GRE

JUNE 2022

PROJECT ID: 4075-39-71

WITH: 4075-39-72

COUNTY: BROWN

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 Details
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 = 192



N

DESIGN DESIGNATION

A.A.D.T.	(2022)	=	3460
A.A.D.T.	(2042)	=	4230
D.H.V.		=	470
D.D.		=	60/40
T.		=	7.5%
DESIGN SPEED		=	60
ESALS		=	664,300

CONVENTIONAL SYMBOLS

PLAN

- CORPORATE LIMITS
- PROPERTY LINE
- LOT LINE
- LIMITED HIGHWAY EASEMENT
- EXISTING RIGHT OF WAY
- PROPOSED OR NEW R/W LINE
- SLOPE INTERCEPT
- REFERENCE LINE (300'EB')
- EXISTING CULVERT
- PROPOSED CULVERT (Box or Pipe)
- COMBUSTIBLE FLUIDS (CAUTION)
- MARSH AREA
- WOODED OR SHRUB AREA

PROFILE

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

UTILITIES

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

WRIGHTSTOWN - DENMARK

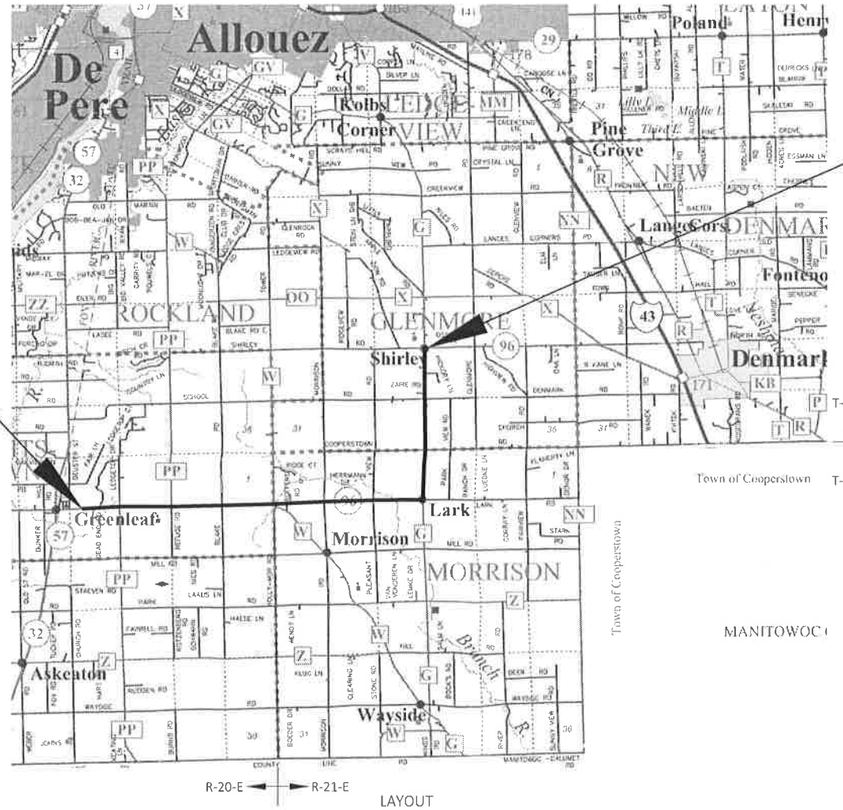
STH 32 - CTH G

STH 96

BROWN COUNTY

STATE PROJECT NUMBER
4075-39-71

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
4075-39-71	WISC 2022171	1



BEGIN PROJECT
STA 231+50
X=493904.571
Y=81243.583

END PROJECT
STA 748+18
X=509737.512
Y=117653.945

LAYOUT

SCALE 0 3 MI

TOTAL NET LENGTH OF CENTERLINE = 9.786 MILES

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS), BROWN COUNTY, NAD83 (2011), IN U.S. SURVEY FEET. POSITIONS SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES ARE THE SAME AS GROUND DISTANCES. ELEVATIONS ARE REFERENCED TO NAVD 88 (2012), GPS DERIVED ELEVATIONS ARE BASED ON GEOID 12A.

ORIGINAL PLANS PREPARED BY

MSA

1702 Pankratz St Madison, WI 53704
608-242-7779 1-800-445-0679 Fax: 608-242-5664

WISCONSIN
BRIAN G. HUIBREGTSE
E-40-65
MADISON
WI
PROFESSIONAL ENGINEER

DATE: 10/21/21 (Professional Engineer Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	MSA PROFESSIONAL SERVICES, INC.
Designer	MSA PROFESSIONAL SERVICES, INC.
Project Manager	MATT TERNES, P.E.
Regional Examiner	
Regional Supervisor	DANIEL SEGERSTROM, P.E.

APPROVED FOR THE DEPARTMENT

DATE: 10/27/2021 (Signature)

E

FILE NAME : P:\90S\93\00093473\CADD\SHEETSPLAN\010101-TI_71.DWG

PLOT DATE : 10/21/2021 10:59 AM

PLOT BY : JASON DOLENS

PLOT NAME :

GENERAL NOTES

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

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

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

THE EROSION CONTROL ITEMS SHOWN ON THE PLANS, ARE AT SUGGESTED LOCATIONS. THE ENGINEER SHALL DETERMINE THE EXACT LOCATIONS OF EROSION CONTROL ITEMS. ALL EROSION CONTROL MEASURES SHALL BE MAINTAINED UNTIL SUCH TIME AS THE ENGINEER DETERMINES THE MEASURE IS NO LONGER NECESSARY. THE CONTRACTOR WILL REMOVE ITEMS AT THE ENGINEERS DISCRETION.

PLACE EROSION CONTROL DEVICES IN SEQUENCE WITH CONSTRUCTION OPERATIONS AND MAINTAIN AS DETERMINED BY THE ENGINEER.

ADJUST THE NUMBER, LOCATION, AND SPACING OF TRAFFIC CONTROL SIGNS AND DEVICES, AS SHOWN ON THE PLANS, TO FIT FIELD CONDITIONS.

RIGHT OF WAY LINES SHOWN ARE FROM PLAT DATA AND FROM BROWN COUNTY GIS.

REMOVING APRON ENDWALLS CONNECTED TO CULVERT PIPES SHALL BE PAID FOR UNDER "REMOVING SMALL PIPE CULVERTS".

DNR LIAISON

WISCONSIN DEPARTMENT OF NATURAL RESOURCES
ATTN: JIM DOPERALSKI JR.
2984 SHAWANO AVE
GREEN BAY, WI 54313
PHONE: (920) 412-0165
EMAIL: james.doperalski@wisconsin.gov

DESIGN CONTACTS

WISCONSIN DEPARTMENT OF TRANSPORTATION
NORTHEAST REGION
ATTN: KRISTEN BERG
944 VANDERPERREN WAY
GREEN BAY, WI 54304
PHONE: (920) 492-0139
E-MAIL: kristen.berg@dot.wi.gov

MSA PROFESSIONAL SERVICES
ATTN: BRIAN HUIBREGSTE
1702 PANKRATZ ST
MADISON, WI 53704
PHONE: (608) 242-6650
E-MAIL: bhuibregtse@msa-ps.com

INDEX OF TYPICAL SECTIONS & DETAIL SHEETS

GENERAL NOTES
PROJECT OVERVIEW
TYPICAL SECTIONS
CONSTRUCTION DETAILS
STORM SEWER
PAVEMENT MARKINGS
DETOUR SIGNING PLAN

STANDARD ABBREVIATIONS

AC	ACRES
AEW	APRON ENDWALL
AGG	AGGREGATE
AH	AHEAD
ALUM.	ALUMINUM
A.P.	ACCESS POINT
ASPH	ASPHALT
AVE	AVENUE
BAD	BASE AGGREGATE DENSE
BK	BACK
BLK	BLOCK
BOC	BACK OF CURB
BOW	BACK OF SIDEWALK
BM	BENCHMARK
CABC	CRUSHED AGGREGATE BASE COURSE
CL or ℄	CENTERLINE
Δ	CENTRAL ANGLE or DELTA
CMCP	CORRUGATED METAL CULVERT PIPE
CONC	CONCRETE
CP	CONTROL POINT
CPCS	CULVERT PIPE CORRUGATED STEEL
CSM	CERTIFIED SURVEY MAP
CTH	COUNTY TRUNK HIGHWAY
D	DEGREE OF CURVATURE
DES	DESIRABLE
E	EAST
EB	EASTBOUND
EBS	EXCAVATION BELOW SUBGRADE
EOP	EDGE OF PAVEMENT
ET AL	AND OTHERS
EW	ENDWALL
EXIST	EXISTING
FT	FOOT
FT2	SQUARE FEET
GN	GRID NORTH
GV	GAS VALVE
HERCP	HORIZONTAL ELLIPTICAL REINFORCED CONCRETE PIPE
HYD	HYDRANT
IN	INCH
INL	INLET
INV	INVERT
IP	IRON PIPE
L	LENGTH
L	LENGTH OF CURVE
LC	LONG CHORD
LCP	LONG CHORD BEARING
LF	LINEAR FEET
LT	LEFT
MH	MANHOLE
MON	MONUMENT
N	NORTH
NB	NORTHBOUND
N.C.	NORMAL CROWN
NO	NUMBER
PB	PULLBOX
PC	POINT OF CURVATURE
PI	POINT OF INTERSECTION
PL	PROPERTY LINE
PLE	PERMANENT LIMITED EASEMENT
POB	POINT OF BEGINNING
PT	POINT OF TANGENCY
R	RADIUS
R	RANGE
RCP	REINFORCED CONCRETE PIPE
RD	ROAD
REQ'D	REQUIRED
RL or R/L	REFERENCE LINE
RP	RADIUS POINT
RT	RIGHT
R/W	RIGHT OF WAY
S	SOUTH
SAN	SANITARY SEWER
SB	SOUTHBOUND
S.E.	SUPERELEVATION
SEC	SECTION
SSPRC	STORM SEWER PIPE REINFORCED CONCRETE
SSPRCHE	STORM SEWER PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL
SQ	SQUARE
ST	STREET
STA	STATION
STD	STANDARD
STH	STATE TRUNK HIGHWAY
STM	STORM SEWER
STR	STRUCTURE
T	TANGENT
TAN	TANGENT
TEMP	TEMPORARY
TLE	TEMPORARY LIMITED EASEMENT
T or TN	TOWN
TYP.	TYPICAL
WM	WATERMIN
WV	WATER VALVE
W	WEST
WB	WESTBOUND
X	EAST GRID COORDINATE
Y	NORTH GRID COORDINATE

UTILITIES

ELECTRICITY/TRANSMISSION
ATC MANAGEMENT, INC.
ATTN: CHRIS DAILEY
P.O. BOX 47
WAUKESHA, WI 53187-0047
PHONE: (262) 506-6884
EMAIL: cdailey@atcllc.com

COMMUNICATION LINE
SPECTRUM COMMUNICATIONS
ATTN: VINCENT ALBIN
3520 E DESTINATION DR
APPLETON, WI 54915
PHONE: (920) 831-9249, (920) 378-0444
EMAIL: vince.albin@charter.com

GAS/PETROLEUM
ANR PIPELINE CO.
ATTN: TODD BRISTER
W3925 PIPELINE LANE
EDEN, WI 53019
PHONE: (920) 477-2235
EMAIL: todd_brister@transcanada.com

GAS/PETROLEUM
WISCONSIN PUBLIC SERVICE CORPORATION
ATTN: JIM EIDEN
2850 S ASHLAND AVE
GREEN BAY, WI 54304
PHONE: (920) 617-5231, (920) 676-8068
EMAIL: james.eiden@wisconsinpublicservices.com

ELECTRIC
WISCONSIN PUBLIC SERVICE CORPORATION
ATTN: RYAN VOSKUIL
2850 S ASHLAND AVE
GREEN BAY, WI 54304
PHONE: (920) 617-5150, (920) 655-1584
EMAIL: ryan.voskuil@wisconsinpublicservices.com

COMMUNICATION LINE
CENTURY LINK
ATTN: MATT GUNDERSON
212 CHURCH AVE
CASCO, WI 54205
PHONE: (920) 837-2344, (920) 896-2867
EMAIL: matt.gunderson@lumen.com

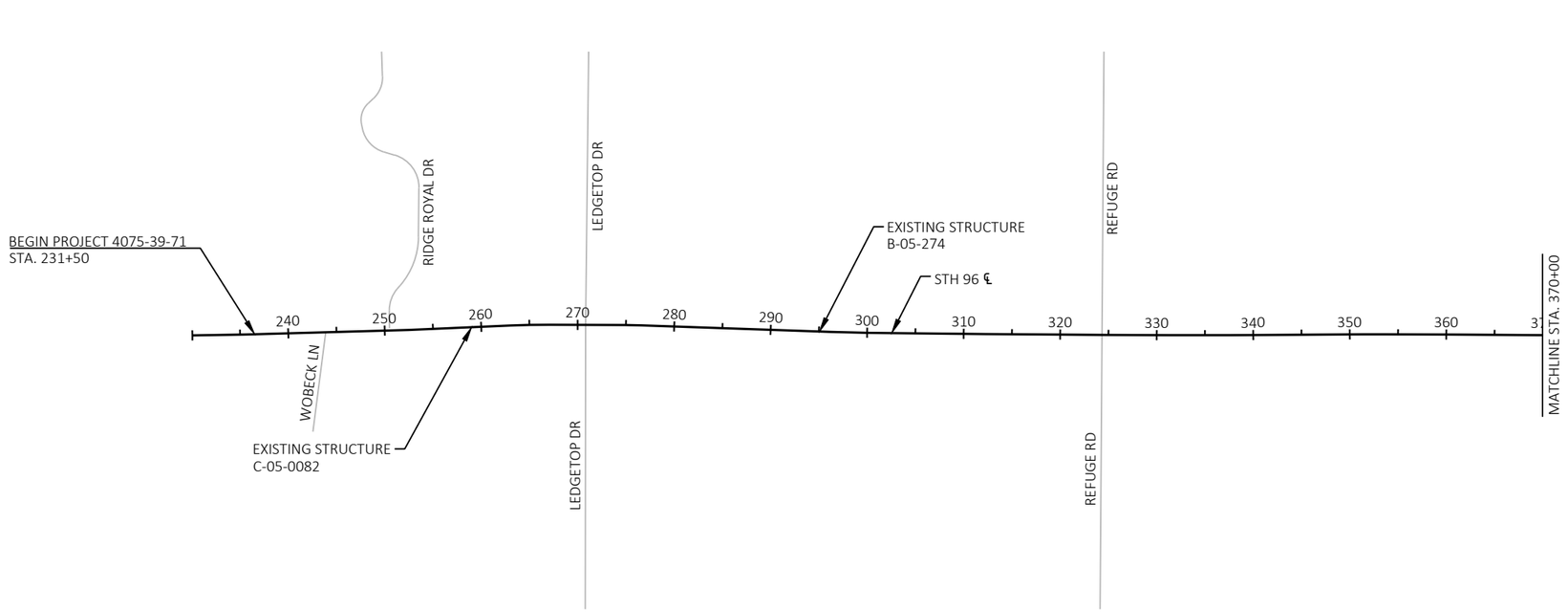
WATER/SEWER
** WRIGHTSTOWN SANITARY DISTRICT #1
ATTN: TODD WEYENBERG
1250 CENTENNIAL CENTRE BLVD
HOBART, WI 54155
PHONE: (920) 662-9641
EMAIL: tweyenberg@releeinc.com

** DENOTES NOT A MEMBER OF DIGGERS HOTLINE

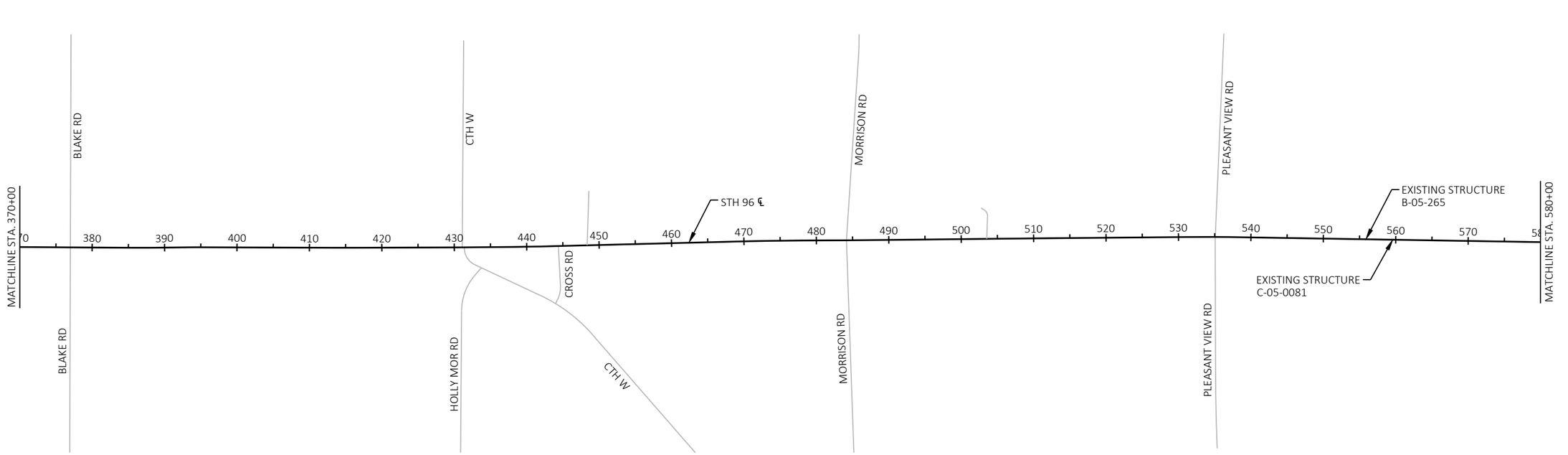
SURVEY MONUMENT CONTACT

NORTHEAST REGION SURVEYS
ATTN: CORMAC MCINNIS, PLS
944 VANDERPERREN WAY
GREEN BAY, WI 54304
PHONE: (920) 362-1267
EMAIL: cormac.mcinnis@dot.wi.gov

DIGGERS HOTLINE
Dial 811 or (800)242-8511
www.DiggersHotline.com



2

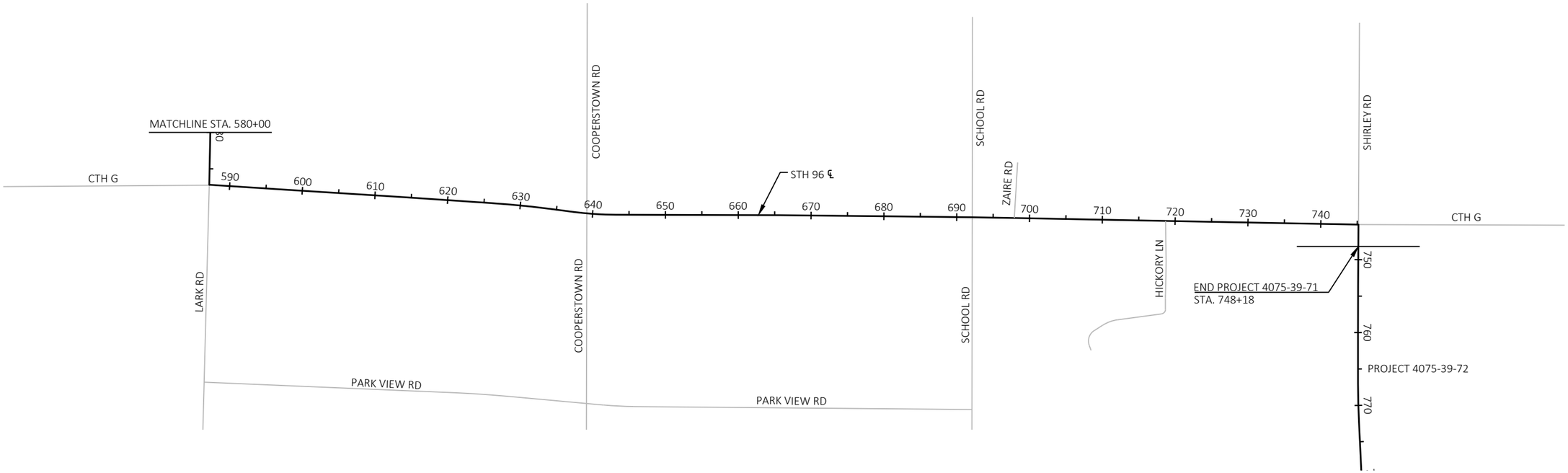


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PLOT BY : JASON DOLENS
PLOT NAME :
PLOT SCALE : 1 IN:1500 FT
WISDOT/CADDS SHEET 44

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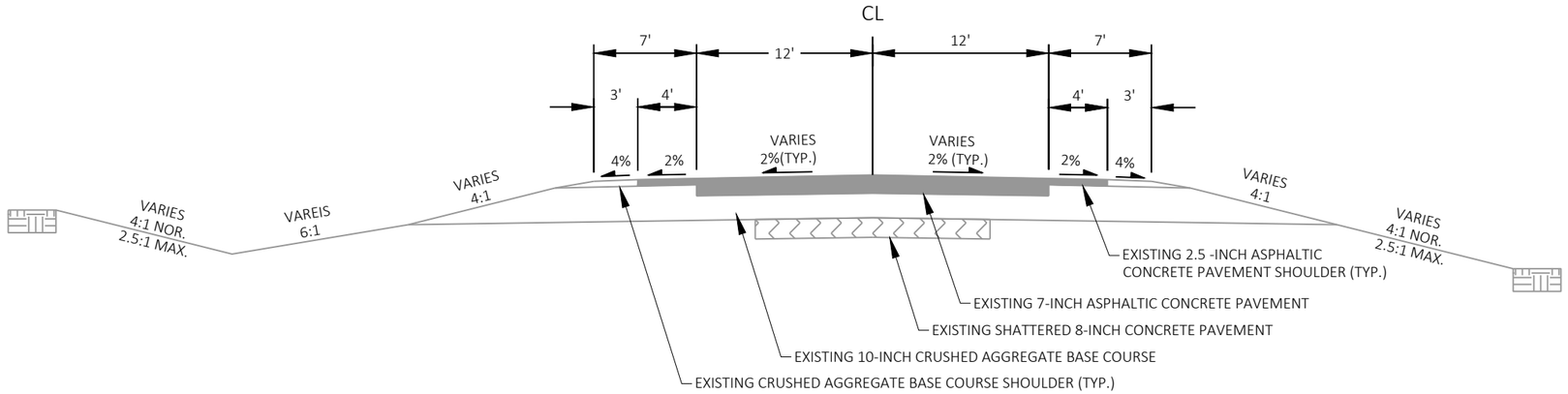


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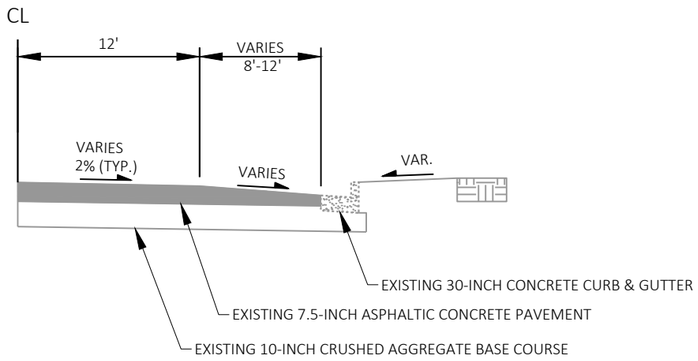
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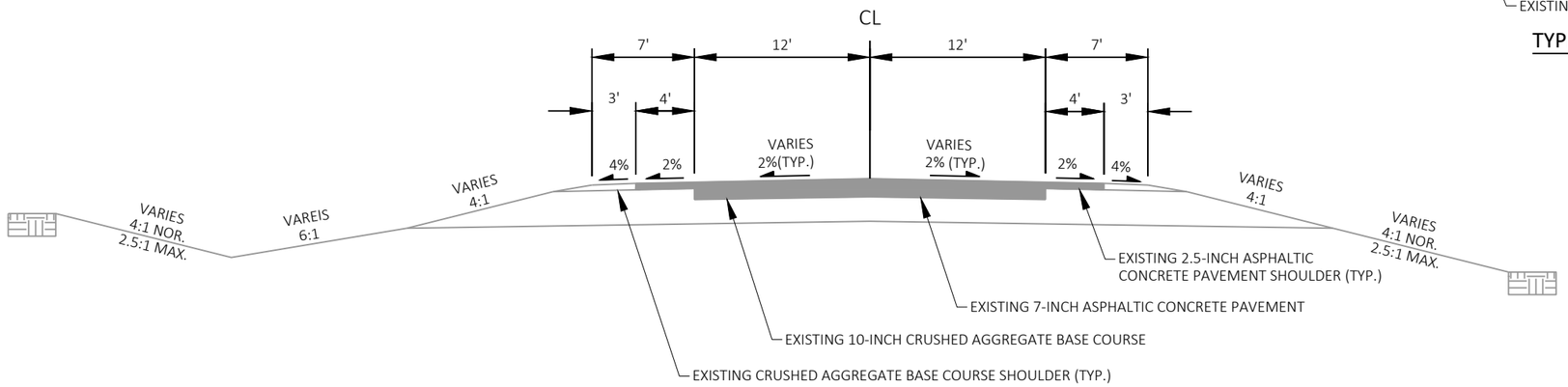
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TYPICAL EXISTING SECTION - STH 96
STA 231+50 TO 239+00
STA 273+00 TO 292+00
STA 300+00 TO 325+00

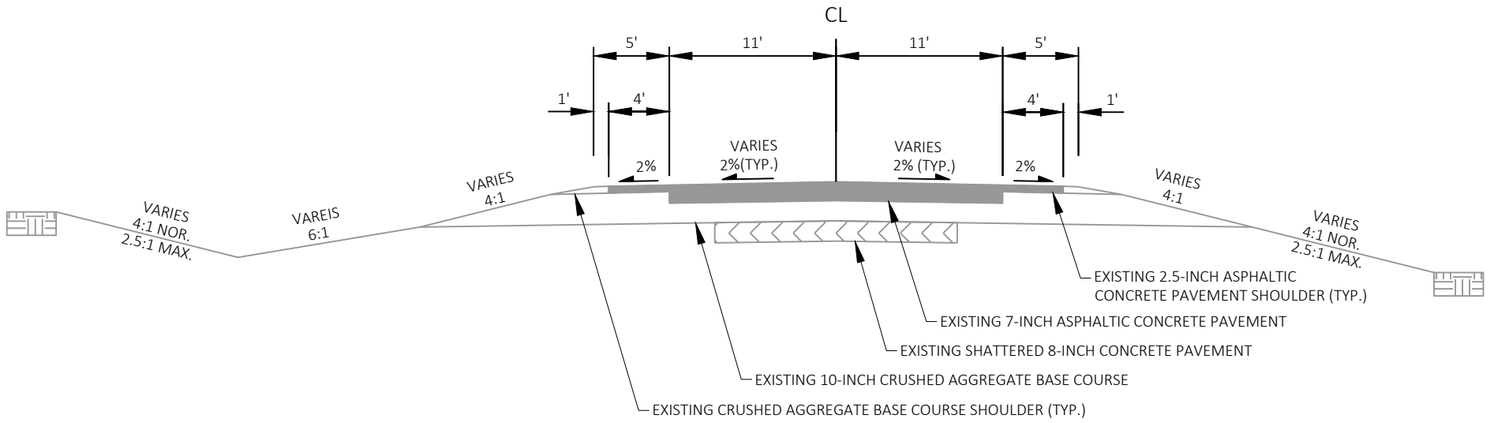


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STA 249+18 TO 254+25 RT
STA 251+15 TO 253+51 LT
STA 271+41 TO 273+30 LT

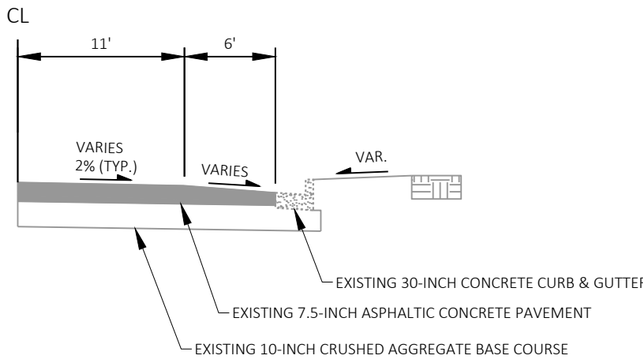


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STA 239+00 TO 273+00
STA 292+00 TO 294+04
STA 295+26 TO 300+00

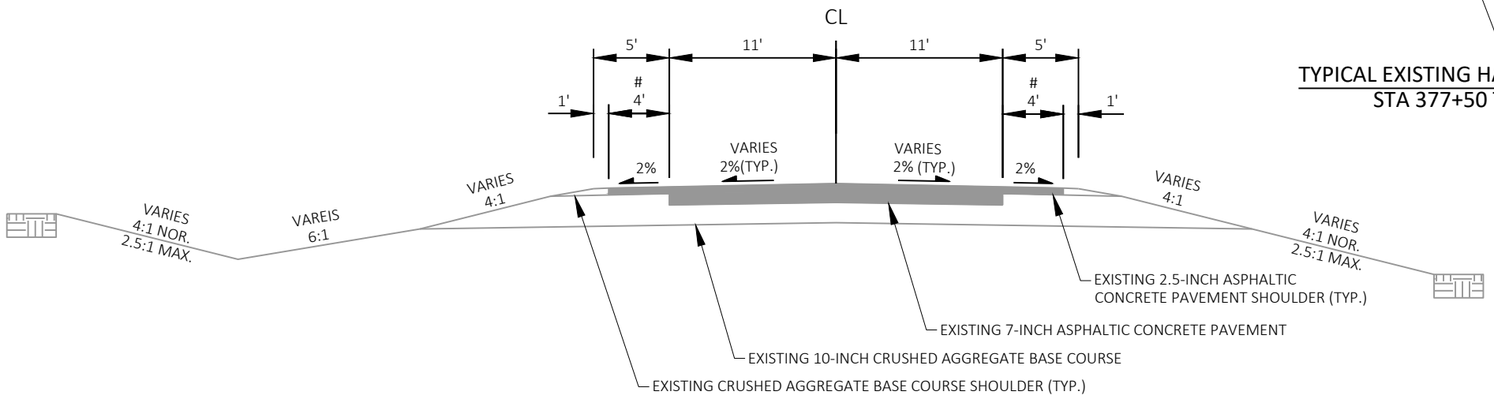
PROJECT NO: 4075-39-71	HWY: STH 96	COUNTY: BROWN	EXISTING TYPICAL SECTIONS	SHEET 5	E



TYPICAL EXISTING SECTION - STH 96
STA 325+00 TO 334+00
STA 403+00 TO 421+00
STA 445+00 TO 479+00
STA 488+00 TO 520+50



TYPICAL EXISTING HALF SECTION - STH 96
STA 377+50 TO 379+96 LT

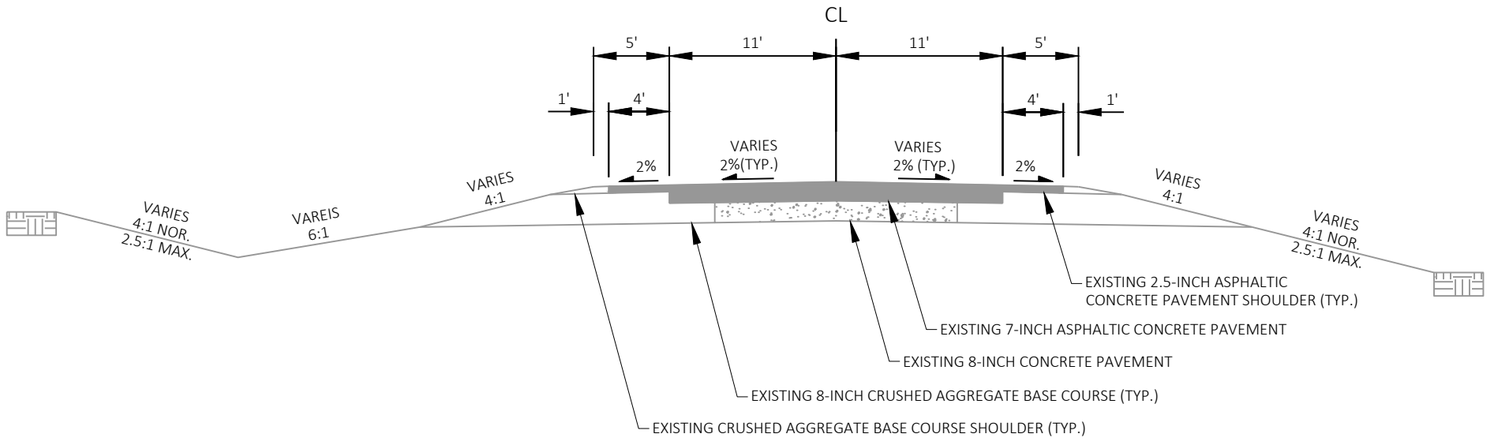


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STA 520+50 TO 572+00

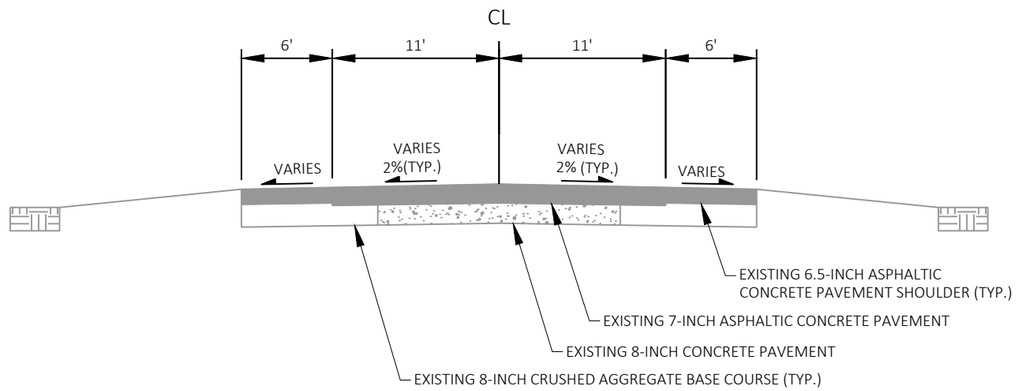
- PAVED SHOULDERS
ARE 6' WIDE IN AREAS
WITH GUARDRAIL

PROJECT NO: 4075-39-71	HWY: STH 96	COUNTY: BROWN	EXISTING TYPICAL SECTIONS	SHEET 6	E

2



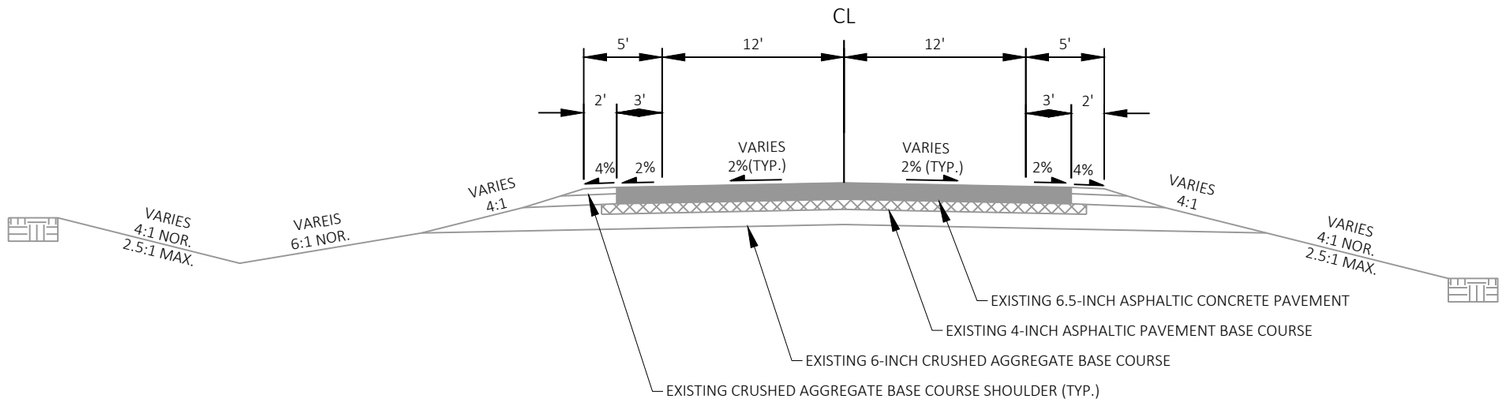
TYPICAL EXISTING SECTION - STH 96
STA 572+00 TO 578+44



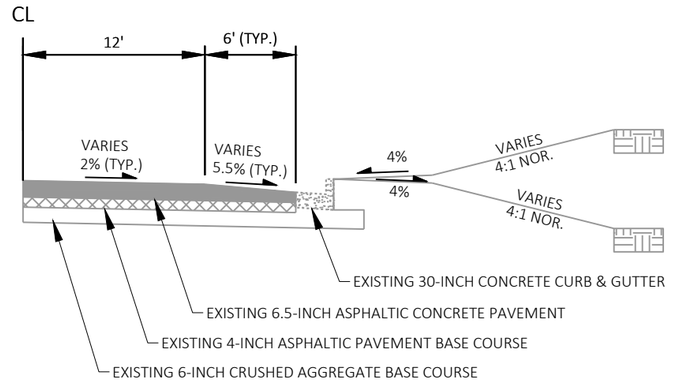
TYPICAL EXISTING SECTION - STH 96
STA 578+44 TO 587+66

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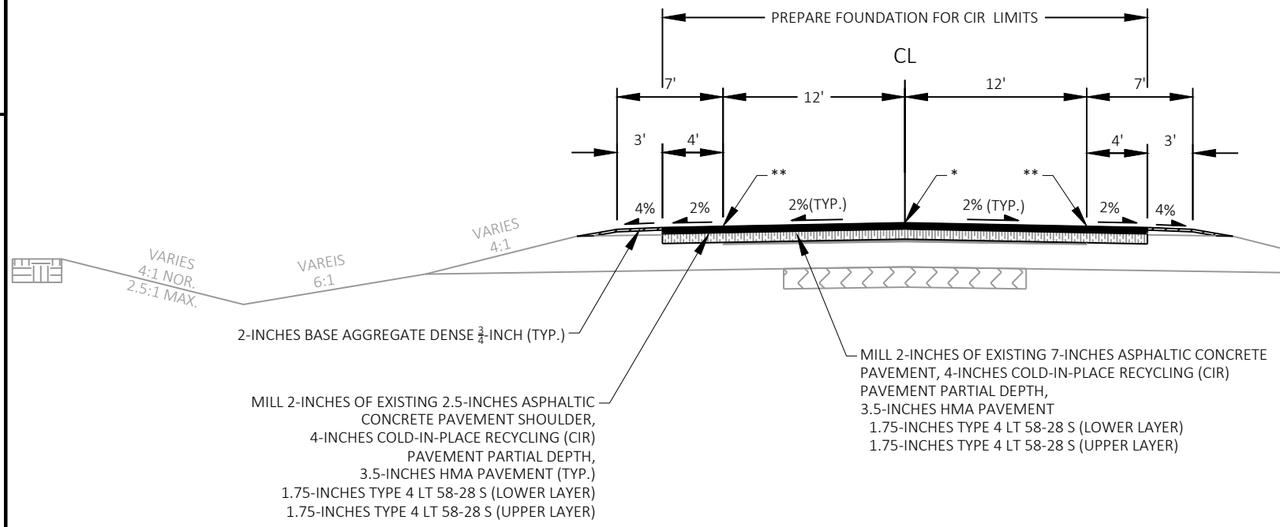
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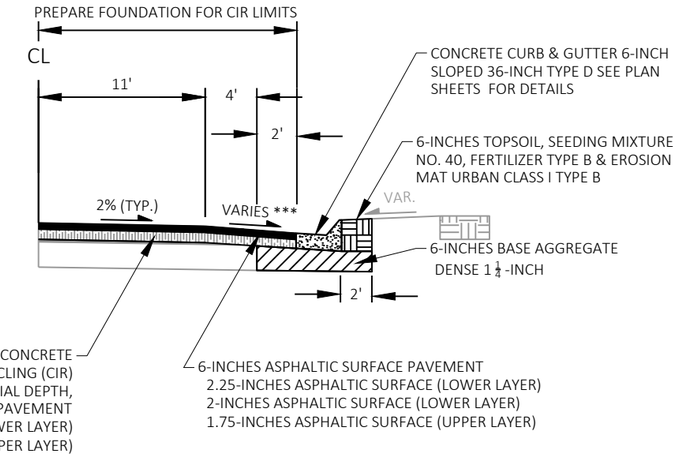
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STA 745+18 TO 748+18



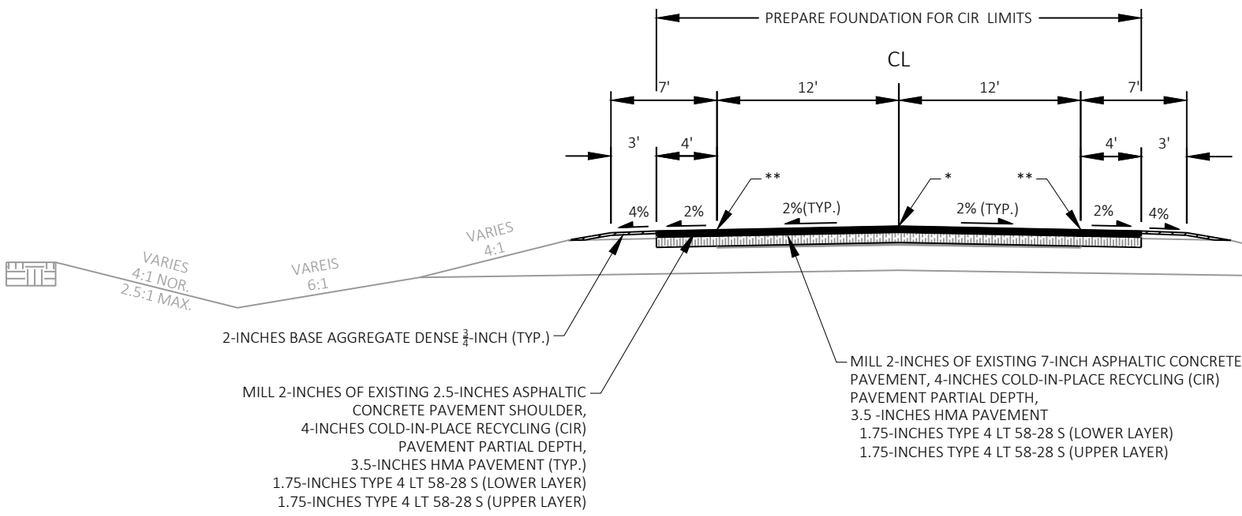
TYPICAL EXISTING HALF SECTION - STH 96
STA 587+66 TO 593+34 LT
STA 587+70 TO 589+76 RT
STA 597+12 TO 599+30 RT
STA 617+21 TO 621+19 RT
STA 639+86 TO 640+70 LT
STA 668+77 TO 670+29 RT
STA 743+91 TO 744+67 LT
STA 745+87 TO 747+43 LT



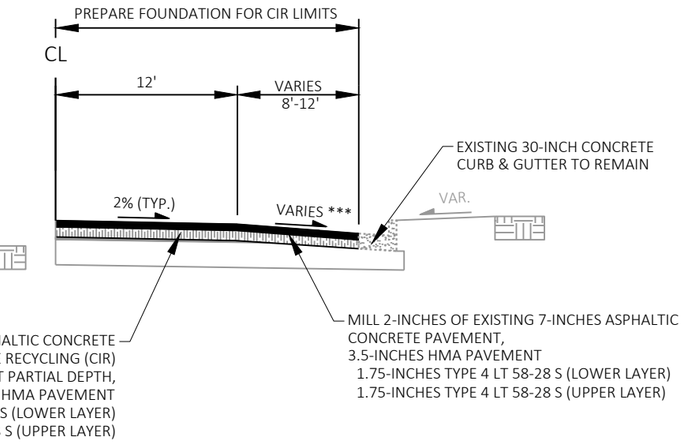
TYPICAL FINISHED SECTION - STH 96
STA 231+50 TO 239+00
STA 273+00 TO 292+00
STA 300+00 TO 325+00



TYPICAL REPLACING CURB AND GUTTER SECTION - STH 96
STA 323+01 TO 323+88 LT



TYPICAL FINISHED SECTION - STH 96
STA 239+00 TO 273+00
STA 292+00 TO 295+04
STA 295+26 TO 300+00



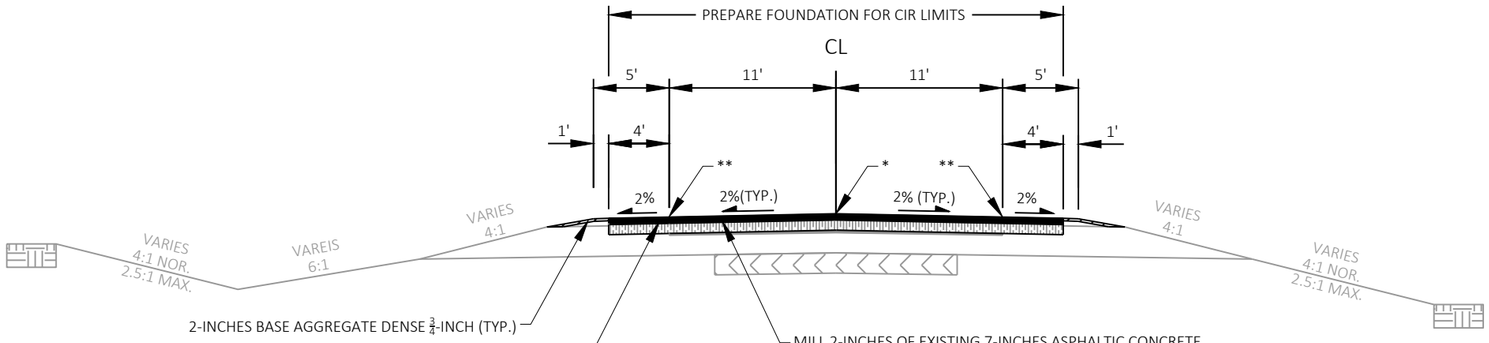
LEGEND

*	ASPHALTIC CENTER LINE RUMBLE STRIP 2-LANE RURAL
**	ASPHALTIC SHOULDER RUMBLE STRIP 2-LANE RURAL (TYPE 2)
***	MATCH EXISTING CROSS SLOPE

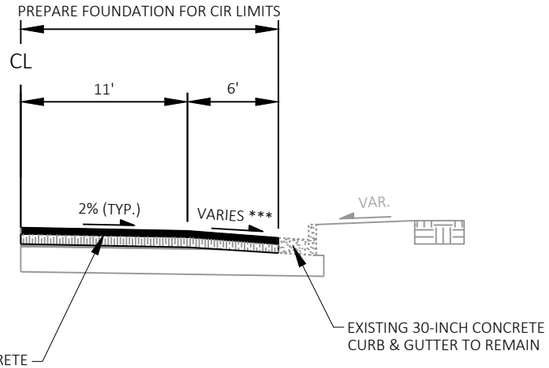
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STA 251+15 TO 253+17 LT
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PROJECT NO: 4075-39-71	HWY: STH 96	COUNTY: BROWN	FINISHED TYPICAL SECTIONS	SHEET 9	E

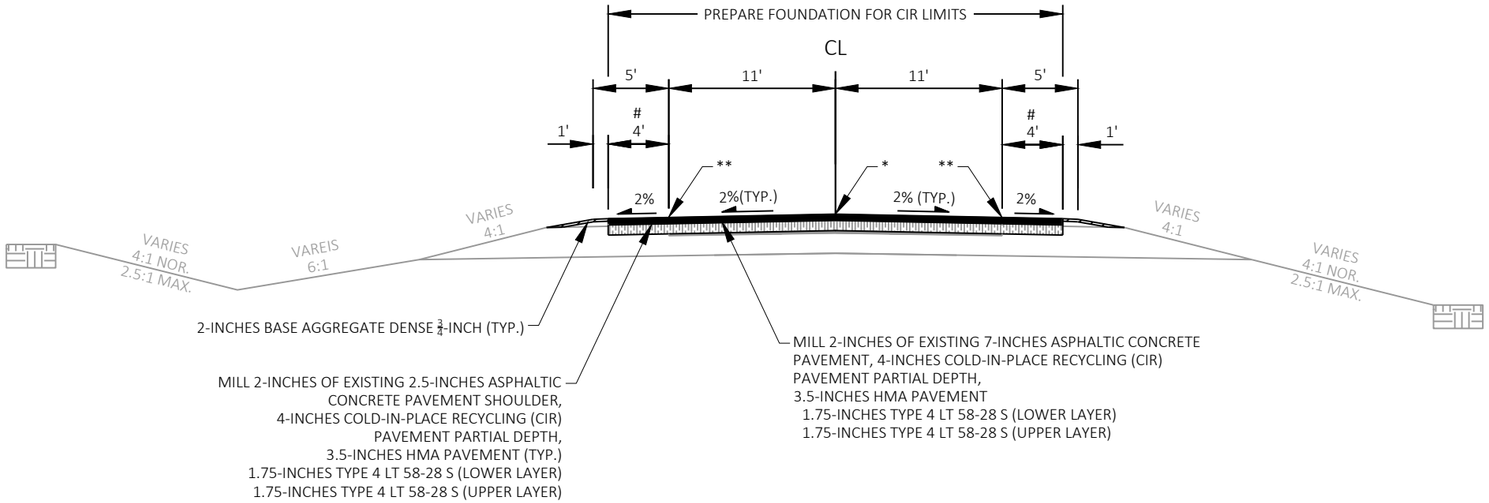
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LAYOUT NAME - 020305-ts
PLOT DATE : 12/6/2021 4:22 PM PLOT BY : JASON DOLENS PLOT NAME : PLOT SCALE : 1 IN:10 FT



TYPICAL FINISHED SECTION - STH 96
STA 325+00 TO 334+00
STA 403+00 TO 421+00
STA 445+00 TO 479+00
STA 488+00 TO 520+50



TYPICAL FINISHED HALF SECTION - STH 96
STA 377+50 TO 379+96 LT



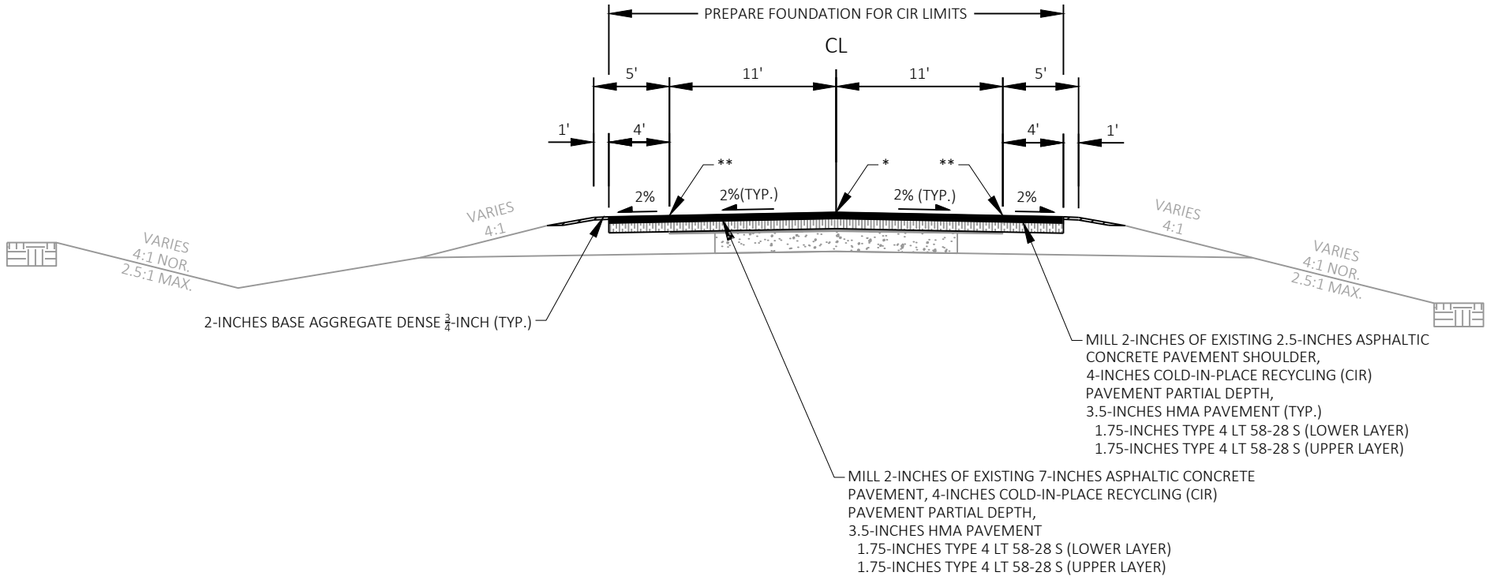
TYPICAL FINISHED SECTION - STH 96
STA 334+00 TO 403+00
STA 421+00 TO 445+00
STA 479+00 TO 488+00
STA 520+50 TO 572+00

LEGEND

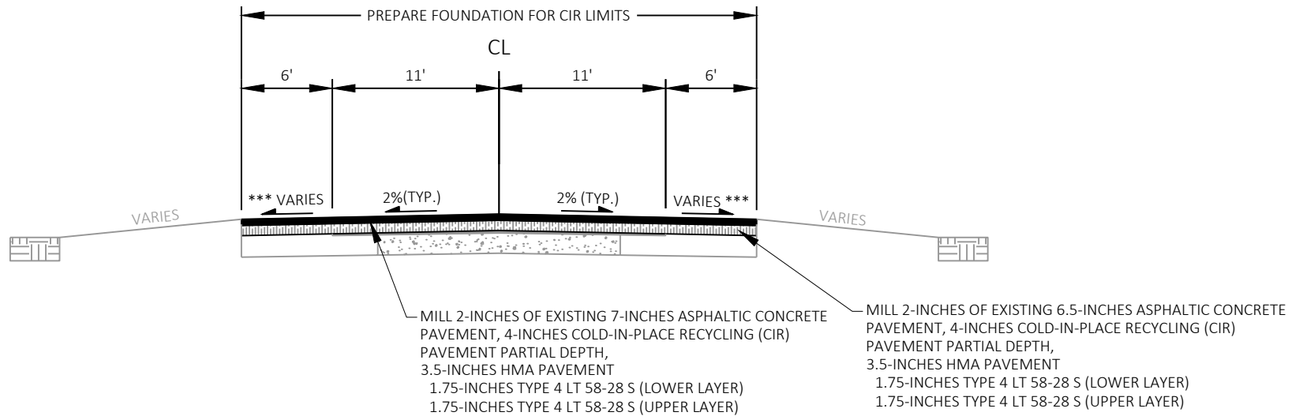
*	ASPHALTIC CENTER LINE RUMBLE STRIP 2-LANE RURAL
**	ASPHALTIC SHOULDER RUMBLE STRIP 2-LANE RURAL (TYPE 2)
***	MATCH EXISTING CROSS SLOPE

- PAVED SHOULDERS ARE 6' WIDE IN AREAS WITH GUARDRAIL

PROJECT NO: 4075-39-71	HWY: STH 96	COUNTY: BROWN	FINISHED TYPICAL SECTIONS	SHEET 10	E



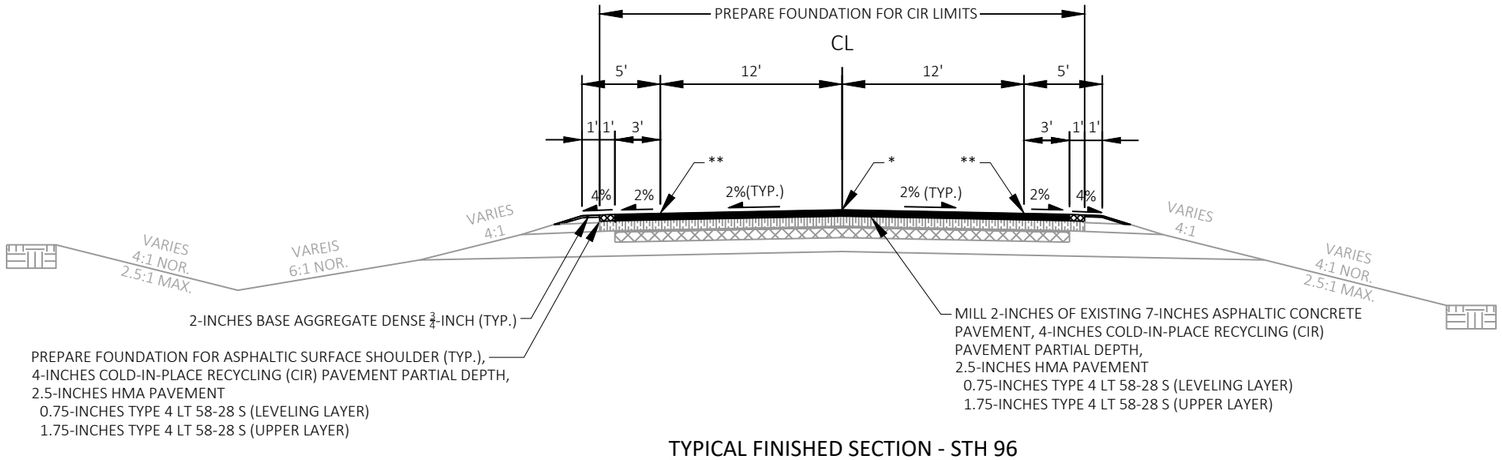
TYPICAL FINISHED SECTION - STH 96
STA 572+00 TO 578+44



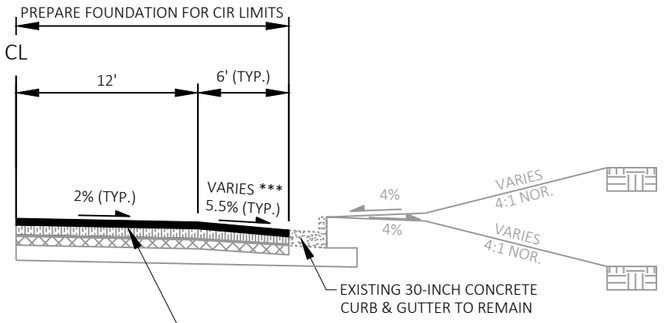
TYPICAL FINISHED SECTION - STH 96
STA 578+44 TO 587+66

LEGEND

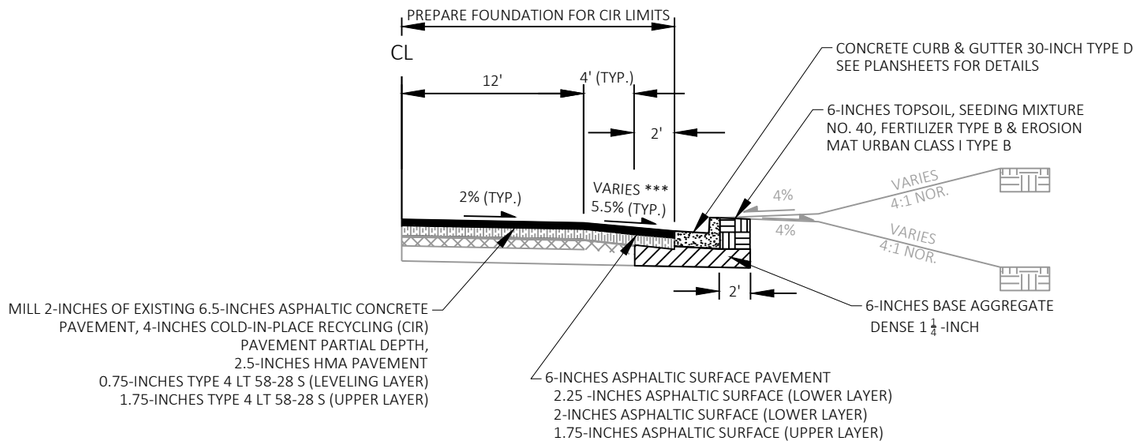
*	ASPHALTIC CENTER LINE RUMBLE STRIP 2-LANE RURAL
**	ASPHALTIC SHOULDER RUMBLE STRIP 2-LANE RURAL (TYPE 2)
***	MATCH EXISTING CROSS SLOPE



TYPICAL FINISHED SECTION - STH 96
STA 587+66 TO 745+18
STA 745+18 TO 748+18



TYPICAL FINISHED HALF SECTION - STH 96
STA 587+66 TO 593+11 LT
STA 587+70 TO 589+76 RT
STA 597+12 TO 599+30 RT
STA 617+21 TO 621+19 RT
STA 639+86 TO 640+70 LT
STA 668+77 TO 670+29 RT
STA 743+91 TO 744+67 LT
STA 745+87 TO 747+43 LT

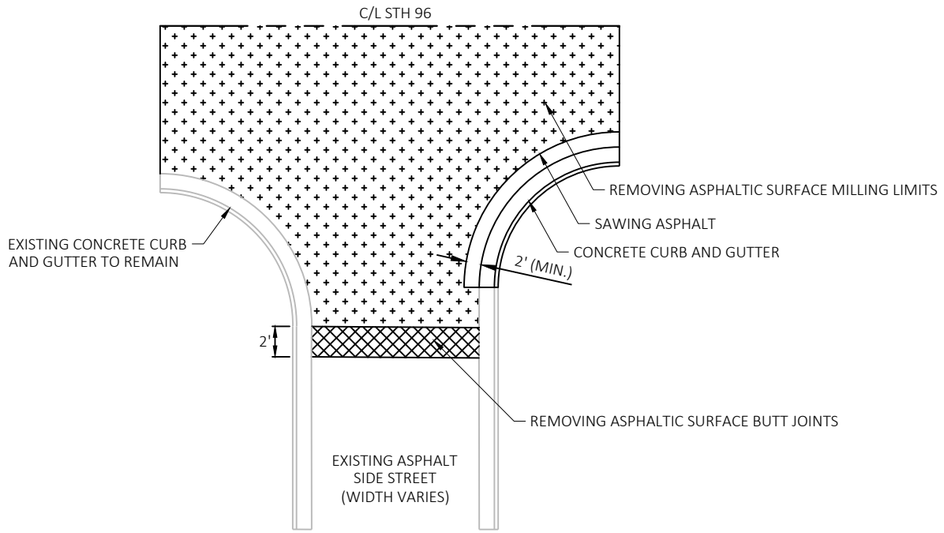


TYPICAL REPLACING CURB AND GUTTER SECTION - STH 96
STA 593+11 TO 593+34 LT

LEGEND

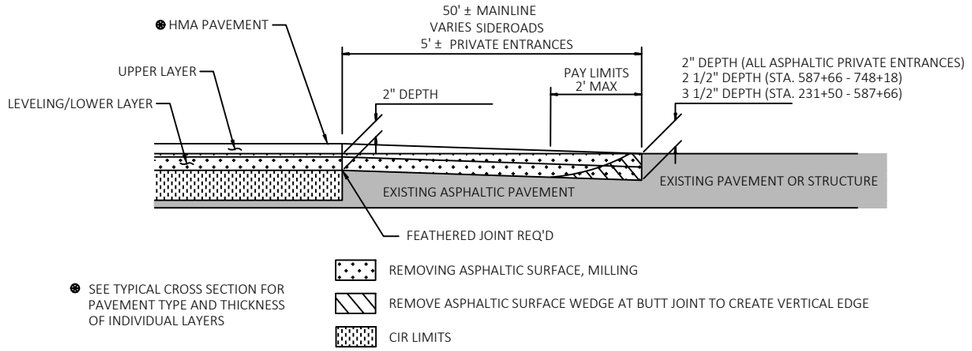
*	ASPHALTIC CENTER LINE RUMBLE STRIP 2-LANE RURAL
**	ASPHALTIC SHOULDER RUMBLE STRIP 2-LANE RURAL (TYPE 2)
***	MATCH EXISTING CROSS SLOPE

PROJECT NO: 4075-39-71	HWY: STH 96	COUNTY: BROWN	FINISHED TYPICAL SECTIONS	SHEET 12	E



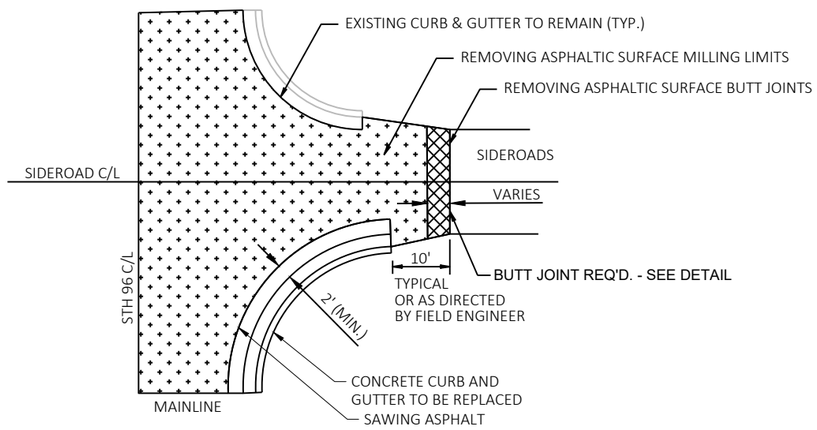
URBAN ASPHALTIC SURFACE SIDE ROAD DETAIL

SIDE ROAD WITH CURB AND GUTTER

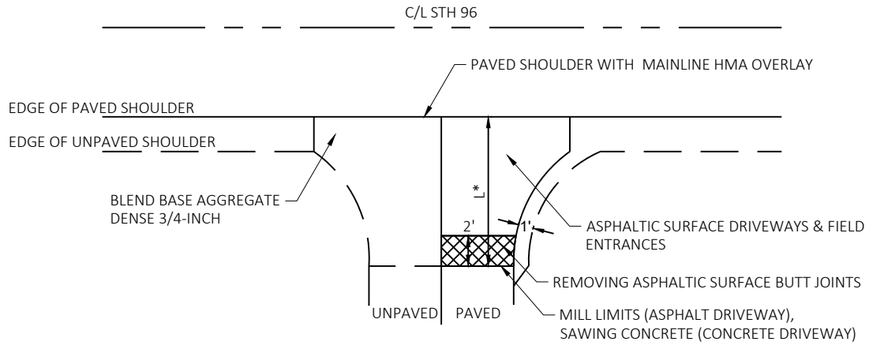


BUTT JOINT DETAIL FOR MILLED ASPHALTIC PAVEMENTS (PROFILE CHANGE)

SCALE: NONE



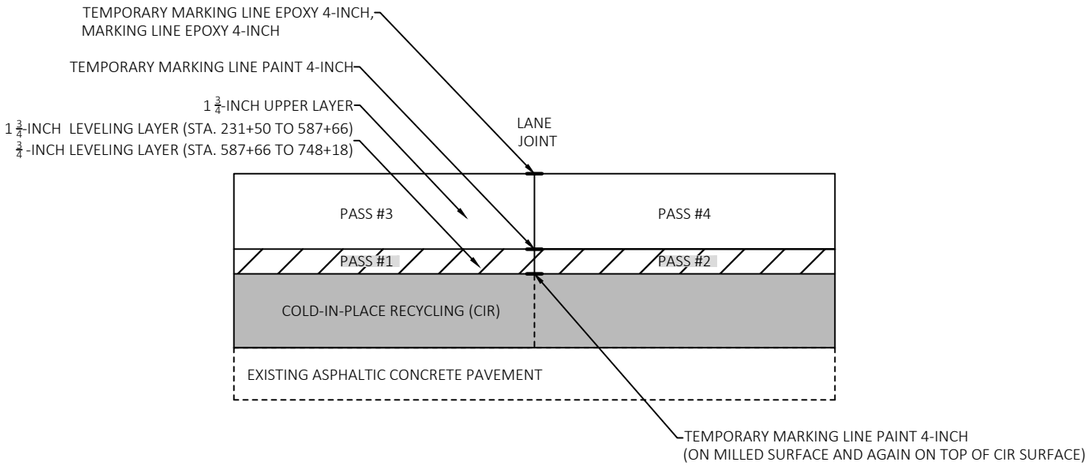
RURAL ASPHALTIC SURFACE SIDE ROAD DETAIL



NOTE: USE CONCRETE DRIVEWAY 6-INCH OVER 2 INCHES BASE AGGREGATE DENSE 1 1/4-INCH FOR CONCRETE DRIVEWAYS

*L = 5' TYPICAL: EXACT LENGTH TO BE DETERMINED IN THE FIELD BY THE ENGINEER.

DRIVEWAY PLAN



LONGITUDINAL JOINTS DETAIL

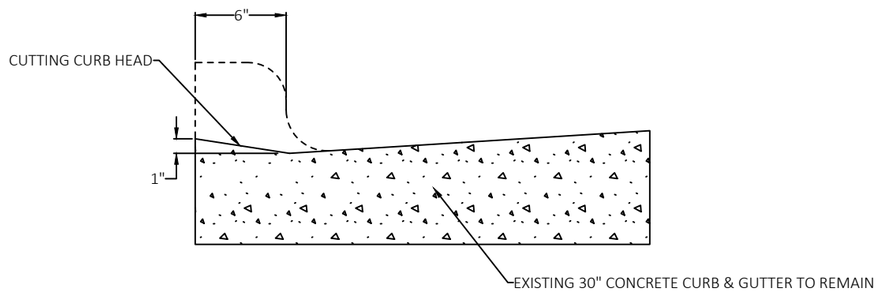
SCALE: NONE



W8-11
48" X 48"

NOTES:

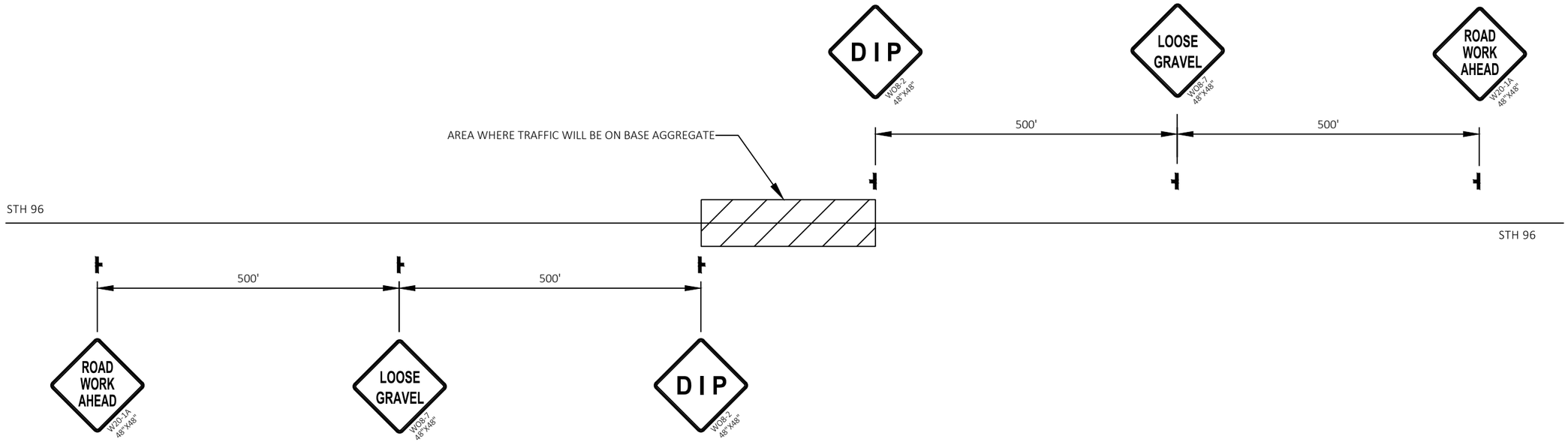
1. TO BE UTILIZED FOR TEMPORARY INSTALLATIONS IN WORK AREAS INVOLVING PAVING LONGITUDINAL JOINTS.
2. UNEVEN LANE SIGNS SHALL BE PLACED AT THE BEGINNING OF JOINT AND AT 1/2 MILE INCREMENTS.
3. SIGNS WILL BE PAID AS TRAFFIC CONTROL SIGNS.
4. REFER TO S.D.D. "TRAFFIC CONTROL, DROP-OFF SIGNING" FOR ADDITIONAL INFORMATION.
5. REFER TO S.D.D. " HMA LONGITUDINAL JOINTS" FOR THE REQUIRED WEDGE AT JOINTS. VERTICAL DROP OFFS ARE NOT ALLOWED.
6. ALL TEMPORARY MARKINGS TO BE OFFSET 3 INCHES FROM CROWN.
7. TEMPORARY MARKING LINES SHALL BE APPLIED TO MATCH EXISTING NO PASSING ZONES FOR EACH INSTALLATION.



CUTTING CURB HEAD DETAIL

SCALE: NONE
STA. 252+91 - 253+75, RT

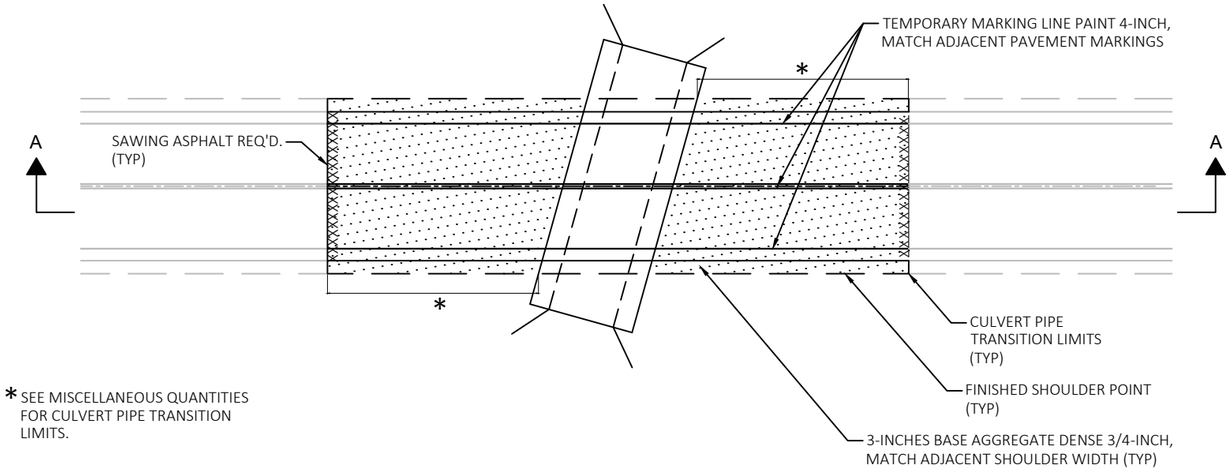
2



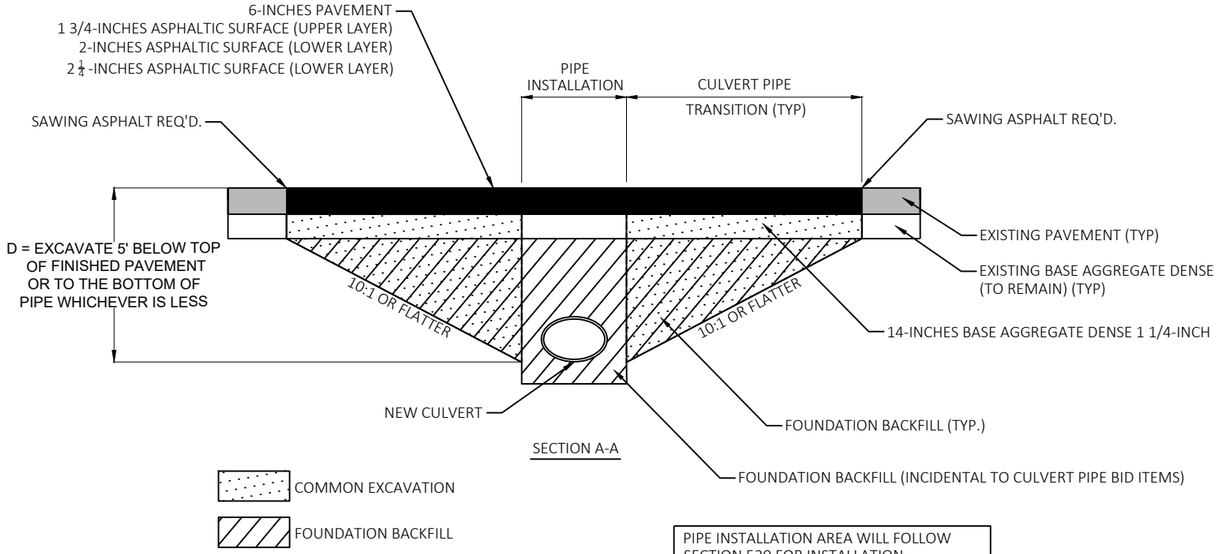
TEMPORARY SIGNING AT CULVERT PIPE REPLACEMENT

SCALE: NONE

USE AT ALL CULVERT PIPE REPLACEMENTS WHEN ASPHALTIC SURFACE IS NOT IN PLACE.



* SEE MISCELLANEOUS QUANTITIES FOR CULVERT PIPE TRANSITION LIMITS.



NEW CULVERT PIPES WITH TRANSITION

STA. 285+19	STA. 380+20	STA. 505+41
STA. 285+25	STA. 432+98	STA. 525+75
STA. 285+29	STA. 433+05	STA. 525+83
STA. 302+25	STA. 454+69	STA. 719+26
STA. 302+32	STA. 467+99	STA. 742+19
STA. 322+33	STA. 468+06	
STA. 322+41	STA. 495+95	
STA. 326+03	STA. 496+00	
STA. 372+18	STA. 496+07	
STA. 372+25	STA. 496+13	

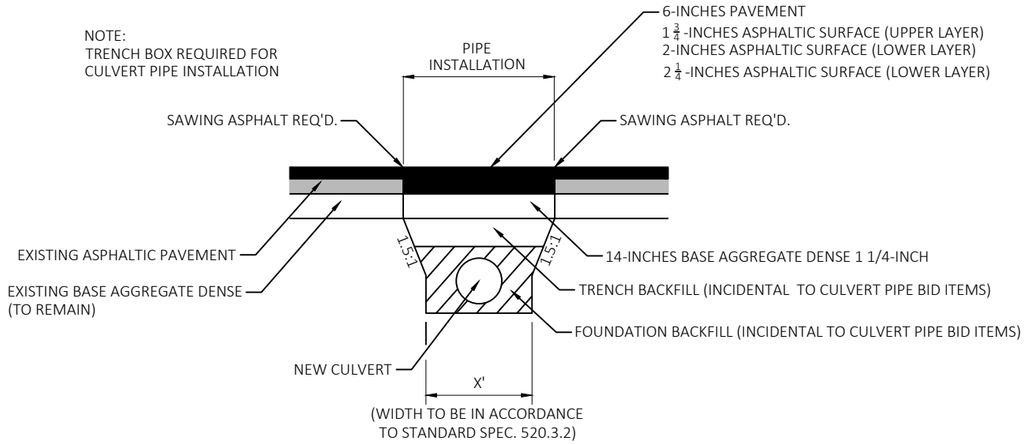
PIPE INSTALLATION AREA WILL FOLLOW SECTION 520 FOR INSTALLATION, WIDTHS AND PAYMENT.

CONSTRUCT TRANSITION PERPENDICULAR TO CULVERT PIPE.

CULVERT PIPE TRANSITION AREAS WILL BE PAID BY COMMON EXCAVATION & SPV FOUNDATION BACKFILL.

PAVEMENT SAW CUT TO BE PERPENDICULAR TO ROADWAY ALIGNMENT.

NOTE:
TRENCH BOX REQUIRED FOR CULVERT PIPE INSTALLATION



CULVERT REPLACEMENTS NO TRANSITION

SCALE: NONE

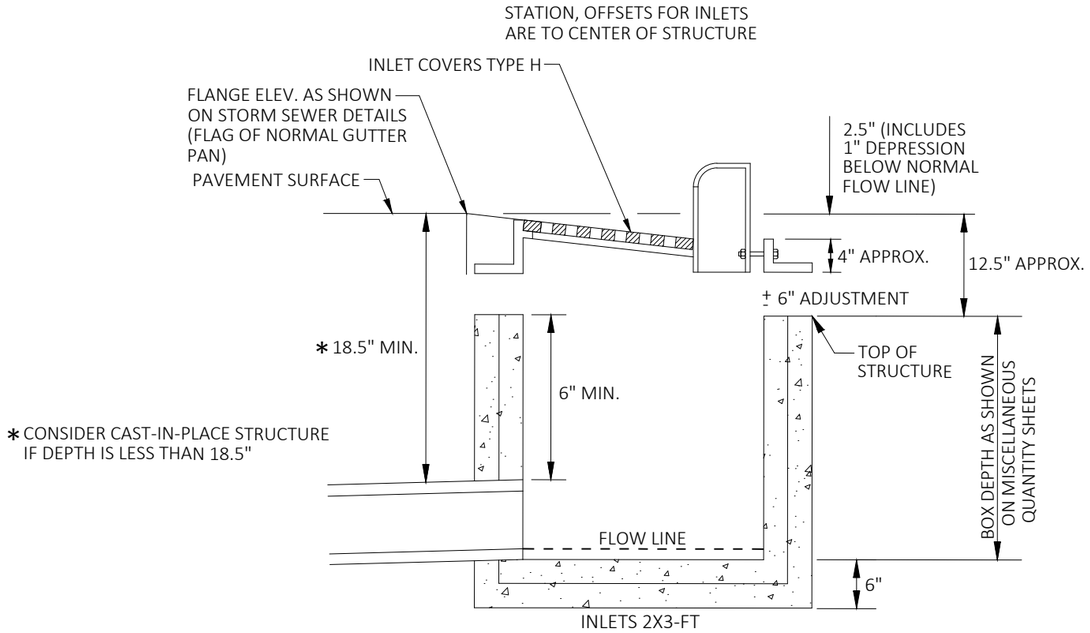
STA. 267+38
STA. 342+39
STA. 360+94
STA. 483+80
STA. 483+88
STA. 603+71
STA. 643+68
STA. 661+89
STA. 662+00
STA. 662+12
STA. 680+29
STA. 700+98
STA. 705+10
STA. 708+75
STA. 728+11

FOUNDATION BACKFILL

PIPE INSTALLATION AREA WILL FOLLOW SECTION 520 FOR INSTALLATION, WIDTHS AND PAYMENT.

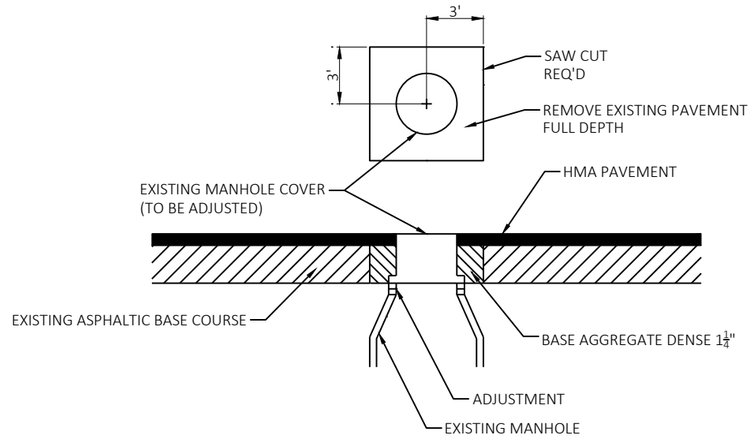
CONSTRUCT TRANSITION PERPENDICULAR TO CULVERT PIPE.

PAVEMENT SAW CUT TO BE PERPENDICULAR TO ROADWAY ALIGNMENT.



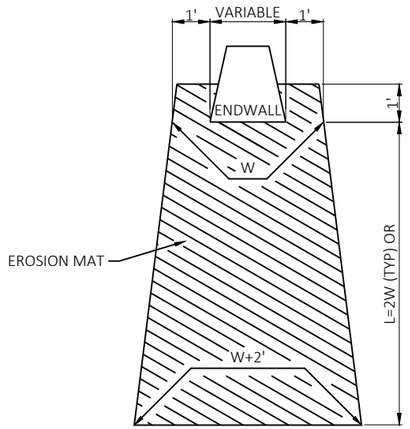
DETAIL FOR COMPUTING INLET ELEVATIONS

SCALE: NONE



ADJUSTING MANHOLE COVERS

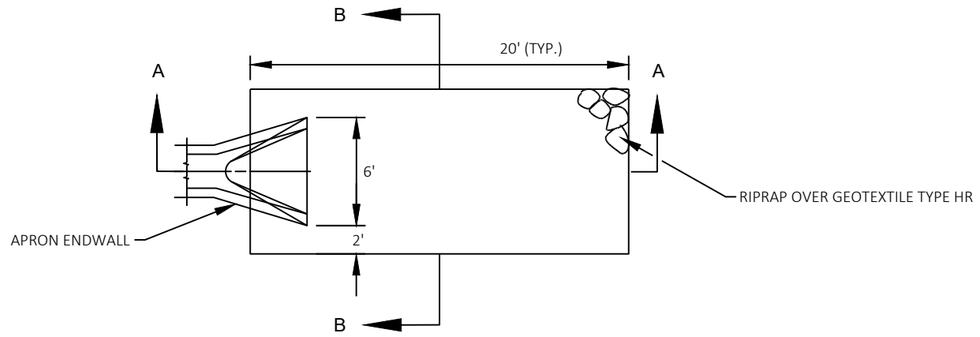
STA. 745+31 LT

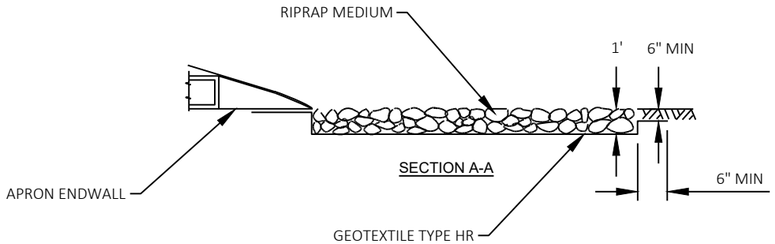


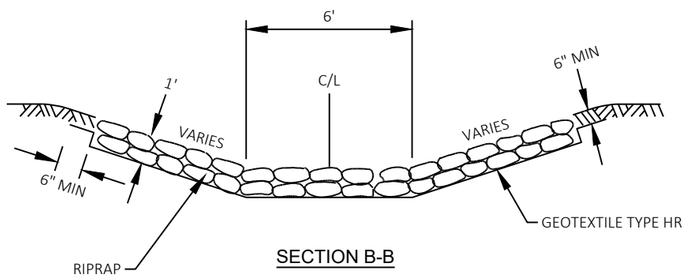
EROSION MAT TREATMENT AT CULVERTS

PROJECT NO: 4075-39-71	HWY: STH 96	COUNTY: BROWN	CONSTRUCTION DETAILS	SHEET 17	E

2

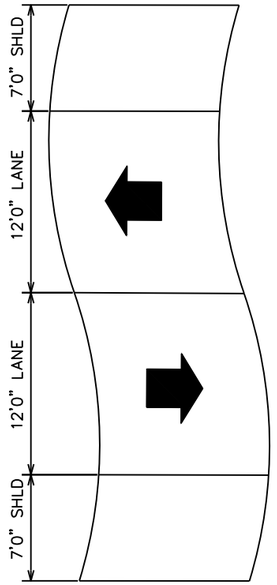


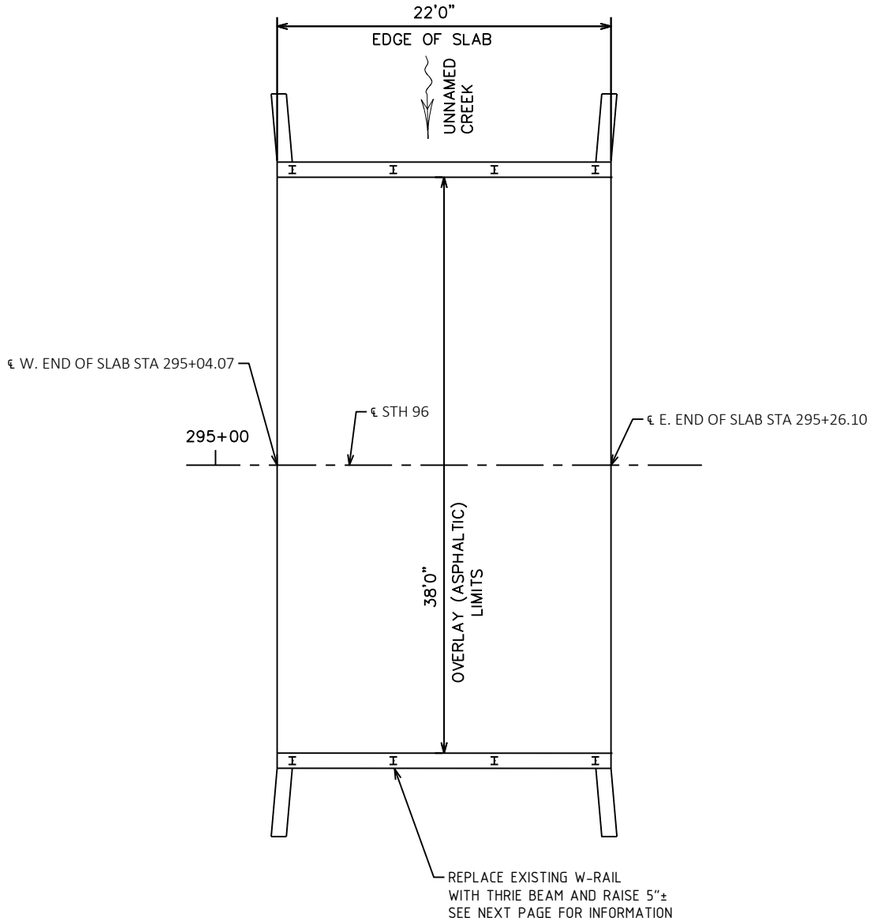




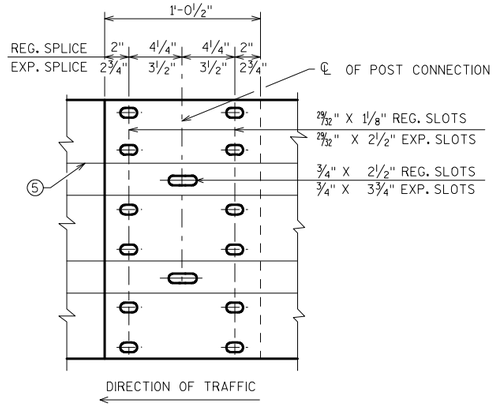
RIP RAP AND GEOTEXTILE

2



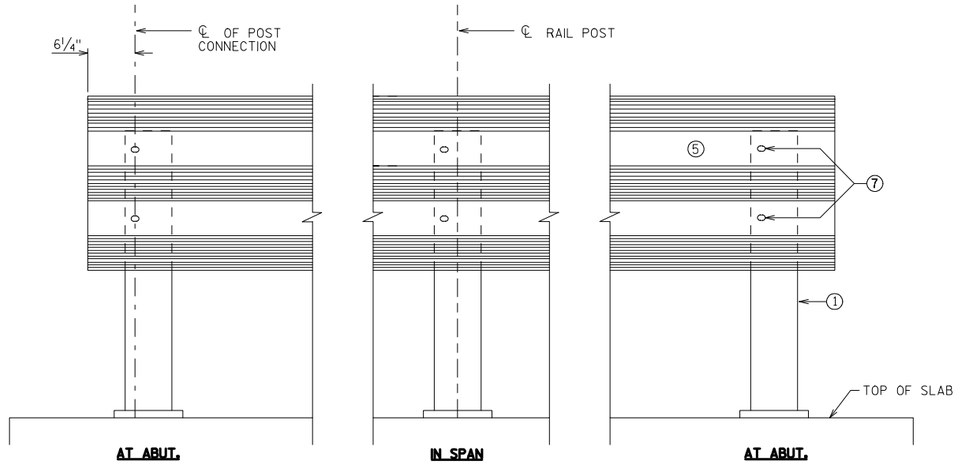


RAILING STEEL TYPE W MODIFIED, B-05-0274
STA 295+04 TO 295+26



RAIL MEMBER SPLICE

5/8" DIA. BUTTON HEAD OVAL SHOULDER BOLTS WITH HEX NUTS AT ALL SLOTS.



ELEVATION

LEGEND

1. EXISTING W6 X 25. DRILL (2) 3/4" DIA. HOLES FOR BOLT NO. 7
2. EXISTING C8 X 11.5 WITH 13/16" DIA HOLES, ATTACH TO NO. 4 WITH BOLTS NO. 8
3. EXISTING PLATE 1/2" X 5 3/4" X 6" WITH 1 1/4" DIA HOLES FOR BOLTS NO. 8
4. STRUCTURAL TUBE 6" X 4" X 3/8" WITH 13/16" DIA HOLES 6" LONG, ATTACH TO NO. 3 WITH BOLTS NO. 8
5. NEW THRIE BEAM. ATTACH TO NO. 1 WITH BOLTS NO. 7
6. 1 3/4" X3" MOUNTING BOLT WASHER, EIGHT GAGE GALVANIZED.
7. 5/8" DIA. BUTTON HEAD RAIL MOUNTING BOLT WITH ROUND WASHER AND NUT, 2 PER POST.
8. EXISTING PLATE 1/2" X 5 3/4" X 11 1/2" WITH 1 1/4" DIA. HOLES FOR BOLTS NO. 8.

NOTES:

BID ITEM SHALL BE "RAILING STEEL TYPE "W" MODIFIED, B-05-0274" WHICH SHALL INCLUDE ALL MATERIALS AND LABOR NECESSARY TO RAISE ITEMS NO. 2 AND NO. 5 BETWEEN THE LONGITUDAL LIMITS OF THE RAILING AS SHOWN IN THE ELEVATION.

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

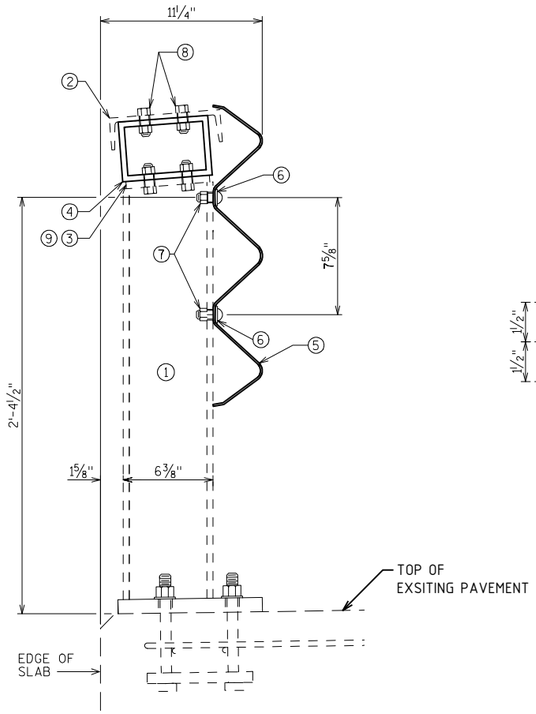
SHIM PLATES 6' X 1/16' MAY BE USED BETWEEN TOP OF POST AND CHANNEL MEMBER TO ACHIEVE VERTICAL ALIGNMENT.

ALL MATERIAL SHALL BE GALVANIZED AFTER FABRICATION

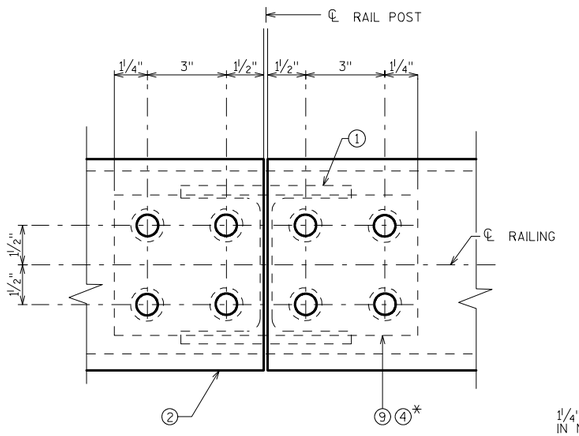
PRIOR TO GALVANIZING, ALL STEEL STRUCTURAL TUBE SHALL BE GIVEN A NO.6 BLAST CLEANING BY S.S.P.C. SPECIFICATIONS.

RAIL MEMBERS SHALL BE LAPPED IN THE DIRECTION OF TRAFFIC AND THE UPPER RAIL SHALL LAP THE LOWER RAIL.

NEW BOLTS AND REFLECTORS SHALL BE FURNISHED AND USED TO RESET THE STRUCTURAL TUBES AND W-RAIL.

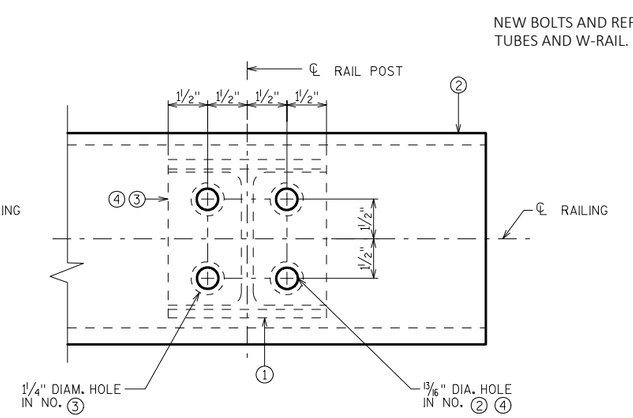


SECTION THRU RAILING



TYPICAL SPLICE

* INSTALL (2) NO.4 STRUCTURAL TUBES OR (1) MODIFIED NO.4, 11 1/2" LONG.



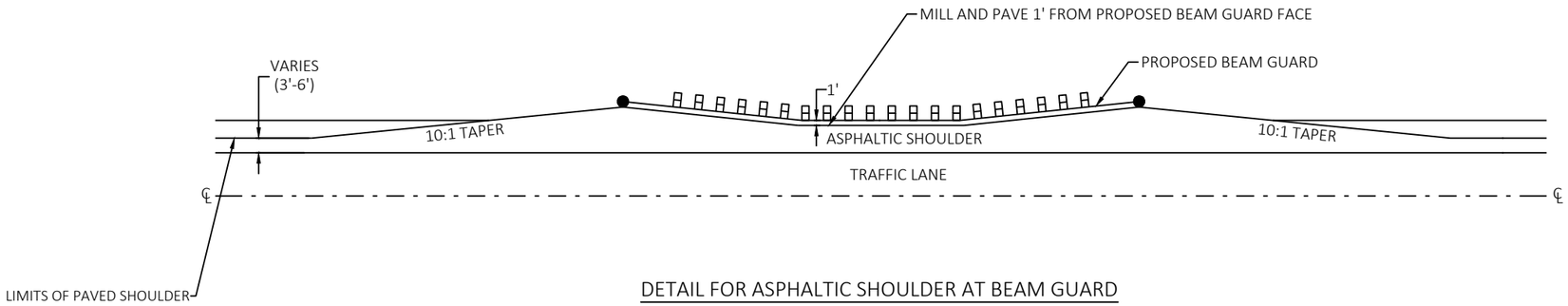
AT POST CONNECTION

CHANNEL MEMBER DETAILS

RAILING STEEL TYPE W MODIFIED, B-05-0274
STA 295+04 TO 295+26

DETAIL DEVELOPED BY BOS

2



DETAIL FOR ASPHALTIC SHOULDER AT BEAM GUARD

SCALE: NONE

PROJECT NO: 4075-39-71	HWY: STH 96	COUNTY: BROWN	CONSTRUCTION DETAILS	SHEET 21	E

NOTE: PRIVATE STORM SEWER LATERAL LOCATIONS ARE APPROXIMATE.

WISCONSIN PUBLIC SERVICE CORP. (GAS)
CENTURYLINK (FIBER OPTIC)
EXISTING 15" RCP STORM SEWER PIPE TO REMAIN
APPROX. STA. 582+30
EXISTING 4" PRIVATE STORM SEWER
LATERAL TO REMAIN (TAP-IN)
EXISTING R/W
EXISTING 15" RCP STORM SEWER PIPE TO REMAIN
EX.1 STA. 582+34.29, 17.63' LT.
EXISTING INLET TO REMAIN
582+00
583+00
STH 96
EXISTING R/W
WISCONSIN PUBLIC SERVICE CORP. (GAS)
STA. 583+39
STA. 583+47
STA. 583+55
STA. 583+63
WISCONSIN PUBLIC SERVICE CORP. (GAS)
CAUTION
1 EA - CONCRETE COLLARS FOR PIPE
8 L.F. - RELAID STORM SEWER 15-INCH
8 L.F. - REMOVING STORM SEWER 15-INCH
8 L.F. - STORM SEWER PIPE REINFORCED CONCRETE CLASS III 15-INCH
8 L.F. - RELAID STORM SEWER 15-INCH
1 EA - CONCRETE COLLARS FOR PIPE
EXISTING 15" RCP STORM SEWER PIPE TO REMAIN
EX.2 STA. 583+86.76, 17.21' LT.
EXISTING INLET TO REMAIN
584+00
APPROX. STA. 583+65
EXISTING 4" PRIVATE STORM SEWER
LATERAL TO REMAIN (TAP-IN)
WISCONSIN PUBLIC SERVICE CORP. (OVERHEAD)
WISCONSIN PUBLIC SERVICE CORP. (GAS)
EXISTING 15" RCP STORM SEWER PIPE TO REMAIN
APPROX. STA. 585+06
EXISTING 4" PRIVATE STORM SEWER
LATERAL TO REMAIN (TAP-IN)
STA. 585+77.84, 18.04' LT.
EXISTING INLET TO REMAIN
EX.3
585+00
TAP INTO EXISTING INLET
STRUCTURE (INCIDENTAL)
EXISTING R/W
TAP INTO EXISTING INLET
STRUCTURE (INCIDENTAL)
82 L.F. - REMOVING STORM SEWER 15-INCH
82 L.F. - STORM SEWER PIPE
REINFORCED CONCRETE CLASS IV 15-INCH
WISCONSIN PUBLIC SERVICE CORP. (GAS)
CENTURYLINK (FIBER OPTIC)
STORM SEWER PLUG
EXISTING R/W
EXISTING R/W
STA. 586+60.19, 17.81' LT.
EXISTING INLET TO REMAIN
EX.4
586+00
EXISTING 12" RCP STORM
SEWER PIPE TO REMAIN
1 EA - CONCRETE COLLARS FOR PIPE
8 L.F. - RELAID STORM SEWER 12-INCH
7 L.F. - REMOVING STORM SEWER 12-INCH
7 L.F. - STORM SEWER PIPE REINFORCED CONCRETE CLASS III 12-INCH
TAP INTO EXISTING INLET
STRUCTURE (INCIDENTAL)
588+00
STH 96
EXISTING R/W
EXISTING R/W
CAUTION
CAUTION
118 L.F. - STORM SEWER PIPE
REINFORCED CONCRETE
CLASS IV 12-INCH
EXISTING R/W
EX.5 STA. 586+67.96, 17.72' RT.
EXISTING INLET TO REMAIN
587+00
STA. 587+41.13, 57.30' RT.
INLETS 2x3-H
1.1
LARK ROAD
CENTURYLINK
(TELEPHONE)
EXISTING R/W
CTH G
EXISTING R/W
EXISTING R/W
N

TAP INTO EXISTING INLET
STRUCTURE (INCIDENTAL)
7 L.F. - REMOVING STORM SEWER 12-INCH
7 L.F. - STORM SEWER PIPE REINFORCED CONCRETE CLASS III 12-INCH
@ APPROX. 0.30% (MATCH EXISTING PIPE SLOPE)
1 EA - CONCRETE COLLARS FOR PIPE

925 930 920 925 915

EX.4
RIM = 923.19
EX.5
RIM = 923.30
I.E. (W) = 921.04
I.E. (SE) = 921.04
I.E. (NW) = 921.15
EXISTING 12" RCP STORM
SEWER PIPE TO REMAIN
8 L.F. - RELAID STORM SEWER 12-INCH

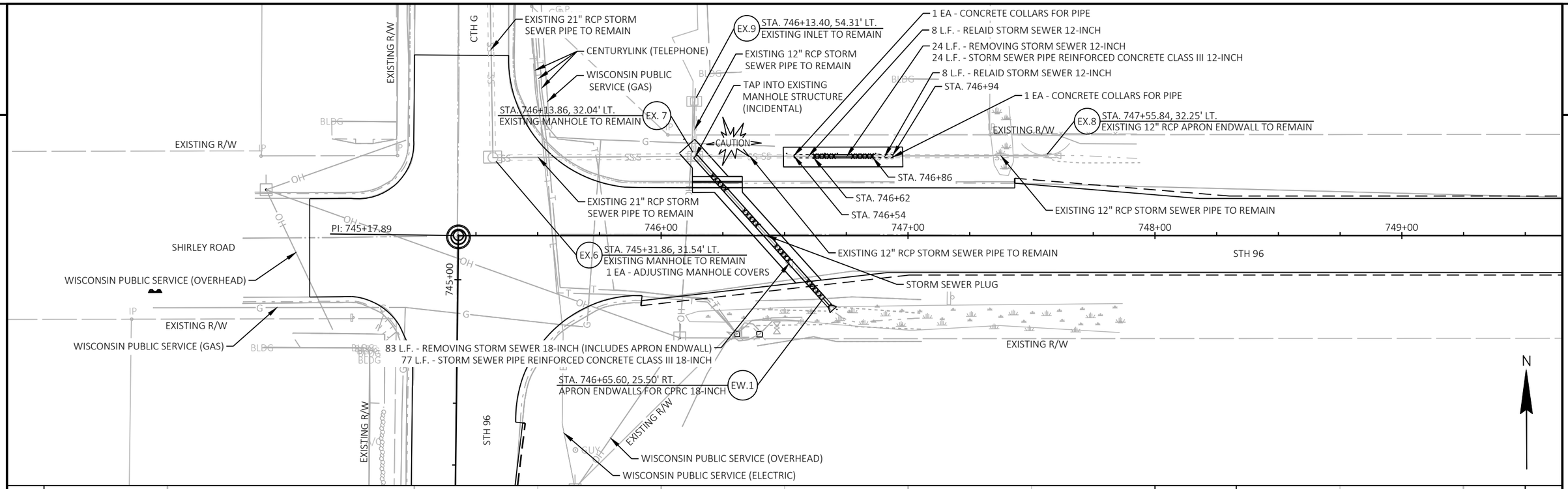
EXISTING 15" RCP STORM SEWER PIPE TO REMAIN
EX.1
RIM = 923.15
1 EA - CONCRETE COLLARS FOR PIPE
1 EA - CONCRETE COLLARS FOR PIPE
EXISTING 15" RCP STORM
SEWER PIPE TO REMAIN
I.E. (W) = 919.00
I.E. (E) = 919.12
EXISTING 15" RCP STORM SEWER PIPE TO REMAIN
EX.2
RIM = 923.38
I.E. (W) = 920.33
I.E. (E) = 920.33
8 L.F. - RELAID STORM SEWER 15-INCH
8 L.F. - REMOVING STORM SEWER 15-INCH
8 L.F. - STORM SEWER PIPE REINFORCED CONCRETE CLASS III 15-INCH
@ APPROX. 0.79% (MATCH EXISTING PIPE SLOPE)
8 L.F. - RELAID STORM SEWER 15-INCH
EXISTING 15" RCP STORM SEWER PIPE TO REMAIN

TAP INTO EXISTING INLET
STRUCTURE (INCIDENTAL)
EX.3
RIM = 923.47
TAP INTO EXISTING INLET
STRUCTURE (INCIDENTAL)
I.E. (W) = 920.67
I.E. (E) = 920.67
82 L.F. - REMOVING STORM SEWER 15-INCH
82 L.F. - STORM SEWER PIPE REINFORCED
CONCRETE CLASS IV 15-INCH @ APPROX. 0.45%
(MATCH EXISTING PIPE SLOPE)
EX.4
RIM = 923.19
I.E. (W) = 921.04
I.E. (SE) = 921.04
I.E. (E) = 921.04
1.1
FLAG = 923.92
(CONSIDER CAST-IN-PLACE
DUE TO STRUCTURE DEPTH)
I.E. (W) = 921.63
118 L.F. - STORM SEWER PIPE REINFORCED
CONCRETE CLASS IV 12-INCH @ 0.50%

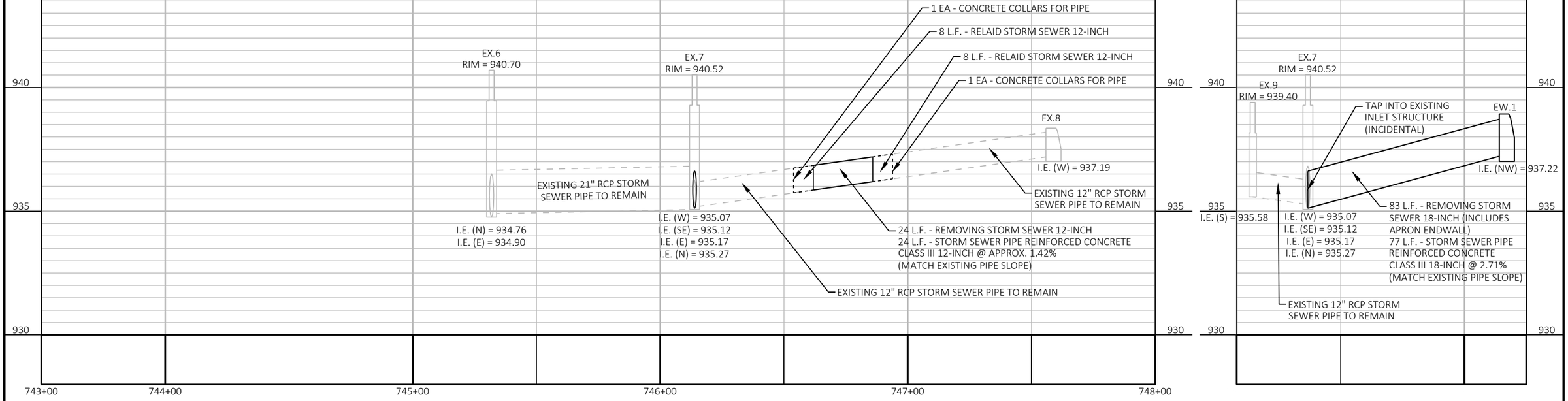
NOTE: ALL EXISTING STORM SEWER INFORMATION IS APPROXIMATE.
FIELD VERIFY ELEVATIONS PRIOR TO CONSTRUCTION.

582+00 583+00 584+00 585+00 586+00 587+00

PROJECT NO: 4075-39-71	HWY: STH 96	COUNTY: BROWN	STORM SEWER	SHEET 22	E



NOTE: ALL EXISTING STORM SEWER INFORMATION IS APPROXIMATE.
FIELD VERIFY ELEVATIONS PRIOR TO CONSTRUCTION.



PROJECT NO: 4075-39-71	HWY: STH 96	COUNTY: BROWN	STORM SEWER	SHEET 23	E

2

2

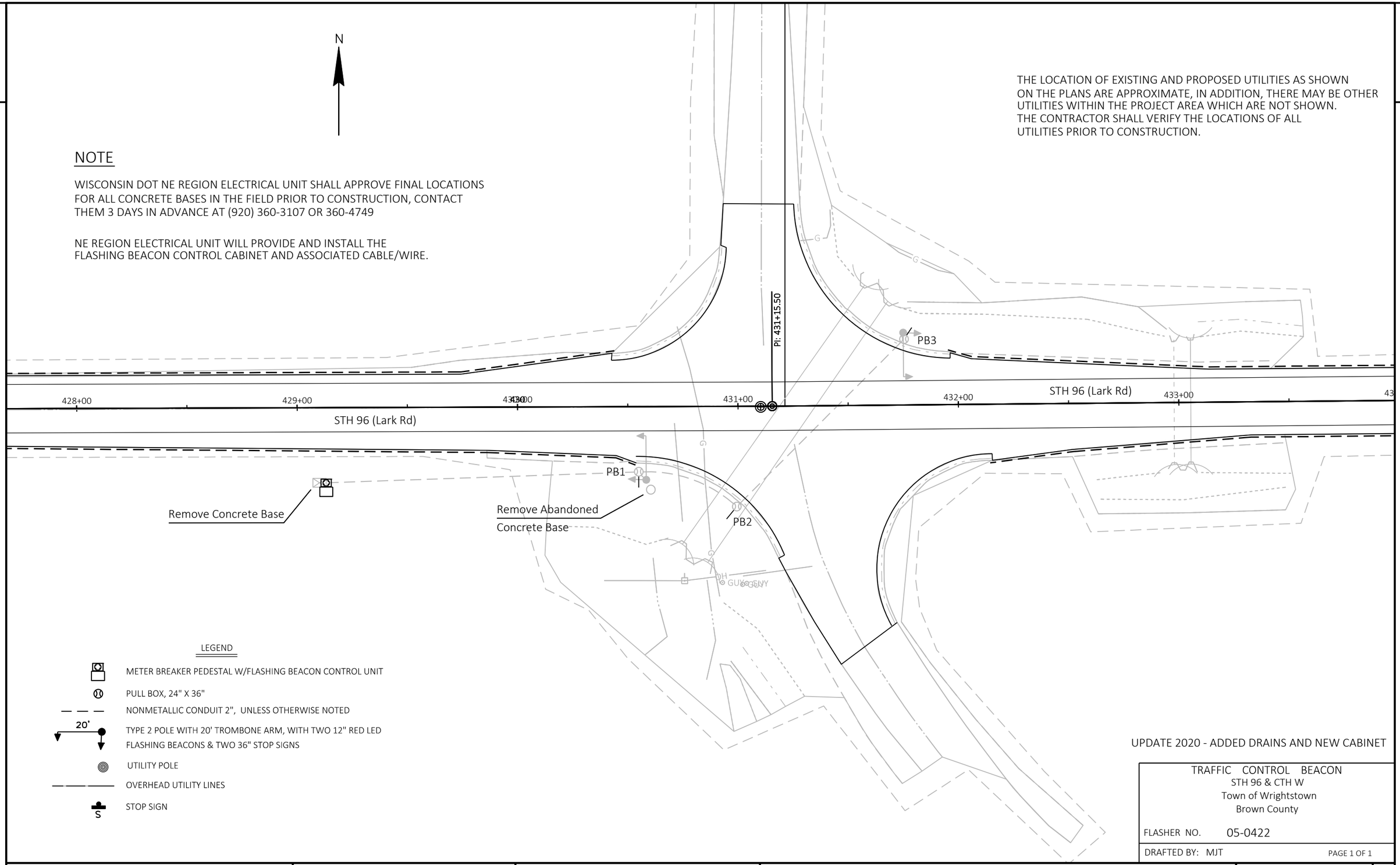
N

NOTE

WISCONSIN DOT NE REGION ELECTRICAL UNIT SHALL APPROVE FINAL LOCATIONS FOR ALL CONCRETE BASES IN THE FIELD PRIOR TO CONSTRUCTION, CONTACT THEM 3 DAYS IN ADVANCE AT (920) 360-3107 OR 360-4749

NE REGION ELECTRICAL UNIT WILL PROVIDE AND INSTALL THE FLASHING BEACON CONTROL CABINET AND ASSOCIATED CABLE/WIRE.

THE LOCATION OF EXISTING AND PROPOSED UTILITIES AS SHOWN ON THE PLANS ARE APPROXIMATE, IN ADDITION, THERE MAY BE OTHER UTILITIES WITHIN THE PROJECT AREA WHICH ARE NOT SHOWN. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL UTILITIES PRIOR TO CONSTRUCTION.



LEGEND

- METER BREAKER PEDESTAL W/FLASHING BEACON CONTROL UNIT
- PULL BOX, 24" X 36"
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- 20' TYPE 2 POLE WITH 20' TROMBONE ARM, WITH TWO 12" RED LED FLASHING BEACONS & TWO 36" STOP SIGNS
- UTILITY POLE
- OVERHEAD UTILITY LINES
- S STOP SIGN

UPDATE 2020 - ADDED DRAINS AND NEW CABINET

TRAFFIC CONTROL BEACON
STH 96 & CTH W
Town of Wrightstown
Brown County

FLASHER NO. 05-0422

DRAFTED BY: MJT

PAGE 1 OF 1

PROJECT NO: 4075-39-00	HWY: STH 96	COUNTY: Brown	RED FLASHING BEACON, STH 96 & CTH W	SHEET 24	E

FILE NAME : F:\D3_TRAFFI\F05-0422 (96 & W)\F05-0422 (96 & W) REV1.DWG
LAYOUT NAME - Plan 1 IN 40 FT

PLOT DATE : 6/15/2020 8:45 AM PLOT BY : TALCOTT, MATTHEW J PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

N

CTH W

DY4

W4

60' LT.

+10.77

W18

PI: 431+15.50

500' MIN.

W4

DY4

+71.09

430

+61.88

W18

STH 96

+86.11

500' MIN.

W18

+92.78

432

DY4

+13.52

STH 96

W4

434

+32.48

+51.19

W18

+35.77

64' RT.

DY4

W4

CTH W

LEGEND

PAVEMENT MARKING

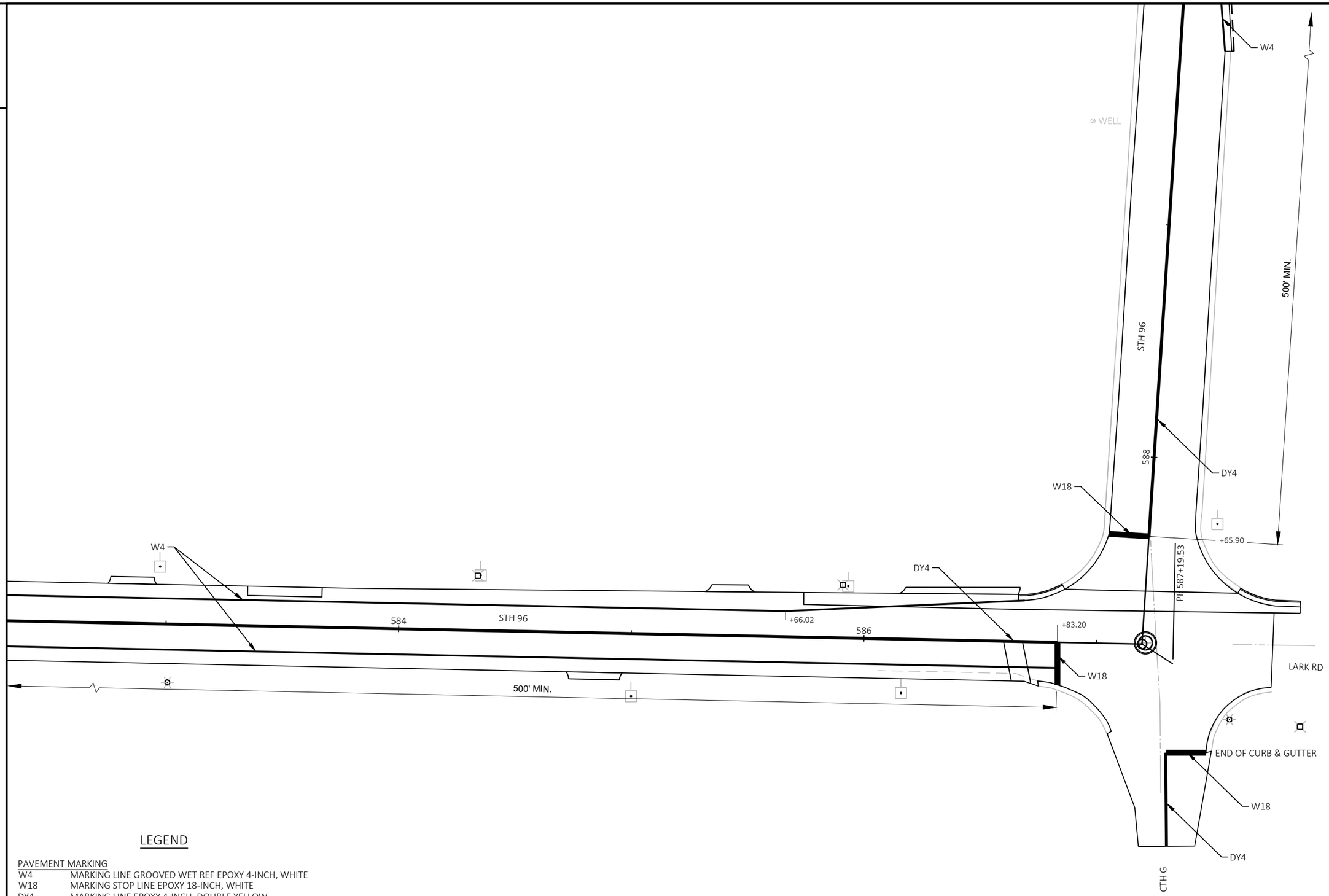
W4	MARKING LINE GROOVED WET REF EPOXY 4-INCH, WHITE
W18	MARKING STOP LINE EPOXY 18-INCH, WHITE
DY4	MARKING LINE EPOXY 4-INCH, DOUBLE YELLOW

PROJECT NO: 4075-39-71	HWY: STH 96	COUNTY: BROWN	PAVEMENT MARKING - CTH W INTERSECTION DETAIL	SHEET 25 E

FILE NAME : P:\90S\93\00093473\CADD\SHEETSPLAN\024501-PM_71.DWG
LAYOUT NAME - 024501-pm

PLOT DATE : 6/30/2021 7:41 AM PLOT BY : JASON DOLENS PLOT NAME : PLOT SCALE : 1 IN:40 FT

2



LEGEND

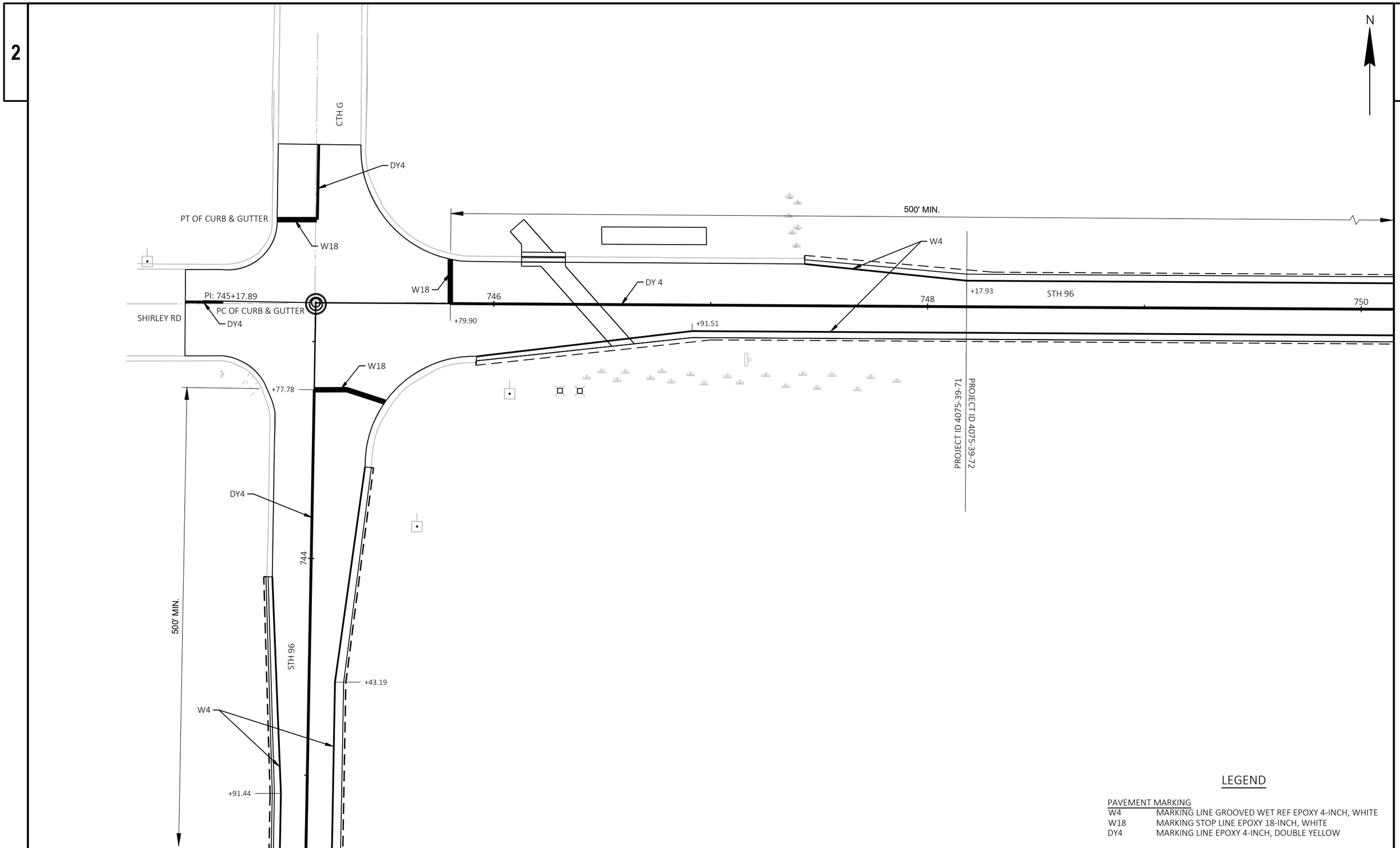
PAVEMENT MARKING

W4	MARKING LINE GROOVED WET REF EPOXY 4-INCH, WHITE
W18	MARKING STOP LINE EPOXY 18-INCH, WHITE
DY4	MARKING LINE EPOXY 4-INCH, DOUBLE YELLOW

PROJECT NO: 4075-39-71	HWY: STH 96	COUNTY: BROWN	PAVEMENT MARKING - CTH G/LARK RD INTERSECTION DETAIL	SHEET 26 E

FILE NAME : P:\90S\93\00093473\CADD\SHEETSPLAN\024501-PM_71.DWG
LAYOUT NAME - 024502-pm
PLOT DATE : 6/30/2021 7:41 AM
PLOT BY : JASON DOLENS
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2



LEGEND

PAVEMENT MARKING

W4	MARKING LINE GROOVED WET REF EPOXY 4-INCH, WHITE
W18	MARKING STOP LINE EPOXY 18-INCH, WHITE
DY4	MARKING LINE EPOXY 4-INCH, DOUBLE YELLOW

PROJECT NO: 4075-39-71	HWY: STH 96	COUNTY: BROWN	PAVEMENT MARKING - CTH G/SHIRLEY RD DETAIL	SHEET 27	E

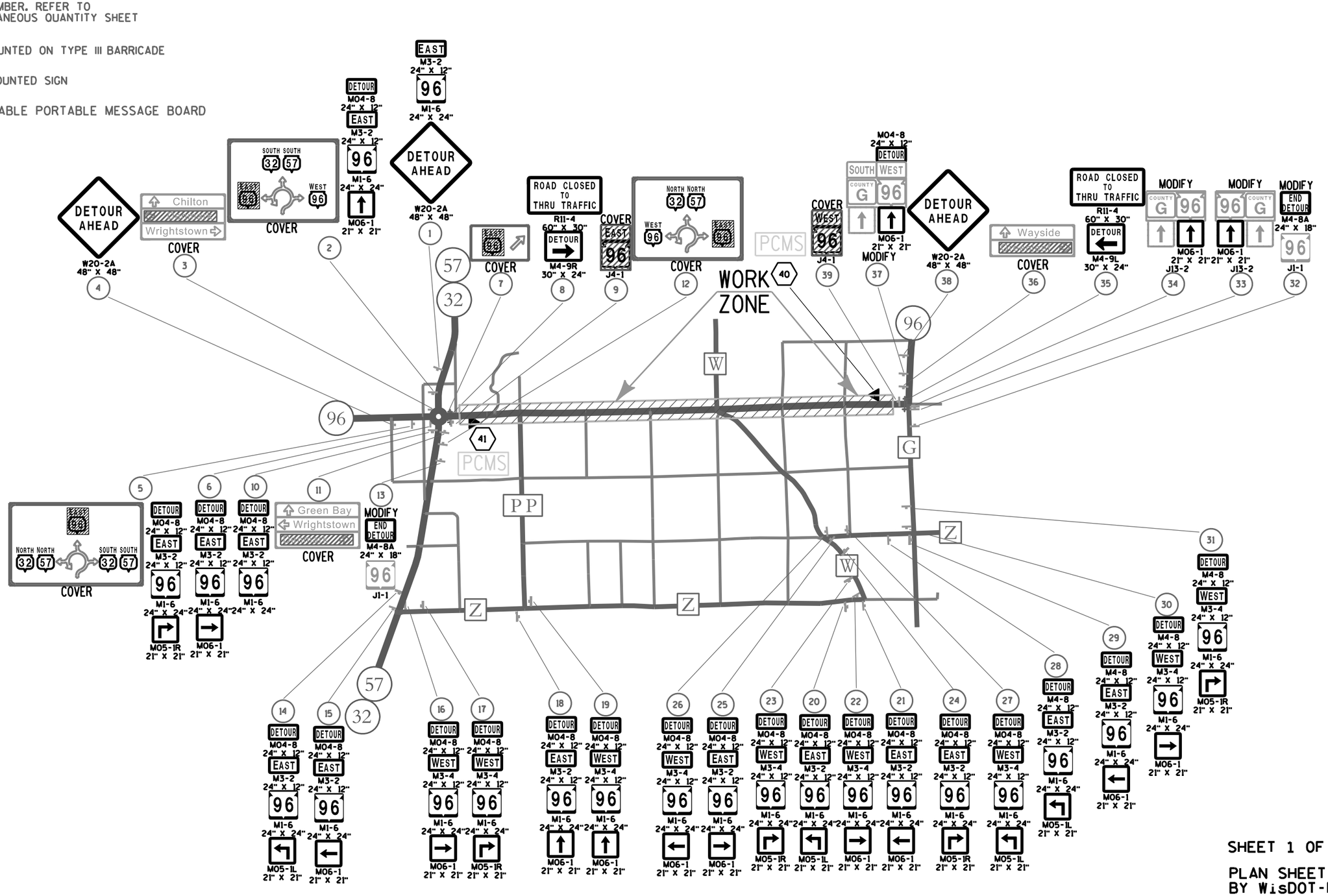
LEGEND

(X) SIGN NUMBER. REFER TO MISCELLANEOUS QUANTITY SHEET

SIGN MOUNTED ON TYPE III BARRICADE

POST MOUNTED SIGN

(X) CHANGEABLE PORTABLE MESSAGE BOARD



SHEET 1 OF 1

PLAN SHEET PRODUCED BY WisDOT-NE REGION

PROJECT NO: 4075-39-71	HWY: STH 96	COUNTY: BROWN	DETOUR SIGNING DETAIL - STAGE 1	SHEET	E

FILE NAME : $$....designfile....$$ PLOT DATE : $$...plottingdate...$$ PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

4075-39-71

Line	Item	Item Description	Unit	Total	Qty
0004	201.0120	Clearing	ID	60.000	60.000
0008	201.0220	Grubbing	ID	60.000	60.000
0010	203.0100	Removing Small Pipe Culverts	EACH	33.000	33.000
0012	203.0220	Removing Structure (structure) 01. 60" CACP, 661+93	EACH	1.000	1.000
0014	203.0220	Removing Structure (structure) 02. 60" CACP, 662+00	EACH	1.000	1.000
0016	203.0220	Removing Structure (structure) 03. 60" CACP, 662+08	EACH	1.000	1.000
0020	204.0100	Removing Concrete Pavement	SY	1,256.000	1,256.000
0022	204.0115	Removing Asphaltic Surface Butt Joints	SY	365.000	365.000
0024	204.0120	Removing Asphaltic Surface Milling	SY	188,130.000	188,130.000
0026	204.0150	Removing Curb & Gutter	LF	619.000	619.000
0028	204.0165	Removing Guardrail	LF	3,461.000	3,461.000
0030	204.0190	Removing Surface Drains	EACH	2.000	2.000
0032	204.0195	Removing Concrete Bases	EACH	2.000	2.000
0034	204.0245	Removing Storm Sewer (size) 01. 12-Inch	LF	31.000	31.000
0036	204.0245	Removing Storm Sewer (size) 02. 15-Inch	LF	90.000	90.000
0038	204.0245	Removing Storm Sewer (size) 03. 18-Inch	LF	83.000	83.000
0040	205.0100	Excavation Common	CY	3,880.000	3,880.000
0044	206.2000	Excavation for Structures Culverts (structure) 01. B-5-265	LS	1.000	1.000
0046	208.0100	Borrow	CY	765.000	765.000
0048	208.1500.S	Temporary Lane Shift During Culvert Work	EACH	12.000	12.000
0052	210.2500	Backfill Structure Type B	TON	25.000	25.000
0054	211.0100	Prepare Foundation for Asphaltic Paving (project) 01. 4075-39-71	LS	1.000	1.000
0058	211.0400	Prepare Foundation for Asphaltic Shoulders	STA	324.000	324.000
0060	211.0700.S	Prepare Foundation for CIR Base Layer (project) 01. 4075-39-71	EACH	1.000	1.000
0064	211.0800.S	Base Repair for CIR Layer	CY	700.000	700.000
0066	213.0100	Finishing Roadway (project) 01. 4075-39-71	EACH	1.000	1.000
0070	305.0110	Base Aggregate Dense 3/4-Inch	TON	4,392.000	4,392.000
0072	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	6,610.000	6,610.000
0074	305.0504.S	Hauling Excess Shoulder Material	CY	150.000	150.000
0078	327.1000.S	CIR Asphaltic Base Layer	SY	180,165.000	180,165.000
0084	416.0160	Concrete Driveway 6-Inch	SY	32.000	32.000
0090	455.0605	Tack Coat	GAL	23,502.000	23,502.000
0092	455.0770.S	Asphalt Stabilizing Agent	TON	1,351.000	1,351.000
0094	460.0105.S	HMA Percent Within Limits (PWL) Test Strip Volumetrics	EACH	1.000	1.000
0096	460.0110.S	HMA Percent Within Limits (PWL) Test Strip Density	EACH	2.000	2.000
0098	460.2005	Incentive Density PWL HMA Pavement	DOL	21,655.000	21,655.000
0100	460.2007	Incentive Density HMA Pavement Longitudinal Joints	DOL	87,240.000	87,240.000
0102	460.2010	Incentive Air Voids HMA Pavement	DOL	31,432.000	31,432.000
0104	460.5224	HMA Pavement 4 LT 58-28 S	TON	33,980.000	33,980.000
0106	465.0105	Asphaltic Surface	TON	2,027.000	2,027.000
0108	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	58.000	58.000
0110	465.0315	Asphaltic Flumes	SY	30.000	30.000
0112	465.0425	Asphaltic Shoulder Rumble Strips 2-Lane Rural	LF	80,903.000	80,903.000
0114	465.0475	Asphalt Centerline Rumble Strips 2-Lane Rural	LF	42,967.000	42,967.000
0122	504.0900	Concrete Masonry Endwalls	CY	30.000	30.000
0128	509.1500	Concrete Surface Repair	SF	40.000	40.000
0136	520.1030	Apron Endwalls for Culvert Pipe 30-Inch	EACH	6.000	6.000
0138	520.1036	Apron Endwalls for Culvert Pipe 36-Inch	EACH	16.000	16.000
0144	520.3430	Culvert Pipe Class III-A Non-metal 30-Inch	LF	249.000	249.000

4075-39-71

Line	Item	Item Description	Unit	Total	Qty
0146	520.3436	Culvert Pipe Class III-A Non-metal 36-Inch	LF	475.000	475.000
0148	520.3636	Culvert Pipe Class III-B Non-metal 36-Inch	LF	214.000	214.000
0150	520.8000	Concrete Collars for Pipe	EACH	5.000	5.000
0152	522.0154	Culvert Pipe Reinforced Concrete Class III 54-Inch	LF	79.000	79.000
0154	522.0160	Culvert Pipe Reinforced Concrete Class III 60-Inch	LF	312.000	312.000
0156	522.0424	Culvert Pipe Reinforced Concrete Class IV 24-Inch	LF	844.000	844.000
0158	522.0430	Culvert Pipe Reinforced Concrete Class IV 30-Inch	LF	218.000	218.000
0162	522.1018	Apron Endwalls for Culvert Pipe Reinforced Concrete 18-Inch	EACH	1.000	1.000
0164	522.1024	Apron Endwalls for Culvert Pipe Reinforced Concrete 24-Inch	EACH	30.000	30.000
0166	522.1030	Apron Endwalls for Culvert Pipe Reinforced Concrete 30-Inch	EACH	8.000	8.000
0170	522.1054	Apron Endwalls for Culvert Pipe Reinforced Concrete 54-Inch	EACH	2.000	2.000
0172	522.2324	Culvert Pipe Reinforced Concrete Horizontal Elliptical Class HE-III 24x38-Inch	LF	228.000	228.000
0174	522.2624	Apron Endwalls for Culvert Pipe Reinforced Concrete Horizontal Elliptical 24x38-Inch	EACH	8.000	8.000
0178	601.0411	Concrete Curb & Gutter 30-Inch Type D	LF	337.000	337.000
0180	601.0557	Concrete Curb & Gutter 6-Inch Sloped 36-Inch Type D	LF	225.000	225.000
0186	606.0100	Riprap Light	CY	14.000	14.000
0188	606.0200	Riprap Medium	CY	11.000	11.000
0192	608.0112	Relaid Storm Sewer 12-Inch	LF	24.000	24.000
0194	608.0115	Relaid Storm Sewer 15-Inch	LF	16.000	16.000
0196	608.0312	Storm Sewer Pipe Reinforced Concrete Class III 12-Inch	LF	31.000	31.000
0198	608.0315	Storm Sewer Pipe Reinforced Concrete Class III 15-Inch	LF	8.000	8.000
0200	608.0318	Storm Sewer Pipe Reinforced Concrete Class III 18-Inch	LF	77.000	77.000
0202	608.0412	Storm Sewer Pipe Reinforced Concrete Class IV 12-Inch	LF	118.000	118.000
0204	608.0415	Storm Sewer Pipe Reinforced Concrete Class IV 15-Inch	LF	82.000	82.000
0206	611.0624	Inlet Covers Type H	EACH	1.000	1.000
0208	611.3230	Inlets 2x3-FT	EACH	1.000	1.000
0210	611.8110	Adjusting Manhole Covers	EACH	1.000	1.000
0216	614.2300	MGS Guardrail 3	LF	1,312.500	1,312.500
0218	614.2330	MGS Guardrail 3 K	LF	1,362.500	1,362.500
0220	614.2340	MGS Guardrail 3 L	LF	250.000	250.000
0222	614.2500	MGS Thrie Beam Transition	LF	150.000	150.000
0224	614.2610	MGS Guardrail Terminal EAT	EACH	12.000	12.000
0226	614.8010	Anchor Post Assembly Top Mount	EACH	24.000	24.000
0228	618.0100	Maintenance And Repair of Haul Roads (project) 01. 4075-39-71	EACH	1.000	1.000
0232	619.1000	Mobilization	EACH	0.650	0.650
0234	624.0100	Water	MGAL	155.000	155.000
0236	625.0100	Topsoil	SY	14,800.000	14,800.000
0238	628.1504	Silt Fence	LF	7,700.000	7,700.000
0240	628.1520	Silt Fence Maintenance	LF	7,700.000	7,700.000
0242	628.1905	Mobilizations Erosion Control	EACH	8.000	8.000
0244	628.1910	Mobilizations Emergency Erosion Control	EACH	4.000	4.000
0246	628.2008	Erosion Mat Urban Class I Type B	SY	14,800.000	14,800.000
0248	628.7020	Inlet Protection Type D	EACH	18.000	18.000
0252	628.7555	Culvert Pipe Checks	EACH	442.000	442.000
0254	629.0210	Fertilizer Type B	CWT	9.300	9.300
0256	630.0140	Seeding Mixture No. 40	LB	265.000	265.000
0258	630.0500	Seed Water	MGAL	835.000	835.000
0260	633.5200	Markers Culvert End	EACH	79.000	79.000
0266	638.2102	Moving Signs Type II	EACH	8.000	8.000

4075-39-71

Line	Item	Item Description	Unit	Total	Qty
0272	638.4000	Moving Small Sign Supports	EACH	8.000	8.000
0274	642.5401	Field Office Type D	EACH	0.650	0.650
0276	643.0300	Traffic Control Drums	DAY	30,000.000	30,000.000
0278	643.0420	Traffic Control Barricades Type III	DAY	128.000	128.000
0280	643.0705	Traffic Control Warning Lights Type A	DAY	256.000	256.000
0282	643.0900	Traffic Control Signs	DAY	14,928.000	14,928.000
0286	643.0920	Traffic Control Covering Signs Type II	EACH	8.000	8.000
0290	643.1050	Traffic Control Signs PCMS	DAY	42.000	42.000
0292	643.5000	Traffic Control	EACH	0.500	0.500
0296	645.0120	Geotextile Type HR	SY	79.000	79.000
0298	646.1020	Marking Line Epoxy 4-Inch	LF	43,510.000	43,510.000
0300	646.1040	Marking Line Grooved Wet Ref Epoxy 4-Inch	LF	99,340.000	99,340.000
0302	646.6120	Marking Stop Line Epoxy 18-Inch	LF	275.000	275.000
0304	648.0100	Locating No-Passing Zones	MI	9.780	9.780
0306	649.0105	Temporary Marking Line Paint 4-Inch	LF	113,750.000	113,750.000
0308	649.0120	Temporary Marking Line Epoxy 4-Inch	LF	142,850.000	142,850.000
0310	650.4000	Construction Staking Storm Sewer	EACH	2.000	2.000
0312	650.4500	Construction Staking Subgrade	LF	1,888.000	1,888.000
0314	650.5000	Construction Staking Base	LF	1,888.000	1,888.000
0316	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	562.000	562.000
0318	650.6000	Construction Staking Pipe Culverts	EACH	40.000	40.000
0324	650.8000	Construction Staking Resurfacing Reference	LF	51,646.000	51,646.000
0326	650.9910	Construction Staking Supplemental Control (project) 01. 4075-39-71	LS	1.000	1.000
0330	650.9920	Construction Staking Slope Stakes	LF	4,716.000	4,716.000
0332	652.0225	Conduit Rigid Nonmetallic Schedule 40 2-Inch	LF	60.000	60.000
0334	654.0220	Concrete Control Cabinet Bases Type 10	EACH	1.000	1.000
0336	656.0200	Electrical Service Meter Breaker Pedestal (location) 01. STH 96/CTH W Intersection (F05-0422)	LS	1.000	1.000
0338	690.0150	Sawing Asphalt	LF	3,024.000	3,024.000
0340	690.0250	Sawing Concrete	LF	432.000	432.000
0346	740.0440	Incentive IRI Ride	DOL	78,240.000	78,240.000
0350	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	2,500.000	2,500.000
0352	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	3,280.000	3,280.000
0354	SPV.0035	Special 01. Foundation Backfill	CY	1,894.000	1,894.000
0356	SPV.0060	Special 01. Storm Sewer Plug	EACH	2.000	2.000
0358	SPV.0060	Special 02. Cleaning Ditch	EACH	6.000	6.000
0360	SPV.0070	Special 01. Sprayed Asphaltic Surface Treatment	GAL	17.000	17.000
0362	SPV.0090	Special 01. Cutting Curb Head	LF	84.000	84.000
0364	SPV.0090	Special 02. Railing Steel, Type W Modified, B-05-0274	LF	44.000	44.000

3

CLEARING AND GRUBBING

CATEGORY	STATION	LOCATION	(201.0120) CLEARING ID	(201.0220) GRUBBING ID
0010	598+10	RT	24	24
	598+32	RT	36	36
	PROJECT 4075-39-71 TOTALS		**60**	**60**

REMOVING SMALL PIPE CULVERTS

CATEGORY	STATION	LOCATION	(203.0100) REMOVING SMALL PIPE CULVERTS EACH	PIPE LENGTH	PIPE DIAMETER	PIPE MATERIAL
0010	267+38	LT & RT	1	89'	30"	CMCP
	285+21	LT & RT	1	58'	24"	CMCP
	285+28	LT & RT	1	58'	24"	CMCP
	302+25	LT & RT	1	57'	24"	CMCP
	302+32	LT & RT	1	57'	24"	CMCP
	322+33	LT & RT	1	59'	30"	CMCP
	322+41	LT & RT	1	59'	30"	CMCP
	326+03	LT & RT	1	67'	24"	CMCP
	342+40	LT & RT	1	119'	36"	CMCP
	360+94	LT & RT	1	67'	36"	CMCP
	372+19	LT & RT	1	50'	24"	CMCP
	372+25	LT & RT	1	50'	24"	CMCP
	380+20	LT & RT	1	52'	24"	CMCP
	432+98	LT & RT	1	57'	30"	CMCP
	433+05	LT & RT	1	57'	30"	CMCP
	454+69	LT & RT	1	50'	24"	CMCP
	467+99	LT & RT	1	51'	24"	CMCP
	468+06	LT & RT	1	48'	24"	CMCP
	483+89	LT & RT	1	99'	36"	CMCP
	496+00	LT & RT	1	45'	29" X 41"	CMCP
	496+09	LT & RT	1	45'	29" X 41"	CMCP
	505+41	LT & RT	1	50'	24"	CMCP
	525+76	LT & RT	1	59'	24"	CMCP
	525+83	LT & RT	1	59'	24"	CMCP
	603+71	LT & RT	1	71'	36"	CMCP
	643+68	LT & RT	1	91'	54"	CACP
	680+30	LT & RT	1	95'	36"	CACP
	700+98	LT & RT	1	87'	36"	CMCP
	705+10	LT & RT	1	109'	36"	CMCP
	708+75	LT & RT	1	101'	30"	CMCP
	719+26	LT & RT	1	61'	30"	CMCP
	728+11	LT & RT	1	78'	24"	CMCP
	742+19	LT & RT	1	65'	24"	CMCP
	PROJECT 4075-39-71 TOTAL		**33**			

NOTE: INCLUDES REMOVING APRON ENDWALLS CONNECTED TO CULVERT PIPE

REMOVING STRUCTURE

CATEGORY	STATION	LOCATION	(203.0220.01) REMOVING STRUCTURE (60" CACP) EACH	(203.0220.02) REMOVING STRUCTURE (60" CACP) EACH	(203.0220.03) REMOVING STRUCTURE (60" CACP) EACH	PIPE LENGTH	PIPE DIAMETER	PIPE MATERIAL
0010	661+93	LT & RT	1	-	-	115'	60"	CACP
	662+00	LT & RT	-	1	-	115'	60"	CACP
	662+08	LT & RT	-	-	1	115'	60"	CACP
	PROJECT 4075-39-71 TOTALS		**1**	**1**	**1**			

REMOVING ASPHALTIC SURFACE BUTT JOINTS

CATEGORY	STATION	TO STATION	LOCATION	(204.0115) REMOVING ASPHALTIC SURFACE BUTT JOINTS SY	NOTES
0010	231+48	231+50	LT & RT	7	STH 96 MAINLINE
	250+37	250+61	LT	5	RIDGE ROYALE DRIVE
	269+07	269+48	RT	9	DRIVEWAY
	270+71	271+01	RT	7	CTH PP
	270+71	270+94	LT	5	LEDGETOP DRIVE
	295+02	295+04	LT & RT	9	STRUCTURE B-05-274
	295+26	295+28	LT & RT	9	STRUCTURE B-05-274
	310+35	310+66	RT	7	DRIVEWAY
	311+86	312+30	RT	10	DRIVEWAY
	313+51	313+94	RT	9	DRIVEWAY
	324+28	324+61	LT	7	REFUGE ROAD
	324+31	324+54	RT	5	CTH PP
	330+87	331+19	LT	7	DRIVEWAY
	337+64	338+10	LT	10	DRIVEWAY
	339+70	340+28	LT	12	DRIVEWAY
	352+80	353+07	LT	6	DRIVEWAY
	353+53	353+83	LT	6	DRIVEWAY
	365+90	366+17	LT	6	DRIVEWAY
	376+75	377+00	RT	5	BLAKE ROAD
	376+77	377+00	LT	5	BLAKE ROAD
	387+96	388+25	LT	6	DRIVEWAY
	390+83	391+19	LT	8	DRIVEWAY
	430+94	431+26	LT	7	CTH W
	431+45	431+69	RT	6	CTH W
	439+87	440+28	RT	9	DRIVEWAY
	440+35	440+68	LT	7	DRIVEWAY
	444+25	444+48	RT	5	CROSS ROAD
	484+03	484+28	RT	6	MORRISON ROAD
	484+09	484+31	LT	5	MORRISON ROAD
	507+02	507+28	RT	5	DRIVEWAY
	534+92	535+19	RT	6	PLEASANT VIEW ROAD
	534+98	535+24	LT	6	PLEASANT VIEW ROAD
	567+50	567+91	RT	8	DRIVEWAY
	579+39	579+75	LT	8	DRIVEWAY
	582+75	582+95	LT	4	DRIVEWAY
	584+73	584+96	RT	5	DRIVEWAY
	585+33	585+51	LT	4	DRIVEWAY
	586+16	586+67	LT	11	DRIVEWAY
	587+20	-	RT	5	CTH G
	587+20	-	RT	7	LARK ROAD
	639+00	639+25	LT	5	COOPERSTOWN ROAD
	639+09	639+40	RT	7	COOPERSTOWN ROAD
	658+70	659+13	LT	9	DRIVEWAY
	667+33	667+74	LT	9	DRIVEWAY
	691+98	692+25	LT	6	SCHOOL ROAD
	691+99	692+29	RT	7	SCHOOL ROAD
	693+23	693+41	LT	4	DRIVEWAY
	693+95	694+26	RT	7	DRIVEWAY
	695+97	696+30	RT	7	DRIVEWAY
	697+78	698+05	LT	6	ZAIRE ROAD
	718+60	718+81	RT	5	HICKORY LANE
	745+18	-	LT	9	SHIRLEY ROAD
	745+18	-	LT	8	CTH G
	PROJECT 4075-39-71 TOTAL			**365**	

3

REMOVING CONCRETE PAVEMENT

CATEGORY	STATION	TO STATION	LOCATION	* (204.0100) REMOVING CONCRETE PAVEMENT SY	* (690.0250) SAWING CONCRETE LF	NOTES
0010	350+00	350+38	LT	13	25	DRIVEWAY
	635+13	635+57	RT	19	29	DRIVEWAY
PROJECT 4075-39-71 TOTALS				**32**	**54**	

*ADDITIONAL QUANTITIES FOUND ELSEWHERE

REMOVING ASPHALTIC SURFACE MILLING

CATEGORY	STATION	TO STATION	LOCATION	(204.0120) REMOVING ASPHALTIC SURFACE MILLING SY
0010	231+50	295+04	LT & RT	25,520
	295+26	748+18	LT & RT	162,610
PROJECT 4075-39-71 TOTAL				**188,130**

REMOVING CURB & GUTTER

CATEGORY	STATION	TO STATION	LOCATION	(204.0150) REMOVING CURB & GUTTER LF	* (690.0250) SAWING CONCRETE LF
0010	250+85	251+40	LT	56	5
	253+17	253+40	LT	24	2.5
	253+75	254+13	RT	38	2.5
	270+96	270+97	LT	97	2.5
	323+01	324+26	LT	141	-
	324+61	325+14	LT	83	-
	377+02	377+51	LT	80	2.5
	586+66	586+85	LT	20	2.5
	587+42	587+46	RT	27	2.5
	593+01	593+34	LT	33	2.5
	746+13	746+33	LT	20	5
PROJECT 4075-39-71 TOTALS				**619**	**28**

*ADDITIONAL QUANTITIES FOUND ELSEWHERE

REMOVING GUARDRAIL

CATEGORY	STATION	TO STATION	LOCATION	# (204.0165) REMOVING GUARDRAIL LF
0010	254+00	260+66	RT	666
	254+24	262+64	LT	841
	293+11	296+58	RT	348
	293+72	297+20	LT	348
	554+48	560+77	RT	629
	554+61	560+89	LT	629
PROJECT 4075-39-71 TOTAL				**3,461**

#REMOVAL OF POSTS AND DISCONNECTION FROM EXISTING STRUCTURE B-05-0265 ARE INCLUDED IN THE REMOVING GUARDRAIL BID ITEM

REMOVING SURFACE DRAINS

CATEGORY	STATION	LOCATION	(204.0190) REMOVING SURFACE DRAINS EACH
0010	253+40	LT	1
	254+13	RT	1
PROJECT 4075-39-71 TOTAL			**2**

REMOVING STORM SEWER PIPE

CATEGORY	STATION	TO STATION	LOCATION	(204.0245.01) REMOVING STORM SEWER 12-INCH LF	(204.0245.02) REMOVING STORM SEWER 15-INCH LF	(204.0245.03) REMOVING STORM SEWER 18-INCH LF
0010	583+47	583+55	LT	-	8	-
	585+78	586+60	LT	-	82	-
	586+60	586+68	LT & RT	7	-	-
	746+14	746+65	LT & RT	-	-	83
	746+62	746+86	LT	24	-	-
PROJECT 4075-39-71 TOTALS				**31**	**90**	**83**

EARTHWORK PROJECT I.D. 4075-39-71

Division	From/To Station	Location	Excavation Common (1) (item # 205.0100) Cut (2)	EBS Excavation	Salvaged/Unusable Pavement Material (4)	Available Material (5)	Unexpanded Fill	Expanded Fill (13) Factor 1.33	Mass Ordinate +/- (14)	Waste	Borrow (item #208.0100)	Comment:
1	253+00 to 264+50	STH 96 Beamguard	56	0	0	56	173	230	-174	0	174	
2	291+50 to 298+00	STH 96 Beamguard B-05-0274	39	0	0	39	202	269	-229	0	229	
3	556+00 to 562+00	STH 96 Beamguard B-05-0265 & C-05-0081	48	0	0	48	308	409	-361	0	361	
4	*Culvert Pipe Shallow Transitions		3,737	0	120	3,617	0	0	0	3,617	0	
	Undistributed (EBS)		0	0	0	0	0	0	0	0	0	
	4075-39-71 Project Totals		3,880		120	3,760	683	908	-765	3,617	765	

*SEE CONSTRUCTION DETAILS

1) Excavation Common is the sum of the Cut and EBS Excavation columns. Item number 205.0100
2) Salvaged/Unsuable Pavement Material is included in Cut.
4) Salvaged/Unsuable Pavement Material
5) Available Material = Cut - Salvaged/Unusuable Pavement Material
13) Expanded Fill. Factor = 1.25
Depending on selections: **Expanded Fill = (Unexpanded Fill - Rock* Rock Factor - Reduced Marsh - Reduced EBS) * Fill Factor**
14) 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.

PREPARE FOUNDATION FOR ASPHALTIC PAVING AND CIR

CATEGORY	DESCRIPTION	(211.0100.01) PREPARE FOUNDATION FOR ASPHALTIC PAVING LS	(211.0700.S.01) PREPARE FOUNDATION FOR CIR BASE LAYER EACH
0010	PROJECT 4075-39-71	1	1
PROJECT 4075-39-71 TOTALS		**1**	**1**

NOTE: PREPARE FOUNDATION FOR ASPHALTIC PAVING IS FOR NON-CIR AREAS

BASE REPAIR FOR CIR LAYER

CATEGORY	DESCRIPTION	(211.0800.S) BASE REPAIR FOR CIR LAYER CY
0010	UNDISTRIBUTED	700
PROJECT 4075-39-71 TOTAL		**700**

COLD-IN-PLACE RECYCLING (CIR) PAVEMENT

CATEGORY	STATION	TO STATION	(327.1000.S) CIR ASPHALTIC BASE LAYER SY	(455.0770.S) ASPHALT STABILIZING AGENT TON
0010	231+98	295+04	23,975	180
	295+26	325+00	10,575	79
	325+00	578+44	84,565	634
	578+44	587+66	3,570	27
	587+66	748+18	57,480	431
PROJECT 4075-39-71 TOTALS			**180,165**	**1,351**

BASE AGGREGATE SHOULDERS

CATEGORY	STATION	TO STATION	LOCATION	* (305.0110) BASE AGGREGATE DENSE 3/4-INCH TON	(305.0504.S) HAULING EXCESS SHOULDER MATERIAL CY
0010	231+48	249+94	LT	114	-
	231+48	249+18	RT	134	-
	253+21	270+71	LT	126	-
	253+83	270+11	RT	109	-
	271+41	295+04	RT	152	-
	273+30	295+04	LT	140	-
	295+26	323+01	LT	176	-
	295+26	324+31	RT	179	-
	324+54	376+75	RT	196	-
	325+14	376+77	LT	184	-
	377+00	430+54	RT	200	-
	379+96	430+43	LT	185	-
	431+96	484+09	LT	199	-
	432+15	444+25	RT	44	-
	444+48	484+03	RT	148	-
	484+28	534+92	RT	189	-
	484+31	534+98	LT	197	-
	535+19	578+21	RT	192	-
	535+24	578+26	LT	189	-
	589+76	596+73	RT	26	-
	593+70	638+62	LT	166	-
	599+65	616+86	RT	64	-
	639+78	668+42	RT	106	-
	621+58	638+56	RT	61	-
	640+70	670+43	LT	185	-
	670+67	691+40	RT	88	-
	692+68	718+60	RT	92	-
	692+84	696+78	LT	19	-
	697+05	743+91	LT	171	-
	718+81	744+42	RT	96	-
	745+92	748+18	RT	10	-
	747+43	748+18	LT	4	-
		UNDISTRIBUTED		-	150
PROJECT 4075-39-71 TOTALS				**4,137**	**150**

*ADDITIONAL QUANTITIES FOUND ELSEWHERE

FILE NAME : P:\905\93\00093473\CADD\SHEETSPLAN\030201-MQ BORDER.DWG
LAYOUT NAME - 030201-mq
PLOT DATE : 6/15/2021 11:44 AM PLOT BY : JASON DOLENS PLOT NAME .
WISDOT/CADDS SHEET 42

DRIVEWAYS & PARKING LOTS

CATEGORY	STATION	TO STATION	LOCATION	* (305.0110) BASE AGGREGATE DENSE 3/4-INCH TON	* (305.0120) BASE AGGREGATE DENSE 1 1/4-INCH TON	(416.0160) CONCRETE DRIVEWAY 6-INCH SY	(465.0120) ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES TON	* (690.0150) SAWING ASPHALT LF
0010	269+03	269+51	RT	-	-	-	3	-
	310+28	310+71	RT	-	-	-	3	-
	311+82	312+34	RT	-	-	-	3	-
	313+45	313+99	RT	-	-	-	3	-
	330+83	331+23	LT	-	-	-	2	-
	337+61	338+13	LT	-	-	-	2	-
	339+67	340+32	LT	-	-	-	3	-
	350+00	350+38	LT	-	1	13	-	-
	352+76	353+11	LT	-	-	-	1	-
	353+51	353+86	LT	-	-	-	1	-
	365+87	366+20	LT	-	-	-	1	-
	387+91	388+29	LT	-	-	-	1	-
	390+79	391+23	LT	-	-	-	2	-
	439+83	440+32	RT	-	-	-	2	-
	440+31	440+72	LT	-	-	-	2	-
	506+99	507+31	RT	-	-	-	1	-
	567+45	567+96	RT	-	-	-	2	-
	579+36	579+78	LT	-	-	-	1	-
	582+75	582+96	LT	-	-	-	1	-
	584+72	584+96	RT	-	-	-	1	-
	585+31	585+53	LT	-	-	-	1	-
	586+15	586+67	LT	-	-	-	2	-
	593+12	593+34	LT	-	2	-	1	20
	635+13	635+57	RT	-	2	19	-	-
	658+67	659+17	LT	-	-	-	3	-
	667+29	667+77	LT	-	-	-	3	-
	693+21	693+43	LT	-	-	-	1	-
	693+93	694+28	RT	-	-	-	2	-
	695+94	696+33	RT	-	-	-	2	-
	746+07	746+33	LT	-	7	-	2	50
	746+50	746+98	LT	-	14	-	5	113
UNDISTRIBUTED (AGG. DRIVEWAYS AND FIELD ENTRANCES)				130	-	-	-	-
PROJECT 4075-39-71 TOTALS				**130**	**26**	**32**	**58**	**183**

*ADDITIONAL QUANTITIES FOUND ELSEWHERE

ASPHALTIC FLUMES

CATEGORY	STATION	LOCATION	(465.0315) ASPHALTIC FLUMES SY
0010	253+17	LT	8
	253+75	RT	8
	270+96	LT	6
	323+00	LT	8
PROJECT 4075-39-71 TOTAL			**30**

SPRAYED ASPHALTIC SURFACE TREATMENT

CATEGORY	STATION	TO STATION	LOCATION	(SPV.0070.01) GAL
0010	555+50	556+25	LT & RT	17
PROJECT 4075-39-71 TOTAL				**17**

HMA PAVEMENT

CATEGORY	STATION	TO STATION	LOCATION	UPPER LAYER HMA PAVEMENT 4 LT 58-28 S (460.5224) * TON	UPPER LAYER HMA PAVEMENT 4 LT 58-28 S TRAVEL LANE TON	UPPER LAYER HMA PAVEMENT 4 LT 58-28 S SHOULDER TON	LOWER LAYER HMA PAVEMENT 4 LT 58-28 S (460.5224) * TON	LOWER LAYER HMA PAVEMENT 4 LT 58-28 S TRAVEL LANE TON	LOWER LAYER HMA PAVEMENT 4 LT 58-28 S SHOULDER TON	* (455.0605) TACK COAT GAL
0010	231+50	295+04	LT & RT	2,501	1,661	840	2,501	1,661	840	3,062
	295+26	587+66	LT & RT	10,240	7,069	3,171	10,240	7,069	3,171	12,539
	587+66	748+18	LT & RT	5,600	4,195	1,405	2,400	1,798	602	6,857
PROJECT 4075-39-71 TOTALS				**18,340**	**12,925**	**5,415**	**15,140**	**10,528**	**4,612**	**22,458**

*ADDITIONAL QUANTITIES FOUND ELSEWHERE

HMA SHOULDER WIDENING

CATEGORY	STATION	TO STATION	LOCATION	(211.0400) PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS STA	* UPPER LAYER HMA PAVEMENT 4 LT 58-28 S (460.5224) TON	* LOWER LAYER HMA PAVEMENT 4 LT 58-28 S (460.5224) TON	* (455.0605) TACK COAT GAL
0010	587+66	748+18	LT & RT	324	350	150	428
PROJECT 4075-39-71 TOTALS				**324**	**350**	**150**	**428**

*ADDITIONAL QUANTITIES FOUND ELSEWHERE

CULVERT AND STORM SEWER REPLACEMENT REPAIR AREAS

CATEGORY	STATION	TO STATION	LOCATION	** (205.0100) EXCAVATION COMMON CY	* (204.0100) REMOVING CONCRETE PAVEMENT SY	* (305.0110) BASE AGGREGATE DENSE 3/4-INCH TON	* (305.0120) BASE AGGREGATE DENSE 1 1/4-INCH TON	(SPV.0035.01) FOUNDATION BACKFILL CY	* (455.0605) TACK COAT GAL	* (465.0105) ASPHALTIC SURFACE TON	* (690.0150) SAWING ASPHALT LF	* (690.0250) SAWING CONCRETE LF
0010	267+22	267+54	LT & RT	-	-	4	128	-	12	39	64	-
	284+84	285+64	LT & RT	261	160	10	316	130	28	96	64	36
	301+93	302+64	LT & RT	234	142	9	282	113	25	85	64	36
	321+97	322+77	LT & RT	245	160	10	352	124	32	106	73	36
	325+67	326+39	LT & RT	269	144	4	360	138	32	109	81	36
	342+17	342+63	LT & RT	-	-	3	170	-	15	52	60	-
	360+80	361+08	LT & RT	-	-	2	104	-	9	31	60	-
	371+88	372+57	LT & RT	216	-	4	255	99	23	77	60	-
	379+90	380+52	LT & RT	208	-	3	239	97	22	72	62	-
	432+53	433+50	LT & RT	386	-	5	402	218	36	121	69	-
	454+37	455+03	LT & RT	230	132	4	245	111	22	74	60	36
	467+65	468+40	LT & RT	257	150	4	278	128	25	84	60	36
	483+66	484+03	LT & RT	-	-	2	256	-	23	77	133	-
	495+61	496+48	LT & RT	257	174	5	323	128	29	98	60	36
	505+07	505+75	LT & RT	245	136	4	252	122	23	76	60	36
	525+31	526+28	LT & RT	395	-	5	361	223	32	109	60	-
	583+35	583+67	LT	-	-	-	16	-	1	5	40	-
	585+74	587+42	LT & RT	-	17	-	172	-	15	52	296	36
	586+60	586+72	RT	-	8	-	17	-	2	5	53	26
	603+58	603+84	LT & RT	-	-	2	103	-	9	31	64	-
	643+48	643+88	LT & RT	-	-	4	158	-	14	48	64	-
	661+63	662+38	LT & RT	-	-	7	298	-	27	90	64	-
	680+07	680+53	LT & RT	-	-	4	182	-	16	55	64	-
	700+75	701+22	LT & RT	-	-	4	185	-	17	56	64	-
	704+85	705+35	LT & RT	-	-	5	199	-	18	60	64	-
	708+57	708+93	LT & RT	-	-	3	143	-	13	43	64	-
	718+89	719+63	LT & RT	271	-	7	307	137	28	93	77	-
	727+98	728+24	LT & RT	-	-	2	103	-	9	31	64	-
	741+79	742+58	LT & RT	265	-	7	311	122	28	94	64	-
	745+29	745+39	LT	-	-	-	4	-	0	1	24	-
	746+21	746+65	LT & RT	-	-	1	51	-	5	15	97	-
PROJECT 4075-39-71 TOTALS				**3,737**	**1,224**	**125**	**6,572**	**1,894**	**591**	**1,987**	**2,253**	**350**

*ADDITIONAL QUANTITIES FOUND ELSEWHERE

**FOR INFORMATIONAL PURPOSES ONLY; QUANTITY IS INCLUDED IN EARTHWORK SUMMARY TABLE

HMA AT CURB & GUTTER REPLACEMENTS

CATEGORY	STATION	TO STATION	LOCATION	* (465.0105) ASPHALTIC SURFACE TON	* (455.0605) TACK COAT GAL	* (690.0150) SAWING ASPHALT LF
0010	250+85	251+40	LT	4	3	63
	270+96	270+97	LT	8	5	116
	322+92	324+26	LT	12	7	162
	324+61	325+14	LT	6	4	96
	377+02	377+51	LT	6	4	90
	593+01	593+34	LT	2	1	37
	746+13	746+33	LT	2	1	24
PROJECT 4075-39-71 TOTALS				**40**	**25**	**588**

*ADDITIONAL QUANTITIES FOUND ELSEWHERE

CONCRETE CURB & GUTTER

CATEGORY	STATION	TO STATION	LOCATION	(601.0411) CONCRETE CURB & GUTTER 30-INCH TYPE D LF	(601.0557) CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D LF	(650.5500) CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER LF	* (305.0120) BASE AGGREGATE DENSE 1 1/4-INCH TON
0010	250+85	251+40	LT	57	-	57	1
	270+96	270+97	LT	101	-	101	2
	323+01	324+26	LT	-	142	142	3
	324+61	325+14	LT	-	83	83	2
	377+02	377+51	LT	79	-	79	2
	586+66	586+85	LT	20	-	20	0
	587+42	587+46	RT	27	-	27	1
	593+01	593+34	LT	33	-	33	1
	746+13	746+33	LT	20	-	20	0
PROJECT 4075-39-71 TOTALS				**337**	**225**	**562**	**12**

*ADDITIONAL QUANTITIES FOUND ELSEWHERE

CUTTING CURB HEAD

CATEGORY	STATION	TO STATION	LOCATION	(SPV.0090.01) LF
0010	252+91	253+75	RT	84
PROJECT 4075-39-71 TOTAL				**84**

FILE NAME : P:\905\93\00093473\CADD\SHEETSPLAN\030201-MQ BORDER.DWG
LAYOUT NAME - 030201-mq
PLOT DATE : 6/15/2021 11:44 AM PLOT BY : JASON DOLENS PLOT NAME :
WISDOT/CADDS SHEET 42

ASPHALTIC SHOULDER RUMBLE STRIPS

CATEGORY	STATION	TO STATION	LOCATION	(465.0425) ASPHALTIC SHOULDER RUMBLE STRIPS 2-LANE RURAL (TYPE 2) LF
0010	231+48	240+71	LT	923
	231+48	242+25	RT	1,077
	241+71	248+56	LT	685
	244+85	249+03	RT	418
	261+61	263+76	RT	215
	263+60	267+83	LT	423
	264+44	267+61	RT	317
	272+91	291+30	RT	1,839
	275+84	285+77	LT	993
	286+47	293+10	LT	663
	297+12	300+12	RT	300
	297+72	304+33	LT	661
	300+75	310+11	RT	936
	304+99	307+92	LT	293
	308+58	317+01	LT	843
	310+90	311+62	RT	72
	312+55	313+27	RT	72
	314+18	321+68	RT	750
	318+00	319+45	LT	145
	320+11	321+84	LT	173
	325+86	336+79	RT	1,093
	326+52	330+64	LT	412
	331+43	333+71	LT	228
	334+35	337+40	LT	305
	337+47	353+93	RT	1,646
	338+34	339+47	LT	113
	340+51	347+19	LT	668
	347+83	349+82	LT	199
	351+10	352+57	LT	147
	354+06	365+66	LT	1,160
	354+57	375+50	RT	2,093
	366+41	368+02	LT	161
	368+70	375+83	LT	713
	378+04	385+94	RT	790
	380+26	387+73	LT	747
	386+58	393+44	RT	686
	388+48	390+60	LT	212
	391+42	402+35	LT	1,093
	394+12	398+93	RT	481
	399+55	429+86	RT	3,031
	403+21	405+82	LT	261
	406+46	429+25	LT	2,279
	433+14	435+02	LT	188
	433+83	439+64	RT	581
	436+41	440+12	LT	371
	440+51	443+47	RT	296
	440+91	441+23	LT	32
	441+87	443+22	LT	135
	443+94	447+28	LT	334
	445+42	479+09	RT	3,367
	448+95	459+33	LT	1,038
	460+71	476+08	LT	1,537
	476+72	478+61	LT	189
	479+25	482+67	LT	342
	479+80	482+65	RT	285

(CONTINUED)

ASPHALTIC SHOULDER RUMBLE STRIPS (CONTINUED)

CATEGORY	STATION	TO STATION	LOCATION	(465.0425) ASPHALTIC SHOULDER RUMBLE STRIPS 2-LANE RURAL (TYPE 2) LF
0010	485+41	497+35	RT	1,194
	485+91	502+44	LT	1,653
	497+97	499+45	RT	148
	500+07	506+79	RT	672
	504+13	534+03	LT	2,990
	507+52	512+72	RT	520
	513+38	533+87	RT	2,049
	535+84	553+85	LT	1,801
	536+09	549+33	RT	1,324
	549+99	553+22	RT	323
	561+20	567+27	RT	607
	561+53	569+83	LT	830
	568+14	574+29	RT	615
	570+49	578+04	LT	755
	574+93	577+13	RT	220
	590+26	596+62	RT	636
	593+84	629+16	LT	3,532
	599+80	616+71	RT	1,691
	621+69	634+88	RT	1,319
	629+78	637+82	LT	804
	635+82	638+06	RT	224
	641+15	658+42	LT	1,727
	641+26	652+37	RT	1,111
	653+07	668+27	RT	1,520
	659+42	667+04	LT	762
	668+02	675+35	LT	733
	670+79	683+98	RT	1,319
	676+11	690+11	LT	1,400
	686+26	691+40	RT	514
	694+35	696+88	LT	253
	694+53	695+69	RT	116
	696+58	701+63	RT	505
	699+45	724+81	LT	2,536
	702+35	703+84	RT	149
	704+54	717+35	RT	1,281
	719+57	732+61	RT	1,304
	725+51	742+91	LT	1,740
	733+39	742+33	RT	894
	742+99	743+43	RT	44
	747+41	748+18	RT	77
PROJECT 4075-39-71 TOTAL				**80,903**

ASPHALTIC CENTER LINE RUMBLE STRIPS

CATEGORY	STATION	TO STATION	LOCATION	(465.0475) ASPHALTIC CENTER LINE RUMBLE STRIPS 2-LANE RURAL LF
0010	231+48	241+80	CL	1,032
	245+80	248+49	CL	269
	252+49	268+83	CL	1,634
	272+83	294+79	CL	2,196
	295+51	322+45	CL	2,694
	326+45	374+88	CL	4,843
	378+88	429+10	CL	5,022
	433+57	442+37	CL	880
	450+37	482+20	CL	3,183
	486+20	501+54	CL	1,534
	505+54	533+11	CL	2,757
	536+11	576+00	CL	3,989
	593+84	637+12	CL	4,328
	641+12	683+37	CL	4,225
	687+37	690+11	CL	274
	694+11	695+92	CL	181
	699+92	716+70	CL	1,678
	720+70	743+18	CL	2,248
PROJECT 4075-39-71 TOTAL				**42,967**

CULVERT PIPES

CATEGORY	STATION	(520.1030) APRON ENDWALLS FOR CULVERT PIPE 30-INCH EACH	(520.1036) APRON ENDWALLS FOR CULVERT PIPE 36-INCH EACH	(520.3430) CULVERT PIPE CLASS III-A NON-METAL 30-INCH LF	(520.3436) CULVERT PIPE CLASS III-A NON-METAL 36-INCH LF	(520.3636) CULVERT PIPE CLASS III-B NON-METAL 36-INCH LF	(522.0154) CULVERT PIPE REINFORCED CONCRETE CLASS III 54-INCH LF	(522.0160) CULVERT PIPE REINFORCED CONCRETE CLASS III 60-INCH LF	(522.0424) CULVERT PIPE REINFORCED CONCRETE CLASS IV 24-INCH LF	(522.0430) CULVERT PIPE REINFORCED CONCRETE CLASS IV 30-INCH LF	(522.1024) APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 24-INCH EACH	(522.1030) APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 30-INCH EACH	(522.1054) APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 54-INCH EACH
0010	245+60	-	-	-	-	-	-	-	-	-	-	-	-
	258+99	-	-	-	-	-	-	-	-	-	-	-	-
	267+38	2	-	83	-	-	-	-	-	-	-	-	-
	285+19	-	-	-	-	-	-	-	49	-	2	-	-
	285+24	-	-	-	-	-	-	-	49	-	2	-	-
	285+29	-	-	-	-	-	-	-	49	-	2	-	-
	295+15	-	-	-	-	-	-	-	-	-	-	-	-
	302+25	-	-	-	-	-	-	-	48	-	2	-	-
	302+32	-	-	-	-	-	-	-	48	-	2	-	-
	322+33	-	-	-	-	-	-	-	54	-	2	-	-
	322+41	-	-	-	-	-	-	-	54	-	2	-	-
	326+03	-	-	-	-	-	-	-	59	-	2	-	-
	342+40	-	2	-	-	112	-	-	-	-	-	-	-
	360+94	-	2	-	63	-	-	-	-	-	-	-	-
	372+19	-	-	-	-	-	-	-	45	-	2	-	-
	372+25	-	-	-	-	-	-	-	45	-	2	-	-
	380+20	-	-	-	-	-	-	-	45	-	2	-	-
	432+98	-	-	-	-	-	-	-	-	56	-	2	-
	433+05	-	-	-	-	-	-	-	-	56	-	2	-
	454+69	-	-	-	-	-	-	-	46	-	2	-	-
	467+99	-	-	-	-	-	-	-	47	-	2	-	-
	468+06	-	-	-	-	-	-	-	47	-	2	-	-
	483+80	-	2	-	89	-	-	-	-	-	-	-	-
	483+88	-	2	-	89	-	-	-	-	-	-	-	-
	495+95	-	-	-	-	-	-	-	-	-	-	-	-
	496+00	-	-	-	-	-	-	-	-	-	-	-	-
	496+07	-	-	-	-	-	-	-	-	-	-	-	-
	496+13	-	-	-	-	-	-	-	-	-	-	-	-
	505+41	-	-	-	-	-	-	-	47	-	2	-	-
	525+76	-	-	-	-	-	-	-	56	-	-	-	-
	525+83	-	-	-	-	-	-	-	56	-	-	-	-
	603+71	-	2	-	58	-	-	-	-	-	-	-	-
	643+68	-	-	-	-	-	79	-	-	-	-	-	2
	662+92	-	-	-	-	-	-	104	-	-	-	-	-
	662+00	-	-	-	-	-	-	104	-	-	-	-	-
	662+09	-	-	-	-	-	-	104	-	-	-	-	-
	680+29	-	2	-	97	-	-	-	-	-	-	-	-
	700+98	-	2	-	79	-	-	-	-	-	-	-	-
	705+10	-	2	-	-	102	-	-	-	-	-	-	-
	708+75	2	-	93	-	-	-	-	-	-	-	-	-
	719+26	-	-	-	-	-	-	-	-	46	-	2	-
	728+11	2	-	73	-	-	-	-	-	-	-	-	-
	742+19	-	-	-	-	-	-	-	-	60	-	2	-
PROJECT 4075-39-71 TOTALS		**6**	**16**	**249**	**475**	**214**	**79**	**312**	**844**	**218**	**30**	**8**	**2**

(CONTINUED ON NEXT SHEET)

CULVERT PIPES (CONTINUED)

CATEGORY	STATION	(504.0900) CONCRETE MASONRY ENDWALLS CY	(522.2324) CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-IV 24X38-INCH LF	(522.2624) APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL 24X38-INCH EACH	(633.5200) MARKERS CULVERT END EACH	(650.6000) CONSTRUCTION STAKING PIPE CULVERTS EACH	(SPV.0060.02) CLEANING DITCH EACH	NOTES
0010	245+60	-	-	-	1	-	-	36-INCH CMCP
	258+99	-	-	-	1	-	-	STRUCTURE C-05-0082
	267+38	-	-	-	1	1	2	
	285+19	-	-	-	2	1	-	
	285+24	-	-	-	2	1	-	
	285+29	-	-	-	2	1	-	
	295+15	-	-	-	2	-	-	STRUCTURE B-05-274
	302+25	-	-	-	2	1	-	
	302+32	-	-	-	2	1	-	
	322+33	-	-	-	2	1	-	
	322+41	-	-	-	2	1	-	
	326+03	-	-	-	2	1	-	
	342+40	-	-	-	2	1	-	
	360+94	-	-	-	2	1	-	
	372+19	-	-	-	2	1	-	
	372+25	-	-	-	2	1	-	
	380+20	-	-	-	2	1	-	
	432+98	-	-	-	2	1	-	
	433+05	-	-	-	2	1	-	
	454+69	-	-	-	2	1	-	
	467+99	-	-	-	2	1	-	
	468+06	-	-	-	2	1	-	
	483+80	-	-	-	2	1	-	
	483+88	-	-	-	2	1	-	
	495+95	-	57	2	2	1	-	
	496+00	-	57	2	2	1	-	
	496+07	-	57	2	2	1	-	
	496+13	-	57	2	2	1	-	
	505+41	-	-	-	2	1	-	
	525+76	-	-	-	2	1	-	
	525+83	-	-	-	2	1	-	
	603+71	-	-	-	2	1	-	
	643+68	-	-	-	2	1	-	
	661+92	-	-	-	1	1	-	
	662+00	30	-	-	-	1	-	
	662+09	-	-	-	1	1	-	
	680+29	-	-	-	2	1	-	
	700+98	-	-	-	2	1	-	
	705+10	-	-	-	2	1	-	
	708+75	-	-	-	2	1	-	
	719+26	-	-	-	2	1	2	
	728+11	-	-	-	2	1	-	
	742+19	-	-	-	2	1	2	
PROJECT 4075-39-71 TOTALS		**30**	**228**	**8**	**79**	**40**	**6**	

3

3

STORM SEWER PIPE

CATEGORY	STATION	TO STATION	LOCATION	(520.8000) CONCRETE COLLARS FOR PIPE EACH	(608.0112) RELAID STORM SEWER 12-INCH LF	(608.0115) RELAID STORM SEWER 15-INCH LF	(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	(608.0412) STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 12-INCH LF	(608.0415) STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 15-INCH LF	(SPV.0060.01) STORM SEWER PLUG EACH
0010	583+39	583+47	LT	-	-	8	-	-	-	-	-	-
	583+47	583+55	LT	2	-	-	-	8	-	-	-	-
	583+55	583+63	LT	-	-	8	-	-	-	-	-	-
	585+78	586+60	LT	-	-	-	-	-	-	-	82	-
	586+60	586+68	LT & RT	1	8	-	7	-	-	-	-	-
	586+60	587+41	LT	-	-	-	-	-	-	118	-	1
	746+14	746+65	LT & RT	-	-	-	-	-	77	-	-	1
	746+54	746+62	LT	-	8	-	-	-	-	-	-	-
	746+62	746+86	LT	2	-	-	24	-	-	-	-	-
	746+86	746+94	LT	-	8	-	-	-	-	-	-	-
PROJECT 4075-39-71 TOTALS				**5**	**24**	**16**	**31**	**8**	**77**	**118**	**82**	**2**

STORM SEWER STRUCTURES

CATEGORY	STRUCTURE ID	STATION	LOCATION	(522.1018) APRON ENDWALLS FOR CULVERT PIPE REINFORED CONCRETE 18-INCH EACH	(611.3230) INLETS 2x3-FT EACH	(611.0624) INLET COVERS TYPE H EACH	(650.4000) CONSTRUCTION STAKING STORM SEWER EACH	TOP OF STRUCTURE ELEVATION	BOX DEPTH FEET	RIM ELEVATION	INVERT ELEVATION	NOTES
0010	1.1	587+41.13	57.30' RT	-	1	1	1	923.38	1.75	923.92	921.63	NO ADJUSTMENT RINGS, CONSIDER CAST-IN-PLACE
	EW.1	746+65.60	25.50' RT	1	-	-	1	-	-	-	937.22	
PROJECT 4075-39-71 TOTALS				**1**	**1**	**1**	**2**					

STORM SEWER ADJUSTMENTS

CATEGORY	STRUCTURE ID	STATION	LOCATION	(611.8110) ADJUSTING MANHOLE COVERS EACH
0010	EX.6	745+31.86	31.54' LT	1
PROJECT 4075-39-71 TOTAL				**1**

MAINTENANCE AND REPAIR OF HAUL ROADS

CATEGORY	DESCRIPTION	(618.0100.01) EACH
0010	PROJECT 4075-39-71	1
PROJECT 4075-39-71 TOTAL		**1**

RIPRAP

CATEGORY	STATION	TO STATION	LOCATION	(606.0100) RIPRAP LIGHT CY	(606.0200) RIPRAP MEDIUM CY	(645.0120) GEOTEXTILE TYPE HR SY
0010	253+29	253+54	LT	7	-	23
	253+88	254+12	RT	7	-	23
	701+14	701+35	LT	-	11	33
PROJECT 4075-39-71 TOTALS				**14**	**11**	**79**

WATER

CATEGORY	DESCRIPTION	(624.0100) MGAL
0010	PROJECT 4075-39-71	155
PROJECT 4075-39-71 TOTAL		**155**

NOTE: WATER BID ITEM IS FOR BASE AGGREGATE DENSE DUST CONTROL AND COMPACTION.

3

BEAM GUARD

CATEGORY	STATION	TO STATION	LOCATION	(614.2300) MGS GUARDRAIL 3 LF	(614.2330) MGS GUARDRAIL 3 K LF	(614.2340) MGS GUARDRAIL 3 L LF	(614.2500) MGS THRIE BEAM TRANSITION LF	(614.2610) MGS GUARDRAIL TERMINAL EAT EACH	(614.8010) ANCHOR POST ASSEMBLIES TOP MOUNTED EACH	(SPV.0090.02) RAILING STEEL TYPE W MODIFIED, B-05-0274 LF
0010	253+91	254+44	RT	-	-	-	-	1	-	-
	254+44	256+69	RT	-	225	-	-	-	-	-
	256+69	260+56	RT	-	387.5	-	-	-	-	-
	260+56	261+10	RT	-	-	-	-	1	-	-
	254+17	254+70	LT	-	-	-	-	1	-	-
	254+70	256+20	LT	-	150	-	-	-	-	-
	256+20	260+45	LT	-	425	-	-	-	-	-
	260+45	263+07	LT	262.5	-	-	-	-	-	-
	263+07	263+60	LT	-	-	-	-	1	-	-
	292+75	293+29	RT	-	-	-	-	1	--	-
	293+29	295+04	RT	137.5	-	-	37.5	-	-	-
	295+04	295+26	LT&RT	-	-	-	-	-	-	44
	295+26	296+01	RT	37.5	-	-	37.5	-	-	-
	296+01	296+54	RT	-	-	-	-	1	-	-
	293+76	294+29	LT	-	-	-	-	1	-	-
	294+29	295+04	LT	37.5	-	-	37.5	-	-	-
	295+26	296+51	LT	87.5	-	-	37.5	-	-	-
	296+51	297+04	LT	-	-	-	-	1	-	-
	553+60	554+13	RT	-	-	-	-	1	-	-
	554+13	555+51	RT	137.5	-	-	-	-	-	-
	555+51	556+39	RT	-	87.5	-	-	-	12	-
	556+39	559+01	RT	262.5	-	-	-	-	-	-
	559+01	560+26	RT	-	-	125	-	-	-	-
	560+26	560+79	RT	-	-	-	-	1	-	-
	554+20	554+73	LT	-	-	-	-	1	-	-
	554+73	555+48	LT	75	-	-	-	-	-	-
	555+48	556+36	LT	-	87.5	-	-	-	12	-
	556+36	558+98	LT	262.5	-	-	-	-	-	-
	558+98	560+23	LT	-	-	125	-	-	-	-
	560+23	560+35	LT	12.5	-	-	-	-	-	-
	560+35	560+88	LT	-	-	-	-	1	-	-
PROJECT 4075-39-71 TOTALS				**1,312.5**	**1,362.5**	**250.0**	**150.0**	**12**	**24**	**44**

*ADDITIONAL QUANTITIES FOUND ELSEWHERE

FINISHING ITEMS

CATEGORY	STATION	TO STATION	LOCATION	(625.0100) TOPSOIL SY	(628.2008) EROSION MAT URBAN CLASS I TYPE B SY	(629.0210) FERTILIZER TYPE B CWT	(630.0140) SEEDING MIXTURE NO. 40 LB	(630.0500) SEED WATER MGAL
0010	250+87	251+40	LT	12	12	0.01	0	1
	252+36	262+45	RT	706	706	0.45	13	40
	253+15	265+14	LT	1,095	1,095	0.69	20	62
	267+25	267+50	LT	82	82	0.05	1	5
	267+25	267+50	RT	80	80	0.05	1	5
	270+95	271+05	LT	25	25	0.02	0	1
	284+84	285+61	LT	144	144	0.09	3	8
	284+84	285+61	RT	123	123	0.08	2	7
	291+25	295+04	LT	281	281	0.18	5	16
	291+74	295+04	RT	417	417	0.26	8	24
	295+26	297+42	LT	127	127	0.08	2	7
	295+26	297+70	RT	201	201	0.13	4	11
	297+68	298+53	LT	15	15	0.01	0	1
	301+90	302+68	RT	125	125	0.08	2	7
	301+95	302+62	LT	125	125	0.08	2	7
	322+06	322+65	LT	88	88	0.06	2	5
	322+06	322+65	RT	111	111	0.07	2	6
	322+73	324+25	LT	43	43	0.03	1	2
	324+62	325+14	LT	18	18	0.01	0	1
	325+76	326+28	LT	92	92	0.06	2	5
	325+78	326+24	RT	80	80	0.05	1	5
	342+02	342+74	LT	309	309	0.19	6	17
	342+02	342+74	RT	289	289	0.18	5	16
	360+47	361+42	LT	254	254	0.16	5	14
	360+56	361+42	RT	199	199	0.13	4	11
	371+86	372+56	LT	134	134	0.08	2	8
	371+86	372+56	RT	134	134	0.08	2	8
	377+02	377+51	LT	17	17	0.01	0	1
	379+90	380+52	LT	111	111	0.07	2	6
	379+90	380+52	RT	164	164	0.10	3	9
	432+75	433+30	LT	114	114	0.07	2	6
	432+75	433+30	RT	130	130	0.08	2	7
	454+37	455+03	LT	87	87	0.06	2	5
	454+37	455+03	RT	90	90	0.06	2	5
	467+65	468+40	LT	133	133	0.08	2	8
	467+65	468+40	RT	140	140	0.09	3	8
	483+35	484+02	RT	178	178	0.11	3	10
	483+39	484+08	LT	234	234	0.15	4	13
	495+61	496+48	LT	206	206	0.13	4	12
	495+61	496+48	RT	266	266	0.17	5	15
	505+07	505+75	LT	128	128	0.08	2	7
	505+07	505+75	RT	138	138	0.09	2	8
	525+65	525+93	LT	70	70	0.04	1	4
	525+65	525+93	RT	65	65	0.04	1	4
	551+98	555+71	LT	503	503	0.32	9	28
	552+00	555+71	RT	352	352	0.22	6	20
	556+10	559+54	LT	113	113	0.07	2	6
	556+10	559+54	RT	253	253	0.16	5	14
	559+69	560+95	LT	220	220	0.14	4	12
	559+69	561+42	RT	200	200	0.13	4	11

(CONTINUED)

FINISHING ITEMS (CONTINUED)

CATEGORY	STATION	TO STATION	LOCATION	(625.0100) TOPSOIL SY	(628.2008) EROSION MAT URBAN CLASS I TYPE B SY	(629.0210) FERTILIZER TYPE B CWT	(630.0140) SEEDING MIXTURE NO. 40 LB	(630.0500) SEED WATER MGAL
0010	561+11	561+39	LT	19	19	0.01	0	1
	561+66	562+44	LT	49	49	0.03	1	3
	561+71	562+43	RT	37	37	0.02	1	2
	583+35	583+67	LT	14	14	0.01	0	1
	586+66	586+85	LT	6	6	0.00	0	0
	587+42	587+50	RT	11	11	0.01	0	1
	593+01	593+13	LT	3	3	0.00	0	0
	597+05	597+15	RT	6	6	0.00	0	0
	597+27	597+37	RT	6	6	0.00	0	0
	603+47	603+99	LT	150	150	0.09	3	9
	603+47	603+99	RT	153	153	0.10	3	9
	643+24	644+08	LT	223	223	0.14	4	13
	643+24	644+08	RT	274	274	0.17	5	16
	661+51	662+47	LT	350	350	0.22	6	20
	661+51	662+47	RT	365	365	0.23	7	21
	679+90	680+60	LT	239	239	0.15	4	14
	679+94	680+60	RT	253	253	0.16	5	14
	700+45	701+14	RT	165	165	0.10	3	9
	700+85	701+44	LT	146	146	0.09	3	8
	704+85	705+37	RT	208	208	0.13	4	12
	704+96	705+26	LT	157	157	0.10	3	9
	708+50	708+97	LT	180	180	0.11	3	10
	708+50	708+97	RT	187	187	0.12	3	11
	718+85	719+74	LT	215	215	0.14	4	12
	718+85	719+74	RT	246	246	0.15	4	14
	727+92	728+35	LT	142	142	0.09	3	8
	727+92	728+35	RT	128	128	0.08	2	7
	741+88	742+50	LT	126	126	0.08	2	7
	741+88	742+50	RT	117	117	0.07	2	7
	746+54	746+81	RT	30	30	0.02	1	2
	JNDISTRIBUTED (ADDITIONAL DISTURBED AREAS			1,373	1,373	0.84	24	75
	PROJECT 4075-39-71 TOTALS			**14,800**	**14,800**	**9.30**	**265**	**835**

SILT FENCE

CATEGORY	STATION	TO STATION	LOCATION	(628.1504) SILT FENCE LF	(628.1520) SILT FENCE MAINTENANCE LF
0010	253+60	259+56	LT	625	625
	254+13	262+53	RT	865	865
	259+96	265+25	LT	540	540
	267+17	267+57	LT	85	85
	267+17	267+60	RT	75	75
	291+13	295+05	LT	410	410
	293+37	295+05	RT	190	190
	295+26	297+41	LT	240	240
	295+26	296+00	RT	90	90
	297+68	298+50	LT	90	90
	341+89	342+89	RT	128	128
	341+91	342+87	LT	135	135
	371+75	372+64	LT	78	78
	371+75	372+67	RT	84	84
	379+76	380+60	RT	60	60
	379+84	380+58	LT	89	89
	483+27	483+64	RT	78	78
	483+32	483+71	LT	72	72
	504+96	505+82	LT	89	89
	504+97	505+82	RT	67	67
	525+42	526+19	RT	73	73
	551+90	555+69	RT	395	395
	551+91	555+60	LT	385	385
	556+12	559+53	LT	345	345
	556+13	559+53	RT	345	345
	559+65	560+94	LT	140	140
	559+68	560+93	RT	140	140
	561+12	561+38	LT	30	30
	561+70	562+46	RT	80	80
	561+66	562+50	LT	90	90
	679+84	680+65	LT	99	99
	679+90	680+64	RT	118	118
	700+40	701+17	RT	69	69
	700+79	701+48	LT	66	66
	704+80	705+40	RT	107	107
	704+84	705+32	LT	114	114
	708+45	709+03	LT	100	100
	708+46	709+02	RT	102	102
	727+85	728+39	RT	90	90
	727+86	728+38	LT	80	80
	UNDISTRIBUTED			642	642
	PROJECT 4075-39-71 TOTALS			**7,700**	**7,700**

MOBILIZATIONS EROSION CONTROL

CATEGORY	DESCRIPTION	(628.1905) EACH	(628.1910) EMERGENCY EACH
0010	PROJECT 4075-39-71	8	4
	PROJECT 4075-39-71 TOTALS	**8**	**4**

INLET PROTECTION

CATEGORY	STATION	LOCATION	(628.7020) INLET PROTECTION TYPE D EACH	NOTES
0010	579+76	LT	2	1 INSTALLATION PER CALENDAR YEAR
	582+34	LT	2	1 INSTALLATION PER CALENDAR YEAR
	583+87	LT	2	1 INSTALLATION PER CALENDAR YEAR
	585+78	LT	2	1 INSTALLATION PER CALENDAR YEAR
	586+60	LT	2	1 INSTALLATION PER CALENDAR YEAR
	586+68	RT	2	1 INSTALLATION PER CALENDAR YEAR
	587+41	RT	2	1 INSTALLATION PER CALENDAR YEAR
	746+14	LT	2	1 INSTALLATION PER CALENDAR YEAR
	746+14	LT	2	1 INSTALLATION PER CALENDAR YEAR
	PROJECT 4075-39-71 TOTAL		**18**	

CULVERT PIPE CHECKS

CATEGORY	STATION	LOCATION	(628.7555) CULVERT PIPE CHECKS EACH	CULVERT SIZE	NOTES
0010	267+38	RT	10	30"	1 INSTALLATION PER CALENDAR YEAR
	285+19	RT	6	24"	1 INSTALLATION PER CALENDAR YEAR
	285+24	RT	6	24"	1 INSTALLATION PER CALENDAR YEAR
	285+29	RT	6	24"	1 INSTALLATION PER CALENDAR YEAR
	302+25	RT	6	24"	1 INSTALLATION PER CALENDAR YEAR
	302+32	RT	6	24"	1 INSTALLATION PER CALENDAR YEAR
	322+33	RT	6	24"	1 INSTALLATION PER CALENDAR YEAR
	322+41	RT	6	24"	1 INSTALLATION PER CALENDAR YEAR
	326+03	LT	6	24"	1 INSTALLATION PER CALENDAR YEAR
	342+40	RT	14	36"	1 INSTALLATION PER CALENDAR YEAR
	360+94	RT	14	36"	1 INSTALLATION PER CALENDAR YEAR
	372+19	RT	6	24"	1 INSTALLATION PER CALENDAR YEAR
	372+25	RT	6	24"	1 INSTALLATION PER CALENDAR YEAR
	380+20	RT	6	24"	1 INSTALLATION PER CALENDAR YEAR
	432+98	RT	10	30"	1 INSTALLATION PER CALENDAR YEAR
	433+05	RT	10	30"	1 INSTALLATION PER CALENDAR YEAR
	454+69	LT	6	24"	1 INSTALLATION PER CALENDAR YEAR
	467+99	LT	6	24"	1 INSTALLATION PER CALENDAR YEAR
	468+06	LT	6	24"	1 INSTALLATION PER CALENDAR YEAR
	483+80	RT	14	36"	1 INSTALLATION PER CALENDAR YEAR
	483+89	RT	14	36"	1 INSTALLATION PER CALENDAR YEAR
	495+95	RT	14	24"X38"	1 INSTALLATION PER CALENDAR YEAR
	496+00	RT	14	24"X38"	1 INSTALLATION PER CALENDAR YEAR
	496+07	RT	14	24"X38"	1 INSTALLATION PER CALENDAR YEAR
	496+13	RT	14	24"X38"	1 INSTALLATION PER CALENDAR YEAR
	505+41	LT	6	24"	1 INSTALLATION PER CALENDAR YEAR
	525+76	LT	6	24"	1 INSTALLATION PER CALENDAR YEAR
	525+83	LT	6	24"	1 INSTALLATION PER CALENDAR YEAR
	603+71	RT	14	36"	1 INSTALLATION PER CALENDAR YEAR
	643+68	LT	24	54"	1 INSTALLATION PER CALENDAR YEAR
	661+92	LT	26	60"	1 INSTALLATION PER CALENDAR YEAR
	662+00	LT	26	60"	1 INSTALLATION PER CALENDAR YEAR
	662+09	LT	26	60"	1 INSTALLATION PER CALENDAR YEAR
	680+29	LT	14	36"	1 INSTALLATION PER CALENDAR YEAR
	700+98	RT	14	36"	1 INSTALLATION PER CALENDAR YEAR
	705+10	RT	14	36"	1 INSTALLATION PER CALENDAR YEAR
	708+75	RT	10	30"	1 INSTALLATION PER CALENDAR YEAR
	719+26	RT	10	30"	1 INSTALLATION PER CALENDAR YEAR
	728+11	RT	10	30"	1 INSTALLATION PER CALENDAR YEAR
	742+19	RT	10	30"	1 INSTALLATION PER CALENDAR YEAR
	PROJECT 4075-39-71 TOTAL		**442**		

3

3

MOVING SIGNS

CATEGORY	STATION	LOCATION	(638.2102) MOVING SIGNS TYPE II EACH	(638.4000) MOVING SMALL SIGN SUPPORTS EACH
0010	254+40	LT	1	1
	261+64	RT	1	1
	322+53	LT	1	1
	484+00	LT	1	1
	559+38	LT	1	1
	680+59	LT	1	1
	700+98	RT	1	1
	742+25	LT	1	1
PROJECT 4075-39-71 TOTALS			**8**	**8**

PAVEMENT MARKINGS

CATEGORY	STATION	TO STATION	(646.1020) MARKING LINE EPOXY 4-INCH (YELLOW) LF	(649.0120) TEMPORARY MARKING LINE EPOXY 4-INCH (YELLOW) LF	(649.0120) TEMPORARY MARKING LINE EPOXY 4-INCH (WHITE) LF	(646.1040) MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE) LF	(646.6120) MARKING STOP LINE EPOXY 18-INCH LF	(648.0100) LOCATING NO-PASSING ZONES MI	(649.0105) TEMPORARY MARKING LINE PAINT 4-INCH (YELLOW) LF	(649.0105) TEMPORARY MARKING LINE PAINT 4-INCH (WHITE) LF
0010	231+00	587+00	30,410	30,410	69,170	69,170	165	-	75,245	-
	587+00	745+00	12,520	12,520	29,865	29,865	70	-	30,275	-
	745+00	748+18	580	580	305	305	40	-	1,740	-
	CULVERT REPLACEMENT AREAS		-	-	-	-	-	-	3,200	3,290
	PROJECT 4075-39-71		-	-	-	-	-	9.78	-	-
	SUBTOTALS		**-**	**43,510**	**99,340**	**-**	**-**	**-**	**110,460**	**3,290**
	PROJECT 4075-39-71 TOTALS		**43,510**	**142,850**		**99,340**	**275**	**9.78**	**113,750**	

NOTE: TEMPORARY MARKING LINE EPOXY 4-INCH TO BE APPLIED BEFORE CENTERLINE RUMBLE STRIPS ARE INSTALLED
NOTE: MARKING LINE EPOXY 4-INCH TO BE APPLIED AFTER CENTERLINE RUMBLE STRIPS ARE INSTALLED
NOTE: TEMPORARY MARKING LINE EPOXY 4-INCH TO BE APPLIED BEFORE TYPE 2 SHOULDER RUMBLE STRIPS ARE INSTALLED
NOTE: MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH TO BE APPLIED AFTER TYPE 2 SHOULDER RUMBLE STRIPS ARE INSTALLED
NOTE: STOP LINES TO BE PLACED ON ALL STATE TRUNK AND COUNTY HIGHWAYS.
NOTE: TEMPORARY MARKINGS FOR THE MILLED SURFACE, THE CIR SURFACE, AND THE LOWER HMA SURFACE ARE INCLUDED WITH BID ITEM 649.0105.

TRAFFIC CONTROL

CATEGORY	DESCRIPTION	(643.5000) TRAFFIC CONTROL EACH	DRUMS NO. DEVICES	(643.0300) TRAFFIC CONTROL DRUMS DAY	BARRICADES TYPE III NO. DEVICES	* (643.0420) TRAFFIC CONTROL BARRICADES TYPE III DAY	WARNING LIGHTS TYPE A NO. DEVICES	* (643.0705) TRAFFIC CONTROL WARNING LIGHTS TYPE A DAY	SIGNS NO. DEVICES	* (643.0900) TRAFFIC CONTROL SIGNS DAY	DURATION	
0010	ADVANCE WARNING SIGNS (MAINLINE & SIDEROAD)	-	-	-	-	-	-	-	34	2,720	80	DAYS
	LANE CLOSURE WITH FLAGGING OPERATION	-	-	-	-	-	-	-	8	600	75	DAYS
	MOVING PAVEMENT MARKING OPERATION	-	-	-	-	-	-	-	8	480	60	DAYS
	SHOULDER CLOSURE	-	25	750	-	-	-	-	-	-	30	DAYS
	UNEVEN LANES	-	-	-	-	-	-	-	20	900	45	DAYS
	CULVERT PIPE REPLACEMENT (LANE SHIFT)	-	480	22,080	-	-	-	-	-	-	46	DAYS
	TEMPORARY SIGNING FOR CULVERT REPLACEMENT	-	-	-	-	-	-	-	174	8,004	46	DAYS
	CURB & GUTTER REPLACEMENT	-	90	1,350	-	-	-	-	-	-	15	DAYS
	STORM SEWER REPLACEMENT	-	10	100	-	-	-	-	-	-	10	DAYS
	PROJECT 4075-39-71	0.5	-	-	-	-	-	-	-	-		
	UNDISTRIBUTED	-	-	5,720	-	100	-	200	-	796		
	PROJECT 4075-39-71 TOTALS	**0.5**		**30,000**		**100**		**200**		**13,500**		

*ADDITIONAL QUANTITIES FOUND ELSEWHERE
NOTES:
ADVANCE WARNING SIGNS (MAINLINE & SIDEROAD) - SEE S.D.D. "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC"
LANE CLOSURE WITH FLAGGING OPERATION - SEE S.D.D. "TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION"
MOVING PAVEMENT MARKING OPERATION - SEE S.D.D. "MOVING PAVEMENT MARKING OPERATION - TWO-LANE TWO-WAY ROADWAY"
SHOULDER CLOSURE - SEE S.D.D. "TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY"

TRAFFIC CONTROL SIGNS PCMS

CATEGORY	LOCATION	DESCRIPTION	* (643.1050) TRAFFIC CONTROL SIGNS PCMS DAY	NOTES
0010	STH 96 EASTBOUND, WEST OF PROJECT LIMITS	ADVANCE PROJECT NOTIFICATION	14	7 DAYS PER CALENDAR YEAR
	STH 96 WESTBOUND, EAST OF PROJECT LIMITS	ADVANCE PROJECT NOTIFICATION	14	7 DAYS PER CALENDAR YEAR
		PROJECT 4075-39-71 TOTAL	**28**	

*ADDITIONAL QUANTITIES FOUND ELSEWHERE

TEMPORARY LANE SHIFT DURING CULVERT WORK

CATEGORY	CULVERT STATION	(208.1500.S) TEMPORARY LANE SHIFT DURING CULVERT WORK EACH
0010	267+38	1
	342+39	1
	360+94	1
	483+84	1
	572+80	1
	603+71	1
	643+68	1
	662+00	1
	680+29	1
	700+98	1
	705+10	1
	708+75	1
PROJECT 4075-39-71 TOTAL		**12**

TRAFFIC CONTROL DETOUR SUMMARY

SIGN NO.	LOCATION	SIGN CODE	SIZE W X H	NUMBER IN SERVICE	APPROX SERVICE PERIOD 14 DAYS	* (643.0900) SIGNS DAYS	* (643.0420) BARRICADES TYPE III DAYS	* (643.0705) WARNING LIGHTS TYPE A DAYS	* (643.1050) SIGNS PCMS DAYS	NO. OF CYCLES	(643.0920) COVERING SIGNS TYPE II EACH	REMARKS
1	STH 32/57, N. OF STH 96, PLACE 1000' N. OF STH 96 RAB INTERSECTION	M 3-2	24"X12"	1	14	14						
	"	M 1-6	24"X24"	1	14	14						96
	"	W 20-2A	48"X48"	1	14	14						
2	STH 32/57, N. OF STH 96, COVER/PLACE RIGHT OF EXISTING D1-62 SIGN	MO 4-8	24"X12"	1	14	14				1	1	COVER EXISTING D1-62 SIGN AS SHOWN
	"	M 3-2	24"X12"	1	14	14						
	"	M 1-6	24"X24"	1	14	14						96
	"	MO 6-1	21"X21"	1	14	14						AHEAD
3	STH 32/57, N. OF STH 96, COVER EXISTING D1-3 SIGN AS SHOWN									1	1	COVER "DENMARK"
4	STH 96, W. OF STH 32/57, PLACE 1000' W. OF STH 32/57 RAB INTERSECTION			1	14	14						
5	STH 96, W. OF STH 32/57, COVER/PLACE RIGHT OF EXISTING D1-62 SIGN	MO 4-8	24"X12"	1	14	14				1	1	COVER EXISTING D1-62 SIGN AS SHOWN
	"	M 3-2	24"X12"	1	14	14						
	"	M 1-6	24"X24"	1	14	14						96
	"	MO 5-1R	21"X21"	1	14	14						
6	STH 96, W. OF STH 32/57, PLACE 100' W. OF STH 32/57 RAB INTERSECTION	MO 4-8	24"X12"	1	14	14						
	"	M 3-2	24"X12"	1	14	14						
	"	M 1-6	24"X24"	1	14	14						96
	"	MO 6-1	21"X21"	1	14	14						RIGHT
7	STH 96, AT STH 32/57 INTERSECTION, COVER EXISTING D1-1 SIGN AS SHOWN									1	1	COVER ENTIRE SIGN
8	STH 96, AT STH 32/57, PLACE ON RIGHT SHOULDER IN SE QUADRANT OF INTERSECTION	R 11-4	60"X30"	1	14	14	14	28				
	"	M 4-9R	30"X24"	1	14	14						
9	STH 96, E. OF STH 32/57, COVER EXISTING J4-1 SIGN AS SHOWN											COVER ENTIRE SIGN
10	STH 32/57, S. OF STH 96, PLACE RIGHT OF EXISTING J4-1 SIGN	MO 4-8	24"X12"	1	14	14						
	"	M 3-2	24"X12"	1	14	14						
	"	M 1-6	24"X24"	1	14	14						96
11	STH 32/57, S. OF STH 96, COVER EXISTING D1-3 SIGN AS SHOWN									1	1	COVER "DENMARK"
12	STH 32/57, S. OF STH 96, COVER EXISTING D1-62 SIGN AS SHOWN									1	1	COVER EXISTING D1-62 SIGN AS SHOWN
13	STH 32/57, S. OF STH 96, MODIFY EXISTING J1-1 SIGN AS SHOWN	M 4-8A	24"X18"	1	14	14						
14	STH 32/57, N. OF CTH Z, PLACE 750' N. OF CTH Z INTERSECTION	MO 4-8	24"X12"	1	14	14						
	"	M 3-2	24"X12"	1	14	14						
	"	M 1-6	24"X24"	1	14	14						96
	"	MO 5-1L	21"X21"	1	14	14						
15	STH 32/57, N. OF CTH Z, PLACE RIGHT OF EXISTING J13-1 AT CTH Z INTERSECTION	MO 4-8	24"X12"	1	14	14						
	"	M 3-2	24"X12"	1	14	14						
	"	M 1-6	24"X24"	1	14	14						96
	"	MO 6-1	21"X21"	1	14	14						LEFT
16	CTH Z, E. OF STH 32/57, PLACE RIGHT OF EXISTING R1-1 SIGN	MO 4-8	24"X12"	1	14	14						
	"	M 3-4	24"X12"	1	14	14						
	"	M 1-6	24"X24"	1	14	14						96
	"	MO 6-1	21"X21"	1	14	14						RIGHT
17	CTH Z, E. OF STH 32/57, PLACE 750' E. OF STH 32/57 INTERSECTION	MO 4-8	24"X12"	1	14	14						
	"	M 3-4	24"X12"	1	14	14						
	"	M 1-6	24"X24"	1	14	14						96
	"	MO 5-1R	21"X21"	1	14	14						
*ADDITIONAL QUANTITIES FOUND ELSEWHERE		PAGE SUBTOTALS				532	14	28	0		6	

3

TRAFFIC CONTROL DETOUR SUMMARY CONTINUED

SIGN NO.	LOCATION	SIGN CODE	SIZE W X H	NUMBER IN SERVICE	APPROX. SERVICE PERIOD 14 DAYS	* (643.0900) SIGNS DAYS	* (643.0420) BARRICADES TYPE III DAYS	* (643.0705) WARNING LIGHTS TYPE A DAYS	* (643.1050) SIGNS PCMS DAYS	NO. OF CYCLES	(643.0920) COVERING SIGNS TYPE II EACH	REMARKS
18	CTH Z, W. OF CTH PP, PLACE 150' W. OF CTH PP INTERSECTION	MO 4-8	24"X12"	1	14	14						
	"	M 3-2	24"X12"	1	14	14						
	"	M 1-6	24"X24"	1	14	14						96
	"	MO 6-1	21"X21"	1	14	14						AHEAD
19	CTH Z, E. OF CTH PP, PLACE 150' E. OF CTH PP INTERSECTION	MO 4-8	24"X12"	1	14	14						
	"	M 3-4	24"X12"	1	14	14						
	"	M 1-6	24"X24"	1	14	14						96
	"	MO 6-1	21"X21"	1	14	14						AHEAD
20	CTH Z, W. OF CTH W, PLACE 750' W. OF CTH W INTERSECTION	MO 4-8	24"X12"	1	14	14						
	"	M 3-2	24"X12"	1	14	14						
	"	M 1-6	24"X24"	1	14	14						96
	"	MO 5-1L	21"X21"	1	14	14						
21	CTH Z, AT CTH W, PLACE RIGHT OF EXISTING R1-1 SIGN	MO 4-8	24"X12"	1	14	14						
	"	M 3-2	24"X12"	1	14	14						
	"	M 1-6	24"X24"	1	14	14						96
	"	MO 6-1	21"X21"	1	14	14						LEFT
22	CTH W, AT CTH Z, PLACE RIGHT OF EXISTING R1-1 SIGN	MO 4-8	24"X12"	1	14	14						
	"	M 3-4	24"X12"	1	14	14						
	"	M 1-6	24"X24"	1	14	14						96
	"	MO 6-1	21"X21"	1	14	14						RIGHT
23	CTH W, N. OF CTH Z, PLACE 750' N. OF CTH Z INTERSECTION	MO 4-8	24"X12"	1	14	14						
	"	M 3-4	24"X12"	1	14	14						
	"	M 1-6	24"X24"	1	14	14						96
	"	MO 5-1R	21"X21"	1	14	14						
24	CTH W, S. OF CTH Z, PLACE 750' S. OF CTH Z INTERSECTION	MO 4-8	24"X12"	1	14	14						
	"	M 3-2	24"X12"	1	14	14						
	"	M 1-6	24"X24"	1	14	14						96
	"	MO 5-1R	21"X21"	1	14	14						
25	CTH W, AT CTH Z, PLACE RIGHT OF EXISTING R1-1 SIGN	MO 4-8	24"X12"	1	14	14						
	"	M 3-2	24"X12"	1	14	14						
	"	M 1-6	24"X24"	1	14	14						96
	"	MO 6-1	21"X21"	1	14	14						RIGHT
26	CTH Z, AT CTH W, PLACE RIGHT OF EXISTING R1-1 SIGN	MO 4-8	24"X12"	1	14	14						
	"	M 3-4	24"X12"	1	14	14						
	"	M 1-6	24"X24"	1	14	14						96
	"	MO 6-1	21"X21"	1	14	14						LEFT
27	CTH Z, E. OF CTH W, PLACE 750' E. OF CTH W INTERSECTION	MO 4-8	24"X12"	1	14	14						
	"	M 3-4	24"X12"	1	14	14						
	"	M 1-6	24"X24"	1	14	14						96
	"	MO 5-1L	21"X21"	1	14	14						
*ADDITIONAL QUANTITIES FOUND ELSEWHERE		PAGE SUBTOTALS				560	0	0	0		0	

FILE NAME : P:\905\93\00093473\CADD\SHEETSPLAN\030201-MQ BORDER.DWG
LAYOUT NAME - 030201-mq
PLOT DATE : 6/15/2021 11:44 AM PLOT BY : JASON DOLENS PLOT NAME .
WISDOT/CADDS SHEET 42

3

TRAFFIC CONTROL DETOUR SUMMARY CONTINUED

SIGN NO.	LOCATION	SIGN CODE	SIZE W X H	NUMBER IN SERVICE	APPROX. SERVICE PERIOD 14 DAYS	* (643.0900) SIGNS DAYS	* (643.0420) BARRICADES TYPE III DAYS	* (643.0705) WARNING LIGHTS TYPE A DAYS	* (643.1050) SIGNS PCMS DAYS	NO. OF CYCLES	(643.0920) COVERING SIGNS TYPE II EACH	REMARKS
28	CTH Z, W. OF CTH G, PLACE 750' W. OF CTH G INTERSECTION	MO 4-8	24"X12"	1	14	14						
	"	M 3-2	24"X12"	1	14	14						
	"	M 1-6	24"X24"	1	14	14						96
	"	MO 5-1L	21"X21"	1	14	14						
29	CTH Z, AT CTH G, PLACE RIGHT OF EXISTING R1-1 SIGN	M 4-8	24"X12"	1	14	14						
	"	M 3-2	24"X12"	1	14	14						
	"	M 1-6	24"X24"	1	14	14						96
	"	MO 6-1	21"X21"	1	14	14						LEFT
30	CTH G, AT CTH Z, PLACE RIGHT OF EXISTING R1-1 SIGN	M 4-8	24"X12"	1	14	14						
	"	M 3-4	24"X12"	1	14	14						
	"	M 1-6	24"X24"	1	14	14						96
	"	MO 6-1	21"X21"	1	14	14						RIGHT
31	CTH G, N. OF CTH Z, PLACE 750' N. OF CTH Z INTERSECTION	M 4-8	24"X12"	1	14	14						
	"	M 3-4	24"X12"	1	14	14						
	"	M 1-6	24"X24"	1	14	14						96
	"	MO 5-1R	21"X21"	1	14	14						
32	CTH G, S. OF STH 96, MODIFY EXISTING J1-1 SIGN AS SHOWN	M 4-8A	24"X18"	1	14	14						
33	CTH G, AT STH 96, MODIFY EXISTING J13-2 SIGN AS SHOWN	MO 6-1	21"X21"	1	14	14						AHEAD
34	CTH G, AT STH 96, MODIFY EXISTING J13-2 SIGN AS SHOWN	MO 6-1	21"X21"	1	14	14						AHEAD
35	STH 96, AT CTH G, PLACE IN ROADWAY ON WEST LEG OF INTERSECTION	R 11-4	60"X30"	1	14	14	14	28				
	"	M 4-9L	30"X24"	1	14	14						
36	STH 96, N. OF CTH G, COVER EXISTING D1-2 SIGN AS SHOWN									1	1	COVER "GREENLEAF"
37	STH 96, N. OF CTH G, MODIFY EXISTING J2-2 SIGN AS SHOWN	MO 4-8	24"X12"	1	14	14						
	"	MO 6-1	21"X21"	1	14	14						AHEAD
38	STH 96, N. OF CTH G, PLACE 1500' N. OF CTH G INTERSECTION	W 20-2A	48"X48"	1	14	14						
39	STH 96, W. OF CTH G, COVER EXISTING J4-1 SIGN AS SHOWN									1	1	COVER ENTIRE SIGN
40	STH 96, W. OF CTH G, PLACE ON RIGHT SHOULDER, FIELD DETERMINE LOCATION	PCMS		1					7			PLACE IN ADVANCE OF CLOSURE
41	STH 96, E. OF STH 32/57, PLACE ON RIGHT SHOULDER, FIELD DETERMINE LOCATION	PCMS		1					7			PLACE IN ADVANCE OF CLOSURE
*ADDITIONAL QUANTITIES FOUND ELSEWHERE		PAGE SUBTOTALS				336	14	28	14		2	
PROJECT 4075-39-71 TOTALS						**1,428**	**28**	**56**	**14**		**8**	

CONSTRUCTION STAKING

CATEGORY	STATION	TO STATION	LOCATION	(650.4500) SUBGRADE LF	(650.5000) BASE LF	(650.8000) RESURFACING REFERENCE LF	(650.9910.01) SUPPLEMENTAL CONTROL LS	(650.9920) SLOPE STAKES LF
0010	231+50	295+04	LT & RT	-	-	6,354	-	-
	295+26	748+18	LT & RT	-	-	45,292	-	-
	252+35	265+15	LT & RT	-	-	-	-	1,280
	267+22	267+54	LT & RT	32	32	-	-	32
	284+84	285+64	LT & RT	80	80	-	-	80
	291+25	295+04	LT & RT	-	-	-	-	379
	295+26	298+53	LT & RT	-	-	-	-	327
	301+93	302+64	LT & RT	71	71	-	-	71
	321+97	322+77	LT & RT	80	80	-	-	59
	325+67	326+39	LT & RT	72	72	-	-	52
	342+02	342+74	LT & RT	46	46	-	-	72
	360+47	361+43	LT & RT	28	28	-	-	96
	371+88	372+57	LT & RT	69	69	-	-	69
	379+90	380+52	LT & RT	62	62	-	-	62
	432+53	433+50	LT & RT	97	97	-	-	55
	454+37	455+03	LT & RT	66	66	-	-	66
	467+65	468+40	LT & RT	75	75	-	-	75
	483+35	484+08	LT & RT	37	37	-	-	73
	495+61	496+48	LT & RT	87	87	-	-	87
	505+07	505+75	LT & RT	68	68	-	-	68
	525+31	526+28	LT & RT	97	97	-	-	27
	551+98	555+71	LT & RT	-	-	-	-	373
	556+09	559+54	LT & RT	-	-	-	-	345
	559+69	562+44	LT & RT	-	-	-	-	275
	583+35	583+67	LT	32	32	-	-	-
	585+74	587+42	LT & RT	213	213	-	-	-
	586+60	586+72	RT	12	12	-	-	-
	603+47	603+99	LT & RT	37	37	-	-	52
	643+24	644+08	LT & RT	40	40	-	-	84
	661+51	662+47	LT & RT	75	75	-	-	96
	679+90	680+60	LT & RT	46	46	-	-	70
	700+45	701+44	LT & RT	47	47	-	-	99
	704+85	705+35	LT & RT	50	50	-	-	50
	708+50	708+97	LT & RT	36	36	-	-	47
	718+85	719+74	LT & RT	74	74	-	-	89
	727+92	728+35	LT & RT	26	26	-	-	43
	741+79	742+58	LT & RT	79	79	-	-	63
	745+29	745+39	LT	10	10	-	-	-
	746+21	746+65	LT & RT	44	44	-	-	-
	PROJECT 4075-39-71			-	-	-	1	-
	PROJECT 4075-39-71 TOTALS			**1,888**	**1,888**	**51,646**	**1**	**4,716**

HMA INCENTIVES SUMMARY TABLE

Station	To	Station	Location	HMA Pavement 4 LT 58-28 S 460.5224 Ton	PWL Density Incentive Ton*	PWL Air Voids Ton**	Incentive Density HMA Pavement Longitudinal Joints LF****	Remarks
231+50		295+04	LT & RT	1,661	1,661	--	12,708	LOWER LAYER, DRIVING LANES, 2 - 12 FOOT LANES
231+50		295+04	LT & RT	1,661	1,661	--	12,708	UPPER LAYER, DRIVING LANES, 2 - 12 FOOT LANES
231+50		295+04	LT & RT	840	--	840	--	LOWER LAYER, MAINLINE 4-FOOT SHOULDERS
231+50		295+04	LT & RT	840	--	840	--	UPPER LAYER, MAINLINE 4-FOOT SHOULDERS
295+26		587+66	LT & RT	7,069	7,069	--	58,480	LOWER LAYER, DRIVING LANES, 2 - 12 FOOT LANES
295+26		587+66	LT & RT	7,069	7,069	--	58,480	UPPER LAYER, DRIVING LANES, 2 - 12 FOOT LANES
295+26		587+66	LT & RT	3,171	--	3,171	--	LOWER LAYER, MAINLINE 4-FOOT SHOULDERS
295+26		587+66	LT & RT	3,171	--	3,171	--	UPPER LAYER, MAINLINE 4-FOOT SHOULDERS
587+66		748+18	LT & RT	4,195	4,195	--	32,104	UPPER LAYER, DRIVING LANES, 2 - 12 FOOT LANES
587+66		748+18	LT & RT	1,405	--	1,405	--	UPPER LAYER, MAINLINE 4-FOOT SHOULDERS
587+66		748+18	LT & RT	350	--	350	--	UPPER LAYER, MAINLINE 4-FOOT SHOULDERS, SHOULDER WIDENING

* Tonnage is eligible for Incentive Density PWL 460.2005 and Incentive Air Voids 460.2010.
** Tonage is eligible for Incentive Air Voids 460.2010.
*** Tonnage is eligible for QMP Density Incentive 460.2000. Wedging & leveling layers are excluded from density testing and density incentive.
**** LF is eligible for Incentive Density HMA Pavement Longitudinal Joints 460.2007

REMOVING CONCRETE BASES

CATEGORY	DESCRIPTION	(204.0195) REMOVING CONCRETE BASES EACH
STH 96/CTH W		
0010	STH 96/CTH W INTERSECTION	2
	PROJECT 4075-39-71 TOTAL	**2**

CONDUIT RIGID NONMETALLIC

CATEGORY	FROM	TO	(652.0225) CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH LF
STH 96/CTH W			
0010	PB1	DRAIN	20
	PB2	DRAIN	20
	PB3	DRAIN	20
	PROJECT 4075-39-71 TOTAL		**60**

CONCRETE CONTROL CABINET BASE

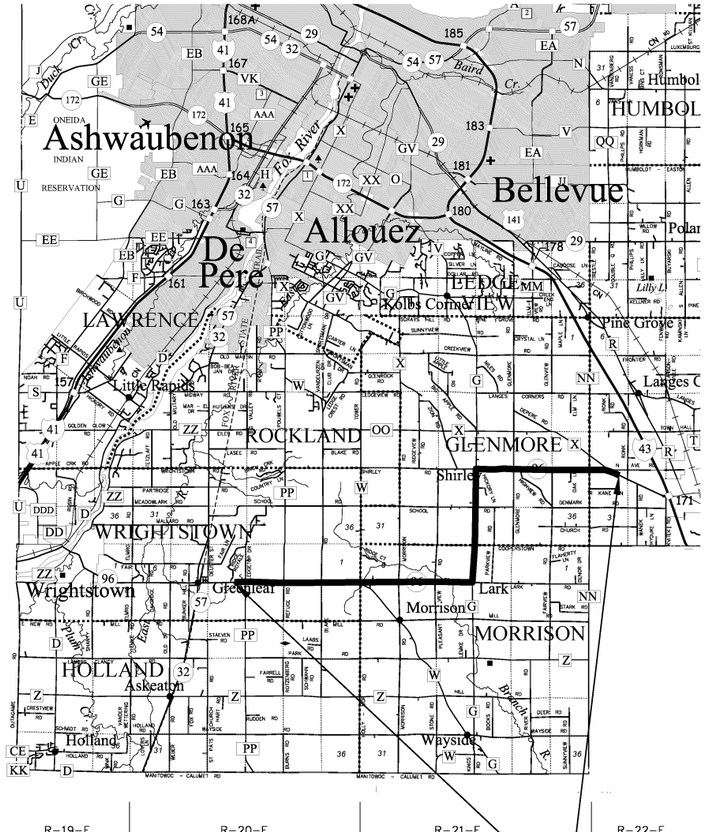
CATEGORY	DESCRIPTION	(654.0220) CONCRETE CONTROL CABINET BASES TYPE 10 EACH
STH 96/CTH W		
0010	STH 96/CTH W INTERSECTION	1
	PROJECT 4075-39-71 TOTAL	**1**

ELECTRIC SERVICE METER BREAKER PEDESTAL

CATEGORY	DESCRIPTION	(656.0200.01) ELECTRICAL SERVICE METER BREAKER PEDESTAL LS
STH 96/CTH W		
0010	STH 96/CTH W INTERSECTION (F05-0422)	1
	PROJECT 4075-39-71 TOTAL	**1**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
TRANSPORTATION PROJECT PLAT TITLE SHEET
4075-39-21
WRIGHTSTOWN - DENMARK
STH 32 - I 43
STH 96
BROWN COUNTY





GN

LAYOUT
SCALE 0 2.0 MI.

CONVENTIONAL SYMBOLS

- SECTION LINE
- QUARTER LINE
- SIXTEENTH LINE
- NEW REFERENCE LINE
- NEW R/W LINE
- EXISTING R/W OR HE LINE
- PROPERTY LINE
- LOT, TIE & OTHER MINOR LINES
- SLOPE INTERCEPT
- CORPORATE LIMITS
- UNDERGROUND FACILITY (COMMUNICATIONS, ELECTRIC, ETC) — W (TYPE)
- NEW R/W (FEE OR HE) (HATCHING VARIES BY OWNER)
- TEMPORARY LIMITED EASEMENT AREA
- EASEMENT AREA (PERMANENT LIMITED OR RESTRICTED DEVELOPMENT)
- TRANSMISSION STRUCTURES
- BUILDING — TO BE REMOVED
- BRIDGE
- SECTION CORNER SYMBOL (11 / 23 24 / 14 16 35)
- SECTION CORNER MONUMENT
- GEODETIC SURVEY MONUMENT
- SIXTEENTH CORNER MONUMENT
- SIGN
- OFF-PREMISE SIGN (#1-25)
- R/W MONUMENT (TO BE SET)
- NON-MONUMENTED R/W POINT
- FOUND IRON PIN (1-INCH UNLESS NOTED) — IP

	COMPENSABLE	NON-COMPENSABLE
ELECTRIC POLE		
TELEPHONE POLE		
PEDESTAL (LABEL TYPE) (TV, TEL, ELEC, ETC.)		

- ACCESS RESTRICTED BY ACQUISITION
- NO ACCESS (BY STATUTORY AUTHORITY)
- ACCESS RESTRICTED (BY PREVIOUS PROJECT OR CONTROL)
- NO ACCESS (NEW HIGHWAY)
- PARCEL NUMBER 25
- UTILITY NUMBER 40
- PARALLEL OFFSETS

CONVENTIONAL ABBREVIATIONS

ACCESS RIGHTS	AR	POINT OF INTERSECTION	PI
ACRES	AC	PROPERTY LINE	PL
AHEAD	AH	RECORDED AS	(100')
ALUMINUM	ALUM	REEL / IMAGE	R/I
AND OTHERS	ET AL	REFERENCE LINE	R/L
BACK	BK	REMAINING	REM
BLOCK	BLK	RESTRICTIVE DEVELOPMENT EASEMENT	RDE
CENTERLINE	C/L	RIGHT	RT
CERTIFIED SURVEY MAP	CSM	RIGHT OF WAY	R/W
CONCRETE	CONC	SECTION	SEC
COUNTY	CO	SEPTIC VENT	SEPV
COUNTY TRUNK HIGHWAY	CTH	SQUARE FEET	SF
DISTANCE	DIST	STATE TRUNK HIGHWAY	STH
CORNER	COR	STATION	STA
DOCUMENT NUMBER	DOC	TELEPHONE PEDESTAL	TP
EASEMENT	EASE	TEMPORARY LIMITED EASEMENT	TLE
EXISTING	EX	TRANSPORTATION PROJECT PLAT	TPP
GAS VALVE	GV	UNITED STATES HIGHWAY	USH
GRID NORTH	GN	VOLUME	V
HIGHWAY EASEMENT	HE		
IDENTIFICATION	ID		
LAND CONTRACT	LC		
LEFT	LT		
MONUMENT	MON		
NATIONAL GEODETIC SURVEY	NGS		
NUMBER	NO		
OUTLOT	OL		
PAGE	P		
POINT OF TANGENCY	PT		
PERMANENT LIMITED EASEMENT	PLE		
POINT OF BEGINNING	POB		
POINT OF CURVATURE	PC		
POINT OF COMPOUND CURVE	PCC		

CURVE DATA

LONG CHORD	LCH
LONG CHORD BEARING	LCB
RADIUS	R
DEGREE OF CURVE	D
CENTRAL ANGLE	Δ/DELTA
LENGTH OF CURVE	L
TANGENT	T
DIRECTION AHEAD	DA
DIRECTION BACK	DB

CONVENTIONAL UTILITY SYMBOLS

- W — WATER
- G — GAS
- T — TELEPHONE
- OH — OVERHEAD TRANSMISSION LINES
- E — ELECTRIC
- TV — CABLE TELEVISION
- FO — FIBER OPTIC
- SAN — SANITARY SEWER
- SS — STORM SEWER

THE NOTES,CONVENTIONAL SIGNS, AND ABBREVIATIONS ARE ASSOCIATED WITH EACH TRANSPORTATION PROJECT PLAT FOR PROJECT 4075-39-21.

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), BROWN COUNTY, NAD83(2011), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY 1" X 24" IRON PIPES), UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

ALL RIGHT-OF-WAY LINES DEPICTED IN THE NON-ACQUISITION AREAS ARE INTENDED TO RE-ESTABLISH EXISTING RIGHT-OF-WAY LINES AS DETERMINED FROM PREVIOUS PROJECTS, OTHER RECORDED DOCUMENTS, OR FROM CENTERLINE OF EXISTING PAVEMENTS.

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

DIMENSIONING FOR THE NEW RIGHT-OF-WAY IS MEASURED ALONG AND PERPENDICULAR TO THE NEW REFERENCE LINES.

A TEMPORARY LIMITED EASEMENT (TLE) IS A RIGHT FOR CONSTRUCTION PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON, 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 DESIRABLE. ALL (TLEs) ON THIS PLAT EXPIRE AT THE COMPLETION OF THE CONSTRUCTION PROJECT FOR WHICH THIS INSTRUMENT IS GIVEN.

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, AND SHOULD NOT BE USED AS A SUBSTITUTE FOR AN ACCURATE FIELD SURVEY.

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN GREEN BAY.

PARCEL IDENTIFICATION NUMBERS MAY NOT POINT TO ALL AREAS OF ACQUISITION, AS NOTED ON THE SCHEDULE OF LANDS & INTERESTS REQUIRED.

INFORMATION FOR THE BASIS OF EXISTING HIGHWAY RIGHT-OF-WAY POINTS OF REFERENCE AND ACCESS CONTROL ARE LISTED ON THE TPP DETAIL PAGES.

PROJECT NUMBER 4075-39-21 - 4.01
SHEET 2 OF 2
AMENDMENT NO:

FILE NAME : P:\90S\93\00093473\CADD\RW\STH 96 TPP.DWG
LAYOUT NAME: TPP Title
PLOT DATE : 9/16/2015 3:04 PM
PLOT BY : BRAD TISDALE
PLOT NAME : _____
APPRAISAL PLAT DATE : 06/10/2020

TRANSPORTATION PROJECT PLAT NO: 4075-39-21 - 4.01

A PART OF THE SE 1/4 OF THE SE 1/4 OF SECTION 4, T21N, R20E AND A PART OF THE NE 1/4 OF THE NE 1/4 OF SECTION 9, T21N, R20E, ALL IN THE TOWN OF WRIGHTSTOWN, BROWN COUNTY, WISCONSIN.

RELOCATION ORDER: STH 96 WRIGHTSTOWN - DENMARK, STH 32 - I 43, BROWN 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), 84.09, AND 84.30, 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.

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), BROWN COUNTY, NAD83 (2011) IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY 1"X24" IRON PIPES) UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

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

DIMENSIONING FOR THE NEW RIGHT-OF-WAY 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 GREEN BAY.

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF THE REGISTER OF DEEDS, IN BROWN COUNTY, AS SHEET 2 OF 2 OF THIS DOCUMENT.

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:
PREVIOUS PROJECT 4075 2 21 (4.6-4.7), CSM 1917 AS DOC. NO. 928525, AND CSM 7180 AS DOC. NO. 2151352.

FOUND IRON PINS ARE 1" IRON PIPES, UNLESS OTHERWISE STATED

ALIGNMENT INFORMATION

PI = STA 265+08.26
Y = 494,014.038
X = 84,599.937
Δ = 02°39'58" RT
D = 00°38'56"
T = 205.47'
L = 410.86'
R = 8,830.00'
LC = 410.83'
LCB = N88°52'22"E
PC = 263+02.79
PT = 267+13.66

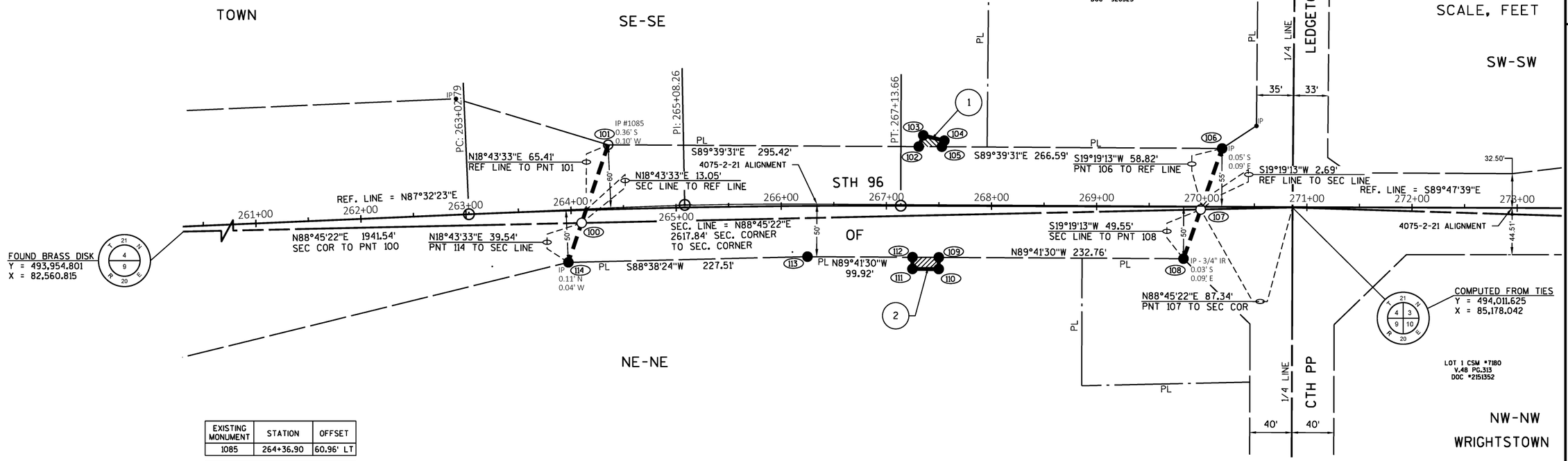
SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W SQ FT REQUIRED			TLE SQ FT
			NEW	EXISTING	TOTAL	
1	E & J REALTY LLC	FEE	182	--	182	--
2	JAMES K. LEICK AND CHRISTINE D. LEICK	FEE	277	--	277	--

2906511
VOLUME:
PAGE: 2
CHERYL BERKEN
BROWN COUNTY
REGISTER OF DEEDS
GREEN BAY, WI
RECORDED ON
06/12/2020 01:06 PM
REC FEE: 25.00
PAGES: 2
*The above recording Information verifies that this document has been electronically recorded and returned to the submitter**

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 4075-39-21 - 4.01
SHEET 1 OF 2
AMENDMENT NO:___



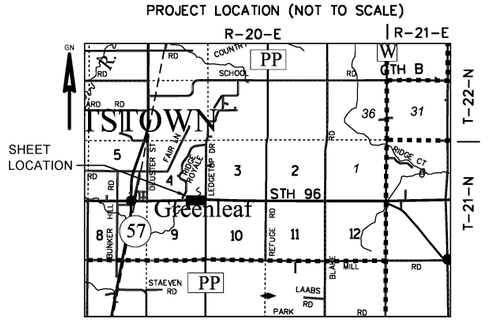
EXISTING MONUMENT	STATION	OFFSET
1085	264+36.90	60.96' LT

R/W POINT	STATION	OFFSET
100	264+09.74	12.22' RT
101*	264+37.01	61.32' LT
102	267+30.56	56.26' LT
103	267+34.84	67.00' LT
104	267+54.84	62.00' LT
105	267+52.53	56.20' LT
106	270+19.13	55.57' LT
107	269+98.99	2.55' RT
108	269+82.76	49.36' RT
109	267+50.00	48.94' RT
110	267+50.00	60.00' RT
111	267+25.00	60.00' RT
112	267+25.00	48.90' RT
113	266+24.59	48.27' RT
114	263+95.82	49.25' RT

* - NO IRON SET DUE TO CLOSE PROXIMITY TO EXISTING MONUMENT. USE R/W POINT FOR ULTIMATE R/W.

COURSE	BEARING	DISTANCE
100-107	N88°45'22"E	588.96'
102-103	N21°54'50"E	11.56'
103-104	S75°45'29"E	20.62
104-105	S21°51'59"W	6.24'
109-110	S00°12'21"W	11.06'
110-111	N89°47'39"W	25.00'
111-112	N00°12'21"E	11.10'

PROJECT LOCATION (NOT TO SCALE)



MSA
ENGINEERING | ARCHITECTURE | SURVEYING
FUNDING | PLANNING | ENVIRONMENTAL
1702 Pankratz St Madison, WI 53704
(608) 242-7779 www.msa-ps.com
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I, BRADLEY L. TISDALE, PROFESSIONAL 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 OF TRANSPORTATION, I HAVE SURVEYED AND MAPPED THIS TRANSPORTATION PROJECT 4075-39-21 - 4.01 AND SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

SIGNATURE: _____ DATE: 06/10/20
PRINT NAME: BRADLEY L. TISDALE
REGISTRATION NUMBER: S-2824

WISCONSIN BRADLEY L. TISDALE S-2824 WAUNAKEE WI LAND SURVEYOR

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

SIGNATURE: _____ DATE: 06/12/20
PRINT NAME: CURT VAN EREM

FILE NAME : P:\90S\93\00093473\CADD\RW\STH 96 TPP.DWG
APPRAISAL PLAT DATE : 06/12/2020
PLOT DATE : 6/12/2020 10:18 AM
PLOT BY : BRAD TISDALE
PLOT NAME :
PLOT SCALE : ##########

TRANSPORTATION PROJECT PLAT NO: 4075-39-21 - 4.02

PART OF THE SW 1/4 OF THE SW 1/4 OF SECTION 3, T21N, R21E IN THE TOWN OF MORRISON, BROWN COUNTY, WISCONSIN.

RELOCATION ORDER: STH 96 WRIGHTSTOWN - DENMARK, STH 32 - I 43, BROWN 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), 84.09, AND 84.30, 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.

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), BROWN COUNTY, NAD83 (2011) IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY 1"X24" IRON PIPES) UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

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

DIMENSIONING FOR THE NEW RIGHT-OF-WAY IS MEASURED ALONG AND PERPENDICULAR TO THE NEW REFERENCE LINES.

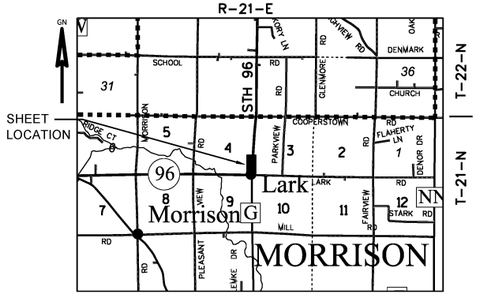
FOR THE LATEST ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN GREEN BAY.

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF THE REGISTER OF DEEDS, IN BROWN COUNTY, AS SHEET 2 OF 2 OF DOCUMENT *2906511.

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:
PREVIOUS PROJECT 4095 02 21 (4.3), CSM 3553 RECORDED AS DOC. NO. 1162428, AND PLATS OF SURVEY AS SHOWN.

FOUND IRON PINS ARE 1" IRON PIPES, UNLESS OTHERWISE STATED

PROJECT LOCATION (NOT TO SCALE)

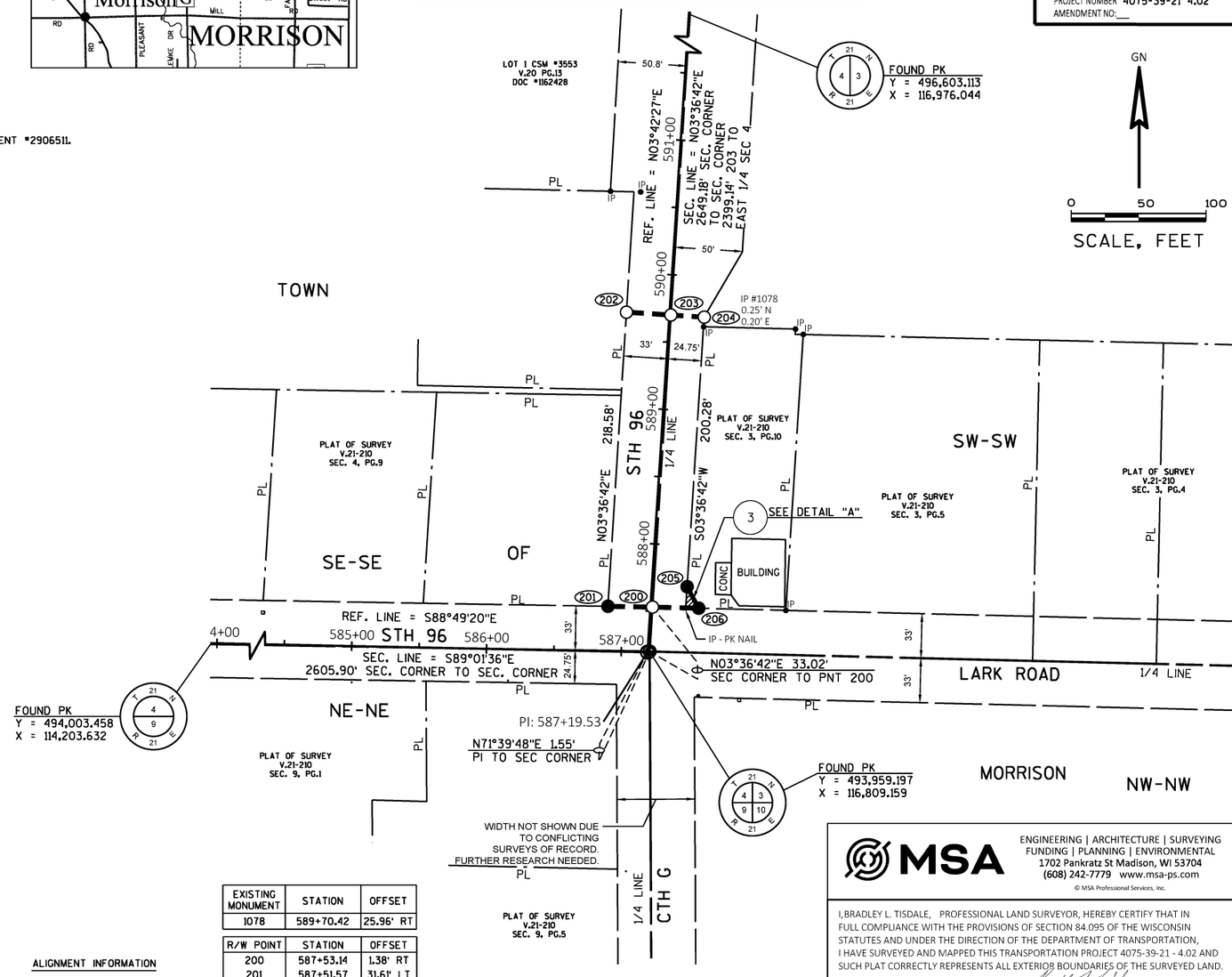


SCHEDULE OF LANDS & INTERESTS REQUIRED						
			OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.			
PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W SQ FT REQUIRED			TLE SQ FT
			NEW	EXISTING	TOTAL	
3	FRANK A. WESSELY, ALICE HERBST, WILLIAM OTTO AND MAJORIE WESSELY, ALL AS TENANTS IN COMMON	FEE	75	--	75	--

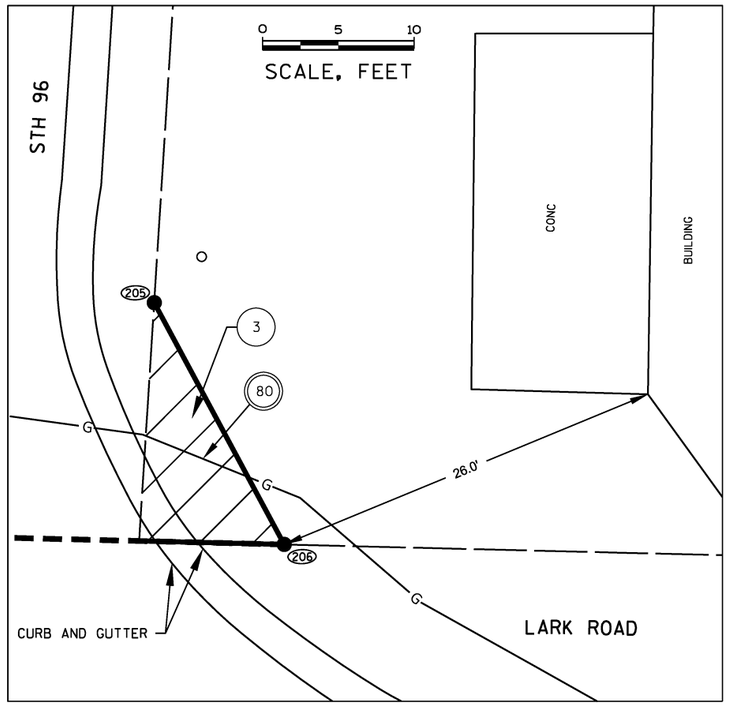
UTILITY INTERESTS REQUIRED		
UTILITY NUMBER	OWNER(S)	INTEREST REQUIRED
80	WISCONSIN PUBLIC SERVICE (GAS) - NO EASEMENT OF RECORD	RELEASE OF RIGHTS

2907353
VOLUME:
PAGE:
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BROWN COUNTY
REGISTER OF DEEDS
GREEN BAY, WI
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RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 4075-39-21 4.02
AMENDMENT NO:___



DETAIL "A"



EXISTING MONUMENT	STATION	OFFSET
1078	589+70.42	25.96' RT

R/W POINT	STATION	OFFSET
200	587+53.14	1.38' RT
201	587+51.57	31.61' LT
202	589+70.16	31.98' LT
203	589+70.16	1.02' RT
204*	589+70.16	25.77' RT
205	587+69.88	26.11' RT
206	587+54.52	35.70' RT

* - NO IRON SET DUE TO CLOSE PROXIMITY TO EXISTING MONUMENT. USE R/W POINT FOR ULTIMATE R/W.

ALIGNMENT INFORMATION

PI = STA 587+19.53
Y = 493,958.709
X = 116,807.686
Δ = 87°28'13" LT

PI = STA 596+88.58
Y = 494,925.732
X = 116,870.347

COURSE	BEARING	DISTANCE
200-REF LINE	N88°36'15"W	1.38'
REF LINE-201	N89°01'05"W	31.65'
202-REF LINE	S86°17'33"E	31.98'
REF LINE-203	S86°17'33"E	1.02'
200-203	N03°36'42"E	217.02'
203-204	S86°17'33"E	24.75'
205-206	S28°15'52"E	18.11'
206-200	N88°36'15"W	34.34'

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I, BRADLEY L. TISDALE, PROFESSIONAL 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 OF TRANSPORTATION, I HAVE SURVEYED AND MAPPED THIS TRANSPORTATION PROJECT 4075-39-21 - 4.02 AND SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

SIGNATURE: _____ DATE: 06/12/20
PRINT NAME: BRADLEY L. TISDALE
REGISTRATION NUMBER: S-2824

WISCONSIN BRADLEY L TISDALE S-2824 WAUNAKEE WI LAND SURVEYOR

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

SIGNATURE: _____ DATE: 06/17/20
PRINT NAME: CURT VAN EREM

FILE NAME : P:\90S\93\00093473\CADD\RW\STH 96 TPP.DWG
APPRAISAL PLAT DATE : 06/12/2020
PLOT DATE : 6/16/2020 3:33 PM PLOT BY : BRAD TISDALE PLOT NAME : PLOT SCALE : ##########
4075-39-21 4.02

TRANSPORTATION PROJECT PLAT NO: 4075-39-21 - 4.03

PART OF LOT 1 OF CSM 6705 IN VOL 45, PAGE 28 AS DOCUMENT NO. 1956814 LOCATED IN AND INCLUDING PART OF THE NE 1/4 OF THE NW 1/4 AND PART OF THE NW 1/4 OF THE NE 1/4 OF SECTION 27, T22N, R21E, AND PART OF THE SE 1/4 OF THE SW 1/4 AND PART OF THE SW 1/4 OF THE SE 1/4 OF SECTION 22, T22N, R21E, ALL IN THE TOWN OF GLENMORE, BROWN COUNTY, WISCONSIN.

RELOCATION ORDER: STH 96 WRIGHTSTOWN - DENMARK, STH 32 - I 43, BROWN 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), 84.09, AND 84.30, 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.

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), BROWN COUNTY, NAD83 (2011) IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY 1"X24" IRON PIPES) UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

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

DIMENSIONING FOR THE NEW RIGHT-OF-WAY 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 GREEN BAY.

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF THE REGISTER OF DEEDS, IN BROWN COUNTY, AS SHEET 2 OF 2 OF DOCUMENT #2906511.

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:
PREVIOUS PROJECT S-0387(6), CSM 1900 AS DOC. NO. 926815, AND CSM 6705 AS DOC. NO. 1956814.

FOUND IRON PINS ARE 1" IRON PIPES, UNLESS OTHERWISE STATED

COURSE	BEARING	DISTANCE
301-302	S89°57'54"E	25.85'
302-303	N00°08'06"E	12.84'
303-304	S89°51'54"E	93.14'
304-305	S00°03'44"E	12.68'
308-309	N02°43'35"W	9.62'
309-310	N87°16'25"E	72.58'
310-311	S02°43'35"E	9.74'
311-312	N87°22'06"E	28.70'
314-315	S87°22'06"W	34.50'
315-316	S02°43'35"E	8.77'
316-317	S87°16'25"W	45.75'
317-318	N02°43'35"W	8.84'
321-322	S00°03'44"E	14.68'
322-324	S89°56'16"W	101.85'
324-325	N00°08'06"E	14.86'
325-326	N89°57'54"W	60.34'

ALIGNMENT INFORMATION

PI = STA 759+99.97
Y = 509,732.714
X = 118,835.903
Δ = 00°11'50" LT

PI = STA 769+70.91
Y = 509,733.771
X = 119,806.842
Δ = 02°39'50" LT
D = 00°30'00"
T = 266.46'
L = 532.82'
R = 11,460.00'
LC = 532.77'
LCB = N88°36'20"E
PC = 767+04.45
PT = 772+37.27

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W SQ FT REQUIRED			TLE SQ FT
			NEW	EXISTING	TOTAL	
4	PAUL O. OSSMANN, DONALD E. OSSMANN, AND THEODORE R. OSSMANN	FEE	2923	--	2923	--
6	SCOTT R. OSSMANN	FEE	472	--	472	--
7	BELGIOIOSO CHEESE INC.	FEE	403	--	403	--

UTILITY INTERESTS REQUIRED

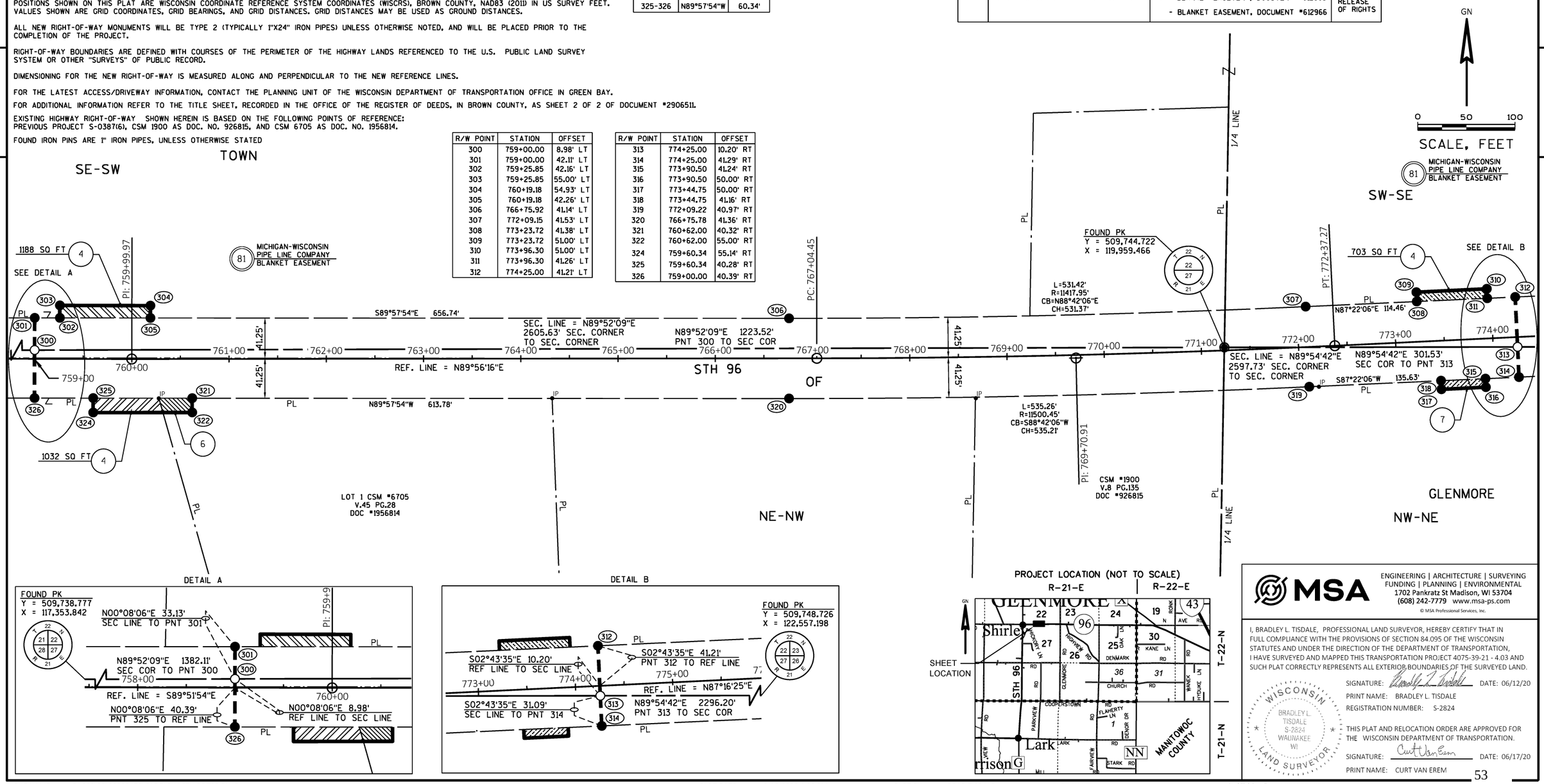
UTILITY NUMBER	OWNER(S)	PARCEL AFFECTED	INTEREST REQUIRED
81	MICHIGAN-WISCONSIN PIPE LINE COMPANY	4 - BLANKET EASEMENT, DOCUMENT #612965 - BLANKET EASEMENT, DOCUMENT #612966	RELEASE OF RIGHTS

2907354
VOLUME:
PAGE:
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RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 4075-39-21 4.03
AMENDMENT NO:___

R/W POINT	STATION	OFFSET
300	759+00.00	8.98' LT
301	759+00.00	42.11' LT
302	759+25.85	42.16' LT
303	759+25.85	55.00' LT
304	760+19.18	54.93' LT
305	760+19.18	42.26' LT
306	766+75.92	41.14' LT
307	772+09.15	41.53' LT
308	773+23.72	41.38' LT
309	773+23.72	51.00' LT
310	773+96.30	51.00' LT
311	773+96.30	41.26' LT
312	774+25.00	41.21' LT

R/W POINT	STATION	OFFSET
313	774+25.00	10.20' RT
314	774+25.00	41.29' RT
315	773+90.50	41.24' RT
316	773+90.50	50.00' RT
317	773+44.75	50.00' RT
318	773+44.75	41.16' RT
319	772+09.22	40.97' RT
320	766+75.78	41.36' RT
321	760+62.00	40.32' RT
322	760+62.00	55.00' RT
324	759+60.34	55.14' RT
325	759+60.34	40.28' RT
326	759+00.00	40.39' RT



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I, BRADLEY L. TISDALE, PROFESSIONAL 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 OF TRANSPORTATION, I HAVE SURVEYED AND MAPPED THIS TRANSPORTATION PROJECT 4075-39-21 - 4.03 AND SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

SIGNATURE: [signature] DATE: 06/12/20
PRINT NAME: BRADLEY L. TISDALE
REGISTRATION NUMBER: S-2824

WISCONSIN BRADLEY L. TISDALE S-2824 WAUNAKEE WI LAND SURVEYOR

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

SIGNATURE: [signature] DATE: 06/17/20
PRINT NAME: CURT VAN EREM

FILE NAME : P:\90S\93\00093473\CADD\RW\STH 96 TPP.DWG
APPRAISAL PLAT DATE : 06/12/2020
PLOT DATE : 6/16/2020 4:08 PM
PLOT BY : BRAD TISDALE
PLOT NAME :
PLOT SCALE : ##########

4075-39-21 4.03

TRANSPORTATION PROJECT PLAT NO: 4075-39-21 - 4.04

PART OF THE SE 1/4 OF THE SW 1/4 OF SECTION 23, T22N, R21E, AND A PART OF THE NE 1/4 OF THE NW 1/4 OF SECTION 26, T22N, R21E, ALL IN THE TOWN OF GLENMORE, BROWN COUNTY, WISCONSIN.

RELOCATION ORDER: STH 96 WRIGHTSTOWN - DENMARK, STH 32 - I 43, BROWN 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), 84.09, AND 84.30, 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.

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), BROWN COUNTY, NAD83 (2011) IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY 1"X24" IRON PIPES) UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

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

DIMENSIONING FOR THE NEW RIGHT-OF-WAY 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 GREEN BAY.

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF THE REGISTER OF DEEDS, IN BROWN COUNTY, AS SHEET 2 OF 2 OF DOCUMENT #2906511.

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:
PREVIOUS PROJECT S-0387 (6).

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.

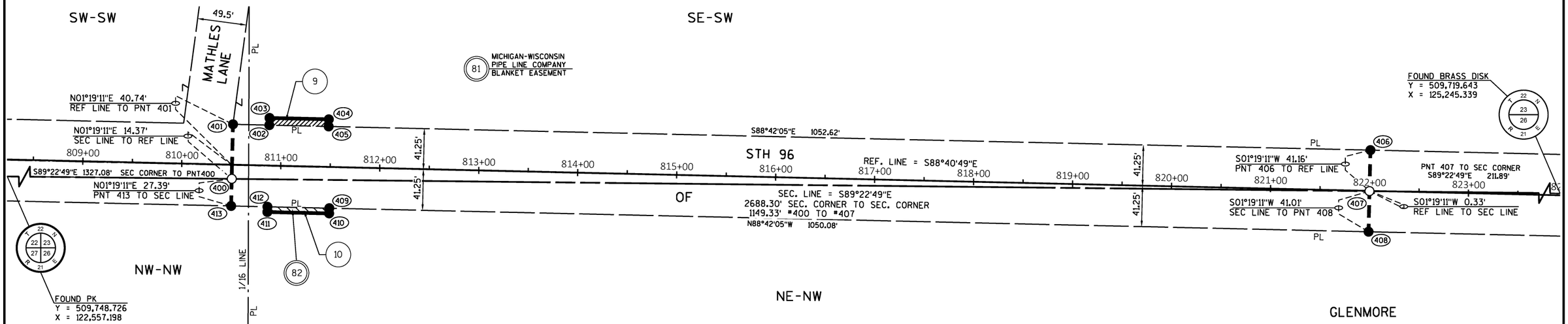
PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W SQ FT REQUIRED			TLE SQ FT
			NEW	EXISTING	TOTAL	
9	DANIEL L. MATHIES	FEE	434	--	434	--
10	RODNEY R. LEITERMAN AND SUSAN A. LEITERMAN	FEE	329	--	329	--

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	OWNER(S)	PARCEL AFFECTED	INTEREST REQUIRED
81	MICHIGAN-WISCONSIN PIPE LINE COMPANY	9 - BLANKET EASEMENT, DOCUMENT #612967	RELEASE OF RIGHTS
82	GENERAL TELEPHONE COMPANY	10 - DOCUMENT #702284	RELEASE OF RIGHTS

2907355
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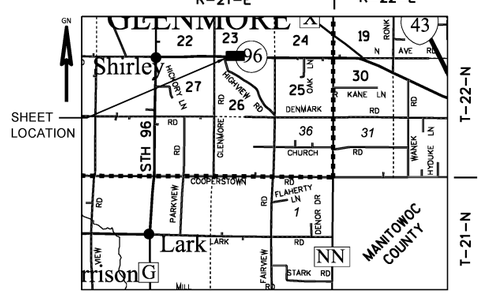
RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 4075-39-21 4.04
AMENDMENT NO:



R/W POINT	STATION	OFFSET
400	810+50.76	14.37' RT
401	810+50.76	40.74' LT
402	810+87.42	40.75' LT
403	810+87.42	48.00' LT
404	811+47.38	48.00' LT
405	811+47.38	40.78' LT
406	822+00.00	41.16' LT
407	822+00.00	0.33' RT
408	822+00.00	41.34' RT
409	811+49.93	41.73' RT
410	811+49.93	47.00' RT
411	810+87.44	47.00' RT
412	810+87.44	41.75' RT
413	810+50.76	41.76' RT

COURSE	BEARING	DISTANCE
401-402	S88°42'05"E	36.66'
402-403	NO1°19'11"E	7.25'
403-404	S88°40'49"E	59.95'
404-405	SO1°19'11"W	7.22'
409-410	SO1°19'11"W	5.28'
410-411	N88°40'49"W	62.49'
411-412	NO1°19'11"E	5.25'
412-413	N88°42'05"W	36.68'

PROJECT LOCATION (NOT TO SCALE)



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I, BRADLEY L. TISDALE, PROFESSIONAL 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 OF TRANSPORTATION, I HAVE SURVEYED AND MAPPED THIS TRANSPORTATION PROJECT 4075-39-21 - 4.04 AND SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

SIGNATURE: Bradley L Tisdale DATE: 06/12/20
PRINT NAME: BRADLEY L. TISDALE
REGISTRATION NUMBER: S-2824

BRADLEY L. TISDALE S-2824 WAUNAKEE WI — WISCONSIN — LAND SURVEYOR

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

SIGNATURE: Curt Van Erem DATE: 06/17/20
PRINT NAME: CURT VAN EREM

FILE NAME : P:\905\93\00093473\CADD\RW\STH 96 TPP.DWG
APPRAISAL PLAT DATE : 06/12/2020
PLOT DATE : 6/16/2020 3:39 PM
PLOT BY : BRAD TISDALE
PLOT NAME :
PLOT SCALE : ##########

TRANSPORTATION PROJECT PLAT NO: 4075-39-21 - 4.05

PART OF THE SW 1/4 OF THE SW 1/4 OF SECTION 24, T22N, R21E, TOWN OF GLENMORE, BROWN COUNTY, WISCONSIN.

RELOCATION ORDER: STH 96 WRIGHTSTOWN - DENMARK, STH 32 - I 43, BROWN 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), 84.09, AND 84.30, 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.

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), BROWN COUNTY, NAD83 (2011) IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY 1"X24" IRON PIPES) UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

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

DIMENSIONING FOR THE NEW RIGHT-OF-WAY 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 GREEN BAY.

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF THE REGISTER OF DEEDS, IN BROWN COUNTY, AS SHEET 2 OF 2 OF DOCUMENT *2906511.

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE: PREVIOUS PROJECT S-0387 (6).

FOUND IRON PINS ARE 1" IRON PIPES, UNLESS OTHERWISE STATED

ALIGNMENT INFORMATION

PI = STA 855+00.00
Y = 506,660.776
X = 128,332.874
Δ = 00°22'31" LT

PI = STA 859+36.96
Y = 509,658.772
X = 128,769.827
Δ = 00°01'36" LT

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.

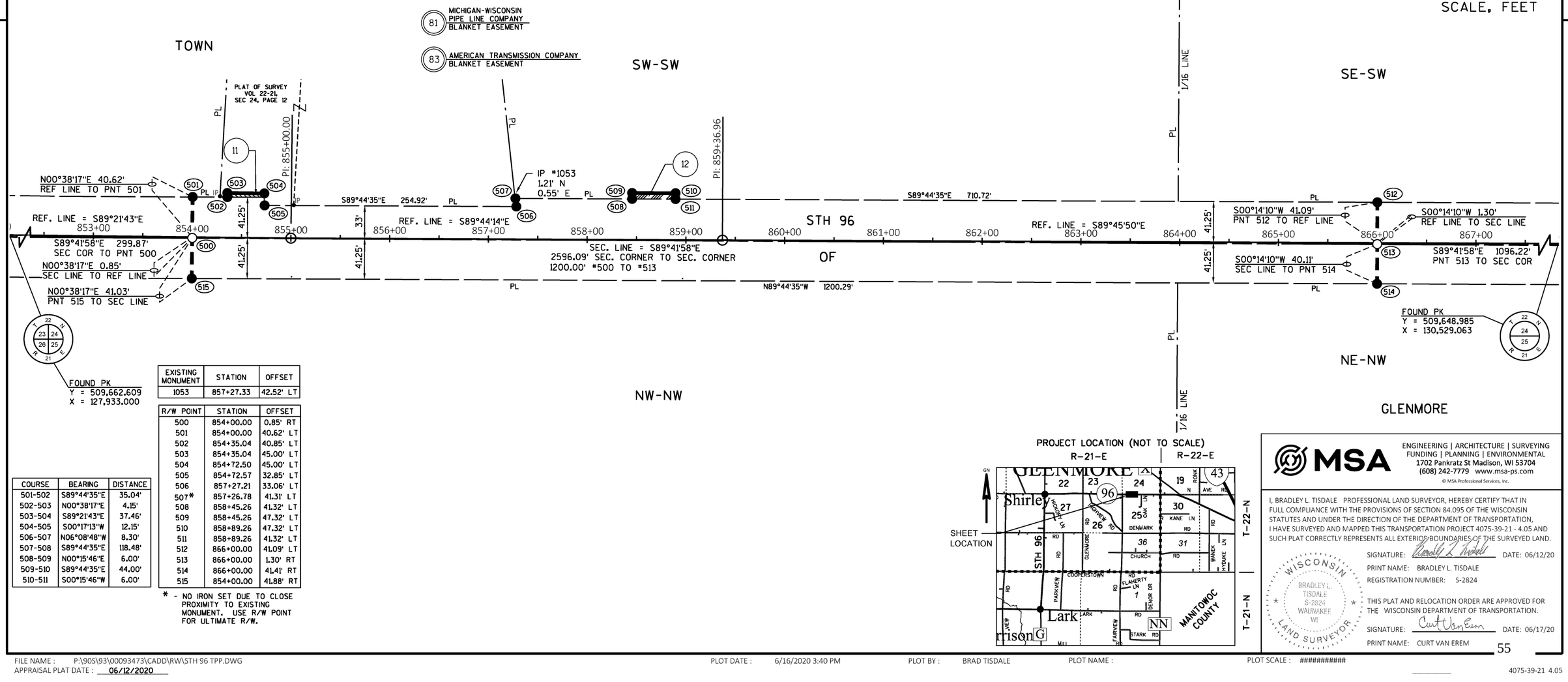
PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W SQ FT REQUIRED			TLE SQ FT
			NEW	EXISTING	TOTAL	
11	PAUL F. AND TERRY R. DESOTELLE REVOCABLE TRUST	FEE	151	--	151	--
12	THOMAS A. RONK AND PEGGY R. RONK	FEE	264	--	264	--

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	OWNER(S)	PARCEL AFFECTED	INTEREST REQUIRED
81	MICHIGAN-WISCONSIN PIPE LINE COMPANY	11 - BLANKET EASEMENT, DOCUMENT *612972 12 - BLANKET EASEMENT, DOCUMENT *612972	RELEASE OF RIGHTS
83	AMERICAN TRANSMISSION COMPANY	11 - WPS BLANKET EASEMENT, DOCUMENT *258682, ASSIGNEMENT TO ATC, DOCUMENT *1788439 12 - WPS BLANKET EASEMENT, DOCUMENT *258682, ASSIGNEMENT TO ATC, DOCUMENT *1788439	RELEASE OF RIGHTS

2907356
VOLUME:
PAGE:
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RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 4075-39-21 4.05
AMENDMENT NO:___



EXISTING MONUMENT	STATION	OFFSET
1053	857+27.33	42.52' LT

R/W POINT	STATION	OFFSET
500	854+00.00	0.85' RT
501	854+00.00	40.62' LT
502	854+35.04	40.85' LT
503	854+35.04	45.00' LT
504	854+72.50	45.00' LT
505	854+72.57	32.85' LT
506	857+27.21	33.06' LT
507*	857+26.78	41.31' LT
508	858+45.26	41.32' LT
509	858+45.26	47.32' LT
510	858+89.26	47.32' LT
511	858+89.26	41.32' LT
512	866+00.00	41.09' LT
513	866+00.00	1.30' RT
514	866+00.00	41.41' RT
515	854+00.00	41.88' RT

COURSE	BEARING	DISTANCE
501-502	S89°44'35"E	35.04'
502-503	N00°38'17"E	4.15'
503-504	S89°21'43"E	37.46'
504-505	S00°17'13"W	12.15'
506-507	N06°08'48"W	8.30'
507-508	S89°44'35"E	118.48'
508-509	N00°15'46"E	6.00'
509-510	S89°44'35"E	44.00'
510-511	S00°15'46"W	6.00'

* - NO IRON SET DUE TO CLOSE PROXIMITY TO EXISTING MONUMENT. USE R/W POINT FOR ULTIMATE R/W.

PROJECT LOCATION (NOT TO SCALE)

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1702 Pankratz St Madison, WI 53704
(608) 242-7779 www.msa-ps.com

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I, BRADLEY L. TISDALE PROFESSIONAL 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 OF TRANSPORTATION, I HAVE SURVEYED AND MAPPED THIS TRANSPORTATION PROJECT 4075-39-21 - 4.05 AND SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

SIGNATURE: Bradley L Tisdale DATE: 06/12/20
PRINT NAME: BRADLEY L. TISDALE
REGISTRATION NUMBER: S-2824

WISCONSIN BRADLEY L TISDALE S-2824 WAUNAKEE WI LAND SURVEYOR

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

SIGNATURE: Curt Van Erem DATE: 06/17/20
PRINT NAME: CURT VAN EREM

GN
0 50 100
SCALE, FEET

FILE NAME : P:\90S\93\00093473\CADD\RW\STH 96 TPP.DWG
APPRAISAL PLAT DATE : 06/12/2020
PLOT DATE : 6/16/2020 3:40 PM
PLOT BY : BRAD TISDALE
PLOT NAME :
PLOT SCALE : ##########

4075-39-21 4.05

TRANSPORTATION PROJECT PLAT NO: 4075-39-21 - 4.06

PART OF THE SW 1/4 OF THE SE 1/4 OF SECTION 24, T22N, R21E, AND PART OF THE NW 1/4 OF THE NE 1/4 OF SECTION 25, T22N, R21E, ALL IN THE TOWN OF GLENMORE, BROWN COUNTY, WISCONSIN.

RELOCATION ORDER: STH 96 WRIGHTSTOWN - DENMARK, STH 32 - I 43, BROWN 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), 84.09, AND 84.30, 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.

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), BROWN COUNTY, NAD83 (2011) IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY 1"X24" IRON PIPES) UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

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

DIMENSIONING FOR THE NEW RIGHT-OF-WAY 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 GREEN BAY.

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF THE REGISTER OF DEEDS, IN BROWN COUNTY, AS SHEET 2 OF 2 OF DOCUMENT #2906511.

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE: PREVIOUS PROJECT S-0387(6), CSM 2222 AS DOC. NO. 958991, AND CSM 2996 AS DOC. NO. 1064360.

FOUND IRON PINS ARE 1" IRON PIPES, UNLESS OTHERWISE STATED

ALIGNMENT INFORMATION

PI = STA 883+98.77
Y = 509,648.622
X = 131,231.611
Δ = 00°01'59" RT

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W SQ FT REQUIRED			TLE SQ FT
			NEW	EXISTING	TOTAL	
13	RANDY LEITERMAN	FEE	180	--	180	--
14	PAUL L. SCHAETZ	FEE	119	--	119	--

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	OWNER(S)	PARCEL AFFECTED	INTEREST REQUIRED
81	MICHIGAN-WISCONSIN PIPE LINE COMPANY	13 - BLANKET EASEMENT, DOCUMENT #612970	RELEASE OF RIGHTS
82	GENERAL TELEPHONE COMPANY	14 - DOCUMENT #702286	RELEASE OF RIGHTS

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PROJECT NUMBER 4075-39-21 4.06
AMENDMENT NO:___

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SCALE, FEET

TOWN

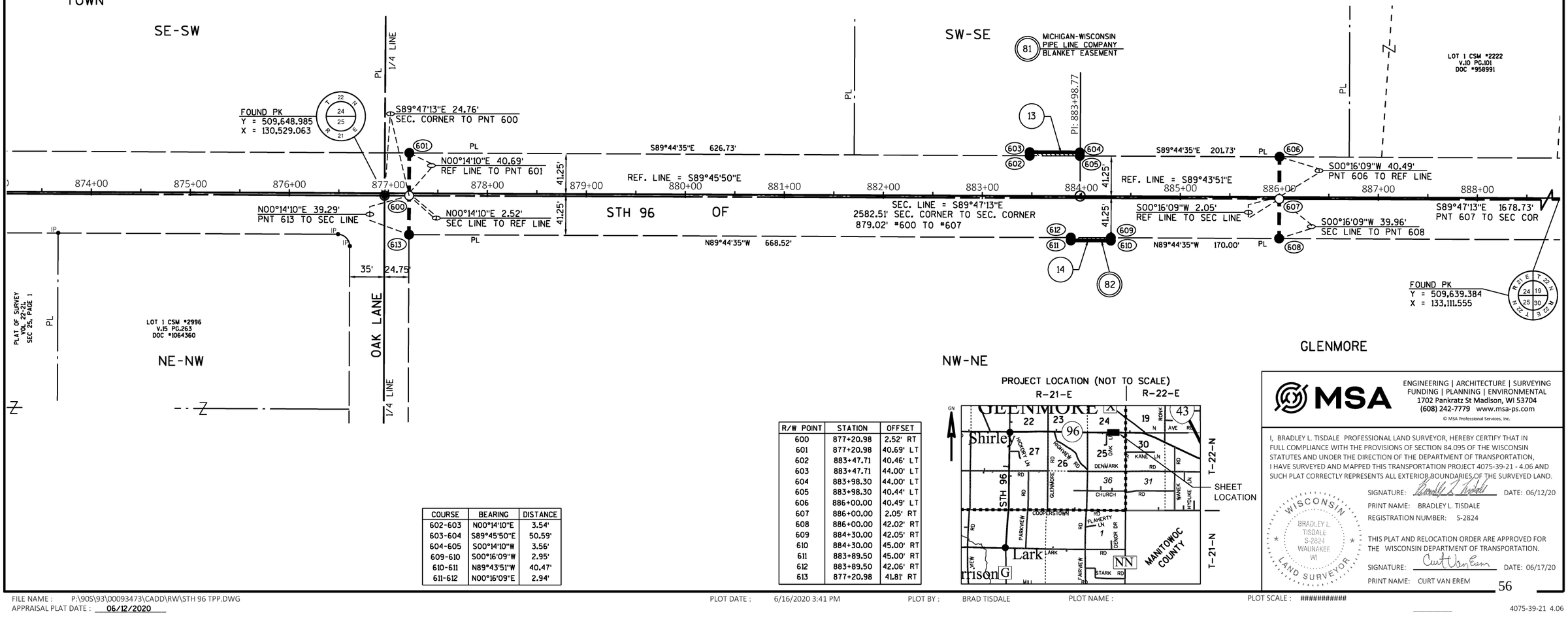
SE-SW

NE-NW

SW-SE

NW-NE

GLENMORE



COURSE	BEARING	DISTANCE
602-603	N00°14'10"E	3.54'
603-604	S89°45'50"E	50.59'
604-605	S00°14'10"W	3.56'
609-610	S00°16'09"W	2.95'
610-611	N89°43'51"W	40.47'
611-612	N00°16'09"E	2.94'

R/W POINT	STATION	OFFSET
600	877+20.98	2.52' RT
601	877+20.98	40.69' LT
602	883+47.71	40.46' LT
603	883+47.71	44.00' LT
604	883+98.30	44.00' LT
605	883+98.30	40.44' LT
606	886+00.00	40.49' LT
607	886+00.00	2.05' RT
608	886+00.00	42.02' RT
609	884+30.00	42.05' RT
610	884+30.00	45.00' RT
611	883+89.50	45.00' RT
612	883+89.50	42.06' RT
613	877+20.98	41.81' RT

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I, BRADLEY L. TISDALE PROFESSIONAL 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 OF TRANSPORTATION, I HAVE SURVEYED AND MAPPED THIS TRANSPORTATION PROJECT 4075-39-21 - 4.06 AND SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

SIGNATURE: Bradley L. Tisdale DATE: 06/12/20
PRINT NAME: BRADLEY L. TISDALE
REGISTRATION NUMBER: S-2824

WISCONSIN BRADLEY L. TISDALE S-2824 WAUNAKEE WI LAND SURVEYOR

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

SIGNATURE: Curt Van Erem DATE: 06/17/20
PRINT NAME: CURT VAN EREM

FILE NAME : P:\90S\93\00093473\CADD\RW\STH 96 TPP.DWG
APPRAISAL PLAT DATE : 06/12/2020
PLOT DATE : 6/16/2020 3:41 PM
PLOT BY : BRAD TISDALE
PLOT NAME :
PLOT SCALE : ##########

TRANSPORTATION PROJECT PLAT NO: 4075-39-21 - 4.07

PART OF THE NW 1/4 OF THE NE 1/4 OF SECTION 30, T22N, R22E, TOWN OF NEW DENMARK, BROWN COUNTY, WISCONSIN.

RELOCATION ORDER: STH 96 WRIGHTSTOWN - DENMARK, STH 32 - I 43, BROWN 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), 84.09, AND 84.30, 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.

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), BROWN COUNTY, NAD83 (2011) IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY 1"X24" IRON PIPES) UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

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

DIMENSIONING FOR THE NEW RIGHT-OF-WAY 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 GREEN BAY.

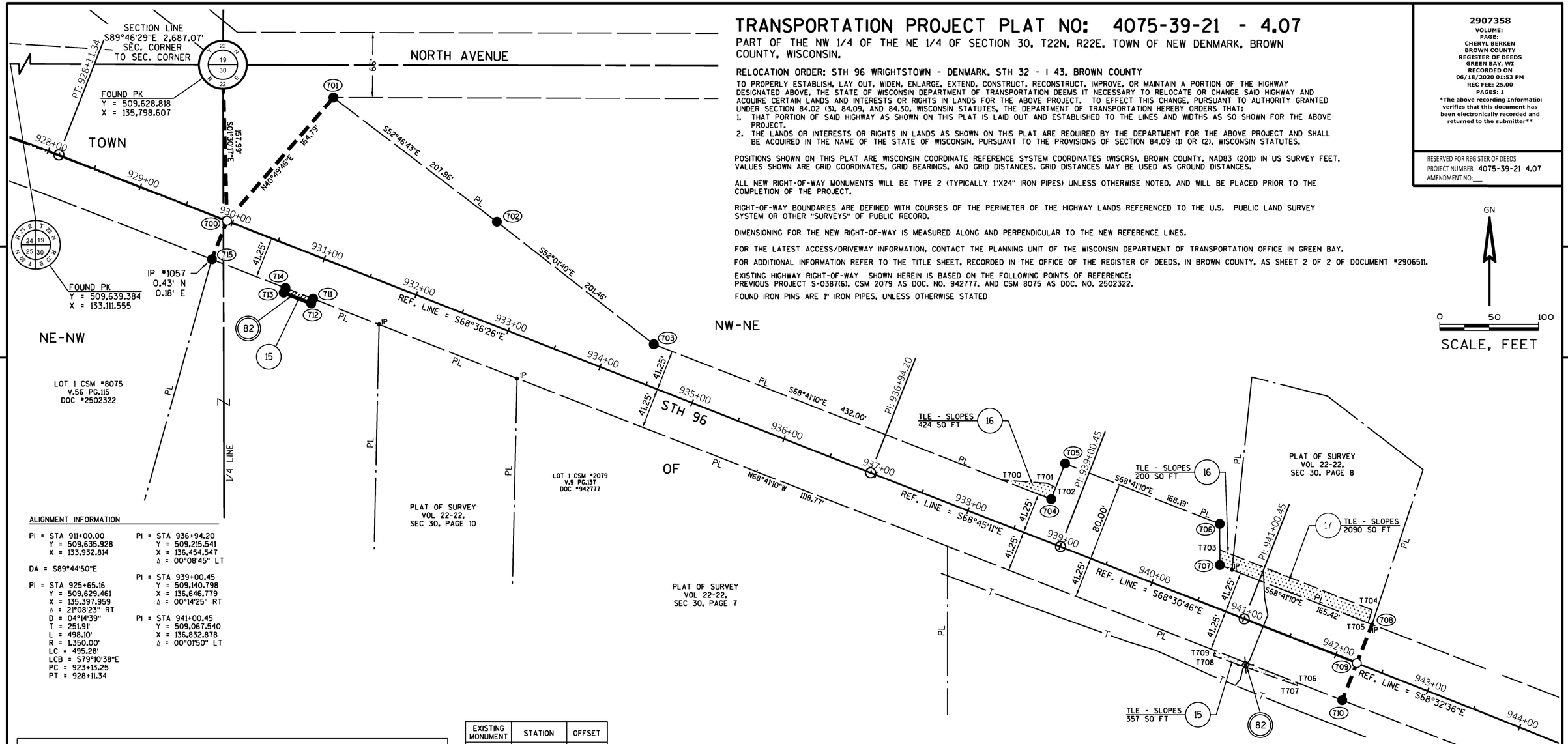
FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF THE REGISTER OF DEEDS, IN BROWN COUNTY, AS SHEET 2 OF 2 OF DOCUMENT *2906511.

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE: PREVIOUS PROJECT S-0387(6), CSM 2079 AS DOC. NO. 942777, AND CSM 8075 AS DOC. NO. 2502322.

FOUND IRON PINS ARE 1" IRON PIPES, UNLESS OTHERWISE STATED

2907358
VOLUME:
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RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 4075-39-21 4.07
AMENDMENT NO:___



ALIGNMENT INFORMATION

PI = STA 911+00.00
Y = 509,635.928
X = 133,932.814

DA = S89°44'50"E

PI = STA 925+65.16
Y = 509,629.461
X = 135,397.959
Δ = 21°08'23" RT
D = 04°14'39"
T = 251.91'
L = 498.10'
R = 1,350.00'
LC = 495.28'
LCB = S79°10'38"E
PC = 923+13.25
PT = 928+11.34

PI = STA 936+94.20
Y = 509,215.541
X = 136,454.547
Δ = 00°08'45" LT

PI = STA 939+00.45
Y = 509,140.798
X = 136,646.779
Δ = 00°14'25" RT

PI = STA 941+00.45
Y = 509,067.540
X = 136,832.878
Δ = 00°01'50" LT

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	OWNER(S)	PARCEL AFFECTED	INTEREST REQUIRED
82	GENERAL TELEPHONE COMPANY	15 - DOCUMENT *702878	RELEASE OF RIGHTS

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W SQ FT REQUIRED			TLE SQ FT
			NEW	EXISTING	TOTAL	
15	KENNETH E. VAN DEN ELZEN AND JEAN VAN DEN ELZEN	FEE/TLE	156	--	156	357
16	NORBERT L. RONK AND ROBERT RONK, CO-TRUSTEES OF THE NORBERT L. RONK AND JEAN M. RONK FAMILY TRUST U/D/O OCTOBER 27, 1999, AN UNDIVIDED 1/2 INTEREST AND NORBERT L. RONK, TRUSTEE OF THE NORBERT L. RONK SURVIVOR'S TRUST U/D/O OCTOBER 27, 1999 AN UNDIVIDED 1/2 INTEREST	TLE	--	--	--	624
17	BRIAN A. BRAUN AND FRANCES K. THOMPSON	TLE	--	--	--	2090

EXISTING MONUMENT	STATION	OFFSET
1057	929+94.52	41.61' RT

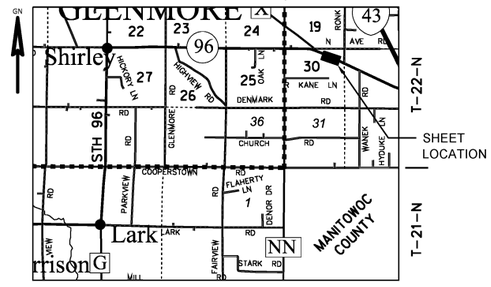
R/W POINT	STATION	OFFSET
700	929+94.18	0.00' RT
701	930+49.02	155.40' LT
702	932+49.09	98.67' LT
703	934+42.17	41.19' LT
704	938+74.28	41.33' LT
705	938+74.32	80.08' LT
706	940+42.18	80.47' LT
707	940+57.51	41.77' LT
708	942+22.95	42.21' LT
709	942+22.95	0.00' RT
710	942+22.95	40.30' RT
711	931+04.14	41.78' RT
712	931+04.14	47.00' RT
713	930+74.14	47.00' RT
714	930+74.14	41.82' RT
715*	929+94.18	41.93' RT

* - NO IRON SET DUE TO CLOSE PROXIMITY TO EXISTING MONUMENT. USE R/W POINT FOR ULTIMATE R/W.

TLE POINT	STATION	OFFSET
T700	938+20.84	41.39' LT
T701	938+65.00	55.00' LT
T702	938+74.29	53.92' LT
T703	940+51.84	56.07' LT
T704	942+17.66	55.92' LT
T705	942+18.59	42.20' LT
T706	941+74.99	40.41' RT
T707	941+75.00	43.00' RT
T708	940+85.00	46.00' RT
T709	940+84.98	40.65' RT

COURSE	BEARING	DISTANCE
704-705	N21°18'50"E	38.75'
706-707	S00°07'28"E	41.63'
708-709	S21°27'24"W	42.21'
709-710	S21°27'24"W	40.29'
711-712	S21°23'34"W	5.22'
712-713	N68°36'26"W	30.00'
713-714	N21°23'34"E	5.18'
714-715	N68°41'10"W	79.96'
715-700	N21°23'34"E	41.93'

PROJECT LOCATION (NOT TO SCALE)



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I, BRADLEY L. TIDSALE PROFESSIONAL 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 OF TRANSPORTATION, I HAVE SURVEYED AND MAPPED THIS TRANSPORTATION PROJECT 4075-39-21 - 4.07 AND SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN BRADLEY L. TIDSALE S-2824 WAUNAKEE WI LAND SURVEYOR

SIGNATURE: Bradley L. Tidsale DATE: 06/12/20
PRINT NAME: BRADLEY L. TISDALE
REGISTRATION NUMBER: S-2824

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

SIGNATURE: Curt Van Erem DATE: 06/17/20
PRINT NAME: CURT VAN EREM

FILE NAME : P:\90S\93\00093473\CADD\RW\STH 96 TPP.DWG
APPRAISAL PLAT DATE : 06/12/2020
PLOT DATE : 6/16/2020 3:41 PM
PLOT BY : BRAD TISDALE
PLOT NAME :
PLOT SCALE : ##########

BP: 230+06.21
PC: 230+73.64
PT: 235+40.74
EXISTING R/W
SECTION CORNER MONUMENT
TO BE REPLACED BY OTHERS
N89° 34' 09"E
232
234
236
238
240
242
N88° 24' 05"E
244
STH 96
MATCHLINE - STA 245+00
BEGIN PROJECT
STA 231+50.00
Y=493,904.571
X=81,243.583
PI STA = 233+07.20
Y = 493905.754
X = 81400.779
DELTA = 1°10'04"
D = 0°15'00"
T = 233.56'
L = 467.10'
R = 22920.00'
PC STA = 230+73.64
Y = 493903.997
X = 81167.227
PT STA = 235+40.74
Y = 493912.269
X = 81634.246
BK = N89°34'08.8"E
AH = N88°24'05.2"E
SE = NC
EXISTING R/W
WOBECK LN
EXISTING R/W
5
5
N

EROSION CONTROL LEGEND

INLET PROTECTION		RIPRAP	
INLET PROTECTION FOR EXISTING INLET (TYPE)	D	EROSION MAT URBAN CLASS I TYPE B	
INLET PROTECTION FOR PROPOSED INLET (TYPE)	D	SLOPE INTERCEPTS	
SILT FENCE		DRAINAGE FLOW ARROW	
CULVERT PIPE CHECK			

N
WISCONSIN PUBLIC SERVICE CORP. (GAS)
EXISTING R/W
RIDGE ROYALE DR
EXISTING CONCRETE CURB & GUTTER TO REMAIN
REPLACE CONCRETE CURB & GUTTER 30-INCH TYPE D
EXISTING CONCRETE CURB & GUTTER TO REMAIN
REMOVING CURB & GUTTER
REMOVING SURFACE DRAINS
RIPRAP LIGHT
STA. 254+17
MGS GUARDRAIL
TERMINAL EAT
PI: 252+45.01
Y = 493959.813
X = 83337.855
+85.70
-31.57'L
+40.48
-19.52'L
179°9'1"
#100
MOVING TYPE II
SIGNS, AND SMALL
SIGN SUPPORTS
STA. 254+70 - 256+20
MGS GUARDRAIL 3
FEMA FLOODPLAIN BOUNDARY (TYP.)
STA. 260+20
MGS GUARDRAIL 3 K
EXISTING R/W
WISCONSIN PUBLIC SERVICE CORP. (GAS)
WETLANDS
246
248
250
252
254
256
N87° 32' 23"E
258
STH 96
+90.81
22.66'R
+75.00
22.59'R
MATCHLINE - STA 245+00
MATCHLINE - STA 260+00
STA 245+60
EXISTING 36" CMCP
(TO REMAIN)
1 EACH - CULVERT MARKER LT
EXISTING CONCRETE CURB & GUTTER TO REMAIN
SLOPE INTERCEPT (TYP.)
CUTTING CURB HEAD
ASPHALTIC FLUME
REMOVING CURB & GUTTER
STA. 253+91
MGS GUARDRAIL
TERMINAL EAT
REMOVING SURFACE DRAINS
STA. 254+44 - 256+69
MGS GUARDRAIL 3 K
STA. 256+69 - 260+56
MGS GUARDRAIL 3
REMOVE EXISTING GUARDRAIL
EXISTING R/W
EXISTING R/W
CENTURYLINK (TELEPHONE)
WISCONSIN PUBLIC SERVICE CORP. (OVERHEAD)
FEMA FLOODPLAIN BOUNDARY (TYP.)
STRUCTURE C-05-0082
STA 258+98.55
(TO REMAIN)
1 EACH - CULVERT MARKER LT
WISCONSIN PUBLIC SERVICE
CORP. (OVERHEAD)

CONTROL POINTS/BENCH MARKS

NO.	STATION	DESCRIPTION	OFFSET	ELEV.	X	Y
100	254+08.41	3/4-INCH IRON PIPE	28.01' LT	867.07	83,498.89	493,944.81

PROJECT NO: 4075-39-71	HWY: STH 96	COUNTY: BROWN	PLAN - STH 96 - WEST SECTION	SHEET

FILE NAME : P:\90S\93\00093473\CADD\SHEETSPLAN\050201-PN_71.DWG
LAYOUT NAME - 050201-pn
PLOT DATE : 10/26/2021 11:56 AM
PLOT BY : KEVIN KLOCKZIEM
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

FEMA FLOODPLAIN BOUNDARY (TYP.)

STA. 267+38
83 LF CULVERT PIPE CLASS III-A NON-METAL
30-INCH WITH APRON ENDWALLS (2)
1 EACH - CULVERT MARKER RT
2 EACH - CLEANING DITCH

CAUTION

PROPOSED R/W

WISCONSIN PUBLIC SERVICE CORP. (GAS)

1 EACH - REMOVING SMALL PIPE CULVERTS

EXISTING R/W

+94.83
-176.82'L
EL. 861.60
(FLAG)

ASPHALTIC FLUME

REPLACE CONCRETE CURB & GUTTER 30-INCH TYPE D

LEDGETOP DR

+93.68
-75.81'L
EL. 861.98
(FLAG)

N

PC: 263+02.79

STA. 263+60
MGS GUARDRAIL
TERMINAL EAT

PT: 267+13.66

SLOPE INTERCEPT (TYP.)

PC: 274+86.42

STA. 260+45 - 263+07
MGS GUARDRAIL 3

BLDG BLDG

MATCHLINE - STA 260+00

260 262 264 266 STH 96 268 270 S89° 47' 39"E 272 274

MATCHLINE - STA 275+00

MOVING TYPE II
SIGNS, AND SMALL
SIGN SUPPORTS

EXISTING R/W

WISCONSIN PUBLIC SERVICE
CORP. (OVERHEAD)

PROPOSED R/W

EXISTING CONCRETE CURB
& GUTTER TO REMAIN

*101

STA. 263+60
MGS GUARDRAIL
TERMINAL EAT

REMOVE EXISTING GUARDRAIL

CENTURYLINK (TELEPHONE)

CTH PP

PI STA = 265+08.26
Y = 494014.038
X = 84599.937
DELTA = 2°39'58"
D = 0°38'56"
T = 205.47'
L = 410.86'
R = 8830.00'
PC STA = 263+02.79
Y = 494005.218
X = 84394.657
PT STA = 267+13.66
Y = 494013.300
X = 84805.405
BK = N87°32'23.3"E
AH = S89°47'39.1"E
SE = 3.6%

CONTROL POINTS/BENCH MARKS

NO.	STATION	DESCRIPTION	OFFSET	ELEV.	X	Y
101	260+13.46	3/4-INCH IRON PIPE	106.08' RT	855.72	84,110.15	493,886.82
102	263+21.06	3/4-INCH IRON PIPE	19.81' LT	853.56	84,412.10	494,025.78

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CAUTION

STA. 285+24
49 LF CULVERT PIPE REINFORCED CONCRETE
CLASS IV 24-INCH WITH APRON ENDWALLS (2)
2 EACH - CULVERT MARKER RT & LT

WISCONSIN PUBLIC SERVICE CORP. (GAS)

STA. 285+19
49 LF CULVERT PIPE REINFORCED CONCRETE
CLASS IV 24-INCH WITH APRON ENDWALLS (2)
2 EACH - CULVERT MARKER RT & LT

STA. 285+29
49 LF CULVERT PIPE REINFORCED CONCRETE
CLASS IV 24-INCH WITH APRON ENDWALLS (2)
2 EACH - CULVERT MARKER RT& LT

PT: 276+64.52

EXISTING R/W

MATCHLINE - STA 275+00

276 278 280 282 284 286 S88° 00' 48"E 288

MATCHLINE - STA 290+00

STH 96

EXISTING R/W

2 EACH - REMOVING SMALL PIPE CULVERTS

WISCONSIN PUBLIC SERVICE CORP. (OVERHEAD)

CENTURYLINK (TELEPHONE)

PI STA = 275+75.48
Y = 494010.205
X = 85667.219
DELTA = 1°46'51"
D = 1°00'00"
T = 89.06'
L = 178.10'
R = 5730.00'
PC STA = 274+86.42
Y = 494010.524
X = 85578.161
PT STA = 276+64.52
Y = 494007.117
X = 85756.223
BK = S89°47'39.1"E
AH = S88°00'47.9"E
SE = 2.7%

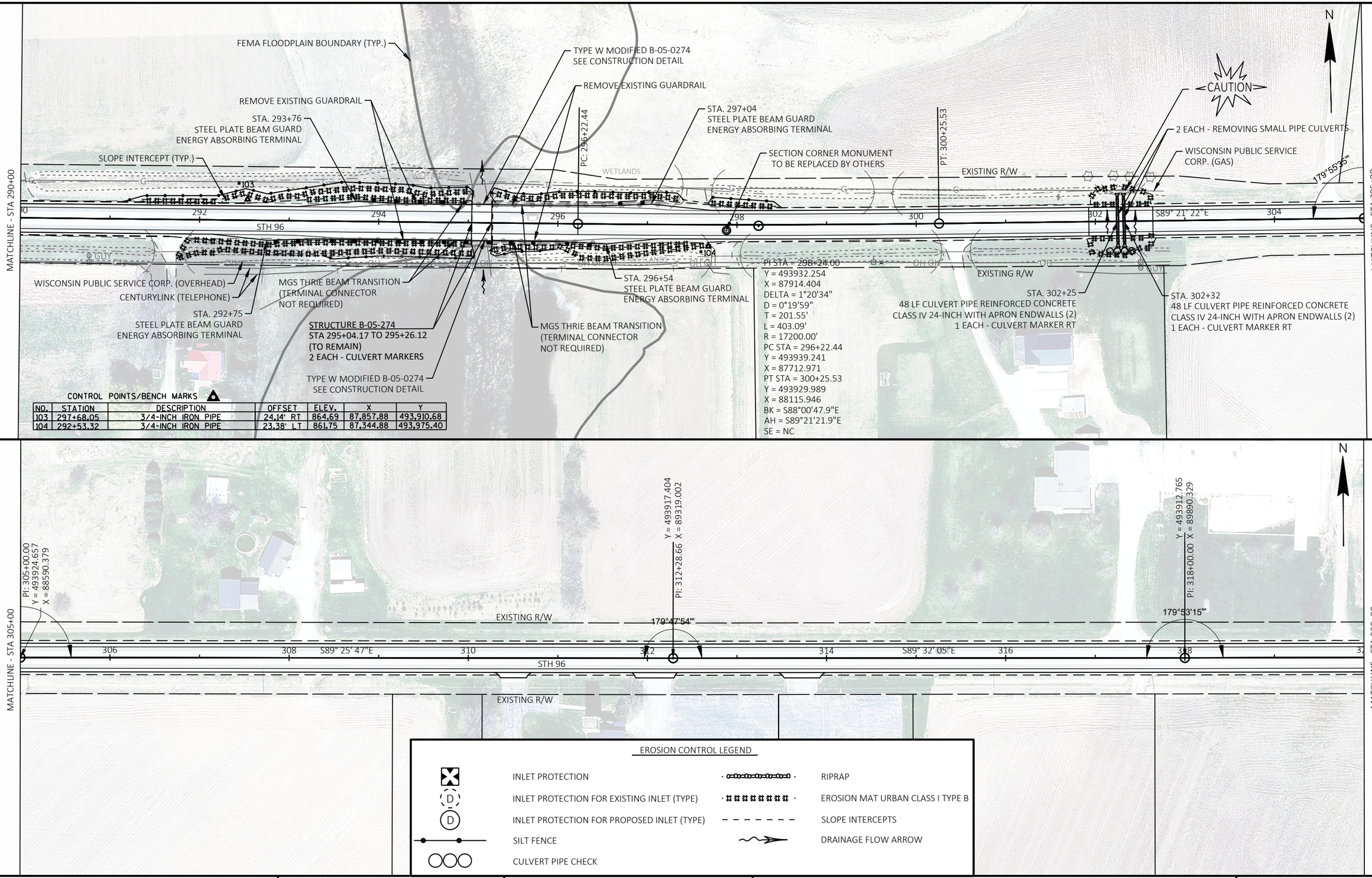
EROSION CONTROL LEGEND

	INLET PROTECTION		RIPRAP
D	INLET PROTECTION FOR EXISTING INLET (TYPE)		EROSION MAT URBAN CLASS I TYPE B
D	INLET PROTECTION FOR PROPOSED INLET (TYPE)		SLOPE INTERCEPTS
	SILT FENCE		DRAINAGE FLOW ARROW
	CULVERT PIPE CHECK		

PROJECT NO: 4075-39-71	HWY: STH 96	COUNTY: BROWN	PLAN - STH 96 - WEST SECTION	SHEET 59	E

FILE NAME : P:\90S\93\00093473\CADD\SHEETSPLAN\050201-PN_71.DWG
LAYOUT NAME - 050202-pn

PLOT DATE : 10/26/2021 11:56 AM PLOT BY : KEVIN KLOCKZIEM PLOT NAME : PLOT SCALE : 1 IN:100 FT



CONTROL POINTS/BENCH MARKS

NO.	STATION	DESCRIPTION	OFFSET	ELEV.	X	Y
103	297+68.05	3/4-INCH IRON PIPE	24.14' RT	864.69	87,857.88	493,910.68
104	292+53.32	3/4-INCH IRON PIPE	23.38' LT	861.75	87,344.88	493,975.40

EROSION CONTROL LEGEND

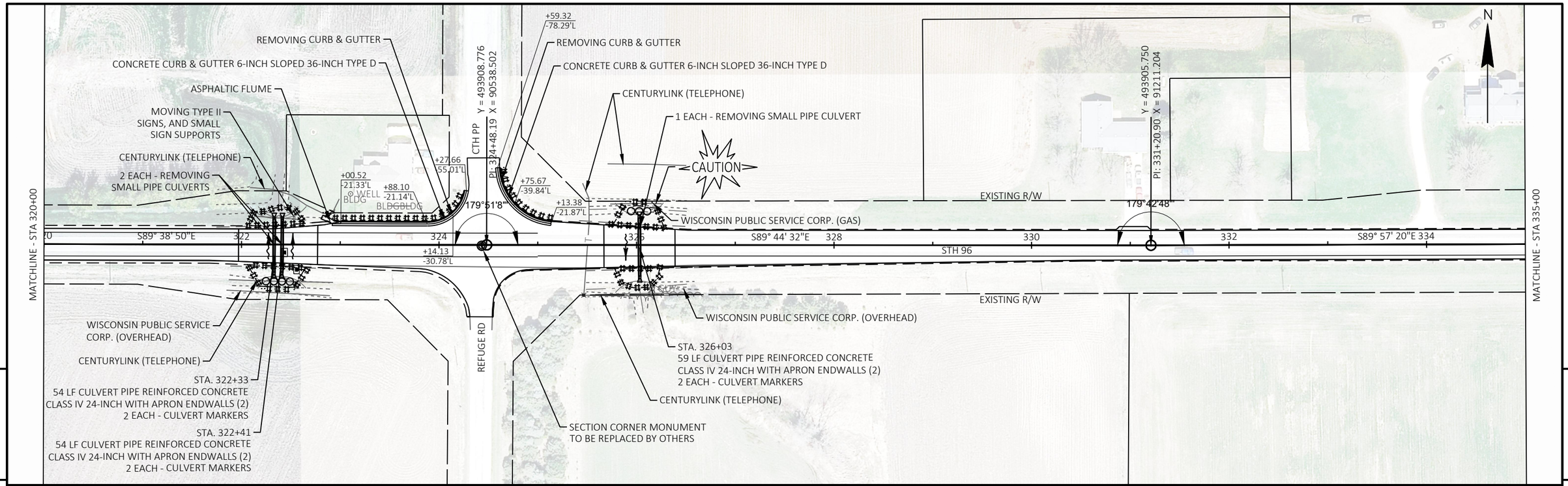
INLET PROTECTION		RIPRAP	
INLET PROTECTION FOR EXISTING INLET (TYPE)	D	EROSION MAT URBAN CLASS I TYPE B	
INLET PROTECTION FOR PROPOSED INLET (TYPE)	D	SLOPE INTERCEPTS	
SILT FENCE		DRAINAGE FLOW ARROW	
CULVERT PIPE CHECK			

PROJECT NO: 4075-39-71	HWY: STH 96	COUNTY: BROWN	PLAN - STH 96 - WEST SECTION	SHEET 60	E

FILE NAME : P:\90S\93\00093473\CADD\SHEETSPLAN\050201-PN_71.DWG
LAYOUT NAME - 050203-pn

PLOT DATE : 10/26/2021 11:56 AM PLOT BY : KEVIN KLOCKZIEM PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

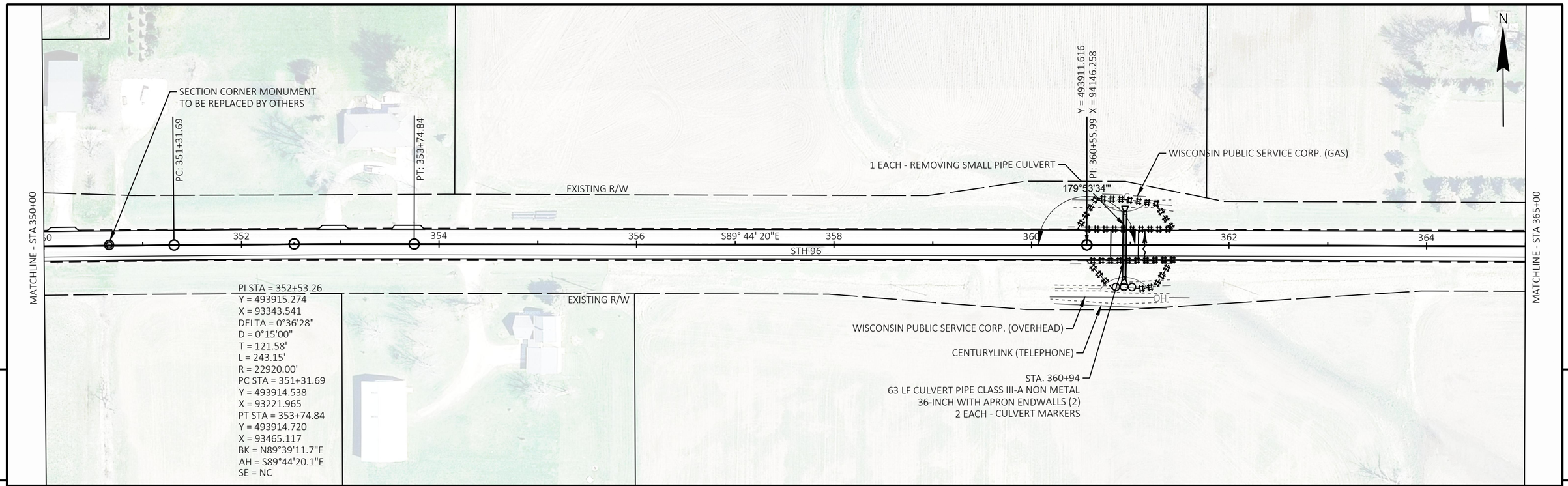


PROJECT NO: 4075-39-71	HWY: STH 96	COUNTY: BROWN	PLAN - STH 96 - WEST SECTION	SHEET 61 E

FILE NAME : P:\90S\93\00093473\CADD\SHEETSPLAN\050201-PN_71.DWG
LAYOUT NAME - 050204-pn

PLOT DATE : 10/26/2021 11:56 AM PLOT BY : KEVIN KLOCKZIEM PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44



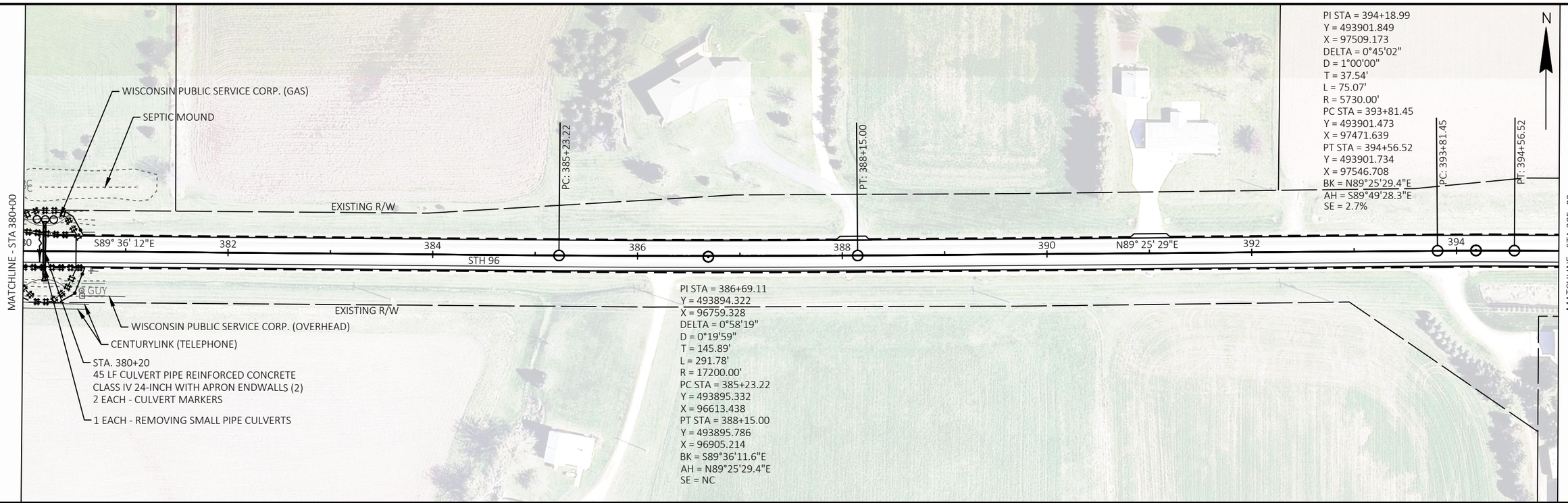
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PROJECT NO: 4075-39-71	HWY: STH 96	COUNTY: BROWN	PLAN - STH 96 - WEST SECTION	SHEET 62	E

FILE NAME : P:\90S\93\00093473\CADD\SHEETSPLAN\050201-PN_71.DWG
LAYOUT NAME - 050205-pn

PLOT DATE : 10/26/2021 11:57 AM PLOT BY : KEVIN KLOCKZIEM PLOT NAME : PLOT SCALE : 1 IN:100 FT

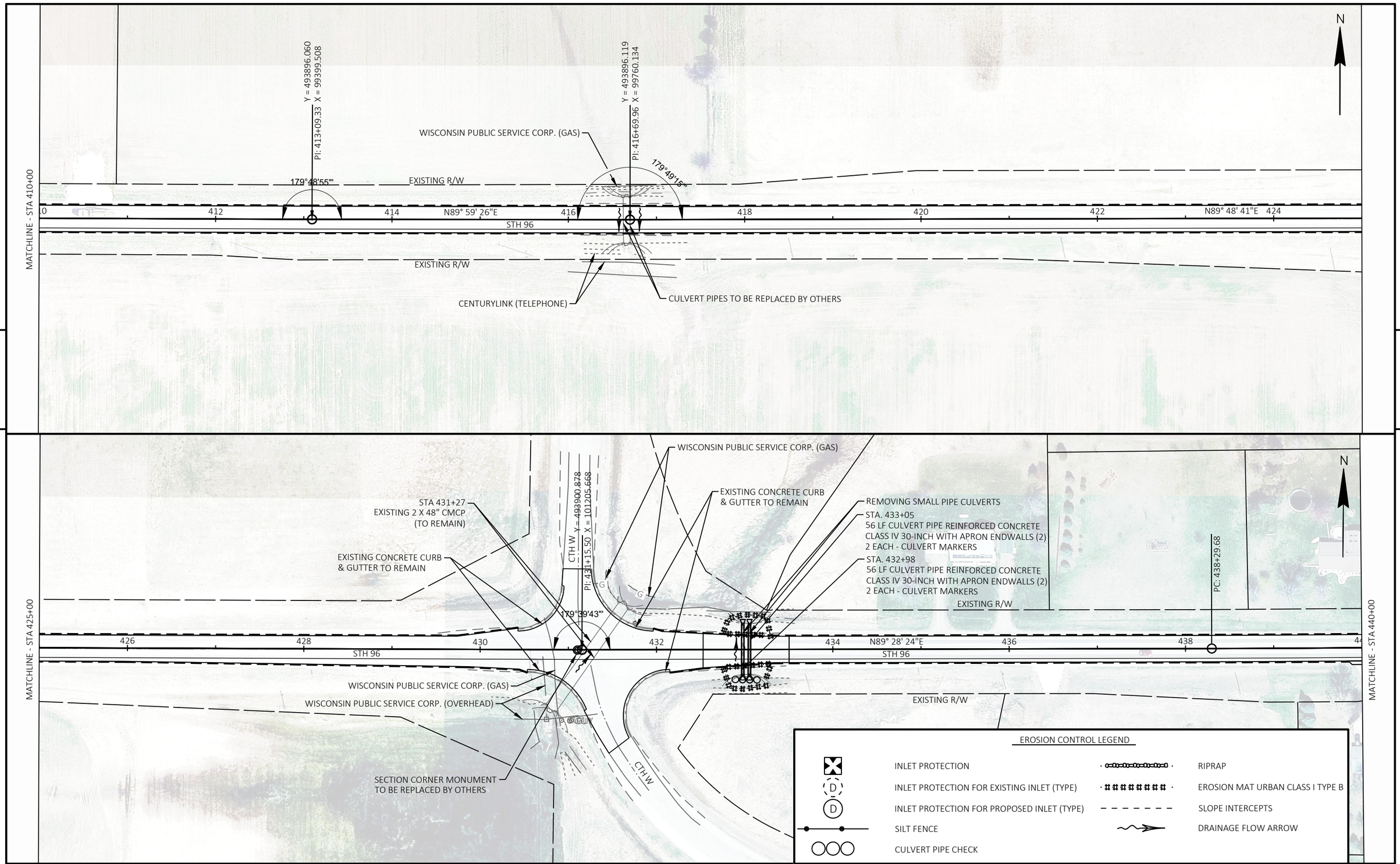


PROJECT NO: 4075-39-71	HWY: STH 96	COUNTY: BROWN	PLAN - STH 96 - WEST SECTION	SHEET 63	E

FILE NAME : P:\90S\93\00093473\CADD\SHEETSPLAN\050201-PN_71.DWG
LAYOUT NAME - 050206-pn

PLOT DATE : 10/26/2021 11:57 AM PLOT BY : KEVIN KLOCKZIEM PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44



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PROJECT NO: 4075-39-71	HWY: STH 96	COUNTY: BROWN	PLAN - STH 96 - WEST SECTION	SHEET 64	E

FILE NAME : P:\90S\93\00093473\CADD\SHEETSPLAN\050201-PN_71.DWG
LAYOUT NAME - 050207-pn

PLOT DATE : 10/26/2021 11:57 AM PLOT BY : KEVIN KLOCKZIEM PLOT NAME : PLOT SCALE : 1 IN:100 FT

MATCHLINE - STA 440+00

PT: 441+98.01

ROFFER DR

EXISTING R/W

CENTURYLINE (TELEPHONE)

TILE

440 442 444 446 448 450 452 454

STH 96

EXISTING R/W

PI STA = 440+13.85
Y = 493909.137
X = 102103.977
DELTA = 0°55'15"
D = 0°15'00"
T = 184.17'
L = 368.33'
R = 22920.00'
PC STA = 438+29.68
Y = 493907.444
X = 101919.817
PT STA = 441+98.01
Y = 493913.789
X = 102288.086
BK = N89°28'23.6"E
AH = N88°33'08.9"E
SE = NC

CROSS RD

WISCONSIN PUBLIC SERVICE CORP. (OVERHEAD)

STA. 454+69
46 LF CULVERT PIPE REINFORCED CONCRETE
CLASS IV 24-INCH WITH APRON ENDWALLS (2)
2 EACH - CULVERT MARKERS

1 EACH - REMOVING SMALL PIPE CULVERTS

MATCHLINE - STA 455+00

N

5

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MATCHLINE - STA 455+00

EXISTING R/W

456 N88° 33' 09"E 458 460 462 464 466 4

STH 96

EXISTING R/W

SECTION CORNER MONUMENT
TO BE REPLACED BY OTHERS

STA. 467+99
47 LF CULVERT PIPE
REINFORCED CONCRETE
CLASS IV 24-INCH
WITH APRON ENDWALLS (2)
2 EACH - CULVERT MARKERS

WISCONSIN PUBLIC SERVICE CORP. (OVERHEAD)

REMOVING SMALL PIPE CULVERTS

STA. 468+06
47 LF CULVERT PIPE
REINFORCED CONCRETE
CLASS IV 24-INCH
WITH APRON ENDWALLS (2)
2 EACH - CULVERT MARKERS

MATCHLINE - STA 470+00

N

EROSION CONTROL LEGEND

INLET PROTECTION		RIPRAP	
INLET PROTECTION FOR EXISTING INLET (TYPE)		EROSION MAT URBAN CLASS I TYPE B	
INLET PROTECTION FOR PROPOSED INLET (TYPE)		SLOPE INTERCEPTS	
SILT FENCE		DRAINAGE FLOW ARROW	
CULVERT PIPE CHECK			

PROJECT NO: 4075-39-71	HWY: STH 96	COUNTY: BROWN	PLAN - STH 96 - WEST SECTION	SHEET 65 E

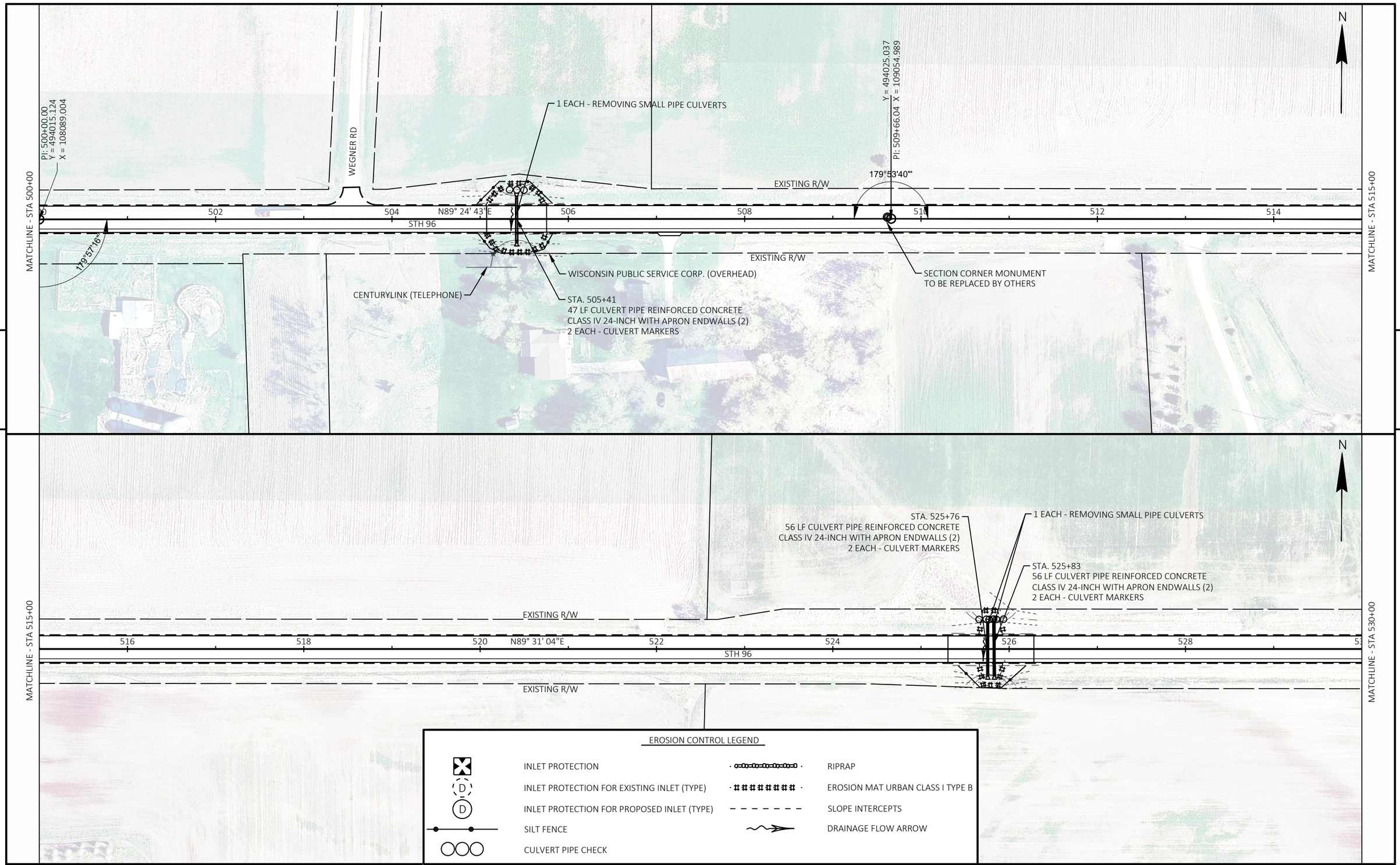
FILE NAME : P:\90S\93\00093473\CADD\SHEETSPLAN\050201-PN_71.DWG
LAYOUT NAME - 050208-pn

PLOT DATE : 10/26/2021 11:57 AM PLOT BY : KEVIN KLOCKZIEM PLOT NAME : PLOT SCALE : 1 IN:100 FT



PROJECT NO: 4075-39-71	HWY: STH 96	COUNTY: BROWN	PLAN - STH 96 - WEST SECTION	SHEET 66	E

FILE NAME : P:\90S\93\00093473\CADD\SHEETSPLAN\050201-PN_71.DWG
LAYOUT NAME - 050209-pn
PLOT DATE : 10/26/2021 11:58 AM
PLOT BY : KEVIN KLOCKZIEM
PLOT NAME :
PLOT SCALE : 1 IN:100 FT



5

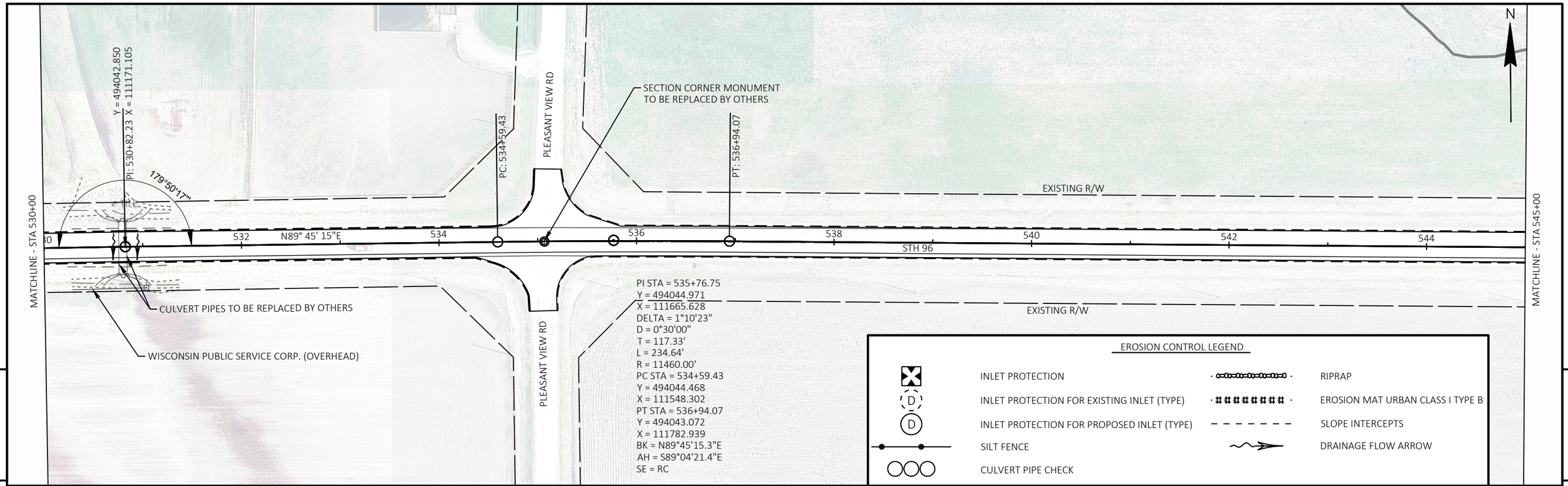
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PROJECT NO: 4075-39-71	HWY: STH 96	COUNTY: BROWN	PLAN - STH 96 - WEST SECTION	SHEET 67	E

FILE NAME : P:\90S\93\00093473\CADD\SHEETSPLAN\050201-PN_71.DWG
LAYOUT NAME - 050210-pn

PLOT DATE : 10/26/2021 11:58 AM PLOT BY : KEVIN KLOCKZIEM PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44



CONTROL POINTS/BENCH MARKS

NO.	STATION	DESCRIPTION	OFFSET	ELEV.	X	Y
105	553+86.59	3/4-INCH IRON PIPE	19.65' LT	870.50	113,475.56	494,035.32

REMOVE EXISTING GUARDRAIL

STA. 560+88 MGS GUARDRAIL TERMINAL EAT

WISCONSIN PUBLIC SERVICE CORP. (GAS)

WISCONSIN PUBLIC SERVICE CORP. (ELECTRIC)

EXISTING R/W

SLOPE INTERCEPT (TYP.)

WETLANDS

WETLANDS

560 562 564 566 568 570 572 574

STH 96

106

WETLANDS

SECTION CORNER MONUMENT
TO BE REPLACED BY OTHERS

EXISTING R/W

STA. 560+79
MGS GUARDRAIL
TERMINAL EAT

MATCHLINE - STA 560+00

MATCHLINE - STA 575+00

N

5

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EROSION CONTROL LEGEND

INLET PROTECTION	RIPRAP
INLET PROTECTION FOR EXISTING INLET (TYPE)	EROSION MAT URBAN CLASS I TYPE B
INLET PROTECTION FOR PROPOSED INLET (TYPE)	SLOPE INTERCEPTS
SILT FENCE	DRAINAGE FLOW ARROW
CULVERT PIPE CHECK	

CONTROL POINTS/BENCH MARKS

NO.	STATION	DESCRIPTION	OFFSET	ELEV.	X	Y
106	561+16.98	3/4-INCH IRON PIPE	22.30' RT	873.65	114,205.17	493,981.56

Y = 493972.943
X = 1161115.269

PI: 580+26.97

179°44'7"

EXISTING R/W

576 578 580 582 584 586

S88° 49' 20"E

STH 96

EXISTING R/W

MATCHLINE - STA 575+00

+66.76
-17.00'L

+34.76
-17.00'L

WISCONSIN PUBLIC SERVICE CORP. (GAS)

CENTURYLINK (FIBER OPTIC)

SEE STORM SEWER PLANS

WISCONSIN PUBLIC SERVICE CORP. (OVERHEAD)

EXISTING CONCRETE
CURB & GUTTER
TO REMAIN

WISCONSIN PUBLIC SERVICE CORP. (GAS)

REPLACE CONCRETE
CURB & GUTTER
30-INCH TYPE D

EXISTING CONCRETE
CURB & GUTTER
TO REMAIN

PROPOSED R/W

+43.99
39.65'R

+39.87
66.83'R

88°31'47"

+85.92
-22.88'L

+66.05
-17.61'L

588

STH 96

WALL

±33001

±33000

CENTURYLINK
(TELEPHONE)

60'

LARK RD

EXISTING CONCRETE
CURB & GUTTER
TO REMAIN

Y = 493958.709
X = 116807.686

EXISTING CONCRETE CURB
& GUTTER TO REMAIN

SECTION CORNER MONUMENT
TO BE REPLACED BY OTHERS

PI: 587+19.53

CTH G

N

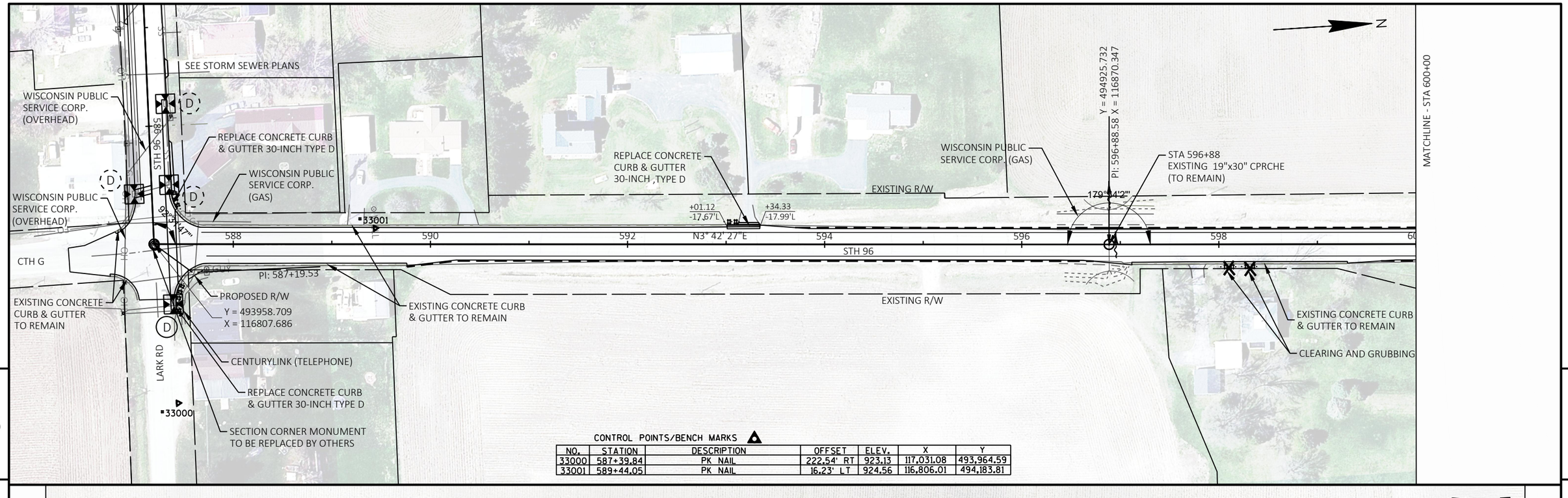
CONTROL POINTS/BENCH MARKS

NO.	STATION	DESCRIPTION	OFFSET	ELEV.	X	Y
33000	587+39.84	PK NAIL	222.54' RT	923.13	117,031.08	493,964.59
33001	589+44.05	PK NAIL	16.23' LT	924.56	116,806.01	494,183.81

PROJECT NO: 4075-39-71	HWY: STH 96	COUNTY: BROWN	PLAN - STH 96 - WEST SECTION	SHEET 69 E

FILE NAME : P:\90S\93\00093473\CADD\SHEETSPLAN\050201-PN_71.DWG
LAYOUT NAME - 050212-pn

PLOT DATE : 10/26/2021 11:58 AM PLOT BY : KEVIN KLOCKZIEM PLOT NAME : PLOT SCALE : 1 IN:100 FT



PROJECT NO: 4075-39-71	HWY: STH 96	COUNTY: BROWN	PLAN - STH 96 - CENTRAL SECTION	SHEET 70	E

FILE NAME : P:\90S\93\00093473\CADD\SHEETSPLAN\050213-PN_71.DWG
LAYOUT NAME - 050213-pn
PLOT DATE : 10/28/2021 8:37 AM PLOT BY : KEVIN KLOCKZIEM PLOT NAME : PLOT SCALE : 1 IN:100 FT

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MATCHLINE - STA 615+00

EXISTING R/W

PC: 625+60.59

616 618 N3° 49' 51"E 620 622 624 626 628

STH 96

EXISTING CONCRETE CURB & GUTTER TO REMAIN

EXISTING R/W

MATCHLINE - STA 630+00

PI STA = 630+07.73
Y = 498237.888
X = 117085.564
DELTA = 3°39'31"
D = 0°24'33"
T = 447.14'
L = 893.97'
R = 14000.00'
PC STA = 625+60.59
Y = 497791.750
X = 117055.691
PT STA = 634+54.56
Y = 498681.211
X = 117143.845
BK = N03°49'50.8"E
AH = N07°29'21.8"E
SE = NC

PT: 634+54.56

PC: 637+32.15

EXISTING R/W

632 634 N7° 29' 22"E 636 638 640 642 644

STH 96

EXISTING R/W

EXISTING CONCRETE CURB & GUTTER TO REMAIN

WISCONSIN PUBLIC SERVICE CORP. (GAS)

COOPERSTOWN RD

PI STA = 640+26.04
Y = 499247.814
X = 117218.333
DELTA = 7°19'38"
D = 1°14'54"
T = 293.89'
L = 586.98'
R = 4590.00'
PC STA = 637+32.15
Y = 498956.429
X = 117180.027
PT STA = 643+19.13
Y = 499541.706
X = 117219.166
BK = N07°29'21.8"E
AH = N00°09'44.1"E
SE = 3.2%

REMOVING SMALL CULVERT

WISCONSIN PUBLIC SERVICE CORP. (GAS)

WISCONSIN PUBLIC SERVICE CORP. (GAS)

PT: 643+19.13

MATCHLINE - STA 645+00

STA 638+85
EXISTING 19"x30" CPRCHE
(TO REMAIN)

SECTION CORNER MONUMENT
TO BE REPLACED BY OTHERS

COOPERSTOWN RD

EXISTING CONCRETE CURB & GUTTER
TO REMAIN

STA 643+68
79 LF CULVERT PIPE REINFORCED CONCRETE
CLASS III 54-INCH WITH APRON ENDWALLS (2)
2 EACH - CULVERT MARKERS

WISCONSIN PUBLIC SERVICE CORP. (OVERHEAD)

STA 644+78
EXISTING 54" CMCP
(TO REMAIN)

EROSION CONTROL LEGEND

INLET PROTECTION	RIPRAP
INLET PROTECTION FOR EXISTING INLET (TYPE)	EROSION MAT URBAN CLASS I TYPE B
INLET PROTECTION FOR PROPOSED INLET (TYPE)	SLOPE INTERCEPTS
SILT FENCE	DRAINAGE FLOW ARROW
CULVERT PIPE CHECK	

PROJECT NO: 4075-39-71	HWY: STH 96	COUNTY: BROWN	PLAN - STH 96 - CENTRAL SECTION	SHEET 71	E

FILE NAME : P:\90S\93\00093473\CADD\SHEETSPLAN\050213-PN_71.DWG
LAYOUT NAME - 050214-pn

PLOT DATE : 10/28/2021 8:37 AM PLOT BY : KEVIN KLOCKZIEM PLOT NAME : PLOT SCALE : 1 IN:100 FT

MATCHLINE - STA 645+00

MATCHLINE - STA 660+00

EXISTING R/W

646 648 650 N0° 09' 44"E 652 654 656 658

STH 96

EXISTING R/W

5

5

MATCHLINE - STA 660+00

MATCHLINE - STA 675+00

STA 662+00
104 LF CULVERT PIPE REINFORCED CONCRETE
CLASS III 60-INCH WITH CONCRETE MASONRY ENDWALLS

STA 662+09
104 LF CULVERT PIPE REINFORCED CONCRETE
CLASS III 60-INCH WITH CONCRETE MASONRY ENDWALLS
1 EACH - CULVERT MARKERS

WISCONSIN PUBLIC SERVICE CORP. (GAS)

DEVIL'S RIVER

PI: 660+00.00

PI: 665+59.11

179°35'50"

SECTION CORNER MONUMENT
TO BE REPLACED BY OTHERS

EXISTING R/W

660 N0° 09' 44"E 664 666 668 670 672 N0° 33' 54"E 674

STH 96

Y = 501781.670
X = 117225.508

EXISTING R/W

WISCONSIN PUBLIC SERVICE CORP. (OVERHEAD)

EXISTING CONCRETE CURB & GUTTER
TO REMAIN

3 EACH - REMOVING STRUCTURES

STA 661+92
104 LF CULVERT PIPE REINFORCED CONCRETE
CLASS III 60-INCH WITH CONCRETE MASONRY ENDWALLS
1 EACH - CULVERT MARKER

EROSION CONTROL LEGEND

INLET PROTECTION		RIPRAP	
INLET PROTECTION FOR EXISTING INLET (TYPE)	D	EROSION MAT URBAN CLASS I TYPE B	
INLET PROTECTION FOR PROPOSED INLET (TYPE)	D	SLOPE INTERCEPTS	
SILT FENCE		DRAINAGE FLOW ARROW	
CULVERT PIPE CHECK			

PROJECT NO: 4075-39-71	HWY: STH 96	COUNTY: BROWN	PLAN - STH 96 - CENTRAL SECTION	SHEET 72	E

FILE NAME : P:\90S\93\00093473\CADD\SHEETSPLAN\050213-PN_71.DWG
LAYOUT NAME - 050215-pn

PLOT DATE : 10/28/2021 8:38 AM PLOT BY : KEVIN KLOCKZIEM PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

MATCHLINE - STA 675+00

MATCHLINE - STA 690+00

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WISCONSIN PUBLIC SERVICE CORP. (GAS)

MOVING TYPE II SIGNS, AND SMALL SIGN SUPPORTS

PI: 682+59.14

179°53'32"

EXISTING R/W

GEODETIC SURVEY MARKER DO NOT DISTURB

GPS

676 678 680 682 684 686 N0° 40' 22"E 688

STH 96

Y = 503481.615
X = 117242.274

EXISTING R/W

TREML LANE

STA 680+29
88 LF CULVERT PIPE CLASS III-A NON METAL
36-INCH WITH APRON ENDWALLS (2)
2 EACH - CULVERT MARKERS

REMOVING SMALL CULVERT

N

SCHOOL RD

PI: 692+11.94

EXISTING CONCRETE CURB & GUTTER TO REMAIN

ZAIRE RD

PI: 697+94.25

RIPRAP MEDIUM

WISCONSIN PUBLIC SERVICE CORP. (GAS)

STA 700+98
79 LF CULVERT PIPE CLASS III-A NON METAL
36-INCH WITH APRON ENDWALLS (2)
2 EACH - CULVERT MARKERS

690 692 694 N1° 03' 30"E 696 698 700 702 704

Y = 505016.568
X = 117264.218

MOVING TYPE II SIGNS, AND SMALL SIGN SUPPORTS

REMOVING SMALL CULVERT

Y = 504434.353
X = 117253.462

SECTION CORNER MONUMENT TO BE REPLACED BY OTHERS

SCHOOL RD

EXISTING CONCRETE CURB & GUTTER TO REMAIN

WISCONSIN PUBLIC SERVICE CORP. (OVERHEAD)

EROSION CONTROL LEGEND

INLET PROTECTION		RIPRAP	
INLET PROTECTION FOR EXISTING INLET (TYPE)		EROSION MAT URBAN CLASS I TYPE B	
INLET PROTECTION FOR PROPOSED INLET (TYPE)		SLOPE INTERCEPTS	
SILT FENCE		DRAINAGE FLOW ARROW	
CULVERT PIPE CHECK			

PROJECT NO: 4075-39-71	HWY: STH 96	COUNTY: BROWN	PLAN - STH 96 - CENTRAL SECTION	SHEET 73 E

FILE NAME : P:\90S\93\00093473\CADD\SHEETSPLAN\050213-PN_71.DWG
LAYOUT NAME - 050216-pn

PLOT DATE : 10/28/2021 8:38 AM PLOT BY : KEVIN KLOCKZIEM PLOT NAME : PLOT SCALE : 1 IN:100 FT

N

STA 705+10
102 LF CULVERT PIPE CLASS III-B NON METAL
36-INCH WITH APRON ENDWALLS (2)
2 EACH - CULVERT MARKERS

WISCONSIN PUBLIC SERVICE CORP. (GAS)

WISCONSIN PUBLIC SERVICE CORP. (GAS)

STA 708+75
93 LF CULVERT PIPE CLASS III-A NON METAL
30-INCH WITH APRON ENDWALLS (2)
2 EACH - CULVERT MARKERS

REMOVING SMALL CULVERTS

EXISTING R/W

706 708 710 N1° 06' 01"E 712 714 716 718

STH 96

GUY

EXISTING R/W

WISCONSIN PUBLIC SERVICE CORP. (OVERHEAD)

WISCONSIN PUBLIC SERVICE CORP. (OVERHEAD)

REMOVING SMALL CULVERTS

WISCONSIN PUBLIC SERVICE CORP. (GAS)

STA 719+26
46 LF CULVERT PIPE REINFORCED CONCRETE
CLASS IV 30-INCH WITH APRON ENDWALLS (2)
2 EACH - CULVERT MARKERS

SECTION CORNER MONUMENT
TO BE REPLACED BY OTHERS

REMOVING SMALL CULVERT

HICKORY LN

GUY

WISCONSIN PUBLIC SERVICE CORP. (OVERHEAD)

MATCHLINE - STA 705+00

MATCHLINE - STA 720+00

5

5

N

EXISTING R/W

PI: 725+12.75

179°58'8"

720 722 724 726 728 730 N1° 05' 21"E 732 734

STH 96

Y = 507734.568
X = 117316.423

EXISTING R/W

WISCONSIN PUBLIC SERVICE CORP. (GAS)

STA 728+11
73 LF CULVERT PIPE CLASS III-A NON METAL
30-INCH WITH APRON ENDWALLS (2)
2 EACH - CULVERT MARKERS

WISCONSIN PUBLIC SERVICE CORP. (OVERHEAD)

REMOVING SMALL CULVERT

MATCHLINE - STA 720+00

MATCHLINE - STA 735+00

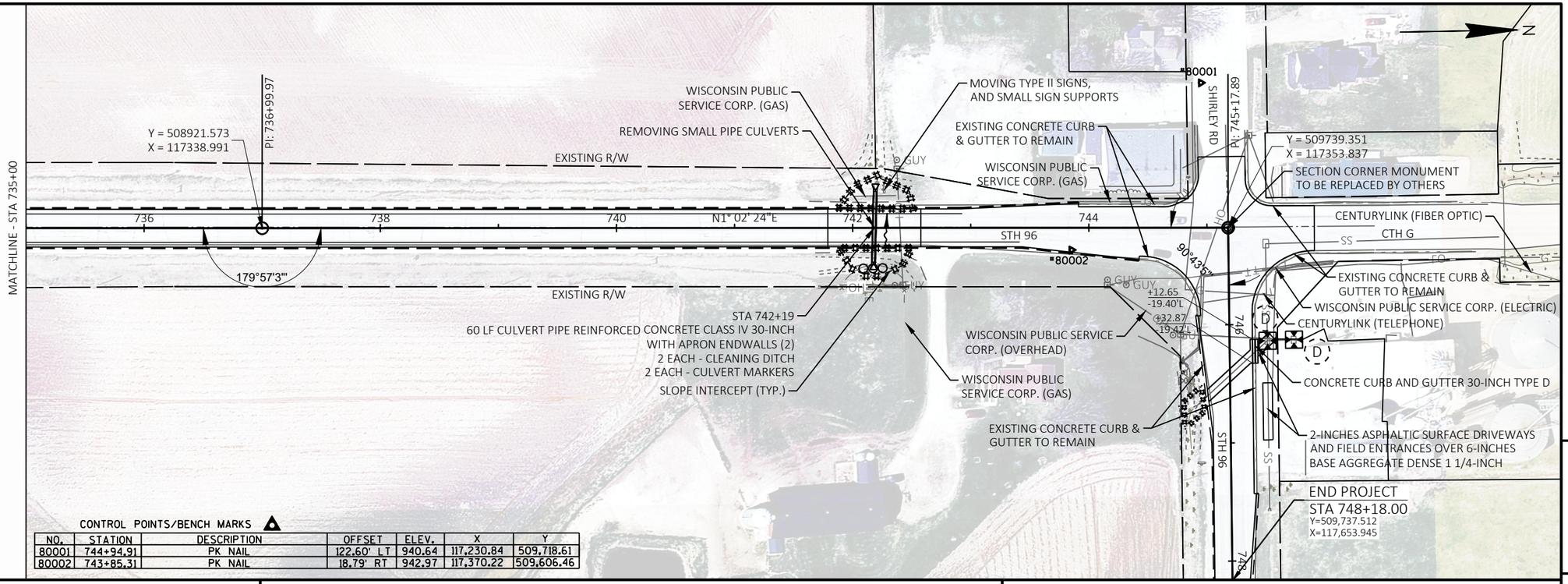
EROSION CONTROL LEGEND

	INLET PROTECTION		RIPRAP
D	INLET PROTECTION FOR EXISTING INLET (TYPE)		EROSION MAT URBAN CLASS I TYPE B
D	INLET PROTECTION FOR PROPOSED INLET (TYPE)		SLOPE INTERCEPTS
	SILT FENCE		DRAINAGE FLOW ARROW
	CULVERT PIPE CHECK		

PROJECT NO: 4075-39-71	HWY: STH 96	COUNTY: BROWN	PLAN - STH 96 - CENTRAL SECTION	SHEET 74	E

FILE NAME : P:\90S\93\00093473\CADD\SHEETSPLAN\050213-PN_71.DWG
LAYOUT NAME - 050217-pn

PLOT DATE : 10/28/2021 8:38 AM PLOT BY : KEVIN KLOCKZIEM PLOT NAME : PLOT SCALE : 1 IN:100 FT



CONTROL POINTS/BENCH MARKS

NO.	STATION	DESCRIPTION	OFFSET	ELEV.	X	Y
80001	744+94.91	PK NAIL	122.60' LT	940.64	117,230.84	509,718.61
80002	743+85.31	PK NAIL	18.79' RT	942.97	117,370.22	509,606.46

EROSION CONTROL LEGEND

	INLET PROTECTION		RIPRAP
D	INLET PROTECTION FOR EXISTING INLET (TYPE)		EROSION MAT URBAN CLASS I TYPE B
D	INLET PROTECTION FOR PROPOSED INLET (TYPE)		SLOPE INTERCEPTS
	SILT FENCE		DRAINAGE FLOW ARROW
	CULVERT PIPE CHECK		

PROJECT NO: 4075-39-71	HWY: STH 96	COUNTY: BROWN	PLAN - STH 96 - CENTRAL SECTION	SHEET 75	E

FILE NAME : P:\90S\93\00093473\CADD\SHEETSPLAN\050213-PN_71.DWG
LAYOUT NAME - 050218-pn
PLOT DATE : 10/28/2021 8:38 AM PLOT BY : KEVIN KLOCKZIEM PLOT NAME : PLOT SCALE : 1 IN:100 FT

4075-39-71 CULVERT PIPE STAKING INFORMATION										
PLAN STATION	UPSTREAM STATION	UPSTREAM LOCATION	UPSTREAM INVERT ELEVATION	PIPE LENGTH	PIPE DIAMETER	PIPE MATERIAL	PIPE SLOPE	DOWNSTREAM STATION	DOWNSTREAM LOCATION	DOWNSTREAM INVERT ELEVATION
267+38	267+38.00	40.00' RT	849.26	83'	30-INCH	CULVERT PIPE CLASS III-A NON-METAL	1.04%	267+38.00	43.00' LT	848.40
285+19	285+19.00	24.50' RT	858.97	49'	24-INCH	CULVERT PIPE REINFORCED CONCRETE CLASS IV	0.12%	285+19.00	24.50' LT	858.91
285+24	285+24.00	24.50' RT	858.97	49'	24-INCH	CULVERT PIPE REINFORCED CONCRETE CLASS IV	0.12%	285+24.00	24.50' LT	858.91
285+29	285+29.00	24.50' RT	858.97	49'	24-INCH	CULVERT PIPE REINFORCED CONCRETE CLASS IV	0.12%	285+29.00	24.50' LT	858.91
302+25	302+25.00	23.00' RT	869.03	48'	24-INCH	CULVERT PIPE REINFORCED CONCRETE CLASS IV	1.24%	302+25.00	25.00' LT	868.44
302+32	302+32.00	23.00' RT	869.03	48'	24-INCH	CULVERT PIPE REINFORCED CONCRETE CLASS IV	1.24%	302+32.00	25.00' LT	868.44
322+33	322+33.00	28.00' RT	896.13	54'	24-INCH	CULVERT PIPE REINFORCED CONCRETE CLASS IV	0.09%	322+33.00	26.00' LT	896.08
322+41	322+41.00	28.00' RT	896.13	54'	24-INCH	CULVERT PIPE REINFORCED CONCRETE CLASS IV	0.09%	322+41.00	26.00' LT	896.08
326+03	326+03.00	27.50' LT	897.27	59'	24-INCH	CULVERT PIPE REINFORCED CONCRETE CLASS IV	0.26%	326+03.00	31.50' RT	897.12
342+40	342+40.00	56.00' RT	908.10	112'	36-INCH	CULVERT PIPE CLASS III-B NON-METAL	0.03%	342+40.00	56.00' LT	908.07
360+94	360+94.00	32.00' RT	904.85	63'	36-INCH	CULVERT PIPE CLASS III-A NON-METAL	0.16%	360+94.00	31.00' LT	904.76
372+19	372+19.00	22.00' RT	902.75	45'	24-INCH	CULVERT PIPE REINFORCED CONCRETE CLASS IV	0.80%	372+19.00	23.00' LT	902.39
372+25	372+25.00	22.00' RT	902.75	45'	24-INCH	CULVERT PIPE REINFORCED CONCRETE CLASS IV	0.80%	372+25.00	23.00' LT	902.39
380+20	380+20.00	22.00' LT	909.47	45'	24-INCH	CULVERT PIPE REINFORCED CONCRETE CLASS IV	0.22%	380+20.00	23.00' RT	909.37
432+98	432+98.00	28.00' RT	894.72	56'	30-INCH	CULVERT PIPE REINFORCED CONCRETE CLASS IV	0.55%	432+98.00	28.00' LT	894.41
433+05	433+05.00	28.00' RT	894.72	56'	30-INCH	CULVERT PIPE REINFORCED CONCRETE CLASS IV	0.55%	433+05.00	28.00' LT	894.41
454+69	454+69.00	22.00' LT	907.38	46'	24-INCH	CULVERT PIPE REINFORCED CONCRETE CLASS IV	0.95%	454+69.00	24.00' RT	906.94
467+99	467+99.00	23.00' LT	904.70	47'	24-INCH	CULVERT PIPE REINFORCED CONCRETE CLASS IV	0.52%	467+99.00	24.00' RT	904.45
468+06	468+06.00	23.00' LT	904.70	47'	24-INCH	CULVERT PIPE REINFORCED CONCRETE CLASS IV	0.52%	468+06.00	24.00' RT	904.45
483+80	483+79.20	47.00' RT	885.57	88'	36-INCH	CULVERT PIPE CLASS III-A NON-METAL	2.77%	483+80.20	41.00' LT	883.13
483+88	483+88.20	47.00' RT	885.57	88'	36-INCH	CULVERT PIPE CLASS III-A NON-METAL	2.77%	483+89.20	41.00' LT	883.13
495+95	495+95.00	28.50' RT	875.14	57'	24X38-INCH	CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-IV	0.55%	495+95.00	28.50' LT	874.82
496+00	496+01.00	28.50' RT	875.14	57'	24X38-INCH	CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-IV	0.55%	496+01.00	28.50' LT	874.82
496+07	496+07.00	28.50' RT	875.14	57'	24X38-INCH	CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-IV	0.55%	496+07.00	28.50' LT	874.82
496+13	496+13.00	28.50' RT	875.14	57'	24X38-INCH	CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-IV	0.55%	496+13.00	28.50' LT	874.82
505+41	505+41.00	23.00' LT	878.56	47'	24-INCH	CULVERT PIPE REINFORCED CONCRETE CLASS IV	0.97%	505+41.00	24.00' RT	878.10
525+76	525+76.00	28.00' LT	867.92	56'	24-INCH	CULVERT PIPE REINFORCED CONCRETE CLASS IV	0.54%	525+76.00	28.00' RT	867.62
525+83	525+83.00	28.00' LT	867.92	56'	24-INCH	CULVERT PIPE REINFORCED CONCRETE CLASS IV	0.54%	525+83.00	28.00' RT	867.62
603+71	603+71.00	28.50' RT	916.14	58'	36-INCH	CULVERT PIPE CLASS III-A NON-METAL	0.39%	603+71.00	29.50' LT	915.91
643+68	643+68.00	38.50' LT	875.25	79'	54-INCH	CULVERT PIPE REINFORCED CONCRETE CLASS III	0.24%	643+68.00	40.50' RT	875.06
661+92	661+91.50	53.00' LT	885.59	104'	60-INCH	CULVERT PIPE REINFORCED CONCRETE CLASS III	0.17%	661+92.50	51.50' RT	885.41
662+00	662+00.00	53.00' LT	885.59	104'	60-INCH	CULVERT PIPE REINFORCED CONCRETE CLASS III	0.17%	662+01.00	51.50' RT	885.41
662+09	662+08.50	53.00' LT	885.59	104'	60-INCH	CULVERT PIPE REINFORCED CONCRETE CLASS III	0.17%	662+09.50	51.50' RT	885.41
680+29	680+29.00	41.00' LT	926.65	88'	36-INCH	CULVERT PIPE CLASS III-A NON-METAL	3.01%	680+29.00	47.00' RT	924.01
700+98	700+81.50	32.50' RT	935.32	79'	36-INCH	CULVERT PIPE CLASS III-A NON-METAL	1.73%	701+18.00	37.30' LT	933.96
705+10	705+10.00	49.00' RT	926.51	102'	36-INCH	CULVERT PIPE CLASS III-B NON-METAL	0.20%	705+10.00	53.00' LT	926.31
708+75	708+75.00	45.50' RT	932.64	93'	30-INCH	CULVERT PIPE CLASS III-A NON-METAL	0.23%	708+75.00	47.50' LT	932.43
719+26	719+26.00	22.00' RT	944.08	46'	30-INCH	CULVERT PIPE REINFORCED CONCRETE CLASS IV	1.40%	719+26.00	24.00' LT	943.44
728+11	728+11.00	36.50' RT	945.54	73'	30-INCH	CULVERT PIPE CLASS III-A NON-METAL	0.05%	728+11.00	36.50 LT	945.51
742+19	742+17.50	29.00' RT	940.51	60'	30-INCH	CULVERT PIPE REINFORCED CONCRETE CLASS IV	0.18%	742+19.00	31.00' LT	940.40

Standard Detail Drawing List

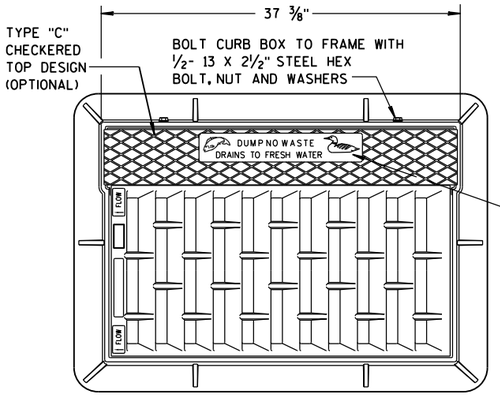
08A05-19A	INLET COVERS TYPE A, H, A-S, H-S & Z
08C07-02	INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT
08D01-22A	CONCRETE CURB & GUTTER
08D01-22B	CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS
08D04-06	CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES
08D21-01	DRIVEWAYS WITHOUT CURB & GUTTER
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
08E15-01	CULVERT PIPE CHECK
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
08F02-01	APRON ENDWALLS FOR PIPE ARCH AND ELLIPTICAL PIPE
08F04-08	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
08F10-01	CONCRETE MASONRY ENDWALLS FOR CULVERT PIPE AND PIPE ARCH
09B02-10	CONDUIT
09C05-10	CONCRETE CONTROL CABINET BASES
09D01-05	CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)
13A10-02A	2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING
13A10-02B	2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING
13A10-02C	2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING
13A10-02D	2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING
13A11-03A	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
13A11-03B	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
13C19-03	HMA LONGITUDINAL JOINTS
14B29-01	SAFETY EDGE
14B42-07A	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-07B	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-07C	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-07D	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B43-04A	MIDWEST GUARDRAIL SYSTEM LONG SPAN MGS (L)
14B43-04B	MIDWEST GUARDRAIL SYSTEM LONG SPAN MGS (L)
14B43-04C	MIDWEST GUARDRAIL SYSTEM LONG SPAN MGS (L)
14B44-04A	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-04B	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-04C	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B45-05A	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05B	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05C	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05D	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05E	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05F	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05G	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05H	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05I	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05J	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05K	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05L	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B50-01A	THRIE BEAM APPROACH RETROFIT INSTALLATION OF MISSING POST
14B50-01B	THRIE BEAM APPROACH RETROFIT INSTALLATION OF MISSING POST
14B50-01C	THRIE BEAM APPROACH RETROFIT INSTALLATION OF MISSING POST
15A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
15A03-02B	FLEXIBLE MARKER POST FOR CULVERT END
15C02-08A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-08B	BARRICADES AND SIGNS FOR VARIOUS CLOSURES
15C02-08C	DETOUR SIGNING FOR MAINLINE CLOSURES
15C02-08F	ADVANCED WIDTH RESTRICTION SIGNING
15C03-05	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C04-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C06-09	SIGNING & MARKING FOR TWO LANE BRIDGES
15C08-20A	LONGITUDINAL MARKING (MAINLINE)
15C11-09B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C12-08	TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION
15C19-06A	MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
15C33-04	STOP LINE AND CROSSWALK PAVEMENT MARKING
15C35-04B	PAVEMENT MARKING AND SIGNING (CLIMBING LANE & PASSING LANE)
15D28-04	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY
15D39-02	TRAFFIC CONTROL, DROP-OFF SIGNING
15D44-02	TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH MILLED SURFACES

6

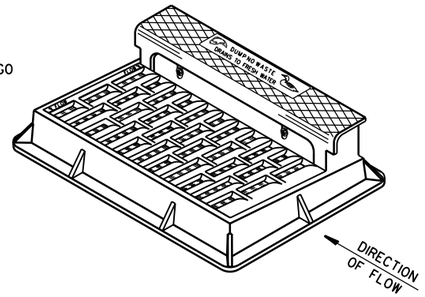
Standard Detail Drawing List

15D48-01 TRAFFIC CONTROL, LANE SHIFT IN FLAGGING OPERATION

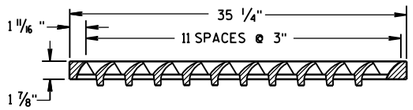
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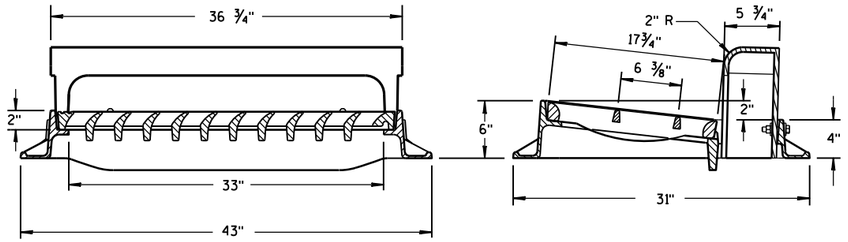


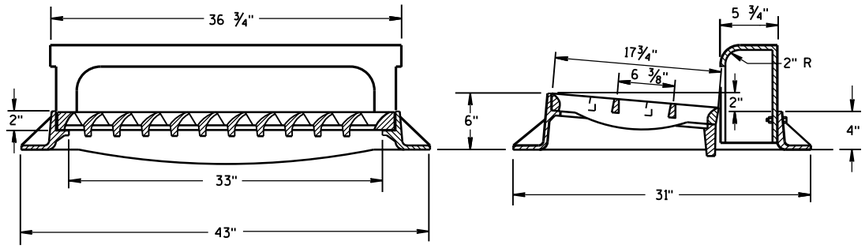
NOTE:
GRATE IS REVERSIBLE.



NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

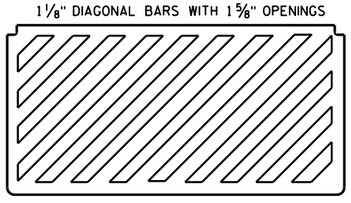






TYPE "H"

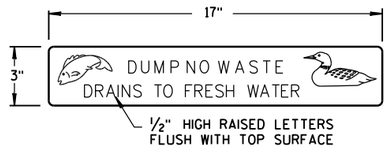
NOTE: EITHER CASTING IS ACCEPTABLE



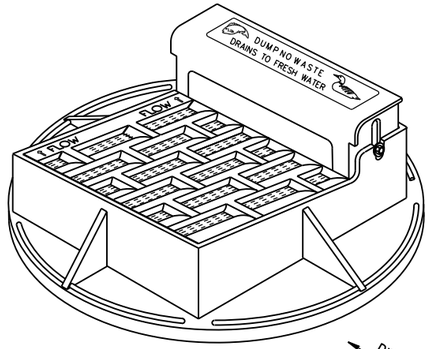
SPECIAL GRATE FOR TYPE "H" COVER

(MEASURES 35 1/4" X 17 3/4" X 2")

(NOTED AS TYPE H-S ON DRAINAGE TABLE)

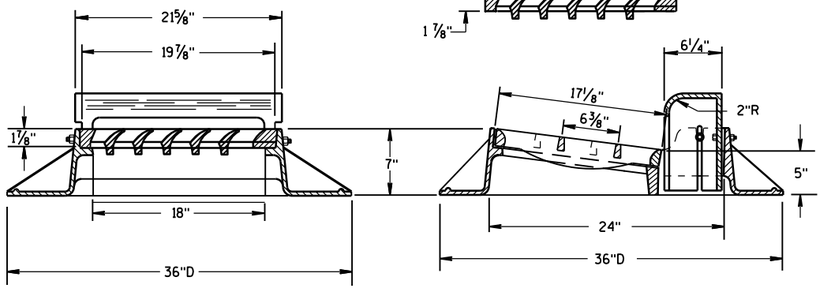


LOGO DETAIL



NOTE: CURB BOX ADJUSTABLE 4" TO 9"

NOTE:
GRATE IS REVERSIBLE.



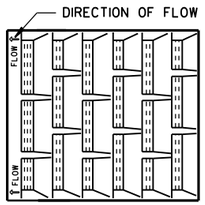
TYPE "A"

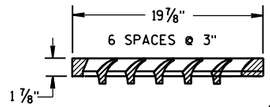
GENERAL NOTES

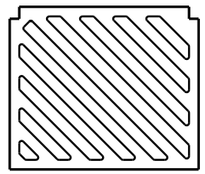
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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.



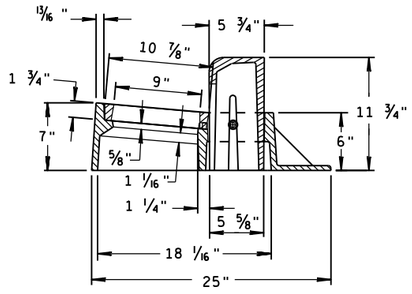


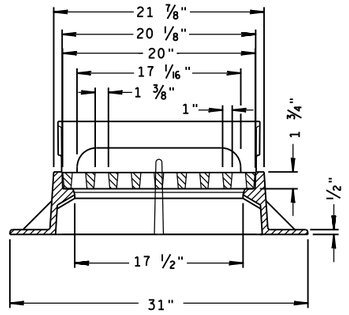


SPECIAL GRATE FOR TYPE "A" COVER

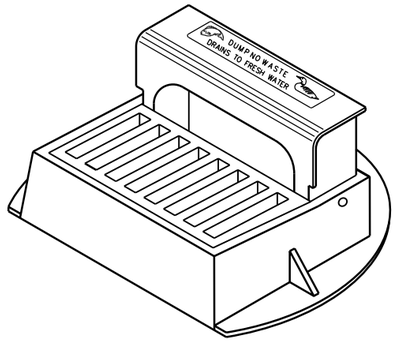
(MEASURES 19 3/4" X 17" X 1 7/8")

(NOTED AS TYPE A-S ON DRAINAGE TABLE)





TYPE "Z"



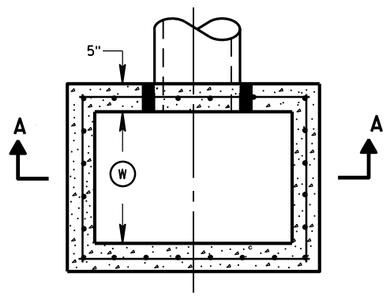
INLET COVERS
TYPE A, H, A-S, H-S & Z

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

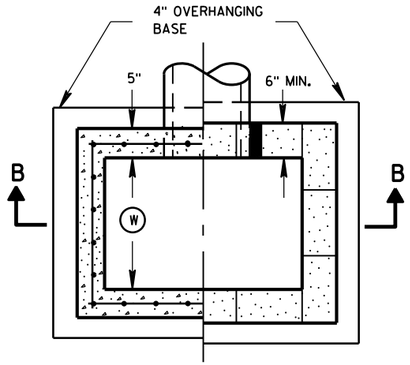
APPROVED
11-27-13 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
FHWA

6

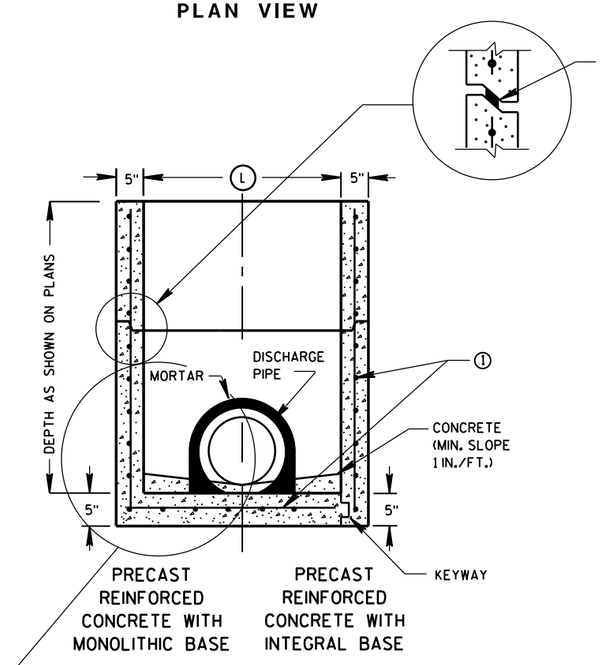
S.D.D. 8 A 5-19a



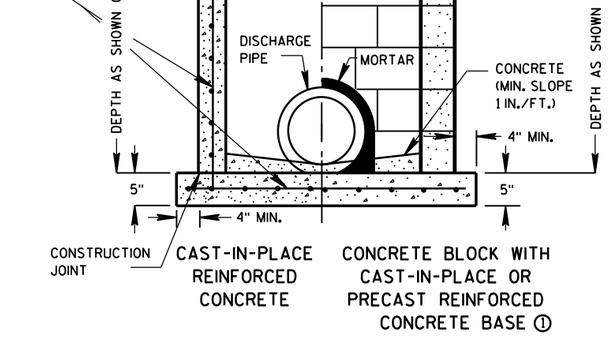
PLAN VIEW



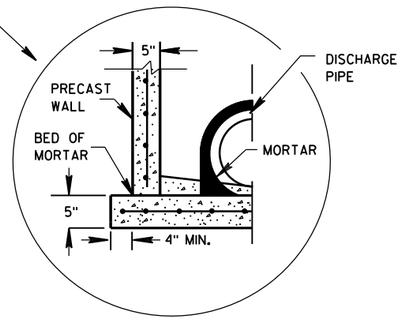
PLAN VIEW



SECTION A-A



SECTION B-B



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

GENERAL NOTES

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

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST INLET UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF ASTM C 913.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATES THE SIZE OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF FOUNDATION BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

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

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

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

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

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

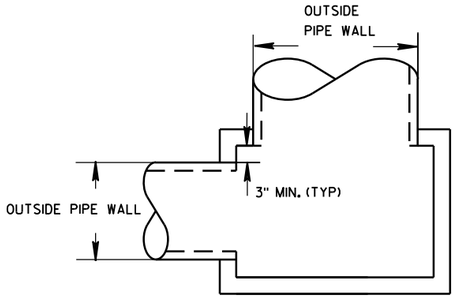
② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

INLET COVER MATRIX

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

PIPE MATRIX

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



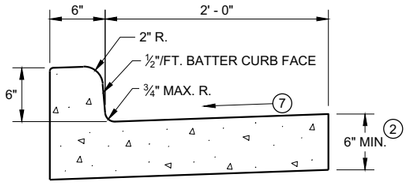
DETAIL "A"

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

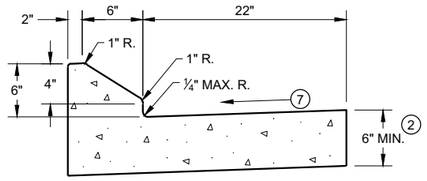
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept., 2016 — DATE
/S/ Rodney Taylor
ROADWAY STANDARDS D IT
UNIT SUPERVIS
FHWA

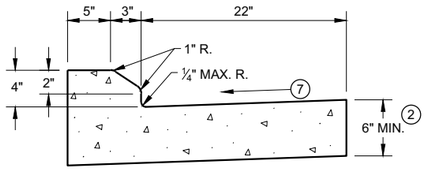
6
S.D.D. 8 C 7-2



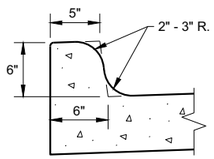
TYPES A[1] & D



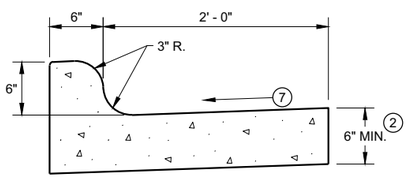
6" SLOPED CURB TYPES G[1] & J



4" SLOPED CURB TYPES G[1] & J

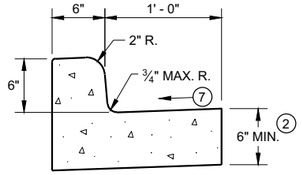


TYPES K[1] & L
(OPTIONAL CURB SHAPE)



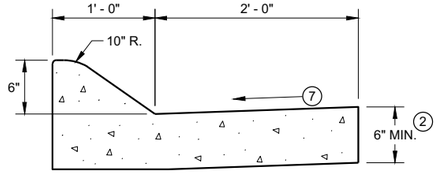
TYPES K[1] & L

CONCRETE CURB AND GUTTER 30"



TYPES A[1] & D

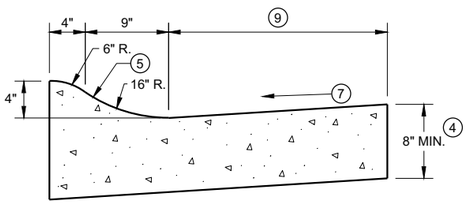
CONCRETE CURB AND GUTTER 18"



6" SLOPED CURB TYPES A[1] & D

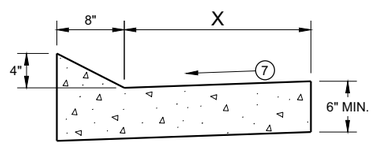
4" SLOPED CURB TYPES A[1] & D

CONCRETE CURB AND GUTTER 36"



4" SLOPED CURB TYPES R[1] & T

TBT & TBTT	X
30"	22"
36"	28"

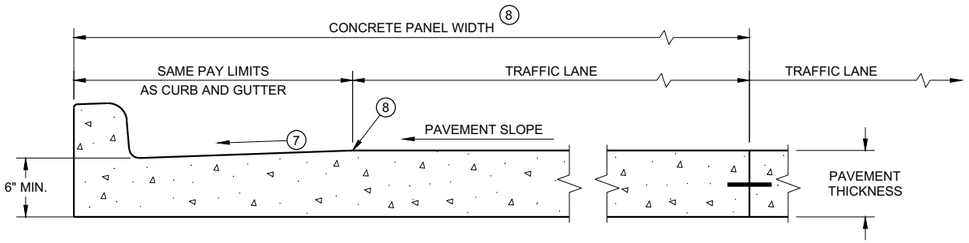


TYPES TBT & TBTT[1]

CONCRETE CURB AND GUTTER

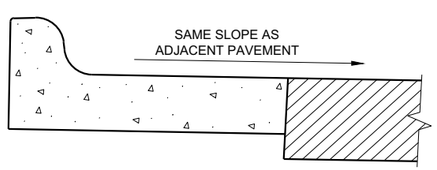
PAVEMENT THICKNESS AND MAXIMUM CONCRETE PANEL WIDTH TABLE

PAVEMENT THICKNESS	MAXIMUM PANEL WIDTH
LESS THAN 10"	12'
10" & ABOVE	15'



PARTIAL SECTION OF PAVEMENT * WITH INTEGRAL CURB AND GUTTER

* BIKE LANE IS NOT SHOWN



REVERSE SLOPE GUTTER[6]
(TYPICAL FOR ALL CURB & GUTTER TYPES)

GENERAL NOTES

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

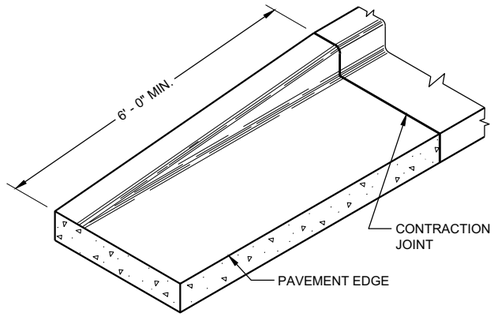
PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

INTEGRAL CURB AND GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB AND GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE.

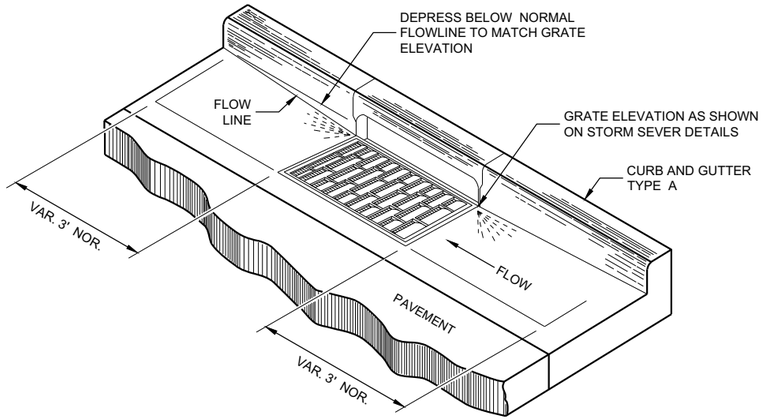
UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2' - 0" BEHIND THE BACK OF CURBS.

1. TIE BARS ARE REQUIRED FOR CURB AND GUTTERS TYPES A, G, K, R, AND TBTT.
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. USE 8" MINIMUM GUTTER THICKNESS WHEN USED WITH AN ADJACENT CONCRETE TRUCK APRON PLACED BEHIND BACK OF CURB.
4. 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.
5. UNLESS OTHERWISE NOTED, FOR STAKING PURPOSES THE FACE OF CURB IS 6" FROM THE BACK OF CURB.
6. WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.
7. USE 4% GUTTER CROSS SLOPE UNLESS OTHERWISE NOTED IN THE PLANS.
8. INCLUDE LONGITUDINAL JOINT AND TIE BARS ALONG LANE EDGE WHEN CONCRETE PANEL WIDTH EXCEEDS THE MAXIMUM WIDTH PER TABLE BELOW. LONGITUDINAL JOINT(S) ARE NOT ALLOWED WITHIN TRAFFIC LANES AND BIKE LANES. LONGITUDINAL JOINT MAY BE SAWED.
9. CONCRETE CURB AND GUTTER 4-INCH SLOPED 30-INCH TYPE "R" AND "T" = 17 INCHES
   CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE "R" AND "T" = 23 INCHES

CONCRETE CURB AND GUTTER



END SECTIONCURB AND GUTTER



DETAIL OF CURB AND GUTTER AT INLETS
(TYPICAL H INLET COVER SHOWN)

GENERAL NOTES

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

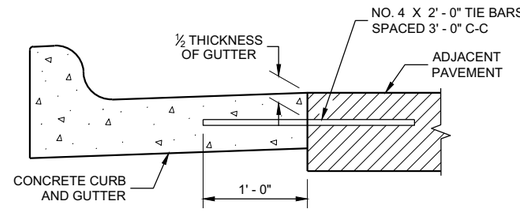
PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2' - 0" BEHIND THE BACK OF CURBS.

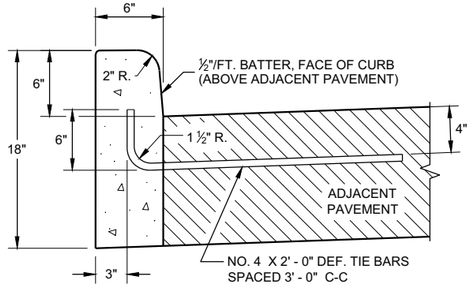
(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTERS TYPES A, G, K, R, AND TBTT.

(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.

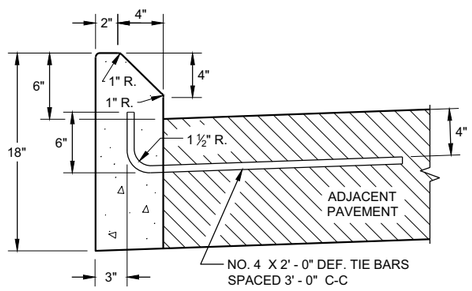
(9) REFER TO SDD 08D18 AND 08D19 FOR ADDITIONAL DRIVEWAY ENTRANCE CURB DETAILS.



TYPICAL TIE BAR LOCATION (1)

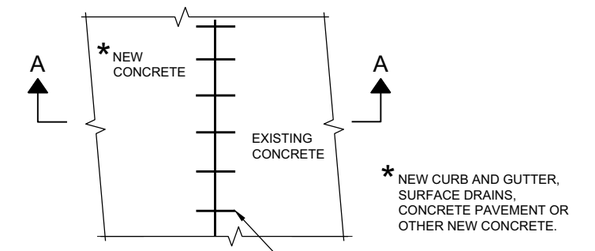


TYPES A (1) & D

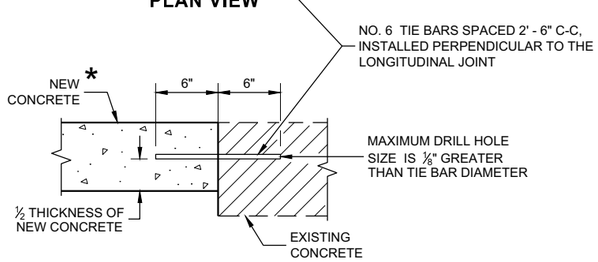


TYPES G (1) & J

CONCRETE CURB

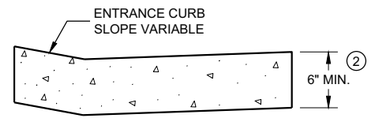


PLAN VIEW



SECTION A - A

TIE BARS DRILLED INTO EXISTING PAVEMENT



DRIVEWAY ENTRANCE CURB (9)
(WHEN DIRECTED BY THE ENGINEER)

CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2021 — DATE
/S/ Rodnery Taylor — ROADWAY STANDARDS DEVE ENGINEER

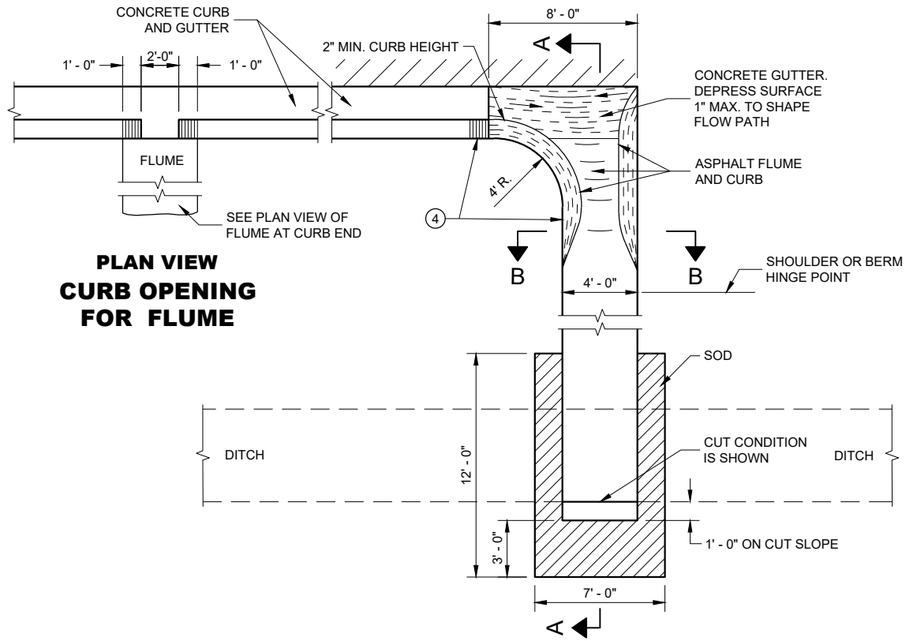
FHWA

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SDD08D01 - 22b

NOTE: TAPER CURB ENDS TO GUTTER IN 1' - 0"

ASPHALTIC FLUME

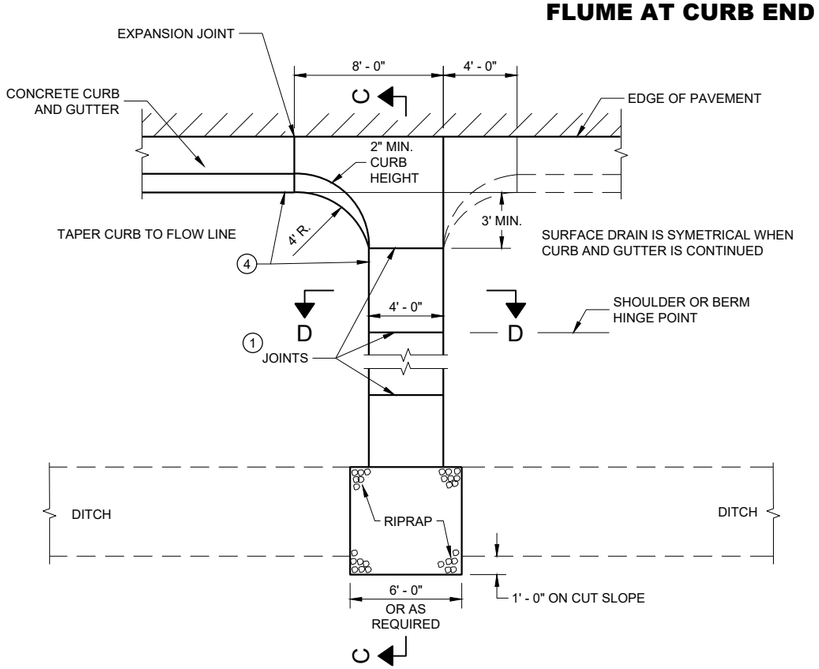


PLAN VIEW

CURB OPENING FOR FLUME

PLAN VIEW

FLUME AT CURB END



PLAN VIEW

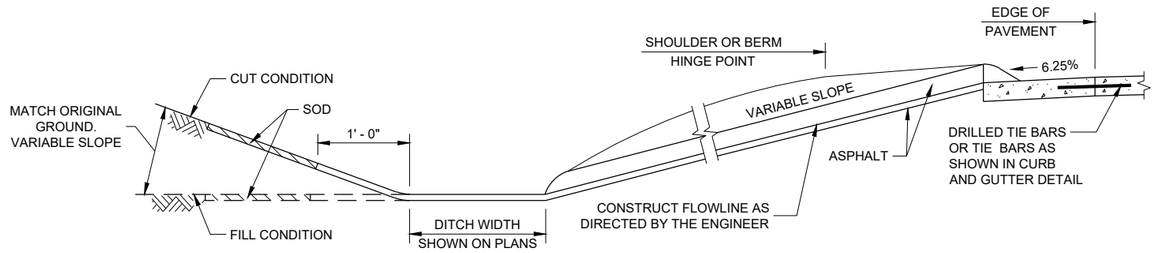
CONCRETE SURFACE DRAIN

GENERAL NOTES

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

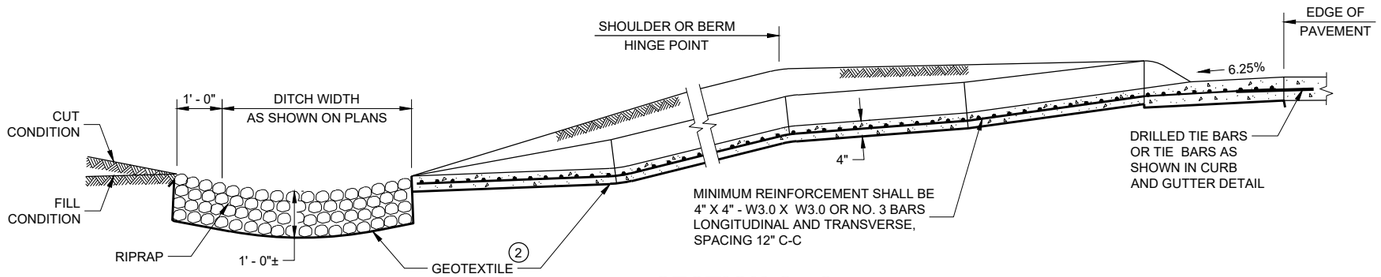
4" X 4" - W3.0 X W3.0 CONCRETE REINFORCEMENT SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

1. JOINTS SHALL BE ⅛" TO ¼" WIDE BY 1½" DEEP AND SPACED AT UNIFORM INTERVALS OF APPROXIMATELY 4 FEET.
2. GEOTEXTILE TYPE "R" SHALL UNDERLAY THE FULL LENGTH AND WIDTH OF THE CONCRETE SURFACE DRAIN AND RIPRAP.
3. CONCRETE SURFACE DRAIN WITHOUT CURB AND GUTTER MAY BE USED ON BACKSLOPES WHEN SPECIFIED.
4. ANGLE OF FLUME IN RELATION TO BACK OF CURB TO BE CONSTRUCTED PER THE PLAN DETAILS OR AS DIRECTED BY THE ENGINEER. ANGLE OF FLUME MAY BE OTHER THAN 90 DEGREES AS SHOWN.

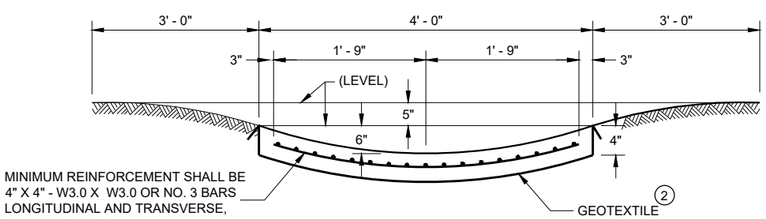


SECTION A - A

SECTION B - B



SECTION C - C



SECTION D - D

CONCRETE SURFACE DRAINS AND ASPHALTIC FLUMES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

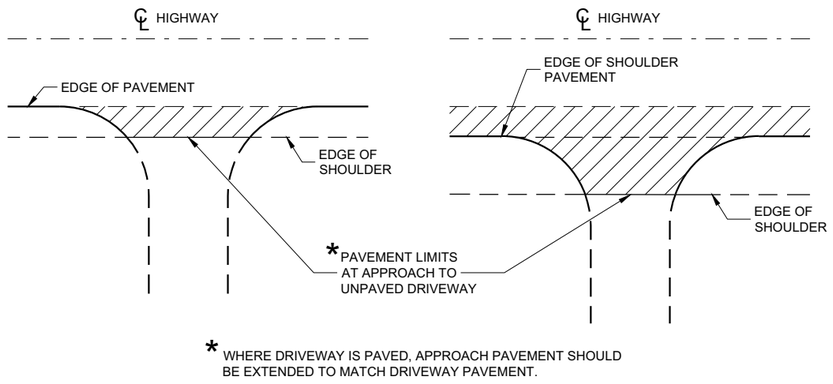
APPROVED
November 2021
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

FHWA

SDD 08D04 - 06

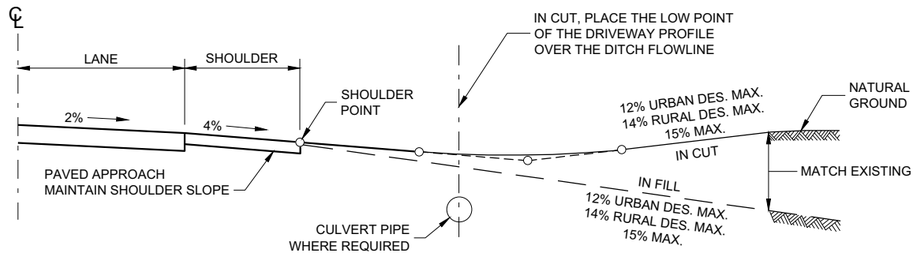
SDD 08D04 - 06



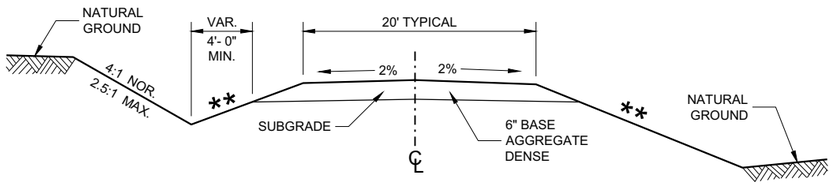
PLAN VIEW
(UNPAVED SHOULDER ON HIGHWAY)

PLAN VIEW
(PAVED SHOULDER ON HIGHWAY)

RURAL DRIVEWAY INTERSECTION DETAIL
(NO CURB AND GUTTER OR SIDEWALK)



TYPICAL DRIVEWAY PROFILES

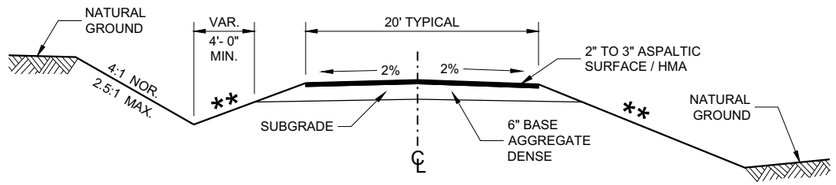


IN CUT **IN FILL**

TYPICAL CROSS SECTION FOR PRIVATE DRIVE OR FIELD ENTRANCE AGGREGATE SURFACE

** SLOPE CAN VARY WITH SPEED. SEE 11-45-30.6.2

POSTED SPEED MPH	MAX. SLOPE
<35	4:1
≥ 35 TO < 60	6:1
≥60	10:1



IN CUT **IN FILL**

TYPICAL CROSS SECTION FOR PRIVATE DRIVE OR FIELD ENTRANCE ASPHALTIC SURFACE

6

6

SDD 08D21 - 01

SDD 08D21 - 01

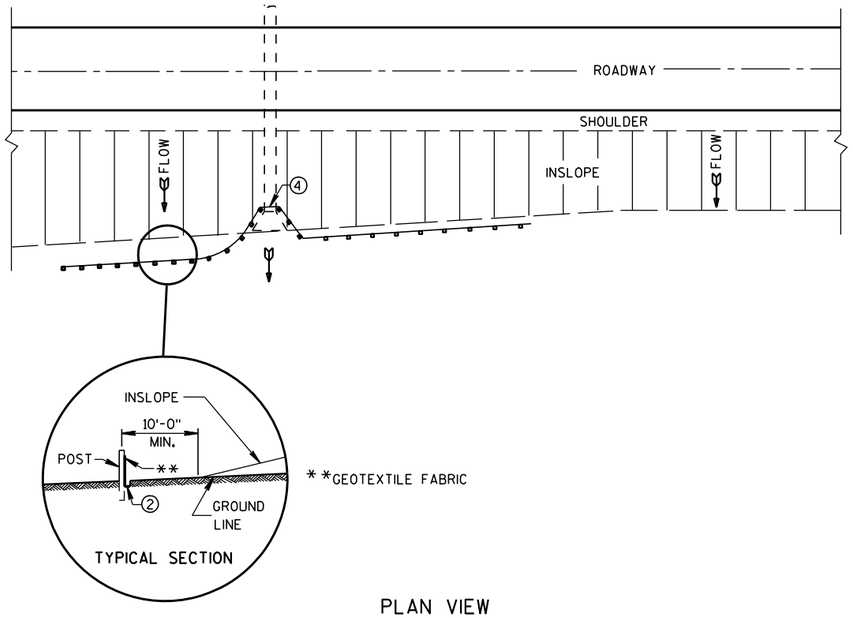
DRIVEWAYS WITHOUT CURB AND GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December 2017
DATE

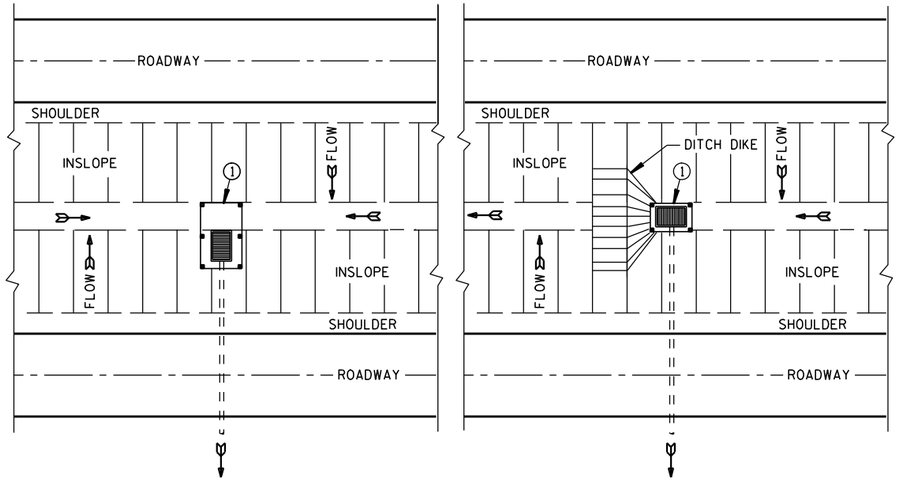
/S/ Rodney Taylor
ROADWAY STANDARDS DEVE
UNIT SUPERVISOR

FHWA



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



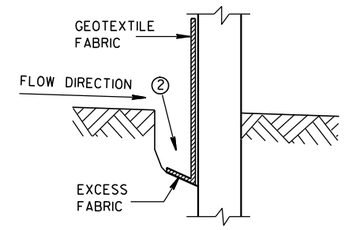
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

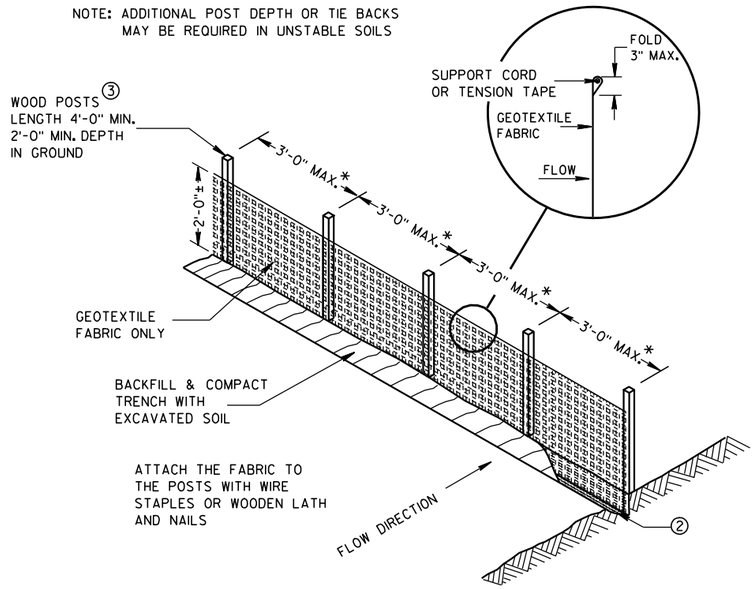
GENERAL NOTES

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

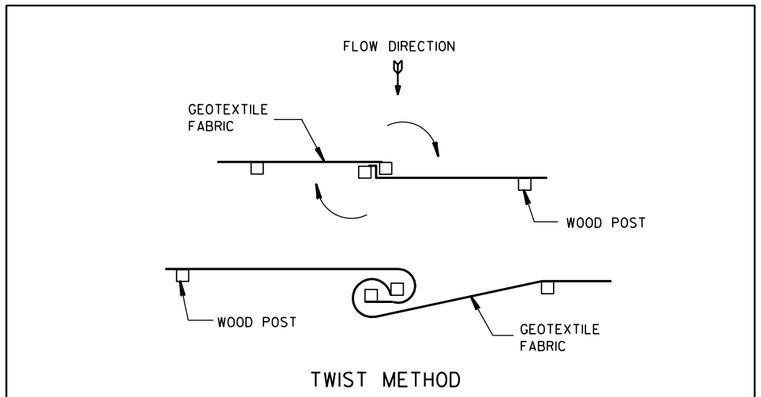
1. HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
2. FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
3. WOOD POSTS SHALL 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.



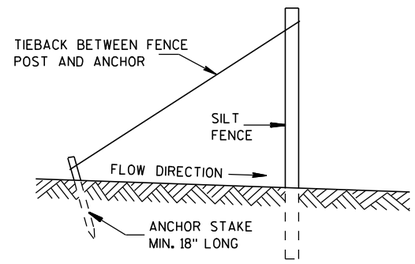
TRENCH DETAIL



SILT FENCE



JOINING TWO LENGTHS OF SILT FENCE 5



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

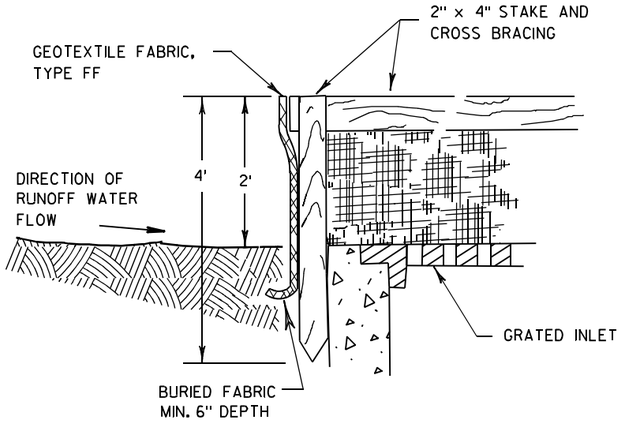
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

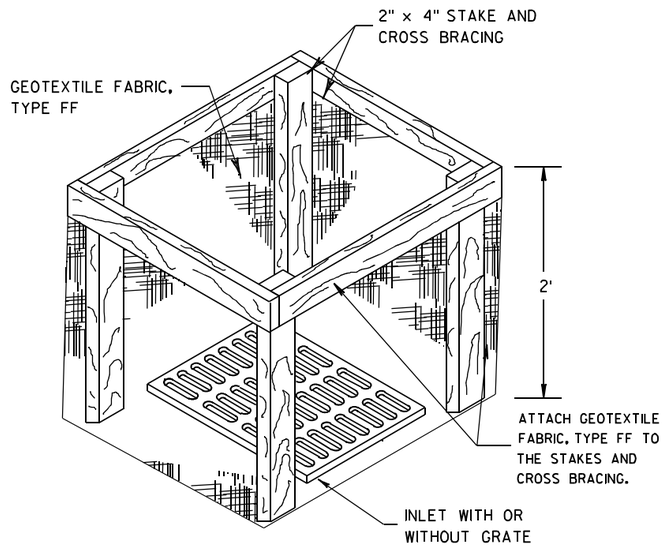
6

S.D.D. 8 E 9-6

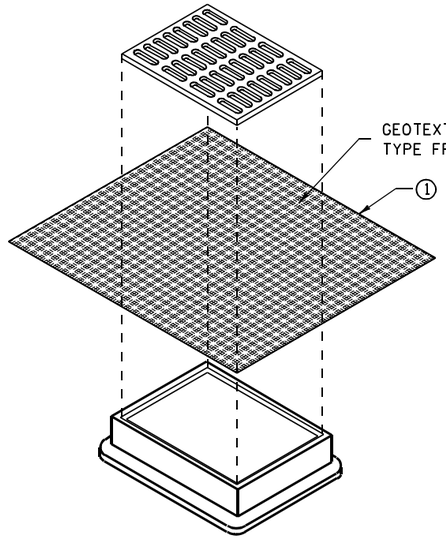
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S.D.D. 8 E 9-6



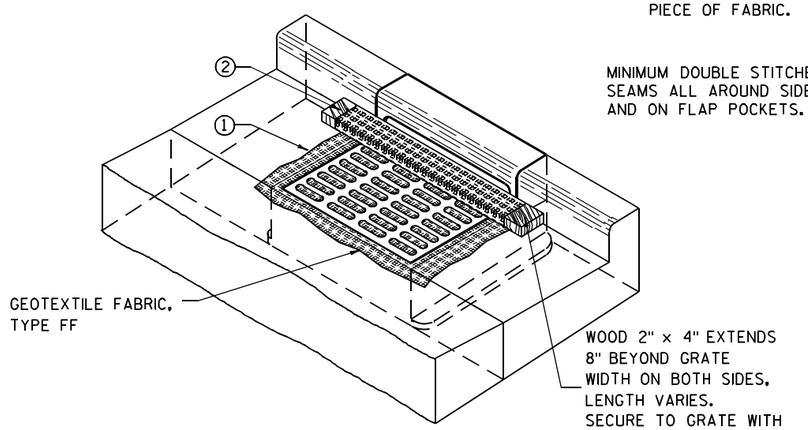


INLET PROTECTION, TYPE A

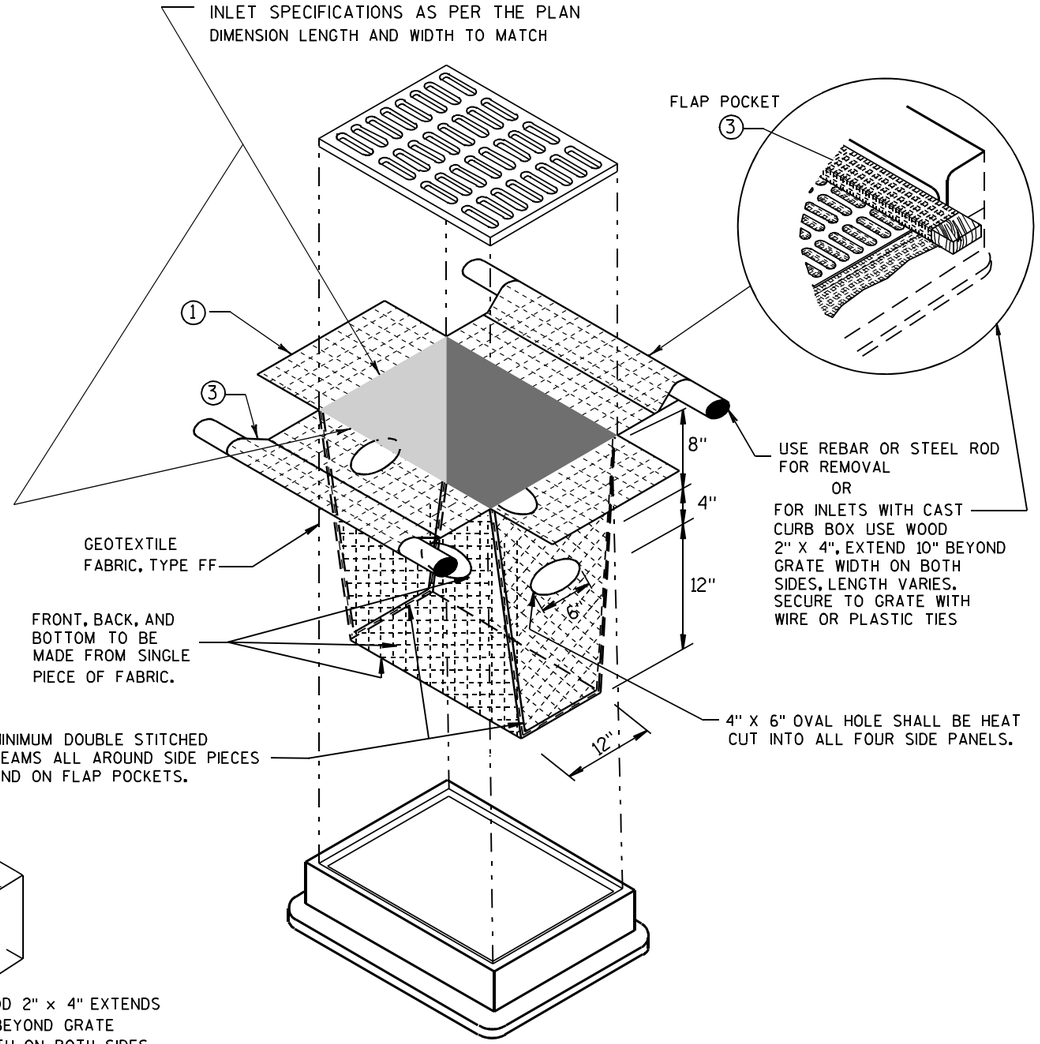


INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

(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

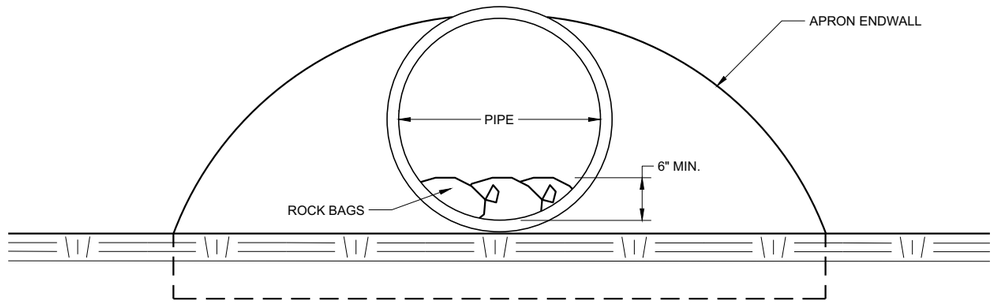
10/16/02
DATE

/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER

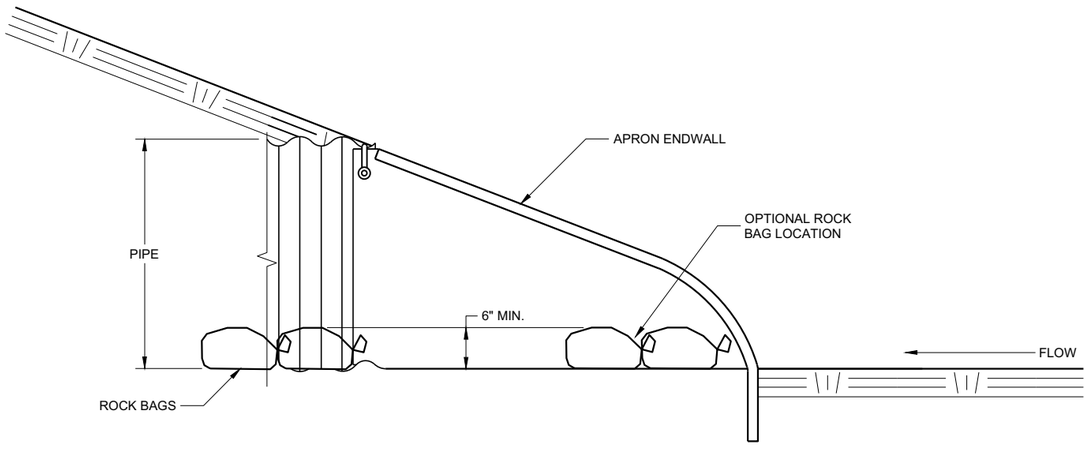
FHWA

6

S.D.D. 8 E 10-2



END VIEW



SIDE VIEW

CULVERT PIPE CHECK

(INSTALL ON INLET END ONLY)

CULVERT PIPE CHECK

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019 — DATE
/S/ Daniel Schave — EROSION CONTROL ENGI
FHWA

6

SDD 08E15 - 01

6

SDD 08E15 - 01

METAL APRON ENDWALLS

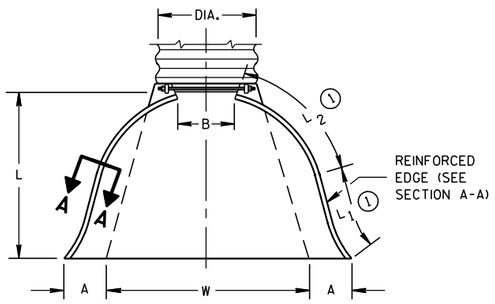
PIPE DIA. (IN.)	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4	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

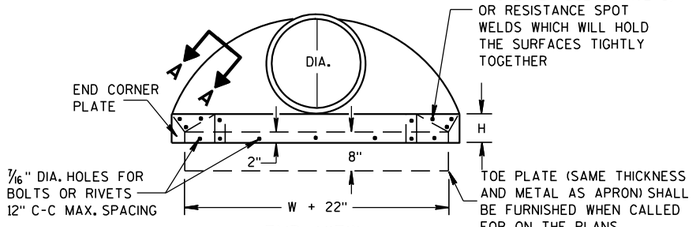
REINFORCED CONCRETE APRON ENDWALLS

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

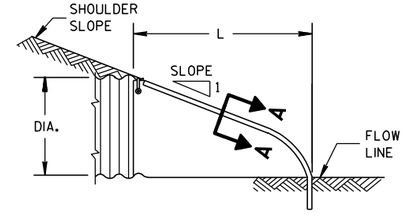
*MINIMUM
**MAXIMUM



PLAN VIEW

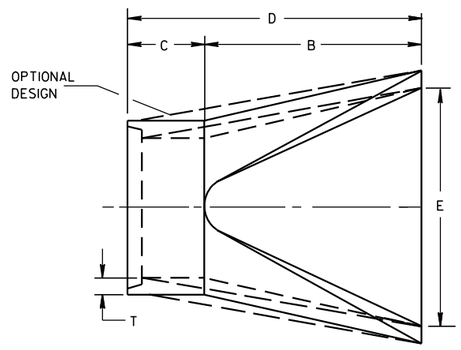


END VIEW

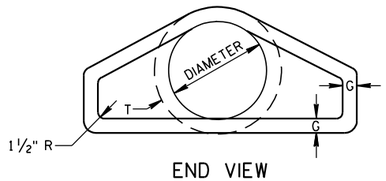


SIDE ELEVATION

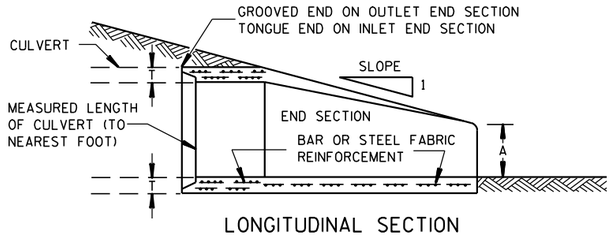
METAL ENDWALLS



PLAN

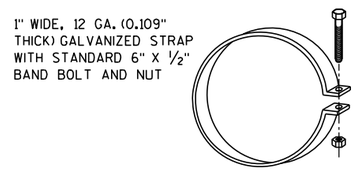


END VIEW



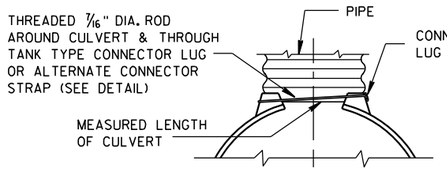
LONGITUDINAL SECTION

CONCRETE ENDWALLS

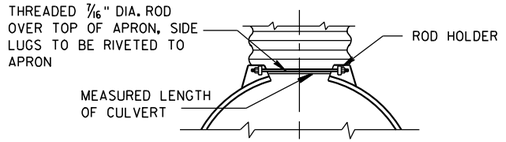


ALTERNATE FOR TYPE 1 CONNECTION

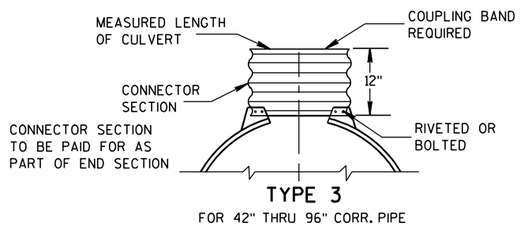
END SECTION CONNECTOR STRAP



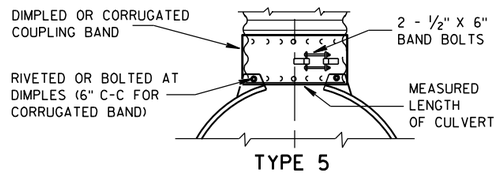
TYPE 1
FOR 12" THRU 24" CORR. PIPE



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

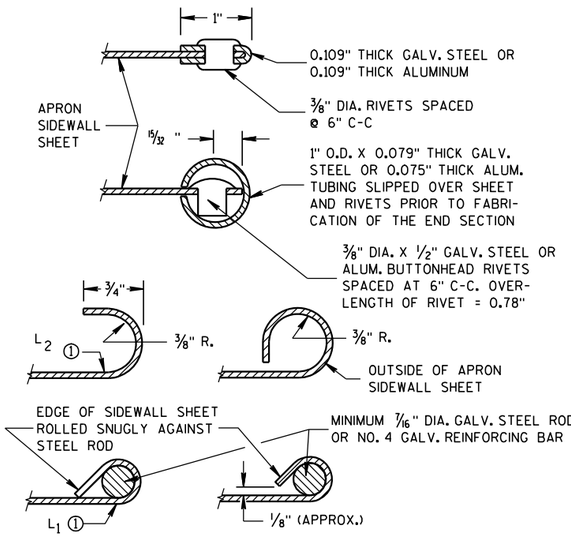
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

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.

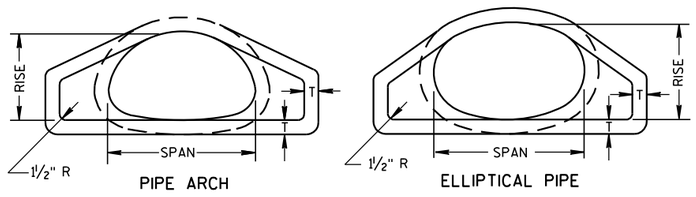
① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR CULVERT PIPE

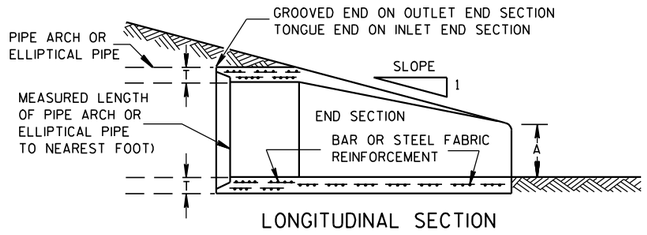
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

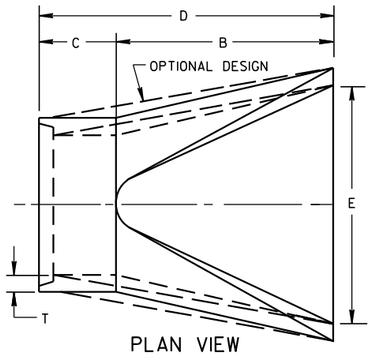
6
S.D.D. 8 F 1-11



END VIEW

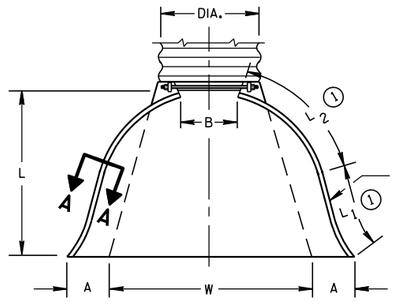


LONGITUDINAL SECTION

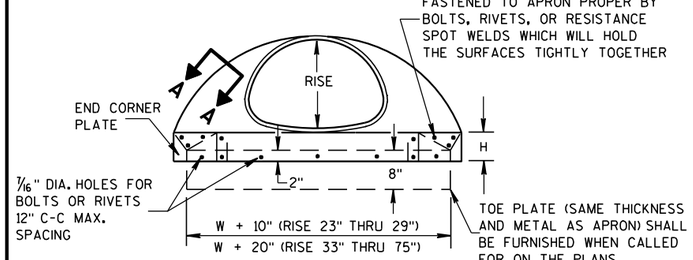


PLAN VIEW

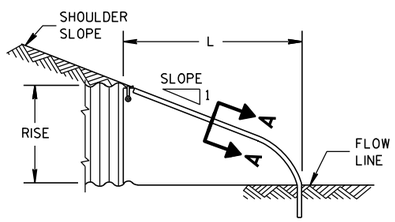
CONCRETE ENDWALLS



PLAN VIEW

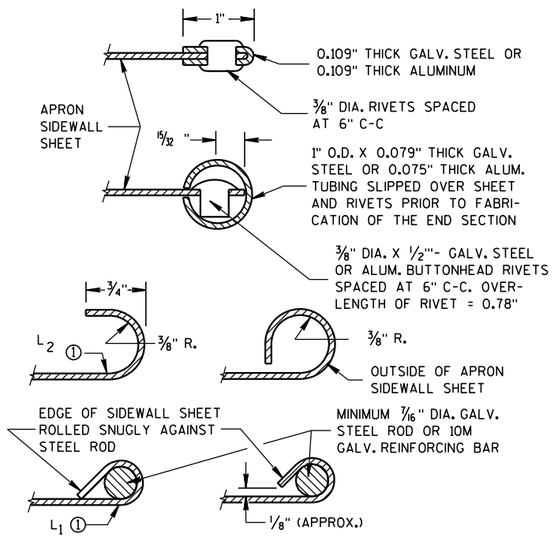


END VIEW



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

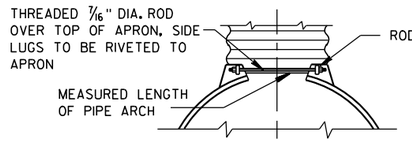
REINFORCED CONCRETE PIPE ARCH

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

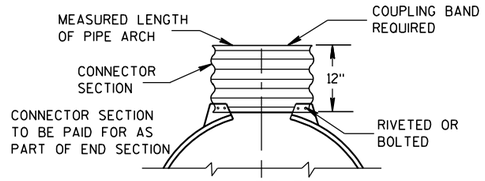
EQUIV. DIA. (Inches)	DIMENSIONS (Inches) ** SPAN	** RISE	T	A	B	C	D	E	APPROX. SLOPE
24	30	19	3¼	8½	39	33	72	48	3 to 1
30	38	24	3¾	9½	54	18	72	60	3 to 1
36	45	29	4½	11⅛	60	24	84	72	2½ to 1
42	53	34	5	15¾	60	36	96	78	2½ to 1
48	60	38	5½	21	60	36	96	84	2½ to 1
54	68	43	6	25½	60	36	96	90	2½ to 1
60	76	48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

**NOMINAL SIZE



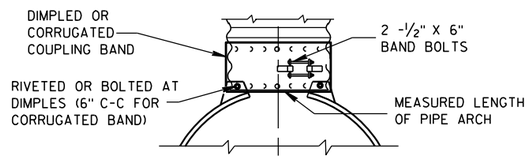
TYPE 2

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

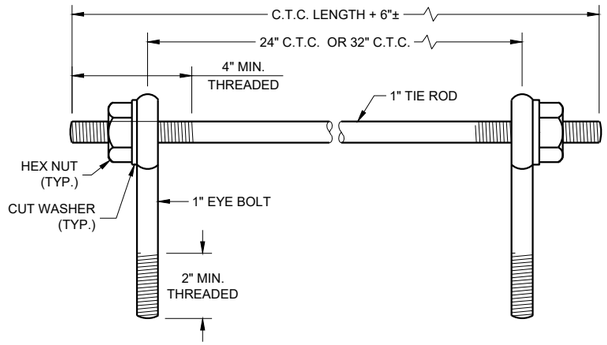
11/30/94 — DATE

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

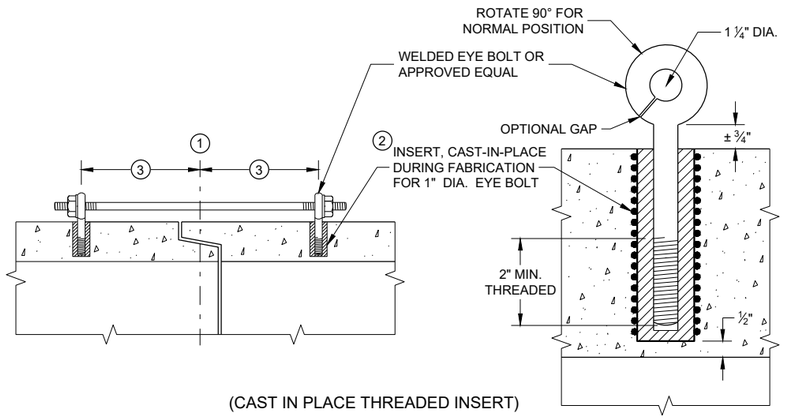
FHWA

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6



EYE BOLTS AND TIE ROD



(CAST IN PLACE THREADED INSERT)

LONGITUDINAL SECTIONS

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 1)

GENERAL NOTES

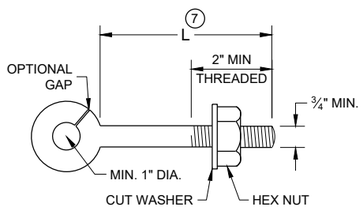
DETAILS OF CONSTRUCTION, MATERIALS, AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

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.

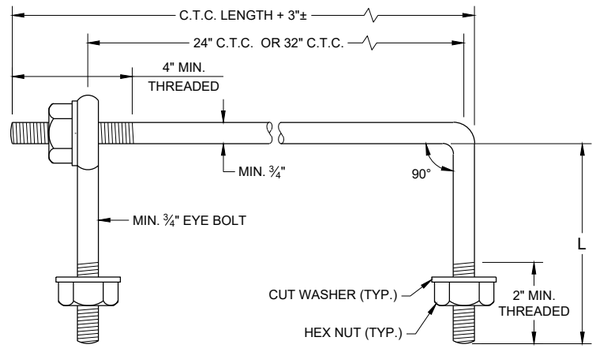
JOINT TIES TO BE HOT-DIP GALVANIZED PER ASTM A 153.

1. CENTER LINE 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 PER THE APPLICABLE DETAIL, AND EQUAL DISTANCE FROM THE CENTERLINE OF THE JOINT.
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 ½ INCH OF THE INNER SURFACE OF THE PIPE.
7. EYE BOLT LENGTH DETERMINED BY WALL THICKNESS, BELL THICKNESS AND BOLT PROJECTION INSIDE PIPE.

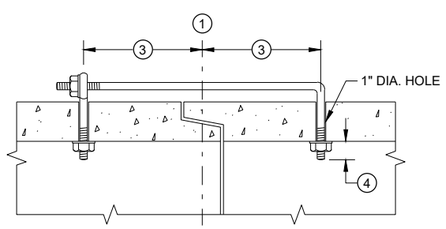


EYE BOLT 7

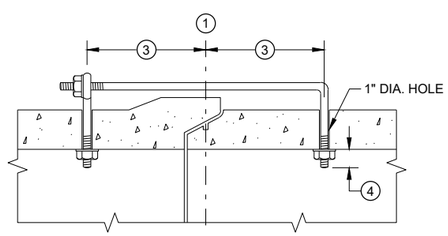
NOTE: TWO EYE BOLTS MAY BE USED WITH A 30" OR 38" LONG THREADED ROD IN LIEU OF THE 90° BENT TIE ROD.



EYE BOLT AND TIE ROD



(TONGUE AND GROOVE PIPE)



(MODIFIED BELL PIPE)

LONGITUDINAL SECTION

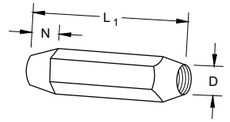
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 2)

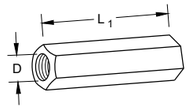
ADJUSTABLE TIE ROD TABLE

PIPE DIAMETER	TIE ROD DIAMETER	D	L_1	N
12 - 60	⅝	⅝	5	½
66 - 84	¾	¾	5	½
90 - 144	1	1	7	1 7/16

DIMENSIONS SHOWN ARE IN INCHES



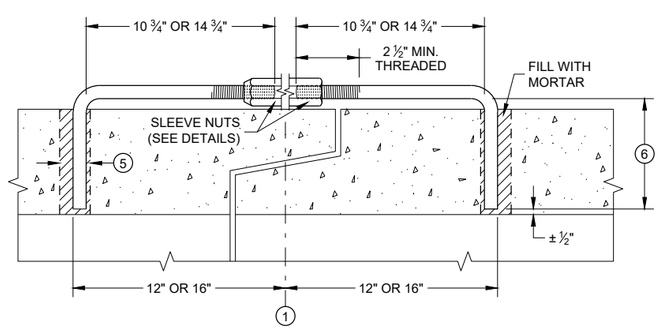
TAPERED



PLAIN

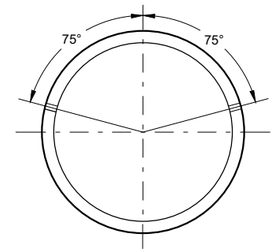
RIGHT AND LEFT THREADS

SLEEVE NUTS



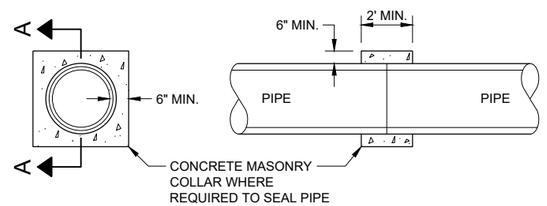
LONGITUDINAL SECTION

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

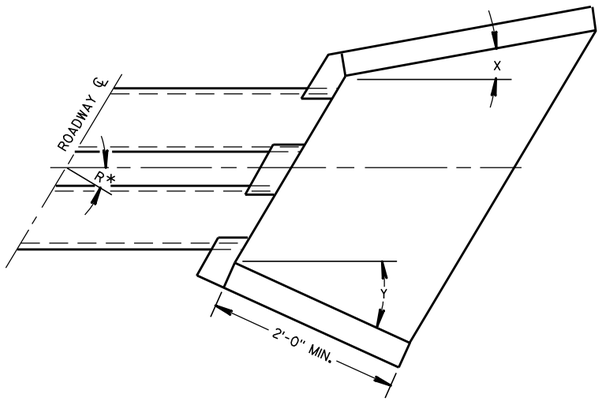
JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2021 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE ENGINEER

FHWA

6
SDD 08F04 - 08



WINGWALL ANGLE DETAILS

INLET			OUTLET		
R*	X	Y	R*	X	Y
0 - 7°	30°	30°	0 - 15°	15°	15°
8 - 22°	25°	"	16 - 45°	10°	"
23 - 37°	20°	"	46 - 75°	5°	"
38 - 52°	15°	"	OVER 75°	0°	"
53 - 67°	10°	"			
68 - 82°	5°	"			
OVER 82°	0°	"			

*R = NUMBER OF DEGREES RIGHT OR LEFT HAND FORWARD

GENERAL NOTES

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

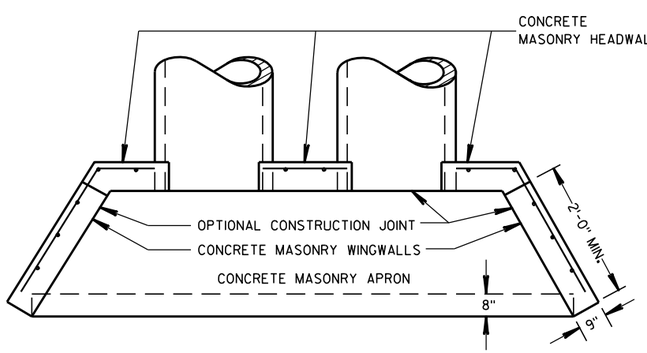
FILL SLOPES FLATTER THAN 2 ½:1 SHALL BE WARPED TO MEET THE TOP OF THE WINGWALLS.

ALL STEEL REINFORCEMENT AND WELDED STEEL WIRE FABRIC SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE NOTED.

(1) MINIMUM REINFORCEMENT SHALL BE 6" X 6" - W4.0 X W4.0 OR NO. 3 BARS SPACED 12" C-C IN BOTH DIRECTIONS.

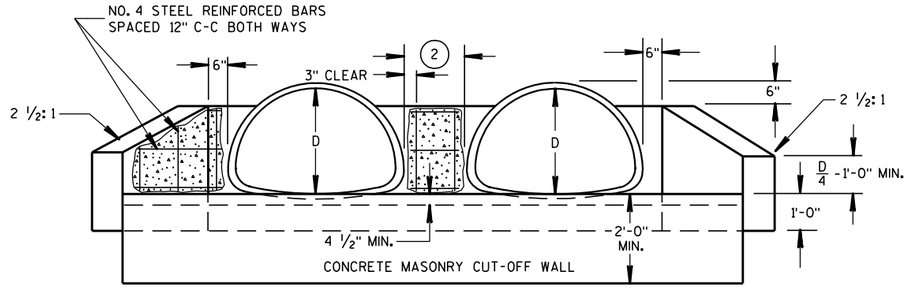
(2) THE SPACE BETWEEN PIPES SHALL BE AS FOLLOWS:

DIAMETER OR SPAN	SPACE
UP TO AND INCLUDING 48"	2'-0"
OVER 48" TO 72"	½ DIA. OR SPAN
OVER 72"	3'-0"



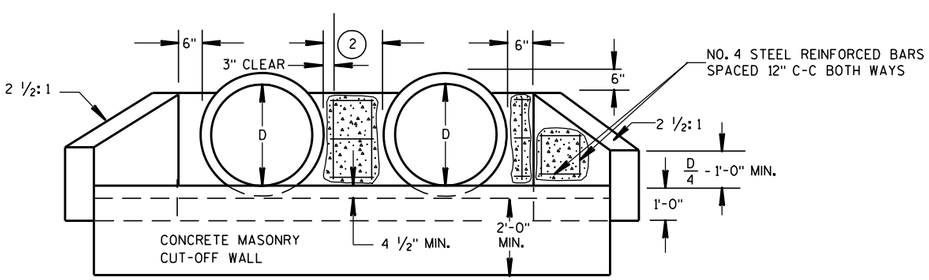
PLAN VIEW

CULVERT PIPE AND PIPE ARCH



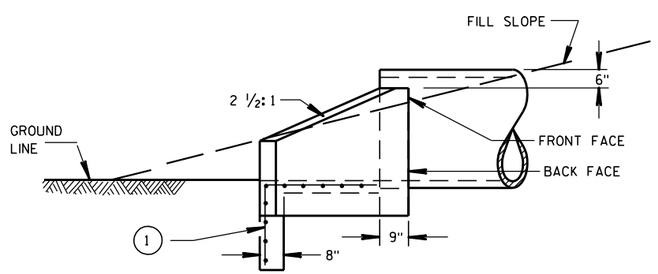
END ELEVATION

PIPE ARCH



END ELEVATION

CULVERT PIPE



SIDE ELEVATION

CULVERT PIPE AND PIPE ARCH

CONCRETE MASONRY ENDWALLS FOR CULVERT PIPE AND PIPE ARCH

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

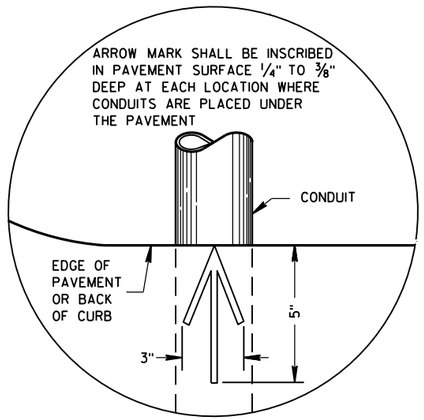
9/14/98 DATE

/S/ Rory L. Rhinehart
CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

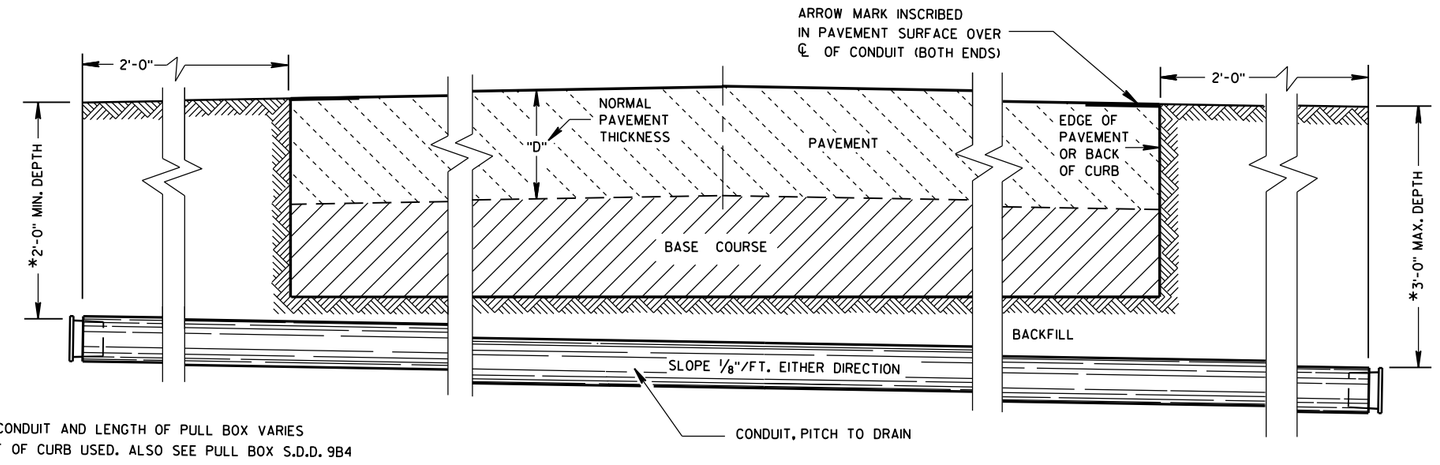
6

S.D.D. 8 F 10-1



PLAN VIEW

ARROW MARK



*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

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.).

TRACER 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.

CONDUIT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

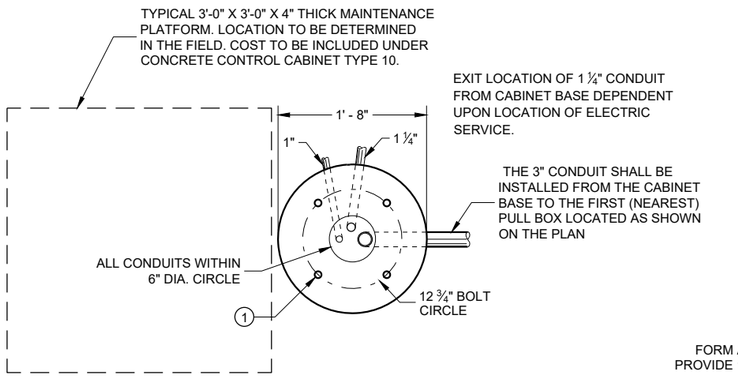
APPROVED
March, 2017 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

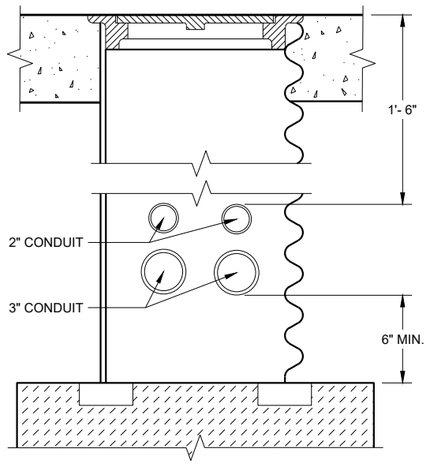
6

S.D.D. 9 B 2-10

CONTROL CABINET BASE TYPE	DIMENSIONS				CUBIC YARD CONCRETE (APPROX.)
	H	I	J	K	
TYPE 6 - 30" CABINET	34"	60"	10"	17"	.64
TYPE 7 - 38" CABINET	42"	60"	10"	21"	.93
TYPE 8 - 38" CABINET	42"	72"	12"	21"	1.29
TYPE 9 - VARIABLE	54"	72"	14"	27"	1.56
TYPE 10 - POST MOUNT	AS SHOWN				.65*

* INCLUDES MAINTENANCE PLATFORM.





CONDUIT LOCATIONS IN 24" X 36" PULL BOX

(LEADING TO CONTROLLER CABINET BASE TYPE 6, 7, 8 AND 9)

GENERAL NOTES

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

INSTALL FOUR (4) ½" INCH MINIMUM DIAMETER X 4 INCH MINIMUM LENGTH APPROVED CONCRETE MASONRY ANCHORS WITH A PULLOUT STRENGTH OF 9,000 LBS. 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 NON - METALLIC 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.

WHEN A TYPE 10 CONTROL CABINET BASE IS USED TO POST MOUNT A CONTROL CABINET, A 36" SQUARE 4" THICK CONCRETE MAINTENANCE PLATFORM SHALL BE REQUIRED ON THE DOOR SIDE OF THE CABINET. THE TOP 1 INCH SHALL BE ABOVE FINISHED GRADE AND BE BROOM FINISHED AND LEVEL.

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

MINIMUM BENDING RADIUS OF CONDUIT EQUALS 6 TIMES THE DIAMETER.

ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

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

ALL FOUR (TWO INCH AND THREE INCH) CONDUIT SHALL BE INSTALLED FROM THE CABINET BASE TO THE FIRST (NEAREST PULL BOX LOCATED AS SHOWN ON THE PLANS.

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

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

WHEN ANCHOR RODS USING THE ALTERNATE L BEND ARE FURNISHED FOR THE TYPE 10 BASE, THE 4" L BEND SHALL BE IN ADDITION TO THE SPECIFIED ANCHOR ROD BAR LENGTH.

THE "L" BEND SHALL NOT BE THREADED.

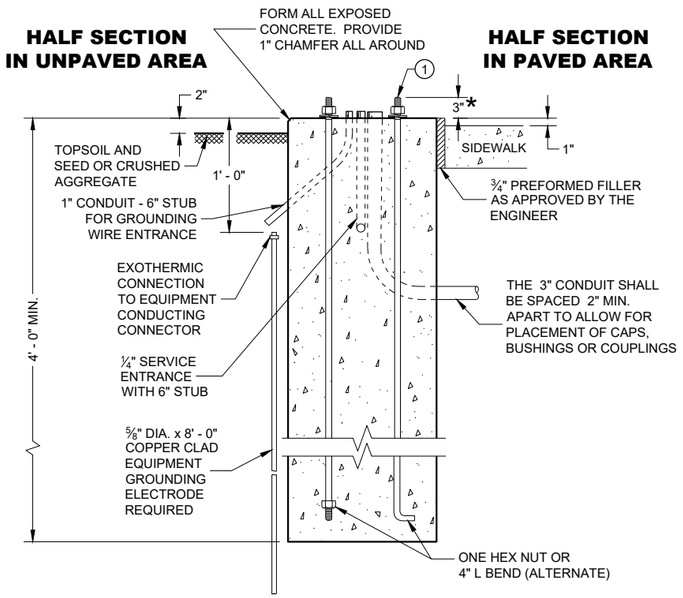
STRAIGHT ANCHOR RODS SHALL BE THREADED 12" IN LENGTH ON EACH END OF THE ROD.

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

(1) FOUR (4) ANCHOR RODS, 1" DIA. X 3'-6". ANCHOR RODS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 654.2 OF THE STANDARD SPECIFICATIONS.

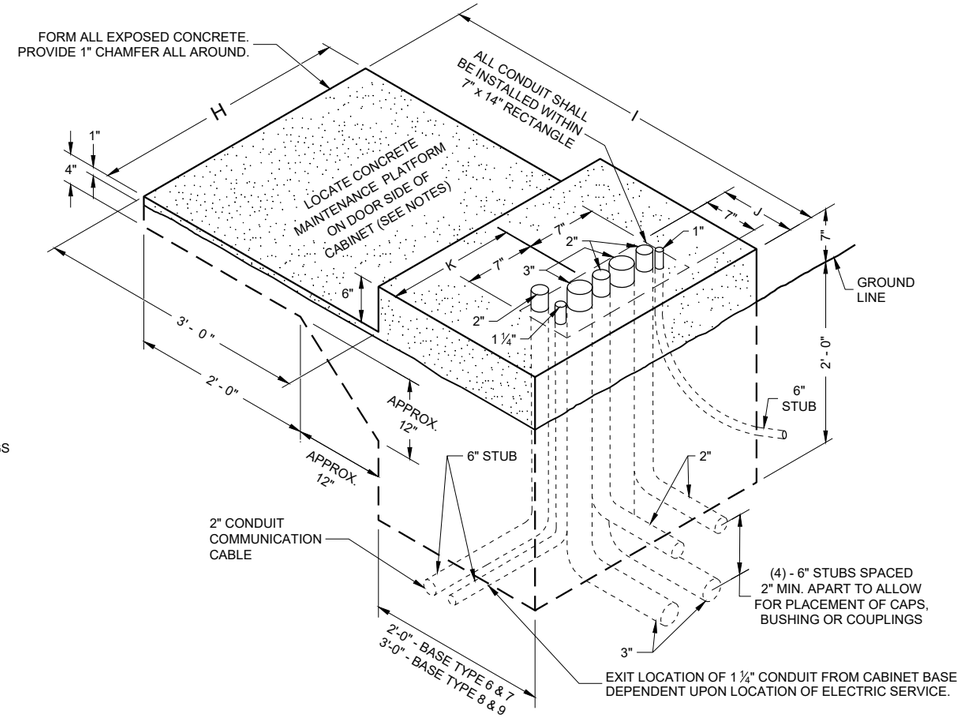
HALF SECTION IN UNPAVED AREA

HALF SECTION IN PAVED AREA



TYPE 10

* ANY ANCHOR ROD PROJECTION SHORTER THAN 2 ¾" OR LONGER THAN 3 ¼" SHALL REQUIRE THE BASE TO BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE.



ISOMETRIC VIEW
TYPE 6, 7, 8 AND 9

CONCRETE CABINET CONTROL BASES

CONCRETE CABINET CONTROL BASES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

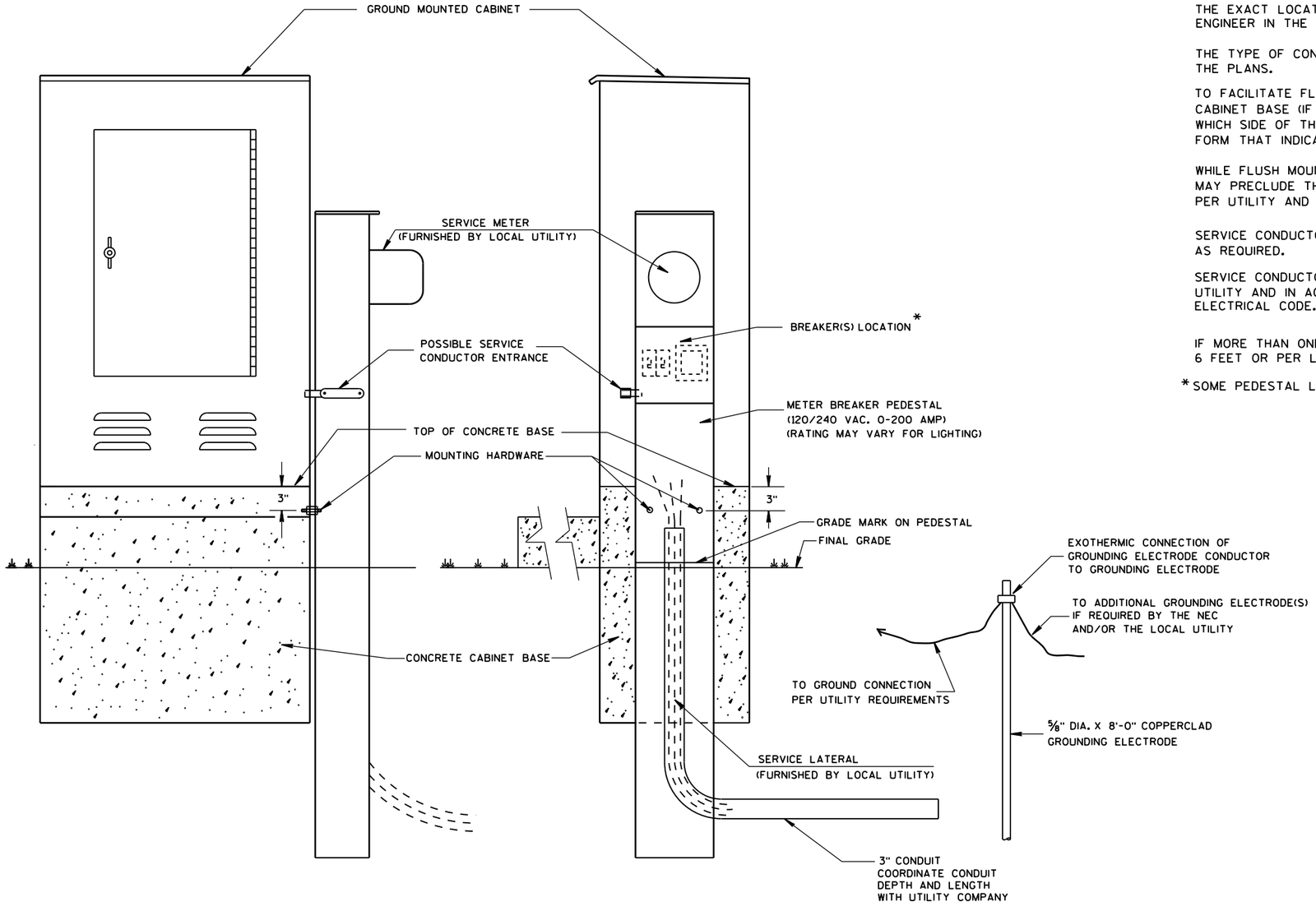
APPROVED
September 2016
DATE
/S/ Ahmet Demerbilek
STATE ELECTRICAL ENGI 93
FHWA

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SDD 09C05 - 10

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SDD 09C05 - 10



TYPICAL CABINET SERVICE INSTALLATION

GENERAL NOTES

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

THE EXACT LOCATION OF THE METER BREAKER PEDESTAL SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

THE TYPE OF CONCRETE CABINET BASE TO BE INSTALLED SHALL BE AS CALLED FOR IN THE PLANS.

TO FACILITATE FLUSH MOUNTING OF THE METER BREAKER PEDESTAL AGAINST THE SIDE OF THE CABINET BASE (IF FLUSH MOUNTING POSSIBLE. CONFER WITH THE LOCAL UTILITY TO DETERMINE WHICH SIDE OF THE CONCRETE BASE THE ELECTRICAL SERVICE LATERAL WILL APPROACH. THEN FORM THAT INDICATED SIDE FOR FULL SIDE DEPTH.

WHILE FLUSH MOUNTING IS THE MOST DESIRABLE MOUNTING CONFIGURATION UTILITY REQUIREMENTS MAY PRECLUDE THIS OPTION. CONTRACTOR MUST PROVIDE UTILITY APPROVED PEDESTAL AND INSTALL PER UTILITY AND MANUFACTURERS REQUIREMENTS.

SERVICE CONDUCTOR ENTRANCES SHALL BE RIGID METALLIC CONDUIT, NIPPLES AND/OR CONDULETS AS REQUIRED.

SERVICE CONDUCTOR ENTRANCES SHALL BE SIZED AND LOCATED AS REQUIRED BY THE LOCAL UTILITY AND IN ACCORDANCE WITH APPROPRIATE ARTICLES OF THE LATEST ACCEPTED NATIONAL ELECTRICAL CODE.

IF MORE THAN ONE GROUNDING ELECTRODE IS REQUIRED, THE DISTANCE APART SHALL BE 6 FEET OR PER LOCAL UTILITY REGULATIONS.

* SOME PEDESTAL LIGHTING PLANS SHOW MAIN LUGS ONLY.

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S.D.D. 9 D 1-5

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S.D.D. 9 D 1-5

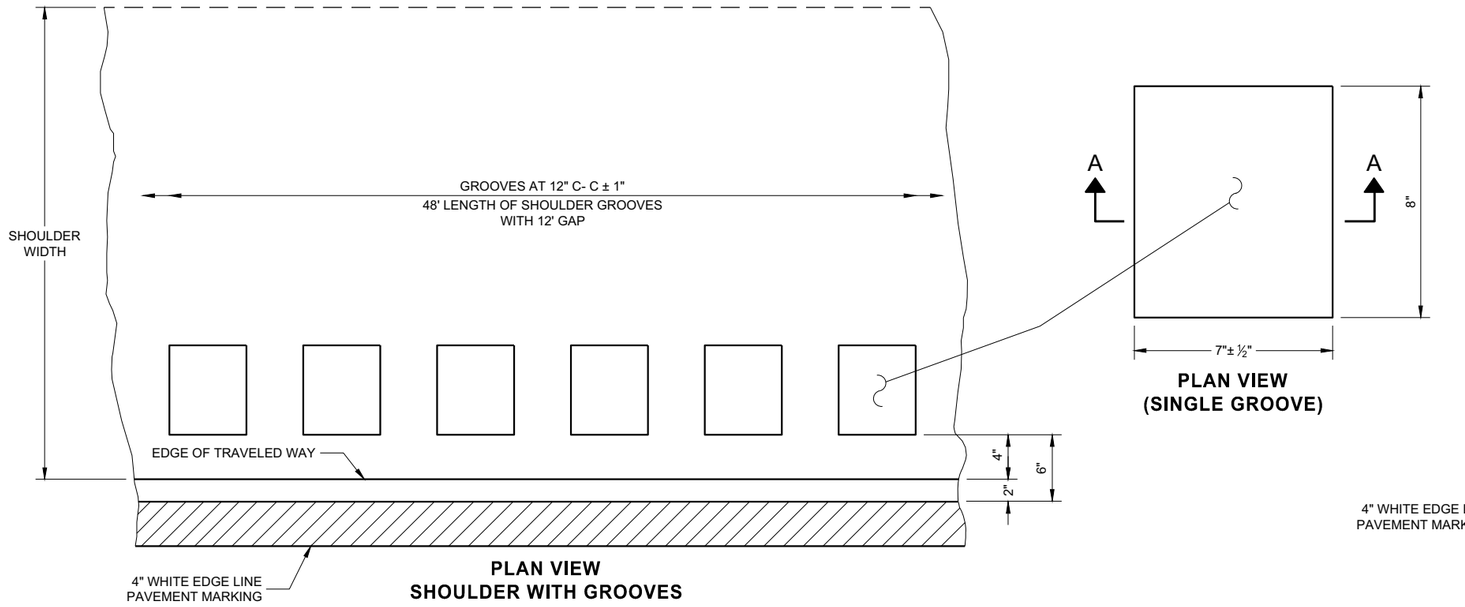
CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL

FHWA



PLAN VIEW
SHOULDER WITH GROOVES

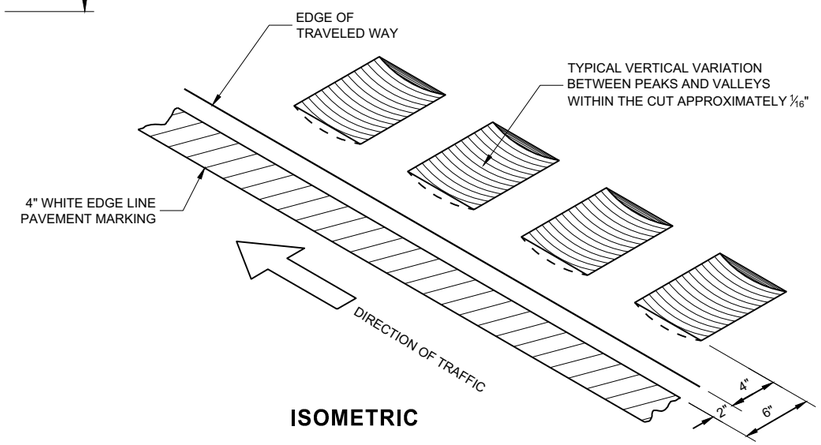
PLAN VIEW
(SINGLE GROOVE)

GENERAL NOTES

DETAILS OF CONSTRUCTION NO SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

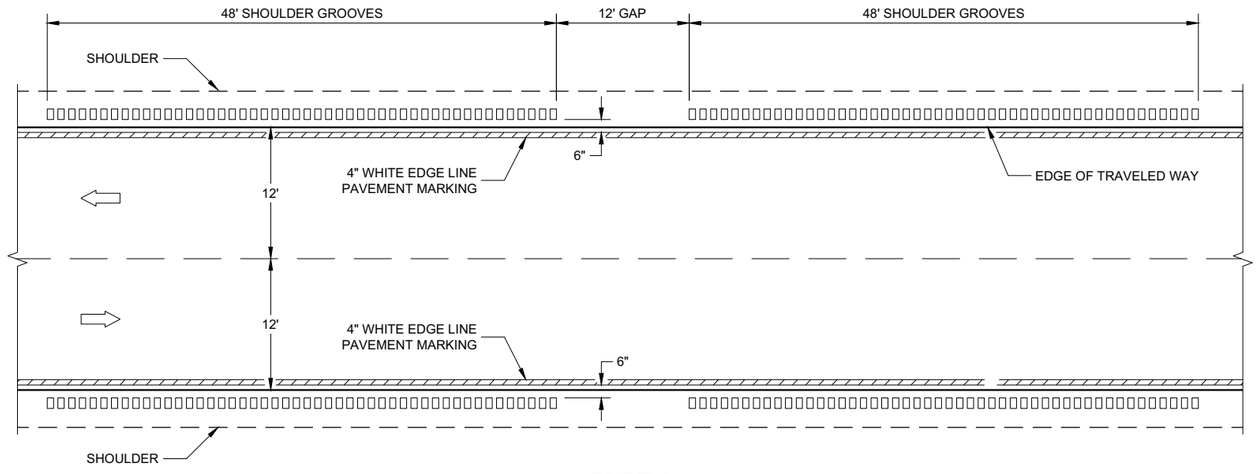
DO NOT MILL SHOULDER GROOVES THROUGH ANY INTERSECTION, MARKED CROSSWALK, NON-MOTORIZED PATH CROSSING, OR SNOWMOBILE CROSSING.

(1) SHOULDER GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS. WHEN DIRECTED BY THE ENGINEER.

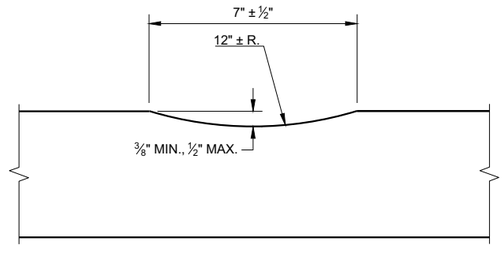


ISOMETRIC

PLACEMENT DETAIL FOR TYPE 1 MILLED RUMBLE STRIP



TYPE 1
2 - LANE SHOULDER RUMBLE STRIP



SECTION A - A

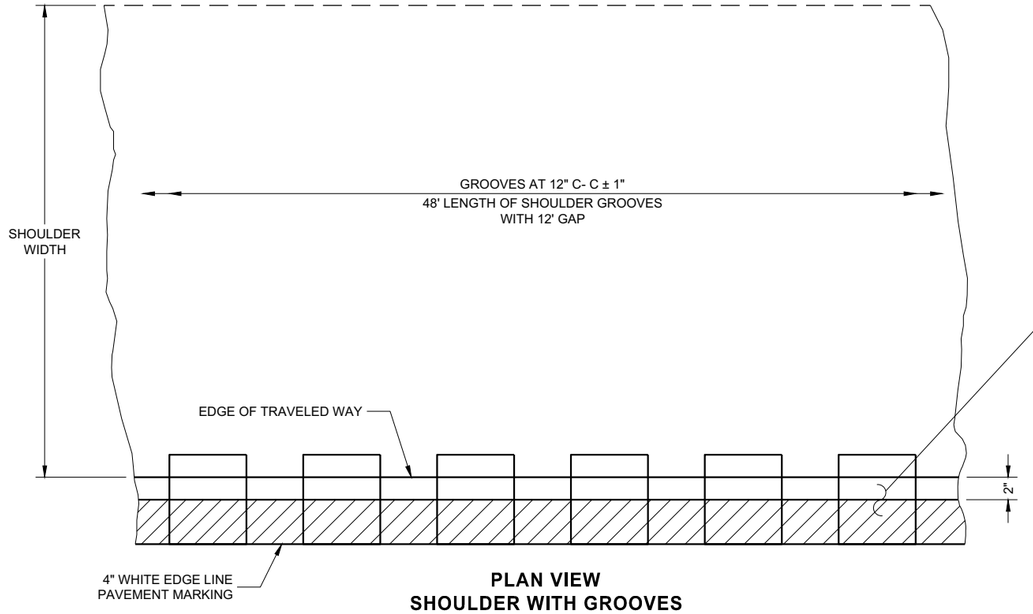
2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

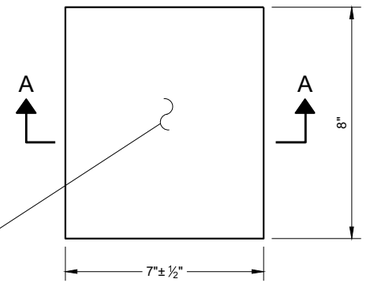
SDD 13A10 - 02a

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SDD 13A10 - 02a



PLAN VIEW
SHOULDER WITH GROOVES



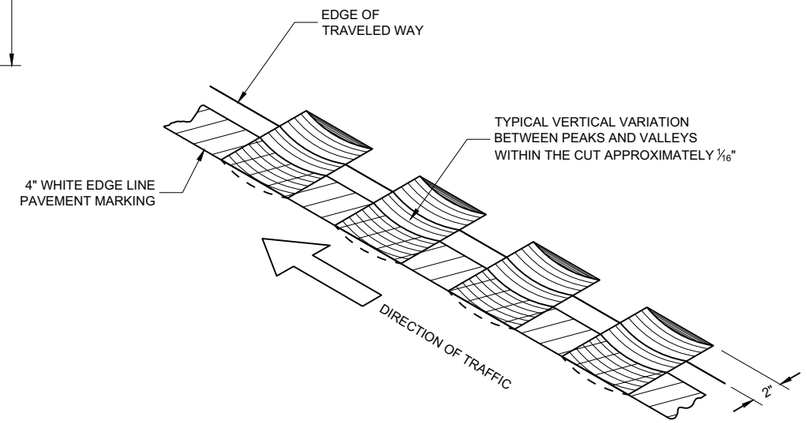
PLAN VIEW
(SINGLE GROOVE)

GENERAL NOTES

DETAILS OF CONSTRUCTION NO SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

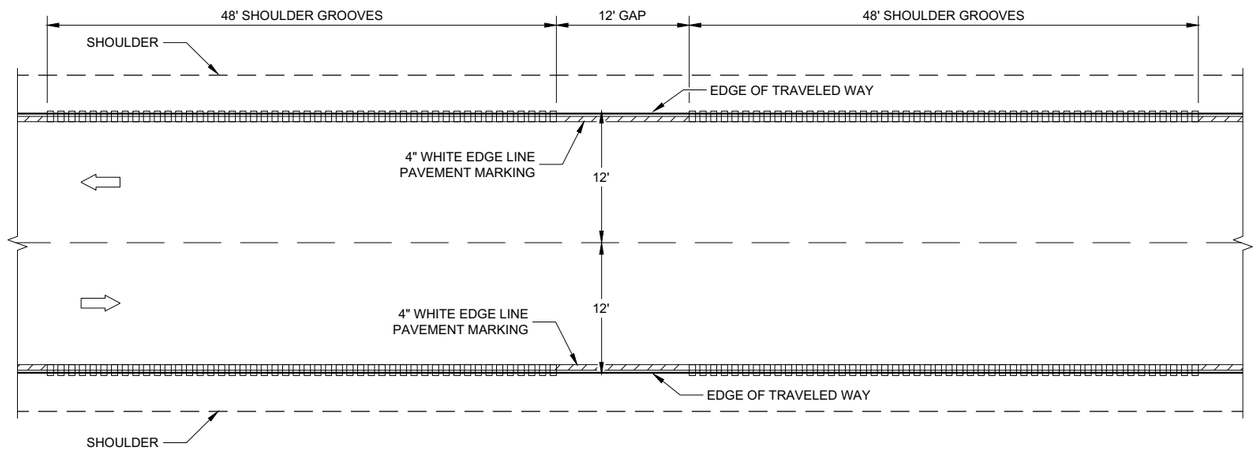
DO NOT MILL SHOULDER GROOVES THROUGH ANY INTERSECTION, MARKED CROSSWALK, NON-MOTORIZED PATH CROSSING, OR SNOWMOBILE CROSSING.

(1) SHOULDER GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS. WHEN DIRECTED BY THE ENGINEER.

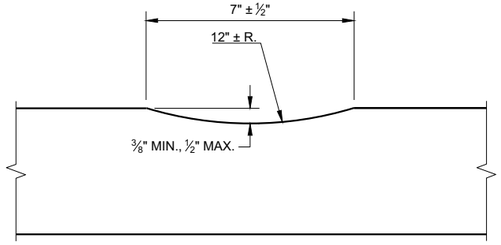


ISOMETRIC

PLACEMENT DETAIL FOR TYPE 2 MILLED RUMBLE STRIP



TYPE 2
2 - LANE SHOULDER RUMBLE STRIP

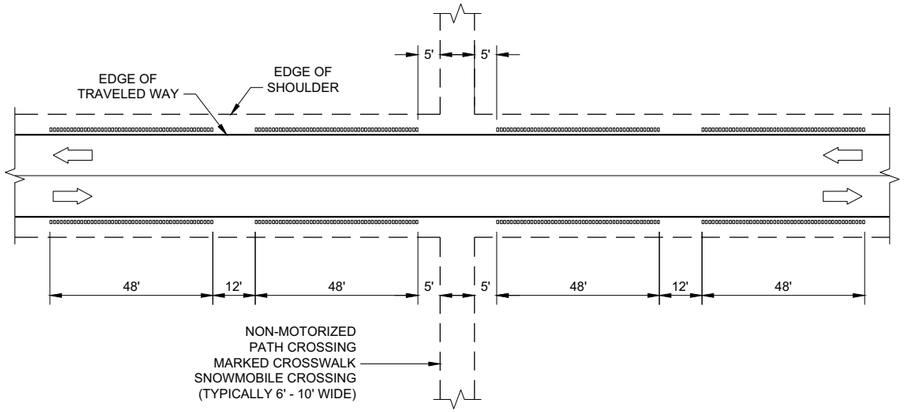


SECTION A - A

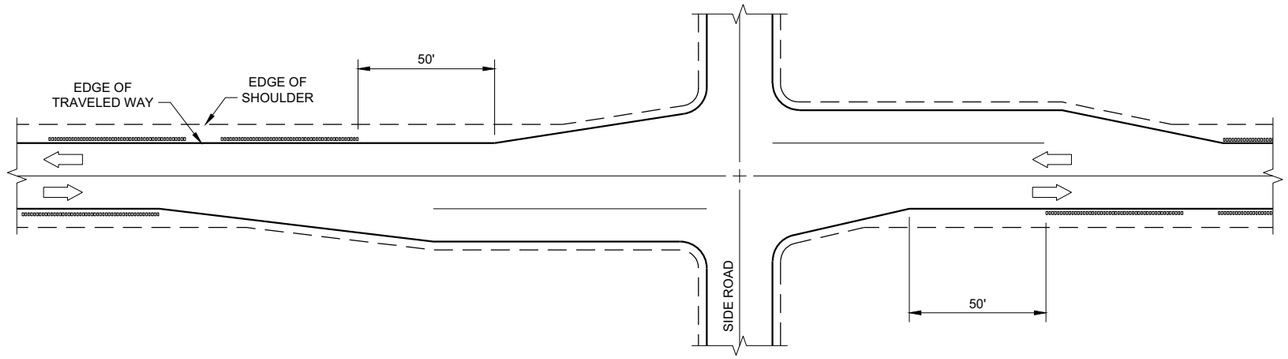
2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

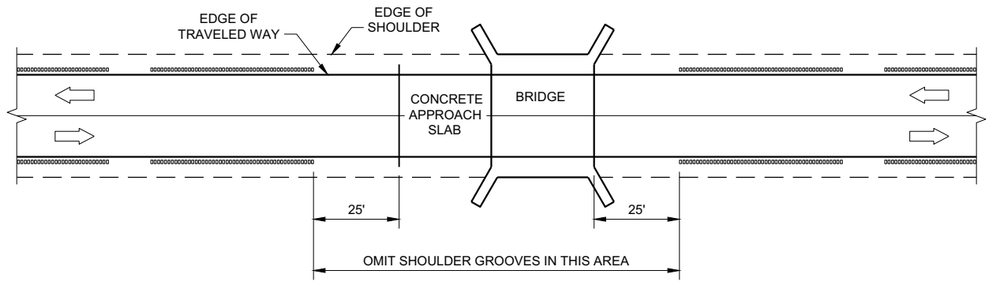
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SDD 13A10 - 02b
SDD13A10 - 02b



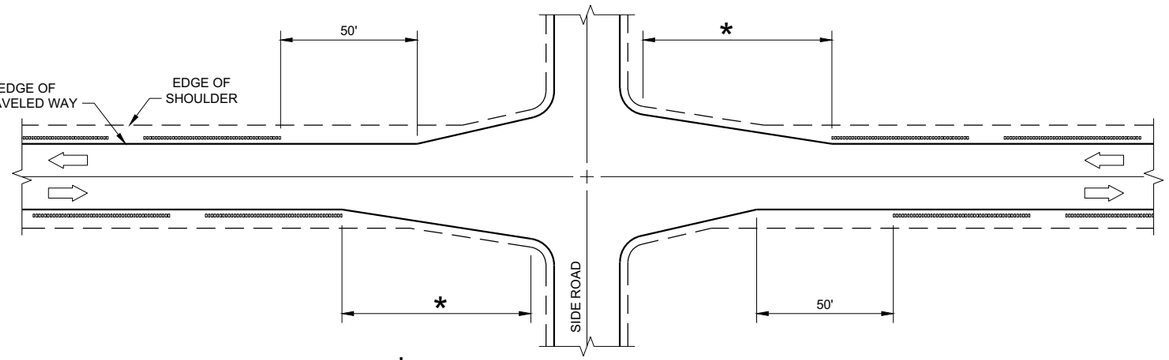
SHOULDER GROOVES AT MISCELLANEOUS CROSSINGS



SHOULDER GROOVES AT RIGHT TURN LANE

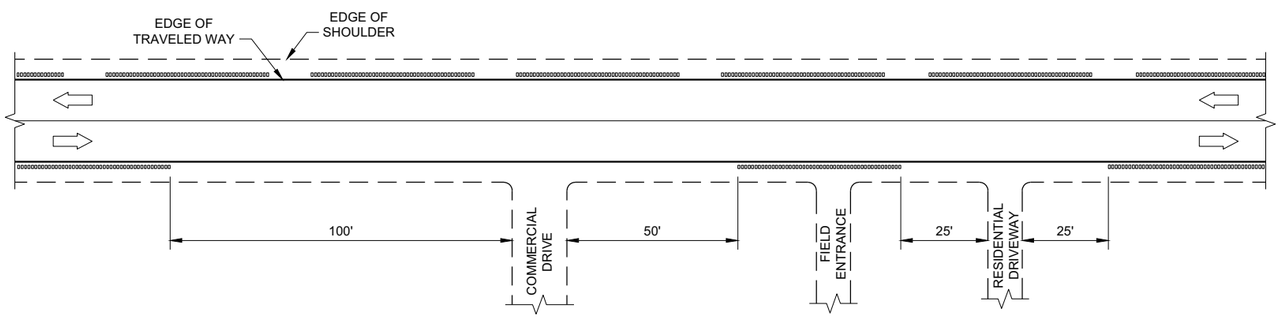


SHOULDER GROOVES AT BRIDGES



* GREATER OF 100' OR APPROACH TAPER LENGTH

SHOULDER GROOVES AT INTERSECTIONS WITH APPROACH TAPER



SHOULDER GROOVES AT DRIVEWAYS (1)

GENERAL NOTES

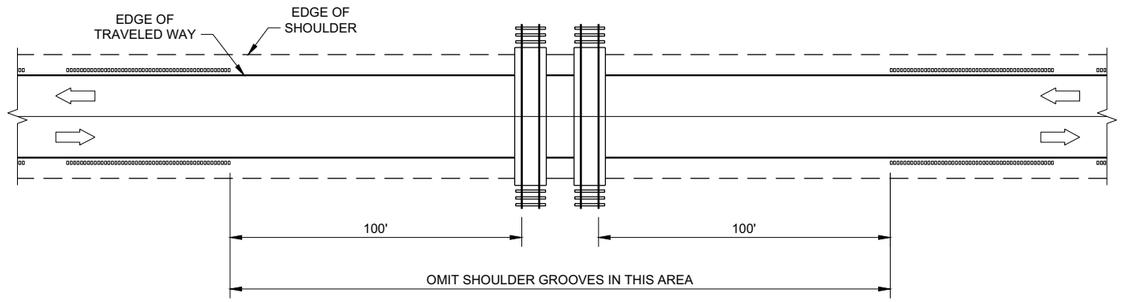
(1) SHOULDER GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS. WHEN DIRECTED BY THE ENGINEER.

2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING

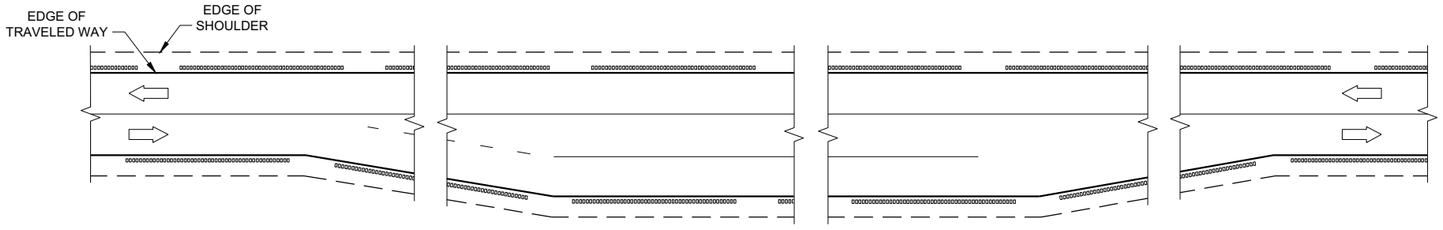
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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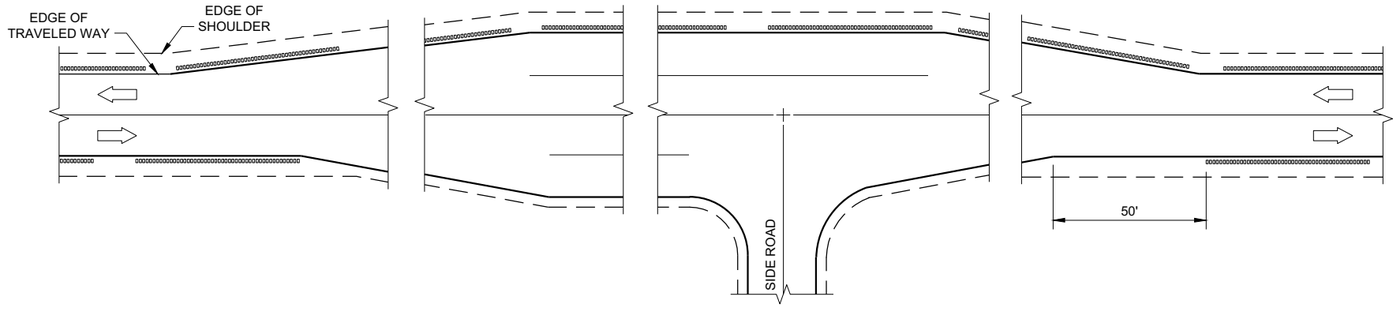
SDD 13A10 - 02c



SHOULDER GROOVES AT RAILROADS



SHOULDER GROOVES AT PASSING AND CLIMBING LANES



SHOULDER GROOVES AT BYPASS LANES

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SDD 13A10 - 02d

SDD13A10 - 02d

2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING

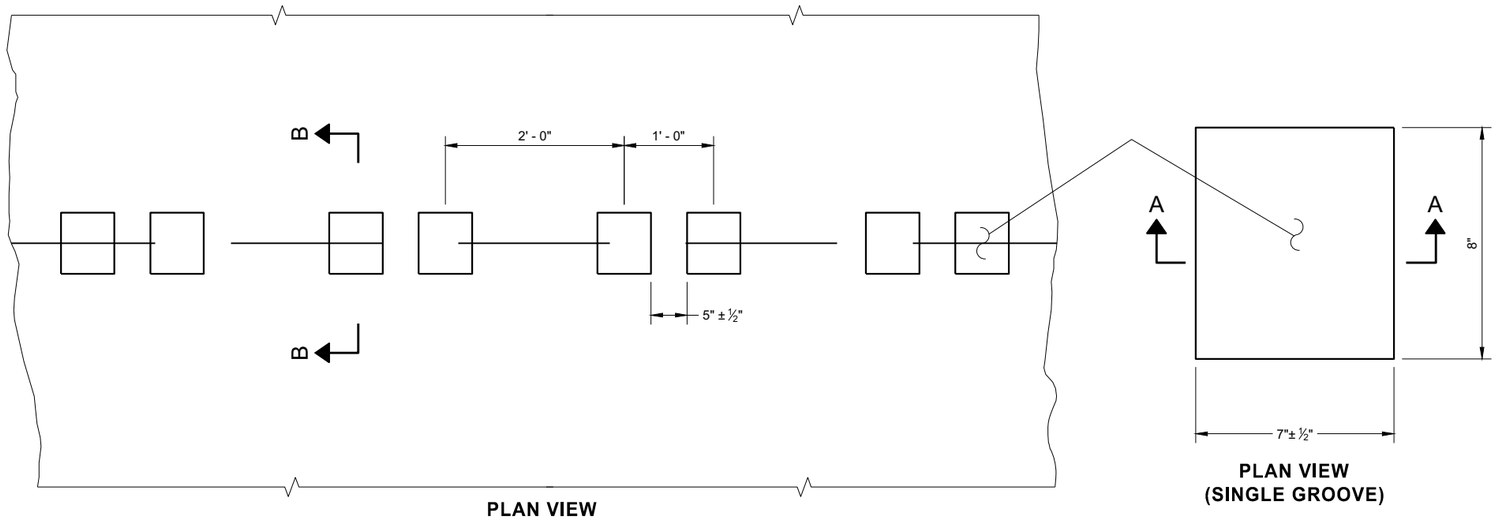
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7/2018
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

FHWA



PLAN VIEW
SHOULDER WITH GROOVES

PLAN VIEW
(SINGLE GROOVE)

PLACEMENT DETAIL FOR TYPE 1 MILLED RUMBLE STRIP

GENERAL NOTES

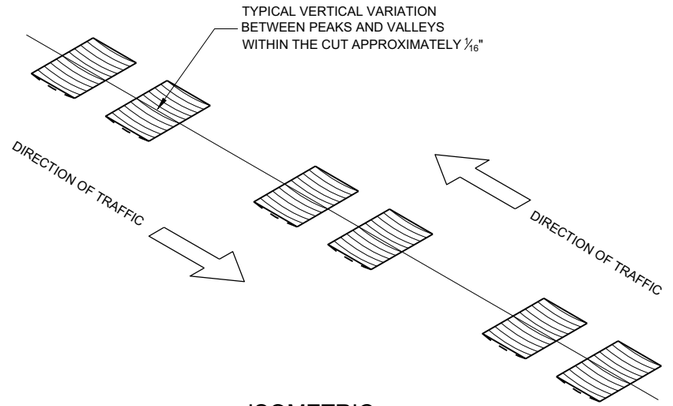
DETAILS OF CONSTRUCTION NO SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

DO NOT MILL CENTERLINE GROOVES THROUGH ANY INTERSECTION, MARKED CROSSWALK, NON-MOTORIZED PATH CROSSING, OR SNOWMOBILE CROSSING.

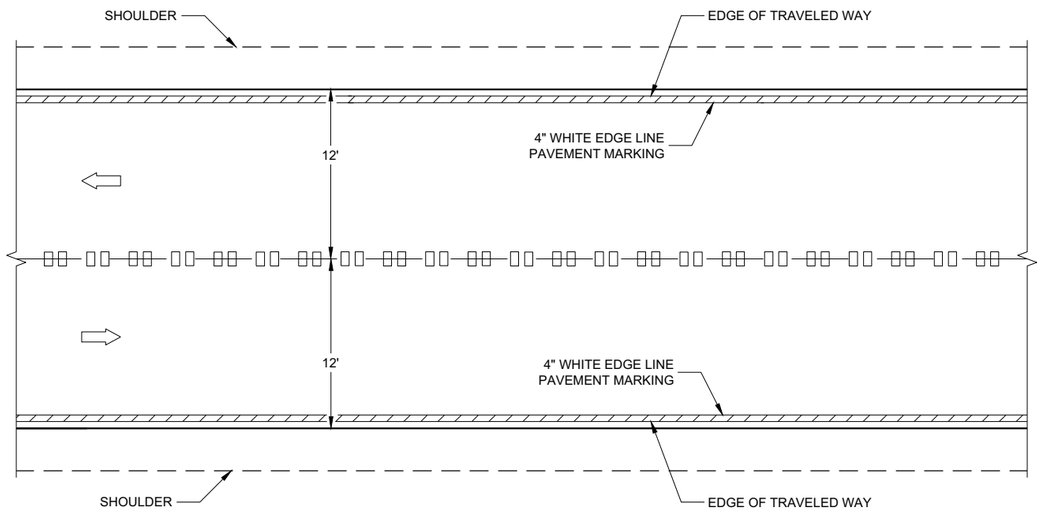
INSTALL PAVEMENT MARKING AFTER THE GROOVES ARE INSTALLED.

SEE SIGNING PLAN FOR SIGN REQUIREMENTS THAT MAY BE NEEDED.

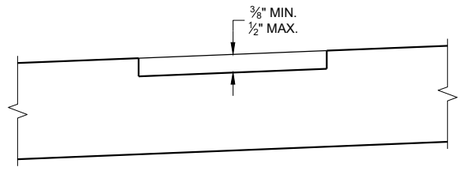
(1) CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS. WHEN DIRECTED BY THE ENGINEER.



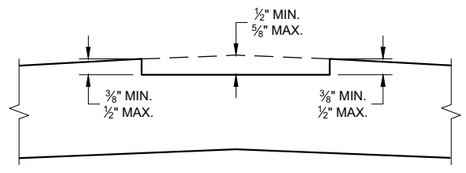
ISOMETRIC



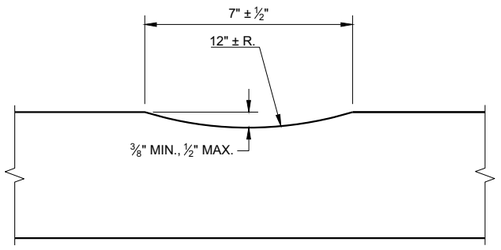
CENTERLINE GROOVES ON TWO-WAY ROADWAYS



SECTION B - B
SUPERELEVATED ROADWAY



SECTION B - B
CROWNED ROADWAY



SECTION A - A

2-LANE RURAL
CENTER LINE RUMBLE STRIP, MILLING

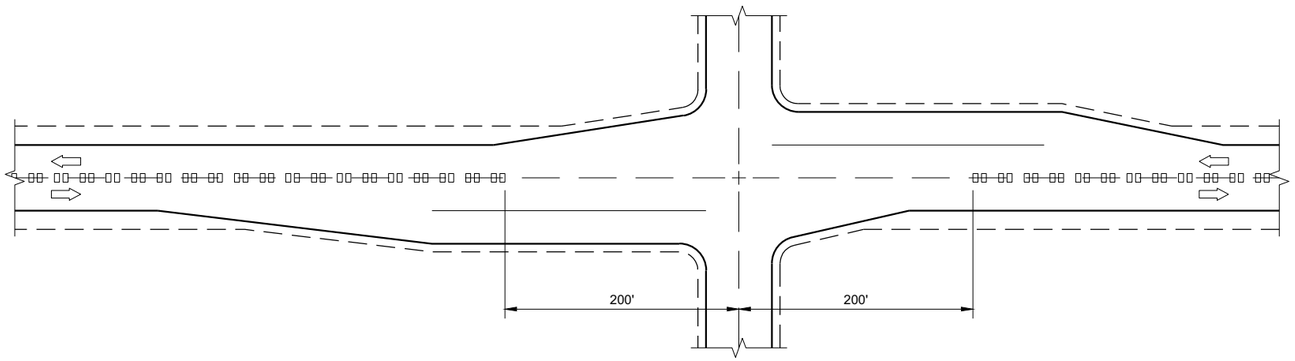
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

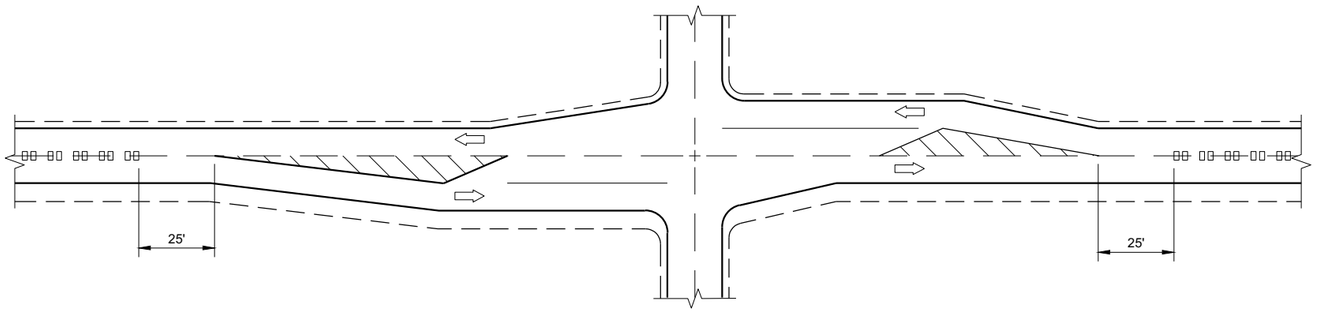
SDD 13A11 - 03a

6

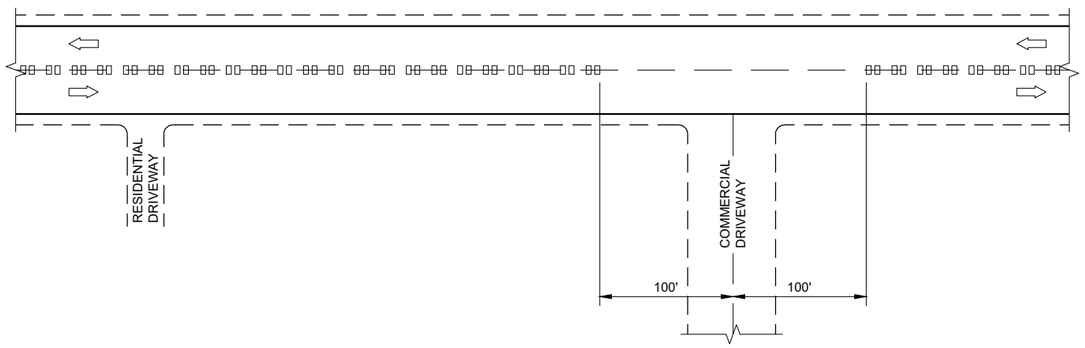
SDD 13A11 - 03a



CENTERLINE GROOVES AT INTERSECTIONS



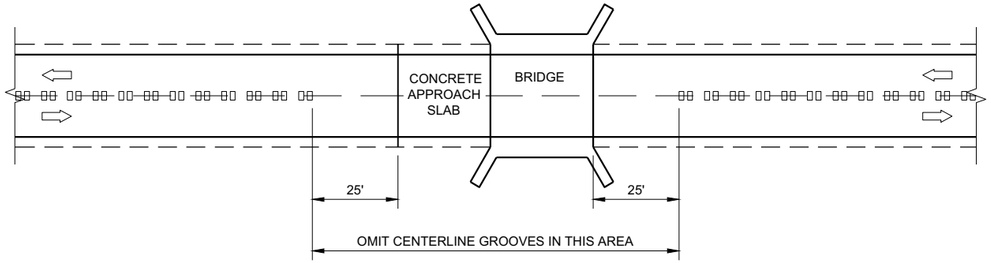
CENTERLINE GROOVES AT INTERSECTIONS (WITH LEFT TURN LANES)



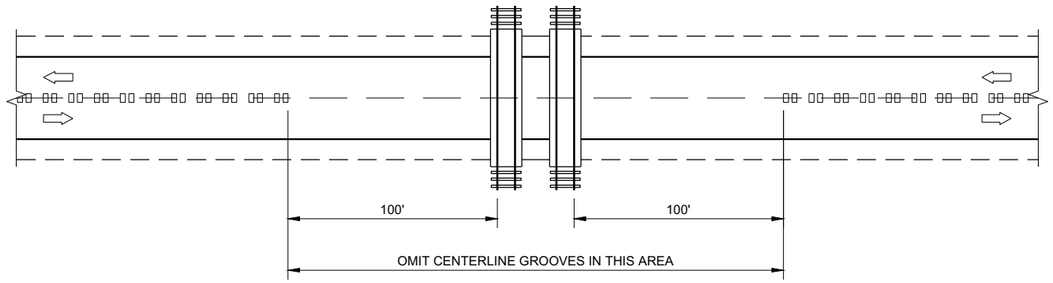
CENTERLINE GROOVES AT DRIVEWAYS (1)

GENERAL NOTES

(1) CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS. WHEN DIRECTED BY THE ENGINEER.



CENTERLINE GROOVES AT BRIDGES



CENTERLINE GROOVES AT RAILROADS

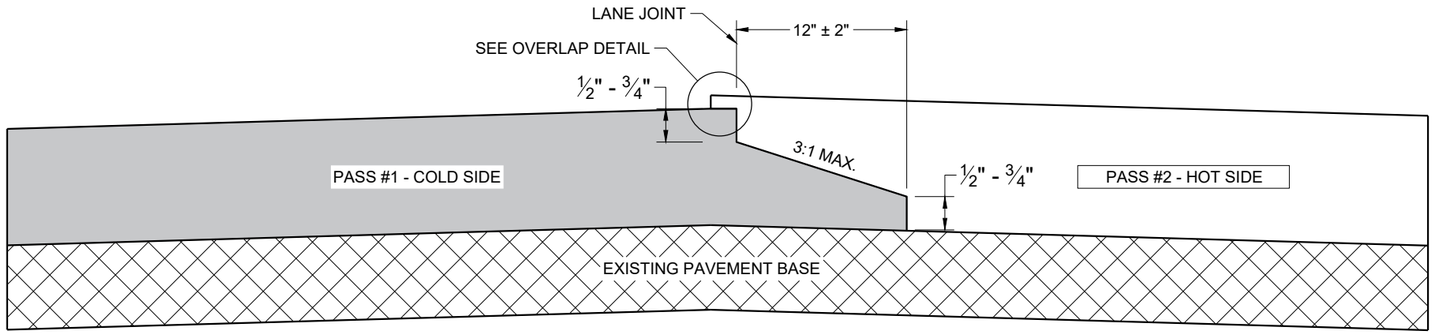
2-LANE RURAL CENTERLINE RUMBLE STRIP, MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

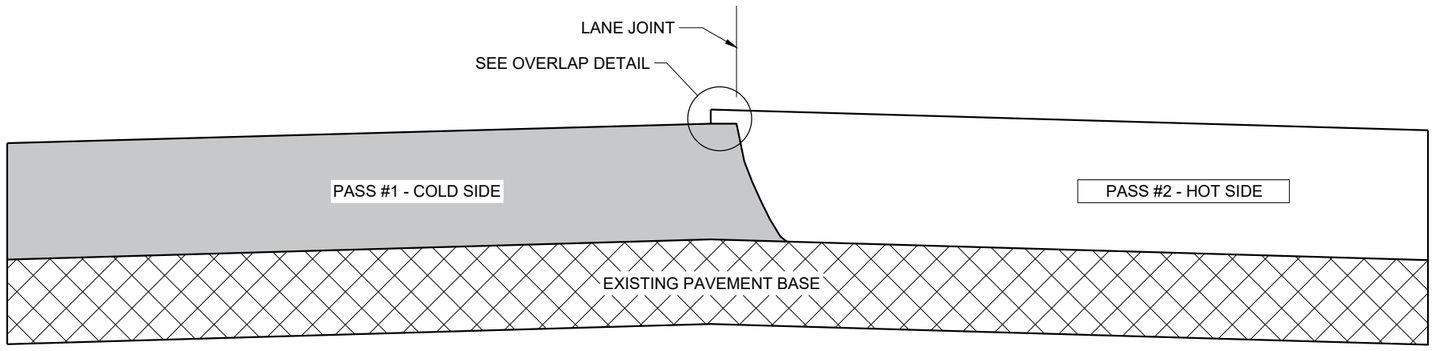
APPROVED
7/2018
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

FHWA

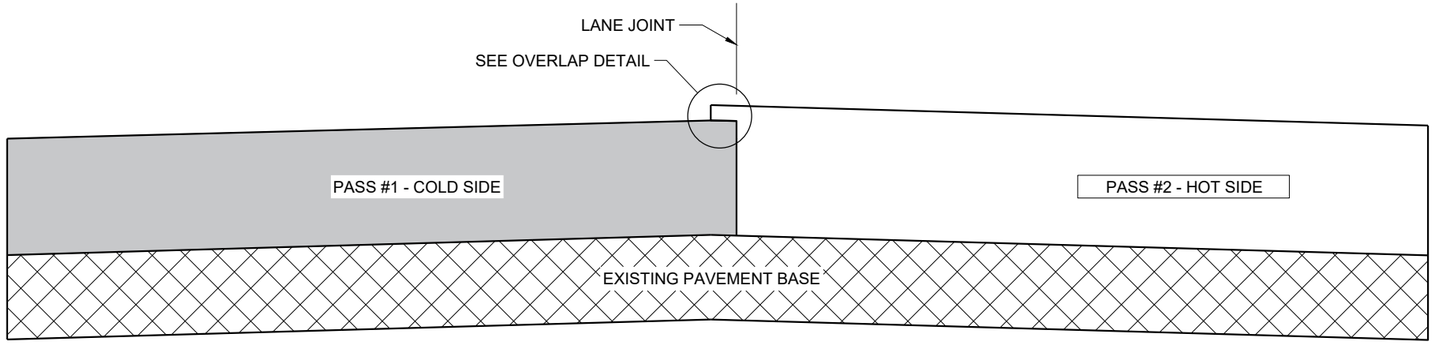
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SDD13A11 - 03b



TYPICAL PAVEMENT CROSS SECTION
NOTCHED WEDGE JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT (MILLED)

GENERAL NOTES

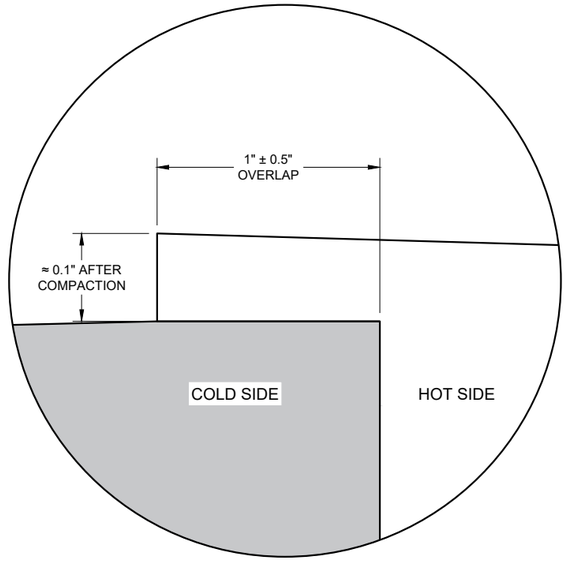
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

FOR ALL LONGITUDINAL JOINTS, ENSURE THE PAVER SCREED OVERLAPS THE PREVIOUSLY PLACED PAVEMENT BY 1" ± 0.5" AND THE HOT SIDE OF THE JOINT REMAINS HIGHER THAN THE COLD SIDE BY APPROXIMATELY 0.1" AFTER FINAL COMPACTION. (IT WILL BE FLUSH WHEN PAVING IN ECHELON.)

ONLY REMOVE THE LONGITUDINAL NOTCHED WEDGE JOINT FOR SMA PAVEMENT OR AS DIRECTED BY THE ENGINEER TO ADDRESS SPECIFIC LENGTHS OF JOINT DAMAGED BY TRAFFIC.

WHEN MILLING BACK OR REMOVING ANY LONGITUDINAL JOINT, LIMIT THE MATERIAL REMOVED TO 2" FROM THE TOP NOTCH OR FROM THE VERTICAL JOINT EDGE ON THE COLD SIDE OF THE JOINT.

USE LONGITUDINAL MILLED JOINT AS PLANS SHOW OR THE AS THE ENGINEER DIRECTS.



OVERLAP DETAIL (TYPICAL)

HMA LONGITUDINAL JOINTS	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED November 2020 DATE	/S/ Steven Hefel HMA PAVEMENT ENGIN

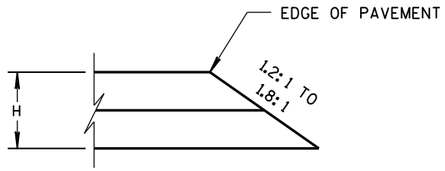
FHWA

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SDD 13C19 - 03

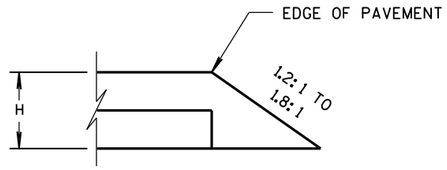
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SDD 13C19 - 03



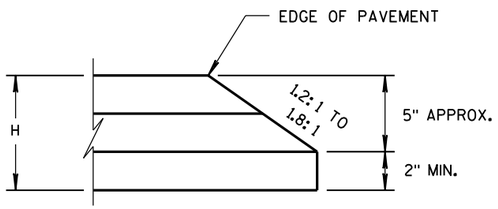
CONSTRUCTED WITH FINAL TWO LAYERS

FOR H 5" OR LESS



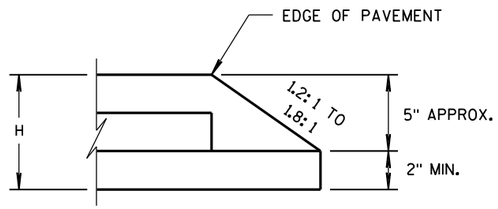
CONSTRUCTED WITH FINAL LAYER

FOR H 5" OR LESS



CONSTRUCTED WITH FINAL TWO LAYERS

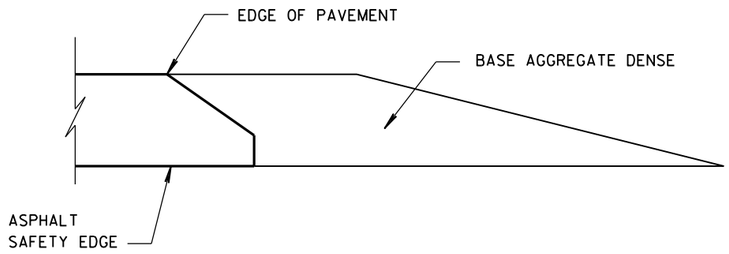
FOR H GREATER THAN 5"



CONSTRUCTED WITH FINAL LAYER

FOR H GREATER THAN 5"

HMA PAVEMENT AND HMA OVERLAYS



FINISHED SHOULDER AGGREGATE PLACEMENT

6

6

S.D.D. 14 B 29-1

S.D.D. 14 B 29-1

SAFETY EDGE SM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

11/30/2012
DATE

/S/ Jerry H. Zoda
ROADWAY STANDARDS DEVELOPMENT ENGINEER

FHWA

(1) WOOD OR STEEL POSTS (w6X9 OR w6X8.5) MAY BE USED. DO NOT INTERMIX WOOD AND STEEL POSTS. INSTALL STEEL POSTS WITH HOLES ON APPROACHING TRAFFIC SIDE.

(2) USE WOOD OR APPROVED PLASTIC BLOCKOUTS. WOOD BLOCKOUTS MAY BE CONSTRUCTED OUT OF TWO OR MORE WOOD BLOCKOUTS. SEE ALTERNATE WOOD BLOCKOUT DETAIL. DIMENSIONS OF APPROVED PLASTIC BLOCKOUTS MAY VARY.

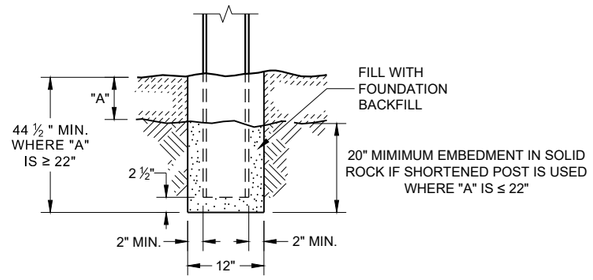
(3) IF ROCK IS ENCOUNTERED DURING EXCAVATION, PROVIDE A HOLE 12 INCHES IN DIAMETER EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE APPROXIMATELY 2 1/2" INCHES OF GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE. CUT THE POSTS THE TO LENGTH AMD INSTALL. BACKFILL WITH EXCAVATED MATERIAL AND COMPACT. BACKFILL IS TO BE FREE OF LARGE ROCKS.

(4) WHEN THE DISTANCE FROM BACK OF POST TO SHOULDER HINGE POINT IS LESS THAN 2 FEET INSTALL LONGER POST AT HALF POST SPACING (K).

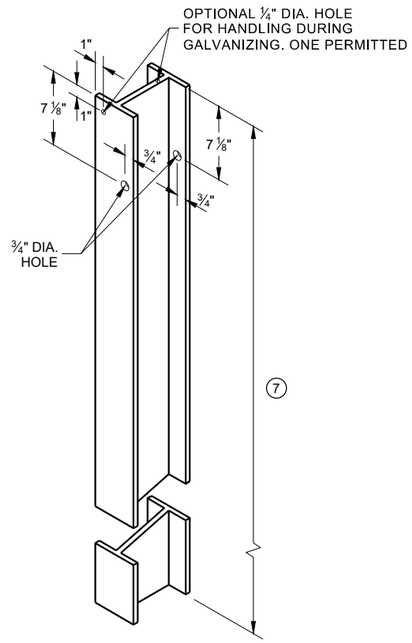
(5) FOR NEW MGS INSTALLATION TOP OF W-BEAM RAIL TOLERANCE IS ±1". FOR EXISTING MGS INSTALLATION TOP OF W-BEAM IS BETWEEN 27 ¾" TO 32".

(6) WHEN USING STEEL POST AND WOOD BLOCKOUTS INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

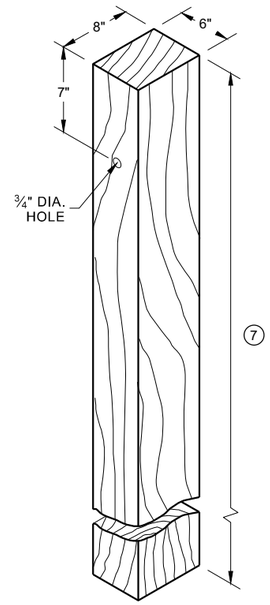
(7) TOTAL POST LENGTH FOR TYPE K IS 7' - 0".
TOTAL POST LENGTH FOR OTHER MGS TYPES IS 6' - 0".



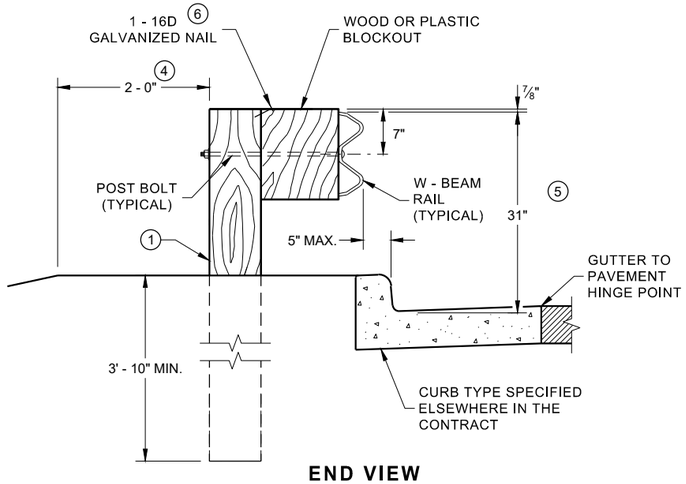
END VIEW
SETTING STEEL OR WOOD POST IN ROCK (3)



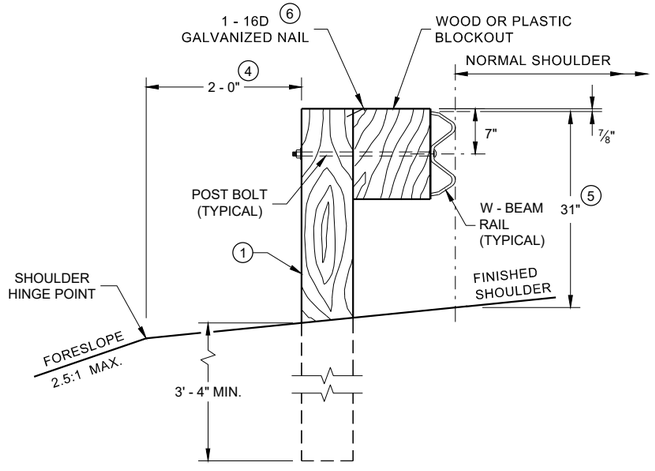
STEEL POST & HOLE PUNCHING DETAIL (W 6 X 9) (1)



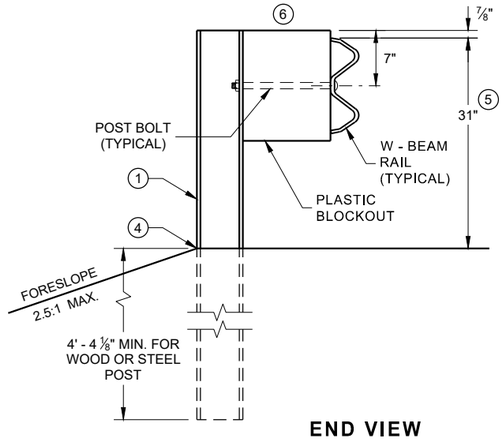
WOOD POST (6" X 8") NOMINAL (1)



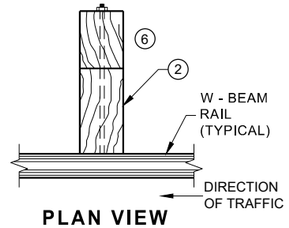
END VIEW
LOCATED ALONG A CURBED ROADWAY



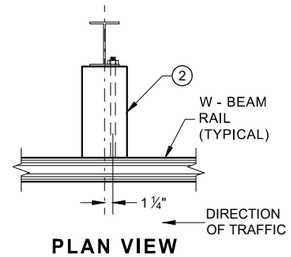
END VIEW
LOCATED ALONG A ROADWAY SHOULDER STANDARD INSTALLATION



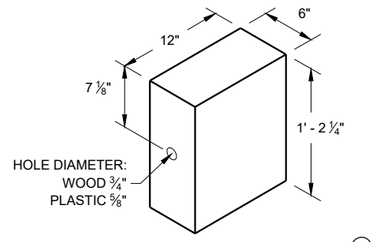
END VIEW
MGS LONGER POST AT HALFPOST SPACING W BEAM (K)



PLAN VIEW
WOOD POST, BLOCKOUT & BEAM



PLAN VIEW
STEEL POST, PLASTIC BLOCKOUT & BEAM



WOOD OR PLASTIC BLOCKOUT (2)

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

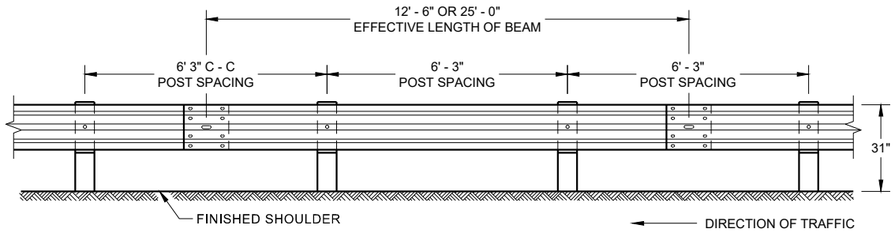
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

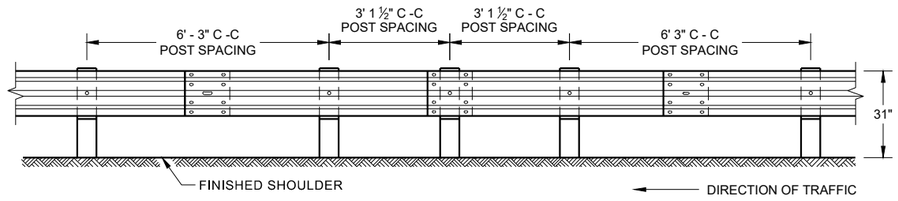
SDD 14B42 - 07a

6

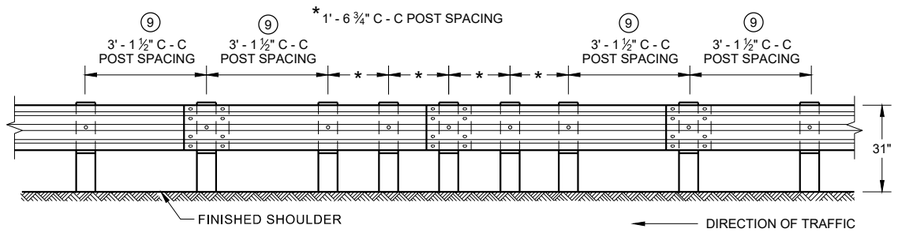
SDD 14B42 - 07a



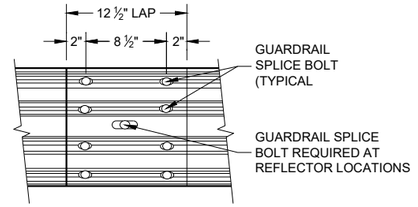
FRONT VIEW
POST SPACING STANDARD INSTALLATION



FRONT VIEW
HALF POST SPACING (HS) AND
HALF POST SPACING WITH LONGER POSTS (K)



FRONT VIEW
QUARTER POST SPACING (QS)



FRONT VIEW
MID-SPAN BEAM SPLICE

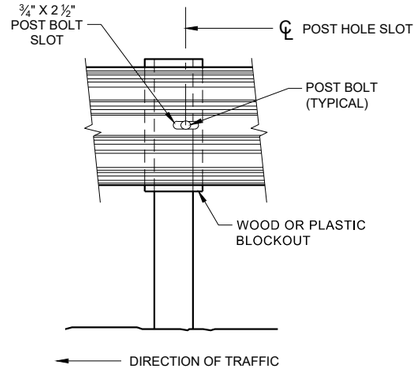
GENERAL NOTES

⑧ DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

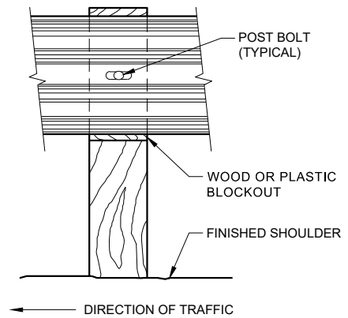
⑨ 25 FEET OF HALF POST SPACING IS REQUIRED ON APPROACH AND DEPARTURE ENDS OF QUARTER POST SPACING.

POST BOLTS ARE A ⅝" DIAMETER ASTM A307 GUARDRAIL BOLT. A POST BOLT REQUIRES ⅝" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT AND ⅝" DIAMETER F844 FLAT WASHER. POST BOLTS MAY BE LONGER IF MULTIPLE BLOCKOUTS ARE BEING USED.

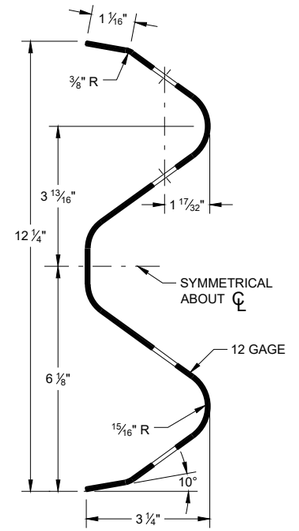
GUARD RAIL SPLICE BOLTS ARE A ⅝" DIAMETER ASTM A307 GUARDRAIL HEAD BOLT. A GUARDRAIL SPLICE BOLT REQUIRES ⅝" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT.



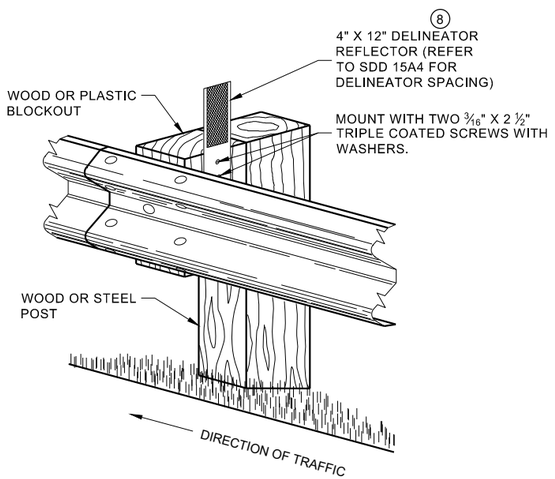
FRONT VIEW AT STEEL POST



FRONT VIEW AT WOOD POST



SECTION THRU W-BEAM RAIL



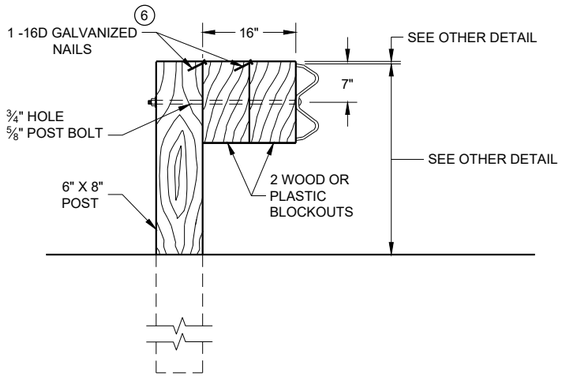
ONE SIDED REFLECTOR DETAIL
AND TYPICAL INSTALLATION

MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 14B42 - 07b
SDD 14B42 - 07b

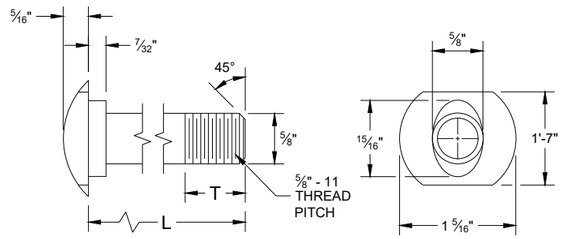


DETAIL FOR 16" BLOCKOUT DEPTH

IT IS ACCEPTABLE TO USE BLOCKOUTS UP TO 16" DEEP TO INCREASE THE POST OFFSET TO AVOID UNDERGROUND OBSTACLES. THERE IS NO LIMIT TO THE NUMBER OF POSTS THAT CAN HAVE ADDITIONAL BLOCKOUTS UP TO 16" DEEP.

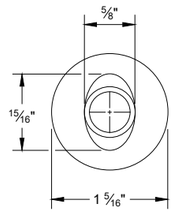
NOTE:

1. ALL FILLETS SHALL HAVE A MINIMUM RADIUS OF 3/16".
2. IF THE BOLT EXTENDS MORE THAN ¼" FROM THE NUT THE BOLT SHOULD BE TRIMMED BACK.

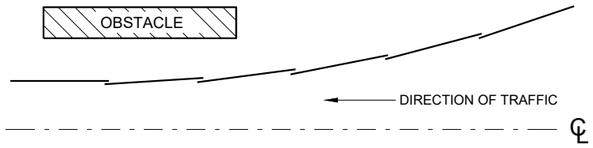


POST BOLT TABLE

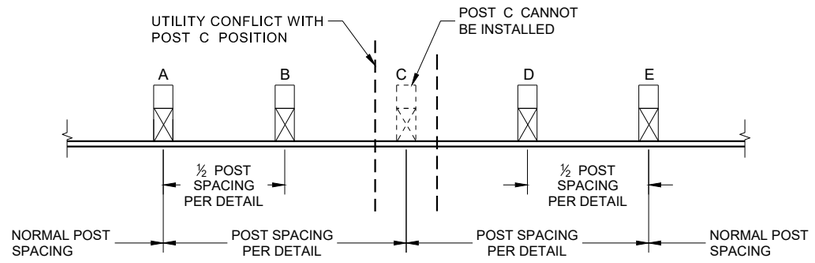
L	T (MIN.)
1 ¼"	1 ⅛"
2"	1 ¾"
10"	4"
14"	4 1/16"
18"	4"
21"	4 1/16"
25"	4"



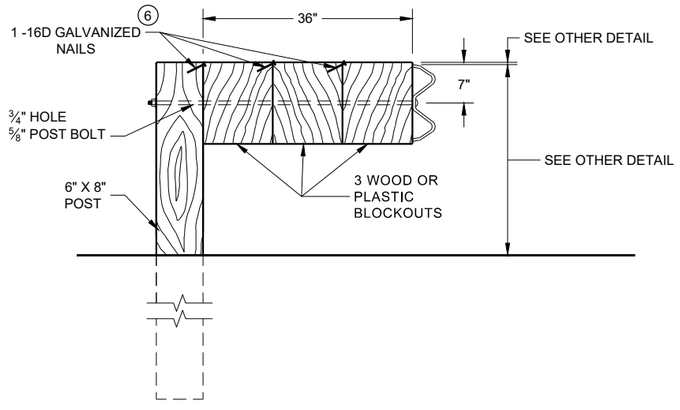
ALTERNATE BOLT HEAD



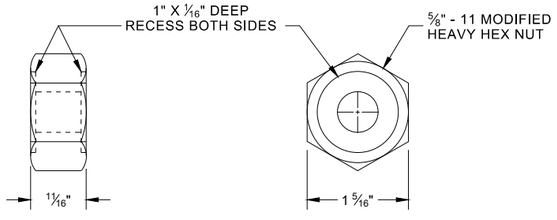
PLAN VIEW
BEAM LAPPING DETAIL



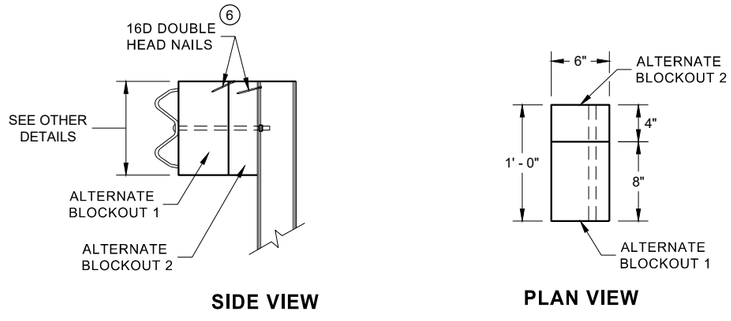
POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION



DETAIL FOR 36" BLOCKOUT DEPTH



POST BOLT, SPLICE BOLT AND RECESS NUT



SIDE VIEW

PLAN VIEW

ALTERNATE WOOD BLOCKOUT DETAIL

NOTES: UNDER SPECIAL CIRCUMSTANCES, SUCH AS AVOIDING OBSTACLES THAT ARE NOT RELOCATED, IT IS ACCEPTABLE TO INSTALL ADDITIONAL BLOCKOUTS TO OBTAIN UP TO 36" DEPTH FOR ONE OR TWO POSTS IN A SECTION OF GUARDRAIL.

DO NOT USE 16" OR 36" BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION DISTANCE OF THE BARRIER.

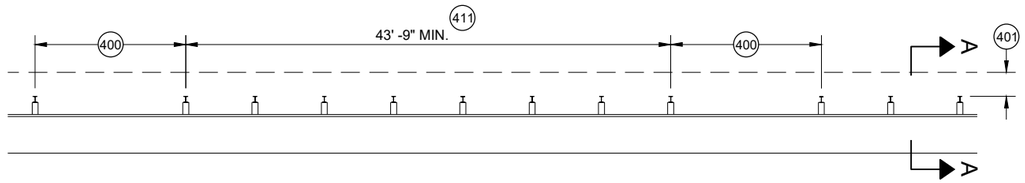
(6) WHEN USING STEEL POST AD WOOD BLOCKOUTS, INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

6

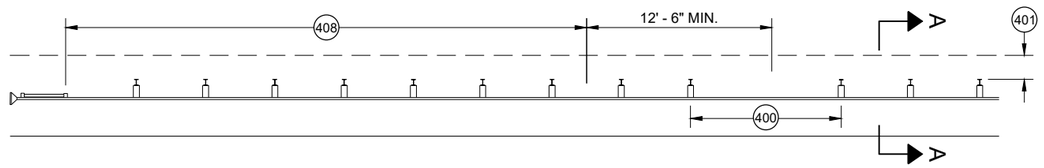
MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA 105

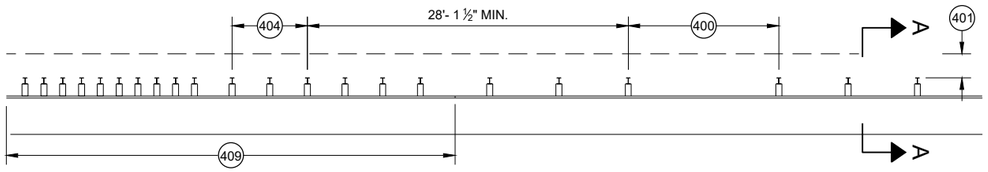
SDD 14B42 - 07c



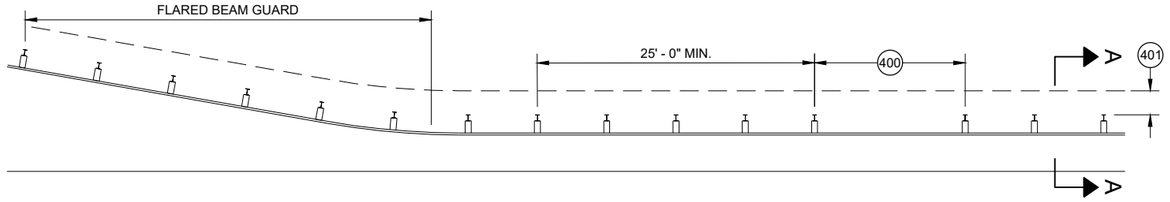
MISSING POST IN MGS GUARDRAIL



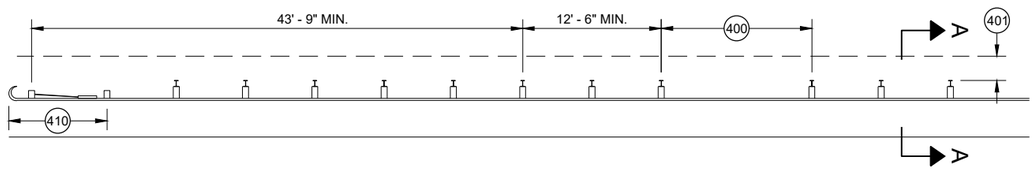
MISSING POST IN MGS GUARDRAIL NEAR EAT



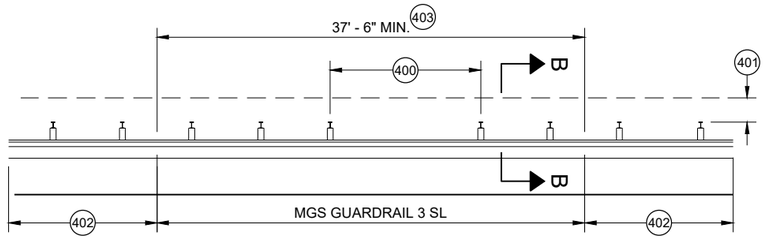
MISSING POST IN MGS GUARDRAIL NEAR AN APPROACH TRANSITION



MISSING POST IN MGS GUARDRAIL NEAR FLARED BEAM GUARD

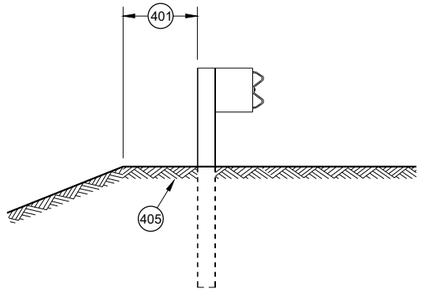


MISSING POST IN MGS GUARDRAIL NEAR A TYPE 2 END TERMINAL

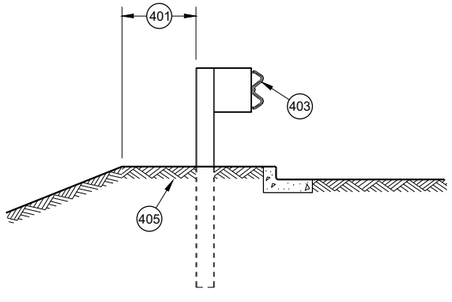


MISSING POST IN SHORT SPAN MGS GUARDRAIL NEAR CURB (SL) 407

(400) MAX SPAN 12' - 6"
(401) 2' MIN.
(402) MGS GUARDRAIL 3
(403) NESTING BEAM GUARD
(404) ASYMMETRIC TRANSITION
(405) SOIL WELL DRAINED AND COMPACTED
(406) SEE OTHER DRAWINGS IN THIS SDD
(407) SEE OTHER DRAWINGS FOR MIN. SPACING BETWEEN SPANS
(408) SEE SDD 14B44
(409) SEE SDD 14B45
(410) SEE SDD 14B47
(411) MINIMUM DISTANCE BETWEEN MISSING POST SPANS.



SECTION A - A 406



SECTION B - B 406

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2021
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS DEVE
UNIT SUPERVISOR

FHWA

6

SDD 14B42 - 07d

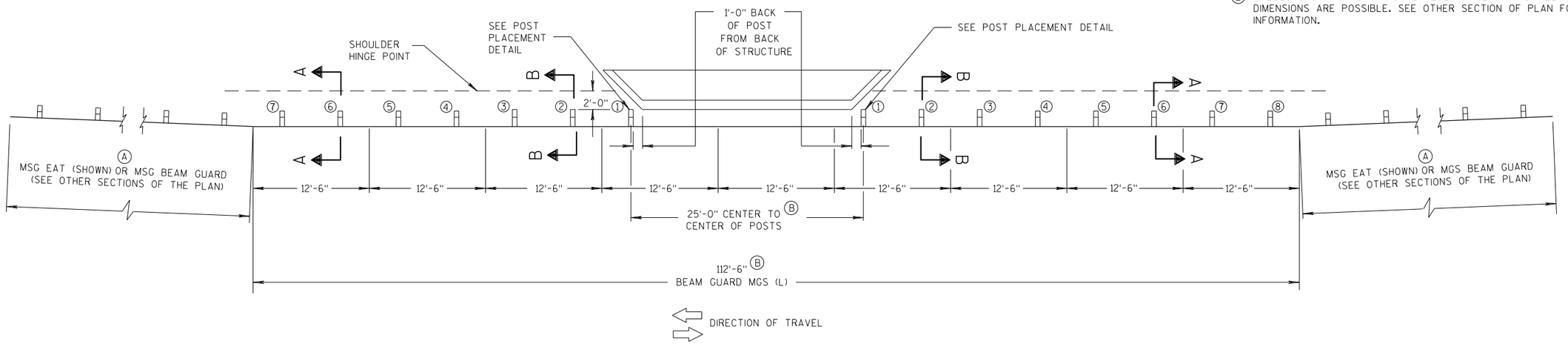
GENERAL NOTES

POSTS 1 THROUGH 3 ARE CRT POSTS.
ALL OTHER POSTS SHALL BE WOOD OR STEEL.

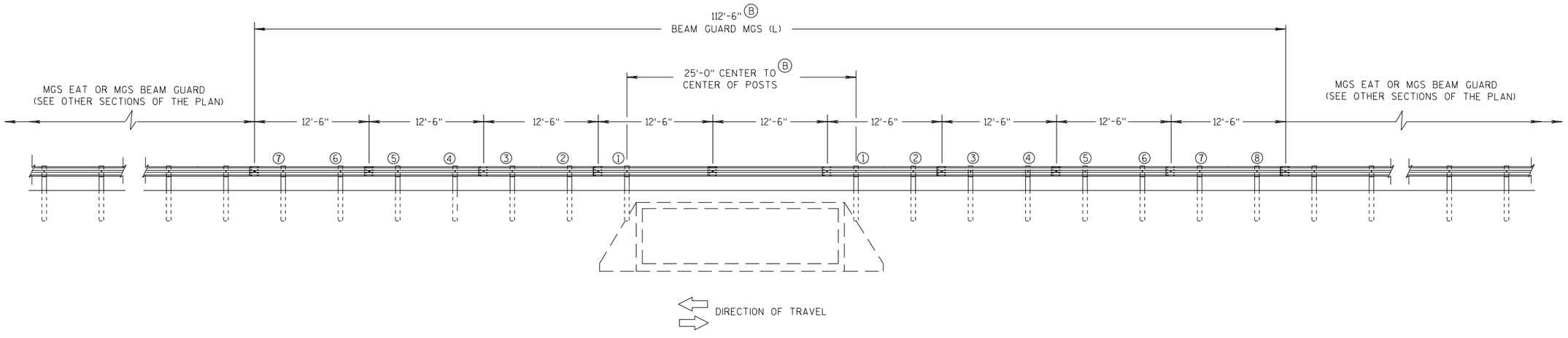
SEE SDD 14 B 42 FOR MORE DETAILS.

(A) FLARE FOR MGS EAT SHOWN. IF INSTALLING MGS NO FLARE NEEDED.

(B) VALUES SHOWN ON DRAWING REPRESENT THE MAXIMUM LENGTH. SHORTER DIMENSIONS ARE POSSIBLE. SEE OTHER SECTION OF PLAN FOR MORE INFORMATION.



PLAN VIEW



ELEVATION VIEW

MIDWEST GUARDRAIL SYSTEM LONG SPAN MGS (L) TWO-WAY TRAFFIC

MIDWEST GUARDRAIL SYSTEM LONG SPAN MGS (L)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
S.D.D. 14 B 43-4a

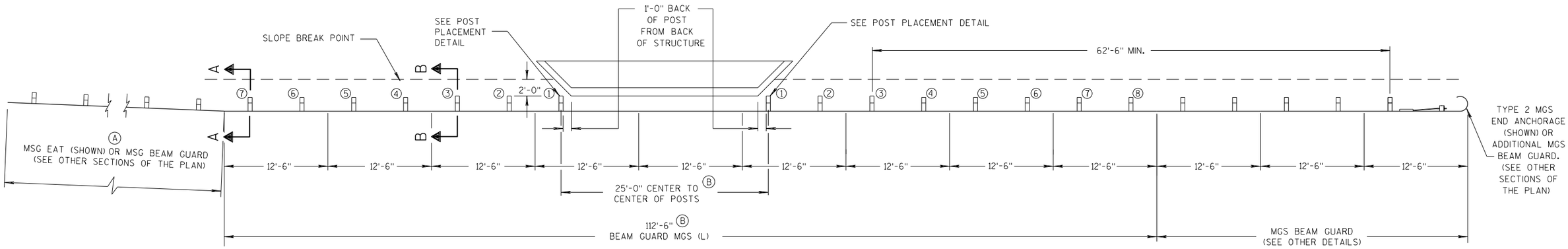
GENERAL NOTES

POSTS 1 THROUGH 3 ARE CRT POSTS.
ALL OTHER POSTS SHALL BE WOOD OR STEEL.

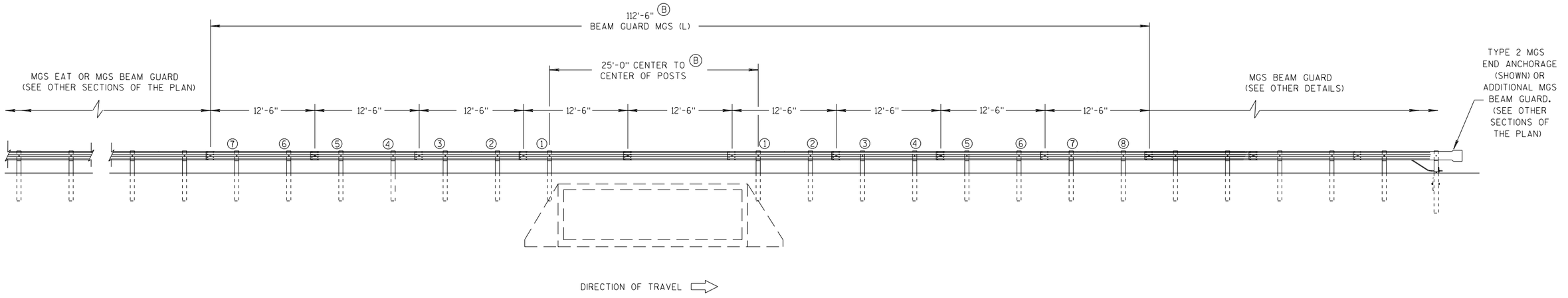
SEE SDD 14 B 42 FOR MORE DETAILS.

(A) FLARE FOR MGS EAT SHOWN. IF INSTALLING MGS NO FLARE NEEDED.

(B) VALUES SHOWN ON DRAWING REPRESENT THE MAXIMUM LENGTH. SHORTER DIMENSIONS ARE POSSIBLE. SEE OTHER SECTION OF PLAN FOR MORE INFORMATION.



PLAN VIEW



ELEVATION VIEW

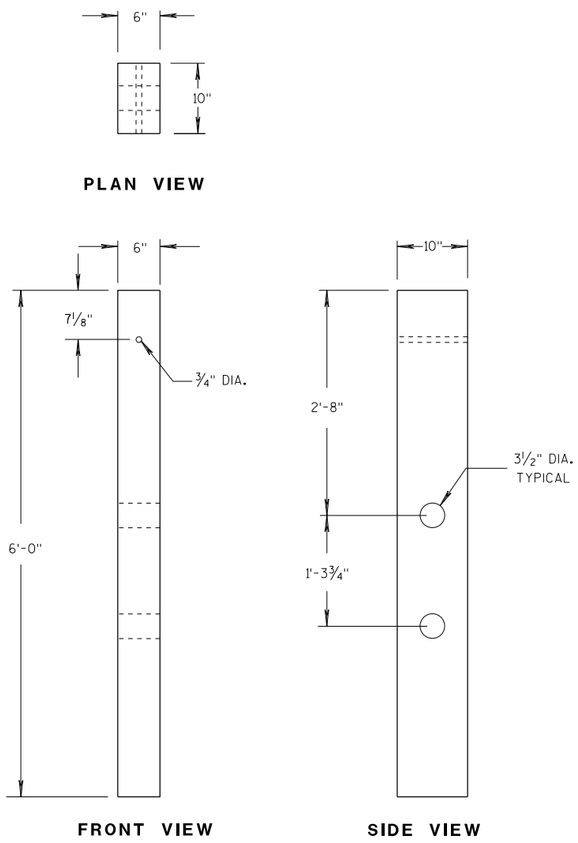
MIDWEST GUARDRAIL SYSTEM LONG SPAN MGS (L) ONE-WAY TRAFFIC

MIDWEST GUARDRAIL SYSTEM LONG SPAN MGS (L)

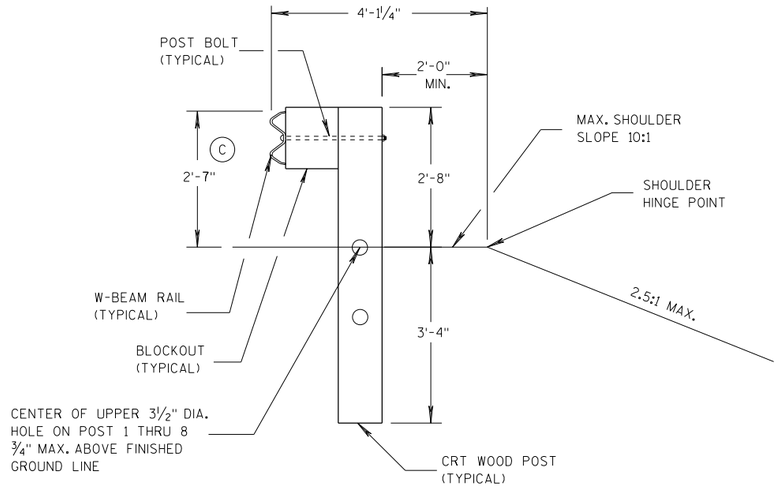
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

S.D.D. 14 B 43-4b



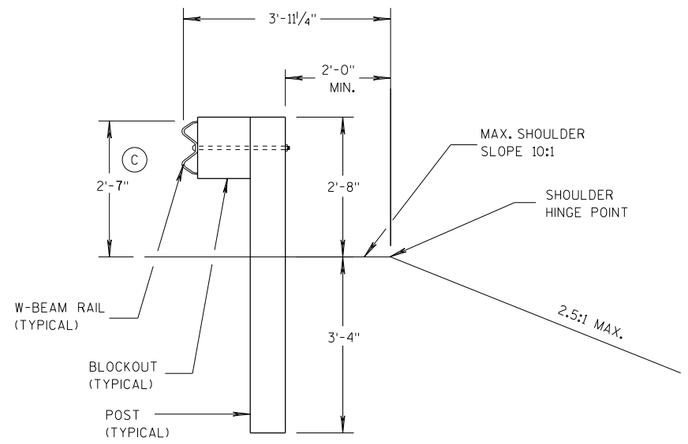
CRT WOOD POST



SECTION B-B

POSTS NO. 1-3

SEE OTHER DETAILS



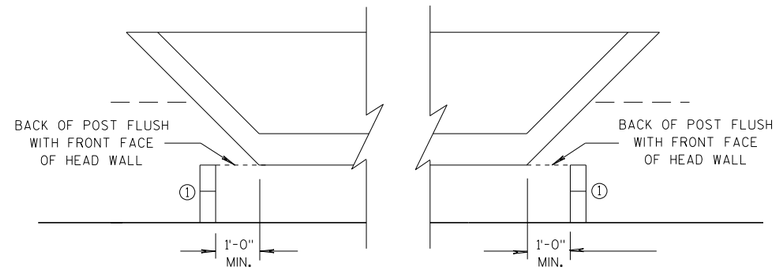
SECTION A-A

POSTS NO. 4-8

SEE OTHER DETAILS

GENERAL NOTES

(C) TOLERANCE FOR TOP OF W-BEAM RAIL IS ± 1".



POST PLACEMENT DETAIL

MIDWEST GUARDRAIL SYSTEM
LONG SPAN MGS (L)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
07/2018
DATE
FHWA

/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT ENGINEER

6

S.D.D. 14 B 43-4c

6

S.D.D. 14 B 43-4c

GENERAL NOTES

(A) THE SLOPE IN THE AREA BOUNDED BY THE GRADELINE, THE HINGE POINT LINE (HPL) AND THE CLEAR ZONE LIMITS (CZL) SHALL BE 4:1 OR FLATTER.

(B) AFTER FINAL ASSEMBLY, RECHECK CABLE TO BE SURE IT IS TAUT AND HAS NOT RELAXED

(C) DIFFERENT MANUFACTURERS REQUIRE DIFFERENT PERFORATED W - BEAM RAIL END PANELS. SEE MANUFACTURER'S INFORMATION.

(D) ATTACH ALUMINUM SHEET TO E.A.T. HEAD USING 4 STAINLESS STEEL SELF - TAPPING SCREWS. ONE SCREW PER CORNER.

(E) HARDWARE MAY VARY BETWEEN MANUFACTURER. SEE MANUFACTURER'S DRAWING FOR INFORMATION.

DIMENSIONS MAY VARY, MANUFACTURER'S INFORMATION.

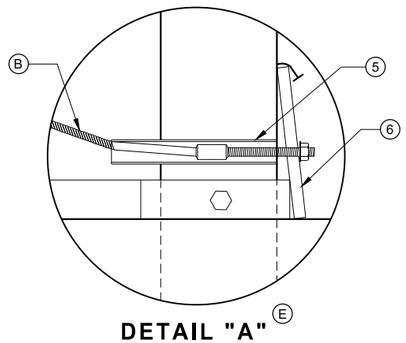
SEE SDD 14B42 FOR MORE INFORMATION.

* DO NOT ATTACH BLOCKOUTS TO POST 1 AND 2.

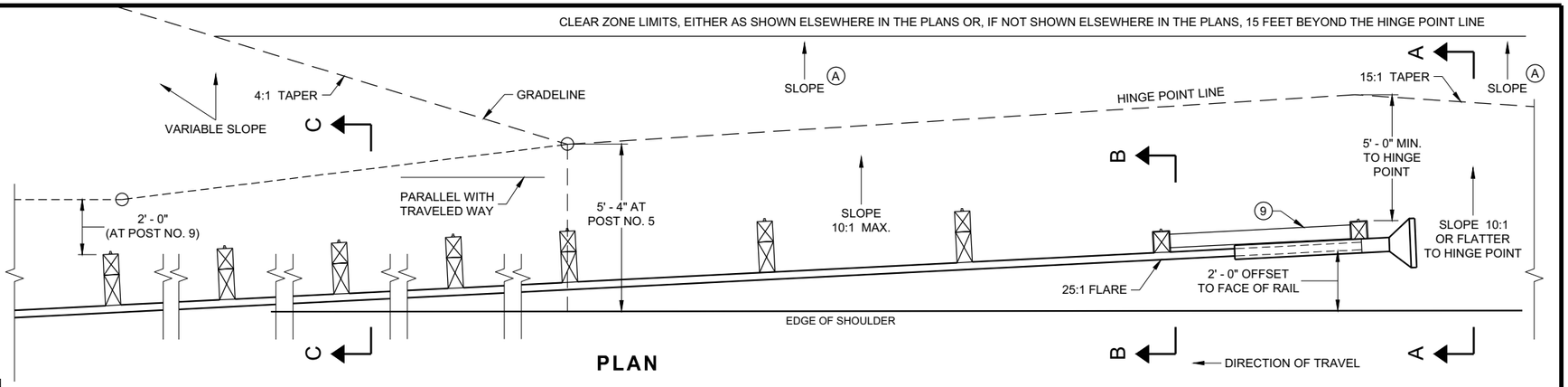
DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

SEE MANUFACTURER'S DRAWING FOR SPLICE LOCATION, HARDWARE DIMENSIONS AND INSTALLATION INSTRUCTIONS.

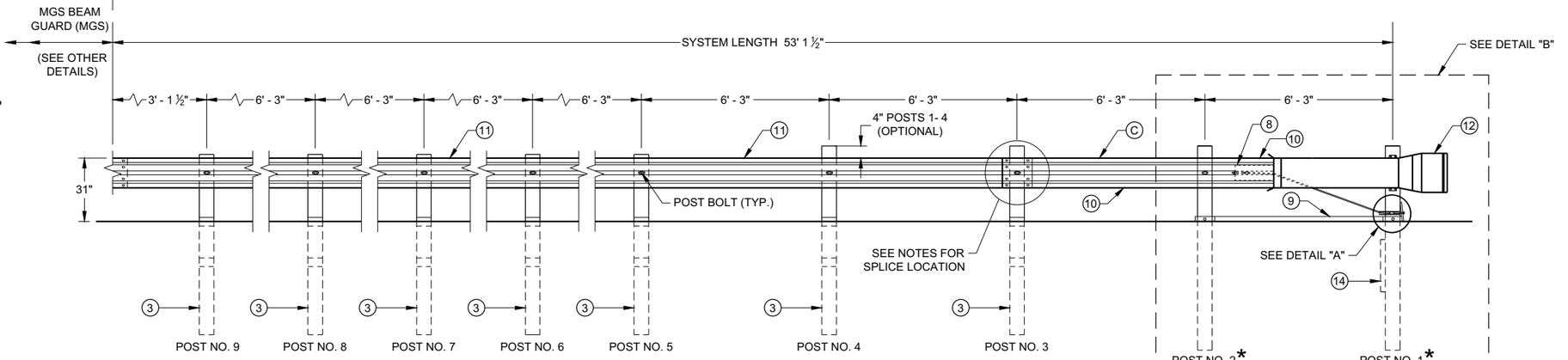
THE CENTER OF THE UPPER 3 ½" DIAMETER HOLE ON POST NUMBER 3 THROUGH POST 9 IS TO BE FLUSH WITH THE GROUND LINE UP TO A MAXIMUM OF 2" ABOVE GROUND LINE. WOOD BLOCKS ON POSTS NUMBERED 3 THROUGH 9 MAY BE ADJUSTED UP TO 3" ABOVE THE TOP OF POST.



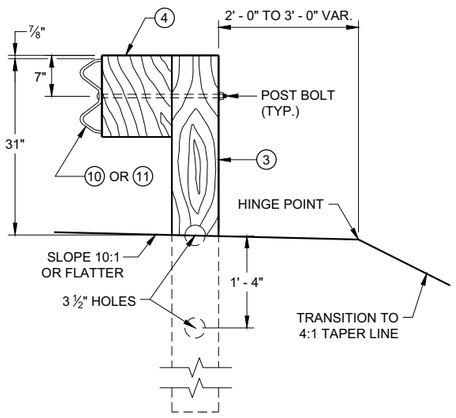
DETAIL "A" (E)



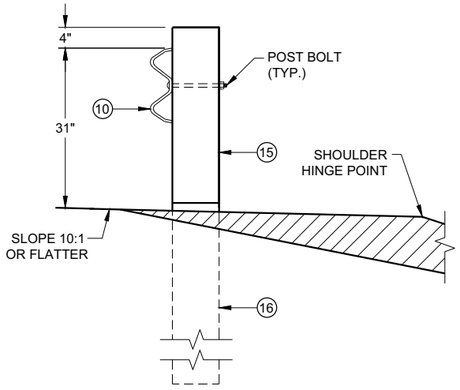
PLAN



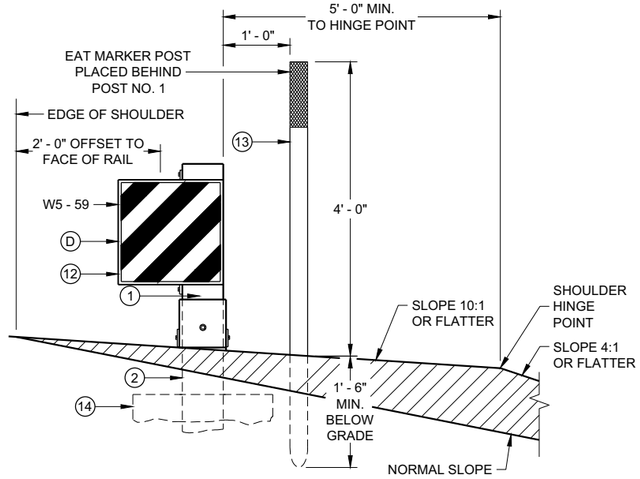
ELEVATION



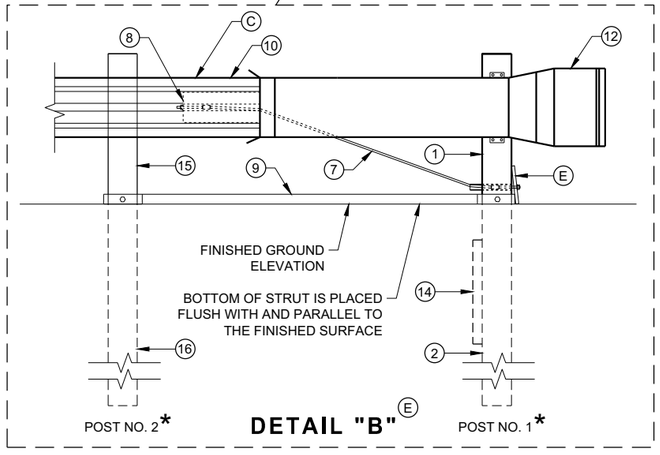
SECTION C - C
TYPICAL AT POST NOS. 3 - 9



SECTION B - B
TYPICAL AT POST NO. 2*



SECTION A - A
TYPICAL AT POST NO. 1*



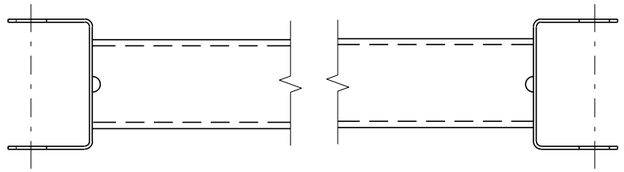
DETAIL "B" (E)

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 14B44 - 04a

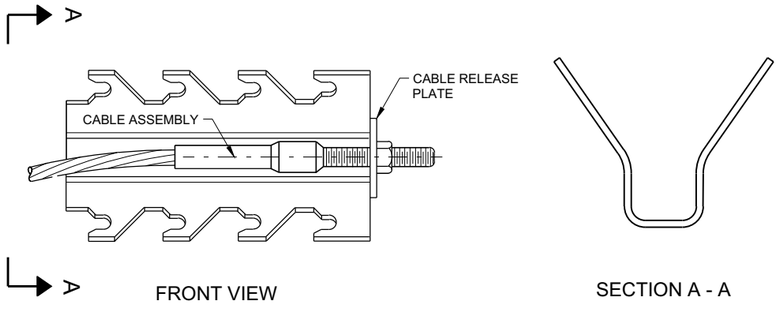
SDD 14B44 - 04a



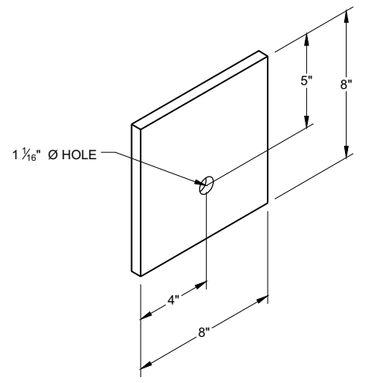
GENERIC GROUND STRUT ⑨ Ⓔ

BILL OF MATERIALS

PART NO.	DESCRIPTION MATERIALS PROVIDED BY MGS EAT MANUFACTURER. SEE MANUGACTURER'S DETAILS FOR MORE INFORMATION.
①	UPPER POST NO. 1 6" X 6" TUBE
②	LOWER POST NO. 1
③	WOOD CRT
④	WOOD BLOCKOUT
⑤	PIPE SLEEVE
⑥	BEARING PLATE
⑦	BCT CABLE ASSEMBLY
⑧	ANCHOR CABLE BOX
⑨	GROUND STRUT
⑩	PERFORATED W-BEAM RAIL END PANEL, 12'-6" LONG.
⑪	STANDARD W-BEAM RAIL. MULTIPLE SECTIONS REQUIRED. SECTIONS VARY IN LENGTH.
⑫	IMPACT HEAD
⑬	EAT MARKER POST - YELLOW (SEE APPROVED PRODUCTS LIST)
⑭	SOIL PLATE
⑮	UPPER POST NO. 2
⑯	LOWER POST NO. 2



GENERIC ANCHOR CABLE BOX ⑨ Ⓔ



BEARING PLATE ⑥ Ⓔ

6

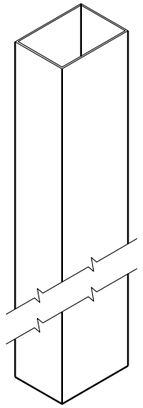
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SDD 14B44 - 04b

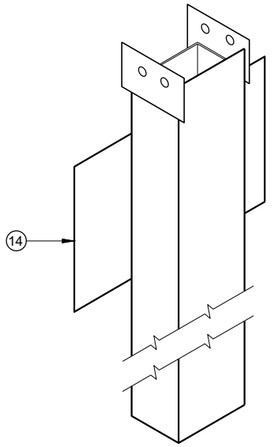
SDD 14B44 - 04b

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

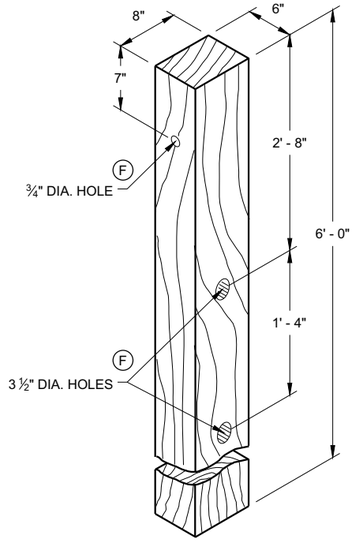
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA



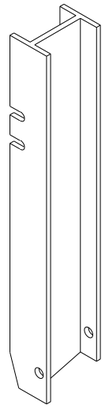
UPPER POST NO. 1 (1) (E)



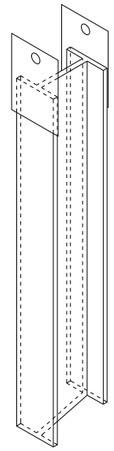
LOWER POST NO. 1 (2) (E)



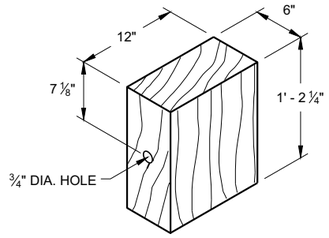
WOOD CRT POST (3) (E)
POSTS NUMBER 3-9



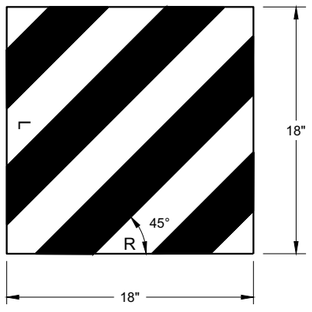
UPPER POST NO. 2 (15) (E)



LOWER POST NO. 2 (16) (E)

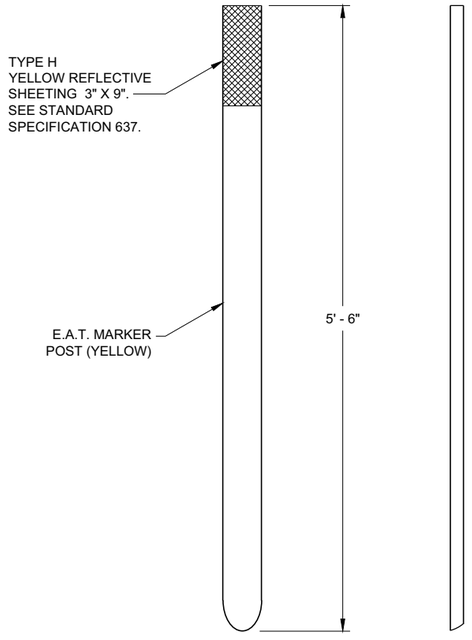


WOOD BLOCKOUT (4)
REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2



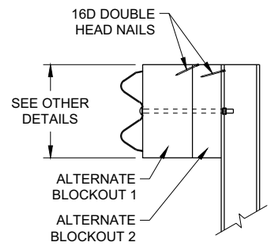
W5 - 59

REFLECTIVE SHEETING DETAIL (E)

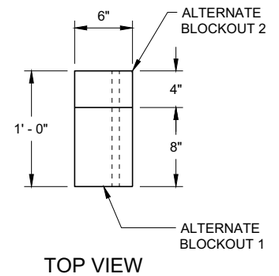


FRONT VIEW SIDE VIEW

E.A.T. MARKER POST (13)



SIDE VIEW



TOP VIEW

ALTERNATE WOOD BLOCKOUT DETAIL

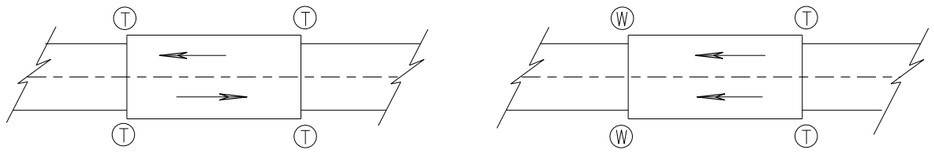
MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7/2018 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE UNIT SUPERVISOR
FHWA

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SDD 14B44 - 04c



TWO WAY TRAFFIC

ONE WAY TRAFFIC

(T) THRIE BEAM CONNECTION

(W) W-BEAM CONNECTION WHEN REQUIRED

TYPICAL LOCATIONS OF THRIE BEAM AND W-BEAM CONNECTIONS TO BRIDGE

GENERAL NOTES

IF ROCK IS ENCOUNTERED, REMOVE ROCK TO FULL DEPTH OF POST PLUS 2½", AND 12" DIAMETER AROUND POST. SEE 14B42 FOR MORE DETAILS.

TRANSITION USES STEEL POSTS ONLY.

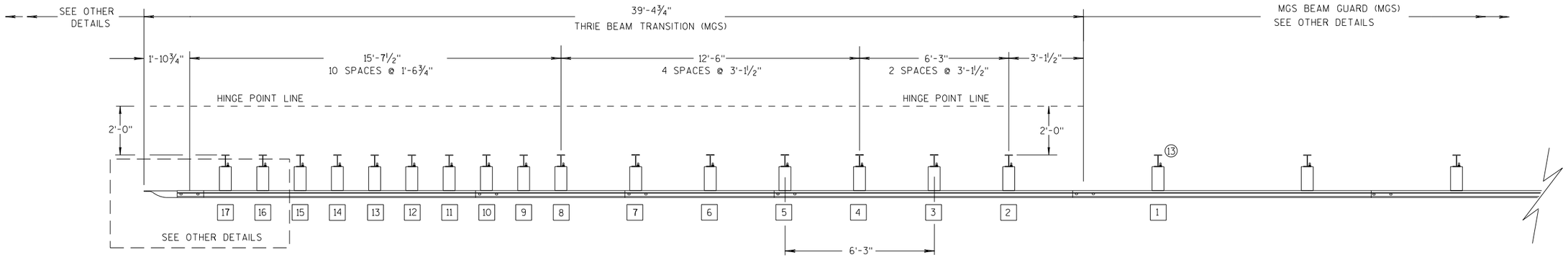
SEE STANDARD DETAIL DRAWING 14 B 42 FOR MORE INFORMATION.

POST 2 THROUGH 17 USES STEEL POST ONLY

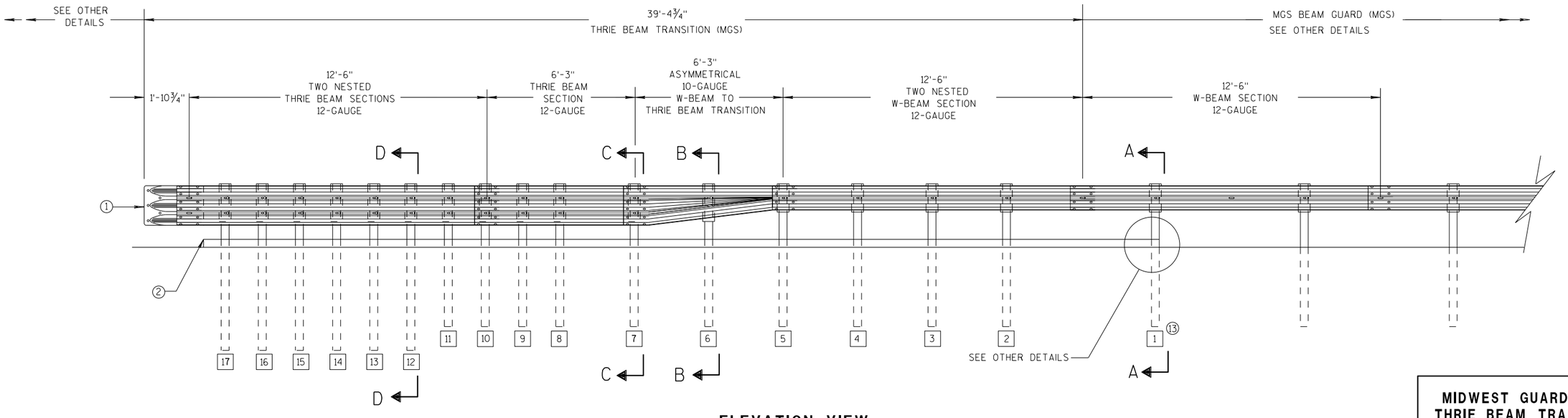
(1) BRIDGE RAILING TYPE "W" DOES NOT REQUIRE A TERMINAL CONNECTOR.

(2) OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

(13) STEEL OR WOOD POST IS ACCEPTABLE AT POST 1. SEE SDD14B42



PLAN VIEW



ELEVATION VIEW

MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6
S.D.D. 14 B 45-5a

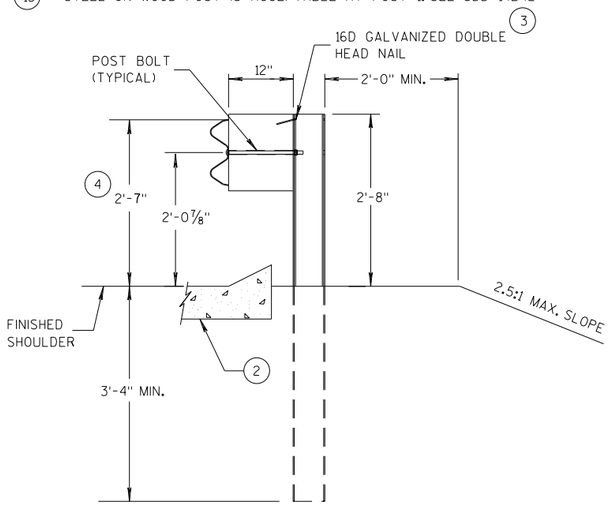
GENERAL NOTES

(2) OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

(3) WHEN USING STEEL POSTS AND WOOD BLOCKOUTS INSTALL FOUR 10D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

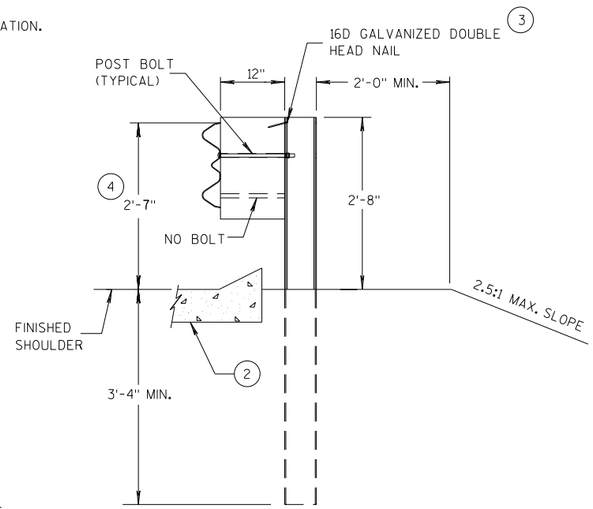
(4) TOLERANCE FOR TOP OF W-BEAM RAIL IS ± 1".

(13) STEEL OR WOOD POST IS ACCEPTABLE AT POST 1. SEE SDD 14B42



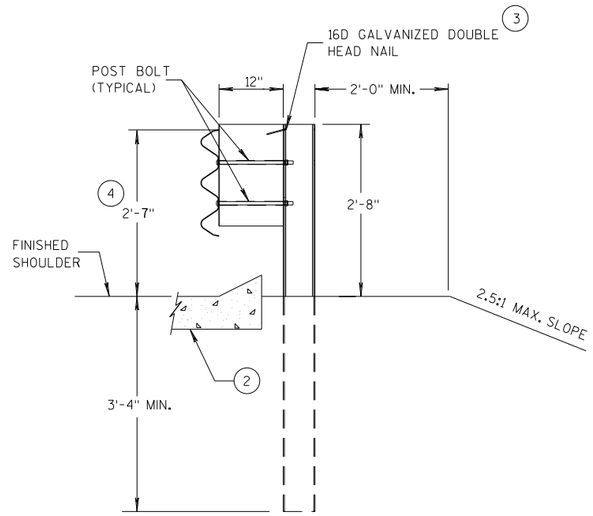
SECTION A-A (13)

POSTS 1-5



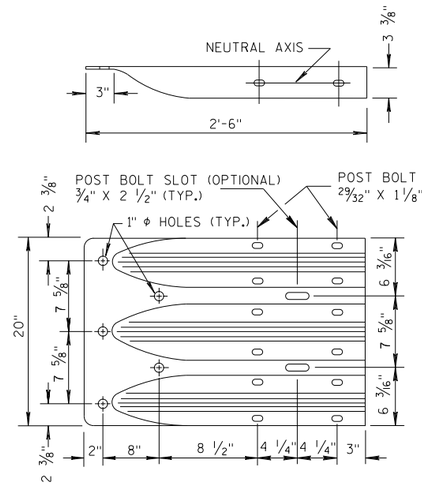
SECTION B-B

POST 6

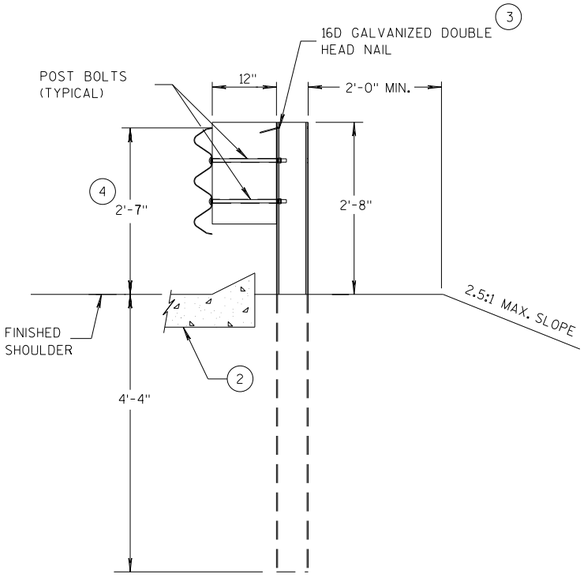


SECTION C-C

POSTS 7-11

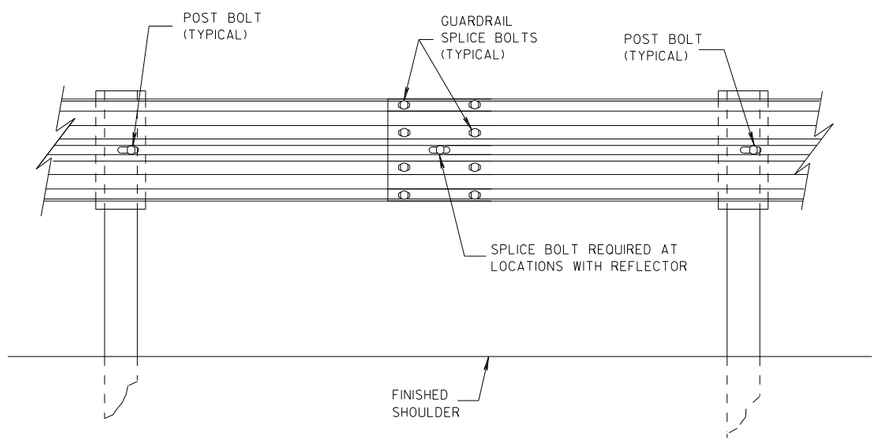


THRIE BEAM TERMINAL CONNECTOR



SECTION D-D

POSTS 12-17



SPLICE DETAIL

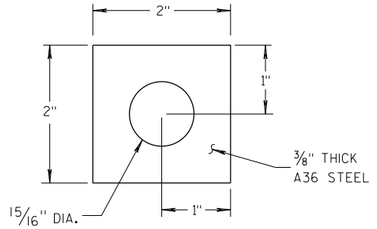
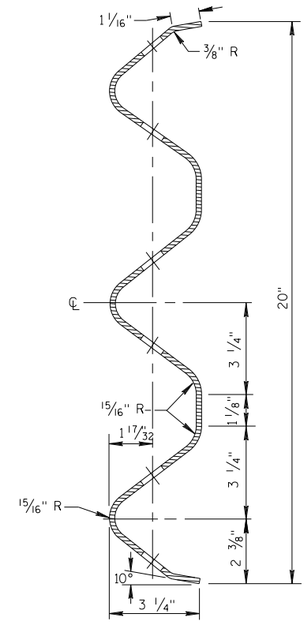


PLATE WASHER DETAIL



SECTION THRU THRIE BEAM RAIL ELEMENT

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

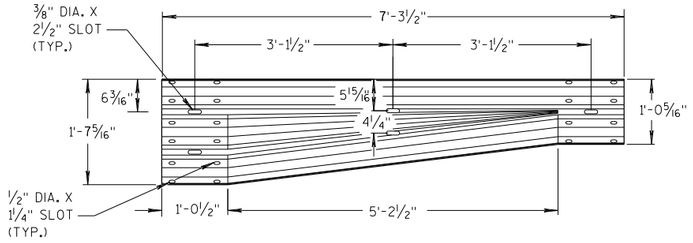
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR 114

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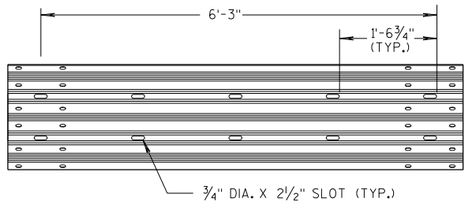
S.D.D. 14 B 45-5b

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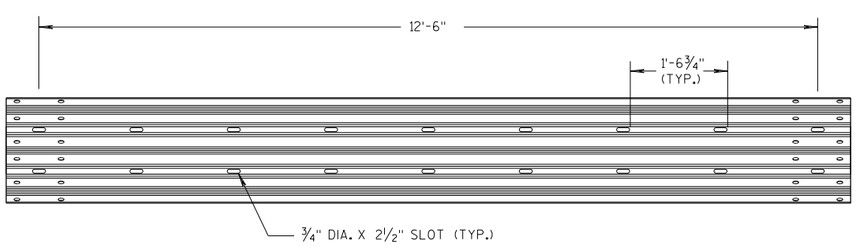
S.D.D. 14 B 45-5b



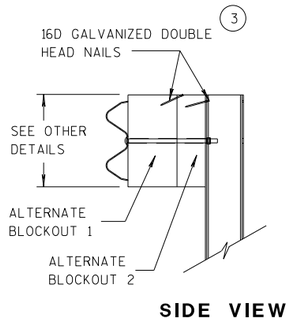
W-BEAM TO THRIE BEAM TRANSITION SECTION



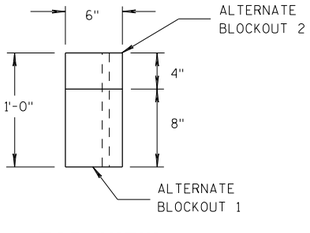
6'-3" THRIE BEAM SECTION



12'-6" THRIE BEAM SECTION

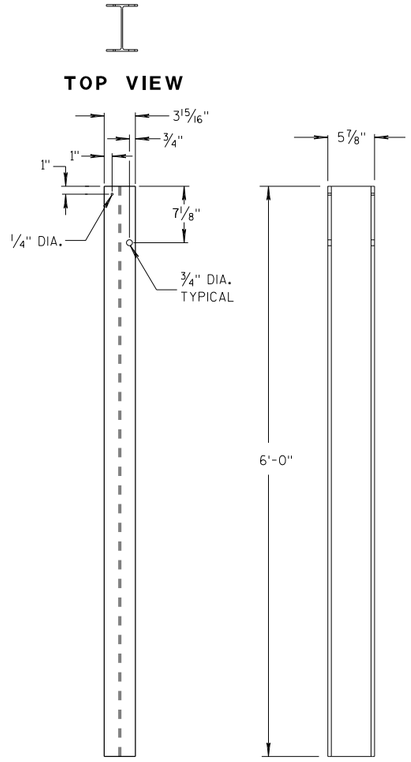


SIDE VIEW



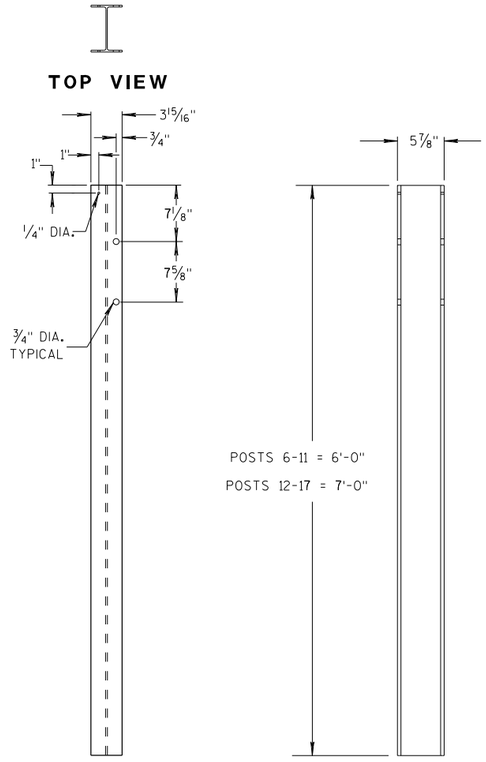
TOP VIEW

ALTERNATE WOOD BLOCKOUT DETAIL



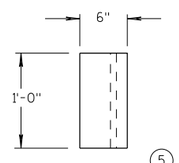
FRONT VIEW SIDE VIEW

STEEL POSTS 1-5 (13)

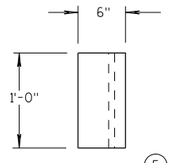


FRONT VIEW SIDE VIEW

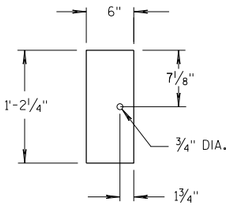
STEEL POSTS 6-17



TOP VIEW (5)

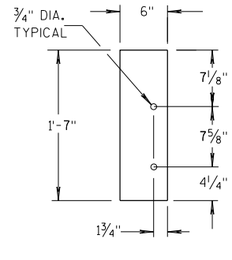


TOP VIEW (5)



FRONT VIEW

BLOCKOUT POSTS 1-5



FRONT VIEW

BLOCKOUT POSTS 6-17

GENERAL NOTES

STEEL POSTS ARE W6X9 OR W6X8.5.

BOLT HOLES FOR POST ARE ON FRONT AND OF SIDE OF POST.

(3) WHEN USING STEEL POSTS AND WOOD BLOCKOUTS INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

(5) WOOD BLOCKS MAY BE CONSTRUCTED OUT OF 2 WOOD BLOCKS. SEE ALTERNATE WOOD BLOCK DETAIL.

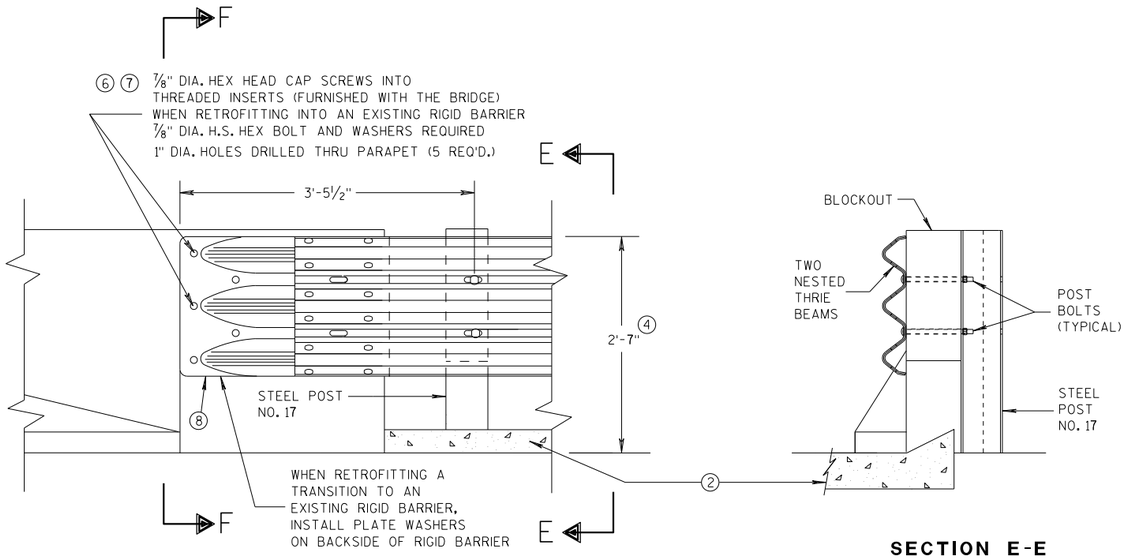
(13) STEEL OR WOOD POST IS ACCEPTABLE AT POST 1. SEE SDD 14B42.

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOF

6

S.D.D. 14 B 45-5c



FRONT VIEW

SECTION E-E

THRIE BEAM CONNECTION TO BRIDGE PARAPET WITH SQUARE ENDS

GENERAL NOTES

THESE ARE TYPICAL CONNECTION DETAILS. ADJUST THE POSTION OF CONNECTIONS TO EXISTING BRIDGES TO FIT THE ACTUAL BRIDGE AND SITE DIMENSIONS.

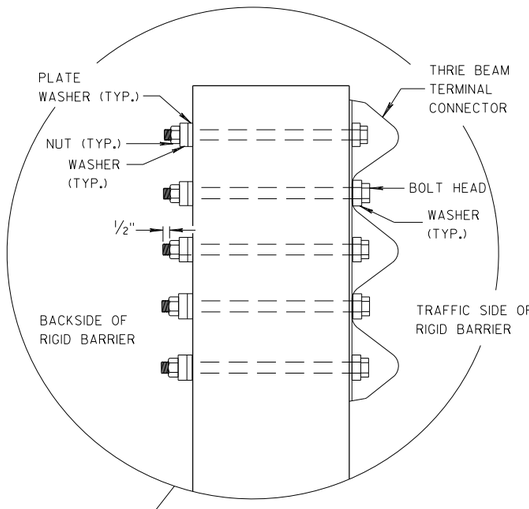
② OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

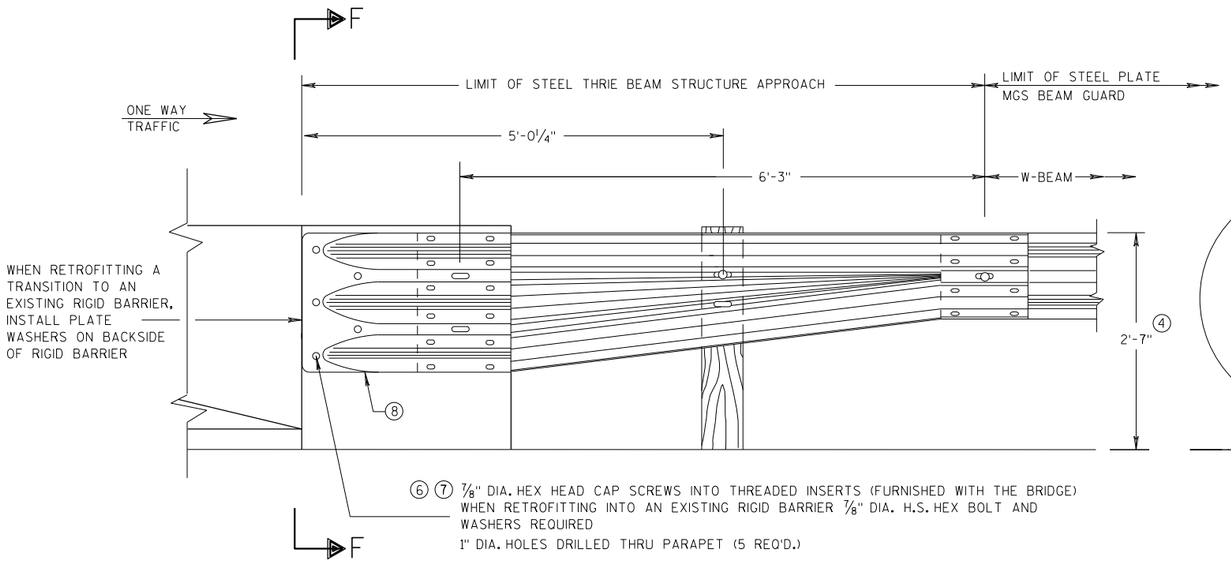
④ TOLERANCE FOR TOP OF BEAM IS ± 1".

⑥ DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

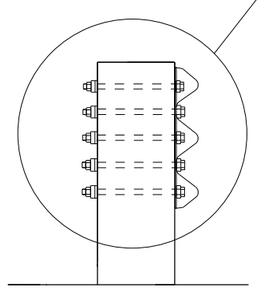
⑦ BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X 5/32" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.

⑧ THE RECESS FOR A W-BEAM CONNECTION, WHICH EXISTS ON SOME PARAPETS OF THIS TYPE, SHALL BE FILLED WITH A TREATED TIMBER BLOCKOUT. BLOCKOUT SIZE IS 1'-6" X 2'-0" X 3 1/2".

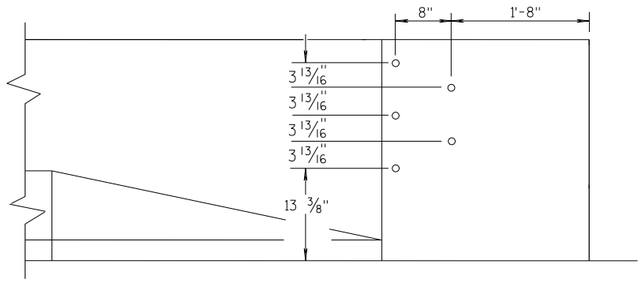




FRONT VIEW



SECTION F-F



DRILL HOLE LOCATION

W BEAM TRANSITION AND CONNECTION TO BRIDGE PARAPETS WITH SQUARE ENDS

(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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/S/ Rodney Taylor — ROADWAY STANDARDS D UNIT SUPERVIS NT
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S.D.D. 14 B 45-5d

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S.D.D. 14 B 45-5d

GENERAL NOTES

THESE ARE TYPICAL CONNECTION DETAILS. ADJUST THE POSTION OF CONNECTIONS TO EXISTING BRIDGES TO FIT THE ACTUAL BRIDGE AND SITE DIMENSIONS.

(2) OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

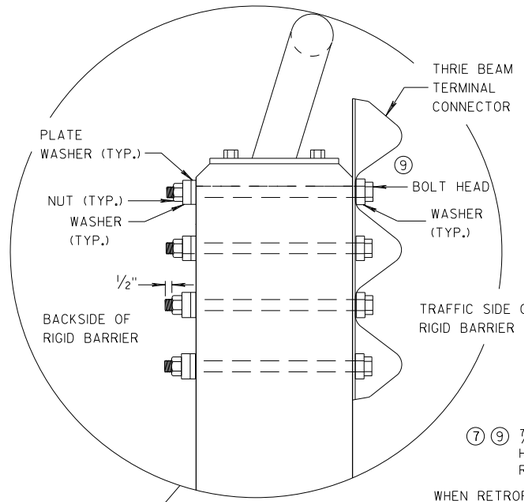
(4) TOLERANCE FOR TOP OF BEAM IS ± 1".

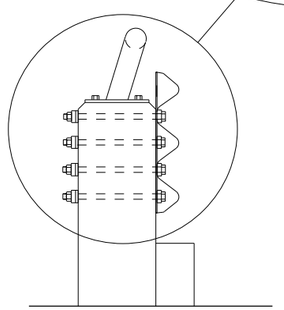
(6) DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

(7) BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X 5/32" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.

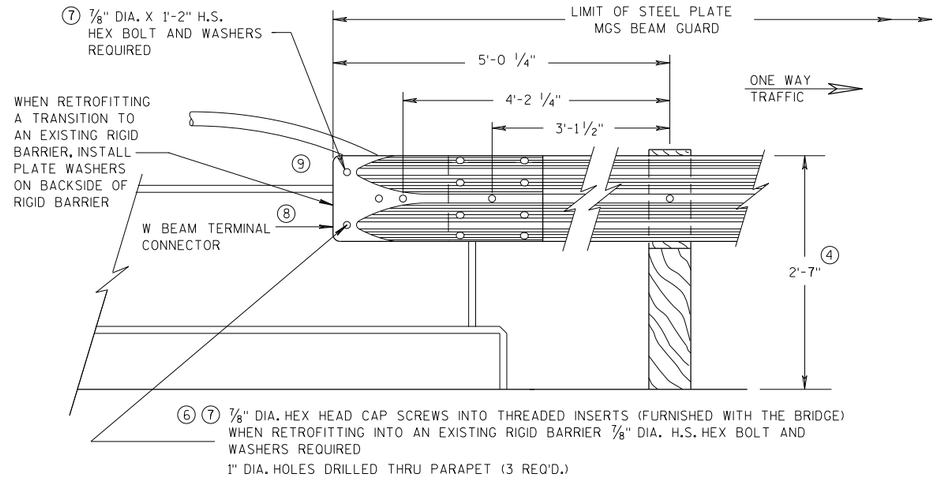
(8) THE RECESS FOR A W-BEAM CONNECTION, WHICH EXISTS ON SOME PARAPETS OF THIS TYPE, SHALL BE FILLED WITH A TREATED TIMBER BLOCKOUT. BLOCKOUT SIZE IS 1'-6" X 2'-0" X 3 ½".

(9) BOLT, NUT AND WASHERS NOT REQUIRED FOR THIS LOCATION WHEN RETROFITTING AN EXISTING PAPAPET AND THE HOLE IS EITHER ABOVE PARAPET OR WITHIN 4 INCHES OF THE EDGE OF PARAPET.





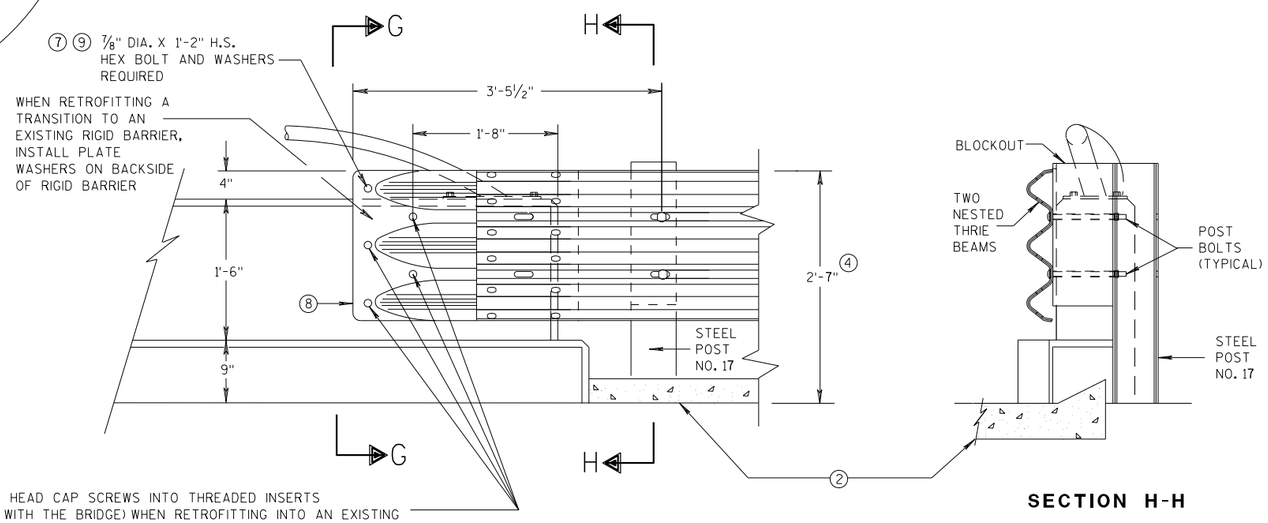
SECTION G-G



FRONT VIEW

W BEAM CONNECTION TO VERTICAL FACE PARAPET

(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)



FRONT VIEW

SECTION H-H

THRIE BEAM CONNECTION TO VERTICAL FACED PARAPETS

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

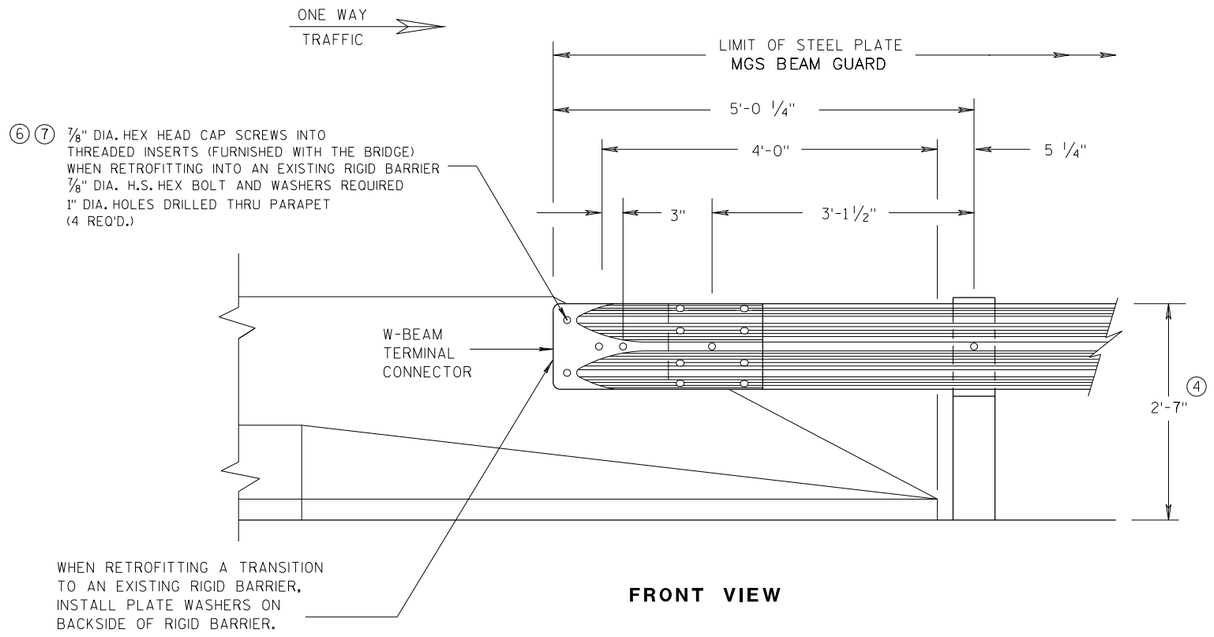
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07/2018 — DATE
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S.D.D. 14 B 45-5e

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S.D.D. 14 B 45-5e



FRONT VIEW

W BEAM CONNECTION TO PARAPETS WITH SLOPED ENDS

(USE ONLY AT TRAFFIC EXIT END OF ONE WAY BRIDGE)

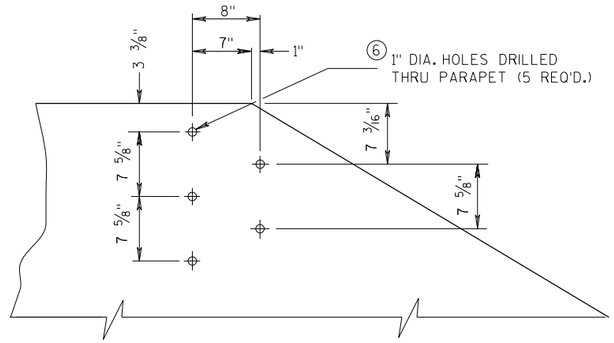
GENERAL NOTES

② OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

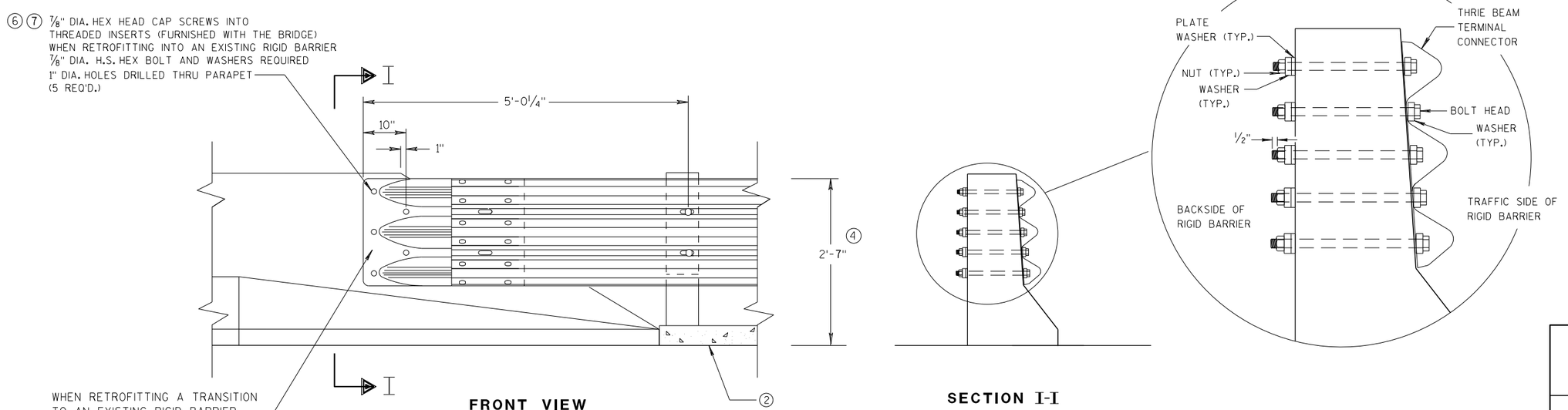
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DRILL HOLE LOCATION AND PATTERN FOR THRIE BEAM CONNECTION



FRONT VIEW

SECTION I-I

THRIE BEAM CONNECTION TO BRIDGE PARAPETS WITH SLOPED ENDS

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

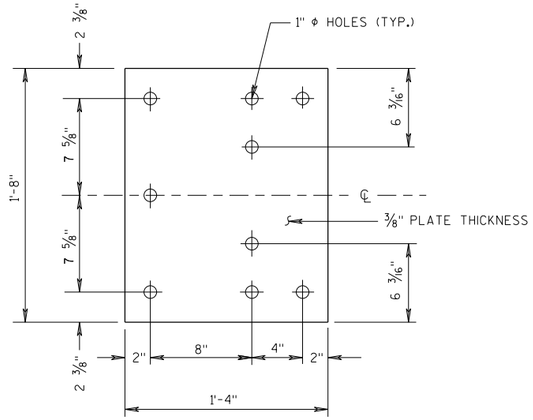
APPROVED
07/2018 — DATE
/S/ Rodney Taylor
ROADWAY STANDARDS [illegible] UNIT SUPERVI[illegible]ENT
FHWA

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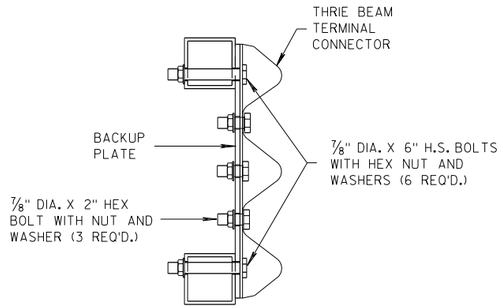
S.D.D. 14 B 45-5f

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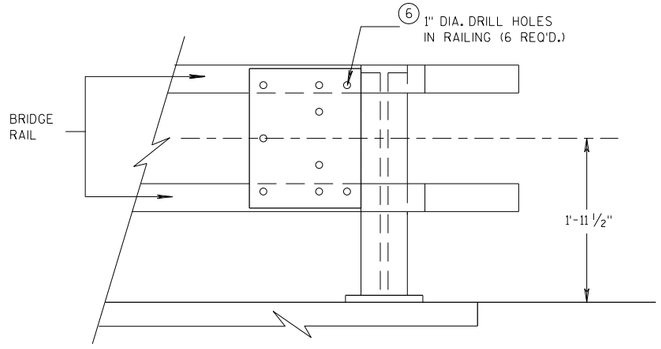
S.D.D. 14 B 45-5f



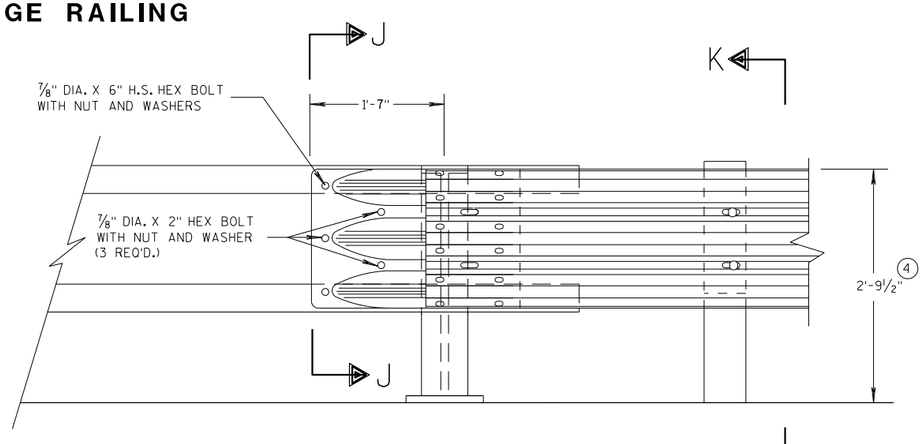
BACK-UP PLATE DETAIL



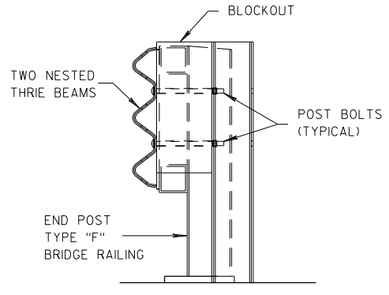
SECTION J-J



BACK-UP PLATE MOUNTING ONTO BRIDGE RAILING



FRONT VIEW



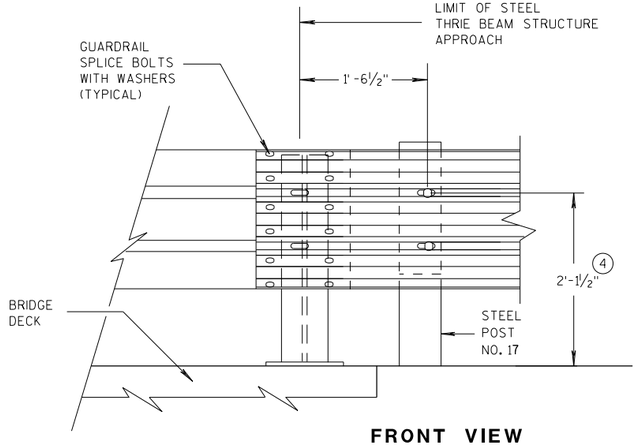
SECTION K-K

THRIE BEAM CONNECTION TO TUBULAR RAILING TYPE "F"

GENERAL NOTES

④ TOLERANCE FOR TOP OF BEAM IS ± 1".

⑥ DRILLING HOLES THROUGH THE PAPRPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.



FRONT VIEW

THRIE BEAM CONNECTION TO STEEL RAILING TYPE "W"

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED 07/2018 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA

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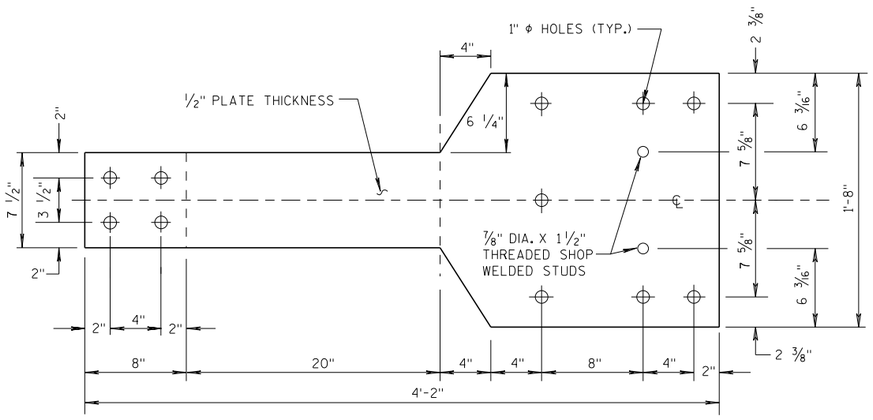
S.D.D. 14 B 45-5g

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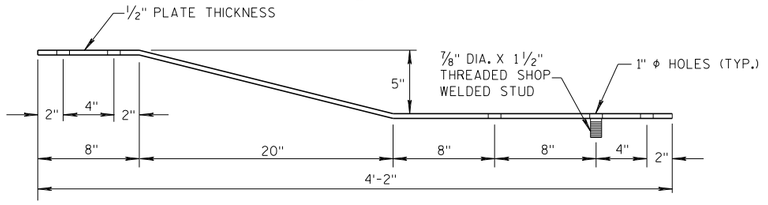
S.D.D. 14 B 45-5g

GENERAL NOTES

(4) TOLERANCE FOR TOP OF W-BEAM RAIL IS ± 1".

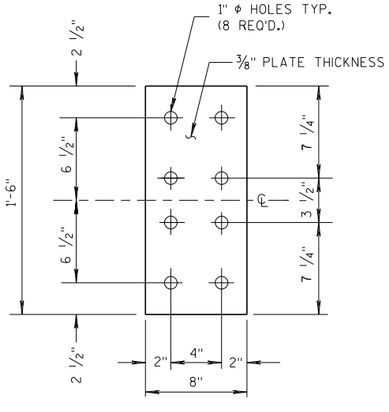


FRONT VIEW



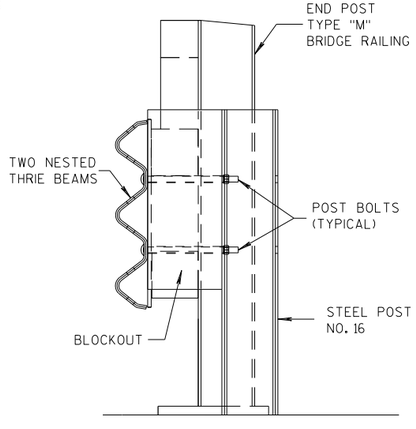
PLAN VIEW

BACK-UP PLATE DETAIL, TYPE "M"

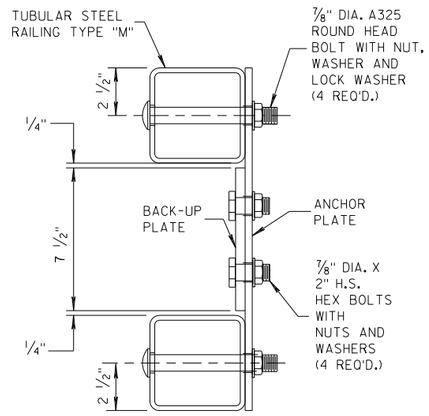


FRONT VIEW

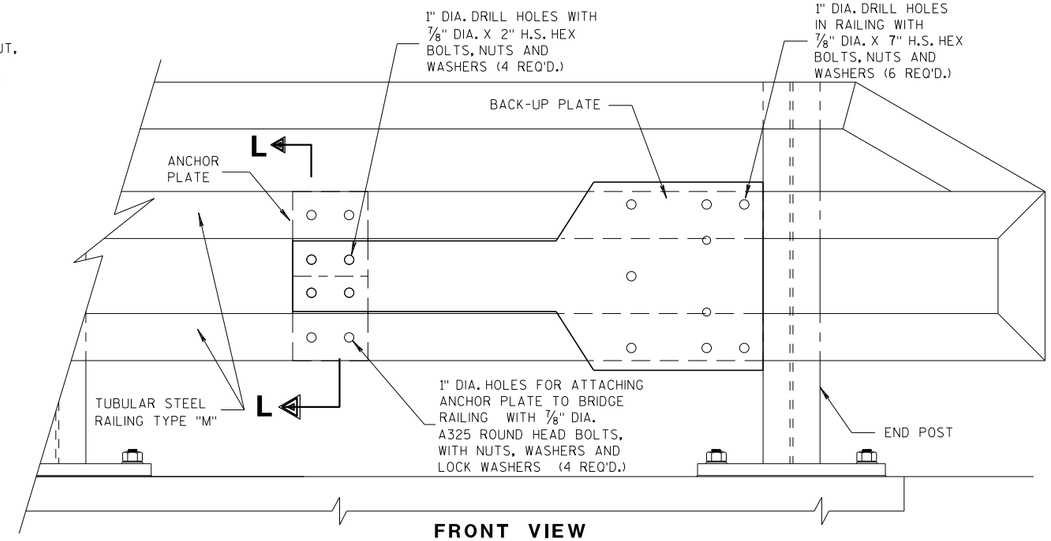
ANCHOR PLATE DETAIL, TYPE "M"



SECTION M-M

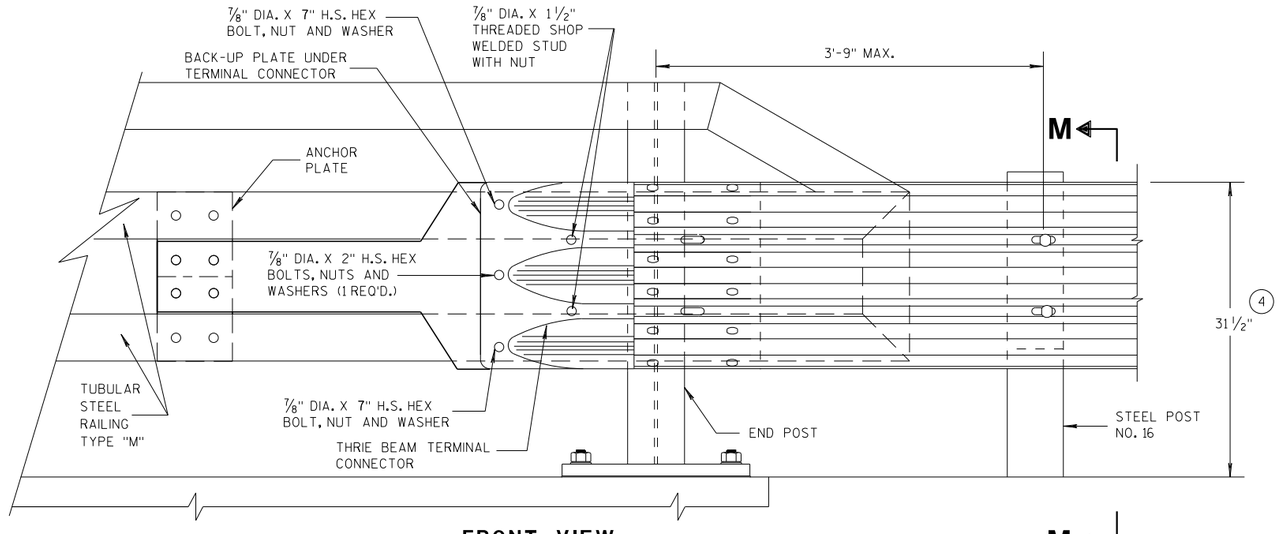


SECTION L-L

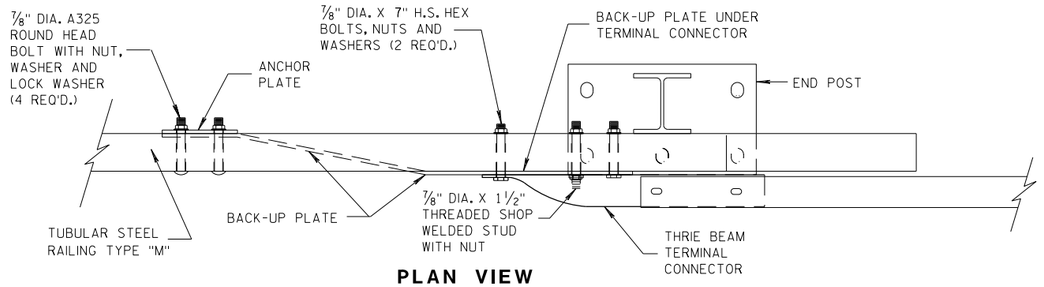


FRONT VIEW

ANCHOR AND BACK-UP PLATE MOUNTING TO BRIDGE RAILING, TYPE "M"



FRONT VIEW



PLAN VIEW

THRIE BEAM CONNECTION TO TUBULAR RAILING, TYPE "M"

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

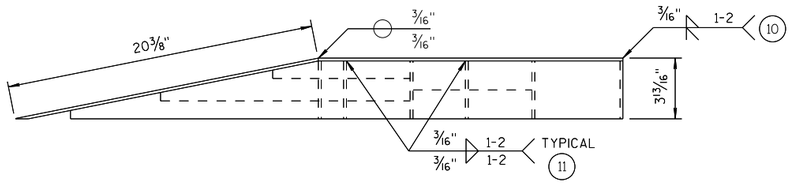
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07/2018 — DATE
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FHWA

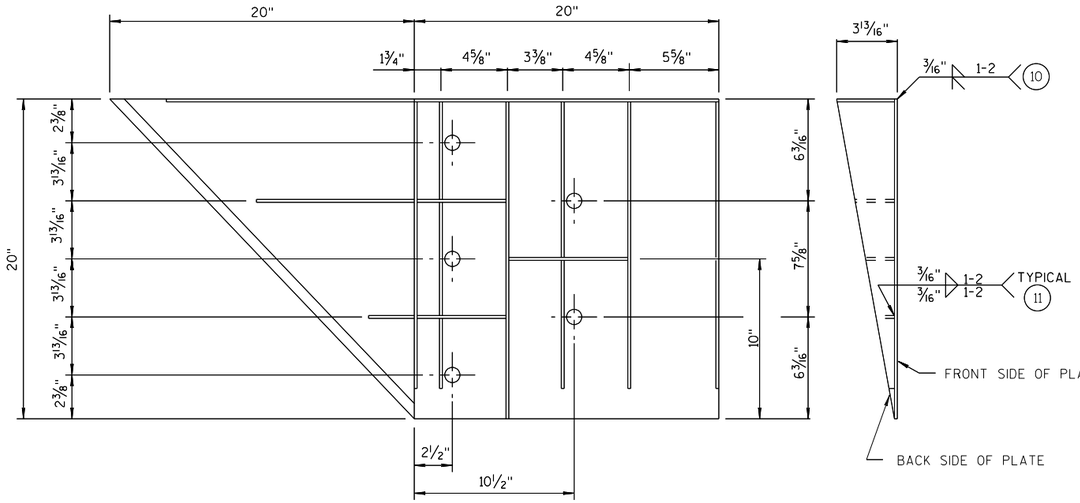
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S.D.D. 14 B 45-5h

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S.D.D. 14 B 45-5h





WELDING INSTRUCTION

(VIEWED FROM BACK SIDE OF PLATE)

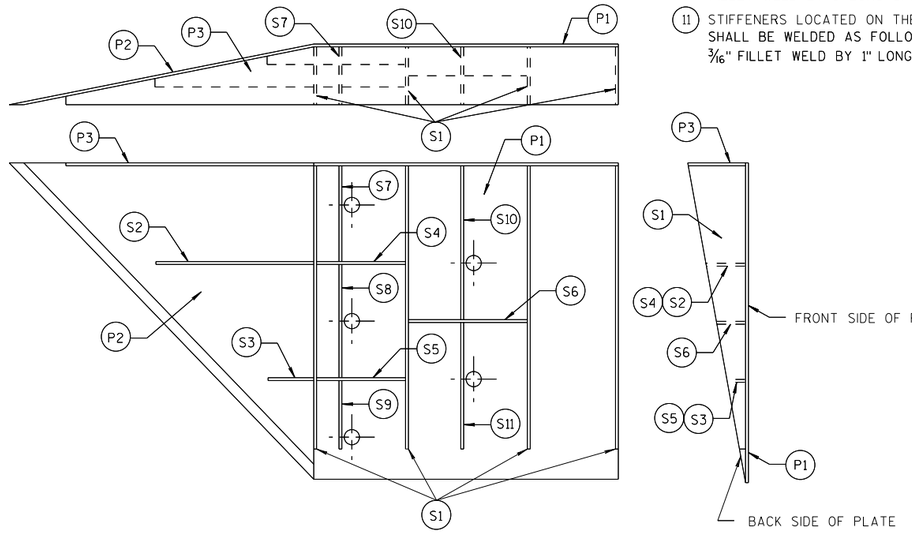


PLATE AND STIFFENER IDENTIFICATION

(VIEWED FROM BACK SIDE OF PLATE)

GENERAL NOTES

COVER PLATE PANELS ARE 3/16" THICK.

ALL STIFFENERS ARE 1/4" THICK.

CONNECTOR PLATE SHALL BE FABRICATED FROM ASTM GRADE A36 STEEL AND GALVANIZED.

FOR GALVANIZED REQUIREMENTS, SEE SECTION 614 OF THE STANDARD SPECIFICATIONS.

ALL HOLE DIAMETERS SHALL BE 1".

FOR OPPOSITE SIDE INSTALLATION MIRROR DRAWINGS.

(10) STIFFENERS LOCATED AT THE OUTSIDE EDGES OF THE COVER PLATES SHALL BE WELDED AS FOLLOWS:
SINGLE BEVEL GROOVE WELD ON EXTERNAL SIDES AND 3/16" FILLET WELD BY 1" LONG SPACED AT 2" ON INTERNAL SIDES.

(11) STIFFENERS LOCATED ON THE INSIDE OF THE COVER PLATE SHALL BE WELDED AS FOLLOWS:
3/16" FILLET WELD BY 1" LONG SPACED AT 2".

CONNECTOR PLATE DIMENSION (PER ASSEMBLY)

PLATE	QUANTITY	SHAPE	SIZE (A x B x C x D)	THICKNESS
P1	1		20" x 20"	3/16"
P2	1		20" x 20" x 28 9/16"	3/16"
P3	1		39" x 3 5/8" x 20" x 19 5/16"	3/16"
S1	4		18 7/16" x 3 5/8" x 18 3/4"	1/4"
S2	1		10 1/4" x 2 7/16" x 10 3/8" x 1/2"	1/4"
S3	1		3" x 1 1/16" x 3 1/8" x 1/2"	1/4"
S4	1		6 1/8" x 2 7/16"	1/4"
S5	1		6 1/8" x 1 1/16"	1/4"
S6	1		7 3/4" x 1 3/4"	1/4"
S7	1		2 9/16" x 6" x 3 5/8" x 5 7/8"	1/4"
S8	1		1 5/32" x 7 1/2" x 2 1/2" x 7 3/8"	1/4"
S9	1		6 1/16" x 6 3/16" x 1 3/32"	1/4"
S10	1		1 7/8" x 9 7/8" x 3 5/8" x 9 11/16"	1/4"
S11	1		8 1/2" x 8 3/4" x 1 13/16"	1/4"

SINGLE SLOPE CONNECTION PLATE

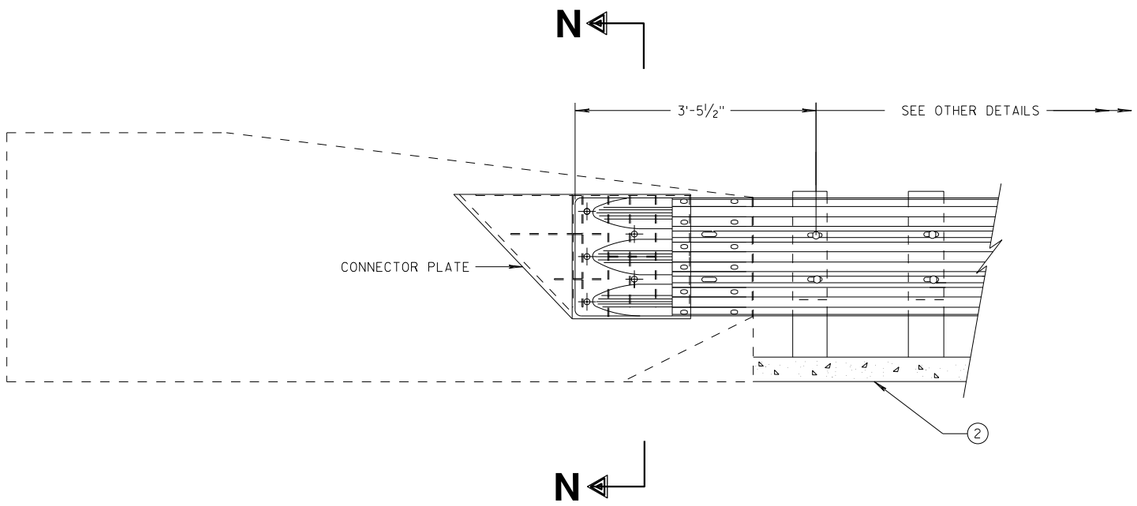
MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

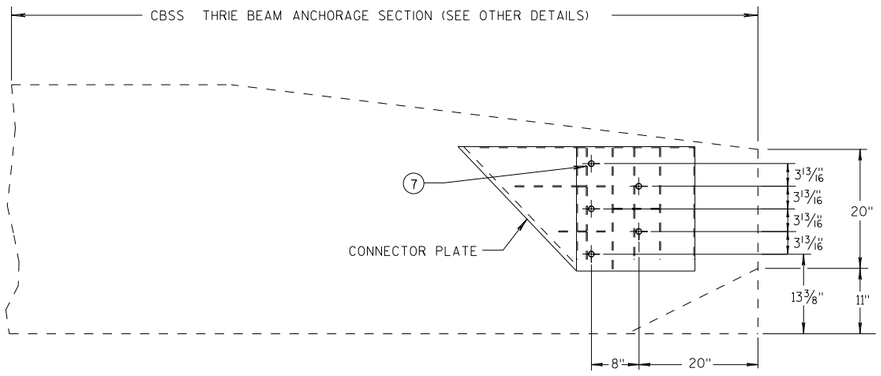
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THRIE BEAM CONNECTION TO SINGLE SLOPE BARRIER



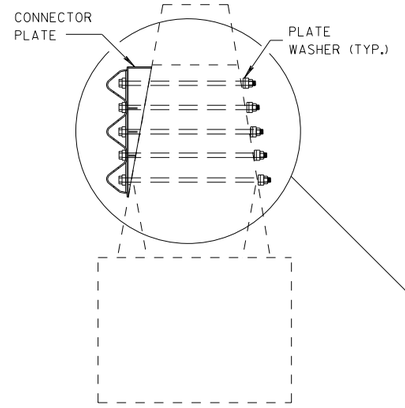
SINGLE SLOPE CONNECTION PLATE PLACEMENT

GENERAL NOTES

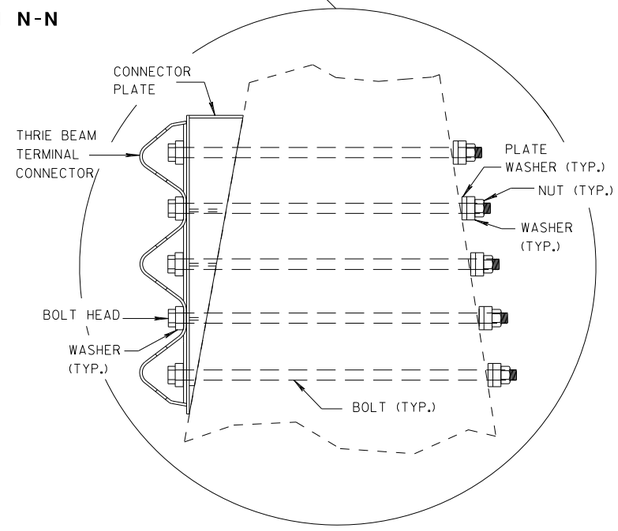
CONNECTOR PLATE, DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

(2) OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

(7) BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X 5/32" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.



SECTION N-N



MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

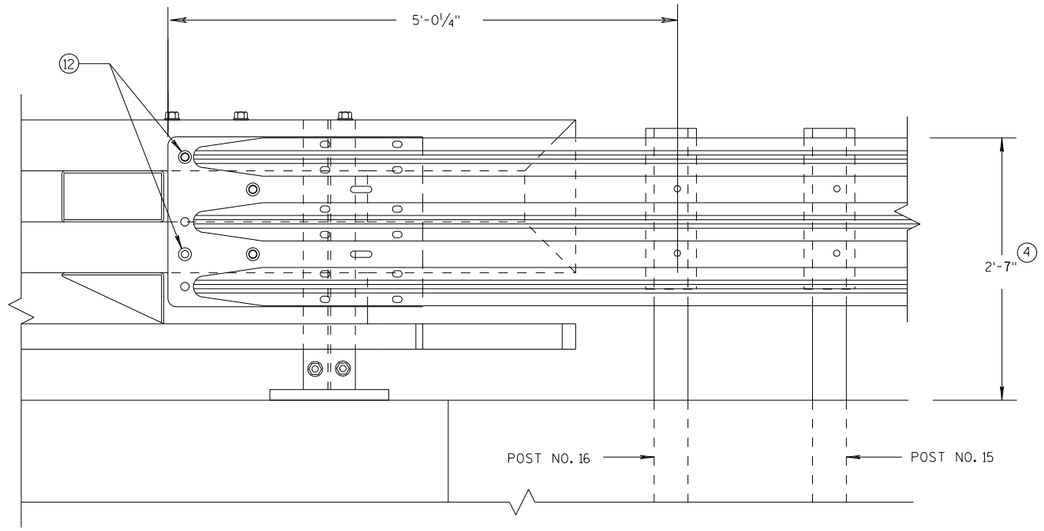
APPROVED
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/S/ Rodney Taylor
ROADWAY STANDARDS DI UNIT SUPERVIS
FHWA

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S.D.D. 14 B 45-5j

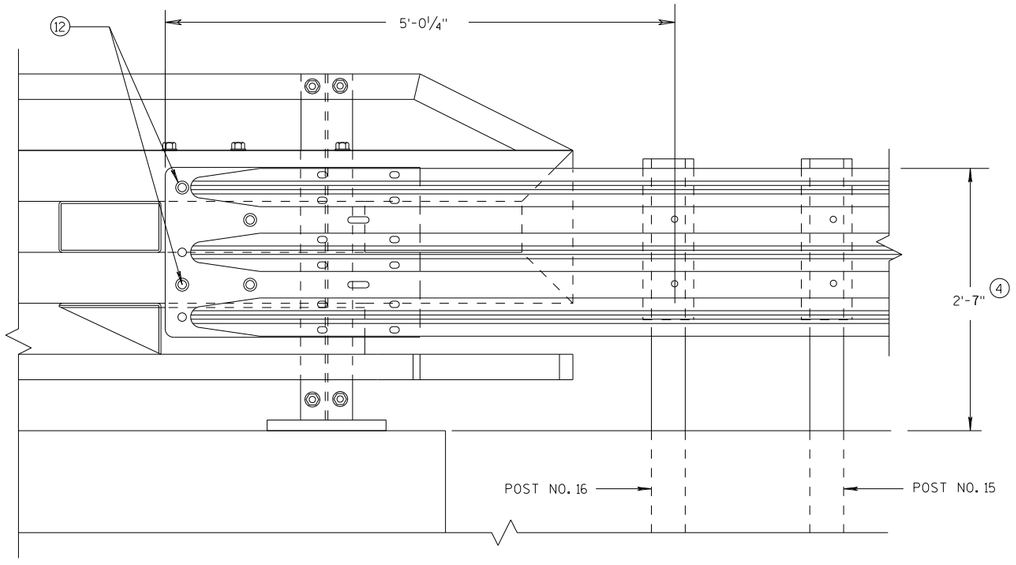
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S.D.D. 14 B 45-5j



ELEVATION OF DETAIL AT NY3 END POST

THRIE BEAM RAIL ATTACHMENT



ELEVATION OF DETAIL AT NY4 END POST

THRIE BEAM RAIL ATTACHMENT

GENERAL NOTES

(4) TOLERANCE FOR TOP OF BEAM IS ± 1".

(12) BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. ON BACKSIDE OF PARAPET ONE ROUND WASHER, AND NUT REQUIRED. BOLT THREAD IS TO EXTEND 1/2-INCH BEYOND NUT.

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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DATE
FHWA

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ROADWAY STANDARDS D
UNIT SUPERVIS

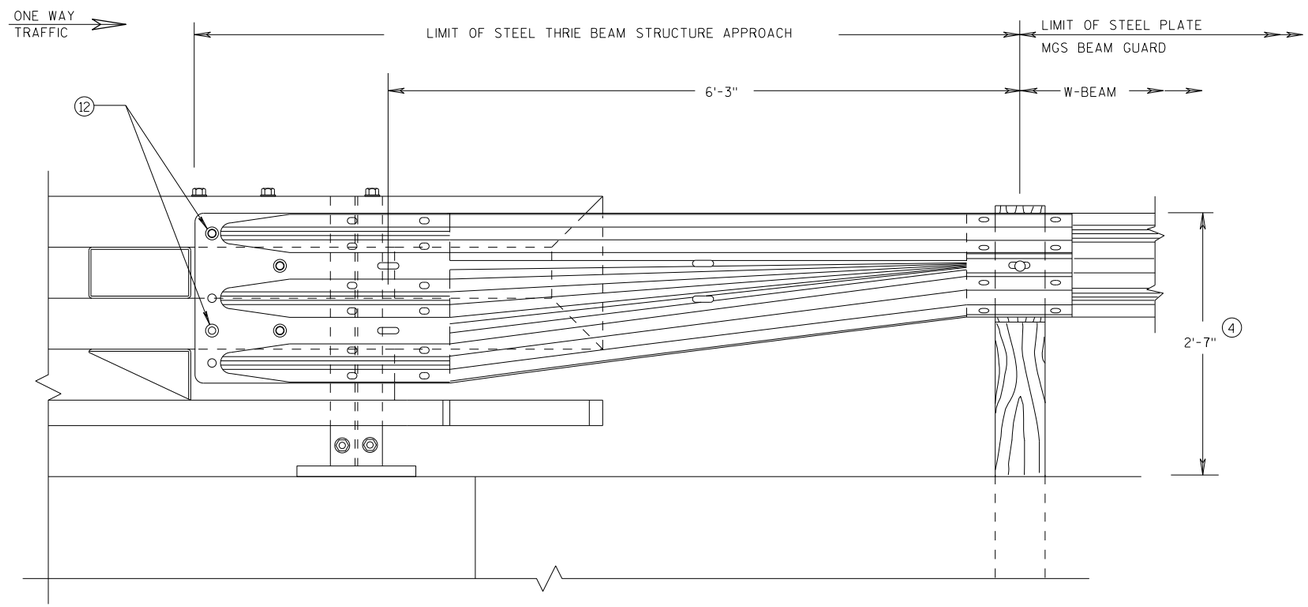
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S.D.D. 14 B 45-5k

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S.D.D. 14 B 45-5k



FRONT VIEW

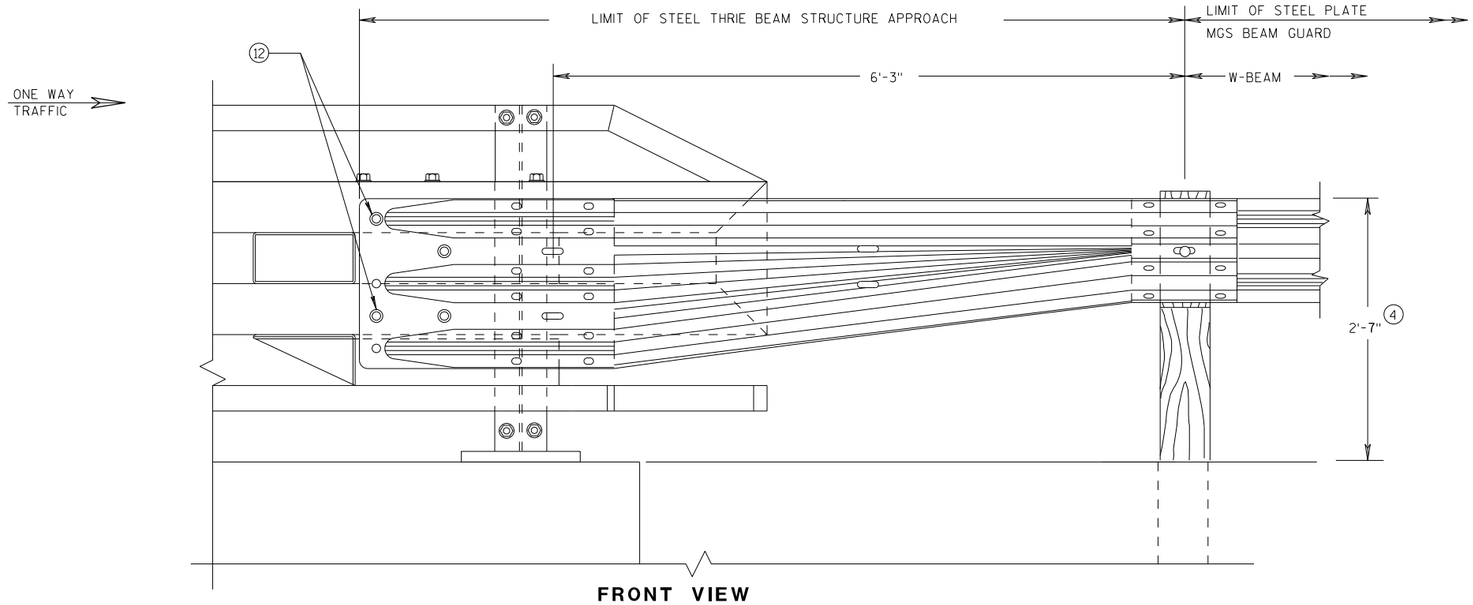
W BEAM TRANSITION AND CONNECTION TO BRIDGE RAILING TYPE "NY3"

(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)

GENERAL NOTES

(4) TOLERANCE FOR TOP OF BEAM IS ± 1".

(12) BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. ON BACKSIDE OF PARAPET ONE ROUND WASHER, AND NUT REQUIRED. BOLT THREAD IS TO EXTEND 1/2-INCH BEYOND NUT.



FRONT VIEW

W BEAM TRANSITION AND CONNECTION TO BRIDGE RAILING TYPE "NY4"

(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7/2018
DATE
FHWA

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ROADWAY STANDARDS D
UNIT SUPERVIS

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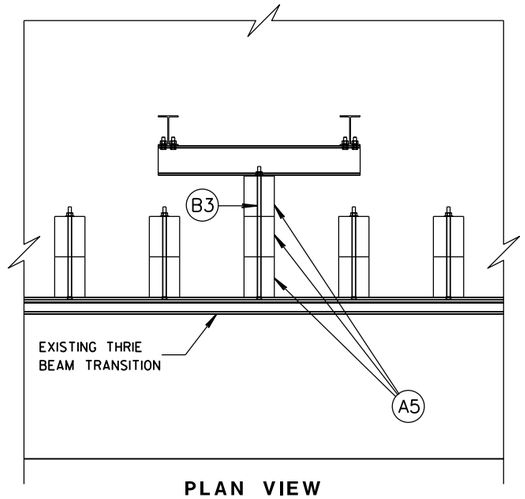
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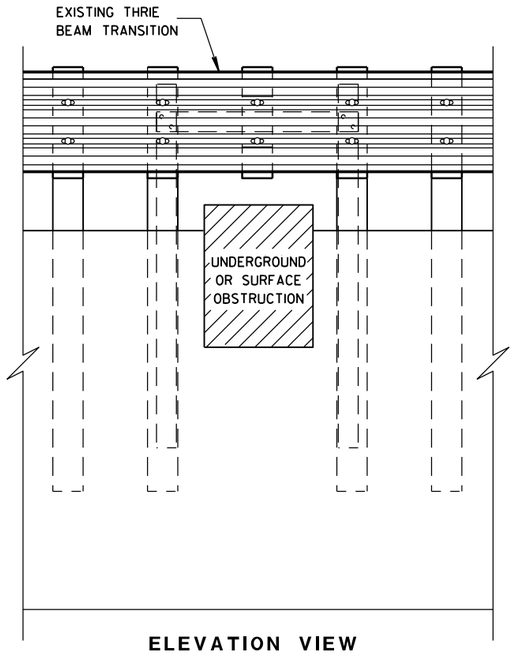
S.D.D. 14 B 45-5L

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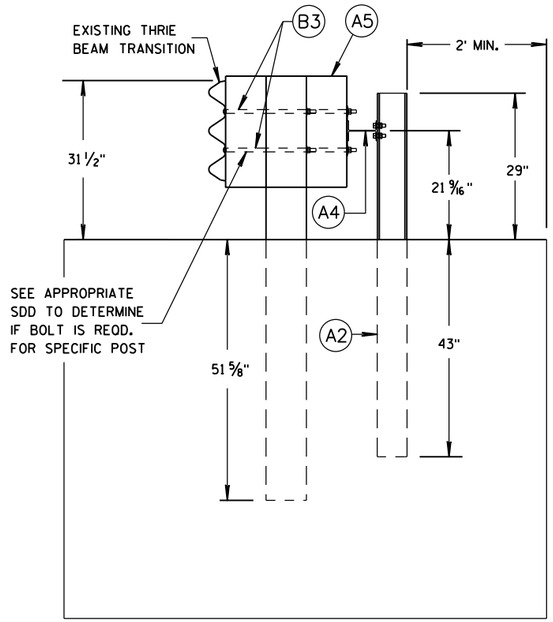
S.D.D. 14 B 45-5L



PLAN VIEW



ELEVATION VIEW



SIDE VIEW

72" MISSING POST CROSS-BEAM

GENERAL NOTES

ONLY ONE SUCH POST RETROFIT PER SYSTEM.

SEE SDD 14B20 FOR MORE INFORMATION ON THE THRIE BEAM TRANSITIONS.

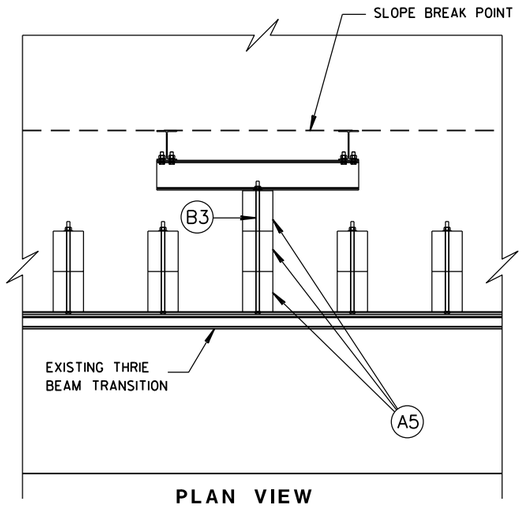
IF ROCK IS ENCOUNTERED, REMOVE ROCK TO FULL DEPTH OF POST PLUS 2½-INCHES AND 12-INCHES IN DIAMETER AROUND POST. SEE SDD 14B20 OR 14B45 FOR MORE DETAILS.

ONLY STEEL POST CAN BE USED.

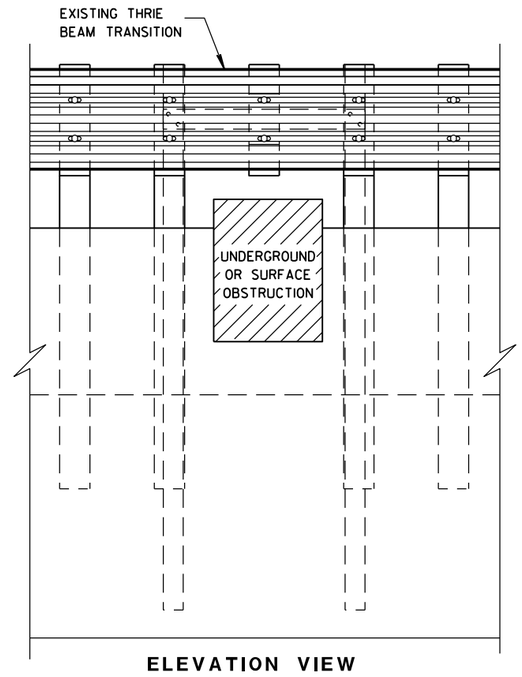
BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN ALL HARDWARE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH.

ONLY ONE WASHER AND ONE NUT CAN BE INSTALLED AT A CONNECTION. CUT THREADING OF BOLTS SO THAT NO MORE THAN ¼-INCH TO ½-INCH OF THREADING IS BEYOND THE NUT.

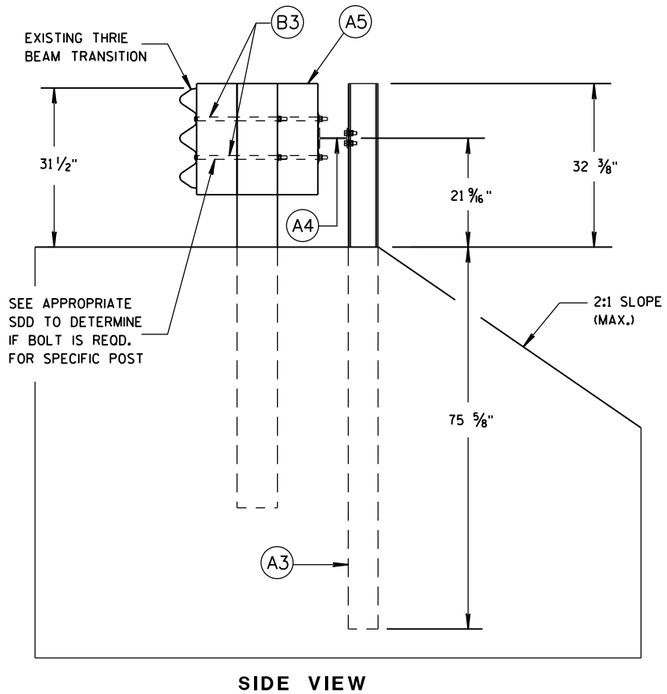
WHEN USING APPROACH RETROFIT POST BID ITEM, REVIEW SDD 14B20 INSTALL POST INFORMATION AND LOCATION, BLOCK AND HARDWARE.



PLAN VIEW



ELEVATION VIEW



SIDE VIEW

108" MISSING POST CROSS-BEAM

THRIE BEAM APPROACH
RETROFIT INSTALLATION
OF MISSING POST

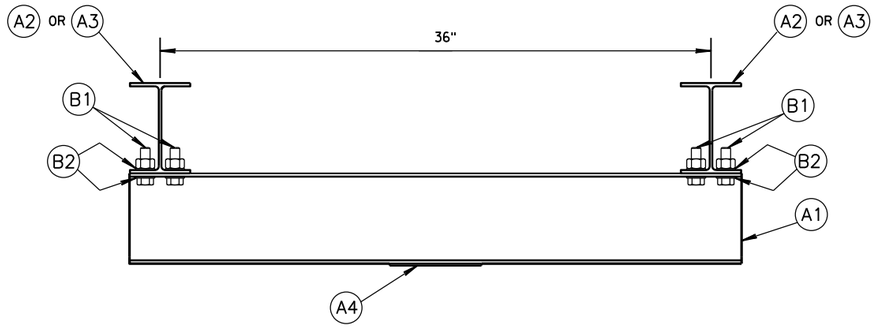
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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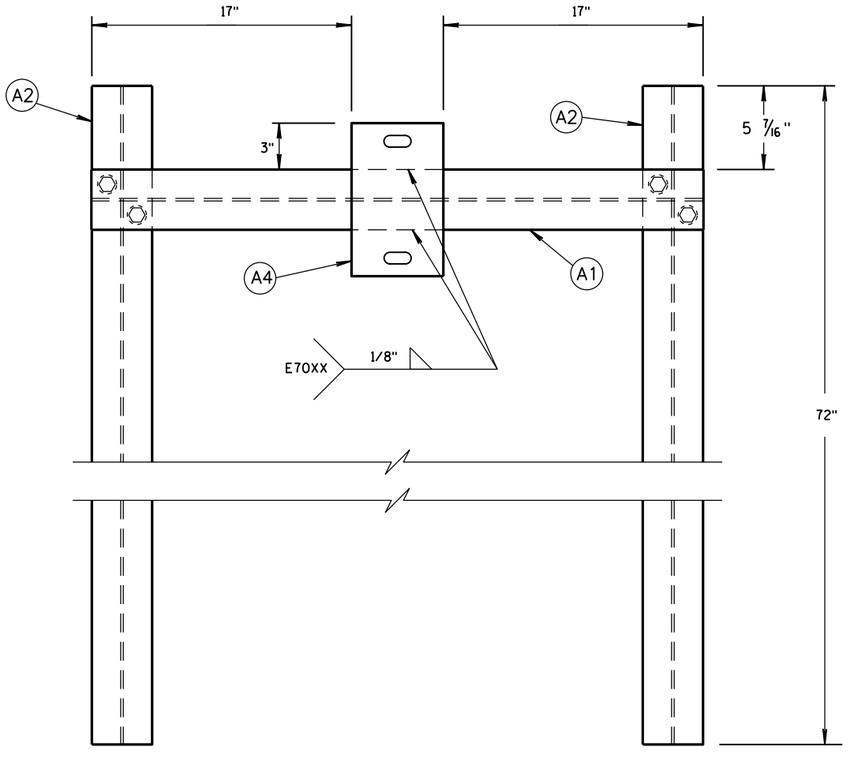
S.D.D. 14 B 50-1a

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S.D.D. 14 B 50-1a

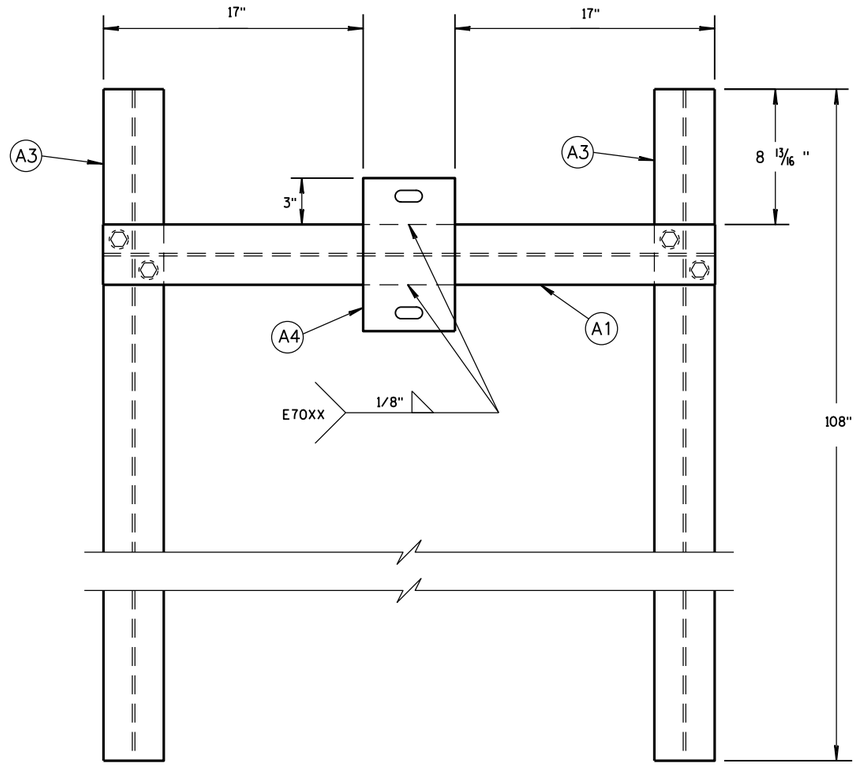


PLAN VIEW



ELEVATION VIEW

72" POST



ELEVATION VIEW

108" POST

MISSING POST CROSS-BEAM DETAIL

THRIE BEAM APPROACH
RETROFIT INSTALLATION
OF MISSING POST

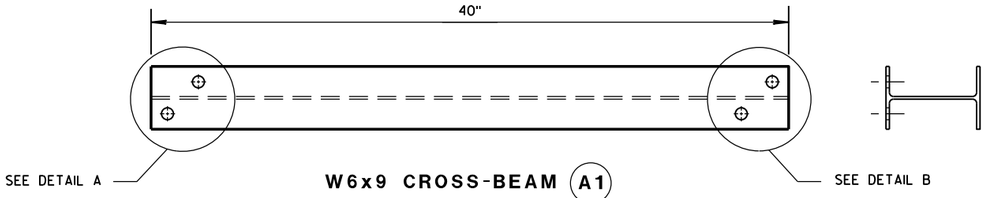
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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S.D.D. 14 B 50-1b

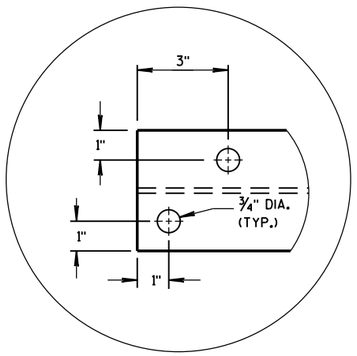
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S.D.D. 14 B 50-1b

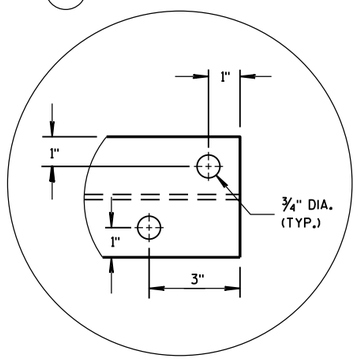


W6x9 CROSS-BEAM (A1)

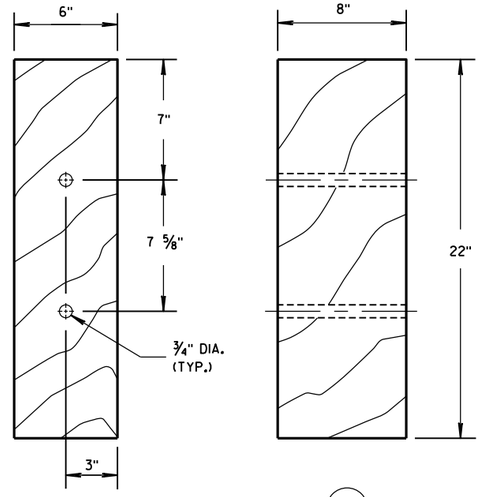
BILL OF MATERIALS			
ITEM NO.	QTY.	DESCRIPTION	MATERIAL SPECIFICATION
(A1)	1	40" LONG W6x9 CROSS-BEAM	ASTM A992 GR. 50 OR ASTM A36
(A2)	2	72" LONG W6x9 POST	ASTM A992 GR. 50 OR ASTM A36
(A3)	2	108" LONG W6x9 POST	ASTM A992 GR. 50 OR ASTM A36
(A4)	1	6" x 10" x 1/8" BACKUP PLATE	ASTM A992 GR. 50 OR ASTM A36
(A5)	3	6" x 8" x 22" BLOCKOUT	
(B1)	4	5/8" DIA. - HEX HEAD BOLT	BOLT: HEAVY HEX HEAD ASTM A307 OR SAE J429 GRADE 2 NUT: HEAVY HEX HEAD ASTM A563 A
(B2)	8	5/8" DIA. NARROW FLAT WASHER	ASTM F436
(B3)	2	LONG, 5/8" DIA. - POST BOLT AND NUT	BOLT: SAE J429 GRADE 2 OR ASTM A307 GRADE C OR ASTM F1554 GRADE 36 NUT: 5/8" DIA. ASTM A563 A DOUBLE RECESSED (DR) HEAVY HEX HEAD
(B4)	2	5/8" DIA. PLAIN ROUND WASHER	ASTM F844



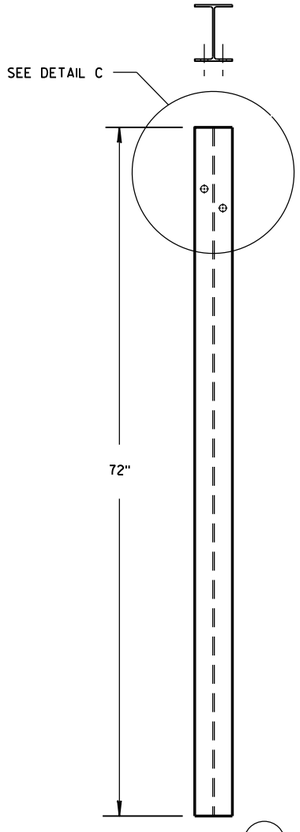
DETAIL A



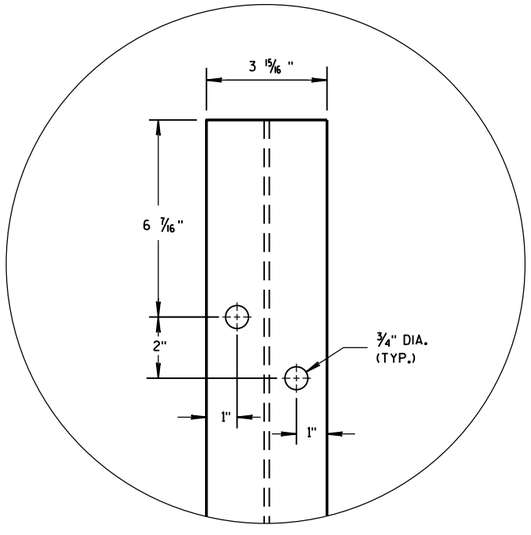
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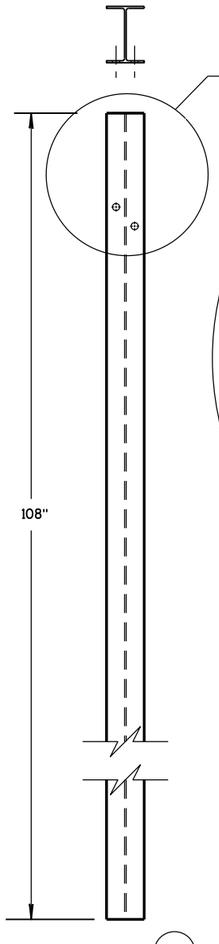
BLOCKOUT (A5)



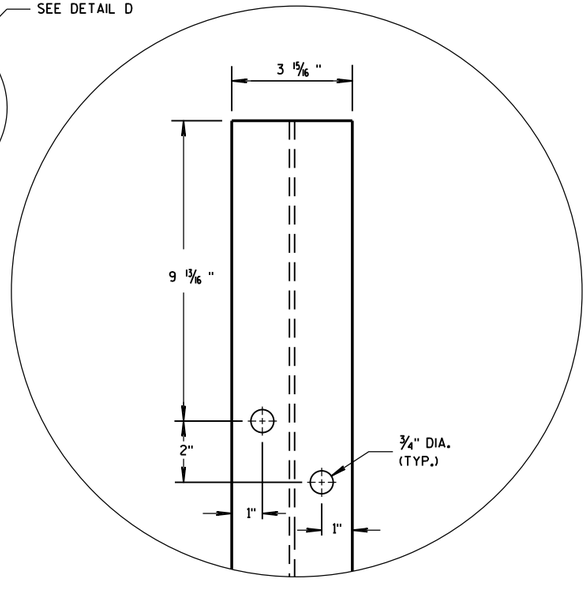
W6x9 POST (A2)



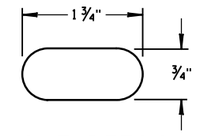
DETAIL C



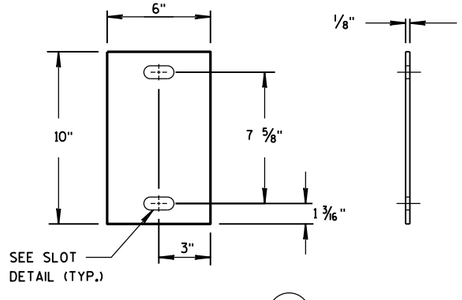
W6x9 POST (A3)



DETAIL D



SLOT DETAIL



BLACKUP PLATE (A4)

THRIE BEAM APPROACH
RETROFIT INSTALLATION
OF MISSING POST

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2014
DATE
/S/ Jerry H. Zoga
ROADWAY STANDARDS ENGINEER

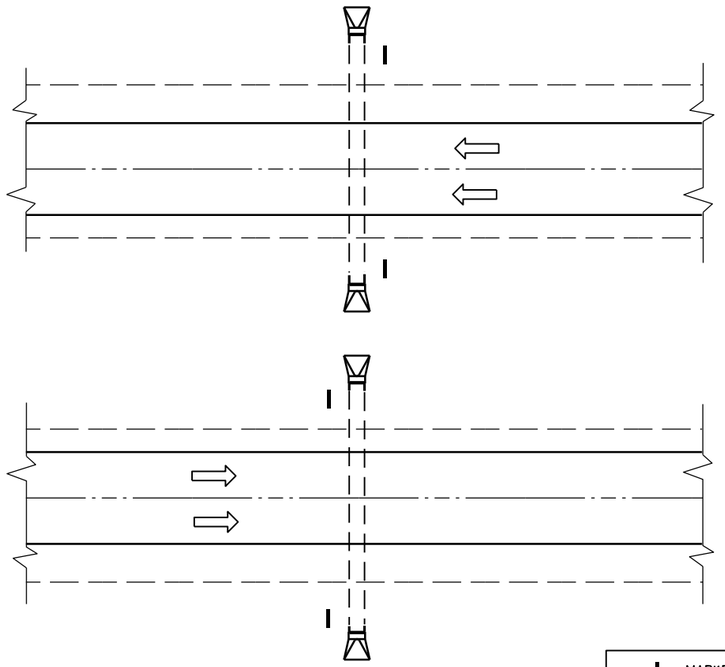
FHWA

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S.D.D. 14 B 50-1c

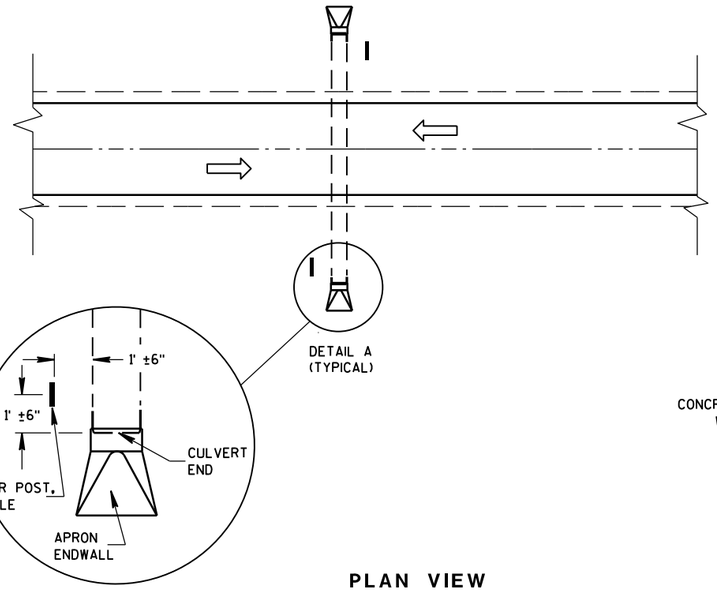
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S.D.D. 14 B 50-1c



PLAN VIEW

DIVIDED HIGHWAY



DETAIL A
(TYPICAL)

PLAN VIEW

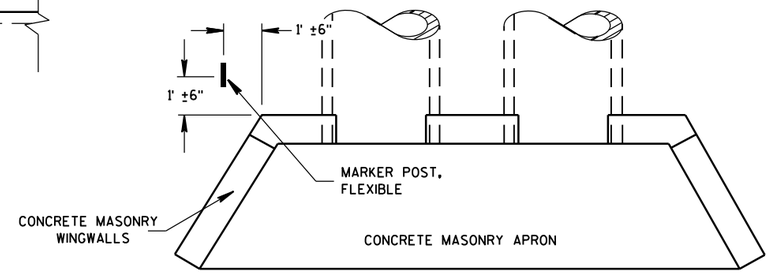
UNDIVIDED HIGHWAY

MARKER POST, FLEXIBLE

DIRECTION OF TRAFFIC FLOW

GENERAL NOTES

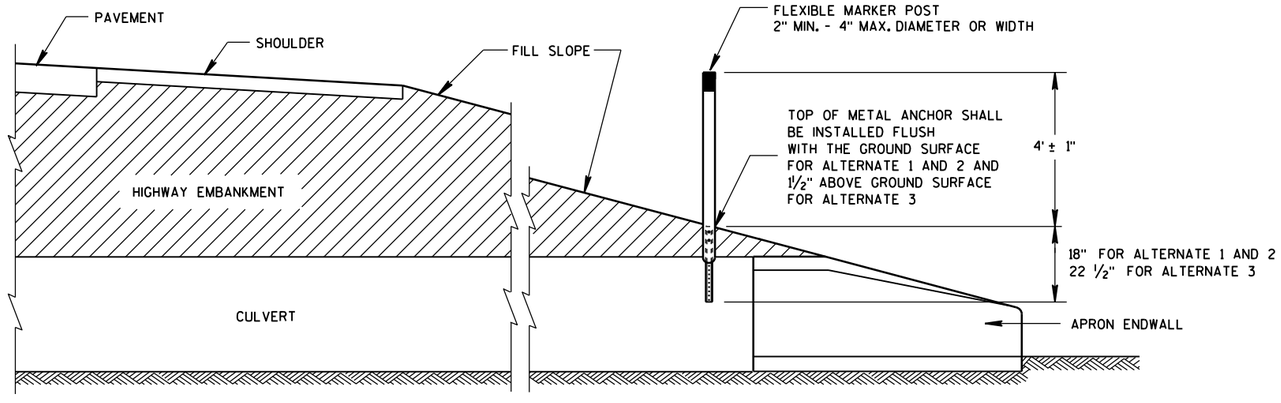
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.



PLAN VIEW

CONCRETE MASONRY ENDWALLS FOR CULVERT PIPE AND PIPE ARCH

FLEXIBLE MARKER POST LOCATION



CROSS SECTION

FLEXIBLE MARKER POST

FLEXIBLE MARKER POST FOR CULVERT END

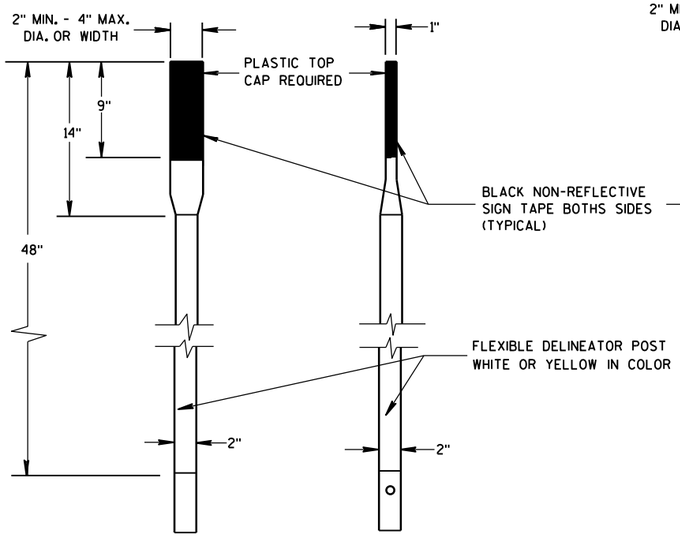
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

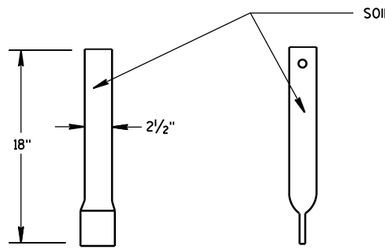
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S.D.D. 15 A 3-2a

6

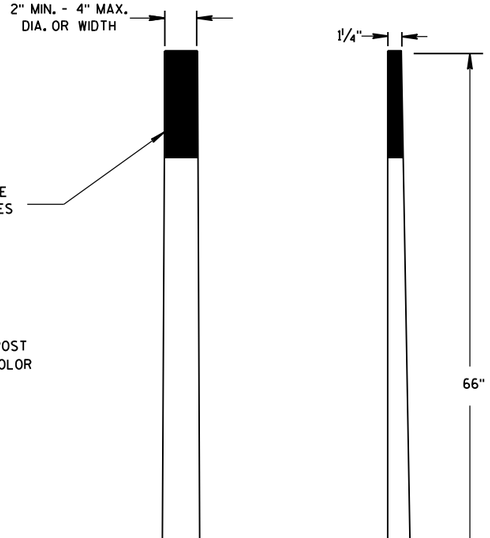
S.D.D. 15 A 3-2a





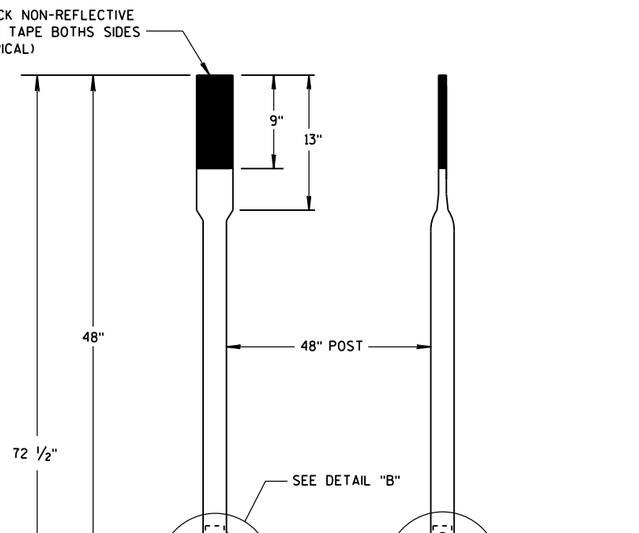
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

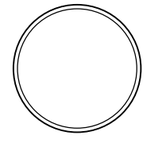
ALTERNATE 2



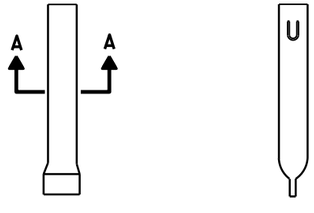
FRONT VIEW SIDE VIEW

ALTERNATE 3

FLEXIBLE MARKER POSTS

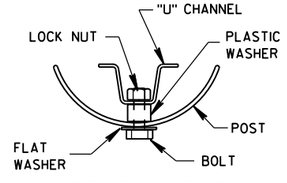


SECTION A-A

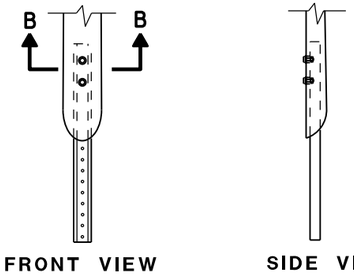


FRONT VIEW SIDE VIEW

ALTERNATE 1

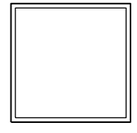


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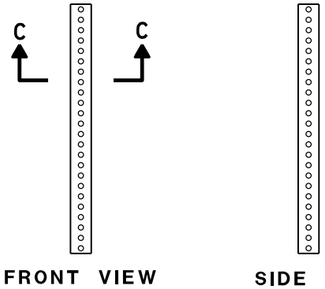


FRONT VIEW SIDE VIEW

ALTERNATE 2



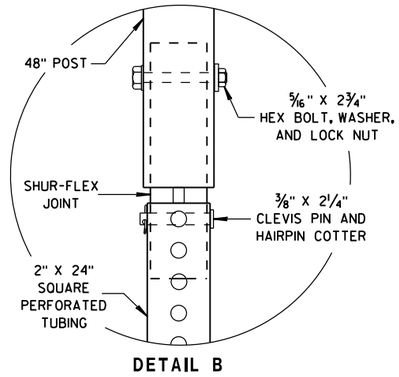
SECTION C-C



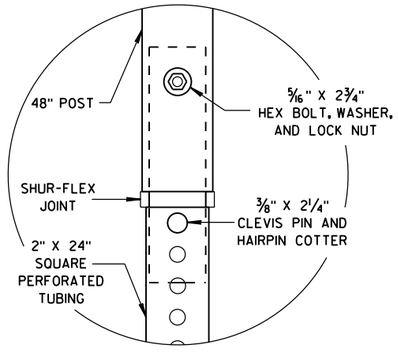
FRONT VIEW SIDE VIEW

ALTERNATE 3

FLEXIBLE MARKER POST ANCHORS



DETAIL B



DETAIL C

FLEXIBLE MARKER POST
FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

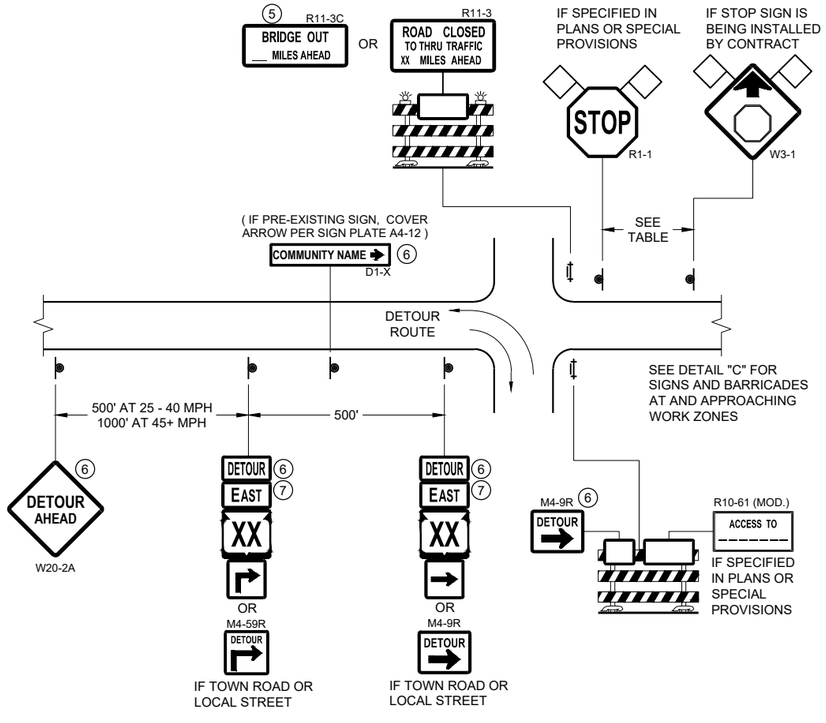
APPROVED
10/1/2012 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

6

S.D.D. 15 A 3-2b

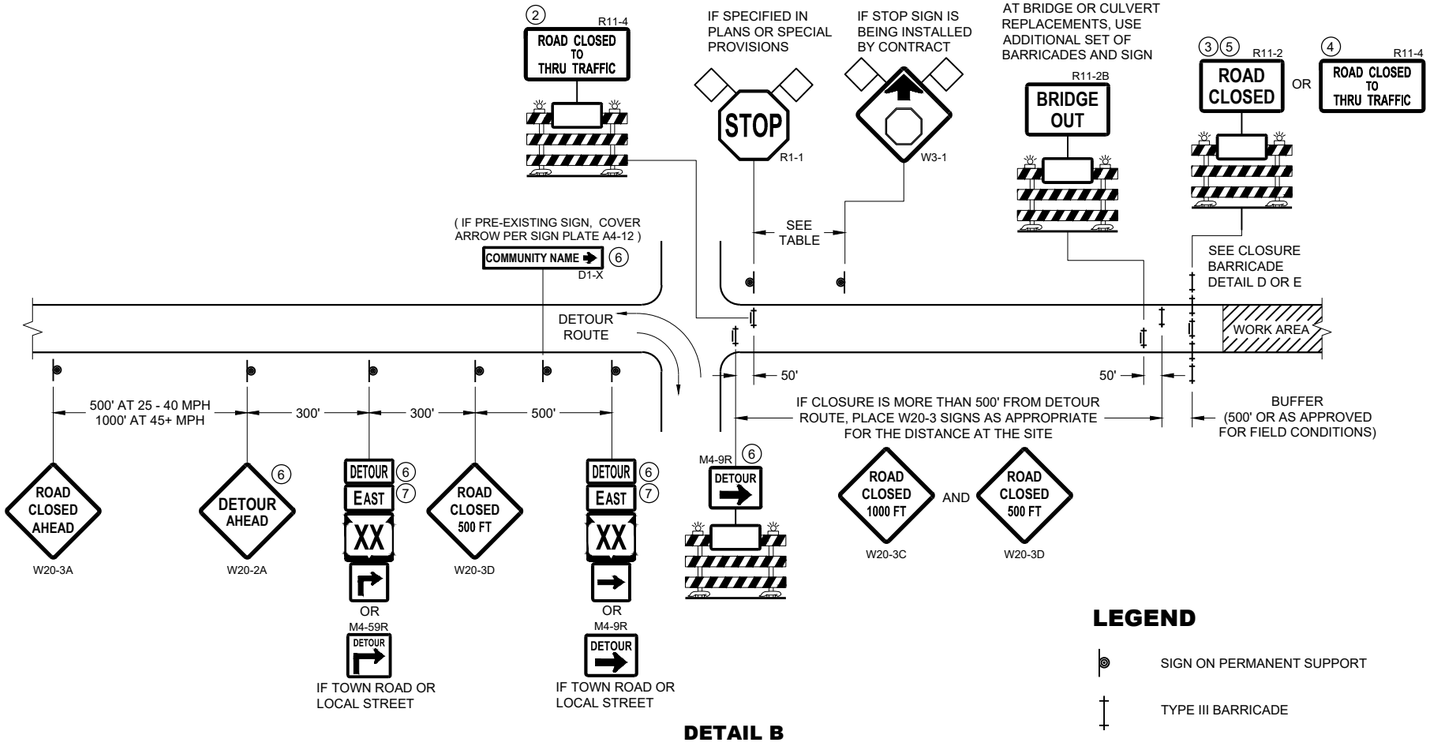
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S.D.D. 15 A 3-2b



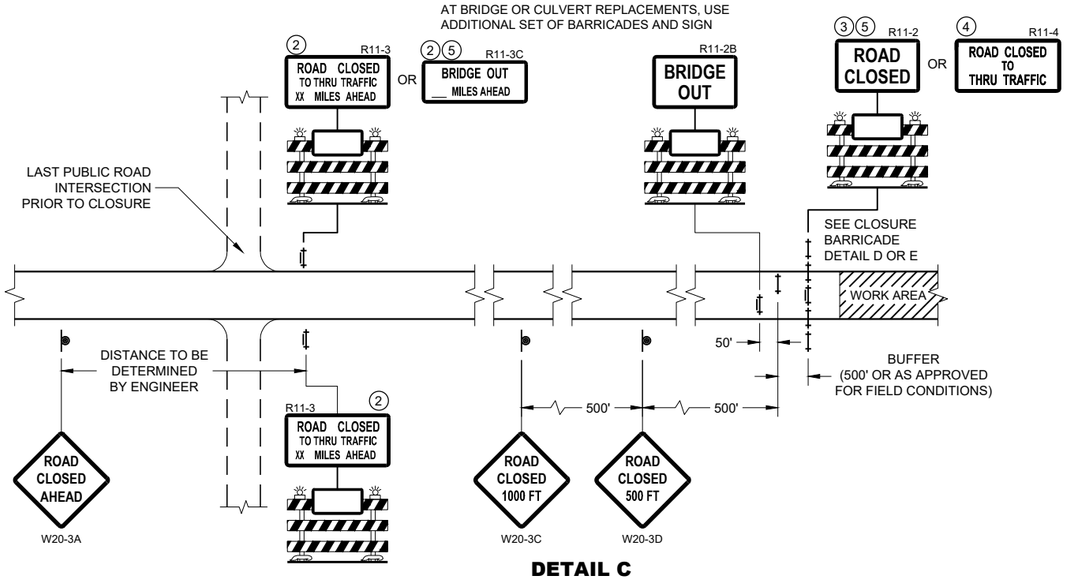
DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE GREATER THAN OR EQUAL TO ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE LESS THAN ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL C
MAINLINE CLOSURE, NO POSTED DETOUR

SPEED LIMIT (MPH)	"STOP AHEAD" ADVANCE WARNING DISTANCE (FT)
25	200
30	200
35	350
40	350
45	500
50	550
55	750

SEE SDD 15C2-SHEET "b"
FOR GENERAL NOTES
AND FOOTNOTES ① THROUGH ⑦

LEGEND

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA
- FLAGS, 16" X 16" MIN. (ORANGE)

DETOUR M4 - 8
EAST M3 - X
XX M1 - 4 OR XX M1 - 6 OR COUNTY X M1 - 5A
M05 - 1 OR M06 - 1

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

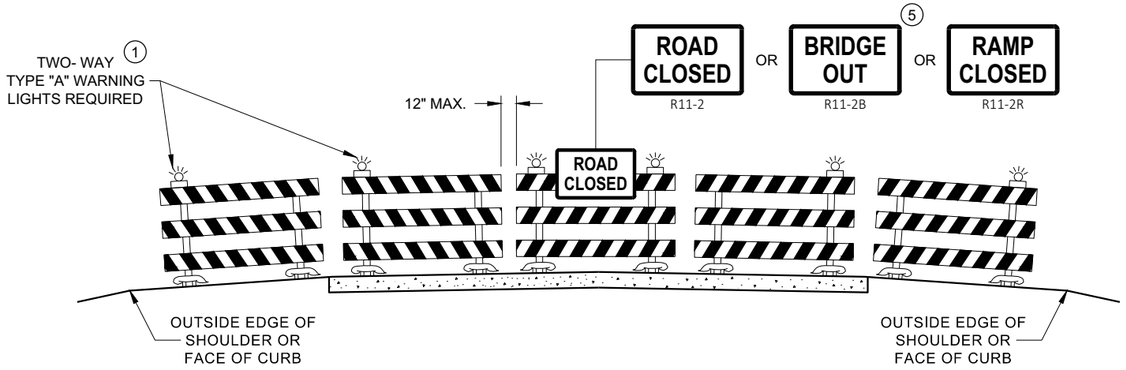
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEER

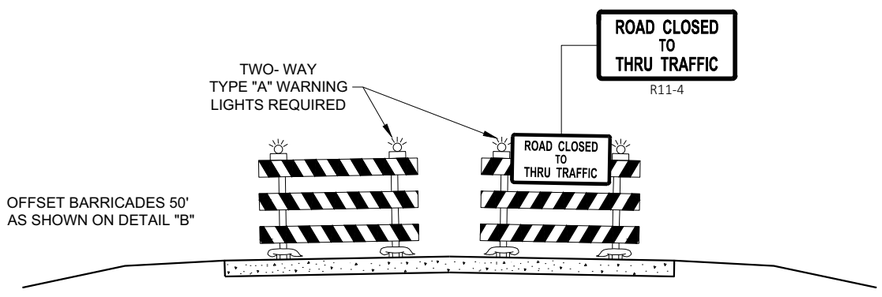
FHWA

SDD 15C02 - 08a

SDD 15C02 - 08a



DETAIL D
ROAD CLOSURE BARRICADE DETAIL
APPROACH VIEW



DETAIL E
LANE CLOSURE BARRICADE DETAIL
APPROACH VIEW

SEE SDD 15C2 - SHEET "a" FOR LEGEND

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND BARRICADES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE", SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL "D" FOR FULL ROAD CLOSURES.

TYPE "A" LOW - INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE R11 - 2, R11 - 3, M4 - 9, R11 - 4, AND R10 - 61 SIGNS PLACED ON THE BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE RAIL OR BOTTOM RAILS.

"WO" AND "MO" SIGNS ARE THE SAME AS "W" AND "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
- R11 - 2 SHALL BE 48" X 30"
- R11 - 3 SHALL, R11 - 4 AND R10 - 61 SHALL BE 60 " X 30"
- M4 - 9 SHALL BE 30" X 24"
- M3 - X SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M4 - 8 SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M1 - 4, M1 - 5A AND M1 - 6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS)
- MO5 - 1 AND MO6 - 1 SHALL BE 21" X 21" (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS)
- D1 - X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.
- R1 - 1 SHALL BE 36" X 36"

(1) TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND A MINIMUM OF ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN (APPROX. 8 FOOT LIGHT SPACING.

(2) THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT AN INTERSECTION.

(3) FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL "D".

(4) FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL "E".

(5) FOR BRIDGE OR CULVERT REPLACEMENTS, SUBSTITUTE "BRIDGE OUT" INSTEAD OF "ROAD CLOSED" ON R11 - 2 AND R11 - 3 SIGNS.

(6) INSTALL DETOUR AND COMMUNITY GUIDE SIGNS AND ARROWS ONLY IF SPECIFIED IN THE CONTRACT. IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. MODIFY EXISTING SIGNS WHERE POSSIBLE. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. IF DETOUR SIGNS ARE BEING INSTALLED BY OTHERS, PLACE THE CONTRACTED TRAFFIC CONTROL SIGNS TO ALLOW FOR PLACEMENT OF ALL WARNING, DETOUR AND GUIDE SIGNS AS SHOWN.

(7) "EAST" CARDINAL DIRECTION MARKERS AND RIGHT TURN ARROWS ARE SHOWN. USE OTHER CARDINAL DIRECTIONS AND ARROWS AS APPROPRIATE.

BARRICADES AND SIGNS FOR VARIOUS CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEE
FHWA

6

SDD 15C02 - 08b

6

SDD 15C02 - 08b

THIS DRAWING PROVIDES GENERAL GUIDANCE ON TYPICAL DETOUR SIGN LAYOUT AND SPACING. SEE PROJECT DETOUR SIGNING SHEETS FOR SPECIFIC DETAILS FOR EACH PROJECT.

LEGEND

- SIGN ON PERMANENT SUPPORT
- WORK AREA
- DETOUR — M4 - 8
- EAST — M3 - X
- XX — M1 - 4 OR XX — M1 - 6 OR COUNTY X — M1 - 5A
- M05 - 1 OR M06 - 1 OR M06 - 1

GENERAL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. MODIFY EXISTING SIGNS WHERE POSSIBLE.

THE SPACING BETWEEN TRAFFIC CONTROL AND DETOUR SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

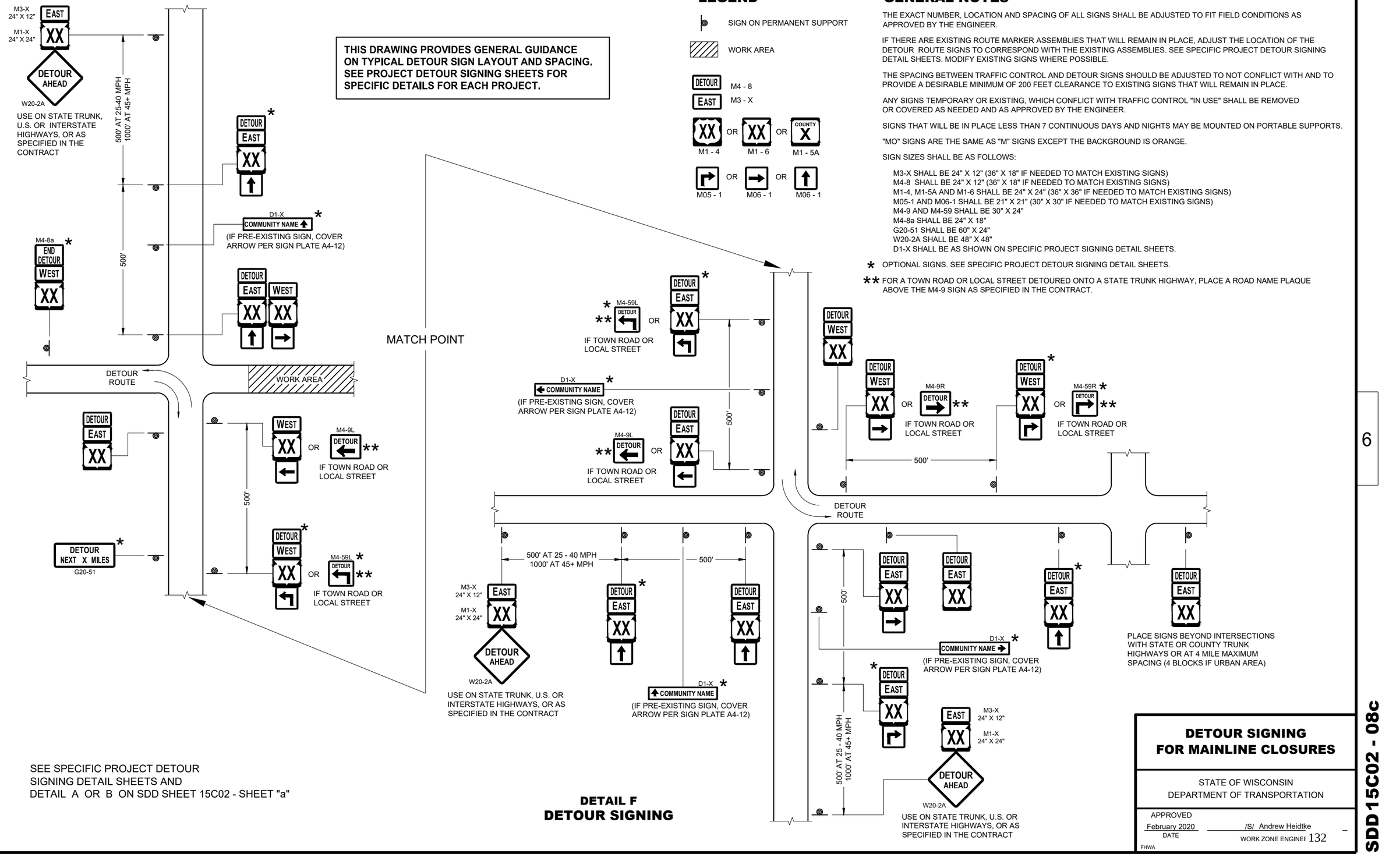
"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

SIGN SIZES SHALL BE AS FOLLOWS:

- M3-X SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M4-8 SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M1-4, M1-5A AND M1-6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS)
- M05-1 AND M06-1 SHALL BE 21" X 21" (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS)
- M4-9 AND M4-59 SHALL BE 30" X 24"
- M4-8a SHALL BE 24" X 18"
- G20-51 SHALL BE 60" X 24"
- W20-2A SHALL BE 48" X 48"
- D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.

* OPTIONAL SIGNS. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS.

** FOR A TOWN ROAD OR LOCAL STREET DETOURED ONTO A STATE TRUNK HIGHWAY, PLACE A ROAD NAME PLAQUE ABOVE THE M4-9 SIGN AS SPECIFIED IN THE CONTRACT.



SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS AND DETAIL A OR B ON SDD SHEET 15C02 - SHEET "a"

DETAIL F
DETOUR SIGNING

DETOUR SIGNING FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

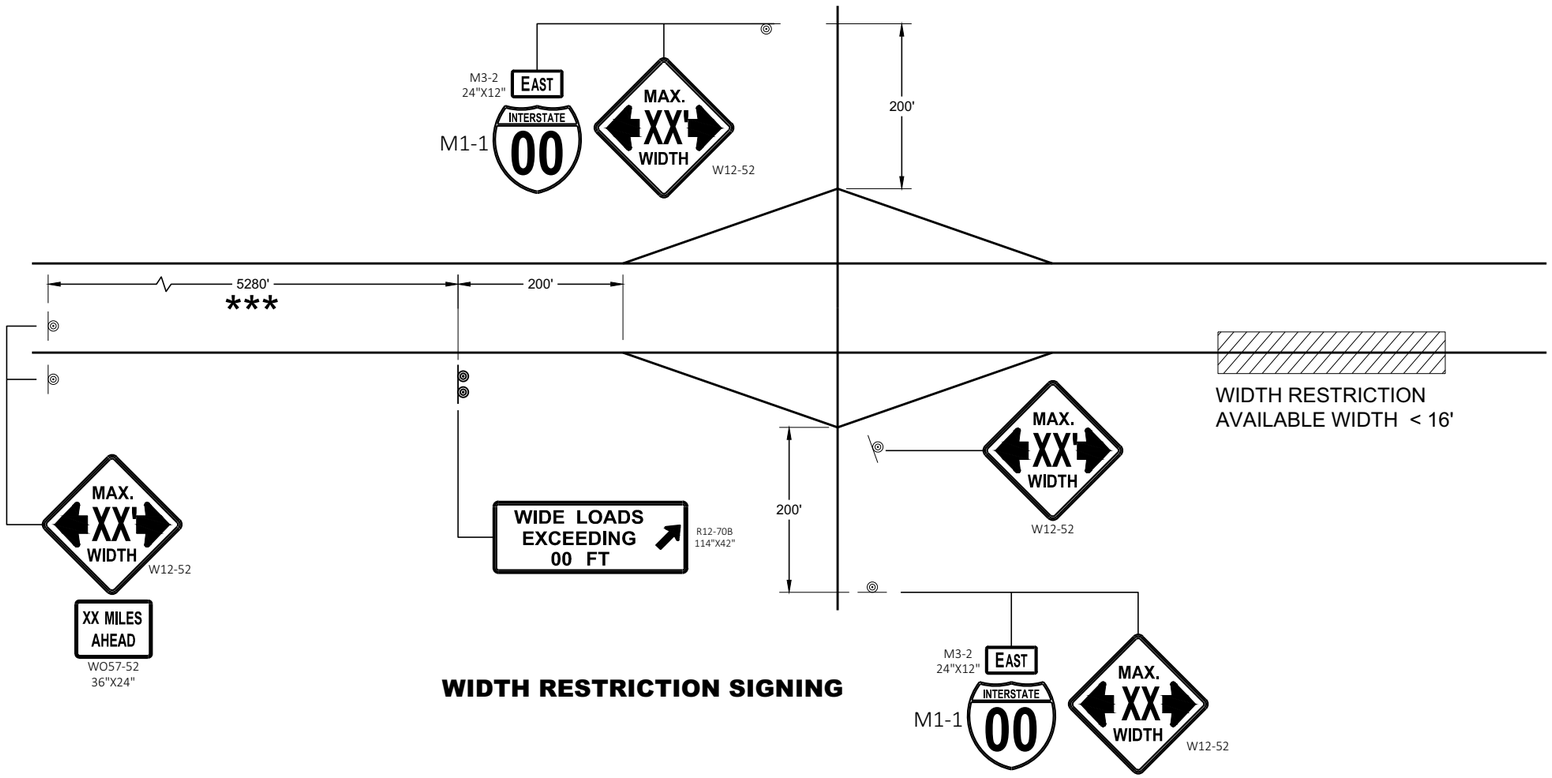
APPROVED
February 2020
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

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SDD 15C02 - 08c



WIDTH RESTRICTION SIGNING

LEGEND

SIGN ON PERMANENT SUPPORT

GENERAL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL " IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

WIDTH ON SIGN TO BE APPROXIMATELY ONE FOOT LESS THAN AVAILABLE WIDTH.

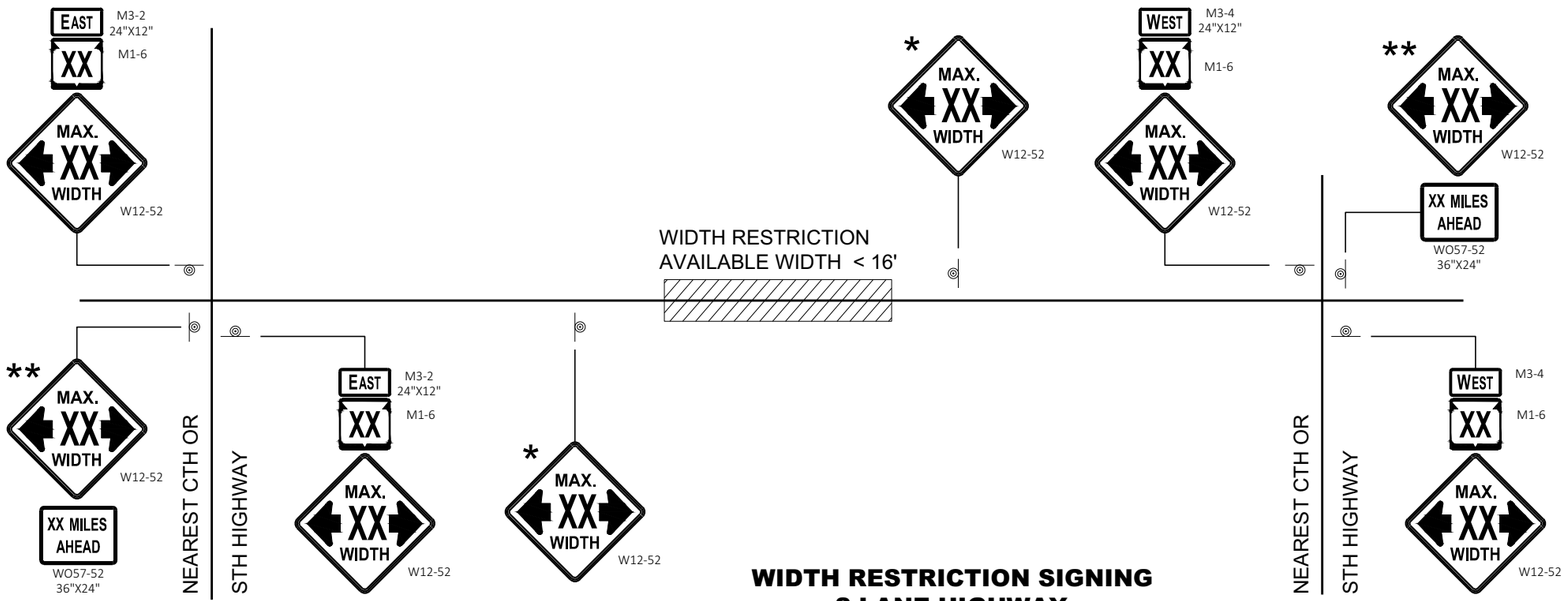
* PLACE 500 FEET AFTER THE W20 - 1A AND 500 FEET BEFORE ADDITIONAL SIGNS FOR ROADWAYS WITH A PRE - CONSTRUCTION SPEED LIMIT OF 45 MPH OR MORE. FOR 35-40 MPH, USE 350 FOOT TYPICAL SPACING. FOR 25-30 MPH, USE 200 FOOT TYPICAL SPACING.

** SIGN SHALL BE VISIBLE FROM ROADWAY.

*** ADDITIONAL SIGNS NEEDED IF THERE IS AN ON RAMP BETWEEN SIGNS.



WIDTH ON SIGN TO BE APPROX. 1 - FOOT LESS THAN AVAILABLE WIDTH



WIDTH RESTRICTION SIGNING
2 LANE HIGHWAY

ADVANCED WIDTH RESTRICTION SIGNING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

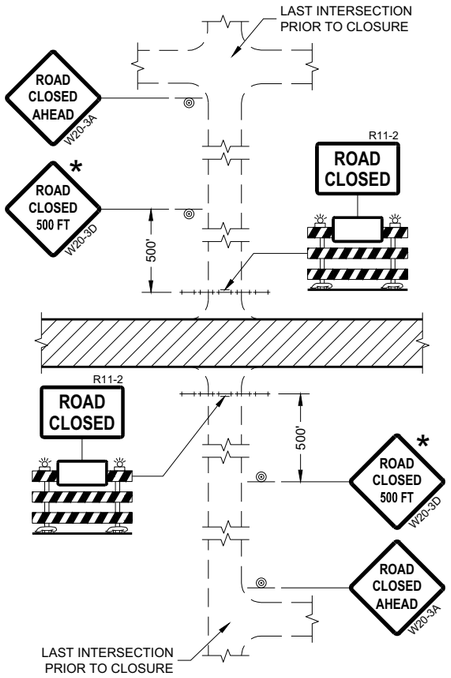
APPROVED
February 2020
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

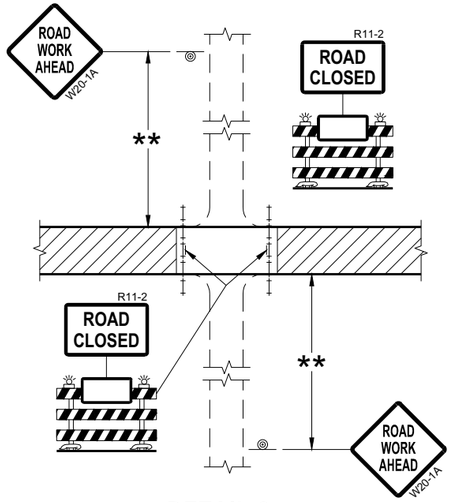
FHWA

6

SDD 15C02 - 08f



DETAIL 1
(NO ACCESS TO PROJECT)



DETAIL 2
(PUBLIC CROSS-TRAFFIC MAINTAINED.
NO ACCESS TO PROJECT)

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND BARRICADES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE (500 FEET DESIRABLE) TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

IF A "STOP" SIGN MUST BE REMOVED FOR A WORK OPERATION, A TEMPORARY "STOP" SIGN SHALL BE PLACED PRIOR TO THE SIGN REMOVAL, OR A FLAGGER SHALL BE PROVIDED UNTIL THE SIGN IS REESTABLISHED.

BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

SIGNS THAT WILL BE IN PLACE LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL "D" FOR FULL ROAD CLOSURES.

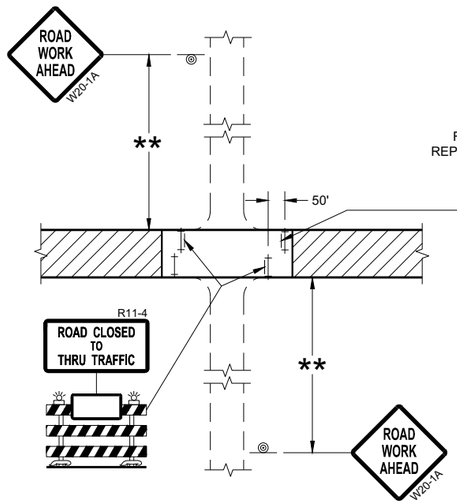
TYPE "A" LOW-INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE R11-2, R11-3, AND R11-4 SIGNS PLACED ON BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE OR BOTTOM RAILS.

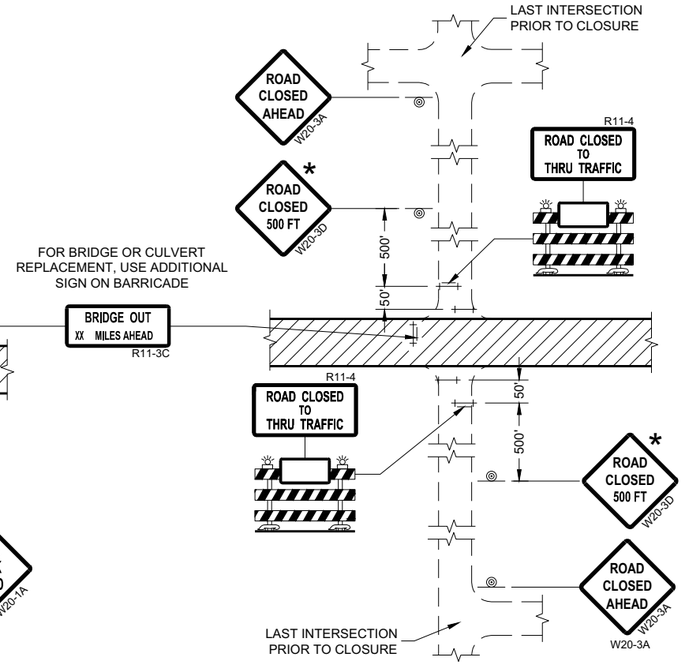
ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
R11-2 SHALL BE 48" X 30".
R11-4 AND R11-3 SHALL BE 60" X 30".

* OMIT THE "ROAD CLOSED 500 FT." SIGN IF THE LAST INTERSECTION IS 500 FEET OR LESS FROM THE WORK ZONE.

** 500' MAX. OR AT LAST INTERSECTION, WHICHEVER IS CLOSEST.



DETAIL 3
(PUBLIC CROSS-TRAFFIC MAINTAINED.
CONTRACTOR, LOCAL BUSINESS AND
RESIDENT ACCESS TO PROJECT)



DETAIL 4
(CONTRACTOR, LOCAL BUSINESS AND
RESIDENT ACCESS TO PROJECT)

LEGEND

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA

BARRICADES AND SIGNS FOR SIDEROAD CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

6

SDD 15C03 - 05

SDD 15C03 - 05

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.

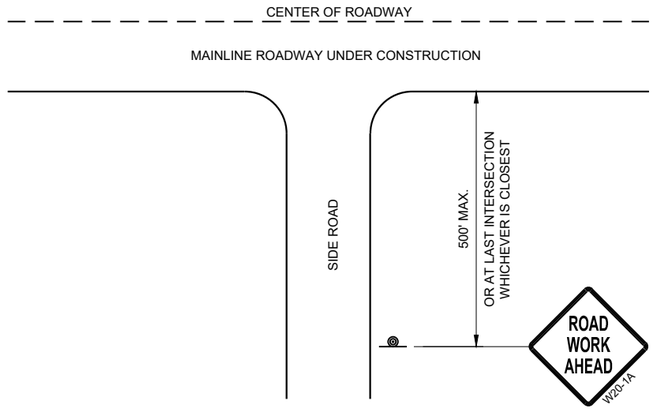
ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

SIGNS THAT WILL BE IN PLACE LESS THAN SEVEN 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 REESTABLISHED.

* OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS

** PLACE AN ADDITIONAL W20-1A "ROAD WORK AHEAD" SIGN IF WORK AREA WITHIN THE PROJECT IS SEPARATED BY MORE THAN 2 MILES FROM PREVIOUS WORK AREA.



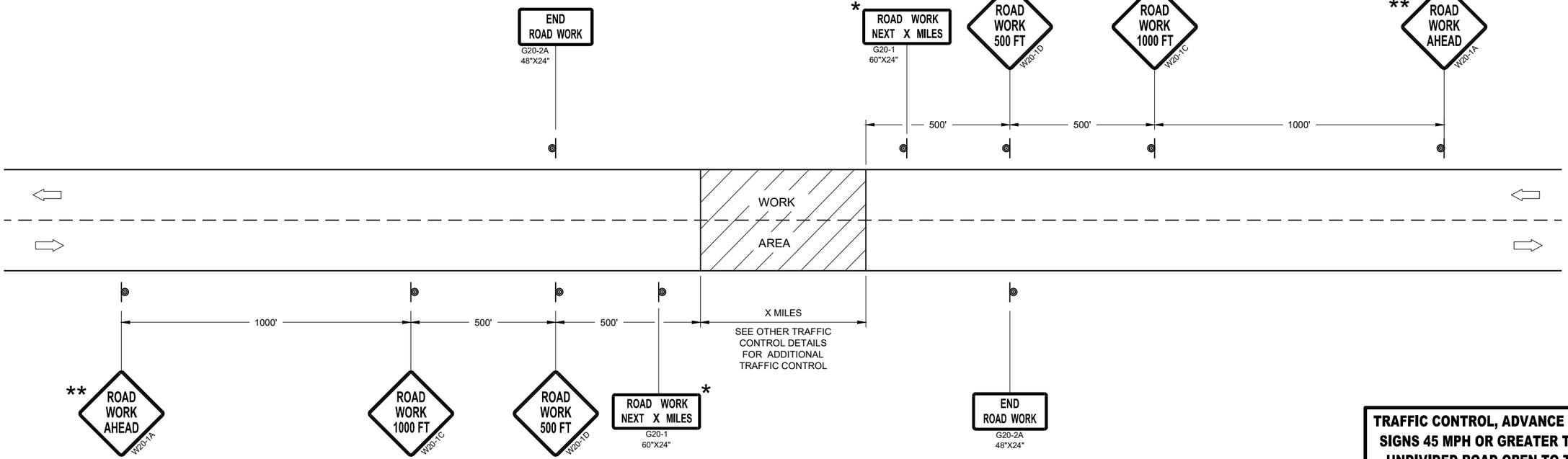
TYPICAL SIDE ROAD APPROACH WARNING SIGN DETAIL

LEGEND

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC

WORK AREA



TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45MPH OR GREATER

TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 MPH OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

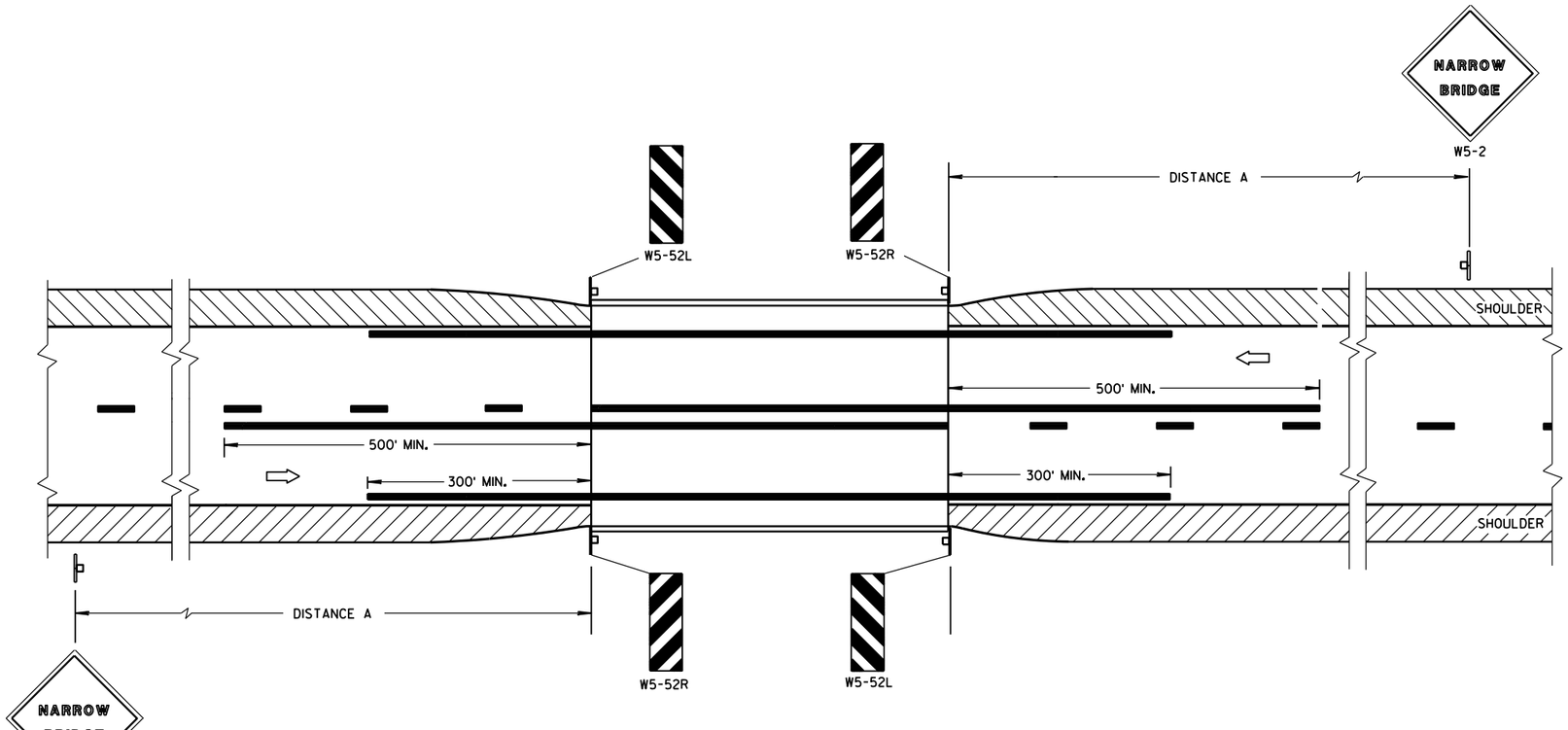
APPROVED
July 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15C04 - 05



SITUATION 1

WARRANTING CRITERIA:
BRIDGE WIDTH IS AT LEAST 16 FEET BUT LESS THAN 24 FEET.

DISTANCE TABLE

POSTED OR 85th PERCENTILE SPEED	DISTANCE "A"
25	150'
30	200'
35	250'
40	300'
45	400'
50	550'
55	750'

GENERAL NOTES

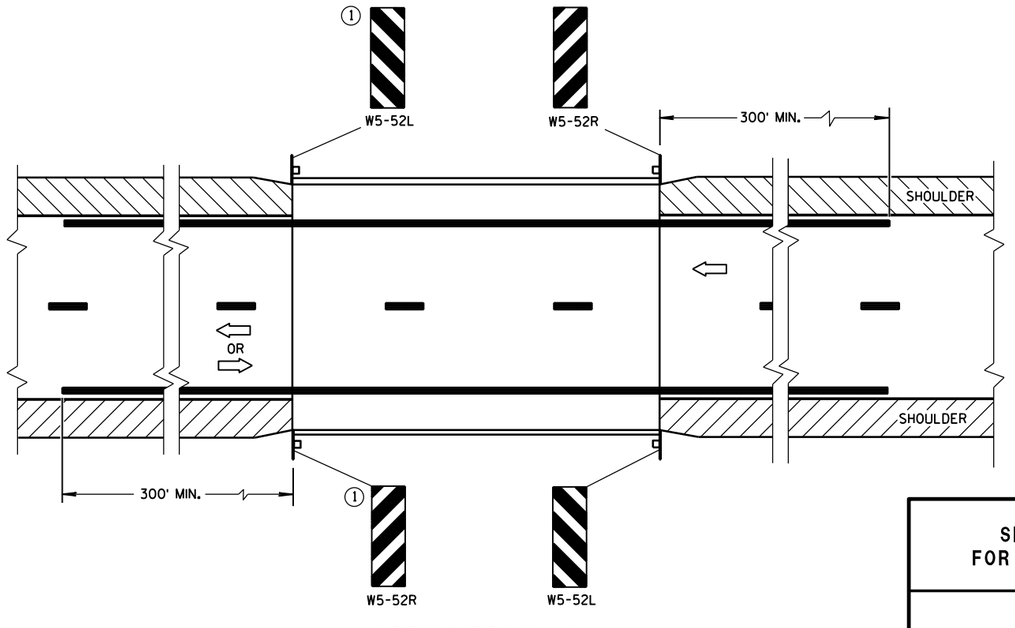
DETAILS OF TRAFFIC CONTROL DEVICES AND INSTALLATION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

LOCATE W5-52 SIGN POST(S) BEHIND GUARDRAIL WHEN PRESENT.

PLACE THE EDGE OF THE W5-52 SIGN IN LINE WITH FACE OF CURB OR PARAPET.

(1) OMIT ON ONE-WAY TRAVELLED WAYS.

⇨ DIRECTION OF TRAFFIC



SITUATION 2

WARRANTING CRITERIA:

1. BRIDGE WIDTH IS AT LEAST 24 FEET AND
2. BRIDGE SHOULDER WIDTH IS LESS THAN 6 FEET.

SIGNING & MARKING FOR TWO LANE BRIDGES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

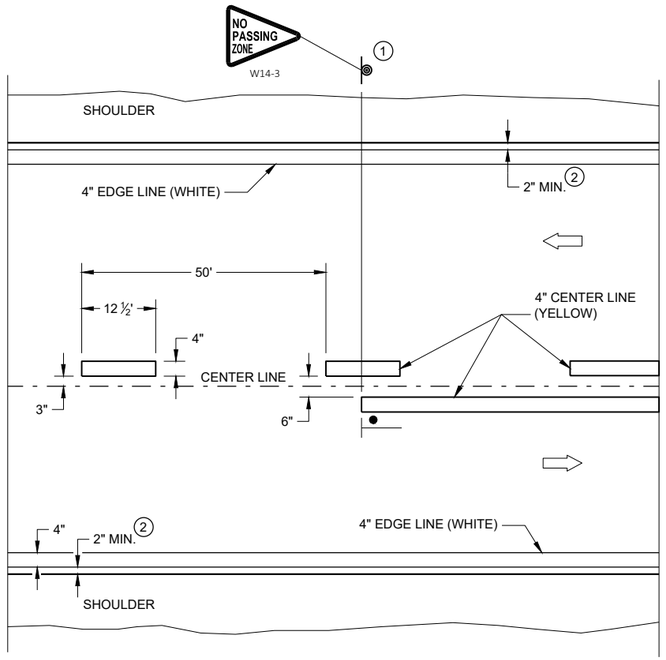
APPROVED
June 2017 — DATE
/S/ Matthew R. Rauch — STATE SIGNING AND MAR ...IEER
FHWA

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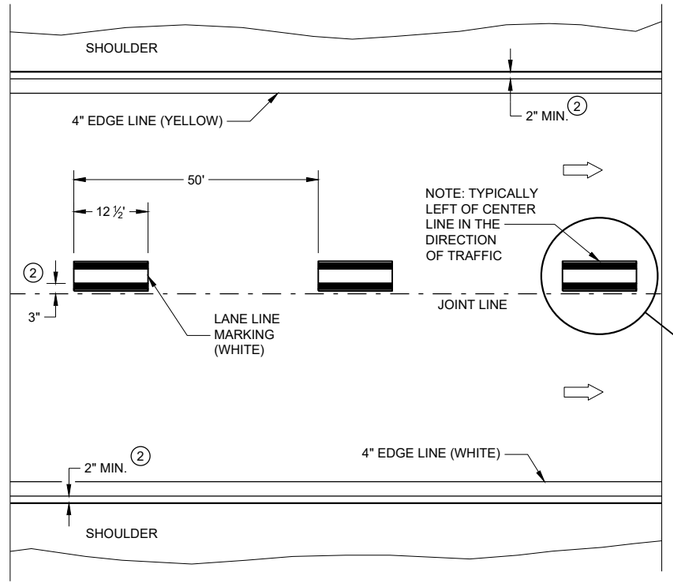
S.D.D. 15 C 6-9

6

S.D.D. 15 C 6-9

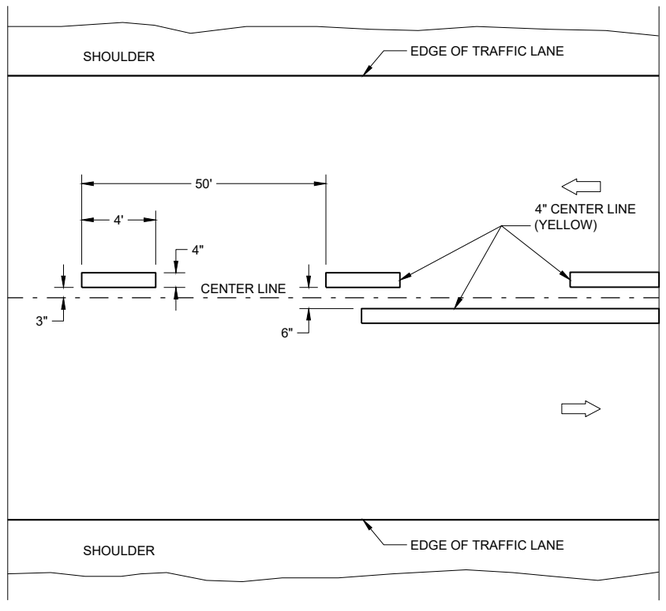


TWO WAY TRAFFIC

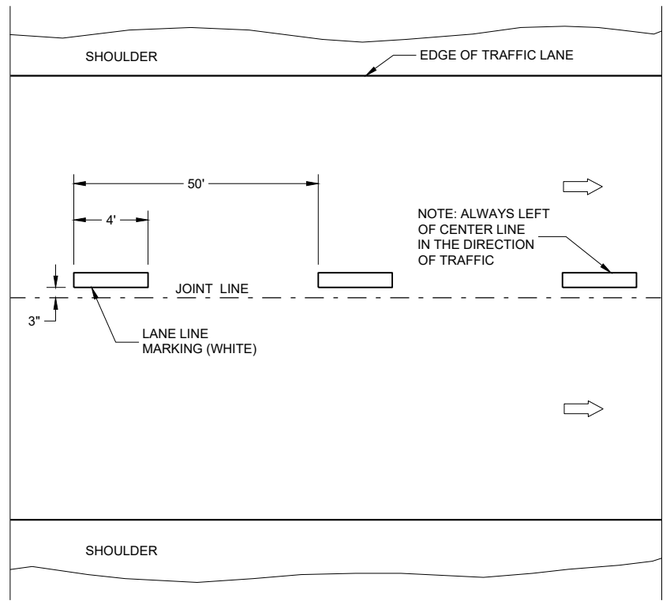


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY PAVEMENT MARKING

GENERAL NOTES

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

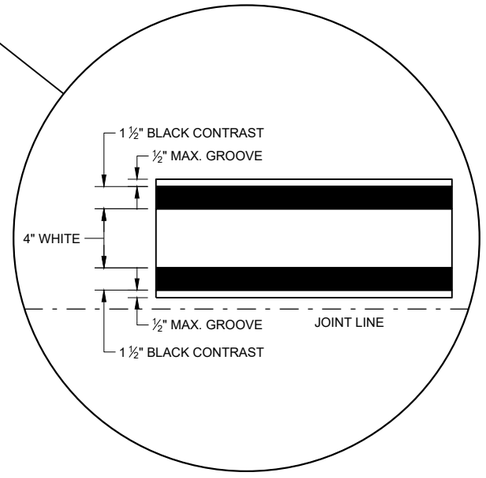
1. LOCATE THE NO PASSING ZONE W14-3 SIGN WITHIN 50 FEET OF THE "T" MARKING
2. MEASURE FROM EDGE OF MARKING TO JOINT LINE. THIS DOES NOT INCLUDE SPACE NEEDED FOR GROOVING OPERATIONS.

LEGEND

"T" MARKING

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC



LONGITUDINAL MARKING (MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020
DATE
/S/ Matthew Rauch
STATEWIDE SIGNING AND M ENGINEER

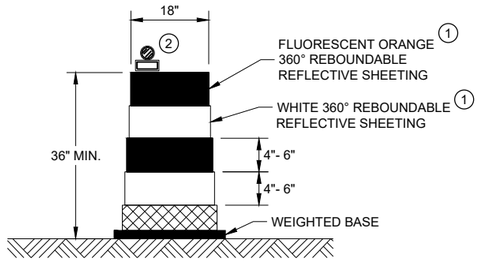
FHWA

SDD 15C08 - 20a

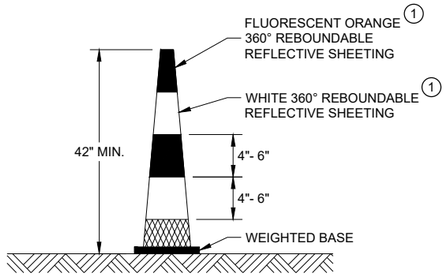
SDD 15C08 - 20a

GENERAL NOTES

1. REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.
2. LOCATION OF WARNING LIGHTS WHEN SHOWN ON THE PLAN.

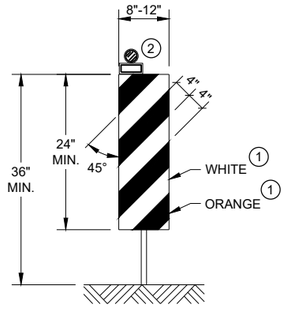


DRUM



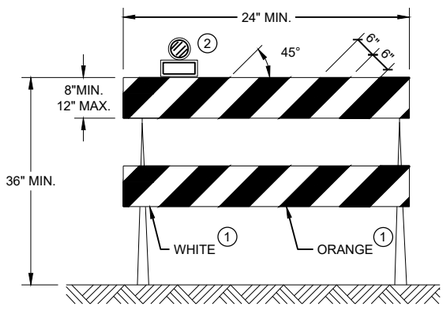
42" CONE

DO NOT USE IN TAPERS
½ SPACING OF DRUMS



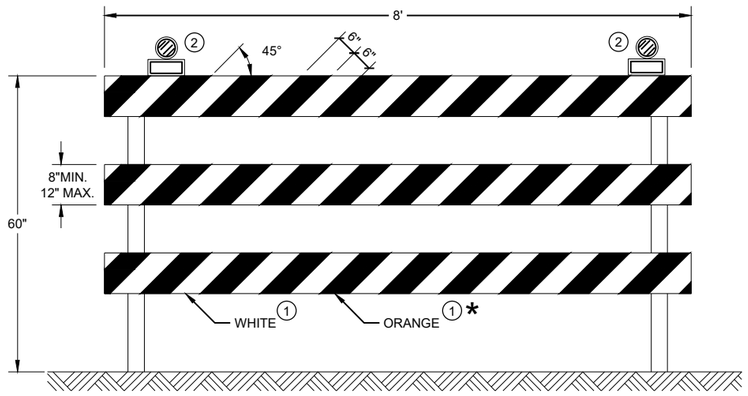
VERTICAL PANEL

THE STRIPES SHALL SLOPE DOWNWARD TO
THE TRAFFIC SIDE FOR CHANNELIZATION.



TYPE II BARRICADE

FOR RAILS LESS THAN 36" LONG, 4" WIDE STRIPES
MAY BE USED. ALL STRIPES SHALL SLOPE DOWNWARD
TO THE TRAFFIC SIDE FOR CHANNELIZATION.



TYPE III BARRICADE

IF SIGN MOUNTED, DO NOT COVER MORE THAN 50% OF THE TOP
TWO RAILS OR 33% OF THE TOTAL AREA OF THE THREE RAILS.

* IF USED FOR A PERMANENT APPLICATION USE RED SHEETING.

CHANNELIZING DEVICES
DRUMS, CONES, BARRICADES
AND VERTICAL PANELS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2021
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15C11 - 09b

6

SDD 15C11 - 09b

LEGEND

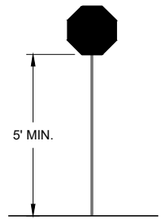
SIGN ON PORTABLE OR PERMANENT SUPPORT

TEMPORARY PORTABLE RUMBLE STRIP ARRAY

DIRECTION OF TRAFFIC

WORK AREA

FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF



STOP/SLOW PADDLE ON SUPPORT STAFF

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.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS, DEVICES, AND 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.

FLAGGING

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 REMOVE TEMPORARY PORTABLE RUMBLE STRIPS PRIOR TO COVERING OR REMOVING ALL ADVANCE SIGNING.

(1) FOR MOVING WORK OPERATIONS, POST ADDITIONAL W20-7A FLAGGER SIGNS AT APPROXIMATELY 3,500' 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.

WHEN THE DISTANCE BETWEEN FLAGGERS EXCEEDS 2 MILES, A PILOT CAR IS REQUIRED. WHEN CURVES REDUCE SIGHT DISTANCE BELOW 400', A PILOT CAR IS REQUIRED.

TEMPORARY PORTABLE RUMBLE STRIPS

UTILIZE TEMPORARY PORTABLE RUMBLE STRIPS ON ALL FLAGGING OPERATIONS.

(3) EACH TEMPORARY PORTABLE RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS PLACED TRANSVERSE ACROSS THE LANE AT THE LOCATIONS SHOWN. WITHIN EACH ARRAY, SPACING BETWEEN RUMBLE STRIPS SHALL BE 15 FEET ON CENTER

ONLY USE TEMPORARY PORTABLE RUMBLE STRIPS FROM THE APPROVED PRODUCTS LIST.

INSTALL TEMPORARY RUMBLE STRIPS PER MANUFACTURER'S RECOMMENDATIONS.

PLACE ADVANCE SIGNING PRIOR TO INSTALLING TEMPORARY RUMBLE STRIPS.

DO NOT INSTALL TEMPORARY PORTABLE RUMBLE STRIPS ON GRAVEL, MILLED SURFACES, OR ASPHALT THAT HAS BEEN PAVED LESS THAN 12 HOURS.

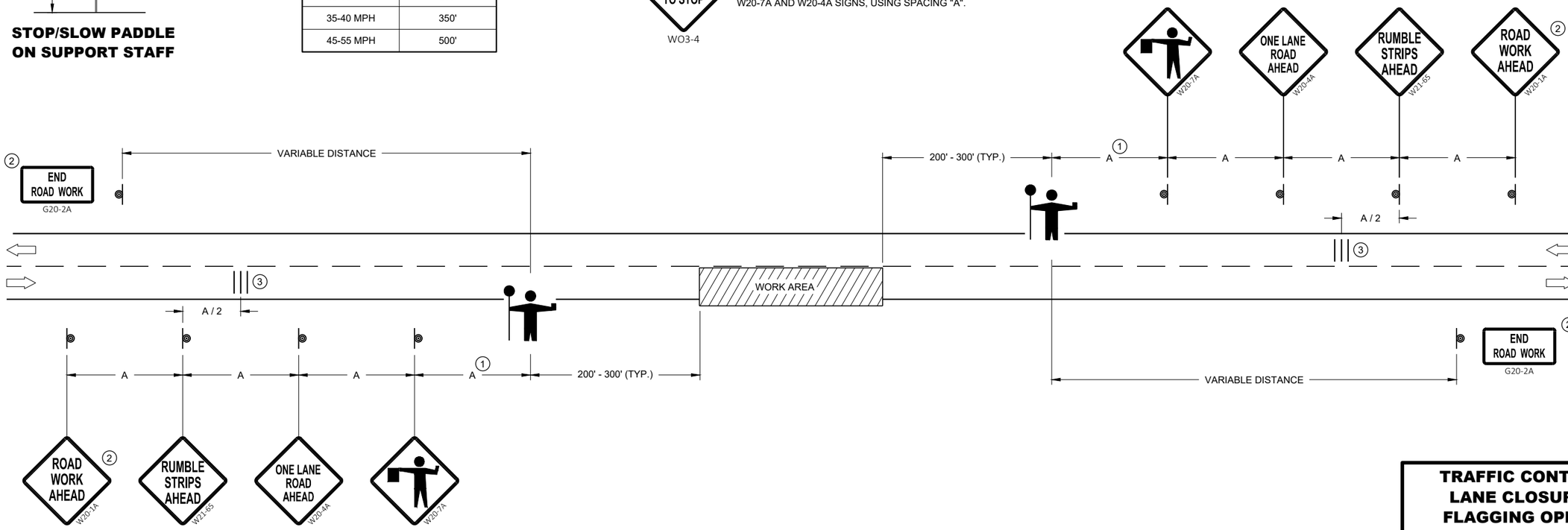
SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

SPEED LIMIT	SPACING "A"
25-30 MPH	200'
35-40 MPH	350'
45-55 MPH	500'



WO3-4

USE OF WO3-4 SIGN IS OPTIONAL. WHEN USED, THIS SIGN SHALL BE LOCATED BETWEEN THE W20-7A AND W20-4A SIGNS, USING SPACING "A".



TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2021 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER
FHWA

6

SDD 15C12 - 08

SDD 15C12 - 08

LEGEND

V1 LEAD VEHICLE

V2 MARKING VEHICLE

V3 SHADOW VEHICLE

TRUCK MOUNTED ATTENUATOR (TMA)

SIGN ON TEMPORARY SUPPORT

DIRECTION OF TRAFFIC

FLASHING ARROW PANEL (CAUTION)

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.

ALL 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.

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 AND HORIZONTAL CURVES THAT RESTRICT SIGHT DISTANCE.

THE WORK AND SHADOW VEHICLES SHOULD PULL OVER PERIODICALLY TO ALLOW TRAFFIC TO PASS.

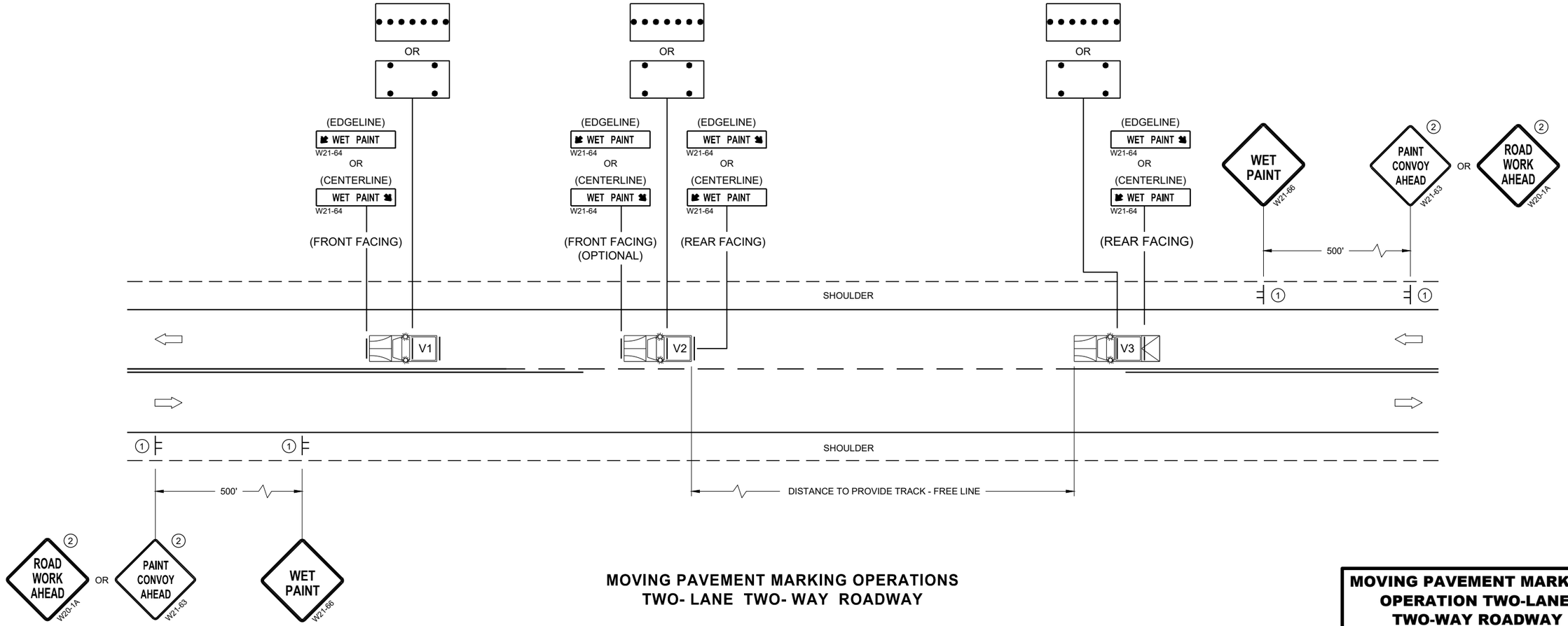
WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR LAY STATIONARY SIGNS AND SUPPORTS FLAT ON THE GRADE WITH UPRIGHTS ORIENTED PARALLEL TO AND DOWNSTREAM FROM TRAFFIC.

CONES SHOULD BE USED BETWEEN THE MARKING AND SHADOW VEHICLE AT 100 FOOT SPACING. CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.

CONES SHALL BE A MINIMUM OF 28" FOR WET PAVEMENT MARKING .

(1) SIGNS SHALL BE REPEATED APPROXIMATELY EVERY THREE MILES.

(2) IF CONSTRUCTION WORK ZONE SIGNS ARE IN PLACE, W20-1A OR W21-63 ARE NOT REQUIRED.



MOVING PAVEMENT MARKING OPERATIONS TWO- LANE TWO- WAY ROADWAY

MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

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SDD 15C19 - 06a

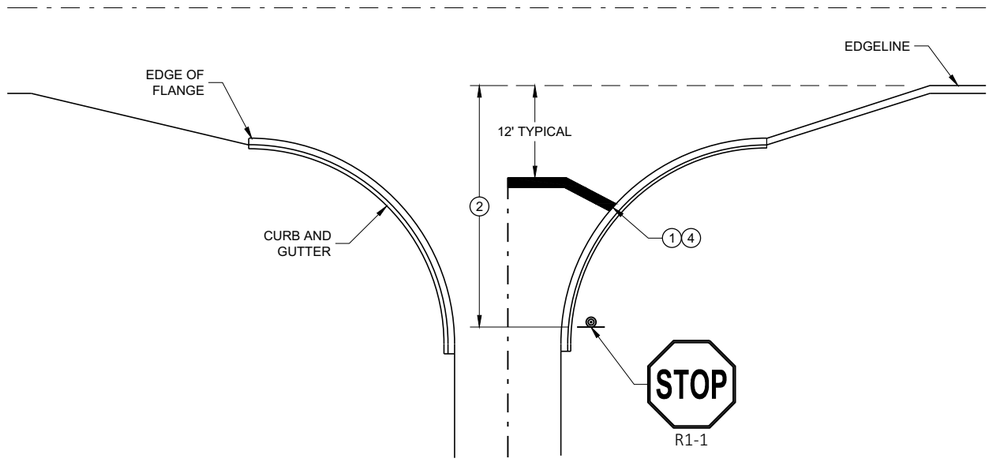
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SDD 15C19 - 06a

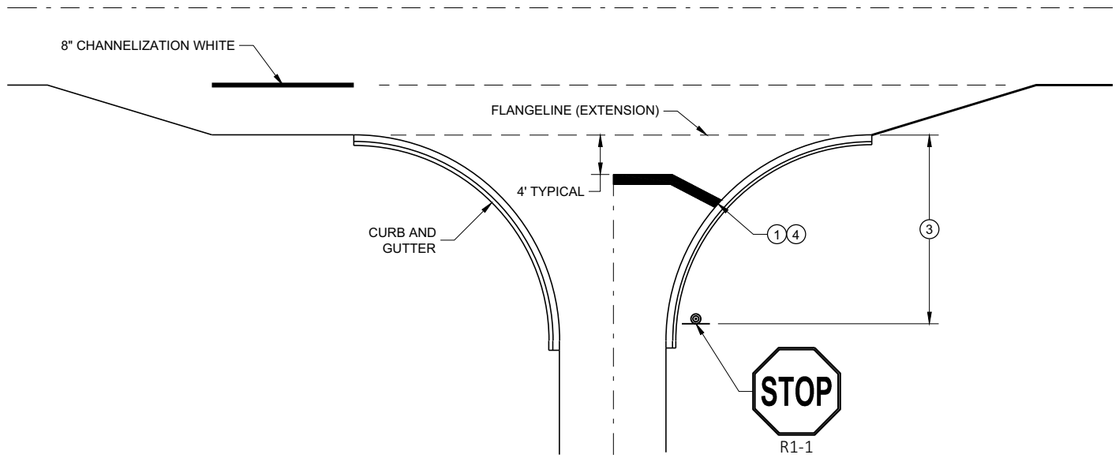
GENERAL NOTES

STOP SIGN SHALL BE PLACED A MINIMUM OF 6 FEET TO A MAXIMUM OF 50 FEET FROM THE EDGELINE LOCATION.

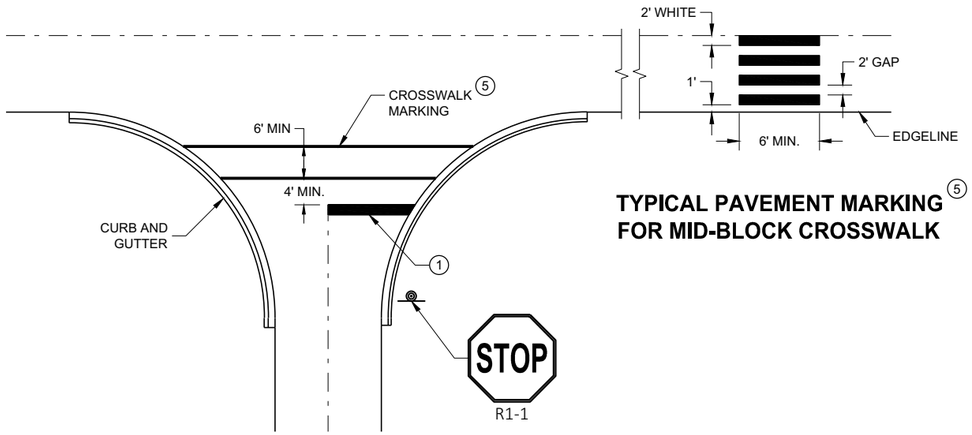
1. 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE REGION MARKING ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
2. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGELINE.
3. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGELINE EXTENSION.
4. MOVE CLOSER TO THE EDGE OF TRAVEL LINE AS NEEDED FOR VISIBILITY AND SIGHT LINES (NO CLOSER THAN 4 FEET).
5. LADDER BAR CROSSWALKS SHOULD ONLY BE USED FOR MID BLOCK CROSSINGS. USE 2 - 6" TRANSVERSE LINES INSTEAD.



TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER

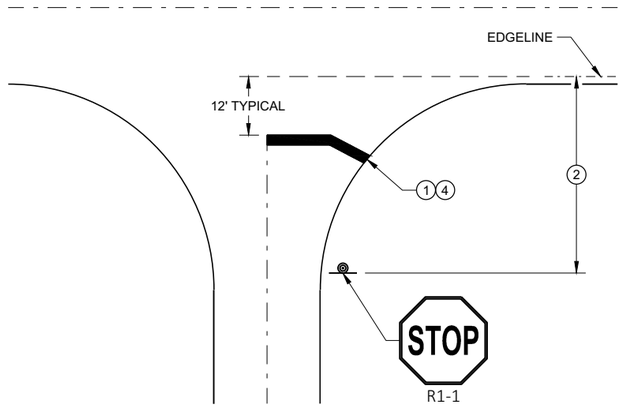


TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH RIGHT TURN LANE



TYPICAL PAVEMENT MARKING FOR MID-BLOCK CROSSWALK 5

TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH CROSSWALK MARKING



TYPICAL STOP LINE PAVEMENT MARKING WITHOUT CURB AND GUTTER

STOP LINE AND CROSSWALK PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

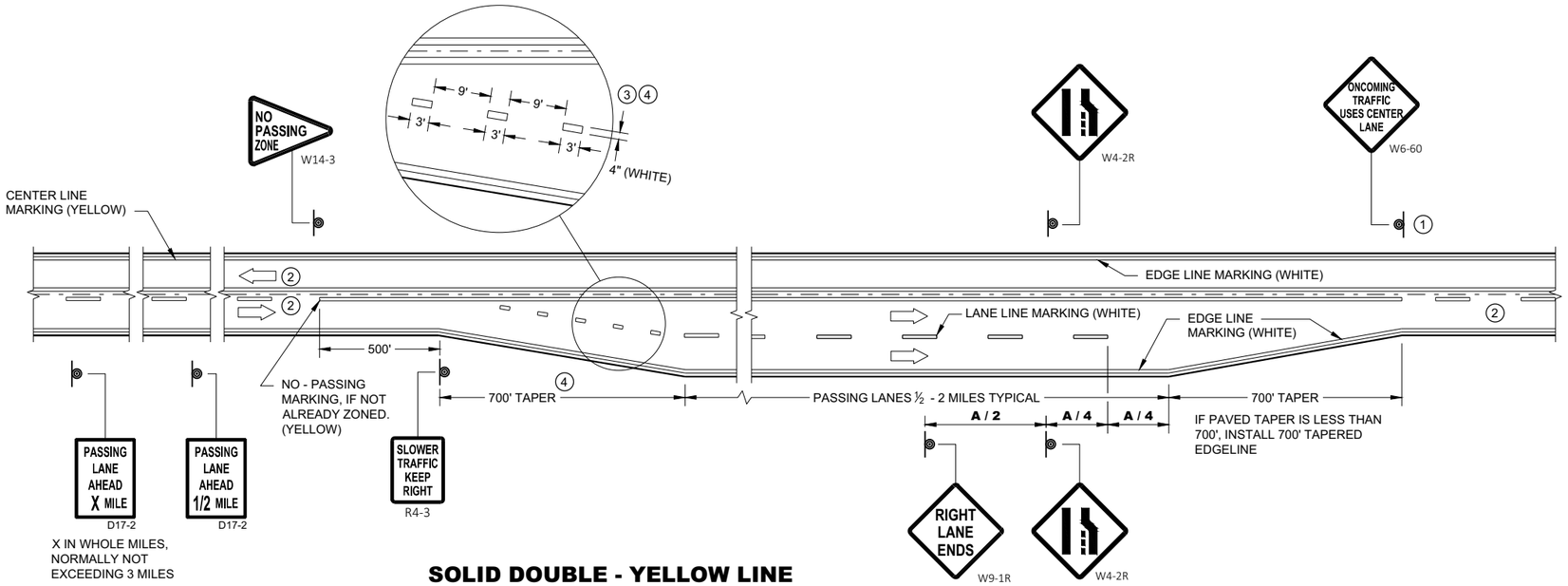
APPROVED
November 2019
DATE

/S/ Matthew Rauch
STATE SIGNING AND MAF ENGINEER

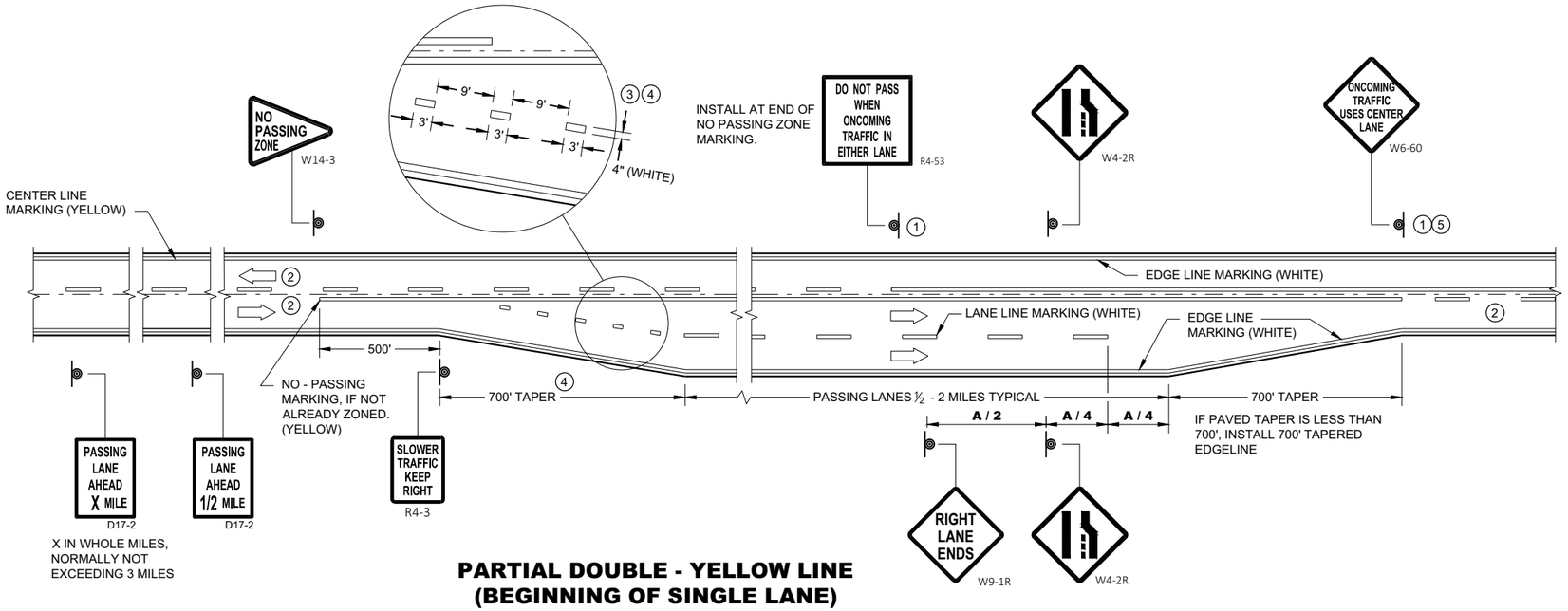
FHWA

6

SDD 15C33 - 04



SOLID DOUBLE - YELLOW LINE
(THROUGHOUT ENTIRE PASSING / CLIMBING LANE)



PARTIAL DOUBLE - YELLOW LINE
(BEGINNING OF SINGLE LANE)

GENERAL NOTES

1. SIGN SHALL BE REPEATED AT 1 MILE INCREMENTS OR AT THE DISCRETION OF THE REGIONAL TRAFFIC ENGINEER.
2. THERE MAY BE SOLID YELLOW ON THE CENTERLINE DUE TO SIGHT CONDITIONS.
3. THE TAPER LENGTH OF THE DOTTED LINE PAVEMENT MARKING SHALL BE 700 FEET, 3' LINE, 9' GAP, EXCEPT RETRACE THE EXISTING LINE - GAP PATTERN WHERE EXISTING MARKINGS ARE IN PLACE.
4. WHEN THE ENTRANCE TAPER IS LESS THAN 700 FEET OR THE SHOULDER WIDTH IN THE PASSING / CLIMBING LANE IS LESS THAN THE ADJACENT HIGHWAY, DO NOT INSTALL DOTTED LINE PAVEMENT MARKING.
5. REPEAT EVERY 1 MILE UP UNTIL R4-53.

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL

DISTANCE TABLE

POSTED OR 85th PERCENTILE SPEED	DISTANCE "A"
45	775
50	885
55	990

PAVEMENT MARKING & SIGNING (CLIMBING LANE & PASSING LANE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 15C35 - 04b

SDD 15C35 - 04b

LEGEND

SIGN ON PERMANENT SUPPORT

TRAFFIC CONTROL DRUM

DIRECTION OF TRAFFIC

WORK ZONE

GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" SIGNS MAY BE USED IF APPROVED BY THE REGIONAL TRAFFIC UNIT.

"WO" SIGN IS THE SAME AS "W" SIGN EXCEPT THE BACKGROUND IS ORANGE.

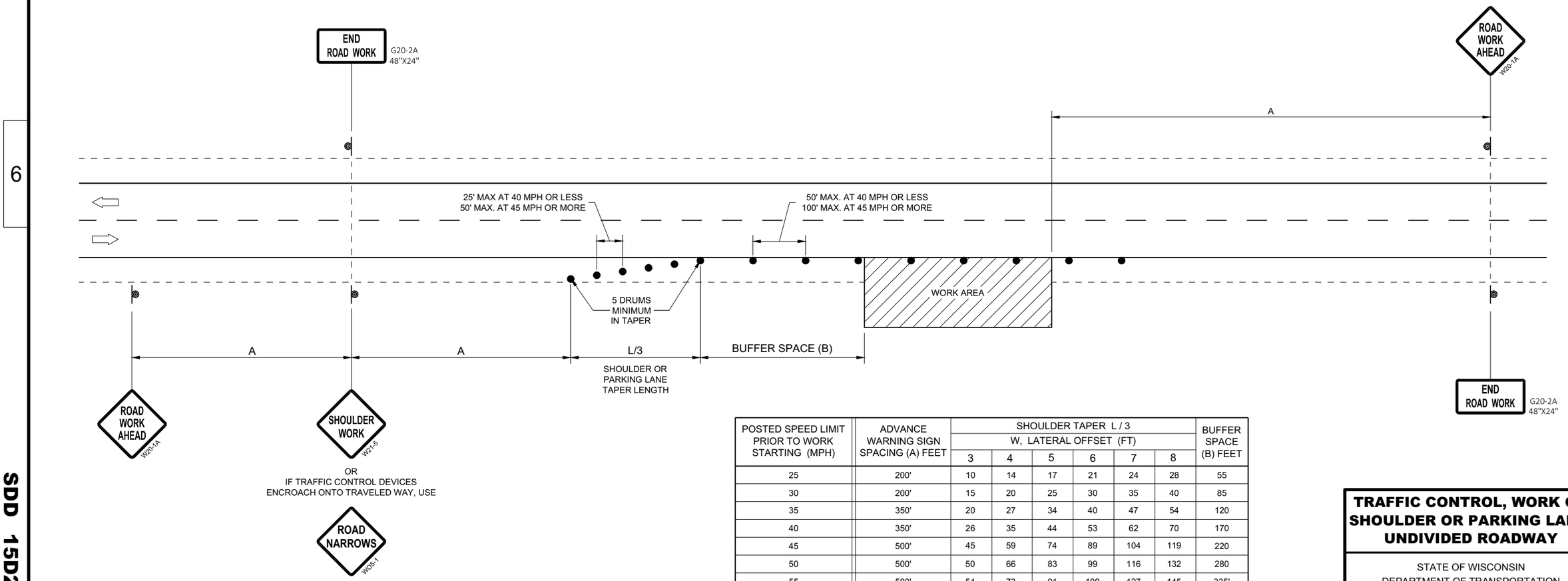
ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

W20-1A 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.



POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	SHOULDER TAPER L / 3 W, LATERAL OFFSET (FT)						BUFFER SPACE (B) FEET
		3	4	5	6	7	8	
25	200'	10	14	17	21	24	28	55
30	200'	15	20	25	30	35	40	85
35	350'	20	27	34	40	47	54	120
40	350'	26	35	44	53	62	70	170
45	500'	45	59	74	89	104	119	220
50	500'	50	66	83	99	116	132	280
55	500'	54	73	91	109	127	145	335'

TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

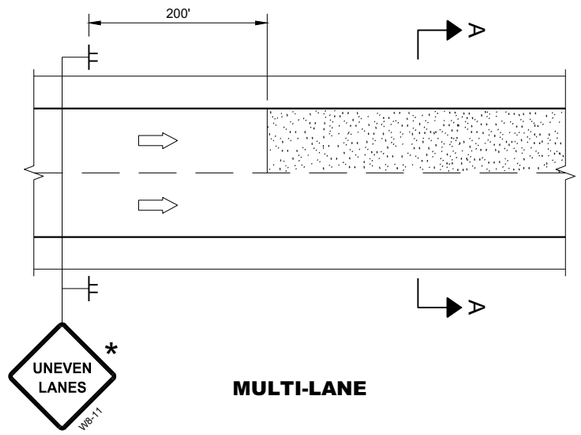
APPROVED
May 2020
DATE

/S/ Andrew Heidtke
STATEWIDE WORK ZONE T
SAFETY ENGINEER

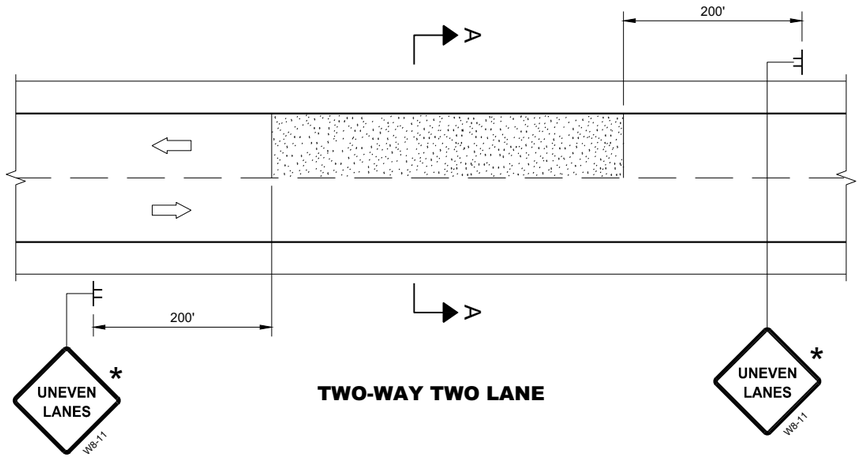
FHWA

SDD 15D28 - 04

SDD 15D28 - 04



MULTI-LANE



TWO-WAY TWO LANE

GENERAL NOTES

FOR SPOT LOCATIONS USE ENGINEERING JUDGEMENT WHEN PLACING ADDITIONAL SIGNS.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

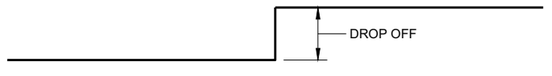
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

* IF THE DROP-OFF IS CONTINUOUS ALONG THE PROJECT, PLACE ADDITIONAL SIGNS EVERY 1 MILE AND AFTER EVERY ENTRANCE RAMP.

(1) USE CLOSER SPACING WHEN DELINEATING DROP-OFF.

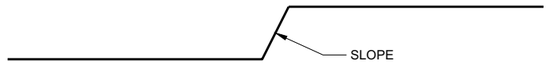
LEGEND

- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- WORK AREA WITH DROP-OFF
- MILLED SURFACE

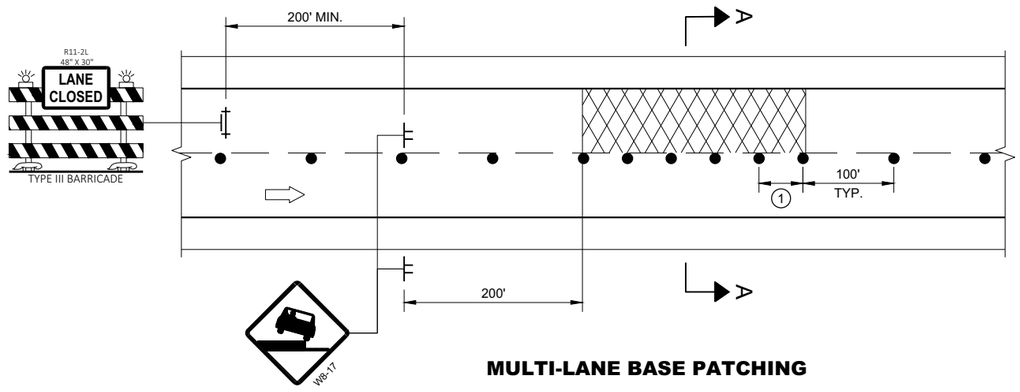


SECTION A - A

OR

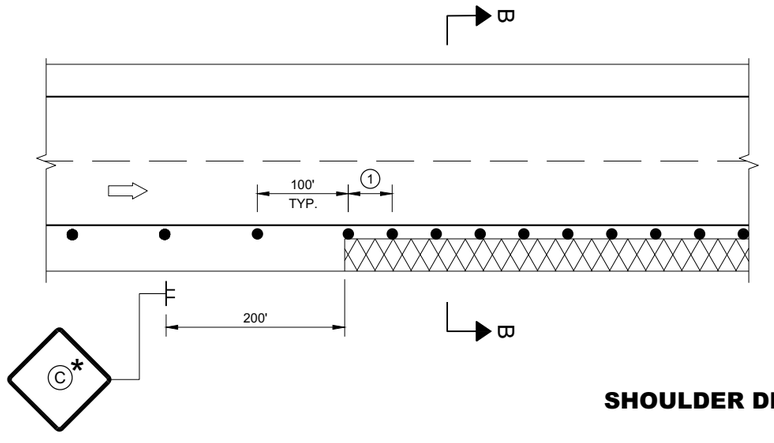


SECTION A - A

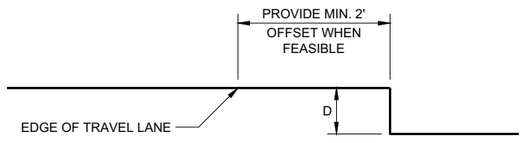


MULTI-LANE BASE PATCHING

ADJACENT LANE DROP-OFFS



SHOULDER DROP-OFFS



SECTION B - B

D	SIGN (C)
< 2" WITH A SLOPE STEEPER THAN 3:1	LOW SHOULDER WO8-9
2" < 6" WITH A SLOPE STEEPER THAN 3:1	SHOULDER DROP - OFF W8-9A PROVIDE A 3:1 OR FLATTER SLOPE OF MATERIAL ADJACENT TO THE PAVEMENT

TRAFFIC CONTROL, DROP-OFF SIGNING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15D39 - 02

6

SDD 15D39 - 02

GENERAL NOTES

DRAWING NOT TO SCALE. ALL SIGNS AND POSTS ON THIS SHEET SHALL BE PAID FOR WITH 'TRAFFIC CONTROL SIGNS' BID ITEM. ALL SIDE ROADS WHICH ARE UNDER CONSTRUCTION OF CURB AND GUTTER AND/OR GRADING SHALL BE ADEQUATELY SIGNED.

ALL SIGNS AND DEVICES SHALL BE IN CONFORMANCE WITH THE WISCONSIN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (WMUTCD). SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISDOT STANDARD SIGN PLATES.

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THAT THE BACKGROUND IS ORANGE.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.

ALL SIGNS INAPPROPRIATE TO THE STATUS OF THE CONTROL ZONE, INCLUDING PRE-EXISTING SIGNS IN THE VICINITY, SHALL BE COVERED OR REMOVED AS DIRECTED BY THE ENGINEER.

SEE 15C34 FOR ADDITIONAL TRAFFIC CONTROL SIGNING WHEN CENTERLINE PAVEMENT MAKINGS ARE MISSING. 'DO NOT PASS' SIGNS MUST BE INSTALLED ON THE SAME DAY AS MILLING OPERATIONS.

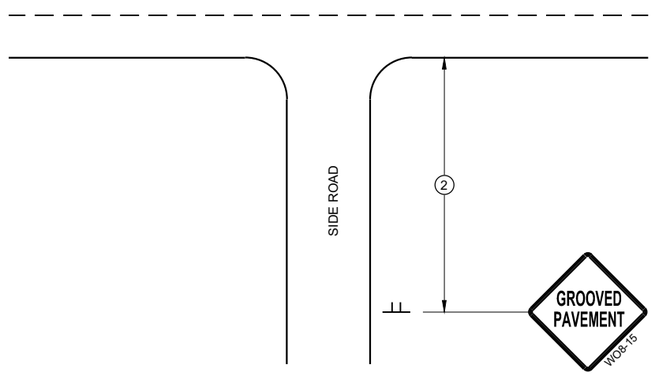
(1) PLACE SIGNS 350' IN ADVANCE OF MILLED SURFACES AND AT 1 MILE INTERVALS, OR AS DIRECTED BY THE ENGINEER.

(2) PLACE SIGN 200' MIN. FROM INTERSECTION AND 200' MIN. AFTER ADVANCE WARNING SIGN SHOWN IN SDD 15C04.

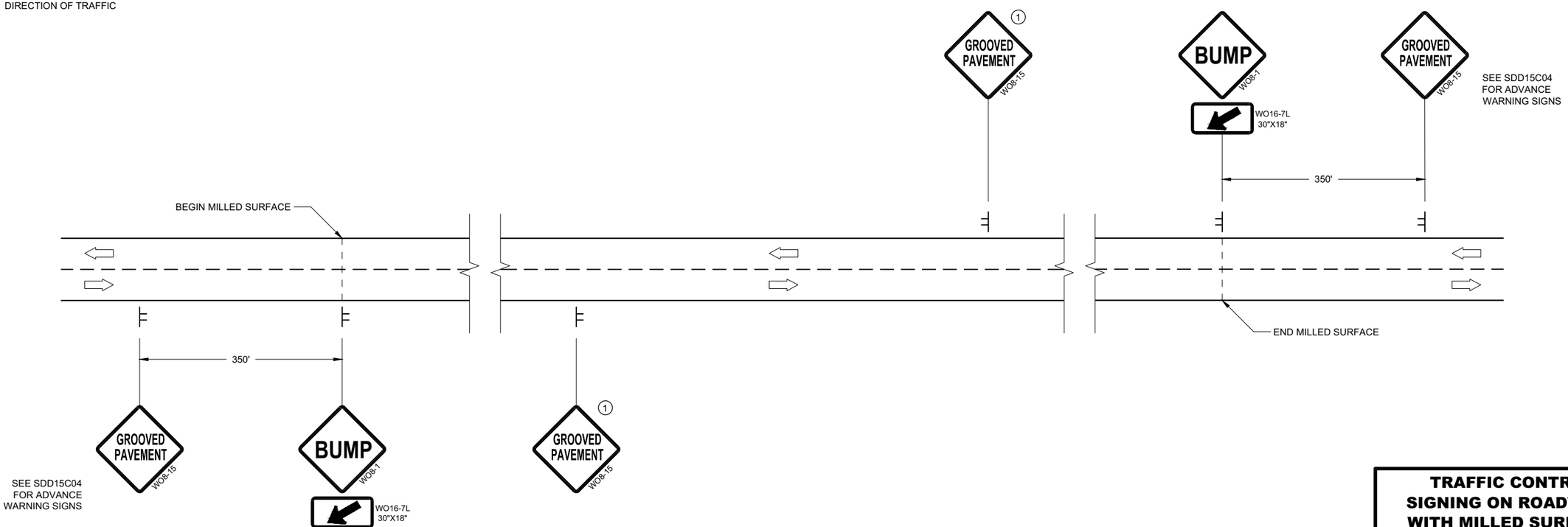
LEGEND

SIGN ON TEMPORARY SUPPORT

DIRECTION OF TRAFFIC



TYPICAL SIDE ROAD APPROACH SIGN DETAIL



DETAIL FOR SIGNING ON MILLED SURFACES

TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH MILLED SURFACES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

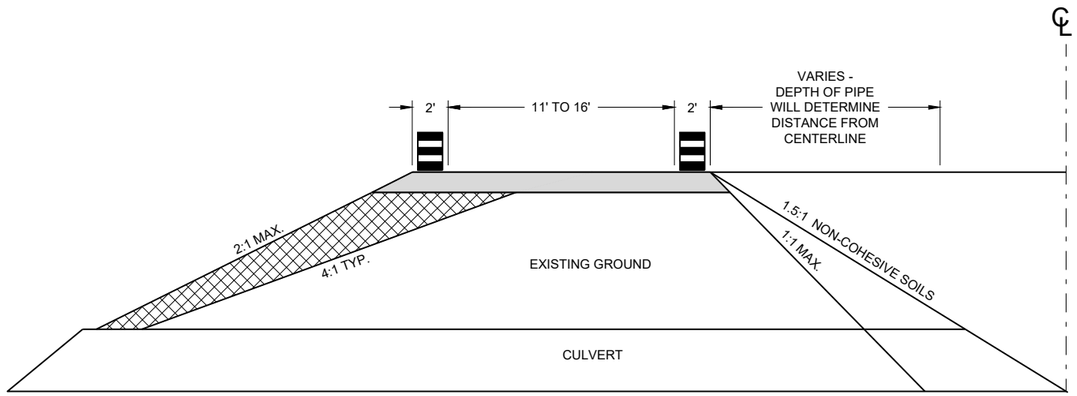
APPROVED
February 2020
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

SDD 15D44 - 02

SDD 15D44 - 02



CROSS SECTION

GENERAL NOTES

USE 1:1 FOR COHESIVE CLAYS AND SILTS, LOAMS, SANDY CLAYS AND ANGULAR GRAVEL SOILS.
USE 1.5:1 FOR NON-COHESIVE SOILS.

THE TAPER SHOULD EXTEND ACROSS THE SHOULDER UNLESS DOING SO WOULD GREATLY CONFLICT WITH THE WORK OPERATION.

ALL LANE CLOSURE SIGNS SHALL BE REMOVED OR COVERED AND ALL DEVICES REMOVED BEYOND THE SHOULDER WHEN WORK IS NOT IN PROGRESS AND THE LANE IS RESTORED TO A SAFE OPERATING CONDITION.

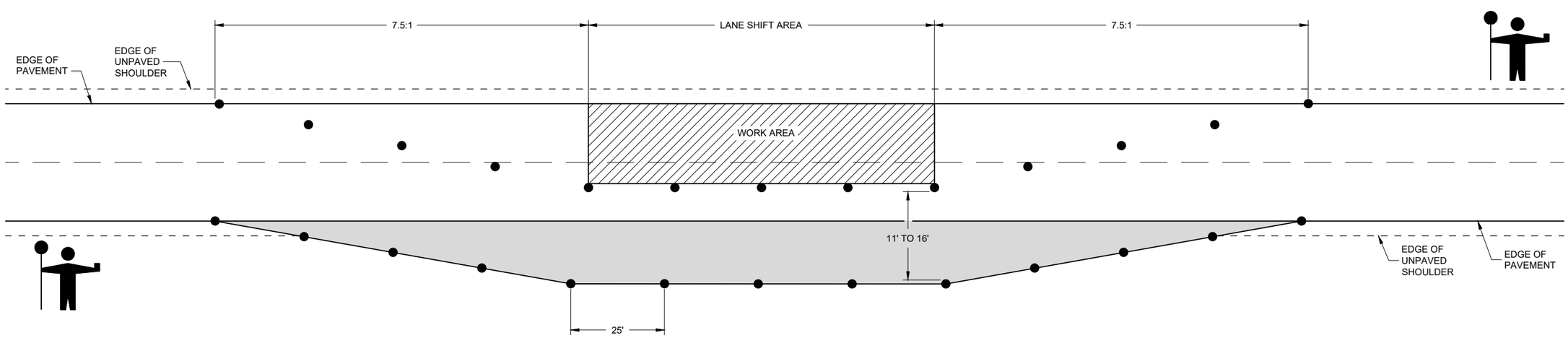
CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

USE WITH SDD 15C12 "TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATIONS"

USE WITH SDD 15D45 "SIGNING ON ROADWAYS WITH LOOSE GRAVEL"

LEGEND

- DRUM WITHOUT WARNING LIGHT
- 6" BASE AGGREGATE DENSE 1 ¼" -INCIDENTAL TO LANE SHIFT ITEM
- FILL - INCIDENTAL TO LANE SHIFT ITEM
- WORK AREA
- FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF



LANE SHIFT IN FLAGGING OPERATION

TRAFFIC CONTROL, TEMPORARY LANE SHIFT DURING CULVERT WORK

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2021
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

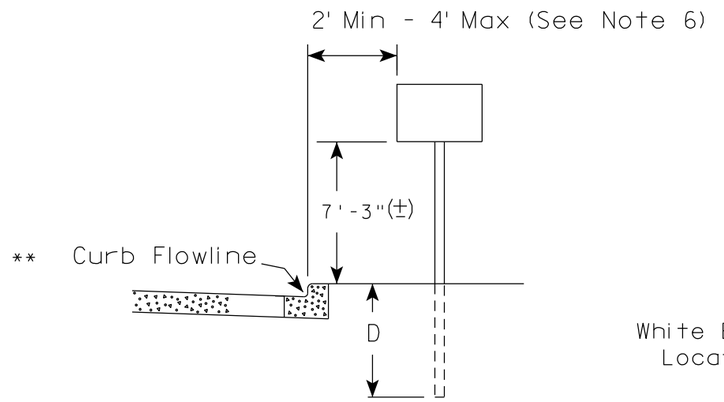
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SDD 15D48 - 01

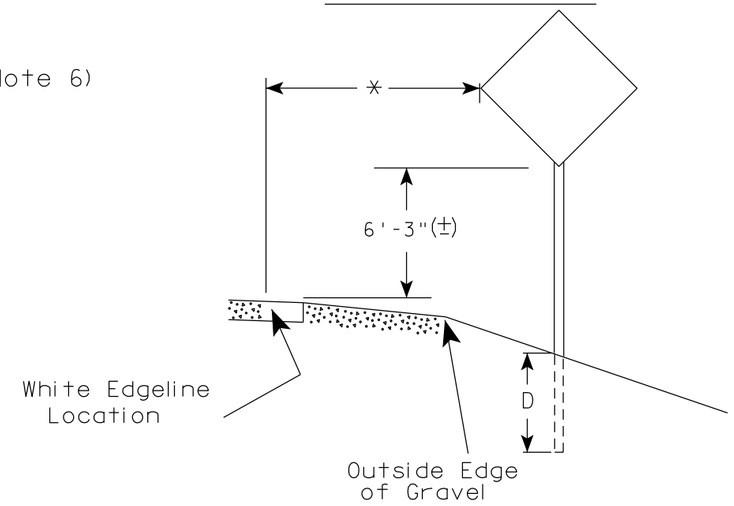
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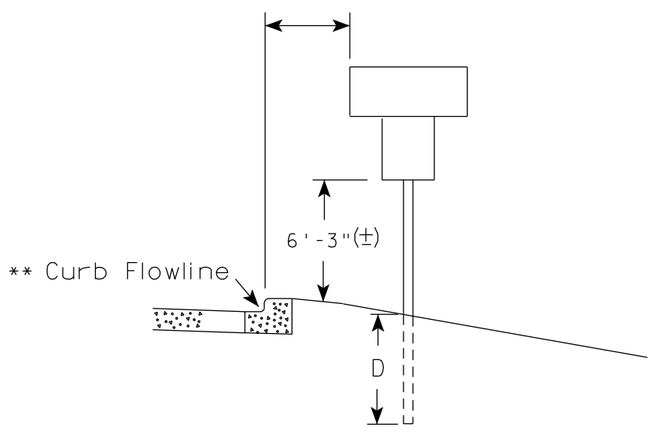
SDD 15D48 - 01

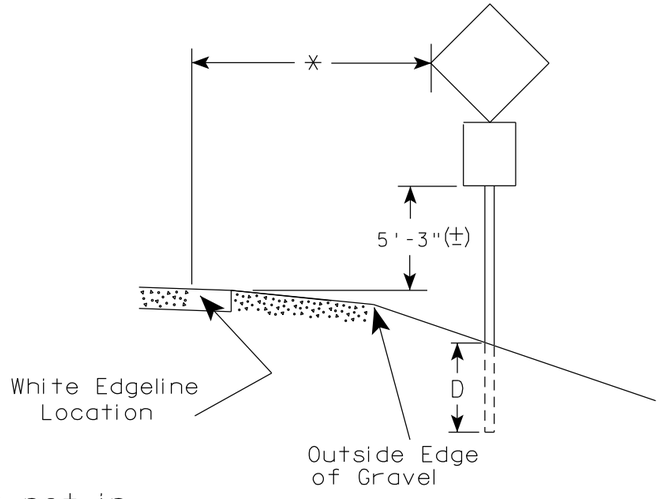
URBAN AREA



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.

POST EMBEDMENT DEPTH

Area of Sign Installation (Sq.Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

GENERAL NOTES

1. Signs wider than 4 feet or 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on or behind barrier wall, see A4-10 sign plate.
   The Double Arrow sign (W12-1D) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Enhanced Reference Markers, Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±).
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 signs mounted on traffic signal poles is 5'- 3" (±).
5. Offset distance shall be consistent with existing signs or consistent throughout length of project.
6. The (±) tolerance for mounting height is 3 inches.
7. Folding signs shall be mounted at a height of 5'-3" (±) or as directd by the Engineer.

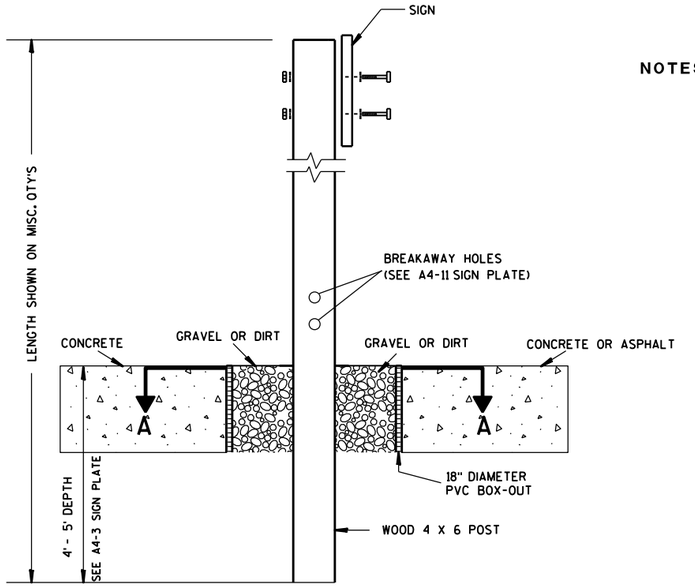
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/13/2020 PLATE NO. A4-3.22

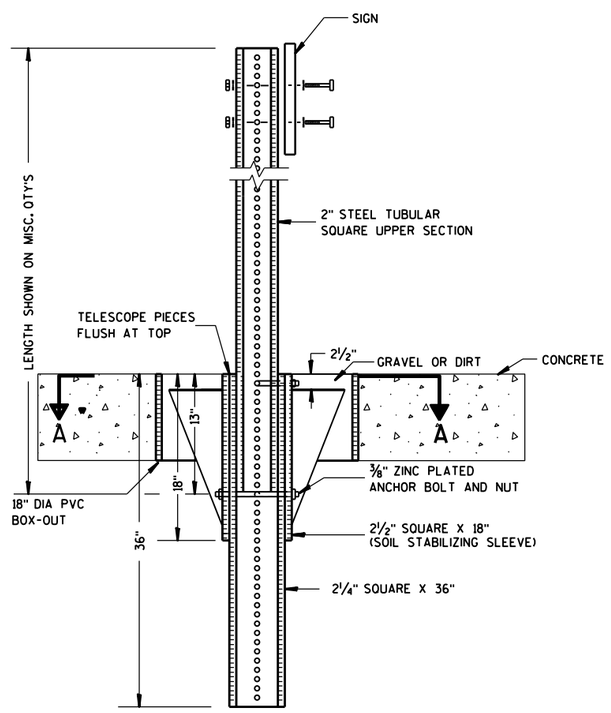
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 147	E



ELEVATION VIEW

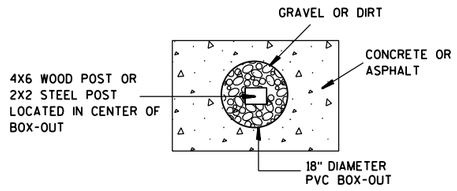
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

NOTES:
1. ALL MATERIAL TO BE APPROVED BY ENGINEER PRIOR TO INSTALLATION
2. SEE SIGN PLATE A4-8 FOR SIGN HARDWARE REQUIREMENTS
3. 18 INCH X 18 INCH SQUARE BOX-OUTS MAY BE USED FOR INSTALLATIONS IN EXISTING CONCRETE OR ASPHALT LOCATIONS.



ELEVATION VIEW

DETAIL OF STEEL 2 X 2 SIGN POST IN BOX-OUT



PLAN VIEW

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST BOX-OUTS A4-3B

WISCONSIN DEPT OF TRANSPORTATION

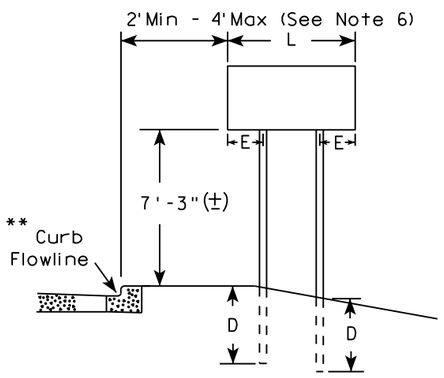
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/27/14 PLATE NO. A4-3B.1

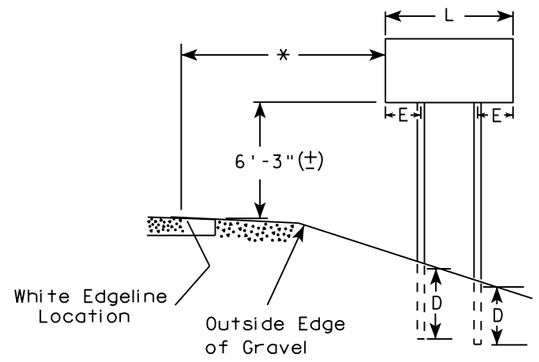
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

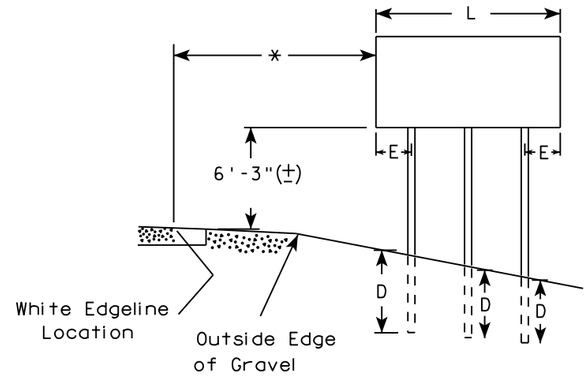
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A43B.DGN PLOT DATE : 27-JAN-2014 09:48 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000 WISDOT/CADDS SHEET 42

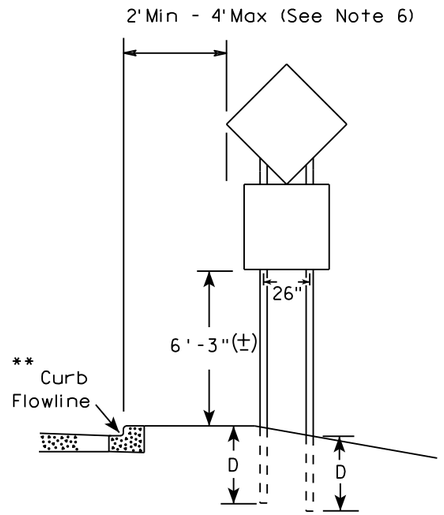
URBAN AREA



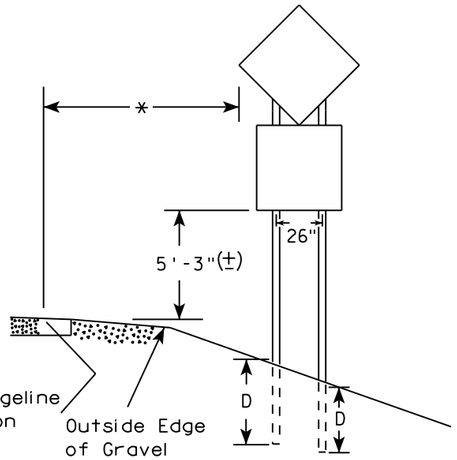
RURAL AREA (See Note 3)







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 108"	L/5

SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED)	
L	E
Greater than 108" to 144"	12"

GENERAL NOTES

1. For 3 or 4 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. J-Assemblies are considered to be one sign for mounting height.
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. Folding signs 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), In Road Object Markers (W5-54) & End of Road Markers (W5-56) 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 and less than 20 S.F. in area.

POST EMBEDMENT DEPTH

Area of Sign Installation (Sq. Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

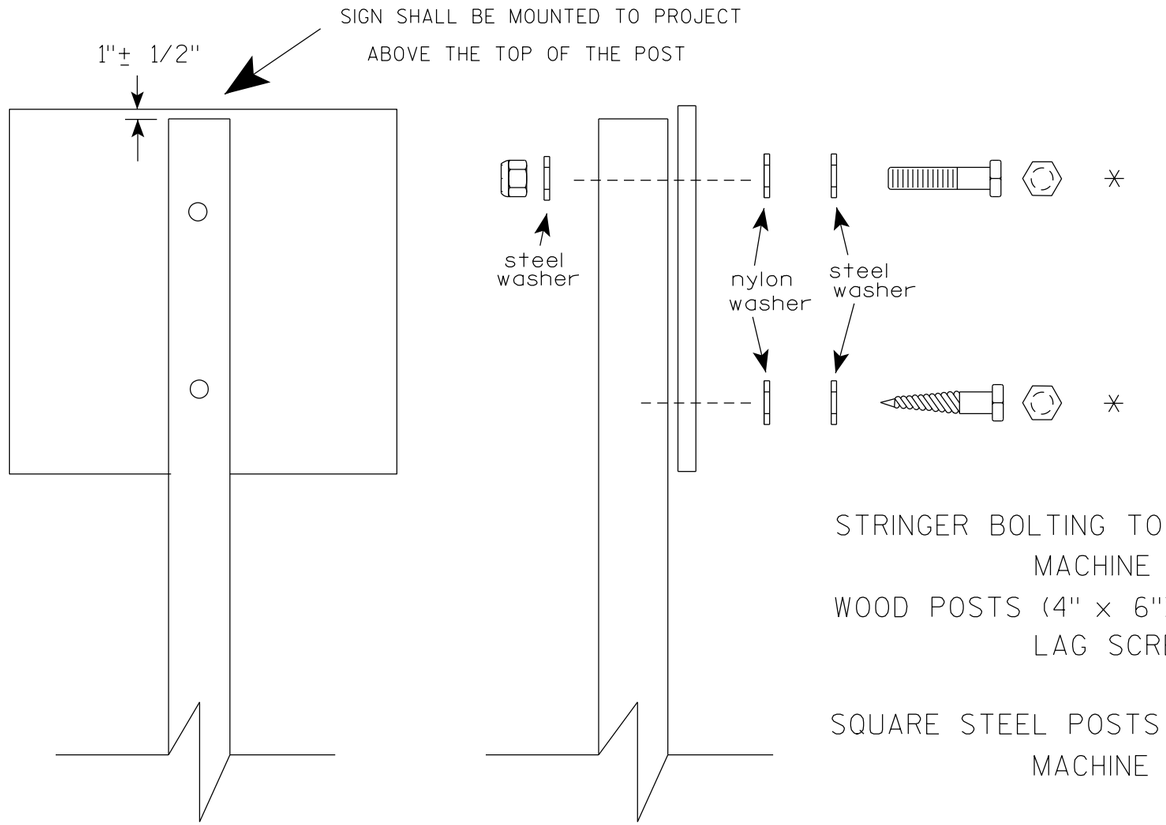
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/21/17 PLATE NO. A4-4.15

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 149	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.

STRINGER BOLTING TO ALUMINUM SIGNS (SEE SIGN PLATE A4-18)

MACHINE BOLTS - 5/16" X 1-3/4" Length w/ lock nuts

WOOD POSTS (4" x 6")

LAG SCREWS - 3/8" X 3" (NO STRINGERS ON BACK OF SIGN)
3/8" X 4" (STRINGERS ON BACK OF SIGN)

SQUARE STEEL POSTS (2" x 2")

MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts (NO STRINGER ON BACK OF SIGN)
3/8" X 5" Length w/ nuts (STRINGERS ON BACK OF SIGN)

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

* 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

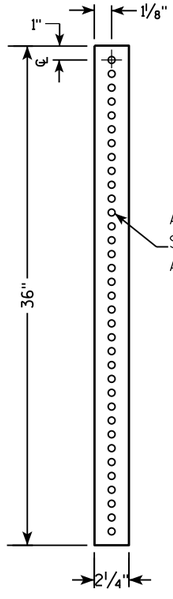
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

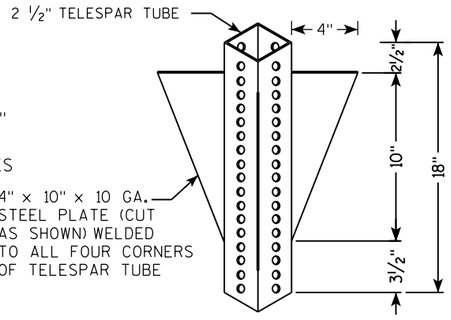
DATE 4/1/2020 PLATE NO. A4-8.9

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

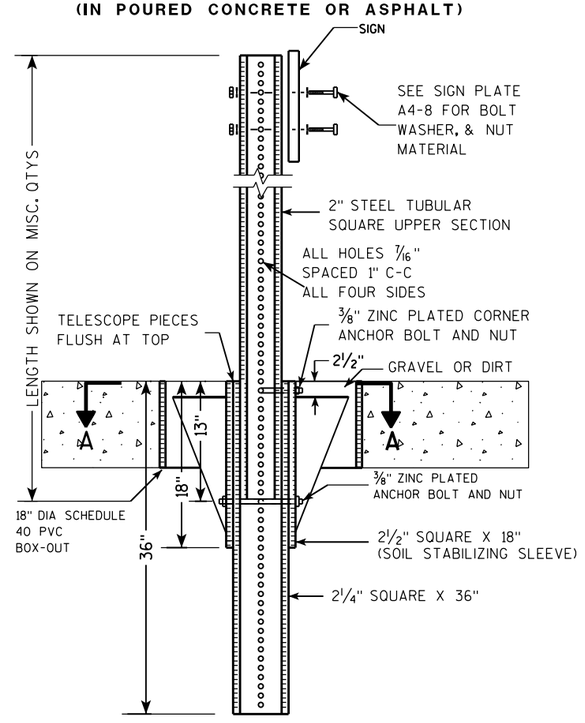
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



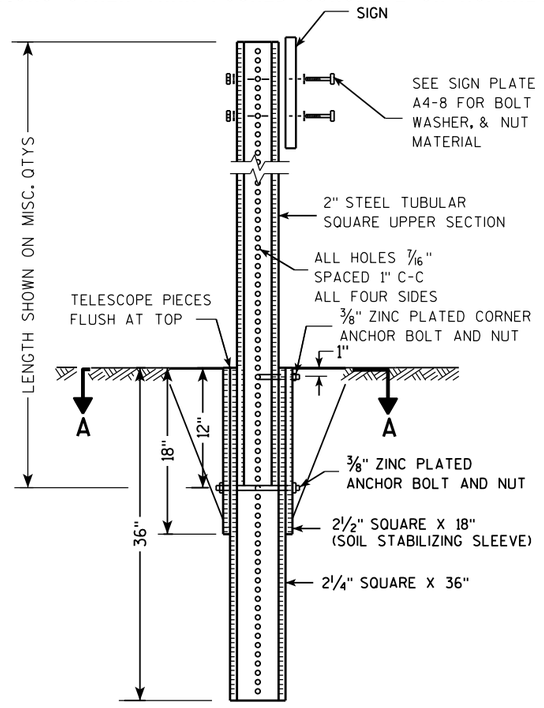
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

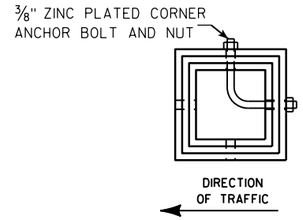


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



DETAIL OF TUBULAR STEEL SIGN POST
(IN LOCATIONS OTHER THAN POURED CONCRETE OR ASPHALT)





SECTION A-A

Area of Sign Installation (Sq. Ft.)	Number of Required Posts
9 or less	1
Greater than 9 less than or equal to 18	2
Greater than 18 less than or equal to 27	3

Signs wider than 3 feet or larger than 9 sq. ft shall be mounted on multiple posts (see above table).

TUBULAR STEEL
SIGN POST
A4-9

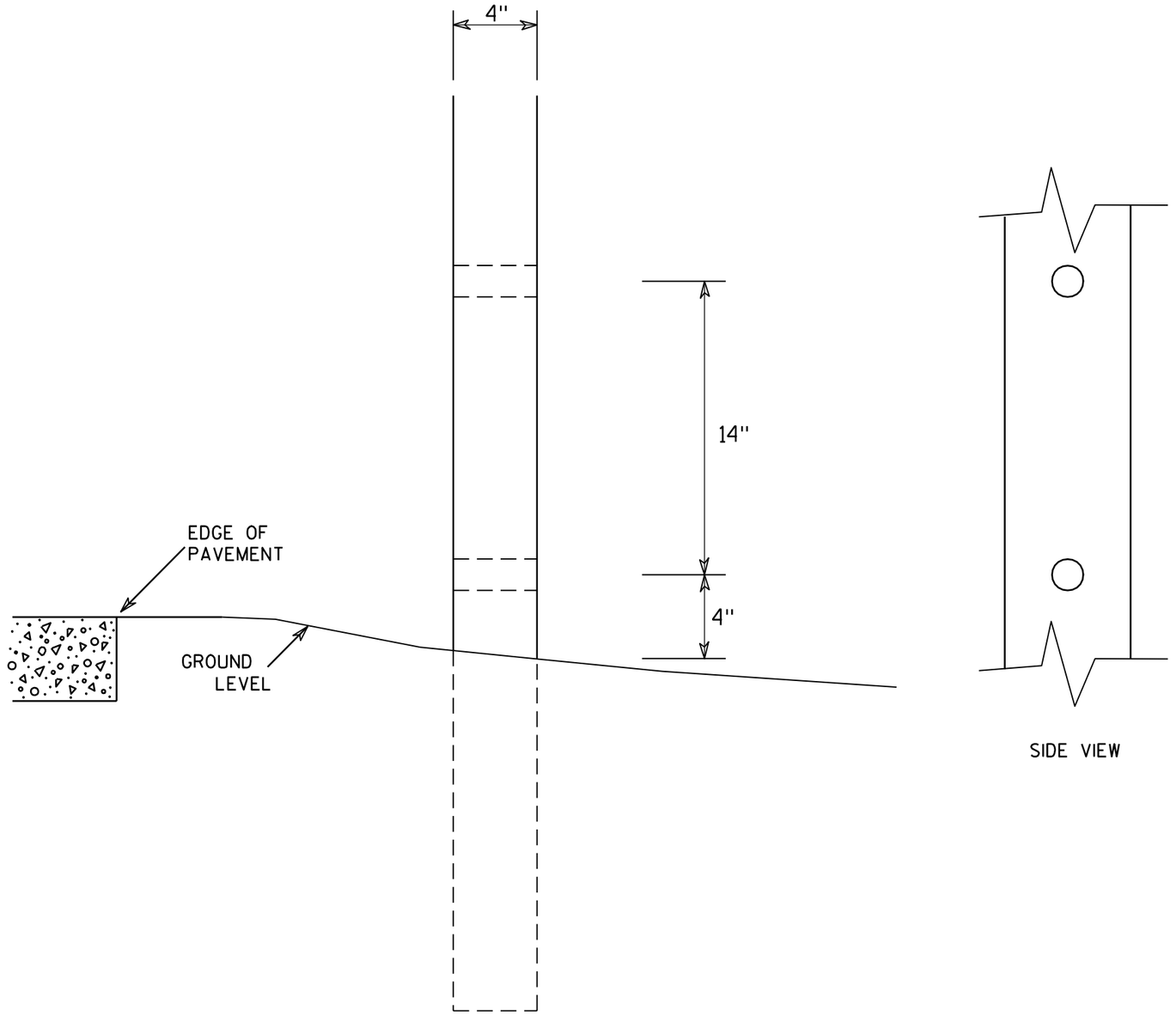
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE A4-9.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A49.DGN PLOT DATE : 05-FEB-2015 17:09 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000
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

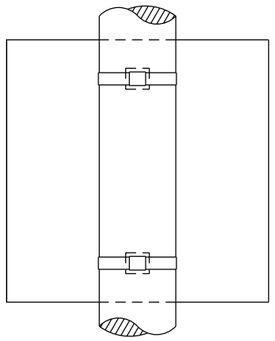
APPROVED Chester J Spang for State Traffic Engineer

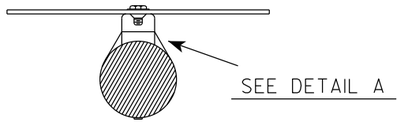
DATE 3/27/97 PLATE NO. A4-11.2

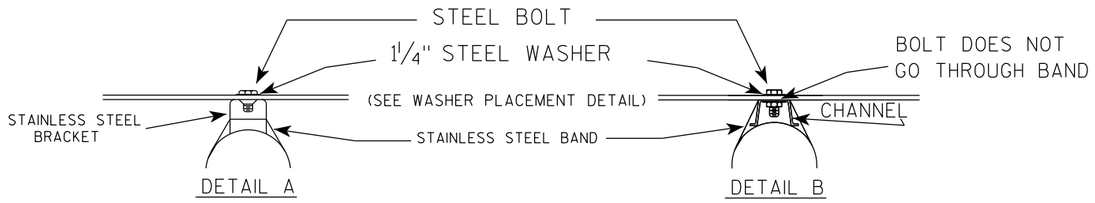
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 152	E

BANDING

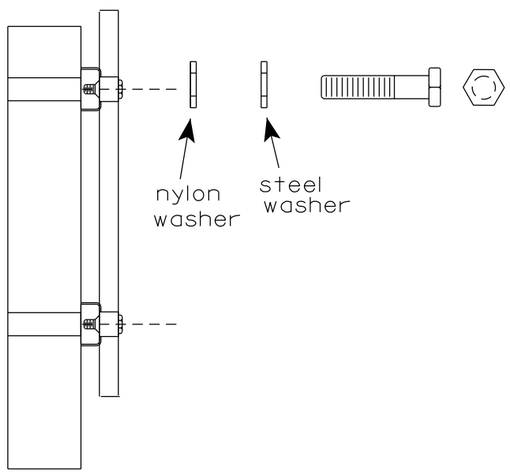
SINGLE SIGN







WASHER PLACEMENT

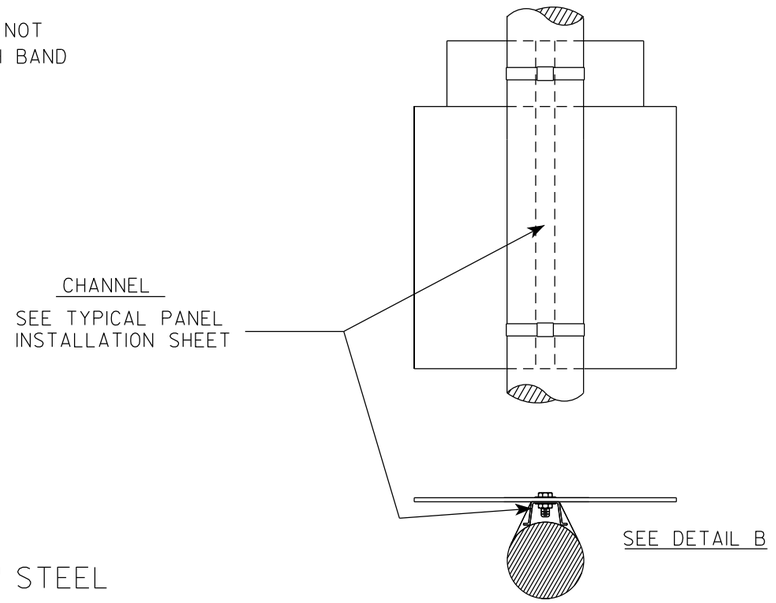


WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

GENERAL NOTES

1. Any sign over 3 feet in width shall use the V-Block banding method. See A5-10 standard plate.
2. Signs 3 feet or greater in height shall have three bracket bands installed. Signs less than 3 feet 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.
4. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
   a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D
   b. Electro-galvanized in accordance with ASTM designation: B 633, Type III, SC 3

"J" ASSEMBLY



STANDARD SIGN
SIGN BANDING DETAILS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

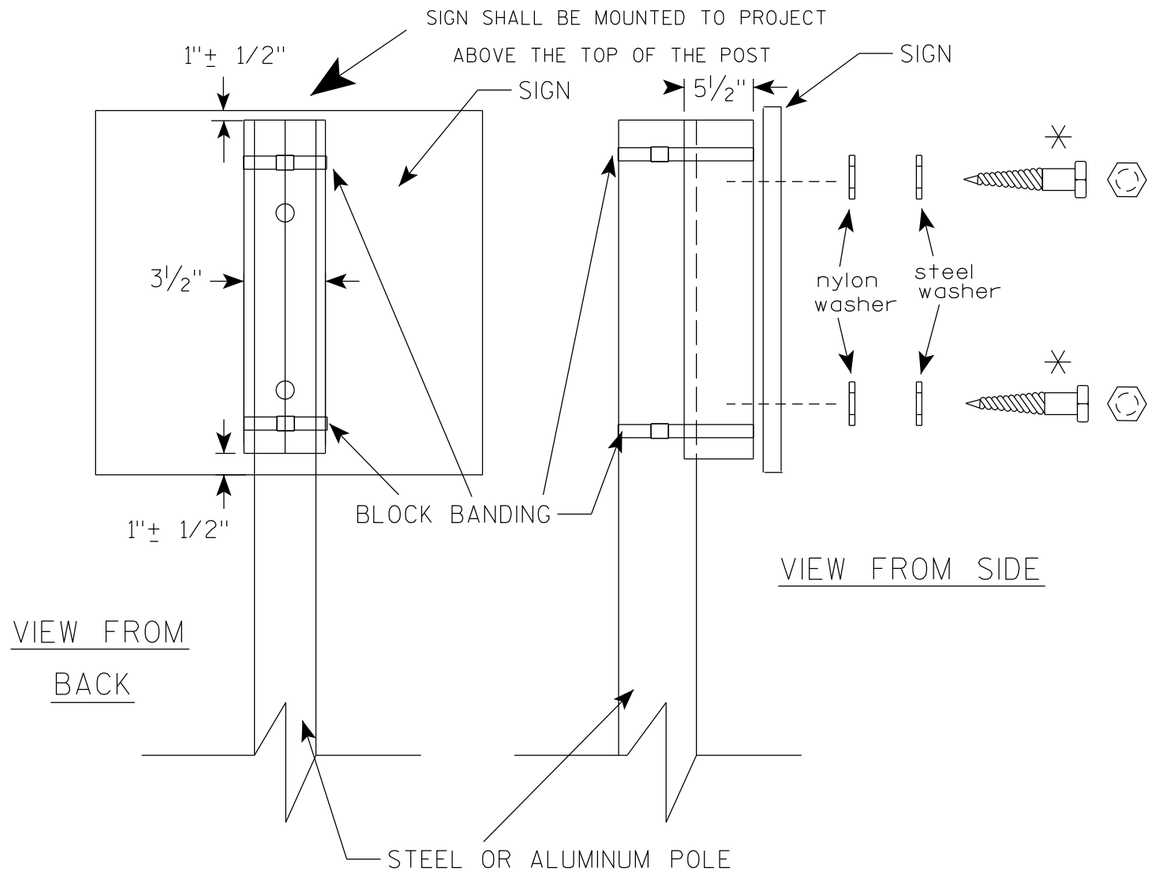
DATE 6/10/19 PLATE NO. A5-9.4

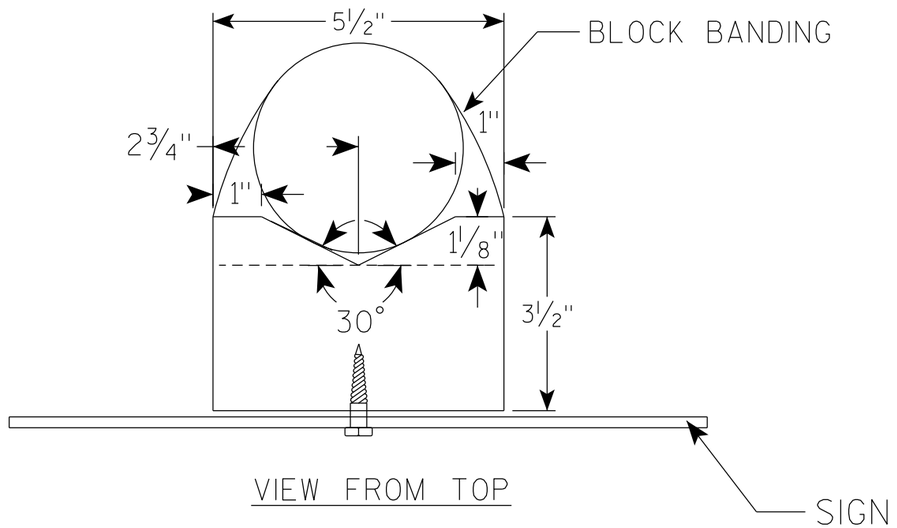
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 153	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A59.dgn PLOT DATE : 10-JUN 2019 4:10 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

7

7





GENERAL NOTES

1. WOOD 4"X6" POST MATERIAL SHALL CONFORM TO 507.2.2 OF THE WisDOT STANDARD SPECIFICATIONS
2. BLOCK BANDING AND CLIPS SHALL BE STAINLESS STEEL, ¾" WIDTH AND 0.025" THICKNESS
3. SIGNS 3' OR GREATER IN HEIGHT SHALL UTILIZE 3 BLOCK BANDS. SIGNS UNDER 3' IN HEIGHT SHALL UTILIZE 2 BLOCK BANDS
4. ACTUAL NUMBER OF FASTENERS PER SIGN VARIES WITH THE SIGN AREA, BUT NORNALLY THERE ARE TWO. FOR SIGNS GREATER THAN 9 S.F. 3 FASTENERS SHALL BE USED.
5. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
   a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D
   b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3
6. ALL BOLTS SHALL HAVE HEXAGONAL HEADS.
7. STEEL WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X 1/16"
8. NYLON WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X .080 FOR TYPE H OR TYPE F FACE SIGN

✳ LAG BOLTS SHALL BE ⅜" X 2½"

BLOCK BANDING DETAIL (V-BLOCK OPTION)

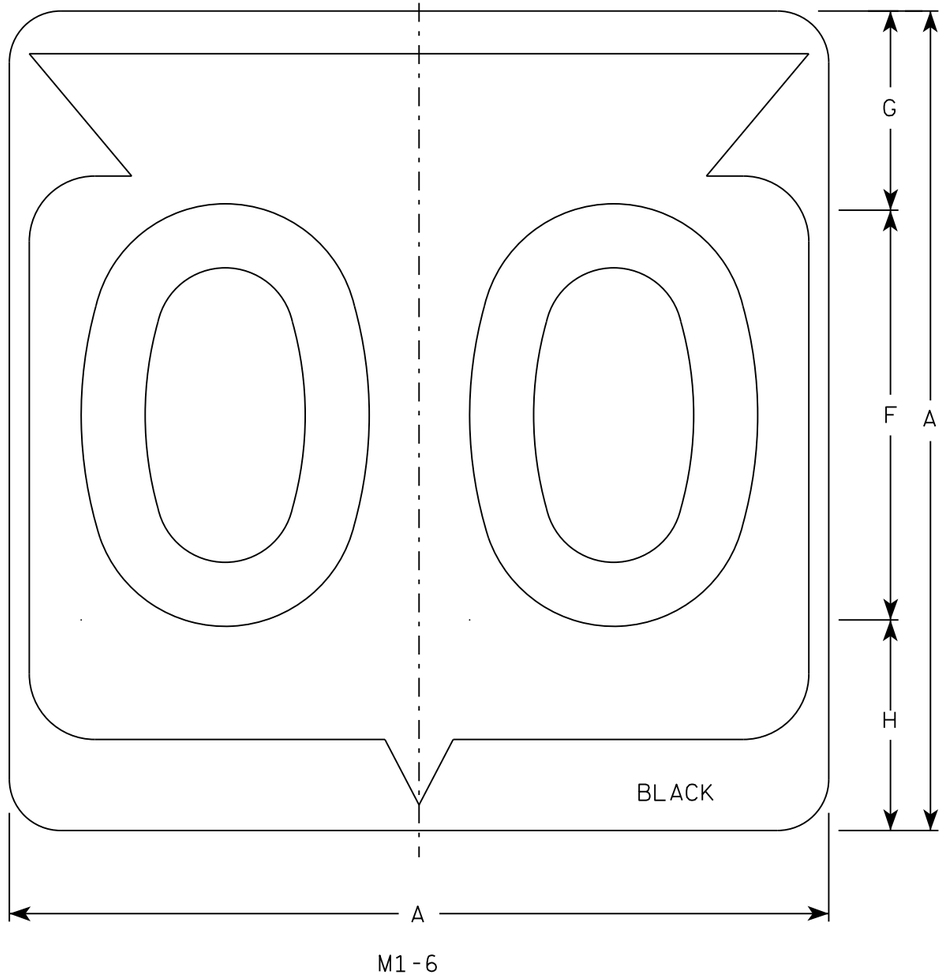
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 6/10/19 PLATE NO. A5-10.2

PROJECT NO:

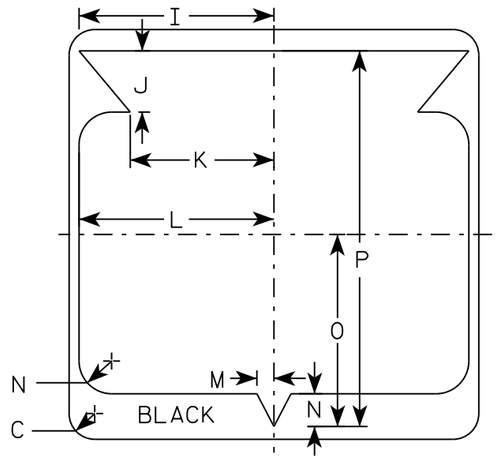
SHEET NO: 154 E



M1-6

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D except 3 number signs Series C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24		1 1/2			12	5 1/2	6 1/2	10 1/4	2 1/2	8 7/8	11 1/2	1	1 7/8	11 1/4	21 7/8											4.0
3	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0
4	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0
5	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0

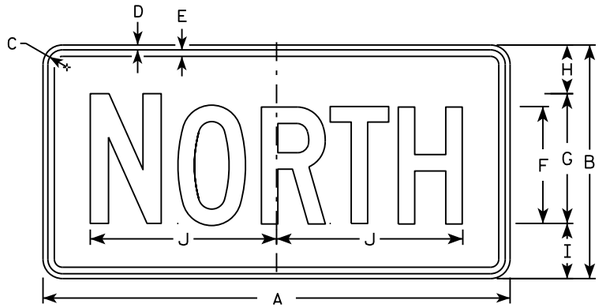
STATE ROUTE MARKER M1-6 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

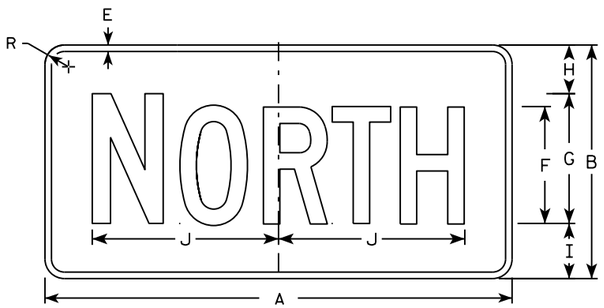
APPROVED Matthew R Rauch for State Traffic Engineer

DATE 3/16/18 PLATE NO. M1-6.10

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 155	E



M3-1
MM3-1
MP3-1



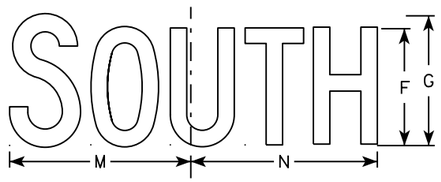
MB3-1
MK3-1
MN3-1



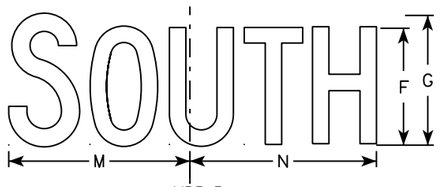
M3-2
MM3-2
MP3-2



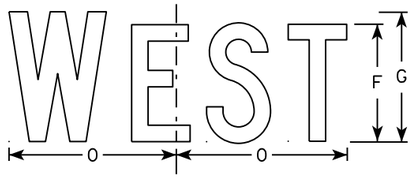
MB3-2
MK3-2
MN3-2



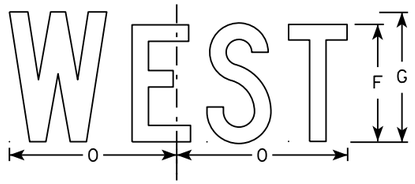
M3-3
MM3-3
MP3-3



MB3-3
MK3-3
MN3-3



M3-4
MM3-4
MP3-4



MB3-4
MK3-4
MN3-4

NOTES

1. All Signs Type II - Type H
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
   Message - Black
   MB3-1 thru MB3-4 Background - Blue
   Message - White
   MK3-1 thru MK3-4 Background - Green
   Message - White
   MM3-1 thru MM3-4 Background - White
   Message - Green
   MN3-1 thru MN3-4 Background - Brown
   Message - White
   MP3-1 thru MP3-4 Background - White
   Message - Blue
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

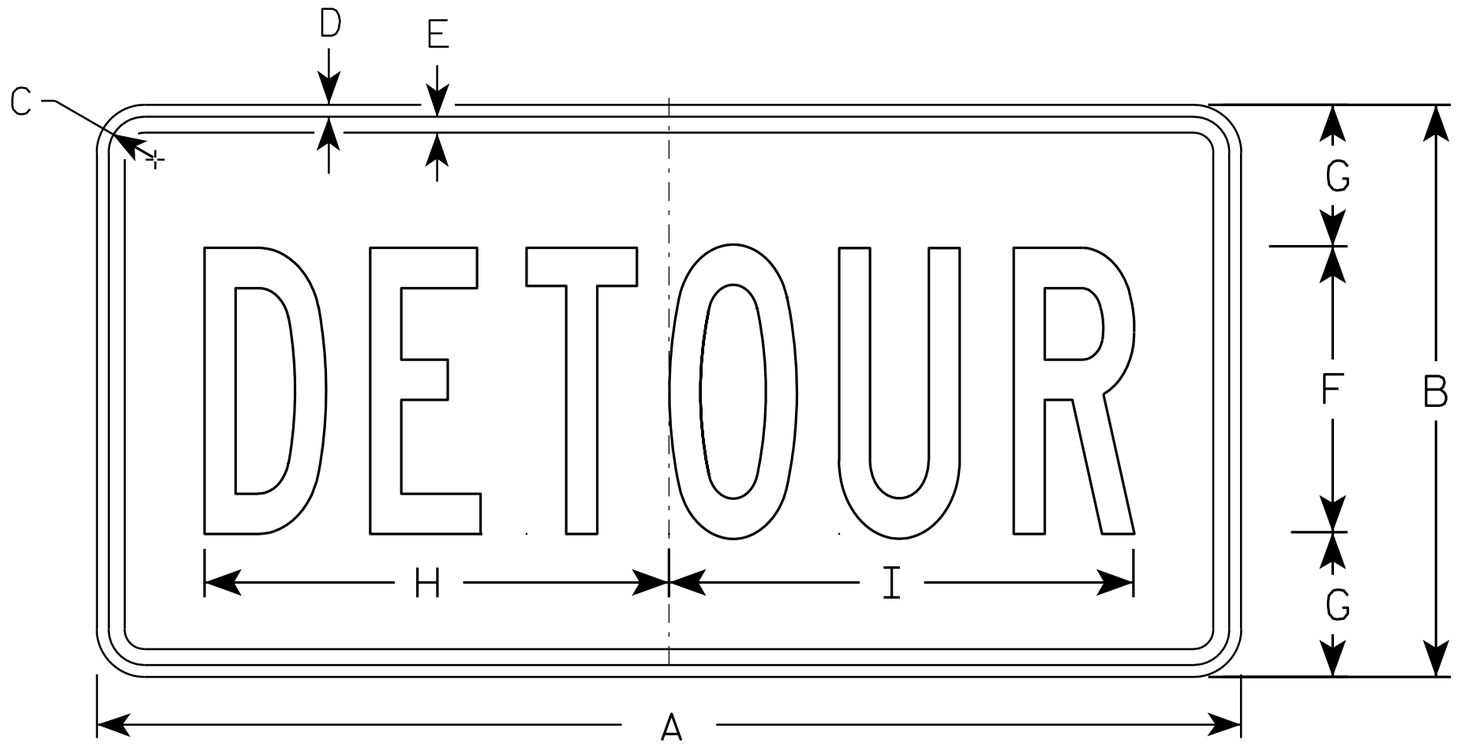
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew P Rauch for State Traffic Engineer

DATE 10/15/15 PLATE NO M3-1.14

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M31.DGN PLOT DATE : 01-DEC-2015 17:54 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



M4-8

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - B
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

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	3	10	10 1/4																		2.0
3	36	18	1 1/8	3/8	1/2	9	4 1/2	14 5/8	14 1/2																		4.5
4																											
5																											

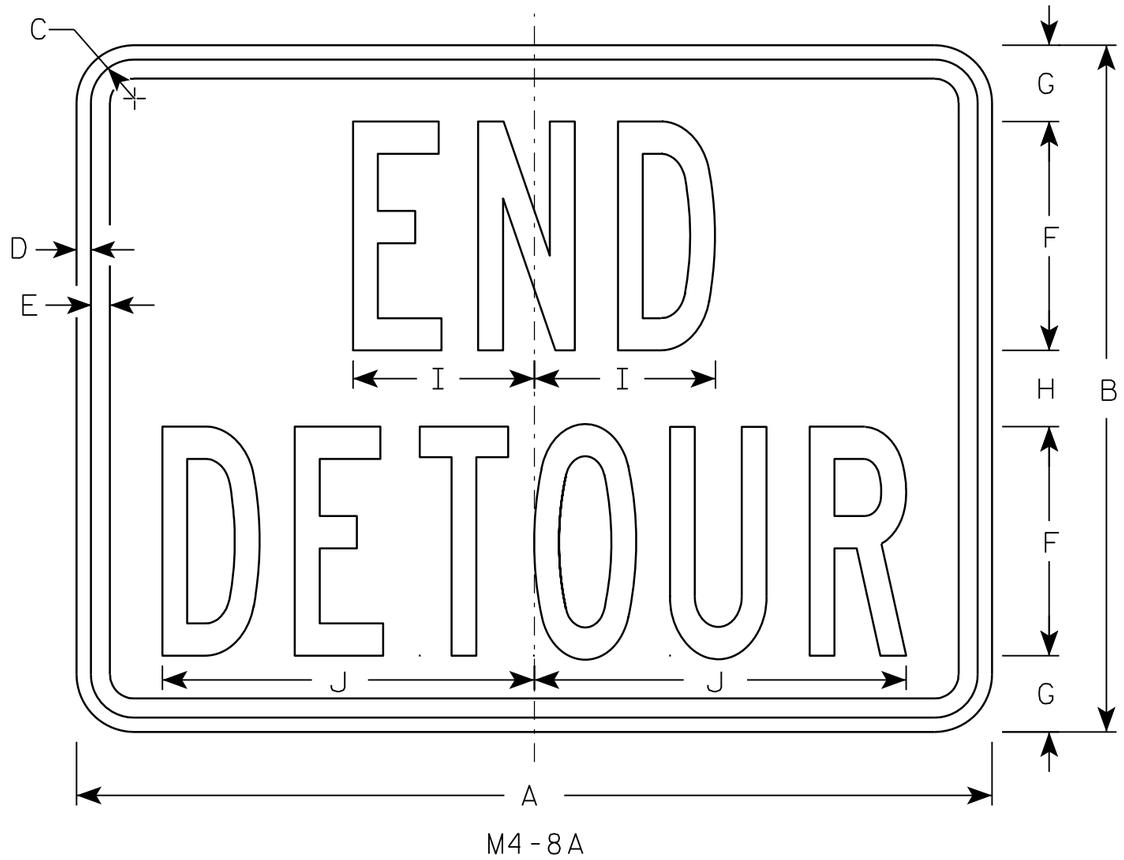
STANDARD SIGN
M4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/10/10 PLATE NO. M4-8.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 157	E



M4-8A

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - B
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

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	18	1 1/8	3/8	1/2	6	2	2	4 3/4	9 3/4																	3.0
3	30	24	1 1/8	3/8	1/2	8	2 1/2	3	6 3/4	13																	5.0
4																											
5																											

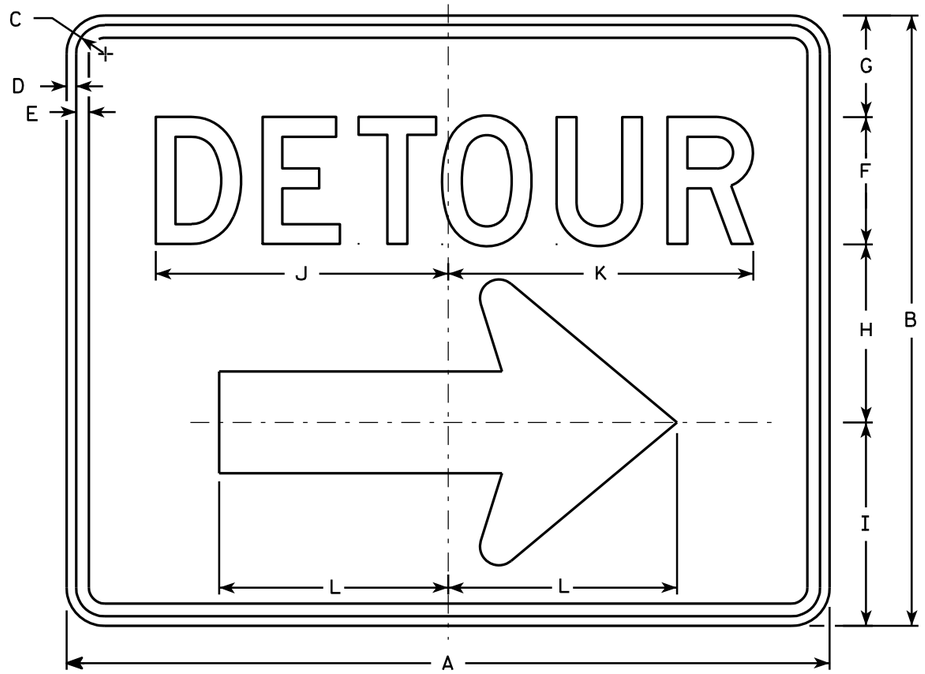
STANDARD SIGN
M4-8A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/9/11 PLATE NO. M4-8A.2

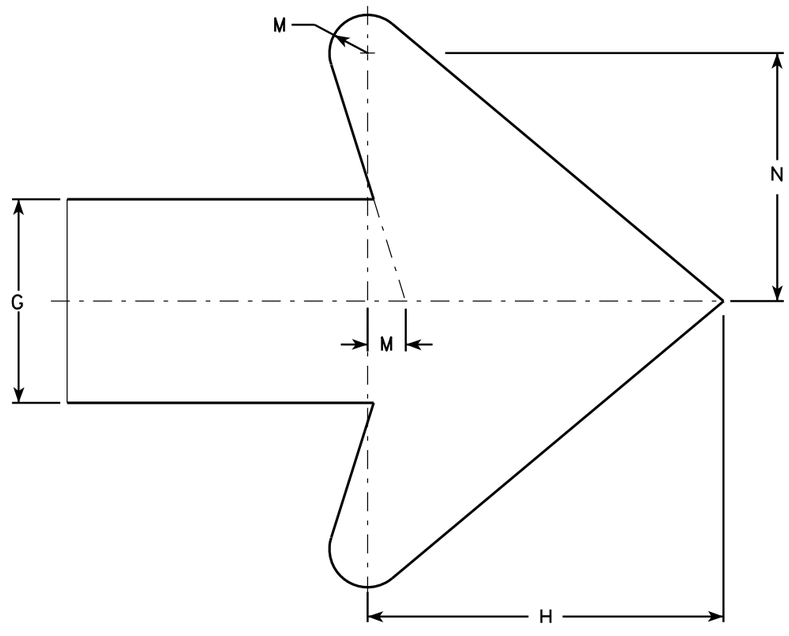
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 158	E



M4-9R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M4-9L is the same as M4-9R except the arrow is reversed.



Arrow Detail

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	30	24	1 1/8	3/8	1/2	5	4	7	8	11 1/2	12	9	3/4	4 7/8													5.00
3	30	24	1 1/8	3/8	1/2	5	4	7	8	11 1/2	12	9	3/4	4 7/8													5.00
4	48	36	1 3/8	1/2	5/8	8	6	10 1/2	11 5/8	20 5/8	20 1/2	13 1/4	1 1/8	6 7/8													12.0
5	48	36	1 3/8	1/2	5/8	8	6	10 1/2	11 5/8	20 5/8	20 1/2	13 1/4	1 1/8	6 7/8													12.0

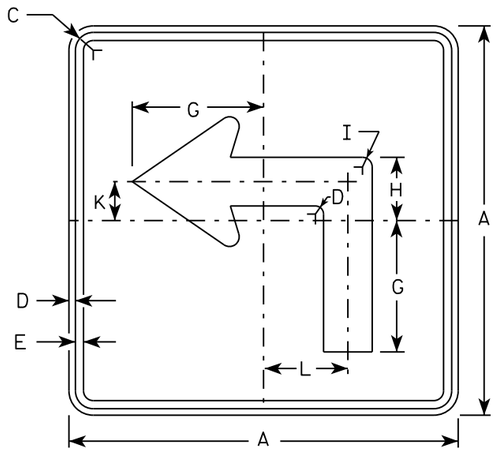
STANDARD SIGN
M4-9 R & L

WISCONSIN DEPT OF TRANSPORTATION

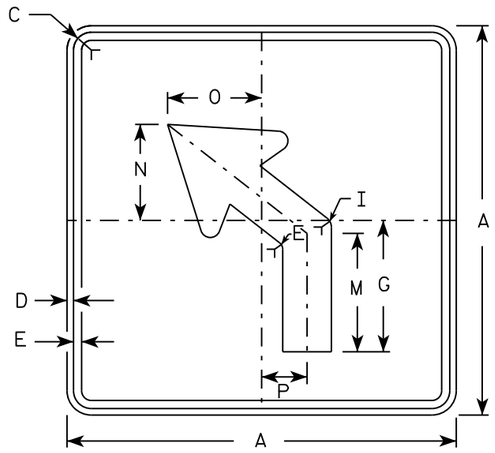
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/9/11 PLATE NO. M4-9R.4

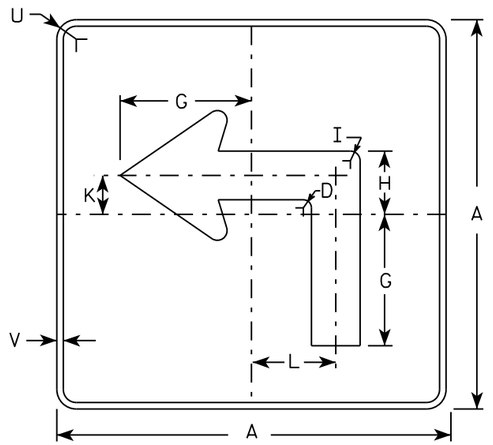
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 159 | E



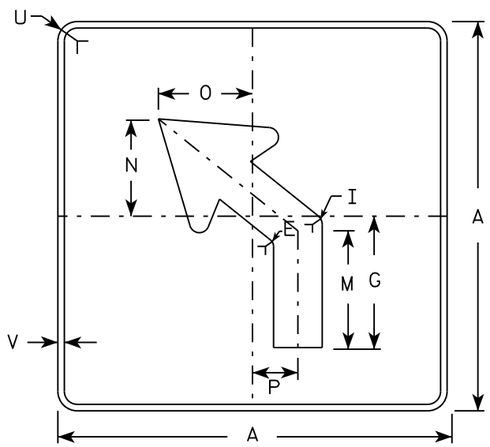
M5-1L
MM5-1L
MO5-1L
MP5-1L



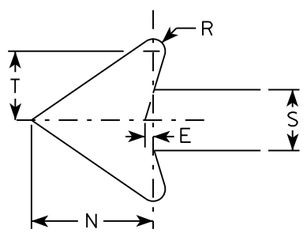
M5-2L
MM5-2L
MO5-2L
MP5-2L



MB5-1L
MK5-1L
MN5-1L
MR5-1L



MB5-2L
MK5-2L
MN5-2L
MR5-2L



NOTES

1. Signs are Type II - Type H reflective except as shown
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
   Message - Black
   MB5-1 and MB5-2 Background - Blue
   Message - White
   MK5-1 and MK5-2 Background - Green
   Message - White
   MM5-1 and MM5-2 Background - White
   Message - Green
   MN5-1 and MN5-2 Background - Brown
   Message - White
   MO5-1 and MO5-2 Background - Orange - Type F Reflective
   Message - Black
   MP5-1 and MP5-2 Background - White - Type H Reflective
   Message - Blue
   MR5-1 and MR5-2 Background - Brown
   Message - Yellow
5. M5-1R same as M5-1L except arrow points right.
6. M5-2R same as M5-2L except arrow tilts right.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
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
3	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
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
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

STANDARD SIGN
M5-1 & M5-2

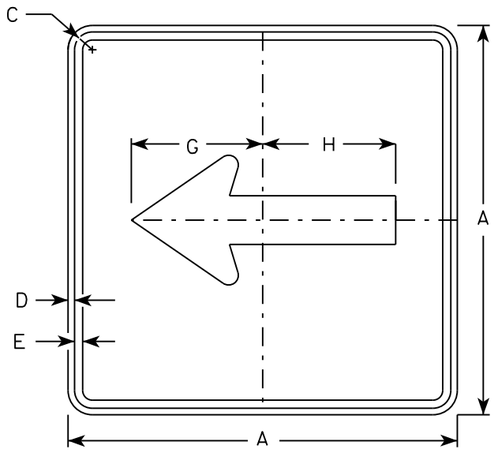
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

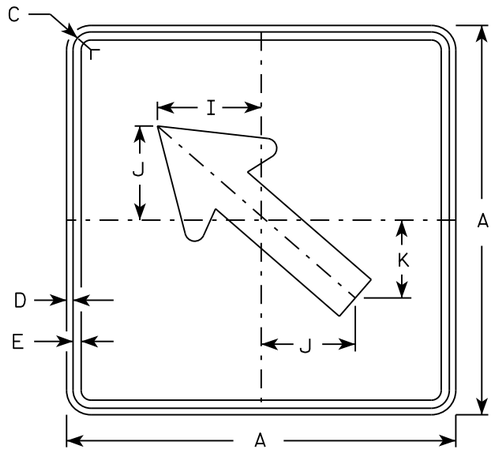
DATE 10/15/15 PLATE NO. M5-1.13

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M51.DGN PLOT DATE : 01-DEC-2015 18:07 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



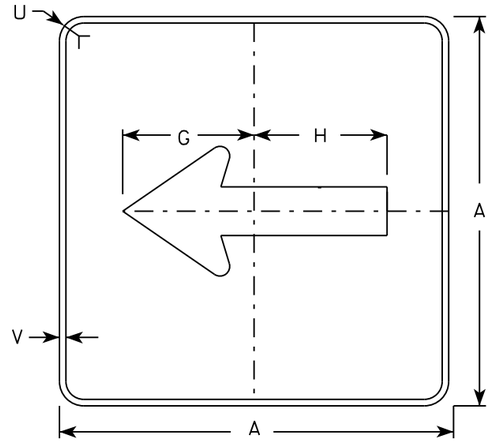
M6-1
MM6-1
MO6-1
MP6-1



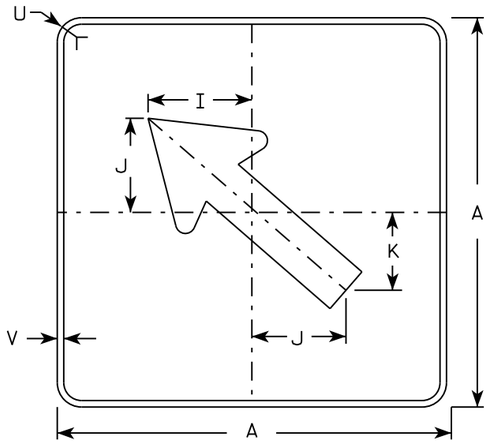
M6-2
MM6-2
MO6-2
MP6-2

NOTES

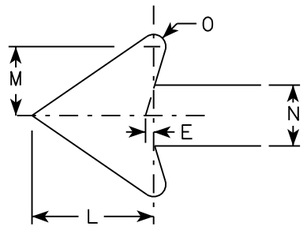
1. Signs are Type II - Type H except as Shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-1 and M6-2 Background - White
   Message - Black
   MB6-1 and MB6-2 Background - Blue
   Message - White
   MK6-1 and MK6-2 Background - Green
   Message - White
   MM6-1 and MM6-2 Background - White
   Message - Green
   MN6-1 and MN6-2 Background - Brown
   Message - White
   MO6-1 and MO6-2 Background - Orange - Type F Reflective
   Message - Black
   MP6-1 and MP6-2 Background - White
   Message - Blue
   MR6-1 and MR6-2 Background - Brown
   Message - Yellow



MB6-1
MK6-1
MN6-1
MR6-1



MB6-2
MK6-2
MN6-2
MR6-2



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	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
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
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
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

STANDARD SIGN
M6-1 & M6-2
SERIES

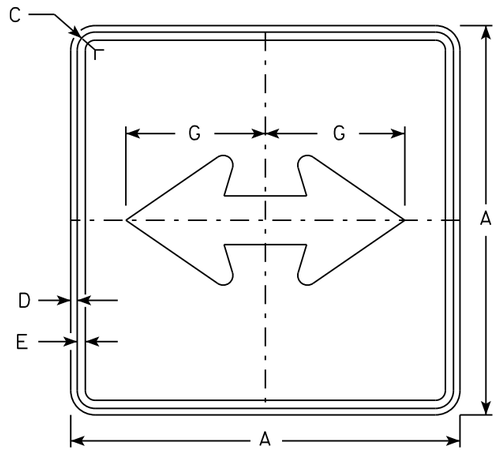
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

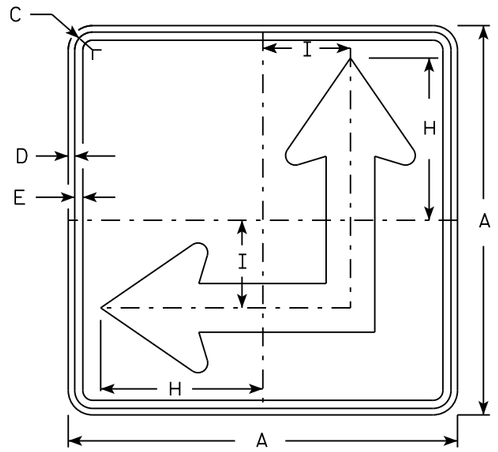
DATE 10/15/15 PLATE 161 M6-1.15

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M61.DGN PLOT DATE : 01-DEC-2015 17:57 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



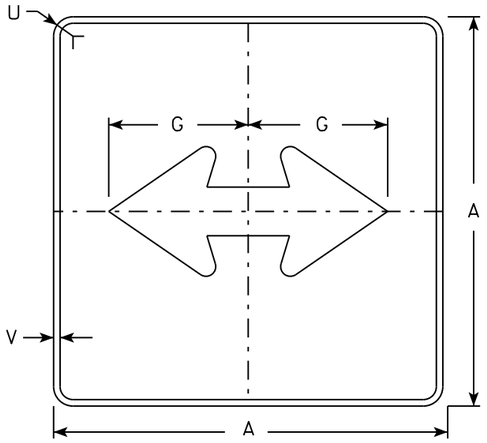
M6-4
MM6-4
MO6-4
MP6-4



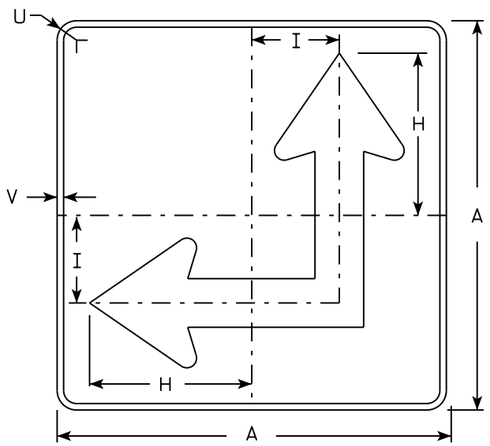
M6-6
MM6-6
MO6-6
MP6-6

NOTES

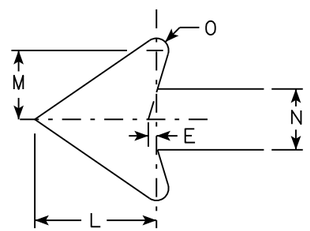
1. Signs are Type II - Type H except as Shown
2. Color:
   Background - See Note 4
   Message - See Note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-4 and M6-6 Background - White
   Message - Black
   MB6-4 and MB6-6 Background - Blue
   Message - White
   MK6-4 and MK6-6 Background - Green
   Message - White
   MM6-4 and MM6-6 Background - White
   Message - Green
   MN6-4 and MN6-6 Background - Brown
   Message - White
   MO6-4 and MO6-6 Background - Orange - Type F Reflective
   Message - Black
   MP6-4 and MP6-6 Background - White
   Message - Blue
   MR6-4 and MR6-6 Background - Brown
   Message - Yellow
5. M6-6R same as M6-6L except arrow points ahead and right.



MB6-4
MK6-4
MN6-4
MR6-4



MB6-6
MK6-6
MN6-6
MR6-6



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21		1 1/8	3/8	3/8		7 1/2	8 3/4	4 1/4			5 1/4	3	2 5/8	1/2						1 1/2	1/2					3.06
3	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25
4	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25
5	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25

STANDARD SIGN
M6-4 & M6-6
SERIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

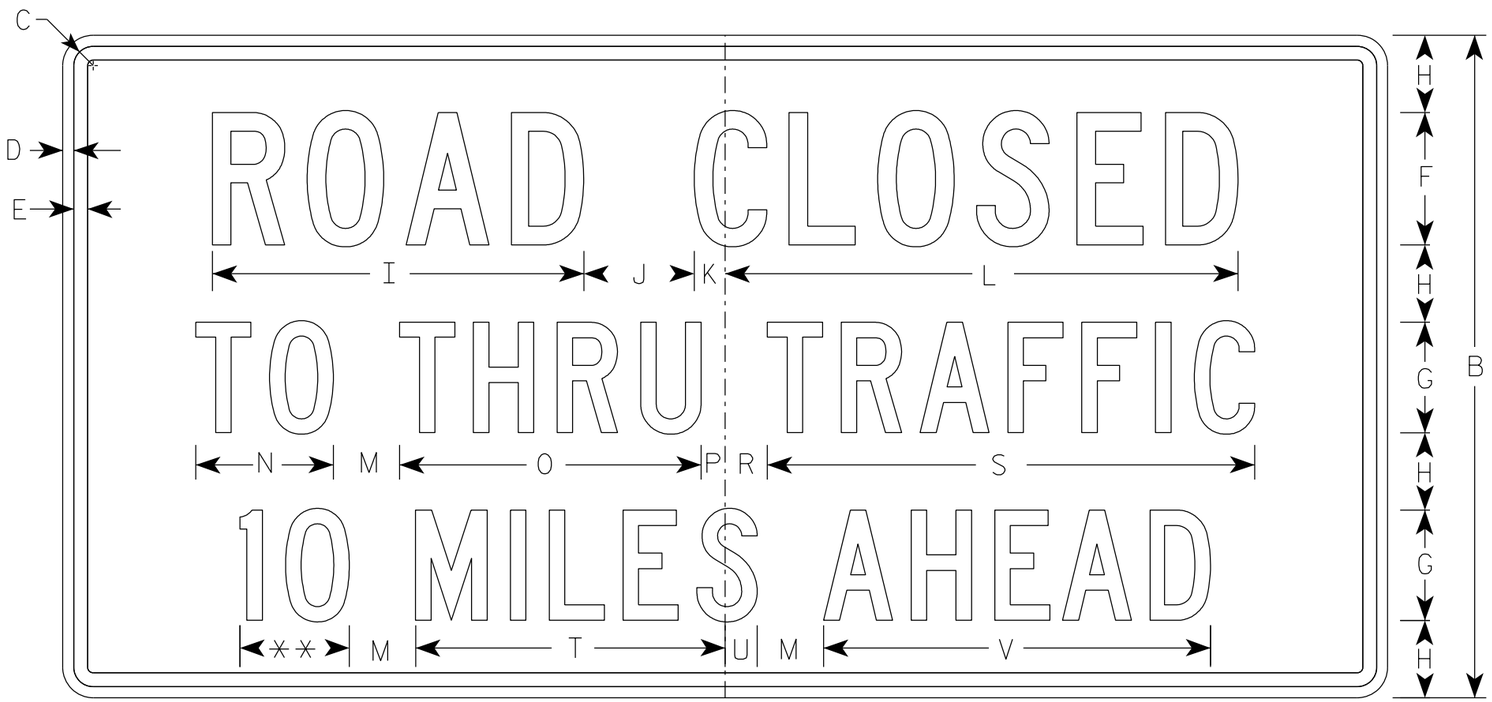
DATE 10/15/15 PLATE 162 M6-4.10

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M64.DGN PLOT DATE : 01-DEC-2015 17:58 PLOT BY : $$ platuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000

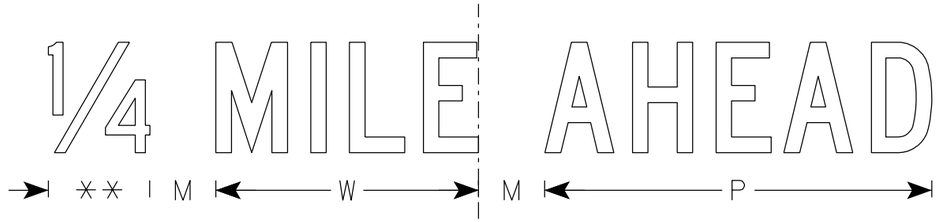
NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals to nearest quarter mile and optically adjust spacing to achieve proper balance.



R11-3

** See Note 5



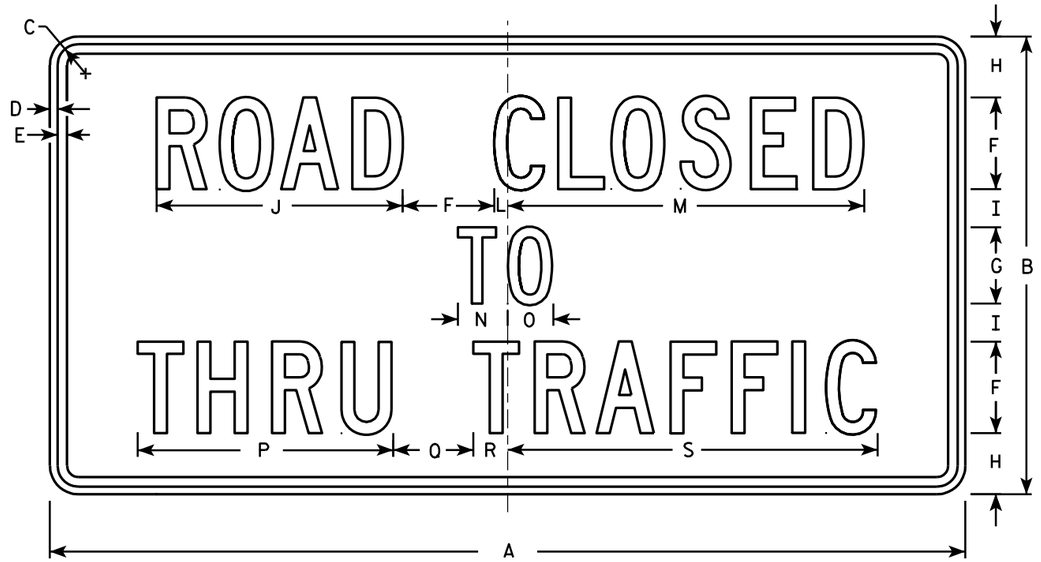
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	18	1 1/4	3/8	3/8	4	3	2	11 1/4	3	1 1/8	15 3/8	2	3 3/4	8 1/4	5/8		1 3/8	13 1/4	8 3/8	7/8	10 1/2	7 1/8				4.5
2S	60	30	1 3/8	1/2	5/8	6	5	3 1/2	16 7/8	5	1 3/8	23 1/4	3	6 1/4	13 5/8	1 1/8		1 7/8	22 1/8	14	1 1/2	17 1/2	11 7/8				12.5
2M	60	30	1 3/8	1/2	5/8	6	5	3 1/2	16 7/8	5	1 3/8	23 1/4	3	6 1/4	13 5/8	1 1/8		1 7/8	22 1/8	14	1 1/2	17 1/2	11 7/8				12.5
3																											
4																											
5																											

STANDARD SIGN
R11-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer
DATE 6/14/2021 PLATE NO. R11-3.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 163	E



R11-4

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	60	30	1 3/8	1/2	5/8	6	5	4	2 1/2	16 1/8		7/8	23 3/8	3 1/4	3	16 3/4	5 1/4	2 1/4	24 1/4								12.5
2M	60	30	1 3/8	1/2	5/8	6	5	4	2 1/2	16 1/8		7/8	23 3/8	3 1/4	3	16 3/4	5 1/4	2 1/4	24 1/4								12.5
3																											
4																											
5																											

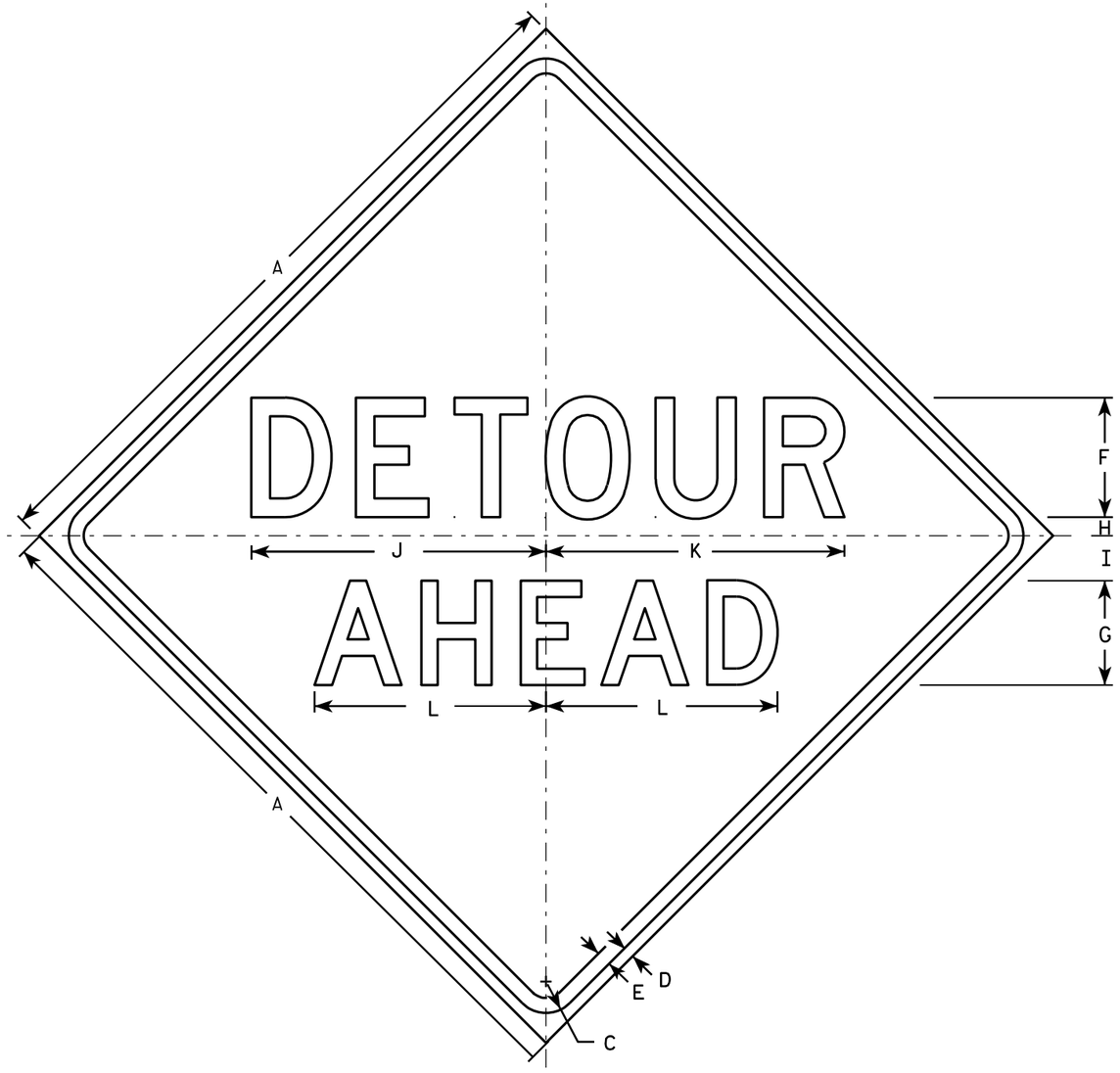
STANDARD SIGN
R11 - 4

WISCONSIN DEPT OF TRANSPORTATION

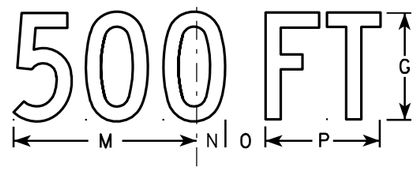
APPROVED Matthew R Rauch for State Traffic Engineer

DATE 4/1/11 PLATE NO. R11-4.3

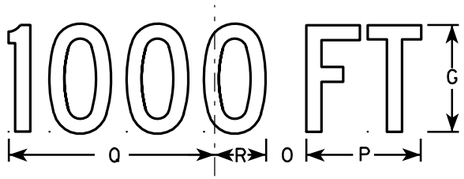
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 164 | E



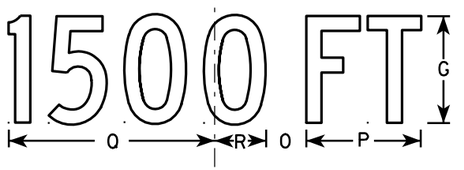
W20-2A



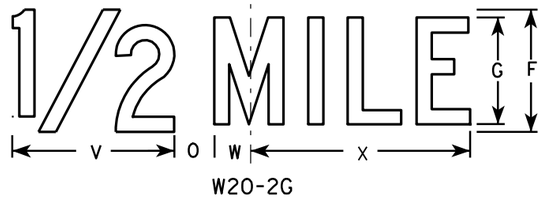
W20-2D



W20-2C



W20-2B



W20-2G



W20-2F

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - See note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Line 1 is Series D.
   Line 2 is Series D for AHEAD and Series C for all other distances.

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	36		1 5/8	5/8	3/4	6	5	1	2 1/4	14 3/4	15	11 5/8	9	1 3/8	1 7/8	5 5/8	10 1/8	2 1/2	1 1/8	4 1/2	3 1/2	8	1 3/4	10 3/4			9.0
2S	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
2M	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
3	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
4	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
5	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0

STANDARD SIGN
W20-2A,B,C,D,F & G

WISCONSIN DEPT OF TRANSPORTATION

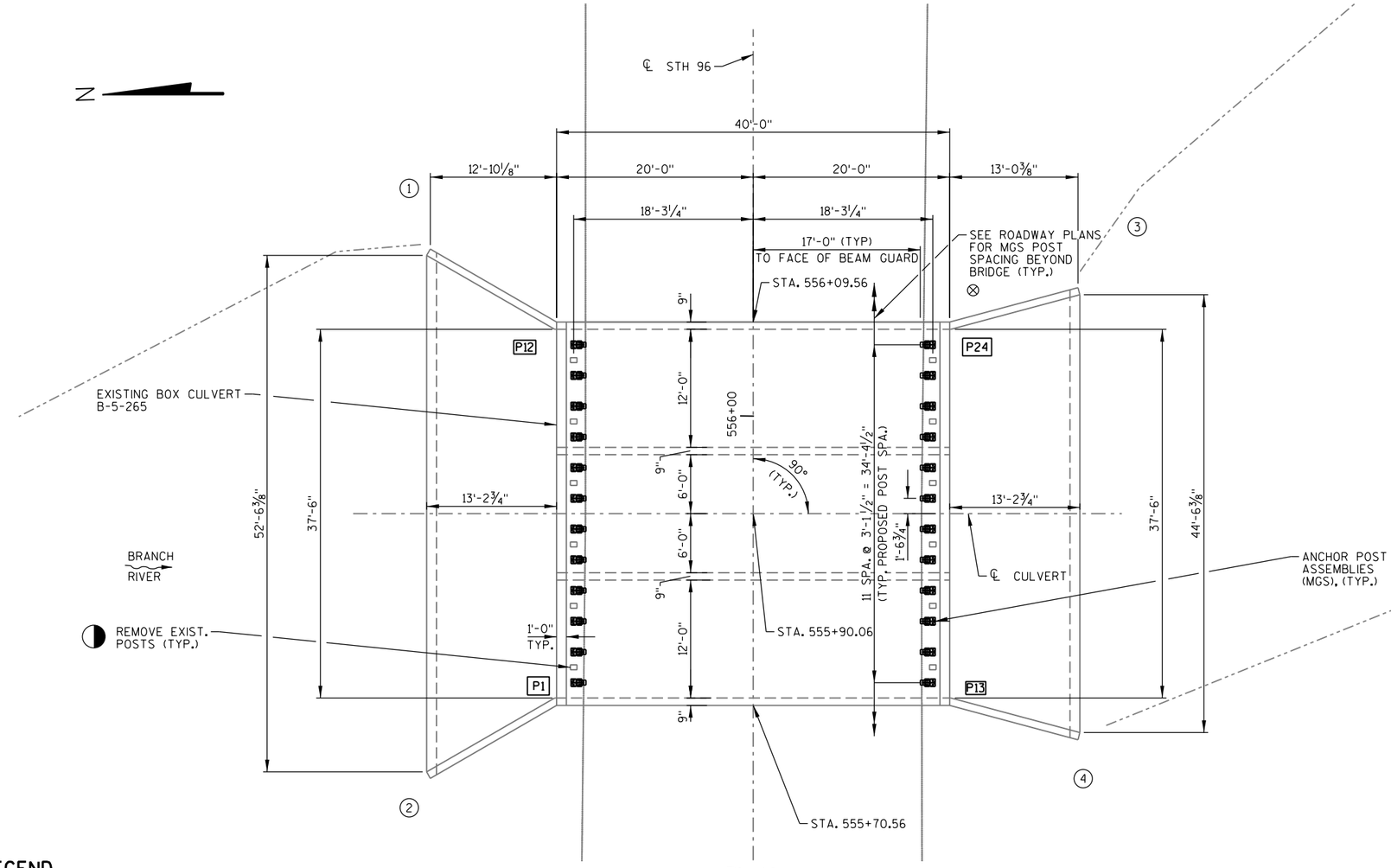
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-2.6

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 165	E

STATE PROJECT NUMBER

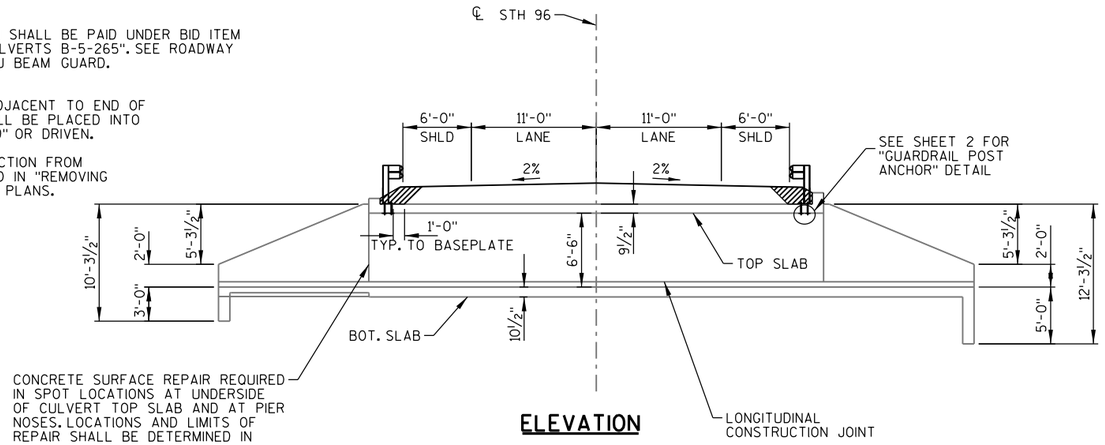
4075-39-71



PLAN

LEGEND

- ◯ - INDICATES WING NUMBER
- ▭ - INDICATES POST NUMBER
- ▨ - LIMITS OF EXCAVATION. EXCAVATION SHALL BE PAID UNDER BID ITEM "EXCAVATION FOR STRUCTURES CULVERTS B-5-265". SEE ROADWAY PLANS FOR FINISHED SECTION THRU BEAM GUARD.
- ⊗ - THE FIRST (2) GUARDRAIL POSTS ADJACENT TO END OF STRUCTURE AT EACH CORNER SHALL BE PLACED INTO PRE-DRILLED HOLES, NOT "PUNCHED" OR DRIVEN.
- ◑ - REMOVAL OF POSTS AND DISCONNECTION FROM EXISTING STRUCTURE ARE INCLUDED IN "REMOVING GUARDRAIL" BID ITEM ON ROADWAY PLANS.



ELEVATION

DESIGN DATA

TRAFFIC DATA: ◨ TAKEN FROM HSI, 09/01/2021

STH 96:
A.A.D.T. (2022) = 1,520
A.A.D.T. (2042) = 1,820

LIVE LOAD:
DESIGN LOADING — HS20
INVENTORY RATING — HS20
OPERATIONAL RATING — HS33
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV) — 190 KIPS

MATERIAL PROPERTIES:
CONCRETE MASONRY - CONCRETE SURFACE REPAIR — f'c = 4,000 P.S.I.

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS. CONTRACTOR SHALL COMPLETE ADJUSTMENTS TO POST HEIGHT "H" BASED ON FIELD CONDITIONS.

DETAILS SHOWN FOR POSTS, PLATES, ANCHORAGE SYSTEM AND INSTALLATION, BLOCKS, AND GUARD RAIL ARE NOT PART OF THE STRUCTURE CONTRACT, BUT ARE BID PER THE ROADWAY DESIGN PLANS.

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

CUT BOTTOM OF POST SO THAT POST WILL BE VERTICAL WHEN POST ASSEMBLY IS PLACED ON TOP OF THE CULVERT. ALONG THE ROADWAY THE POST WILL BE NORMAL TO GRADE LINE. HEX BOLTS AND THREADED RODS ARE TO BE PLACED PERPENDICULAR TO THE BASE PLATE.

POST, BASE PLATE (AND BOTTOM PLATE IF USED), AND SHIMS SHALL BE GALVANIZED AFTER FABRICATION.

PRIOR TO GALVANIZING, ALL STEEL POSTS AND PLATES SHALL BE GIVEN A NO. 6 COMMERCIAL BLAST CLEANING BY SSPC SPECS.

ALL MATERIAL USED IN POSTS AND PLATES SHALL BE MADE FROM MATERIAL CONFORMING TO ASTM DESIGNATION A709 GRADE 50 OR 50S.

HEX BOLTS, THREADED RODS, HEX NUTS, AND WASHERS SHALL CONFORM TO THE REQUIREMENTS OF ASTM F1554 GRADE 36, AND SHALL BE GALVANIZED. RODS ARE TO BE FULLY THREADED AND BOLTS TO BE THREADED 3". CHAMFER TOP OF BOLTS AND RODS BEFORE THREADING.

STEEL SHIMS MAY BE USED BETWEEN PLATES AND SLAB WHERE REQUIRED FOR ALIGNMENT.

THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE NOT SHOWN.

LIST OF DRAWINGS

1. GENERAL PLAN
2. GUARDRAIL DETAILS AND QUANTITIES

WISCONSIN
KYLE H. BUSCH
E-46187
MADISON
WI
PROFESSIONAL ENGINEER
9/8/2021

CONSULTANT DESIGN CONTACT:
KYLE BUSCH
(608) 216-2063

BRIDGE OFFICE CONTACT:
AARON BONK
(608) 261-0261

NO.	DATE	REVISION	BY

MSA
ENGINEERING | ARCHITECTURE | SURVEYING
FUNDING | PLANNING | ENVIRONMENTAL
1702 PANKRATZ ST., MADISON WI 53704
(608) 242-7779 www.msa-ps.com
© MSA Professional Services, Inc.

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED SDR 11/15/21
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE B-5-265

STH 96 OVER BRANCH RIVER

COUNTY	TOWN/~~CITY/VILLAGE~~
BROWN	MORRISON

DESIGN SPEC.
REHABILITATION N/A

DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
KHB	JFM	TES	KHB

GENERAL PLAN

SHEET 1 OF 2
166

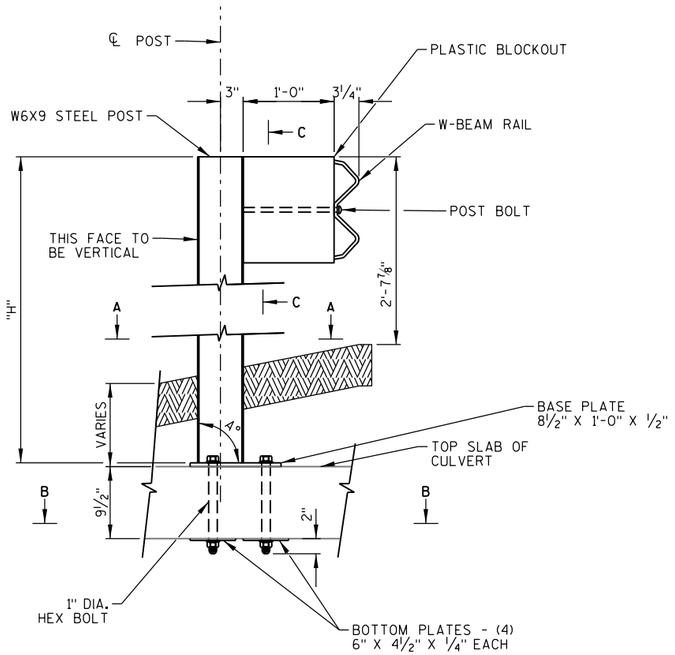
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DATE= 9/8/2021

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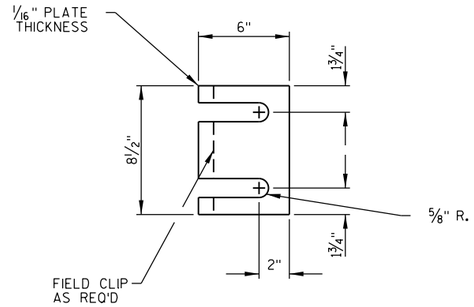
STATE PROJECT NUMBER

4075-39-71



GUARDRAIL POST ANCHOR

(ELEVATION VIEW)



STEEL SHIM DETAIL

4 PER POST

TOTAL ESTIMATED QUANTITIES

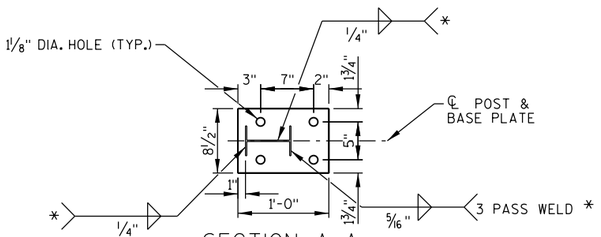
	ITEM NUMBER	BID ITEM	UNIT	TOTAL
	206.2000.01	EXCAVATION FOR STRUCTURES CULVERTS B-5-265	LS	1
	210.2500	BACKFILL STRUCTURE TYPE B	TON	25
*	509.1500	CONCRETE SURFACE REPAIR	SF	40

*QUANTITY OF SURFACE REPAIR IS AN ESTIMATE. LOCATIONS AND LIMITS OF REPAIR SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER.

POST HEIGHT ⊕

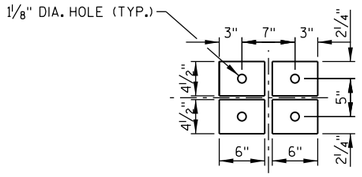
POST NO.	"H"	A°	POST NO.	"H"	A°
P1	4' - 4"	90° 17'	P13	4' - 6 ¼"	89° 43'
P2	4' - 4"	90° 17'	P14	4' - 6 ¼"	89° 43'
P3	4'- 4 ¼"	90° 17'	P15	4' - 6 ¼"	89° 43'
P4	4'- 4 ¼"	90° 17'	P16	4' - 6 ¼"	89° 43'
P5	4'- 4 ¼"	90° 17'	P17	4' - 6 ¼"	89° 43'
P6	4'- 4 ¼"	90° 17'	P18	4' - 6 ¼"	89° 43'
P7	4'- 4 ¼"	90° 17'	P19	4' - 6 ¼"	89° 43'
P8	4'- 4 ¼"	90° 17'	P20	4' - 6 ¼"	89° 43'
P9	4' - 4"	90° 17'	P21	4' - 6 ¼"	89° 43'
P10	4' - 4"	90° 17'	P22	4' - 6 ¼"	89° 43'
P11	4' - 4"	90° 17'	P23	4' - 6 ¼"	89° 43'
P12	4'- 3 ¾"	90° 17'	P24	4' - 6"	89° 43'

⊕ WITH APPROVAL FROM FIELD ENGINEER, CONTRACTOR IS ABLE TO ADJUST POST HEIGHT "H" AND ANGLE "A°", DUE TO DIFFERENCES BETWEEN ORICINAL PLANS AND EXISTING FIELD OPTIONS.



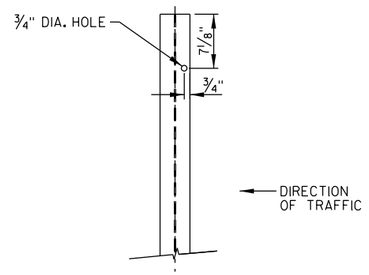
SECTION A-A

POST & BASE PLATE



SECTION B-B

(4)-BOTTOM PLATES



SECTION C-C

HOLE IN POST FLANGE ON APPROACHING TRAFFIC SIDE

* WELDING IS TO BE COMPLETED USING THE GAS-METAL ARC WELDING (GMAW) PROCESS WITH ER70S-3 WELDING WIRE AND ARGON-OXYGEN OR CO_2 COVER GAS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-5-265

DRAWN BY TES | PLANS CK'D. KHB

GUARDRAIL DETAILS AND QUANTITIES

SHEET 2 OF 2

167

8

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93473_B-5-265_01.dgn 9/8/2021 1:57:10 PM tsweeney

FILE= 00093494-C-22-230-01.DGN
DATE= 9/8/2021

STATION DIVISION 1	Real Station	Distance	AREA (SF)			Incremental Vol (CY) (Unadjusted)			Cumulative Vol (CY)		Mass Ordinate
			Cut	Salvaged/Unusable Pavement Material	Fill	Cut Note 1	Salvaged/Unusable Pavement Material Note 2	Fill Note 3	Cut 1.00 Note 1	Expanded Fill 1.25	Note 8
253+00	25300	0	2.9	0.00	0	0	0	0	0	0	0
253+25	25325	25	2	0.00	0	2	0	0	2	0	2
253+50	25350	25	2	0.00	0.13	2	0	0	4	0	4
253+75	25375	25	1	0.00	0.09	1	0	0	6	0	5
253+91	25391	16	4.27	0.00	0	2	0	0	7	0	7
254+16	25416	25	6.95	0.00	0	5	0	0	12	0	12
254+17	25417	1	6.28	0.00	0	0	0	0	12	0	12
254+41	25441	24	2.2	0.00	0.74	4	0	0	16	1	16
254+42	25442	1	1.95	0.00	1.38	0	0	0	16	1	16
254+67	25467	25	1.23	0.00	0	1	0	1	18	1	16
255+00	25500	33	0.8	0.00	0.5	1	0	0	19	2	17
255+50	25550	50	0.61	0.00	1.25	1	0	2	20	4	16
256+00	25600	50	0.25	0.00	3	1	0	4	21	9	12
256+50	25650	50	0.42	0.00	0.35	1	0	3	22	13	9
257+00	25700	50	0.47	0.00	7.14	1	0	7	23	21	1
257+50	25750	50	0.13	0.00	5.14	1	0	11	23	36	-12
258+00	25800	50	0.26	0.00	11.61	0	0	16	24	55	-31
258+50	25850	50	1.2	0.00	5.71	1	0	16	25	75	-50
259+00	25900	50	0.3	0.00	3.17	1	0	8	26	85	-59
259+50	25950	50	0.88	0.00	0.02	1	0	3	27	89	-62
260+00	26000	50	0.93	0.00	0	2	0	6	29	97	-68
260+59	26059	59	1.06	0.00	0.75	2	0	5	31	104	-72
260+84	26084	25	1.18	0.00	1.36	1	0	1	32	105	-73
261+09	26109	25	1	0.00	2.49	1	0	1	33	106	-73
261+50	26150	41	2.94	0.00	1.04	3	0	5	36	112	-76
262+00	26200	50	3.54	0.00	0	6	0	5	42	118	-76
262+50	26250	50	1.29	0.00	0	4	0	0	47	118	-72
263+10	26310	60	0.23	0.00	17.6	2	0	20	48	143	-95
263+35	26335	25	0.64	0.00	19.76	0	0	17	49	164	-116
263+60	26360	25	0.68	0.00	20.35	1	0	19	49	188	-138
264+00	26400	40	1.3	0.00	0.5	1	0	15	51	207	-156
264+50	26450	50	3.87	0.00	0	5	0	7	56	216	-160
						56	0	173			

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PROJECT NO: 4075-39-71 | HWY: STH 96 | COUNTY: BROWN | EARTHWORK | SHEET 168 | E

FILE NAME : P:\90S\93\00093473\CADD\SHEETSPLAN\090101-EW BORDER.DWG
LAYOUT NAME - 090101-ew

PLOT DATE : 4/6/2021 3:43 PM PLOT BY : KEVIN KLOCKZIEM PLOT NAME :

WISDOT/CADDS SHEET 49

West Side of Structure B-05-274

STATION DIVISION 2	Real Station	Distance	AREA (SF) Cut	AREA (SF) Salvaged/Unusable Pavement Material	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Salvaged/Unusable Pavement Material Note 2	Incremental Vol (CY) (Unadjusted) Fill Note 3	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.25	Mass Ordinate Note 8
291+50	29150	0	0.5	0.00	2.5	0	0	0	0	0	0
292+00	29200	50	6.98	0.00	2.92	7	0	5	7	6	1
292+50	29250	50	5.09	0.00	7.05	11	0	9	18	18	0
292+75	29275	25	2.09	0.00	11.78	3	0	9	21	29	-7
293+00	29300	25	1.92	0.00	8.62	2	0	9	23	40	-17
293+25	29325	25	2.73	0.00	9.64	2	0	9	26	51	-26
293+74	29374	49	0.38	0.00	13.62	3	0	21	28	77	-49
293+99	29399	25	0.41	0.00	9.68	0	0	11	29	91	-62
294+24	29424	25	0.97	0.00	12.63	1	0	10	29	104	-75
295+00	29500	76	0.55	0.00	26.41	2	0	55	31	172	-141
295+05	29505	5	0.55	0.00	26.41	0	0	5	32	179	-147
						32	0	143			

East Side of Structure B-05-274

STATION DIVISION 3	Real Station	Distance	AREA (SF) Cut	AREA (SF) Salvaged/Unusable Pavement Material	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Salvaged/Unusable Pavement Material Note 2	Incremental Vol (CY) (Unadjusted) Fill Note 3	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.25	Mass Ordinate Note 8
295+26	29526	0	0.55	0.00	26.41	0	0	0	0	0	0
295+50	29550	24	0	0.00	4.99	0	0	14	0	17	-17
295+79	29579	53	0.47	0.00	4.89	0	0	10	1	30	-29
296+04	29604	25	0.36	0.00	3.64	0	0	4	1	35	-33
296+29	29629	25	0.12	0.00	12.69	0	0	8	1	44	-43
296+54	29654	25	0.33	0.00	13.78	0	0	12	2	59	-58
296+79	29679	25	0.05	0.00	1.66	0	0	7	2	68	-67
297+04	29704	25	0.16	0.00	3.02	0	0	2	2	71	-69
297+50	29750	46	2.62	0.00	0	2	0	3	4	74	-70
298+00	29800	50	1.39	0.00	0	4	0	0	8	74	-66
						8	0	59			

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West Side of Structures B-05-265

STATION DIVISION 4	Real Station	Distance	AREA (SF) Cut	AREA (SF) Salvaged/Unusable Pavement Material	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Salvaged/Unusable Pavement Material Note 2	Incremental Vol (CY) (Unadjusted) Fill Note 3	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.25	Mass Ordinate Note 8
552+50	55250	0	2.62	0.00	8.55	0	0	0	0	0	0
553+00	55300	50	1.35	0.00	9.97	4	0	17	4	21	-18
553+60	55360	60	0.82	0.00	25.45	2	0	39	6	71	-65
553+85	55385	25	0.97	0.00	27.46	1	0	24	7	101	-94
554+10	55410	25	0.78	0.00	25.5	1	0	25	8	132	-124
554+20	55420	10	0.82	0.00	23.32	0	0	9	8	143	-135
554+45	55445	25	1.61	0.00	21.5	1	0	21	9	169	-160
554+70	55470	25	2.04	0.00	15.55	2	0	17	11	190	-179
555+00	55500	30	0.64	0.00	9.95	2	0	14	12	208	-196
555+50	55550	50	0.06	0.00	11.1	1	0	19	13	232	-219
555+70	55570	20	0.06	0.00	7.5	0	0	7	13	241	-228
						13	0	193			

Middle of Structures B-05-265 & C-05-0081

STATION DIVISION 5	Real Station	Distance	AREA (SF) Cut	AREA (SF) Salvaged/Unusable Pavement Material	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Salvaged/Unusable Pavement Material Note 2	Incremental Vol (CY) (Unadjusted) Fill Note 3	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.25	Mass Ordinate Note 8
556+00	55600	0	0.03	0.00	4.77	0	0	0	0	0	0
556+50	55650	50	0.23	0.00	8.14	0	0	12	0	15	-15
557+00	55700	50	0.09	0.00	3.97	0	0	11	1	29	-28
557+50	55750	50	0.52	0.00	2.13	1	0	6	1	36	-35
558+00	55800	50	0.4	0.00	2.1	1	0	4	2	41	-39
558+50	55850	50	0.51	0.00	1.98	1	0	4	3	46	-43
559+00	55900	50	0.72	0.00	3.26	1	0	5	4	52	-48
559+50	55950	50	0.93	0.00	4.54	2	0	7	5	61	-55
559+54	55954	4	0.77	0.00	4.37	0	0	1	2	42	-56
						6	0	49			

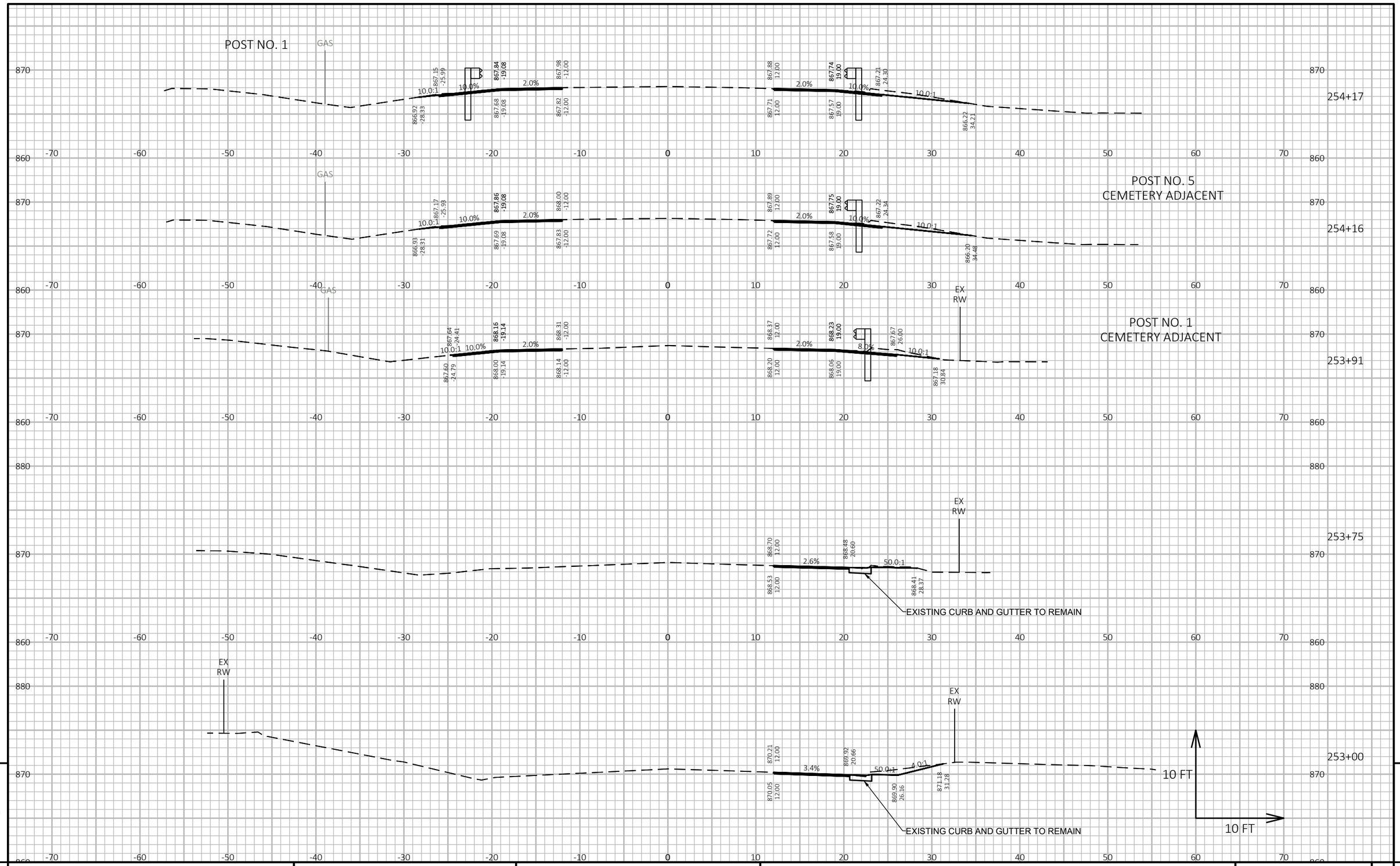
East Side of Structures C-05-0081

STATION DIVISION 6	Real Station	Distance	AREA (SF) Cut	AREA (SF) Salvaged/Unusable Pavement Material	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Salvaged/Unusable Pavement Material Note 2	Incremental Vol (CY) (Unadjusted) Fill Note 3	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.25	Mass Ordinate Note 8
560+00	56000	0	0.82	0.00	1.57	0	0	0	0	0	0
560+29	56029	29	1.53	0.00	32.15	1	0	18	1	22	-21
560+38	56038	10	1.78	0.00	33.54	1	0	12	2	37	-35
560+54	56054	15	2.77	0.00	29.37	1	0	18	3	60	-56
560+63	56063	10	3.47	0.00	25.34	1	0	10	4	72	-67
560+79	56079	15	5.41	0.00	1.54	3	0	8	7	81	-75
560+88	56088	10	8.62	0.00	0.5	3	0	0	9	82	-72
561+00	56100	12	2.76	0.00	0	2	0	0	12	82	-70
561+25	56125	25	6.13	0.00	0	4	0	0	16	82	-66
562+00	56200	75	3.78	0.00	0	14	0	0	30	82	-52
						30	0	65			

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PROJECT NO: 4075-39-71 | HWY: STH 96 | COUNTY: BROWN | EARTHWORK | SHEET 170 E



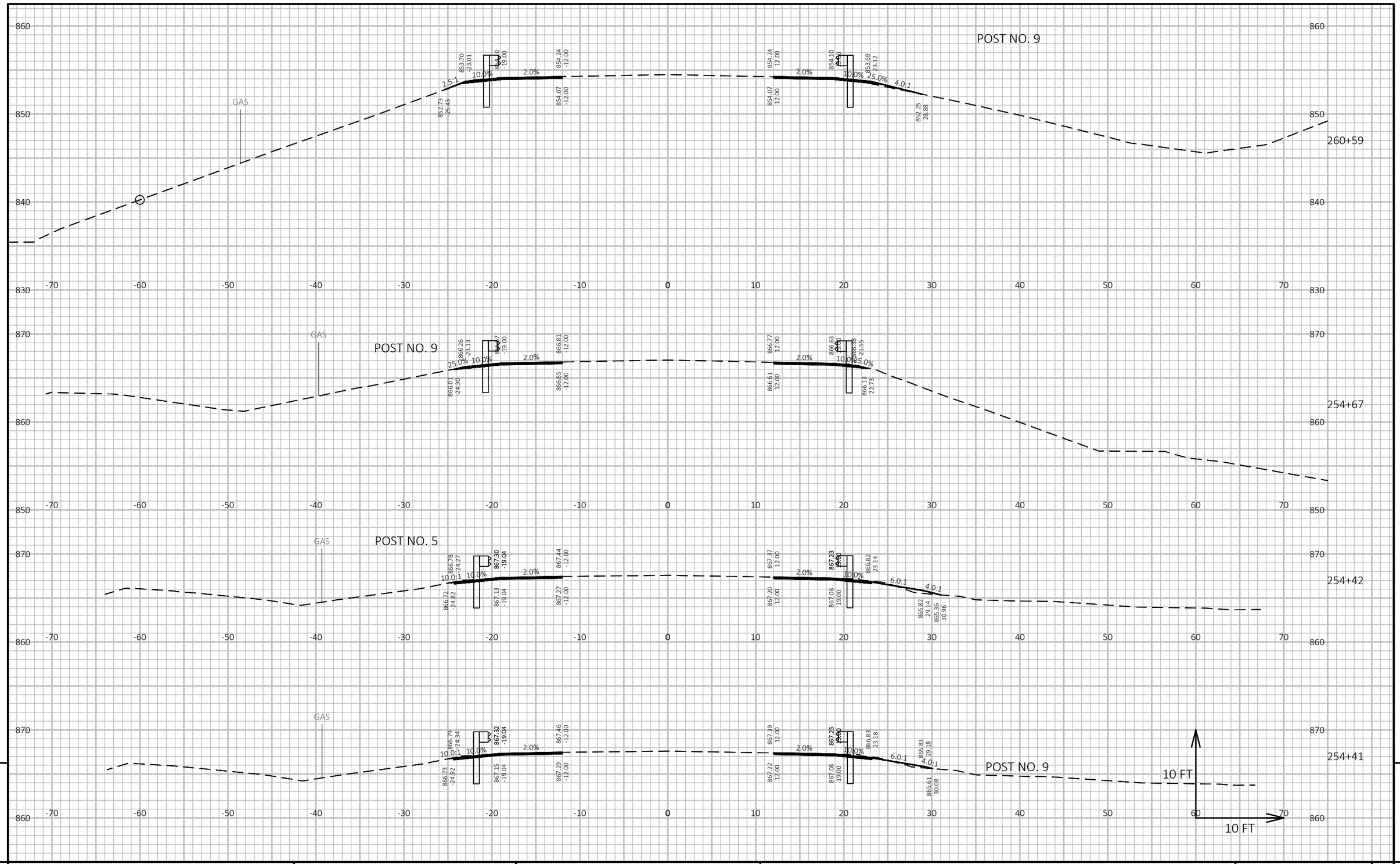
PROJECT NO: 4075-39-71	HWY: STH 96	COUNTY: BROWN	CROSS SECTIONS: STH 96	SHEET 171	E

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LAYOUT NAME - 090201-xs NEW

PLOT DATE : 10/28/2021 8:17 AM PLOT BY : KEVIN KLOCKZIEM PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

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PROJECT NO: 4075-39-71	HWY: STH 96	COUNTY: BROWN	CROSS SECTIONS: STH 96	SHEET 172	E

FILE NAME : P:\90S\93\00093473\CADD\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090202-xs NEW

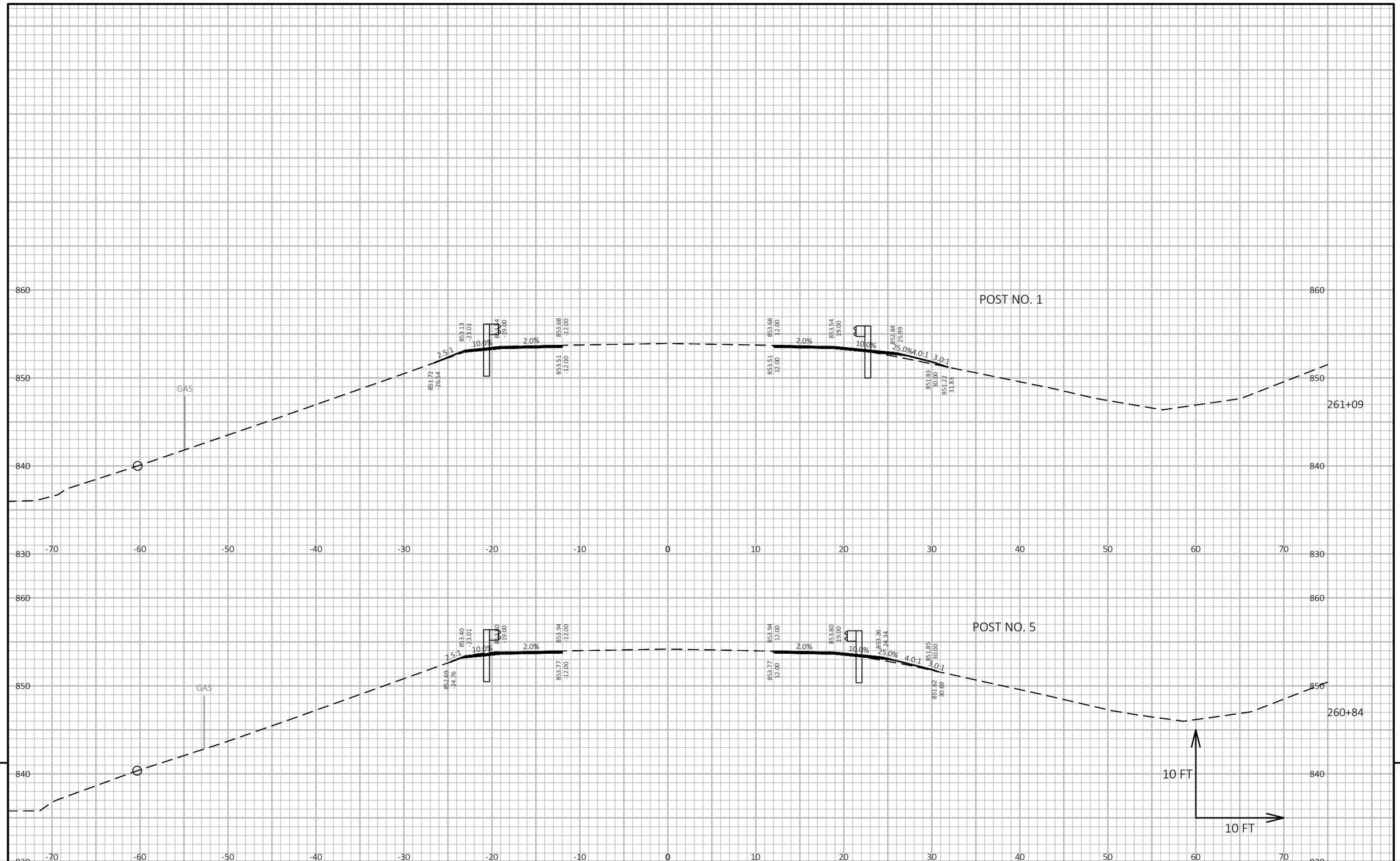
PLOT DATE : 10/28/2021 8:17 AM

PLOT BY : KEVIN KLOCKZIEM

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9 9

PROJECT NO: 4075-39-71	HWY: STH 96	COUNTY: BROWN	CROSS SECTIONS: STH 96	SHEET 173	E

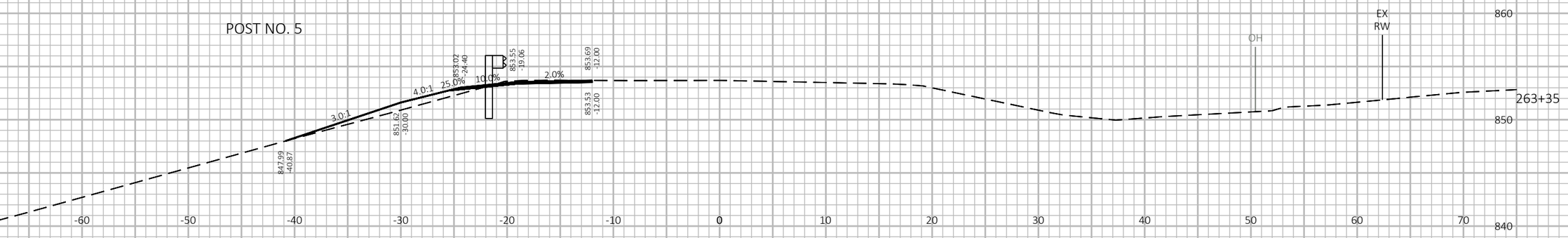
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PLOT DATE : 10/28/2021 8:17 AM PLOT BY : KEVIN KLOCKZIEM PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

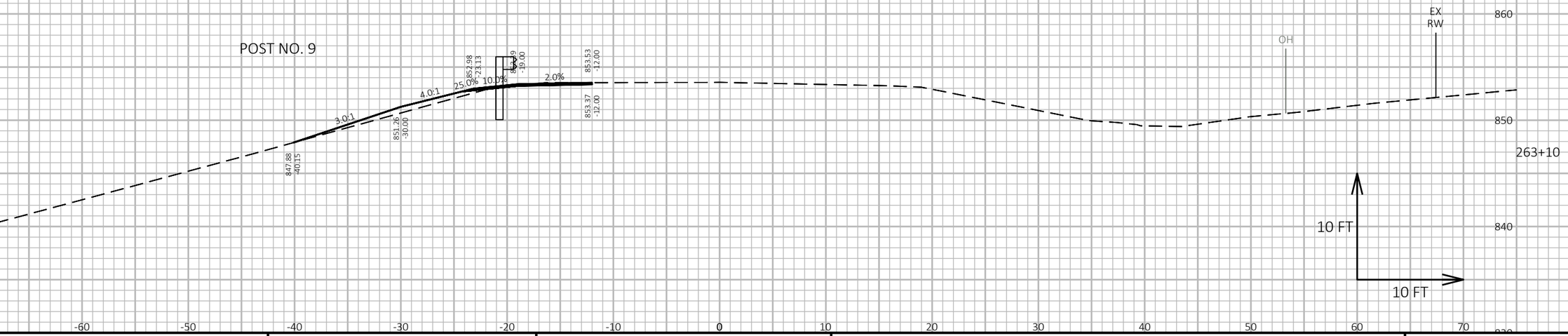
POST NO. 1



POST NO. 5



POST NO. 9



9

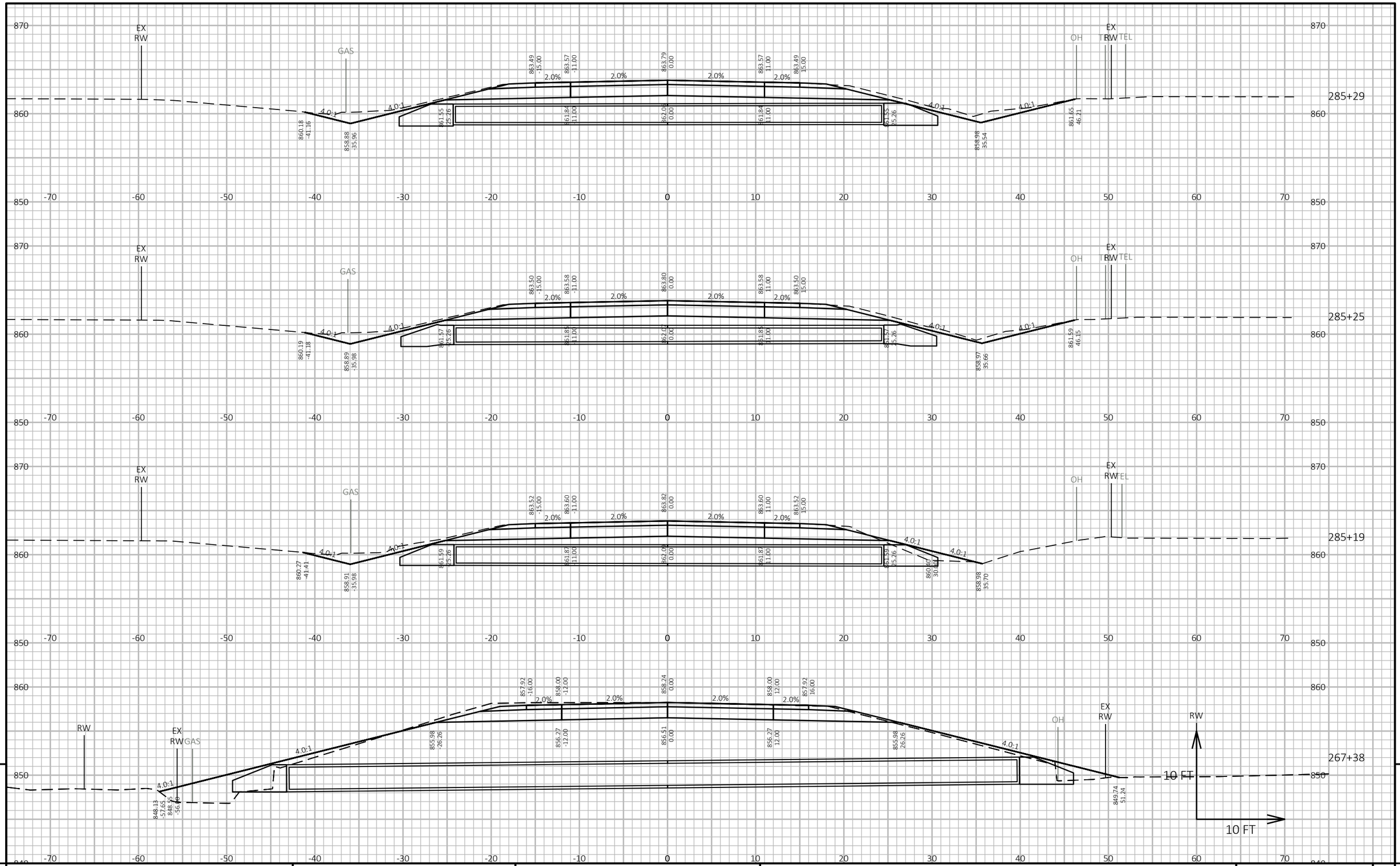
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PROJECT NO: 4075-39-71	HWY: STH 96	COUNTY: BROWN	CROSS SECTIONS: STH 96	SHEET 174	E

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WISDOT/CADDS SHEET 49



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PROJECT NO: 4075-39-71	HWY: STH 96	COUNTY: BROWN	CROSS SECTIONS: STH 96	SHEET 175	E

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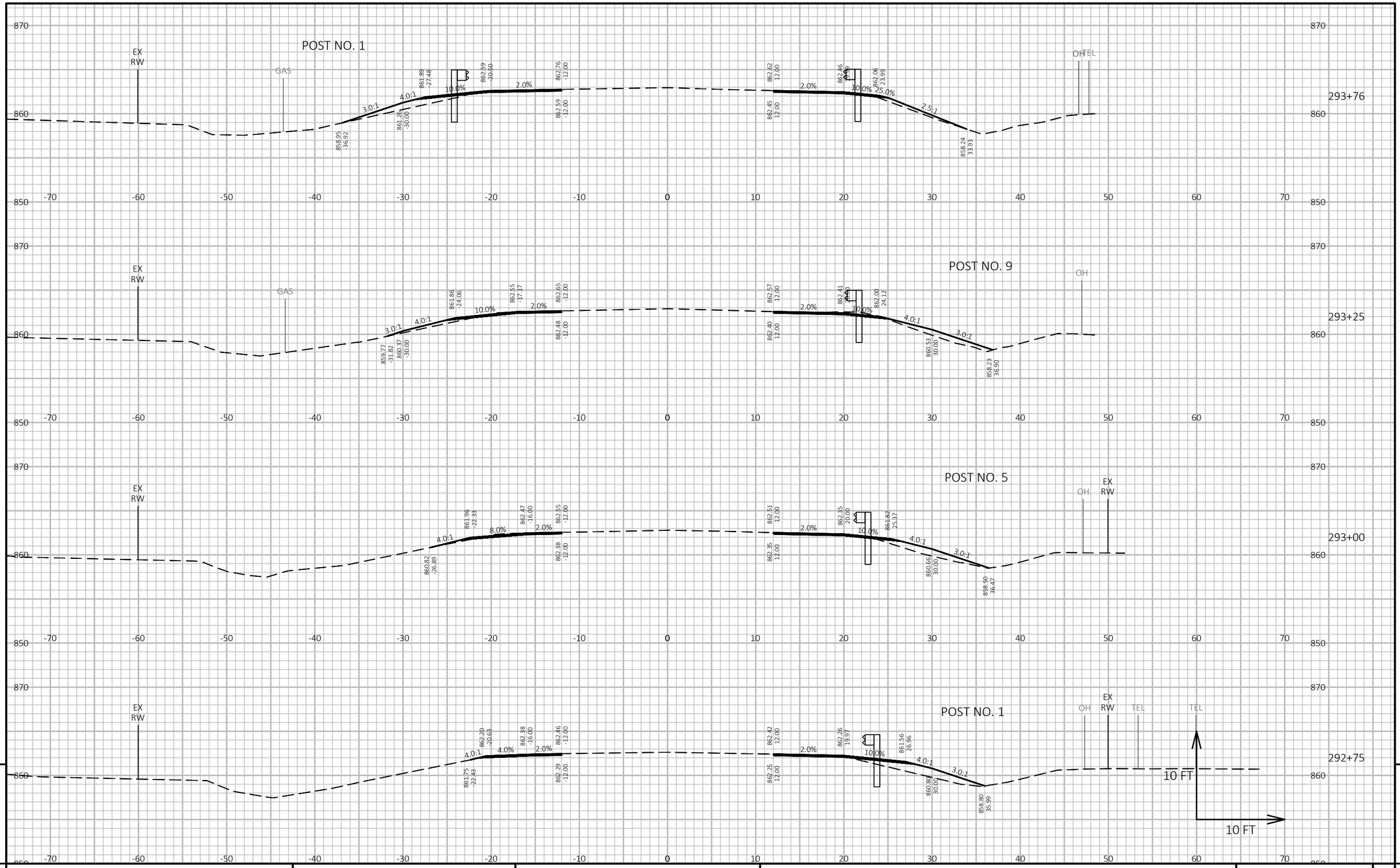
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PLOT BY : KEVIN KLOCKZIEM

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 4075-39-71	HWY: STH 96	COUNTY: BROWN	CROSS SECTIONS: STH 96	SHEET 176	E

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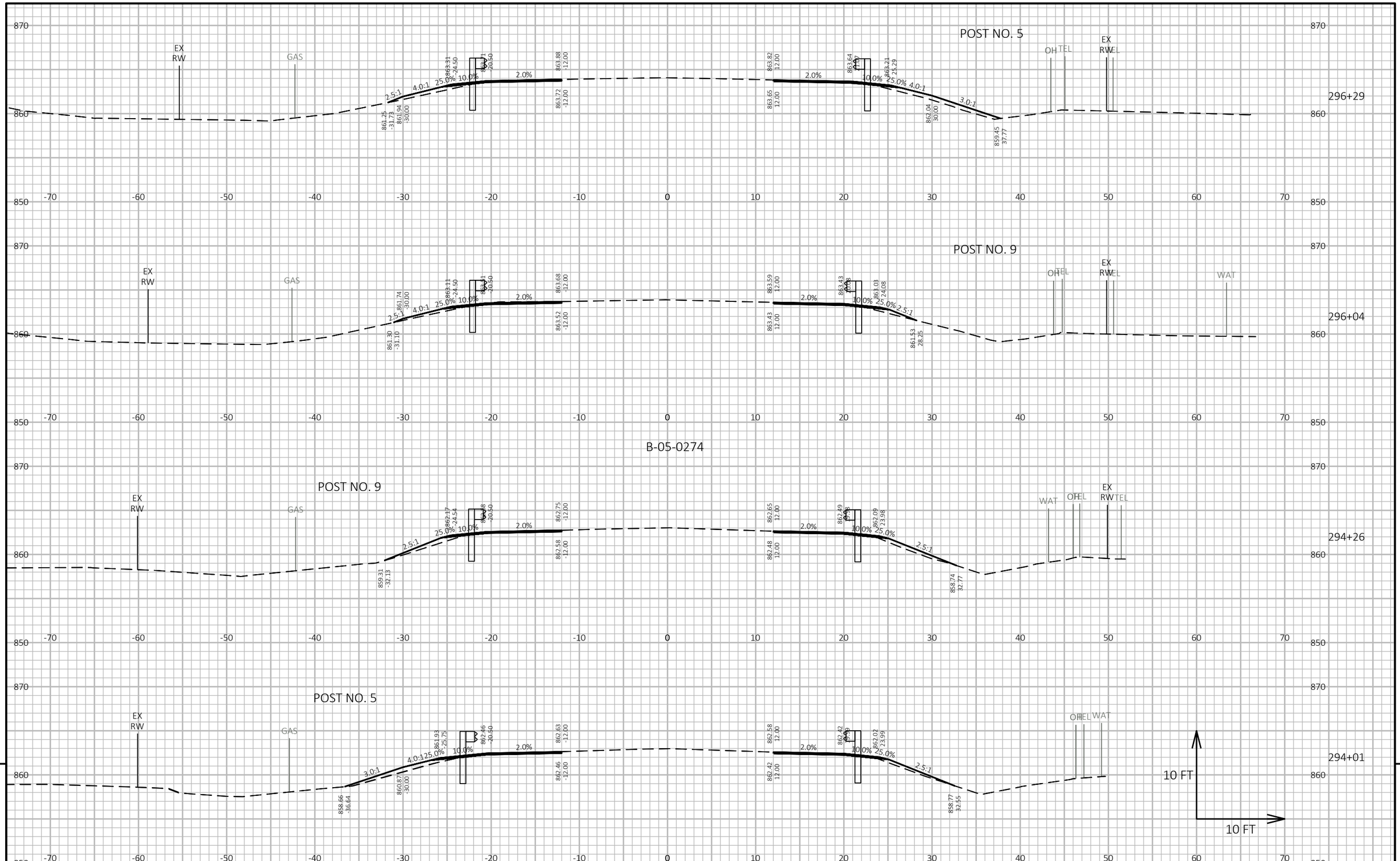
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PLOT BY : KEVIN KLOCKZIEM

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 4075-39-71	HWY: STH 96	COUNTY: BROWN	CROSS SECTIONS: STH 96	SHEET 177	E

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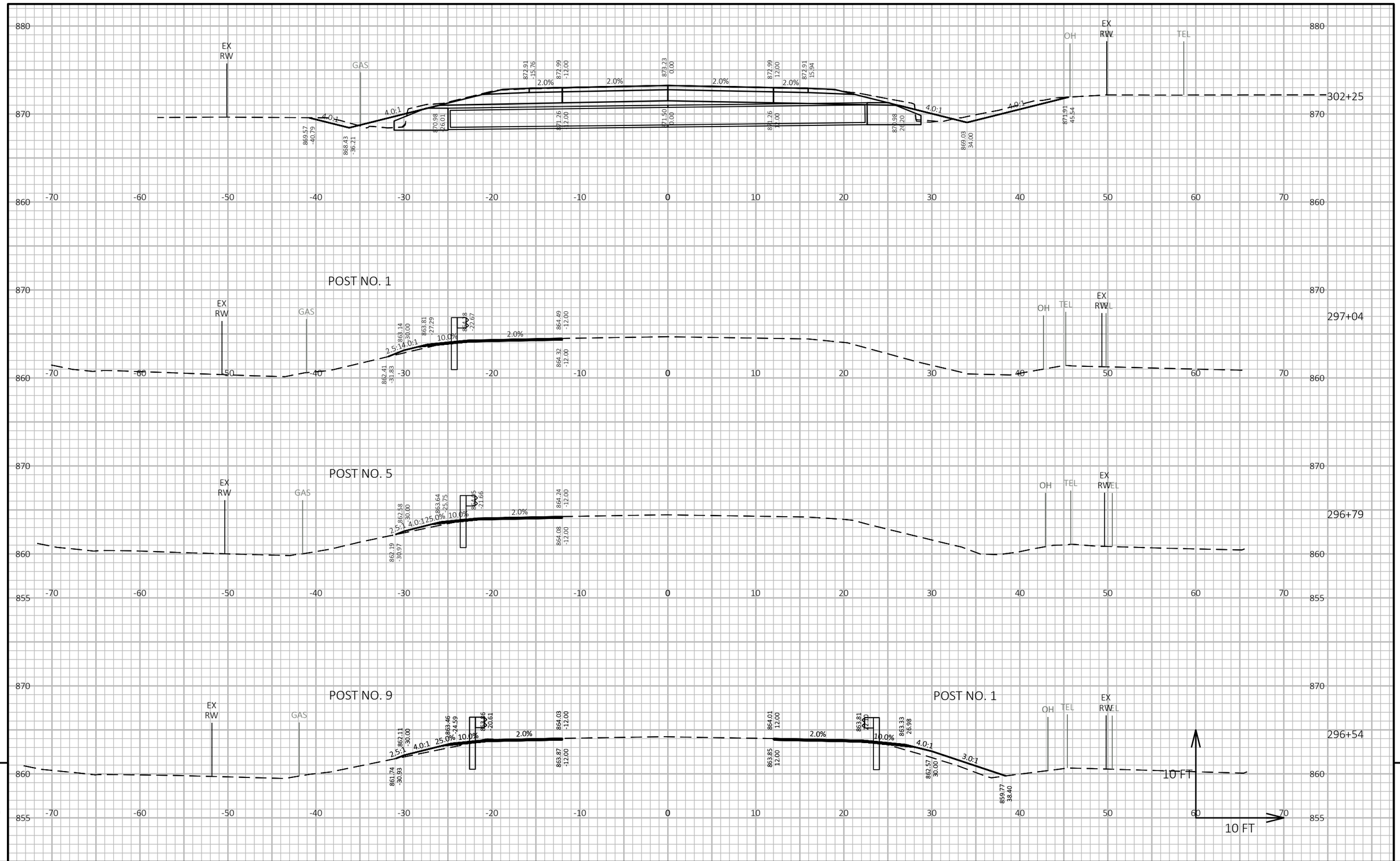
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PLOT BY : KEVIN KLOCKZIEM

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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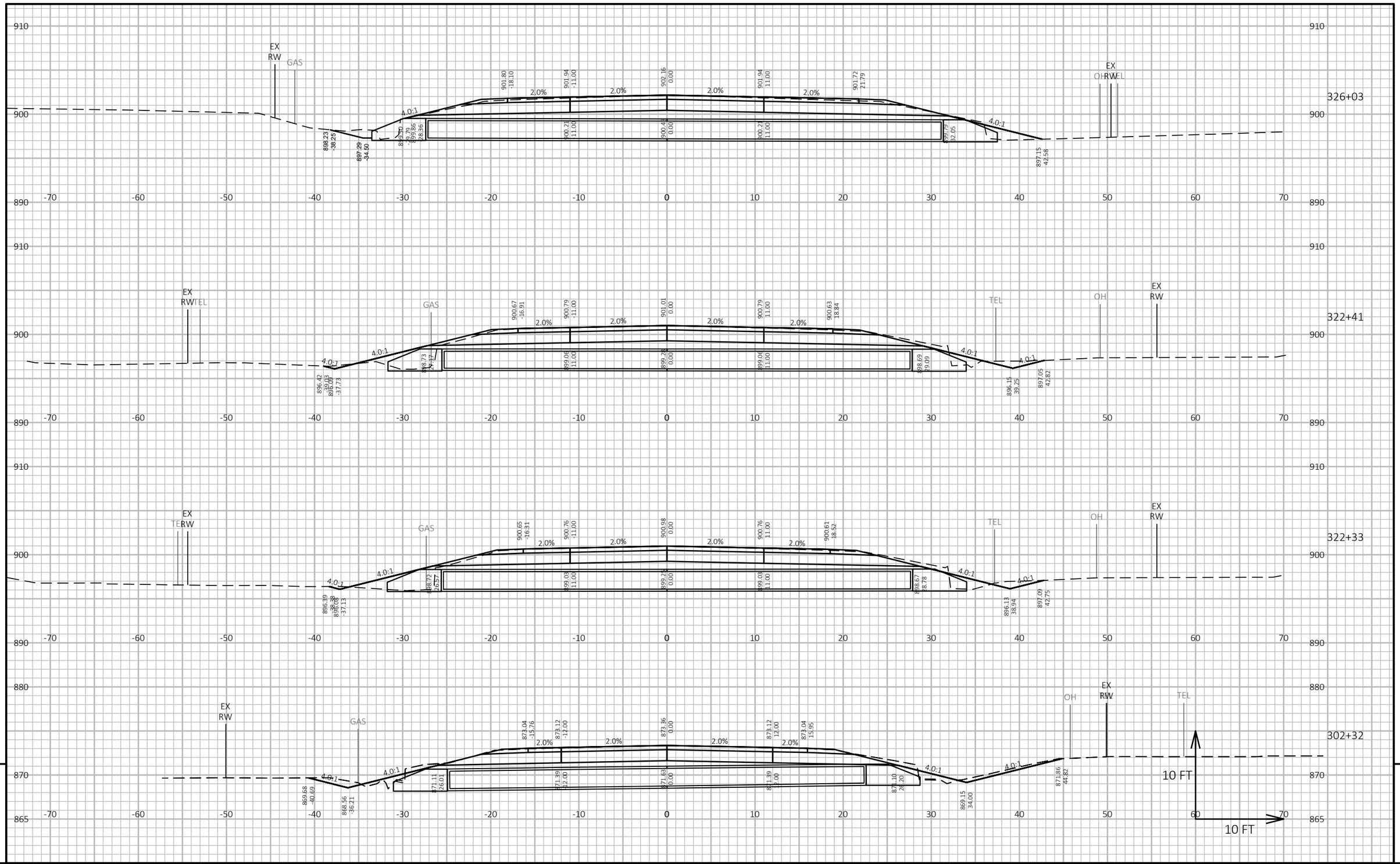
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WISDOT/CADDS SHEET 49

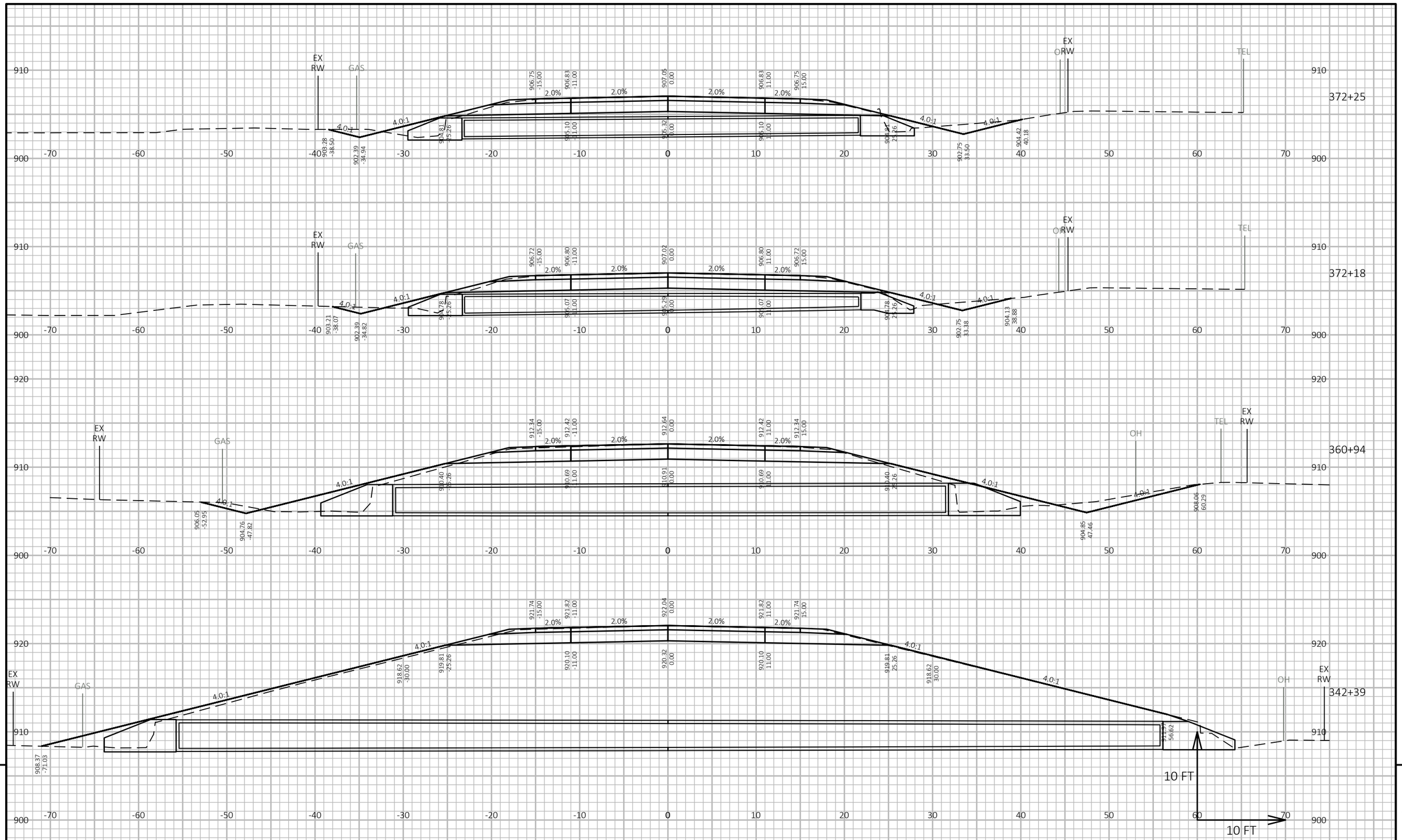


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PLOT DATE : 10/28/2021 8:18 AM PLOT BY : KEVIN KLOCKZIEM PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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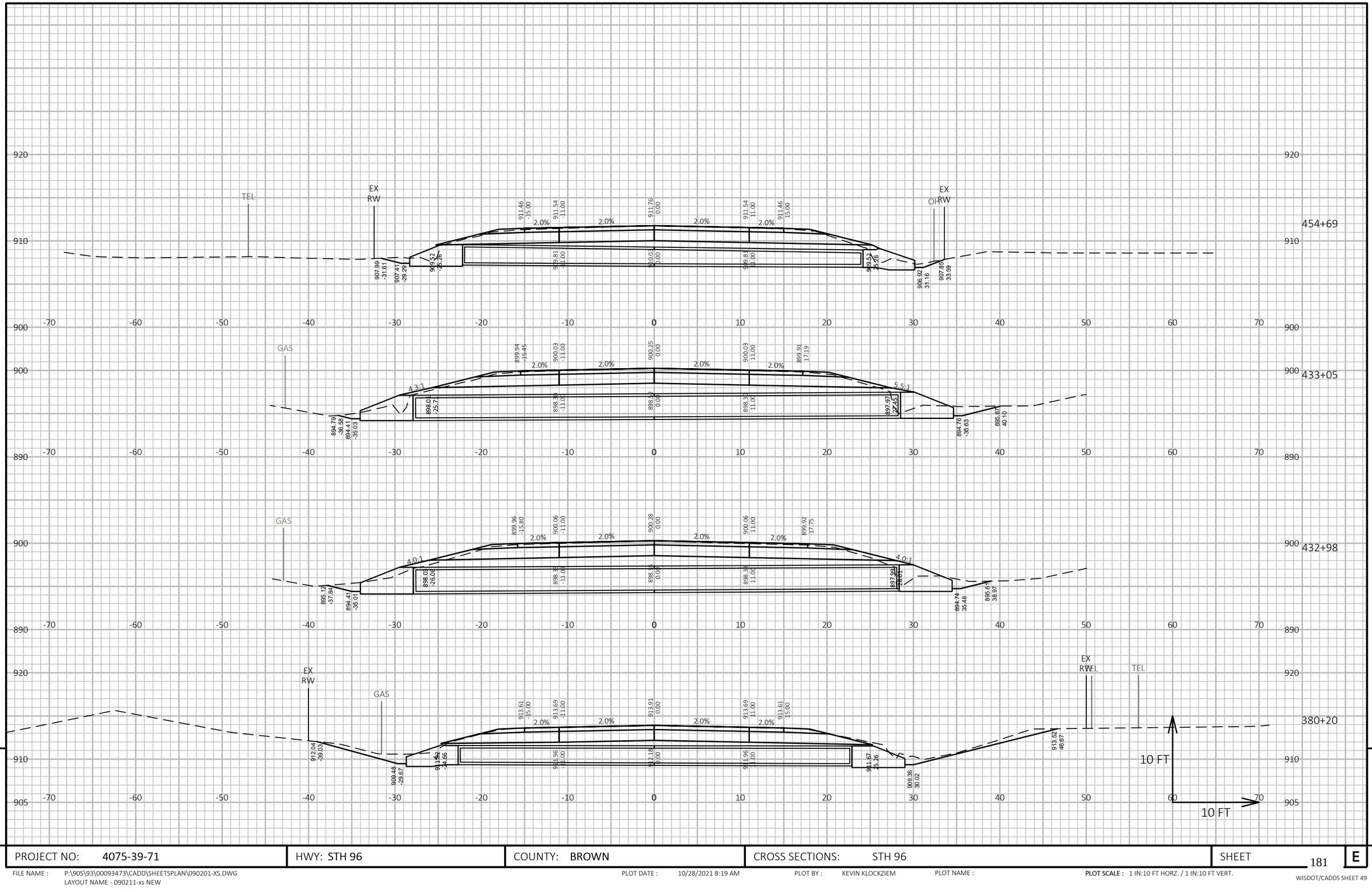
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WISDOT/CADDS SHEET 49

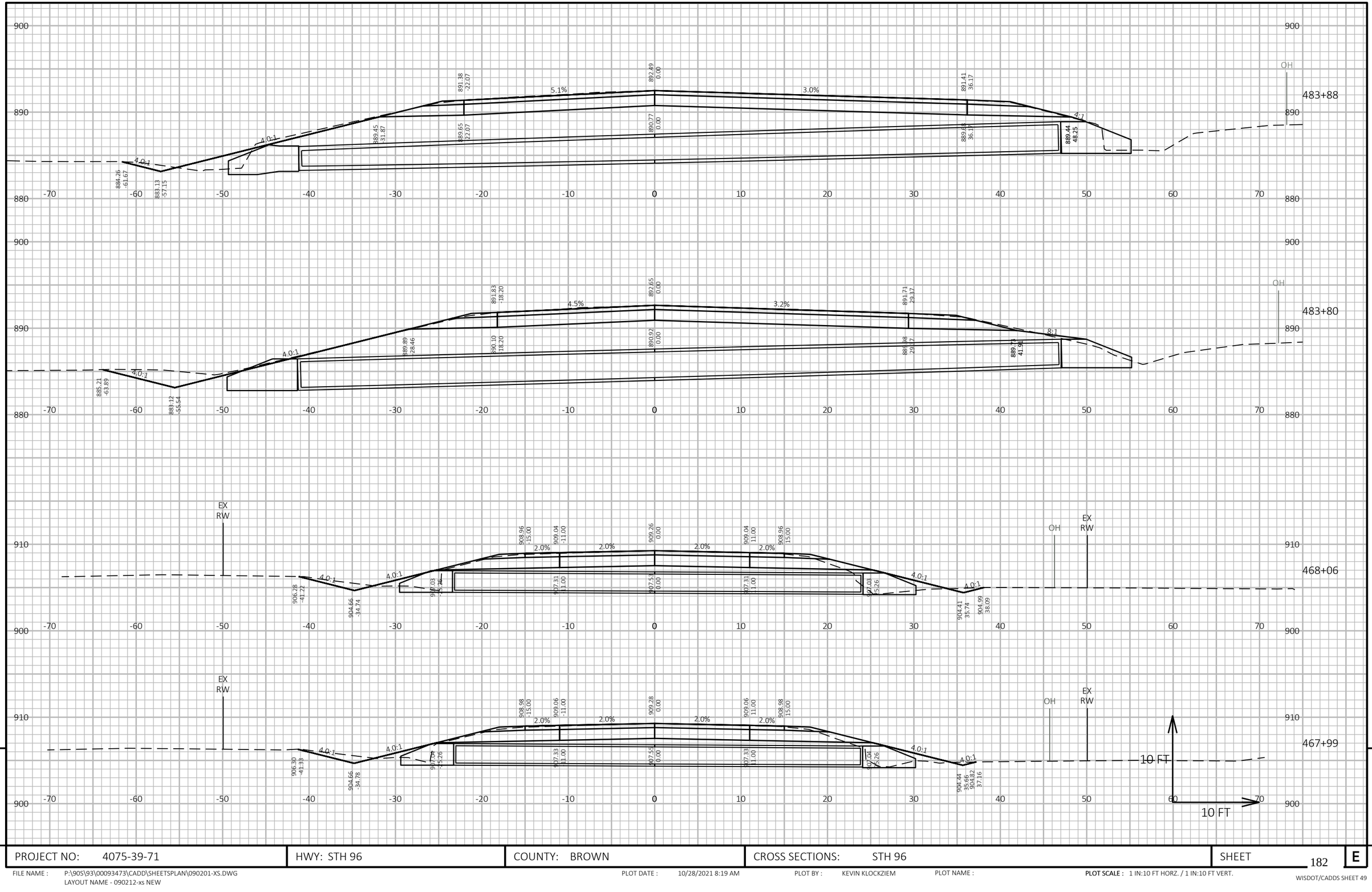


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WISDOT/CADDS SHEET 49

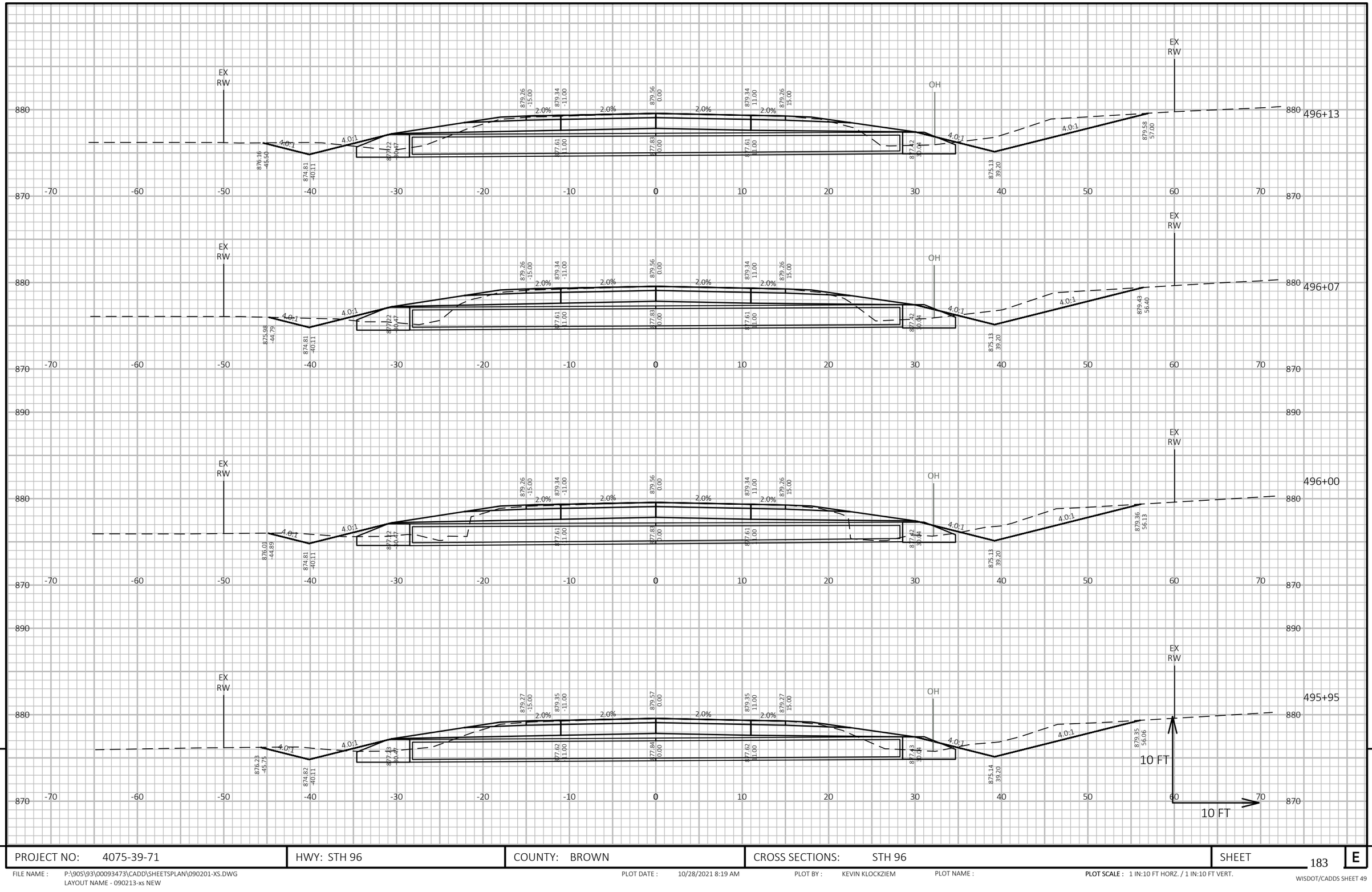


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WISDOT/CADDS SHEET 49



PROJECT NO: 4075-39-71	HWY: STH 96	COUNTY: BROWN	CROSS SECTIONS: STH 96	SHEET 183	E

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WISDOT/CADDS SHEET 49

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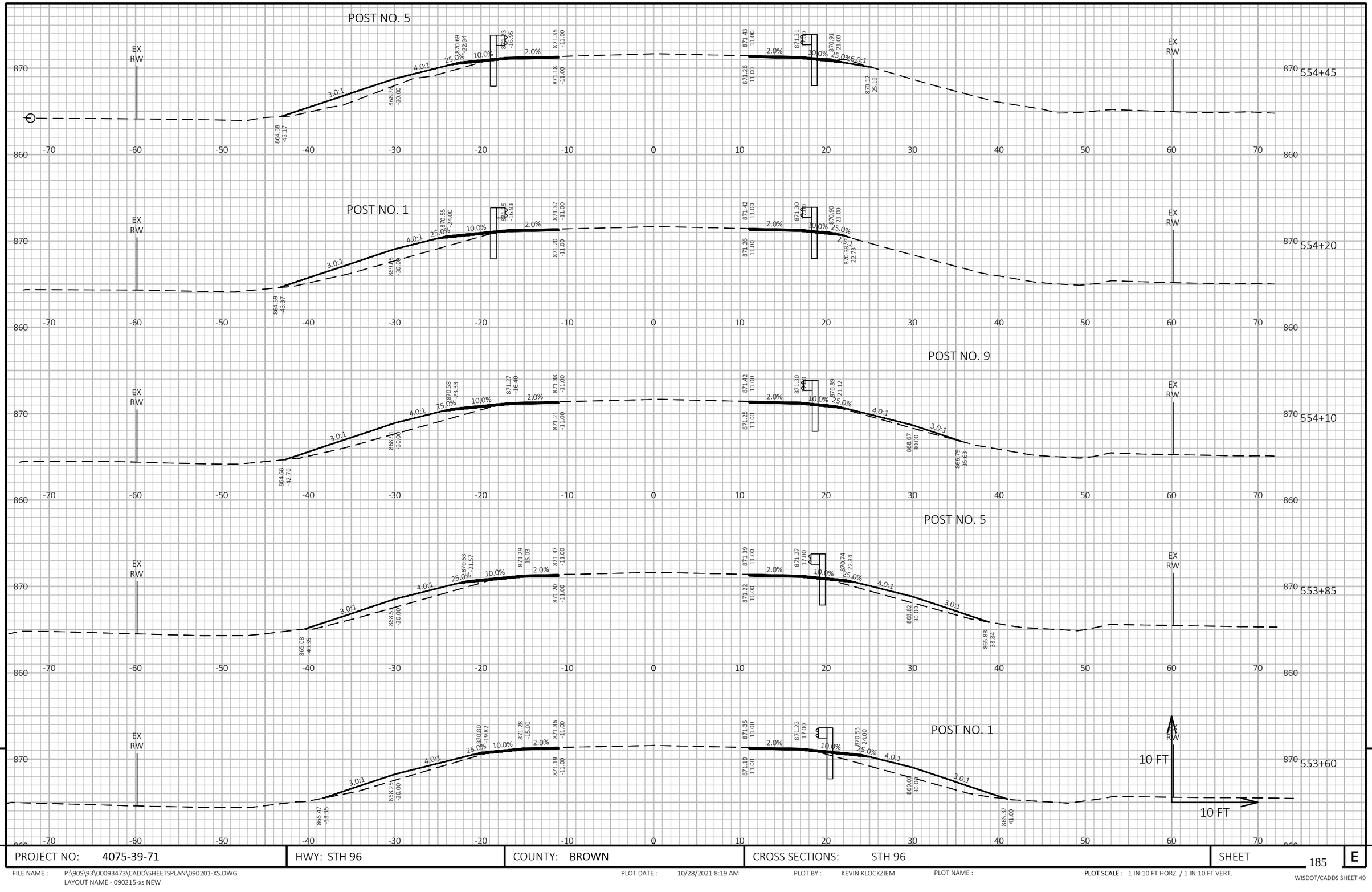
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PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



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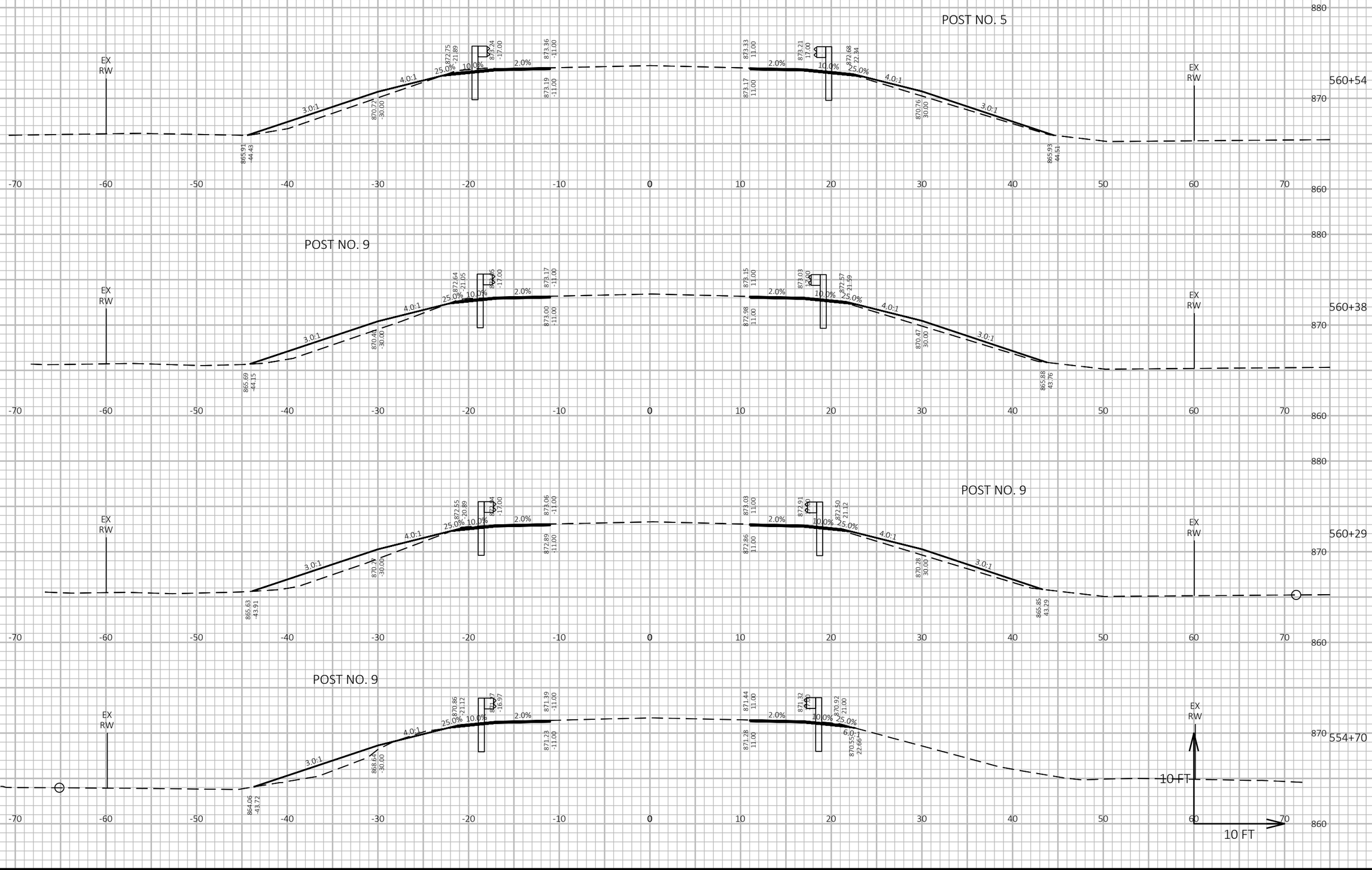
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WISDOT/CADDS SHEET 49

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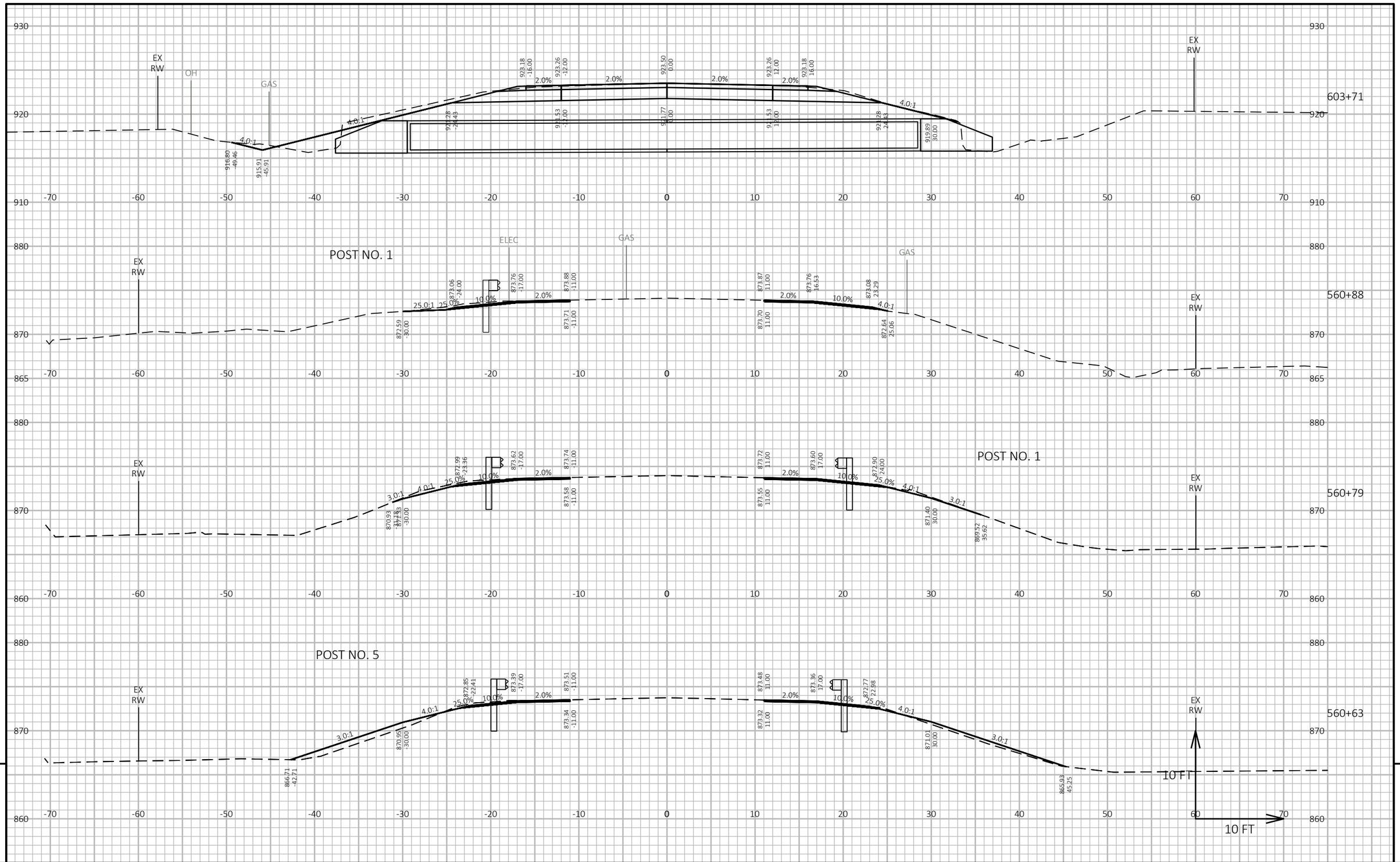


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WISDOT/CADDS SHEET 49



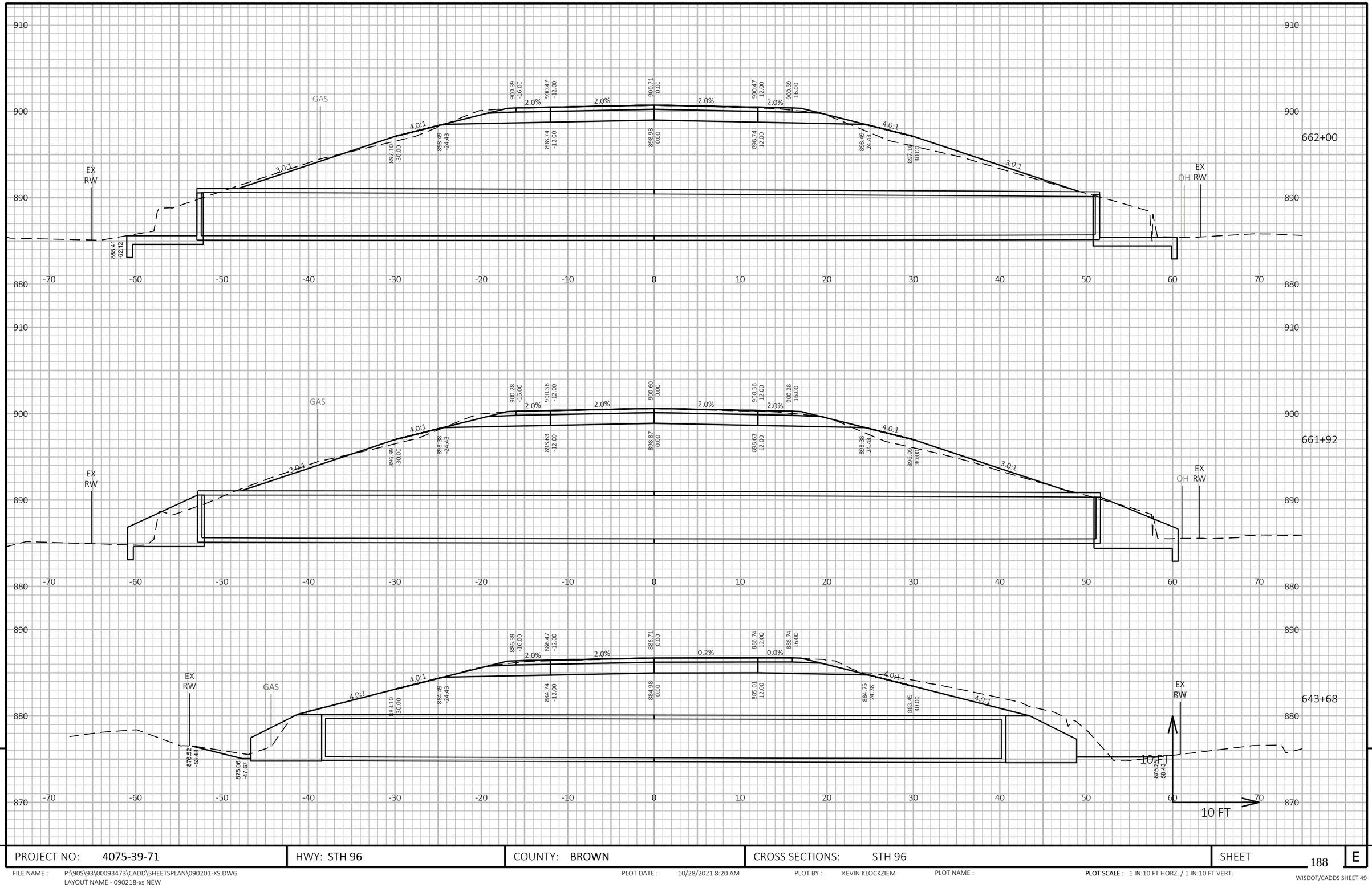
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PROJECT NO: 4075-39-71	HWY: STH 96	COUNTY: BROWN	CROSS SECTIONS: STH 96	SHEET 188	E

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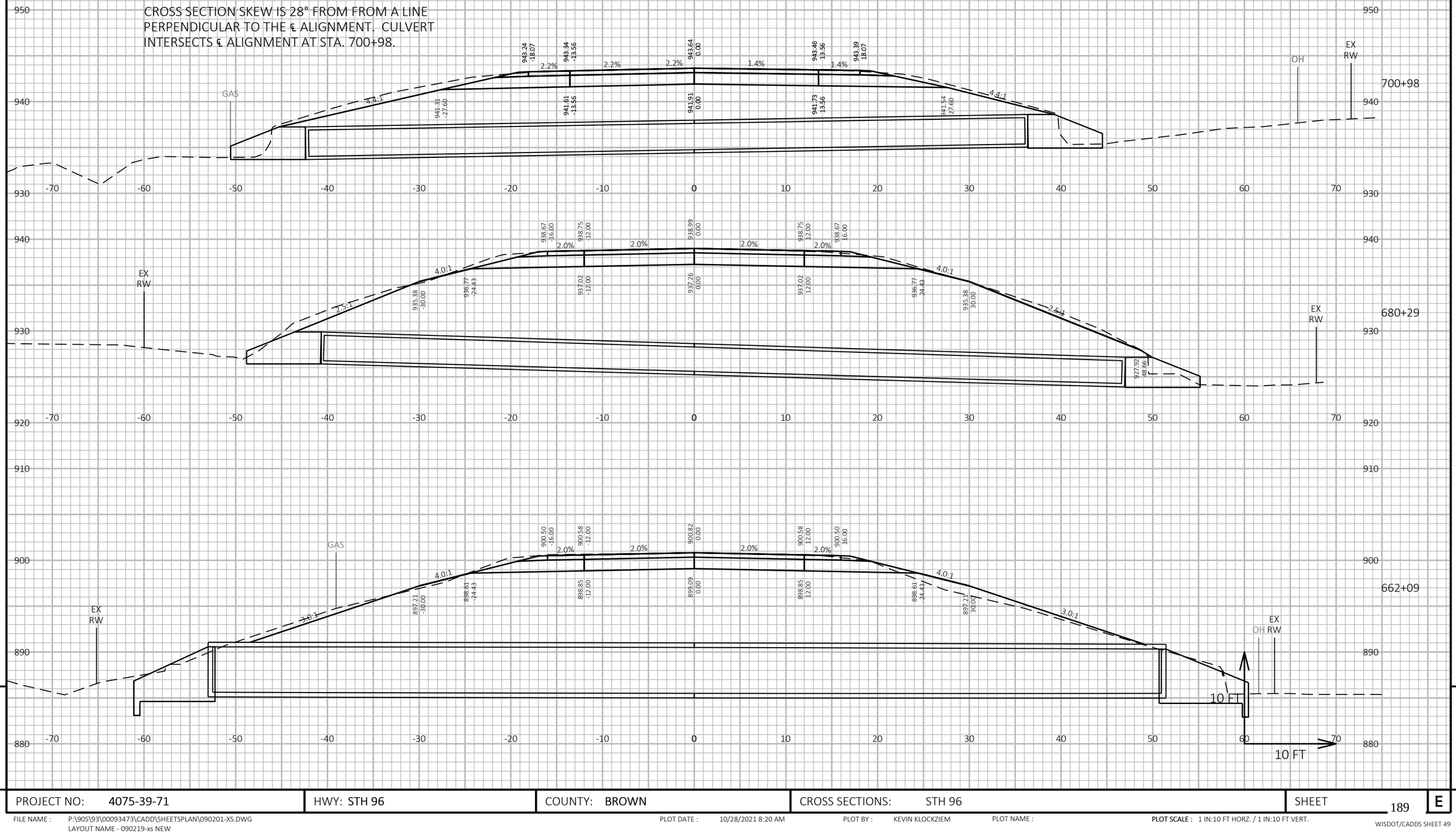
PLOT BY : KEVIN KLOCKZIEM

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

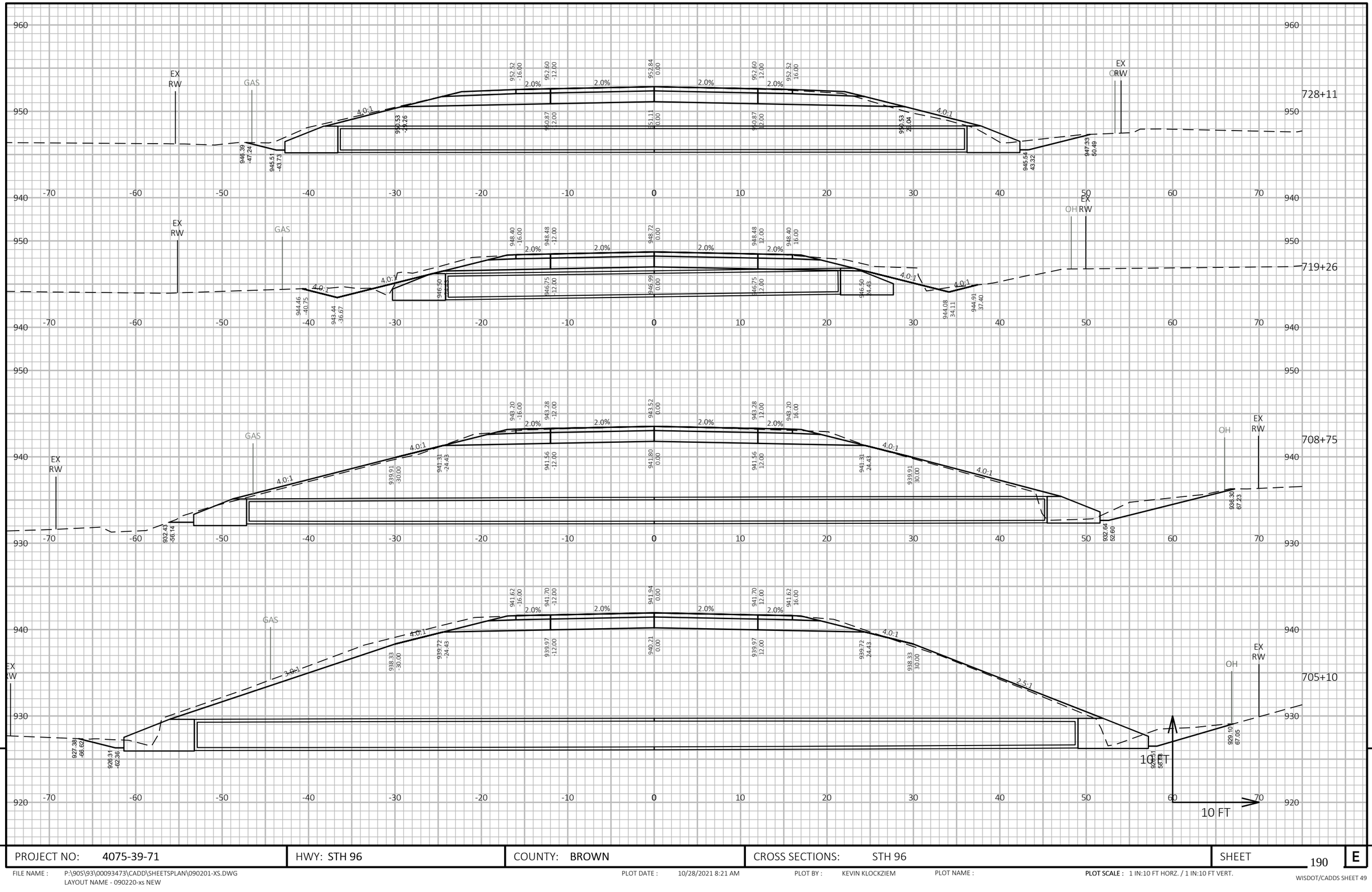
CROSS SECTION SKEW IS 28° FROM FROM A LINE PERPENDICULAR TO THE ℄ ALIGNMENT. CULVERT INTERSECTS ℄ ALIGNMENT AT STA. 700+98.



PROJECT NO: 4075-39-71	HWY: STH 96	COUNTY: BROWN	CROSS SECTIONS: STH 96	SHEET 189	E

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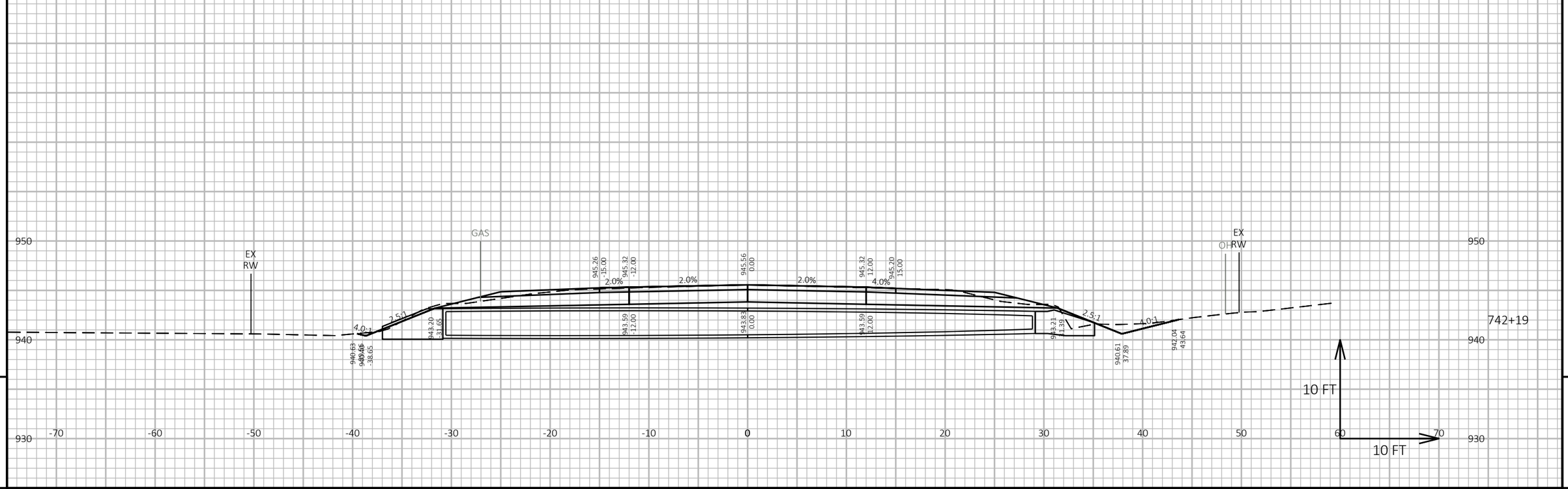
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PLOT DATE : 10/28/2021 8:21 AM PLOT BY : KEVIN KLOCKZIEM PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 4075-39-71	HWY: STH 96	COUNTY: BROWN	CROSS SECTIONS: STH 96	SHEET 191	E

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LAYOUT NAME - 090221-xs NEW

PLOT DATE : 10/28/2021 8:21 AM PLOT BY : KEVIN KLOCKZIEM PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

http://www.dot.wisconsin.gov

GRE

JUNE 2022

PROJECT ID: 4075-39-72

WITH: 4075-39-71

COUNTY: BROWN

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 Details
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 = 152



N

DESIGN DESIGNATION

A.A.D.T.	(2022)	=	3460
A.A.D.T.	(2042)	=	4230
D.H.V.		=	470
D.D.		=	60/40
T.		=	7.5%
DESIGN SPEED		=	60
ESALS		=	710,000

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 (CENTER)
- EXISTING CULVERT
- PROPOSED CULVERT (Box or Pipe)
- COMBUSTIBLE FLUIDS (CAUTION)
- MARSH AREA
- WOODED OR SHRUB AREA

PROFILE

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

UTILITIES

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

WRIGHTSTOWN - DENMARK

CTH G - IH 43

STH 96

BROWN COUNTY

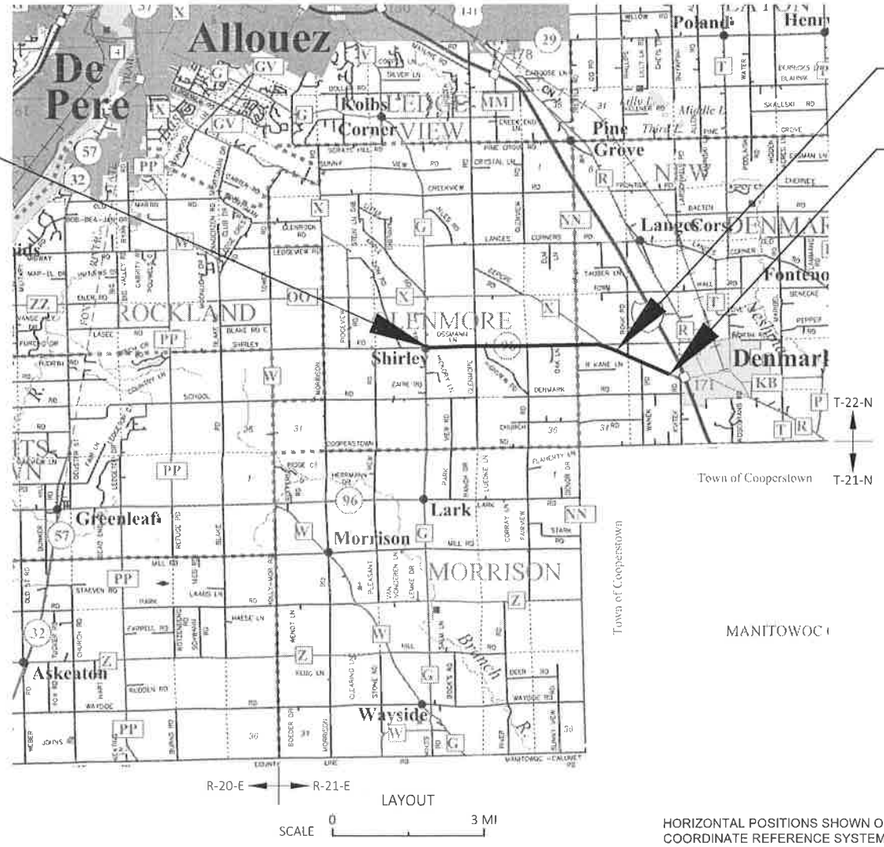
STATE PROJECT NUMBER
4075-39-72

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
4075-39-72	WISC 2022172	1

BEGIN PROJECT
STA 748+18
X=509737.512
Y=117653.945

END PROJECT
STA 1005+47
X=506329.184
Y=142667.743

B-05-0468



LAYOUT

SCALE 0 3 MI

TOTAL NET LENGTH OF CENTERLINE = 4.874 MILES

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS), BROWN COUNTY, NAD83 (2011), IN U.S. SURVEY FEET. POSITIONS SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES ARE THE SAME AS GROUND DISTANCES. ELEVATIONS ARE REFERENCED TO NAVD 88 (2012). GPS DERIVED ELEVATIONS ARE BASED ON GEOID 12A.

ORIGINAL PLANS PREPARED BY

MSA

1702 Pankratz St• Madison, WI 53704
608-242-7779 1-800-446-0679 Fax: 608-242-5664

WISCONSIN
BRIAN G. HUIBREGTSE
E-40465
MADISON
WI
PROFESSIONAL ENGINEER

DATE: 10/21/21 (Professional Engineer Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	MSA PROFESSIONAL SERVICES, INC.
Designer	MSA PROFESSIONAL SERVICES, INC.
Project Manager	MATT TERNES, P.E.
Regional Examiner	
Regional Supervisor	DANIEL SEGERSTROM, P.E.

APPROVED FOR THE DEPARTMENT

DATE: 10/27/2021 (Signature)

E

GENERAL NOTES

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

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

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

THE EROSION CONTROL ITEMS SHOWN ON THE PLANS, ARE AT SUGGESTED LOCATIONS. THE ENGINEER SHALL DETERMINE THE EXACT LOCATIONS OF EROSION CONTROL ITEMS. ALL EROSION CONTROL MEASURES SHALL BE MAINTAINED UNTIL SUCH TIME AS THE ENGINEER DETERMINES THE MEASURE IS NO LONGER NECESSARY. THE CONTRACTOR WILL REMOVE ITEMS AT THE ENGINEERS DISCRETION.

PLACE EROSION CONTROL DEVICES IN SEQUENCE WITH CONSTRUCTION OPERATIONS AND MAINTAIN AS DETERMINED BY THE ENGINEER.

ADJUST THE NUMBER, LOCATION, AND SPACING OF TRAFFIC CONTROL SIGNS AND DEVICES, AS SHOWN ON THE PLANS, TO FIT FIELD CONDITIONS.

RIGHT OF WAY LINES SHOWN ARE FROM PLAT DATA AND FROM BROWN COUNTY GIS.

REMOVING APRON ENDWALLS CONNECTED TO CULVERT PIPES SHALL BE PAID FOR UNDER "REMOVING SMALL PIPE CULVERTS".

DNR LIAISON

WISCONSIN DEPARTMENT OF NATURAL RESOURCES
ATTN: JIM DOPERALSKI JR.
2984 SHAWANO AVE
GREEN BAY, WI 54313
PHONE: (920) 412-0165
EMAIL: james.doperalski@wisconsin.gov

DESIGN CONTACTS

WISCONSIN DEPARTMENT OF TRANSPORTATION
NORTHEAST REGION
ATTN: KRISTEN BERG
944 VANDERPERREN WAY
GREEN BAY, WI 54304
PHONE: (920) 492-0139
E-MAIL: kristen.berg@dot.wi.gov

MSA PROFESSIONAL SERVICES
ATTN: BRIAN HUIBREGSTE
1702 PANKRATZ ST
MADISON, WI 53704
PHONE: (608) 242-6650
E-MAIL: bhuibregtse@msa-ps.com

INDEX OF TYPICAL SECTIONS & DETAIL SHEETS

GENERAL NOTES
PROJECT OVERVIEW
TYPICAL SECTIONS
CONSTRUCTION DETAILS
INTERSECTION DETAILS
DETOUR SIGNING PLAN

STANDARD ABBREVIATIONS

AC	ACRES
AEW	APRON ENDWALL
AGG	AGGREGATE
AH	AHEAD
ALUM.	ALUMINUM
A.P.	ACCESS POINT
ASPH	ASPHALT
AVE	AVENUE
BAD	BASE AGGREGATE DENSE
BK	BACK
BLK	BLOCK
BOC	BACK OF CURB
BOW	BACK OF SIDEWALK
BM	BENCHMARK
CABC	CRUSHED AGGREGATE BASE COURSE
CL or ℄	CENTERLINE
Δ	CENTRAL ANGLE or DELTA
CMCP	CORRUGATED METAL CULVERT PIPE
CONC	CONCRETE
CP	CONTROL POINT
CPCS	CULVERT PIPE CORRUGATED STEEL
CSM	CERTIFIED SURVEY MAP
CTH	COUNTY TRUNK HIGHWAY
D	DEGREE OF CURVATURE
DES	DESIRABLE
E	EAST
EB	EASTBOUND
EBS	EXCAVATION BELOW SUBGRADE
EOP	EDGE OF PAVEMENT
ET AL	AND OTHERS
EW	ENDWALL
EXIST	EXISTING
FT	FOOT
FT2	SQUARE FEET
GN	GRID NORTH
GV	GAS VALVE
HERCP	HORIZONTAL ELLIPTICAL REINFORCED CONCRETE PIPE
HYD	HYDRANT
IN	INCH
INL	INLET
INV	INVERT
IP	IRON PIPE
L	LENGTH
L	LENGTH OF CURVE
LC	LONG CHORD
LCP	LONG CHORD BEARING
LF	LINEAR FEET
LT	LEFT
MH	MANHOLE
MON	MONUMENT
N	NORTH
NB	NORTHBOUND
N.C.	NORMAL CROWN
NO	NUMBER
PB	PULLBOX
PC	POINT OF CURVATURE
PI	POINT OF INTERSECTION
PL	PROPERTY LINE
PLE	PERMANENT LIMITED EASEMENT
POB	POINT OF BEGINNING
PT	POINT OF TANGENCY
R	RADIUS
R	RANGE
RCP	REINFORCED CONCRETE PIPE
RD	ROAD
REQ'D	REQUIRED
RL or R/L	REFERENCE LINE
RP	RADIUS POINT
RT	RIGHT
R/W	RIGHT OF WAY
S	SOUTH
SAN	SANITARY SEWER
SB	SOUTHBOUND
S.E.	SUPERELEVATION
SEC	SECTION
SSPRC	STORM SEWER PIPE REINFORCED CONCRETE
SSPRCHE	STORM SEWER PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL
SQ	SQUARE
ST	STREET
STA	STATION
STD	STANDARD
STH	STATE TRUNK HIGHWAY
STM	STORM SEWER
STR	STRUCTURE
T	TANGENT
TAN	TANGENT
TEMP	TEMPORARY
TLE	TEMPORARY LIMITED EASEMENT
T or TN	TOWN
TYP.	TYPICAL
WM	WATERMIN
WV	WATER VALVE
W	WEST
WB	WESTBOUND
X	EAST GRID COORDINATE
Y	NORTH GRID COORDINATE

UTILITIES

ELECTRICITY/TRANSMISSION
ATC MANAGEMENT, INC.
ATTN: CHRIS DAILEY
P.O. BOX 47
WAUKESHA, WI 53187-0047
PHONE: (262) 506-6884
EMAIL: cdailey@atcllc.com

COMMUNICATION LINE
SPECTRUM COMMUNICATIONS
ATTN: VINCENT ALBIN
3520 E DESTINATION DR
APPLETON, WI 54915
PHONE: (920) 831-9249, (920) 378-0444
EMAIL: vince.albin@charter.com

GAS/PETROLEUM
WISCONSIN PUBLIC SERVICE CORPORATION
ATTN: JIM EIDEN
2850 S ASHLAND AVE
GREEN BAY, WI 54304
PHONE: (920) 617-5231, (920) 676-8068
EMAIL: james.eiden@wisconsinpublicservices.com

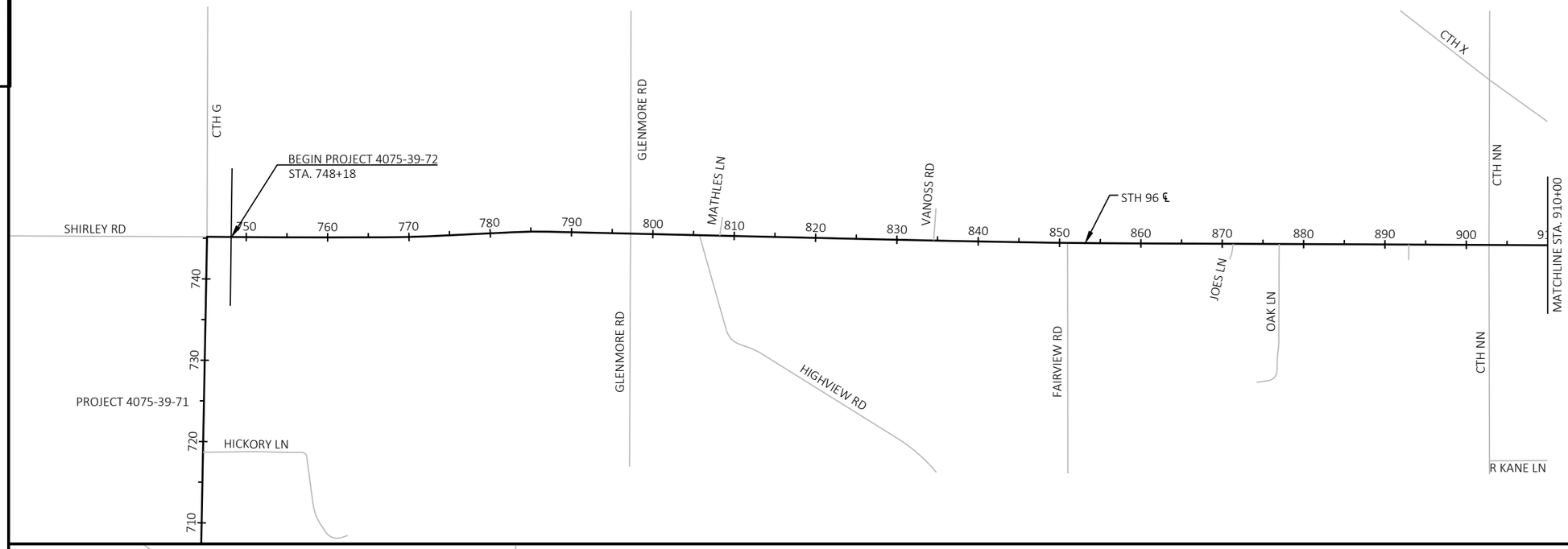
ELECTRIC
WISCONSIN PUBLIC SERVICE CORPORATION
ATTN: RYAN VOSKUIL
2850 S ASHLAND AVE
GREEN BAY, WI 54304
PHONE: (920) 617-5150, (920) 655-1584
EMAIL: ryan.voskuil@wisconsinpublicservices.com

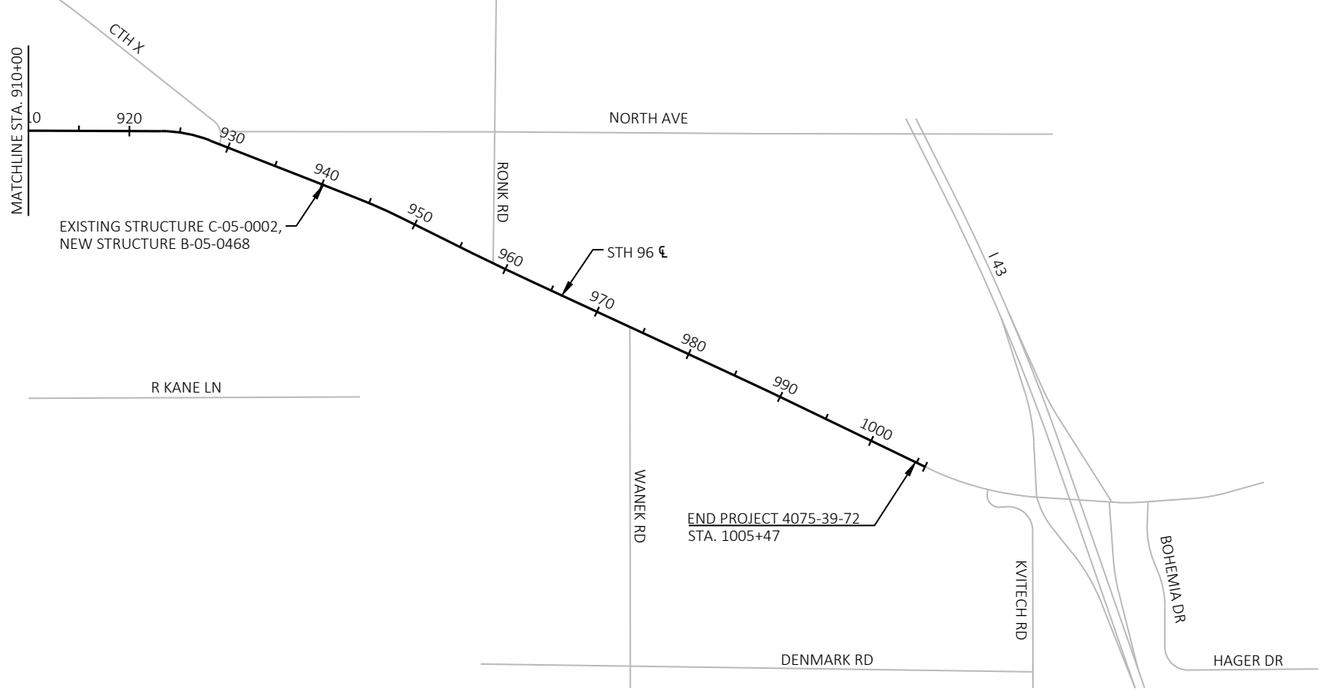
COMMUNICATION LINE
CENTURY LINK
ATTN: MATT GUNDERSON
212 CHURCH AVE
CASCO, WI 54205
PHONE: (920) 837-2344, (920) 896-2867
EMAIL: matt.gunderson@lumen.com

SURVEY MONUMENT CONTACT

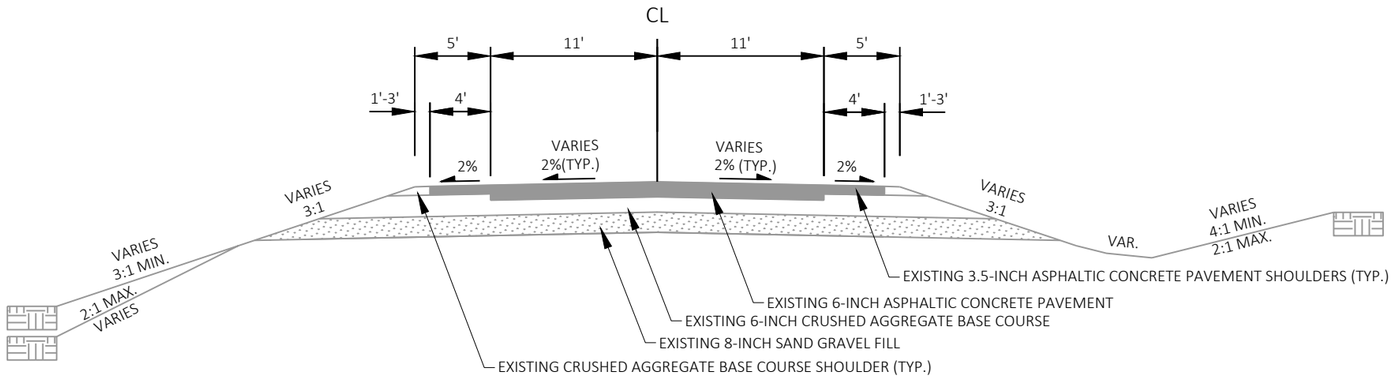
NORTHEAST REGION SURVEYS
ATTN: CORMAC MCINNIS, PLS
944 VANDERPERREN WAY
GREEN BAY, WI 54304
PHONE: (920) 362-1267
EMAIL: cormac.mcinnis@dot.wi.gov

DIGGERS HOTLINE
Dial 811 or (800)242-8511
www.DiggersHotline.com

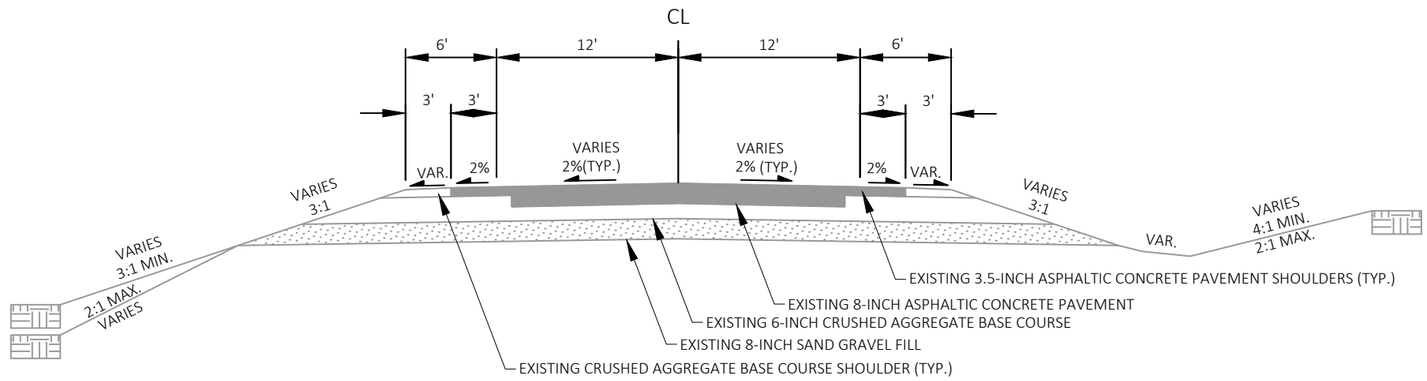




PROJECT NO: 4075-39-72	HWY: STH 96	COUNTY: BROWN	PROJECT OVERVIEW	SHEET 3	E



TYPICAL EXISTING SECTION - STH 96
STA 748+18 TO 904+25

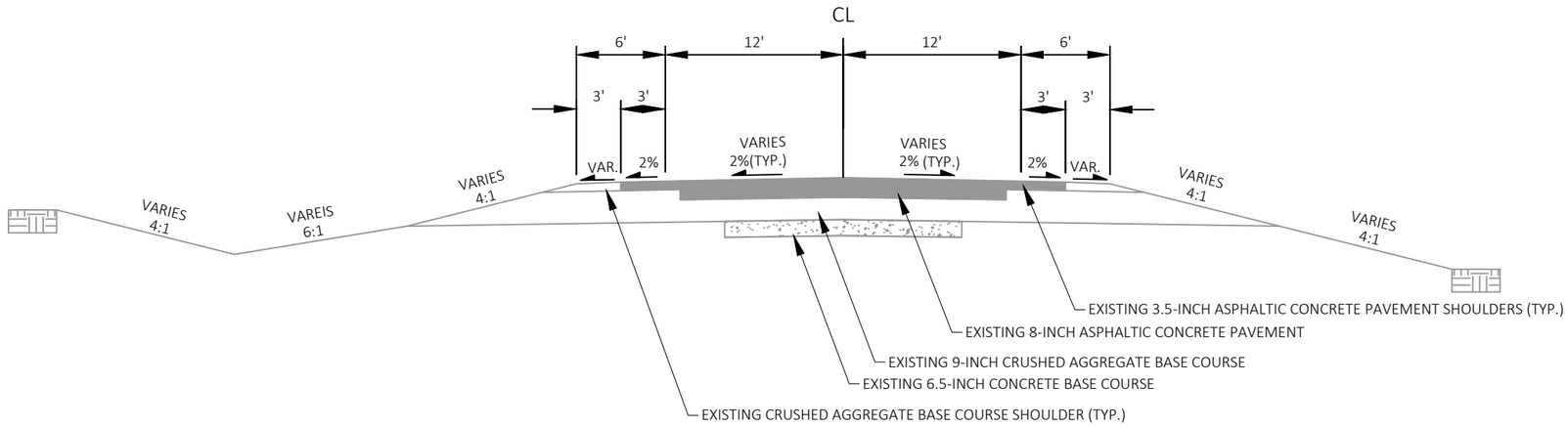


TYPICAL EXISTING SECTION - STH 96
STA 904+25 TO 949+33

PROJECT NO: 4075-39-72	HWY: STH 96	COUNTY: BROWN	EXISTING TYPICAL SECTIONS	SHEET 4	E

FILE NAME : P:\90S\93\00093473\CADD\SHEETSPLAN\020301-TS_72.DWG
LAYOUT NAME - 020301-ts
PLOT DATE : 10/20/2021 2:34 PM PLOT BY : KEVIN KLOCKZIEM PLOT NAME : PLOT SCALE : 1 IN:10 FT

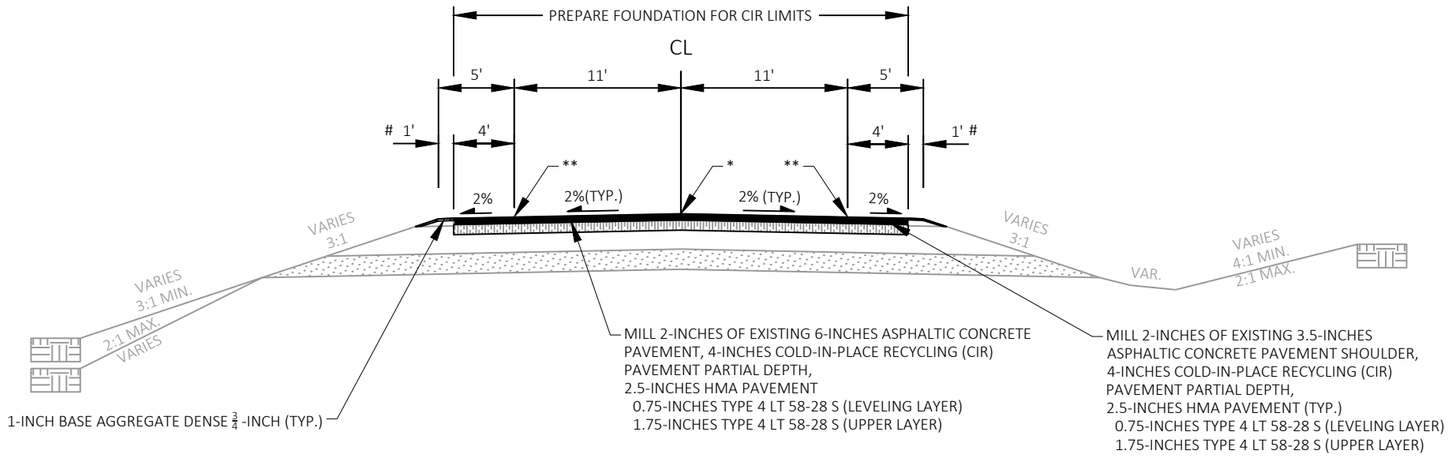
2



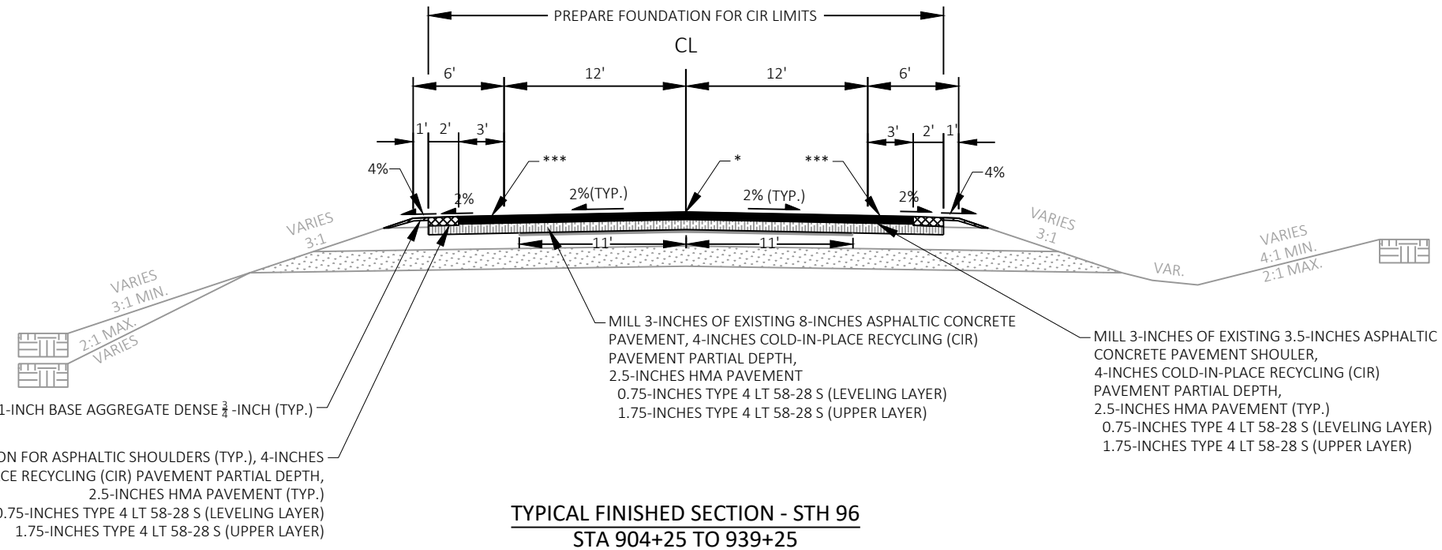
TYPICAL EXISTING SECTION - STH 96
STA 949+33 TO 1000+47

PROJECT NO: 4075-39-72	HWY: STH 96	COUNTY: BROWN	EXISTING TYPICAL SECTIONS	SHEET 5	E

FILE NAME : P:\90S\93\00093473\CADD\SHEETSPLAN\020301-TS_72.DWG
LAYOUT NAME - 020302-ts
PLOT DATE : 10/20/2021 2:34 PM
PLOT BY : KEVIN KLOCKZIEM
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42



TYPICAL FINISHED SECTION - STH 96
STA 748+18 TO 904+25

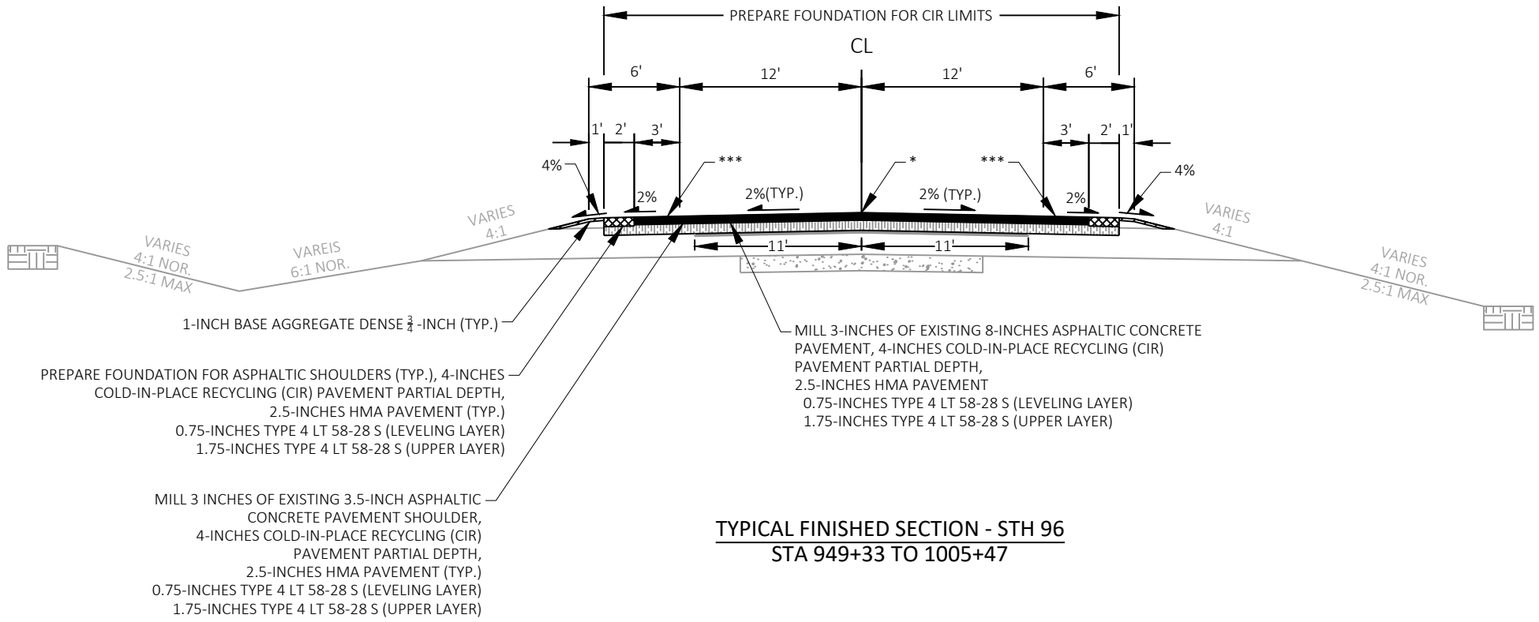


TYPICAL FINISHED SECTION - STH 96
STA 904+25 TO 939+25
STA 941+10 TO 949+33

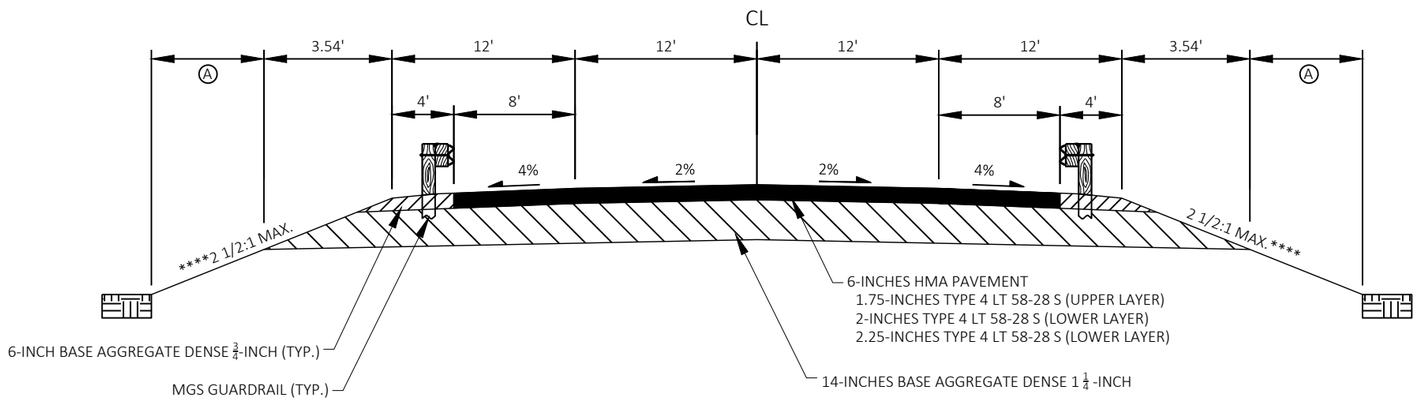
LEGEND

*	ASPHALTIC CENTER LINE RUMBLE STRIP 2-LANE RURAL
**	ASPHALTIC SHOULDER RUMBLE STRIP 2-LANE RURAL (TYPE 2)
***	ASPHALTIC SHOULDER RUMBLE STRIP 2-LANE RURAL (TYPE 1)
#	AT SOME LOCATIONS THE GRAVEL SHOULDER IS AS WIDE AS 3'; THE CULVERT REPLACEMENTS WILL REPLACE THE GRAVEL SHOULDERS TO MATCH THE EXISTING WIDTHS

2



TYPICAL FINISHED SECTION - STH 96
STA 949+33 TO 1005+47



TYPICAL FINISHED SECTION - STH 96
STA 939+25 TO 941+10

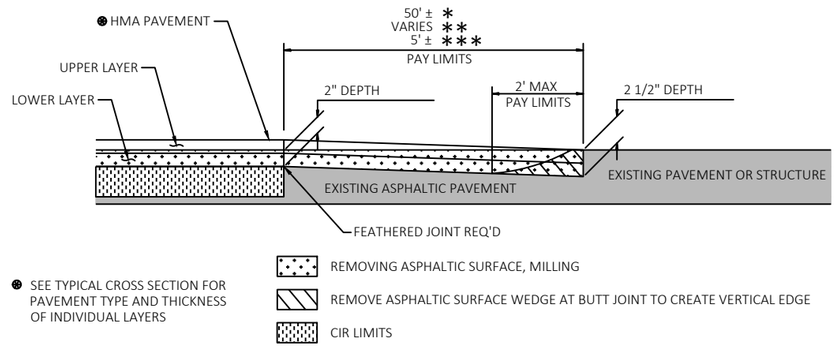
LEGEND

*	ASPHALTIC CENTER LINE RUMBLE STRIP 2-LANE RURAL
***	ASPHALTIC SHOULDER RUMBLE STRIP 2-LANE RURAL (TYPE 1)
****	SEE STANDARD DETAIL DRAWING AND CROSS SECTIONS FOR ENERGY ABSORBING TERMINAL GRADING
Ⓐ	6-INCHES TOPSOIL, SEEDING MIXTURE NO. 40, FERTILIZER TYPE B & EROSION MAT URBAN CLASS I TYPE B

PROJECT NO: 4075-39-72	HWY: STH 96	COUNTY: BROWN	FINISHED TYPICAL SECTIONS	SHEET 7	E

FILE NAME : P:\90S\93\00093473\CADD\SHEETSPLAN\020303-TS_72.DWG
LAYOUT NAME - 020304-ts
PLOT DATE : 12/6/2021 4:28 PM
PLOT BY : JASON DOLENS
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

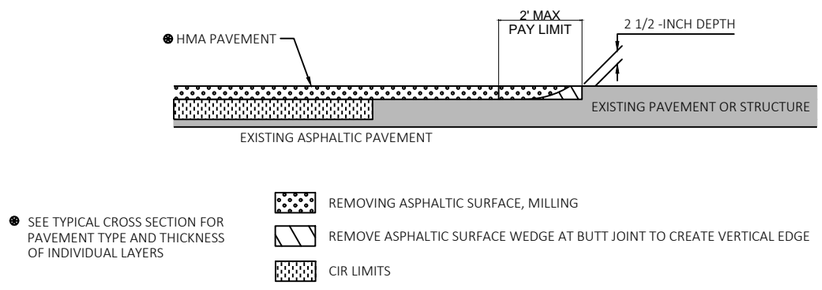
2



BUTT JOINT DETAIL FOR MILLED ASPHALTIC PAVEMENTS (PROFILE CHANGE)

* MAINLINE
** SIDEROADS
*** PRIVATE ENTRANCES

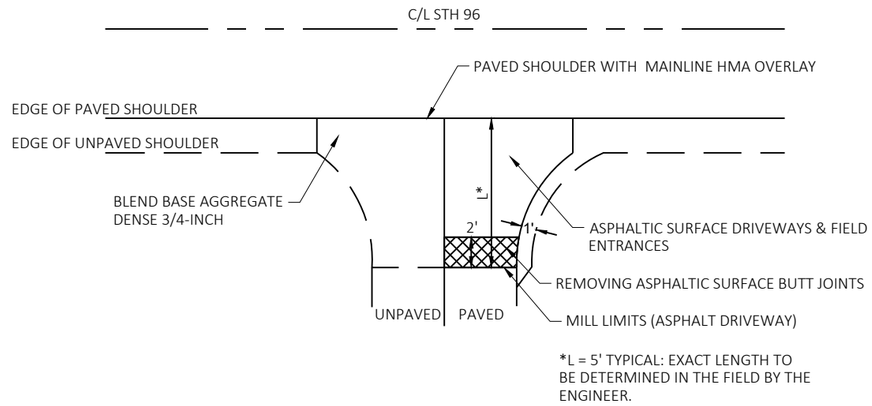
STA. 748+18 - 904+25



BUTT JOINT DETAIL FOR ASPHALTIC PAVEMENTS (NO PROFILE CHANGE)

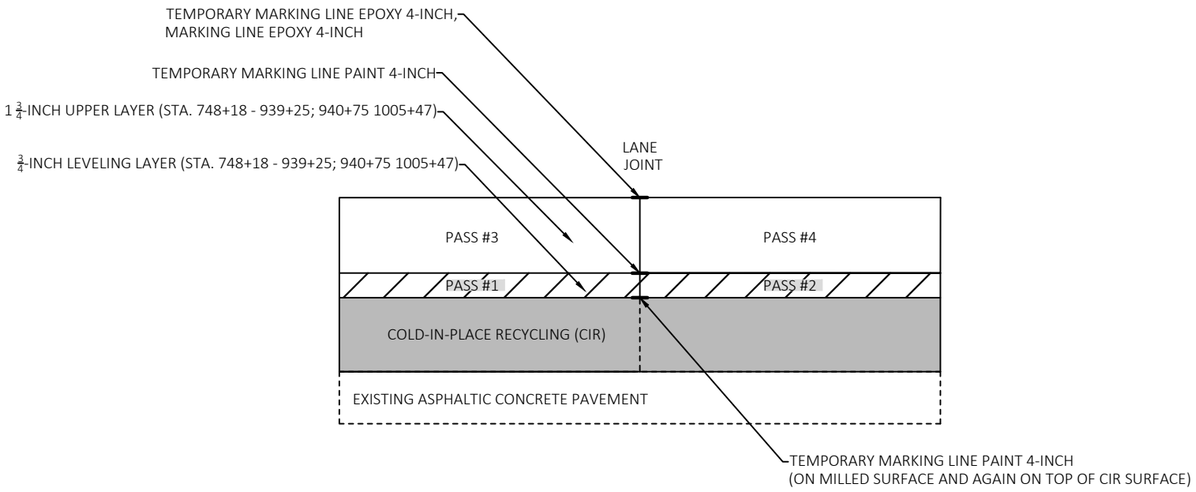
STA. 904+25 -939+25
STA. 940+75 - 1005+47

2



DRIVEWAY PLAN

STA. 748+18 - 904+25



LONGITUDINAL JOINTS DETAIL

SCALE: NONE

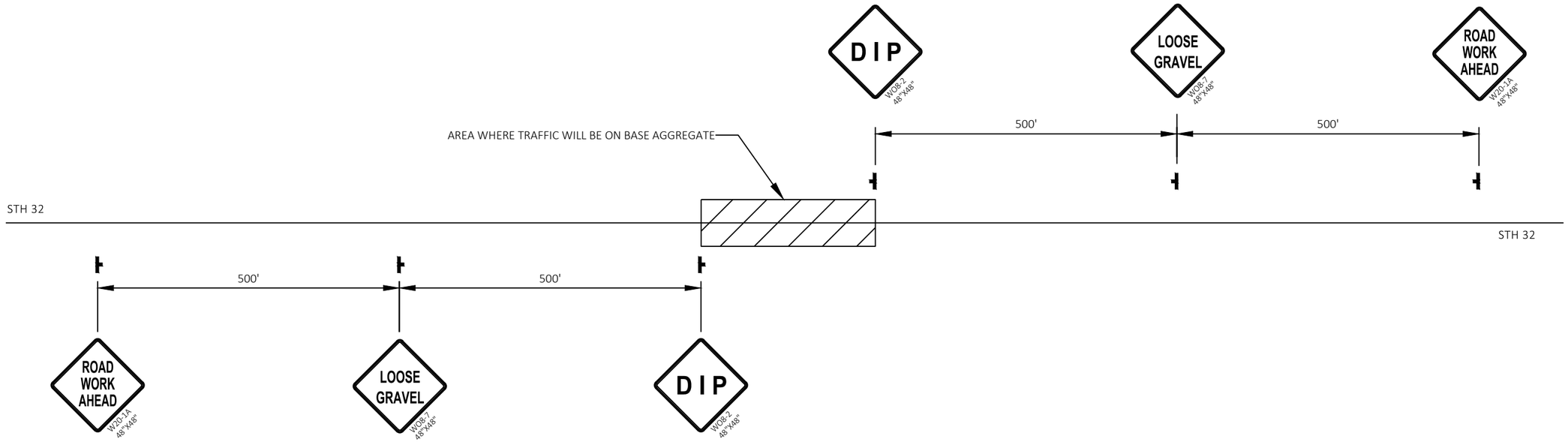


W8-11
48" X 48"

NOTES:

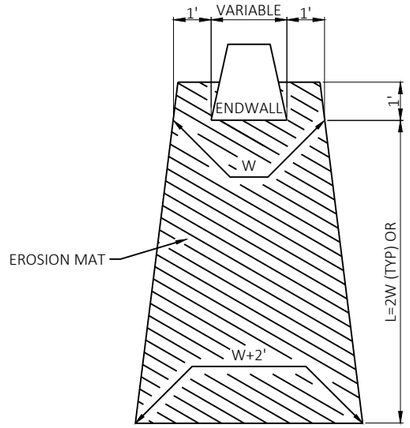
1. TO BE UTILIZED FOR TEMPORARY INSTALLATIONS IN WORK AREAS INVOLVING PAVING LONGITUDINAL JOINTS.
2. UNEVEN LANE SIGNS SHALL BE PLACED AT THE BEGINNING OF JOINT AND AT 1/2 MILE INCREMENTS.
3. SIGNS WILL BE PAID AS TRAFFIC CONTROL SIGNS.
4. REFER TO S.D.D. "TRAFFIC CONTROL, DROP-OFF SIGNING" FOR ADDITIONAL INFORMATION.
5. REFER TO S.D.D. " HMA LONGITUDINAL JOINTS" FOR THE REQUIRED WEDGE AT JOINTS. VERTICAL DROP OFFS ARE NOT ALLOWED.
6. ALL TEMPORARY MARKINGS TO BE OFFSET 3 INCHES FROM CROWN.
7. TEMPORARY MARKING LINES SHALL BE APPLIED TO MATCH EXISTING NO PASSING ZONES FOR EACH INSTALLATION.

2



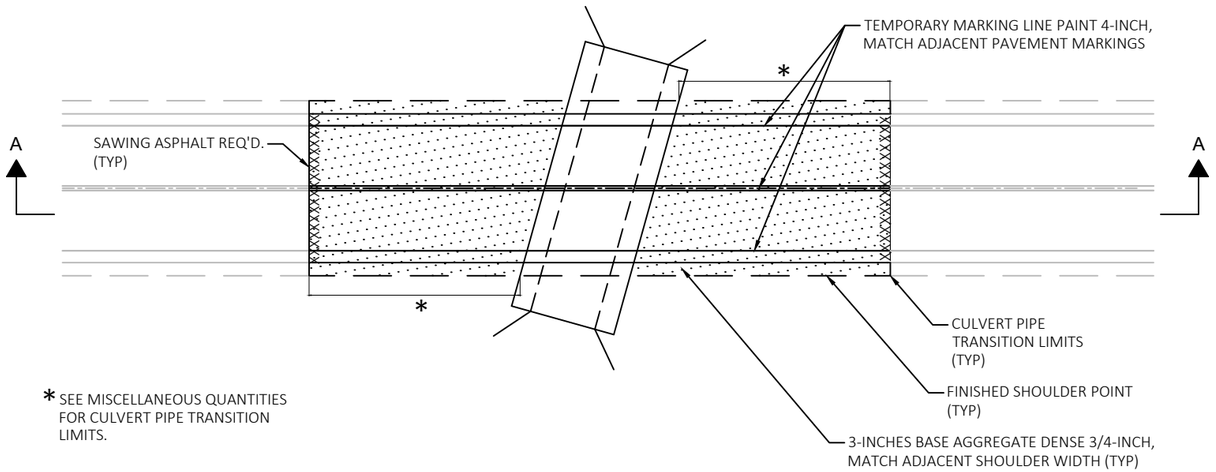
TEMPORARY SIGNING AT CULVERT PIPE REPLACEMENT

USE AT ALL CULVERT PIPE REPLACEMENTS WHEN ASPHALTIC SURFACE IS NOT IN PLACE.

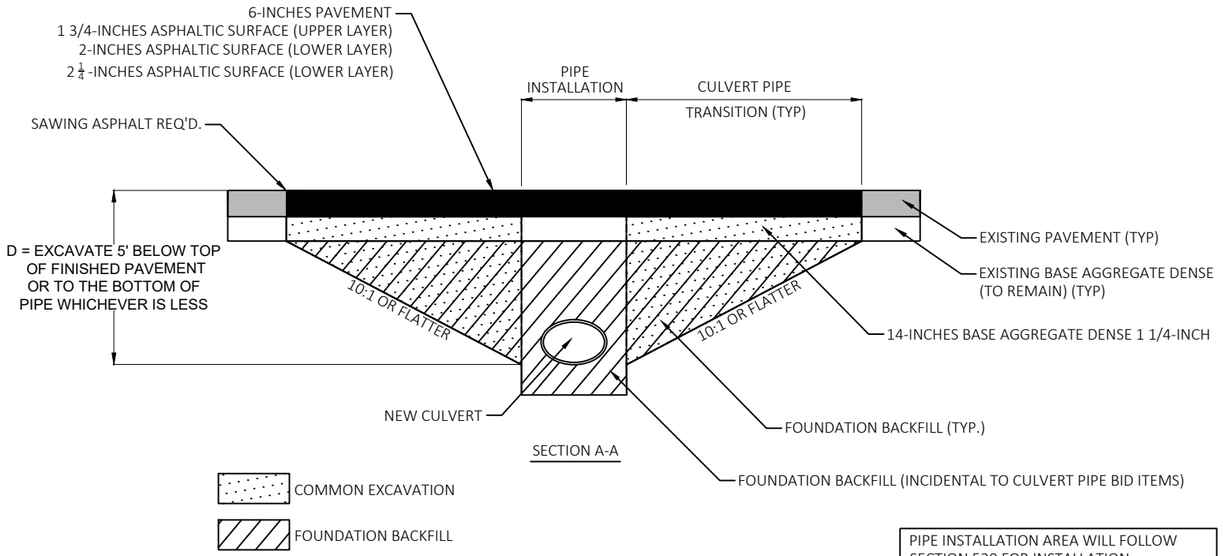


EROSION MAT TREATMENT AT CULVERTS

PROJECT NO: 4075-39-72	HWY: STH 96	COUNTY: BROWN	CONSTRUCTION DETAILS	SHEET 10	E



* SEE MISCELLANEOUS QUANTITIES FOR CULVERT PIPE TRANSITION LIMITS.



NEW CULVERT PIPES WITH TRANSITION

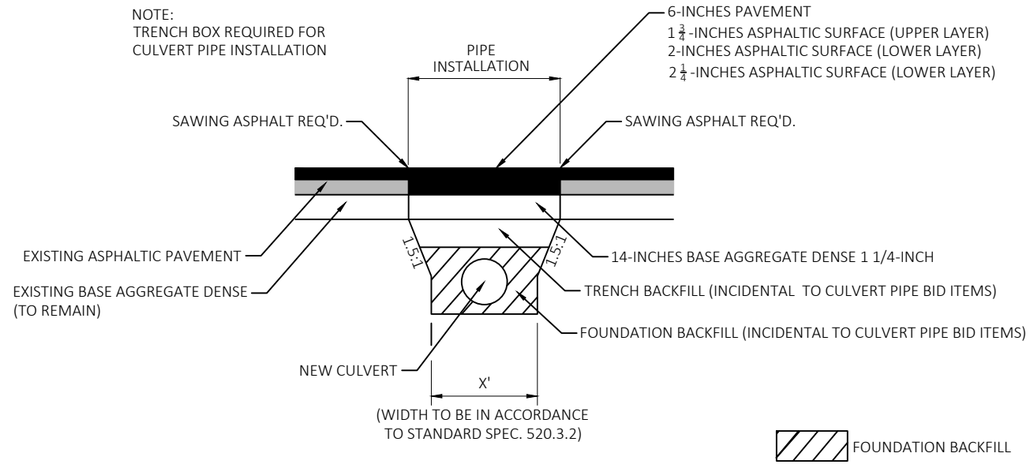
STA. 797+28	STA. 949+28
STA. 797+71	STA. 955+83
STA. 811+18	STA. 955+91
STA. 821+14	STA. 965+41
STA. 831+43	STA. 978+81
STA. 839+93	STA. 998+62
STA. 854+71	STA. 1003+01
STA. 858+81	
STA. 876+01	
STA. 900+30	
STA. 930+88	

PIPE INSTALLATION AREA WILL FOLLOW SECTION 520 FOR INSTALLATION, WIDTHS AND PAYMENT.

CONSTRUCT TRANSITION PERPENDICULAR TO CULVERT PIPE.

CULVERT PIPE TRANSITION AREAS WILL BE PAID BY COMMON EXCAVATION & SPV FOUNDATION BACKFILL.

PAVEMENT SAW CUT TO BE PERPENDICULAR TO ROADWAY ALIGNMENT.



CULVERT REPLACEMENTS NO TRANSITION

SCALE: NONE
STA. 759+91
STA. 760+00
STA. 773+66

PIPE INSTALLATION AREA WILL FOLLOW SECTION 520 FOR INSTALLATION, WIDTHS AND PAYMENT.

CONSTRUCT TRANSITION PERPENDICULAR TO CULVERT PIPE.

PAVEMENT SAW CUT TO BE PERPENDICULAR TO ROADWAY ALIGNMENT.

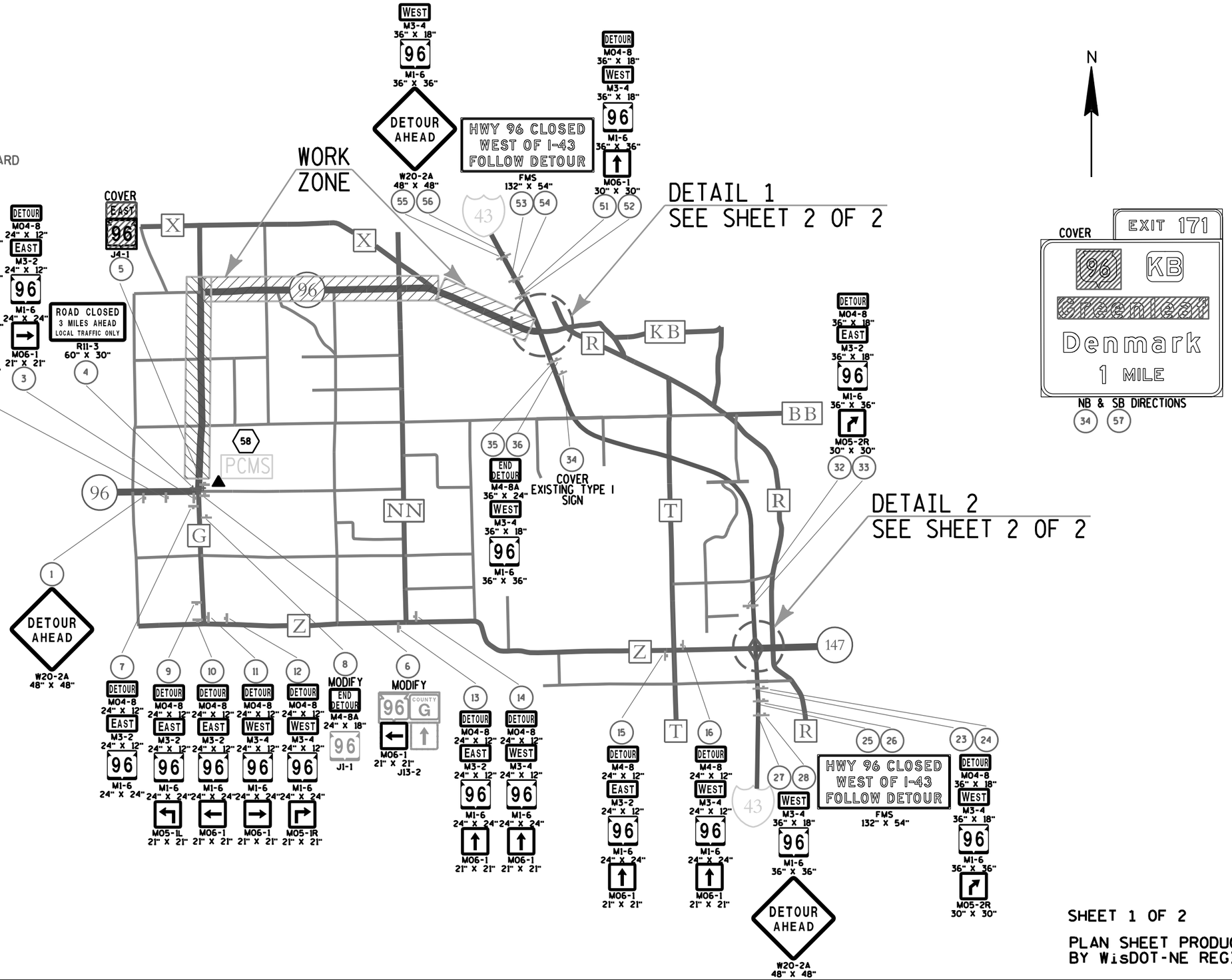
LEGEND

(X) SIGN NUMBER. REFER TO MISCELLANEOUS QUANTITY SHEET

SIGN MOUNTED ON TYPE III BARRICADE

POST MOUNTED SIGN

(X) CHANGEABLE PORTABLE MESSAGE BOARD



SHEET 1 OF 2

PLAN SHEET PRODUCED BY WisDOT-NE REGION

PROJECT NO: 4075-39-72	HWY: STH 96	COUNTY: BROWN	DETOUR SIGNING DETAIL - STAGE 2	SHEET 12	E

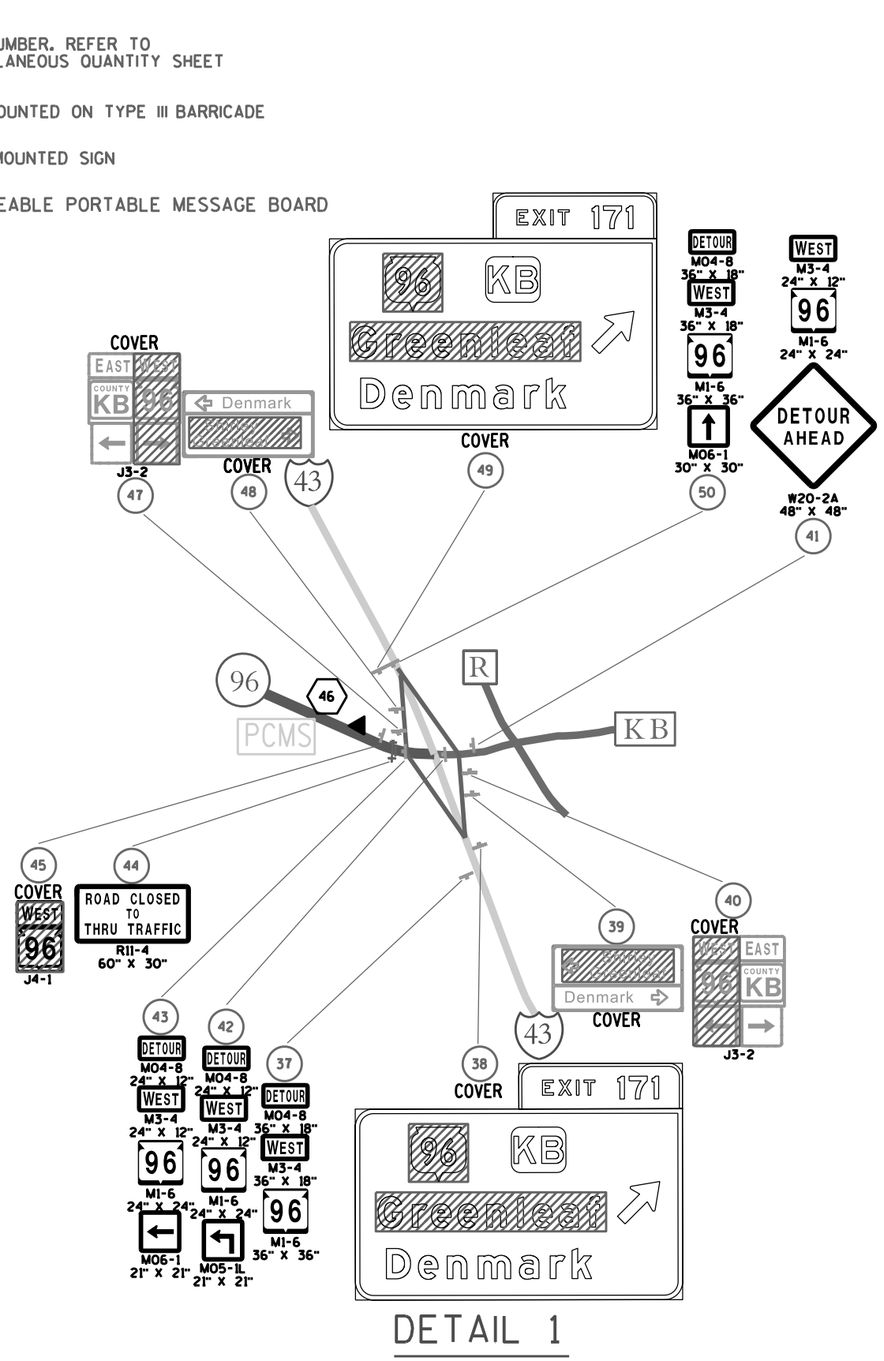
LEGEND

(X) SIGN NUMBER. REFER TO MISCELLANEOUS QUANTITY SHEET

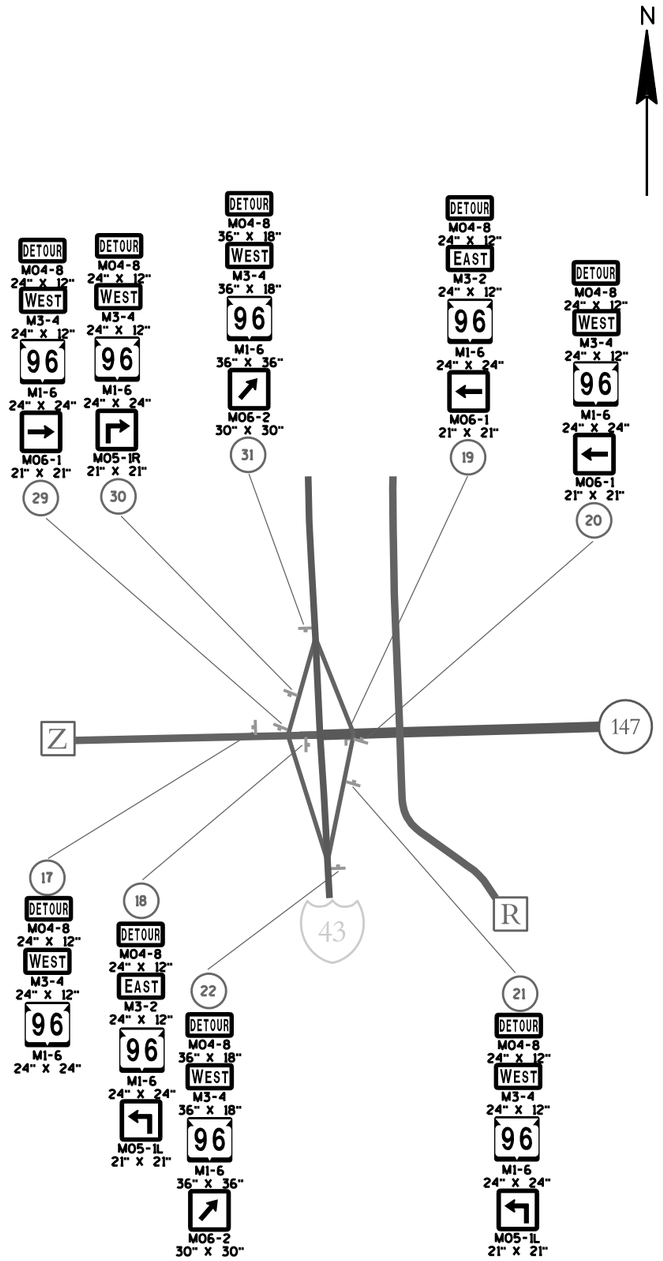
SIGN MOUNTED ON TYPE III BARRICADE

POST MOUNTED SIGN

(X) CHANGEABLE PORTABLE MESSAGE BOARD



DETAIL 1



DETAIL 2

SHEET 2 OF 2

PLAN SHEET PRODUCED BY WisDOT-NE REGION

PROJECT NO: 4075-39-72	HWY: STH 96	COUNTY: BROWN	DETOUR SIGNING DETAIL - STAGE 2	SHEET 13	E

4075-39-72

Line	Item	Item Description	Unit	Total	Qty
0002	201.0105	Clearing	STA	2.000	2.000
0006	201.0205	Grubbing	STA	2.000	2.000
0010	203.0100	Removing Small Pipe Culverts	EACH	24.000	24.000
0018	203.0260	Removing Structure Over Waterway Minimal Debris (structure) 01. C-5-2	EACH	1.000	1.000
0022	204.0115	Removing Asphaltic Surface Butt Joints	SY	181.000	181.000
0024	204.0120	Removing Asphaltic Surface Milling	SY	87,750.000	87,750.000
0028	204.0165	Removing Guardrail	LF	410.000	410.000
0040	205.0100	Excavation Common	CY	7,051.000	7,051.000
0042	206.1000	Excavation for Structures Bridges (structure) 01. B-5-468	LS	1.000	1.000
0048	208.1500.S	Temporary Lane Shift During Culvert Work	EACH	19.000	19.000
0050	210.1500	Backfill Structure Type A	TON	376.000	376.000
0056	211.0100	Prepare Foundation for Asphaltic Paving (project) 02. 4075-39-72	LS	1.000	1.000
0058	211.0400	Prepare Foundation for Asphaltic Shoulders	STA	198.000	198.000
0062	211.0700.S	Prepare Foundation for CIR Base Layer (project) 02. 4075-39-72	EACH	1.000	1.000
0064	211.0800.S	Base Repair for CIR Layer	CY	300.000	300.000
0068	213.0100	Finishing Roadway (project) 02. 4075-39-72	EACH	1.000	1.000
0070	305.0110	Base Aggregate Dense 3/4-Inch	TON	1,302.000	1,302.000
0072	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	7,681.000	7,681.000
0074	305.0504.S	Hauling Excess Shoulder Material	CY	150.000	150.000
0076	312.0115	Select Crushed Material	CY	60.000	60.000
0078	327.1000.S	CIR Asphaltic Base Layer	SY	89,565.000	89,565.000
0080	415.0080	Concrete Pavement 8-Inch	SY	75.000	75.000
0082	415.0410	Concrete Pavement Approach Slab	SY	116.000	116.000
0086	416.1010	Concrete Surface Drains	CY	4.000	4.000
0088	450.4000	HMA Cold Weather Paving	TON	1,210.000	1,210.000
0090	455.0605	Tack Coat	GAL	11,701.000	11,701.000
0092	455.0770.S	Asphalt Stabilizing Agent	TON	672.000	672.000
0098	460.2005	Incentive Density PWL HMA Pavement	DOL	6,428.000	6,428.000
0100	460.2007	Incentive Density HMA Pavement Longitudinal Joints	DOL	25,748.000	25,748.000
0102	460.2010	Incentive Air Voids HMA Pavement	DOL	9,108.000	9,108.000
0104	460.5224	HMA Pavement 4 LT 58-28 S	TON	12,993.000	12,993.000
0106	465.0105	Asphaltic Surface	TON	2,158.000	2,158.000
0108	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	38.000	38.000
0112	465.0425	Asphaltic Shoulder Rumble Strips 2-Lane Rural	LF	45,563.000	45,563.000
0114	465.0475	Asphalt Centerline Rumble Strips 2-Lane Rural	LF	21,123.000	21,123.000
0116	502.0100	Concrete Masonry Bridges	CY	214.000	214.000
0118	502.3200	Protective Surface Treatment	SY	192.000	192.000
0120	502.3210	Pigmented Surface Sealer	SY	60.000	60.000
0124	505.0400	Bar Steel Reinforcement HS Structures	LB	5,660.000	5,660.000
0126	505.0600	Bar Steel Reinforcement HS Coated Structures	LB	30,640.000	30,640.000
0130	516.0500	Rubberized Membrane Waterproofing	SY	24.000	24.000
0132	520.1015	Apron Endwalls for Culvert Pipe 15-Inch	EACH	2.000	2.000
0134	520.1024	Apron Endwalls for Culvert Pipe 24-Inch	EACH	8.000	8.000
0140	520.3415	Culvert Pipe Class III-A Non-metal 15-Inch	LF	23.000	23.000
0142	520.3424	Culvert Pipe Class III-A Non-metal 24-Inch	LF	364.000	364.000
0156	522.0424	Culvert Pipe Reinforced Concrete Class IV 24-Inch	LF	452.000	452.000
0158	522.0430	Culvert Pipe Reinforced Concrete Class IV 30-Inch	LF	527.000	527.000
0160	522.0436	Culvert Pipe Reinforced Concrete Class IV 36-Inch	LF	117.000	117.000
0164	522.1024	Apron Endwalls for Culvert Pipe Reinforced Concrete 24-Inch	EACH	18.000	18.000

4075-39-72

Line	Item	Item Description	Unit	Total	Qty
0166	522.1030	Apron Endwalls for Culvert Pipe Reinforced Concrete 30-Inch	EACH	20.000	20.000
0168	522.1036	Apron Endwalls for Culvert Pipe Reinforced Concrete 36-Inch	EACH	4.000	4.000
0176	550.1100	Piling Steel HP 10-Inch X 42 Lb	LF	1,050.000	1,050.000
0182	601.0588	Concrete Curb & Gutter 4-Inch Sloped 36-Inch Type TBT	LF	67.000	67.000
0184	601.0590	Concrete Curb & Gutter 4-Inch Sloped 36-Inch Type TBTT	LF	13.000	13.000
0188	606.0200	Riprap Medium	CY	6.000	6.000
0190	606.0300	Riprap Heavy	CY	140.000	140.000
0212	612.0406	Pipe Underdrain Wrapped 6-Inch	LF	160.000	160.000
0214	614.0150	Anchor Assemblies for Steel Plate Beam Guard	EACH	4.000	4.000
0216	614.2300	MGS Guardrail 3	LF	50.000	50.000
0222	614.2500	MGS Thrie Beam Transition	LF	157.600	157.600
0224	614.2610	MGS Guardrail Terminal EAT	EACH	4.000	4.000
0230	618.0100	Maintenance And Repair of Haul Roads (project) 02. 4075-39-72	EACH	1.000	1.000
0232	619.1000	Mobilization	EACH	0.350	0.350
0234	624.0100	Water	MGAL	125.000	125.000
0236	625.0100	Topsoil	SY	7,185.000	7,185.000
0238	628.1504	Silt Fence	LF	3,127.000	3,127.000
0240	628.1520	Silt Fence Maintenance	LF	3,127.000	3,127.000
0242	628.1905	Mobilizations Erosion Control	EACH	8.000	8.000
0244	628.1910	Mobilizations Emergency Erosion Control	EACH	4.000	4.000
0246	628.2008	Erosion Mat Urban Class I Type B	SY	7,185.000	7,185.000
0250	628.7504	Temporary Ditch Checks	LF	32.000	32.000
0252	628.7555	Culvert Pipe Checks	EACH	210.000	210.000
0254	629.0210	Fertilizer Type B	CWT	4.550	4.550
0256	630.0140	Seeding Mixture No. 40	LB	130.000	130.000
0258	630.0500	Seed Water	MGAL	405.000	405.000
0260	633.5200	Markers Culvert End	EACH	48.000	48.000
0262	634.0612	Posts Wood 4x6-Inch X 12-FT	EACH	4.000	4.000
0264	637.2230	Signs Type II Reflective F	SF	12.000	12.000
0266	638.2102	Moving Signs Type II	EACH	4.000	4.000
0268	638.2602	Removing Signs Type II	EACH	4.000	4.000
0270	638.3000	Removing Small Sign Supports	EACH	4.000	4.000
0272	638.4000	Moving Small Sign Supports	EACH	4.000	4.000
0274	642.5401	Field Office Type D	EACH	0.350	0.350
0276	643.0300	Traffic Control Drums	DAY	25,900.000	25,900.000
0278	643.0420	Traffic Control Barricades Type III	DAY	1,868.000	1,868.000
0280	643.0705	Traffic Control Warning Lights Type A	DAY	2,936.000	2,936.000
0282	643.0900	Traffic Control Signs	DAY	23,012.000	23,012.000
0284	643.0910	Traffic Control Covering Signs Type I	EACH	4.000	4.000
0286	643.0920	Traffic Control Covering Signs Type II	EACH	6.000	6.000
0288	643.1000	Traffic Control Signs Fixed Message	SF	198.000	198.000
0290	643.1050	Traffic Control Signs PCMS	DAY	42.000	42.000
0292	643.5000	Traffic Control	EACH	0.500	0.500
0294	645.0111	Geotextile Type DF Schedule A	SY	118.000	118.000
0296	645.0120	Geotextile Type HR	SY	303.000	303.000
0298	646.1020	Marking Line Epoxy 4-Inch	LF	21,030.000	21,030.000
0300	646.1040	Marking Line Grooved Wet Ref Epoxy 4-Inch	LF	50,620.000	50,620.000
0302	646.6120	Marking Stop Line Epoxy 18-Inch	LF	70.000	70.000
0304	648.0100	Locating No-Passing Zones	MI	4.870	4.870

4075-39-72

Line	Item	Item Description	Unit	Total	Qty
0306	649.0105	Temporary Marking Line Paint 4-Inch	LF	59,490.000	59,490.000
0308	649.0120	Temporary Marking Line Epoxy 4-Inch	LF	51,620.000	51,620.000
0312	650.4500	Construction Staking Subgrade	LF	1,953.000	1,953.000
0314	650.5000	Construction Staking Base	LF	1,909.000	1,909.000
0316	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	67.000	67.000
0318	650.6000	Construction Staking Pipe Culverts	EACH	26.000	26.000
0320	650.6500	Construction Staking Structure Layout (structure) 01. B-5-468	LS	1.000	1.000
0322	650.7000	Construction Staking Concrete Pavement	LF	44.000	44.000
0324	650.8000	Construction Staking Resurfacing Reference	LF	25,544.000	25,544.000
0328	650.9910	Construction Staking Supplemental Control (project) 02. 4075-39-72	LS	1.000	1.000
0330	650.9920	Construction Staking Slope Stakes	LF	2,086.000	2,086.000
0338	690.0150	Sawing Asphalt	LF	1,460.000	1,460.000
0340	690.0250	Sawing Concrete	LF	15.000	15.000
0342	715.0502	Incentive Strength Concrete Structures	DOL	1,284.000	1,284.000
0344	715.0720	Incentive Compressive Strength Concrete Pavement	DOL	500.000	500.000
0346	740.0440	Incentive IRI Ride	DOL	38,960.000	38,960.000
0348	999.2005.S	Maintaining Bird Deterrent System (station) 01. Station 940+12	EACH	1.000	1.000
0354	SPV.0035	Special 01. Foundation Backfill	CY	3,607.000	3,607.000
0358	SPV.0060	Special 02. Cleaning Ditch	EACH	2.000	2.000

CLEARING AND GRUBBING

CATEGORY	STATION	TO STATION	LOCATION	(201.0105) CLEARING STA	(201.0205) GRUBBING STA
0010	939+00	941+00	LT & RT	2	2
PROJECT 4075-39-72 TOTALS				**2**	**2**

REMOVING GUARDRAIL

CATEGORY	STATION	TO STATION	LOCATION	(204.0165) REMOVING GUARDRAIL LF
0010	939+01	941+06	LT	205
	939+18	941+23	RT	205
PROJECT 4075-39-72 TOTAL				**410**

REMOVING SMALL PIPE CULVERTS

CATEGORY	STATION	LOCATION	(203.0100) REMOVING SMALL PIPE CULVERTS EACH	PIPE LENGTH	PIPE DIAMETER	PIPE MATERIAL
0010	759+96	LT & RT	1	65'	24"	CMCP
	773+66	LT & RT	1	62'	24"	CMCP
	797+28	LT & RT	1	72'	30"	CMCP
	797+71	LT & RT	1	43'	30"	CMCP
	811+18	LT & RT	1	56'	30"	CMCP
	821+14	LT & RT	1	47'	24"	CMCP
	831+41	LT & RT	1	45'	24"	CMCP
	839+93	LT & RT	1	43'	24"	CMCP
	854+71	LT & RT	1	51'	24"	CMCP
	858+81	LT & RT	1	55'	36"	CMCP
	876+01	LT & RT	1	45'	24"	CMCP
	883+91	LT & RT	1	49'	36"	CMCP
	900+31	LT & RT	1	49'	24"	CMCP
	910+32	LT & RT	1	53'	24"	CMCP
	926+34	LT & RT	1	68'	30"	CMCP
	930+88	LT & RT	1	46'	24"	CMCP
	938+35	RT	1	25'	15"	CMCP
	949+29	LT & RT	1	54'	24"	CMCP
	941+56	LT	1	37'	24"	CMCP
	955+87	LT & RT	1	67'	30"	CMCP
	965+41	LT & RT	1	50'	30"	CMCP
	978+81	LT & RT	1	61'	30"	CMCP
	998+63	LT & RT	1	61'	24"	CMCP
	1003+01	LT & RT	1	59'	30"	CMCP
PROJECT 4075-39-72 TOTAL			**24**			

NOTE: INCLUDES REMOVING APRON ENDWALLS CONNECTED TO CULVERT PIPE

REMOVING ASPHALTIC SURFACE BUTT JOINTS

CATEGORY	STATION	TO STATION	LOCATION	(204.0115) REMOVING ASPHALTIC SURFACE BUTT JOINTS SY	NOTES
0010	752+71	752+89	LT	4	DRIVEWAY
	753+49	753+85	LT	8	DRIVEWAY
	769+59	769+87	RT	6	DRIVEWAY
	780+43	780+75	LT	7	DRIVEWAY
	797+16	797+38	RT	5	GLENMORE ROAD
	797+16	797+37	LT	5	GLENMORE ROAD
	805+77	806+00	RT	5	HIGHVIEW ROAD
	834+28	834+56	RT	6	DRIVEWAY
	835+69	836+01	RT	7	DRIVEWAY
	850+87	851+14	RT	6	FAIRVIEW ROAD
	870+11	870+41	LT	6	DRIVEWAY
	874+20	874+49	RT	6	DRIVEWAY
	876+85	877+04	RT	4	OAK LANE
	902+67	902+91	RT	5	CTH NN
	902+67	902+91	LT	5	CTH NN
	908+30	908+66	LT	8	DRIVEWAY
	928+85	929+18	LT	8	CTH X
	937+37	937+75	RT	8	DRIVEWAY
	948+29	948+55	RT	6	DRIVEWAY
	950+84	951+13	RT	6	DRIVEWAY
	958+30	958+48	LT	4	RONK ROAD
	960+14	960+32	RT	4	DRIVEWAY
	961+76	962+00	RT	5	DRIVEWAY
	962+57	963+16	RT	13	DRIVEWAY
	971+22	971+44	LT	5	DRIVEWAY
	973+71	974+01	RT	6	WANEK ROAD
	939+69	939+71	LT & RT	9	STH 96 MAINLINE
	940+54	940+56	LT & RT	8	STH 96 MAINLINE
	1005+45	1105+47	LT & RT	8	STH 96 MAINLINE
PROJECT 4075-39-72 TOTAL				**181**	

REMOVING ASPHALTIC SURFACE MILLING

CATEGORY	STATION	TO STATION	LOCATION	(204.0120) REMOVING ASPHALTIC SURFACE MILLING SY
0010	748+18	939+71	LT & RT	65,420
	940+54	1005+74	LT & RT	22,330
PROJECT 4075-39-72 TOTAL				**87,750**

EARTHWORK PROJECT I.D. 4075-39-72

Division	From/To Station	Location	Excavation Common (1) (item # 205.0100) Cut (2)	EBS Excavation (3)	Salvaged/Unusable Pavement Material (4)	Available Material (5)	Unexpanded Fill	Expanded Fill (13) Factor 1.33	Mass Ordinate +/- (14)	Waste	Borrow (item #208.0100)	Comment:
1	938+00 to 940+00	STH 96 - B-05-0468 West Approach	212	0	50	163	267	355	-193	0	193	
2	938+00 to 940+00	STH 96 - B-05-0468 East Approach	211	0	34	177	283	376	-199	0	199	
3	*Culvert Pipe Shallow Transitions		6,568	0	391	6,177	0	0	6,177	0	-6177	
	Undistributed (EBS)		0	60	0	0	0	0	0	0	0	
	4075-39-72 Project Totals		7,051		475	163	267	355	5,785	5,785	0	

*SEE CONSTRUCTION DETAILS

1) Excavation Common is the sum of the Cut and EBS Excavation columns. Item number 205.0100
2) Salvaged/Unsuable Pavement Material is included in Cut.
3) EBS Excavation to be backfilled with Select Crushed Material
4) Salvaged/Unusable Pavement Material
5) Available Material = Cut - Salvaged/Unusuable Pavement Material
13) Expanded Fill. Factor = 1.25
Depending on selections: **Expanded Fill = (Unexpanded Fill - Rock* Rock Factor - Reduced Marsh - Reduced EBS) * Fill Factor**
14) 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.

PREPARE FOUNDATION FOR ASPHALTIC PAVING AND CIR

CATEGORY	DESCRIPTION	(211.0100.02) PREPARE FOUNDATION FOR ASPHALTIC PAVING LS	(211.0700.S.02) PREPARE FOUNDATION FOR CIR BASE LAYER EACH
0010	PROJECT 4075-39-72	1	1
PROJECT 4075-39-72 TOTALS		**1**	**1**

NOTE: PREPARE FOUNDATION FOR ASPHALTIC PAVING IS FOR NON-CIR AREAS

BASE REPAIR FOR CIR LAYER

CATEGORY	DESCRIPTION	(211.0800.S) BASE REPAIR FOR CIR LAYER CY
0010	UNDISTRIBUTED	300
PROJECT 4075-39-72 TOTAL		**300**

COLD-IN-PLACE RECYCLING (CIR) PAVEMENT

CATEGORY	STATION	TO STATION	(327.1000.S) CIR ASPHALTIC BASE LAYER SY	(455.0770.S) ASPHALT STABILIZING AGENT TON
0010	748+18	939+25	65,245	490
	941+10	1005+74	24,320	182
PROJECT 4075-39-72 TOTALS			**89,565**	**672**

BASE AGGREGATE SHOULDERS

CATEGORY	STATION	TO STATION	LOCATION	* (305.0110) BASE AGGREGATE DENSE 3/4-INCH TON	(305.0504.S) HAULING EXCESS SHOULDER MATERIAL CY
0010	748+18	797+16	LT	89	-
	748+18	797+16	RT	90	-
	797+36	902+67	LT	201	-
	797+38	805+78	RT	16	-
	806+00	850+87	RT	83	-
	851+14	876+85	RT	49	-
	877+03	902+67	RT	51	-
	902+91	928+85	LT	48	-
	902+93	939+25	RT	70	-
	929+18	939+25	LT	24	-
	939+25	939+69	LT	8	-
	939+25	939+94	RT	13	-
	940+31	941+10	LT	13	-
	940+56	941+10	RT	8	-
	941+10	958+32	LT	35	-
	941+10	973+73	RT	63	-
	958+47	1005+47	LT	87	-
	974+01	1005+47	RT	59	-
		UNDISTRIBUTED		-	150
		PROJECT 4075-39-72 TOTALS		**1,008**	**150**

*ADDITIONAL QUANTITIES FOUND ELSEWHERE

3

SELECT CRUSHED MATERIAL

CATEGORY	DESCRIPTION	(312.0115) SELECT CRUSHED MATERIAL CY
0010	UNDISTRIBUTED (EBS)	60
	PROJECT 4075-39-72 TOTAL	**60**

CONCRETE APPROACH

CATEGORY	STATION	TO STATION	LOCATION	* (305.0120) BASE AGGREGATE DENSE 1 1/4-INCH TON	(415.0080) CONCRETE PAVEMENT 8-INCH SY	(415.0410) CONCRETE PAVEMENT APPROACH SLAB SY
0010	939+71	939+93	LT & RT	34	39	58
	940+32	940+54	LT & RT	31	36	58
	PROJECT 4075-39-72 TOTALS			**65**	**75**	**116**

*ADDITIONAL QUANTITIES FOUND ELSEWHERE

CONCRETE SURFACE DRAINS

CATEGORY	STATION	LOCATION	(416.1010) CONCRETE SURFACE DRAINS CY
0010	940+84	LT	2
	941+07	RT	2
	PROJECT 4075-39-72 TOTAL		**4**

DRIVEWAYS

CATEGORY	STATION	TO STATION	LOCATION	* (305.0110) BASE AGGREGATE DENSE 3/4-INCH TON	* (305.0120) BASE AGGREGATE DENSE 1 1/4-INCH TON	(465.0120) ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES TON	* (690.0150) SAWING ASPHALT LF	(690.0250) SAWING CONCRETE LF
0010	752+70	752+91	LT	-	-	1	-	-
	753+45	753+90	LT	-	-	2	-	-
	769+54	769+92	RT	-	-	1	-	-
	780+39	780+79	LT	-	-	2	-	-
	834+23	834+61	RT	-	-	1	-	-
	835+65	836+05	RT	-	-	2	-	-
	870+07	870+45	LT	-	-	2	-	-
	874+16	874+52	RT	-	-	1	-	-
	908+25	908+71	LT	-	-	3	-	-
	937+35	937+77	RT	-	-	2	-	-
	941+44	941+70	LT	-	16	5	10	-
	948+25	948+59	RT	-	-	2	-	-
	950+80	951+18	RT	-	-	2	-	-
	960+09	960+37	RT	-	-	2	-	-
	961+72	962+04	RT	-	-	2	-	-
	962+49	963+24	RT	-	-	5	-	-
	970+55	970+85	LT	-	-	1	-	15
	971+16	971+50	LT	-	-	2	-	-
UNDISTRIBUTED (AGG. DRIVEWAYS AND FIELD ENTRANCES)				60	-	-	-	-
	PROJECT 4075-39-72 TOTALS			**60**	**16**	**38**	**10**	**15**

*ADDITIONAL QUANTITIES FOUND ELSEWHERE

3

HMA PAVEMENT

				UPPER LAYER HMA PAVEMENT 4 LT 58-28 S			LOWER LAYER HMA PAVEMENT 4 LT 58-28 S			* (455.0605) TACK COAT
CATEGORY	STATION	TO STATION	LOCATION	(460.5224) * TON	TRAVEL LANE TON	SHOULDER TON	(460.5224) * TON	TRAVEL LANE TON	SHOULDER TON	GAL
0010	748+18	904+25	LT & RT	5,212	3,739	1,473	2,234	1,602	631	6,382
	904+25	939+25	LT & RT	1,160	915	245	497	392	105	1,420
	939+25	939+71	LT & RT	20	12	8	-	-	-	10
	940+54	941+10	LT & RT	23	15	8	-	-	-	12
	941+10	1005+47	LT & RT	2,141	1,682	459	918	721	197	2,622
	PROJECT 4075-39-72 TOTALS			**8,556**	**6,362**	**2,194**	**3,649**	**2,715**	**933**	**10,446**

*ADDITIONAL QUANTITIES FOUND ELSEWHERE

HMA SHOULDER WIDENING

				(211.0400) PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS	* UPPER LAYER HMA PAVEMENT 4 LT 58-28 S (460.5224)	* LOWER LAYER HMA PAVEMENT 4 LT 58-28 S (460.5224)	* (455.0605) TACK COAT
CATEGORY	STATION	TO STATION	LOCATION	STA	TON	TON	GAL
0010	904+25	939+25	LT & RT	70	162	69	198
	941+10	949+33	LT & RT	16	42	18	51
	949+33	1005+47	LT & RT	112	245	105	299
	PROJECT 4075-39-72 TOTALS			**198**	**449**	**192**	**548**

*ADDITIONAL QUANTITIES FOUND ELSEWHERE

ROADWAY RECONSTRUCTION AREA

				* (305.0120) BASE AGGREGATE DENSE 1 1/4-INCH	* (455.0605) TACK COAT	UPPER LAYER HMA PAVEMENT 4 LT 58-28 S			LOWER LAYERS HMA PAVEMENT 4 LT 58-28 S			* (450.4000) HMA COLD WEATHER PAVING	* (690.0150) SAWING ASPHALT
CATEGORY	STATION	TO STATION	LOCATION	TON	GAL	(460.5224) * TON	TRAVEL LANE TON	SHOULDER TON	(460.5224) * TON	TRAVEL LANE TON	SHOULDER TON	TON	LF
0010	939+25	939+71	LT & RT	208	30	20	12	8	49	29	19	69	30
	940+54	941+10	LT & RT	257	35	23	15	8	55	36	19	78	30
	PROJECT 4075-39-72 TOTALS			**465**	**65**	**43**	**27**	**15**	**104**	**65**	**38**	**147**	**60**

*ADDITIONAL QUANTITIES FOUND ELSEWHERE

CULVERT REPLACEMENT REPAIR AREAS

CATEGORY	STATION	TO STATION	LOCATION	** (205.0100) EXCAVATION COMMON CY	* (305.0110) BASE AGGREGATE DENSE 3/4-INCH TON	* (305.0120) BASE AGGREGATE DENSE 1 1/4-INCH TON	(SPV.0035.01) FOUNDATION BACKFILL CY	* (455.0605) TACK COAT GAL	(465.0105) ASPHALTIC SURFACE TON	* (450.4000) HMA COLD WEATHER PAVING TON	* (690.0150) SAWING ASPHALT LF
0010	759+70	760+21	LT & RT	-	7	187	-	17	56	-	60
	773+53	773+79	LT & RT	-	3	97	-	9	29	-	60
	796+68	798+05	LT & RT	497	18	554	252	50	167	-	190
	810+63	811+75	LT & RT	-	15	414	-	37	125	-	60
	820+76	821+52	LT & RT	285	10	281	147	25	85	-	60
	830+99	831+82	LT & RT	316	11	307	165	28	93	-	60
	839+62	840+24	LT & RT	211	8	230	101	21	69	-	60
	854+24	855+20	LT & RT	377	12	355	199	32	107	-	60
	858+21	859+41	LT & RT	565	16	445	340	40	135	-	60
	875+55	876+48	LT & RT	400	12	344	229	31	104	-	60
	883+36	884+46	LT & RT	541	14	407	338	37	123	-	60
	899+90	900+70	LT & RT	306	10	296	159	27	90	90	60
	909+88	910+75	LT & RT	339	11	377	179	34	114	114	60
	925+75	926+93	LT & RT	566	15	508	346	46	154	154	60
	930+36	931+40	LT & RT	474	13	435	281	39	131	131	60
	949+02	949+56	LT & RT	164	7	226	69	20	68	68	60
	955+38	956+37	LT & RT	420	13	415	238	37	126	126	60
	965+04	965+79	LT & RT	275	10	311	139	28	94	94	60
	978+40	979+22	LT & RT	312	11	347	163	31	105	105	60
	998+27	998+99	LT & RT	269	9	304	138	27	92	92	60
	1002+66	1003+36	LT & RT	251	9	295	125	27	89	89	60
PROJECT 4075-39-72 TOTALS				**6,568**	**234**	**7,135**	**3,607**	**642**	**2,158**	**1,063**	**1,390**

*ADDITIONAL QUANTITIES FOUND ELSEWHERE

**FOR INFORMATIONAL PURPOSES ONLY; QUANTITY IS INCLUDED IN EARTHWORK SUMMARY TABLE

CONCRETE CURB & GUTTER

CATEGORY	STATION	TO STATION	LOCATION	(601.0588) CONCRETE CURB & GUTTER 4-INCH 36-INCH TBT LF	(601.0590) CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TBTT LF	(650.5500) CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER LF
0010	940+41	940+81	LT	27	13	27
	940+64	941+04	RT	40	-	40
PROJECT 4075-39-72 TOTALS				**67**	**13**	**67**

ASPHALTIC SHOULDER RUMBLE STRIPS

CATEGORY	STATION	TO STATION	LOCATION	(465.0425) ASPHALTIC SHOULDER RUMBLE STRIPS 2-LANE RURAL (TYPE 1) LF	(465.0425) ASPHALTIC SHOULDER RUMBLE STRIPS 2-LANE RURAL (TYPE 2) LF
0010	748+18	752+47	LT	-	429
	748+18	751+48	RT	-	330
	752+21	755+05	RT	-	284
	753+13	753+26	LT	-	13
	754+08	769+31	LT	-	1,523
	755+82	762+47	RT	-	665
	763+10	769+36	RT	-	626
	770+10	782+05	RT	-	1,195
	770+60	779+43	LT	-	883
	780+98	796+45	LT	-	1,547
	782+78	796+38	RT	-	1,360
	798+14	807+65	LT	-	951
	798+18	804+78	RT	-	660
	806+74	834+05	RT	-	2,731
	808+85	823+64	LT	-	1,479
	824+29	833+67	LT	-	938
	834+78	835+46	RT	-	68
	835+43	847+55	LT	-	1,212
	836+25	841+99	RT	-	574
	842+63	844+43	RT	-	180
	845+08	849+97	RT	-	489
	848+18	854+69	LT	-	651
	852+01	864+66	RT	-	1,265
	855+32	865+83	LT	-	1,051
	865+29	870+98	RT	-	569
	866+73	867+88	LT	-	115
	868+55	869+88	LT	-	133
	870+64	886+53	LT	-	1,589
	871+60	873+96	RT	-	236
	874+72	876+14	RT	-	142
	877+87	892+39	RT	-	1,452
	887+28	901+73	LT	-	1,445
	893+45	901+70	RT	-	825
	903+80	904+25	RT	-	45
	903+83	904+25	LT	-	42
	904+25	908+00	LT	375	-
	904+25	916+20	RT	1,195	-
	908+96	928+11	LT	1,915	-
	916+86	917+27	RT	41	-
	917+89	921+66	RT	377	-
	922+34	925+26	RT	292	-
	925+92	929+43	RT	351	-
	930+09	932+55	RT	246	-
	930+18	939+46	LT	928	-
	933+17	934+50	RT	133	-
	935+10	937+10	RT	200	-
	938+02	939+46	RT	144	-
	940+79	941+21	LT	42	-
	940+79	948+00	RT	721	-
	941+95	957+53	LT	1,558	-
	948+84	950+54	RT	170	-
	951+43	959+84	RT	841	-
	959+47	970+30	LT	1,083	-
	960+62	961+47	RT	85	-
	963+49	972+64	RT	915	-
	971+75	985+34	LT	1,359	-
	974+76	993+69	RT	1,893	-
	986+57	1005+47	LT	1,890	-
	994+35	1005+47	RT	1,112	-
SUBTOTALS				**17,866**	**27,697**
PROJECT 4075-39-72 TOTAL				**45,563**	

ASPHALTIC CENTER LINE RUMBLE STRIPS

CATEGORY	STATION	TO STATION	LOCATION	(465.0475) ASPHALTIC CENTER LINE RUMBLE STRIPS 2-LANE RURAL LF
0010	748+18	795+26	CL	4,708
	799+26	803+76	CL	450
	807+76	832+55	CL	2,479
	836+55	849+00	CL	1,245
	853+00	869+29	CL	1,629
	873+29	874+94	CL	165
	878+94	890+93	CL	1,199
	894+93	900+79	CL	586
	904+79	927+15	CL	2,236
	931+15	939+46	CL	831
	940+79	955+50	CL	1,471
	960+50	971+87	CL	1,137
	975+87	1005+74	CL	2,987
PROJECT 4075-39-72 TOTAL				**21,123**

CULVERT PIPES

CATEGORY	STATION	(520.1015) APRON ENDWALLS FOR CULVERT PIPE 15-INCH EACH	(520.1024) APRON ENDWALLS FOR CULVERT PIPE 24-INCH EACH	(520.3415) CULVERT PIPE CLASS III-A NON-METAL 15-INCH LF	(520.3424) CULVERT PIPE CLASS III-A NON-METAL 24-INCH LF	(522.0424) CULVERT PIPE REINFORCED CONCRETE CLASS IV 24-INCH LF	(522.0430) CULVERT PIPE REINFORCED CONCRETE CLASS IV 30-INCH LF	(522.0436) CULVERT PIPE REINFORCED CONCRETE CLASS IV 36-INCH LF	(522.1024) APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 24-INCH EACH	(522.1030) APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 30-INCH EACH
0010	759+91	-	2	-	87	-	-	-	-	-
	760+00	-	2	-	87	-	-	-	-	-
	773+66	-	2	-	70	-	-	-	-	-
	797+28	-	-	-	-	-	72	-	-	2
	797+71	-	-	-	-	-	41	-	-	2
	811+18	-	-	-	-	-	62	-	-	2
	821+14	-	-	-	-	49	-	-	2	-
	831+41	-	-	-	-	-	48	-	-	2
	839+93	-	-	-	-	45	-	-	2	-
	854+71	-	-	-	-	54	-	-	2	-
	858+81	-	-	-	-	-	-	54	-	-
	876+01	-	-	-	-	56	-	-	2	-
	883+91	-	-	-	-	-	-	63	-	-
	900+30	-	-	-	-	48	-	-	2	-
	910+32	-	-	-	-	53	-	-	2	-
	926+34	-	-	-	-	-	61	-	-	2
	930+88	-	-	-	-	56	-	-	2	-
	938+24	2	-	23	-	-	-	-	-	-
	941+79	-	2	-	120	-	-	-	-	-
	949+29	-	-	-	-	41	-	-	2	-
	955+84	-	-	-	-	-	52	-	-	2
	955+92	-	-	-	-	-	52	-	-	2
	965+41	-	-	-	-	-	44	-	-	2
	978+80	-	-	-	-	-	49	-	-	2
	998+62	-	-	-	-	50	-	-	2	-
	1003+01	-	-	-	-	-	46	-	-	2
PROJECT 4075-39-72 TOTALS		**2**	**8**	**23**	**364**	**452**	**527**	**117**	**18**	**20**

CULVERT PIPES (CONTINUED)

CATEGORY	STATION	(522.1036) APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 36-INCH EACH	(633.5200) MARKERS CULVERT END EACH	(650.6000) CONSTRUCTION STAKING PIPE CULVERTS EACH	(SPV.0060.02) CLEANING DITCH EACH	NOTES
0010	759+91	-	2	1	-	
	760+00	-	2	1	-	
	773+66	-	2	1	-	
	797+28	-	2	1	-	
	797+71	-	2	1	-	
	811+18	-	2	1	-	
	821+14	-	2	1	-	
	831+41	-	2	1	-	
	839+93	-	2	1	-	
	854+71	-	2	1	-	
	858+81	2	2	1	-	
	876+01	-	2	1	-	
	883+91	2	2	1	-	
	900+30	-	2	1	-	
	910+32	-	2	1	-	
	926+34	-	2	1	-	
	930+88	-	2	1	-	
	938+24	-	-	1	-	
	941+79	-	-	1	-	
	949+29	-	2	1	-	
	955+84	-	2	1	-	
	955+92	-	2	1	-	
	965+41	-	2	1	2	
	978+80	-	2	1	-	
	998+62	-	2	1	-	
	1003+01	-	2	1	-	
PROJECT 4075-39-72 TOTALS		**4**	**48**	**26**	**2**	

RIPRAP

CATEGORY	STATION	LOCATION	(606.0200) RIPRAP MEDIUM CY	(645.0120) GEOTEXTILE TYPE HR SY
0010	940+84	LT	2	9
	941+07	RT	4	14
PROJECT 4075-39-72 TOTALS			**6**	**23**

BEAM GUARD

CATEGORY	STATION	TO STATION	LOCATION	(614.2300) MGS GUARDRAIL 3 LF	(614.2500) MGS THRIE BEAM TRANSITION LF	(614.2610) MGS GUARDRAIL TERMINAL EAT EACH
0010	938+56	939+09	RT	-	-	1
	939+09	939+47	RT	37.5	-	-
	939+47	939+86	RT	-	39.4	-
	940+62	941+01	RT	-	39.4	-
	941+01	941+54	RT	-	-	1
	938+58	939+11	LT	-	-	1
	939+11	939+24	LT	12.5	-	-
	939+24	939+63	LT	-	39.4	-
	940+38	940+78	LT	-	39.4	-
	940+78	941+31	LT	-	-	1
PROJECT 4075-39-72 TOTALS				**50.0**	**157.6**	**4**

MAINTENANCE AND REPAIR OF HAUL ROADS

CATEGORY	DESCRIPTION	(618.0100.02) EACH
0010	PROJECT 4075-39-72	1
PROJECT 4075-39-72 TOTAL		**1**

WATER

CATEGORY	DESCRIPTION	(624.0100) MGAL
0010	PROJECT 4075-39-72	125
PROJECT 4075-39-72 TOTAL		**125**

NOTE: WATER BID ITEM IS FOR BASE AGGREGATE DENSE DUST CONTROL AND COMPACTION.

FINISHING ITEMS

CATEGORY	STATION	TO STATION	LOCATION	(625.0100) TOPSOIL SY	(628.2008) EROSION MAT URBAN CLASS I TYPE B SY	(629.0210) FERTILIZER TYPE B CWT	(630.0140) SEEDING MIXTURE NO. 40 LB	(630.0500) SEED WATER MGAL
0010	759+29	760+37	LT	303	303	0.19	5	17
	759+56	760+58	RT	299	299	0.19	5	17
	773+26	774+00	LT	208	208	0.13	4	12
	773+39	773+99	RT	156	156	0.10	3	9
	796+86	797+15	LT	61	61	0.04	1	3
	796+86	797+15	RT	47	47	0.03	1	3
	797+39	797+94	RT	85	85	0.05	2	5
	797+51	797+94	LT	54	54	0.03	1	3
	810+78	811+58	RT	181	181	0.11	3	10
	810+85	811+58	LT	188	188	0.12	3	11
	820+76	821+52	LT	97	97	0.06	2	5
	820+76	821+52	RT	113	113	0.07	2	6
	831+11	831+71	LT	86	86	0.05	2	5
	831+11	831+71	RT	87	87	0.05	2	5
	839+62	840+24	LT	87	87	0.05	2	5
	839+62	840+24	RT	71	71	0.04	1	4
	854+22	855+08	LT	145	145	0.09	3	8
	854+41	855+01	RT	76	76	0.05	1	4
	858+33	859+25	LT	184	184	0.12	3	10
	858+50	859+25	RT	114	114	0.07	2	6
	875+71	876+31	LT	93	93	0.06	2	5
	875+71	876+31	RT	99	99	0.06	2	6
	883+33	884+34	LT	189	189	0.12	3	11
	883+33	884+42	RT	216	216	0.14	4	12
	900+00	900+60	LT	71	71	0.04	1	4
	900+00	900+60	RT	72	72	0.05	1	4
	910+00	910+65	LT	111	111	0.07	2	6
	910+00	910+65	RT	92	92	0.06	2	5
	925+95	926+63	RT	125	125	0.08	2	7
	926+05	926+77	LT	165	165	0.10	3	9
	930+50	931+25	LT	119	119	0.07	2	7
	930+50	931+25	RT	103	103	0.06	2	6
	937+25	939+85	LT	359	359	0.23	6	20
	937+74	938+29	RT	76	76	0.05	1	4
	938+41	940+08	RT	191	191	0.12	3	11
	940+15	941+49	LT	269	269	0.17	5	15
	940+54	942+80	RT	268	268	0.17	5	15
	941+54	942+80	LT	183	183	0.12	3	10
	949+02	949+48	LT	59	59	0.04	1	3
	949+02	949+53	RT	80	80	0.05	1	5
	955+59	956+14	LT	70	70	0.04	1	4
	955+62	956+13	RT	92	92	0.06	2	5
	965+07	965+59	RT	84	84	0.05	2	5
	965+10	965+69	LT	89	89	0.06	2	5
	978+52	979+06	LT	86	86	0.05	2	5
	978+56	979+09	RT	112	112	0.07	2	6
	998+25	998+99	LT	127	127	0.08	2	7
	998+25	999+04	RT	118	118	0.07	2	7
	1002+70	1003+29	RT	97	97	0.06	2	5
	1002+73	1003+29	LT	93	93	0.06	2	5
UNDISTRIBUTED (ADDITIONAL DISTURBED AREAS)				638	638	0.42	12	35
PROJECT 4075-39-72 TOTALS				**7,185**	**7,185**	**4.55**	**130**	**405**

3

SILT FENCE

CATEGORY	STATION	TO STATION	LOCATION	(628.1504) SILT FENCE LF	(628.1520) SILT FENCE MAINTENANCE LF
0010	759+22	760+42	LT	115	115
	759+52	760+64	RT	112	112
	773+19	774+06	LT	100	100
	773+34	774+05	RT	78	78
	796+81	797+15	LT	41	41
	797+39	797+95	RT	43	43
	797+48	798+00	LT	44	44
	810+73	811+65	RT	89	89
	810+79	811+62	LT	93	93
	820+69	821+57	RT	78	78
	820+71	821+54	RT	69	69
	831+05	831+77	RT	67	67
	831+07	831+79	LT	64	64
	839+58	840+26	RT	66	66
	839+59	840+28	LT	64	64
	854+14	854+84	LT	50	50
	854+35	855+05	RT	59	59
	858+25	859+31	LT	93	93
	858+42	859+30	RT	69	69
	875+65	876+35	RT	65	65
	875+65	876+39	LT	65	65
	883+23	884+48	RT	96	96
	883+27	884+40	LT	82	82
	899+95	900+63	LT	62	62
	899+95	900+64	RT	64	64
	909+89	910+73	LT	65	65
	909+93	910+71	RT	46	46
	925+87	926+72	RT	63	63
	926+00	926+82	LT	79	79
	930+43	931+31	RT	64	64
	930+45	931+33	LT	87	87
	937+21	939+87	LT	285	285
	940+53	942+86	RT	250	250
	978+48	979+11	LT	63	63
	978+50	979+16	RT	52	52
	998+17	998+08	RT	72	72
	998+20	999+05	LT	63	63
	1002+65	1003+35	LT	65	65
	1002+67	1003+37	RT	45	45
	PROJECT 4075-39-72 TOTALS			**3,127**	**3,127**

MOBILIZATIONS EROSION CONTROL

CATEGORY	DESCRIPTION	(628.1905) EACH	(628.1910) EMERGENCY EACH
0010	PROJECT 4075-39-72	8	4
	PROJECT 4075-39-72 TOTALS	**8**	**4**

TEMPORARY DITCH CHECKS

CATEGORY	STATION	LOCATION	(628.7504) TEMPORARY DITCH CHECKS LF	NOTES
0010	940+40	LT	32	1 INSTALLATION PER CALENDAR YEAR
	PROJECT 4075-39-72 TOTAL		**32**	

CULVERT PIPE CHECKS

CATEGORY	STATION	LOCATION	(628.7555) CULVERT PIPE CHECKS EACH	CULVERT SIZE	NOTES
0010	759+91	RT	6	24-INCH	1 INSTALLATION PER CALENDAR YEAR
	760+00	RT	6	24-INCH	1 INSTALLATION PER CALENDAR YEAR
	773+66	LT	6	24-INCH	1 INSTALLATION PER CALENDAR YEAR
	797+28	RT	10	30-INCH	1 INSTALLATION PER CALENDAR YEAR
	797+71	LT	10	30-INCH	1 INSTALLATION PER CALENDAR YEAR
	811+18	LT	10	30-INCH	1 INSTALLATION PER CALENDAR YEAR
	821+14	RT	6	24-INCH	1 INSTALLATION PER CALENDAR YEAR
	831+41	LT	10	30-INCH	1 INSTALLATION PER CALENDAR YEAR
	839+93	LT	6	24-INCH	1 INSTALLATION PER CALENDAR YEAR
	854+71	RT	6	24-INCH	1 INSTALLATION PER CALENDAR YEAR
	858+81	RT	14	36-INCH	1 INSTALLATION PER CALENDAR YEAR
	876+01	LT	6	24-INCH	1 INSTALLATION PER CALENDAR YEAR
	883+91	LT	14	36-INCH	1 INSTALLATION PER CALENDAR YEAR
	900+30	LT	6	24-INCH	1 INSTALLATION PER CALENDAR YEAR
	910+32	RT	6	24-INCH	1 INSTALLATION PER CALENDAR YEAR
	926+34	RT	10	30-INCH	1 INSTALLATION PER CALENDAR YEAR
	930+88	RT	6	24-INCH	1 INSTALLATION PER CALENDAR YEAR
	938+18	RT	4	15-INCH	1 INSTALLATION PER CALENDAR YEAR
	941+85	LT	6	24-INCH	1 INSTALLATION PER CALENDAR YEAR
	949+28	LT	6	24-INCH	1 INSTALLATION PER CALENDAR YEAR
	955+84	LT	10	30-INCH	1 INSTALLATION PER CALENDAR YEAR
	955+92	LT	10	30-INCH	1 INSTALLATION PER CALENDAR YEAR
	965+41	RT	10	30-INCH	1 INSTALLATION PER CALENDAR YEAR
	978+80	LT	10	30-INCH	1 INSTALLATION PER CALENDAR YEAR
	998+62	RT	6	24-INCH	1 INSTALLATION PER CALENDAR YEAR
	1003+01	RT	10	30-INCH	1 INSTALLATION PER CALENDAR YEAR
	PROJECT 4075-39-72 TOTAL		**210**		

MOVING SIGNS

CATEGORY	STATION	LOCATION	(638.2102) MOVING SIGNS TYPE II EACH	(638.4000) MOVING SMALL SIGN SUPPORTS EACH
0010	759+44	LT	1	1
	797+05	LT	1	1
	926+04	LT	1	1
	941+13	LT	1	1
PROJECT 4075-39-72 TOTALS			**4**	**4**

REMOVING SIGNS

CATEGORY	STATION	LOCATION	(638.2602) REMOVING SIGNS TYPE II EACH	(638.3000) REMOVING SMALL SIGN SUPPORTS EACH	NOTES
0010	939+89	LT	1	1	BRIDGE HASH MARKS
	940+08	RT	1	1	BRIDGE HASH MARKS
	940+16	LT	1	1	BRIDGE HASH MARKS
	940+35	RT	1	1	BRIDGE HASH MARKS
PROJECT 4075-39-72 TOTALS			**4**	**4**	

PERMANENT SIGNING

CATEGORY	STATION	LOCATION	SIGN CODE	SIGN WIDTH X HEIGHT	(634.0612) POSTS WOOD 4x6-INCH X 12 FT EACH	(637.2230) SIGNS TYPE II REFLECTIVE F EACH
0010	939+69	LT	W5-52L	12" X 36"	1	3.0
	939+94	RT	W5-52R	12" X 36"	1	3.0
	940+31	LT	W5-52R	12" X 36"	1	3.0
	940+56	RT	W5-52L	12" X 36"	1	3.0
PROJECT 4075-39-72 TOTALS					**4**	**12.0**

3

PAVEMENT MARKINGS

CATEGORY	STATION	TO STATION	(646.1020) MARKING LINE EPOXY 4-INCH (YELLOW) LF	(649.0120) TEMPORARY MARKING LINE EPOXY 4-INCH (YELLOW) LF	(649.0120) TEMPORARY MARKING LINE EPOXY 4-INCH (WHITE) LF	(646.1040) MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE) LF	(646.6120) MARKING STOP LINE EPOXY 18-INCH LF	(648.0100) LOCATING NO-PASSING ZONES MI	(649.0105) TEMPORARY MARKING LINE PAINT 4-INCH (YELLOW) LF	(649.0105) TEMPORARY MARKING LINE PAINT 4-INCH (WHITE) LF
0010	748+18	1005+92	21,030	21,030	30,590	50,620	70	-	52,230	-
	CULVERT REPLACEMENT AREAS		-	-	-	-	-	-	3,765	3,495
	PROJECT 4075-39-72		-	-	0	-	-	4.87	-	-
	SUBTOTALS		**-**	**21,030**	**30,590**	**-**	**-**	**-**	**55,995**	**3,495**
	PROJECT 4075-39-72 TOTALS		**21,030**	**51,620**		**50,620**	**70**	**4.87**	**59,490**	

NOTES:
TEMPORARY MARKING LINE EPOXY 4-INCH TO BE APPLIED BEFORE CENTERLINE RUMBLE STRIPS ARE INSTALLED
MARKING LINE EPOXY 4-INCH TO BE APPLIED AFTER CENTERLINE RUMBLE STRIPS ARE INSTALLED
TEMPORARY MARKING LINE EPOXY 4-INCH TO BE APPLIED BEFORE TYPE 2 SHOULDER RUMBLE STRIPS ARE INSTALLED
MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH TO BE APPLIED AFTER TYPE 2 SHOULDER RUMBLE STRIPS ARE INSTALLED
STOP LINES TO BE PLACED ON ALL STATE TRUNK AND COUNTY HIGHWAYS.

TRAFFIC CONTROL

CATEGORY	DESCRIPTION	(643.5000) TRAFFIC CONTROL EACH	DRUMS NO. DEVICES	(643.0300) TRAFFIC CONTROL DRUMS DAY	BARRICADES TYPE III NO. DEVICES	* (643.0420) TRAFFIC CONTROL BARRICADES TYPE III DAY	WARNING LIGHTS TYPE A NO. DEVICES	* (643.0705) TRAFFIC CONTROL WARNING LIGHTS TYPE A DAY	SIGNS NO. DEVICES	* (643.0900) TRAFFIC CONTROL SIGNS DAY	DURATION	
0010	ADVANCE WARNING SIGNS (MAINLINE & SIDEROAD)	-	-	-	-	-	-	-	22	3,520	160	DAYS
	LANE CLOSURE WITH FLAGGING OPERATION	-	-	-	-	-	-	-	8	600	75	DAYS
	MOVING PAVEMENT MARKING OPERATION	-	-	-	-	-	-	-	8	480	60	DAYS
	SHOULDER CLOSURE	-	25	750	-	-	-	-	-	-	30	DAYS
	UNEVEN LANES	-	-	-	-	-	-	-	10	450	45	DAYS
	ROAD CLOSURE (STRUCTURE B-05-0468)	-	-	-	18	1,512	28	2,352	14	1,176	84	DAYS
	CULVERT PIPE REPLACEMENT (LANE SHIFT)	-	760	22,800	-	-	-	-	-	-	30	DAYS
	TEMPORARY SIGNING FOR CULVERT REPLACEMENT	-	-	-	-	-	-	-	126	3,780	30	DAYS
	PROJECT 4075-39-72	0.5	-	-	-	-	-	-	-	-		
	UNDISTRIBUTED	-	-	2,350	-	188	-	248	-	994		
	PROJECT 4075-39-72 TOTALS	**0.5**		**25,900**		**1,700**		**2,600**		**11,000**		

*ADDITIONAL QUANTITIES FOUND ELSEWHERE
NOTES:
ADVANCE WARNING SIGNS (MAINLINE & SIDEROAD) - SEE S.D.D. "TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO WAY UNDIVIDED ROAD OPEN TO TRAFFIC"
LANE CLOSURE WITH FLAGGING OPERATION - SEE S.D.D. "TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION"
MOVING PAVEMENT MARKING OPERATION - SEE S.D.D. "MOVING PAVEMENT MARKING OPERATION - TWO-LANE TWO-WAY ROADWAY"
SHOULDER CLOSURE - SEE S.D.D. "TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY"
ROAD CLOSURE - SEE S.D.D. "BARRICADES AND SIGNS FOR MAINLINE CLOSURES"

TRAFFIC CONTROL SIGNS PCMS

CATEGORY	LOCATION	DESCRIPTION	* (643.1050) TRAFFIC CONTROL SIGNS PCMS DAY	NOTES
0010	USH 96 EASTBOUND, WEST OF PROJECT LIMITS	ADVANCE PROJECT NOTIFICATION	14	7 DAYS PER CALENDAR YEAR
	USH 96 WESTBOUND, EAST OF PROJECT LIMITS	ADVANCE PROJECT NOTIFICATION	14	7 DAYS PER CALENDAR YEAR
		PROJECT 4075-39-72 TOTAL	**28**	

*ADDITIONAL QUANTITIES FOUND ELSEWHERE

TEMPORARY LANE SHIFT DURING CULVERT WORK

CATEGORY	CULVERT STATION	(208.1500.S) TEMPORARY LANE SHIFT DURING CULVERT WORK EACH
0010	759+95	1
	773+66	1
	811+18	1
	821+14	1
	831+41	1
	839+93	1
	854+71	1
	858+81	1
	876+01	1
	883+91	1
	900+30	1
	910+32	1
	926+34	1
	930+88	1
	949+29	1
	955+83	1
	955+91	1
	965+41	1
	978+81	1
	PROJECT 4075-39-72 TOTAL	**19**

FILE NAME: P:\905\93\00093473\CADD\SHEETSPLAN\030201-MQ BORDER72.DWG
LAYOUT NAME - 030201-mq
PLOT DATE: 6/17/2021 12:12 PM PLOT BY: JASON DOLENS PLOT NAME:
WISDOT/CADDS SHEET 42

TRAFFIC CONTROL DETOUR SUMMARY

SIGN NO.	LOCATION	SIGN CODE	SIZE W X H	NUMBER IN SERVICE	APPROX SERVICE PERIOD 84 DAYS	* (643.0900) SIGNS DAYS	* (643.0420) BARRICADES TYPE III DAYS	* (643.0705) WARNING LIGHTS TYPE A DAYS	(643.1000) SIGNS FIXED MESSAGE SF	* (643.1050) SIGNS PCMS DAYS	NO. OF CYCLES	(643.0910) COVERING SIGNS TYPE I EACH	(643.0920) COVERING SIGNS TYPE II EACH	REMARKS
1	STH 96, W. OF CTH G, PLACE 1500' W. OF CTH G INTERSECTION	W 20-2A	48"X48"	1	84	84								
2	STH 96, W. OF CTH G, PLACE 750' W. OF CTH G INTERSECTION	MO 4-8	24"X12"	1	84	84								
	"	M 3-2	24"X12"	1	84	84								
	"	M 1-6	24"X24"	1	84	84								96
	"	MO 5-1R	21"X21"	1	84	84								
3	STH 96, AT CTH G, PLACE RIGHT OF EXISTING R1-1 SIGN	MO 4-8	24"X12"	1	84	84								
	"	M 3-2	24"X12"	1	84	84								
	"	M 1-6	24"X24"	1	84	84								96
	"	MO 6-1	21"X21"	1	84	84								RIGHT
4	STH 96, AT CTH G, PLACE IN ROADWAY ON N. LEG OF CTH G INTERSECTION	R 11-3	60"X30"	1	84	84	84	168						3 MILES AHEAD
5	STH 96, N. OF CTH G INTERSECTION, COVER EXISTING J4-1 SIGN AS SHOWN										1		1	COVER ENTIRE SIGN
6	CTH G, AT STH 96, MODIFY EXISTING J13-2 SIGN AS SHOWN	MO 6-1	21"X21"	1	84	84								LEFT
7	CTH G, S. OF STH 96, PLACE RIGHT OF EXISTING J4-1 SIGN	MO 4-8	24"X12"	1	84	84								
	"	M 3-2	24"X12"	1	84	84								
	"	M 1-6	24"X24"	1	84	84								96
8	CTH G, S. OF STH 96, MODIFY EXISTING J1-1 SIGN AS SHOWN	M 4-8A	24"X18"	1	84	84								
9	CTH G, N. OF CTH Z, PLACE 500' N. OF CTH Z INTERSECTION	MO 4-8	24"X12"	1	84	84								
	"	M 3-2	24"X12"	1	84	84								
	"	M 1-6	24"X24"	1	84	84								96
	"	MO 5-1L	21"X21"	1	84	84								
10	CTH G, AT CTH Z, PLACE RIGHT OF EXISTING R1-1 SIGN	MO 4-8	24"X12"	1	84	84								
	"	M 3-2	24"X12"	1	84	84								
	"	M 1-6	24"X24"	1	84	84								96
	"	MO 6-1	21"X21"	1	84	84								LEFT
11	CTH Z, AT CTH G, PLACE RIGHT OF EXISTING R1-1 SIGN	MO 4-8	24"X12"	1	84	84								
	"	M 3-4	24"X12"	1	84	84								
	"	M 1-6	24"X24"	1	84	84								96
	"	MO 6-1	21"X21"	1	84	84								RIGHT
12	CTH Z, E. OF CTH G, PLACE 500' E. OF CTH G INTERSECTION	MO 4-8	24"X12"	1	84	84								
	"	M 3-4	24"X12"	1	84	84								
	"	M 1-6	24"X24"	1	84	84								96
	"	MO 5-1R	21"X21"	1	84	84								
13	CTH Z, W. OF CTH NN, PLACE 150' W. OF CTH NN INTERSECTION	MO 4-8	24"X12"	1	84	84								
	"	M 3-2	24"X12"	1	84	84								
	"	M 1-6	24"X24"	1	84	84								96
	"	MO 6-1	21"X21"	1	84	84								AHEAD
14	CTH Z, E. OF CTH NN, PLACE 150' E. OF CTH NN INTERSECTION	MO 4-8	24"X12"	1	84	84								
	"	M 3-4	24"X12"	1	84	84								
	"	M 1-6	24"X24"	1	84	84								96
	"	MO 6-1	21"X21"	1	84	84								AHEAD
15	CTH Z, W. OF CTH T, PLACE 150' W. OF CTH T INTERSECTION	MO 4-8	24"X12"	1	84	84								
	"	M 3-2	24"X12"	1	84	84								
	"	M 1-6	24"X24"	1	84	84								96
	"	MO 6-1	21"X21"	1	84	84								AHEAD
*ADDITIONAL QUANTITIES FOUND ELSEWHERE		PAGE SUBTOTALS				3,612	84	168	0	0		0	1	

TRAFFIC CONTROL DETOUR SUMMARY CONTINUED

SIGN NO.	LOCATION	SIGN CODE	SIZE W X H	NUMBER IN SERVICE	APPROX SERVICE PERIOD 84 DAYS	* (643.0900) SIGNS DAYS	* (643.0420) BARRICADES TYPE III DAYS	* (643.0705) WARNING LIGHTS TYPE A DAYS	(643.1000) SIGNS FIXED MESSAGE SF	* (643.1050) SIGNS PCMS DAYS	NO. OF CYCLES	(643.0910) COVERING SIGNS TYPE I EACH	(643.0920) COVERING SIGNS TYPE II EACH	REMARKS
16	CTH Z, E. OF CTH T, PLACE 150' E. OF CTH T INTERSECTION	MO 4-8	24"X12"	1	84	84								
	"	M 3-4	24"X12"	1	84	84								
	"	M 1-6	24"X24"	1	84	84								96
	"	MO 6-1	21"X21"	1	84	84								AHEAD
17	CTH Z, W. OF I-43, PLACE RIGHT OF EXISTING J4-1 SIGN	MO 4-8	24"X12"	1	84	84								
	"	M 3-4	24"X12"	1	84	84								
	"	M 1-6	24"X24"	1	84	84								96
18	CTH Z, AT I-43, PLACE 175' E. OF I-43 SB RAMP INTERSECTION	MO 4-8	24"X12"	1	84	84								
	"	M 3-2	24"X12"	1	84	84								
	"	M 1-6	24"X24"	1	84	84								96
	"	MO 5-1L	21"X21"	1	84	84								
19	CTH Z, AT I-43, PLACE IN MEDIAN AT I-43 NB RAMP INTERSECTION	MO 4-8	24"X12"	1	84	84								
	"	M 3-2	24"X12"	1	84	84								
	"	M 1-6	24"X24"	1	84	84								96
	"	MO 6-1	21"X21"	1	84	84								LEFT
20	I-43 NB OFF-RAMP TO STH 147, PLACE 125' PRIOR TO STH 147 INTERSECTION	MO 4-8	24"X12"	1	84	84								
	"	M 3-4	24"X12"	1	84	84								
	"	M 1-6	24"X24"	1	84	84								96
	"	MO 6-1	21"X21"	1	84	84								LEFT
21	I-43 NB OFF-RAMP TO STH 147, PLACE 900' PRIOR TO STH 147 INTERSECTION	MO 4-8	24"X12"	1	84	84								
	"	M 3-4	24"X12"	1	84	84								
	"	M 1-6	24"X24"	1	84	84								96
	"	MO 5-1L	21"X21"	1	84	84								
22	I-43, AT STH 147 EXIT, PLACE LEFT OF EXISTING TYPE I GROUND MOUNT SIGN	MO 4-8	36"X18"	1	84	84								
	"	M 3-4	36"X18"	1	84	84								
	"	M 1-6	36"X36"	1	84	84								96
	"	MO 6-2	30"X30"	1	84	84								TILT RIGHT
23	I-43, S. OF STH 147, PLACE 1000' S. OF STH 147 EXIT IN MEDIAN	MO 4-8	36"X18"	1	84	84								
	"	M 3-4	36"X18"	1	84	84								
	"	M 1-6	36"X36"	1	84	84								96
	"	MO 5-2R	30"X30"	1	84	84								
24	I-43, S. OF STH 147, PLACE 1000' S. OF STH 147 EXIT ON RIGHT SHOULDER	MO 4-8	36"X18"	1	84	84								
	"	M 3-4	36"X18"	1	84	84								
	"	M 1-6	36"X36"	1	84	84								96
	"	MO 5-2R	30"X30"	1	84	84								
25	I-43, S. OF STH 147, PLACE 1750' S. OF STH 147 EXIT IN MEDIAN	FMS	132"X54"	1					49.5					SEE SIGN DETAIL SHEET
26	I-43, S. OF STH 147, PLACE 1750' S. OF STH 147 EXIT ON RIGHT SHOULDER	FMS	132"x54"	1					49.5					SEE SIGN DETAIL SHEET
27	I-43, S. OF STH 147, PLACE 1/2 MILE S. OF STH 147 EXIT IN MEDIAN	M 3-4	36"X18"	1	84	84								
	"	M 1-6	36"X36"	1	84	84								96
	"	W 20-2A	48"X48"	1	84	84								
28	I-43, S. OF STH 147, PLACE 1/2 MILE S. OF STH 147 EXIT ON RIGHT SHOULDER	M 3-4	36"X18"	1	84	84								
	"	M 1-6	36"X36"	1	84	84								96
	"	W 20-2A	48"X48"	1	84	84								
29	I-43 SB OFF-RAMP TO STH 147, PLACE 125' PRIOR TO CTH Z INTERSECTION	MO 4-8	24"X12"	1	84	84								
	"	M 3-4	24"X12"	1	84	84								
	"	M 1-6	24"X24"	1	84	84								96
	"	MO 6-1	21"X21"	1	84	84								RIGHT
*ADDITIONAL QUANTITIES FOUND ELSEWHERE		PAGE SUBTOTALS				3,780	0	0	99	0		0	0	

TRAFFIC CONTROL DETOUR SUMMARY CONTINUED

SIGN NO.	LOCATION	SIGN CODE	SIZE W X H	NUMBER IN SERVICE	APPROX SERVICE PERIOD 84 DAYS	* (643.0900) SIGNS DAYS	* (643.0420) BARRICADES TYPE III DAYS	* (643.0705) WARNING LIGHTS TYPE A DAYS	(643.1000) SIGNS FIXED MESSAGE SF	* (643.1050) SIGNS PCMS DAYS	NO. OF CYCLES	(643.0910) COVERING SIGNS TYPE I EACH	(643.0920) COVERING SIGNS TYPE II EACH	REMARKS
30	I-43 SB OFF-RAMP TO STH 147, PLACE 900' PRIOR TO CTH Z INTERSECTION	MO 4-8	24"X12"	1	84	84								
	"	M 3-4	24"X12"	1	84	84								
	"	M 1-6	24"X24"	1	84	84								96
	"	MO 5-1R	21"X21"	1	84	84								
31	I-43, AT STH 147 EXIT, PLACE LEFT OF EXISTING TYPE I GROUND MOUNT SIGN	MO 4-8	36"X18"	1	84	84								
	"	M 3-4	36"X18"	1	84	84								
	"	M 1-6	36"X36"	1	84	84								96
	"	MO 6-2	30"X30"	1	84	84								TILT RIGHT
32	I-43, N. OF STH 147, PLACE 1000' N. OF STH 147 EXIT ON RIGHT SHOULDER	MO 4-8	36"X18"	1	84	84								
	"	M 3-2	36"X18"	1	84	84								
	"	M 1-6	36"X36"	1	84	84								96
	"	MO 5-2R	30"X30"	1	84	84								
33	I-43, N. OF STH 147, PLACE 1000' N. OF STH 147 EXIT IN MEDIAN	MO 4-8	36"X18"	1	84	84								
	"	M 3-2	36"X18"	1	84	84								
	"	M 1-6	36"X36"	1	84	84								96
	"	MO 5-2R	30"X30"	1	84	84								
34	I-43, S. OF STH 96, COVER EXISTING TYPE I SIGN AS SHOWN										1	1		COVER "96" AND "GREENLEAF"
35	I-43, S. OF STH 96, PLACE 1/2 MILE S. OF STH 96 EXIT IN MEDIAN	M 4-8A	36"X24"	1	84	84								
	"	M 3-4	36"X18"	1	84	84								
	"	M 1-6	36"X36"	1	84	84								96
36	I-43, S. OF STH 96, PLACE 1/2 MILE S. OF STH 96 EXIT ON RIGHT SHOULDER	M 4-8A	36"X24"	1	84	84								
	"	M 3-4	36"X18"	1	84	84								
	"	M 1-6	36"X36"	1	84	84								96
37	I-43, S. OF STH 96, PLACE RIGHT OF EXISTING J4-1 SIGN	MO 4-8	36"X18"	1	84	84								
	"	M 3-4	36"X18"	1	84	84								
	"	M 1-6	36"X36"	1	84	84								96
38	I-43, AT STH 96 EXIT, COVER EXISTING TYPE I SIGN AS SHOWN										1	1		COVER "96" AND "GREENLEAF"
39	I-43 OFF-RAMP TO STH 96, COVER EXISTING D1-3 SIGN AS SHOWN										1		1	COVER "SHIRLEY-GREENLEAF"
40	I-43 OFF-RAMP TO STH 96, COVER EXISTING J3-2 SIGN AS SHOWN										1		1	COVER "WEST 96 LT"
41	CTH KB, E. OF I-43, PLACE 750' E. OF I-43 RAMP INTERSECTION	M 3-4	24"X12"	1	84	84								
	"	M 1-6	24"X24"	1	84	84								96
	"	W 20-2A	48"X48"	1	84	84								
42	CTH KB, E. OF I-43, PLACE BETWEEN I-43 RAMP INTERSECTIONS IN MEDIAN	MO 4-8	24"X12"	1	84	84								
	"	M 3-4	24"X12"	1	84	84								
	"	M 1-6	24"X24"	1	84	84								96
	"	MO 5-1L	21"X21"	1	84	84								
43	STH 96, AT I-43 SB RAMP INTERSECTION, PLACE IN MEDIAN ON WEST SIDE OF RAMP INTERSECTION	MO 4-8	24"X12"	1	84	84								
	"	M 3-4	24"X12"	1	84	84								
	"	M 1-6	24"X24"	1	84	84								96
	"	MO 6-1	21"X21"	1	84	84								LEFT
44	STH 96, AT I-43 SB RAMP INTERSECTION, PLACE IN ROADWAY ON WEST LEG OF INTERSECTION	R 11-4	60"X30"	1	84	84	84	168						
45	STH 96, W. OF I-43, COVER EXISTING J4-1 SIGN AS SHOWN										1		1	COVER ENTIRE SIGN
46	STH 96, W. OF I-43, PLACE ON RIGHT SHOULDER, FIELD DETERMINE LOCATION	PCMS		1						7				PLACE IN ADVANCE OF DETOUR/WORK
47	I-43 OFF-RAMP TO STH 96, COVER EXISTING J3-2 SIGN AS SHOWN										1		1	COVER "WEST 96 RT"
*ADDITIONAL QUANTITIES FOUND ELSEWHERE		PAGE SUBTOTALS				3,108	84	168	0	7		2	4	

3

SIGN NO.	LOCATION	SIGN CODE	SIZE W X H	NUMBER IN SERVICE	APPROX SERVICE PERIOD 84 DAYS	* (643.0900) SIGNS DAYS	* (643.0420) BARRICADES TYPE III DAYS	* (643.0705) WARNING LIGHTS TYPE A DAYS	(643.1000) SIGNS FIXED MESSAGE SF	* (643.1050) SIGNS PCMS DAYS	NO. OF CYCLES	(643.0910) COVERING SIGNS TYPE I EACH	(643.0920) COVERING SIGNS TYPE II EACH	REMARKS
48	I-43 OFF-RAMP TO STH 96, COVER EXISTING D1-3 SIGN AS SHOWN										1		1	COVER "SHIRLEY-GREENLEAF"
49	I-43, AT STH 96 EXIT, COVER EXISTING TYPE I GROUND MOUNT SIGN AS SHOWN										1	1		COVER "96" AND "GREENLEAF"
50	I-43, AT STH 96 EXIT, PLACE LEFT OF EXISTING TYPE I SIGN	MO 4-8	36"X18"	1	84	84								
	"	M 3-4	36"X18"	1	84	84								
	"	M 1-6	36"X36"	1	84	84								96
	"	MO 6-1	30"X30"	1	84	84								AHEAD
51	I-43, N. OF STH 96 EXIT, PLACE 1000' N. OF STH 96 EXIT ON RIGHT SHOULDER	MO 4-8	36"X18"	1	84	84								
	"	M 3-4	36"X18"	1	84	84								
	"	M 1-6	36"X36"	1	84	84								96
	"	MO 6-1	30"X30"	1	84	84								AHEAD
52	I-43, N. OF STH 96 EXIT, PLACE 1000' N. OF STH 96 EXIT IN MEDIAN	MO 4-8	36"X18"	1	84	84								
	"	M 3-4	36"X18"	1	84	84								
	"	M 1-6	36"X36"	1	84	84								96
	"	MO 6-1	30"X30"	1	84	84								AHEAD
53	I-43, N. OF STH 96, PLACE 1750' N. OF STH 96 EXIT ON RIGHT SHOULDER	FMS	132"X54"	1					49.5					SEE SIGN DETAIL SHEET
54	I-43, N. OF STH 96, PLACE 1750' N. OF STH 96 EXIT IN MEDIAN	FMS	132"X54"	1					49.5					SEE SIGN DETAIL SHEET
55	I-43, N. OF STH 96, PLACE 1/2 MILE N. OF STH 96 ON RIGHT SHOULDER	M 3-4	36"X18"	1	84	84								
	"	M 1-6	36"X36"	1	84	84								96
	"	W 20-2A	48"X48"	1	84	84								
56	I-43, N. OF STH 96, PLACE 1/2 MILE N. OF STH 96 IN MEDIAN	M 3-4	36"X18"	1	84	84								
	"	M 1-6	36"X36"	1	84	84								96
	"	W 20-2A	48"X48"	1	84	84								
57	I-43, N. OF STH 96, COVER EXISTING TYPE I SIGN AS SHOWN										1	1		COVER "96" AND "GREENLEAF"
58	STH 96, E. OF CTH G, PLACE ON RIGHT SHOULDER, FIELD DETERMINE LOCATION	PCMS		1						7				PLACE IN ADVANCE OF DETOUR/WORK
*ADDITIONAL QUANTITIES FOUND ELSEWHERE		PAGE SUBTOTALS				1,512	0	0	99	7		2	1	
PROJECT 4075-39-72 TOTALS						**12,012**	**168**	**336**	**198**	**14**		**4**	**6**	

CONSTRUCTION STAKING

CATEGORY	STATION	TO STATION	LOCATION	(650.4500) SUBGRADE LF	(650.5000) BASE LF	(650.7000) CONCRETE PAVEMENT LF	(650.8000) RESURFACING REFERENCE LF	(650.9910.02) SUPPLEMENTAL CONTROL LS	(650.9920) SLOPE STAKES LF
0010	748+18	939+25	LT & RT	-	-	-	19,107	-	-
	941+10	1005+47	LT & RT	-	-	-	6,437	-	-
	759+29	760+58	LT & RT	51	51	-	-	-	129
	773+26	774+00	LT & RT	26	26	-	-	-	74
	796+68	798+05	LT & RT	137	137	-	-	-	84
	810+63	811+75	LT & RT	112	112	-	-	-	80
	820+76	821+52	LT & RT	76	76	-	-	-	76
	830+99	831+82	LT & RT	83	83	-	-	-	60
	839+62	840+24	LT & RT	62	62	-	-	-	62
	854+24	855+20	LT & RT	96	96	-	-	-	86
	858+21	859+41	LT & RT	120	120	-	-	-	92
	875+55	876+48	LT & RT	93	93	-	-	-	60
	883+36	884+46	LT & RT	110	110	-	-	-	110
	899+90	900+70	LT & RT	80	80	-	-	-	60
	909+88	910+75	LT & RT	87	87	-	-	-	68
	925+75	926+93	LT & RT	118	118	-	-	-	73
	930+36	931+40	LT & RT	104	104	-	-	-	75
	937+25	940+04	LT & RT	-	-	-	-	-	279
	939+25	939+71	LT & RT	46	46	-	-	-	-
	939+71	939+93	LT & RT	22	-	22	-	-	-
	940+32	940+54	LT & RT	22	-	22	-	-	-
	940+54	941+10	LT & RT	56	56	-	-	-	-
	940+15	942+80	LT & RT	-	-	-	-	-	265
	949+02	949+56	LT & RT	54	54	-	-	-	54
	955+38	956+37	LT & RT	99	99	-	-	-	56
	965+04	965+79	LT & RT	75	75	-	-	-	59
	978+40	979+22	LT & RT	82	82	-	-	-	53
	998+27	998+99	LT & RT	72	72	-	-	-	72
	1002+66	1003+36	LT & RT	70	70	-	-	-	59
		PROJECT 4075-39-72		-	-	-	-	1	-
	PROJECT 4075-39-72 TOTALS			**1,953**	**1,909**	**44**	**25,544**	**1**	**2,086**

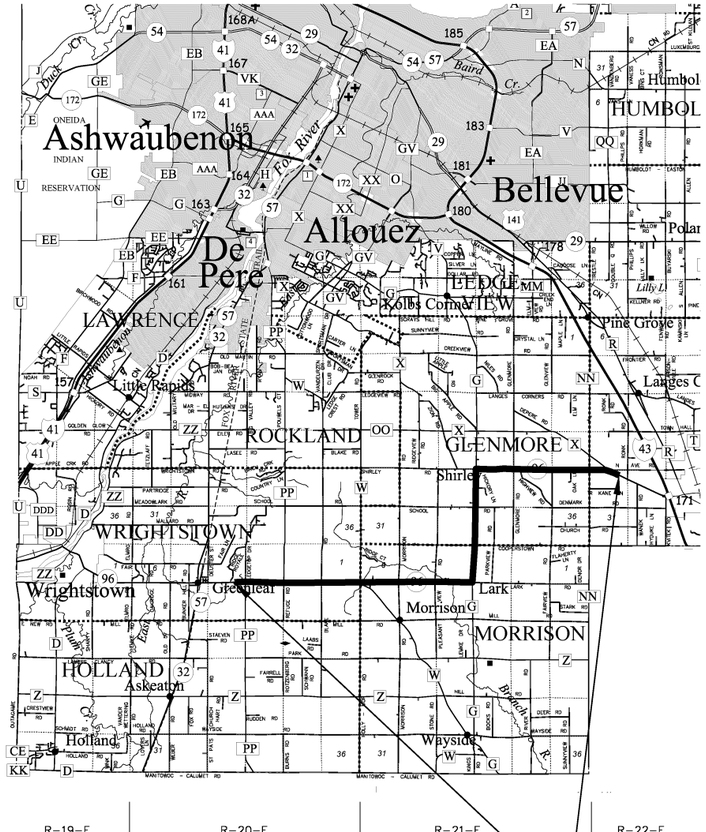
HMA INCENTIVES SUMMARY TABLE

Station	To	Station	Location	HMA Pavement 4 LT 58-28 S 460.5224 Ton	PWL Density Incentive Ton*	PWL Air Voids Ton**	Incentive Density HMA Pavement Longitudinal Joints LF****	Remarks
748+18		904+25	LT & RT	3,739	3,739	--	31,214	UPPER LAYER, DRIVING LANES, 2 - 12 FOOT LANES
748+18		904+25	LT & RT	1,473	--	1,473	--	UPPER LAYER, MAINLINE 4-FOOT SHOULDERS
904+25		939+25	LT & RT	915	915	--	7,000	UPPER LAYER, DRIVING LANES, 2 - 12 FOOT LANES
904+25		939+25	LT & RT	245	--	245	--	UPPER LAYER, MAINLINE 4-FOOT SHOULDERS
939+25		939+71	LT & RT	29	29	--	92	LOWER LAYER, DRIVING LANES, 2 - 12 FOOT LANES
939+25		939+71	LT & RT	12	12	--	92	UPPER LAYER, DRIVING LANES, 2 - 12 FOOT LANES
939+25		939+71	LT & RT	19	--	19	--	LOWER LAYER, MAINLINE 8-FOOT SHOULDERS
939+25		939+71	LT & RT	8	--	8	--	UPPER LAYER, MAINLINE 8-FOOT SHOULDERS
940+54		941+10	LT & RT	36	36	--	112	LOWER LAYER, DRIVING LANES, 2 - 12 FOOT LANES
940+54		941+10	LT & RT	15	15	--	112	UPPER LAYER, DRIVING LANES, 2 - 12 FOOT LANES
940+54		941+10	LT & RT	19	--	19	--	LOWER LAYER, MAINLINE 8-FOOT SHOULDERS
940+54		941+10	LT & RT	8	--	8	--	UPPER LAYER, MAINLINE 4-FOOT SHOULDERS
941+10		1005+47	LT & RT	1,682	1,682	--	12,874	UPPER LAYER, DRIVING LANES, 2 - 12 FOOT LANES
941+10		1005+47	LT & RT	459	--	459	--	UPPER LAYER, MAINLINE 4-FOOT SHOULDERS
904+25		939+25	LT & RT	162	--	162	--	UPPER LAYER, MAINLINE 5-FOOT SHOULDERS, SHOULDER WIDENING
941+10		949+33	LT & RT	42	--	42	--	UPPER LAYER, MAINLINE 5-FOOT SHOULDERS, SHOULDER WIDENING
949+33		1005+47	LT & RT	245	--	245	--	UPPER LAYER, MAINLINE 5-FOOT SHOULDERS, SHOULDER WIDENING

* Tonnage is eligible for Incentive Density PWL 460.2005 and Incentive Air Voids 460.2010.
** Tonage is eligible for Incentive Air Voids 460.2010.
*** Tonnage is eligible for QMP Density Incentive 460.2000. Wedging & leveling layers are excluded from density testing and density incentive.
**** LF is eligible for Incentive Density HMA Pavement Longitudinal Joints 460.2007

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
TRANSPORTATION PROJECT PLAT TITLE SHEET
4075-39-21
WRIGHTSTOWN - DENMARK
STH 32 - I 43
STH 96
BROWN COUNTY





LAYOUT
SCALE 0 2.0 MI.

GN

CONVENTIONAL SYMBOLS

- SECTION LINE
- QUARTER LINE
- SIXTEENTH LINE
- NEW REFERENCE LINE
- NEW R/W LINE
- EXISTING R/W OR HE LINE
- PROPERTY LINE
- LOT, TIE & OTHER MINOR LINES
- SLOPE INTERCEPT
- CORPORATE LIMITS
- UNDERGROUND FACILITY (COMMUNICATIONS, ELECTRIC, ETC) — W (TYPE)
- NEW R/W (FEE OR HE) (HATCHING VARIES BY OWNER)
- TEMPORARY LIMITED EASEMENT AREA
- EASEMENT AREA (PERMANENT LIMITED OR RESTRICTED DEVELOPMENT)
- TRANSMISSION STRUCTURES
- BUILDING — TO BE REMOVED
- BRIDGE

- SECTION CORNER SYMBOL
- SECTION CORNER MONUMENT
- GEODETIC SURVEY MONUMENT
- SIXTEENTH CORNER MONUMENT
- SIGN
- OFF-PREMISE SIGN (#1-25)
- R/W MONUMENT (TO BE SET)
- NON-MONUMENTED R/W POINT
- FOUND IRON PIN (1-INCH UNLESS NOTED) — IP

	COMPENSABLE	NON-COMPENSABLE
ELECTRIC POLE		
TELEPHONE POLE		
PEDESTAL (LABEL TYPE) (TV, TEL, ELEC, ETC.)		

- ACCESS RESTRICTED BY ACQUISITION
- NO ACCESS (BY STATUTORY AUTHORITY)
- ACCESS RESTRICTED (BY PREVIOUS PROJECT OR CONTROL)
- NO ACCESS (NEW HIGHWAY)
- PARCEL NUMBER (25)
- UTILITY NUMBER (40)
- PARALLEL OFFSETS

CONVENTIONAL ABBREVIATIONS

ACCESS RIGHTS	AR	POINT OF INTERSECTION	PI
ACRES	AC	PROPERTY LINE	PL
AHEAD	AH	RECORDED AS	(100')
ALUMINUM	ALUM	REEL / IMAGE	R/I
AND OTHERS	ET AL	REFERENCE LINE	R/L
BACK	BK	REMAINING	REM
BLOCK	BLK	RESTRICTIVE DEVELOPMENT EASEMENT	RDE
CENTERLINE	C/L	RIGHT	RT
CERTIFIED SURVEY MAP	CSM	RIGHT OF WAY	R/W
CONCRETE	CONC	SECTION	SEC
COUNTY	CO	SEPTIC VENT	SEPV
COUNTY TRUNK HIGHWAY	CTH	SQUARE FEET	SF
DISTANCE	DIST	STATE TRUNK HIGHWAY	STH
CORNER	COR	STATION	STA
DOCUMENT NUMBER	DOC	TELEPHONE PEDESTAL	TP
EASEMENT	EASE	TEMPORARY LIMITED EASEMENT	TLE
EXISTING	EX	TRANSPORTATION PROJECT PLAT	TPP
GAS VALVE	GV	UNITED STATES HIGHWAY	USH
GRID NORTH	GN	VOLUME	V
HIGHWAY EASEMENT	HE		
IDENTIFICATION	ID		
LAND CONTRACT	LC		
LEFT	LT		
MONUMENT	MON		
NATIONAL GEODETIC SURVEY	NGS		
NUMBER	NO		
OUTLOT	OL		
PAGE	P		
POINT OF TANGENCY	PT		
PERMANENT LIMITED EASEMENT	PLE		
POINT OF BEGINNING	POB		
POINT OF CURVATURE	PC		
POINT OF COMPOUND CURVE	PCC		

CURVE DATA

LONG CHORD	LCH
LONG CHORD BEARING	LCB
RADIUS	R
DEGREE OF CURVE	D
CENTRAL ANGLE	Δ/DELTA
LENGTH OF CURVE	L
TANGENT	T
DIRECTION AHEAD	DA
DIRECTION BACK	DB

CONVENTIONAL UTILITY SYMBOLS

- W — WATER
- G — GAS
- T — TELEPHONE
- OH — OVERHEAD TRANSMISSION LINES
- E — ELECTRIC
- TV — CABLE TELEVISION
- FO — FIBER OPTIC
- SAN — SANITARY SEWER
- SS — STORM SEWER

THE NOTES,CONVENTIONAL SIGNS, AND ABBREVIATIONS ARE ASSOCIATED WITH EACH TRANSPORTATION PROJECT PLAT FOR PROJECT 4075-39-21.

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), BROWN COUNTY, NAD83(2011), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY 1" X 24" IRON PIPES), UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

ALL RIGHT-OF-WAY LINES DEPICTED IN THE NON-ACQUISITION AREAS ARE INTENDED TO RE-ESTABLISH EXISTING RIGHT-OF-WAY LINES AS DETERMINED FROM PREVIOUS PROJECTS, OTHER RECORDED DOCUMENTS, OR FROM CENTERLINE OF EXISTING PAVEMENTS.

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

DIMENSIONING FOR THE NEW RIGHT-OF-WAY IS MEASURED ALONG AND PERPENDICULAR TO THE NEW REFERENCE LINES.

A TEMPORARY LIMITED EASEMENT (TLE) IS A RIGHT FOR CONSTRUCTION PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON, 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 DESIRABLE. ALL (TLEs) ON THIS PLAT EXPIRE AT THE COMPLETION OF THE CONSTRUCTION PROJECT FOR WHICH THIS INSTRUMENT IS GIVEN.

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, AND SHOULD NOT BE USED AS A SUBSTITUTE FOR AN ACCURATE FIELD SURVEY.

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN GREEN BAY.

PARCEL IDENTIFICATION NUMBERS MAY NOT POINT TO ALL AREAS OF ACQUISITION, AS NOTED ON THE SCHEDULE OF LANDS & INTERESTS REQUIRED.

INFORMATION FOR THE BASIS OF EXISTING HIGHWAY RIGHT-OF-WAY POINTS OF REFERENCE AND ACCESS CONTROL ARE LISTED ON THE TPP DETAIL PAGES.

PROJECT NUMBER 4075-39-21 - 4.01
SHEET 2 OF 2
AMENDMENT NO:

FILE NAME : P:\90S\93\00093473\CADD\RW\STH 96 TPP.DWG
LAYOUT NAME: TPP Title
PLOT DATE : 9/16/2015 3:04 PM
PLOT BY : BRAD TISDALE
PLOT NAME : _____
APPRAISAL PLAT DATE : 06/10/2020

TRANSPORTATION PROJECT PLAT NO: 4075-39-21 - 4.01

A PART OF THE SE 1/4 OF THE SE 1/4 OF SECTION 4, T21N, R20E AND A PART OF THE NE 1/4 OF THE NE 1/4 OF SECTION 9, T21N, R20E, ALL IN THE TOWN OF WRIGHTSTOWN, BROWN COUNTY, WISCONSIN.

RELOCATION ORDER: STH 96 WRIGHTSTOWN - DENMARK, STH 32 - I 43, BROWN 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), 84.09, AND 84.30, 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.

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), BROWN COUNTY, NAD83 (2011) IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY 1"X24" IRON PIPES) UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

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

DIMENSIONING FOR THE NEW RIGHT-OF-WAY 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 GREEN BAY.

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF THE REGISTER OF DEEDS, IN BROWN COUNTY, AS SHEET 2 OF 2 OF THIS DOCUMENT.

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:
PREVIOUS PROJECT 4075 2 21 (4.6-4.7), CSM 1917 AS DOC. NO. 928525, AND CSM 7180 AS DOC. NO. 2151352.

FOUND IRON PINS ARE 1" IRON PIPES, UNLESS OTHERWISE STATED

ALIGNMENT INFORMATION

PI = STA 265+08.26
Y = 494,014.038
X = 84,599.937
Δ = 02°39'58" RT
D = 00°38'56"
T = 205.47'
L = 410.86'
R = 8,830.00'
LC = 410.83'
LCB = N88°52'22"E
PC = 263+02.79
PT = 267+13.66

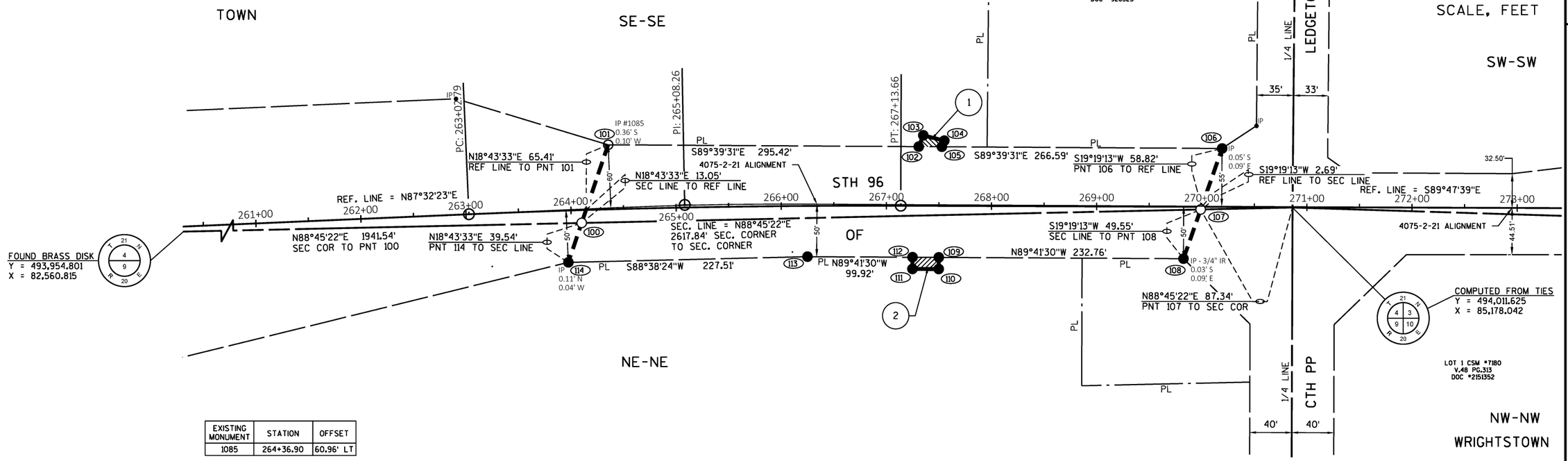
SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W SQ FT REQUIRED			TLE SQ FT
			NEW	EXISTING	TOTAL	
1	E & J REALTY LLC	FEE	182	--	182	--
2	JAMES K. LEICK AND CHRISTINE D. LEICK	FEE	277	--	277	--

2906511
VOLUME:
PAGE: 2
CHERYL BERKEN
BROWN COUNTY
REGISTER OF DEEDS
GREEN BAY, WI
RECORDED ON
06/12/2020 01:06 PM
REC FEE: 25.00
PAGES: 2
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RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 4075-39-21 - 4.01
SHEET 1 OF 2
AMENDMENT NO:___



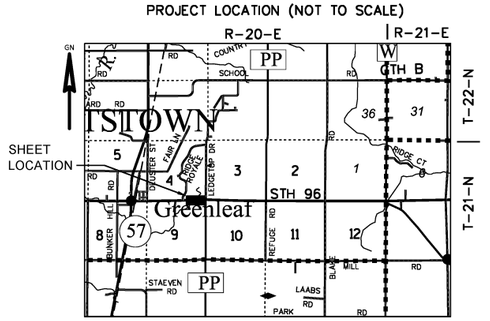
EXISTING MONUMENT	STATION	OFFSET
1085	264+36.90	60.96' LT

R/W POINT	STATION	OFFSET
100	264+09.74	12.22' RT
101*	264+37.01	61.32' LT
102	267+30.56	56.26' LT
103	267+34.84	67.00' LT
104	267+54.84	62.00' LT
105	267+52.53	56.20' LT
106	270+19.13	55.57' LT
107	269+98.99	2.55' RT
108	269+82.76	49.36' RT
109	267+50.00	48.94' RT
110	267+50.00	60.00' RT
111	267+25.00	60.00' RT
112	267+25.00	48.90' RT
113	266+24.59	48.27' RT
114	263+95.82	49.25' RT

* - NO IRON SET DUE TO CLOSE PROXIMITY TO EXISTING MONUMENT. USE R/W POINT FOR ULTIMATE R/W.

COURSE	BEARING	DISTANCE
100-107	N88°45'22"E	588.96'
102-103	N21°54'50"E	11.56'
103-104	S75°45'29"E	20.62
104-105	S21°51'59"W	6.24'
109-110	S00°12'21"W	11.06'
110-111	N89°47'39"W	25.00'
111-112	N00°12'21"E	11.10'

PROJECT LOCATION (NOT TO SCALE)



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1702 Pankratz St Madison, WI 53704
(608) 242-7779 www.msa-ps.com

© MSA Professional Services, Inc.

I, BRADLEY L. TISDALE, PROFESSIONAL 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 OF TRANSPORTATION, I HAVE SURVEYED AND MAPPED THIS TRANSPORTATION PROJECT 4075-39-21 - 4.01 AND SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

SIGNATURE: _____ DATE: 06/10/20
PRINT NAME: BRADLEY L. TISDALE
REGISTRATION NUMBER: S-2824

WISCONSIN BRADLEY L. TISDALE S-2824 WAUNAKEE WI LAND SURVEYOR

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

SIGNATURE: _____ DATE: 06/12/20
PRINT NAME: CURT VAN EREM

FILE NAME : P:\90S\93\00093473\CADD\RW\STH 96 TPP.DWG
APPRAISAL PLAT DATE : 06/12/2020
PLOT DATE : 6/12/2020 10:18 AM
PLOT BY : BRAD TISDALE
PLOT NAME :
PLOT SCALE : ##########

TRANSPORTATION PROJECT PLAT NO: 4075-39-21 - 4.02

PART OF THE SW 1/4 OF THE SW 1/4 OF SECTION 3, T21N, R21E IN THE TOWN OF MORRISON, BROWN COUNTY, WISCONSIN.

RELOCATION ORDER: STH 96 WRIGHTSTOWN - DENMARK, STH 32 - I 43, BROWN 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), 84.09, AND 84.30, 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.

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), BROWN COUNTY, NAD83 (2011) IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY 1"X24" IRON PIPES) UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

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

DIMENSIONING FOR THE NEW RIGHT-OF-WAY IS MEASURED ALONG AND PERPENDICULAR TO THE NEW REFERENCE LINES.

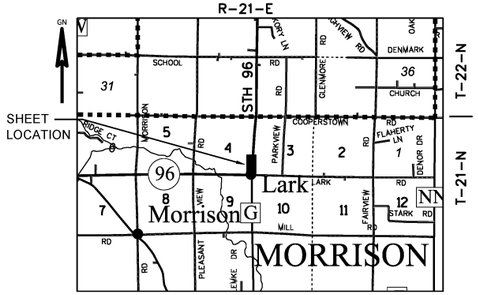
FOR THE LATEST ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN GREEN BAY.

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF THE REGISTER OF DEEDS, IN BROWN COUNTY, AS SHEET 2 OF 2 OF DOCUMENT *2906511.

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:
PREVIOUS PROJECT 4095 02 21 (4.3), CSM 3553 RECORDED AS DOC. NO. 1162428, AND PLATS OF SURVEY AS SHOWN.

FOUND IRON PINS ARE 1" IRON PIPES, UNLESS OTHERWISE STATED

PROJECT LOCATION (NOT TO SCALE)

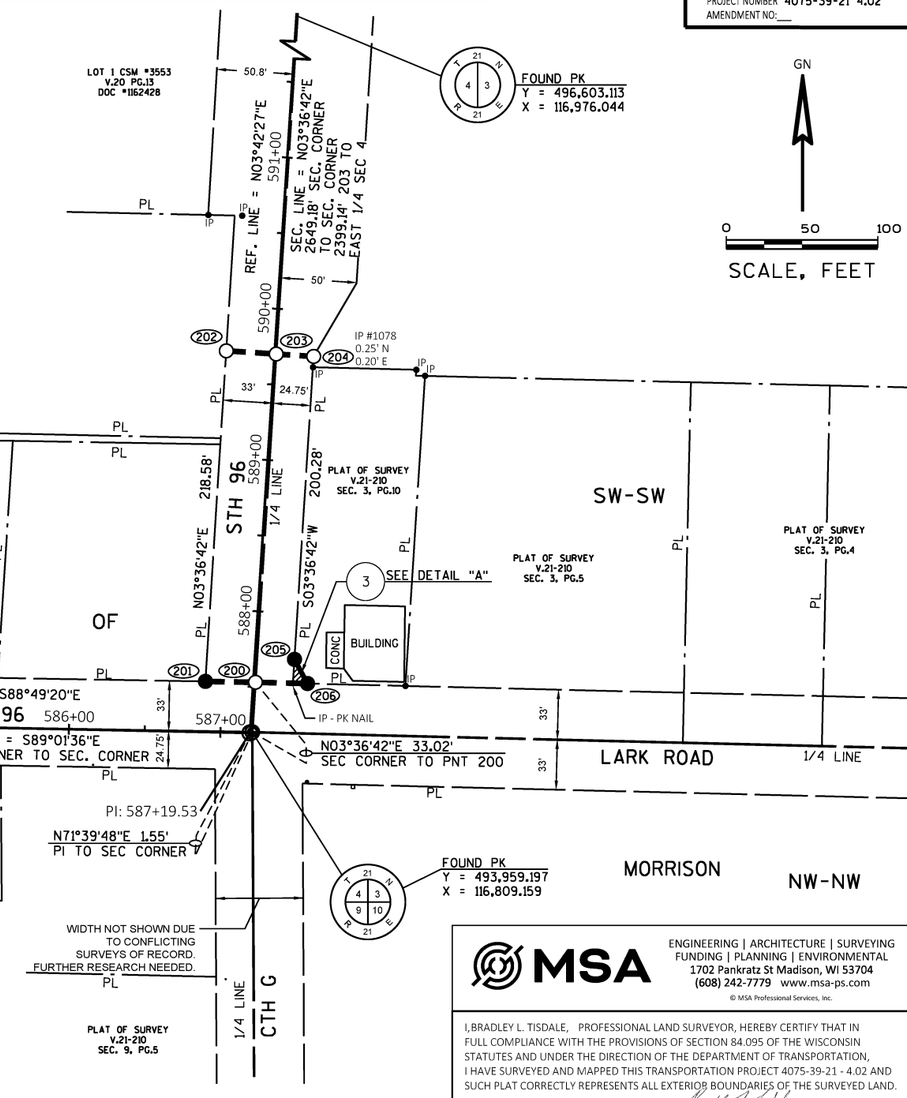


SCHEDULE OF LANDS & INTERESTS REQUIRED						OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.
PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W SQ FT REQUIRED			TLE SQ FT
			NEW	EXISTING	TOTAL	
3	FRANK A. WESSELY, ALICE HERBST, WILLIAM OTTO AND MAJORIE WESSELY, ALL AS TENANTS IN COMMON	FEE	75	--	75	--

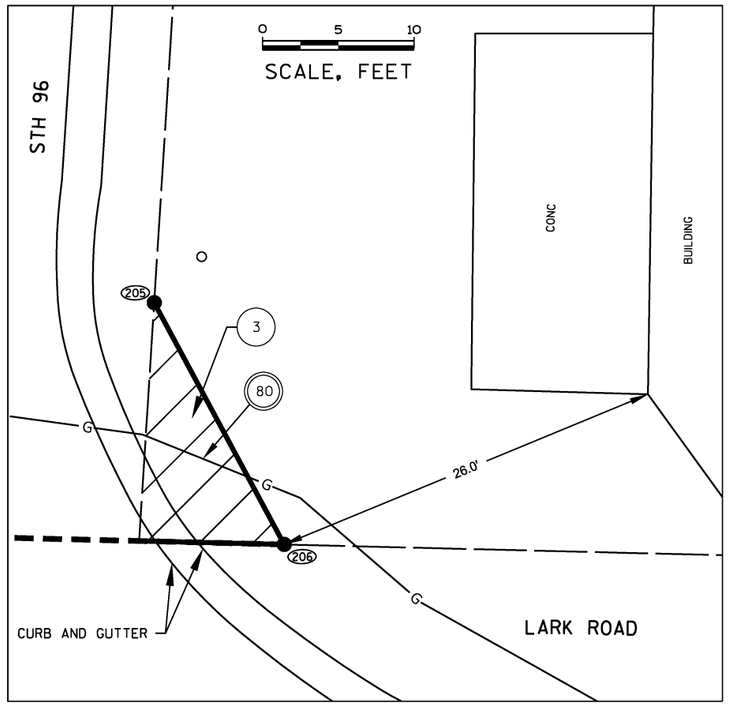
UTILITY INTERESTS REQUIRED		
UTILITY NUMBER	OWNER(S)	INTEREST REQUIRED
80	WISCONSIN PUBLIC SERVICE (GAS) - NO EASEMENT OF RECORD	RELEASE OF RIGHTS

2907353
VOLUME:
PAGE:
CHERYL BERKEN
BROWN COUNTY
REGISTER OF DEEDS
GREEN BAY, WI
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PAGES: 1
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RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 4075-39-21 4.02
AMENDMENT NO:___



DETAIL "A"



EXISTING MONUMENT	STATION	OFFSET
1078	589+70.42	25.96' RT

R/W POINT	STATION	OFFSET
200	587+53.14	1.38' RT
201	587+51.57	31.61' LT
202	589+70.16	31.98' LT
203	589+70.16	1.02' RT
204*	589+70.16	25.77' RT
205	587+69.88	26.11' RT
206	587+54.52	35.70' RT

* - NO IRON SET DUE TO CLOSE PROXIMITY TO EXISTING MONUMENT. USE R/W POINT FOR ULTIMATE R/W.

ALIGNMENT INFORMATION

PI = STA 587+19.53
Y = 493,958.709
X = 116,807.686
Δ = 87°28'13" LT

PI = STA 596+88.58
Y = 494,925.732
X = 116,870.347

COURSE	BEARING	DISTANCE
200-REF LINE	N88°36'15"W	1.38'
REF LINE-201	N89°01'05"W	31.65'
202-REF LINE	S86°17'33"E	31.98'
REF LINE-203	S86°17'33"E	1.02'
200-203	N03°36'42"E	217.02'
203-204	S86°17'33"E	24.75'
205-206	S28°15'52"E	18.11'
206-200	N88°36'15"W	34.34'

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1702 Pankratz St Madison, WI 53704
(608) 242-7779 www.msa-ps.com
© MSA Professional Services, Inc.

I, BRADLEY L. TISDALE, PROFESSIONAL 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 OF TRANSPORTATION, I HAVE SURVEYED AND MAPPED THIS TRANSPORTATION PROJECT 4075-39-21 - 4.02 AND SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN BRADLEY L TISDALE S-2824 WAUNAKEE WI LAND SURVEYOR

SIGNATURE: _____ DATE: 06/12/20
PRINT NAME: BRADLEY L. TISDALE
REGISTRATION NUMBER: S-2824

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION.
SIGNATURE: _____ DATE: 06/17/20
PRINT NAME: CURT VAN EREM

FILE NAME : P:\90S\93\00093473\CADD\RW\STH 96 TPP.DWG
APPRAISAL PLAT DATE : 06/12/2020
PLOT DATE : 6/16/2020 3:33 PM PLOT BY : BRAD TISDALE PLOT NAME : PLOT SCALE : ##########
4075-39-21 4.02

TRANSPORTATION PROJECT PLAT NO: 4075-39-21 - 4.03

PART OF LOT 1 OF CSM 6705 IN VOL 45, PAGE 28 AS DOCUMENT NO. 1956814 LOCATED IN AND INCLUDING PART OF THE NE 1/4 OF THE NW 1/4 AND PART OF THE NW 1/4 OF THE NE 1/4 OF SECTION 27, T22N, R21E, AND PART OF THE SE 1/4 OF THE SW 1/4 AND PART OF THE SW 1/4 OF THE SE 1/4 OF SECTION 22, T22N, R21E, ALL IN THE TOWN OF GLENMORE, BROWN COUNTY, WISCONSIN.

RELOCATION ORDER: STH 96 WRIGHTSTOWN - DENMARK, STH 32 - I 43, BROWN 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), 84.09, AND 84.30, 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.

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), BROWN COUNTY, NAD83 (2011) IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

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

DIMENSIONING FOR THE NEW RIGHT-OF-WAY 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 GREEN BAY.

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF THE REGISTER OF DEEDS, IN BROWN COUNTY, AS SHEET 2 OF 2 OF DOCUMENT #2906511.

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:
PREVIOUS PROJECT S-0387(6), CSM 1900 AS DOC. NO. 926815, AND CSM 6705 AS DOC. NO. 1956814.

FOUND IRON PINS ARE 1" IRON PIPES, UNLESS OTHERWISE STATED

COURSE	BEARING	DISTANCE
301-302	S89°57'54"E	25.85'
302-303	N00°08'06"E	12.84'
303-304	S89°51'54"E	93.14'
304-305	S00°03'44"E	12.68'
308-309	N02°43'35"W	9.62'
309-310	N87°16'25"E	72.58'
310-311	S02°43'35"E	9.74'
311-312	N87°22'06"E	28.70'
314-315	S87°22'06"W	34.50'
315-316	S02°43'35"E	8.77'
316-317	S87°16'25"W	45.75'
317-318	N02°43'35"W	8.84'
321-322	S00°03'44"E	14.68'
322-324	S89°56'16"W	101.85'
324-325	N00°08'06"E	14.86'
325-326	N89°57'54"W	60.34'

ALIGNMENT INFORMATION

PI = STA 759+99.97
Y = 509,732.714
X = 118,835.903
Δ = 00°11'50" LT

PI = STA 769+70.91
Y = 509,733.771
X = 119,806.842
Δ = 02°39'50" LT
D = 00°30'00"
T = 266.46'
L = 532.82'
R = 11,460.00'
LC = 532.77'
LCB = N88°36'20"E
PC = 767+04.45
PT = 772+37.27

R/W POINT	STATION	OFFSET
300	759+00.00	8.98' LT
301	759+00.00	42.11' LT
302	759+25.85	42.16' LT
303	759+25.85	55.00' LT
304	760+19.18	54.93' LT
305	760+19.18	42.26' LT
306	766+75.92	41.14' LT
307	772+09.15	41.53' LT
308	773+23.72	41.38' LT
309	773+23.72	51.00' LT
310	773+96.30	51.00' LT
311	773+96.30	41.26' LT
312	774+25.00	41.21' LT

R/W POINT	STATION	OFFSET
313	774+25.00	10.20' RT
314	774+25.00	41.29' RT
315	773+90.50	41.24' RT
316	773+90.50	50.00' RT
317	773+44.75	50.00' RT
318	773+44.75	41.16' RT
319	772+09.22	40.97' RT
320	766+75.78	41.36' RT
321	760+62.00	40.32' RT
322	760+62.00	55.00' RT
324	759+60.34	55.14' RT
325	759+60.34	40.28' RT
326	759+00.00	40.39' RT

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W SQ FT REQUIRED			TLE SQ FT
			NEW	EXISTING	TOTAL	
4	PAUL O. OSSMANN, DONALD E. OSSMANN, AND THEODORE R. OSSMANN	FEE	2923	--	2923	--
6	SCOTT R. OSSMANN	FEE	472	--	472	--
7	BELGIOIOSO CHEESE INC.	FEE	403	--	403	--

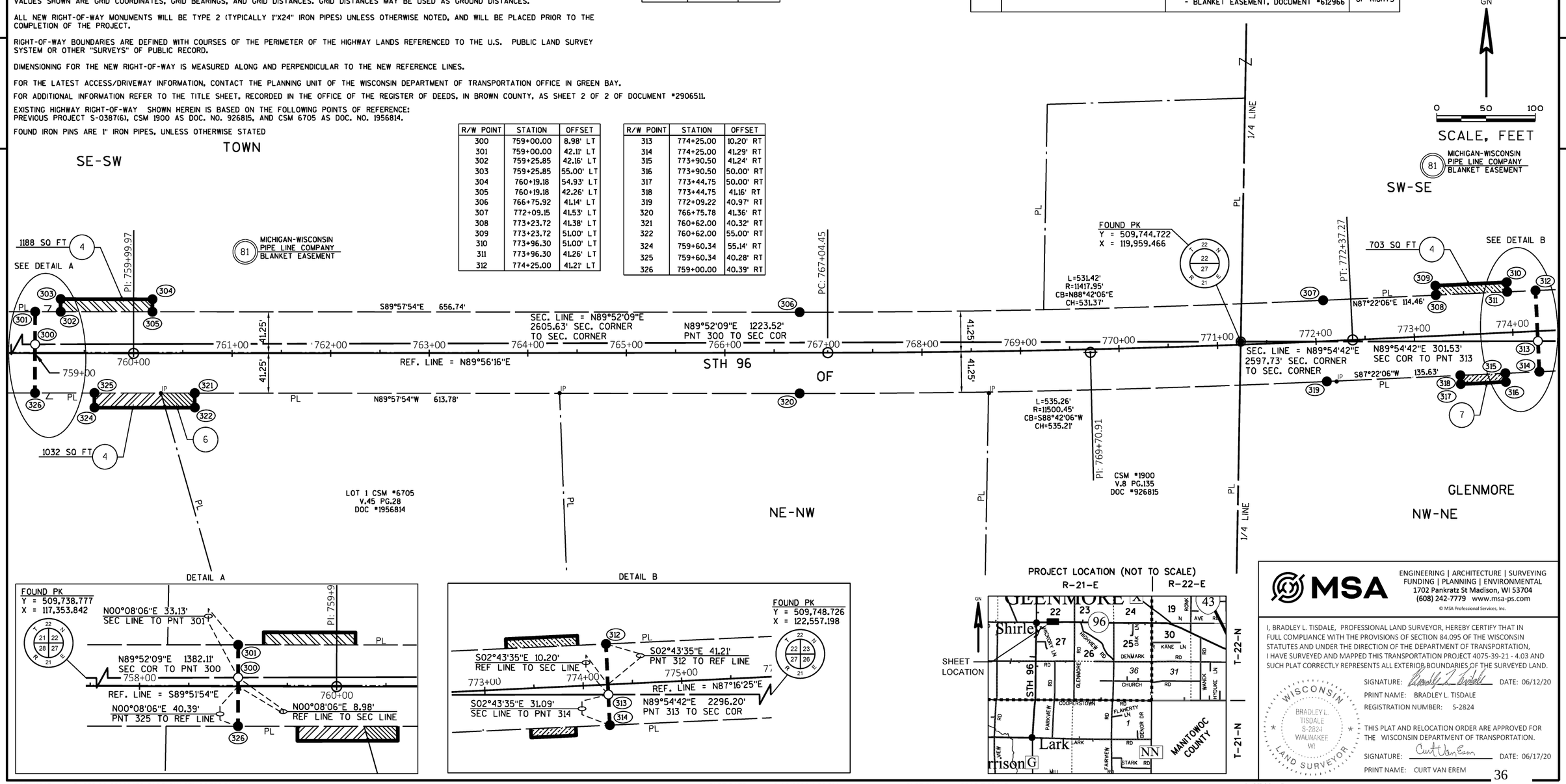
UTILITY INTERESTS REQUIRED

UTILITY NUMBER	OWNER(S)	PARCEL AFFECTED	INTEREST REQUIRED
81	MICHIGAN-WISCONSIN PIPE LINE COMPANY	4 - BLANKET EASEMENT, DOCUMENT #612965 - BLANKET EASEMENT, DOCUMENT #612966	RELEASE OF RIGHTS

2907354
VOLUME:
PAGE:
CHERYL BERKEN
BROWN COUNTY
REGISTER OF DEEDS
GREEN BAY, WI
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PROJECT NUMBER 4075-39-21 4.03
AMENDMENT NO:___

4



DETAIL A

DETAIL B

PROJECT LOCATION (NOT TO SCALE)

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FUNDING | PLANNING | ENVIRONMENTAL
1702 Pankratz St Madison, WI 53704
(608) 242-7779 www.msa-ps.com
© MSA Professional Services, Inc.

I, BRADLEY L. TISDALE, PROFESSIONAL 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 OF TRANSPORTATION, I HAVE SURVEYED AND MAPPED THIS TRANSPORTATION PROJECT 4075-39-21 - 4.03 AND SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

SIGNATURE: [signature] DATE: 06/12/20
PRINT NAME: BRADLEY L. TISDALE
REGISTRATION NUMBER: S-2824

WISCONSIN BRADLEY L. TISDALE S-2824 WAUNAKEE WI LAND SURVEYOR

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

SIGNATURE: [signature] DATE: 06/17/20
PRINT NAME: CURT VAN EREM

FILE NAME : P:\90S\93\00093473\CADD\RW\STH 96 TPP.DWG
APPRAISAL PLAT DATE : 06/12/2020
PLOT DATE : 6/16/2020 4:08 PM
PLOT BY : BRAD TISDALE
PLOT NAME :
PLOT SCALE : ##########

4075-39-21 4.03

TRANSPORTATION PROJECT PLAT NO: 4075-39-21 - 4.04

PART OF THE SE 1/4 OF THE SW 1/4 OF SECTION 23, T22N, R21E, AND A PART OF THE NE 1/4 OF THE NW 1/4 OF SECTION 26, T22N, R21E, ALL IN THE TOWN OF GLENMORE, BROWN COUNTY, WISCONSIN.

RELOCATION ORDER: STH 96 WRIGHTSTOWN - DENMARK, STH 32 - I 43, BROWN 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), 84.09, AND 84.30, 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.

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), BROWN COUNTY, NAD83 (2011) IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY 1"X24" IRON PIPES) UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

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

DIMENSIONING FOR THE NEW RIGHT-OF-WAY 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 GREEN BAY.

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF THE REGISTER OF DEEDS, IN BROWN COUNTY, AS SHEET 2 OF 2 OF DOCUMENT #2906511.

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:
PREVIOUS PROJECT S-0387 (6).

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.

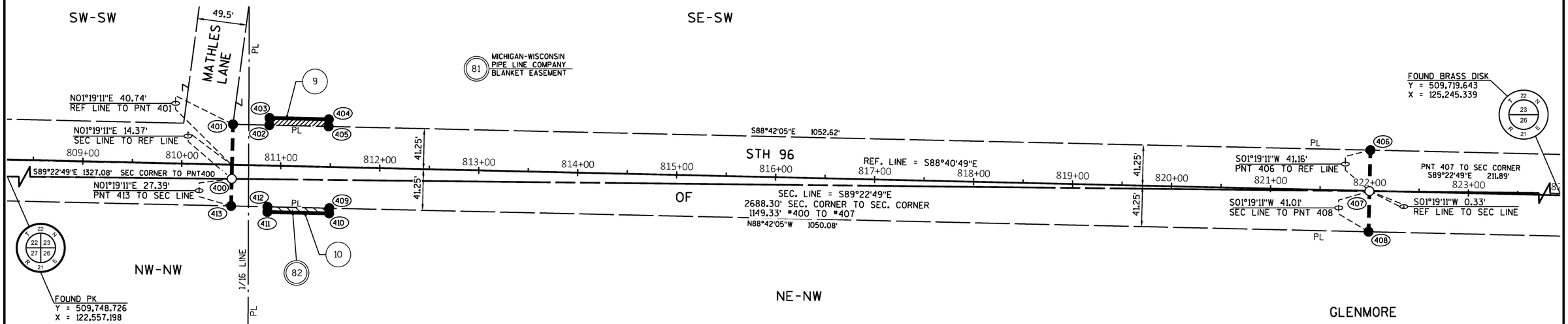
PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W SQ FT REQUIRED			TLE SQ FT
			NEW	EXISTING	TOTAL	
9	DANIEL L. MATHIES	FEE	434	--	434	--
10	RODNEY R. LEITERMAN AND SUSAN A. LEITERMAN	FEE	329	--	329	--

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	OWNER(S)	PARCEL AFFECTED	INTEREST REQUIRED
81	MICHIGAN-WISCONSIN PIPE LINE COMPANY	9 - BLANKET EASEMENT, DOCUMENT #612967	RELEASE OF RIGHTS
82	GENERAL TELEPHONE COMPANY	10 - DOCUMENT #702284	RELEASE OF RIGHTS

2907355
VOLUME:
PAGE:
CHERYL BERKEN
BROWN COUNTY
REGISTER OF DEEDS
GREEN BAY, WI
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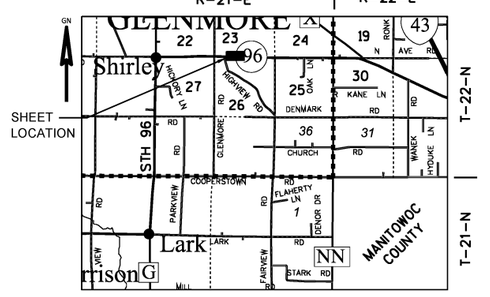
RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 4075-39-21 4.04
AMENDMENT NO:



R/W POINT	STATION	OFFSET
400	810+50.76	14.37' RT
401	810+50.76	40.74' LT
402	810+87.42	40.75' LT
403	810+87.42	48.00' LT
404	811+47.38	48.00' LT
405	811+47.38	40.78' LT
406	822+00.00	41.16' LT
407	822+00.00	0.33' RT
408	822+00.00	41.34' RT
409	811+49.93	41.73' RT
410	811+49.93	47.00' RT
411	810+87.44	47.00' RT
412	810+87.44	41.75' RT
413	810+50.76	41.76' RT

COURSE	BEARING	DISTANCE
401-402	S88°42'05"E	36.66'
402-403	NO1°19'11"E	7.25'
403-404	S88°40'49"E	59.95'
404-405	SO1°19'11"W	7.22'
409-410	SO1°19'11"W	5.28'
410-411	N88°40'49"W	62.49'
411-412	NO1°19'11"E	5.25'
412-413	N88°42'05"W	36.68'

PROJECT LOCATION (NOT TO SCALE)



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1702 Pankratz St Madison, WI 53704
(608) 242-7779 www.msa-ps.com
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I, BRADLEY L. TISDALE, PROFESSIONAL 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 OF TRANSPORTATION, I HAVE SURVEYED AND MAPPED THIS TRANSPORTATION PROJECT 4075-39-21 - 4.04 AND SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

SIGNATURE: Bradley L Tisdale DATE: 06/12/20
PRINT NAME: BRADLEY L. TISDALE
REGISTRATION NUMBER: S-2824

BRADLEY L. TISDALE S-2824 WAUNAKEE WI — WISCONSIN — LAND SURVEYOR

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

SIGNATURE: Curt Van Erem DATE: 06/17/20
PRINT NAME: CURT VAN EREM

FILE NAME : P:\905\93\00093473\CADD\RW\STH 96 TPP.DWG
APPRAISAL PLAT DATE : 06/12/2020
PLOT DATE : 6/16/2020 3:39 PM
PLOT BY : BRAD TISDALE
PLOT NAME :
PLOT SCALE : ##########

4075-39-21 - 4.04

TRANSPORTATION PROJECT PLAT NO: 4075-39-21 - 4.05

PART OF THE SW 1/4 OF THE SW 1/4 OF SECTION 24, T22N, R21E, TOWN OF GLENMORE, BROWN COUNTY, WISCONSIN.

RELOCATION ORDER: STH 96 WRIGHTSTOWN - DENMARK, STH 32 - I 43, BROWN 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), 84.09, AND 84.30, 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.

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), BROWN COUNTY, NAD83 (2011) IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY 1"X24" IRON PIPES) UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

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

DIMENSIONING FOR THE NEW RIGHT-OF-WAY 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 GREEN BAY.

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF THE REGISTER OF DEEDS, IN BROWN COUNTY, AS SHEET 2 OF 2 OF DOCUMENT *2906511.

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE: PREVIOUS PROJECT S-0387 (6).

FOUND IRON PINS ARE 1" IRON PIPES, UNLESS OTHERWISE STATED

ALIGNMENT INFORMATION

PI = STA 855+00.00
Y = 506,660.776
X = 128,332.874
Δ = 00°22'31" LT

PI = STA 859+36.96
Y = 509,658.772
X = 128,769.827
Δ = 00°01'36" LT

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.

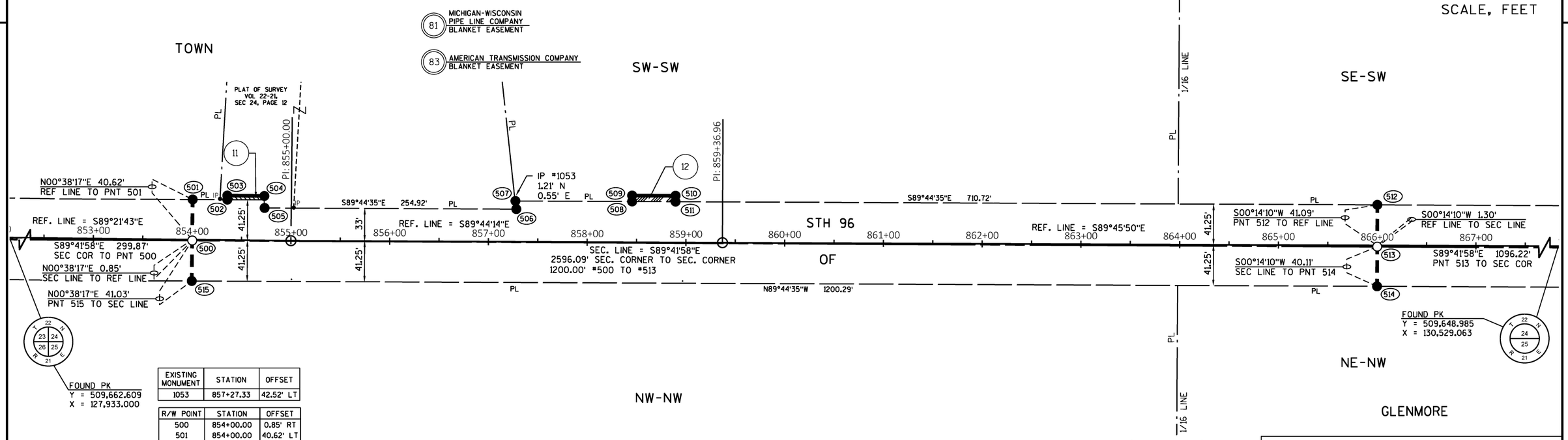
PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W SQ FT REQUIRED			TLE SQ FT
			NEW	EXISTING	TOTAL	
11	PAUL F. AND TERRY R. DESOTELLE REVOCABLE TRUST	FEE	151	--	151	--
12	THOMAS A. RONK AND PEGGY R. RONK	FEE	264	--	264	--

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	OWNER(S)	PARCEL AFFECTED	INTEREST REQUIRED
81	MICHIGAN-WISCONSIN PIPE LINE COMPANY	11 - BLANKET EASEMENT, DOCUMENT *612972 12 - BLANKET EASEMENT, DOCUMENT *612972	RELEASE OF RIGHTS
83	AMERICAN TRANSMISSION COMPANY	11 - WPS BLANKET EASEMENT, DOCUMENT *258682, ASSIGNEMENT TO ATC, DOCUMENT *1788439 12 - WPS BLANKET EASEMENT, DOCUMENT *258682, ASSIGNEMENT TO ATC, DOCUMENT *1788439	RELEASE OF RIGHTS

2907356
VOLUME:
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CHERYL BERKEN
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PROJECT NUMBER 4075-39-21 4.05
AMENDMENT NO:___

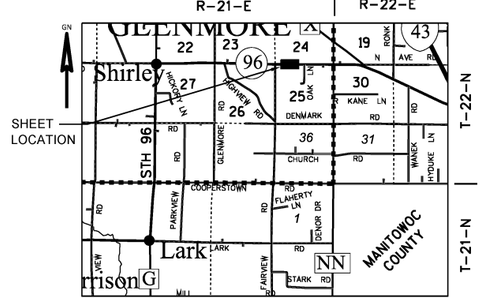


EXISTING MONUMENT	STATION	OFFSET
1053	857+27.33	42.52' LT

R/W POINT	STATION	OFFSET
500	854+00.00	0.85' RT
501	854+00.00	40.62' LT
502	854+35.04	40.85' LT
503	854+35.04	45.00' LT
504	854+72.50	45.00' LT
505	854+72.57	32.85' LT
506	857+27.21	33.06' LT
507*	857+26.78	41.31' LT
508	858+45.26	41.32' LT
509	858+45.26	47.32' LT
510	858+89.26	47.32' LT
511	858+89.26	41.32' LT
512	866+00.00	41.09' LT
513	866+00.00	1.30' RT
514	866+00.00	41.41' RT
515	854+00.00	41.88' RT

* - NO IRON SET DUE TO CLOSE PROXIMITY TO EXISTING MONUMENT. USE R/W POINT FOR ULTIMATE R/W.

COURSE	BEARING	DISTANCE
501-502	S89°44'35"E	35.04'
502-503	N00°38'17"E	4.15'
503-504	S89°21'43"E	37.46'
504-505	S00°17'13"W	12.15'
506-507	N06°08'48"W	8.30'
507-508	S89°44'35"E	118.48'
508-509	N00°15'46"E	6.00'
509-510	S89°44'35"E	44.00'
510-511	S00°15'46"W	6.00'



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(608) 242-7779 www.msa-ps.com
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I, BRADLEY L. TISDALE PROFESSIONAL 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 OF TRANSPORTATION, I HAVE SURVEYED AND MAPPED THIS TRANSPORTATION PROJECT 4075-39-21 - 4.05 AND SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

SIGNATURE: Bradley L Tisdale DATE: 06/12/20
PRINT NAME: BRADLEY L. TISDALE
REGISTRATION NUMBER: S-2824

WISCONSIN BRADLEY L. TISDALE S-2824 WAUNAKEE WI LAND SURVEYOR

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

SIGNATURE: Curt Van Erem DATE: 06/17/20
PRINT NAME: CURT VAN EREM

FILE NAME : P:\90S\93\00093473\CADD\RW\STH 96 TPP.DWG
APPRAISAL PLAT DATE : 06/12/2020
PLOT DATE : 6/16/2020 3:40 PM
PLOT BY : BRAD TISDALE
PLOT NAME :
PLOT SCALE : ##########

TRANSPORTATION PROJECT PLAT NO: 4075-39-21 - 4.06

PART OF THE SW 1/4 OF THE SE 1/4 OF SECTION 24, T22N, R21E, AND PART OF THE NW 1/4 OF THE NE 1/4 OF SECTION 25, T22N, R21E, ALL IN THE TOWN OF GLENMORE, BROWN COUNTY, WISCONSIN.

RELOCATION ORDER: STH 96 WRIGHTSTOWN - DENMARK, STH 32 - I 43, BROWN 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), 84.09, AND 84.30, 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.

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), BROWN COUNTY, NAD83 (2011) IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY 1"X24" IRON PIPES) UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

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

DIMENSIONING FOR THE NEW RIGHT-OF-WAY 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 GREEN BAY.

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF THE REGISTER OF DEEDS, IN BROWN COUNTY, AS SHEET 2 OF 2 OF DOCUMENT #2906511.

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE: PREVIOUS PROJECT S-0387(6), CSM 2222 AS DOC. NO. 958991, AND CSM 2996 AS DOC. NO. 1064360.

FOUND IRON PINS ARE 1" IRON PIPES, UNLESS OTHERWISE STATED

ALIGNMENT INFORMATION

PI = STA 883+98.77
Y = 509,648.622
X = 131,231.611
Δ = 00°01'59" RT

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W SQ FT REQUIRED			TLE SQ FT
			NEW	EXISTING	TOTAL	
13	RANDY LEITERMAN	FEE	180	--	180	--
14	PAUL L. SCHAETZ	FEE	119	--	119	--

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	OWNER(S)	PARCEL AFFECTED	INTEREST REQUIRED
81	MICHIGAN-WISCONSIN PIPE LINE COMPANY	13 - BLANKET EASEMENT, DOCUMENT #612970	RELEASE OF RIGHTS
82	GENERAL TELEPHONE COMPANY	14 - DOCUMENT #702286	RELEASE OF RIGHTS

2907357
VOLUME:
PAGE:
CHERYL BERKEN
BROWN COUNTY
REGISTER OF DEEDS
GREEN BAY, WI
RECORDED ON
06/18/2020 01:52 PM
REC FEE: 25.00
PAGES: 1
*The above recording Informatio verifies that this document has been electronically recorded and returned to the submitter**

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 4075-39-21 4.06
AMENDMENT NO:___

GN
0 50 100
SCALE, FEET

TOWN

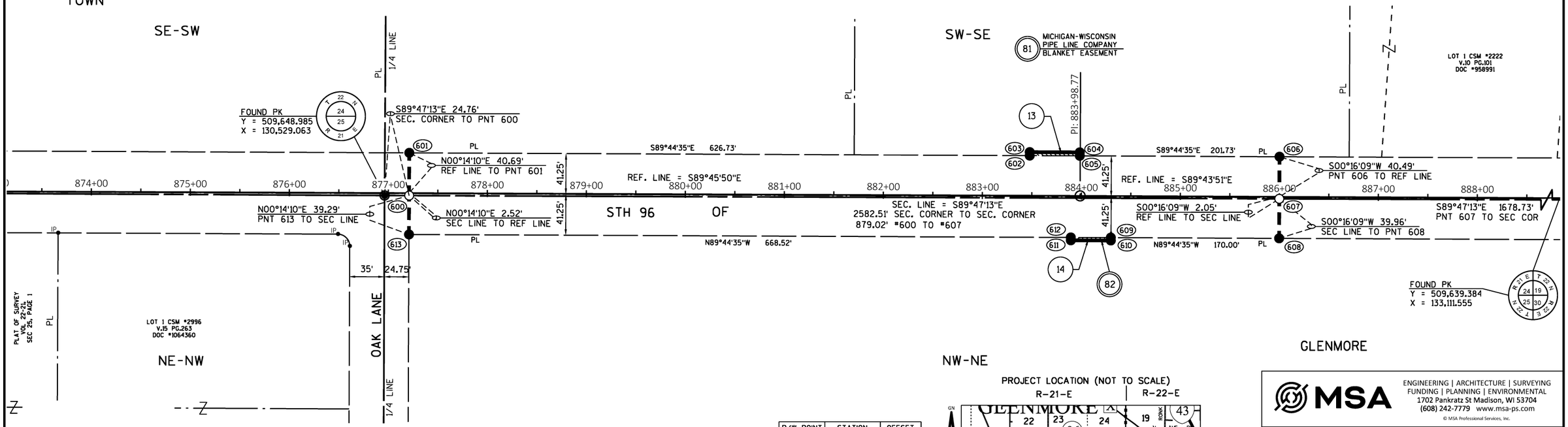
SE-SW

NE-NW

SW-SE

NW-NE

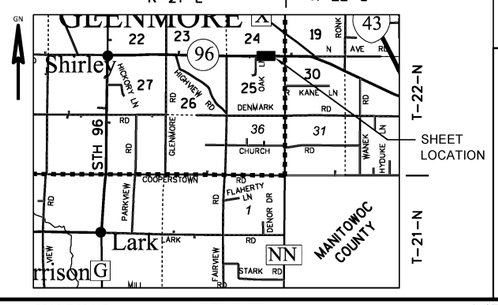
GLENMORE



COURSE	BEARING	DISTANCE
602-603	N00°14'10"E	3.54'
603-604	S89°45'50"E	50.59'
604-605	S00°14'10"W	3.56'
609-610	S00°16'09"W	2.95'
610-611	N89°43'51"W	40.47'
611-612	N00°16'09"E	2.94'

R/W POINT	STATION	OFFSET
600	877+20.98	2.52' RT
601	877+20.98	40.69' LT
602	883+47.71	40.46' LT
603	883+47.71	44.00' LT
604	883+98.30	44.00' LT
605	883+98.30	40.44' LT
606	886+00.00	40.49' LT
607	886+00.00	2.05' RT
608	886+00.00	42.02' RT
609	884+30.00	42.05' RT
610	884+30.00	45.00' RT
611	883+89.50	45.00' RT
612	883+89.50	42.06' RT
613	877+20.98	41.81' RT

PROJECT LOCATION (NOT TO SCALE)



MSA
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1702 Pankratz St Madison, WI 53704
(608) 242-7779 www.msa-ps.com

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I, BRADLEY L. TISDALE PROFESSIONAL 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 OF TRANSPORTATION, I HAVE SURVEYED AND MAPPED THIS TRANSPORTATION PROJECT 4075-39-21 - 4.06 AND SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

SIGNATURE: _____ DATE: 06/12/20
PRINT NAME: BRADLEY L. TISDALE
REGISTRATION NUMBER: S-2824

WISCONSIN BRADLEY L. TISDALE S-2824 WAUNAKEE WI LAND SURVEYOR

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

SIGNATURE: _____ DATE: 06/17/20
PRINT NAME: CURT VAN EREM

FILE NAME : P:\90S\93\00093473\CADD\RW\STH 96 TPP.DWG
APPRAISAL PLAT DATE : 06/12/2020
PLOT DATE : 6/16/2020 3:41 PM
PLOT BY : BRAD TISDALE
PLOT NAME :
PLOT SCALE : ##########

TRANSPORTATION PROJECT PLAT NO: 4075-39-21 - 4.07

PART OF THE NW 1/4 OF THE NE 1/4 OF SECTION 30, T22N, R22E, TOWN OF NEW DENMARK, BROWN COUNTY, WISCONSIN.

RELOCATION ORDER: STH 96 WRIGHTSTOWN - DENMARK, STH 32 - I 43, BROWN 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), 84.09, AND 84.30, 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.

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), BROWN COUNTY, NAD83 (2011) IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY 1"X24" IRON PIPES) UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

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

DIMENSIONING FOR THE NEW RIGHT-OF-WAY 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 GREEN BAY.

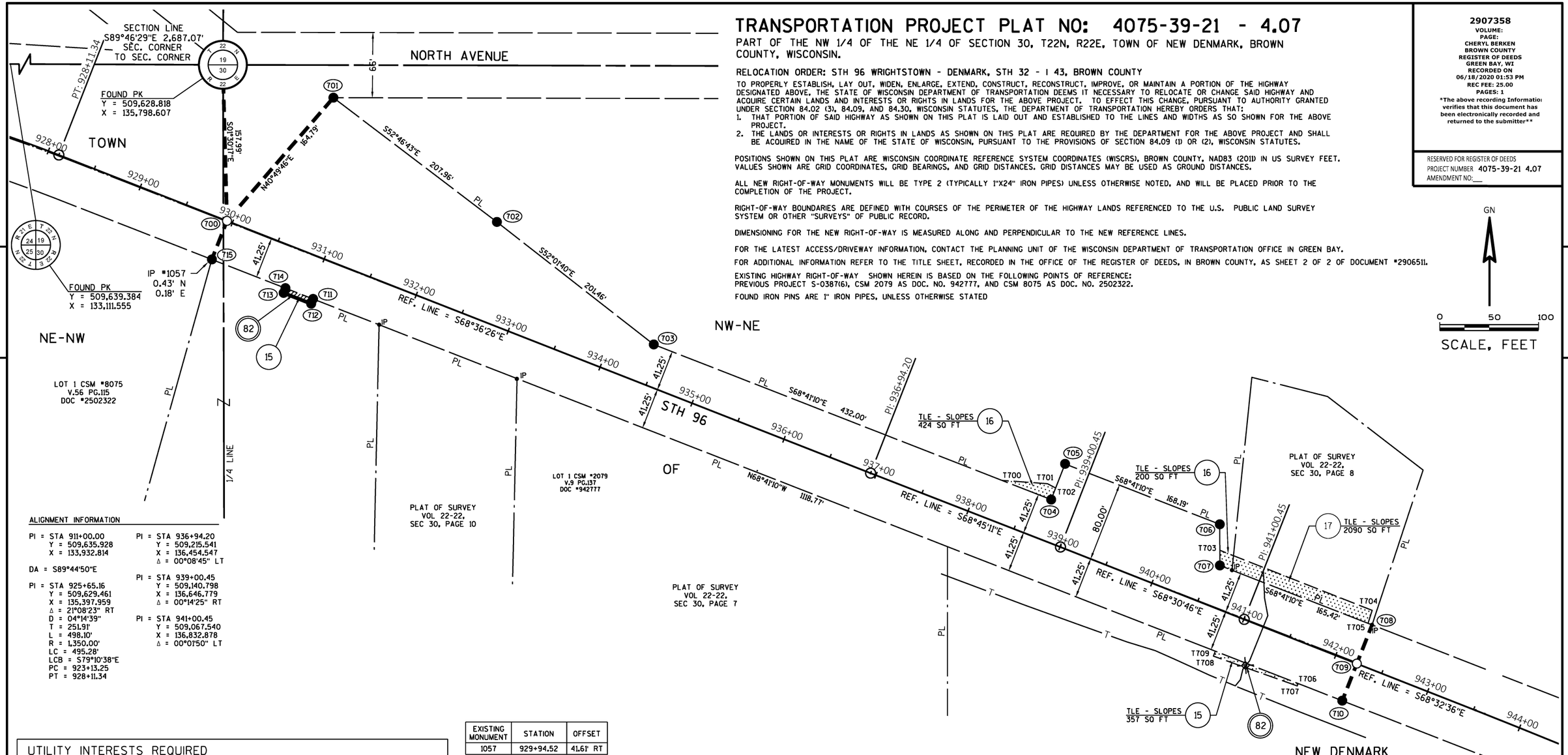
FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF THE REGISTER OF DEEDS, IN BROWN COUNTY, AS SHEET 2 OF 2 OF DOCUMENT *2906511.

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE: PREVIOUS PROJECT S-0387(6), CSM 2079 AS DOC. NO. 942777, AND CSM 8075 AS DOC. NO. 2502322.

FOUND IRON PINS ARE 1" IRON PIPES, UNLESS OTHERWISE STATED

2907358
VOLUME:
PAGE:
CHERYL BERKEN
BROWN COUNTY
REGISTER OF DEEDS
GREEN BAY, WI
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RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 4075-39-21 4.07
AMENDMENT NO:___



GN

0 50 100

SCALE, FEET

4

4

ALIGNMENT INFORMATION

PI = STA 911+00.00
Y = 509,635.928
X = 133,932.814

DA = S89°44'50"E

PI = STA 925+65.16
Y = 509,629.461
X = 135,397.959
Δ = 21°08'23" RT
D = 04°14'39"
T = 251.91'
L = 498.10'
R = 1,350.00'
LC = 495.28'
LCB = S79°10'38"E
PC = 923+13.25
PT = 928+11.34

PI = STA 936+94.20
Y = 509,215.541
X = 136,454.547
Δ = 00°08'45" LT

PI = STA 939+00.45
Y = 509,140.798
X = 136,646.779
Δ = 00°14'25" RT

PI = STA 941+00.45
Y = 509,067.540
X = 136,832.878
Δ = 00°01'50" LT

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	OWNER(S)	PARCEL AFFECTED	INTEREST REQUIRED
82	GENERAL TELEPHONE COMPANY	15 - DOCUMENT *702878	RELEASE OF RIGHTS

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W SQ FT REQUIRED			TLE SQ FT
			NEW	EXISTING	TOTAL	
15	KENNETH E. VAN DEN ELZEN AND JEAN VAN DEN ELZEN	FEE/TLE	156	--	156	357
16	NORBERT L. RONK AND ROBERT RONK, CO-TRUSTEES OF THE NORBERT L. RONK AND JEAN M. RONK FAMILY TRUST U/D/O OCTOBER 27, 1999, AN UNDIVIDED 1/2 INTEREST AND NORBERT L. RONK, TRUSTEE OF THE NORBERT L. RONK SURVIVOR'S TRUST U/D/O OCTOBER 27, 1999 AN UNDIVIDED 1/2 INTEREST	TLE	--	--	--	624
17	BRIAN A. BRAUN AND FRANCES K. THOMPSON	TLE	--	--	--	2090

EXISTING MONUMENT	STATION	OFFSET
1057	929+94.52	41.61' RT

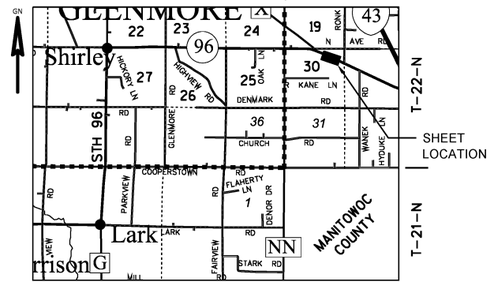
R/W POINT	STATION	OFFSET
700	929+94.18	0.00' RT
701	930+49.02	155.40' LT
702	932+49.09	98.67' LT
703	934+42.17	41.19' LT
704	938+74.28	41.33' LT
705	938+74.32	80.08' LT
706	940+42.18	80.47' LT
707	940+57.51	41.77' LT
708	942+22.95	42.21' LT
709	942+22.95	0.00' RT
710	942+22.95	40.30' RT
711	931+04.14	41.78' RT
712	931+04.14	47.00' RT
713	930+74.14	47.00' RT
714	930+74.14	41.82' RT
715*	929+94.18	41.93' RT

* - NO IRON SET DUE TO CLOSE PROXIMITY TO EXISTING MONUMENT. USE R/W POINT FOR ULTIMATE R/W.

TLE POINT	STATION	OFFSET
T700	938+20.84	41.39' LT
T701	938+65.00	55.00' LT
T702	938+74.29	53.92' LT
T703	940+51.84	56.07' LT
T704	942+17.66	55.92' LT
T705	942+18.59	42.20' LT
T706	941+74.99	40.41' RT
T707	941+75.00	43.00' RT
T708	940+85.00	46.00' RT
T709	940+84.98	40.65' RT

COURSE	BEARING	DISTANCE
704-705	N21°18'50"E	38.75'
706-707	S00°07'28"E	41.63'
708-709	S21°27'24"W	42.21'
709-710	S21°27'24"W	40.29'
711-712	S21°23'34"W	5.22'
712-713	N68°36'26"W	30.00'
713-714	N21°23'34"E	5.18'
714-715	N68°41'10"W	79.96'
715-700	N21°23'34"E	41.93'

PROJECT LOCATION (NOT TO SCALE)



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(608) 242-7779 www.msa-ps.com

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I, BRADLEY L. TIDSALE PROFESSIONAL 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 OF TRANSPORTATION, I HAVE SURVEYED AND MAPPED THIS TRANSPORTATION PROJECT 4075-39-21 - 4.07 AND SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

SIGNATURE: Bradley L. Tidsale DATE: 06/12/20
PRINT NAME: BRADLEY L. TISDALE
REGISTRATION NUMBER: S-2824

WISCONSIN BRADLEY L. TISDALE S-2824 WAUNAKEE WI LAND SURVEYOR

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

SIGNATURE: Curt Van Erem DATE: 06/17/20
PRINT NAME: CURT VAN EREM

FILE NAME : P:\90S\93\00093473\CADD\RW\STH 96 TPP.DWG
APPRAISAL PLAT DATE : 06/12/2020
PLOT DATE : 6/16/2020 3:41 PM
PLOT BY : BRAD TISDALE
PLOT NAME :
PLOT SCALE : ##########

LEGEND

CONCRETE PAVEMENT APPROACH SLAB (REINFORCED)

CONCRETE PAVEMENT APPROACH SLAB (NON-REINFORCED)

STH 96

PI: 936+04.20

EXISTING R/W

SLOPE INTERCEPT (TYP.)

STA. 938+58
MGS GUARDRAIL
TERMINAL EAT

TLE

CONCRETE PAVEMENT
8-INCH (TYP.)

CONCRETE PAVEMENT
APPROACH SLAB (TYP.)

PI: 939+00.45

MGS THRIE BEAM
TRANSITION

RIPRAP
HEAVY

PROPOSED DITCH
(TYP.)

MGS THRIE BEAM
TRANSITION

CONCRETE CURB AND GUTTER
4-INCH SLOPED 36-INCH TYPE
TBTT

CONCRETE CURB AND
GUTTER 4-INCH SLOPED
36-INCH TYPE TBT

120 LF CULVERT PIPE CLASS III-A NON METAL
24-INCH WITH APRON ENDWALLS

RIPRAP
MEDIUM

TLE

STA. 941+31
MGS GUARDRAIL
TERMINAL EAT

STA. 941+55
10' ASPHALT
DRIVEWAY REQ'D.

TLE

REMOVING SMALL
PIPE CULVERTS

EXISTING CULVERT
(TO REMAIN)

PI: 941+00.45

AGG.
FIELD ENTRANCE

937+00 | 938+00 | S68°45'11"E | 939+00 | S68°30'46"E | 940+00 | 941+00 | 942+00 | S68°32'36"E | 943+00

STA. 939+25
RECONSTRUCTION LIMITS

STA. 941+10
RECONSTRUCTION LIMITS

ASPH
PE

EXISTING R/W

EXISTING CULVERT
(TO REMAIN)

STA. 938+35
12' AGG. FIELD
ENTRANCE REQ'D.

STA. 938+56
MGS GUARDRAIL
TERMINAL EAT

MGS GUARDRAIL 3

MGS THRIE BEAM
TRANSITION

EXISTING STRUCTURE C-005-02
(TO BE REMOVED)

UNNAMED CREEK

TLE

STA. 941+54
MGS GUARDRAIL
TERMINAL EAT

REMOVING SMALL PIPE CULVERTS

23 LF CULVERT PIPE CLASS III-A NON-METAL
15-INCH WITH APRON ENDWALLS

B-05-0468
(SEE STRUCTURE PLANS)

CONCRETE
SURFACE DRAINS

RIPRAP
MEDIUM

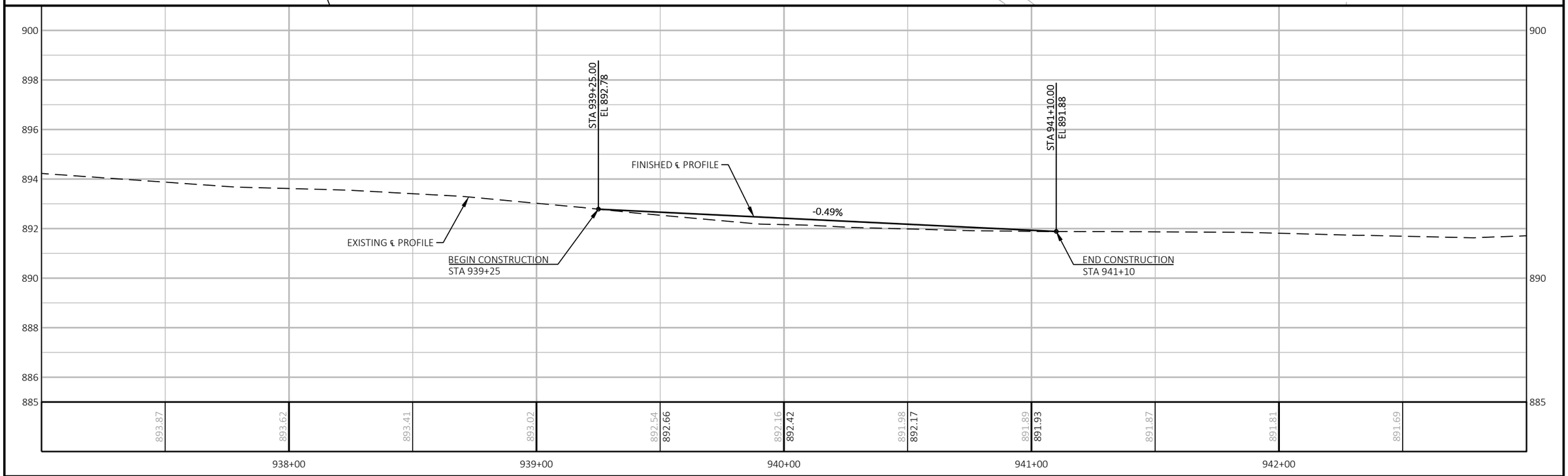
BURIED TELEPHONE (CENTURYLINK)

MGS THRIE BEAM
TRANSITION

N

5

5



PROJECT NO: 4075-39-72	HWY: STH 96	COUNTY: BROWN	PLAN AND PROFILE: STH 96	SHEET 41	E

FILE NAME : P:\90S\93\00093473\CADD\SHEETSPLAN\050101-PP.DWG
LAYOUT NAME - 050101-pp

PLOT DATE : 11/23/2021 8:17 AM PLOT BY : JASON DOLENS PLOT NAME : PLOT SCALE : 1 IN:40 FT

N

CTH G

EXISTING R/W

PI: 745+17.89

746 748 S89° 38' 56"E 750 752 754 755 756 S89° 51' 54"E

STH 96

90°43'5"

EXISTING R/W

BEGIN PROJECT 4075-39-72
STA 748+18.00
Y=509,737.512
X=117,653.945

Y = 509734.244
X = 118186.925
PI: 753+50.99
179°47'2"

MATCHLINE - STA 758+00

5

744 745

STH 96

GUY GUY GUY

N

CAUTION

PROPOSED R/W

SLOPE INTERCEPT (TYP.)

WISCONSIN PUBLIC SERVICE CORP. (GAS)

MOVING TYPE II SIGNS, AND SMALL SIGN SUPPORTS

Y = 509732.714
X = 118835.903
PI: 759+99.97
179°45'21"

STA. 759+91
87 LF CULVERT PIPE CLASS III-A NON-METAL
24-INCH WITH APRON ENDWALLS (2)
2 EACH - CULVERT MARKERS

1 EACH - REMOVING SMALL PIPE CULVERTS

STA. 760+00
87 LF CULVERT PIPE CLASS III-A NON-METAL 24-INCH
WITH APRON ENDWALLS (2)
2 EACH - CULVERT MARKERS

PC: 767+04.45

SECTION CORNER MONUMENT
TO BE REPLACED BY OTHERS

PT: 772+37.27

MATCHLINE - STA 758+00

EXISTING R/W

758 762 N89° 56' 16"E 764 765 766 768 770 772

STH 96

EXISTING R/W

MATCHLINE - STA 773+00

WISCONSIN PUBLIC SERVICE CORP. (OVERHEAD)

PROPOSED R/W

PI STA = 769+70.91
Y = 509733.771
X = 119806.842
DELTA = 2°39'50"
D = 0°30'00"
T = 266.46'
L = 532.82'
R = 11460.00'
PC STA = 767+04.45
Y = 509733.481
X = 119540.385
PT STA = 772+37.27
Y = 509746.445
X = 120072.997
BK = N89°56'15.5"E
AH = N87°16'25.5"E
SE = 3%

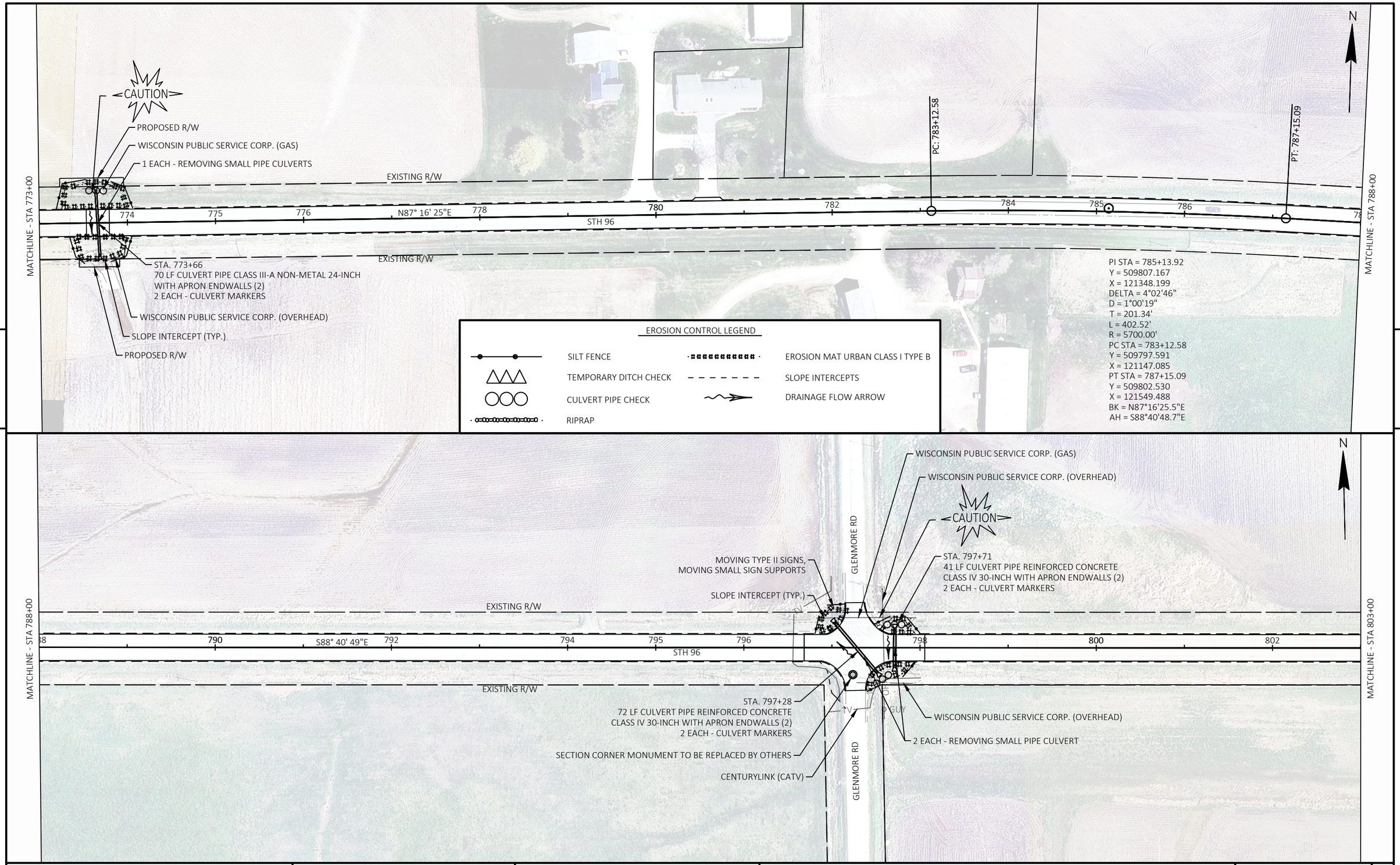
EROSION CONTROL LEGEND

SILT FENCE	EROSION MAT URBAN CLASS I TYPE B
TEMPORARY DITCH CHECK	SLOPE INTERCEPTS
CULVERT PIPE CHECK	DRAINAGE FLOW ARROW
RIPRAP	

PROJECT NO: 4075-39-72	HWY: STH 96	COUNTY: BROWN	PLAN - STH 96 - EAST SECTION	SHEET 42	E

FILE NAME : P:\90S\93\00093473\CADD\SHEETSPLAN\050219-PN_72.DWG
LAYOUT NAME - 050201-pn

PLOT DATE : 11/23/2021 9:25 AM PLOT BY : JASON DOLENS PLOT NAME : PLOT SCALE : 1 IN:100 FT



5

5

PROJECT NO: 4075-39-72	HWY: STH 96	COUNTY: BROWN	PLAN - STH 96 - EAST SECTION	SHEET 43	E

FILE NAME : P:\90S\93\00093473\CADD\SHEETSPLAN\050219-PN_72.DWG
LAYOUT NAME - 050202-pn

PLOT DATE : 11/23/2021 9:26 AM PLOT BY : JASON DOLENS PLOT NAME : PLOT SCALE : 1 IN:100 FT

MATCHLINE - STA 803+00

MATCHLINE - STA 818+00

MATHLES LANE

SLOPE INTERCEPT (TYP.)

CAUTION

WISCONSIN PUBLIC SERVICE CORP. (GAS)

PROPOSED R/W

1 EACH - REMOVING SMALL PIPE CULVERTS

EXISTING R/W

804 805 806 S88° 40' 49"E 808 810 812 814 815 816

STH 96

EXISTING R/W

HIGHVIEW RD

STA. 811+18
62 LF CULVERT PIPE REINFORCED CONCRETE CLASS IV 30-INCH
WITH APRON ENDWALLS (2)
1 EACH CULVERT MARKER RT

WISCONSIN PUBLIC SERVICE CORP. (OVERHEAD)

CENTURYLINK (CATV)

PROPOSED R/W

N

5

5

MATCHLINE - STA 818+00

MATCHLINE - STA 833+00

CAUTION

WISCONSIN PUBLIC SERVICE CORP. (GAS)

1 EACH - REMOVING SMALL PIPE CULVERT

SECTION CORNER MONUMENT
TO BE REPLACED BY OTHERS

EXISTING R/W

Y = 509709.134
X = 125603.335
PI: 827+70.02

179°56'5"

CAUTION

WISCONSIN PUBLIC SERVICE CORP. (GAS)

STA. 831+41
48 LF CULVERT PIPE REINFORCED CONCRETE CLASS IV 30-INCH
WITH APRON ENDWALLS (2)
1 EACH CULVERT MARKER RT

820 822 824 825 826 828 830 S88° 45' 14"E 832 S88° 45' 14"E

STH 96

EXISTING R/W

1 EACH - REMOVING SMALL PIPE CULVERT

CENTURYLINK (CATV)

WISCONSIN PUBLIC SERVICE CORP. (OVERHEAD)

WISCONSIN PUBLIC SERVICE CORP. (OVERHEAD)

CENTURYLINK (CATV)

SLOPE INTERCEPT (TYP.)

STA. 821+14
49 LF CULVERT PIPE REINFORCED CONCRETE CLASS IV 24-INCH
WITH APRON ENDWALLS (2)
2 EACH - CULVERT MARKERS

N

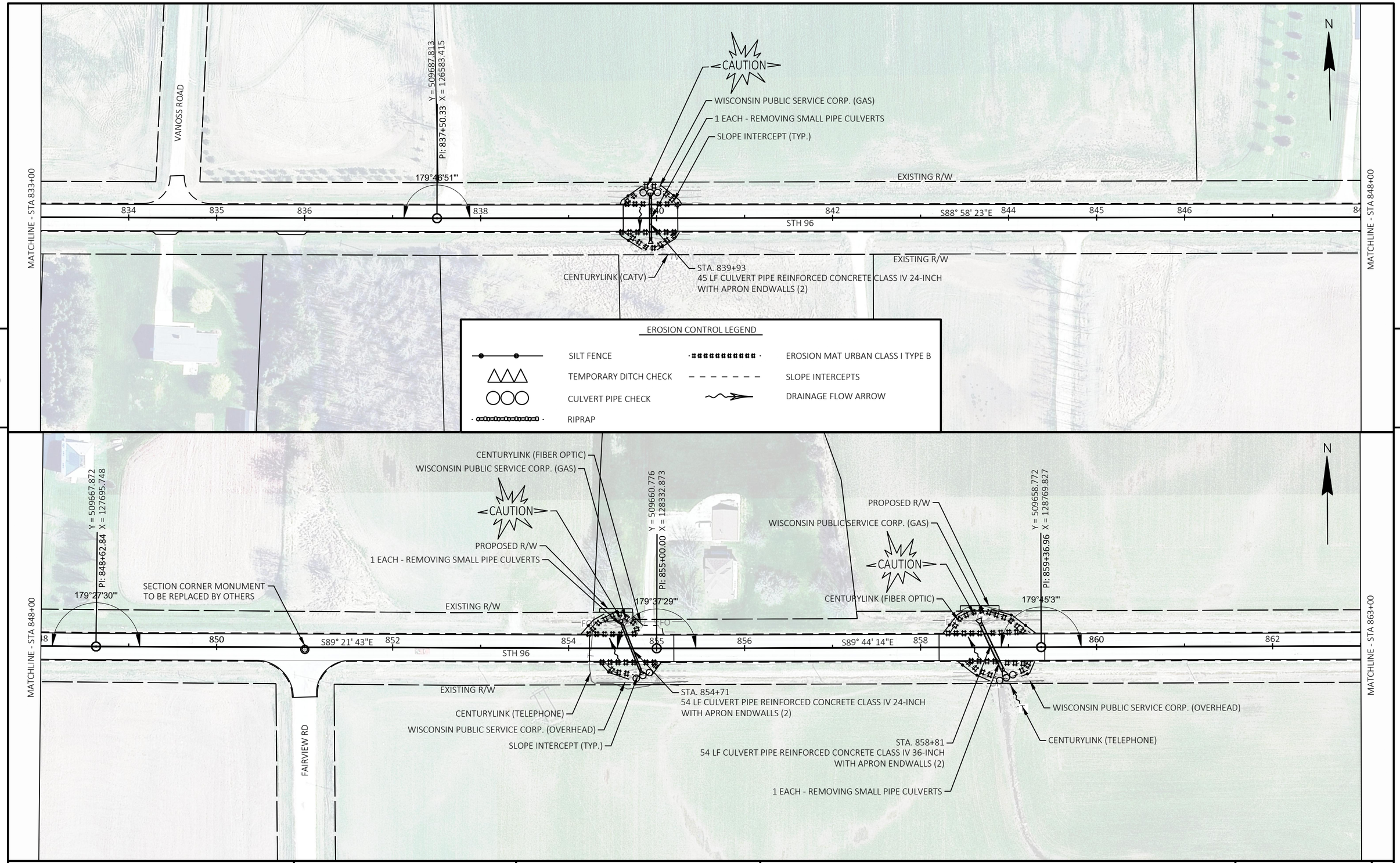
EROSION CONTROL LEGEND

SILT FENCE		EROSION MAT URBAN CLASS I TYPE B	
TEMPORARY DITCH CHECK		SLOPE INTERCEPTS	
CULVERT PIPE CHECK		DRAINAGE FLOW ARROW	
RIPRAP			

PROJECT NO: 4075-39-72	HWY: STH 96	COUNTY: BROWN	PLAN - STH 96 - EAST SECTION	SHEET 44	E

FILE NAME : P:\90S\93\00093473\CADD\SHEETSPLAN\050219-PN_72.DWG
LAYOUT NAME - 050203-pn

PLOT DATE : 11/23/2021 9:26 AM PLOT BY : JASON DOLENS PLOT NAME : PLOT SCALE : 1 IN:100 FT



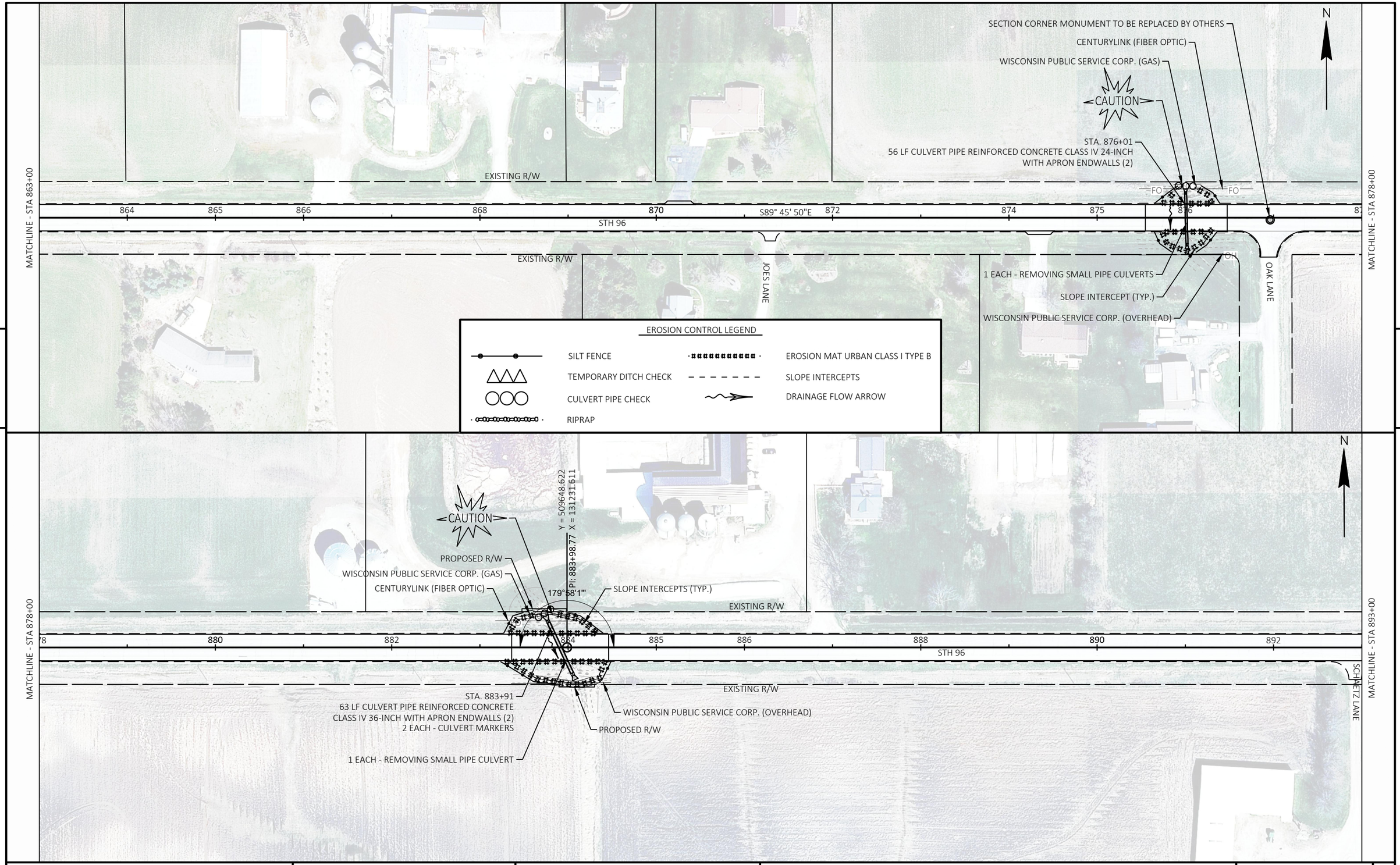
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5

PROJECT NO: 4075-39-72	HWY: STH 96	COUNTY: BROWN	PLAN - STH 96 - EAST SECTION	SHEET 45	E

FILE NAME : P:\90S\93\00093473\CADD\SHEETSPLAN\050219-PN_72.DWG
LAYOUT NAME - 050204-pn

PLOT DATE : 11/23/2021 9:27 AM PLOT BY : JASON DOLENS PLOT NAME : PLOT SCALE : 1 IN:100 FT



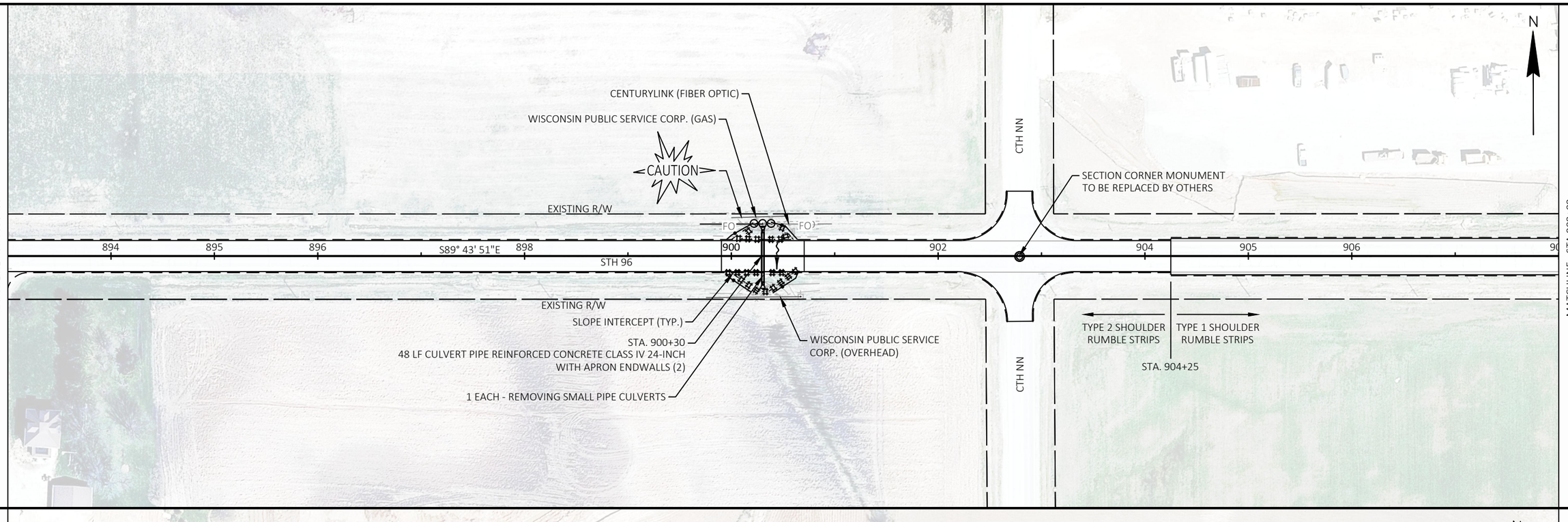
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5

PROJECT NO: 4075-39-72	HWY: STH 96	COUNTY: BROWN	PLAN - STH 96 - EAST SECTION	SHEET 46	E

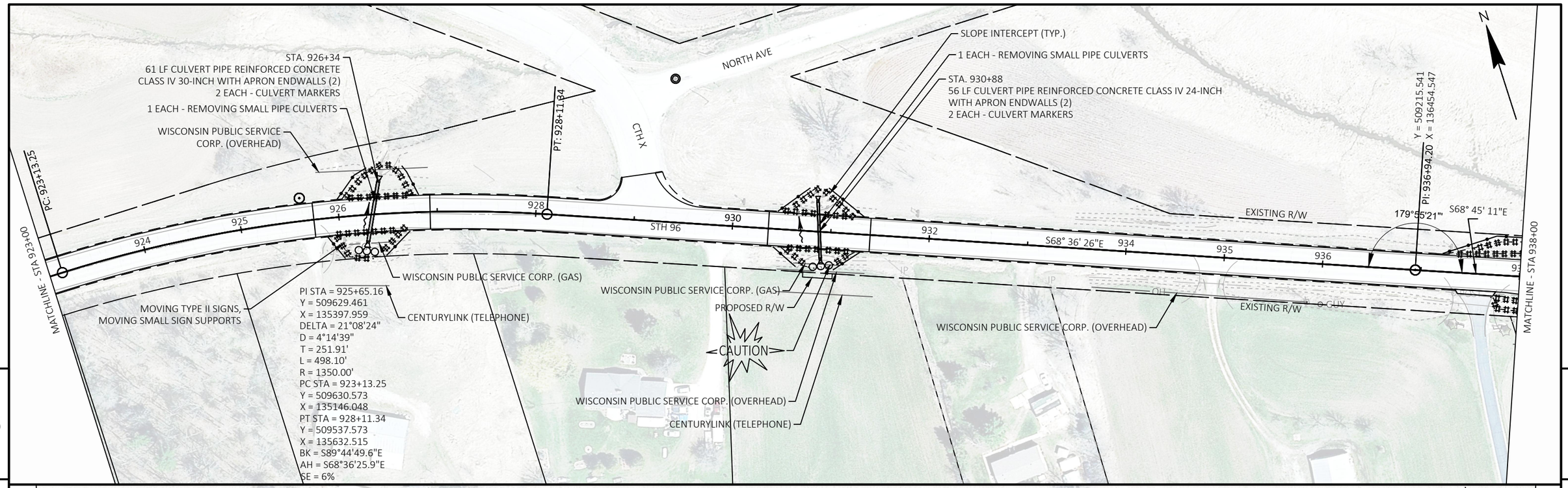
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LAYOUT NAME - 050205-pn

PLOT DATE : 11/23/2021 9:27 AM PLOT BY : JASON DOLENS PLOT NAME : PLOT SCALE : 1 IN:100 FT



PROJECT NO: 4075-39-72	HWY: STH 96	COUNTY: BROWN	PLAN - STH 96 - EAST SECTION	SHEET 47	E

FILE NAME : P:\90S\93\00093473\CADD\SHEETSPLAN\050219-PN_72.DWG
LAYOUT NAME - 050206-pn
PLOT DATE : 11/23/2021 9:28 AM
PLOT BY : JASON DOLENS
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44



PROJECT NO: 4075-39-72	HWY: STH 96	COUNTY: BROWN	PLAN - STH 96 - EAST SECTION	SHEET 48	E

FILE NAME : P:\90S\93\00093473\CADD\SHEETSPLAN\050219-PN_72.DWG
LAYOUT NAME - 050207-pn
PLOT DATE : 11/23/2021 9:28 AM
PLOT BY : JASON DOLENS
PLOT NAME :
PLOT SCALE : 1 IN:100 FT

MATCHLINE - STA 953+00

1 EACH - REMOVING SMALL PIPE CULVERTS

Y = 508426.085
X = 138222.500
PI: 956+31.96

RONK RD

179°7'3"

954 955 956 S64° 14' 16"E 958

STH 96

Y = 508266.033
X = 138554.142
PI: 960+00.20

179°26'27"

960 S64° 47' 50"E 962

EXISTING R/W

Y = 508138.370
X = 138825.406
PI: 963+00.00

179°37'28"

964 965 966

STA. 965+41
44 LF CULVERT PIPE REINFORCED CONCRETE
CLASS IV 30-INCH WITH APRON ENDWALLS (2)
2 EACH - CULVERT MARKERS

1 EACH - REMOVING SMALL PIPE CULVERT

MATCHLINE - STA 968+00

WISCONSIN PUBLIC SERVICE CORP. (OVERHEAD)

CENTURYLINK (TELEPHONE)

STA. 955+84
52 LF CULVERT PIPE REINFORCED CONCRETE
CLASS IV 30-INCH WITH APRON ENDWALLS (2)
2 EACH - CULVERT MARKERS

STA. 955+92
52 LF CULVERT PIPE REINFORCED CONCRETE
CLASS IV 30-INCH WITH APRON ENDWALLS (2)
2 EACH - CULVERT MARKERS

EXISTING R/W

CENTURYLINK (TELEPHONE)

WISCONSIN PUBLIC SERVICE CORP. (OVERHEAD)

EROSION CONTROL LEGEND

- SILT FENCE
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- RIPRAP
- EROSION MAT URBAN CLASS I TYPE B
- SLOPE INTERCEPTS
- DRAINAGE FLOW ARROW

MATCHLINE - STA 968+00

EXISTING R/W

968 970 S65° 10' 22"E 972 974 975 976 978

STH 96

WANEK RD

EXISTING R/W

STA. 978+80
49 LF CULVERT PIPE REINFORCED CONCRETE
CLASS IV 30-INCH WITH APRON ENDWALLS (2)
2 EACH - CULVERT MARKERS

1 EACH - REMOVING SMALL PIPE CULVERT

Y = 507454.940
X = 140302.638
PI: 979+27.67

179°52'3"

980 S65° 10' 39"E 982

MATCHLINE - STA 983+00

WISCONSIN PUBLIC SERVICE CORP. (OVERHEAD)

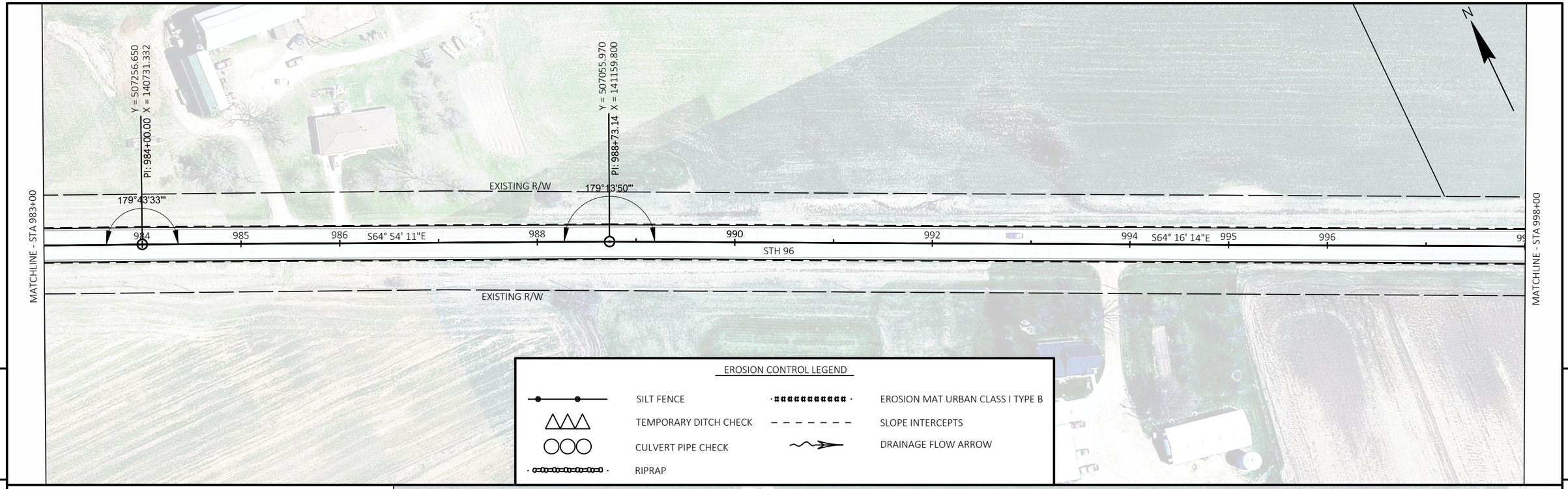
CENTURYLINK (TELEPHONE)

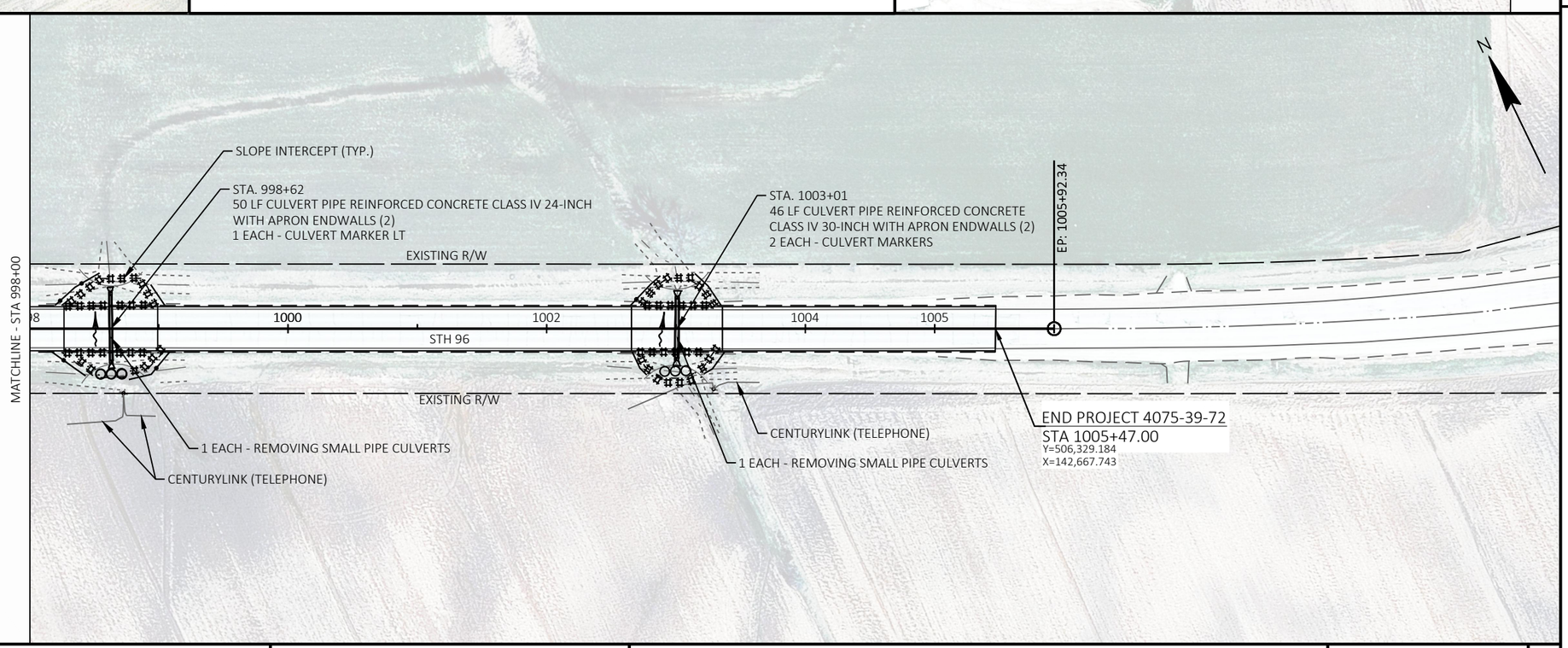
PROJECT NO: 4075-39-72	HWY: STH 96	COUNTY: BROWN	PLAN - STH 96 - EAST SECTION	SHEET 49	E

FILE NAME : P:\90S\93\00093473\CADD\SHEETSPLAN\050219-PN_72.DWG
LAYOUT NAME - 050208-pn

PLOT DATE : 11/23/2021 9:29 AM PLOT BY : JASON DOLENS PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44





PROJECT NO: 4075-39-72	HWY: STH 96	COUNTY: BROWN	PLAN - STH 96 - EAST SECTION	SHEET 50 E

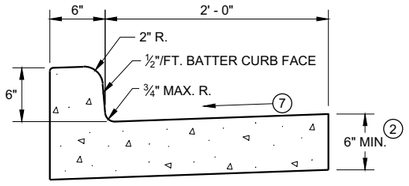
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LAYOUT NAME - 050209-pn
PLOT DATE : 11/23/2021 9:29 AM PLOT BY : JASON DOLENS PLOT NAME : PLOT SCALE : 1 IN:100 FT

4075-39-72 CULVERT PIPE STAKING INFORMATION										
PLAN STATION	UPSTREAM STATION	UPSTREAM LOCATION	UPSTREAM INVERT ELEVATION	PIPE LENGTH	PIPE DIAMETER	PIPE MATERIAL	PIPE SLOPE	DOWNSTREAM STATION	DOWNSTREAM LOCATION	DOWNSTREAM INVERT ELEVATION
759+91	760+09.00	39.00' RT	942.41	87'	24-INCH	CULVERT PIPE CLASS III-A NON METAL	0.71%	759+73.00	41.00' LT	941.79
760+00	760+17.00	39.00' RT	942.43	87'	24-INCH	CULVERT PIPE CLASS III-A NON METAL	0.71%	759+81.00	41.00' LT	941.81
773+66	773+65.00	34.50' LT	945.58	70'	24-INCH	CULVERT PIPE CLASS III-A NON METAL	0.42%	773+68.00	35.50' RT	945.28
797+28	797+50.50	27.25' RT	931.81	72'	30-INCH	CULVERT PIPE REINFORCED CONCRETE CLASS IV	0.36%	797+04.50	27.35' LT	931.55
797+71	797+71.00	20.50' LT	932.04	41'	30-INCH	CULVERT PIPE REINFORCED CONCRETE CLASS IV	0.27%	797+71.00	20.50' RT	931.93
811+18	811+17.00	31.00' LT	929.70	62'	30-INCH	CULVERT PIPE REINFORCED CONCRETE CLASS IV	0.27%	811+20.00	31.50' RT	929.53
821+14	821+14.00	24.00' RT	931.40	49'	24-INCH	CULVERT PIPE REINFORCED CONCRETE CLASS IV	0.49%	821+14.00	25.00' LT	931.16
831+41	831+43.00	23.50' LT	931.44	48'	30-INCH	CULVERT PIPE REINFORCED CONCRETE CLASS IV	0.32%	831+39.00	24.50' RT	931.29
839+93	839+93.00	22.50' LT	932.64	45'	24-INCH	CULVERT PIPE REINFORCED CONCRETE CLASS IV	0.47%	839+93.00	22.50' RT	932.44
854+71	854+81.00	23.50' RT	932.79	54'	24-INCH	CULVERT PIPE REINFORCED CONCRETE CLASS IV	1.26%	854+61.00	26.50' LT	932.11
858+81	858+92.50	24.50' RT	930.77	54'	36-INCH	CULVERT PIPE REINFORCED CONCRETE CLASS IV	0.20%	858+69.50	24.75' LT	930.67
876+01	876+00.00	27.00' LT	929.27	56'	24-INCH	CULVERT PIPE REINFORCED CONCRETE CLASS IV	1.08%	876+02.00	29.00' RT	928.67
883+91	883+78.00	28.00' LT	924.96	63'	36-INCH	CULVERT PIPE REINFORCED CONCRETE CLASS IV	0.55%	884+05.00	29.00' RT	924.61
900+30	900+30.00	22.50' LT	922.05	48'	24-INCH	CULVERT PIPE REINFORCED CONCRETE CLASS IV	1.34%	900+30.00	25.50' RT	921.41
910+32	910+33.00	24.50' RT	908.76	53'	24-INCH	CULVERT PIPE REINFORCED CONCRETE CLASS IV	1.97%	910+31.00	28.50' LT	907.72
926+34	926+28.00	26.75' RT	894.76	61'	30-INCH	CULVERT PIPE REINFORCED CONCRETE CLASS IV	1.08%	926+42.00	32.50' LT	894.10
930+88	930+91.00	26.50' RT	892.39	56'	24-INCH	CULVERT PIPE REINFORCED CONCRETE CLASS IV	1.36%	930+85.00	29.50' LT	891.62
938+24	938+24.00	37.25' RT	888.80	23'	15-INCH	CULVERT PIPE CLASS III-A NON METAL	0.89%	938+47.00	37.25' RT	888.60
941+79	941+78.50	32.50' LT	888.35	120'	24-INCH	CULVERT PIPE CLASS III-A NON METAL	1.12%	940+58.50	37.00' LT	887.00
949+28	949+28.00	21.00' LT	892.66	41'	24-INCH	CULVERT PIPE REINFORCED CONCRETE CLASS IV	0.54%	949+30.00	20.00' RT	892.44
955+84	955+84.00	23.50' LT	893.37	52'	30-INCH	CULVERT PIPE REINFORCED CONCRETE CLASS IV	2.40%	955+84.00	28.50' RT	892.12
955+92	955+92.00	23.50' LT	893.37	52'	30-INCH	CULVERT PIPE REINFORCED CONCRETE CLASS IV	2.40%	955+92.00	28.50' RT	892.12
965+41	965+41.00	22.00' RT	901.84	44'	30-INCH	CULVERT PIPE REINFORCED CONCRETE CLASS IV	0.54%	965+41.00	22.00' LT	901.60
978+80	978+80.50	23.25' LT	903.71	49'	30-INCH	CULVERT PIPE REINFORCED CONCRETE CLASS IV	1.37%	978+81.50	25.75' RT	903.04
998+62	998+63.50	24.00' RT	908.10	50'	24-INCH	CULVERT PIPE REINFORCED CONCRETE CLASS IV	0.90%	998+62.50	26.00' LT	907.65
1003+01	1003+01.00	22.50' RT	908.04	46'	30-INCH	CULVERT PIPE REINFORCED CONCRETE CLASS IV	1.11%	1003+01.00	23.50' LT	907.53

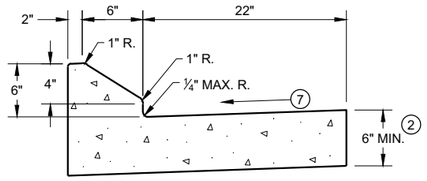
Standard Detail Drawing List

08D01-22A	CONCRETE CURB & GUTTER
08D01-22B	CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS
08D02-07A	CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES
08D02-07B	CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES
08D02-07C	CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES
08D21-01	DRIVEWAYS WITHOUT CURB & GUTTER
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08E15-01	CULVERT PIPE CHECK
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
08F04-08	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
12A03-10	NAME PLATE (STRUCTURES)
13A05-05A	SHOULDER RUMBLE STRIP, MILLING
13A10-02A	2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING
13A10-02B	2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING
13A10-02C	2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING
13A11-03A	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
13A11-03B	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
13B02-09A	CONCRETE PAVEMENT APPROACH SLAB
13C19-03	HMA LONGITUDINAL JOINTS
14B29-01	SAFETY EDGE
14B42-07A	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-07B	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-07C	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-07D	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B43-04A	MIDWEST GUARDRAIL SYSTEM LONG SPAN MGS (L)
14B43-04B	MIDWEST GUARDRAIL SYSTEM LONG SPAN MGS (L)
14B43-04C	MIDWEST GUARDRAIL SYSTEM LONG SPAN MGS (L)
14B44-04A	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-04B	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-04C	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B45-05A	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05B	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05C	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05D	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05E	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05F	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05G	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05H	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05I	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05J	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05K	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05L	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
15A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
15A03-02B	FLEXIBLE MARKER POST FOR CULVERT END
15C02-08A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-08B	BARRICADES AND SIGNS FOR VARIOUS CLOSURES
15C02-08C	DETOUR SIGNING FOR MAINLINE CLOSURES
15C02-08F	ADVANCED WIDTH RESTRICTION SIGNING
15C03-05	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C04-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C06-09	SIGNING & MARKING FOR TWO LANE BRIDGES
15C08-20A	LONGITUDINAL MARKING (MAINLINE)
15C11-09B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C12-08	TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION
15C19-06A	MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
15C33-04	STOP LINE AND CROSSWALK PAVEMENT MARKING
15C35-04B	PAVEMENT MARKING AND SIGNING (CLIMBING LANE & PASSING LANE)
15D28-04	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY
15D39-02	TRAFFIC CONTROL, DROP-OFF SIGNING
15D44-02	TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH MILLED SURFACES
15D48-01	TRAFFIC CONTROL, LANE SHIFT IN FLAGGING OPERATION

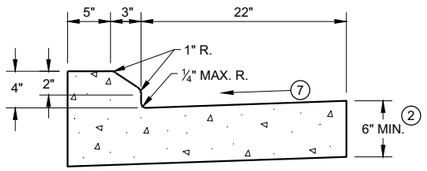
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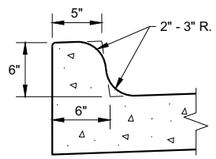
TYPES A (1) & D



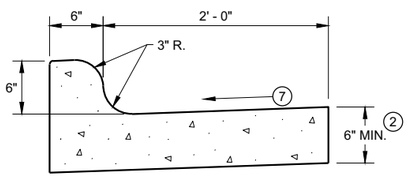
6" SLOPED CURB TYPES G (1) & J



4" SLOPED CURB TYPES G (1) & J

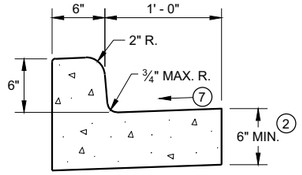


TYPES K (1) & L
(OPTIONAL CURB SHAPE)



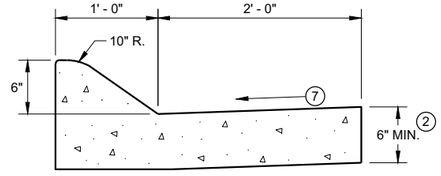
TYPES K (1) & L

CONCRETE CURB AND GUTTER 30"

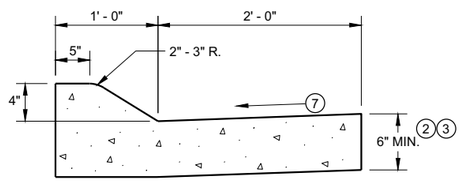


TYPES A (1) & D

CONCRETE CURB AND GUTTER 18"

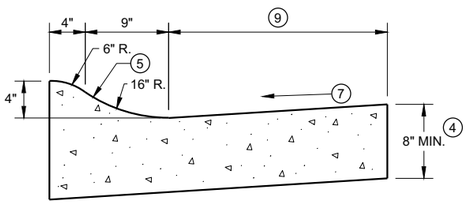


6" SLOPED CURB TYPES A (1) & D



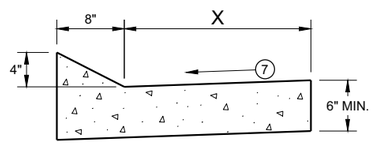
4" SLOPED CURB TYPES A (1) & D

CONCRETE CURB AND GUTTER 36"



4" SLOPED CURB TYPES R (1) & T

TBT & TBTT	X
30"	22"
36"	28"

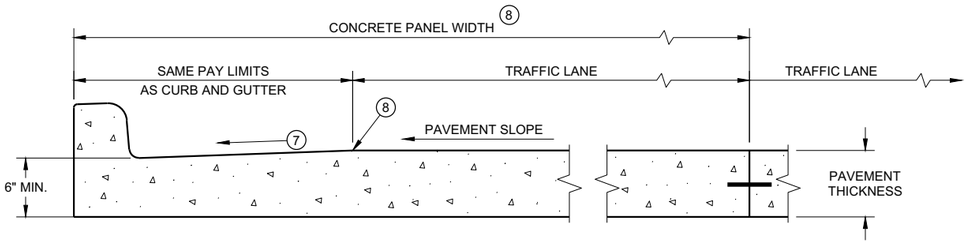


TYPES TBT & TBTT (1)

CONCRETE CURB AND GUTTER

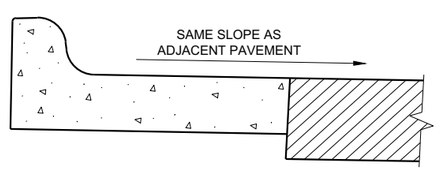
PAVEMENT THICKNESS AND MAXIMUM CONCRETE PANEL WIDTH TABLE

PAVEMENT THICKNESS	MAXIMUM PANEL WIDTH
LESS THAN 10"	12'
10" & ABOVE	15'



PARTIAL SECTION OF PAVEMENT * WITH INTEGRAL CURB AND GUTTER

* BIKE LANE IS NOT SHOWN



REVERSE SLOPE GUTTER (6)
(TYPICAL FOR ALL CURB & GUTTER TYPES)

GENERAL NOTES

DETAILS OF CONSTRUCTION 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 AND GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB AND GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE.

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 GUTTERS TYPES A, G, K, R, AND TBTT.

(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) USE 8" MINIMUM GUTTER THICKNESS WHEN USED WITH AN ADJACENT CONCRETE TRUCK APRON PLACED BEHIND BACK OF CURB.

(4) 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.

(5) UNLESS OTHERWISE NOTED, FOR STAKING PURPOSES THE FACE OF CURB IS 6" FROM THE BACK OF CURB.

(6) WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.

(7) USE 4% GUTTER CROSS SLOPE UNLESS OTHERWISE NOTED IN THE PLANS.

(8) INCLUDE LONGITUDINAL JOINT AND TIE BARS ALONG LANE EDGE WHEN CONCRETE PANEL WIDTH EXCEEDS THE MAXIMUM WIDTH PER TABLE BELOW. LONGITUDINAL JOINT(S) ARE NOT ALLOWED WITHIN TRAFFIC LANES AND BIKE LANES. LONGITUDINAL JOINT MAY BE SAWED.

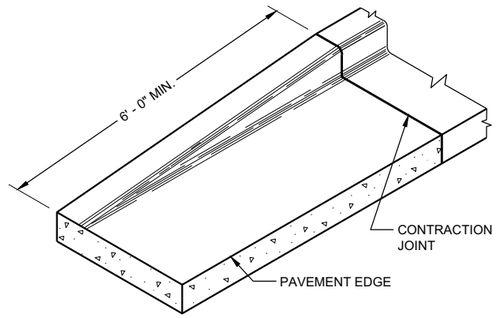
(9) CONCRETE CURB AND GUTTER 4-INCH SLOPED 30-INCH TYPE "R" AND "T" = 17 INCHES
CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE "R" AND "T" = 23 INCHES

CONCRETE CURB AND GUTTER

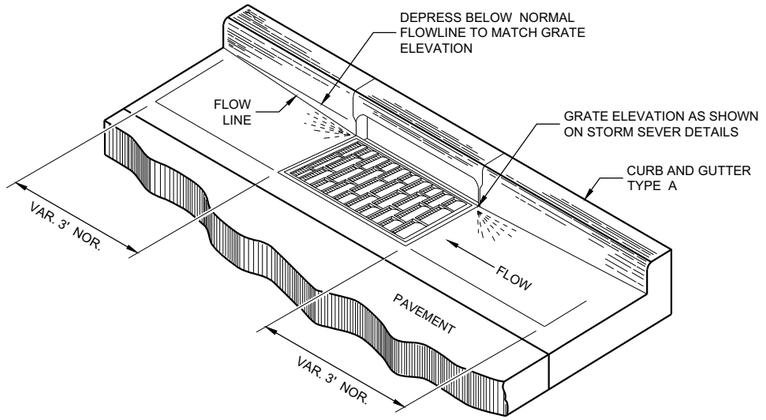
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 08D01 - 22a
SDD 08D01 - 22a



END SECTIONCURB AND GUTTER



DETAIL OF CURB AND GUTTER AT INLETS

(TYPICAL H INLET COVER SHOWN)

GENERAL NOTES

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

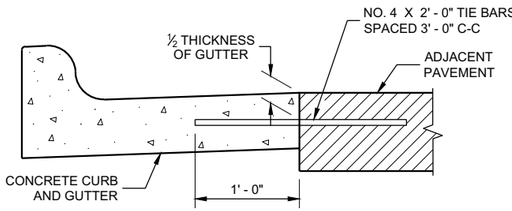
PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2' - 0" BEHIND THE BACK OF CURBS.

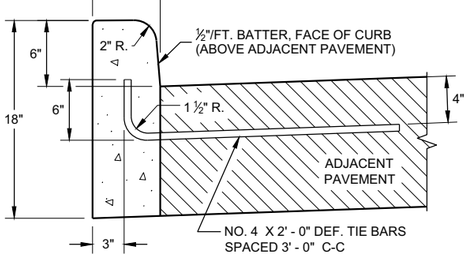
(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTERS TYPES A, G, K, R, AND TBTT.

(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.

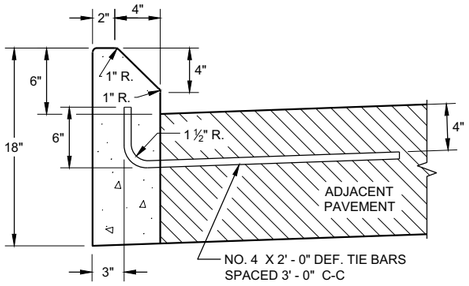
(9) REFER TO SDD 08D18 AND 08D19 FOR ADDITIONAL DRIVEWAY ENTRANCE CURB DETAILS.



TYPICAL TIE BAR LOCATION (1)

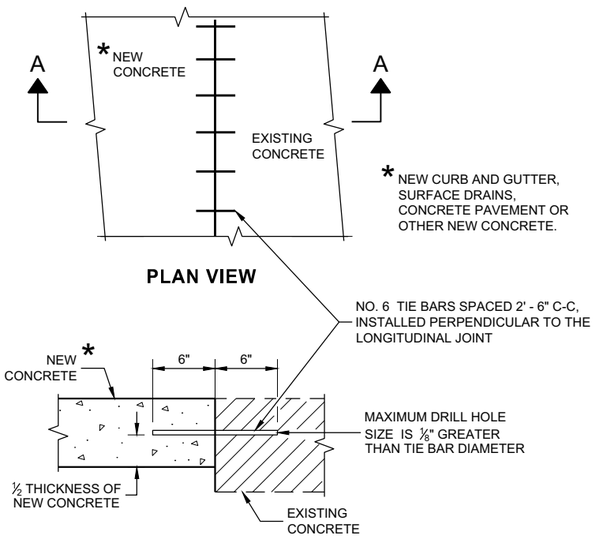


TYPES A (1) & D

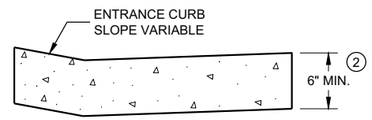


TYPES G (1) & J

CONCRETE CURB



TIE BARS DRILLED INTO EXISTING PAVEMENT



DRIVEWAY ENTRANCE CURB (9)

(WHEN DIRECTED BY THE ENGINEER)

CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2021 — DATE
/S/ Rodnery Taylor — ROADWAY STANDARDS DEVE ENGINEER

FHWA

6

SDD08D01 - 22b

GENERAL NOTES

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

ALL STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

(1) USE A JOINT SEALANT CONFORMING TO STANDARD SPECIFICATION 415.2.6.

(2) NO. 4 X 2' - 0" TIE BARS SPACED AT 12" C-C TO BE PLACED BY BRIDGE CONTRACTOR OR DRILLED TIE BARS PLACED AS DIRECTED BY THE ENGINEER.

(3) PAVED CONCRETE SHOULDER (SDD 13A03) OR CONCRETE DRAINAGE SLAB.

(4) CONCRETE PAVEMENT APPROACH SLAB (SHOWN) OR STRUCTURE APPROACH SLAB AND CONCRETE PAVEMENT APPROACH SLAB. SEE SDD 13B02.

(5) PAVED CONCRETE SHOULDER (SDD 13A03) OR ASPHALT SHOULDER.

(6) CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE TBT OR TBTT. USE TYPE TBTT CURB WITH NO. 4 X 2' -0" TIE BARS SPACED AT 3' - 0" C-C ONLY WHEN ADJACENT TO CONCRETE PAVEMENTS.

(7) PLACE FLUME BEFORE MSG THRIE BEAM TRANSITION POST 1 (SEE SDD 14B45)

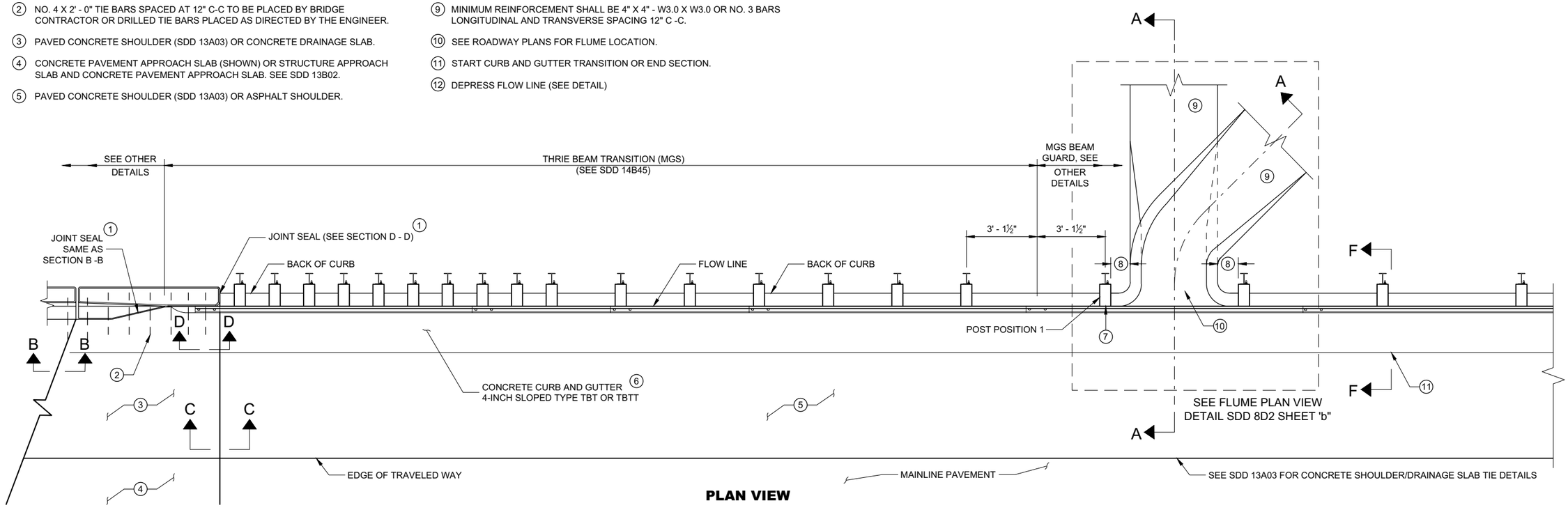
(8) CENTER FLUME BETWEEN POSTS. 6-INCH MINIMUM SEPARATION FROM OUTSIDE EDGE OF FLUME TO POSTS.

(9) MINIMUM REINFORCEMENT SHALL BE 4" X 4" - W3.0 X W3.0 OR NO. 3 BARS LONGITUDINAL AND TRANSVERSE SPACING 12" C -C.

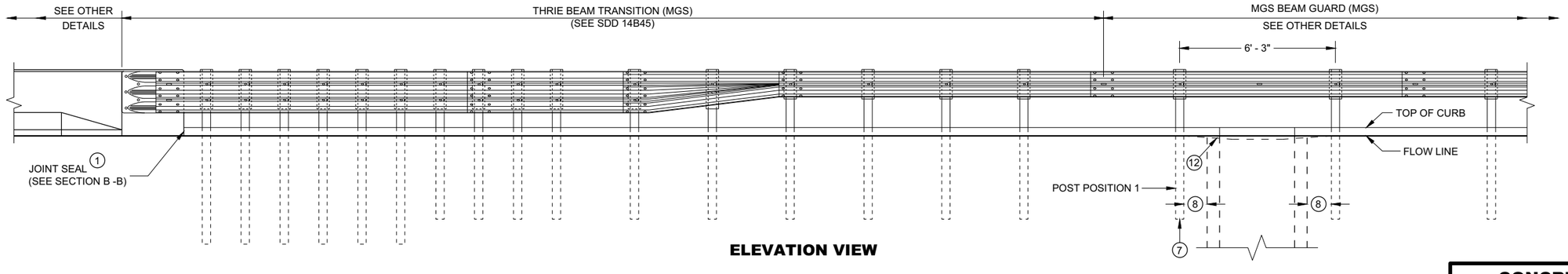
(10) SEE ROADWAY PLANS FOR FLUME LOCATION.

(11) START CURB AND GUTTER TRANSITION OR END SECTION.

(12) DEPRESS FLOW LINE (SEE DETAIL)



PLAN VIEW



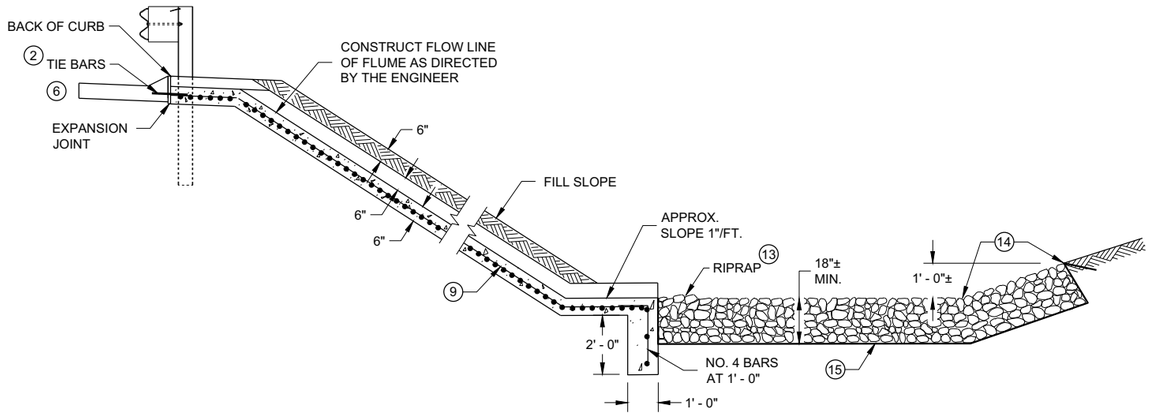
ELEVATION VIEW

CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES

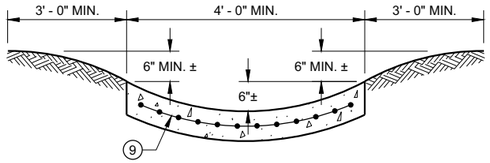
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 08D02 - 07a

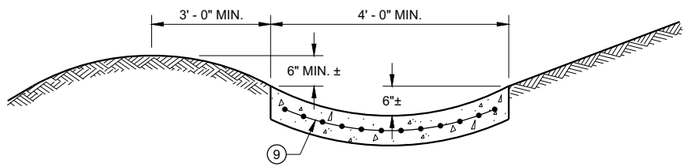
SDD 08D02 - 07a



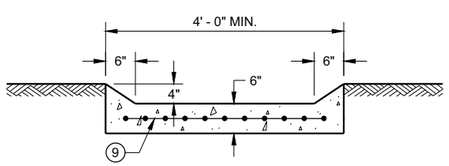
SECTION A - A



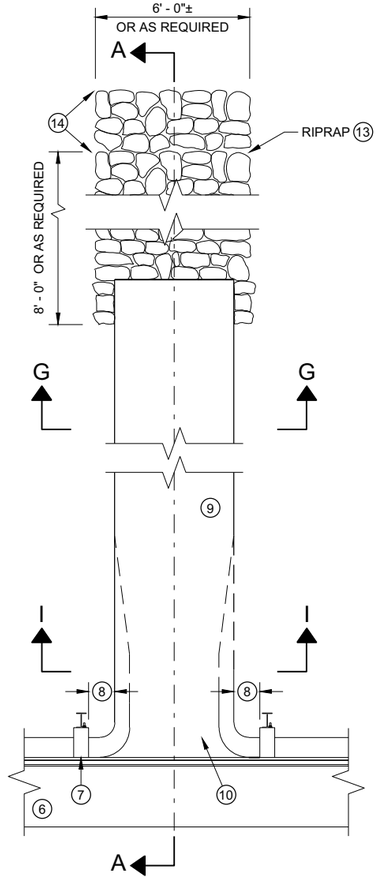
SECTION G - G



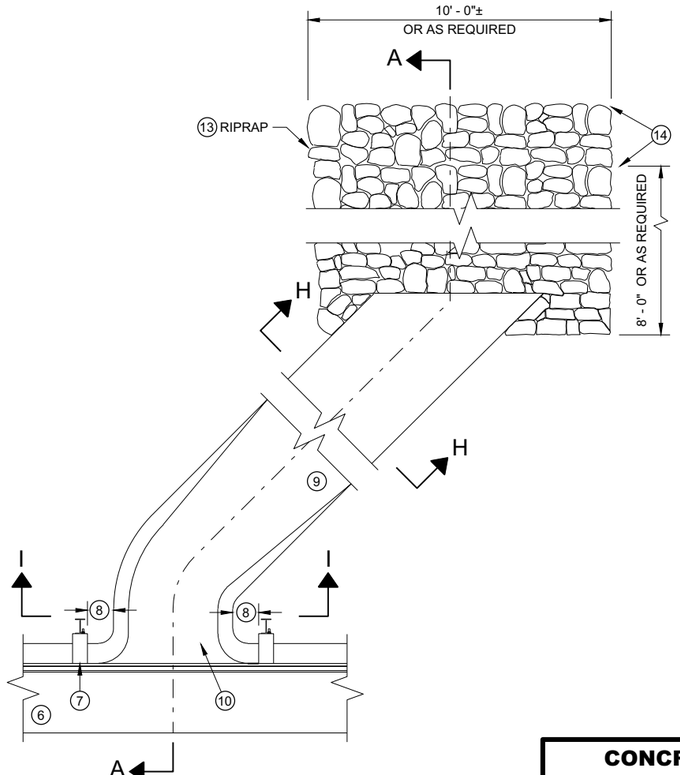
SECTION H - H



SECTION I - I



PLAN VIEW PERPENDICULAR FLUME



PLAN VIEW SKEWED FLUME

GENERAL NOTES

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

ALL STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

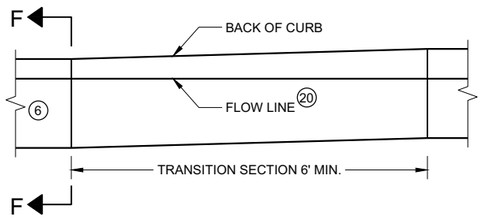
1. USE A JOINT SEALANT CONFORMING TO STANDARD SPECIFICATION 415.2.6.
2. NO. 4 X 2' - 0" TIE BARS SPACED AT 12" C-C TO BE PLACED BY BRIDGE CONTRACTOR OR DRILLED TIE BARS PLACED AS DIRECTED BY THE ENGINEER.
3. PAVED CONCRETE SHOULDER (SDD 13A03) OR CONCRETE DRAINAGE SLAB.
4. CONCRETE PAVEMENT APPROACH SLAB (SHOWN) OR STRUCTURE APPROACH SLAB AND CONCRETE PAVEMENT APPROACH SLAB. SEE SDD 13B02 AND STRUCTURE PLANS.
5. PAVED CONCRETE SHOULDER (SDD 13A03) OR ASPHALT SHOULDER.
6. CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE TBT OR TBTT. USE TYPE TBTT CURB WITH NO. 4 X 2' -0" TIE BARS SPACED AT 3' - 0" C-C ONLY WHEN ADJACENT TO CONCRETE PAVEMENTS.
7. PLACE FLUME BEFORE MSG THRIE BEAM TRANSITION POST 1 (SEE SDD 14B45)
8. CENTER FLUME BETWEEN POSTS. 6-INCH MINIMUM SEPARATION FROM OUTSIDE EDGE OF FLUME TO POSTS.
9. MINIMUM REINFORCEMENT SHALL BE 4" X 4" - W3.0 X W3.0 OR NO. 3 BARS LONGITUDINAL AND TRANSVERSE SPACING 12" C -C.
10. SEE ROADWAY PLANS FOR FLUME LOCATION.
11. START CURB AND GUTTER TRANSITION OR END SECTION.
12. DEPRESS FLOW LINE (SEE DETAIL)
13. MEDIUM RIPRAP UNLESS OTHERWISE SPECIFIED.
14. LIMITS OF ADDITIONAL RIPRAP WHEN SPECIAL DITCH AS REQUIRED.
15. GEOTEXTILE FABRIC TYPE HR.

CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES

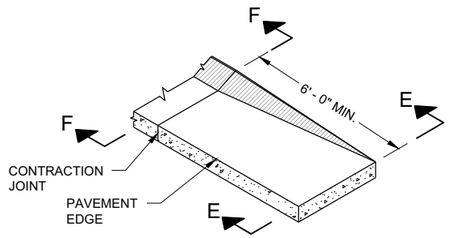
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

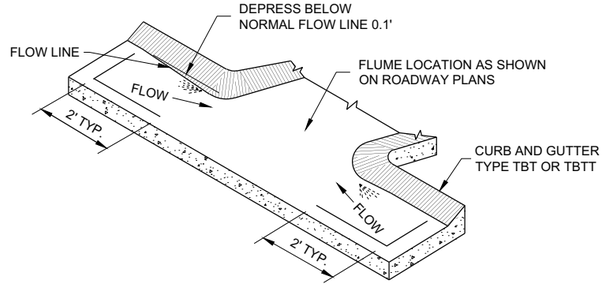
SDD 08D02 - 07b



CURB AND GUTTER TRANSITION SECTION
CONCRETE CURB AND GUTTER 4-INCH SLOPED 36 INCH TYPE TBT OR TBTT



CURB AND GUTTER END SECTION
CONCRETE CURB AND GUTTER 4-INCH SLOPED 36 INCH TYPE TBT OR TBTT



CURB AND GUTTER FLOW LINE DEPRESSION AT FLUMES CONCRETE CURB AND GUTTER 4-INCH SLOPED 36 INCH TYPE TBT OR TBTT

GENERAL NOTES

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(5) PAVED CONCRETE SHOULDER (SDD 13A03) OR ASPHALT SHOULDER.

(6) CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE TBT OR TBTT. USE TYPE TBTT CURB WITH NO. 4 X 2' -0" TIE BARS SPACED AT 3' - 0" C-C ONLY WHEN ADJACENT TO CONCRETE PAVEMENTS.

(7) PLACE FLUME BEFORE MSG THRIE BEAM TRANSITION POST 1 (SEE SDD 14B45)

(8) CENTER FLUME BETWEEN POSTS. 6-INCH MINIMUM SEPARATION FROM OUTSIDE EDGE OF FLUME TO POSTS.

(9) MINIMUM REINFORCEMENT SHALL BE 4" X 4" - W3.0 X W3.0 OR NO. 3 BARS LONGITUDINAL AND TRANSVERSE SPACING 12" C -C.

(10) SEE ROADWAY PLANS FOR FLUME LOCATION.

(11) START CURB AND GUTTER TRANSITION OR END SECTION.

(12) DEPRESS FLOW LINE (SEE DETAIL)

(13) MEDIUM RIPRAP UNLESS OTHERWISE SPECIFIED.

(14) LIMITS OF ADDITIONAL RIPRAP WHEN SPECIAL DITCH IS REQUIRED.

(15) GEOTEXTILE FABRIC TYPE HR.

(16) MINIMUM REINFORCEMENT SHALL BE 6" X 6" - W4.0 X W4.0 OR NO. 3 BARS LONGITUDINAL AND TRANSVERSE SPACING 12" C - C.

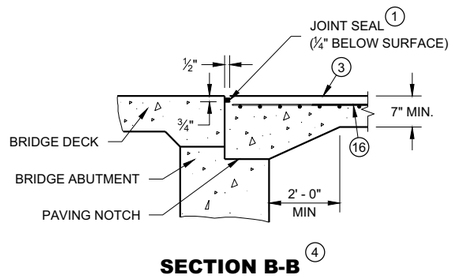
(17) MSG THRIE BEAM TRANSITION POST 1. SEE SDD 14B45 FOR ADDITIONAL CONSTRUCTION DETAILS AND ACCEPTABLE MATERIALS.

(18) MAINTAIN WIDTH, THICKNESS AND CROSS SLOPE OF ADJACENT TYPE TBT OR TBTT CURB. SEE NOTE 6 FOR TIE BAR SPACING.

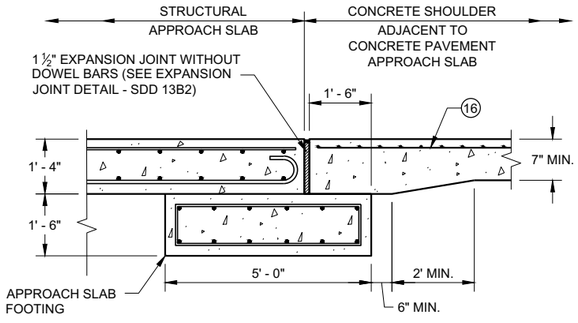
(19) ALIGN FACE OF POST BLOCK WITH FLOW LINE.

(20) MAINTAIN FLOW LINE AT EDGE OF PAVEMENT/FACE OF BEAM GUARD AS APPLICABLE.

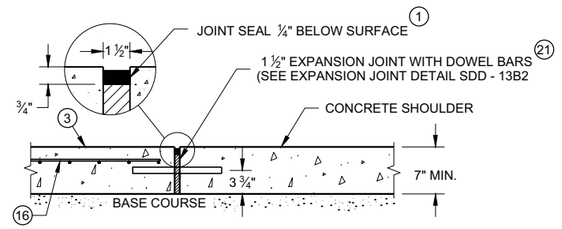
(21) DO NOT CONSTRUCT AN EXPANSION JOINT OR INSTALL DOWEL BARS WHEN ABUTTING HMA PAVEMENTS.



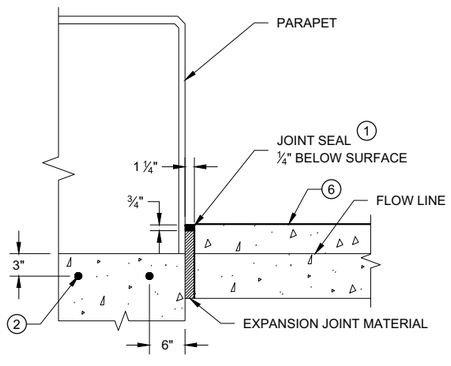
SECTION B-B



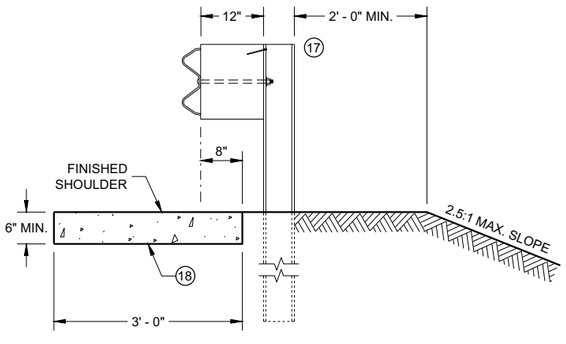
SECTION C - C
JOINT DETAIL FOR BRIDGE WITH STRUCTURAL APPROACH SLAB AND CONCRETE APPROACH SLAB



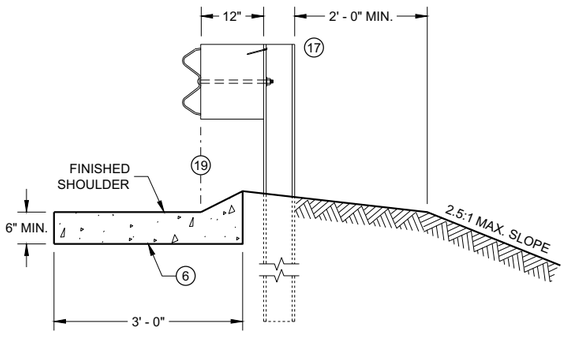
SECTION C - C
JOINT DETAIL FOR BRIDGE APPROACH WITH CONCRETE SHOULDERS



SECTION D - D



SECTION E - E



SECTION F - F

CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES

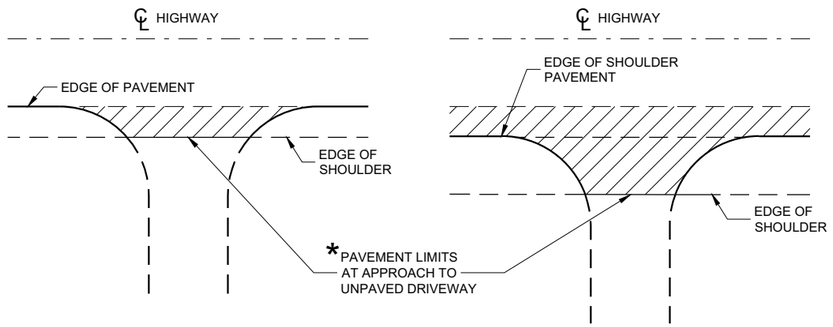
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE ENGINEER

FHWA

SDD 08D02 - 07c

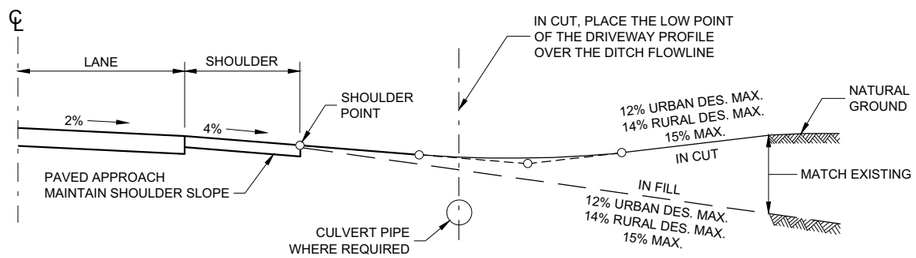
SDD 08D02 - 07c



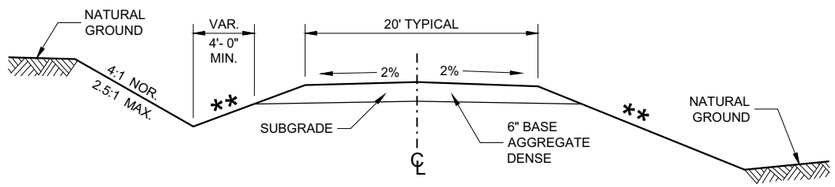
PLAN VIEW
(UNPAVED SHOULDER ON HIGHWAY)

PLAN VIEW
(PAVED SHOULDER ON HIGHWAY)

RURAL DRIVEWAY INTERSECTION DETAIL
(NO CURB AND GUTTER OR SIDEWALK)



TYPICAL DRIVEWAY PROFILES

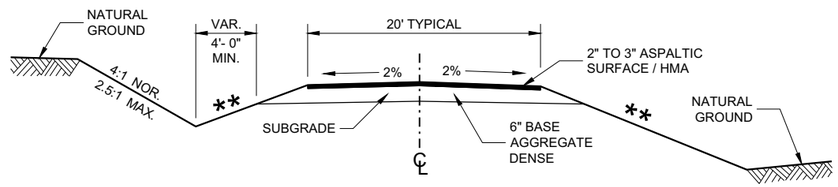


IN CUT IN FILL

TYPICAL CROSS SECTION FOR PRIVATE DRIVE OR FIELD ENTRANCE AGGREGATE SURFACE

** SLOPE CAN VARY WITH SPEED. SEE 11-45-30.6.2

POSTED SPEED MPH	MAX. SLOPE
<35	4:1
≥ 35 TO < 60	6:1
≥60	10:1



IN CUT IN FILL

TYPICAL CROSS SECTION FOR PRIVATE DRIVE OR FIELD ENTRANCE ASPHALTIC SURFACE

6

SDD 08D21 - 01

DRIVEWAYS WITHOUT CURB AND GUTTER

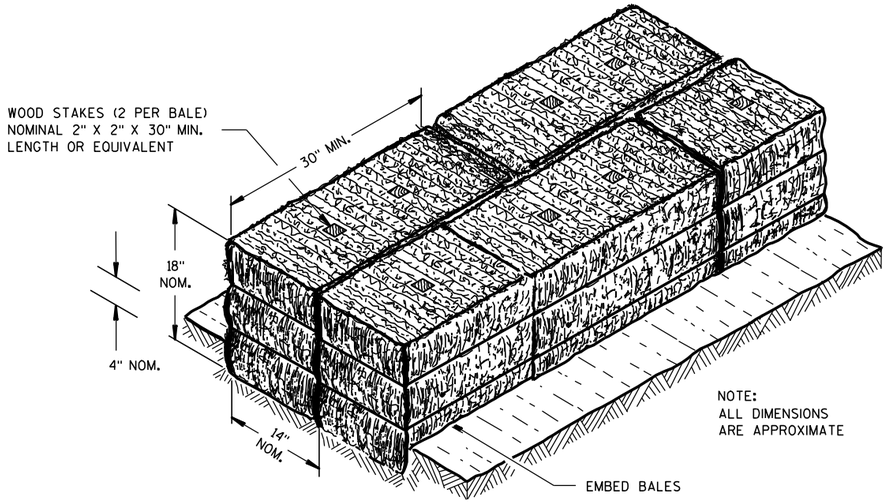
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December 2017 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE UNIT SUPERVISOR

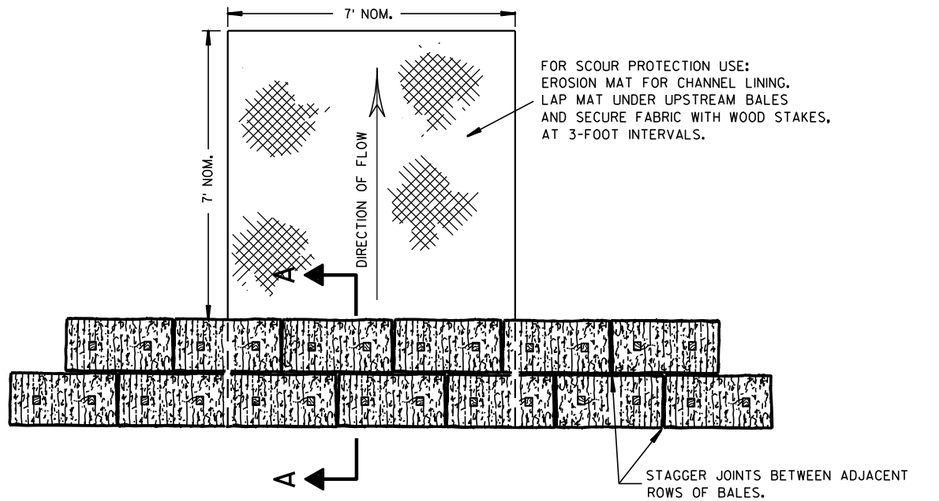
FHWA

6

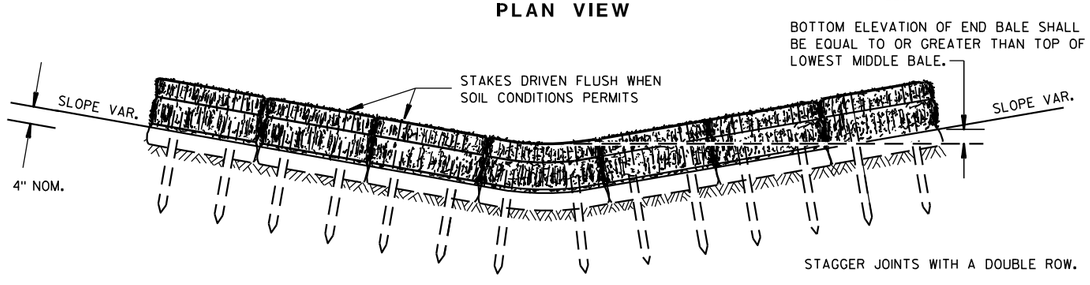
SDD 08D21 - 01



SECTION A-A



PLAN VIEW



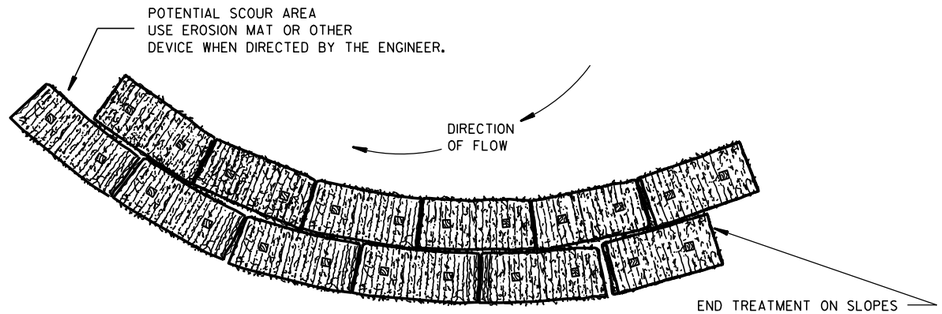
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES ①

GENERAL NOTES

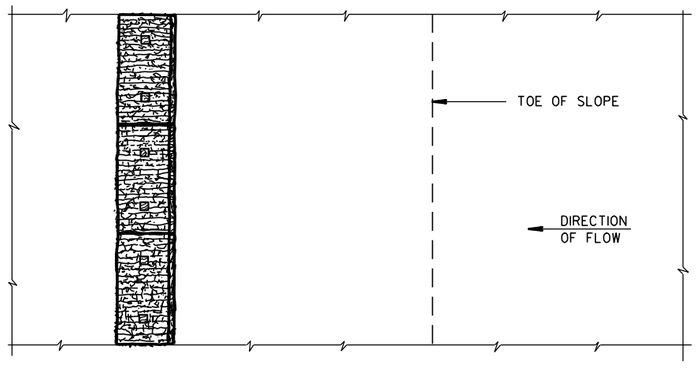
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

① TEMPORARY DITCH CHECKS EITHER EROSION BALES OR MANUFACTURED SHALL BE PAID FOR UNDER THE BID ITEM OF TEMPORARY DITCH CHECK. THE DEPARTMENT WILL NOT PAY FOR TEMPORARY DITCH CHECKS CONSTRUCTED OF A SINGLE ROW OF EROSION BALES.

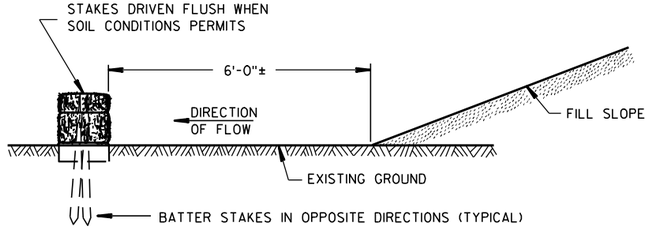


PLAN VIEW

WHEN ALTERING THE DIRECTION OF FLOW



PLAN VIEW



FRONT ELEVATION

WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

EROSION BALES FOR SHEET FLOW

TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

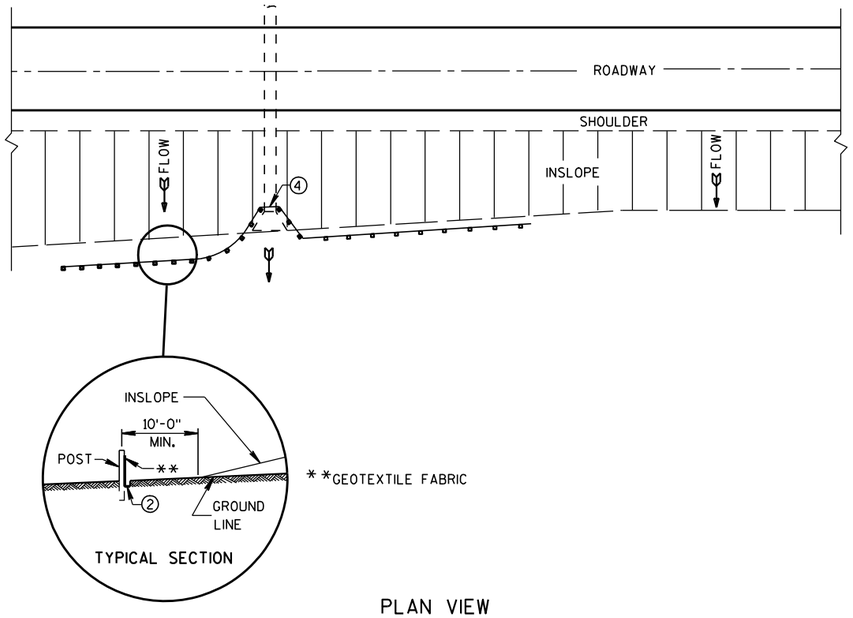
APPROVED

6/04/02 DATE — /S/ Beth Cannestra — CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

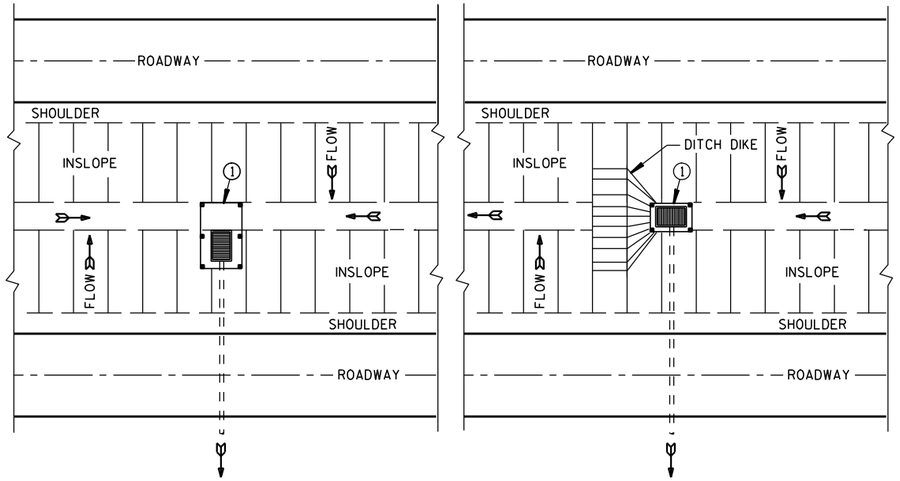
6

S.D.D. 8 E 8-3



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



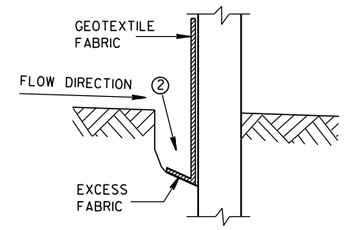
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

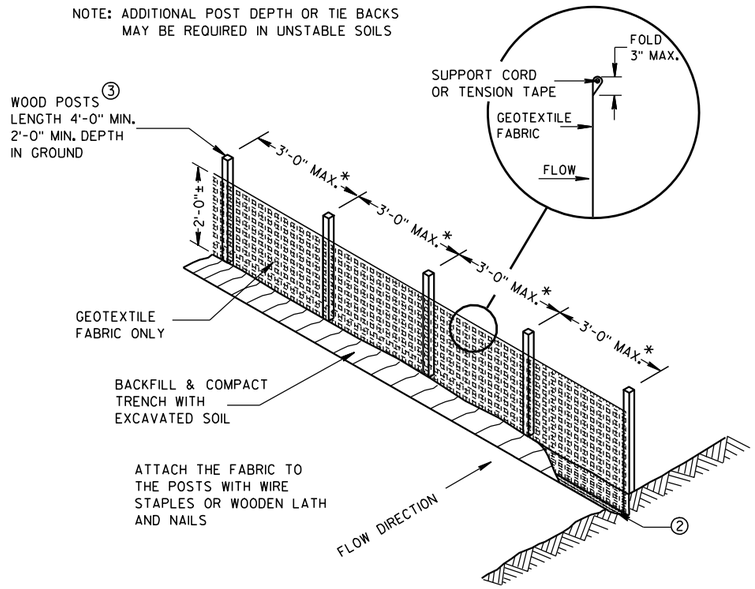
GENERAL NOTES

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

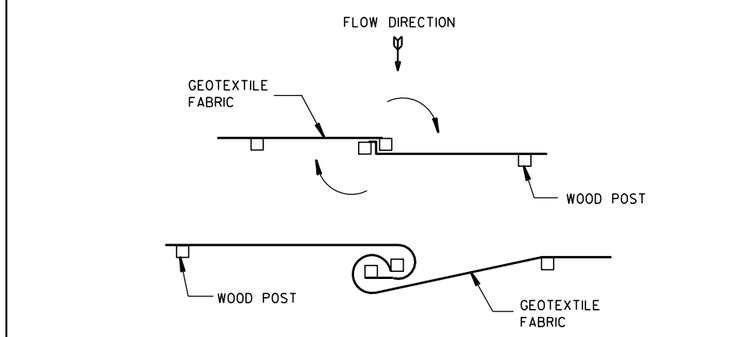
1. HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
2. FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
3. WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OF OAK OR HICKORY.
4. SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.
5. CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.



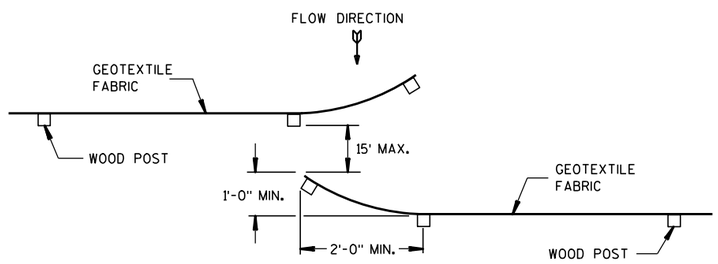
TRENCH DETAIL



SILT FENCE

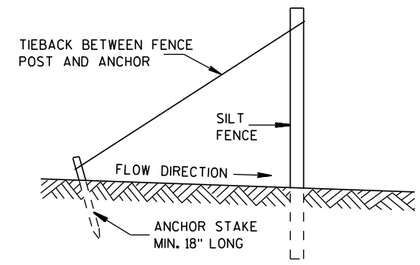


TWIST METHOD



HOOK METHOD

JOINING TWO LENGTHS OF SILT FENCE 5



SILT FENCE TIE BACK

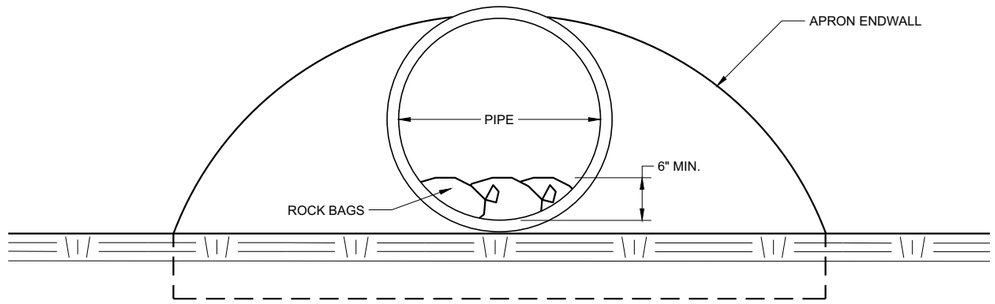
(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

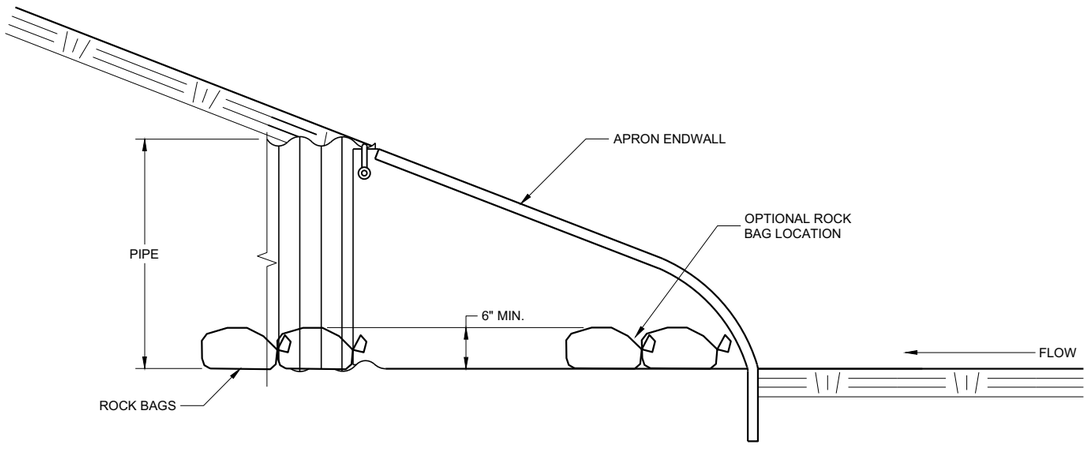
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

6
S.D.D. 8 E 9-6



END VIEW



SIDE VIEW

CULVERT PIPE CHECK

(INSTALL ON INLET END ONLY)

CULVERT PIPE CHECK

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019
DATE

/S/ Daniel Schave
EROSION CONTROL ENGI

FHWA

6

SDD 08E15 - 01

6

SDD 08E15 - 01

METAL APRON ENDWALLS

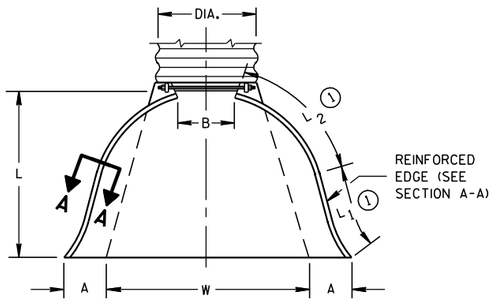
PIPE DIA. (IN.)	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4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

× EXCEPT CENTER PANEL SEE GENERAL NOTES

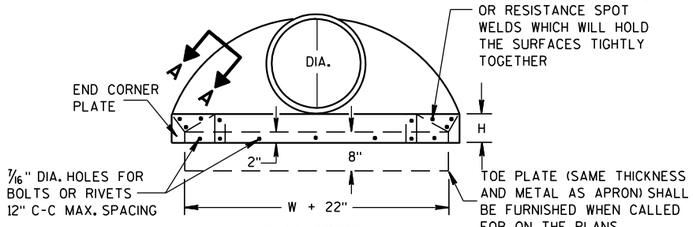
REINFORCED CONCRETE APRON ENDWALLS

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

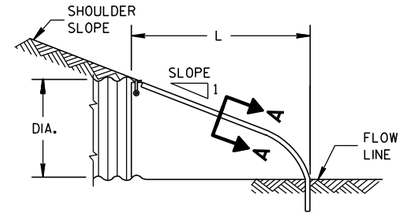
*MINIMUM
**MAXIMUM



PLAN VIEW

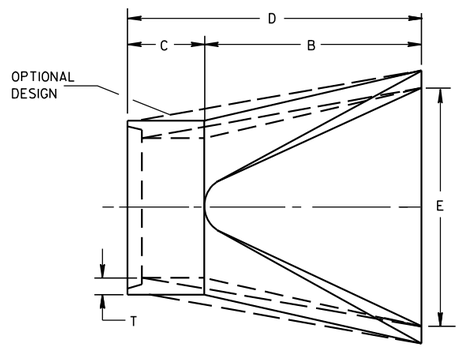


END VIEW

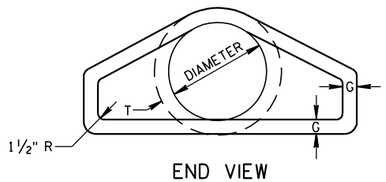


SIDE ELEVATION

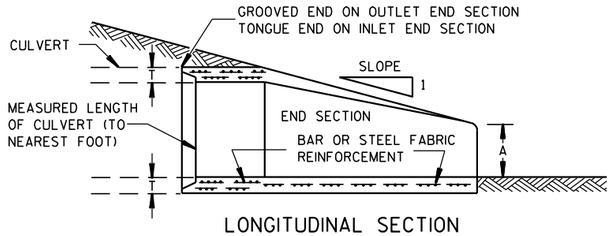
METAL ENDWALLS



PLAN

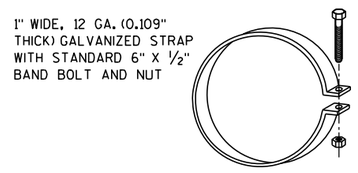


END VIEW



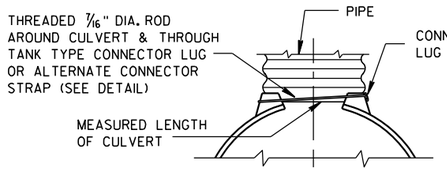
LONGITUDINAL SECTION

CONCRETE ENDWALLS

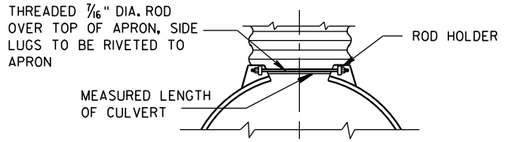


ALTERNATE FOR TYPE 1 CONNECTION

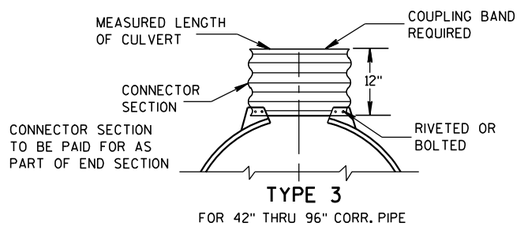
END SECTION CONNECTOR STRAP



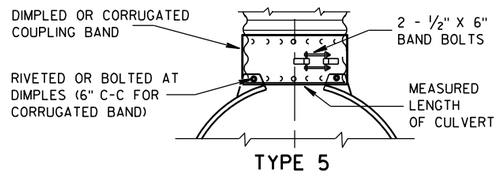
TYPE 1
FOR 12" THRU 24" CORR. PIPE



TYPE 2
FOR 30" THRU 96" CORR. PIPE



TYPE 3
FOR 42" THRU 96" CORR. PIPE



TYPE 5
ALTERNATE FOR:
ALL SIZES CORRUGATED CIRCULAR PIPE

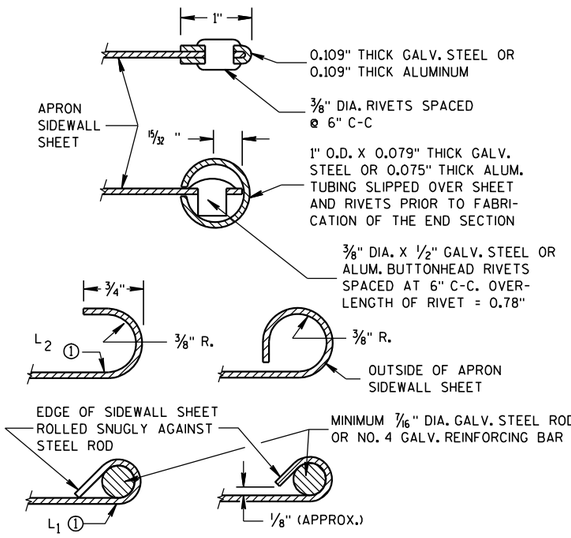
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

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

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

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

CONNECTION DETAILS



SECTION A-A

GENERAL NOTES

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

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

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

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

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

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

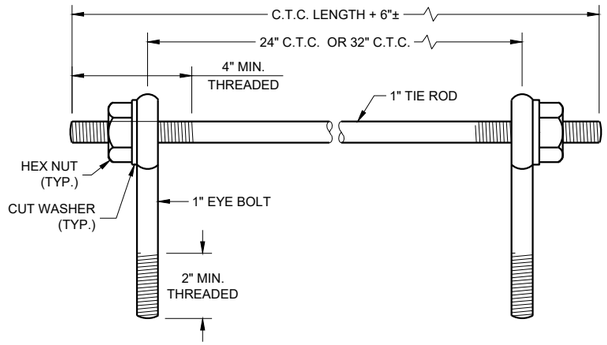
APRON ENDWALLS FOR CULVERT PIPE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

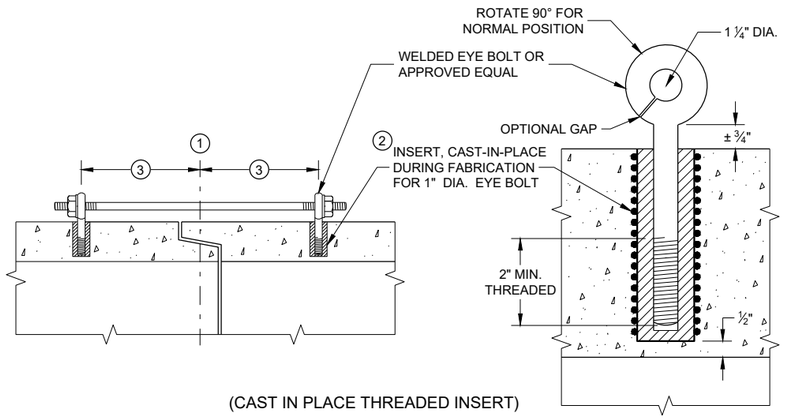
APPROVED
11/30/94 DATE
/S/ Rory L. Rhinesmith
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6

S.D.D. 8 F 1-11



EYE BOLTS AND TIE ROD



(CAST IN PLACE THREADED INSERT)

LONGITUDINAL SECTIONS

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 1)

GENERAL NOTES

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

CONCRETE CULVERT AND STORM SEWER PIPE SHALL BE TIED TOGETHER IN THE MANNER ILLUSTRATED BY THIS DETAIL AT LOCATIONS DESIGNATED IN THE STANDARD SPECIFICATIONS AND THE PLAN. THE CONTRACTOR MAY USE EITHER ALTERNATE 1, 2 OR 3 FOR DRAINAGE STRUCTURES. ONLY ALTERNATE 1 AND 3 MAY BE USED FOR CATTLE PASSES, UNLESS OTHERWISE STATED IN THE CONTRACT. THE MATERIALS, FABRICATION AND WORK NECESSARY TO TIE THE PIPE BY THIS DETAIL WILL BE CONSIDERED INCIDENTAL TO THE PIPE AND APRON ENDWALLS IF REQUIRED.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR JOINT TIES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

JOINT TIES TO BE HOT-DIP GALVANIZED PER ASTM A 153.

(1) CENTER LINE 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.

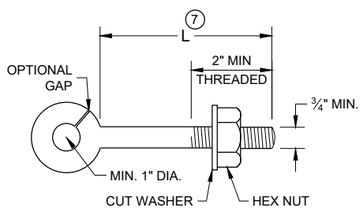
(3) HOLES SHALL BE CAST-IN-PLACE OR DRILLED PER THE APPLICABLE DETAIL, AND EQUAL DISTANCE FROM THE CENTERLINE OF THE JOINT.

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

(5) OPENING TO BE ROD DIAMETER PLUS 1 INCH.

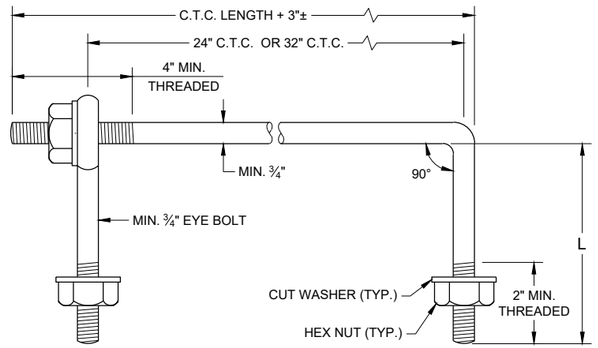
(6) LENGTH ADEQUATE TO EXTEND TO WITHIN ½ INCH OF THE INNER SURFACE OF THE PIPE.

(7) EYE BOLT LENGTH DETERMINED BY WALL THICKNESS, BELL THICKNESS AND BOLT PROJECTION INSIDE PIPE.

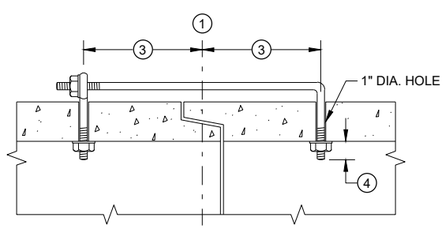


EYE BOLT (7)

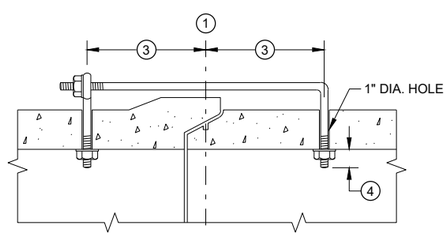
NOTE: TWO EYE BOLTS MAY BE USED WITH A 30" OR 38" LONG THREADED ROD IN LIEU OF THE 90° BENT TIE ROD.



EYE BOLT AND TIE ROD



(TONGUE AND GROOVE PIPE)



(MODIFIED BELL PIPE)

LONGITUDINAL SECTION

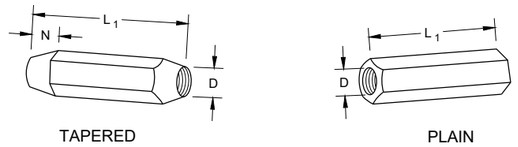
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 2)

ADJUSTABLE TIE ROD TABLE

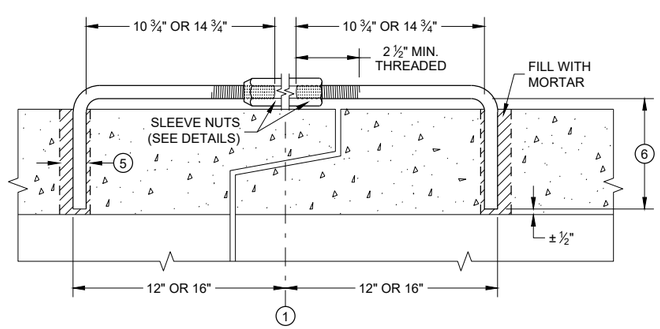
PIPE DIAMETER	TIE ROD DIAMETER	D	L_1	N
12 - 60	⅝	⅝	5	½
66 - 84	¾	¾	5	½
90 - 144	1	1	7	1 7/16

DIMENSIONS SHOWN ARE IN INCHES



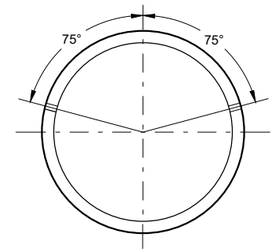
RIGHT AND LEFT THREADS

SLEEVE NUTS



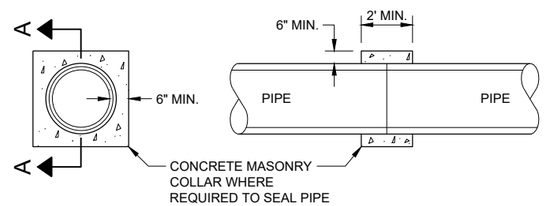
LONGITUDINAL SECTION

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

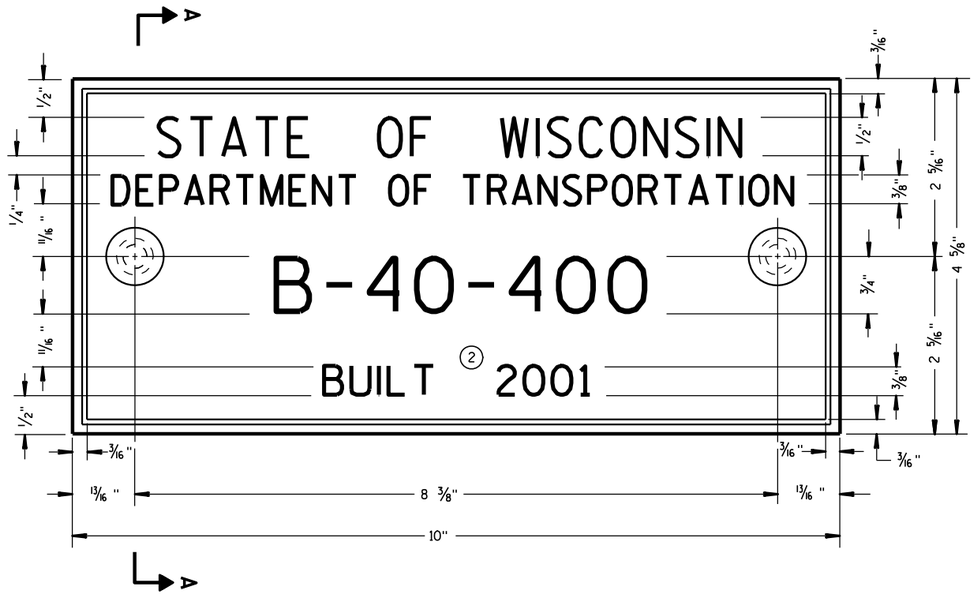
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2021 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE ENGINEER

FHWA

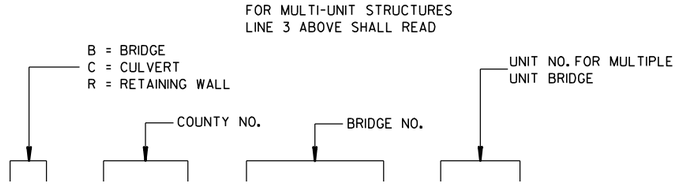
SDD 08F04 - 08

SDD 08F04 - 08



TYPICAL NAME PLATE

(BRIDGES, CULVERTS, AND RETAINING WALLS)



NUMBERING DESIGNATION MULTI-UNIT STRUCTURES

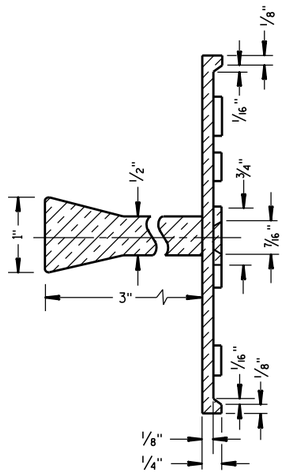
GENERAL NOTES

NAME PLATES TO BE INSTALLED ON BRIDGES, CULVERTS, AND RETAINING WALLS SHALL CONFORM TO THE REQUIREMENTS OF SECTION 502.3.11 OF THE STANDARD SPECIFICATIONS.

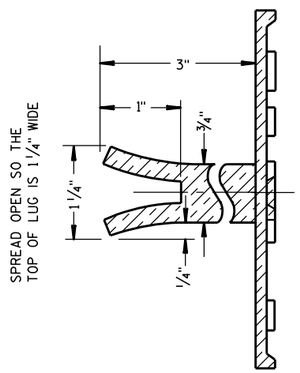
THE BRIDGE NUMBER AND YEAR BUILT SHOWN ON THIS DRAWING ARE EXAMPLES ONLY. SEE CONSTRUCTION PLANS FOR INDIVIDUAL NUMBERING AND YEAR BUILT.

(1) EPOXY RESIN SHALL BE FROM AN APPROVED MANUFACTURER AND USED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

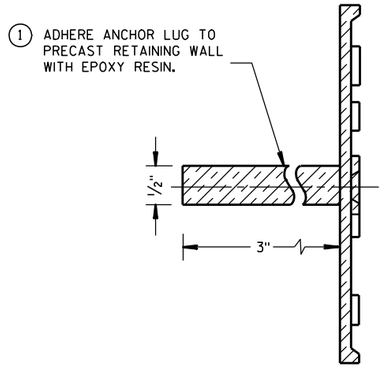
(2) REHABILITATION OF AN EXISTING STRUCTURE SHOULD USE THE DATE OF ORIGINAL STRUCTURE CONSTRUCTION.



SECTION A-A



ALTERNATE LUG



ALTERNATE LUG

(FOR ATTACHMENT TO PRECAST STRUCTURES)

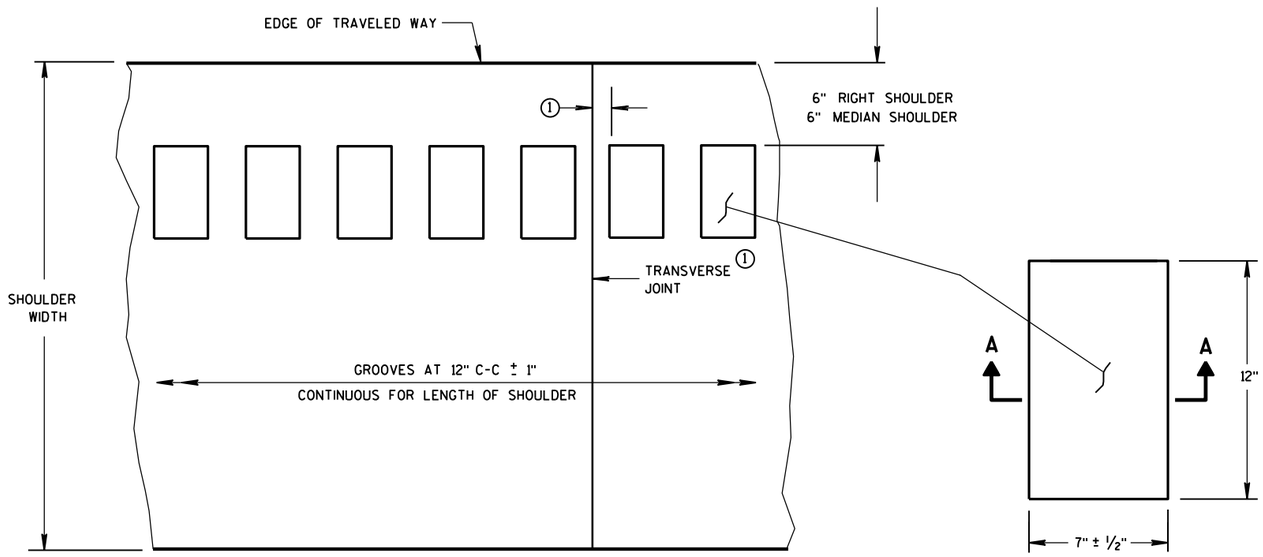
NAME PLATE (STRUCTURES)	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	
3/26/10 DATE	/S/ Scot Becker CHIEF STRUCTURAL DEVELOPMENT ENGINEER
FHWA	

6

S.D.D. 12 A 3-10

6

S.D.D. 12 A 3-10



PLAN VIEW
SHOULDER WITH GROOVES

PLAN VIEW
(SINGLE GROOVE)

PLACEMENT DETAIL FOR MILLED RUMBLE STRIP

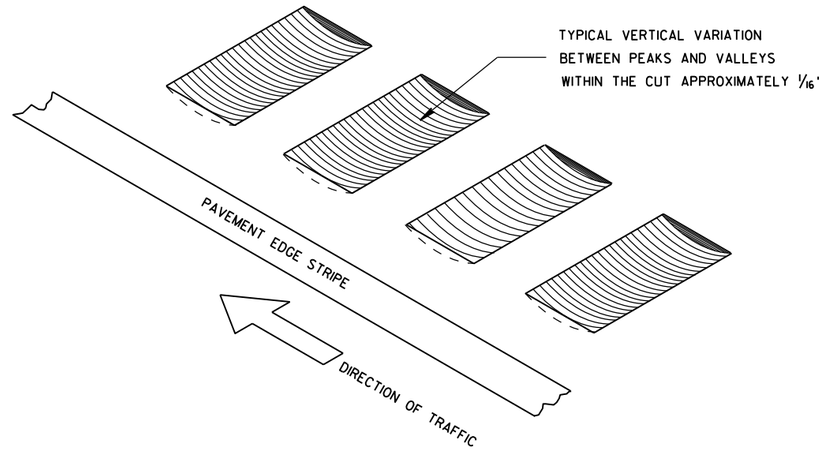
GENERAL NOTES

DETAILS OF CONSTRUCTION SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

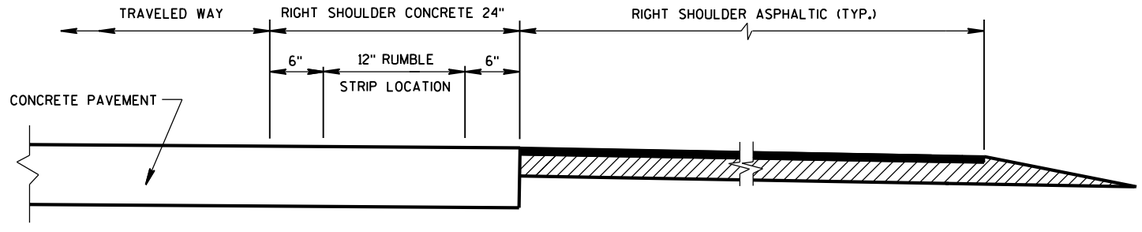
RUMBLE STRIPS ON EXPRESSWAYS

DO NOT INSTALL RUMBLE STRIPS ACROSS SIDE ROAD INTERSECTIONS, COMMERCIAL DRIVEWAYS, PRIVATE DRIVEWAYS OR ADJACENT TO RIGHT TURN LANES, LEFT TURN LANES, TURN LANE TAPERS, BRIDGE DECKS, BRIDGE APPROACHES, OR 100 FEET IN ADVANCE OF RAILROAD CROSSING. THE ATTACHED STANDARD DETAIL DRAWING SHOWS THE LOCATION OF THE RUMBLE STRIPS AT INTERCHANGE AREAS.

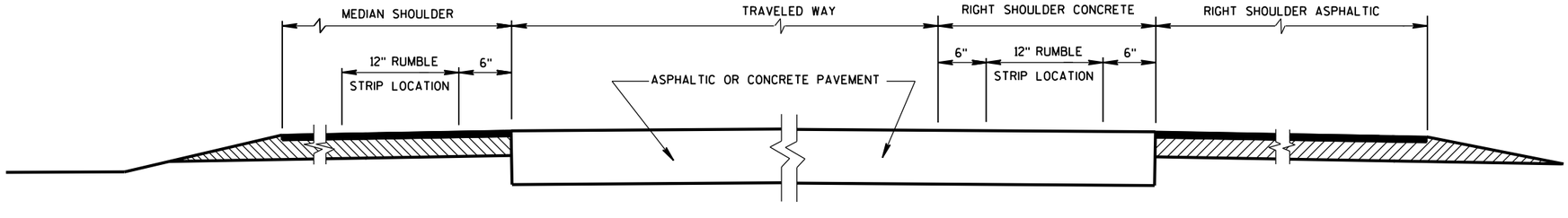
(1) CONCRETE PAVEMENT - RUMBLE STRIPS SHALL BE A MINIMUM OF 6" AWAY FROM TRANSVERSE JOINTS.



ISOMETRIC



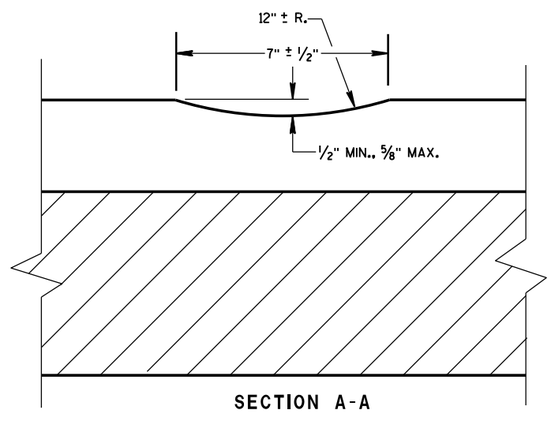
SECTION VIEW
CONCRETE PAVEMENT EXTENDS INTO RIGHT SHOULDER)



SECTION VIEW

TYPICAL LOCATIONS OF SHOULDER RUMBLE STRIPS IN RURAL DIVIDED HIGHWAYS

(ONE ROADWAY IS SHOWN)



SECTION A-A

SHOULDER RUMBLE STRIP, MILLING

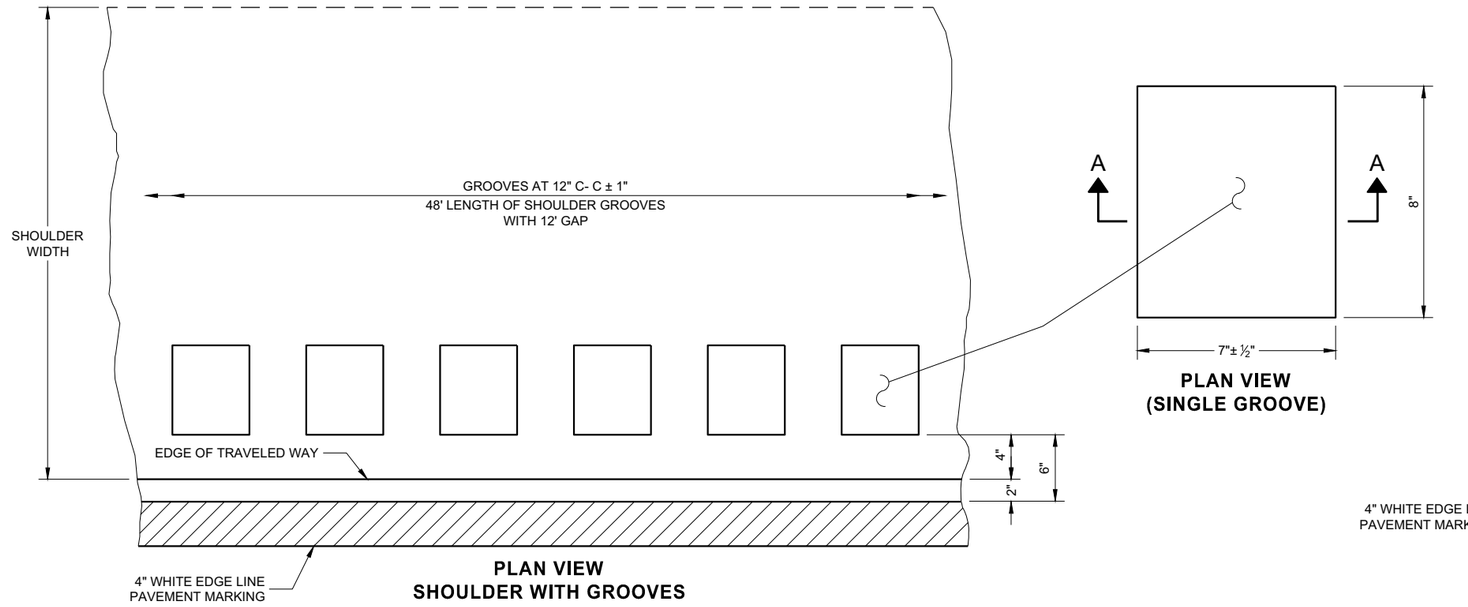
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

S.D.D. 13 A 5-5a

6

S.D.D. 13 A 5-5a



PLAN VIEW
SHOULDER WITH GROOVES

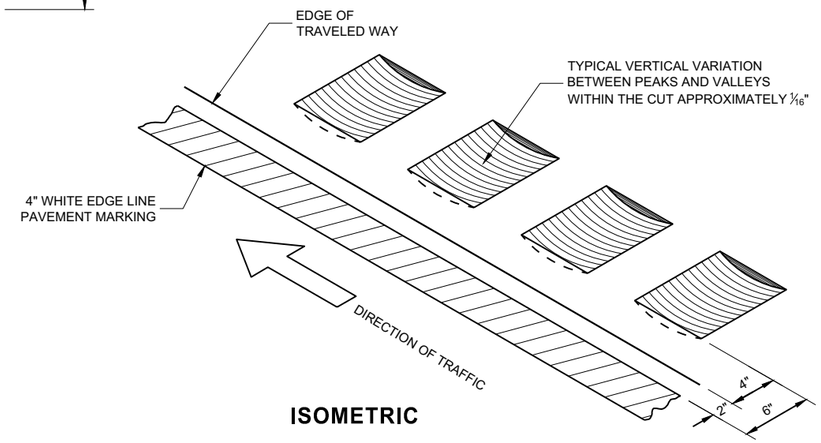
PLAN VIEW
(SINGLE GROOVE)

GENERAL NOTES

DETAILS OF CONSTRUCTION NO SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

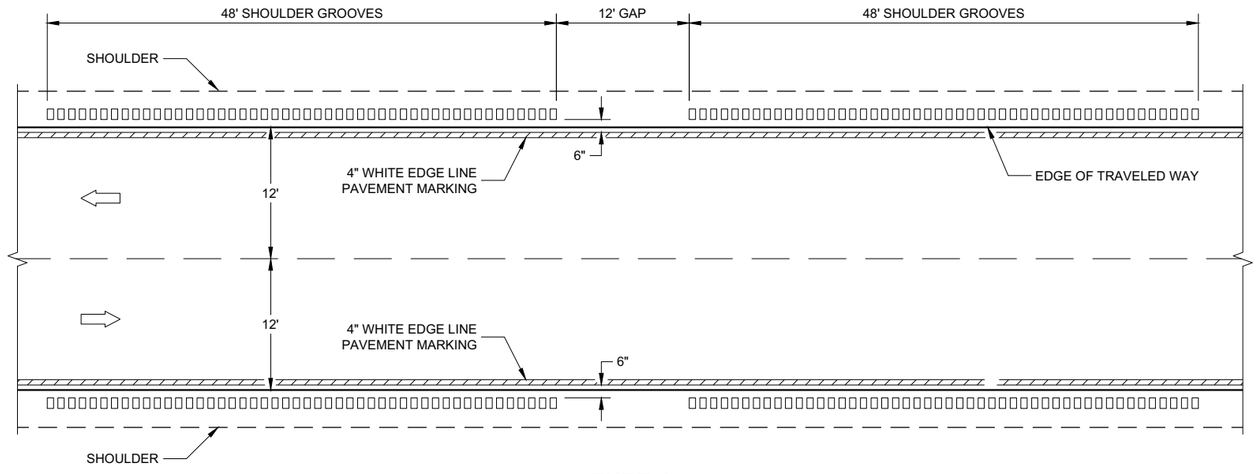
DO NOT MILL SHOULDER GROOVES THROUGH ANY INTERSECTION, MARKED CROSSWALK, NON-MOTORIZED PATH CROSSING, OR SNOWMOBILE CROSSING.

(1) SHOULDER GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS. WHEN DIRECTED BY THE ENGINEER.

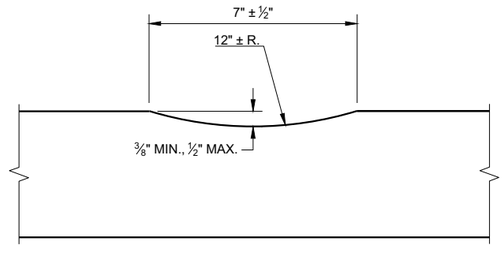


ISOMETRIC

PLACEMENT DETAIL FOR TYPE 1 MILLED RUMBLE STRIP



TYPE 1
2 - LANE SHOULDER RUMBLE STRIP



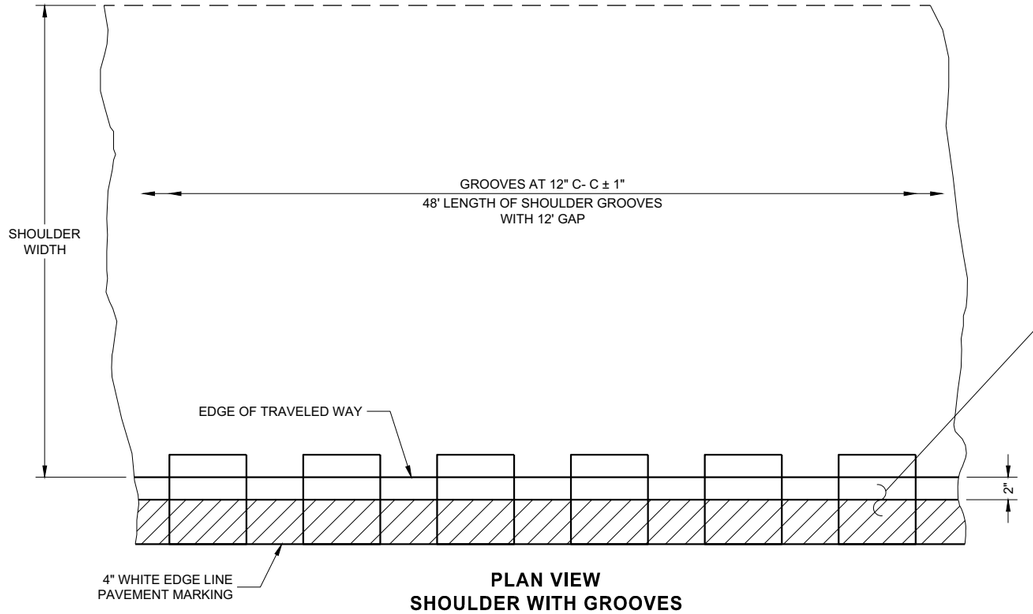
SECTION A - A

2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING

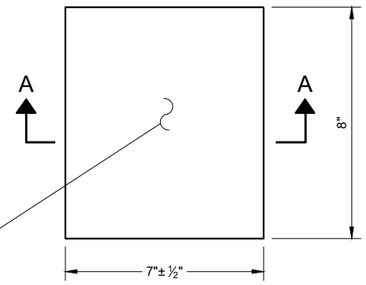
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 13A10 - 02a
SDD 13A10 - 02a



PLAN VIEW
SHOULDER WITH GROOVES



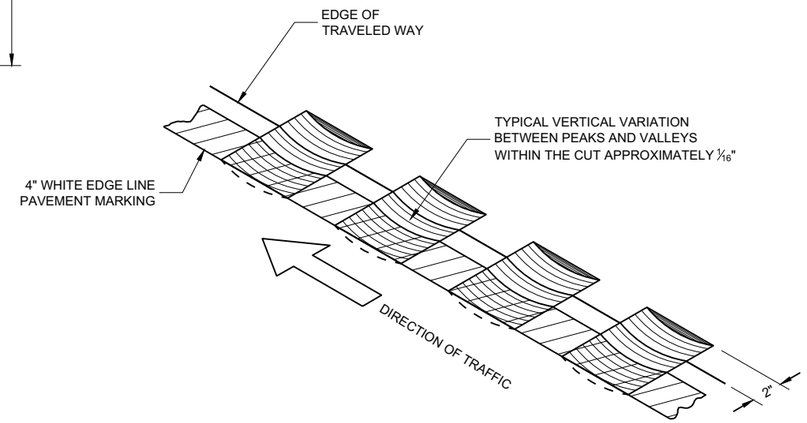
PLAN VIEW
(SINGLE GROOVE)

GENERAL NOTES

DETAILS OF CONSTRUCTION NO SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

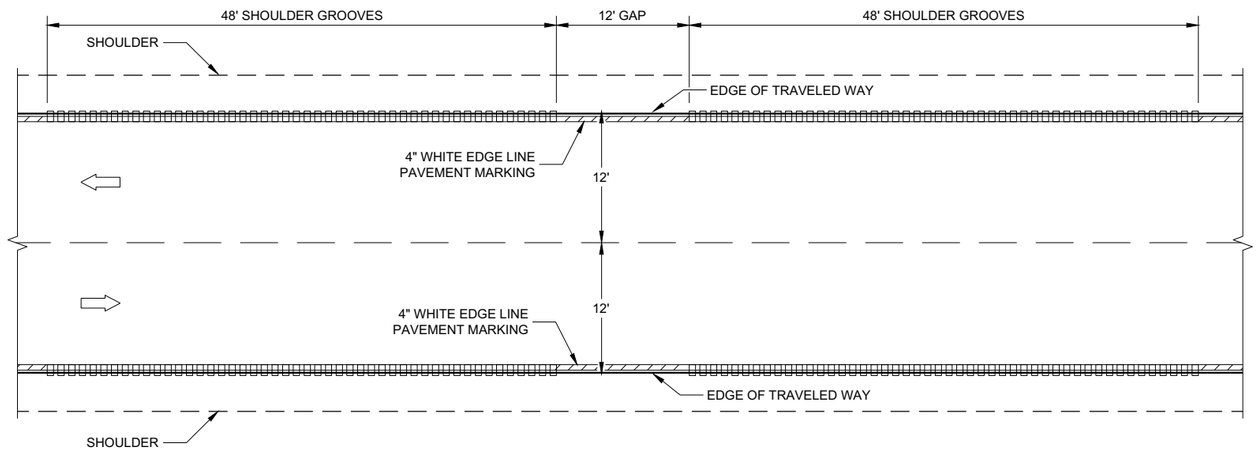
DO NOT MILL SHOULDER GROOVES THROUGH ANY INTERSECTION, MARKED CROSSWALK, NON-MOTORIZED PATH CROSSING, OR SNOWMOBILE CROSSING.

(1) SHOULDER GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS. WHEN DIRECTED BY THE ENGINEER.

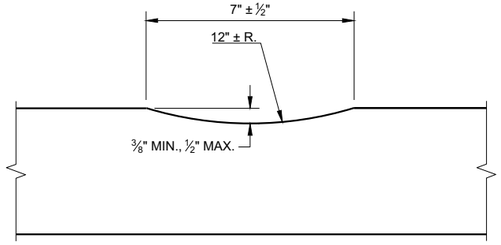


ISOMETRIC

PLACEMENT DETAIL FOR TYPE 2 MILLED RUMBLE STRIP



TYPE 2
2 - LANE SHOULDER RUMBLE STRIP

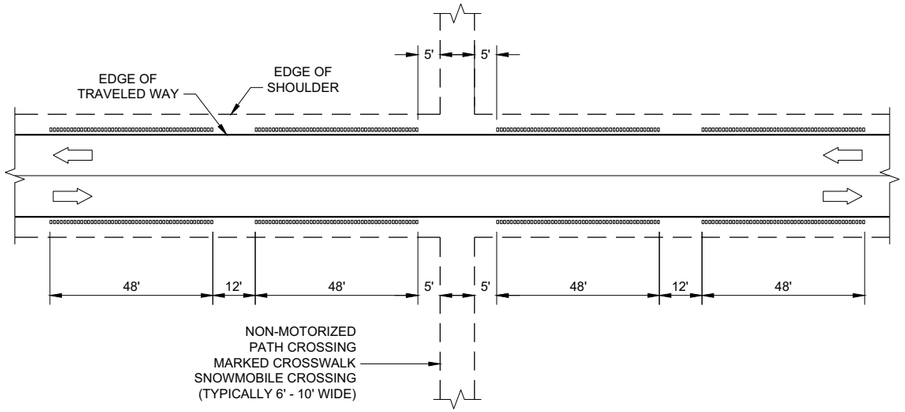


SECTION A - A

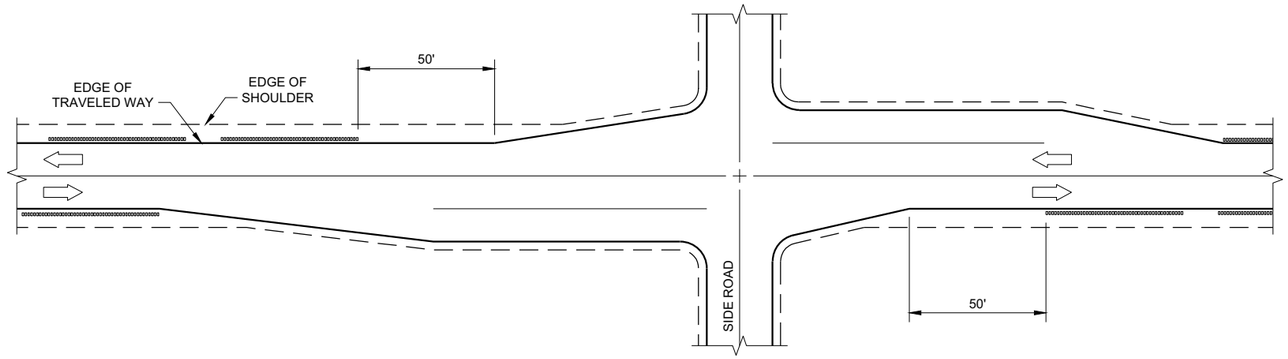
2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

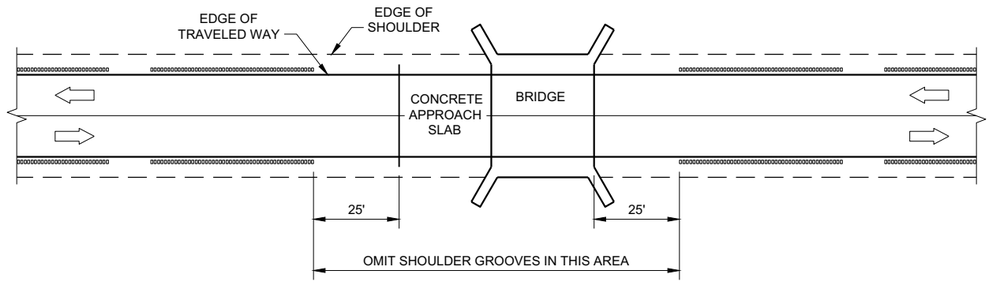
6
SDD13A10 - 02b



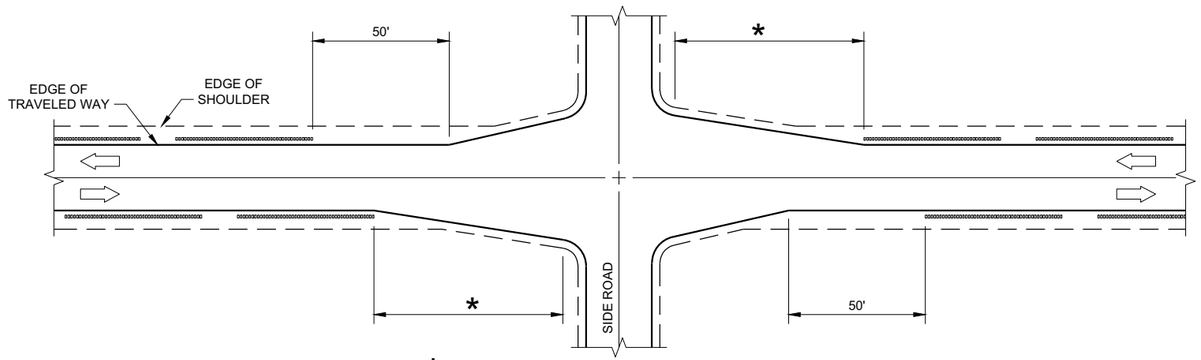
SHOULDER GROOVES AT MISCELLANEOUS CROSSINGS



SHOULDER GROOVES AT RIGHT TURN LANE

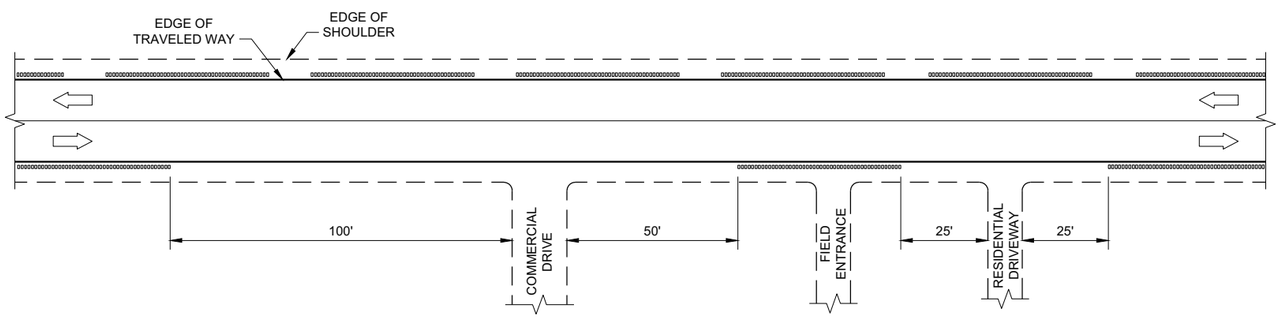


SHOULDER GROOVES AT BRIDGES



* GREATER OF 100' OR APPROACH TAPER LENGTH

SHOULDER GROOVES AT INTERSECTIONS WITH APPROACH TAPER



SHOULDER GROOVES AT DRIVEWAYS (1)

GENERAL NOTES

(1) SHOULDER GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS. WHEN DIRECTED BY THE ENGINEER.

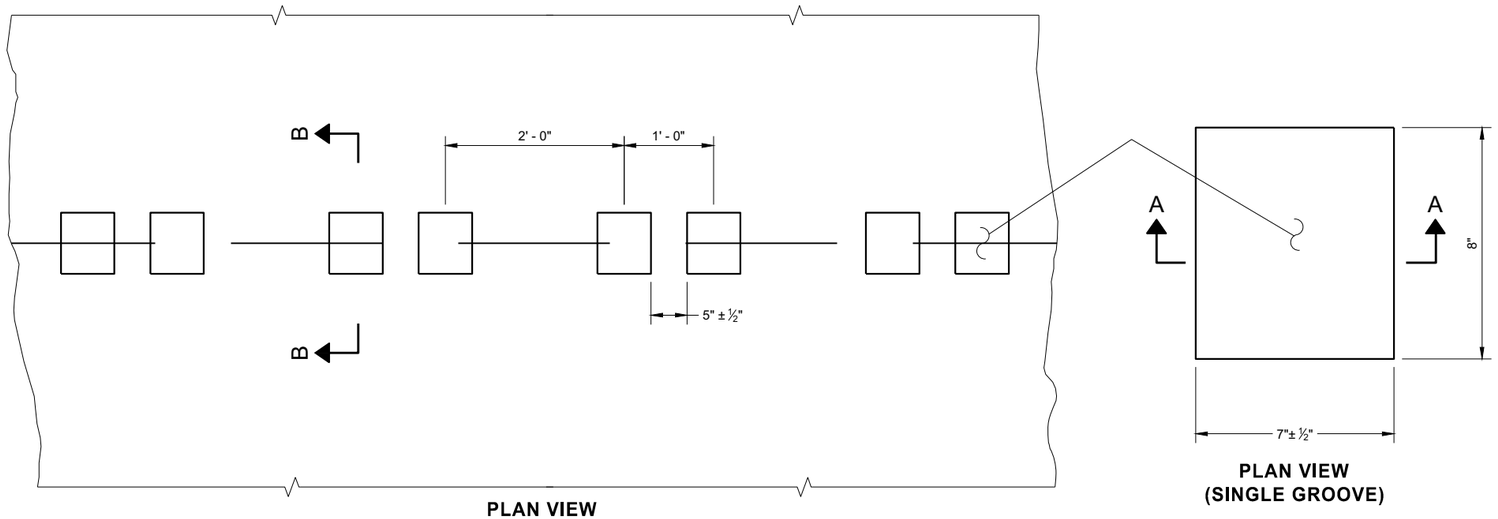
2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 13A10 - 02c

SDD 13A10 - 02c



PLAN VIEW
SHOULDER WITH GROOVES

PLAN VIEW
(SINGLE GROOVE)

PLACEMENT DETAIL FOR TYPE 1 MILLED RUMBLE STRIP

GENERAL NOTES

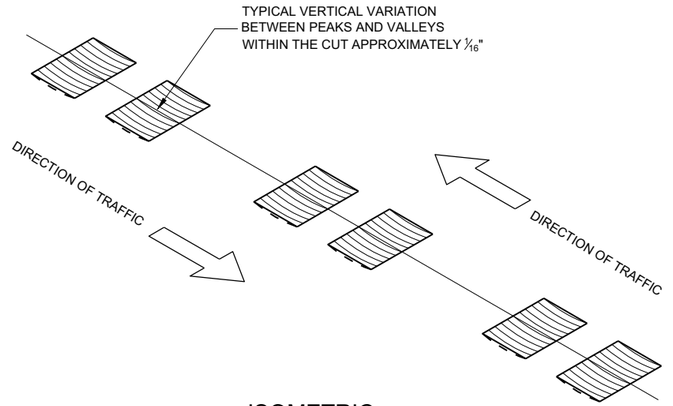
DETAILS OF CONSTRUCTION NO SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

DO NOT MILL CENTERLINE GROOVES THROUGH ANY INTERSECTION, MARKED CROSSWALK, NON-MOTORIZED PATH CROSSING, OR SNOWMOBILE CROSSING.

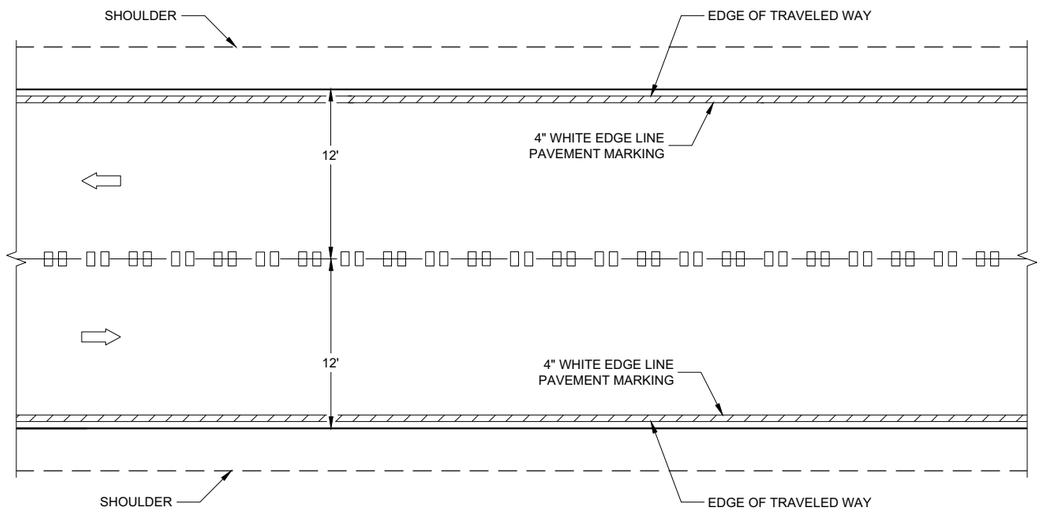
INSTALL PAVEMENT MARKING AFTER THE GROOVES ARE INSTALLED.

SEE SIGNING PLAN FOR SIGN REQUIREMENTS THAT MAY BE NEEDED.

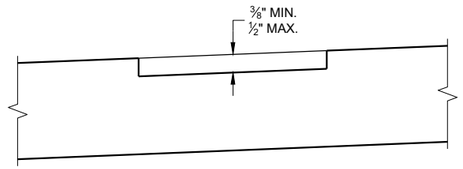
(1) CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS. WHEN DIRECTED BY THE ENGINEER.



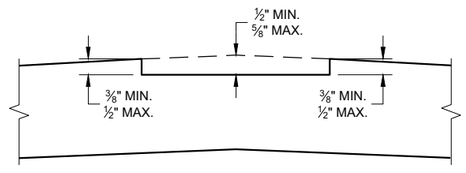
ISOMETRIC



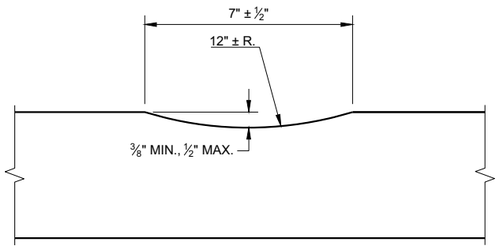
CENTERLINE GROOVES ON TWO-WAY ROADWAYS



SECTION B - B
SUPERELEVATED ROADWAY



SECTION B - B
CROWNED ROADWAY



SECTION A - A

2-LANE RURAL
CENTER LINE RUMBLE STRIP, MILLING

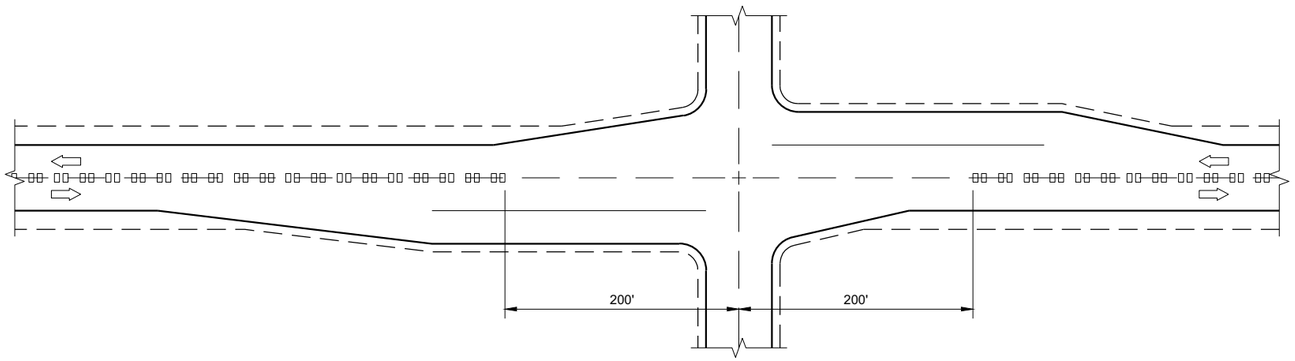
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

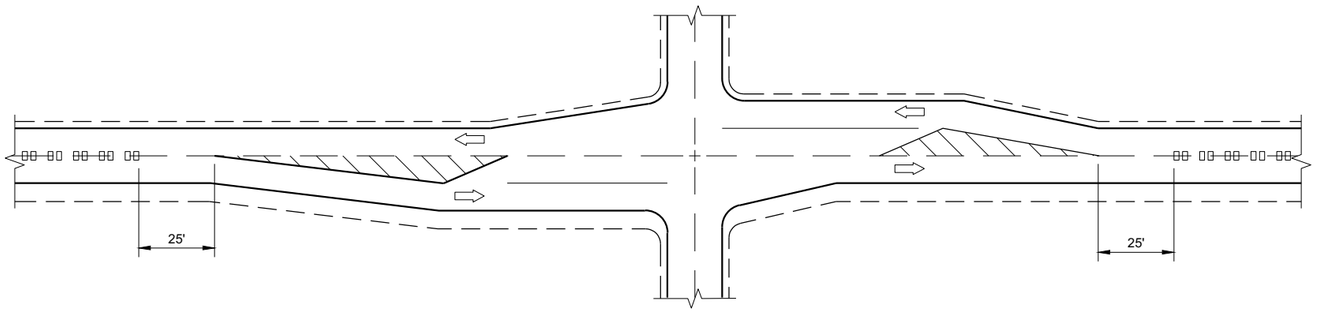
SDD 13A11 - 03a

6

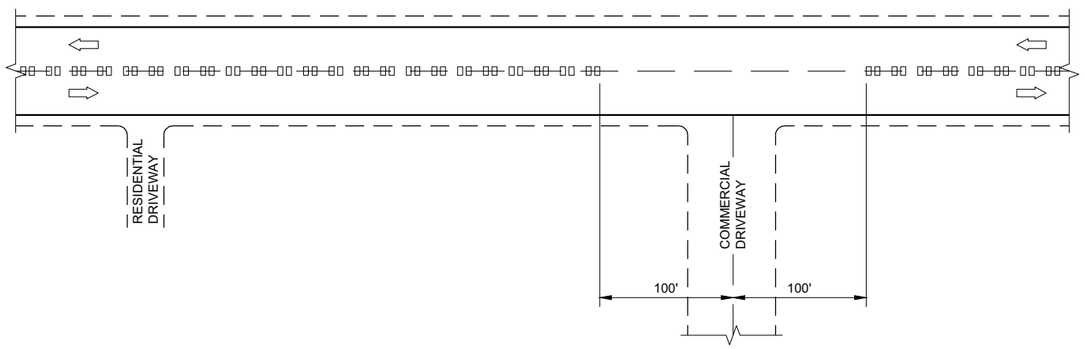
SDD 13A11 - 03a



CENTERLINE GROOVES AT INTERSECTIONS



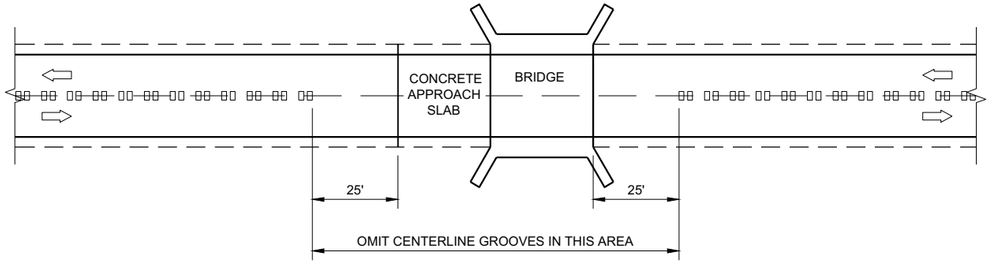
CENTERLINE GROOVES AT INTERSECTIONS (WITH LEFT TURN LANES)



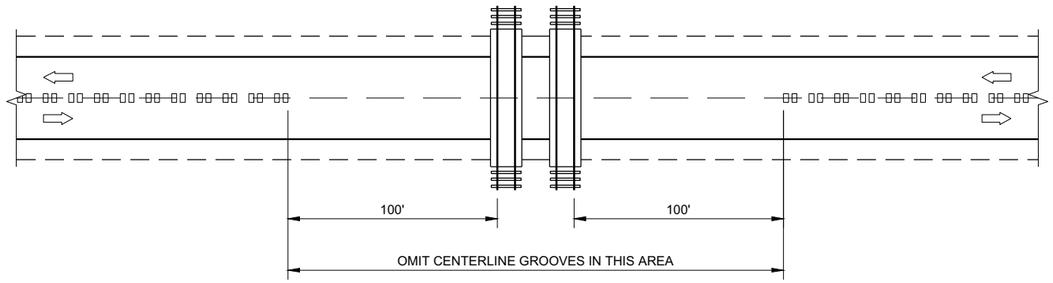
CENTERLINE GROOVES AT DRIVEWAYS (1)

GENERAL NOTES

(1) CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS. WHEN DIRECTED BY THE ENGINEER.



CENTERLINE GROOVES AT BRIDGES



CENTERLINE GROOVES AT RAILROADS

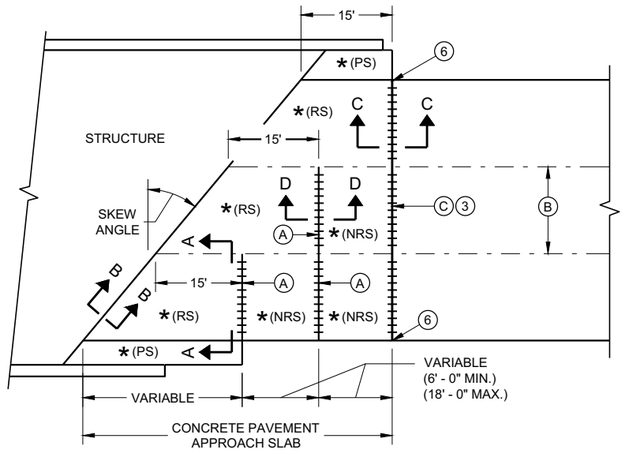
2-LANE RURAL CENTERLINE RUMBLE STRIP, MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7/2018
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

FHWA

6
SDD13A11 - 03b



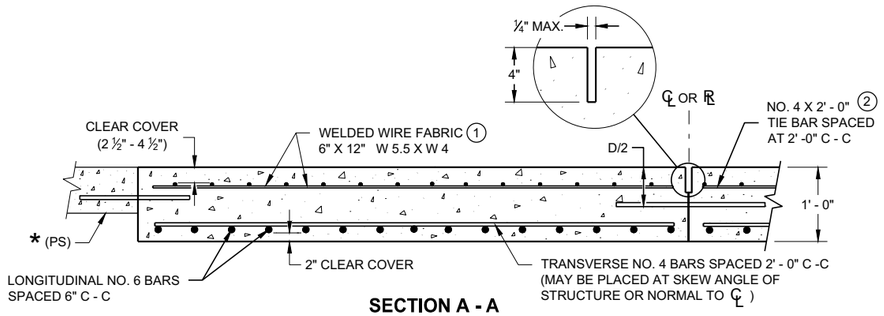
SKEWED APPROACH
(PAVEMENT MORE THAN TWO LANES)

* (RS) = REINFORCED CONCRETE SLAB

* (PS) = PAVED CONCRETE SHOULDER OR CONCRETE DRAINAGE SLAB

* (NRS) - NON - REINFORCED CONCRETE SLAB

*** STANDARD DOWEL BAR DIAMETER (SEE SDD 13C11 AND SDD 13C13)



SECTION A - A
REINFORCEMENT POSITIONING DETAIL

GENERAL NOTES

THE CONTRACTOR MAY SPLICE NO. 6 BARS IN THE APPROACH SLAB FOR SKEWED STRUCTURES ONLY. STAGGER SPLICES WITH A MAXIMUM OF ONE SPLICE PER BAR. THE LENGTH OF LAP IS 20 INCHES.

TACK WELD DOWEL BARS TO THE BASKETS ON ALTERNATE ENDS.

(1) THE CONTRACTOR MAY USE NO. 4 BARS SPACED AT 2' - 0 " C - C IN BOTH THE LONGITUDINAL AND TRANSVERSE DIRECTIONS FOR TOP REINFORCEMENT AS AN ALTERNATIVE TO THE WELDED WIRE FABRIC.

(2) THE CONTRACTOR MAY OMIT THE BARS BETWEEN REINFORCED SLABS WHERE SLAB REINFORCEMENT BARS EXTEND ACROSS THE CENTERLINE OR REFERENCE LINE.

(3) DO NOT CONSTRUCT AN EXPANSION JOINT OR INSTALL DOWEL BARS WHEN ABUTTING AN HMA PAVEMENT.

(4) USE A JOINT SEALANT CONFORMING TO STANDARD SPECIFICATION 415.2.6.

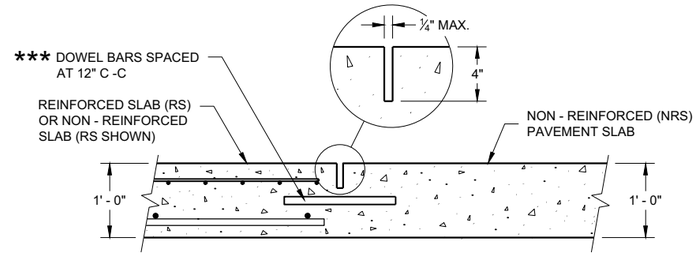
(5) PLACE EXPANSION CAP ON THE END OF THE DOWEL THAT IS NOT TACK WELDED TO THE BASKET. DO NOT FORCE DOWEL BAR PAST THE DOWEL STOP.

(6) EXTEND EXPANSION JOINT THROUGH ANY ADJACENT TIED CONCRETE.

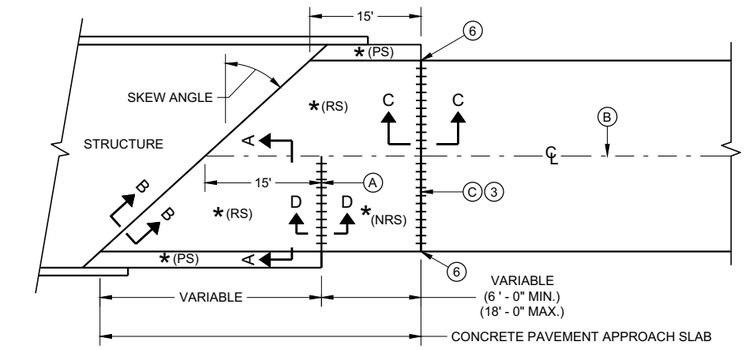
(A) STANDARD CONTRACTION JOINT NORMAL TO ℄ OR ℞.

(B) STANDARD LONGITUDINAL JOINT WITH TIE BARS.

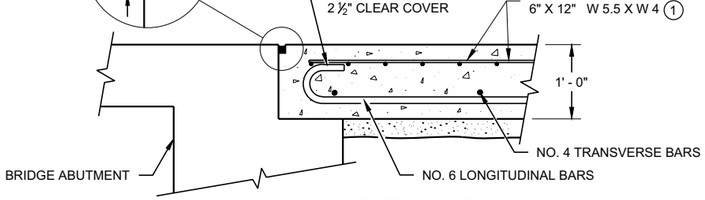
(C) 1 ½" EXPANSION JOINT WITH DOWEL BARS NORMAL TO ℄ OR ℞ .



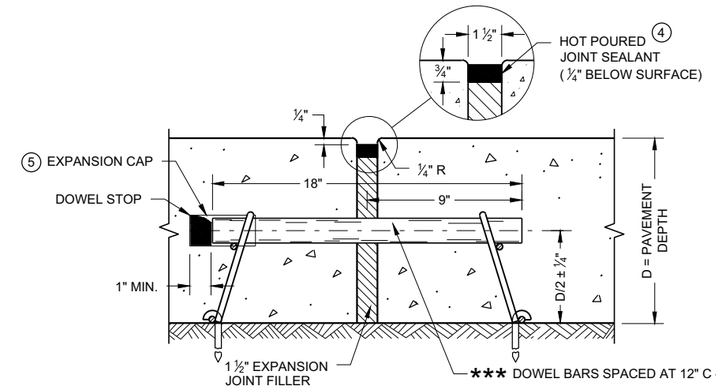
SECTION D - D
CONTRACTION JOINT



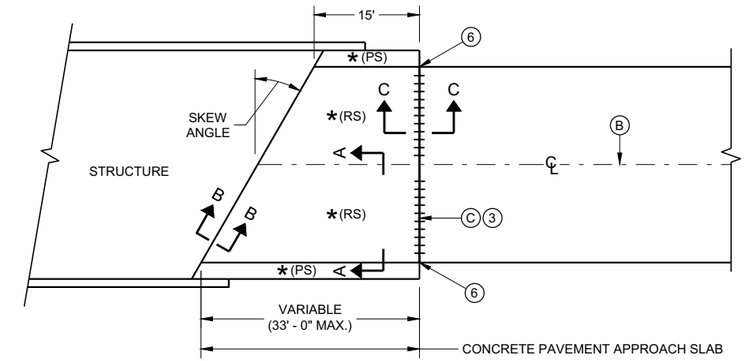
SKEWS > 20°
(PAVEMENT WIDTH ≤ 30')



SECTION B - B
BEND DETAIL
BOTTOM REINFORCEMENT

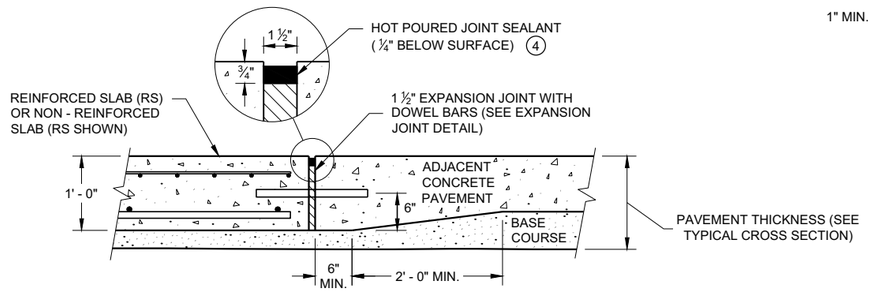


EXPANSION JOINT DETAIL



SKEWS ≤ 20°
(PAVEMENT WIDTH ≤ 30')

APPROACH SLAB AND ADJACENT PAVEMENT



SECTION C - C
TRANSITION DETAIL
APPROACH SLAB TO ADJACENT PAVEMENT

CONCRETE PAVEMENT APPROACH SLAB

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

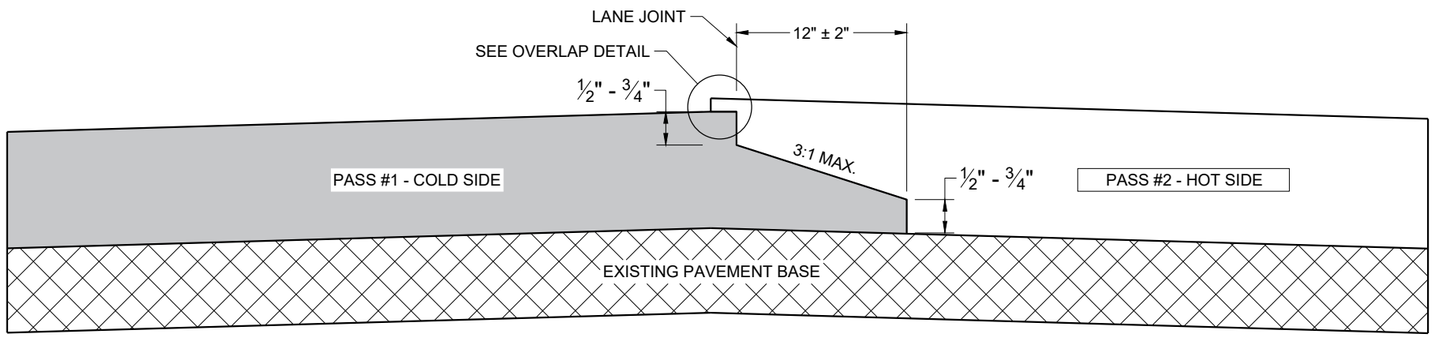
APPROVED
November 2018
DATE

/S/ Peter Kemp, P.E.
PAVEMENT SUPERVIS

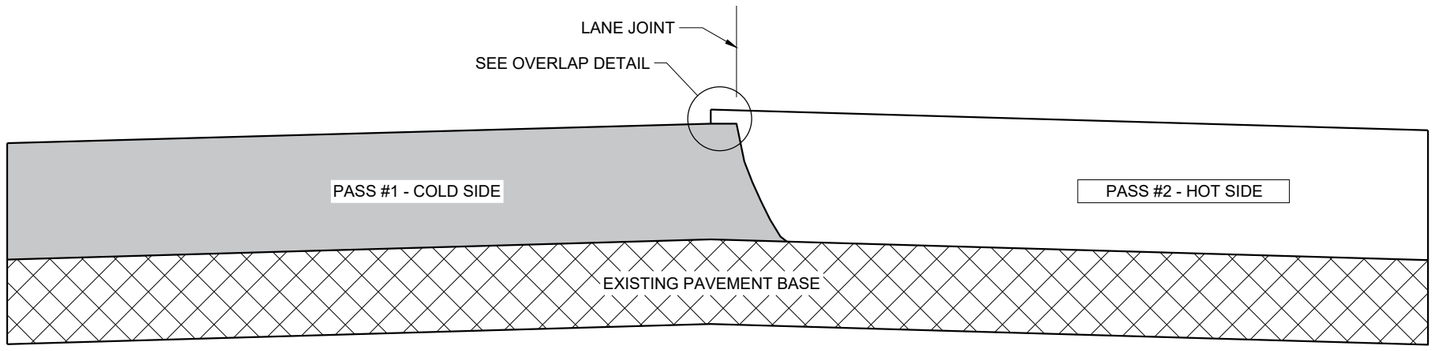
FHWA

6

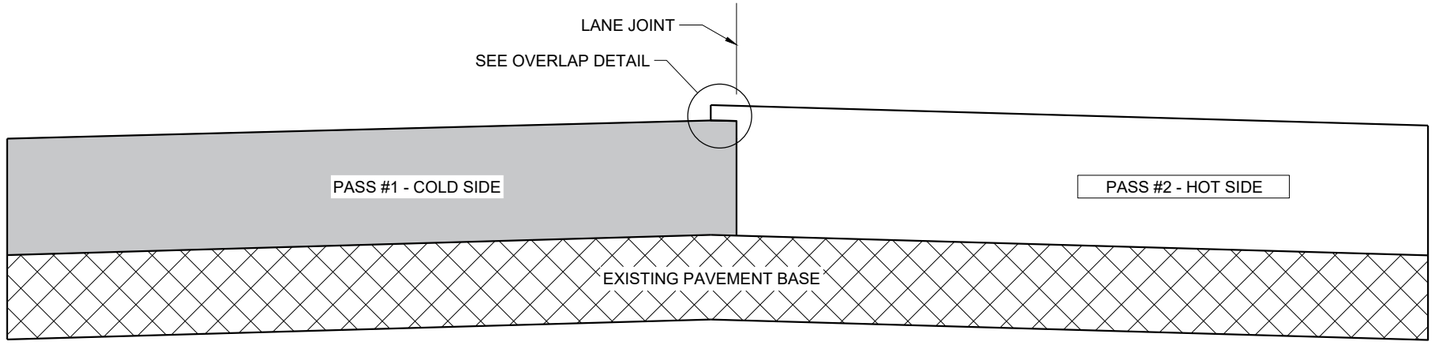
SDD 13B02 - 09a



TYPICAL PAVEMENT CROSS SECTION
NOTCHED WEDGE JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT (MILLED)

GENERAL NOTES

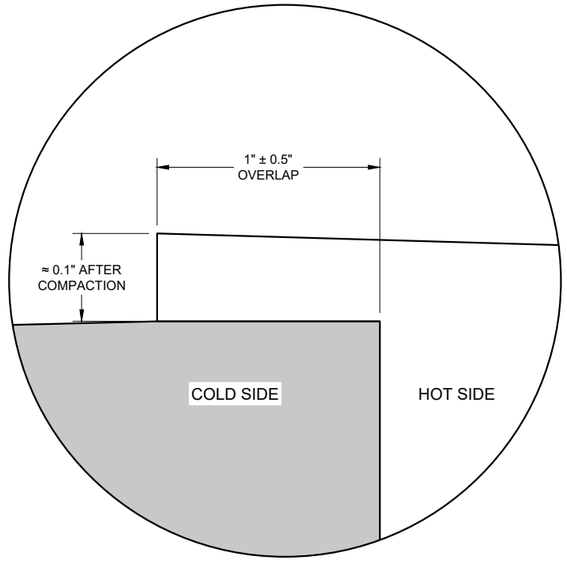
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

FOR ALL LONGITUDINAL JOINTS, ENSURE THE PAVER SCREED OVERLAPS THE PREVIOUSLY PLACED PAVEMENT BY 1" ± 0.5" AND THE HOT SIDE OF THE JOINT REMAINS HIGHER THAN THE COLD SIDE BY APPROXIMATELY 0.1" AFTER FINAL COMPACTION. (IT WILL BE FLUSH WHEN PAVING IN ECHELON.)

ONLY REMOVE THE LONGITUDINAL NOTCHED WEDGE JOINT FOR SMA PAVEMENT OR AS DIRECTED BY THE ENGINEER TO ADDRESS SPECIFIC LENGTHS OF JOINT DAMAGED BY TRAFFIC.

WHEN MILLING BACK OR REMOVING ANY LONGITUDINAL JOINT, LIMIT THE MATERIAL REMOVED TO 2" FROM THE TOP NOTCH OR FROM THE VERTICAL JOINT EDGE ON THE COLD SIDE OF THE JOINT.

USE LONGITUDINAL MILLED JOINT AS PLANS SHOW OR THE AS THE ENGINEER DIRECTS.



OVERLAP DETAIL (TYPICAL)

6

6

SDD 13C19 - 03

SDD 13C19 - 03

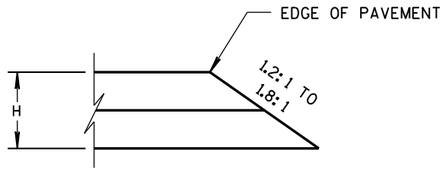
HMA LONGITUDINAL JOINTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2020
DATE

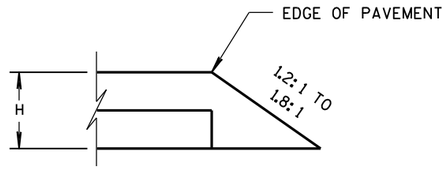
/S/ Steven Hefel
HMA PAVEMENT ENGIN

FHWA



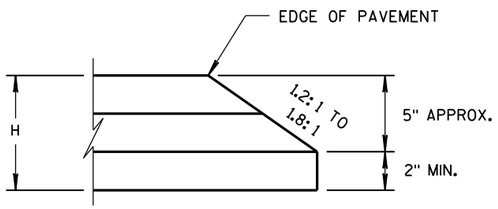
CONSTRUCTED WITH FINAL TWO LAYERS

FOR H 5" OR LESS



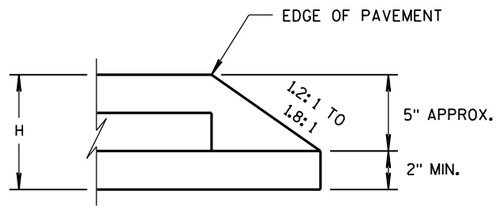
CONSTRUCTED WITH FINAL LAYER

FOR H 5" OR LESS



CONSTRUCTED WITH FINAL TWO LAYERS

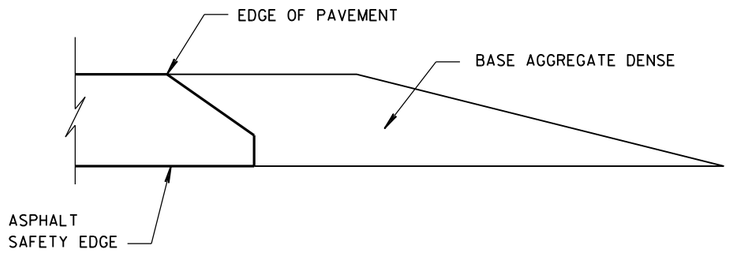
FOR H GREATER THAN 5"



CONSTRUCTED WITH FINAL LAYER

FOR H GREATER THAN 5"

HMA PAVEMENT AND HMA OVERLAYS



FINISHED SHOULDER AGGREGATE PLACEMENT

6

6

S.D.D. 14 B 29-1

S.D.D. 14 B 29-1

SAFETY EDGE SM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

11/30/2012
DATE

/S/ Jerry H. Zoda
ROADWAY STANDARDS DEVELOPMENT ENGINEER

FHWA

(1) WOOD OR STEEL POSTS (w6X9 OR w6X8.5) MAY BE USED. DO NOT INTERMIX WOOD AND STEEL POSTS. INSTALL STEEL POSTS WITH HOLES ON APPROACHING TRAFFIC SIDE.

(2) USE WOOD OR APPROVED PLASTIC BLOCKOUTS. WOOD BLOCKOUTS MAY BE CONSTRUCTED OUT OF TWO OR MORE WOOD BLOCKOUTS. SEE ALTERNATE WOOD BLOCKOUT DETAIL. DIMENSIONS OF APPROVED PLASTIC BLOCKOUTS MAY VARY.

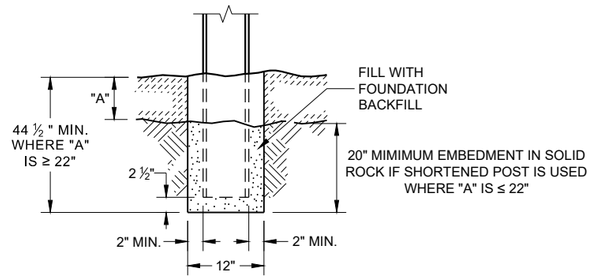
(3) IF ROCK IS ENCOUNTERED DURING EXCAVATION, PROVIDE A HOLE 12 INCHES IN DIAMETER EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE APPROXIMATELY 2 1/2" INCHES OF GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE. CUT THE POSTS THE TO LENGTH AMD INSTALL. BACKFILL WITH EXCAVATED MATERIAL AND COMPACT. BACKFILL IS TO BE FREE OF LARGE ROCKS.

(4) WHEN THE DISTANCE FROM BACK OF POST TO SHOULDER HINGE POINT IS LESS THAN 2 FEET INSTALL LONGER POST AT HALF POST SPACING (K).

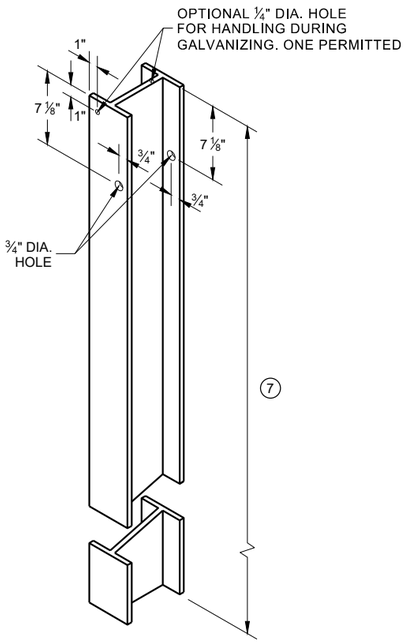
(5) FOR NEW MGS INSTALLATION TOP OF W-BEAM RAIL TOLERANCE IS ±1". FOR EXISTING MGS INSTALLATION TOP OF W-BEAM IS BETWEEN 27 ¾" TO 32".

(6) WHEN USING STEEL POST AND WOOD BLOCKOUTS INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

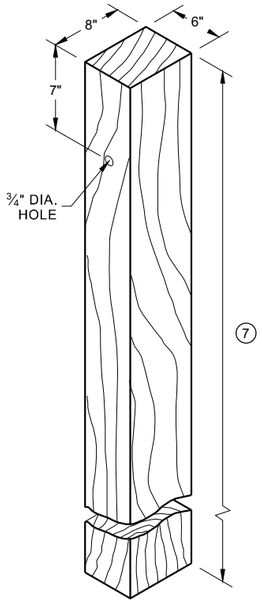
(7) TOTAL POST LENGTH FOR TYPE K IS 7' - 0".
TOTAL POST LENGTH FOR OTHER MGS TYPES IS 6' - 0".



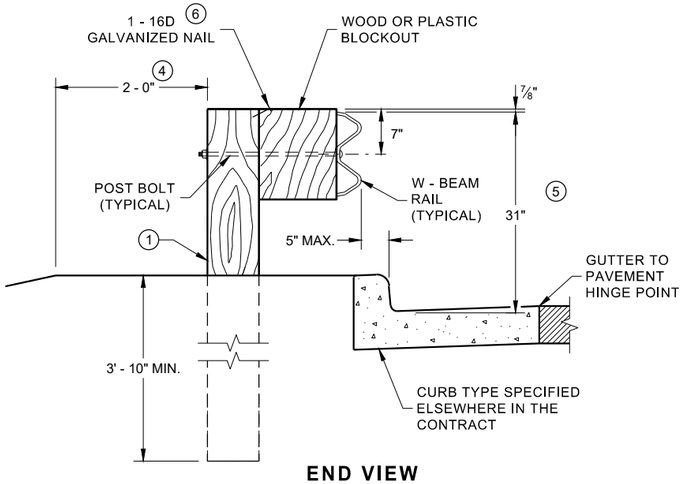
END VIEW
SETTING STEEL OR WOOD POST IN ROCK (3)



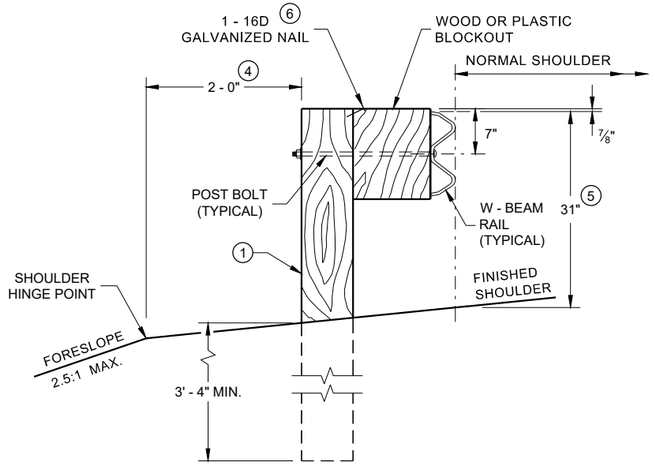
STEEL POST & HOLE PUNCHING DETAIL (W 6 X 9) (1)



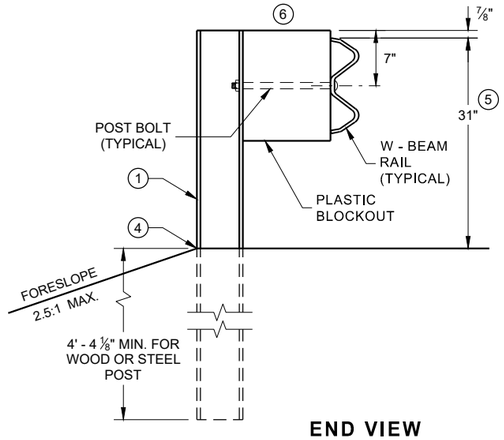
WOOD POST (6" X 8") NOMINAL (1)



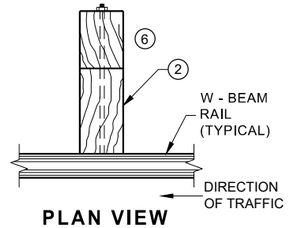
END VIEW
LOCATED ALONG A CURBED ROADWAY



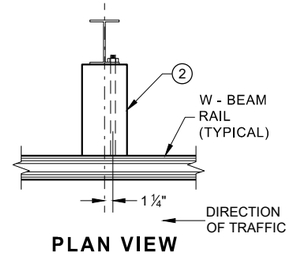
END VIEW
LOCATED ALONG A ROADWAY SHOULDER STANDARD INSTALLATION



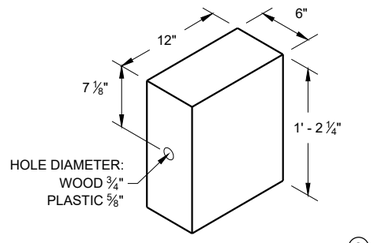
END VIEW
MGS LONGER POST AT HALFPOST SPACING W BEAM (K)



PLAN VIEW
WOOD POST, BLOCKOUT & BEAM



PLAN VIEW
STEEL POST, PLASTIC BLOCKOUT & BEAM



WOOD OR PLASTIC BLOCKOUT (2)

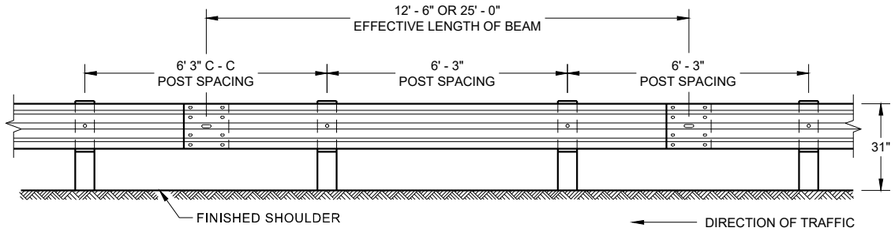
MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

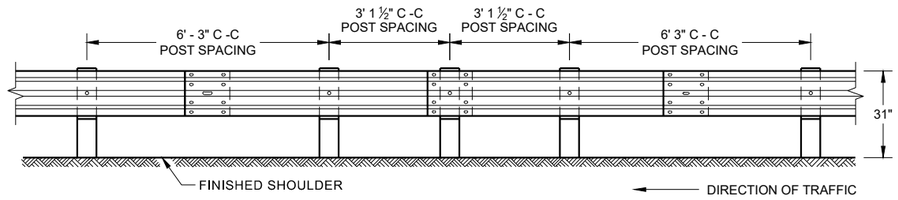
6

SDD 14B42 - 07a

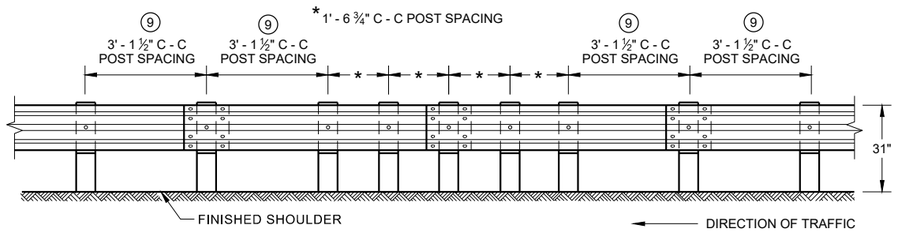
SDD 14B42 - 07a



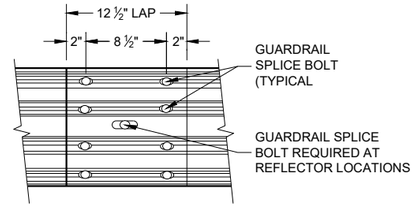
FRONT VIEW
POST SPACING STANDARD INSTALLATION



FRONT VIEW
HALF POST SPACING (HS) AND
HALF POST SPACING WITH LONGER POSTS (K)



FRONT VIEW
QUARTER POST SPACING (QS)



FRONT VIEW
MID-SPAN BEAM SPLICE

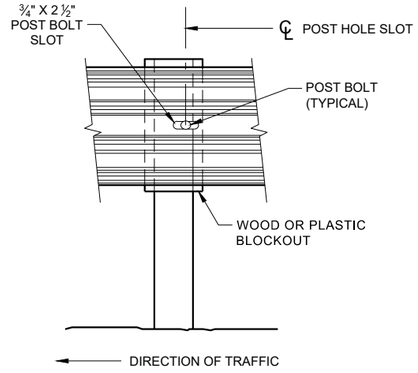
GENERAL NOTES

⑧ DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

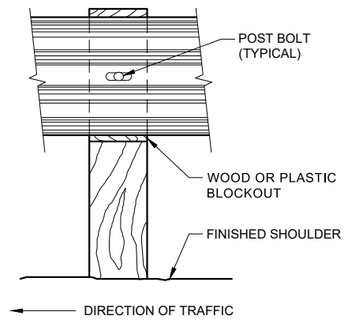
⑨ 25 FEET OF HALF POST SPACING IS REQUIRED ON APPROACH AND DEPARTURE ENDS OF QUARTER POST SPACING.

POST BOLTS ARE A ⅝" DIAMETER ASTM A307 GUARDRAIL BOLT. A POST BOLT REQUIRES ⅝" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT AND ⅝" DIAMETER F844 FLAT WASHER. POST BOLTS MAY BE LONGER IF MULTIPLE BLOCKOUTS ARE BEING USED.

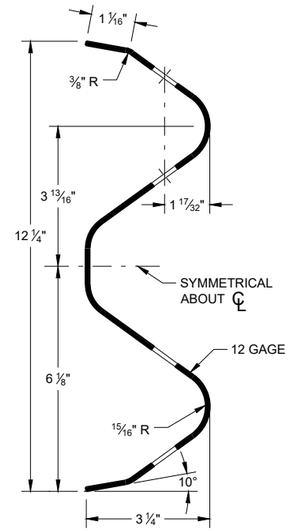
GUARD RAIL SPLICE BOLTS ARE A ⅝" DIAMETER ASTM A307 GUARDRAIL HEAD BOLT. A GUARDRAIL SPLICE BOLT REQUIRES ⅝" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT.



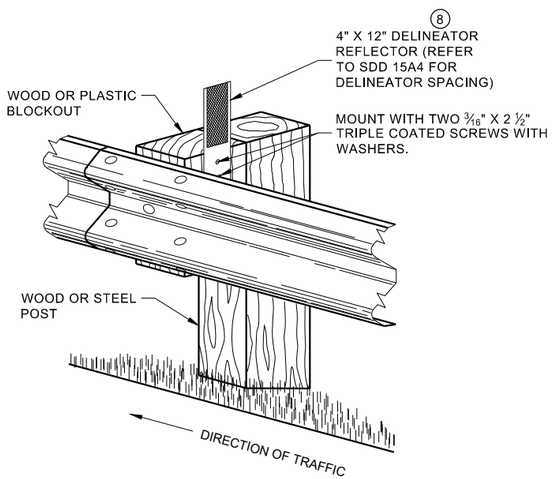
FRONT VIEW AT STEEL POST



FRONT VIEW AT WOOD POST



SECTION THRU W-BEAM RAIL



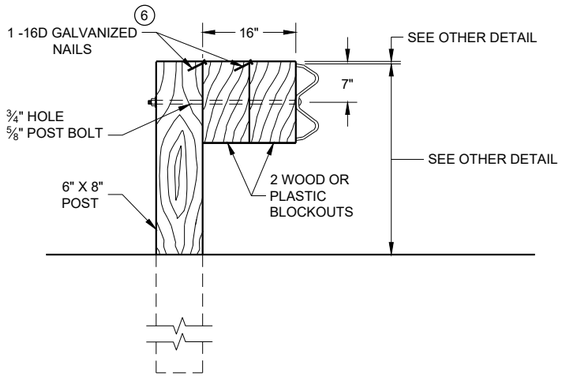
ONE SIDED REFLECTOR DETAIL
AND TYPICAL INSTALLATION

MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 14B42 - 07b
SDD 14B42 - 07b

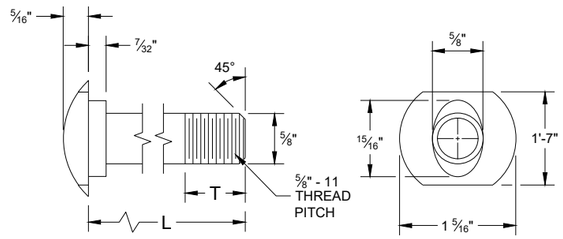


DETAIL FOR 16" BLOCKOUT DEPTH

IT IS ACCEPTABLE TO USE BLOCKOUTS UP TO 16" DEEP TO INCREASE THE POST OFFSET TO AVOID UNDERGROUND OBSTACLES. THERE IS NO LIMIT TO THE NUMBER OF POSTS THAT CAN HAVE ADDITIONAL BLOCKOUTS UP TO 16" DEEP.

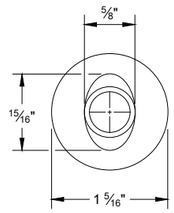
NOTE:

1. ALL FILLETS SHALL HAVE A MINIMUM RADIUS OF 3⁄16".
2. IF THE BOLT EXTENDS MORE THAN ¼" FROM THE NUT THE BOLT SHOULD BE TRIMMED BACK.

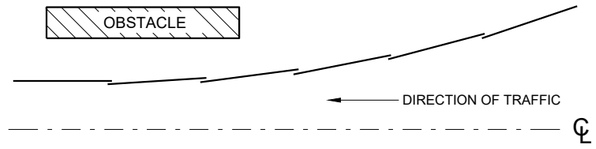


POST BOLT TABLE

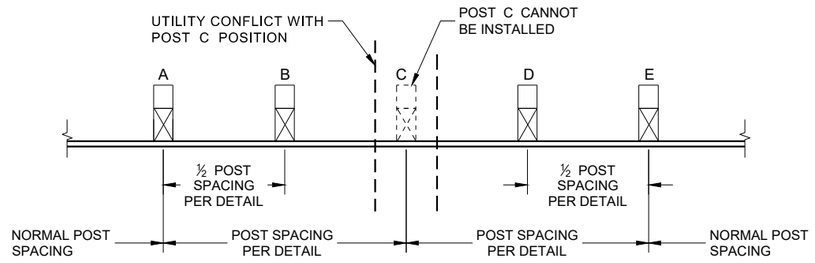
L	T (MIN.)
1 ¼"	1 ⅛"
2"	1 ¾"
10"	4"
14"	4 1⁄16"
18"	4"
21"	4 1⁄16"
25"	4"



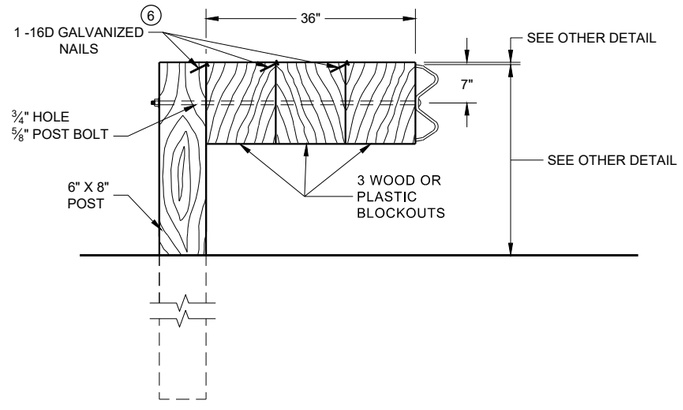
ALTERNATE BOLT HEAD



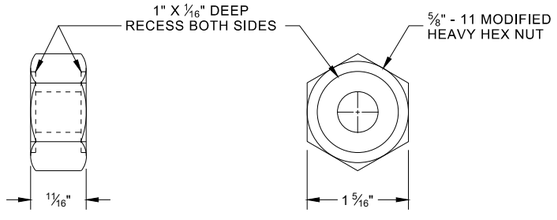
PLAN VIEW
BEAM LAPPING DETAIL



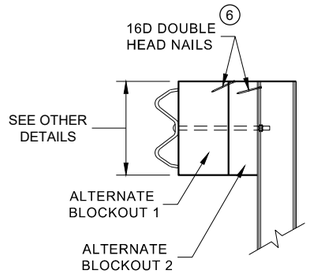
POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION



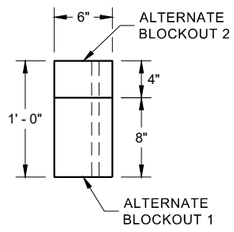
DETAIL FOR 36" BLOCKOUT DEPTH



POST BOLT, SPLICE BOLT AND RECESS NUT



SIDE VIEW



PLAN VIEW

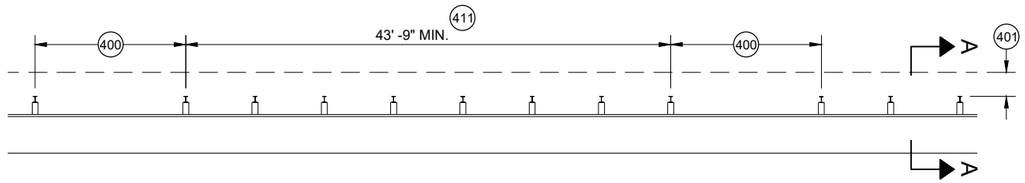
ALTERNATE WOOD BLOCKOUT DETAIL

NOTES: UNDER SPECIAL CIRCUMSTANCES, SUCH AS AVOIDING OBSTACLES THAT ARE NOT RELOCATED, IT IS ACCEPTABLE TO INSTALL ADDITIONAL BLOCKOUTS TO OBTAIN UP TO 36" DEPTH FOR ONE OR TWO POSTS IN A SECTION OF GUARDRAIL.

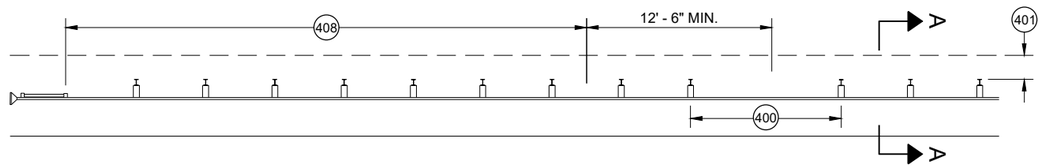
DO NOT USE 16" OR 36" BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION DISTANCE OF THE BARRIER.

(6) WHEN USING STEEL POST AD WOOD BLOCKOUTS, INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

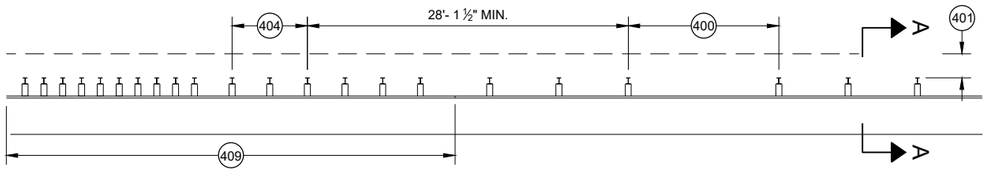
MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL



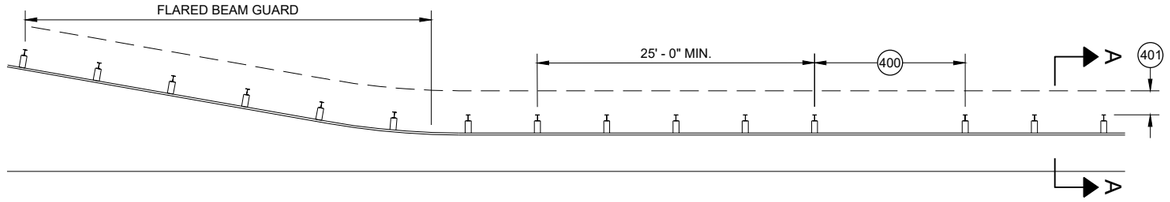
MISSING POST IN MGS GUARDRAIL



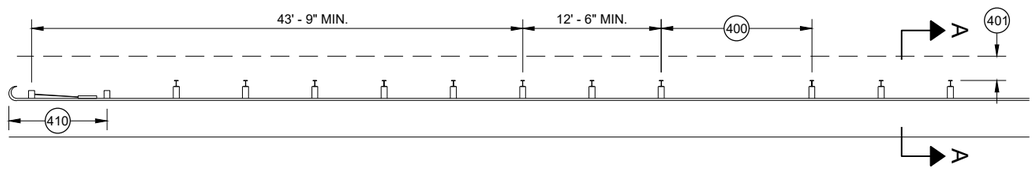
MISSING POST IN MGS GUARDRAIL NEAR EAT



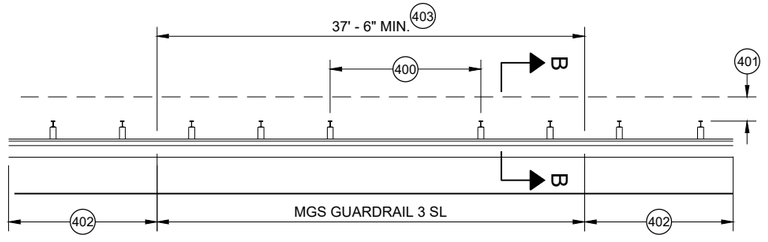
MISSING POST IN MGS GUARDRAIL NEAR AN APPROACH TRANSITION



MISSING POST IN MGS GUARDRAIL NEAR FLARED BEAM GUARD

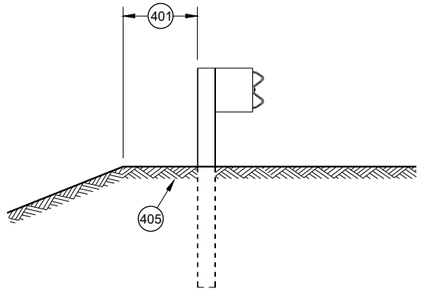


MISSING POST IN MGS GUARDRAIL NEAR A TYPE 2 END TERMINAL

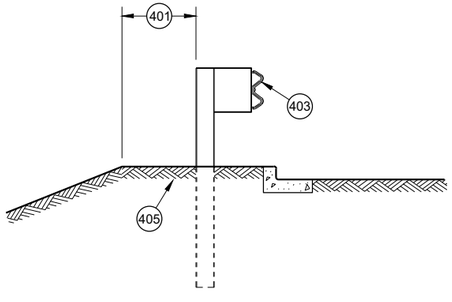


MISSING POST IN SHORT SPAN MGS GUARDRAIL NEAR CURB (SL) 407

(400) MAX SPAN 12' - 6"
(401) 2' MIN.
(402) MGS GUARDRAIL 3
(403) NESTING BEAM GUARD
(404) ASYMMETRIC TRANSITION
(405) SOIL WELL DRAINED AND COMPACTED
(406) SEE OTHER DRAWINGS IN THIS SDD
(407) SEE OTHER DRAWINGS FOR MIN. SPACING BETWEEN SPANS
(408) SEE SDD 14B44
(409) SEE SDD 14B45
(410) SEE SDD 14B47
(411) MINIMUM DISTANCE BETWEEN MISSING POST SPANS.



SECTION A - A 406



SECTION B - B 406

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2021 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE UNIT SUPERVISOR

FHWA

6

SDD 14B42 - 07d

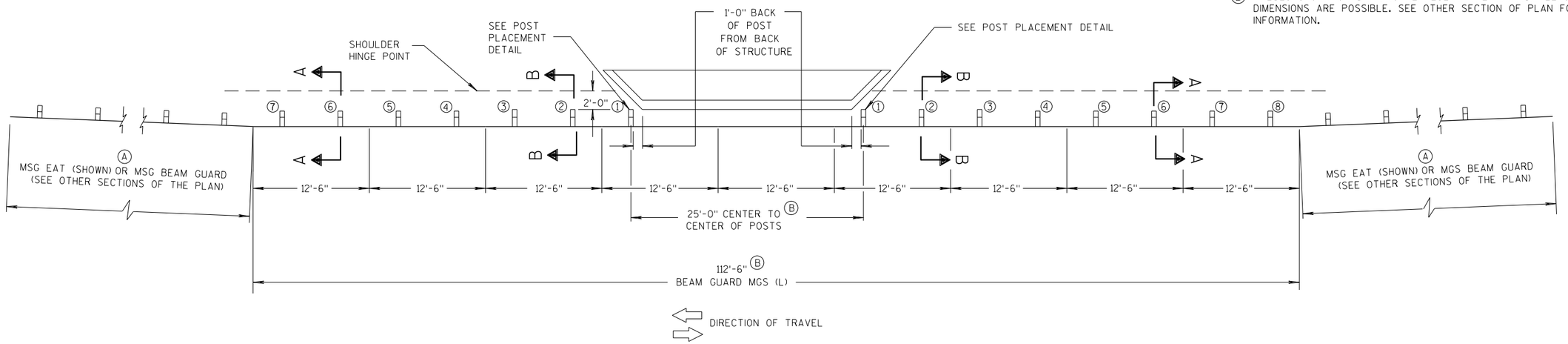
GENERAL NOTES

POSTS 1 THROUGH 3 ARE CRT POSTS.
ALL OTHER POSTS SHALL BE WOOD OR STEEL.

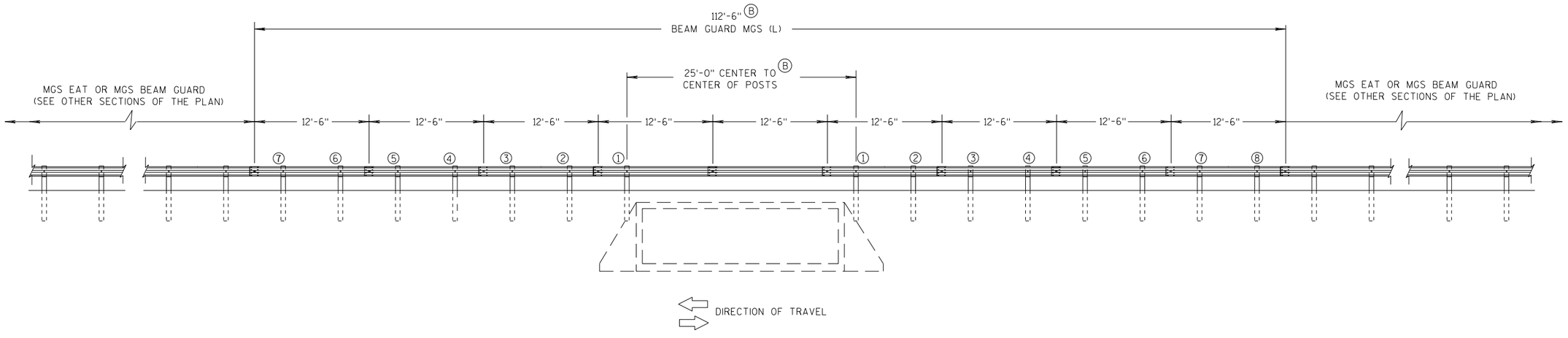
SEE SDD 14 B 42 FOR MORE DETAILS.

(A) FLARE FOR MGS EAT SHOWN. IF INSTALLING MGS NO FLARE NEEDED.

(B) VALUES SHOWN ON DRAWING REPRESENT THE MAXIMUM LENGTH. SHORTER DIMENSIONS ARE POSSIBLE. SEE OTHER SECTION OF PLAN FOR MORE INFORMATION.



PLAN VIEW



ELEVATION VIEW

MIDWEST GUARDRAIL SYSTEM LONG SPAN MGS (L) TWO-WAY TRAFFIC

MIDWEST GUARDRAIL SYSTEM LONG SPAN MGS (L)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
S.D.D. 14 B 43-4a

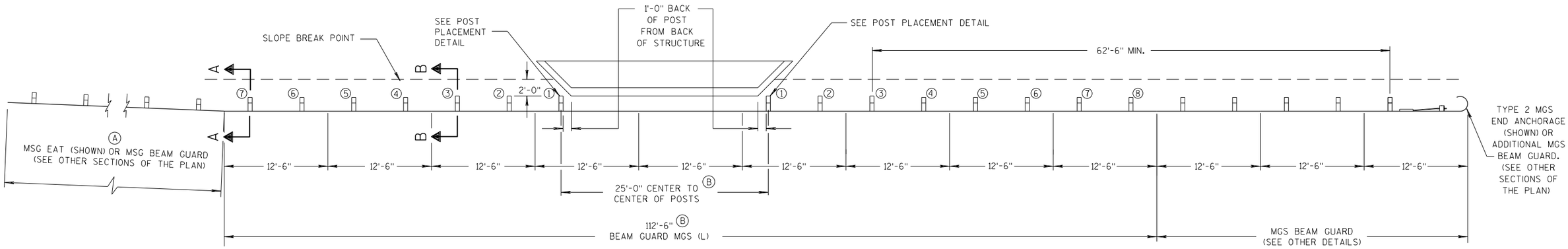
GENERAL NOTES

POSTS 1 THROUGH 3 ARE CRT POSTS.
ALL OTHER POSTS SHALL BE WOOD OR STEEL.

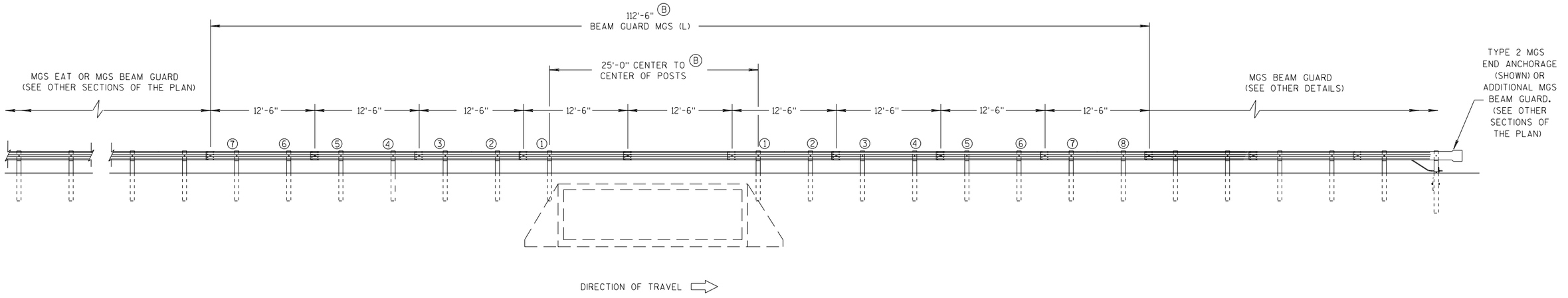
SEE SDD 14 B 42 FOR MORE DETAILS.

(A) FLARE FOR MGS EAT SHOWN. IF INSTALLING MGS NO FLARE NEEDED.

(B) VALUES SHOWN ON DRAWING REPRESENT THE MAXIMUM LENGTH. SHORTER DIMENSIONS ARE POSSIBLE. SEE OTHER SECTION OF PLAN FOR MORE INFORMATION.



PLAN VIEW



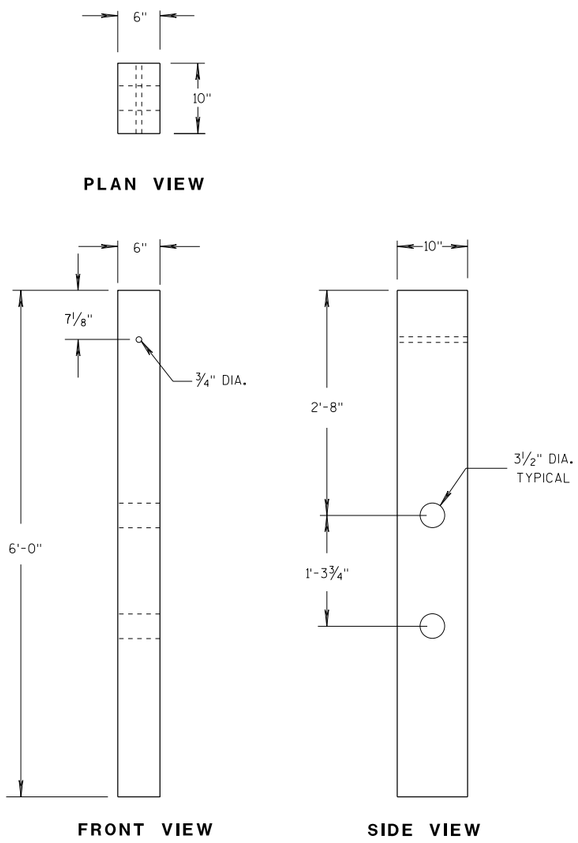
ELEVATION VIEW

MIDWEST GUARDRAIL SYSTEM LONG SPAN MGS (L) ONE-WAY TRAFFIC

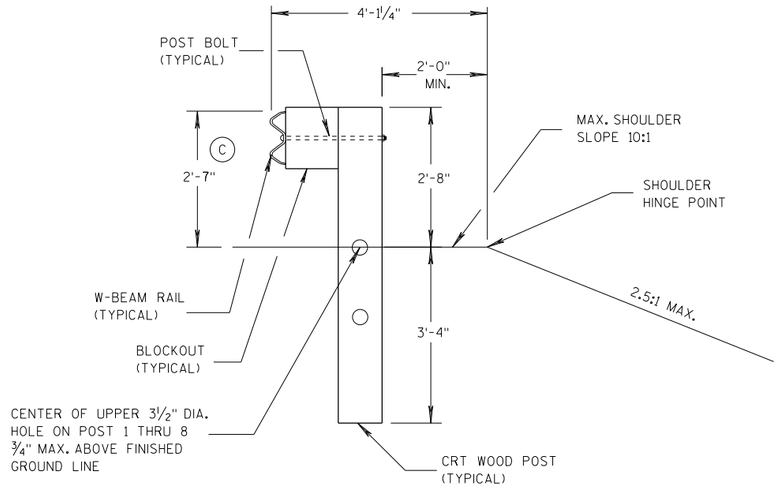
MIDWEST GUARDRAIL SYSTEM LONG SPAN MGS (L)	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	79

6

S.D.D. 14 B 43-4b



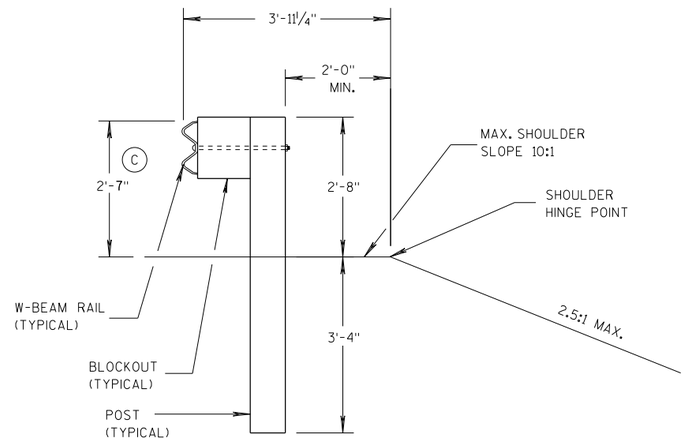
CRT WOOD POST



SECTION B-B

POSTS NO. 1-3

SEE OTHER DETAILS



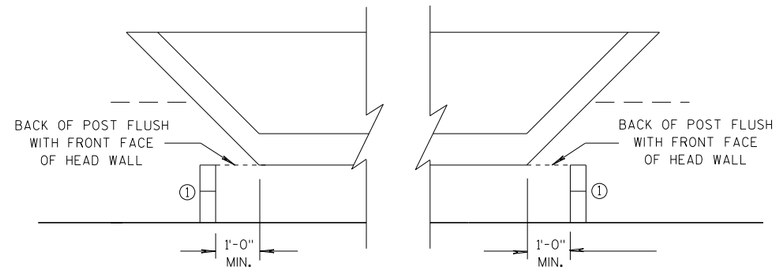
SECTION A-A

POSTS NO. 4-8

SEE OTHER DETAILS

GENERAL NOTES

(C) TOLERANCE FOR TOP OF W-BEAM RAIL IS ± 1".



POST PLACEMENT DETAIL

MIDWEST GUARDRAIL SYSTEM
LONG SPAN MGS (L)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
07/2018
DATE
FHWA

/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT ENGINEER

6

S.D.D. 14 B 43-4c

6

S.D.D. 14 B 43-4c

GENERAL NOTES

(A) THE SLOPE IN THE AREA BOUNDED BY THE GRADELINE, THE HINGE POINT LINE (HPL) AND THE CLEAR ZONE LIMITS (CZL) SHALL BE 4:1 OR FLATTER.

(B) AFTER FINAL ASSEMBLY, RECHECK CABLE TO BE SURE IT IS TAUT AND HAS NOT RELAXED

(C) DIFFERENT MANUFACTURERS REQUIRE DIFFERENT PERFORATED W - BEAM RAIL END PANELS. SEE MANUFACTURER'S INFORMATION.

(D) ATTACH ALUMINUM SHEET TO E.A.T. HEAD USING 4 STAINLESS STEEL SELF - TAPPING SCREWS. ONE SCREW PER CORNER.

(E) HARDWARE MAY VARY BETWEEN MANUFACTURER. SEE MANUFACTURER'S DRAWING FOR INFORMATION.

DIMENSIONS MAY VARY, MANUFACTURER'S INFORMATION.

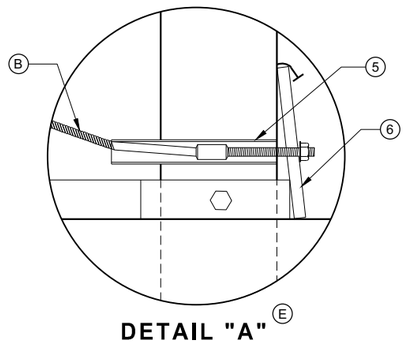
SEE SDD 14B42 FOR MORE INFORMATION.

* DO NOT ATTACH BLOCKOUTS TO POST 1 AND 2.

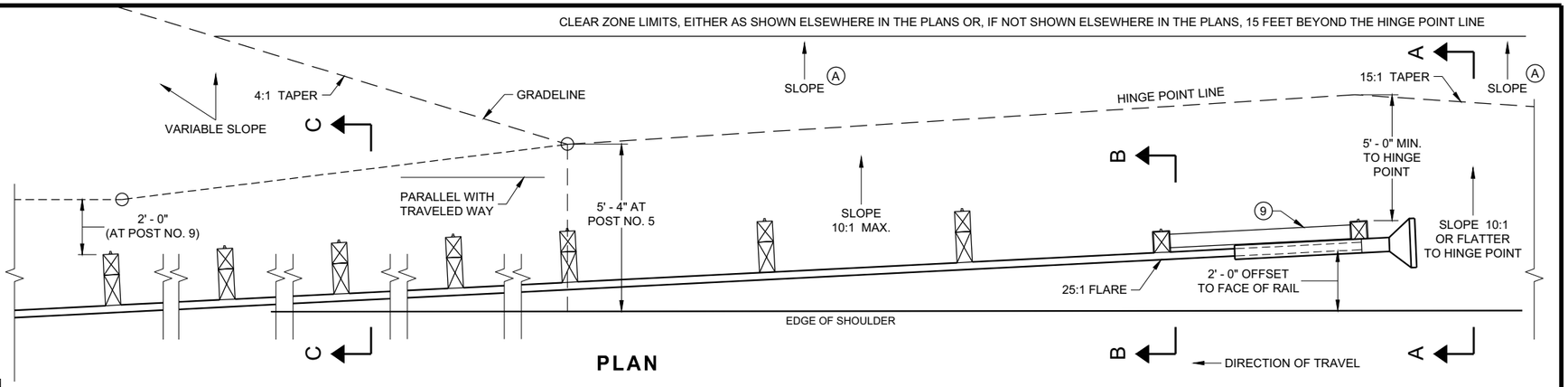
DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

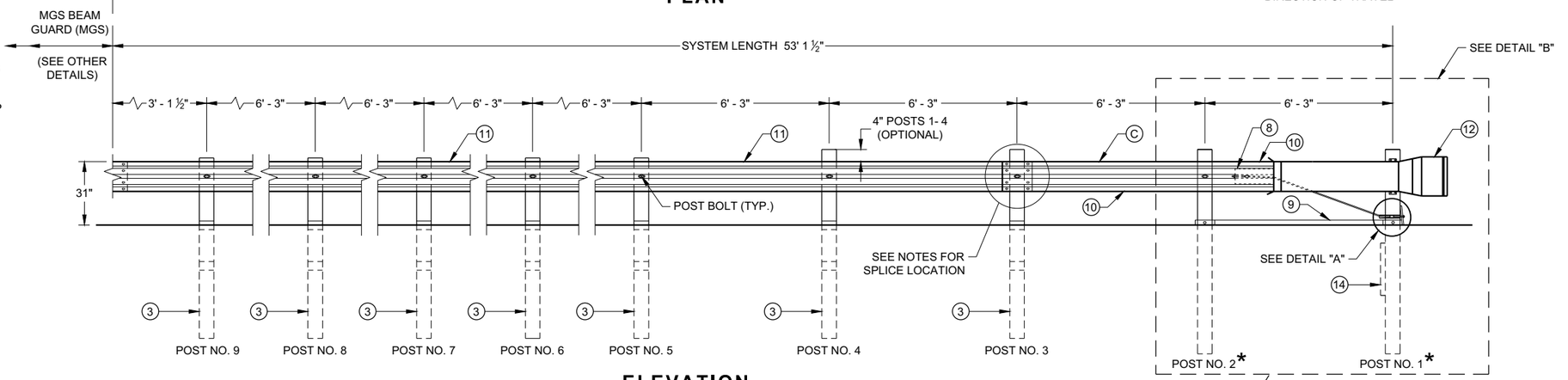
SEE MANUFACTURER'S DRAWING FOR SPLICE LOCATION, HARDWARE DIMENSIONS AND INSTALLATION INSTRUCTIONS.

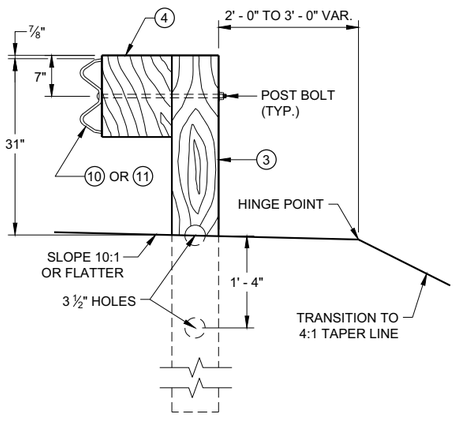
THE CENTER OF THE UPPER 3 ½" DIAMETER HOLE ON POST NUMBER 3 THROUGH POST 9 IS TO BE FLUSH WITH THE GROUND LINE UP TO A MAXIMUM OF 2" ABOVE GROUND LINE. WOOD BLOCKS ON POSTS NUMBERED 3 THROUGH 9 MAY BE ADJUSTED UP TO 3" ABOVE THE TOP OF POST.



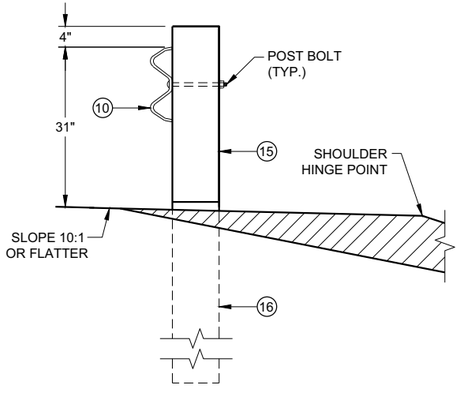
DETAIL "A" (E)



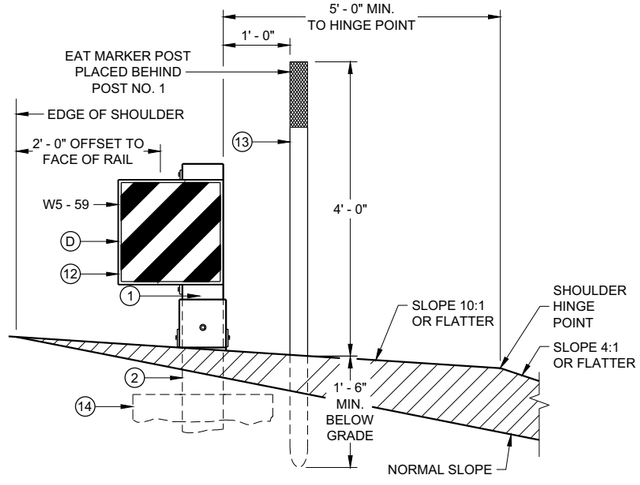




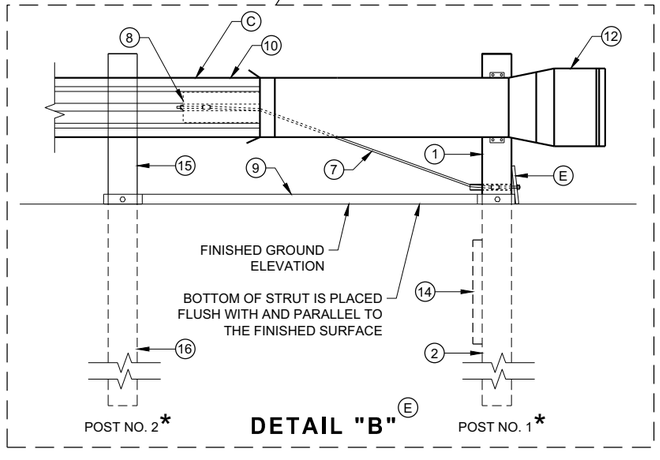
SECTION C - C
TYPICAL AT POST NOS. 3 - 9



SECTION B - B
TYPICAL AT POST NO. 2*



SECTION A - A
TYPICAL AT POST NO. 1*



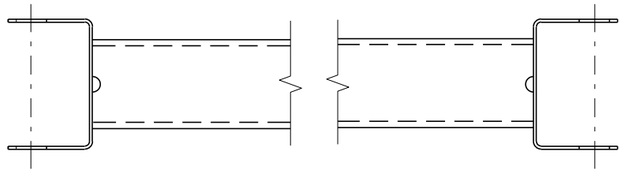
DETAIL "B" (E)

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 14B44 - 04a

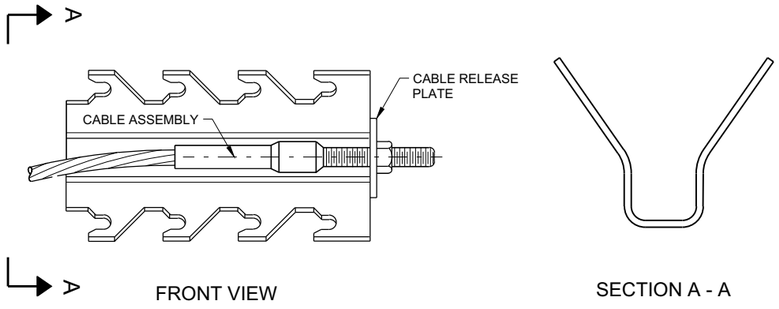
SDD 14B44 - 04a



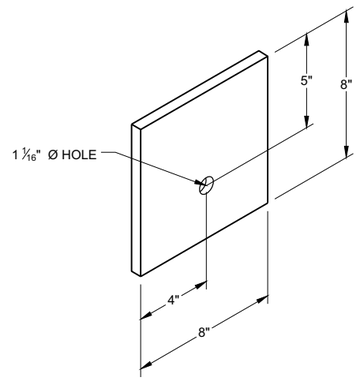
GENERIC GROUND STRUT ⑨ Ⓔ

BILL OF MATERIALS

PART NO.	DESCRIPTION MATERIALS PROVIDED BY MGS EAT MANUFACTURER. SEE MANUGACTURER'S DETAILS FOR MORE INFORMATION.
①	UPPER POST NO. 1 6" X 6" TUBE
②	LOWER POST NO. 1
③	WOOD CRT
④	WOOD BLOCKOUT
⑤	PIPE SLEEVE
⑥	BEARING PLATE
⑦	BCT CABLE ASSEMBLY
⑧	ANCHOR CABLE BOX
⑨	GROUND STRUT
⑩	PERFORATED W-BEAM RAIL END PANEL, 12'-6" LONG.
⑪	STANDARD W-BEAM RAIL. MULTIPLE SECTIONS REQUIRED. SECTIONS VARY IN LENGTH.
⑫	IMPACT HEAD
⑬	EAT MARKER POST - YELLOW (SEE APPROVED PRODUCTS LIST)
⑭	SOIL PLATE
⑮	UPPER POST NO. 2
⑯	LOWER POST NO. 2



GENERIC ANCHOR CABLE BOX ⑧ Ⓔ



BEARING PLATE ⑥ Ⓔ

6

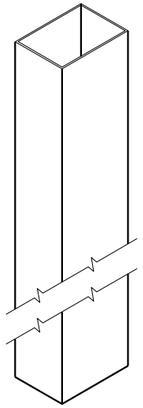
6

SDD 14B44 - 04b

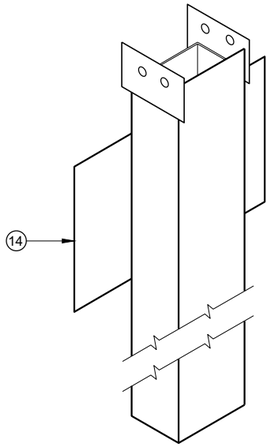
SDD 14B44 - 04b

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

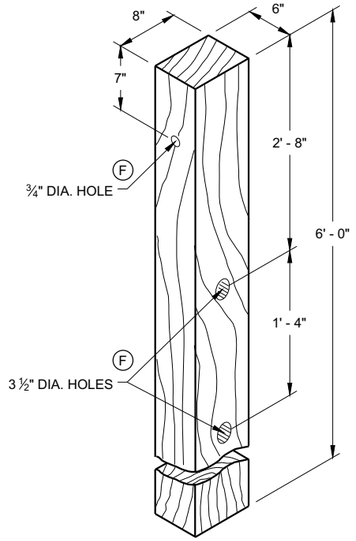
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



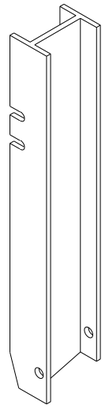
UPPER POST NO. 1 (1) (E)



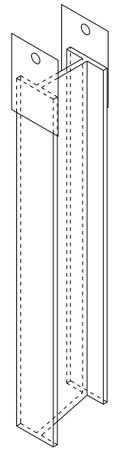
LOWER POST NO. 1 (2) (E)



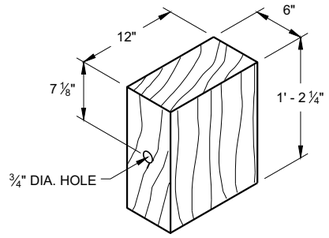
WOOD CRT POST (3) (E)
POSTS NUMBER 3-9



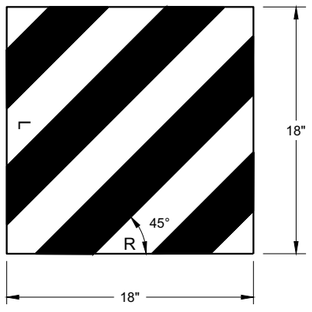
UPPER POST NO. 2 (15) (E)



LOWER POST NO. 2 (16) (E)

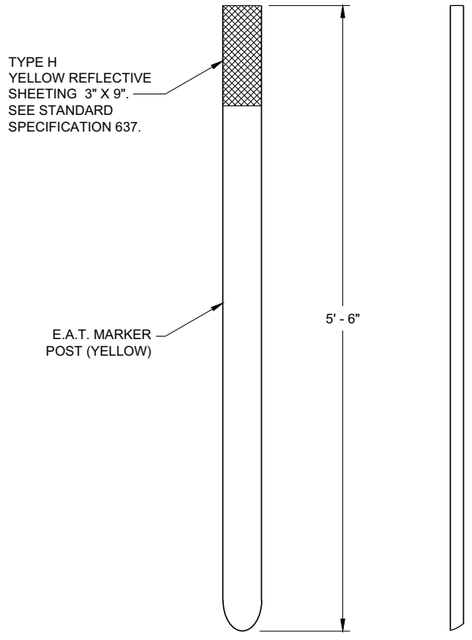


WOOD BLOCKOUT (4)
REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2



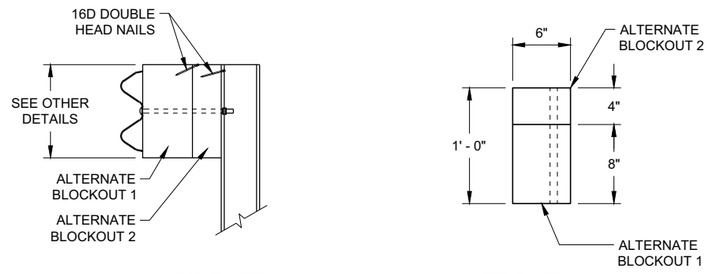
W5 - 59

REFLECTIVE SHEETING DETAIL (E)



FRONT VIEW SIDE VIEW

E.A.T. MARKER POST (13)



SIDE VIEW TOP VIEW

ALTERNATE WOOD BLOCKOUT DETAIL

MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)

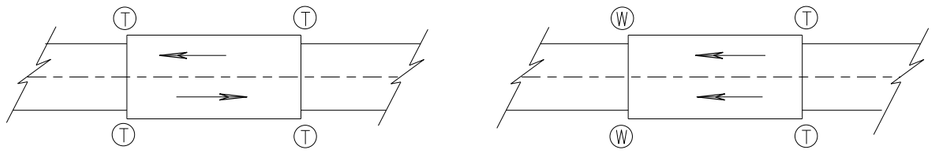
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7/2018 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE UNIT SUPERVISOR

FHWA

6

SDD 14B44 - 04c



TWO WAY TRAFFIC

ONE WAY TRAFFIC

(T) THRIE BEAM CONNECTION

(W) W-BEAM CONNECTION WHEN REQUIRED

TYPICAL LOCATIONS OF THRIE BEAM AND W-BEAM CONNECTIONS TO BRIDGE

GENERAL NOTES

IF ROCK IS ENCOUNTERED, REMOVE ROCK TO FULL DEPTH OF POST PLUS 2½", AND 12" DIAMETER AROUND POST. SEE 14B42 FOR MORE DETAILS.

TRANSITION USES STEEL POSTS ONLY.

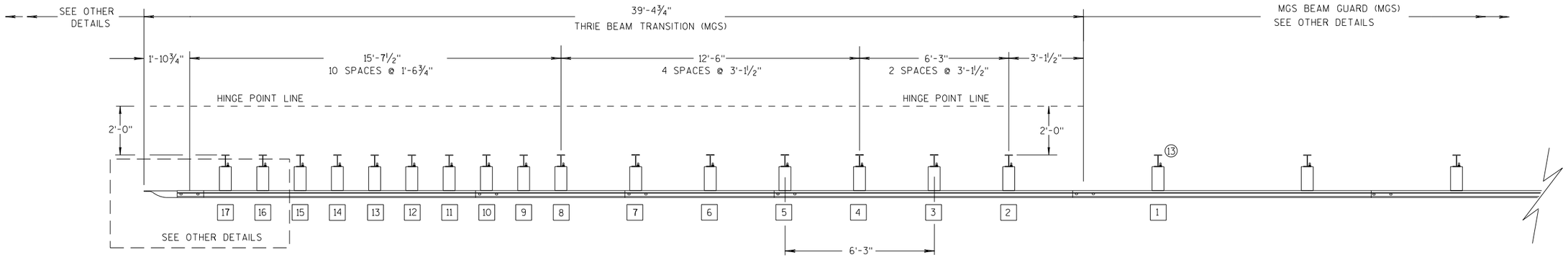
SEE STANDARD DETAIL DRAWING 14 B 42 FOR MORE INFORMATION.

POST 2 THROUGH 17 USES STEEL POST ONLY

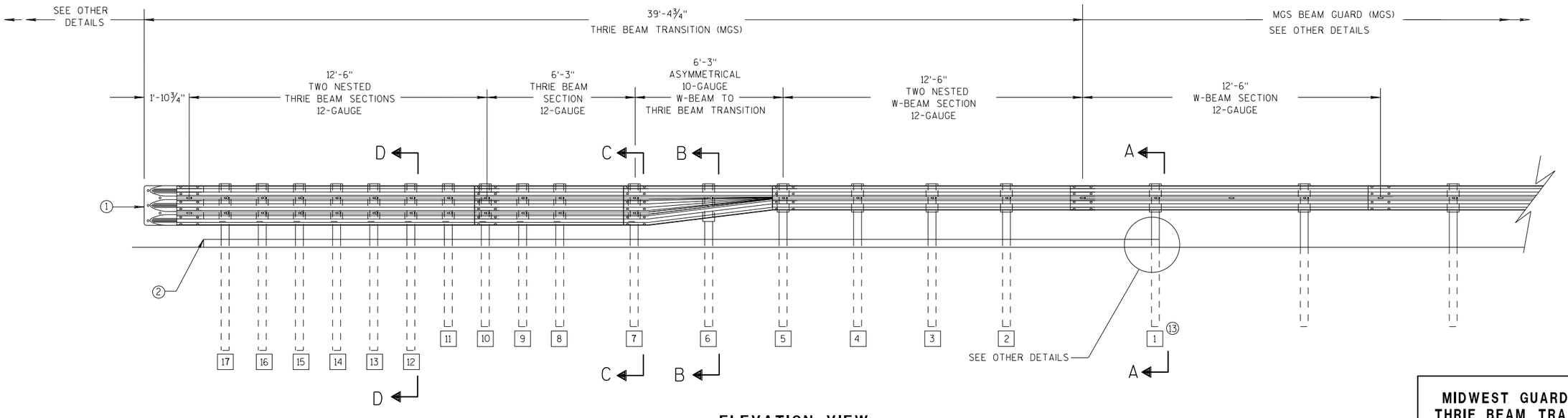
(1) BRIDGE RAILING TYPE "W" DOES NOT REQUIRE A TERMINAL CONNECTOR.

(2) OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

(13) STEEL OR WOOD POST IS ACCEPTABLE AT POST 1. SEE SDD14B42



PLAN VIEW



ELEVATION VIEW

MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

S.D.D. 14 B 45-5a

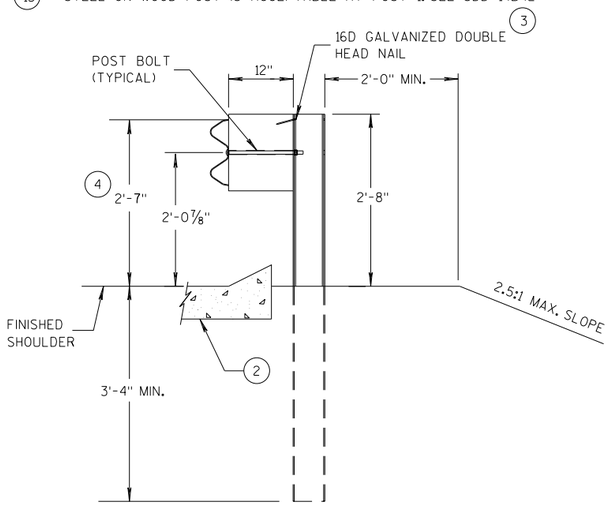
GENERAL NOTES

(2) OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

(3) WHEN USING STEEL POSTS AND WOOD BLOCKOUTS INSTALL FOUR 10D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

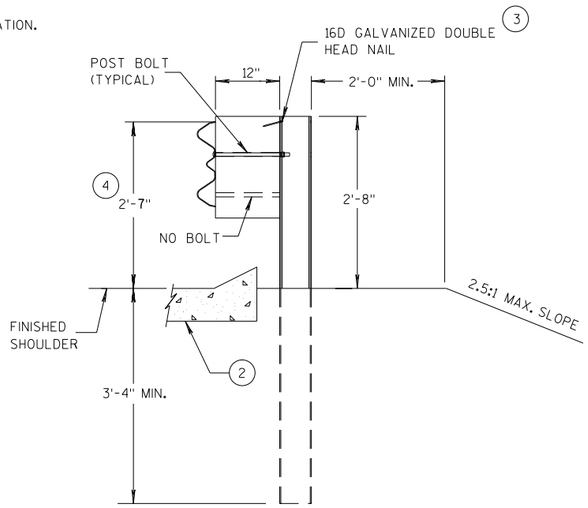
(4) TOLERANCE FOR TOP OF W-BEAM RAIL IS ± 1".

(13) STEEL OR WOOD POST IS ACCEPTABLE AT POST 1. SEE SDD 14B42



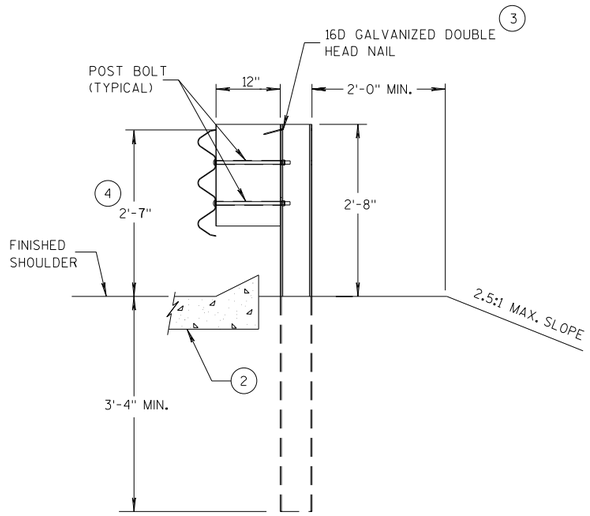
SECTION A-A (13)

POSTS 1-5



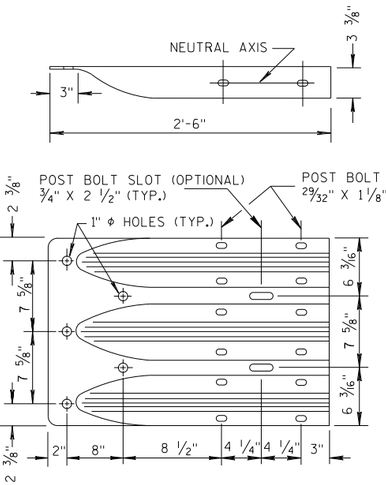
SECTION B-B

POST 6

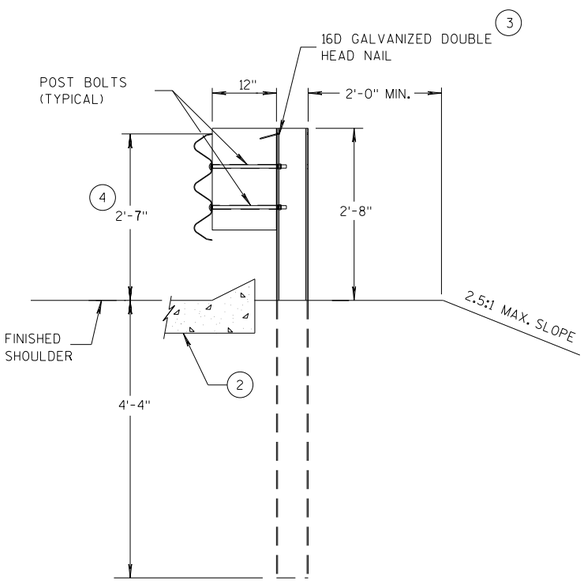


SECTION C-C

POSTS 7-11

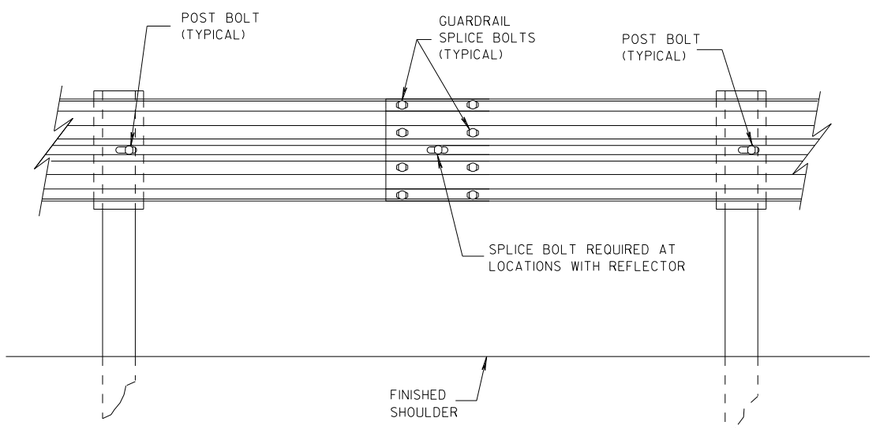


THRIE BEAM TERMINAL CONNECTOR



SECTION D-D

POSTS 12-17



SPLICE DETAIL

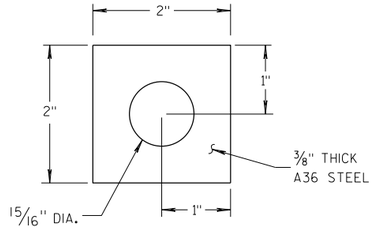
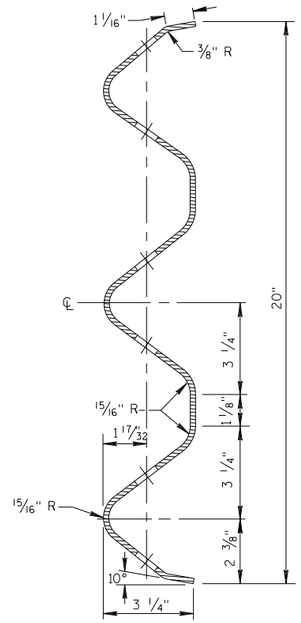


PLATE WASHER DETAIL



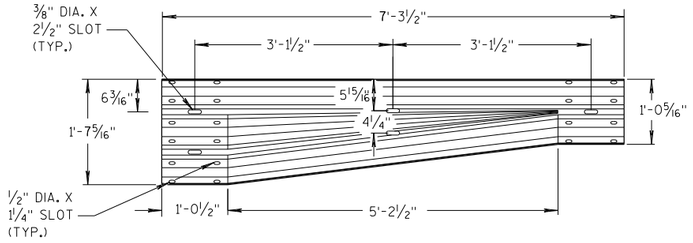
SECTION THRU THRIE BEAM RAIL ELEMENT

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

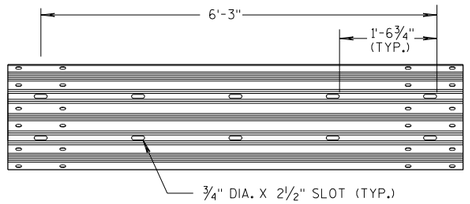
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOF

6

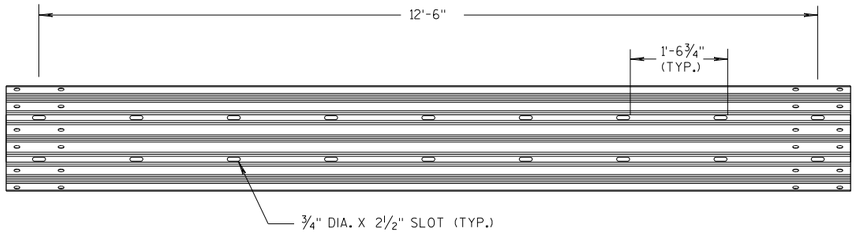
S.D.D. 14 B 45-5b



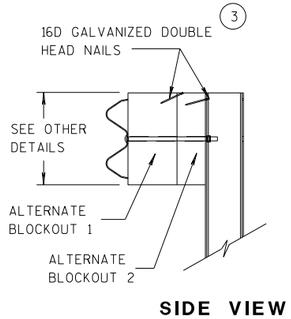
W-BEAM TO THRIE BEAM TRANSITION SECTION



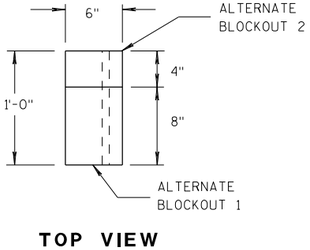
6'-3" THRIE BEAM SECTION



12'-6" THRIE BEAM SECTION

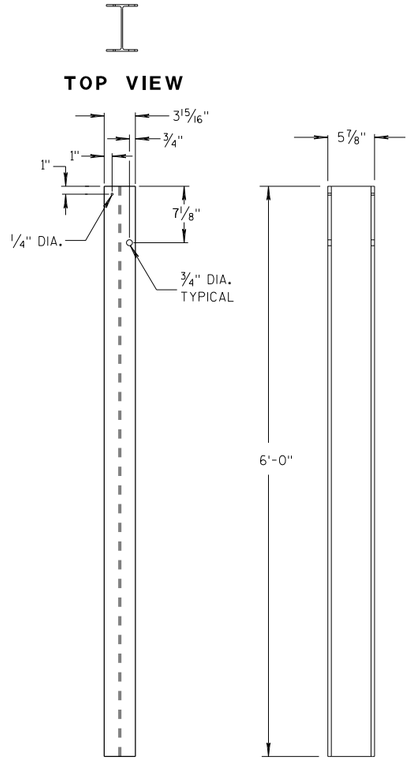


SIDE VIEW



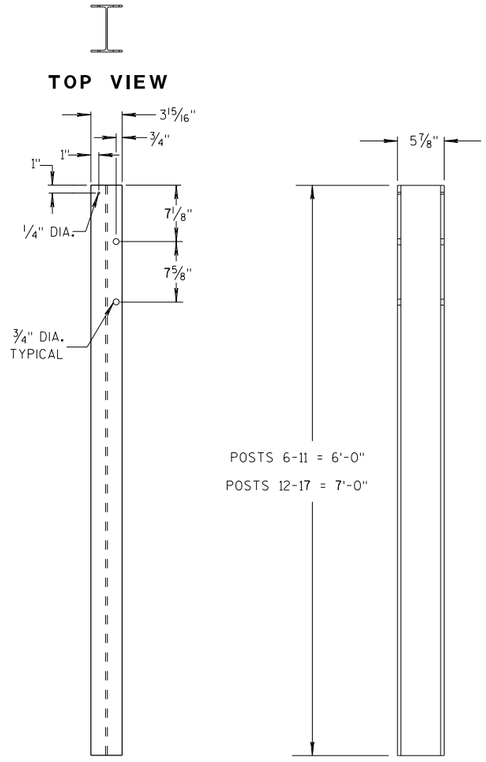
TOP VIEW

ALTERNATE WOOD BLOCKOUT DETAIL



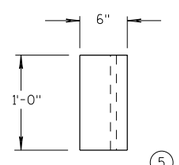
FRONT VIEW SIDE VIEW

STEEL POSTS 1-5 (13)

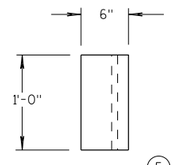


FRONT VIEW SIDE VIEW

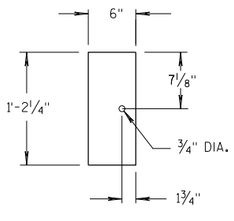
STEEL POSTS 6-17



TOP VIEW (5)

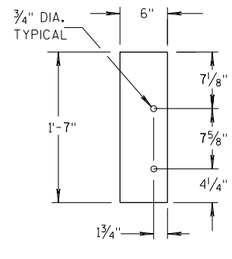


TOP VIEW (5)



FRONT VIEW

BLOCKOUT POSTS 1-5



FRONT VIEW

BLOCKOUT POSTS 6-17

GENERAL NOTES

STEEL POSTS ARE W6X9 OR W6X8.5.

BOLT HOLES FOR POST ARE ON FRONT AND OF SIDE OF POST.

(3) WHEN USING STEEL POSTS AND WOOD BLOCKOUTS INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

(5) WOOD BLOCKS MAY BE CONSTRUCTED OUT OF 2 WOOD BLOCKS. SEE ALTERNATE WOOD BLOCK DETAIL.

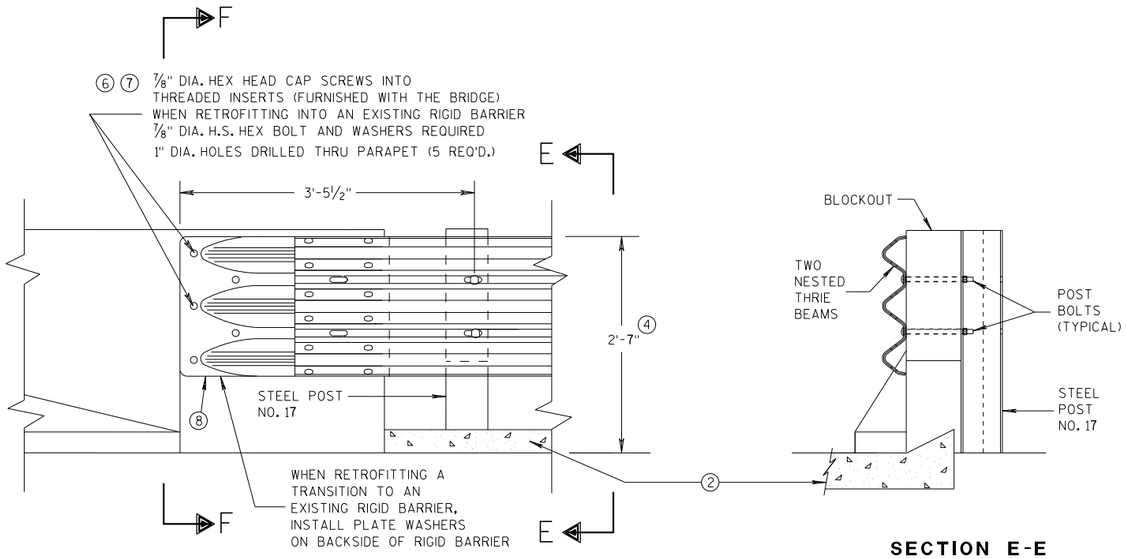
(13) STEEL OR WOOD POST IS ACCEPTABLE AT POST 1. SEE SDD 14B42.

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOF

6

S.D.D. 14 B 45-5c



FRONT VIEW

SECTION E-E

THRIE BEAM CONNECTION TO BRIDGE PARAPET WITH SQUARE ENDS

GENERAL NOTES

THESE ARE TYPICAL CONNECTION DETAILS. ADJUST THE POSTION OF CONNECTIONS TO EXISTING BRIDGES TO FIT THE ACTUAL BRIDGE AND SITE DIMENSIONS.

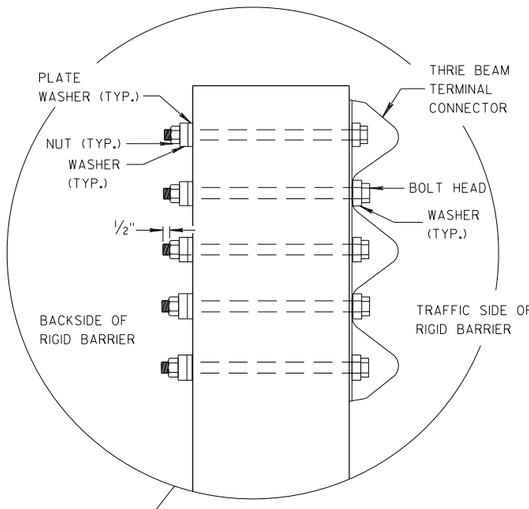
② OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

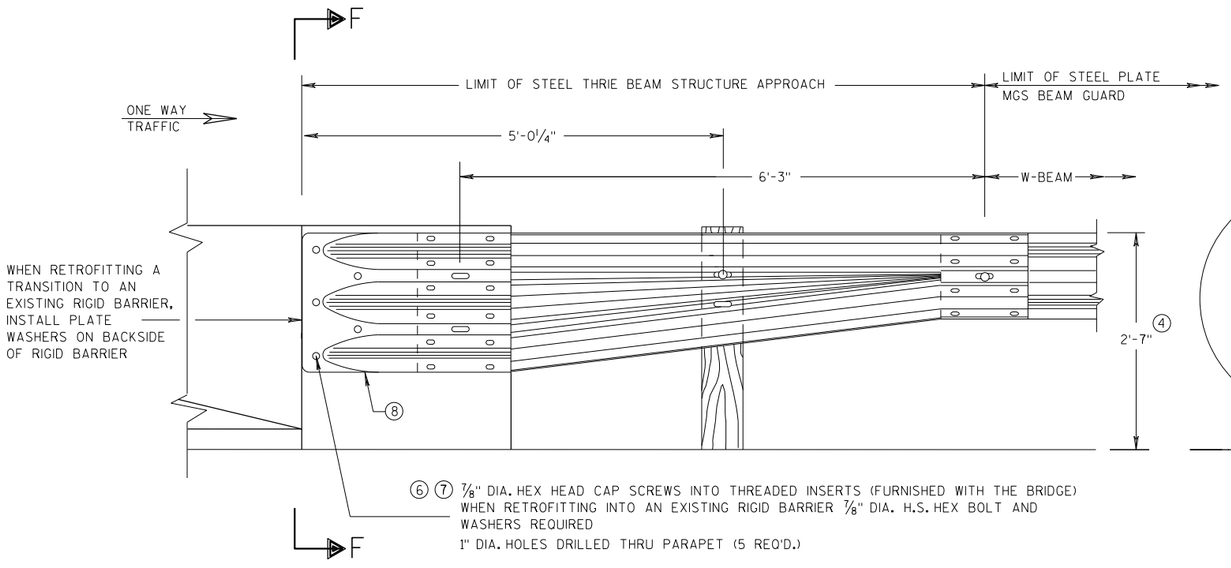
④ TOLERANCE FOR TOP OF BEAM IS ± 1".

⑥ DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

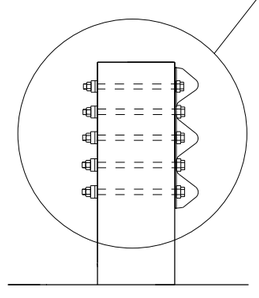
⑦ BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X 5/32" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.

⑧ THE RECESS FOR A W-BEAM CONNECTION, WHICH EXISTS ON SOME PARAPETS OF THIS TYPE, SHALL BE FILLED WITH A TREATED TIMBER BLOCKOUT. BLOCKOUT SIZE IS 1'-6" X 2'-0" X 3 1/2".

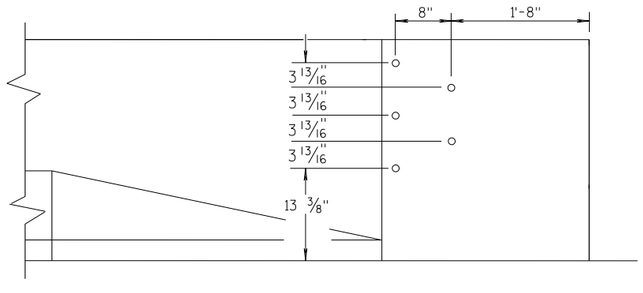




FRONT VIEW



SECTION F-F



DRILL HOLE LOCATION

W BEAM TRANSITION AND CONNECTION TO BRIDGE PARAPETS WITH SQUARE ENDS

(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
07/2018 DATE
/S/ Rodney Taylor
ROADWAY STANDARDS D UNIT SUPERVI
NT
FHWA

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S.D.D. 14 B 45-5d

6

S.D.D. 14 B 45-5d

GENERAL NOTES

THESE ARE TYPICAL CONNECTION DETAILS. ADJUST THE POSTION OF CONNECTIONS TO EXISTING BRIDGES TO FIT THE ACTUAL BRIDGE AND SITE DIMENSIONS.

(2) OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

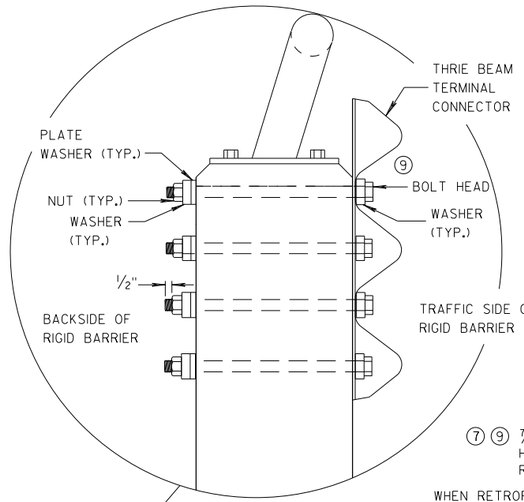
(4) TOLERANCE FOR TOP OF BEAM IS ± 1".

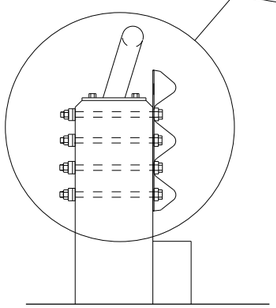
(6) DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

(7) BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X 5/32" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.

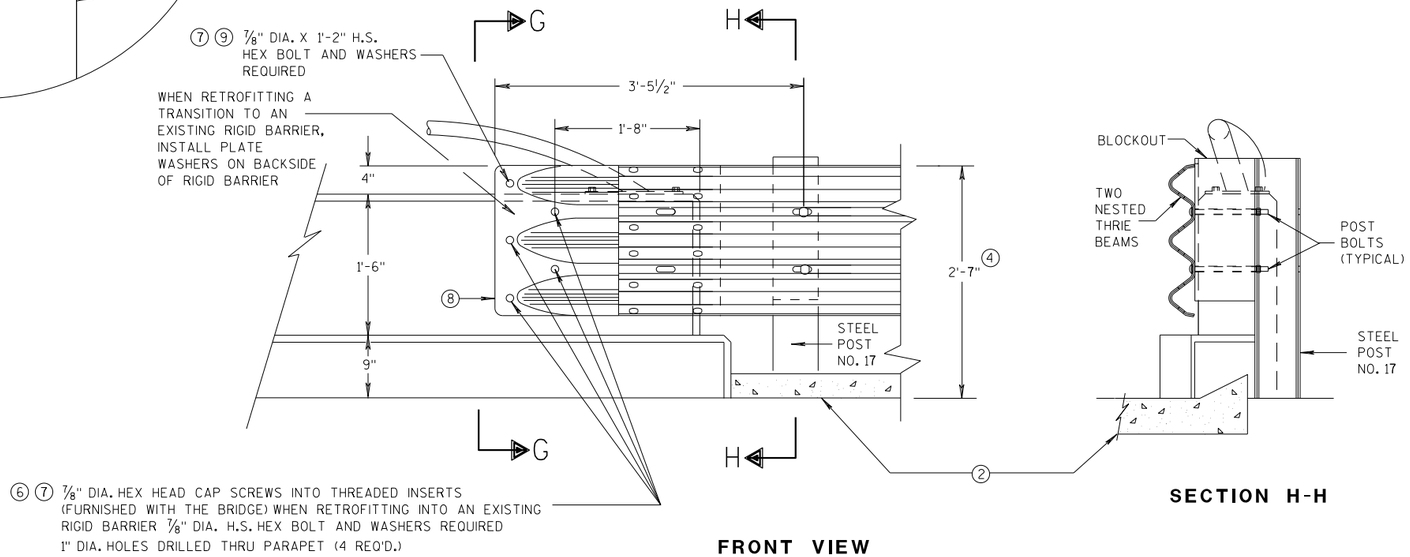
(8) THE RECESS FOR A W-BEAM CONNECTION, WHICH EXISTS ON SOME PARAPETS OF THIS TYPE, SHALL BE FILLED WITH A TREATED TIMBER BLOCKOUT. BLOCKOUT SIZE IS 1'-6" X 2'-0" X 3 ½".

(9) BOLT, NUT AND WASHERS NOT REQUIRED FOR THIS LOCATION WHEN RETROFITTING AN EXISTING PAPAPET AND THE HOLE IS EITHER ABOVE PARAPET OR WITHIN 4 INCHES OF THE EDGE OF PARAPET.





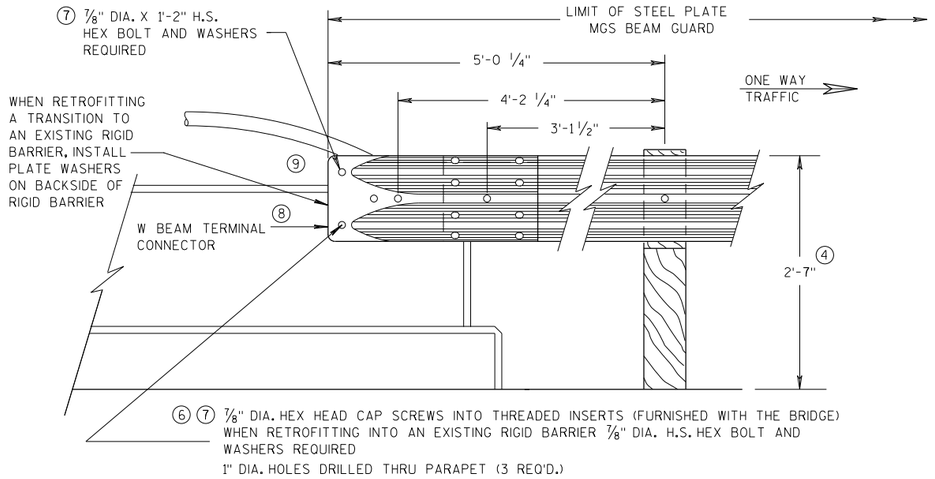
SECTION G-G



FRONT VIEW

SECTION H-H

THRIE BEAM CONNECTION TO VERTICAL FACED PARAPETS



FRONT VIEW

W BEAM CONNECTION TO VERTICAL FACE PARAPET

(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

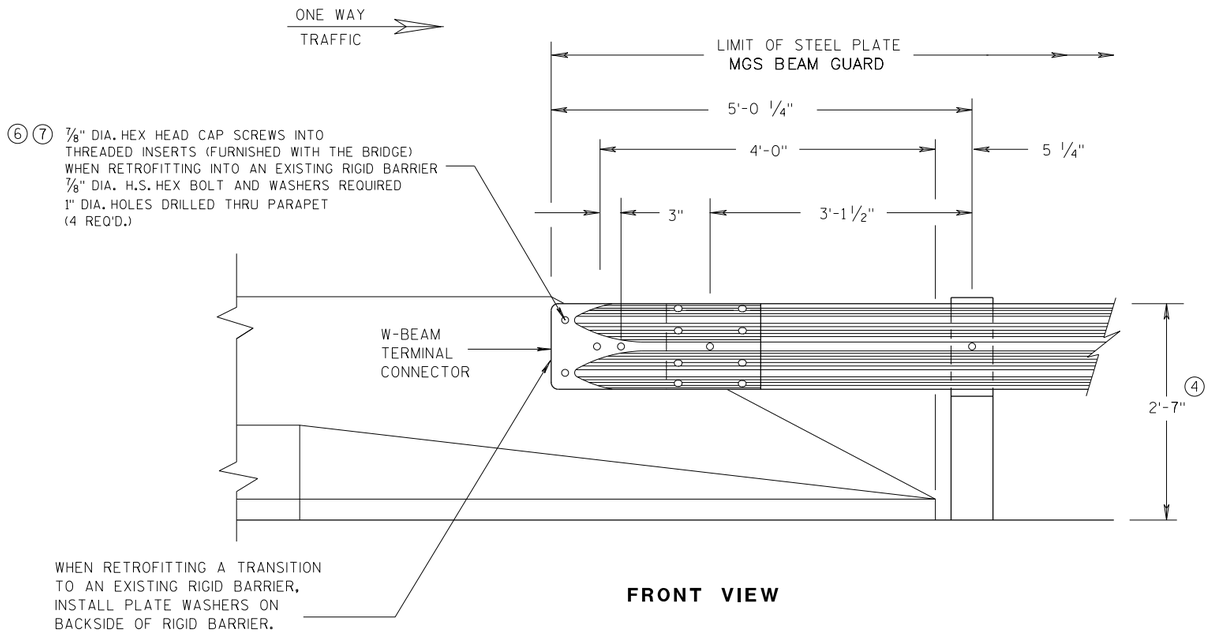
APPROVED
07/2018 — DATE
/S/ Rodney Taylor
ROADWAY STANDARDS D UNIT SUPERVIS — NT
FHWA

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S.D.D. 14 B 45-5e

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S.D.D. 14 B 45-5e



FRONT VIEW

W BEAM CONNECTION TO PARAPETS WITH SLOPED ENDS

(USE ONLY AT TRAFFIC EXIT END OF ONE WAY BRIDGE)

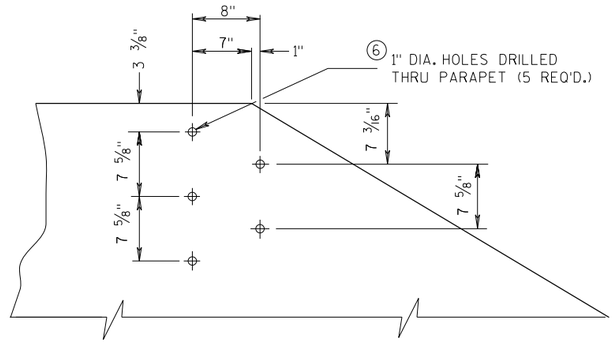
GENERAL NOTES

② OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

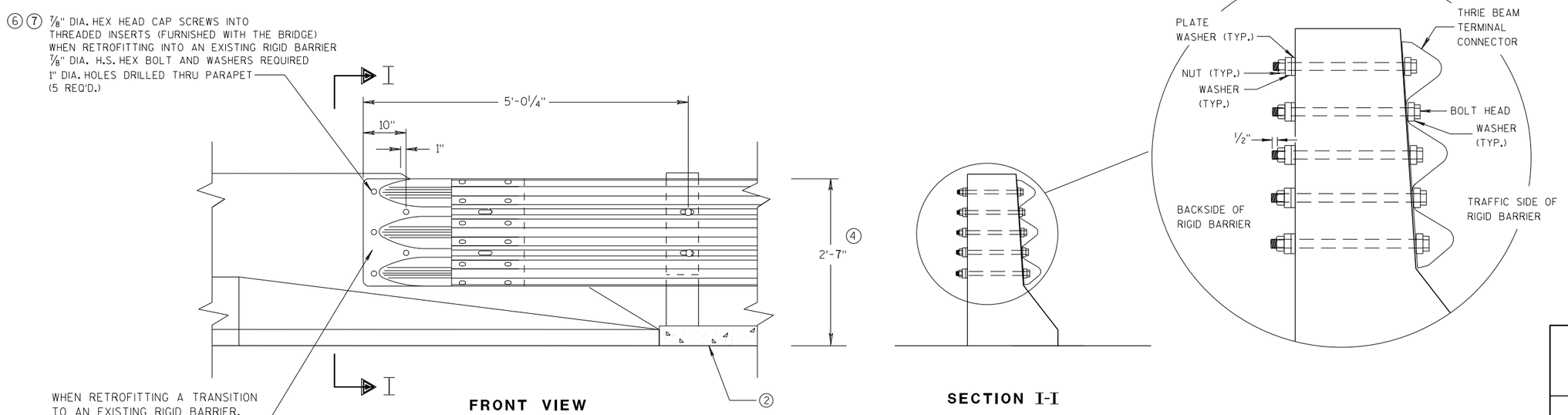
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DRILL HOLE LOCATION AND PATTERN
FOR THRIE BEAM CONNECTION



FRONT VIEW

SECTION I-I

THRIE BEAM CONNECTION TO BRIDGE PARAPETS WITH SLOPED ENDS

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

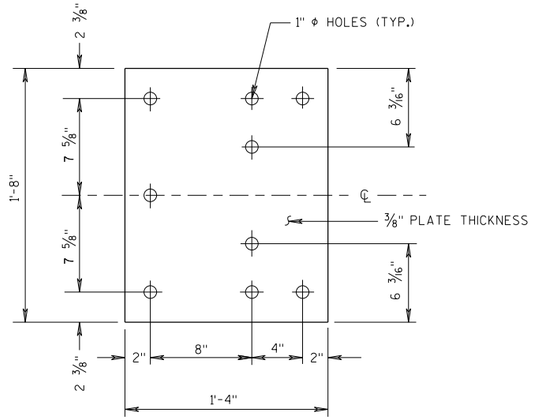
APPROVED
07/2018 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS [illegible] UNIT SUPERVI[illegible]ENT
FHWA

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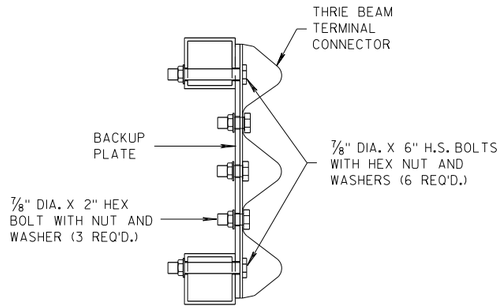
S.D.D. 14 B 45-5f

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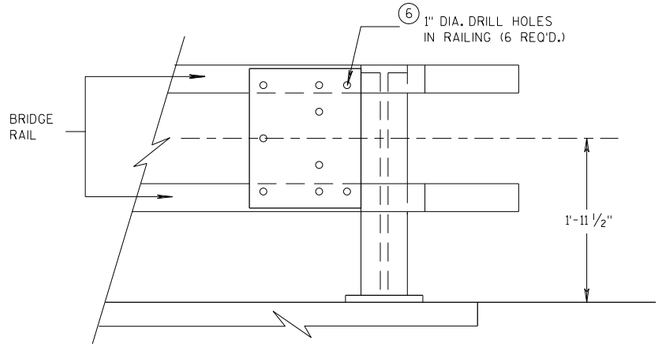
S.D.D. 14 B 45-5f



BACK-UP PLATE DETAIL



SECTION J-J

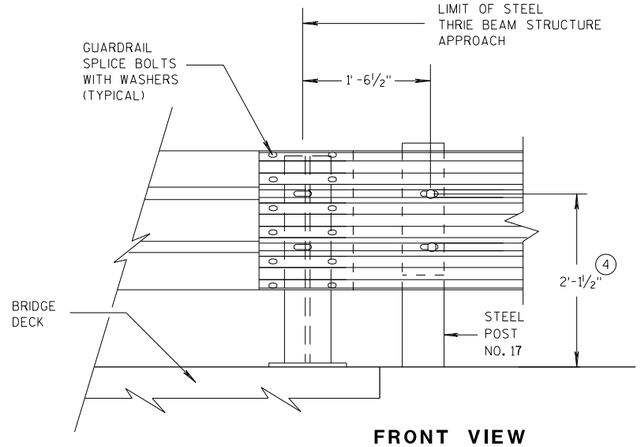


BACK-UP PLATE MOUNTING ONTO BRIDGE RAILING

GENERAL NOTES

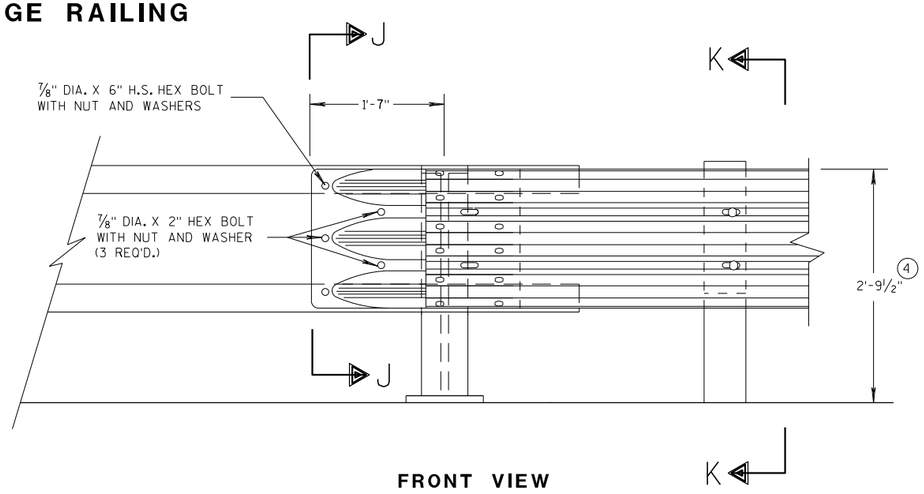
④ TOLERANCE FOR TOP OF BEAM IS ± 1".

⑥ DRILLING HOLES THROUGH THE PAPRPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

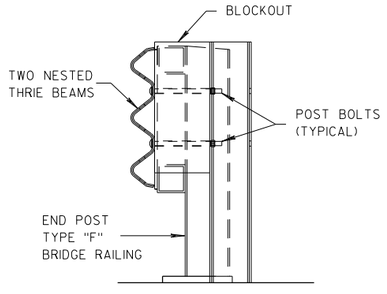


FRONT VIEW

THRIE BEAM CONNECTION TO STEEL RAILING TYPE "W"



FRONT VIEW



SECTION K-K

THRIE BEAM CONNECTION TO TUBULAR RAILING TYPE "F"

MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED 07/2018 — DATE — FHWA

/S/ Rodney Taylor 90 — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

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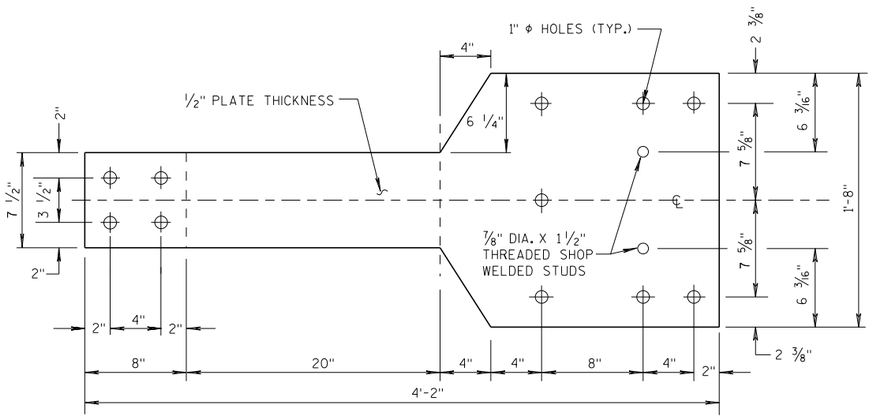
S.D.D. 14 B 45-5g

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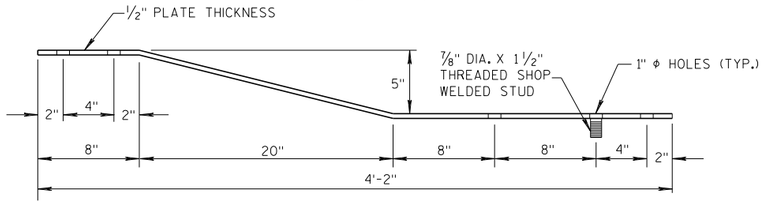
S.D.D. 14 B 45-5g

GENERAL NOTES

(4) TOLERANCE FOR TOP OF W-BEAM RAIL IS ± 1".

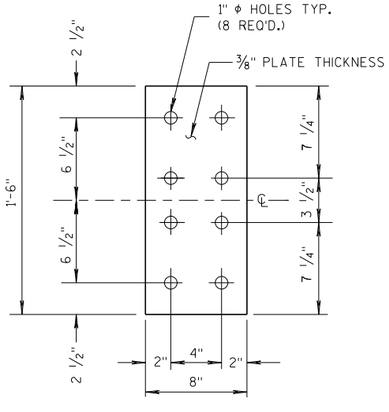


FRONT VIEW



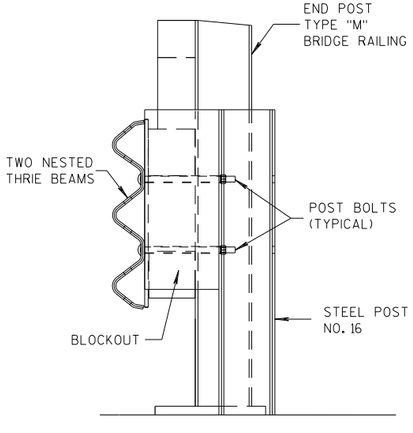
PLAN VIEW

BACK-UP PLATE DETAIL, TYPE "M"

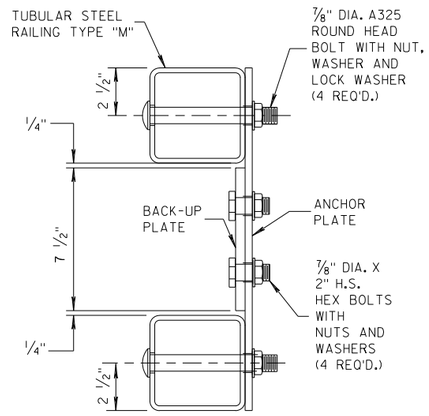


FRONT VIEW

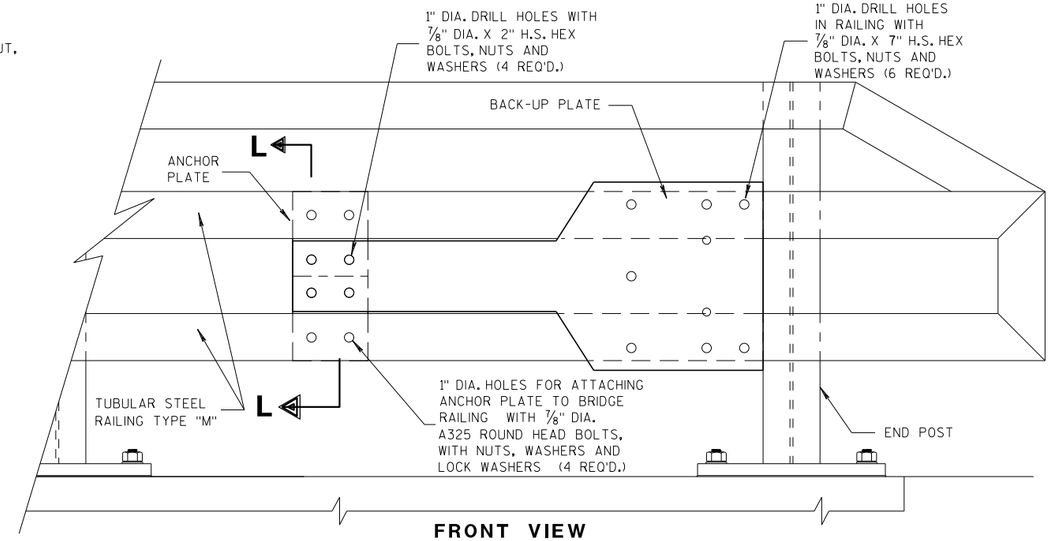
ANCHOR PLATE DETAIL, TYPE "M"



SECTION M-M

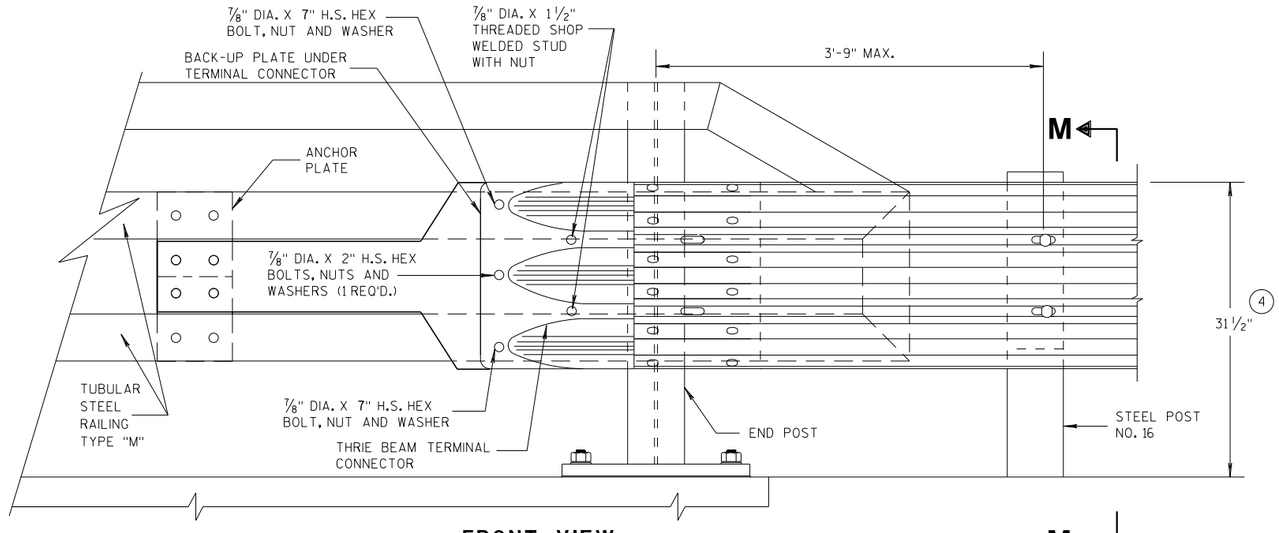


SECTION L-L

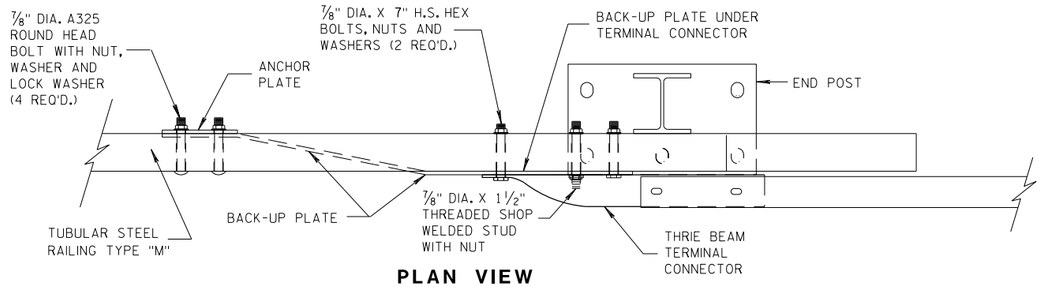


FRONT VIEW

ANCHOR AND BACK-UP PLATE MOUNTING TO BRIDGE RAILING, TYPE "M"



FRONT VIEW



PLAN VIEW

THRIE BEAM CONNECTION TO TUBULAR RAILING, TYPE "M"

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

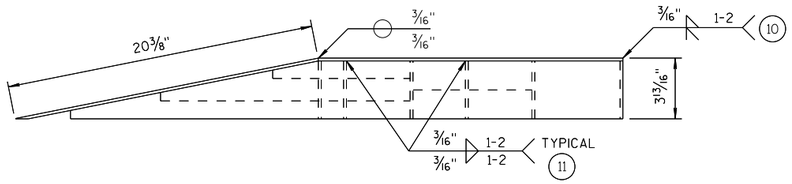
APPROVED
07/2018 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS UNIT SUPERVISOR
FHWA

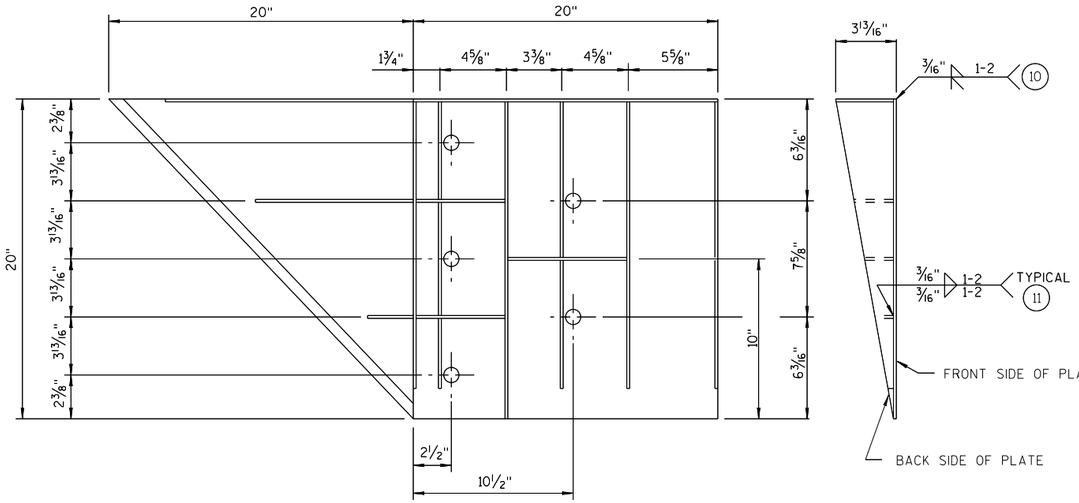
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S.D.D. 14 B 45-5h

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S.D.D. 14 B 45-5h





WELDING INSTRUCTION

(VIEWED FROM BACK SIDE OF PLATE)

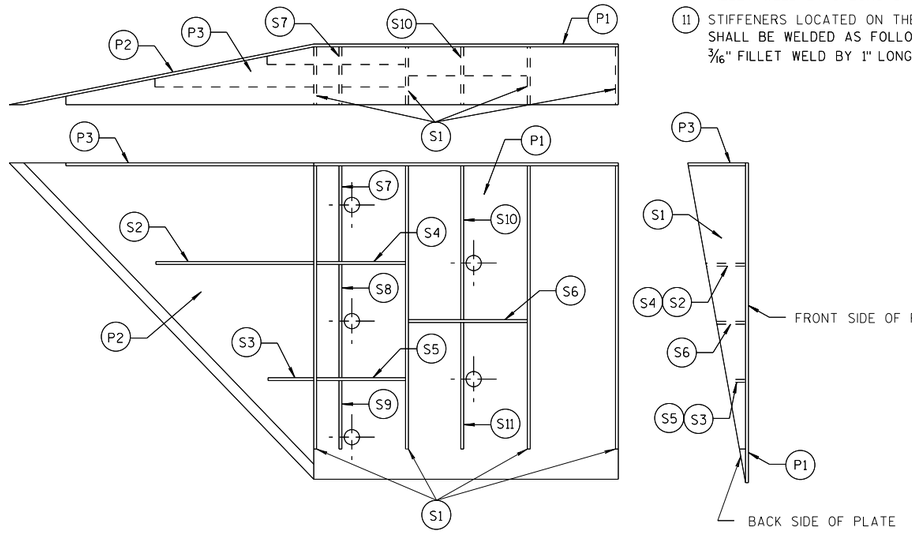


PLATE AND STIFFENER IDENTIFICATION

(VIEWED FROM BACK SIDE OF PLATE)

GENERAL NOTES

COVER PLATE PANELS ARE 3/16" THICK.

ALL STIFFENERS ARE 1/4" THICK.

CONNECTOR PLATE SHALL BE FABRICATED FROM ASTM GRADE A36 STEEL AND GALVANIZED.

FOR GALVANIZED REQUIREMENTS, SEE SECTION 614 OF THE STANDARD SPECIFICATIONS.

ALL HOLE DIAMETERS SHALL BE 1".

FOR OPPOSITE SIDE INSTALLATION MIRROR DRAWINGS.

(10) STIFFENERS LOCATED AT THE OUTSIDE EDGES OF THE COVER PLATES SHALL BE WELDED AS FOLLOWS:
SINGLE BEVEL GROOVE WELD ON EXTERNAL SIDES AND 3/16" FILLET WELD BY 1" LONG SPACED AT 2" ON INTERNAL SIDES.

(11) STIFFENERS LOCATED ON THE INSIDE OF THE COVER PLATE SHALL BE WELDED AS FOLLOWS:
3/16" FILLET WELD BY 1" LONG SPACED AT 2".

CONNECTOR PLATE DIMENSION (PER ASSEMBLY)

PLATE	QUANTITY	SHAPE	SIZE (A x B x C x D)	THICKNESS
P1	1		20" x 20"	3/16"
P2	1		20" x 20" x 28 9/16"	3/16"
P3	1		39" x 3 5/8" x 20" x 19 5/16"	3/16"
S1	4		18 7/16" x 3 5/8" x 18 3/4"	1/4"
S2	1		10 1/4" x 2 7/16" x 10 3/8" x 1/2"	1/4"
S3	1		3" x 1 1/16" x 3 1/8" x 1/2"	1/4"
S4	1		6 1/8" x 2 7/16"	1/4"
S5	1		6 1/8" x 1 1/16"	1/4"
S6	1		7 3/4" x 1 3/4"	1/4"
S7	1		2 9/16" x 6" x 3 5/8" x 5 7/8"	1/4"
S8	1		1 5/32" x 7 1/2" x 2 1/2" x 7 3/8"	1/4"
S9	1		6 1/16" x 6 3/16" x 1 3/32"	1/4"
S10	1		1 7/8" x 9 7/8" x 3 5/8" x 9 11/16"	1/4"
S11	1		8 1/2" x 8 3/4" x 1 13/16"	1/4"

SINGLE SLOPE CONNECTION PLATE

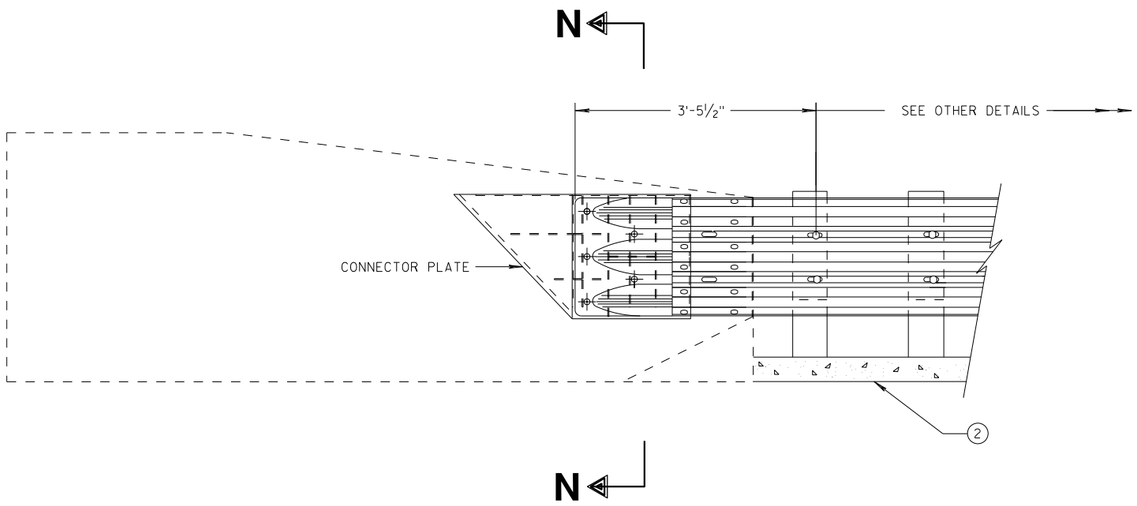
MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

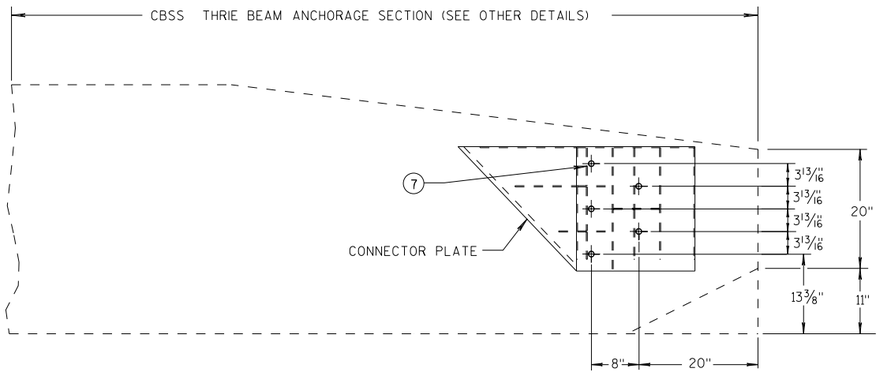
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7/2018
DATE
FHWA

/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT
UNIT SUPERVISOR

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S.D.D. 14 B 45-5i



THRIE BEAM CONNECTION TO SINGLE SLOPE BARRIER



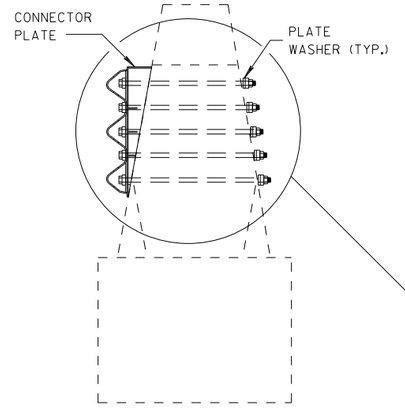
SINGLE SLOPE CONNECTION PLATE PLACEMENT

GENERAL NOTES

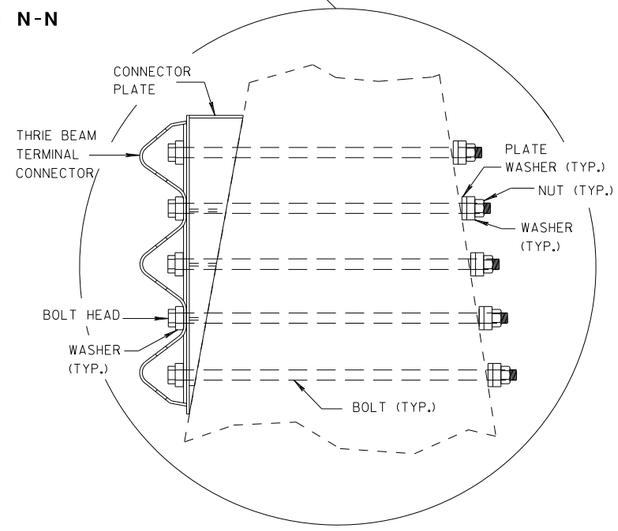
CONNECTOR PLATE, DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

(2) OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

(7) BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X 5/32" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.



SECTION N-N



MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

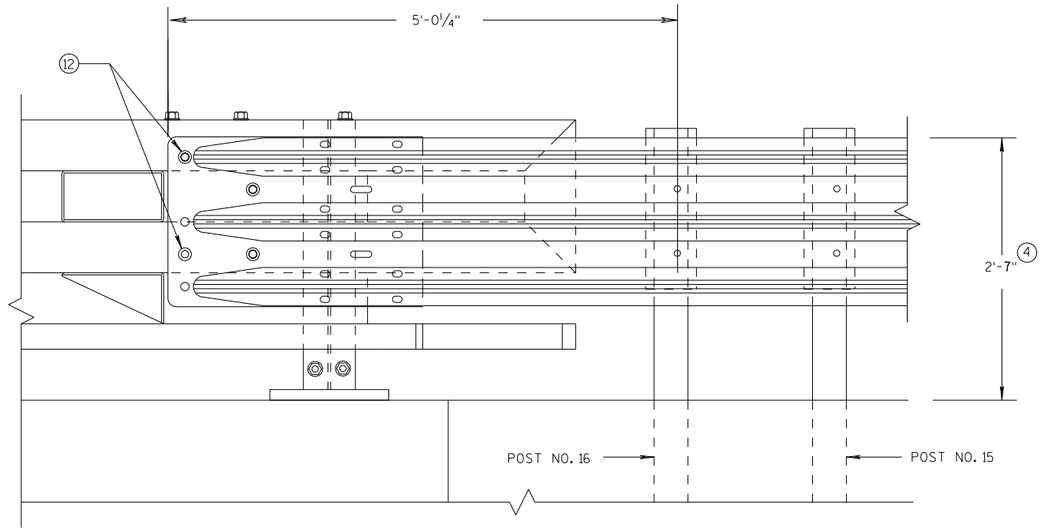
APPROVED
7/2018
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS DI
UNIT SUPERVIS
FHWA

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S.D.D. 14 B 45-5j

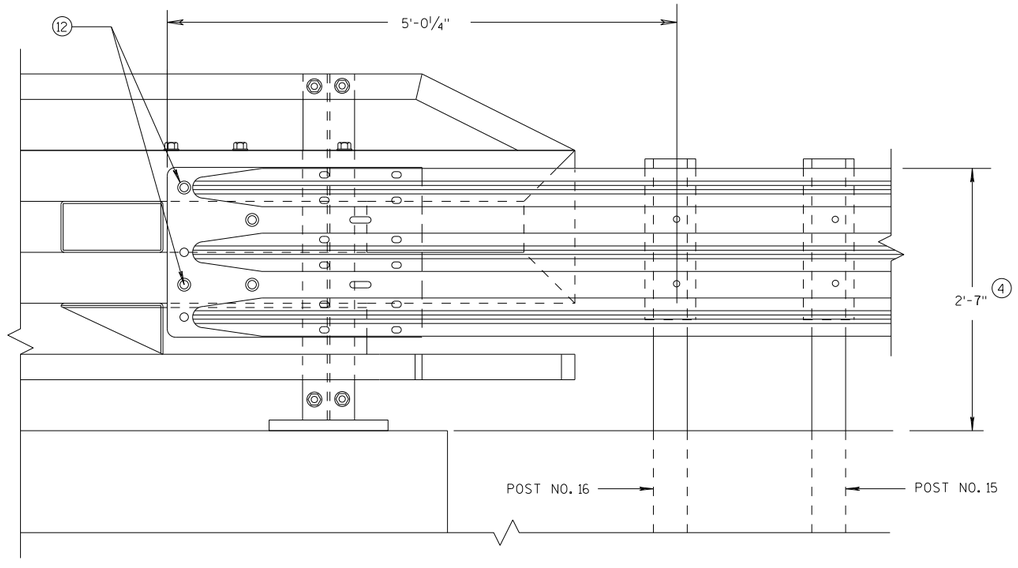
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S.D.D. 14 B 45-5j



ELEVATION OF DETAIL AT NY3 END POST

THRIE BEAM RAIL ATTACHMENT



ELEVATION OF DETAIL AT NY4 END POST

THRIE BEAM RAIL ATTACHMENT

GENERAL NOTES

(4) TOLERANCE FOR TOP OF BEAM IS ± 1".

(12) BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. ON BACKSIDE OF PARAPET ONE ROUND WASHER, AND NUT REQUIRED. BOLT THREAD IS TO EXTEND 1/2-INCH BEYOND NUT.

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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7/2018
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS D
UNIT SUPERVIS

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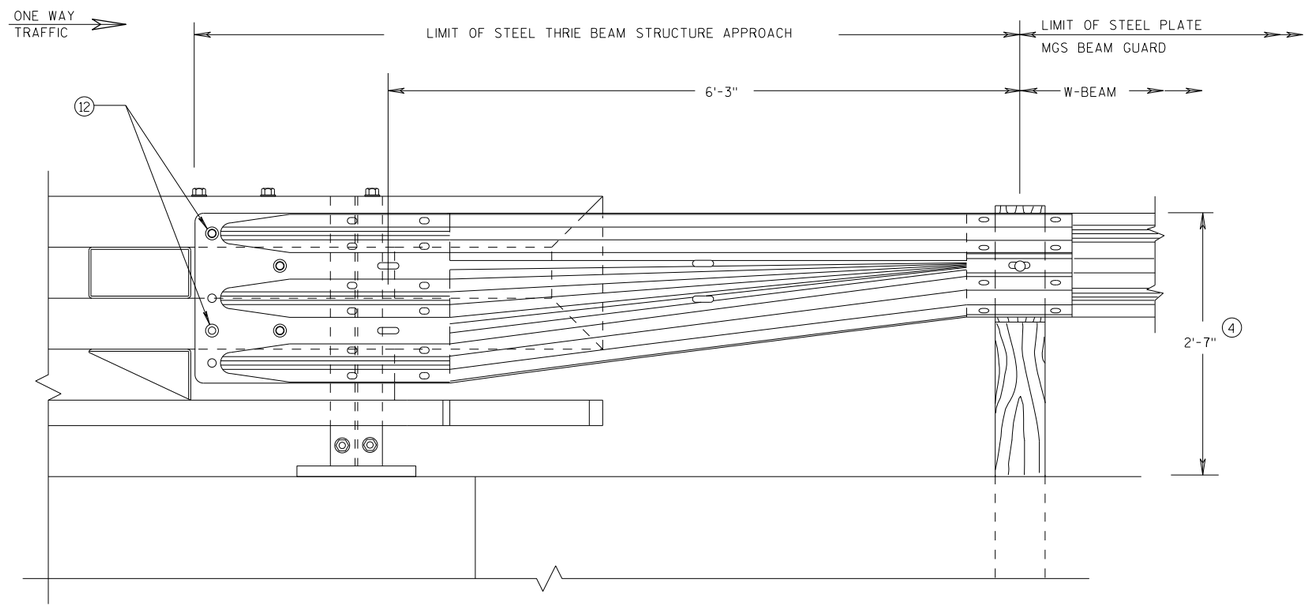
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S.D.D. 14 B 45-5k

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S.D.D. 14 B 45-5k



FRONT VIEW

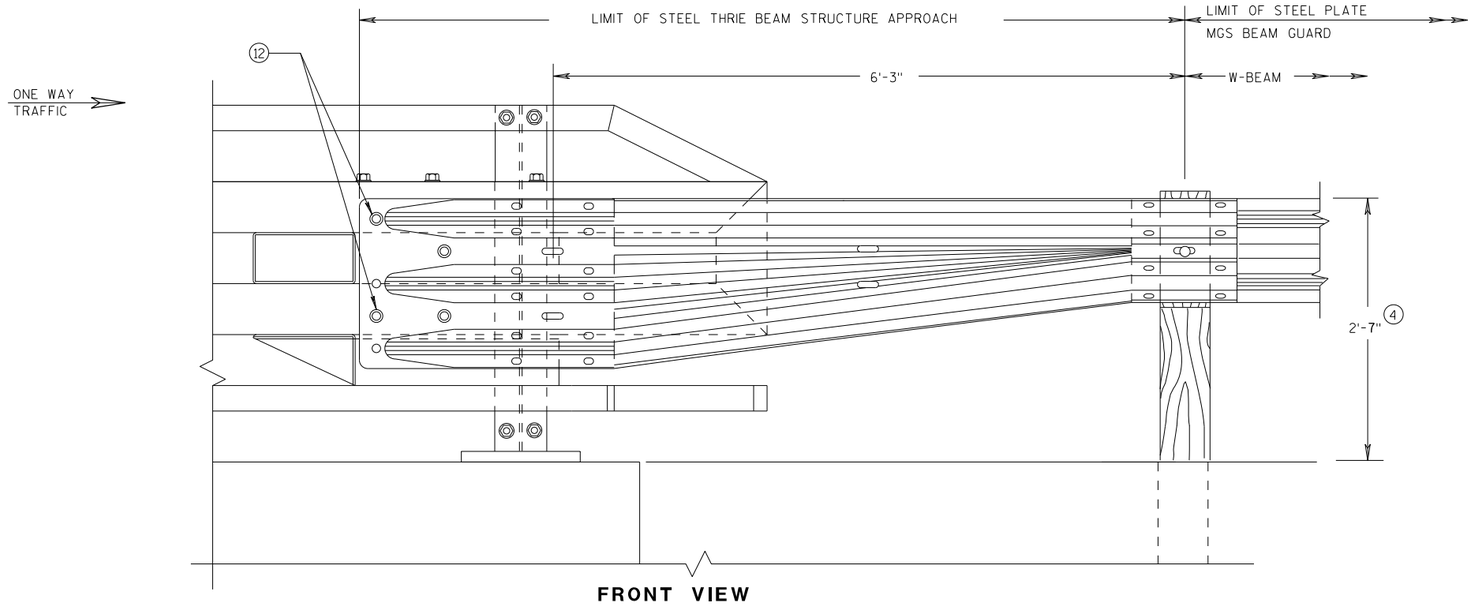
W BEAM TRANSITION AND CONNECTION TO BRIDGE RAILING TYPE "NY3"

(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)

GENERAL NOTES

(4) TOLERANCE FOR TOP OF BEAM IS ± 1".

(12) BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. ON BACKSIDE OF PARAPET ONE ROUND WASHER, AND NUT REQUIRED. BOLT THREAD IS TO EXTEND 1/2-INCH BEYOND NUT.



FRONT VIEW

W BEAM TRANSITION AND CONNECTION TO BRIDGE RAILING TYPE "NY4"

(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

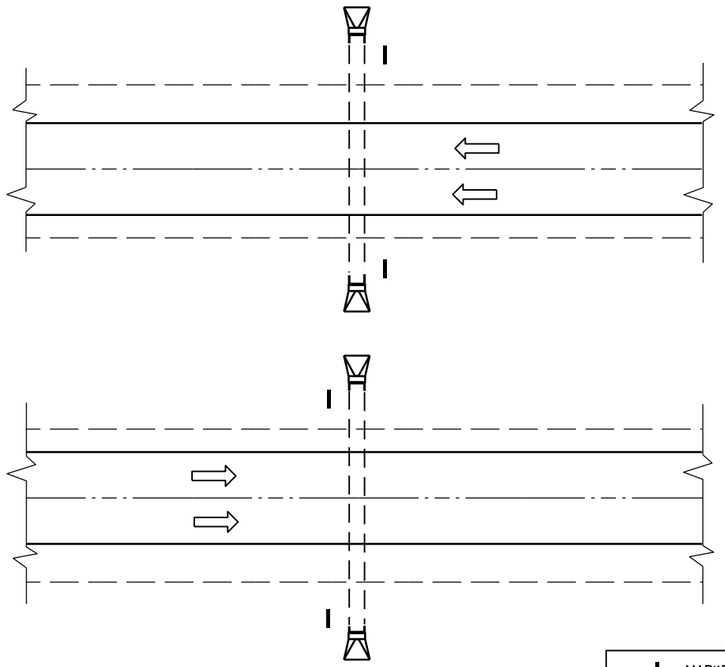
APPROVED
7/2018 DATE
/S/ Rodney Taylor
ROADWAY STANDARDS D UNIT SUPERVIS
FHWA

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S.D.D. 14 B 45-5L

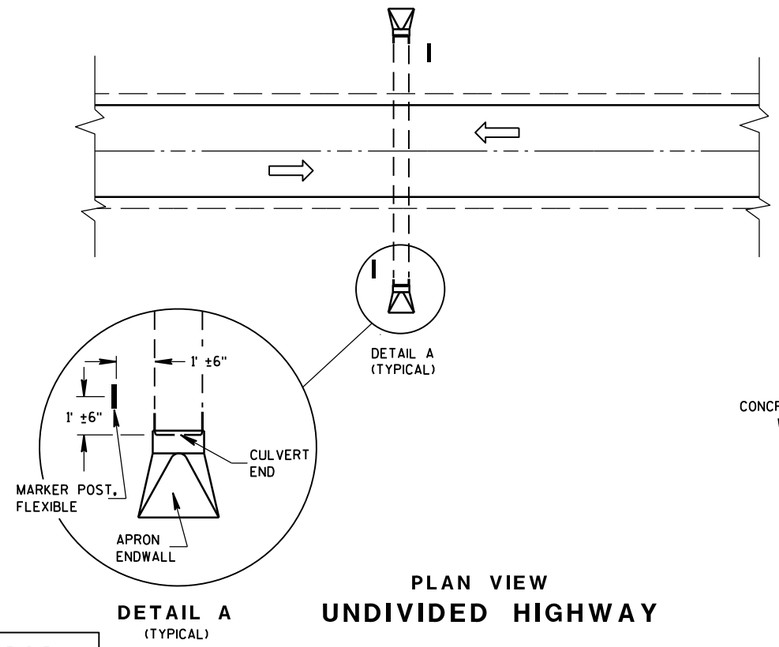
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S.D.D. 14 B 45-5L



PLAN VIEW

DIVIDED HIGHWAY



DETAIL A
(TYPICAL)

PLAN VIEW

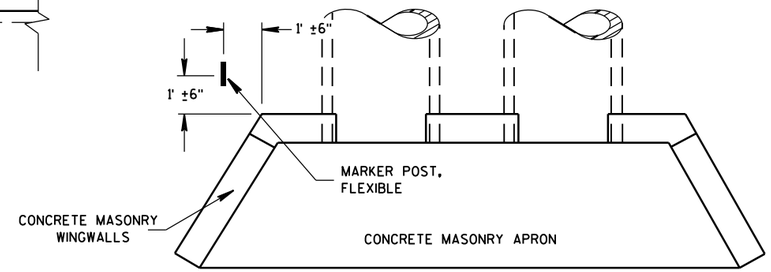
UNDIVIDED HIGHWAY

MARKER POST, FLEXIBLE

DIRECTION OF TRAFFIC FLOW

GENERAL NOTES

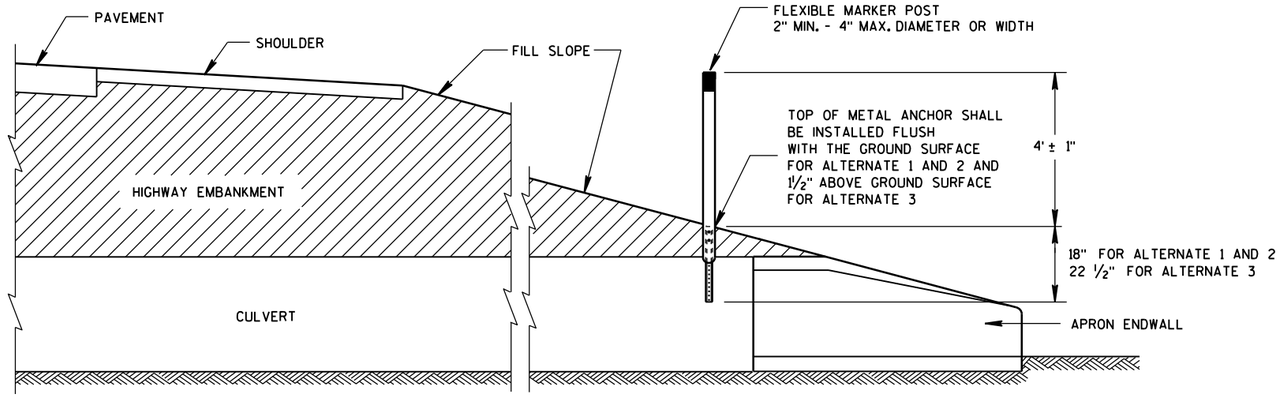
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.



PLAN VIEW

CONCRETE MASONRY ENDWALLS FOR CULVERT PIPE AND PIPE ARCH

FLEXIBLE MARKER POST LOCATION



CROSS SECTION

FLEXIBLE MARKER POST

FLEXIBLE MARKER POST FOR CULVERT END

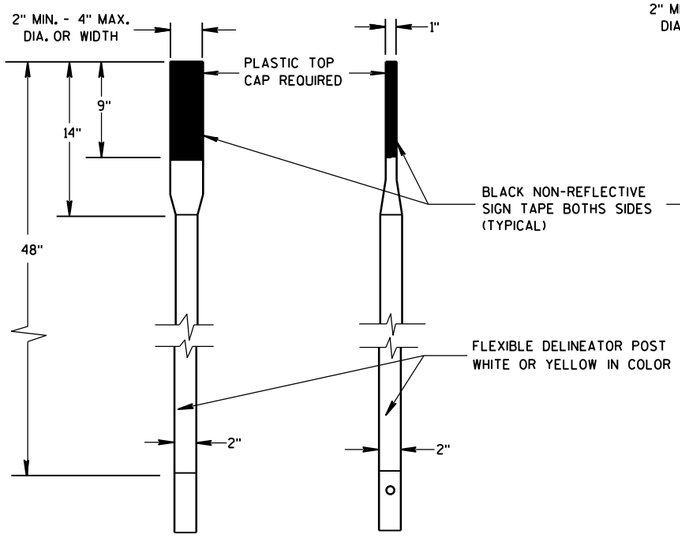
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

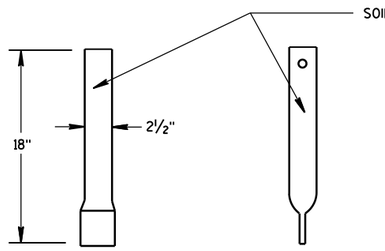
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S.D.D. 15 A 3-2a

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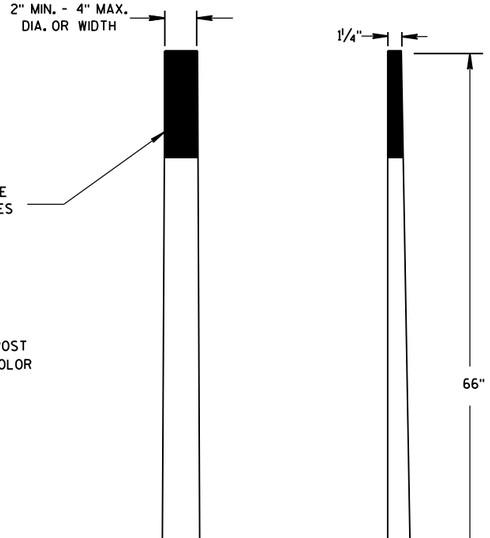
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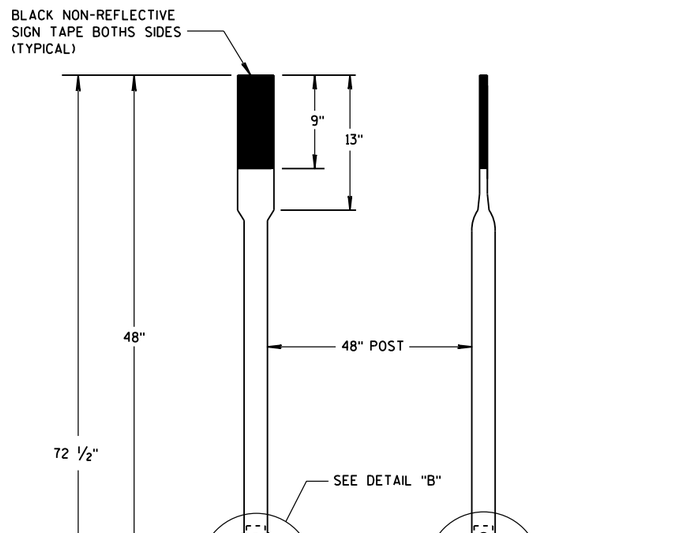
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

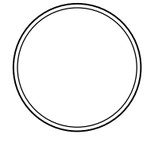
ALTERNATE 2



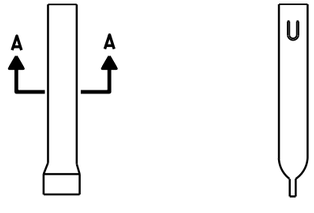
FRONT VIEW SIDE VIEW

ALTERNATE 3

FLEXIBLE MARKER POSTS

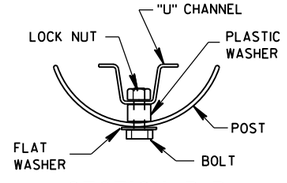


SECTION A-A

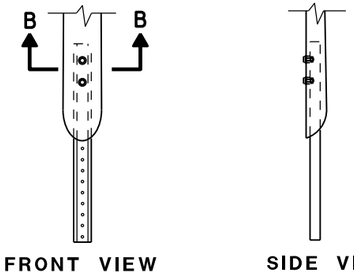


FRONT VIEW SIDE VIEW

ALTERNATE 1

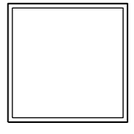


SECTION B-B

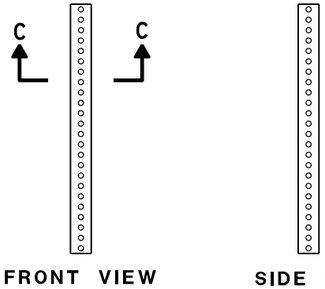


FRONT VIEW SIDE VIEW

ALTERNATE 2



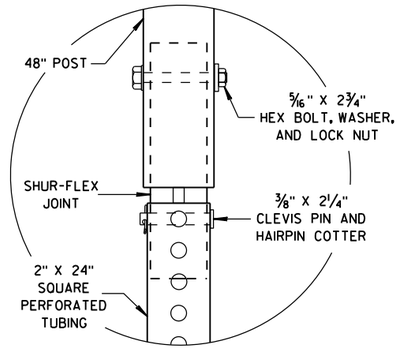
SECTION C-C



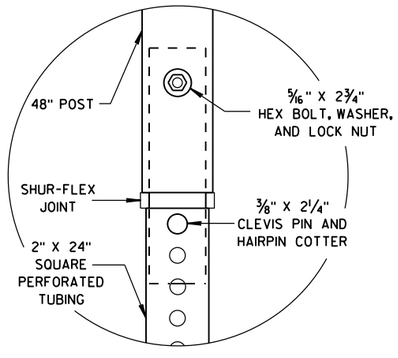
FRONT VIEW SIDE VIEW

ALTERNATE 3

FLEXIBLE MARKER POST ANCHORS



DETAIL B



DETAIL C

FLEXIBLE MARKER POST
FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

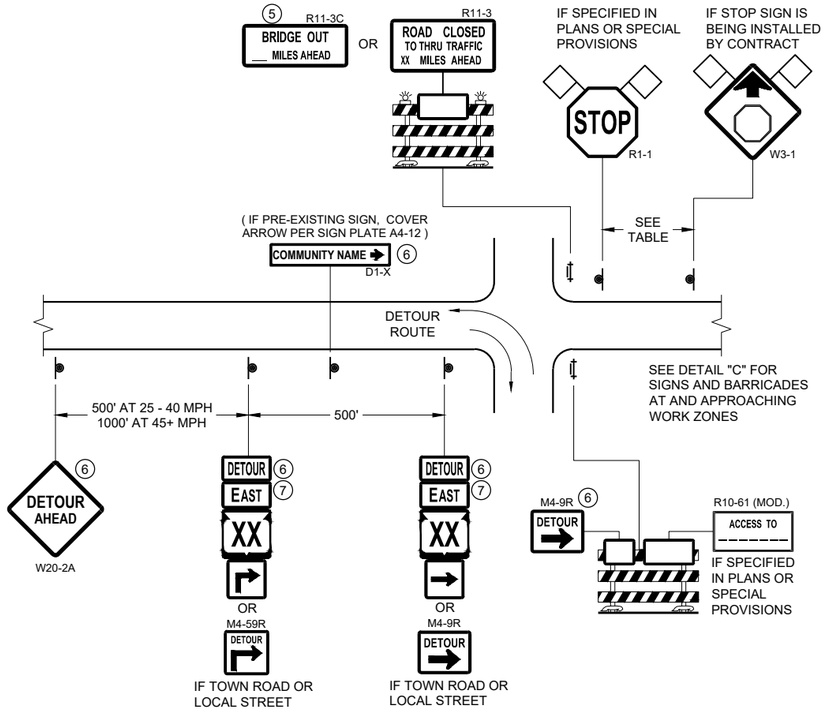
APPROVED
10/1/2012 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

6

S.D.D. 15 A 3-2b

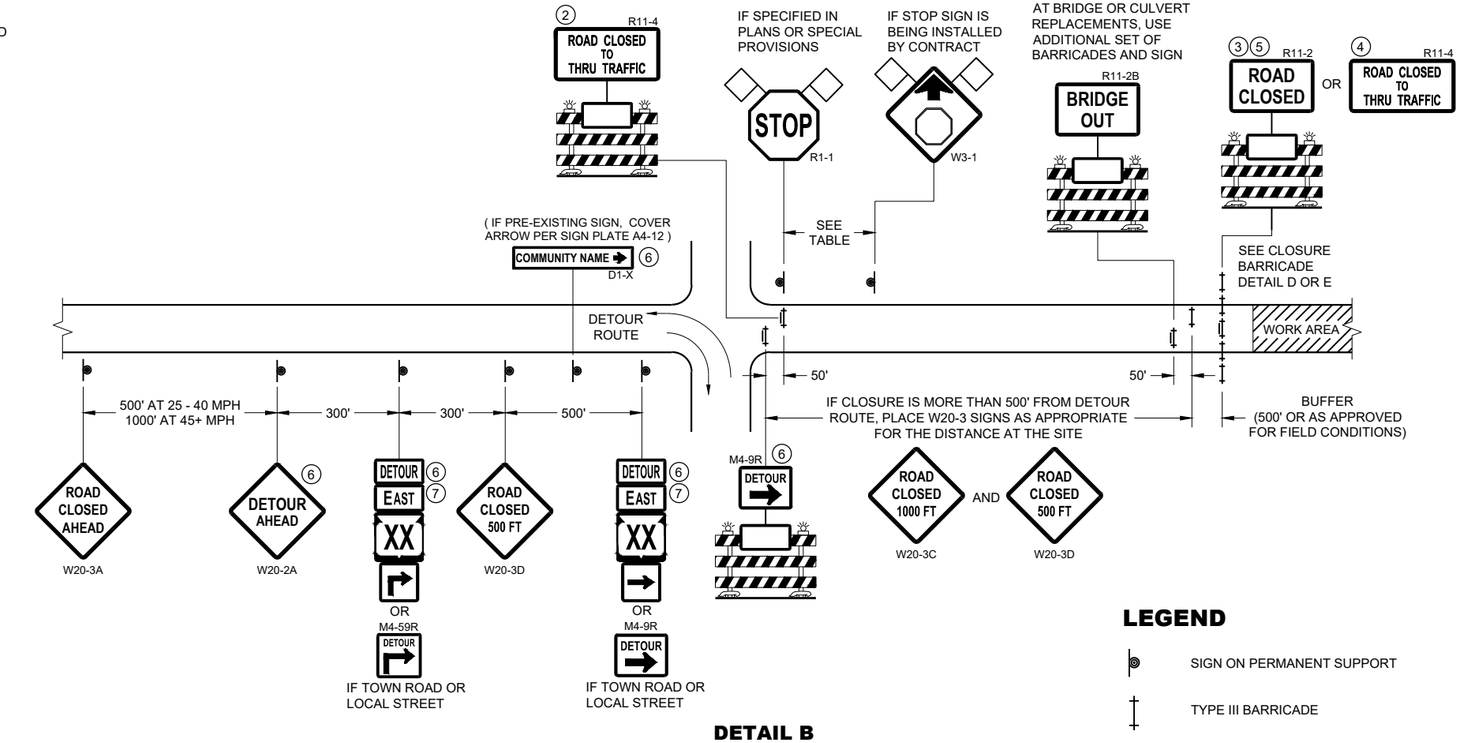
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S.D.D. 15 A 3-2b



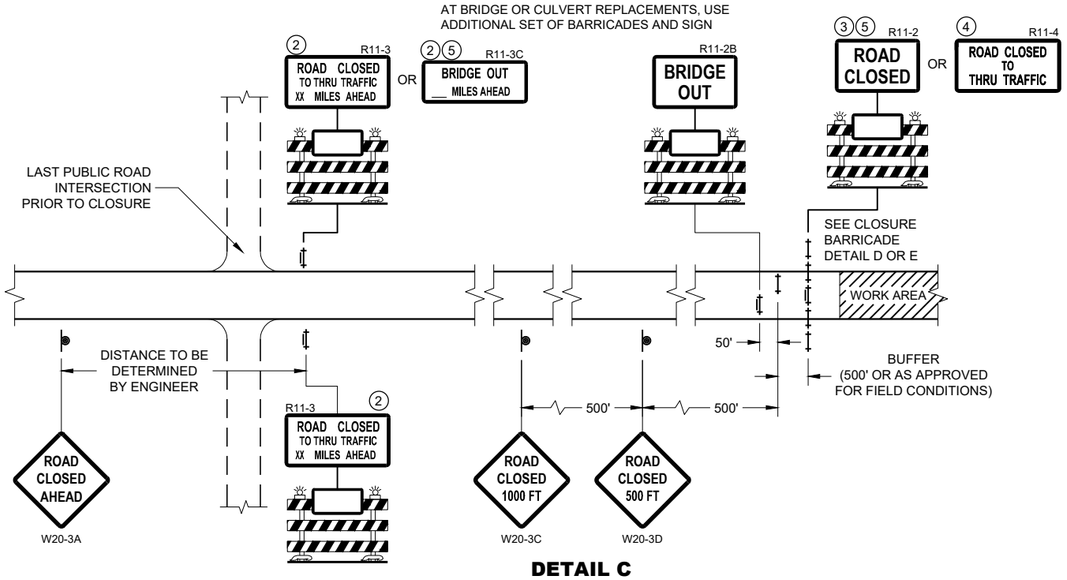
DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE GREATER THAN OR EQUAL TO ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE LESS THAN ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL C
MAINLINE CLOSURE, NO POSTED DETOUR

SPEED LIMIT (MPH)	"STOP AHEAD" ADVANCE WARNING DISTANCE (FT)
25	200
30	200
35	350
40	350
45	500
50	550
55	750

SEE SDD 15C2-SHEET "b"
FOR GENERAL NOTES
AND FOOTNOTES ① THROUGH ⑦

LEGEND

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA
- FLAGS, 16" X 16" MIN. (ORANGE)

DETOUR M4 - 8
EAST M3 - X
XX M1 - 4 OR XX M1 - 6 OR COUNTY X M1 - 5A
M05 - 1 OR M06 - 1

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

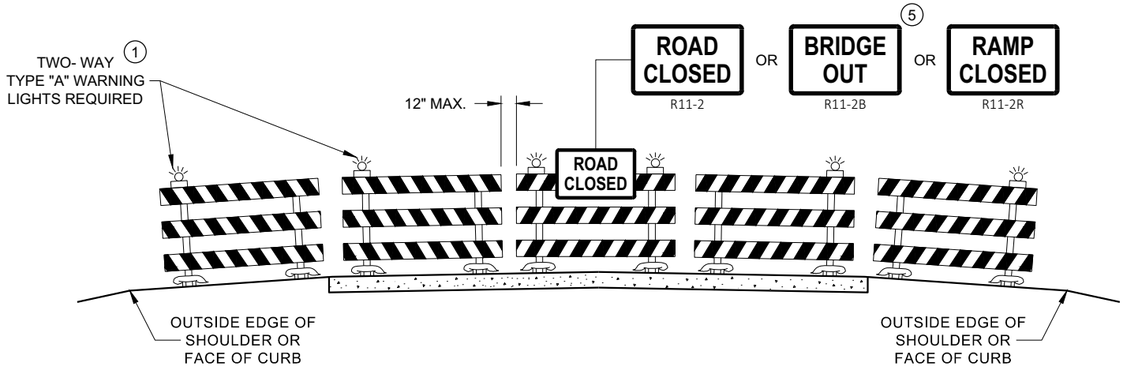
APPROVED
February 2020
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

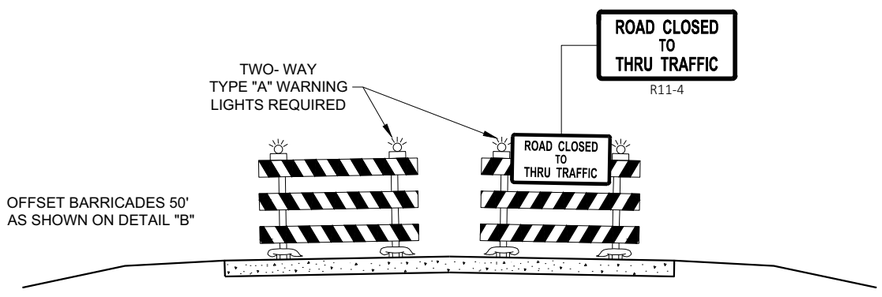
6

SDD 15C02 - 08a

SDD 15C02 - 08a



DETAIL D
ROAD CLOSURE BARRICADE DETAIL
APPROACH VIEW



DETAIL E
LANE CLOSURE BARRICADE DETAIL
APPROACH VIEW

SEE SDD 15C2 - SHEET "a" FOR LEGEND

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND BARRICADES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE", SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL "D" FOR FULL ROAD CLOSURES.

TYPE "A" LOW - INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE R11 - 2, R11 - 3, M4 - 9, R11 - 4, AND R10 - 61 SIGNS PLACED ON THE BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE RAIL OR BOTTOM RAILS.

"WO" AND "MO" SIGNS ARE THE SAME AS "W" AND "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
- R11 - 2 SHALL BE 48" X 30"
- R11 - 3 SHALL, R11 - 4 AND R10 - 61 SHALL BE 60 " X 30"
- M4 - 9 SHALL BE 30" X 24"
- M3 - X SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M4 - 8 SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M1 - 4, M1 - 5A AND M1 - 6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS)
- MO5 - 1 AND MO6 - 1 SHALL BE 21" X 21" (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS)
- D1 - X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.
- R1 - 1 SHALL BE 36" X 36"

(1) TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND A MINIMUM OF ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN (APPROX. 8 FOOT LIGHT SPACING.

(2) THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT AN INTERSECTION.

(3) FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL "D".

(4) FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL "E".

(5) FOR BRIDGE OR CULVERT REPLACEMENTS, SUBSTITUTE "BRIDGE OUT" INSTEAD OF "ROAD CLOSED" ON R11 - 2 AND R11 - 3 SIGNS.

(6) INSTALL DETOUR AND COMMUNITY GUIDE SIGNS AND ARROWS ONLY IF SPECIFIED IN THE CONTRACT. IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. MODIFY EXISTING SIGNS WHERE POSSIBLE. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. IF DETOUR SIGNS ARE BEING INSTALLED BY OTHERS, PLACE THE CONTRACTED TRAFFIC CONTROL SIGNS TO ALLOW FOR PLACEMENT OF ALL WARNING, DETOUR AND GUIDE SIGNS AS SHOWN.

(7) "EAST" CARDINAL DIRECTION MARKERS AND RIGHT TURN ARROWS ARE SHOWN. USE OTHER CARDINAL DIRECTIONS AND ARROWS AS APPROPRIATE.

BARRICADES AND SIGNS FOR VARIOUS CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEER
FHWA

6

SDD 15C02 - 08b

6

SDD 15C02 - 08b

THIS DRAWING PROVIDES GENERAL GUIDANCE ON TYPICAL DETOUR SIGN LAYOUT AND SPACING. SEE PROJECT DETOUR SIGNING SHEETS FOR SPECIFIC DETAILS FOR EACH PROJECT.

LEGEND

- SIGN ON PERMANENT SUPPORT
- WORK AREA
- DETOUR — M4 - 8
- EAST — M3 - X
- XX — M1 - 4 OR XX — M1 - 6 OR COUNTY X — M1 - 5A
- M05 - 1 OR M06 - 1 OR M06 - 1

GENERAL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. MODIFY EXISTING SIGNS WHERE POSSIBLE.

THE SPACING BETWEEN TRAFFIC CONTROL AND DETOUR SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

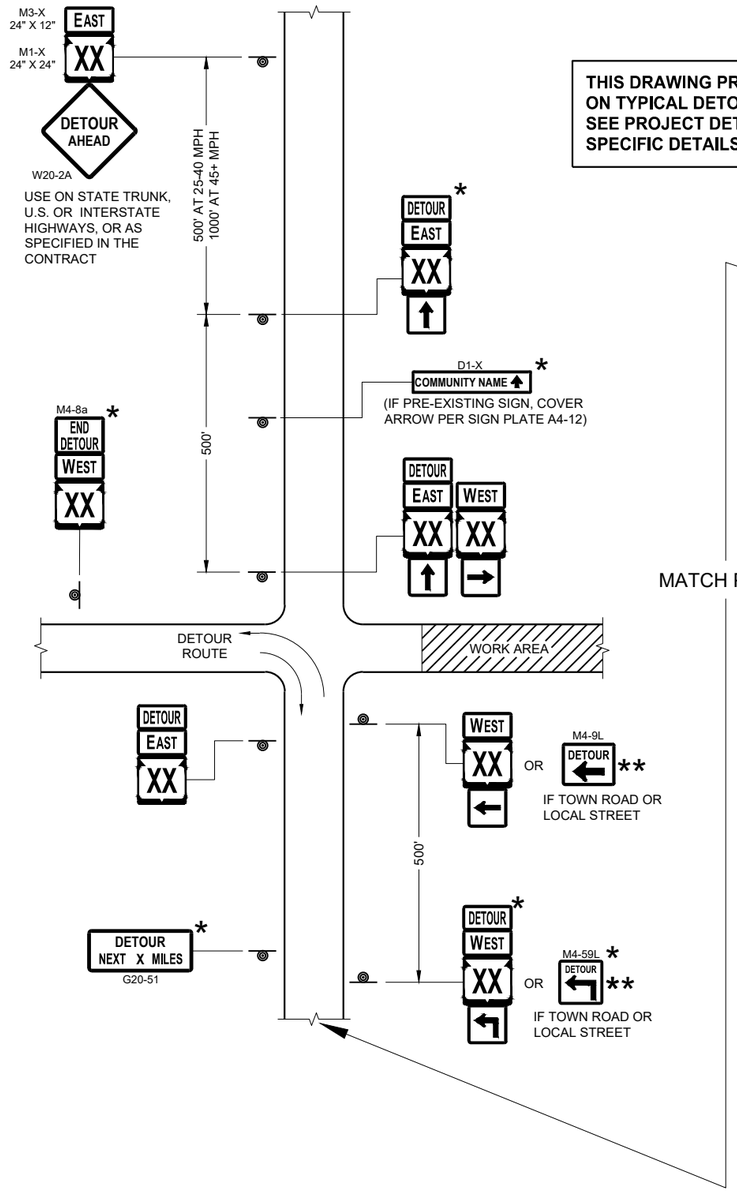
"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

SIGN SIZES SHALL BE AS FOLLOWS:

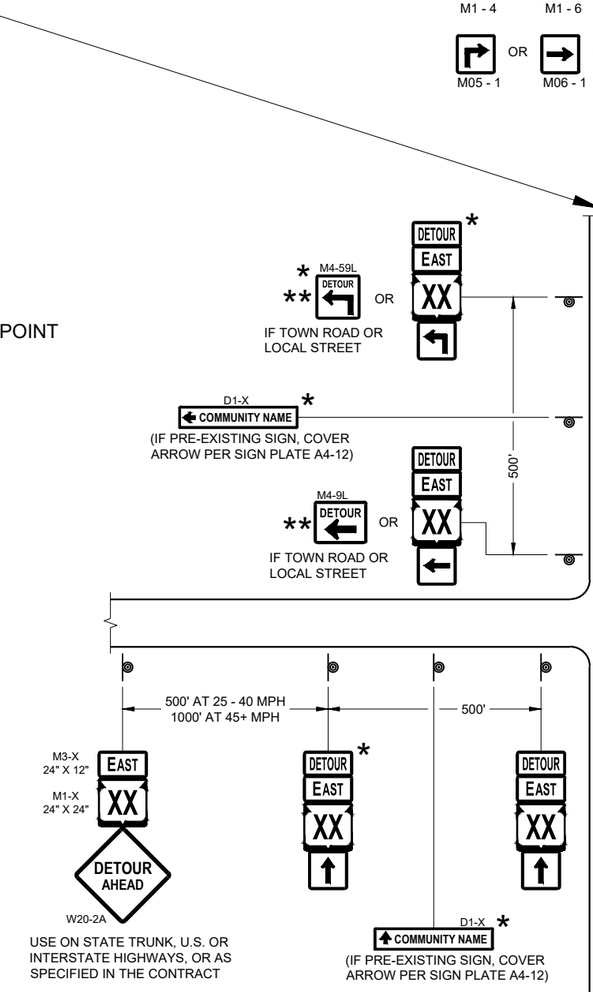
- M3-X SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M4-8 SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M1-4, M1-5A AND M1-6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS)
- M05-1 AND M06-1 SHALL BE 21" X 21" (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS)
- M4-9 AND M4-59 SHALL BE 30" X 24"
- M4-8a SHALL BE 24" X 18"
- G20-51 SHALL BE 60" X 24"
- W20-2A SHALL BE 48" X 48"
- D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.

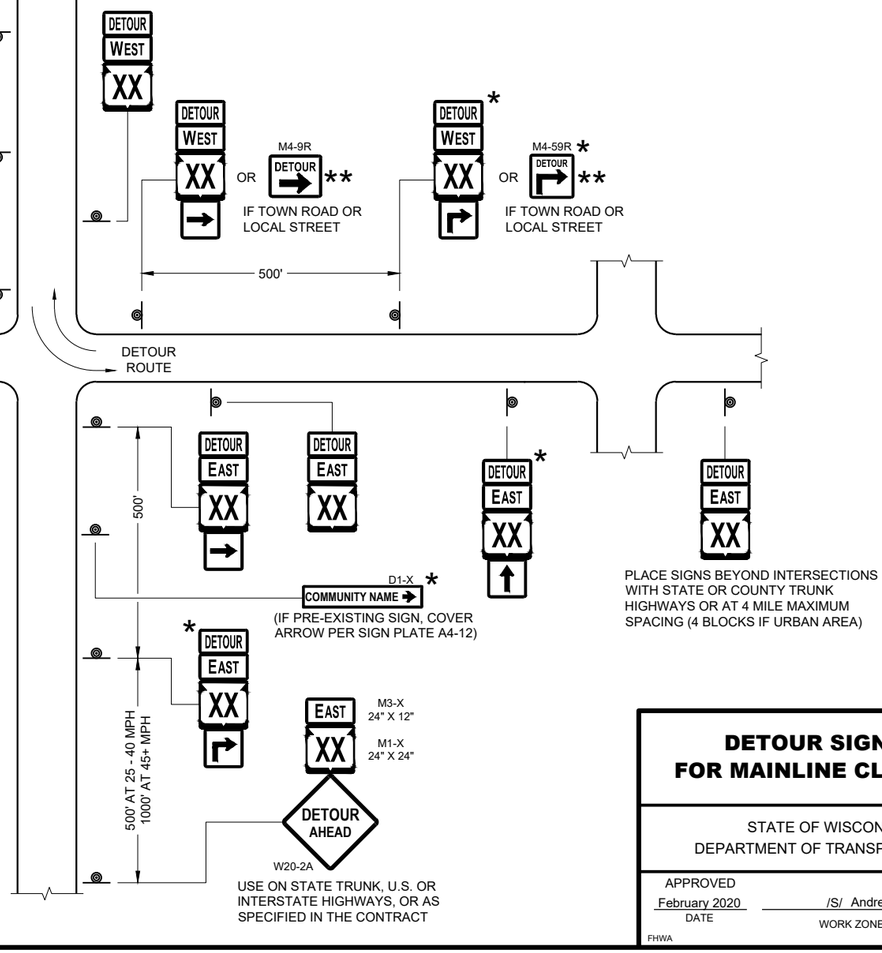
* OPTIONAL SIGNS. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS.

** FOR A TOWN ROAD OR LOCAL STREET DETOURED ONTO A STATE TRUNK HIGHWAY, PLACE A ROAD NAME PLAQUE ABOVE THE M4-9 SIGN AS SPECIFIED IN THE CONTRACT.



MATCH POINT





SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS AND DETAIL A OR B ON SDD SHEET 15C02 - SHEET "a"

DETAIL F
DETOUR SIGNING

DETOUR SIGNING FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

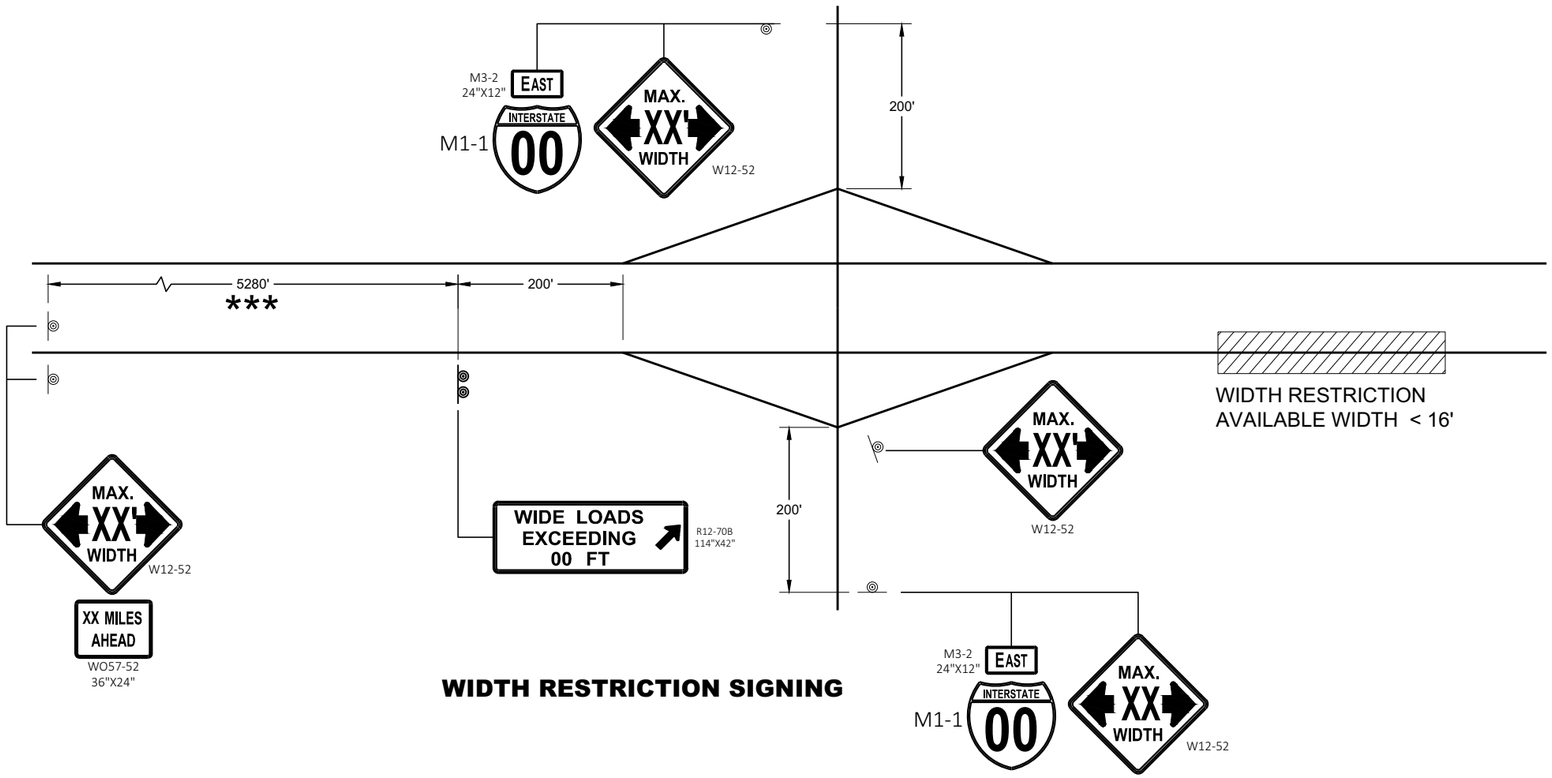
APPROVED
February 2020
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

SDD 15C02 - 08c

6



WIDTH RESTRICTION SIGNING

LEGEND

SIGN ON PERMANENT SUPPORT

GENERAL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL " IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

WIDTH ON SIGN TO BE APPROXIMATELY ONE FOOT LESS THAN AVAILABLE WIDTH.

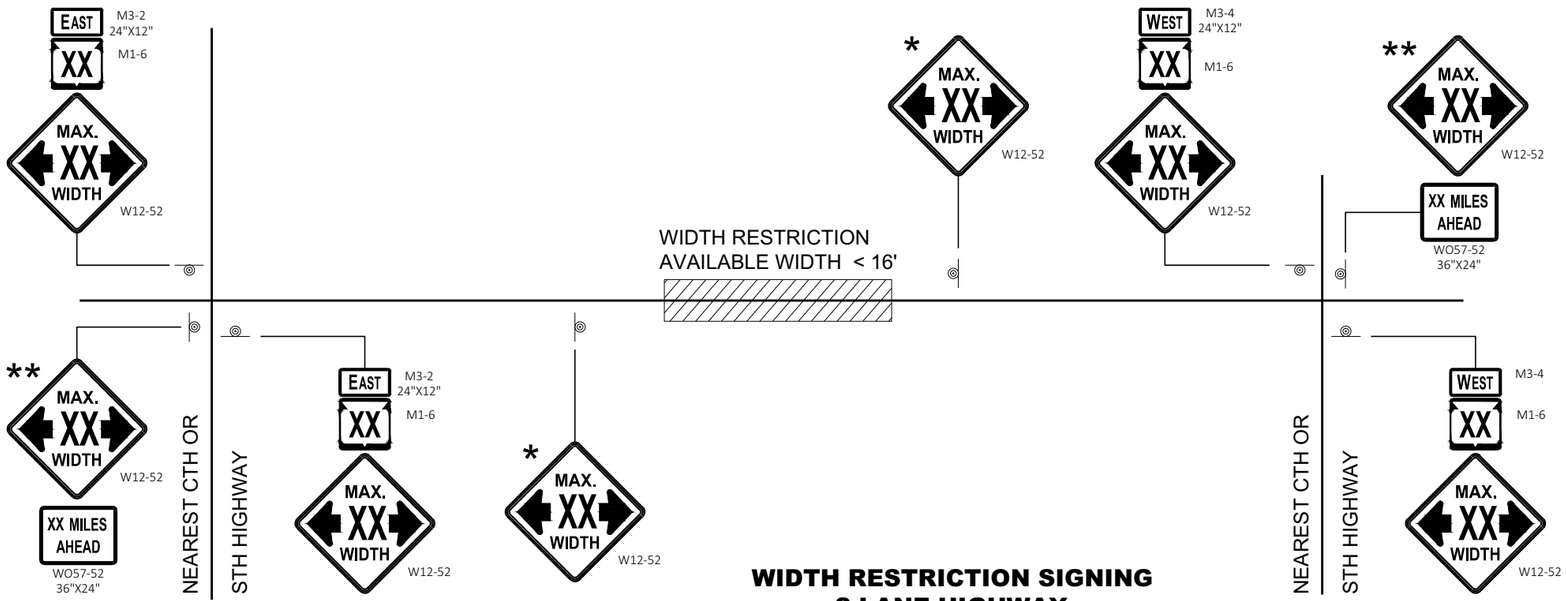
* PLACE 500 FEET AFTER THE W20 - 1A AND 500 FEET BEFORE ADDITIONAL SIGNS FOR ROADWAYS WITH A PRE - CONSTRUCTION SPEED LIMIT OF 45 MPH OR MORE. FOR 35-40 MPH, USE 350 FOOT TYPICAL SPACING. FOR 25-30 MPH, USE 200 FOOT TYPICAL SPACING.

** SIGN SHALL BE VISIBLE FROM ROADWAY.

*** ADDITIONAL SIGNS NEEDED IF THERE IS AN ON RAMP BETWEEN SIGNS.



WIDTH ON SIGN TO BE APPROX. 1 - FOOT LESS THAN AVAILABLE WIDTH



WIDTH RESTRICTION SIGNING
2 LANE HIGHWAY

ADVANCED WIDTH RESTRICTION SIGNING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

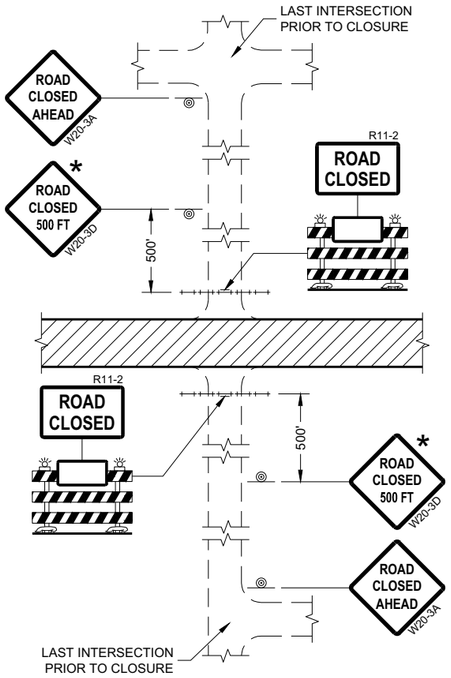
APPROVED
February 2020
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

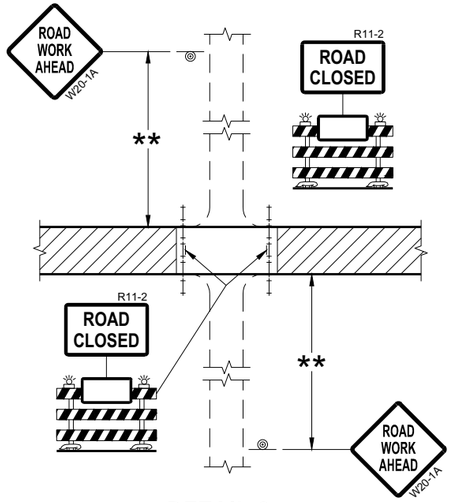
FHWA

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SDD 15C02 - 08f



DETAIL 1
(NO ACCESS TO PROJECT)



DETAIL 2
(PUBLIC CROSS-TRAFFIC MAINTAINED.
NO ACCESS TO PROJECT)

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND BARRICADES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE (500 FEET DESIRABLE) TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

IF A "STOP" SIGN MUST BE REMOVED FOR A WORK OPERATION, A TEMPORARY "STOP" SIGN SHALL BE PLACED PRIOR TO THE SIGN REMOVAL, OR A FLAGGER SHALL BE PROVIDED UNTIL THE SIGN IS REESTABLISHED.

BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

SIGNS THAT WILL BE IN PLACE LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL "D" FOR FULL ROAD CLOSURES.

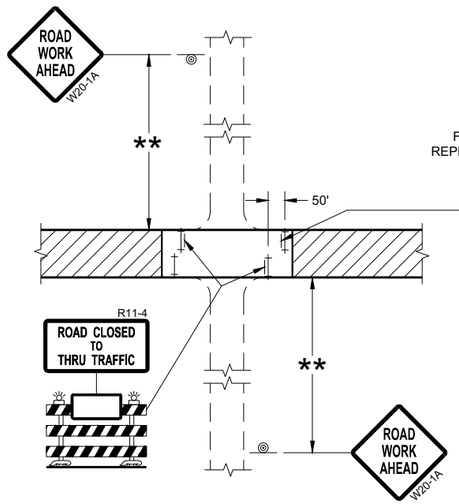
TYPE "A" LOW-INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE R11-2, R11-3, AND R11-4 SIGNS PLACED ON BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE OR BOTTOM RAILS.

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
R11-2 SHALL BE 48" X 30".
R11-4 AND R11-3 SHALL BE 60" X 30".

* OMIT THE "ROAD CLOSED 500 FT." SIGN IF THE LAST INTERSECTION IS 500 FEET OR LESS FROM THE WORK ZONE.

** 500' MAX. OR AT LAST INTERSECTION, WHICHEVER IS CLOSEST.



DETAIL 3
(PUBLIC CROSS-TRAFFIC MAINTAINED.
CONTRACTOR, LOCAL BUSINESS AND
RESIDENT ACCESS TO PROJECT)

DETAIL 4
(CONTRACTOR, LOCAL BUSINESS AND
RESIDENT ACCESS TO PROJECT)

LEGEND

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA

BARRICADES AND SIGNS FOR SIDEROAD CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15C03 - 05

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.

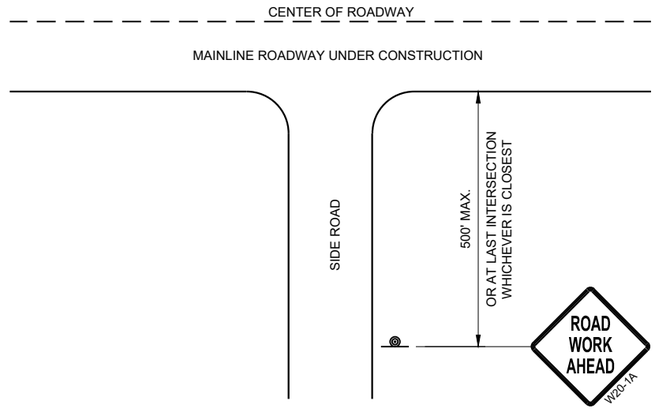
ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

SIGNS THAT WILL BE IN PLACE LESS THAN SEVEN 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 REESTABLISHED.

* OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS

** PLACE AN ADDITIONAL W20-1A "ROAD WORK AHEAD" SIGN IF WORK AREA WITHIN THE PROJECT IS SEPARATED BY MORE THAN 2 MILES FROM PREVIOUS WORK AREA.



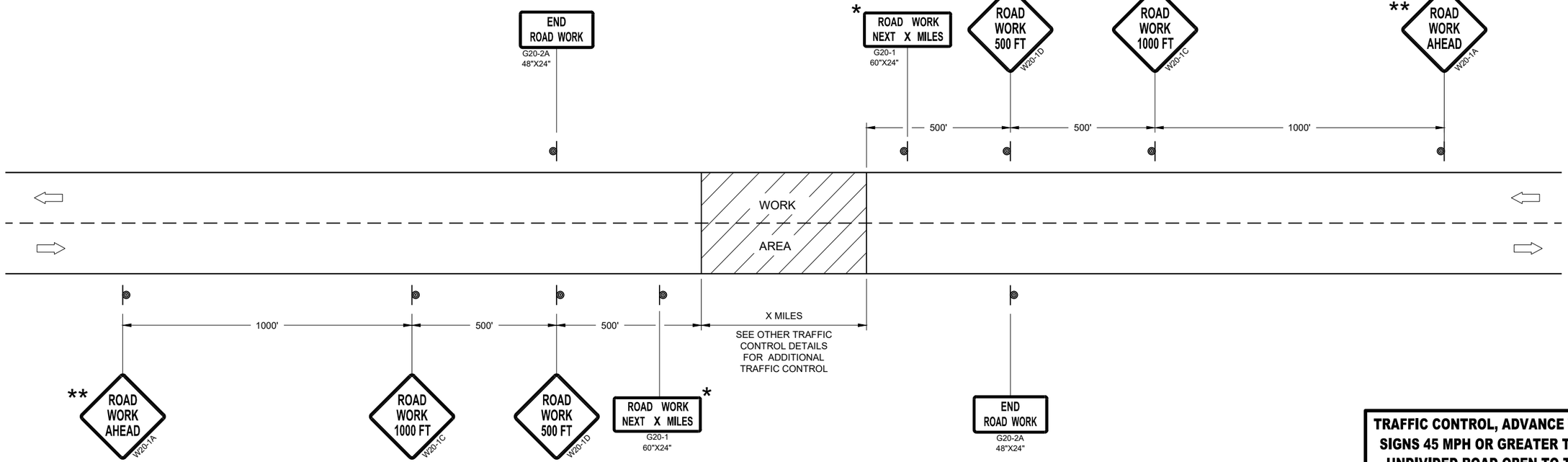
TYPICAL SIDE ROAD APPROACH WARNING SIGN DETAIL

LEGEND

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC

WORK AREA



TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45MPH OR GREATER

TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 MPH OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

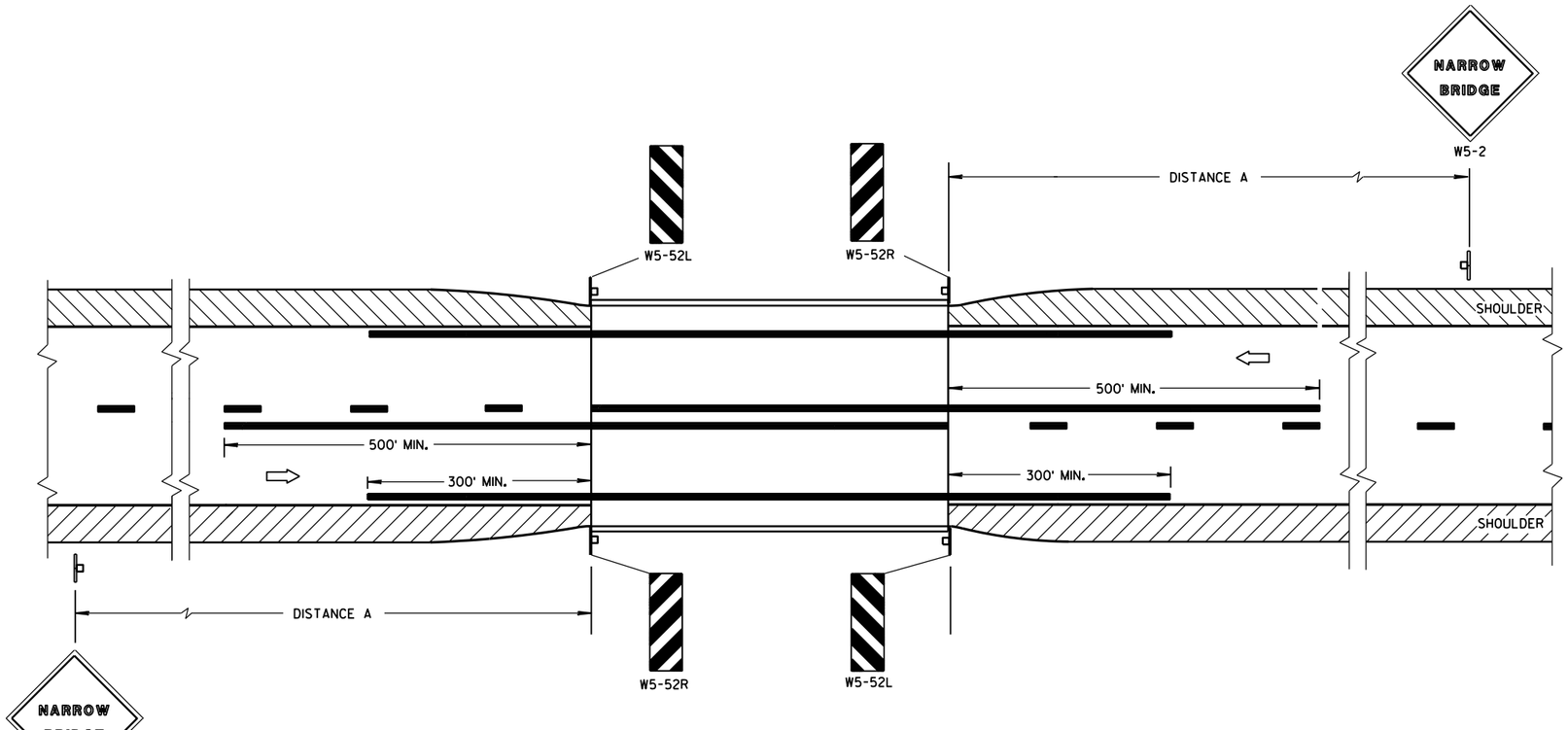
APPROVED
July 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

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SDD 15C04 - 05



SITUATION 1

WARRANTING CRITERIA:
BRIDGE WIDTH IS AT LEAST 16 FEET BUT LESS THAN 24 FEET.

DISTANCE TABLE

POSTED OR 85th PERCENTILE SPEED	DISTANCE "A"
25	150'
30	200'
35	250'
40	300'
45	400'
50	550'
55	750'

GENERAL NOTES

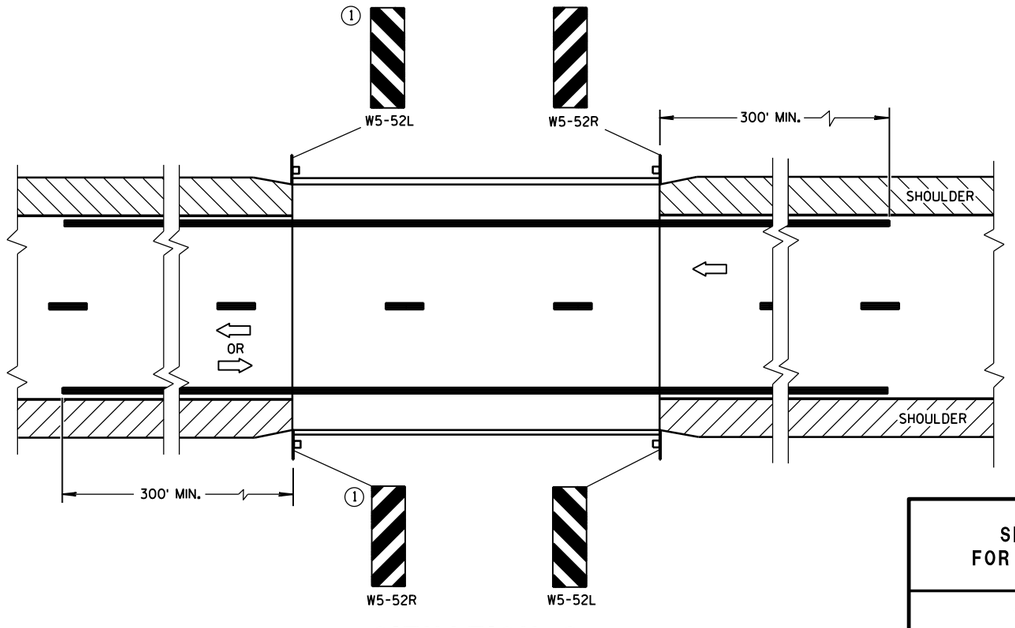
DETAILS OF TRAFFIC CONTROL DEVICES AND INSTALLATION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

LOCATE W5-52 SIGN POST(S) BEHIND GUARDRAIL WHEN PRESENT.

PLACE THE EDGE OF THE W5-52 SIGN IN LINE WITH FACE OF CURB OR PARAPET.

(1) OMIT ON ONE-WAY TRAVELLED WAYS.

⇨ DIRECTION OF TRAFFIC



SITUATION 2

WARRANTING CRITERIA:

1. BRIDGE WIDTH IS AT LEAST 24 FEET AND
2. BRIDGE SHOULDER WIDTH IS LESS THAN 6 FEET.

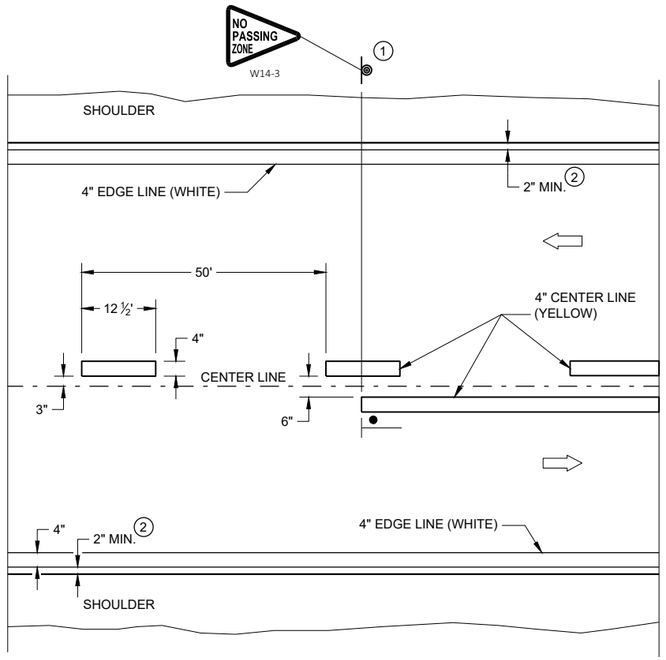
SIGNING & MARKING FOR TWO LANE BRIDGES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

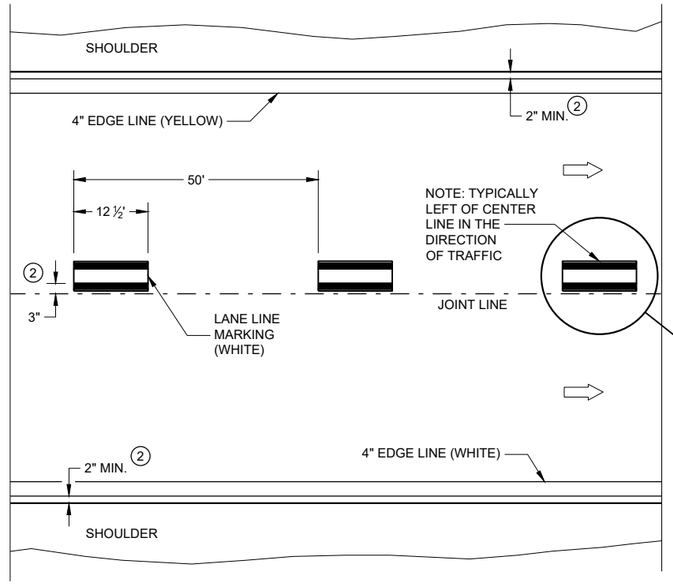
APPROVED
June 2017 — DATE
/S/ Matthew R. Rauch — STATE SIGNING AND MARKING ENGINEER
FHWA

6

S.D.D. 15 C 6-9

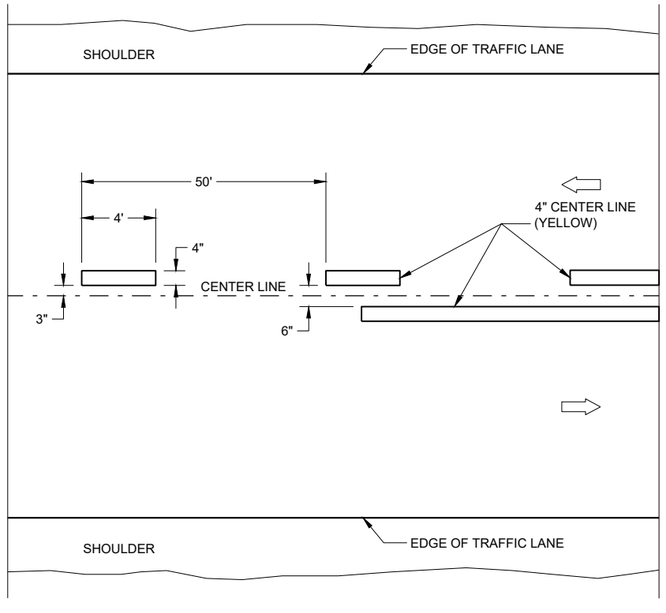


TWO WAY TRAFFIC

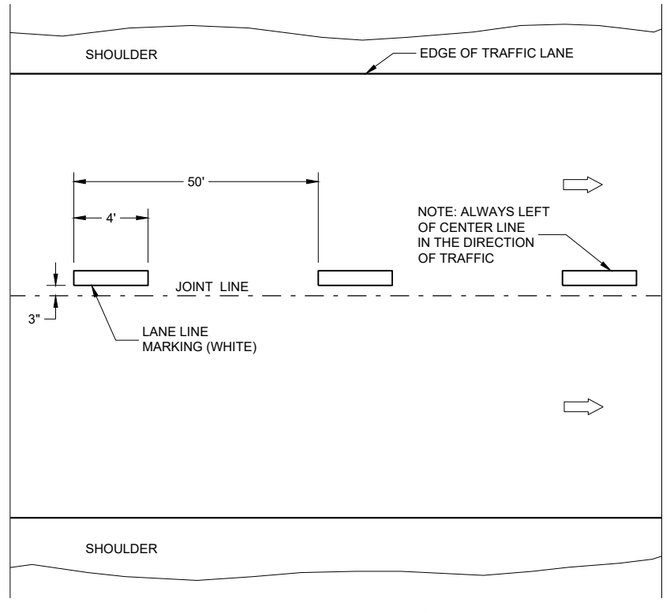


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY PAVEMENT MARKING

GENERAL NOTES

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

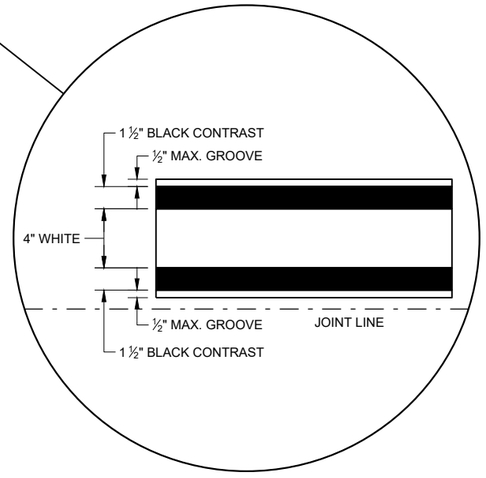
1. LOCATE THE NO PASSING ZONE W14-3 SIGN WITHIN 50 FEET OF THE "T" MARKING
2. MEASURE FROM EDGE OF MARKING TO JOINT LINE. THIS DOES NOT INCLUDE SPACE NEEDED FOR GROOVING OPERATIONS.

LEGEND

"T" MARKING

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC



LONGITUDINAL MARKING (MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020
DATE
/S/ Matthew Rauch
STATEWIDE SIGNING AND M ENGINEER

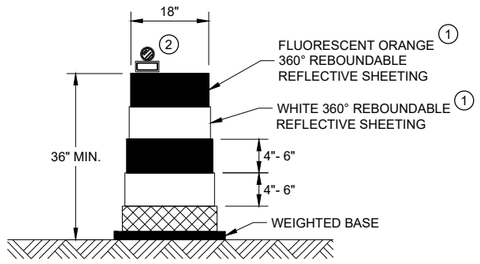
FHWA

SDD 15C08 - 20a

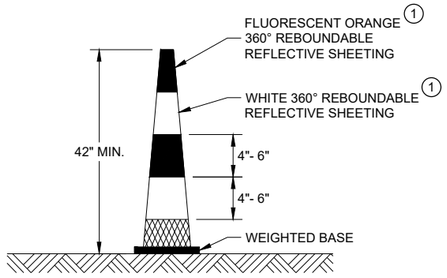
SDD 15C08 - 20a

GENERAL NOTES

1. REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.
2. LOCATION OF WARNING LIGHTS WHEN SHOWN ON THE PLAN.

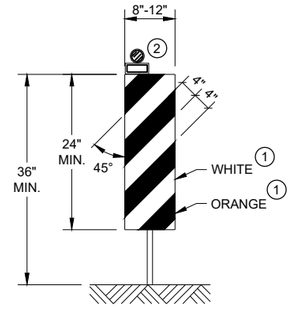


DRUM



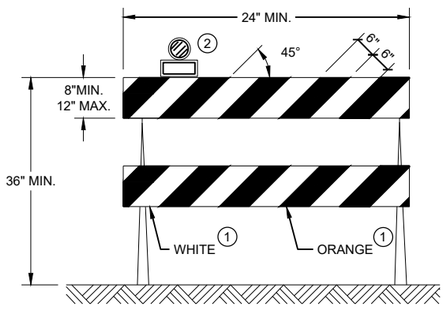
42" CONE

DO NOT USE IN TAPERS
½ SPACING OF DRUMS



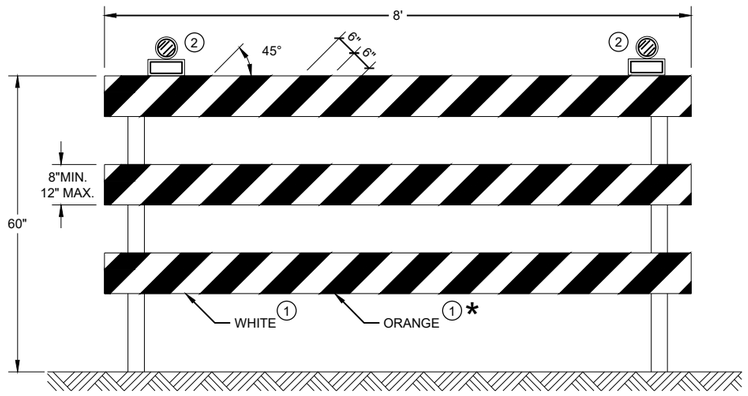
VERTICAL PANEL

THE STRIPES SHALL SLOPE DOWNWARD TO
THE TRAFFIC SIDE FOR CHANNELIZATION.



TYPE II BARRICADE

FOR RAILS LESS THAN 36" LONG, 4" WIDE STRIPES
MAY BE USED. ALL STRIPES SHALL SLOPE DOWNWARD
TO THE TRAFFIC SIDE FOR CHANNELIZATION.



TYPE III BARRICADE

IF SIGN MOUNTED, DO NOT COVER MORE THAN 50% OF THE TOP
TWO RAILS OR 33% OF THE TOTAL AREA OF THE THREE RAILS.

* IF USED FOR A PERMANENT APPLICATION USE RED SHEETING.

CHANNELIZING DEVICES
DRUMS, CONES, BARRICADES
AND VERTICAL PANELS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2021
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

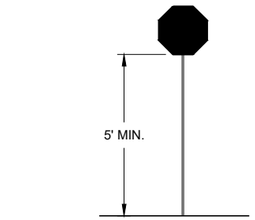
SDD 15C11 - 09b

6

SDD 15C11 - 09b

LEGEND

- SIGN ON PORTABLE OR PERMANENT SUPPORT
- TEMPORARY PORTABLE RUMBLE STRIP ARRAY
- DIRECTION OF TRAFFIC
- WORK AREA
- FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF



STOP/SLOW PADDLE ON SUPPORT STAFF

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.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS, DEVICES, AND 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.

FLAGGING

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 REMOVE TEMPORARY PORTABLE RUMBLE STRIPS PRIOR TO COVERING OR REMOVING ALL ADVANCE SIGNING.

(1) FOR MOVING WORK OPERATIONS, POST ADDITIONAL W20-7A FLAGGER SIGNS AT APPROXIMATELY 3,500' 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.

WHEN THE DISTANCE BETWEEN FLAGGERS EXCEEDS 2 MILES, A PILOT CAR IS REQUIRED. WHEN CURVES REDUCE SIGHT DISTANCE BELOW 400', A PILOT CAR IS REQUIRED.

TEMPORARY PORTABLE RUMBLE STRIPS

UTILIZE TEMPORARY PORTABLE RUMBLE STRIPS ON ALL FLAGGING OPERATIONS.

(3) EACH TEMPORARY PORTABLE RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS PLACED TRANSVERSE ACROSS THE LANE AT THE LOCATIONS SHOWN. WITHIN EACH ARRAY, SPACING BETWEEN RUMBLE STRIPS SHALL BE 15 FEET ON CENTER

ONLY USE TEMPORARY PORTABLE RUMBLE STRIPS FROM THE APPROVED PRODUCTS LIST.

INSTALL TEMPORARY RUMBLE STRIPS PER MANUFACTURER'S RECOMMENDATIONS.

PLACE ADVANCE SIGNING PRIOR TO INSTALLING TEMPORARY RUMBLE STRIPS.

DO NOT INSTALL TEMPORARY PORTABLE RUMBLE STRIPS ON GRAVEL, MILLED SURFACES, OR ASPHALT THAT HAS BEEN PAVED LESS THAN 12 HOURS.

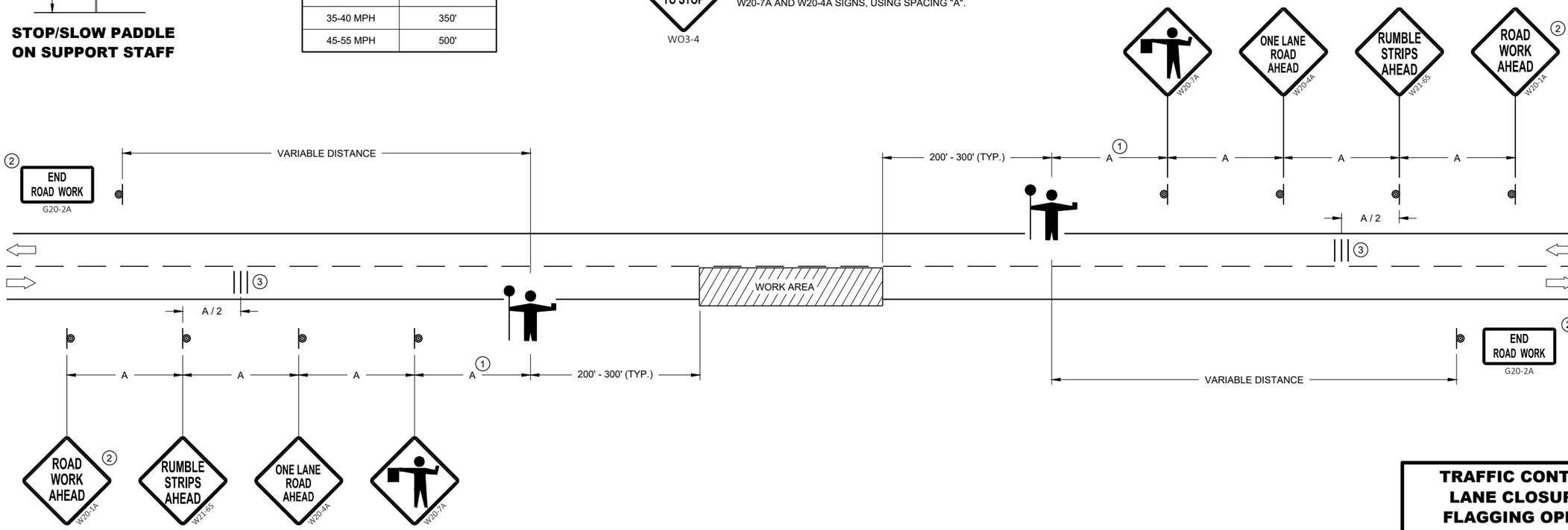
SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

SPEED LIMIT	SPACING "A"
25-30 MPH	200'
35-40 MPH	350'
45-55 MPH	500'



WO3-4

USE OF WO3-4 SIGN IS OPTIONAL. WHEN USED, THIS SIGN SHALL BE LOCATED BETWEEN THE W20-7A AND W20-4A SIGNS, USING SPACING "A".



TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2021
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15C12 - 08

LEGEND

V1 LEAD VEHICLE

V2 MARKING VEHICLE

V3 SHADOW VEHICLE

TRUCK MOUNTED ATTENUATOR (TMA)

SIGN ON TEMPORARY SUPPORT

DIRECTION OF TRAFFIC

FLASHING ARROW PANEL (CAUTION)

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.

ALL 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.

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 AND HORIZONTAL CURVES THAT RESTRICT SIGHT DISTANCE.

THE WORK AND SHADOW VEHICLES SHOULD PULL OVER PERIODICALLY TO ALLOW TRAFFIC TO PASS.

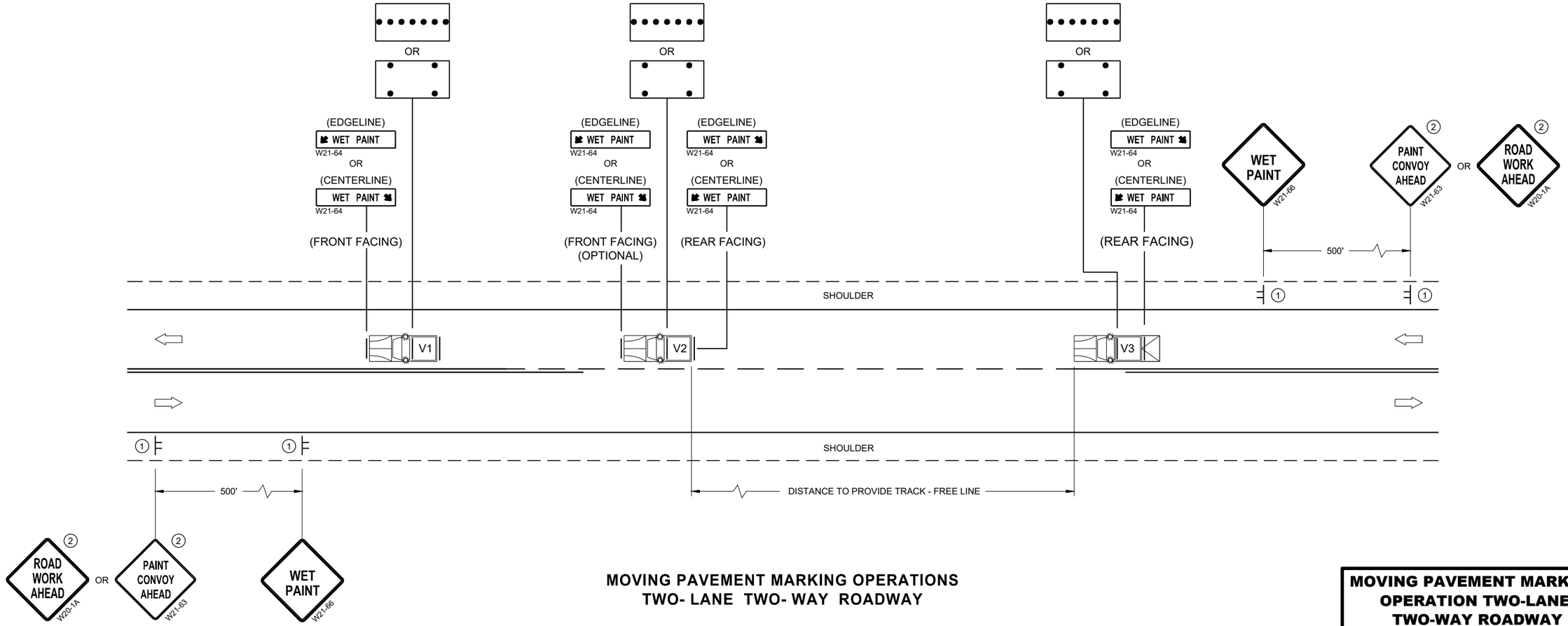
WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR LAY STATIONARY SIGNS AND SUPPORTS FLAT ON THE GRADE WITH UPRIGHTS ORIENTED PARALLEL TO AND DOWNSTREAM FROM TRAFFIC.

CONES SHOULD BE USED BETWEEN THE MARKING AND SHADOW VEHICLE AT 100 FOOT SPACING. CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.

CONES SHALL BE A MINIMUM OF 28" FOR WET PAVEMENT MARKING .

(1) SIGNS SHALL BE REPEATED APPROXIMATELY EVERY THREE MILES.

(2) IF CONSTRUCTION WORK ZONE SIGNS ARE IN PLACE, W20-1A OR W21-63 ARE NOT REQUIRED.



MOVING PAVEMENT MARKING OPERATIONS TWO- LANE TWO- WAY ROADWAY

MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

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SDD 15C19 - 06a

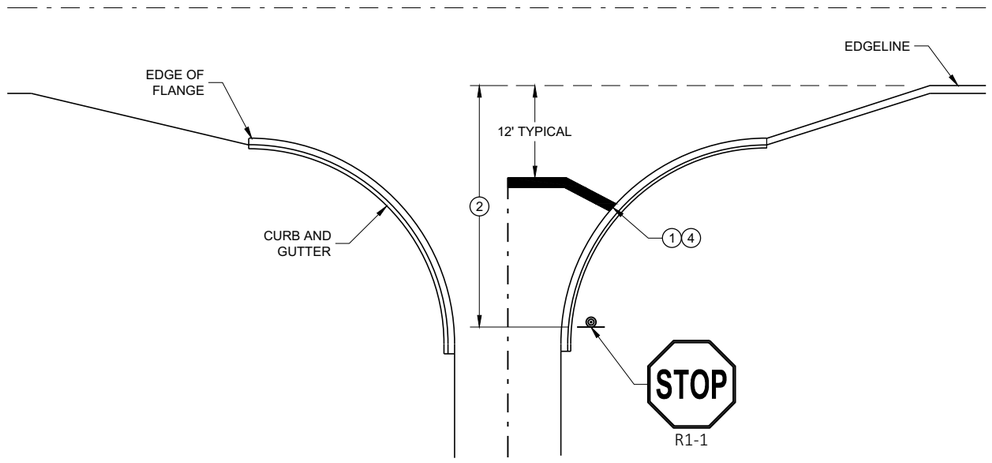
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SDD 15C19 - 06a

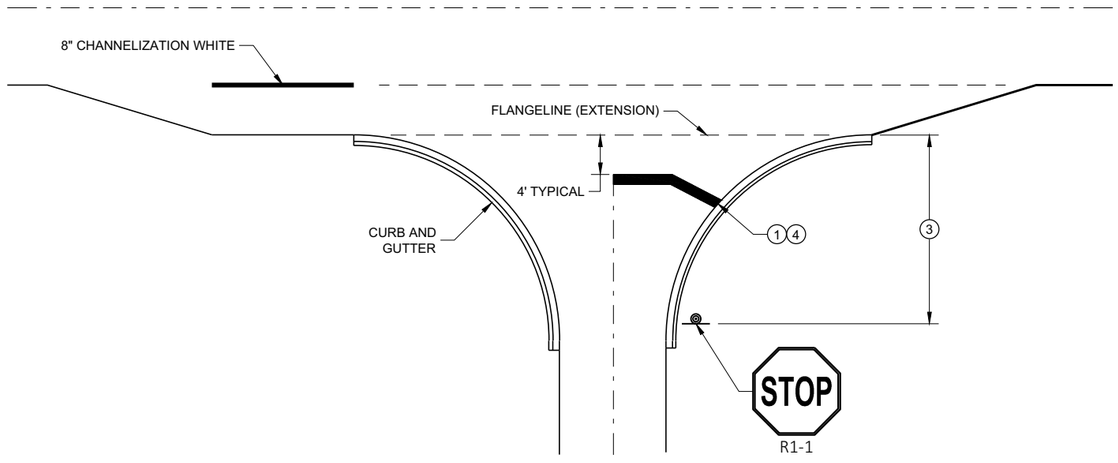
GENERAL NOTES

STOP SIGN SHALL BE PLACED A MINIMUM OF 6 FEET TO A MAXIMUM OF 50 FEET FROM THE EDGELINE LOCATION.

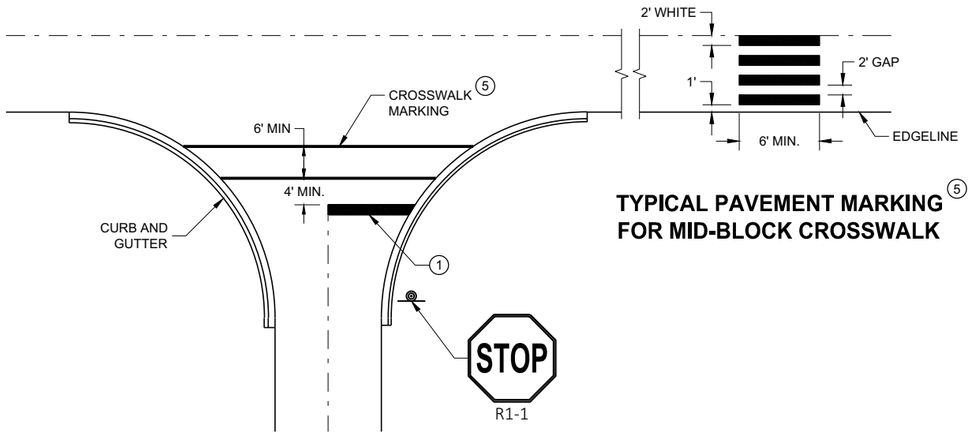
1. 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE REGION MARKING ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
2. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGELINE.
3. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGELINE EXTENSION.
4. MOVE CLOSER TO THE EDGE OF TRAVEL LINE AS NEEDED FOR VISIBILITY AND SIGHT LINES (NO CLOSER THAN 4 FEET).
5. LADDER BAR CROSSWALKS SHOULD ONLY BE USED FOR MID BLOCK CROSSINGS. USE 2 - 6" TRANSVERSE LINES INSTEAD.



TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER

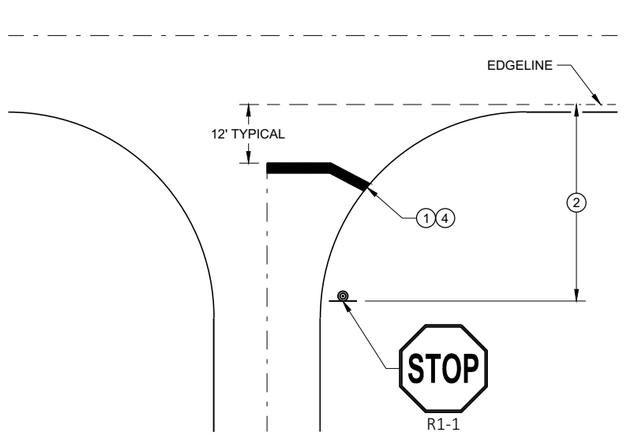


TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH RIGHT TURN LANE



TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH CROSSWALK MARKING

TYPICAL PAVEMENT MARKING FOR MID-BLOCK CROSSWALK 5



TYPICAL STOP LINE PAVEMENT MARKING WITHOUT CURB AND GUTTER

STOP LINE AND CROSSWALK PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

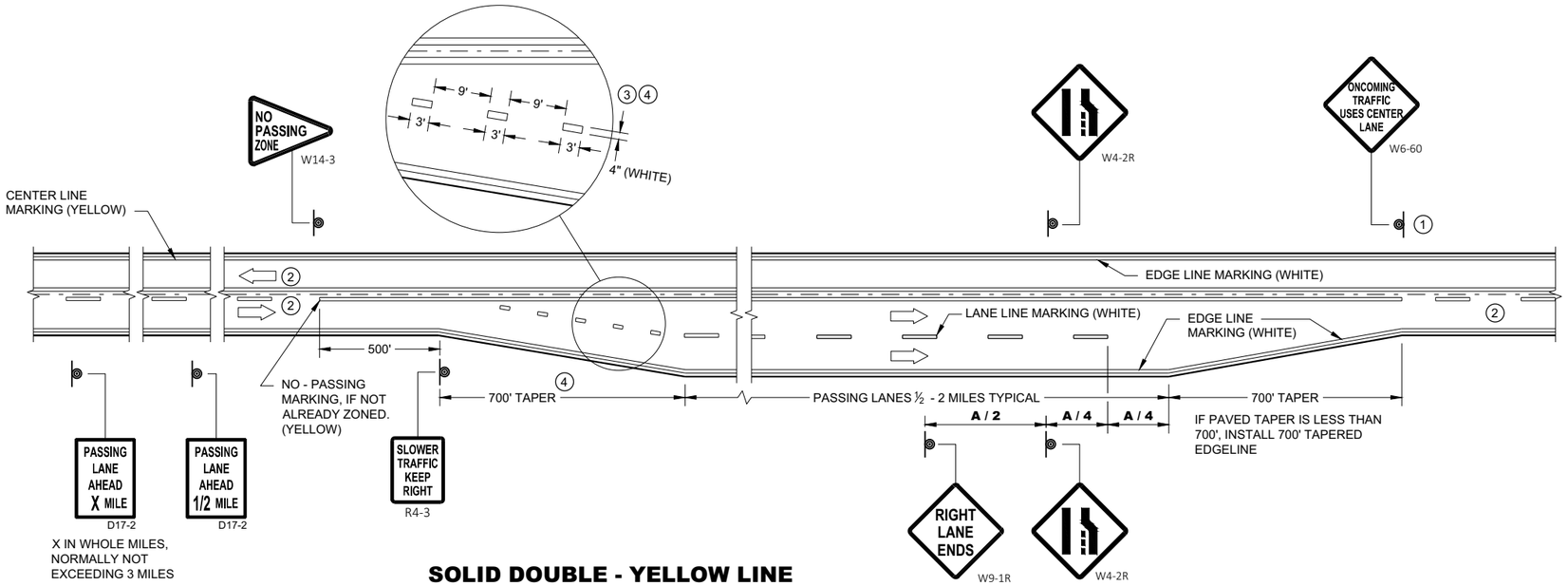
APPROVED
November 2019
DATE

/S/ Matthew Rauch
STATE SIGNING AND MAF ENGINEER

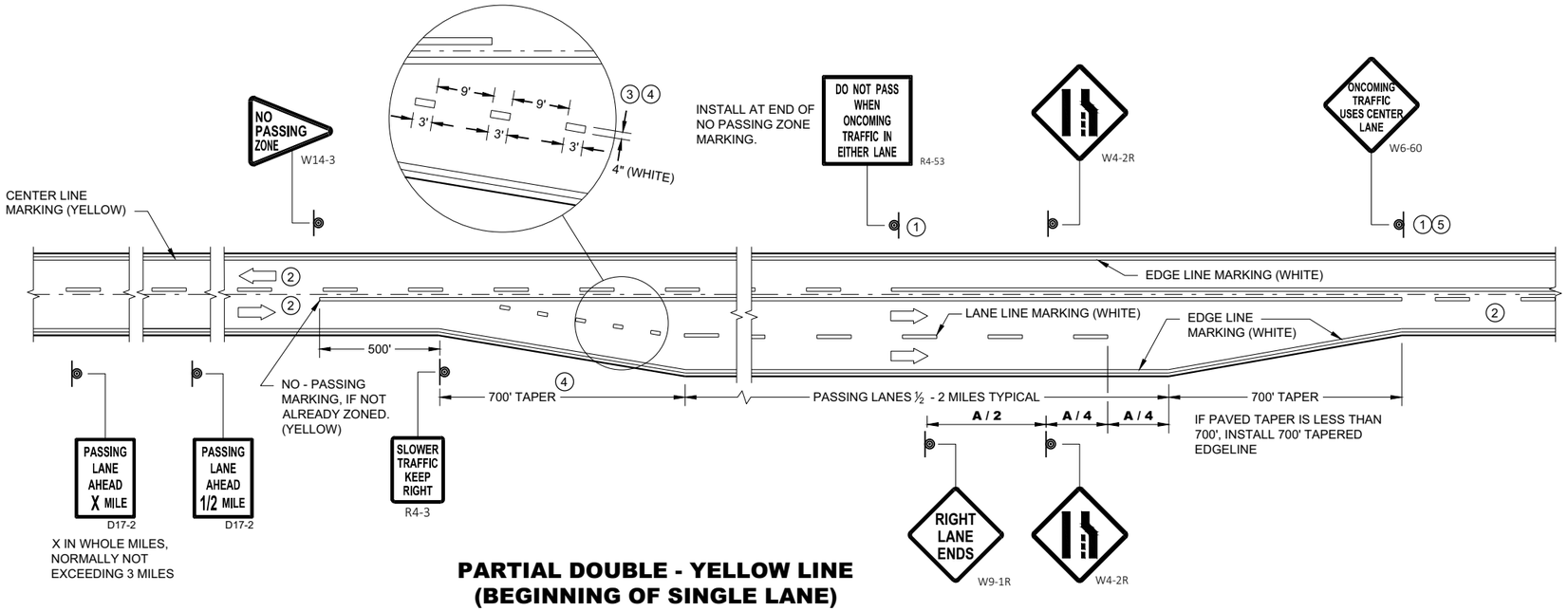
FHWA

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SDD 15C33 - 04



SOLID DOUBLE - YELLOW LINE
(THROUGHOUT ENTIRE PASSING / CLIMBING LANE)



PARTIAL DOUBLE - YELLOW LINE
(BEGINNING OF SINGLE LANE)

GENERAL NOTES

1. SIGN SHALL BE REPEATED AT 1 MILE INCREMENTS OR AT THE DISCRETION OF THE REGIONAL TRAFFIC ENGINEER.
2. THERE MAY BE SOLID YELLOW ON THE CENTERLINE DUE TO SIGHT CONDITIONS.
3. THE TAPER LENGTH OF THE DOTTED LINE PAVEMENT MARKING SHALL BE 700 FEET, 3' LINE, 9' GAP, EXCEPT RETRACE THE EXISTING LINE - GAP PATTERN WHERE EXISTING MARKINGS ARE IN PLACE.
4. WHEN THE ENTRANCE TAPER IS LESS THAN 700 FEET OR THE SHOULDER WIDTH IN THE PASSING / CLIMBING LANE IS LESS THAN THE ADJACENT HIGHWAY, DO NOT INSTALL DOTTED LINE PAVEMENT MARKING.
5. REPEAT EVERY 1 MILE UP UNTIL R4-53.

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL

DISTANCE TABLE

POSTED OR 85th PERCENTILE SPEED	DISTANCE "A"
45	775
50	885
55	990

PAVEMENT MARKING & SIGNING (CLIMBING LANE & PASSING LANE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 15C35 - 04b

SDD 15C35 - 04b

LEGEND

SIGN ON PERMANENT SUPPORT

TRAFFIC CONTROL DRUM

DIRECTION OF TRAFFIC

WORK ZONE

GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" SIGNS MAY BE USED IF APPROVED BY THE REGIONAL TRAFFIC UNIT.

"WO" SIGN IS THE SAME AS "W" SIGN EXCEPT THE BACKGROUND IS ORANGE.

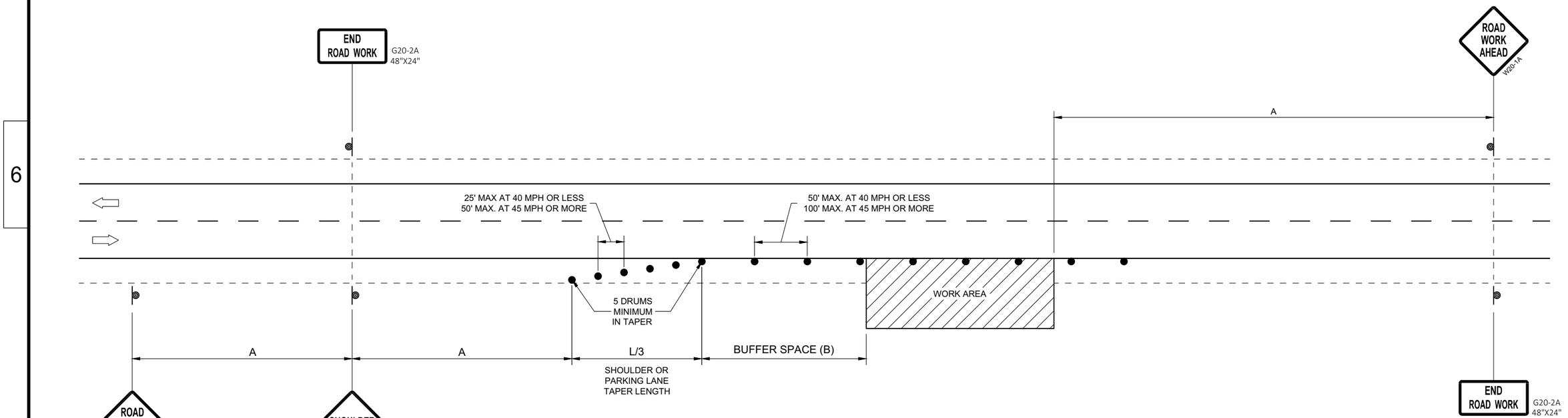
ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

W20-1A 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.



POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	SHOULDER TAPER L / 3 W, LATERAL OFFSET (FT)						BUFFER SPACE (B) FEET
		3	4	5	6	7	8	
25	200'	10	14	17	21	24	28	55
30	200'	15	20	25	30	35	40	85
35	350'	20	27	34	40	47	54	120
40	350'	26	35	44	53	62	70	170
45	500'	45	59	74	89	104	119	220
50	500'	50	66	83	99	116	132	280
55	500'	54	73	91	109	127	145	335'

TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

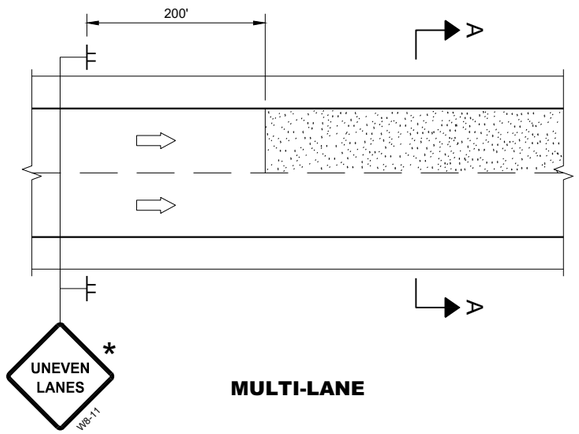
APPROVED
May 2020
DATE

/S/ Andrew Heidtke
STATEWIDE WORK ZONE T SAFETY ENGINEER

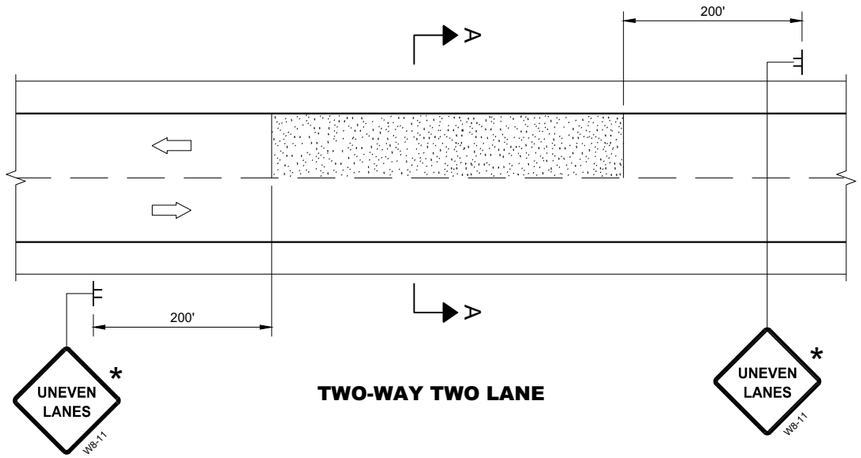
FHWA

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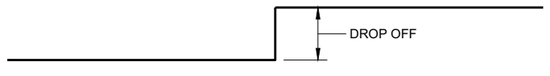
SDD 15D28 - 04



MULTI-LANE

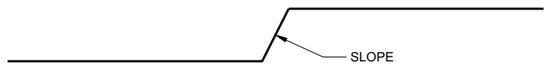


TWO-WAY TWO LANE

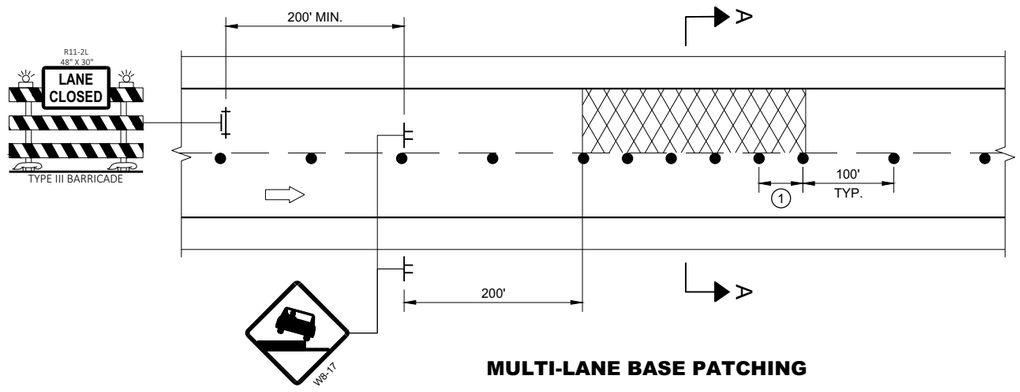


SECTION A - A

OR



SECTION A - A



MULTI-LANE BASE PATCHING

ADJACENT LANE DROP-OFFS

GENERAL NOTES

FOR SPOT LOCATIONS USE ENGINEERING JUDGEMENT WHEN PLACING ADDITIONAL SIGNS.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

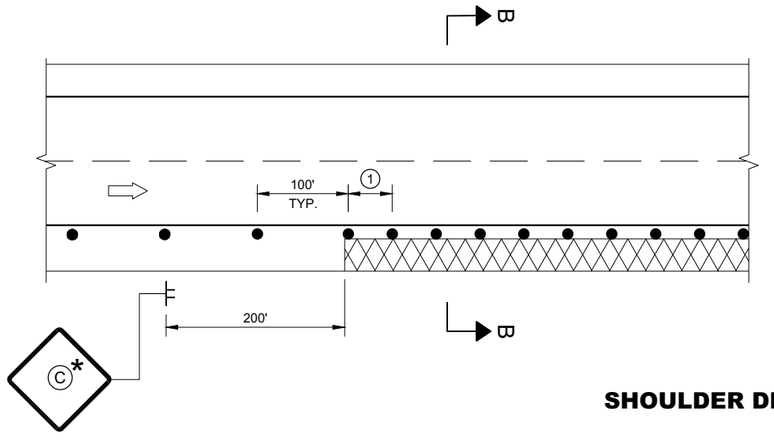
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

* IF THE DROP-OFF IS CONTINUOUS ALONG THE PROJECT, PLACE ADDITIONAL SIGNS EVERY 1 MILE AND AFTER EVERY ENTRANCE RAMP.

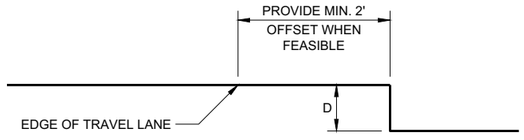
(1) USE CLOSER SPACING WHEN DELINEATING DROP-OFF.

LEGEND

- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- WORK AREA WITH DROP-OFF
- MILLED SURFACE



SHOULDER DROP-OFFS



SECTION B - B

D	SIGN (C)
< 2" WITH A SLOPE STEEPER THAN 3:1	LOW SHOULDER WO8-9
2" < 6" WITH A SLOPE STEEPER THAN 3:1	SHOULDER DROP - OFF W8-9A PROVIDE A 3:1 OR FLATTER SLOPE OF MATERIAL ADJACENT TO THE PAVEMENT

TRAFFIC CONTROL, DROP-OFF SIGNING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15D39 - 02

GENERAL NOTES

DRAWING NOT TO SCALE. ALL SIGNS AND POSTS ON THIS SHEET SHALL BE PAID FOR WITH 'TRAFFIC CONTROL SIGNS' BID ITEM. ALL SIDE ROADS WHICH ARE UNDER CONSTRUCTION OF CURB AND GUTTER AND/OR GRADING SHALL BE ADEQUATELY SIGNED.

ALL SIGNS AND DEVICES SHALL BE IN CONFORMANCE WITH THE WISCONSIN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (WMUTCD). SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISDOT STANDARD SIGN PLATES.

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THAT THE BACKGROUND IS ORANGE.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.

ALL SIGNS INAPPROPRIATE TO THE STATUS OF THE CONTROL ZONE, INCLUDING PRE-EXISTING SIGNS IN THE VICINITY, SHALL BE COVERED OR REMOVED AS DIRECTED BY THE ENGINEER.

SEE 15C34 FOR ADDITIONAL TRAFFIC CONTROL SIGNING WHEN CENTERLINE PAVEMENT MAKINGS ARE MISSING. 'DO NOT PASS' SIGNS MUST BE INSTALLED ON THE SAME DAY AS MILLING OPERATIONS.

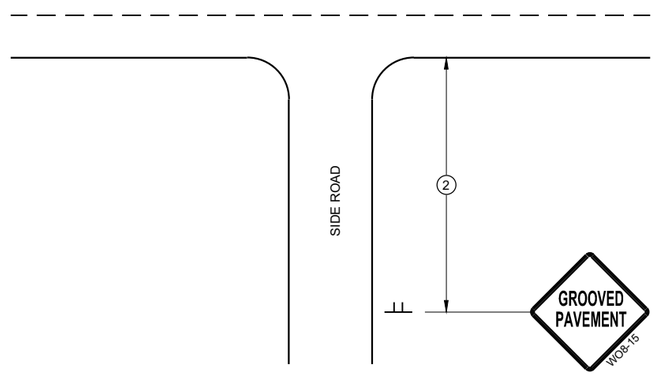
(1) PLACE SIGNS 350' IN ADVANCE OF MILLED SURFACES AND AT 1 MILE INTERVALS, OR AS DIRECTED BY THE ENGINEER.

(2) PLACE SIGN 200' MIN. FROM INTERSECTION AND 200' MIN. AFTER ADVANCE WARNING SIGN SHOWN IN SDD 15C04.

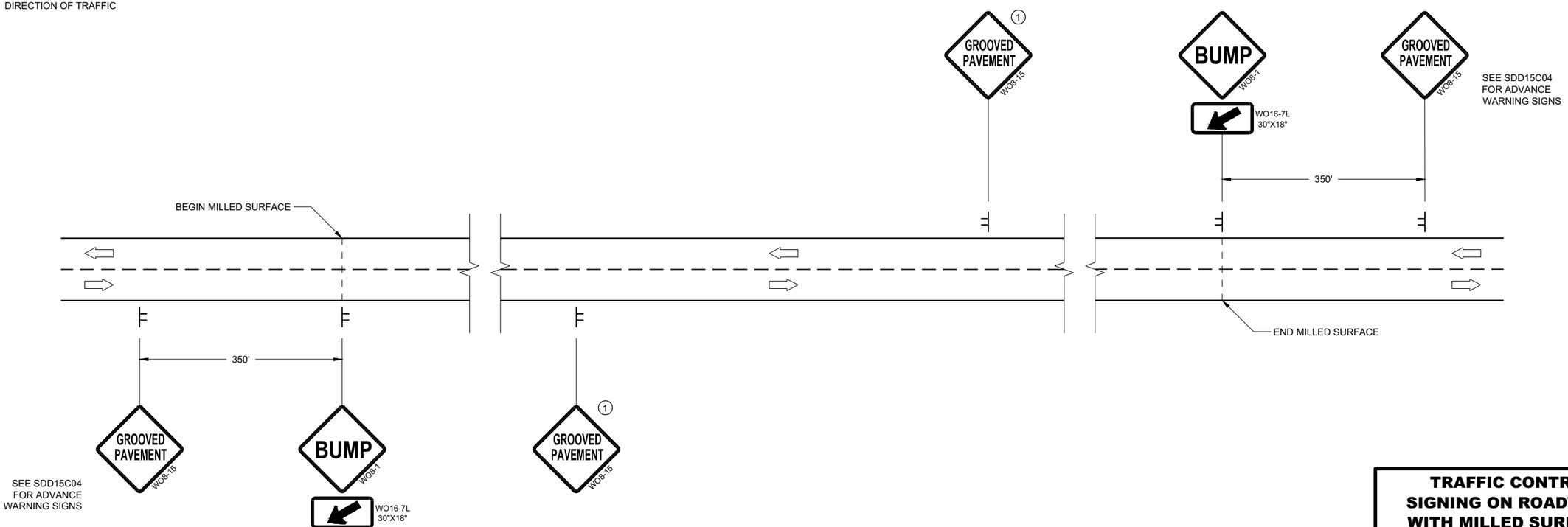
LEGEND

SIGN ON TEMPORARY SUPPORT

DIRECTION OF TRAFFIC



TYPICAL SIDE ROAD APPROACH SIGN DETAIL



DETAIL FOR SIGNING ON MILLED SURFACES

TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH MILLED SURFACES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

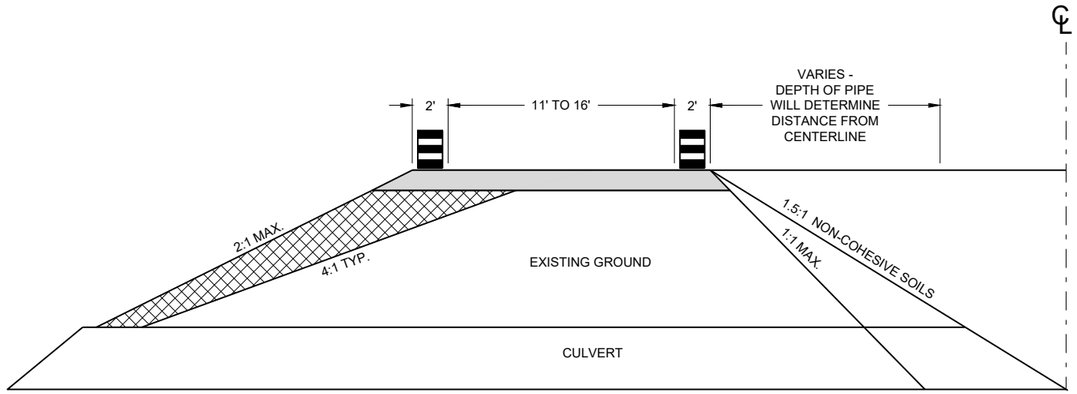
APPROVED
February 2020
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

SDD 15D44 - 02

SDD 15D44 - 02



CROSS SECTION

GENERAL NOTES

USE 1:1 FOR COHESIVE CLAYS AND SILTS, LOAMS, SANDY CLAYS AND ANGULAR GRAVEL SOILS.
USE 1.5:1 FOR NON-COHESIVE SOILS.

THE TAPER SHOULD EXTEND ACROSS THE SHOULDER UNLESS DOING SO WOULD GREATLY CONFLICT WITH THE WORK OPERATION.

ALL LANE CLOSURE SIGNS SHALL BE REMOVED OR COVERED AND ALL DEVICES REMOVED BEYOND THE SHOULDER WHEN WORK IS NOT IN PROGRESS AND THE LANE IS RESTORED TO A SAFE OPERATING CONDITION.

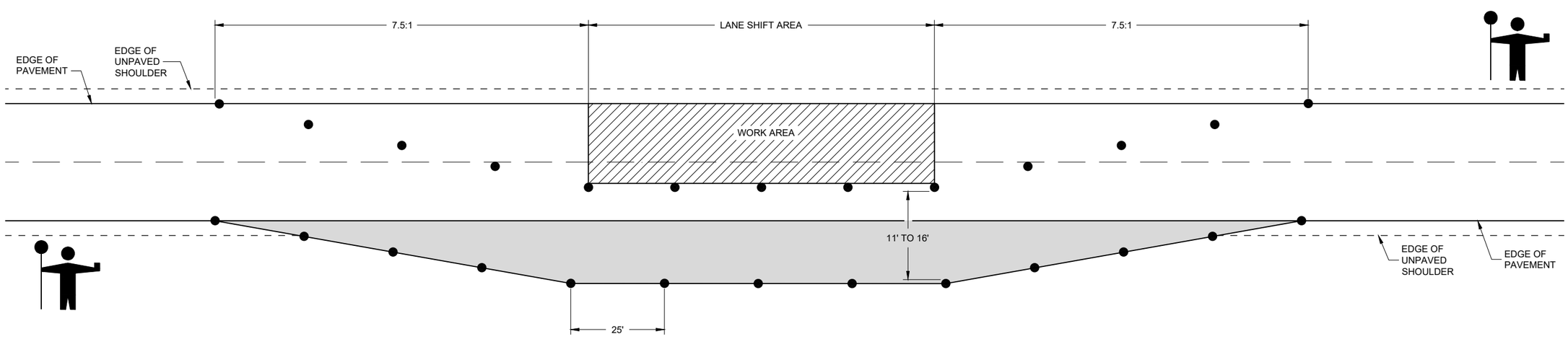
CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

USE WITH SDD 15C12 "TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATIONS"

USE WITH SDD 15D45 "SIGNING ON ROADWAYS WITH LOOSE GRAVEL"

LEGEND

- DRUM WITHOUT WARNING LIGHT
- 6" BASE AGGREGATE DENSE 1 ¼" -INCIDENTAL TO LANE SHIFT ITEM
- FILL - INCIDENTAL TO LANE SHIFT ITEM
- WORK AREA
- FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF



LANE SHIFT IN FLAGGING OPERATION

TRAFFIC CONTROL, TEMPORARY LANE SHIFT DURING CULVERT WORK

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2021
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

6

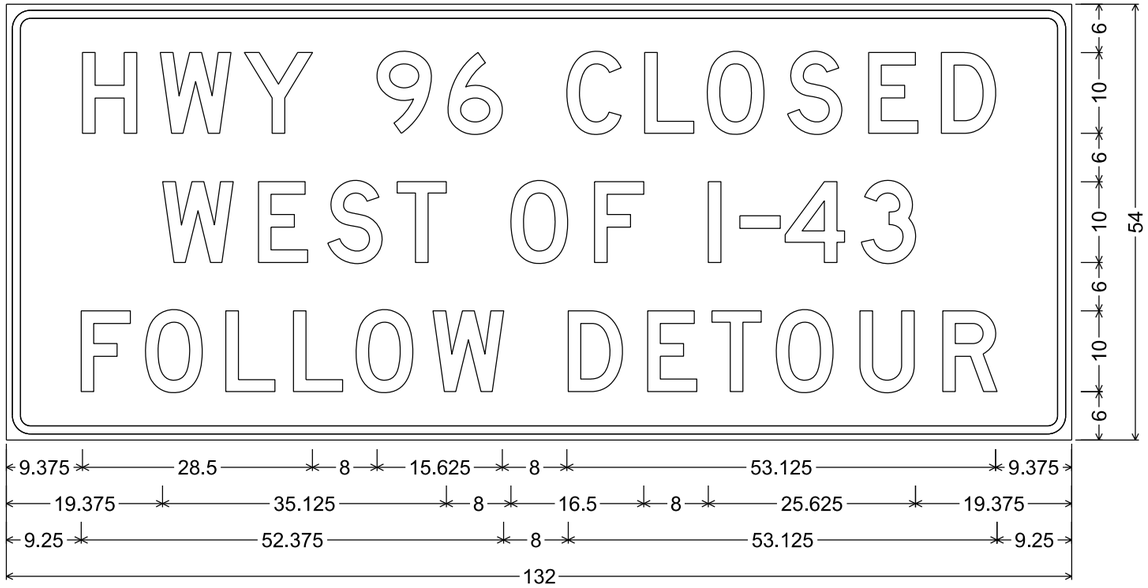
SDD 15D48 - 01

6

SDD 15D48 - 01

NOTES

1. Fixed Message Type II Signs - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - D



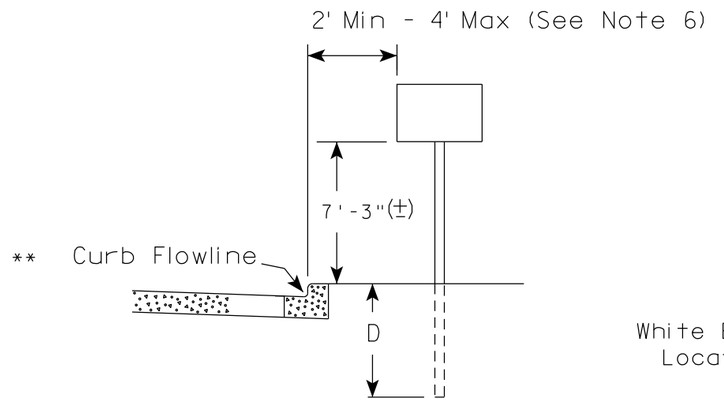
3.000" Radius, 1.000" Border, 0.750" Indent

7

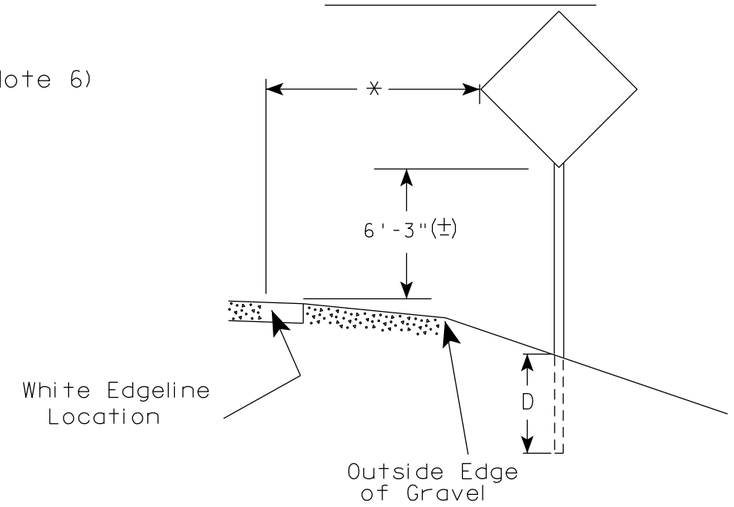
7

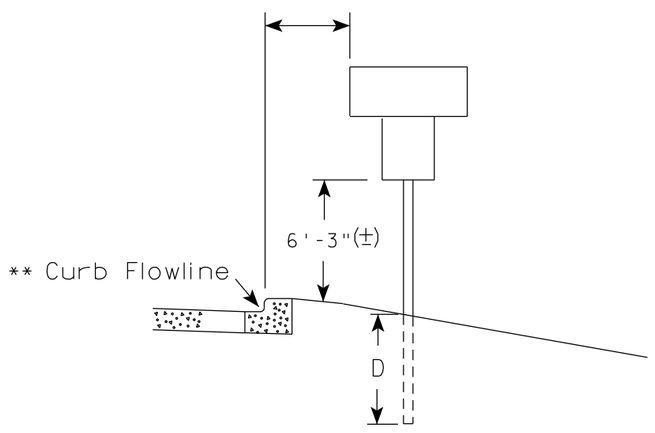
PROJECT NO: 4075-39-72	HWY: STH 96	COUNTY: BROWN	TEMPORARY SIGNING	SHEET NO: 115	E

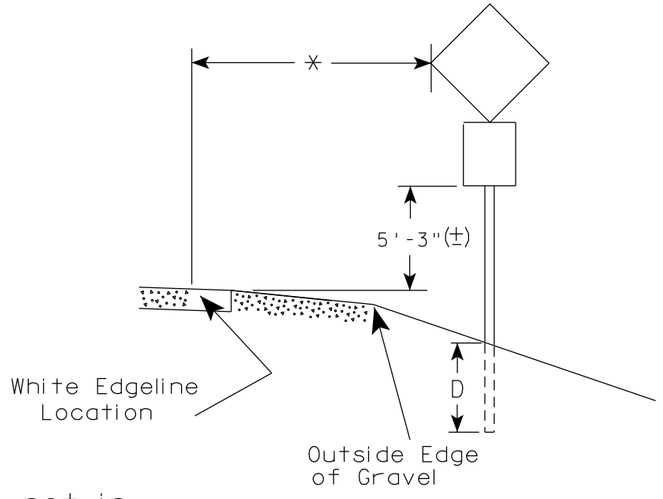
URBAN AREA



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.

POST EMBEDMENT DEPTH

Area of Sign Installation (Sq.Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

GENERAL NOTES

1. Signs wider than 4 feet or 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on or behind barrier wall, see A4-10 sign plate.
   The Double Arrow sign (W12-1D) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Enhanced Reference Markers, Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±).
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 signs mounted on traffic signal poles is 5'- 3" (±).
5. Offset distance shall be consistent with existing signs or consistent throughout length of project.
6. The (±) tolerance for mounting height is 3 inches.
7. Folding signs shall be mounted at a height of 5'-3" (±) or as directd by the Engineer.

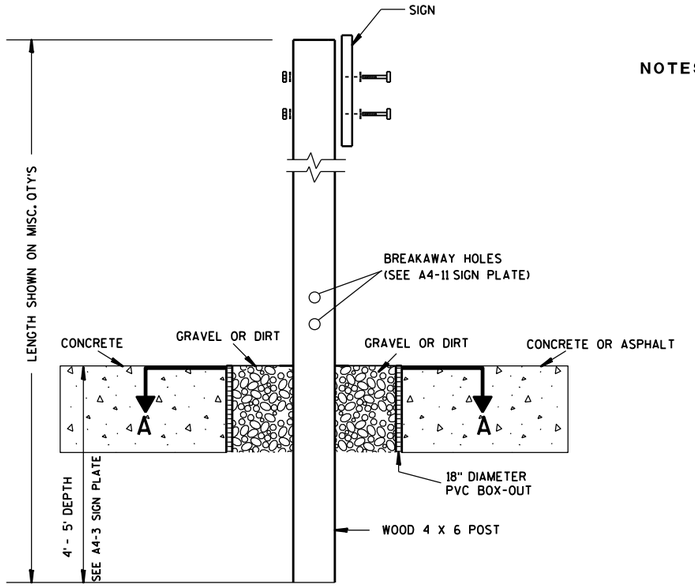
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/13/2020 PLATE NO. A4-3.22

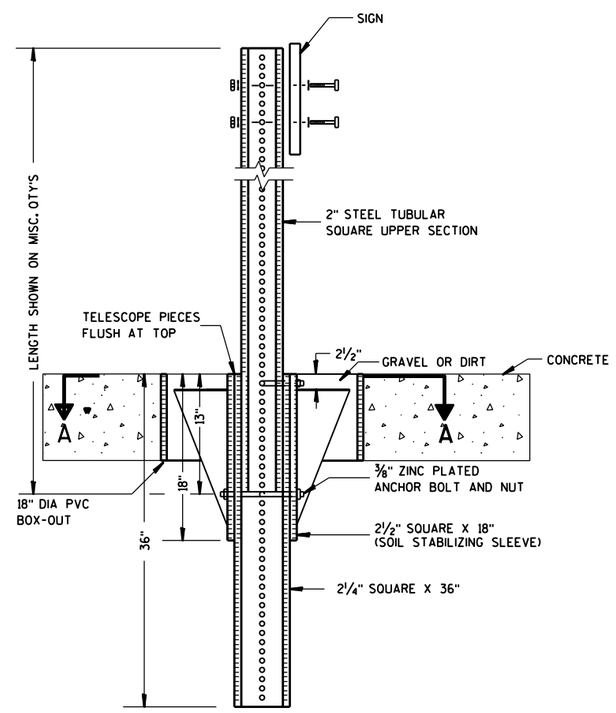
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 116	E



ELEVATION VIEW

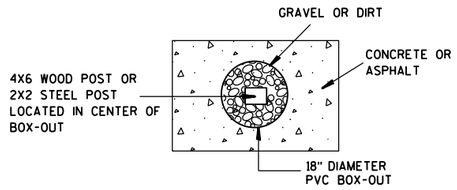
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

NOTES:
1. ALL MATERIAL TO BE APPROVED BY ENGINEER PRIOR TO INSTALLATION
2. SEE SIGN PLATE A4-8 FOR SIGN HARDWARE REQUIREMENTS
3. 18 INCH X 18 INCH SQUARE BOX-OUTS MAY BE USED FOR INSTALLATIONS IN EXISTING CONCRETE OR ASPHALT LOCATIONS.



ELEVATION VIEW

DETAIL OF STEEL 2 X 2 SIGN POST IN BOX-OUT



PLAN VIEW

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST BOX-OUTS A4-3B

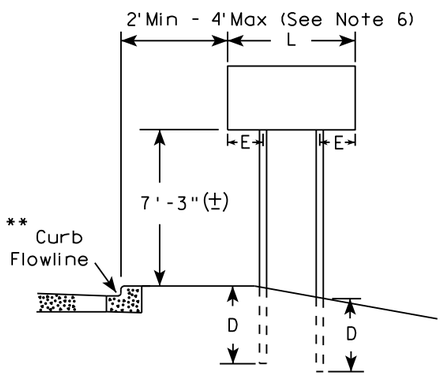
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

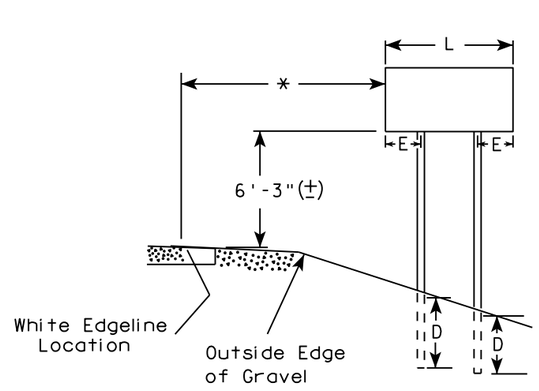
DATE 1/27/14 PLATE NO. A4-3B.1

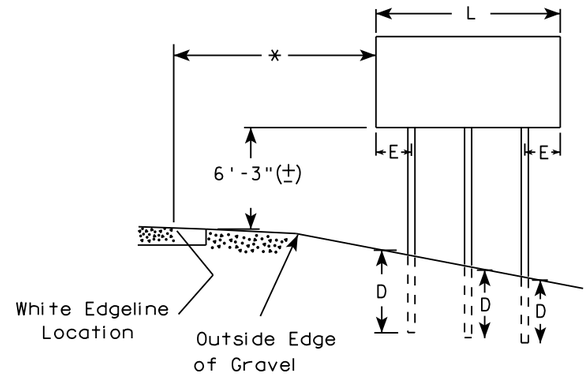
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

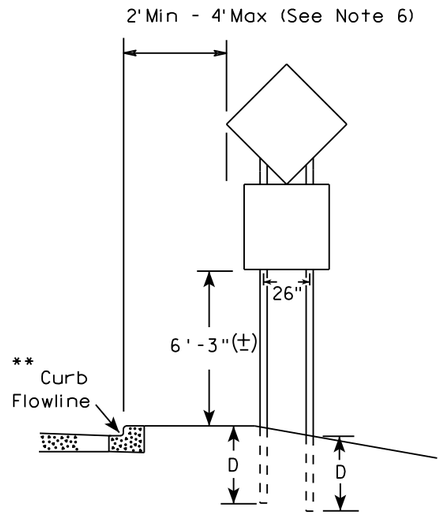
URBAN AREA



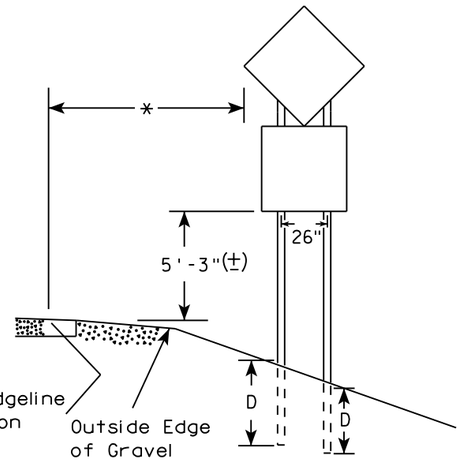
RURAL AREA (See Note 3)







48" DIAMOND WARNING SIGN



48" DIAMOND WARNING SIGN

***	SIGN SHAPE OTHER THAN DIAMOND (TWO POSTS REQUIRED)	
	L	E
	Greater than 48" Less than 60"	12"
	60" to 108"	L/5

SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED)	
L	E
Greater than 108" to 144"	12"

GENERAL NOTES

1. For 3 or 4 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. J-Assemblies are considered to be one sign for mounting height.
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. Folding signs 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), In Road Object Markers (W5-54) & End of Road Markers (W5-56) 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 and less than 20 S.F. in area.

POST EMBEDMENT DEPTH

Area of Sign Installation (Sq. Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

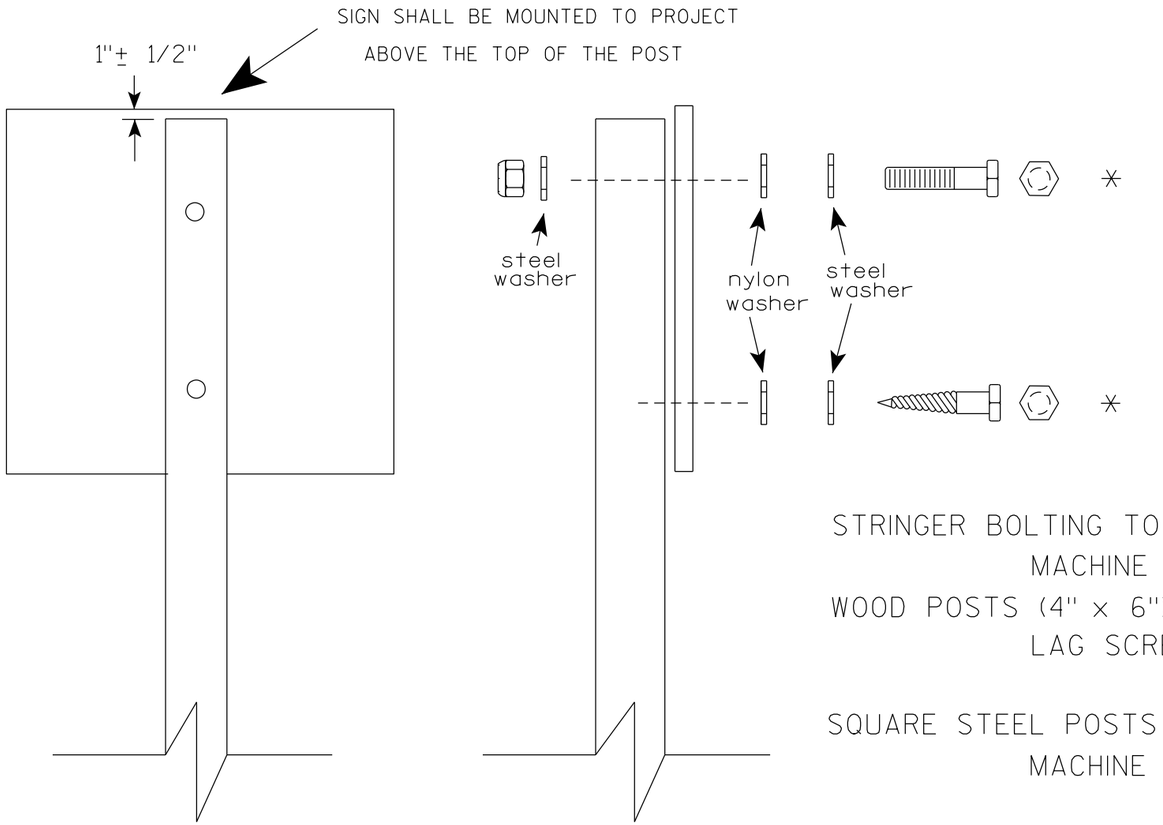
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 8/21/17 PLATE NO. A4-4.15

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 118	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.

STRINGER BOLTING TO ALUMINUM SIGNS (SEE SIGN PLATE A4-18)

MACHINE BOLTS - 5/16" X 1-3/4" Length w/ lock nuts

WOOD POSTS (4" x 6")

LAG SCREWS - 3/8" X 3" (NO STRINGERS ON BACK OF SIGN)
3/8" X 4" (STRINGERS ON BACK OF SIGN)

SQUARE STEEL POSTS (2" x 2")

MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts (NO STRINGER ON BACK OF SIGN)
3/8" X 5" Length w/ nuts (STRINGERS ON BACK OF SIGN)

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

* 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

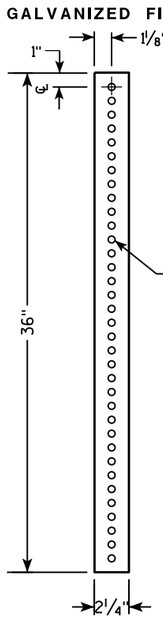
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

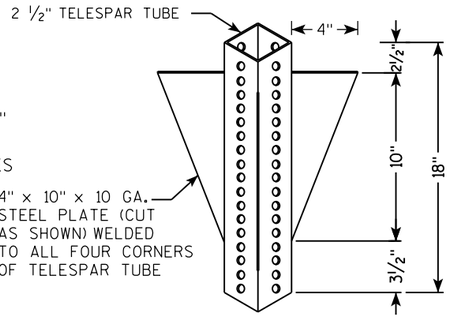
DATE 4/1/2020 PLATE NO. A4-8.9

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

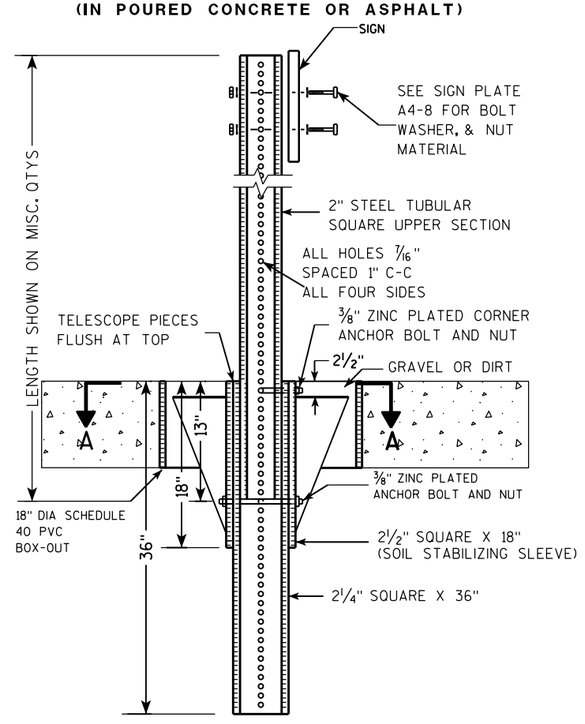
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



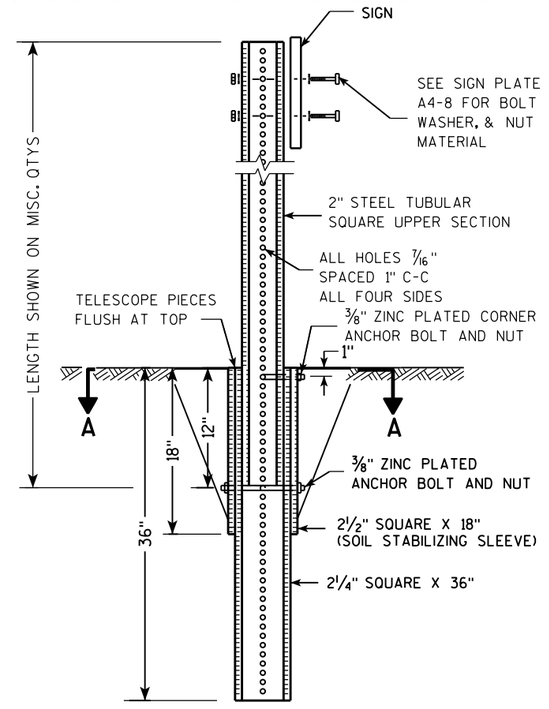
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

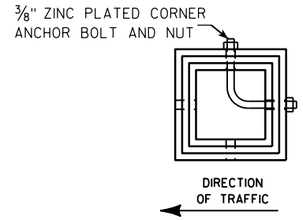


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



DETAIL OF TUBULAR STEEL SIGN POST
(IN LOCATIONS OTHER THAN POURED CONCRETE OR ASPHALT)





SECTION A-A

Area of Sign Installation (Sq. Ft.)	Number of Required Posts
9 or less	1
Greater than 9 less than or equal to 18	2
Greater than 18 less than or equal to 27	3

Signs wider than 3 feet or larger than 9 sq. ft shall be mounted on multiple posts (see above table).

TUBULAR STEEL
SIGN POST
A4-9

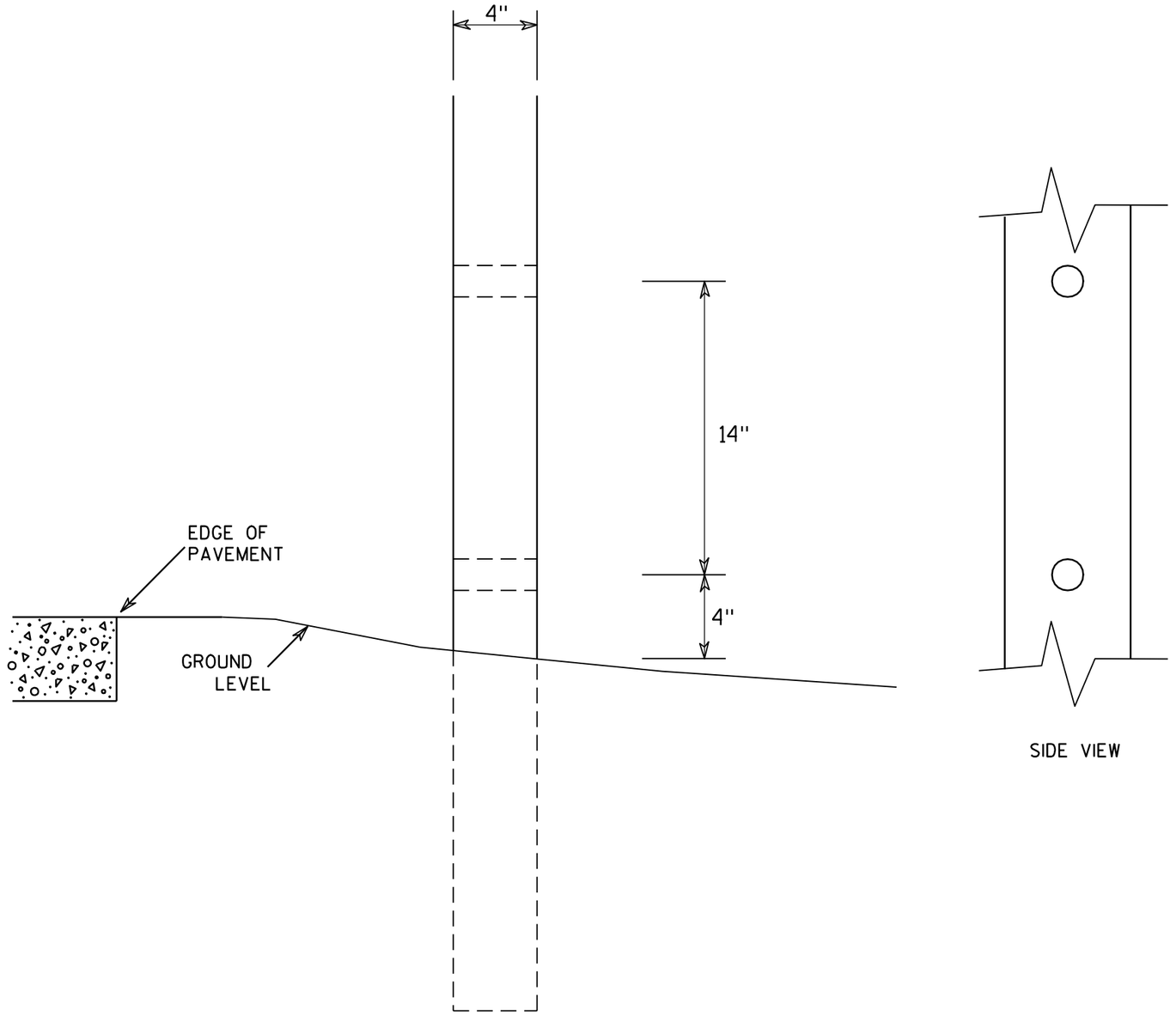
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE A4-9.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A49.DGN PLOT DATE : 05-FEB-2015 17:09 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000 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.

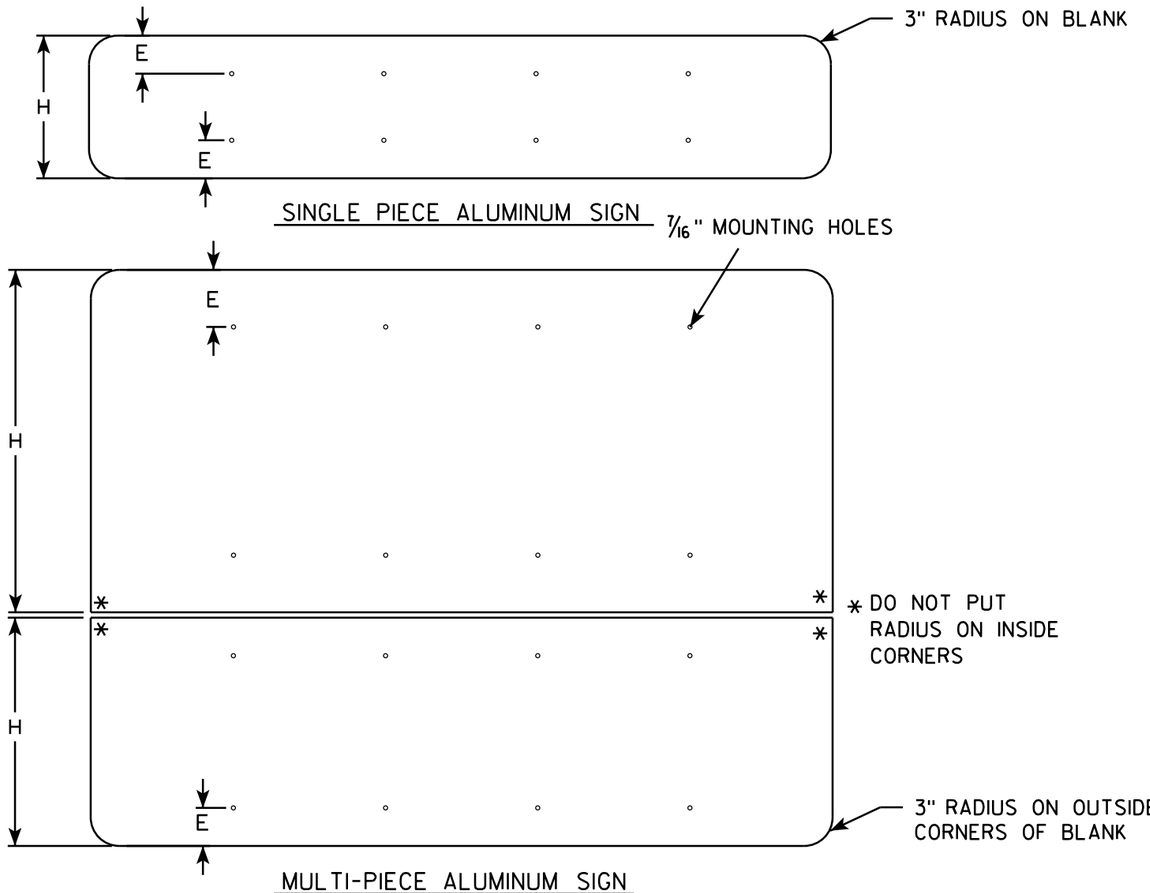
4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang
for State Traffic Engineer

DATE 3/27/97 PLATE NO. A4-11.2

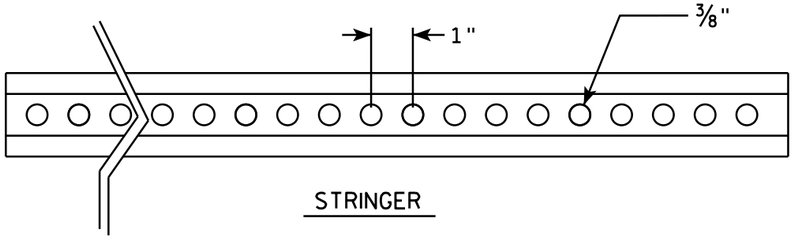
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 121	E

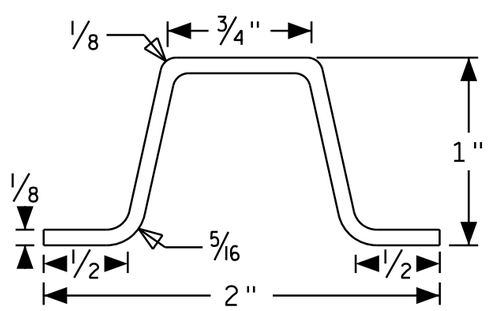


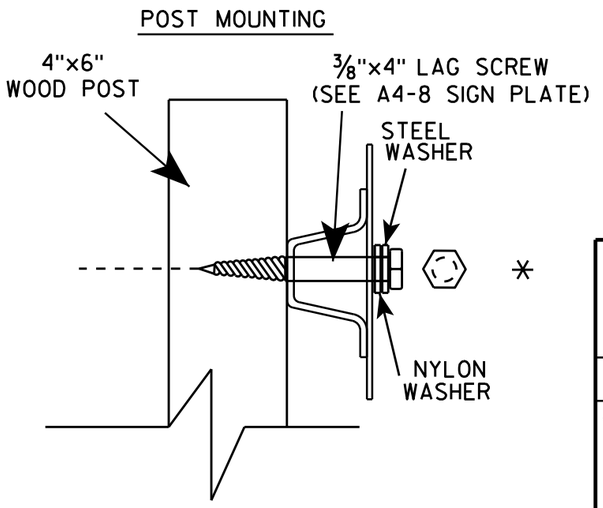
GENERAL NOTES

- ALL SIGNS OVER 60" IN WIDTH SHALL HAVE A 3" RADIUS ON THE OUTSIDE CORNERS OF THE ALUMINUM BLANK.
- MOUNTING HOLES SHALL BE 7/16" DIAMETER.
- SEE CHART FOR HOLE SPACING REQUIREMENTS
- FOR SIGN PANELS WITH DIMENSION (H) 36" AND OVER, DIMENSION E SHALL BE 6"
- FOR SIGN PANELS WITH DIMENSION (H) UNDER 36", DIMENSION E SHALL BE 4"
- SIGN STRINGER MATERIAL SHALL CONSIST OF STEEL CHANNEL POST SECTIONS, WEIGHING 1.12 LBS/FT IN ACCORDANCE WITH SECTION 633.2.1 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION.
- SEE SIGN PLATE A4-8 FOR SIGN STRINGER BOLTING REQUIREMENTS.

SIGN WIDTH	STRINGER WIDTH	POSTS	HOLE SPACING	MOUNTING HOLES
78"	72"	2	16"	15" 31" 47" 63"
84"	72"	2	17"	16½" 33½" 50½" 67½"
90"	72"	2	18"	18" 36" 54" 72"
96"	90"	2	19"	19½" 38½" 57½" 76½"
102"	90"	2	20"	21" 41" 61" 81"
108"	90"	2	21"	22½" 43½" 64½" 85½"
114"	108"	3	15"	12" 27" 42" 57" 72" 87" 102"
120"	108"	3	16"	12" 28" 44" 60" 76" 92" 108"
126"	108"	3	17"	12" 29" 46" 63" 80" 97" 114"
132"	126"	3	18"	12" 30" 48" 66" 84" 102" 120"
138"	126"	3	19"	12" 31" 50" 69" 88" 107" 126"
144"	126"	3	20"	12" 32" 52" 72" 92" 112" 132"







SIGN STRINGER MOUNTING REQUIREMENTS

WISCONSIN DEPT OF TRANSPORTATION

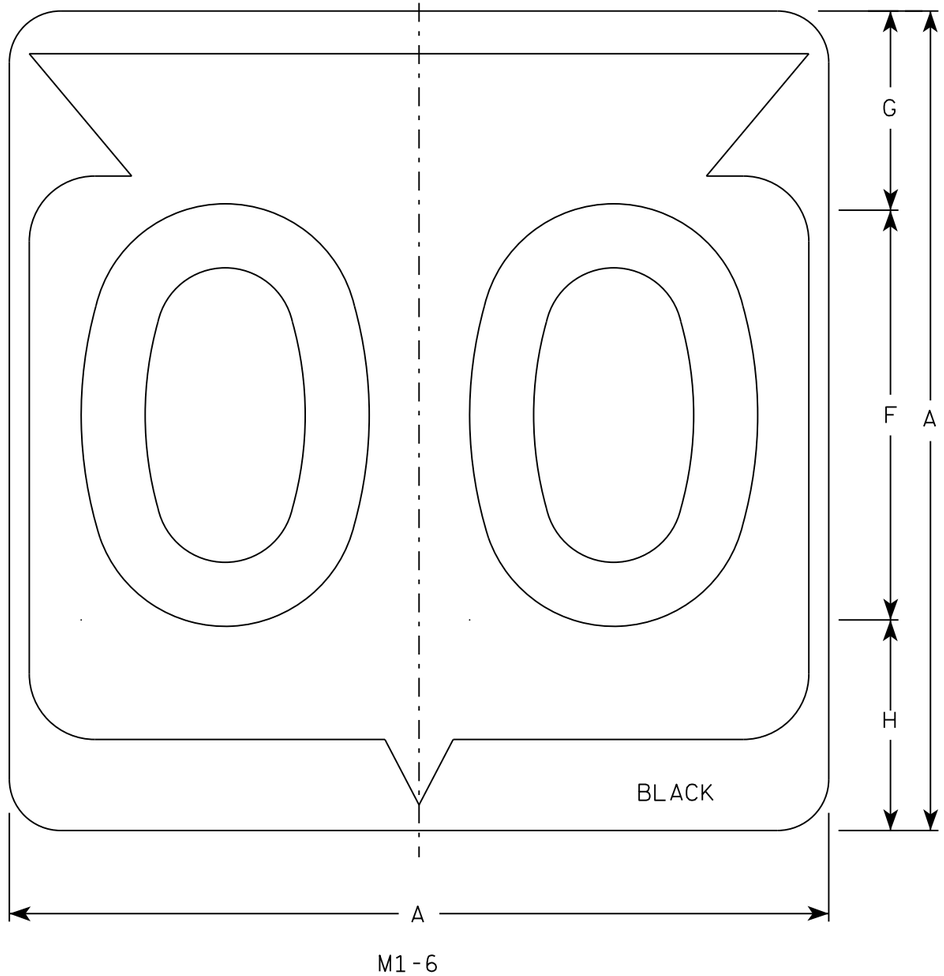
APPROVED Matthew R Rauch

for State Traffic Engineer

DATE 4/26/16 PLATE NO A4-18.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

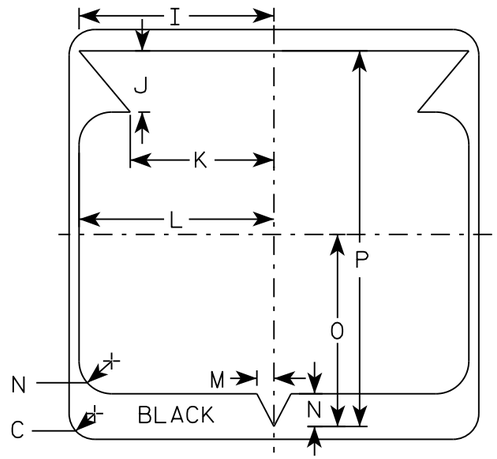
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A418.dgn PLOT DATE : 27-APR-2016 13:56 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 41.805205:1.000000 WISDOT/CADDS SHEET 42



M1-6

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D except 3 number signs Series C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24		1 1/2			12	5 1/2	6 1/2	10 1/4	2 1/2	8 7/8	11 1/2	1	1 7/8	11 1/4	21 7/8											4.0
3	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0
4	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0
5	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0

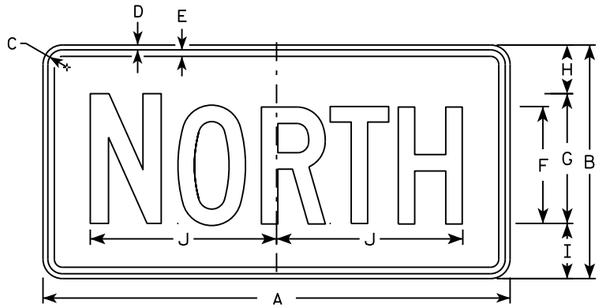
STATE ROUTE MARKER M1-6 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

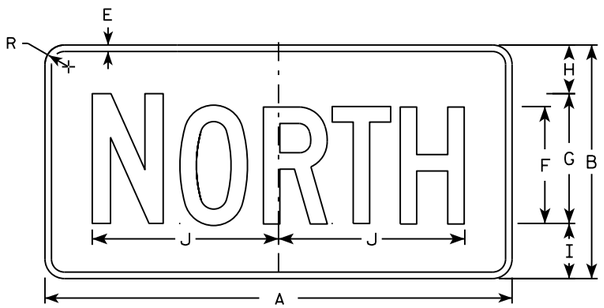
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/16/18 PLATE NO. M1-6.10

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 123 | E



M3-1
MM3-1
MP3-1



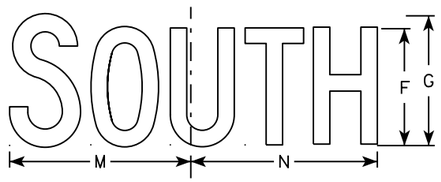
MB3-1
MK3-1
MN3-1



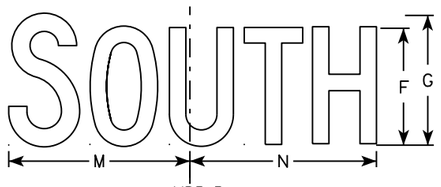
M3-2
MM3-2
MP3-2



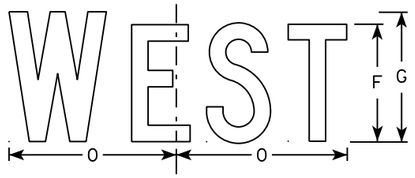
MB3-2
MK3-2
MN3-2



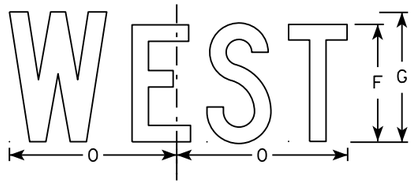
M3-3
MM3-3
MP3-3



MB3-3
MK3-3
MN3-3



M3-4
MM3-4
MP3-4



MB3-4
MK3-4
MN3-4

NOTES

1. All Signs Type II - Type H
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
   Message - Black
   MB3-1 thru MB3-4 Background - Blue
   Message - White
   MK3-1 thru MK3-4 Background - Green
   Message - White
   MM3-1 thru MM3-4 Background - White
   Message - Green
   MN3-1 thru MN3-4 Background - Brown
   Message - White
   MP3-1 thru MP3-4 Background - White
   Message - Blue
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

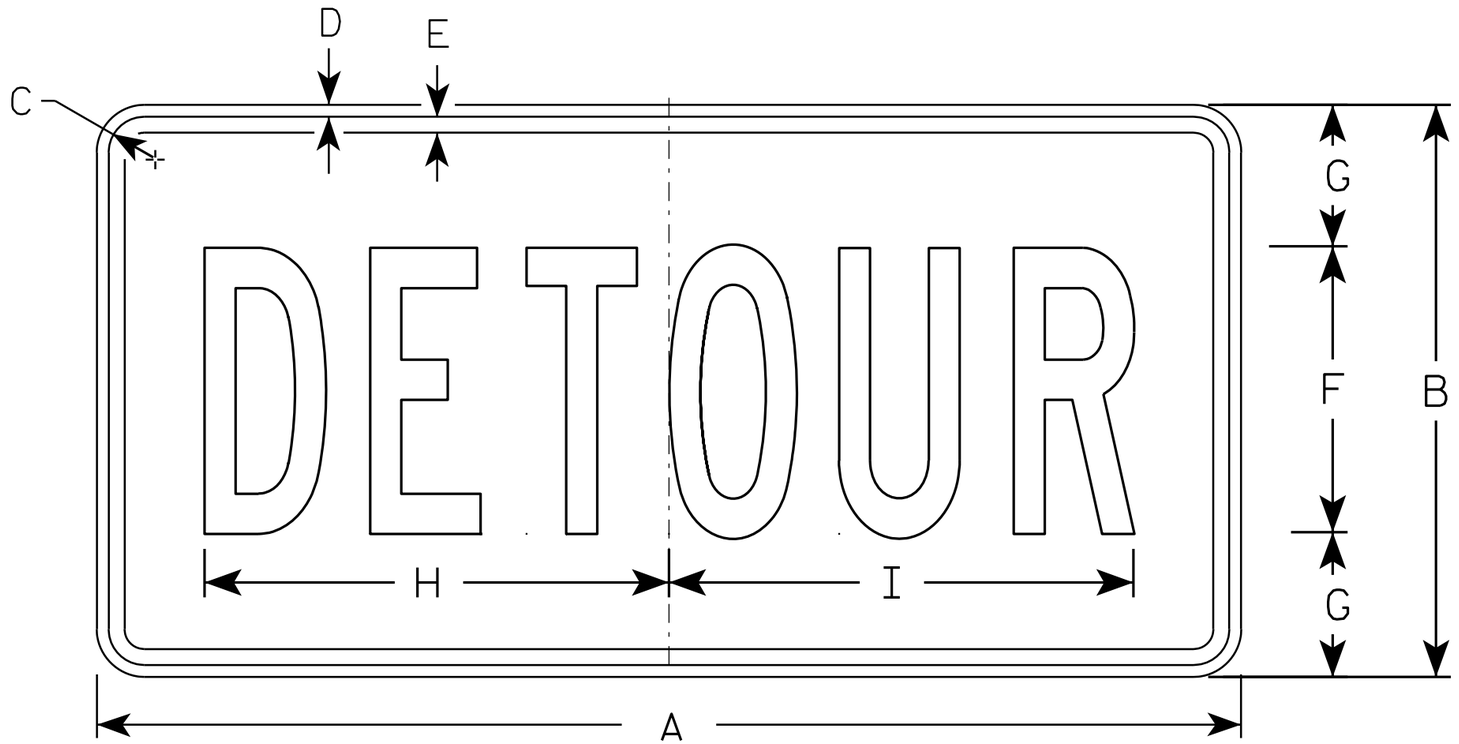
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew P Rauch for State Traffic Engineer

DATE 10/15/15 PLATE NO M3-1.14

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M31.DGN PLOT DATE : 01-DEC-2015 17:54 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



M4-8

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - B
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

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	3	10	10 1/4																		2.0
3	36	18	1 1/8	3/8	1/2	9	4 1/2	14 5/8	14 1/2																		4.5
4																											
5																											

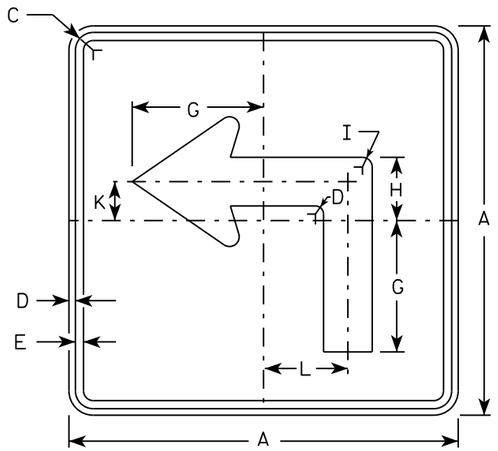
STANDARD SIGN
M4-8

WISCONSIN DEPT OF TRANSPORTATION

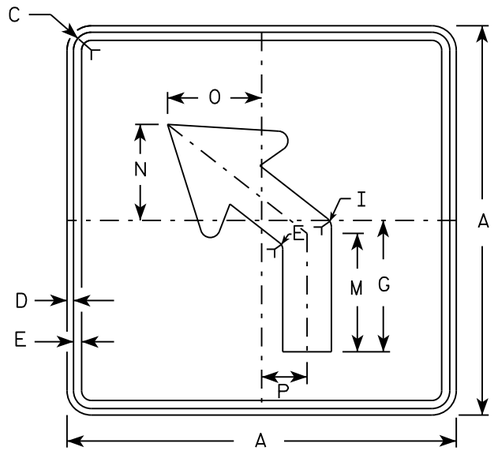
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/10/10 PLATE NO. M4-8.2

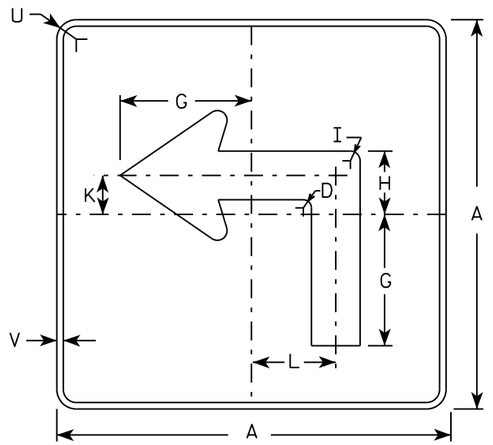
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 125	E



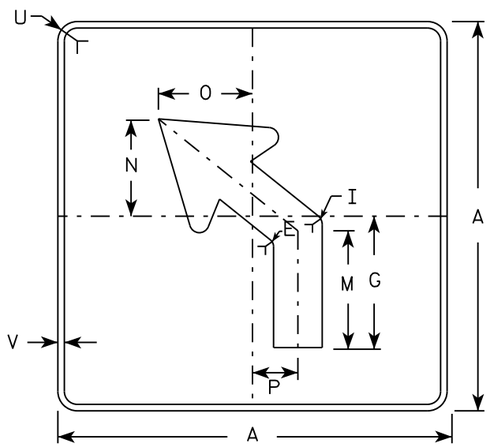
M5-1L
MM5-1L
MO5-1L
MP5-1L



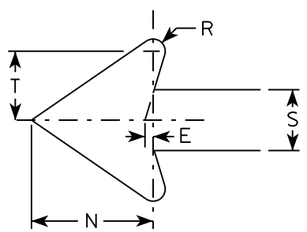
M5-2L
MM5-2L
MO5-2L
MP5-2L



MB5-1L
MK5-1L
MN5-1L
MR5-1L



MB5-2L
MK5-2L
MN5-2L
MR5-2L



NOTES

1. Signs are Type II - Type H reflective except as shown
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
   Message - Black
   MB5-1 and MB5-2 Background - Blue
   Message - White
   MK5-1 and MK5-2 Background - Green
   Message - White
   MM5-1 and MM5-2 Background - White
   Message - Green
   MN5-1 and MN5-2 Background - Brown
   Message - White
   MO5-1 and MO5-2 Background - Orange - Type F Reflective
   Message - Black
   MP5-1 and MP5-2 Background - White - Type H Reflective
   Message - Blue
   MR5-1 and MR5-2 Background - Brown
   Message - Yellow
5. M5-1R same as M5-1L except arrow points right.
6. M5-2R same as M5-2L except arrow tilts right.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
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
3	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
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
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

STANDARD SIGN
M5-1 & M5-2

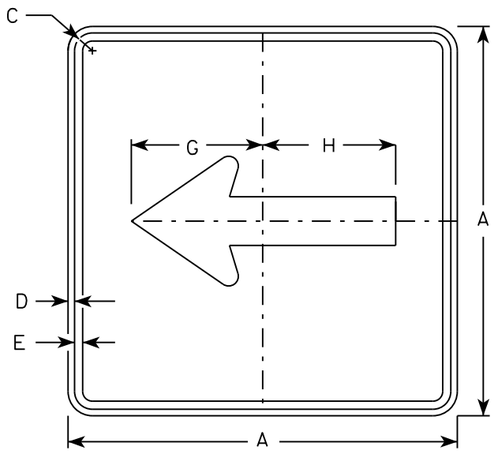
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

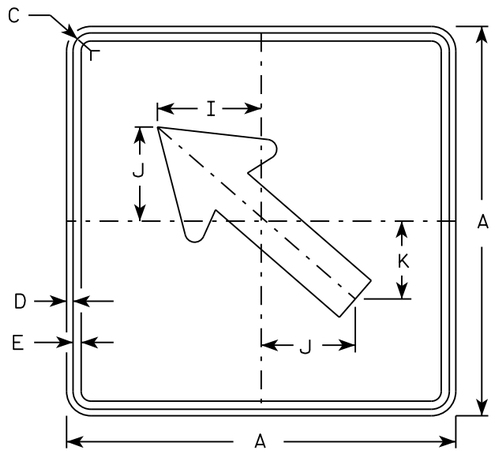
DATE 10/15/15 PLATE M5-1.13

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M51.DGN PLOT DATE : 01-DEC-2015 18:07 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



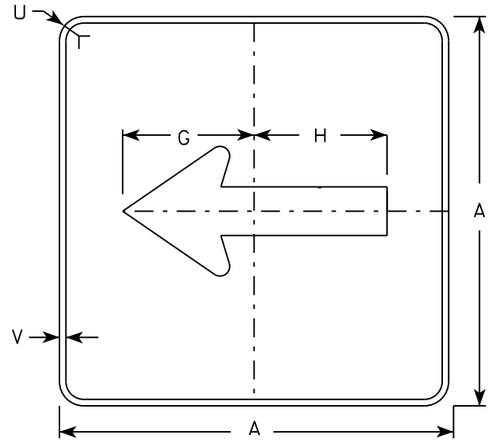
M6-1
MM6-1
MO6-1
MP6-1



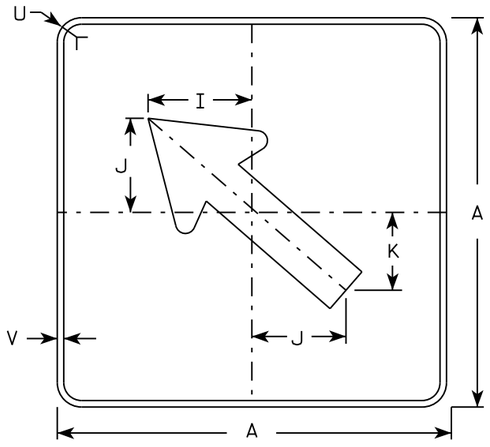
M6-2
MM6-2
MO6-2
MP6-2

NOTES

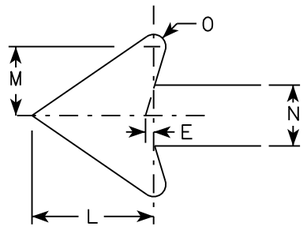
1. Signs are Type II - Type H except as Shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-1 and M6-2 Background - White
   Message - Black
   MB6-1 and MB6-2 Background - Blue
   Message - White
   MK6-1 and MK6-2 Background - Green
   Message - White
   MM6-1 and MM6-2 Background - White
   Message - Green
   MN6-1 and MN6-2 Background - Brown
   Message - White
   MO6-1 and MO6-2 Background - Orange - Type F Reflective
   Message - Black
   MP6-1 and MP6-2 Background - White
   Message - Blue
   MR6-1 and MR6-2 Background - Brown
   Message - Yellow



MB6-1
MK6-1
MN6-1
MR6-1



MB6-2
MK6-2
MN6-2
MR6-2



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	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
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
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
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

STANDARD SIGN
M6-1 & M6-2
SERIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

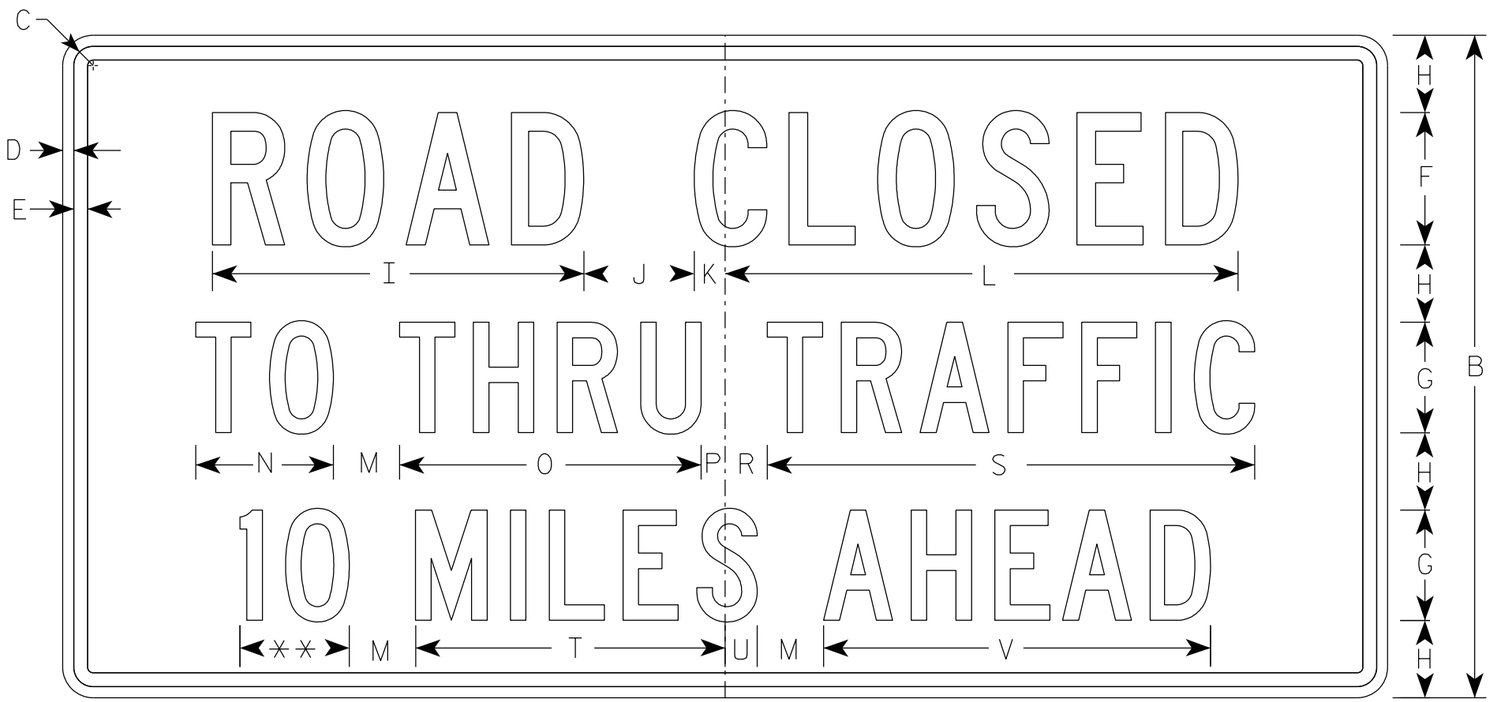
DATE 10/15/15 PLATE 127 M6-1.15

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M61.DGN PLOT DATE : 01-DEC-2015 17:57 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000

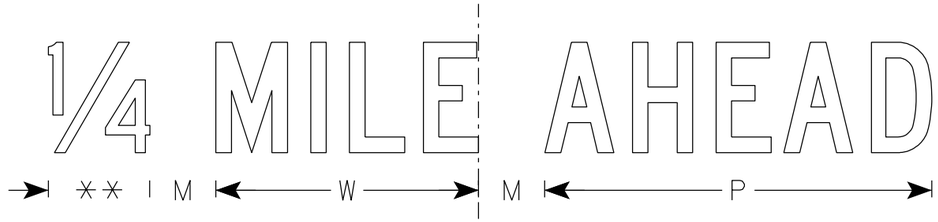
NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals to nearest quarter mile and optically adjust spacing to achieve proper balance.



R11-3

** See Note 5



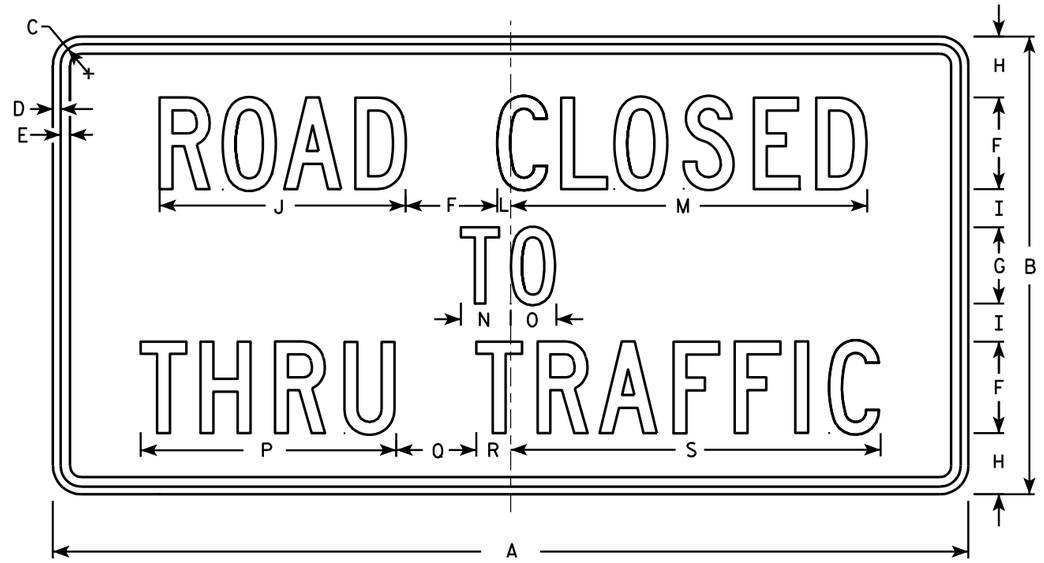
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	18	1 1/4	3/8	3/8	4	3	2	11 1/4	3	1 1/8	15 3/8	2	3 3/4	8 1/4	5/8		1 3/8	13 1/4	8 3/8	7/8	10 1/2	7 1/8				4.5
2S	60	30	1 3/8	1/2	5/8	6	5	3 1/2	16 7/8	5	1 3/8	23 1/4	3	6 1/4	13 5/8	1 1/8		1 7/8	22 1/8	14	1 1/2	17 1/2	11 7/8				12.5
2M	60	30	1 3/8	1/2	5/8	6	5	3 1/2	16 7/8	5	1 3/8	23 1/4	3	6 1/4	13 5/8	1 1/8		1 7/8	22 1/8	14	1 1/2	17 1/2	11 7/8				12.5
3																											
4																											
5																											

STANDARD SIGN
R11-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer
DATE 6/14/2021 PLATE NO. R11-3.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 128	E



R11-4

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	60	30	1 3/8	1/2	5/8	6	5	4	2 1/2	16 1/8		7/8	23 3/8	3 1/4	3	16 3/4	5 1/4	2 1/4	24 1/4								12.5
2M	60	30	1 3/8	1/2	5/8	6	5	4	2 1/2	16 1/8		7/8	23 3/8	3 1/4	3	16 3/4	5 1/4	2 1/4	24 1/4								12.5
3																											
4																											
5																											

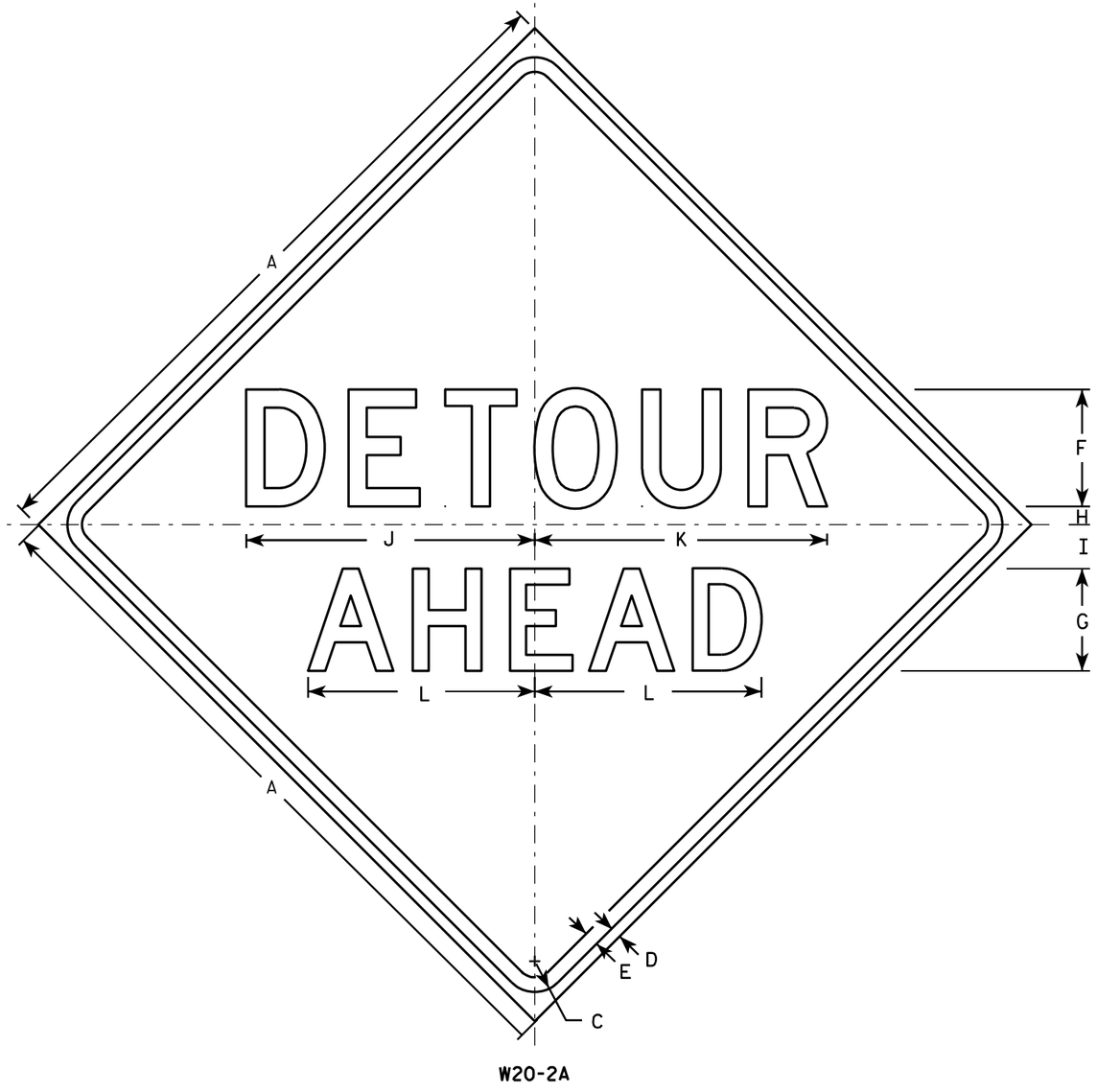
STANDARD SIGN
R11 - 4

WISCONSIN DEPT OF TRANSPORTATION

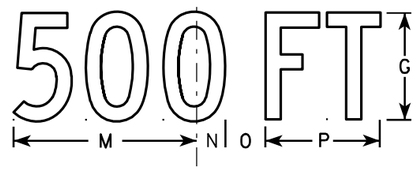
APPROVED Matthew R Rauch for State Traffic Engineer

DATE 4/1/11 PLATE NO. R11-4.3

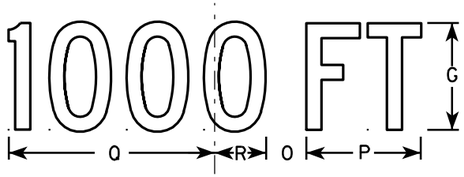
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 129 | E



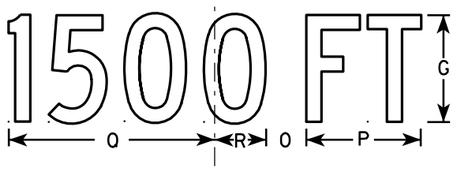
W20-2A



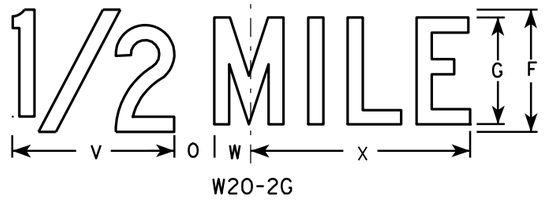
W20-2D



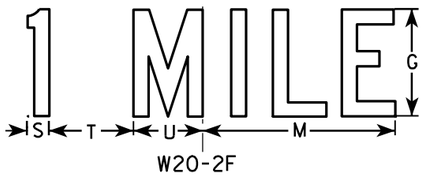
W20-2C



W20-2B



W20-2G



W20-2F

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - See note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Line 1 is Series D.
   Line 2 is Series D for AHEAD and Series C for all other distances.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	6	5	1	2 1/4	14 3/4	15	11 5/8	9	1 3/8	1 7/8	5 5/8	10 1/8	2 1/2	1 1/8	4 1/2	3 1/2	8	1 3/4	10 3/4			9.0
2S	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
2M	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
3	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
4	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
5	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0

STANDARD SIGN
W20-2A,B,C,D,F & G

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-2.6

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 130	E

STATE PROJECT NUMBER

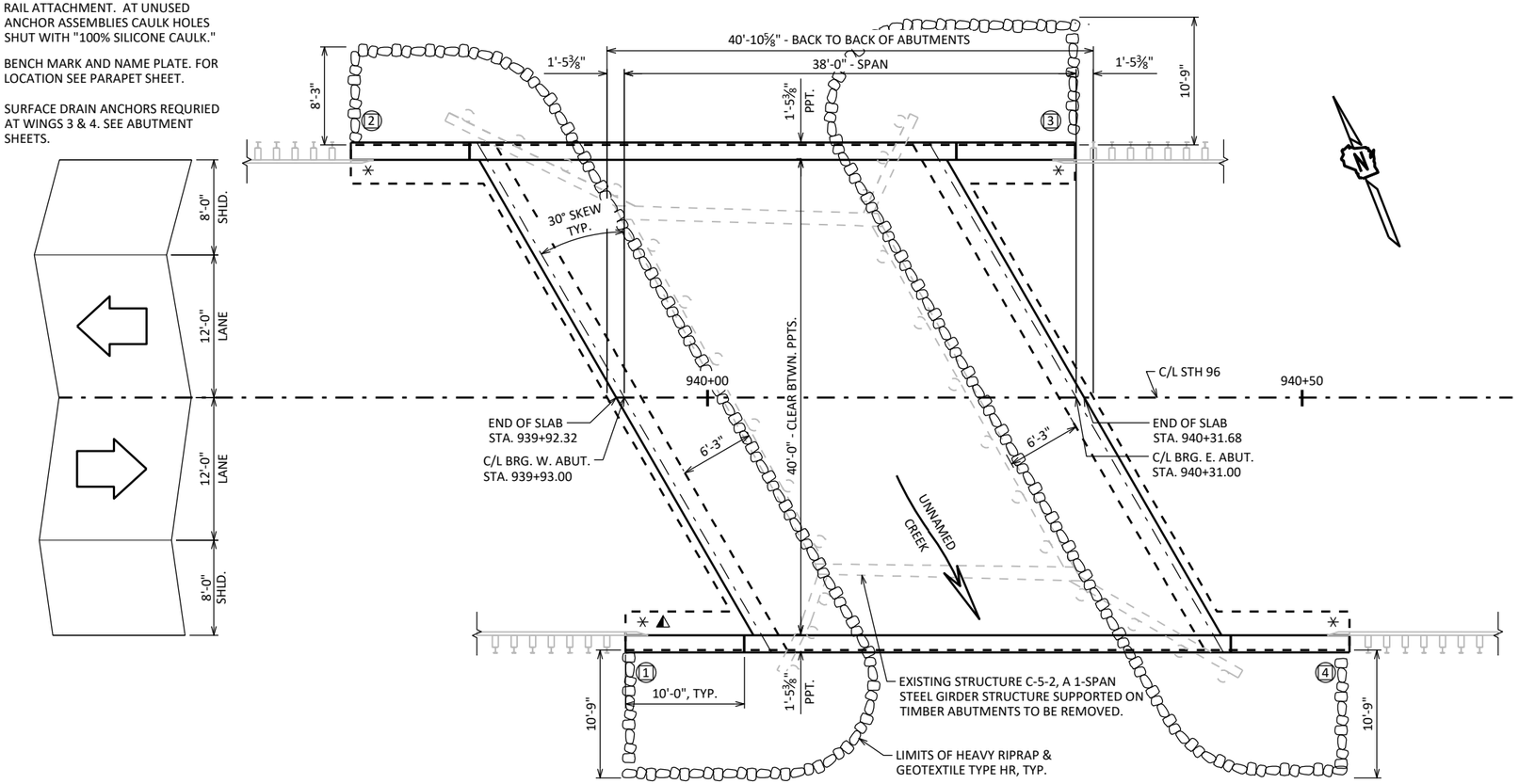
4075-39-72

(1) INDICATES WING NUMBER

⚹ PROVIDE FOR THRIE BEAM GUARD RAIL ATTACHMENT. AT UNUSED ANCHOR ASSEMBLIES CAULK HOLES SHUT WITH "100% SILICONE CAULK."

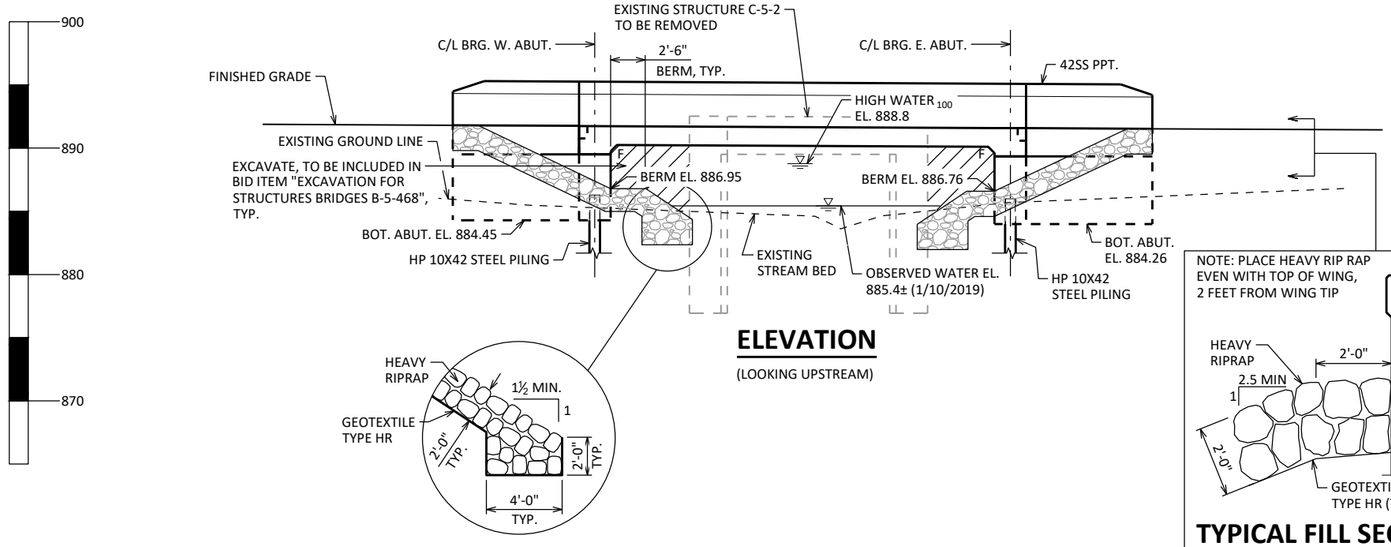
⚠ BENCH MARK AND NAME PLATE. FOR LOCATION SEE PARAPET SHEET.

SURFACE DRAIN ANCHORS REQURIED AT WINGS 3 & 4. SEE ABUTMENT SHEETS.



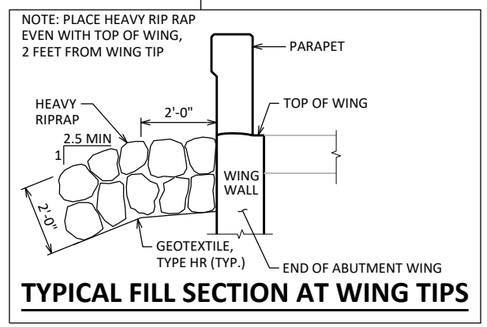
PLAN

SINGLE SPAN 21½" FLAT SLAB



ELEVATION

(LOOKING UPSTREAM)



TYPICAL FILL SECTION AT WING TIPS

DESIGN DATA

LIVE LOAD:

DESIGN LOADING: HL-93
INVENTORY RATING: RF = 1.26
OPERATING RATING: RF = 1.64
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV): 250 (KIPS)

STRUCTURE IS DESIGNED FOR A FUTURE WEARING SURFACE OF 20 POUNDS PER SQUARE FOOT.

MATERIAL PROPERTIES:

CONCRETE MASONRY:
SUPERSTRUCTURE ——— f'_C = 4,000 PSI
ALL OTHER ——— f'_c = 3,500 PSI

BAR STEEL REINFORCEMENT
GRADE 60 ——— f_y = 60,000 PSI

FOUNDATION DATA

ABUTMENTS TO BE SUPPORTED ON HP 10X42 PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 150 TONS ** PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA.
ESTIMATED 75'-0" LONG.
ESTIMATED 75'-0" LONG.

**THE FACTORED AXIAL RESISTANCE OF PILES IN COMPRESSION USED FOR DESIGN IS THE REQUIRED DRIVING RESISTANCE MULTIPLIED BY A RESISTANCE FACTOR OF 0.5 USING MODIFIED GATES TO DETERMINE PILE CAPACITY.

HYDRAULIC DATA

100-YEAR FREQUENCY:
Q_{100}= 300 C.F.S.
V_{100}= 2.73F.P.S.
HW_{100}= EL. 888.76
WATERWAY AREA = 109.89 SQ. FT.
DRAINAGE AREA = 3.58 SQ. MI.
ROADWAY OVERTOPPING = N/A
SCOUR CRITICAL CODE = 5

2-YEAR FREQUENCY:
Q_{100}= 75 C.F.S.
V_{100}= 1.11 F.P.S.
HW_{100}= EL. 887.12

TRAFFIC DATA

STH 96:
ADT = 4,230 (2042)
R.D.S. = 60 MPH

LIST OF DRAWINGS:

1 GENERAL PLAN
2 CROSS SECTION & QUANTITIES
3 SUBSURFACE EXPLORATION
4 WEST ABUTMENT
5 WEST ABUTMENT DETAILS
6 EAST ABUTMENT
7 EAST ABUTMENT DETAILS
8 SUPERSTRUCTURE
9 SUPERSTRUCTURE DETAILS
10 SINGLE SLOPE PARAPET 42SS

STRUCTURE DESIGN CONTACTS:
JOHN SENDOR 608-266-5163
DOMINIQUE BECHLE 608-261-8205

NO.	DATE	REVISION	BY

WISCONSIN DEPARTMENT OF TRANSPORTATION
BUREAU OF STRUCTURES

ACCEPTED DMB 11/19/21
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE B-05-468

STH 96 OVER UNNAMED CREEK

COUNTY	TOWN
BROWN	NEW DENMARK

DESIGN SPEC.
AASHTO LRFD BRIDGE DESIGN SPECIFICATION

DESIGNED BY	DESIGNED CK'D	DRAWN BY	PLANS CK'D
JJS	ABS	ABS	JJS

GENERAL PLAN

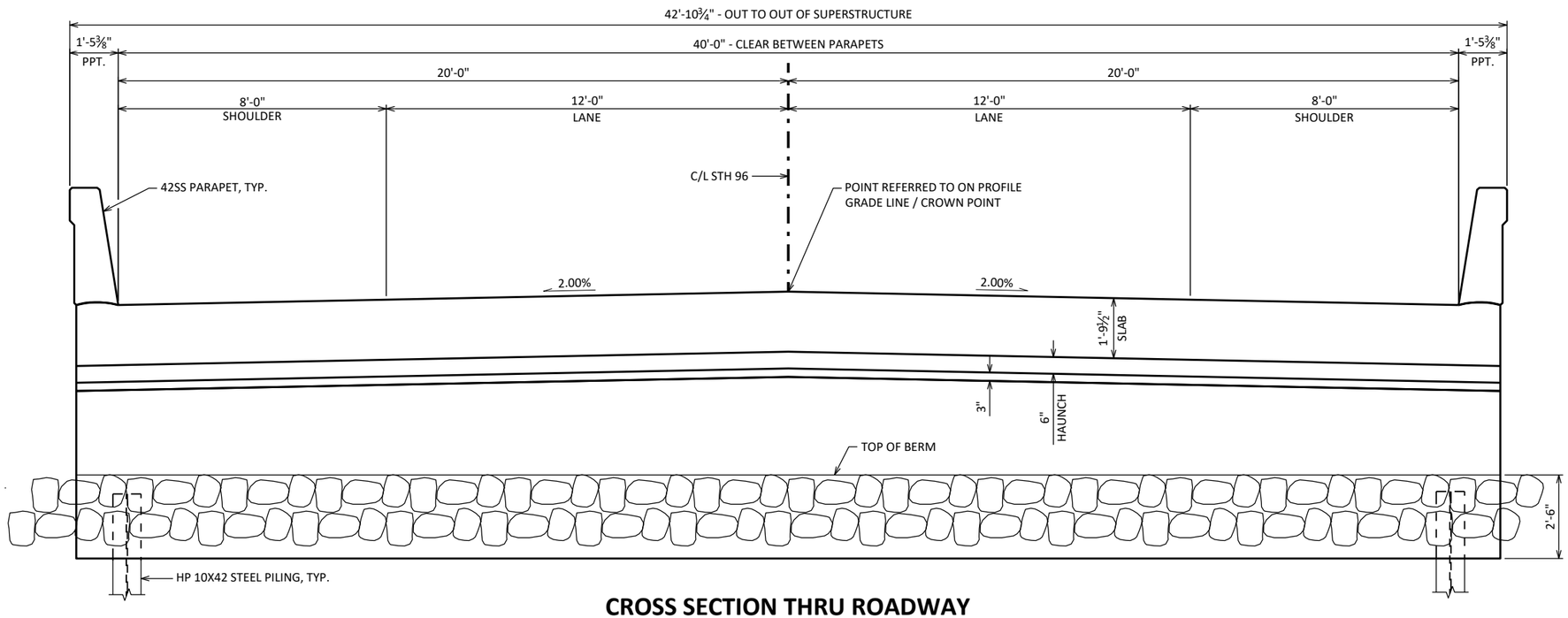
SHEET 1 OF 10
131

SCALE = 1.0

I.D. 4075-36-00A DATE: NOV. 2021

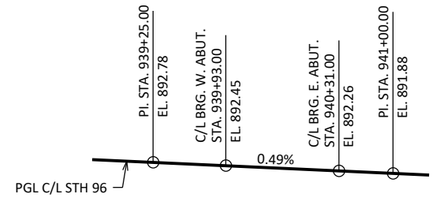
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CROSS SECTION THRU ROADWAY

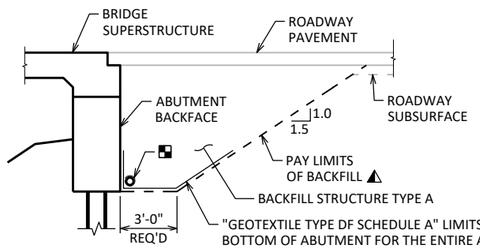
(LOOKING EAST)



PROFILE GRADE LINE - STH 96

TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEMS	UNIT	SUPER.	WEST ABUT.	EAST ABUT.	TOTALS
203.0260	REMOVING STRUCTURE OVER WATERWAY MINIMAL DEBRIS C-5-2	EACH	---	---	---	1
206.1000	EXCAVATION FOR STRUCTURES BRIDGES B-5-468	LS	---	---	---	1
210.1500	BACKFILL STRUCTURE TYPE A	TON	---	188	188	376
502.0100	CONCRETE MASONRY BRIDGES	CY	131.5	41.2	41.2	214
502.3200	PROTECTIVE SURFACE TREATMENT	SY	192	---	---	192
502.3210	PIGMENTED SURFACE SEALER	SY	40	10	10	60
505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	LB	---	2,830	2,830	5,660
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	26,530	2,040	2,070	30,640
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	---	12	12	24
550.1100	PILING STEEL HP 10-INCH X 42 LB	LF	---	525	525	1,050
606.0300	RIPRAP HEAVY	CY	---	70	70	140
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	---	80	80	160
614.0150	ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD	EACH	4	---	---	4
645.0111	GEOTEXTILE TYPE DF SCHEDULE A	SY	---	59	59	118
645.0120	GEOTEXTILE TYPE HR	SY	---	140	140	280
	NON-BID ITEMS					
	FILLER	SIZE	---	---	---	1/2", 3/4"



TYPICAL SECTION THRU ABUTMENT

⚠ BACKFILL PAY LIMITS. BACKFILL BEYOND PAY LIMITS SHALL BE INCIDENTAL TO EXCAVATION FOR STRUCTURES. LIMITS OF EXCAVATION SHALL BE DETERMINED BY THE CONTRACTOR.

▪ PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT ENDS OF PIPE UNDERDRAIN.

STATE PROJECT NUMBER

4075-39-72

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

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

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

BEVEL EXPOSED EDGES OF CONCRETE ¾" UNLESS OTHERWISE NOTED.

THE UPPER LIMITS OF "EXCAVATION FOR STRUCTURES BRIDGES B-5-468" SHALL BE THE EXISTING GROUNDLINE.

AT THE BACK FACE OF ABUTMENT ALL VOLUME WHICH CANNOT BE PLACED BEFORE ABUTMENT CONSTRUCTION AND IS NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH STRUCTURE BACKFILL TYPE A.

EXCAVATION BELOW THE ABUTMENT AND ABUTMENT BEDDING MATERIALS REQUIRES ENGINEER APPROVAL. GEOTEXTILE SHALL BE SET AT THE BOTTOM OF EXCAVATION AND EXTEND 2'-0" ABOVE BOTTOM OF ABUTMENT.

THE QUANTITY FOR BACKFILL STRUCTURE IS CALCULATED BASED ON THE DETAIL SHOWN IN THE PLANS.

PROTECTIVE SURFACE TREATMENT TO BE APPLIED TO THE ENTIRE EXPOSED TOP OF DECK AND TO THE VERTICAL AND HORIZONTAL SURFACES OF THE PAVING NOTCHES AT ABUTMENT DIAPHRAGMS.

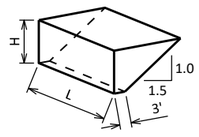
PIGMENTED SURFACE SEALER TO BE APPLIED TO THE FRONT FACE AND THE TOP OF THE PARAPETS.

THE SLOPE OF THE FILL IN FRONT OF THE ABUTMENTS SHALL BE COVERED WITH HEAVY RIPRAP AND GEOTEXTILE TYPE "HR" TO THE EXTENT SHOWN ON SHEET 1 AND THE ABUTMENT DETAILS.

AT ABUTMENTS, HP 12X53 STEEL PILING MAY BE USED IN LIEU OF HP 10X42 STEEL PILING. PAYMENT SHALL BE BASED ON BID PRICE FOR HP 10X42 STEEL PILING.

SLAB FALSEWORK SHALL BE SUPPORTED ON PILES OR THE SUBSTRUCTURE, UNLESS AN ALTERNATE METHOD IS APPROVED BY THE ENGINEER.

AT ABUTMENTS, CONCRETE POURED UNDER WATER WILL BE ALLOWED AND SHALL BE DONE IN ACCORDANCE WITH SECTION 502.3.5.3 OF THE STANDARD SPECIFICATIONS.



ABUTMENT BACKFILL DIAGRAM

L = OUT TO OUT OF ABUTMENT BODY INCLUDING WINGS (FT)
H = AVERAGE ABUTMENT FILL HEIGHT (FT)
EF = EXPANSION FACTOR (1.20 FOR CY BID ITEMS AND 1.00 FOR TON BID ITEMS)
V_{CF} = (L)(3.0')(H) + (L)(0.5)(1.5H)(H)
V_{CY} = V_{CF}(EF)/27
V_{TON} = V_{CY}(2.0)

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-05-468

DRAWN BY ABS | PLANS CK'D JJS

CROSS SECTION & QUANTITIES

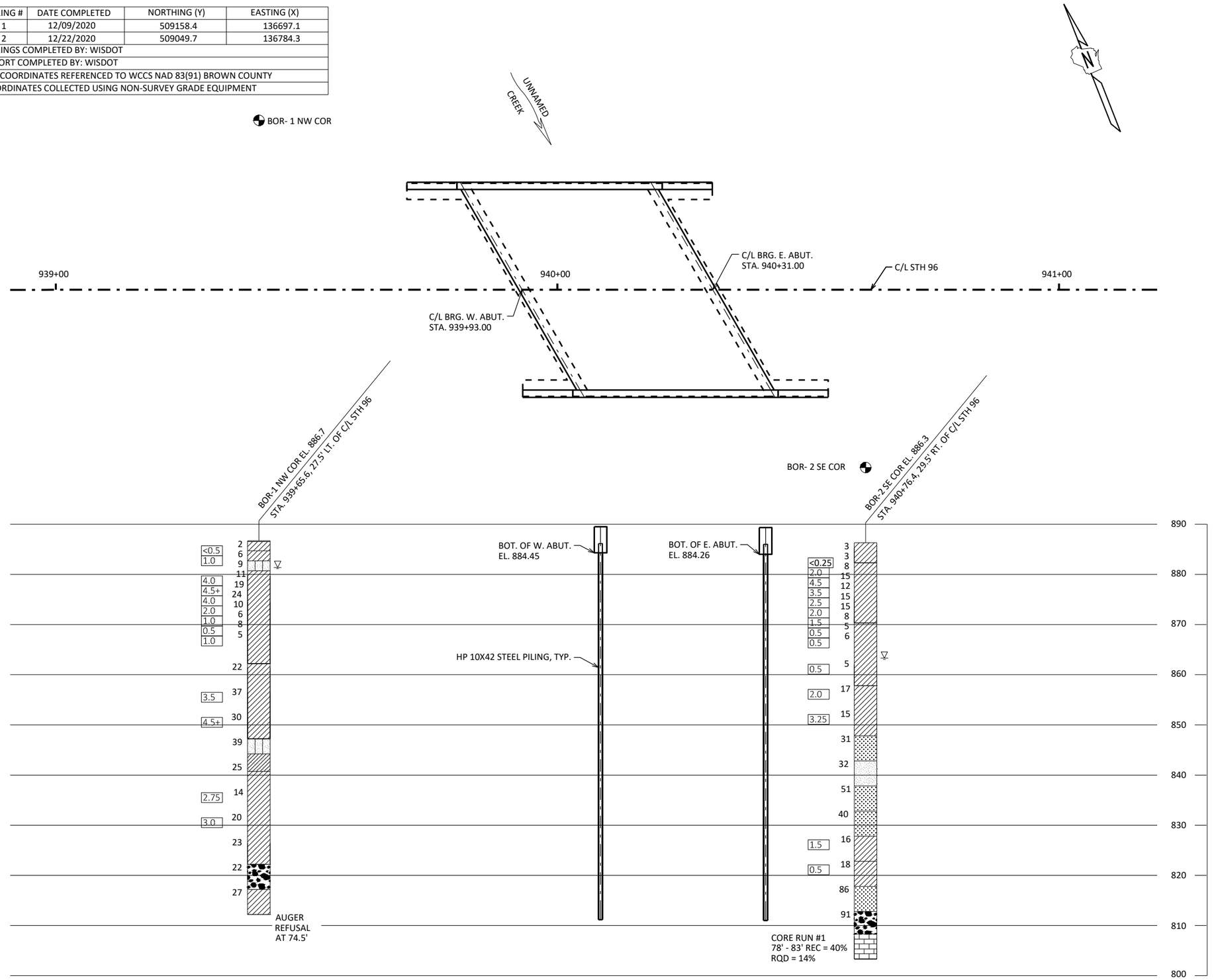
SHEET 2
132

SCALE = 4.0

8

8

BORING #	DATE COMPLETED	NORTHING (Y)	EASTING (X)
1	12/09/2020	509158.4	136697.1
2	12/22/2020	509049.7	136784.3
BORINGS COMPLETED BY: WISDOT			
REPORT COMPLETED BY: WISDOT			
ALL COORDINATES REFERENCED TO WCCS NAD 83(91) BROWN COUNTY			
COORDINATES COLLECTED USING NON-SURVEY GRADE EQUIPMENT			



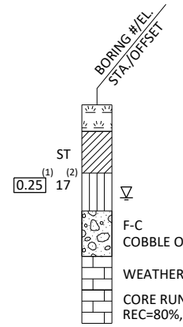
STATE PROJECT NUMBER

4075-39-72

MATERIAL SYMBOLS

ASPHALT, TOPSOIL, PEAT, CONCRETE, FILL, GRAVEL, SAND, CLAY, SILT, BOULDERS OR COBBLES, LIMESTONE, BEDROCK (UNKNOWN), SHALE, SANDSTONE, IGNEOUS/META

LEGEND OF BORING



(1) UNCONFINED STRENGTH, AS DETERMINED BY A POCKET PENETROMETER (TSF)

(2) UNLESS OTHERWISE, SPECIFIED THE SPT 'N' VALUE IS BASED ON AASHTO T-206, STANDARD PENETRATION TEST. THE SPT 'N' VALUE PRESENTED HAS NOT BEEN CORRECTED FOR OVERBURDEN PRESSURE OR HAMMER EFFICIENCY.

GROUND WATER ELEVATION

AT TIME OF DRILLING
END OF DRILLING
AFTER DRILLING

ABBREVIATIONS

F-FINE M-MEDIUM C-COARSE ST-SHELBY TUBE

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

BORINGS WERE COMPLETED AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING TO OBTAIN INFORMATION CONCERNING THE CHARACTER OF SUBSURFACE MATERIALS FOUND AT THE SITE. BECAUSE THE INVESTIGATED DEPTHS ARE LIMITED AND THE AREA OF THE BORINGS IS VERY SMALL IN RELATION TO THE ENTIRE SITE, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT SIMILAR SUBSURFACE CONDITIONS BELOW, BETWEEN, OR BEYOND THESE BORINGS. VARIATIONS IN SOIL CONDITIONS SHOULD BE EXPECTED AND FLUCTUATIONS IN GROUNDWATER LEVELS MAY OCCUR.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-05-468

DRAWN BY ABS/TLP | PLANS CK'D JJS

SUBSURFACE EXPLORATION

SHEET 3
133

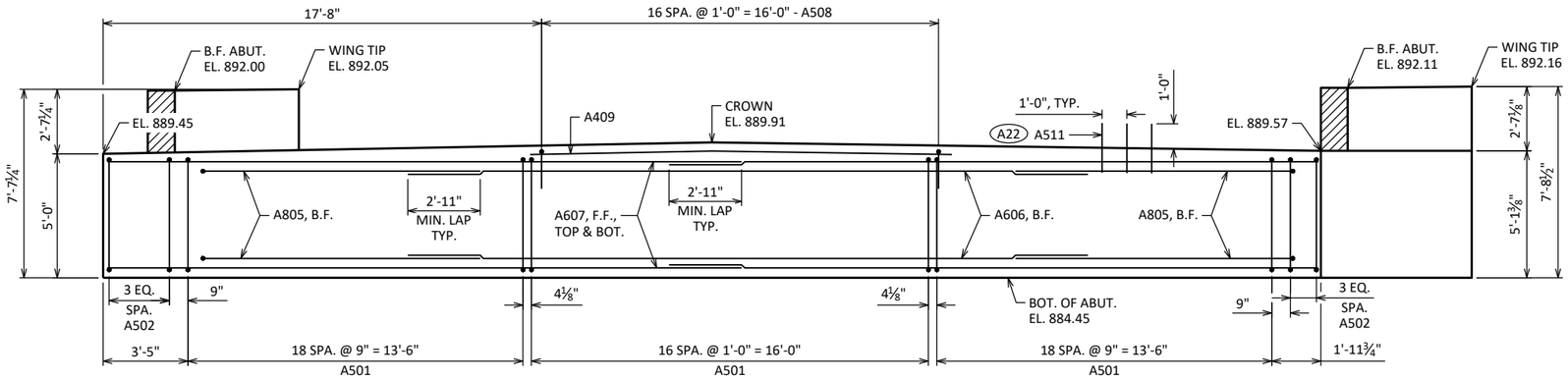
SCALE =

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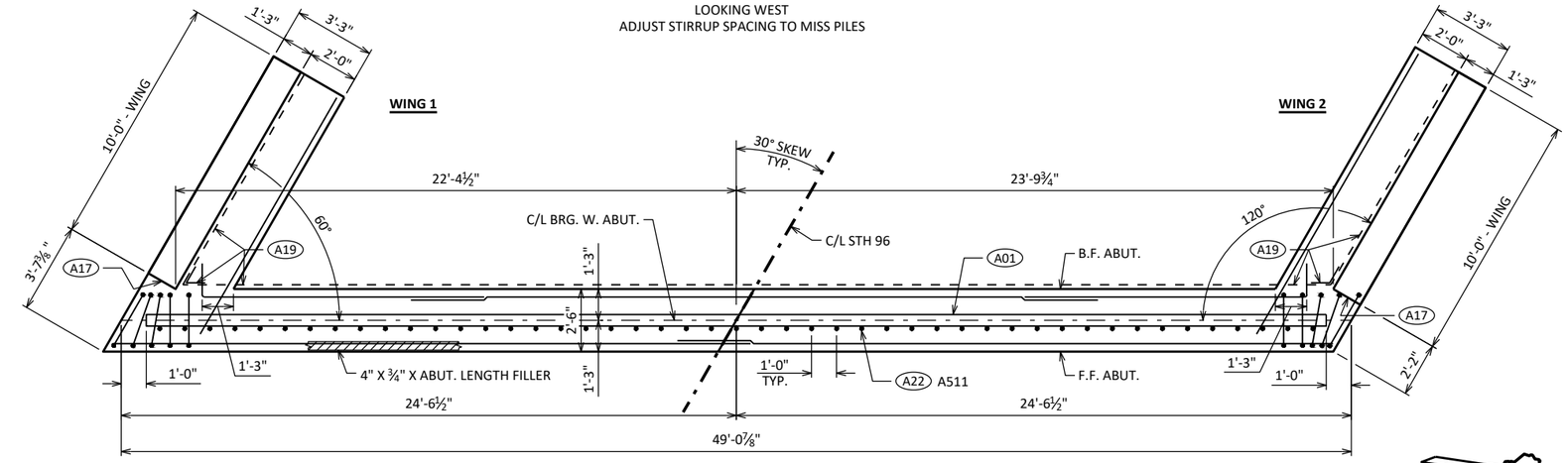
STATE PROJECT NUMBER

4075-39-72

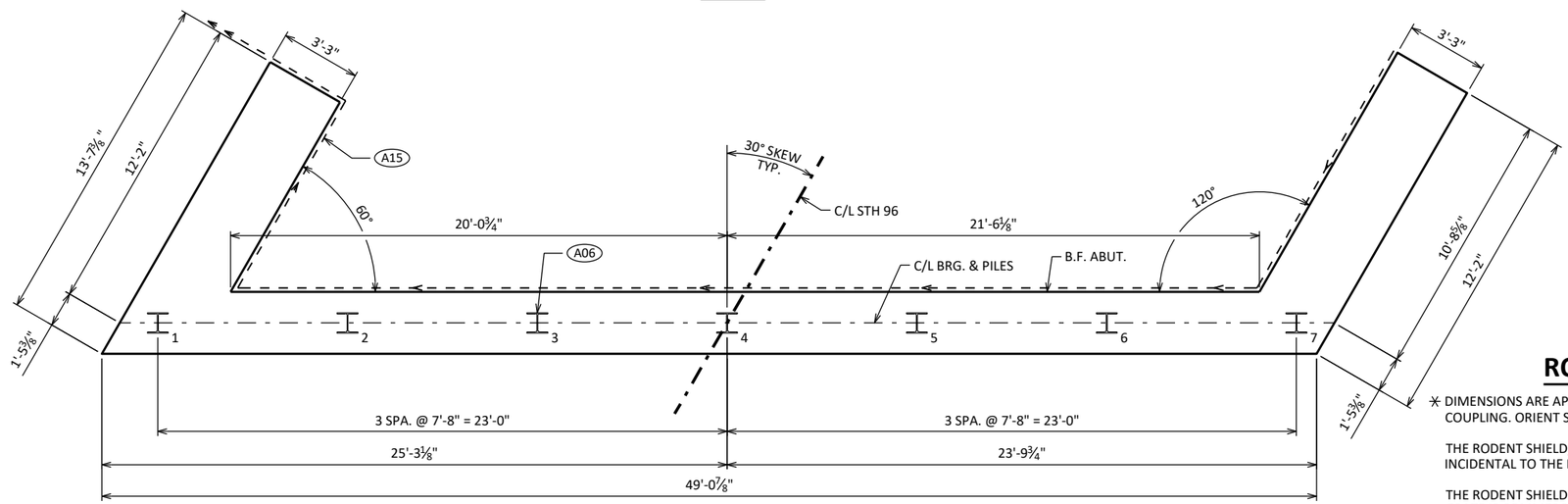


ELEVATION

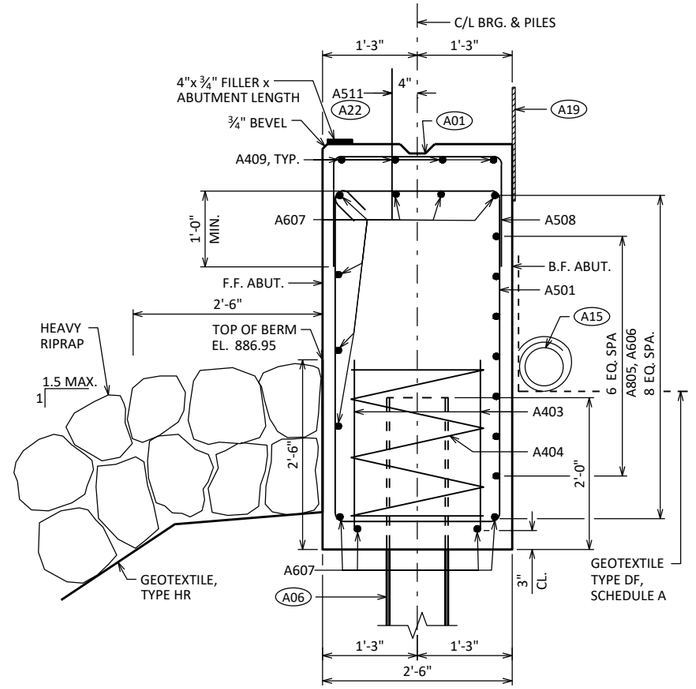
LOOKING WEST
ADJUST STIRRUP SPACING TO MISS PILES



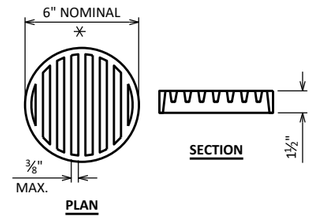
PLAN



PILE PLAN



SECTION THRU BODY



RODENT SHIELD DETAIL

⚹ DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING. ORIENT SO SLOTS ARE VERTICAL.

THE RODENT SHIELD, PIPE COUPLING AND SCREWS SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "PIPE UNDERDRAING WRAPPED 6-INCH".

THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALLY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE EXPOSED END OF THE PIPE UNDERDRAIN. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH STAINLESS STEEL SHEET METAL SCREWS.

- (A01) CONST. JOINT: KEYWAY FORMED BY A BEVELED 2 x 6.
- (A03) OPTIONAL CONST. JOINT: KEYWAY FORMED BY BEVELED 2 x 6. (18" RMW @ B.F. & ¾" "V" GROOVE @ F.F. IF JOINT IS USED).
- (A06) SUPPORT ABUTMENT ON HP 10 x 42 STEEL PILING, ESTIMATED 75'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 150 TONS PER PILE.
- (A15) PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE, MINIMUM INVERT AT OUTLET = EL. 886.4. RODENT SHIELD REQUIRED.
- (A17) ½" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF ½" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.
- (A19) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.
- (A22) A511 BARS @ 1'-0" CTRS. BETWEEN BEAM SEATS. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 1'-0" INTO CONC.)

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-05-468

DRAWN BY ABS | PLANS CK'D JJS

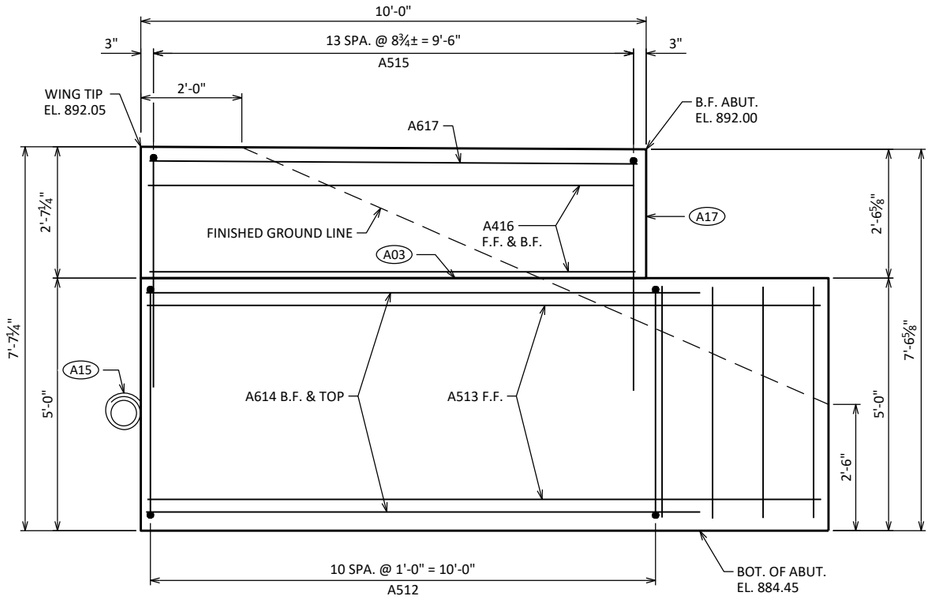
WEST ABUTMENT

SHEET 4
134

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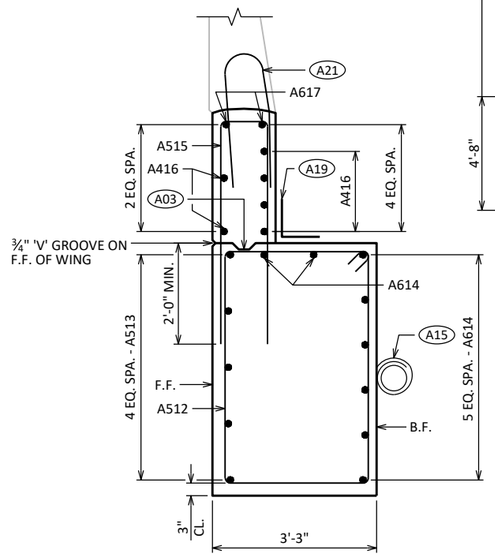
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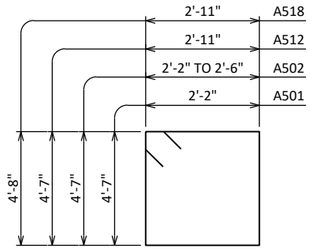


WING 1 ELEVATION

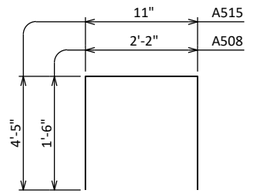
LOOKING NORTH



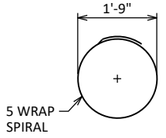
SECTION THRU WING 1



A501, A502, A512, A518



A508, A515



A404



A805

BILL OF BARS

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

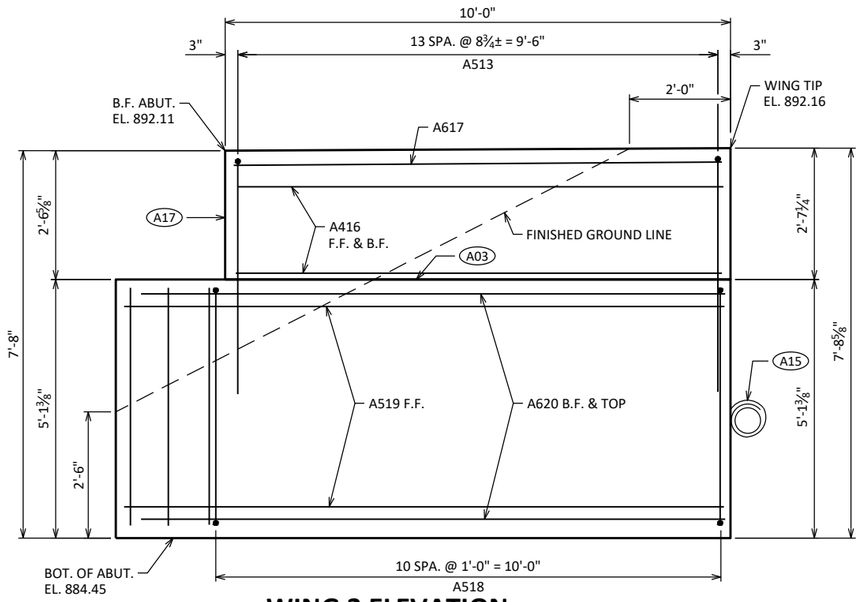
BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
A501		55	14'-2"	X		BODY - STIRRUPS
A502		8	14'-6"	X	⚠	BODY - STIRRUPS - ENDS
A403		14	2'-3"			BODY - VERT. - 2 PER PILE
A404		7	28'-0"	X		BODY - VERT. - AT BODY PILES
A805		14	12'-5"	X		BODY - HORIZ. - B.F. - ENDS
A606		7	27'-5"			BODY - HORIZ. B.F.
A607		22	25'-10"			BODY - HORIZ. - F.F. TOP AND BOTTOM
A508		17	4'-11"	X		BODY - VERT.
A409		4	17'-0"			BODY -HORIZ. -TOP
A410	X	7	4'-7"			BODY - VERT. - ENDS
A511	X	47	2'-0"			BODY - VERT. - DOWELS
A512	X	11	15'-8"	X		WING 1 - STIRRUPS
A513	X	5	13'-0"			WING 1 - HORIZ. - F.F.
A614	X	8	10'-11"			WING 1 - HORIZ. - B.F. & TOP
A515	X	28	9'-6"	X		WINGS 1 & 2 - VERT.
A416	X	12	9'-7"			WINGS 1 & 2 - HORIZ. - B.F. & F.F.
A617	X	4	9'-7"			WINGS 1 & 2 - HORIZ. - TOP
A518	X	11	15'-10"	X		WING 2 - STIRRUPS
A519	X	5	11'-10"			WING 2 - HORIZ. - F.F.
A620	X	8	12'-11"			WING 2 - HORIZ. - B.F. & TOP

⚠ LENGTH SHOWN FOR BAR IS AN AVERAGE AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

BAR SERIES TABLE

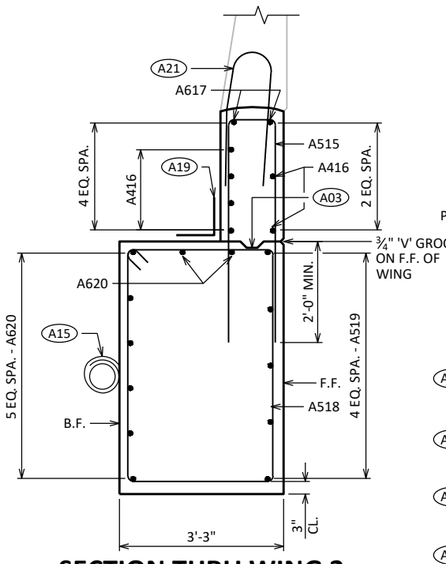
BUNDLE AND TAG EACH SERIES SEPARATELY.

BAR MARK	NO. REQ'D.	LENGTH
A502	2 SERIES OF 4	14'-2" TO 14'-10"

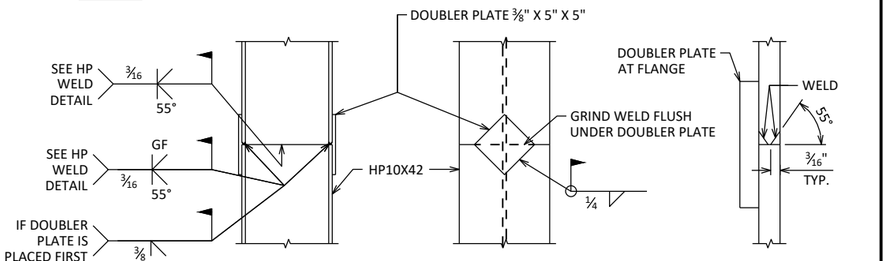


WING 2 ELEVATION

LOOKING SOUTH



SECTION THRU WING 2



STEEL 'HP' SHAPE

HP WELD DETAIL

FLANGE SHOWN, WEB SIMILAR

'HP' PILE DETAILS (A06)

(A03) OPTIONAL CONST. JOINT: KEYWAY FORMED BY BEVELED 2 x 6. (18" RMW @ B.F. & ¾" "V" GROOVE @ F.F. IF JOINT IS USED).

(A06) SUPPORT ABUTMENT ON HP 10 x 42 STEEL PILING, ESTIMATED 75'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 150 TONS PER PILE.

(A15) PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE, MINIMUM INVERT AT OUTLET = EL. 886.4. RODENT SHIELD REQUIRED.

(A17) ½" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF ½" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

(A19) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

(A21) FOR PPT. BARS & DIMENSIONS SEE PARAPET SHEET.

STATE PROJECT NUMBER

4075-39-72

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-05-468

DRAWN BY ABS | PLANS CK'D JJS

WEST ABUTMENT DETAILS

SHEET 5
135

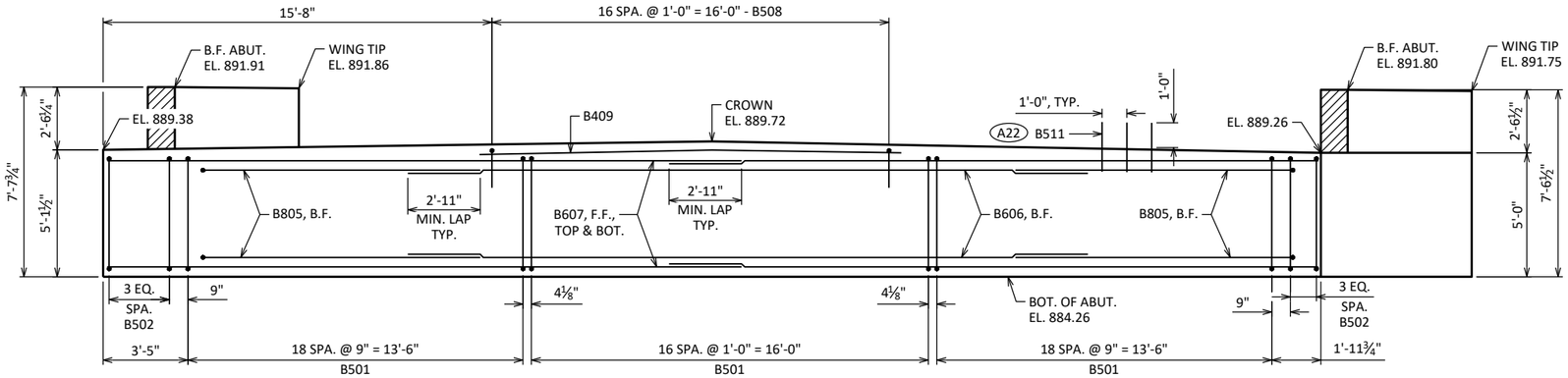
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8

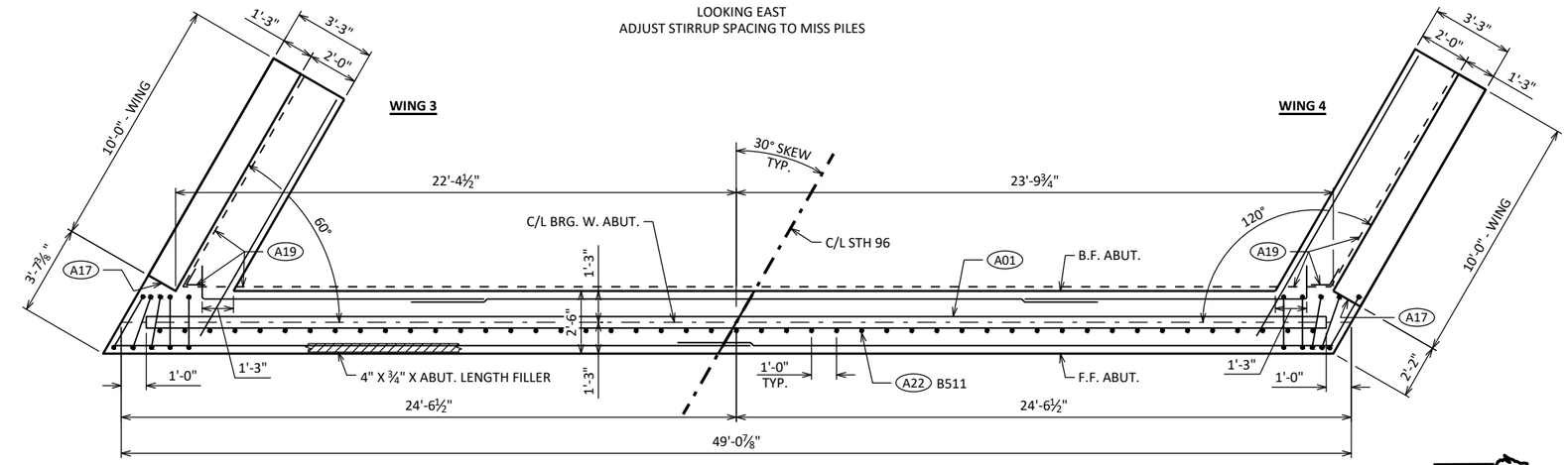
STATE PROJECT NUMBER

4075-39-72

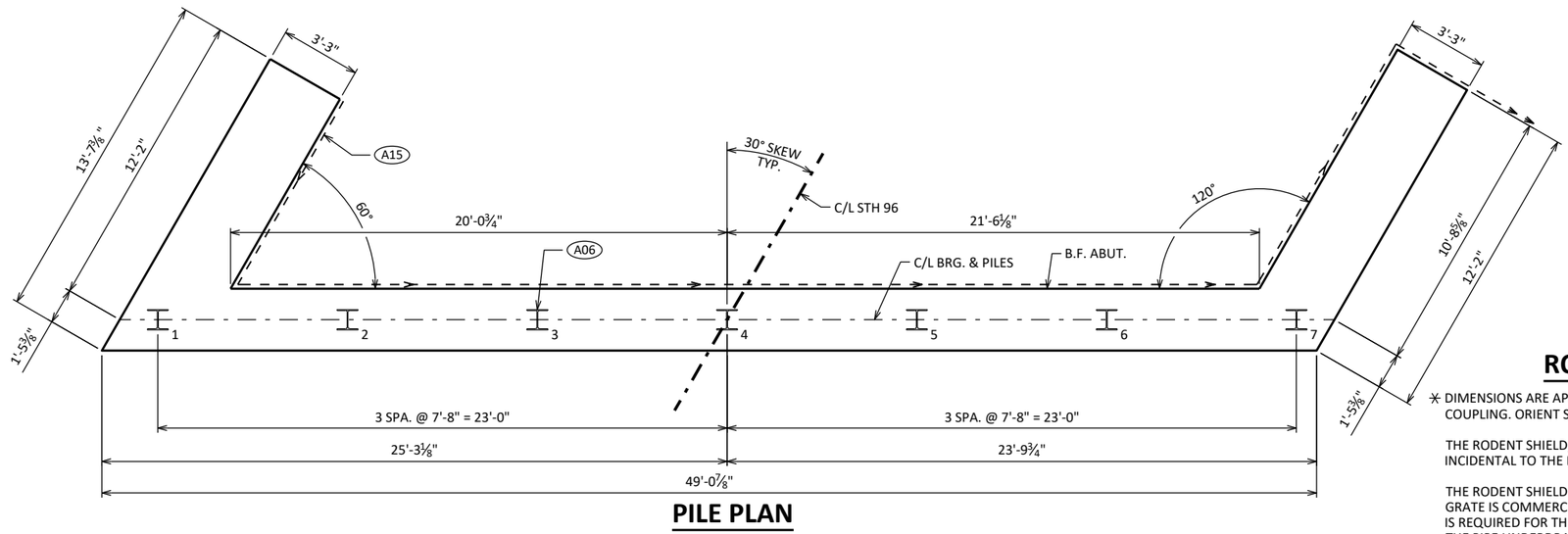


ELEVATION

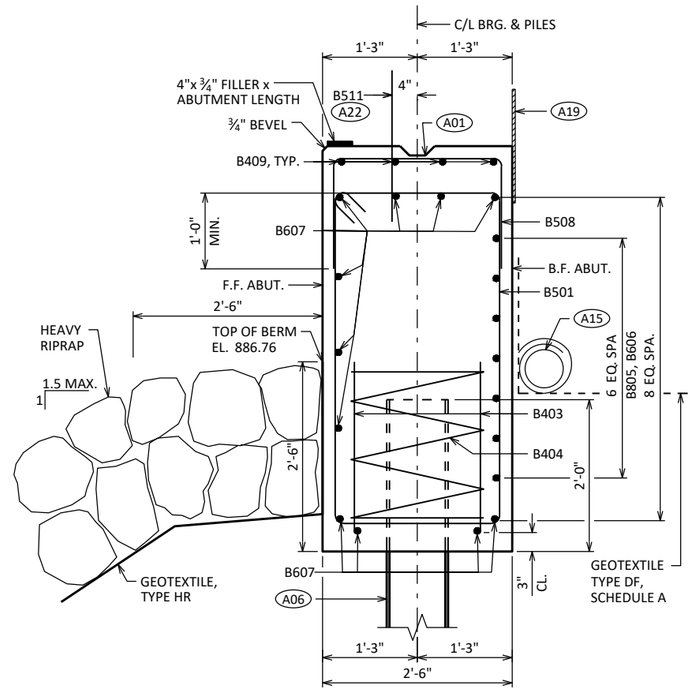
LOOKING EAST
ADJUST STIRRUP SPACING TO MISS PILES



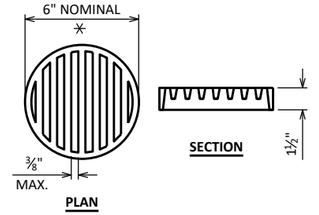
PLAN



PILE PLAN



SECTION THRU BODY



RODENT SHIELD DETAIL

⁎ DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING. ORIENT SO SLOTS ARE VERTICAL.

THE RODENT SHIELD, PIPE COUPLING AND SCREWS SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "PIPE UNDERDRAING WRAPPED 6-INCH".

THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALLY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE EXPOSED END OF THE PIPE UNDERDRAIN. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH STAINLESS STEEL SHEET METAL SCREWS.

(A01) CONST. JOINT: KEYWAY FORMED BY A BEVELED 2 x 6.

(A03) OPTIONAL CONST. JOINT: KEYWAY FORMED BY BEVELED 2 x 6. (18" RMW @ B.F. & ¾" "V" GROOVE @ F.F. IF JOINT IS USED).

(A06) SUPPORT ABUTMENT ON HP 10 x 42 STEEL PILING, ESTIMATED 75'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 150 TONS PER PILE.

(A15) PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE, MINIMUM INVERT AT OUTLET = EL. 886.4. RODENT SHIELD REQUIRED.

(A17) ½" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF ½" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

(A19) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

(A22) B511 BARS @ 1'-0" CTRS. BETWEEN BEAM SEATS. MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. (EMBED 1'-0" INTO CONC.)

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-05-468

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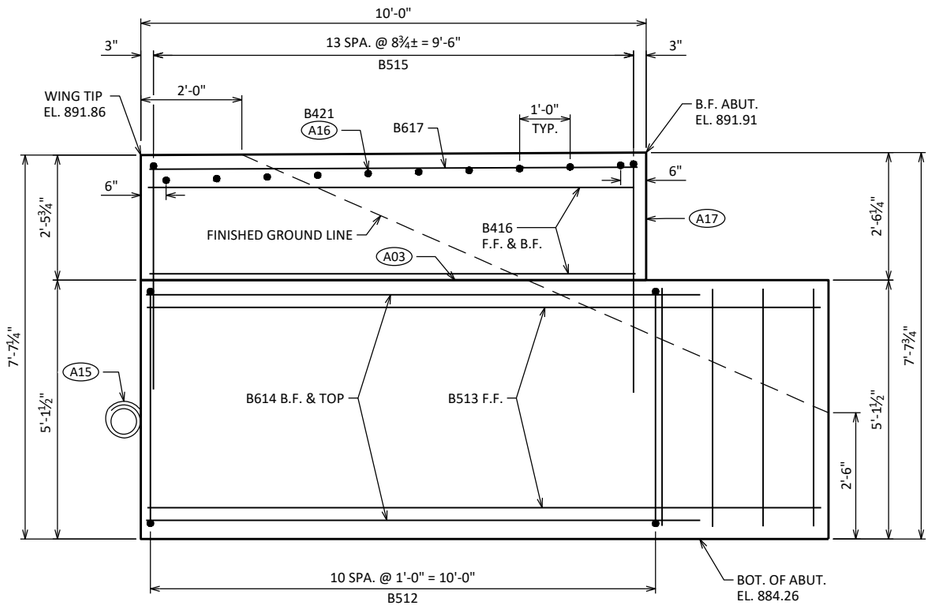
EAST ABUTMENT

SHEET 6
136

SCALE = 4.0

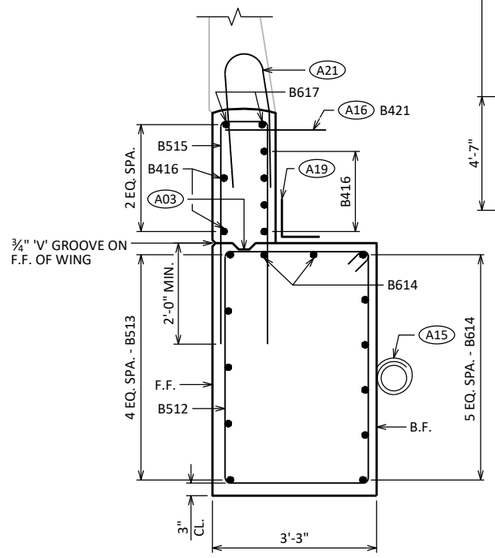
8

8

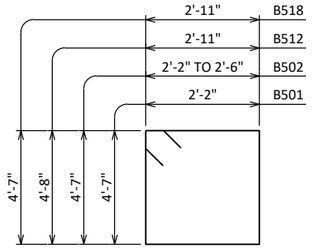


WING 3 ELEVATION

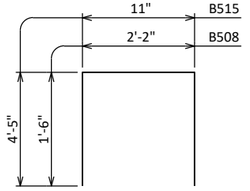
LOOKING SOUTH



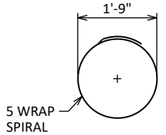
SECTION THRU WING 3



B501, B502, B512, B518



B508, B515



B404



B805

STATE PROJECT NUMBER

4075-39-72

BILL OF BARS

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

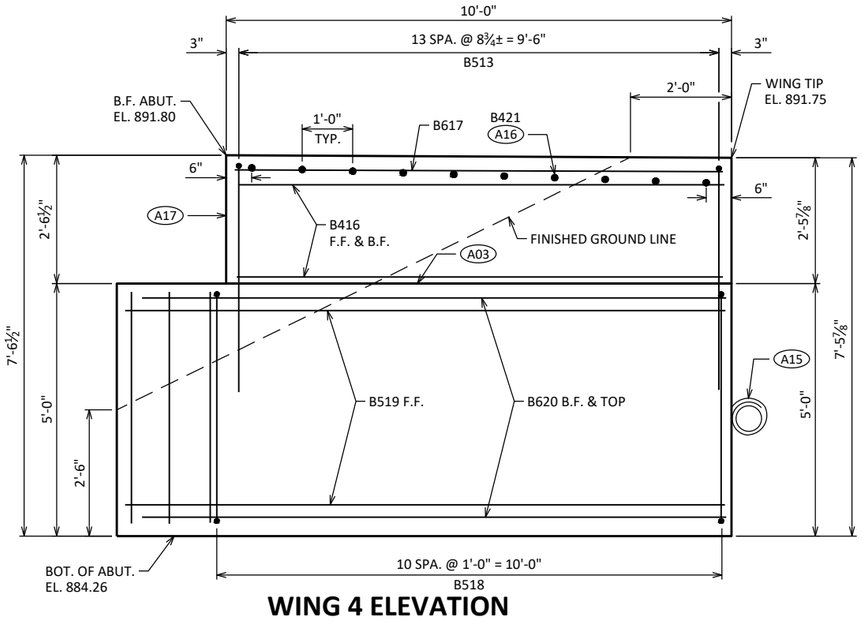
BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
B501		55	14'-2"	X		BODY - STIRRUPS
B502		8	14'-6"	X	⚠	BODY - STIRRUPS - ENDS
B403		14	2'-3"			BODY - VERT. - 2 PER PILE
B404		7	28'-0"	X		BODY - VERT. - AT BODY PILES
B805		14	12'-5"	X		BODY - HORIZ. - B.F. - ENDS
B606		7	27'-5"			BODY - HORIZ. B.F. - F.F. TOP AND BOTTOM
B607		22	25'-10"			BODY - HORIZ.
B508		17	4'-11"	X		BODY - VERT.
B409		4	17'-0"			BODY -HORIZ. -TOP
B410	X	7	4'-7"			BODY - VERT. - ENDS
B511	X	47	2'-0"			BODY - VERT. - DOWELS
B512	X	11	15'-10"	X		WING 3 - STIRRUPS
B513	X	5	13'-0"			WING 3 - HORIZ. - F.F.
B614	X	8	10'-11"			WING 3 - HORIZ. - B.F. & TOP
B515	X	28	9'-6"	X		WINGS 3 & 4 - VERT.
B416	X	12	9'-7"			WINGS 3 & 4 - HORIZ. - B.F. & F.F.
B617	X	4	9'-7"			WINGS 3 & 4 - HORIZ. - TOP
B518	X	11	15'-8"	X		WING 4 - STIRRUPS
B519	X	5	11'-10"			WING 4 - HORIZ. - F.F.
B620	X	8	12'-11"			WING 4 - HORIZ. - B.F. & TOP
B421	X	20	2'-0"			WINGS 3 & 4 - SURFACE DRAIN ANCHORS

⚠ LENGTH SHOWN FOR BAR IS AN AVERAGE AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

BAR SERIES TABLE

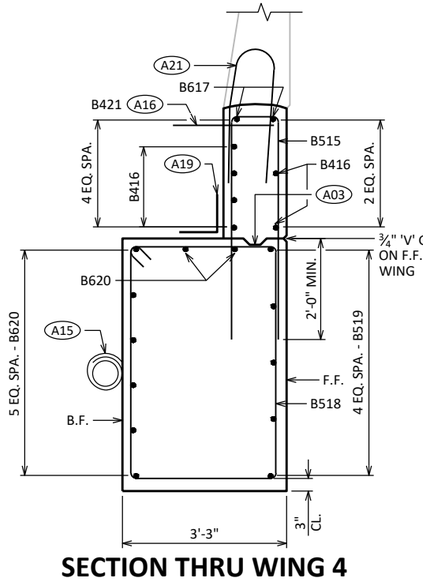
BUNDLE AND TAG EACH SERIES SEPARATELY.

BAR MARK	NO. REQ'D.	LENGTH
B502	2 SERIES OF 4	14'-2" TO 14'-10"

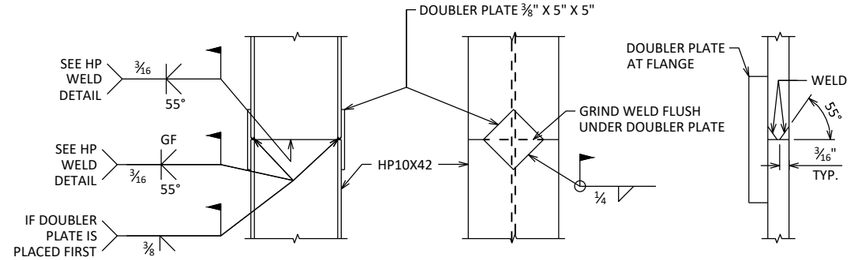


WING 4 ELEVATION

LOOKING NORTH



SECTION THRU WING 4



STEEL 'HP' SHAPE

HP WELD DETAIL

FLANGE SHOWN, WEB SIMILAR

'HP' PILE DETAILS (A06)

(A03) OPTIONAL CONST. JOINT: KEYWAY FORMED BY BEVELED 2 x 6. (18" RMW @ B.F. & ¾" "V" GROOVE @ F.F. IF JOINT IS USED).

(A06) SUPPORT ABUTMENT ON HP 10 x 42 STEEL PILING, ESTIMATED 75'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 150 TONS PER PILE.

(A15) PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE, MINIMUM INVERT AT OUTLET = EL. 886.4. RODENT SHIELD REQUIRED.

(A16) B421 BARS SPACED @ 1'-0" CTRS. EMBED 1'-0" INTO WING CONC. LOCATE 3" DOWN FROM TOP OF WING @ BACKFACE TO 6" DOWN @ WING TIP.

(A17) ½" FILLER (INCLUDED IN WING LENGTH): SEAL ALL EXPOSED HORIZ. & VERT. SURFACES OF ½" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE). EXTEND SEALER 3" BELOW GUTTER LINE AT INSIDE FACE.

(A19) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

(A21) FOR PPT. BARS & DIMENSIONS SEE PARAPET SHEET.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-05-468

DRAWN BY ABS | PLANS CK'D JJS

EAST ABUTMENT DETAILS

SHEET 7
137

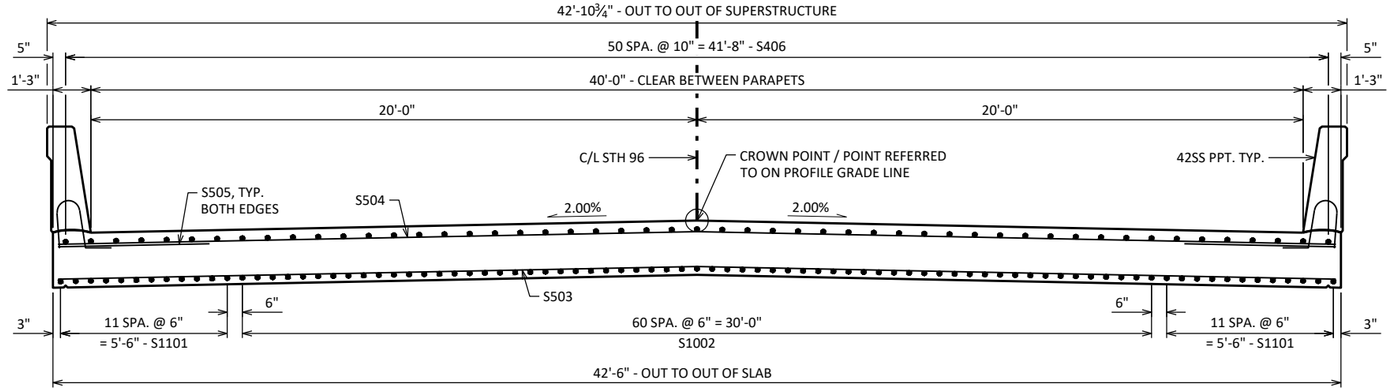
SCALE = 3.0

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8

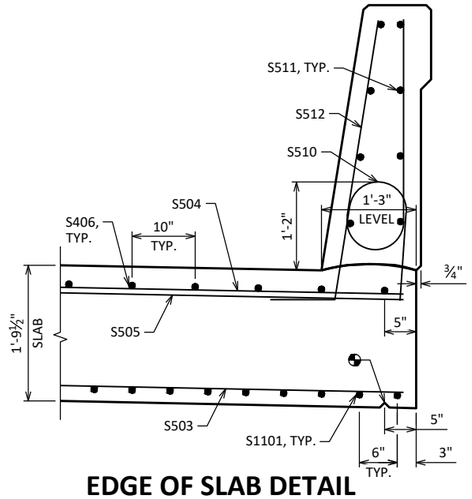
STATE PROJECT NUMBER

4075-39-72



CROSS SECTION THRU ROADWAY

LOOKING EAST

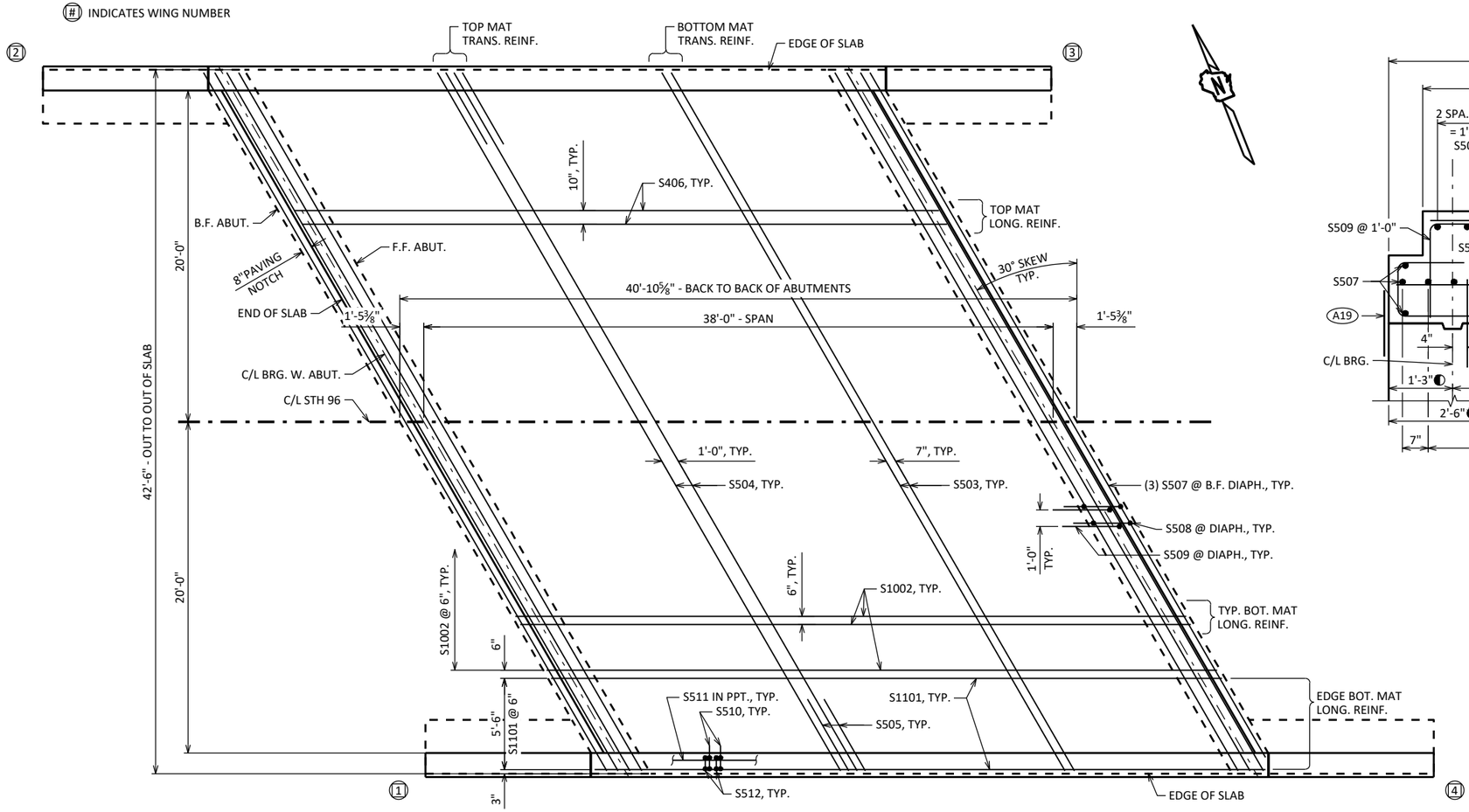


EDGE OF SLAB DETAIL

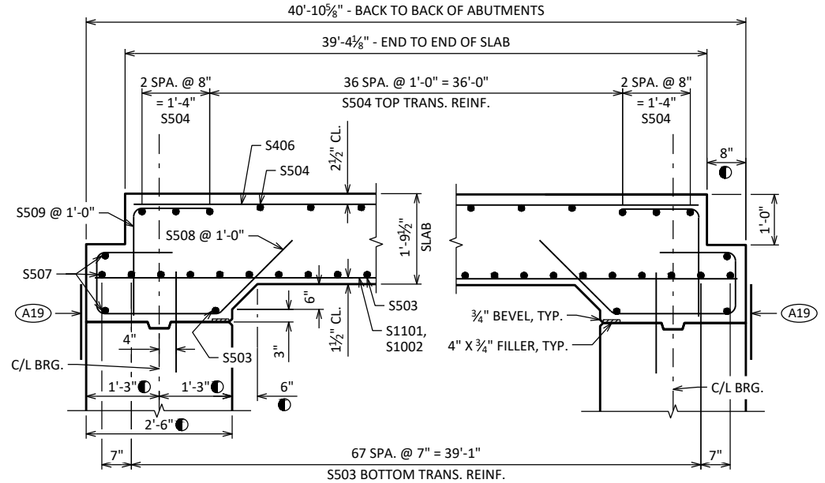
¾" V-GROOVE. EXTEND V-GROOVE TO 6" FROM F.F. OF ABUT. DIAPHRAGM.

V-GROOVES ARE REQUIRED.

Ⓝ INDICATES WING NUMBER



PLAN



LONGITUDINAL SECTION

LOOKING NORTH
DIMENSIONS GIVEN PARALLEL TO C/L ROADWAY UNLESS OTHERWISE NOTED

◐ MEASURED NORMAL TO THE C/L OF ABUTMENT. DIMENSIONS ARE TYPICAL FOR BOTH ABUTMENTS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-05-468

DRAWN BY ABS | PLANS CK'D JJS

SUPERSTRUCTURE

SHEET 8
138

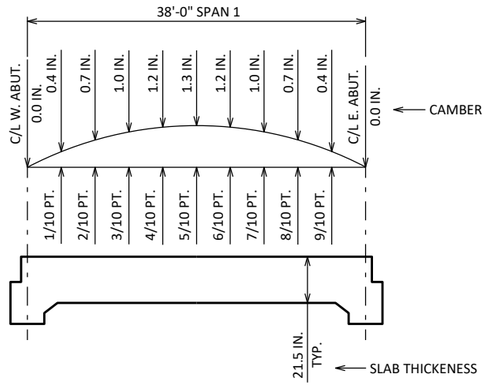
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8

8

STATE PROJECT NUMBER

4075-39-72



CAMBER AND SLAB THICKNESS DIAGRAM

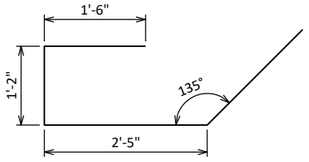
CAMBER SHOWN IS BASED ON 3 TIMES DEAD LOAD DEFLECTIONS.

CAMBER SPANS AS SHOWN TO PROVIDE FOR DEAD LOAD DEFLECTION AND FUTURE CREEP. CAMBER DOES NOT INCLUDE ALLOWANCE FOR FORM SETTLEMENT.

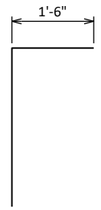
PARAPETS PLACED ON TOP OF THE SLAB SHALL BE POURED AFTER FALSEWORK HAS BEEN RELEASED, EXCEPT FOR STAGED CONSTRUCTION.

TO DETERMINE FALSEWORK ELEVATION AT EDGE OF SLAB, CROWN OR REFERENCE LINE FOLLOW THIS PROCEDURE:

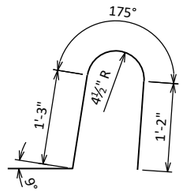
	TOP OF SLAB ELEVATION AT FINAL GRADE
MINUS	SLAB THICKNESS
PLUS	CAMBER
PLUS	FORM SETTLEMENT/DEFLECTION DUE TO PLACEMENT OF SLAB CONCRETE (TO BE COMPUTED BY THE CONTRACTOR)
EQUALS	TOP OF SLAB FALSEWORK ELEVATION



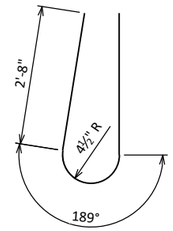
S508



S509



S510



S512

BILL OF BARS

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

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
S1101	X	24	40'-6''			SLAB - BOT. - LONGIT. - EDGES
S1002	X	61	40'-6''			SLAB - BOT. - LONGIT.
S503	X	70	48'-8''			SLAB - BOT. -TRANS.
S504	X	41	48'-8''			SLAB - TOP - TRANS.
S505	X	80	5'-0''			SLAB - TOP - TRANS. - EDGES
S406	X	51	38'-11''			SLAB - TOP - LONGIT.
S507	X	6	47'-8''			DIAPH. - HORIZ. - B.F.
S508	X	86	7'-0''	X		DIAPH. - STIRRUPS
S509	X	86	3'-6''	X		DIAPH. - L-BARS
S510	X	124	4'-5''	X		PARAPET - VERT.
S511	X	16	40'-6''			PARAPET - LONGIT.
S512	X	124	6'-8''	X		PARAPET - VERT.

TOP OF SLAB ELEVATIONS

SPAN	LOCATION	C/L BRG. W. ABUT.	1/10 PT.	2/10 PT.	3/10 PT.	4/10 PT.	5/10 PT.	6/10 PT.	7/10 PT.	8/10 PT.	9/10 PT.	C/L BRG. E. ABUT.
1	N. EDGE OF SLAB	892.11	892.09	892.07	892.05	892.03	892.01	891.99	891.98	891.96	891.94	891.92
	CROWN OR C/L	892.45	892.43	892.41	892.39	892.38	892.36	892.34	892.32	892.30	892.28	892.26
	S. EDGE OF SLAB	891.99	891.97	891.96	891.94	891.92	891.90	891.88	891.86	891.85	891.83	891.81

SURVEY TOP OF SLAB ELEVATIONS

LOCATION	ABUTMENT	5/10 PT.	ABUTMENT
N. GUTTER			
CROWN OR C/L			
S. GUTTER			

PRIOR TO RELEASING SLAB FALSEWORK, TAKE TOP OF SLAB ELEVATIONS AT THE C/L OF ABUTMENTS AND AT 5/10 PTS. TO VERIFY CAMBER. TAKE ELEVATIONS ALONG GUTTER LINES AND CROWN OR C/L. RECORD THE ELEVATIONS IN THE ABOVE TABLE FOR THE "AS BUILT" PLANS.

NOTES

FILL IN THE TABLE OF "SURVEY TOP OF SLAB ELEVATIONS" FOR EACH SPAN ON AS BUILT PLANS.

TOP TRANSVERSE BARS IN SLAB SHALL BE SUPPORTED BY INDIVIDUAL BAR CHAIRS AT APPROXIMATELY 3'-0" CENTERS EACH WAY. BOTTOM LONGITUDINAL BARS SHALL BE SUPPORTED BY CONTINUOUS BAR CHAIRS AT APPROXIMATELY 4'-0" CENTERS.

ALL SLAB THICKNESS DIMENSIONS ARE MINIMUM. ANY TOLERANCES NECESSARY TO CORRECT CONSTRUCTION DISCREPANCIES ARE TO BE PLUS (+)

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-05-468

DRAWN BY ABS | PLANS CK'D JJS

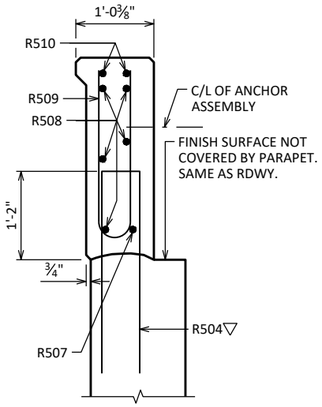
SUPERSTRUCTURE DETAILS

SHEET 9
139

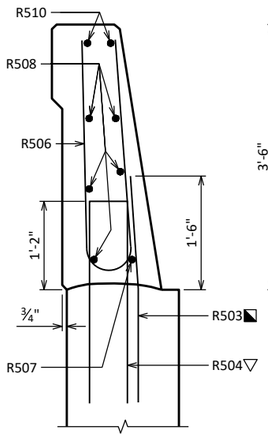
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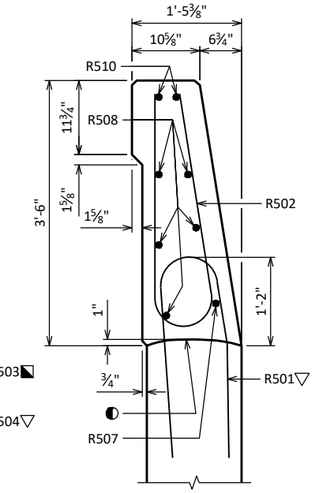
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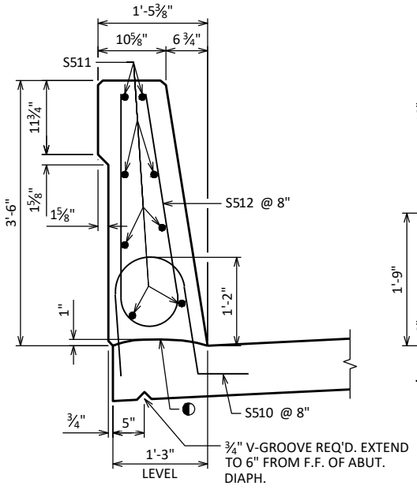
SECTION A-A



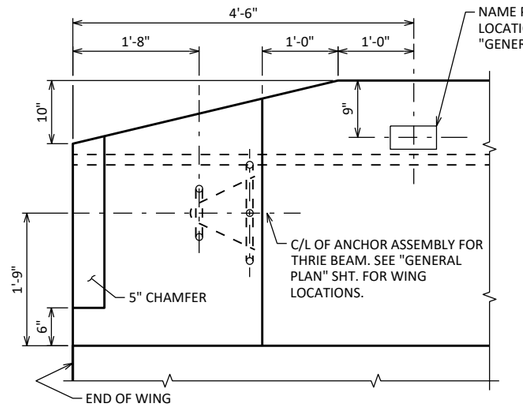
SECTION B-B



SECTION C-C



SECTION THRU PARAPET ON SLAB



PARAPET END TREATMENT DETAIL

LOOKING AT INSIDE FACE OF PARAPET

STATE PROJECT NUMBER

4075-39-72

BILL OF BARS

FOR WING PARAPETS

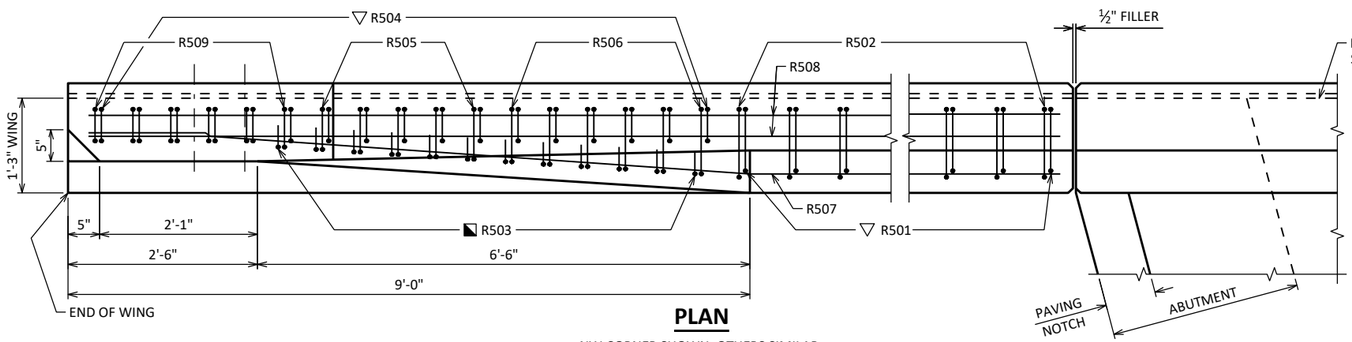
BAR MARK	COAT	W. ABUT.	E. ABUT.	LENGTH	BENT	BAR SERIES	LOCATION
R501	X	6	6	5'-10"	X		PARAPET VERT.
R502	X	6	6	6'-8"	X		PARAPET VERT.
R503	X	24	24	3'-0"	X		PARAPET VERT.
R504	X	34	34	5'-7"	X		PARAPET VERT.
R505	X	10	10	6'-5"	X		PARAPET VERT.
R506	X	12	12	6'-6"	X		PARAPET VERT.
R507	X	2	2	9'-7"	X		PARAPET HORIZ.
R508	X	10	10	9'-7"			PARAPET HORIZ.
R509	X	12	12	5'-5"	X	⚠	PARAPET VERT.
R510	X	4	4	9'-7"	X		PARAPET HORIZ.

⚠ LENGTH SHOWN FOR BAR IS AN AVERAGE AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

BAR SERIES TABLE

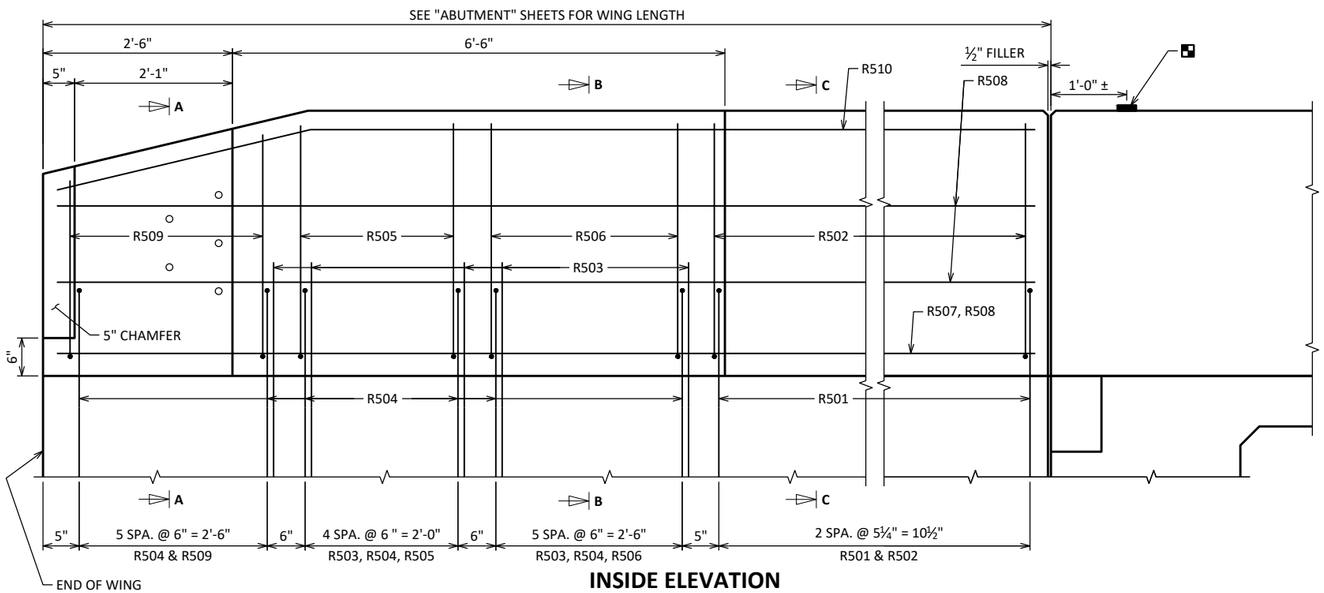
BUNDLE AND TAG EACH SERIES SEPARATELY.

BAR MARK	NO. REQ'D.	LENGTH
R509	4 SERIES OF 6	4'-9" TO 6'-1"



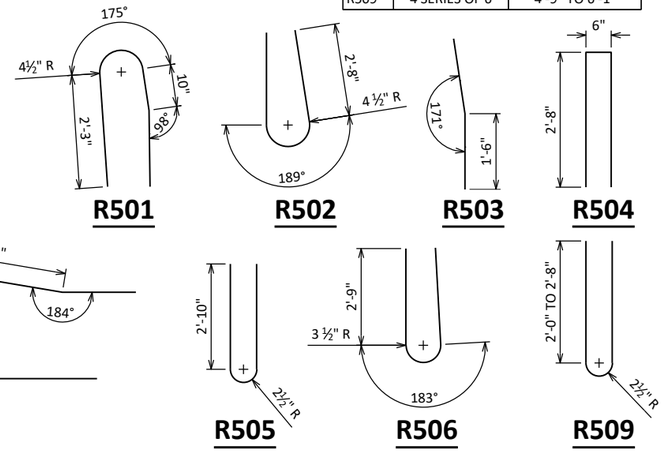
PLAN

NW CORNER SHOWN, OTHERS SIMILAR

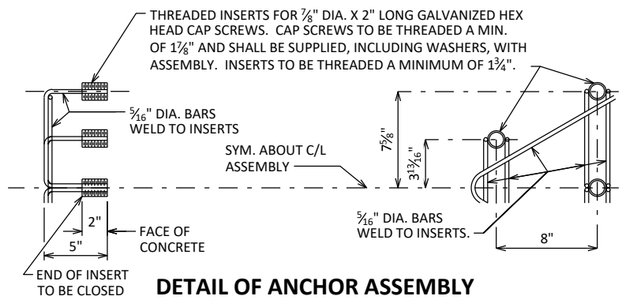


INSIDE ELEVATION

NW CORNER SHOWN, OTHERS SIMILAR



BENCH MARK CAP



DETAIL OF ANCHOR ASSEMBLY

NOTE: HEX HEAD CAP SCREWS & WASHERS TO BE GALVANIZED IN ACCORDANCE WITH AASHTO M232 CLASS C.

ASSEMBLY SHALL BE BID ITEM "ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD", EACH.

◐ CONST. JOINT - STRIKE OFF AS SHOWN

◪ R503 BARS MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. USE CARE TO PLACE R503 BARS CORRECTLY ALONG TRANSITION OF PARAPET.

▽ R501 AND R504 BARS TO BE TIED TO WING STEEL BEFORE WING IS POURED.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-05-468

DRAWN BY ABS | PLANS CK'D JJS

SINGLE SLOPE PARAPET 42SS

SHEET 10
140

SCALE = 2.00

8

8

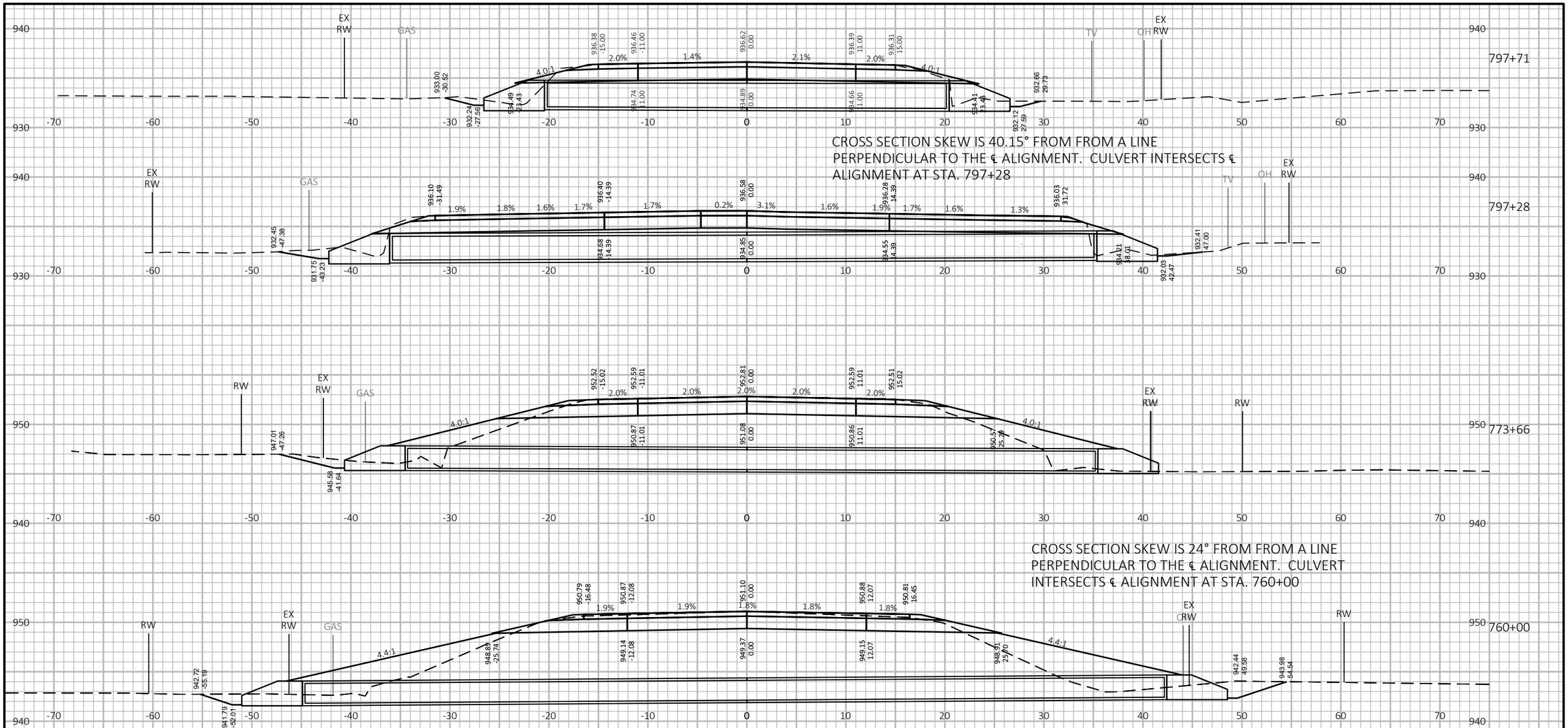
	STATION DIVISION 1	Real Station	Distance	AREA (SF) Cut	AREA (SF) Salvaged/Unusable Pavement Material	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Salvaged/Unusable Pavement Material Note 2	Incremental Vol (CY) (Unadjusted) Fill Note 3	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.25	Mass Ordinate Note 8
West Side of Structure C-05-0002	938+00	93800	0	2.13	0.00	23.13	0	0	0	0	0	0
	938+58	93858	58	0	0.00	61.28	2	0	90	2	113	-111
	938+64	93864	6	0	0.00	59.88	0	0	13	2	129	-127
	938+83	93883	19	0.11	0.00	51.95	0	0	40	2	179	-177
	938+89	93889	6	0.14	0.00	50.3	0	0	11	2	193	-190
	939+08	93908	19	0.25	0.00	47.05	0	0	35	2	236	-234
	939+14	93914	6	0.28	0.00	40.51	0	0	9	3	248	-245
	939+30	93930	16	72.9	17.10	20.3	22	5	18	25	271	-251
	939+80	93980	50	72	17.10	19	134	32	36	159	316	-194
	940+00	94000	20	72	17.10	19	53	13	14	212	334	-171
							212	50	267			

	STATION DIVISION 2	Real Station	Distance	AREA (SF) Cut	AREA (SF) Salvaged/Unusable Pavement Material	AREA (SF) Fill	Incremental Vol (CY) (Unadjusted) Cut Note 1	Incremental Vol (CY) (Unadjusted) Salvaged/Unusable Pavement Material Note 2	Incremental Vol (CY) (Unadjusted) Fill Note 3	Cumulative Vol (CY) Cut 1.00 Note 1	Cumulative Vol (CY) Expanded Fill 1.25	Mass Ordinate Note 8
East Side of Structure C-05-0002	940+20	94020	0	78.58	17.10	61.4	0	0	0	0	0	0
	940+40	94040	20	78.58	17.10	61.4	58	13	45	58	57	-11
	940+50	94050	10	81.5	17.10	39.6	30	6	19	88	80	-11
	940+70	94070	20	65.11	17.10	39.6	55	13	30	143	117	-6
	940+77	94077	7	65	0.00	39	18	2	11	160	131	-4
	941+02	94102	25	0.25	0.00	51.7	30	0	42	190	183	-27
	941+27	94127	25	0.23	0.00	52.09	0	0	48	191	243	-86
	941+53	94153	25	0.5	0.00	19.16	0	0	33	191	285	-128
	941+85	94185	32	16.45	0.00	20.39	10	0	24	201	314	-147
	942+00	94200	15	1.75	0.00	16.79	5	0	10	206	327	-155
	942+50	94250	50	3.57	0.00	6.15	5	0	21	211	354	-177
							211	34	283			

9

9

PROJECT NO: 4075-39-72 | HWY: STH 96 | COUNTY: BROWN | EARTHWORK | SHEET 141 E



9

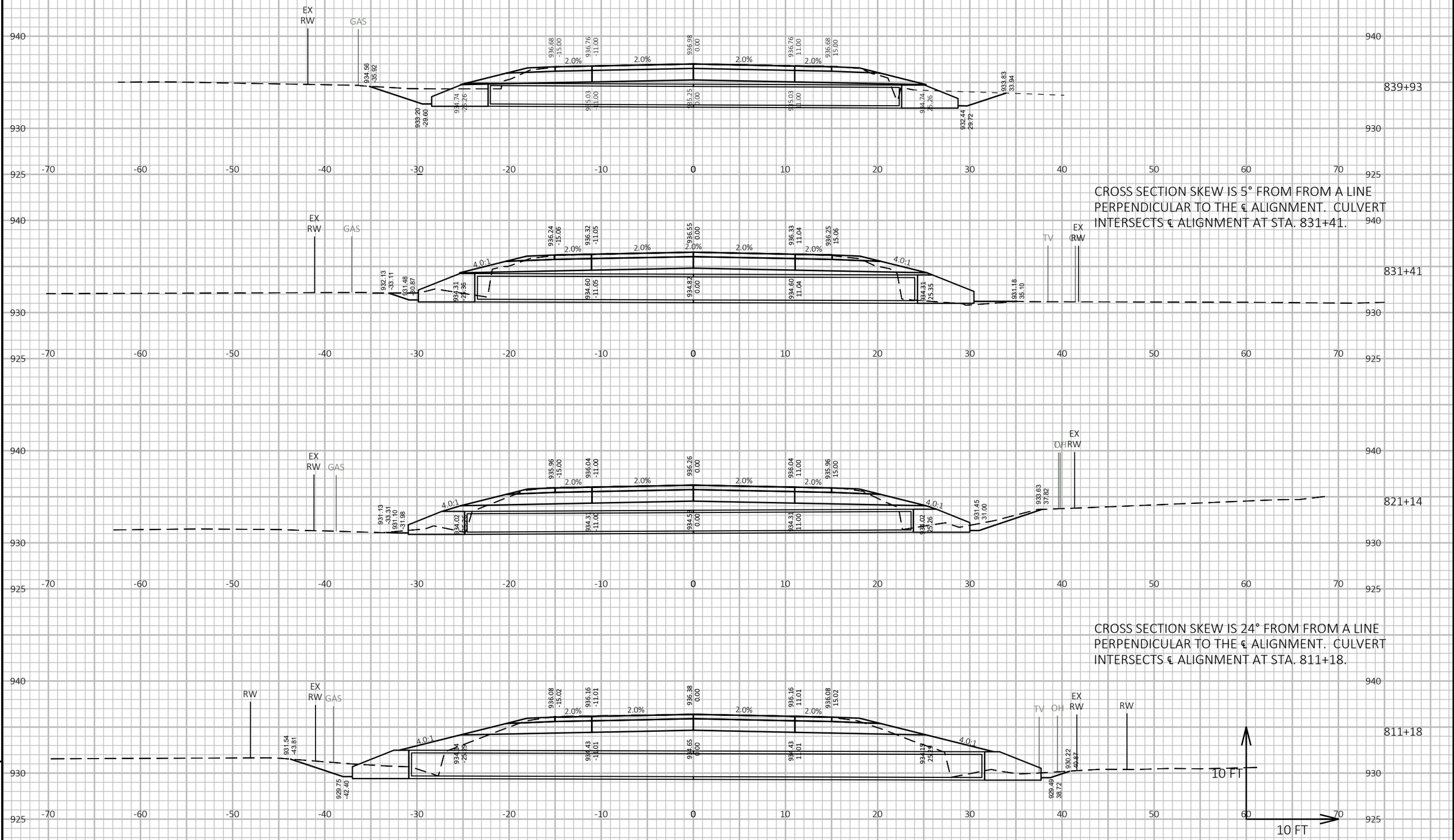
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PROJECT NO: 4075-39-72	HWY: STH 96	COUNTY: BROWN	CROSS SECTIONS: STH 96	SHEET 142	E

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LAYOUT NAME - 090222-xs NEW

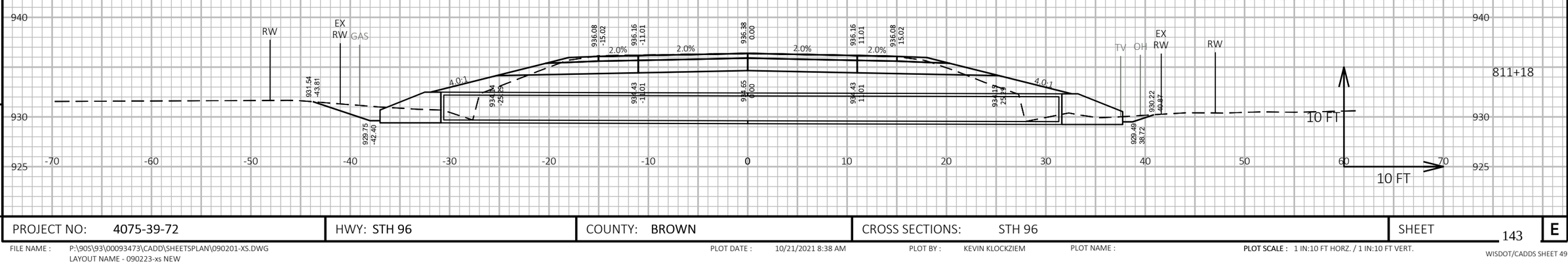
PLOT DATE : 10/21/2021 8:37 AM PLOT BY : KEVIN KLOCKZIEM PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



CROSS SECTION SKEW IS 5° FROM FROM A LINE PERPENDICULAR TO THE ℄ ALIGNMENT. CULVERT INTERSECTS ℄ ALIGNMENT AT STA. 831+41.

CROSS SECTION SKEW IS 24° FROM FROM A LINE PERPENDICULAR TO THE ℄ ALIGNMENT. CULVERT INTERSECTS ℄ ALIGNMENT AT STA. 811+18.



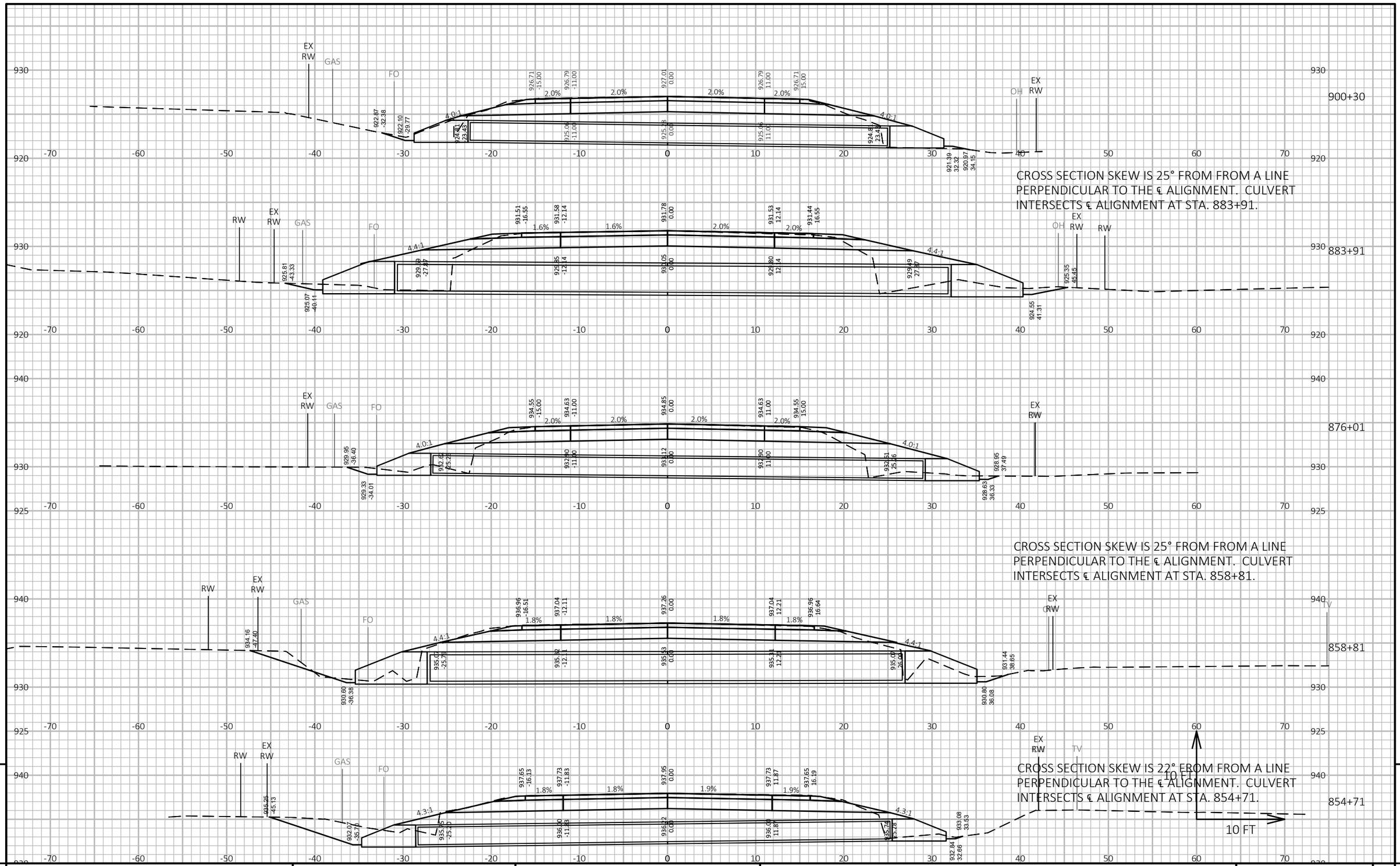
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PROJECT NO: 4075-39-72	HWY: STH 96	COUNTY: BROWN	CROSS SECTIONS: STH 96	SHEET 143	E

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LAYOUT NAME - 090223-xs NEW

PLOT DATE : 10/21/2021 8:38 AM PLOT BY : KEVIN KLOCKZIEM PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



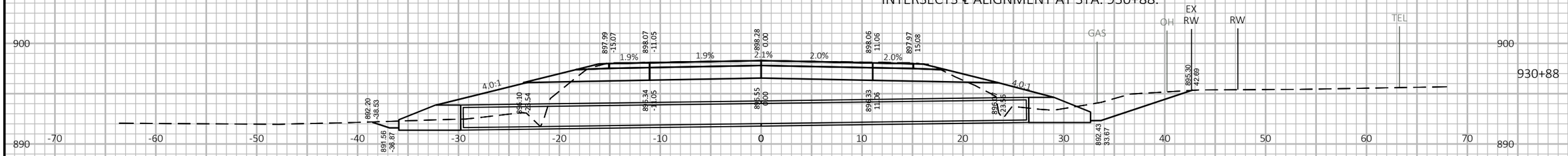
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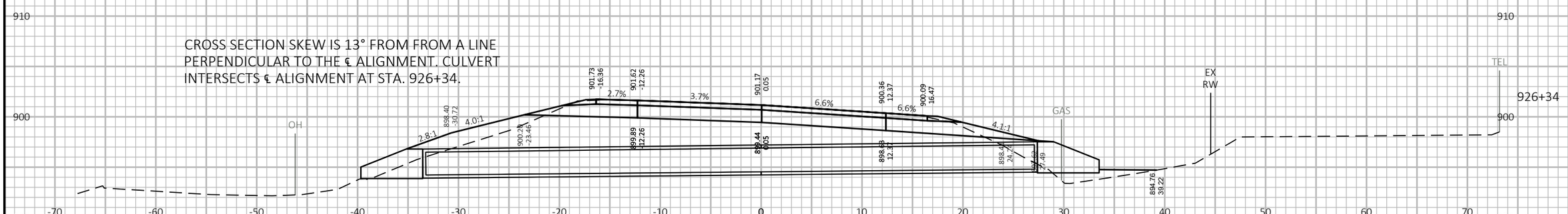
PLOT DATE : 10/21/2021 8:38 AM PLOT BY : KEVIN KLOCKZIEM PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

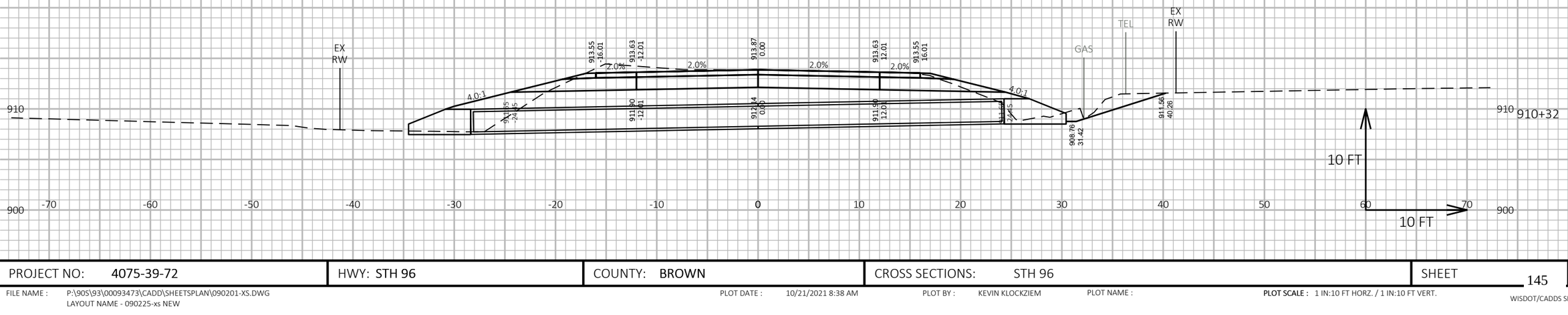
WISDOT/CADDS SHEET 49

CROSS SECTION SKEW IS 5° FROM FROM A LINE PERPENDICULAR TO THE ℄ ALIGNMENT. CULVERT INTERSECTS ℄ ALIGNMENT AT STA. 930+88.



CROSS SECTION SKEW IS 13° FROM FROM A LINE PERPENDICULAR TO THE ℄ ALIGNMENT. CULVERT INTERSECTS ℄ ALIGNMENT AT STA. 926+34.





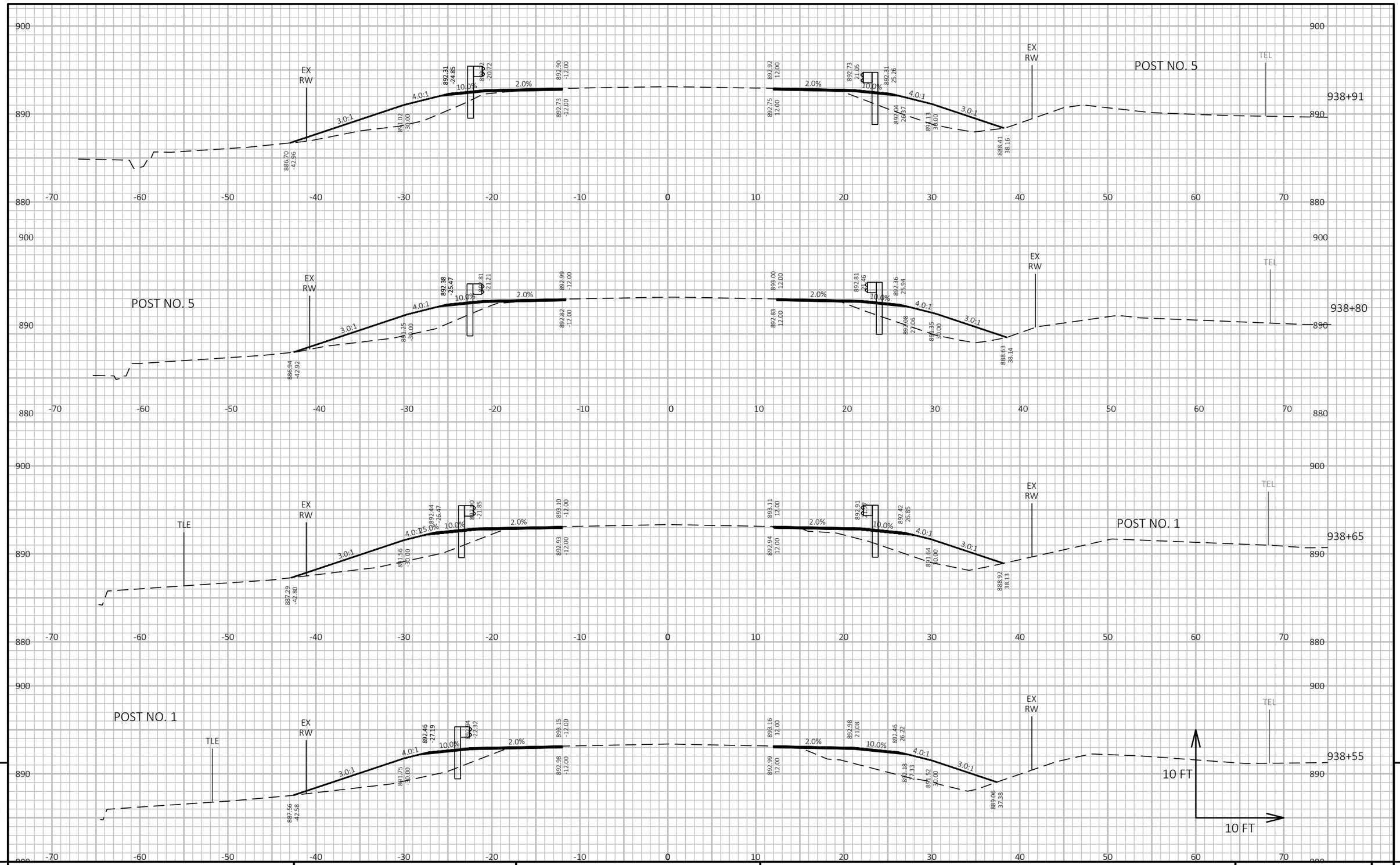
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PROJECT NO: 4075-39-72	HWY: STH 96	COUNTY: BROWN	CROSS SECTIONS: STH 96	SHEET 145	E

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LAYOUT NAME - 090225-xs NEW

PLOT DATE : 10/21/2021 8:38 AM PLOT BY : KEVIN KLOCKZIEM PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



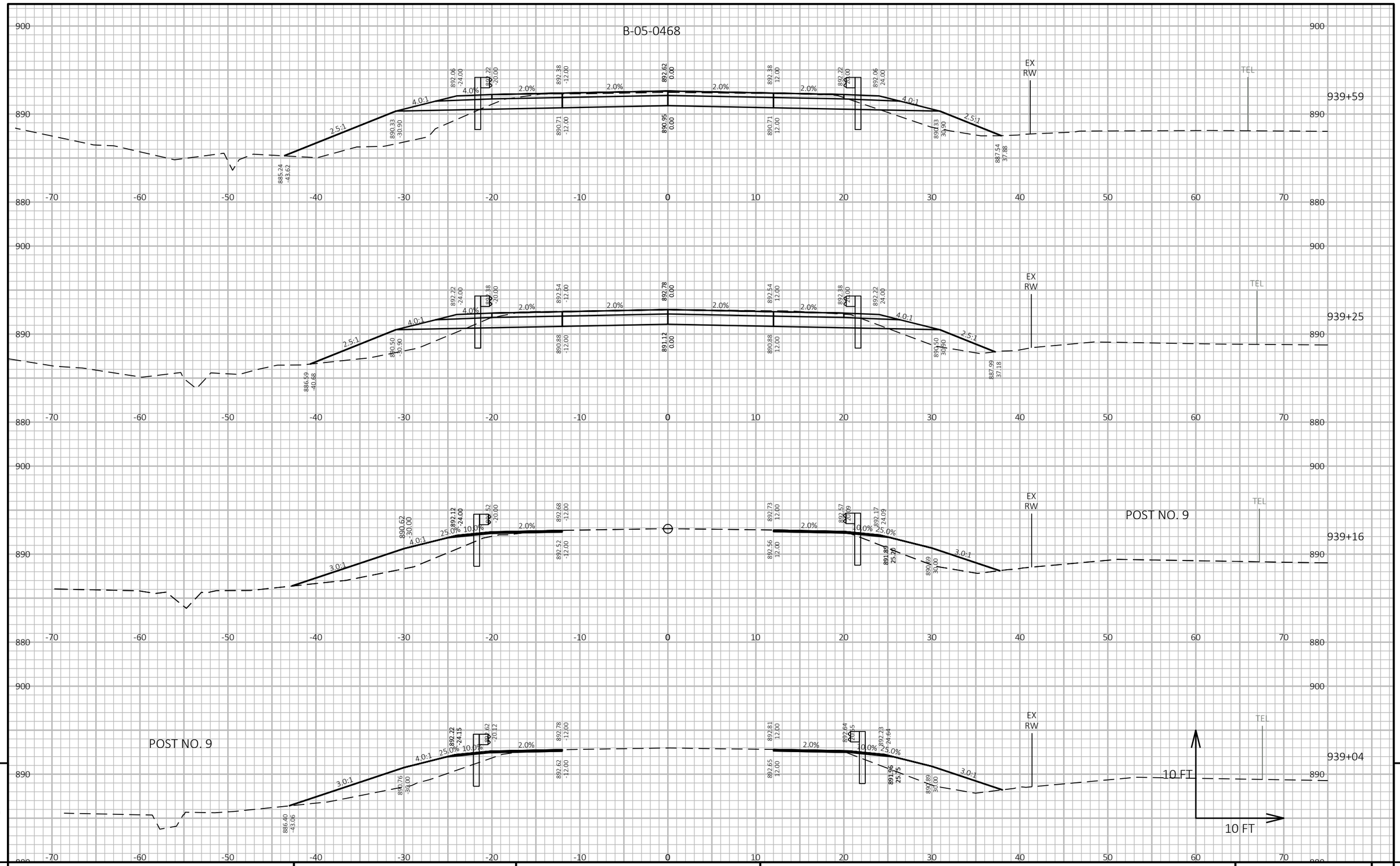
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PROJECT NO: 4075-39-72	HWY: STH 96	COUNTY: BROWN	CROSS SECTIONS: STH 96	SHEET 146	E

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WISDOT/CADDS SHEET 49

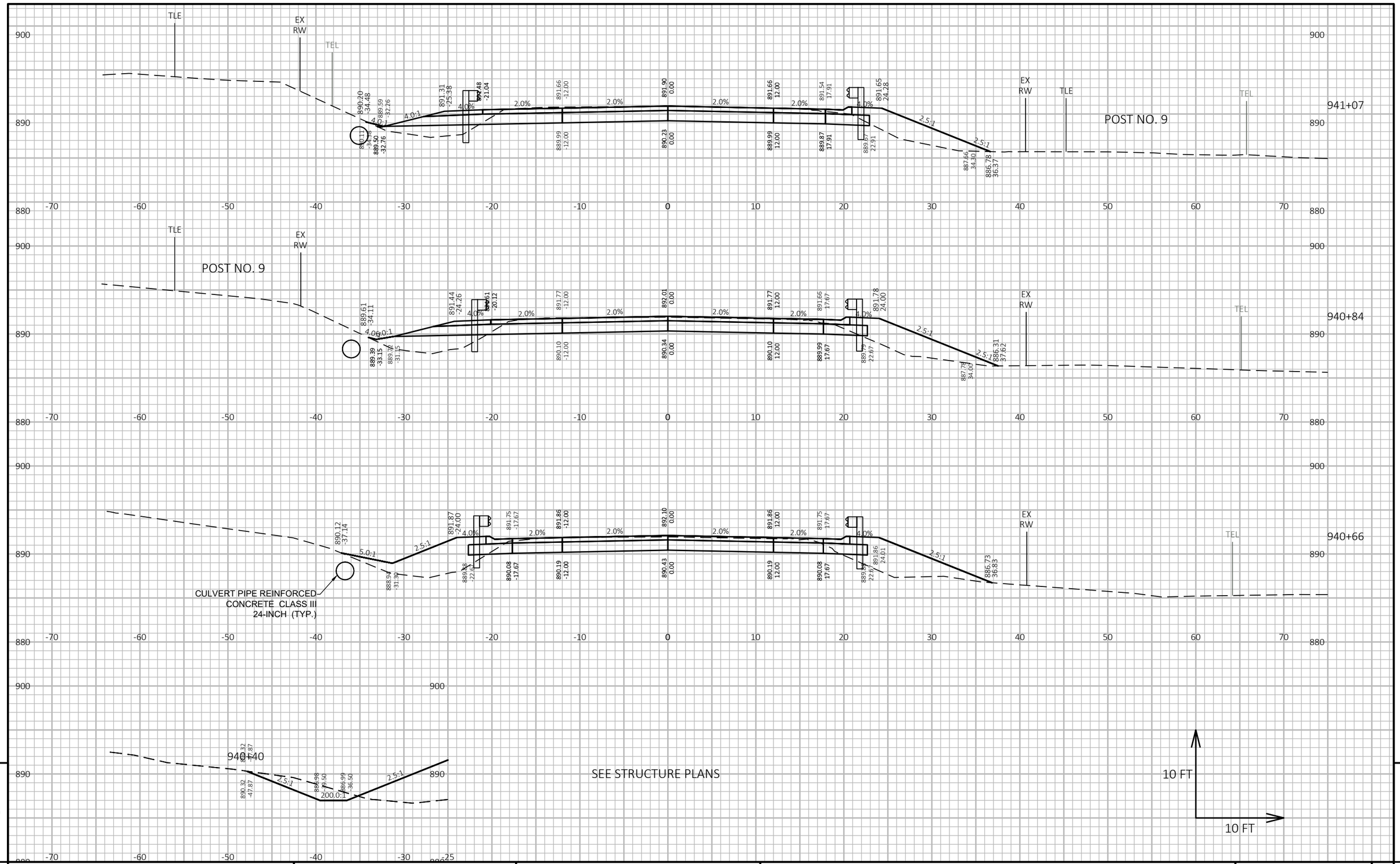


PROJECT NO: 4075-39-72	HWY: STH 96	COUNTY: BROWN	CROSS SECTIONS: STH 96	SHEET 147	E

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PLOT DATE : 10/21/2021 8:39 AM PLOT BY : KEVIN KLOCKZIEM PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

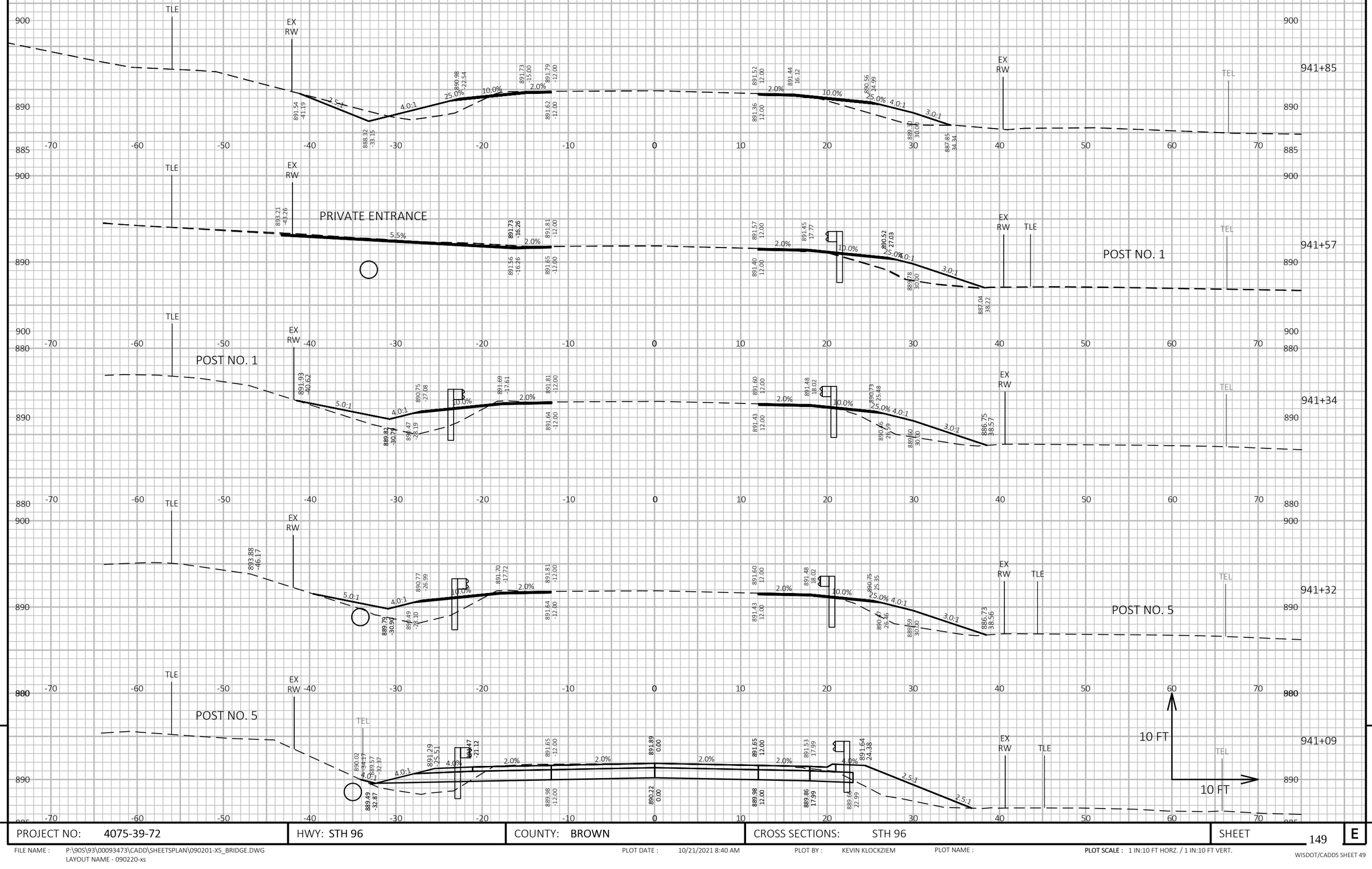


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LAYOUT NAME - 090219-xs

PLOT DATE : 10/21/2021 8:40 AM PLOT BY : KEVIN KLOCKZIEM PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



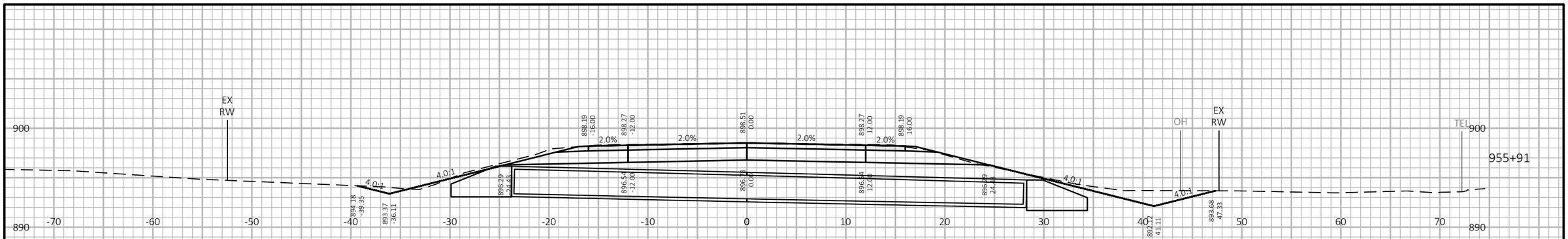
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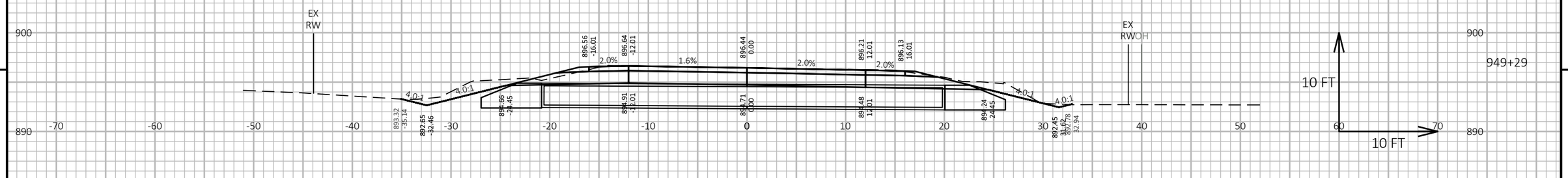
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PLOT DATE : 10/21/2021 8:40 AM PLOT BY : KEVIN KLOCKZIEM PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.







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PROJECT NO: 4075-39-72	HWY: STH 96	COUNTY: BROWN	CROSS SECTIONS: STH 96	SHEET 150	E

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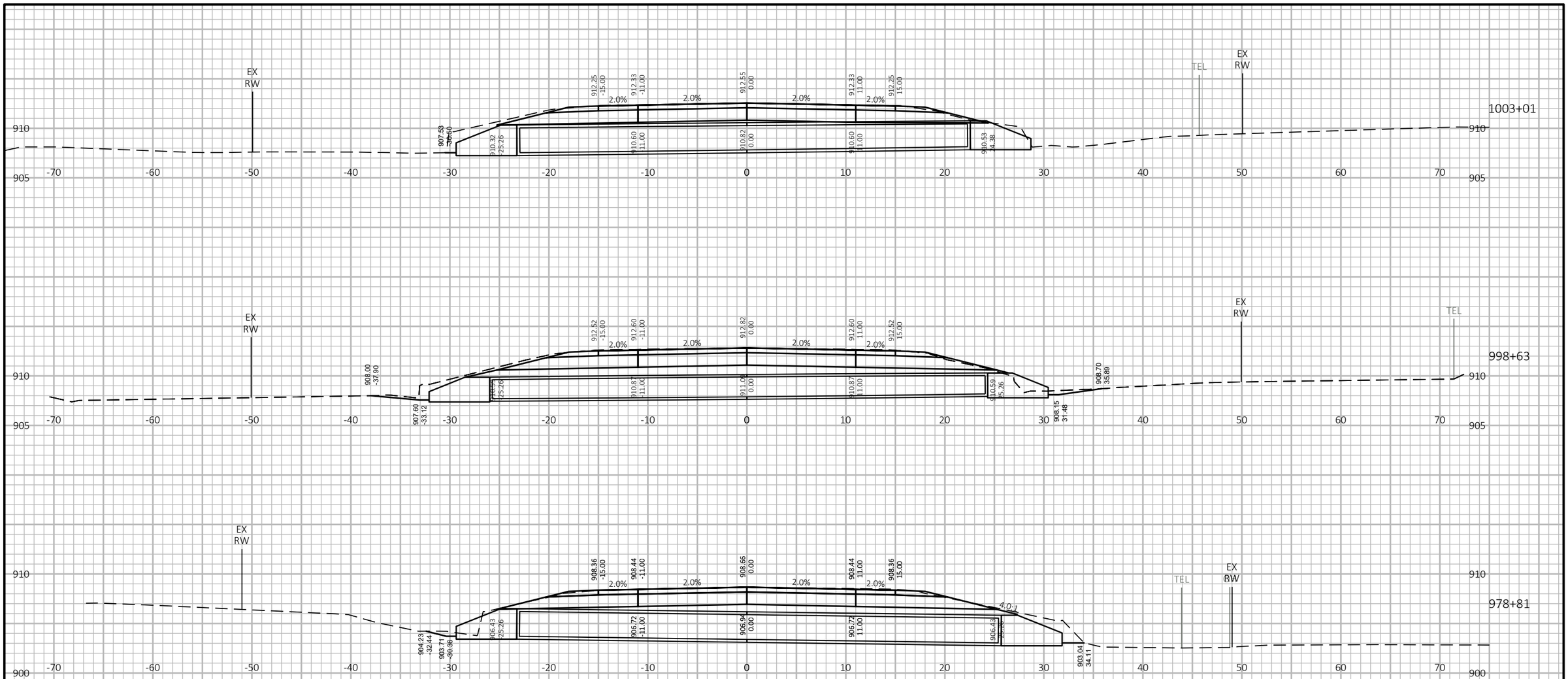
PLOT DATE : 10/21/2021 8:40 AM

PLOT BY : KEVIN KLOCKZIEM

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 4075-39-72	HWY: STH 96	COUNTY: BROWN	CROSS SECTIONS: STH 96	SHEET 151	E

FILE NAME : P:\90S\93\00093473\CADD\SHEETSPLAN\090201-XS.DWG
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PLOT DATE : 10/21/2021 8:40 AM PLOT BY : KEVIN KLOCKZIEM PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

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