

WKE

PROJECT ID:
WITH: N/A

4060-00-75

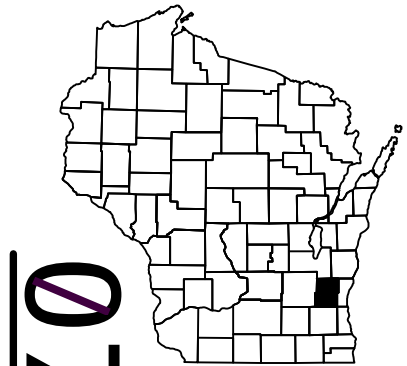
COUNTY:

WASHINGTON

JUNE 2022
ORDER OF SHEETS

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

TOTAL SHEETS = 130



DESIGN DESIGNATION

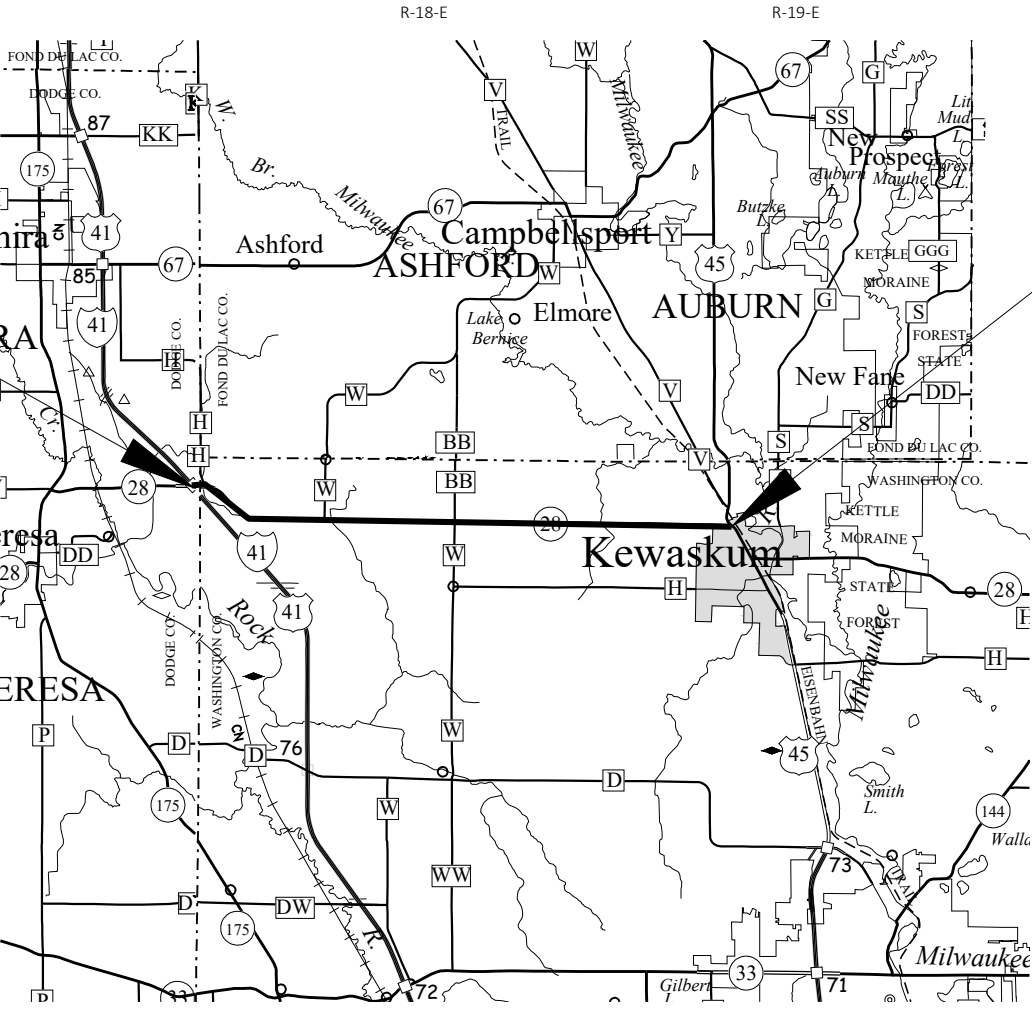
A.A.D.T.	(2026)	=	2800
A.A.D.T.	(2046)	=	3400
D.H.V.		=	410
D.D.		=	60/40
T.		=	10.9
DESIGN SPEED		=	55 MPH
ESALS		=	720,000

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	
EXISTING CULVERT	
PROPOSED CULVERT (Box or Pipe)	
COMBUSTIBLE FLUIDS	
MARSH AREA	
WOODED OR SHRUB AREA	

PROFILE	
GRADE LINE	
ORIGINAL GROUND	
MARSH OR ROCK PROFILE (To be noted as such)	
SPECIAL DITCH	
GRADE ELEVATION	
CULVERT (Profile View)	
UTILITIES	
ELECTRIC	
FIBER OPTIC	
GAS	
SANITARY SEWER	
STORM SEWER	
TELEPHONE	
WATER	
UTILITY PEDESTAL	
POWER POLE	
TELEPHONE POLE	

ROCK	
LABEL	
95.36	
76	
72	
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98	
99	
100	



LAYOUT
SCALE 0 3 MI
TOTAL NET LENGTH OF CENTERLINE = 8.453 MI

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WASHINGTON COUNCIL OF COUNTY SURVEYORS (WCCS), WASHINGTON 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.

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
4060-00-75	WISC 2022432	1

ORIGINAL PLANS PREPARED BY



Jessica Lewis
(Professional Engineer Signature)

DATE: 3/31/22

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY	
Surveyor	CORRE, INC.
Designer	CORRE, INC.
Project Manager	ROBERT BELLIN
Regional Examiner	STEVE CHOJNACKI
Regional Supervisor	BENEDICT ERUCHALU

APPROVED FOR THE DEPARTMENT
DATE: 3/31/2022 Robert A. Bellin
(Signature)

E

GENERAL NOTES

THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN. COORDINATE CONSTRUCTION ACTIVITIES WITH A CALL TO DIGGERS HOTLINE AND/OR A DIRECT CALL TO THE UTILITIES THAT HAVE FACILITIES IN THE AREA. NOT ALL UTILITIES ARE MEMBERS OF DIGGERS HOTLINE.

CONTACT THE PROJECT ENGINEER AND THE COUNTY SURVEYOR AT LEAST TWO WEEKS BEFORE WORKING NEAR ANY SECTION CORNER MONUMENT.

RESHAPE, RESTORE AND FINISH ALL PREVIOUSLY GRASSED AREAS DISTURBED BY OPERATIONS OUTSIDE OF THE NORMAL CONSTRUCTION LIMITS AT NO EXPENSE TO THE DEPARTMENT.

DISTURBED AREAS WITHIN THE RIGHT OF WAY ARE TO BE TOPSOILED, FERTILIZED, SEEDED, AND MULCHED OR EROSION MATTED AS DIRECTED BY THE ENGINEER.

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

ALL SIGN LOCATIONS SHALL BE REVIEWED BY THE ENGINEER PRIOR TO INSTALLATION.

CURB AND GUTTER GRADES ARE GIVEN TO THE FLANGE OF CURB AND GUTTER. CURB AND GUTTER RADII ARE MEASURED TO THE FLANGE OF CURB AND GUTTER.

TOTAL LAYER PAVEMENT THICKNESS	HMA PAVEMENT ITEM
2 INCHES	4 MT 58-28 S

UTILITY CONTACTS

ATC MANAGEMENT, INC. - ELECTRICITY-TRANSMISSION
CHRIS DAILEY
PO BOX 47
WAUKESHA, WI 53187
PHONE: (262) 506-6884
EMAIL: CDAILEY@ATCLLC.COM

CHARTER COMMUNICATIONS - COMMUNICATION LINE
NICK FRASE
1515 WEST WASHINGTON STREET
WEST BEND, WI 53095
PHONE: (920) 793-2216
EMAIL: NICK.FRASE@CHARTER.COM

EVERSTREAM - COMMUNICATION LINE
SHAD GARCIA
324 E WISCONSIN AVE, SUITE 730
MILWAUKEE, WI 53202
PHONE: (414) 522-6685
EMAIL: SGARCIA@EVERSTREAM.NET

FRONTIER COMMUNICATIONS OF WI LLC -
COMMUNICATION LINE
RUSS RYAN
118 DIVISION STREET
PLYMOUTH, WI 53073
PHONE: (920) 583-3275
EMAIL: RUSSELL.W.RYAN@FTR.COM

KEWASKUM WATER DEPARTMENT - ROAD FACILITY,
SEWER & WATER
DENNIS AUPPERLE
1002 FOND DU LAC AVENUE
KEWASKUM, WI 53040
PHONE: (262) 626-4310
EMAIL: DAUPPERLE@VILLAGE.KEWASKUM.WI.US

SPRINT COMMUNICATIONS CO LP - COMMUNICATION LINE
DAN HILLIARD
849 EARL ST SAINT PAUL, MN 55106
PHONE: (612) 217-3526
EMAIL: DAN.J.HILLIARD@T-MOBILE.COM

KEWASKUM WATER DEPARTMENT - ROAD FACILITY,
SEWER & WATER
DENNIS AUPPERLE
1002 FOND DU LAC AVENUE
KEWASKUM, WI 53040
PHONE: (262) 626-4310
EMAIL: DAUPPERLE@VILLAGE.KEWASKUM.WI.US

WE ENERGIES - ELECTRICITY
WE ENERGIES UTILITY COORDINATOR
500 S 116TH STREET
WEST ALLIS, WI 53214
PHONE: (414) 221-2738
EMAIL: WE-UTILITY-RELOCATIONS@WE-ENERGIES.COM

WE ENERGIES - GAS/PETROLEUM
JACOB HULBERT
500 S 116TH STREET
WEST ALLIS, WI 53214
PHONE: (414) 944-5575
EMAIL: JACOB.HULBERT@WE-ENERGIES.COM



ORDER OF SHEETS

- GENERAL NOTES
- PROJECT OVERVIEW
- TYPICAL SECTIONS
- PLAN DETAILS
- CURB RAMP DETAILS
- TRAFFIC CONTROL PEDESTRIAN ACCOMODATION

DNR LIASION

WISCONSIN DEPARTMENT OF NATURAL RESOURCES
KRISTINA BETZOLD
2300 N MARTIN LUTHER KING DR
MILWAUKEE, WI 53212-3128
PHONE: (414) 343-9346
EMAIL: KRISTINA.BETZOLD@WISCONSIN.GOV

WISDOT CONTACT

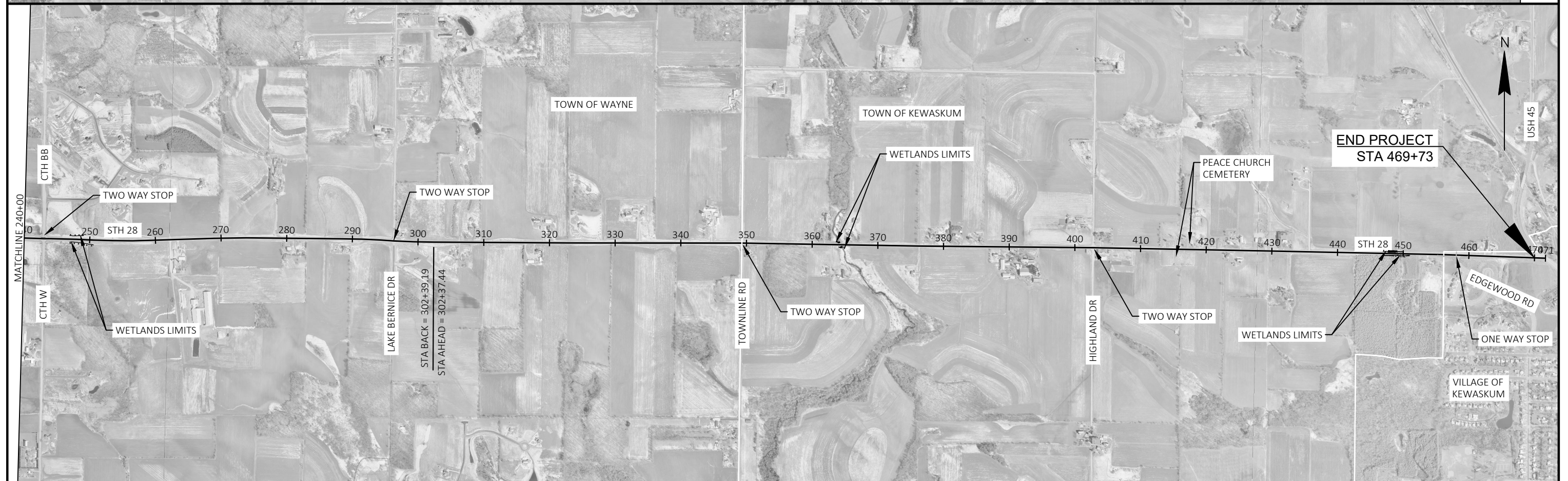
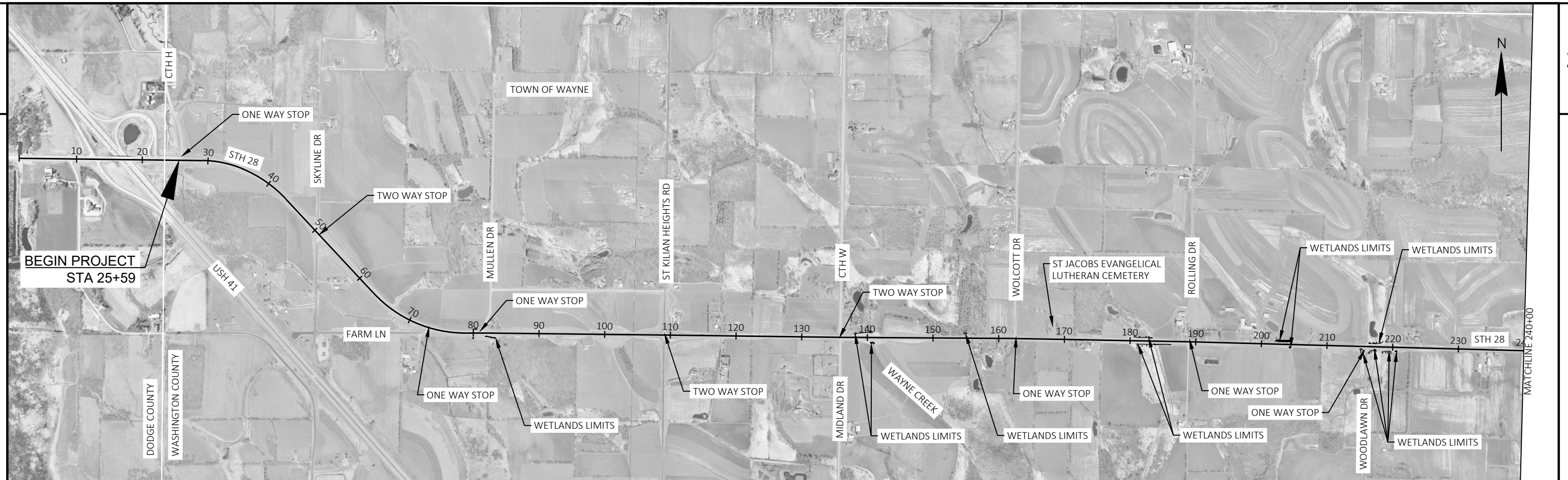
ROBERT BELLIN
141 NW BARSTOW STREET
WAUKESHA, WI 53188
262-521-4405
ROBERT.BELLIN@DOT.WI.GOV

SECTION CORNER CONTACT

SCOTT M. SCHMIDT, PE, RLS
WASHINGTON COUNTY ENGINEER/SURVEYOR
900 LANG STREET
WEST BEND, WI 53090
PHONE: 262-335-6881
EMAIL: SCOTT.SCHMIDT@CO.WASHINGTON.WI.US

DESIGN CONTACT

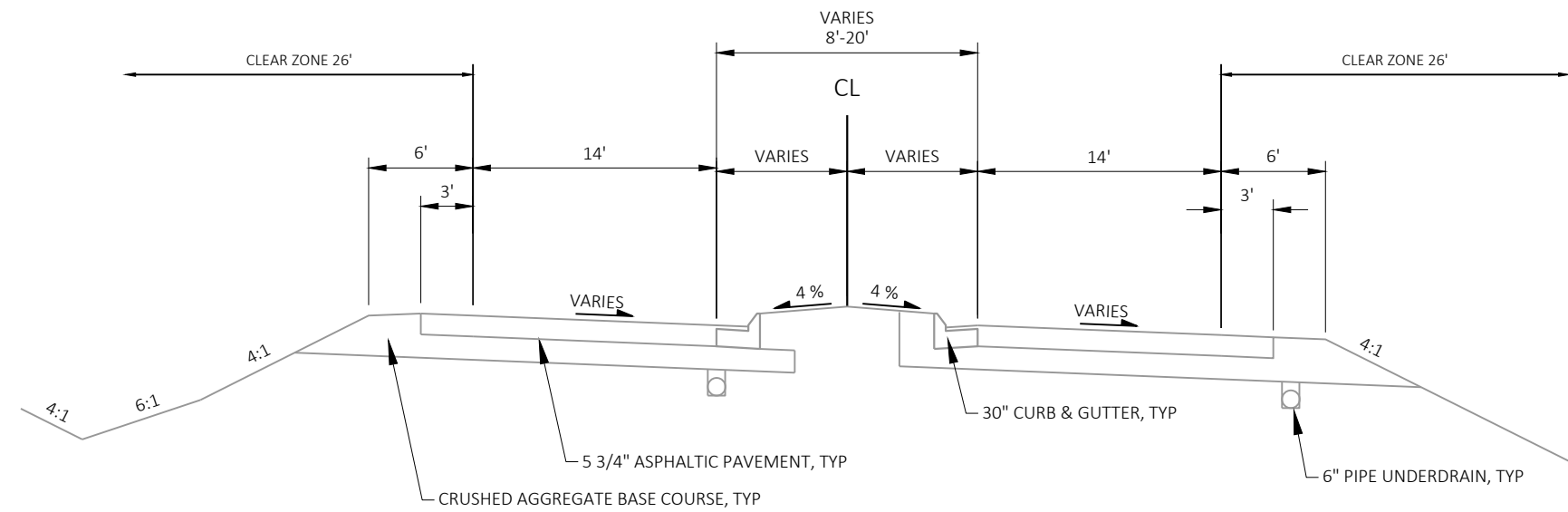
CORRE, INC.
JESSICA LEWIS, PE
175 E WISCONSIN AVENUE
SUITE 27
OCONOMOWOC, WI 53066
PHONE: 608-826-6293
EMAIL: JLEWIS@CORREINC.COM



PROJECT NO: 4060-00-75	HWY: STH 28	COUNTY: WASHINGTON	PROJECT OVERVIEW	SHEET	E
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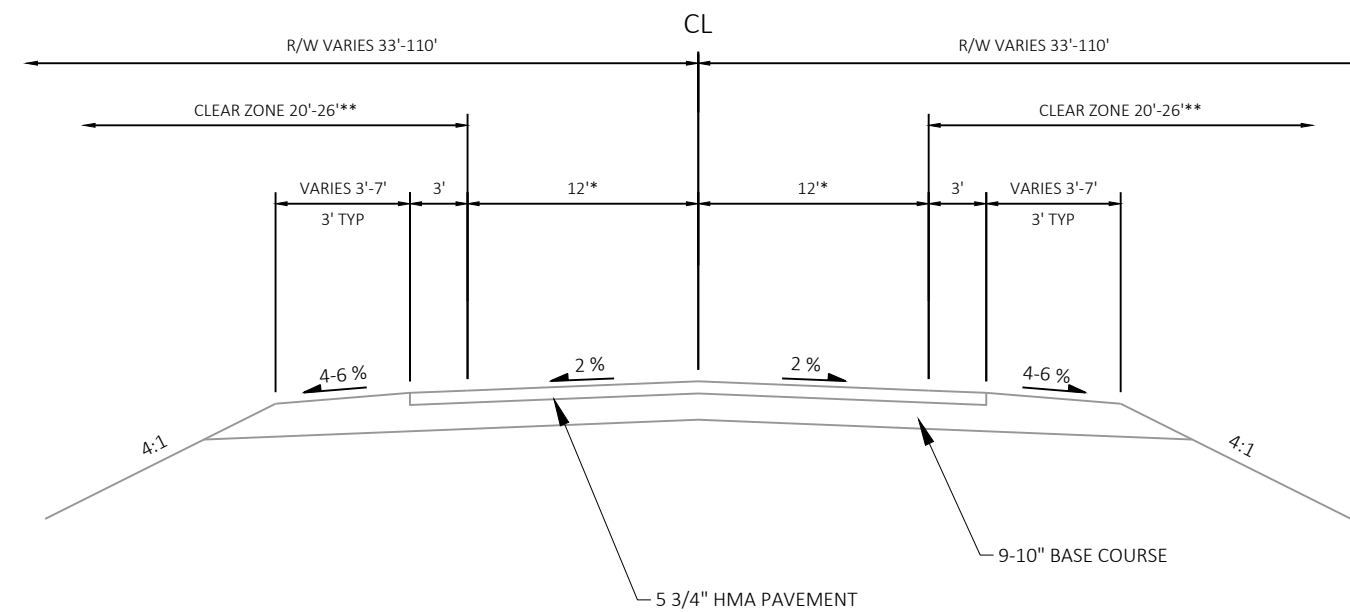
2

2 |

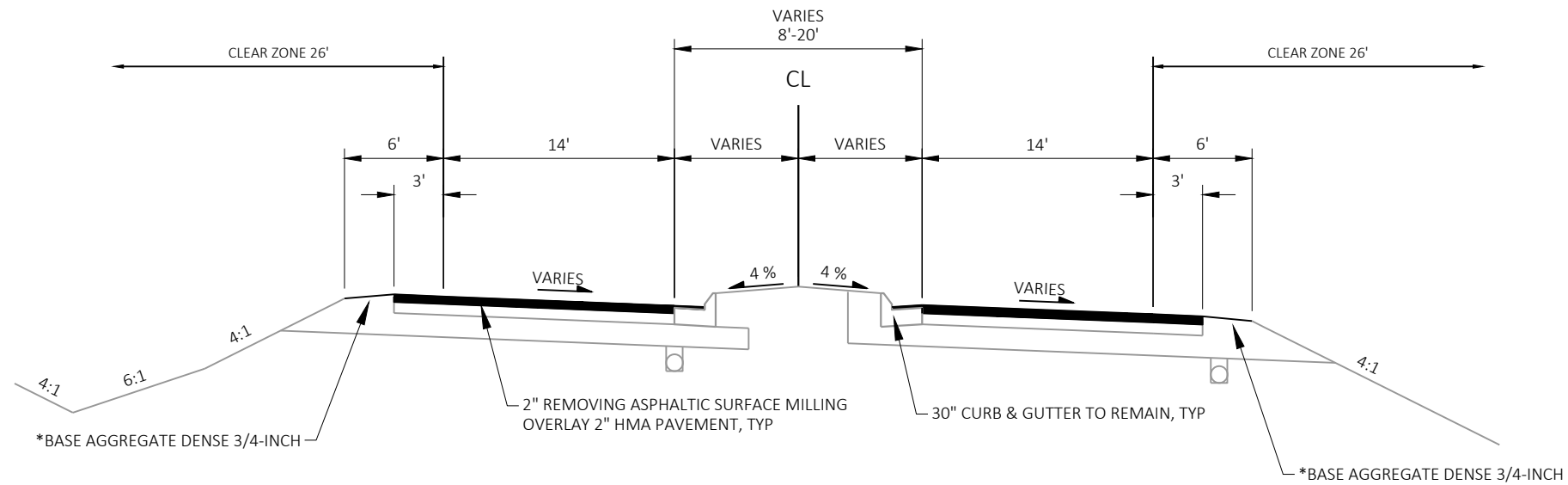


EXISTING TYPICAL SECTION
STA 25+59 - 33+60

** CLEAR ZONE WIDTH
STA 33+60 TO 83+00 = 26'
STA 83+00 TO 470+15 = 20'



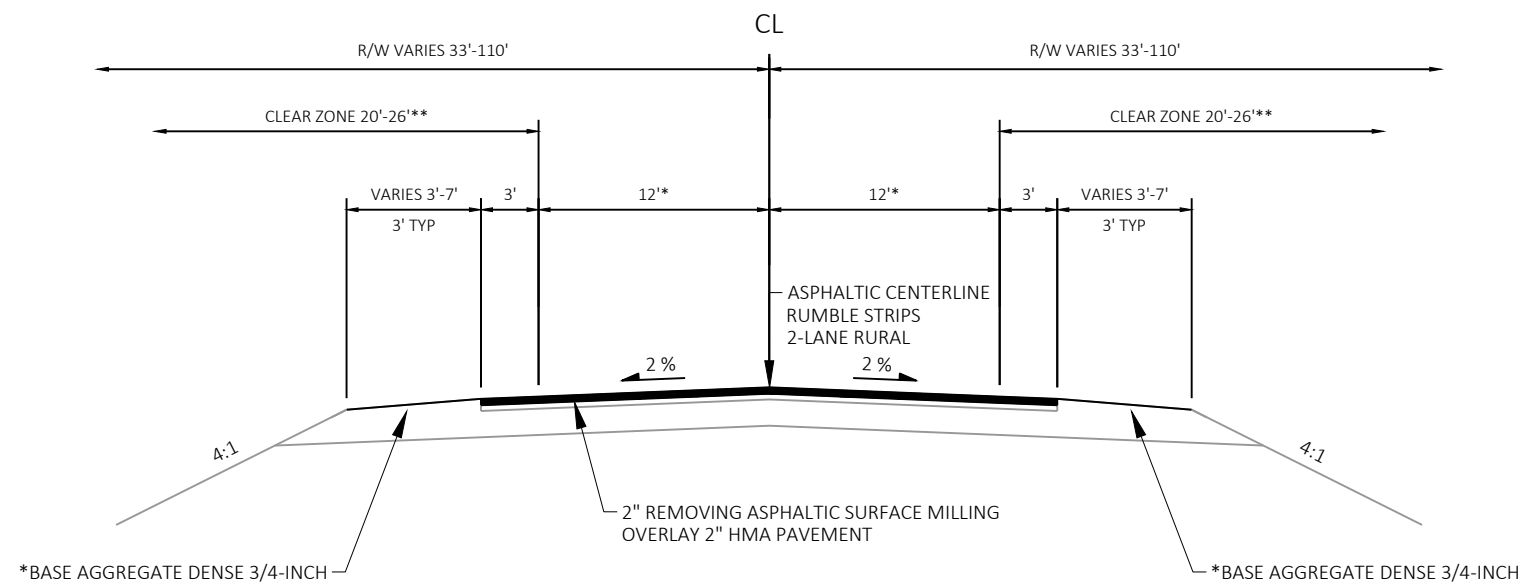
EXISTING TYPICAL SECTION
STA 33+60 - 469+73

**FINISHED TYPICAL SECTION**

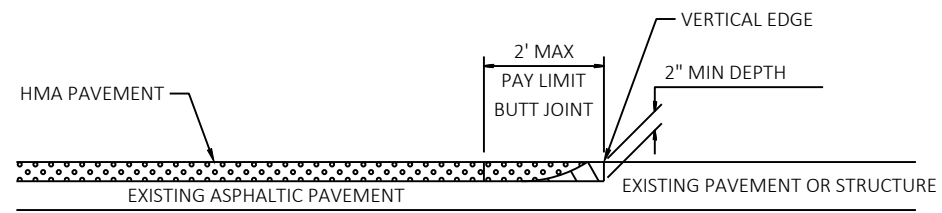
STA 25+59 - 33+60



* DEPTH VARIES, MATCH PAVEMENT
ELEVATION INTO EXISTING SHOULDER,
6% MAX GRADE

** CLEAR ZONE WIDTH
STA 33+60 TO 83+00 = 26'
STA 83+00 TO 470+15 = 20'

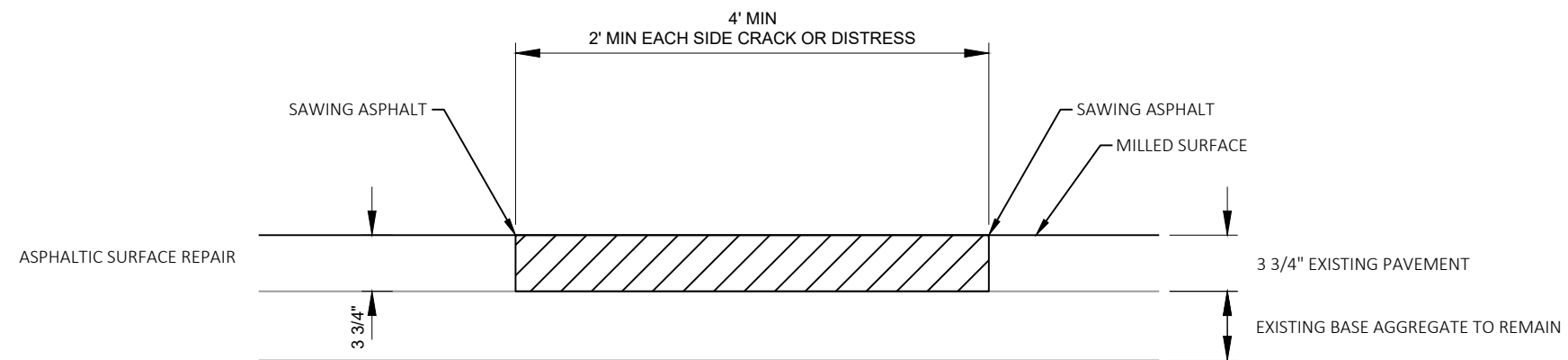
**FINISHED TYPICAL SECTION**

STA 33+60 - 469+73



-  REMOVING ASPHALTIC SURFACE, MILLING
-  TEMPORARY PAPER JOINT PLACED AFTER MILLING TO BE REMOVED PRIOR TO PAVING

BUTT JOINT DETAIL FOR ASPHALTIC PAVEMENTS (NO PROFILE CHANGE)



FULL DEPTH ASPHALTIC SURFACE REPAIR DETAIL

 REMOVING ASPHALTIC SURFACE & REPLACING WITH ASPHALTIC SURFACE

NOTES:
FINAL DIMENSION TO BE DETERMINED BY ENGINEER IN THE FIELD.
*REMOVING ASPHALTIC SURFACE MILLING TO BE DONE PRIOR TO SURFACE REPAIR.
REPLACE ASPHALTIC SURFACE TO ADJACENT SURFACE ELEVATION SAME DAY.
SEE ARTICLE #3 IN THE SPECIAL PROVISIONS.
TO BE COMPLETED WITH PAVING MACHINE.



LEGEND

(HMA)	REMOVE 2" ASPH SURFACE MILLING AND REPLACE WITH 2" HMA PAVEMENT
(DWYA)	DRIVEWAY ASPHALT
(DWYG)	DRIVEWAY GRAVEL
.XXXXX.	SAWING
∞	CULVERT PIPE CHECK
→	FLOW ARROW
⊠	INLET PROTECTION TYPE C

LEGEND

- (HMA) REMOVE 2" ASPH SURFACE MILLING AND
REPLACE WITH 2" HMA PAVEMENT
- (DWYA) DRIVEWAY ASPHALT
- (DWYG) DRIVEWAY GRAVEL
- .XXXXX. SAWING
- ∞ CULVERT PIPE CHECK
- FLOW ARROW
- ⊠ INLET PROTECTION TYPE C



PROJECT NO: 4060-00-75

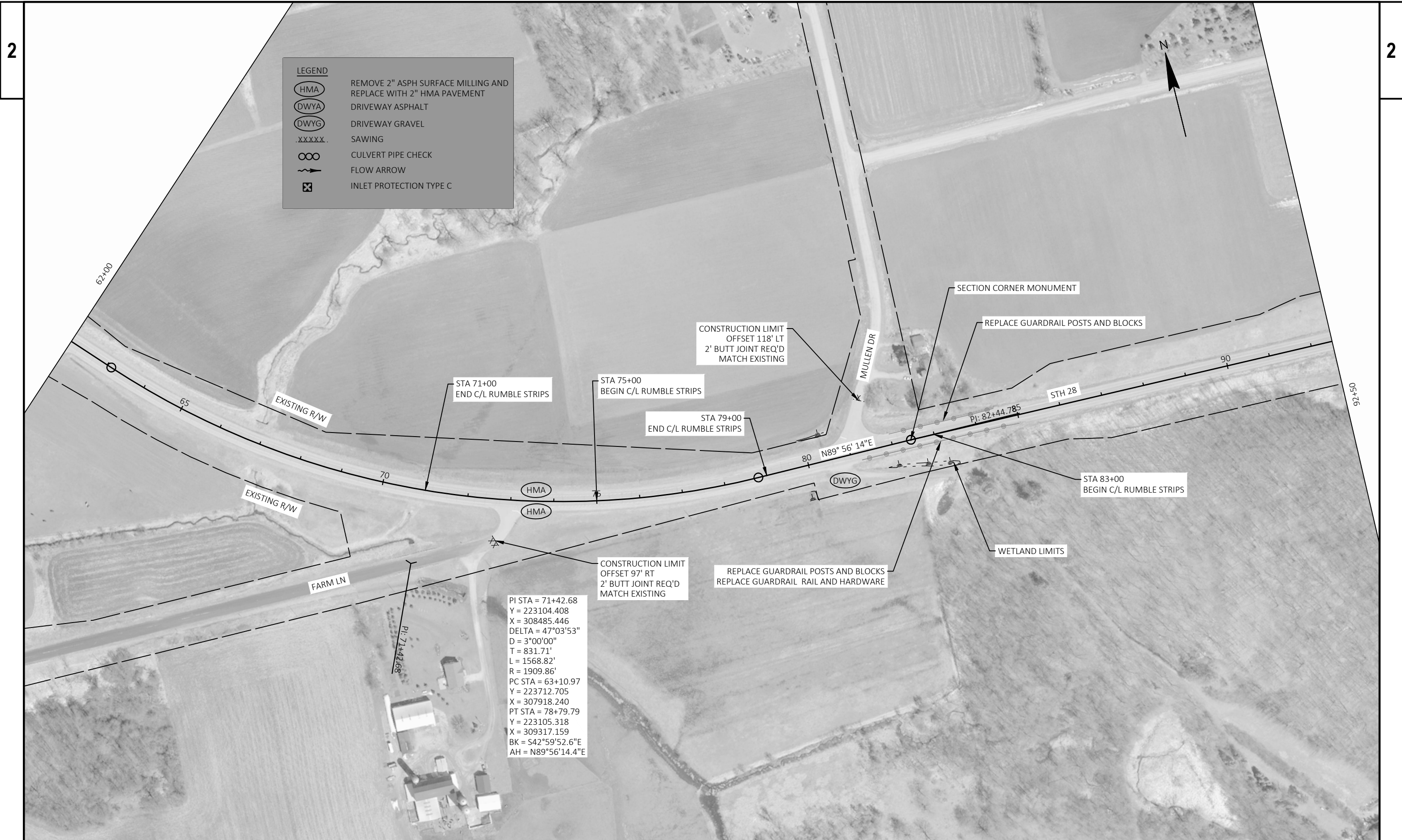
HWY: STH 28

COUNTY: WASHINGTON

PLAN DETAILS & EROSION CONTROL

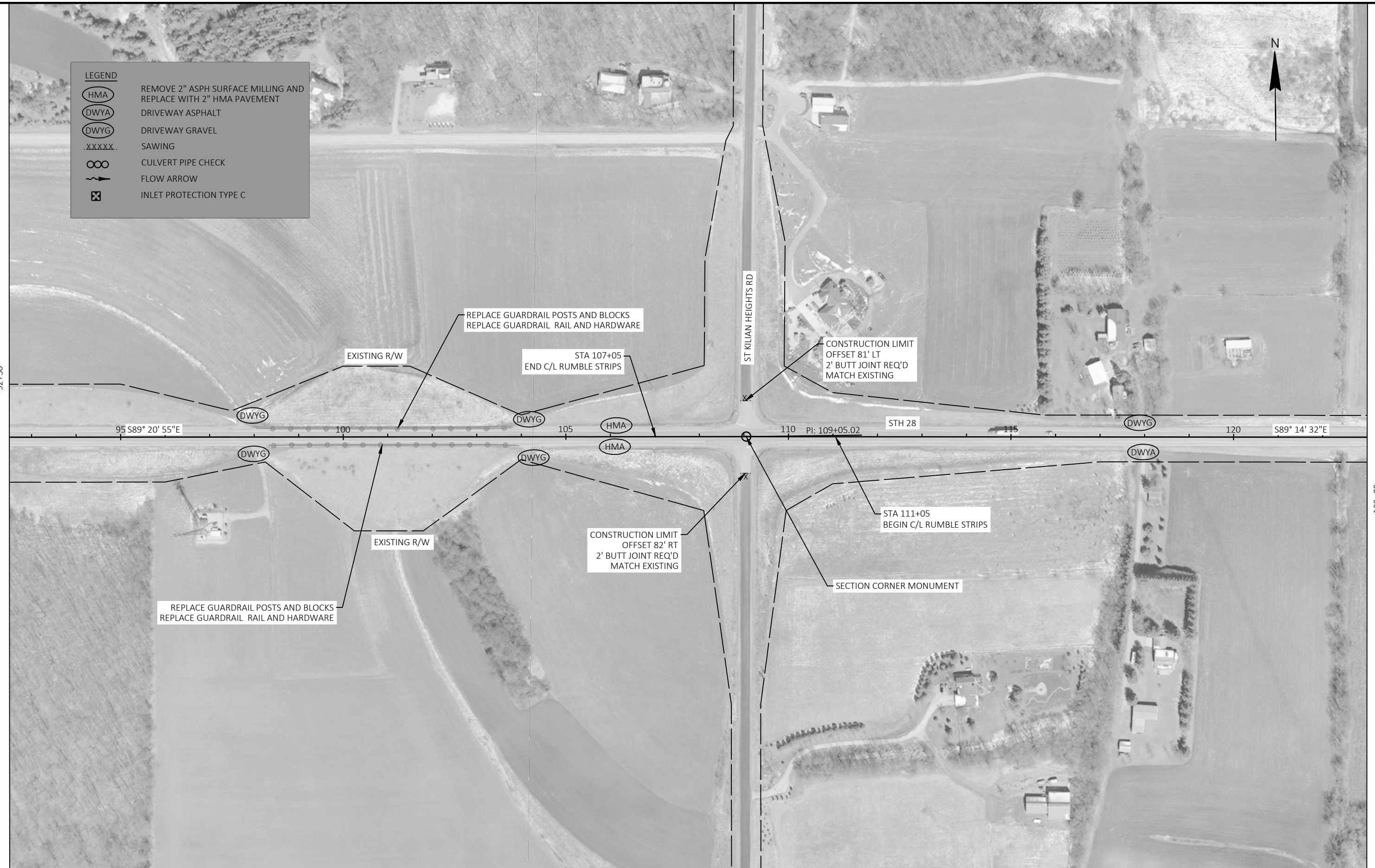
SHEET

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PROJECT NO:	4060-00-75
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HWY: STH 28

COUNTY: WASHINGTON

PLAN DETAILS & EROSION CONTROL

SHEET

11

FILE NAME : C:\OD\CORRE, INC\PROJECTS - DOCUMENTS\WI - SE REGION\4060-00-05 STH 28, WASHINGTON COUNTY\500_CADD\501_C3D_2018\40600005\SHEETS\PLAN\021201-PD.DWG
LAYOUT NAME - 04








PLOT DATE : 3/30/2022 9:47 AM

PLOT BY : TOM ORNER

PLOT NAME :

PLOT SCALE : 1 IN:200 FT

WISDOT/CADDS SHEET 42

LEGEND	
	REMOVE 2" ASPH SURFACE MILLING AND REPLACE WITH 2" HMA PAVEMENT
	DRIVEWAY ASPHALT
	DRIVEWAY GRAVEL
	SAWING
	CULVERT PIPE CHECK
	FLOW ARROW
	INLET PROTECTION TYPE C

123+00

153+50



SECTION CORNER MONUMENT

STA 111+05
END C/L RUMBLE STRIPS

EXISTING R/W

CTH W

CONSTRUCTION LIMIT
OFFSET 106' LT
2' BUTT JOINT REQ'D
MATCH EXISTINGREPLACE GUARDRAIL POSTS AND BLOCKS
REPLACE GUARDRAIL RAIL AND HARDWARE

DWYG

125

130

HMA

135

PI: 135+86.50

140

DWYG

STH 28

145

S89° 37' 08"E 150

EXISTING R/W

HMA

CONSTRUCTION LIMIT
OFFSET 90' RT
2' BUTT JOINT REQ'D
MATCH EXISTING

MIDLAND DR

STA 137+86
BEGIN C/L RUMBLE STRIPS

WETLANDS LIMITS

REPLACE GUARDRAIL POSTS AND BLOCKS

WAYNE CREEK

2

2



PROJECT NO: 4060-00-75	HWY: STH 28	COUNTY: WASHINGTON	PLAN DETAILS & EROSION CONTROL	SHEET	E
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FILE NAME :	C:\OD\CORRE_INC\PROJECTS - DOCUMENTS\WI-SE REGION\4060-00-05 STH 28, WASHINGTON COUNTY\500_CADD\501_C3D_2018\40600005\SHEETS\PLAN\021201-PD.DWG	PLOT DATE :	3/30/2022 9:48 AM	PLOT BY :	TOM ORNER	PLOT NAME :		PLOT SCALE :	1 IN=200 FT	
LAYOUT NAME :	- 06									WISDOT/CADDS SHEET 42

2

2 |



PROJECT NO:	4060-00-75
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HWY: STH 28

COUNTY: WASHINGTON

PLAN DETAILS & EROSION CONTROL

SHEET

11

FILE NAME : C:\OD\CORRE, INC\PROJECTS - DOCUMENTS\WI - SE REGION\4060-00-05 STH 28, WASHINGTON COUNTY\500_CADD\501_C3D_2018\40600005\SHEETS\PLAN\021201-PD.DWG
LAYOUT NAME - 07








PLOT DATE : 3/30/2022 9:50 AM

PLOT BY : TOM ORNER

PLOT NAME :

PLOT SCALE : 1 IN:200 FT

WISDOT/CADDS SHEET 42

LEGEND	
	REMOVE 2" ASPH SURFACE MILLING AND REPLACE WITH 2" HMA PAVEMENT
	DRIVEWAY ASPHALT
	DRIVEWAY GRAVEL
	SAWING
	CULVERT PIPE CHECK
	FLOW ARROW
	INLET PROTECTION TYPE C



PROJECT NO: 4060-00-75

HWY: STH 28

COUNTY: WASHINGTON

PLAN DETAILS & EROSION CONTROL

SHEET

E

FILE NAME : C:\OD\CORRE, INC\PROJECTS - DOCUMENTS\WI - SE REGION\4060-00-05 STH 28, WASHINGTON COUNTY\500_CADD\501_C3D_2018\40600005\SHEETS\PLAN\021201-PD.DWG
LAYOUT NAME - 08

PLOT DATE : 3/30/2022 10:02 AM

PLOT BY : TOM ORNER

PLOT NAME :

PLOT SCALE : 1 IN:200 FT

WISDOT/CADD SHEET 42

LEGEND



REMOVE 2" ASPH SURFACE MILLING AND
REPLACE WITH 2" HMA PAVEMENT



DRIVEWAY ASPHALT



DRIVEWAY GRAVEL



SAWING



CULVERT PIPE CHECK



FLOW ARROW



INLET PROTECTION TYPE C

245+00

PI: 246+05.76

505.75

S87° 32' 37"E

250

DWYG

255

STH 28

HMA

HMA

260

DWYG

DWYA

DWYG

N88° 05' 20"E

EXISTING R/W

265

270

DWYG

275

STA 245+06
BEGIN C/L RUMBLE STRIPS

PI STA = 246+05.76
Y = 222825.750
X = 326040.259
DELTA = 1°54'35"
D = 0°30'00"
T = 190.97'
L = 381.91'
R = 11458.56'
PC STA = 244+14.79
Y = 222827.572
X = 325849.293
PT STA = 247+96.70
Y = 222817.565
X = 326231.057
BK = S89°27'12.2"E
AH = S87°32'37.5"E

WETLANDS LIMITS

PI: 255+06.18

PI STA = 255+06.18
Y = 222787.159
X = 326939.889
DELTA = 4°22'03"
D = 0°30'00"
T = 436.96'
L = 873.50'
R = 11459.16'
PC STA = 250+69.22
Y = 222805.886
X = 326503.329
PT STA = 259+42.72
Y = 222801.733
X = 327376.608
BK = S87°32'37.5"E
AH = N88°05'19.5"E

EXISTING R/W

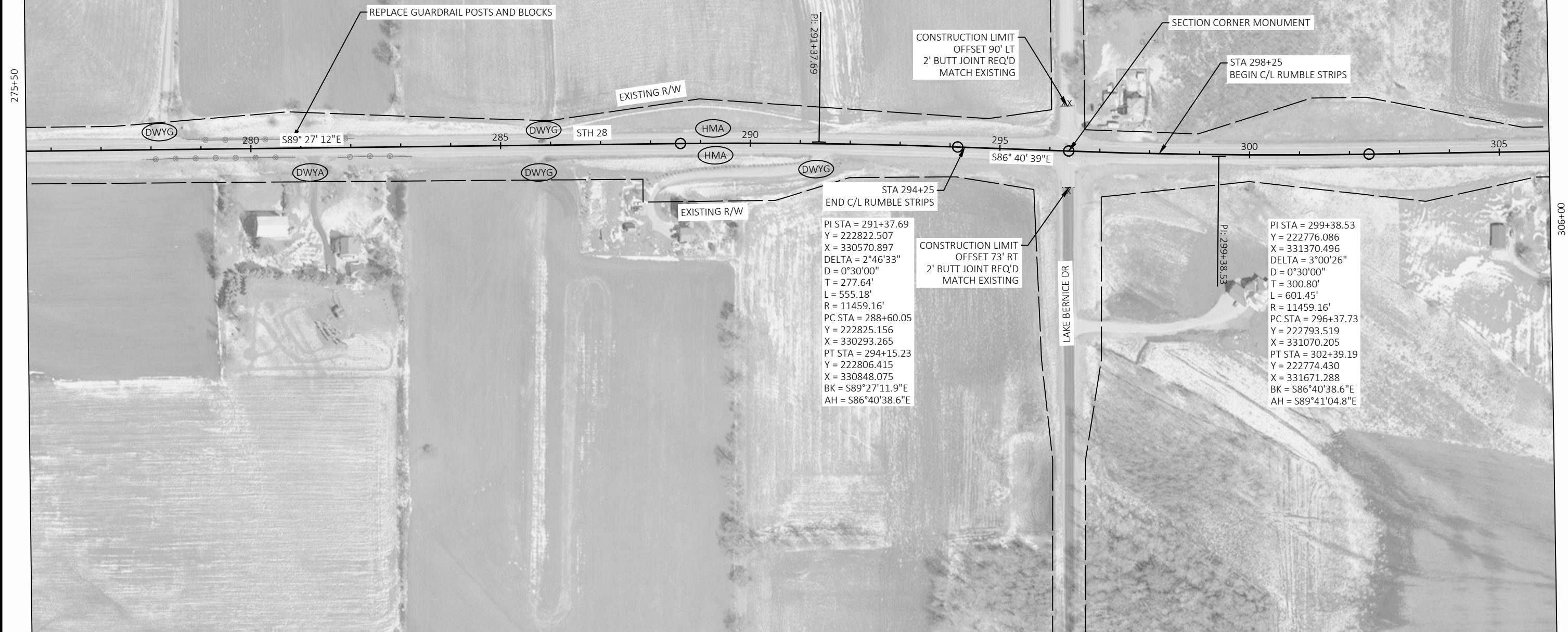
SECTION CORNER MONUMENT
IS 6' SOUTH OF PAVEMENT

PI STA = 271+37.79
Y = 222841.590
X = 328571.016
DELTA = 2°27'29"
D = 0°30'00"
T = 245.83'
L = 491.59'
R = 11459.16'
PC STA = 268+91.96
Y = 222833.391
X = 328325.320
PT STA = 273+83.55
Y = 222839.244
X = 328816.837
BK = N88°05'19.5"E
AH = S89°27'11.9"E

275+50

LEGEND

- (HMA) REMOVE 2" ASPH SURFACE MILLING AND
REPLACE WITH 2" HMA PAVEMENT
- (DWYA) DRIVEWAY ASPHALT
- (DWYG) DRIVEWAY GRAVEL
- .XXXXX. SAWING
- ∞ CULVERT PIPE CHECK
- FLOW ARROW
- ⊠ INLET PROTECTION TYPE C



PROJECT NO: 4060-00-75

HWY: STH 28

COUNTY: WASHINGTON

PLAN DETAILS & EROSION CONTROL

SHEET

E

LEGEND

- (HMA) REMOVE 2" ASPH SURFACE MILLING AND
REPLACE WITH 2" HMA PAVEMENT
- (DWYA) DRIVEWAY ASPHALT
- (DWYG) DRIVEWAY GRAVEL
- .XXXXX. SAWING
- ∞ CULVERT PIPE CHECK
- ⚡ FLOW ARROW
- ⊠ INLET PROTECTION TYPE C



REPLACE GUARDRAIL POSTS AND BLOCKS

SECTION CORNER MONUMENT

REPLACE GUARDRAIL POSTS AND BLOCKS

REPLACE GUARDRAIL POSTS AND BLOCKS
REPLACE GUARDRAIL RAIL AND HARDWARE

306+00

336+50

PROJECT NO: 4060-00-75

HWY: STH 28

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PLAN DETAILS & EROSION CONTROL

SHEET

E

LEGEND	
(HMA)	REMOVE 2" ASPH SURFACE MILLING AND REPLACE WITH 2" HMA PAVEMENT
(DWYA)	DRIVEWAY ASPHALT
(DWYG)	DRIVEWAY GRAVEL
.XXXXX.	SAWING
∞	CULVERT PIPE CHECK
→	FLOW ARROW
⊗	INLET PROTECTION TYPE C

336+50

367+00



CONSTRUCTION LIMIT
OFFSET 99' LT
2' BUTT JOINT REQ'D
MATCH EXISTING

STA 347+33
END C/L RUMBLE STRIPS

SECTION CORNER MONUMENT

EXISTING R/W

STH 28

PI: 349+32.71

EXISTING R/W

STA 351+33
BEGIN C/L RUMBLE STRIPS

REPLACE GUARDRAIL POSTS AND BLOCKS
REPLACE GUARDRAIL RAIL AND HARDWARE

WETLANDS LIMITS

REPLACE GUARDRAIL POSTS AND BLOCKS

CONSTRUCTION LIMIT
OFFSET 57' RT
2' BUTT JOINT REQ'D
MATCH EXISTING

TOWNLINE RD

PROJECT NO: 4060-00-75

HWY: STH 28

COUNTY: WASHINGTON

PLAN DETAILS & EROSION CONTROL

SHEET

E

LEGEND

HMA

REMOVE 2" ASPH SURFACE MILLING AND
REPLACE WITH 2" HMA PAVEMENT

DWYA

DRIVEWAY ASPHALT

DWYG

DRIVEWAY GRAVEL

.XXXXX.

SAWING

∞

CULVERT PIPE CHECK

↗

FLOW ARROW

⊠

INLET PROTECTION TYPE C



SECTION CORNER MONUMENT

367+00

397+50

LEGEND

HMA

REMOVE 2" ASPH SURFACE MILLING AND
REPLACE WITH 2" HMA PAVEMENT

DWYA

DRIVEWAY ASPHALT

DWYG

DRIVEWAY GRAVEL

.XXXXX.

SAWING

∞

CULVERT PIPE CHECK

→

FLOW ARROW

⊠

INLET PROTECTION TYPE C



397+50

428+00

CONSTRUCTION LIMIT
OFFSET 113' LT
2' BUTT JOINT REQ'D
MATCH EXISTINGSTA 400+78
END C/L RUMBLE STRIPS

400

CONSTRUCTION LIMIT
OFFSET 99' RT
2' BUTT JOINT REQ'D
MATCH EXISTING

HIGHLAND DR

SECTION CORNER MONUMENT

DWYA

PI: 402+78.508

HMA

HMA

EXISTING R/W

410

S88° 54' 49"E

STH 28

DWYA

DWYA

DWYA

DWYA

DWYA

DWYA

DWYA

DWYA

DWYA








DWYA

DWYA

DWYG

STA 404+78
BEGIN C/L RUMBLE STRIPS

EXISTING R/W

LEGEND	
	REMOVE 2" ASPH SURFACE MILLING AND REPLACE WITH 2" HMA PAVEMENT
	DRIVEWAY ASPHALT
	DRIVEWAY GRAVEL
	SAWING
	CULVERT PIPE CHECK
	FLOW ARROW
	INLET PROTECTION TYPE C



428+00

455+00



PROJECT NO: 4060-00-75

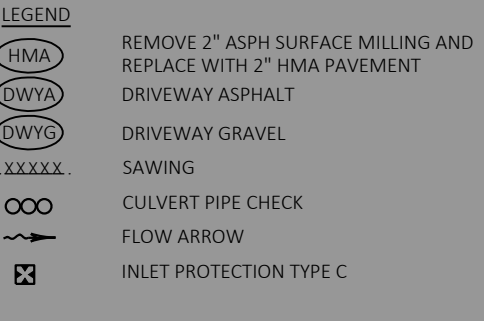
HWY: STH 28

COUNTY: WASHINGTON

PLAN DETAILS & EROSION CONTROL

SHEET

E



CONTROL POINTS					
NO.	STATION	NORTHING	EASTING	DESCRIPTION	ELEV.
902	458+30.86, 40.2' LT	222617.502	347262.708	FENO MONUMENT	962.149
903	469+78.36, 45.3' RT	222490.712	348406.376	FENO MONUMENT	966.061

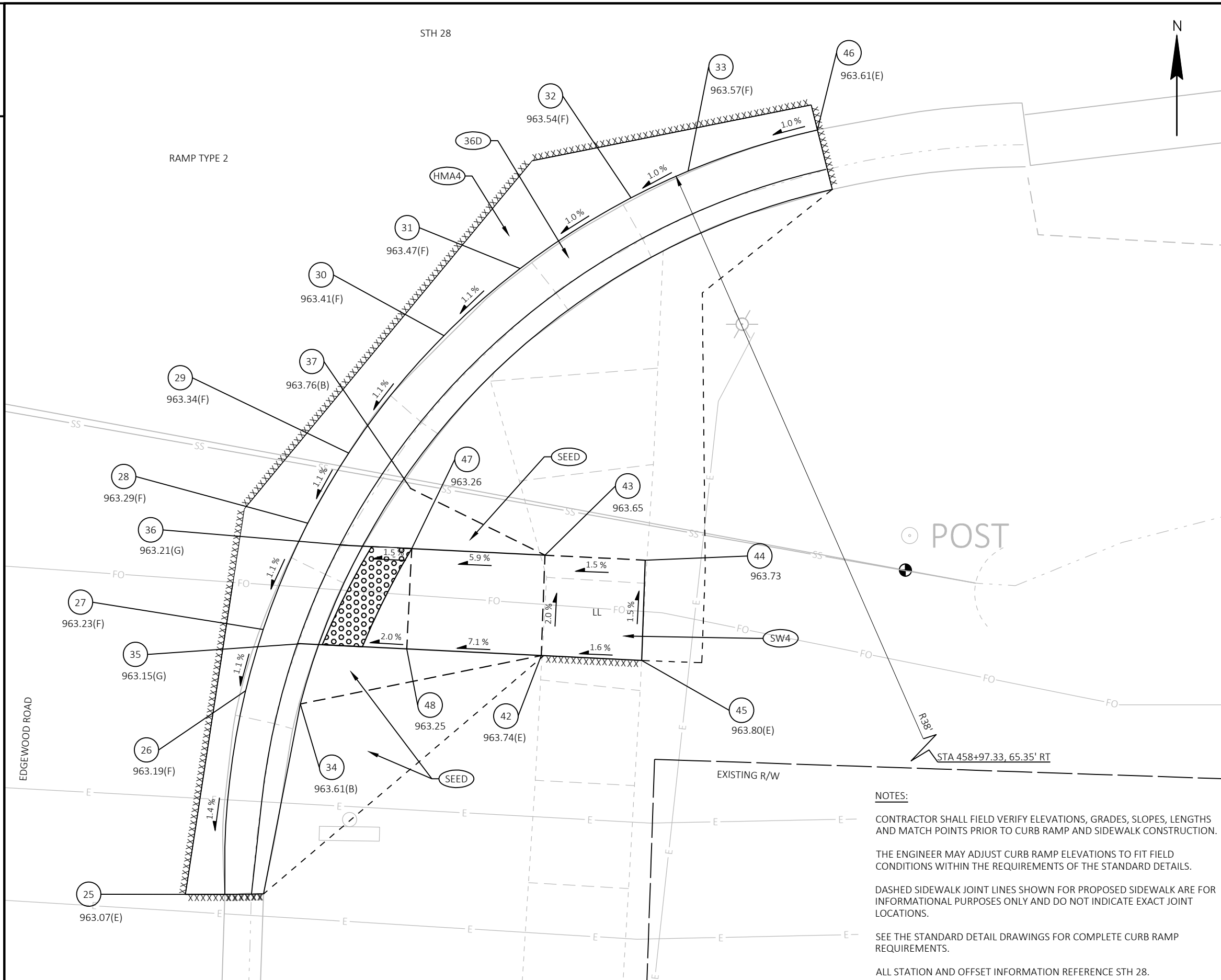
BENCHMARKS					
NO.	STATION	NORTHING	EASTING	DESCRIPTION	ELEV.
3222	458+93.22, 50.6' RT	222524.480	347321.593	CHISELED CROSS TOP OF CULVERT	961.712

LEGEND

XXX.XX(B) PROPOSED CURB & GUTTER BACK OF CURB ELEVATION

ALL STATION AND OFFSET INFORMATION REFERENCE STH 28.





STATION & OFFSET TABLE				
POINT	STATION	OFFSET	Y COORDS	X COORDS
25	458+59.79	68.01 RT	222508.327	347287.712
26	458+60.46	57.84 RT	222518.466	347288.750
27	458+61.22	54.76 RT	222521.515	347289.623
28	458+63.25	49.39 RT	222526.807	347291.846
29	458+65.16	45.83 RT	222530.300	347293.881
30	458+69.69	39.81 RT	222536.148	347298.625
31	458+73.36	36.34 RT	222539.483	347302.414
32	458+78.76	32.62 RT	222543.007	347307.943
33	458+81.54	31.19 RT	222544.338	347310.779
34	458+63.21	58.40 RT	222517.808	347291.475
35	458+63.16	55.40 RT	222520.808	347291.535
36	458+65.36	50.43 RT	222525.697	347293.914
37	458+68.32	47.49 RT	222528.527	347296.976
42	458+75.11	55.56 RT	222520.217	347303.472
43	458+75.11	50.56 RT	222525.215	347303.653
44	458+80.11	50.62 RT	222524.967	347308.649
45	458+80.11	55.63 RT	222519.970	347308.469
46	458+87.91	28.91 RT	222546.382	347317.226
47	458+68.47	50.47 RT	222525.543	347297.019
48	458+68.40	55.47 RT	222520.549	347296.772

- LEGEND
- HMA4 REMOVE ASPHALTIC SURFACE AND REPLACE WITH 4" HMA PAVEMENT OVER 2"BASE AGGREGATE DENSE 1 1/4-INCH
 - SW4 REMOVE CONCRETE SIDEWALK, REPLACE WITH 6" BASE AGGREGATE DENSE 1 1/4-INCH AND CONCRETE SIDEWALK 4-INCH
 - 36D REMOVE CURB AND GUTTER, REPLACE WITH 9" BASE AGGREGATE DENSE 1 1/4-INCH AND CONCRETE CURB AND GUTTER 6-INCH SLOPED 36-INCH, TYPE D
 - SEED RESTORE WITH TOPSOIL, SEED, FERTILIZER TYPE B AND MULCH
 - XXXXXX DETECTABLE WARNING FIELD
 - XXXXXX SAWING
 - LL LEVEL LANDING
 - XXX.XX PROPOSED SIDEWALK ELEVATION
 - XXX.XX(E) EXISTING GROUND ELEVATION
 - XXX.XX(F) PROPOSED CURB & GUTTER FLANGE ELEVATION
 - XXX.XX(G) PROPOSED CURB & GUTTER FLOWLINE ELEVATION
 - XXX.XX(B) PROPOSED CURB & GUTTER BACK OF CURB ELEVATION

NOTES:

CONTRACTOR SHALL FIELD VERIFY ELEVATIONS, GRADES, SLOPES, LENGTHS AND MATCH POINTS PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION.









THE ENGINEER MAY ADJUST CURB RAMP ELEVATIONS TO FIT FIELD CONDITIONS WITHIN THE REQUIREMENTS OF THE STANDARD DETAILS.

DASHED SIDEWALK JOINT LINES SHOWN FOR PROPOSED SIDEWALK ARE FOR INFORMATIONAL PURPOSES ONLY AND DO NOT INDICATE EXACT JOINT LOCATIONS.

SEE THE STANDARD DETAIL DRAWINGS FOR COMPLETE CURB RAMP REQUIREMENTS.

ALL STATION AND OFFSET INFORMATION REFERENCE STH 28.

LEGEND

-  EXISTING SIGN MOUNTED ON POST(S)
-  EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
-  PROPOSED SIGN MOUNTED ON POST(S)
-  PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
-  EXISTING LIGHT OR SIGNAL POLE
-  CANTILEVER SIGN BRIDGE
-  DENOTES SIGN NUMBER
-  INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN

NO SIGNS
IMPACTED
THIS SHEET

STH 28

10

15

20

TYPE II ALUMINUM SIGNS REMOVED UNDER THE CONTRACT SHALL BE DELIVERED TO WISDOT.
CONTACT THE FOLLOWING INDIVIDUAL AT THE SIGN SHOP FOR DISTRIBUTION COUNTY LOCATION.

SIGNING COORDINATOR	COUNTIES	PHONE #
JENNY BUCKETT	MILWAUKEE, KENOSHA, WASHINGTON, OZAUKEE	414-750-2427
CHUCK SALDIVAR	RACINE, WALWORTH, WAUKESHA	414-750-1682

SIGNS SHALL BE CAREFULLY REMOVED FROM SIGN SUPPORTS. THE SIGNS SHALL BE PALLETIZED FOR HANDLING WITH A FORKLIFT (SEE STANDARD SPEC 638.3.4). THE REGIONAL SIGN SHOP (414-266-1165) SHALL BE NOTIFIED THREE WORKING DAYS PRIOR TO DELIVERY OF THE SIGNS.

WHEN AN EXISTING STOP SIGN SUPPORT IS TO BE REMOVED AND A NEW STOP SIGN AND SUPPORT ERECTED, THE WORK SHALL BE DONE CONCURRENTLY. FOR OTHER SIGNS AND SUPPORTS THAT ARE TO BE REMOVED AND NEW SIGNS AND SUPPORTS ERECTED, THE REMOVAL OF THE EXISTING SIGN/SUPPORT AND ERECTION OF THE NEW SIGN/SUPPORT SHOULD BE DONE AS CONCURRENTLY AS POSSIBLE. IN NO CASE SHALL A NEW SIGN/SUPPORT BE DOWN FOR MORE THAN 24 HOURS AND THERE SHALL NOT BE MORE THAN ONE SIGN OF THE SAME LEGEND MISSING IN A ROW.

WOOD POST SIZES FOR TYPE II SIGNS ARE ESTIMATED LENGTHS AND THE ACTUAL LENGTH WILL BE DETERMINED IN THE FIELD.

STREET NAME SIGNS ARE PROPERTY OF THE MUNICIPALITY (CITY, VILLAGE OR TOWN). THE MUNICIPALITY SHALL BE CONTACTED TO REMOVE THEIR STREET NAME SIGNS PRIOR TO CONSTRUCTION AND IT IS THEIR RESPONSIBILITY TO REINSTALL THE OLD SIGNS OR REPLACE THEM FOLLOWING CONSTRUCTION. WISDOT DOES NOT FURNISH OR INSTALL STREET NAME SIGNS. THE STREET NAME SIGNS SHALL NOT BE PLACED ON TOP OF THE STOP SIGNS.

LOCATE NO PASSING PENNANTS BASED ON ESTABLISHING NO PASSING ZONES PAY ITEM. PLACE SIGNS BASED ON WHERE THE PAVEMENT MARKING FOR NO PASSING ZONES BEGIN.

BOX OUT OR CORING OF CONCRETE SIGN POSTS IS INCIDENTAL TO THE POST

SHEET 1 OF 31

PROJECT NO: 4060-00-75

HWY: STH 28

COUNTY: WASHINGTON

PERMANENT SIGNING PLAN

SHEET

E



2

2

- LEGEND
- EXISTING SIGN MOUNTED ON POST(S)
 - EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
 - PROPOSED SIGN MOUNTED ON POST(S)
 - PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
 - EXISTING LIGHT OR SIGNAL POLE
 - CANTILEVER SIGN BRIDGE
 - DENOTES SIGN NUMBER
 - INDICATES SIGN SIZE
 - EXISTING SIGN TO REMAIN

NO SIGNS
IMPACTED
THIS SHEET



SHEET 2 OF 31



2

2

LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
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- EXISTING LIGHT OR SIGNAL POLE
- CANTILEVER SIGN BRIDGE
- DENOTES SIGN NUMBER
- INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN

NO SIGNS
IMPACTED
THIS SHEET











SHEET 4 OF 31

PROJECT NO: 4060-00-75	HWY: STH 28	COUNTY: WASHINGTON	PERMANENT SIGNING PLAN	SHEET	E
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LEGEND

-  EXISTING SIGN MOUNTED ON POST(S)
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 PROPOSED SIGN MOUNTED ON POST(S)
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 DENOTES SIGN NUMBER
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ESTR EXISTING SIGN TO REMAIN



SHEET 6 OF 31

PROJECT NO: 4060-00-75

HWY: STH 28

COUNTY: WASHINGTON

PERMANENT SIGNING PLAN

SHEET

E

FILE NAME : N:\PDS\C3D\CAD\40600005\SIGN\023201_PS_20.DWG
LAYOUT NAME - 06

PLOT DATE : 10/27/2021 9:11 AM

PLOT BY : WAGNER, SCOTT H

PLOT NAME :

PLOT SCALE : 1 IN:100 FT

WISDOT/CADDs SHEET 42



2

2

- LEGEND
- EXISTING SIGN MOUNTED ON POST(S)
 - EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
 - PROPOSED SIGN MOUNTED ON POST(S)
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 - INDICATES SIGN SIZE
 - EXISTING SIGN TO REMAIN

NO SIGNS
IMPACTED
THIS SHEET



STH 28

110

115

120

STH 28

ST KILIAN HEIGHTS RD

ST KILIAN HEIGHTS RD

PI: 109+05.02

SHEET 7 OF 31



- LEGEND
- EXISTING SIGN MOUNTED ON POST(S)
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 - EXISTING SIGN TO REMAIN

NO SIGNS
IMPACTED
THIS SHEET



- LEGEND
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 - (X) INDICATES SIGN SIZE
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2

2

- LEGEND
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 - DENOTES SIGN NUMBER
 - INDICATES SIGN SIZE
 - EXISTING SIGN TO REMAIN

NO SIGNS
IMPACTED
THIS SHEET

WOLCOTT DR

PI: 162+40.60

STH 28

STH 28

SHEET 10 OF 31



LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
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- INDICATES SIGN SIZE
- EXISTING SIGN TO REMAIN

NO SIGNS
IMPACTED
THIS SHEET

SHEET 11 OF 31



LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
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- DENOTES SIGN NUMBER
- INDICATES SIGN SIZE
- EXISTING SIGN TO REMAIN

NO SIGNS
IMPACTED
THIS SHEET



2

2

- LEGEND
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 - PROPOSED SIGN MOUNTED ON POST(S)
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 - EXISTING LIGHT OR SIGNAL POLE
 - CANTILEVER SIGN BRIDGE
 - DENOTES SIGN NUMBER
 - INDICATES SIGN SIZE
 - EXISTING SIGN TO REMAIN



NO SIGNS
IMPACTED
THIS SHEET

STH 28 200 205 210 STH 28

SHEET 13 OF 31

- LEGEND
- EXISTING SIGN MOUNTED ON POST(S)
 - EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
 - PROPOSED SIGN MOUNTED ON POST(S)
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 - EXISTING LIGHT OR SIGNAL POLE
 - CANTILEVER SIGN BRIDGE
 - DENOTES SIGN NUMBER
 - INDICATES SIGN SIZE
 - EXISTR EXISTING SIGN TO REMAIN



SHEET 14 OF 31

PROJECT NO: 4060-00-75

HWY: STH 28

COUNTY: WASHINGTON

PERMANENT SIGNING PLAN

SHEET

E

FILE NAME : N:\PDS\C3D\CAD\40600005\SIGN\023201_PS_20.DWG
LAYOUT NAME - 14

PLOT DATE : 10/27/2021 9:11 AM

PLOT BY : WAGNER, SCOTT H

PLOT NAME :

PLOT SCALE : 1 IN:100 FT

WISDOT/CADDs SHEET 42



2

2

NO SIGNS
IMPACTED
THIS SHEET

- LEGEND
- EXISTING SIGN MOUNTED ON POST(S)
 - EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
 - PROPOSED SIGN MOUNTED ON POST(S)
 - PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
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 - INDICATES SIGN SIZE
 - EXISTING SIGN TO REMAIN



STH 28

230

235

240

STH 28

SHEET 15 OF 31





2

2

- LEGEND
- EXISTING SIGN MOUNTED ON POST(S)
 - EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
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 - EXISTR EXISTING SIGN TO REMAIN











NO SIGNS
IMPACTED
THIS SHEET

SHEET 17 OF 31

PROJECT NO: 4060-00-75	HWY: STH 28	COUNTY: WASHINGTON	PERMANENT SIGNING PLAN	SHEET	E
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LEGEND

-  EXISTING SIGN MOUNTED ON POST(S)
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 DENOTES SIGN NUMBER
 INDICATES SIGN SIZE
ESTR EXISTING SIGN TO REMAIN



SHEET 18 OF 31

PROJECT NO: 4060-00-75

HWY: STH 28








COUNTY: WASHINGTON

PERMANENT SIGNING PLAN

SHEET

E

LEGEND

-  EXISTING SIGN MOUNTED ON POST(S)
 EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
 PROPOSED SIGN MOUNTED ON POST(S)
 PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
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 CANTILEVER SIGN BRIDGE
 DENOTES SIGN NUMBER
(X) INDICATES SIGN SIZE
ESTR EXISTING SIGN TO REMAIN

NO SIGNS
IMPACTED
THIS SHEET



SHEET 19 OF 31

PROJECT NO: 4060-00-75

HWY: STH 28

COUNTY: WASHINGTON

PERMANENT SIGNING PLAN

SHEET

E



2

2



- LEGEND
- EXISTING SIGN MOUNTED ON POST(S)
 - EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
 - PROPOSED SIGN MOUNTED ON POST(S)
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 - CANTILEVER SIGN BRIDGE
 - DENOTES SIGN NUMBER
 - (X) INDICATES SIGN SIZE
 - ESTR EXISTING SIGN TO REMAIN

NO SIGNS
IMPACTED
THIS SHEET

PT: 322+83.75

STH 28 320 325 330 STH 28

PROJECT NO: 4060-00-75	HWY: STH 28	COUNTY: WASHINGTON	PERMANENT SIGNING PLAN	SHEET	E
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2

2

SHEET 22 OF 31

PROJECT NO: 4060-00-75	HWY: STH 28	COUNTY: WASHINGTON	PERMANENT SIGNING PLAN	SHEET	E
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2

2

- LEGEND
- EXISTING SIGN MOUNTED ON POST(S)
 - EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
 - PROPOSED SIGN MOUNTED ON POST(S)
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 - EXISTING LIGHT OR SIGNAL POLE
 - CANTILEVER SIGN BRIDGE
 - DENOTES SIGN NUMBER
 - INDICATES SIGN SIZE
 - EXISTING SIGN TO REMAIN

NO SIGNS
IMPACTED
THIS SHEET



SHEET 23 OF 31



- LEGEND
- EXISTING SIGN MOUNTED ON POST(S)
 - EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
 - PROPOSED SIGN MOUNTED ON POST(S)
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 - INDICATES SIGN SIZE
 - EXISTING SIGN TO REMAIN



LEGEND

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- PROPOSED SIGN MOUNTED ON POST(S)
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- EXISTING SIGN TO REMAIN

NO SIGNS
IMPACTED
THIS SHEET











SHEET 25 OF 31

PROJECT NO: 4060-00-75	HWY: STH 28	COUNTY: WASHINGTON	PERMANENT SIGNING PLAN	SHEET	E
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LEGEND

-  EXISTING SIGN MOUNTED ON POST(S)
-  EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
-  PROPOSED SIGN MOUNTED ON POST(S)
-  PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
-  EXISTING LIGHT OR SIGNAL POLE
-  CANTILEVER SIGN BRIDGE
-  DENOTES SIGN NUMBER
-  INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN









NO SIGNS
IMPACTED
THIS SHEET



STH 28 410 415 420 STH 28



LEGEND

-  EXISTING SIGN MOUNTED ON POST(S)
-  EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
-  PROPOSED SIGN MOUNTED ON POST(S)
-  PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
-  EXISTING LIGHT OR SIGNAL POLE
-  CANTILEVER SIGN BRIDGE
-  DENOTES SIGN NUMBER
-  INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN



SHEET 29 OF 31

PROJECT NO: 4060-00-75	HWY: STH 28	COUNTY: WASHINGTON	PERMANENT SIGNING PLAN	SHEET	E
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LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- PROPOSED SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
- EXISTING LIGHT OR SIGNAL POLE
- CANTILEVER SIGN BRIDGE
- DENOTES SIGN NUMBER
- INDICATES SIGN SIZE
- EXISTING SIGN TO REMAIN



SHEET 30 OF 31

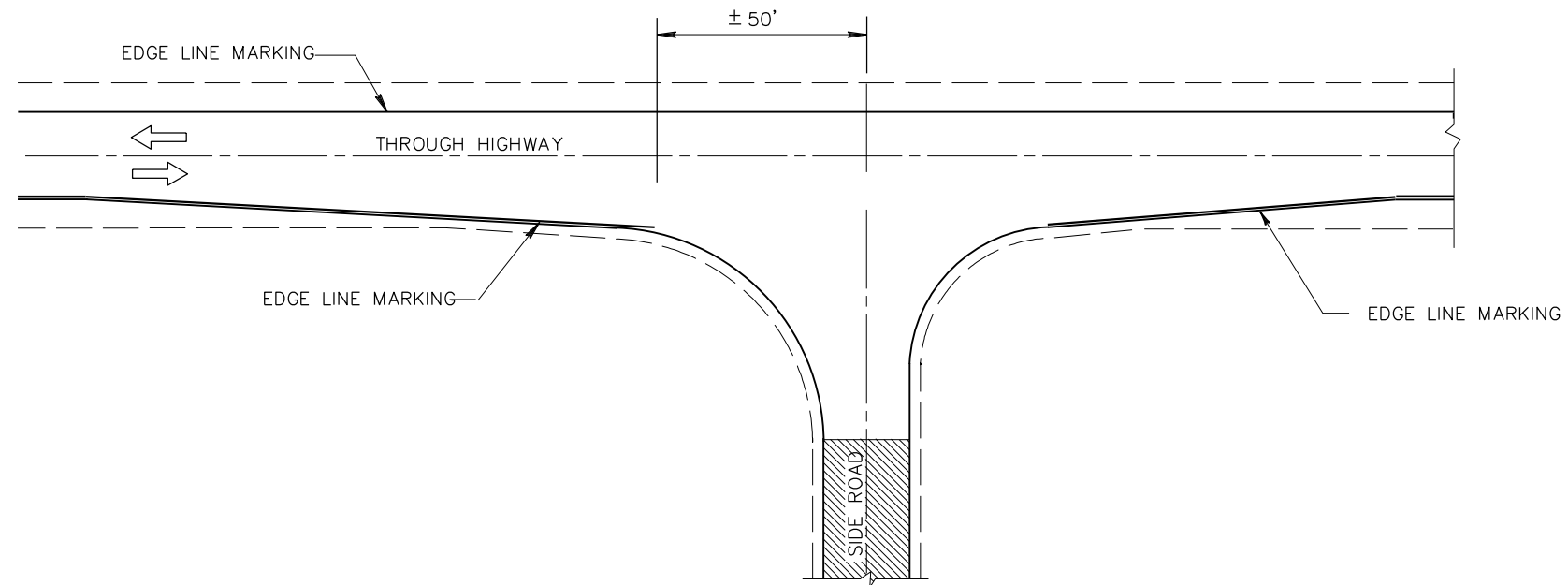


- LEGEND
- EXISTING SIGN MOUNTED ON POST(S)
 - EXISTING SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
 - PROPOSED SIGN MOUNTED ON POST(S)
 - PROPOSED SIGN MOUNTED ON BRIDGE OR SIGN BRIDGE
 - EXISTING LIGHT OR SIGNAL POLE
 - CANTILEVER SIGN BRIDGE
 - DENOTES SIGN NUMBER
 - INDICATES SIGN SIZE
 - EXISTING SIGN TO REMAIN

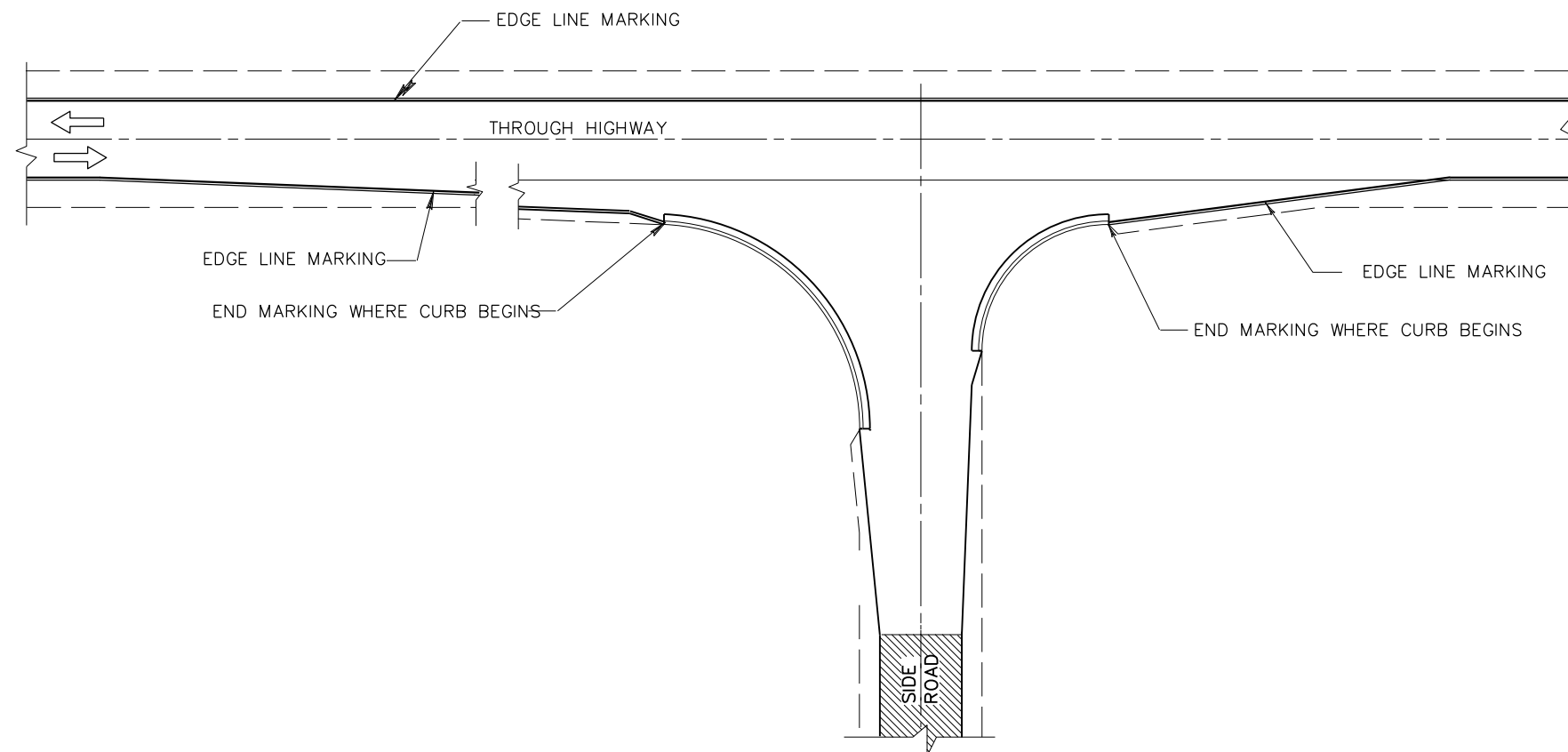
NO SIGNS
IMPACTED
THIS SHEET

SHEET 31 OF 31

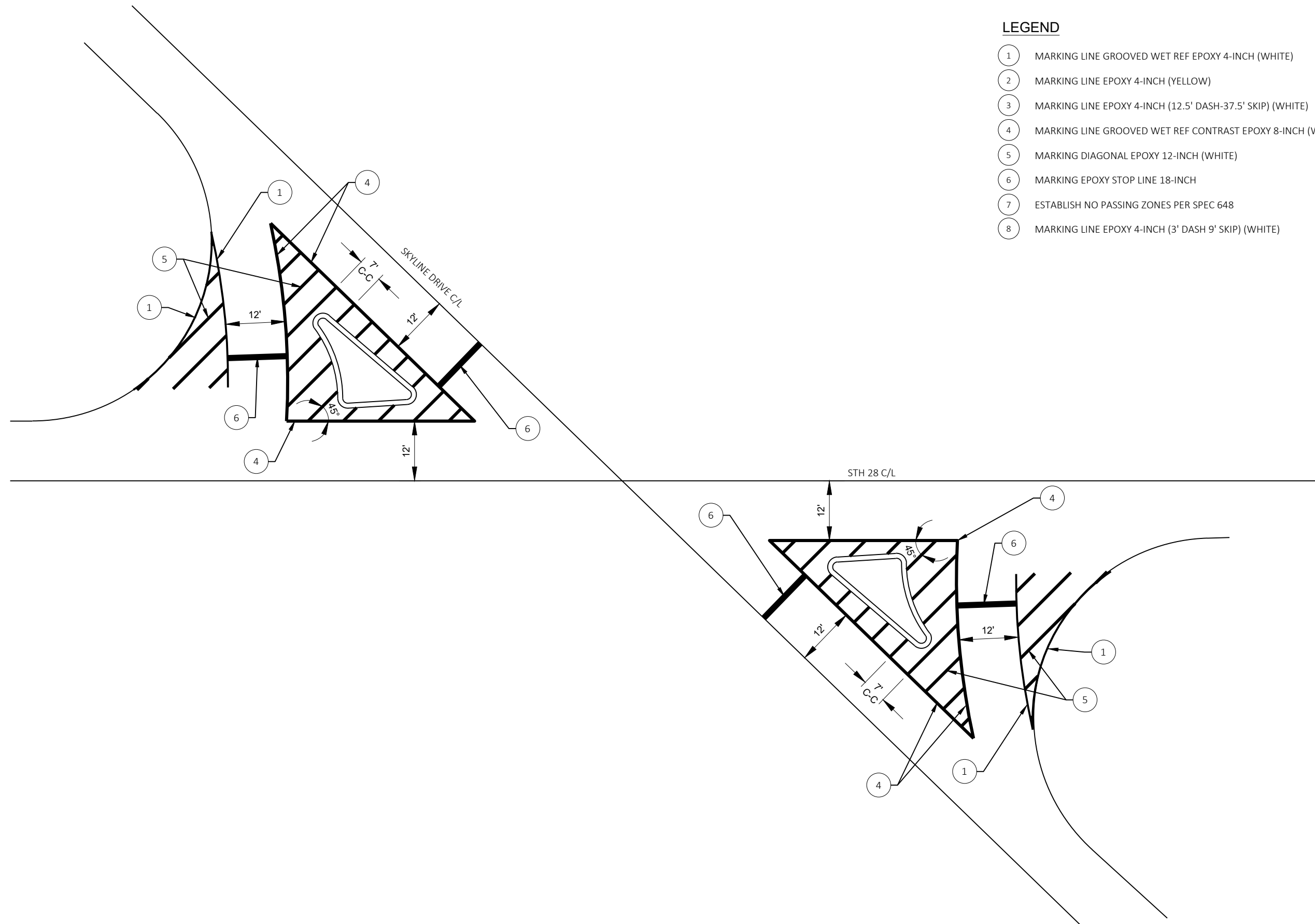
PROJECT NO: 4060-00-75	HWY: STH 28	COUNTY: WASHINGTON	PERMANENT SIGNING PLAN	SHEET	E
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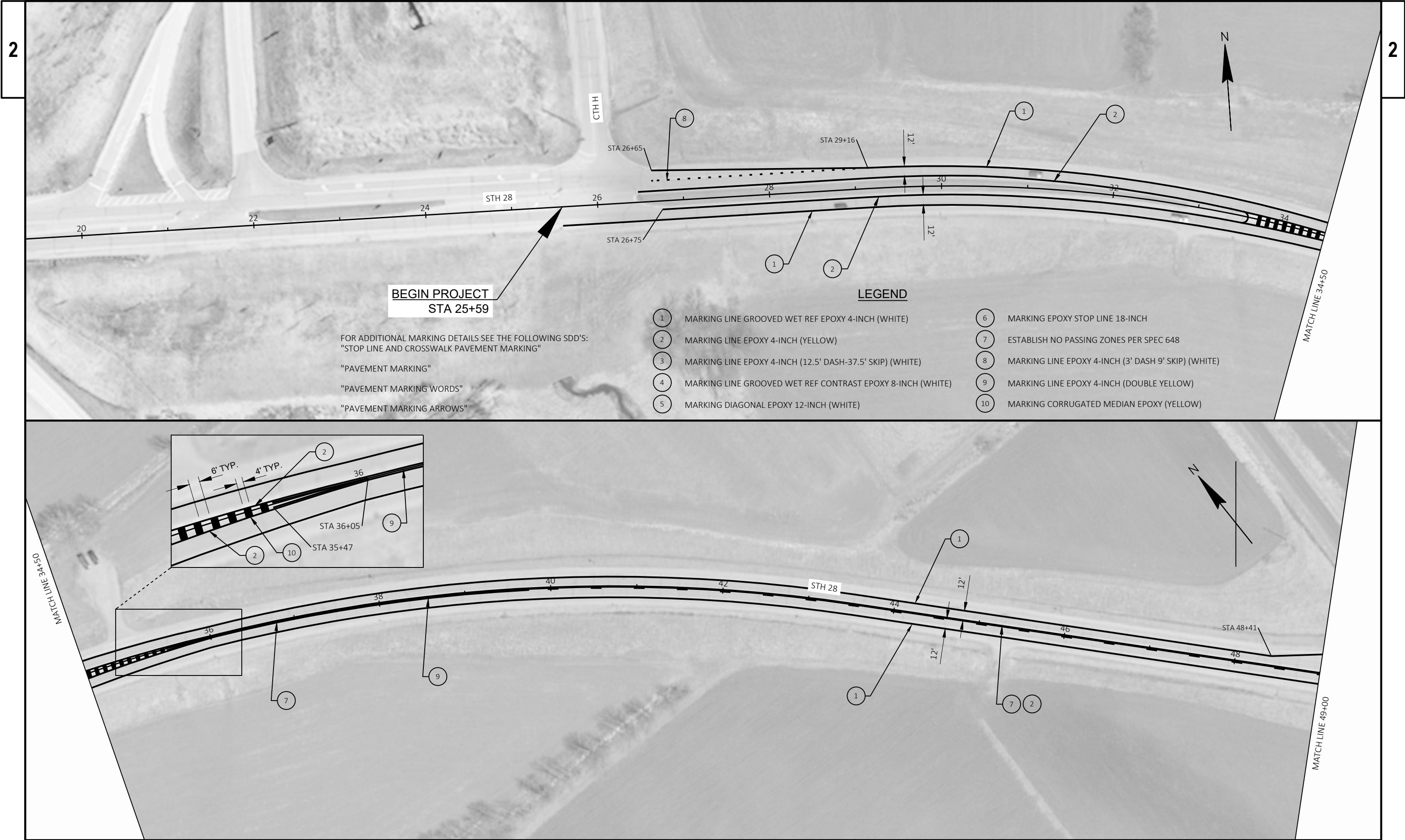


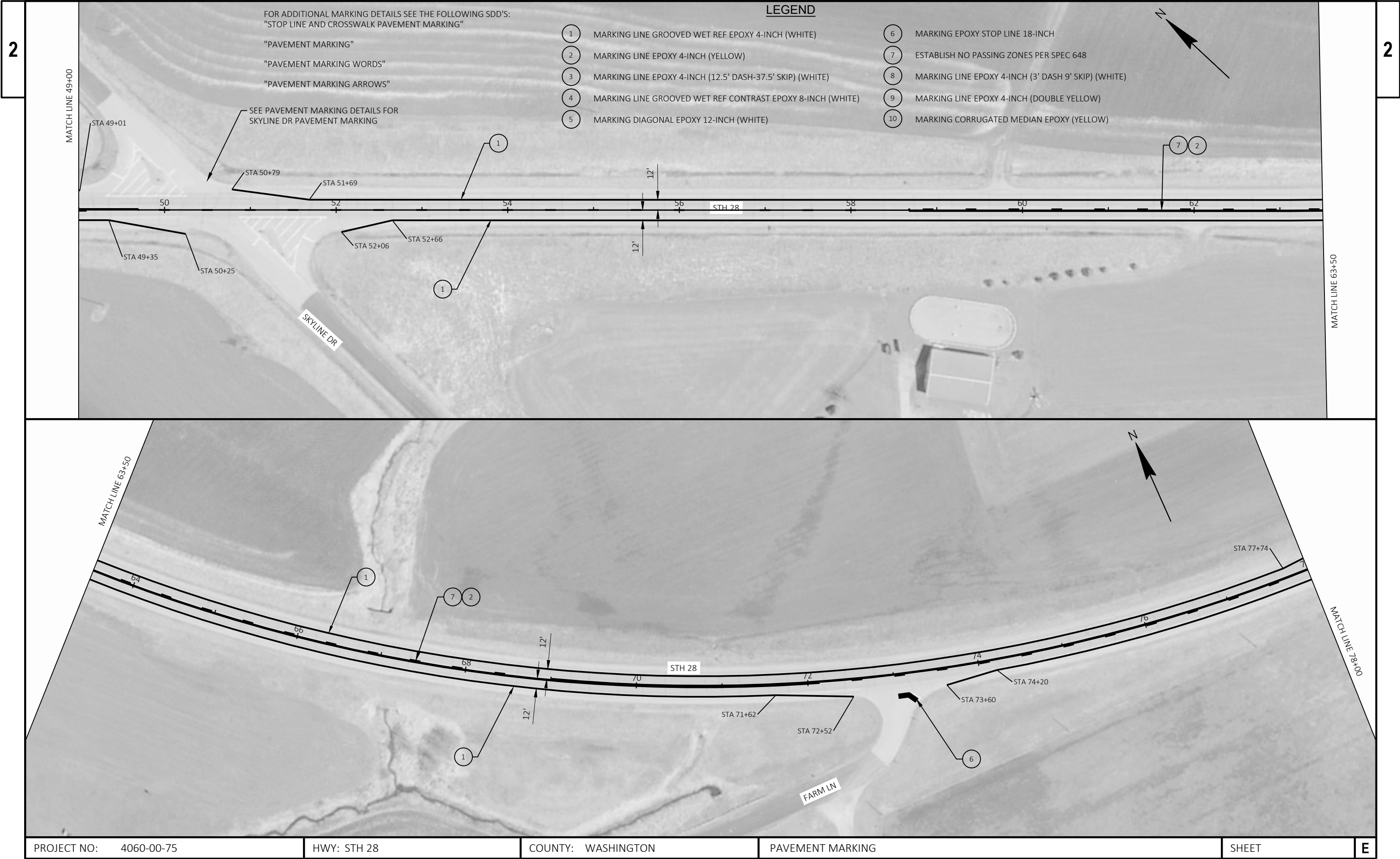
MINOR INTERSECTION WITHOUT CURBS
(TYPICAL MARKING)

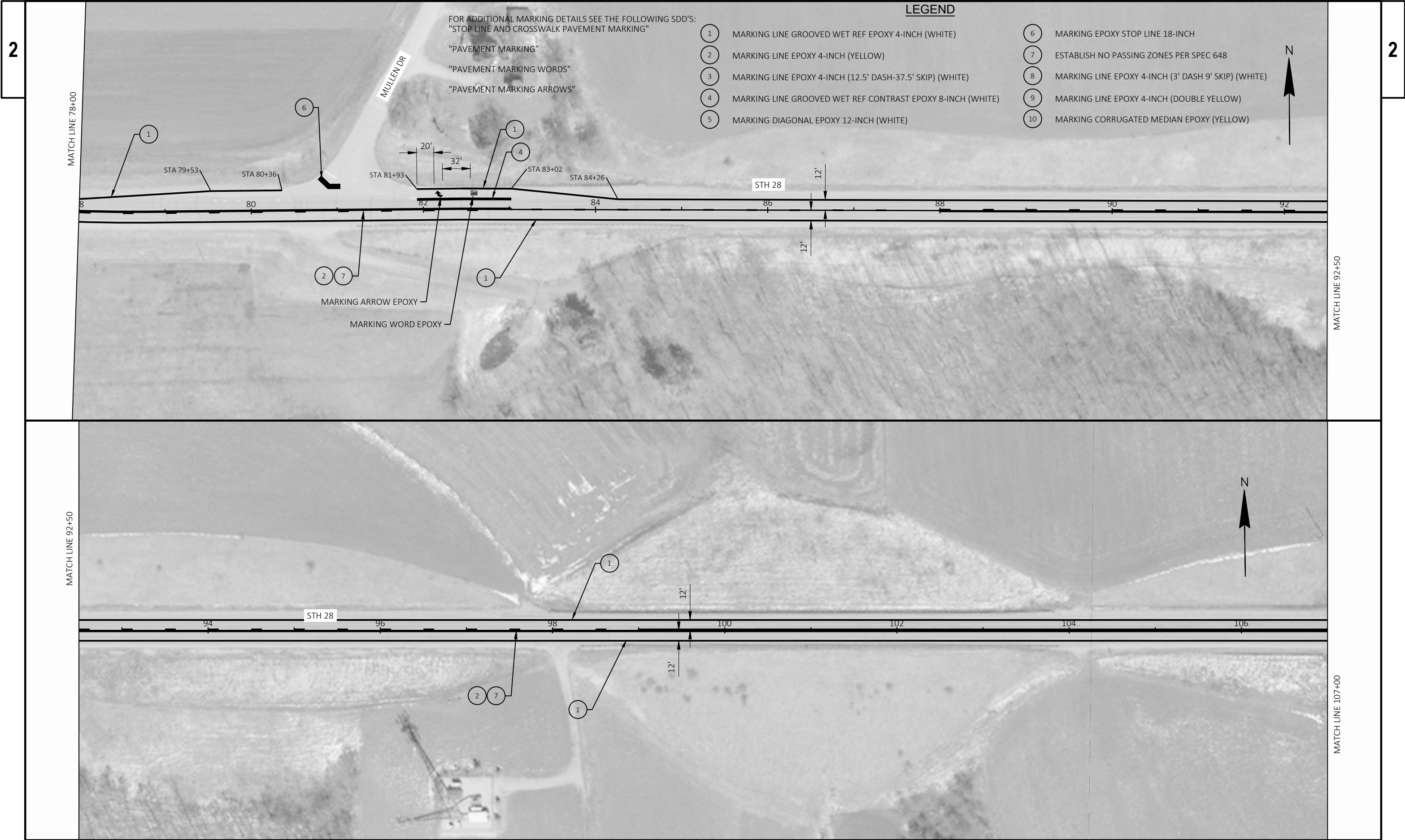


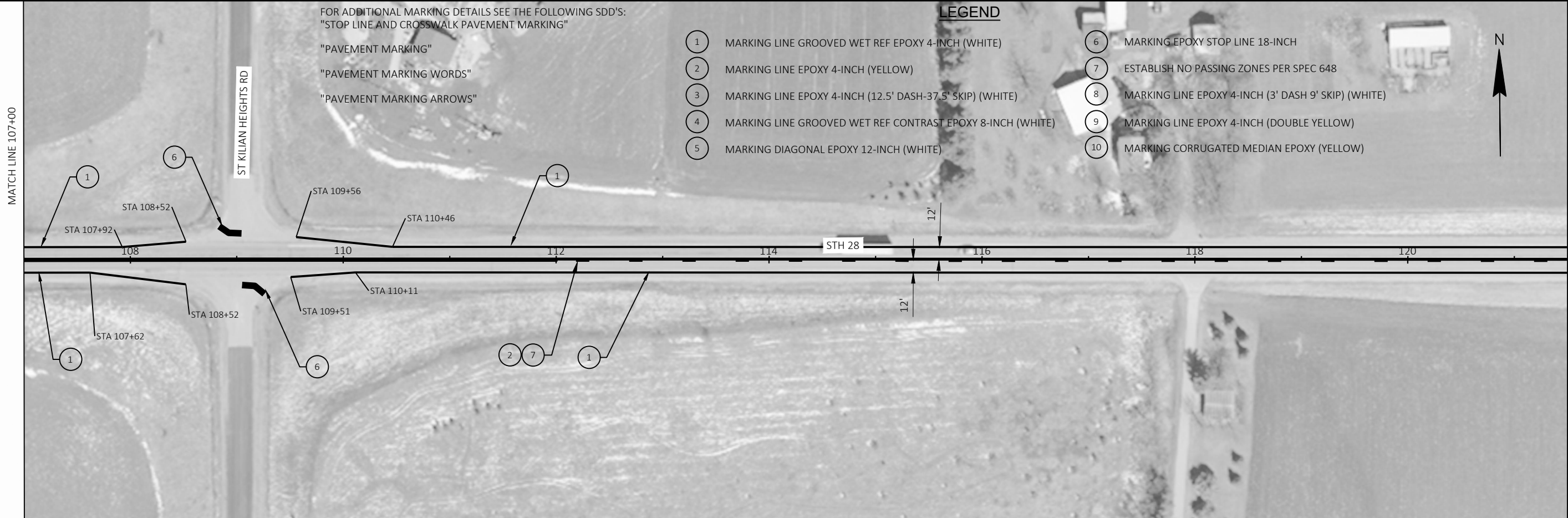
MINOR INTERSECTION WITH CURBS
(TYPICAL MARKING)



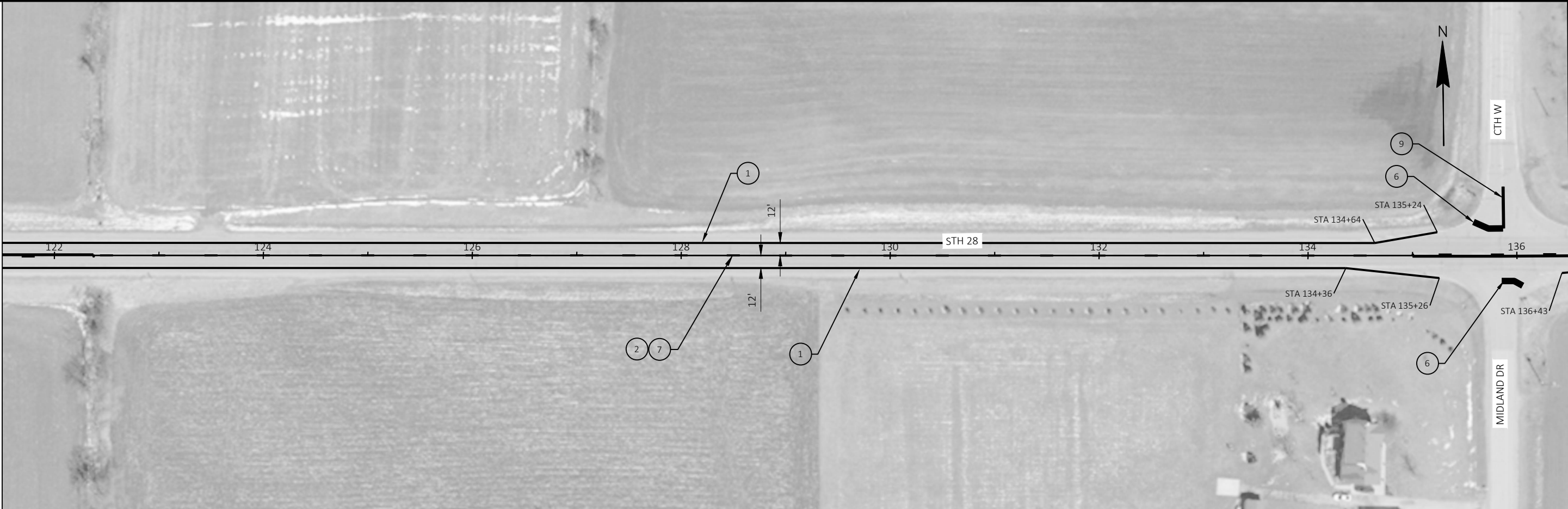








MATCH LINE 121+50



MATCH LINE 136+50

PROJECT NO: 4060-00-75

HWY: STH 28

COUNTY: WASHINGTON

PAVEMENT MARKING

SHEET

E

FOR ADDITIONAL MARKING DETAILS SEE THE FOLLOWING SDD'S:
 "STOP LINE AND CROSSWALK PAVEMENT MARKING"
 "PAVEMENT MARKING"
 "PAVEMENT MARKING WORDS"
 "PAVEMENT MARKING ARROWS"

LEGEND

1	MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE)	6	MARKING EPOXY STOP LINE 18-INCH
2	MARKING LINE EPOXY 4-INCH (YELLOW)	7	ESTABLISH NO PASSING ZONES PER SPEC 648
3	MARKING LINE EPOXY 4-INCH (12.5' DASH-37.5' SKIP) (WHITE)	8	MARKING LINE EPOXY 4-INCH (3' DASH 9' SKIP) (WHITE)
4	MARKING LINE GROOVED WET REF CONTRAST EPOXY 8-INCH (WHITE)	9	MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
5	MARKING DIAGONAL EPOXY 12-INCH (WHITE)	10	MARKING CORRUGATED MEDIAN EPOXY (YELLOW)

STA 136+56 STA 137+46 STA 137+03 138 140 142 144 146 148 150 STH 28

12' 12'

1 7 2 1

N

- 1 MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE)
- 2 MARKING LINE EPOXY 4-INCH (YELLOW)
- 3 MARKING LINE EPOXY 4-INCH (12.5' DASH-37.5' SKIP) (WHITE)
- 4 MARKING LINE GROOVED WET REF CONTRAST EPOXY 8-INCH (WHITE)
- 5 MARKING DIAGONAL EPOXY 12-INCH (WHITE)

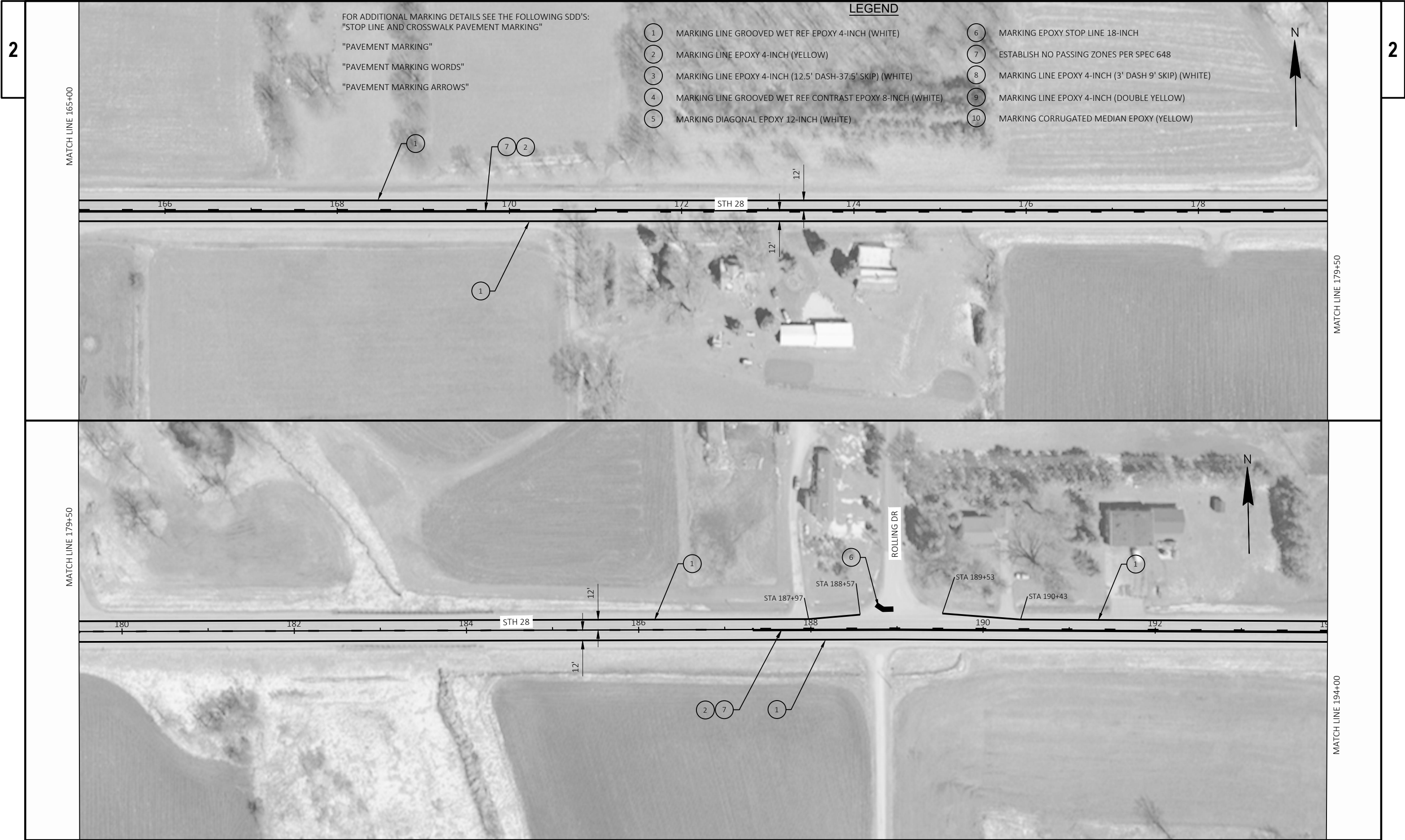
- 6 MARKING EPOXY STOP LINE 18-INCH
- 7 ESTABLISH NO PASSING ZONES PER SPEC 648
- 8 MARKING LINE EPOXY 4-INCH (3' DASH 9' SKIP) (WHITE)
- 9 MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
- 10 MARKING CORRUGATED MEDIAN EPOXY (YELLOW)



MATCH LINE 165+00

WOLCOTT DB

FILE NAME :	C:\OD\CORRE, INC\PROJECTS - DOCUMENTS\WI- SE REGION\4060-00-05 STH 28, WASHINGTON COUNTY\500_CADD\501_C3D_2018\40600005\SHEETSPLAN\024501-PM.DWG	PLOT DATE :	12/16/2021 10:33 AM	PLOT BY :	TOM ORNER	PLOT NAME :		PLOT SCALE :	1 IN=100 FT	
LAYOUT NAME :	05									WISDOT/CADDS SHEET 44





MATCH LINE 223+00

2

MATCH LINE 237+50

This aerial map displays a section of STH 28, with stationing marked from 238 to 250. The road runs horizontally across the center. Two vertical roads intersect STH 28: CTH 88 to the north and CTH W to the south. Various station markers are indicated along STH 28, including STA 241+89, STA 242+49, STA 243+84, STA 244+74, STA 244+14, and STA 243+54. A north arrow is positioned in the top right corner. Several numbered circles (1, 2, 6, 7, 9) are placed around the map, with lines pointing to specific locations. Two vertical dimension lines, each labeled '12'', are shown on the right side of the road.

PROJECT NO: 4060-00-75	HWY: STH 28	COUNTY: WASHINGTON	PAVEMENT MARKING	SHEET	E
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MATCH LINE 266+50

2

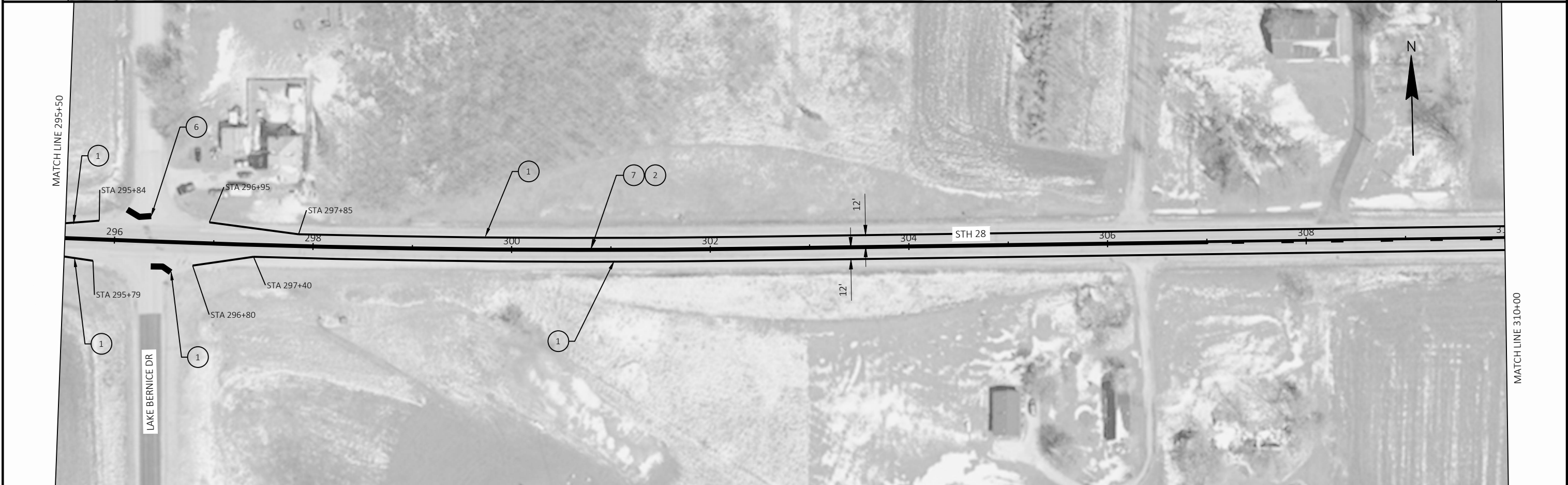
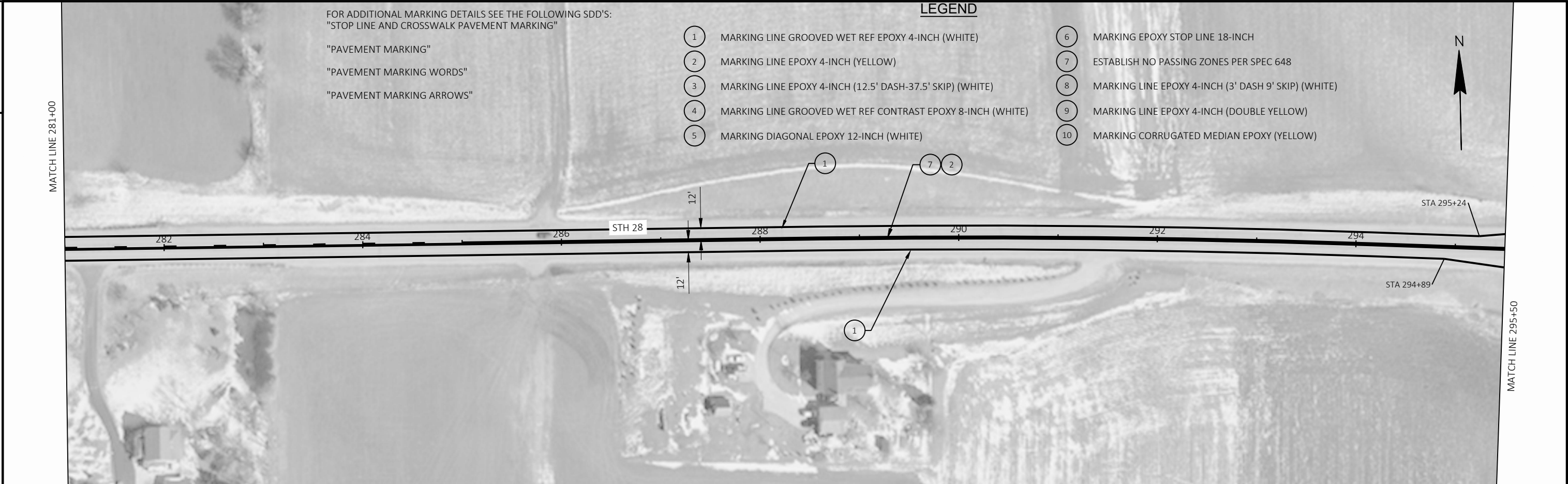
MATCH LINE 266+50

MATCH LINE 281+00

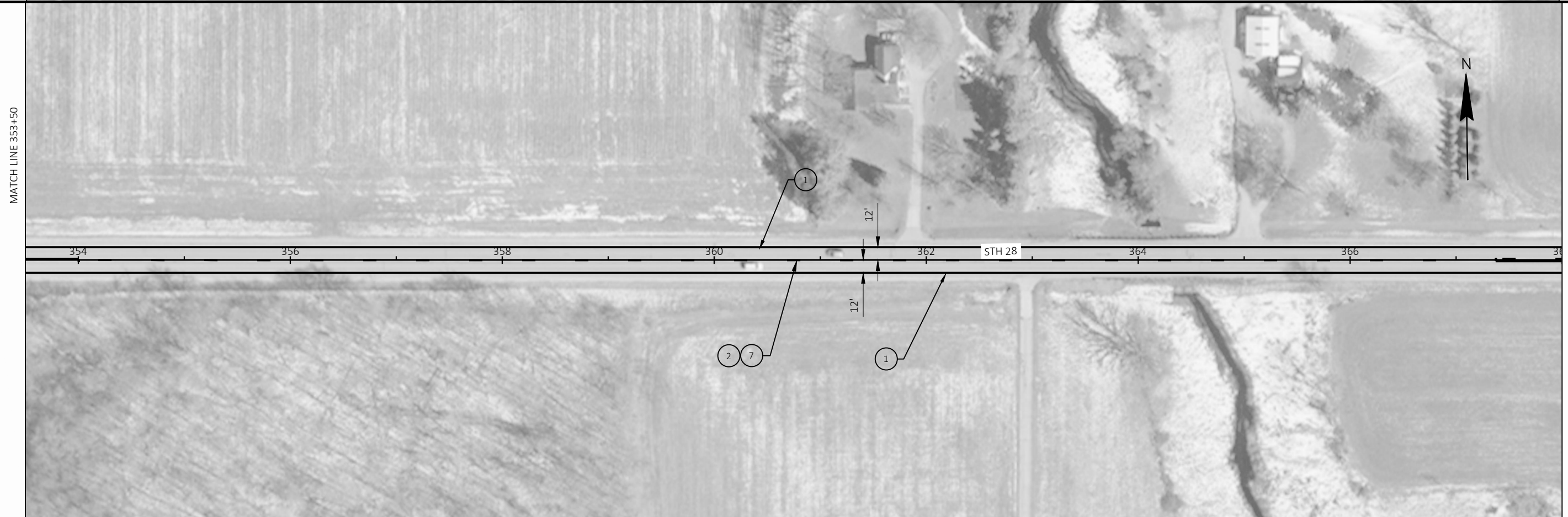
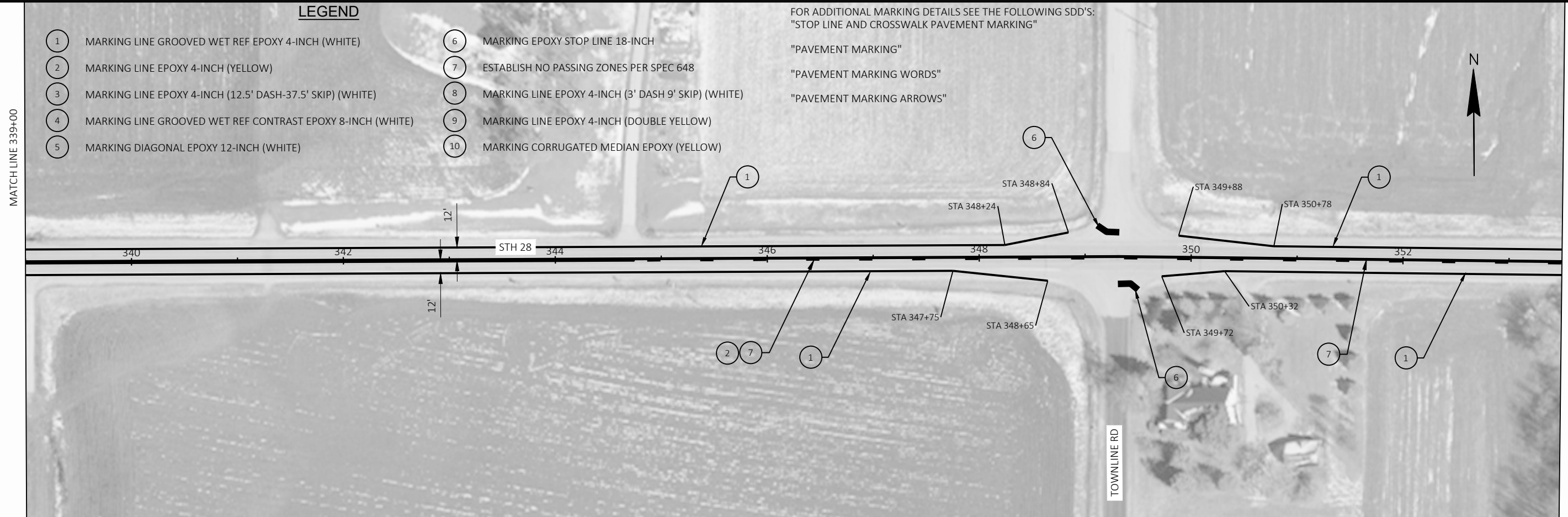
11

2

2







MARKING DIAGONAL EPOXY 12-INCH (WHITE)

- (10) MARKING CORRUGATED MEDIAN EPOXY (YELLOW)

"PAVEMENT MARKING ARROWS"



E

MATCH LINE 397+00

FOR ADDITIONAL MARKING DETAILS SEE THE FOLLOWING SDD'S:
"STOP LINE AND CROSSWALK PAVEMENT MARKING"
"PAVEMENT MARKING"
"PAVEMENT MARKING WORDS"
"PAVEMENT MARKING ARROWS"

LEGEND

- | | | | |
|---|--|----|---|
| 1 | MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE) | 6 | MARKING EPOXY STOP LINE 18-INCH |
| 2 | MARKING LINE EPOXY 4-INCH (YELLOW) | 7 | ESTABLISH NO PASSING ZONES PER SPEC 648 |
| 3 | MARKING LINE EPOXY 4-INCH (12.5' DASH-37.5' SKIP) (WHITE) | 8 | MARKING LINE EPOXY 4-INCH (3' DASH 9' SKIP) (WHITE) |
| 4 | MARKING LINE GROOVED WET REF CONTRAST EPOXY 8-INCH (WHITE) | 9 | MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW) |
| 5 | MARKING DIAGONAL EPOXY 12-INCH (WHITE) | 10 | MARKING CORRUGATED MEDIAN EPOXY (YELLOW) |

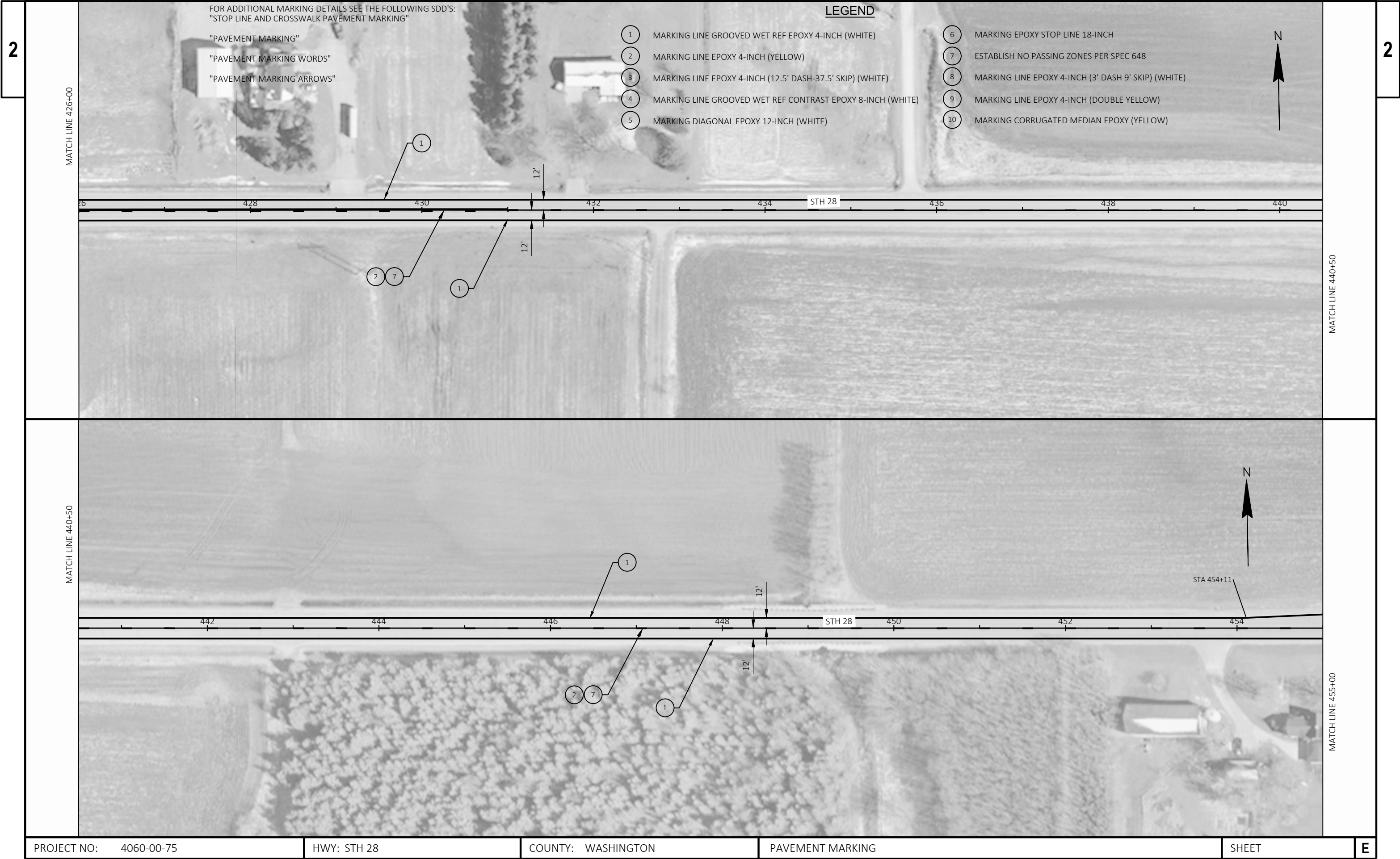
N

MATCH LINE 411+50

MATCH LINE 411+50

N

MATCH LINE 426+00



STH 28

12'

12'

1

2

7

1

1

532

534

536

538

540

542

544

546

548

550

552

554

556

558

560

STH 28

12'

12'

1

2

7

1

1

562

564

566

568

570

572

574

576

578

580

582

584

586

588

590

STH 28

12'

12'

1

2

7

1

1

592

594

596

598

600

602

604

606

608

610

612

614

616

618

620

STH 28

12'

12'

1

2

7

1

1

622

624

626

628

630

632

634

636

638

640

642

644

646

648

650

STH 28

12'

12'

1

2

7

1

1

652

654

656

658

660

662

664

666

668

670

672

674

676

678

680

STH 28

12'

12'

1

2

7

1

1

682

684

686

688

690

692

694

696

698

700

702

704

706

708

710

STH 28

12'

12'

1

2

7

1

1

712

714

716

718

720

722

724

726

728

730

732

734

736

738

740

STH 28

12'

12'

1

2

7

1

1

742

744

746

748

750

752

754

756

758

760

762

764

766

768

770

STH 28

12'

12'

1

2

7

1

1

772

774

776

778

780

782

784

786

788

790

792

794

796

798

800

STH 28

12'

12'

1

2

7

1

1

802

804

806

808

810

812

814

816

818

820

822

824

826

828

830

STH 28

12'

12'

1

2

7

1

1

832

834

836

838

840

842

844

846

848

850

852

854

856

858

860

STH 28

12'

12'

1

2

7

1

1

862

864

866

868

870

872

874

876

878

880

882

884

886

888

890

STH 28

12'

12'

1

2

7

1

1

892

894

896

898

900

902

904

906

908

910

912

914

916

918

920

STH 28

12'

12'

1

2

7

1

1

922

924

926

928

930

932

934

936

938

940

942

944

946

948

950

STH 28

12'

12'

1

2

7

1

1

952

954

956

958

960

962

964

966

968

970

972

974

976

978

980

STH 28

12'

12'

1

2

7

1

1

982

984

986

988

990

992

994

996

998

1000

1002

1004

1006

1008

1010

STH 28

12'

12'

1

2

7

1

1

1012

1014

1016

1018

1020

1022

1024

1026

1028

1030

1032

1034

1036

1038

1040

STH 28

12'

12'

1

2

7

1

1

1042

1044

1046

1048

1050

1052

1054

1056

1058

1060

1062

1064

1066

1068

1070

STH 28

12'

12'

1

2

7

1

1

1072

1074

1076

1078

1080

1082

1084

1086

1088

1090

1092

1094

1096

1098

1100

STH 28

12'

12'

1

2

7

1

1

1102

1104

1106

1108

1110

1112

1114

1116

1118

1120

1122

1124

1126

1128

1130

STH 28

12'

12'

1

2

7

1

1

1132

1134

1136

1138

1140

1142

1144

1146

1148

1150

1152

1154

1156

1158

1160

STH 28

12'

12'

1

2

7

1

1

1162

1164

1166

1168

1170

1172

1174

1176

1178

1180

1182

1184

1186

1188

1190

STH 28

12'

12'

1

2

7

1

1

1192

1194

1196

1198

1200

1202

1204

1206

1208

1210

1212

1214

1216

1218

1220

STH 28

12'

12'

1

2

7

1

1

1222

1224

1226

1228

1230

1232

1234

1236

1238

1240

1242

1244

1246

1248

1250

STH 28

12'

12'

1

2

7

1

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1252

1254

1256

1258

1260

1262

1264

1266

1268

1270

1272

1274

1276

1278

1280

STH 28

12'

12'

1

2

7

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1282

1284

1286

1288

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1296

1298

1300

1302

1304

1306

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1310

STH 28

12'

12'

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STH 28

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1342

1344

1346

1348

1350

1352

1354

1356

1358

1360

1362

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1368

1370

STH 28

12'

12'

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1372

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STH 28

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1456

1458

1460

STH 28

12'

12'

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1462

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1476

1478

1480

1482

1484

1486

1488

1490

STH 28

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12'

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1492

1494

1496

1498

1500

1502

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1520

STH 28

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STH 28

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1580

STH 28

12'

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1582

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1586

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STH 28

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STH 28

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STH 28

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STH 28

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STH 28

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1808

1810

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STH 28

12'

12'

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1824

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1830

1832

1834

1836

1838

1840

1842

1844

1846

1848

1850

STH 28

12'

12'

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1854

1856

1858

1860

1862

1864

1866

1868

1870

1872

1874

1876

1878

1880

STH 28

12'

12'

1

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7

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1

1882

1884

1886

1888

1890

1892

1894

1896

1898

1900

1902

1904

1906

1908

1910

STH 28

12'

12'

1

2

7

1

1

1912

1914

1916

1918

1920

1922

1924

1926

1928

1930

1932

1934

1936

1938

1940

STH 28

12'

12'

1

2

7

1

1

1942

1944

1946

1948

1950

1952

1954

1956

1958

1960

1962

1964

1966

1968

1970

STH 28

12'

12'

1

2

7

1

1

1972

1974

1976

1978

1980

1982

1984

1986

1988

1990

1992

1994

1996

1998

2000

STH 28

12'

12'

1

2

7

1

1

2002

2004

2006

2008

2010

2012

2014

2016

2018

2020

2022

2024

2026

2028

2030

STH 28

12'

12'

1

2

7

1

1

2032

2034

2036

2038

2040

2042

2044

2046

2048

2050

2052

2054

2056

2058

2060

STH 28

12'

12'

1

2

7

1

1

2062

2064

2066

2068

2070

2072

2074

2076

2078

2080

2082

2084

2086

2088

2090

STH 28

12'

12'

1

2

7

1

1

2092

2094

2096

2098

2100

2102

2104

2106

2108

2110

2112

2114

2116

2118

2120

STH 28

12'

12'

1

2

7

1

1

2122

2124

2126

2128

2130

2132

2134

2136

2138

2140

2142

2144

2146

2148

2150

STH 28

12'

12'

1

2

7

1

1

2152

2154

2156

2158

2160

2162

2164

2166

2168

2170

2172

2174

2176

2178

2180

STH 28

12'

12'

1

2

7

1

1

2182

2184

2186

2188

2190

2192

2194

2196

2198

2200

2202

2204

2206

2208

2210

STH 28

12'

12'

1

2

7

1

1

2212

2214

2216

2218

2220

2222

2224

2226

2228

2230

2232

2234

2236

2238

2240

STH 28

12'

12'

1

2

7

1

1

2242

2244

2246

2248

2250

2252

2254

2256

2258

2260

2262

2264

2266

2268

2270

STH 28

12'

12'

1

2

7

1

1

2272

2274

2276

2278

2280

2282

2284

2286

2288

2290

2292

2294

2296

2298

2300

STH 28

12'

12'

1

2

7

1

1

2302

2304

2306

2308

2310

2312

2314

2316

2318

2320

2322

2324

2326

2328

2330

STH 28

12'

12'

1

2

7

1

1

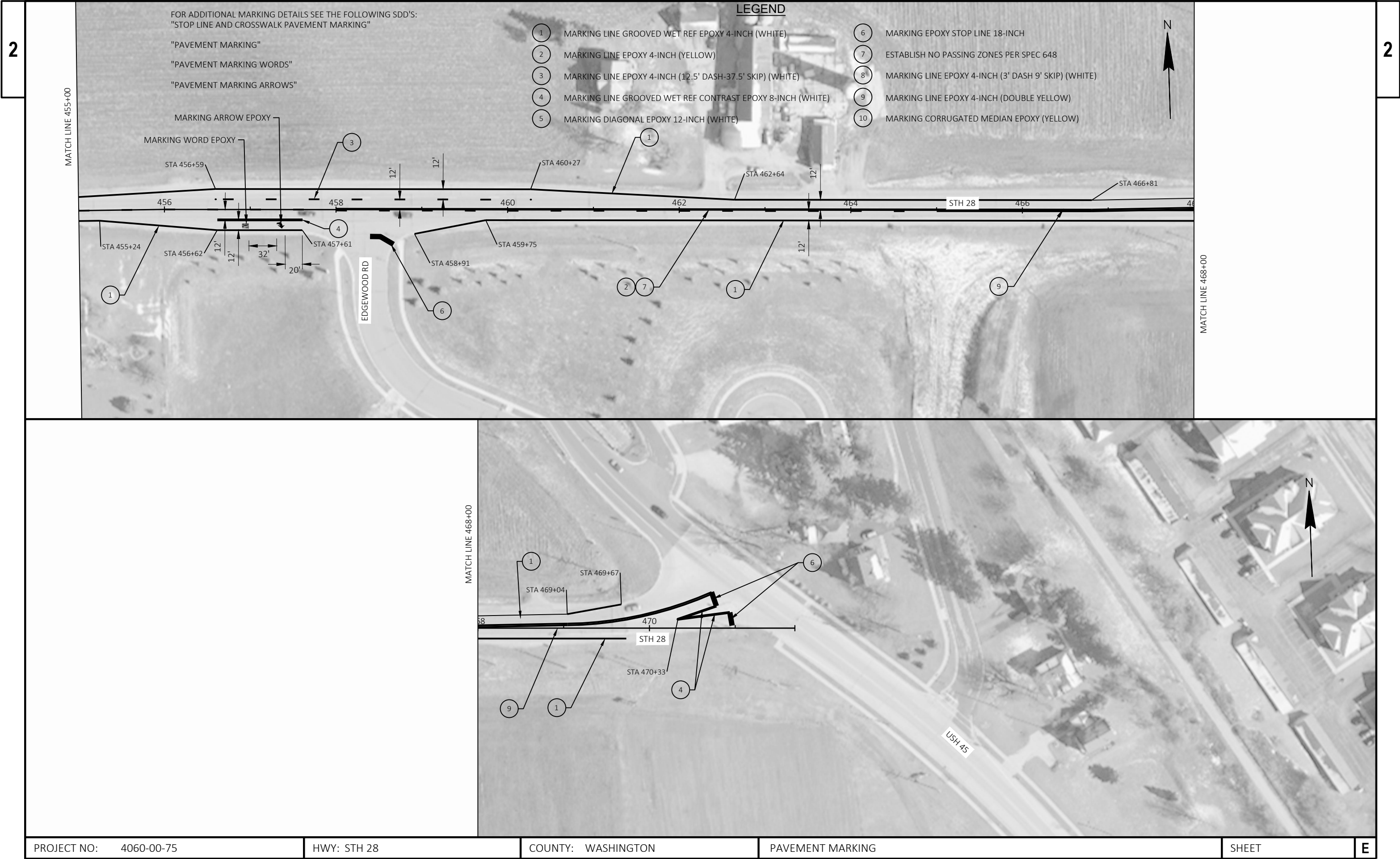
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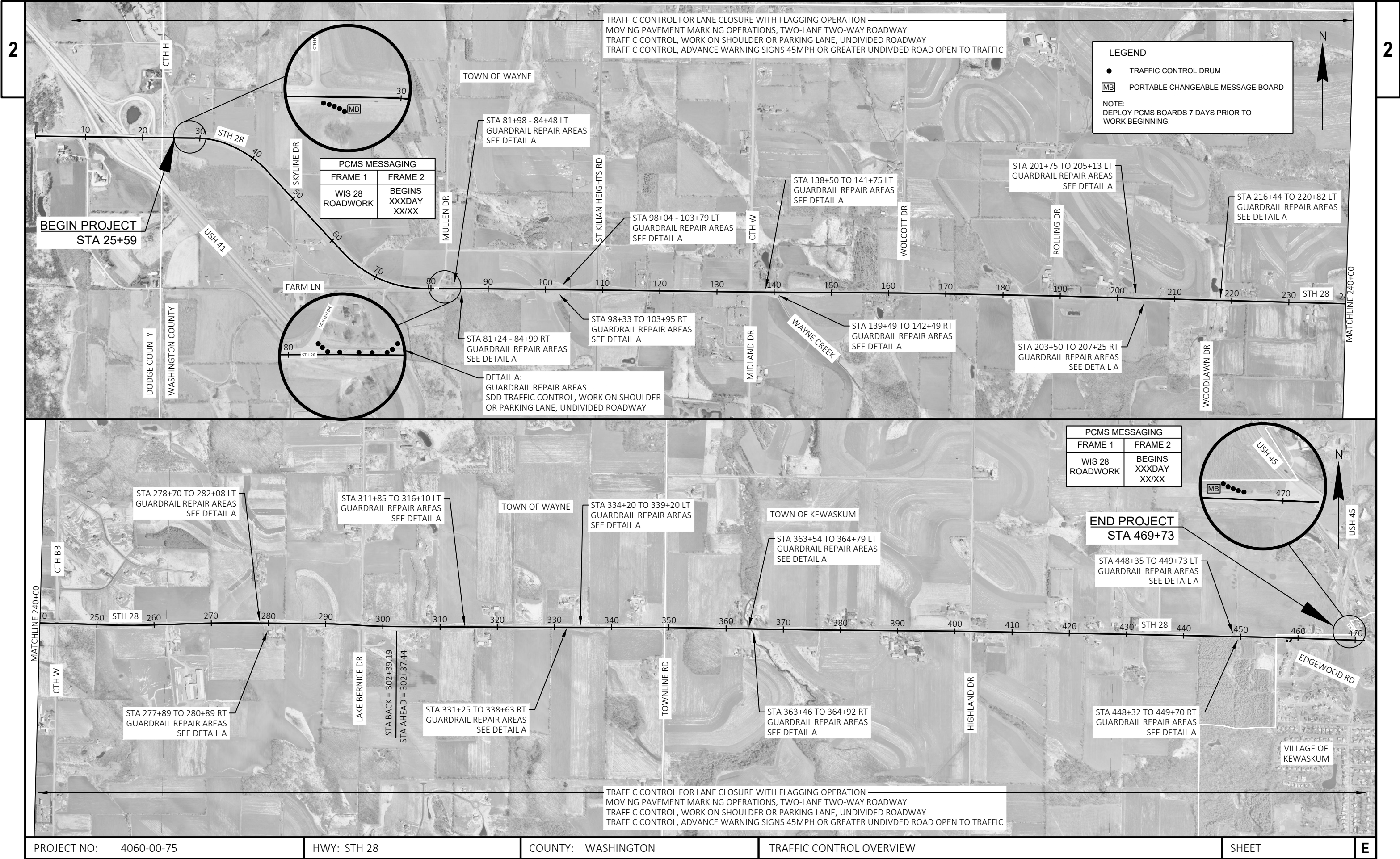
2334

2336

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Estimate Of Quantities

4060-00-75

Line	Item	Item Description	Unit	Total	Qty
0002	204.0110	Removing Asphaltic Surface	SY	7,404.000	7,404.000
0004	204.0115	Removing Asphaltic Surface Butt Joints	SY	142.000	142.000
0006	204.0120	Removing Asphaltic Surface Milling	SY	165,140.000	165,140.000
0008	204.0150	Removing Curb & Gutter	LF	107.000	107.000
0010	204.0155	Removing Concrete Sidewalk	SY	23.000	23.000
0012	213.0100	Finishing Roadway (project) 01. 4060-00-75	EACH	1.000	1.000
0014	305.0110	Base Aggregate Dense 3/4-Inch	TON	3,061.000	3,061.000
0016	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	41.000	41.000
0018	455.0605	Tack Coat	GAL	12,801.000	12,801.000
0020	460.0105.S	HMA Percent Within Limits (PWL) Test Strip Volumetrics	EACH	1.000	1.000
0022	460.0110.S	HMA Percent Within Limits (PWL) Test Strip Density	EACH	1.000	1.000
0024	460.2005	Incentive Density PWL HMA Pavement	DOL	14,220.000	14,220.000
0026	460.2007	Incentive Density HMA Pavement Longitudinal Joints	DOL	22,280.000	22,280.000
0028	460.2010	Incentive Air Voids HMA Pavement	DOL	19,835.000	19,835.000
0030	460.6224	HMA Pavement 4 MT 58-28 S	TON	19,835.000	19,835.000
0032	465.0105	Asphaltic Surface	TON	892.000	892.000
0034	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	233.000	233.000
0036	465.0475	Asphalt Centerline Rumble Strips 2-Lane Rural	LF	38,860.000	38,860.000
0038	601.0557	Concrete Curb & Gutter 6-Inch Sloped 36-Inch Type D	LF	107.000	107.000
0040	602.0405	Concrete Sidewalk 4-Inch	SF	144.000	144.000
0042	602.0605	Curb Ramp Detectable Warning Field Radial Yellow	SF	20.000	20.000
0044	614.0950	Replacing Guardrail Posts and Blocks	EACH	115.000	115.000
0046	614.0951	Replacing Guardrail Rail and Hardware	LF	187.500	187.500
0048	618.0100	Maintenance And Repair of Haul Roads (project) 01. 4060-00-75	EACH	1.000	1.000
0050	619.1000	Mobilization	EACH	1.000	1.000
0052	624.0100	Water	MGAL	31.000	31.000
0054	628.1905	Mobilizations Erosion Control	EACH	3.000	3.000
0056	628.1910	Mobilizations Emergency Erosion Control	EACH	3.000	3.000
0058	628.7015	Inlet Protection Type C	EACH	5.000	5.000
0060	628.7555	Culvert Pipe Checks	EACH	8.000	8.000
0062	633.5200	Markers Culvert End	EACH	46.000	46.000
0064	634.0618	Posts Wood 4x6-Inch X 18-FT	EACH	31.000	31.000
0066	637.2210	Signs Type II Reflective H	SF	40.000	40.000
0068	637.2230	Signs Type II Reflective F	SF	20.000	20.000
0070	638.2102	Moving Signs Type II	EACH	31.000	31.000
0072	638.2602	Removing Signs Type II	EACH	5.000	5.000
0074	638.3000	Removing Small Sign Supports	EACH	31.000	31.000
0076	642.5001	Field Office Type B	EACH	1.000	1.000
0078	643.0300	Traffic Control Drums	DAY	125.000	125.000
0080	643.0900	Traffic Control Signs	DAY	63.000	63.000
0082	643.1050	Traffic Control Signs PCMS	DAY	18.000	18.000
0084	643.5000	Traffic Control	EACH	1.000	1.000
0086	644.1810	Temporary Pedestrian Barricade	LF	53.000	53.000
0088	646.1020	Marking Line Epoxy 4-Inch	LF	1,610.000	1,610.000
0090	646.1040	Marking Line Grooved Wet Ref Epoxy 4-Inch	LF	88,910.000	88,910.000
0092	646.3040	Marking Line Grooved Wet Ref Epoxy 8-Inch	LF	300.000	300.000
0094	646.4520	Marking Line Same Day Epoxy 4-Inch	LF	87,230.000	87,230.000
0096	646.5020	Marking Arrow Epoxy	EACH	2.000	2.000
0098	646.5120	Marking Word Epoxy	EACH	2.000	2.000

Estimate Of Quantities

4060-00-75					
Line	Item	Item Description	Unit	Total	Qty
0100	646.5520	Marking Outfall Epoxy	EACH	19.000	19.000
0102	646.6120	Marking Stop Line Epoxy 18-Inch	LF	204.000	204.000
0104	646.7120	Marking Diagonal Epoxy 12-Inch	LF	550.000	550.000
0106	646.8020	Marking Corrugated Median Epoxy	SF	456.000	456.000
0108	648.0100	Locating No-Passing Zones	MI	8.300	8.300
0110	649.0120	Temporary Marking Line Epoxy 4-Inch	LF	87,300.000	87,300.000
0112	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	107.000	107.000
0114	650.8000	Construction Staking Resurfacing Reference	LF	44,510.000	44,510.000
0116	650.9000	Construction Staking Curb Ramps	EACH	2.000	2.000
0118	650.9910	Construction Staking Supplemental Control (project) 01. 4060-00-75	LS	1.000	1.000
0120	690.0150	Sawing Asphalt	LF	10,114.000	10,114.000
0122	690.0250	Sawing Concrete	LF	30.000	30.000
0124	740.0440	Incentive IRI Ride	DOL	15,820.000	15,820.000
0126	ASP.1T0A	On-the-Job Training Apprentice at \$5.00/HR	HRS	600.000	600.000
0128	ASP.1T0G	On-the-Job Training Graduate at \$5.00/HR	HRS	1,800.000	1,800.000
0130	SPV.0060	Special 01. Curb Ramp Grading, Shaping, and Finishing	EACH	2.000	2.000

FULL DEPTH ASPHALTIC SURFACE REPAIR

						*	*	**
						204.0110	465.0105	690.0150
						REMOVING		
						ASPHALTIC	ASPHALTIC	SAWING
						SURFACE	SURFACE	ASPHALT
CATEGORY	ROADWAY	STATION	TO	STATION	O/S	SY	TON	LF
0010	STH 28	25+59	-	33+60	MAINLINE	170	21	204
		33+60	-	48+24	MAINLINE	244	30	293
		53+18	-	77+74	MAINLINE	410	50	492
		84+36	-	134+47	MAINLINE	930	112	1,120
		138+53	-	240+59	MAINLINE	1,840	221	2,210
		245+92	-	454+94	MAINLINE	3,670	441	4,410
		461+30	-	469+73	MAINLINE	141	17	169
		TOTALS					7,404	892
*UNDISTRIBUTED (5% OF RESURFACE AREAS)								
** SHOWN ELSEWHERE ON PLANS								

PAVEMENT REMOVALS

						204.0150
						REMOVING
						CURB & GUTTER
						LF
CATEGORY	ROADWAY	STATION	TO	STATION	O/S	
0010	STH 28	454+94	-	461+30	EDGEWOOD	107
		TOTALS				107

CONCRETE CURB & GUTTER

						601.0557
						CONCRETE
						CURB & GUTTER
						6-INCH SLOPED
						36-INCH TYPE D
CATEGORY	ROADWAY	STATION	TO	STATION	O/S	LF
0010	STH 28	454+94	-	461+30	EDGEWOOD	107
		TOTALS				107

REMOVING ASPHALTIC SURFACE

						204.0115	204.0120
						REMOVING	REMOVING
						ASPHALTIC SURFACE	ASPHALTIC
						BUTT JOINTS	SURFACE
						SY	MILING
CATEGORY	ROADWAY	STATION	TO	STATION	O/S	SY	SY
0010	STH 28	25+59	-	33+60	MAINLINE	8	3,390
		33+60	-	48+24	MAINLINE	--	4,880
		48+24	-	53+18	SKYLINE	13	4,020
		53+18	-	77+74	MAINLINE	--	8,190
		77+74	-	84+36	MULLEN	7	3,330
		84+36	-	134+47	MAINLINE	13	18,600
		134+47	-	138+53	CTH W	13	2,710
		138+53	-	240+59	MAINLINE	20	36,800
		240+59	-	245+92	CTH BB	13	3,280
		245+92	-	454+94	MAINLINE	40	73,400
		454+94	-	461+30	EDGEWOOD	7	3,730
		461+30	-	469+73	MAINLINE	7	2,810
		TOTALS				142	165,140

REMOVING CONCRETE SIDEWALK

						204.0155
						REMOVING CONCRETE
						SIDEWALK
						SY
CATEGORY	ROADWAY	STATION	TO	STATION	O/S	
0010	STH 28	454+94	-	461+30	EDGEWOOD	23
		TOTALS				23

BASE AGGREGATE ITEMS

						305.0110	305.0120	624.0100
						BASE	BASE	
						AGGREGATE	AGGREGATE	
						DENSE	DENSE	
						¾-INCH	1¼-INCH	WATER
CATEGORY	ROADWAY	STATION	TO	STATION	O/S	TON	TON	MGAL
0010	STH 28	25+59	-	33+60	SHOULDERS	41	--	1
		33+60	-	469+73	SHOULDERS	3,020	--	29
		454+94	-	461+30	EDGEWOOD	--	41	1
		TOTALS				3,061	41	31

ASPHALTIC PAVING									
CATEGORY	ROADWAY	STATION	TO	STATION	O/S	455.0605	460.6224	465.0120	465.0475
						TACK	HMA	ASPHALTIC SURFACE	ASPHALT CENTERLINE
						COAT	PAVEMENT	DRIVEWAYS AND	RUMBLE STRIPS
						4 MT 58-28 S	4 MT 58-28 S	FIELD ENTRANCES	2-LANE RURAL
						GAL	TON	TON	LF
0010	STH 28	25+59	-	33+60	MAINLINE	238	407	--	--
		33+60	-	48+24	MAINLINE	342	586	--	1,470
		48+24	-	53+18	SKYLINE	282	483	--	100
		53+18	-	77+74	MAINLINE	574	983	--	2,060
		77+74	-	84+36	MULLEN	234	400	--	270
		84+36	-	134+47	MAINLINE	1,360	2,240	10	4,620
		134+47	-	138+53	CTH W	190	326	--	10
		138+53	-	240+59	MAINLINE	2,870	4,420	55	9,100
		240+59	-	245+92	CTH BB	230	394	--	140
		245+92	-	454+94	MAINLINE	5,970	8,810	158	20,200
		454+94	-	461+30	EDGEWOOD	262	448	--	240
		461+30	-	469+73	MAINLINE	249	338	10	650
TOTALS						12,801	19,835	233	38,860

REPAIRING GUARDRAIL						614.0950	614.0951
						REPLACING	REPLACING
						GUARDRAIL	GUARDRAIL
CATEGORY	ROADWAY	STATION	TO	STATION	O/S	POSTS AND BLOCKS	RAIL AND HARDWARE
						EACH	LF
0010	STH 28						
		81+98	-	84+48	LT	5	--
		81+24	-	84+99	RT	6	12.5
		98+04	-	103+79	LT	16	25.0
		98+33	-	103+95	RT	5	12.5
		138+50	-	141+75	LT	--	25.0
		139+49	-	142+49	RT	2	--
		201+75	-	205+13	LT	3	12.5
		203+50	-	207+25	RT	5	--
		216+44	-	220+82	LT	4	--
		278+70	-	282+08	LT	2	--
		277+89	-	280+89	RT	10	--
		311+85	-	316+10	LT	5	--
		334+20	-	339+20	LT	4	--
		331+25	-	338+63	RT	4	12.5
		363+54	-	364+79	LT	2	37.5
		363+46	-	364+92	RT	2	--
		448+35	-	449+73	LT	15	12.5
		448+32	-	449+70	RT	2	--
UNDISTRIBUTED(25%)						23	37.5
TOTAL						115	187.5

PWL MIXTURE USE TABLE								
LOCATION	STATION	MIXTURE USE:	UNDERLAYING SURFACE	BID ITEM	TONS	THICKNESS	QUALITY MANAGEMENT PROGRAM TO BE USED FOR:	
							MIXTURE ACCEPTANCE	DENSITY ACCEPTANCE
12 FOOT DRIVING LANE	STA 25+59 - 469+73	UPPER LAYER	MILLED EXISTING HMA SURFACE	4 MT 58-28 S	14,220	2"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
SHOULDERS & APPURTENANCES	STA 25+59 - 469+74	UPPER LAYER	MILLED EXISTING HMA SURFACE	4 MT 58-28 S	5,615	2"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE OR DISINCENTIVE

CONCRETE SIDEWALK														
CATEGORY	ROADWAY	STATION	TO	STATION	O/S	602.0405	602.0605	SPV.0060.01	FOR INFORMATIONAL PURPOSES ONLY					
						CONCRETE	CURB RAMP	CURB RAMP	EXCAVATION	BASE AGGREGATE				
						4-INCH	DETECTABLE WARNING FIELD	GRADING, SHAPING		COMMON	DENSE 1 1/4-INCH	TOPSOIL	FERTILIZER	SEED
						SF	RADIAL YELLOW	AND FINISHING		CY	TON	SY	CWT	LB
0010	STH 28	454+94	-	461+30	EDGEWOOD	144	20	2		6	1	49	1	1
TOTALS						144	20	2		6	1	49	1	1

EROSION CONTROL

CATEGORY	ROADWAY	STATION	TO	STATION	LOCATION	628.1905	628.1910	628.7015	628.7555
						MOBILIZATIONS		INLET	CULVERT
						EROSION	EROSION	PROTECTION	PIPE
						CONTROL	CONTROL	TYPE C	CHECKS
						EA	EA	EA	EA
0010	STH 28								
		25+59	-	33+60		1	1	4	--
		33+60		469+73		1	1	--	6
		UNDISTRIBUTED CATEGORY 0010				1	1	1	2
		TOTALS				3	3	5	8

TRAFFIC CONTROL

CATEGORY	ROADWAY	LOCATION	643.0300	643.0900	643.1050	644.1810
			DRUMS	SIGNS	PCMS	TEMPORARY
			DAY	DAY	DAY	PEDESTRIAN
						BARRICADE
						LF
0010	STH 28					
		EDGEWOOD	100	50	14	42
		SUBTOTAL	100	50	14	42
		UNDISTRIBUTED	25	13	4	11
		TOTAL	125	63	18	53

MAINTENANCE ITEMS

CATEGORY	ROADWAY	STATION	TO	STATION	LOCATION	633.5200	646.5520
						MARKERS	MARKING
						CULVERT	OUTFALL
						END	EPOXY
						EACH	EACH
0010	STH 28						
		25+59	-	33+60	LT/RT	-	4
		25+59	-	469+73	LT/RT	46	15
		TOTALS				46	19

*TO BE DETERMINED BY ENGINEER

CONSTRUCTION STAKING

CATEGORY	ROADWAY	STATION	TO	STATION	O/S	650.5500	650.8000	650.9000
						CONSTRUCTION	CONSTRUCTION	CONSTRUCTION
						STAKING CURB	STAKING	STAKING
						AND GUTTER	RESURFACING REFERENCE	CURB RAMPS
						LF	LF	EACH
0010	STH 28							
		25+59	-	33+60	MAINLINE	--	810	--
		33+60	-	469+73	MAINLINE	--	43,700	--
		454+94	-	461+30	EDGEWOOD	107	--	2
		TOTALS				107	44,510	2

SAWING EXISTING PAVEMENT

CATEGORY	ROADWAY	STATION	-	STATION	LOCATION	690.0150	690.0250
						SAWING	SAWING
						ASPHALT	CONCRETE
						LF	LF
0010	STH 28						
		117+63	-	463+97	ROADWAY	752	--
		117+63	-	463+97	DRIVEWAYS	464	--
		457+85	-	458+99	SIDEWALKS	--	30
		TOTALS				1,216	30

** SHOWN ELSEWHERE ON PLANS

PAVEMENT MARKING

CATEGORY	ROADWAY	STATION	TO	STATION	LOCATION	646.1020	646.1040	646.3040	646.4520	646.5020	646.5120	646.6120	646.7120	646.8020	648.0100	649.0120
						MARKING	MARKING	MARKING	MARKING	MARKING	MARKING	MARKING	MARKING	MARKING	LOCATE	TEMPORARY
						LINE	GROOVED	GROOVED	SAME DAY	ARROW	MARKING	STOP LINE	DIAGONAL	CORRUGATED	NO	MARKING
						EPOXY 4-INCH	EPOXY 4-INCH	REF EPOXY	EPOXY 4-INCH	EPOXY	WORD	EPOXY	EPOXY	EPOXY	PASSING	EPOXY 4-INCH
						YELLOW	WHITE	8-INCH	YELLOW	TYPE 2	EPOXY	18-INCH	12-INCH	MEDIAN	ZONES	YELLOW
						LF	LF	LF	LF	EA	EA	LF	LF	SF	MI	LF
0010	STH 28															
		25+59	-	33+60	LT/RT	1,610	1,610	--	--	--	--	16	--	456	--	--
		33+60	-	469+73	LT/RT	--	87,300	300	87,230	2	2	188	550	--	8.3	87,300
		TOTALS				1,610	88,910	300	87,230	2	2	204	550	456	8.3	87,300

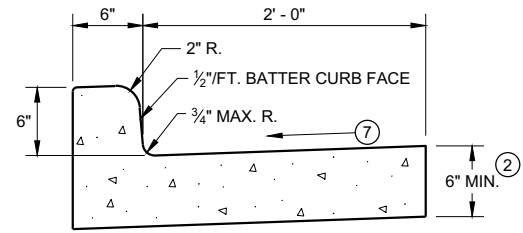
TYPE II PERMANENT SIGNING -

4060-00-75 STH 28

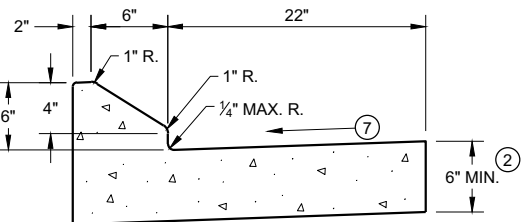
SIGN NO.	SIGN CODE & SIZE	SIGN MESSAGE	SIGN SIZE W x H [IN.] x [IN.]	637.2210 SIGNS TYPE II REFLC H [SF]	637.2230 SIGNS TYPE II REFLC F [SF]	638.2602 REMOVING SIGNS TYPE II (EA)	638.3000 REMOVING SMALL SIGN SUPPORTS [EA]	634.0618 WOOD POSTS 4"X 6"X18' [EA]	638.2102 MOVE SIGNS TYPE II [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION
1	W5-52R						1	1	1		4 FOOT MOUNTING HEIGHT
2	W14-3						1	1	1		
3	W2-1						1	1	1		INCLUDES W13-1
4	W5-52R						1	1	1		4 FOOT MOUNTING HEIGHT
5	W5-52R						1	1	1		4 FOOT MOUNTING HEIGHT
6	W5-52R						1	1	1		4 FOOT MOUNTING HEIGHT
7	W5-52R						1	1	1		4 FOOT MOUNTING HEIGHT
8	R2-1	SPEED LIMIT 55					1	1	1		
9	W5-52R						1	1	1		
10	W5-52R						1	1	1		
11	W5-52R						1	1	1		
12	W5-52R						1	1	1		
13	W14-3						1	1	1		
14	W5-52R						1	1	1		4 FOOT MOUNTING HEIGHT
15	W5-52R						1	1	1		4 FOOT MOUNTING HEIGHT
16	W14-3						1	1	1		
17	W5-52R						1	1	1		4 FOOT MOUNTING HEIGHT
18	W5-52R						1	1	1		4 FOOT MOUNTING HEIGHT
19	W5-52R						1	1	1		4 FOOT MOUNTING HEIGHT
20	W5-52R						1	1	1		4 FOOT MOUNTING HEIGHT
21	R1-1 UNDISTRIBUTED			40.000	20.000	5	10	10	10		
TOTALS				40.000	20.000	5	31	31	31		

Standard Detail Drawing List

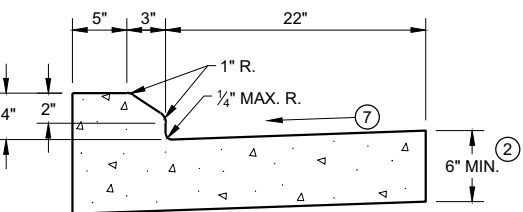
08D01-22A	CONCRETE CURB & GUTTER
08D01-22B	CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS
08D05-20A	CURB RAMPS TYPES 1 AND 1-A
08D05-20B	CURB RAMPS TYPES 2 AND 3
08D05-20C	CURB RAMPS TYPES 4A AND 4A1
08D05-20D	CURB RAMPS TYPE 4B AND 4B1
08D05-20E	CURB RAMPS TYPES 5, 6, 7A, 7B & 8
08D05-20F	CURB RAMPS RADIAL DETECTABLE WARNING FIELD APPLICATIONS
08D05-20G	CURB RAMPS RECTANGULAR AND RADIAL DETECTABLE WARNING PLATES
08D15-05A	EDGEDRAIN OUTLET AND OUTFALL MARKERS
08D22-01	DRIVEWAYS WITHOUT CURB & GUTTER RESURFACING PROJECTS RURAL
08E10-02	INLET PROTECTION TYPE A, B, C AND D
08E15-01	CULVERT PIPE CHECK
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
14B15-11A	STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATION & ELEMENTS
14B15-11B	STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATION & ELEMENTS
14B15-11C	STEEL PLATE BEAM GUARD, CLASS "A", INSTALLATION & ELEMENTS
15A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
15A03-02B	FLEXIBLE MARKER POST FOR CULVERT END
15C04-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C07-15B	PAVEMENT MARKING WORDS
15C07-15C	PAVEMENT MARKING ARROWS
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
15C33-04	STOP LINE AND CROSSWALK PAVEMENT MARKING
15C35-04A	PAVEMENT MARKING (INTERSECTIONS)
15C35-04B	PAVEMENT MARKING AND SIGNING (CLIMBING LANE & PASSING LANE)
15C35-04C	PAVEMENT MARKING AND SIGNING (CLIMBING LANE & PASSING LANE)
15D28-04	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY
15D30-06A	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-06B	TRAFFIC CONTROL, TEMPORARY ADA COMPLIANT PEDESTRIAN ACCOMMODATION
15D30-06C	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D39-02	TRAFFIC CONTROL, DROP-OFF SIGNING
15D44-02	TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH MILLED SURFACES
15D51-01	TRAFFIC CONTROL, MOBILE OPERATIONS ON AN UNDIVIDED ROADWAY



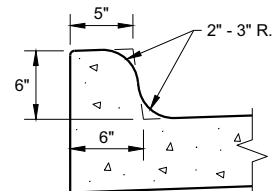
TYPES A^① & D



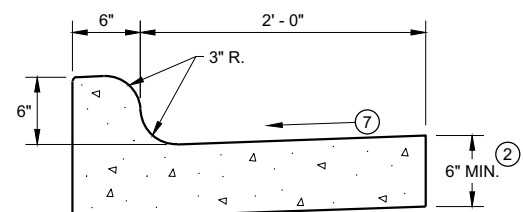
6" SLOPED CURB TYPES G^① & J



4" SLOPED CURB TYPES G^① & J

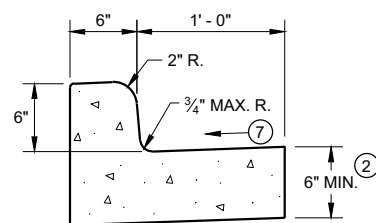


TYPES K^① & L
(OPTIONAL CURB SHAPE)



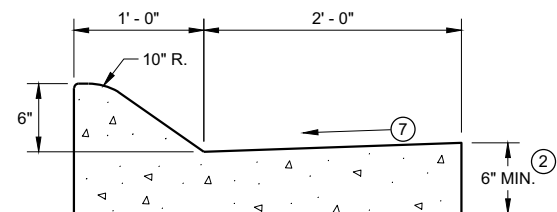
TYPES K^① & L

CONCRETE CURB AND GUTTER 30"

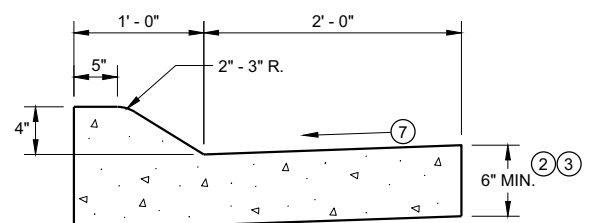


TYPES A^① & D

CONCRETE CURB AND GUTTER 18"

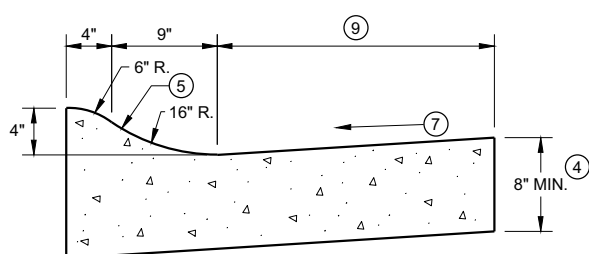


6" SLOPED CURB TYPES A^① & D



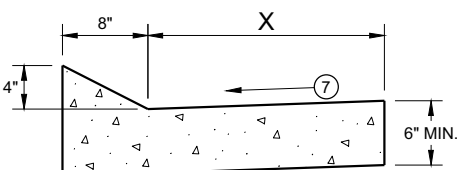
4" SLOPED CURB TYPES A^① & D

CONCRETE CURB AND GUTTER 36"



4" SLOPED CURB TYPES R^① & T

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

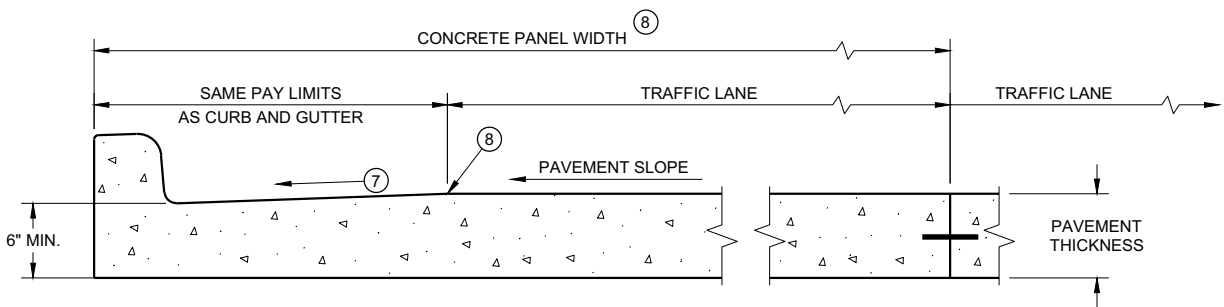


TYPES TBT & TBTT^①

CONCRETE CURB AND GUTTER

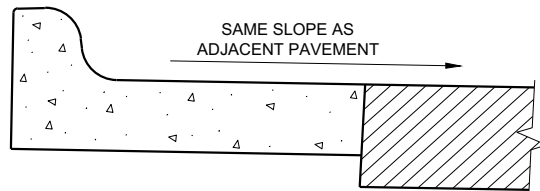
PAVEMENT THICKNESS
AND MAXIMUM CONCRETE
PANEL WIDTH TABLE

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.

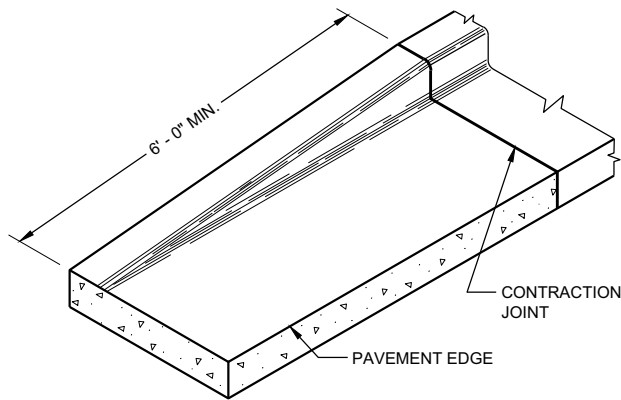
INTEGRAL CURB AND GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB AND GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE.

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

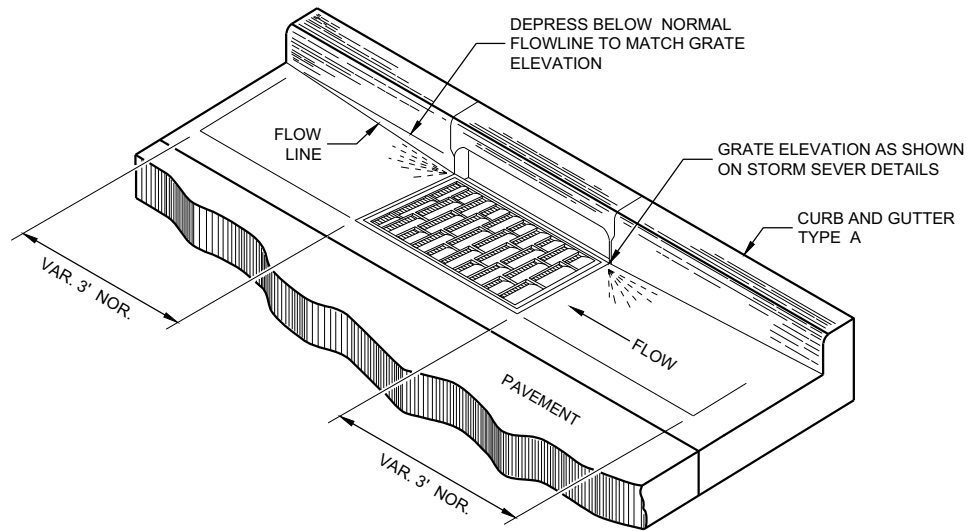
- ① TIE BARS ARE REQUIRED FOR CURB AND GUTTERS TYPES A, G, K, R, AND TBTT.
- ② THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.
- ③ USE 8" MINIMUM GUTTER THICKNESS WHEN USED WITH 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

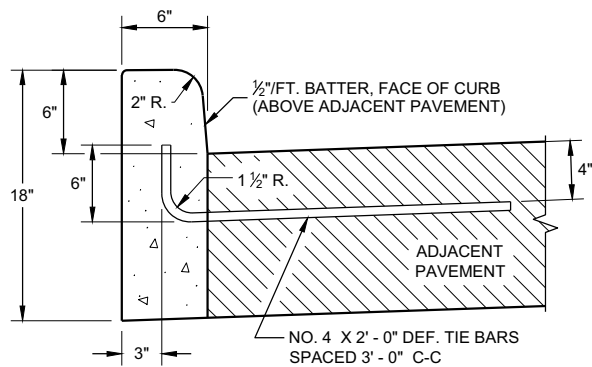
STATE OF WISCONSIN
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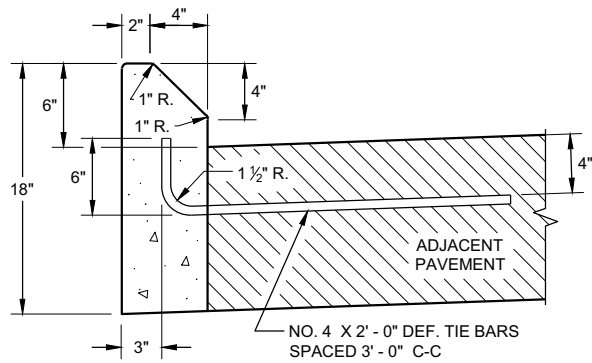
END SECTION CURB AND GUTTER



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

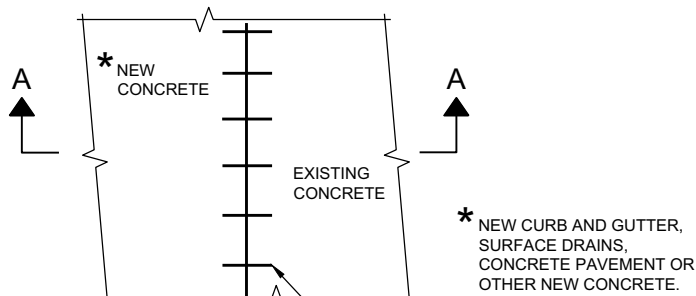


TYPES A^① & D

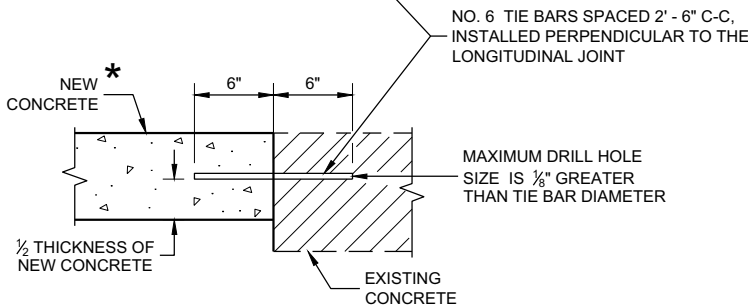


TYPES G^① & J

CONCRETE CURB



PLAN VIEW



SECTION A - A

TIE BARS DRILLED
INTO EXISTING PAVEMENT

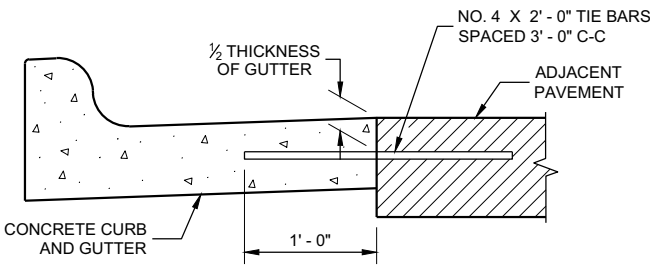
GENERAL NOTES

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

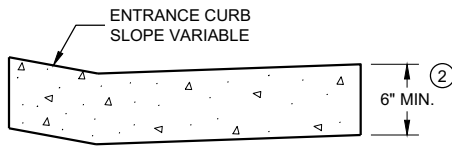
PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

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



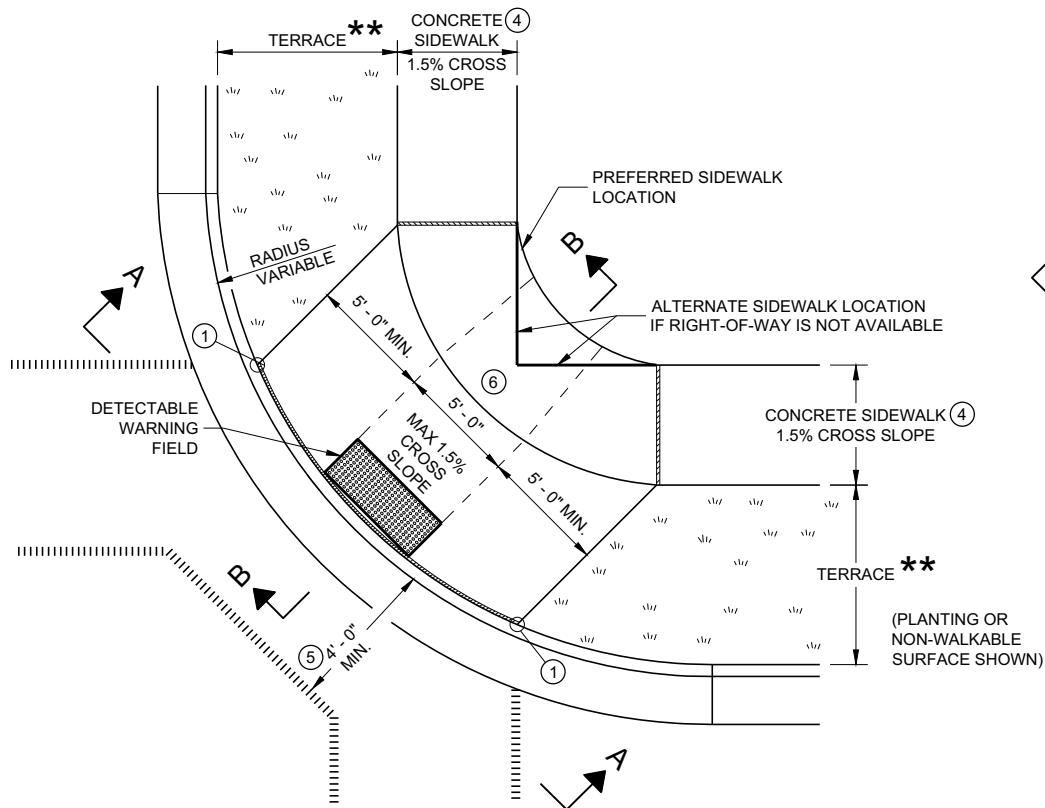
DRIVEWAY ENTRANCE CURB^⑨
(WHEN DIRECTED BY THE ENGINEER)

CONCRETE CURB, TIES
AND CURB AND GUTTER
APPLICATIONS

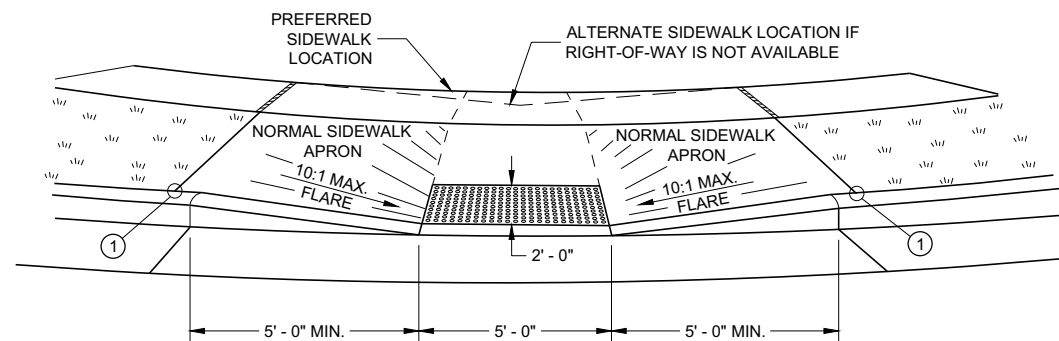
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2021
DATE /S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT
ENGINEER

FHWA

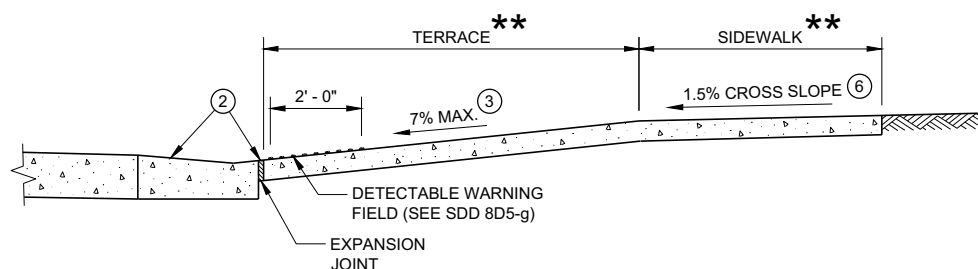


PLAN VIEW
CURB RAMP TYPE 1
(CENTER OF CORNER RADIUS)

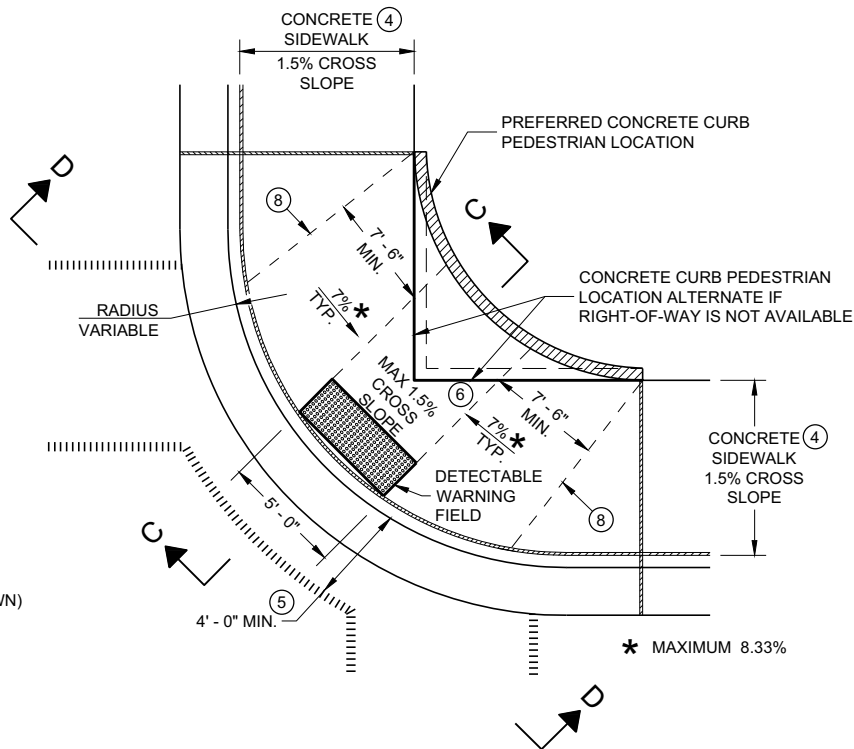


VIEW A - A FOR TYPE 1

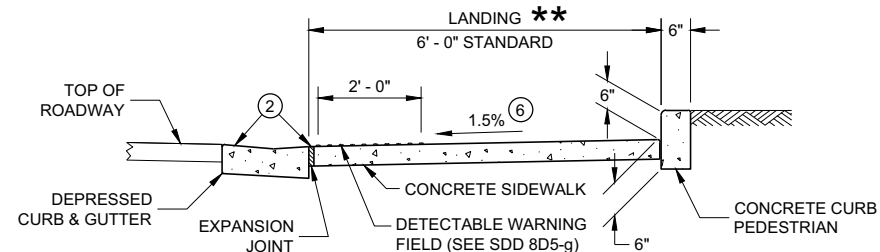
** WIDTH SHOWN ELSEWHERE
IN THE PLANS



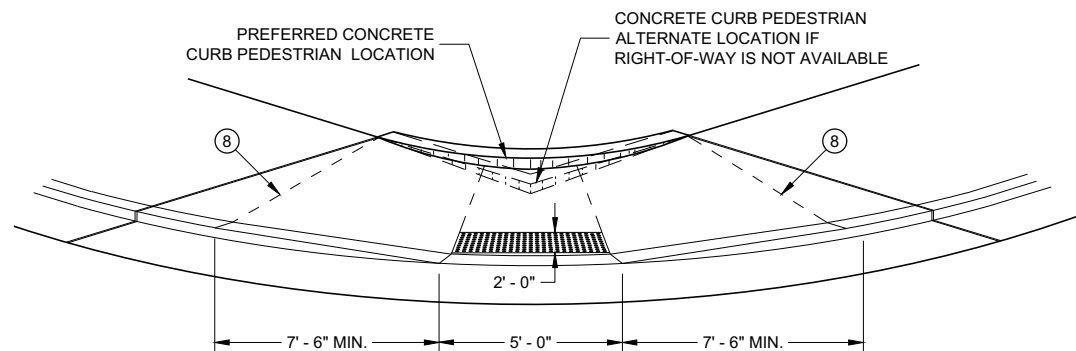
SECTION B - B FOR TYPE 1



PLAN VIEW
CURB RAMP TYPE 1 - A
(NO TERRACE)



SECTION C - C FOR TYPE 1 - A



VIEW D - D FOR TYPE 1 - A

GENERAL NOTES

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

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.

WHEN NECESSARY, THE SIDEWALK ELEVATION MAY BE LOWERED TO MEET THE HIGH POINT ON THE RAMP.

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

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

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

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

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

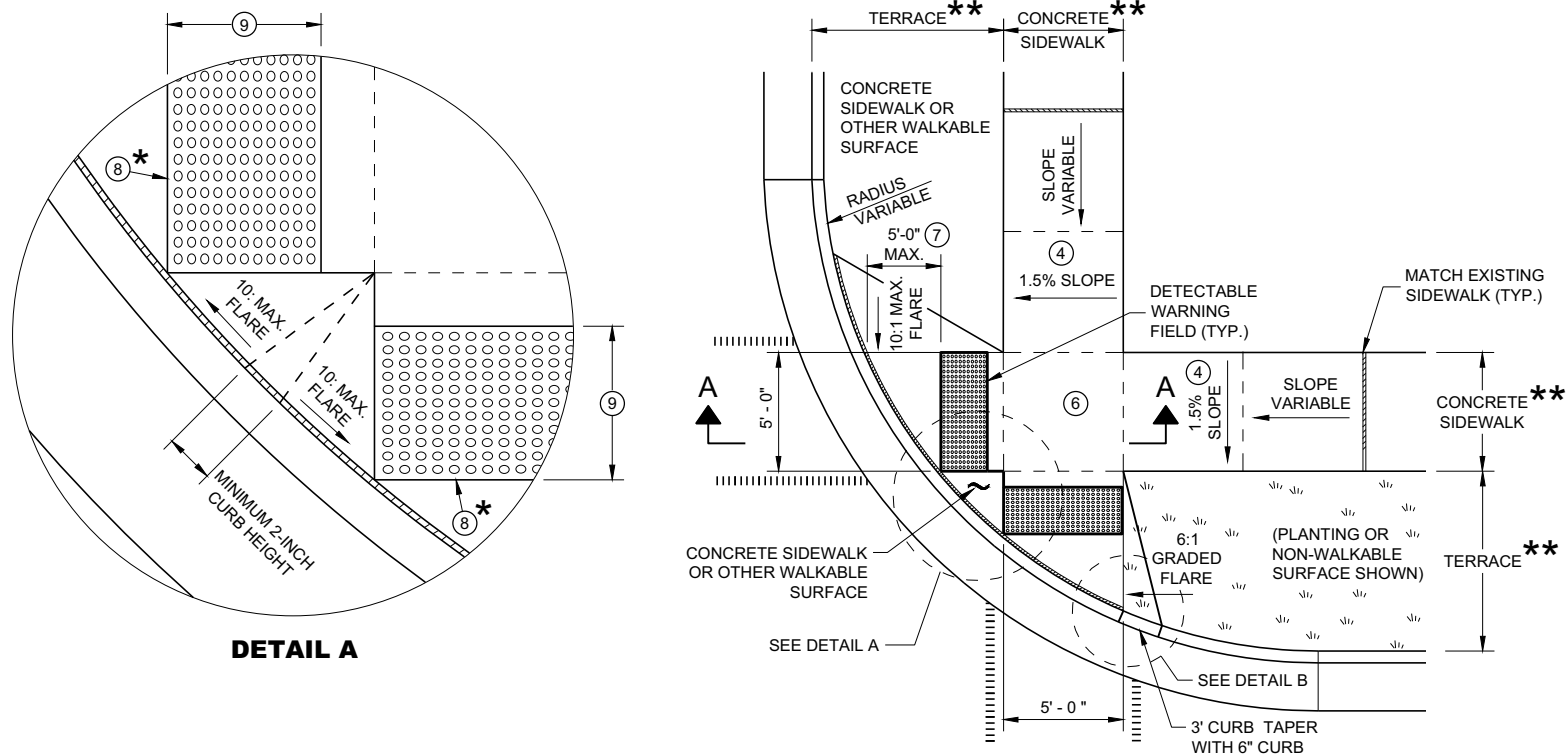
- 1 THIS POINT IS AN EXTENSION OF OUTSIDE EDGE OF APPROACHING SIDEWALK WHERE IT MEETS THE BACK OF CONCRETE CURB. POINT LOCATION MAY BE ADJUSTED TO ALIGN WITH BEGINNING OF FULL-HEIGHT CURB IF THIS DISTANCE IS SHORT.
- 2 GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4 - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.
- 3 MAXIMUM 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.
- 4 ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
- 5 PROVIDE A LEVEL LANDING IN THE STREET AND GUTTER AREA (2% MAXIMUM SLOPE IN ANY DIRECTION). WHEN THE GUTTER SLOPE EXCEEDS 2%, CONSTRUCT THE LEVEL LANDING IN THE STREET AREA.
- 6 PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.
- 8 PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

LEGEND

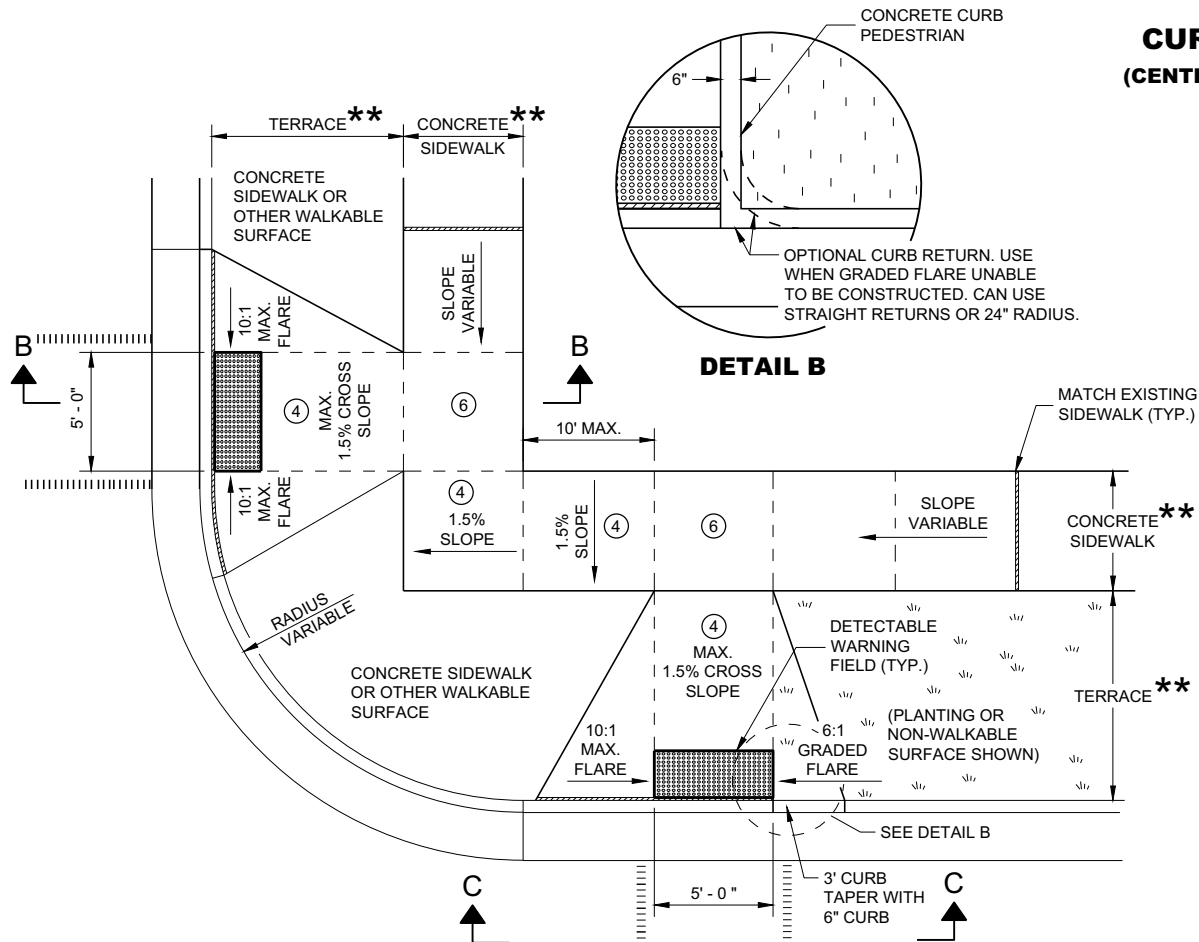
- 1/2" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS TYPE 1 AND 1-A

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



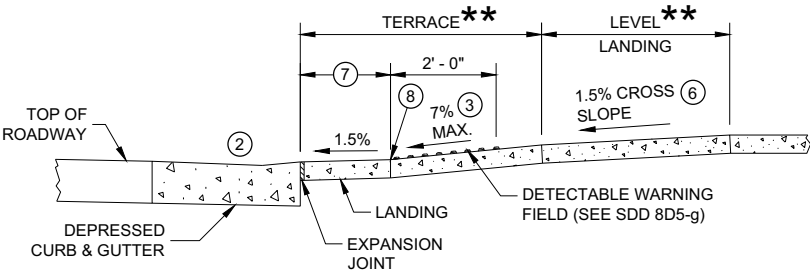
**PLAN VIEW
CURB RAMP TYPE 2
(CENTER OF CORNER RADIUS)**



**PLAN VIEW
CURB RAMP TYPE 3
(OUTSIDE OF CROSSWALK AREA)**

GENERAL NOTES

- AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.
- 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.
- DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE SHALL BE FROM THE SAME MANUFACTURER.
- ② GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/2 - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.
 - ③ AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE (2.67% OR LESS) AND NOT TO EXCEED 11% GRADE CHANGE.
 - ④ ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
 - ⑥ PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET X 5 FEET.
 - ⑦ WHEN GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.
 - ⑧ PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.
 - ⑨ WHEN DISTANCE IS LESS THAN 6' - 0", IT MAY BE DIFFICULT TO ACHIEVE A 7% SLOPE OR FLATTER ALONG THE RAMP. REDUCE CURB HEIGHT IN TRIANGLE AREA TO ACHIEVE 7% SLOPE OR FLATTER ON RAMP. CONSTRUCT 2-INCH MINIMUM CURB HEIGHT BETWEEN 10:1 FLARES.



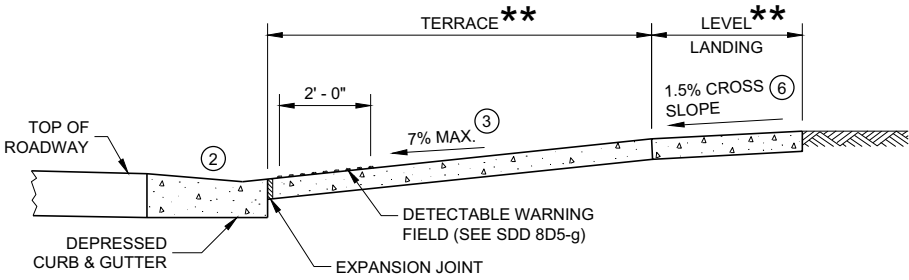
SECTION A - A FOR TYPE 2

* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

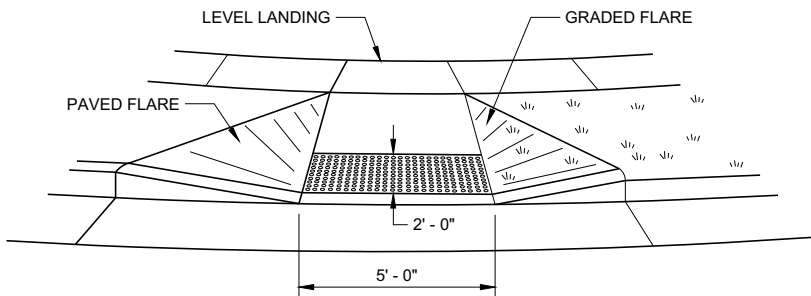
** WIDTH SHOWN ELSEWHERE IN THE PLANS

LEGEND

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



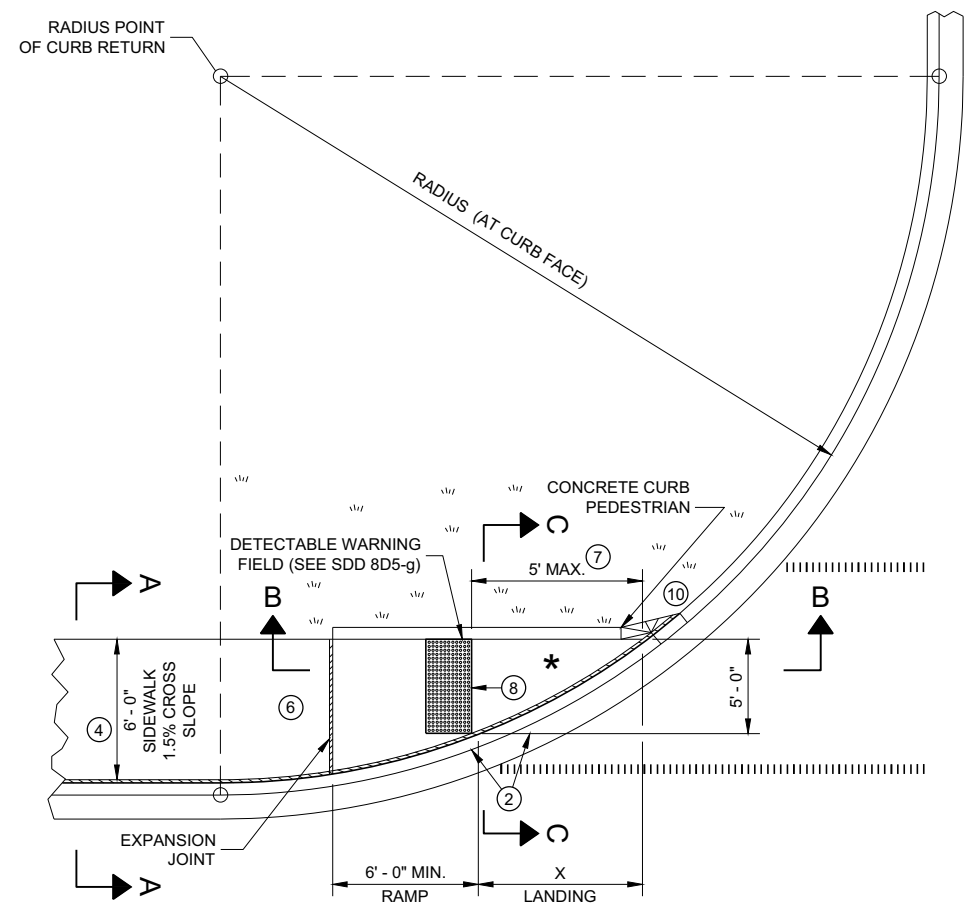
SECTION B - B FOR TYPE 3



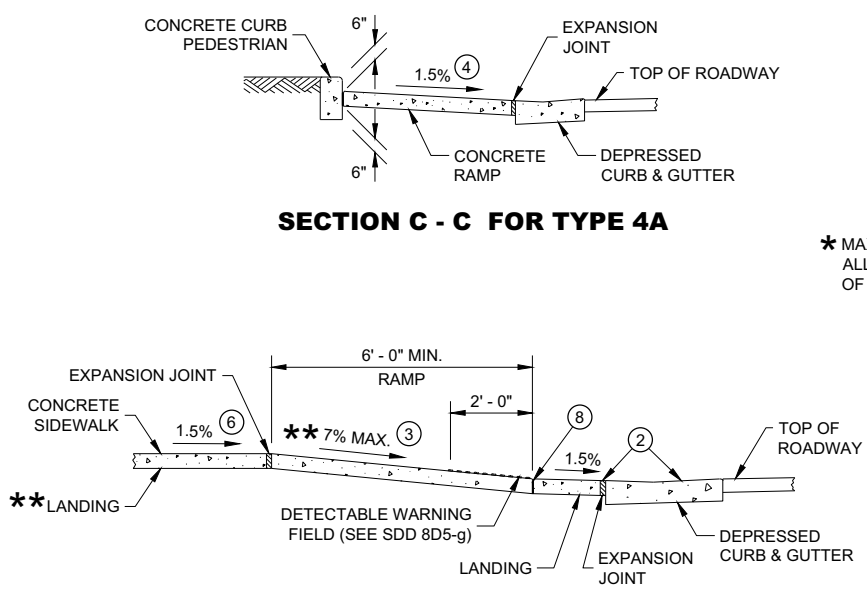
VIEW C - C FOR TYPE 3

**CURB RAMPS
TYPE 2 AND 3**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



PLAN VIEW
CURB RAMP TYPE 4A



SECTION C - C FOR TYPE 4A

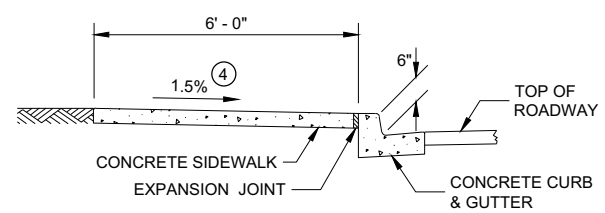


SECTION B - B FOR
TYPE 4A AND TYPE 4A1

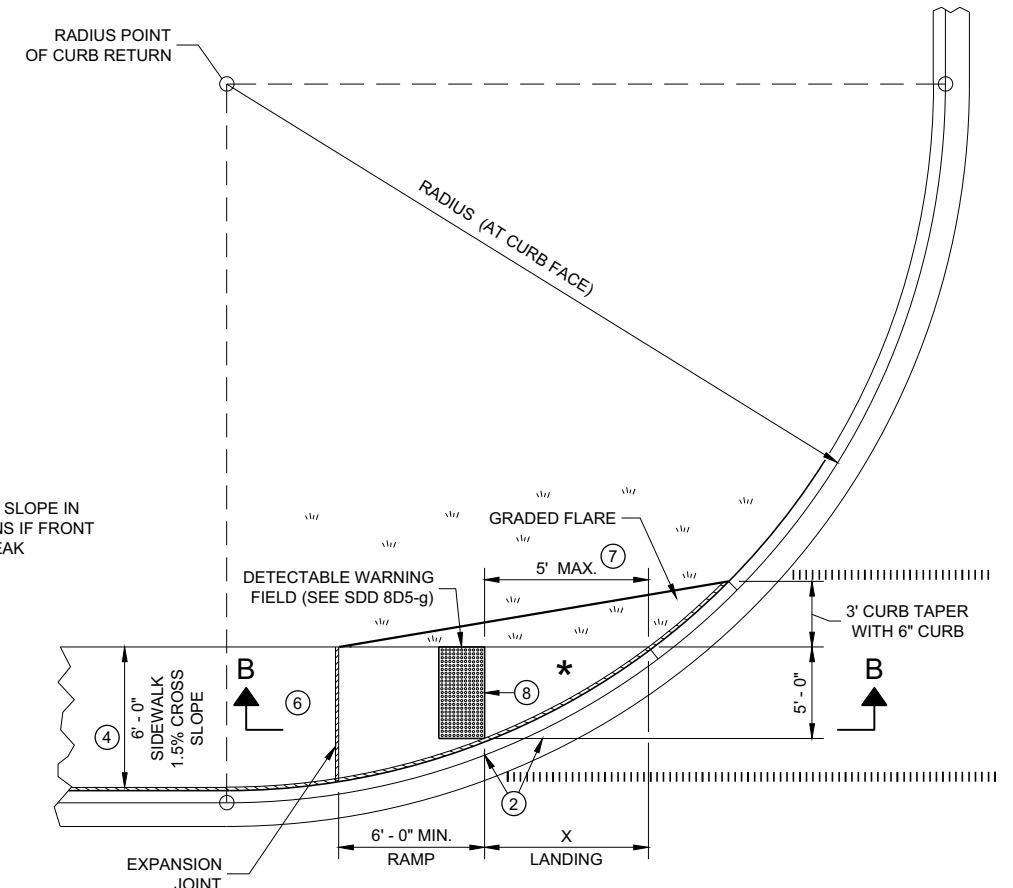
** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

RADIUS (AT CURB FACE)	X
10 FEET	4' - 7"
15 FEET	6' - 5 1/2"

INTERMEDIATE RADII CAN BE INTERPOLATED



SECTION A - A FOR TYPE 4A



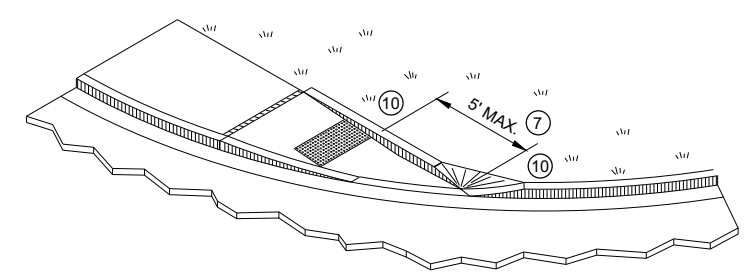
PLAN VIEW
CURB RAMP TYPE 4A1

GENERAL NOTES

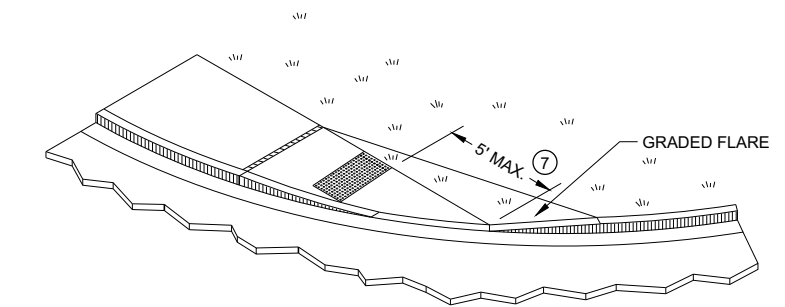
- AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.
- DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.
- DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.
- ② GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4 - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.
 - ③ AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.
 - ④ ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
 - ⑥ PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.
 - ⑦ WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.
 - ⑧ PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.
 - ⑩ INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.

LEGEND

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



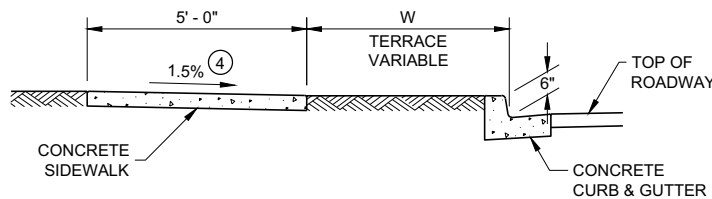
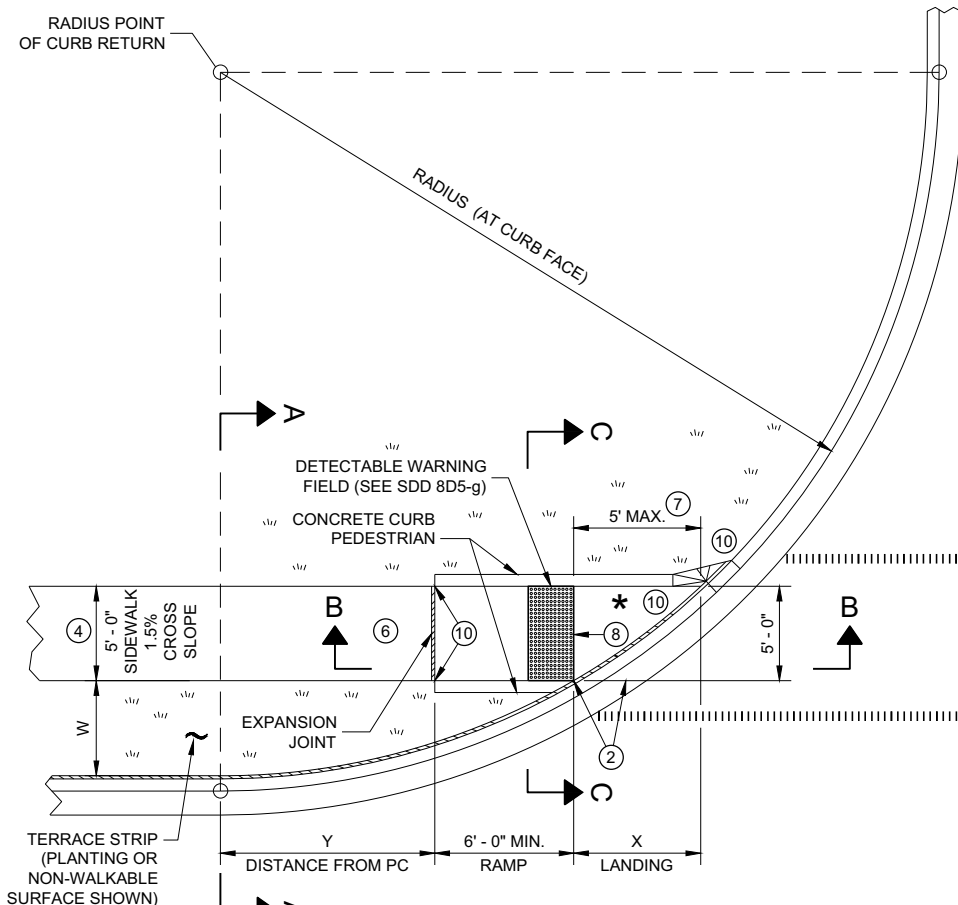
ISOMETRIC VIEW FOR TYPE 4A



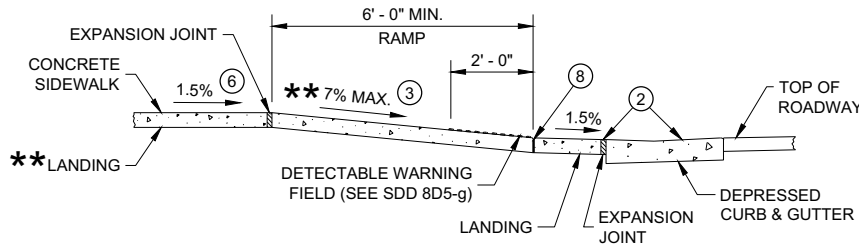
ISOMETRIC VIEW FOR TYPE 4A1

CURB RAMPS TYPE 4A AND 4A1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



SECTION A - A FOR TYPE 4B



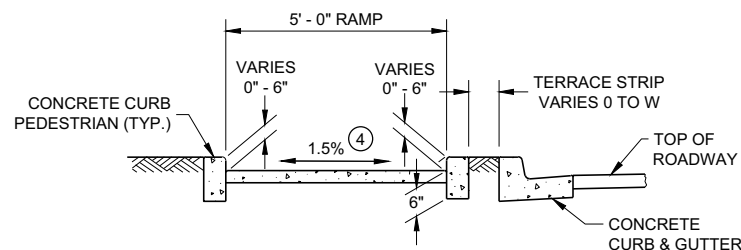
** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

SECTION B - B FOR
TYPE 4B AND TYPE 4B1

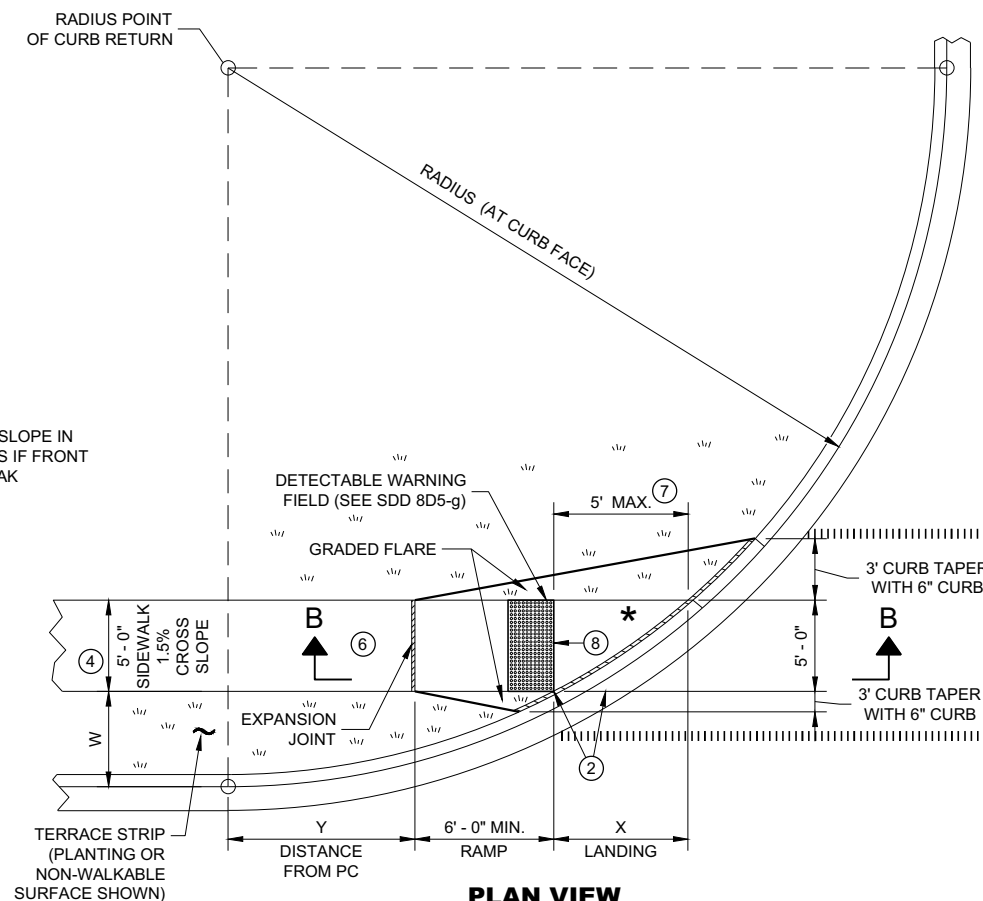
* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IF FRONT OF GRADE BREAK

RADIUS (AT CURB FACE)	W = 3' - 0"		W = 4' - 0"		W = 5' - 0"		W = 6' - 0"		W = 7' - 0"		W = 8' - 0"		W = 9' - 0"		W = 10' - 0"	
	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y
10 FEET	2' - 10 1/4"	0' - 5"	2' - 1"	1' - 4 1/2"	1' - 5"	2' - 1"	0' - 10"	2' - 7 1/2"	0' - 3 3/4"	3' - 0 1/4"						
15 FEET	4' - 6 3/4"	2' - 1 3/4"	3' - 9"	3' - 5 3/4"	3' - 1 1/4"	4' - 6"	2' - 6 3/4"	5' - 4 1/2"	2' - 1"	6' - 1"	1' - 8"	6' - 8 1/2"	1' - 3 1/4"	7' - 2 1/2"	0' - 10 3/4"	7' - 7 1/4"
20 FEET	5' - 9 3/4"	3' - 6 1/2"	4' - 11 1/2"	5' - 1 3/4"	4' - 3 1/4"	6' - 5 1/2"	3' - 8 3/4"	7' - 7"	3' - 3"	8' - 6 1/2"	2' - 10"	9' - 4 1/2"	2' - 5 1/2"	10' - 1 1/4"	2' - 1 1/4"	10' - 9"
30 FEET			6' - 9 1/4"	7' - 11 1/2"	6' - 0 1/4"	9' - 8"	5' - 5"	11' - 1 3/4"	4' - 10 3/4"	12' - 5 3/4"	4' - 5 1/2"	13' - 7 3/4"	4' - 0 3/4"	14' - 8 1/2"	3' - 8 1/2"	15' - 8 1/4"
40 FEET									6' - 1 3/4"	15' - 8 1/2"	5' - 8"	17' - 2"	5' - 3"	18' - 5 3/4"	4' - 10 3/4"	19' - 8 1/4"
50 FEET															5' - 10 1/4"	23' - 2"

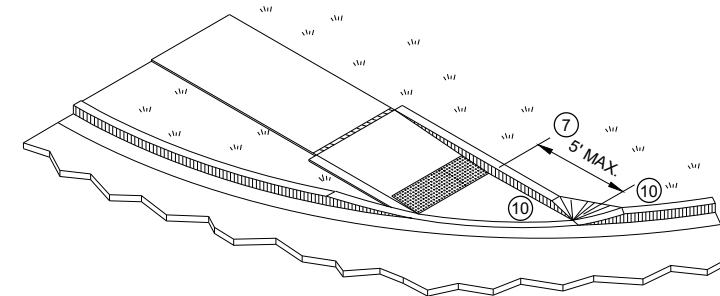
INTERMEDIATE RADII CAN BE INTERPOLATED
DIMENSION "Y" IS CALCULATED BASED ON 6'-0" RAMP LENGTH
DIMENSION "X" IS CALCULATED BASED ON 5'-0" SIDEWALK WIDTH



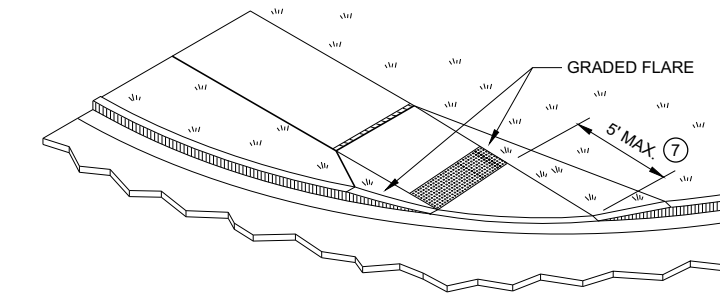
SECTION C - C FOR TYPE 4B



PLAN VIEW
CURB RAMP TYPE 4B1



ISOMETRIC VIEW FOR TYPE 4B



ISOMETRIC VIEW FOR TYPE 4B1

LEGEND

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

GENERAL NOTES

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

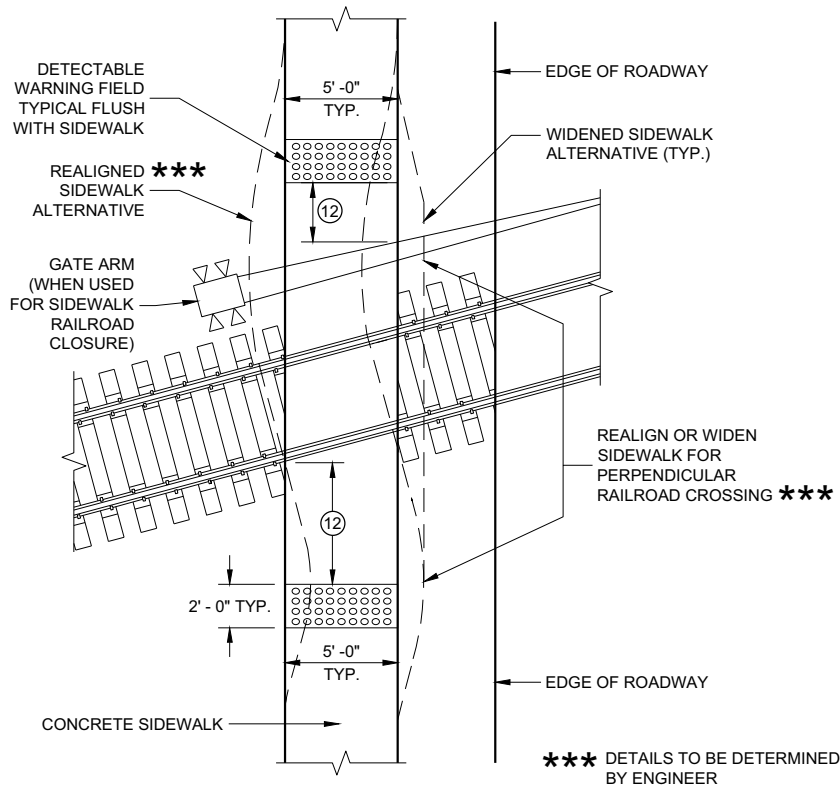
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

- GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4" - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.
- AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.
- ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
- PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.
- WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.
- PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.
- INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.

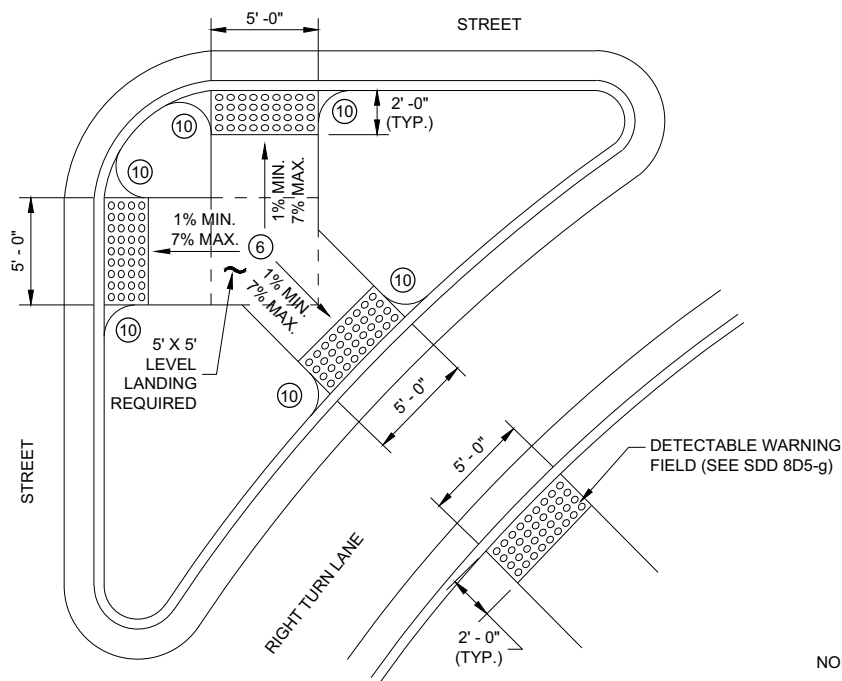
CURB RAMPS TYPE 4B AND 4B1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



CURB RAMP TYPE 8

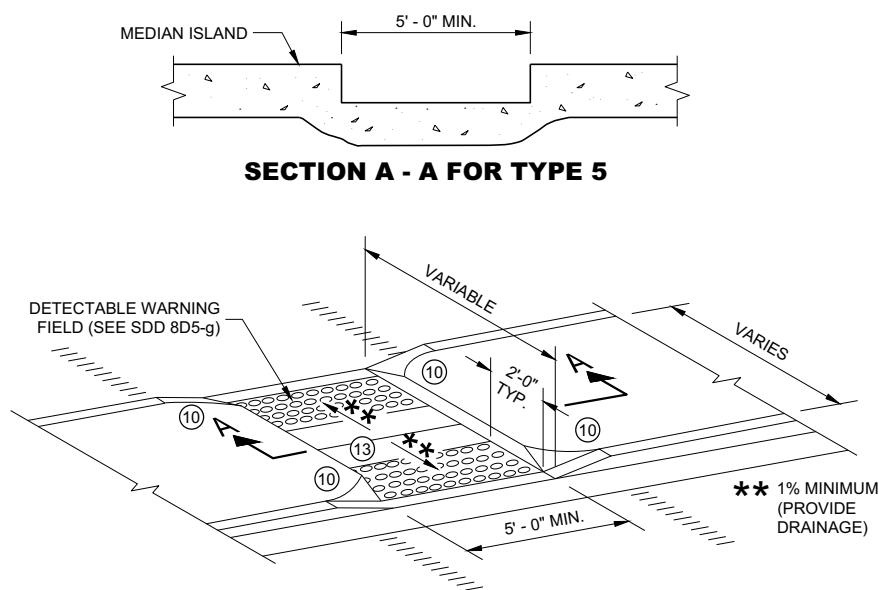
DETECTABLE WARNINGS AT RAILROAD CROSSING



CURB RAMP TYPE 6

DETECTABLE WARNING AT ISLANDS

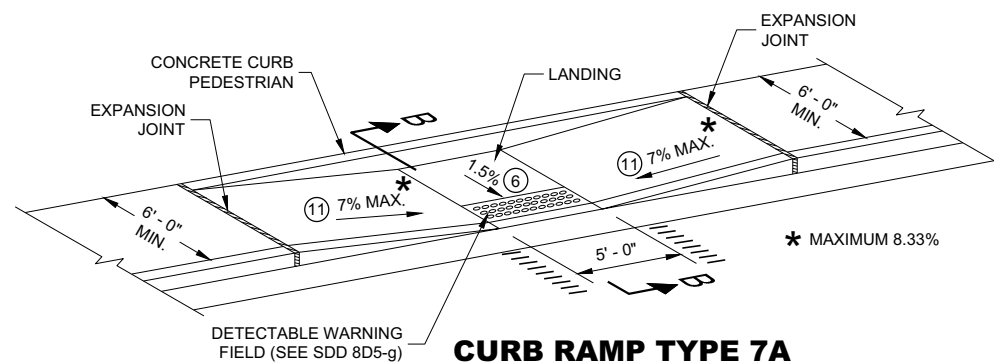
REFER TO GENERAL NOTES (2) AND (3) FOR ALL ISLAND CURB RAMPS



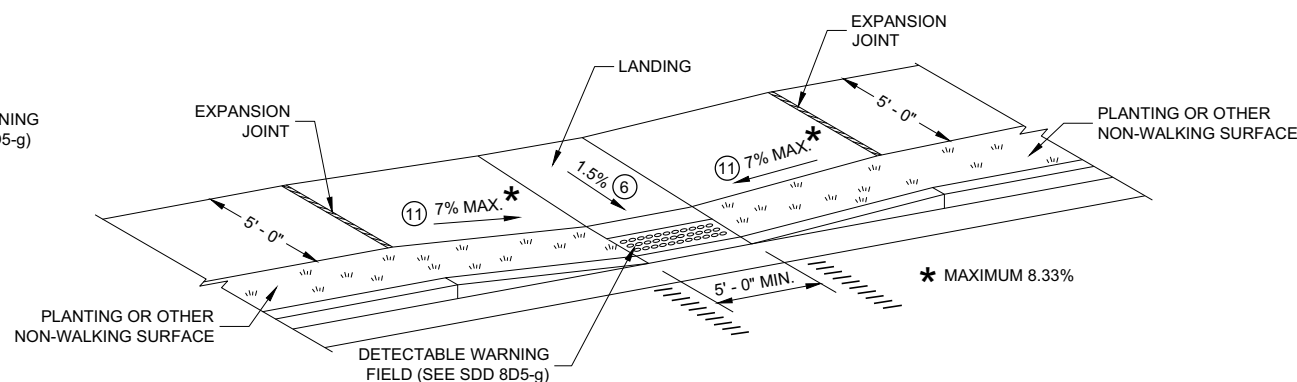
SECTION A - A FOR TYPE 5

CURB RAMP TYPE 5

**MEDIAN ISLAND
NON-ELEVATED PEDESTRIAN CROSSING**



**CURB RAMP TYPE 7A
MID BLOCK CROSSING**



**CURB RAMP TYPE 7B
MID BLOCK CROSSING**

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

GENERAL NOTES

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

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.

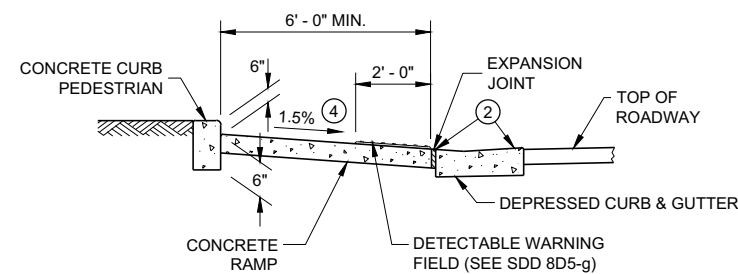
SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

- GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4 - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.
- AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.
- ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
- PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.
- INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.
- SLOPE SIDEWALK TOWARD LANDING AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.
- THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO A RAILROAD CROSSING SHALL BE 1.5 FEET ±0.1' FROM THE FACE OF THE GATE ARM IF THE GATE ARM EXTENDS ACROSS THE SIDEWALK. WHERE THERE IS NO PEDESTRIAN GATE, THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO THE RAILROAD CROSSING SHALL BE 15 FEET FROM THE NEAREST RAIL.
- DO NOT INSTALL DETECTABLE WARNING FIELDS AT THE EDGES OF STEET-LEVEL PEDESTRIAN REFUGE ISLANDS IF A MINIMUM 2 FOOT CONCRETE SURFACE WITHOUT DETECTABLE WARNINGS (MEASURED IN THE DIRECTION OF PEDESTRIAN TRAVEL) CANNOT BE ACHIEVED.

LEGEND

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



SECTION B - B FOR TYPE 7A

**CURB RAMPS
TYPE 5, 6, 7A, 7B & 8**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

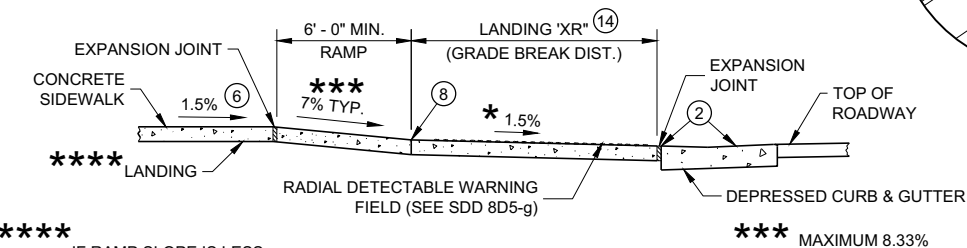
RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-c IS EXCEEDED

Diagram illustrating the placement of a detectable warning field radial when the 5-foot grade break distance per SDD 8D5-c is exceeded.

Key components and dimensions shown:

- EXPANSION JOINT**: Located at the start of the detectable warning field.
- DETECTABLE WARNING FIELD RADIAL**: The shaded area representing the warning field.
- GRADED FLARE**: The curved transition area leading to the curb.
- SEE DETAIL A**: Reference to a detail view of the flare.
- 3' CURB WITH 6" MIN. FINISH**: The curb and finish height.
- Dimensions**:
 - 6'-0" SIDEWALK 1.5% CROSS SLOPE
 - 2'-0" DETECTABLE WARNING FIELD RADIAL
 - 2'-0" MIN. DWF (16) COVERAGE
 - 5'-0" (17) DISTANCE FROM CURB TO START OF RADIAL
 - 6'-0" MIN. RAMP
 - LANDING 'XR'
- Note**: * MAXIMUM 2% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

PLAN VIEW
CURB RAMP TYPE 4A1
(GRADE BREAK DISTANCE GREATER THAN 5 FEET)



SECTION A - A FOR TYPE 4A1

IF RAMP SLOPE IS LESS
THAN 5.0%, THEN NO
ADJACENT UPHILL
LANDING IS REQUIRED

*** MAXIMUM 8.33%

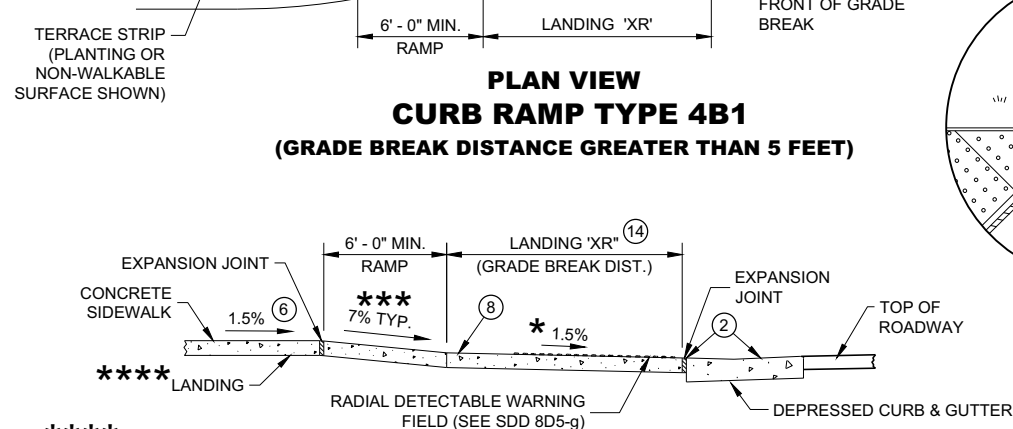
RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-d IS EXCEEDED

Diagram illustrating the radial detectable warning field placement when the 5-foot grade break distance per SDD 8D5-d is exceeded. The diagram shows a cross-section of a ramped curb and flare assembly.

Key components and dimensions:

- EXPANSION JOINT**: Located at the base of the curb.
- GRADED FLARE**: The sloped surface of the curb.
- ERRANCE STRIP**: The flat surface adjacent to the flare.
- 5'-0" SIDEWALK 1.5% CROSS SLOPE**: The slope of the sidewalk area.
- 6'-0" MIN.**: Minimum distance from the curb to the start of the flare.
- LANDING 'XR'**: The horizontal distance from the curb to the start of the flare.
- 2'-0"**: The width of the flare at its base.
- 5'-0"**: The height of the curb.
- 15**: The radius of the flare.
- 14**: The radius of the flare at the base.
- 15**: The radius of the flare at the top.
- SEE DETAIL B**: Reference to a detail view of the flare.
- * MAXIMUM 2% SL IN ALL DIRECTION FRONT OF GRAD BREAK**: Note indicating the maximum slope in all directions in front of the grade break.

PLAN VIEW
CURB RAMP TYPE 4B1
(GRADE BREAK DISTANCE GREATER THAN 5 FEET)






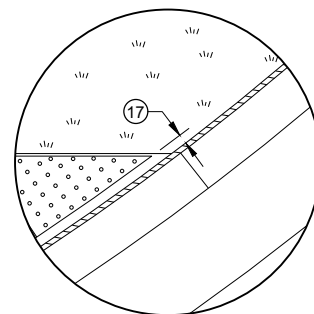
SECTION B - B FOR TYPE 4B1

IF RAMP SLOPE IS LESS
THAN 5.0%, THEN NO
ADJACENT UPHILL
LANDING IS REQUIRED

*** MAXIMUM 8.33%

LEGEND

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



DETAIL A

GENERAL NOTES

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

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.

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

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.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

APPLY RADIAL DETECTABLE WARNING PLACEMENT SIMILARLY FOR TYPE 4A AND 4A1 CURB RAMPS AND SIMILARLY FOR TYPE 4B AND 4B1 CURB RAMPS. TYPE 4A AND 4B CURB RAMPS ARE NOT SHOWN.

REFER TO SDD 8D5-g FOR ADDITIONAL RADIAL PLATE REQUIREMENTS.

FIELD CUTS AT INTERMEDIATE JOINTS WITHIN THE RADIAL DETECTABLE WARNING FILED ARE PROHIBITED.

DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AND ITS INDIVIDUAL PLATE LOCATIONS. PERFORM PRE-LAYOUT PRIOR TO PLACEMENT IN PLASTIC CONCRETE. FOLLOW MANUFACTURER'S PRODUCT LIST AND INSTALLATION RECOMMENDATIONS.

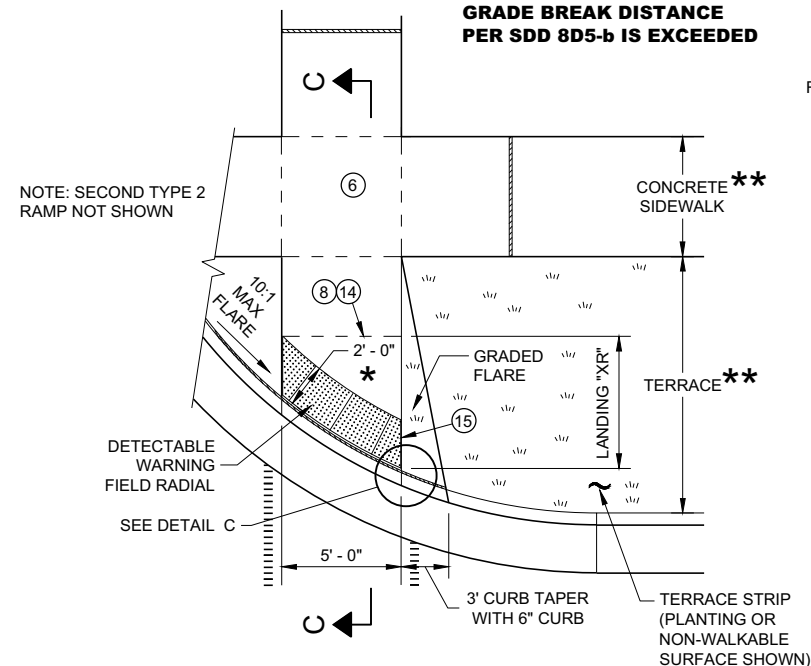
- ② GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4" - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.
- ③ AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.
- ④ ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
- ⑥ PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET BY 5 FEET.
- ⑧ PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.
- ⑭ CONSULT ENGINEER IF GRADE BREAK LOCATION (END OF LANDING DIMENSION "XR") REQUIRES FIELD ADJUSTMENT WHEN ESTABLISHING FINAL RADIAL DETECTABLE WARNING FIELD LOCATION.
- ⑮ FIELD SAW CUTS ALONG RADIAL DETECTABLE WARNING PLATES WILL BE NECESSARY TO MATCH EACH CURB RAMP EDGE. AVOID CUTTING THROUGH DOMES WHENEVER POSSIBLE. MAKE FIELD CUTS TRUE TO LINE AND WITHIN 1/8" DEVIATION. SMOOTH EDGES OF FIELD CUT PLATES.
- ⑯ USE 1' X 2" RECTANGULAR END PLATE AT END OF TYPE 4A1 RAMP AND PROVIDE MINIMUM 2' - 0" DETECTABLE WARNING FIELD COVERAGE (IN DIRECTION OF PEDESTRIAN TRAVEL) ALONG THE ENTIRE CURB RAMP WIDTH.
- ⑰ A MAXIMUM 3 INCH CONCRETE BORDER WITH IS ALLOWABLE IN FROM OF RADIAL DETECTABLE WARNING FIELD FOR CONSTRUCTABILITY PURPOSES. CONCRETE BORDER WIDTH MAY VARY UP TO 1 INCH.

RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-b IS EXCEEDED

The diagram illustrates the placement of a radial detectable warning field when the 5-foot grade break distance is exceeded. Key components and labels include:

- CONCRETE** (marked with **)
- EXPANSION JOINT**
- TOP OF ROADWAY**
- DEPRESSED CURB & GUTTER**
- LANDING 'XR'** (14)
- TERRACE**
- SIDEWALK**
- 1.5% CROSS SLOPE** (6)
- 7% TYP.**
- RADIAL DETECTABLE WARNING FIELD (SEE SDD 8D5-g)**
- 1.5%** and **7% TYP.** (marked with *)
- ***** (marked with 4)

SECTION C - C FOR TYPE 2



SURFACE SHOWN)

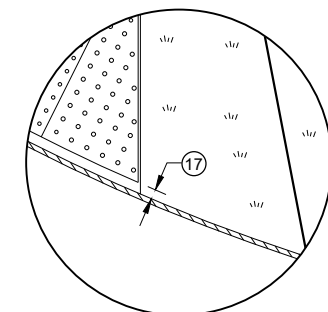
PLAN VIEW
CURB RAMP TYPE 2
(GRADE BREAK DISTANCE GREATER THAN 5 FEET)
(ON LINE WITH SIDEWALK)

NOTE: SECOND TYPE
RAMP NOT SHOWN

* MAXIMUM 2% SLOPE
IN ALL DIRECTIONS IN
FRONT OF GRADE
BREAK

*** WIDTH SHOWN ELSEWHERE
IN THE PLANS

*** MAXIMUM 8.33%



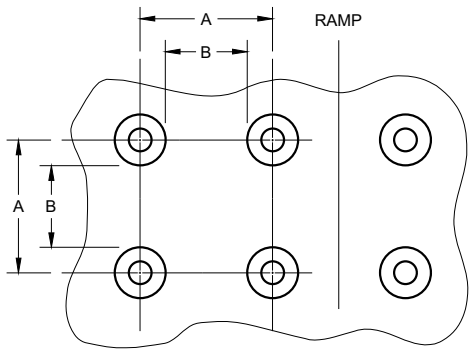
DETAIL C

CURB RAMPS RADIAL DETECTABLE WARNING FIELD APPLICATIONS

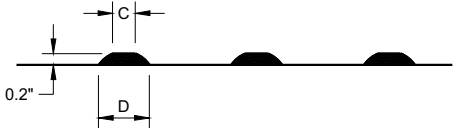
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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

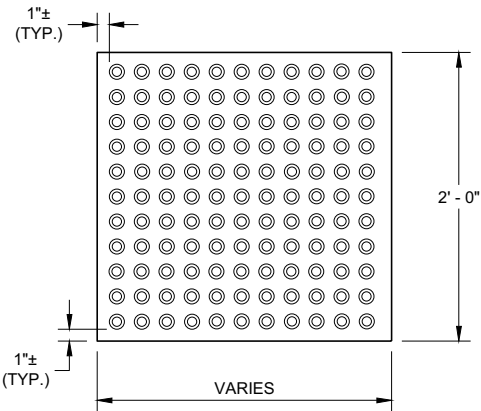


PLAN VIEW

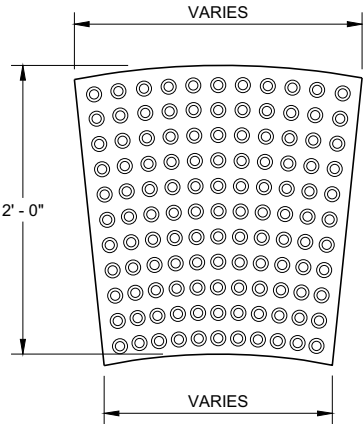


ELEVATION VIEW

TRUNCATED DOMES
DETECTABLE WARNING PATTERN DETAIL



RECTANGULAR
PLATES



RADIAL
PLATES

PLAN VIEW
DETECTABLE WARNING FIELDS (TYPICAL)

GENERAL NOTES

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AT A CURB RAMP SHALL BE FROM THE SAME MANUFACTURER.

PLACE ALL DETECTABLE WARNING FIELD SYSTEMS IN ACCORDANCE TO THE MANUFACTURER'S RECOMMENDATION.

FIELD CUTS AT INTERMEDIATE JOINTS WITHIN THE RADIAL DETECTABLE WARNING FILED ARE PROHIBITED.

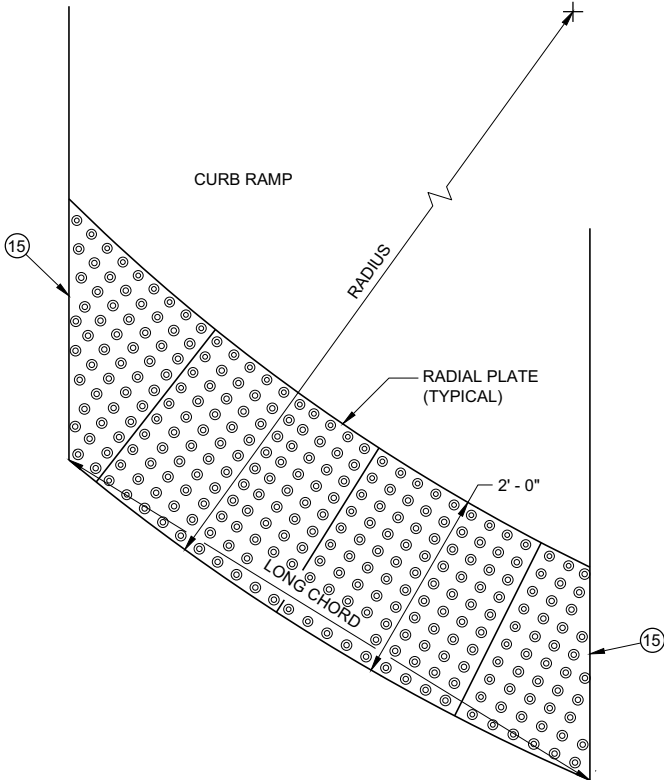
DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AND ITS INDIVIDUAL PLATE LOCATIONS. PERFORM PRE-LAYOUT PRIOR TO PLACEMENT IN PLASTIC CONCRETE. FOLLOW MANUFACTURER'S PRODUCT LIST AND INSTALLATION RECOMMENDATIONS.

FOR RADIAL DETECTABLE WARNING FIELD APPLICATIONS WHERE STANDARD RADIAL PLATES ARE NOT AVAILABLE AT AN INTERSECTION CURB RADIUS, A COMBINATION OF SQUARE OR RECTANGULAR PLATES AND RADIAL PLATES MAY BE USED TO FORM RADIAL CONFIGURATION. RADIAL WEDGE PLATES IN COMBINATION WITH SQUARE PLATES ARE ALSO ACCEPTABLE. FOLLOW MANUFACTURER'S RECOMMENDATIONS.

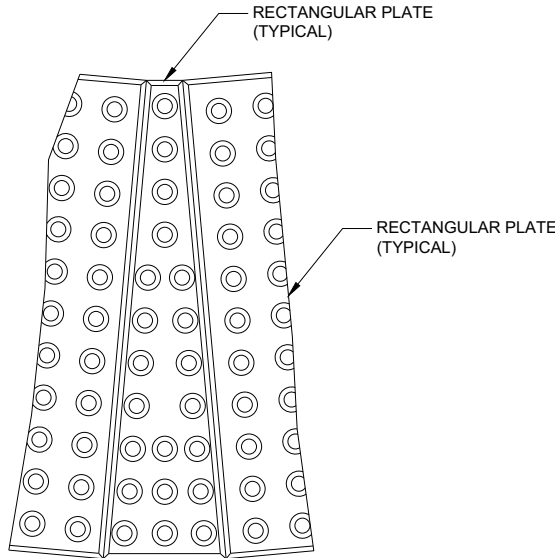
REFER TO CONTRACT AND STANDARD SPECIFICATIONS FOR FIELD CUTTING REQUIREMENTS.

DO NOT EMBED IN CONCRETE ANY FIELD-CUT PLATES WITH CUT EDGES SHORTER THAN 6 INCHES. CONSULT WITH MANUFACTURER FOR RE-DRILLING AND ANCHORING REQUIREMENTS OF FIELD-CUT PLATES.

15 FIELD SAW CUTS ALONG RADIAL DETECTABLE WARNING PLATES WILL BE NECESSARY TO MATCH EACH CURB RAMP EDGE. AVOID CUTTING THROUGH DOMES WHENEVER POSSIBLE. MAKE FIELD CUTS TRUE TO LINE AND WITHIN 1/8" DEVIATION. SMOOTH EDGES OF FIELD CUT PLATES.



PLAN VIEW
RADIAL DETECTABLE
WARNING FIELD ATTRIBUTES

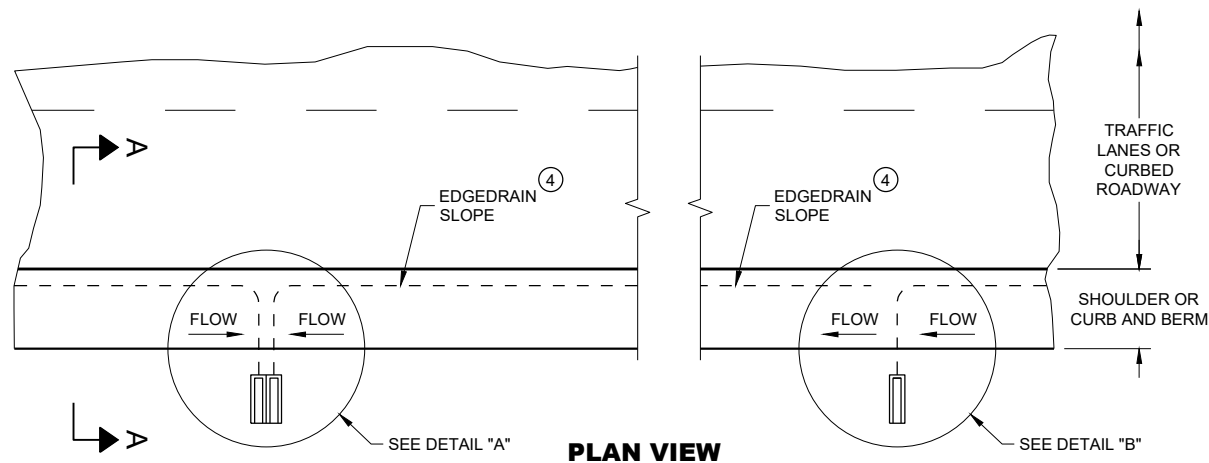


PLAN VIEW
RADIAL WEDGE PLATE
CONNECTION DETAIL

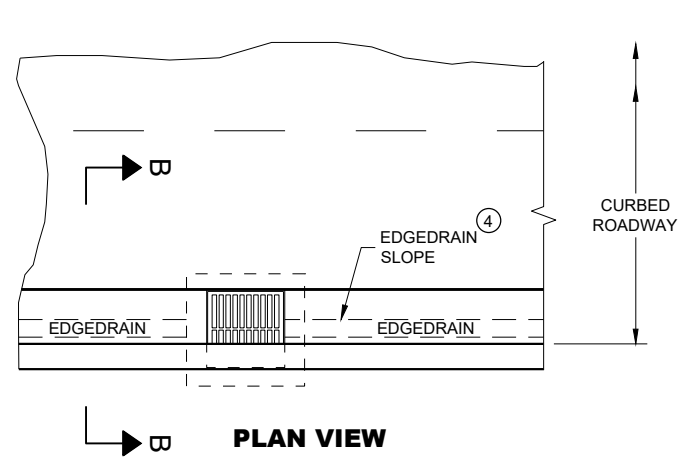
CURB RAMP
RECTANGULAR AND RADIAL
DETECTABLE WARNING PLATES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

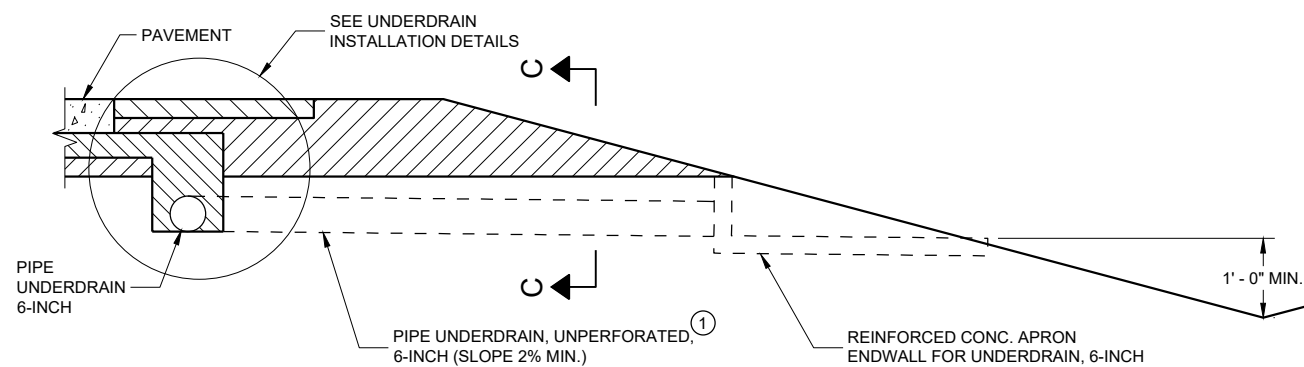
APPROVED
May 2019
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT
UNIT SUPERVISOR
FHWA



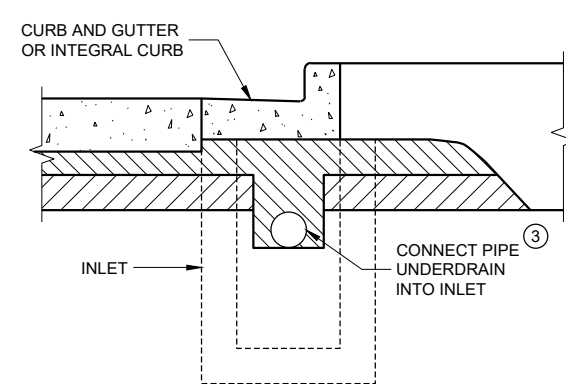
**ROADWAY WITH SHOULDERS OR CURBS
(EDGEDRAIN CONNECTS TO ROADSIDE) ②**



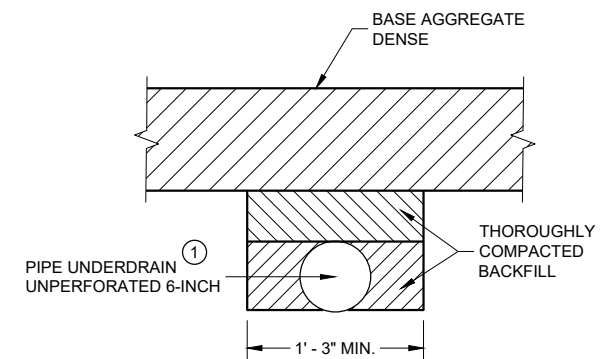
**ROADWAY WITH CURBS
(EDGEDRAIN CONNECTS INTO INLET STRUCTURE)**



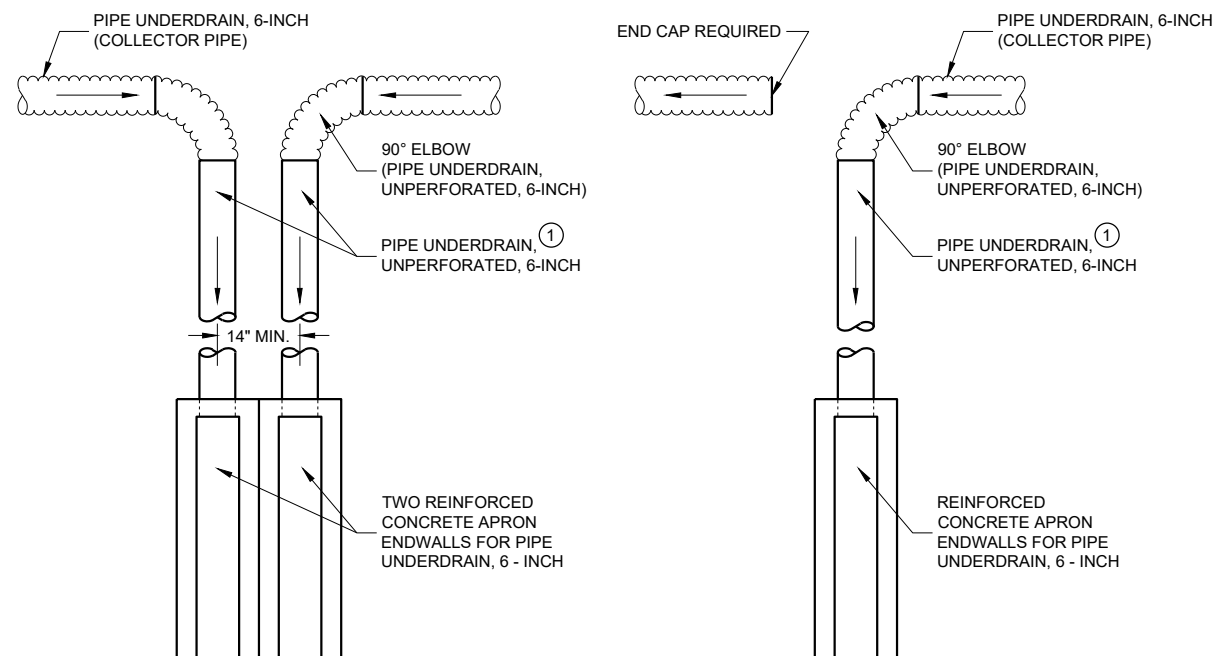
**SECTION A - A
RURAL CROSS SECTION**



**SECTION B - B
URBAN CROSS SECTION**



**SECTION C - C
TRENCH FOR OUTFALL PIPE**



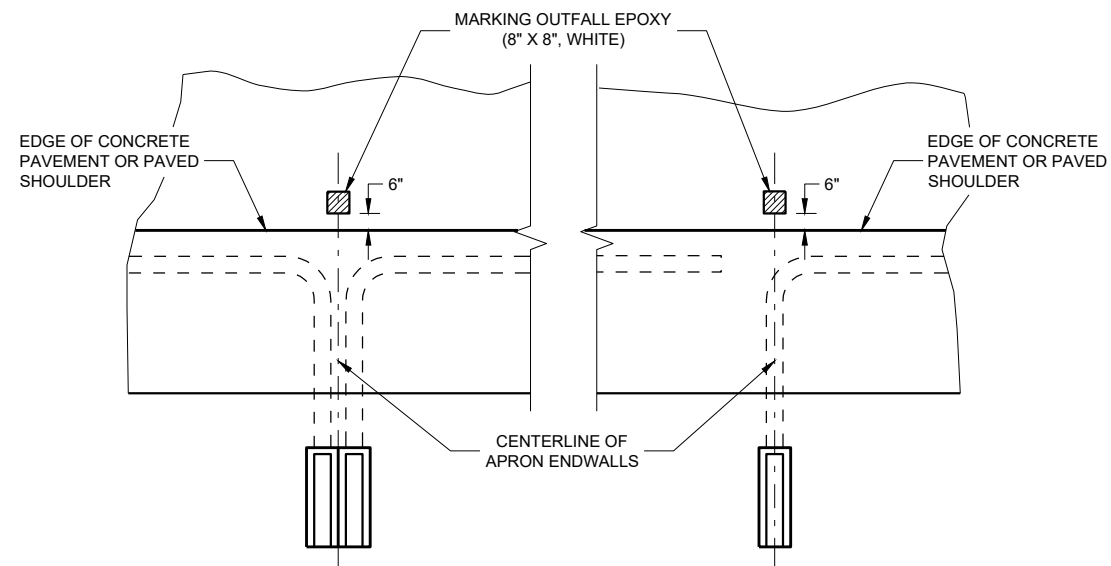
DETAIL "A"

TO BE USED AT LOW POINT LOCATIONS

DETAIL "B"

TO BE USED AT INTERMEDIATE LOCATIONS

TYPICAL DRAIN OUT DETAILS



PAVEMENT MARKINGS FOR OUTFALL MARKERS

**EDGEDRAIN OUTLET
AND OUTFALL MARKERS**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

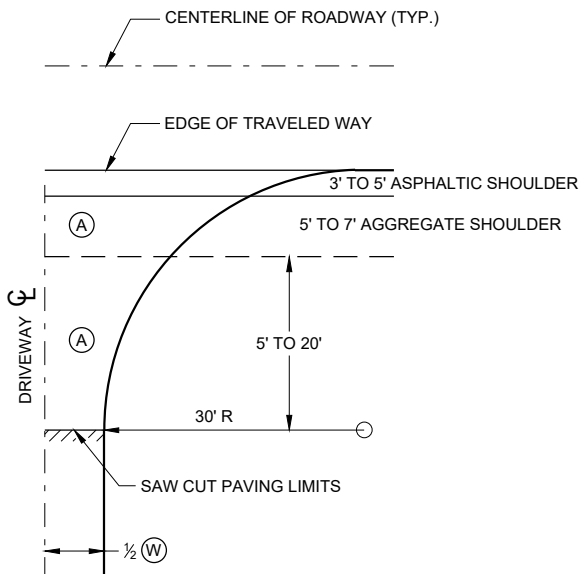
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

- ① UNPERFORATED PIPE UNDERDRAIN AND FITTINGS FURNISHED FOR OUTFALL PIPE SHALL MEET THE REQUIREMENTS OF ONE OF THE FOLLOWING SPECIFICATIONS:

POLYVINYL CHLORIDE (PVC) PLASTIC DRAIN, WASTE, AND VENT PIPE AND FITTINGS, ASTM D 2665, SCHEDULE 40 PVC.

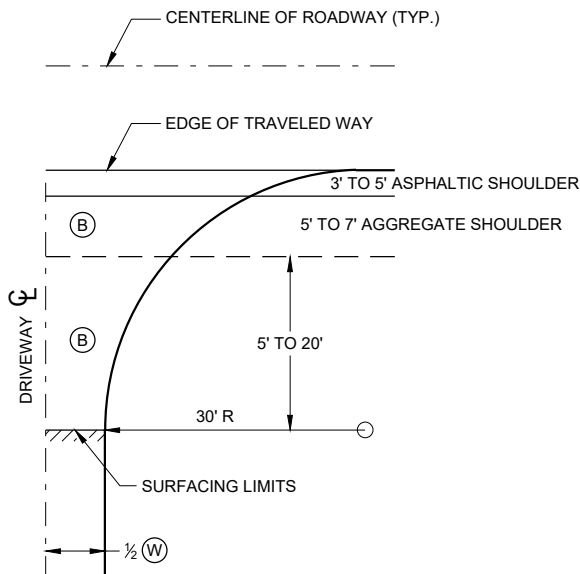
TYPE PSM POLYVINYL CHLORIDE (PVC) SEWER PIPE AND FITTINGS, ASTM D 3034, SDR 23.5 PVC SEWER PIPE.

- ② MAXIMUM SPACING OF EDGEDRAIN OUTLETS SHALL BE 250 FEET UNLESS OTHERWISE SPECIFIED IN THE CONTRACT OR DIRECTED BY THE ENGINEER.
- ③ EDGEDRAIN SHALL BE CONNECTED TO INLETS REGARDLESS OF FLOW DIRECTION FOR DRAINAGE AND MAINTENANCE ACCESS.
- ④ EDGEDRAIN SHALL BE LAID PARALLEL TO THE GRADE OF ROADWAY.

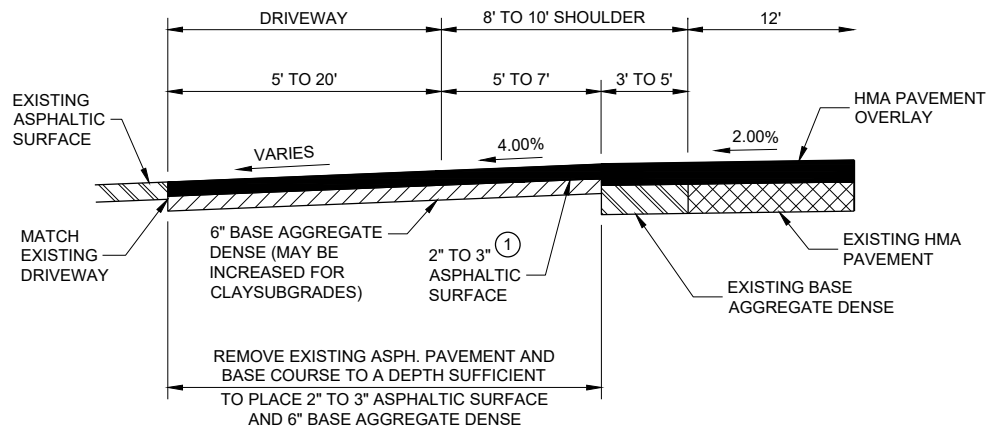


PLAN VIEW
HALF SECTION

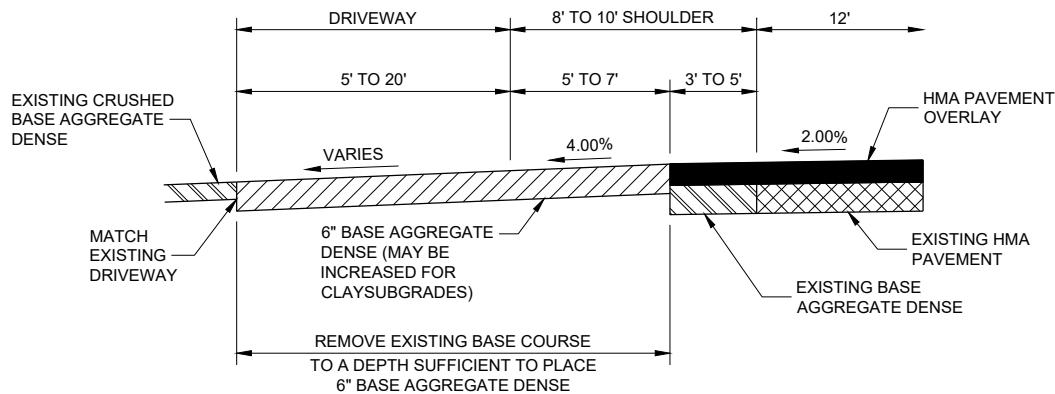
- (A) : PAID FOR AS ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES. (TON)
- (B) : PAID FOR AS BASE AGGREGATE DENSE 1 1/4" (TON)
- (W) : DRIVEWAY WIDTH 16' MIN. - 24' MAX.



PLAN VIEW
HALF SECTION



PROFILE VIEW
RURAL ENTRANCE
WITH ASPHALTIC SURFACE
RESURFACING PROJECTS



PROFILE VIEW
RURAL ENTRANCE
WITH AGGREGATE SURFACE
6" BASE AGGREGATE DENSE
RESURFACING PROJECTS

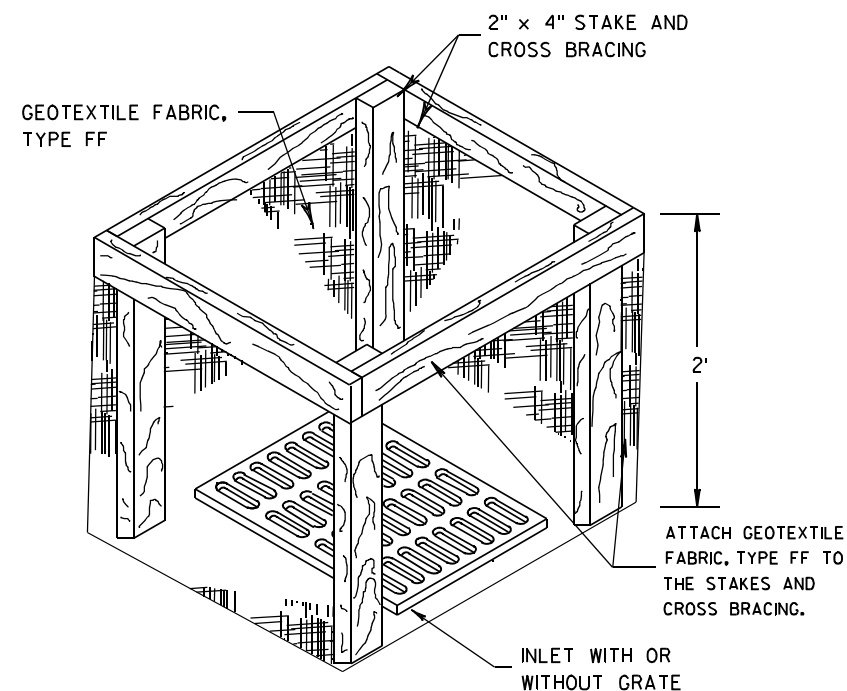
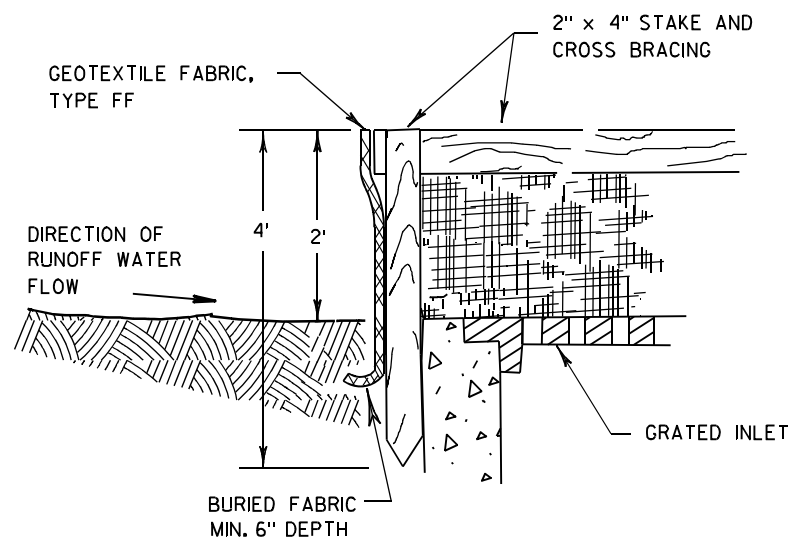
GENERAL NOTES

- ① DESIGN WILL DETERMINE FINAL DRIVEWAY ASPHALTIC THICKNESS BASED ON TYPE OF USAGE AND LOADINGS.

DRIVEWAYS WITHOUT CURB
AND GUTTER RESURFACING
PROJECTS RURAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December 2016 /S/ Rodney Taylor
DATE ROADWAY STANDARDS DEVELOPMENT
ENGINEER
FHWA



INLET PROTECTION, TYPE A

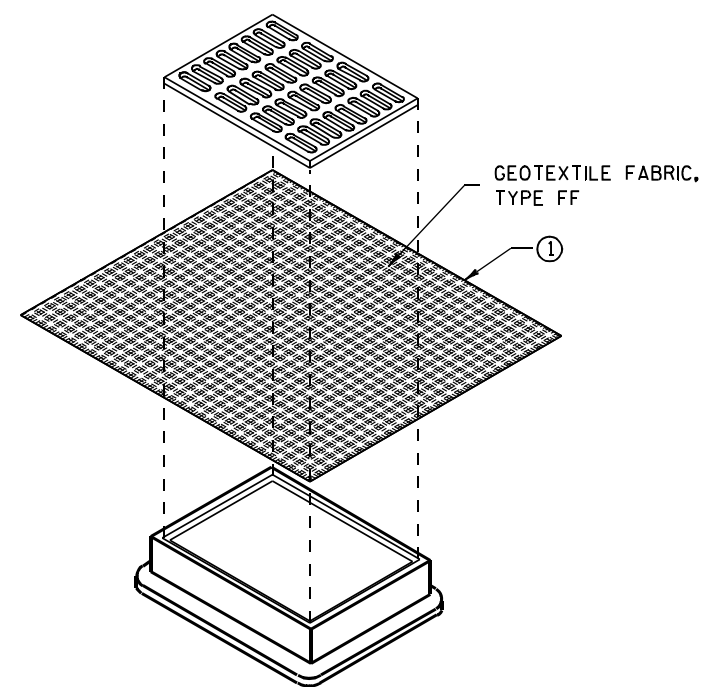
GENERAL NOTES

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.

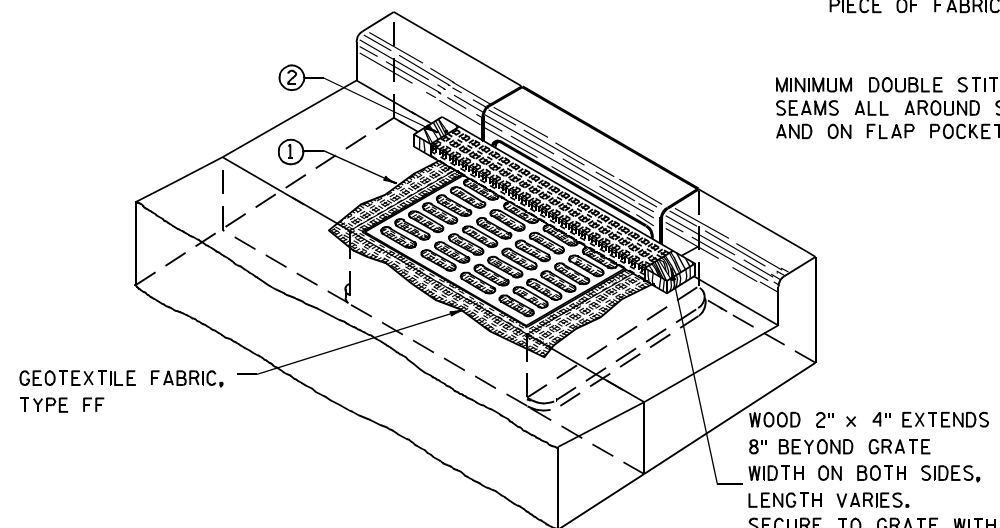
WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

- 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.



**INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)**

(CAN BE INSTALLED IN ANY INLET WITHOUT A CURB BOX)



INLET PROTECTION, TYPE C (WITH CURB BOX)

INSTALLATION NOTES

TYPE B & C

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

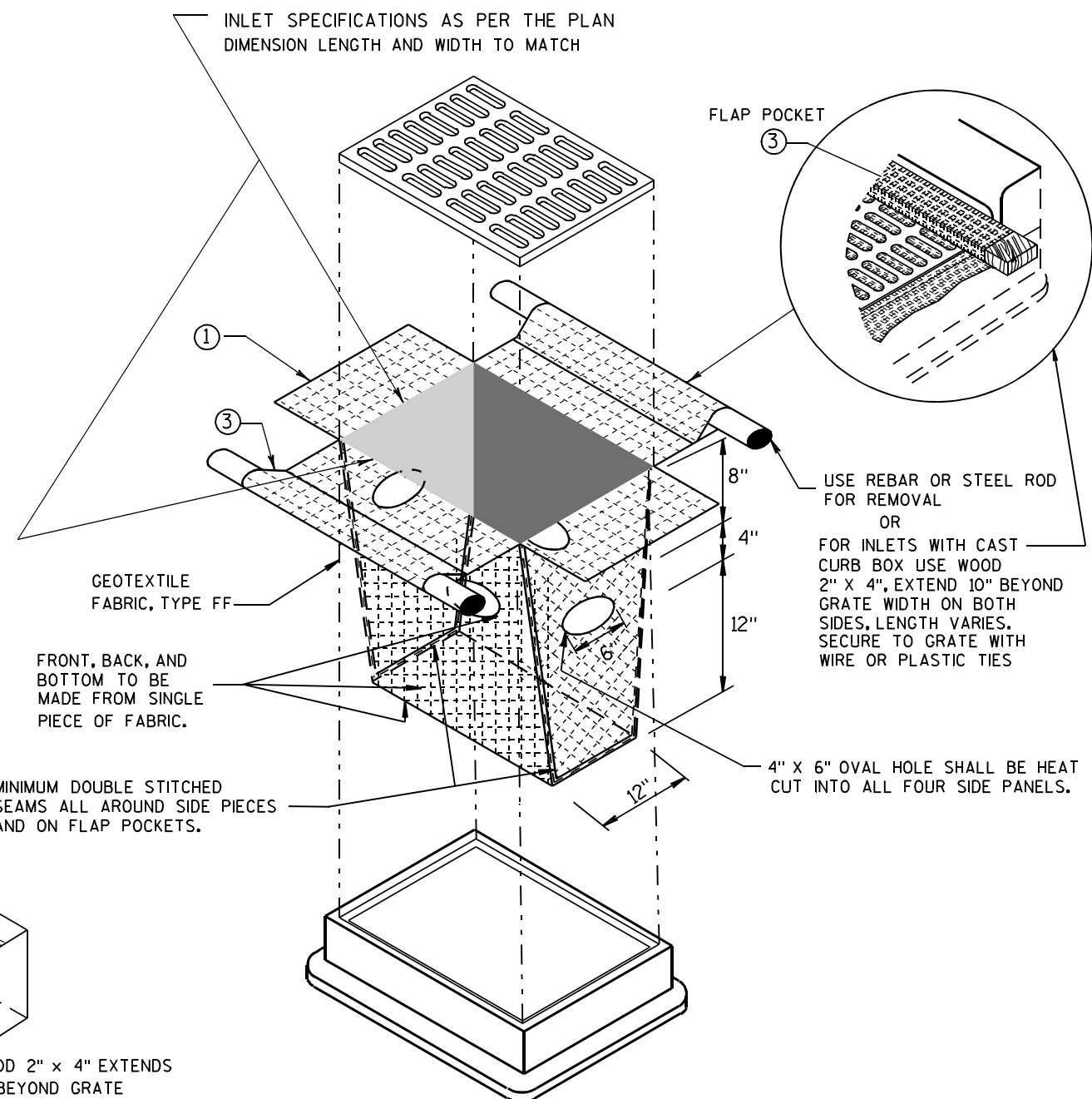
THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

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.



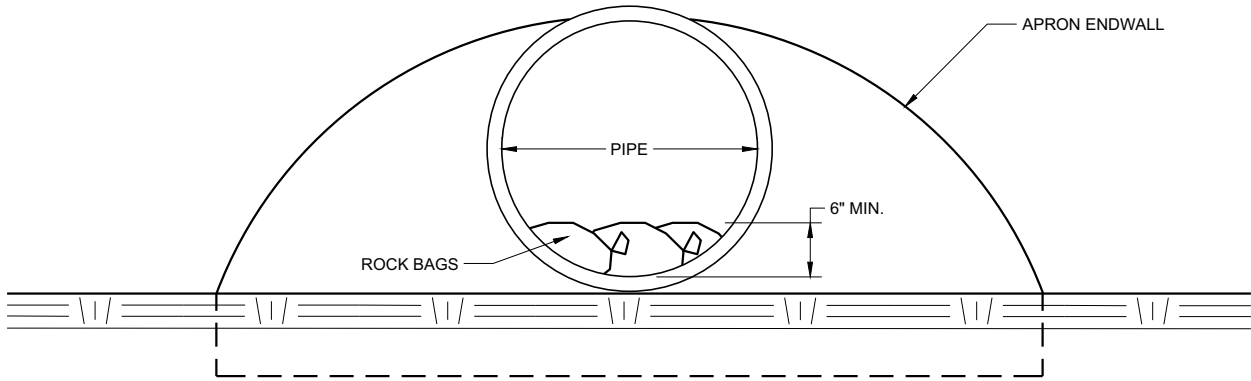
INLET PROTECTION, TYPE D

(CAN BE INSTALLED IN ANY INLET TYPE WITH OR WITHOUT A CURB BOX AS PER NOTE ②)

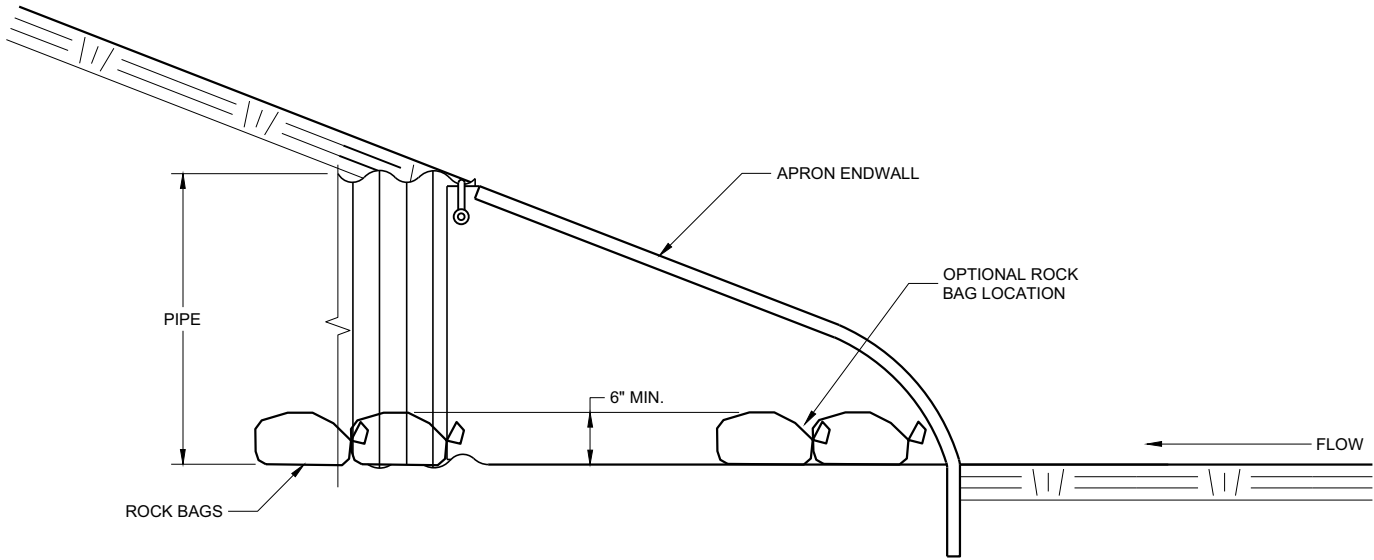
**INLET PROTECTION
TYPE A, B, C, AND D**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/16/02 /S/ Beth Cannestra
DATE
FHWA CHIEF ROADWAY DEVELOPMENT ENGINEER



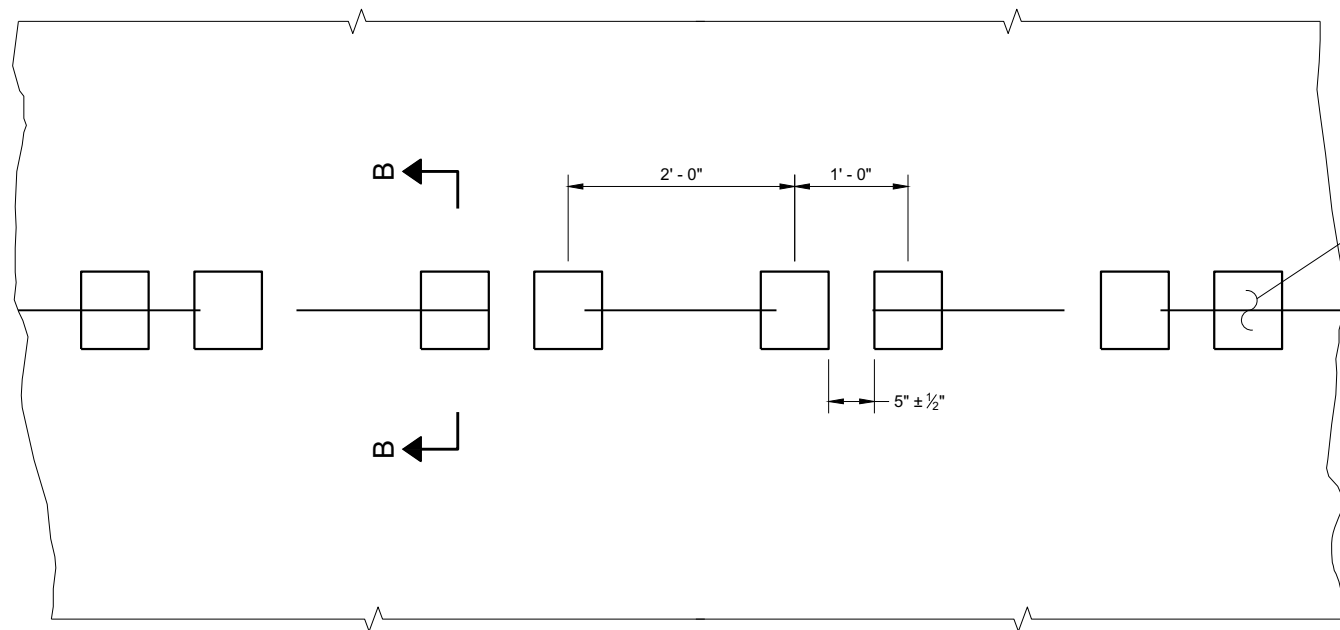
END VIEW



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 ENGINEER
FHWA	

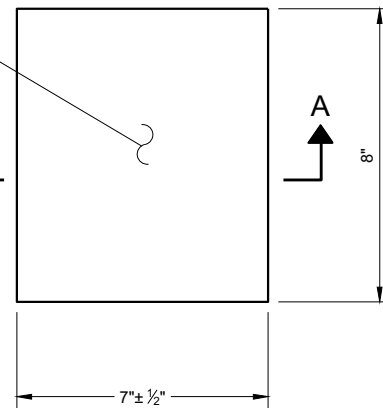


PLAN VIEW
SHOULDER WITH GROOVES

6

6

PLACEMENT DETAIL FOR TYPE 1 MILLED RUMBLE STRIP



PLAN VIEW
(SINGLE GROOVE)

GENERAL NOTES

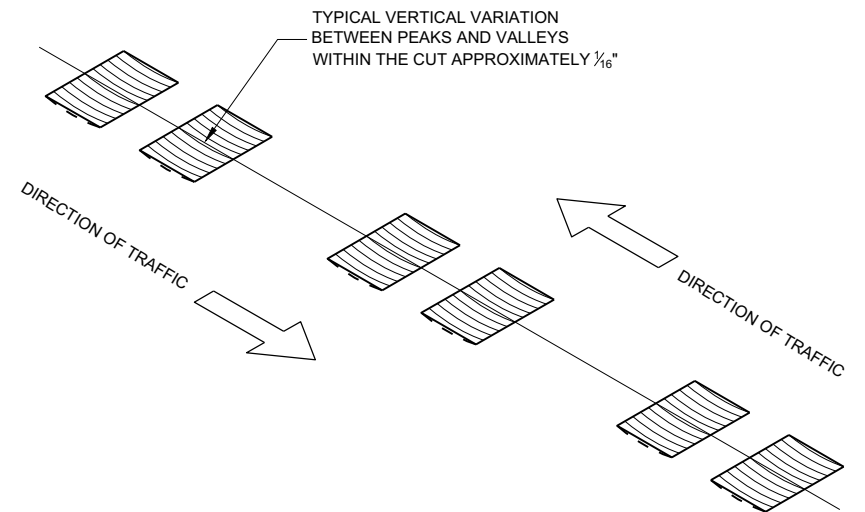
DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

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

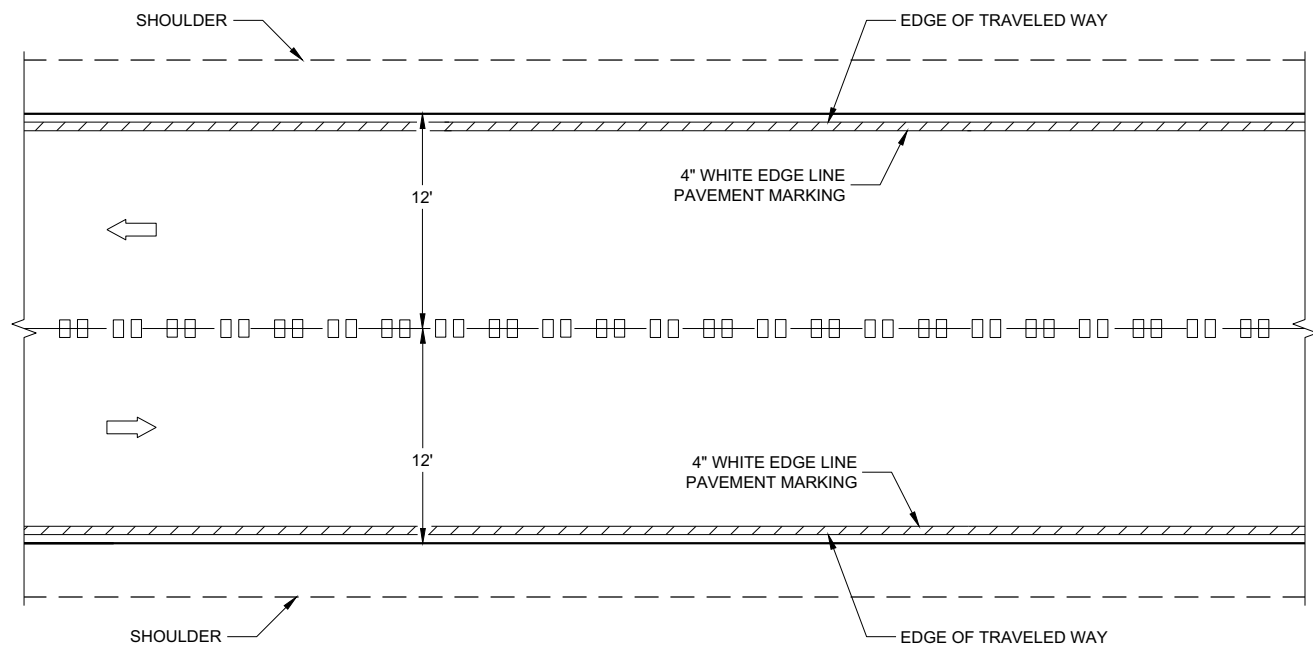
INSTALL PAVEMENT MARKING AFTER THE GROOVES ARE INSTALLED.

SEE SIGNING PLAN FOR SIGN REQUIREMENTS THAT MAY BE NEEDED.

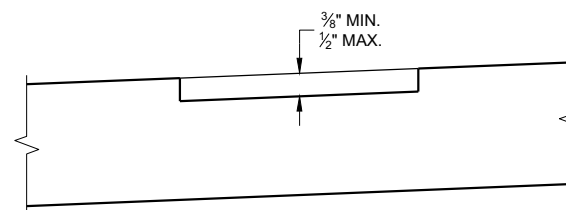
- ① CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS. WHEN DIRECTED BY THE ENGINEER.



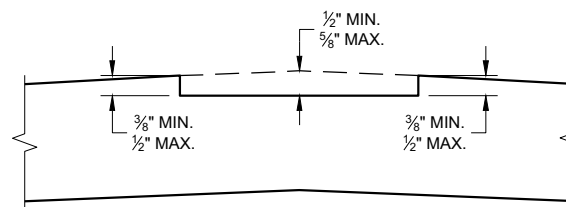
ISOMETRIC



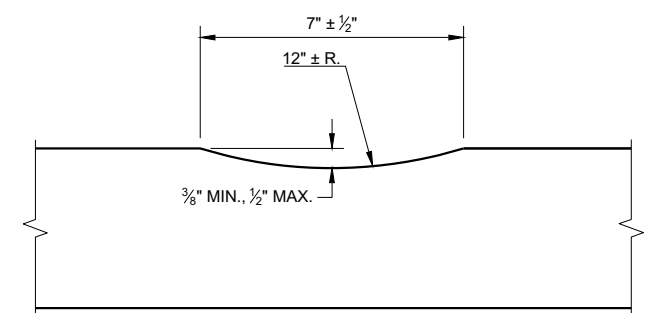
CENTERLINE GROOVES ON TWO-WAY ROADWAYS



SECTION B - B
SUPERELEVATED ROADWAY



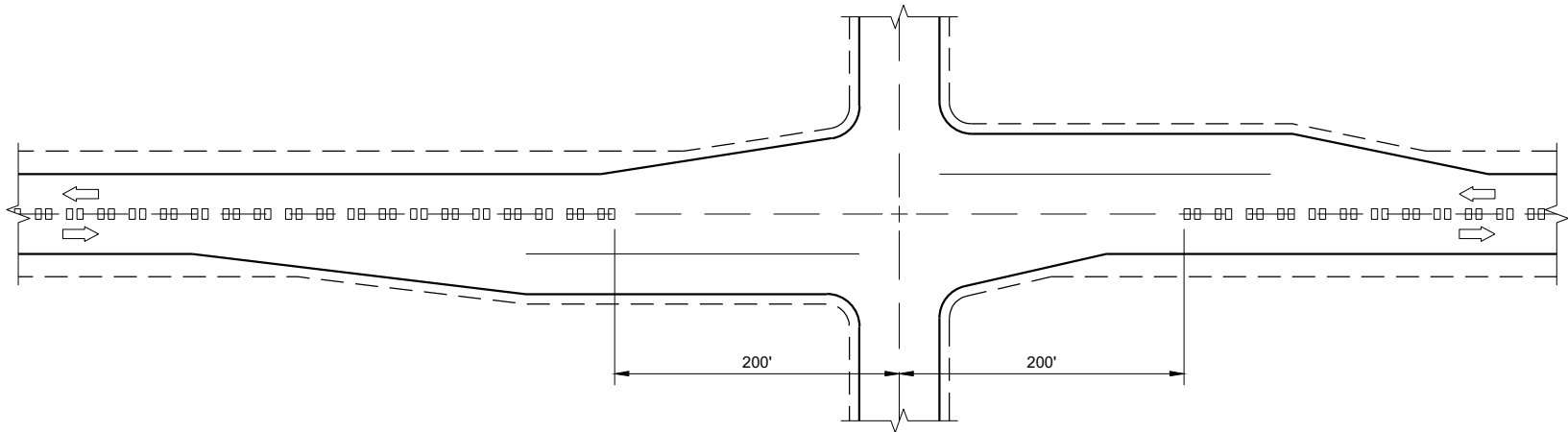
SECTION B - B
CROWNED ROADWAY



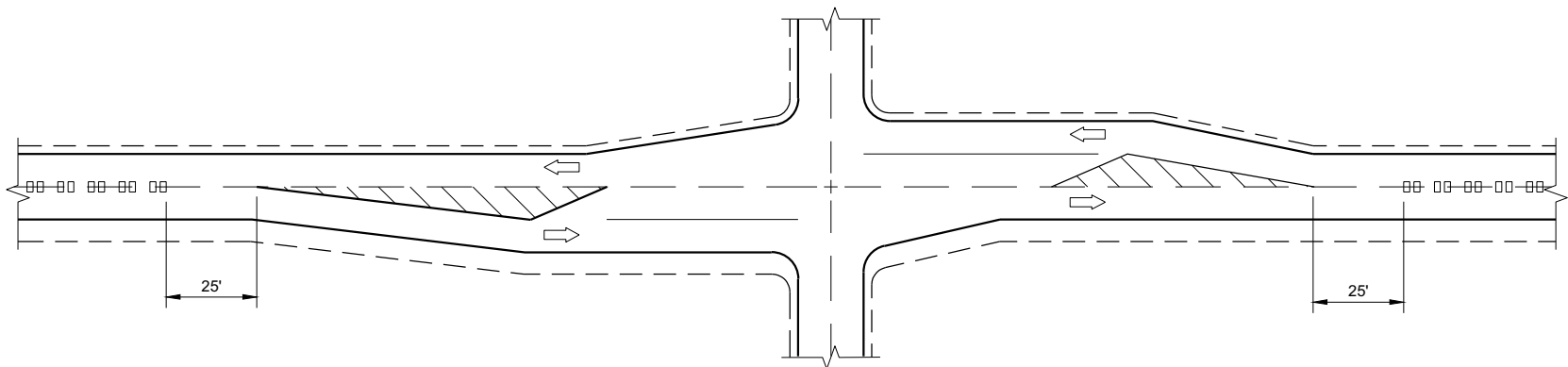
SECTION A - A

2-LANE RURAL
CENTER LINE RUMBLE STRIP,
MILLING

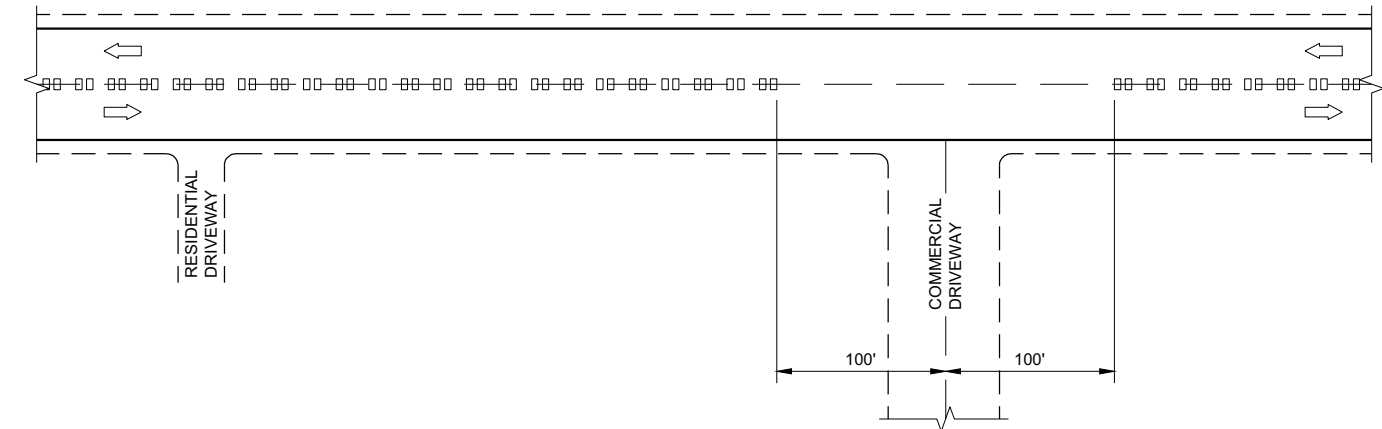
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



CENTERLINE GROOVES AT INTERSECTIONS



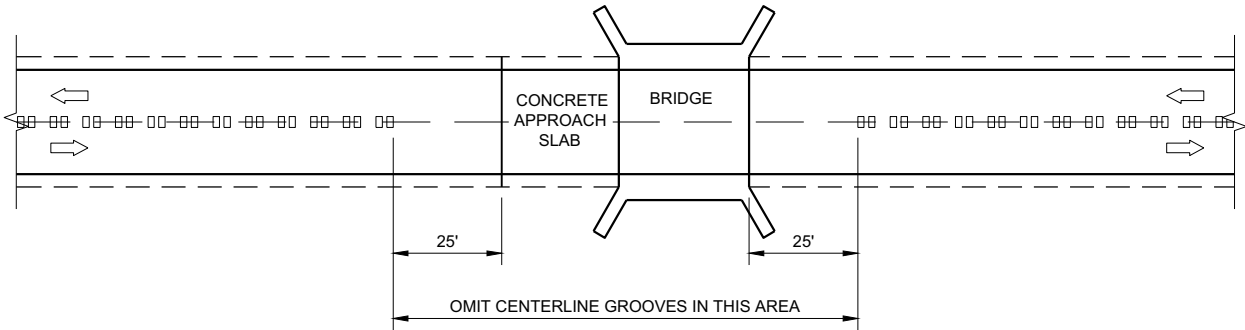
CENTERLINE GROOVES AT INTERSECTIONS
(WITH LEFT TURN LANES)



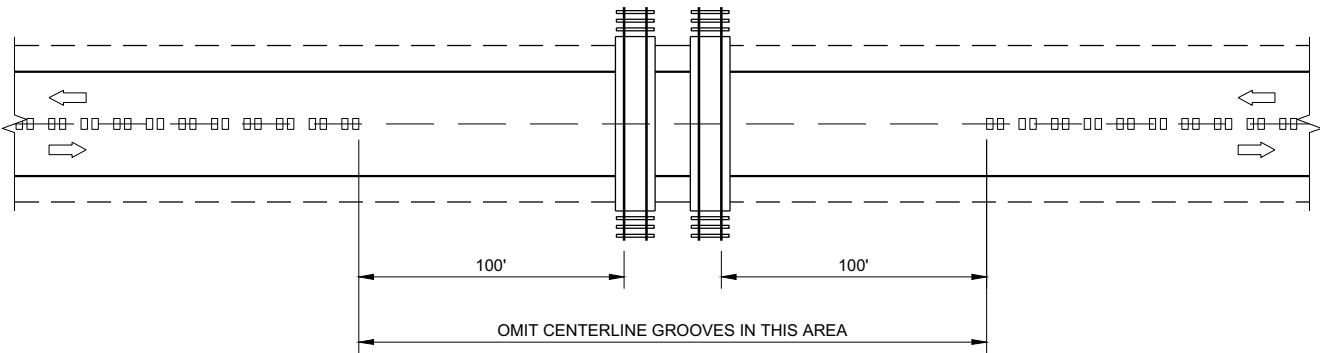
CENTERLINE GROOVES AT DRIVEWAYS^①

GENERAL NOTES

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



CENTERLINE GROOVES AT BRIDGES



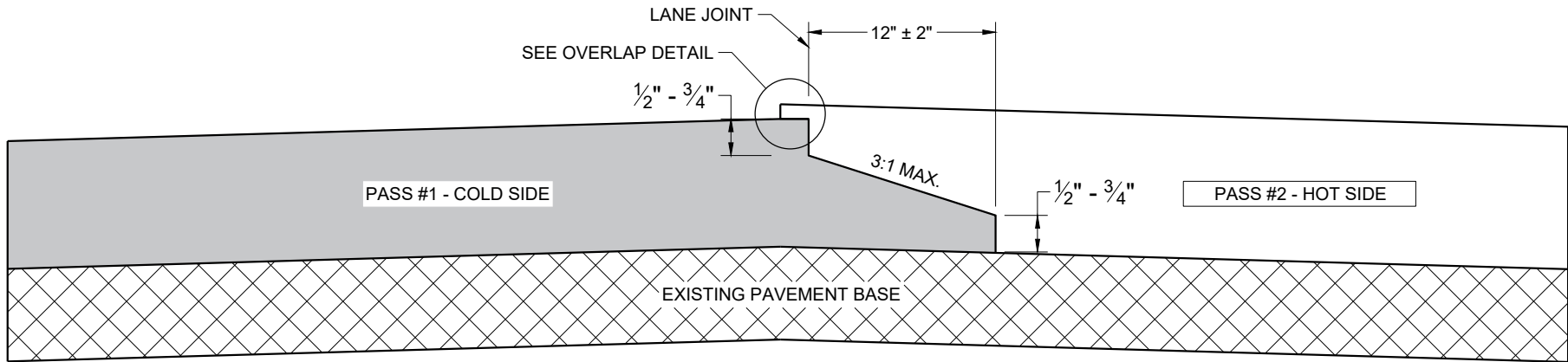
CENTERLINE GROOVES AT RAILROADS

2-LANE RURAL
CENTERLINE RUMBLE STRIP,
MILLING

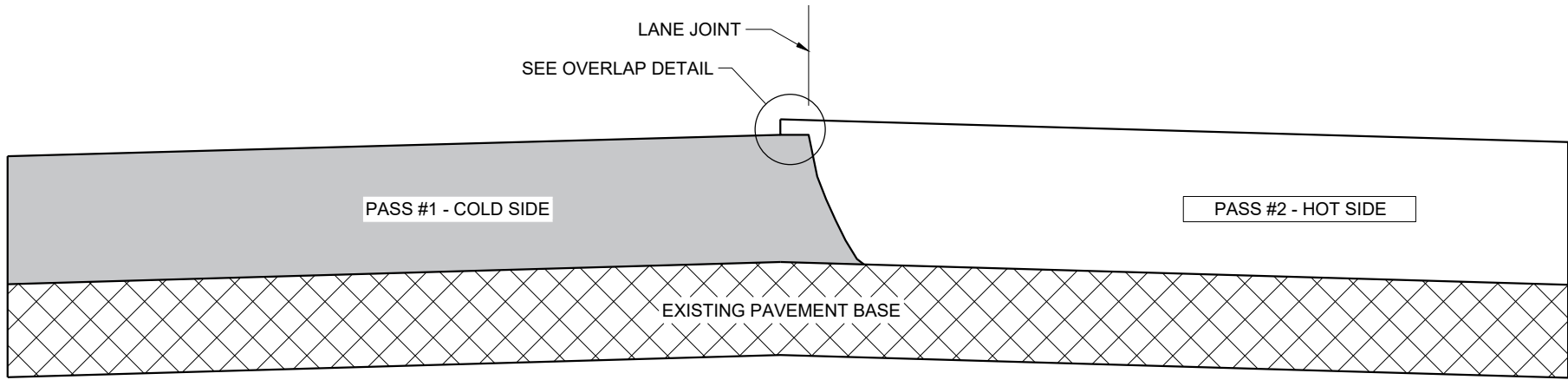
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

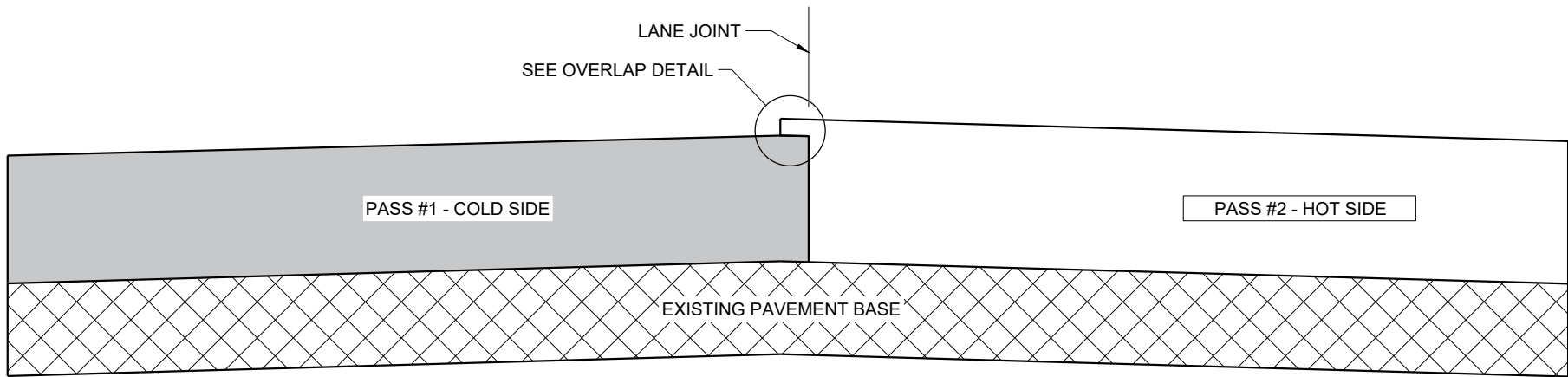
FHWA



TYPICAL PAVEMENT CROSS SECTION
NOTCHED WEDGE JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT (MILLED)

GENERAL NOTES

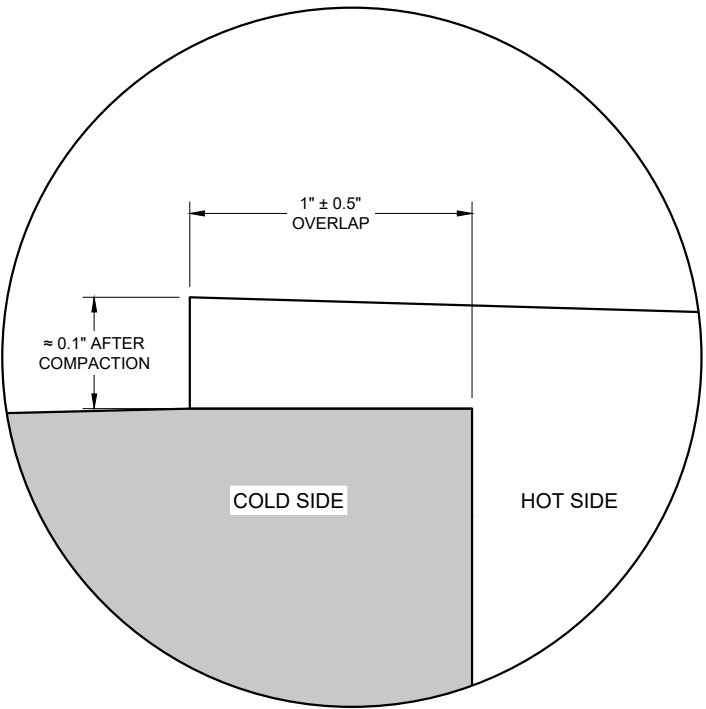
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

FOR ALL LONGITUDINAL JOINTS, ENSURE THE PAVER SCREED OVERLAPS THE PREVIOUSLY PLACED PAVEMENT BY $1" \pm 0.5"$ 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

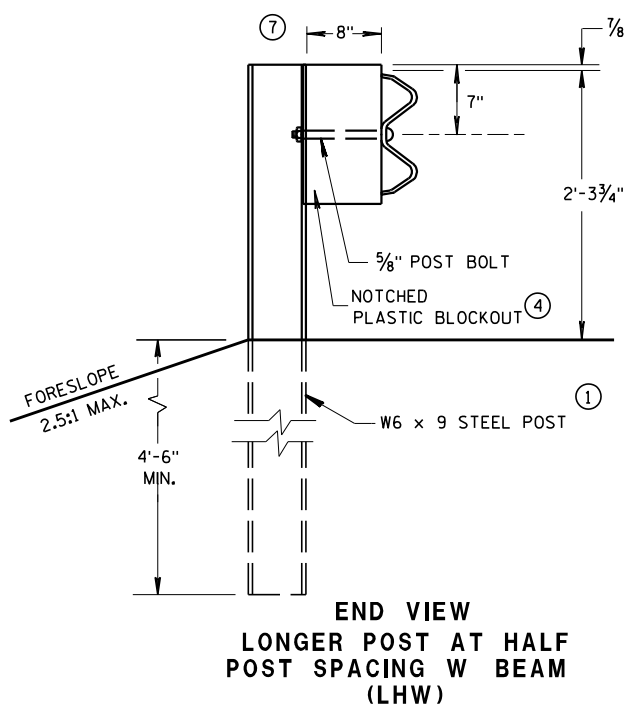
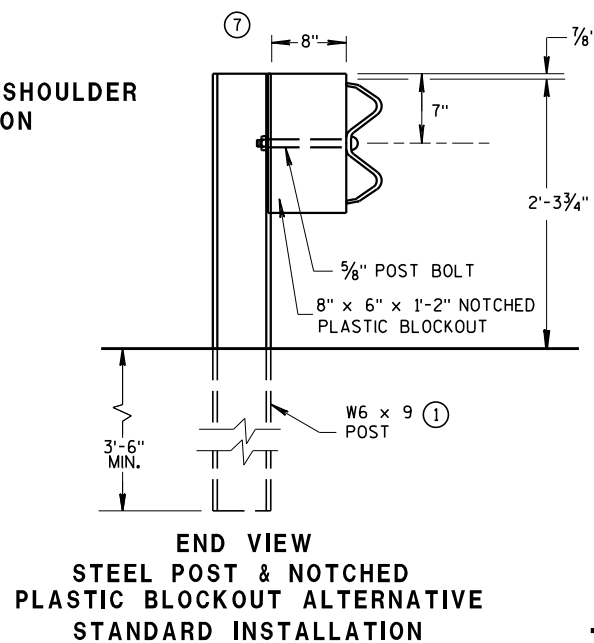
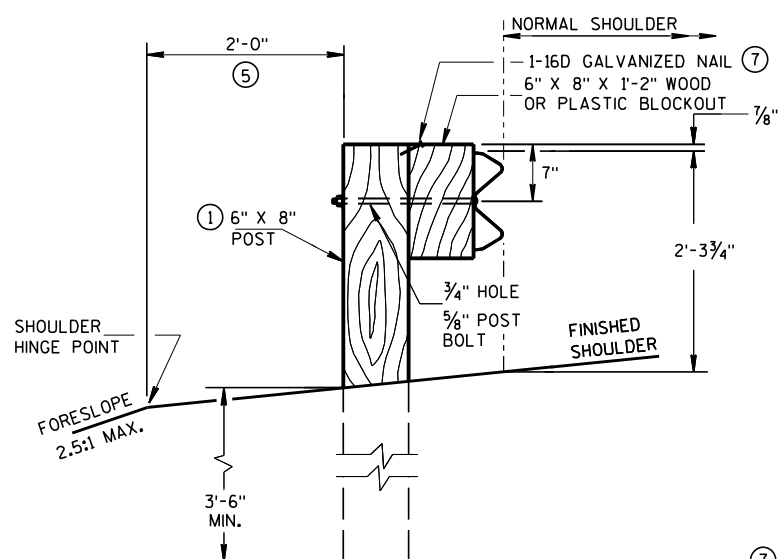
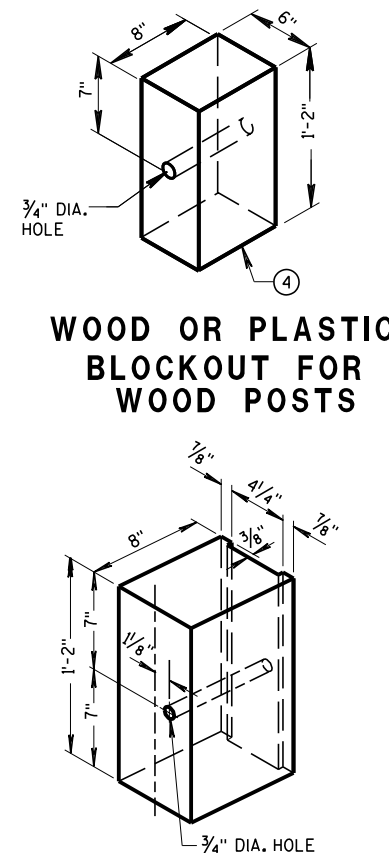
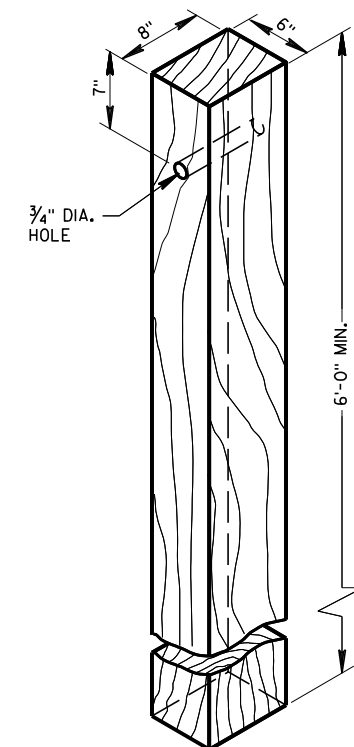
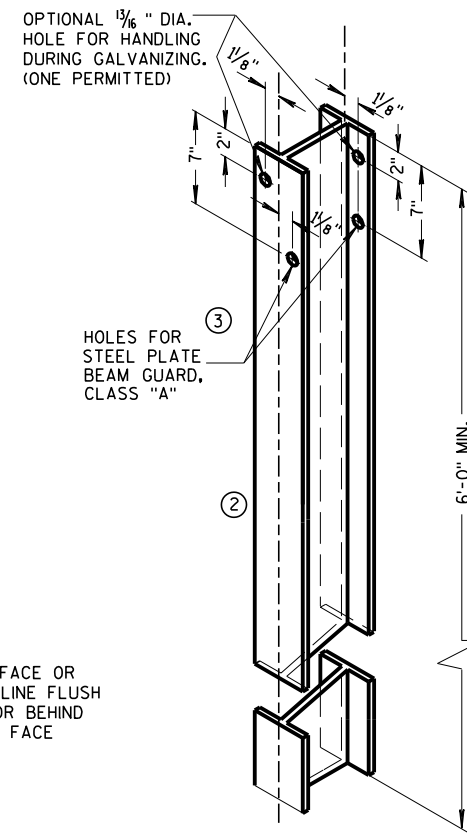
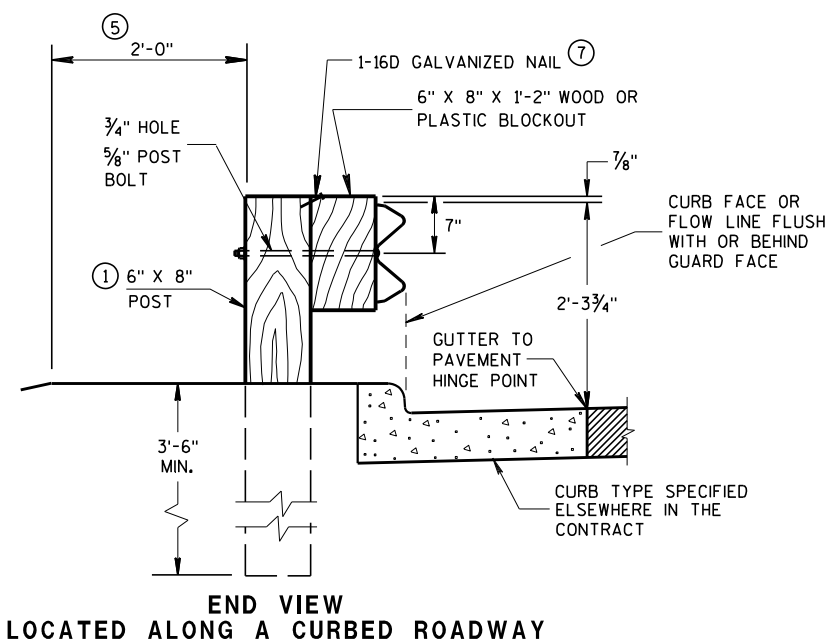
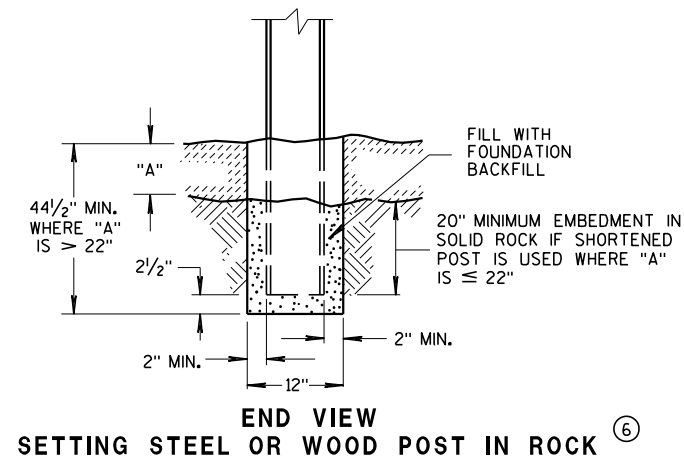
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2020 /S/ Steven Hefel
DATE HMA PAVEMENT ENGINEER
FHWA

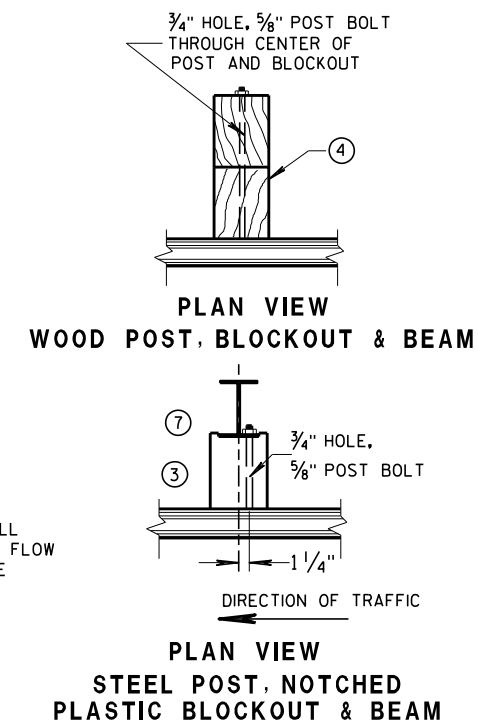
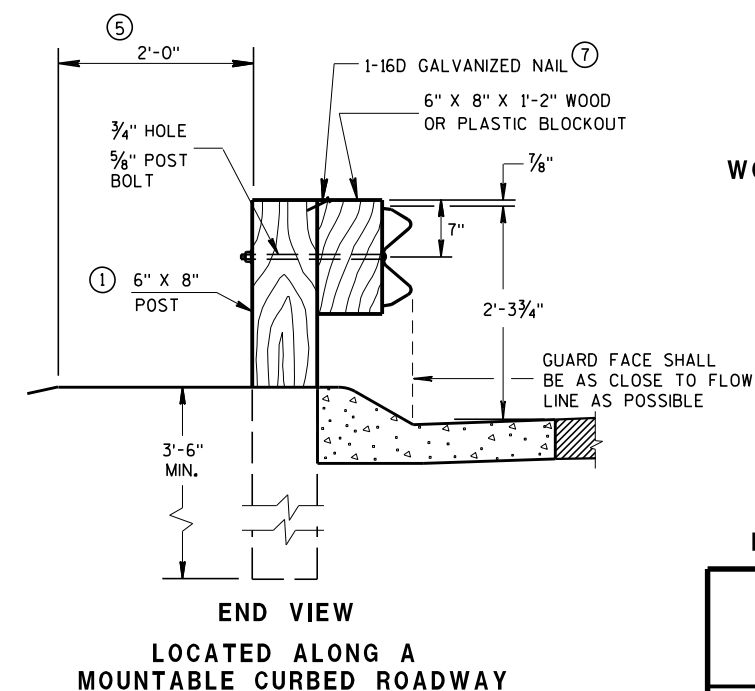
GENERAL NOTES

- W6 X 9 OR W6 X 8.5 STEEL POSTS AND NOTCHED PLASTIC BLOCKOUTS ARE ACCEPTABLE ALTERNATIVES FOR 6" X 8" WOOD POSTS WITH WOOD OR PLASTIC BLOCKOUTS. USE APPROVED NOTCHED PLASTIC BLOCKOUTS WITH STEEL POSTS. APPROVED PLASTIC BLOCKOUT DESIGNS MAY VARY FROM THIS TYPICAL DETAIL WHEN USED IN CONJUNCTION WITH STEEL POSTS. DO NOT MIX STEEL POSTS AND WOOD POSTS IN A SINGLE INSTALLATION.
- USE STRUCTURAL STEEL POSTS CONFORMING TO ASTM A 36. GALVANIZED POSTS ACCORDING TO AASHTO M 111. EITHER SET THE POSTS IN DRILLED HOLES OR DRIVE TO GRADE. REMOVE MUSHROOMING CAUSED BY DRIVING AND REPAIR DAMAGED SPELTER COATING ON GALVANIZED POSTS.
- INSTALL STEEL POSTS WITH HOLES ON APPROACHING TRAFFIC SIDE.
- USE EITHER WOOD OR APPROVED PLASTIC BLOCKOUTS ON WOOD POSTS.
- IF THE DISTANCE FROM BACK OF POST TO SHOULDER HINGE POINT IS LESS THAN 2 FEET INSTALL LONGER POST AT HALF POST SPACING, W BEAM (LHW).
- IF ROCK IS ENCOUNTERED DURING EXCAVATION, THE ENGINEER MAY APPROVE USING A 12 INCH DIAMETER POST HOLE EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE APPROXIMATELY 2 1/2 INCHES DEEP. CUT THE POSTS TO LENGTH AND PLACE IN THE HOLE. BACKFILL WITH MATERIAL EXCAVATED FROM THE HOLE AND COMPACT ADEQUATELY.
- 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.

INSTALL BEAM GUARD SECTIONS AND ALL NECESSARY HARDWARE ACCORDING TO THE APPLICABLE PLAN AND CURRENT STANDARD AND SUPPLEMENTAL SPECIFICATIONS. ALL DIMENSIONS ARE SUBJECT TO MANUFACTURER'S TOLERANCES EXCEPT WHERE ALLOWABLE TOLERANCES ARE SHOWN.

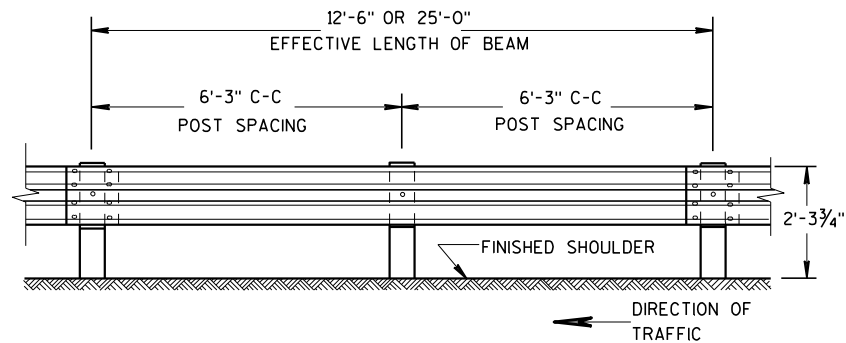


TYPICAL INSTALLATION OF STEEL PLATE BEAM GUARD



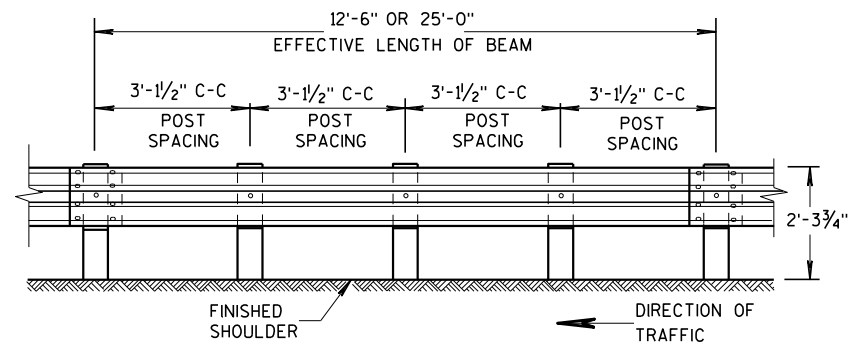
**STEEL PLATE BEAM GUARD,
CLASS "A"
INSTALLATION & ELEMENTS**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



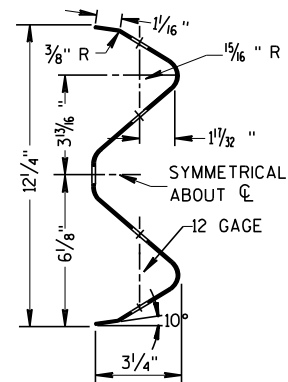
FRONT VIEW

POST SPACING STANDARD INSTALLATION

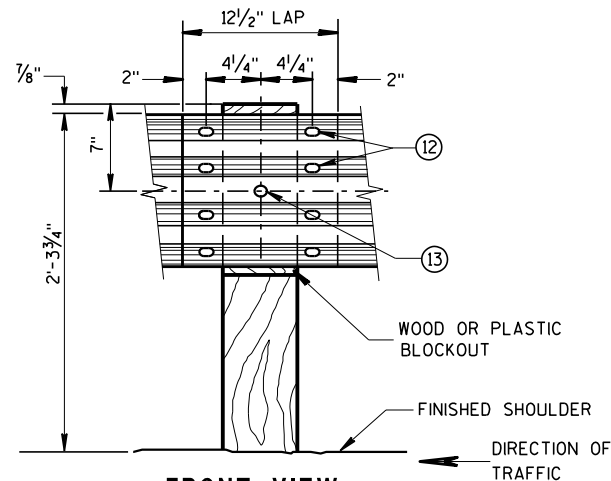


FRONT VIEW

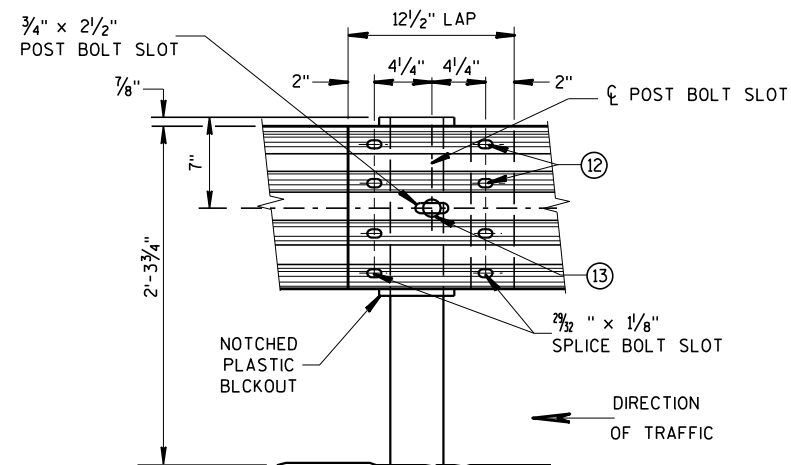
POST SPACING FOR LONGER POST
AT HALF POST SPACING W BEAM (LHW)



SECTION THRU W BEAM



FRONT VIEW
BEAM SPLICE AT WOOD POST
AND POST MOUNTING DETAIL

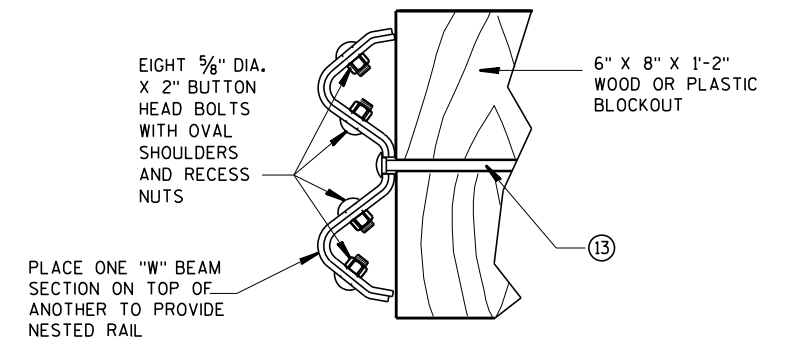


FRONT VIEW
BEAM SPLICE AT STEEL POST
TYPICAL SPlicing DETAILS
OF STEEL PLATE BEAM GUARD

GENERAL NOTES

FURNISH GUARDRAIL DEFLECTORS FROM APPROVED PRODUCTS LIST.

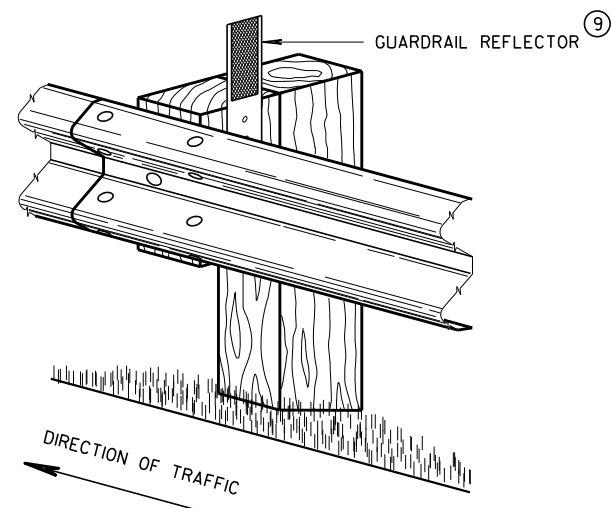
- ⑨ DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINA. START REFLECTORS AT POST #9 AND SPACE EVENLY EVERY 100 FEET (MAX.) TO THE END OF GUARDRAIL RUN, USING A MINIMUM OF 3 REFLECTORS.
- ⑫ 8 - 5/8" ϕ X 2" BUTTON HEAD BOLTS WITH OVAL SHOULDERS & RECESS NUTS.
- ⑬ 5/8" DIA. BUTTON HEAD BOLT AND RECESS NUT WITH 5/8" DIA. F844 FLAT WASHER UNDER NUT.



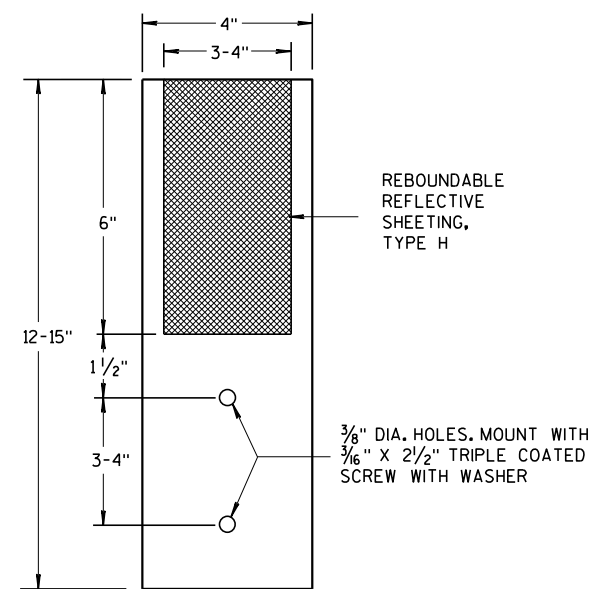
NESTED W BEAM (NW)

USE ALL OTHER STANDARD BEAM GUARD DETAILS FOR
CONSTRUCTING NESTED W BEAM (NW)

* USE DOUBLE SIDED WHITE GUADRAIL REFLECTORS ON ROADWAYS WITH BI-DIRECTIONAL TRAFFIC (NO MEDIAN). USE SINGLE SIDED WHITE (RIGHT SIDE) AND SINGLE SIDED YELLOW (LEFT SIDE) ON ROADWAYS WITH MEDIAN SEPARATION.



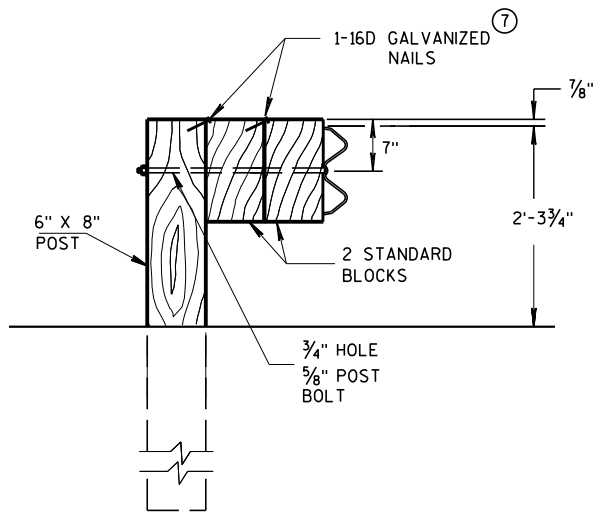
4" X 12" GUARDRAIL REFLECTOR DETAIL
AND TYPICAL INSTALLATION *



4"x 12" GUARDRAIL REFLECTOR

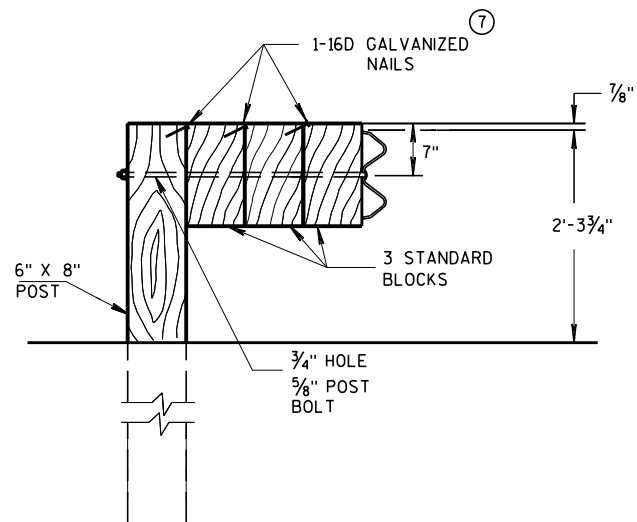
STEEL PLATE BEAM GUARD,
CLASS "A",
INSTALLATION & ELEMENTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



DETAIL FOR DOUBLE BLOCKS

THE NUMBER OF DOUBLE BLOCK POSTS
WITHIN A BARRIER RUN IS UNLIMITED

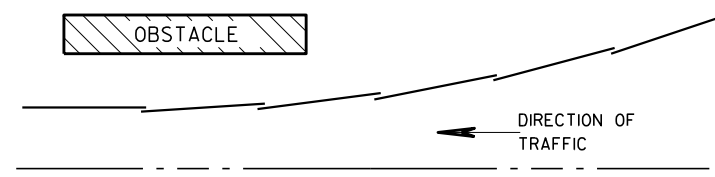


DETAIL FOR TRIPLE BLOCKS

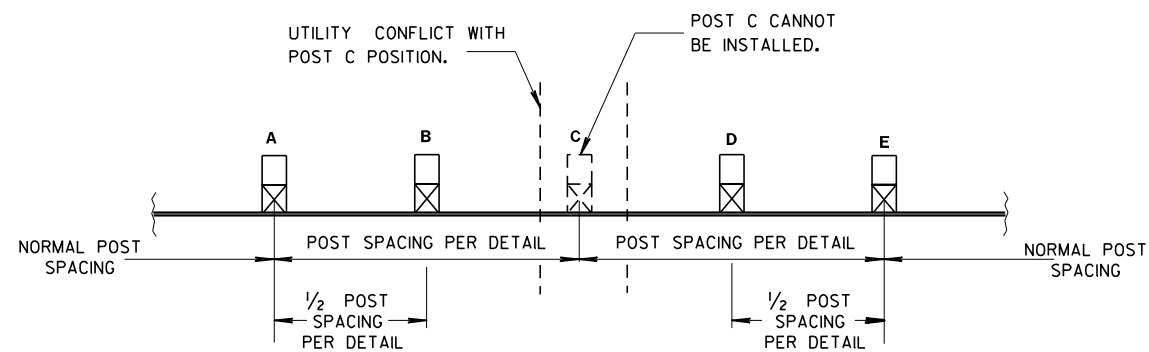
TRIPLE BLOCK DETAIL IS LIMITED TO ONE
LOCATION WITHIN A BEAM GUARD RUN.

NOTES: USE DOUBLE OR TRIPLE BLOCKS WHEN UNDERGROUND OBSTACLES
PREVENT THE POST FROM BEING INSTALLED.

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



PLAN VIEW BEAM LAPPING DETAIL



POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION

STEEL PLATE BEAM GUARD, CLASS "A", INSTALLATION & ELEMENTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

June 2017

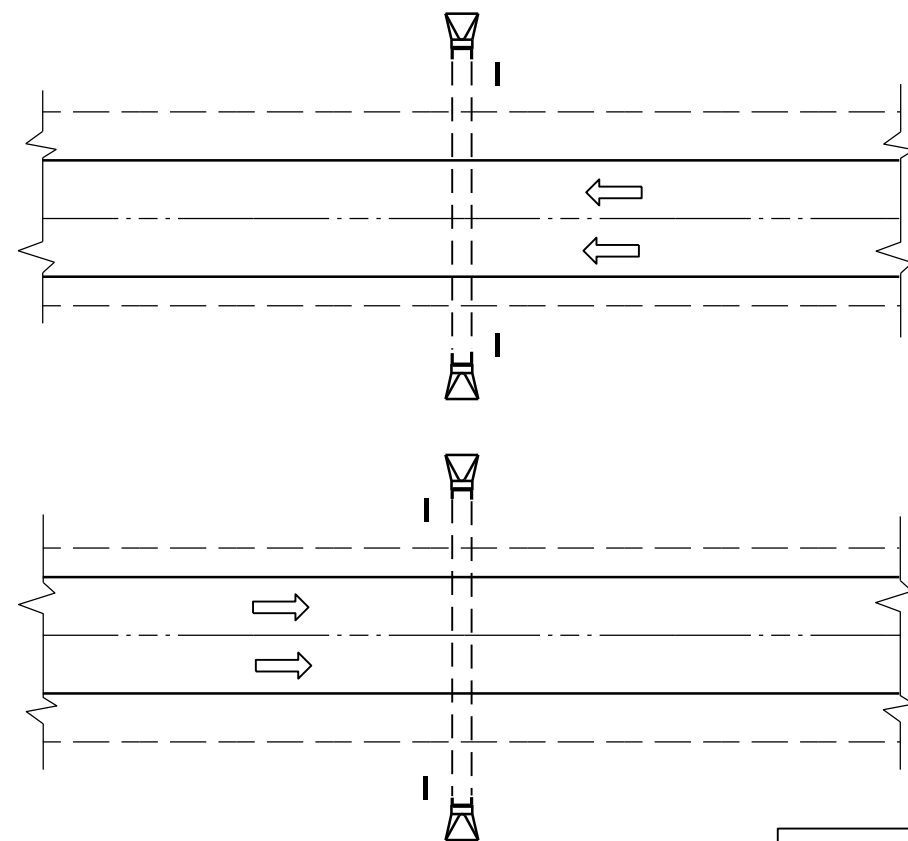
DATE

FHWA

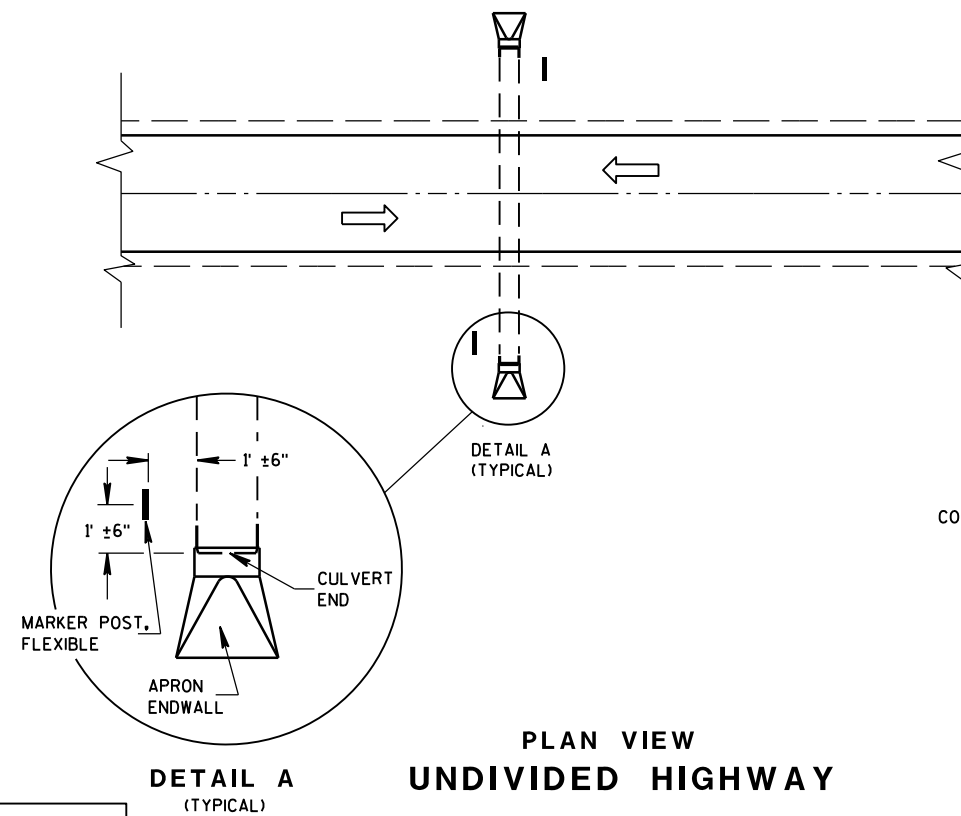
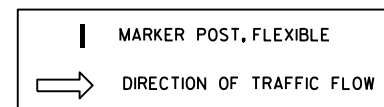
/S/ Rodney Taylor

ROADWAY STANDARDS DEVELOPMENT

UNIT SUPERVISOR



PLAN VIEW
DIVIDED HIGHWAY

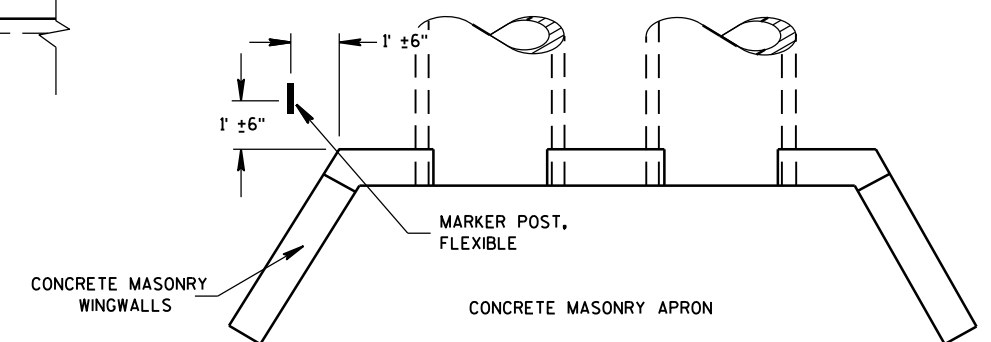


PLAN VIEW
UNDIVIDED HIGHWAY

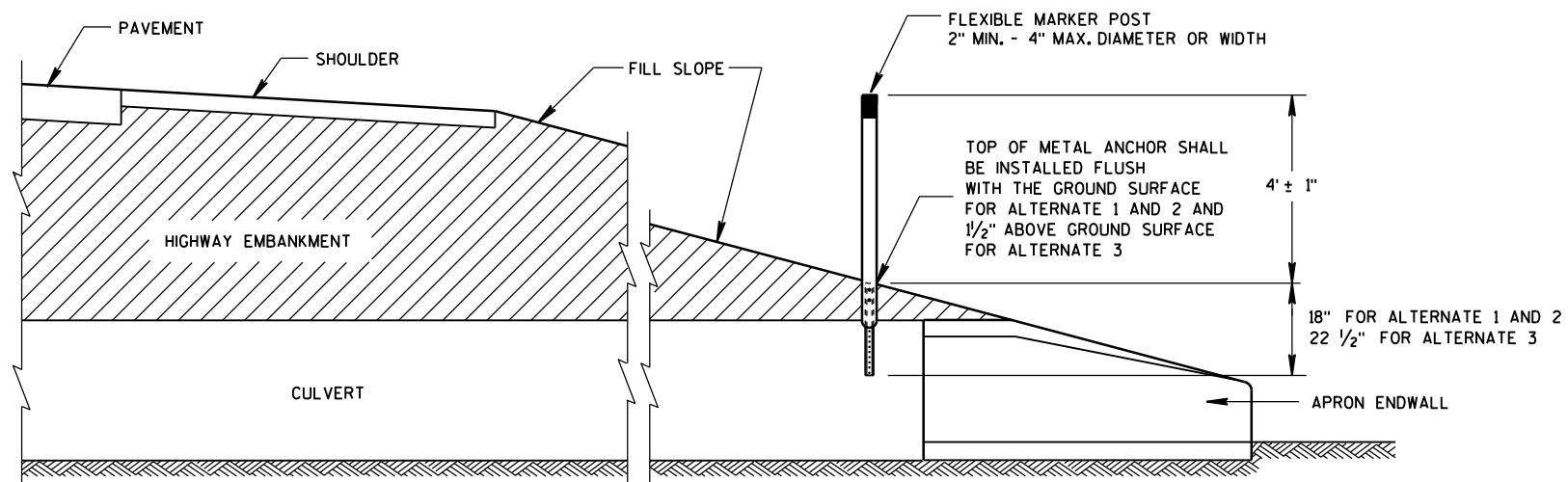
FLEXIBLE MARKER POST LOCATION

GENERAL NOTES

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



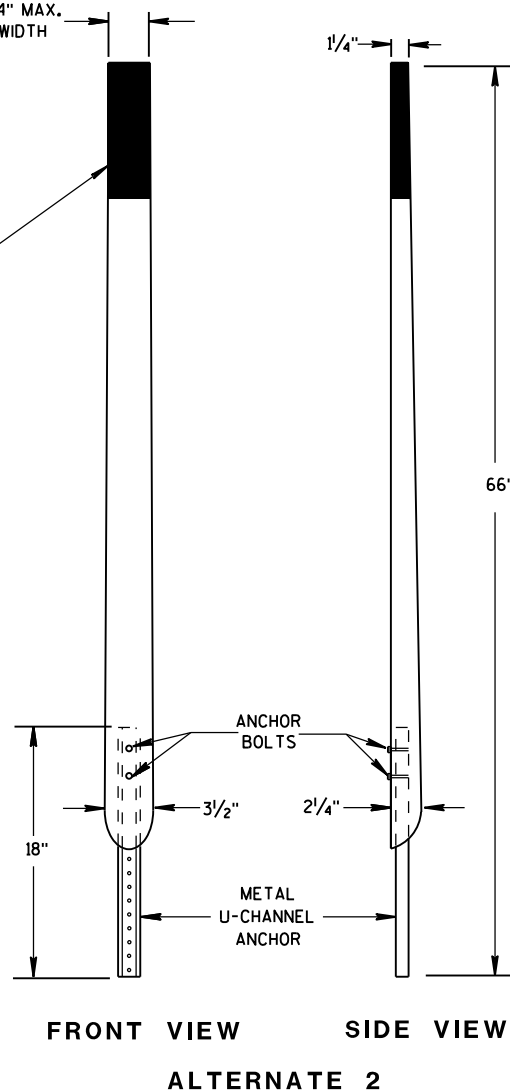
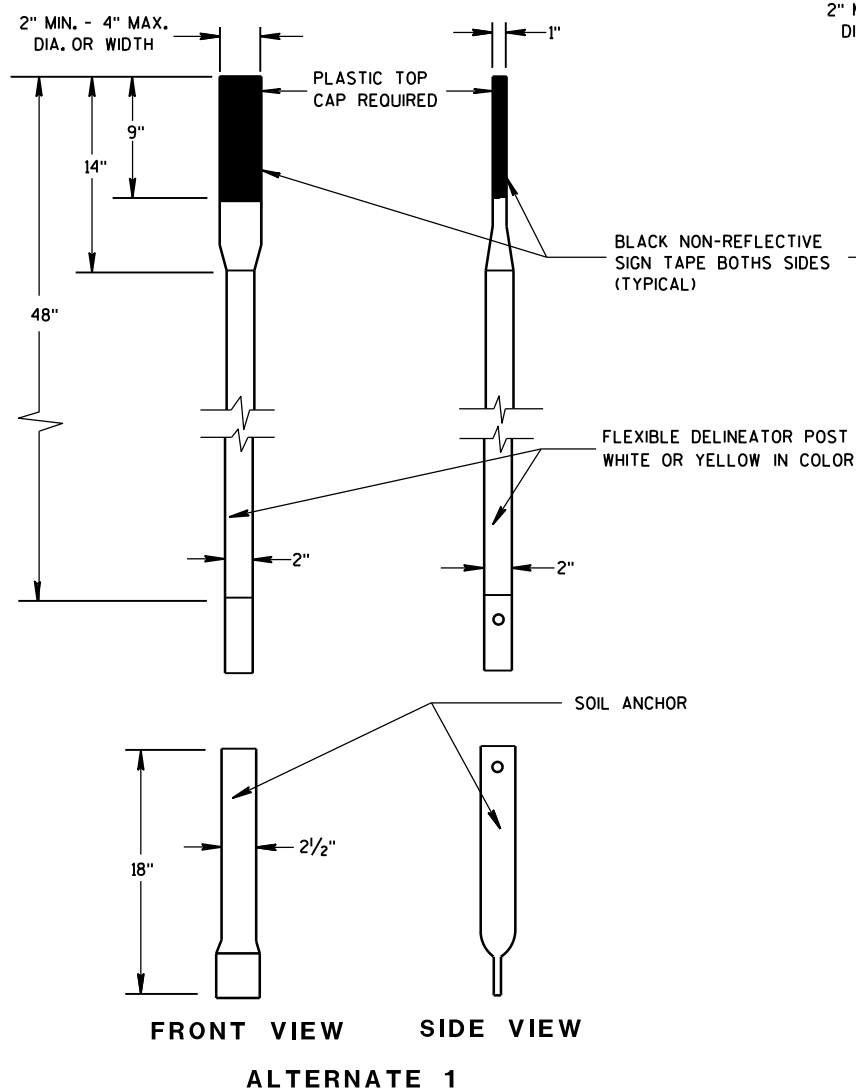
PLAN VIEW
CONCRETE MASONRY ENDWALLS FOR
CULVERT PIPE AND PIPE ARCH



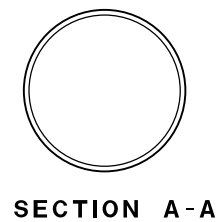
CROSS SECTION
FLEXIBLE MARKER POST

FLEXIBLE MARKER POST
FOR CULVERT END

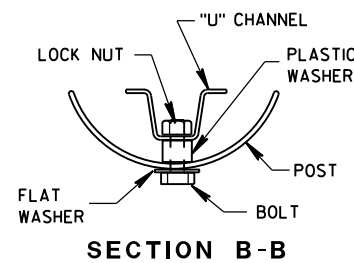
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



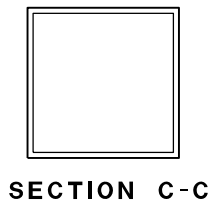
FLEXIBLE MARKER POSTS



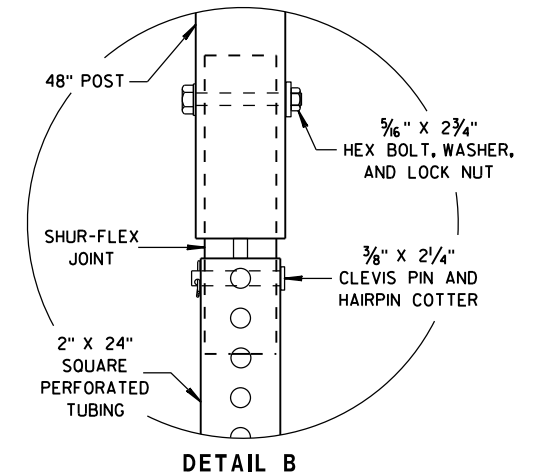
SECTION A-A



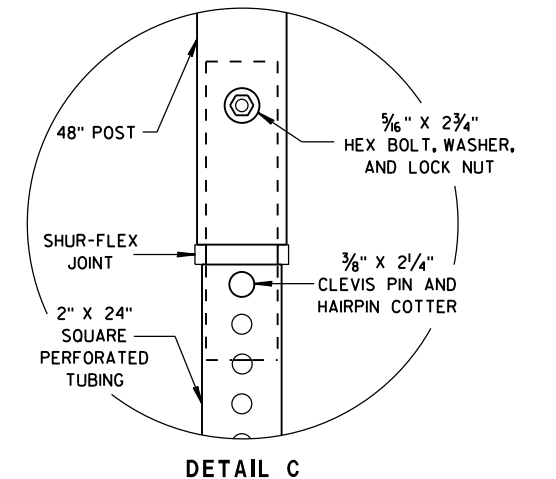
SECTION B-B



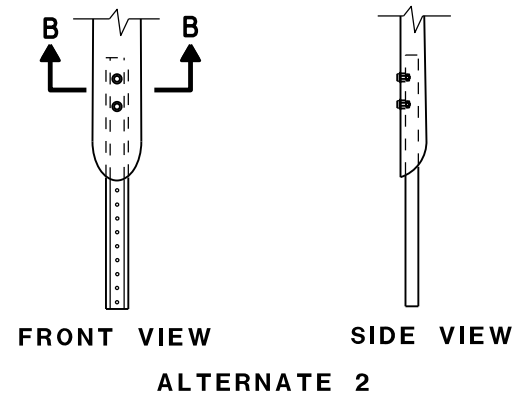
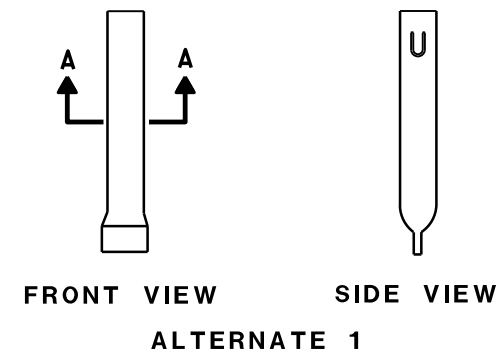
SECTION C-C



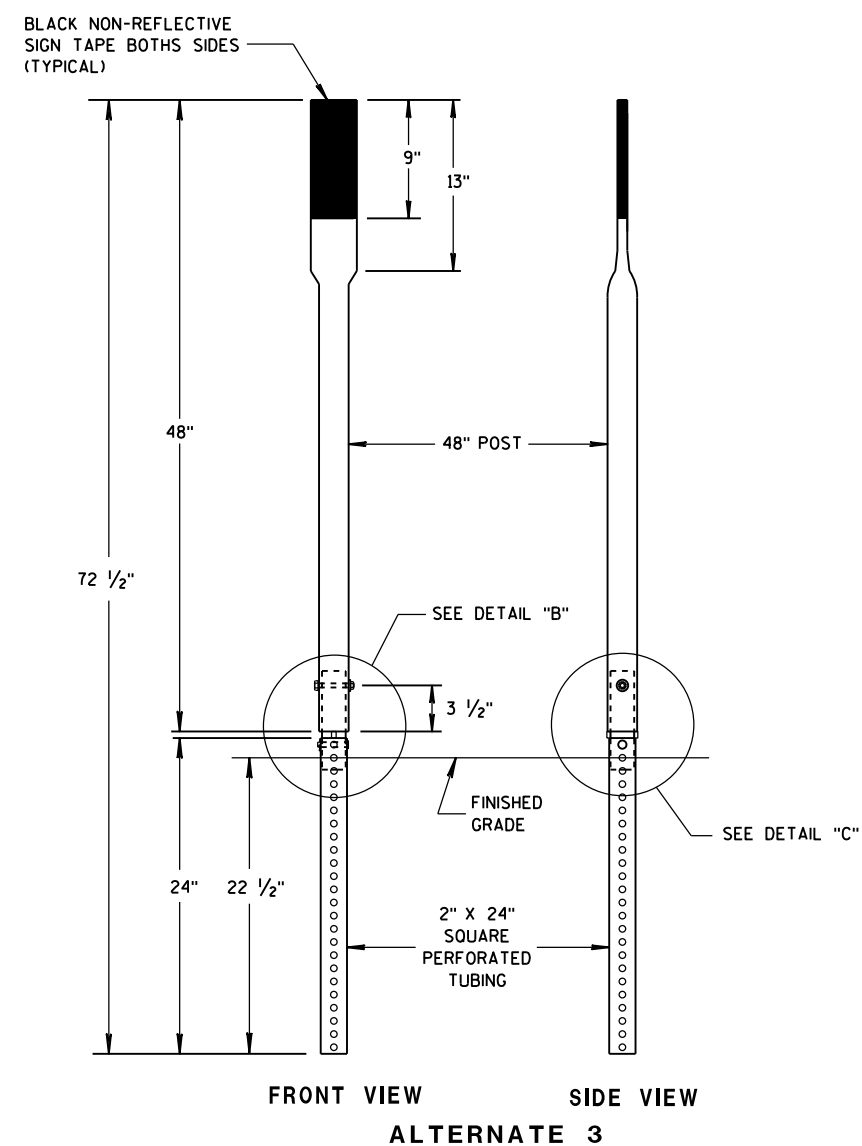
DETAIL B



DETAIL C

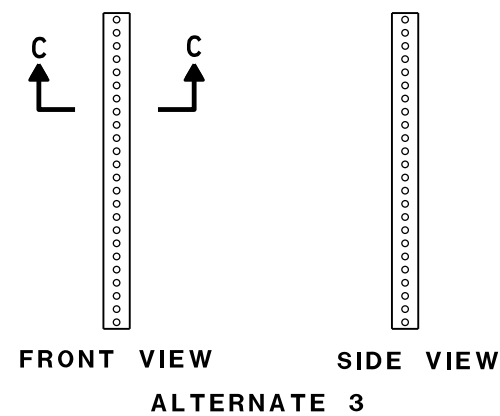


FLEXIBLE MARKER POST ANCHORS



FRONT VIEW SIDE VIEW

ALTERNATE 3



FRONT VIEW SIDE VIEW

ALTERNATE 3

FLEXIBLE MARKER POST FOR CULVERT END	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 10/1/2012 DATE	/S/ Travis Feltes STATE TRAFFIC ENGINEER OF DESIGN
FHWA	

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.

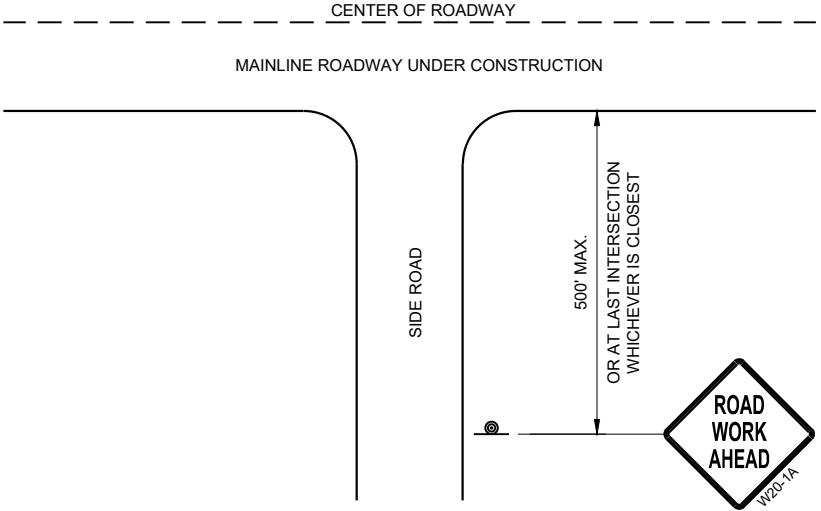
SIGNS THAT WILL BE IN PLACE LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

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.

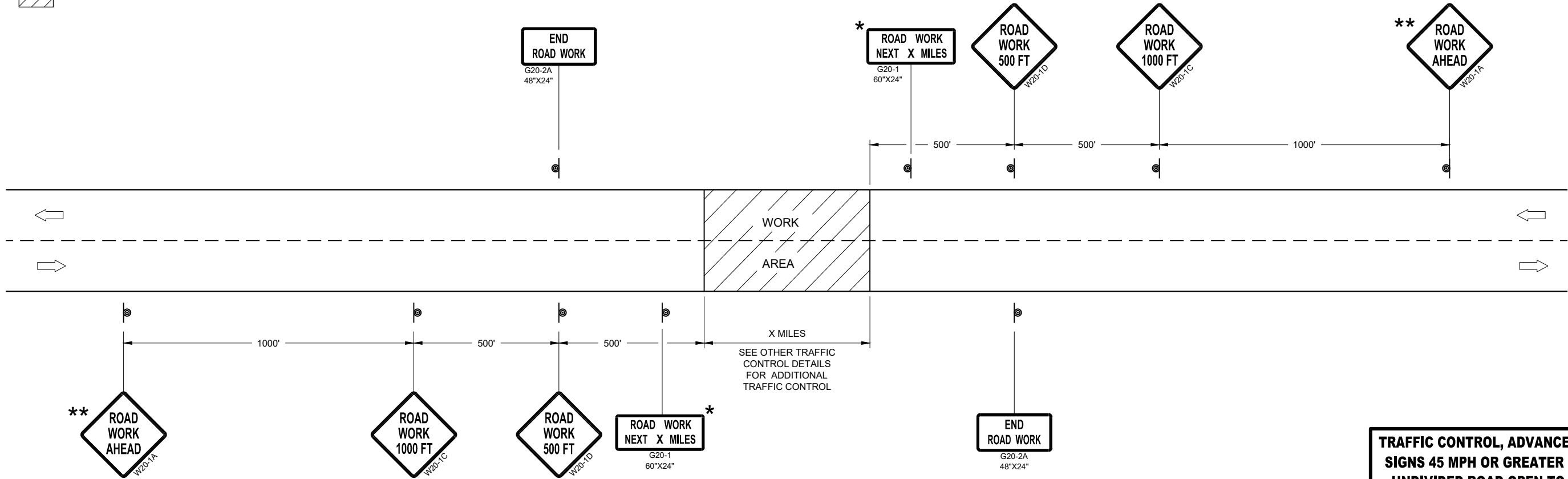
- * OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS
- ** PLACE AN ADDITIONAL W20-1A "ROAD WORK AHEAD" SIGN IF WORK AREA WITHIN THE PROJECT IS SEPARATED BY MORE THAN 2 MILES FROM PREVIOUS WORK AREA.

LEGEND

-  SIGN ON PERMANENT SUPPORT
-  DIRECTION OF TRAFFIC
-  WORK AREA



TYPICAL SIDE ROAD APPROACH
WARNING SIGN DETAIL

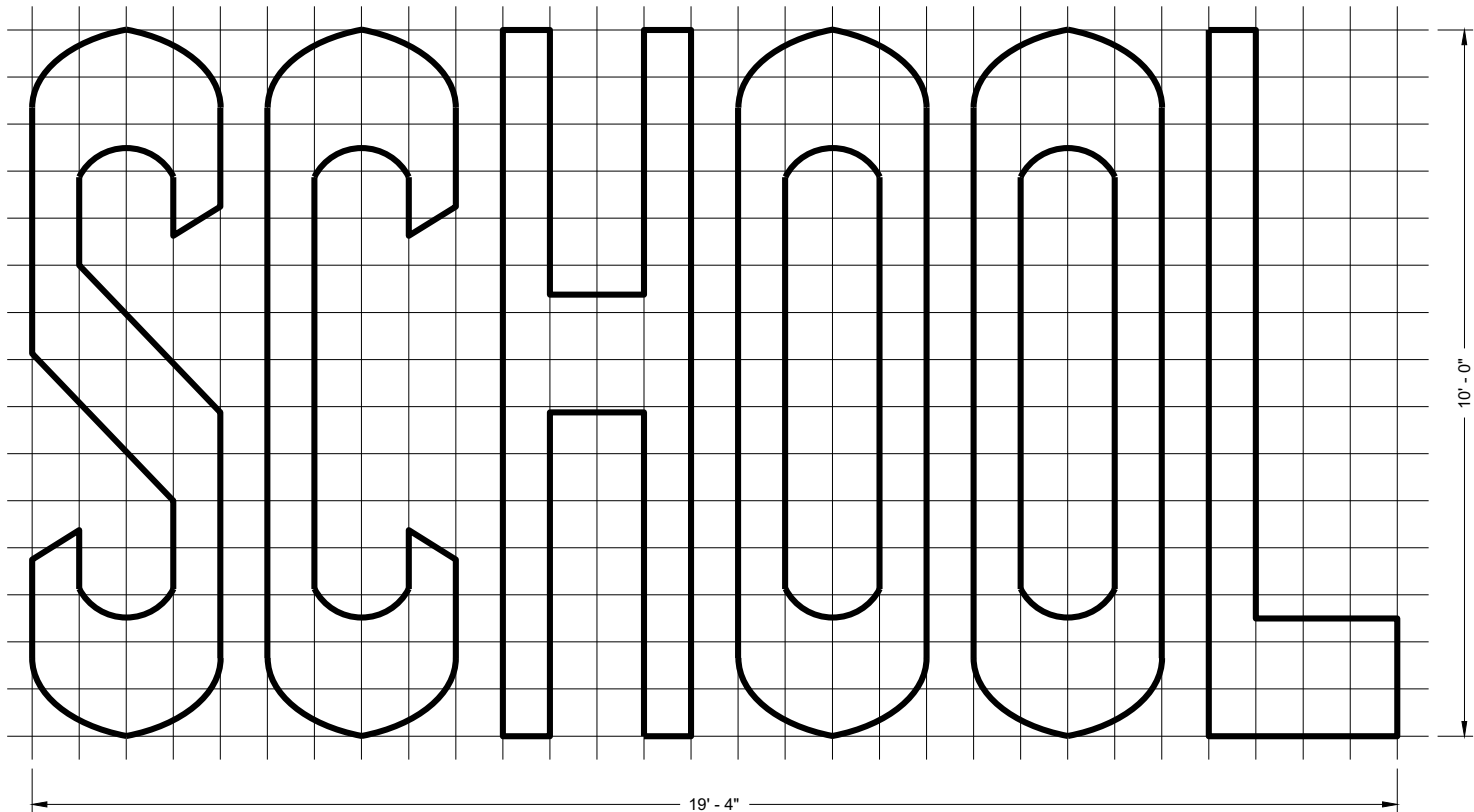
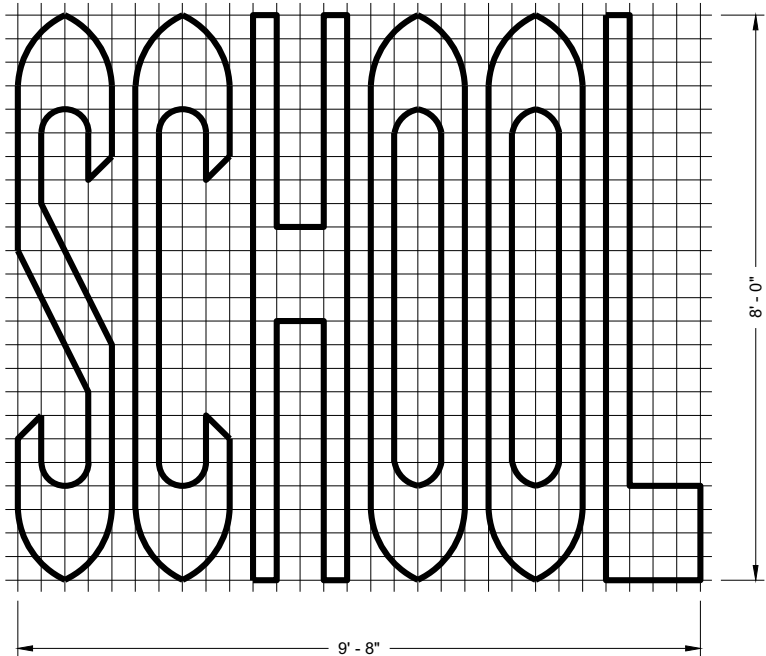
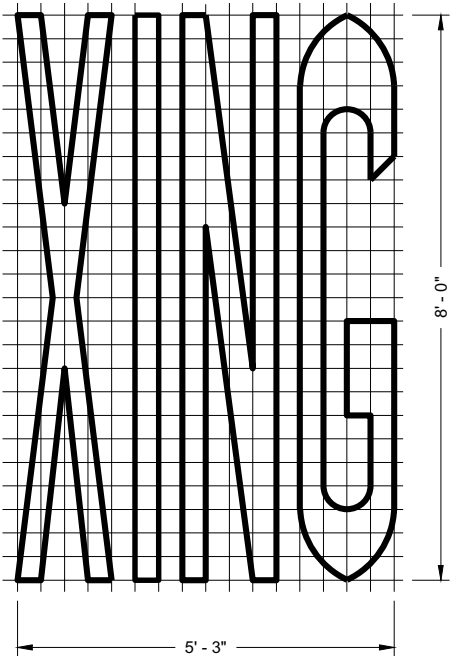
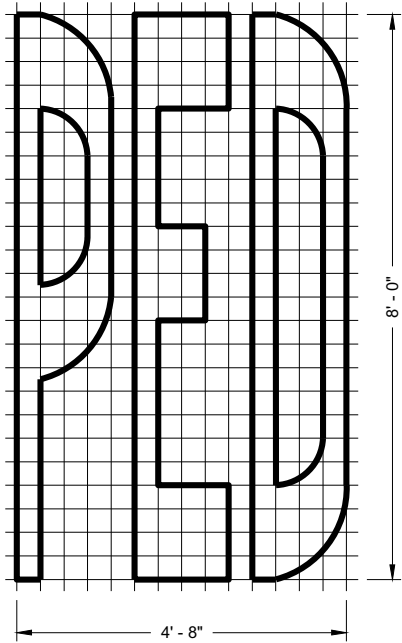
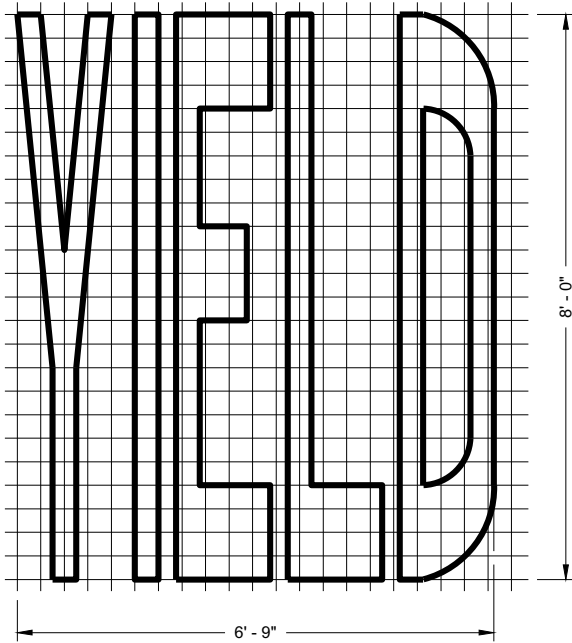
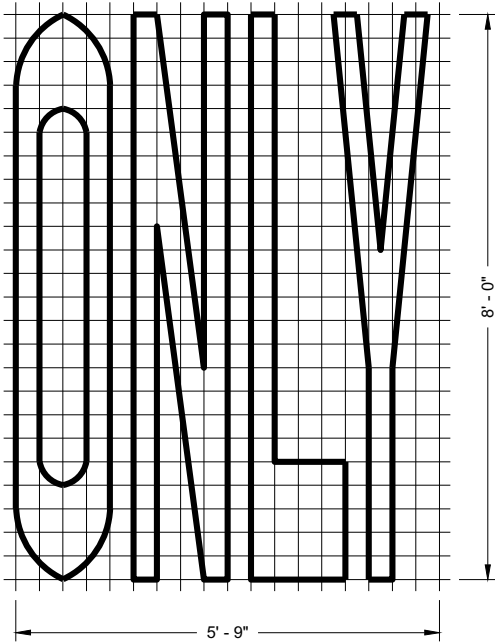
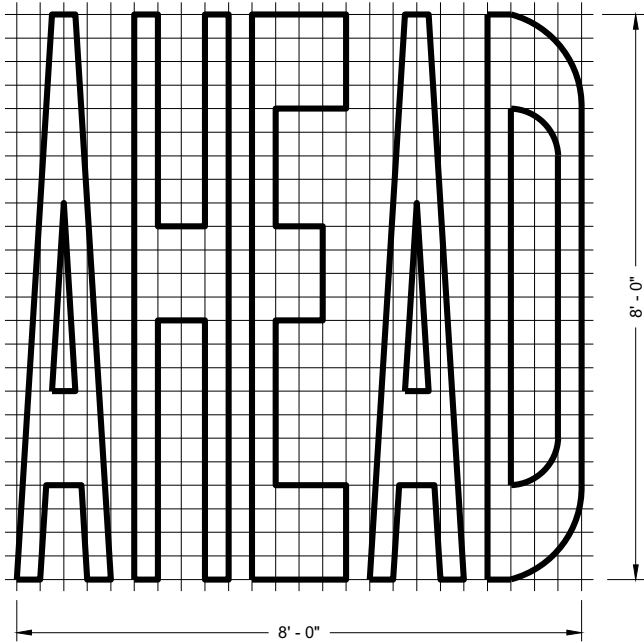
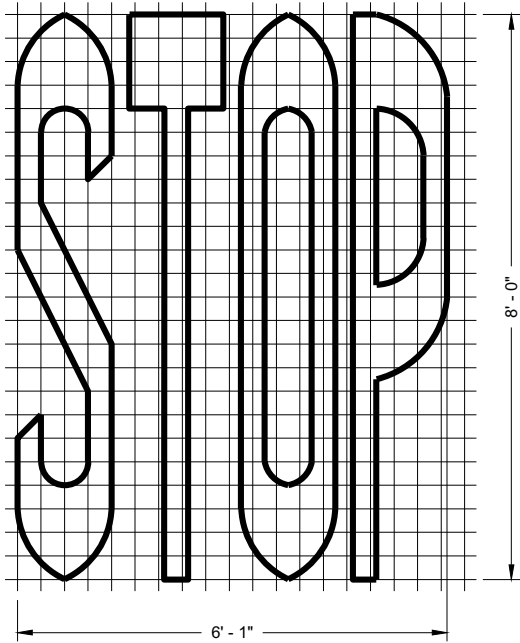


TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45MPH OR GREATER

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 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER
FHWA



SINGLE LANE

TWO - LANE

GENERAL NOTES

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

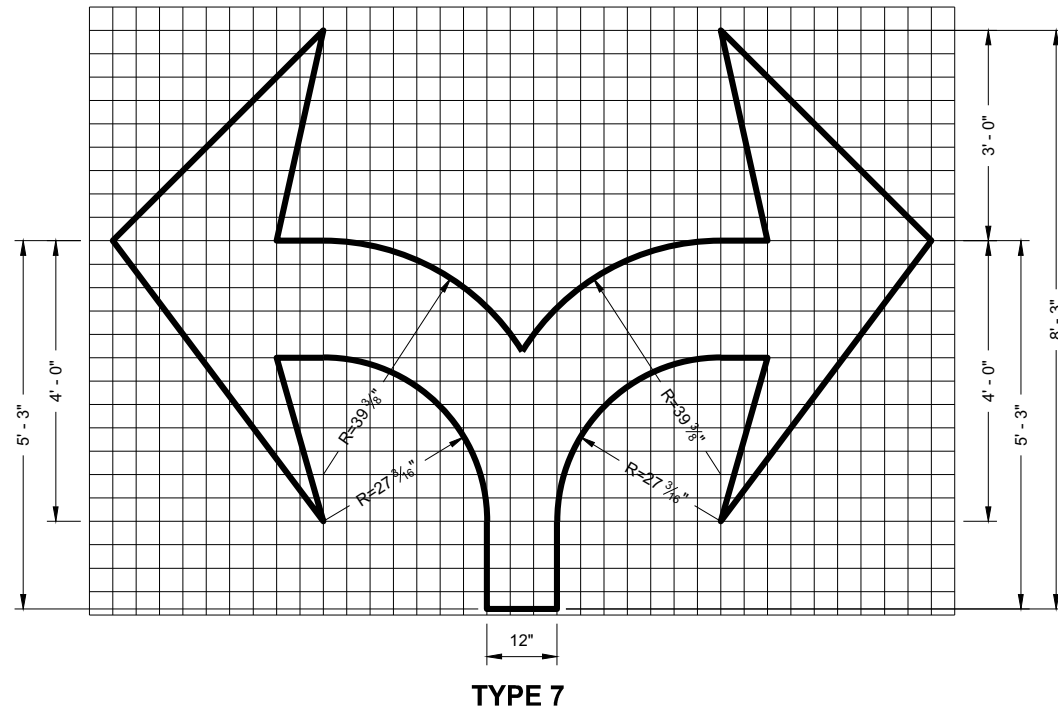
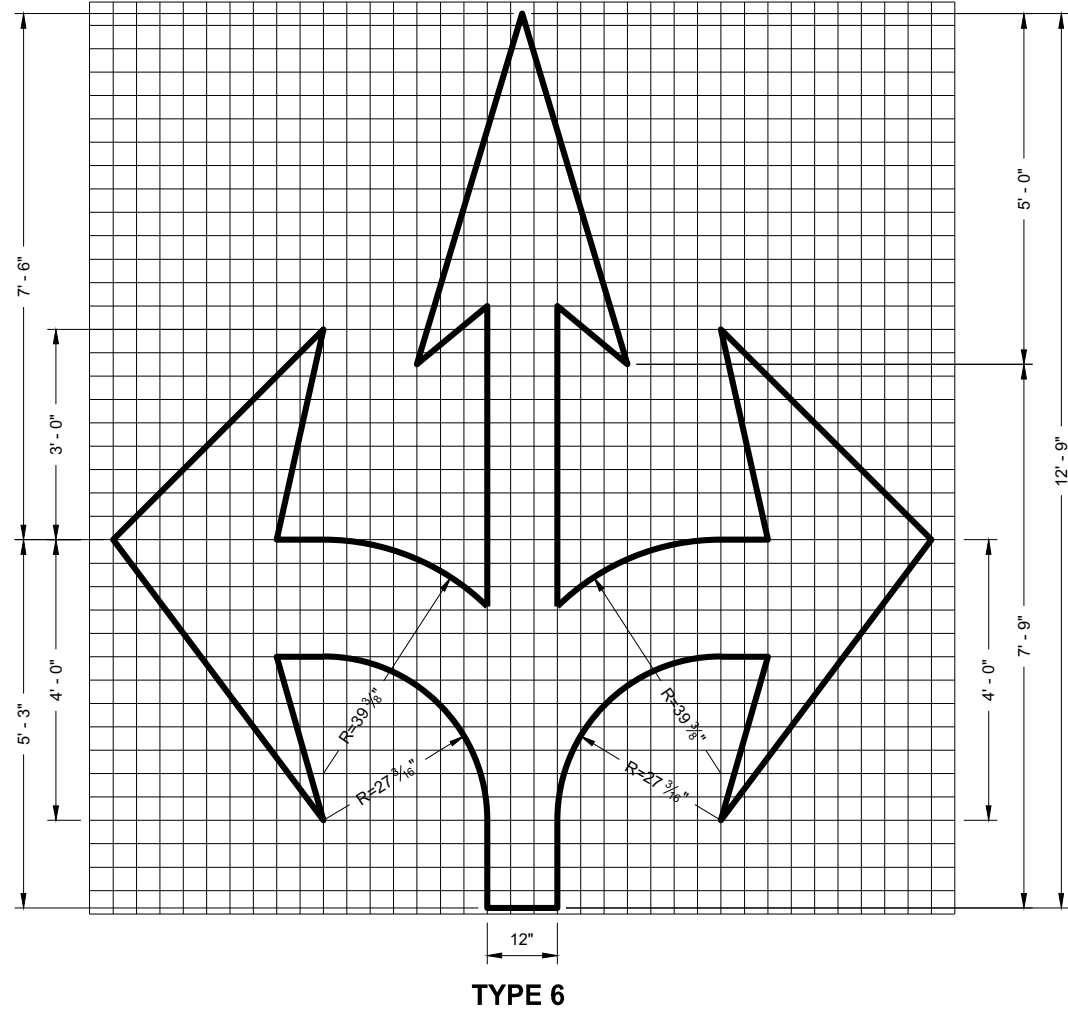
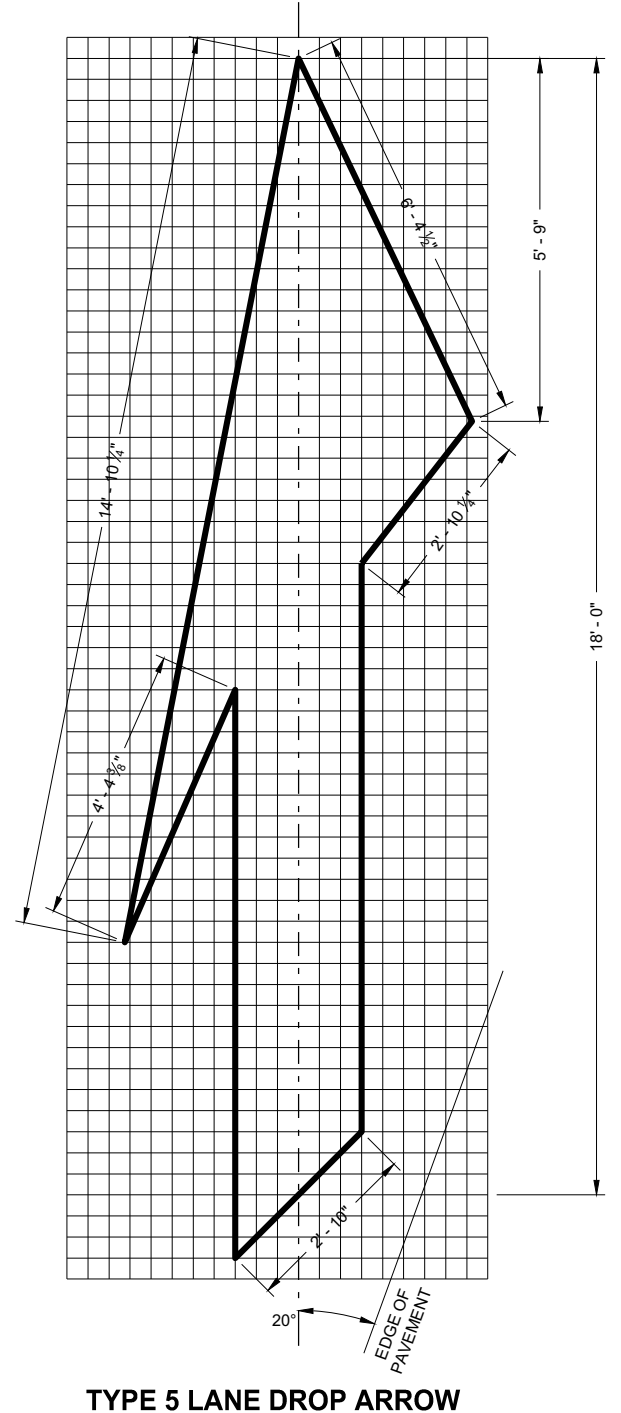
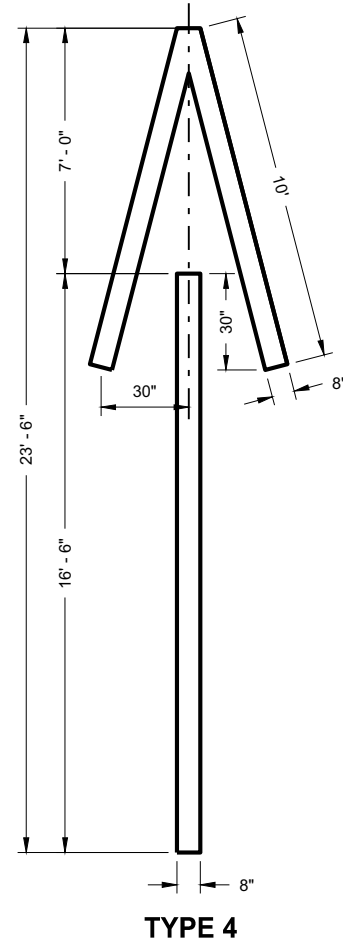
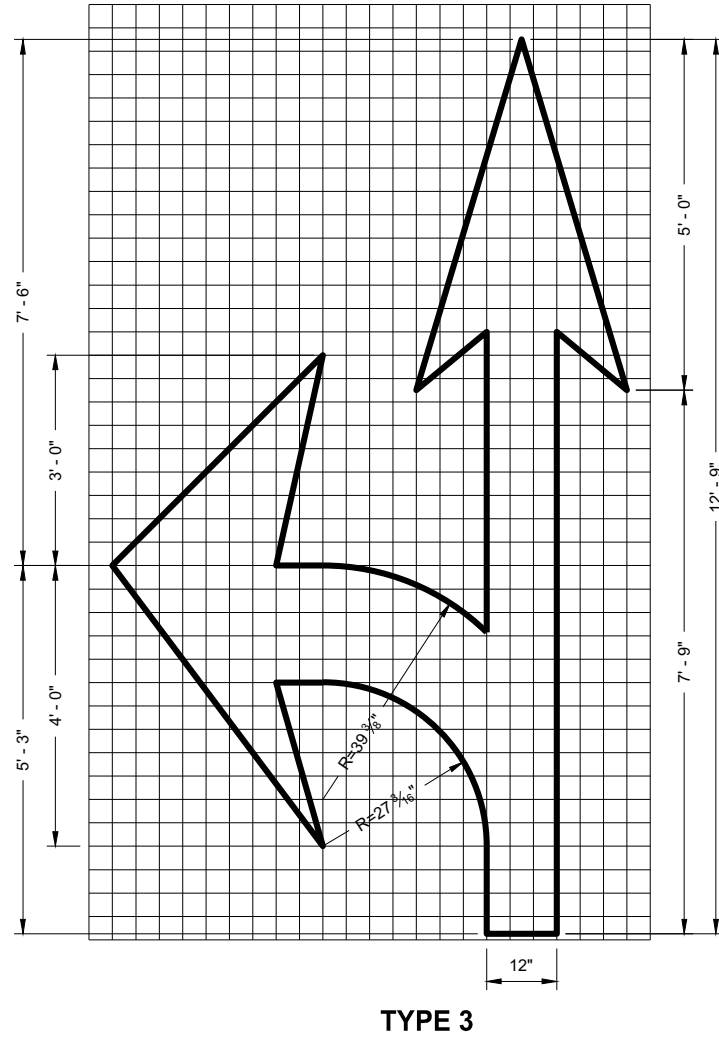
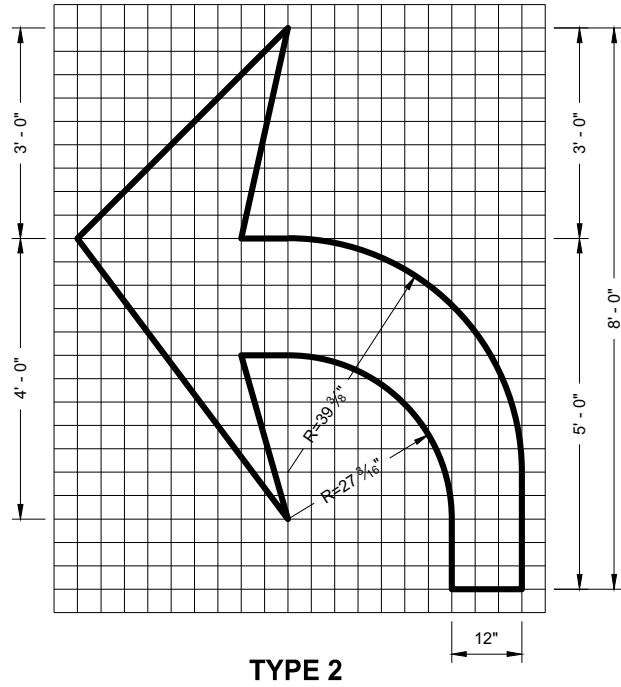
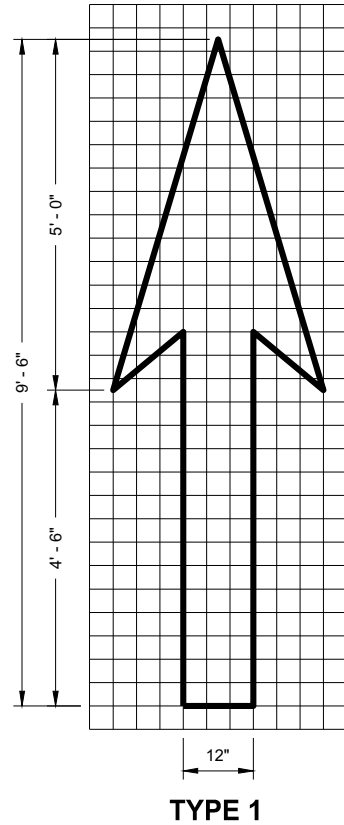
PAVEMENT MARKING WORDS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019
DATE

/S/ Matthew Rauch
STATE SIGNING AND MARKING
ENGINEER

FHWA



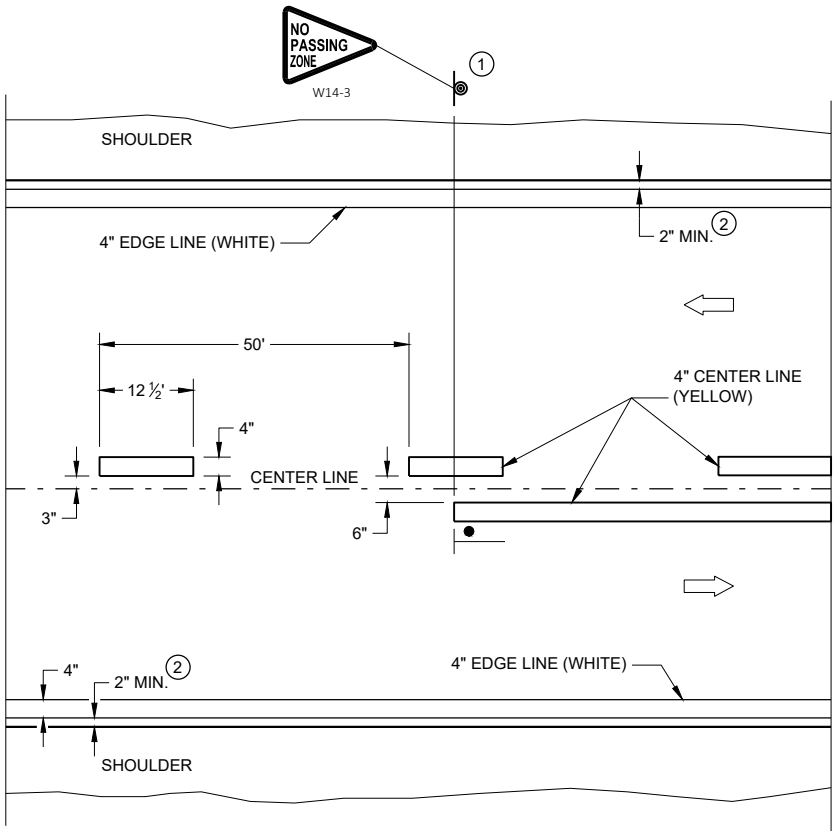
GENERAL NOTES

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

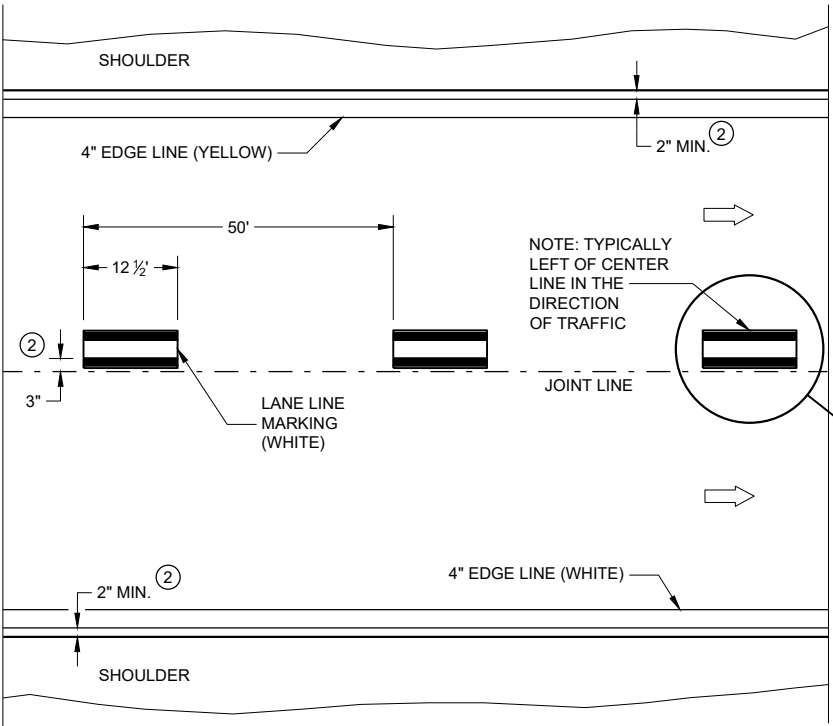
PAVEMENT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019
DATE
/S/ Matthew Rauch
STATE SIGNING AND MARKING
ENGINEER
FHWA

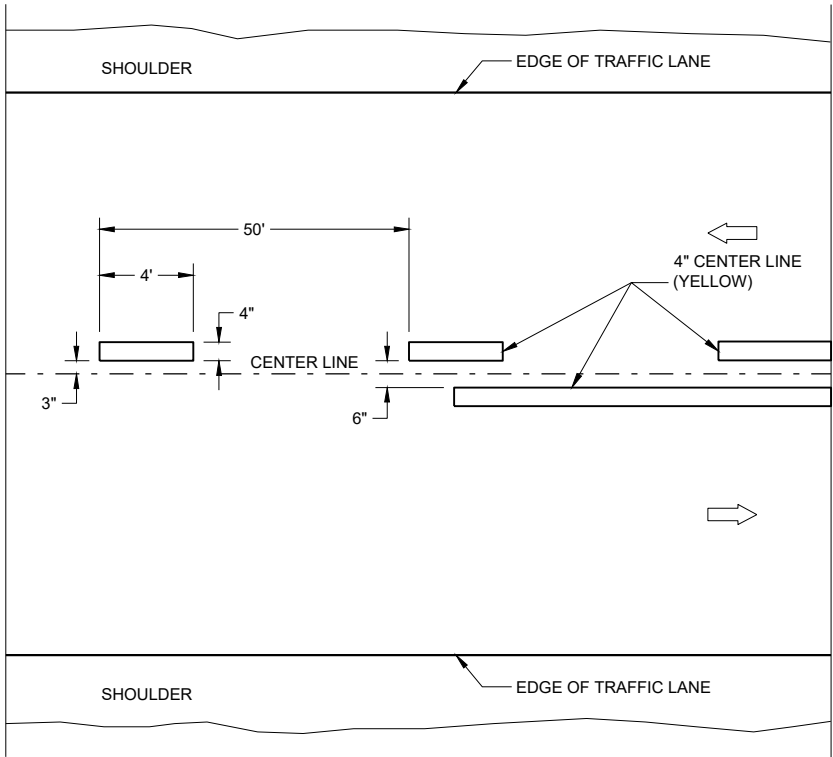


TWO WAY TRAFFIC

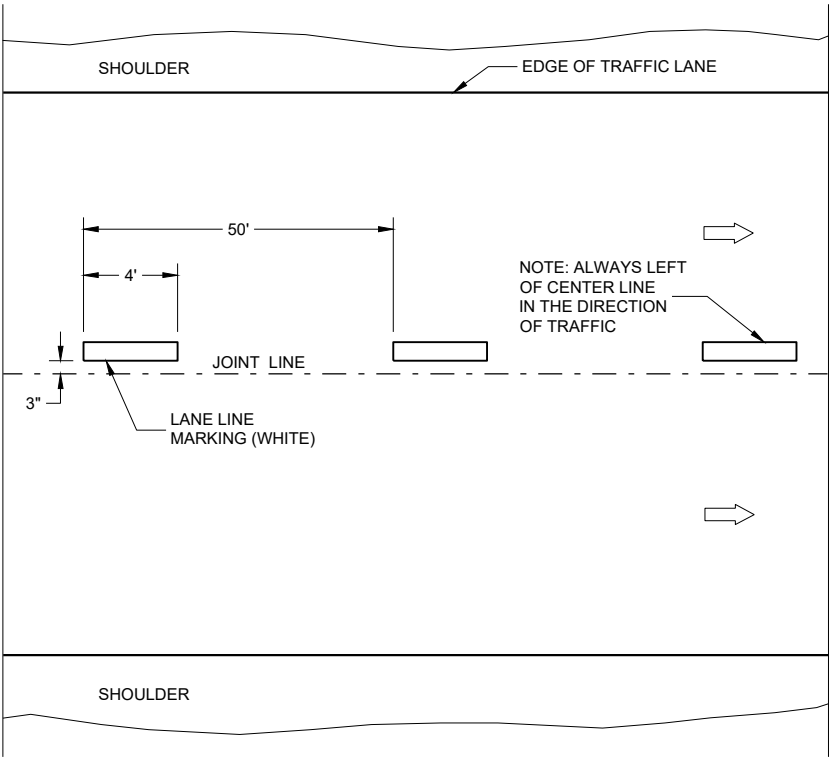


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY PAVEMENT MARKING

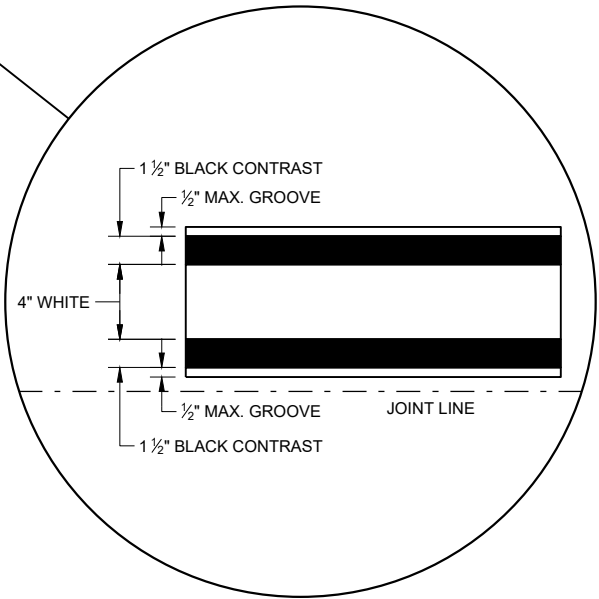
GENERAL NOTES

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

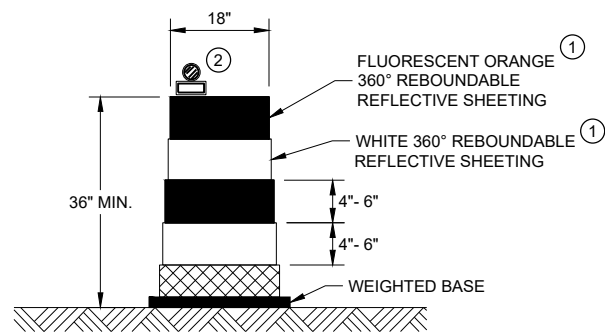
- "T" MARKING
- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC



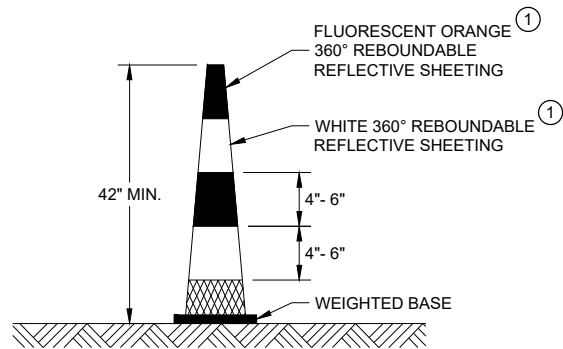
LONGITUDINAL MARKING
(MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020
DATE
/S/ Matthew Rauch
STATEWIDE SIGNING AND MARKING
ENGINEER
FHWA

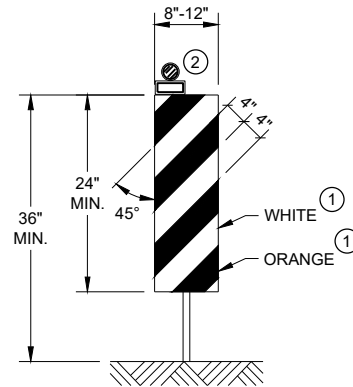


DRUM



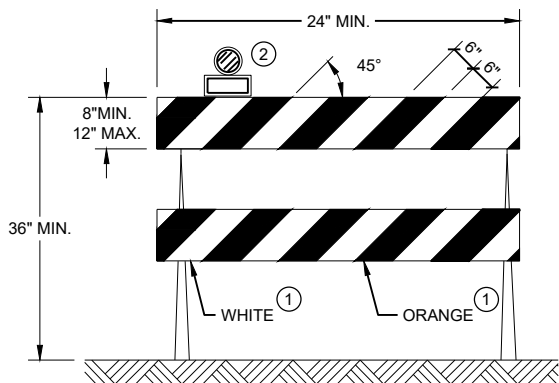
42" CONE

DO NOT USE IN TAPERS
½ SPACING OF DRUMS



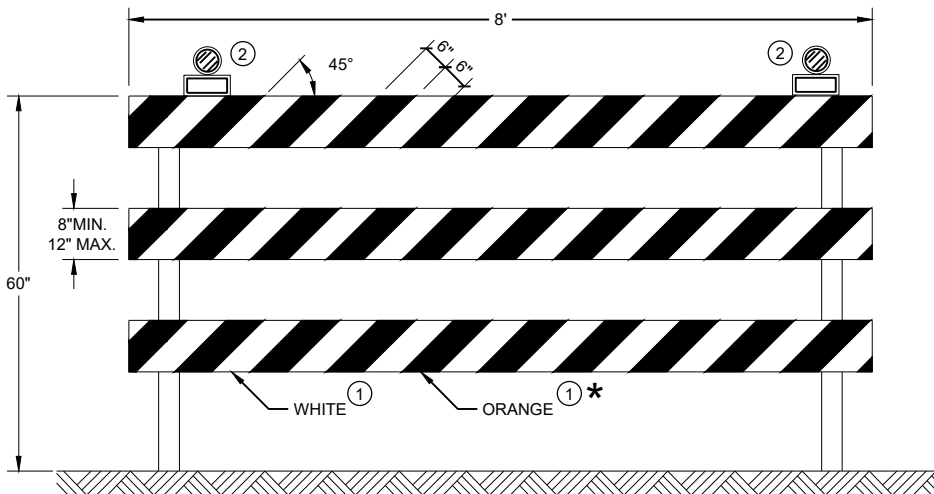
VERTICAL PANEL

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.

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.






CHANNELIZING DEVICES
DRUMS, CONES, BARRICADES
AND VERTICAL PANELS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2021 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER

FHWA

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

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

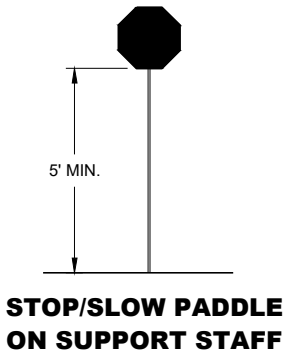
FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT REMOVE TEMPORARY PORTABLE RUMBLE STRIPS PRIOR TO COVERING OR REMOVING ALL ADVANCE SIGNING.

- 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.

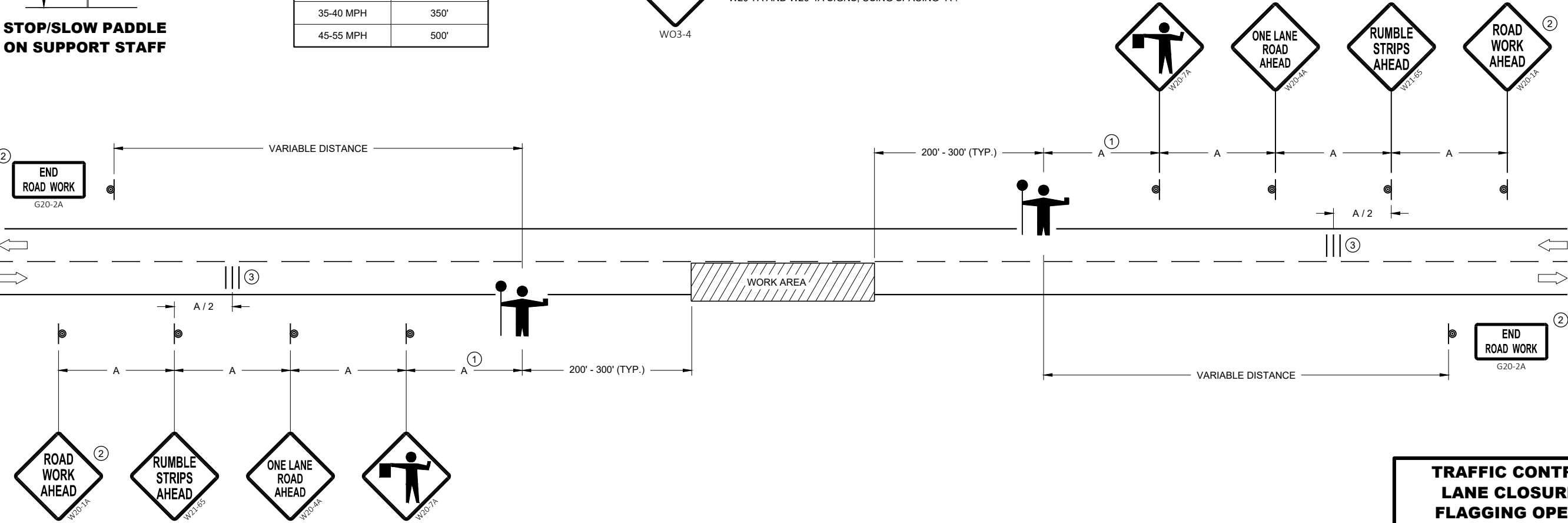


SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

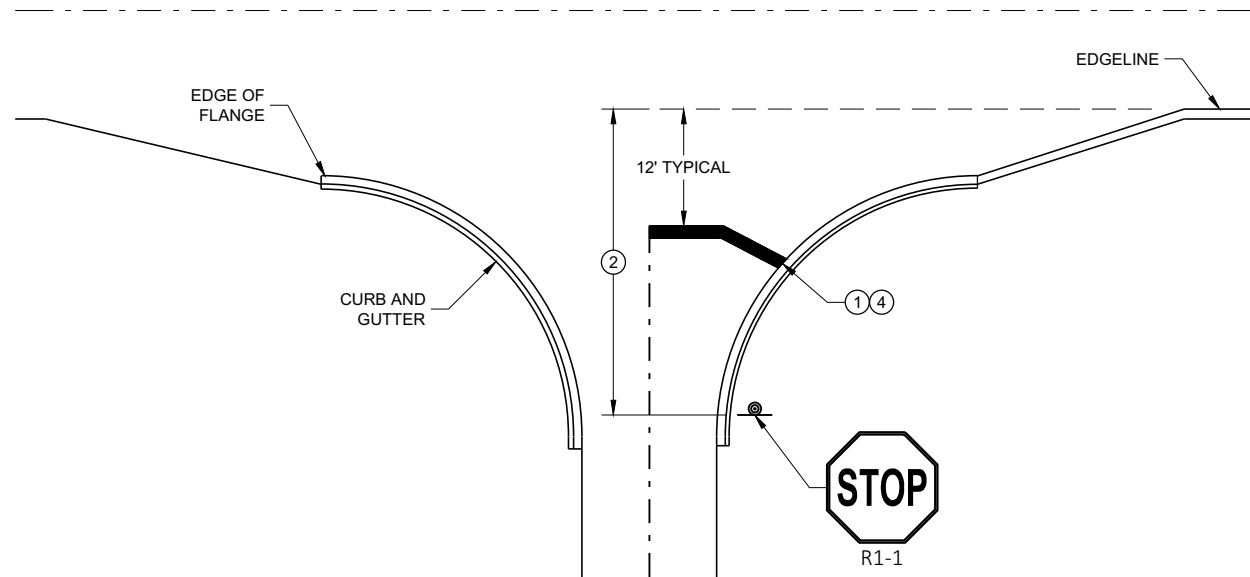
SPEED LIMIT	SPACING "A"
25-30 MPH	200'
35-40 MPH	350'
45-55 MPH	500'



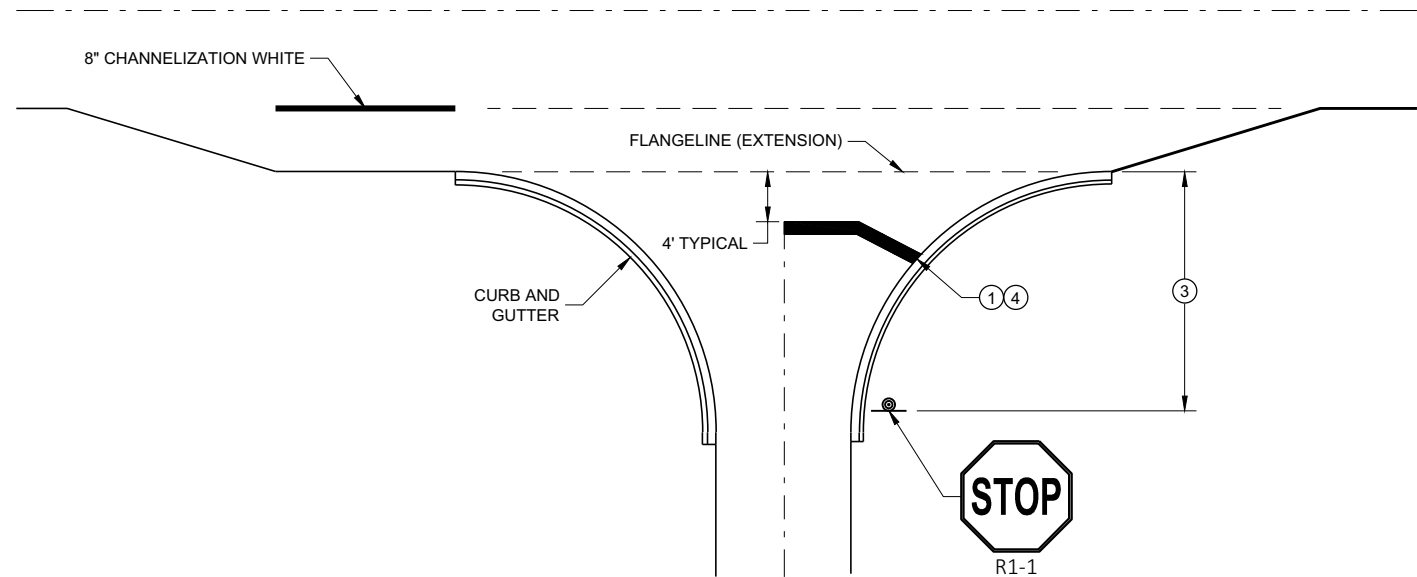
USE OF W03-4 SIGN IS OPTIONAL. WHEN USED, THIS SIGN SHALL BE LOCATED BETWEEN THE W20-7A AND W20-4A SIGNS, USING SPACING "A".



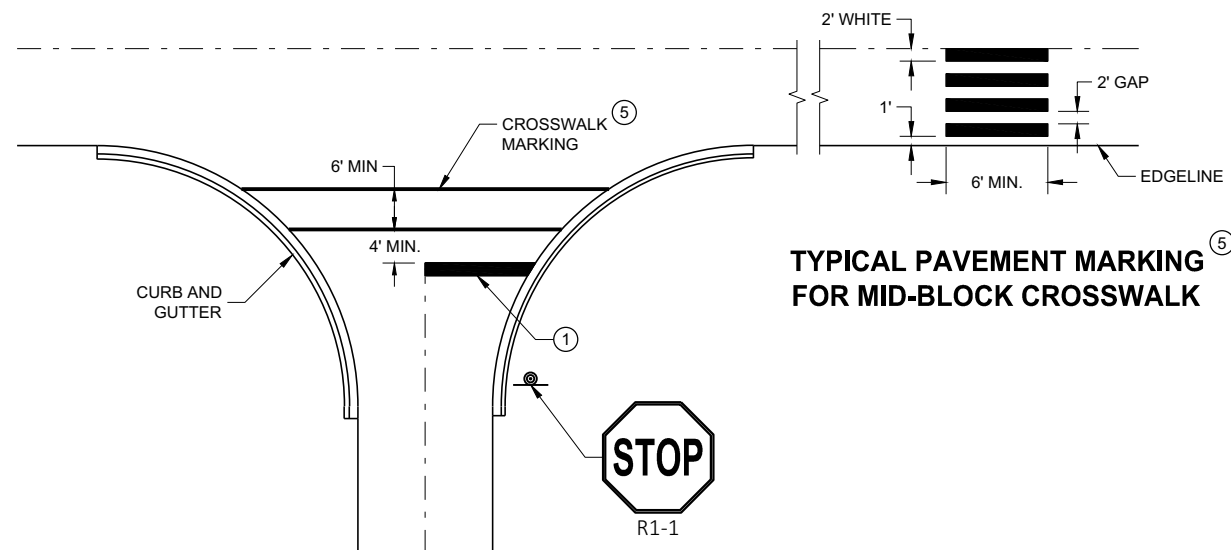
TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED November 2021 DATE	/S/ Andrew Heidtke WORK ZONE ENGINEER
FHWA	



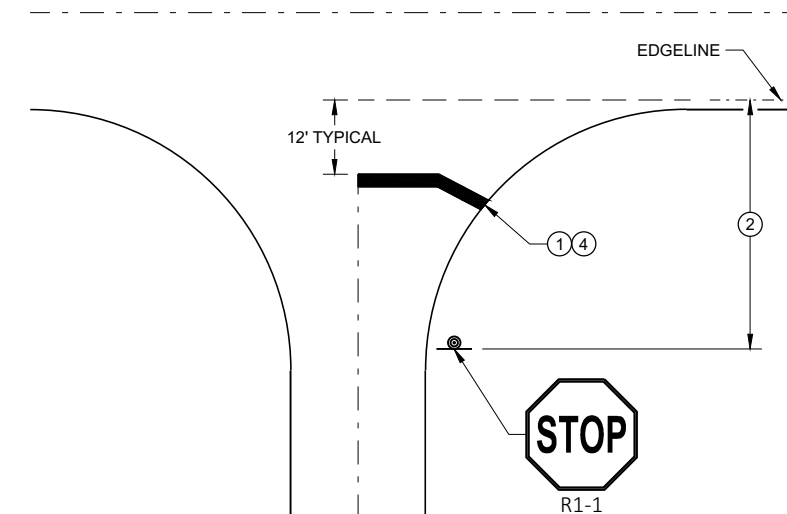
TYPICAL STOP LINE PAVEMENT MARKING
WITH CURB AND GUTTER



TYPICAL STOP LINE PAVEMENT MARKING
FOR SIDEROADS WITH RIGHT TURN LANE



TYPICAL STOP LINE PAVEMENT MARKING FOR
SIDEROADS WITH CROSSWALK MARKING



TYPICAL STOP LINE PAVEMENT MARKING
WITHOUT CURB AND GUTTER

GENERAL NOTES

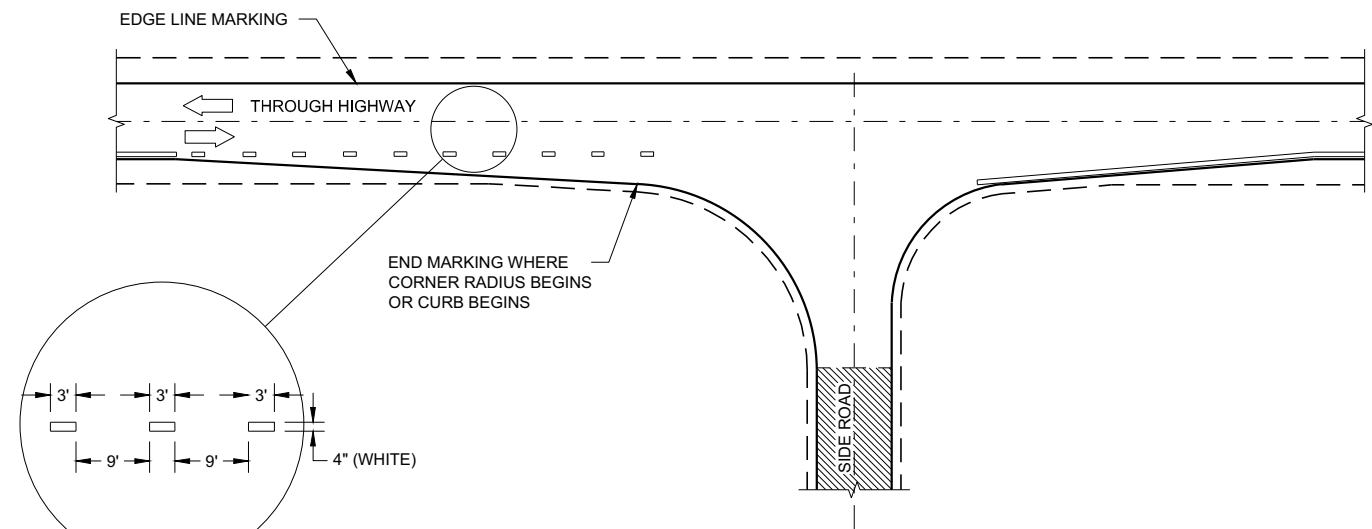
STOP SIGN SHALL BE PLACED A MINIMUM OF 6 FEET TO A MAXIMUM OF 50 FEET FROM THE EDGE LINE LOCATION.

- 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 EDGE LINE.
- 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.

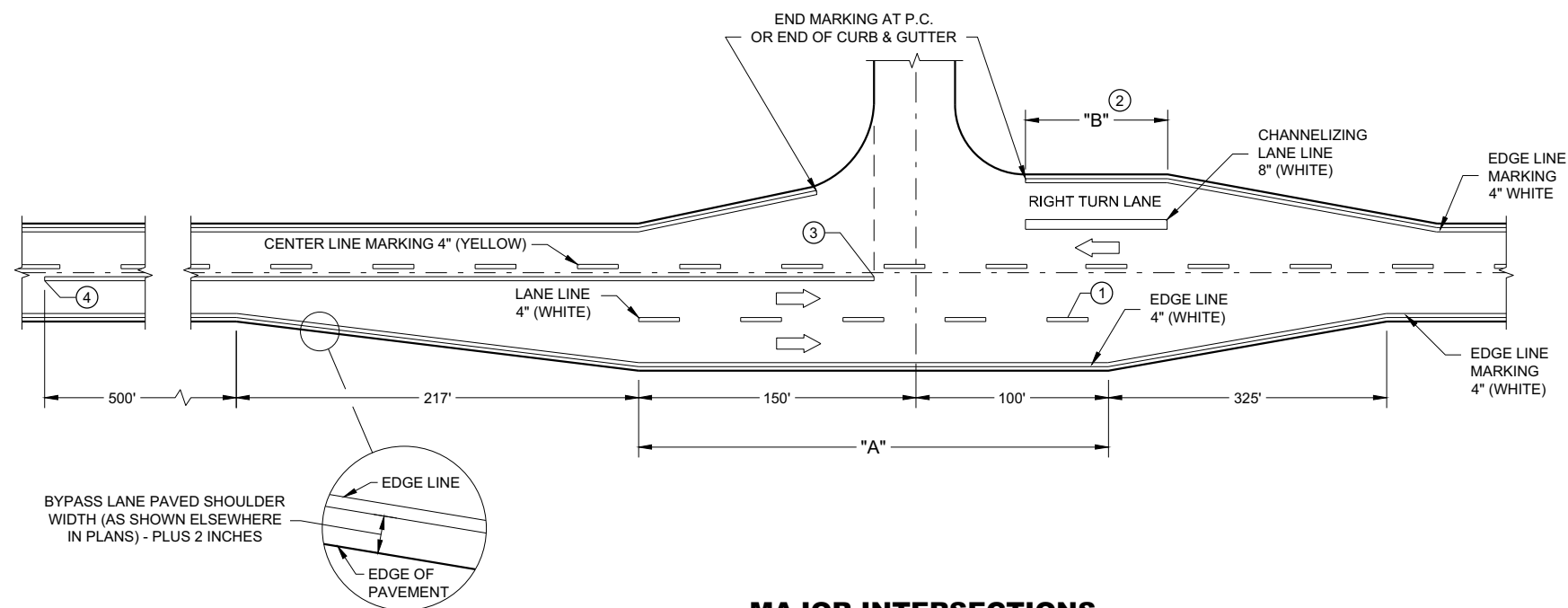
STOP LINE AND CROSSWALK
PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019 DATE /S/ Matthew Rauch
STATE SIGNING AND MARKING
ENGINEER
FHWA



MINOR INTERSECTION



MAJOR INTERSECTIONS
(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANE)

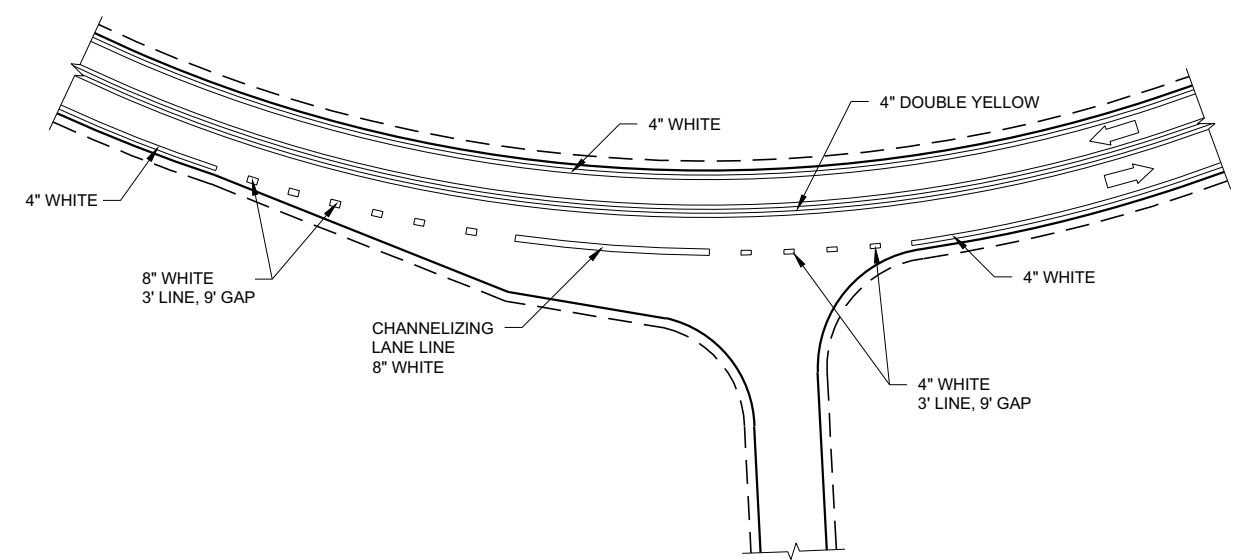
GENERAL NOTES

OMIT EDGE LINES THROUGH INTERSECTIONS. CONTINUE EDGE LINES THROUGH DRIVEWAYS.

- ① WHEN DISTANCE "A" IS LESS THAN 250 FEET, OMIT LANE LINE.
- ② WHEN DISTANCE "B" IS LESS THAN 100 FEET, OMIT CHANNELIZING LANE LINE.
- ③ BARRIER LINE ENDS AT SIDE ROAD PAVEMENT / SURFACE EDGE EXTENSION.
- ④ BARRIER LINE STARTS 500 FEET PRIOR TO THE BYPASS TAPER.

LEGEND

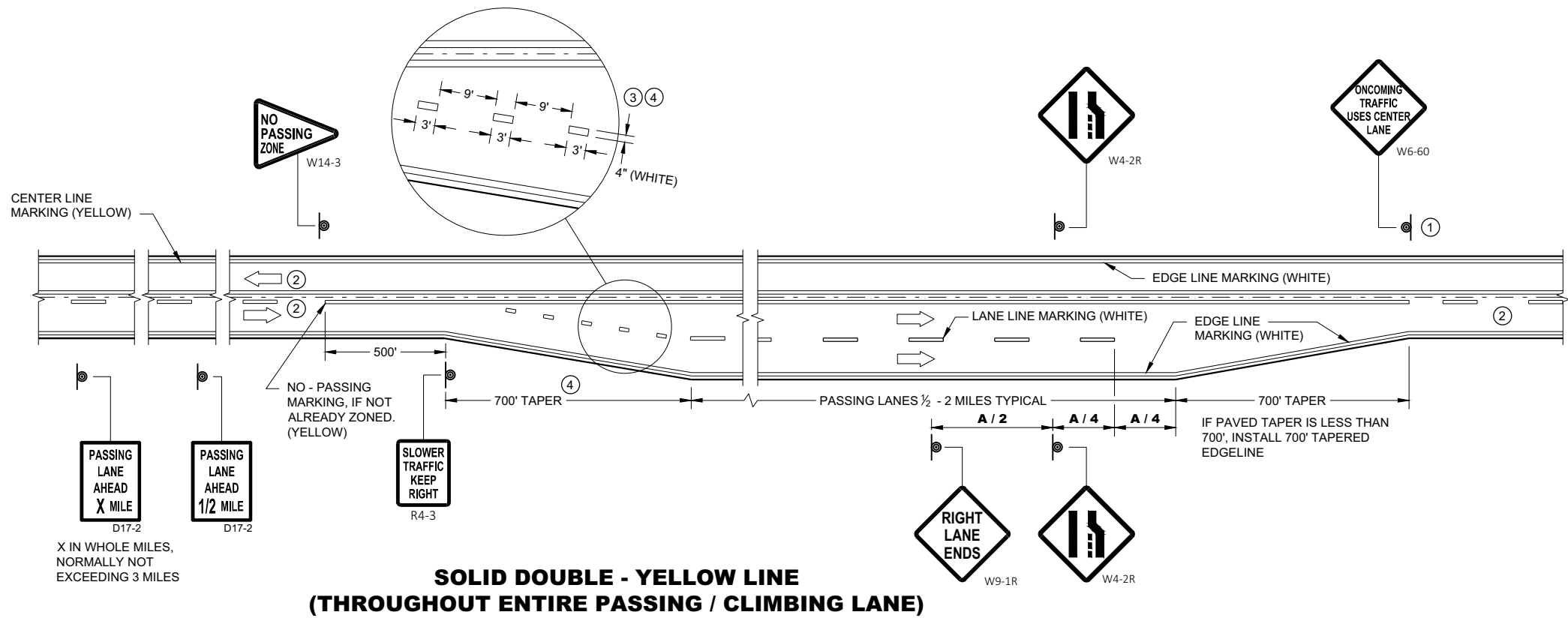
➡ DIRECTION OF TRAVEL



INTERSECTION ON OUTSIDE OF CURVE


PAVEMENT MARKING
(INTERSECTIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



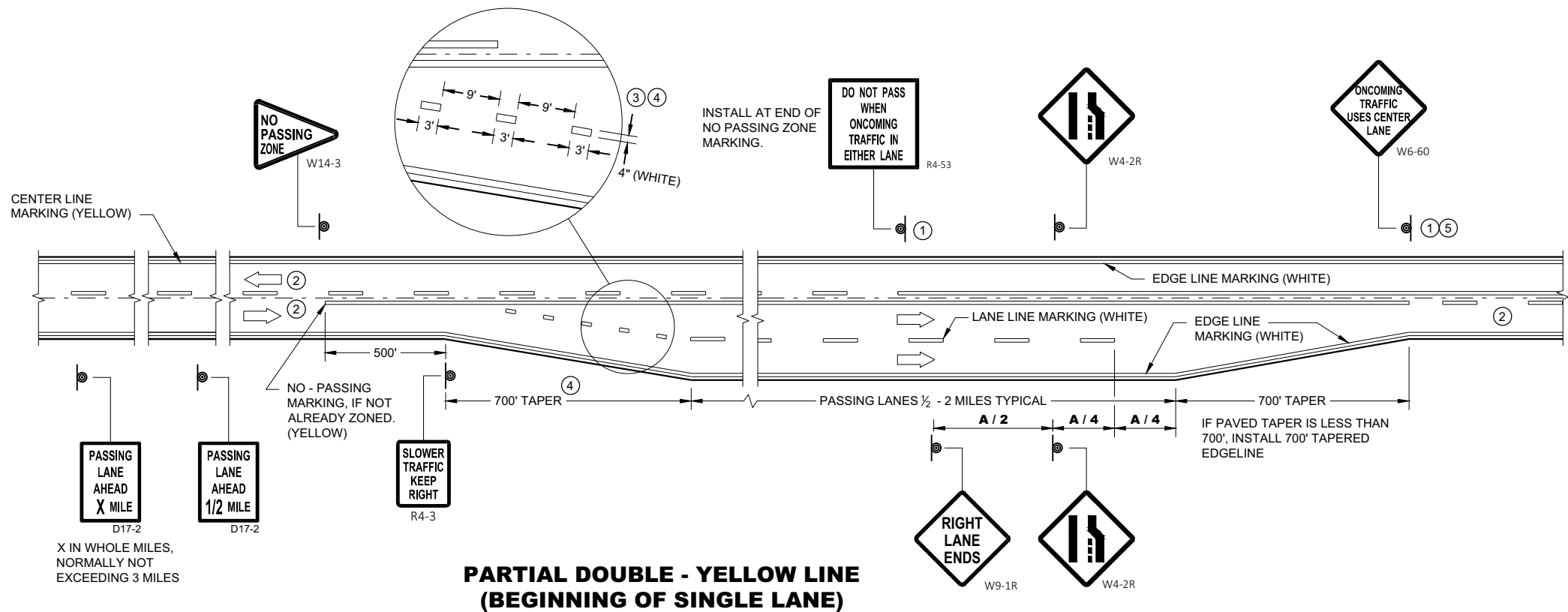
GENERAL NOTES

- 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

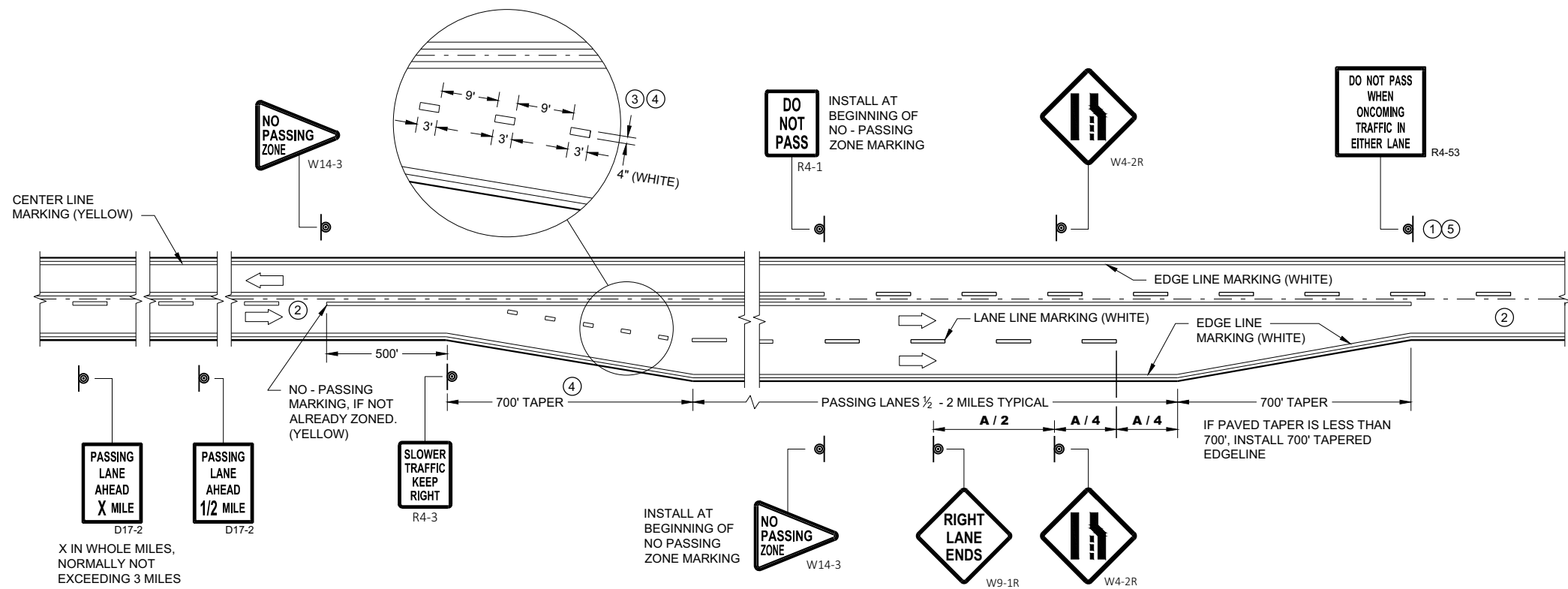
DISTANCE TABLE

POSTED OR 85th PERCENTILE SPEED	DISTANCE "A"
45	775
50	885
55	990

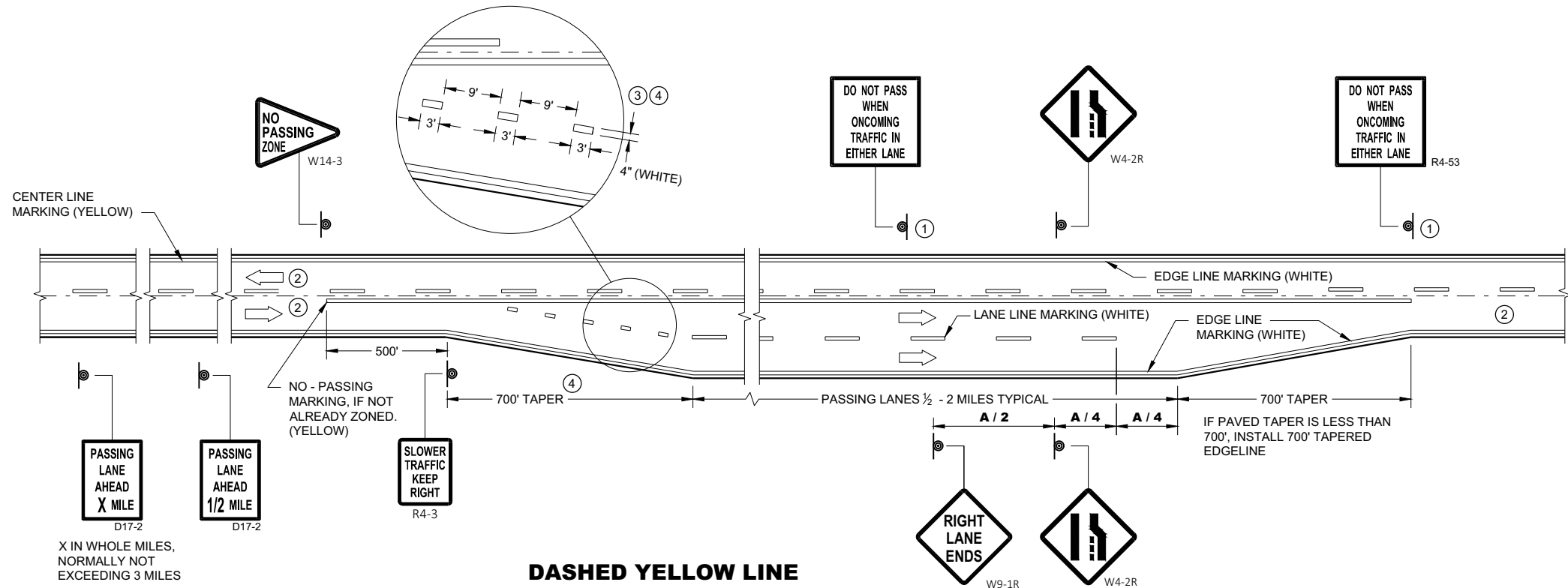


PAVEMENT MARKING & SIGNING (CLIMBING LANE & PASSING LANE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION




**SOLID DOUBLE - YELLOW LINE
(END OF SINGLE LANE)**



**DASHED YELLOW LINE
(THROUGHOUT 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 ONE MILE UP UNTIL NO PASSING ZONE.

ARROW SYMBOL () SHOWS DIRECTION OF TRAVEL

DISTANCE TABLE





POSTED OR 85th PERCENTILE SPEED	DISTANCE "A"
45	775
50	885
55	990

**PAVEMNET MARKING & SIGNING
(CLIMBING LANE & PASSING LANE)**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019 /S/ Matthew Rauch
DATE STATE SIGNING AND MARKING
ENGINEER
FHWA

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.

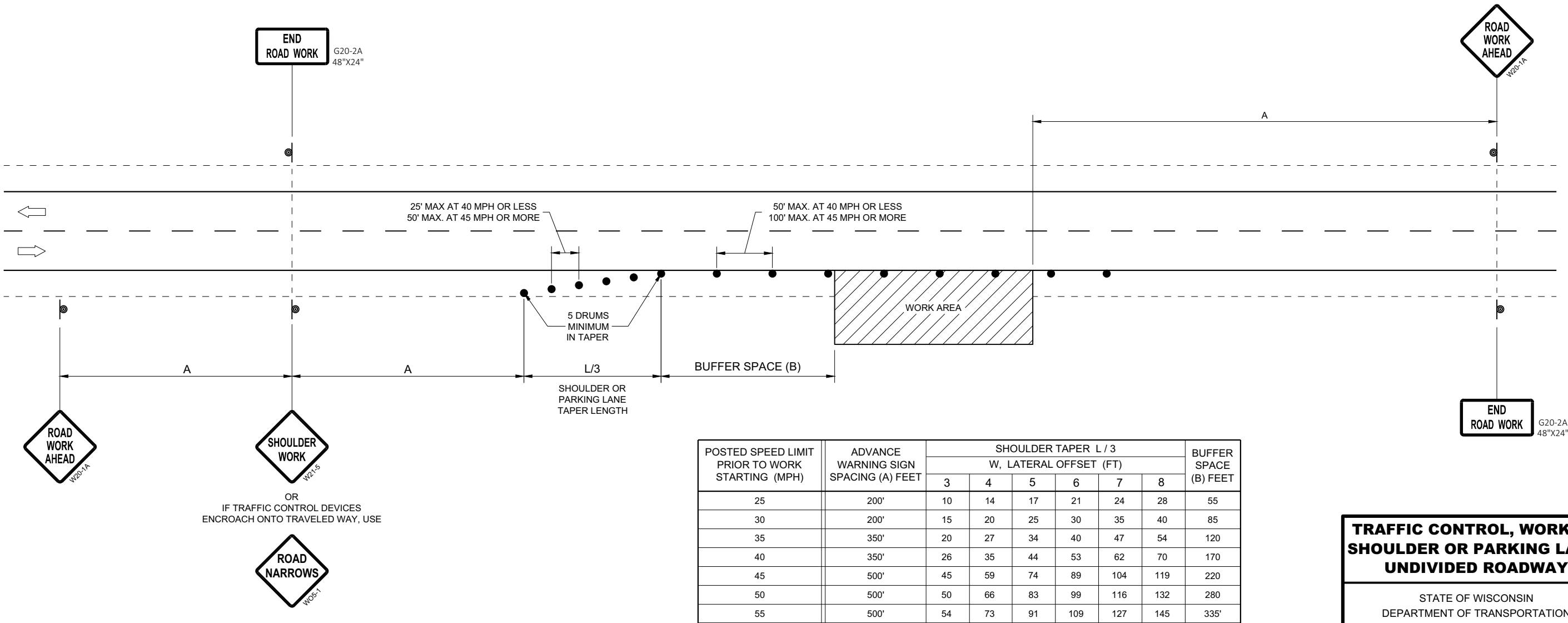
ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

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.

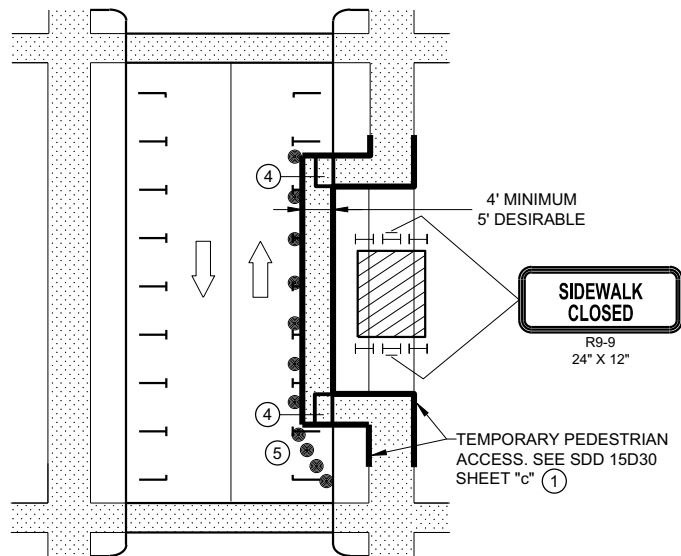


TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

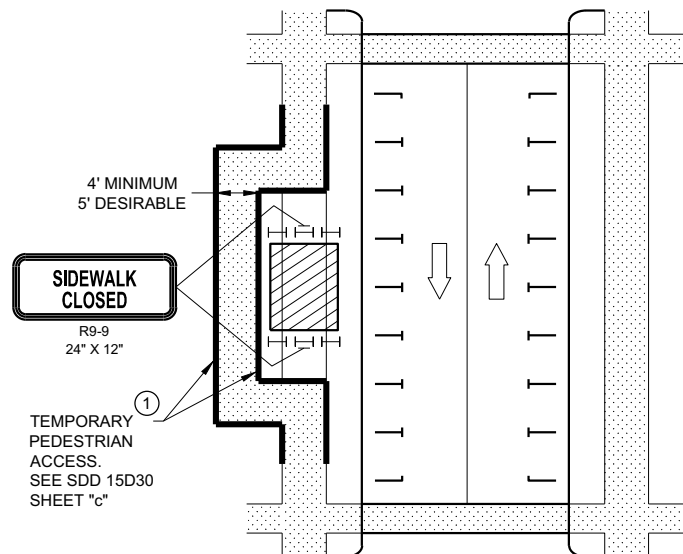
APPROVED
May 2020
DATE
/S/ Andrew Heidtke
STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER
FHWA

NOTE: MAY BE USED ON ROADWAY WITH POSTED SPEED OF LESS THAN 40 MPH.

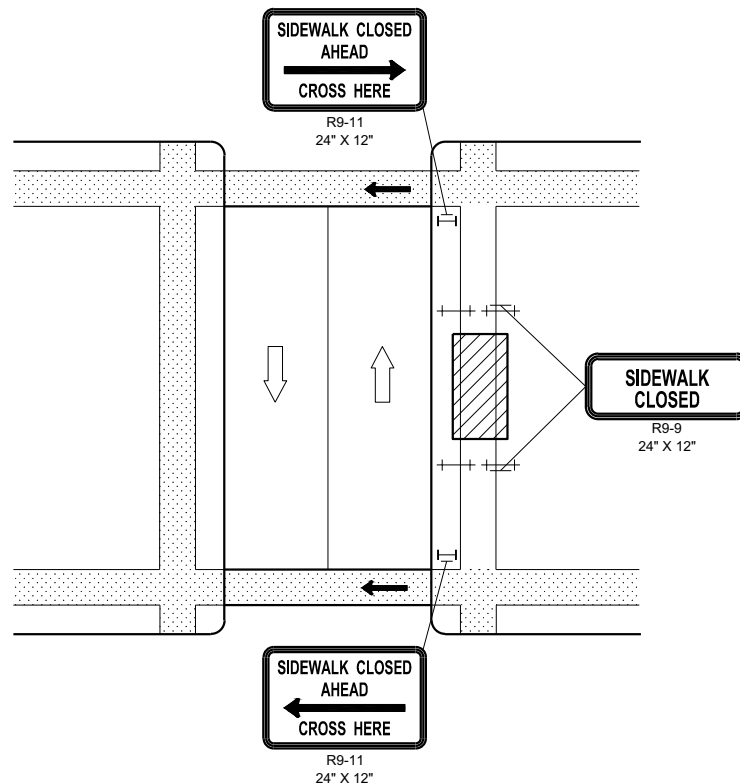


MID-BLOCK SIDEWALK CLOSURE
IN PARKING LANE

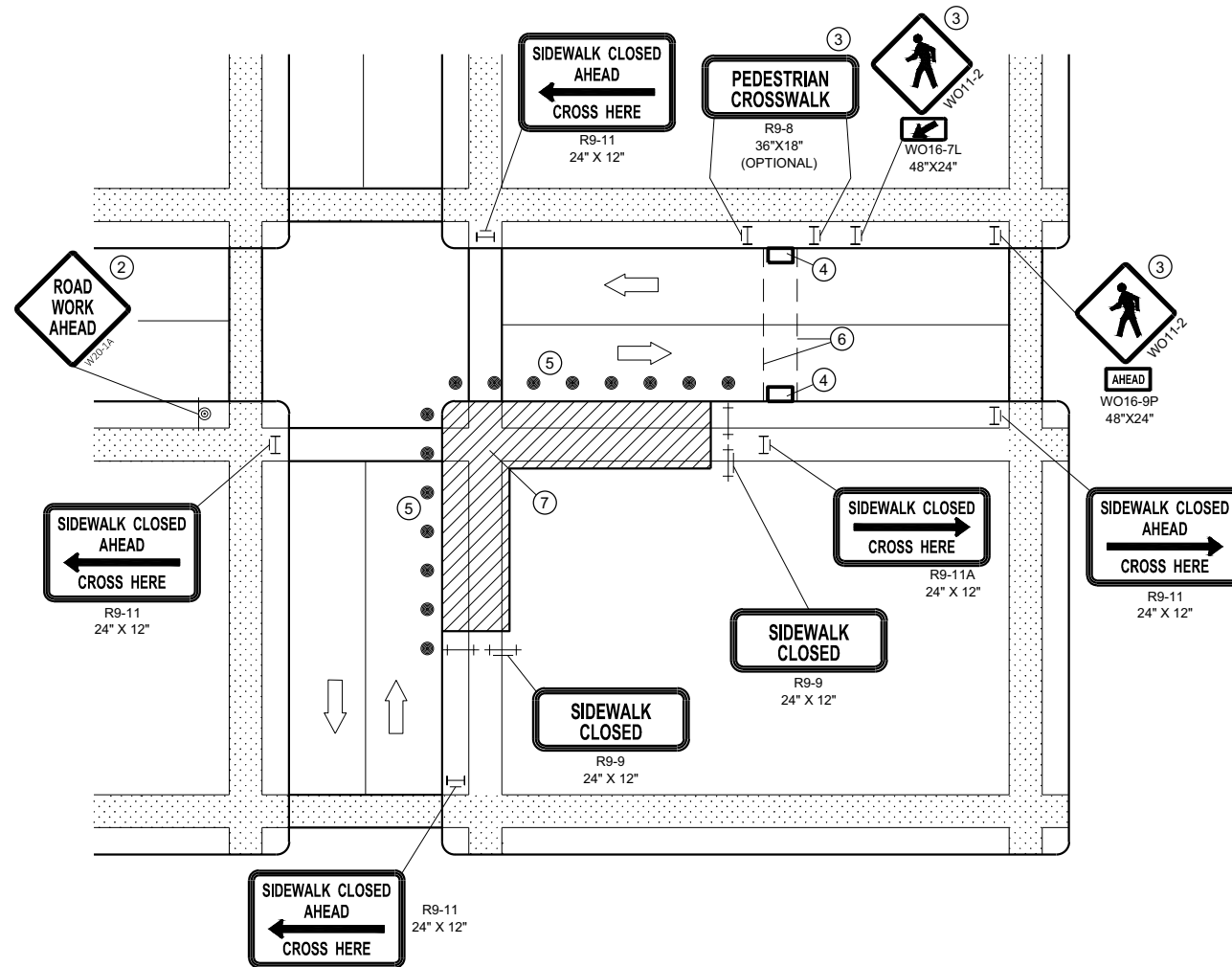
NOTE: LAYOUT SAME AS ABOVE.



SIDEWALK DIVERSION



MID-BLOCK SIDEWALK
CLOSURE



CORNER SIDEWALK CLOSURE WITH TEMPORARY CROSSWALK

GENERAL NOTES

WHEN CLOSING OR RELOCATING CROSSWALKS OR SIDEWALKS, PROVIDE DETECABLE TEMPORARY FACILITIES AND INCLUDE ACCESSIBILITY FEATURES CONSISTENT WITH EXISTING PEDESTRIAN FACILITIES.

TEMPORARY TRAFFIC CONTROL DEVICES FOR PEDESTRIANS ARE SHOWN. OTHER DEVICES MAY BE NECESSARY TO CONTROL VEHICULAR TRAFFIC. STAGE WORK AS NECESSARY, TO PROVIDE A TEMPORARY PEDESTRIAN ACCESS ROUTE AT ALL TIMES. FOR ROADWAYS WITH NO AVAILABLE DETOURS, MAINTAIN ONE OPEN SIDEWALK AT ALL TIMES.

"WO" SIGN IS THE SAME AS "W" SIGN, EXCEPT THE BACKGROUND IS ORANGE.

FOR NIGHTTIME CLOSURE, USE TYPE "A" FLASHING WARNING LIGHTS ON BARRICADES, SUPPORTING SIGNS AND CLOSING SIDEWALK. USE TYPE "C" STEADY BURN LIGHTS ON CHANNELIZING DEVICES SEPARATING THE WORK AREA FROM VEHICULAR TRAFFIC.

PEDESTRIAN TRAFFIC SIGNAL DISPLAY CONTROLLING CLOSED CROSSWALK SHALL BE COVERED OR DEACTIVATED.

POST MOUNTED SIGNS LOCATED ADJACENT TO A SIDEWALK SHALL HAVE A 7 FOOT MINIMUM CLEARANCE FROM THE BOTTOM OF THE SIGN TO THE SIDEWALK SURFACE.

ALTERNATE SIDEWALK WORK BETWEEN LEFT AND RIGHT SIDE OF ROADWAY TO MAINTAIN PEDESTRIAN ACCESS.

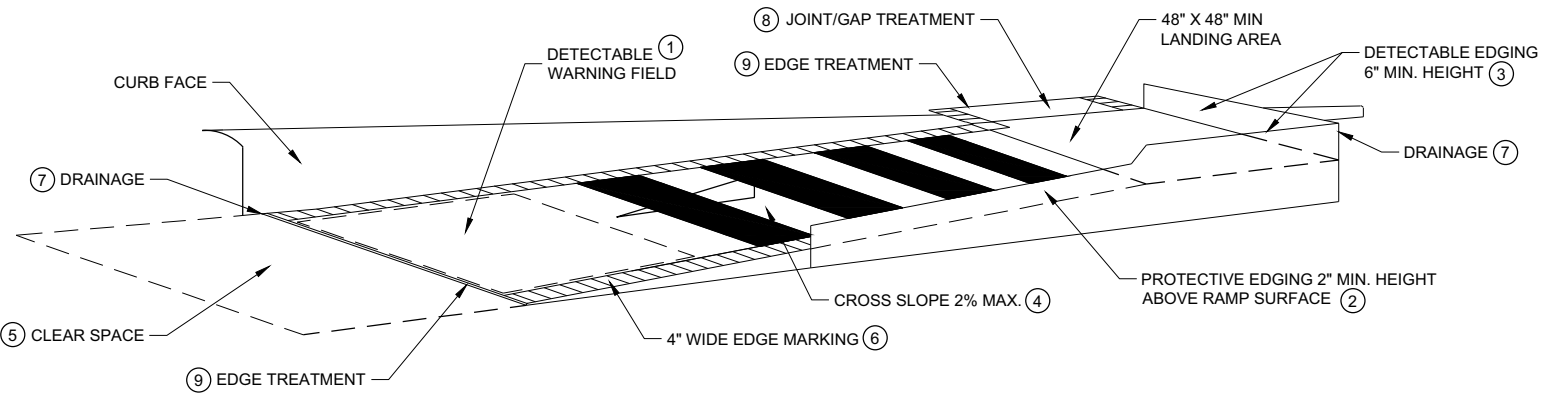
- ① IF SIDEWALK CLOSURE AFFECTS AN ACCESSIBLE AND DETECTABLE FACILITY, MAINTAIN ACCESSIBILITY AND DETECTABILITY ALONG THE ALTERNATE PEDESTRIAN ROUTE
- ② "ROAD WORK AHEAD" SIGNS ARE NOT REQUIRED IF THE SIDEWALK CLOSURE OCCURS WITHIN A LARGER WORK ZONE WHERE ADVANCE WARNING SIGNS ARE ALREADY PRESENT, OR IF THE WORK AREA AND EQUIPMENT ARE MORE THAN 2 FEET BEHIND THE CURB.
- ③ IF TEMPORARY PEDESTRIAN CROSSWALK IS NOT PROVIDED, OMIT R9-8 AND WO11-2 SIGN ASSEMBLIES. IF PROVIDED INCLUDE ON BOTH SIDES OF THE CROSSWALK.
- ④ TEMPORARY CURB RAMPS. SEE SDD 15D30 SHEET "b'.
- ⑤ DRUMS OR BARRICADES AT 25 FOOT SPACING. STREET PARKING SHALL BE PROHIBITED FOR AT LEAST 50 FEET IN ADVANCE OF THE MID-BLOCK CROSSWALK.
- ⑥ TEMPORARY PAVEMENT MARKING FOR CROSSWALK LINES.
- ⑦ LIMIT WORK TO ONE QUADRANT AT A TIME TO MINIMIZE PEDESTRIAN DISRUPTION.

LEGEND

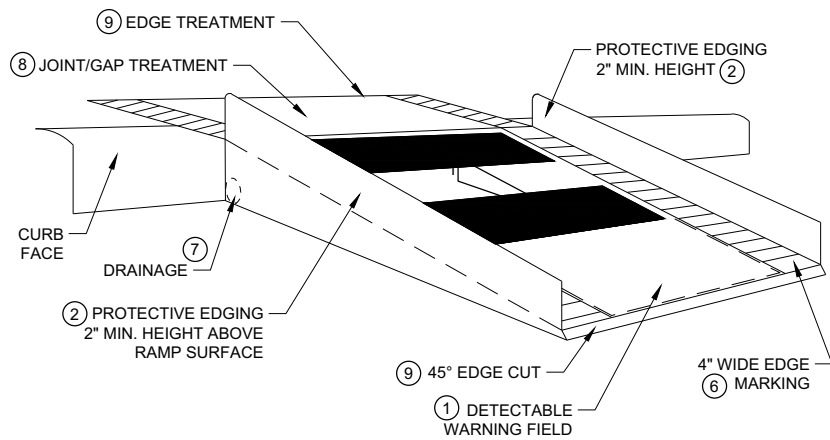
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE II BARRICADE WITH/WITHOUT SIGN (ALL WITH ONE WARNING LIGHT, TYPE A, LOW INTENSITY FLASHING)
- TYPE III BARRICADE WITH/WITHOUT SIGN (ALL WITH ONE WARNING LIGHT, TYPE A, LOW INTENSITY FLASHING)
- UNDER PEDESTRIAN TRAFFIC
- WORK AREA
- PEDESTRIAN CHANNELIZATION DEVICE
- DIRECTION OF TRAFFIC

**TRAFFIC CONTROL,
PEDESTRIAN ACCOMMODATION**

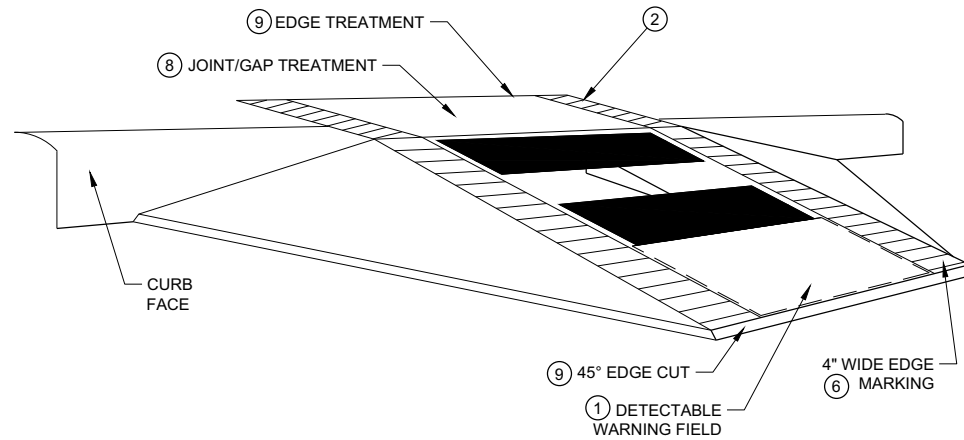
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



TEMPORARY CURB RAMP PARALLEL TO CURB



WITH PROTECTIVE EDGE



WITH SIDE APRON

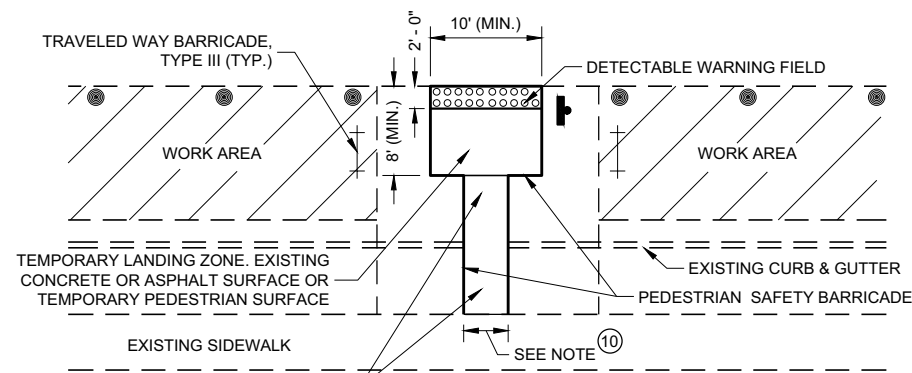
TEMPORARY CURB RAMP PERPENDICULAR TO CURB

GENERAL NOTES

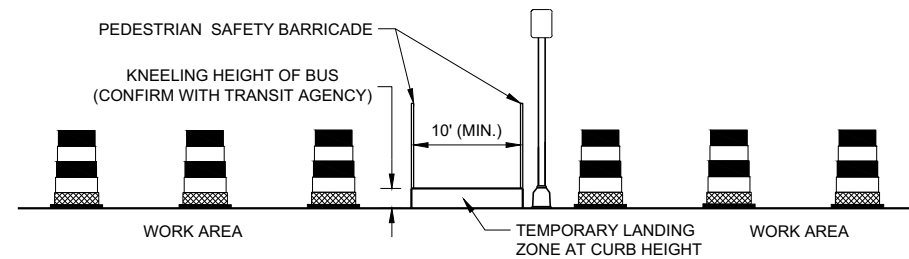
NOTIFY THE BUS COMPANY 7 DAYS IN ADVANCE OF THE BUS STOP RELOCATION.

ALTERNATE SIDEWALK WORK BETWEEN LEFT AND RIGHT SIDE OF ROADWAY TO MAINTAIN PEDESTRIAN ACCESS.

- ① CURB RAMPS SHALL BE 48" MIN. WIDTH WITH A FIRM, STABLE AND SLIP RESISTANT SURFACE. INSTALL CONTRASTING DETECTABLE WARNING FIELD AT PEDESTRIAN STREET CROSSINGS. REFER TO SDD 08D05, SHEET "e".
- ② PROTECTIVE EDGING WITH A 2" MIN. HEIGHT SHALL BE INSTALLED WHEN A CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6" OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3" OR MORE.
- ③ DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).
- ④ CURB RAMPS AND LANDINGS SHALL HAVE A 1:50 (2%) MAX. CROSS-SLOPE.
- ⑤ CLEAR SPACE OF 48" X 48" SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP.
- ⑥ THE CURB RAMP WALKWAY EDGE SHALL BE MARKED WITH A YELLOW COLOR, 4" WIDE MARKING, UNLESS A CONTRASTING DETECTABLE WARNING FIELD IS PROVIDED.
- ⑦ DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.
- ⑧ LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN ½" WIDTH.
- ⑨ CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED ½". LATERAL EDGES SHALL BE VERTICAL UP TO ¼" HIGH AND BEVELED AT 1:2 BETWEEN ¼" AND ½".
- ⑩ 5" WIDE MIN. WITH PEDESTRIAN SAFETY BARRICADE, 10' WIDE MIN. WITHOUT PEDESTRIAN SAFETY BARRICADE.



PLAN VIEW



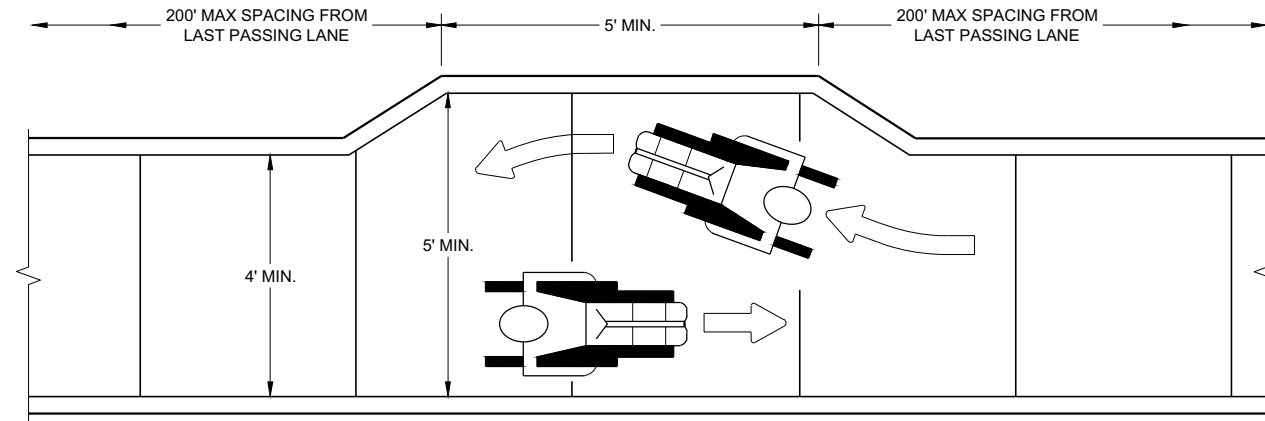
PROFILE VIEW

TEMPORARY BUS STOP PAD

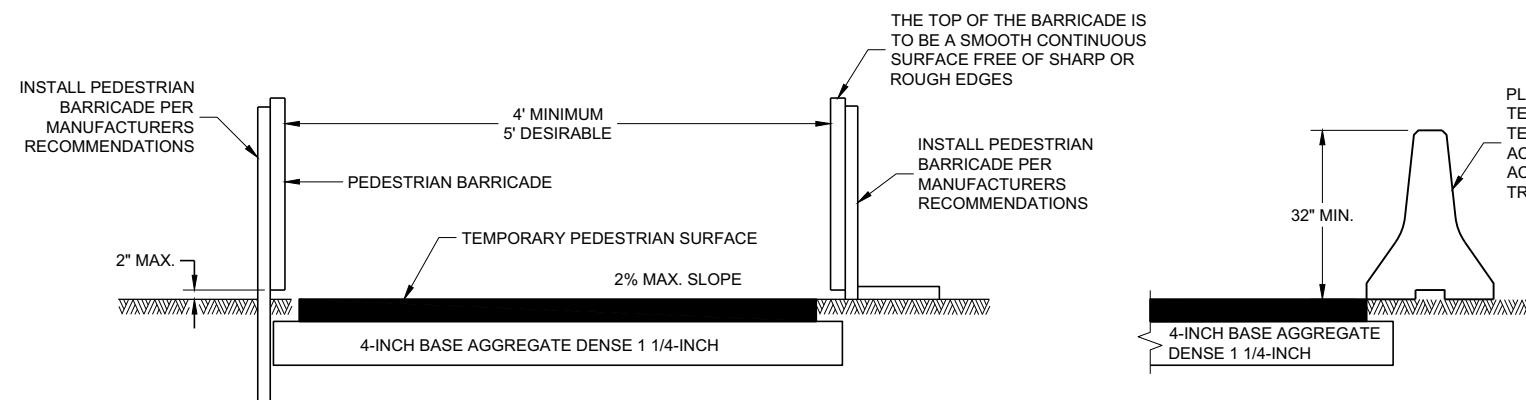
LEGEND

- TRAFFIC CONTROL DRUM
- † TYPE III BARRICADE
- ▨ WORK AREA

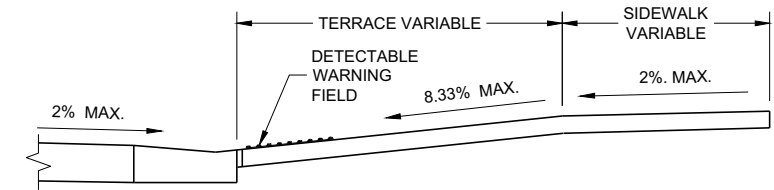
TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION



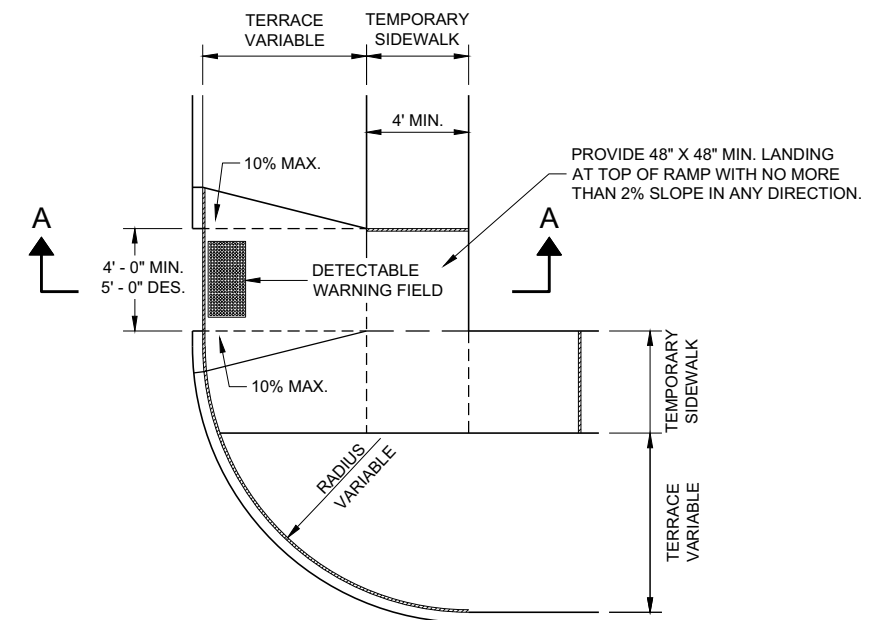
NARROW SIDEWALK PASSING DETAIL



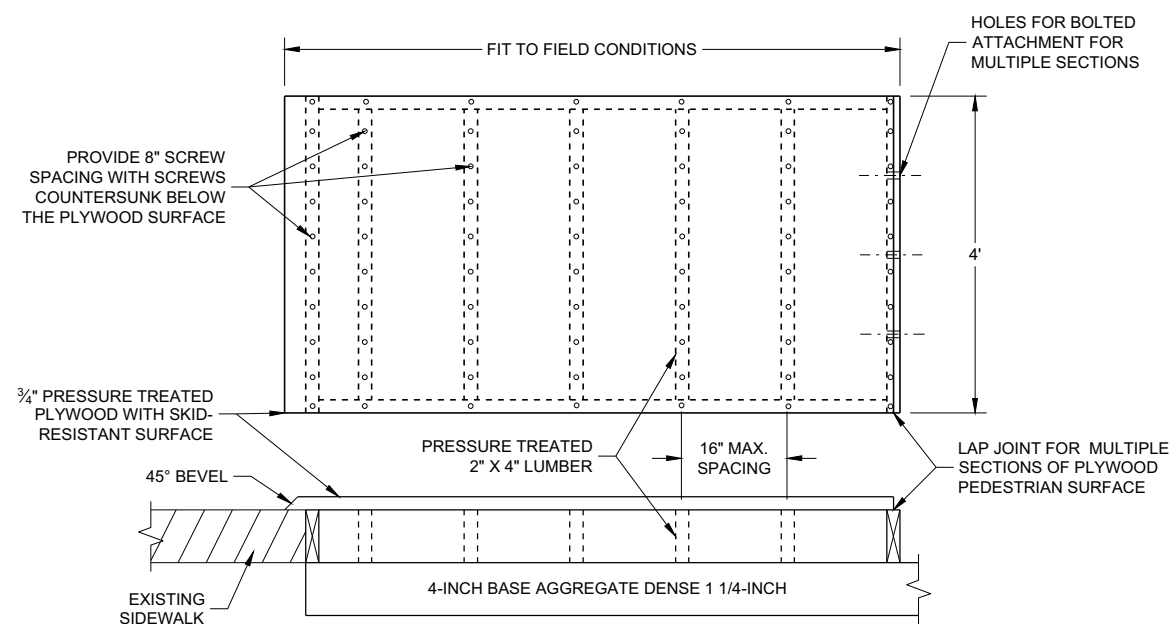
TEMPORARY PEDESTRIAN ACCESS



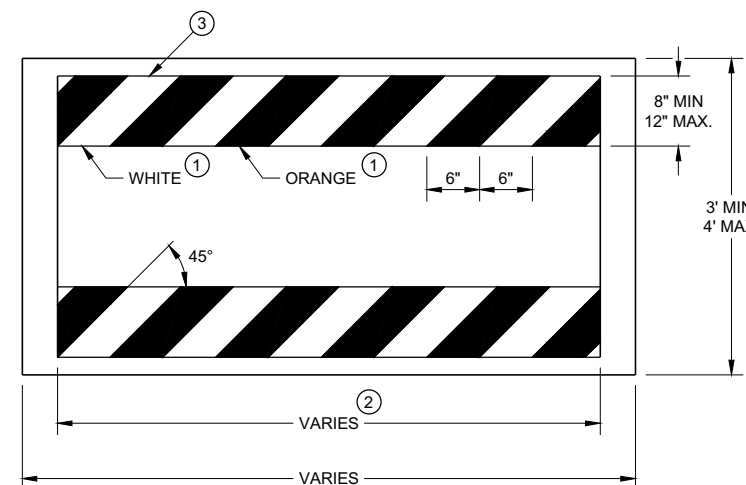
SECTION A - A



**PLAN VIEW
TEMPORARY TYPE 3 RAMP
(OUTSIDE OF CROSSWALK AREA)**



TEMPORARY PEDESTRIAN SURFACE PLYWOOD

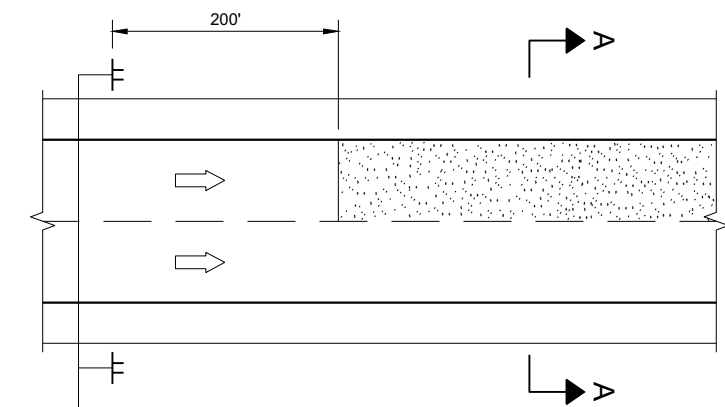


TEMPORARY PEDESTRIAN BARRICADE *

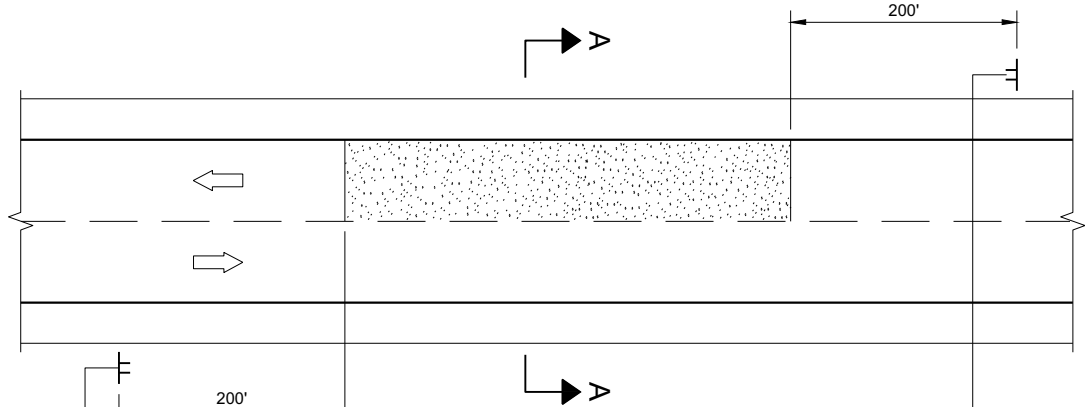
GENERAL NOTES

- BARRICADE DEVICE SELECTED FROM APPROVED PRODUCT LIST
- ① REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.
- ② SHEETING REQUIRED ON MORE THAN 50% OF BARRICADE WIDTH.
- ③ PLACE SHEETING ON BOTH SIDES OF THE BARRICADE.
- * USE THIS DETAIL FOR SHEETING PLACEMENT REFERENCE.

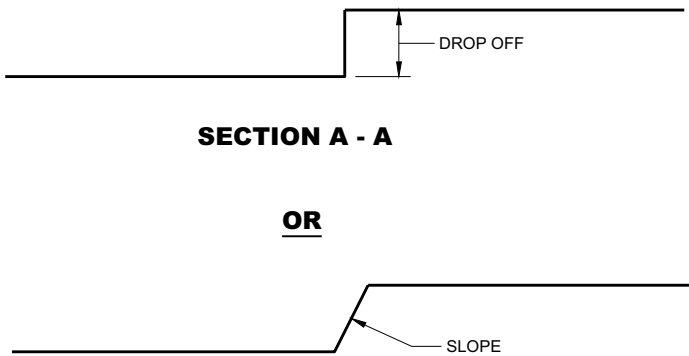
TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED November 2019 DATE	/S/ Andrew Heidtke WORK ZONE ENGINEER
FHWA	



MULTI-LANE

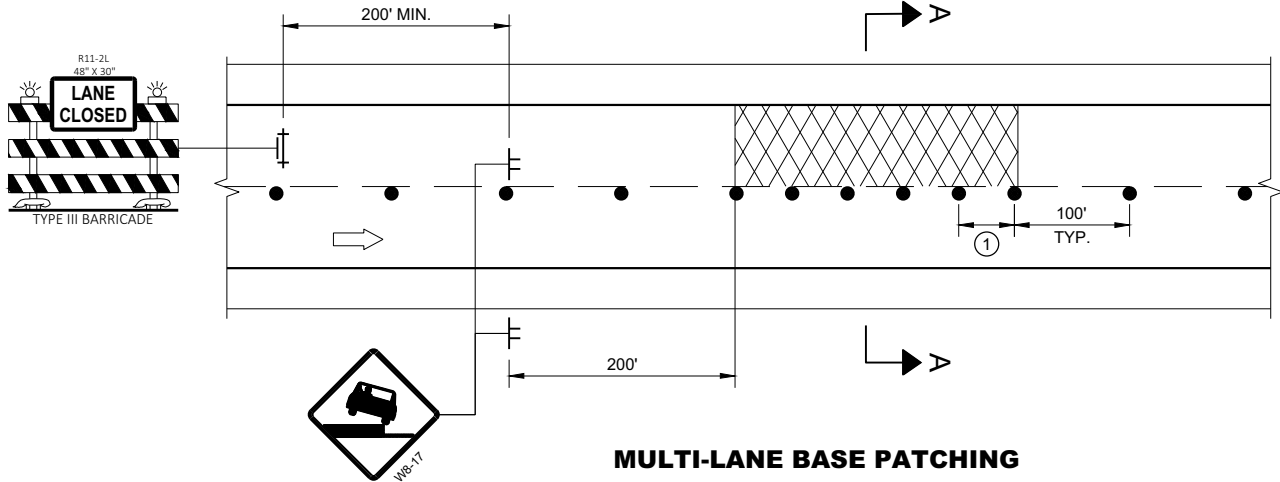


TWO-WAY TWO LANE



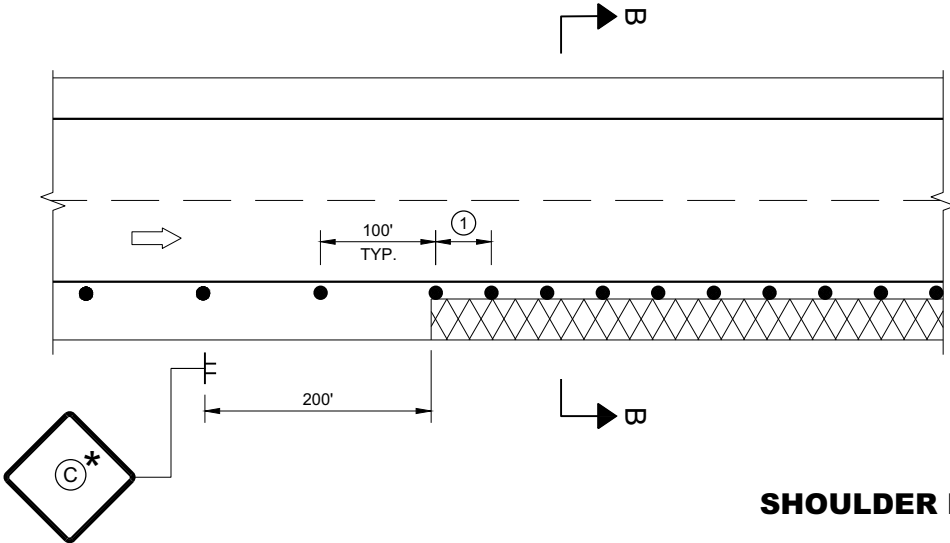
OR

SECTION A - A

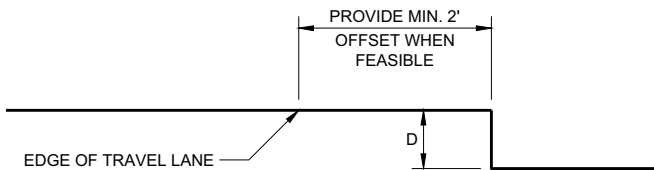


MULTI-LANE BASE PATCHING

ADJACENT LANE DROP-OFFS



SHOULDER DROP-OFFS



SECTION B - B

D	SIGN (C)
< 2" WITH A SLOPE STEEPER THAN 3:1	 WO8-9
2" < 6" WITH A SLOPE STEEPER THAN 3:1	 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 ENGINEER

FHWA

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

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.

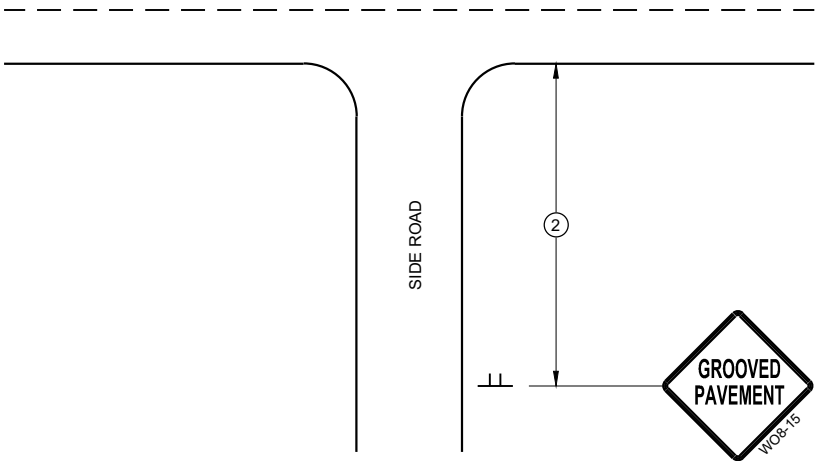
ALL SIGNS INAPPROPRIATE TO THE STATUS OF THE CONTROL ZONE, INCLUDING PRE-EXISTING SIGNS IN THE VICINITY, SHALL BE COVERED OR REMOVED AS DIRECTED BY THE ENGINEER.

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.

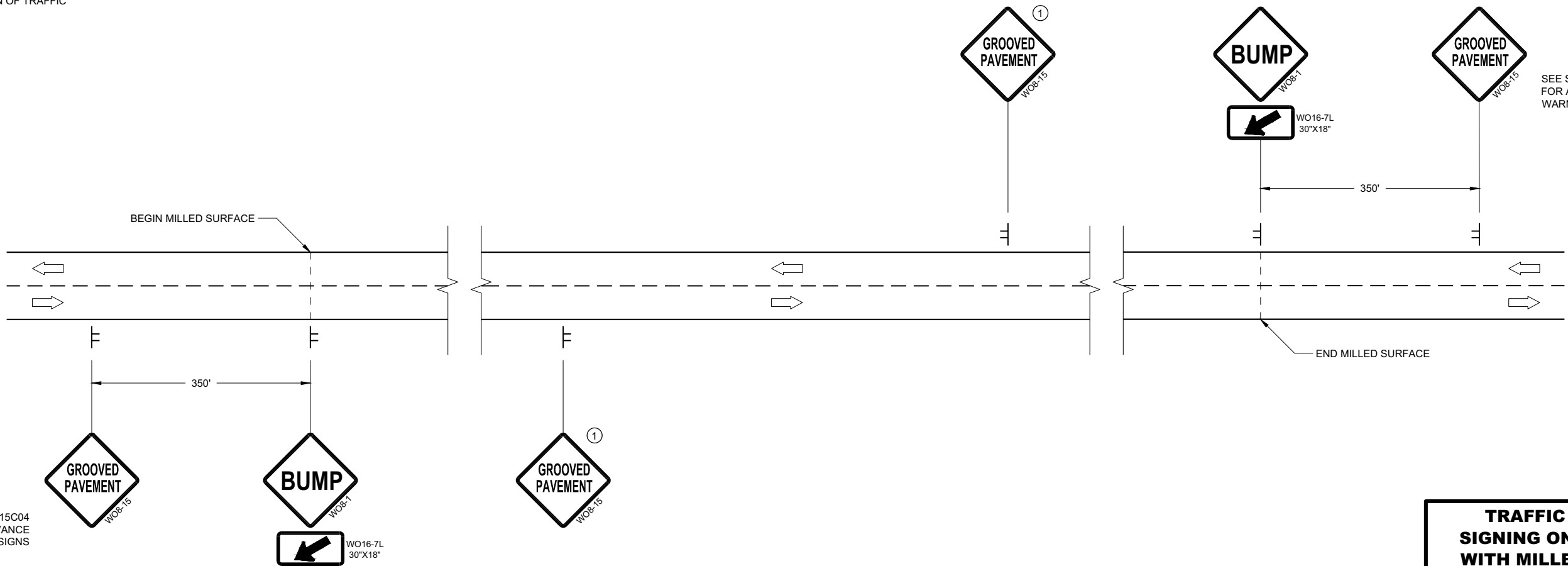
- ① PLACE SIGNS 350' IN ADVANCE OF MILLED SURFACES AND AT 1 MILE INTERVALS, OR AS DIRECTED BY THE ENGINEER.
- ② PLACE SIGN 200' MIN. FROM INTERSECTION AND 200' MIN. AFTER ADVANCE WARNING SIGN SHOWN IN SDD 15C04.

LEGEND

-  SIGN ON TEMPORARY SUPPORT
-  DIRECTION OF TRAFFIC



TYPICAL SIDE ROAD APPROACH
SIGN DETAIL



SEE SDD15C04
FOR ADVANCE
WARNING SIGNS

SEE SDD15C04
FOR ADVANCE
WARNING SIGNS

DETAIL FOR SIGNING ON MILLED SURFACES

TRAFFIC CONTROL,
SIGNING ON ROADWAYS
WITH MILLED SURFACES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION


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


FHWA


LEGEND


- V1

WORK VEHICLE
- V2

SHADOW VEHICLE
- 

TRUCK MOUNTED ATTENUATOR (TMA)
- 

FLASHING ARROW PANEL (CAUTION)
- 

WORK AREA
- 

DIRECTION OF TRAFFIC

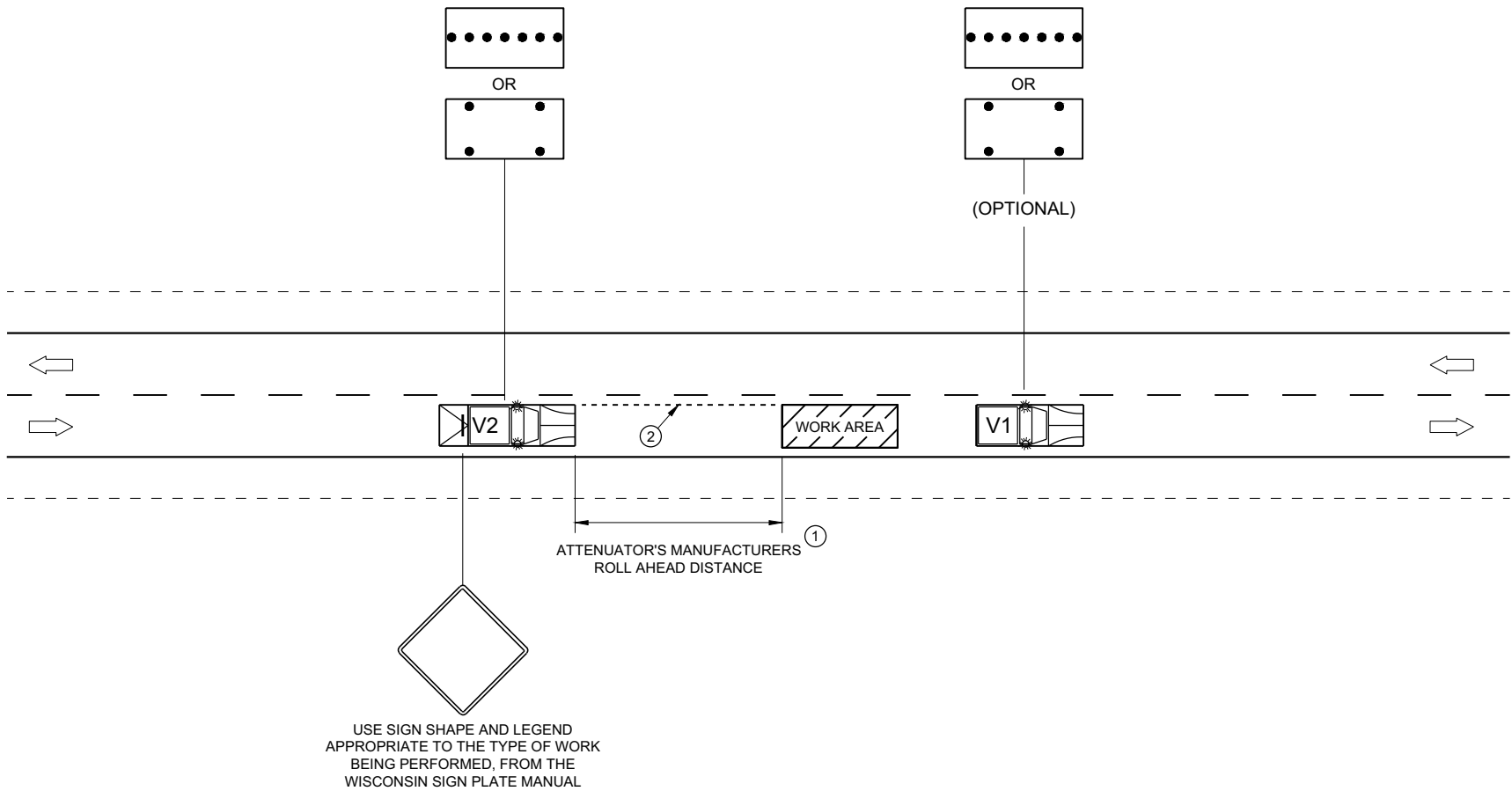
POSTED SPEED PRIOR TO WORK STARTING (MPH)	DECISION SIGHT DISTANCE (D)
0 - 25	550'
30	550'
35	700'
40	700'
45	900'
50	900'
55	1200'

GENERAL NOTES

- ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED.
- MOBILE IS WORK THAT MOVES CONTINUOUSLY OR MOVES AT LEAST THE DECISION SIGHT DISTANCE EVERY 15 MINUTES.
- ALL VEHICLES SHALL BE EQUIPPED WITH TWO 360 DEGREE HIGH INTENSITY YELLOW FLASHING LIGHTS OR STROBE LIGHTS AND OPERATED WITH HEADLIGHTS TURNED ON.
- ALL ARROW PANELS SHALL BE REAR FACING, TYPE "B" OR "C", AND DISPLAYING THE FLASHING CAUTION MODE. SIGNS PLACED ON VEHICLES MUST NOT OBSCURE THE ARROW PANEL.
- USE AN ATTENUATOR ON THE REARMOST VEHICLE THAT BLOCKS ALL OR PART OF THE TRAFFIC LANE.
- ①

DISTANCE BETWEEN VEHICLES MAY INCREASE FROM THE ATTENUATOR'S ROLL AHEAD BASED ON TERRAIN, SIGHT DISTANCE, AND OTHER FACTORS. WHENEVER ADEQUATE STOPPING SIGHT DISTANCE EXISTS TO THE REAR, SHADOW VEHICLES SHOULD MAINTAIN THE MINIMUM DISTANCE FROM THE WORK VEHICLE AND PROCEED AT THE SAME SPEED AS THE WORK VEHICLE. SHADOW VEHICLES SHOULD SLOW DOWN IN ADVANCE OF VERTICAL OR HORIZONTAL CURVES THAT RESTRICT SIGHT DISTANCE.
- ②

ALIGN LEFT SIDE OF SHADOW VEHICLE WITH EDGE OF WORK AREA.



TRAFFIC CONTROL,
MOBILE OPERATIONS ON
AN UNDIVIDED ROADWAY

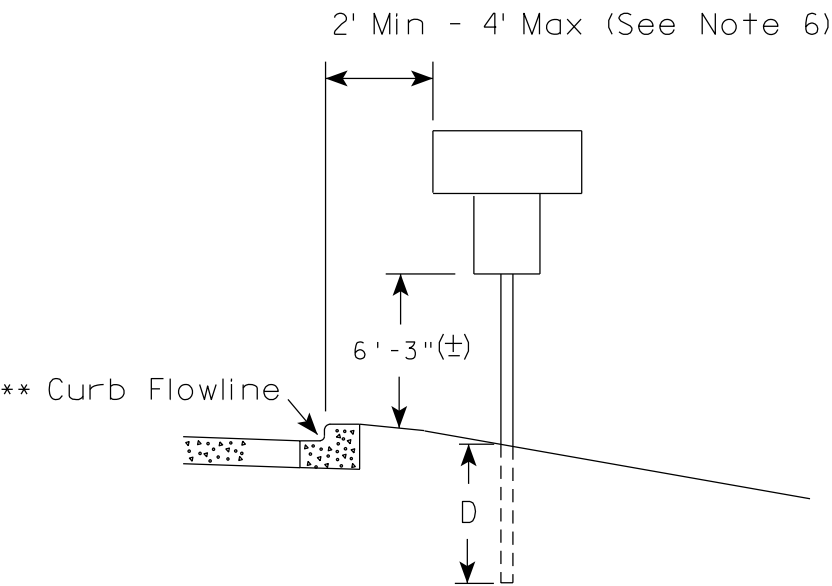
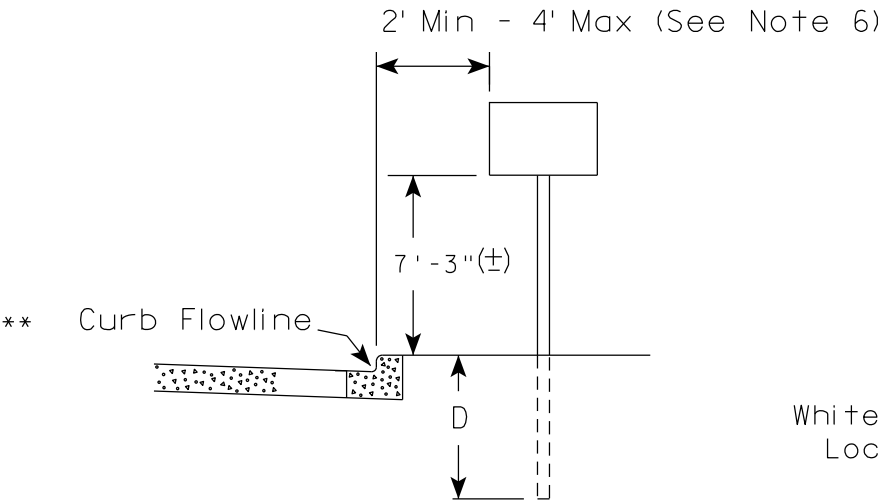
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2021
DATE

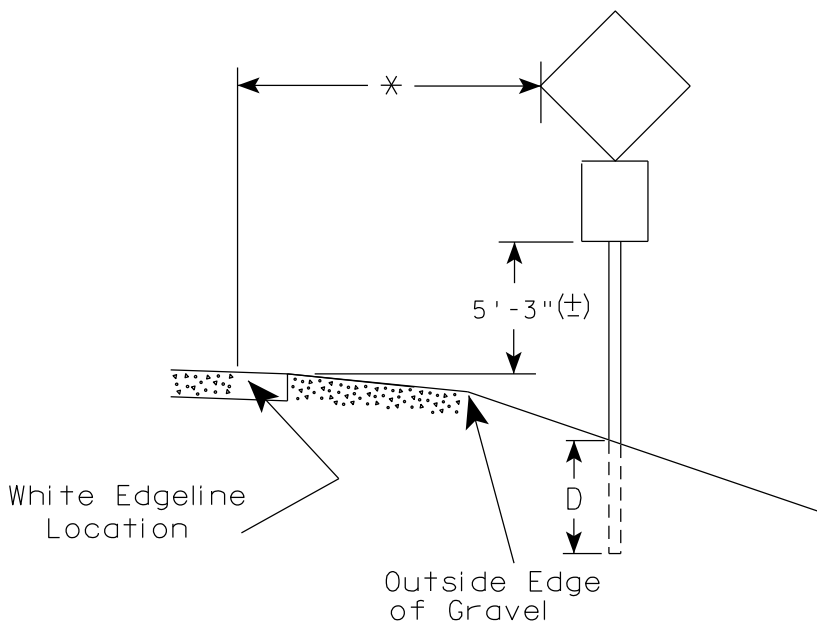
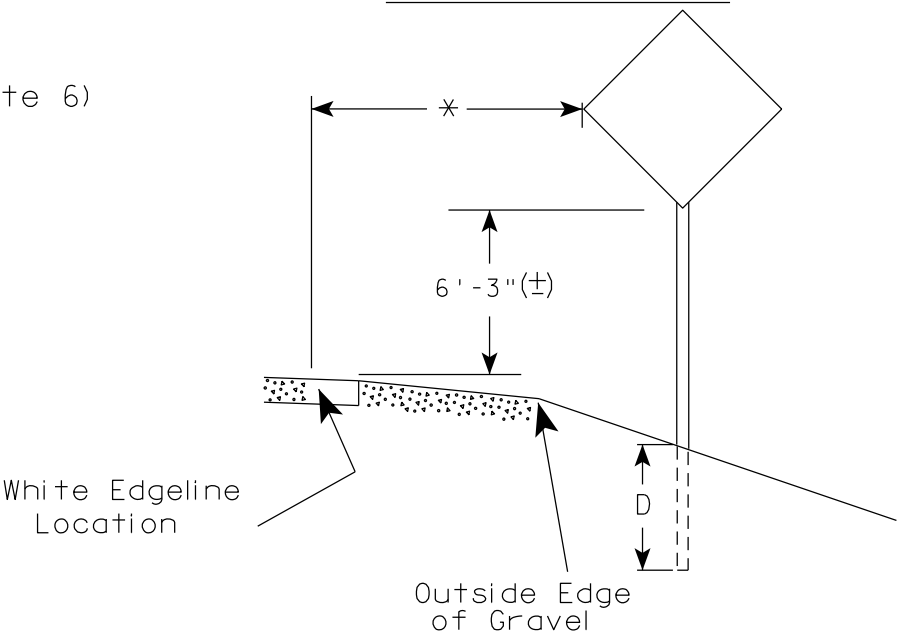
/S/ Andrew Heidtke
STATEWIDE WORK ZONE TRAFFIC
SAFETY ENGINEER

FHWA

URBAN AREA



RURAL AREA (See Note 2)



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 directed by the 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.

* 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.

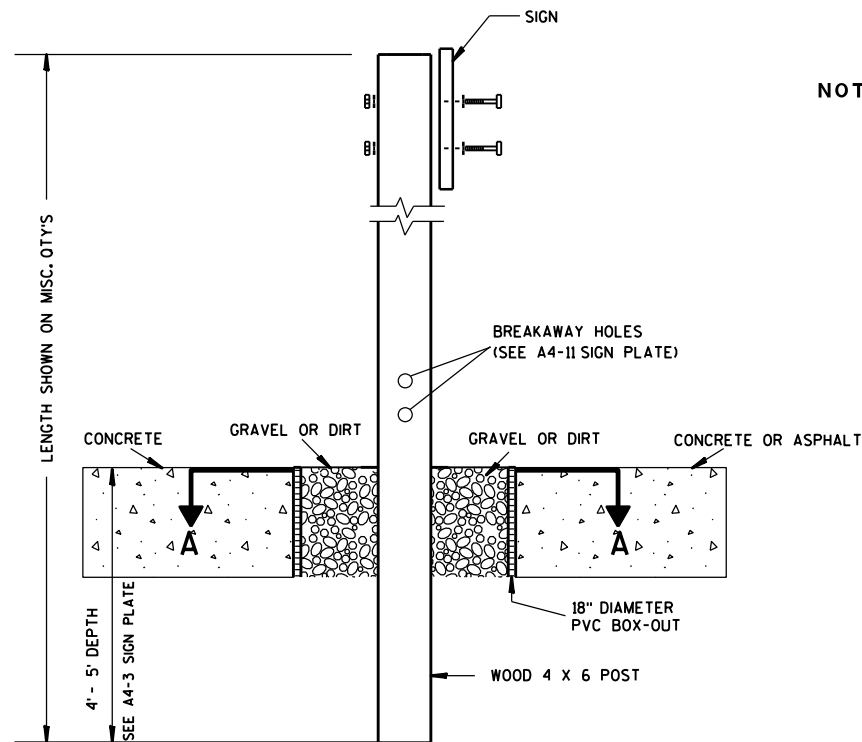
POST EMBEDMENT DEPTH	
Area of Sign Installation (Sq.Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

TYPICAL INSTALLATION
OF PERMANENT TYPE II
SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

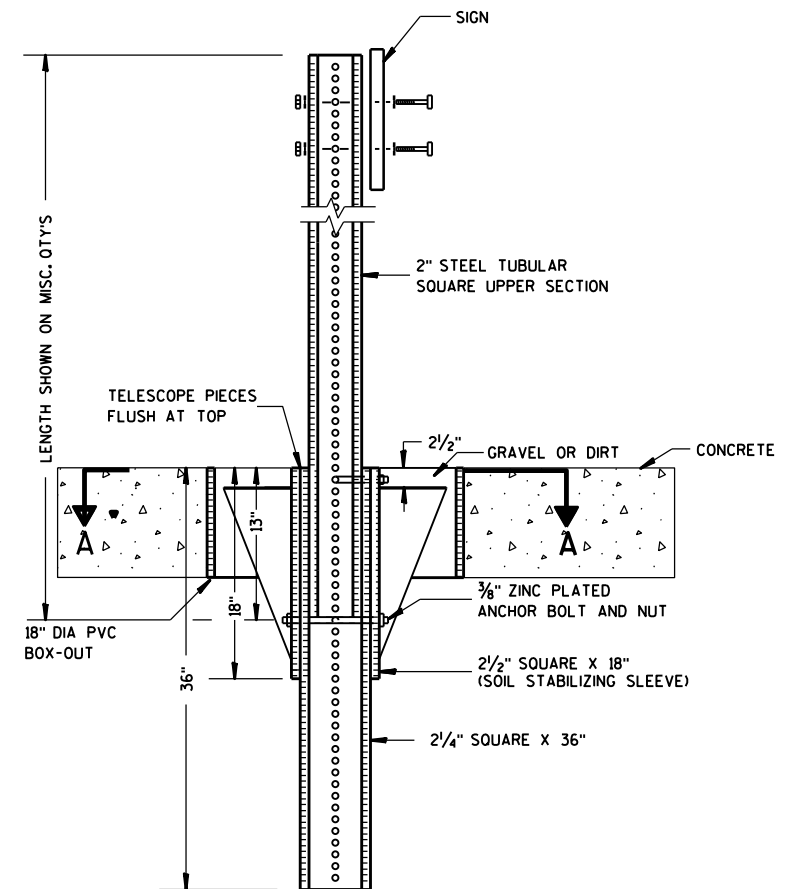
DATE 5/13/2020 PLATE NO. A4-3.22



ELEVATION VIEW

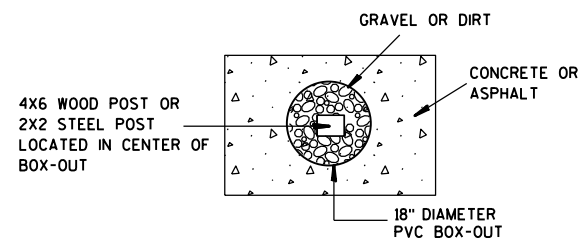
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

- 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

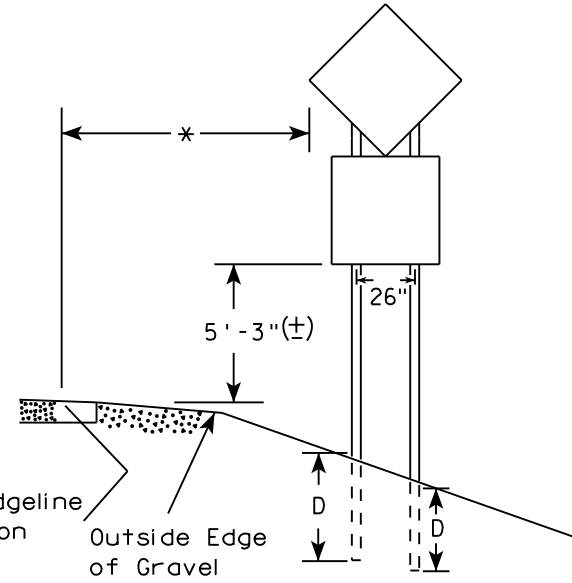
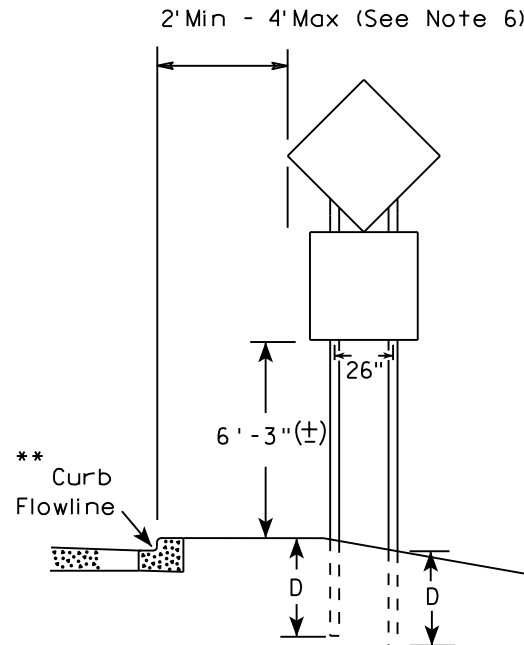
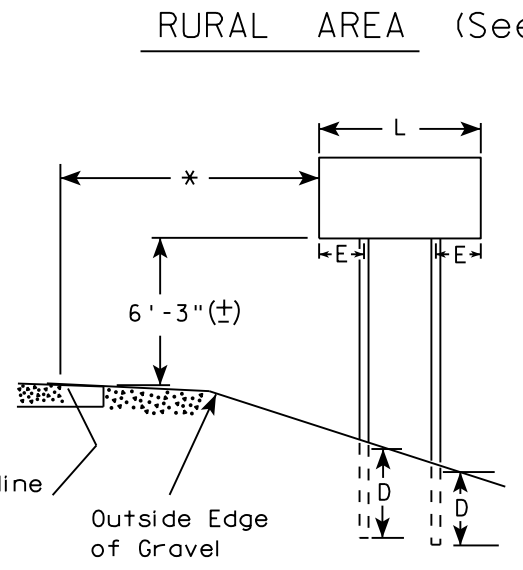
FOR NEW CONCRETE/ASPHALT INSTALLATIONS

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



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"

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

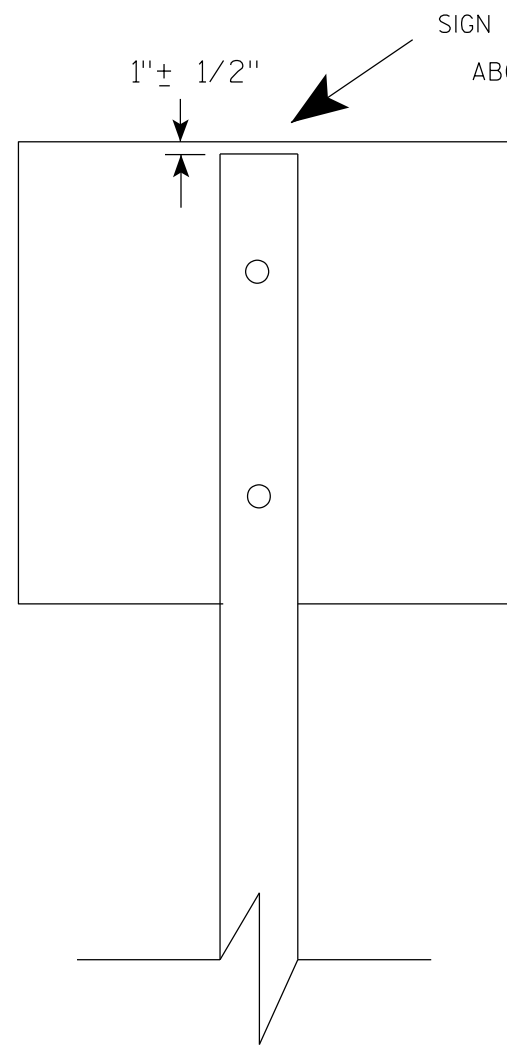
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

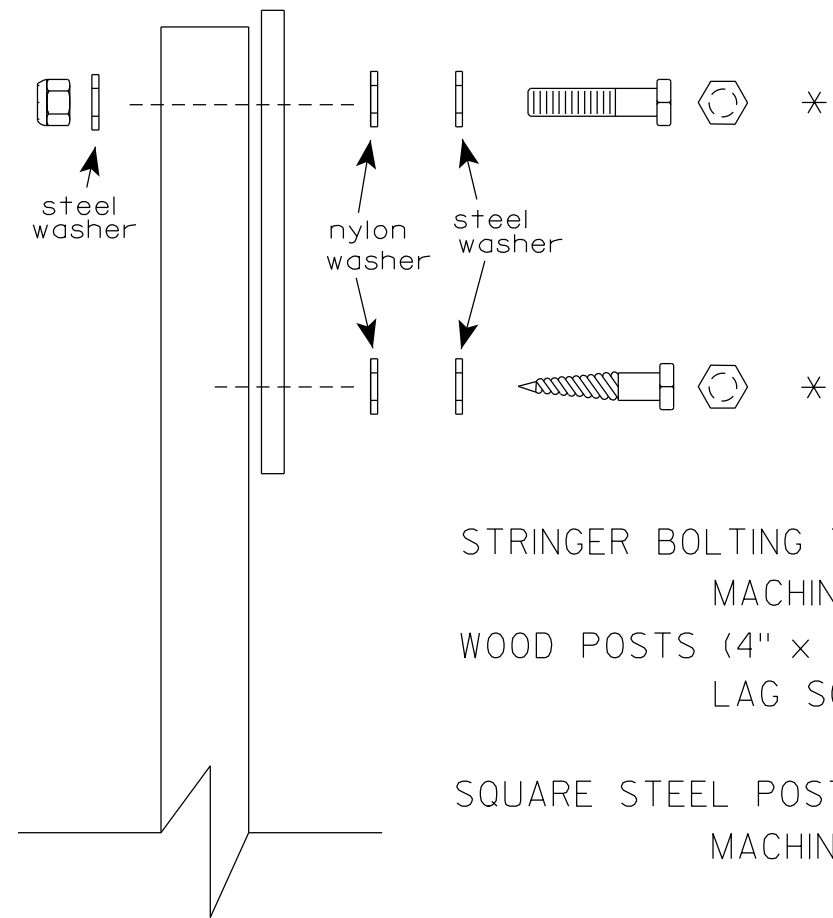
DATE 8/21/17 PLATE NO. A4-4.15

- 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.



SIGN SHALL BE MOUNTED TO PROJECT ABOVE THE TOP OF THE POST



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 - $\frac{5}{16}$ " X 1-3/4" Length w/ lock nuts
- WOOD POSTS (4" x 6")
- LAG SCREWS - $\frac{3}{8}$ " X 3" (NO STRINGERS ON BACK OF SIGN)
 $\frac{3}{8}$ " X 4" (STRINGERS ON BACK OF SIGN)
- SQUARE STEEL POSTS (2" x 2")
- MACHINE BOLTS - $\frac{3}{8}$ " X 3-1/4" Length w/ nuts (NO STRINGER ON BACK OF SIGN)
 $\frac{3}{8}$ " X 5" Length w/ nuts (STRINGERS ON BACK OF SIGN)
- RIVETS - $\frac{9}{32}$ " (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 $\frac{3}{8}$ " I.D. X $\frac{1}{16}$ " STEEL
 - 1-1/4" O.D. X $\frac{3}{8}$ " I.D. X .080 NYLON

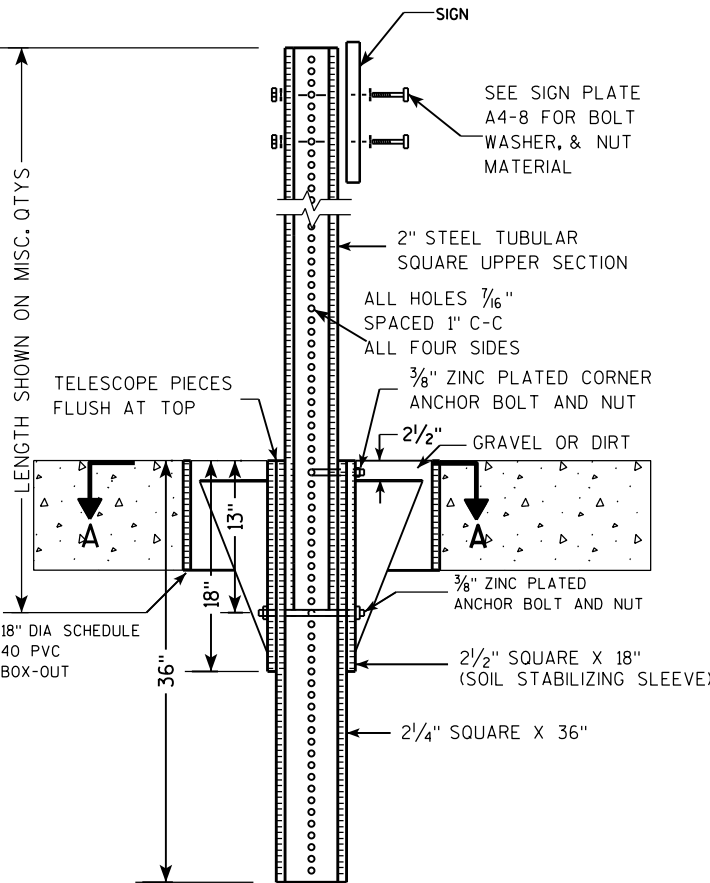
* Two different fastening systems are shown for illustration purposes. On any individual sign, either one or the other system shall be used. Actual number of fasteners per sign varies with the sign area, but normally there are two. For a single post installation, all signs greater than 9 sq. ft. require the use of 3 fasteners.

ATTACHMENT OF SIGNS TO POSTS	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R. Rauch</i> For State Traffic Engineer
DATE 4/1/2020	PLATE NO. A4-8.9

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM



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)



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).

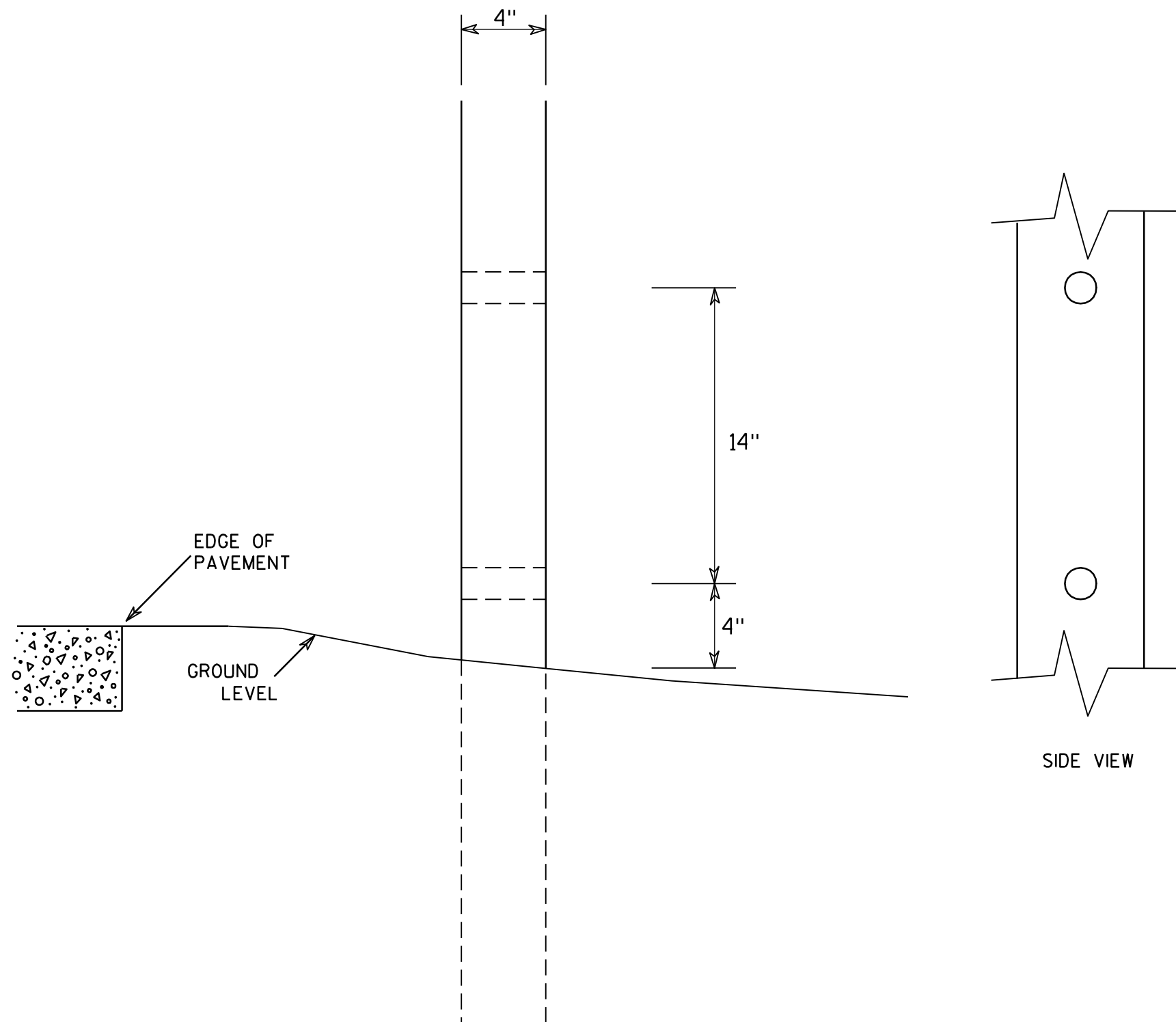
TUBULAR STEEL
SIGN POST
A4-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 2/05/15 PLATE NO. A4-9.9

7

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

**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

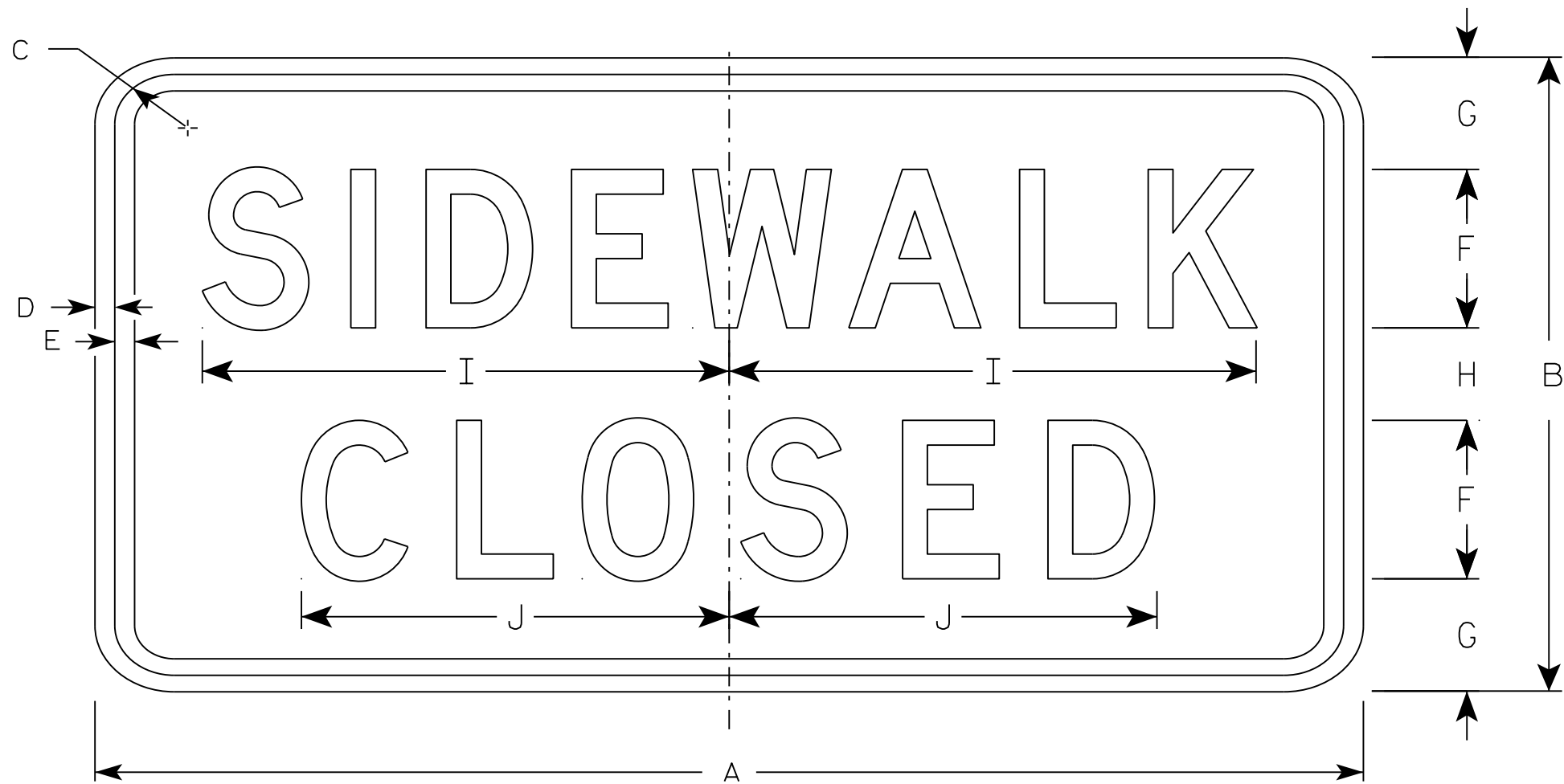
PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E



R9-9

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.
- 5. Use Size 2 for Sidewalks. Use Size 3 for Paths and Trails.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	12	1 3/4	1/2	1/2	3	2 1/8	1 3/4	10	8 1/8																	2.0
2M	24	12	1 3/4	1/2	1/2	3	2 1/8	1 3/4	10	8 1/8																	2.0
3	30	18	1 3/4	1/2	1/2	4	3 1/2	3	12 1/2	10 1/4																	3.75
4																											
5																											

STANDARD SIGN
R9-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

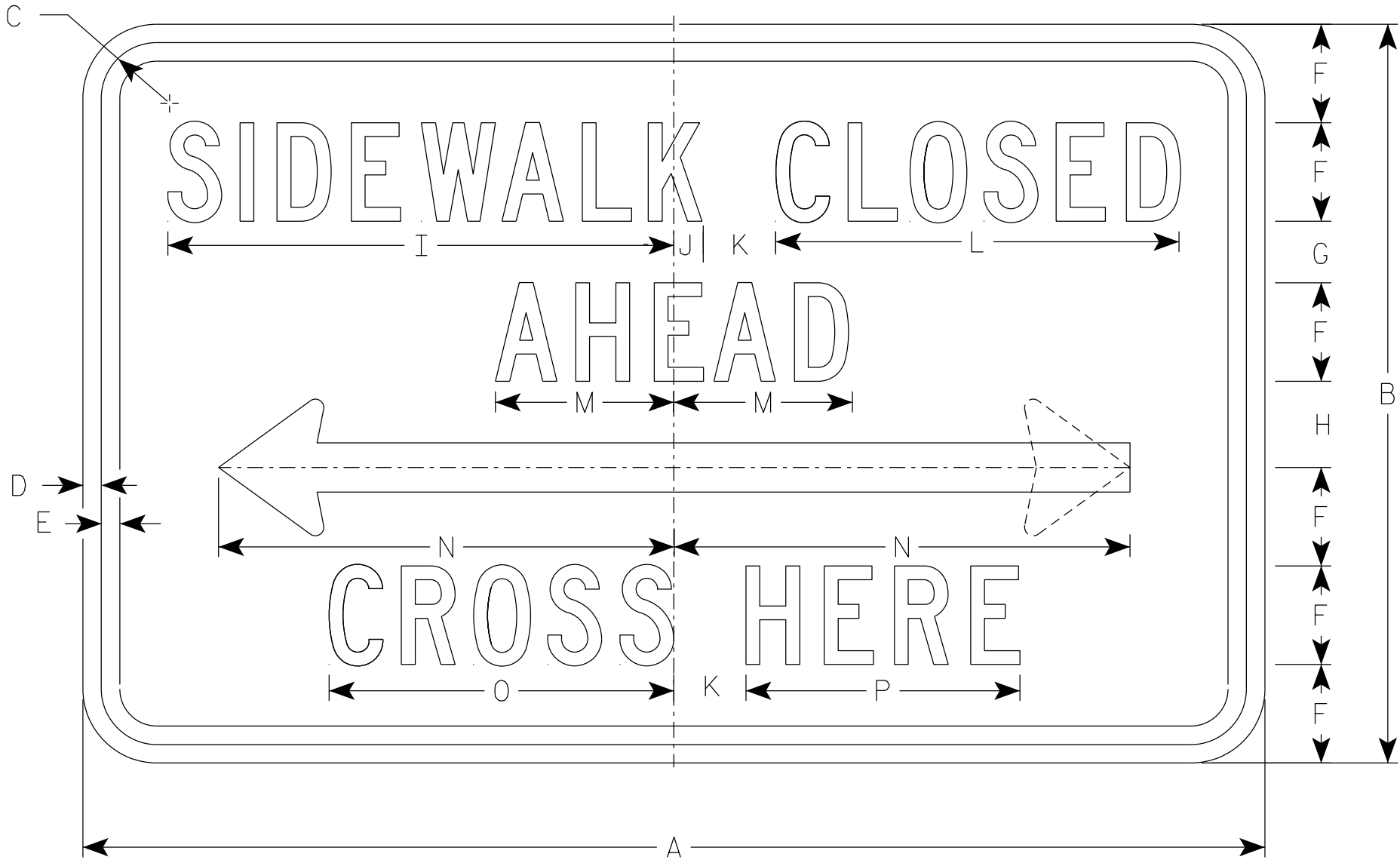
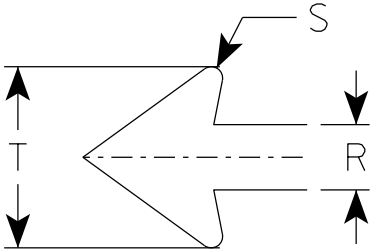
DATE 8/11/16 PLATE NO. R9-9.6

NOTES

1. Sign is Type II - Type H Reflective
2. Color:

Background - White

Message - Black
3. Message Series - C except Size 1 is 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. Use Size 2 for Sidewalks. Use Size 3 for Paths and Trails.
6. R9-11D (double arrow)
R9-11L (left arrow)
R9-11R (right arrow)



R9-11

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	12	1 1/8	3/8	3/8	1 1/2	1 1/2	1 1/2	9 3/4	5/8	1 1/2	7 5/8	3 1/2	9 1/4	6 5/8	5 1/8		1	1/8	2 3/4							2.0
2M	24	12	1 1/8	3/8	3/8	1 1/2	1 1/2	1 1/2	9 3/4	5/8	1 1/2	7 5/8	3 1/2	9 1/4	6 5/8	5 1/8		1	1/8	2 3/4							2.0
3	30	15	1 1/8	3/8	1/2	2	1 1/2	1 1/2	13	3/4	2	10 1/4	4 5/8	12 3/8	8 7/8	6 7/8		1 1/4	1/4	3 5/8							3.125
4																											
5																											

PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E



Wisconsin Department of Transportation

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through innovation and exceptional service.

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