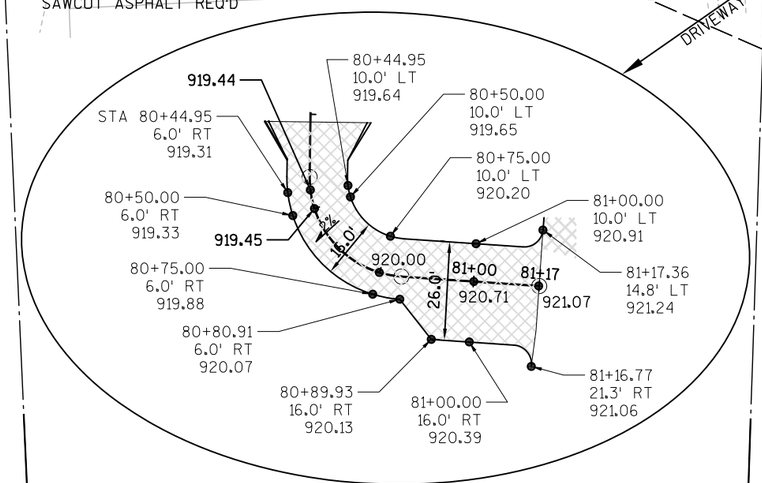
81+00 | 81+17

STA. 32+73 RT
RECONSTRUCT C.E.
(SEE DETAIL)
SAWCUT ASPHALT REQ'D

STA. 34+96 RT
RECONSTRUCT C.E.
(SEE DETAIL)
SAWCUT ASPHALT REQ'D

STA. 36+04 RT
RECONSTRUCT P.E.
(SEE DETAIL)
SAWCUT ASPHALT REQ'D

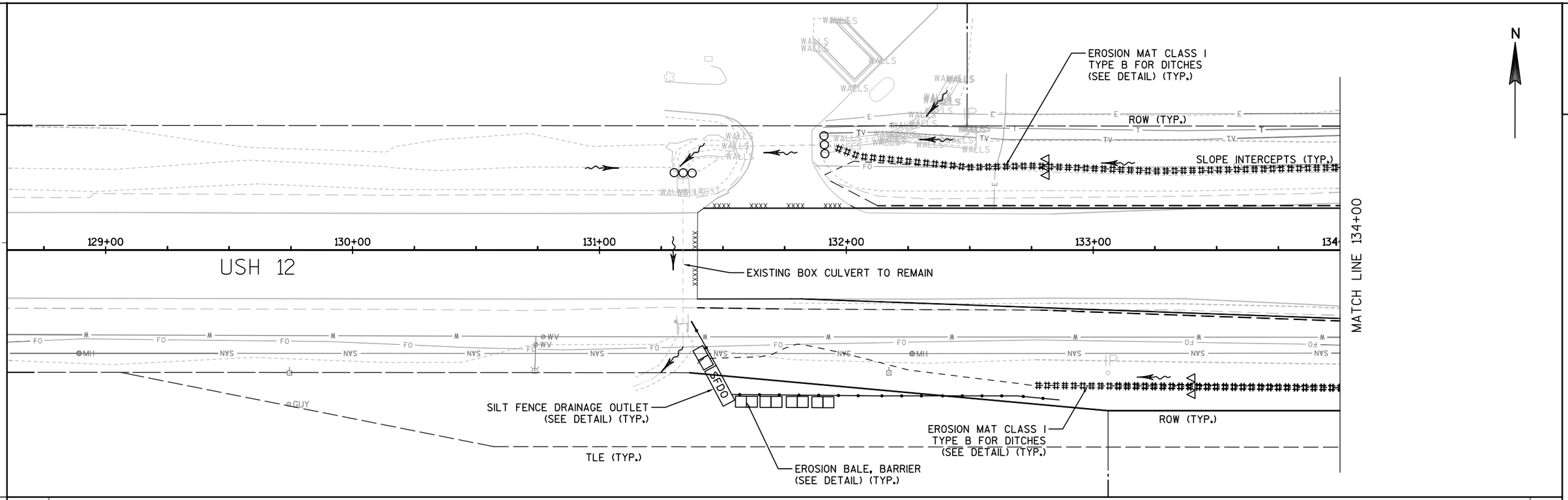
DRIVEWAY DETAILS



POINT	STATION	OFFSET (FT)	COMMENT
PI18	34+20.93	17.0' RT	DEFLECTION
PI19	34+65.81	17.0' RT	DEFLECTION
PI20	35+53.31	24.0' RT	DEFLECTION
PI21	36+46.98	24.0' RT	DEFLECTION
PI22	34+41.01	16.0' LT	DEFLECTION
CC3	36+90.62	74.0' LT	50' RADIUS
PT3	36+98.03	24.6' LT	END CURVE
CG5	34+25.00	16.0' LT	BEGIN CURB & GUTTER
CG6	35+82.25	24.0' RT	BEGIN CURB & GUTTER

PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	PLAN DETAILS	SHEET 35	E

FILE NAME : G:\WDOTCO\10033 (DESIGN WORK ORDERS)\WO 5 & 6 USH 12 & MAYER ROAD\CIVIL 3D\SHEETSPLAN\PLAN DETAILS\021201_PD.DWG PLOT DATE : 12/4/2012 PLOT BY : KL ENGINEERING PLOT NAME : ---------- PLOT SCALE : 1:40_XREF



908 908

LEGEND

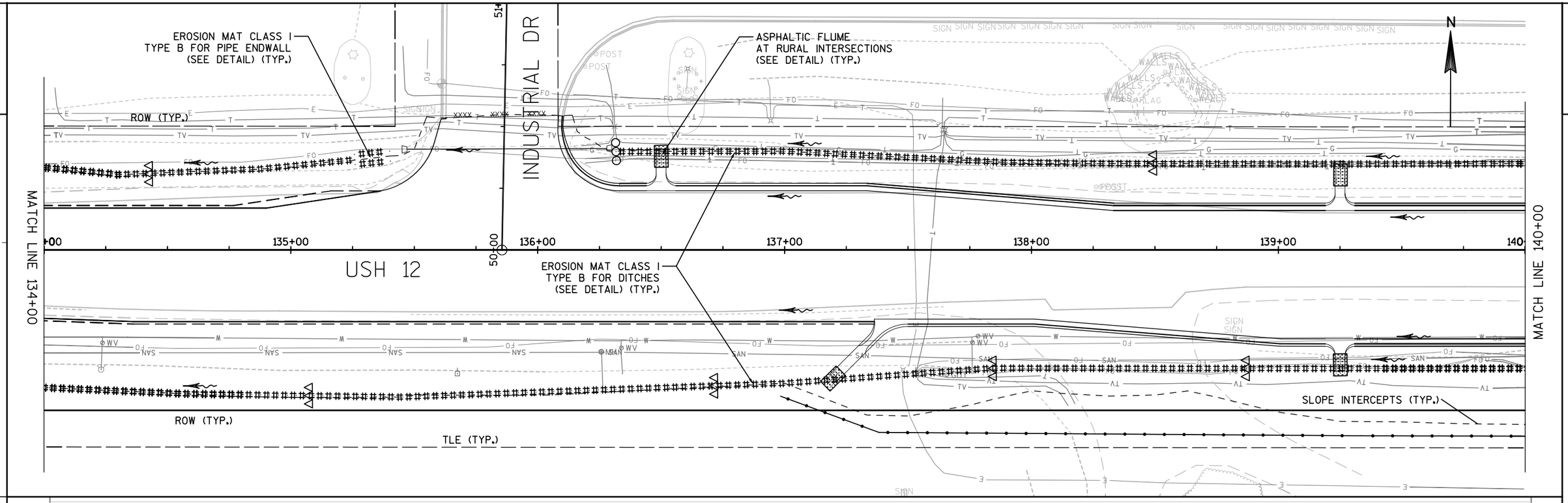
906 906

######	EROSION MAT CLASS I TYPE B
	SOD
	SILT FENCE
	EROSION BALE, BARRIER
	RIP RAP MEDIUM
	SLOPE INTERCEPT
ASPH	ASPHALTIC FLUME
A B C	INLET PROTECTION TYPE A, B, AND C
	TEMPORARY DITCH CHECK
	CULVERT PIPE CHECK
	SURFACE WATER FLOW
SFDO	SILT FENCE DRAINAGE OUTLET

904 904 902 902 900 900 898 898 896 896 894 894 892 892 890 890

PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	EROSION CONTROL & STORM SEWER	SHEET 36	E

FILE NAME : G:\WDOTCO\10033 (DESIGN WORK ORDERS)\WO 5 & 6 USH 12 & MAYER ROAD\CIVIL 3D\SHEETSPLAN\EROSION CONTROL & STORM SEWER\02250ESC01.DWG PLOT DATE : 12/6/2012 PLOT BY : KL ENGINEERING PLOT NAME : _____ PLOT SCALE : 1" = 40'_XREF



908

LEGEND

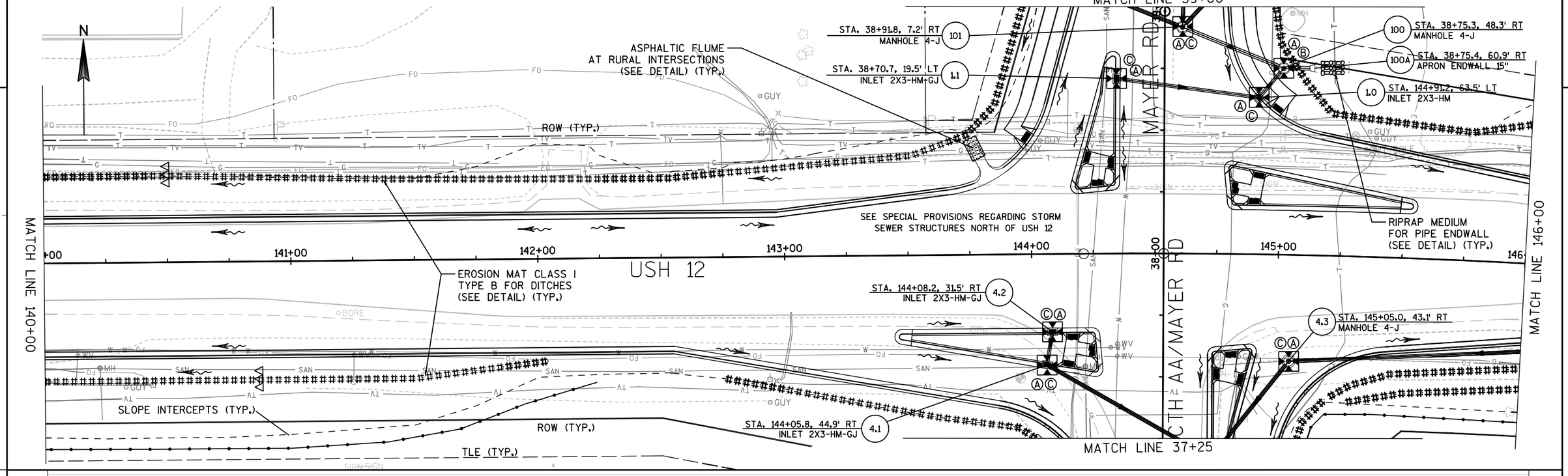
######	EROSION MAT CLASS I TYPE B
	SOD
	SILT FENCE
	EROSION BALE, BARRIER
	RIP RAP MEDIUM
	SLOPE INTERCEPT
ASPH	ASPHALTIC FLUME
A B C	INLET PROTECTION TYPE A, B, AND C
	TEMPORARY DITCH CHECK
	CULVERT PIPE CHECK
	SURFACE WATER FLOW
SFDO	SILT FENCE DRAINAGE OUTLET

908

PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	EROSION CONTROL & STORM SEWER	SHEET 37 E

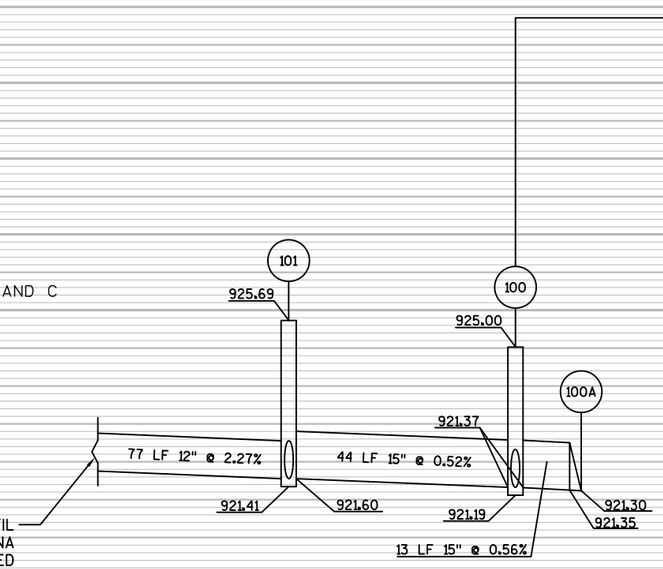
FILE NAME : G:\WDOTCO\10033 (DESIGN WORK ORDERS)\WO 5 & 6 USH 12 & MAYER ROAD\CIVIL 3D\SHEETSPLAN\EROSION CONTROL & STORM SEWER\02250PLOT.DWG PLOT DATE : 12/6/2012 PLOT BY : KL ENGINEERING PLOT NAME : ---------- PLOT SCALE : 1" = 40'_XREF

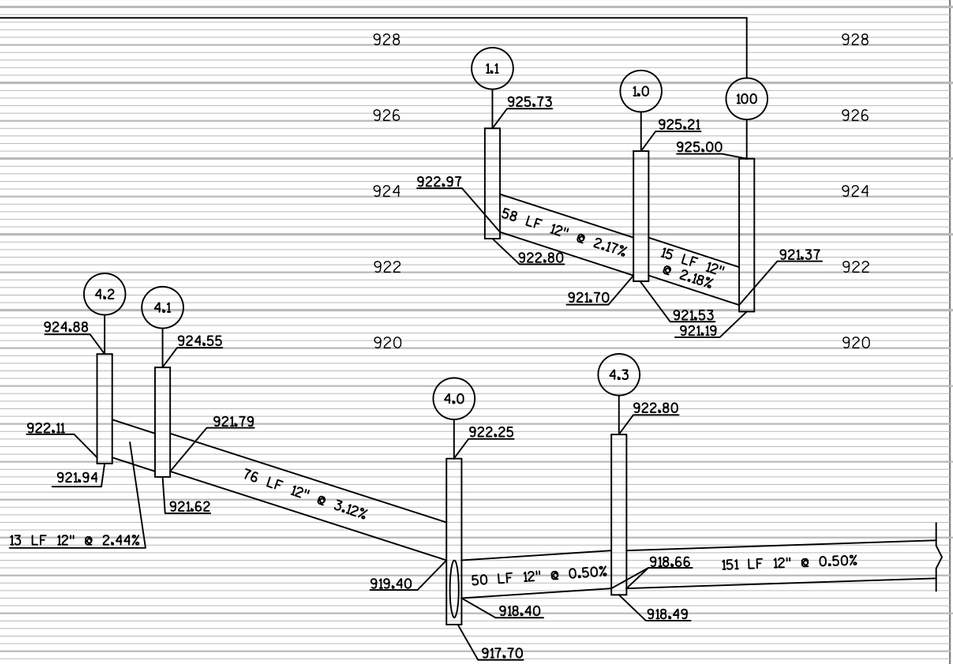
WISDOT/CADDS SHEET 44



LEGEND

- ###### EROSION MAT CLASS I TYPE B
- SOD
- SILT FENCE
- EROSION BALE, BARRIER
- RIP RAP MEDIUM
- SLOPE INTERCEPT
- ASPH — ASPHALTIC FLUME
- A B C — INLET PROTECTION TYPE A, B, AND C
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW
- SFDO — SILT FENCE DRAINAGE OUTLET





PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	EROSION CONTROL & STORM SEWER	SHEET 38	E

2

ASPHALTIC FLUME
AT RURAL INTERSECTIONS
(SEE DETAIL) (TYP.)

ROW (TYP.)

MATCH LINE 146+00

147+00

148+00

149+00

150+00

151+00

MATCH LINE 152+00

USH 12

STA. 146+57.0, 30.0' RT
INLET 2X3-HM
4.4

STA. 146+75.0, 30.0' RT
INLET 2X3-HM
4.5

EROSION MAT CLASS I
TYPE B FOR SLOPES
(SEE DETAIL) (TYP.)

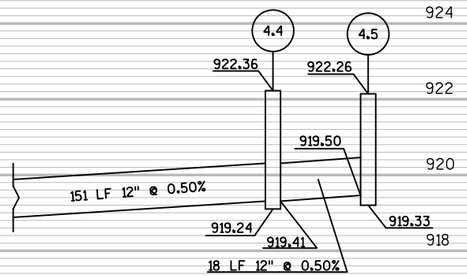
EROSION MAT CLASS I
TYPE B FOR DITCHES
(SEE DETAIL) (TYP.)

SLOPE INTERCEPTS (TYP.)

ROW (TYP.)

TLE (TYP.)

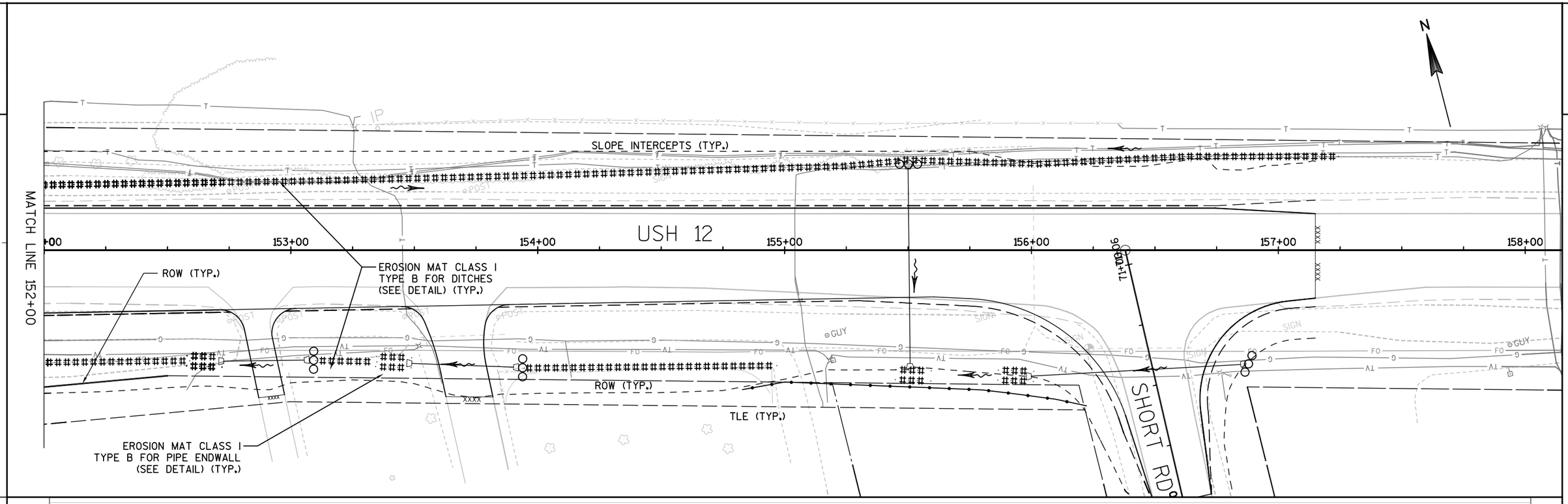
RIPRAP MEDIUM FOR PIPE ENDWALL
(SEE DETAIL) (TYP.)



LEGEND

######	EROSION MAT CLASS I TYPE B
	SOD
	SILT FENCE
	EROSION BALE, BARRIER
	RIP RAP MEDIUM
	SLOPE INTERCEPT
ASPH	ASPHALTIC FLUME
	INLET PROTECTION TYPE A, B, AND C
	TEMPORARY DITCH CHECK
	CULVERT PIPE CHECK
	SURFACE WATER FLOW
SFDO	SILT FENCE DRAINAGE OUTLET

PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	EROSION CONTROL & STORM SEWER	SHEET 39	E



930

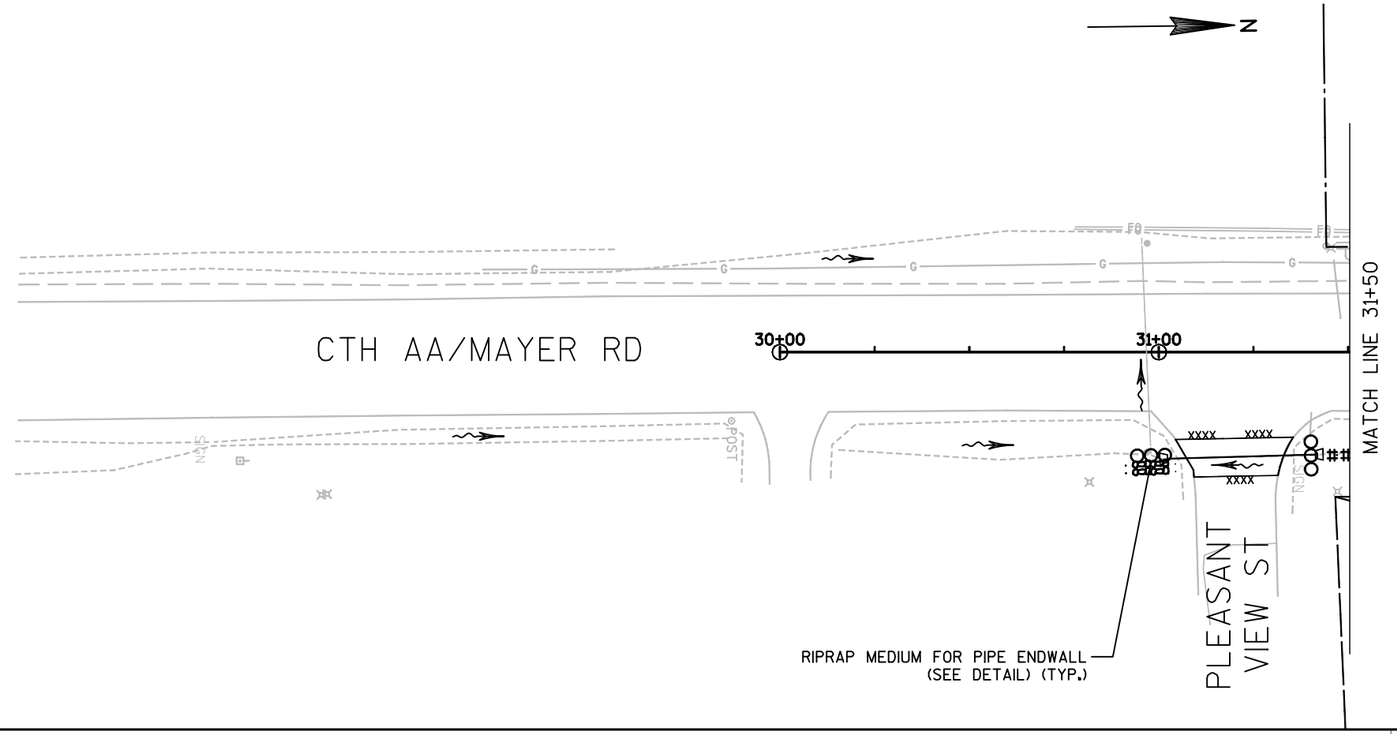
LEGEND

######	EROSION MAT CLASS I TYPE B
	SOD
	SILT FENCE
	EROSION BALE, BARRIER
	RIP RAP MEDIUM
	SLOPE INTERCEPT
ASPH	ASPHALTIC FLUME
A B C	INLET PROTECTION TYPE A, B, AND C
	TEMPORARY DITCH CHECK
	CULVERT PIPE CHECK
	SURFACE WATER FLOW
SFDO	SILT FENCE DRAINAGE OUTLET

928 926 924 922 920 918 916 914 912

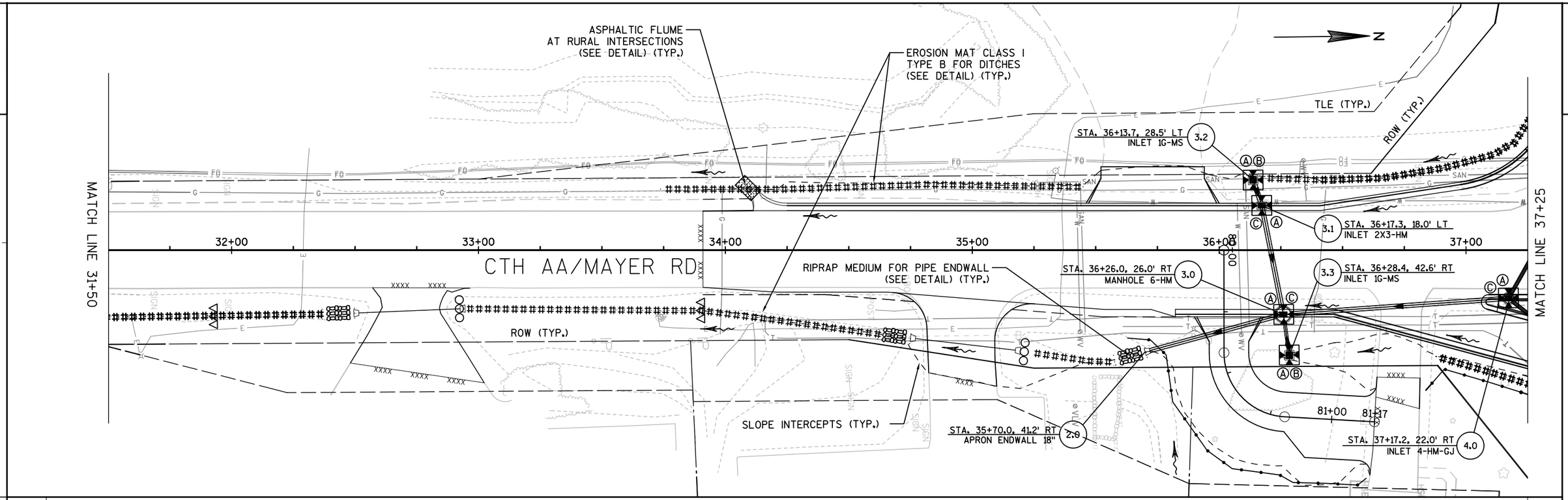
PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	EROSION CONTROL & STORM SEWER	SHEET 40	E

FILE NAME : G:\WDOTCO\10033 (DESIGN WORK ORDERS)\WO 5 & 6 USH 12 & MAYER ROAD\CIVIL 3D\SHEETSPLAN\EROSION CONTROL & STORM SEWER\02250ECLS.DWG PLOT DATE : 12/6/2012 PLOT BY : KL ENGINEERING PLOT NAME : _____ PLOT SCALE : 1" = 40'_XREF



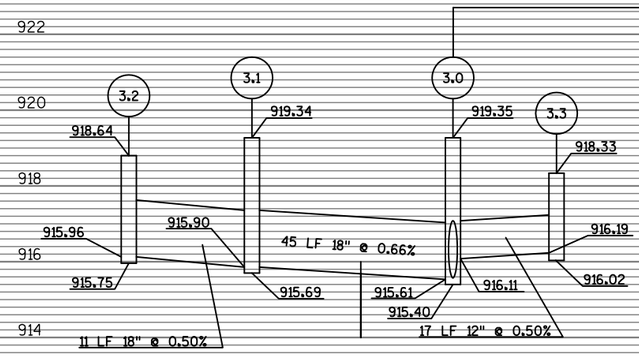
LEGEND

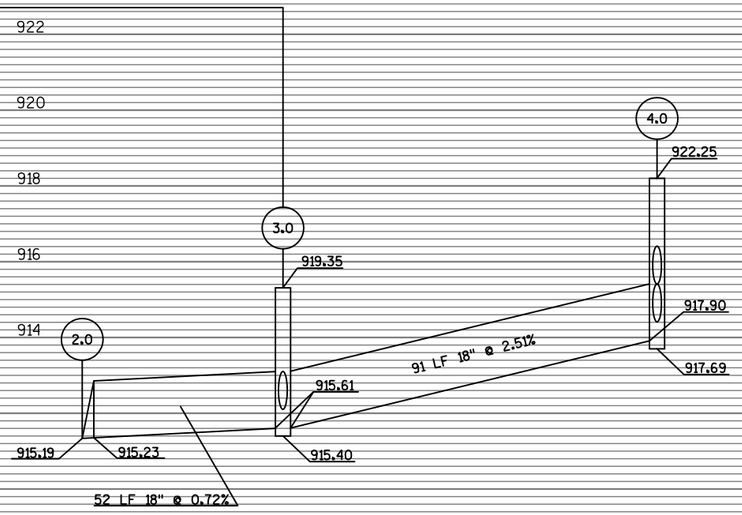
######	EROSION MAT CLASS I TYPE B
	SOD
	SILT FENCE
	EROSION BALE, BARRIER
	RIP RAP MEDIUM
	SLOPE INTERCEPT
ASPH	ASPHALTIC FLUME
A B C	INLET PROTECTION TYPE A, B, AND C
	TEMPORARY DITCH CHECK
	CULVERT PIPE CHECK
	SURFACE WATER FLOW
SFDO	SILT FENCE DRAINAGE OUTLET



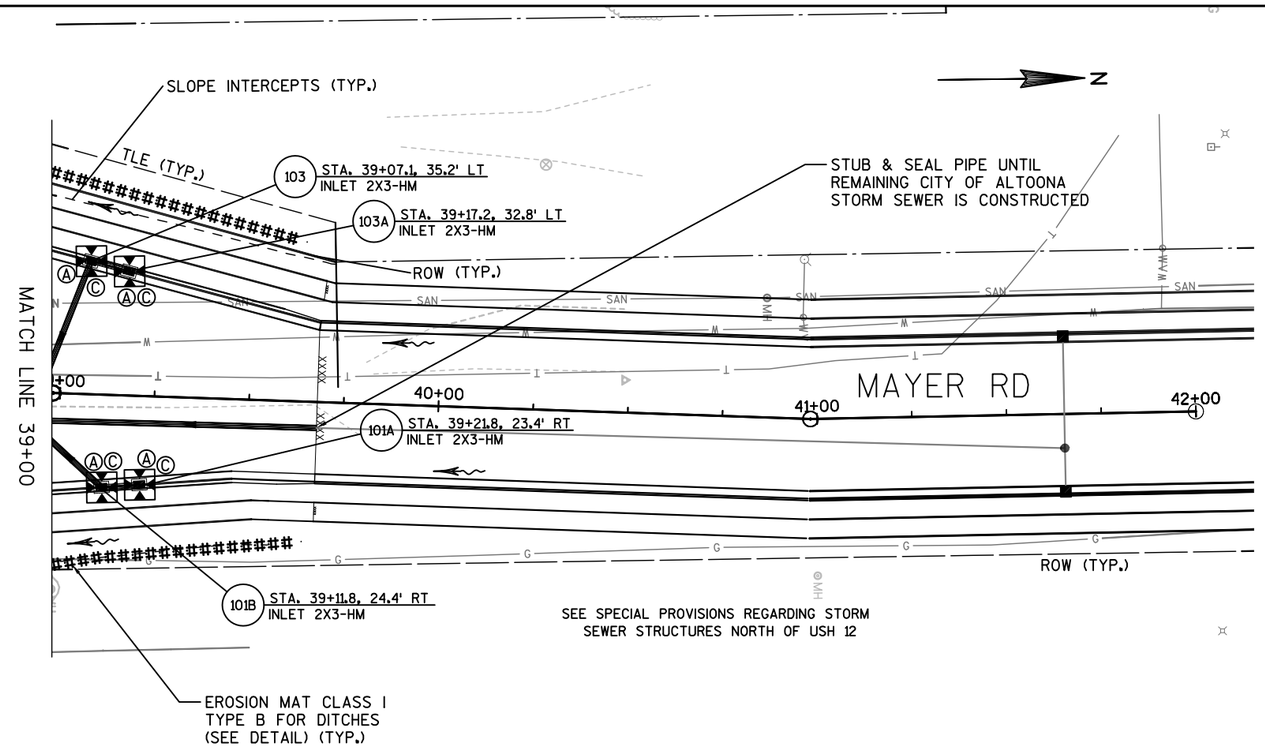
LEGEND

- EROSION MAT CLASS I TYPE B
- SOD
- SILT FENCE
- EROSION BALE, BARRIER
- RIP RAP MEDIUM
- SLOPE INTERCEPT
- ASPH — ASPHALTIC FLUME
- A B C — INLET PROTECTION TYPE A, B, AND C
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW
- SFDO — SILT FENCE DRAINAGE OUTLET



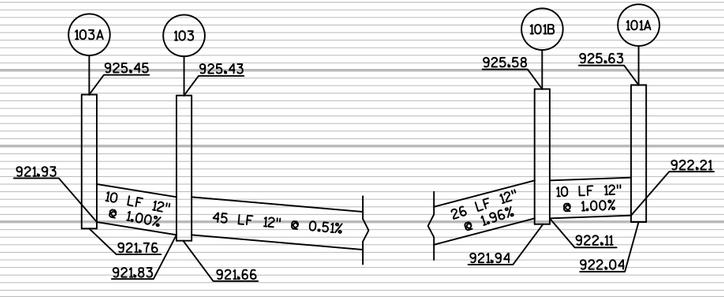


PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	EROSION CONTROL & STORM SEWER	SHEET 42	E



LEGEND

- ###### EROSION MAT CLASS I TYPE B
- SOD
- SILT FENCE
- EROSION BALE, BARRIER
- RIP RAP MEDIUM
- SLOPE INTERCEPT
- ASPH ASPHALTIC FLUME
- A B C INLET PROTECTION TYPE A, B, AND C
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW
- SFDO SILT FENCE DRAINAGE OUTLET



PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	EROSION CONTROL & STORM SEWER	SHEET 43	E

2

2

LEGEND

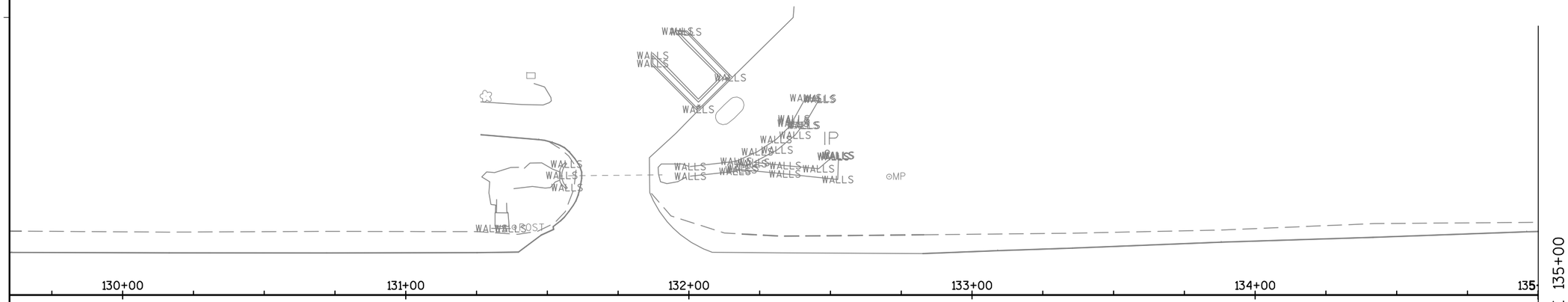
EXISTING SIGN MOUNTED ON POST(S)

EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE

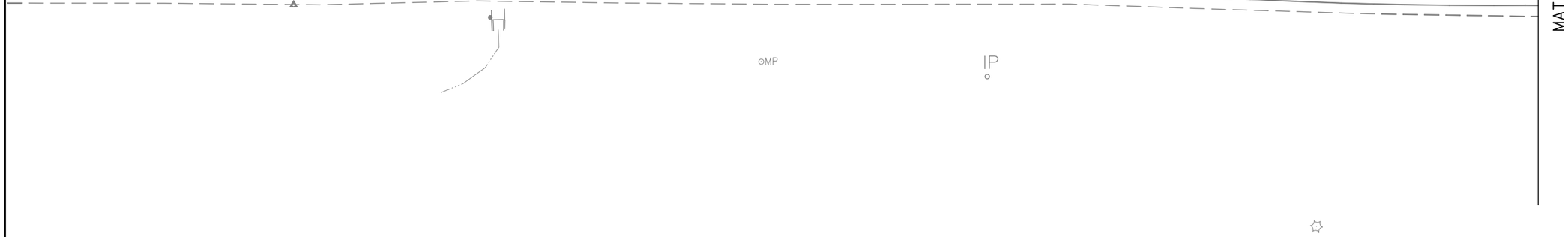
XR-XX DENOTES SIGN TO ME REMOVED

XM-XX DENOTES SIGN TO BE MOVED

N



USH 12



NOTES

EXISTING STREET NAME SIGNS WILL BE REMOVED AND REPLACED BY OTHERS.

PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	SIGNING REMOVALS	SHEET 44	E

FILE NAME : G:\WDOTCO\10033 (DESIGN WORK ORDERS)\WO 5 & 6 USH 12 & MAYER ROAD\CIVIL 3D\SHEETSPLAN\SIGN REMOVAL\023201_PS_REM.DWG PLOT DATE : 12/3/2012 PLOT BY : KL ENGINEERING PLOT NAME : _____ PLOT SCALE : 1:40_XREF

2

2

LEGEND

EXISTING SIGN MOUNTED ON POST(S)

EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE

XR-XX DENOTES SIGN TO ME REMOVED

XM-XX DENOTES SIGN TO BE MOVED

N

INDUSTRIAL DR

51+00

50+00

136+00

137+00

USH 12

138+00

139+00

140+00

141+00

MATCH LINE 135+00

MATCH LINE 141+00

IP

POST

POST

MP

SIGN

WALLS

FLAG

STOP
R1-1
EXISTING SIGN
TO REMAIN

2M-01
Mayer Rd
M1-94

2M-02
J1-1

JCT
M2-1

COUNTY
AA
M1-5A

NOTES

EXISTING STREET NAME SIGNS WILL BE REMOVED AND REPLACED BY OTHERS.

PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	SIGNING REMOVALS	SHEET 45	E

FILE NAME : G:\WDOTCO\10033 (DESIGN WORK ORDERS)\WO 5 & 6 USH 12 & MAYER ROAD\CIVIL 3D\SHEETSPLAN\SIGN REMOVAL\023201_PS_REM.DWG PLOT DATE : 12/3/2012 PLOT BY : KL ENGINEERING PLOT NAME : ---------- PLOT SCALE : 1:40_XREF

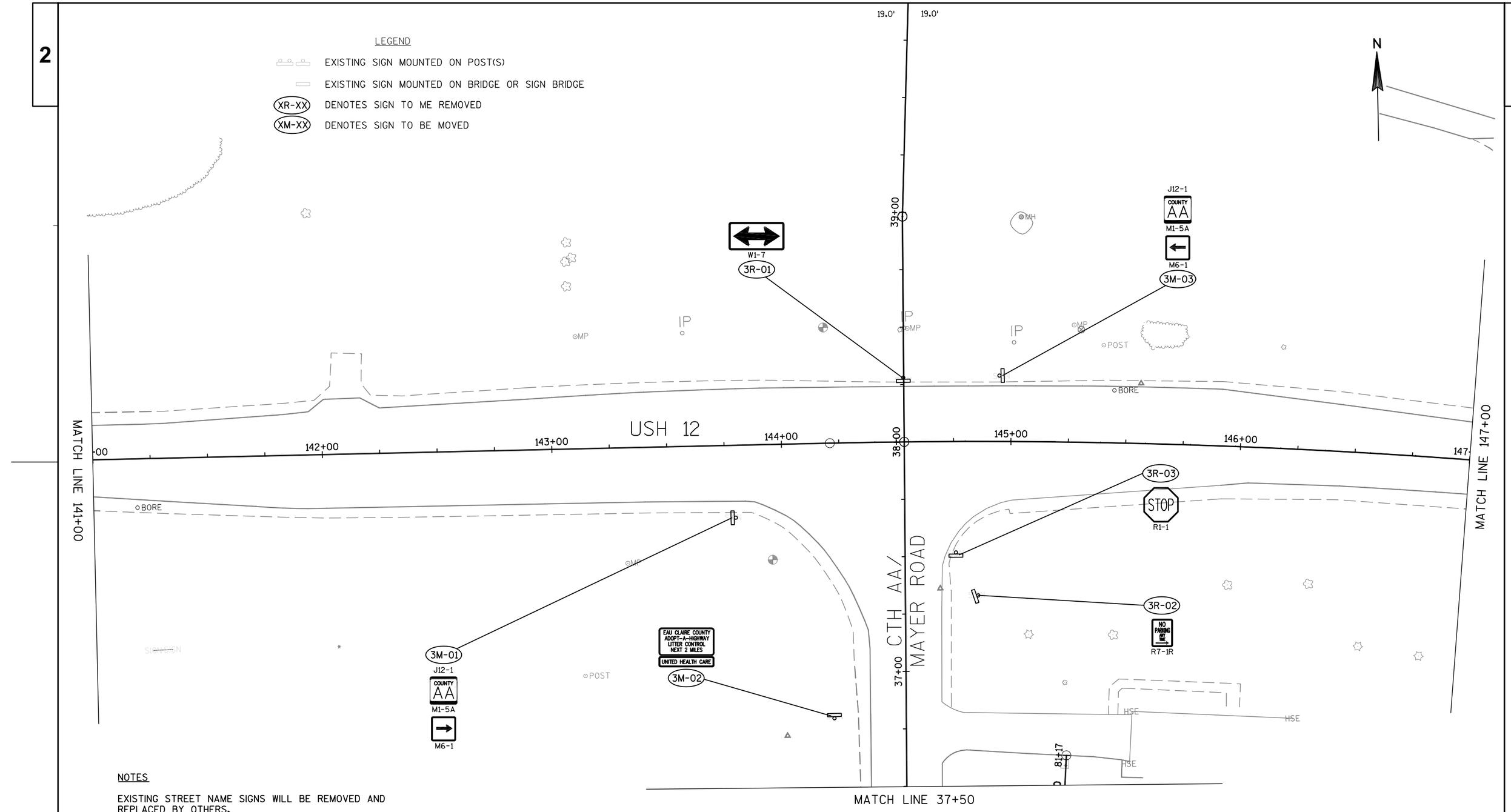
LEGEND

EXISTING SIGN MOUNTED ON POST(S)

EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE

XR-XX DENOTES SIGN TO ME REMOVED

XM-XX DENOTES SIGN TO BE MOVED



NOTES

EXISTING STREET NAME SIGNS WILL BE REMOVED AND REPLACED BY OTHERS.

PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	SIGNING REMOVALS	SHEET 46	E

2

2

LEGEND

EXISTING SIGN MOUNTED ON POST(S)

EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE

XR-XX DENOTES SIGN TO ME REMOVED

XM-XX DENOTES SIGN TO BE MOVED

NOTES

EXISTING STREET NAME SIGNS WILL BE REMOVED AND REPLACED BY OTHERS.

N

I55-56MOD
4M-02

XR1

L1

POST

MP

IP

BORE

POST

MATCH LINE 147+00

148+00

149+00

150+00

151+00

152+00

153+00

USH 12

MATCH LINE 153+00

POST

IP

IP

SIGN

SIGN

SIGN

SIGN

SEPV

4M-01

I55-56MOD

IP

PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	SIGNING REMOVALS	SHEET 47	E

FILE NAME : G:\WDOTCO\10033 (DESIGN WORK ORDERS)\WO 5 & 6 USH 12 & MAYER ROAD\CIVIL 3D\SHEETSPLAN\SIGN REMOVAL\023201_PS_REM.DWG PLOT DATE : 12/3/2012 PLOT BY : KL ENGINEERING PLOT NAME : _____ PLOT SCALE : 1:40_XREF

2

2

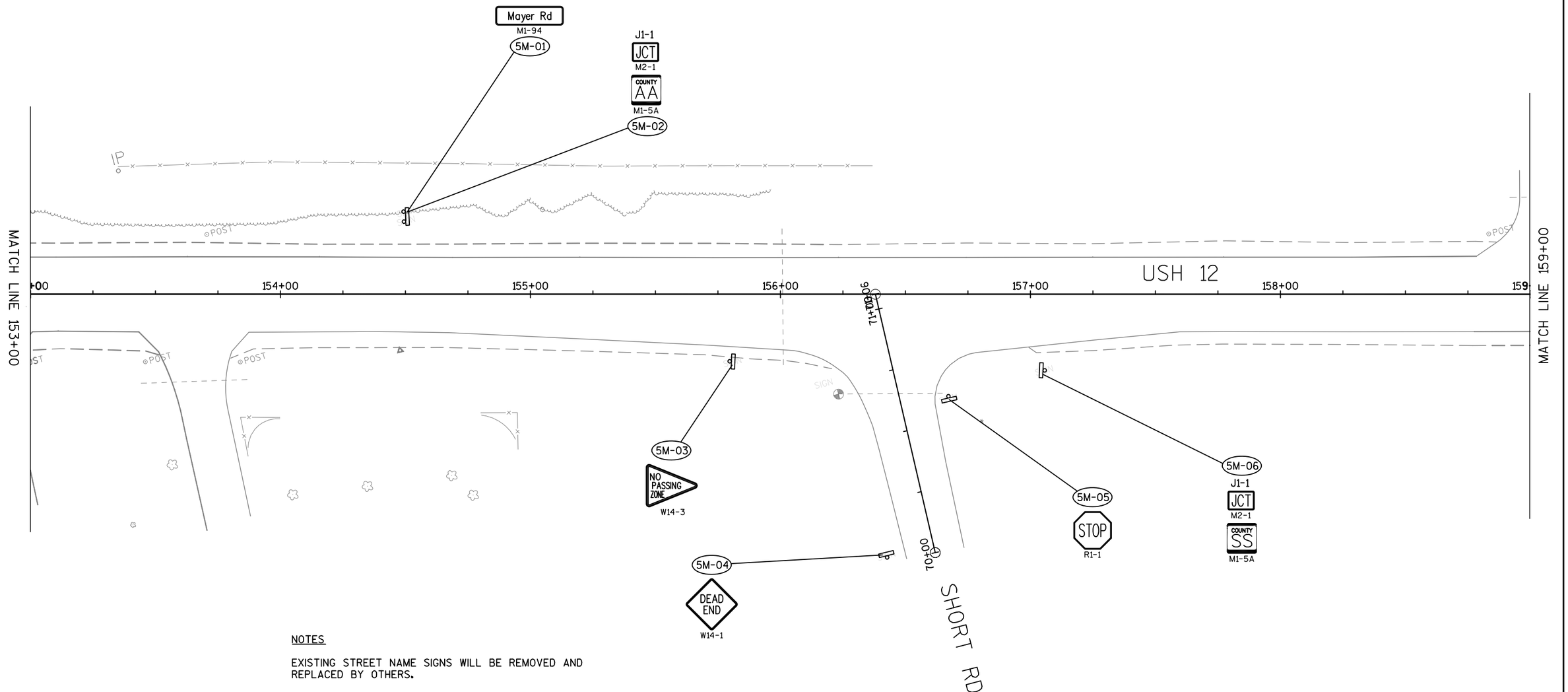
LEGEND

EXISTING SIGN MOUNTED ON POST(S)

EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE

XR-XX DENOTES SIGN TO ME REMOVED

XM-XX DENOTES SIGN TO BE MOVED



NOTES

EXISTING STREET NAME SIGNS WILL BE REMOVED AND REPLACED BY OTHERS.

PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	SIGNING REMOVALS	SHEET 48	E

FILE NAME : G:\WDOTCO\10033 (DESIGN WORK ORDERS)\WO 5 & 6 USH 12 & MAYER ROAD\CIVIL 3D\SHEETSPLAN\SIGN REMOVAL\023201_PS_REM.DWG PLOT DATE : 12/3/2012 PLOT BY : KL ENGINEERING PLOT NAME : _____ PLOT SCALE : 1:40_XREF

2

2

LEGEND

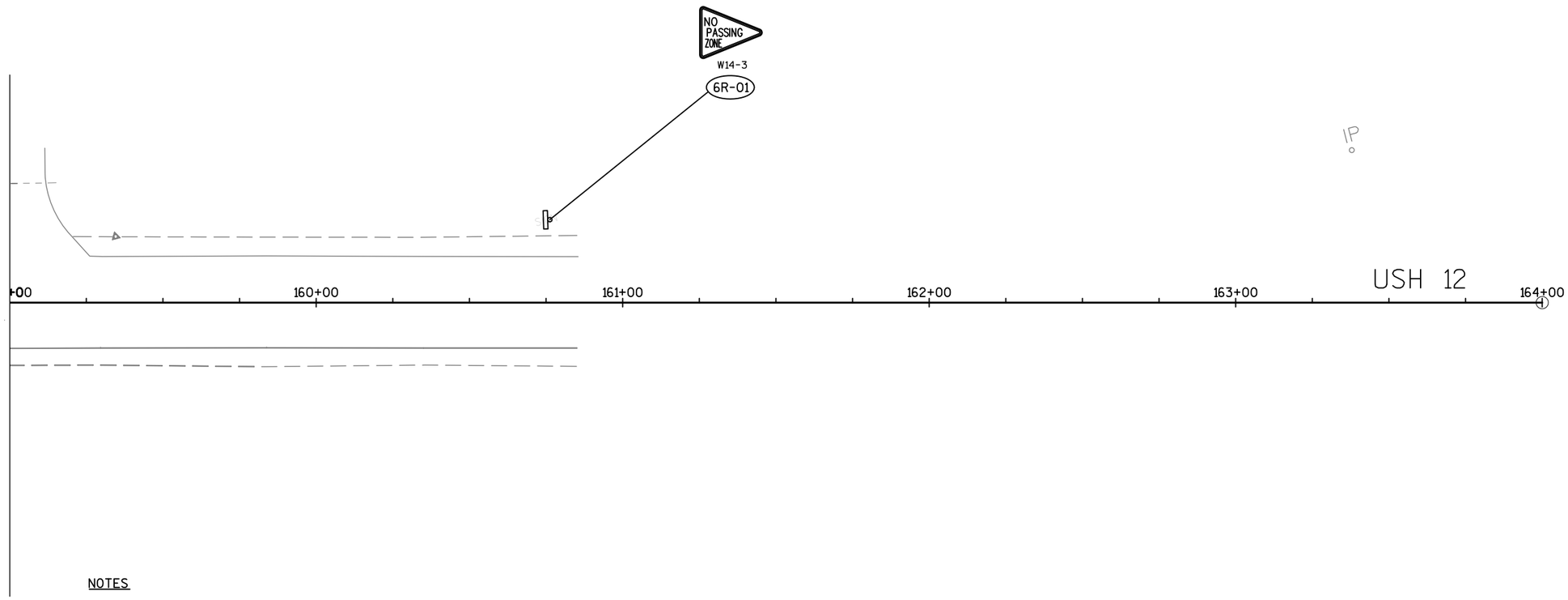
EXISTING SIGN MOUNTED ON POST(S)

EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE

XR-XX DENOTES SIGN TO ME REMOVED

XM-XX DENOTES SIGN TO BE MOVED

N



NOTES

EXISTING STREET NAME SIGNS WILL BE REMOVED AND REPLACED BY OTHERS.

PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	SIGNING REMOVALS	SHEET 49	E

FILE NAME : G:\WDOTCO\10033 (DESIGN WORK ORDERS)\WO 5 & 6 USH 12 & MAYER ROAD\CIVIL 3D\SHEETSPLAN\SIGN REMOVAL\023201_PS_REM.DWG PLOT DATE : 12/3/2012 PLOT BY : KL ENGINEERING PLOT NAME : ---------- PLOT SCALE : 1:40_XREF

2

LEGEND

EXISTING SIGN MOUNTED ON POST(S)

EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE

XR-XX DENOTES SIGN TO ME REMOVED

XM-XX DENOTES SIGN TO BE MOVED

N

NO PARKING ANY TIME R7-1R 7M-02

NO PASSING ZONE W14-3 7M-03

NO PARKING ANY TIME R7-1D 7M-05

COUNTY AA M1-5A 7M-06

SPEED LIMIT 45 R2-1 7R-02

31+00 32+00 33+00 34+00 35+00 36+00

CTH AA/MAYER ROAD

MATCH LINE 37+00

81+00

STOP R1-1 EXISTING SIGN TO REMAIN

PLEASANT VIEW ST

7M-01 NO PARKING ANY TIME R7-1L

7R-01 STOP AHEAD W3-1

7M-04 NO PARKING ANY TIME R7-1D

IP MP POST BORE SIGN

NOTES

EXISTING STREET NAME SIGNS WILL BE REMOVED AND REPLACED BY OTHERS.

PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	SIGNING REMOVALS	SHEET 50	E

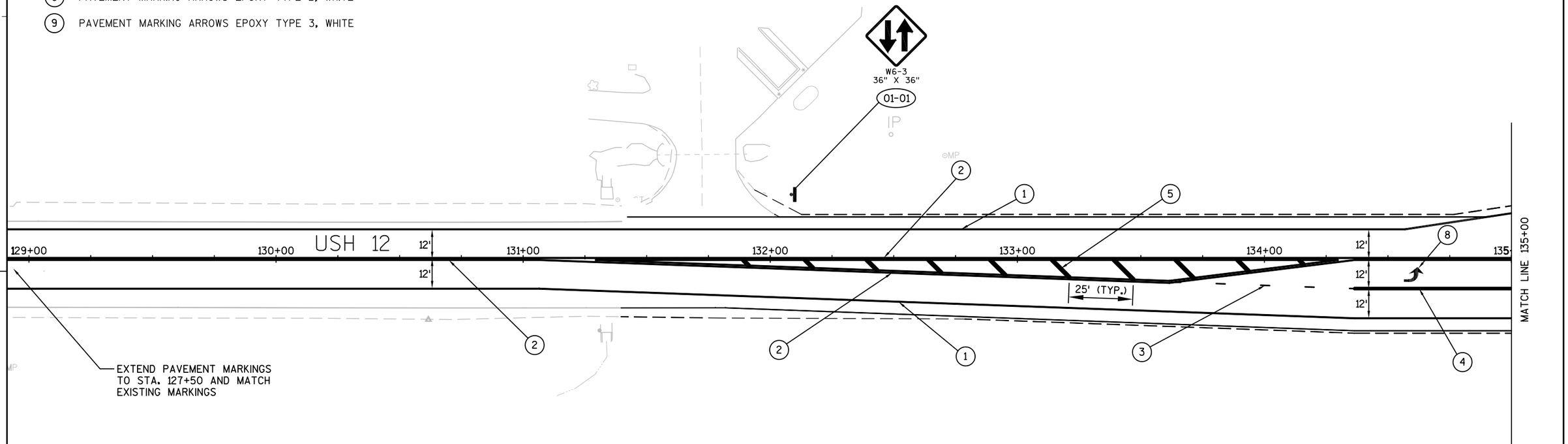
PAVEMENT MARKING LEGEND

1. PAVEMENT MARKING EPOXY 4-INCH, WHITE
2. PAVEMENT MARKING EPOXY 4-INCH, YELLOW, DOUBLE
3. PAVEMENT MARKING EPOXY 4-INCH, DOTTED, WHITE (3' LINE, 9' GAP)
4. PAVEMENT MARKING, EPOXY 8-INCH, WHITE
5. PAVEMENT MARKING DIAGONAL EPOXY 12-INCH, YELLOW (45°)
6. PAVEMENT MARKING WORDS EPOXY, WHITE
7. PAVEMENT MARKING STOP LINE EPOXY 18-INCH, WHITE
8. PAVEMENT MARKING ARROWS EPOXY TYPE 2, WHITE
9. PAVEMENT MARKING ARROWS EPOXY TYPE 3, WHITE

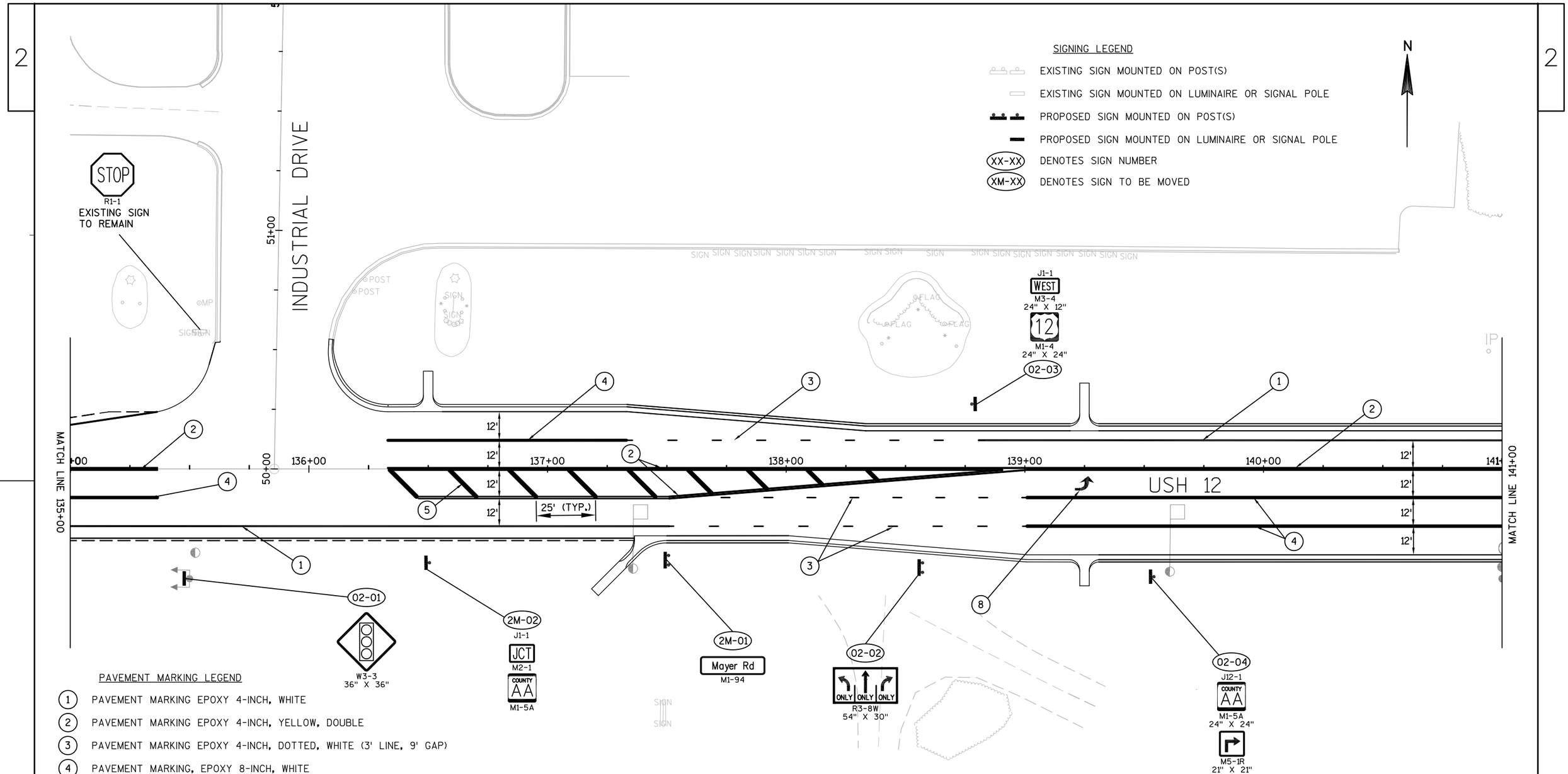
SIGNING LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON LUMINAIRE OR SIGNAL POLE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON LUMINAIRE OR SIGNAL POLE
- (XX-XX) DENOTES SIGN NUMBER
- (XM-XX) DENOTES SIGN TO BE MOVED

N



PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	PERMANENT SIGNING & PAVEMENT MARKING	SHEET 51	E



PAVEMENT MARKING LEGEND

1. PAVEMENT MARKING EPOXY 4-INCH, WHITE
2. PAVEMENT MARKING EPOXY 4-INCH, YELLOW, DOUBLE
3. PAVEMENT MARKING EPOXY 4-INCH, DOTTED, WHITE (3' LINE, 9' GAP)
4. PAVEMENT MARKING, EPOXY 8-INCH, WHITE
5. PAVEMENT MARKING DIAGONAL EPOXY 12-INCH, YELLOW (45°)
6. PAVEMENT MARKING WORDS EPOXY, WHITE
7. PAVEMENT MARKING STOP LINE EPOXY 18-INCH, WHITE
8. PAVEMENT MARKING ARROWS EPOXY TYPE 2, WHITE
9. PAVEMENT MARKING ARROWS EPOXY TYPE 3, WHITE

PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	PERMANENT SIGNING & PAVEMENT MARKING	SHEET 52	E

PAVEMENT MARKING LEGEND

1. PAVEMENT MARKING EPOXY 4-INCH, WHITE
2. PAVEMENT MARKING EPOXY 4-INCH, YELLOW, DOUBLE
3. PAVEMENT MARKING EPOXY 4-INCH, DOTTED, WHITE (3' LINE, 9' GAP)
4. PAVEMENT MARKING, EPOXY 8-INCH, WHITE
5. PAVEMENT MARKING DIAGONAL EPOXY 12-INCH, YELLOW (45°)
6. PAVEMENT MARKING WORDS EPOXY, WHITE
7. PAVEMENT MARKING STOP LINE EPOXY 18-INCH, WHITE
8. PAVEMENT MARKING ARROWS EPOXY TYPE 2, WHITE
9. PAVEMENT MARKING ARROWS EPOXY TYPE 3, WHITE
10. PAVEMENT MARKING ISLAND NOSE EPOXY

SIGNING LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON LUMINAIRE OR SIGNAL POLE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON LUMINAIRE OR SIGNAL POLE
- XX-XX DENOTES SIGN NUMBER
- XM-XX DENOTES SIGN TO BE MOVED

N

MAYER ROAD

40+00

39+00

38+00

USH 12

CTH AA/
MAYER ROAD

MATCH LINE 141+00

MATCH LINE 147+00

MATCH LINE 37+00

142+00

143+00

144+00

145+00

146+00

R3-8
36" X 30"
03-05

W12-1D
24" X 24"
03-04

R2-1
24" X 30"
03-09

R1-2
36" X 31"
03-10

R1-1F
30" X 30"
03-11

W12-1D
24" X 24"
03-12

J12-1
M1-5A
M6-1
3M-03

R1-1
36" X 36"
03-02

R2-1
24" X 30"
03-01

R1-1F
30" X 30"
03-03

R1-1F
30" X 30"
03-14

R1-1
36" X 36"
03-15

R2-1
24" X 30"
03-16

3M-01
J12-1
M1-5A
M6-1

W12-1D
24" X 24"
03-06

R1-1F
30" X 30"
03-07

R1-2
36" X 31"
03-08

W12-1D
24" X 24"
03-13

NOTE:

* DENOTES SIGN WITH 3' MOUNTING HEIGHT

PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	PERMANENT SIGNING & PAVEMENT MARKING	SHEET 53	E

FILE NAME : G:\WDOTCO\10033 (DESIGN WORK ORDERS)\WO 5 & 6 USH 12 & MAYER ROAD\CIVIL 3D\SHEETSPLAN\SIGNING & MARKING\023201_PS.DWG PLOT DATE : 12/6/2012 PLOT BY : KL ENGINEERING PLOT NAME : ---------- PLOT SCALE : 1:40_XREF

SIGNING LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON LUMINAIRE OR SIGNAL POLE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON LUMINAIRE OR SIGNAL POLE
- (XX-XX) DENOTES SIGN NUMBER
- (XM-XX) DENOTES SIGN TO BE MOVED

N

I55-56MOD
4M-02

J12-1
COUNTY AA
M1-5A
24" X 24"
M5-1L
21" X 21"
04-01

ONLY ONLY ONLY
R3-8W
54" X 30"
04-03

Mayer Rd
M1-94
5M-01

MATCH LINE 147+00

148+00

149+00

150+00

151+00

152+00

MATCH LINE 153+00

12'
12'
12'
12'

USH 12

25' (TYP.)

4M-01
I55-56MOD

04-02
J1-1
EAST
M3-2
24" X 12"
12
M1-4
24" X 24"

PAVEMENT MARKING LEGEND

1. PAVEMENT MARKING EPOXY 4-INCH, WHITE
2. PAVEMENT MARKING EPOXY 4-INCH, YELLOW, DOUBLE
3. PAVEMENT MARKING EPOXY 4-INCH, DOTTED, WHITE (3' LINE, 9' GAP)
4. PAVEMENT MARKING, EPOXY 8-INCH, WHITE
5. PAVEMENT MARKING DIAGONAL EPOXY 12-INCH, YELLOW (45°)
6. PAVEMENT MARKING WORDS EPOXY, WHITE
7. PAVEMENT MARKING STOP LINE EPOXY 18-INCH, WHITE
8. PAVEMENT MARKING ARROWS EPOXY TYPE 2, WHITE
9. PAVEMENT MARKING ARROWS EPOXY TYPE 3, WHITE

PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	PERMANENT SIGNING & PAVEMENT MARKING	SHEET 54	E

FILE NAME : G:\WDOTCO\10033 (DESIGN WORK ORDERS)\WO 5 & 6 USH 12 & MAYER ROAD\CIVIL 3D\SHEETSPLAN\SIGNING & MARKING\023201_PS.DWG PLOT DATE : 12/6/2012 PLOT BY : KL ENGINEERING PLOT NAME : ---------- PLOT SCALE : 1:40_XREF

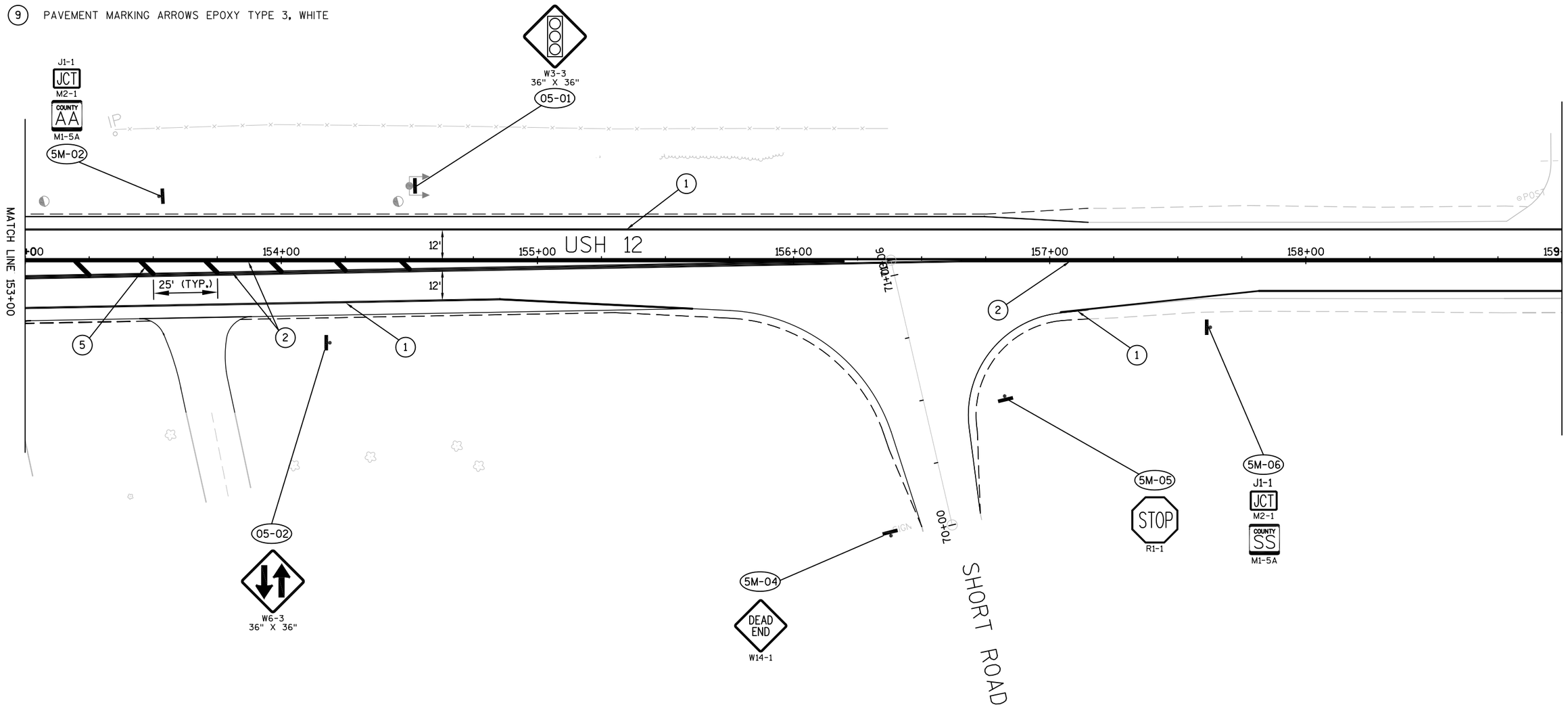
PAVEMENT MARKING LEGEND

1. PAVEMENT MARKING EPOXY 4-INCH, WHITE
2. PAVEMENT MARKING EPOXY 4-INCH, YELLOW, DOUBLE
3. PAVEMENT MARKING EPOXY 4-INCH, DOTTED, WHITE (3' LINE, 9' GAP)
4. PAVEMENT MARKING, EPOXY 8-INCH, WHITE
5. PAVEMENT MARKING DIAGONAL EPOXY 12-INCH, YELLOW (45°)
6. PAVEMENT MARKING WORDS EPOXY, WHITE
7. PAVEMENT MARKING STOP LINE EPOXY 18-INCH, WHITE
8. PAVEMENT MARKING ARROWS EPOXY TYPE 2, WHITE
9. PAVEMENT MARKING ARROWS EPOXY TYPE 3, WHITE

SIGNING LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON LUMINAIRE OR SIGNAL POLE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON LUMINAIRE OR SIGNAL POLE
- XX-XX DENOTES SIGN NUMBER
- XM-XX DENOTES SIGN TO BE MOVED

N



PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	PERMANENT SIGNING & PAVEMENT MARKING	SHEET 55	E

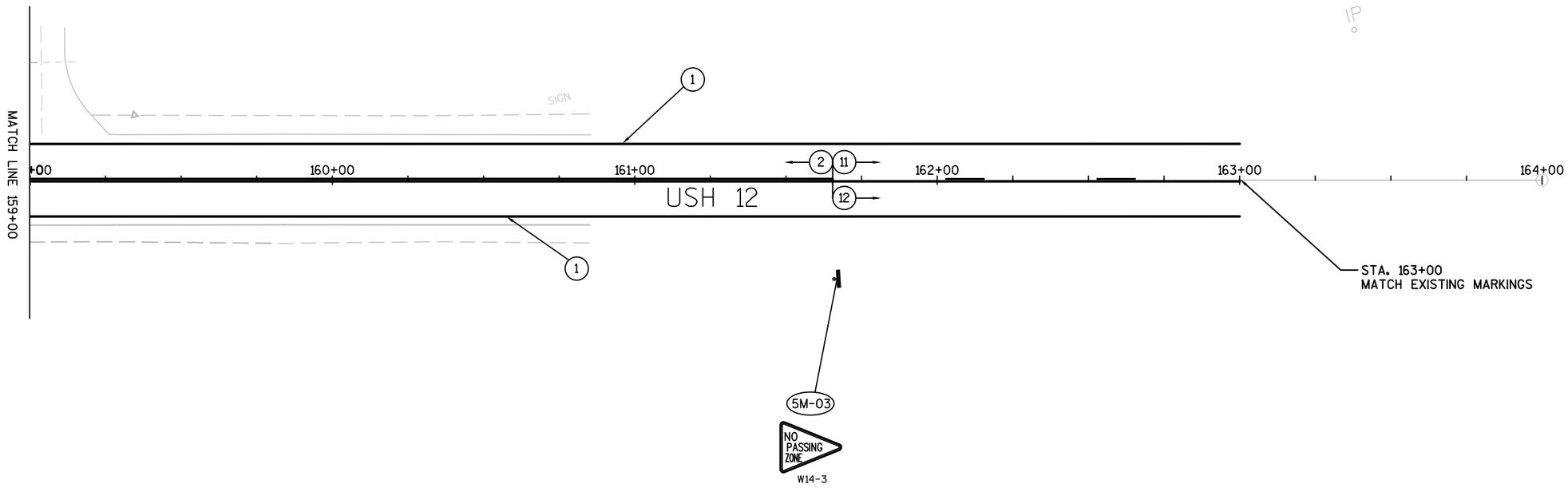
PAVEMENT MARKING LEGEND

1. PAVEMENT MARKING EPOXY 4-INCH, WHITE
2. PAVEMENT MARKING EPOXY 4-INCH, YELLOW, DOUBLE
3. PAVEMENT MARKING EPOXY 4-INCH, DOTTED, WHITE (3' LINE, 9' GAP)
4. PAVEMENT MARKING, EPOXY 8-INCH, WHITE
5. PAVEMENT MARKING DIAGONAL EPOXY 12-INCH, YELLOW (45°)
6. PAVEMENT MARKING WORDS EPOXY, WHITE
7. PAVEMENT MARKING STOP LINE EPOXY 18-INCH, WHITE
8. PAVEMENT MARKING ARROWS EPOXY TYPE 2, WHITE
9. PAVEMENT MARKING ARROWS EPOXY TYPE 3, WHITE
11. PAVEMENT MARKING EPOXY 4-INCH, DASHED, YELLOW (12.5' LINE, 37.5' GAP)
12. PAVEMENT MARKING EPOXY 4-INCH, YELLOW

SIGNING LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON LUMINAIRE OR SIGNAL POLE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON LUMINAIRE OR SIGNAL POLE
- XX-XX DENOTES SIGN NUMBER
- XM-XX DENOTES SIGN TO BE MOVED

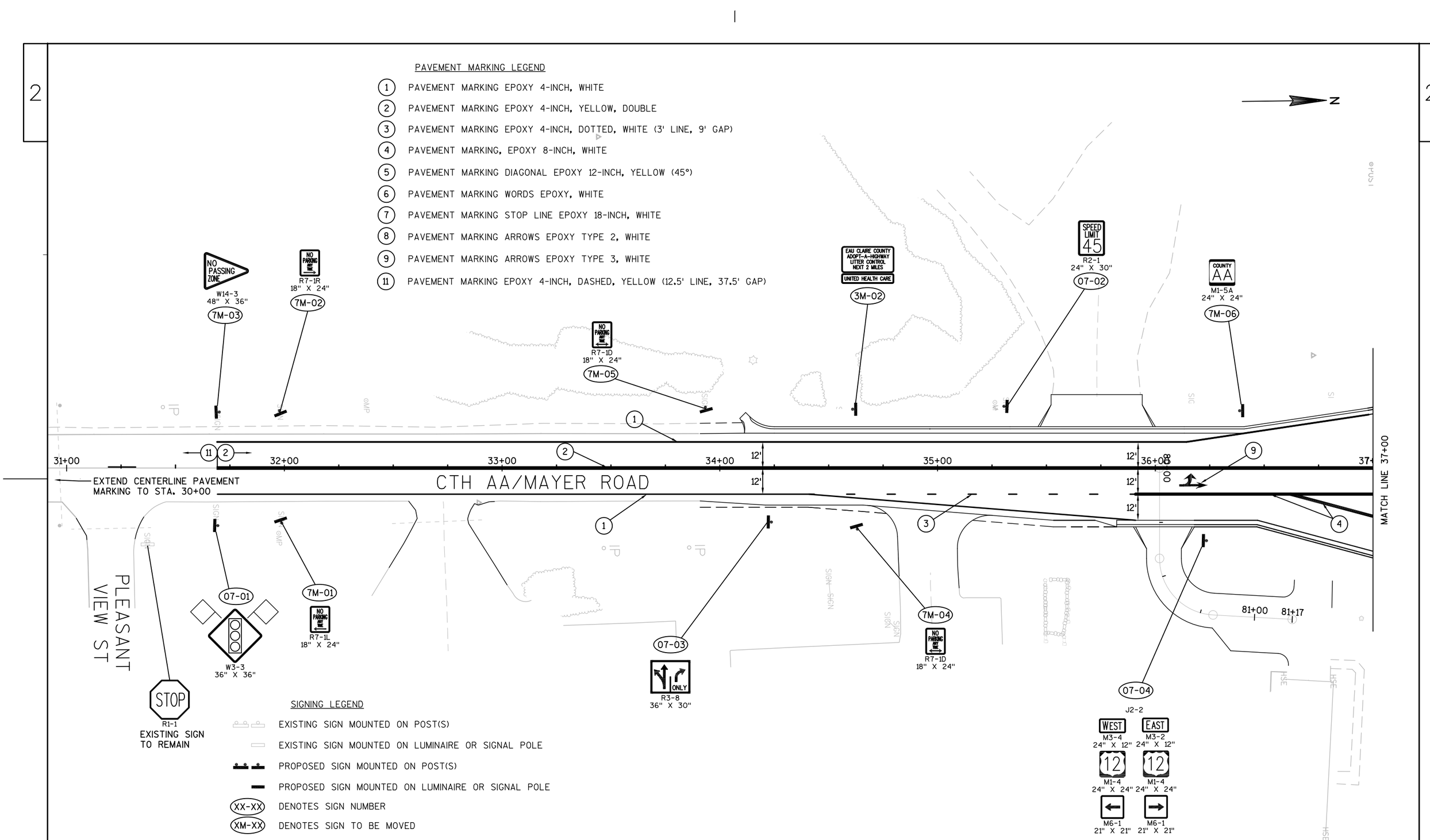
N



PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	PERMANENT SIGNING & PAVEMENT MARKING	SHEET 56	E

PAVEMENT MARKING LEGEND

1. PAVEMENT MARKING EPOXY 4-INCH, WHITE
2. PAVEMENT MARKING EPOXY 4-INCH, YELLOW, DOUBLE
3. PAVEMENT MARKING EPOXY 4-INCH, DOTTED, WHITE (3' LINE, 9' GAP)
4. PAVEMENT MARKING, EPOXY 8-INCH, WHITE
5. PAVEMENT MARKING DIAGONAL EPOXY 12-INCH, YELLOW (45°)
6. PAVEMENT MARKING WORDS EPOXY, WHITE
7. PAVEMENT MARKING STOP LINE EPOXY 18-INCH, WHITE
8. PAVEMENT MARKING ARROWS EPOXY TYPE 2, WHITE
9. PAVEMENT MARKING ARROWS EPOXY TYPE 3, WHITE
11. PAVEMENT MARKING EPOXY 4-INCH, DASHED, YELLOW (12.5' LINE, 37.5' GAP)



SIGNING LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON LUMINAIRE OR SIGNAL POLE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON LUMINAIRE OR SIGNAL POLE
- (XX-XX) DENOTES SIGN NUMBER
- (XM-XX) DENOTES SIGN TO BE MOVED

PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	PERMANENT SIGNING & PAVEMENT MARKING	SHEET 57	E

CONSTRUCTION NOTES:

1)LOCATION IS TO FRONT CENTER OF DETECTOR LOOP

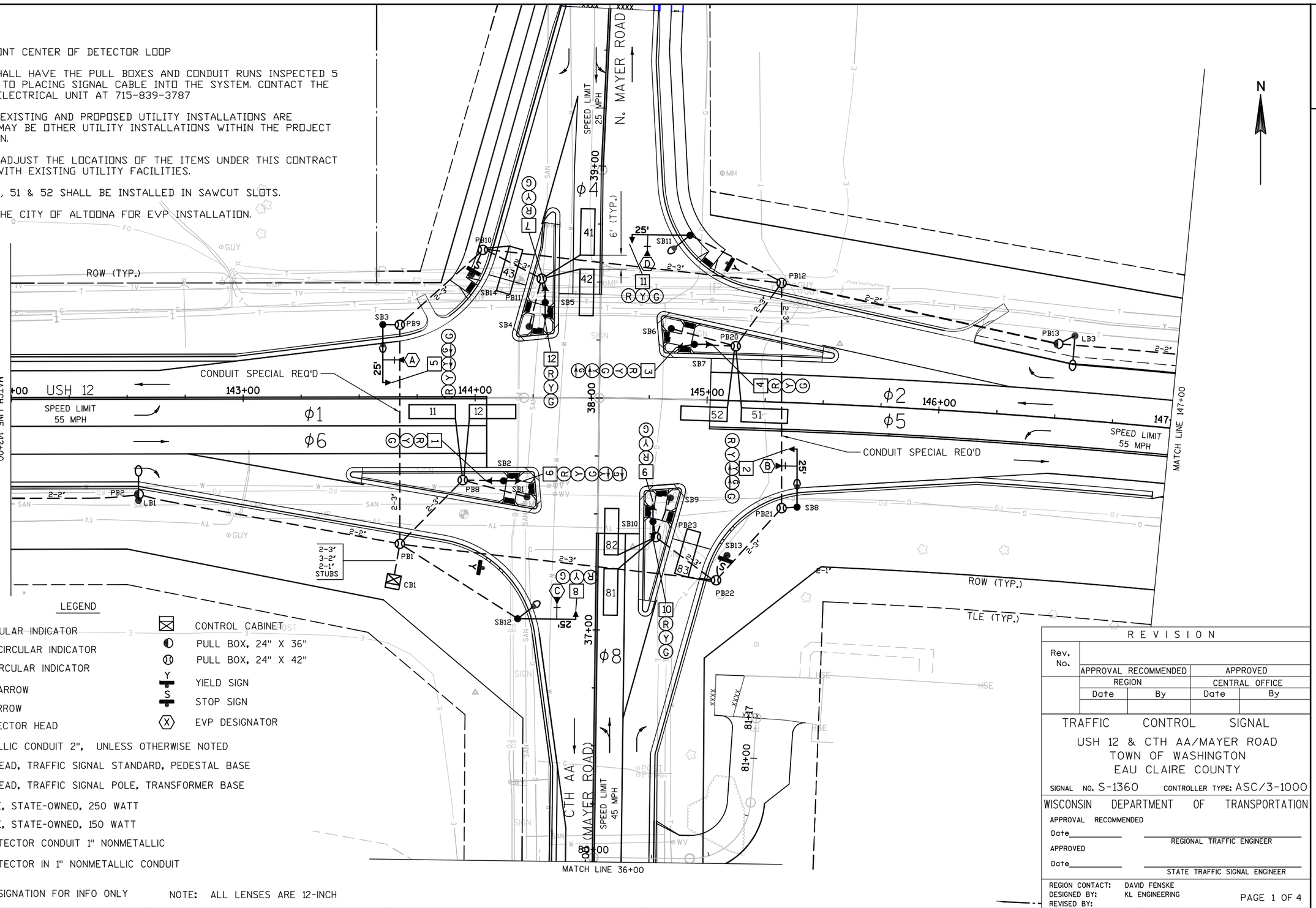
2)THE CONTRACTOR SHALL HAVE THE PULL BOXES AND CONDUIT RUNS INSPECTED 5 WORKING DAYS PRIOR TO PLACING SIGNAL CABLE INTO THE SYSTEM. CONTACT THE WISDOT EAU CLAIRE ELECTRICAL UNIT AT 715-839-3787

3)THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.

4)THE ENGINEER MAY ADJUST THE LOCATIONS OF THE ITEMS UNDER THIS CONTRACT TO AVOID CONFLICT WITH EXISTING UTILITY FACILITIES.

5)LOOPS 11, 12, 21-23, 51 & 52 SHALL BE INSTALLED IN SAWCUT SLOTS.

6)COORDINATE WITH THE CITY OF ALTOONA FOR EVP INSTALLATION.



LEGEND

- RED CIRCULAR INDICATOR
- YELLOW CIRCULAR INDICATOR
- GREEN CIRCULAR INDICATOR
- YELLOW ARROW
- GREEN ARROW
- EVP DETECTOR HEAD
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) SIGNAL HEAD, TRAFFIC SIGNAL POLE, TRANSFORMER BASE
- LUMINAIRE, STATE-OWNED, 250 WATT
- LUMINAIRE, STATE-OWNED, 150 WATT
- LOOP DETECTOR CONDUIT 1" NONMETALLIC
- LOOP DETECTOR IN 1" NONMETALLIC CONDUIT
- LANE DESIGNATION FOR INFO ONLY

- CONTROL CABINET
- PULL BOX, 24" X 36"
- PULL BOX, 24" X 42"
- YIELD SIGN
- STOP SIGN
- EVP DESIGNATOR

NOTE: ALL LENSES ARE 12-INCH

REVISION				
Rev. No.				
	APPROVAL RECOMMENDED		APPROVED	
	REGION		CENTRAL OFFICE	
	Date	By	Date	By

TRAFFIC CONTROL SIGNAL

USH 12 & CTH AA/MAYER ROAD
TOWN OF WASHINGTON
EAU CLAIRE COUNTY

SIGNAL NO. S-1360 CONTROLLER TYPE: ASC/3-1000

WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVAL RECOMMENDED

Date_____ REGIONAL TRAFFIC ENGINEER

APPROVED

Date_____ STATE TRAFFIC SIGNAL ENGINEER

REGION CONTACT: DAVID FENSKE
DESIGNED BY: KL ENGINEERING
REVISED BY:

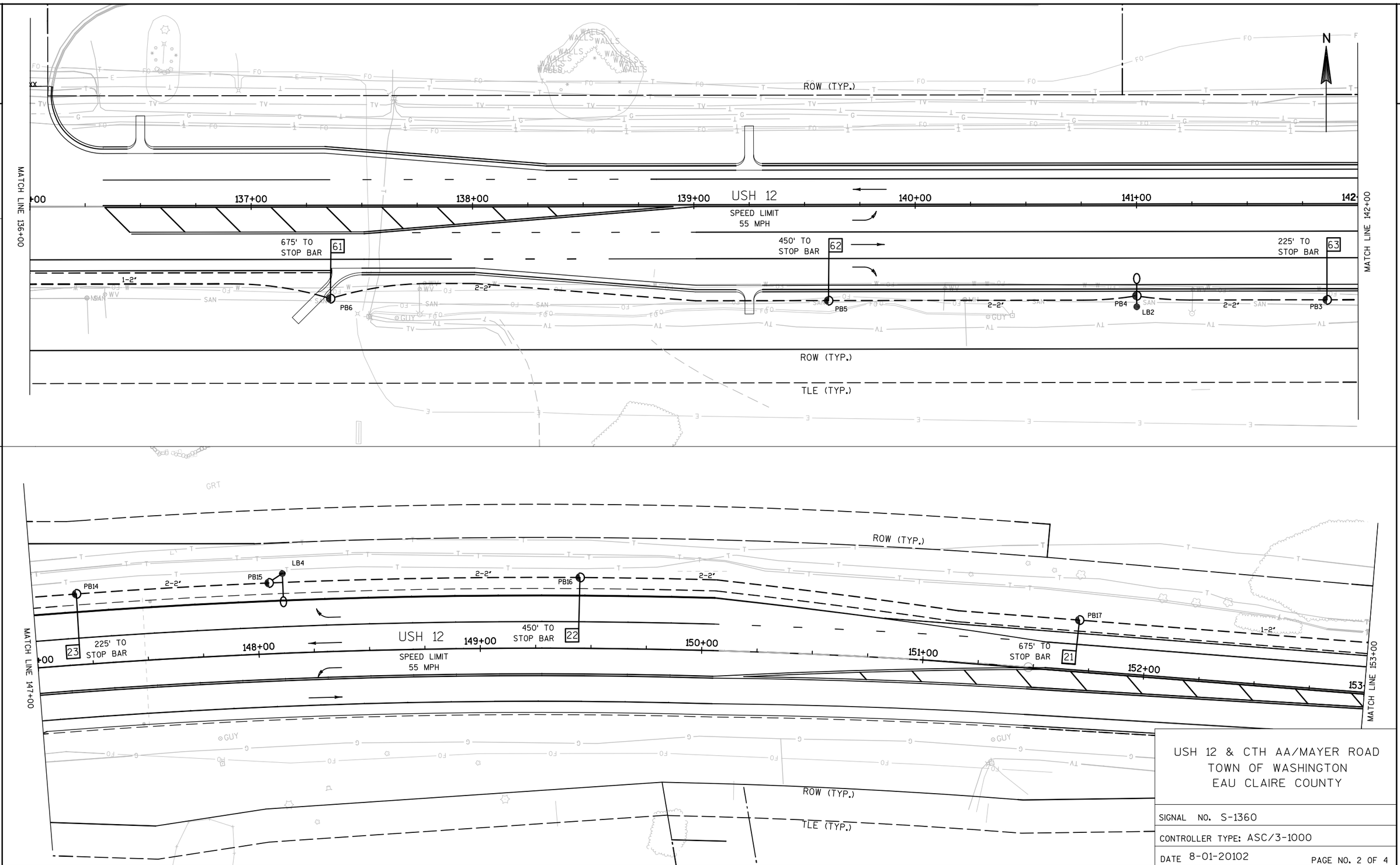
PAGE 1 OF 4

PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	TRAFFIC SIGNAL PLAN	SHEET 58	E

FILE NAME : G:\WDOTCO\10033 (DESIGN WORK ORDERS)\WO 5 & 6 USH 12 & MAYER ROAD\CIVIL 3D\SHEETSPLAN\TRAFFIC SIGNAL\024001_SP.DWG PLOT DATE : 12/6/2012 PLOT BY : KL ENGINEERING PLOT NAME : ----------

WISDOT/CADDS SHEET 42

2



USH 12 & CTH AA/MAYER ROAD
TOWN OF WASHINGTON
EAU CLAIRE COUNTY

SIGNAL NO. S-1360

CONTROLLER TYPE: ASC/3-1000

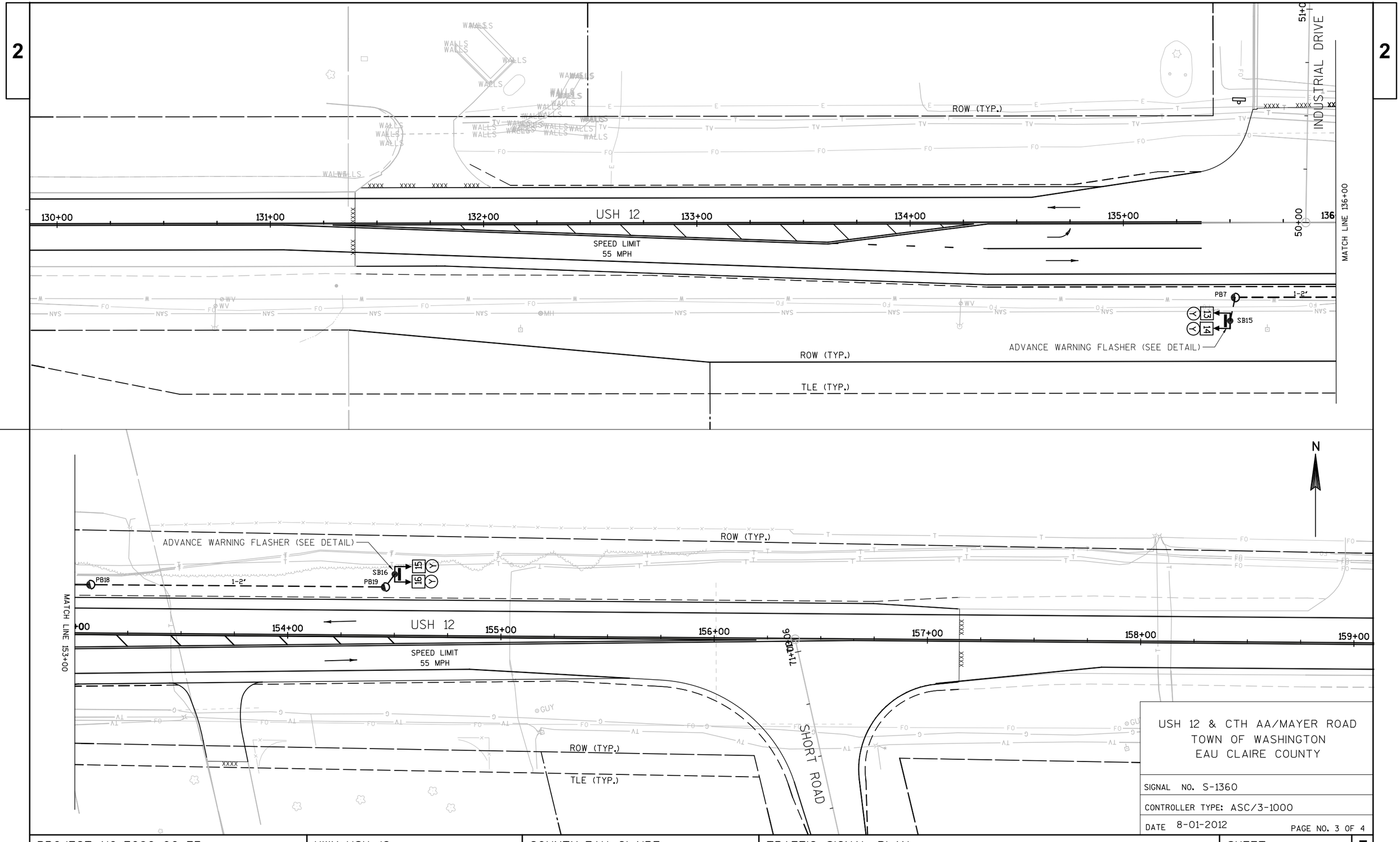
DATE 8-01-20102

PAGE NO. 2 OF 4

PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	TRAFFIC SIGNAL PLAN	SHEET 59	E

FILE NAME : G:\WDOTCO\10033 (DESIGN WORK ORDERS)\WO 5 & 6 USH 12 & MAYER ROAD\CIVIL 3D\SHEETSPLAN\TRAFFIC SIGNAL\024001_SP.DWG PLOT DATE : 12/6/2012 PLOT BY : KL ENGINEERING PLOT NAME : ----------

WISDOT/CADDS SHEET 42



USH 12 & CTH AA/MAYER ROAD
TOWN OF WASHINGTON
EAU CLAIRE COUNTY

SIGNAL NO. S-1360

CONTROLLER TYPE: ASC/3-1000

DATE 8-01-2012

PAGE NO. 3 OF 4

PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	TRAFFIC SIGNAL PLAN	SHEET 60	E

FILE NAME : G:\WDOTCO\10033 (DESIGN WORK ORDERS)\WO 5 & 6 USH 12 & MAYER ROAD\CIVIL 3D\SHEETSPLAN\TRAFFIC SIGNAL\024001_SP.DWG PLOT DATE : 12/6/2012 PLOT BY : KL ENGINEERING PLOT NAME : ----------

SEQUENCE OF OPERATION

		HEAD NUMBERS	Ø1 R/W	Ø1 CLEAR TO **						Ø2 R/W	Ø2 CLEAR TO **						NOT USED Ø3 R/W	Ø3 CLEAR TO **						Ø4 R/W	Ø4 CLEAR TO **						FLASH
	Ø1	2, 3	G ←	Y ←	-					-	-	-												-	-	-					-
	Ø2	4, 5, 6	R	R	R					G	Y	R												R	R	R					R
	Ø4	7, 8, 9	R	R	R					R	R	R												G	Y	R					R
RING 1	Ø5	5, 6	-	-	-					-	-	-												-	-	-					-
	Ø6	1, 2, 3	R	R	R					R	R	R												R	R	R					R
	Ø8	10, 11, 12	R	R	R					R	R	R												R	R	R					R

		HEAD NUMBERS	Ø5 R/W	Ø5 CLEAR TO **						Ø6 R/W	Ø6 CLEAR TO **						NOT USED Ø7 R/W	Ø7 CLEAR TO **						Ø8 R/W	Ø8 CLEAR TO **					
	Ø1	2, 3	-	-	-					-	-	-												-	-	-				
	Ø2	4, 5, 6	R	R	R					R	R	R												R	R	R				
	Ø4	7, 8, 9	R	R	R					R	R	R												R	R	R				
RING 2	Ø5	5, 6	G ←	Y ←	-					-	-	-												-	-	-				
	Ø6	1, 2, 3	R	R	R					G	Y	R												R	R	R				
	Ø8	10, 11, 12	R	R	R					R	R	R												G	Y	R				

N

BARRIER

** CLEARANCE TO A PHASE IN CONFLICT WITH THIS PHASE ON (SEE CHART 1)

CHART 1

PHASE ON	NONCONFLICTING PHASE ALLOWED TO TIME CONCURRENTLY	PHASES IN CONFLICT WITH PHASE ON
1	5 OR 6	2, 4, 8
2	5 OR 6	1, 4, 8
4	8	1, 2, 5, 6
5	1 OR 2	4, 6, 8
6	1 OR 2	4, 5, 8
8	4	1, 2, 5, 6

DETECTOR LOGIC

DETECTOR NUMBER	AMPLIFIER CHANNEL NUMBER	DETECTOR OPERATION: CALLS AND EXTENDS	DETECTOR OPERATION: CALLS ONLY	DETECTOR OPERATION: EXTENDS ONLY	PHASE CALLED	PHASE EXTENDED	DETECTOR DISCONNECT PHASE	CALLING DELAY	EXTENSION STRETCH	LOOP SIZE	NUMBER OF TURNS
11	1	X			1	1				6'X20'	3
12	2	X			1	1				6'X20'	3
21	3	X			2	2			X	6'X6'	6
22	4	X			2	2				6'X6'	6
23	5	X			2	2				6'X6'	6
41	6	X			4	4				6'X20'	3
42	7	X			4	4				6'X20'	3
*43	8	X			4	4				6'X20'	3
51	9	X			5	5				6'X20'	3
52	10	X			5	5				6'X20'	3
61	11	X			6	6			X	6'X6'	6
62	12	X			6	6				6'X6'	6
63	13	X			6	6				6'X6'	4
81	14	X			8	8				6'X20'	3
82	15	X			8	8				6'X20'	3
*83	16	X			8	8				6'X20'	3

* =WIRED IN CABINET FOR FUTURE USE

TYPE OF INTERCONNECT COMMUNICATION	
NONE	-
TBC	-
CLOSED LOOP TWISTED PAIR*	-
CLOSED LOOP FIBER OPTIC*	-
INTERSECTION ONLY (DIAL-UP)	X
FIBER OPTIC	-
RADIO	-
*LOCATION OF MASTER CONTROLLER NO:	S- ____
SIGNAL SYSTEM #:	SS- -- - --

TYPE OF PRE-EMPT	
NONE	_
RAILROAD	_
EMERGENCY VEHICLE	X
3M	_
TOMAR	_
HARDWIRE	_
OTHER	_
LIFT BRIDGE	_
QUEUE DETECTOR	_

TYPE OF LIGHTING	
BY OTHER AGENCY	
IN TRAFFIC SIGNAL CABINET	X
IN SEPARATE DOT LIGHTING CABINET	

CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY W / Ø	PHASE RECALL	PHASE ACTIVE
1				X
2	X	6	MIN.	X
4		8		X
5				X
6	X	2	MIN.	X
8		4		X

OVERLAPS

O.L. "A" =
O.L. "B" =
O.L. "C" =
O.L. "D" =

EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE DETECTOR	A	B	C	D
MOVEMENT	←	→	↓	↑
PHASE	2	6	4	8

NOTES:
AFTER PREEMPTION SEQUENCE 2 OR 6 CONTROLLER SHALL RETURN TO PHASES 2+6.

AFTER PREEMPTION SEQUENCE 4 OR 8 CONTROLLER SHALL RETURN TO PHASES 4+8.

GENERAL NOTES:

1. ANY ACTUATED PHASE FOR WHICH THERE IS NO CALL SHALL BE SKIPPED.
2. WHEN ONE PHASE IS ON ALONE, ANY NONCONFLICTING PHASE MAY START TIMING CONCURRENTLY WITHOUT A CLEARANCE INTERVAL. (SEE CHART 1 AT LEFT.)
3. IF ANY OPPOSING THRU PHASES ARE TIMING CONCURRENTLY, THEY SHALL TERMINATE TOGETHER DUE TO PERMISSIVE LEFT TURN CONFLICT.
4. NO RED SHOWN ON THE CHART FOR PHASES 1 AND 5 SINCE COMPOSITE HEADS ARE USED.
5. USE THE SPARE CABINET BREAKER TO POWER THE 2-CIRCUIT FLASHERS ON THE EB AND WB SIGNAL AHEAD SIGNS.

SEQUENCE OF OPERATIONS
USH 12 & CTH AA/MAYER ROAD
TOWN OF WASHINGTON
EAU CLAIRE COUNTY

SIGNAL NO. S-1360

CONTROLLER TYPE: ASC/3-1000

DATE 8-01-2012

FILE NAME : G:\WDOTCO\10033 (DESIGN WORK ORDERS)\WO 5 & 6 USH 12 & MAYER ROAD\CIVIL 3D\SHEETSPLAN\TRAFFIC SIGNAL\024001_SP.DWG PLOT DATE : 12/6/2012 PLOT BY : KL ENGINEERING PLOT NAME : ----------
WISDOT/CADDS SHEET 42

SIGNAL CABLE, IMSA-20-1, UNGROUNDED CONDUCTORS ROUTING SCHEDULE

PROJECT ID:	7080-00-73
INTERSECTION:	USH 12 & CTH AA/MAYER ROAD

FROM	TO	NO. OF CONDUCTORS	SIGNAL HEAD NO.	SIGNAL INDICATION WIRE COLOR								PED BUTTON
				RED	YELLOW	GREEN	(1) <RED>	(1) <YELLOW>	(1) <GREEN>	D/WALK	WALK	
CB1	SB1	5	FUTURE									
CB1	SB2	12	1	RED/BLACK	ORANGE/BLACK	GREEN/BLACK						
			6	RED	ORANGE	GREEN		BLACK	BLUE			
CB1	SB3	7	5	RED	ORANGE	GREEN		BLACK	BLUE			
CB1	SB4	5	FUTURE									
CB1	SB5	12	12	RED	ORANGE	GREEN						
			7	RED/BLACK	ORANGE/BLACK	GREEN/BLACK						
CB1	SB6	5	FUTURE									
CB1	SB7	12	3	RED/BLACK	ORANGE/BLACK	GREEN/BLACK		BLACK	BLUE			
			4	RED	ORANGE	GREEN						
CB1	SB8	7	2	RED	ORANGE	GREEN		BLACK	BLUE			
CB1	SB9	5	FUTURE									
CB1	SB10	12	10	RED	ORANGE	GREEN						
			9	RED/BLACK	ORANGE/BLACK	GREEN/BLACK						
CB1	SB11	7	11	RED	ORANGE	GREEN						
CB1	SB12	7	8	RED	ORANGE	GREEN						
CB1	SB13	5	FUTURE									
CB1	SB14	5	FUTURE									
CB1	SB15	4	13		RED							
			14		BLACK							
CB1	SB16	4	15		RED							
			16		BLACK							

(1) SEE SIGNAL PLAN FOR ARROW ORIENTATION.

#10 XLP GREEN EQUIPMENT GROUNDING (BONDING) CONDUCTOR	
FROM	TO
CB1	PB1
PB1	PB8
SB3	PB9
PB10	PB11
SB5	PB11
PB20	PB12
SB11	PB12
SB8	PB21
PB22	PB23
SB10	PB23
PB2	LB1
PB3	PB2
PB4	LB2
PB5	PB4
PB6	PB7
PB7	SB15
PB13	LB3
PB14	PB13
PB15	LB4
PB16	PB15
PB17	PB18
PB18	PB19
PB19	SB16

#10 XLP GREEN EQUIPMENT GROUNDING CONDUCTOR	
FROM	TO
CB1	SB1
SB1	SB2
SB2	SB3
SB3	SB14
SB14	SB4
SB4	SB5
SB5	SB11
SB11	SB6
SB6	SB7
SB7	SB8
SB8	SB13
SB13	SB9
SB9	SB10
SB10	SB12
SB12	CB1
SB16	SB11
SB15	SB12

CABLE TYPE UF 2-12 AWG GROUNDED LIGHTING CABLE	
FROM	TO
CB1	SB12
CB1	SB3
CB1	SB11
CB1	SB8
CB1	LB1
LB1	LB2
CB1	LB3
LB3	LB4

EVP CABLE (STATE-SUPPLIED)	
FROM	TO
CB1	SB3
CB1	SB11
CB1	SB8
CB1	SB12

1. WHITE FROM CABLES TO BE USED FOR NEUTRAL.

STAGE 1A

MAINTENANCE OF TRAFFIC:

- TRAFFIC REMAINS ON EXISTING ROADWAYS
- REDUCE SPEED LIMIT OF USH 12 TO 45 MPH WITHIN PROJECT AREA
- MOVING TRAFFIC OPERATIONS DURING MILLING

CONSTRUCTION TO BE COMPLETED:

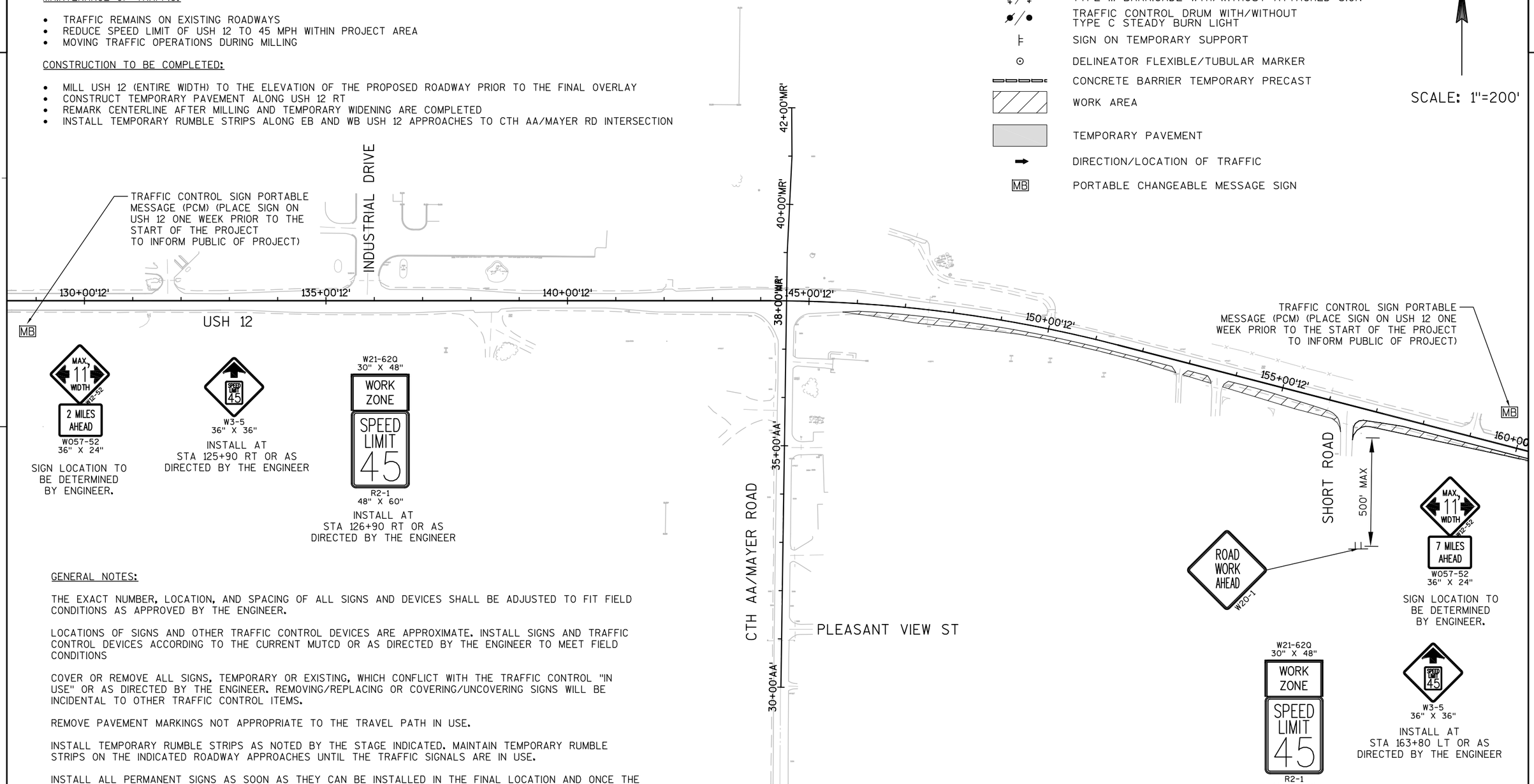
- MILL USH 12 (ENTIRE WIDTH) TO THE ELEVATION OF THE PROPOSED ROADWAY PRIOR TO THE FINAL OVERLAY
- CONSTRUCT TEMPORARY PAVEMENT ALONG USH 12 RT
- REMARK CENTERLINE AFTER MILLING AND TEMPORARY WIDENING ARE COMPLETED
- INSTALL TEMPORARY RUMBLE STRIPS ALONG EB AND WB USH 12 APPROACHES TO CTH AA/MAYER RD INTERSECTION

LEGEND

- TYPE III BARRICADE WTH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- SIGN ON TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- TEMPORARY PAVEMENT
- DIRECTION/LOCATION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE SIGN

N

SCALE: 1"=200'



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.

LOCATIONS OF SIGNS AND OTHER TRAFFIC CONTROL DEVICES ARE APPROXIMATE. INSTALL SIGNS AND TRAFFIC CONTROL DEVICES ACCORDING TO THE CURRENT MUTCD OR AS DIRECTED BY THE ENGINEER TO MEET FIELD CONDITIONS

COVER OR REMOVE ALL SIGNS, TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" OR AS DIRECTED BY THE ENGINEER. REMOVING/REPLACING OR COVERING/UNCOVERING SIGNS WILL BE INCIDENTAL TO OTHER TRAFFIC CONTROL ITEMS.

REMOVE PAVEMENT MARKINGS NOT APPROPRIATE TO THE TRAVEL PATH IN USE.

INSTALL TEMPORARY RUMBLE STRIPS AS NOTED BY THE STAGE INDICATED. MAINTAIN TEMPORARY RUMBLE STRIPS ON THE INDICATED ROADWAY APPROACHES UNTIL THE TRAFFIC SIGNALS ARE IN USE.

INSTALL ALL PERMANENT SIGNS AS SOON AS THEY CAN BE INSTALLED IN THE FINAL LOCATION AND ONCE THE SIGN MESSAGE IS APPLICABLE TO TRAFFIC PATTERNS. OTHER SIGNS NOT SHOWN MAY BE INSTALLED IF APPROVED BY THE ENGINEER.

MOVE, REMOVE OR INSTALL ROUTE MARKER SIGNS AS REQUIRED TO MAINTAIN NECESSARY ROUTE GUIDANCE THROUGHOUT CONSTRUCTION. REFER TO EXISTING SIGN REMOVAL PLANS FOR EXISTING ROUTE MARKER SIGNS TO BE MOVED DURING CONSTRUCTION.

PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	TRAFFIC CONTROL OVERVIEW - STAGE 1A	SHEET 63	E

SEE SDD "TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY" FOR ADVANCED WARNING SIGNS AND DETAILS NOT SHOWN IN PLANS.

N

2

2

USH 12

130+00'12'

132+00'12'

134+00'12'

2

BEGIN MARKING
STA 131+39

MATCH LINE 135+00

POST

TEMPORARY MARKING LEGEND

1. TEMPORARY PAVEMENT MARKING, REFLECTIVE PAINT, 4-INCH, WHITE
2. TEMPORARY PAVEMENT MARKING, REFLECTIVE PAINT, 4-INCH, YELLOW, DOUBLE
3. TEMPORARY PAVEMENT MARKING, REFLECTIVE TAPE, 4-INCH, WHITE
4. TEMPORARY PAVEMENT MARKING, REFLECTIVE TAPE, 4-INCH, YELLOW, DOUBLE

N

MATCH LINE 135+00

INDUSTRIAL DRIVE

50+00

136+00'12'

138+00'12'

140+00'12'

2

USH 12

MATCH LINE 140+50

POST
POST
SIGN
SIGN
SIGN
SIGN
FLAG
FLAG
FLAG
POST
SIGN
SIGN
SIGN

PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	TRAFFIC CONTROL PLAN - STAGE 1A	SHEET 64	E

2

MATCH LINE 140+50

142+00'12'

USH 12

144+00'12'

38+00'WR'

146+00'12'

MATCH LINE 146+50

12'

12'

BORE

SIGN

POST

STA 145+70.79
19.34' RT

CTH AA/
MAYER ROAD

N

2

TEMPORARY MARKING LEGEND

1. TEMPORARY PAVEMENT MARKING, REFLECTIVE PAINT, 4-INCH, WHITE
2. TEMPORARY PAVEMENT MARKING, REFLECTIVE PAINT, 4-INCH, YELLOW, DOUBLE
3. TEMPORARY PAVEMENT MARKING, REFLECTIVE TAPE, 4-INCH, WHITE
4. TEMPORARY PAVEMENT MARKING, REFLECTIVE TAPE, 4-INCH, YELLOW, DOUBLE

SIGN SIGN

MATCH LINE 146+50

148+00'12'

150+00'12'

152+00'12'

USH 12

MATCH LINE 152+50

21.84'

50' (TYP.)

STA 147+22.15
30.0' RT

STA 147+63.79
30.0' RT

TEMPORARY CULVERT
EXTENSION, 30-INCH
STA 147+50.79
50.4' RT

STA 149+58.77
21.84' RT

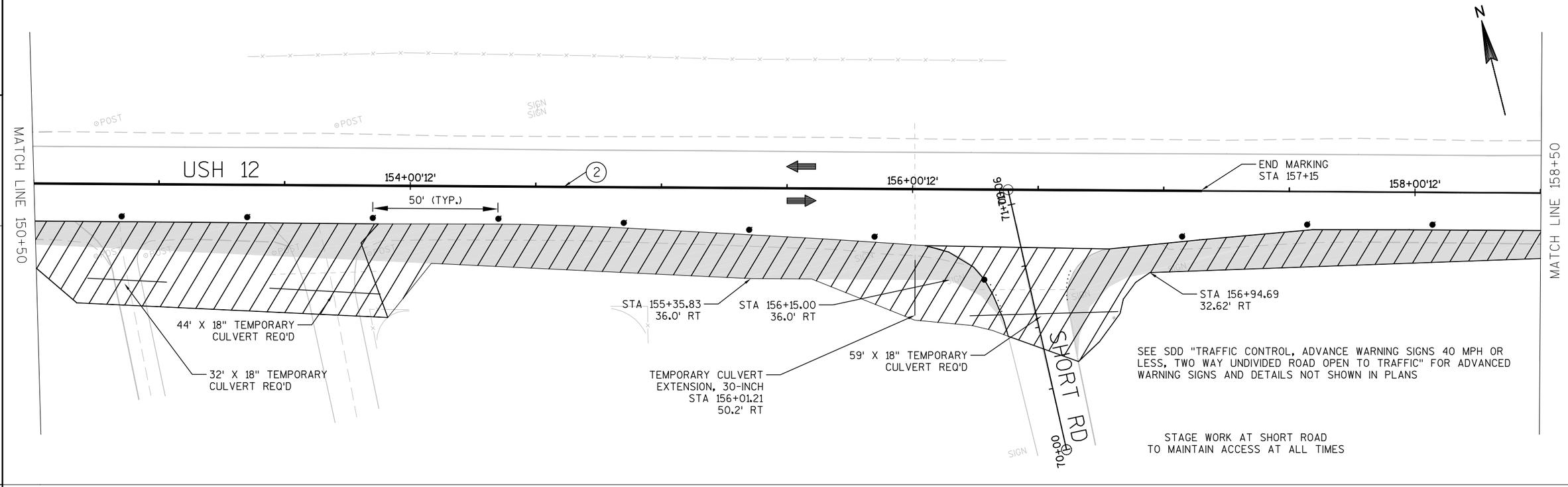
STA 151+47.76
21.84' RT

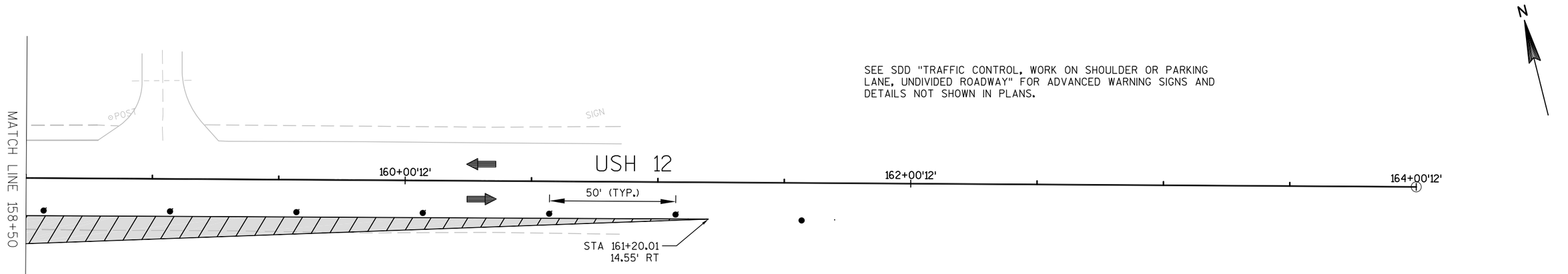
STA 151+95.00
21.84' RT

N

PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	TRAFFIC CONTROL PLAN - STAGE 1A	SHEET 65	E

FILE NAME : G:\WDOTCO\10033 (DESIGN WORK ORDERS)\WO 5 & 6 USH 12 & MAYER ROAD\CIVIL 3D\SHEETSPLAN\TRAFFIC CONTROL\025001_TC_1A.DWG PLOT DATE : 12/3/2012 PLOT BY : KL ENGINEERING PLOT NAME : ---------- PLOT SCALE : 1:40_XREF





TEMPORARY MARKING LEGEND

1. TEMPORARY PAVEMENT MARKING, REFLECTIVE PAINT, 4-INCH, WHITE
2. TEMPORARY PAVEMENT MARKING, REFLECTIVE PAINT, 4-INCH, YELLOW, DOUBLE
3. TEMPORARY PAVEMENT MARKING, REFLECTIVE TAPE, 4-INCH, WHITE
4. TEMPORARY PAVEMENT MARKING, REFLECTIVE TAPE, 4-INCH, YELLOW, DOUBLE

PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	TRAFFIC CONTROL PLAN - STAGE 1A	SHEET 66	E

FILE NAME : G:\WDOTCO\10033 (DESIGN WORK ORDERS)\WO 5 & 6 USH 12 & MAYER ROAD\CIVIL 3D\SHEETSPLAN\TRAFFIC CONTROL\025001_TC_1A.DWG PLOT DATE : 12/3/2012 PLOT BY : KL ENGINEERING PLOT NAME : ---------- PLOT SCALE : 1:40_XREF
WISDOT/CADDS SHEET 42

STAGE 1B

MAINTENANCE OF TRAFFIC:

- TRAFFIC WILL BE ON TEMPORARY WIDENING RT AND EXISTING EB LANES
- BEGIN ALL-WAY STOP CONTROL FOR CTH AA/MAYER ROAD INTERSECTION USING TEMPORARY STOP SIGNS
- CONTINUE REDUCED SPEED LIMIT OF 45 MPH ON USH 12

CONSTRUCTION TO BE COMPLETED:

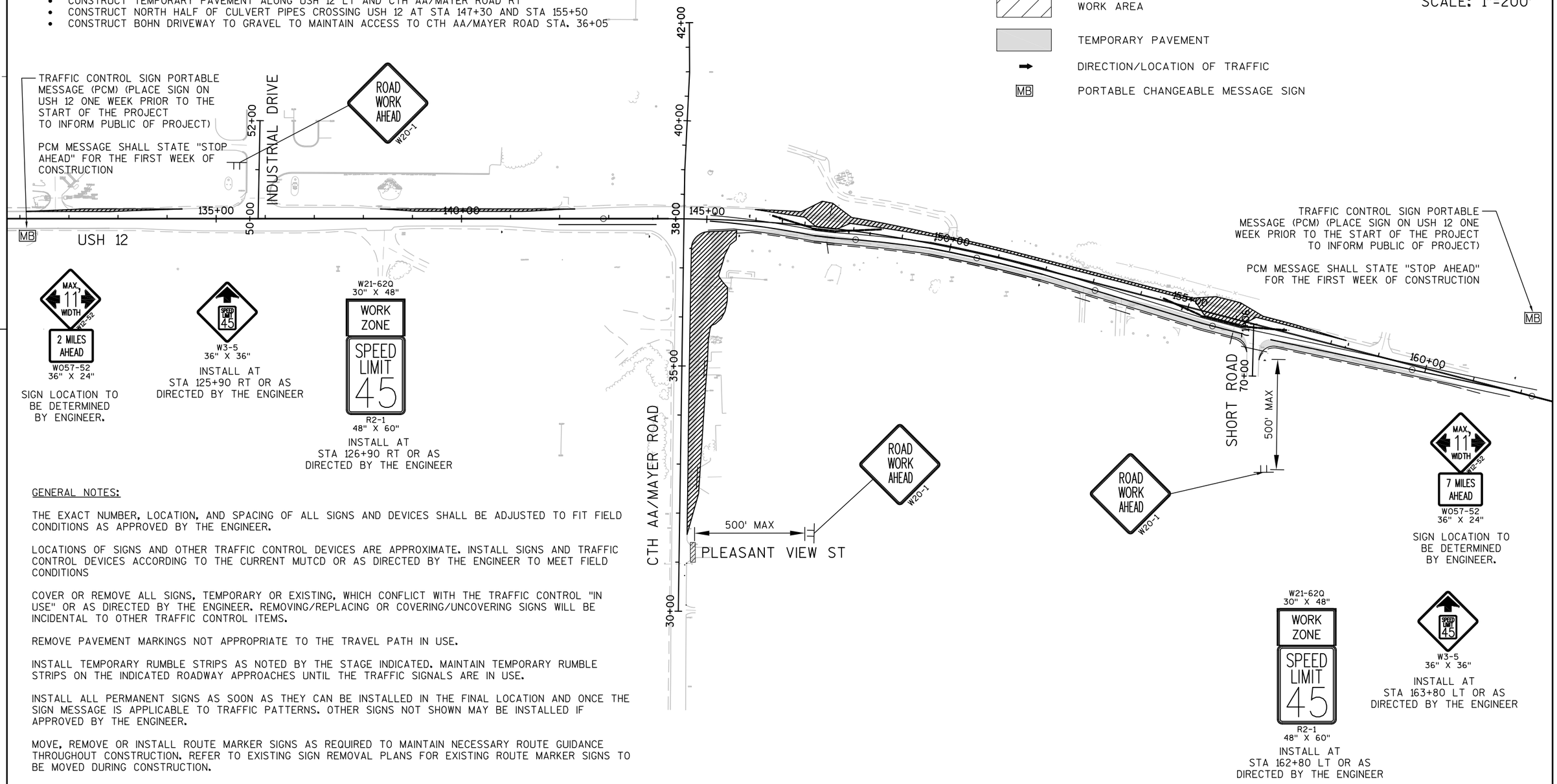
- INSTALL TEMPORARY RUMBLE STRIPS ALONG EB AND WB USH 12 APPROACHES TO CTH AA/MAYER ROAD INTERSECTION
- CONSTRUCT TEMPORARY PAVEMENT ALONG USH 12 LT AND CTH AA/MAYER ROAD RT
- CONSTRUCT NORTH HALF OF CULVERT PIPES CROSSING USH 12 AT STA 147+30 AND STA 155+50
- CONSTRUCT BOHN DRIVEWAY TO GRAVEL TO MAINTAIN ACCESS TO CTH AA/MAYER ROAD STA. 36+05

LEGEND

- TYPE III BARRICADE WTH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- SIGN ON TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- TEMPORARY PAVEMENT
- DIRECTION/LOCATION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE SIGN

N

SCALE: 1"=200'



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.

LOCATIONS OF SIGNS AND OTHER TRAFFIC CONTROL DEVICES ARE APPROXIMATE. INSTALL SIGNS AND TRAFFIC CONTROL DEVICES ACCORDING TO THE CURRENT MUTCD OR AS DIRECTED BY THE ENGINEER TO MEET FIELD CONDITIONS

COVER OR REMOVE ALL SIGNS, TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" OR AS DIRECTED BY THE ENGINEER. REMOVING/REPLACING OR COVERING/UNCOVERING SIGNS WILL BE INCIDENTAL TO OTHER TRAFFIC CONTROL ITEMS.

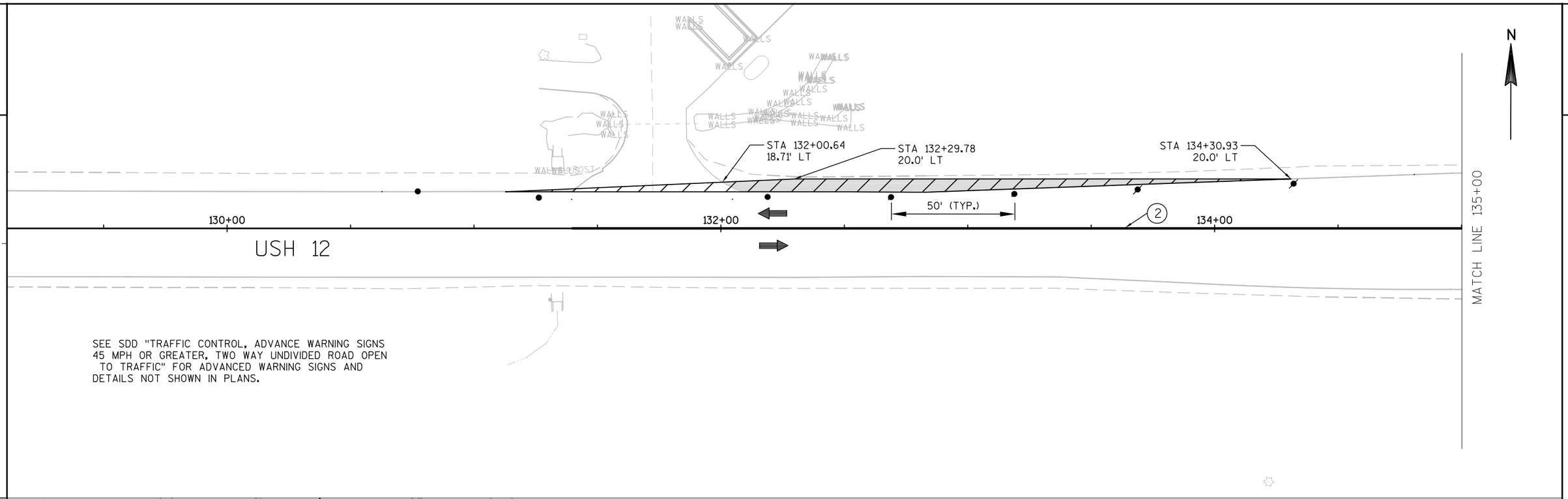
REMOVE PAVEMENT MARKINGS NOT APPROPRIATE TO THE TRAVEL PATH IN USE.

INSTALL TEMPORARY RUMBLE STRIPS AS NOTED BY THE STAGE INDICATED. MAINTAIN TEMPORARY RUMBLE STRIPS ON THE INDICATED ROADWAY APPROACHES UNTIL THE TRAFFIC SIGNALS ARE IN USE.

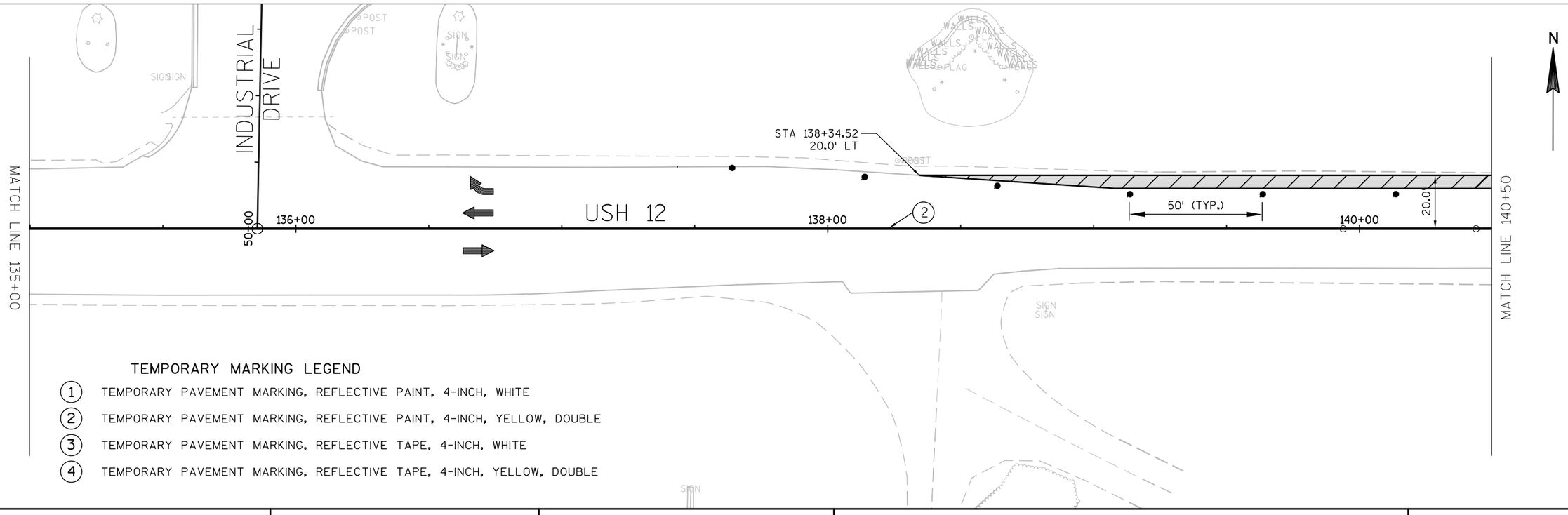
INSTALL ALL PERMANENT SIGNS AS SOON AS THEY CAN BE INSTALLED IN THE FINAL LOCATION AND ONCE THE SIGN MESSAGE IS APPLICABLE TO TRAFFIC PATTERNS. OTHER SIGNS NOT SHOWN MAY BE INSTALLED IF APPROVED BY THE ENGINEER.

MOVE, REMOVE OR INSTALL ROUTE MARKER SIGNS AS REQUIRED TO MAINTAIN NECESSARY ROUTE GUIDANCE THROUGHOUT CONSTRUCTION. REFER TO EXISTING SIGN REMOVAL PLANS FOR EXISTING ROUTE MARKER SIGNS TO BE MOVED DURING CONSTRUCTION.

PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	TRAFFIC CONTROL OVERVIEW - STAGE 1B	SHEET 67	E



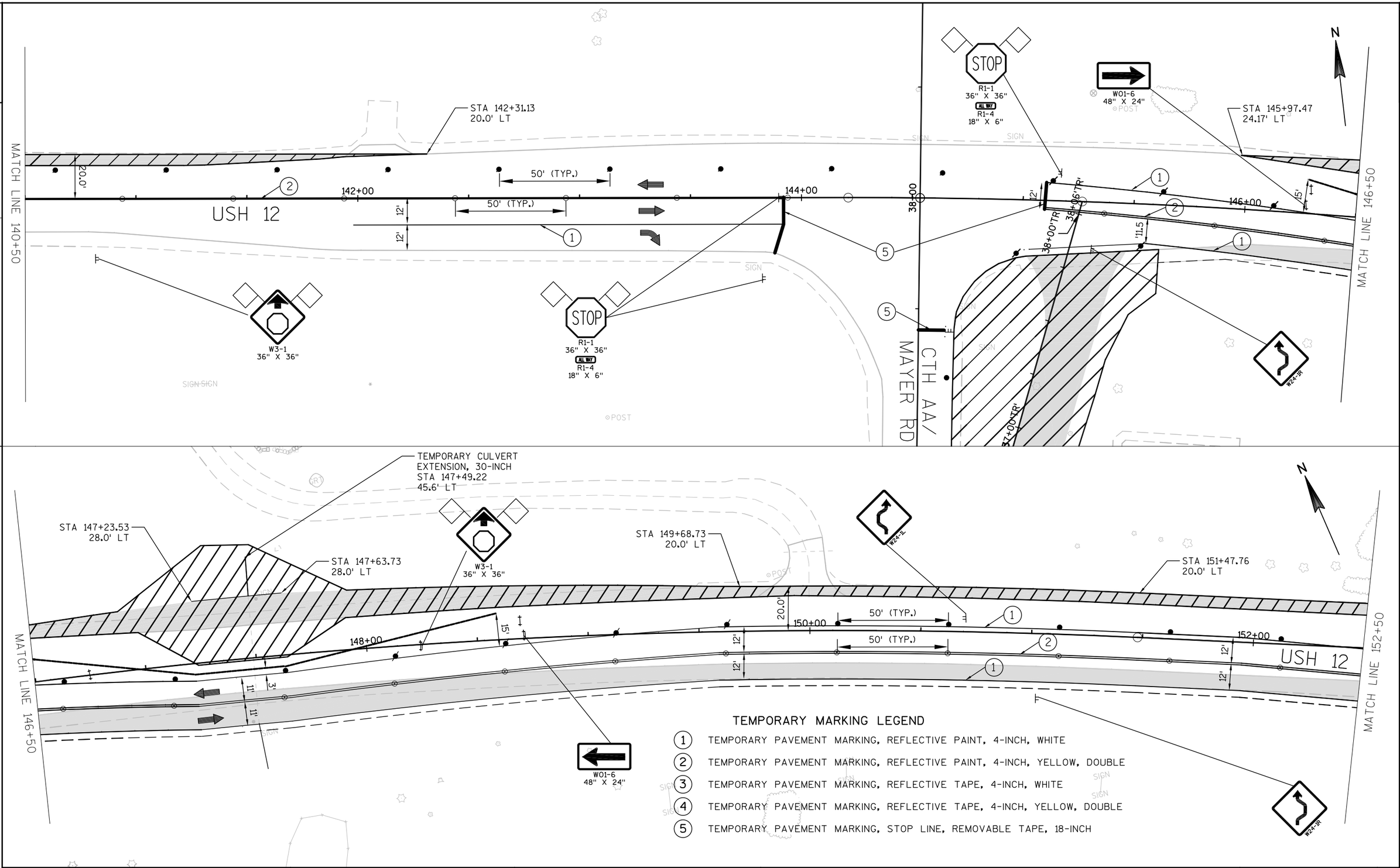
SEE SDD "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 MPH OR GREATER, TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC" FOR ADVANCED WARNING SIGNS AND DETAILS NOT SHOWN IN PLANS.



TEMPORARY MARKING LEGEND

1. TEMPORARY PAVEMENT MARKING, REFLECTIVE PAINT, 4-INCH, WHITE
2. TEMPORARY PAVEMENT MARKING, REFLECTIVE PAINT, 4-INCH, YELLOW, DOUBLE
3. TEMPORARY PAVEMENT MARKING, REFLECTIVE TAPE, 4-INCH, WHITE
4. TEMPORARY PAVEMENT MARKING, REFLECTIVE TAPE, 4-INCH, YELLOW, DOUBLE

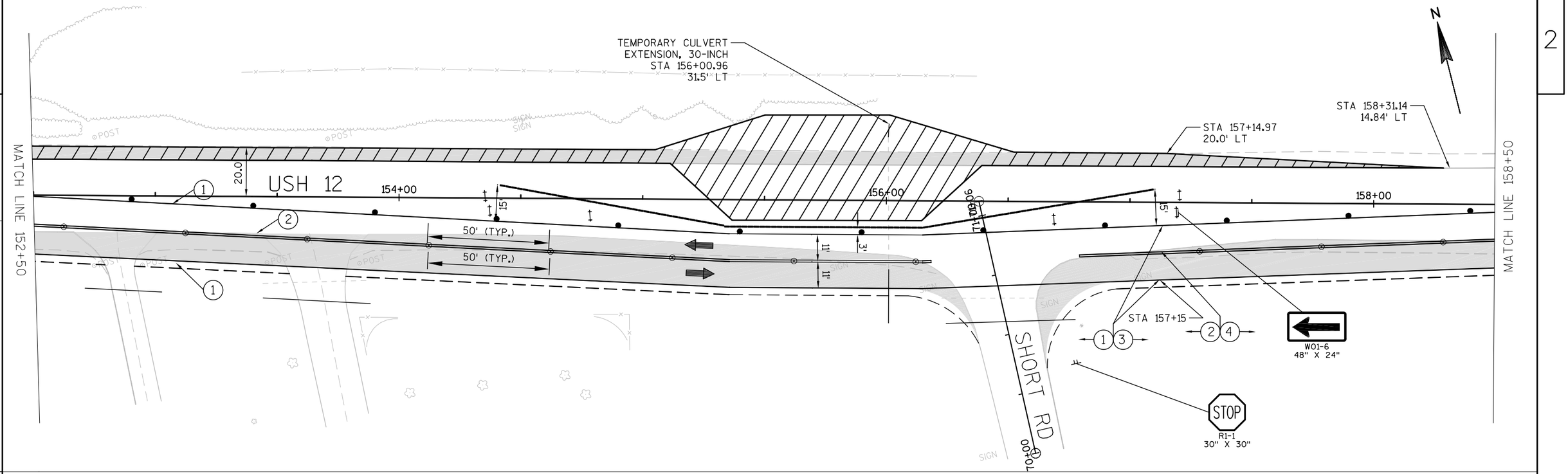
PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	TRAFFIC CONTROL PLAN - STAGE 1B	SHEET 68	E

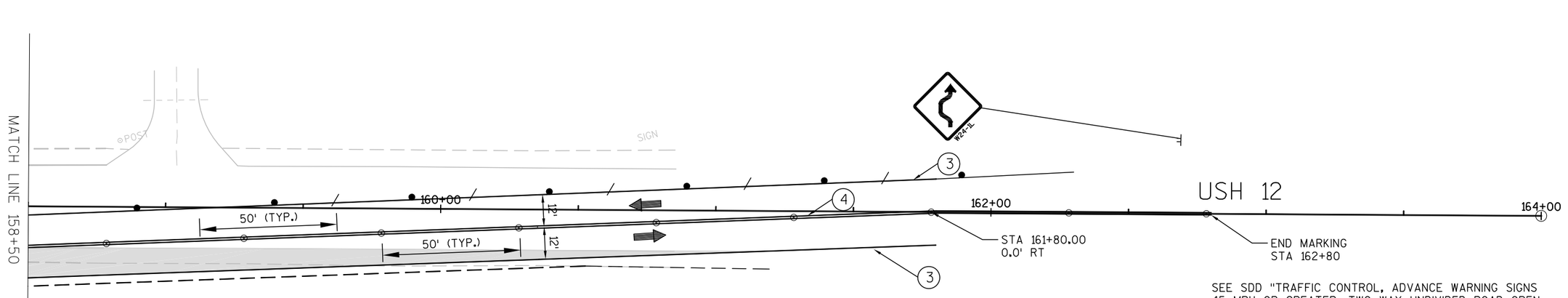


TEMPORARY MARKING LEGEND

1. TEMPORARY PAVEMENT MARKING, REFLECTIVE PAINT, 4-INCH, WHITE
2. TEMPORARY PAVEMENT MARKING, REFLECTIVE PAINT, 4-INCH, YELLOW, DOUBLE
3. TEMPORARY PAVEMENT MARKING, REFLECTIVE TAPE, 4-INCH, WHITE
4. TEMPORARY PAVEMENT MARKING, REFLECTIVE TAPE, 4-INCH, YELLOW, DOUBLE
5. TEMPORARY PAVEMENT MARKING, STOP LINE, REMOVABLE TAPE, 18-INCH

PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	TRAFFIC CONTROL PLAN - STAGE 1B	SHEET 69	E





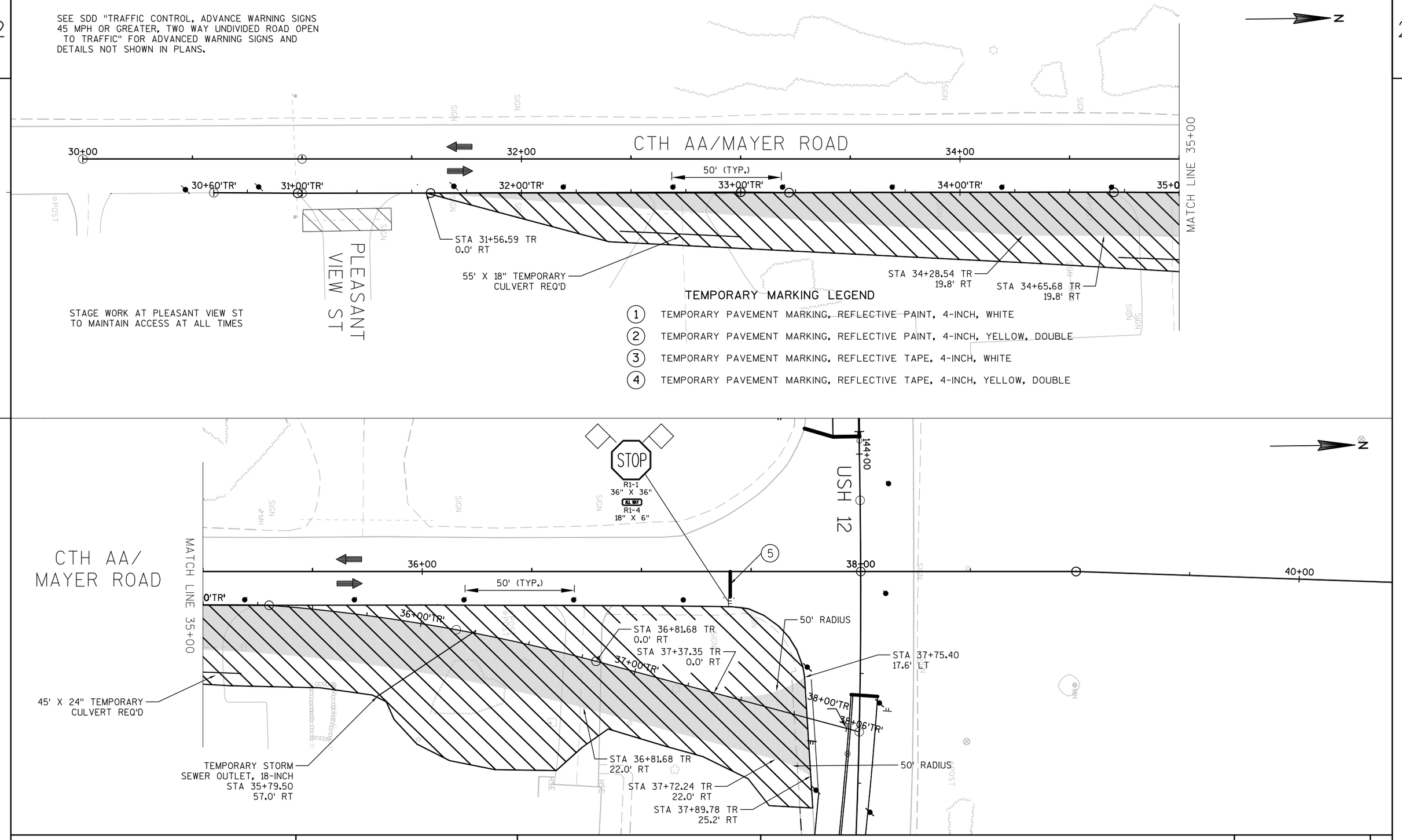
SEE SDD "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 MPH OR GREATER, TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC" FOR ADVANCED WARNING SIGNS AND DETAILS NOT SHOWN IN PLANS.

TEMPORARY MARKING LEGEND

1. TEMPORARY PAVEMENT MARKING, REFLECTIVE PAINT, 4-INCH, WHITE
2. TEMPORARY PAVEMENT MARKING, REFLECTIVE PAINT, 4-INCH, YELLOW, DOUBLE
3. TEMPORARY PAVEMENT MARKING, REFLECTIVE TAPE, 4-INCH, WHITE
4. TEMPORARY PAVEMENT MARKING, REFLECTIVE TAPE, 4-INCH, YELLOW, DOUBLE

PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	TRAFFIC CONTROL PLAN - STAGE 1B	SHEET 70	E

SEE SDD "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 MPH OR GREATER, TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC" FOR ADVANCED WARNING SIGNS AND DETAILS NOT SHOWN IN PLANS.



PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	TRAFFIC CONTROL PLAN - STAGE 1B	SHEET 71	E

STAGE 2A

MAINTENANCE OF TRAFFIC:

- USH 12 TRAFFIC SHIFTS NORTH TO EXISTING WB LANES AND TEMPORARY PAVEMENT
- CTH AA/MAYER TRAFFIC SHIFTS EAST TO TEMPORARY PAVEMENT
- CONTINUE ALL-WAY STOP CONTROL FOR CTH AA/MAYER ROAD INTERSECTION USING TEMPORARY STOP SIGNS
- CONTINUE REDUCED SPEED LIMIT OF 45 MPH ON USH 12

CONSTRUCTION TO BE COMPLETED:

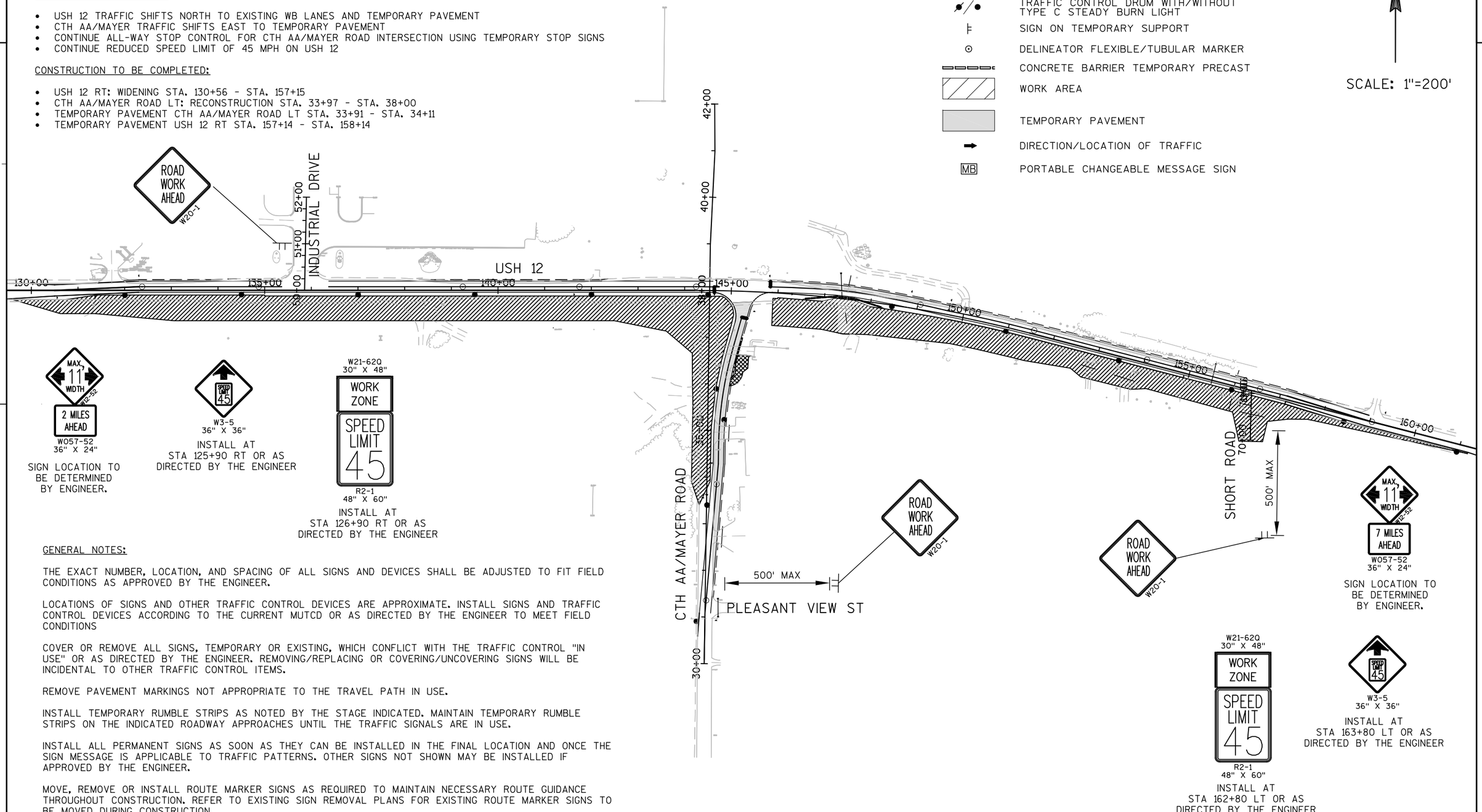
- USH 12 RT: WIDENING STA. 130+56 - STA. 157+15
- CTH AA/MAYER ROAD LT: RECONSTRUCTION STA. 33+97 - STA. 38+00
- TEMPORARY PAVEMENT CTH AA/MAYER ROAD LT STA. 33+91 - STA. 34+11
- TEMPORARY PAVEMENT USH 12 RT STA. 157+14 - STA. 158+14

LEGEND

- TYPE III BARRICADE WTH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- SIGN ON TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- TEMPORARY PAVEMENT
- DIRECTION/LOCATION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE SIGN

N

SCALE: 1"=200'



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.

LOCATIONS OF SIGNS AND OTHER TRAFFIC CONTROL DEVICES ARE APPROXIMATE. INSTALL SIGNS AND TRAFFIC CONTROL DEVICES ACCORDING TO THE CURRENT MUTCD OR AS DIRECTED BY THE ENGINEER TO MEET FIELD CONDITIONS

COVER OR REMOVE ALL SIGNS, TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" OR AS DIRECTED BY THE ENGINEER. REMOVING/REPLACING OR COVERING/UNCOVERING SIGNS WILL BE INCIDENTAL TO OTHER TRAFFIC CONTROL ITEMS.

REMOVE PAVEMENT MARKINGS NOT APPROPRIATE TO THE TRAVEL PATH IN USE.

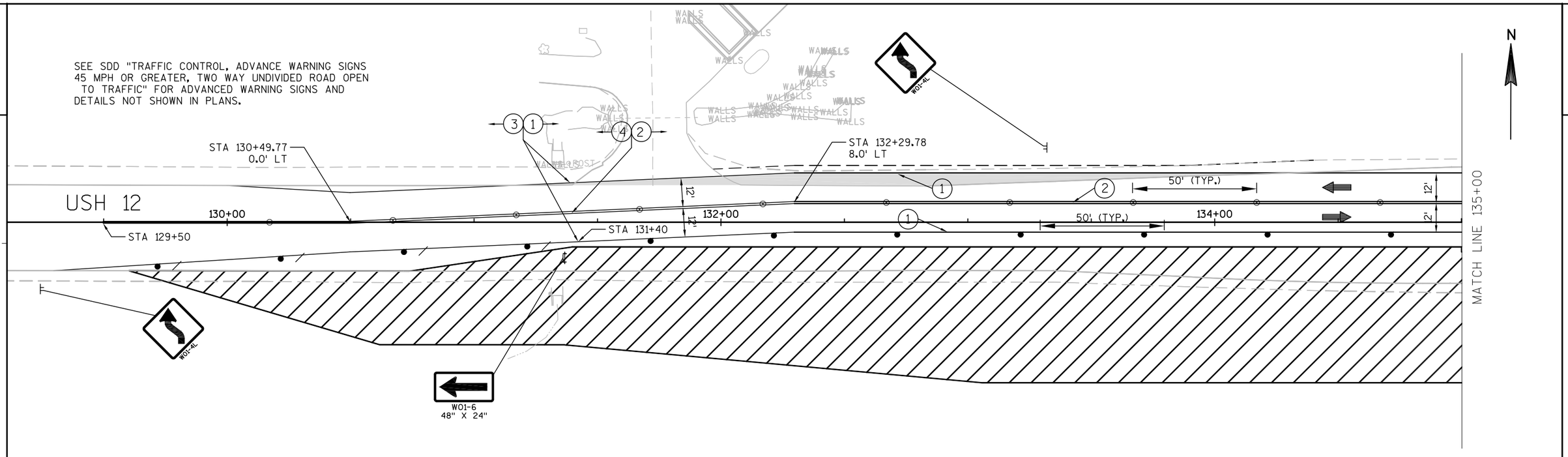
INSTALL TEMPORARY RUMBLE STRIPS AS NOTED BY THE STAGE INDICATED. MAINTAIN TEMPORARY RUMBLE STRIPS ON THE INDICATED ROADWAY APPROACHES UNTIL THE TRAFFIC SIGNALS ARE IN USE.

INSTALL ALL PERMANENT SIGNS AS SOON AS THEY CAN BE INSTALLED IN THE FINAL LOCATION AND ONCE THE SIGN MESSAGE IS APPLICABLE TO TRAFFIC PATTERNS. OTHER SIGNS NOT SHOWN MAY BE INSTALLED IF APPROVED BY THE ENGINEER.

MOVE, REMOVE OR INSTALL ROUTE MARKER SIGNS AS REQUIRED TO MAINTAIN NECESSARY ROUTE GUIDANCE THROUGHOUT CONSTRUCTION. REFER TO EXISTING SIGN REMOVAL PLANS FOR EXISTING ROUTE MARKER SIGNS TO BE MOVED DURING CONSTRUCTION.

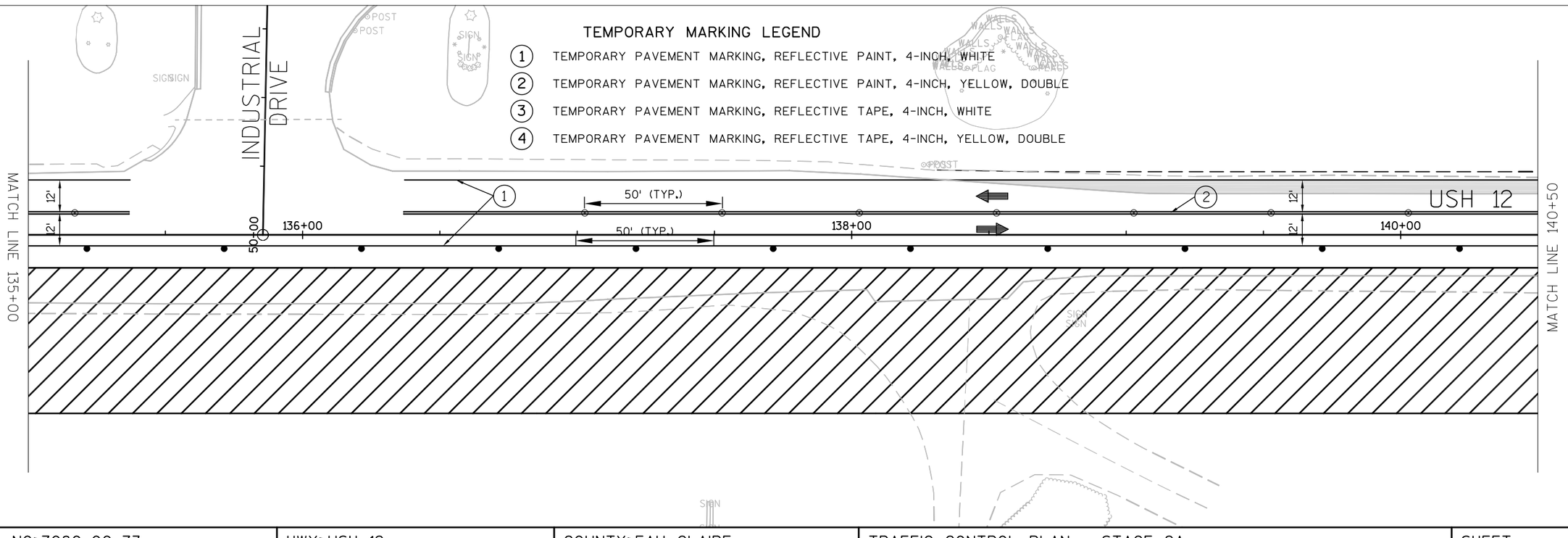
PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	TRAFFIC CONTROL OVERVIEW - STAGE 2A	SHEET 72	E

SEE SDD "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 MPH OR GREATER, TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC" FOR ADVANCED WARNING SIGNS AND DETAILS NOT SHOWN IN PLANS.



TEMPORARY MARKING LEGEND

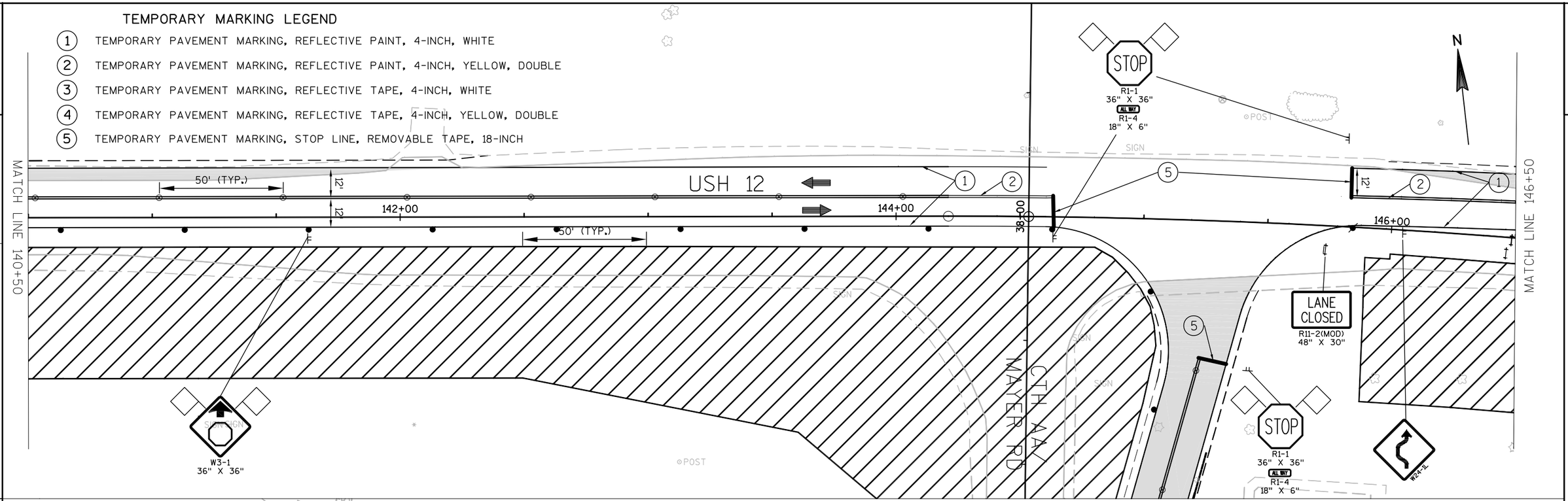
1. TEMPORARY PAVEMENT MARKING, REFLECTIVE PAINT, 4-INCH, WHITE
2. TEMPORARY PAVEMENT MARKING, REFLECTIVE PAINT, 4-INCH, YELLOW, DOUBLE
3. TEMPORARY PAVEMENT MARKING, REFLECTIVE TAPE, 4-INCH, WHITE
4. TEMPORARY PAVEMENT MARKING, REFLECTIVE TAPE, 4-INCH, YELLOW, DOUBLE



PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	TRAFFIC CONTROL PLAN - STAGE 2A	SHEET 73	E

TEMPORARY MARKING LEGEND

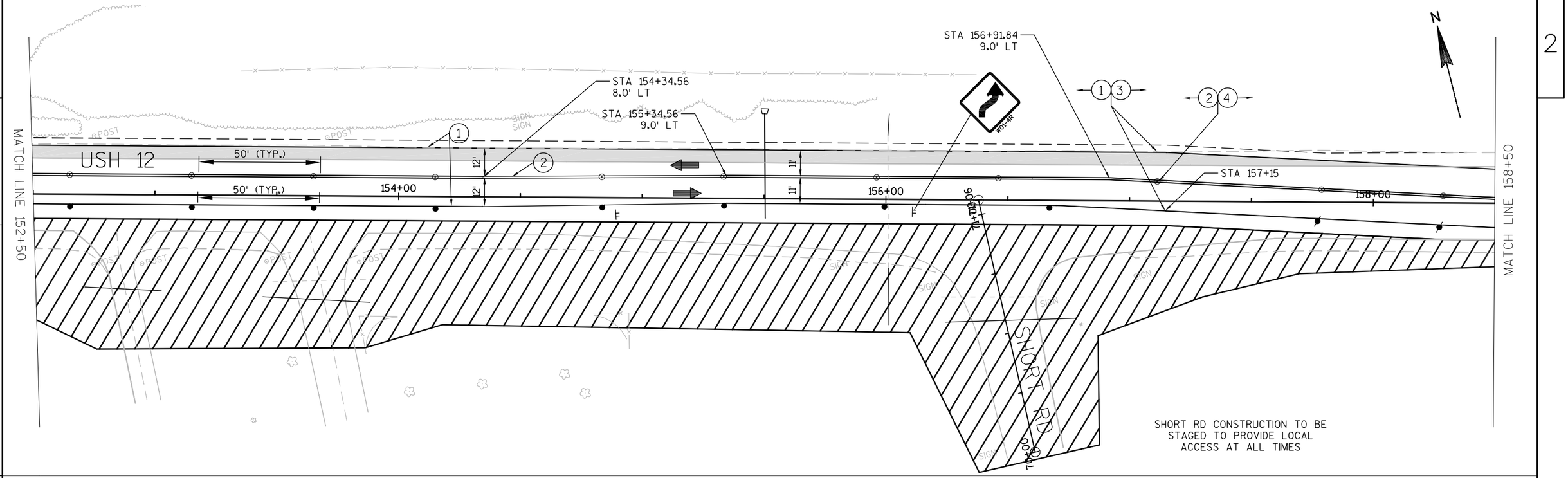
1. TEMPORARY PAVEMENT MARKING, REFLECTIVE PAINT, 4-INCH, WHITE
2. TEMPORARY PAVEMENT MARKING, REFLECTIVE PAINT, 4-INCH, YELLOW, DOUBLE
3. TEMPORARY PAVEMENT MARKING, REFLECTIVE TAPE, 4-INCH, WHITE
4. TEMPORARY PAVEMENT MARKING, REFLECTIVE TAPE, 4-INCH, YELLOW, DOUBLE
5. TEMPORARY PAVEMENT MARKING, STOP LINE, REMOVABLE TAPE, 18-INCH

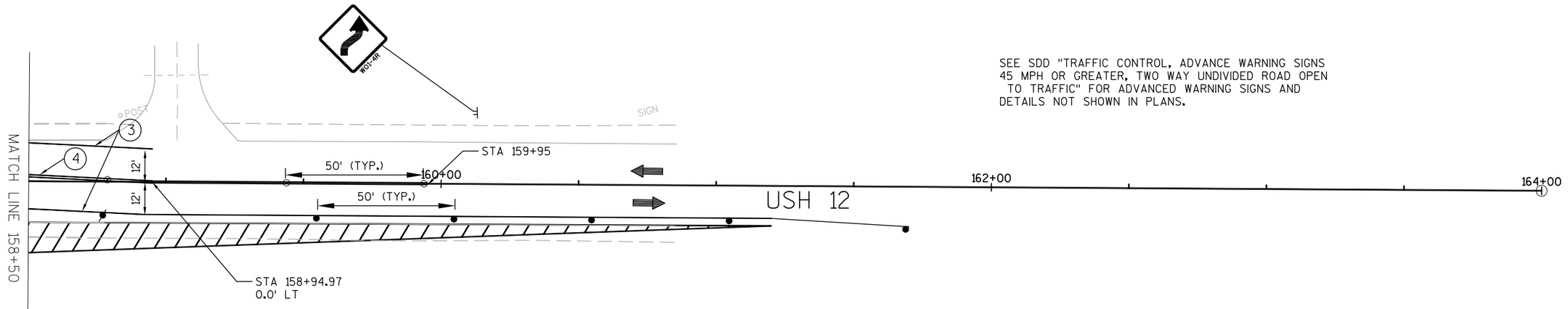


PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	TRAFFIC CONTROL PLAN - STAGE 2A	SHEET 74	E

FILE NAME : G:\WDOTCO\10033 (DESIGN WORK ORDERS)\WO 5 & 6 USH 12 & MAYER ROAD\CIVIL 3D\SHEETSPLAN\TRAFFIC CONTROL\025001_TC_2A.DWG PLOT DATE : 12/3/2012 PLOT BY : KL ENGINEERING PLOT NAME : ---------- PLOT SCALE : 1:40_XREF

WISDOT/CADDS SHEET 42



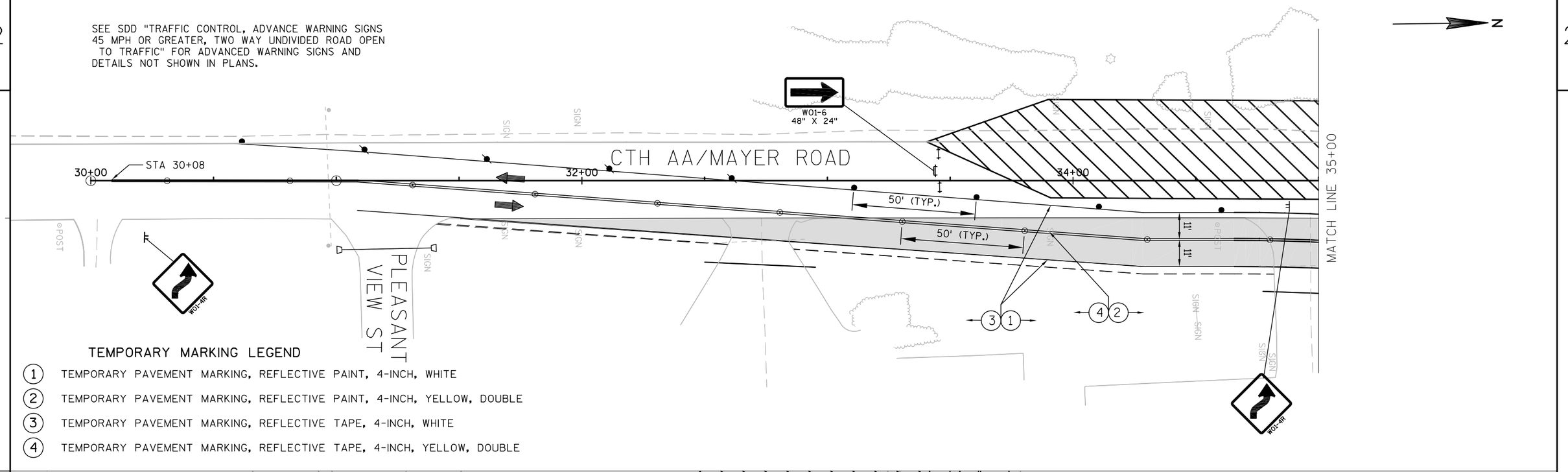


TEMPORARY MARKING LEGEND

1. TEMPORARY PAVEMENT MARKING, REFLECTIVE PAINT, 4-INCH, WHITE
2. TEMPORARY PAVEMENT MARKING, REFLECTIVE PAINT, 4-INCH, YELLOW, DOUBLE
3. TEMPORARY PAVEMENT MARKING, REFLECTIVE TAPE, 4-INCH, WHITE
4. TEMPORARY PAVEMENT MARKING, REFLECTIVE TAPE, 4-INCH, YELLOW, DOUBLE

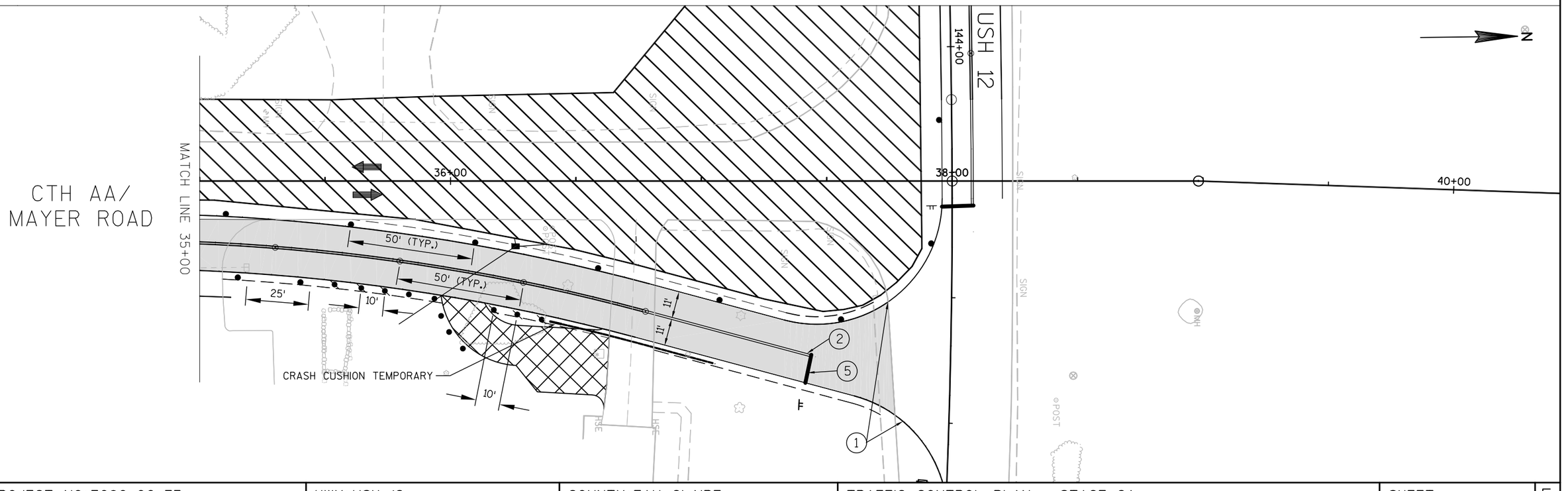
PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	TRAFFIC CONTROL PLAN - STAGE 2A	SHEET 75	E

SEE SDD "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 MPH OR GREATER, TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC" FOR ADVANCED WARNING SIGNS AND DETAILS NOT SHOWN IN PLANS.



TEMPORARY MARKING LEGEND

1. TEMPORARY PAVEMENT MARKING, REFLECTIVE PAINT, 4-INCH, WHITE
2. TEMPORARY PAVEMENT MARKING, REFLECTIVE PAINT, 4-INCH, YELLOW, DOUBLE
3. TEMPORARY PAVEMENT MARKING, REFLECTIVE TAPE, 4-INCH, WHITE
4. TEMPORARY PAVEMENT MARKING, REFLECTIVE TAPE, 4-INCH, YELLOW, DOUBLE



PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	TRAFFIC CONTROL PLAN - STAGE 2A	SHEET 76	E

STAGE 2B

MAINTENANCE OF TRAFFIC:

- USH 12 TRAFFIC REMAINS ON EXISTING WB LANES AND TEMPORARY PAVEMENT
- CTH AA/MAYER ROAD TRAFFIC SHIFTS WEST TO NEW PAVEMENT
- CONTINUE ALL-WAY STOP CONTROL FOR CTH AA/MAYER ROAD INTERSECTION USING TEMPORARY STOP SIGNS
- CONTINUE REDUCED SPEED LIMIT OF 45 MPH ON USH 12

CONSTRUCTION TO BE COMPLETED:

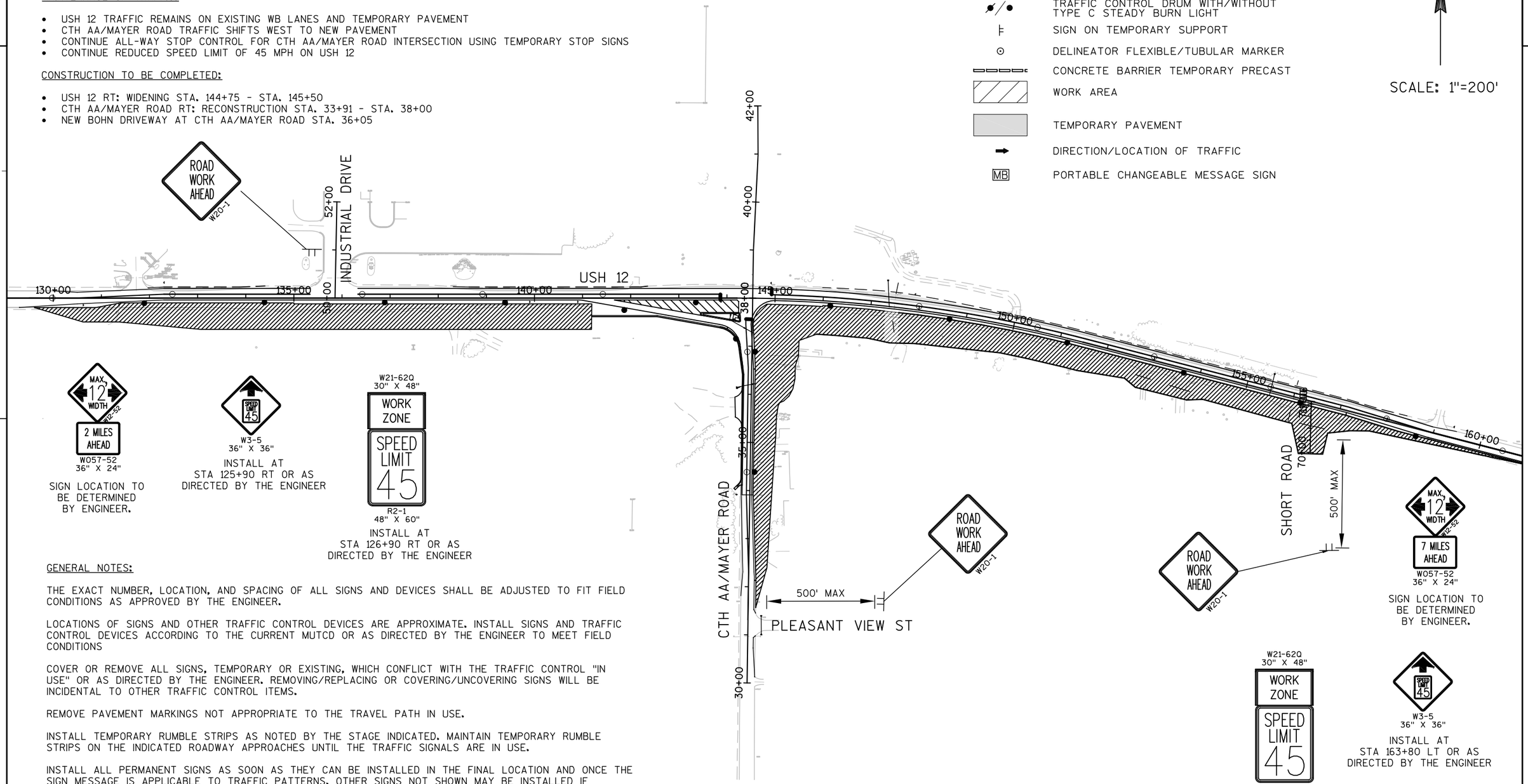
- USH 12 RT: WIDENING STA. 144+75 - STA. 145+50
- CTH AA/MAYER ROAD RT: RECONSTRUCTION STA. 33+91 - STA. 38+00
- NEW BOHN DRIVEWAY AT CTH AA/MAYER ROAD STA. 36+05

LEGEND

- TYPE III BARRICADE WTH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- SIGN ON TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- TEMPORARY PAVEMENT
- DIRECTION/LOCATION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE SIGN

N

SCALE: 1"=200'



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.

LOCATIONS OF SIGNS AND OTHER TRAFFIC CONTROL DEVICES ARE APPROXIMATE. INSTALL SIGNS AND TRAFFIC CONTROL DEVICES ACCORDING TO THE CURRENT MUTCD OR AS DIRECTED BY THE ENGINEER TO MEET FIELD CONDITIONS

COVER OR REMOVE ALL SIGNS, TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" OR AS DIRECTED BY THE ENGINEER. REMOVING/REPLACING OR COVERING/UNCOVERING SIGNS WILL BE INCIDENTAL TO OTHER TRAFFIC CONTROL ITEMS.

REMOVE PAVEMENT MARKINGS NOT APPROPRIATE TO THE TRAVEL PATH IN USE.

INSTALL TEMPORARY RUMBLE STRIPS AS NOTED BY THE STAGE INDICATED. MAINTAIN TEMPORARY RUMBLE STRIPS ON THE INDICATED ROADWAY APPROACHES UNTIL THE TRAFFIC SIGNALS ARE IN USE.

INSTALL ALL PERMANENT SIGNS AS SOON AS THEY CAN BE INSTALLED IN THE FINAL LOCATION AND ONCE THE SIGN MESSAGE IS APPLICABLE TO TRAFFIC PATTERNS. OTHER SIGNS NOT SHOWN MAY BE INSTALLED IF APPROVED BY THE ENGINEER.

MOVE, REMOVE OR INSTALL ROUTE MARKER SIGNS AS REQUIRED TO MAINTAIN NECESSARY ROUTE GUIDANCE THROUGHOUT CONSTRUCTION. REFER TO EXISTING SIGN REMOVAL PLANS FOR EXISTING ROUTE MARKER SIGNS TO BE MOVED DURING CONSTRUCTION.

PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	TRAFFIC CONTROL OVERVIEW - STAGE 2B	SHEET 77	E

SEE SDD "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 MPH OR GREATER, TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC" FOR ADVANCED WARNING SIGNS AND DETAILS NOT SHOWN IN PLANS.

TEMPORARY MARKING LEGEND

1. TEMPORARY PAVEMENT MARKING, REFLECTIVE PAINT, 4-INCH, WHITE
2. TEMPORARY PAVEMENT MARKING, REFLECTIVE PAINT, 4-INCH, YELLOW, DOUBLE
3. TEMPORARY PAVEMENT MARKING, REFLECTIVE TAPE, 4-INCH, WHITE
4. TEMPORARY PAVEMENT MARKING, REFLECTIVE TAPE, 4-INCH, YELLOW, DOUBLE

N

USH 12

STA 131+49.77
0.0' LT

STA 132+29.77
8.0' LT

STA 129+50

STA 131+40

130+00

132+00

134+00

50' (TYP.)

50' (TYP.)

12'

12'

12'

W01-4L

W01-6
48" X 24"

MATCH LINE 135+00

INDUSTRIAL DRIVE

136+00

138+00

140+00

50' (TYP.)

50' (TYP.)

12'

12'

12'

W3-1
36" X 36"

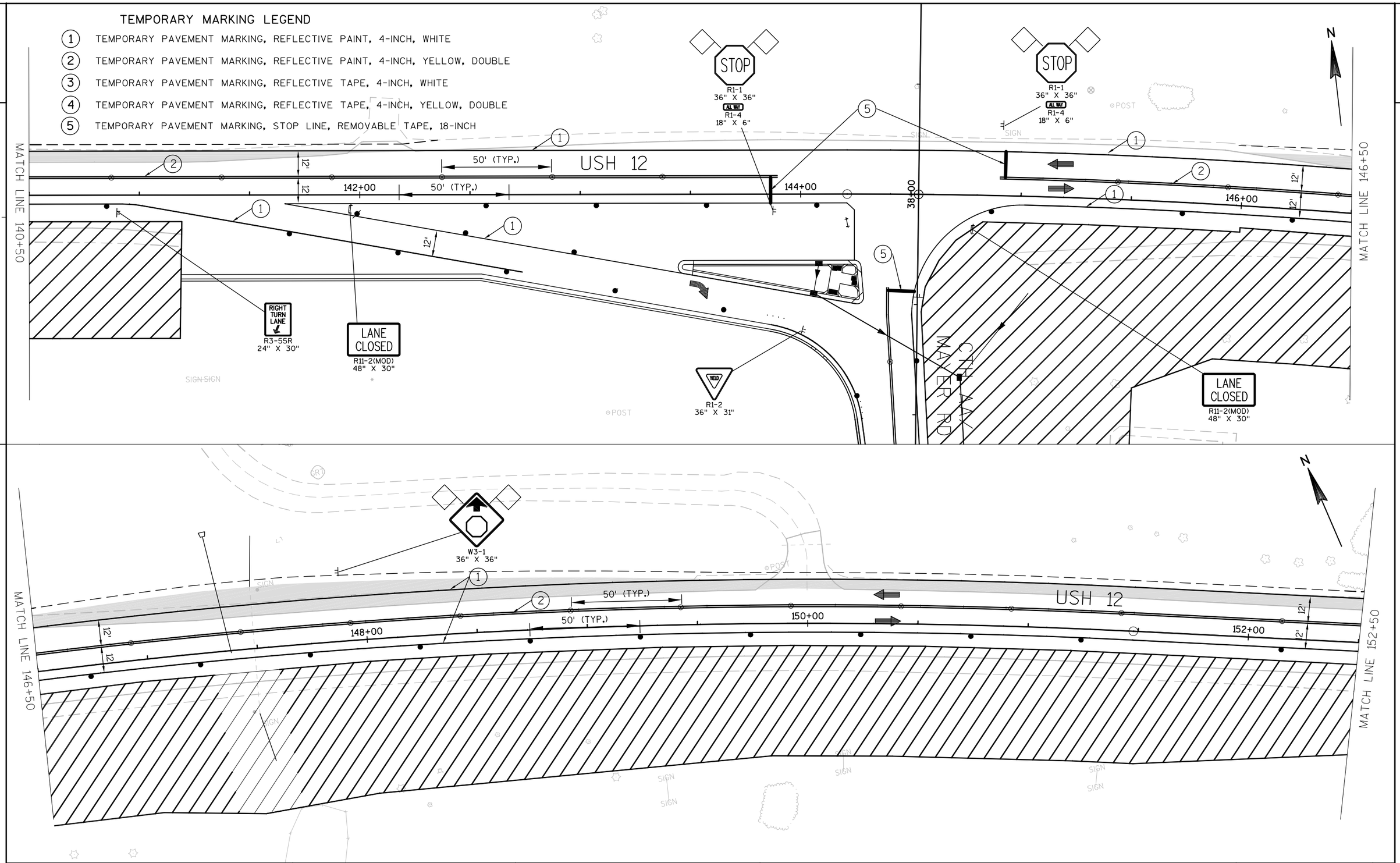
MATCH LINE 135+00

MATCH LINE 140+50

PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	TRAFFIC CONTROL PLAN - STAGE 2B	SHEET 78	E

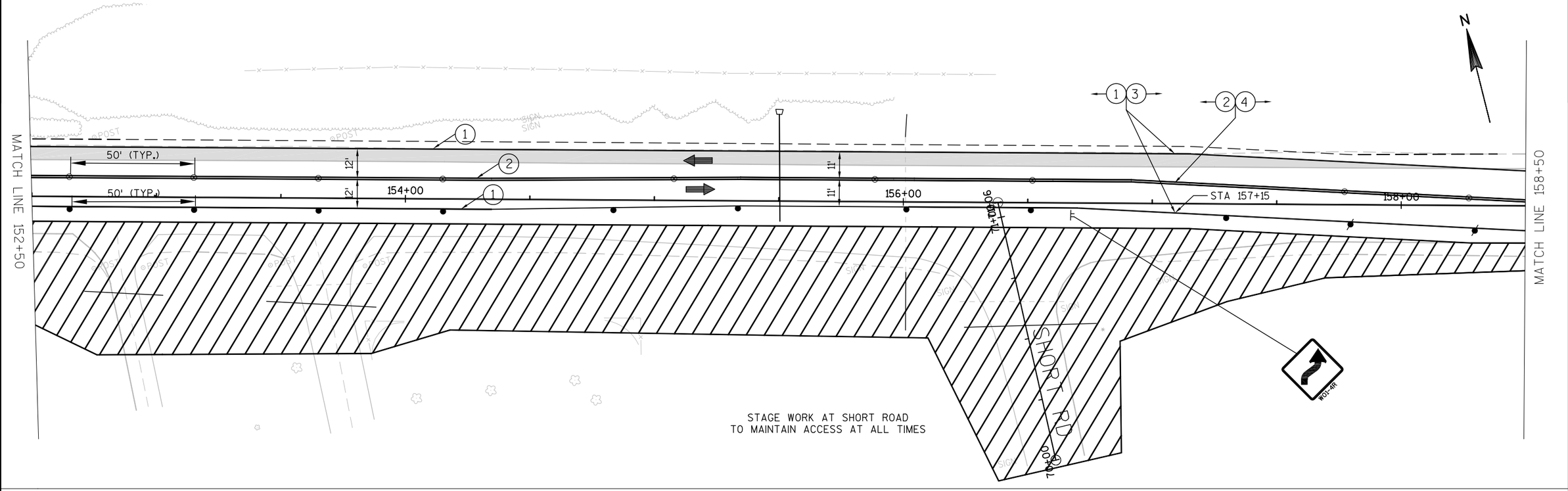
TEMPORARY MARKING LEGEND

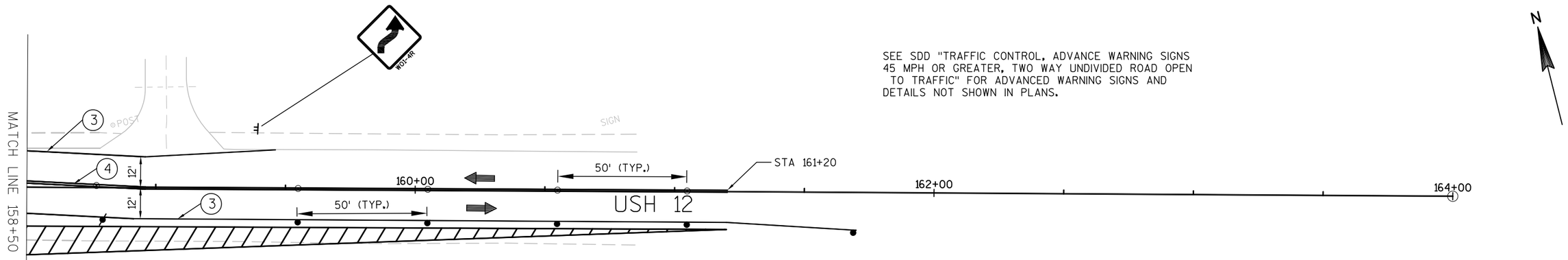
1. TEMPORARY PAVEMENT MARKING, REFLECTIVE PAINT, 4-INCH, WHITE
2. TEMPORARY PAVEMENT MARKING, REFLECTIVE PAINT, 4-INCH, YELLOW, DOUBLE
3. TEMPORARY PAVEMENT MARKING, REFLECTIVE TAPE, 4-INCH, WHITE
4. TEMPORARY PAVEMENT MARKING, REFLECTIVE TAPE, 4-INCH, YELLOW, DOUBLE
5. TEMPORARY PAVEMENT MARKING, STOP LINE, REMOVABLE TAPE, 18-INCH



PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	TRAFFIC CONTROL PLAN - STAGE 2B	SHEET 79	E

FILE NAME : G:\WDOTCO\10033 (DESIGN WORK ORDERS)\WO 5 & 6 USH 12 & MAYER ROAD\CIVIL 3D\SHEETSPLAN\TRAFFIC CONTROL\025001_TC_2B.DWG PLOT DATE : 12/3/2012 PLOT BY : KL ENGINEERING PLOT NAME : ---------- PLOT SCALE : 1:40_XREF





SEE SDD "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 MPH OR GREATER, TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC" FOR ADVANCED WARNING SIGNS AND DETAILS NOT SHOWN IN PLANS.

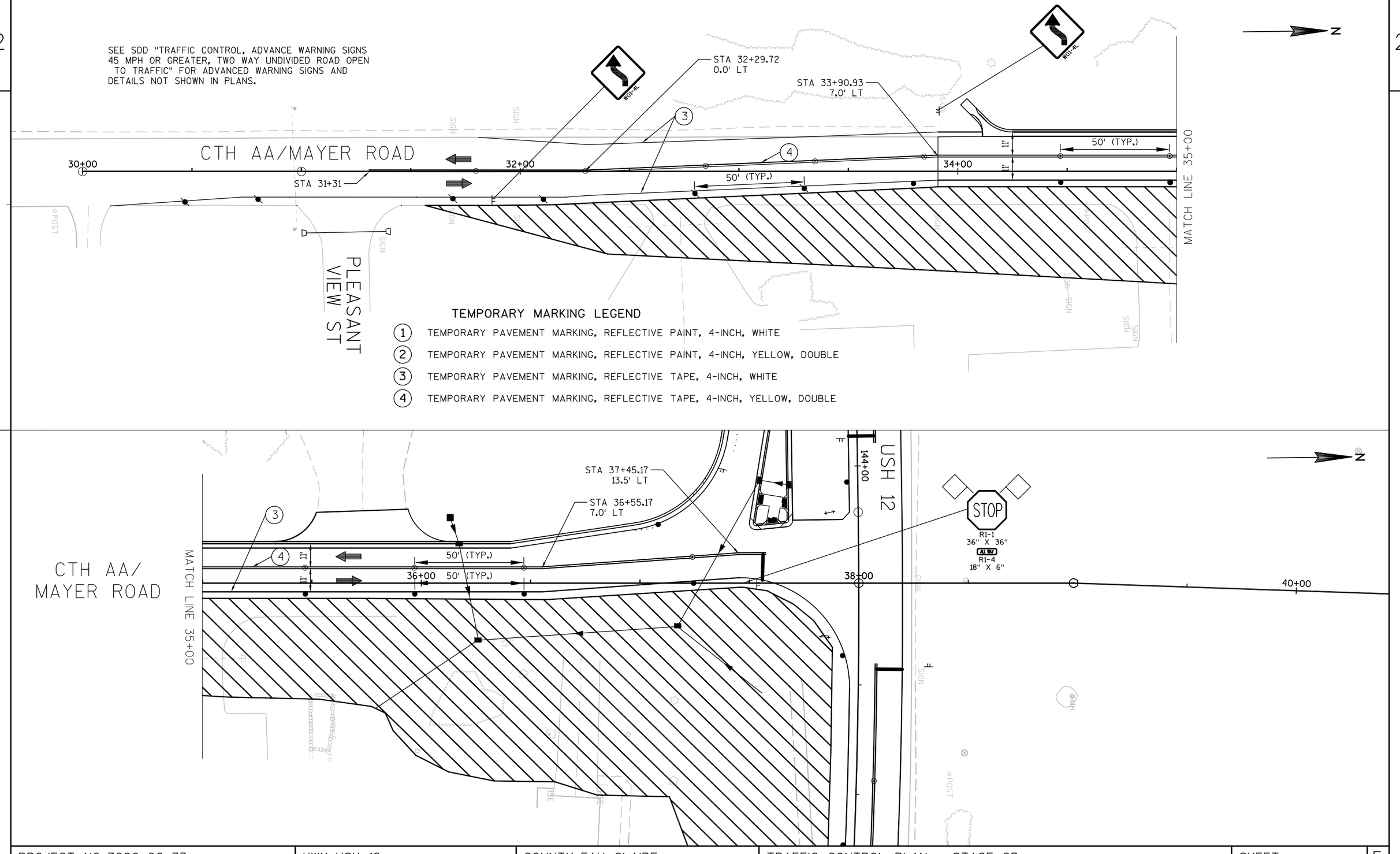
TEMPORARY MARKING LEGEND

1. TEMPORARY PAVEMENT MARKING, REFLECTIVE PAINT, 4-INCH, WHITE
2. TEMPORARY PAVEMENT MARKING, REFLECTIVE PAINT, 4-INCH, YELLOW, DOUBLE
3. TEMPORARY PAVEMENT MARKING, REFLECTIVE TAPE, 4-INCH, WHITE
4. TEMPORARY PAVEMENT MARKING, REFLECTIVE TAPE, 4-INCH, YELLOW, DOUBLE

PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	TRAFFIC CONTROL PLAN - STAGE 2B	SHEET 80	E

FILE NAME : G:\WDOTCO\10033 (DESIGN WORK ORDERS)\WO 5 & 6 USH 12 & MAYER ROAD\CIVIL 3D\SHEETSPLAN\TRAFFIC CONTROL\025001_TC_2B.DWG PLOT DATE : 12/3/2012 PLOT BY : KL ENGINEERING PLOT NAME : ---------- PLOT SCALE : 1:40_XREF

SEE SDD "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 MPH OR GREATER, TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC" FOR ADVANCED WARNING SIGNS AND DETAILS NOT SHOWN IN PLANS.



TEMPORARY MARKING LEGEND

1. TEMPORARY PAVEMENT MARKING, REFLECTIVE PAINT, 4-INCH, WHITE
2. TEMPORARY PAVEMENT MARKING, REFLECTIVE PAINT, 4-INCH, YELLOW, DOUBLE
3. TEMPORARY PAVEMENT MARKING, REFLECTIVE TAPE, 4-INCH, WHITE
4. TEMPORARY PAVEMENT MARKING, REFLECTIVE TAPE, 4-INCH, YELLOW, DOUBLE

PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	TRAFFIC CONTROL PLAN - STAGE 2B	SHEET 81	E

STAGE 3

MAINTENANCE OF TRAFFIC:

- USH 12 TRAFFIC SHIFTS SOUTH TO NEW EB LANE AND EXISTING CENTER LANE
- CTH AA/MAYER ROAD OPEN TO TRAFFIC ON NEW PAVEMENT
- CONTINUE ALL-WAY STOP CONTROL FOR CTH AA/MAYER ROAD INTERSECTION USING TEMPORARY STOP SIGNS
- CONTINUE REDUCED SPEED LIMIT OF 45 MPH ON USH 12

CONSTRUCTION TO BE COMPLETED:

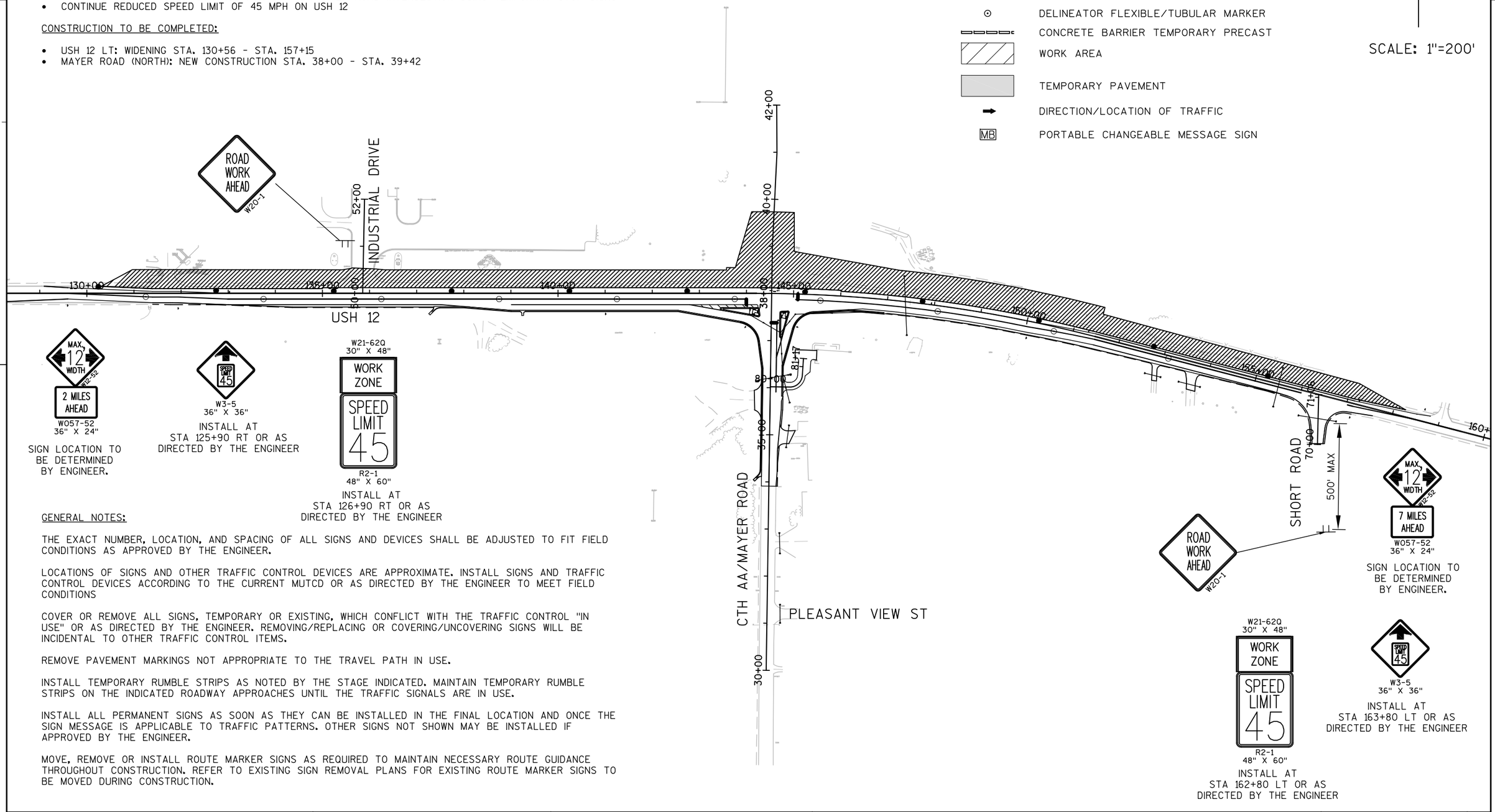
- USH 12 LT: WIDENING STA. 130+56 - STA. 157+15
- MAYER ROAD (NORTH): NEW CONSTRUCTION STA. 38+00 - STA. 39+42

LEGEND

- TYPE III BARRICADE WTH/WITHOUT ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH/WITHOUT TYPE C STEADY BURN LIGHT
- SIGN ON TEMPORARY SUPPORT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- CONCRETE BARRIER TEMPORARY PRECAST
- WORK AREA
- TEMPORARY PAVEMENT
- DIRECTION/LOCATION OF TRAFFIC
- MB PORTABLE CHANGEABLE MESSAGE SIGN

N

SCALE: 1"=200'



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.

LOCATIONS OF SIGNS AND OTHER TRAFFIC CONTROL DEVICES ARE APPROXIMATE. INSTALL SIGNS AND TRAFFIC CONTROL DEVICES ACCORDING TO THE CURRENT MUTCD OR AS DIRECTED BY THE ENGINEER TO MEET FIELD CONDITIONS

COVER OR REMOVE ALL SIGNS, TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" OR AS DIRECTED BY THE ENGINEER. REMOVING/REPLACING OR COVERING/UNCOVERING SIGNS WILL BE INCIDENTAL TO OTHER TRAFFIC CONTROL ITEMS.

REMOVE PAVEMENT MARKINGS NOT APPROPRIATE TO THE TRAVEL PATH IN USE.

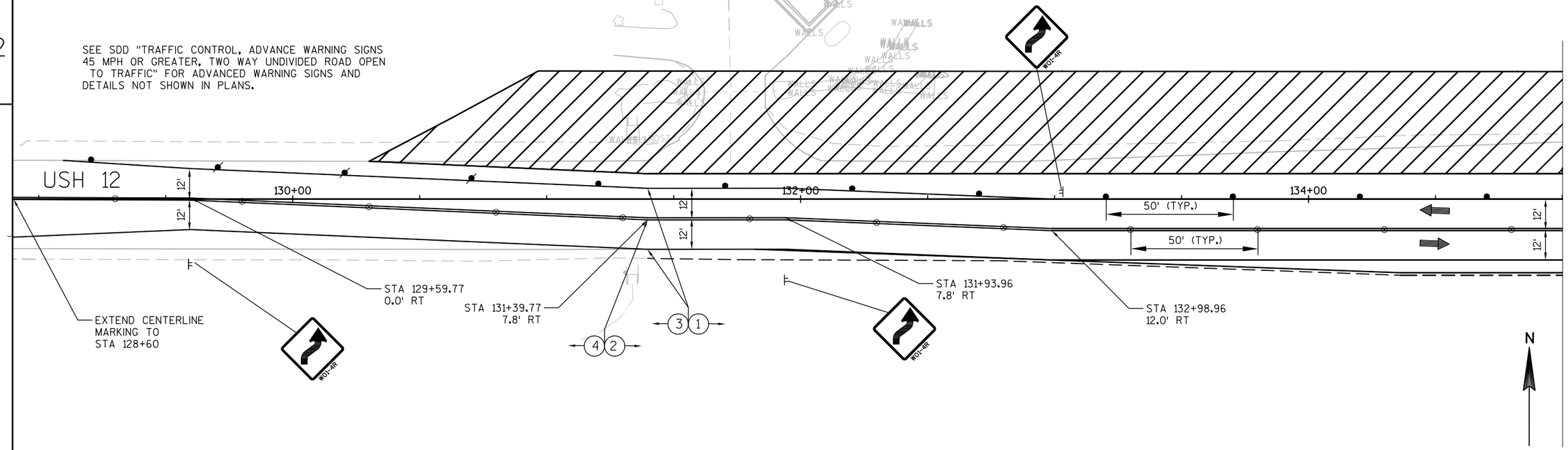
INSTALL TEMPORARY RUMBLE STRIPS AS NOTED BY THE STAGE INDICATED. MAINTAIN TEMPORARY RUMBLE STRIPS ON THE INDICATED ROADWAY APPROACHES UNTIL THE TRAFFIC SIGNALS ARE IN USE.

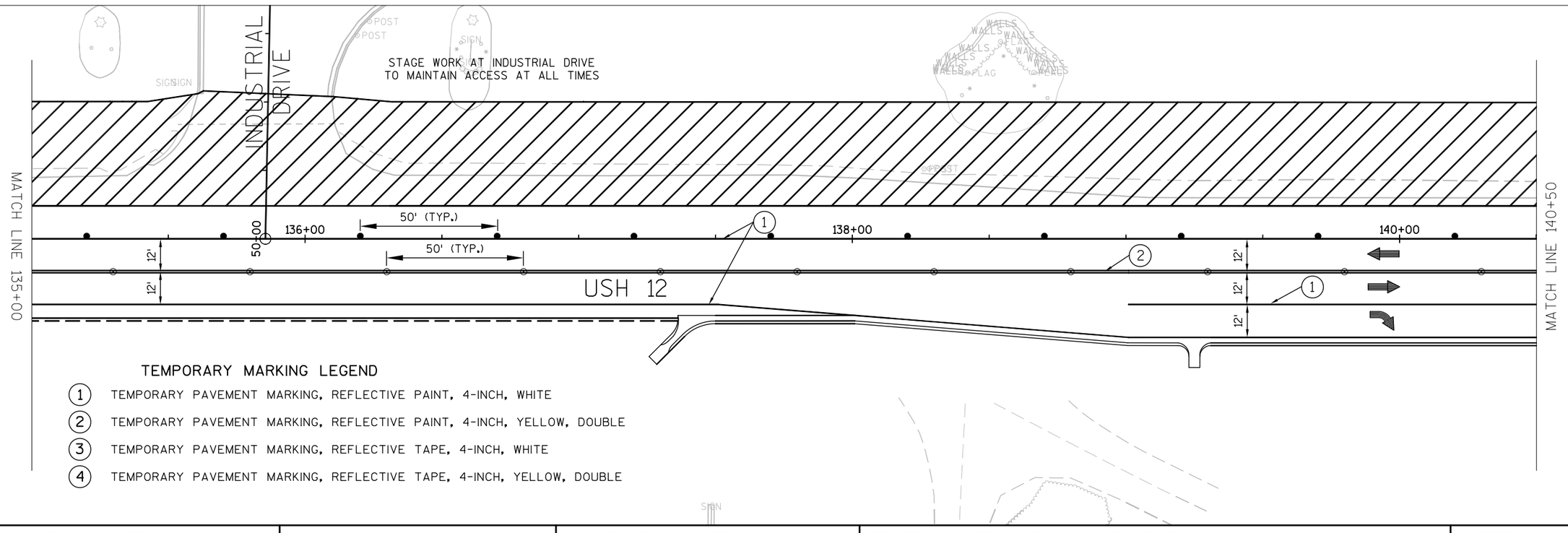
INSTALL ALL PERMANENT SIGNS AS SOON AS THEY CAN BE INSTALLED IN THE FINAL LOCATION AND ONCE THE SIGN MESSAGE IS APPLICABLE TO TRAFFIC PATTERNS. OTHER SIGNS NOT SHOWN MAY BE INSTALLED IF APPROVED BY THE ENGINEER.

MOVE, REMOVE OR INSTALL ROUTE MARKER SIGNS AS REQUIRED TO MAINTAIN NECESSARY ROUTE GUIDANCE THROUGHOUT CONSTRUCTION. REFER TO EXISTING SIGN REMOVAL PLANS FOR EXISTING ROUTE MARKER SIGNS TO BE MOVED DURING CONSTRUCTION.

PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	TRAFFIC CONTROL OVERVIEW - STAGE 3	SHEET 82	E

SEE SDD "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 MPH OR GREATER, TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC" FOR ADVANCED WARNING SIGNS AND DETAILS NOT SHOWN IN PLANS.





TEMPORARY MARKING LEGEND

1. TEMPORARY PAVEMENT MARKING, REFLECTIVE PAINT, 4-INCH, WHITE
2. TEMPORARY PAVEMENT MARKING, REFLECTIVE PAINT, 4-INCH, YELLOW, DOUBLE
3. TEMPORARY PAVEMENT MARKING, REFLECTIVE TAPE, 4-INCH, WHITE
4. TEMPORARY PAVEMENT MARKING, REFLECTIVE TAPE, 4-INCH, YELLOW, DOUBLE

PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	TRAFFIC CONTROL PLAN - STAGE 3	SHEET 83	E

FILE NAME : G:\WDOTCO\10033 (DESIGN WORK ORDERS)\WO 5 & 6 USH 12 & MAYER ROAD\CIVIL 3D\SHEETSPLAN\TRAFFIC CONTROL\025001_TC_3.DWG PLOT DATE : 12/3/2012 PLOT BY : KL ENGINEERING PLOT NAME : _____ PLOT SCALE : 1:40_XREF

MATCH LINE 138+50

142+00

50' (TYP.)

50' (TYP.)

144+00

USH 12

38+00

146+00

MATCH LINE 146+50

12'

12'

12'

16'

W3-1
36" X 36"

STOP
R1-1
36" X 36"
ALL WAY
R1-4
18" X 6"

YIELD
R1-2
36" X 31"

CTH AA/
MAYER RD

STOP
R1-1
36" X 36"
ALL WAY
R1-4
18" X 6"

MATCH LINE 146+50

148+00

50' (TYP.)

50' (TYP.)

150+00

152+00

USH 12

MATCH LINE 152+50

12'

12'

12'

W3-1
36" X 36"

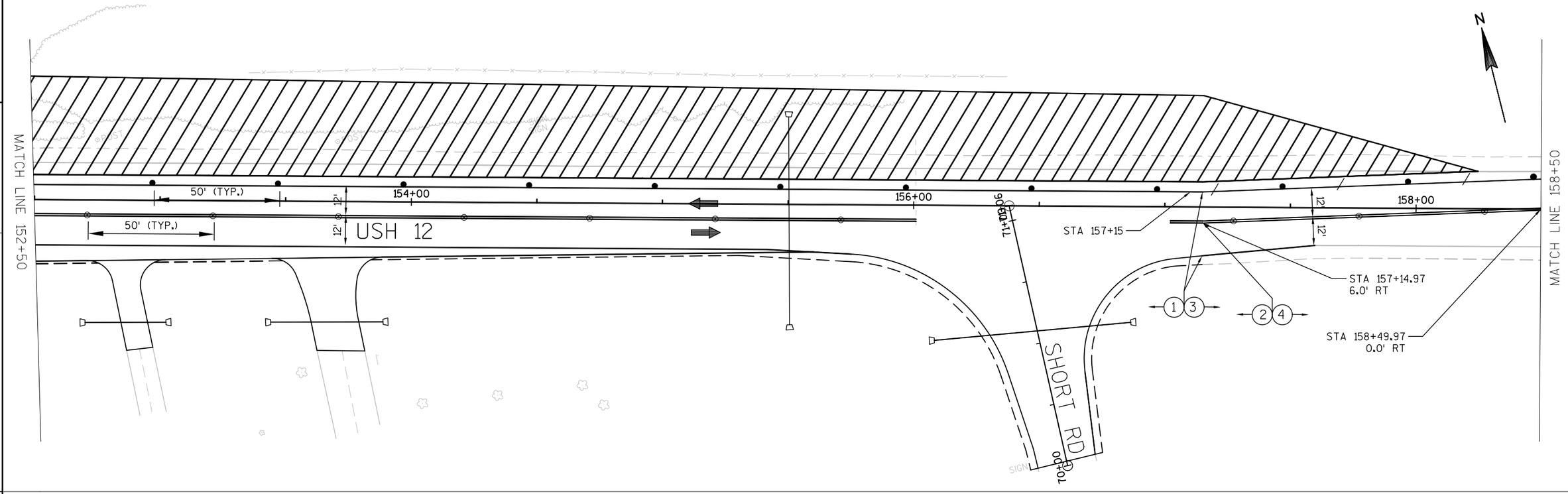
STA 150+05.45
12.0' RT

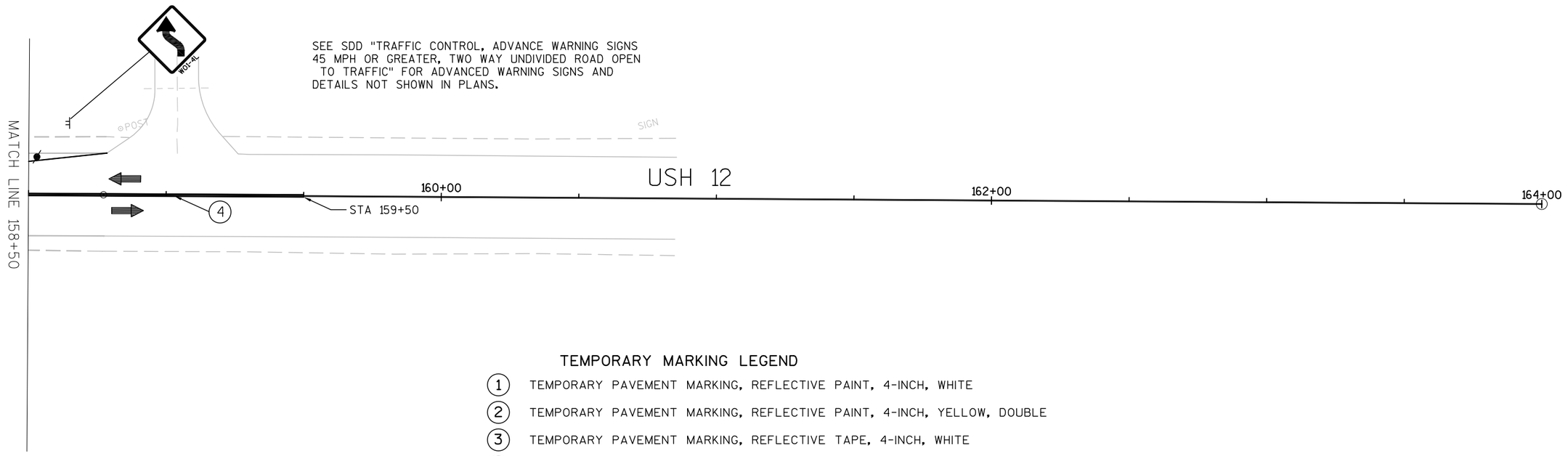
STA 151+47.76
6.0' RT

TEMPORARY MARKING LEGEND

1. TEMPORARY PAVEMENT MARKING, REFLECTIVE PAINT, 4-INCH, WHITE
2. TEMPORARY PAVEMENT MARKING, REFLECTIVE PAINT, 4-INCH, YELLOW, DOUBLE
3. TEMPORARY PAVEMENT MARKING, REFLECTIVE TAPE, 4-INCH, WHITE
4. TEMPORARY PAVEMENT MARKING, REFLECTIVE TAPE, 4-INCH, YELLOW, DOUBLE
5. TEMPORARY PAVEMENT MARKING, STOP LINE, REMOVABLE TAPE, 18-INCH

PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	TRAFFIC CONTROL PLAN - STAGE 3	SHEET 84	E





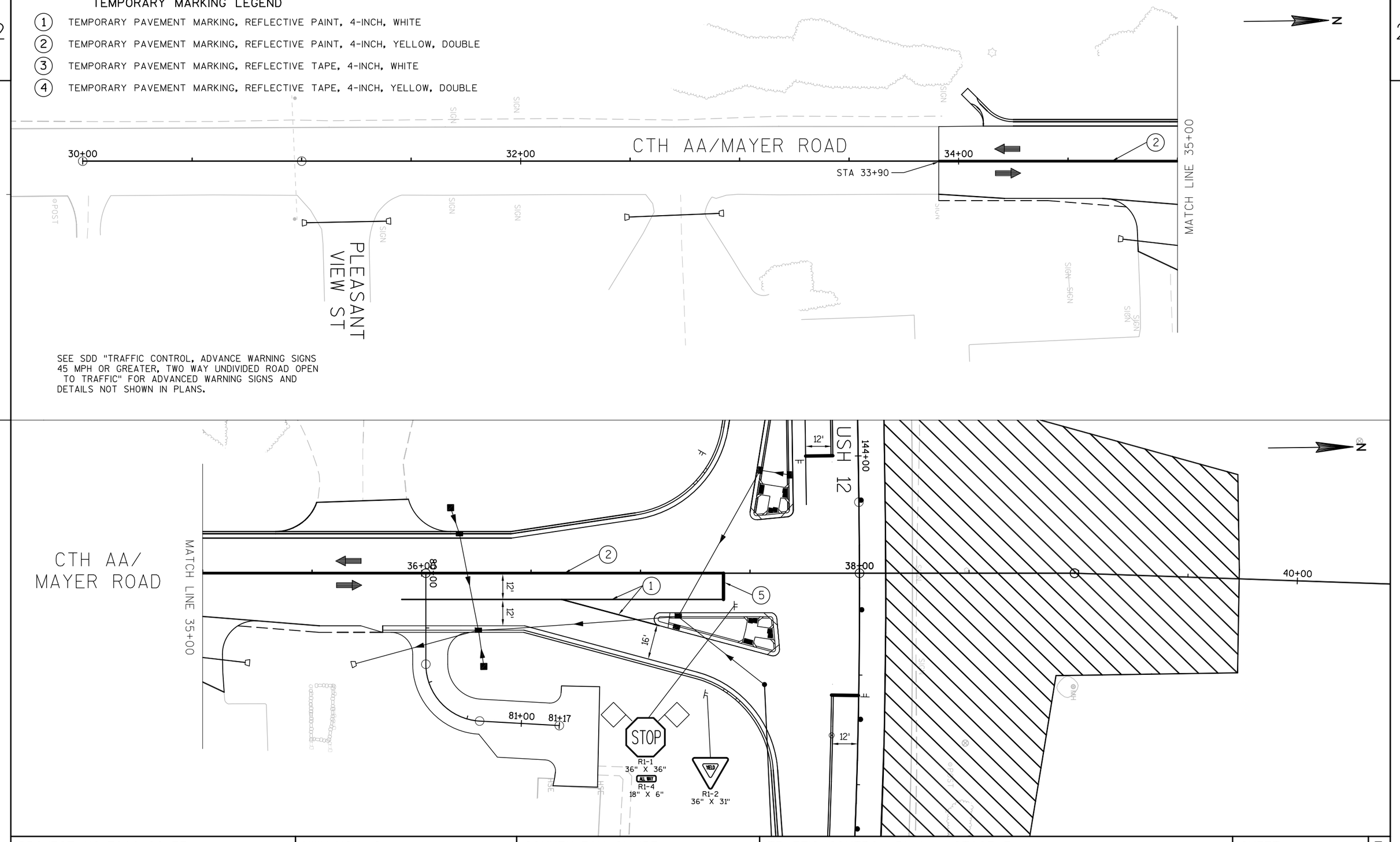
TEMPORARY MARKING LEGEND

1. TEMPORARY PAVEMENT MARKING, REFLECTIVE PAINT, 4-INCH, WHITE
2. TEMPORARY PAVEMENT MARKING, REFLECTIVE PAINT, 4-INCH, YELLOW, DOUBLE
3. TEMPORARY PAVEMENT MARKING, REFLECTIVE TAPE, 4-INCH, WHITE
4. TEMPORARY PAVEMENT MARKING, REFLECTIVE TAPE, 4-INCH, YELLOW, DOUBLE

PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	TRAFFIC CONTROL PLAN - STAGE 3	SHEET 85	E

TEMPORARY MARKING LEGEND

1. TEMPORARY PAVEMENT MARKING, REFLECTIVE PAINT, 4-INCH, WHITE
2. TEMPORARY PAVEMENT MARKING, REFLECTIVE PAINT, 4-INCH, YELLOW, DOUBLE
3. TEMPORARY PAVEMENT MARKING, REFLECTIVE TAPE, 4-INCH, WHITE
4. TEMPORARY PAVEMENT MARKING, REFLECTIVE TAPE, 4-INCH, YELLOW, DOUBLE



SEE SDD "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 MPH OR GREATER, TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC" FOR ADVANCED WARNING SIGNS AND DETAILS NOT SHOWN IN PLANS.

PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	TRAFFIC CONTROL PLAN - STAGE 3	SHEET 86	E

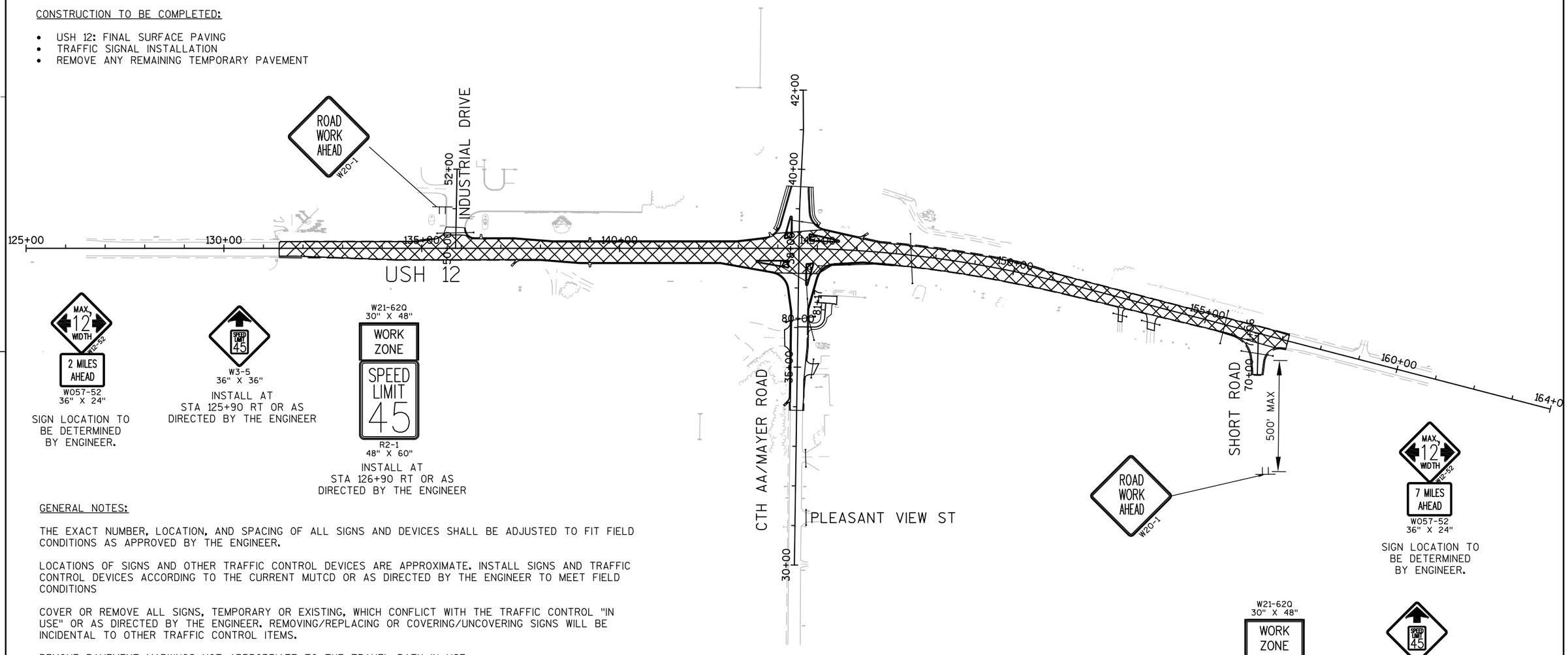
STAGE 4

MAINTENANCE OF TRAFFIC:

- USH 12 UNDER MOVING WORK OPERATIONS
- MAYER ROAD NORTH OF INTERSECTION OPENS TO TRAFFIC
- CONTINUE ALL-WAY STOP CONTROL FOR CTH AA/MAYER ROAD INTERSECTION USING TEMPORARY STOP SIGNS
- CONTINUE REDUCED SPEED OF 45 MPH ON USH 12
- SEE S.D.D. "TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)" FOR ADVANCED WARNING SIGNS AND DETAILS NOT SHOWN IN PLANS

CONSTRUCTION TO BE COMPLETED:

- USH 12: FINAL SURFACE PAVING
- TRAFFIC SIGNAL INSTALLATION
- REMOVE ANY REMAINING TEMPORARY PAVEMENT



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.

LOCATIONS OF SIGNS AND OTHER TRAFFIC CONTROL DEVICES ARE APPROXIMATE. INSTALL SIGNS AND TRAFFIC CONTROL DEVICES ACCORDING TO THE CURRENT MUTCD OR AS DIRECTED BY THE ENGINEER TO MEET FIELD CONDITIONS

COVER OR REMOVE ALL SIGNS, TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" OR AS DIRECTED BY THE ENGINEER. REMOVING/REPLACING OR COVERING/UNCOVERING SIGNS WILL BE INCIDENTAL TO OTHER TRAFFIC CONTROL ITEMS.

REMOVE PAVEMENT MARKINGS NOT APPROPRIATE TO THE TRAVEL PATH IN USE.

INSTALL TEMPORARY RUMBLE STRIPS AS NOTED BY THE STAGE INDICATED. MAINTAIN TEMPORARY RUMBLE STRIPS ON THE INDICATED ROADWAY APPROACHES UNTIL THE TRAFFIC SIGNALS ARE IN USE.

INSTALL ALL PERMANENT SIGNS AS SOON AS THEY CAN BE INSTALLED IN THE FINAL LOCATION AND ONCE THE SIGN MESSAGE IS APPLICABLE TO TRAFFIC PATTERNS. OTHER SIGNS NOT SHOWN MAY BE INSTALLED IF APPROVED BY THE ENGINEER.

MOVE, REMOVE OR INSTALL ROUTE MARKER SIGNS AS REQUIRED TO MAINTAIN NECESSARY ROUTE GUIDANCE THROUGHOUT CONSTRUCTION. REFER TO EXISTING SIGN REMOVAL PLANS FOR EXISTING ROUTE MARKER SIGNS TO BE MOVED DURING CONSTRUCTION.

PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	TRAFFIC CONTROL OVERVIEW - STAGE 4	SHEET 87	E

2

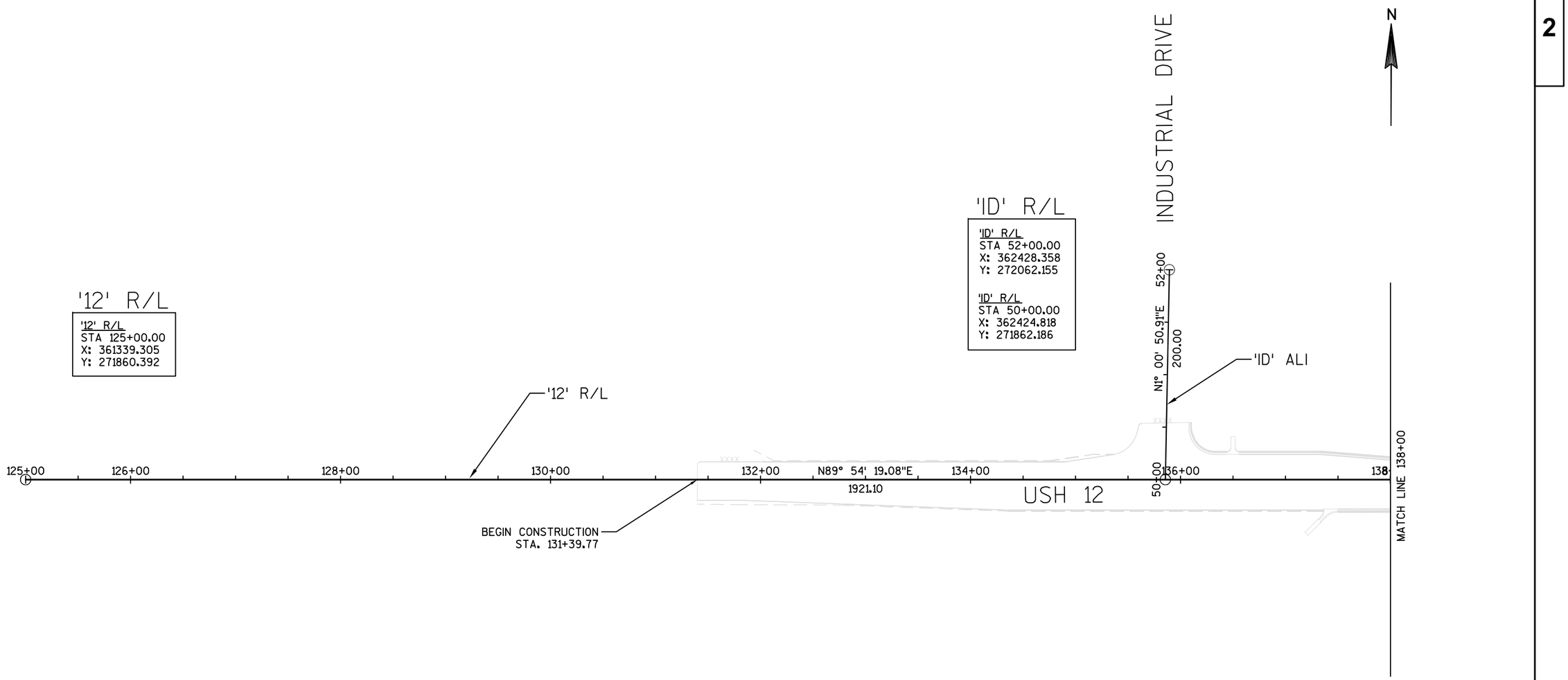
'12' R/L

'12' R/L
STA 125+00.00
X: 361339.305
Y: 271860.392

'ID' R/L

'ID' R/L
STA 52+00.00
X: 362428.358
Y: 272062.155

'ID' R/L
STA 50+00.00
X: 362424.818
Y: 271862.186



PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	ALIGNMENT DIAGRAM	SHEET 88	E

FILE NAME : G:\WDOTCO\10033 (DESIGN WORK ORDERS)\WO 5 & 6 USH 12 & MAYER ROAD\CIVIL 3D\SHEETSPLAN\ALIGNMENT DIAGRAM\027201_AD.DWG PLOT DATE : 12/3/2012 PLOT BY : KL ENGINEERING PLOT NAME : ---------- PLOT SCALE : 1:100_XREF

2

2

N

MAYER ROAD

END CONSTRUCTION
STA. 39+68.00

'12' R/L

'12' R/L
PI STA = 147+86.39
Y = 271864.17
X = 363625.69
DELTA = 14°32'05"
D = 2°00'01"
T = 365.29
L = 726.67
R = 2864.50
PC STA = 144+21.10
PT STA = 151+47.76

'12' R/L

MATCH LINE 138+00

+00 140+00 N89° 54' 19.08"E 142+00 144+00 146+00 148+00 150+00 152+00

1921.10

USH 12

MATCH LINE 153+00

S75° 33' 35.60"E
1252.24

81+17

N3° 56' 45.16"E
36.45

80+00

'BD' R/L

S89° 16' 09.50"E
41.53

'BD' R/L

'BD' R/L
STA 80+00.00
X: 363290.242
Y: 271665.397

'BD' R/L
STA 81+17.36
X: 363360.548
Y: 271725.437

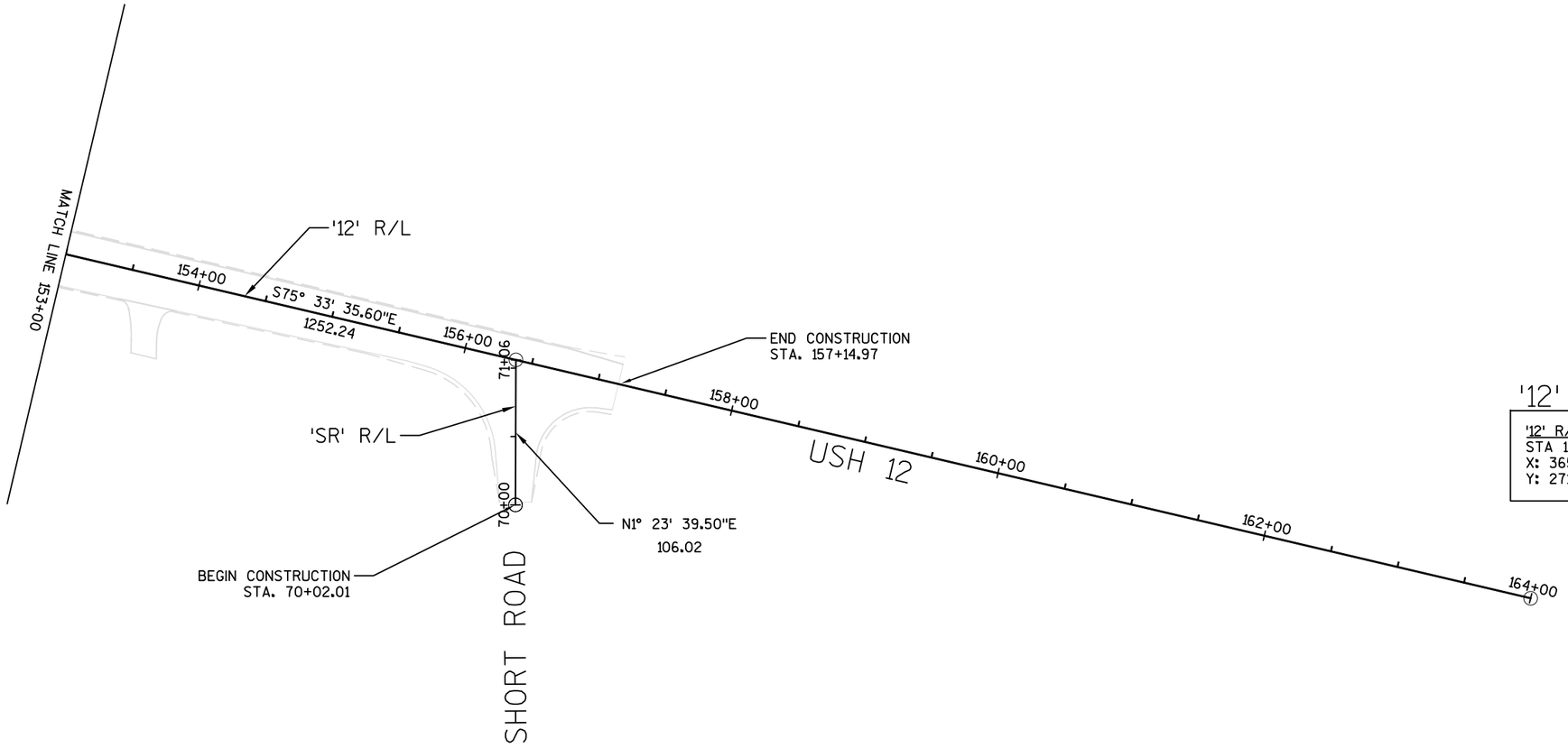
'BD' R/L
PI STA = 80+66.11
Y = 271664.55
X = 363356.35
DELTA = 86°47'05"
D = 220°22'06"
T = 24.58
L = 39.38
R = 26.00
PC STA = 80+41.53
PT STA = 80+80.91

CTH AA/MAYER ROAD

BEGIN CONSTRUCTION
STA. 33+90.93

PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	ALIGNMENT DIAGRAM	SHEET 89	E

2



'12' R/L

'12' R/L
STA 164+00.00
X: 365192.124
Y: 271460.811

'SR' R/L

'SR' R/L	'SR' R/L
STA 71+06.02	STA 70+00.00
X: 364454.189	X: 364451.609
Y: 271650.831	Y: 271544.839

PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	ALIGNMENT DIAGRAM	SHEET 90	E

FILE NAME : G:\WDOTCO\10033 (DESIGN WORK ORDERS)\WO 5 & 6 USH 12 & MAYER ROAD\CIVIL 3D\SHEETSPLAN\ALIGNMENT DIAGRAM\027201_AD.DWG PLOT DATE : 12/3/2012 PLOT BY : KL ENGINEERING PLOT NAME : ---------- PLOT SCALE : 1:100_XREF

2

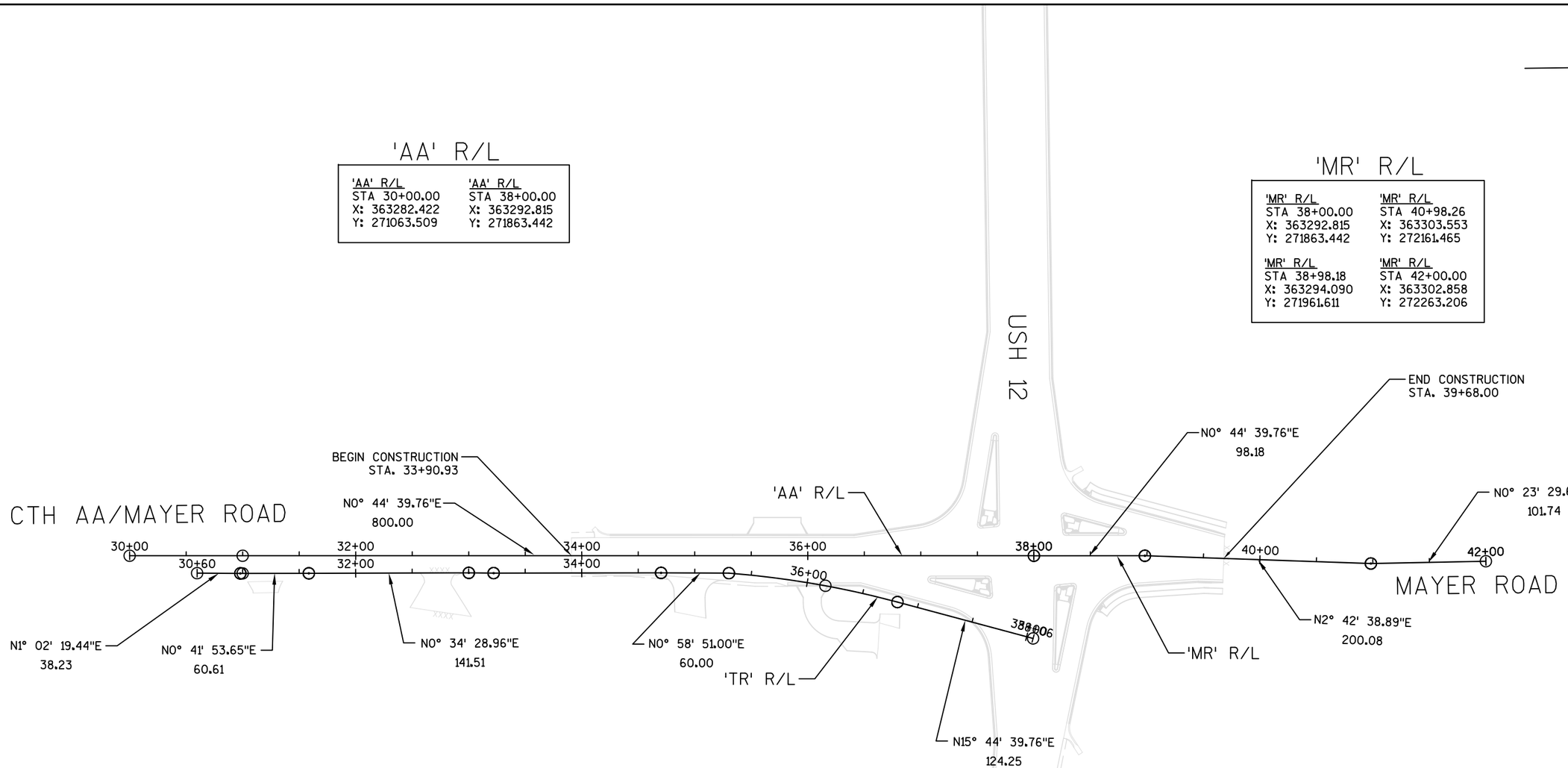
N

'AA' R/L

'AA' R/L	'AA' R/L
STA 30+00.00	STA 38+00.00
X: 363282.422	X: 363292.815
Y: 271063.509	Y: 271863.442

'MR' R/L

'MR' R/L	'MR' R/L
STA 38+00.00	STA 40+98.26
X: 363292.815	X: 363303.553
Y: 271863.442	Y: 272161.465
'MR' R/L	'MR' R/L
STA 38+98.18	STA 42+00.00
X: 363294.090	X: 363302.858
Y: 271961.611	Y: 272263.206



'TR' R/L

'TR' R/L	'TR' R/L	'TR' R/L
STA 30+59.72	STA 33+00.07	PI STA = 36+06.14
X: 363298.601	X: 363301.452	Y = 271669.10
Y: 271123.026	Y: 271363.355	X = 363311.57
		DELTA = 10°33'36"
'TR' R/L	'TR' R/L	D = 6°58'13"
STA 30+97.95	STA 33+22.05	T = 75.97
X: 363299.264	X: 363301.956	L = 151.50
Y: 271161.247	Y: 271385.334	R = 822.00
		PC STA = 35+30.18
		PT STA = 36+81.68
'TR' R/L	'TR' R/L	'TR' R/L
STA 31+58.56	STA 34+70.18	STA 38+05.93
X: 363300.033	X: 363303.680	X: 363365.899
Y: 271221.856	Y: 271533.454	Y: 271861.798

PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	ALIGNMENT DIAGRAM	SHEET 91	E

FILE NAME : G:\WDOTCO\10033 (DESIGN WORK ORDERS)\WO 5 & 6 USH 12 & MAYER ROAD\CIVIL 3D\SHEETSPLAN\ALIGNMENT DIAGRAM\027201_AD.DWG PLOT DATE : 12/3/2012 PLOT BY : KL ENGINEERING PLOT NAME : ---------- PLOT SCALE : 1:100_XREF

'NWB' R/L

'NWB' R/L	'NWB' R/L
STA 38+14.01	STA 39+00.92
X: 363252.552	X: 363276.135
Y: 271881.554	Y: 271965.206

'NWC' R/L

'NWC' R/L	'NWC' R/L	'NWC' R/L
STA 142+55.11	PI STA = 144+00.31	STA 145+38.34
X: 363094.389	Y = 271891.86	X: 363278.414
Y: 271879.284	X = 363238.83	Y: 272032.252
	DELTA = 67°18'48"	
'NWC' R/L	D = 114°35'30"	'NWC' R/L
STA 142+96.86	T = 33.29	STA 146+68.60
X: 363136.139	L = 58.74	X: 363284.574
Y: 271879.353	R = 50.00	Y: 272162.364
	PC STA = 143+67.02	
	PT STA = 144+25.76	

'NEC' R/L

'NEC' R/L	'NEC' R/L
STA 142+40.93	PI STA = 144+84.50
X: 363322.532	Y = 271917.30
Y: 272160.567	X = 363320.11
	DELTA = 74°32'22"
'NEC' R/L	D = 114°35'30"
STA 143+93.20	T = 38.05
X: 363315.330	L = 65.05
Y: 272008.469	R = 50.00
	PC STA = 144+46.45
	PT STA = 145+11.50
'NEC' R/L	'NEC' R/L
STA 146+54.30	PI STA = 147+39.67
X: 363496.694	Y = 271871.43
Y: 271878.274	X = 363581.80
	DELTA = 3°23'11"
'NEC' R/L	D = 1°59'02"
STA 148+25.00	T = 85.38
X: 363666.345	L = 170.70
Y: 271859.571	R = 2888.13
	PC STA = 146+54.30
	PT STA = 148+25.00

'NEB' R/L

'NEB' R/L	'NEB' R/L
STA 144+69.28	STA 145+88.38
X: 363312.325	X: 363428.618
Y: 271902.629	Y: 271876.931

'SWB' R/L

'SWB' R/L	'SWB' R/L
STA 143+13.12	STA 144+36.64
X: 363152.476	X: 363274.146
Y: 271833.389	Y: 271812.103

'SWC' R/L

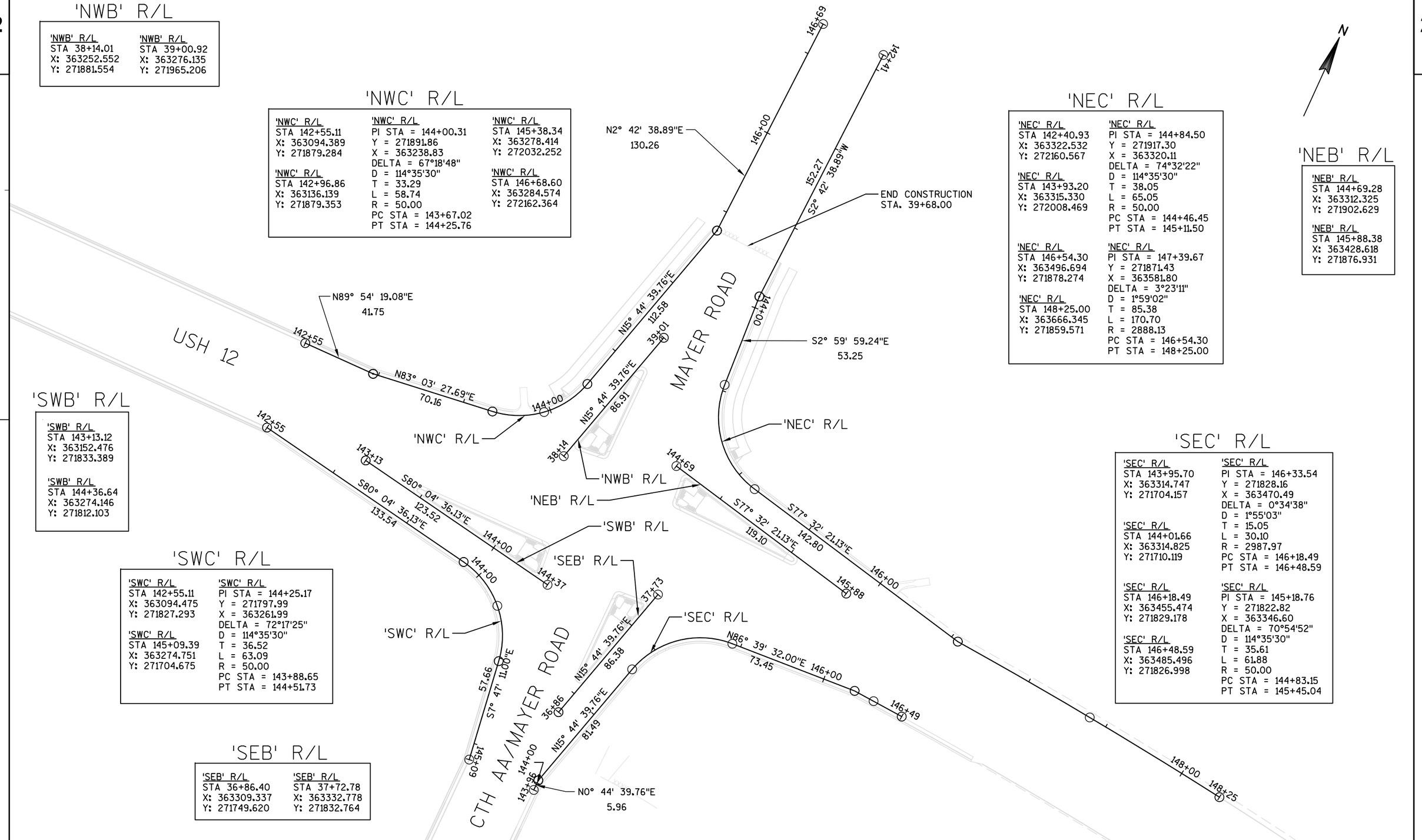
'SWC' R/L	'SWC' R/L
STA 142+55.11	PI STA = 144+25.17
X: 363094.475	Y = 271797.99
Y: 271827.293	X = 363261.99
	DELTA = 72°17'25"
'SWC' R/L	D = 114°35'30"
STA 145+09.39	T = 36.52
X: 363274.751	L = 63.09
Y: 271704.675	R = 50.00
	PC STA = 143+88.65
	PT STA = 144+51.73

'SEB' R/L

'SEB' R/L	'SEB' R/L
STA 36+86.40	STA 37+72.78
X: 363309.337	X: 363332.778
Y: 271749.620	Y: 271832.764

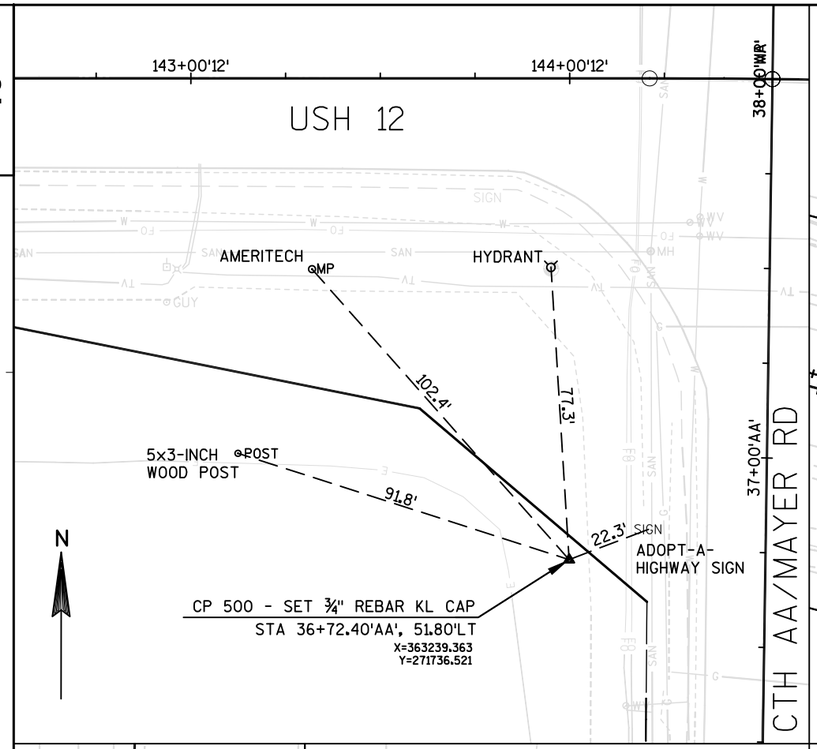
'SEC' R/L

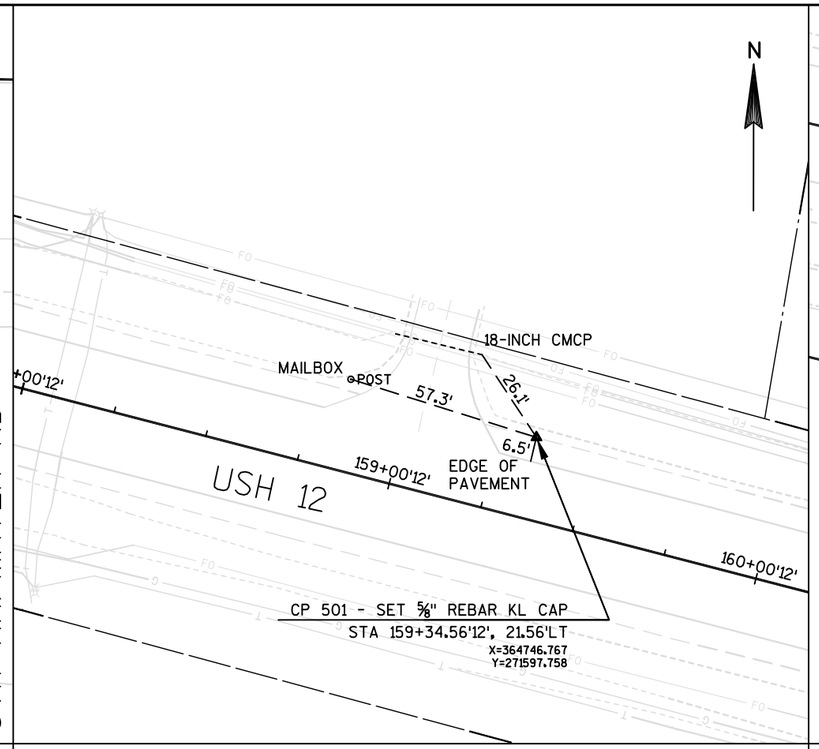
'SEC' R/L	'SEC' R/L
STA 143+95.70	PI STA = 146+33.54
X: 363314.747	Y = 271828.16
Y: 271704.157	X = 363470.49
	DELTA = 0°34'38"
	D = 1°55'03"
'SEC' R/L	T = 15.05
STA 144+01.66	L = 30.10
X: 363314.825	R = 2987.97
Y: 271710.119	PC STA = 146+18.49
	PT STA = 146+48.59
'SEC' R/L	'SEC' R/L
STA 146+18.49	PI STA = 145+18.76
X: 363455.474	Y = 271822.82
Y: 271829.178	X = 363346.60
	DELTA = 70°54'52"
'SEC' R/L	D = 114°35'30"
STA 146+48.59	T = 35.61
X: 363485.496	L = 61.88
Y: 271826.998	R = 50.00
	PC STA = 144+83.15
	PT STA = 145+45.04

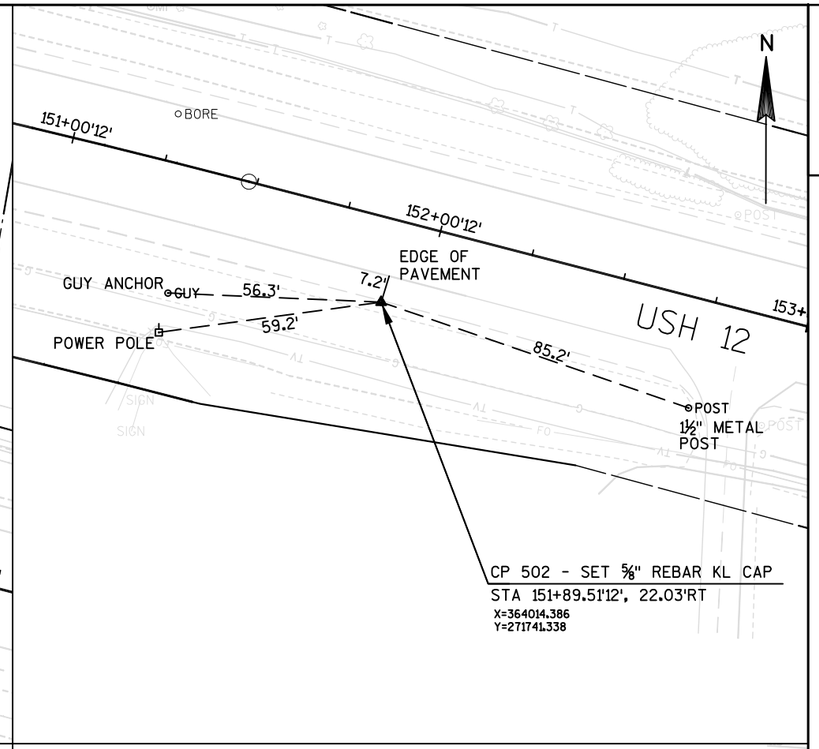


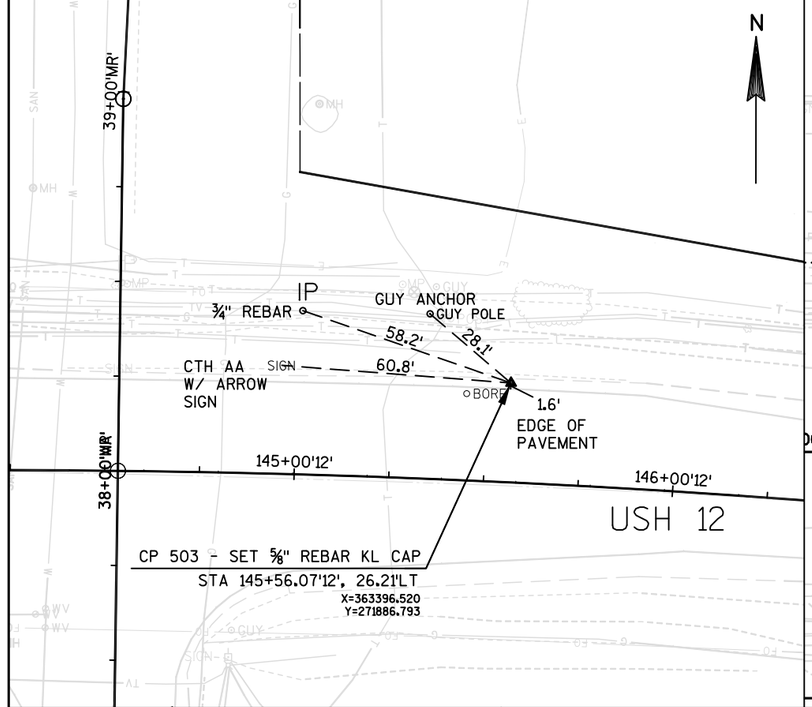
PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	ALIGNMENT DIAGRAM	SHEET 92	E

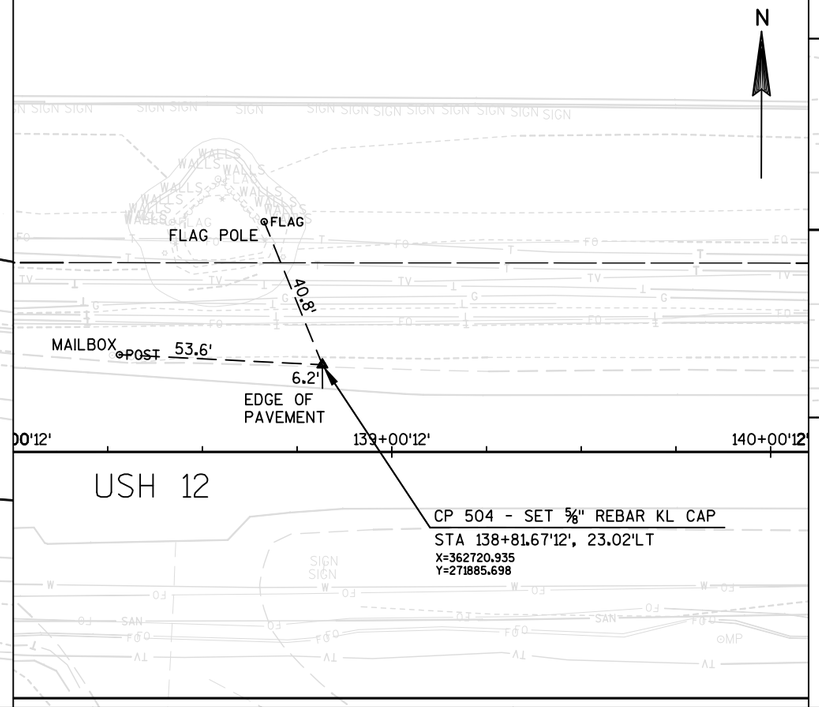
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WISDOT/CADDS SHEET 42

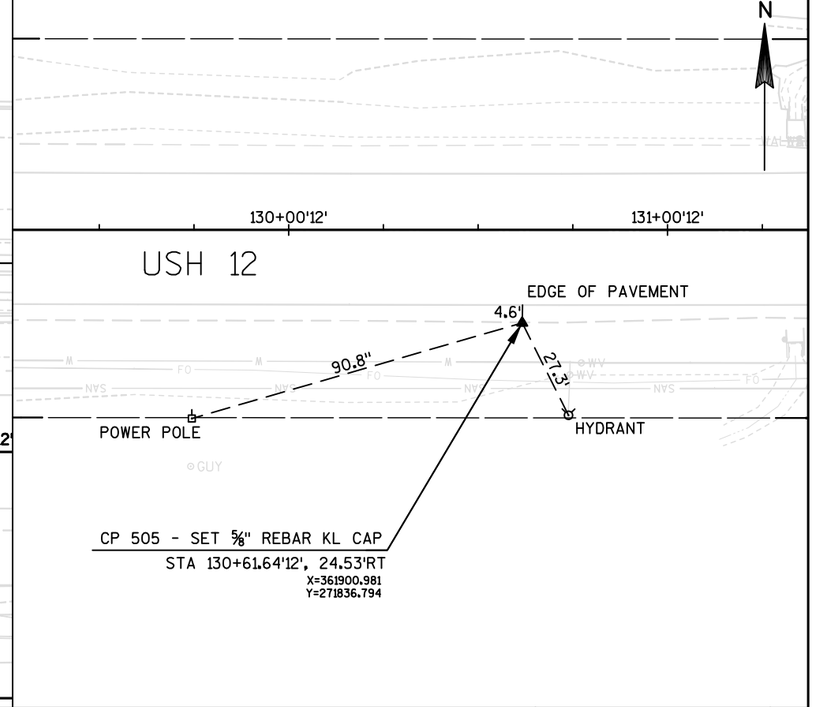








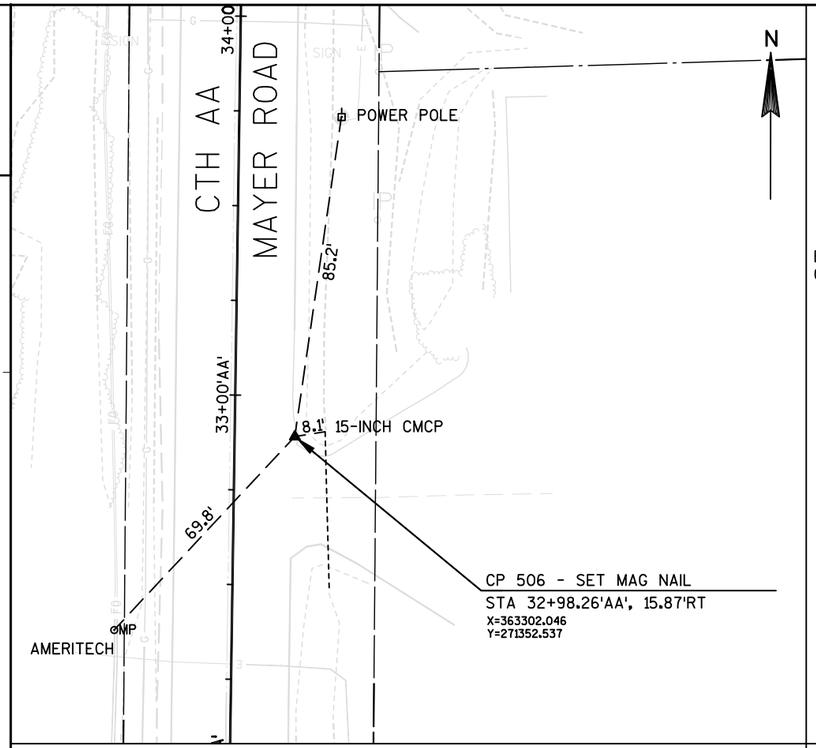


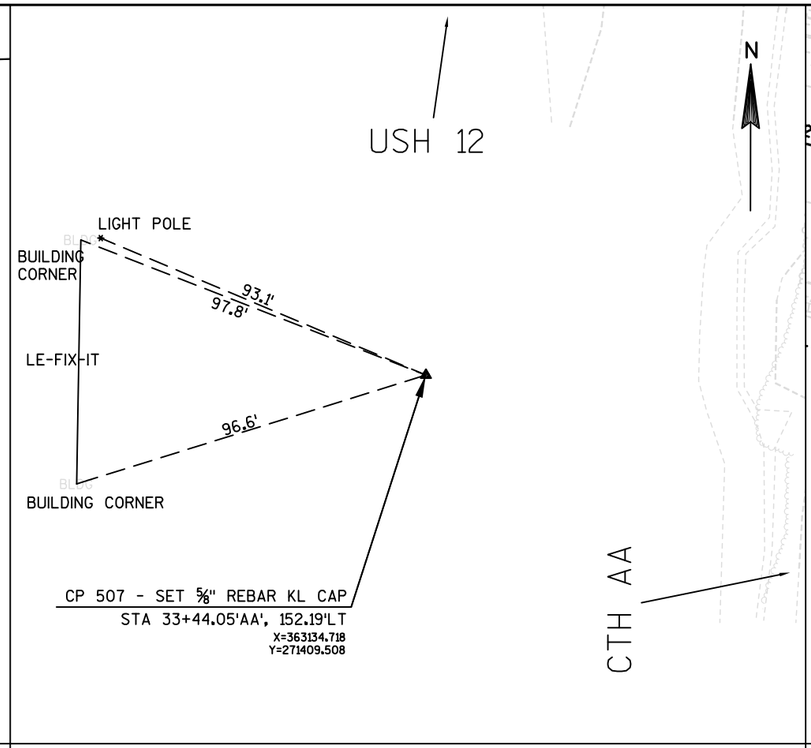


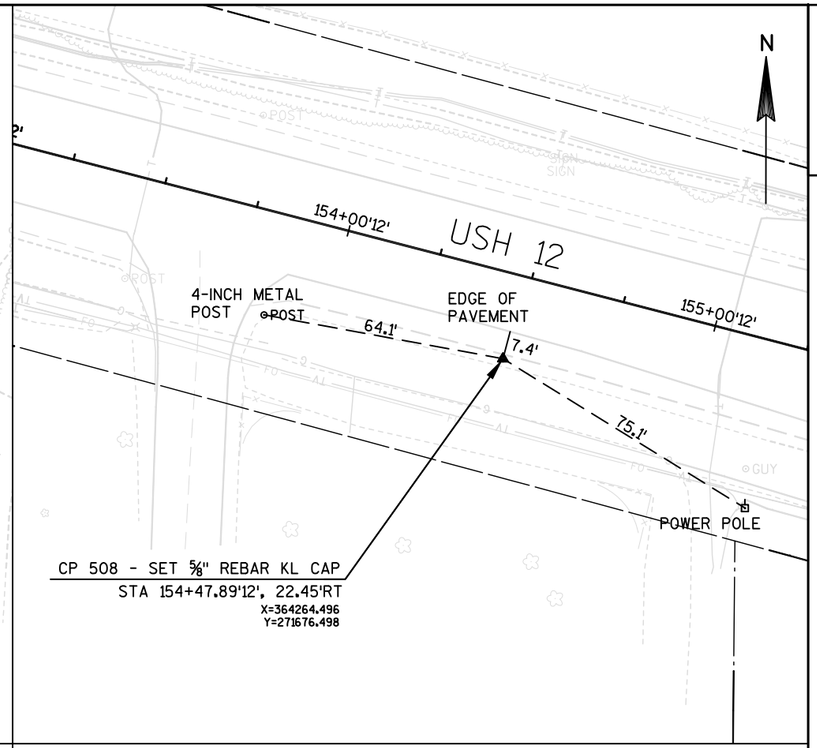
PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	CONTROL POINT DETAILS	SHEET 93	E

FILE NAME : G:\WDOTCO\10033 (DESIGN WORK ORDERS)\WO 5 & 6 USH 12 & MAYER ROAD\CIVIL 3D\SHEETSPLAN\CONTROL POINTS\021002_CP.DWG PLOT DATE : 12/3/2012 PLOT BY : KL ENGINEERING PLOT NAME : _____ PLOT SCALE : 1:40_XREF

WISDOT/CADDS SHEET 42







2

PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	CONTROL POINT DETAILS	SHEET 94	E

FILE NAME : G:\WDOTCO\10033 (DESIGN WORK ORDERS)\WO 5 & 6 USH 12 & MAYER ROAD\CIVIL 3D\SHEETSPLAN\CONTROL POINTS\021002_CP.DWG PLOT DATE : 12/3/2012 PLOT BY : KL ENGINEERING PLOT NAME : _____ PLOT SCALE : 1:40_XREF

DATE 10DEC12 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	7080-00-73 QUANTITY
0010	201.0120	CLEARING	ID	50.000	50.000
0020	201.0220	GRUBBING	ID	50.000	50.000
0030	203.0100	REMOVING SMALL PIPE CULVERTS	EACH	10.000	10.000
0040	204.0100	REMOVING PAVEMENT	SY	50.000	50.000
0050	204.0110	REMOVING ASPHALTIC SURFACE	SY	105.000	105.000
0060	204.0115	REMOVING ASPHALTIC SURFACE BUTT JOINTS	SY	65.000	65.000
0070	204.0120	REMOVING ASPHALTIC SURFACE MILLING	SY	6,400.000	6,400.000
0080	204.0270	ABANDONING CULVERT PIPES	EACH	2.000	2.000
0090	205.0100	EXCAVATION COMMON	CY	11,400.000	11,400.000
0100	208.0100	BORROW	CY	1,760.000	1,760.000
0110	211.0100	PREPARE FOUNDATION FOR ASPHALTIC PAVING (PROJECT) 01. 7080-00-73	LS	1.000	1.000
0120	213.0100	FINISHING ROADWAY (PROJECT) 01. 7080-00-73	EACH	1.000	1.000
0130	305.0110	BASE AGGREGATE DENSE 3/4-INCH	TON	600.000	600.000
0140	305.0120	BASE AGGREGATE DENSE 1 1/4-INCH	TON	13,000.000	13,000.000
0150	312.0110	SELECT CRUSHED MATERIAL	TON	560.000	560.000
0160	455.0135	ASPHALTIC MATERIAL PG58-34P	TON	175.000	175.000
0170	455.0140	ASPHALTIC MATERIAL PG64-28P	TON	120.000	120.000
0180	455.0605	TACK COAT	GAL	835.000	835.000
0190	460.1110	HMA PAVEMENT TYPE E-10	TON	5,350.000	5,350.000
0200	460.2000	INCENTIVE DENSITY HMA PAVEMENT	DOL	3,424.000	3,424.000
0210	465.0120	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES	TON	115.000	115.000
0220	465.0125	ASPHALTIC SURFACE TEMPORARY	TON	840.000	840.000
0230	465.0315	ASPHALTIC FLUMES	SY	93.000	93.000
0240	520.0118	CULVERT PIPE CLASS III 18-INCH	LF	146.000	146.000
0250	520.1018	APRON ENDWALLS FOR CULVERT PIPE 18-INCH	EACH	4.000	4.000
0260	520.4018	CULVERT PIPE TEMPORARY 18-INCH	LF	250.000	250.000
0270	520.4024	CULVERT PIPE TEMPORARY 24-INCH	LF	50.000	50.000
0280	520.4030	CULVERT PIPE TEMPORARY 30-INCH	LF	70.000	70.000
0290	522.0124	CULVERT PIPE REINFORCED CONCRETE CLASS III 24-INCH	LF	36.000	36.000
0300	522.0130	CULVERT PIPE REINFORCED CONCRETE CLASS III 30-INCH	LF	134.000	134.000
0310	522.1015	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 15-INCH	EACH	1.000	1.000
0320	522.1018	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 18-INCH	EACH	1.000	1.000
0330	522.1024	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 24-INCH	EACH	4.000	4.000
0340	522.1030	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 30-INCH	EACH	4.000	4.000
0350	523.0119	CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-III 19X30-INCH	LF	48.000	48.000
0360	523.0124	CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-III 24X38-INCH	LF	24.000	24.000
0370	523.0519	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL 19X30-INCH	EACH	4.000	4.000
0380	523.0524	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL 24X38-INCH	EACH	2.000	2.000
0390	601.0411	CONCRETE CURB & GUTTER 30-INCH TYPE D	LF	20.000	20.000

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DATE 10DEC12 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	7080-00-73 QUANTITY
0400	601.0415	CONCRETE CURB & GUTTER 6-INCH SLOPED 30-INCH TYPE J	LF	531.000	531.000
0410	601.0557	CONCRETE CURB AND GUTTER 6-INCH SLOPED 36-INCH TYPE D	LF	2,475.000	2,475.000
0420	601.0600	CONCRETE CURB PEDESTRIAN	LF	108.000	108.000
0430	602.0405	CONCRETE SIDEWALK 4-INCH	SF	3,116.000	3,116.000
0440	602.0515	CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA	SF	112.000	112.000
0450	603.8000	CONCRETE BARRIER TEMPORARY PRECAST DELIVERED	LF	790.000	790.000
0460	603.8125	CONCRETE BARRIER TEMPORARY PRECAST INSTALLED	LF	790.000	790.000
0470	606.0200	RIPRAP MEDIUM	CY	30.000	30.000
0480	608.0312	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 12-INCH	LF	600.000	600.000
0490	608.0315	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 15-INCH	LF	60.000	60.000
0500	608.0318	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 18-INCH	LF	210.000	210.000
0510	611.0530	MANHOLE COVERS TYPE J	EACH	3.000	3.000
0520	611.0627	INLET COVERS TYPE HM	EACH	9.000	9.000
0530	611.0630	INLET COVERS TYPE HM-GJ	EACH	4.000	4.000
0540	611.0642	INLET COVERS TYPE MS	EACH	2.000	2.000
0550	611.2004	MANHOLES 4-FT DIAMETER	EACH	3.000	3.000
0560	611.2006	MANHOLES 6-FT DIAMETER	EACH	1.000	1.000
0570	611.3004	INLETS 4-FT DIAMETER	EACH	1.000	1.000
0580	611.3230	INLETS 2X3-FT	EACH	11.000	11.000
0590	611.3901	INLETS MEDIAN 1 GRATE	EACH	2.000	2.000
0600	611.9800.S	PIPE GRATES	EACH	10.000	10.000
0610	614.0905	CRASH CUSHIONS TEMPORARY	EACH	3.000	3.000
0620	616.0700.S	FENCE SAFETY	LF	500.000	500.000
0630	618.0100	MAINTENANCE AND REPAIR OF HAUL ROADS (PROJECT) 01. 7080-00-73	EACH	1.000	1.000
0640	619.1000	MOBILIZATION	EACH	1.000	1.000
0650	620.0300	CONCRETE MEDIAN SLOPED NOSE	SF	272.000	272.000
0660	624.0100	WATER	MGAL	240.000	240.000
0670	625.0500	SALVAGED TOPSOIL	SY	13,700.000	13,700.000
0680	627.0200	MULCHING	SY	8,750.000	8,750.000
0690	628.1104	EROSION BALES	EACH	30.000	30.000
0700	628.1504	SILT FENCE	LF	1,500.000	1,500.000
0710	628.1520	SILT FENCE MAINTENANCE	LF	750.000	750.000
0720	628.1905	MOBILIZATIONS EROSION CONTROL	EACH	6.000	6.000
0730	628.1910	MOBILIZATIONS EMERGENCY EROSION CONTROL	EACH	3.000	3.000
0740	628.2004	EROSION MAT CLASS I TYPE B	SY	5,050.000	5,050.000
0750	628.7005	INLET PROTECTION TYPE A	EACH	18.000	18.000
0760	628.7010	INLET PROTECTION TYPE B	EACH	3.000	3.000
0770	628.7015	INLET PROTECTION TYPE C	EACH	15.000	15.000
0780	628.7504	TEMPORARY DITCH CHECKS	LF	110.000	110.000
0790	628.7555	CULVERT PIPE CHECKS	EACH	12.000	12.000
0800	628.7560	TRACKING PADS	EACH	2.000	2.000
0810	628.7560.S	STONE OR ROCK DITCH CHECKS	CY	5.000	5.000
0820	629.0210	FERTILIZER TYPE B	CWT	9.000	9.000
0830	630.0130	SEEDING MIXTURE NO. 30	LB	150.000	150.000
0840	630.0140	SEEDING MIXTURE NO. 40	LB	97.000	97.000
0850	630.0200	SEEDING TEMPORARY	LB	88.000	88.000

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DATE 10DEC12 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	7080-00-73 QUANTITY
0860	631.0300	SOD WATER	MGAL	1.000	1.000
0870	631.1000	SOD LAWN	SY	40.000	40.000
0880	633.5200	MARKERS CULVERT END	EACH	6.000	6.000
0890	634.0612	POSTS WOOD 4X6-INCH X 12-FT	EACH	4.000	4.000
0900	634.0614	POSTS WOOD 4X6-INCH X 14-FT	EACH	3.000	3.000
0910	634.0616	POSTS WOOD 4X6-INCH X 16-FT	EACH	19.000	19.000
0920	637.0202	SIGNS REFLECTIVE TYPE II	SF	188.500	188.500
0930	637.0402	SIGNS REFLECTIVE FOLDING TYPE II	SF	20.720	20.720
0940	637.0620	SIGN FLAGS PERMANENT TYPE II	EACH	2.000	2.000
0950	638.2102	MOVING SIGNS TYPE II	EACH	25.000	25.000
0960	638.2602	REMOVING SIGNS TYPE II	EACH	6.000	6.000
0970	638.3000	REMOVING SMALL SIGN SUPPORTS	EACH	9.000	9.000
0980	638.4000	MOVING SMALL SIGN SUPPORTS	EACH	16.000	16.000
0990	642.5001	FIELD OFFICE TYPE B	EACH	1.000	1.000
1000	643.0100	TRAFFIC CONTROL (PROJECT) 01. 7080-00-73	EACH	1.000	1.000
1010	643.0300	TRAFFIC CONTROL DRUMS	DAY	6,780.000	6,780.000
1020	643.0420	TRAFFIC CONTROL BARRICADES TYPE III	DAY	560.000	560.000
1030	643.0500	TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER POSTS	EACH	220.000	220.000
1040	643.0600	TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER BASES	EACH	220.000	220.000
1050	643.0715	TRAFFIC CONTROL WARNING LIGHTS TYPE C	DAY	1,320.000	1,320.000
1060	643.0900	TRAFFIC CONTROL SIGNS	DAY	3,300.000	3,300.000
1070	643.1050	TRAFFIC CONTROL SIGNS PCMS	DAY	50.000	50.000
1080	646.0106	PAVEMENT MARKING EPOXY 4-INCH	LF	18,160.000	18,160.000
1090	646.0126	PAVEMENT MARKING EPOXY 8-INCH	LF	3,920.000	3,920.000
1100	646.0600	REMOVING PAVEMENT MARKINGS	LF	9,400.000	9,400.000
1110	647.0166	PAVEMENT MARKING ARROWS EPOXY TYPE 2	EACH	7.000	7.000
1120	647.0176	PAVEMENT MARKING ARROWS EPOXY TYPE 3	EACH	3.000	3.000
1130	647.0356	PAVEMENT MARKING WORDS EPOXY	EACH	4.000	4.000
1140	647.0566	PAVEMENT MARKING STOP LINE EPOXY 18-INCH	LF	140.000	140.000
1150	647.0606	PAVEMENT MARKING ISLAND NOSE EPOXY	EACH	4.000	4.000
1160	647.0726	PAVEMENT MARKING DIAGONAL EPOXY 12-INCH	LF	340.000	340.000
1170	648.0100	LOCATING NO-PASSING ZONES	MI	3.000	3.000
1180	649.0200	TEMPORARY PAVEMENT MARKING REFLECTIVE PAINT 4-INCH	LF	33,200.000	33,200.000
1190	649.0300	TEMPORARY PAVEMENT MARKING REFLECTIVE TAPE 4-INCH	LF	11,900.000	11,900.000
1200	649.1200	TEMPORARY PAVEMENT MARKING STOP LINE REMOVABLE TAPE 18-INCH	LF	160.000	160.000
1210	650.4000	CONSTRUCTION STAKING STORM SEWER	EACH	20.000	20.000
1220	650.4500	CONSTRUCTION STAKING SUBGRADE	LF	3,188.000	3,188.000
1230	650.5000	CONSTRUCTION STAKING BASE	LF	3,188.000	3,188.000
1240	650.5500	CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER	LF	3,114.000	3,114.000
1250	650.6000	CONSTRUCTION STAKING PIPE CULVERTS	EACH	4.000	4.000
1260	650.8000	CONSTRUCTION STAKING RESURFACING REFERENCE	LF	3,188.000	3,188.000
1270	650.8500	CONSTRUCTION STAKING ELECTRICAL INSTALLATIONS (PROJECT) 01. 7080-00-73	LS	1.000	1.000
1280	650.9910	CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (PROJECT) 01. 7080-00-73	LS	1.000	1.000
1290	650.9920	CONSTRUCTION STAKING SLOPE STAKES	LF	3,188.000	3,188.000
1300	652.0225	CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH	LF	3,448.000	3,448.000

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DATE 10DEC12 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	7080-00-73 QUANTITY
1310	652.0235	CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH	LF	1,013.000	1,013.000
1320	652.0615	CONDUIT SPECIAL 3-INCH	LF	383.000	383.000
1330	652.0800	CONDUIT LOOP DETECTOR	LF	1,282.000	1,282.000
1340	652.0900	LOOP DETECTOR SLOTS	LF	616.000	616.000
1350	653.0135	PULL BOXES STEEL 24X36-INCH	EACH	13.000	13.000
1360	653.0140	PULL BOXES STEEL 24X42-INCH	EACH	10.000	10.000
1370	654.0101	CONCRETE BASES TYPE 1	EACH	12.000	12.000
1380	654.0102	CONCRETE BASES TYPE 2	EACH	4.000	4.000
1390	654.0105	CONCRETE BASES TYPE 5	EACH	4.000	4.000
1400	654.0217	CONCRETE CONTROL CABINET BASES TYPE 9 SPECIAL	EACH	1.000	1.000
1410	655.0220	CABLE TRAFFIC SIGNAL 4-14 AWG	LF	2,298.000	2,298.000
1420	655.0230	CABLE TRAFFIC SIGNAL 5-14 AWG	LF	1,701.000	1,701.000
1430	655.0240	CABLE TRAFFIC SIGNAL 7-14 AWG	LF	1,039.000	1,039.000
1440	655.0260	CABLE TRAFFIC SIGNAL 12-14 AWG	LF	1,265.000	1,265.000
1450	655.0305	CABLE TYPE UF 2-12 AWG GROUNDED	LF	1,986.000	1,986.000
1460	655.0515	ELECTRICAL WIRE TRAFFIC SIGNALS 10 AWG	LF	5,450.000	5,450.000
1470	655.0610	ELECTRICAL WIRE LIGHTING 12 AWG	LF	1,152.000	1,152.000
1480	655.0700	LOOP DETECTOR LEAD IN CABLE	LF	5,214.000	5,214.000
1490	655.0800	LOOP DETECTOR WIRE	LF	4,892.000	4,892.000
1500	656.0200	ELECTRICAL SERVICE METER BREAKER PEDESTAL (LOCATION) 01. CB1	LS	1.000	1.000
1510	657.0100	PEDESTAL BASES	EACH	12.000	12.000
1520	657.0255	TRANSFORMER BASES BREAKAWAY 11 1/2-INCH BOLT CIRCLE	EACH	8.000	8.000
1530	657.0310	POLES TYPE 3	EACH	4.000	4.000
1540	657.0322	POLES TYPE 5-ALUMINUM	EACH	4.000	4.000
1550	657.0405	TRAFFIC SIGNAL STANDARDS ALUMINUM 3.5-FT	EACH	6.000	6.000
1560	657.0420	TRAFFIC SIGNAL STANDARDS ALUMINUM 13-FT	EACH	2.000	2.000
1570	657.0425	TRAFFIC SIGNAL STANDARDS ALUMINUM 15-FT	EACH	4.000	4.000
1580	657.0595	TROMBONE ARMS 25-FT	EACH	4.000	4.000
1590	657.0714	LUMINAIRE ARMS TRUSS TYPE 4-INCH CLAMP 15-FT	EACH	4.000	4.000
1600	657.0715	LUMINAIRE ARMS TRUSS TYPE 4 1/2-INCH CLAMP 15-FT	EACH	4.000	4.000
1610	658.0190.S	TRAFFIC SIGNAL FACE - LED STATE FURNISHED	EACH	16.000	16.000
1620	659.0115	LUMINAIRES UTILITY HPS 150 WATTS	EACH	4.000	4.000
1630	659.0125	LUMINAIRES UTILITY HPS 250 WATTS	EACH	4.000	4.000
1640	690.0150	SAWING ASPHALT	LF	6,110.000	6,110.000
1650	690.0250	SAWING CONCRETE	LF	100.000	100.000
1660	ASP.1T0A	ON-THE-JOB TRAINING APPRENTICE AT $5. 00/HR	HRS	1,200.000	1,200.000
1670	ASP.1T0G	ON-THE-JOB TRAINING GRADUATE AT $5.00/HR	HRS	300.000	300.000
1680	SPV.0090	SPECIAL 01. CONCRETE CURB & GUTTER CURE AND SEAL TREATMENT	LF	3,114.000	3,114.000
1690	SPV.0105	SPECIAL 01. TEMPORARY RUMBLE STRIPS INTERSECTION	LS	1.000	1.000
1700	SPV.0105	SPECIAL 02. INSTALL STATE FURNISHED TRAFFIC SIGNAL MOUNTING HARDWARE (USH12 & CTHAA)	LS	1.000	1.000
1710	SPV.0105	SPECIAL 03. INST EMERG VEH PRE (EVP) CONTROLLER WISDOT OWNED SIGNALS (USH 12 & CTH AA)	LS	1.000	1.000

3

DATE 10DEC12 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	7080-00-73 QUANTITY
1720	SPV.0165	SPECIAL 01. CONCRETE SIDEWALK CURE AND SEAL TREATMENT	SF	3,116.000	3,116.000

CLEARING & GRUBBING

STATION	- STATION	OFFSET	LOCATION	201.012 CLEARING (ID)	201.0220 GRUBBING (ID)
152+50	155+50	LT	USH 12	-	-
145+65	-	LT	USH 12	2	2
145+96	-	RT	USH 12	3	3
146+32	-	RT	USH 12	3	3
148+27	-	RT	USH 12	5	5
152+05	-	LT	USH 12	3	3
152+21	-	LT	USH 12	3	3
152+36	-	LT	USH 12	3	3
35+98	-	RT	CTH AA / MAYER RD	2	2
36+13	-	RT	CTH AA / MAYER RD	4	4
36+19	-	RT	CTH AA / MAYER RD	4	4
36+30	-	RT	CTH AA / MAYER RD	4	4
36+47	-	RT	CTH AA / MAYER RD	5	5
37+16	-	RT	CTH AA / MAYER RD	3	3
-	-	-	*UNDISTRIBUTED	6	6
TOTALS				50	50

*10% OF ITEM TOTALL

ABANDONING & REMOVING CULVERTS

STATION	OFFSET	LOCATION	203.0100 REMOVING SMALL PIPE CULVERTS (EA)	204.0270 ABANDONING CULVERT PIPES (EA)
135+86	LT	USH 12	1	-
147+30	-	USH 12	-	1
150+00	LT	USH 12	1	-
153+69	RT	USH 12	1	-
156+00	-	USH 12	1	1
156+44	RT	USH 12	1	-
30+97	-	CTH AA / MAYER RD	1	-
31+20	RT	CTH AA / MAYER RD	1	-
32+70	RT	CTH AA / MAYER RD	1	-
34+96	RT	CTH AA / MAYER RD	1	-
35+73	LT	CTH AA / MAYER RD	1	-
TOTALS			10	2

REMOVING PAVEMENT

STATION	- STATION	LOCATION	204.0100 REMOVING PAVEMENT (SY)	204.0110 REMOVING ASPHALTIC SURFACE (SY)	204.0115 REMOVING ASPHALTIC SURFACE BUTT JOINTS (SY)	204.0120 REMOVING ASPHALTIC SURFACE MILLING (SY)
131+40	157+15	USH 12	45	72	59	6,167
33+90	37+70	CTH AA / MAYER ROAD	-	29	-	-
38+18	39+68	MAYER ROAD	-	-	-	-
70+02	70+85	SHORT ROAD	-	-	-	-
-	-	*UNDISTRIBUTED	5	5	6	233
TOTALS			50	105	65	6,400

*5% OF ITEM TOTAL PLUS ROUNDING

3

EXCAVATION SUMMARY

Division	From/To Station	Location	205.0100 Excavation Common (1) (CY) Cut (2)	EBS Excavation (3)	Available Material (4)	Unexpanded Fill	Expanded Fill (5) Factor 1.25	Mass Ordinate +/- (6)	208.0100 Borrow (CY) Waste	Borrow (CY)	Comment:
1	131+15 '12' - 161+00 '12'	(DIV 1-1) USH 12 - STAGE 1A CONSTRUCTION	914	23	914	727	909	5	686	681	
	131+15 '12' - 161+00 '12'	(DIV 1-2) USH 12 - STAGE 1B CONSTRUCTION	1,457	36	1,457	534	667	789	1,093	303	
	31+56 'AA' - 37+70 'AA'	(DIV 1-3) CTH AA - STAGE 1 CONSTRUCTION	395	10	395	570	713	-317	296	614	
		DIVISION 1 SUBTOTAL	2,766	69	2,766	1,831	2,289	477	2,075	1,598	
2	131+40 '12' - 157+15 '12'	(DIV 2-1) USH 12 RT - STAGE 2 CONSTRUCTION (7)	3,725	93	3,725	1,736	2,171	1,555	1,555	-220	WASTE USED IN DIVISION 2
	33+90 'AA' - 37+70 'AA'	(DIV 2-2) CTH AA - STAGE 2 CONSTRUCTION (8)	1,470	37	1,470	102	127	1,343	1,343	0	
	80+27 'BD' - 81+17 'BD'	(DIV 2-3) BOHN DRIVEWAY - STAGE 2 CONSTRUCTION	9	0	9	183	228	-220	-220	220	
	70+02 'SR' - 70+85 'SR'	(DIV 2-4) SHORT ROAD - STAGE 2 CONSTRUCTION	157	4	157	95	118	38	38	0	
	143+14 'SW' - 144+26 'SW'	(DIV 2-5) EB BYPASS LANE - STAGE 2 CONSTRUCTION	49	1	49	10	12	37	37	0	
	36+86 'SE' - 37+62 'SE'	(DIV 2-6) NB BYPASS LANE - STAGE 2 CONSTRUCTION	57	1	57	7	8	49	49	0	
		DIVISION 2 SUBTOTAL	5,467	137	5,467	2,132	2,665	2,802	2,802	0	
3	131+40 '12' - 157+15 '12'	(DIV 3-1) USH 12 LT - STAGE 3 CONSTRUCTION (9)	2,630	66	2,630	965	1,207	1,423	1,423	-34	WASTE USED IN DIVISION 3
	38+18 'MR' - 39+68 'MR'	(DIV 3-2) MAYER ROAD - STAGE 3 CONSTRUCTION	120	3	120	44	55	66	66	0	
	38+24 'NW' - 39+01 'NW'	(DIV 3-3) SB BYPASS LANE - STAGE 3 CONSTRUCTION	57	1	57	29	36	21	21	0	
	144+78 'NE' - 145+88 'NE'	(DIV 3-4) WB BYPASS LANE - STAGE 3 CONSTRUCTION	63	2	63	77	97	-34	-34	34	
		DIVISION 3 SUBTOTAL	2,870	72	2,870	1,115	1,394	1,476	1,476	0	
		UNDISTRIBUTED	-	18	-	-	-	-	-	162	
		SUBTOTALS	11,103	296	11,103	5,078	6,348	4,755	6,353		
	TOTALS			11,400						1,760	

Note 1) Common Excavation is the sum of the Cut and EBS Excavation columns. Item number 205.0100
Note 2) Salvaged/Unusable Pavement Material is included in Cut.
Note 3) EBS Excavation to be backfilled with Select Crushed Material. EBS estimated at 2.5% undistributed quantity.
EBS in Fill - Excavated EBS material is useable in Fills outside the 1.5:1 slope. EBS in Fill Reduction factor = 0.8. EBS quantity not factored into Fill quantity.
EBS Backfill - This is to be filled with Select Crushed Material. EBS Backfill Factor = 1.3.
Note 4) Available Material = Cut - Salvaged/Unusable Pavement Material
Note 5) Expanded Fill Factor = 1.25
Note 6) The Mass Ordinate + or - Qty calculated for the Division. Plus quantity indicates an excess of material within the Division. Minus indicates a shortage of material within the Division.
Note 7) Cut amount also includes 727 CY to remove temporary widening constructed in Stage 1A
Note 8) Cut amount also includes 570 CY to remove temporary roadway constructed in Stage 1B
Note 9) Cut amount also includes 534 CY to remove temporary widening constructed in Stage 1B
Note 10) Undistributed quantity of Common Excavation for rounding purposes
Note 11) Undistributed quantity of Borrow is 10% of total

PIPE SCHEDULE

LOCATION	STRUCTURE FROM	STRUCTURE TO	INLET ELEVATION	DISCHARGE ELEVATION	SLOPE FT/FT	608.0312 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 12-INCH (LF)	608.0315 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 15-INCH (LF)	608.0318 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 18-INCH (LF)
CITY OF ALTOONA	103A	103	921.93	921.83	0.010	10	-	-
	103	101	921.83	921.60	0.005	45	-	-
	101A	101B	922.21	922.11	0.010	10	-	-
	101B	101	922.11	921.60	0.020	26	-	-
	ALTOONA	101	-	921.60	0.023	77	-	-
	101	100	921.60	921.37	0.005	-	44	-
	100	100A	921.37	921.30	0.006	-	13	-
SUBTOTALS			-	-	-	168	57	0
WISDOT	1.0	100	922.44	921.37	0.022	15	-	-
	1.1	1.0	922.97	922.44	0.009	58	-	-
	3.2	3.1	915.96	915.90	0.005	-	-	11
	3.1	3.0	915.90	915.61	0.007	-	-	45
	3.3	3.0	916.19	916.11	0.005	17	-	-
	4.0	3.0	917.90	915.61	0.025	-	-	91
	3.0	2.0	915.61	915.19	0.007	-	-	52
	4.2	4.1	922.11	921.79	0.024	13	-	-
	4.1	4.0	921.79	919.40	0.031	76	-	-
	4.5	4.4	919.50	919.41	0.005	18	-	-
	4.4	4.3	919.41	918.66	0.005	151	-	-
	4.3	4.0	918.66	918.40	0.005	50	-	-
SUBTOTALS			-	-	-	398	0	199
UNDISTRIBUTED			-	-	-	34	3	11
TOTALS						600	60	210

*5% OF ITEM TOTAL PLUS ROUNDING

HMA PAVEMENT ITEMS

STATION	STATION	LOCATION	465.0125 ASPHALTIC SURFACE TEMPORARY (TON)	460.1110 HMA PAVEMENT TYPE E-10 (TON)	455.0135 ASPHALTIC MATERIAL PG58-34P (TON)	455.0140 ASPHALTIC MATERIAL PG64-28P (TON)	455.0605 TACK COAT (GAL)	465.0120 ASPHALTIC SURFACE DRIVEWAYS & FIELD ENTRANCES (TON)
131+40	157+15	USH 12	7	4,239	142	91	717	-
33+90	37+70	CTH AA/MAYER ROAD	-	644	24	12	46	-
38+18	39+68	MAYER ROAD	-	160	-	9	23	-
70+02	70+85	SHORT ROAD	-	55	-	3	8	-
-	-	DRIVEWAYS	-	-	-	-	-	109
-	-	TRAFFIC CONTROL STAGE 1A	334	-	-	-	-	-
-	-	TRAFFIC CONTROL STAGE 1B	459	-	-	-	-	-
-	-	*UNDISTRIBUTED	40	251	10	5	41	6
TOTALS			840	5,350	175	120	835	115

*5% OF ITEM TOTAL PLUS ROUNDING

BASE AGGREGATE

STATION	STATION	LOCATION	305.0110 BASE AGGREGATE DENSE 3/4-INCH (TON)	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH (TON)	312.0110 SELECT CRUSHED MATERIAL (TON)
131+40	157+15	USH 12	383	7,468	-
33+90	37+70	CTH AA / MAYER RD	24	1,267	-
38+18	39+68	MAYER RD	-	485	-
70+02	70+85	SHORT RD	9	187	-
-	-	DRIVEWAYS	114	227	-
-	-	SIDEWALKS	37	-	-
-	-	TRAFFIC CONTROL STAGE 1A	-	1,148	-
-	-	TRAFFIC CONTROL STAGE 1B	-	1,577	-
-	-	*UNDISTRIBUTED	34	641	560
TOTALS			600	13,000	560

*5% OF ITEM TOTAL PLUS ROUNDING

CULVERT PIPE & ENDWALLS

STATION	OFFSET	LOCATION	PIPE THICKNESS STEEL IN	520.0118 CULVERT PIPE CLASS III 18-INCH (LF)	520.1018 APRON ENDWALLS FOR CULVERT PIPE 18-INCH (EA)	522.0124 CULVERT PIPE REINFORCED CONCRETE CLASS III 24-INCH (LF)	522.1024 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 24-INCH (EA)	522.0130 CULVERT PIPE REINFORCED CONCRETE CLASS III 30-INCH (LF)	522.1030 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 30-INCH (EA)	523.0119 CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-III 19X30-INCH (LF)	523.0124 CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-III 24X38-INCH (LF)	523.0519 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL 19X30-INCH (LF)	523.0524 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL 24X38-INCH (LF)	633.5200* MARKERS CULVERT END (EA)	650.6000 CONSTRUCTION STAKING PIPE CULVERTS (EA)	611.9800.S PIPE GRATES (EA)
136+14	LT	USH 12	0.064	71	2	-	-	-	-	-	-	-	-	-	1	-
147+30	-	USH 12	-	-	-	-	-	87	2	-	-	-	-	2	1	2
153+00	RT	USH 12	-	-	-	14	2	-	-	-	-	-	-	-	-	2
153+75	RT	USH 12	-	-	-	22	2	-	-	-	-	-	-	-	-	2
155+50	-	USH 12	-	-	-	-	-	47	2	-	-	-	-	2	1	2
156+60	RT	USH 12	0.064	75	2	-	-	-	-	-	-	-	-	-	1	-
31+21	RT	CTH AA / MAYER RD	-	-	-	-	-	-	-	23	-	2	-	-	-	-
32+70	RT	CTH AA / MAYER RD	-	-	-	-	-	-	-	25	-	2	-	-	-	-
34+98	RT	CTH AA / MAYER RD	-	-	-	-	-	-	-	-	24	-	2	-	-	2
TOTALS				146	4	36	4	134	4	48	24	4	2	4	4	10

*ADDITIONAL QUANTITIES LISTED ELSEWHERE, SEE "STRUCTURE SCHEDULE"

3

CONCRETE SIDEWALK

STATION-STATION	OFFSET	LOCATION	602.0405 CONCRETE SIDEWALK 4-INCH (SF)	602.0515 CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA 4-INCH (SF)	SPV.0165.01 CONCRETE SIDEWALK CURE AND SEAL TREATMENT (SF)
38+42 - 39+71	LT	MAYER RD	579	8	579
38+54 - 39+67	RT	MAYER RD	671	8	671
143+44 - 144+28	RT	EB USH 12 ISLAND	582	24	582
144+78 - 145+56	LT	WB USH 12 ISLAND	521	24	521
37+06 - 37+63	RT	CTH AA / MAYER RD	368	24	368
38+24 - 38+82	LT	MAYER RD	395	24	395
TOTALS			3,116	112	3,116

ASPHALTIC FLUMES

STATION	OFFSET	LOCATION	465.0315 (SY)
136+50	LT	USH 12	11
137+43	RT	USH 13	18
139+25	LT	USH 14	12
139+25	RT	USH 15	9
143+84	LT	USH 16	14
146+07	LT	USH 17	20
34+18	LT	CTH AA / MAYER RD	9
TOTALS			93

FENCE SAFETY

LOCATION	616.0700.S (LF)
UNDISTRIBUTED	500
TOTALS	500

CONCRETE CURB & GUTTER

STATION - STATION	OFFSET	LOCATION	NOTE	601.0411 30-INCH TYPE D (LF)	601.0415 6-INCH SLOPED 30-INCH TYPE J (LF)	604.0557 6-INCH SLOPED 36-INCH TYPE D (LF)	601.0600 CONCRETE CURB PEDESTRIAN (LF)	650.5500 CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER (LF)	SPV.0090.01 CONCRETE CURB & GUTTER CURE AND SEAL TREATMENT (LF)
136+08 - 143+93	LT	USH 12	-	-	-	790	-	790	790
137+50 - 144+14	RT	USH 12	-	-	-	680	-	680	680
144+89 - 146+02	LT	USH 12	-	-	-	120	-	120	120
145+16 - 146+92	RT	USH 12	-	-	-	180	-	180	180
34+25 - 37+70	LT	CTH AA / MAYER RD	-	-	-	304	-	304	304
35+82 - 37+70	RT	CTH AA / MAYER RD	-	-	-	175	-	175	175
38+18 - 39+68	LT	MAYER RD	-	10	-	130	-	130	130
38+18 - 39+68	RT	MAYER RD	-	10	-	96	-	96	96
143+44 - 144+28	RT	USH 12	ISLAND	-	162	-	28	190	190
144+78 - 145+56	LT	USH 12	ISLAND	-	150	-	28	178	178
37+06 - 37+63	RT	CTH AA / MAYER RD	ISLAND	-	109	-	26	135	135
38+24 - 38+82	LT	MAYER RD	ISLAND	-	110	-	26	136	136
TOTALS				20	531	2,475	108	3,114	3,114

STRUCTURE SCHEDULE

LOCATION	STRUC. NO.	STATION	OFFSET TO CENTER OF STRUCTURE	CASTING ELEVATION	BOTTOM OF STRUCTURE ELEVATION	DEPTH	611.0530 MANHOLE COVERS TYPE J (EA)	611.0627 INLET COVERS TYPE HM (EA)	611.0630 INLET COVERS TYPE HM-GJ (EA)	611.0642 INLET COVERS TYPE MS (EA)	611.2004 MANHOLE 4-FT DIAMETER (EA)	611.2006 MANHOLE 6-FT DIAMETER (EA)	611.3004 INLETS 4-FT DIAMETER (EA)	611.3230 INLETS 2X3-FT (EA)	611.3901 INLETS MEDIAN 1 GRATE (EA)	522.1015 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 15-INCH (EA)	522.1018 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 18-INCH (EA)	633.5200* MARKERS CULVERT END (EA)	650.4000 CONSTRUCTION STAKING STORM SEWER (EA)
CITY OF ALTOONA	100	38+75.3	48.3' RT	926.25	921.19	3.81	1	-	-	-	1	-	-	-	-	-	-	-	1
	100A	38+75.4	60.9' RT	-	921.30	-	-	-	-	-	-	-	-	-	-	1	-	1	1
	101	38+91.8	7.2' RT	926.94	921.41	4.28	1	-	-	-	1	-	-	-	-	-	-	-	1
	101A	39+21.8	23.4' RT	926.63	922.04	3.59	-	1	-	-	-	-	-	1	-	-	-	-	1
	101B	39+11.8	24.4' RT	926.58	921.94	3.64	-	1	-	-	-	-	-	1	-	-	-	-	1
	103	39+07.1	35.2' LT	926.43	921.66	3.77	-	1	-	-	-	-	-	1	-	-	-	-	1
	103A	39+17.2	32.8' LT	926.45	921.76	3.69	-	1	-	-	-	-	-	1	-	-	-	-	1
	SUBTOTALS						2	4	0	0	2	0	0	4	0	1	0	1	7
WISDOT	1.0	144+91.2	63.5' LT	926.21	922.27	2.93	-	1	-	-	-	-	-	1	-	-	-	-	1
	1.1	38+70.7	19.5' LT	926.73	922.80	2.93	-	-	1	-	-	-	-	1	-	-	-	-	1
	2.0	35+70.0	41.2' RT	-	915.19	-	-	-	-	-	-	-	-	-	-	-	1	1	1
	3.0	36+26.0	26.0' RT	920.35	915.40	3.95	-	1	-	-	-	1	-	-	-	-	-	-	1
	3.1	36+17.3	18.0' LT	920.34	915.69	3.64	-	1	-	-	-	-	-	1	-	-	-	-	1
	3.2	36+13.7	28.5' LT	918.64	915.75	2.89	-	-	-	1	-	-	-	-	1	-	-	-	1
	3.3	36+28.4	42.6' RT	918.33	916.02	2.31	-	-	-	1	-	-	-	-	1	-	-	-	1
	4.0	37+17.2	19.5' RT	923.25	917.69	4.55	-	-	1	-	-	-	1	-	-	-	-	-	1
	4.1	144+05.8	44.9' RT	925.55	921.62	2.93	-	-	1	-	-	-	-	1	-	-	-	-	1
	4.2	144+08.2	31.5' RT	925.88	921.94	2.93	-	-	1	-	-	-	-	1	-	-	-	-	1
	4.3	145+05.0	43.1' RT	924.05	918.49	4.31	1	-	-	-	1	-	-	-	-	-	-	-	1
	4.4	146+57.0	30.0' RT	923.36	919.24	3.12	-	1	-	-	-	-	-	1	-	-	-	-	1
	4.5	146+75.0	30.0' RT	923.26	919.33	2.93	-	1	-	-	-	-	-	1	-	-	-	-	1
	SUBTOTALS						1	5	4	2	1	1	1	7	2	0	1	1	13
	TOTALS						3	9	4	2	3	1	1	11	2	1	1	2	20

*ADDITIONAL QUANTITIES LISTED ELSEWHERE, SEE "CULVERT PIPE & ENDWALLS"

LANDSCAPING

STA	-	STA	LOCATION	625.0500 SALVAGED TOPSOIL (SY)	627.0200 MULCHING (SY)	629.0210 FERTILIZER TYPE B (CWT)	630.0130 SEEDING MIXTURE NO. 30 (LBS)	630.0140 SEEDING MIXTURE NO. 40 (LBS)	630.0200 SEEDING TEMPORARY (LBS)	631.0300 SOD WATER (MGAL)	631.1000 SOD LAWN (SY)
131+40	-	157+15	USH 12	11,841	7,814	7.5	137.3	75.9	-	0.7	30
33+90	-	37+70	CTH AA / MAYER RD	816	260	0.5	4.0	10.7	-	0.1	5
38+18	-	39+68	MAYER RD	297	171	0.2	-	5.4	-	-	-
70+02	-	70+85	SHORT RD	116	111	0.1	1.0	1.0	-	-	-
-		-	TRAFFIC CONTROL STAGE 1	-	-	-	-	-	83.6	-	-
-		-	*UNDISTRIBUTED	630	394	0.8	7.7	4.1	4.4	0.2	5
TOTALS				13,700	8,750	9.0	150.0	97.0	88.0	1.0	40

*5% OF ITEM TOTAL PLUS ROUNDING

WATER

624.0100

LOCATION	USE	(MGAL)
UNDISTRIBUTED	DUST CONTROL	70
UNDISTRIBUTED	BASE PLACEMENT	170
TOTALS		240

MOBILIZATIONS EROSION CONTROL

LOCATION	628.1905 (EA)	628.1910 EMERGENCY (EA)
PROJECT	6	3
TOTALS	6	3

CONCRETE MEDIAN SLOPED NOSE

620.0300

STATION	OFFSET	LOCATION	(SF)
143+47	RT	USH 12	39
144+25	RT	USH 12	15
144+18	LT	USH 12	14
144+34	LT	USH 12	15
144+73	RT	USH 12	15
144+90	RT	USH 12	14
144+81	LT	USH 12	15
145+52	LT	USH 12	39
37+09	RT	CTH AA / MAYER RD	39
37+52	LT	CTH AA / MAYER RD	14
38+36	RT	MAYER RD	14
38+78	LT	MAYER RD	39
TOTALS			272

3

EROSION CONTROL

STATION	-	STATION	LOCATION	520.4018 CULVERT PIPE TEMPORARY 18-INCH (LF)	520.4024 CULVERT PIPE TEMPORARY 24-INCH (LF)	520.4030 CULVERT PIPE TEMPORARY 30-INCH (LF)	628.1104 EROSION BALES (EA)	628.1504 SILT FENCE (LF)	628.1520 SILT FENCE MAINTENANCE (LF)	628.2004 EROSION MAT CLASS 1 TYPE B (SY)	628.7005 INLET PROTECTION TYPE A (EA)	628.7010 INLET PROTECTION TYPE B (EA)	628.7015 INLET PROTECTION TYPE C (EA)	628.7504 TEMPORARY DITCH CHECKS (LF)	628.7550 CULVERT PIPE CHECKS (EA)	628.7560 TRACKING PADS (EA)	628.7560.S STONE OR ROCK DITCH CHECKS (CY)	606.0200 RIPRAP MEDIUM (CY)
131+40	-	157+15	USH 12	-	-	-	25	1,237	619	4,039	5	-	5	88	7	-	-	6
33+90	-	37+70	CTH AA / MAYER RD	-	-	-	-	174	87	556	5	2	3	16	4	-	-	16
38+18	-	39+68	MAYER RD	-	-	-	-	-	-	211	8	1	7	-	-	-	-	3
70+02	-	70+85	SHORT RD	-	-	-	-	-	-	5	-	-	-	-	1	-	-	-
-		-	TRAFFIC CONTROL STAGE 1A	131	-	43	-	-	-	-	-	-	-	-	-	-	-	-
-		-	TRAFFIC CONTROL STAGE 1B	109	45	23	-	-	-	-	-	-	-	-	-	-	-	-
-		-	*UNDISTRIBUTED	10	5	4	5	89	45	239	-	-	-	6	-	2	5	5
TOTALS				250	50	70	30	1,500	750	5,050	18	3	15	110	12	2	5	30

*5% OF ITEM TOTAL PLUS ROUNDING

TRAFFIC CONTROL DEVICES

LOCATION	# OF DAYS	603.8000 CONCRETE BARRIER TEMPORARY PRECAST DELIVERED (LF)	603.8125 CONCRETE BARRIER TEMPORARY PRECAST INSTALLED (LF)	614.0905 CRASH CUSHIONS TEMPORARY (EACH)	643.0300 DRUMS EACH	643.0300 DRUMS (DAYS)	643.0300 TYPE III EACH	643.0420 BARRICADES TYPE III (DAYS)	643.0500 FLEXIBLE TUBULAR MARKER POSTS (EA)	643.0600 FLEXIBLE TUBULAR MARKER BASES (EA)	643.0715 WARNING LIGHTS TYPE C EACH	643.0715 WARNING LIGHTS TYPE C (DAYS)	643.0900 SIGNS EACH	643.0900 SIGNS (DAYS)	643.1050 SIGNS PCMS	643.1050 SIGNS PCMS (DAYS)	SPV.0105.01 TEMPORARY RUMBLE STRIPS INTERSECTION (LS)
TRAFFIC CONTROL STAGE 1A	9	-	-	-	31	279	-	-	-	-	1	9	18	162	2	18	-
TRAFFIC CONTROL STAGE 1B	12	508	508	-	72	864	12	144	45	45	14	168	38	456	2	24	-
TRAFFIC CONTROL STAGE 2A	30	246	246	3	90	2,700	11	330	73	73	24	720	37	1,110	-	-	-
TRAFFIC CONTROL STAGE 2B	14	-	-	-	84	1,176	4	56	27	27	14	196	39	546	-	-	-
TRAFFIC CONTROL STAGE 3	24	-	-	-	60	1,440	-	-	60	60	7	168	34	816	-	-	-
TRAFFIC CONTROL STAGE 4	3	-	-	-	-	-	-	-	-	-	-	-	19	57	-	-	-
*UNDISTRIBUTED	-	36	36	-	-	321	-	30	15	15	-	59	-	153	-	8	1
TOTALS		790	790	3		6,780		560	220	220		1,320		3,300		50	1

*5% OF ITEM TOTAL PLUS ROUNDING

TRAFFIC CONTROL TEMPORARY MARKING

LOCATION	646.0600 REMOVING PAVEMENT MARKINGS (LF)	649.0200 REFLECTIVE PAINT 4-INCH YELLOW (LF)	649.0200 REFLECTIVE PAINT 4-INCH WHITE (LF)	649.0300 REFLECTIVE TAPE 4-INCH YELLOW (LF)	649.0300 REFLECTIVE TAPE 4-INCH WHITE (LF)	649.1200 STOP LINE REMOVABLE TAPE 18-INCH WHITE (LF)
TRAFFIC CONTROL STAGE 1A	-	5,150	200	-	-	-
TRAFFIC CONTROL STAGE 1B	1,921	2,386	2,266	1,030	1,025	49
TRAFFIC CONTROL STAGE 2A	248	4,476	4,785	2,654	2,503	35
TRAFFIC CONTROL STAGE 2B	2,260	890	1,288	1,254	1,022	35
TRAFFIC CONTROL STAGE 3	4,489	5,518	4,637	930	906	36
TRAFFIC CONTROL STAGE 4	-	-	-	-	-	-
*UNDISTIBUTED	482	930	674	292	284	5
SUBTOTAL	-	19,350	13,850	6,160	5,740	-
TOTALS	9,400	33,200		11,900		160

*5% OF ITEM TOTAL PLUS ROUNDING

PERMANENT SIGNING

SIGN #	SIGN CODE	SIGN SIZE	SIGN SIZE IN	637.0202 SIGNS REFLECTIVE TYPE II (SF)	637.0402 SIGNS REFLECTIVE FOLDING TYPE II (SF)	634.0612 POSTS WOOD 4X6-INCH 12-FT (EA)	634.0614 POSTS WOOD 4X6-INCH 14-FT (EA)	634.0616 POSTS WOOD 4X6-INCH 16-FT (EA)	637.0620 SIGN FLAGS PERMANENT TYPE II (EA)	SIGN MOUNTED ON SAME POST AS	NOTE	REMARKS
1-01	W6-3	(2)	36X36	9.00	-	-	-	1	-	-	-	TWO WAY TRAFFIC
2-01	W3-3	(2)	36X36	9.00	-	-	-	-	-	FLASHER	-	SIGNAL AHEAD
2-02	R3-8W	(2)	30X54	11.25	-	-	-	2	-	-	-	LEFT ONLY / AHEAD ONLY / RIGHT ONLY
2-03	J1-1	(2)	24X39	-	-	-	-	1	-	-	-	JUNCTION OR END ASSEMBLY
	M3-4	(2)	24X12	2.00	-	-	-	-	-	2-02	-	WEST
	M1-4	(2)	24X24	4.00	-	-	-	-	-	2-02	USH 12	US ROUTE MARKER
2-04	J12-1	(2)	24X45	-	-	-	-	1	-	-	-	ROUTE TURN WITHOUT CARDINAL
	M1-5A	(2)	24X24	4.00	-	-	-	-	-	2-03	CTH AA	COUNTY MARKER
	M5-1R	(2)	21X21	3.06	-	-	-	-	-	2-03	-	ADVANCE ARROW (RIGHT TURN)
2M-01	M1-94	(2)	-	-	-	-	-	-	-	-	-	MAYER ROAD
2M-02	J1-1	(2)	24X39	-	-	-	-	1	-	-	-	JUNCTION OR END ASSEMBLY
	M2-1	(2)	21X15	-	-	-	-	-	-	2M-02	-	JCT
	M1-5A	(2)	24X24	-	-	-	-	-	-	2M-02	-	COUNTY MARKER
3-01	R2-1	(2)	24X30	5.00	-	-	1	-	-	-	55 MPH	SPEED LIMIT [__] MPH
3-02	R1-1	(2)	36X36	9.00	-	-	-	-	-	SIGNAL	-	STOP SIGN
3-03	R1-1F	(2)	30X30	-	5.18	-	-	-	-	SIGNAL	-	STOP SIGN (FOLDING)
3-04	W12-1D	(2)	24X24	4.00	-	1	-	-	-	-	-	DOUBLE DOWN ARROW
3-05	R3-8	(2)	30X36	7.50	-	-	1	-	-	-	-	LEFT, AHEAD / RIGHT ONLY
3-06	W12-1D	(2)	24X24	4.00	-	1	-	-	-	-	-	DOUBLE DOWN ARROW
3-07	R1-1F	(2)	30X30	-	5.18	-	-	-	-	SIGNAL	-	STOP SIGN (FOLDING)
3-08	R1-2	(2)	36X31	3.88	-	-	-	1	-	-	-	YIELD
3-09	R2-1	(2)	24X30	5.00	-	-	1	-	-	-	25 MPH	SPEED LIMIT [__] MPH
3-10	R1-2	(2)	36X31	3.88	-	-	-	1	-	-	-	YIELD
3-11	R1-1F	(2)	30X30	-	5.18	-	-	-	-	SIGNAL	-	STOP SIGN (FOLDING)
3-12	W12-1D	(2)	24X24	4.00	-	1	-	-	-	-	-	DOUBLE DOWN ARROW
3-13	W12-1D	(2)	24X24	4.00	-	1	-	-	-	-	-	DOUBLE DOWN ARROW
3-14	R1-1F	(2)	30X30	-	5.18	-	-	-	-	SIGNAL	-	STOP SIGN (FOLDING)
3-15	R1-1	(2)	36X36	9.00	-	-	-	-	-	SIGNAL	-	STOP SIGN
3-16	R2-1	(2)	24X30	5.00	-	-	-	1	-	-	55 MPH	SPEED LIMIT [__] MPH
3M-01	J12-1	(2)	24X45	-	-	-	-	-	-	LIGHT POLE	-	ROUTE TURN WITHOUT CARDINAL
	M1-5A	(2)	24X24	-	-	-	-	-	-	-	CTH AA	COUNTY MARKER
	M6-1	(2)	21X21	-	-	-	-	-	-	-	-	ARROW (RIGHT, LEFT, OR AHEAD)
3M-02	-	(2)	-	-	-	-	-	-	-	-	-	EAU CLAIRE COUNTY ADOPT-A-HIGHWAY
3M-03	J12-1	(2)	24X45	-	-	-	-	-	-	LIGHT POLE	-	ROUTE TURN WITHOUT CARDINAL
	M1-5A	(2)	24X24	-	-	-	-	-	-	-	CTH AA	COUNTY MARKER
	M6-1	(2)	21X21	-	-	-	-	-	-	-	-	ARROW (RIGHT, LEFT, OR AHEAD)
4-01	J12-1	(2)	24X45	-	-	-	-	1	-	-	-	ROUTE TURN WITHOUT CARDINAL
	M1-5A	(2)	24X24	4.00	-	-	-	-	-	4-01	CTH AA	COUNTY MARKER
	M5-1L	(2)	21X21	3.06	-	-	-	-	-	4-01	-	ADVANCE ARROW (LEFT TURN)
4-02	J1-1	(2)	24X39	-	-	-	-	1	-	-	-	JUNCTION OR END ASSEMBLY
	M3-2	(2)	24X12	2.00	-	-	-	-	-	4-02	-	EAST
	M1-4	(2)	24X24	4.00	-	-	-	-	-	4-02	USH 12	US ROUTE MARKER
4-03	R3-8W	(2)	30X54	11.25	-	-	-	2	-	-	-	LEFT ONLY / AHEAD ONLY / RIGHT ONLY
4M-01	I55-56MOD	(2)	-	-	-	-	-	-	-	LIGHT POLE	-	ADOPT-A-HIGHWAY (INDIANHEAD...)
4M-02	I55-56MOD	(2)	-	-	-	-	-	-	-	LIGHT POLE	-	ADOPT-A-HIGHWAY
5-01	W3-3	(2)	36X36	9.00	-	-	-	-	-	FLASHER	-	SIGNAL AHEAD
5-02	W6-3	(2)	36X36	9.00	-	-	-	1	-	-	-	TWO WAY TRAFFIC
5M-01	M1-94	(2)	-	-	-	-	-	-	-	-	-	MAYER ROAD
5M-02	J1-1	(2)	24X39	-	-	-	-	1	-	-	-	JUNCTION OR END ASSEMBLY
	M2-1	(2)	21X15	-	-	-	-	-	-	5M-02	-	JCT
	M1-5A	(2)	24X24	-	-	-	-	-	-	5M-02	-	COUNTY MARKER
5M-03	W14-3	(2)	48X36	-	-	-	-	-	-	-	-	NO PASSING ZONE
5M-04	W14-1	(2)	30X30	-	-	-	-	-	-	-	-	DEAD END
5M-05	R1-1	(2)	30X30	-	-	-	-	-	-	-	-	STOP SIGN
5M-06	J1-1	(2)	24X39	-	-	-	-	-	-	-	-	JUNCTION OR END ASSEMBLY
	M2-1	(2)	21X15	-	-	-	-	-	-	5M-06	-	JCT
	M1-5A	(2)	24X24	-	-	-	-	-	-	5M-06	CTH SS	COUNTY MARKER
7-01	W3-3	(2)	36X36	9.00	-	-	-	1	2	-	-	SIGNAL AHEAD
7-02	R2-1	(2)	24X30	5.00	-	-	-	1	-	-	45 MPH	SPEED LIMIT [__] MPH
7-03	R3-8	(2)	30X36	7.50	-	-	-	1	-	-	-	LEFT, AHEAD / RIGHT ONLY
7-04	J2-2	(2)	48X57	-	-	-	-	1	-	-	-	ROUTE TURN ASSEMBLY
	M3-4	(2)	24X12	2.00	-	-	-	-	-	7-04	-	WEST
	M1-4	(2)	24X24	4.00	-	-	-	-	-	7-04	USH 12	US ROUTE MARKER
	M6-1	(2)	21X21	3.06	-	-	-	-	-	7-04	-	ARROW (RIGHT, LEFT, OR AHEAD)
	M3-2	(2)	24X12	2.00	-	-	-	-	-	7-04	-	EAST
	M1-4	(2)	24X24	4.00	-	-	-	-	-	7-04	USH 12	US ROUTE MARKER
	M6-1	(2)	21X21	3.06	-	-	-	-	-	7-04	-	ARROW (RIGHT, LEFT, OR AHEAD)
7M-01	R7-1L	(2)	18X24	-	-	-	-	-	-	-	-	NO PARKING ANY TIME (LEFT ARROW)
7M-02	R7-1R	(2)	18X24	-	-	-	-	-	-	-	-	NO PARKING ANY TIME (RIGHT ARROW)
7M-03	W14-3	(2)	48X36	-	-	-	-	-	-	-	-	NO PASSING ZONE
7M-04	R7-1D	(2)	18X24	-	-	-	-	-	-	-	-	NO PARKING ANY TIME (DOUBLE ARROW)
7M-05	R7-1D	(2)	18X24	-	-	-	-	-	-	-	-	NO PARKING ANY TIME (DOUBLE ARROW)
7M-06	M1-5A	(2)	24X24	-	-	-	-	-	-	-	CTH AA	COUNTY MARKER
PROJECT TOTALS				**188.50**	**20.72**	**4**	**3**	**19**	**2**			

SIGN REMOVALS

SIGN #	SIGN CODE	638.2602 REMOVING SIGNS TYPE II (EA)	638.3000 REMOVING SMALL SIGN SUPPORTS (EA)	638.2102 MOVING SIGNS TYPE II (EA)	638.4000 MOVING SMALL SIGN SUPPORTS (EA)	SIGN MOUNTED ON SAME POST AS	NOTE	REMARKS
2M-01	M1-94	-	-	1	2	-	-	MAYER ROAD
2M-02	J1-1	-	-	-	-	2M-01	-	JUNCTION OR END ASSEMBLY
	M2-1	-	-	1	-	2M-01	-	JCT
	M1-5A	-	-	1	-	2M-01	CTH AA	COUNTY MARKER
3M-01	J12-1	-	1	-	-	-	-	ROUTE TURN WITHOUT CARDINAL
	M1-5A	-	-	1	-	-	CTH AA	COUNTY MARKER
	M6-1	-	-	1	-	-	-	ARROW (RIGHT, LEFT, OR AHEAD)
3M-02	-	-	-	2	1	-	-	EAU CLAIRE COUNTY ADOPT-A-HIGHWAY
3M-03	J12-1	-	1	-	-	-	-	ROUTE TURN WITHOUT CARDINAL
	M1-5A	-	-	1	-	-	CTH AA	COUNTY MARKER
	M6-1	-	-	1	-	-	-	ARROW (RIGHT, LEFT, OR AHEAD)
3R-01	W1-7	1	1	-	-	-	-	NIGHT ARROW (DOUBLE)
3R-02	R7-1R	1	1	-	-	-	-	NO PARKING ANY TIME (RIGHT ARROW)
3R-03	R1-1	1	1	-	-	-	-	STOP SIGN
4M-01	I55-56MOD	-	-	1	1	-	-	ADOPT-A-HIGHWAY (INDIANHEAD...)
4M-02	I55-56MOD	-	1	1	-	-	-	ADOPT-A-HIGHWAY
5M-01	M1-94	-	-	1	2	-	-	MAYER ROAD
5M-02	J1-1	-	-	-	-	5M-01	-	JUNCTION OR END ASSEMBLY
	M2-1	-	-	1	-	5M-01	-	JCT
	M1-5A	-	-	1	-	5M-01	CTH AA	COUNTY MARKER
5M-03	W14-3	-	-	1	1	-	-	NO PASSING ZONE
5M-04	W14-1	-	-	1	1	-	-	DEAD END
5M-05	R1-1	-	-	1	1	-	-	STOP SIGN
5M-06	J1-1	-	-	-	1	-	-	JUNCTION OR END ASSEMBLY
	M2-1	-	-	1	-	-	-	JCT
	M1-5A	-	-	1	-	-	CTH SS	COUNTY MARKER
6R-01	W14-3	1	1	-	-	-	-	NO PASSING ZONE
7M-01	R7-1L	-	-	1	1	-	-	NO PARKING ANY TIME (LEFT ARROW)
7M-02	R7-1R	-	-	1	1	-	-	NO PARKING ANY TIME (RIGHT ARROW)
7M-03	W14-3	-	-	1	1	-	-	NO PASSING ZONE
7M-04	R7-1D	-	-	1	1	-	-	NO PARKING ANY TIME (DOUBLE ARROW)
7M-05	R7-1D	-	-	1	1	-	-	NO PARKING ANY TIME (DOUBLE ARROW)
7M-06	M1-5A	-	-	1	1	-	CTH AA	COUNTY MARKER
7R-01	W3-1	1	1	-	-	-	-	STOP AHEAD
7R-02	R2-1	1	1	-	-	-	45 MPH	SPEED LIMIT [__] MPH
TOTALS		6	9	25	16			

CONSTRUCTION STAKING

STATION	STATION	DESCRIPTION	650.4500 SUBGRADE (LF)	650.5000 BASE (LF)	650.9920 SLOPE STAKES (LF)	650.8000 RESURFACING REFERENCE (LF)	650.8500.01 ELECTRICAL INSTALLATIONS (LS)	650.9910.01 SUPPLEMENTAL CONTROL (LS)
131+40	157+15	USH 12	2,575	2,575	2,575	2,575	-	-
33+90	37+70	CTH AA / MAYER RD	380	380	380	380	-	-
38+18	39+68	MAYER RD	150	150	150	150	-	-
70+02	70+85	SHORT RD	83	83	83	83	-	-
UNDISTRIBUTED		-	-	-	-	-	1	1
TOTALS			3,188	3,188	3,188	3,188	1	1

PAVEMENT MARKING EPOXY

STATION - STATION	LOCATION	SHEET #	646.0106 4-INCH YELLOW (LF)	646.0106 4-INCH WHITE (LF)	646.0126 8-INCH WHITE (LF)	647.0166 ARROWS TYPE 2 (EA)	647.0176 ARROWS TYPE 3 (EA)	647.0356 WORDS (EA)	647.0606 ISLAND NOSE (EA)	647.0566 STOP LINE 18-INCH (LF)	647.0726 DIAGONAL 12-INCH YELLOW (LF)
127+50 - 135+00	USH 12	1	2,122	1,486	64	1	-	-	-	-	73
135+00 - 141+00	USH 12	2	1,515	602	535	1	-	-	-	-	120
141+00 - 147+00	USH 12	3	1,351	529	1,369	3	2	3	4	134	-
147+00 - 153+00	USH 12	4	1,795	1,265	613	2	-	1	-	-	93
153+00 - 159+00	USH 12	5	1,863	1,039	-	-	-	-	-	-	37
159+00 - 163+00	USH 12	6	735	800	-	-	-	-	-	-	-
30+00 - 37+50	CTH AA	7/3	1,163	1,031	1,150	-	1	-	-	-	-
*UNDISTRIBUTED	-	-	526	338	189	-	-	-	-	6	17
SUBTOTALS			11,070	7,090	3,920	7	3	4	4	140	340
PROJECT TOTALS			18,160		3,920	7	3	4	4	140	340

*5% OF ITEM TOTAL PLUS ROUNDING

CONDUIT RIGID NONMETALLIC

FROM	TO	652.0225 SCHEDULE 40 2-INCH (LF)	652.0235 SCHEDULE 40 3-INCH (LF)	652.0615 SPECIAL 3-INCH (LF)	NOTE
CB1	PB1	-	32	-	2 - 3"
CB1	PB1	48	--	-	3 - 2"
PB1	PB2	229	-	-	2 - 2"
PB2	LB1	5	-	-	-
PB2	PB3	138	-	-	2 - 2"
PB3	PB4	174	-	-	2 - 2"
PB4	LB2	5	-	-	-
PB4	PB5	280	-	-	2 - 2"
PB5	PB6	450	-	-	2 - 2"
PB6	PB7	184	-	-	-
PB7	SB15	11	-	-	-
PB1	PB8	-	77	-	2 - 3"
PB8	SB1	29	-	-	-
PB8	SB2	18	-	-	-
PB1	PB9	-	-	189	2 - 3"
PB9	SB3	7	-	-	-
PB9	PB10	-	96	-	2 - 3"
PB10	SB10	12	-	-	-
PB10	PB11	-	56	-	2 - 3"
PB11	SB4	29	-	-	-
PB11	SB5	18	-	-	-
PB10	PB12	-	260	-	2 - 3"
PB12	SB11	46	-	-	-
PB12	PB13	246	-	-	2 - 2"
PB13	LB3	10	-	-	-
PB13	PB14	144	-	-	2 - 2"
PB14	PB15	174	-	-	2 - 2"
PB15	LB4	10	-	-	-
PB15	PB16	281	-	-	2 - 2"
PB16	PB17	453	-	-	2 - 2"
PB17	PB18	138	-	-	-
PB18	PB19	138	-	-	-
PB19	SB16	10	-	-	-
PB12	PB20	-	67	-	2 - 3"
PB20	SB6	29	-	-	-
PB20	SB7	18	-	-	-
PB12	PB21	-	-	194	2 - 3"
PB21	SB8	10	-	-	-
PB21	PB22	-	84	-	2 - 3"
PB22	SB13	17	-	-	-
PB22	PB23	-	64	-	2 - 3"
PB23	SB9	19	-	-	-
PB23	SB10	8	-	-	-
PB22	PB1	-	276	-	2 - 3"
PB1	SB12	60	-	-	-
TOTALS		3,448	1,013	383	

LIGHTING CABLE AND WIRE

FROM	TO	655.0305 CABLE TYPE UF 2 - 12 AWG GROUNDED (LF)	655.0610 ELECTRICAL WIRE LIGHTING 12 AWG (LF)
CB1	SB1	101	-
SB1	LUMINAIRE	-	144
CB1	SB3	156	-
SB3	LUMINAIRE	-	144
CB1	SB6	382	-
SB6	LUMINAIRE	-	144
CB1	SB8	262	-
SB8	LUMINAIRE	-	144
CB1	LB1	170	-
LB1	LUMINAIRE	-	144
LB1	LB2	200	-
LB2	LUMINAIRE	-	144
CB1	LB3	508	-
LB3	LUMINAIRE	-	144
LB3	LB4	207	-
LB4	LUMINAIRE	-	144
TOTALS		1986	1152

TRAFFIC SIGNALS

SIGNAL BASE NO.	HEAD NO.	658.0190.S TRAFFIC SIGNAL FACE - LED STATE FURNISHED - 3V (EA)	TRAFFIC SIGNAL FACE - LED STATE FURNISHED - 3H (EA)	TRAFFIC SIGNAL FACE - LED STATE FURNISHED - 5V (EA)	TRAFFIC SIGNAL FACE - LED STATE FURNISHED - 5H (EA)	TRAFFIC SIGNAL FACE - LED STATE FURNISHED - 1H (EA)
SB12	8	-	1	-	-	-
SB2	1	1	-	-	-	-
SB2	6	-	-	1	-	-
SB3	5	-	-	-	1	-
SB5	7	1	-	-	-	-
SB5	12	1	-	-	-	-
SB11	11	-	1	-	-	-
SB7	3	-	-	1	-	-
SB7	4	1	-	-	-	-
SB8	2	-	-	-	1	-
SB10	9	1	-	-	-	-
SB10	10	1	-	-	-	-
SB15	13	-	-	-	-	1
SB15	14	-	-	-	-	1
SB16	15	-	-	-	-	1
SB16	16	-	-	-	-	1
		6	2	2	2	4
TOTAL				16		

ELECTRICAL LUMP SUM ITEMS

LOCATION	656.0200.01 ELECTRICAL SERVICE METER BREAKER PEDESTAL (CB1) (LS)	SPV.0105.03 INST EMERG VEH PRE (EVP) CONTROLLER WISDOT OWNED SIGNALS USH 12 & CTH AA (LS)	SPV.0105.02 INSTALL STATE FURNISHED TRAFFIC SIGNAL MOUNTING HARDWARE USH 12 & CTH AA (LS)
USH 12 & CTH AA/MAYER ROAD (CB1)	1	1	1
TOTAL	1	1	1

CONCRETE BASES

BASE NO.	STATION	OFFSET	R/L	654.0101 CONCRETE BASES TYPE 1 (EA)	654.0102 CONCRETE BASES TYPE 2 (EA)	654.0105 CONCRETE BASES TYPE 5 (EA)	654.0217 CONCRETE CONTROL CABINET BASES TYPE 9 SPECIAL (EA)
CB1	143+64.7	78.2'	R	-	-	-	1
SB1	144+22.3	42.8'	R	1	-	-	-
SB2	144+12.2	35.8'	R	1	-	-	-
SB3	143+60.3	31.6'	L	-	1	-	-
SB4	144+23.3	30.6'	L	1	-	-	-
SB5	144+30.3	41.1'	L	1	-	-	-
SB6	144+84.0	30.4'	L	1	-	-	-
SB7	144+94.0	23.8'	L	1	-	-	-
SB8	145+40.6	44.9'	R	-	1	-	-
SB9	144+85.0	42.6'	R	1	-	-	-
SB10	144+77.6	53.0'	R	1	-	-	-
SB11	144+91.1	70.8'	L	-	1	-	-
SB12	144+18.2	95.2'	R	-	1	-	-
SB13	145+10.6	66.7'	R	1	-	-	-
SB14	143+98.4	52.9'	L	1	-	-	-
SB15	135+50.0	46.0'	R	1	-	-	-
SB16	154+50.0	29.0'	L	1	-	-	-
LB1	142+54.9	44.0'	R	-	-	1	-
LB2	141+00.0	46.0'	R	-	-	1	-
LB3	146+56.0	36.0'	L	-	-	1	-
LB4	148+11.9	36.0'	L	-	-	1	-
TOTALS				12	4	4	1

TRAFFIC SIGNAL STRUCTURES

SIGNAL BASE NO.	657.0100 PEDESTAL BASES (EA)	657.0255 TRANSFORMER BASE BREAKAWAY 11 1/2 INCH BOLT CIRCLE (EA)	657.0310 POLES TYPE 3 (EA)	657.0322 POLES TYPE 5 ALUMINUM (EA)	657.0405 TRAFFIC SIGNAL STANDARDS ALUMINUM 3.5-FT (EA)	657.0420 TRAFFIC SIGNAL STANDARDS ALUMINUM 13-FT (EA)	657.0425 TRAFFIC SIGNAL STANDARDS ALUMINUM 15-FT (EA)	657.0595 TROMBONE ARMS 25-FT (EA)	657.0714 LUMINAIRE ARMS TRUSS TYPE 4-INCH CLAMP 15-FT (EA)	657.0715 LUMINAIRE ARMS TRUSS TYPE 4 1/2-INCH CLAMP 15-FT (EA)	659.0115 LUMINARIES UTILITY HPS 150 WATTS (EA)	659.0125 LUMINARIES UTILITY HPS 250 WATTS (EA)
SB1	1	-	-	-	1	-	-	-	-	-	-	-
SB2	1	-	-	-	-	-	1	-	-	-	-	-
SB3	-	1	1	-	-	-	-	1	1	-	-	1
SB4	1	-	-	-	1	-	-	-	-	-	-	-
SB5	1	-	-	-	-	1	-	-	-	-	-	-
SB6	1	-	-	-	1	-	-	-	-	-	-	-
SB7	1	-	-	-	-	-	1	-	-	-	-	-
SB8	-	1	1	-	-	-	-	1	1	-	-	1
SB9	1	-	-	-	1	-	-	-	-	-	-	-
SB10	1	-	-	-	-	1	-	-	-	-	-	-
SB11	-	1	1	-	-	-	-	1	1	-	-	1
SB12	-	1	1	-	-	-	-	1	1	-	-	1
SB13	1	-	-	-	1	-	-	-	-	-	-	-
SB14	1	-	-	-	1	-	-	-	-	-	-	-
SB15	1	-	-	-	-	-	1	-	-	-	-	-
SB16	1	-	-	-	-	-	1	-	-	-	-	-
LB1	-	1	-	1	-	-	-	-	-	1	1	-
LB2	-	1	-	1	-	-	-	-	-	1	1	-
LB3	-	1	-	1	-	-	-	-	-	1	1	-
LB4	-	1	-	1	-	-	-	-	-	1	1	-
TOTALS	12	8	4	4	6	2	4	4	4	4	4	4

PULLBOXES STEEL

PULL BOX NO.	STATION	OFFSET	R/L	653.0135 24 X 36-INCH (EA)	653.0140 24 X 42-INCH (EA)
PB1	143+67.4	62.9'	R	-	1
PB2	142+54.8	41.4'	R	1	-
PB3	141+85.9	43.0'	R	1	-
PB4	141+00.1	41.1'	R	1	-
PB5	139+60.7	43.0'	R	1	-
PB6	137+35.7	41.7'	R	1	-
PB7	135+52.3	35.1'	R	1	-
PB8	143+94.6	35.5'	R	-	1
PB9	143+67.6	31.5'	L	-	1
PB10	144+03.4	63.7'	L	-	1
PB11	144+28.7	51.3'	L	-	1
PB12	145+30.8	51.4'	L	-	1
PB13	146+49.6	32.0'	L	1	-
PB14	147+19.8	32.0'	L	1	-
PB15	148+05.9	32.0'	L	1	-
PB16	149+44.8	32.0'	L	1	-
PB17	151+69.6	23.0'	L	1	-
PB18	153+07.4	23.0'	L	1	-
PB19	154+45.6	22.9'	L	1	-
PB20	145+11.7	23.5'	L	-	1
PB21	145+33.3	45.6'	R	-	1
PB22	145+06.1	77.6'	R	-	1
PB23	144+79.0	59.6'	R	-	1
TOTALS				13	10

ELECTRICAL WIRE TRAFFIC SIGNALS

FROM	TO	655.0515 ELECTRICAL WIRE TRAFFIC SIGNALS 10 AWG (LF)
CB1	PB1	27
PB1	PB8	51
SB3	PB9	20
PB10	PB11	40
SB5	PB11	22
PB20	PB12	36
SB11	PB12	67
SB8	PB21	19
PB22	PB23	44
SB10	PB23	20
PB2	LB1	15
PB3	PB2	80
PB4	LB2	15
PB5	PB4	152
PB6	PB7	196
PB7	SB15	24
PB13	LB3	15
PB14	PB13	84
PB15	LB4	15
PB16	PB15	153
PB17	PB18	150
PB18	PB19	150
PB19	SB16	24
CB1	SB1	119
SB1	SB2	71
SB2	SB3	206
SB3	SB14	104
SB14	SB4	98
SB4	SB5	56
SB5	SB11	261
SB11	SB6	143
SB6	SB7	71
SB7	SB8	204
SB8	SB13	98
SB13	SB9	99
SB9	SB10	50
SB10	SB12	278
SB12	CB1	101
SB16	SB11	1,084
SB15	SB12	988
TOTALS		5,450

LOOP DETECTORS

LOOP NO.	STATION*	OFFSET*	R/L	SIZE (FT)	NO. OF TURNS	652.0800 LOOP DETECTOR CONDUIT (LF)	652.0900 LOOP DETECTOR SLOTS (LF)	655.0800 LOOP DETECTOR WIRE (LF)	655.0700 LOOP DETECTOR LEAD IN CABLE (LF)
11	143+91.5	6.0'	R	6 X 20	3	106	106	318	61
12	144+17.5	6.0'	R	6 X 20	3	106	106	318	61
21	151+62.8	6.0'	L	6 X 6	6	52	52	312	943
22	149+38.4	5.9'	L	6 X 6	6	70	70	420	716
23	147+13.3	6.0'	L	6 X 6	6	70	70	420	488
41	144+47.8	61.5'	L	6 X 20	3	82	-	246	193
42	144+47.6	35.5'	L	6 X 20	3	82	-	246	193
43	144+12.1	45.3'	L	6 X 20	3	68	-	204	180
51	145+14.9	6.0'	R	6 X 20	3	106	106	318	329
52	144+88.8	5.9'	R	6 X 20	3	106	106	318	329
61	137+42.0	18.0'	R	6 X 6	6	66	-	396	657
62	139+67.0	18.0'	R	6 X 6	6	68	-	408	431
63	141+92.0	18.0'	R	6 X 6	4	68	-	272	206
81	144+59.4	73.6'	R	6 X 20	3	82	-	246	131
82	144+59.5	47.6'	R	6 X 20	3	82	-	246	131
83	144+95.7	56.5'	R	6 X 20	3	68	-	204	165
TOTALS						1,282	616	4,892	5,214

* LOCATION IS GIVEN TO THE FRONT CENTER OF THE LOOP

CABLE TRAFFIC SIGNAL

FROM	TO	655.0220 CABINET TO BASE 4-14 AWG (LF)	655.0230 CABINET TO BASE 5-14 AWG (LF)	655.0240 CABINET TO BASE 7-14 AWG (LF)	655.0260 CABINET TO BASE 12-14 AWG (LF)	SIGNAL HEAD NUMBER	655.0230 BASE TO HEAD 5-14 AWG (LF)	655.0240 BASE TO HEAD 7-14 AWG (LF)
CB1	SB1	-	120	-	-	FUTURE	-	-
CB1	SB2	-	-	-	109	1	19	-
		-	-	-	-	6	-	19
CB1	SB3	-	-	155	-	5	-	49
CB1	SB4	-	269	-	-	FUTURE	-	-
CB1	SB5	-	-	-	258	7	19	-
		-	-	-	-	12	19	-
CB1	SB6	-	427	-	-	FUTURE	-	-
CB1	SB7	-	-	-	416	3	-	19
		-	-	-	-	4	19	-
CB1	SB8	-	-	250	-	2	-	49
CB1	SB9	-	252	-	-	FUTURE	-	-
CB1	SB10	-	-	-	241	9	19	-
		-	-	-	-	10	19	-
CB1	SB11	-	-	397	-	11	19	-
CB1	SB12	-	-	101	-	8	19	-
CB1	SB13	-	203	-	-	FUTURE	-	-
CB1	SB14	-	218	-	-	FUTURE	-	-
CB1	SB15	942	-	-	-	13	15	-
		-	-	-	-	14	15	-
CB1	SB16	1,356	-	-	241	15	15	-
		-	-	-	-	16	15	-
SUBTOTALS		2,298	1,489	903	1,265		212	136
TOTALS		2,298	1,701	1,039	1,265		-	-

SAWING PAVEMENT

TRAFFIC CONTROL STAGE	STATION - STATION	OFFSET	LOCATION	NOTE	690.0150 SAWING ASPHALT (LF)	690.0250 SAWING CONCRETE (LF)
1	131+40	-	USH 12	-	62	-
	135+86	LT	USH 12	INDUSTRIAL DR	46	-
	147+33	-	USH 12	CULVERT	15	10
	147+43	-	USH 12	CULVERT	15	10
	155+45	-	USH 12	CULVERT	17	10
	155+55	-	USH 12	CULVERT	17	10
	157+15	-	USH 12	-	34	-
	31+20	-	CTH AA / MAYER RD	DRIVEWAY	53	-
	32+77	-	CTH AA / MAYER RD	DRIVEWAY	94	-
	34+96	RT	CTH AA / MAYER RD	DRIVEWAY	28	-
	36+73	RT	CTH AA / MAYER RD	DRIVEWAY	18	-
	81+17	-	BOHN DRIVEWAY	-	36	-
2	131+40 - 157+15	RT	USH 12	MILL & OVERLAY	2,575	-
	147+33	-	USH 12	CULVERT	15	10
	147+43	-	USH 12	CULVERT	15	10
	152+92	RT	USH 12	DRIVEWAY	11	-
	153+72	RT	USH 12	DRIVEWAY	19	-
	155+45	-	USH 12	CULVERT	17	10
	155+55	-	USH 12	CULVERT	17	10
	33+90	-	CTH AA / MAYER RD	-	31	-
	70+02	-	SHORT RD	-	24	-
3	131+40 - 157+15	LT	USH 12	MILL & OVERLAY	2,575	-
	135+86	LT	USH 12	INDUSTRIAL DR	46	-
	39+68	-	MAYER RD	-	38	-
	39+68	RT	MAYER RD	CURB & GUTTER	-	3
	39+68	LT	MAYER RD	CURB & GUTTER	-	3
	39+68	RT	MAYER RD	SIDEWALK	-	5
	39+68	LT	MAYER RD	SIDEWALK	-	5
	*UNDISTRIBUTED	-	-	-	292	4
	TOTALS				6,110	100

*5% OF ITEM TOTAL PLUS ROUNDING

3

TRANSPORTATION PROJECT PLAT NO: 7080-00-23 - 4.01

PART OF LOT 2, CSM 2752, PART OF LOT 1, CSM 1601 & PART OF THE NE¼ - SE¼, CITY OF ALTOONA, PART OF THE NW¼ - SE¼ AND NE¼ - SE¼, TOWN OF WASHINGTON, ALL LOCATED IN SECTION 25, IN T 27 N, R 9 W, EAU CLAIRE COUNTY, WISCONSIN.

RELOCATION ORDER USH 12 EAU CLAIRE - FAIRCHILD
(CITY OF ALTOONA, CTH AA INTERSECTION) EAU CLAIRE COUNTY

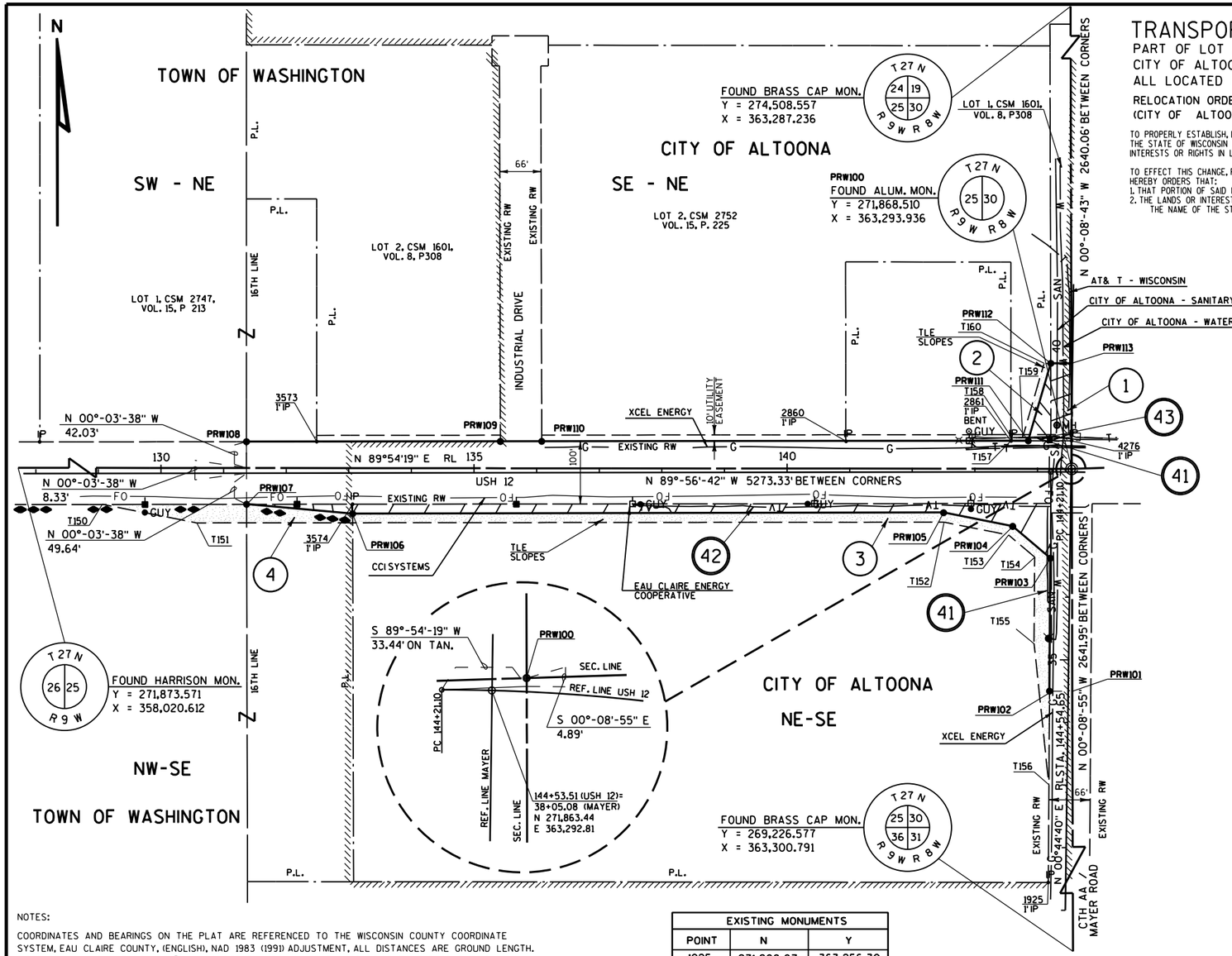
TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

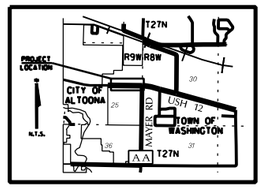
TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3) AND 84.09, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 7080-00-23-4.01
AMENDMENT NO:

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN EAU CLAIRE COUNTY, WISCONSIN AT ___:___ _M ON _____ AS DOCUMENT #_____ AND FILED IN _____

_____
SIGNATURE OF REGISTER OF DEEDS





LOCATION SKETCH

COURSE TABLE		
COURSE	BEARING	DISTANCE
100-101	S 00°08'55" E	355.31'
101-102	N 89°37'24" W	36.34'
102-103	N 00°22'36" E	212.27'
103-104	N 49°48'56" W	78.80'
104-105	N 78°47'05" W	112.55'
105-106	S 89°53'45" W	943.89'
106-107	N 84°54'51" W	170.13'
107-108	N 00°03'38" W	100.00'
108-109	N 89°56'22" E	405.57'
109-110	N 89°56'22" E	66.00'
110-111	N 89°56'22" E	777.16'
111-112	N 16°11'21" E	128.79'
112-113	N 89°51'17" E	33.00'
113-100	S 00°08'43" E	168.38'

STATION & OFFSET TABLE

Point Number	Station	Offset
PRW100	144+54.58	-5.08'
PRW101	144+59.70	350.19'
PRW102	144+18.64	350.12'
PRW103	144+20.38	137.86'
PRW104	143+60.27	86.92'
PRW105	142+49.90	64.84'
PRW106	133+06.02	65.00'
PRW107	131+36.59	49.64'
PRW108	131+36.64	-50.36'
PRW109	135+42.22	-50.12'
PRW110	136+08.22	-50.08'
PRW111	143+85.38	-49.62'
PRW112	144+21.47	-173.24'
PRW113	144+52.59	-173.45'

TLE STATION & OFFSET TABLE

Point Number	Station	Offset
T150	129+06.00	49.50'
T151	130+57.28	79.59'
T152	142+50.71	80.30'
T153	143+53.53	100.86'
T154	143+95.40	136.35'
T155	143+94.26	274.30'
T156	144+17.41	499.47'
T157	143+57.65	-49.64'
T158	143+57.66	-54.64'
T159	143+76.42	-54.62'
T160	144+11.07	-173.23'

CONVENTIONAL ABBREVIATIONS

ACCESS POINT/ DRIVEWAY CONNECTION	AP	REFERENCE LINE	R/L
ACCESS RIGHTS	AR	RELEASE OF RIGHTS	ROR
ACRES	AC.	REMAINING	REM.
AND OTHERS	ET.AL.	RIGHT-OF-WAY	R/W
CENTERLINE	C/L	SECTION	SEC.
CERTIFIED SURVEY MAP	CSM	STATION	STA.
CORNER	COR.	TEMPORARY LIMITED EASEMENT	TLE
DOCUMENT	DOC.	VOLUME	V.
EASEMENT	EASE.		
HIGHWAY EASEMENT	H.E.		
LAND CONTRACT	LC		
MONUMENT	MON.		
PAGE	P.		
PERMANENT LIMITED EASEMENT	PLE		
PROPERTY LINE	PL		
RECORDED AS	(100')		

CURVE DATA

LONG CHORD	LCH
LONG CHORD BEARING	LCB
RADIUS	R
DEGREE OF CURVE	D
CENTRAL ANGLE OR DELTA	DELTA
LENGTH OF CURVE	L
TANGENT	TAN

CONVENTIONAL SYMBOLS

FOUND IRON PIPE/PIN	LF (1" UNLESS NOTED)	PROPOSED R/W LINE	
		EXISTING H.E. LINE	
R/W MONUMENT	•(SET)	PROPERTY LINE	
R/W STANDARD	▲(SET)	LOT & TIE LINES	
SIGN	SIGN	SLOPE INTERCEPTS	
SECTION CORNER MONUMENT		CORPORATE LIMITS	
SECTION CORNER SYMBOL		ACCESS RESTRICTED (BY PREVIOUS ACQUISITION/CONTROL)	
FEE (HATCH VARIES)		ACCESS CONTROLLED BY PARCEL ACQUISITION	
TEMPORARY LIMITED EASEMENT		NO ACCESS (BY STATUTORY AUTHORITY)	
PERMANENT LIMITED EASEMENT		SECTION LINE	
R/W BOUNDARY POINT	PRW20	QUARTER LINE	
PARCEL NUMBER	102	SIXTEENTH LINE	
UTILITY PARCEL NUMBER	92	EXISTING CENTERLINE	
SIGN NUMBER (OFF PREMISE)	21-1	PROPOSED REFERENCE LINE	
BUILDING		PARALLEL OFFSET	

USH 12
P.I. = 147+86.39
Y = 271,864.171
X = 363,625.694
DELTA = 14° 32' 05" (RT)
D = 02° 00' 01"
T = 365.29'
L = 726.66'
R = 2864.50'
P.C. = 144+21.10
P.T. = 151+47.76
AH. TAN = S 75° 33' 36" E

CONVENTIONAL UTILITY SYMBOLS

WATER	W	
GAS	G	
TELEPHONE	T	
OVERHEAD TRANSMISSION LINES	OH	
ELECTRIC	E	
CABLE TELEVISION	TV	
FIBER OPTIC	FO	
SANITARY SEWER	SAN	
STORM SEWER	SS	
	NON COMPENSABLE	COMPENSABLE
POWER POLE		
TELEPHONE POLE		
TELEPHONE PEDESTAL		
ELECTRIC TOWER		

SCALE, FEET
0 100 200

EXISTING MONUMENTS		
POINT	N	Y
1925	271,208.07	363,256.30
2860	271,912.39	363,933.57
2861	271,912.83	363,197.15
3573	271,911.97	362,088.07
3574	271,812.02	362,145.34
4276	271,913.11	363,293.85

43 EAU CLAIRE ELECTRIC COOPERATIVE

EASEMENT VOL. 923, RECORDS P. 643, DOCUMENT # 675491, PARCELS 1 & 2
EASEMENT VOL. 984, RECORDS P. 696, DOCUMENT # 700828, PARCEL 2
EASEMENT VOL. 495, RECORDS P. 548, DOCUMENT # 915858, PARCEL 3

NOTES:

COORDINATES AND BEARINGS ON THE PLAT ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM, EAU CLAIRE COUNTY, (ENGLISH), NAD 1983 (1991) ADJUSTMENT, ALL DISTANCES ARE GROUND LENGTH. RIGHT-OF-WAY MONUMENTS ARE ¾" X 24" REBAR AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

RIGHT-OF-WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE U.S. PUBLIC LAND SURVEY OR OTHER SURVEYS OF 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.

DIMENSIONING FOR THE NEW R/W IS MEASURED ALONG AND PERPENDICULAR TO THE NEW REFERENCE LINES. FOR THE LATEST ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN EAU CLAIRE.

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 DOCUMENTS, OR FROM CENTERLINE OF EXISTING PAVEMENTS.

A TEMPORARY LIMITED EASEMENT (TLE) IS A RIGHT FOR CONSTRUCTION PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON AND THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM NECESSARY OR DESIRABLE. ALL TLES EXPIRE AT THE COMPLETION OF THE CONSTRUCTION PROJECT FOR WHICH THIS INSTRUMENT IS GIVEN.

EXISTING HIGHWAY RIGHT-OF-WAY HEREIN IS BASED ON THE FOLLOWING POINT OF REFERENCE:
EXISTING HIGHWAY RIGHT-OF-WAY FOR USH 12 IS ESTABLISHED FROM PREVIOUS PROJECT 395-G.
EXISTING HIGHWAY RIGHT-OF-WAY FOR CTH AA IS ESTABLISHED FROM RECORDED PLAT OF SCHLEWITZ ADDITION.

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND INTEREST TO D.O.T.
ALL AREAS SHOWN IN ACRES UNLESS OTHERWISE NOTED

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W ACRES REQUIRED NEW	EXISTING	TOTAL	TLE ACRES
1	CITY OF ALTOONA	FEE	0.09	----	0.09	----
2	REDETZKE PROPERTIES, LLC	FEE,TLE	0.05	----	0.05	0.03
3	FINLAND HOLDING GROUP, LLC	FEE,TLE	0.47	----	0.47	0.53
4	ADELINE BAUMBACH	FEE,TLE	0.03	----	0.03	0.19

UTILITY SCHEDULE & INTERESTS REQUIRED

UTILITY NUMBER	UTILITY OWNER(S)	INTEREST REQUIRED
41	AT&T - WISCONSIN (TELEPHONE)	RELEASE OF RIGHTS
42	CHARTER COMMUNICATIONS	RELEASE OF RIGHTS
43	EAU CLAIRE ELECTRIC COOPERATIVE	RELEASE OF RIGHTS

KL Engineering
[A] Better Experience

I, THOMAS J. HANSEN, 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 7080-00-23-4.01 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN THOMAS J. HANSEN S-2033 MADISON, WISCONSIN LAND SURVEYOR

Thomas J. Hansen — JUNE 20, 2012
THOMAS J. HANSEN — DATE
AGENT FOR KL ENGINEERING, INC.
R.L.S. NUMBER 2033

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

MICHAEL PILLER

FILE NAME : G:\WDOTCO\10033 (Design Work Orders)\WO 5 & 6 USH 12 & Mayer Road\TPP\70800023_401.dgn
PLOT DATE : 8/6/2012
PLOT BY : KL Engineering
PLOT NAME :
PLOT SCALE :
APPRAISAL PLAT DATE :

4. 01

TRANSPORTATION PROJECT PLAT NO: 7080-00-23 - 4.02

PART OF LOT 2, CSM 2751, LOCATED IN THE SW¼- NW¼ AND NW¼- SW¼, ALSO PART OF: LOTS 1 & 2, SCHLEWITZ ADDITION, LOT 2, CSM 1735, LOCATED IN THE NW¼- SW 1/4, CITY OF ALTOONA, LOT 1, CSM 1735, LOCATED IN THE NW¼- SW 1/4, AND PART OF NE1/4 - SW¼AND NW¼- SW¼, TOWN OF WASHINGTON, ALL LOCATED IN SECTION 30, IN T 27 N, R 8 W, EAU CLAIRE COUNTY, WISCONSIN.

RELOCATION ORDER USH 12 EAU CLAIRE - FAIRCHILD

(CITY OF ALTOONA, CTH AA INTERSECTION) EAU CLAIRE COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

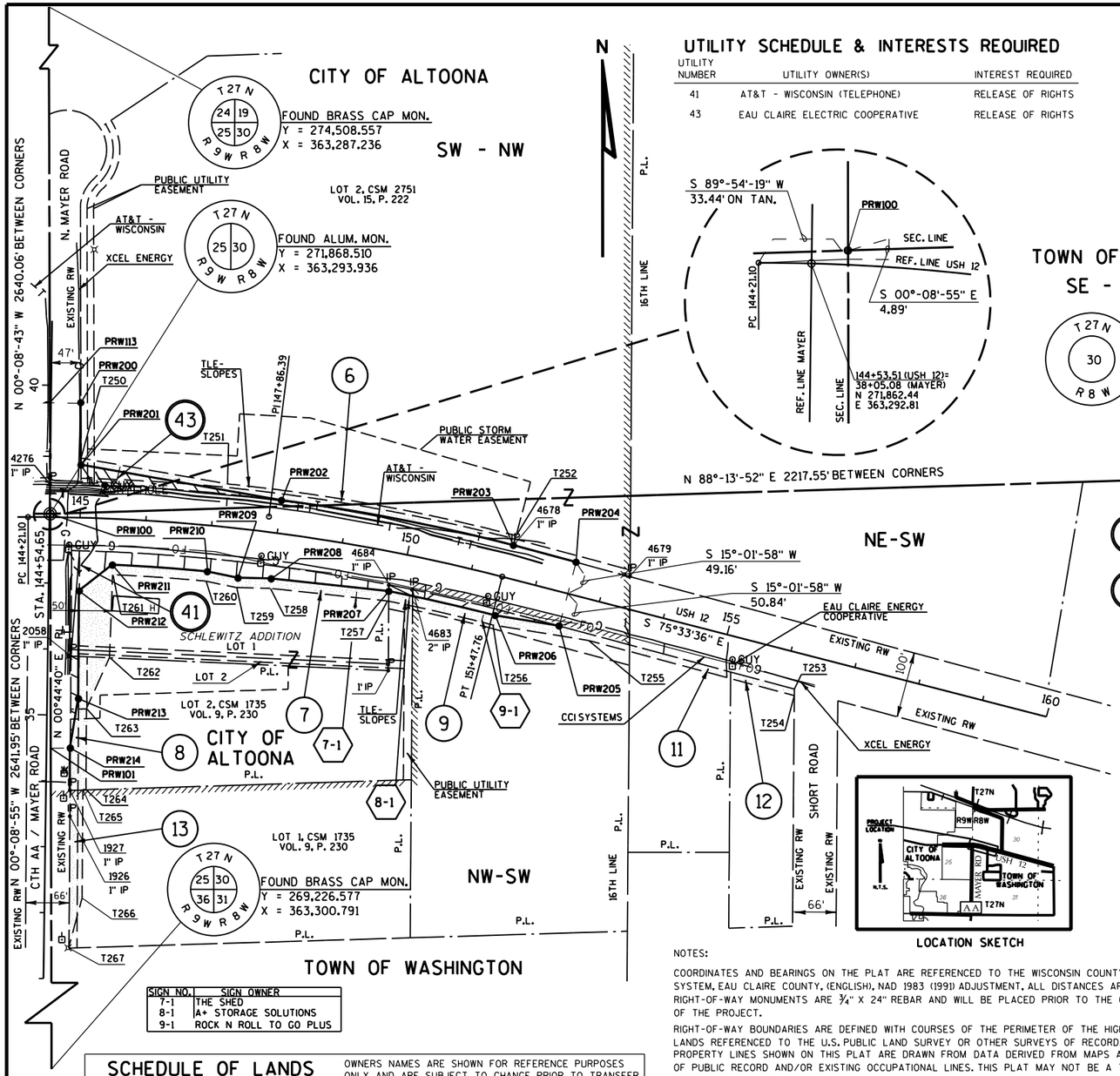
TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3) AND 84.09, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 7080-00-23-4.02
AMENDMENT NO:

ACCEPTED FOR RECORDING AND FILING IN THE OFFICE OF THE REGISTER OF DEEDS IN EAU CLAIRE COUNTY, WISCONSIN AT ..:.. .M ON _____ AS DOCUMENT #_____ AND FILED IN _____

_____
SIGNATURE OF REGISTER OF DEEDS



UTILITY SCHEDULE & INTERESTS REQUIRED

UTILITY NUMBER	UTILITY OWNER(S)	INTEREST REQUIRED
41	AT&T - WISCONSIN (TELEPHONE)	RELEASE OF RIGHTS
43	EAU CLAIRE ELECTRIC COOPERATIVE	RELEASE OF RIGHTS

CURVE DATA

202-203
L = 358.47'
LC = 358.25'
LCB = S 79°01'31" E
R = 2914.93'

206-207
L = 165.47'
LC = 165.45'
LCB = N 77°11'39" W
R = 2804.93'

210-211
L = 144.17'
LC = 144.15'
LCB = N 86°01'38" W
R = 2794.93'

41 AT&T - WISCONSIN (TELEPHONE)
EASEMENT VOL. 739, RECORDS P. 391, DOCUMENT # 596087, PARCEL 6

43 EAU CLAIRE ELECTRIC COOPERATIVE
EASEMENT VOL. 751, RECORDS P. 399, DOCUMENT # 605174, PARCEL 6
EASEMENT VOL. 467, RECORDS P. 388, DOCUMENT # 449392, PARCELS 7 & 8
EASEMENT VOL. 721, RECORDS P. 599, DOCUMENT # 586807, PARCEL 8
EASEMENT VOL. 819, RECORDS P. 576, DOCUMENT # 632680, PARCEL 9
EASEMENT DOCUMENT # 586807, PARCEL 9

COURSE TABLE		
COURSE	BEARING	DISTANCE
100-113	N 00°08'43" W	168.38'
113-200	N 89°51'17" E	47.00'
200-201	S 00°08'38" E	94.62'
201-202	S 79°59'14" E	308.72'
203-204	S 74°58'02" E	98.62'
204-205	S 15°01'58" W	100.00'
205-206	N 80°48'43" W	98.20'
207-208	N 83°52'36" W	179.40'
208-209	N 88°43'30" W	50.39'
209-210	N 78°11'42" W	47.54'
211-212	S 51°58'37" W	63.87'
212-213	S 00°22'36" W	163.50'
213-214	S 09°28'39" W	75.87'
214-101	N 89°37'24" W	29.66'
101-100	N 00°08'55" W	355.31'

CONVENTIONAL ABBREVIATIONS

ACCESS POINT/ DRIVEWAY CONNECTION	AP	REFERENCE LINE	R/L
ACCESS RIGHTS	AR	RELEASE OF RIGHTS	ROR
ACRES	AC.	REMAINING	REM.
AND OTHERS	ET.AL.	RIGHT-OF-WAY	R/W
CENTERLINE	C/L	SECTION	SEC.
CERTIFIED SURVEY MAP	CSM	STATION	STA.
CORNER	COR.	TEMPORARY LIMITED EASEMENT	TLE
DOCUMENT	DOC.	VOLUME	V.
EASEMENT	EASE.		
HIGHWAY EASEMENT	H.E.		
LAND CONTRACT	LC		
MONUMENT	MON.		
	P.		
PERMANENT LIMITED EASEMENT	PLE		
PROPERTY LINE	PL		
RECORDED AS	(100')		

CURVE DATA

LONG CHORD	LCH
LONG CHORD BEARING	LCB
RADIUS	R
DEGREE OF CURVE	D
CENTRAL ANGLE OR DELTA	DELTA
LENGTH OF CURVE	L
TANGENT	TAN

CONVENTIONAL SYMBOLS

FOUND IRON PIPE/PIN	LP (1" UNLESS NOTED)	PROPOSED R/W LINE	
		EXISTING H.E. LINE	
R/W MONUMENT	•(SET)	PROPERTY LINE	
R/W STANDARD	▲(SET)	LOT & TIE LINES	
SIGN	ISIGN	SLOPE INTERCEPTS	
SECTION CORNER MONUMENT		CORPORATE LIMITS	
SECTION CORNER SYMBOL		ACCESS RESTRICTED (BY PREVIOUS ACQUISITION/CONTROL)	
FEE (HATCH VARIES)		ACCESS CONTROLLED BY PARCEL ACQUISITION	
TEMPORARY LIMITED EASEMENT		NO ACCESS (BY STATUTORY AUTHORITY)	
PERMANENT LIMITED EASEMENT		SECTION LINE	
R/W BOUNDARY POINT		QUARTER LINE	
PARCEL NUMBER	PRW20	SIXTEENTH LINE	
UTILITY PARCEL NUMBER	102	EXISTING CENTERLINE	
SIGN NUMBER (OFF PREMISE)	92	PROPOSED REFERENCE LINE	
BUILDING	21-1	PARALLEL OFFSET	

STATION & OFFSET TABLE

Point Number	Station	Offset
PRW100	144+54.58	-5.08'
PRW101	144+59.70	350.19'
PRW113	144+52.59	-173.45'
PRW200	144+96.89	-174.37'
PRW201	144+99.41	-79.78'
PRW202	148+00.02	-49.97'
PRW203	151+52.41	-50.17'
PRW204	152+51.03	-49.15'
PRW205	152+49.99	50.84'
PRW206	151+52.21	59.83'
PRW207	149+83.30	59.93'
PRW208	147+99.99	69.92'
PRW209	147+48.55	74.92'
PRW210	147+00.68	70.09'
PRW211	145+52.26	70.18'
PRW212	145+01.74	111.27'
PRW213	145+05.34	274.74'
PRW214	144+93.48	349.86'

TLE STATION & OFFSET TABLE

Point Number	Station	Offset
T250	144+99.13	-89.94'
T251	147+17.48	-64.92'
T252	151+52.57	-65.17'
T253	156+19.22	54.66'
T254	156+21.72	64.69'
T255	152+99.50	61.35'
T256	151+52.82	74.84'
T257	149+83.98	74.92'
T258	148+01.01	84.91'
T259	147+48.51	89.99'
T260	146+99.82	85.09'
T261	145+53.82	85.17'
T262	145+54.79	210.86'
T263	145+19.77	289.46'
T264	145+23.54	412.49'
T265	145+18.10	412.79'
T266	145+23.38	576.99'
T267	145+00.18	653.22'

USH 12

P.I. = 147+86.39
Y = 271,864.171
X = 363,625.694
DELTA = 14° 32' 05" (RT)
D = 02° 00' 01"
T = 365.29'
L = 726.66'
R = 2864.50'
P.C. = 144+21.10
P.T. = 151+47.76
BK. TAN = N 89° 54' 19" E

CONVENTIONAL UTILITY SYMBOLS

	NON COMPENSABLE	COMPENSABLE
WATER	W	
GAS	G	
TELEPHONE	T	
OVERHEAD TRANSMISSION LINES	OH	
ELECTRIC	E	
CABLE TELEVISION	TV	
FIBER OPTIC	FO	
SANITARY SEWER	SAN	
STORM SEWER	SS	
POWER POLE		
TELEPHONE POLE		
TELEPHONE PEDESTAL		
ELECTRIC TOWER		

SCALE, FEET
0 100 200

SIGN NO.	SIGN OWNER
7-1	THE SHED
8-1	A+ STORAGE SOLUTIONS
9-1	ROCK N ROLL TO GO PLUS

EXISTING MONUMENTS

POINT	N	Y
1926	271,409.72	363,323.70
1927	271,448.92	363,323.96
2058	271,652.66	363,324.63
4276	271,913.11	363,293.85
4678	271,820.46	363,996.47
4679	271,774.10	364,173.24
4683	271,752.94	363,842.88
4684	271,760.33	363,807.52

LOCATION SKETCH

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY, AND ARE SUBJECT TO CHANGE PRIOR TO TRANSFER OF LAND INTEREST TO D.O.T.
ALL AREAS SHOWN IN ACRES UNLESS OTHERWISE NOTED

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W ACRES REQUIRED NEW	EXISTING	TOTAL	TLE ACRES
6	TAMBORNINO, LLC	FEE,TLE	0.09	----	0.09	0.20
7	ROBB F. MAJESKI, VENDOR, EDWARD P. BOHN, PURCHASER	FEE,TLE	0.27	----	0.27	0.28
8	BAUMAN INVESTMENTS, LLC	FEE,TLE	0.04	----	0.04	0.12
9	MARK A. & GAIL D. STUDINSKI	FEE,TLE	0.04	----	0.04	0.11
11	JARL D. & MARY M. HOLMES	TLE	----	----	----	0.04
12	LORRAINE A KOSAKOSKI	TLE	----	----	----	0.02
13	A+ STORAGE SOLUTIONS, LLC	TLE	----	----	----	0.09

NOTES:

COORDINATES AND BEARINGS ON THE PLAT ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM, EAU CLAIRE COUNTY, (ENGLISH), NAD 1983 (1991) ADJUSTMENT. ALL DISTANCES ARE GROUND LENGTH. RIGHT-OF-WAY MONUMENTS ARE ¾" X 24" REBAR AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

RIGHT-OF-WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE U.S. PUBLIC LAND SURVEY OR OTHER SURVEYS OF 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.

DIMENSIONING FOR THE NEW R/W IS MEASURED ALONG AND PERPENDICULAR TO THE NEW REFERENCE LINES. FOR THE LATEST ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN EAU CLAIRE.

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EXISTING HIGHWAY RIGHT-OF-WAY FOR USH 12 IS ESTABLISHED FROM PREVIOUS PROJECT 395-G.
EXISTING HIGHWAY RIGHT-OF-WAY FOR CTH AA IS ESTABLISHED FROM RECORDED PLAT OF SCHLEWITZ ADDITION.
EXISTING HIGHWAY RIGHT-OF-WAY FOR N. MAYER ROAD IS ESTABLISHED FROM CSM #2751.

KL Engineering
[A] Better Experience

I, THOMAS J. HANSEN, 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 7080-00-23-4.02 AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN THOMAS J. HANSEN S-2033 MADISON, WISCONSIN LAND SURVEYOR

Thomas J Hansen JUNE 20, 2012
THOMAS J. HANSEN DATE
AGENT FOR KL ENGINEERING, INC.
R.L.S. NUMBER 2033

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

_____
MICHAEL PILLER

FILE NAME : G:\WDOTCO\10033 (Design Work Orders)\WO 5 & 6 USH 12 & Mayer Road\TPP\70800023_402.dgn PLOT DATE : 8/6/2012 PLOT BY : KL Engineering PLOT NAME : PLOT SCALE :

APPRAISAL PLAT DATE :

4. 02

6118 USH 12
WELKE

6118 USH 12
WELKE

6198 USH 12
REDETZKE

CHARTER (TV)

EAU CLAIRE ENERGY COOP. (ELEC)

ROW (TYP.)

SLOPE INTERCEPTS (TYP.)

AT&T (FO)

N

129+00 130+00 131+00 132+00 133+00 134+00

MATCH LINE 134+00

USH 12

BEGIN PROJECT
STA 131+39.77
MATCH EXISTING
SAWCUT ASPHALT REQ'D

CCI SYSTEMS (FO)

ALTOONA MUNICIPAL (SANITARY)

ALTOONA MUNICIPAL (WATER)

EAU CLAIRE ENERGY COOP. (OH)

ROW (TYP.)

TLE (TYP.)

5

5

6007-5960 USH 12
BAUMBACH

6007-5960 USH 12
BAUMBACH

1512 MAYER RD
FINLAND

PROPOSED PROFILE

EXISTING PROFILE

2.15%

1.06%

ELEV = 911.490
STA = 131+39.77

VPC STA 131+39.77
VPC EL 911.49

VPI STA 132+03.64
VPI EL 912.167

VPT STA 132+67.50
VPT EL 913.54

VCL = 127.73
K = 116.96
DESIGN SPEED: 55 MPH

EXISTING ELEVATION

PROPOSED ELEVATION

916 914 912 910 908 906 904 902

129+50	129+75	130+00	130+25	130+50	130+75	131+00	131+25	131+50	131+75	132+00	132+25	132+50	132+75	133+00	133+25	133+50	133+75	134+00
911.06	910.94	910.86	910.83	910.89	910.97	911.14	911.31	911.61 **911.60**	911.92 **911.92**	912.32 **912.28**	912.73 **912.70**	913.20 **913.18**	913.68 **913.70**	914.21 **914.24**	914.76 **914.78**	915.30 **915.32**	915.84 **915.85**	916.38 **916.39**

PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	PLAN AND PROFILE: USH 12	SHEET 110	E

6198 USH 12
REDETZKE

END CONSTRUCTION
STA. 50+53
MATCH EXISTING
SAWCUT ASPHALT REQ'D

STA. 50+39
18" X 71" CP REQ'D

ROW (TYP.)

INDUSTRIAL DR

6200-6218 USH 12
REDETZKE

AT&T

XCEL ENERGY (GAS)

EAU CLAIRE ENERGY COOP. (ELEC)

MATCH LINE 134+00

MATCH LINE 140+00

135+00 136+00 137+00 138+00 139+00

USH 12

CCI SYSTEMS (FO)

ALTOONA MUNICIPAL (SANITARY)

ALTOONA MUNICIPAL (WATER)

SLOPE INTERCEPTS (TYP.)

ROW (TYP.)

TLE (TYP.)

STA. 138+33 RT
REMOVE C.E.

CHARTER (TV)

1512 MAYER RD
FINLAND

DESIGN SPEED: 60 MPH
VCL = 900.00
K = 299.30

VPC STA 135+80.00
VPC EL 920.27

EXISTING PROFILE

PROPOSED PROFILE

EXISTING ELEVATION

PROPOSED ELEVATION

ADDITIONAL DEPTH MILLING REQUIRED (3.25" MAX) STA 136+50 to STA 139+25

2.15%

930 928 926 924 922 920 918 916

916.38	916.39	916.93	916.93	917.48	917.47	918.04	918.01	918.58	918.54	919.08	919.08	919.58	919.62	920.11	920.16	920.63	920.69	921.16	921.20	921.69	921.69	922.21	922.16	922.72	922.61	923.18	923.04	923.62	923.44	924.03	923.83	924.40	924.19	924.76	924.54	925.09	924.86	925.41	925.16	925.57	925.44	925.73	925.70	925.91	925.94	926.09	926.16	926.32	926.36
134+00		134+25		134+50		134+75		135+00		135+25		135+50		135+75		136+00		136+25		136+50		136+75		137+00		137+25		137+50		137+75		138+00		138+25		138+50		138+75		139+00		139+25		139+50		139+75		140+00	

PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	PLAN AND PROFILE: USH 12	SHEET 111	E

FILE NAME : G:\WDOTCO\10033 (DESIGN WORK ORDERS)\WO 5 & 6 USH 12 & MAYER ROAD\CIVIL 3D\SHEETSPLAN\PLAN AND PROFILE\050101_PP.DWG PLOT DATE : 12/5/2012 PLOT BY : KL ENGINEERING PLOT NAME : ---------- PLOT SCALE : 1" = 40'_XREF

WISDOT/CADDS SHEET 44

6200-6218 USH 12
REDETZKE

6336 USH 12
REDETZKE

6500 USH 12
BUSH

CHARTER (TV)

AT&T

STA. 142+10 LT
REMOVE P.E.

EAU CLAIRE ENERGY COOP. (ELEC)

ROW (TYP.)

XCEL ENERGY (GAS)

ALTOONA MUNICIPAL (SANITARY)

AT&T

MAYER RD

MATCH LINE 140+00

MATCH LINE 146+00

USH 12

CCI SYSTEMS (FO)

ALTOONA MUNICIPAL (WATER)

AT&T

XCEL ENERGY (GAS)

CHARTER (TV)

EAU CLAIRE ENERGY COOP. (OH)

CTH AA/MAYER RD

ROW (TYP.)

SLOPE INTERCEPTS (TYP.)

TLE (TYP.)

1503 MAYER RD
BOHN

1512 MAYER RD
FINLAND

5

5

DESIGN SPEED: 60 MPH
VCL = 900.00
K = 299.30

VPI STA 140+30.00
VPI EL 929.950

142+24.08
927.20

VPT STA 144+80.00
VPT EL 926.10

PROPOSED PROFILE

EXISTING PROFILE

EXISTING ELEVATION

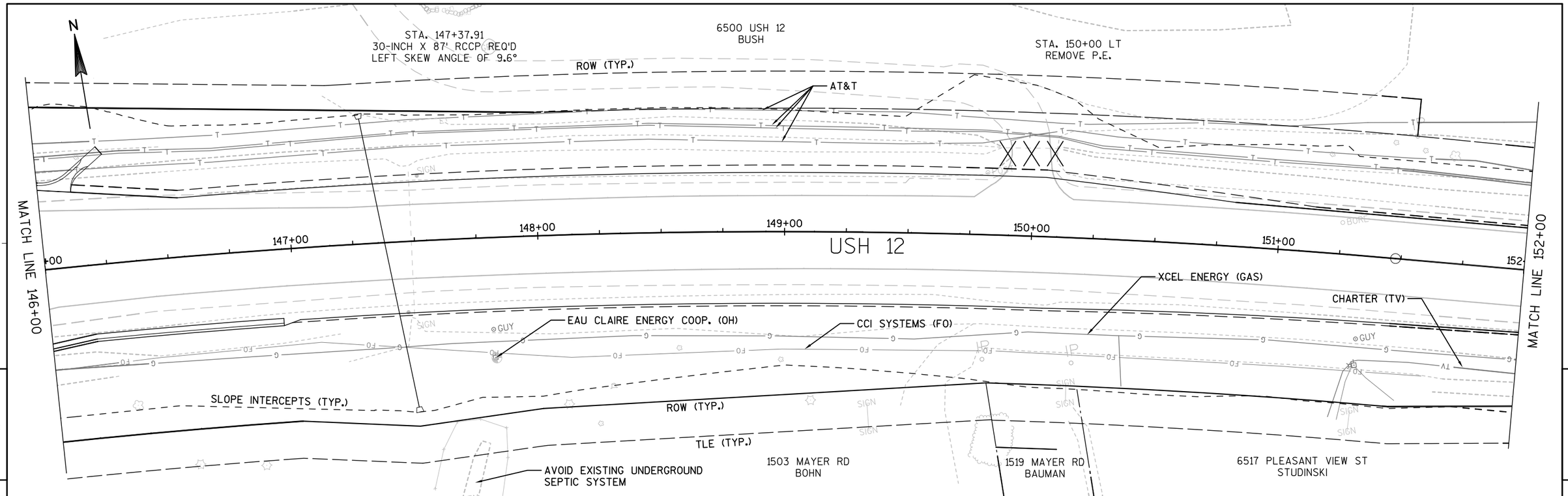
PROPOSED ELEVATION

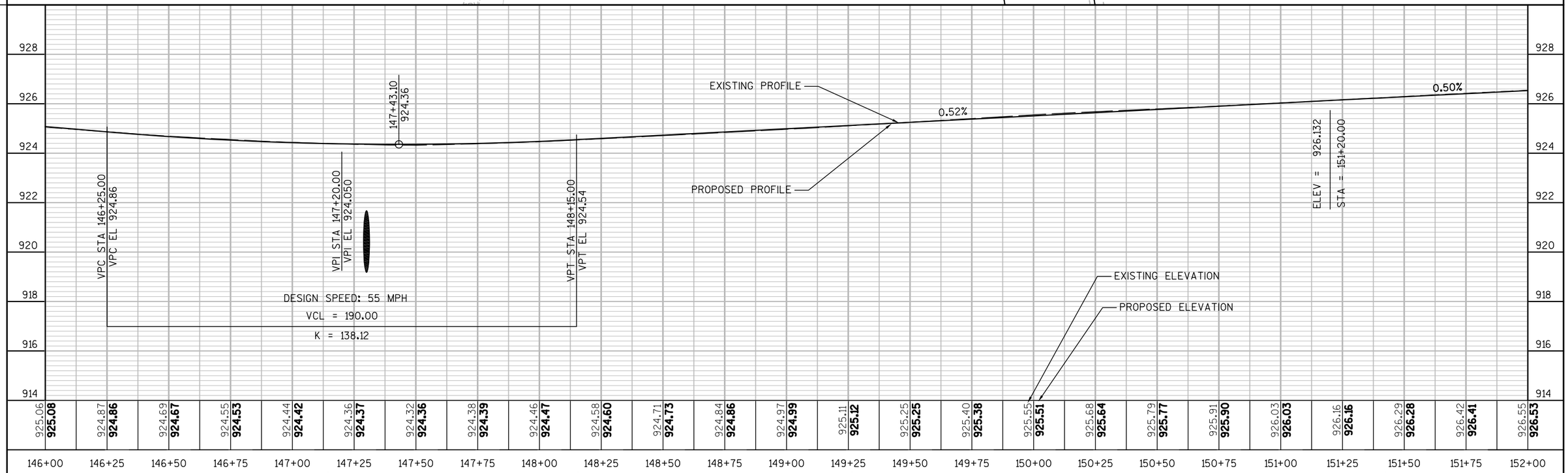
-0.86%

926.32	926.36	926.54	926.53	926.68	926.69	926.81	926.83	926.92	926.94	927.02	927.03	927.08	927.10	927.12	927.16	927.15	927.19	927.17	927.20	927.16	927.19	927.13	927.15	927.07	927.10	926.96	927.03	926.87	926.93	926.78	926.82	926.68	926.68	926.54	926.52	926.39	926.34	926.23	926.14	926.03	925.93	925.75	925.72	925.48	925.50	925.27	925.29	925.06	925.08
140+00	140+25	140+50	140+75	141+00	141+25	141+50	141+75	142+00	142+25	142+50	142+75	143+00	143+25	143+50	143+75	144+00	144+25	144+50	144+75	145+00	145+25	145+50	145+75	146+00																										

PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	PLAN AND PROFILE: USH 12	SHEET 112	E

FILE NAME : G:\WDOTCO\10033 (DESIGN WORK ORDERS)\WO 5 & 6 USH 12 & MAYER ROAD\CIVIL 3D\SHEETSPLAN\PLAN AND PROFILE\050101_PP.DWG PLOT DATE : 12/5/2012 PLOT BY : KL ENGINEERING PLOT NAME : ---------- PLOT SCALE : 1" = 40'_XREF





PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	PLAN AND PROFILE: USH 12	SHEET 113	E

6500 USH 12
BUSH

6636 USH 12
AXELSEN

STA. 155+50
30-INCH X 47' RCCP REQ'D

AT&T (TEL)

SLOPE INTERCEPTS (TYP.)

END PROJECT
STA 157+14.97
MATCH EXISTING
SAWCUT ASPHALT REQ'D

MATCH LINE 152+00

USH 12

153+00 154+00 155+00 156+00 157+00 158+00

XCEL ENERGY (GAS)

CCI SYSTEMS (FO)

ROW (TYP.)

TLE (TYP.)

CHARTER (TV)

SHORT RD

STA. 152+85 RT
RECONSTRUCT P.E.
SAWCUT ASPHALT REQ'D
14' X 24" CP REQ'D

STA. 153+66 RT
RECONSTRUCT P.E.
SAWCUT ASPHALT REQ'D
22' X 24" RCCP REQ'D

6517 PLEASANT VIEW ST
STUDINSKI

6543 USH 12
HOLMES

2628 SHORT RD
KOSAKOSKI

2711 SHORT RD
FITCH

5

5

EXISTING PROFILE

PROPOSED PROFILE

0.50%

0.46%

ELEV = 927.689
STA = 154+30.00

ELEV = 929.000
STA = 157+14.97

EXISTING ELEVATION

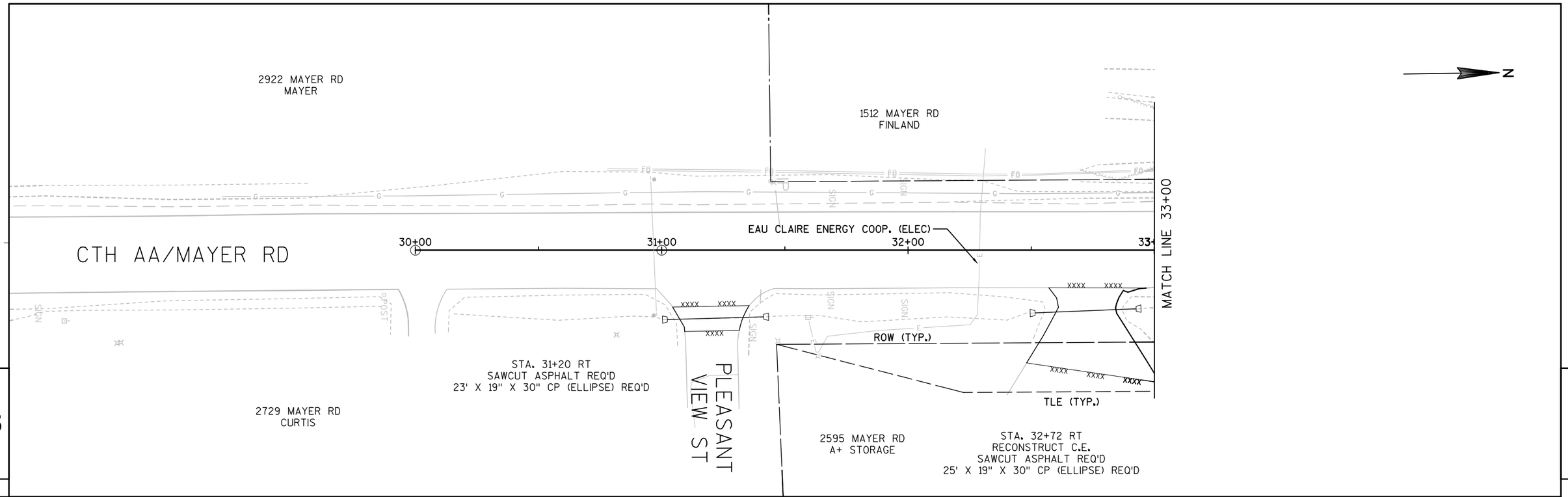
PROPOSED ELEVATION

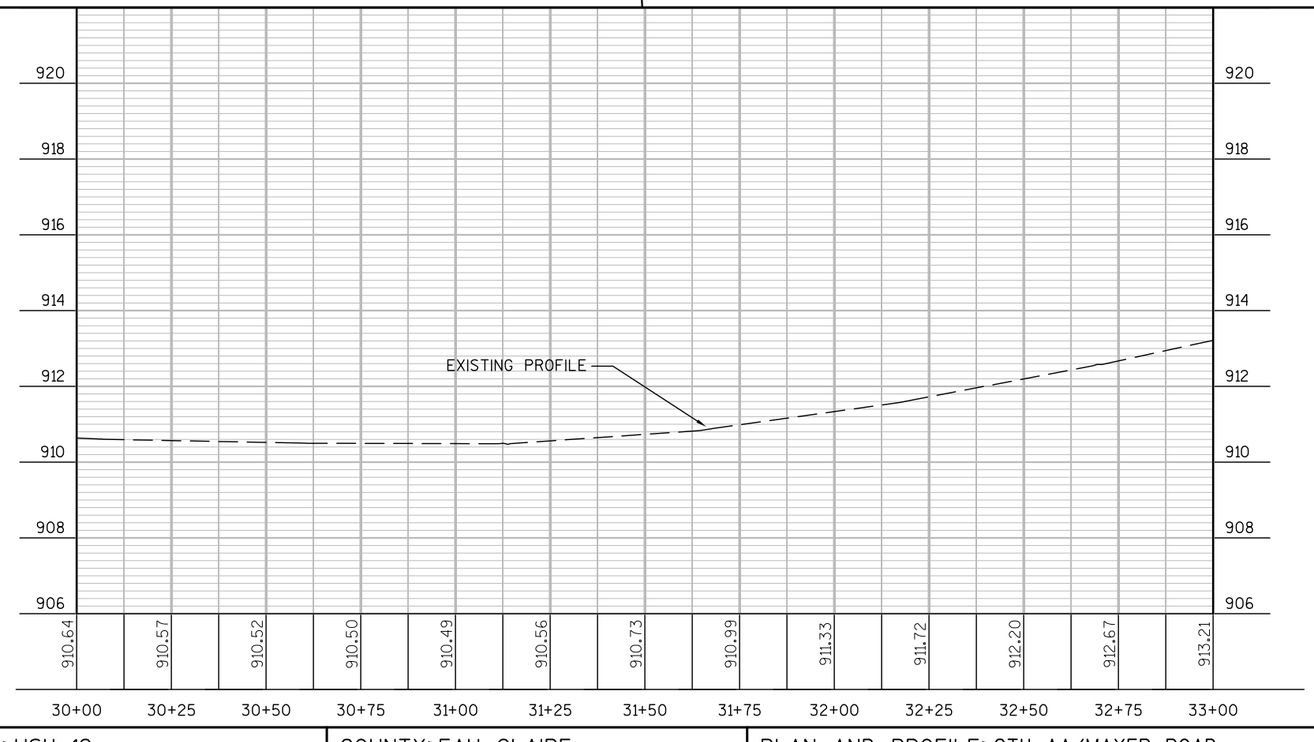
934	932	930	928	926	924	922	920

926.55	926.53	926.66	926.66	926.78	926.78	926.90	926.91	927.04	927.04	927.16	927.16	927.27	927.29	927.40	927.41	927.53	927.54	927.66	927.66	927.79	927.78	927.91	927.90	928.03	928.01	928.15	928.13	928.26	928.24	928.37	928.36	928.47	928.47	928.58	928.59	928.71	928.70	928.84	928.82	928.94	928.93	929.04	929.17	929.30	929.45

152+00	152+25	152+50	152+75	153+00	153+25	153+50	153+75	154+00	154+25	154+50	154+75	155+00	155+25	155+50	155+75	156+00	156+25	156+50	156+75	157+00	157+25	157+50	157+75	158+00

PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	PLAN AND PROFILE: USH 12	SHEET 114	E





PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	PLAN AND PROFILE: CTH AA/MAYER ROAD	SHEET 115	E

FILE NAME : G:\WDOTCO\10033 (DESIGN WORK ORDERS)\WO 5 & 6 USH 12 & MAYER ROAD\CIVIL 3D\SHEETSPLAN\PLAN AND PROFILE\050101_PP.DWG PLOT DATE : 12/5/2012 PLOT BY : KL ENGINEERING PLOT NAME : _____ PLOT SCALE : 1" = 40'_XREF

N

1512 MAYER RD
FINLAND

STA. 35+75 LT
RECONSTRUCT C.E.
SAWCUT ASPHALT REQ'D

BEGIN CONSTRUCTION
STA. 33+90.93
MATCH EXISTING
SAWCUT ASPHALT REQ'D

TLE (TYP.)

ROW (TYP.)

AT&T (FO)

USH 12

MATCH LINE 33+00

EAU CLAIRE ENERGY COOP. (ELEC)

XCEL ENERGY (GAS)

CTH AA/MAYER RD

ALTOONA MUNICIPAL (WATER)

ALTOONA MUNICIPAL (SAN.)

CHARTER (TV)

AT&T(TEL)

EAU CLAIRE ENERGY COOP. (OH)

ROW (TYP.)

SLOPE INTERCEPTS (TYP.)

MATCH LINE 38+00

00 34+00 35+00 36+00 37+00 38

80+00 81+00 81+17

1519 MAYER RD
BAUMAN

1503 MAYER RD
BOHN

2595 MAYER RD
A+ STORAGE

STA. 34+96 RT
RECONSTRUCT C.E.
SAWCUT ASPHALT REQ'D
24' X 38" X 24" CP (ELLIPSE) REQ'D

STA. 36+05 RT
RECONSTRUCT P.E.
SAWCUT ASPHALT REQ'D

5

5

926
924
922
920
918
916
914
912
911

EXISTING PROFILE
PROPOSED PROFILE

2.25%
3.10%
3.47%

ELEV = 915.220
STA = 33+90.93

VPC STA 35+10.50
VPC EL 917.91

VPI STA 35+90.00
VPI EL 919.696

VPT STA 36+69.50
VPT EL 922.16

VCL = 159.00
K = 186.72

ELEV = 925.276
STA = 37+70.00

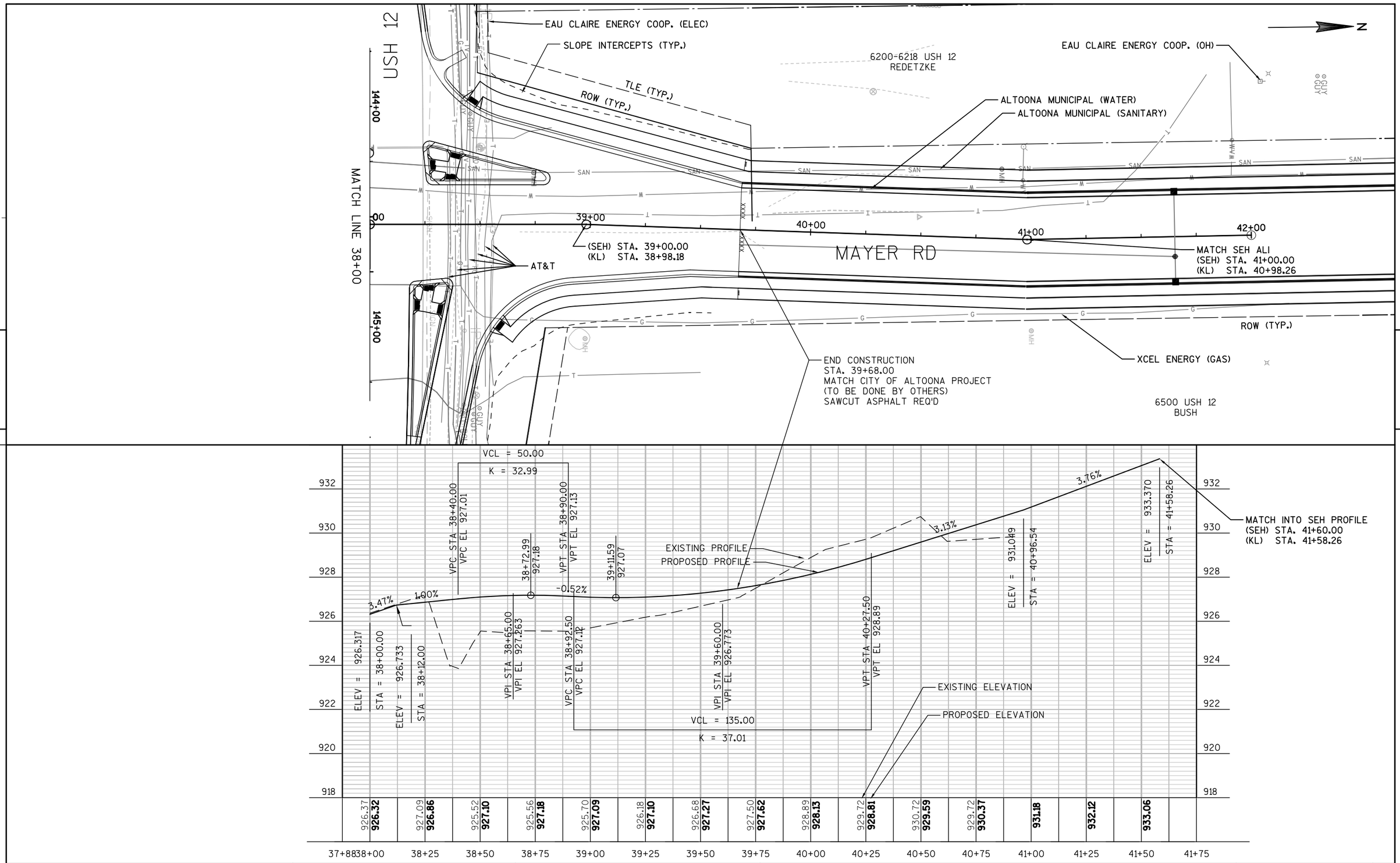
ELEV = 926.317
STA = 38+00.00

EXISTING ELEVATION
PROPOSED ELEVATION

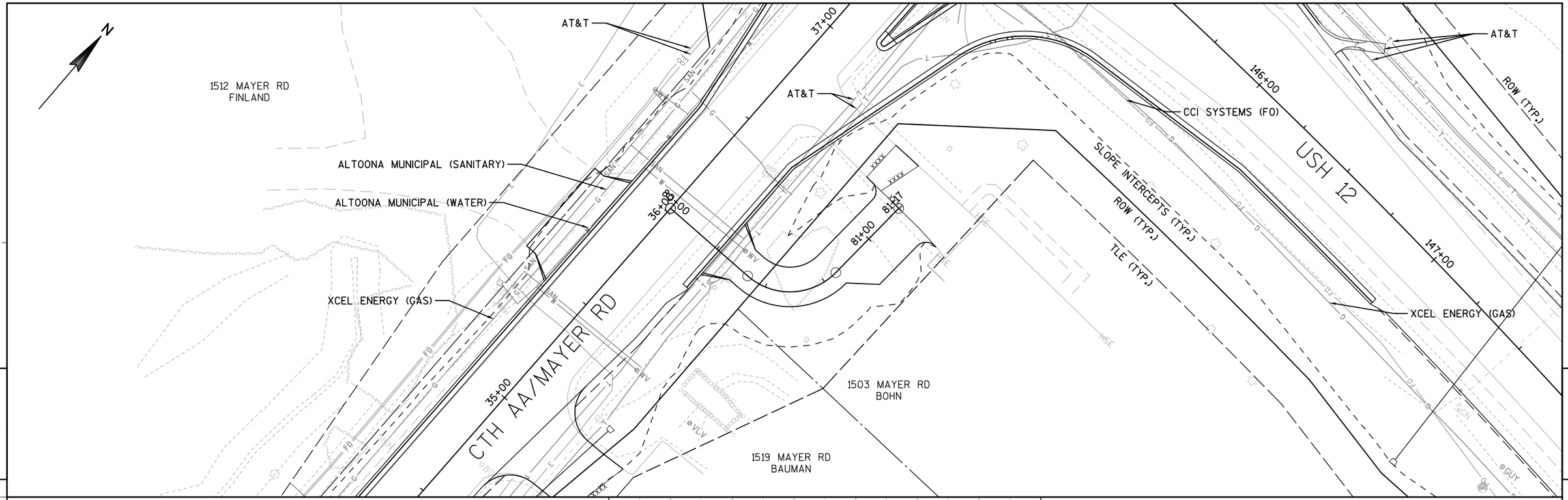
914.32	914.88	915.42	**915.42**	915.96	**915.99**	916.51	**916.55**	917.06	**917.11**	917.65	**917.67**	918.26	**918.24**	918.90	**918.84**	919.56	**919.47**	920.22	**920.14**	920.88	**920.83**	921.59	**921.57**	922.34	**922.33**	923.19	**923.11**	924.08	**923.88**	924.77	**924.66**	925.47	**925.45**	**926.32**

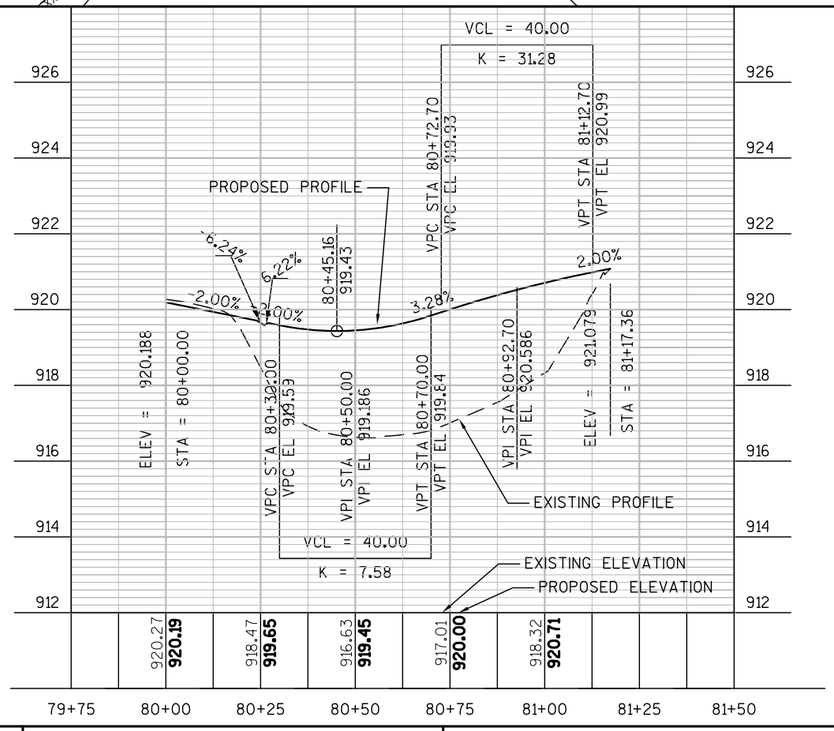
33+50 33+75 34+00 34+25 34+50 34+75 35+00 35+25 35+50 35+75 36+00 36+25 36+50 36+75 37+00 37+25 37+50 37+75 38+0038+12

PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	PLAN AND PROFILE: CTH AA/MAYER ROAD	SHEET 116	E

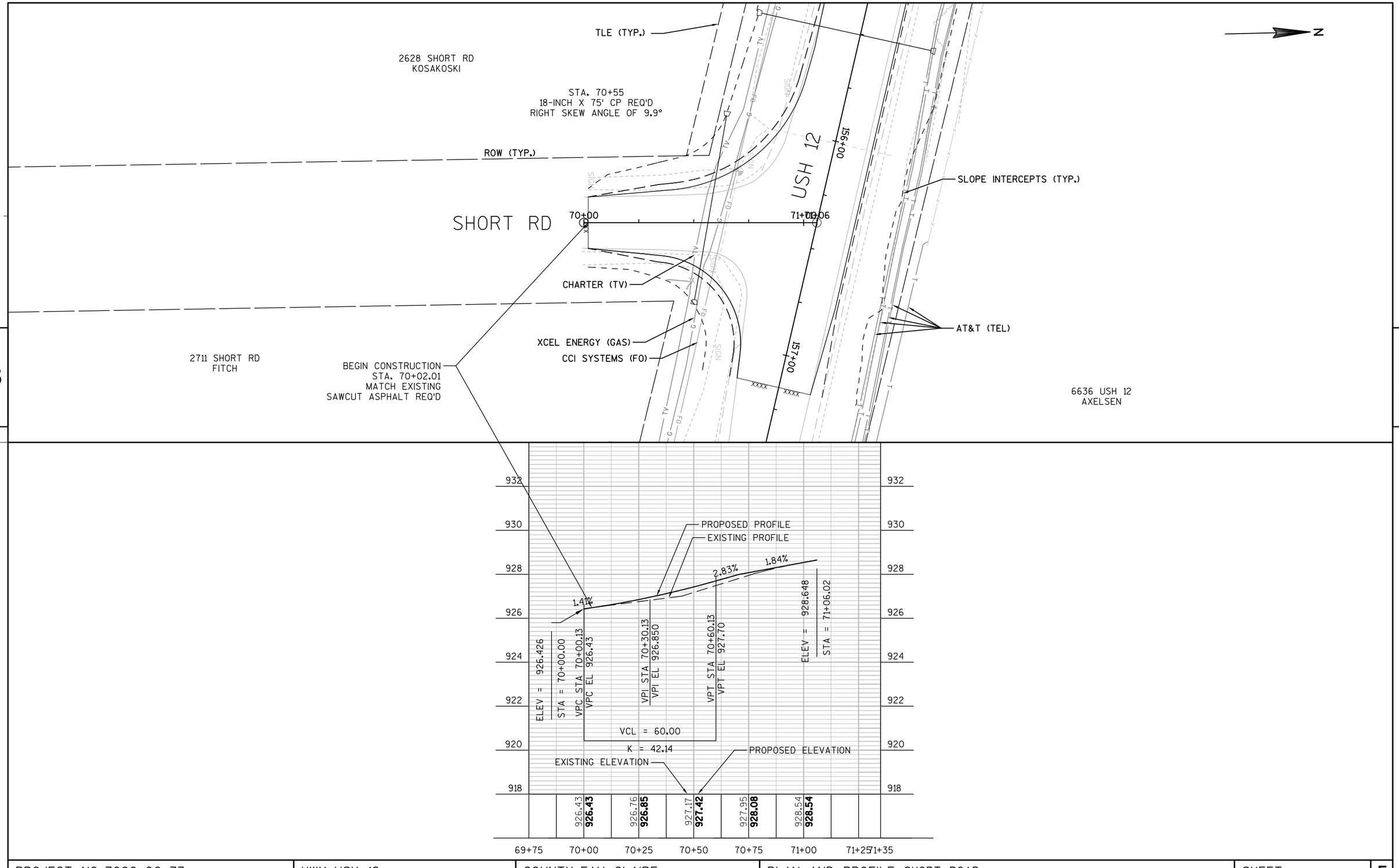


PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	PLAN AND PROFILE: MAYER ROAD	SHEET 117	E

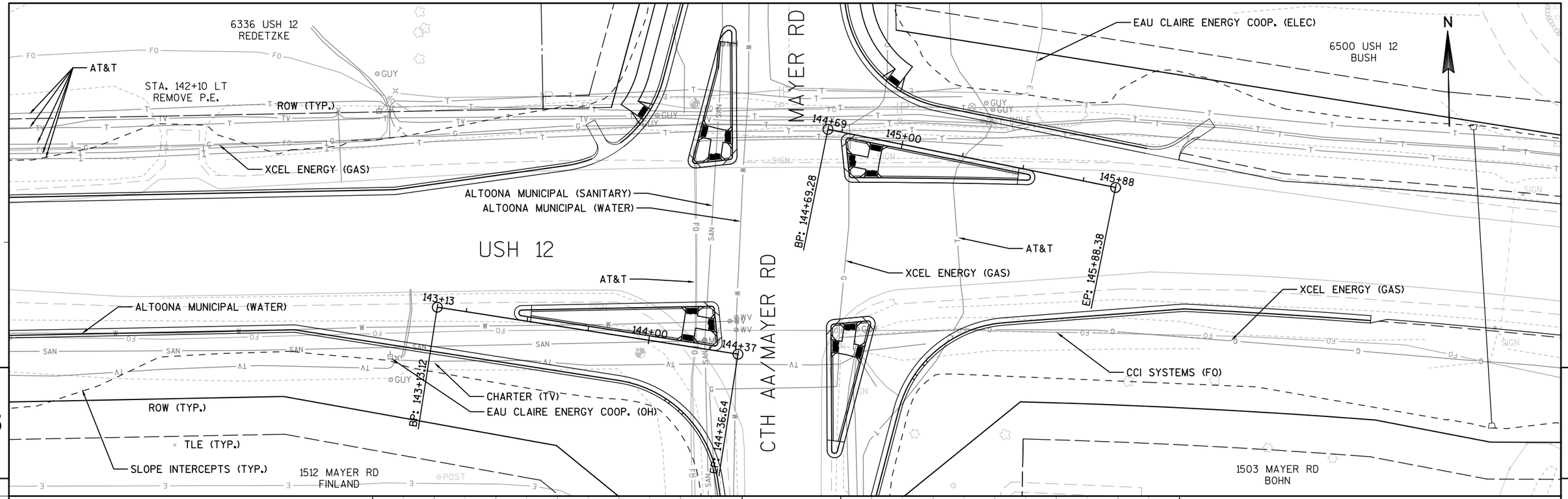


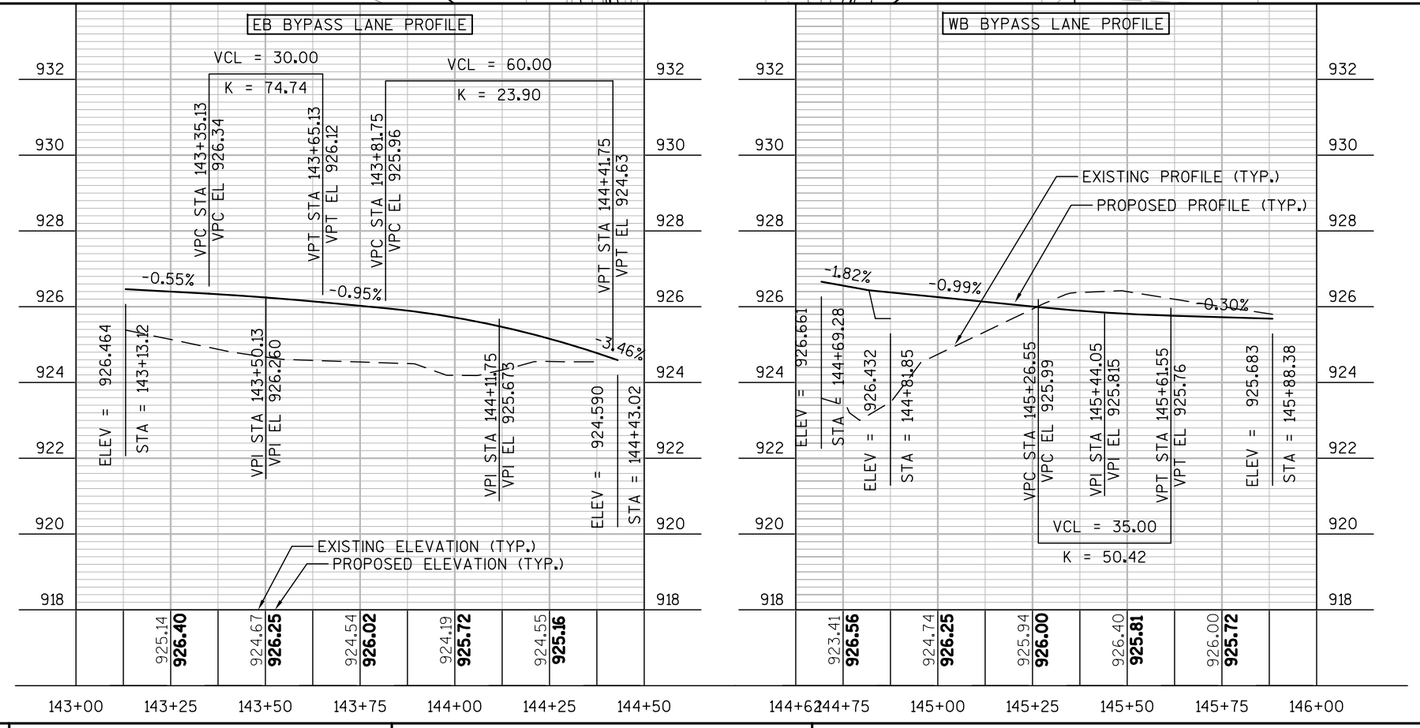


PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	PLAN AND PROFILE: BOHN DRIVEWAY	SHEET 118	E

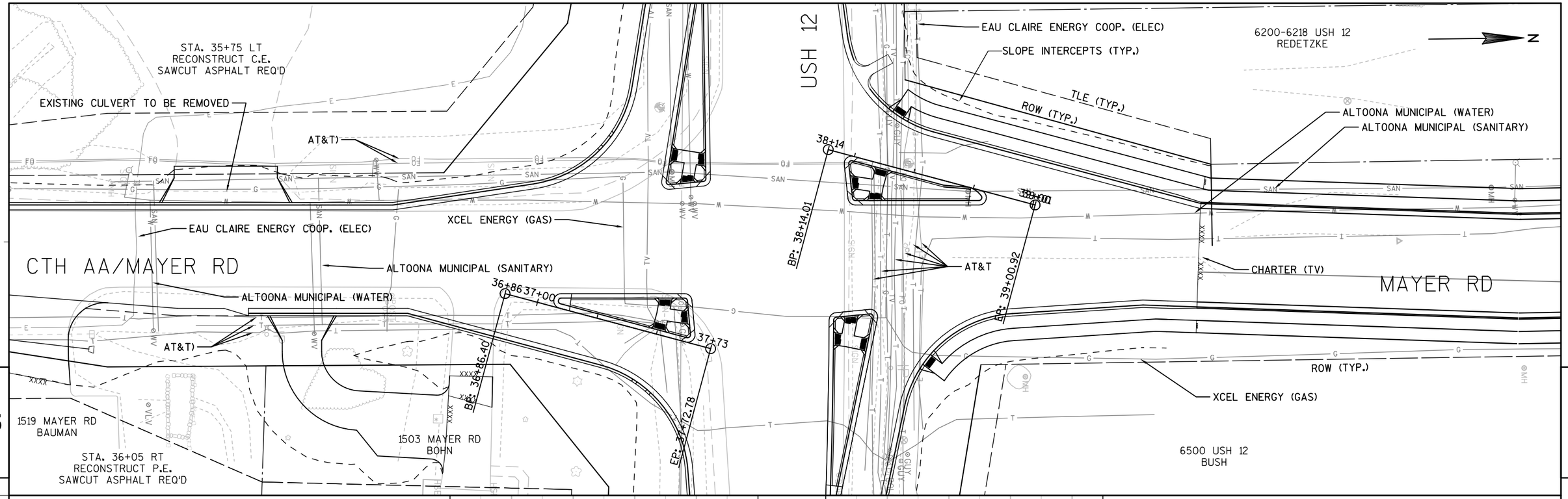


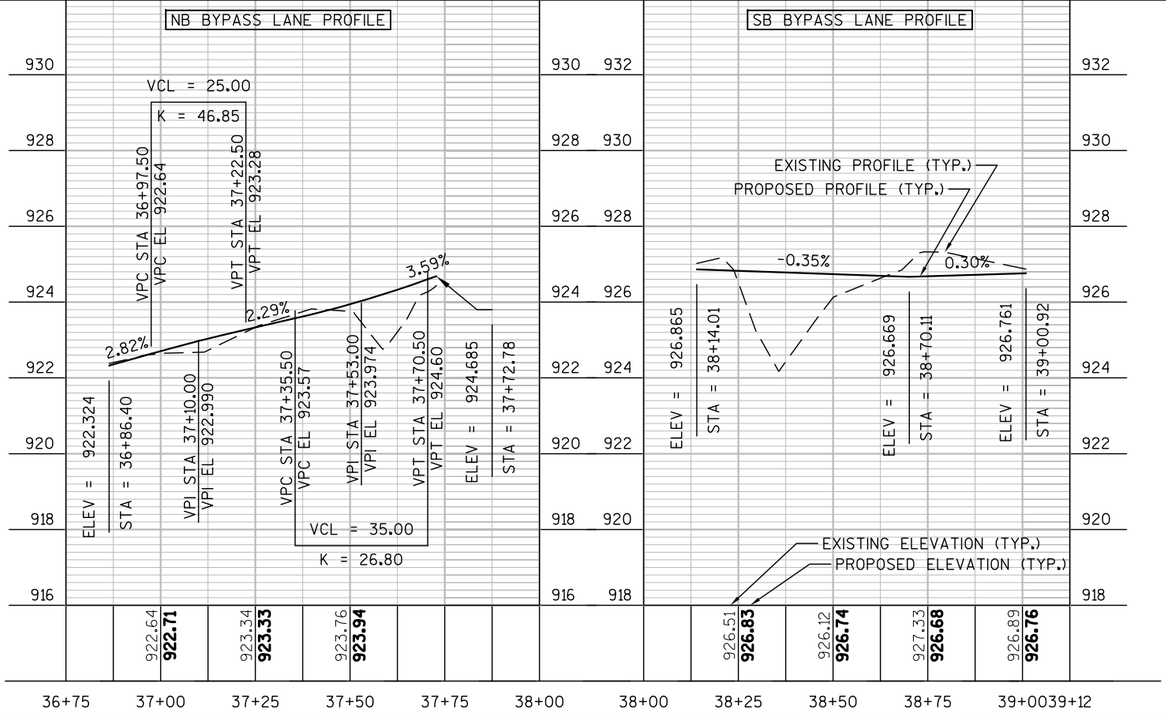
PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	PLAN AND PROFILE: SHORT ROAD	SHEET 119	E



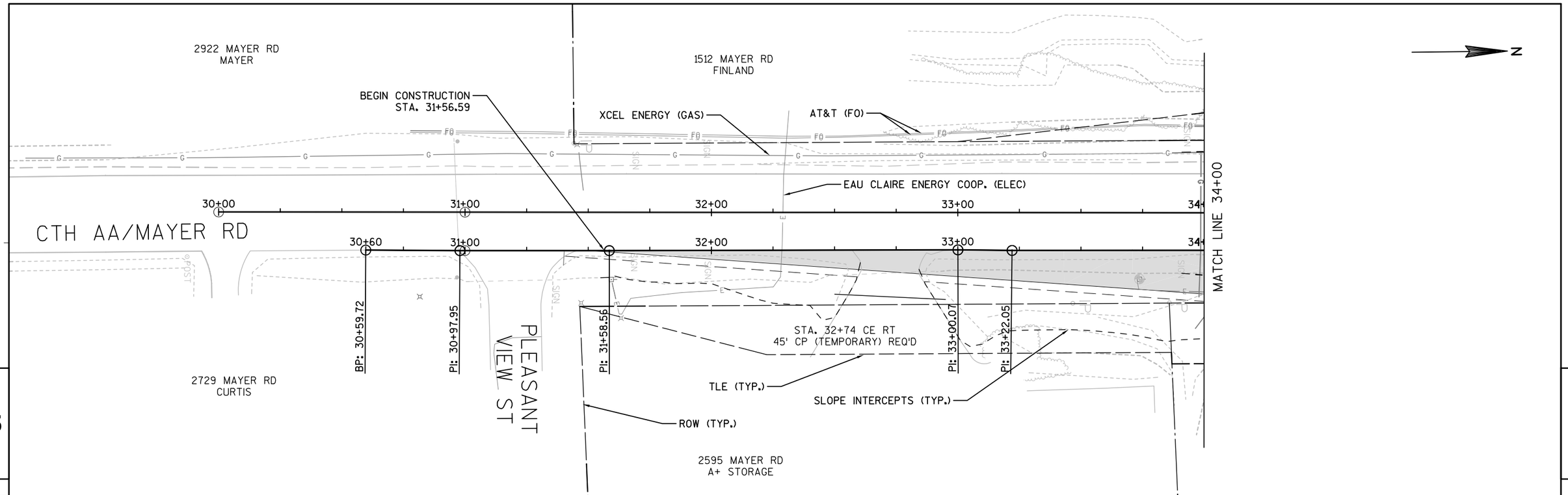


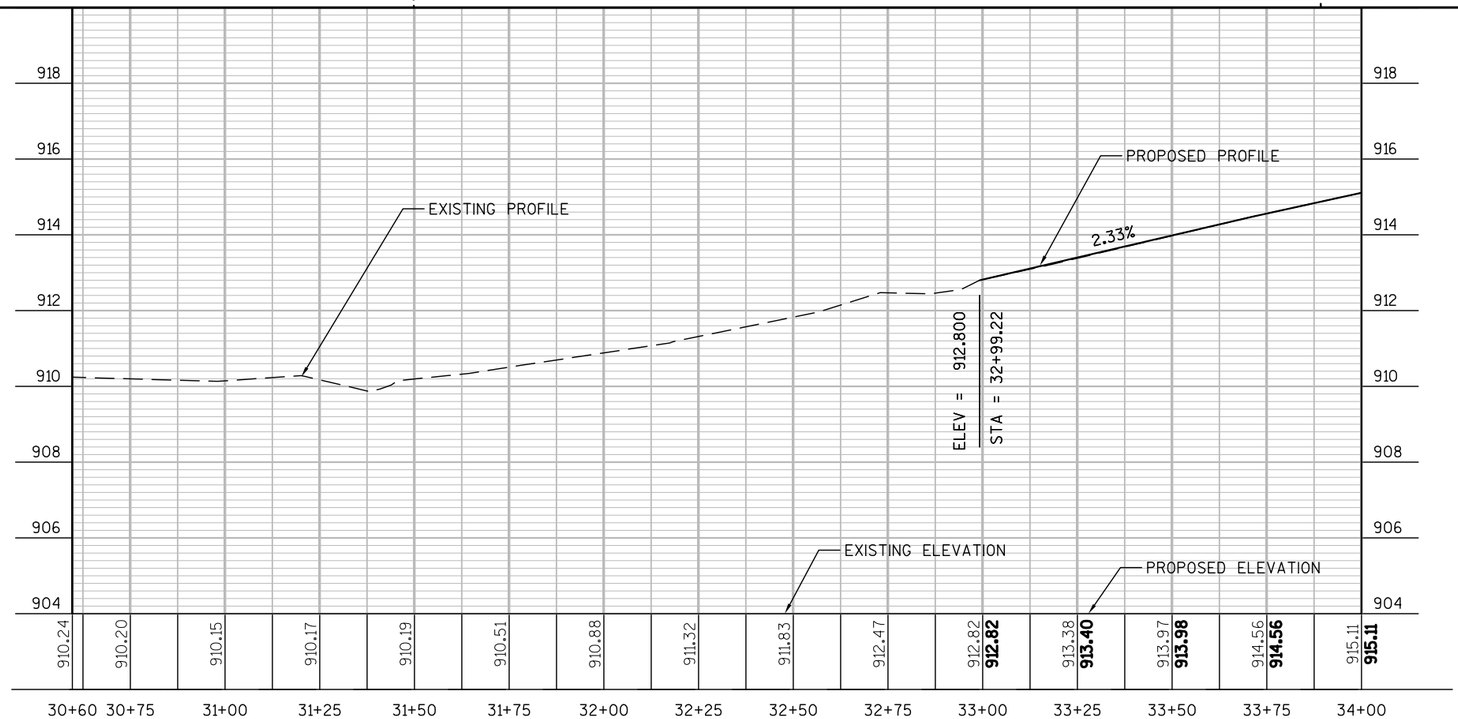
PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	PLAN AND PROFILE: BYPASS LANES	SHEET 120	E



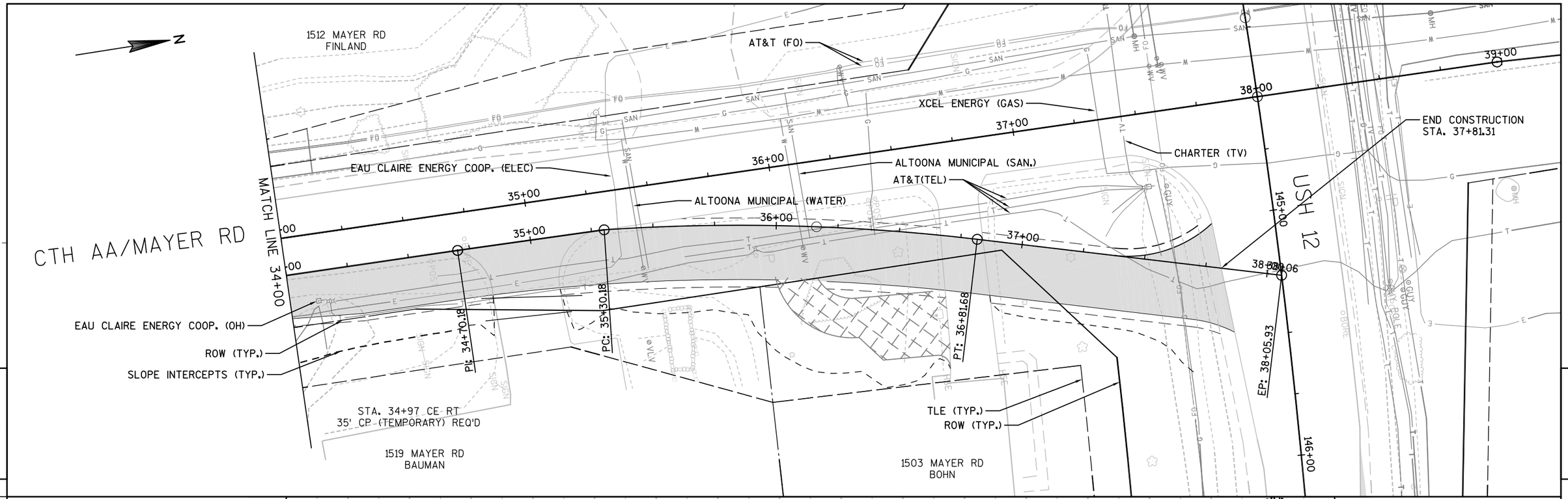


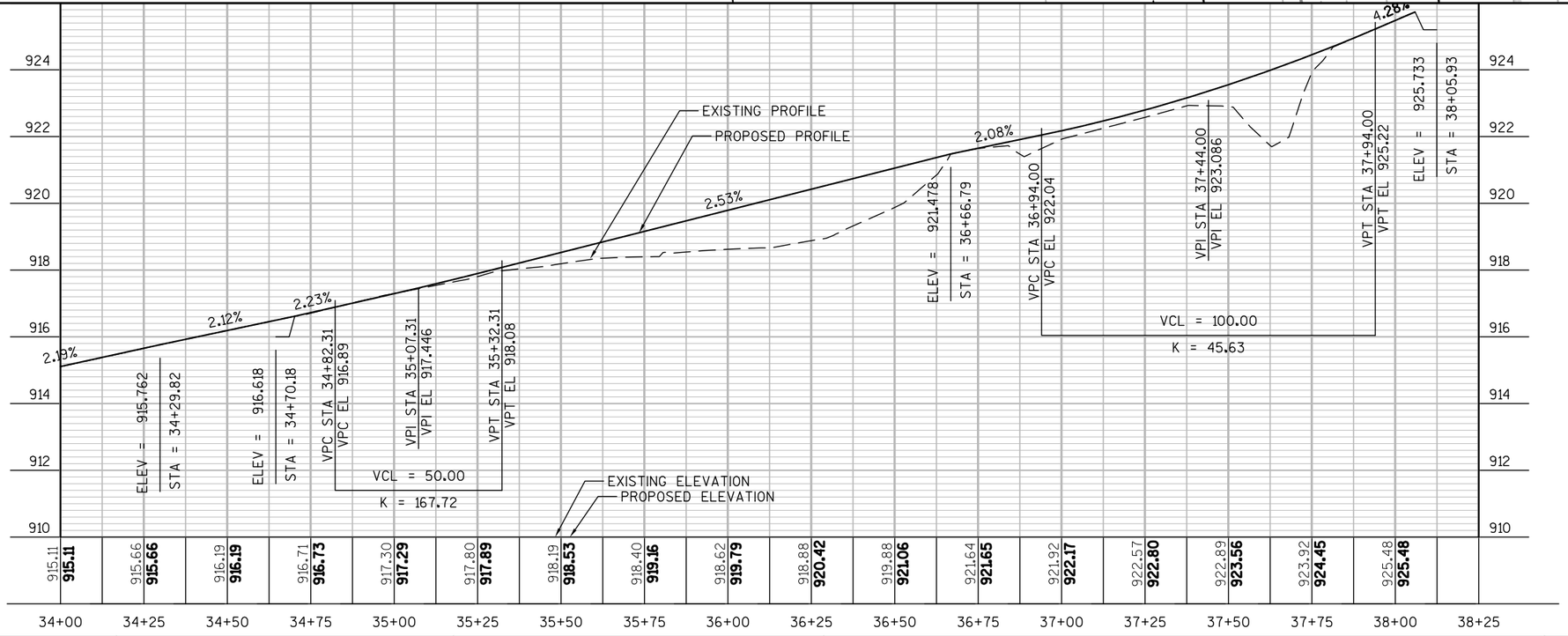
PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	PLAN AND PROFILE: BYPASS LANES	SHEET 121	E





PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	PLAN AND PROFILE: TEMPORARY ROADWAY	SHEET 122	E



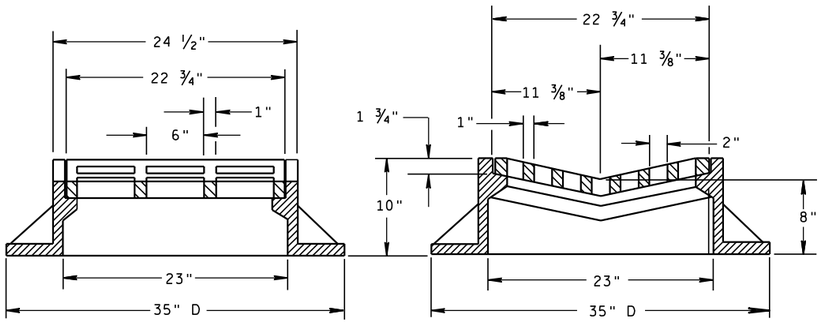


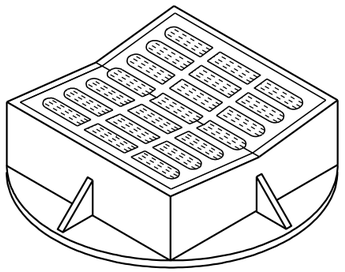
PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	PLAN AND PROFILE: TEMPORARY ROADWAY	SHEET 123	E

Standard Detail Drawing List

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
08D05-14A	CURB RAMPS TYPES 1 AND 1-A
08D05-14B	CURB RAMPS TYPES 2 AND 3
08D05-14C	CURB RAMPS TYPE 4A
08D05-14D	CURB RAMPS TYPE 4B
08D05-14E	CURB RAMPS TYPES 5, 6, 7A, 7B & 8
08E05-02	SODDED BACKSLOPE FLUME AND INTERCEPTING EMBANKMENT
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
08E14-01	TRACKING PAD
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
08F02-01	APRON ENDWALLS FOR PIPE ARCH AND ELLIPTICAL PIPE
08F04-07	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
09B02-07	CONDUIT
09B04-09	PULL BOX
09C02-06	CONCRETE BASES, TYPES 1, 2 & 5
09C03-03	TRANSFORMER/PEDESTAL BASES
09C06-05	CONCRETE CONTROL CABINET BASE, TYPE 9, SPECIAL
09D01-04	CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)
09D02-02	SIGNAL OR LIGHTING CONTROL CABINET
09E01-11B	POLE MOUNTINGS FOR TRAFFIC SIGNALS AND LIGHTING UNITS, TYPE 3 (HEAVY DUTY)
09E01-11D	POLE MOUNTINGS FOR LIGHTING UNITS, TYPE 5 (30 FEET)
09E01-11G	HARDWARE DETAILS FOR POLE MOUNTINGS
09E03-04	NON-FREEWAY LIGHTING UNIT POLE WIRING
09E06-04	TRAFFIC SIGNAL STANDARD POLY BRACKET MOUNTINGS (TYPICAL) 13 FT. OR 15 FT.
09F13-03	LOOP DETECTOR INSTALLED IN EXISTING ASPHALTIC PAVEMENT
09F15-03A	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)
11B02-02	CONCRETE MEDIAN NOSE
13A08-01	ASPHALTIC RUMBLE STRIPS AT INTERSECTION
14B07-12A	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-12B	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-12C	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-12D	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
15A03-01	MARKER POSTS, FLEXIBLE, FOR CULVERT END
15C04-01	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C05-01	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS
15C07-12B	PAVEMENT MARKING WORDS
15C07-12C	PAVEMENT MARKING ARROWS
15C08-14A	PAVEMENT MARKING (MAINLINE)
15C08-14B	PAVEMENT MARKING (INTERSECTIONS)
15C08-14E	PAVEMENT MARKING (LEFT TURN LANE)
15C08-14F	PAVEMENT MARKING (ISLANDS, STOP LINE & CROSS WALK)
15C11-05	FLEXIBLE TUBULAR MARKER POST, ANCHOR & BASES
15C12-03	TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)
15C18-03	MEDIAN ISLAND MARKING
15C19-01A	MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
15D28-01	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY
15D31-01	TRAFFIC CONTROL, TEMPORARY BYPASS ROADWAY

6

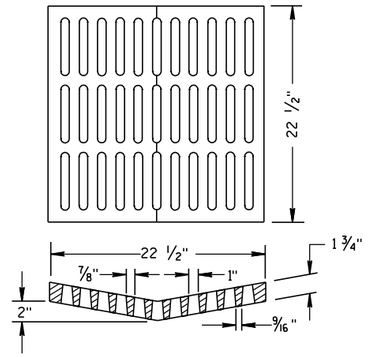




TYPE "B"

(APPROXIMATE WEIGHT 405 LBS.)

FRAME..... 294 LBS.
GRATE..... 111 LBS.

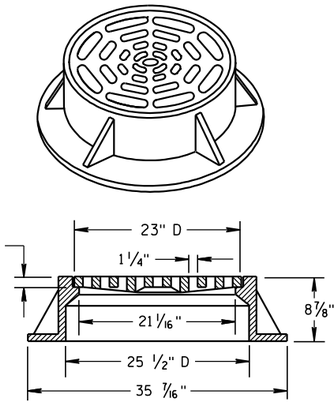


ALTERNATIVE GRATE FOR TYPE "B" COVER

(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.

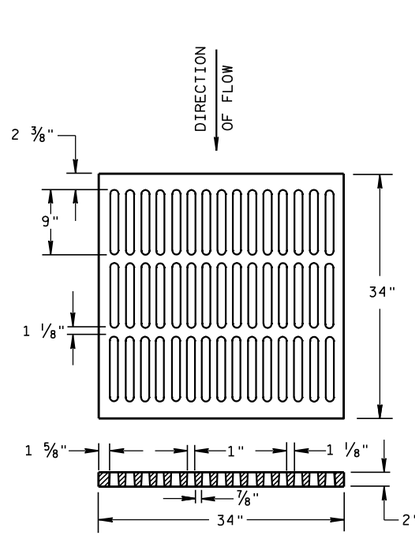
GENERAL NOTES

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.

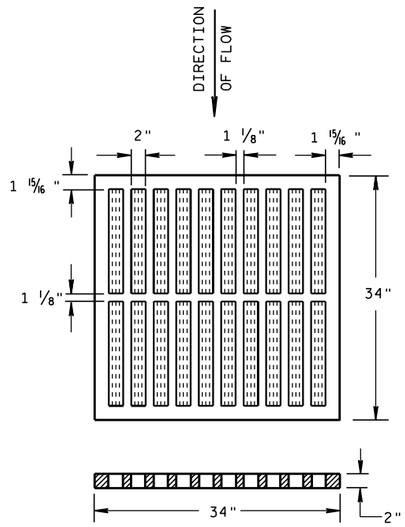


ALTERNATIVE TYPE "MS"

(APPROXIMATE GRATE WEIGHT 329 LBS.)

USE WHERE PEDESTRIAN OR BICYCLE TRAFFIC IS PERMITTED

NOTED AS TYPE MS-A ON THE DRAINAGE TABLE

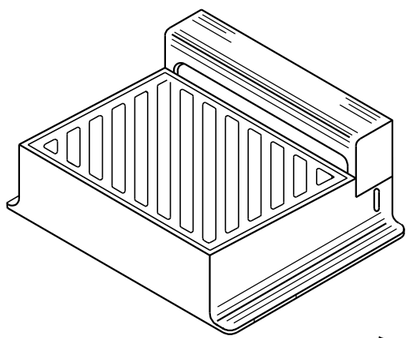


TYPE "MS"

(APPROXIMATE GRATE WEIGHT 268 LBS.)

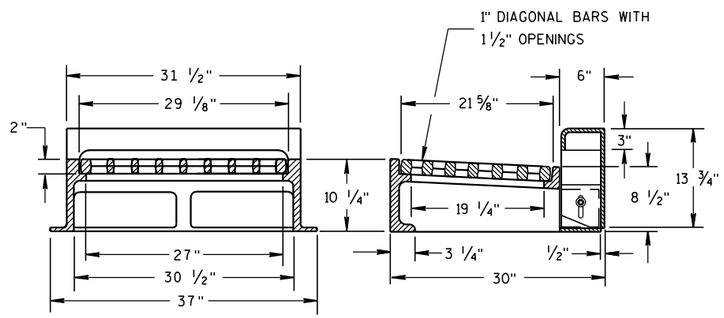
USE ON FREEWAYS AND EXPRESSWAYS

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

125

ENT

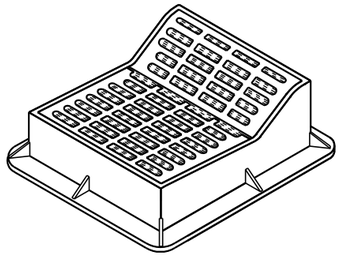
FHWA

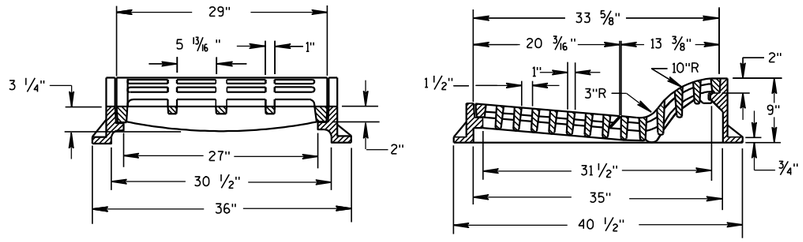
6

S.D.D. 8 A 5-18b

6

S.D.D. 8 A 5-18b



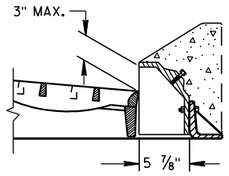


TYPE "F"

(APPROXIMATE WEIGHT 644 LBS.)

FRAME.....302 LBS.
GRATE.....160 LBS.
GRATE.....182 LBS.

USE WITH TYPES A & D CONCRETE CURB & GUTTER, 36 INCH.



ALTERNATIVE CURB BOX FOR TYPE "HM" COVER

(APPROXIMATE WEIGHT CURB BOX 68 LBS.)

USE WITH TYPES G & J CONCRETE CURB & GUTTER, 30 INCH
NOTED AS TYPE HM-GJ ON DRAINAGE TABLE

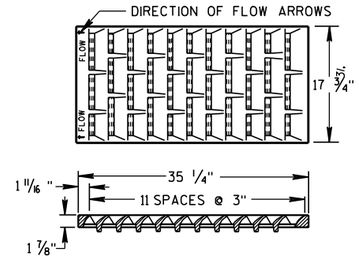
NOTE:
SPECIAL GRATE FOR THE
TYPE "H" COVER MAY ALSO BE
USED FOR THE TYPE "HM-GJ" COVER
NOTED AS TYPE HM-GJ-S ON DRAINAGE TABLE

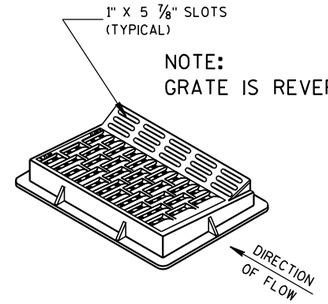
GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

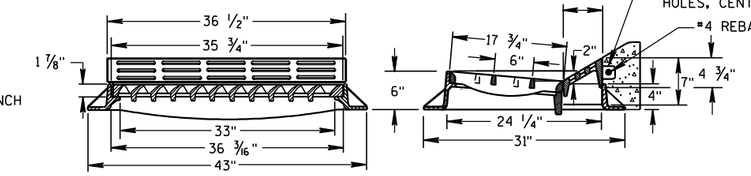
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

THE ACTUAL WEIGHT OF COVERS MAY VARY WITHIN 5 PERCENT, PLUS OR MINUS, OF THE APPROXIMATE WEIGHT.





NOTE:
GRATE IS REVERSIBLE.

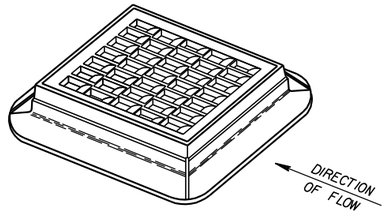


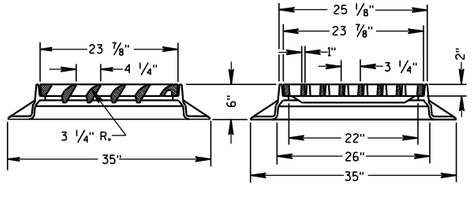
TYPE "HM"

(APPROXIMATE WEIGHT 414 LBS.)
FRAME..... 181 LBS.
GRATE..... 159 LBS.
CURB BOX..... 74 LBS.

USE WITH TYPES A & D CONCRETE CURB & GUTTER, 36 INCH.

NOTE:
SPECIAL GRATE FOR THE
TYPE "H" COVER MAY ALSO BE
USED FOR THE TYPE "HM" COVER
NOTED AS TYPE HM-S ON DRAINAGE TABLE

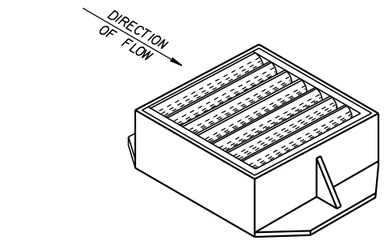


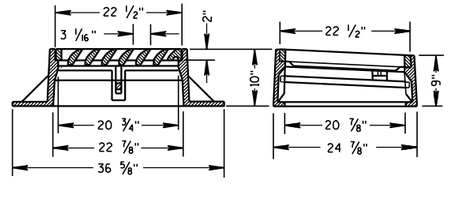


TYPE "S"

(APPROXIMATE WEIGHT 333 LBS.)

FRAME.....164 LBS.
GRATE..... 169 LBS.

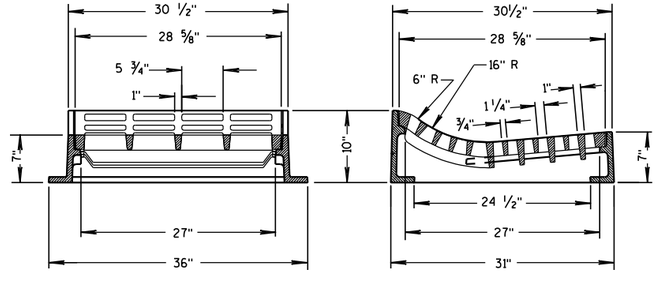




TYPE "V"

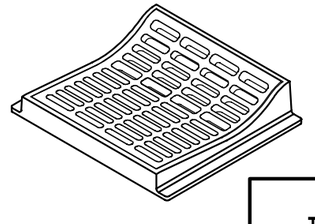
(APPROXIMATE WEIGHT 410 LBS.)

FRAME..... 269 LBS.
GRATE..... 136 LBS.
SAFETY BAR..... 5 LBS.



TYPE "T"

(APPROXIMATE WEIGHT 530 LBS.)
FRAME.....270 LBS.
GRATE.....260 LBS.
USE WITH TYPES R & T CONCRETE CURB & GUTTER, 36 INCH.



INLET COVERS TYPE F, HM, HM-S, S, T, V, HM-GJ, & HM-GJ-S

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

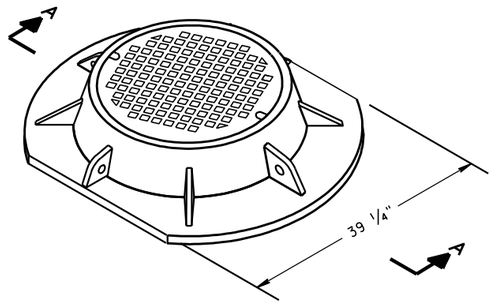
APPROVED
6/5/2012 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
FHWA

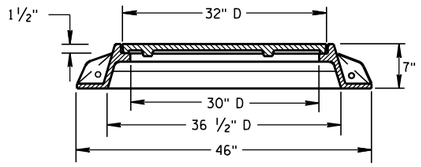
6

S.D.D. 8 A 5-18c

6

S.D.D. 8 A 5-18c



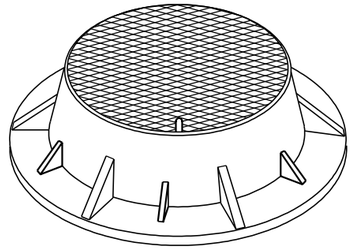


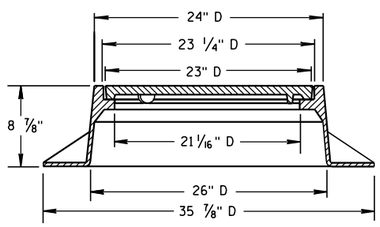
SECTION A-A

TYPE "K"

(APPROXIMATE WEIGHT 439 LBS.)

FRAME.....216 LBS.
LID.....223 LBS.

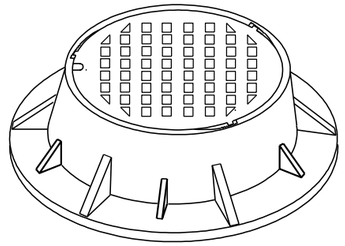


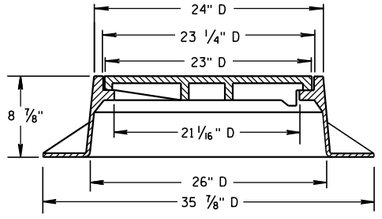


TYPE "J"

(APPROXIMATE WEIGHT 267 LBS.)

FRAME.....152 LBS.
LID.....115 LBS.





TYPE "J" SPECIAL

TYPE "B" NON-ROCKING SELF-SEAL LID

(APPROXIMATE WEIGHT 267 LBS.)

FRAME.....158 LBS.
LID.....109 LBS.

(NOTED AS TYPE J-S ON THE DRAINAGE TABLE)

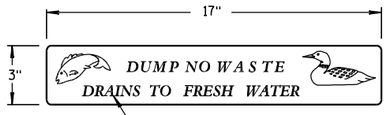
GENERAL NOTES

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.

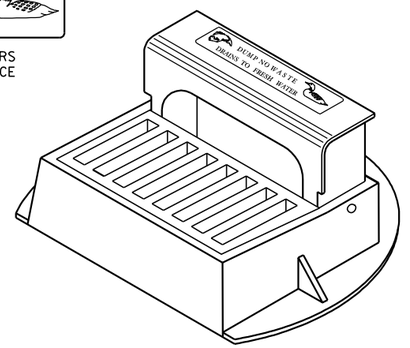
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR MANHOLE COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

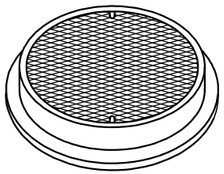
ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.

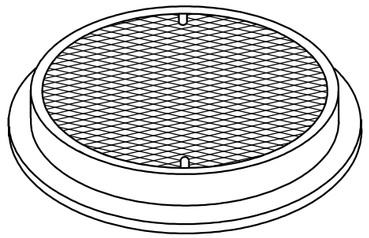
THE ACTUAL WEIGHT OF COVERS MAY VARY WITH 5 PERCENT, PLUS OR MINUS, OF THE APPROXIMATE WEIGHT.

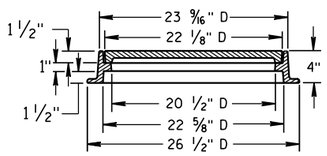


LOGO DETAIL





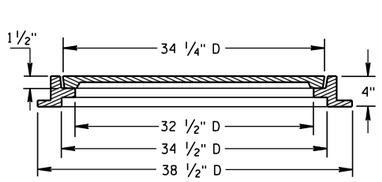




TYPE "L"

(APPROXIMATE WEIGHT 158 LBS.)

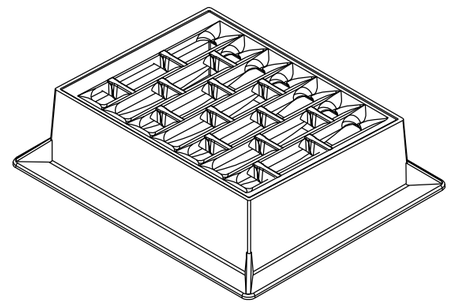
FRAME.....81 LBS.
LID.....77 LBS.

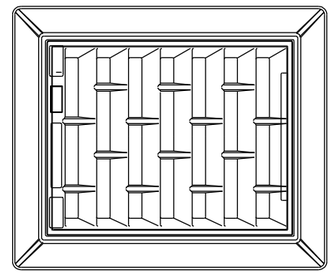


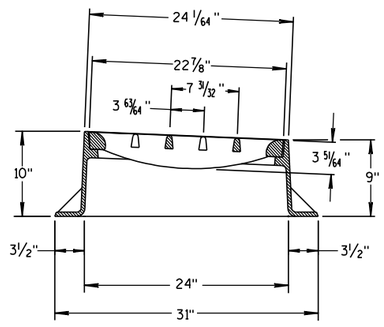
TYPE "M"

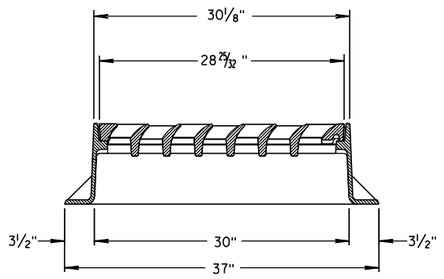
(APPROXIMATE WEIGHT 377 LBS.)

FRAME..... 125 LBS.
LID..... 252 LBS.

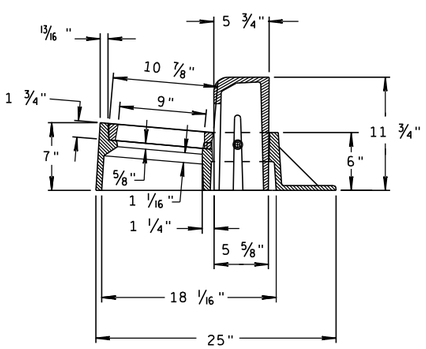








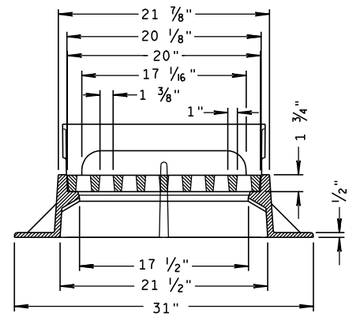
INLET COVER TYPE "BW"



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

127

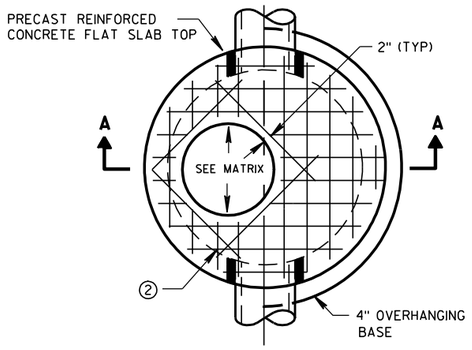
NT

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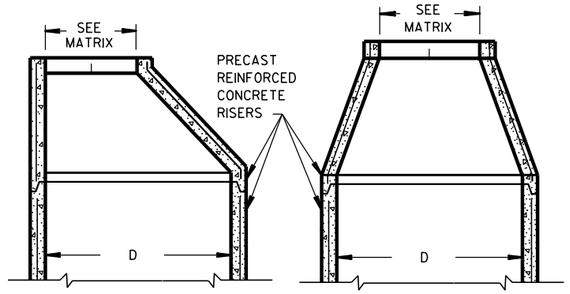
S.D.D. 8 A 5-18d

6

S.D.D. 8 A 5-18d

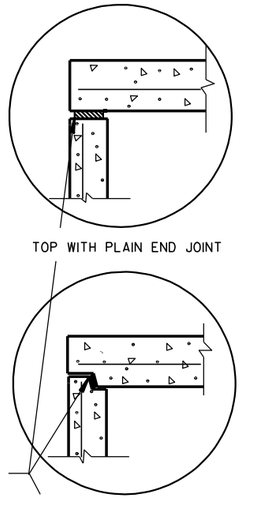


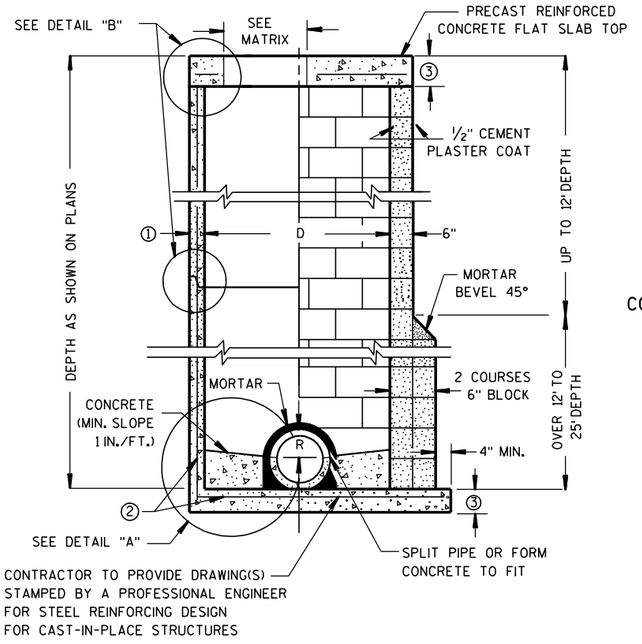
PLAN VIEW CIRCULAR OPENING



OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP

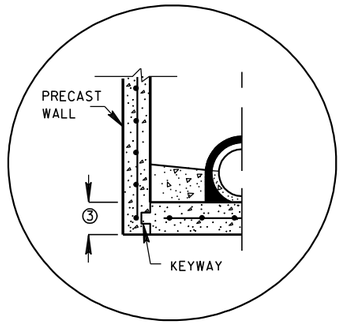
OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP



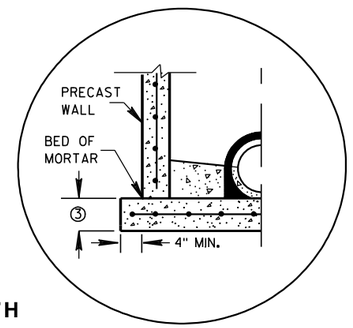


PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

CONCRETE BLOCK WITH CAST-IN-PLACE OR PRECAST REINFORCED CONCRETE BASE ②

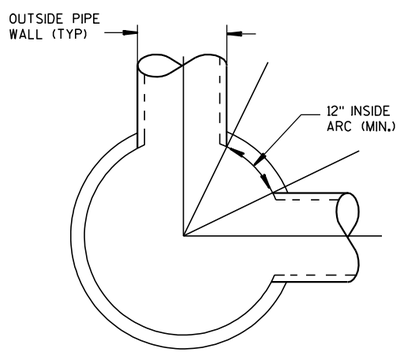


PRECAST REINFORCED
CONCRETE WITH INTEGRAL BASE OPTION

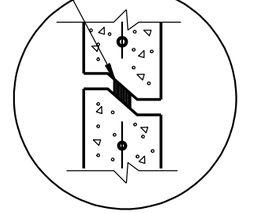


SEPERATE PRECAST REINFORCED
CONCRETE BASE OPTION

DETAIL "A"



DETAIL "C"



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 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

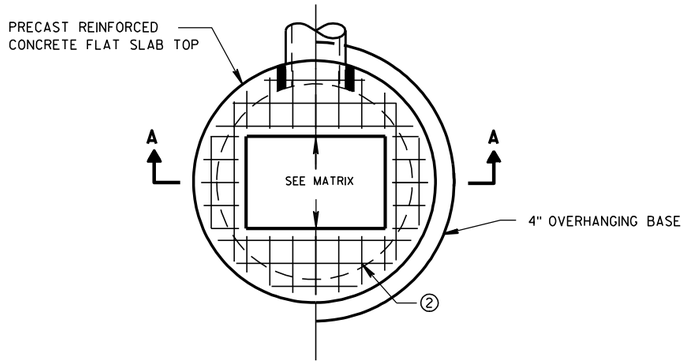
APPROVED

6/5/2012
DATE

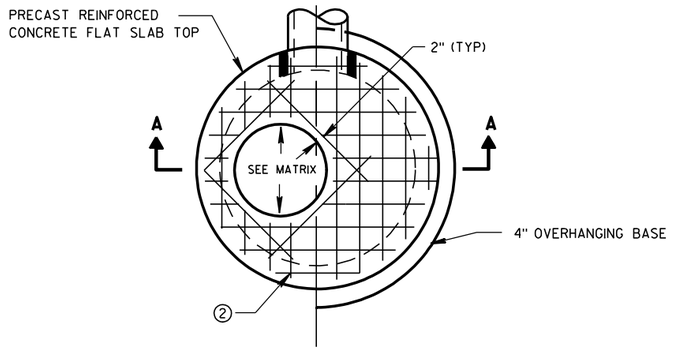
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER

FHWA

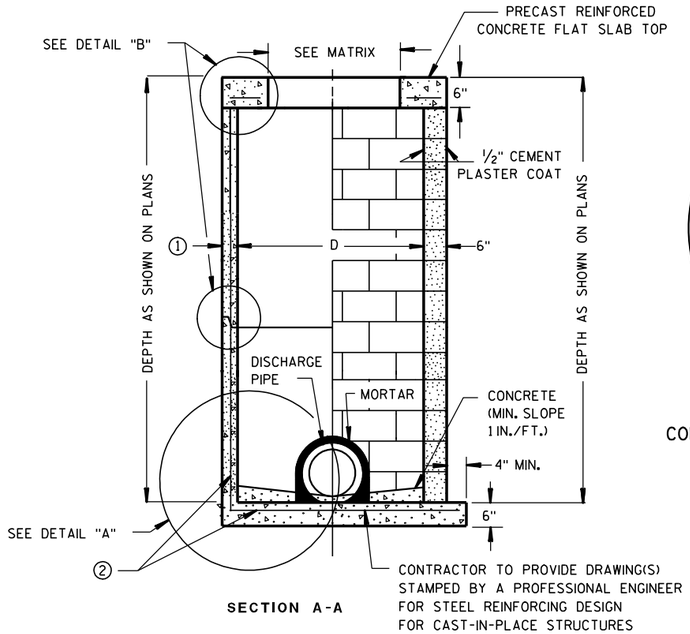
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PLAN VIEW RECTANGULAR OPENING



PLAN VIEW CIRCULAR OPENING

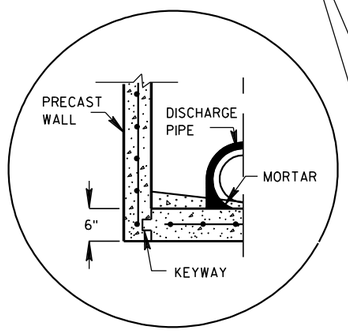


SECTION A-A

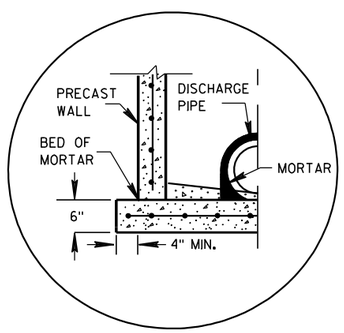
PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

CONCRETE BLOCK WITH CAST-IN-PLACE OR PRECAST REINFORCED CONCRETE BASE ②

CIRCULAR INLETS W/ FLAT TOP

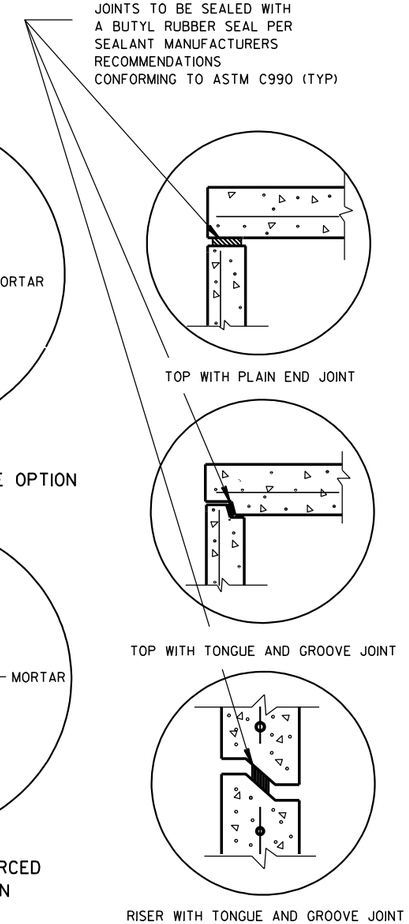


PRECAST REINFORCED
CONCRETE WITH INTEGRAL BASE OPTION



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.

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.

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.

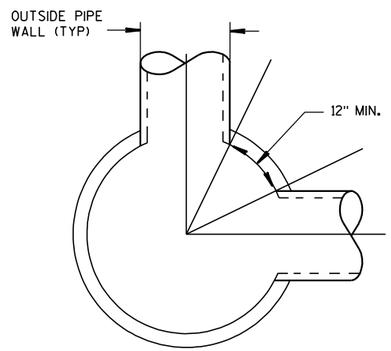
FOR ADDITIONAL CONFIGURATIONS, MAINTAIN A MINIMUM OF 12 INCHES AS MEASURED FROM THE INSIDE OF THE STRUCTURE WALL BETWEEN THE OUTSIDE PIPE WALLS OF ADJACENT PIPES. SEE DETAIL "C".

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

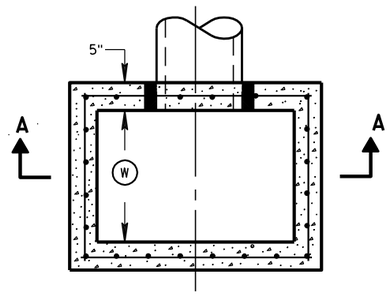
INLET SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	180° SEPARATION (IN)	90° SEPARATION (IN)
3-FT	15	12
4-FT	24	18

INLETS 3-FT AND 4-FT DIAMETER

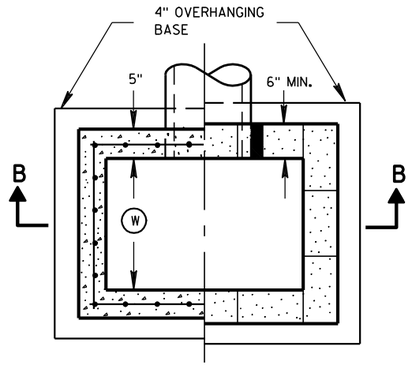
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/5/2012 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
FHWA

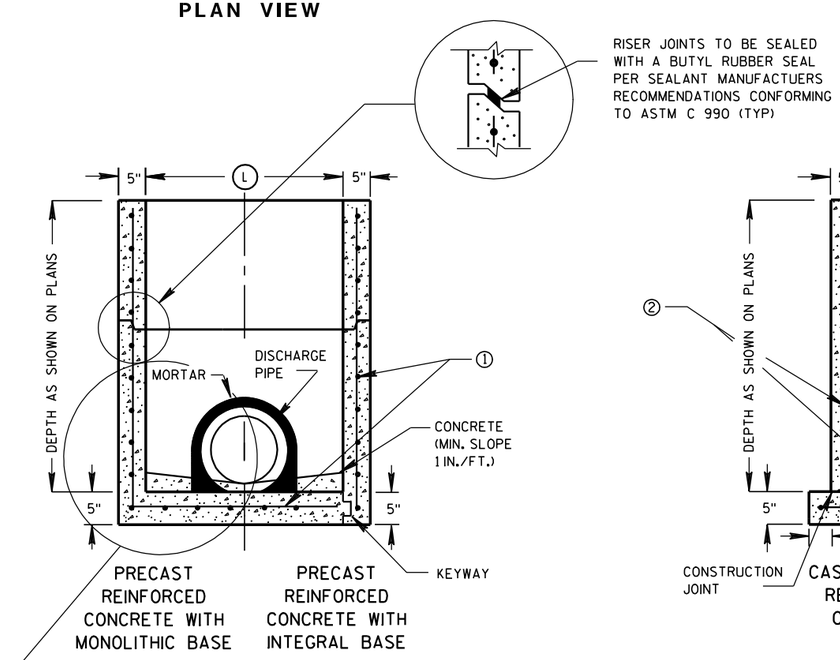
INLETS 3-FT AND 4-FT DIAMETER



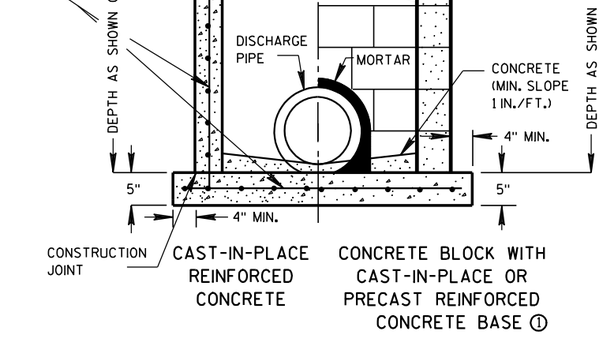
PLAN VIEW



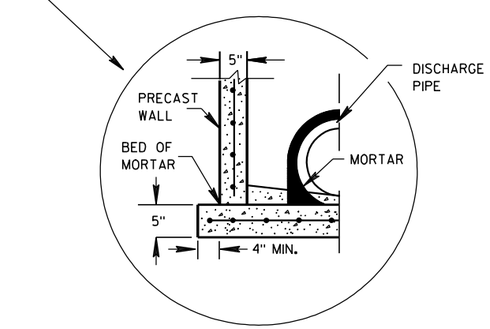
PLAN VIEW



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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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.

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PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

4" OVERHANGING BASES ARE REQUIRED FOR CAST-IN-PLACE REINFORCED CONCRETE AND CONCRETE BLOCK INSTALLATIONS. 4" OVERHANG IS REQUIRED WHEN SEPERATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

MAXIMUM INSIDE PIPE DIAMETER DETERMINED BY 3 INCH CLEARANCE ON EACH SIDE OF THE OUTSIDE WALL OF THE PIPE. SEE DETAIL "A". ASSUMES PIPE ENTERS PERPENDICULAR TO THE STRUCTURE.

① FOR PRECAST INLETS PROVIDE REINFORCING STEEL IN ACCORDANCE TO ASTM C 913.

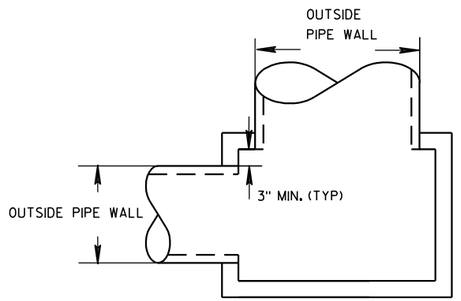
② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

INLET COVER MATRIX

INLET SIZE		INLET COVER TYPE	ALL A'S	ALL B'S	BW	F	ALL H'S	S	T	V	WM
	WIDTH (W) (FT)	LENGTH (L) (FT)									
2X2-FT	2	2	X	X				X		X	
2X2.5-FT	2	2.5			X			X	X	X	X
2X3-FT	2	3					X				
2.5X3-FT	2.5	3				X					

PIPE MATRIX

INLET SIZE	MAXIMUM INSIDE PIPE DIAMETER	
	WIDTH (IN)	LENGTH (IN)
2X2-FT	12	12
2X2.5-FT	12	18
2X3-FT	12	24
2.5X3-FT	18	24



DETAIL "A"

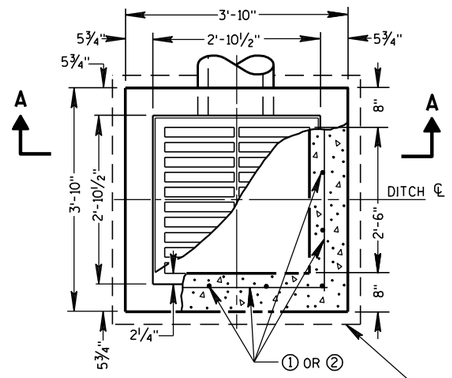
INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

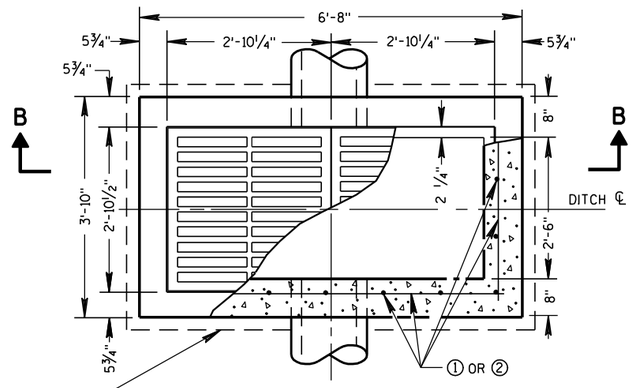
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6/5/2012 — DATE
/S/ Jerry H. Zoda — ROADWAY STANDARDS D ENGINEER
FHWA

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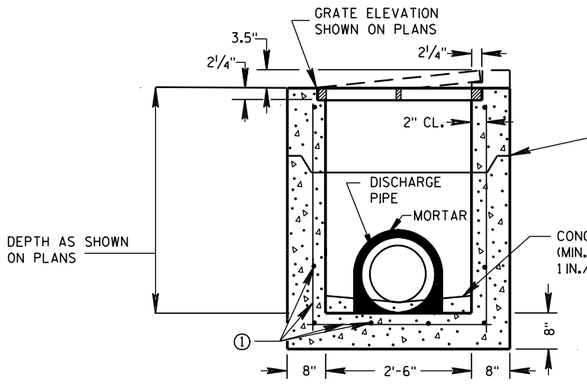


PLAN VIEW

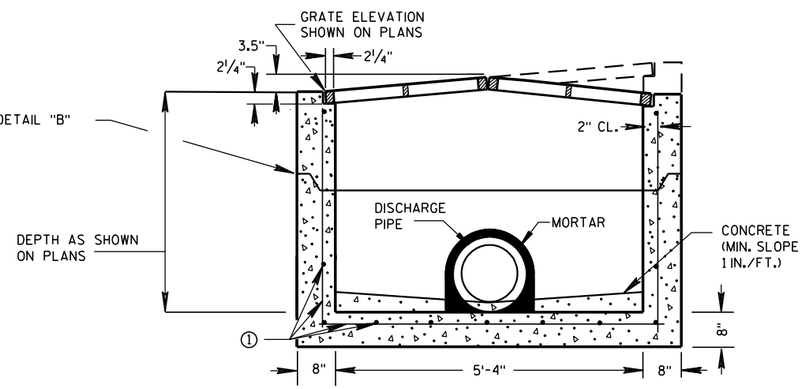


PLAN VIEW

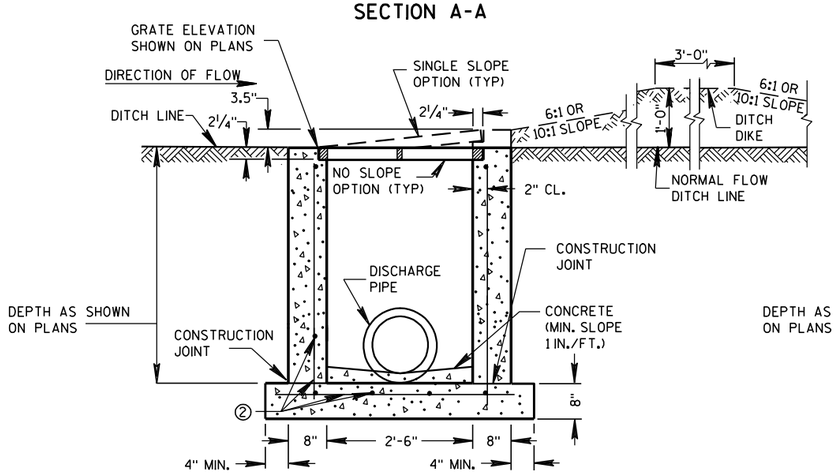
4" OVERHANGING BASE ON REINFORCED CAST-IN-PLACE CONCRETE INLETS



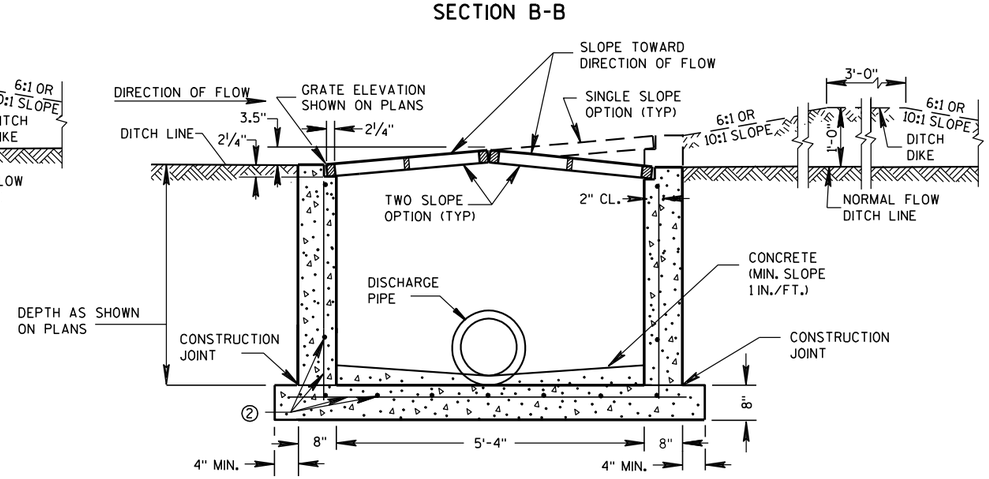
PRECAST REINFORCED CONCRETE SECTION A-A



PRECAST REINFORCED CONCRETE SECTION B-B



REINFORCED CAST-IN-PLACE CONCRETE SECTION A-A



REINFORCED CAST-IN-PLACE CONCRETE SECTION B-B

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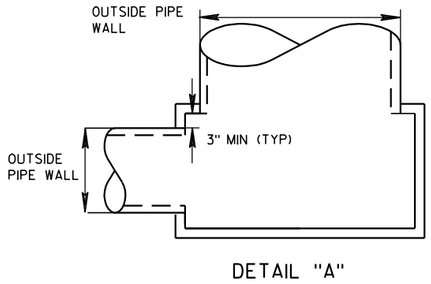
MAXIMUM INSIDE PIPE DIAMETER DETERMINED BY 3" CLEARANCE ON EACH SIDE OF THE OUTSIDE WALL OF THE PIPE. SEE DETAIL "A". ASSUMES PIPE ENTERS PERPENDICULAR TO THE STRUCTURE.

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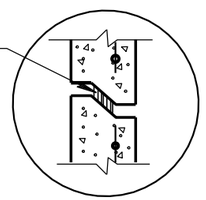
PIPE MATRIX

	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 GRATE

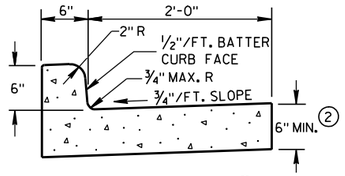
INLETS MEDIAN 2 GRATE

INLETS MEDIAN 1 AND 2 GRATE

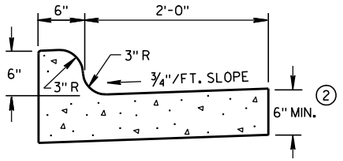
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/5/2012 — DATE
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FHWA

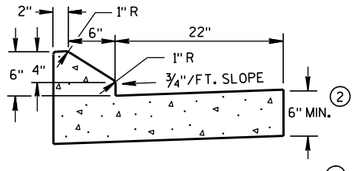
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S.D.D. 8 C 8-1



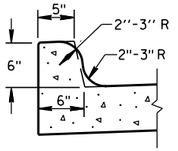
TYPES A & D (1)



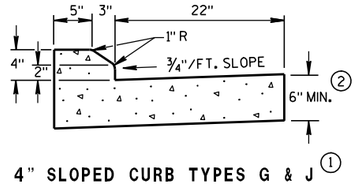
TYPES K & L (1)



6" SLOPED CURB TYPES G & J (1)

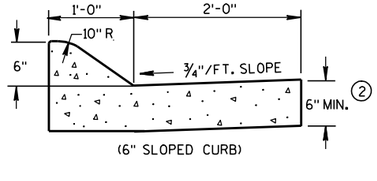


OPTIONAL CURB SHAPE FOR TYPES K & L (1)

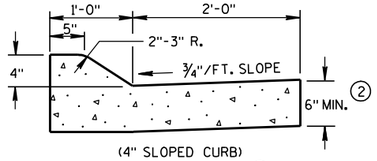


4" SLOPED CURB TYPES G & J (1)

CONCRETE CURB & GUTTER 30"

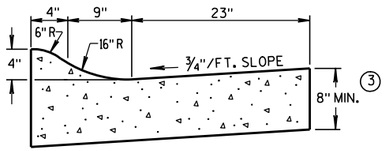


(6" SLOPED CURB)



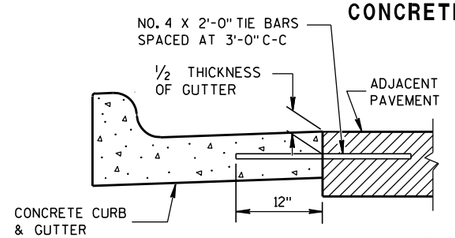
(4" SLOPED CURB)

TYPES A & D (1)

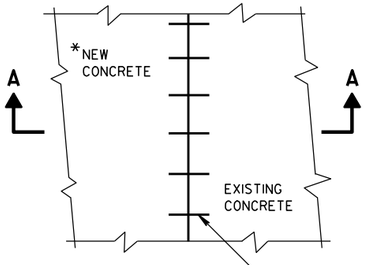


4" SLOPED CURB TYPES R & T (1) (4)

CONCRETE CURB & GUTTER 36"

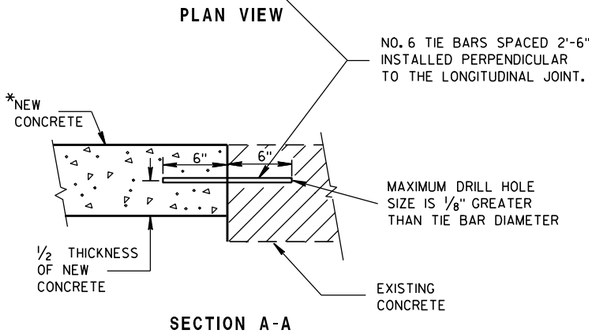


TYPICAL TIE BAR LOCATION (1)



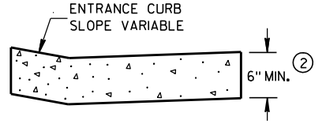
*NEW CURB & GUTTER, SURFACE DRAINS, CONCRETE PAVEMENT OR OTHER NEW CONCRETE.

PLAN VIEW

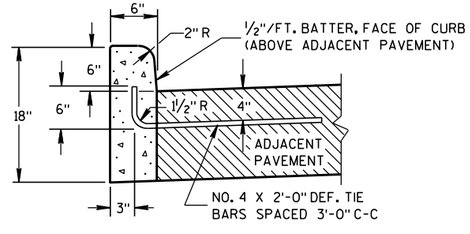


SECTION A-A

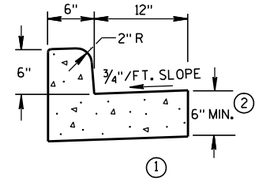
TIE BARS DRILLED INTO EXISTING PAVEMENT



DRIVEWAY ENTRANCE CURB
(WHEN DIRECTED BY THE ENGINEER)

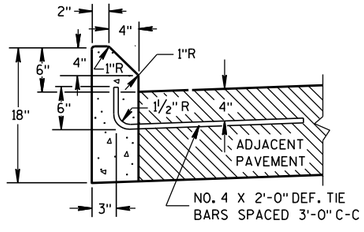


(1)
TYPES A & D



(1)
TYPES A & D

CONCRETE CURB & GUTTER 18"



(1)
TYPES G & J

CONCRETE CURB

REVERSE SLOPE GUTTER (5)
(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.

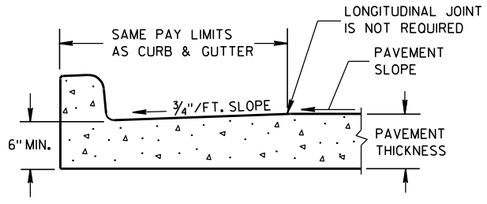
(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G, K AND R.

(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.

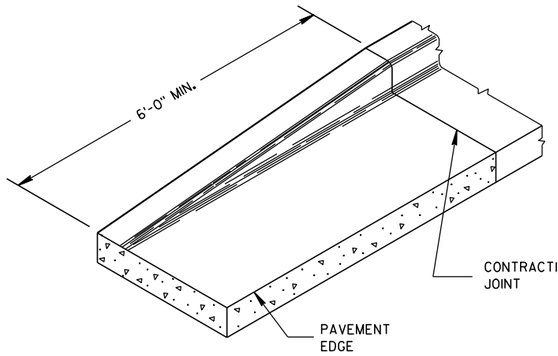
(3) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 8" MINIMUM GUTTER THICKNESS IS MAINTAINED.

(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

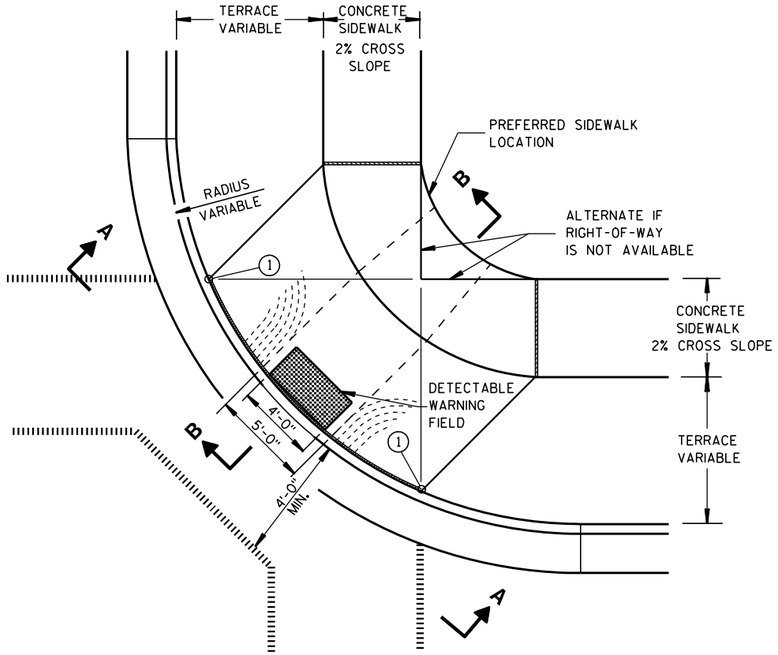
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
9/4/08 DATE
/S/ Jerry H. [illegible]
ROADWAY STANDARDS ENGINEER

FHWA

6

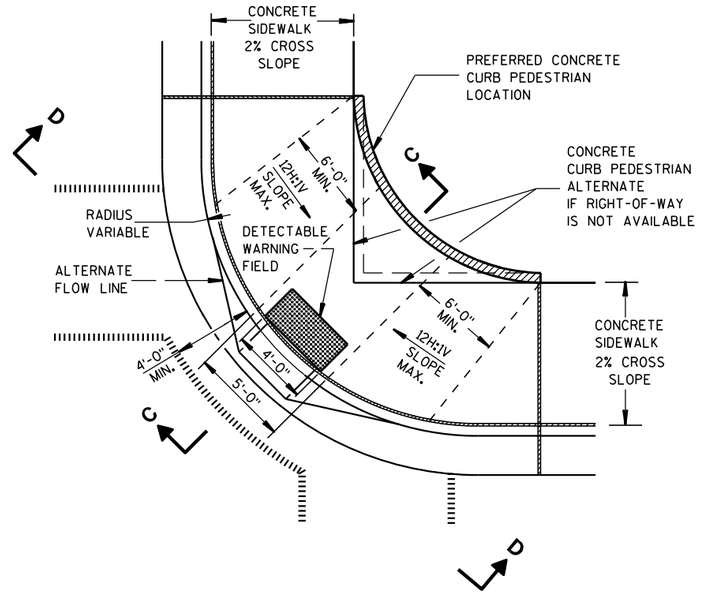
S.D.D. 8 D 1-17



PLAN VIEW

TYPE 1 RAMP

(CENTER OF CORNER RADIUS)



PLAN VIEW

TYPE 1-A RAMP

(NO TERRACE)

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

RAMPS SHALL BE BUILT AT 12H:1V OR FLATTER. WHEN NECESSARY, THE SIDEWALK ELEVATION MAY BE LOWERED TO MEET THE HIGH POINT ON THE RAMP.

TYPE 1 RAMPS SHALL HAVE A NORMAL SIDEWALK APRON AND CURB ON BOTH SIDES OF RAMP.

DETECTABLE WARNING FIELD SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS "CURB RAMP DETECTABLE WARNING FIELD". THE CONCRETE PEDESTRIAN CURB, IF NEEDED, SHALL BE MEASURED AND PAID BY THE LINEAL FOOT AS "CONCRETE CURB PEDESTRIAN". CONCRETE SIDEWALK IN THE CURB RAMP AREA SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS CONCRETE SIDEWALK, INCLUDING THE AREA UNDER THE DETECTABLE WARNING FIELD.

SELECT CURB RAMP DETECTABLE WARNING FIELD MATERIALS AND DEVICES FROM THE DEPARTMENT'S APPROVED MATERIALS LIST. THE COLOR OF THE DETECTABLE WARNING FIELD IS SPECIFIED ELSEWHERE AND IS INCIDENTAL TO THE BID ITEM OF "CURB RAMP DETECTABLE WARNING FIELD".

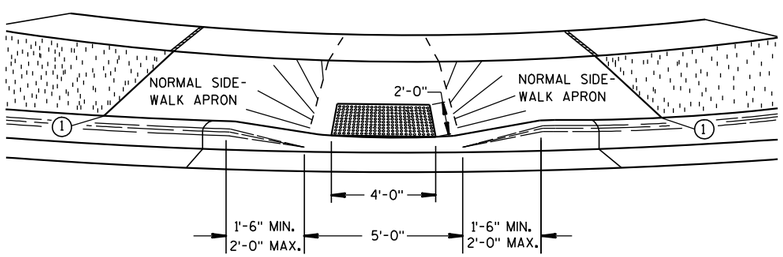
SURFACE TEXTURE OF THE RAMP SHALL BE OBTAINED BY COARSE BROOMING TRANSVERSE TO THE SLOPE OF THE RAMP.

(1) THIS POINT IS AN EXTENSION OF OUTSIDE EDGE OF APPROACHING SIDEWALK WHERE IT MEETS THE BACK OF CONCRETE CURB.

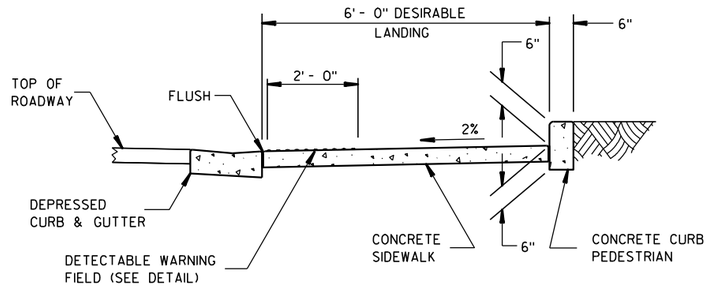
(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. PROVIDE DRAINAGE AWAY FROM CURB RAMP AT GUTTER FLAG INTERFACE.

LEGEND

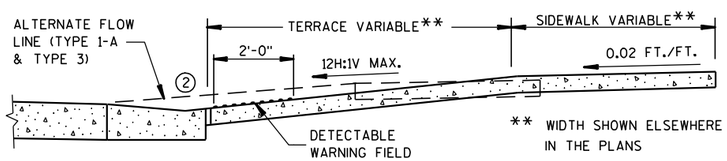
- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT



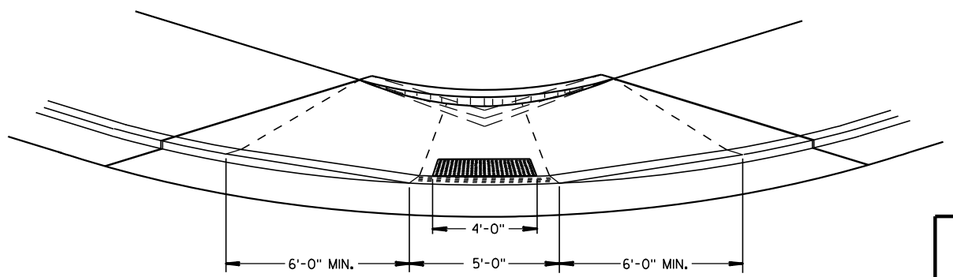
VIEW A-A



SECTION C-C



SECTION B-B



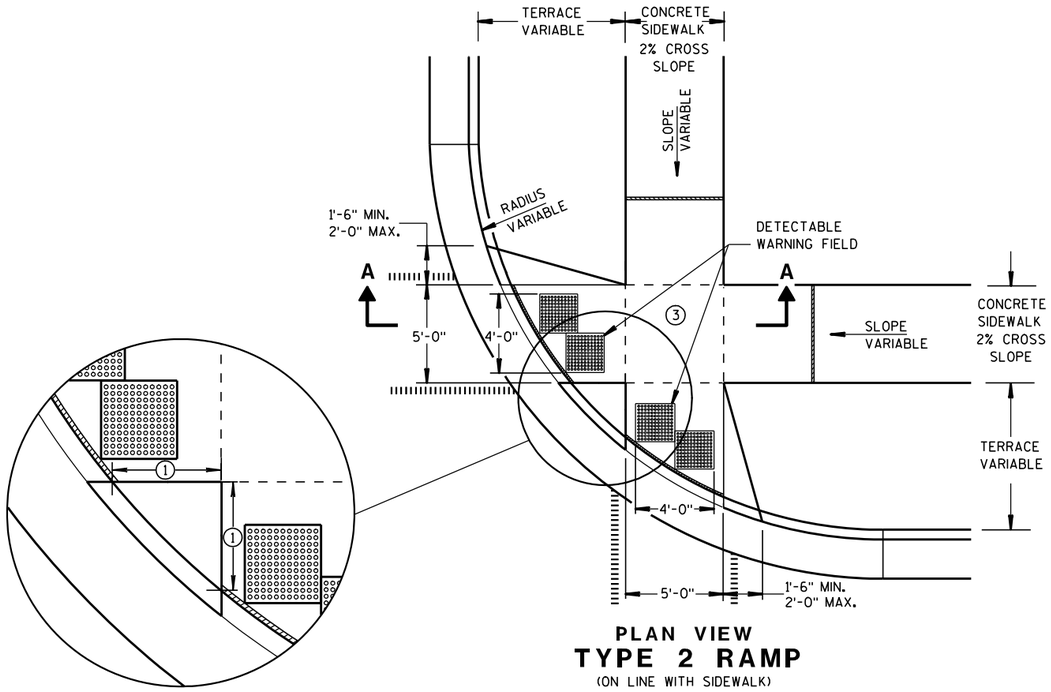
VIEW D-D

CURB RAMPS TYPES 1 AND 1-A

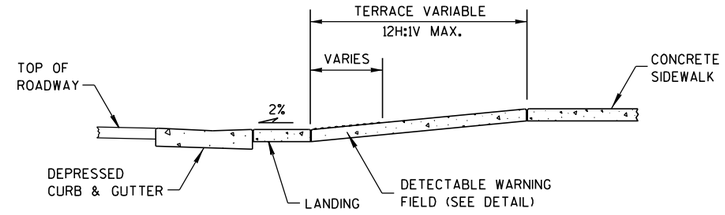
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

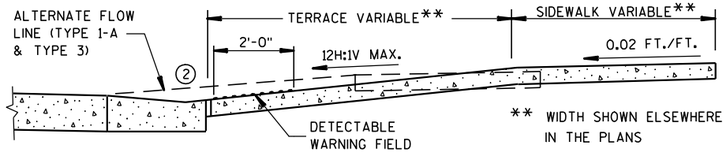
S.D.D. 8 D 5-14a



PLAN VIEW
TYPE 2 RAMP
(ON LINE WITH SIDEWALK)



SECTION A-A



SECTION B-B

GENERAL NOTES

USE THE TYPE 3 RAMP ONLY WHEN A TYPE 1 OR TYPE 2 CANNOT BE ACHIEVED BECAUSE OF FIELD CONDITIONS.

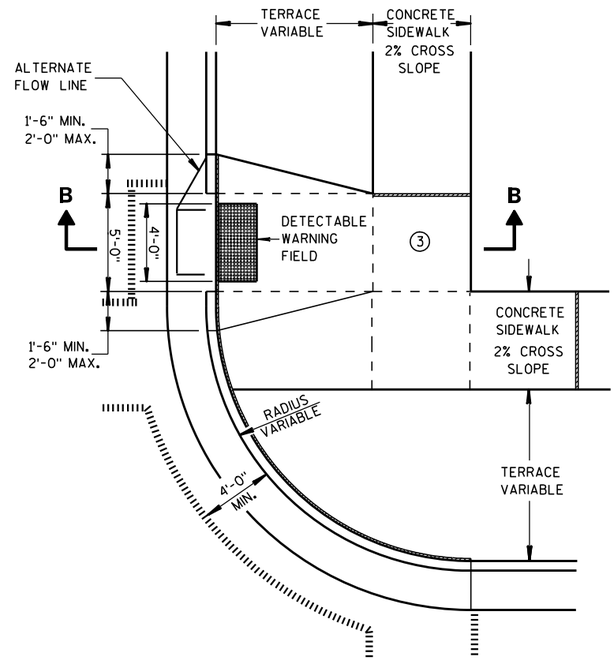
(1) WHEN THIS DISTANCE IS LESS THAN 6'-0" IT MAY BE DIFFICULT TO ACHIEVE A 12H:1V SLOPE, OR FLATTER, ON THE RAMP. REDUCE CURB HEIGHT IN TRIANGLE AREA TO ACHIEVE 12H:1V SLOPE, OR FLATTER, ON RAMP. 2" MINIMUM CURB HEIGHT.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. PROVIDE DRAINAGE AWAY FROM CURB RAMP AT GUTTER FLAG INTERFACE.

(3) PROVIDE LANDING AT TOP OF RAMP WITH NO MORE THAN 2% SLOPE IN ANY DIRECTION.

LEGEND

- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT

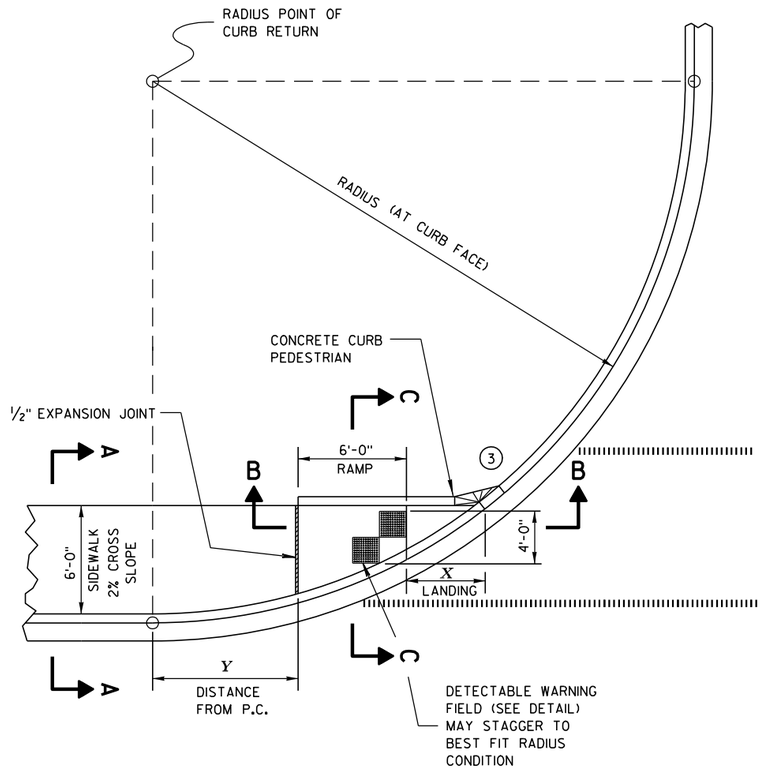


PLAN VIEW
TYPE 3 RAMP
(OUTSIDE OF CROSSWALK AREA)

CURB RAMPS
TYPES 2 AND 3

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

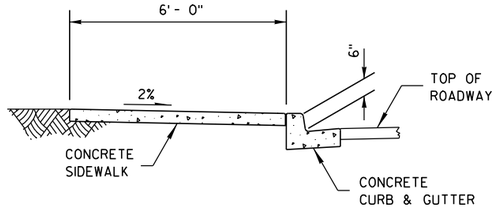
6
S.D.D. 8 D 5-14b



CURB RAMP TYPE 4A
PLAN VIEW

RADIUS (AT CURB FACE)	X	Y
20 FEET	6'-1 3/4"	2'-7 1/4"
30 FEET	7'-11 3/4"	4'-8 1/4"
40 FEET	9'-5 1/4"	6'-5"
50 FEET	10'-8 3/4"	7'-11 1/4"
60 FEET	11'-10 1/4"	9'-3 1/2"

INTERMEDIATE RADII CAN BE INTERPOLATED



SECTION A-A

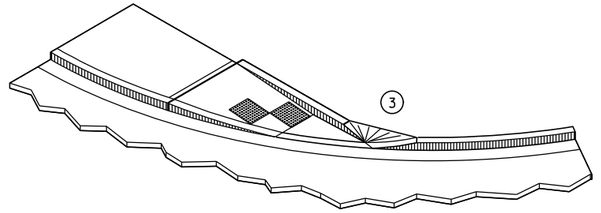
GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

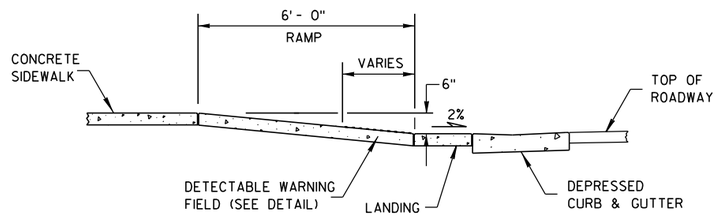
RAMP SLOPES SHALL NOT BE STEEPER THAN 12:1.

SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

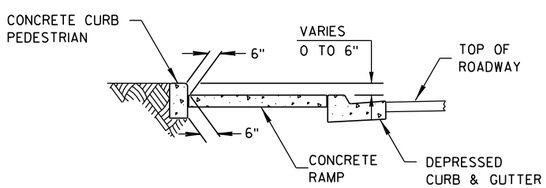
(3) INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS.) DO NOT MARK TRANSITION NOSE.



ISOMETRIC VIEW



SECTION B-B



SECTION C-C

LEGEND

- 1/2" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS TYPE 4A

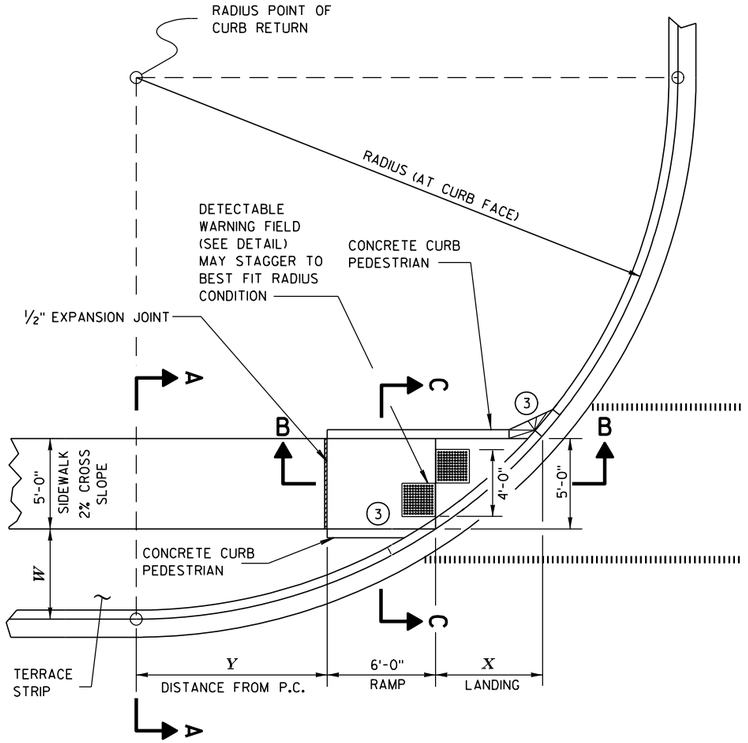
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

S.D.D. 8 D 5-14c

6

S.D.D. 8 D 5-14c



CURB RAMP TYPE 4B
PLAN VIEW

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

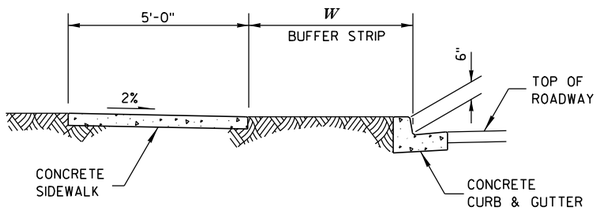
RAMP SLOPES SHALL NOT BE STEEPER THAN 12:1.

SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

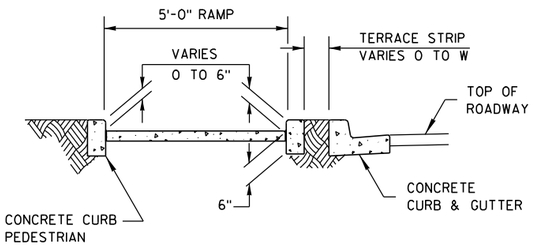
(3) INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS.) DO NOT MARK TRANSITION NOSE.

RADIUS (AT CURB FACE)	W = 3'- 0"		W = 4'- 0"		W = 5'- 0"		W = 6'- 0"		W = 7'- 0"	
	X	Y	X	Y	X	Y	X	Y	X	Y
20 FEET	5'-5½"	4'-6½"	4'-8½"	6'-0"	4'-1"	7'-2¾"	3'-7"	8'-3½"	3'-1½"	9'-2½"
30 FEET	7'-3¾"	7'-1"	6'-5½"	8'-11½"	5'-9¼"	10'-7"	5'-2½"	12'-0"	4'-8¾"	13'-3¼"
40 FEET	8'-9½"	9'-2½"	7'-10"	11'-5¼"	7'-1"	13'-4½"	6'-5¾"	15'-¾"	5'-11½"	16'-7¼"
50 FEET	10'-¾"	11'-¾"	9'-¼"	13'-7¼"	8'-2½"	15'-9½"	7'-6½"	17'-9"	6'-11¾"	19'-6¼"
60 FEET	11'-2½"	12'-8¾"	10'-¾"	15'-6½"	9'-2¼"	17'-11¾"	8'-5¾"	20'-1¾"	7'-10½"	22'-1½"
70 FEET	12'-2¾"	14'-3¼"	11'-¼"	17'-4"	10'-1"	19'-11¾"	9'-3¾"	22'-4¼"	8'-8¼"	24'-6¼"
80 FEET	13'-2"	15'-8½"	11'-10½"	18'-11¾"	10'-10¾"	21'-10"	10'-1"	24'-4¾"	9'-5"	26'-8¾"
90 FEET	14'- ½"	17'-½"	12'-8¼"	20'-6½"	11'-7¾"	23'-7"	10'-9¾"	26'-3¾"	10'-1¼"	28'-9½"
100 FEET	14'-10½"	18'-3¾"	13'-5½"	22'-0"	12'-4¼"	25'-2¾"	11'-5¾"	28'-1½"	10'-9"	30'-9"

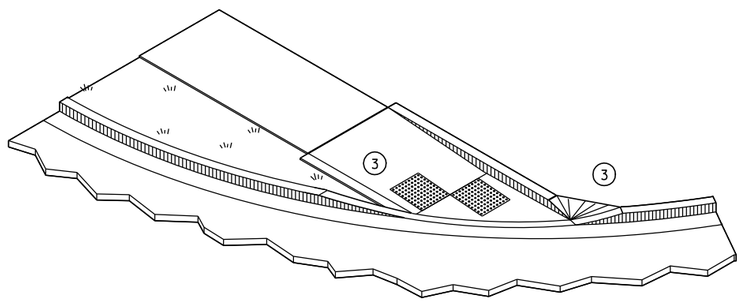
INTERMEDIATE RADII CAN BE INTERPOLATED



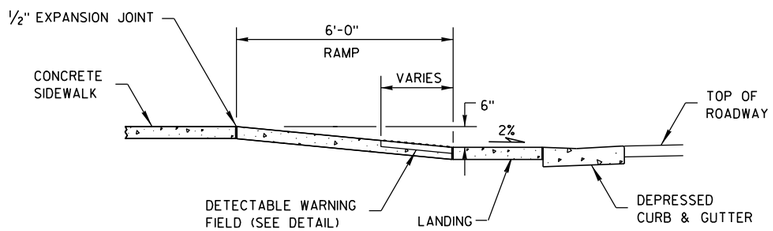
SECTION A-A



SECTION C-C



ISOMETRIC VIEW



SECTION B-B

LEGEND

½" EXPANSION JOINT-SIDEWALK

CONTRACTION JOINT FIELD LOCATED

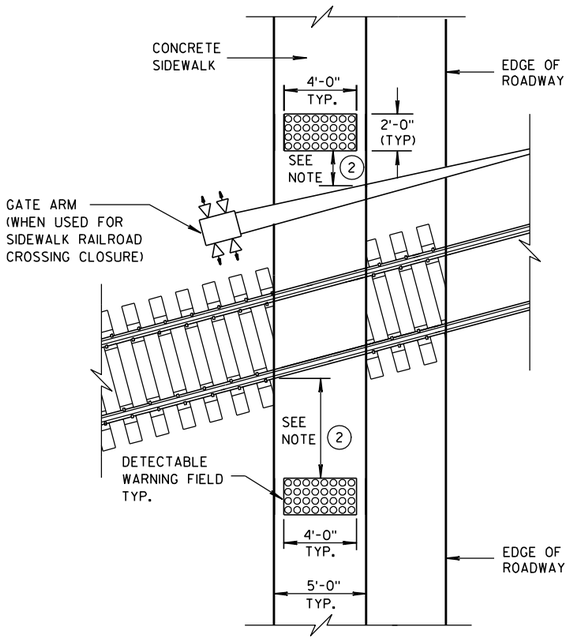
PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS TYPE 4B

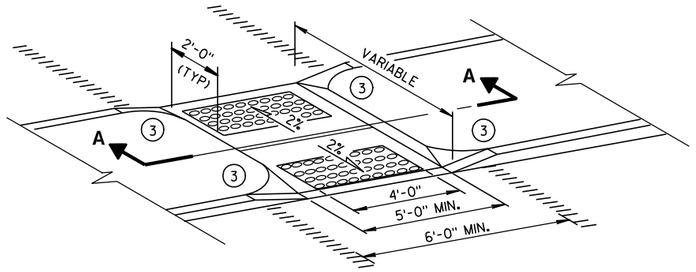
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

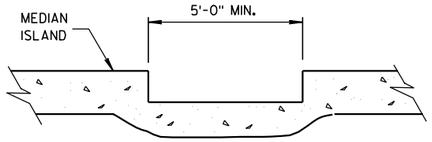
S.D.D. 8 D 5-14d



TYPE 8
DETECTABLE WARNINGS AT RAILROAD CROSSING



MEDIAN ISLAND
NON-ELEVATED CROSSING
TYPE 5



SECTION A-A

GENERAL NOTES

SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

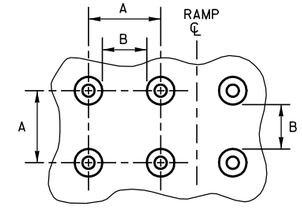
(1) SLOPE SIDEWALK TOWARD LANDING AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.

(2) THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO A RAILROAD CROSSING SHALL BE 1.5 FEET ± 0.1' FROM THE FACE OF THE GATE ARM IF THE GATE ARM EXTENDS ACROSS THE SIDEWALK. WHERE THERE IS NO PEDESTRIAN GATE, THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO THE RAILROAD CROSSING SHALL BE 15 FEET FROM THE NEAREST RAIL.

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

LEGEND

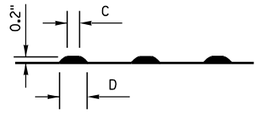
- ½" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)



PLAN VIEW

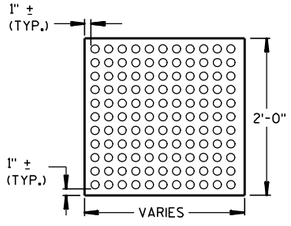
	MIN.	MAX.
A	1.6"	2.4"
B	0.65"	1.5"
C	*	*
D	0.9"	1.4"

* THE C DIMENSION IS 50% TO 65% OF THE D DIMENSION.



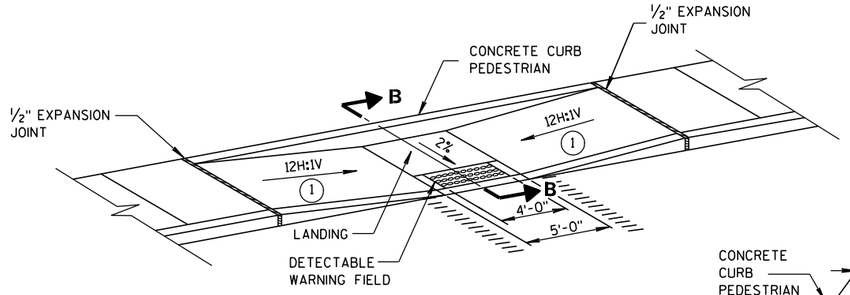
ELEVATION VIEW

TRUNCATED DOMES
DETECTABLE WARNING PATTERN DETAIL

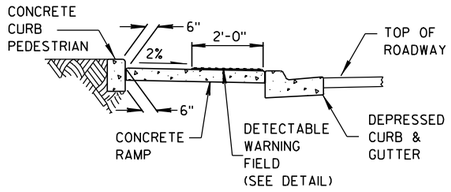


PLAN VIEW

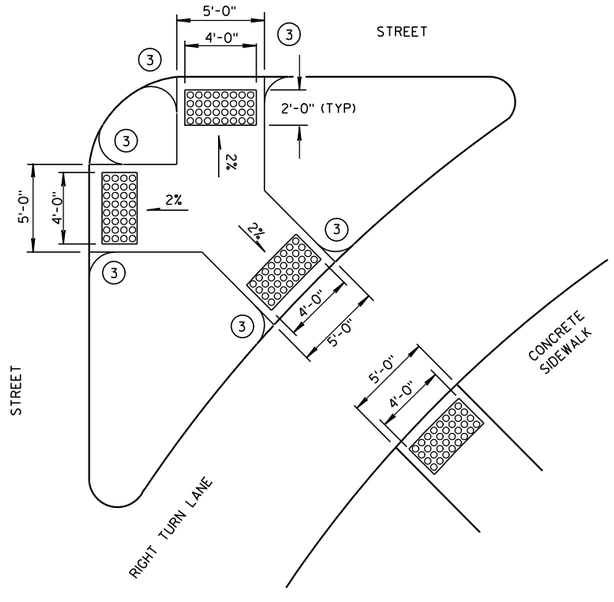
DETECTABLE WARNING FIELD (TYPICAL)



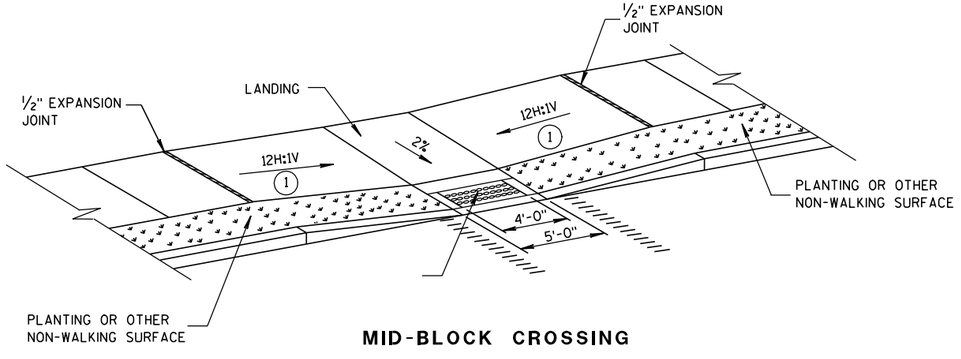
MID-BLOCK CROSSING
TYPE 7A



SECTION B-B



TYPE 6
DETECTABLE WARNING AT ISLANDS



MID-BLOCK CROSSING
TYPE 7B

NOTE: THESE PARALLEL AND PARALLEL/PERPENDICULAR CURB RAMPS MAY BE USED AT INTERSECTIONS AND MID BLOCK LOCATIONS.

CURB RAMPS
TYPES 5, 6, 7A, 7B & 8

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

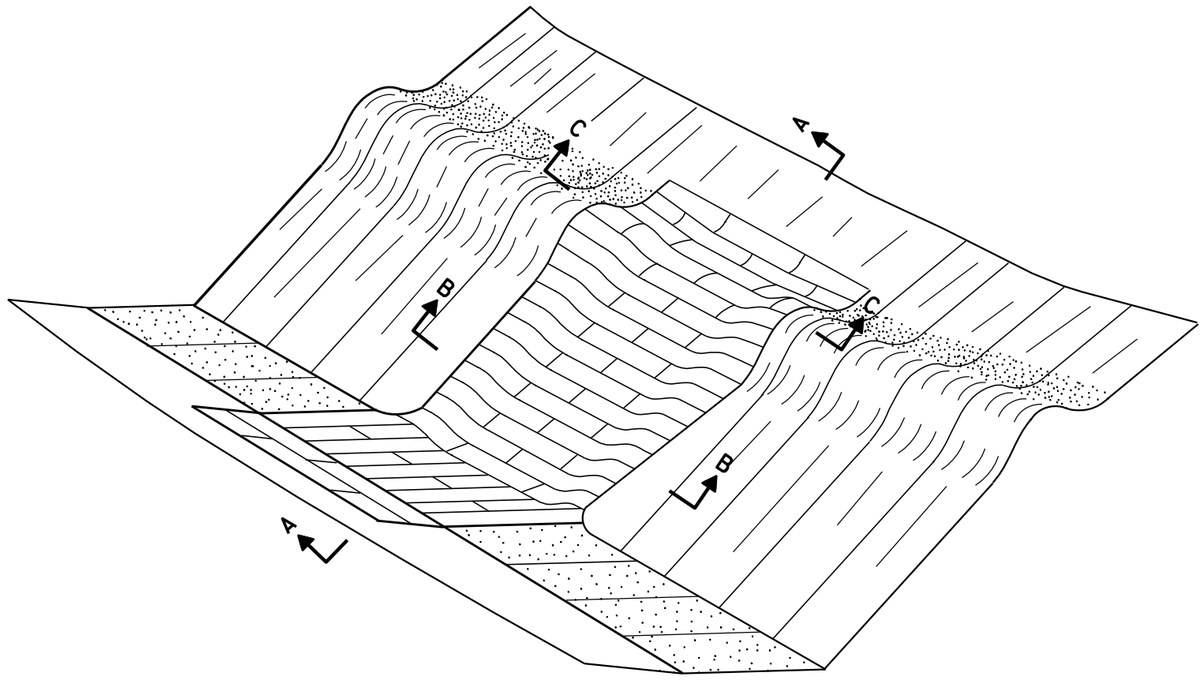
APPROVED
2-9-10 DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER
FHWA

6

S.D.D. 8 D 5-14e

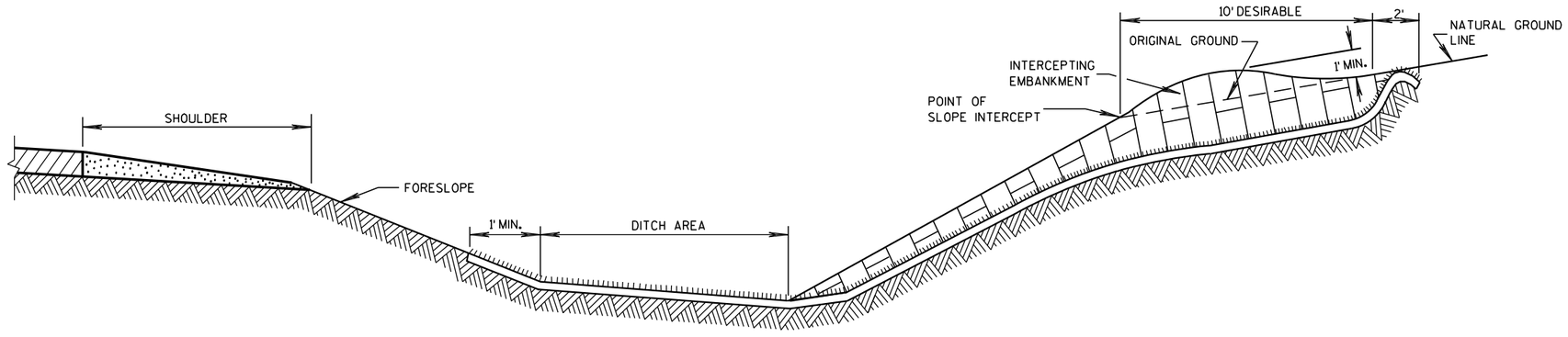
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S.D.D. 8 D 5-14e

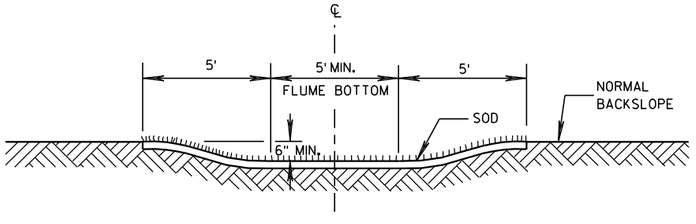


PERSPECTIVE

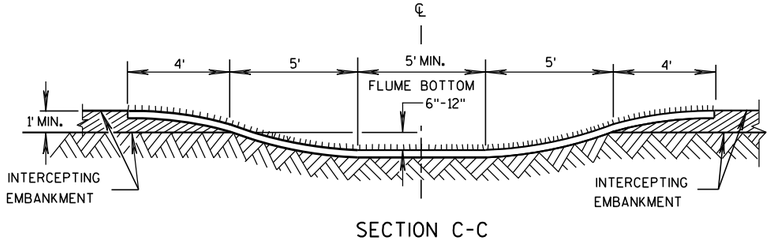
BACKSLIDE WITH FLUME AND INTERCEPTING EMBANKMENT



SECTION A-A



SECTION B-B



SECTION C-C

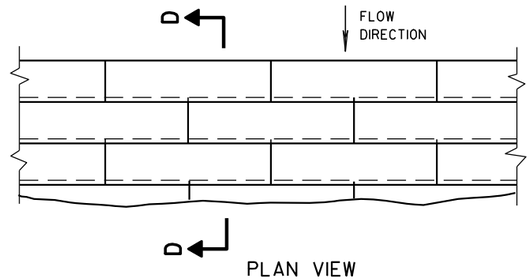
GENERAL NOTES

DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS.

GRADING AND SHAPING INTERCEPTING EMBANKMENT WILL BE MEASURED AND PAID FOR IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS, SECTION 205, "ROADWAY AND DRAINAGE EXCAVATION".

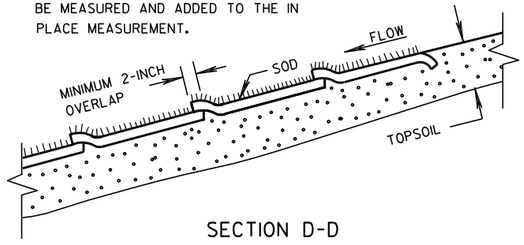
SOD STRIPS SHALL BE LAID TRANSVERSELY TO THE DIRECTION OF THE WATER FLOW.

DIMENSIONS SHALL BE ADJUSTED TO FIT SITE CONDITIONS AS DIRECTED BY THE ENGINEER.



PLAN VIEW

NOTE:
SOD SHALL BE LAID AS SHOWN ON THE PLAN VIEW, AND AS DIRECTED BY THE ENGINEER. THE SOD OVERLAP WILL BE MEASURED AND ADDED TO THE IN PLACE MEASUREMENT.



SECTION D-D

DETAIL FOR OVERLAP OF SOD STRIPS

6

6

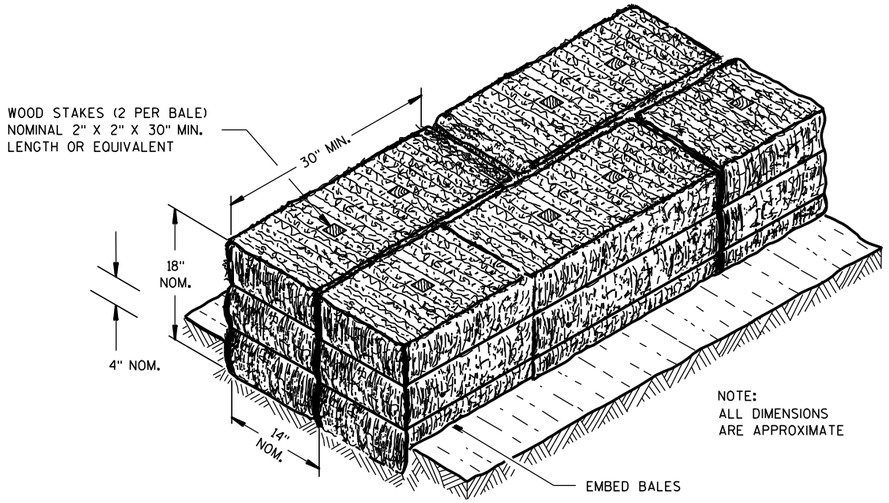
S.D.D. 8 E 5-2

S.D.D. 8 E 5-2

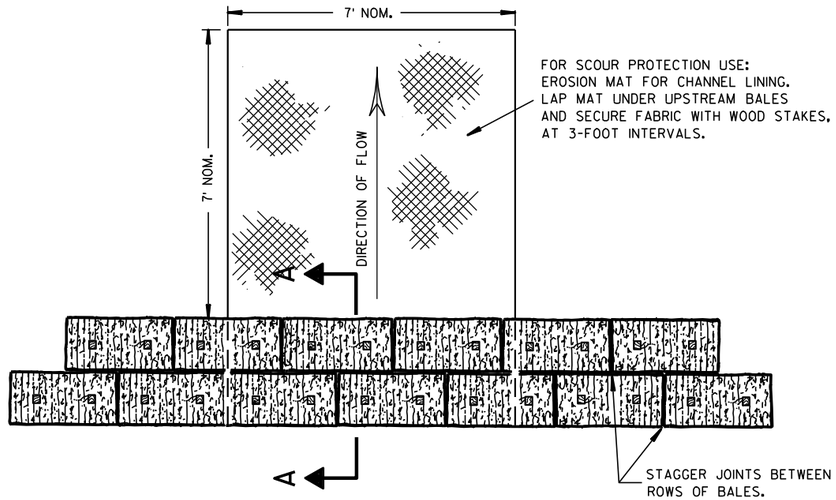
SODDED BACKSLOPE FLUME AND INTERCEPTING EMBANKMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

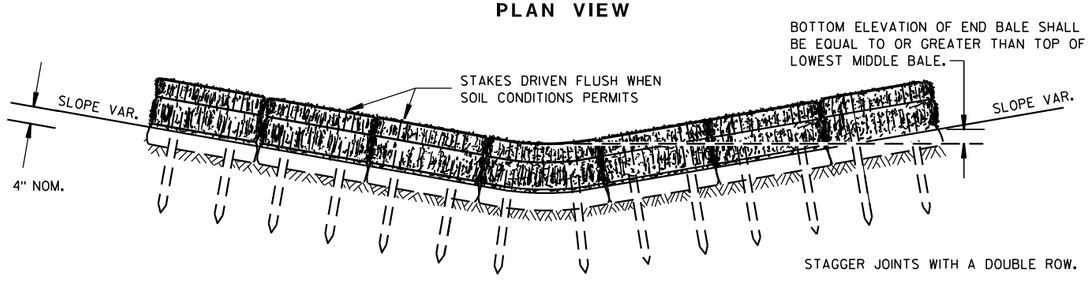
APPROVED
10/24/95 DATE
/S/ Rory L. Rhinesmith
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA



SECTION A-A



PLAN VIEW



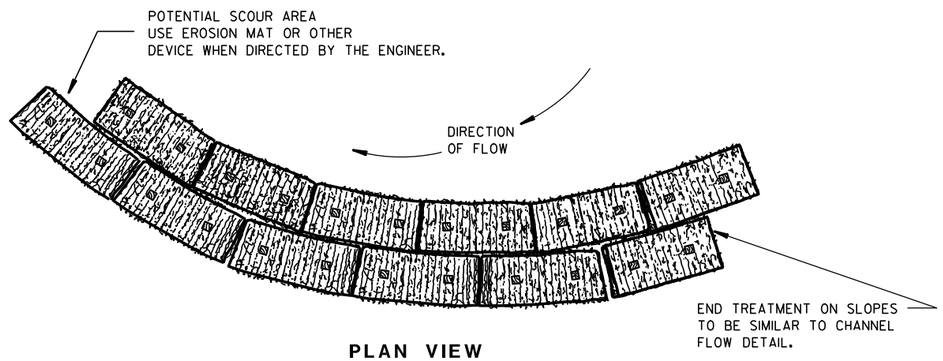
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES (1)

GENERAL NOTES

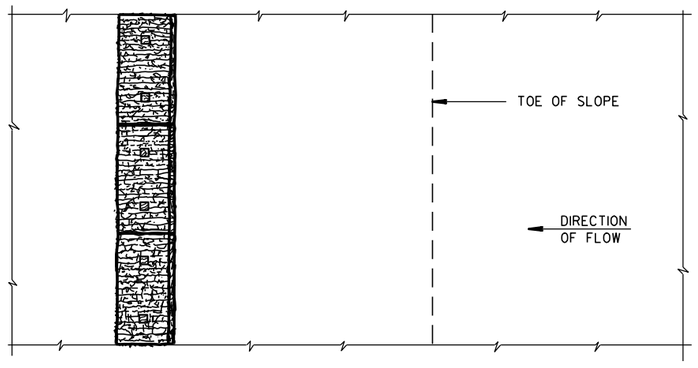
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

(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.

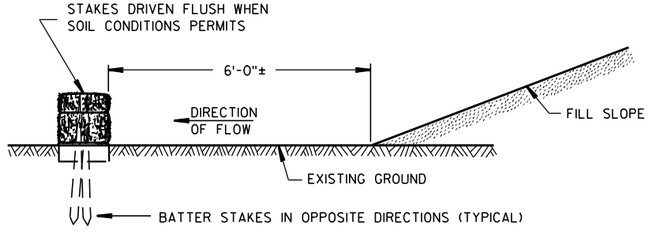


PLAN VIEW

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

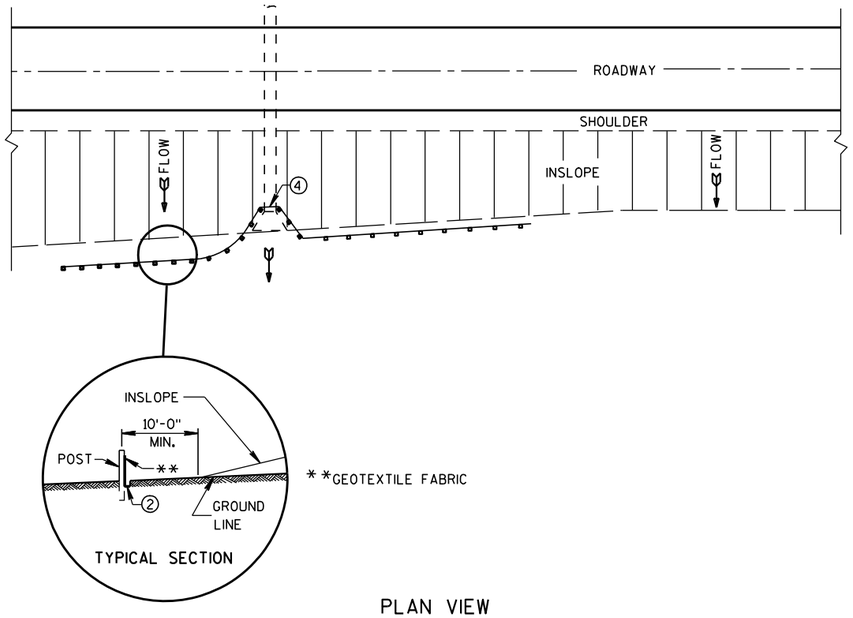
FHWA

6

S.D.D. 8 E 8-3

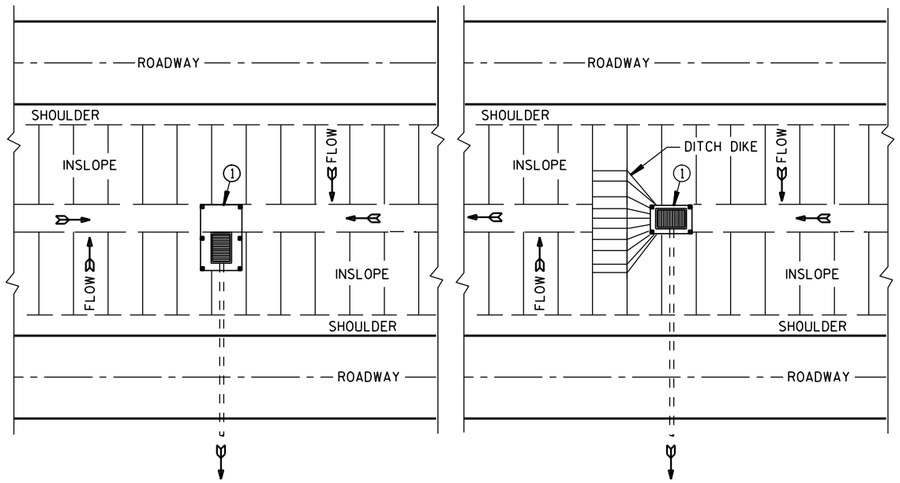
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S.D.D. 8 E 8-3



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

GENERAL NOTES

DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

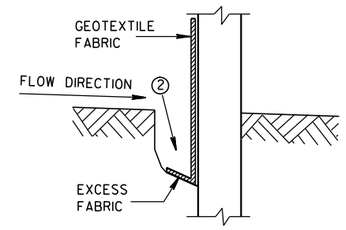
① HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.

② FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.

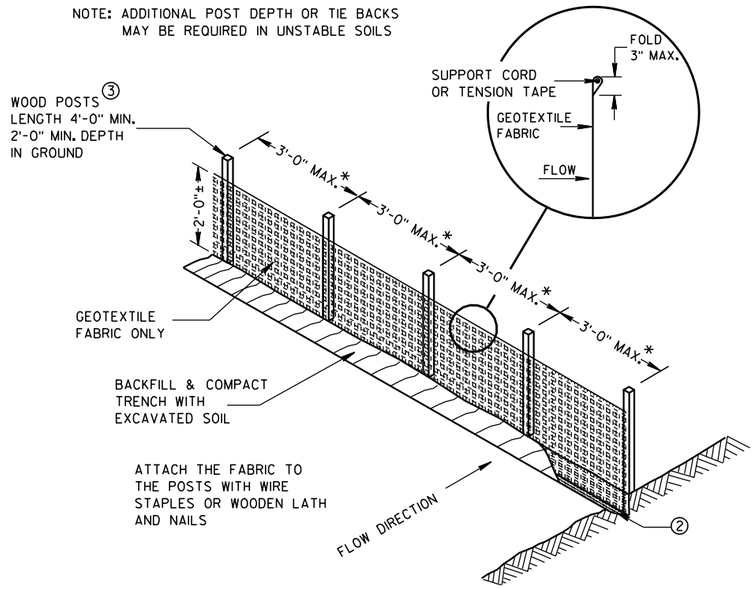
③ WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OF OAK OR HICKORY.

④ SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.

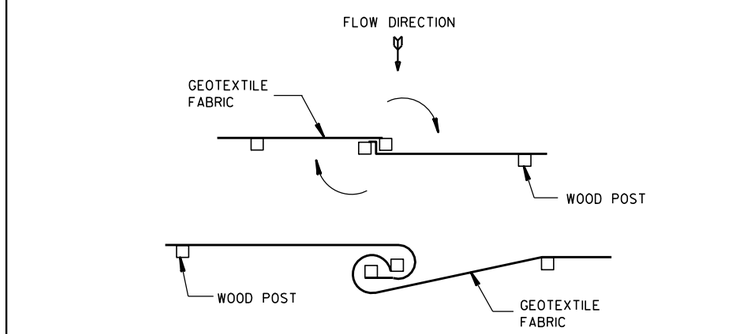
⑤ CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.



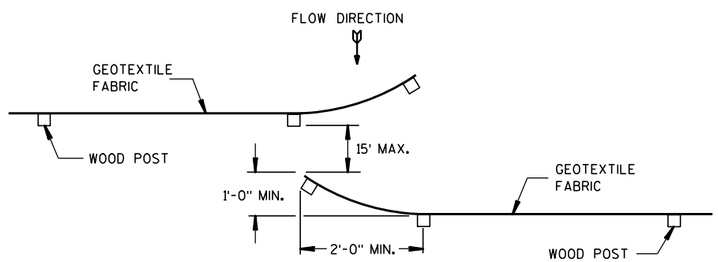
TRENCH DETAIL



SILT FENCE

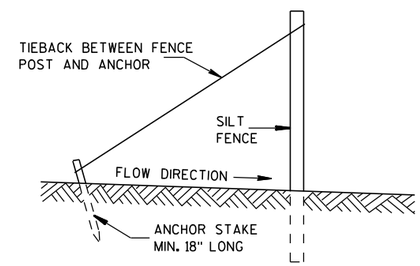


TWIST METHOD



HOOK METHOD

JOINING TWO LENGTHS OF SILT FENCE ⑤



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

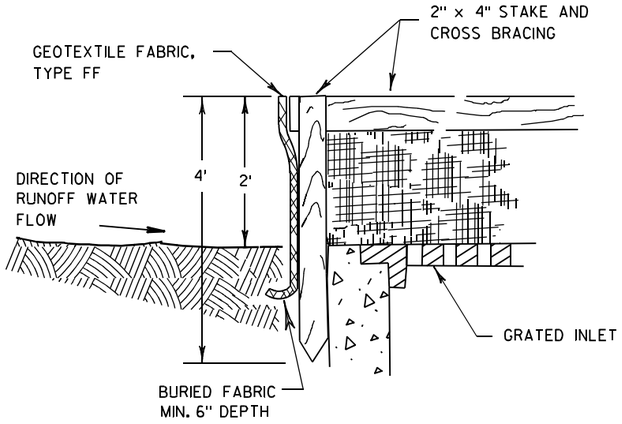
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

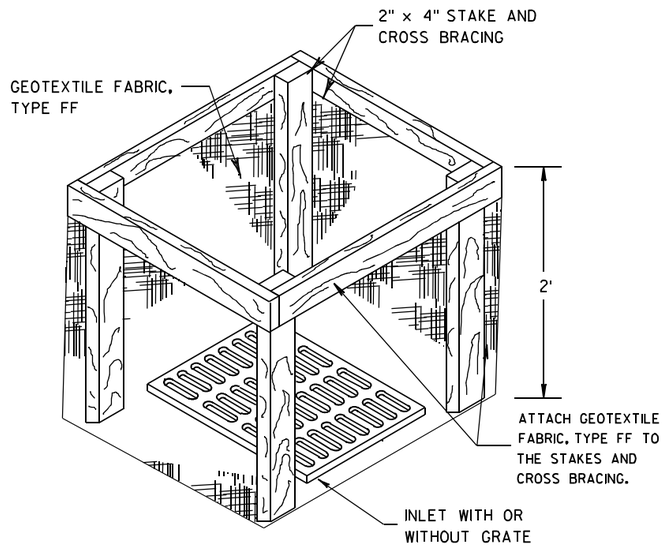
6

S.D.D. 8 E 9-6

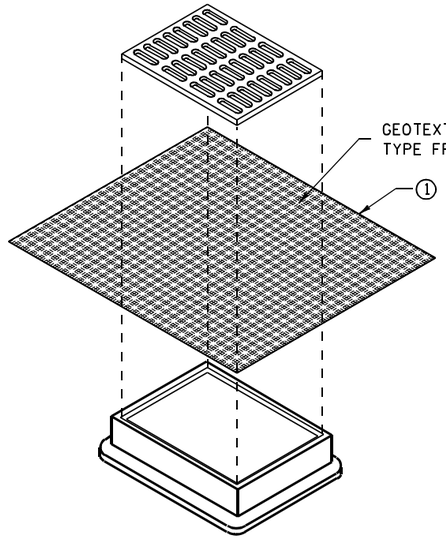
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S.D.D. 8 E 9-6



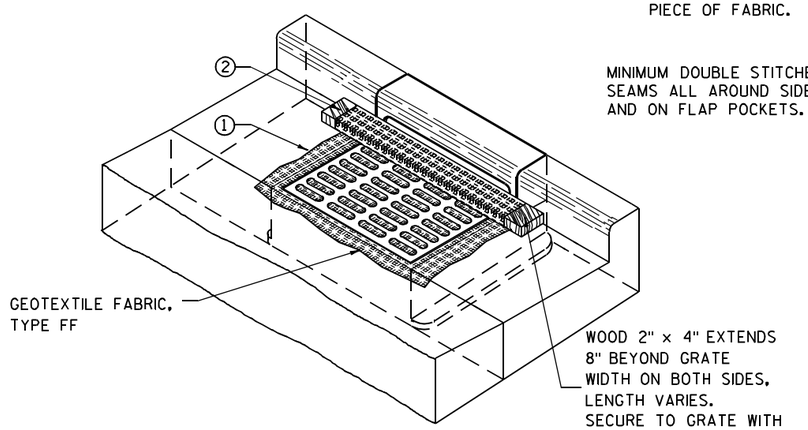


INLET PROTECTION, TYPE A

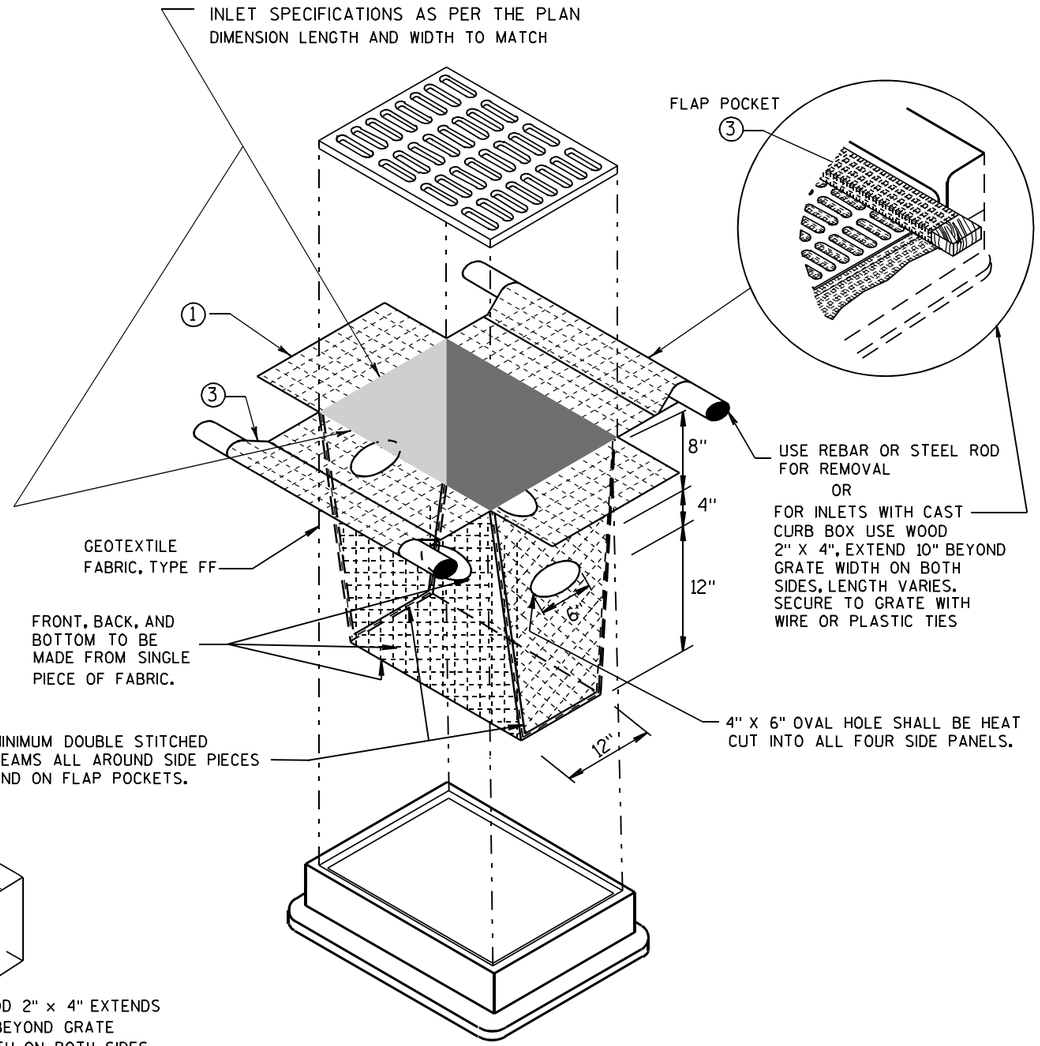


INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

(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.

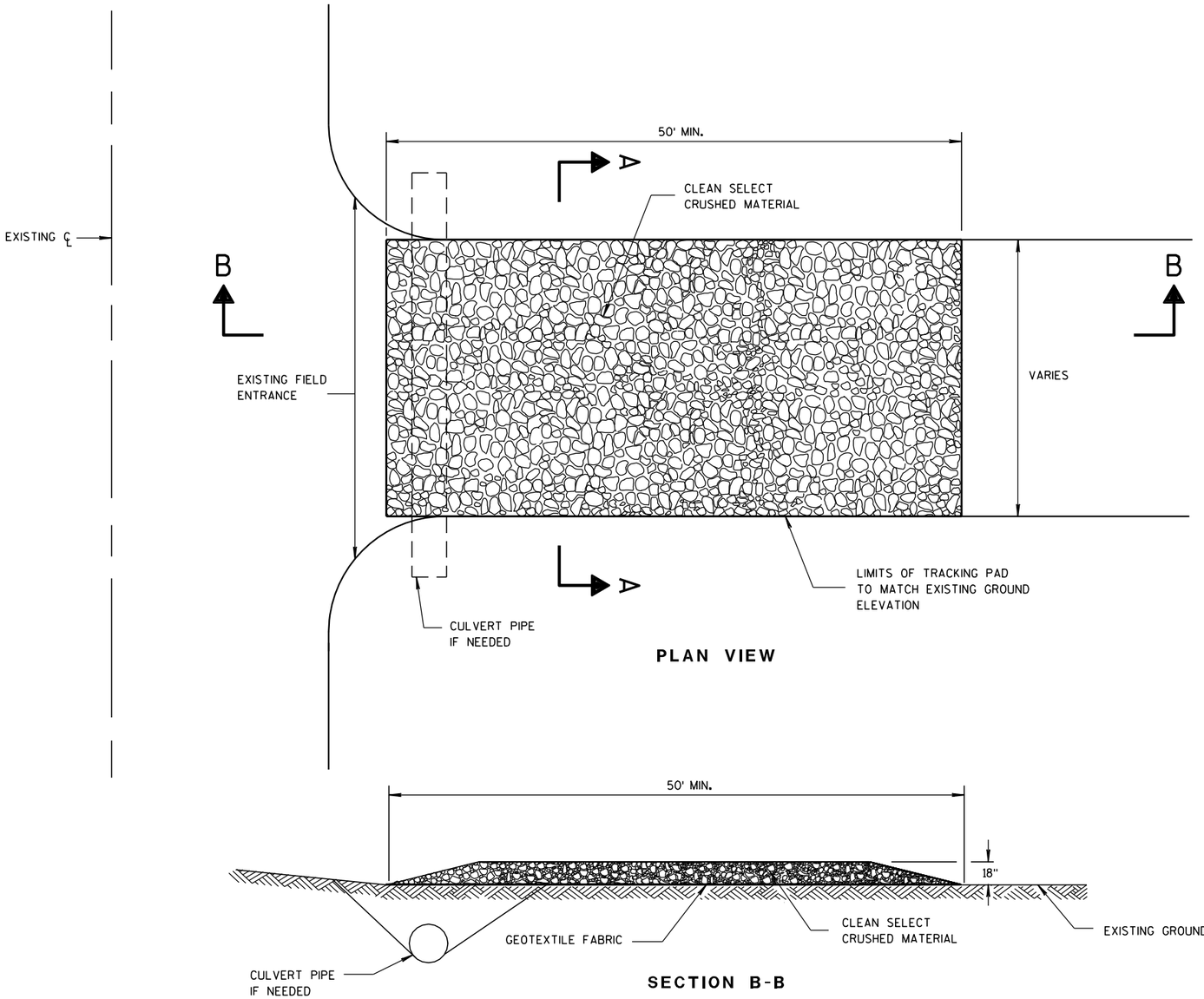
THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE 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



PLAN VIEW

SECTION B-B

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

TRACKING PAD SHALL BE INSPECTED DAILY. DEFICIENT AREAS SHALL BE REPAIRED OR REPLACED IMMEDIATELY.

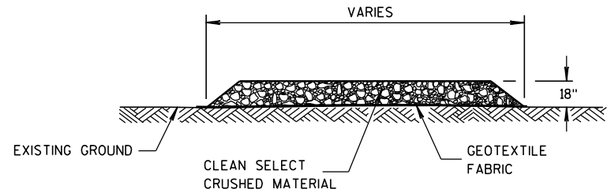
TRACKING PAD TO BE REMOVED AFTER CONSTRUCTION IS COMPLETED.

TRACKING PAD SHALL BE THE FULL WIDTH OF THE EGRESS POINT.

SURFACE WATER MUST BE PREVENTED FROM PASSING THROUGH THE TRACKING PAD. FLOWS SHALL BE DIVERTED AWAY, AROUND OR CONVEYED UNDER THE TRACKING PAD.

CULVERT PIPE OR OTHER BMP USED TO DIVERT WATER AWAY, AROUND OR UNDER THE TRACKING PAD SHALL BE DESIGNED TO CONVEY THE 2 YEAR - 24 HOUR EVENT.

THE COST OF ADDITIONAL BMP TO DIVERT WATER ARE INCIDENTAL TO THE TRACKING PAD BID ITEM.



SECTION A-A

TRACKING PAD

6

S.D.D. 8 E 14-1

TRACKING PAD

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

3/24/2011	/S/ Jerry H. Zoda	
DATE	ROADWAY STANDARDS ENGINEER	ENT

FHWA

6

S.D.D. 8 E 14-1

METAL APRON ENDWALLS

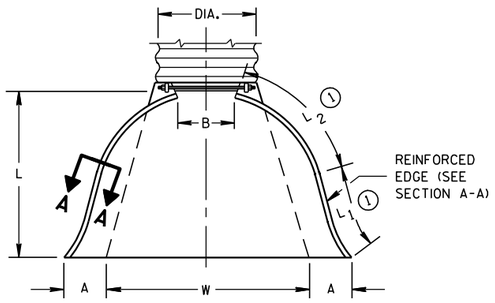
PIPE DIA. (IN.)	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4	36	2 1/2 to 1	1 Pc.
21	.064	.060	9	12	6	36	18	29 5/8	42	2 1/2 to 1	1 Pc.
24	.064	.075	10	13	6	41	18	37 1/4	48	2 1/2 to 1	1 Pc.
30	.079	.075	12	16	8	51	18	52 1/4	60	2 1/2 to 1	1 Pc.
36	.079	.105	14	19	9	60	24	59 3/4	72	2 1/2 to 1	2 Pc.
42	.109	.105	16	22	11	69	24	75 5/8	84	2 1/2 to 1	2 Pc.
48	.109	.105	18	27	12	78	24	81	90	2 1/4 to 1	3 Pc.
54	.109	.105	18	30	12	84	30	85 1/2	102	2 1/4 to 1	3 Pc.
60	.109×	.105×	18	33	12	87	—	—	114	2 to 1	3 Pc.
66	.109×	.105×	18	36	12	87	—	—	120	2 to 1	3 Pc.
72	.109×	.105×	18	39	12	87	—	—	126	2 to 1	3 Pc.
78	.109×	.105×	18	42	12	87	—	—	132	1 1/2 to 1	3 Pc.
84	.109×	.105×	18	45	12	87	—	—	138	1 1/2 to 1	3 Pc.
90	.109×	.105×	18	37	12	87	—	—	144	1 1/2 to 1	3 Pc.
96	.109×	.105×	18	35	12	87	—	—	150	1 1/2 to 1	3 Pc.

× EXCEPT CENTER PANEL SEE GENERAL NOTES

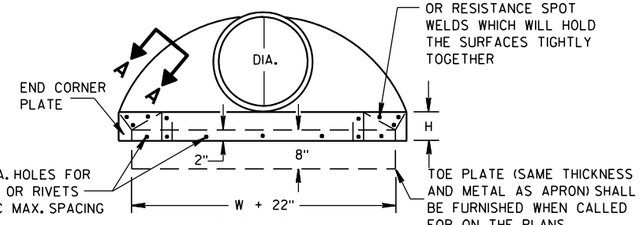
REINFORCED CONCRETE APRON ENDWALLS

PIPE DIA. (IN.)	DIMENSIONS (Inches) T	A	B	C	D	E	G	APPROX. SLOPE
12	2	4	24	48 7/8	72 1/8	24	2	3 to 1
15	2 1/4	6	27	46	73	30	2 1/4	3 to 1
18	2 1/2	9	27	46	73	36	2 1/2	3 to 1
21	2 3/4	9	36	37 1/2	73 1/2	42	2 3/4	3 to 1
24	3	9 1/2	43 1/2	30	73 1/2	48	3	3 to 1
27	3 1/4	10 1/2	49 1/2	24	73 1/2	54	3 1/4	3 to 1
30	3 1/2	12	54	19 3/4	73 1/2	60	3 1/2	3 to 1
36	4	15	63	34 3/4	97 3/4	72	4	3 to 1
42	4 1/2	21	63	35	98	78	4 1/2	3 to 1
48	5	24	72	26	98	84	5	3 to 1
54	5 1/2	27	65	* 33 1/4 - ** 35	* 98 1/4 - ** 100	90	5 1/2	2 2/5 to 1
60	6	* 30 - ** 35	60	39	99	96	5	2 to 1
66	6 1/2	* 24 - ** 30	* 72 - ** 78	* 21 - ** 27	99	102	5 1/2	2 to 1
72	7	* 24 - ** 36	78	21	99	108	6	2 to 1
78	7 1/2	* 24 - ** 36	78	21	99	114	6 1/2	2 to 1
84	8	36	90 1/2	21	111 1/2	120	6 1/2	1 1/2 to 1
90	8 1/2	41	87 1/2	24	111 1/2	132	6 1/2	1 1/2 to 1

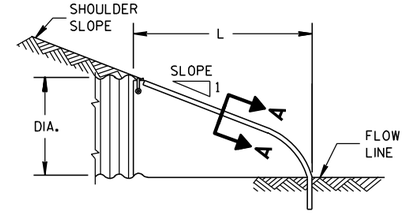
*MINIMUM
**MAXIMUM



PLAN VIEW

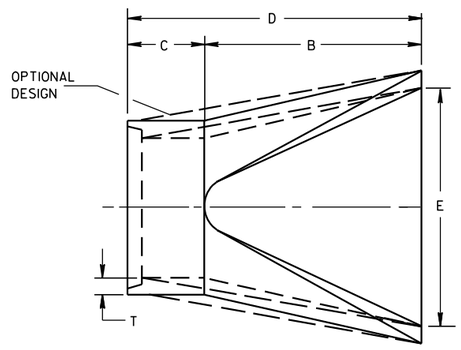


END VIEW

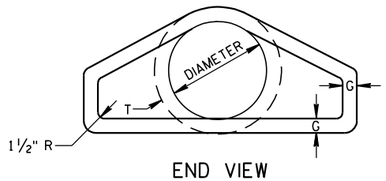


SIDE ELEVATION

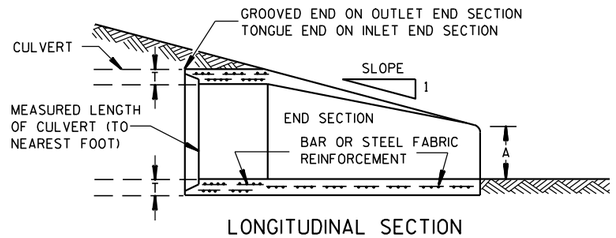
METAL ENDWALLS



PLAN

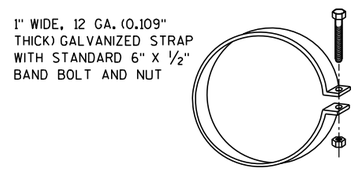


END VIEW



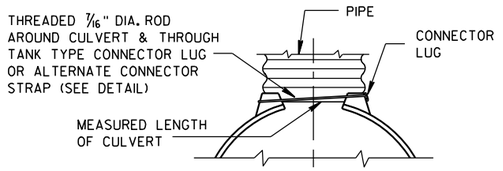
LONGITUDINAL SECTION

CONCRETE ENDWALLS

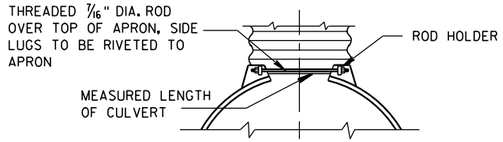


ALTERNATE FOR TYPE 1 CONNECTION

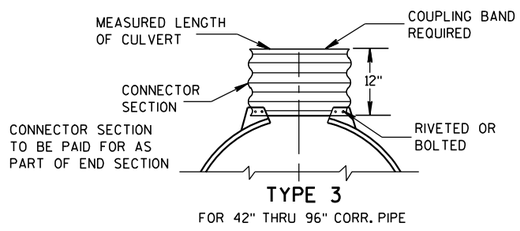
END SECTION CONNECTOR STRAP



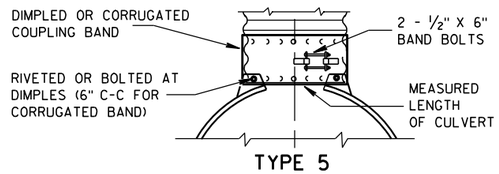
TYPE 1
FOR 12" THRU 24" CORR. PIPE



TYPE 2
FOR 30" THRU 96" CORR. PIPE



TYPE 3
FOR 42" THRU 96" CORR. PIPE



TYPE 5
ALTERNATE FOR:
ALL SIZES CORRUGATED CIRCULAR PIPE

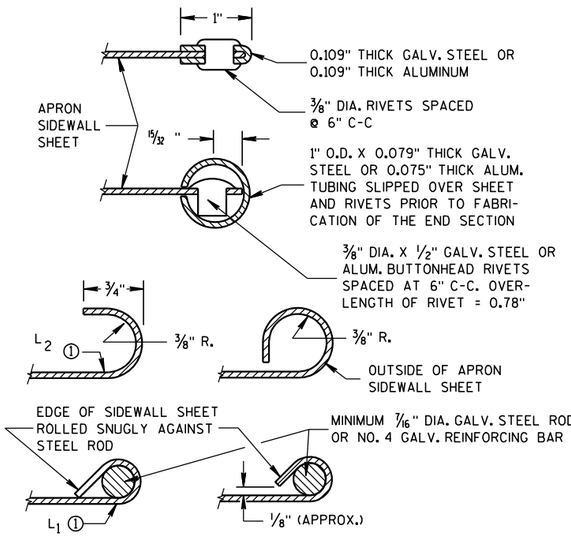
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

FOR CIRCUMFERENTIALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2, 3 OR 5 AS APPLICABLE.

FOR HELICALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2 OR 5.

FOR HELICALLY CORRUGATED PIPES WITH TWO CIRCUMFERENTIAL CORRUGATIONS AT EACH END USE ENDWALL CONNECTION DETAILS 1, 2 OR 3.

CONNECTION DETAILS



SECTION A-A

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

CONCRETE CULVERT ENDWALLS MAY NOT BE USED WITH GALVANIZED STEEL OR ALUMINUM CULVERT PIPE OR VISE VERSA. GALVANIZED STEEL OR ALUMINUM ENDWALLS SHALL NORMALLY BE INSTALLED ON CULVERT PIPE OF THE SAME METAL.

ALL THREE PIECE STEEL APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.105" SIDES AND 0.134" CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT OF THE PIPE PERIMETER.

LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS FOR STEEL UNITS AND ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS. FOR THE 60" THROUGH 96" DIAMETER APRON ENDWALL SIZES, THE REINFORCED EDGES AND CENTER PANEL SEAMS SHALL BE FURTHER REINFORCED WITH GALVANIZED STEEL OR ALUMINUM STIFFENER ANGLES. THE ANGLES SHALL BE ATTACHED BY GALVANIZED NUTS AND BOLTS FOR STEEL UNITS AND ALUMINUM NUTS AND BOLTS FOR ALUMINUM UNITS.

WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

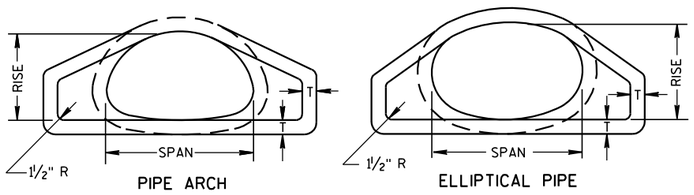
① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR CULVERT PIPE

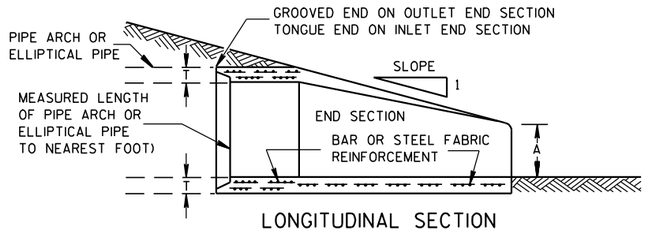
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/30/94 DATE
/S/ Rory L. Rhinesmith
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

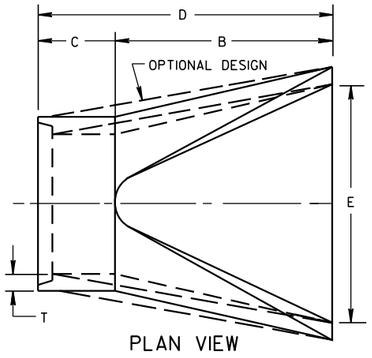
6
S.D.D. 8 F 1-11



END VIEW

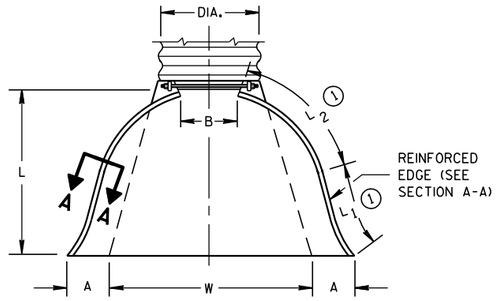


LONGITUDINAL SECTION

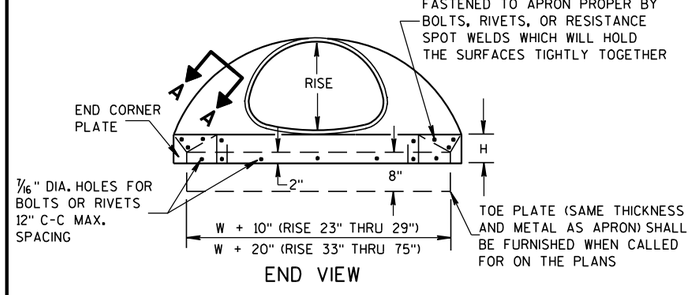


PLAN VIEW

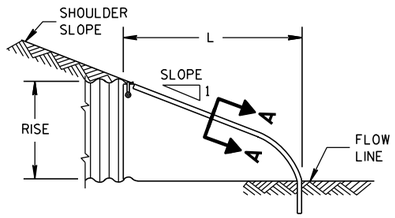
CONCRETE ENDWALLS



PLAN VIEW

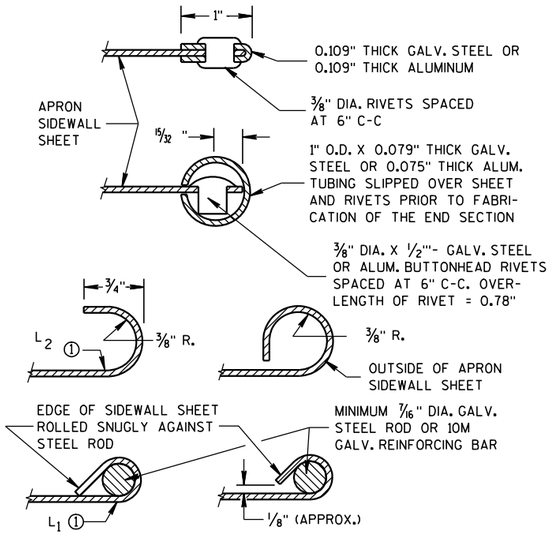


END VIEW



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

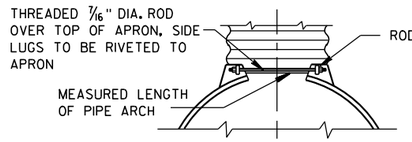
REINFORCED CONCRETE PIPE ARCH

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

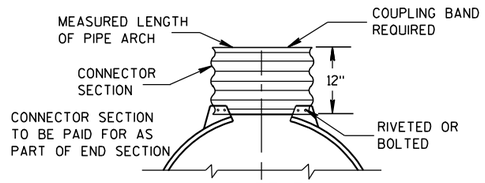
EQUIV. DIA. (Inches)	DIMENSIONS (Inches) ** SPAN	** RISE	T	A	B	C	D	E	APPROX. SLOPE
24	30	19	3¼	8½	39	33	72	48	3 to 1
30	38	24	3¾	9½	54	18	72	60	3 to 1
36	45	29	4½	11⅛	60	24	84	72	2½ to 1
42	53	34	5	15¾	60	36	96	78	2½ to 1
48	60	38	5½	21	60	36	96	84	2½ to 1
54	68	43	6	25½	60	36	96	90	2½ to 1
60	76	48	6½	30	60	36	96	96	2½ to 1

**NOMINAL SIZE



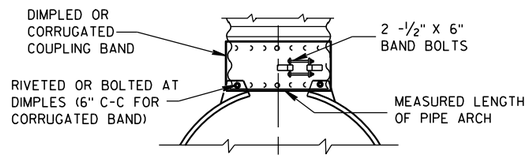
TYPE 2

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

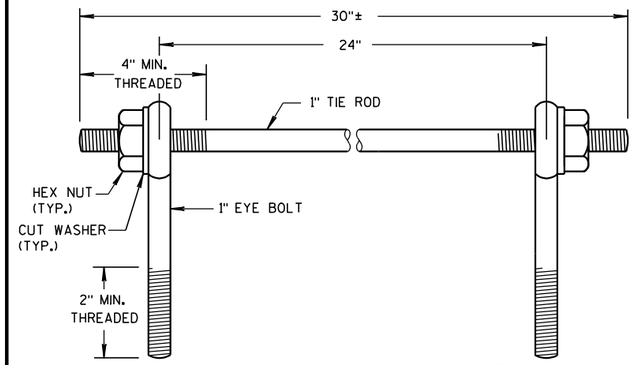
11/30/94 — DATE

/S/ Rory L. Rhinesmith — CHIEF ROADWAY DEVELOPMENT ENGINEER

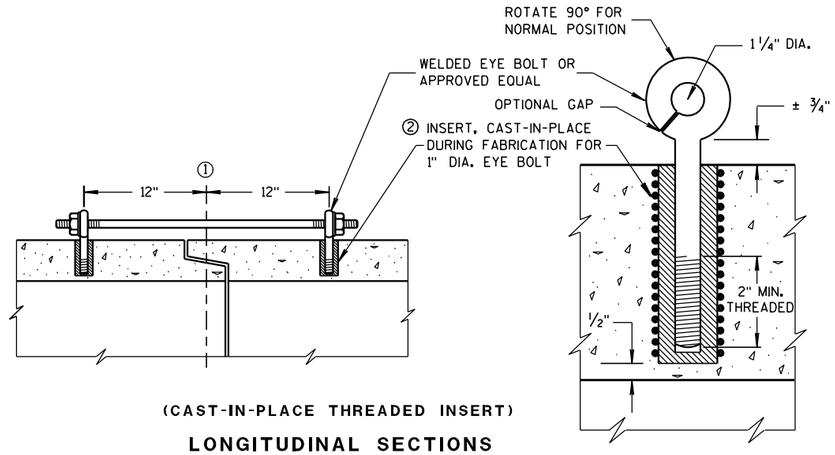
FHWA

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S.D.D. 8 F 2-1



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.

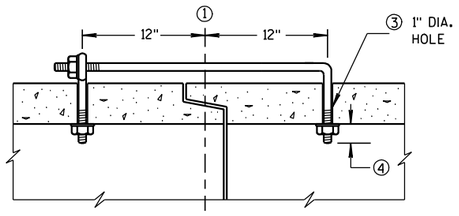
② THE INSIDE OF THE THREADED INSERTS SHALL BE CLEAN TO ALLOW THE INSERTION OF THREADED EYE BOLTS.

③ HOLES SHALL BE CAST-IN-PLACE OR DRILLED 12 INCHES FROM ℄ OF TONGUE AND GROOVE.

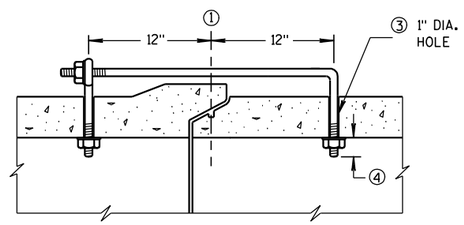
④ BOLT PROJECTION INSIDE OF PIPE SHALL NOT EXCEED 2 INCHES.

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)

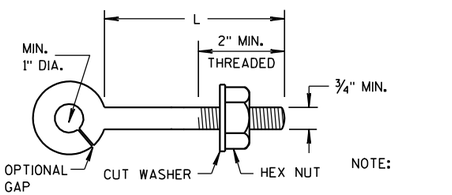


(MODIFIED BELL PIPE)

LONGITUDINAL SECTION

EYE BOLT DIMENSION TABLE

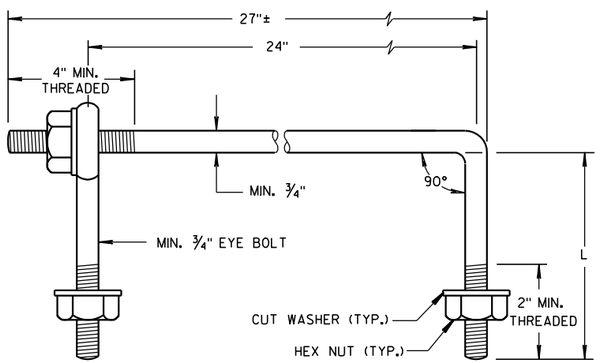
PIPE SIZE	L = LENGTH	
	TONGUE & GROOVE PIPE	MODIFIED BELL PIPE
18" TO 24"	4 1/2"	6 1/4"
30"	5"	7"
36"	5 1/2"	7"
42"	6"	
48"	6 1/2"	
60"	7 1/2"	
66"	8"	



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

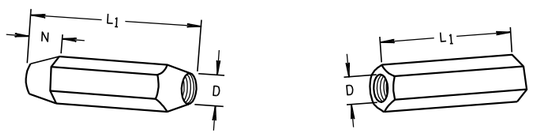
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

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

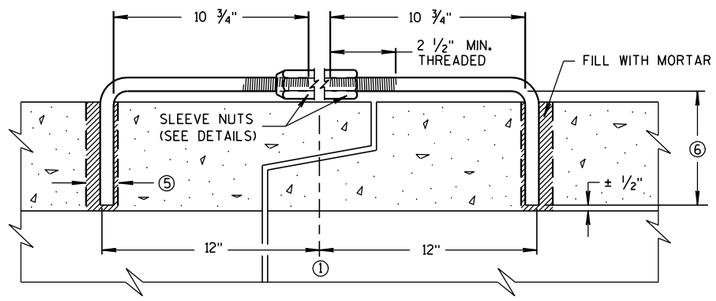
DIMENSIONS SHOWN ARE IN INCHES



TAPERED PLAIN

RIGHT AND LEFT THREADS

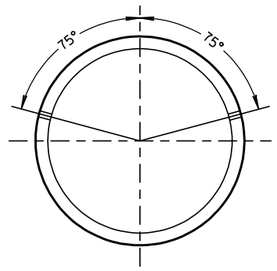
SLEEVE NUTS



LONGITUDINAL SECTION

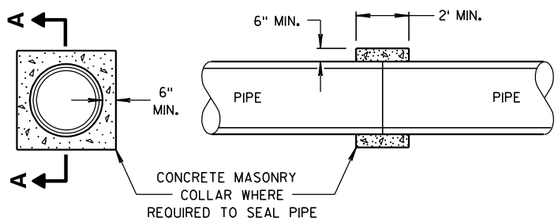
(JOINT TIES FOR 12" TO 108" DIA. CONCRETE PIPE)

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

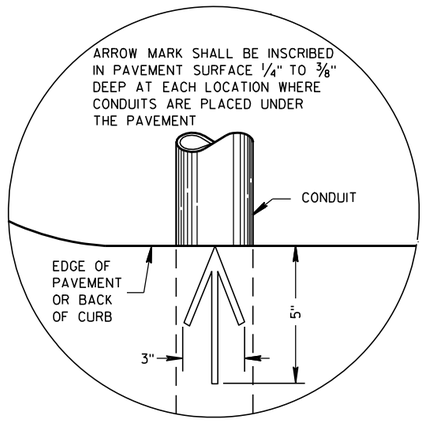
JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/5/2012 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
145
FHWA

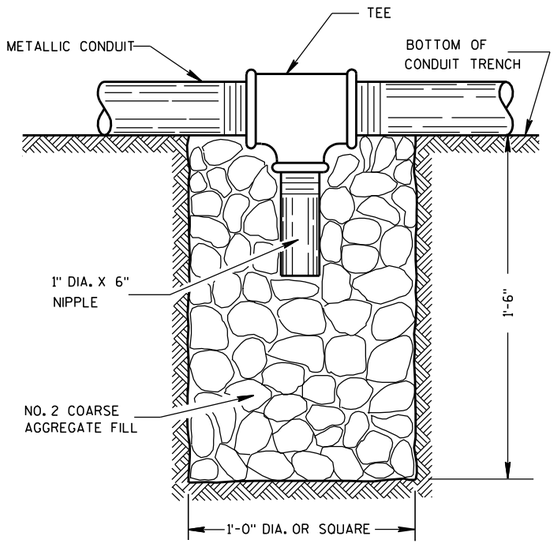
6

S.D.D. 8 F 4-7



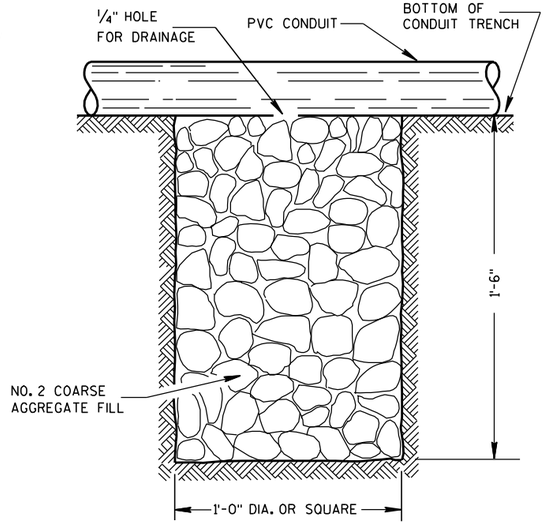
PLAN VIEW

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.

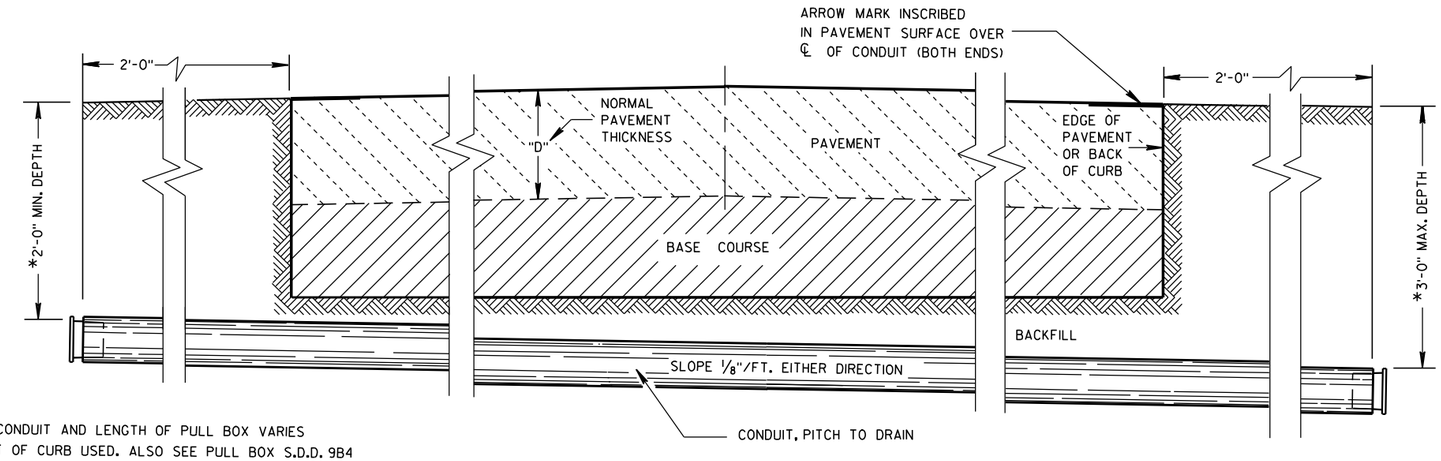
PRIOR TO CONDUIT ACCEPTANCE, CONDUIT CAPS OR PLUGS SHALL BE REMOVED, AND THE CAPS, PLUGS AND CONDUIT ENDS SHALL BE THOROUGHLY CLEANED AND THEN THE CAPS OR PLUGS REINSTALLED TO ENSURE THAT THE CAPS OR PLUGS CAN BE EASILY REMOVED IN THE FUTURE.

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

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S.D.D. 9 B 2-7

TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

DIMENSION IN INCHES		CORRUGATED STEEL PIPE								
PIPE DIAMETER (INSIDE)	A	12	12	12	18	18	18	24	24	24
PIPE LENGTH **	B	24	30	36	24	30	36	36	42	48
WALL THICKNESS	C	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064
COVER	D	10 1/4	10 1/4	10 1/4	16 1/4	16 1/4	16 1/4	22 1/4	22 1/4	22 1/4
FRAME	E	14 1/2	14 1/2	14 1/2	20 1/2	20 1/2	20 1/2	26 1/2	26 1/2	26 1/2
FRAME	F	8 1/2	8 1/2	8 1/2	14 1/2	14 1/2	14 1/2	20 1/2	20 1/2	20 1/2
FRAME	G	11 1/2	11 1/2	11 1/2	17 1/2	17 1/2	17 1/2	23 1/2	23 1/2	23 1/2
WEIGHT IN POUNDS *										
FRAME AND COVER		60	60	60	110	110	110	155	155	155

* THE ACTUAL WEIGHT OF THE MANHOLE FRAME AND COVER MAY VARY WITHIN 5 PERCENT PLUS OR MINUS OF THE WEIGHTS SHOWN.

** NORMALLY USED LENGTHS. THE PROJECT ENGINEER SHALL DETERMINE IF PIPE LENGTHS, OTHER THAN THOSE SPECIFIED, SHALL BE USED, TO A MAXIMUM OF 48" (CONTINUOUS LENGTH, NON-SPLICED). THE ADDITIONAL LENGTH SHALL BE INCIDENTAL TO THE PULL BOX BID PRICE.

GENERAL NOTES

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

ALL FRAMES AND COVERS SHALL BE HEAVY DUTY TYPE, SUITABLE FOR VEHICULAR TRAFFIC LOADS.

PULL BOXES LOCATED IN THE ROADWAYS SHALL HAVE LOCKING COVERS.

ENTRANCE HOLES INTO PULL BOXES SHALL BE CUT WITH A CIRCULAR HOLE SAW OR HYDRAULIC CONDUIT PUNCH. HOLE SIZE SHALL BE THE OUTSIDE DIAMETER OF THE CONDUIT THAT IS TO FIT IN THE OPENING PLUS NO MORE THAN 1/4".

THE CONTRACTOR SHALL NOT INSTALL WIRE IN ANY PULL BOX UNTIL ITS INSTALLATION HAS BEEN INSPECTED AND ACCEPTED BY THE ENGINEER.

GROUNDING LUGS (MECHANICAL CONNECTORS) SHALL BE U.L. LISTED AND APPROVED FOR USE WITH COPPER WIRE. THE MECHANICAL CONNECTION (INSIDE AND OUTSIDE) TO THE PULL BOX, SHALL BE TOTALLY AND PERMANENTLY SEALED WITH A SILICONE OR RUBBERIZED CAULKING COMPOUND AS APPROVED BY THE ENGINEER.

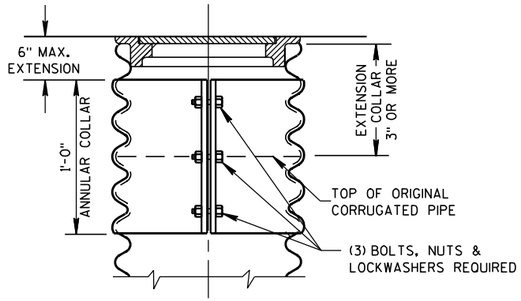
GROUNDING LUGS ARE NOT REQUIRED IN PULL BOXES WHEN VOLTAGES OF LESS THAN 50 VOLTS AC ARE THE ONLY VOLTAGES ENCOUNTERED IN THE BOXES.

ALL METALLIC CONDUIT IN WHICH WIRE AND/OR CABLE IS TO BE INSTALLED, SHALL BE BUSHED BEFORE INSTALLATION OF THE WIRE AND/OR CABLE.

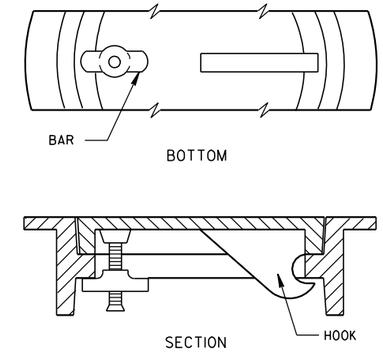
S.D.D. 9B2, "CONDUIT", APPLIES TO THIS DRAWING.

WHEN PULL BOXES ARE INSTALLED FOR FUTURE USE, DO NOT INSTALL THE EQUIPMENT GROUNDING LUG. THE EQUIPMENT GROUNDING LUG, THE EQUIPMENT GROUNDING ELECTRODE AND THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE REQUIRED AND INSTALLED UNDER A FUTURE WIRING CONTRACT.

IF PULL BOX EQUIPMENT GROUNDING IS REQUIRED USING AN EQUIPMENT GROUNDING ELECTRODE IN EACH PULL BOX, THE EQUIPMENT GROUNDING ELECTRODE SHALL BE 5/8" X 8'-0", COPPERCLAD AND BE EXOTHERMICALLY WELDED TO A #4 AWG, COPPER, STRANDED WIRE (BARE OR GREEN INSULATED). THE #4 AWG WIRE SHALL BE 4 FEET IN LENGTH, NEATLY COILED, TAPED AND AVAILABLE FOR USE WHEN REQUIRED.

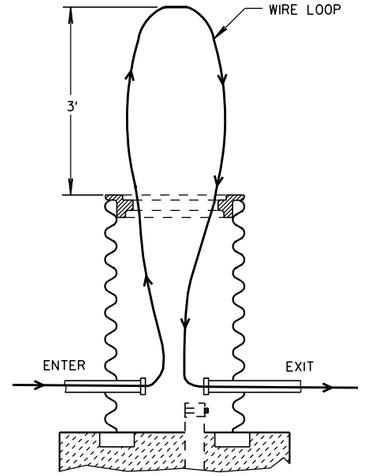


CORRUGATED PIPE EXTENDER

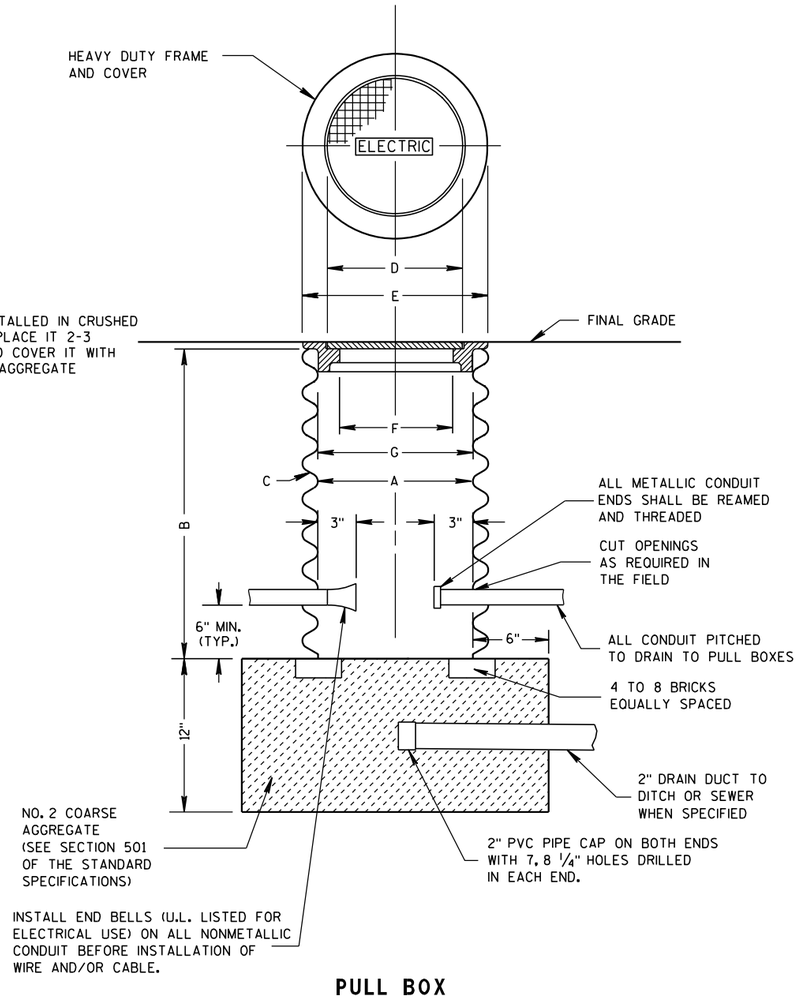


ALTERNATE COVER (LOCKING)

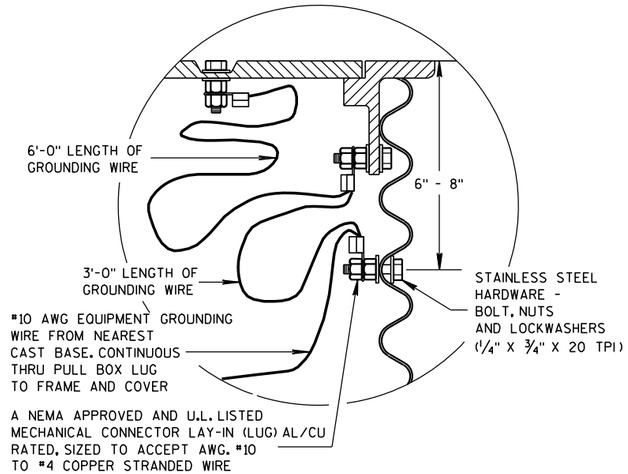
TIGHTENING BAR TYPE



MEASUREMENT DETAIL FOR WIRE/CABLE IN THE PULL BOX



PULL BOX



EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES

PULL BOX

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

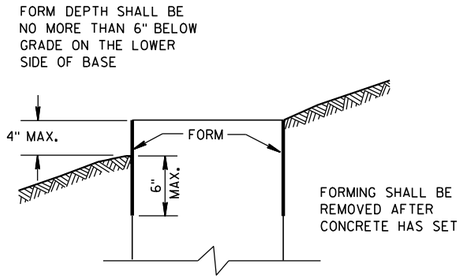
APPROVED

9/27/06 DATE

/S/ Balu Ananthanarayanan
STATE ELECTRICAL ENGI

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FORMING DETAIL

QUANTITY REQUIREMENTS	CONCRETE BASE TYPE		
	1	2	5
APPROX. CUBIC YARDS OF CONCRETE	0.40	0.57	0.40
LBS. OF HOOP BAR STEEL	NONE	23	16
LBS. OF VERTICAL BAR STEEL	NONE	60	18

GENERAL NOTES

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

BASES SHALL BE EXCAVATED BY USE OF A CIRCULAR AUGER.

TOP SURFACES OF CONCRETE BASES SHALL BE TROWEL FINISHED SMOOTH AND LEVEL.

CONDUIT SIZES AND LOCATIONS SHALL BE AS SHOWN ON THE PLANS.

THE FINAL OR TERMINATING CONCRETE BASE IN A CONDUIT RUN SHALL HAVE A 6" EXIT STUB INSTALLED FOR FUTURE CABLING USE. THE EXIT STUB SHALL BE SIZED AS USED THROUGHOUT THE CONDUIT RUN AS SHOWN AT THE ENTRANCE OF THE BASE.

MINIMUM BENDING RADIUS OF CONDUIT IS EQUAL TO 6 X THE DIAMETER.

CONDUIT HEIGHT ABOVE CONCRETE BASES SHALL BE 1 INCH. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

GENERAL NOTES (CONTINUED)

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

ENDS OF CONDUIT INSTALLED BELOW GRADE FOR FUTURE USE SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC.

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

IF A BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE DIRT OR FILL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING AROUND THE BASE. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BARE CONCRETE BASE IN LAYERS OF 1 FOOT OR LESS.

A NO. 4 AWG, STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD) FOR TYPE 2 AND TYPE 5 BASES.

THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE FURNISHED AND INSTALLED TO ENTER THE BASE OF THE TYPE 2 AND TYPE 5 BASES THROUGH A 1 INCH CONDUIT INSTALLED FOR GROUNDING PURPOSES, LEAVING A 4 FOOT COIL OF WIRE ABOVE THE CONCRETE BASE. THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE NEATLY COILED AND THE COILS TIED TOGETHER.

ANCHOR RODS SHALL BE THREADED 12" IN LENGTH ON EACH END OF THE ROD. ANCHOR RODS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 654.2.1 AND 641.2.2 OF THE STANDARD SPECIFICATIONS, ASTM A-449, OR ASTM A-687 (GRADE 105).

WASHERS AND LOCK WASHERS ARE REQUIRED ON ALL ANCHOR RODS.

WHEN ANCHOR RODS USING THE ALTERNATE "L" BEND ARE FURNISHED, THE 4" "L" BEND SHALL BE IN ADDITION TO THE SPECIFIED ANCHOR ROD BAR LENGTH. THE "L" BEND END SHALL NOT BE THREADED.

ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

WELDING OF THE ANCHOR RODS TO THE CAGE IS UNACCEPTABLE. TIE WIRES SHALL BE USED.

BAR STEEL REINFORCEMENT SHALL BE COATED WITH POWDERED EPOXY RESIN IN ACCORDANCE WITH SECTION 505 OF THE STANDARD SPECIFICATIONS (LATEST EDITION).

(1) THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18 INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36 INCHES EXCEPT WITH WRITTEN APPROVAL BY THE ENGINEER.

(2) (4) I" DIA. X 3'-6" ANCHOR RODS.

(3) (4) I" DIA. X 5'-0" ANCHOR RODS.

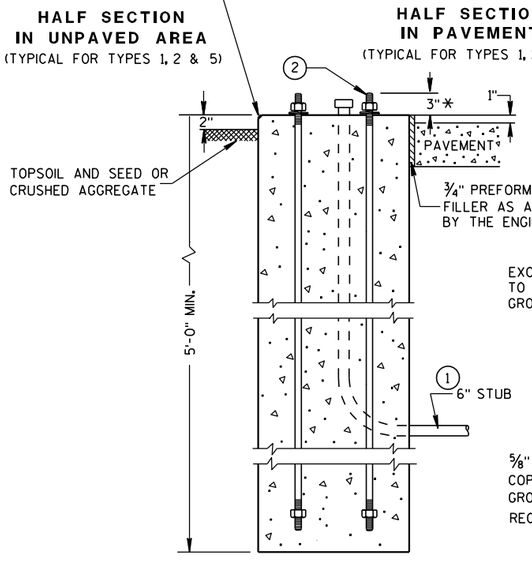
(4) (6) NO. 6 X 6'-8" BAR STEEL REINFORCEMENT.

(5) (7) NO. 4 X 5'-1" BAR STEEL REINFORCEMENT @ 1'-0" C-C.

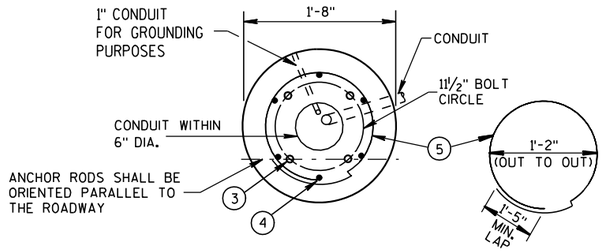
(6) (4) I" DIA. X 3'-6" ANCHOR RODS.

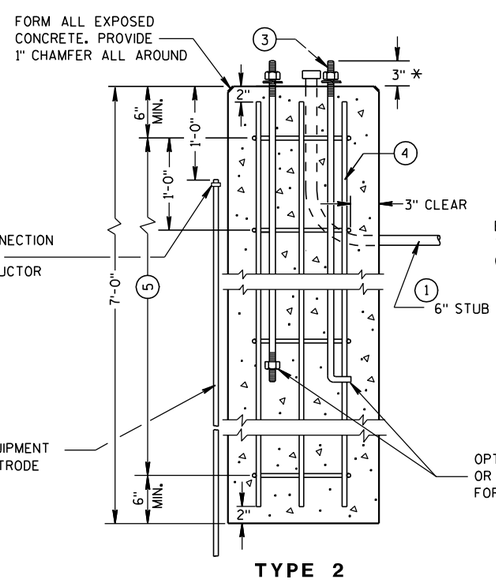
(7) (6) NO.4 X 4'-8" BAR STEEL REINFORCEMENT.

(8) (5) NO. 4 X 5'-1" BAR STEEL REINFORCEMENT @ 1'-0" C-C.

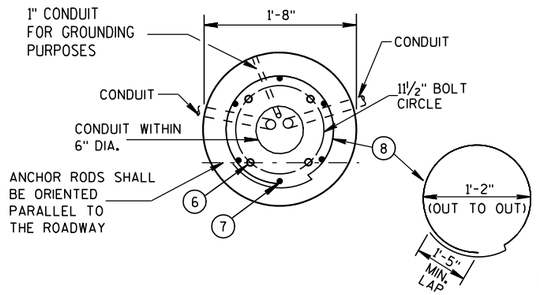


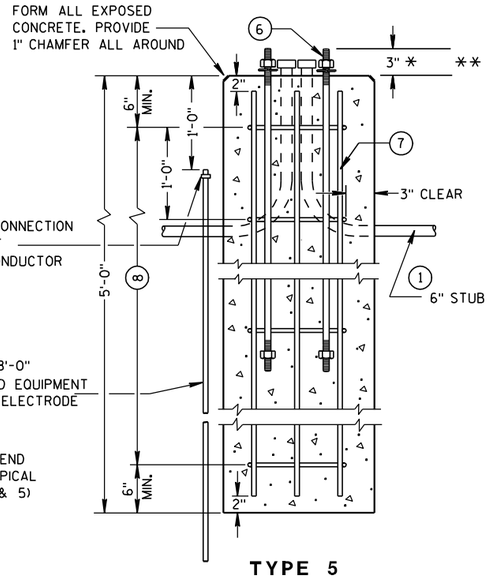
TYPE 1





TYPE 2





TYPE 5

CONCRETE BASES

* ANY ANCHOR ROD PROJECTION SHORTER THAN 2¾" OR LONGER THAN 3¼" SHALL REQUIRE THE BASE TO BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE.

** FOR NONBREAKAWAY INSTALLATIONS, 4½" ± ANCHOR ROD PROJECTION WITH THE USE OF LEVELING NUTS. RODENT SCREEN REQUIRED.

CONCRETE BASES, TYPES 1, 2 & 5

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

3/3/10 — DATE

/S/ Joanna L. Rush — STATE ELECTRICAL ENGI

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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.

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.

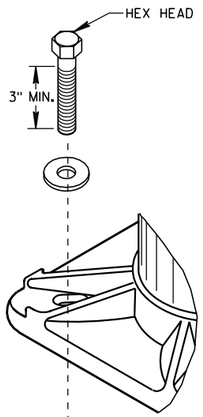
THE MECHANICAL CONNECTOR SHALL BE INSTALLED USING A 1/4" - 20 (TPI) STAINLESS STEEL HEX HEAD BOLT OF SUFFICIENT LENGTH TO FIRMLY ATTACH THE LUG TO THE BASE.

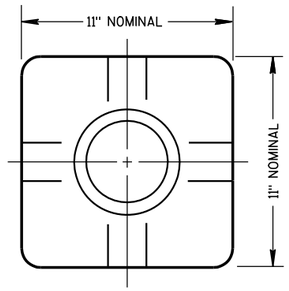
SHOULD THE MANNER OF ATTACHMENT OF THE LUG REQUIRE WASHERS, HEX NUTS, LOCK WASHER - THEY SHALL BE STAINLESS STEEL AS IS THE BOLT. THE MANNER OF ATTACHMENT SHALL NOT BLOCK ACCESSIBILITY TO WIRE PLACEMENT IN THE CONNECTOR.

PEDESTAL BASE COLLAR THREADING SHALL BE TAPERED AND IN ACCORDANCE WITH NATIONAL PIPE THREADING DIMENSIONS.

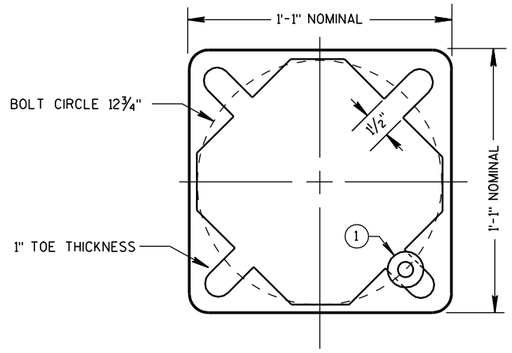
BASE COLLAR THREADING SHALL EXTEND INTO THE BASE COLLAR WITH SUFFICIENT DEPTH TO ACCEPT THE INSTALLATION OF TRAFFIC SIGNAL STANDARDS TO A DEPTH OF 1½", THEN TIGHTENING TO A POINT OF BEING IMMOVABLE.

THE ACCESS DOOR SHALL BE OF THE SAME MATERIAL AS THE BASE.

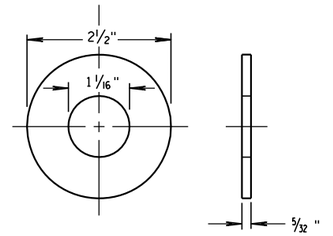




TOP VIEW
(PEDESTAL BASE)

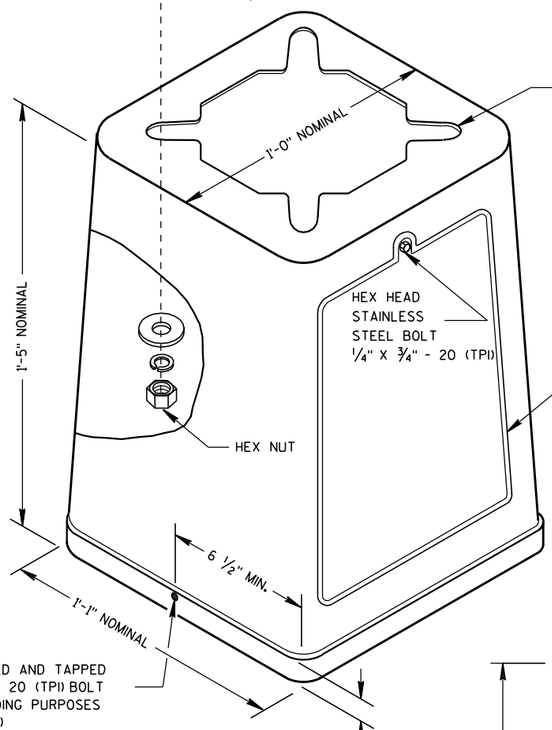


BOTTOM VIEW
(PEDESTAL BASE)

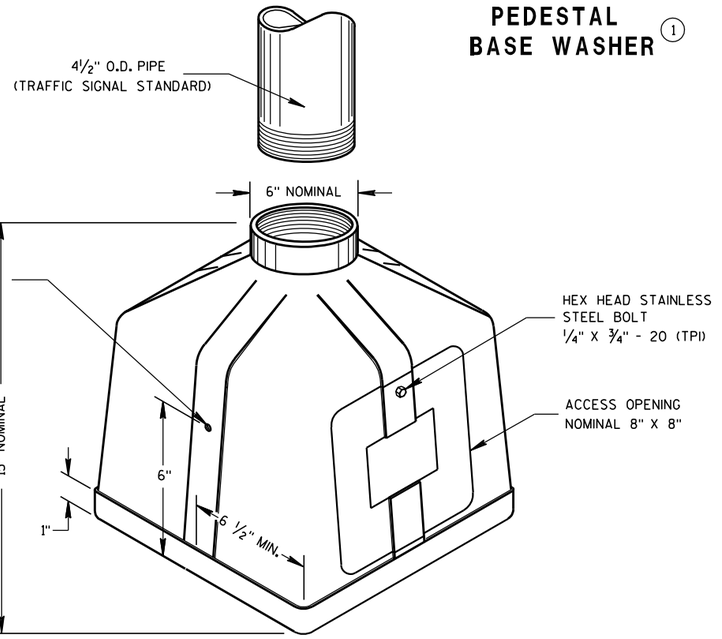


ZINC COATED STEEL WASHER
TO BE PROVIDED BY THE CONTRACTOR

PEDESTAL BASE WASHER (1)

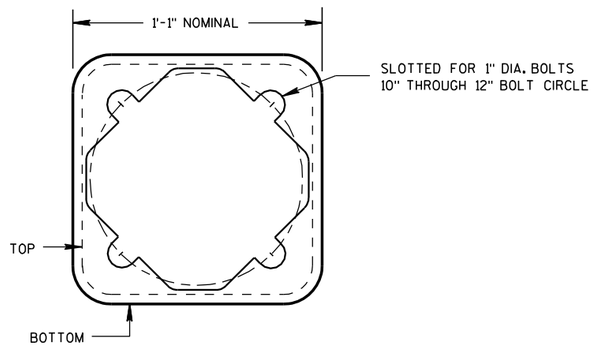


ISOMETRIC VIEW

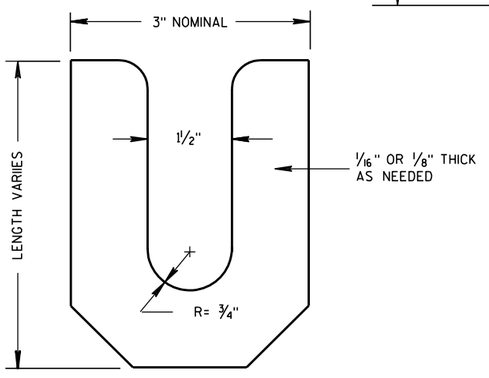


ISOMETRIC VIEW

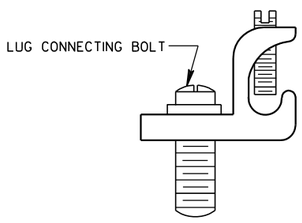
PEDESTAL BASE



BOTTOM VIEW
(TRANSFORMER BASE)



LEVELING SHIM



TYPICAL MECHANICAL CONNECTOR LUG

TO BE FURNISHED WITH EACH BASE

TRANSFORMER BASE

INTENDED FOR USE WITH TYPE 2, 3, 4, 5 & 6 POLES

TRANSFORMER/PEDESTAL BASES

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DEPARTMENT OF TRANSPORTATION

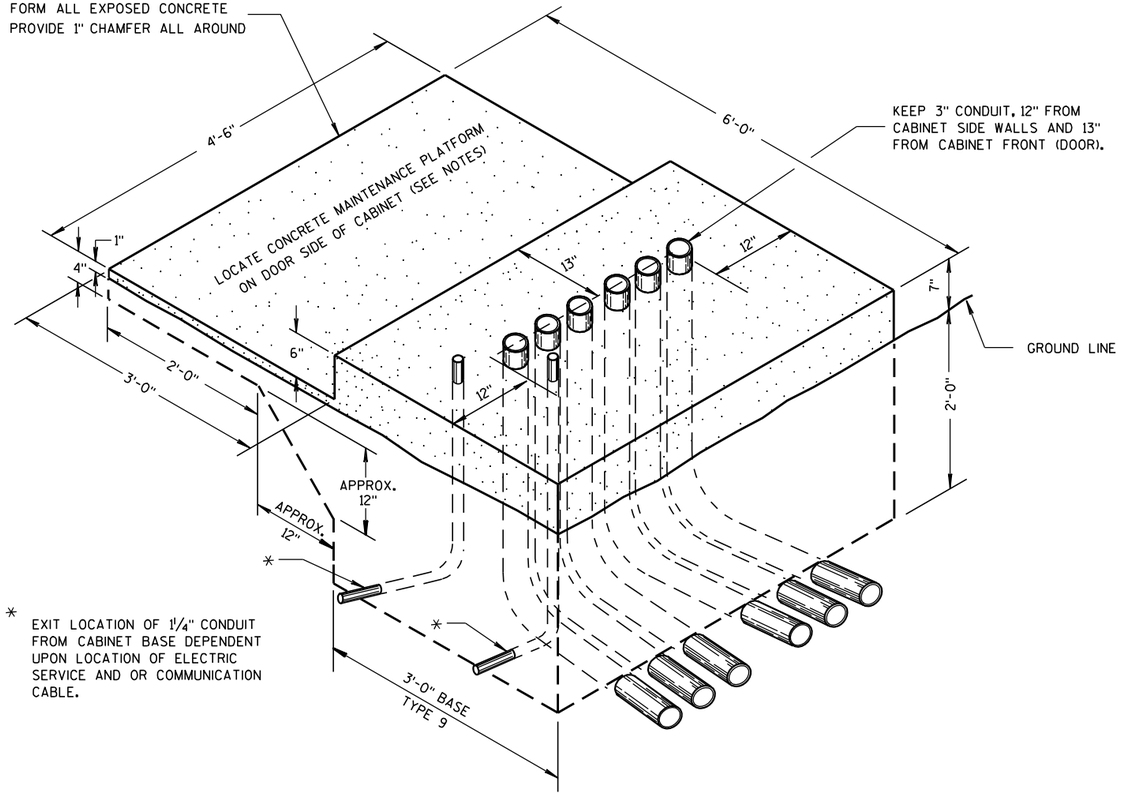
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10/27/09 — DATE
/S/ Joanna L. Rich — STATE ELECTRICAL ENGI
149
HWYS
FHWA

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S.D.D. 9 C 3-3

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S.D.D. 9 C 3-3

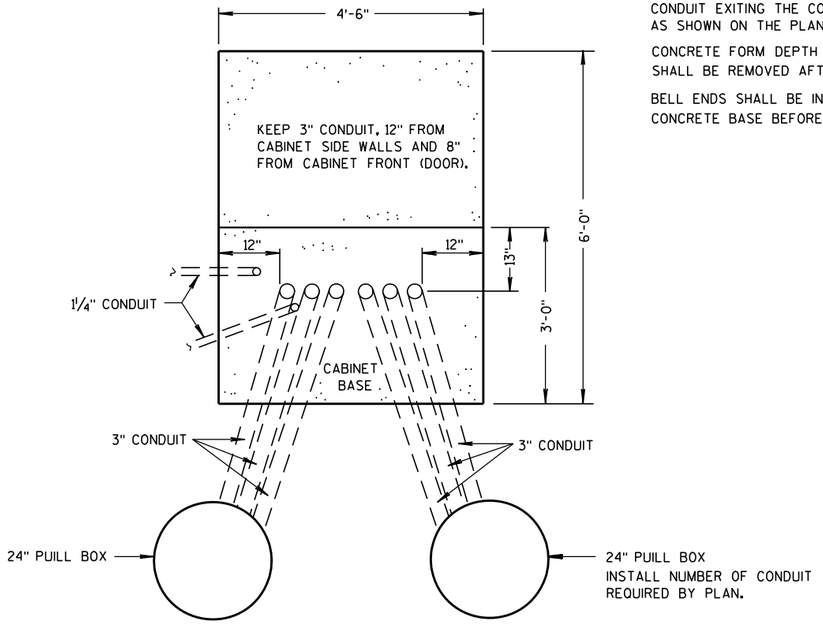


* EXIT LOCATION OF 1¼" CONDUIT FROM CABINET BASE DEPENDENT UPON LOCATION OF ELECTRIC SERVICE AND OR COMMUNICATION CABLE.

ISOMETRIC VIEW

TYPE 9, SPECIAL

(C.Y. CONCRETE = APPROX. 1.56)



PLAN VIEW

CONCRETE CONTROL CABINET BASE, TYPE 9, SPECIAL

GENERAL NOTES

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

INSTALL FOUR ½ INCH MINIMUM DIAMETER X 4 INCH MINIMUM LENGTH STAINLESS STEEL APPROVED CONCRETE MASONRY ANCHORS TO ANCHOR THE CABINET TO TYPE 6, 7, 8, AND 9 BASES. THE ANCHOR STUDS SHALL BE LOCATED AS DIRECTED BY THE ENGINEER TO PROPERLY ANCHOR THE CONTROL CABINET TO THE BASE.

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

CONDUIT HEIGHT ABOVE THE CONCRETE BASE SHALL BE 1 INCH.

DEPTH OF CONDUIT INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES MINIMUM AND 36 INCHES MAXIMUM.

DEPTH OF CONDUIT INSTALLED THAT IS NOT BELOW THE TRAVELED WAY SHALL BE 18 INCHES MINIMUM AND 36 INCHES MAXIMUM.

ANY EXCEPTION TO THE MAXIMUM DEPTH SHALL BE ONLY WITH THE WRITTEN APPROVAL OF THE ENGINEER.

CONTROL CABINET BASE TOP SURFACE SHALL BE TROWEL FINISHED SMOOTH AND LEVEL.

MAINTENANCE PLATFORM SHALL BE FLOAT OR BROOM FINISHED AND BE LEVEL.

MAINTENANCE PLATFORMS ARE NOT REQUIRED WHEN THE SURROUNDING AREA IS PAVED.

MINIMUM BENDING RADIUS OF CONDUIT = 6 X THE DIAMETER.

ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

CAP ALL BELOW GRADE METALLIC CONDUIT ENDS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED.

PLUG ALL BELOW GRADE NONMETALLIC CONDUIT ENDS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

CONDUIT EXITING THE CONCRETE BASE (SIX THREE INCH) SHALL TERMINATE IN PULL BOXES AS SHOWN ON THE PLANS.

CONCRETE FORM DEPTH BELOW FINISHED GRADE SHALL BE 6" MAXIMUM. CONCRETE FORMS SHALL BE REMOVED AFTER CONCRETE HAS SET.

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

CONCRETE CONTROL CABINET BASE, TYPE 9, SPECIAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

2/27/07
DATE

/S/ Balu Ananthapadmanabhan
STATE ELECTRICAL ENGI 150 HWYS

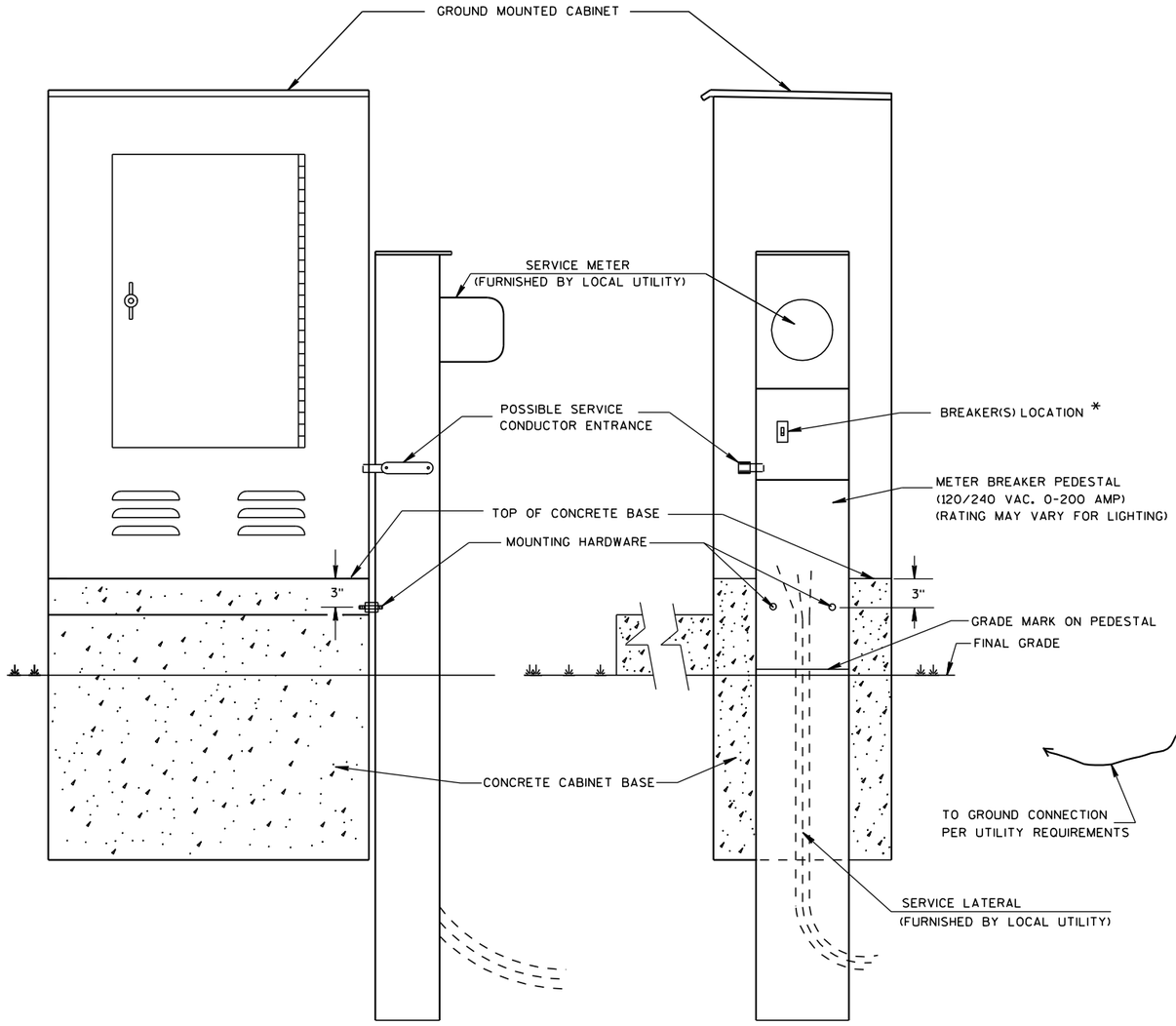
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S.D.D. 9 C 6-5

S.D.D. 9 C 6-5



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.

CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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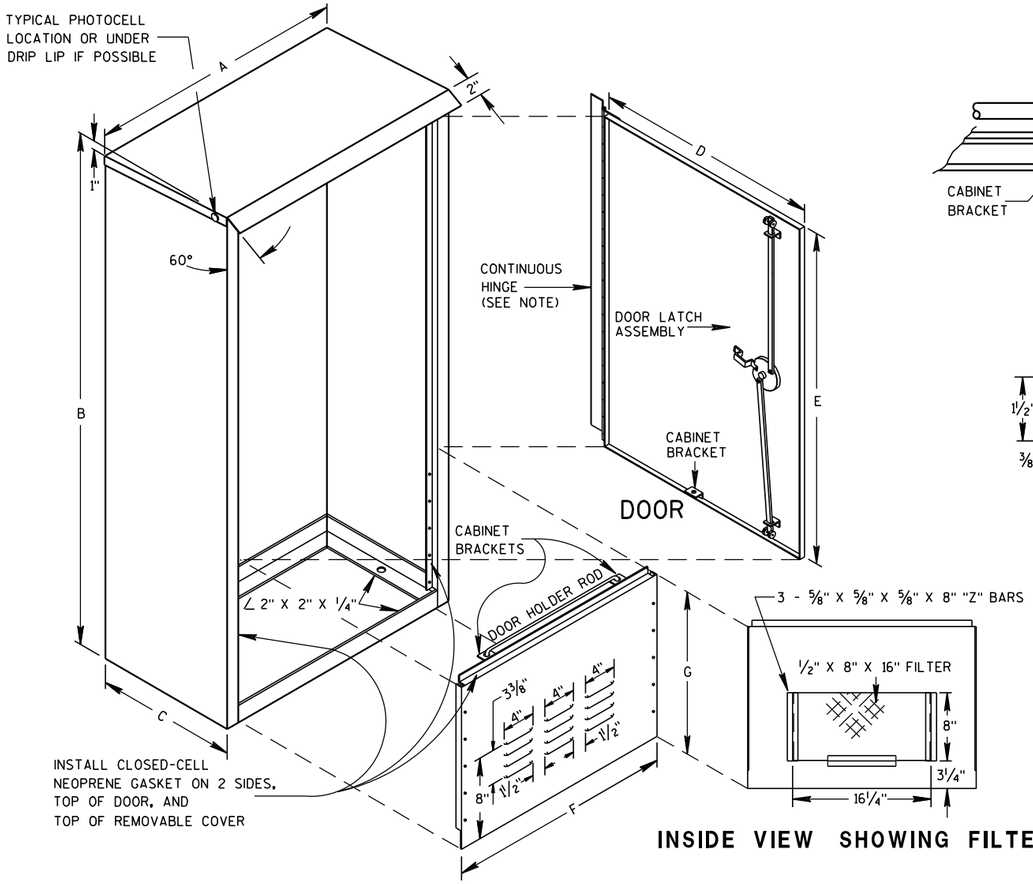
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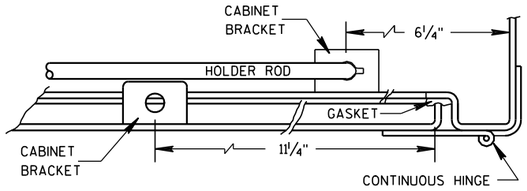
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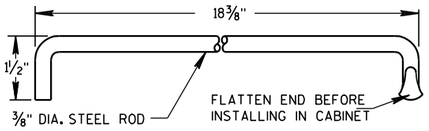


REMOVABLE COVER

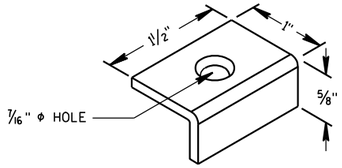
INSIDE VIEW SHOWING FILTER



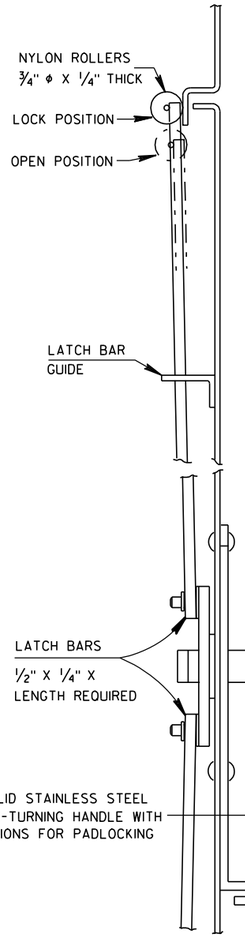
HINGE & DOOR HOLDER



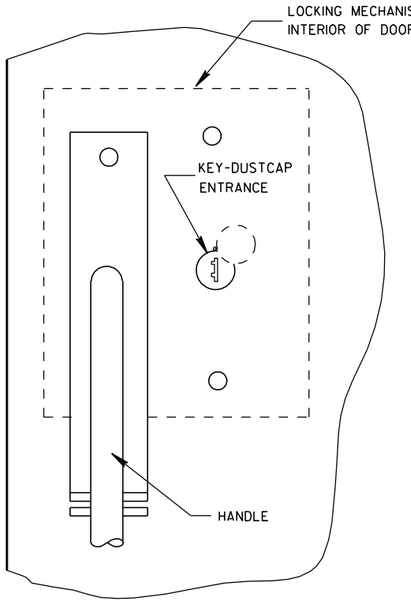
HOLDER ROD



CABINET BRACKET

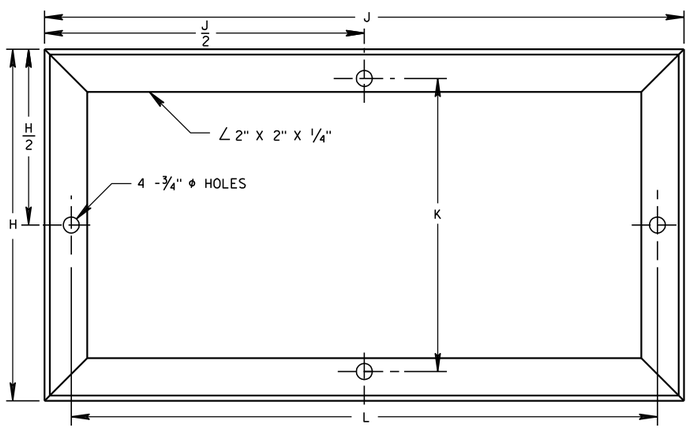


SIDE VIEW



FRONT VIEW

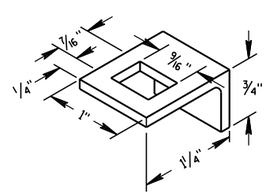
LATCH ASSEMBLY



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



LATCH BAR GUIDE

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

PRIME WITH PHOSPHATE TREATMENT AND PRIMER.

FINISH EXTERIOR SURFACES WITH RUSTOLEUM #906 SILVER GRAY OR APPROVED EQUAL.

FINISH INTERIOR WITH RUSTOLEUM #2766 HIGH GLOSS WHITE ENAMEL OR APPROVED EQUAL.

ALL SHEET METAL PARTS SHALL BE .125 INCH THICK ALUMINUM.

ALL SEAMS SHALL BE CONTINUOUSLY WELDED.

ALUMINUM SHALL BE TYPE 5052-H32.

CONTINUOUS HINGE SHALL BE HEAVY GAUGE ALUMINUM WITH 1/4" DIAMETER STAINLESS STEEL HINGE PIN. HINGE IS SECURED WITH 1/4" X 20 TPI STAINLESS STEEL CARRIAGE BOLTS AND STAINLESS STEEL NYLOCK NUTS.

A SINGLE PHOTOCELL SHALL BE LOCATED ON THE NORTH-NORTHEAST SIDE OF THE CABINET UNLESS OTHERWISE CALLED FOR IN THE SPECIAL PROVISIONS. THE PHOTOCELL SHALL BE PLACED AS SHOWN AND SHALL BE AN APPROVED TYPE.

DOOR LATCH ASSEMBLY TO BE PROVIDED WITH THREE-POINT LOCKING MECHANISM.

SIGNAL OR LIGHTING CONTROL CABINET

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/21/96 — DATE
/S/ Balu Ananthanarayanan — STATE ELECTRICAL ENGI
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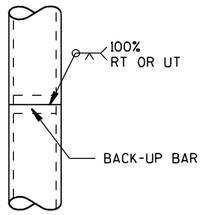
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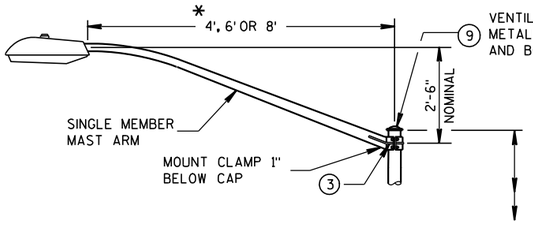
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FOR MANUFACTURERS USE ONLY

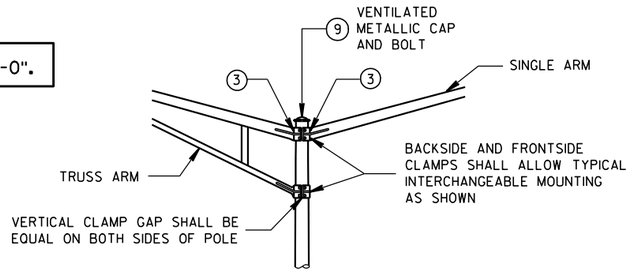
WELD TO BE 100% R.T. OR U.T. TESTED AS PER THE REQUIREMENTS OF AWS D 1.5-88. RECORDS OF COMPLIANCE OF SUCH TESTING SHALL BE FURNISHED TO THE OFFICE OF DESIGN/BRIDGE FOR VERIFICATION AND APPROVAL.

*RISE FOR 4' ARM SHALL BE 2'-0".





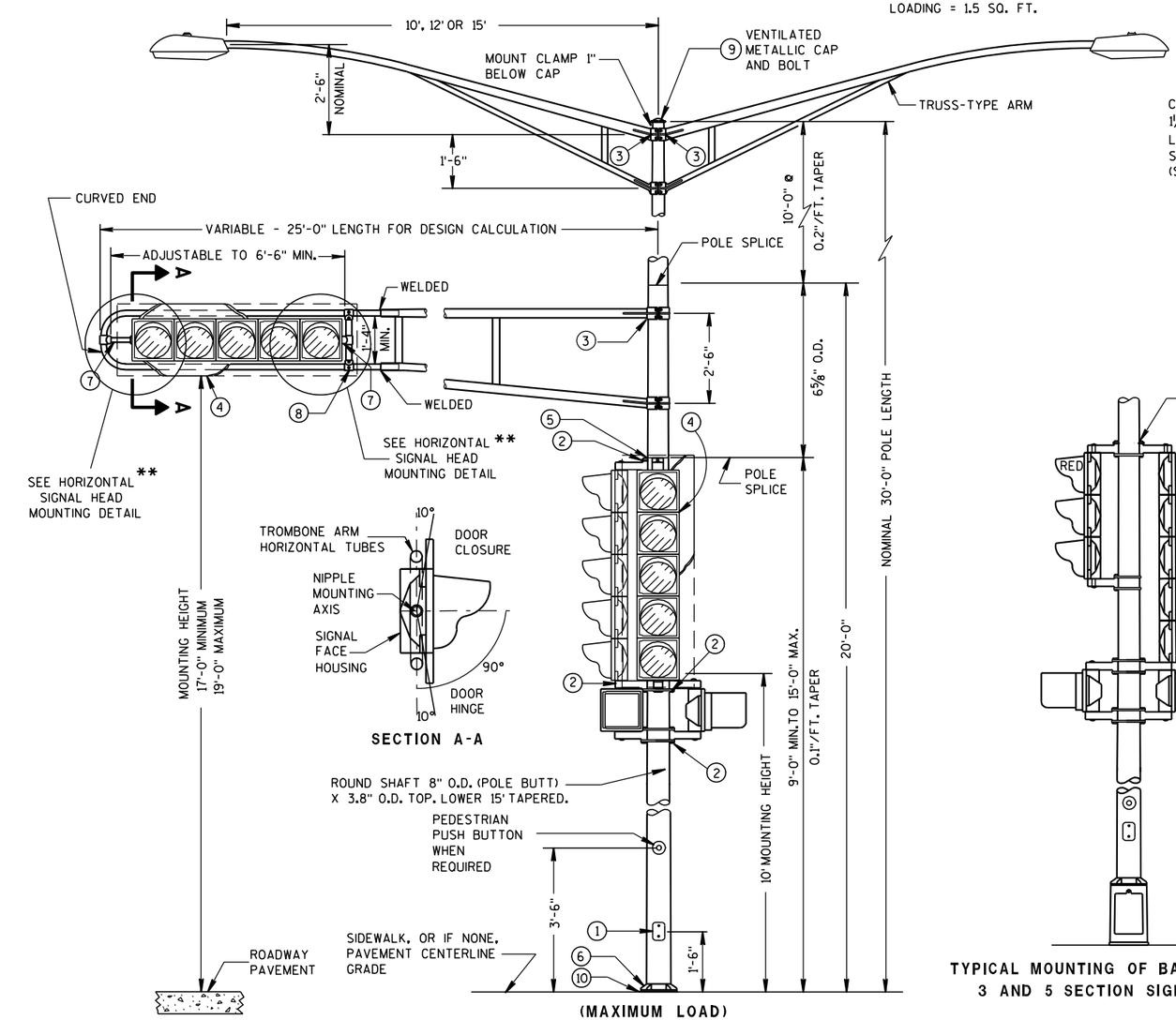
POLE SPLICE DETAIL

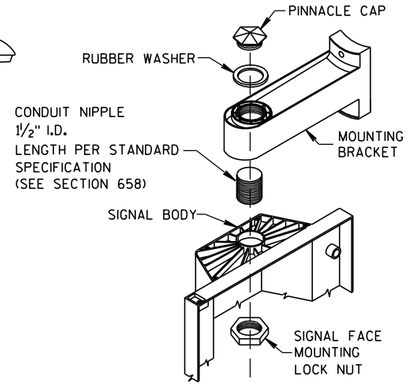


INTERCHANGEABLE MOUNTING DETAIL

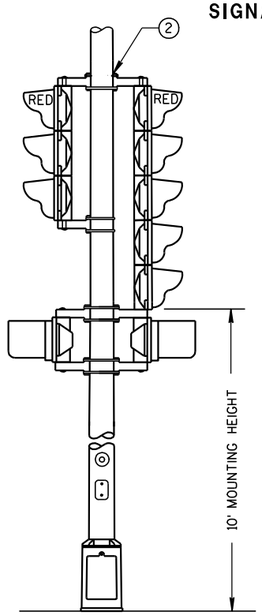
LUMINAIRE

WT. - 50 LBS.
EFFECTIVE PROJECTED AREA FOR WIND LOADING = 1.5 SQ. FT.

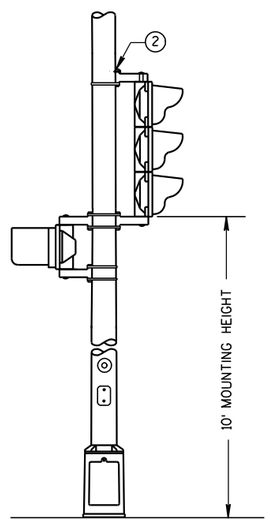




SIGNAL FACE MOUNTING DETAIL (BANDED)



TYPICAL MOUNTING OF BACK TO BACK 3 AND 5 SECTION SIGNAL FACES



TYPICAL MOUNTING OF 3 SECTION SIGNAL FACE

GENERAL NOTES

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

ALL TYPE 3 POLE MOUNTINGS SHALL BE DESIGNED TO INCLUDE TWIN 15' ARMS WITH LUMINAIRES.

POLES SHALL BE GALVANIZED STEEL.

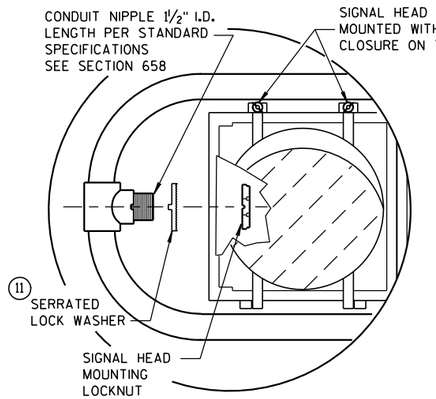
SECTION 657, POLES, OF THE STANDARD SPECIFICATIONS SHALL APPLY TO THIS DRAWING.

A PULL WIRE/ROPE IN ACCORDANCE WITH STANDARD SPECIFICATION 652, SHALL BE INSTALLED IN EACH TROMBONE ARM RACEWAY DURING THE MANUFACTURING PROCESS.

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 MAST 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. SIGNAL FACE MOUNTING BRACKETS, MOUNT WITH CAP SCREWS AND BANDING. (SEE STANDARD SPECIFICATIONS - SEC. 658)
3. GROMMETS, 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1⅜" HOLE IN POLE SHAFT FOR WIRING.
4. SECURELY MOUNT DULL BLACK POLYCARBONATE BACKPLATES, PROJECTING 5" BEYOND ALL SIDES OF THE SIGNAL FACE HOUSING, PER MANUFACTURER'S RECOMMENDATIONS.
5. POLE MOUNTED SIGNAL FACES SHALL REQUIRE 1 OR MORE MOUNTING SPACERS UNDER THE TOP MOUNTING BRACKET(S) AS REQUIRED, TO PLUMB THE SIGNAL FACE.
6. TYPE 3 POLE CONFIGURATIONS SHALL BE MOUNTED DIRECTLY TO THEIR CONCRETE BASES.
7. MOUNTING BRACKET NIPPLES FOR THE SIGNAL FACE(S) SHALL BE 2 INCHES IN LENGTH AND 1½ INCHES IN DIAMETER. (SEE STANDARD SPECIFICATION - SECTION 658)
8. VERTICAL STRUT (ADJUSTABLE). ONE (1) SET SCREW (1/4 " X ¾" -20 TPI, STAINLESS STEEL, HEX HEAD) INTO EACH ARM MEMBER IF STRUT IS THE SLIDING TYPE.
9. FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.
10. SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND POLE.
11. USE SERRATED LOCK WASHERS WITH NOTCHES BETWEEN END TEE AND SIGNAL HEAD.



HORIZONTAL SIGNAL HEAD MOUNTING DETAIL **

** SIGNAL HEAD ATTACHMENT ALSO APPLYS TO MOUNTING AT CROSS BAR

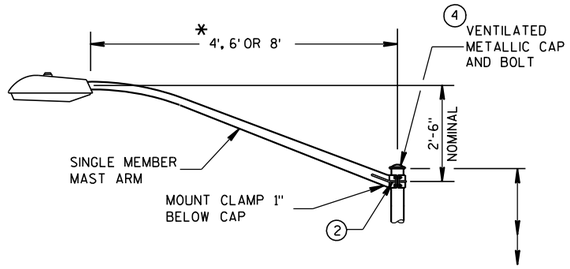
TYPE 3 POLE MOUNTING CONFIGURATION

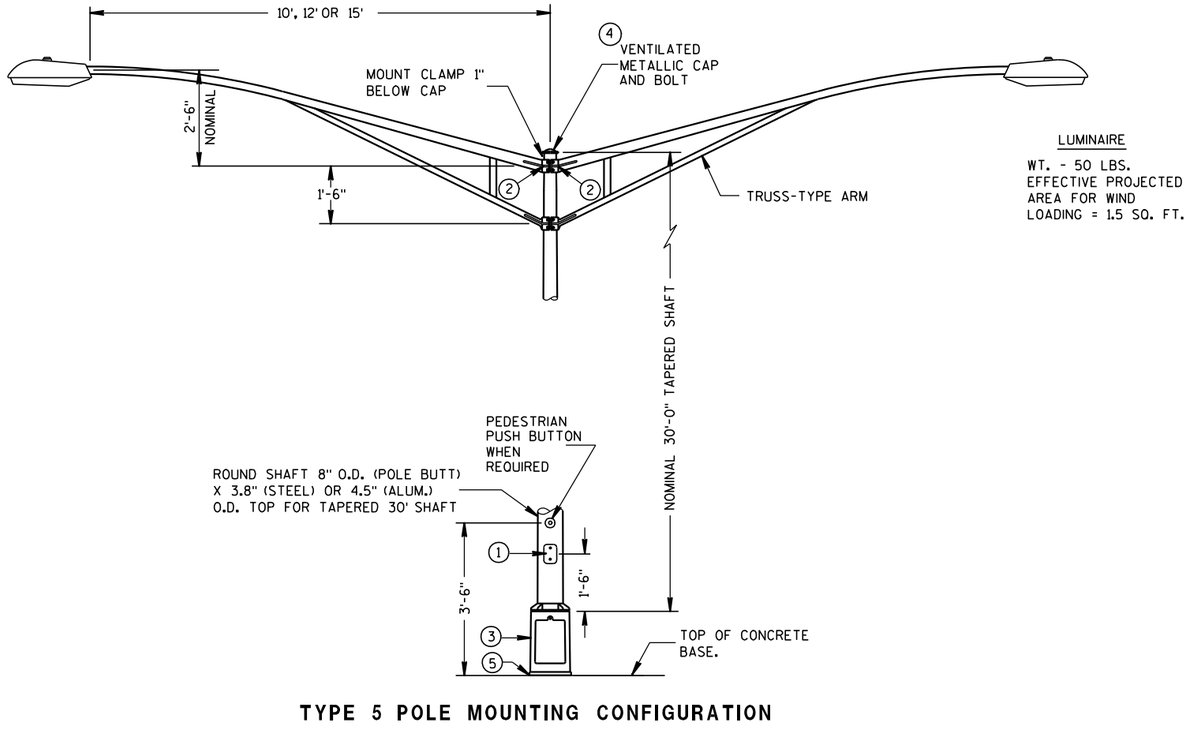
POLE MOUNTINGS FOR TRAFFIC SIGNALS AND LIGHTING UNITS, TYPE 3 (HEAVY DUTY)

STATE OF WISCONSIN
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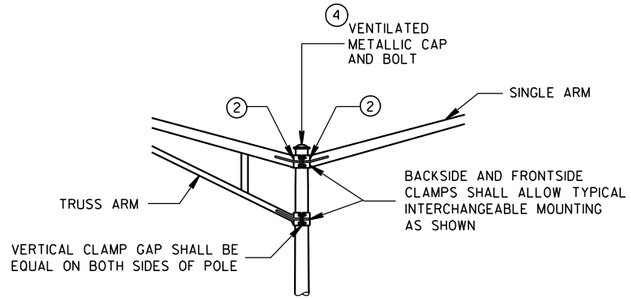
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*RISE FOR 4' ARM SHALL BE 2'-0".





TYPE 5 POLE MOUNTING CONFIGURATION
(MAXIMUM LOAD)
LIGHTING ONLY



INTERCHANGEABLE MOUNTING DETAIL

GENERAL NOTES

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

ALL TYPE 5 POLE MOUNTINGS SHALL BE DESIGNED TO INCLUDE TWIN 15' ARMS WITH LUMINAIRES.

POLES SHALL BE GALVANIZED STEEL OR ALUMINUM, AS CALLED FOR IN THE CONTRACT.

TYPE 5 ALUMINUM POLES SHALL BE CONSTRUCTED OF 6063-T6 ALUMINUM ALLOY. SLEEVING INSIDE THE POLE IS NOT ACCEPTABLE.

THE TYPE 5 ALUMINUM POLES SHALL HAVE A MINIMUM WALL THICKNESS OF 0.188".

TYPE 5 STEEL POLES SHALL HAVE A MINIMUM WALL THICKNESS OF U.S. STANDARD 11 GAGE (.1196").

THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 2⅜ INCHES IN OUTSIDE DIAMETER. THE STRAIGHT PORTION OF THE SLIPFITTER END OF THE LUMINAIRE ARM SHALL BE A NOMINAL 12 INCHES IN LENGTH.

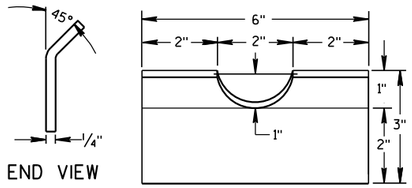
WHEN TRANSFORMER BASES ARE USED, WIRE CONEECTIONS SHALL BE MADE IN THE TRANSFORMER BASE.

1. 4" x 6" REINFORCED HANDHOLE & COVER ASSEMBLY WITH 2 (TWO) ¼" X ¾" - 20 TPI HEX HEAD STAINLESS STEEL BOLTS.
2. GROMMETS, 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1⅜" HOLE IN POLE SHAFT FOR WIRING.
3. CAST ALUMINUM TRANSFORMER BASE, WHEN REQUIRED.
4. FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.
5. SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND THE TRANSFORMER BASE.

POLE MONTINGS FOR LIGHTING UNITS, TYPE 5 (30 FEET)

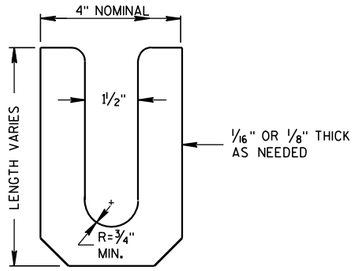
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
S.D.D. 9 E 1-11d



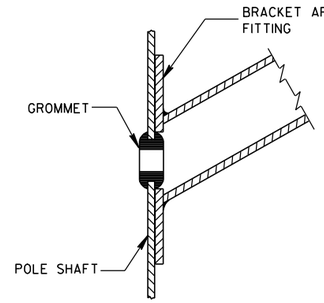
RECTANGULAR CLAMP SHIM

(4 TO A SET)

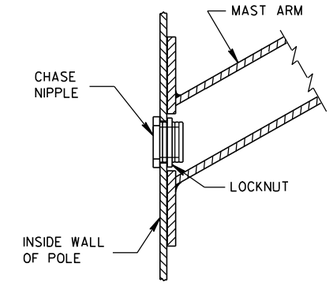


LEVELING SHIM (15)

SHALL BE ALUMINUM



TYPICAL APPLICATION OF GROMMET IN POLE SHAFT



TYPICAL APPLICATION OF CHASE NIPPLE IN POLE SHAFT

GENERAL NOTES

CLAMP BOLT-NUT TIGHTENING TORQUE SHALL BE INDICATED BY INDENT STAMPING (1/2 INCH NUMERALS AND LETTERS) OR WEATHERPROOF PRINTING ON THE INSIDE OF THE CLAMP THAT IS WELDED TO THE ARM MEMBER.

(10.) 4.5" I.D. FOR LUMINAIRE MAST ARM CLAMP.
6.625" I.D. FOR TROMBONE MAST ARM CLAMP.

(11.) INDIVIDUAL BASE PLATE ANCHOR ROD COVERS. (4 REQUIRED)

(12.) BASE PLATE SLOTTED TO ACCEPT 11" THROUGH 12" BOLT CIRCLE USING 1" DIAMETER ANCHOR RODS.

(13.) OUTSIDE SHIM DIAMETER - (4.5" O.D. FOR LUMINAIRE MAST ARM)
(6.625" O.D. FOR TROMBONE MAST ARM)

(14.) VARIABLE SHIM THICKNESS - (0.10", 0.25", 0.35", 0.53" OR 0.70")

SHIM THICKNESS FOR TROMBONE MAST ARMS MAY BE TYPICALLY 0.25", 0.35", 0.53" OR 0.70".

SHIM THICKNESS FOR LUMINAIRE MAST ARMS MAY BE TYPICALLY 0.10", 0.25" OR 0.35".

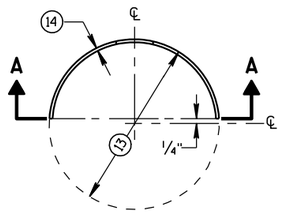
SHIM MATERIAL SHALL BE ALUMINUM ALLOY.

SHIM THICKNESS SHALL BE IMPRESSED INTO EACH SHIM. NUMERALS SHALL BE 1/4" HIGH AND LEGIBLE.

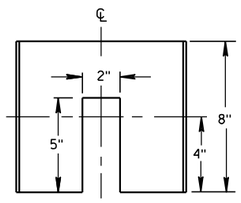
THE CONTRACTOR SHALL SUBMIT TWO COPIES OF ALL SHIM SHOP DRAWINGS TO THE ENGINEER FOR APPROVAL.

(15.) LEVELING SHIMS, DESIGNED FOR THE PURPOSE, SHALL BE USED WHEN PLUMBING POLES. THE USE OF WASHERS IN LIEU OF PROPER LEVELING SHIMS IS NOT ACCEPTABLE. LEVELING SHIMS SHALL BE USED ONLY BETWEEN THE TOP OF THE CONCRETE BASE AND A METALLIC BASE PLATE.

SHIMS SHALL BE LONG ENOUGH AND WIDE ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.



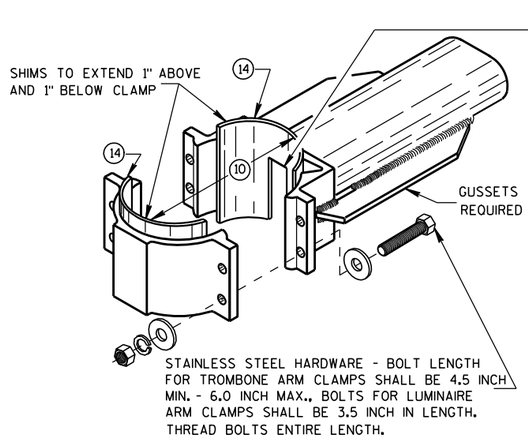
PLAN VIEW



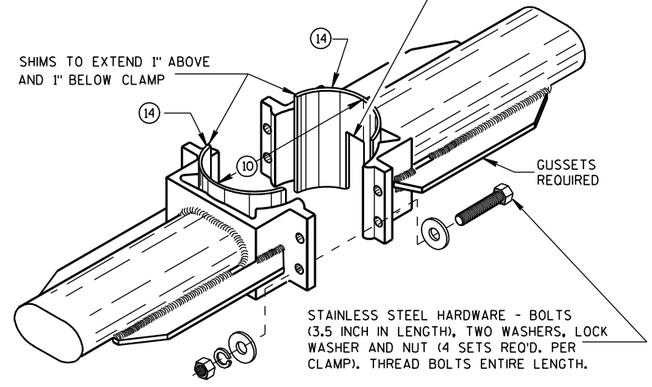
SECTION A-A

CIRCULAR CLAMP SHIM

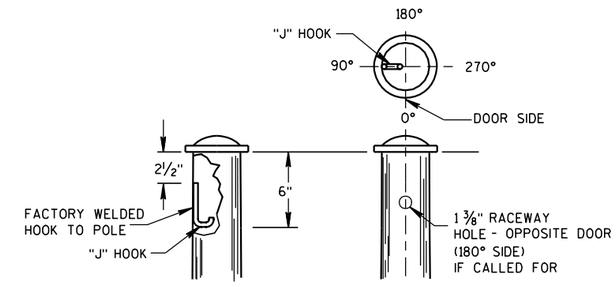
(2 TO A SET)



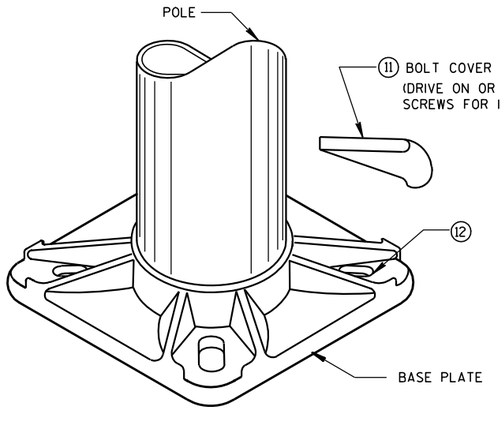
TYPICAL TROMBONE MAST ARM AND SINGLE LUMINAIRE MAST ARM MOUNTING CLAMP



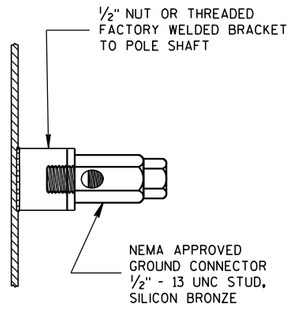
TYPICAL LUMINAIRE MAST ARM (DOUBLE) MOUNTING BRACKETS

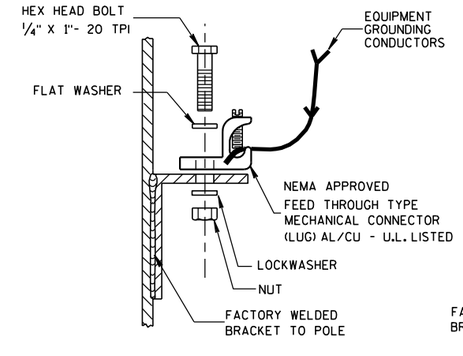


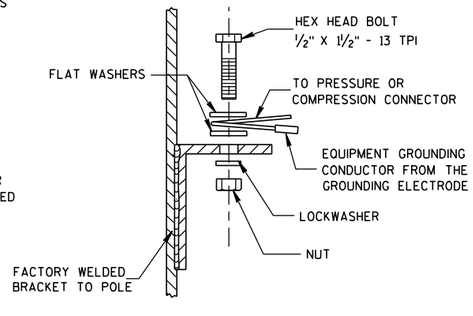
TYPICAL "J" HOOK LOCATION



BASE PLATE







TYPICAL GROUNDING CONNECTIONS

NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL

HARDWARE DETAILS FOR POLE MOUNTINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

3/2/11 — DATE

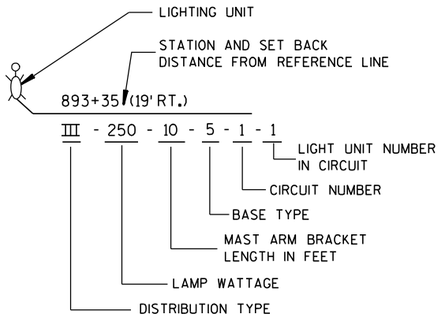
/S/ Thomas J. Gosling — STATE ELECTRICAL ENGI

FHWA

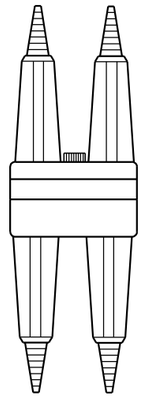
HWYS

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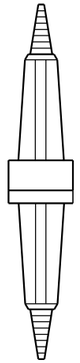
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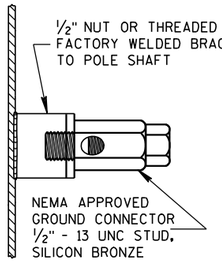
LIGHTING UNIT CODE
(TYPICAL)

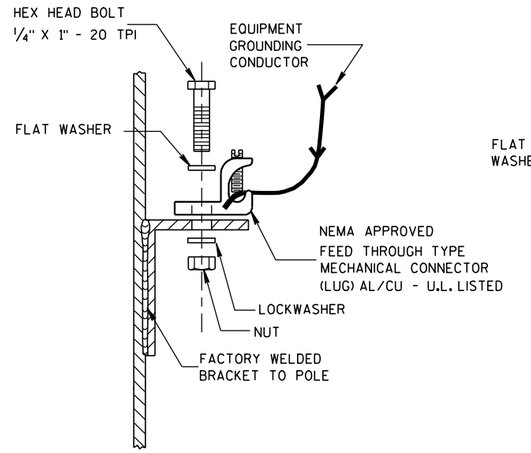


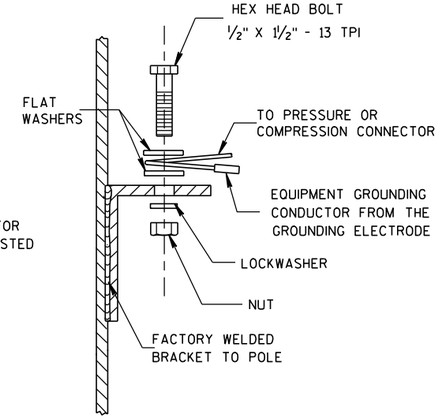
DETAIL "A"
BREAKAWY
DOUBLE POLE WITH
WATERPROOF
INSULATING BOOT



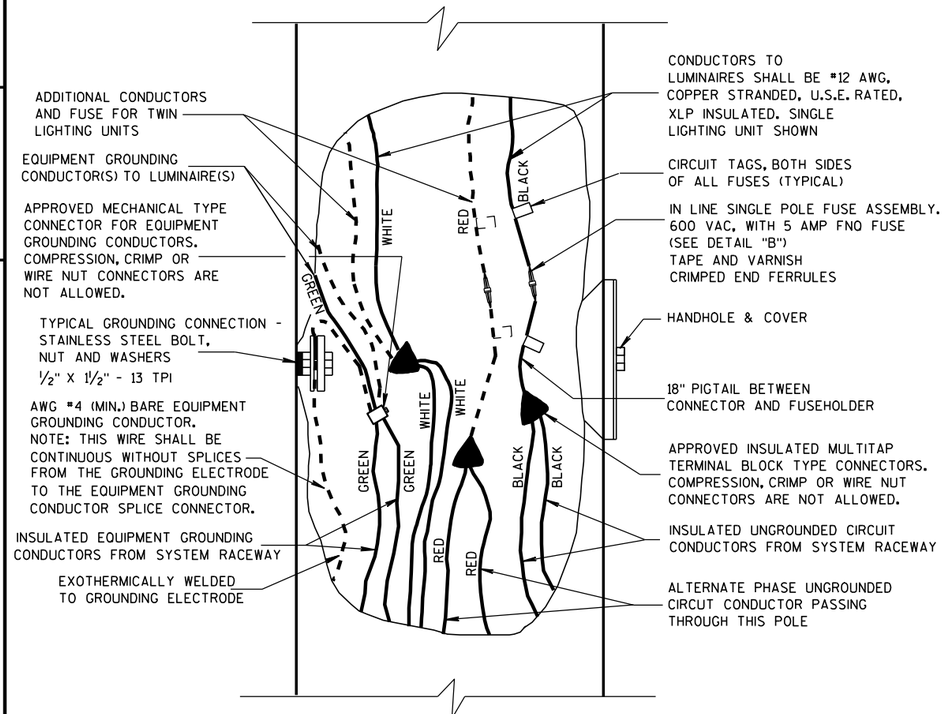
DETAIL "B"
BREAKAWY
SINGLE POLE WITH
WATERPROOF
INSULATING BOOT



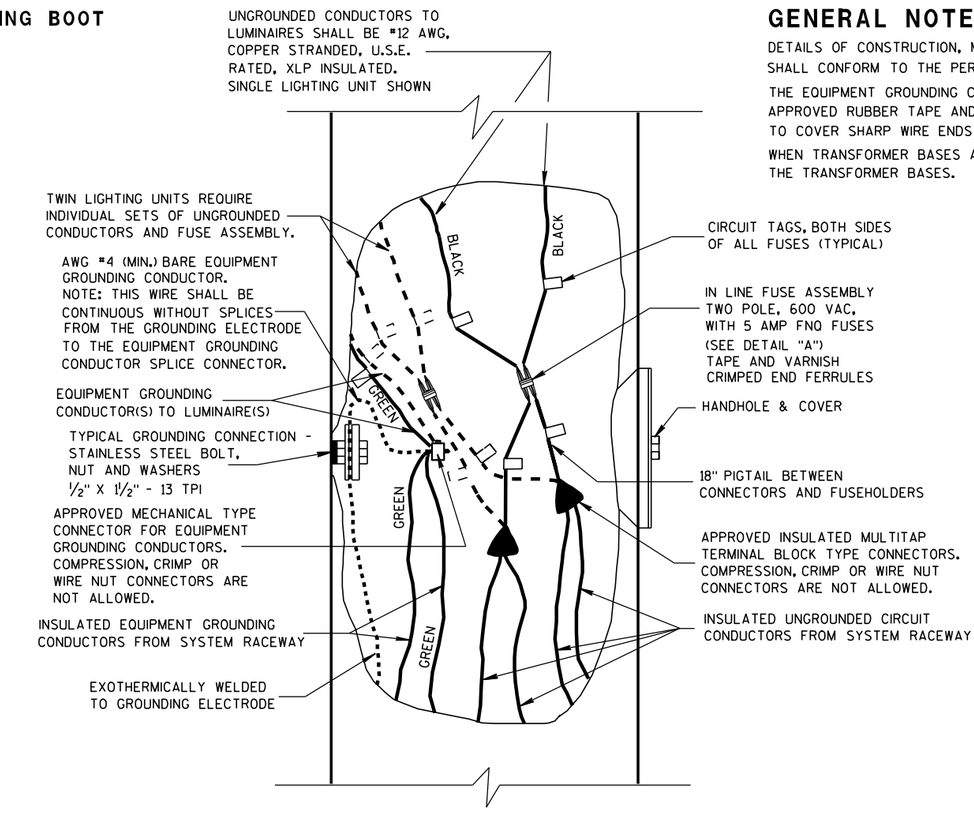




TYPICAL GROUNDING CONNECTIONS
NUT, BOLT, WASHERS AND LOCKWASHERS SHALL BE STAINLESS STEEL



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

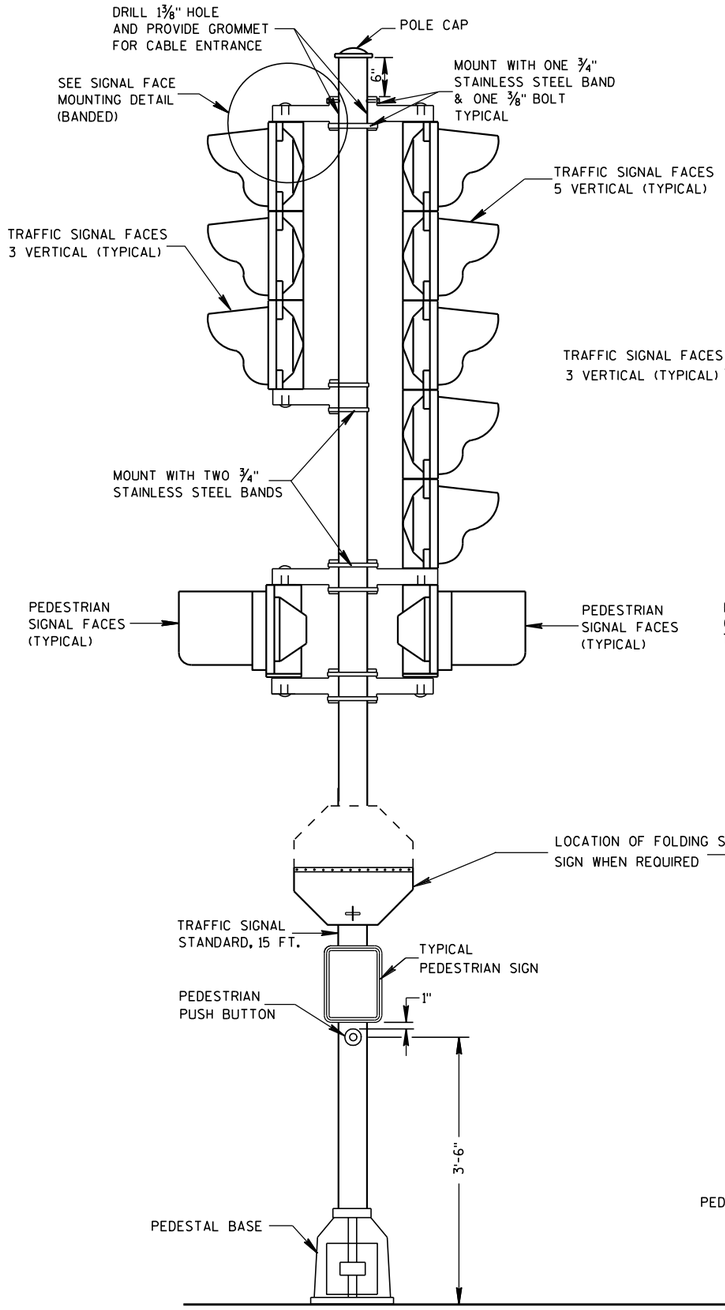
3/2/2011 — DATE

/S/ Thomas J. Gosnine — STATE ELECTRICAL ENGI

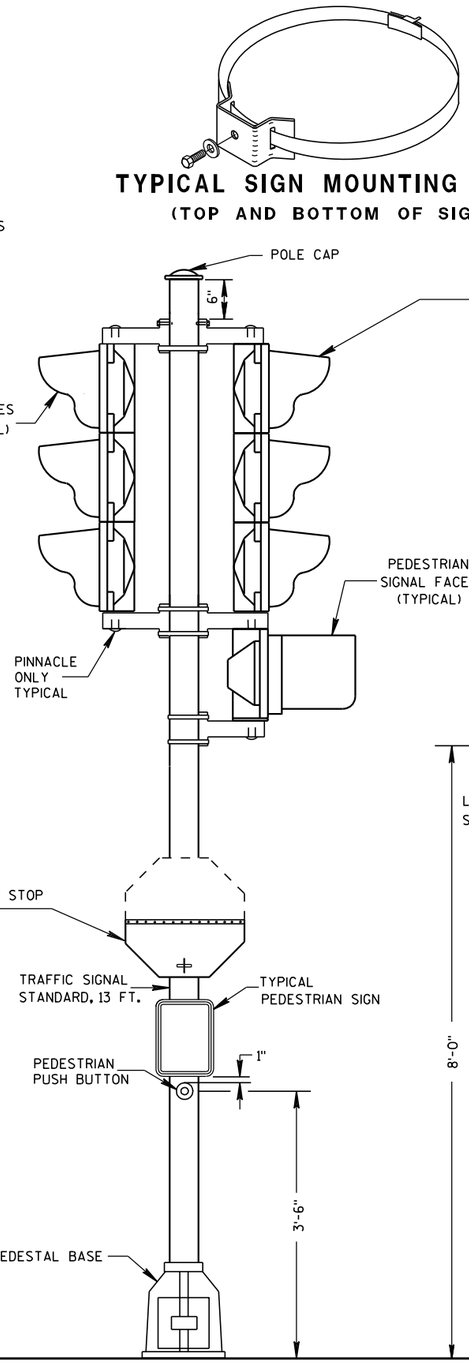
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S.D.D. 9 E 3-4

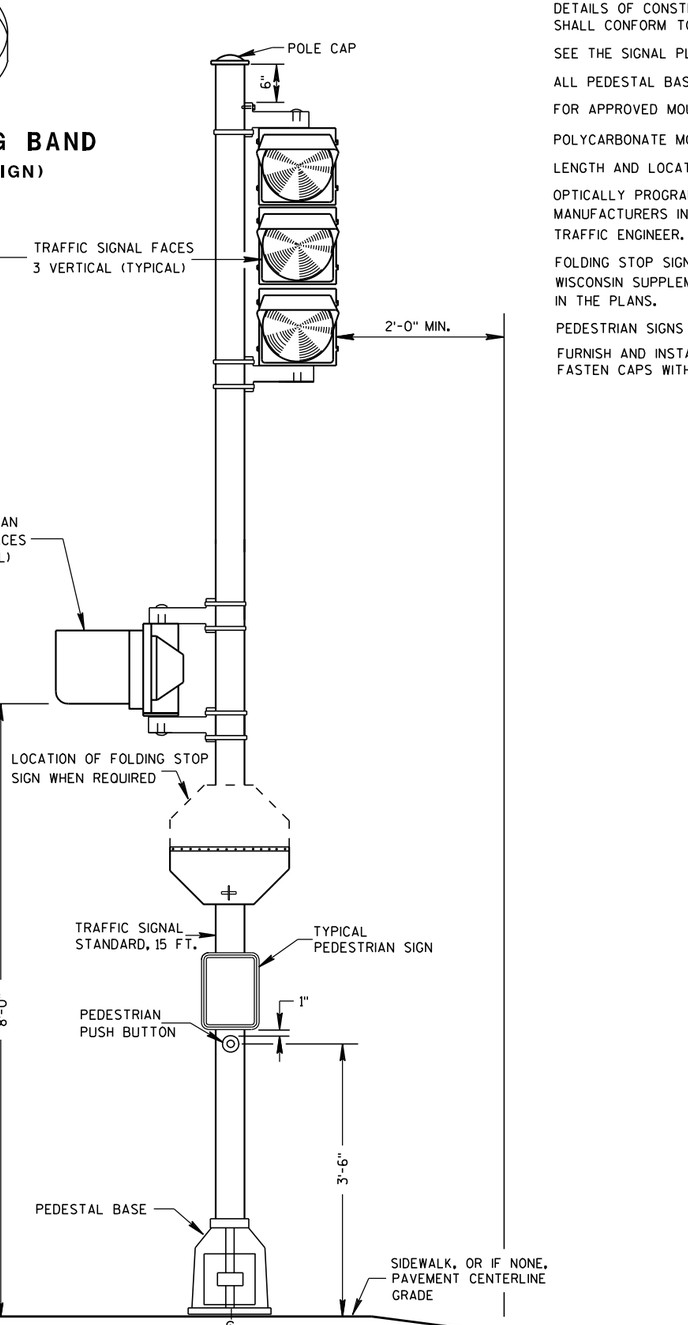


TRAFFIC SIGNAL STANDARD-15 FT.



TRAFFIC SIGNAL STANDARD-13 FT.

TYPICAL SIGN MOUNTING BAND
(TOP AND BOTTOM OF SIGN)



TRAFFIC SIGNAL STANDARD-15 FT.
3M MOUNTING (TYPICAL)

GENERAL NOTES

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

SEE THE SIGNAL PLAN FOR REQUIRED SIGNAL FACE SIZES.

ALL PEDESTAL BASES SHALL BE MOUNTED ON CONCRETE BASE - TYPE 1.

FOR APPROVED MOUNTING HARDWARE, SEE THE CONTRACT SPECIAL PROVISIONS.

POLYCARBONATE MOUNTING BRACKETS SHALL BE USED.

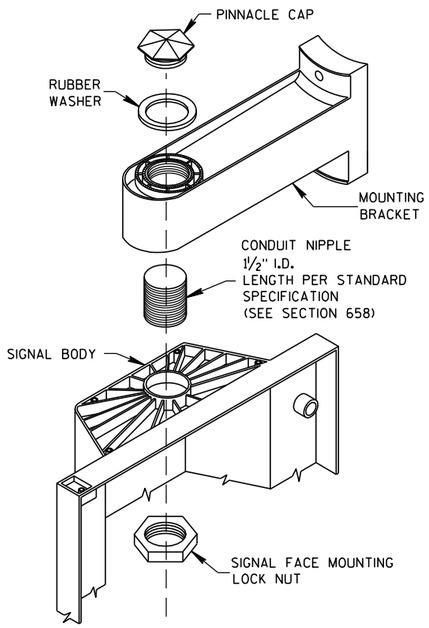
LENGTH AND LOCATION OF TRAFFIC SIGNAL STANDARDS SHALL BE AS SHOWN ON THE PLANS.

OPTICALLY PROGRAMMED SIGNAL FACES SHALL BE MASKED IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS, AND UNDER THE DIRECTIONS OF THE DISTRICT TRAFFIC ENGINEER.

FOLDING STOP SIGNS SHALL BE IN ACCORDANCE WITH THE MUTCD AND/OR THE LATEST WISCONSIN SUPPLEMENT. THE SIGNS SHALL BE SIZED AND LOCATED AS CALLED FOR IN IN THE PLANS.

PEDESTRIAN SIGNS SHALL BE AS DESIGNATED IN THE PLANS.

FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) 1/4" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.



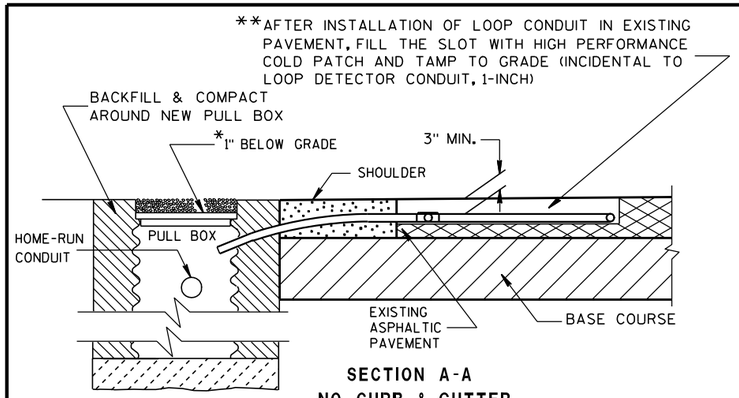
SIGNAL FACE MOUNTING DETAIL
(BANDED)

TRAFFIC SIGNAL STANDARD
POLY BRACKET MOUNTINGS
(TYPICAL) 13 FT. OR 15 FT.

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
5/11/10 — DATE
/S/ John Corbin — STATE ELECTRICAL ENGI
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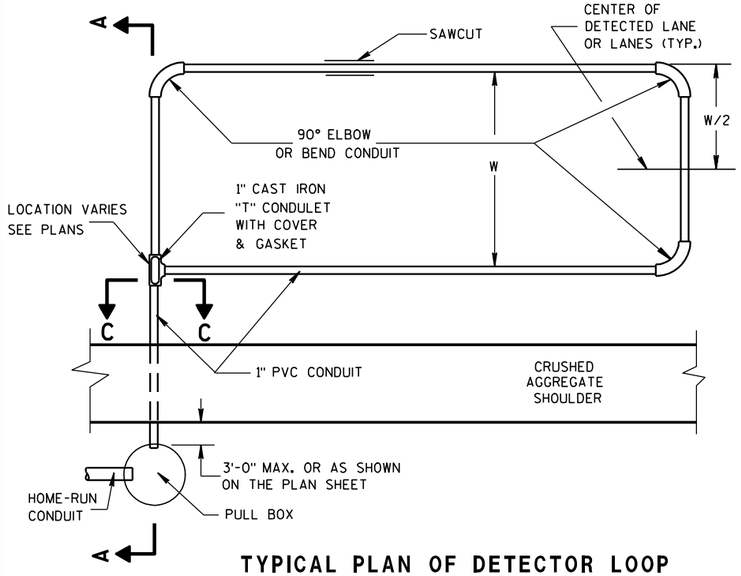
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S.D.D. 9 E 6-4



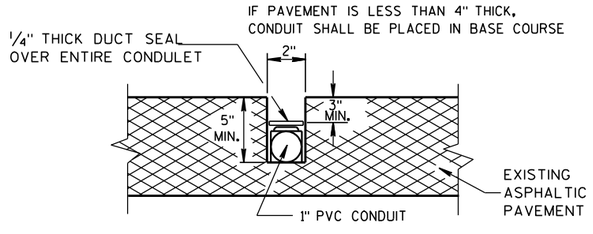
SECTION A-A
NO CURB & GUTTER

TYPICAL PLAN OF LOOP DETECTOR

*RECESS PULL BOX SO THAT THE COVER IS 3" BELOW GRADE IN SHOULDER AREAS OF CRUSHED AGGREGATE. BACKFILL OVER COVER WITH THE CRUSHED AGGREGATE TO BRING THE AREA TO GRADE LEVEL.



TYPICAL PLAN OF DETECTOR LOOP



SIDE VIEW
SECTION C-C

LOOP DETECTOR SLOT DETAIL

GENERAL NOTES

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

LOOP SIZE, LOCATION, NUMBER OF TURNS OF WIRE AND ASSOCIATED SIGNAL PHASE SHALL BE AS SHOWN ON THE PLANS.

PITCH LEAD OUT CONDUIT TO DRAIN TO ROADSIDE PULL BOX.

SPLICES SHALL BE INSTALLED BY USING CAST IN PLACE SPLICE KITS SUCH AS 3M TYPE 82A1 OR APPROVED EQUAL. NON-INSULATED BUTT SPLICES TO FIT #12 AWG STRANDED WIRE SHALL BE USED. SPLICES SHALL BE SOLDERED AND INSULATED FROM EACH OTHER AS PER INSTRUCTIONS INCLUDED IN THE SPLICE KIT.

MEASURE GROUND RESISITANCE USING A MEGGER. REPLACE LOOP WIRE NOT ATTAINING A READING OF INFINITY TO GROUND.

AFTER SPLICING THE LOOP WIRE TO THE LOOP LEAD-IN CABLE, THE CONTRACTOR SHALL MEASURE INDUCTANCE, GROUND RESISTANCE AND WIRE RESISTANCE AT THE CABINET END OF THE LEAD-IN CABLE AND FURNISH A COPY OF THE READINGS TO THE PROJECT ENGINEER FOR EVALUATION.

ANTI-SIEZE LUBRICATING MATERIAL SHALL BE USED ON ALL THREADS OF THREADED ASSEMBLIES BEFORE INSTALLATION.

LOOP DETECTOR LEADS SHALL BE IDENTIFIED WITH THEIR ASSOCIATED LOOP BY USE OF WATERPROOF TAGS AT BOTH ENDS OF THE CABLE. A LISTING OF THE CABLE IDENTIFICATION PER INDIVIDUAL LOOP LEAD-IN SHALL BE PLACED IN THE CABINET.

THE #12 AWG LOOP WIRE FROM THE LOOP TO THE ROADSIDE PULL BOX, SHALL BE HAND TWISTED AT LEAST 3 TWISTS PER FOOT BEFORE INSTALLATION.

SPLICES OF LOOP WIRE TO LEAD-IN CABLE SHALL BE MADE ONLY IN PULL BOXES AT THE SIDE OF THE ROAD.

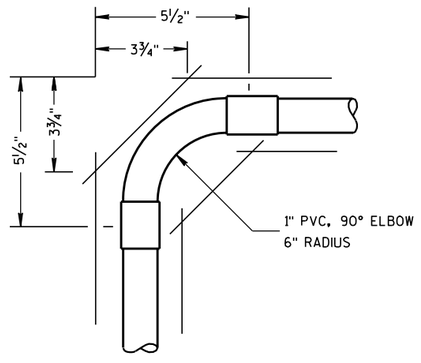
THE #12 AWG LOOP WIRE SHALL BE INSTALLED FROM THE ROADSIDE PULL BOX, THROUGH THE LOOP CONDUIT, BACK TO THE ROADSIDE PULL BOX, AND BE INSTALLED IN ONE, NON-SPLICED, CONTINUOUS LENGTH.

IN THE EVENT THAT THE EXISTING PAVEMENT IS MORE THAN 5 INCHES THICK, AND THEREFORE , THE 1 INCH CONDUIT DOES NOT REQUIRE INSTALLATION BELOW THE PAVEMENT INTO THE BASE COURSE, PLACE SOME OF THE TAR OR EPOXY SEALANT IN THE SLOT TO A DEPTH OF APPROXIMATELY 1/2 INCH BEFORE INSTALLATION OF THE CONDUIT. IF THE CONDUIT MUST BE PLACED IN THE BASE COURSE, DO NOT PLACE THE TAR OR EPOXY SEALANT IN THE SLOT.

ONCE THE 2" LOOP SLOT HAS BEEN CHIPPED OUT, THE LOOP INSTALLATION SHALL BE COMPLETED PRIOR TO OPENING THE LANE(S) TO TRAFFIC.

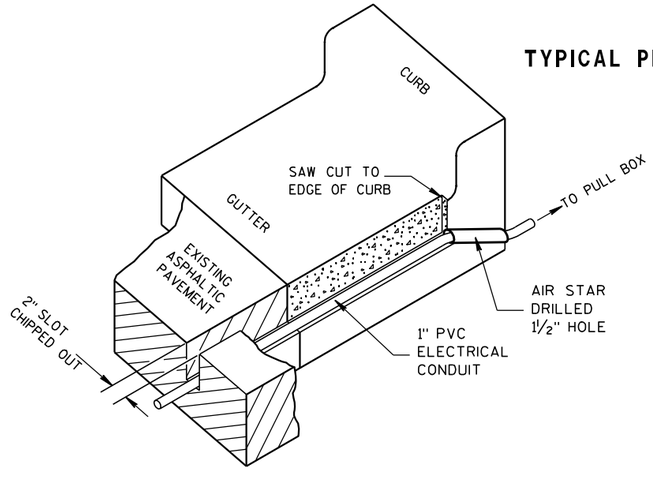
** AFTER THE HIGH PERFORMANCE COLD PATCH HAS BEEN TAMPED, SEAL THE SLOT/HIGH PERFORMANCE COLD PATCH/ PAVEMENT OPENING WITH HOT POURED ELASTIC TYPE MATERIAL CONFORMING TO THE REQUIREMENTS OF THE "SPECIFICATION FOR JOINT SEALANTS, HOT POURED, FOR CONCRETE AND ASPHALT PAVEMENTS, ASTM DESIGNATION: D3405".

IN THE EVENT HIGH PERFORMANCE COLD PATCH IS NOT AVAILABLE, AND FLEXIBLE TYPE EPOXY IS USED AS A LOOP SLOT FILLER, THE 2 INCH SLOT SHALL BE TOTALLY CLEAN AND DRY BEFORE ITS INSTALLATION. EPOXY USE SHALL BE APPROVED BY THE DISTRICT TRAFFIC ENGINEER AND THE FURNISHED EPOXY SHALL BE INSTALLED AFTER WRITTEN APPROVAL BY THE PROJECT ENGINEER.



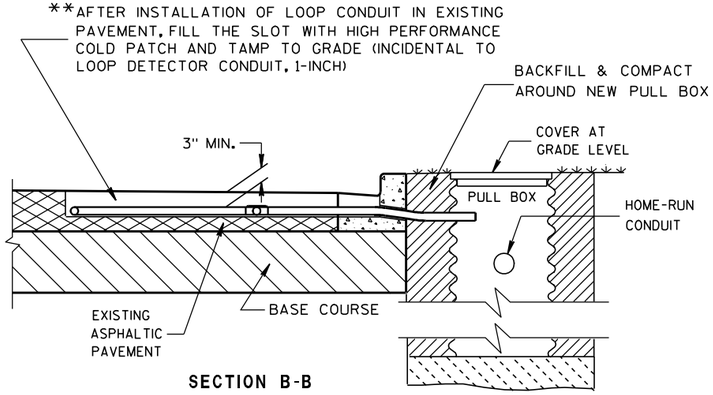
TOP VIEW

CORNER SAW SLOT DETAIL



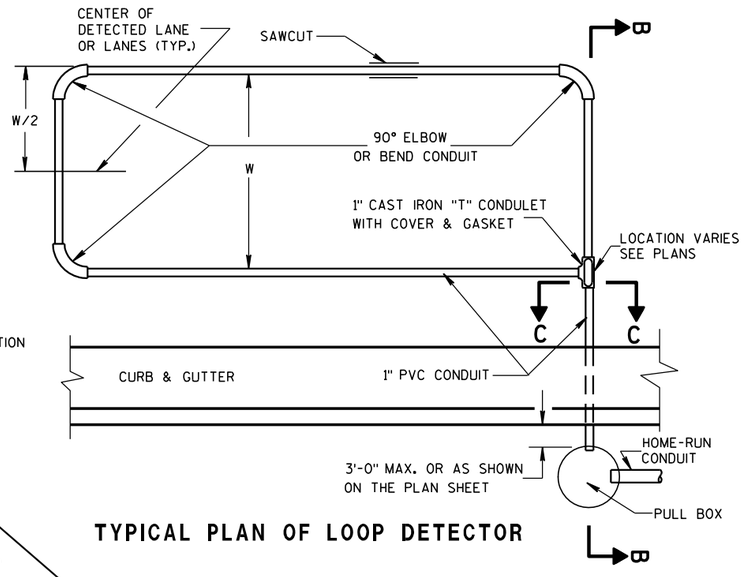
ISOMETRIC VIEW

TYPICAL SAW CUT DETAIL FOR LEAD-IN CONDUIT



SECTION B-B
CURB & GUTTER

LOOP DETECTOR INSTALLATION DETAIL



TYPICAL PLAN OF LOOP DETECTOR

LOOP DETECTOR INSTALLED IN EXISTING ASPHALTIC PAVEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

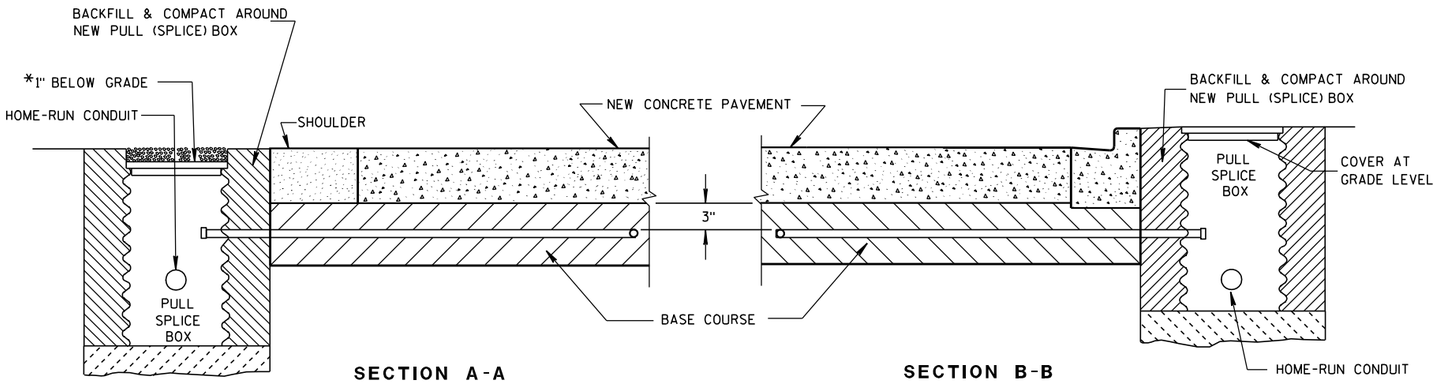
APPROVED
6/7/06 DATE
/S/ Balu Ananthanarayanan
STATE ELECTRICAL ENGI 158 HWYS
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SECTION A-A
NO CURB & GUTTER

SECTION B-B
CURB & GUTTER

*RECESS PULL (SPLICE) BOX SO THAT THE COVER IS 3" BELOW GRADE IN SHOULDER AREAS OF CRUSHED AGGREGATE. BACKFILL OVER COVER WITH THE CRUSHED AGGREGATE TO BRING THE AREA TO GRADE LEVEL.

LOOP DETECTOR INSTALLATION DETAIL

GENERAL NOTES

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

LOOP SIZE, CONFIGURATION LOCATION, NUMBER OF TURNS OF WIRE AND ASSOCIATED SIGNAL PHASE SHALL BE AS SHOWN ON THE PLANS.

PITCH LEAD OUT CONDUIT TO DRAIN TO ROADSIDE PULL (SPLICE) BOX.

SPLICES SHALL BE INSTALLED BY USING CAST IN PLACE SPLICE KITS SUCH AS 3M TYPE 82A1 OR APPROVED EQUAL. NON-INSULATED BUTT SPLICES TO FIT #12 AWG STRANDED WIRE SHALL BE USED. SPLICES SHALL BE SOLDERED AND INSULATED FROM EACH OTHER AS PER INSTRUCTIONS INCLUDED IN THE SPLICE KIT.

MEASURE GROUND RESISTANCE USING A MEGGER. REPLACE LOOP WIRE NOT ATTAINING A READING OF INFINITY TO GROUND.

AFTER SPLICING THE LOOP WIRE TO THE LOOP LEAD-IN CABLE, THE CONTRACTOR SHALL MEASURE INDUCTANCE, GROUND RESISTANCE AND WIRE RESISTANCE AT THE CABINET END OF THE LEAD-IN CABLE AND FURNISH A COPY OF THE READINGS TO THE PROJECT ENGINEER FOR EVALUATION.

LOOP DETECTOR LEADS SHALL BE IDENTIFIED WITH THEIR ASSOCIATED LOOP BY USE OF WATERPROOF TAGS AT BOTH ENDS OF THE CABLE. A LISTING OF THE CABLE IDENTIFICATION PER INDIVIDUAL LOOP LEAD-IN SHALL BE PLACED IN THE CABINET.

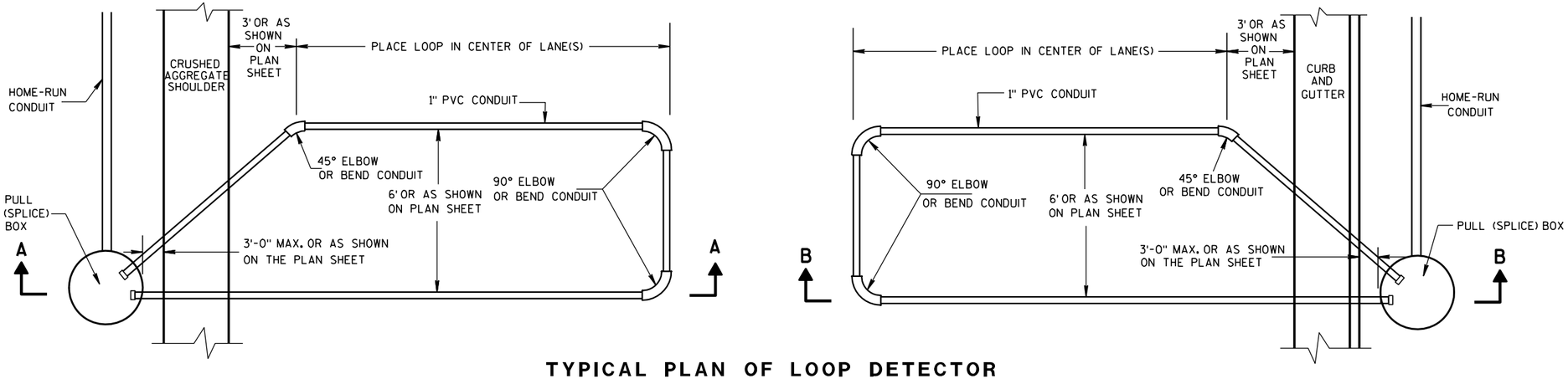
THE #12 AWG. LOOP WIRE IN THE PULL (SPLICE) BOX SHALL BE HAND TWISTED AT LEAST 3 TWISTS PER FOOT BEFORE BEING SPLICED TO THE LOOP LEAD-IN CABLE.

SPLICES OF LOOP WIRE TO LEAD-IN CABLE SHALL BE MADE ONLY IN PULL (SPLICE) BOXES AT THE SIDE OF THE ROAD.

THE #12 AWG LOOP WIRE SHALL BE INSTALLED FROM THE ROADSIDE PULL (SPLICE) BOX THROUGH THE LOOP CONDUIT, BACK TO THE ROADSIDE PULL (SPLICE) BOX, AND BE INSTALLED IN ONE, NON-SPLICE CONTINUOUS LENGTH.

PROTECTION OF THE CONDUIT IN THE BASE COURSE, SHALL BE REQUIRED AFTER INSTALLATION AND BEFORE NEW PAVEMENT IS INSTALLED.

SHOULD INSTALLATION REPAIR BE REQUIRED, IT SHALL BE DONE UNDER THE DIRECTION OF THE PROJECT ENGINEER.



TYPICAL PLAN OF LOOP DETECTOR WITH 18" OR 24" PULL (SPLICE) BOX

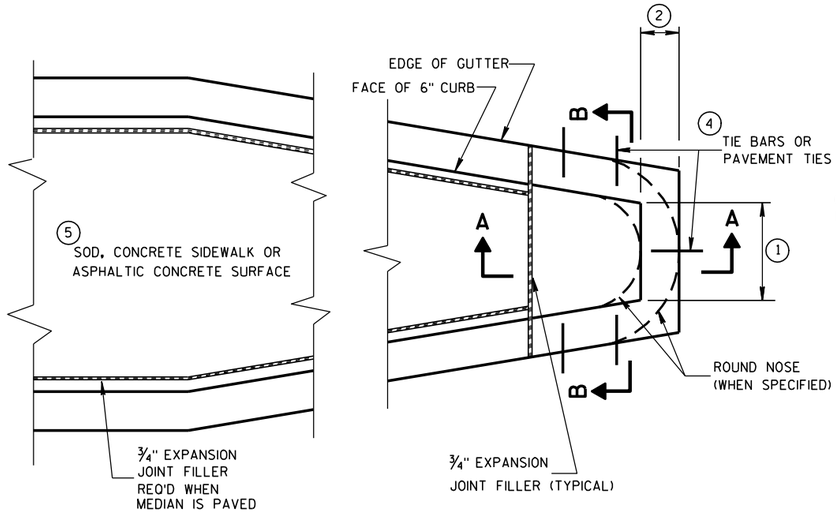
LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 1)

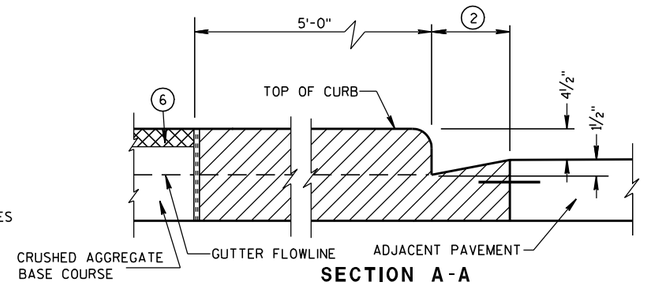
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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6/7/06 — DATE
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FHWA

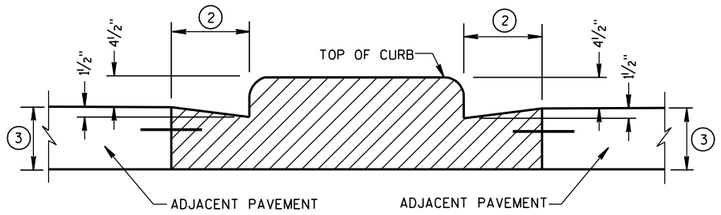
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S.D.D. 9 F 15-3a





SECTION A-A



SECTION B-B

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.

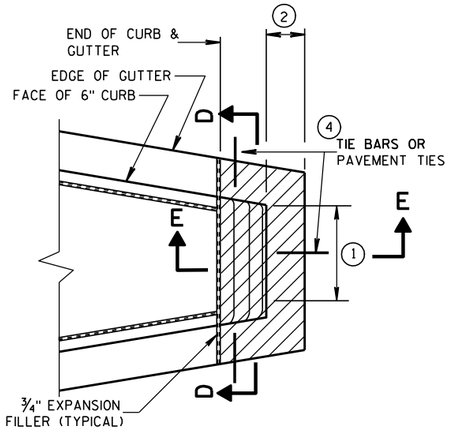
(2) ASPHALTIC CONCRETE PAVEMENT OVER NEW OR EXISTING CONCRETE BASE COURSE.

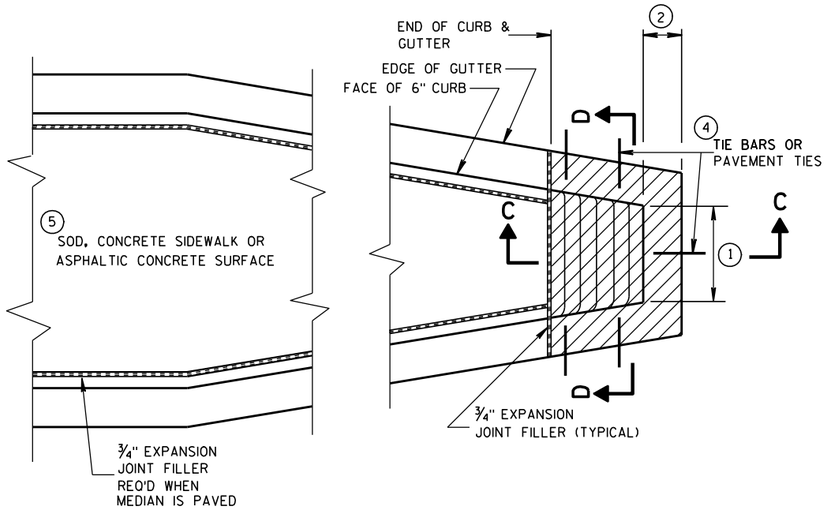
(3) ASPHALTIC CONCRETE PAVEMENT OVER CRUSHED AGGREGATE BASE COURSE.

(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.

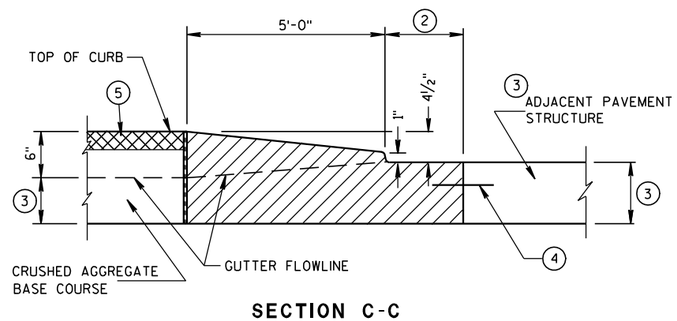
PAVEMENT TIES REQUIRED IN EXISTING CONCRETE BASE COURSE. PAVEMENT TIES SHALL BE NO. 6 X 1'-0" SPACED AT 3'-0" C-C INSTALLED ON A HORIZONTAL SKEW OF 6:1. THE DIRECTION OF SKEW SHALL ALTERNATE AFTER EVERY ONE OR TWO BARS.

(5) SURFACE TYPE AND DETAILS ARE SHOWN ELSEWHERE IN THE PLAN.

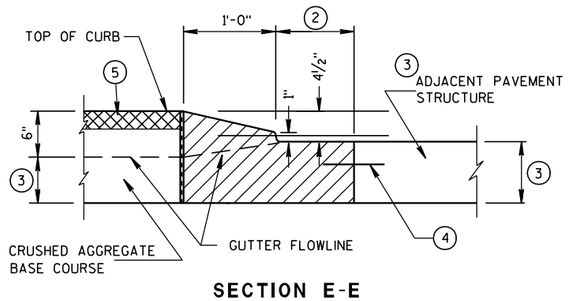




CONCRETE MEDIAN SLOPED NOSE TYPE 1

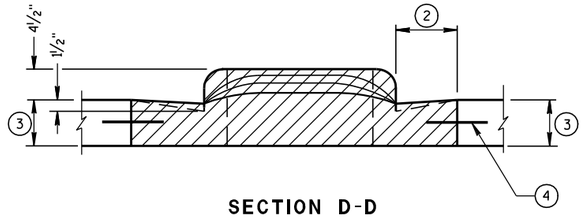


SECTION C-C



SECTION E-E

CONCRETE MEDIAN SLOPED NOSE TYPE 2



SECTION D-D

CONCRETE MEDIAN NOSE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6/8/2006
DATE

/S/ Jerry H. [illegible]
ROADWAY STANDARDS ENGINEER

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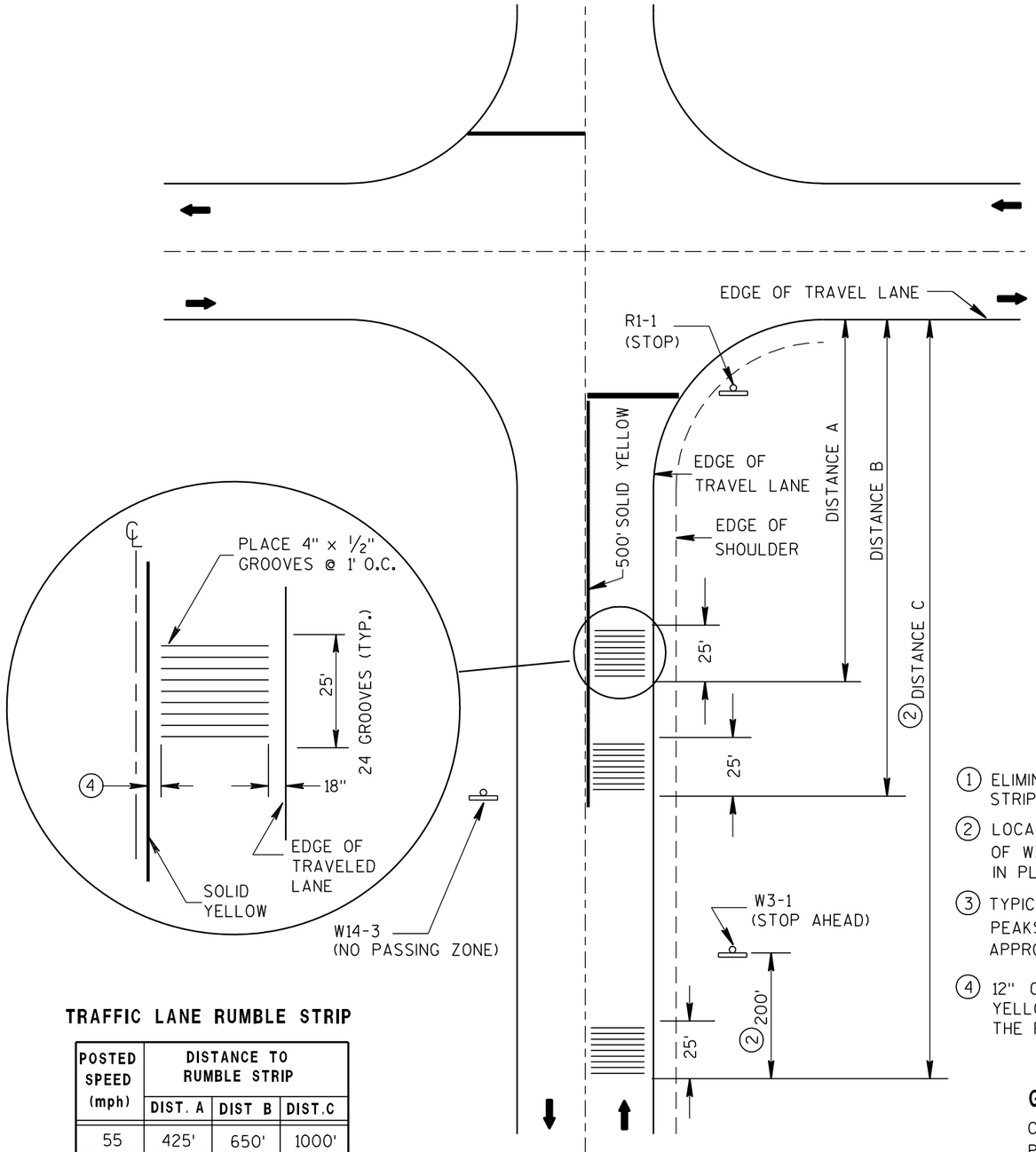
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S.D.D. 11 B 2-2



ARROW SYMBOL (➡) SHOWS DIRECTION OF TRAVEL

PLAN VIEW

RUMBLE STRIP LOCATION

TRAFFIC LANE RUMBLE STRIP

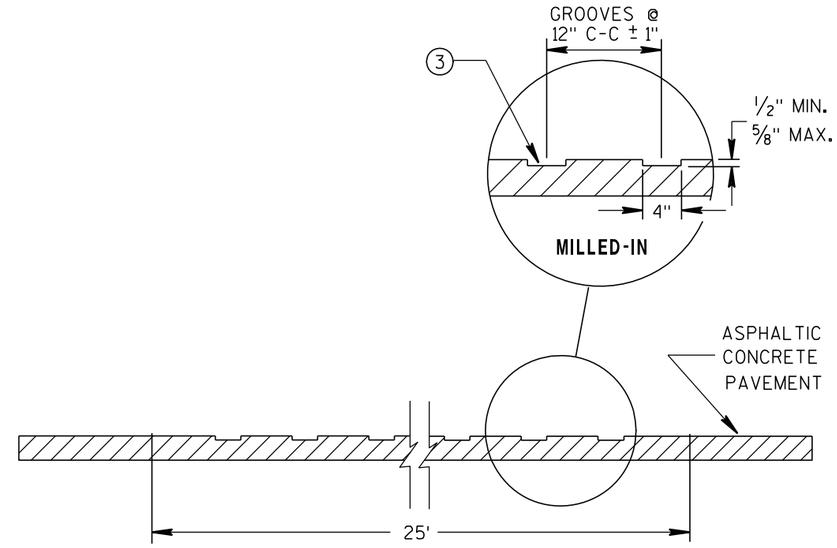
POSTED SPEED (mph)	DISTANCE TO RUMBLE STRIP		
	DIST. A	DIST B	DIST.C
55	425'	650'	1000'
50	325'	450'	800'
45	275'	400'	650'
40	225'	(1)	550'
35	175'	(1)	475'
≤ 30	125'	(1)	425'

(1) ELIMINATE THE MIDDLE SET OF RUMBLE STRIPS.

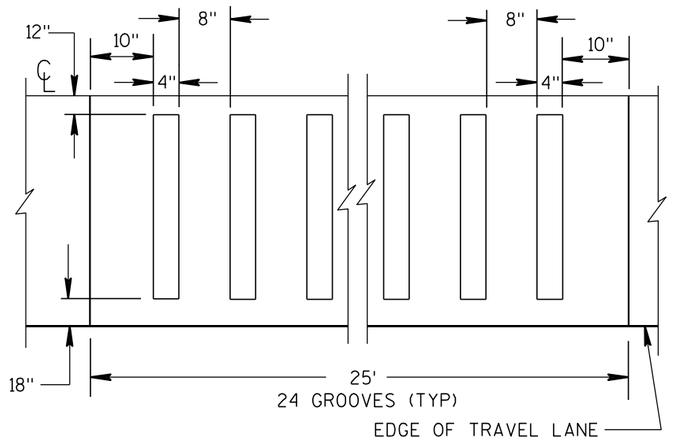
(2) LOCATE RUMBLE STRIP 200' IN ADVANCE OF W3-1 SIGN AS SHOWN. IF W3-1 IS NOT IN PLACE, USE DISTANCE C.

(3) TYPICAL VERTICAL VARIATION BETWEEN PEAKS AND VALLEYS WITHIN THE CUT APPROXIMATELY 1/16"

(4) 12" CLEAR BETWEEN THE SOLID YELLOW LINE AND THE EDGE OF THE RUMBLE.



ELEVATION VIEW



PLAN VIEW

ASPHALTIC PAVEMENT MILLED-IN

GENERAL NOTES

CONTRACTOR SHALL CONFIRM RUMBLE STRIP LOCATION WITH THE ENGINEER PRIOR TO INSTALLATION. THE ENGINEER MAY MODIFY THE RUMBLE STRIP LOCATION AS FIELD CONDITIONS DICTATE.

WHEN ASPHALTIC PAVEMENT IS NEW IN THE RUMBLE AREA THE CONTRACTOR SHALL ALLOW THE PAVEMENT TO CURE A MINIMUM OF 7 DAYS PRIOR TO RUMBLE INSTALLATION.

PAVEMENT MARKING AND SIGNING DETAILS AND SPECIFICATIONS ARE PROVIDED ELSEWHERE IN THE CONTRACT.

ASPHALTIC RUMBLE STRIPS AT INTERSECTION

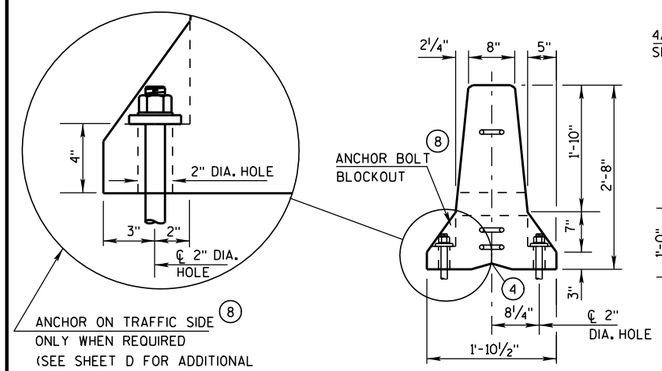
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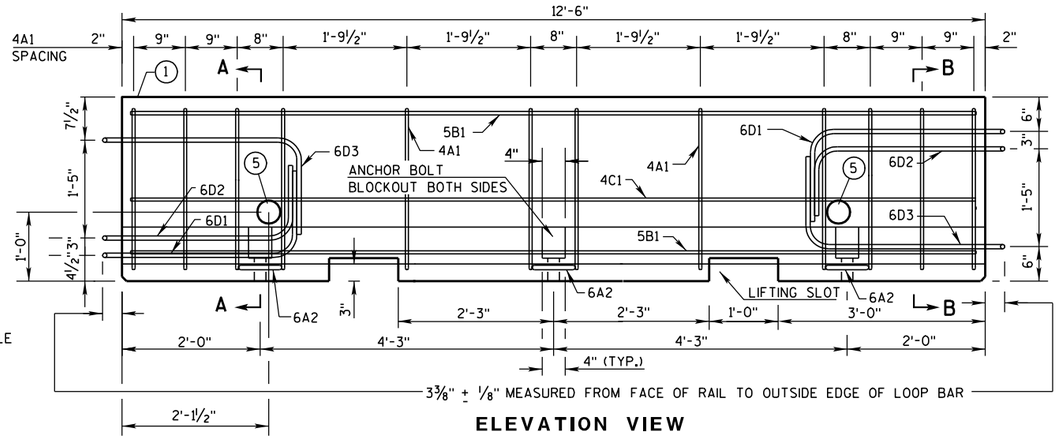
8/17/2011
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER

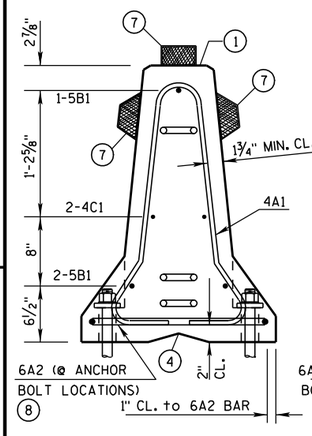
FHWA



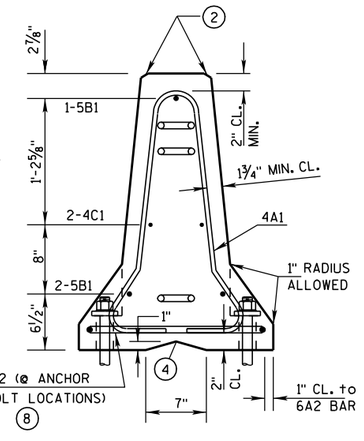
END VIEW



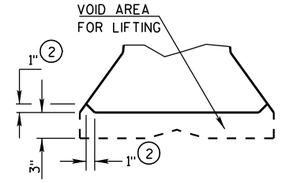
ELEVATION VIEW



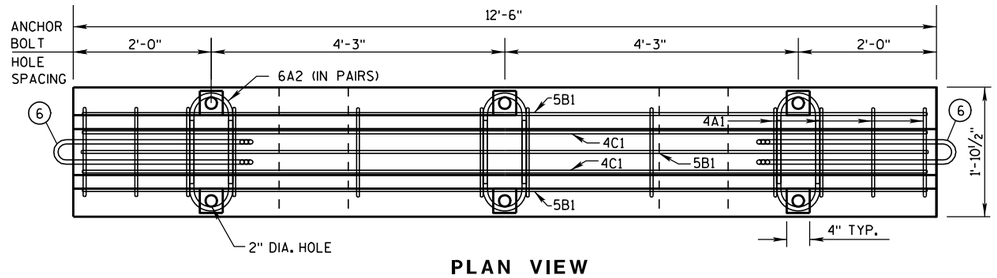
SECTION A-A
(STIRRUP PLACEMENT)



SECTION B-B
(STIRRUP PLACEMENT)

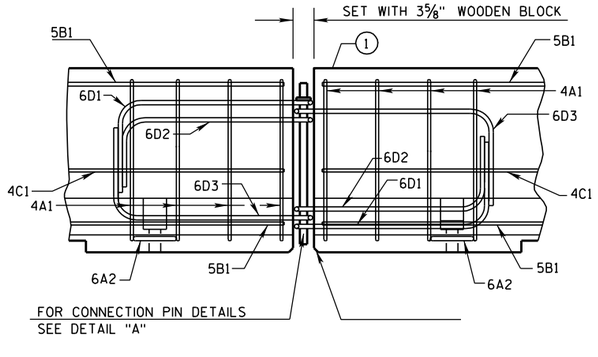


DETAIL "B"
LIFTING SLOT DETAIL

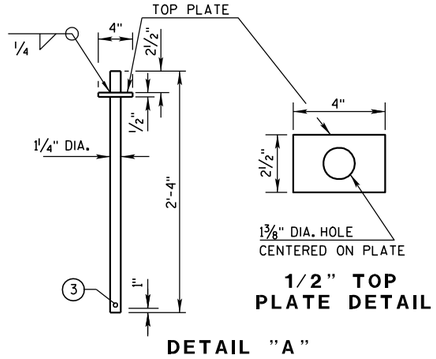


PLAN VIEW

DETAILS OF BARRIER SECTION



DETAILS OF BARRIER CONNECTION



1/2" TOP PLATE DETAIL

DETAIL "A"
CONNECTION PIN
(A36 STEEL (10.9 LB EACH))

GENERAL NOTES

THESE GENERAL NOTES APPLY TO SHEETS 14B7-12(a) THRU 14B7-12(d).

DETAILS AND REQUIREMENTS FOR THE FABRICATION AND INSTALLATION OF CONCRETE BARRIER TEMPORARY PRECAST, 12'-6" (CBTP12.5) ARE SHOWN ON 4 SHEETS, 14B7-12(a) THRU 14B7-12(d)

DO NOT INTERMIX CONCRETE BARRIER TEMPORARY PRCAST, 12'-6" (CBTP12.5) WITH OTHER TEMPORARY CONCRETE BARRIERS.

USE ASTM A-615, GRADE 60, DEFORMED STEEL BARS FOR BARS 4A1, 6A2, 5B1 AND 4C1 IN THE BARRIER SECTION AND FOR 4V1, 4V2, 4V3, 4V4, 4V5, 4V6, 4F1, 4F2 AND 5F3 IN THE BARRIER TAPER SECTION.

LOOP BARS 6D1, 6D2 AND 6D3 SHALL BE ¾" SMOOTH STEEL BARS WITH A MINIMUM YIELD STRENGTH OF 60 KSI, A TENSILE STRENGTH OF NOT LESS THAN 1.25 TIMES THE YIELD STRENGTH BUT A MINIMUM OF 80 KSI, A MINIMUM 14% ELONGATION IN 8 INCHES AND PASSING A 180 DEGREE BEND TEST USING A 3-½" PIN BEND DIAMETER FOR BEND TESTS. THE LOOPS SHALL BE INSTALLED WITHIN ⅛" OF THE PLAN DIMENSION.

CONSTRUCT LIFTING SLOTS AS SPECIFIED ON THE PLANS TO FACILITATE THE DRAINAGE OF WATER AFTER INSTALLATION.

PLACE BARRIER ON A PAVED SURFACE. REMOVE ALL LOOSE DIRT AND SAND FROM THE ROADWAY SURFACE PRIOR TO PLACEMENT OF THE BARRIER.

(1) MARK ONE END OF EACH BARRIER PERMANENTLY BY FORMING INTO THE BARRIER THE FOLLOWING INFORMATION:
- a. TYPE: WI CBTP
- b. MANUFACTURER
- c. DATE MANUFACTURED (MONTH AND YEAR)

(2) 1" CHAMFER TO PREVENT SPALLING.

(3) A ⅜" HOLE IN THE CONNECTION PIN, AT THE LOCATION SHOWN, IS ACCEPTABLE, BUT NOT REQUIRED..

(4) "V" NOTCH IS OPTIONAL.

(5) THE 4" DIAMETER, 11 GAUGE STEEL, ROUND MECHANICAL TUBING SLEEVE FOR LIFTING (OPTIONAL).

(6) NEVER USE LOOP BARS (6D1, 6D2 OR 6D3) TO LIFT, MOVE OR REPOSITION THE BARRIER.

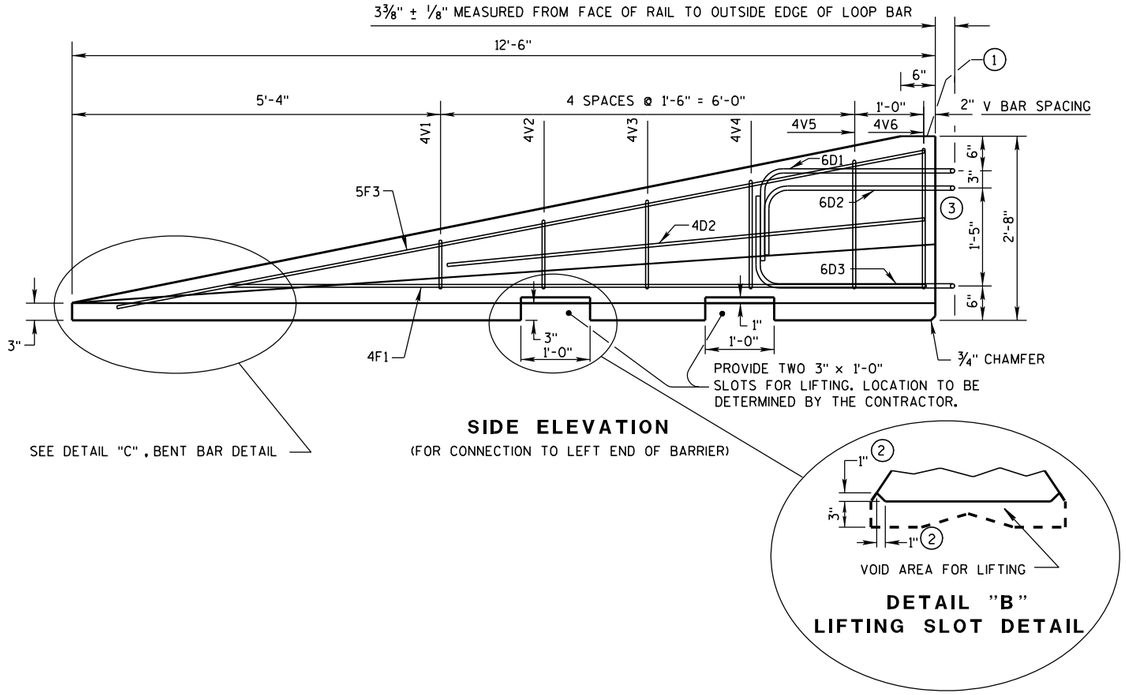
(7) USE DELINEATORS CONFORMING TO SECTION 633 OF THE STANDARD SPECIFICATIONS. CONTRACTOR MAY USE ALTERNATE SHAPES AND HOUSING. INSTALL DELINEATORS ACCORDING TO MANUFACTURES INSTRUCTION. INSTALL YELLOW REFLECTORS WHEN BARRIER IS LOCATED TO THE LEFT OF TRAFFIC AND WHITE REFLECTORS WHEN BARRIER IS LOCATED TO THE RIGHT OF TRAFFIC. SPACE DELINEATORS A MAXIMUM OF 25 FEET APART. PROVIDE TOP MOUNTED DELINEATORS IN ADDITION TO THE SIDE MOUNTED DELINEATORS ON ALL BARRIER INSTALLATIONS LOCATED ON A CURVED ALIGNMENT LONGER THAN 200 FEET AND ON BARRIERS USED TO SEPARATE OPPOSING TRAFFIC.

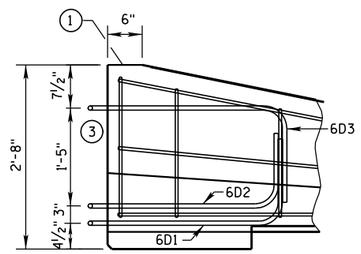
(8) SEE SHEET D FOR ANCHORING CRITERIA.

CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO...

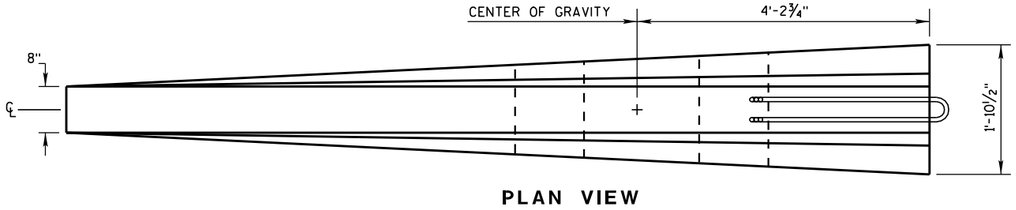
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S.D.D. 14 B 7-12a

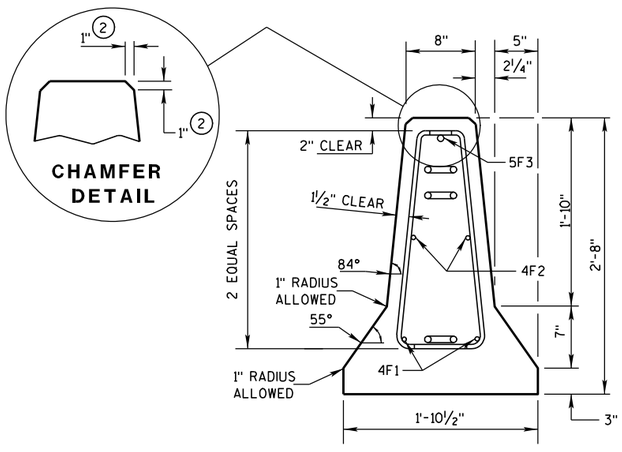


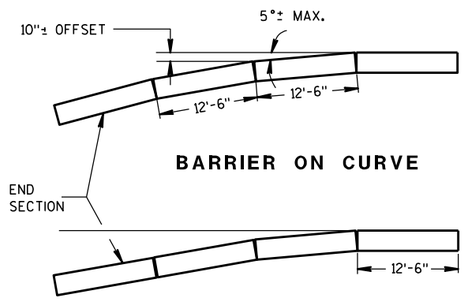


GENERAL NOTES

1. MARK ONE END OF EACH BARRIER PERMANENTLY BY FORMING INTO THE BARRIER THE FOLLOWING INFORMATION:
   a. TYPE WICBTP
   b. MANUFACTURER
   c. DATE MANUFACTURED (MONTH AND YEAR)
2. 1" CHAMFER TO PREVENT SPALLING.
3. NEVER USE LOOP BARS (6D1, 6D2 OR 6D3) TO LIFT, MOVE OR REPOSITION THE BARRIER.







POSTED SPEED, (MPH)	FLARE RATE
40 OR LESS	6:1
45 OR GREATER	8:1

DETAILS OF BARRIER TAPER SECTION

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

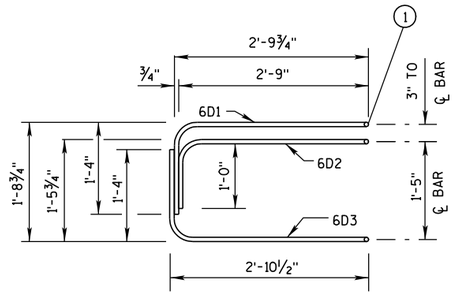
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S.D.D. 14 B 7-12b

BARRIER TAPER SECTION BILL OF MATERIALS

(PER 12'-6" BARRIER TAPER SECTION)

BAR	BAR SIZE	NO. OF BARS	LENGTH FT.
4V1	4	2	1'-11"
4V2	4	2	2'-2"
4V3	4	2	2'-6"
4V4	4	2	2'-9"
4V5	4	2	3'-2"
4V6	4	2	3'-4"
4F1	4	2	12'-0"
4F2	4	2	7'-6"
5F3	5	1	11'-9"
LOOP ASSEMBLY			
6D1	6	1	8'-5"
6D2	6	1	7'-7"
6D3	6	1	8'-6"



ELEVATION
LOOP BAR ASSEMBLY

DETAIL "C"
BENT BAR DETAIL

BAR	a	b
V1	10"	1"
V2	1'-1"	1¼"
V3	1'-5"	1⅝"
V4	1'-8"	1⅞"
V5	2'-0½"	2⅜"
V6	2'-3"	2¾"

4V BARS
2 AT EACH SIZE REQUIRED
FOR STIRRUP ASSEMBLY

TAPER BARRIER SECTION

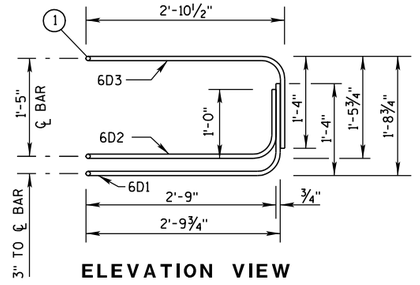
GENERAL NOTES

(1) NEVER USE LOOP BARS (6D1, 6D2 OR 6D3) TO LIFT, MOVE OR REPOSITION THE BARRIER.

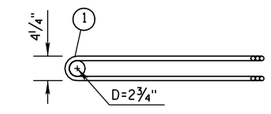
BARRIER SECTION BILL OF MATERIALS

(PER 12'-6" BARRIER SECTION)

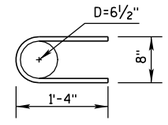
BAR	BAR SIZE	NO. OF BARS	LENGTH FT.
4A1	4	12	6'-0"
6A2	6	6	2'-11"
5B1	5	3	12'-2"
4C1	4	2	12'-2"
LOOP ASSEMBLY			
6D1	6	2	8'-5"
6D2	6	2	7'-7"
6D3	6	2	8'-6"



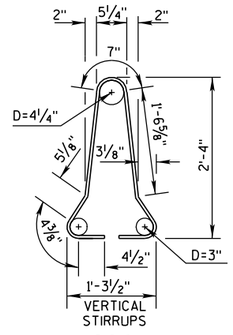
ELEVATION VIEW



PLAN VIEW
LOOP BAR ASSEMBLY
(MARKED END SHOWN, INVERT FOR OTHER END)



6A2



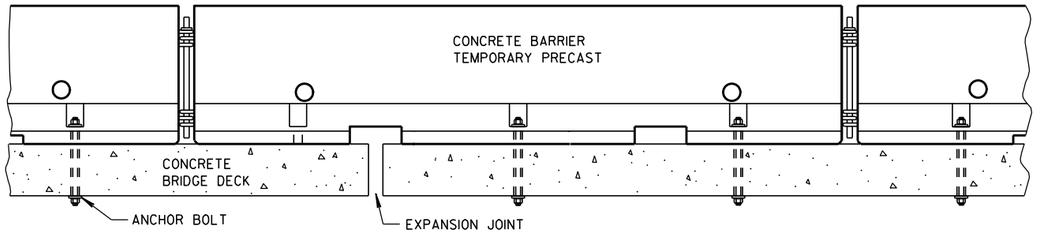
4A1

BARRIER SECTION

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

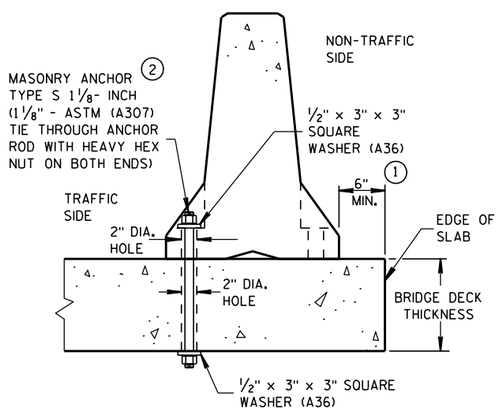
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
S.D.D. 14 B 7-12c



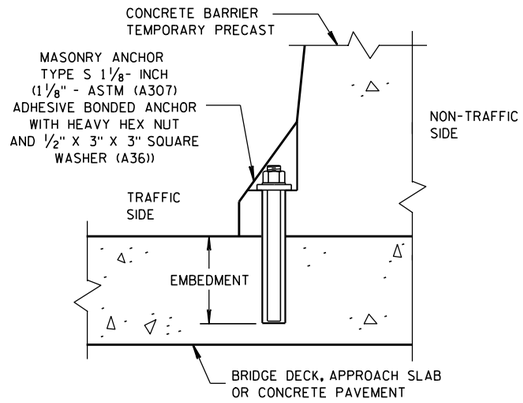
TREATMENT AT BRIDGE DECK EXPANSION JOINTS

(NO SINGLE CONCRETE BARRIER SECTION SHALL BE ANCHORED TO BOTH THE BRIDGE DECK AND THE APPROACH SLAB. ALL ANCHOR BOLT LOCATIONS SHALL BE ANCHORED TO THE DECK IN ACCORDANCE WITH THE DETAIL. NO MORE THAN ONE ANCHOR BOLT SHALL BE ELIMINATED FROM A BARRIER SECTION WHEN SPANNING AN EXPANSION JOINT.)



THROUGH BOLTED ANCHOR INSTALLATION ON BRIDGE DECK

(DO NOTUSE ON CONCRETE BRIDGE DECK WITH ASPHALT OVERLAY)



REMOVABLE ADHESIVE BONDED ANCHOR (2) INSTALLATION ON CONCRETE BRIDGE DECK, CONCRETE APPROACH SLAB, OR CONCRETE PAVEMENT

(DO NOT USE ON CONCRETE WITH AN ASPHALTIC OVERLAY)

GENERAL NOTES

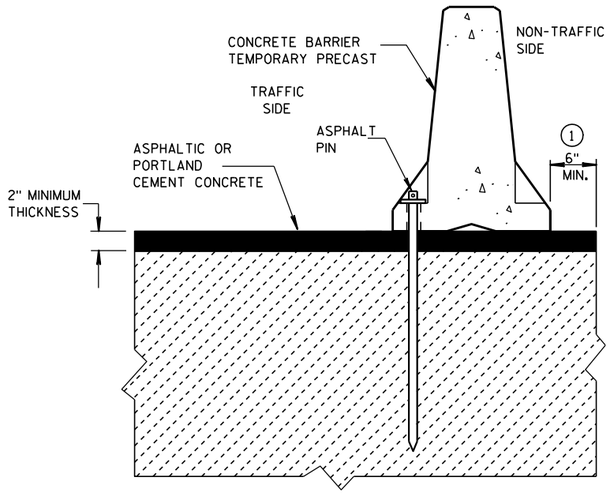
(1) CONCRETE BARRIER TEMPORARY PRECAST, 12'-6" SHALL BE ANCHORED IF:
THE DISTANCE TO A 2 FOOT OR GREATER DROPOFF THAT IS STEEPER THAN 3H : 1V, FOR EXAMPLE THE EDGE OF A BRIDGE DECK OR A DROPOFF AT THE EDGE OF PAVEMENT, IS LESS THAN 4 FEET FROM THE SIDE OF THE BARRIER CLOSEST TO THE DROPOFF AND THE POSTED SPEED IS 45 MPH OR GREATER, OR

THE DISTANCE TO A 2 FOOT OR GREATER DROPOFF THAT IS STEEPER THAN 3H : 1V, FOR EXAMPLE THE EDGE OF A BRIDGE DECK OR A DROPOFF AT THE EDGE OF PAVEMENT, IS LESS THAN 2 FEET FROM THE SIDE OF THE BARRIER CLOSEST TO THE DROPOFF AND THE POSTED SPEED IS 40 MPH OR LESS.

(2) ANCHORING IS INCIDENTAL TO CONCRETE BARRIER TEMPORARY PRECAST.

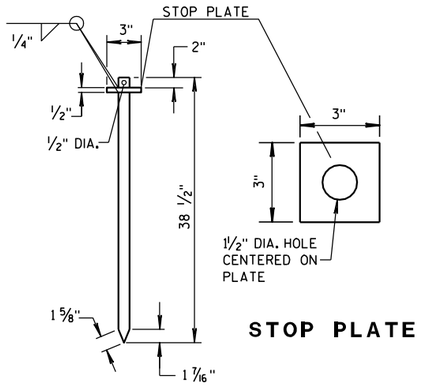
WITH THE APPROVAL OF THE ENGINEER, REMOVABLE ADHESIVE BONDED (EPOXY) ANCHOR BOLT INSTALLATION MAY BE USED IN LIEU OF THROUGH BOLTED ANCHOR INSTALLATION. THE ADHESIVE BONDED ANCHOR BOLT MUST BE REMOVABLE. USE ASTM (A307) MASONRY ANCHORS TYPE S 1⅛-INCH, EMBEDDED TO A DEPTH SUFFICIENT TO DEVELOP THE ULTIMATE CAPACITY OF THE ANCHOR BOLT AND PROVIDE DOCUMENTATION TO CONFIRM THIS.

UPON REMOVAL OR RELOCATION OF THE BARRIER UNITS, REMOVE ALLANCHOR BOLTS AND COMPLETELY FILL IN THE REMAINING HOLES IN CONCRETE BRIDGE DECKS, CONCRETE APPROACH SLABS AND CONCRETE PAVEMENTS THAT ARE TO REMAIN, WITH A NON-SHRINK COMMERICAL GROUT OR EPOXY MATERIAL IDENTIFIED ON THE CURRENT WISDOT APPROVED PRODUCTS LIST.



STAKE DOWN INSTALLATION FOR ASPHALTIC OR PORTLAND CEMENT CONCRETE SURFACE

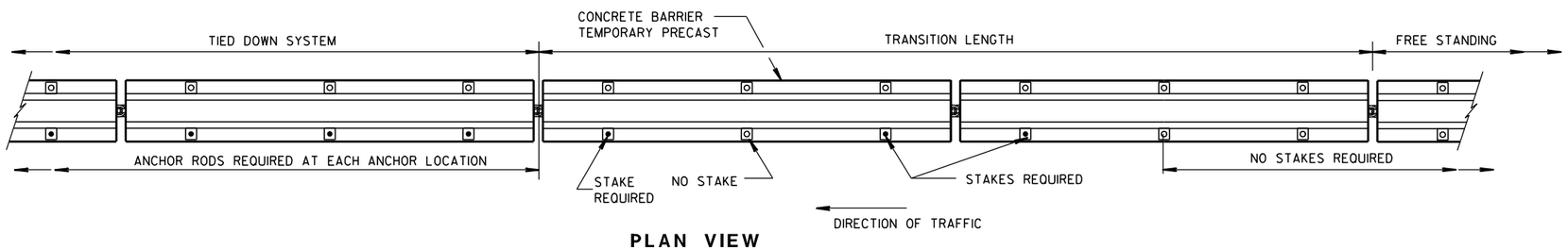
(STAKING IS INCIDENTAL TO CONCRETE BARRIER TEMPORARY PRECAST)



STOP PLATE

ASPHALT PIN

(ASTM A36 STEEL)



PLAN VIEW

FREE STANDING TRANSITION TO TIED-DOWN SYSTEM

(PLACE TRANSITION IN A TANGENT SECTION OF BARRIER PARALLEL TO THE ROADWAY. IF TRANSITION OCCURS ON STRUCTURAL SLAB, ANCHOR AS SHOWN.)

CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6-3-2010
DATE

/S/ Jerry H. ?---
ROADWAY STANDARD D ENGINEER

FHWA

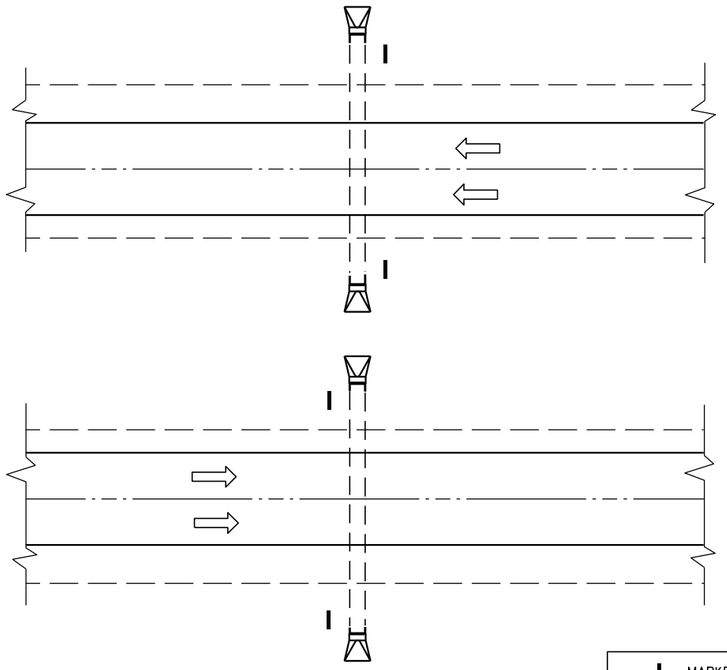
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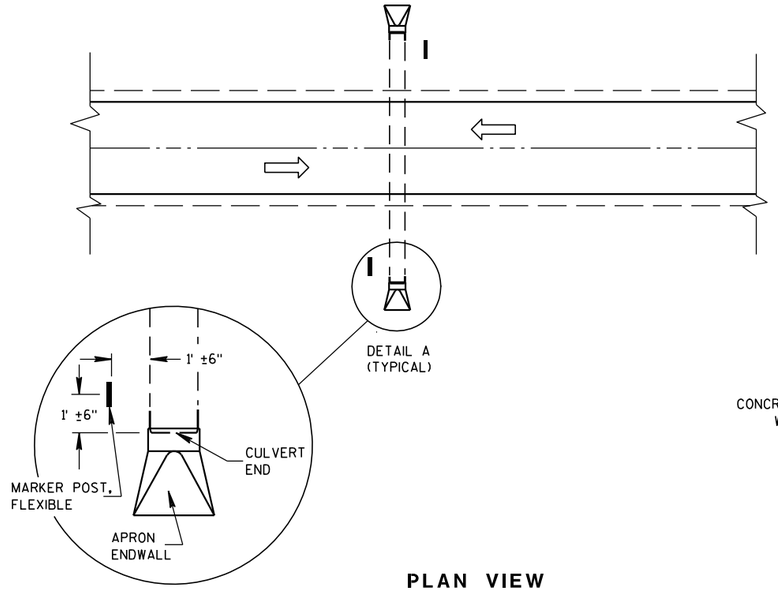
S.D.D. 14 B 7-12d

S.D.D. 14 B 7-12d



PLAN VIEW

DIVIDED HIGHWAY



DETAIL A
(TYPICAL)

PLAN VIEW

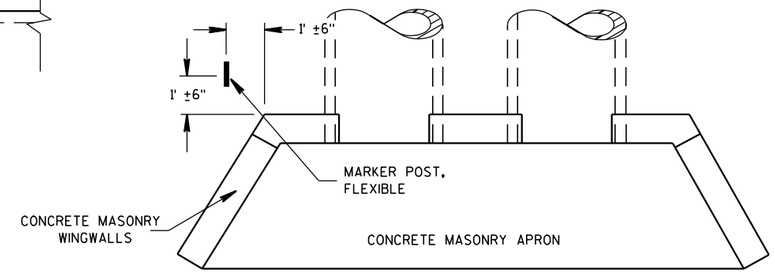
UNDIVIDED HIGHWAY

MARKER POST, FLEXIBLE

DIRECTION OF TRAFFIC FLOW

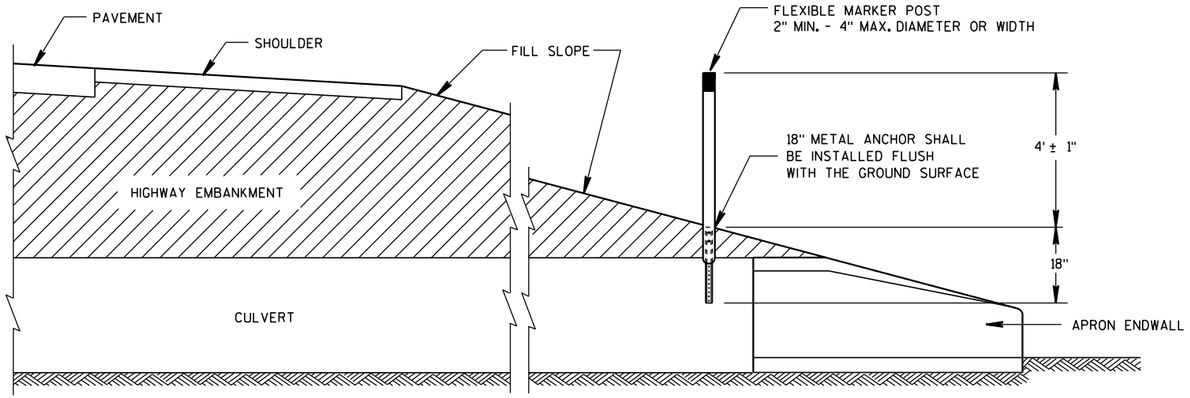
GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.



PLAN VIEW

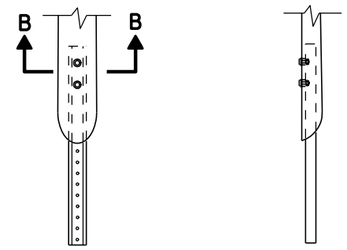
CONCRETE MASONRY ENDWALLS FOR CULVERT PIPE AND PIPE ARCH



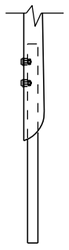
CROSS SECTION

FLEXIBLE MARKER POST

FLEXIBLE MARKER POST LOCATION

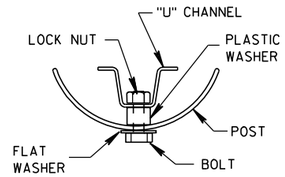


FRONT VIEW

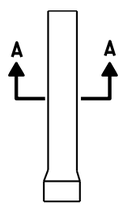


SIDE VIEW

CURVED MARKER



SECTION B-B

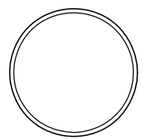


FRONT VIEW



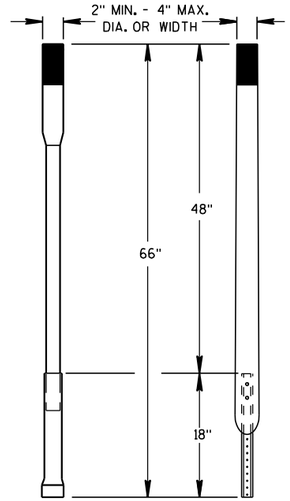
SIDE VIEW

ROUND MARKER



SECTION A-A

FLEXIBLE MARKER POST ANCHORS



ALTERNATE 1 ALTERNATE 2

FLEXIBLE MARKER POST

MARKER POST, FLEXIBLE, FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

10/1/98
DATE

/S/ Rory L. Rhinesmith
CHEIF ROADWAY DEVELOP ENGINEER

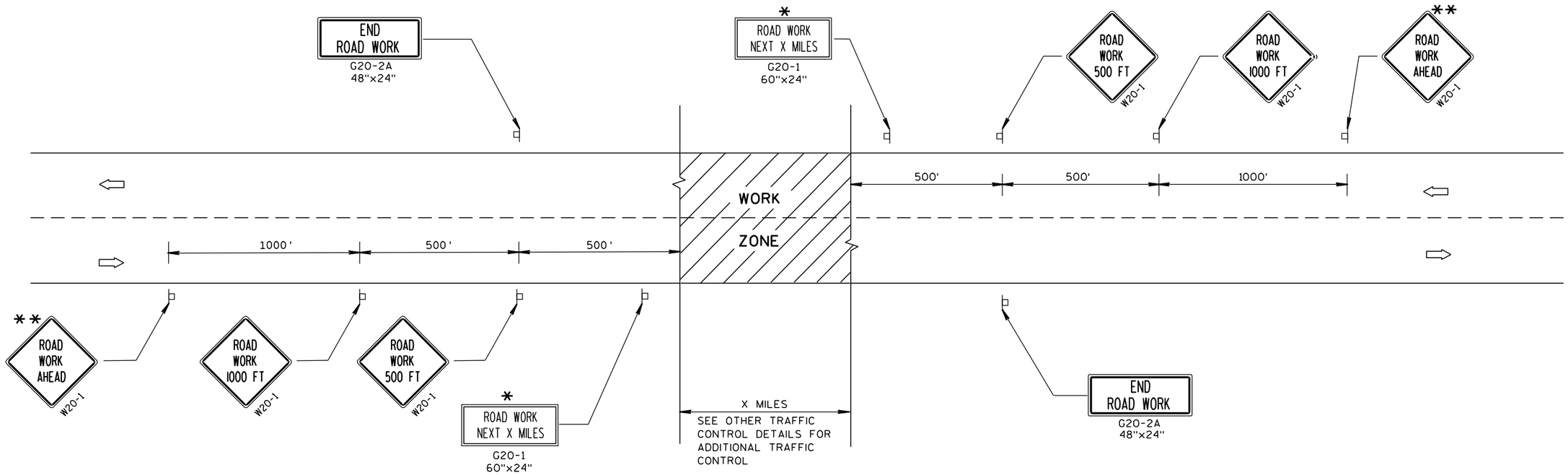
FHWA

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S.D.D. 15 A 3-1

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S.D.D. 15 A 3-1



GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

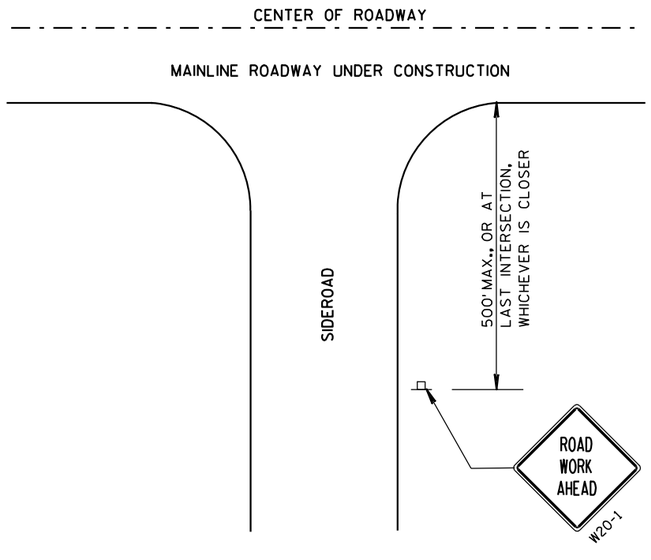
SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

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.

TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL



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

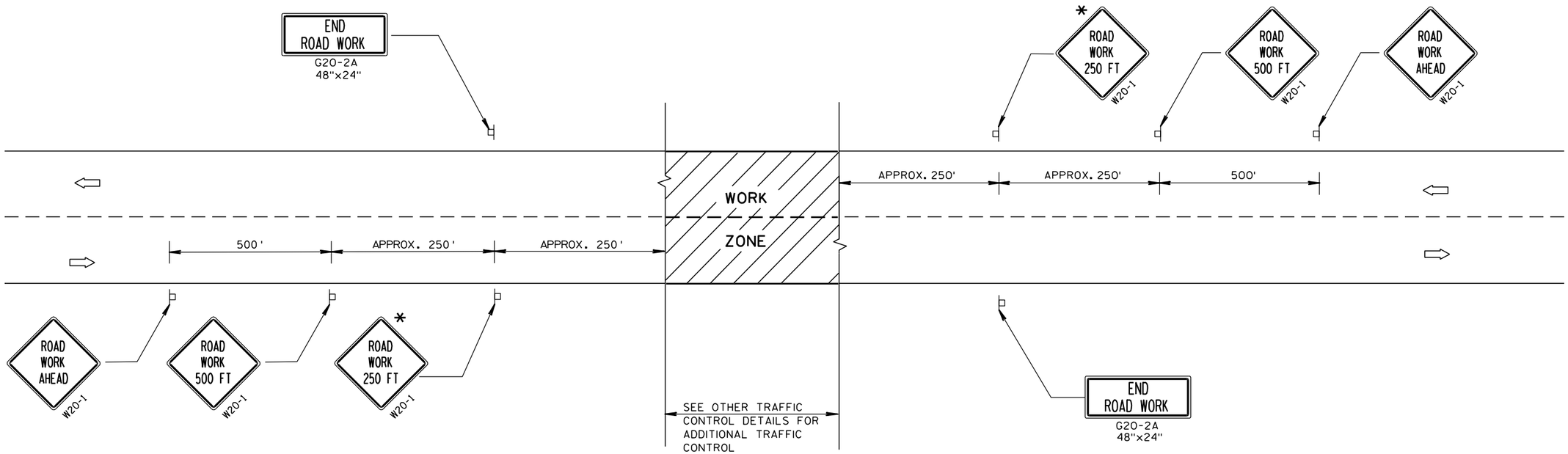
5/23/00 DATE

/S/ Chester J. [illegible] CHIEF SIGNS AND MARKINGS ENGINEER

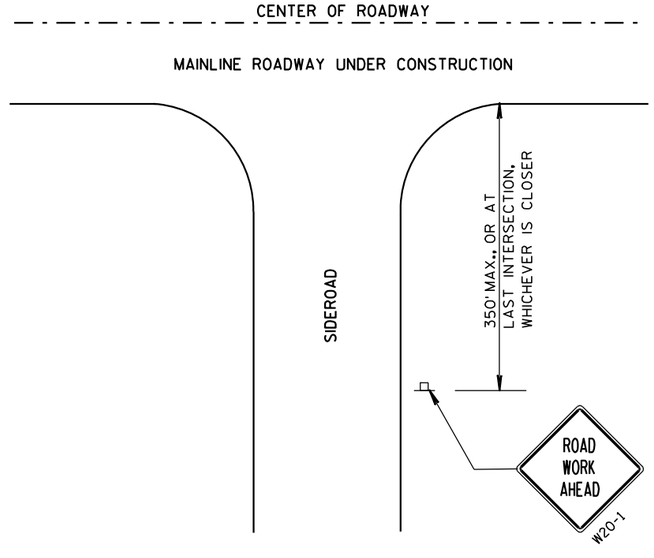
FHWA

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S.D.D. 15 C 4-1



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 DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS, 36"x36" SIGNS MAY BE USED INSTEAD OF 48"x48" SIGNS, IF APPROVED BY DISTRICT TRAFFIC UNIT.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

IF A "STOP" SIGN MUST BE REMOVED FOR A WORK OPERATION, A TEMPORARY "STOP" SIGN SHALL BE PLACED PRIOR TO THE SIGN REMOVAL, OR A FLAGGER SHALL BE PROVIDED UNTIL THE SIGN IS RE-ESTABLISHED.

* THE THIRD W20-1 SIGN IS REQUIRED ONLY IF THERE IS AN INTERSECTION BETWEEN THE "ROAD WORK 500 FT" SIGN AND THE WORK ZONE. ADJUST THE PLACEMENT OF THIS SIGN BASED ON INTERSECTION LOCATION AND OTHER FIELD CONDITIONS.

LEGEND

POST MOUNTED SIGN

DIRECTION OF TRAFFIC FLOW

TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

5/23/00
DATE

/S/ Chester J. [illegible]
CHIEF SIGNS AND MARKING ENGINEER

FHWA

6

S.D.D. 15 C 5-1

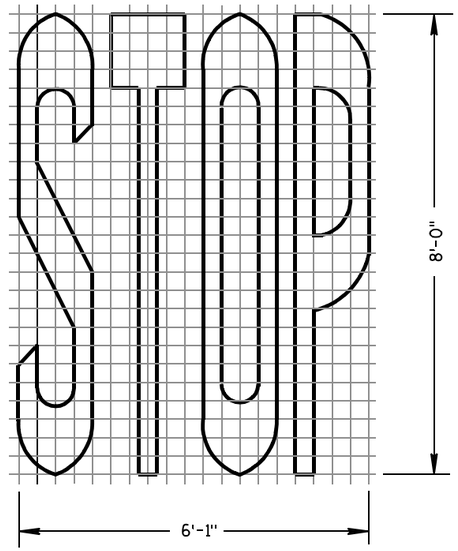
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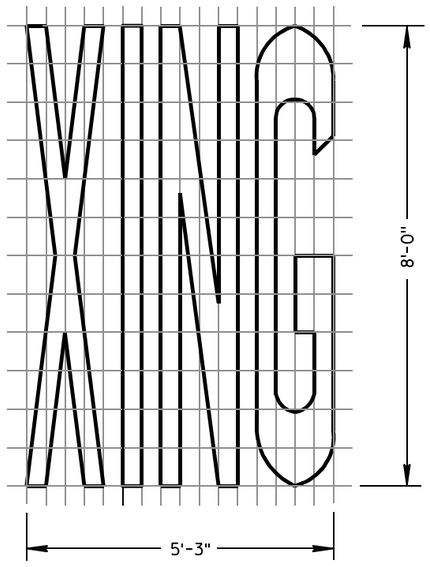
S.D.D. 15 C 5-1

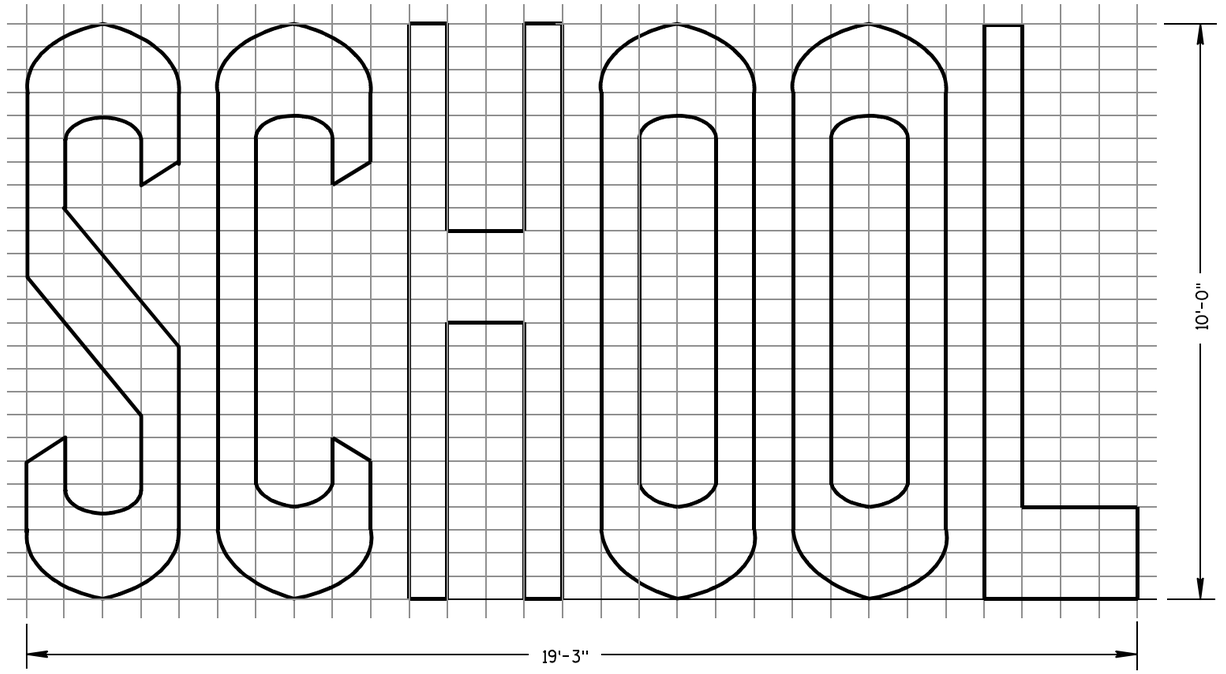
GENERAL NOTES

DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

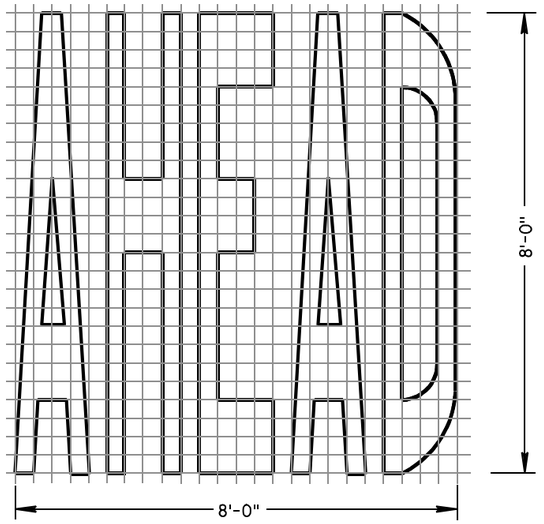
ALL LETTERS, ARROWS AND SYMBOLS SHALL BE IN CONFORMANCE WITH REQUIREMENTS INCLUDED IN "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKING" BOOK BY THE FEDERAL HIGHWAY ADMINISTRATION. ALL LETTERS, ARROWS AND SYMBOLS SHALL BE WHITE AND REFLECTORIZED. SMALL DIFFERENCES IN DIMENSIONS WITHIN THE TOLERANCES OF THAT BOOK ARE ACCEPTABLE.

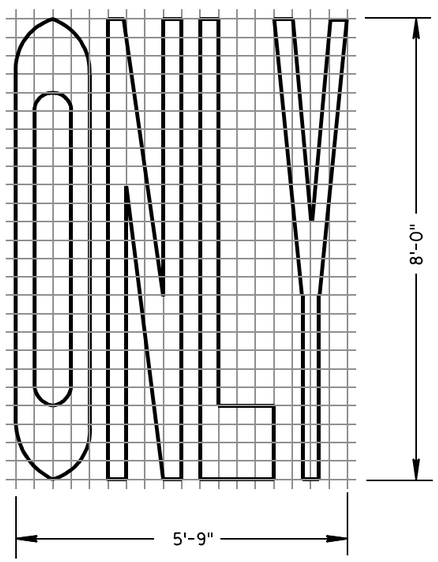


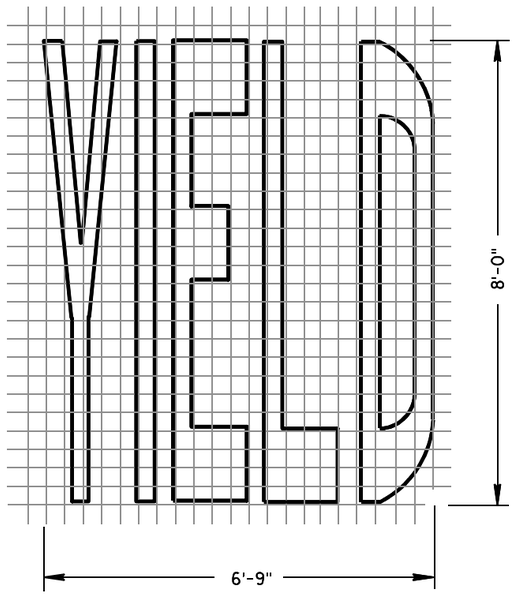


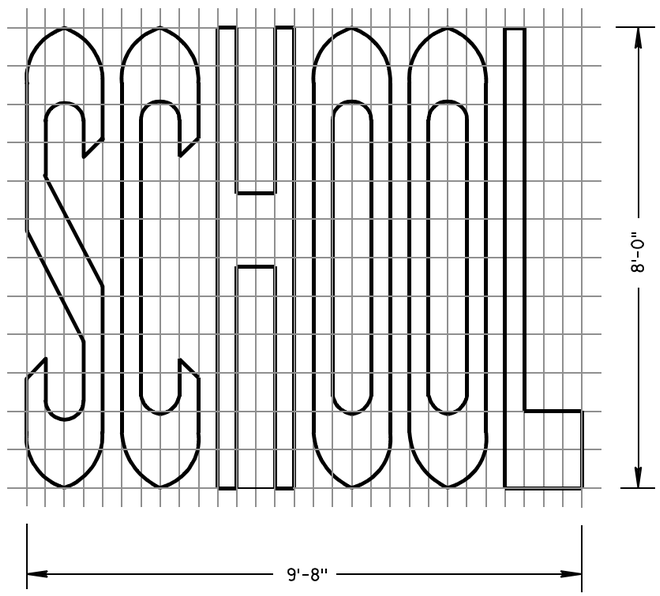


TWO-LANE









SINGLE-LANE

PAVEMENT MARKING WORDS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7-1-11 DATE — /S/ Thomas N. Nothohm STATE TRAFFIC ENGINEER — IGN

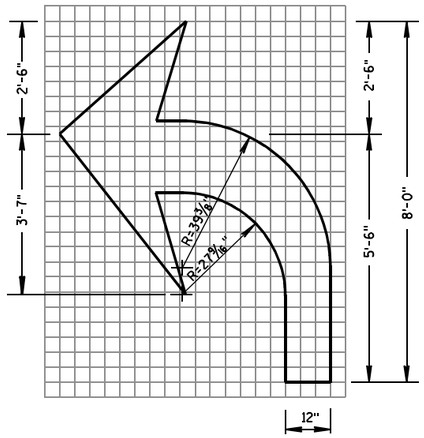
FHWA

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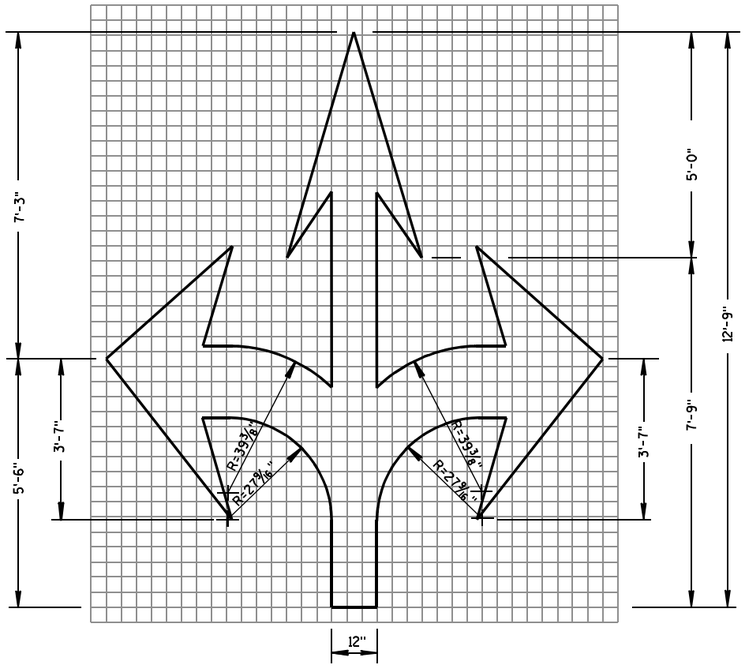
S.D.D. 15 C 7-12b

6

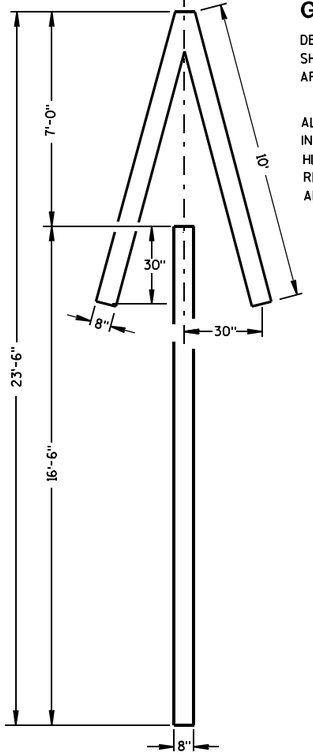
S.D.D. 15 C 7-12b



TYPE 2



TYPE 6

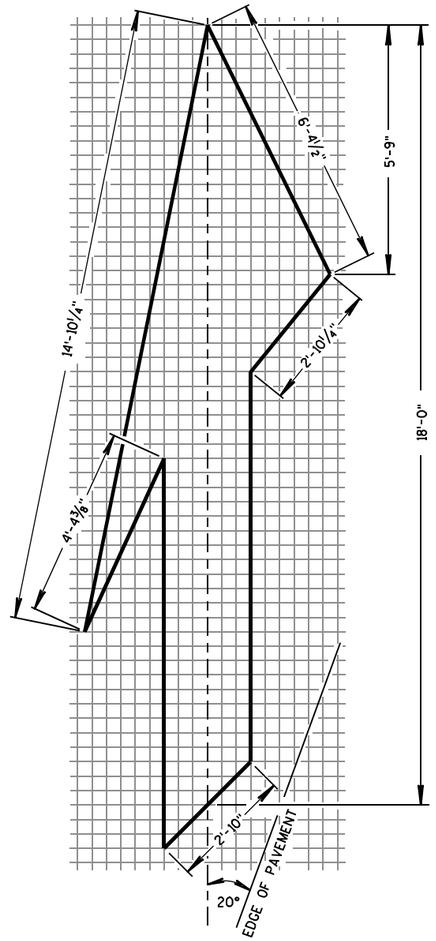


TYPE 4

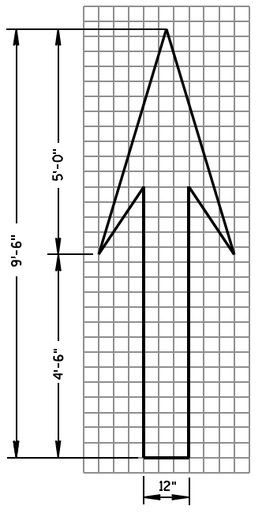
GENERAL NOTES

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.

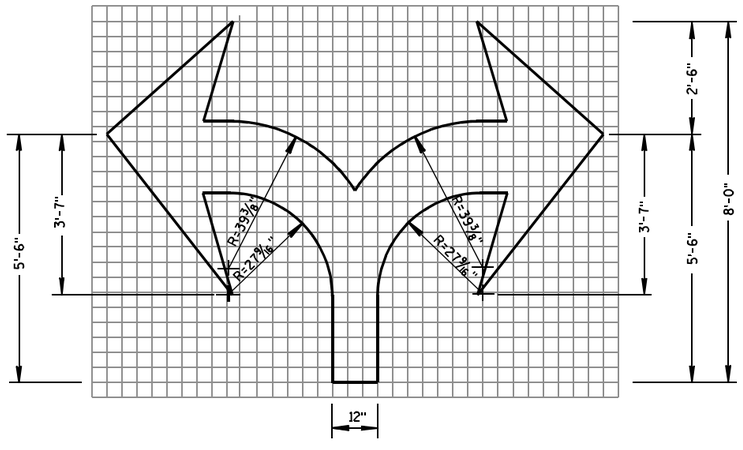
ALL LETTERS, ARROWS AND SYMBOLS SHALL BE IN CONFORMANCE WITH REQUIREMENTS INCLUDED IN "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKING" BOOK BY THE FEDERAL HIGHWAY ADMINISTRATION. ALL LETTERS, ARROWS AND SYMBOLS SHALL BE WHITE AND REFLECTORIZED. SMALL DIFFERENCES IN DIMENSIONS WITHIN THE TOLERANCES OF THAT BOOK ARE ACCEPTABLE.



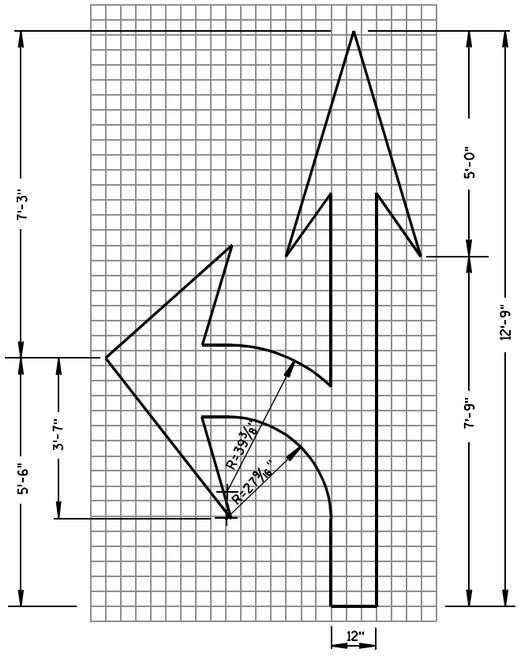
TYPE 5 LANE DROP ARROW



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

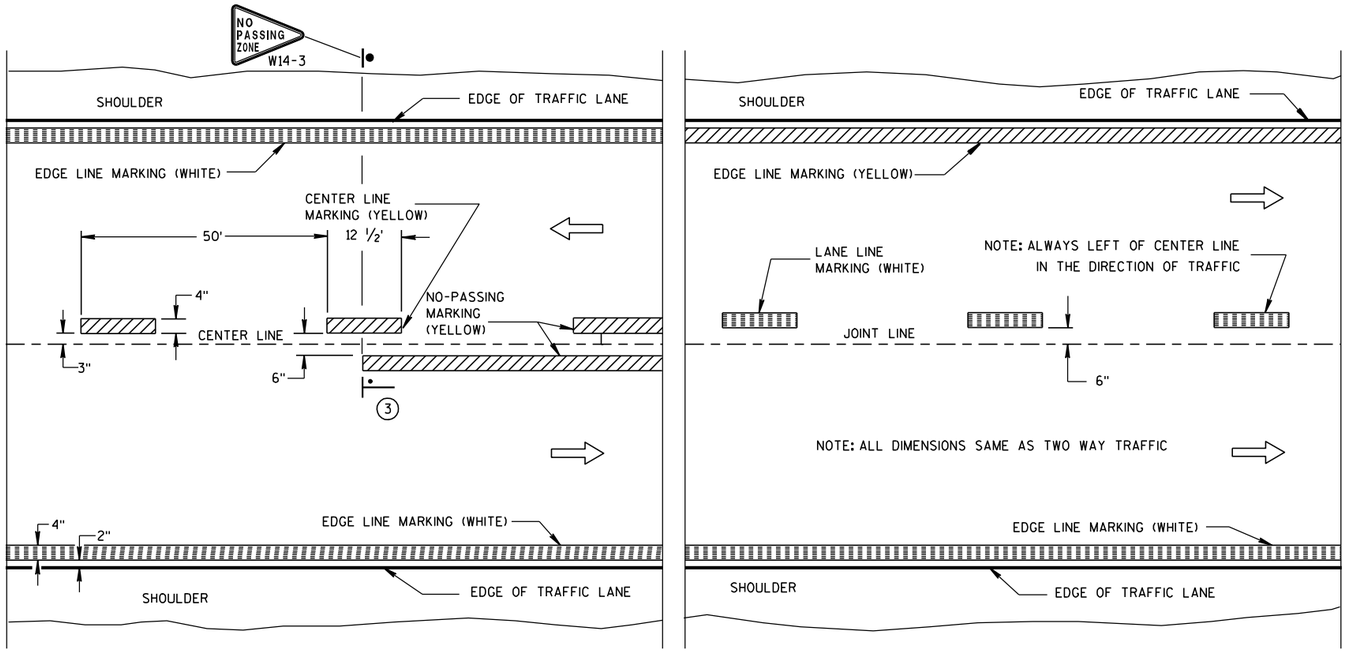
FHWA

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S.D.D. 15 C 7-12c

6

S.D.D. 15 C 7-12c



TWO WAY TRAFFIC

ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING

GENERAL NOTES

DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.

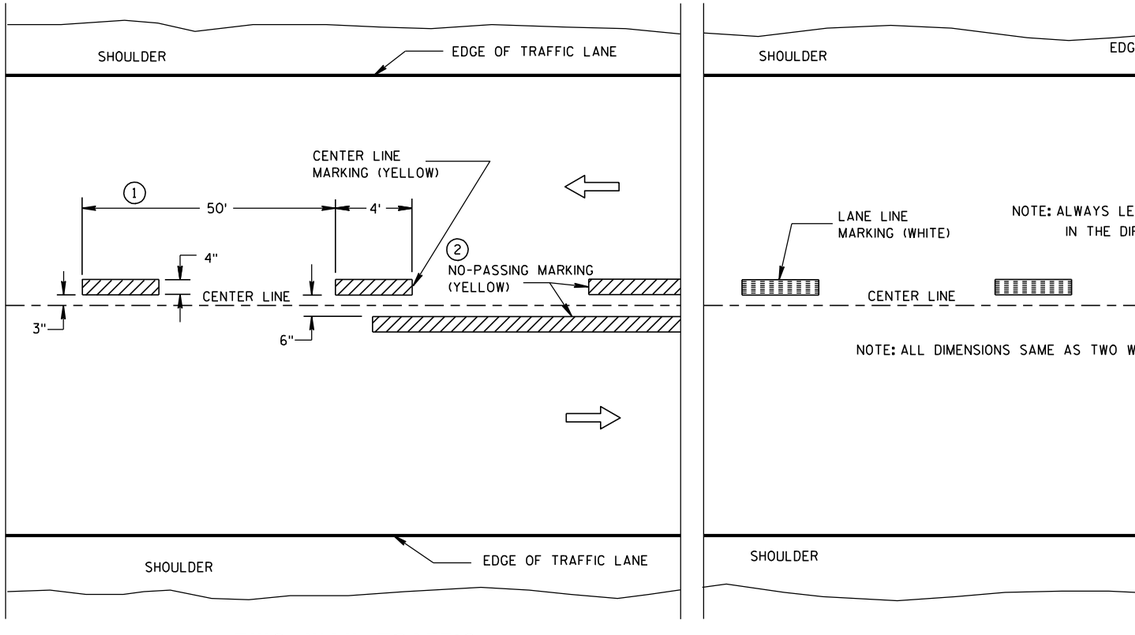
(1) HALF CYCLE LENGTHS (25'±) WITH 2' MINIMUM STRIPE LENGTHS SHALL BE PROVIDED ON ROADWAYS (INCLUDING TEMPORARY TRAVELED WAYS) WITH REVERSE CURVATURE, CURVATURE OF OVER 5 DEGREES OR WHEN DIRECTED BY THE ENGINEER TO MARK UNUSUAL ALIGNMENT OF THE TRAVELED WAY.

(2) NO PASSING ZONE TEMPORARY PAVEMENT MARKING IS REQUIRED TO BE PLACED, WHERE APPROPRIATE, ALONG WITH CENTERLINE TEMPORARY PAVEMENT MARKING WHEN A SAME DAY PERMANENT PAVEMENT MARKING ITEM IS INCLUDED IN THE CONTRACT.

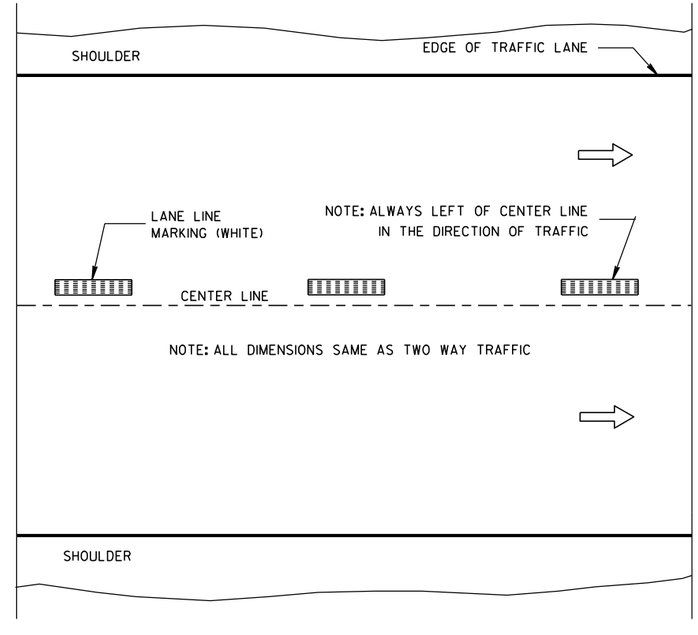
(3) NO PASSING ZONE MARKINGS ARE PLACED ACCORDING TO "T" MARKINGS. IF EXISTING NO PASSING ZONE W14-3 SIGNS ARE BEYOND 50 FEET IN EITHER DIRECTION, THE SIGNS SHALL BE MOVED TO THE "T" MARKINGS.

NOTE

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL



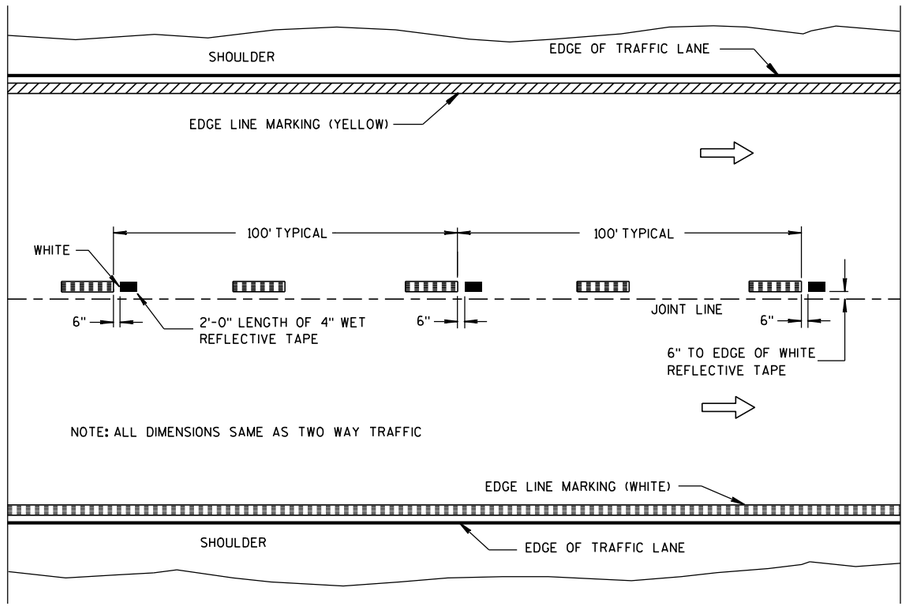
TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY (INTERMEDIATE) PAVEMENT MARKING

(SHOWS CYCLE FOR TEMPORARY CENTER LINE OR TEMPORARY LANE LINE MARKING)



WET REFLECTIVE TAPE SUPPLEMENT TO SPRAYED OR NON WET REFLECTIVE TAPE LANE LINE

LEGEND

"T" MARKING

POST MOUNTED SIGN

PAVEMENT MARKING (MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6-23-11 DATE
/S/ Thomas N. Notbohm
STATE TRAFFIC ENGINEER

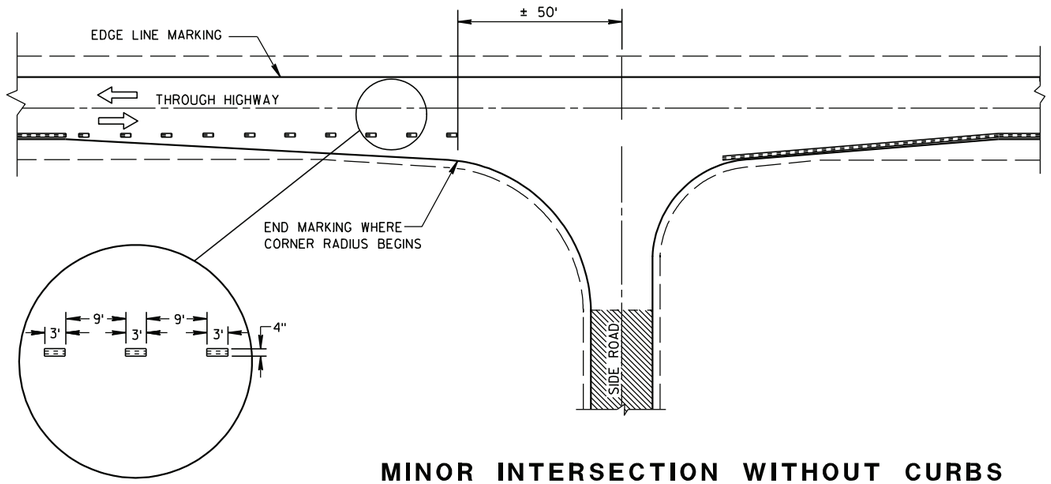
FHWA

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S.D.D. 15 C 8-14a

6

S.D.D. 15 C 8-14a



MINOR INTERSECTION WITHOUT CURBS

GENERAL NOTES

EDGE LINES SHALL BE OMITTED THROUGH INTERSECTIONS. EDGE LINES SHALL BE CONTINUED THROUGH DRIVEWAYS.

(1) WHEN DISTANCE "A" IS LESS THAN 250 FEET, OMIT LANE LINE.

(2) WHEN DISTANCE "B" IS LESS THAN 100 FEET, OMIT CHANNELIZING LANE LINE.

(3) ALTERNATIVE MARKING SHALL BE PROVIDED WHEN SPECIFIED IN THE CONTRACT. TYPICAL SITUATIONS WHERE THIS MARKING MAY BE REQUIRED ARE WHERE THE INTERSECTION IS ON A SHARP HORIZONTAL CURVE OR CREST VERTICAL CURVE IN AN UNLIGHTED AREA SUCH THAT THE EDGE LINE MAY BE MISLEADING TO THE MOTORIST OR DISAPPEAR FROM SIGHT.

(4) THE EDGE LINE IN THE TAPER AREAS OF THE BYPASS LANE AND THE BYPASS LANE SHALL BE LOCATED 1-FOOT FROM EDGE OF PAVEMENT TO THE OUTSIDE EDGE OF EDGE LINE.

(5) BARRIER LINE ENDS AT SIDE ROAD PAVEMENT/SURFACE EDGE EXTENSION.

(6) BARRIER LINE STARTS 500 FEET PRIOR TO THE BYPASS TAPER.

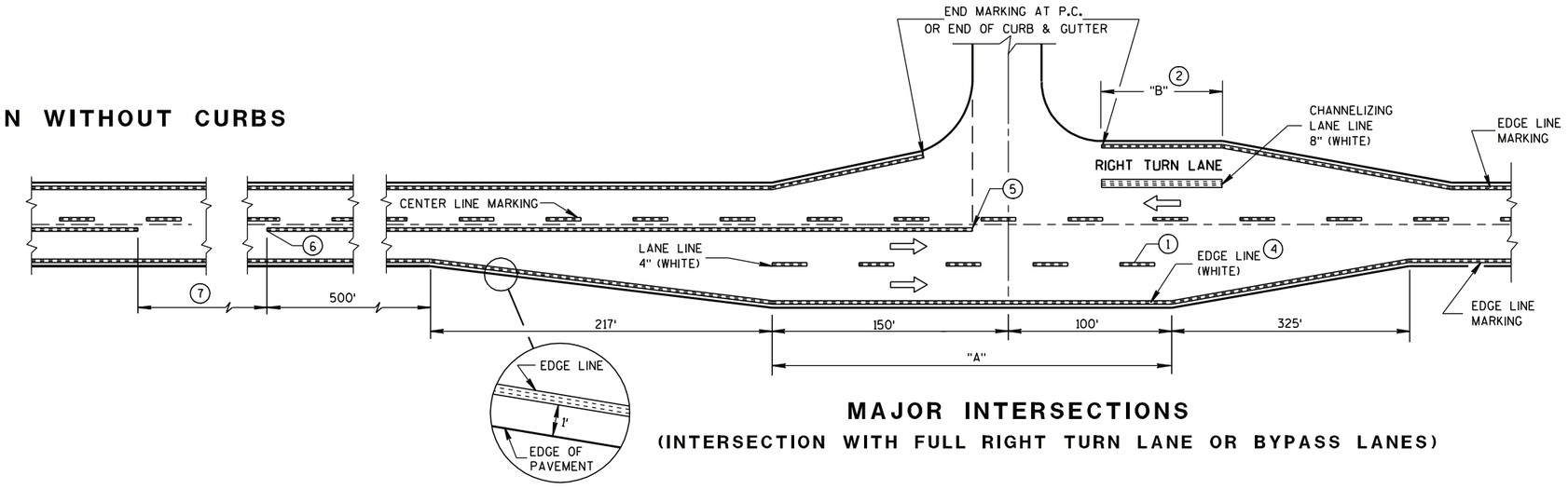
(7) IF THE DISTANCE BETWEEN 2 SUCCESSIVE NO-PASSING ZONES IS LESS THAN THE MINIMUM DISTANCE BETWEEN ZONES, CONNECT THE 2 ZONES.

(8) 3' LINE 9' GAP, EXCEPT RETRACE THE EXISTING LINE - GAP PATTERN WHERE EXISTING MARKINGS ARE IN PLACE.

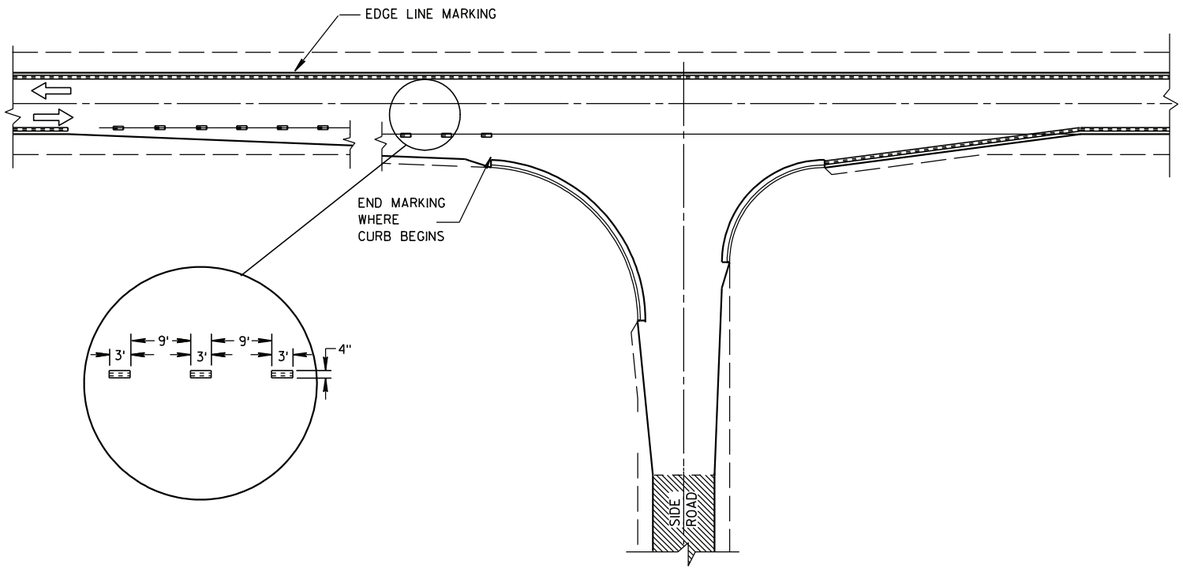
ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL

(7)

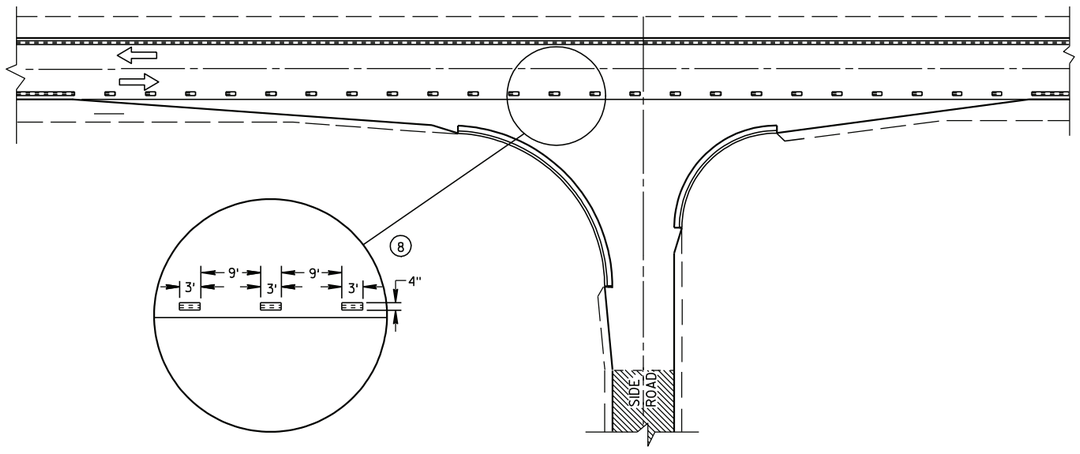
POSTED SPEED (MPH)	MINIMUM DISTANCE BETWEEN ZONES (FEET)
25 - 30	528
35 - 40	528
45 - 50	686
55	792



MAJOR INTERSECTIONS
(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANES)



MINOR INTERSECTION WITH CURBS
(TYPICAL MARKING)



MINOR INTERSECTION WITH CURBS
(3) (FOR SPECIAL CONDITIONS AS SPECIFIED)

PAVEMENT MARKING (INTERSECTIONS)

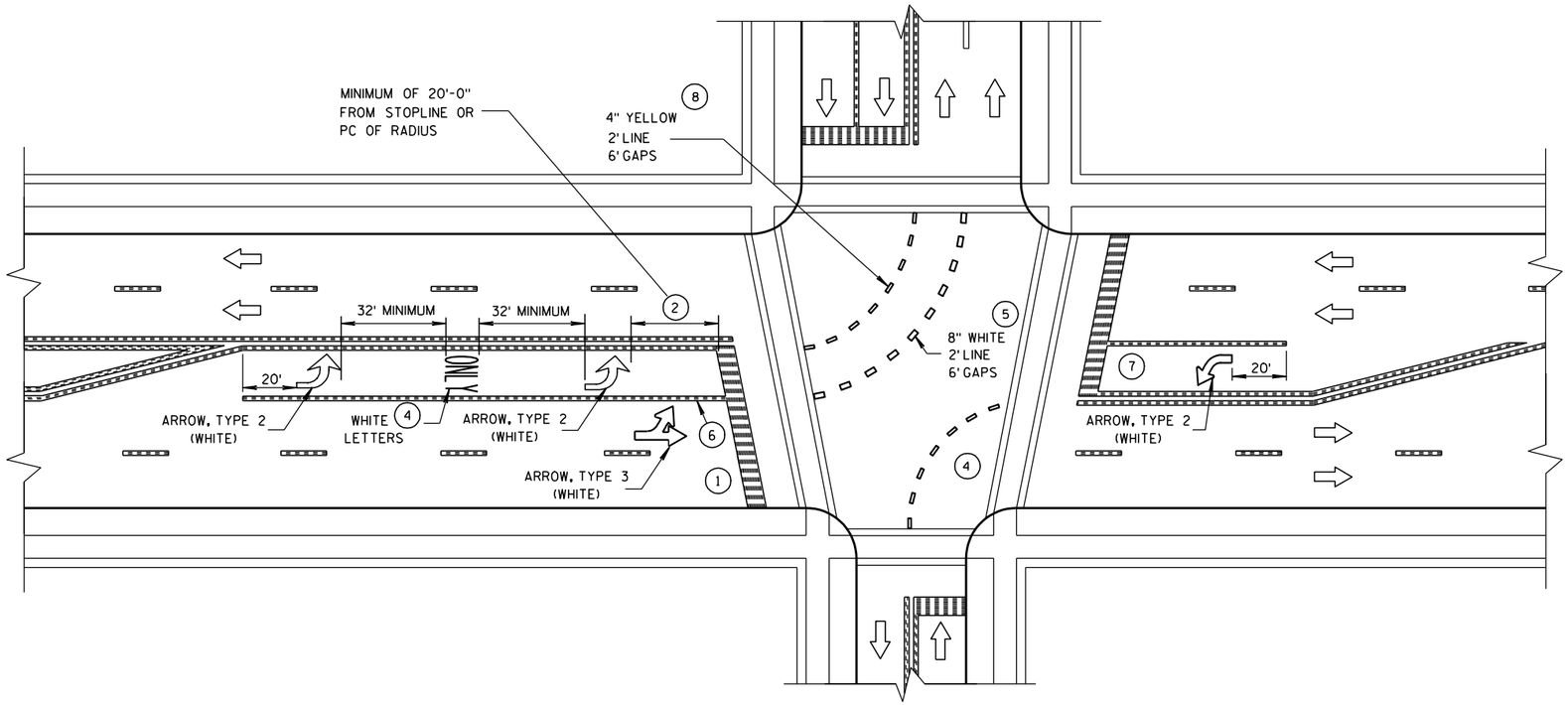
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

S.D.D. 15 C 8-14b

6

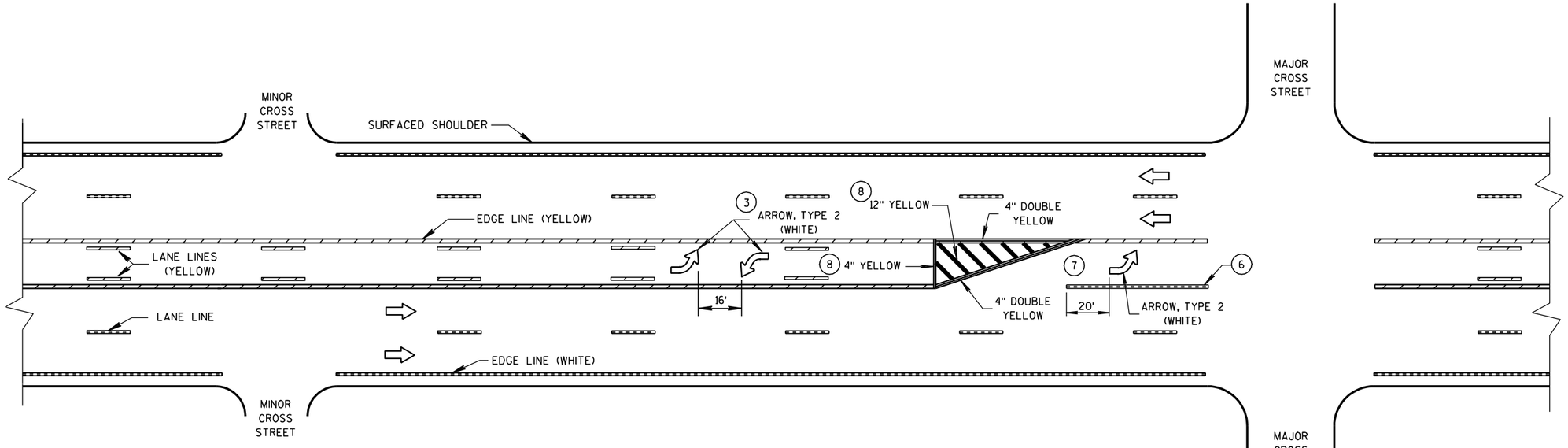
S.D.D. 15 C 8-14b



GENERAL NOTES

1. STOP BAR IS REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT.
2. DISTANCE MAY BE ADJUSTED TO ACCOMODATE SHORT LEFT TURN LANES. AS APPROVED BY THE ENGINEER.
3. A SET OF ARROWS IS REQUIRED EVERY 400' OR NEAR INTERSECTIONS OR DRIVEWAYS WITH TURNING TRAFFIC.
4. ADD EXTRA ARROW AND ONLY PER 160' OR WHEN ON A CURVE.
5. 8" WHITE WITH 2' LINE 6' GAPS FOR DUAL TURN LANE.
6. 8" WHITE
7. ADD SECOND ARROW WHEN TURN BAY IS GREATER THAN OR EQUAL TO 108'.
8. REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT.

NOTE:
ARROW SYMBOL (⇨)
SHOWS DIRECTION OF TRAVEL



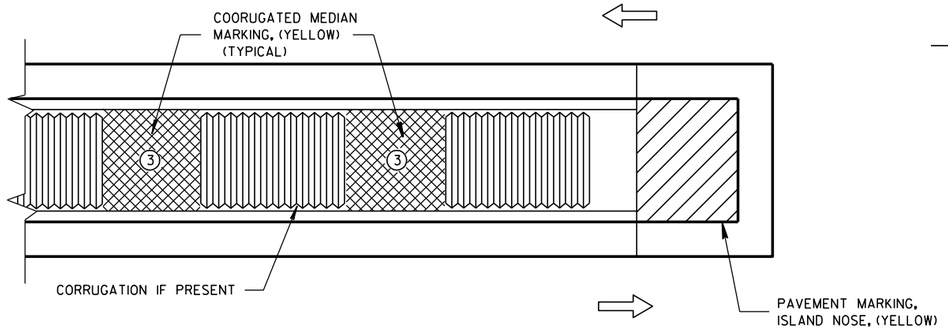
TWO WAY LEFT TURN LANE

PAVEMENT MARKING
(LEFT TURN LANE)

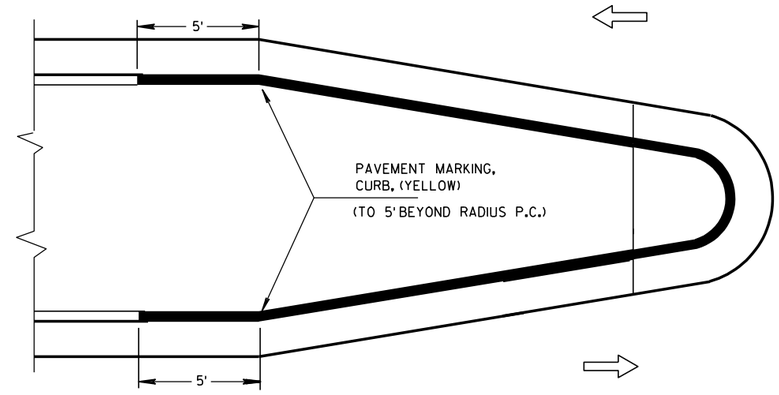
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

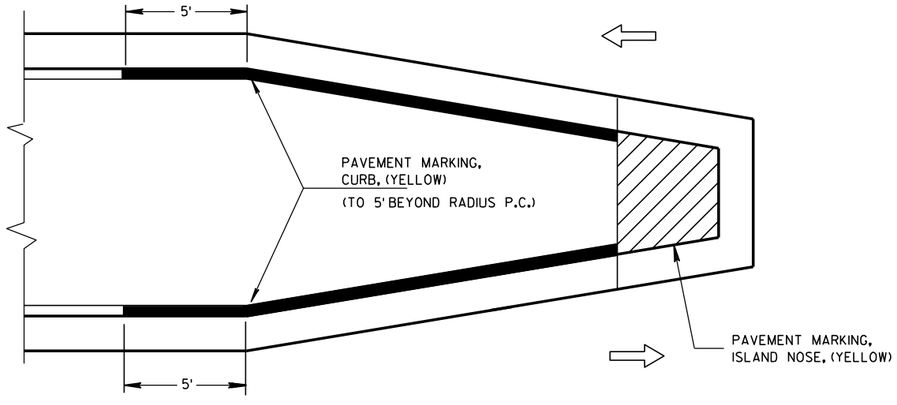
S.D.D. 15 C 8-14e



MEDIAN ISLAND WITH SQUARE BLUNT NOSE

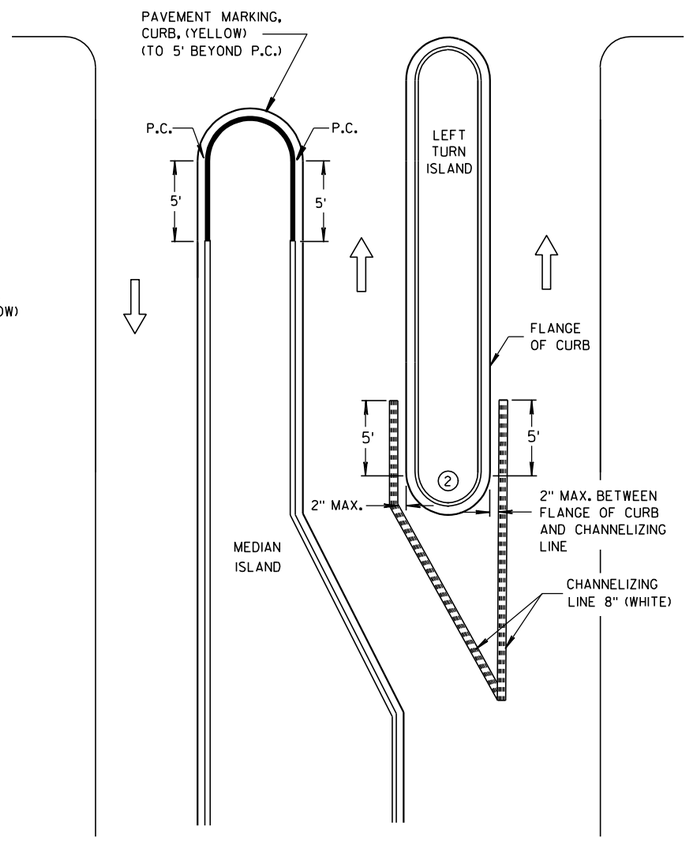


MEDIAN ISLAND WITH ROUND BLUNT NOSE



MEDIAN ISLAND WITH SLOPED NOSE

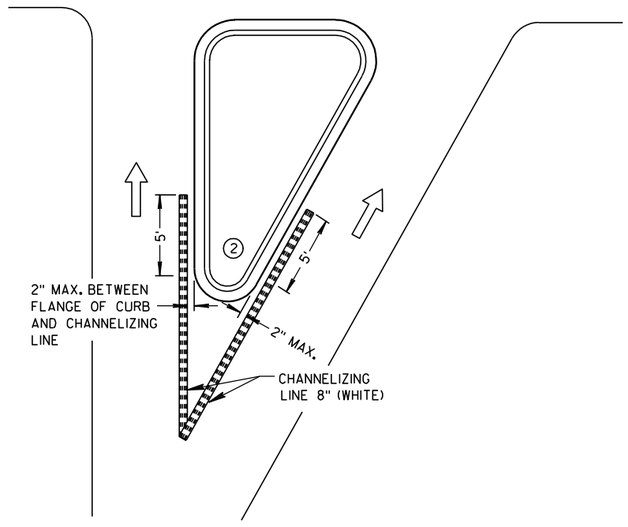
TYPICAL PLACEMENT OF PAVEMENT MARKING ON MEDIAN ISLANDS



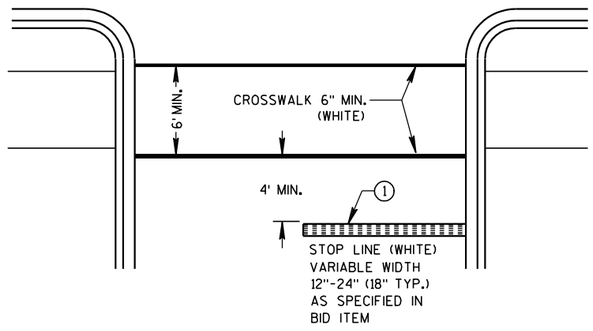
LEFT TURN & MEDIAN ISLAND

GENERAL NOTES

1. STOP LINE IS REQUIRED ONLY WHEN SPECIFIED IN THE CONTRACT.
2. DO NOT MARK CURB NOSES THAT SEPARATE LANES OF TRAFFIC TRAVELING IN THE SAME DIRECTION.
3. WHEN CONCRETE CORRUGATED MEDIAN IS CONSTRUCTED TO SEPARATE TRAFFIC OPERATING IN THE OPPOSING DIRECTION YELLOW PAVEMENT MARKING SHALL BE APPLIED TO THE FLAT PORTION OF THE CONCRETE CORRUGATED MEDIAN. THE ITEM OF PAVEMENT MARKING, CONCRETE CORRUGATED MEDIAN, WILL BE MEASURED IN PLACE AND AND ACCEPTED IN ACCORDANCE WITH THE CONTRACT AND PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE FOOT.



RIGHT TURN ISLAND



STOP LINE AND CROSSWALK

LEGEND

- ISLAND NOSE MARKING
- CURB MAKING
- CORRUGATED MEDIAN MARKING
- DIRECTION OF TRAVEL

PAVEMENT MARKING (ISLANDS, STOP LINE & CROSS WALK)

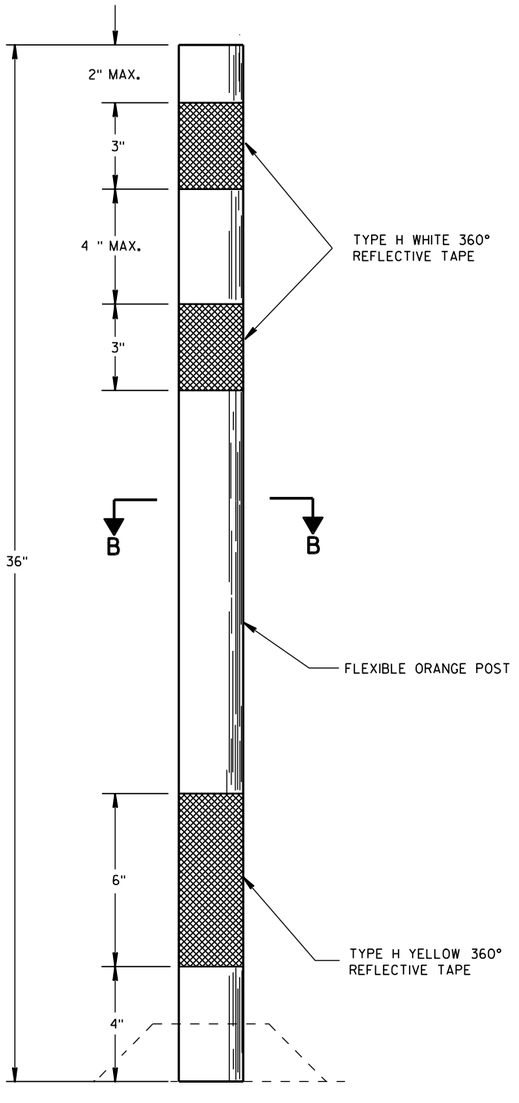
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

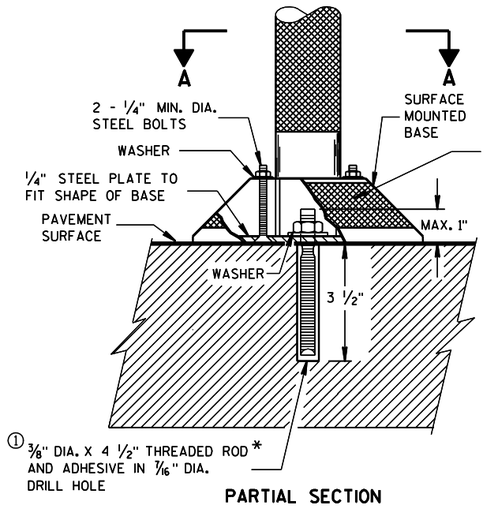
S.D.D. 15 C 8-14f

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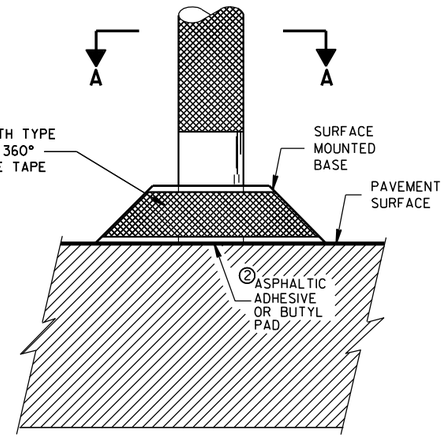
S.D.D. 15 C 8-14f



FLEXIBLE TUBULAR MARKER POST



PARTIAL SECTION TO SHOW BOLTS



POST BASES ON NEW OR EXISTING PAVEMENT

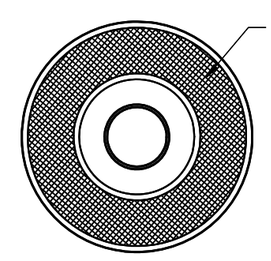
GENERAL NOTES

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.

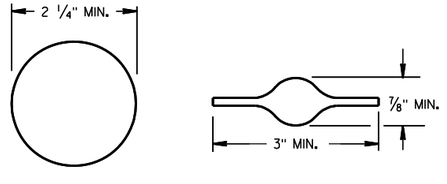
① THREADED ROD SHALL BE MACHINED DOWN TO 0.280 INCH DIA. 1 1/4 INCHES FROM THE TOP.

② THE ASPHALTIC ADHESIVE OR BUTYL PAD FURNISHED SHALL BE IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.



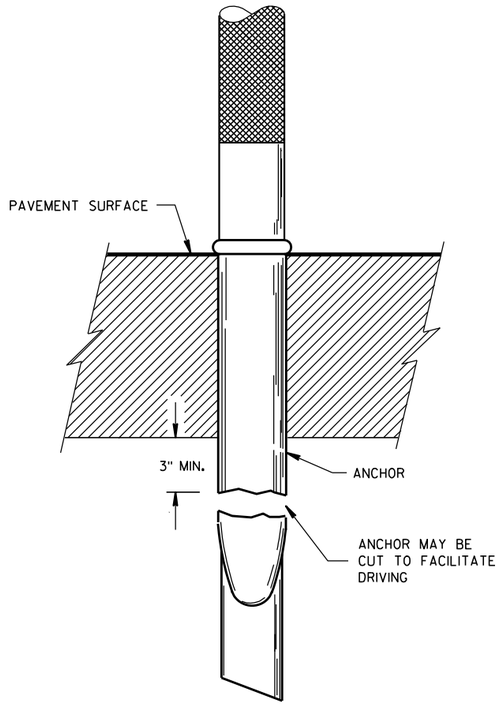
SECTION A-A

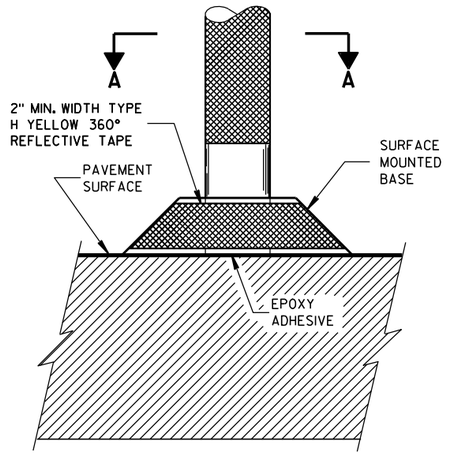
SURFACE MOUNTED BASE



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

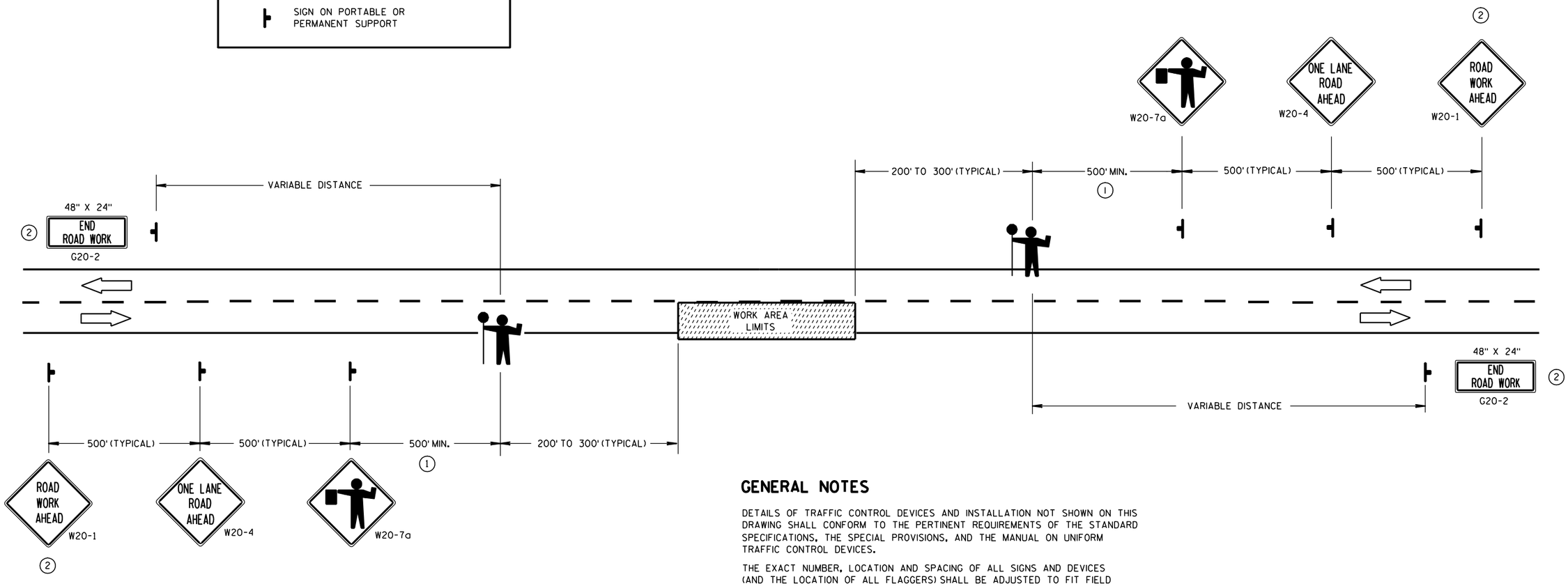
FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF

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

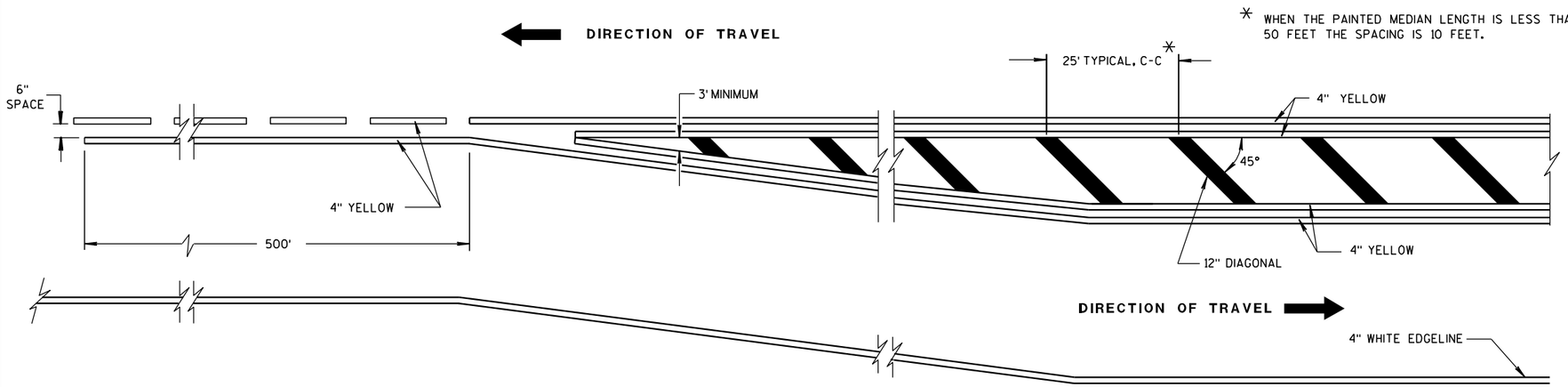
FHWA

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S.D.D. 15 C 12-3

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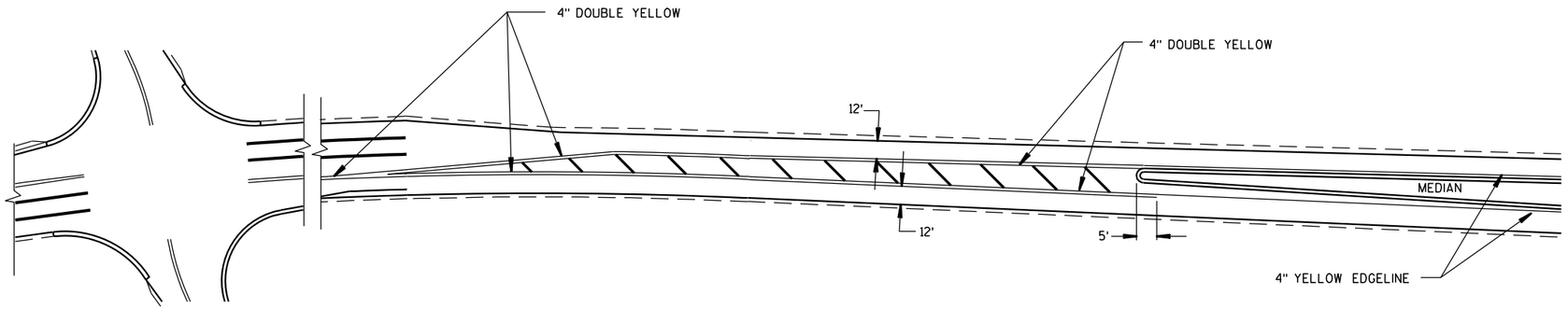
S.D.D. 15 C 12-3



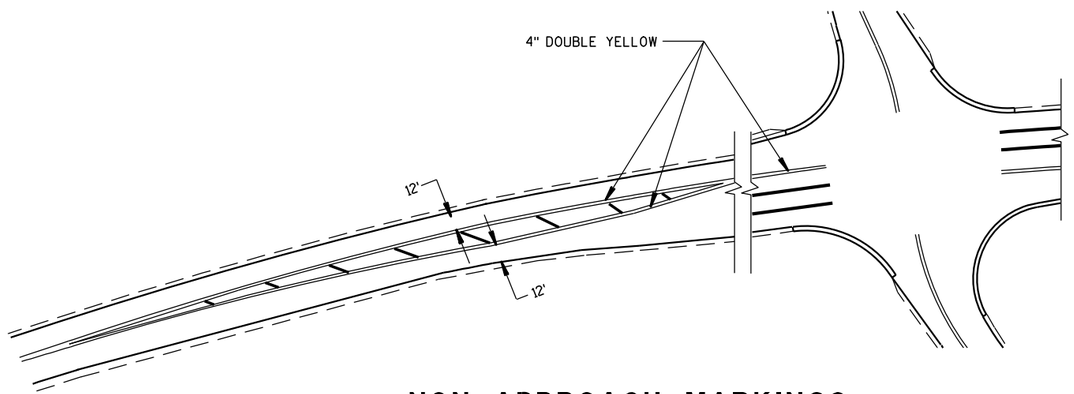
MEDIAN ISLAND DETAIL

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

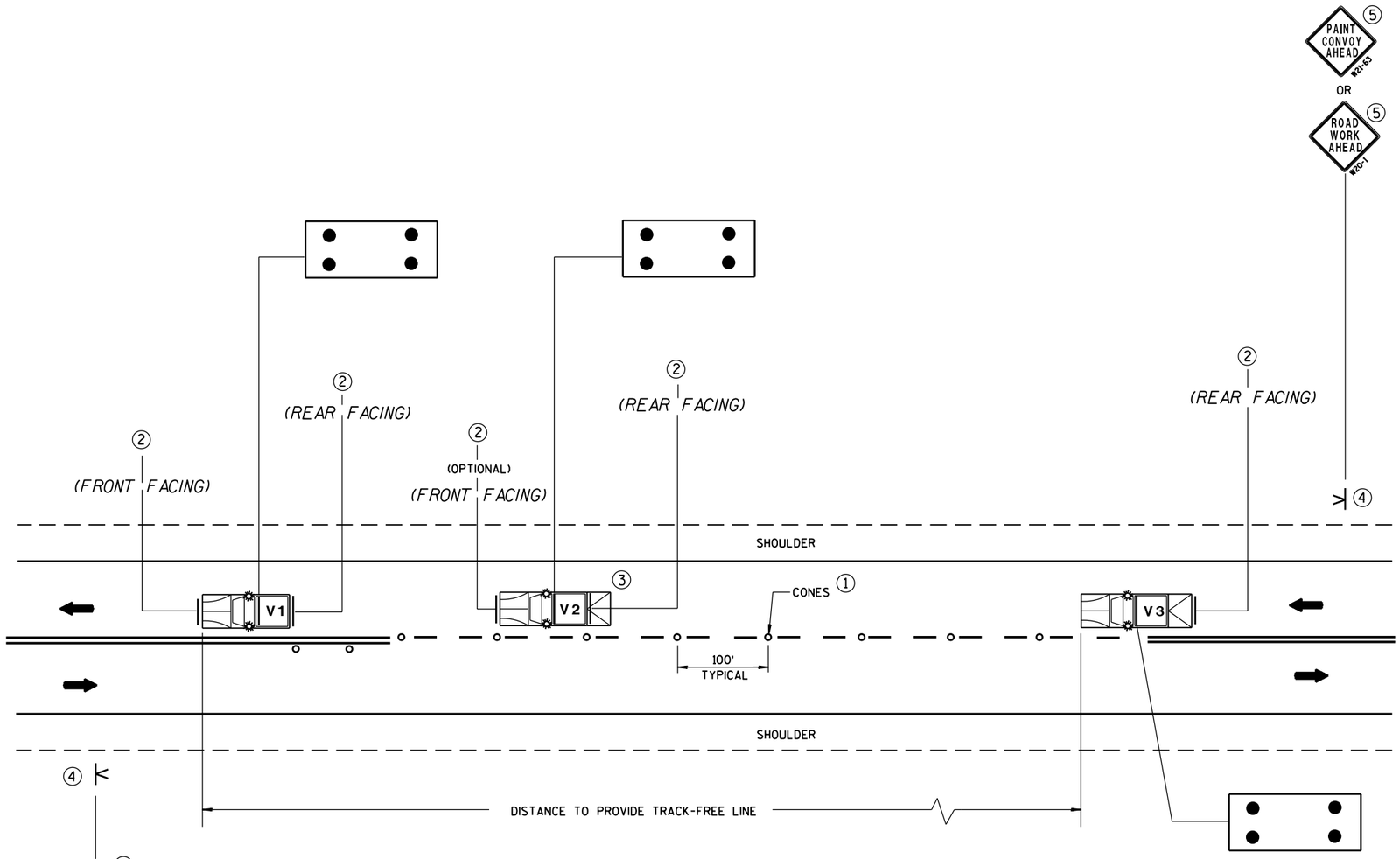
MEDIAN ISLAND MARKING	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 2-5-09 DATE	/S/ Thomas N. Nothohm STATE TRAFFIC ENGINEER 177 IGN
FHWA	

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S.D.D. 15 C 18-3

6

S.D.D. 15 C 18-3



MOVING PAVEMENT MARKING OPERATIONS
TWO-LANE TWO-WAY ROADWAY

GENERAL NOTES

ALL VEHICLES SHALL BE EQUIPPED WITH TWO 360 DEGREE HIGH INTENSITY YELLOW FLASHING LIGHTS OR STROBE LIGHTS AND OPERATED WITH HEADLIGHTS TURNED ON.

VEHICLES SHALL BE EQUIPPED WITH REAR FACING TYPE B OR C FLASHING ARROW PANEL OPERATING IN CAUTION MODE. SIGNS PLACED ON VEHICLES MUST NOT OBSCURE THE ARROW PANEL.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE SPECIFIED.

IF SPEED LIMIT IS 40 MPH OR LESS STATIONARY SIGNS MAY BE OMITTED IF CONES ARE USED.

ALTERNATE SIGN MESSAGES, SUCH AS "PAINT CREW AHEAD" OR "ROAD PAINTING AHEAD" MAY BE USED.

DISTANCE BETWEEN VEHICLES MAY VARY ACCORDING TO TERRAIN, SIGHT DISTANCE, PAINT DRYING TIME, AND OTHER FACTORS. WHENEVER ADEQUATE STOPPING SIGHT DISTANCE EXISTS TO THE REAR, SHADOW VEHICLES SHOULD MAINTAIN THE MINIMUM DISTANCE FROM THE WORK VEHICLE AND PROCEED AT THE SAME SPEED AS THE WORK VEHICLE. SHADOW VEHICLES SHOULD SLOW DOWN IN ADVANCE OF VERTICAL OR HORIZONTAL CURVES THAT RESTRICT SIGHT DISTANCE.

THE WORK AND SHADOW VEHICLES SHOULD PULL OVER PERIODICALLY TO ALLOW TRAFFIC TO PASS.

THIS DRAWING SHALL BE USED FOR CENTERLINE OR EDGELINE MARKING.

WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR TURN THE STATIONARY WARNING SIGNS AWAY FROM TRAFFIC.

(1) CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.

(2) USE STANDARD SIGN W21-64 WITH APPROPRIATE ARROW.

WET PAINT W21-64 OR WET PAINT W21-64

(3) OPTIONAL TRUCK-MOUNTED ATTENUATOR.

(4) SIGNS SHALL BE REPEATED APPROXIMATELY EVERY THREE MILES.

(5) IF CONSTRUCTION WORK ZONE SIGNS ARE IN PLACE, W20-1 OR W21-63 ARE NOT REQUIRED.

LEGEND

V1	LEAD VEHICLE
V2	SHADOW VEHICLE
V3	TRAIL VEHICLE WITH TMA
TMA	TRUCK-MOUNTED ATTENUATOR
	SIGN ON PORTABLE SUPPORT
	DIRECTION OF TRAVEL
	CONES
	FLASHING ARROW PANEL (CAUTION)

MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION
APPROVED 12/6/2011 DATE /S/ Thomas N. Notbohm STATE TRAFFIC ENGINEER SIGN
FHWA

6

S.D.D. 15 C 19-1a

6

S.D.D. 15 C 19-1a

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.

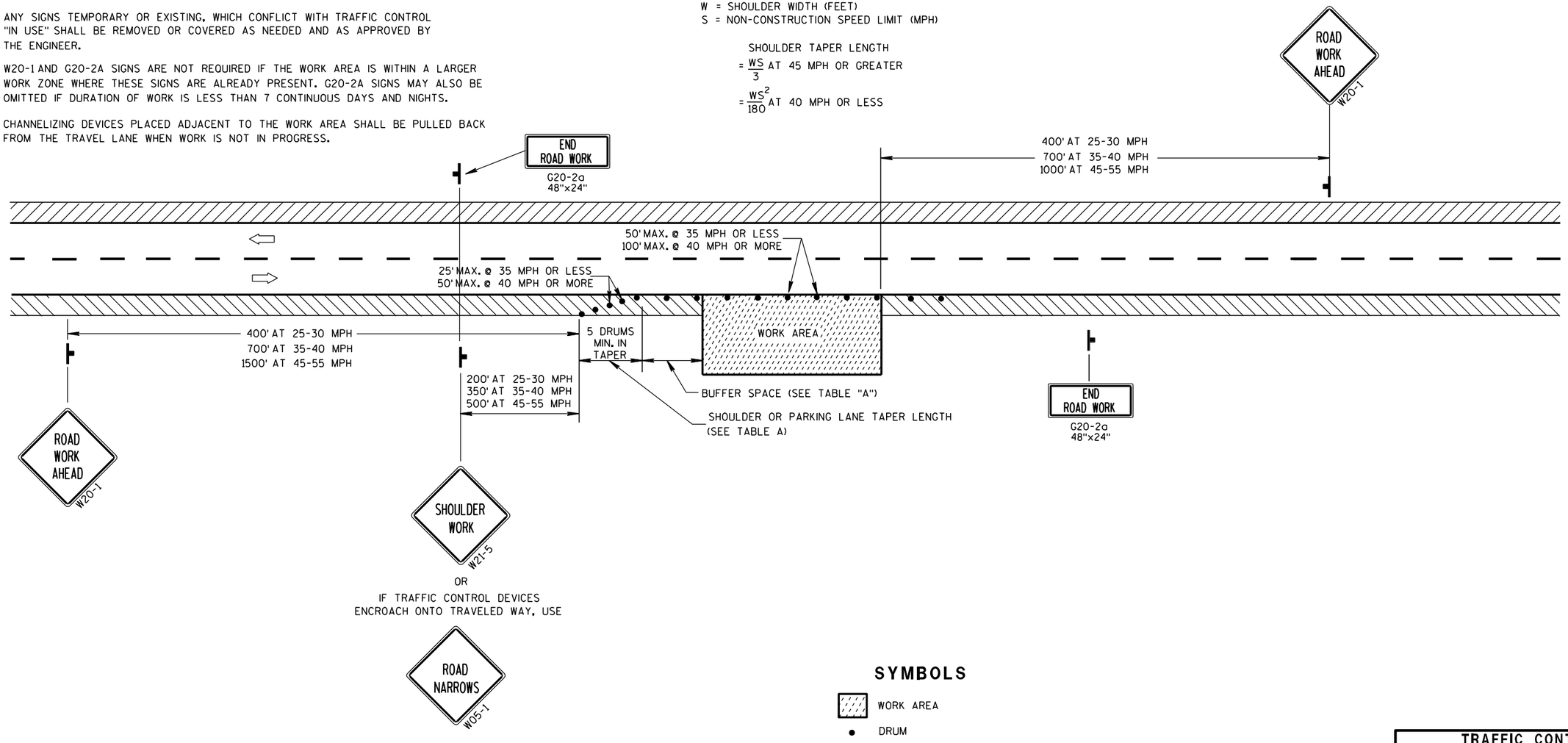
CHANNELIZING DEVICES PLACED ADJACENT TO THE WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

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

6

S.D.D. 15 D 28-1

S	BUFFER SPACE (DESIRABLE)
25	55'
30	85'
35	120'
40	170'
45	220'
50	280'
55	335'

S = NON-CONSTRUCTION SPEED LIMIT (MPH)

END ROAD WORK
G20-2A
48"x24"

NO PASSING ZONE
W14-3
48"x36"

BEGIN TEMPORARY PAVEMENT MARKING, 4-INCH SOLID YELLOW CENTERLINE ✳✳

1000'
500'
200'
500'
50'
50'
25' TYP.

W01-6
48"x24"
✳✳✳

R11-2
48"x30"
ROAD CLOSED
TYPE III BARRICADE

FOR BRIDGE OR CULVERT REPLACEMENTS SUBSTITUTE
BRIDGE OUT
R11-2 (MOD)
48"x30"

ROAD CLOSURE OR BRIDGE/CULVERT REPLACEMENT

BUFFER SPACE (SEE TABLE)

WORK AREA

TEMPORARY STEEL PLATE BEAM GUARD AND END TREATMENT WHEN INCLUDED IN THE CONTRACT. FOR LAYOUT, SEE DETAILS ELSEWHERE IN THE PLAN.

W5-52L
12"x36"

W5-52R
12"x36"

W01-4L
W01-3L
W013-1
XX M.P.H.
24"x24"
OR

ROAD WORK 1000 FT
W20-1

ROAD WORK AHEAD
W20-1

END TEMPORARY PAVEMENT MARKING, 4-INCH SOLID YELLOW CENTERLINE ✳✳

END TEMPORARY PAVEMENT MARKING, 4-INCH WHITE EDGELINE

TEMPORARY PAVEMENT MARKING, 4-INCH WHITE EDGELINES. (USE REMOVABLE TAPE WHERE TEMPORARY MARKING CROSSES PERMANENT PAVEMENT)

TEMPORARY PAVEMENT MARKING, 4-INCH DOUBLE YELLOW CENTERLINE AND 2-WAY YELLOW RAISED PAVEMENT MARKERS AT 25' SPACING. (USE REMOVABLE TAPE WHERE TEMPORARY MARKING CROSSES PERMANENT PAVEMENT)

BEGIN TEMPORARY PAVEMENT MARKING, 4-INCH WHITE EDGELINE

W01-4R
W01-3R
W013-1
XX M.P.H.
24"x24"
OR

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.

"WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED.

EQUIPMENT, VEHICLES, OR MATERIAL SHOULD NOT BE STORED IN BUFFER SPACE.

✳ INDICATE THE ADVISORY SPEED PLATE LEGEND IN THE MISCELLANEOUS QUANTITIES. IF ADVISORY SPEED IS GREATER THAN 30 MPH, USE THE W01-4 SIGN. IF ADVISORY SPEED IS 30 MPH OR LESS, USE THE W01-3 SIGN.

✳✳ WHEN THE DISTANCE TO/FROM THE NEXT CLOSEST NO-PASSING ZONE IS LESS THAN THE MINIMUM DISTANCE BETWEEN ZONES AS INDICATED IN THE SPECIFICATIONS, THE TWO ZONES SHALL BE CONNECTED.

✳✳✳ OMIT THESE W01-6 SIGNS IF THE ADVISORY SPEED OF THE CURVE IS GREATER THAN 30 MPH.

LEGEND

- POST MOUNTED SIGN
- DRUM WITH WARNING LIGHT, TYPE C (STEADY-BURN)
- DRUM
- TYPE III BARRICADE (8' EQUIVALENT) WITHOUT / WITH SIGN
- (A) WARNING LIGHT, TYPE A (LOW-INTENSITY FLASHING)
- TEMPORARY DELINEATOR, CRYSTAL (WHITE) (SINGLE DELINEATOR)
- TEMPORARY RAISED PAVEMENT MARKERS (TWO-WAY YELLOW)
- XXX REMOVE PAVEMENT MARKING
- DIRECTION OF TRAFFIC FLOW
- TEMPORARY STEEL PLATE BEAM GUARD AND END TREATMENT

TRAFFIC CONTROL, TEMPORARY BYPASS ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

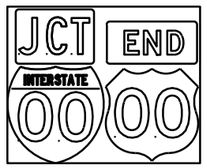
APPROVED
5/23/2000
DATE
/S/ Chester J. [illegible]
CHIEF SIGNS AND MARKINGS ENGINEER
FHWA

6
S.D.D. 15 D 31-1

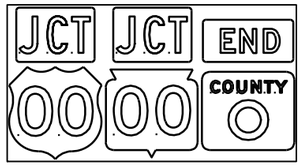
TYPICAL ASSEMBLIES



J1-1



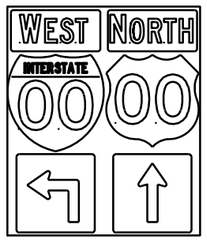
J1-2



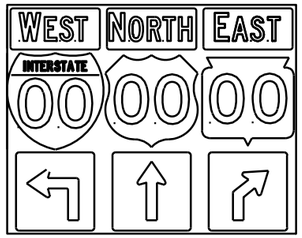
J1-3



J2-1



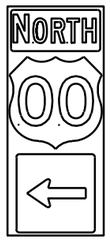
J2-2



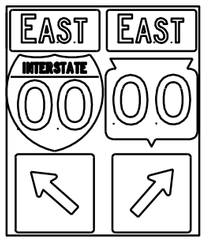
J2-3



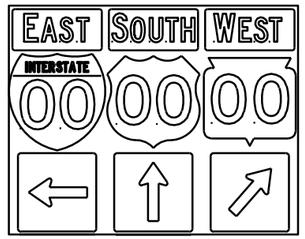
JV



J3-1



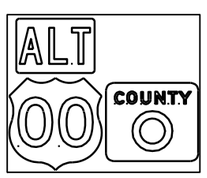
J3-2



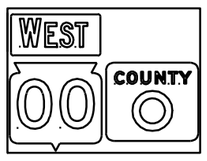
J3-3



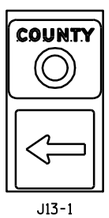
J4-1



J4-2



J4-2



J13-1



J12-1



J32-1



J33-1



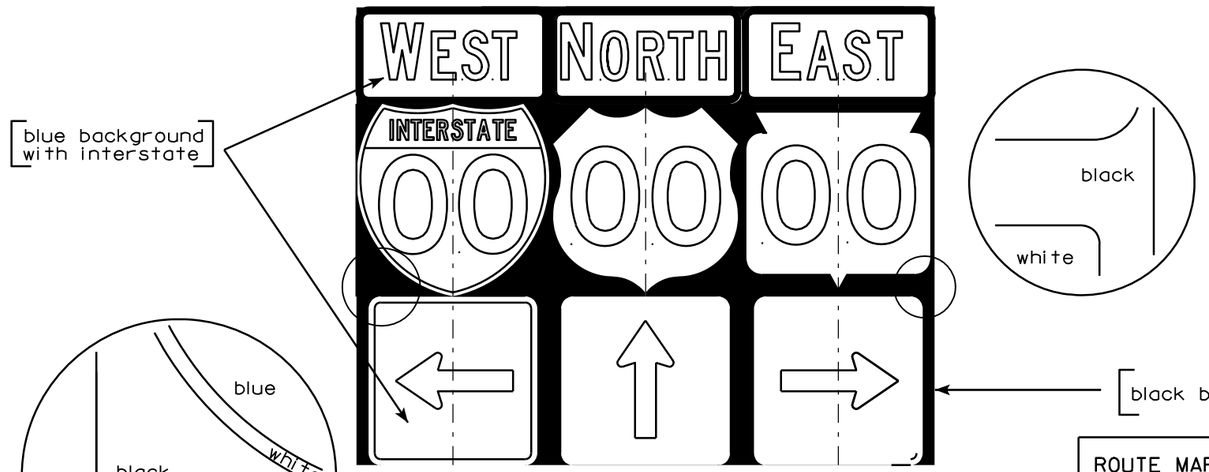
J23-1



J22-1

NOTES

1. Signs are Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Black Non-reflective
   Message - see Note 5
3. Message Series - See Note 5
4. Corners shall be square since base material is plywood.
5. The colors and message spacing on each marker shall be according to the applicable route marker panel specifications.
6. Certain marker heads require the component pieces to be the same color. As an example, all the components used with an M1-1 Interstate marker shall be blue.
7. Single panel j-assemblies shall only be used with route marker shields that are same size. If the route marker shields are different size use multiple piece component.
8. Route assemblies that have 24 inch route shields and have dimensions greater than 48 inches (both vertical and horizontal) shall have one horizontal splice between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 inches or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.
9. Route assemblies that have 36 inch shields and have dimensions greater than 48 inchs (both vertical and horizontal) shall have two horizontal splices. One horizontal splice shall be between the cardinal direction and route shields and the other horizontal splice shall be between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.



ROUTE MARKERS & COMPONENTS IN TYPICAL ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/21/09 PLATE NO. A2-1S.6

7

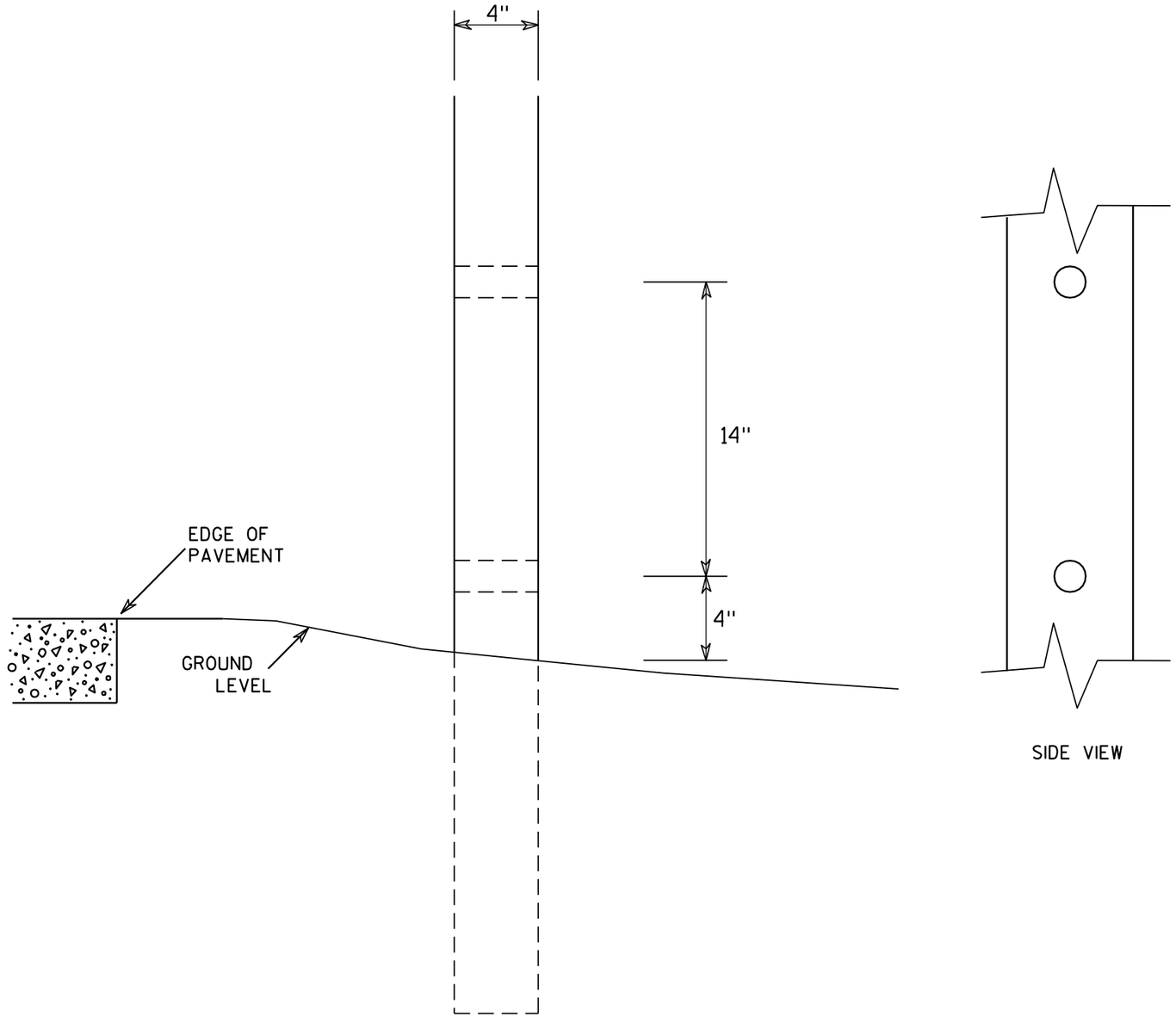
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PROJECT NO:

SHEET NO: 181 E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\A21S.DGN PLOT DATE : 21-OCT-2009 09:27 PLOT BY : ditjph PLOT NAME :

WISDOT/CADDS SHEET 42



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.

7

7

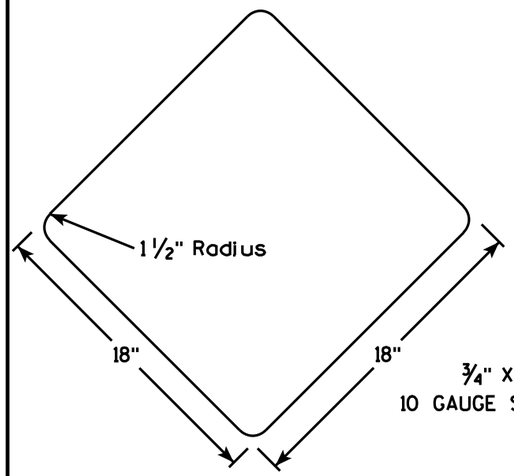
4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

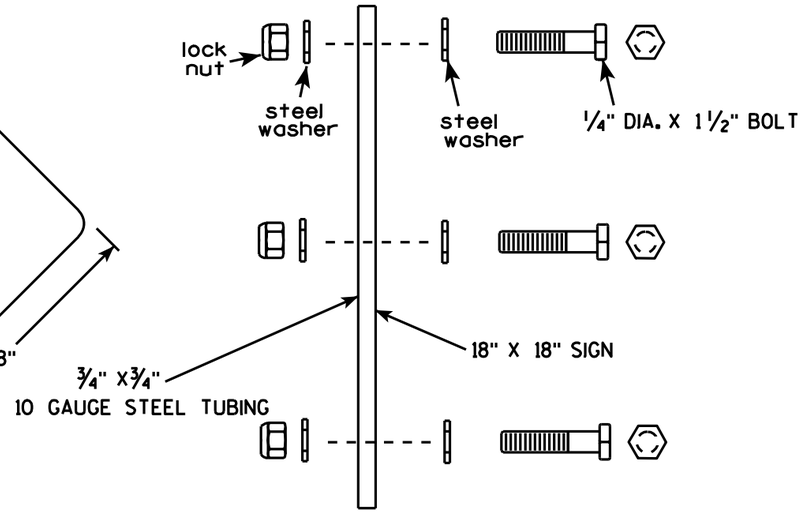
APPROVED Chester J Spang for State Traffic Engineer

DATE 3/27/97 PLATE NO. A4-11.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 182	E



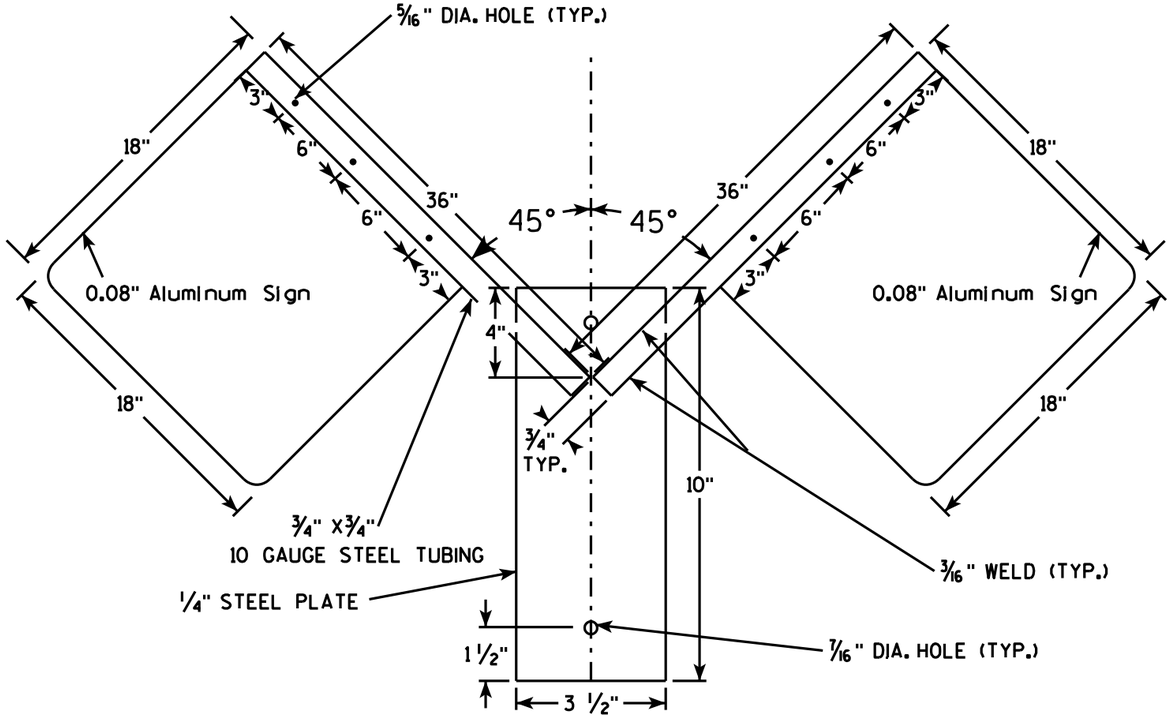
SIGN DETAIL



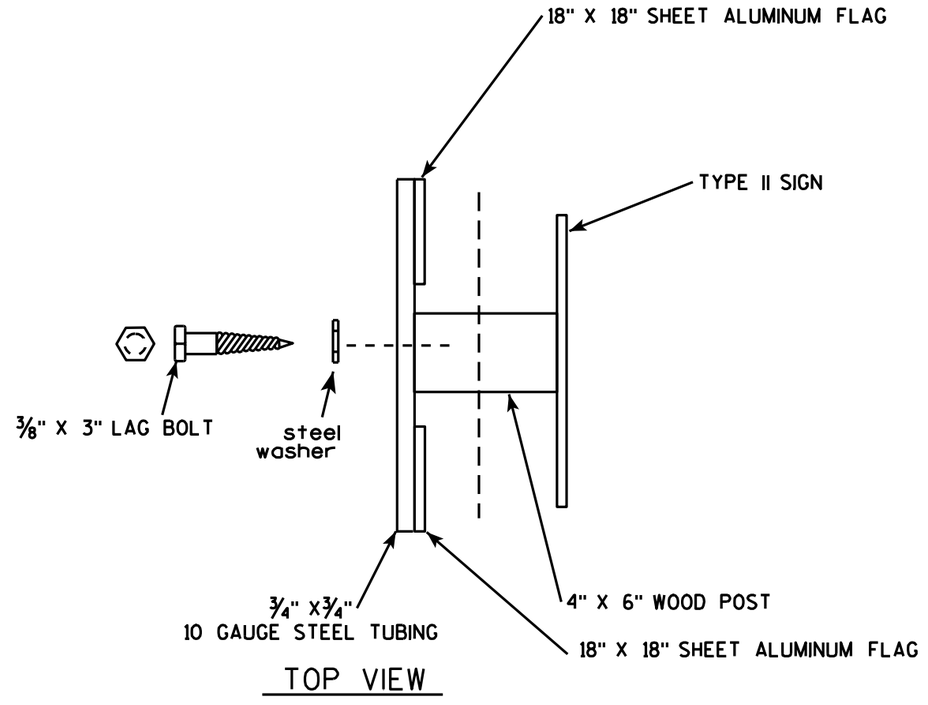
FLAG BOLTING PROCEDURE

GENERAL NOTES

1. ALL MATERIAL TO BE APPROVED BY ENGINEER BEFORE INSTALLATION.
2. SEE SIGN PLATE A4-8 FOR HARDWARE REQUIREMENTS.
3. SIGN IS TYPE II, TYPE F REFLECTIVE- REFERENCE WisDOT STANDARD. SPECIFICATION FOR HIGHWAY AND STRUCTURE CONSTRUCTION LATEST EDITION.
4. SIGN COLOR - ORANGE
5. SIGN CORNERS SHALL BE ROUNDED
6. BRACKET SHALL BE ENTIRELY PRIMED AND PAINTED WITH TWO COATS OF A BLACK POWDER COATED ENAMEL PAINT.



BACK VIEW



TOP VIEW

TYPICAL INSTALLATION OF PERMANENT TYPE II SIGN FLAGS

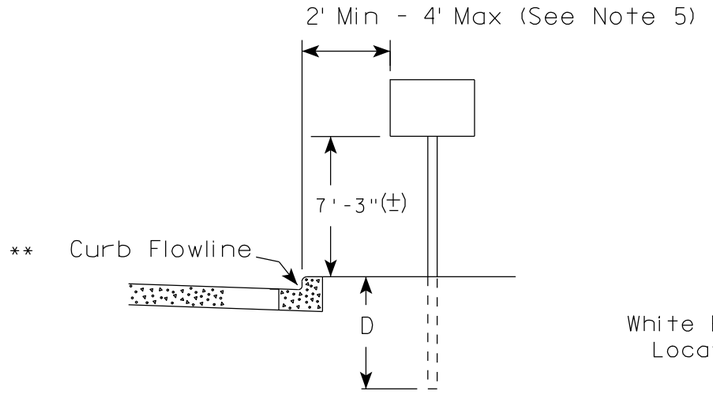
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

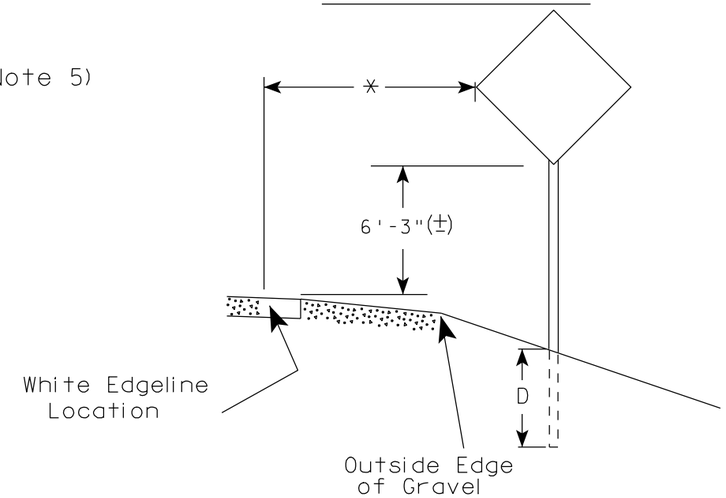
DATE 8/15/2012 PLATE NO. A4-15.2

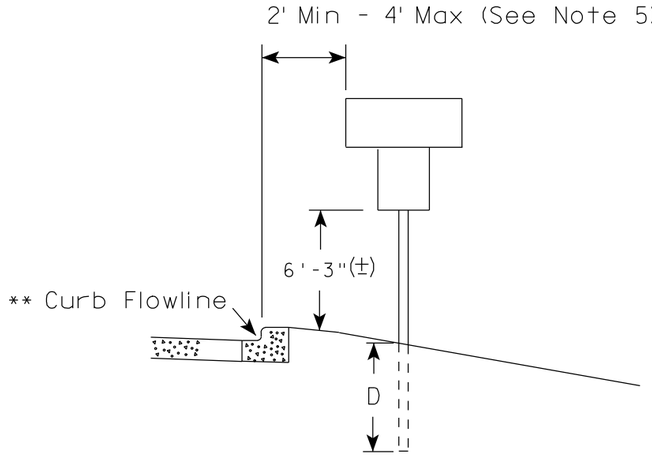
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 183	E

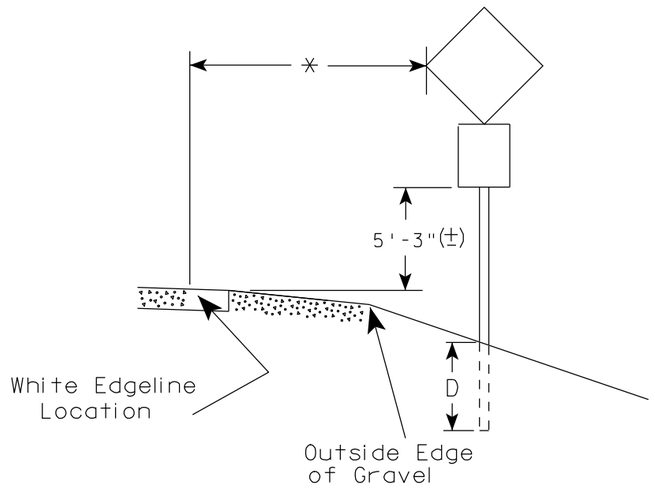
URBAN AREA



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

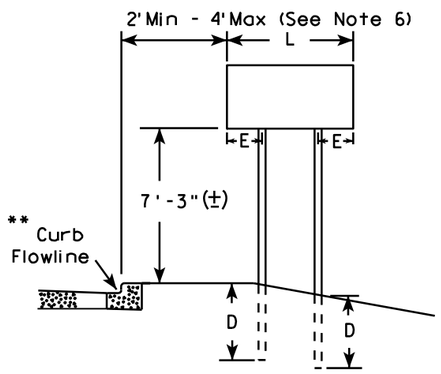
DATE 9/21/2011 PLATE NO. A4-3.16

7

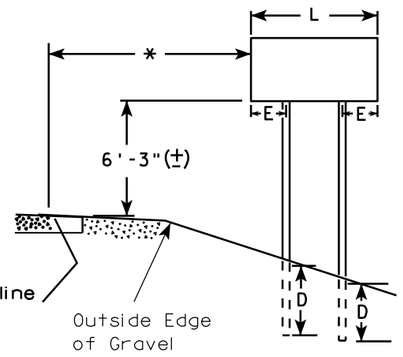
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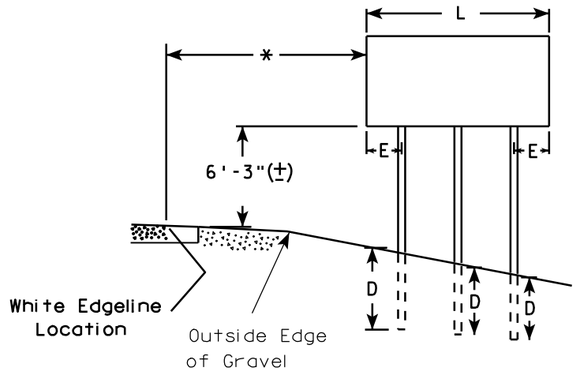
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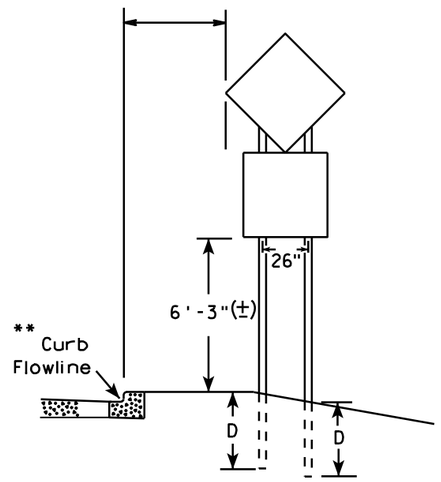
URBAN AREA



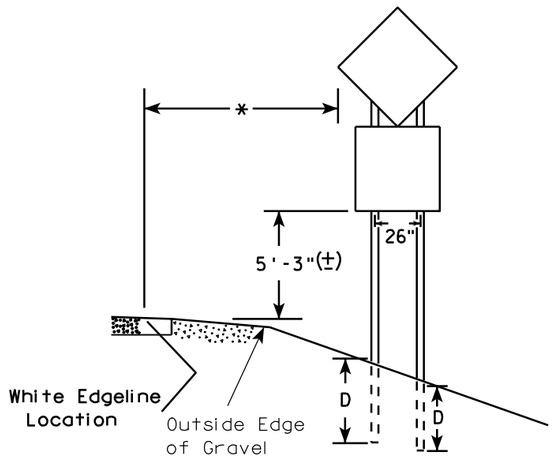
RURAL AREA (See Note 3)







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.

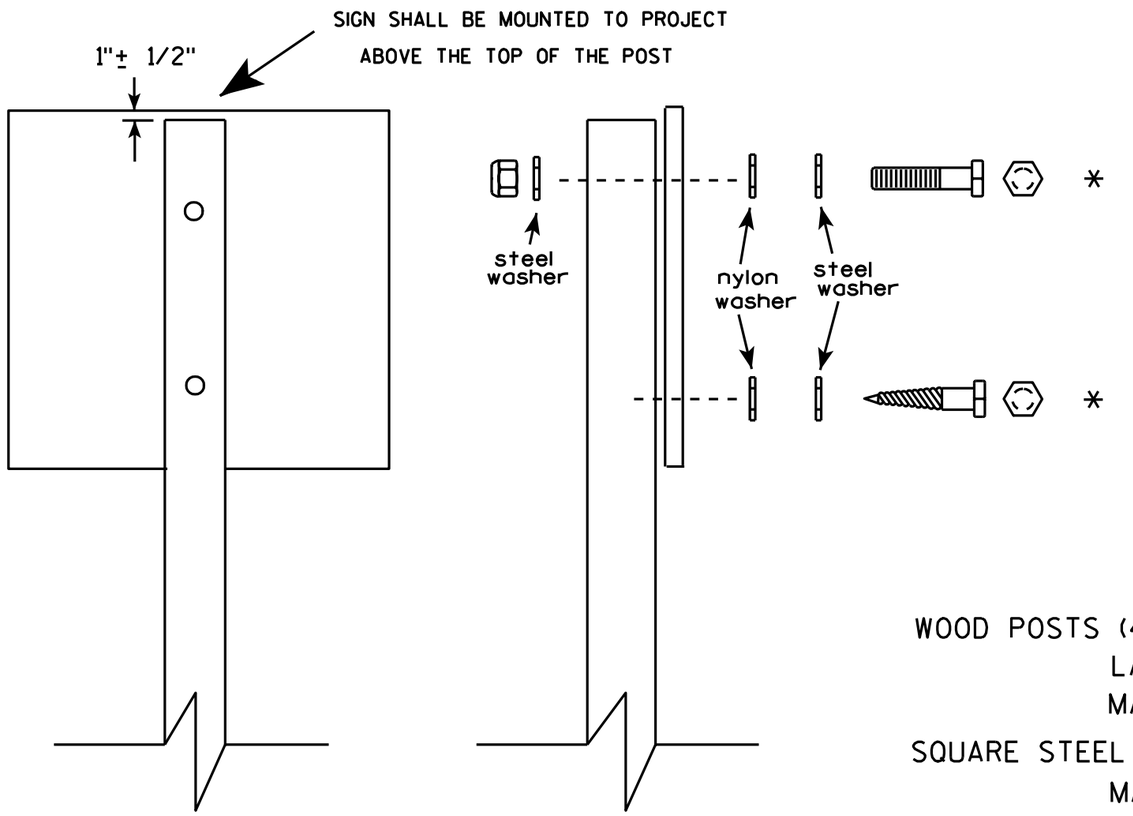
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

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: 185	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

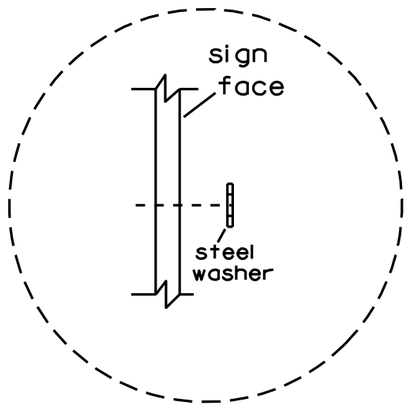
b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

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

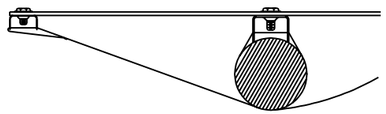
7

7

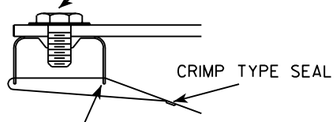
PROJECT NO:

SHEET NO: 186 E

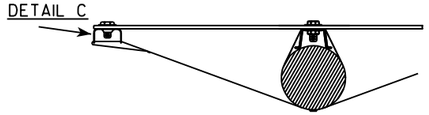
BRACE BANDING

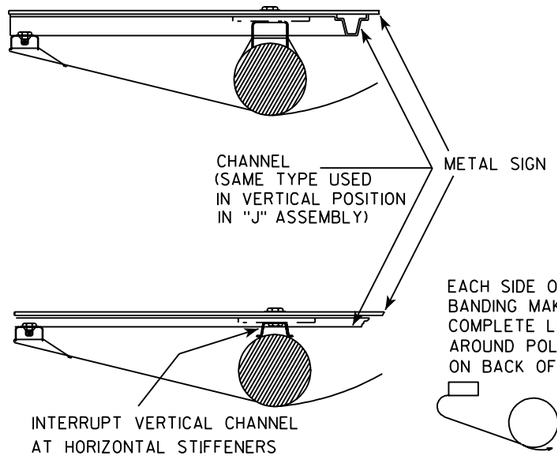


DETAIL C
CADMIUM PLATED STEEL BOLT
THROUGH BLACK BORDER



DETAIL C

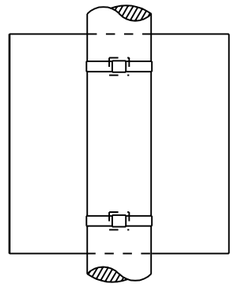


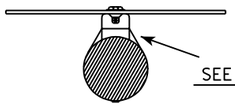


EACH SIDE OF BRACE
BANDING MAKES ONE
COMPLETE LOOP
AROUND POLE-SEAL
ON BACK OF POLE

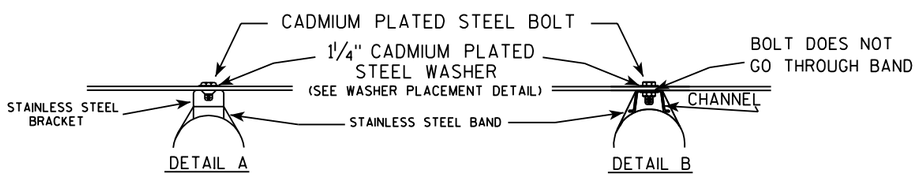
BRACKET BANDING

SINGLE SIGN





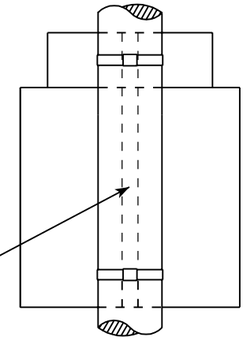
SEE DETAIL A



DETAIL A

DETAIL B

"J" ASSEMBLY

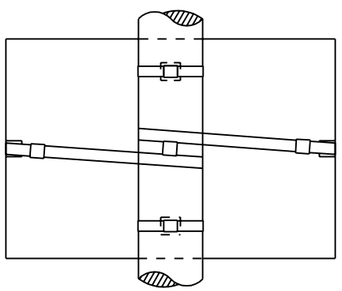


CHANNEL
SEE TYPICAL PANEL
INSTALLATION SHEET

SEE DETAIL B

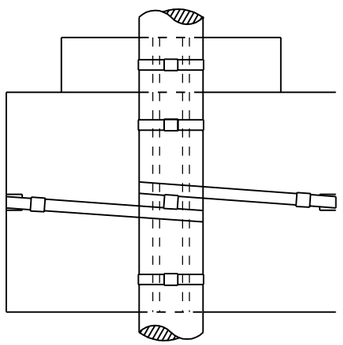
GENERAL NOTES

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.

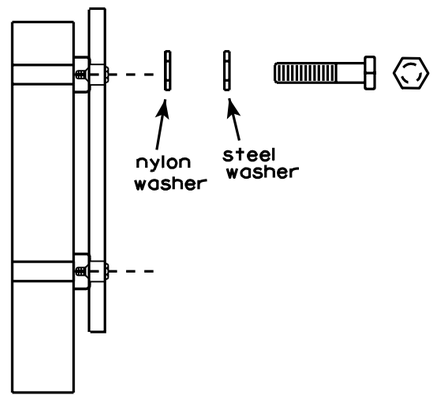


BRACE BANDING

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

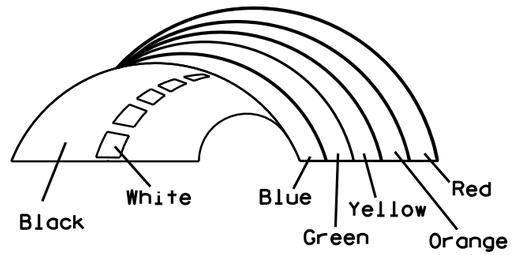
DATE 11/08/05 PLATE NO. A5-9.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 187	E



* VARIES

Background Colors of Symbol*



*1/4" Black Border between each color of rainbow and border of rainbow

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 - (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. Border - Blue
   Line 1 - Red
   Line 2 - Black
   Line 3-5 - Blue
6. Line 1 - Dutch 8011L
   Line 2 - Series E
   Line 3-5 - Series C
7. Contractor shall provide and install a new post bracket in accordance with the I55-56B sign 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																											
2	30	36	1 1/2	1/2	5/8	3	2	3 1/2	2 7/8	1	8	2 1/8	11 1/4	11 1/8	9 3/8	1 1/4		3/4	12 5/8	7 1/2							7.5
3																											
4																											
5																											

STANDARD SIGN
I55-56

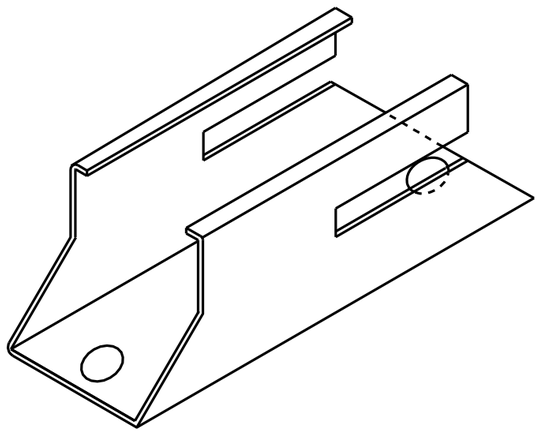
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/27/11 PLATE NO. 155-56.3

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 188

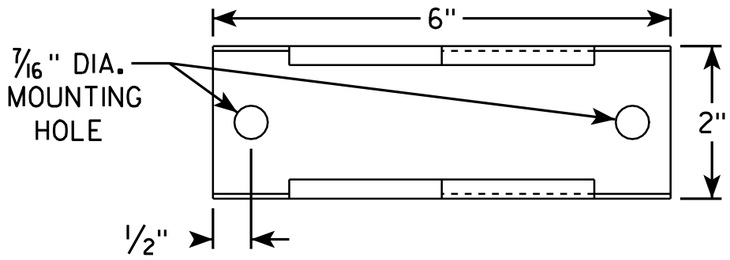
ISOMETRIC VIEW



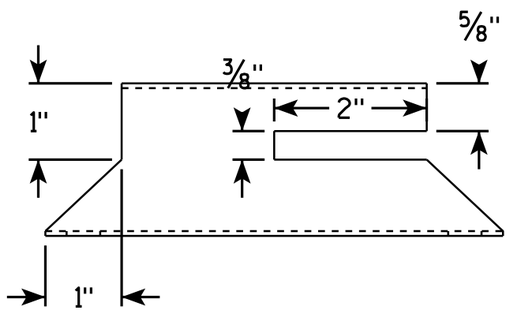
NOTES

1. Must be capable of permanent attachment to a wood or steel channel sign post utilizing the fastening hardware specified on the A4-8 sign plate.
2. Shall be entirely primed and painted with two coats of a black powder coated enamel paint.
3. Shall be made with 12 gauge steel, and incorporate no welds, no hinged components, no threaded lock-type components, and no parts which are loose or can be separated from the main body.
4. Shall have rounded edges with at least 1/8" radii.
5. Shall not have unrounded and uncoated metal edges which can contact the back surface of the roll-up sign.
6. Top of bracket shall be mounted 2' below the bottom of the I55-56 sign.
7. Cost of bracket and fastening hardware shall be incidental to the I55-56 sign.

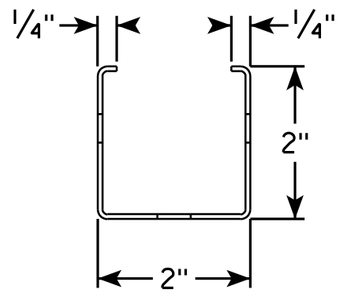
TOP VIEW



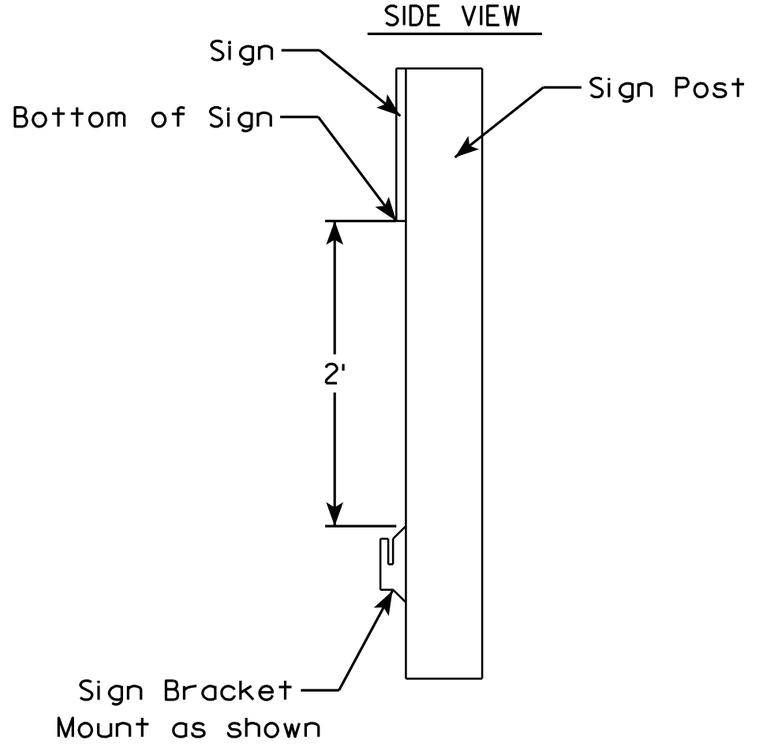
SIDE VIEW



END VIEW



SIDE VIEW



ROLLUP SIGN BRACKET
I55-56B

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/5/10 PLATE NO. I55-56B.1

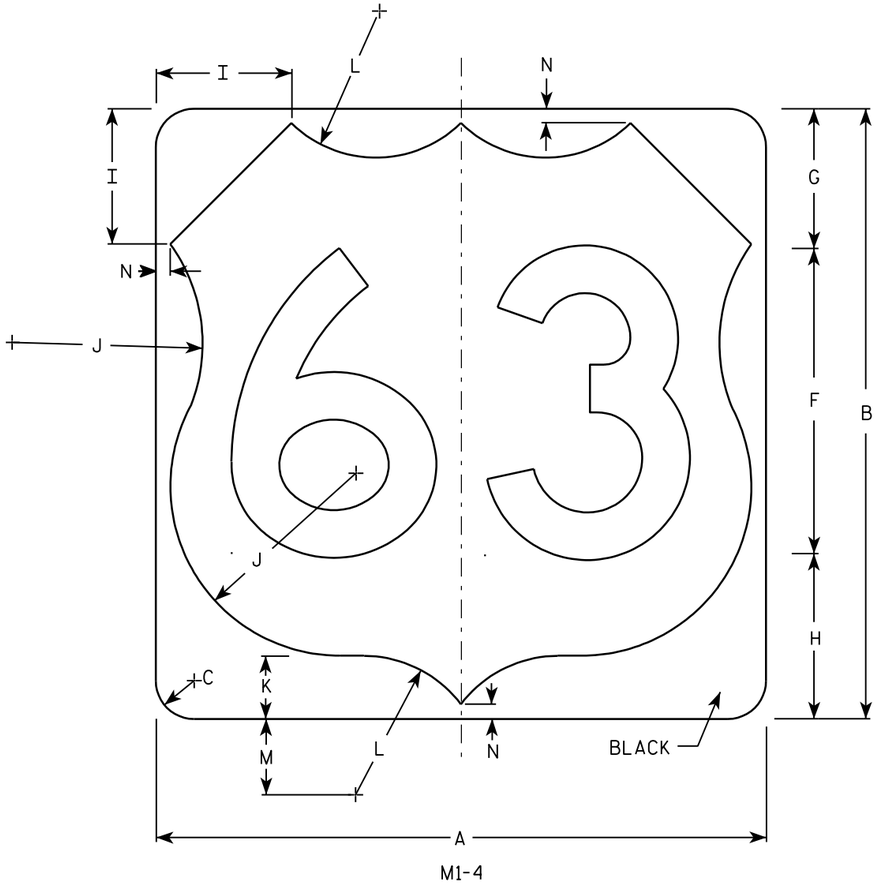
7

7

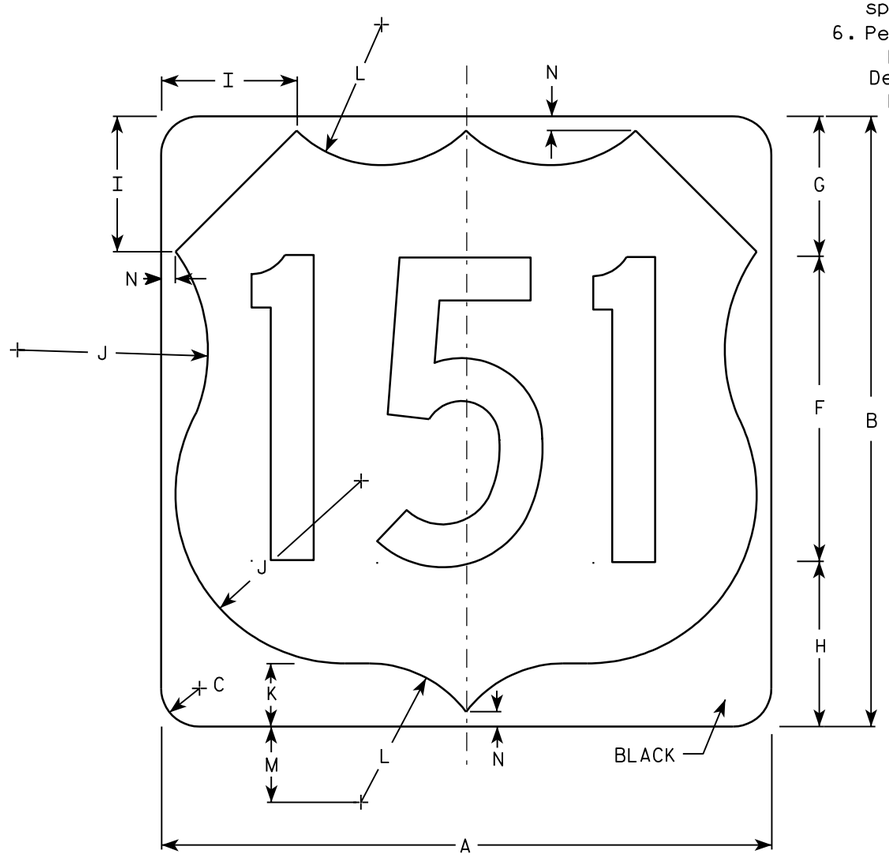
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 189	E

NOTES

1. Sign is Type II - See Note 6 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White & Black - See Note 6
   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. Substitute appropriate numerals and adjust spacing as per Plate A10-1.
6. Permanent Signs
   Background - Type H Reflective
   Detour or other temporary signs
   Background - Reflective



M1-4



M1-4

7

7

Metric equivalent for this sign is:

SIZE	
1	
2	600 mm X 600 mm
3	900 mm X 900 mm
4	900 mm X 900 mm
5	900 mm X 900 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	24	24	1 1/2			12	5 1/2	6 1/2	5	7 1/2	2 1/2	5 1/2	3	1/2													4.0	.36
3	36	36	2 1/4			18	8 1/4	9 1/4	7 1/4	11 1/4	3 3/4	8 1/4	4 1/2	3/4													9.0	.81
4	36	36	2 1/4			18	8 1/4	9 1/4	7 1/4	11 1/4	3 3/4	8 1/4	4 1/2	3/4													9.0	.81
5	36	36	2 1/4			18	8 1/4	9 1/4	7 1/4	11 1/4	3 3/4	8 1/4	4 1/2	3/4													9.0	.81

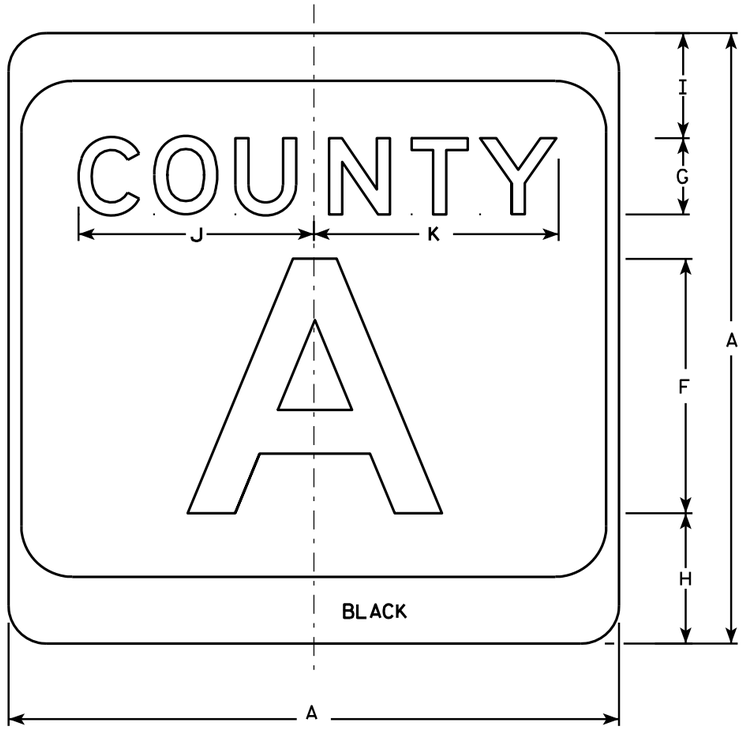
USH MARKER
M1-4 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

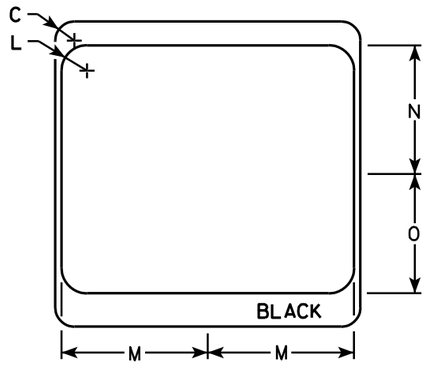
APPROVED Matthew R Rauch
for State Traffic Engineer

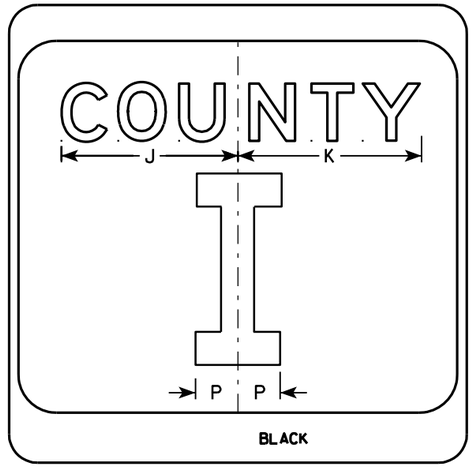
DATE 08/25/05 PLATE NO. M1-4.9

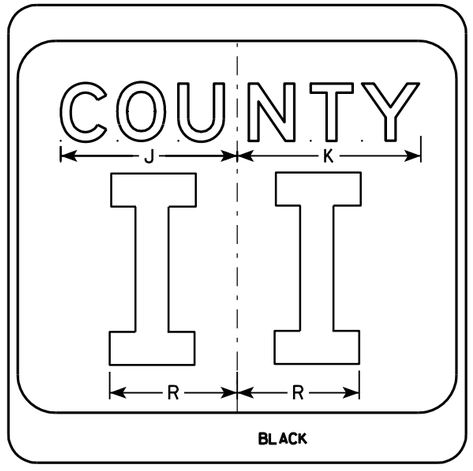
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 190	E



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

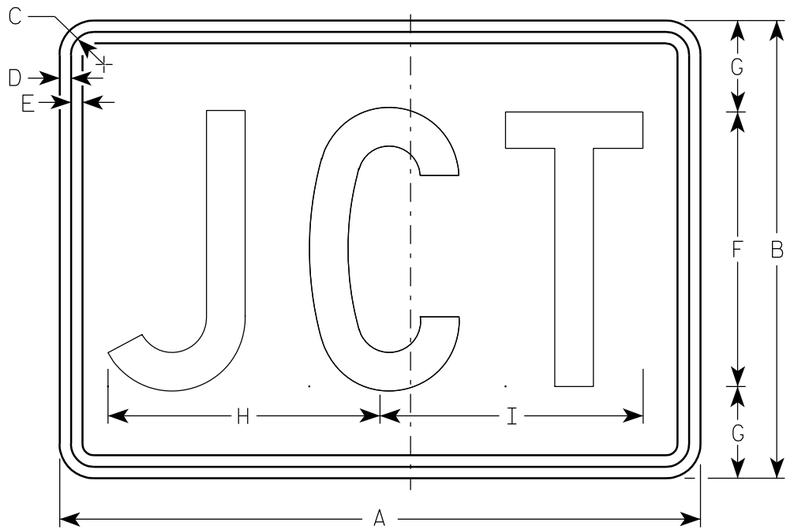
CTH MARKER
M1-5A FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

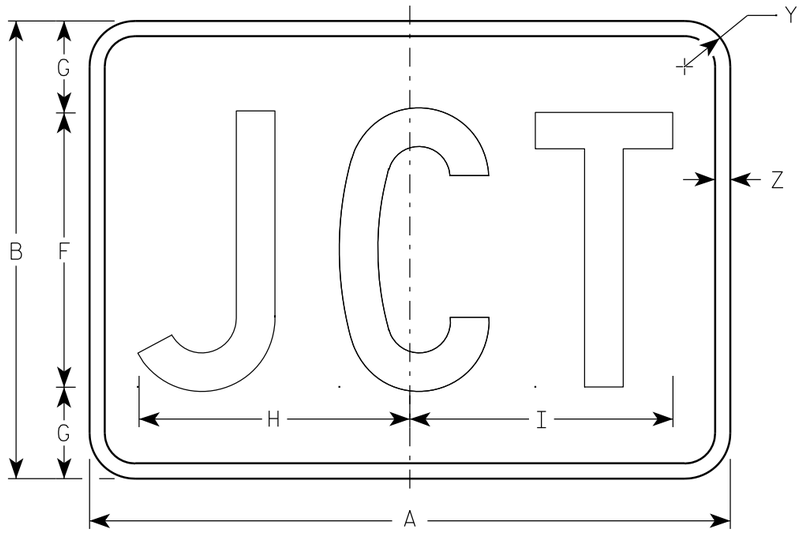
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/27/11 PLATE NO. M1-5A.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 191	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

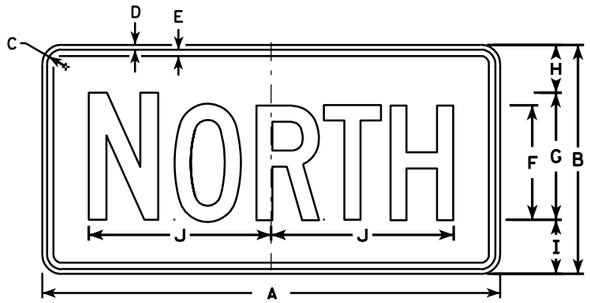
STANDARD SIGN
M2-1

WISCONSIN DEPT OF TRANSPORTATION

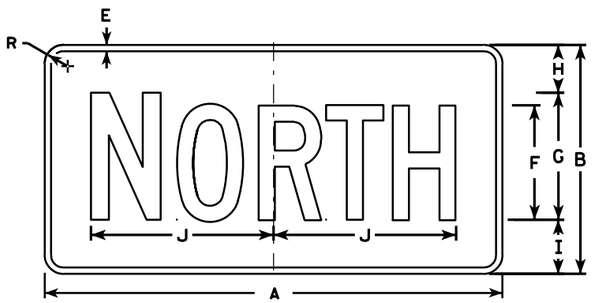
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/16/10 PLATE NO. M2-1.10

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 192	E



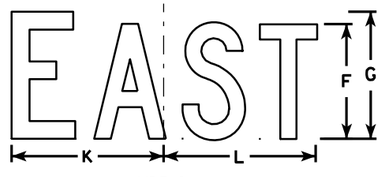
M3-1
MK3-1
MO3-1



MB3-1
MG3-1
MM3-1
MN3-1



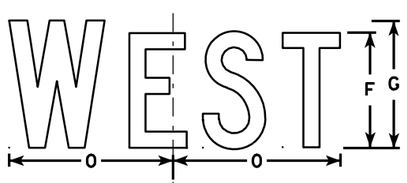
M3-2
MK3-2
MO3-2



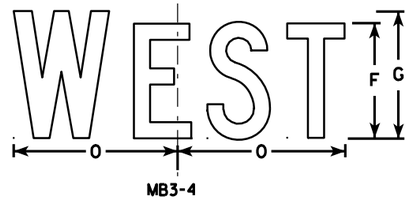
MB3-2
MG3-2
MM3-2
MN3-2

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
   M03-1 thru M03-4 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

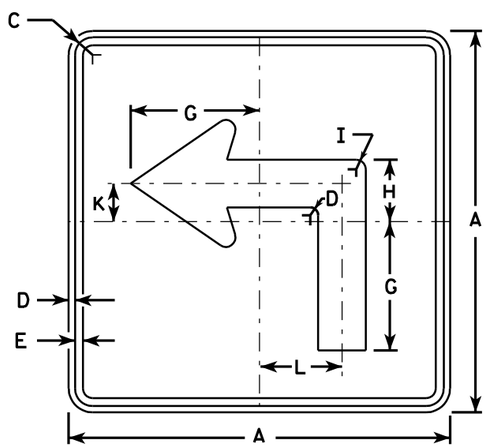
STANDARD SIGNS
M3-1 thur M3-4
SERIES

WISCONSIN DEPT OF TRANSPORTATION

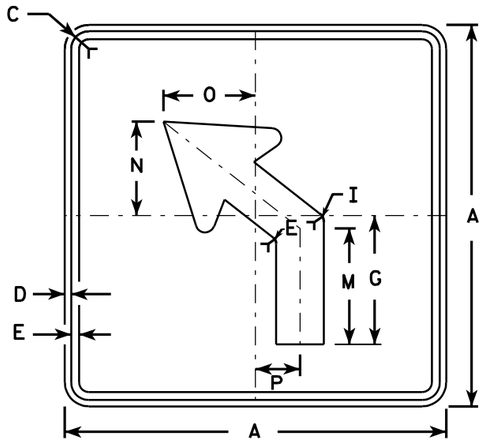
APPROVED Matthew R Rauch for State Traffic Engineer

DATE 11/10/10 PLATE NO. M3-1.12

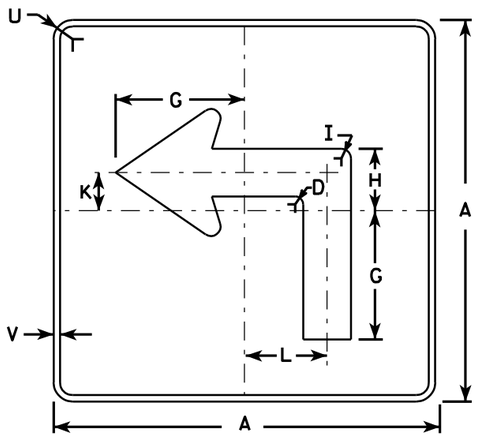
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 193	E



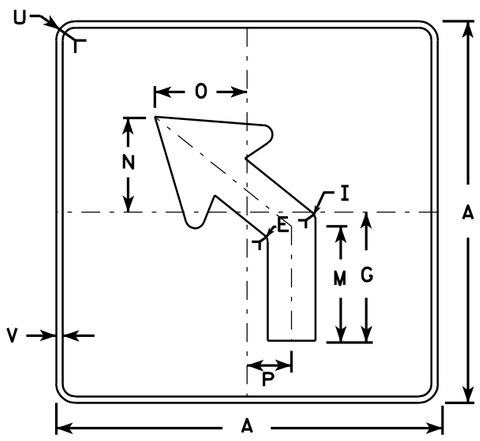
M5-1L
MK5-1L
MM5-1L
MO5-1L
MR5-1L



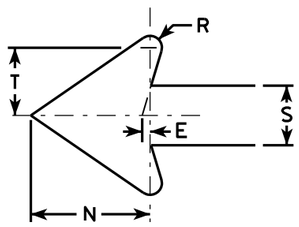
M5-2L
MK5-2L
MM5-2L
MO5-2L
MR5-2L



MB5-1L
MG5-1L
MN5-1L



MB5-2L
MG5-2L
MN5-2L



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. M5-1 and M5-2 Background - White - Type H Reflective (Detour or temporary Signs - Reflective) Message - Black
   MB5-1 and MB5-2 Background - Blue Message - White - Type H Reflective (Detour or temporary Signs - Reflective)
   MG5-1 and MG5-2 Background - Green Message - White - Type H Reflective
   MK5-1 and MK5-2 Background - Green Message - White Type H Reflective
   MM5-1 and MM5-2 Background - White - Type H Reflective Message - Green
   MN5-1 and MN5-2 Background - Brown Message - White - Type H Reflective
   MO5-1 and MO5-2 Background - Orange - Reflective Message - Black
   MR5-1 and MR5-2 Background - Brown Message - Yellow - Type H Reflective
5. M5-1R same as M5-1L except arrow points right.
6. M5-2R same as M5-2L except arrow tilts 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	3 3/8	5/8		2 1/8	4 1/2	6 3/8	5 1/4	5	2 1/2		1/2	2 5/8	3	1 1/2	1/2					3.06	0.28
3	30		1 3/8	1/2	5/8		10 1/8	4 1/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25	0.56
4	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25	0.56
5	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25	0.56

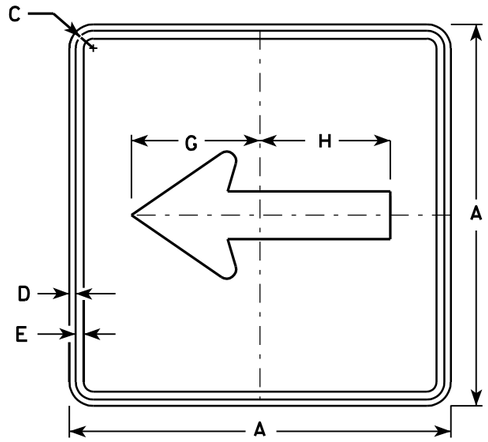
STANDARD SIGN
M5-1 & M5-2

WISCONSIN DEPT OF TRANSPORTATION

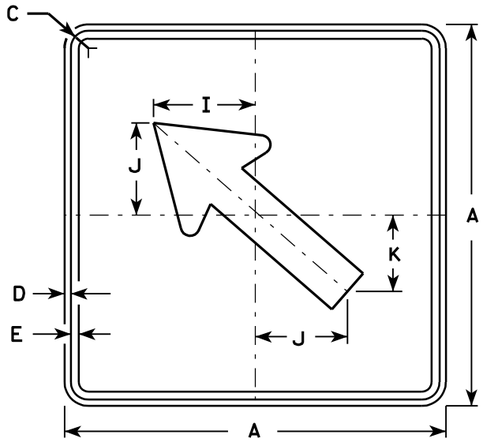
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/16/10 PLATE NO. M5-1.11

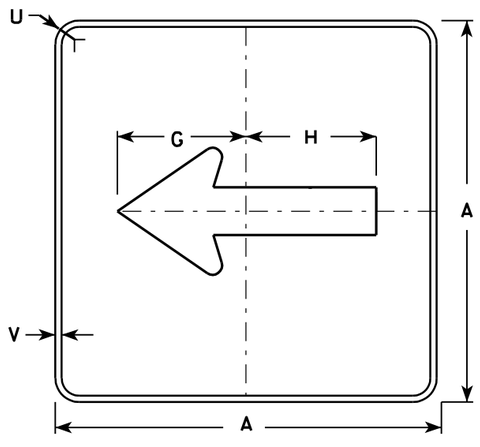
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 194	E



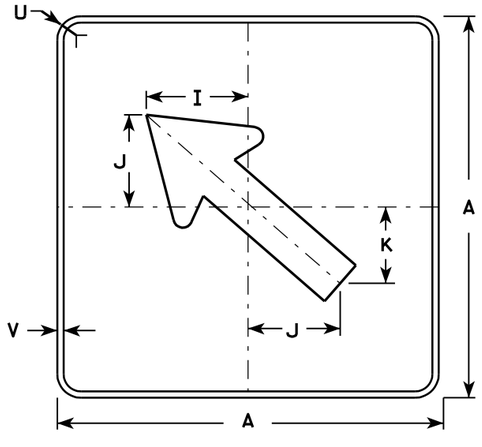
M6-1
MK6-1
MM6-1
MO6-1
MR6-1



M6-2
MK6-2
MM6-2
MO6-2
MR6-2



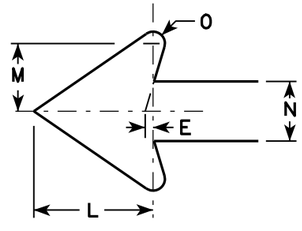
MB6-1
MG6-1
MN6-1



MB6-2
MG6-2
MN6-2

NOTES

1. Signs are Type II - See Note 4 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-1 and M6-2 Background - White - Type H Reflective (Detour or temporary Signs - Reflective) Message - Black
   MB6-1 and MB6-2 Background - Blue Message - White - Type H Reflective (Detour or temporary Signs - Reflective)
   MG6-1 and MG6-2 Background - Green Message - White - Type H Reflective
   MK6-1 and MK6-2 Background - Green Message - White - Type H Reflective
   MM6-1 and MM6-2 Background - White - Type H Reflective Message - Green
   MN6-1 and MN6-2 Background - Brown Message - White - Type H Reflective
   MO6-1 and MO6-2 Background - Orange - Reflective Message - Black
   MR6-1 and MR6-2 Background - Brown Message - Yellow - Type H Reflective



Metric equivalent for this sign is:

SIZE	
1	
2	525 mm X 525 mm
3	750 mm X 750 mm
4	750 mm X 750 mm
5	750 mm X 750 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1																												
2	21		1 1/8	3/8	3/8		7 1/2	7 1/8	5 5/8	5	4 1/4	5 1/4	3	2 5/8	1/2						1 1/2	1/2					3.06	0.28
3	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25	0.56
4	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25	0.56
5	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25	0.56

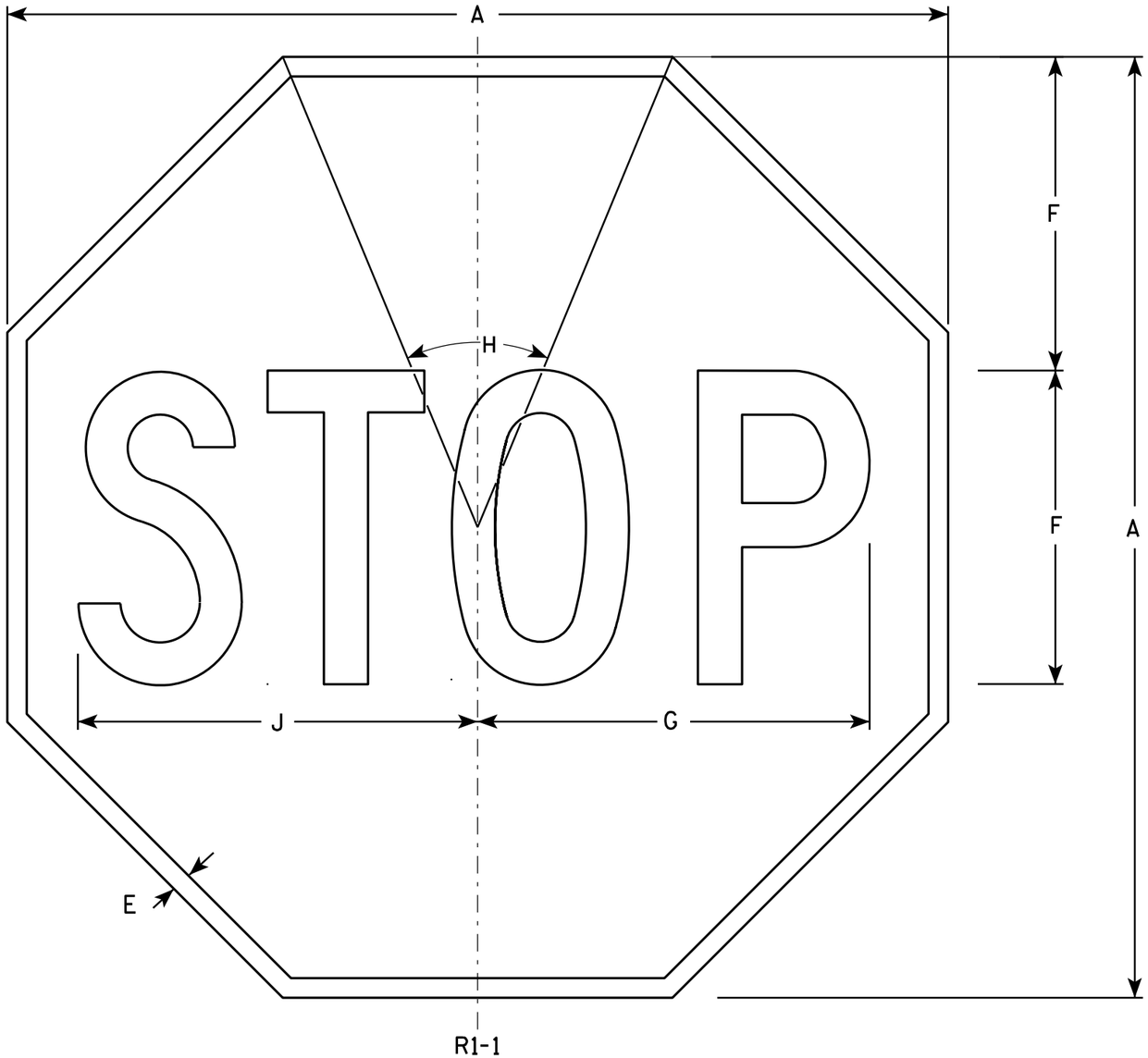
STANDARD SIGN M6-1 & M6-2 SERIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/16/10 PLATE NO. M6-1.12

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 195	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

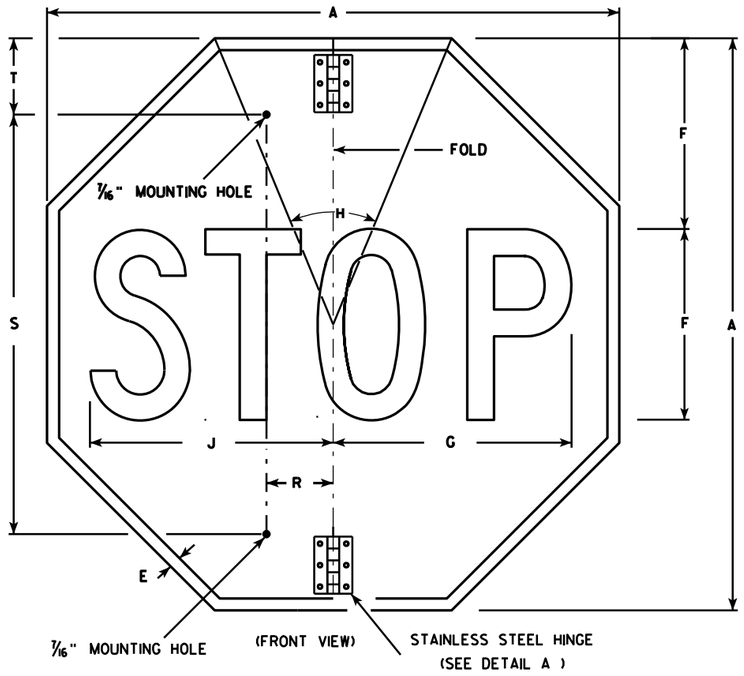
STANDARD SIGN
R1-1

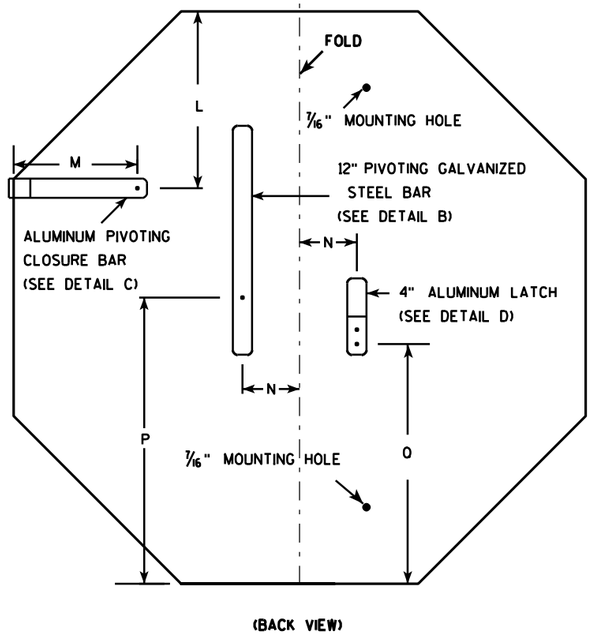
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/03/10 PLATE NO. R1-1.12

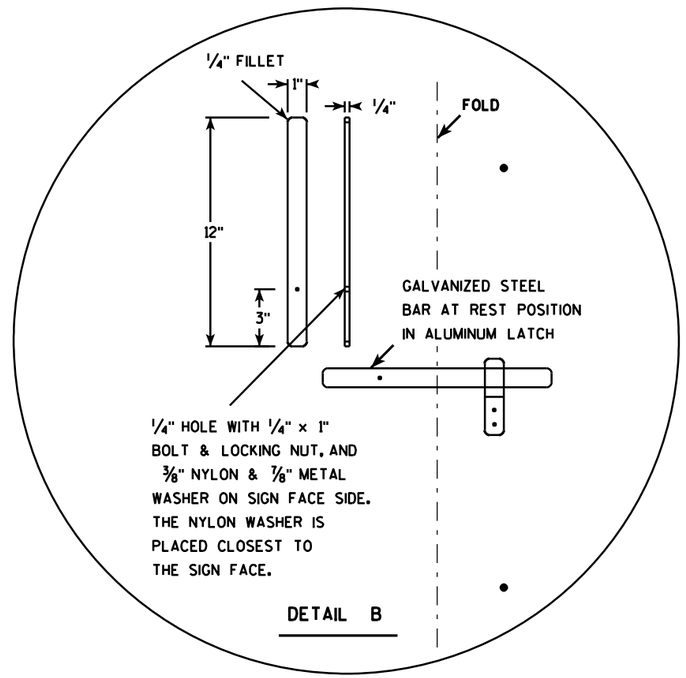
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 196	E



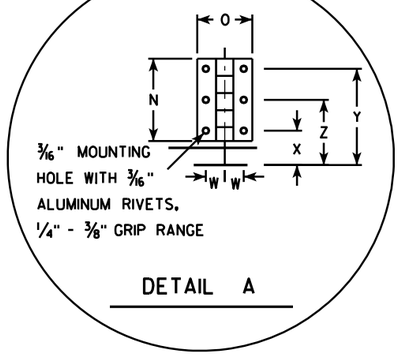


NOTES

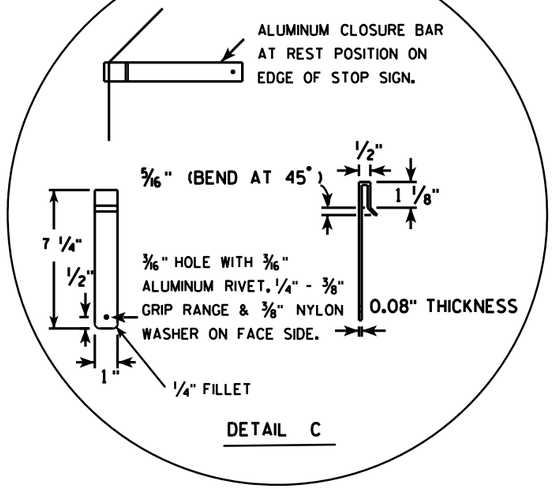
1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Red
   Message - White
3. Message Series - C
4. All hardware used on the folding STOP sign installation shall conform to 637.2.4 of the WIS DOT Standard Specification.



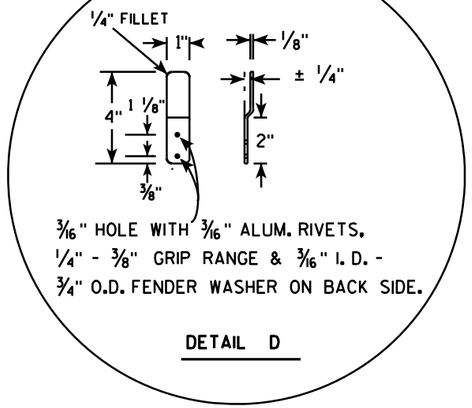
DETAIL B



DETAIL A



DETAIL C



DETAIL D

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30				5/8	10	12 1/2	45		12 3/4		9 1/4	6 1/2	3	2	15	12 3/8	2 1/2	22	5			11/16	1 1/4	3 1/2	2 3/8	5.18
2M	36				3/4	12	15	45		15 3/8		11	6 1/2	3	2	18	15 3/8	2 1/2	26	5			11/16	1 1/4	3 1/2	2 3/8	7.46
3	36				3/4	12	15	45		15 3/8		11	6 1/2	3	2	18	15 3/8	2 1/2	26	5			11/16	1 1/4	3 1/2	2 3/8	7.46
4																											
5																											

STANDARD SIGN
R1-1F

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/03/10 PLATE NO. R1-1F.3

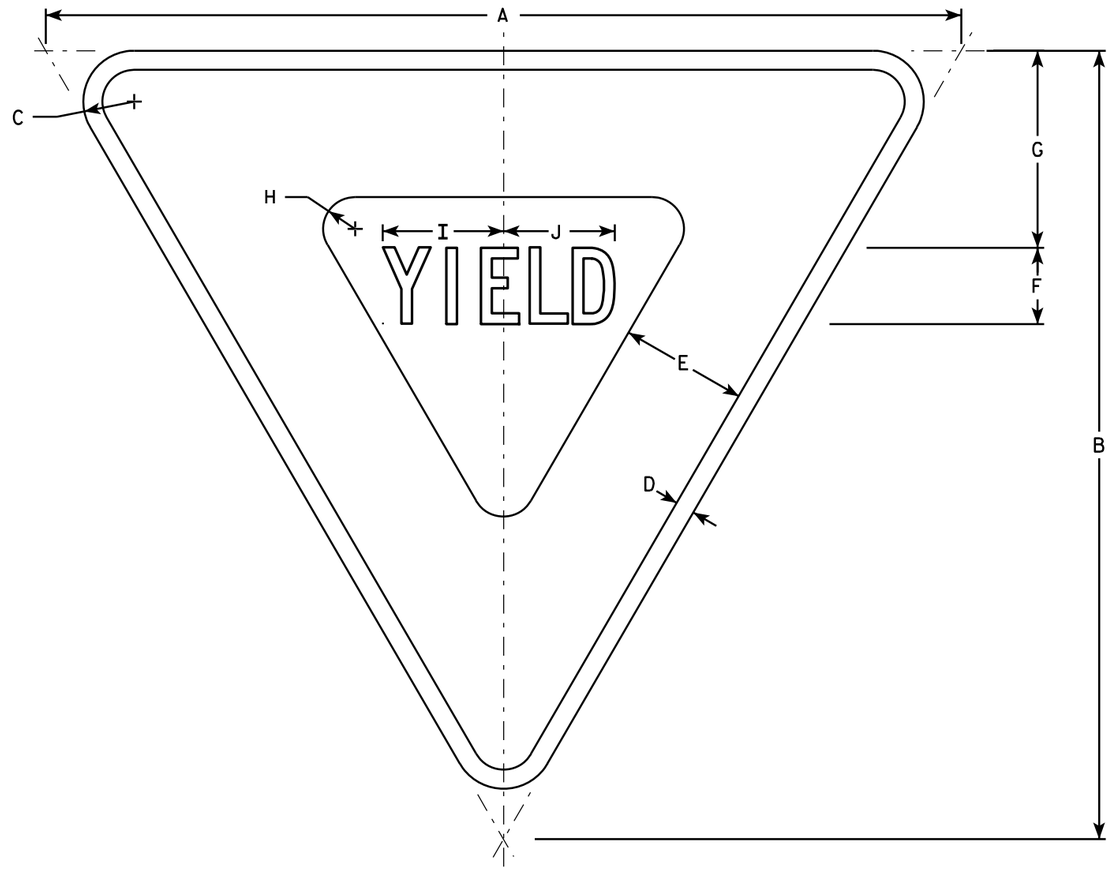
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 197 | E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R11F.DGN PLOT DATE : 02-DEC-2010 15:26 PLOT BY : dotsja PLOT NAME : PLOT SCALE : 7.945391:1.000000

WISDOT/CADDS SHEET 42

7

7



R1-2

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. The border strip and word message are reflectorized red.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30	26	1 1/2	5/8	4	2 1/2	6 3/8	7/8	4	3 5/8																	2.71
2S	36	31	2	3/4	5	3	7 3/4	1 1/4	4 3/4	4 3/8																	3.88
2M	48	42	3	1	6	4	9 3/4	2	6 1/4	5 7/8																	7.00
3	48	42	3	1	6	4	9 3/4	2	6 1/4	5 7/8																	7.00
4	48	42	3	1	6	4	9 3/4	2	6 1/4	5 7/8																	7.00
5	60	52	3	1 1/2	8	5	13	2 1/2	7 7/8	7 1/4																	10.83
6	24	21	1 1/2	3/8	3	2	4 3/4	7/8	3 1/4	3																	1.75
7	18	15 1/2	1	3/8	2 1/2	1 1/2	3 7/8	5/8	2 3/8	2 1/4																	0.97

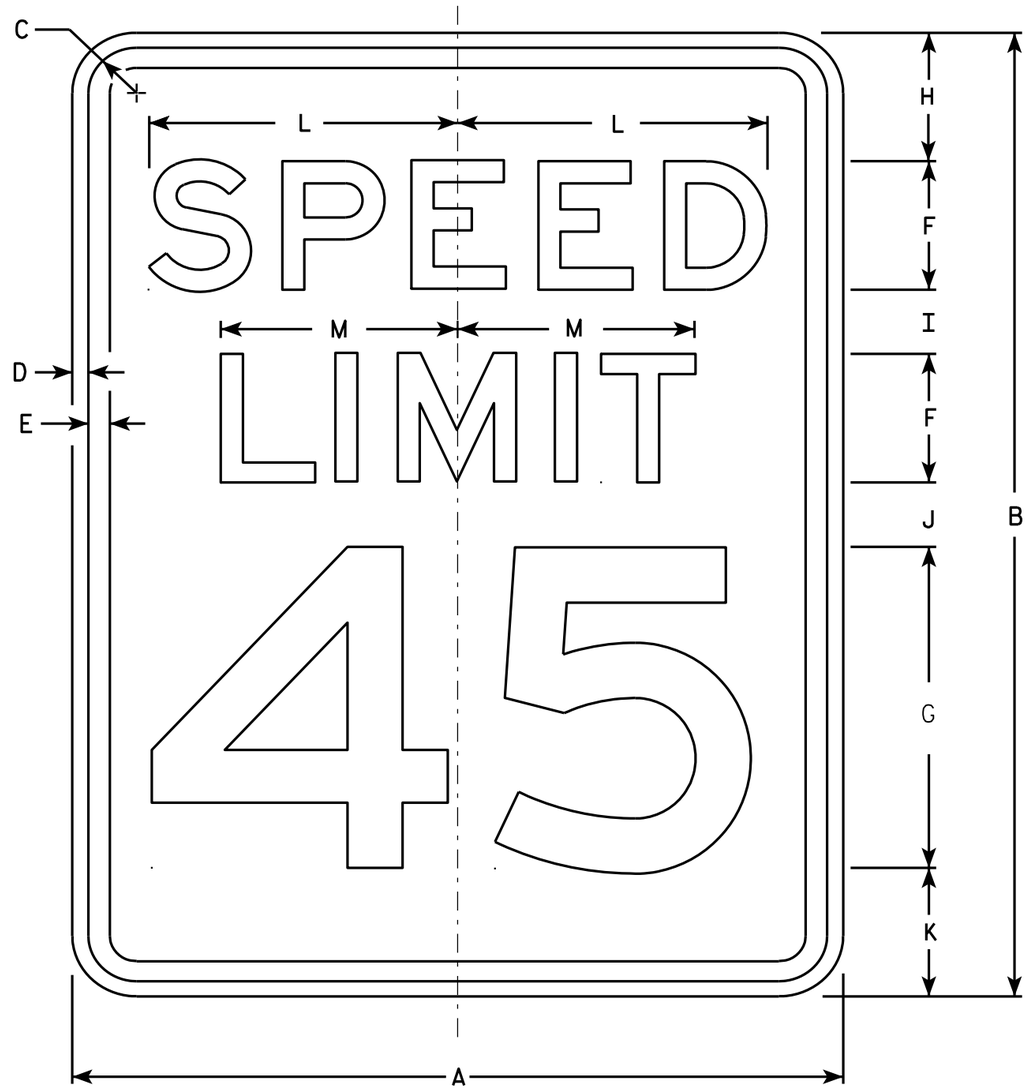
STANDARD SIGN
R1-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/02/10 PLATE NO. R1-2.11

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 198 | 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

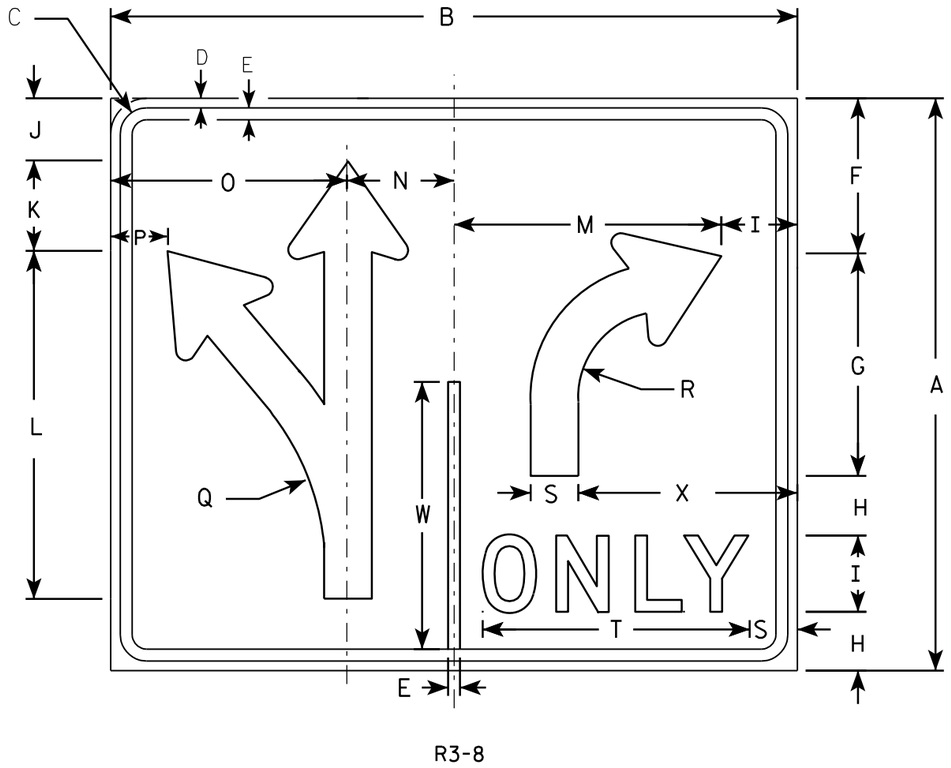
STANDARD SIGN
R2-1

WISCONSIN DEPT OF TRANSPORTATION

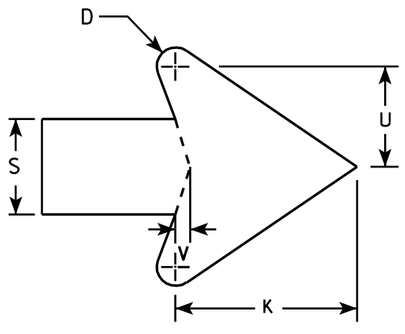
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/26/10 PLATE NO. R2-1.13

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 199	E



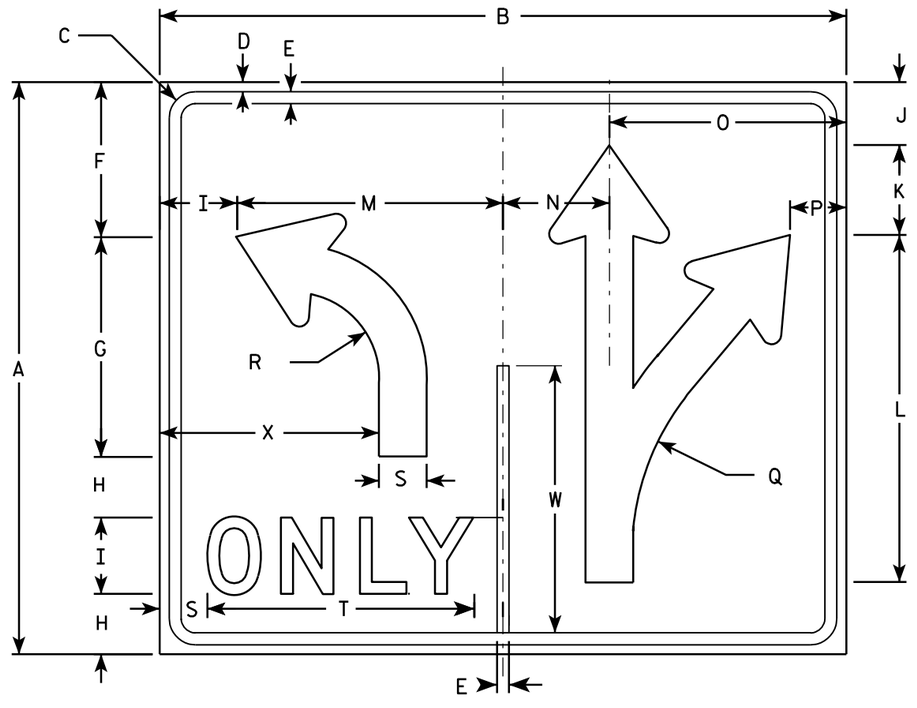
R3-8



ARROW DETAIL

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - WHITE
   Message - BLACK
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



R3-8A

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	36	1 3/8	1/2	5/8	8 1/8	11 5/8	3 1/8	4	3 1/4	4 3/4	18 1/4	14	5 5/8	12 3/8	3	13 1/4	4 1/2	2 1/2	14	2 5/8	3/8	14	11 1/2			7.5
2M	30	36	1 3/8	1/2	5/8	8 1/8	11 5/8	3 1/8	4	3 1/4	4 3/4	18 1/4	14	5 5/8	12 3/8	3	13 1/4	4 1/2	2 1/2	14	2 5/8	3/8	14	11 1/2			7.5
3																											
4	48	54	2 1/4	3/4	1	13 1/4	18 1/2	5 1/8	6	5 1/4	7 1/8	29 1/8	21	8 3/8	18 5/8	4 3/8	21 7/8	7 1/4	3 3/4	20 5/8	4	5/8	22 3/8	17 1/4			18.0
5	48	54	2 1/4	3/4	1	13 1/4	18 1/2	5 1/8	6	5 1/4	7 1/8	29 1/8	21	8 3/8	18 5/8	4 3/8	21 7/8	7 1/4	3 3/4	20 5/8	4	5/8	22 3/8	17 1/4			18.0

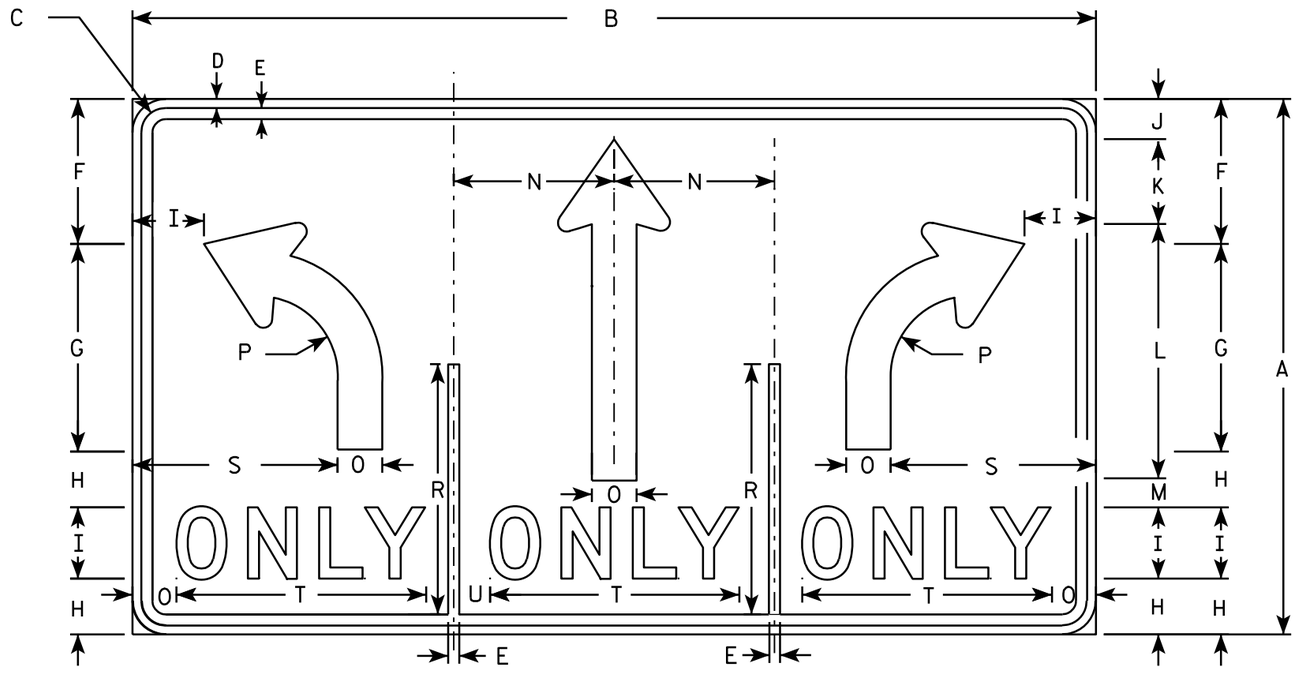
STANDARD SIGN
R3-8 & R3-8A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/2011 PLATE NO. R3-8.5

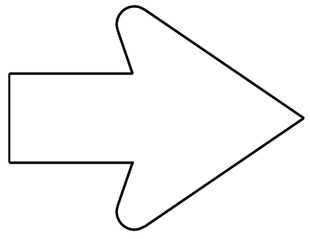
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 200	E



R3-8W

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - WHITE
   Message - BLACK
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



SEE R3-8 FOR ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	54	1 3/8	1/2	5/8	8 1/8	11 5/8	3 1/8	4	2 1/4	4 3/4	14 1/4	1 5/8	9	2 1/2	4 1/2		14	11 1/2	14	2						11.25
2M	30	54	1 3/8	1/2	5/8	8 1/8	11 5/8	3 1/8	4	2 1/4	4 3/4	14 1/4	1 5/8	9	2 1/2	4 1/2		14	11 1/2	14	2						11.25
3																											
4	48	84	2 1/4	3/4	1	13	18 1/2	5 1/4	6	3 3/4	7	29 1/8	2 3/8	14	3 3/4	7 1/4		22 3/8	17 1/4	20 1/2	3 1/4						28.0
5	48	84	2 1/4	3/4	1	13	18 1/2	5 1/4	6	3 3/4	7	29 1/8	2 7/8	14	3 3/4	7 1/4		22 3/8	17 1/4	20 1/2	3 1/4						28.0

STANDARD SIGN
R3-8W

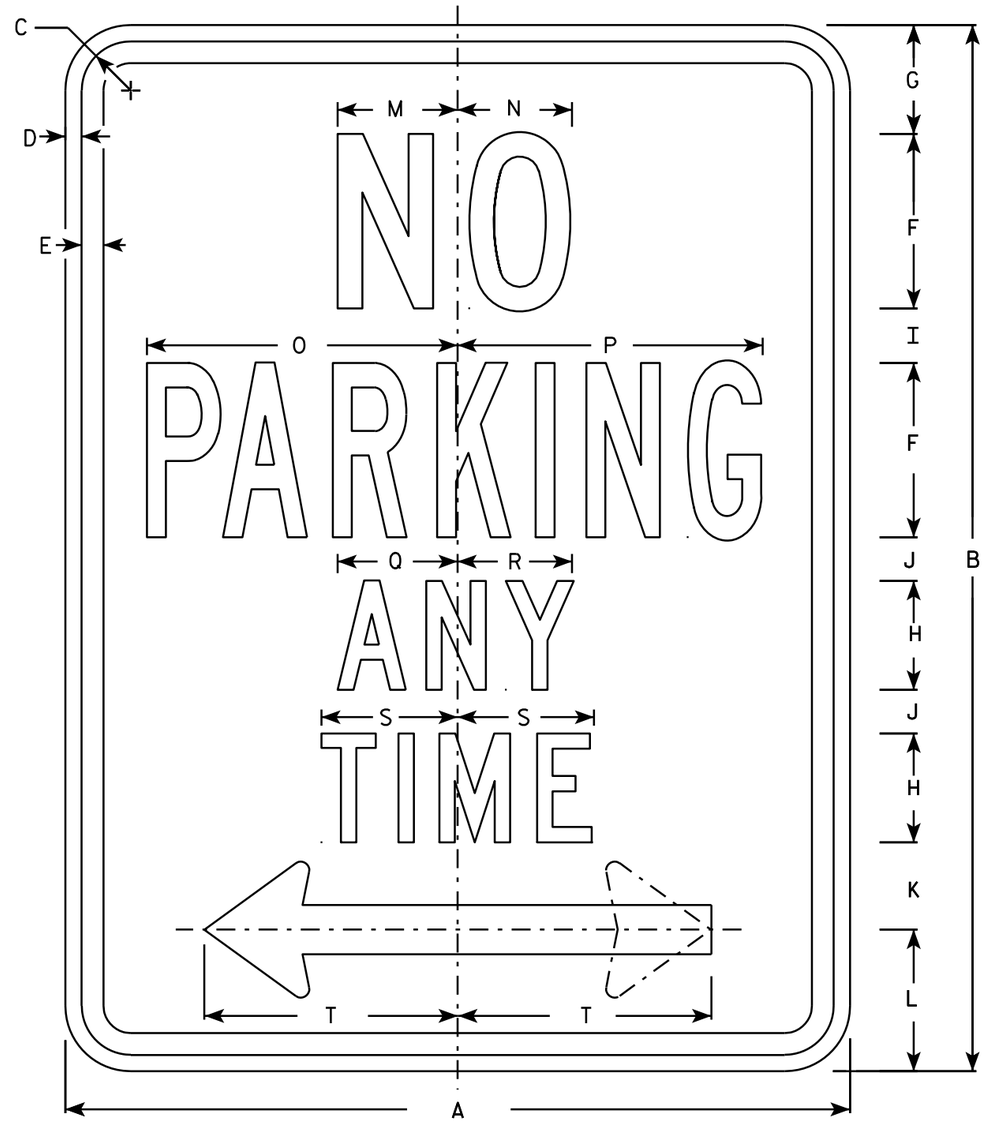
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/24/2011 PLATE NO. R3-8W.4

PROJECT NO:

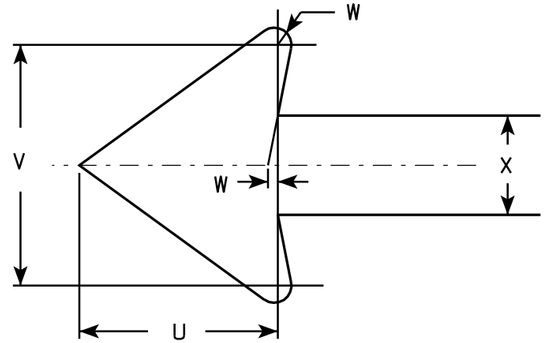
SHEET NO: 201 E



R7-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Red
3. Message Series - See Note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Lines 1, 3 and 4 are series C, line 2 is series B.
6. R7-1D (double arrow)
   R7-1L (left arrow)
   R7-1R (right arrow)



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	12	18	1 1/8	3/8	3/8	3	1 7/8	2	7/8	5/8	1 1/2	2 1/2	2	2	4 7/8	4 7/8	2 1/4	2 1/8	2 1/2	3 7/8	1 1/2	1 3/4	1/8	3/4			1.5
2S	18	24	1 1/8	3/8	1/2	4	2 1/2	2 1/2	1 1/4	1	2	3 1/4	2 3/4	2 5/8	7 1/8	7	2 3/4	2 5/8	3 1/8	5 7/8	2 1/4	2 5/8	1/4	1 1/8			3.0
2M	24	30	1 1/8	3/8	1/2	5	3	3	2	1 1/4	2 1/2	4	3 1/4	3 3/8	9 1/4	9 1/4	3 1/4	3 1/4	3 3/4	7 3/4	3	3 1/2	1/4	1 1/2			5.0
3	24	30	1 1/8	3/8	1/2	5	3	3	2	1 1/4	2 1/2	4	3 1/4	3 3/8	9 1/4	9 1/4	3 1/4	3 1/4	3 3/4	7 3/4	3	3 1/2	1/4	1 1/2			5.0
4																											
5																											

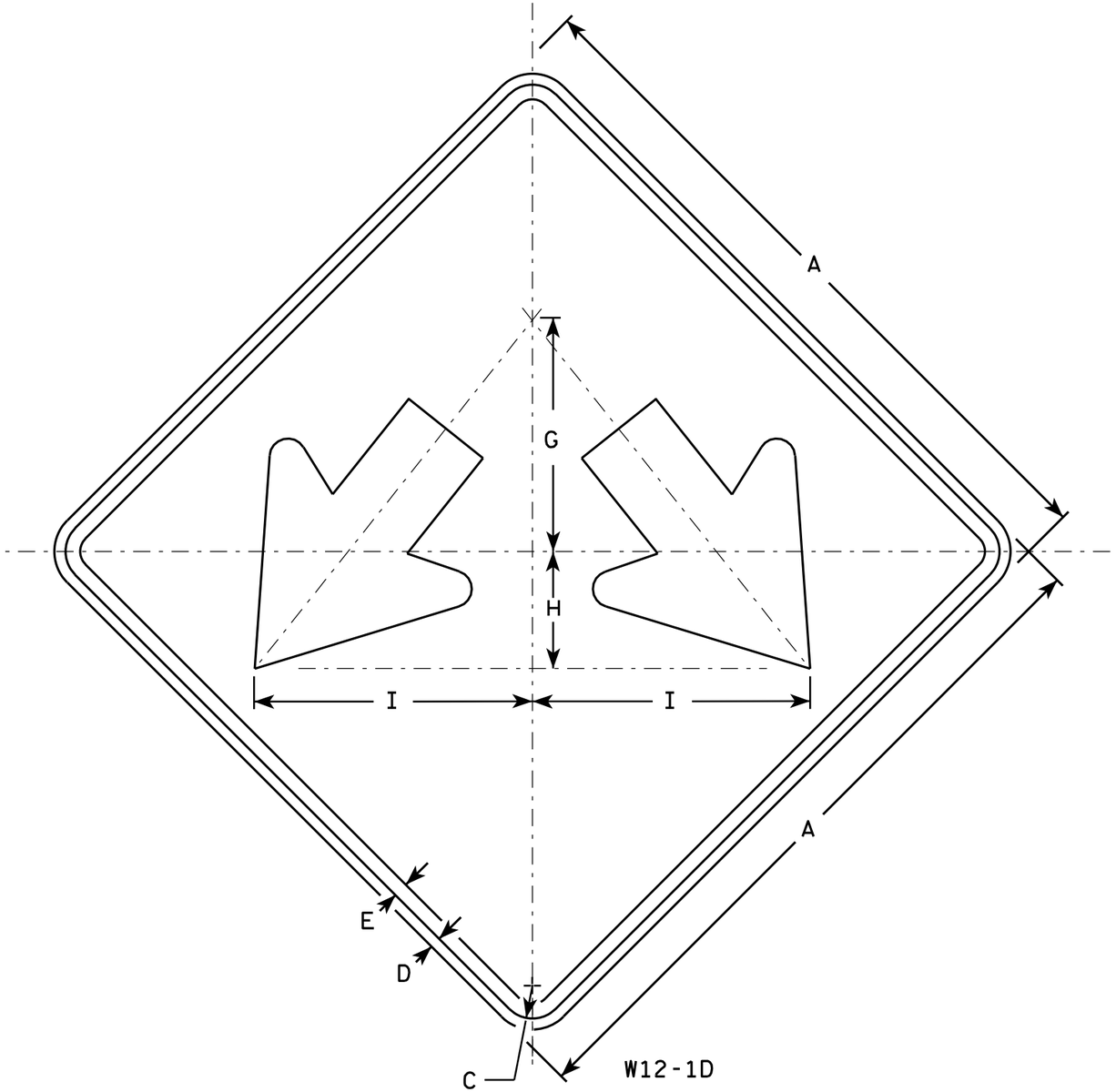
STANDARD SIGN
R7-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

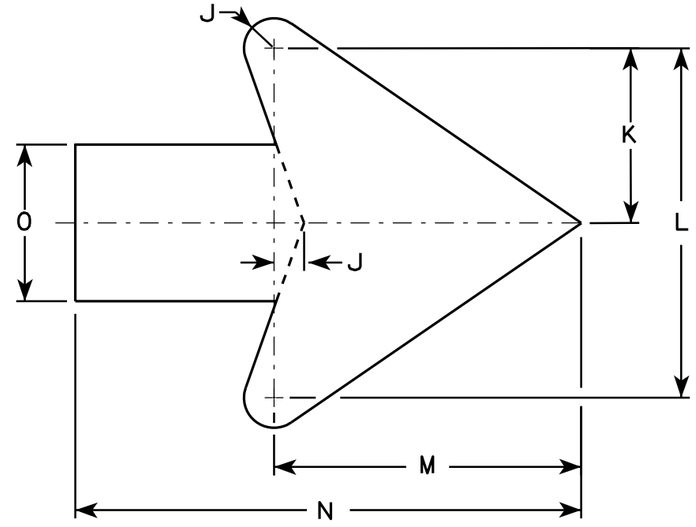
DATE 3/31/2011 PLATE NO. R7-1.9

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 202 | E



NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



Arrow Detail

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24		1 1/8	1/2	3/8		8	4	9 1/2	3/8	3 3/8	7 1/4	6 3/8	10 3/8	3 1/4												4.0
2M	24		1 1/8	1/2	3/8		8	4	9 1/2	3/8	3 3/8	7 1/4	6 3/8	10 3/8	3 1/4												4.0
3	30		1 3/8	1/2	5/8		10	5	11 7/8	3/4	4 1/2	9	7 7/8	13	4												6.25
4	36		1 3/8	1/2	5/8		12	6	14 1/4	1	5 1/2	10 7/8	9 5/8	15 3/4	4 3/4												9.0
5	48		2 1/4	3/4	1		16	8	19	1 1/4	7 1/4	14 1/2	12 3/4	21	6 1/4												16.0

STANDARD SIGN
W12-1D

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/15/11 PLATE NO. W12-1D.14

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 203	E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\W121D.DGN PLOT DATE : 16-MAR-2011 14:10 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 4.717577:1.000000

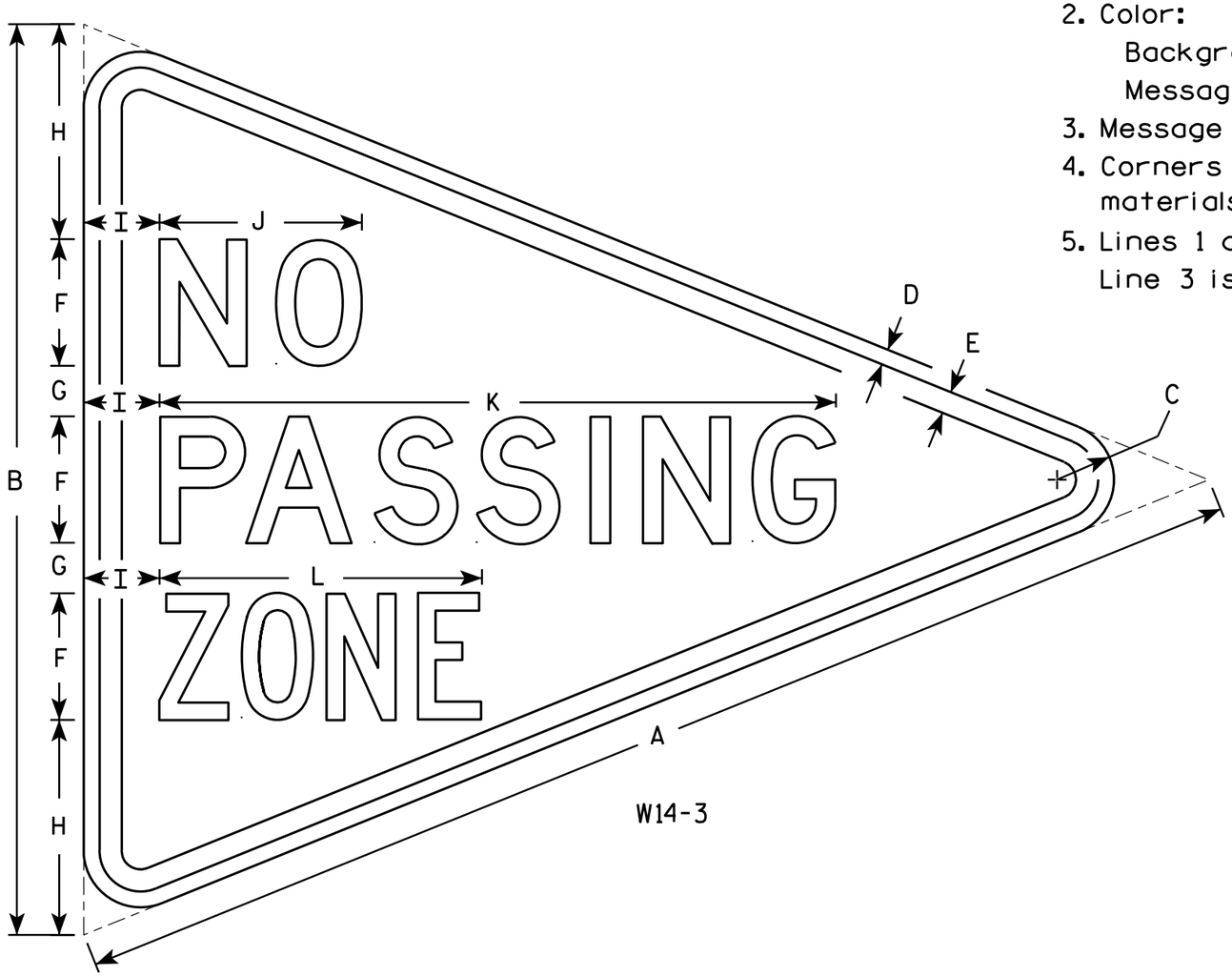
WISDOT/CADDS SHEET 42

7

7

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																											

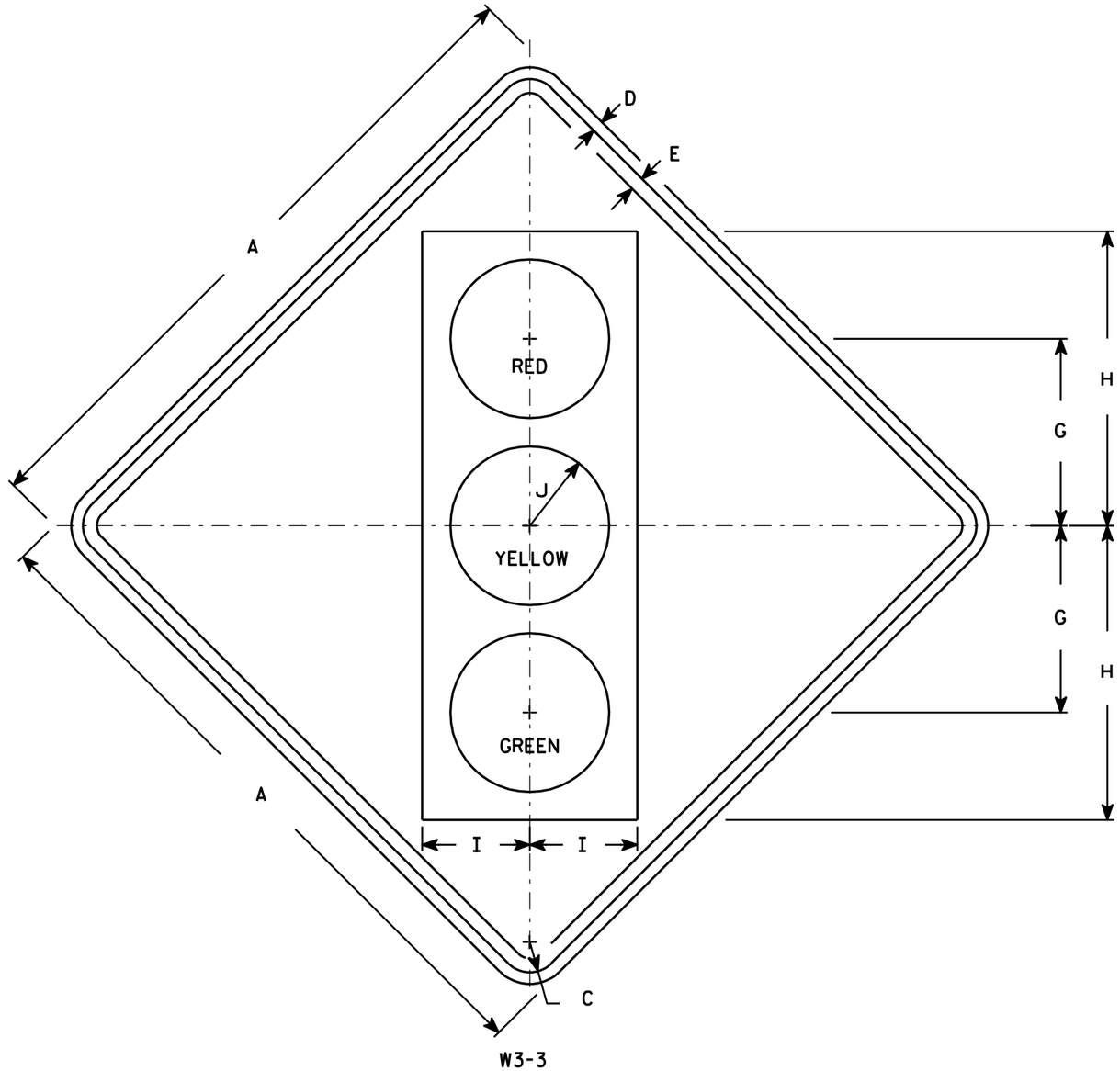
STANDARD SIGN
W14-3

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: 204	E



NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - See Note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. Symbol and border are non-reflective black.
   Top circle - Type H Reflectorized Red
   Center circle - Same as background
   Bottom circle - Type H Reflectorized Green

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8		8 3/4	13 3/4	5	3 3/4																	6.25
2S	36		1 5/8	5/8	3/4		10	15 3/4	5 3/4	4 1/4																	9.0
2M	36		1 5/8	5/8	3/4		10	15 3/4	5 3/4	4 1/4																	9.0
3	36		1 5/8	5/8	3/4		10	15 3/4	5 3/4	4 1/4																	9.0
4	48		2 1/4	3/4	1		12 1/2	20	7 1/2	5																	16.0
5	48		2 1/4	3/4	1		12 1/2	20	7 1/2	5																	16.0

STANDARD SIGN
W3-3

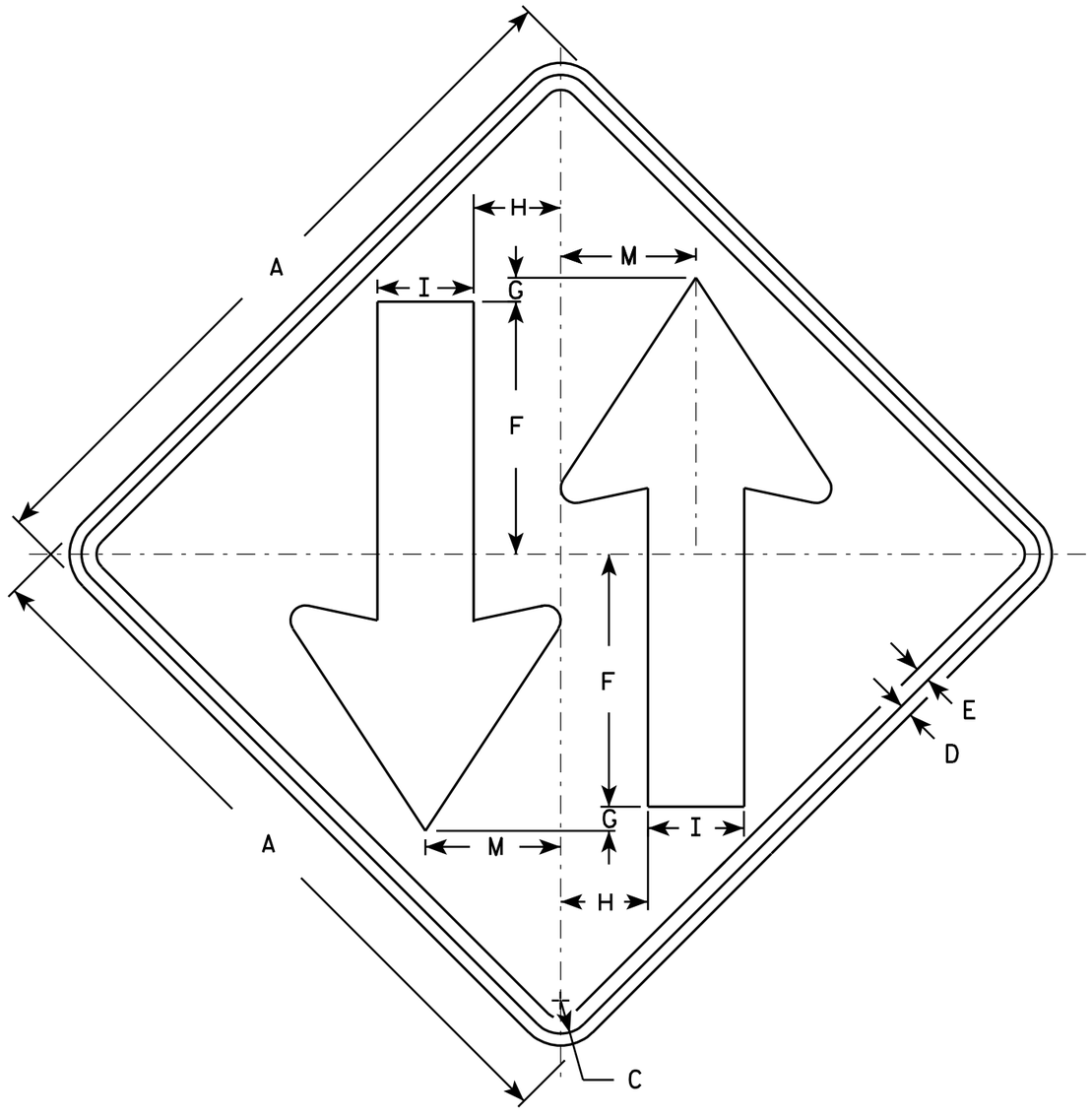
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 6/7/10 PLATE NO. W3-3.11

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 205 | E

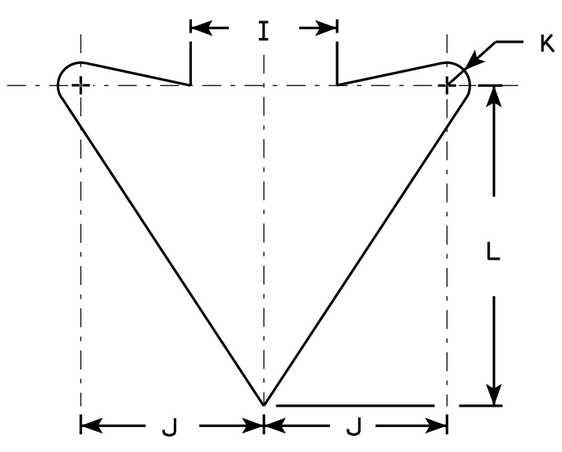
FILE NAME : C:\Users\PROJECTS\tr_stdplate\W33.DGN PLOT DATE : 07-JUN-2010 13:07 PLOT BY : ditjph PLOT NAME : PLOT SCALE : 7.448805:1.000000



W6-3

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8	10 1/2	1	3 5/8	4	5	5/8	8 3/4	5 5/8														6.25
2S	36		1 5/8	5/8	3/4	12	1	4 1/4	5	6	3/4	10 1/2	6 3/4														9.0
2M	36		1 5/8	5/8	3/4	12	1	4 1/4	5	6	3/4	10 1/2	6 3/4														9.0
3																											
4	48		2 1/4	3/4	1	15 1/2	1	6	6	8	1	14	9														16.0
5	48		2 1/4	3/4	1	15 1/2	1	6	6	8	1	14	9														16.0

STANDARD SIGN
W6-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/22/11 PLATE NO. W6-3.9

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 206 | E

DIVISION 1-1 (STA 131+15 - STA 161+00): STAGE 1A CONSTRUCTION - USH 12 (TEMPORARY WIDENING SOUTH)

STATION	Distance	Area		Incremental Volume (Unadjusted)		Cumulative Vol (CY)		Mass Ordinate
		Cut (SF)	Fill (SF)	Cut Note 1 (CY)	Fill Note 3 (CY)	Cut 1.00 Note 1	Expanded Fill 1.25	Note 6
145+73		16.54	0.82					
146+00	27	13.72	2.44	14	2	14	3	11
146+50	50	14.46	0.91	26	3	40	7	33
147+00	50	14.31	13.64	27	13	66	24	43
147+50	50	11.41	48.68	24	58	90	96	-6
148+00	50	11.04	26.10	21	69	111	182	-71
148+50	50	11.88	16.11	21	39	132	231	-99
149+00	50	14.06	1.95	24	17	156	252	-96
149+50	50	16.65	0.15	28	2	185	255	-70
150+00	50	20.72	0.00	35	0	219	255	-35
150+50	50	16.72	0.29	35	0	254	255	-1
151+00	50	15.72	0.46	30	1	284	256	28
151+50	50	13.70	0.39	27	1	311	257	54
152+00	50	14.02	0.97	26	1	337	259	78
152+50	50	15.83	1.85	28	3	365	262	103
153+00	50	17.88	3.63	31	5	396	268	128
153+50	50	34.91	0.77	49	4	445	273	171
154+00	50	19.76	9.75	51	10	495	285	210
154+50	50	23.13	13.59	40	22	535	312	223
155+00	50	14.54	25.00	35	36	570	357	213
155+50	50	15.35	27.34	28	48	598	418	180
156+00	50	15.81	36.94	29	60	626	492	134
156+50	50	69.07	0.00	79	34	705	535	170
157+00	50	14.16	33.82	77	31	782	574	208
157+50	50	9.89	31.01	22	60	804	649	155
158+00	50	9.41	29.81	18	56	822	719	103
158+50	50	9.70	24.98	18	51	840	783	57
159+00	50	9.68	21.46	18	43	858	837	21
159+50	50	10.12	14.30	18	33	876	878	-2
160+00	50	10.33	5.16	19	18	895	901	-5
160+50	50	10.44	2.35	19	7	914	909	5
				914	727			

NOTES:
NOTE 1) SALVAGED/UNUSABLE PAVEMENT MATERIAL IS INCLUDED IN CUT VOLUME
NOTE 2) SALVAGED/UNUSABLE PAVEMENT MATERIAL DOES NOT SHOW UP ON CROSS SECTIONS
NOTE 3) FILL VOLUME DOES NOT INCLUDE SALVAGED/UNUSABLE PAVEMENT MATERIAL
NOTE 4) MASS ORDINATE EQUALS = (CUT) - ((FILL - REDUCED MARSH IN FILL))*FILL FACTOR)

DIVISION 1-2 (STA 131+15 - STA 161+00): STAGE 1B CONSTRUCTION - USH 12 (TEMPORARY WIDENING NORTH)

STATION	Distance	Area		Incremental Volume (Unadjusted)		Cumulative Vol (CY)		Mass Ordinate
		Cut (SF)	Fill (SF)	Cut Note 1 (CY)	Fill Note 3 (CY)	Cut 1.00 Note 1	Expanded Fill 1.25	Note 6
129+45		19.53	0.05					
129+50	5	19.88	0.04	4	0	4	0	4
130+00	50	16.51	0.31	34	0	37	0	37
130+50	50	14.26	0.45	28	1	66	1	65
131+00	50	13.89	3.46	26	4	92	6	86
131+50	50	2.05	10.31	15	13	107	22	85
132+00	50	19.11	2.71	20	12	126	37	89
132+50	50	15.56	0.77	32	3	158	41	117
133+00	50	14.42	0.75	28	1	186	43	143
133+50	50	15.08	0.64	27	1	213	44	169
134+00	50	15.07	0.52	28	1	241	46	196
134+50	50	9.66	0.00	23	0	264	46	218
135+00	50	12.58	0.00	21	0	285	46	239
135+50	50	18.70	0.00	29	0	314	46	268
136+00	50	22.05	0.00	38	0	352	46	305
136+50	50	18.80	0.00	38	0	389	46	343
137+00	50	17.60	0.00	34	0	423	46	377
137+50	50	16.82	0.00	32	0	455	46	409
138+00	50	13.80	0.00	28	0	483	46	437
138+50	50	18.50	0.06	30	0	513	46	467
139+00	50	16.46	0.50	32	1	546	47	499
139+50	50	15.88	0.49	30	1	576	48	527
140+00	50	15.88	0.69	29	1	605	49	556
140+50	50	14.77	0.45	28	1	633	51	583
141+00	50	16.30	0.04	29	0	662	51	611
141+50	50	16.50	1.93	30	2	692	54	639
142+00	50	36.45	0.00	49	2	741	56	686
142+50	50	20.91	0.00	53	0	795	56	739
143+00	50	0.00	0.00	19	0	814	56	758
145+50	50	0.00	0.00	0	0	814	56	758
146+00	50	18.52	7.79	17	7	831	65	766
146+50	50	14.63	19.62	31	25	862	97	765
147+00	50	12.55	35.32	25	51	887	160	727
147+50	50	11.11	64.01	22	92	909	275	634
148+00	50	9.97	44.76	20	101	928	401	527
148+50	50	9.77	37.13	18	76	947	496	451
149+00	50	9.54	26.51	18	59	965	569	395
149+50	50	9.78	13.65	18	37	982	616	367
150+00	50	33.85	0.29	40	13	1023	632	391
150+50	50	14.80	2.54	45	3	1068	635	433
151+00	50	15.14	3.65	28	6	1096	642	453
151+50	50	15.67	1.73	29	5	1124	649	475
152+00	50	11.51	1.32	25	3	1149	652	497
152+50	50	11.70	1.87	21	3	1171	656	515
153+00	50	12.69	0.55	23	2	1193	659	535
153+50	50	13.50	0.90	24	1	1218	660	557
154+00	50	12.98	0.66	25	1	1242	662	580
154+50	50	13.39	0.23	24	1	1267	663	603
155+00	50	13.18	0.28	25	0	1291	664	627
155+50	50	14.15	0.15	25	0	1316	664	652
156+00	50	13.57	0.21	26	0	1342	665	677
156+50	50	13.51	0.23	25	0	1367	665	702
157+00	50	14.08	0.46	26	1	1393	666	727
157+50	50	14.18	0.08	26	1	1419	667	752
158+00	50	13.24	0.18	25	0	1444	667	777
158+50	50	0.00	0.00	12	0	1457	667	789
				1,457	534			

DIVISION 1-3 (STA 31+56 - STA 37+70): STAGE 1B CONSTRUCTION - CTH AA/MAYER ROAD (TEMPORARY ROADWAY)

STATION	Distance	Area		Incremental Volume (Unadjusted)		Cumulative Vol (CY)		Mass Ordinate
		Cut (SF)	Fill (SF)	Cut Note 1 (CY)	Fill Note 3 (CY)	Cut 1.00 Note 1	Expanded Fill 1.25	Note 6
31+56		1.82	2.77					
32+00	44	3.55	6.55	4	8	4	9	-5
32+50	50	34.77	7.19	35	13	40	25	14
33+00	50	55.40	0.00	83	7	123	34	90
33+50	50	34.40	4.56	83	4	206	39	168
34+00	50	25.25	3.34	55	7	262	48	214
34+50	50	5.96	34.74	29	35	291	92	198
35+00	50	49.82	0.00	52	32	342	132	210
35+50	50	0.00	100.18	46	93	388	248	140
36+00	50	0.00	81.84	0	169	388	459	-71
36+50	50	0.00	38.69	0	112	388	599	-210
37+00	50	0.00	12.02	0	47	388	657	-269
37+50	50	5.19	8.16	5	19	393	681	-287
37+70	20	0.12	60.84	2	26	395	713	-317
				395	570			

DIVISION 2-1 (STA 131+40 - STA 157+15): STAGE 2 CONSTRUCTION - USH 12

STATION	Distance	Area Cut (SF)	Area Fill (SF)	Incremental Volume (Unadjusted) Cut Note 1 (CY)	Incremental Volume (Unadjusted) Fill Note 3 (CY)	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.25	Mass Ordinate Note 6
131+40		24.87	4.17					
131+50	10	24.56	1.22	9	1	9	1	8
132+00	50	24.94	1.32	46	2	55	4	51
132+50	50	23.73	14.65	45	15	100	23	77
133+00	50	23.55	22.04	44	34	144	65	79
133+50	50	24.67	23.42	45	42	188	118	71
134+00	50	27.20	20.92	48	41	237	169	67
134+50	50	29.86	25.71	53	43	289	223	66
135+00	50	30.79	27.53	56	49	345	285	61
135+50	50	27.33	24.38	54	48	399	345	55
136+00	50	26.50	19.31	50	40	449	395	54
136+50	50	29.21	14.90	52	32	501	435	66
137+00	50	30.97	11.33	56	24	556	465	91
137+50	50	30.22	38.12	57	46	613	522	91
138+00	50	37.14	5.12	62	40	675	573	103
138+50	50	57.48	0.14	88	5	763	579	184
139+00	50	24.07	33.71	76	31	839	618	221
139+50	50	21.75	59.28	42	86	881	725	156
140+00	50	22.03	58.39	41	109	922	862	60
140+50	50	20.10	56.91	39	107	961	995	-34
141+00	50	22.91	43.35	40	93	1000	1111	-111
141+50	50	29.00	21.02	48	60	1048	1186	-137
142+00	50	29.32	9.17	54	28	1102	1221	-118
142+50	50	29.22	2.89	54	11	1157	1235	-78
143+00	50	32.99	2.18	58	5	1214	1240	-26
143+50	50	23.40	0.00	52	2	1266	1243	24
144+00	50	25.74	0.00	46	0	1312	1243	69
144+50	50	29.18	0.00	51	0	1363	1243	120
145+00	50	29.69	0.00	55	0	1417	1243	174
145+50	50	24.20	0.00	50	0	1467	1243	224
146+00	50	20.55	0.00	41	0	1509	1243	266
146+50	50	25.32	36.57	42	34	1551	1285	266
147+00	50	24.92	57.06	47	87	1598	1394	204
147+50	50	20.45	96.03	42	142	1640	1571	69
148+00	50	21.14	64.15	39	148	1678	1756	-78
148+50	50	21.49	49.01	39	105	1718	1887	-169
149+00	50	23.82	23.11	42	67	1760	1971	-211
149+50	50	30.30	4.28	50	25	1810	2002	-193
150+00	50	70.46	0.38	93	4	1903	2008	-105
150+50	50	64.02	2.97	125	3	2028	2012	16
151+00	50	56.58	4.27	112	7	2139	2020	119
151+50	50	53.02	7.52	101	11	2241	2034	207
152+00	50	55.96	9.36	101	16	2342	2053	288
152+50	50	52.85	7.00	101	15	2442	2072	370
153+00	50	43.95	1.56	90	8	2532	2082	450
153+50	50	45.31	0.06	83	2	2615	2084	531
154+00	50	44.01	7.28	83	7	2697	2092	605
154+50	50	42.28	7.78	80	14	2777	2110	667
155+00	50	29.01	13.04	66	19	2843	2134	709
155+50	50	25.02	9.30	50	21	2893	2160	733
156+00	50	14.68	0.00	37	9	2930	2171	759
156+50	50	15.70	0.00	28	0	2958	2171	788
157+00	50	15.86	0.00	29	0	2987	2171	817
157+15	15	23.22	0.11	11	0	2998	2171	828
				2,998	1,736			

DIVISION 2-2 (STA 33+90 - STA 37+70): STAGE 2 CONSTRUCTION - CTH AA/MAYER ROAD

STATION	Distance	Area Cut (SF)	Area Fill (SF)	Incremental Volume (Unadjusted) Cut Note 1 (CY)	Incremental Volume (Unadjusted) Fill Note 3 (CY)	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.25	Mass Ordinate Note 6
33+90		60.91	0.70					
34+00	10	51.88	0.99	21	0	21	0	20
34+50	50	51.22	5.80	95	6	116	8	108
35+00	50	112.02	1.65	151	7	267	17	251
35+50	50	57.04	32.68	157	32	424	57	367
36+00	50	57.12	10.25	106	40	530	106	423
36+50	50	56.69	4.02	105	13	635	123	512
37+00	50	52.79	0.00	101	4	736	127	609
37+50	50	73.43	0.00	117	0	853	127	726
37+70	20	53.29	0.00	47	0	900	127	773
				900	102			

DIVISION 2-3 (STA 80+27 - STA 81+17): STAGE 2 CONSTRUCTION - BOHN DRIVEWAY

STATION	Distance	Area Cut (SF)	Area Fill (SF)	Incremental Volume (Unadjusted) Cut Note 1 (CY)	Incremental Volume (Unadjusted) Fill Note 3 (CY)	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.25	Mass Ordinate Note 6
80+27		0.00	34.36					
80+50	23	0.00	65.24	0	42	0	53	-53
81+00	50	0.00	64.23	0	120	0	203	-203
81+17	17	27.25	0.03	9	20	9	228	-220
				9	183			

DIVISION 2-4 (STA 70+02 - STA 71+06): STAGE 2 CONSTRUCTION - SHORT ROAD

STATION	Distance	Area Cut (SF)	Area Fill (SF)	Incremental Volume (Unadjusted) Cut Note 1 (CY)	Incremental Volume (Unadjusted) Fill Note 3 (CY)	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.25	Mass Ordinate Note 6
70+02		50.30	1.50					
70+50	48	51.20	34.50	90	32	90	40	50
70+85	35	51.20	62.30	66	63	157	118	38
				157	95			

DIVISION 2-5 (STA 143+14 - STA 144+26): STAGE 2 CONSTRUCTION - USH 12 EB BYPASS LANE

STATION	Distance	Area Cut (SF)	Area Fill (SF)	Incremental Volume (Unadjusted) Cut Note 1 (CY)	Incremental Volume (Unadjusted) Fill Note 3 (CY)	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.25	Mass Ordinate Note 6
143+14		9.45	2.31					
143+50	36	7.37	2.82	11	3	11	4	7
144+00	50	11.73	1.17	18	4	29	9	20
144+26	26	29.73	4.17	20	3	49	12	37
				49	10			

DIVISION 2-6 (STA 36+86 - STA 37+62): STAGE 2 CONSTRUCTION - CTH AA/MAYER ROAD NB BYPASS LANE

STATION	Distance	Area Cut (SF)	Area Fill (SF)	Incremental Volume (Unadjusted) Cut Note 1 (CY)	Incremental Volume (Unadjusted) Fill Note 3 (CY)	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.25	Mass Ordinate Note 6
36+86		25.06	0.17					
37+00	14	20.29	0.71	12	0	12	0	11
37+50	50	23.17	1.52	40	2	52	3	49
37+62	12	0.64	17.79	5	4	57	8	49
				57	7			

DIVISION 3-1 (STA 131+40 - STA 157+15): STAGE 3 CONSTRUCTION - USH 12

STATION	Distance	Area Cut (SF)	Area Fill (SF)	Incremental Volume (Unadjusted) Cut Note 1 (CY)	Incremental Volume (Unadjusted) Fill Note 3 (CY)	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.25	Mass Ordinate Note 6
131+40		0.83	0.00					
131+50	10	1.08	0.00	0	0	0	0	0
132+00	50	1.20	0.00	2	0	2	0	2
132+50	50	26.36	0.00	26	0	28	0	28
133+00	50	23.72	0.76	46	1	74	1	73
133+50	50	24.59	0.49	45	1	119	2	117
134+00	50	25.53	0.60	46	1	165	4	162
134+50	50	27.38	0.00	49	1	214	4	210
135+00	50	28.38	0.30	52	0	266	5	261
135+50	50	28.45	0.81	53	1	319	6	313
136+00	50	65.59	0.00	87	1	406	7	399
136+50	50	25.28	5.83	84	5	490	14	476
137+00	50	26.48	7.11	48	12	538	29	509
137+50	50	26.17	4.78	49	11	587	42	544
138+00	50	21.00	0.76	44	5	630	49	582
138+50	50	18.57	0.43	37	1	667	50	617
139+00	50	16.23	0.48	32	1	699	51	648
139+50	50	14.32	0.70	28	1	727	53	675
140+00	50	14.29	0.59	26	1	754	54	700
140+50	50	13.55	1.39	26	2	780	56	723
141+00	50	13.71	2.46	25	4	805	61	744
141+50	50	14.27	0.98	26	3	831	65	766
142+00	50	32.52	0.00	43	1	874	66	808
142+50	50	15.46	0.00	44	0	919	66	853
143+00	50	17.05	0.00	30	0	949	66	883
143+50	50	0.00	0.00	16	0	965	66	899
144+00	50	0.00	0.00	0	0	965	66	899
144+50	50	10.34	0.00	10	0	974	66	908
145+00	50	35.43	0.00	42	0	1016	66	951
145+50	50	17.62	0.00	49	0	1066	66	1000
146+00	50	46.22	28.79	59	27	1125	99	1025
146+50	50	30.70	22.51	71	48	1196	159	1037
147+00	50	23.33	40.56	50	58	1246	232	1014
147+50	50	18.91	71.69	39	104	1285	362	924
148+00	50	17.62	60.95	34	123	1319	515	804
148+50	50	16.54	65.68	32	117	1351	662	689
149+00	50	15.90	60.92	30	117	1381	808	572
149+50	50	16.23	45.27	30	98	1410	931	479
150+00	50	29.18	5.17	42	47	1452	989	463
150+50	50	20.18	16.21	46	20	1498	1014	484
151+00	50	19.22	19.57	36	33	1535	1056	479
151+50	50	20.77	12.52	37	30	1572	1093	479
152+00	50	22.14	10.27	40	21	1611	1119	492
152+50	50	21.54	9.35	40	18	1652	1142	510
153+00	50	23.31	8.42	42	16	1693	1162	531
153+50	50	24.67	6.63	44	14	1738	1180	558
154+00	50	24.25	4.19	45	10	1783	1192	591
154+50	50	27.46	1.54	48	5	1831	1199	632
155+00	50	29.16	0.32	52	2	1883	1201	682
155+50	50	34.55	0.00	59	0	1942	1201	741
156+00	50	22.31	2.20	53	2	1995	1204	791
156+50	50	23.65	0.00	43	2	2037	1207	831
157+00	50	24.40	0.00	44	0	2082	1207	875
157+15	15	25.11	0.00	14	0	2096	1207	889
				2,096	965			

DIVISION 3-2 (STA 38+18 - STA 39+68): STAGE 3 CONSTRUCTION - MAYER ROAD

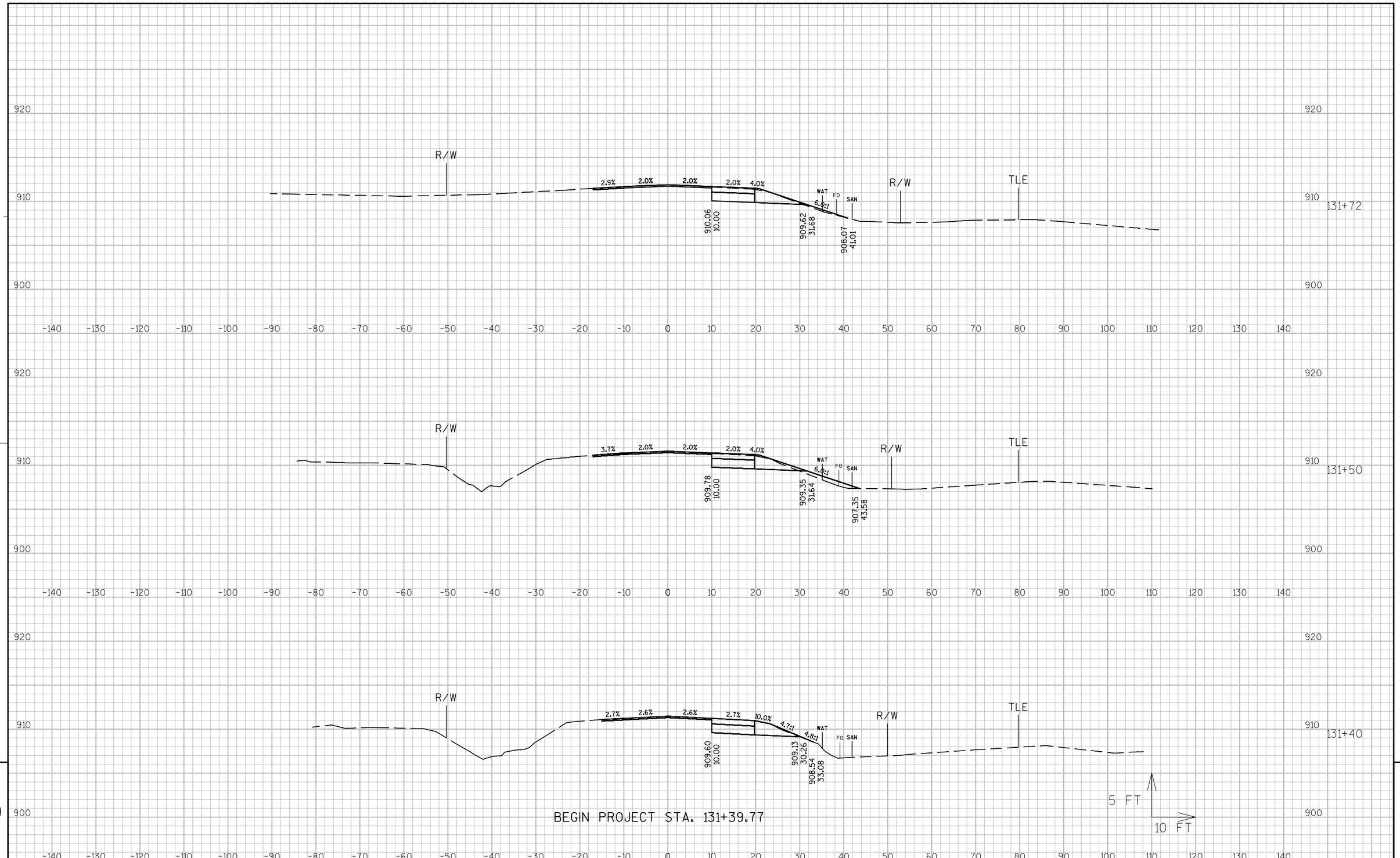
STATION	Distance	Area Cut (SF)	Area Fill (SF)	Incremental Volume (Unadjusted) Cut Note 1 (CY)	Incremental Volume (Unadjusted) Fill Note 3 (CY)	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.25	Mass Ordinate Note 6
38+18		50.49	0.00					
38+50	32	0.03	17.78	30	11	30	13	17
39+00	50	6.11	8.97	6	25	36	44	-9
39+50	50	49.21	0.00	51	8	87	55	32
39+68	18	50.96	0.00	33	0	120	55	66
				120	44			

DIVISION 3-3 (STA 38+24 - STA 39+01): STAGE 3 CONSTRUCTION - MAYER ROAD SB BYPASS LANE

STATION	Distance	Area Cut (SF)	Area Fill (SF)	Incremental Volume (Unadjusted) Cut Note 1 (CY)	Incremental Volume (Unadjusted) Fill Note 3 (CY)	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.25	Mass Ordinate Note 6
38+24		4.37	40.14					
38+50	26	11.55	6.75	8	23	8	28	-21
39+00	50	40.24	0.00	48	6	56	36	20
39+01	1	40.14	0.00	1	0	57	36	21
				57	29			

DIVISION 3-4 (STA 144+78 - STA 145+88): STAGE 3 CONSTRUCTION - USH 12 WB BYPASS LANE

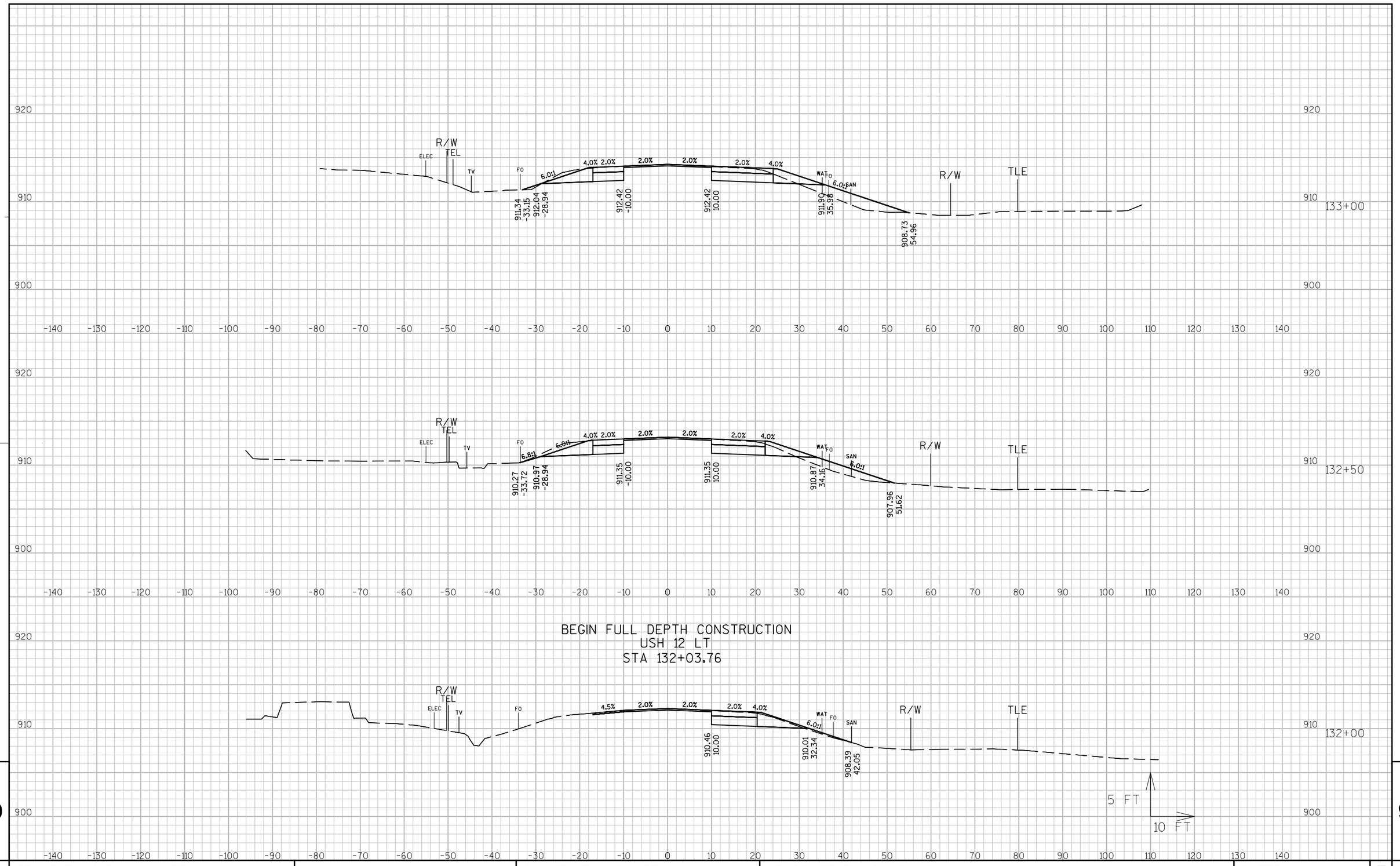
STATION	Distance	Area Cut (SF)	Area Fill (SF)	Incremental Volume (Unadjusted) Cut Note 1 (CY)	Incremental Volume (Unadjusted) Fill Note 3 (CY)	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.25	Mass Ordinate Note 6
144+78		13.33	16.58					
145+00	22	7.70	11.88	9	12	9	14	-6
145+50	50	17.64	20.97	23	30	32	53	-20
145+88	38	26.41	29.31	31	35	63	97	-34
				63	77			



9

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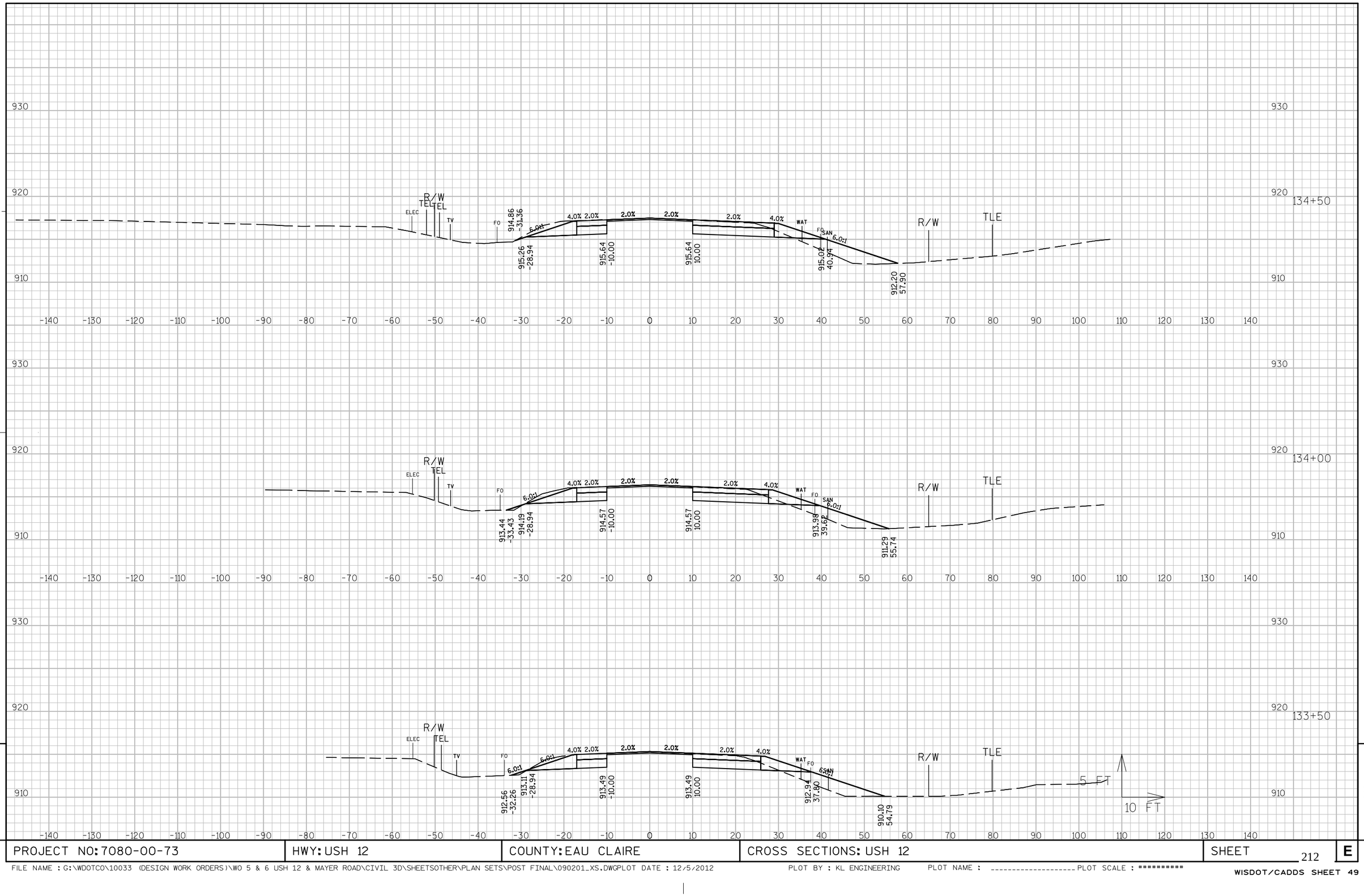
PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	CROSS SECTIONS: USH 12	SHEET 210	E



9

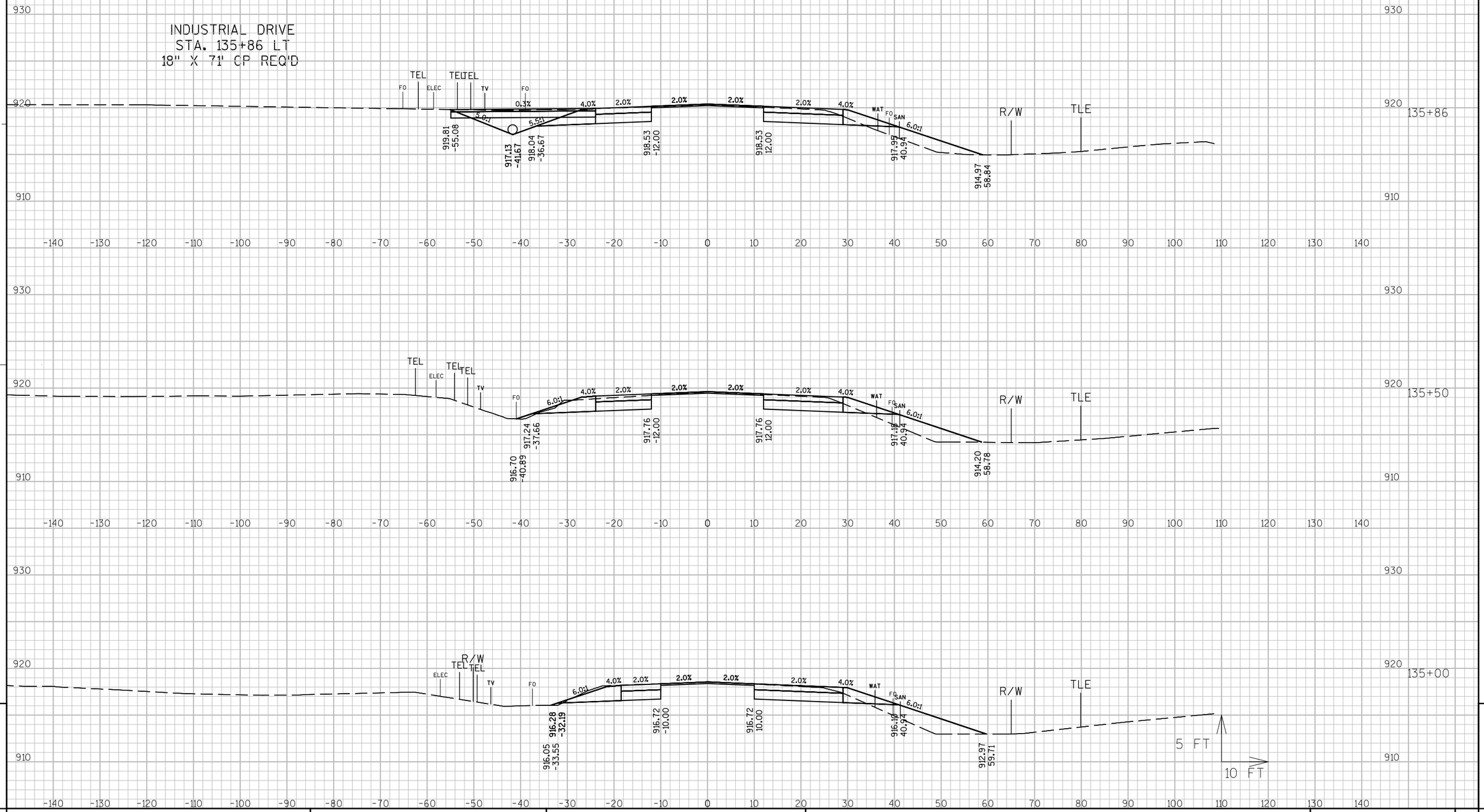
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PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	CROSS SECTIONS: USH 12	SHEET 211	E



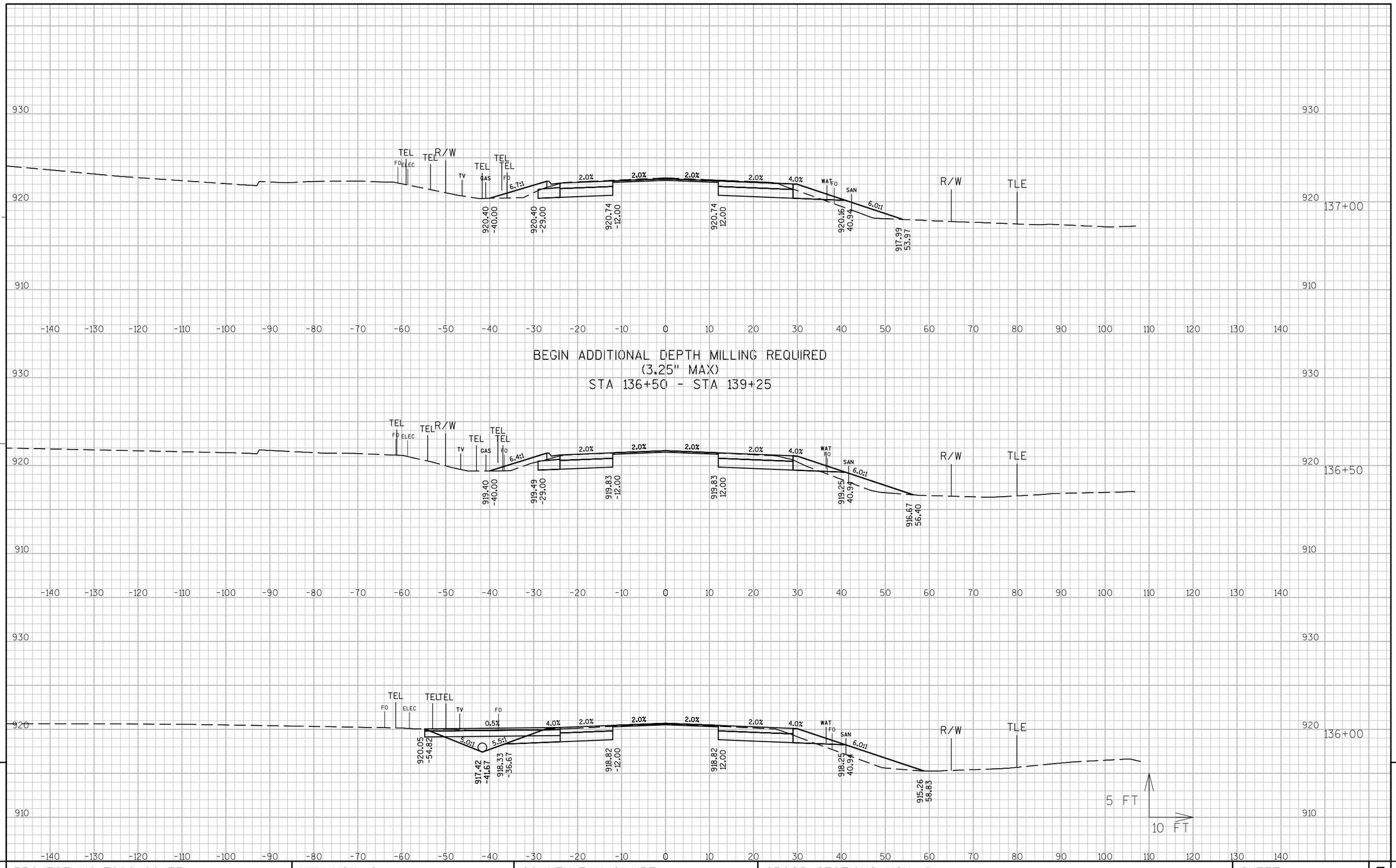
PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	CROSS SECTIONS: USH 12	SHEET 212 E

INDUSTRIAL DRIVE
STA. 135+86 LT
18" X 71' CP REQ'D

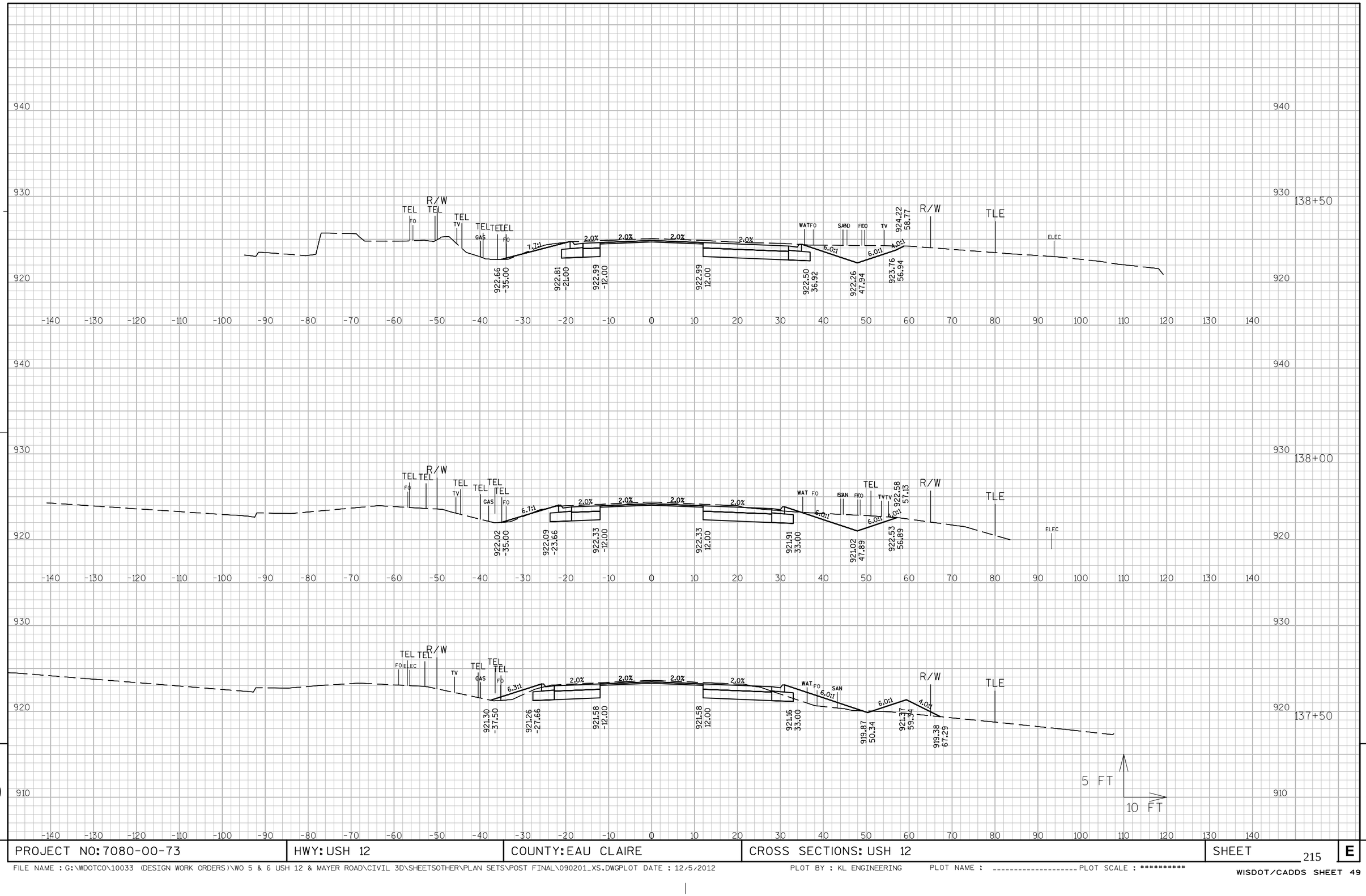


PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	CROSS SECTIONS: USH 12	SHEET 213	E

FILE NAME : G:\WDOTCO\10033 (DESIGN WORK ORDERS)\WO 5 & 6 USH 12 & MAYER ROAD\CIVIL 3D\SHEETSOTHER\PLAN SETS\POST FINAL\090201_XS.DWGPLOT DATE : 12/5/2012
PLOT BY : KL ENGINEERING PLOT NAME : ---------- PLOT SCALE : **********
WISDOT/CADDS SHEET 49

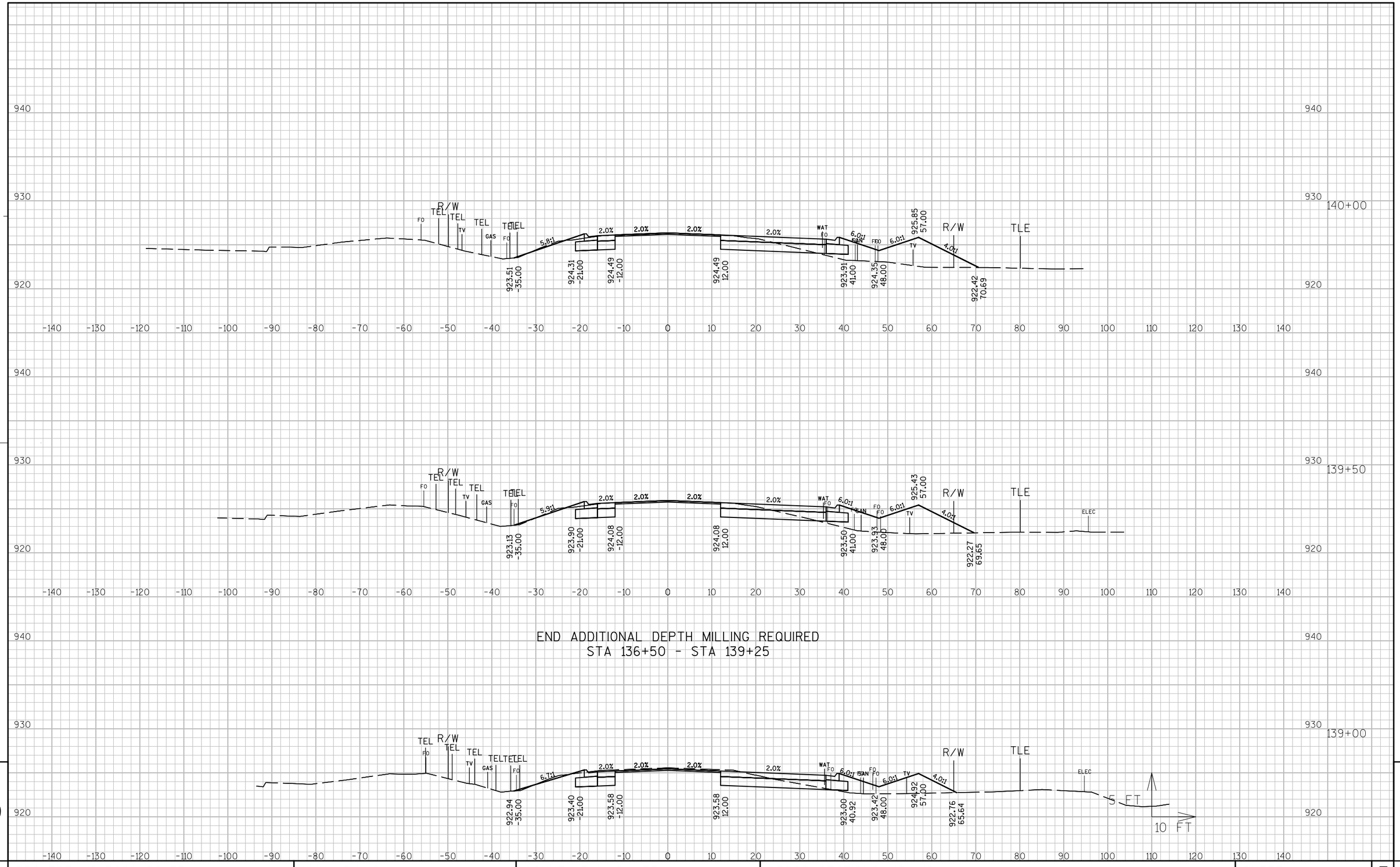


PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	CROSS SECTIONS: USH 12	SHEET 214	E

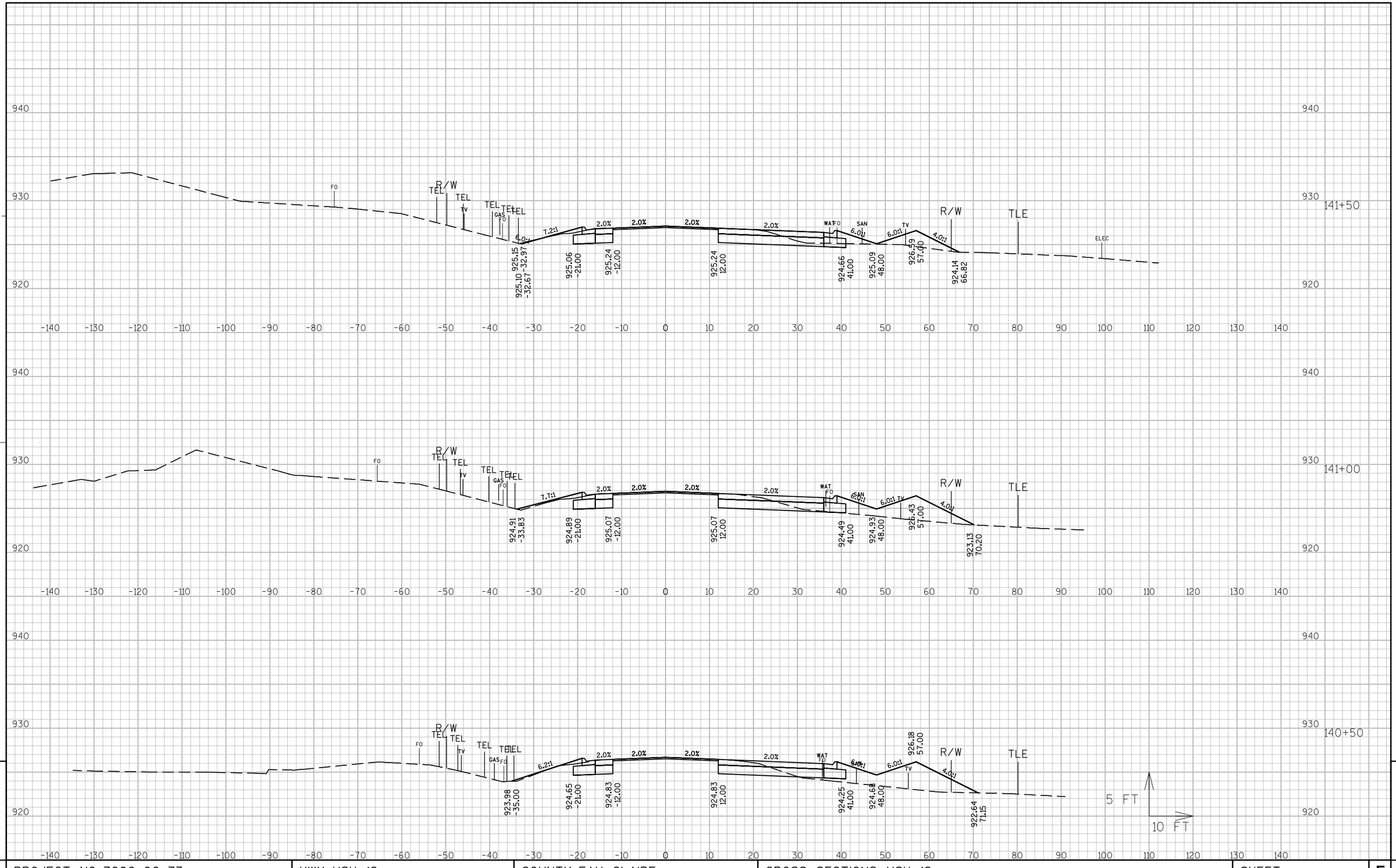


PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	CROSS SECTIONS: USH 12	SHEET 215	E

FILE NAME : G:\WDOTCO\10033 (DESIGN WORK ORDERS)\WO 5 & 6 USH 12 & MAYER ROAD\CIVIL 3D\SHEETSOTHER\PLAN SETS\POST FINAL\090201_XS.DWGPLOT DATE : 12/5/2012 PLOT BY : KL ENGINEERING PLOT NAME : ---------- PLOT SCALE : **********



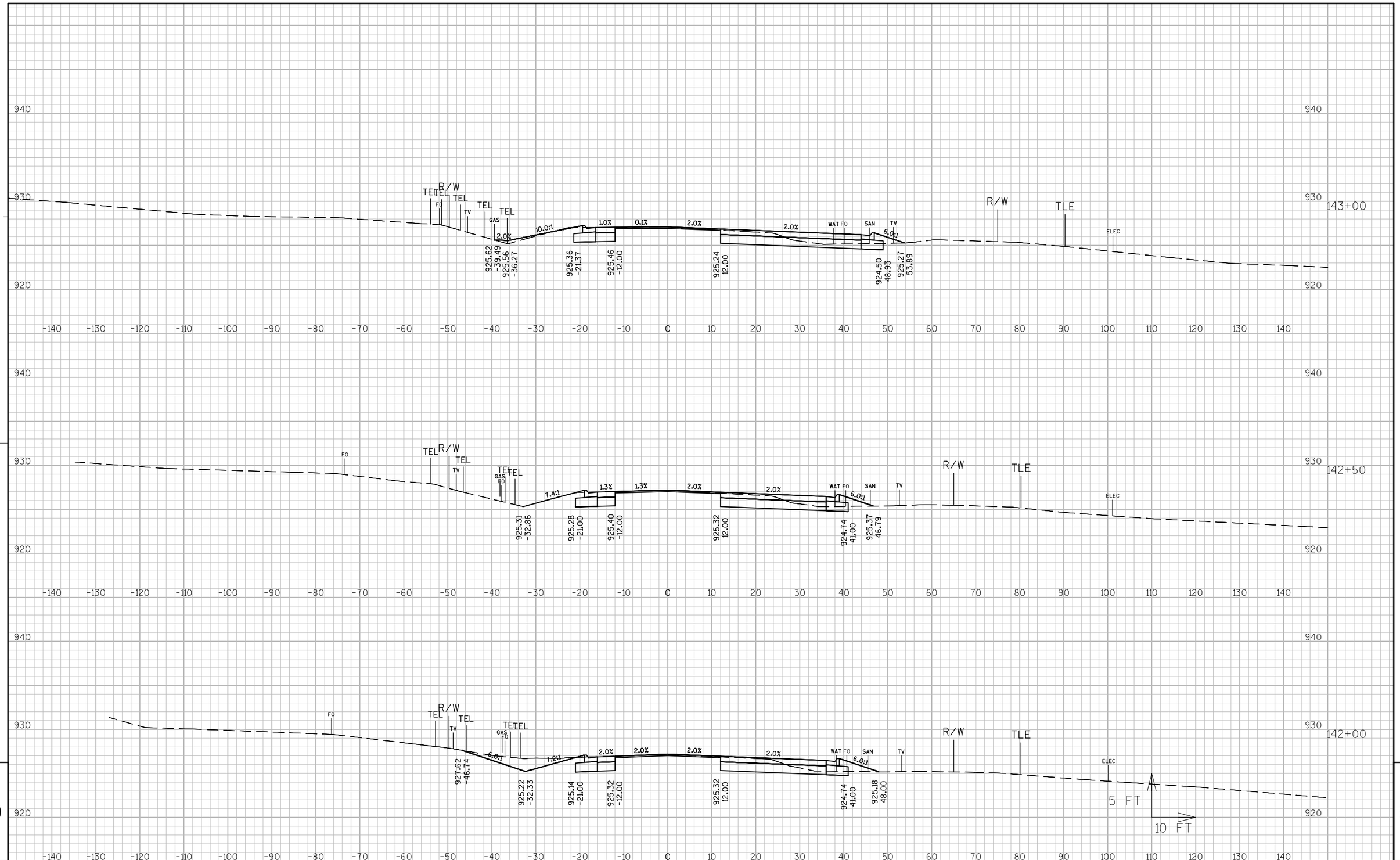
PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	CROSS SECTIONS: USH 12	SHEET 216	E



9

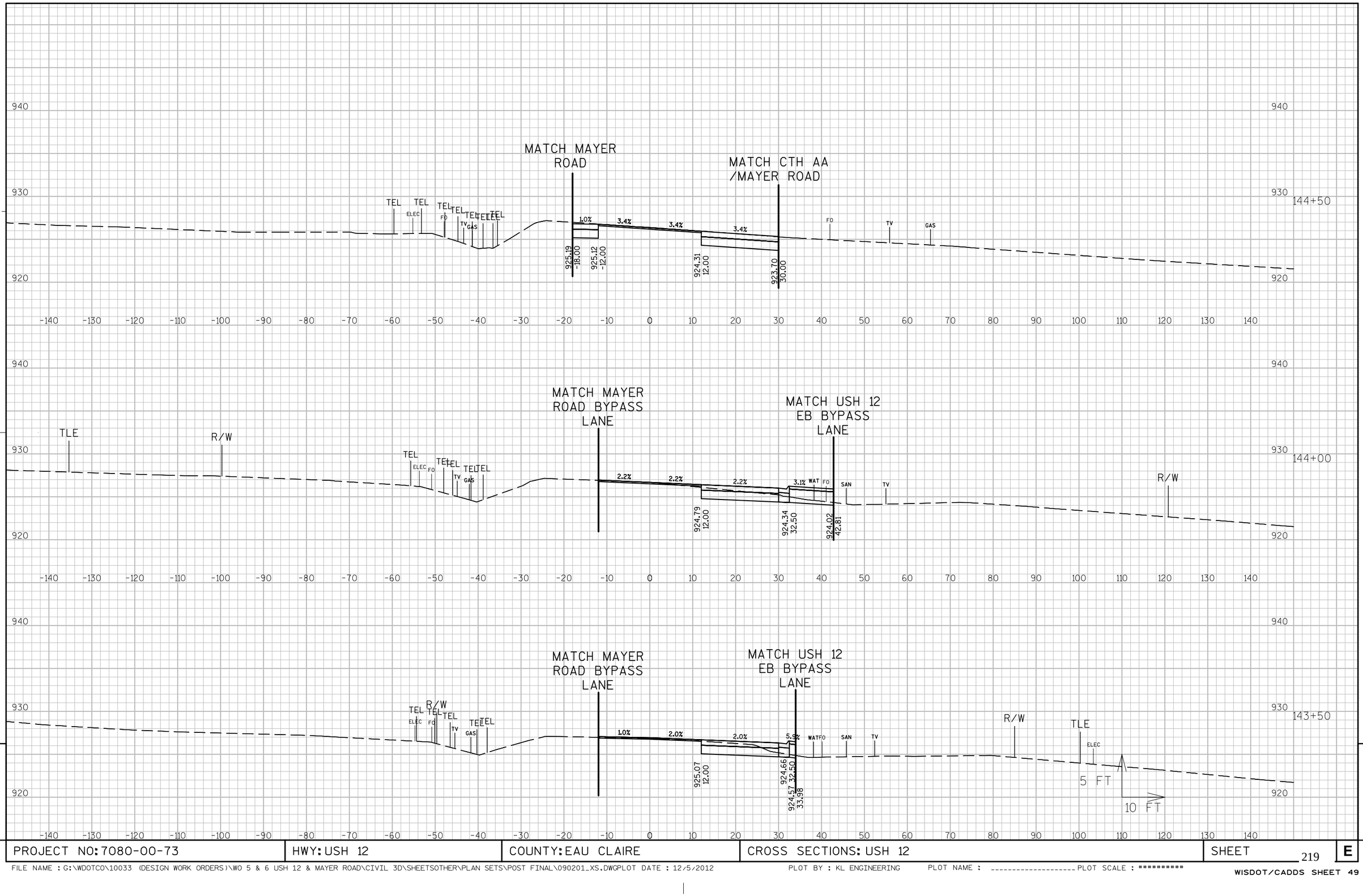
PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	CROSS SECTIONS: USH 12	SHEET 217	E

FILE NAME : G:\WDOTCO\10033 (DESIGN WORK ORDERS)\WO 5 & 6 USH 12 & MAYER ROAD\CIVIL 3D\SHEETSOTHER\PLAN SETS\POST FINAL\090201_XS.DWGPLOT DATE : 12/5/2012 PLOT BY : KL ENGINEERING PLOT NAME : ---------- PLOT SCALE : **********

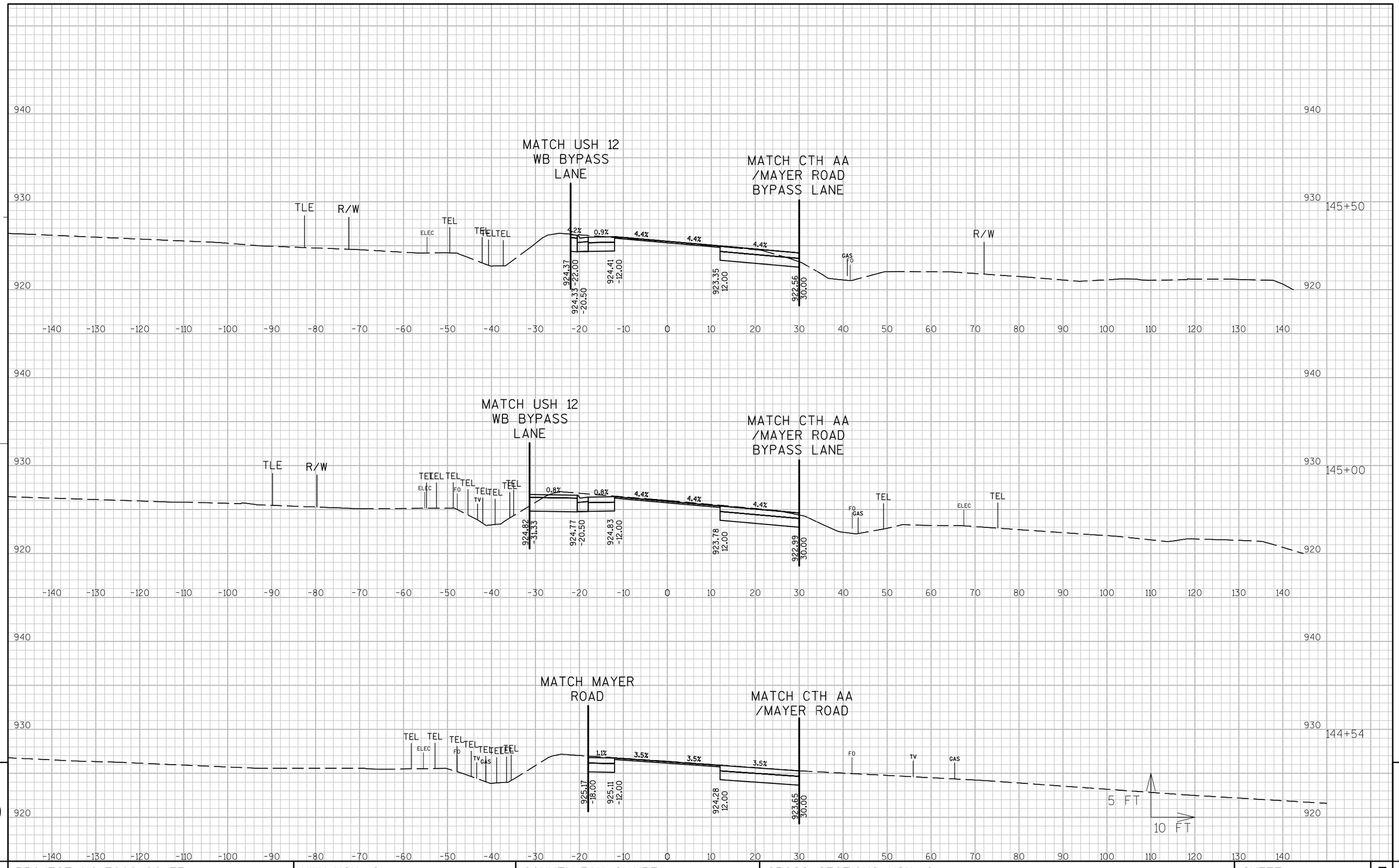


PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	CROSS SECTIONS: USH 12	SHEET 218	E

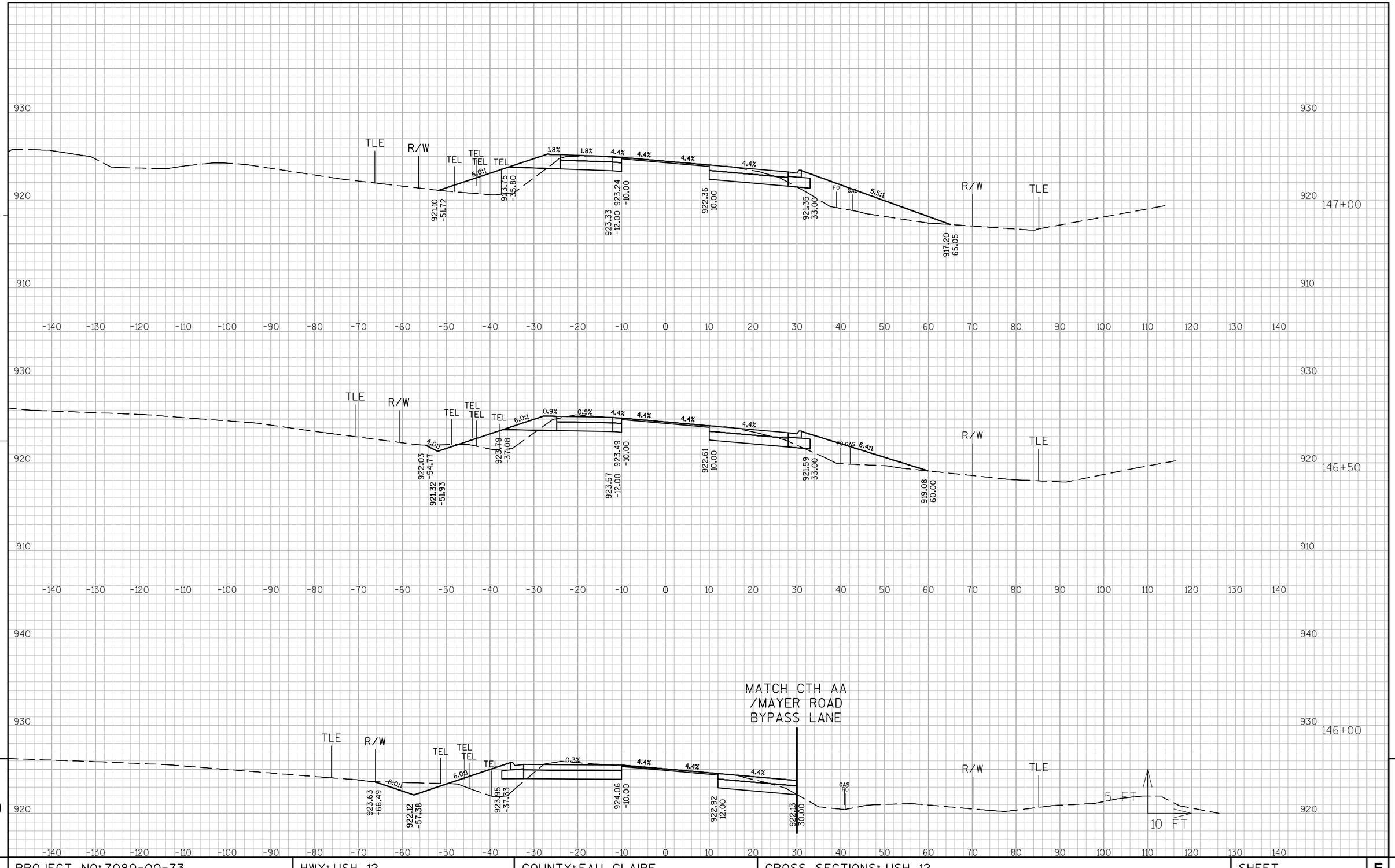
FILE NAME : G:\WDOTCO\10033 (DESIGN WORK ORDERS)\WO 5 & 6 USH 12 & MAYER ROAD\CIVIL 3D\SHEETSOTHER\PLAN SETS\POST FINAL\090201_XS.DWGPLOT DATE : 12/5/2012 PLOT BY : KL ENGINEERING PLOT NAME : ---------- PLOT SCALE : ********** WISDOT/CADDS SHEET 49



PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	CROSS SECTIONS: USH 12	SHEET 219	E



PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	CROSS SECTIONS: USH 12	SHEET 220	E



9

9

PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	CROSS SECTIONS: USH 12	SHEET 221	E

FILE NAME : G:\WDOTCO\10033 (DESIGN WORK ORDERS)\WO 5 & 6 USH 12 & MAYER ROAD\CIVIL 3D\SHEETSOTHER\PLAN SETS\POST FINAL\090201_XS.DWGPLOT DATE : 12/5/2012
PLOT BY : KL ENGINEERING PLOT NAME : ---------- PLOT SCALE : **********

AVOID EXISTING UNDERGROUND
SEPTIC SYSTEM
STA 147+56 - STA 147+85
73.0' RT

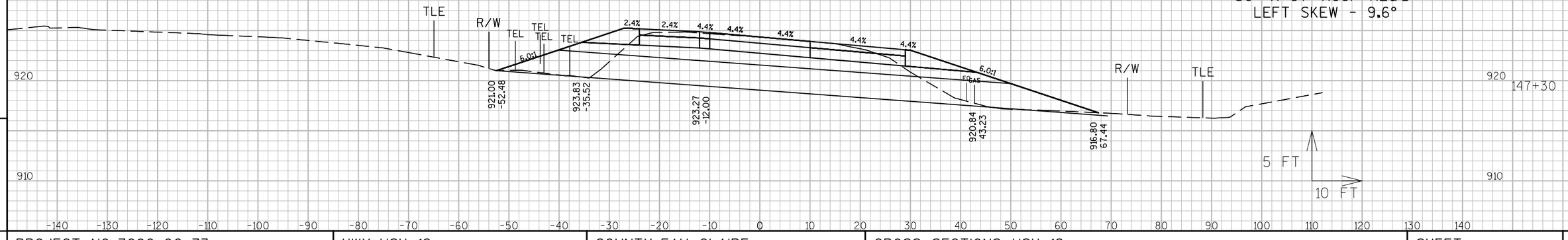


FULL SECTION RECONSTRUCT FOR
PROPOSED CULVERT PLACEMENT ONLY



FULL SECTION RECONSTRUCT FOR
PROPOSED CULVERT PLACEMENT ONLY

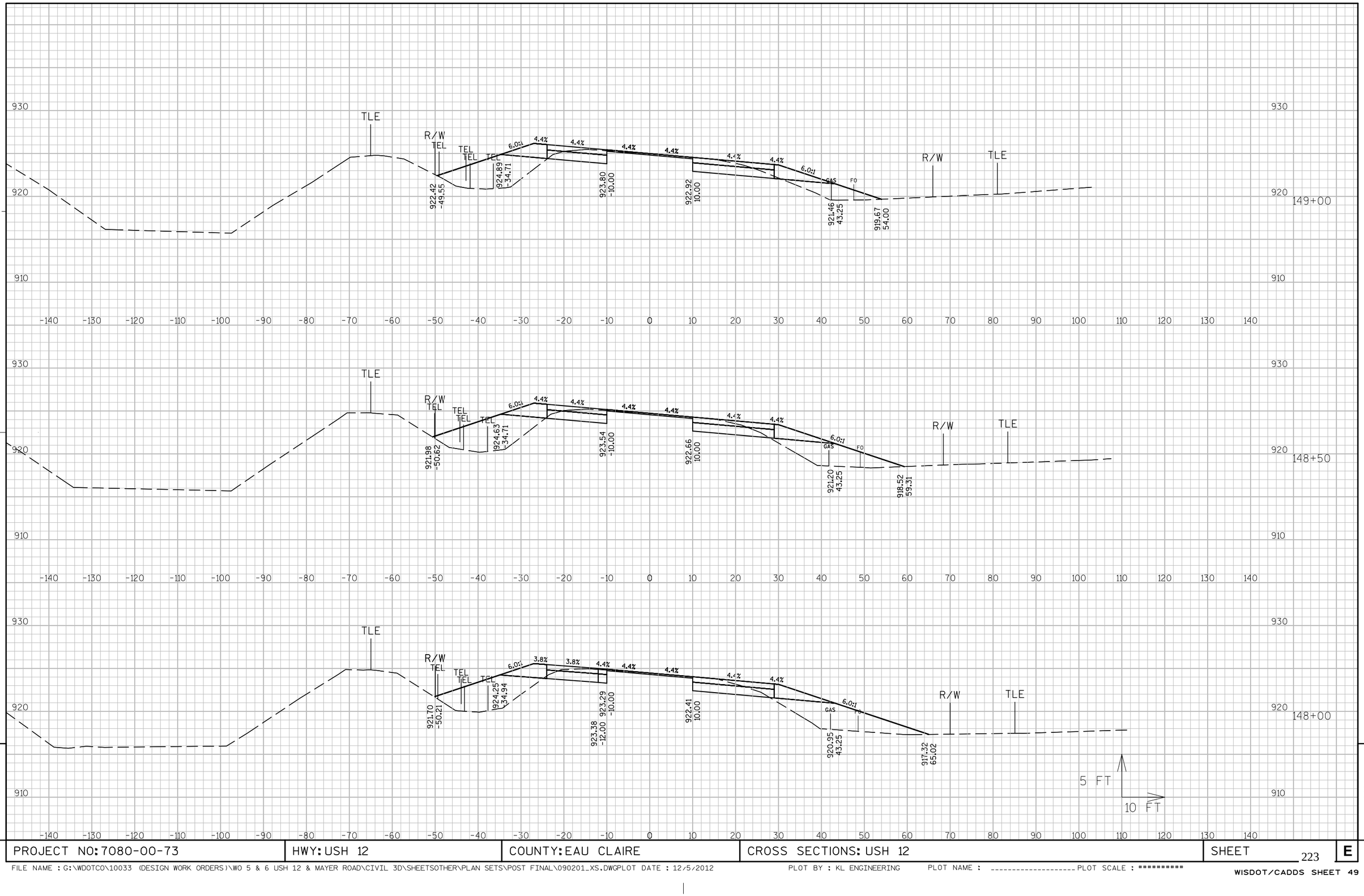
30" X 87' RCCP REQ'D
LEFT SKEW - 9.6°



9

9

PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	CROSS SECTIONS: USH 12	SHEET 222	E

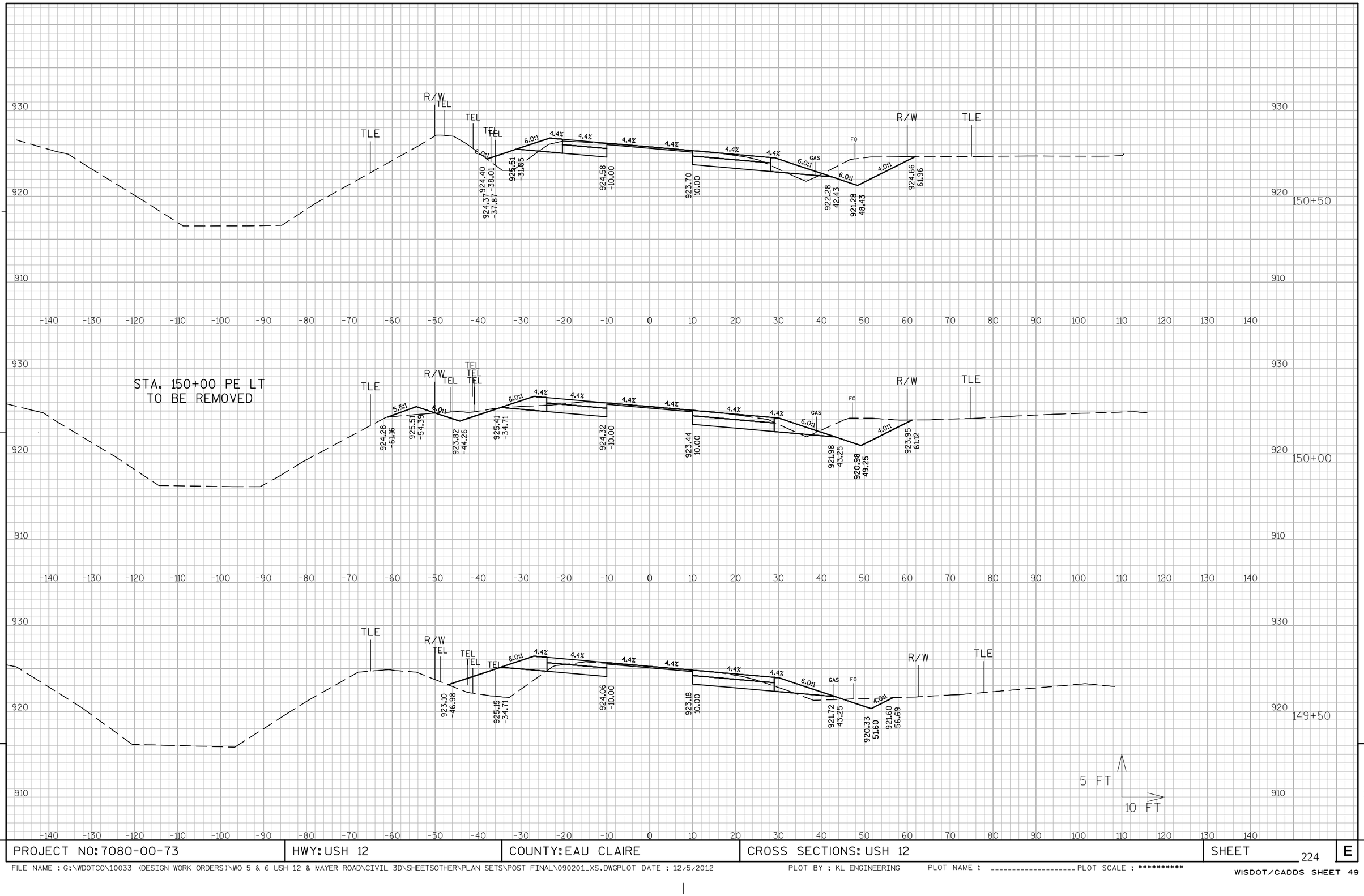


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PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	CROSS SECTIONS: USH 12	SHEET 223	E

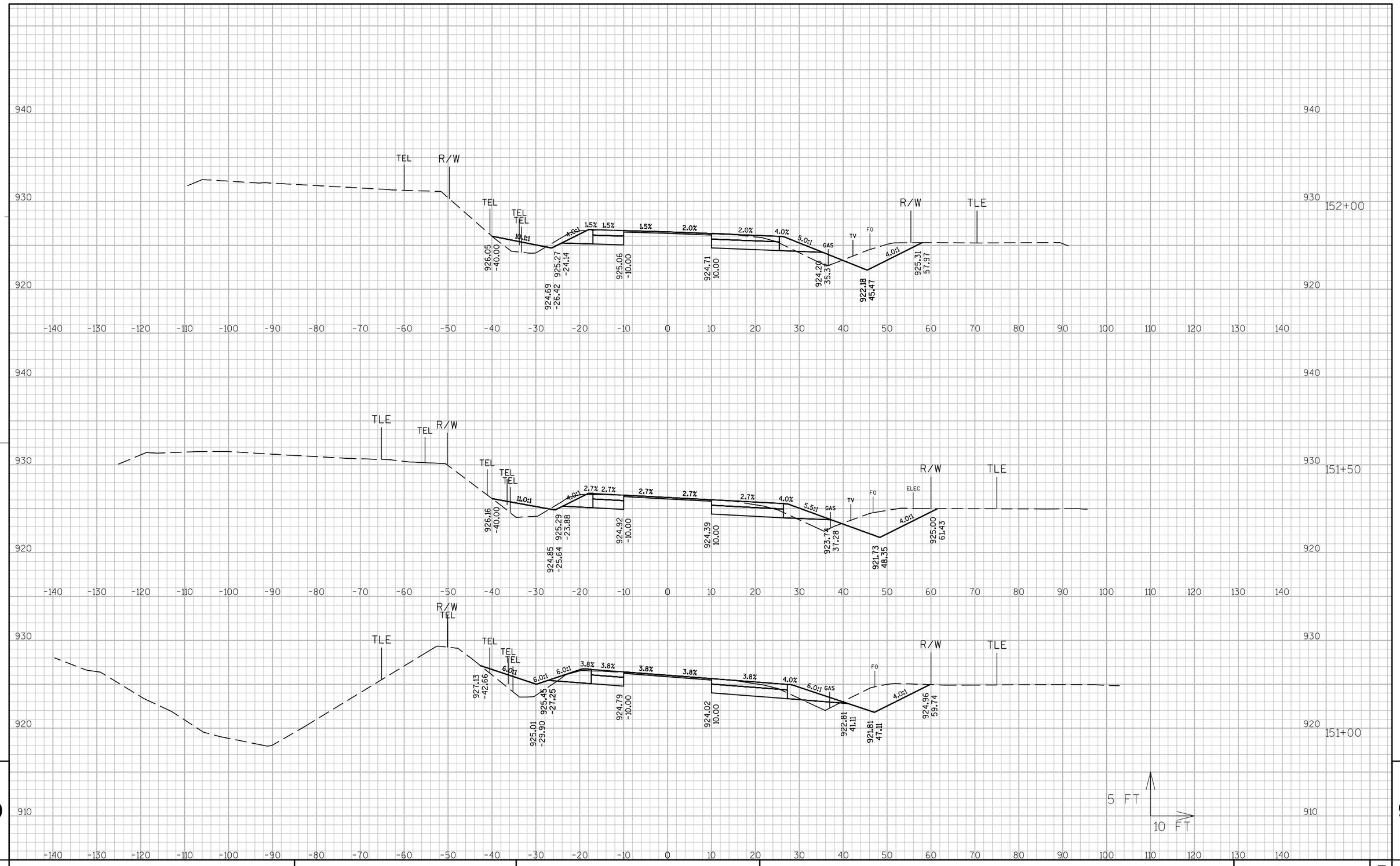
FILE NAME : G:\WDOTCO\10033 (DESIGN WORK ORDERS)\WO 5 & 6 USH 12 & MAYER ROAD\CIVIL 3D\SHEETSOTHER\PLAN SETS\POST FINAL\090201_XS.DWGPLOT DATE : 12/5/2012 PLOT BY : KL ENGINEERING PLOT NAME : _____ PLOT SCALE : **********



9

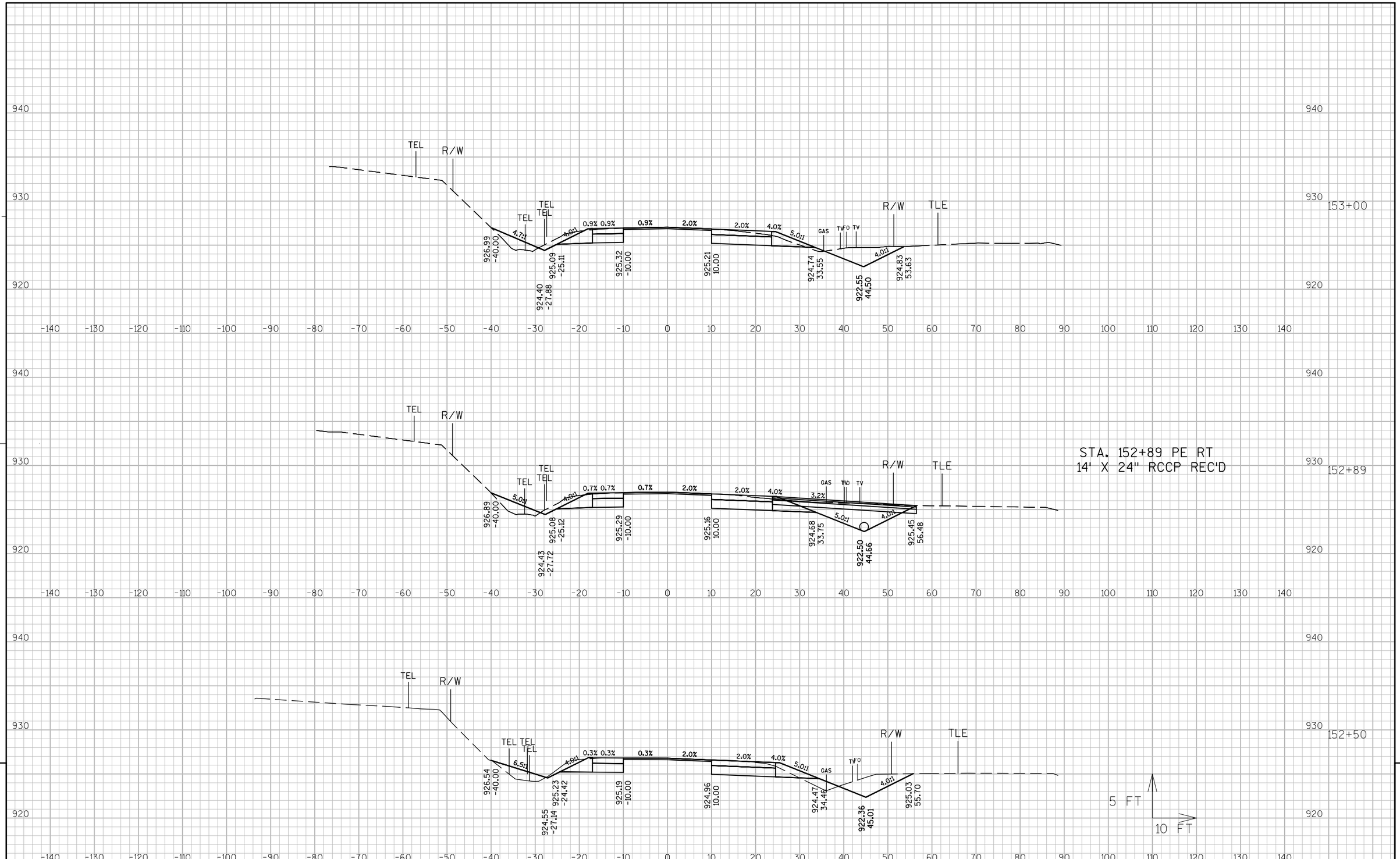
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PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	CROSS SECTIONS: USH 12	SHEET 224	E

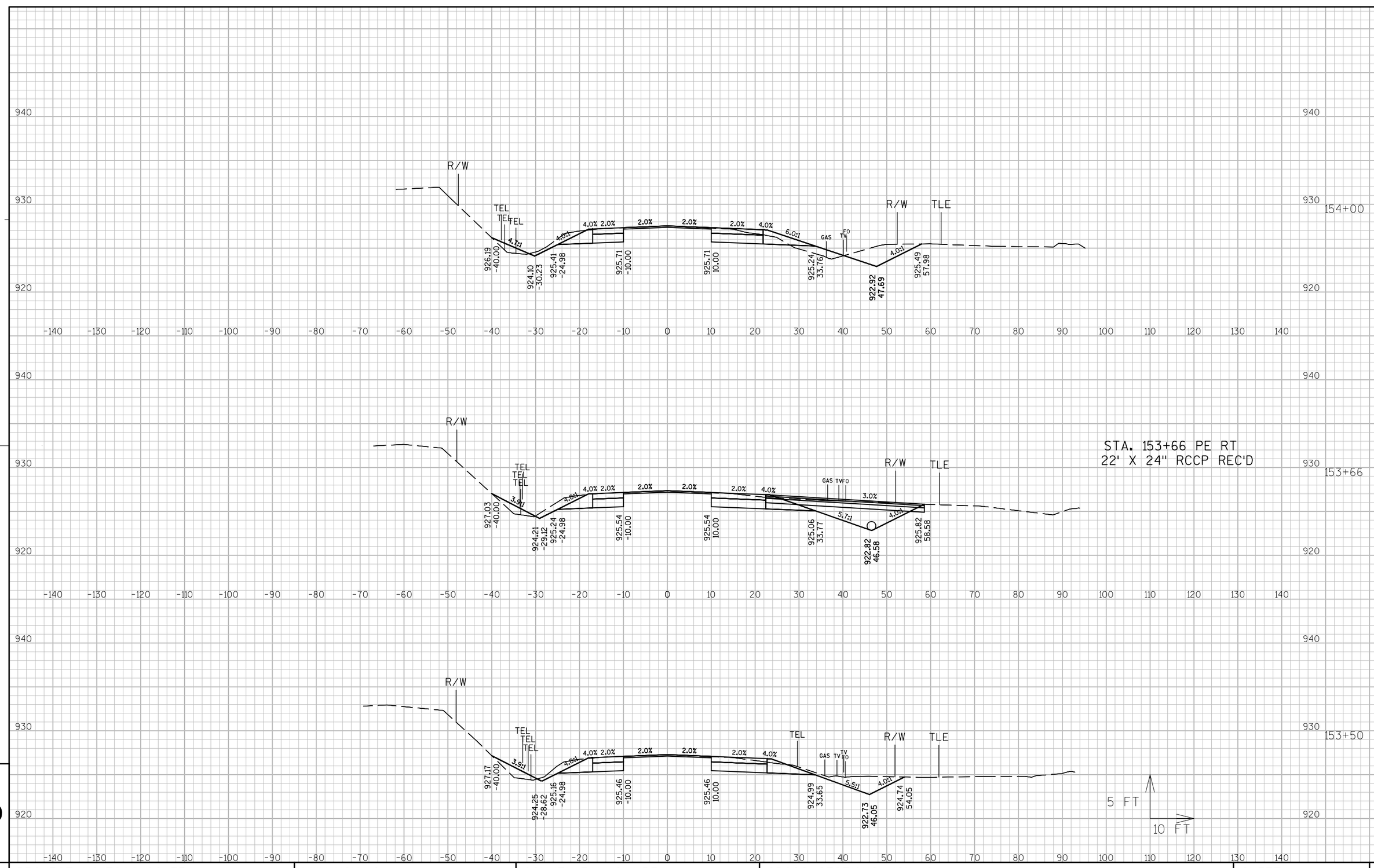


PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	CROSS SECTIONS: USH 12	SHEET 225	E

FILE NAME : G:\WDOTCO\10033 (DESIGN WORK ORDERS)\WO 5 & 6 USH 12 & MAYER ROAD\CIVIL 3D\SHEETSOTHER\PLAN SETS\POST FINAL\090201_XS.DWGPLOT DATE : 12/5/2012 PLOT BY : KL ENGINEERING PLOT NAME : ---------- PLOT SCALE : **********



PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	CROSS SECTIONS: USH 12	SHEET 226	E



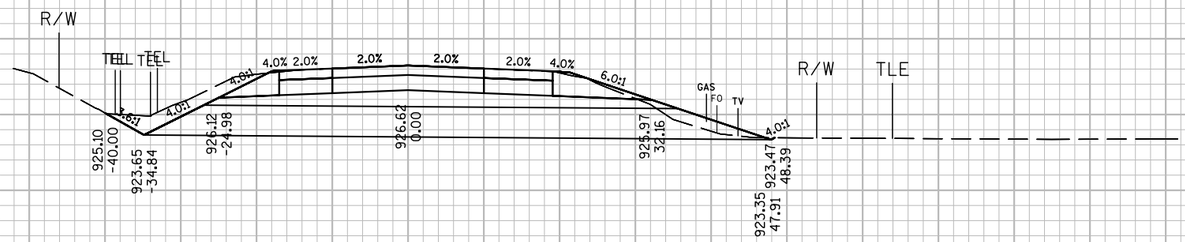
PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	CROSS SECTIONS: USH 12	SHEET 227	E

FILE NAME : G:\WDOTCO\10033 (DESIGN WORK ORDERS)\WO 5 & 6 USH 12 & MAYER ROAD\CIVIL 3D\SHEETSOTHER\PLAN SETS\POST FINAL\090201_XS.DWGPLOT DATE : 12/5/2012 PLOT BY : KL ENGINEERING PLOT NAME : ---------- PLOT SCALE : **********

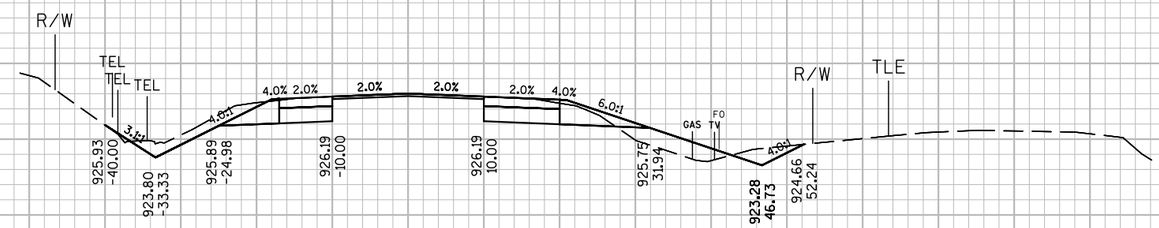
WISDOT/CADDS SHEET 49

FULL SECTION RECONSTRUCT FOR
PROPOSED CULVERT PLACEMENT ONLY

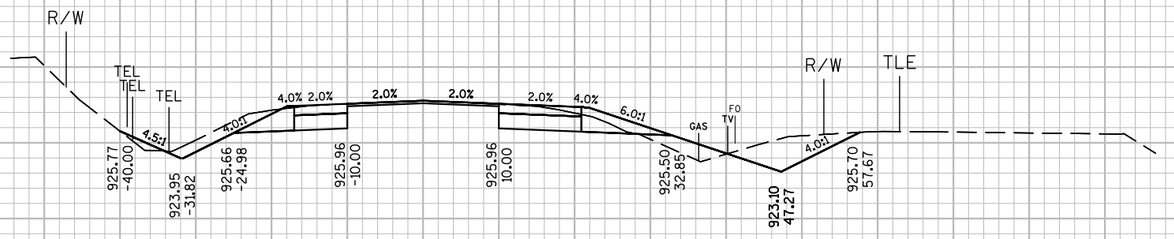
30" X 47' RCCP REQ'D



155+50



155+00



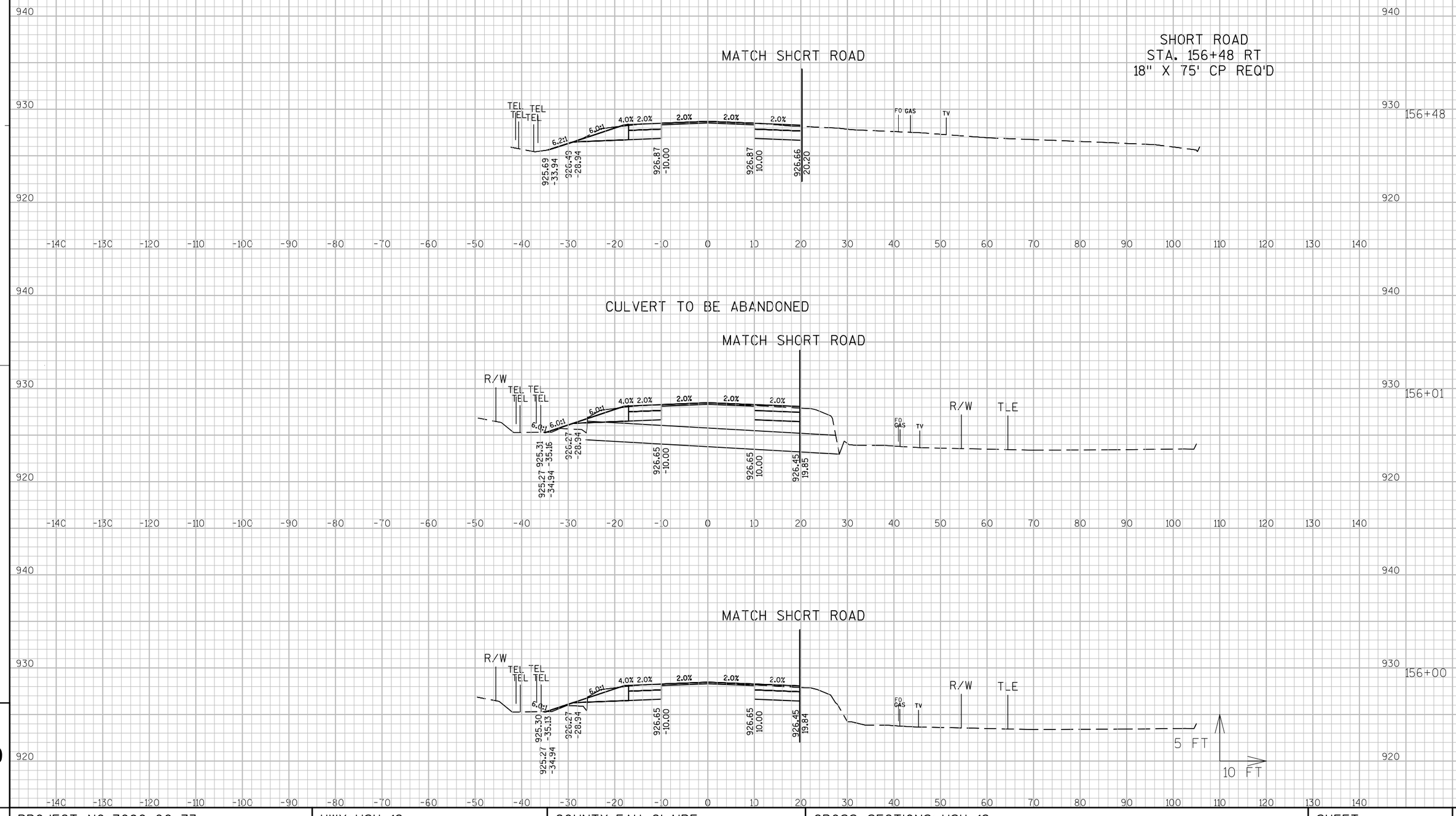
154+50

5 FT
10 FT

PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	CROSS SECTIONS: USH 12	SHEET 228	E

FILE NAME : G:\WDOTCO\10033 (DESIGN WORK ORDERS)\WO 5 & 6 USH 12 & MAYER ROAD\CIVIL 3D\SHEETSOTHER\PLAN SETS\POST FINAL\090201_XS.DWGPLOT DATE : 12/5/2012 PLOT BY : KL ENGINEERING PLOT NAME : ---------- PLOT SCALE : **********

WISDOT/CADDS SHEET 49

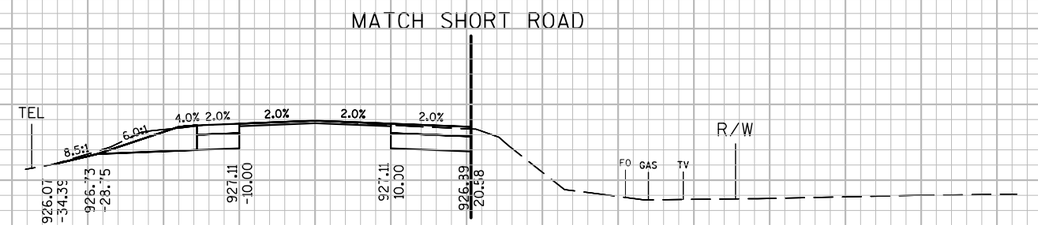


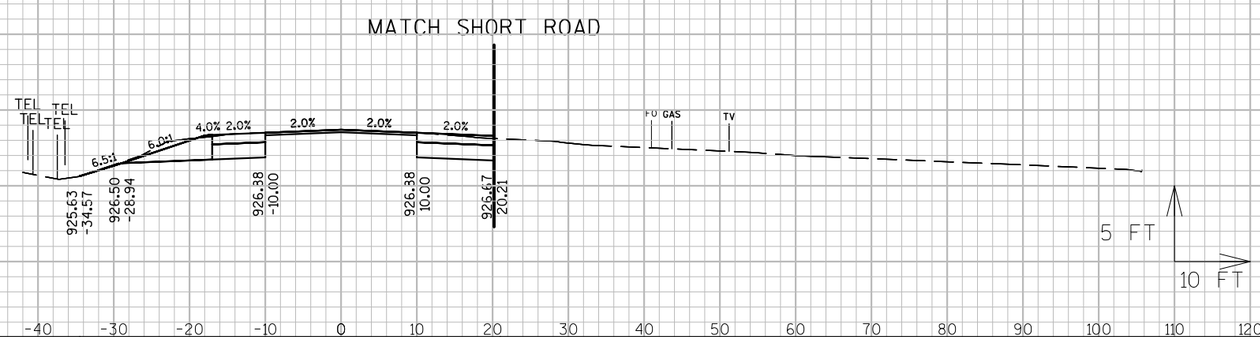
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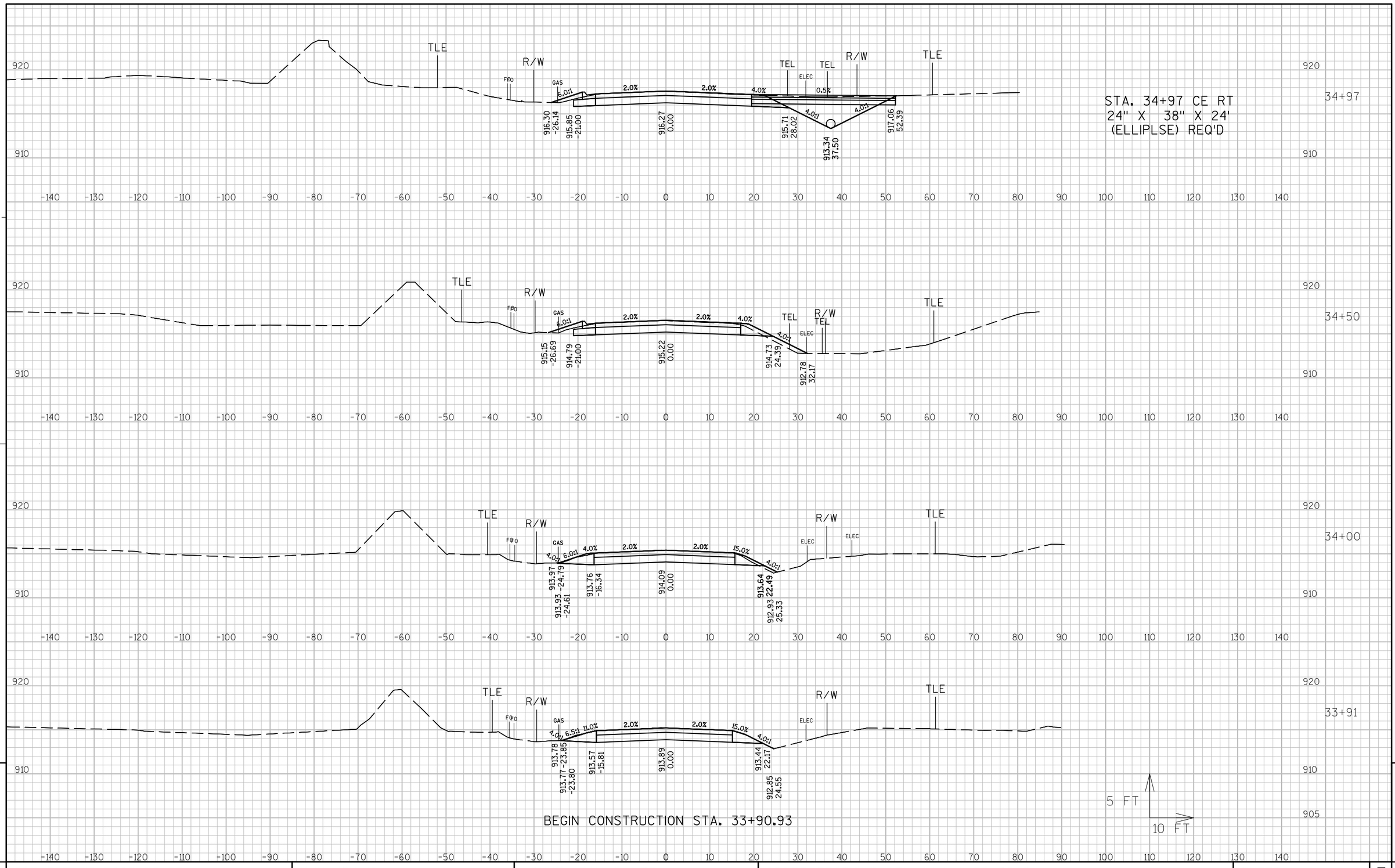
PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	CROSS SECTIONS: USH 12	SHEET 229	E

END PROJECT STA. 157+14.97





PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	CROSS SECTIONS: USH 12	SHEET 230	E

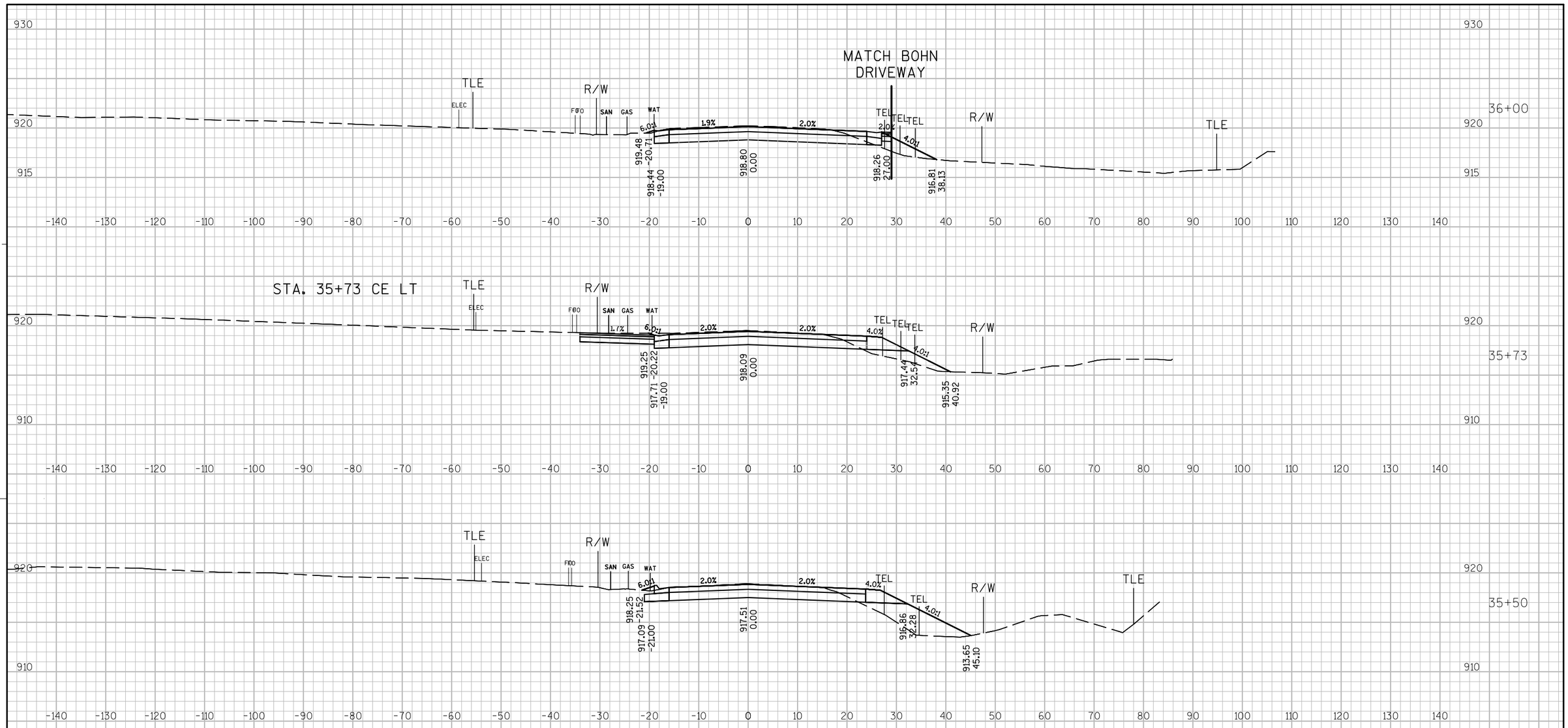


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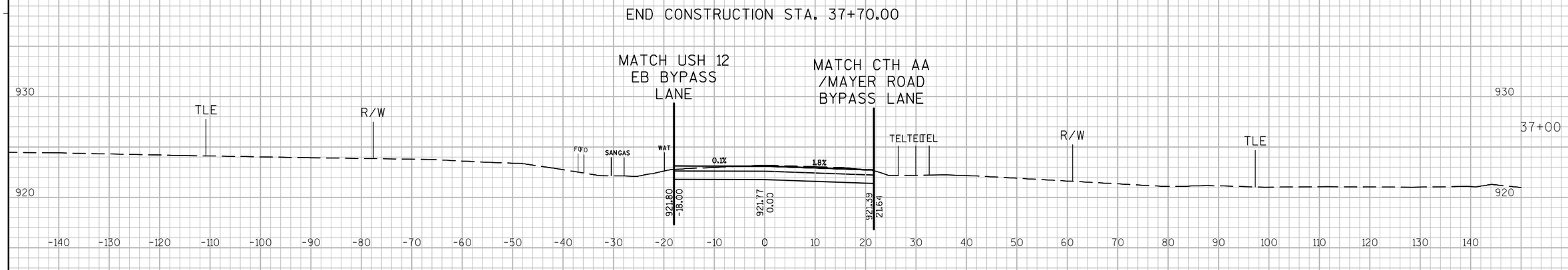
PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	CROSS SECTIONS: CTH AA/MAYER ROAD	SHEET 231	E

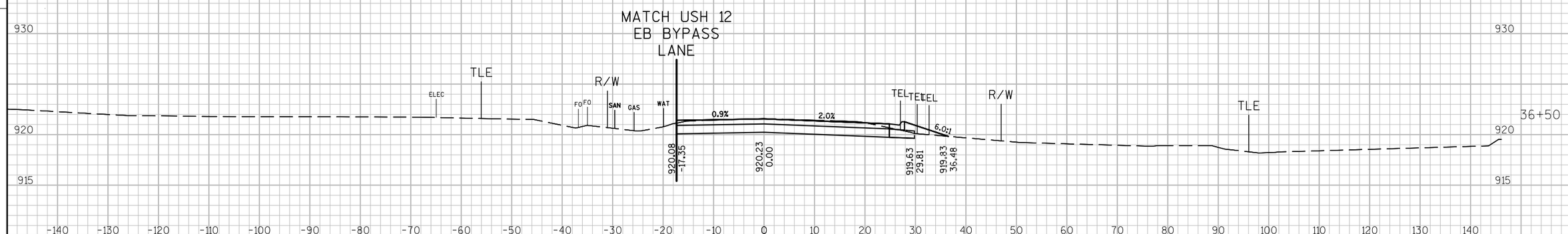
FILE NAME : G:\WDOTCO\10033 (DESIGN WORK ORDERS)\WO 5 & 6 USH 12 & MAYER ROAD\CIVIL 3D\SHEETSOTHER\PLAN SETS\POST FINAL\090201_XS.DWGPLOT DATE : 12/5/2012
PLOT BY : KL ENGINEERING PLOT NAME : ---------- PLOT SCALE : **********
WISDOT/CADDS SHEET 49

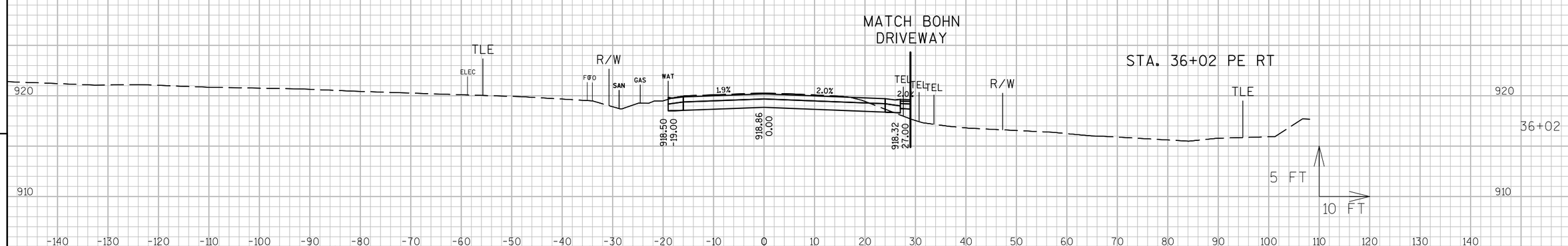


PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	CROSS SECTIONS: CTH AA/MAYER ROAD	SHEET 232	E

END CONSTRUCTION STA. 37+70.00







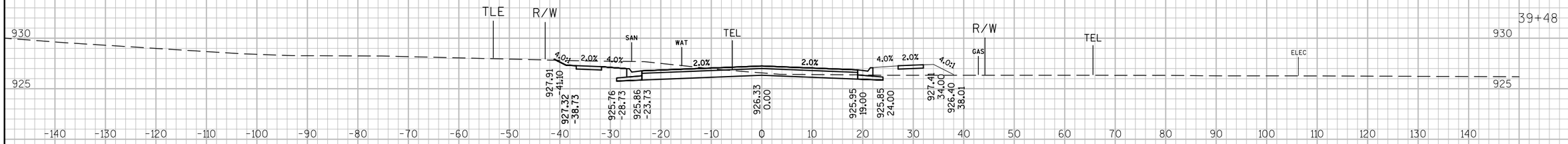
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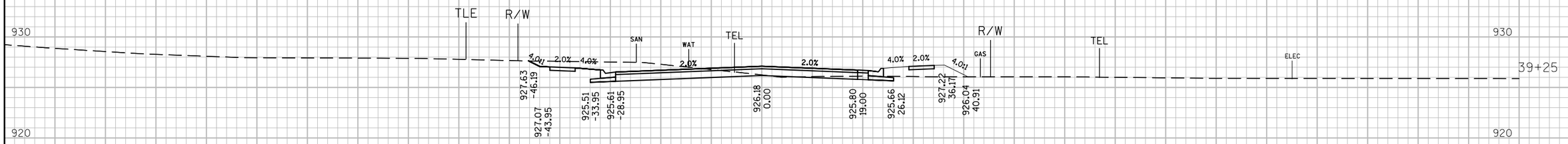
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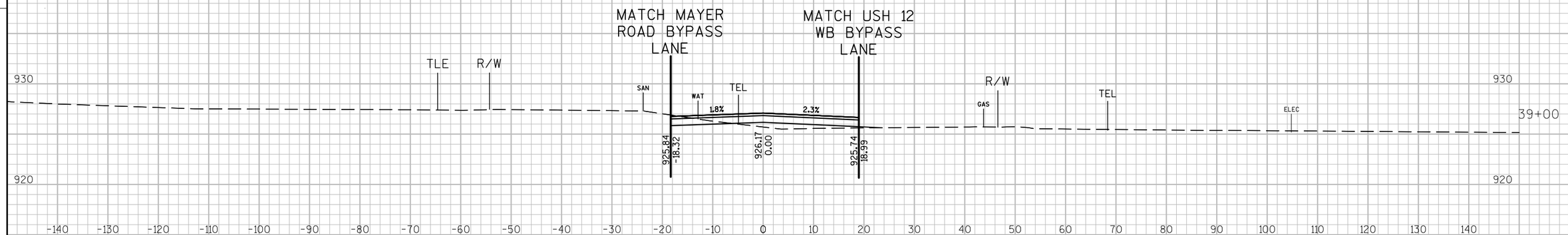
PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	CROSS SECTIONS: CTH AA/MAYER ROAD	SHEET 233	E

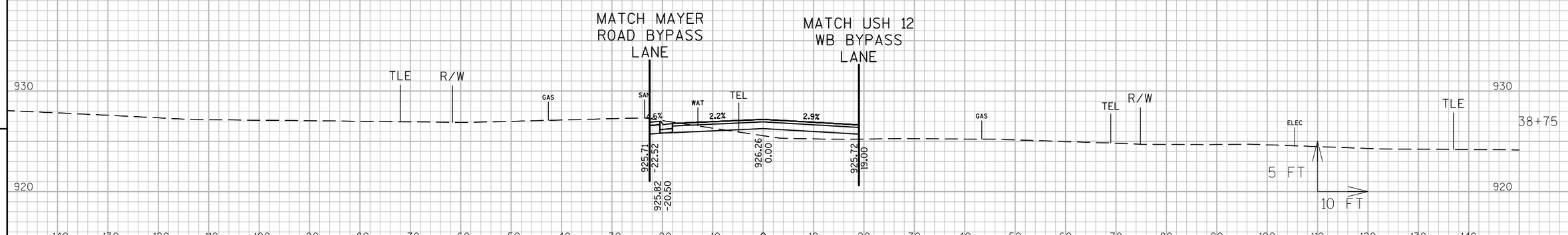
FILE NAME : G:\WDOTCO\10033 (DESIGN WORK ORDERS)\WO 5 & 6 USH 12 & MAYER ROAD\CIVIL 3D\SHEETSOTHER\PLAN SETS\POST FINAL\090201_XS.DWGPLOT DATE : 12/5/2012 PLOT BY : KL ENGINEERING PLOT NAME : ---------- PLOT SCALE : ********** WISDOT/CADDS SHEET 49

END CONSTRUCTION STA. 39+68.00





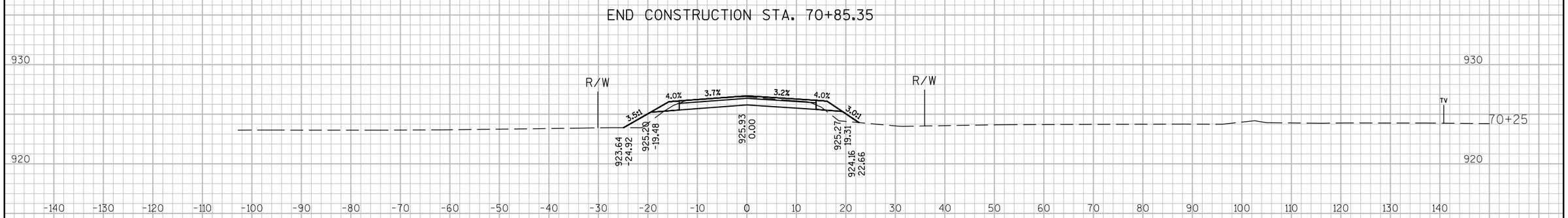


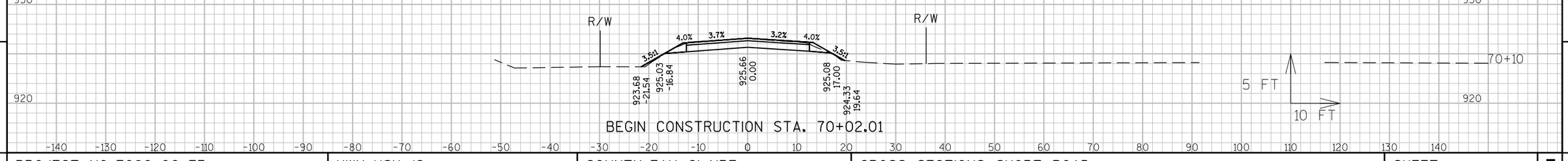


PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	CROSS SECTIONS: MAYER ROAD	SHEET 234	E

FILE NAME : G:\WDOTCO\10033 (DESIGN WORK ORDERS)\WO 5 & 6 USH 12 & MAYER ROAD\CIVIL 3D\SHEETSOTHER\090201_XS.DWG PLOT DATE : 12/5/2012 PLOT BY : KL ENGINEERING PLOT NAME : ---------- PLOT SCALE : ********** WISDOT/CADDS SHEET 49

END CONSTRUCTION STA. 70+85.35



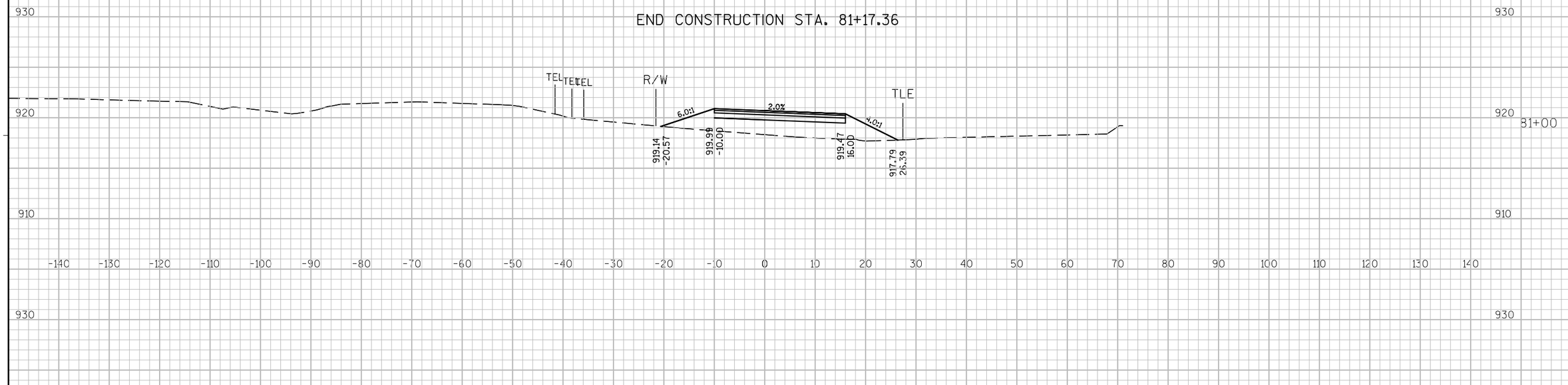


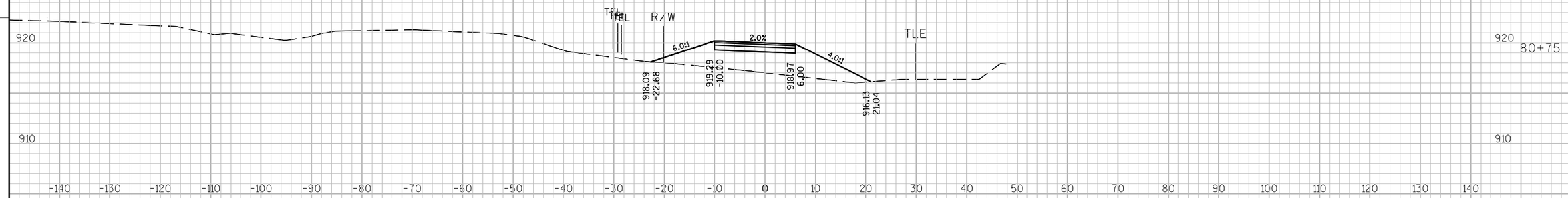
BEGIN CONSTRUCTION STA. 70+02.01

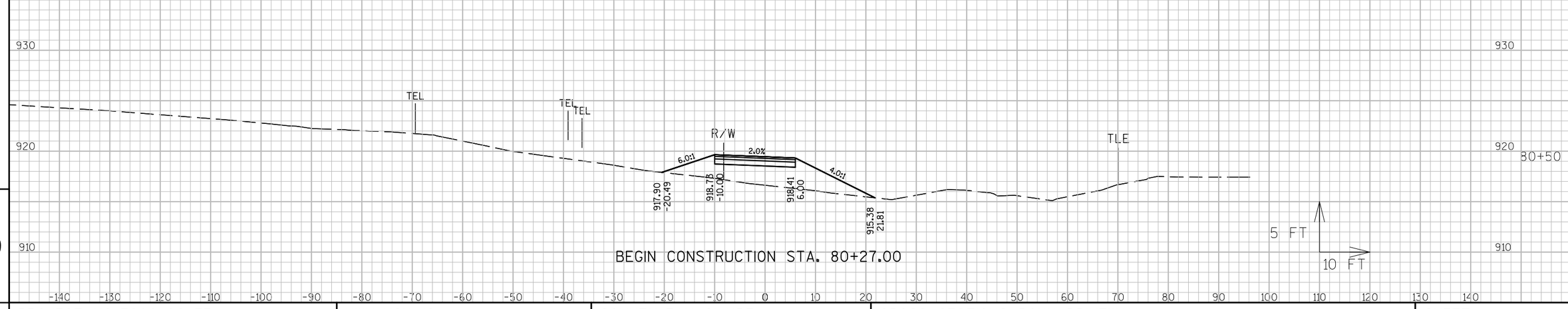
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PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	CROSS SECTIONS: SHORT ROAD	SHEET 235	E

END CONSTRUCTION STA. 81+17.36







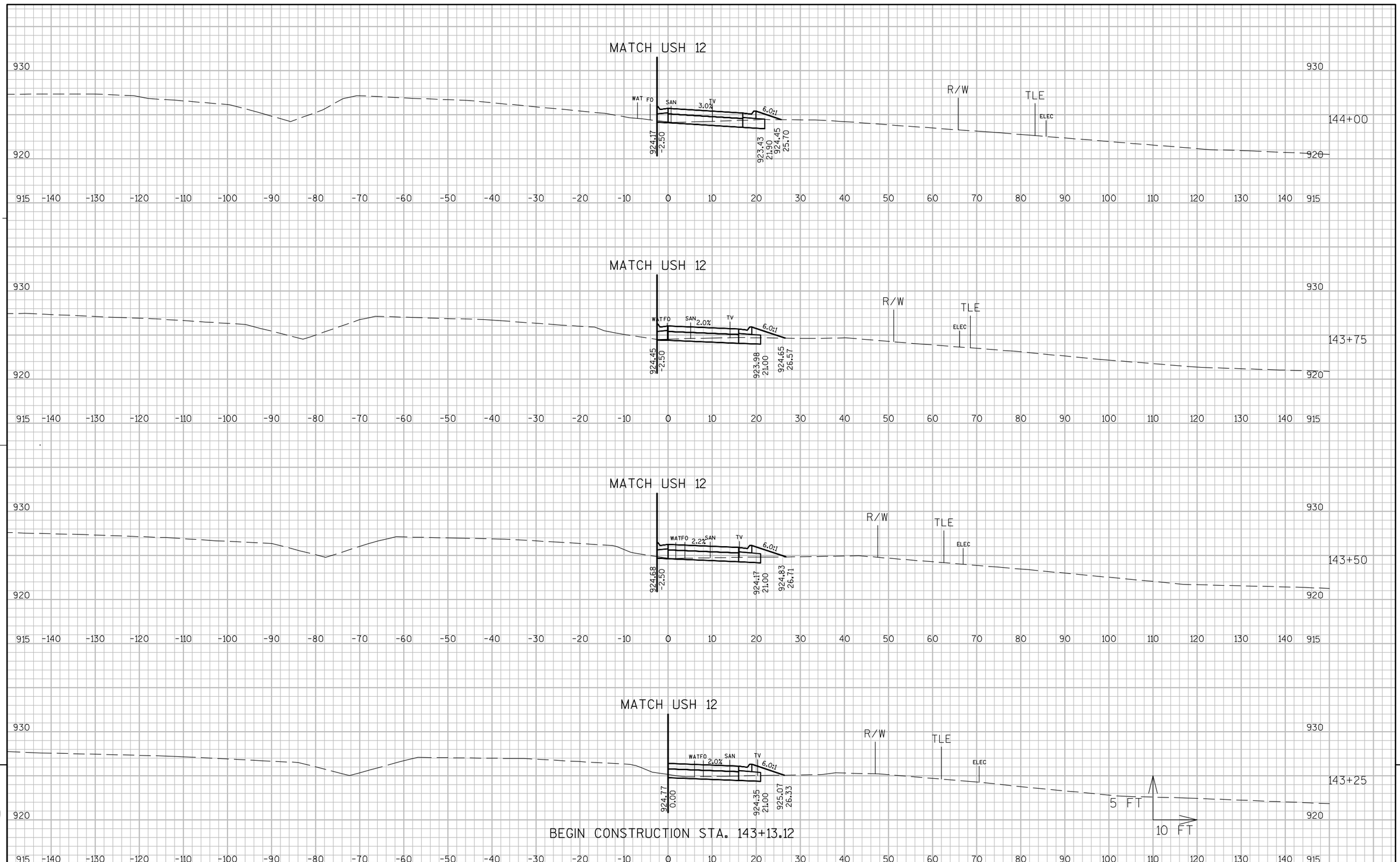
BEGIN CONSTRUCTION STA. 80+27.00

9

9

PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	CROSS SECTIONS: BOHN DRIVEWAY	SHEET 236	E

FILE NAME : G:\WDOTCO\10033 (DESIGN WORK ORDERS)\WO 5 & 6 USH 12 & MAYER ROAD\CIVIL 3D\SHEETSOTHER\PLAN SETS\POST FINAL\090201_XS.DWGPLOT DATE : 12/5/2012 PLOT BY : KL ENGINEERING PLOT NAME : ---------- PLOT SCALE : **********

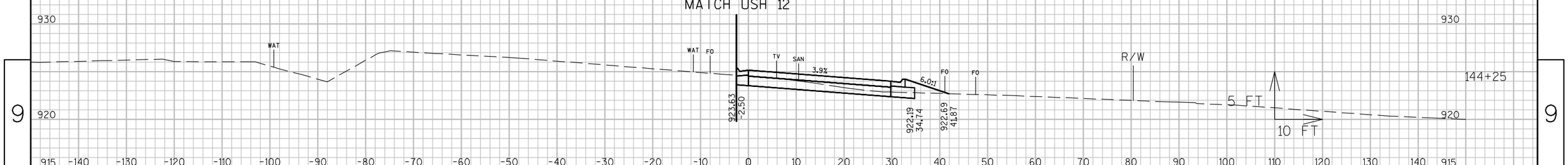


PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	CROSS SECTIONS: USH 12 EB BYPASS LANE	SHEET 237 E

FILE NAME : G:\WDOTCO\10033 (DESIGN WORK ORDERS)\WO 5 & 6 USH 12 & MAYER ROAD\CIVIL 3D\SHEETSOTHER\PLAN SETS\PS&E\090202_XS.DWG PLOT DATE : 8/6/2012 PLOT BY : KL ENGINEERING PLOT NAME : ---------- PLOT SCALE : **********
WISDOT/CADDS SHEET 49

END CONSTRUCTION STA. 144+36.64

MATCH USH 12

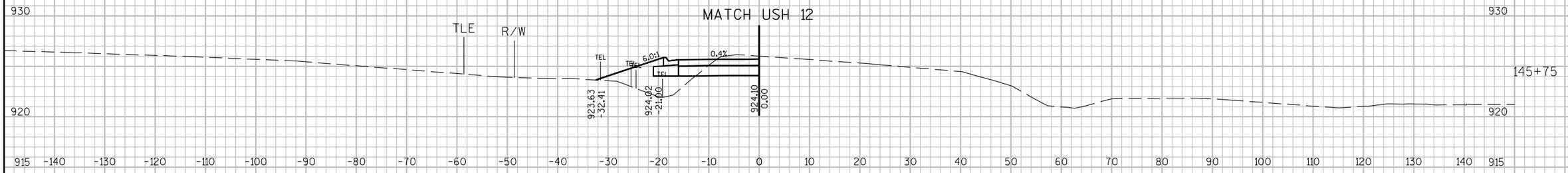


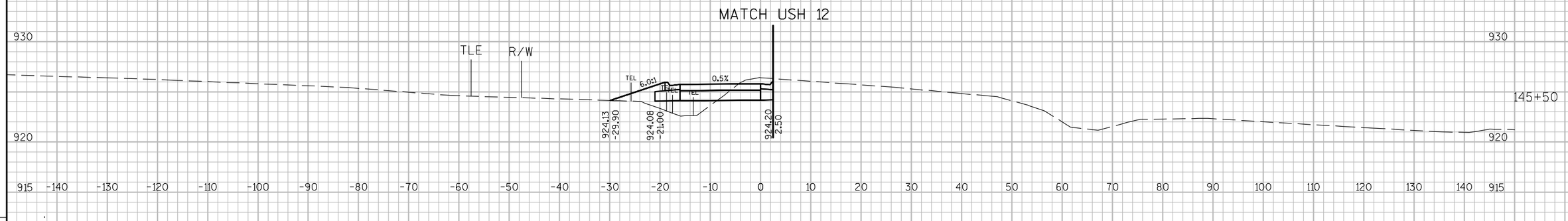
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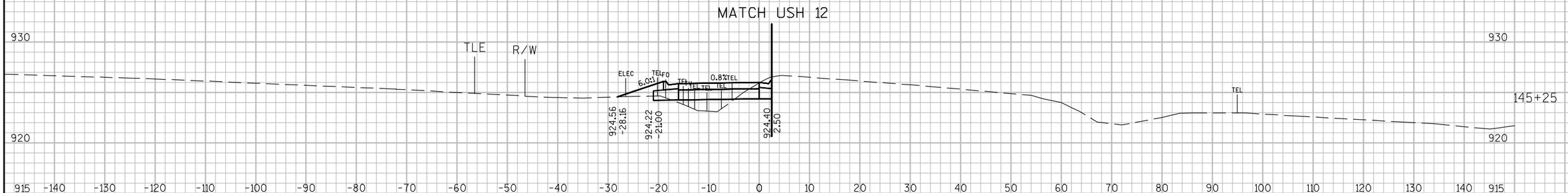
PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	CROSS SECTIONS: USH 12 EB BYPASS LANE	SHEET 238 E

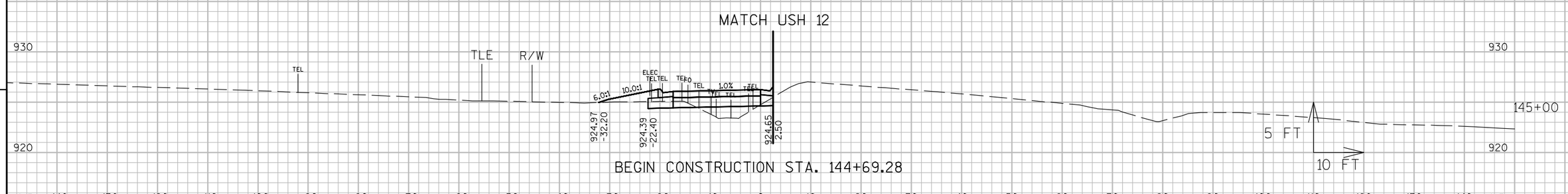
FILE NAME : G:\WDOTCO\10033 (DESIGN WORK ORDERS)\WO 5 & 6 USH 12 & MAYER ROAD\CIVIL 3D\SHEETSOTHER\PLAN SETS\PS&E\090202_XS.DWG PLOT DATE : 8/6/2012 PLOT BY : KL ENGINEERING PLOT NAME : ---------- PLOT SCALE : **********

END CONSTRUCTION STA. 145+88.38







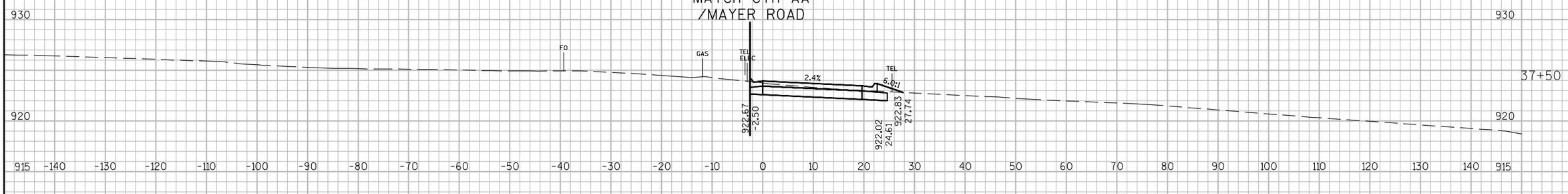


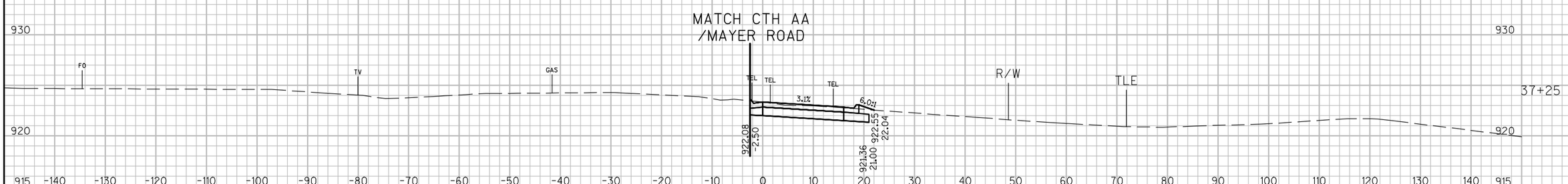
BEGIN CONSTRUCTION STA. 144+69.28

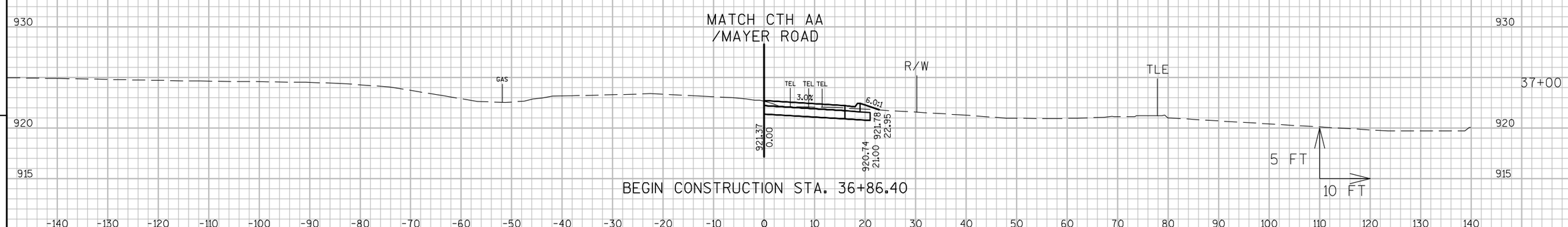
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PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	CROSS SECTIONS: USH 12 WB BYPASS LANE	SHEET 239 E

END CONSTRUCTION STA. 37+72.78







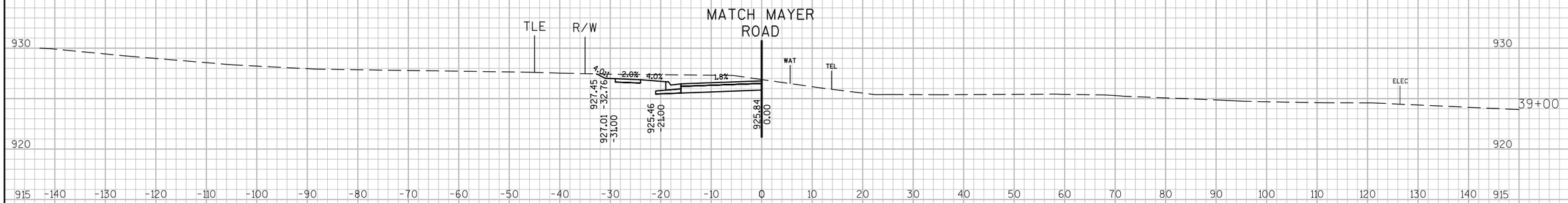
BEGIN CONSTRUCTION STA. 36+86.40

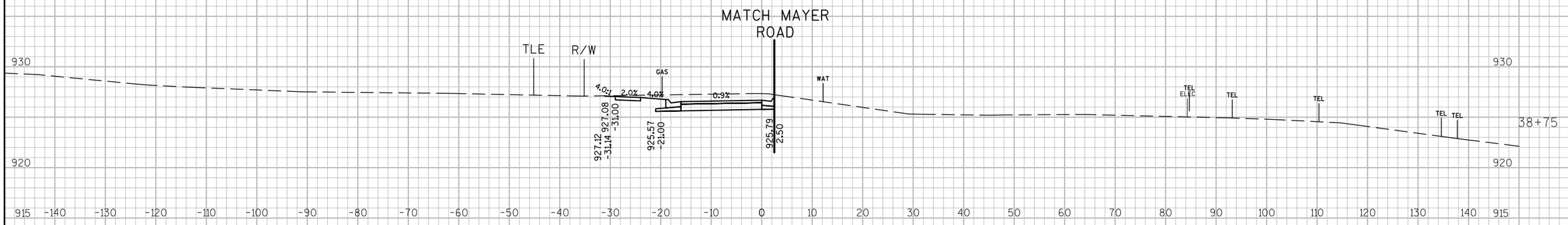
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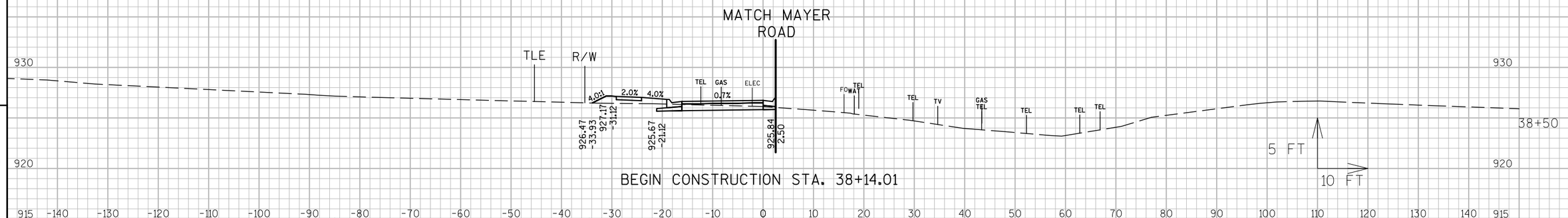
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PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	CROSS SECTIONS: CTH AA/MAYER ROAD BYPASS LANE	SHEET 240	E

END CONSTRUCTION STA. 39+00.92







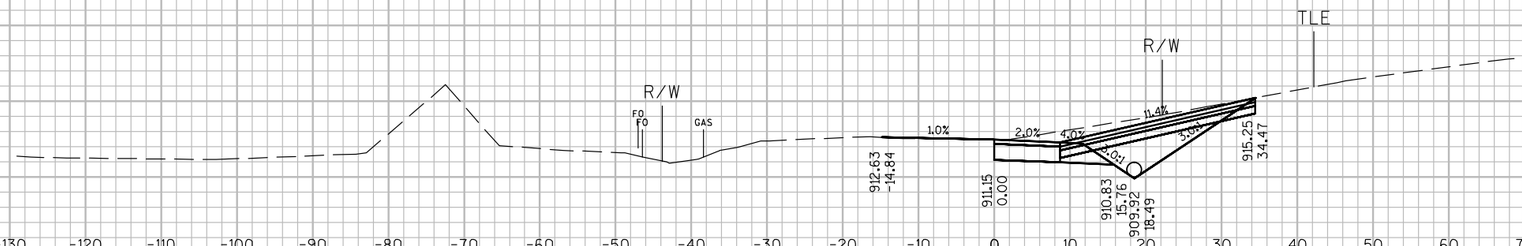
BEGIN CONSTRUCTION STA. 38+14.01

9 9

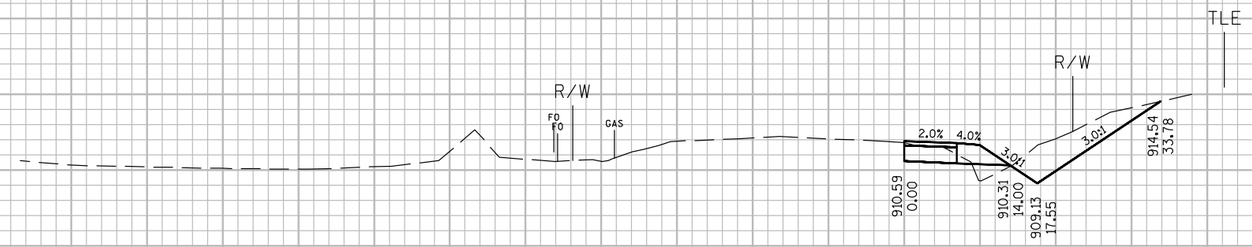
PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	CROSS SECTIONS: MAYER ROAD BYPASS LANE	SHEET 241	E

FILE NAME : G:\WDOTCO\10033 (DESIGN WORK ORDERS)\WO 5 & 6 USH 12 & MAYER ROAD\CIVIL 3D\SHEETSOTHER\PLAN SETS\POST FINAL\090201_XS.DWGPLOT DATE : 12/3/2012
PLOT BY : KL ENGINEERING PLOT NAME : ----------
WISDOT/CADDS SHEET 49

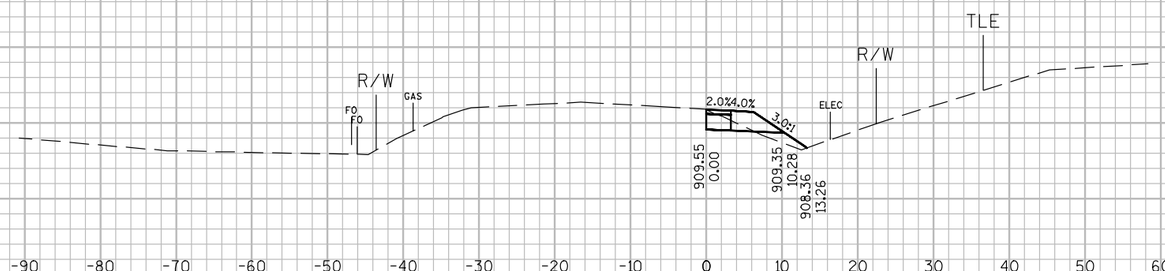
STA. 32+74 CE RT
55' CP (TEMPORARY) REQ'D



32+74



32+50



32+00



31+59

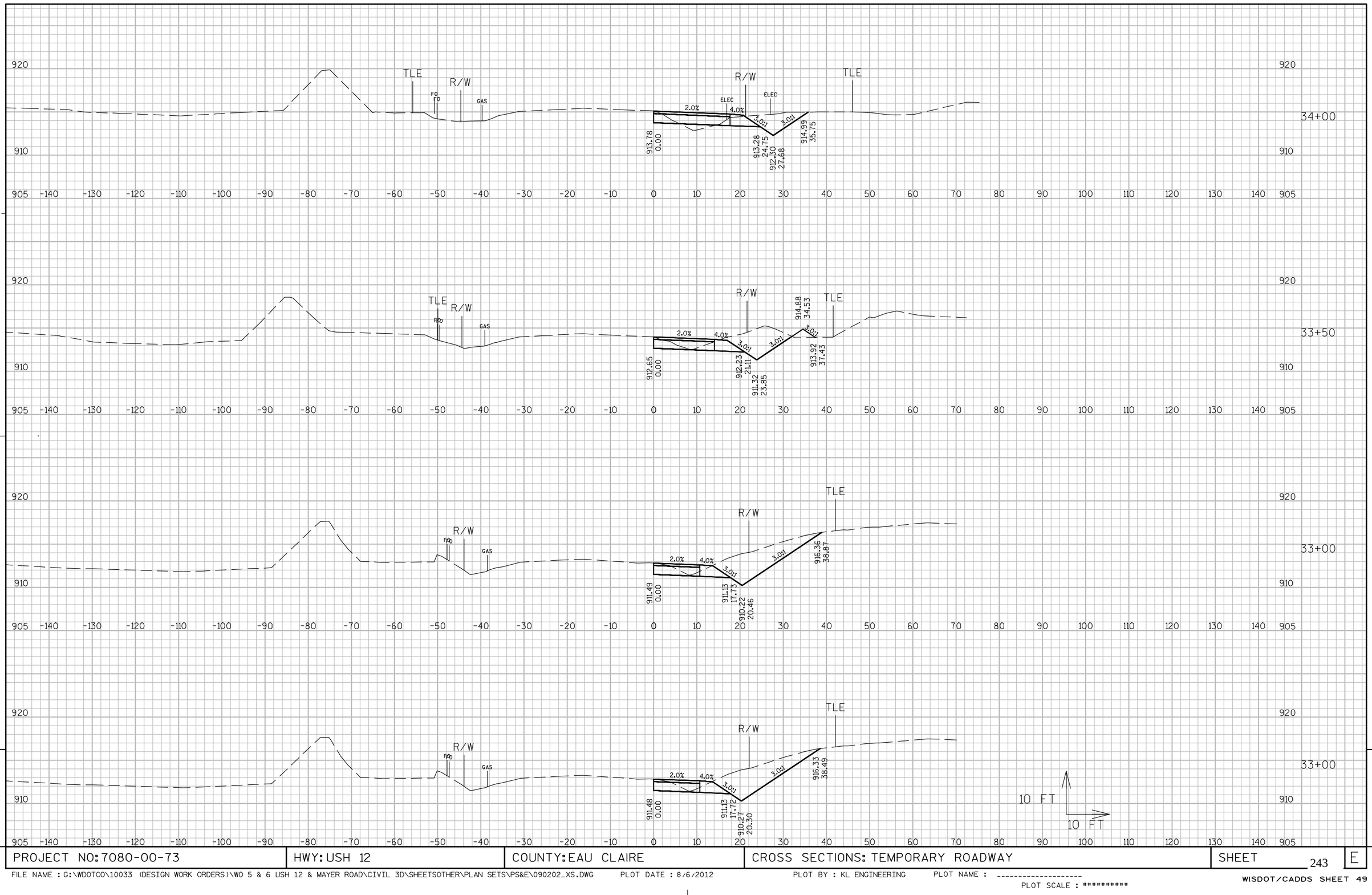
BEGIN CONSTRUCTION STA. 31+56.59

10 FT
10 FT

PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	CROSS SECTIONS: TEMPORARY ROADWAY	SHEET 242 E

FILE NAME : G:\WDOTCO\10033 (DESIGN WORK ORDERS)\WO 5 & 6 USH 12 & MAYER ROAD\CIVIL 3D\SHEETSOTHER\PLAN SETS\PS&E\090202_XS.DWG PLOT DATE : 8/6/2012 PLOT BY : KL ENGINEERING PLOT NAME : ---------- PLOT SCALE : **********

WISDOT/CADDS SHEET 49

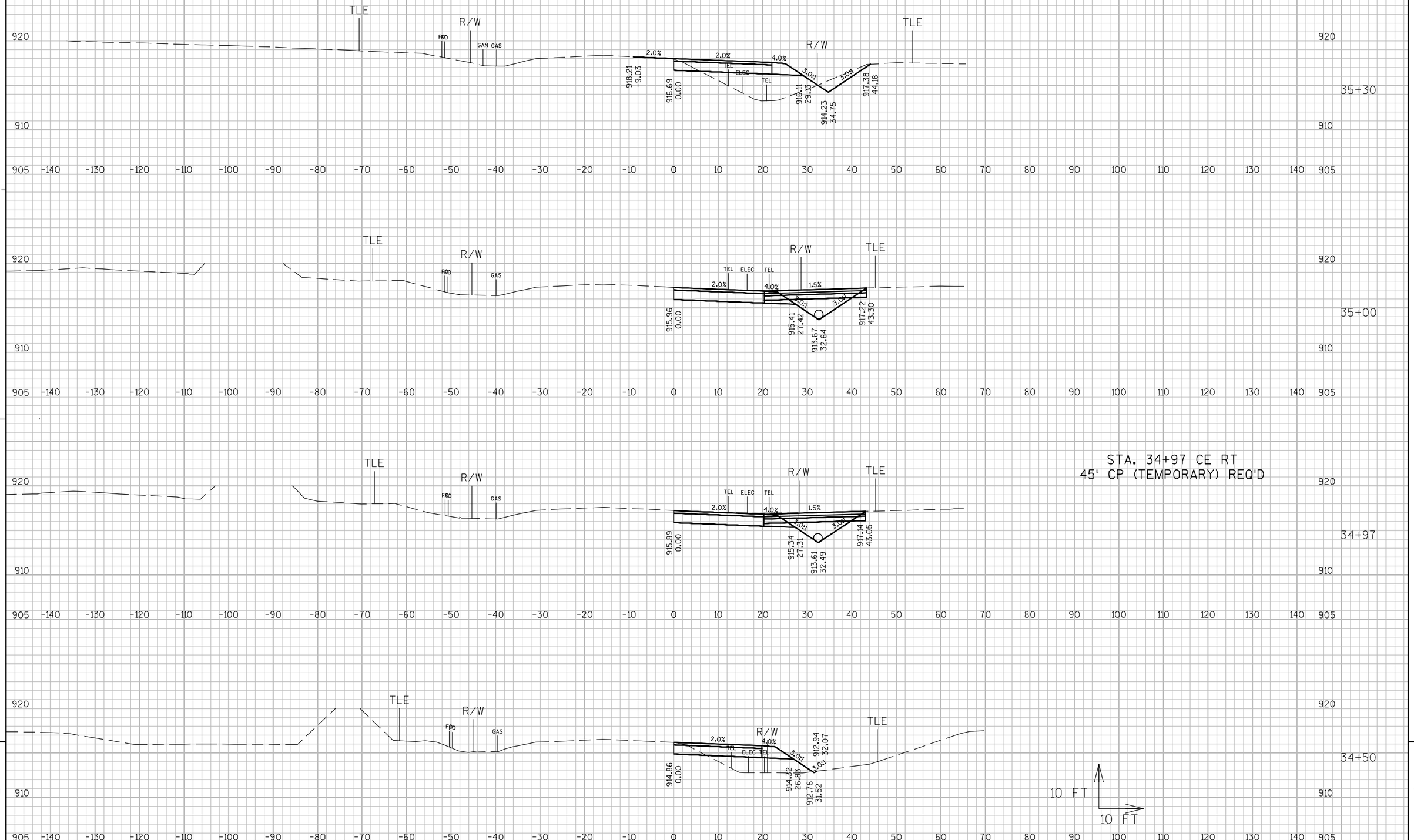


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PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	CROSS SECTIONS: TEMPORARY ROADWAY	SHEET 243 E

FILE NAME : G:\WDOTCO\10033 (DESIGN WORK ORDERS)\WO 5 & 6 USH 12 & MAYER ROAD\CIVIL 3D\SHEETSOTHER\PLAN SETS\PS&E\090202_XS.DWG PLOT DATE : 8/6/2012 PLOT BY : KL ENGINEERING PLOT NAME : ---------- PLOT SCALE : **********



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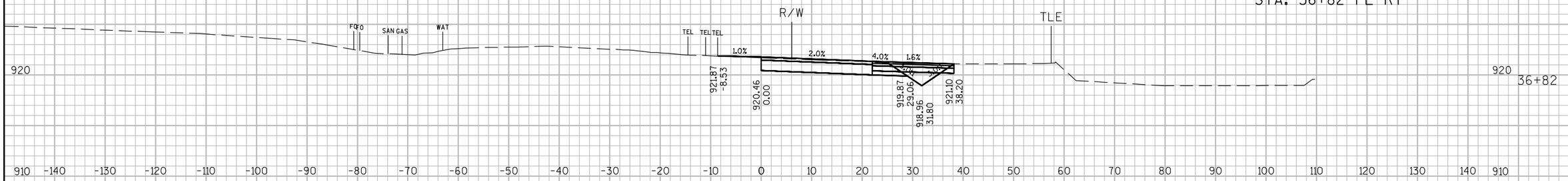
PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	CROSS SECTIONS: TEMPORARY ROADWAY	SHEET 244 E

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FILE NAME : G:\WDOTCO\10033 (DESIGN WORK ORDERS)\WO 5 & 6 USH 12 & MAYER ROAD\CIVIL 3D\SHEETSOTHER\PLAN SETS\PS&E\090202_XS.DWG PLOT DATE : 8/6/2012 PLOT BY : KL ENGINEERING PLOT NAME : ---------- PLOT SCALE : **********

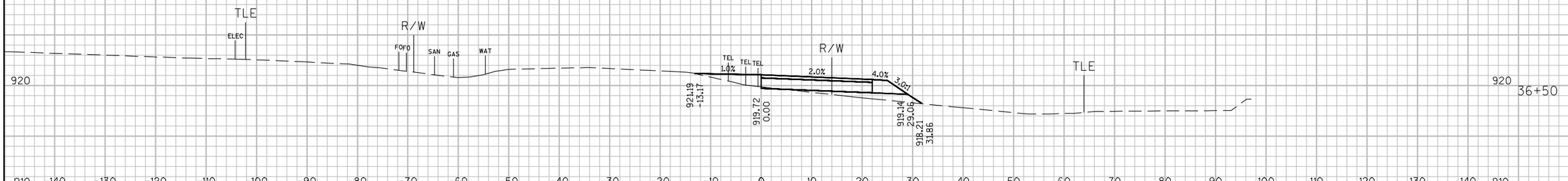
WISDOT/CADDS SHEET 49

STA. 36+82 PE RT



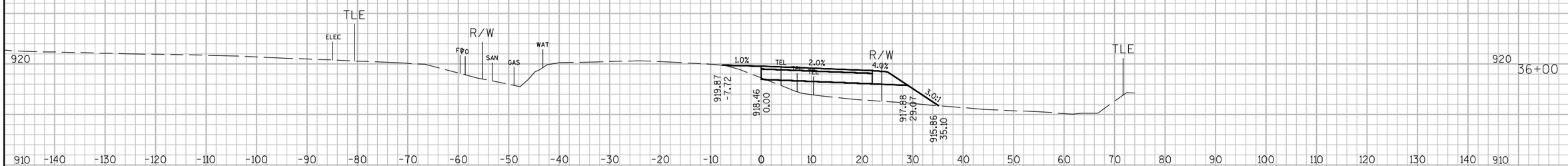
36+82

STA. 36+50



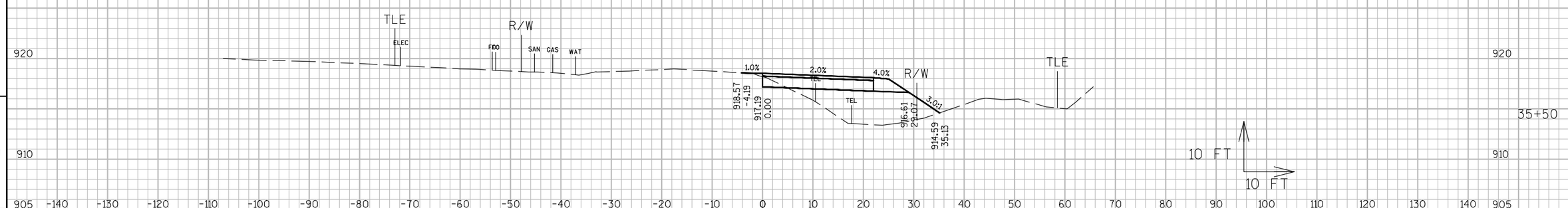
36+50

STA. 36+00



36+00

STA. 35+50



35+50

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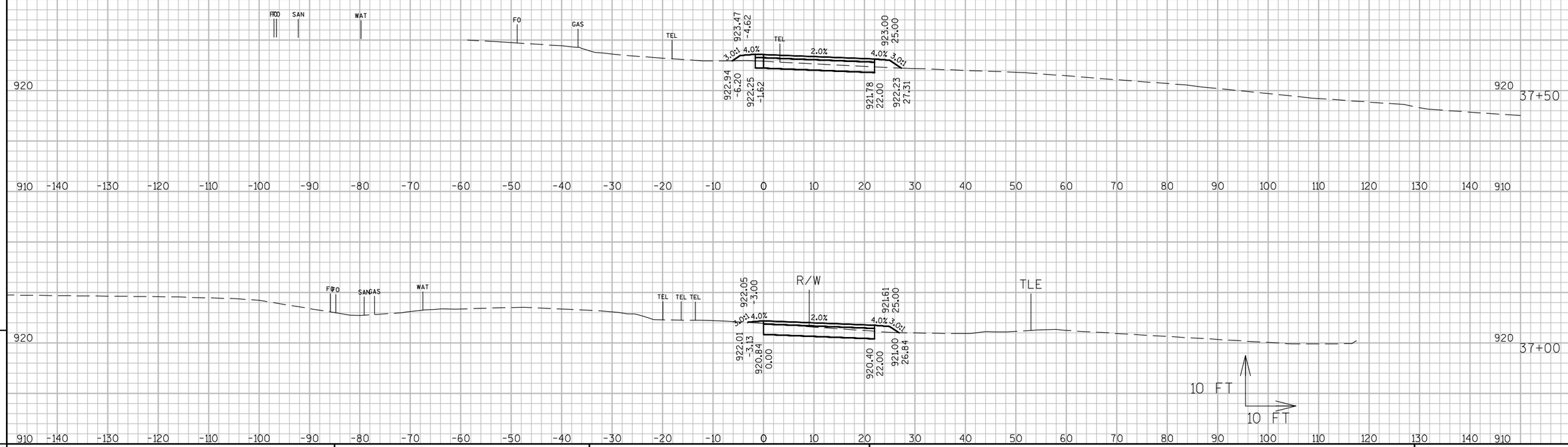
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PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	CROSS SECTIONS: TEMPORARY ROADWAY	SHEET 245 E

FILE NAME : G:\WDOTCO\10033 (DESIGN WORK ORDERS)\WO 5 & 6 USH 12 & MAYER ROAD\CIVIL 3D\SHEETSOTHER\PLAN SETS\PS&E\090202_XS.DWG PLOT DATE : 8/6/2012 PLOT BY : KL ENGINEERING PLOT NAME : ---------- PLOT SCALE : **********

WISDOT/CADDS SHEET 49

END CONSTRUCTION STA. 37+81.31



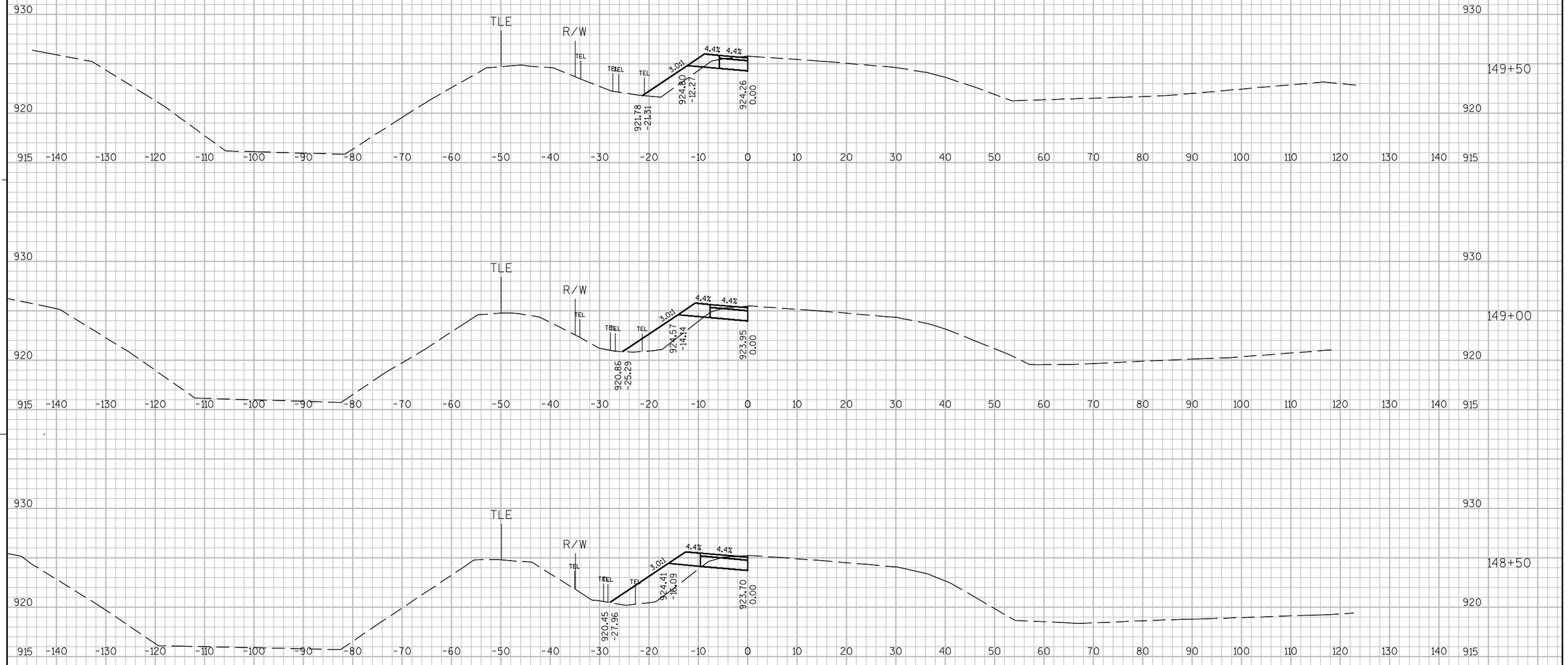
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FILE NAME : G:\WDOTCO\10033 (DESIGN WORK ORDERS)\WO 5 & 6 USH 12 & MAYER ROAD\CIVIL 3D\SHEETSOTHER\PLAN SETS\PS&E\090202_XS.DWG PLOT DATE : 8/6/2012 PLOT BY : KL ENGINEERING PLOT NAME : ---------- PLOT SCALE : **********

WISDOT/CADDS SHEET 49



PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	CROSS SECTIONS: TEMPORARY WIDENING - NORTH	SHEET 247 E



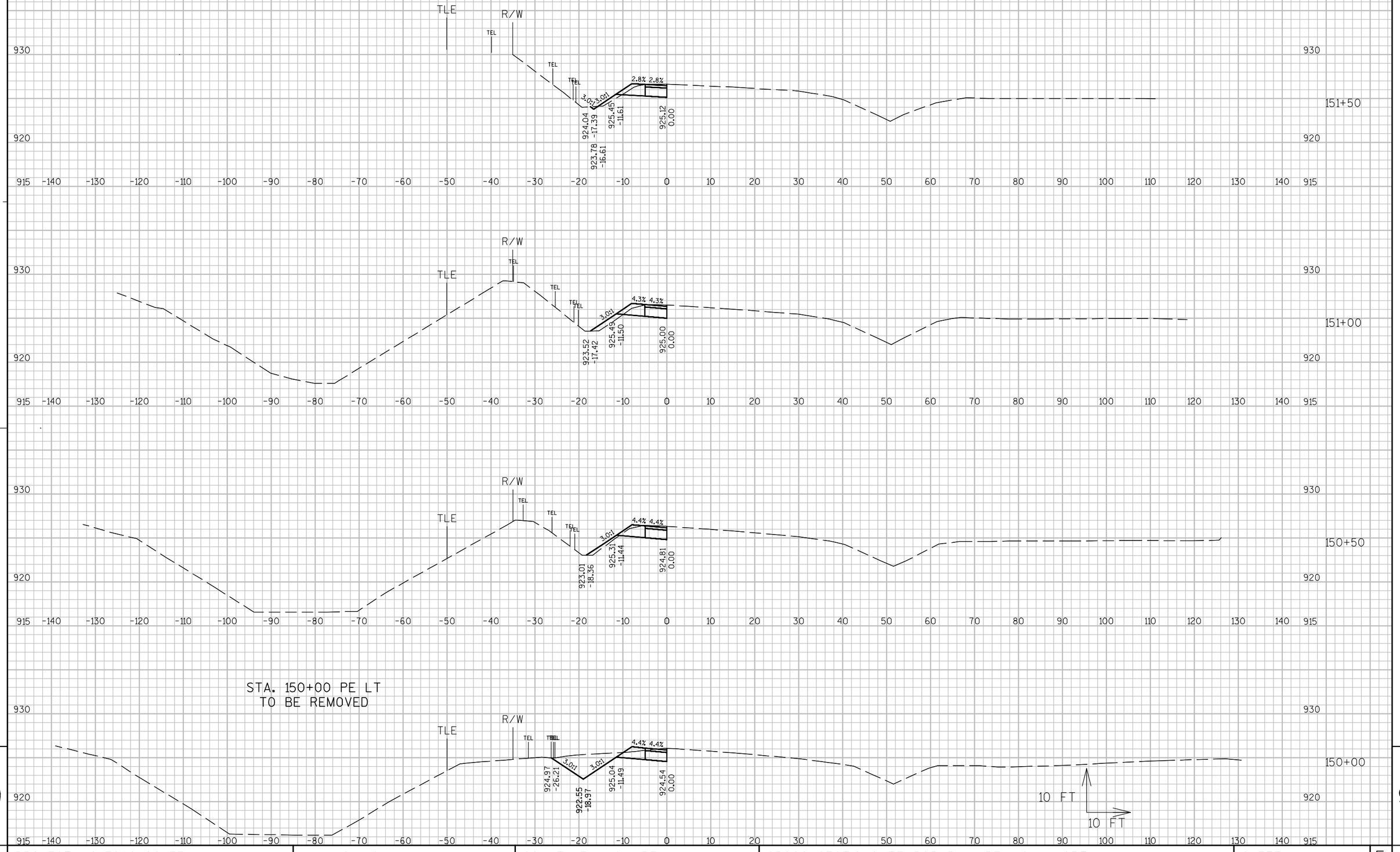


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PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	CROSS SECTIONS: TEMPORARY WIDENING - NORTH	SHEET	E

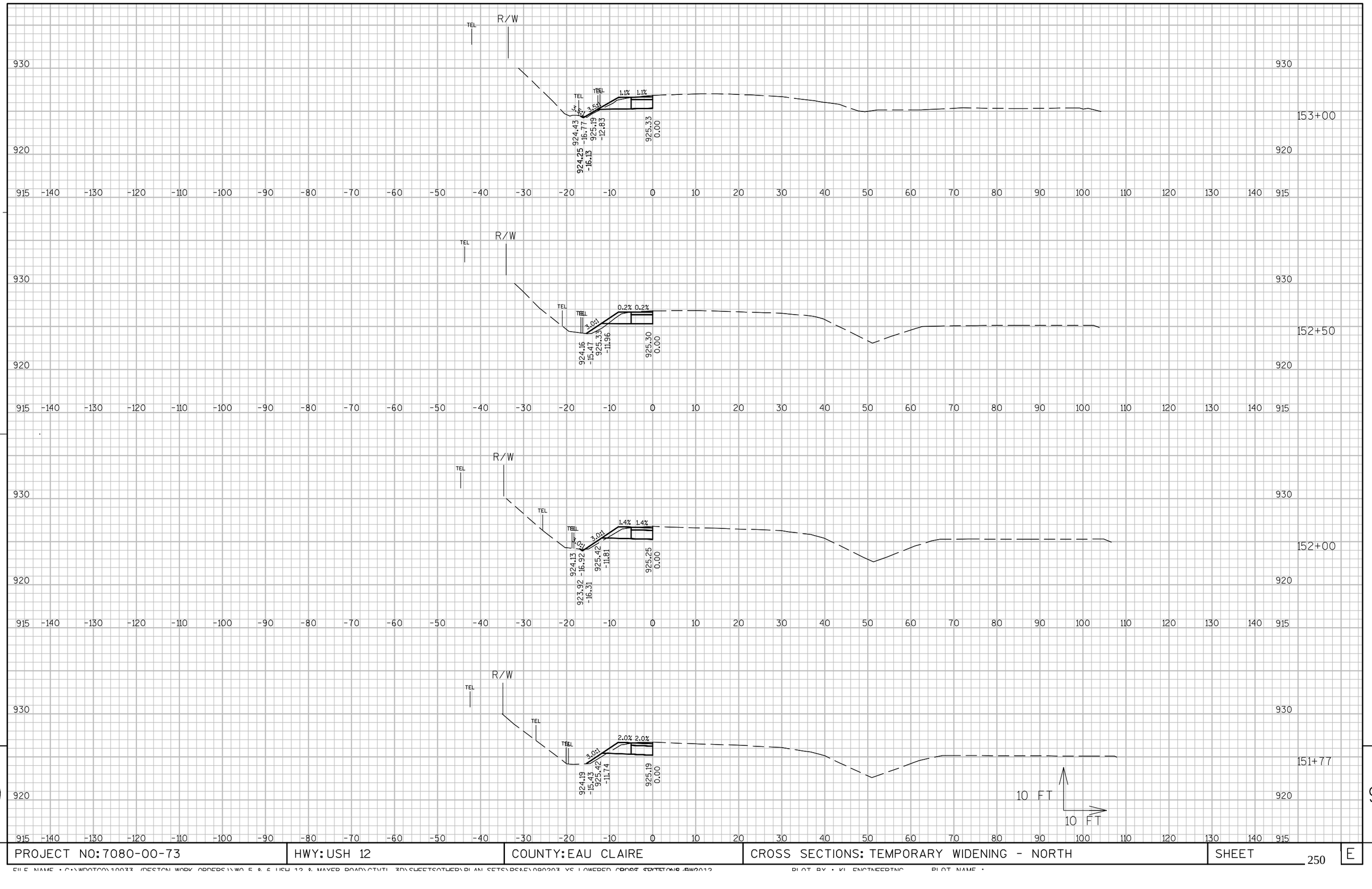
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PLOT BY = KL ENGINEERING PLOT NAME =



PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	CROSS SECTIONS: TEMPORARY WIDENING - NORTH	SHEET	E

FILE NAME = C:\WDOTCO\10033 (DESIGN WORK ORDERS)\WO 5 & 6 USH 12 & MAYER ROAD\CIVIL 3D\SHEETSOTHER\PLAN SETS\RS&E\080303 XS LOWERED CROSS SECTIONS.DWG

PLOT BY = KL ENGINEERING PLOT NAME =

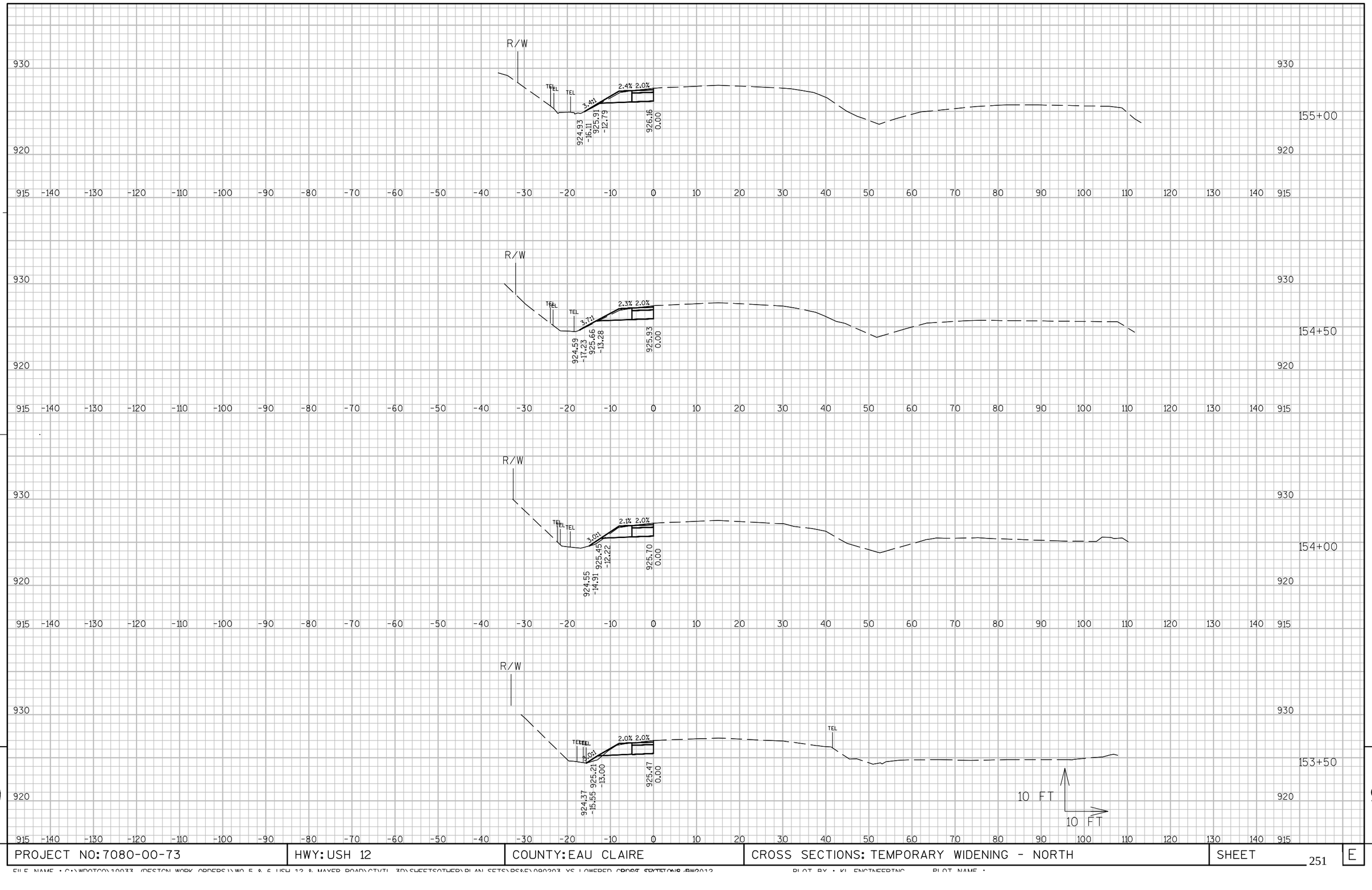


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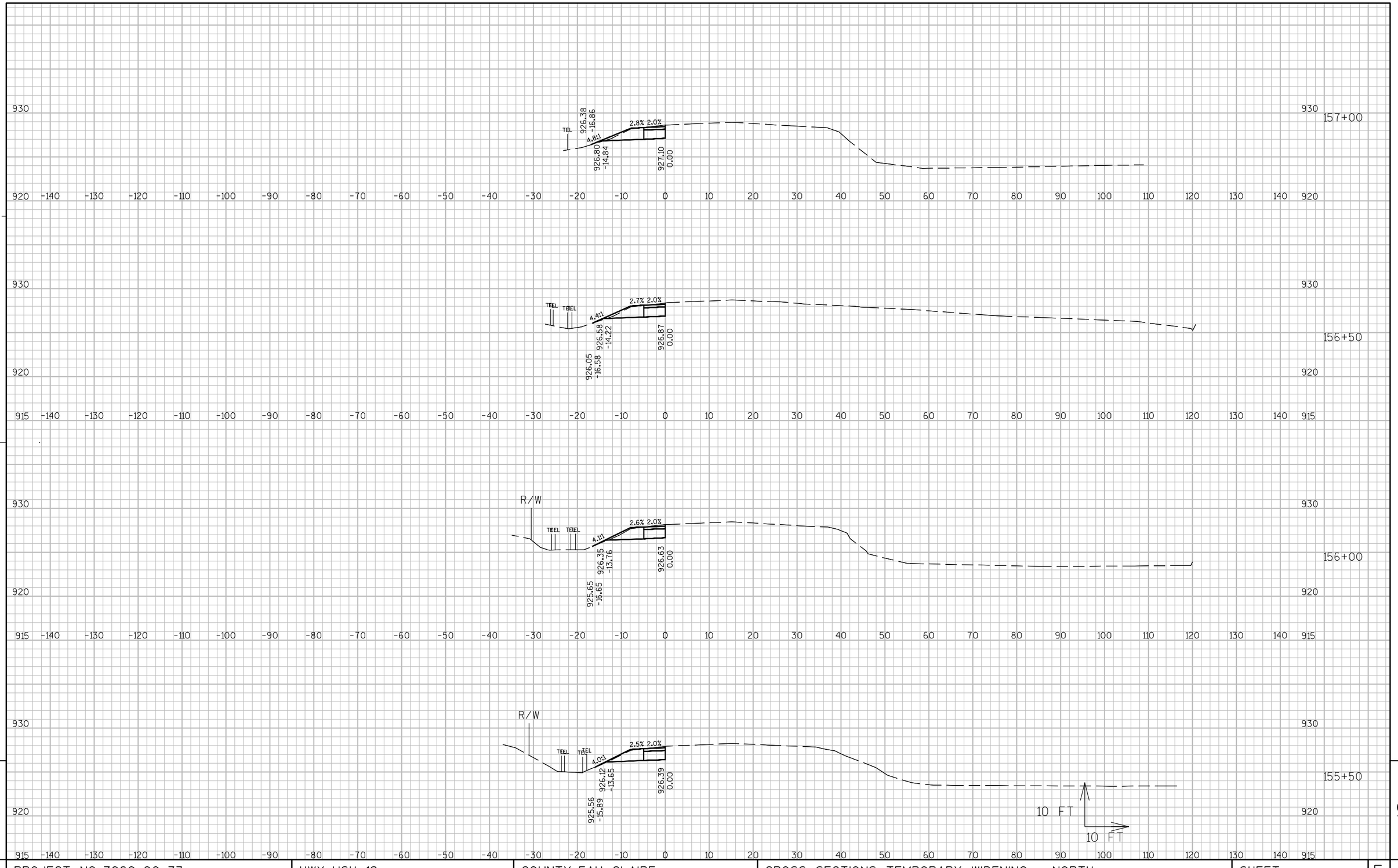
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FILE NAME • C:\WDOTCO\10033 (DESIGN WORK ORDERS)\WO 5 & 6 USH 12 & MAYER ROAD\CIVIL 3D\SHEETSOTHER\PLAN SETS\RS&E\080303 XS LOWERED CROSS SECTIONS.DWG012 PLOT BY • KL ENGINEERING PLOT NAME •



PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	CROSS SECTIONS: TEMPORARY WIDENING - NORTH	SHEET 251	E

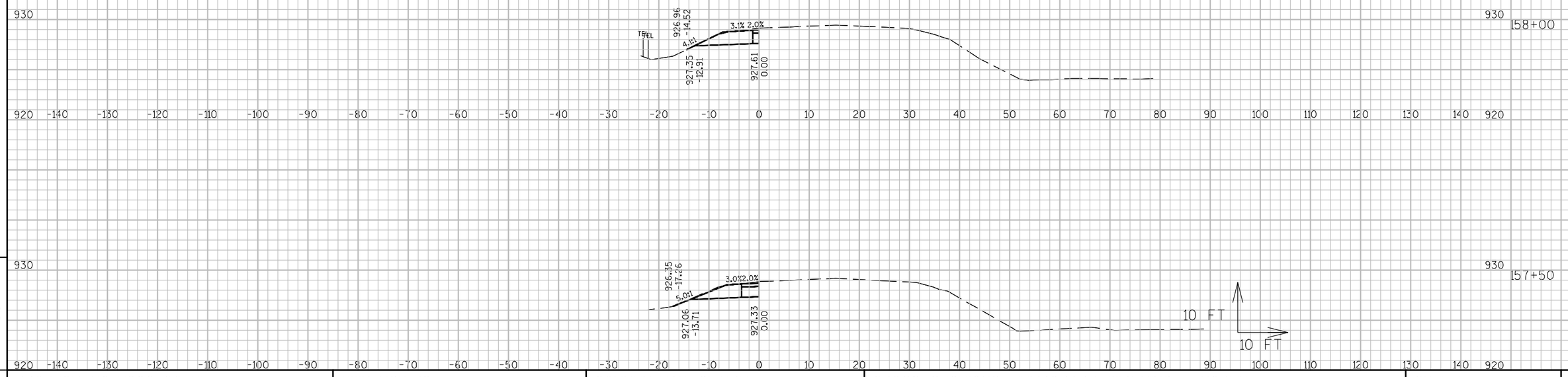
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PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	CROSS SECTIONS: TEMPORARY WIDENING - NORTH	SHEET 252	E

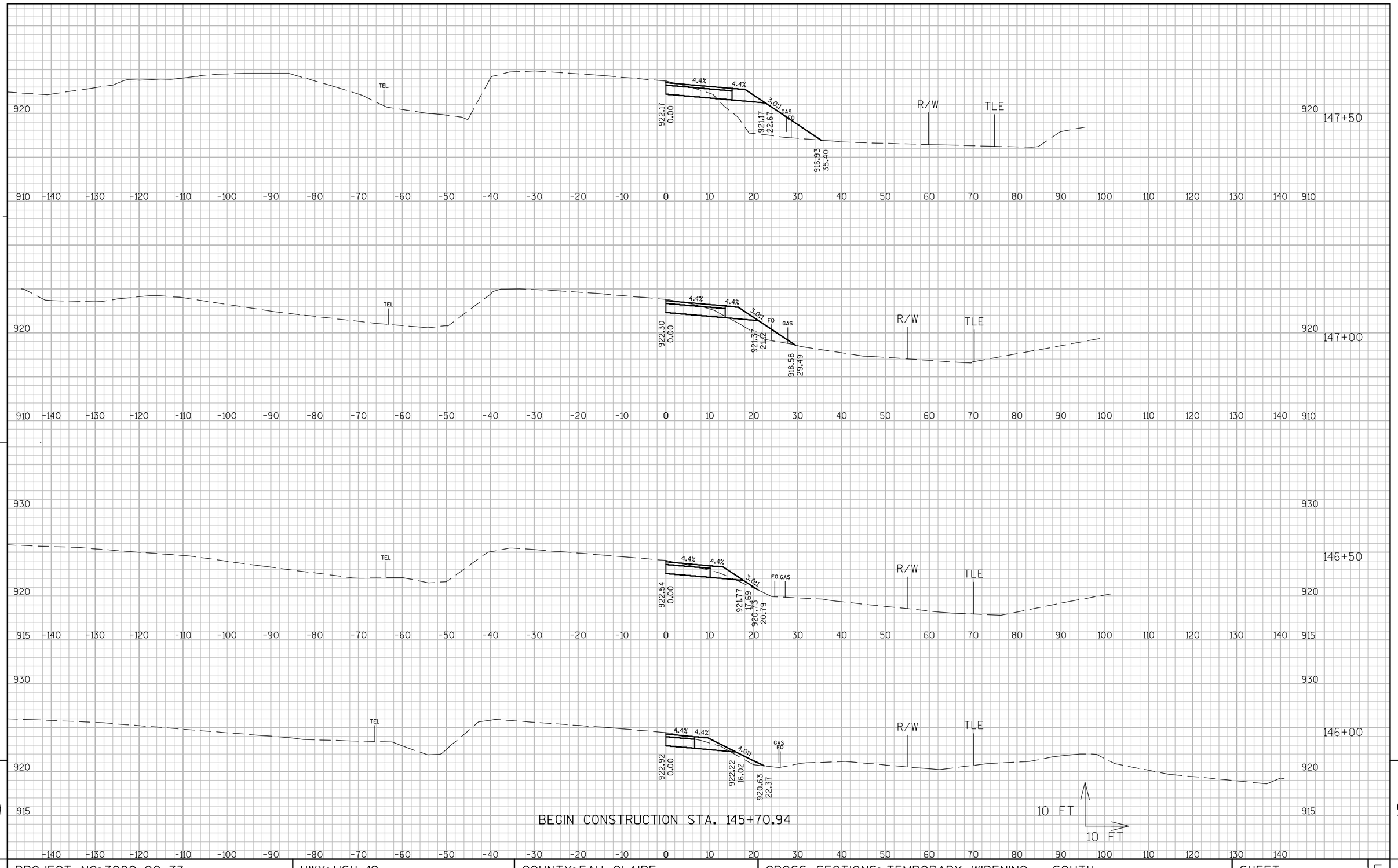
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END CONSTRUCTION STA. 158+27.85

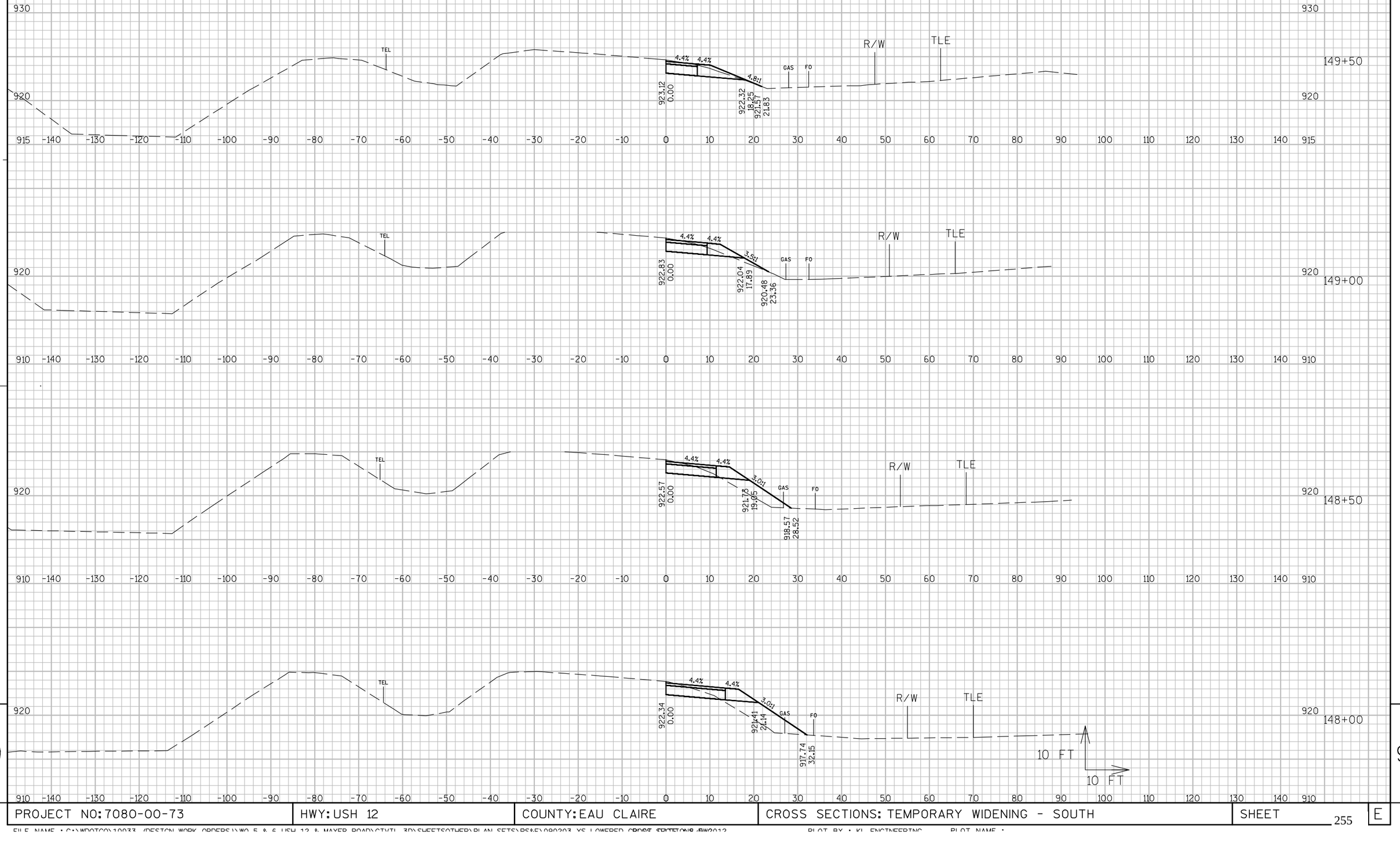


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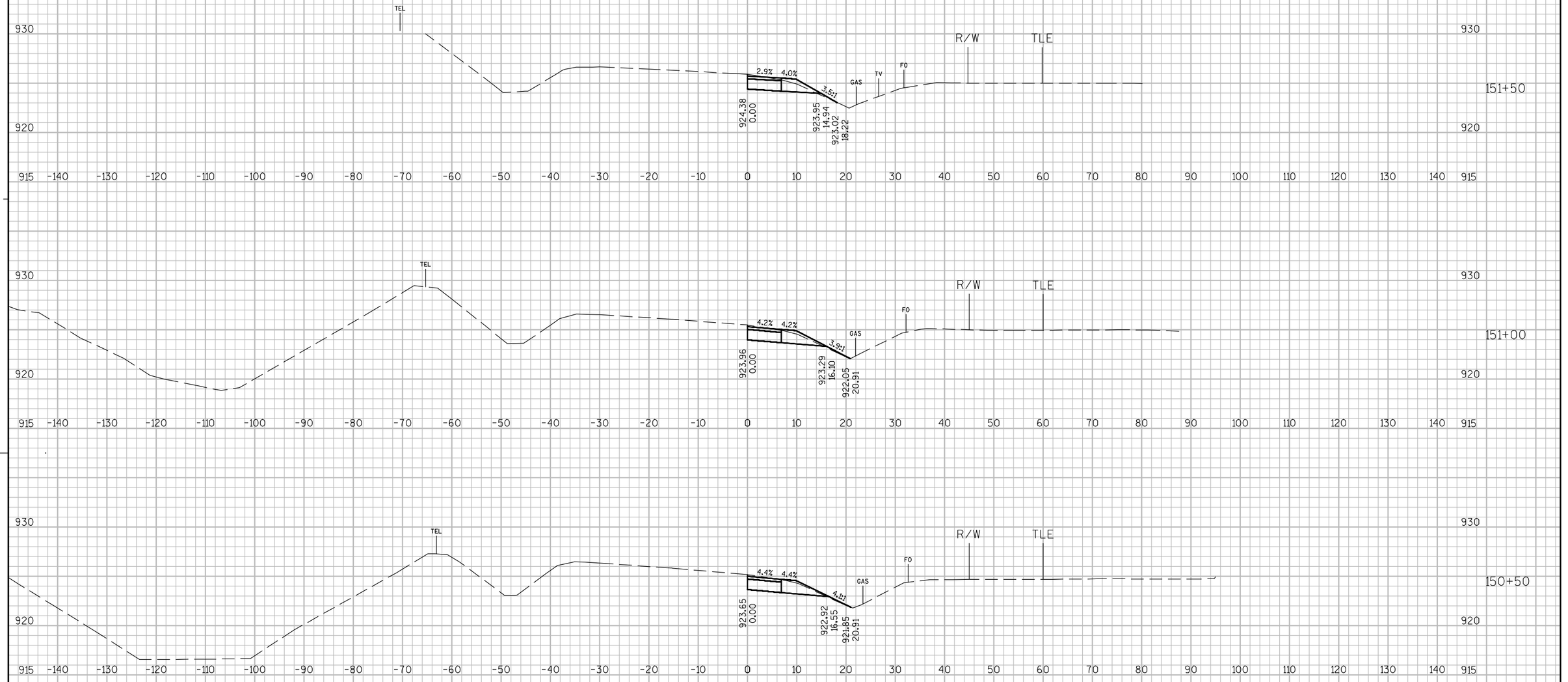
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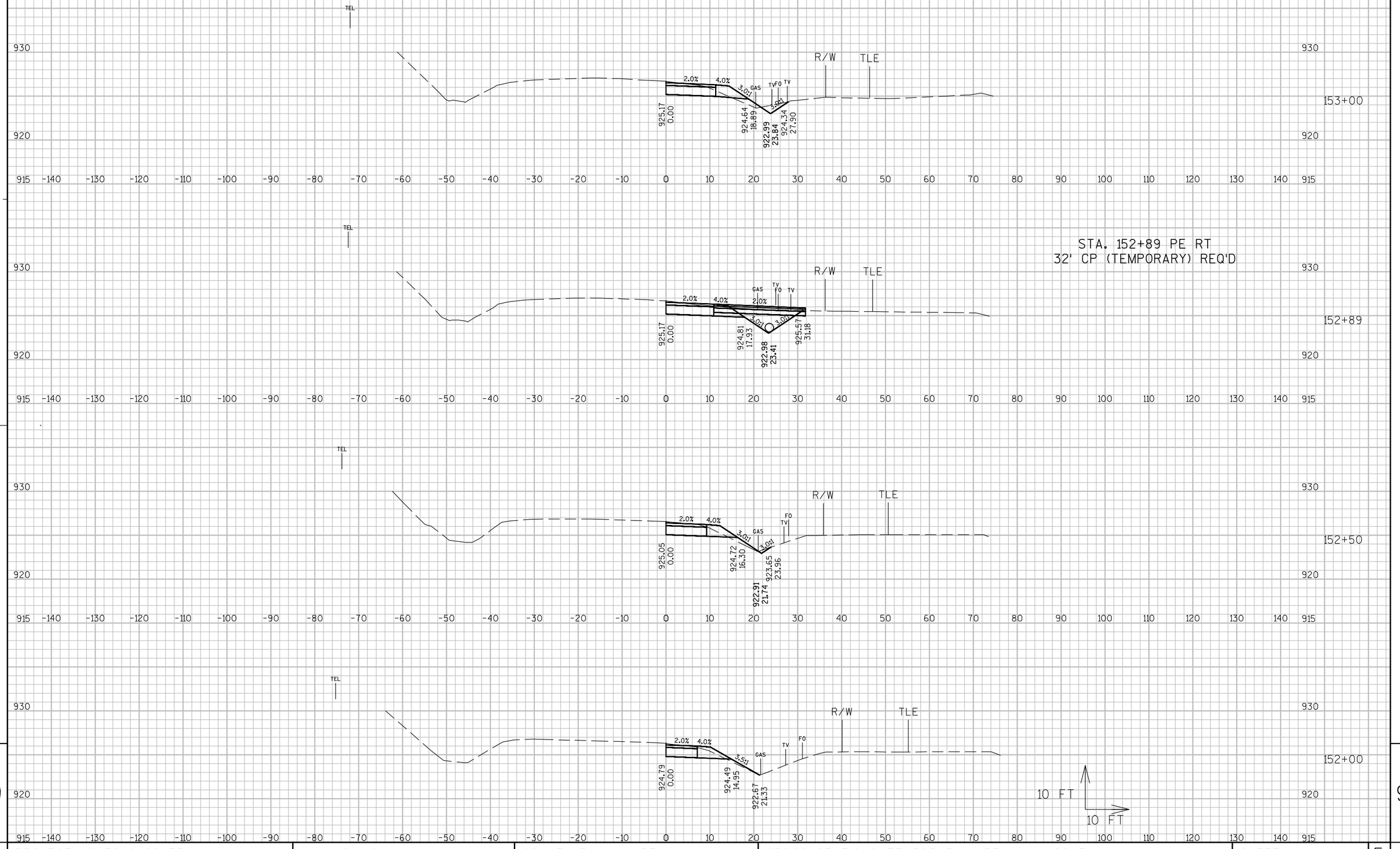
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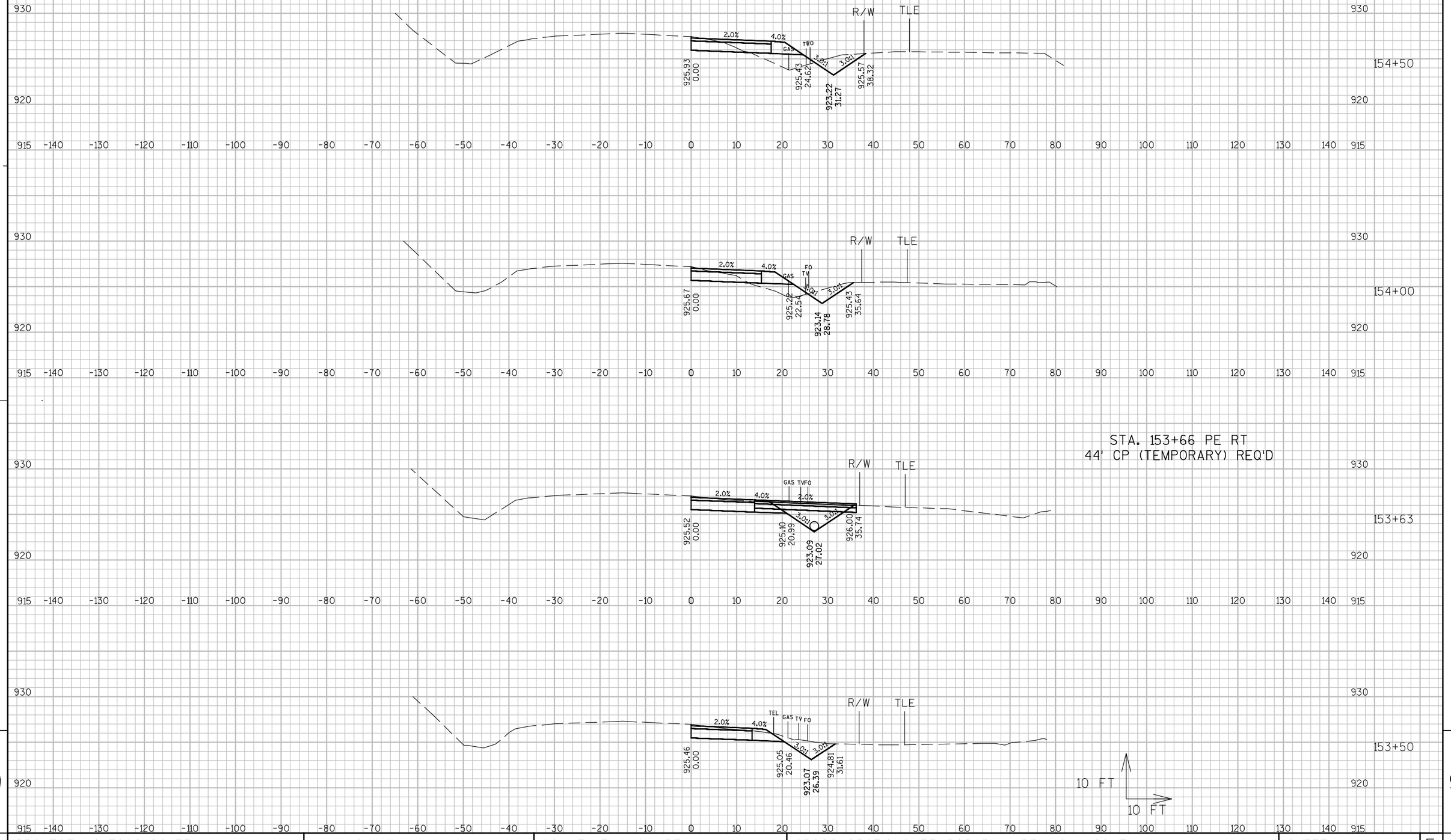


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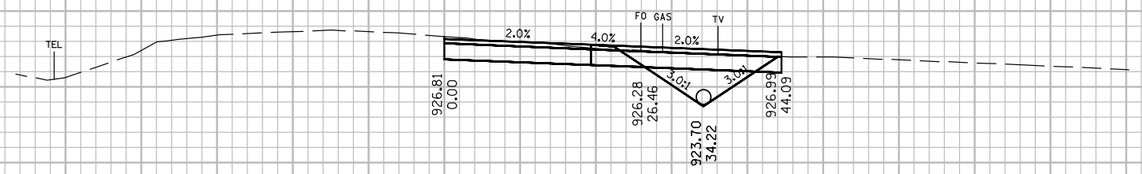
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FILE NAME • C:\WDOTCO\10033 (DESIGN WORK ORDERS)\WO 5 & 6 USH 12 & MAYER ROAD\CIVIL 3D\SHEETSOTHER\PLAN SETS\RS&E\080303 XS LOWERED CROSS SECTIONS.DWG 2012 PLOT BY • KL ENGINEERING PLOT NAME •

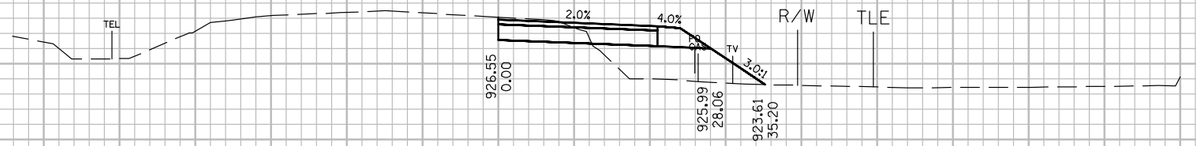


PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	CROSS SECTIONS: TEMPORARY WIDENING - SOUTH	SHEET 258 E

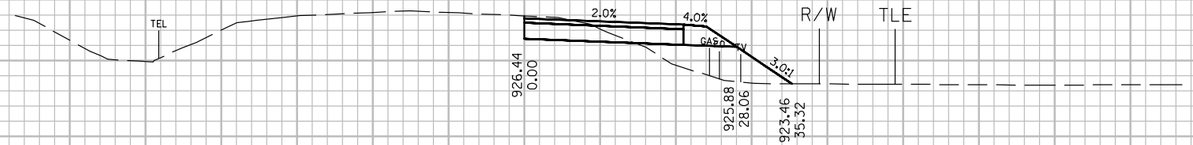
SHORT ROAD
STA. 156+50 RT
59' CP (TEMPORARY) REQ'D



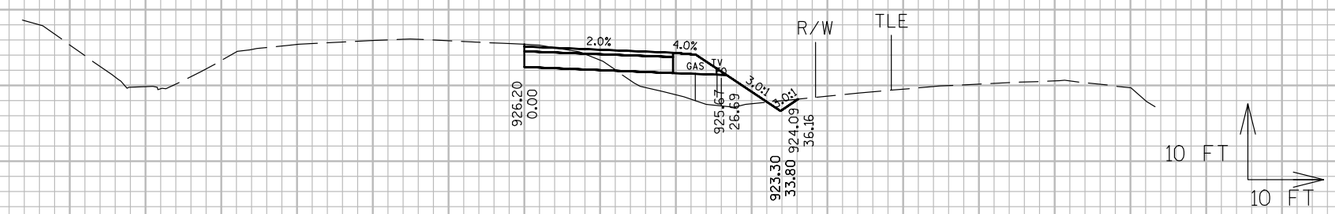
156+50



156+00



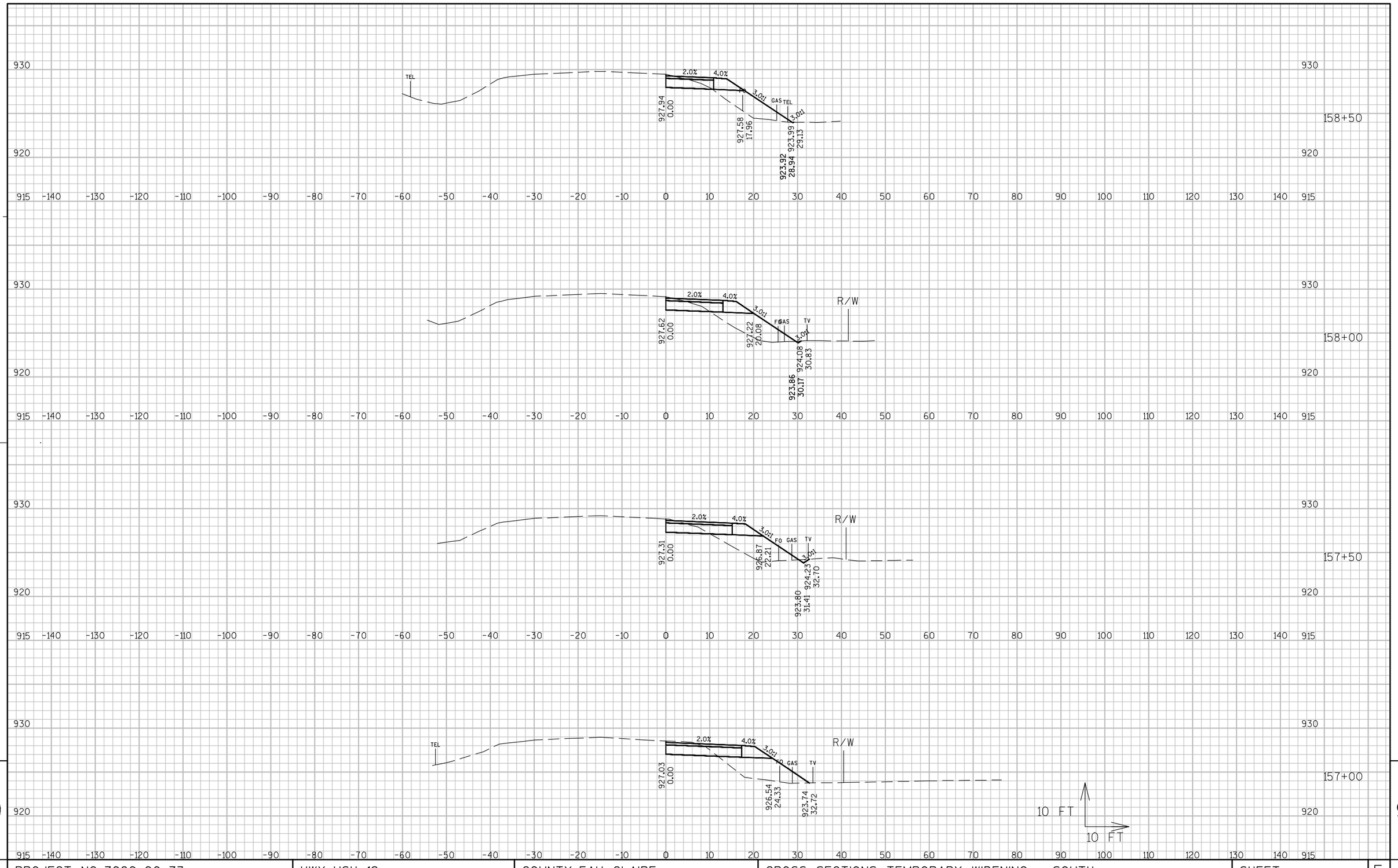
155+50



155+00

PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	CROSS SECTIONS: TEMPORARY WIDENING - SOUTH	SHEET 259 E

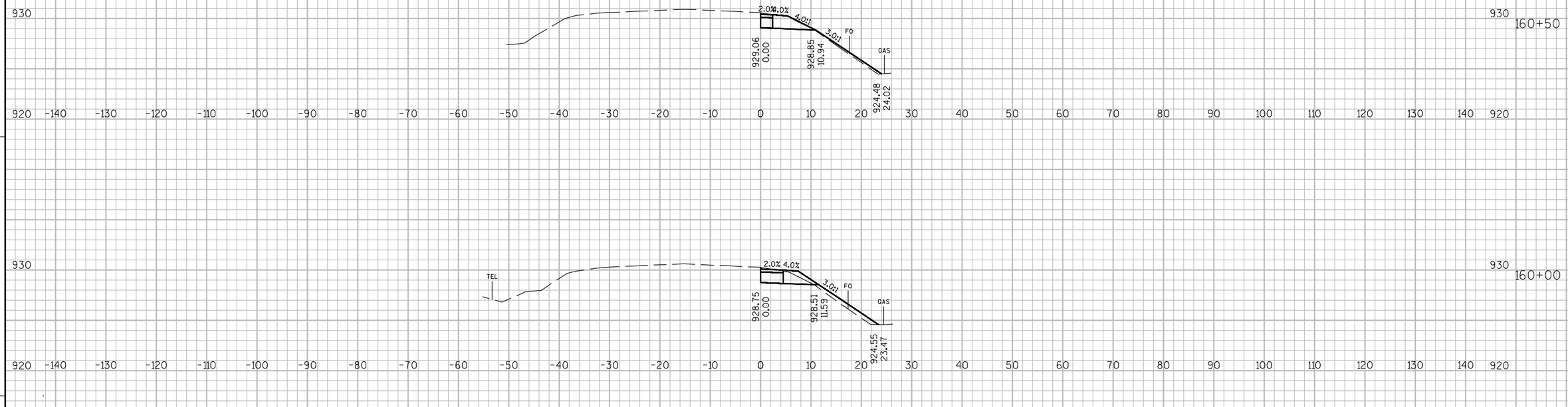
FILE NAME = C:\WDOTCO\10033 (DESIGN WORK ORDERS)\WO 5 & 6 USH 12 & MAYER ROAD\CIVIL 3D\SHEETSOTHER\PLAN SETS\RS&E\090303 XS LOWERED CROSS SECTIONS.DWG2012 PLOT BY = KL ENGINEERING PLOT NAME =



PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	CROSS SECTIONS: TEMPORARY WIDENING - SOUTH	SHEET 260 E

FILE NAME = C:\WDOTCO\10033 (DESIGN WORK ORDERS)\WO 5 & 6 USH 12 & MAYER ROAD\CIVIL 3D\SHEETSOTHER\PLAN SETS\RS&E\080303 XS LOWERED CROSS SECTIONS.DWG2012 PLOT BY = KL ENGINEERING PLOT NAME =

END CONSTRUCTION STA. 161+06.48



PROJECT NO: 7080-00-73	HWY: USH 12	COUNTY: EAU CLAIRE	CROSS SECTIONS: TEMPORARY WIDENING - SOUTH	SHEET 261 E

FILE NAME = C:\WDOTCO\10033 (DESIGN WORK ORDERS)\WO 5 & 6 USH 12 & MAYER ROAD\CIVIL 3D\SHEETSOTHER\PLAN SETS\RS&E\080303 XS LOWERED CROSS SECTIONS.DWG 2012 PLOT BY = KL ENGINEERING PLOT NAME =

Wisconsin Department of Transportation

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