WKE Mar 14, 2023

PROJECT ID: 1030-09-76
WITH: 1320-23-75

COUNTY: RACINE

ORDER OF SHEETS

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

TOTAL SHEETS = 290

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1030-09-76		

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

IH 41 NORTH SOUTH FREEWAY

EAST AND WEST FRONTAGE ROADS

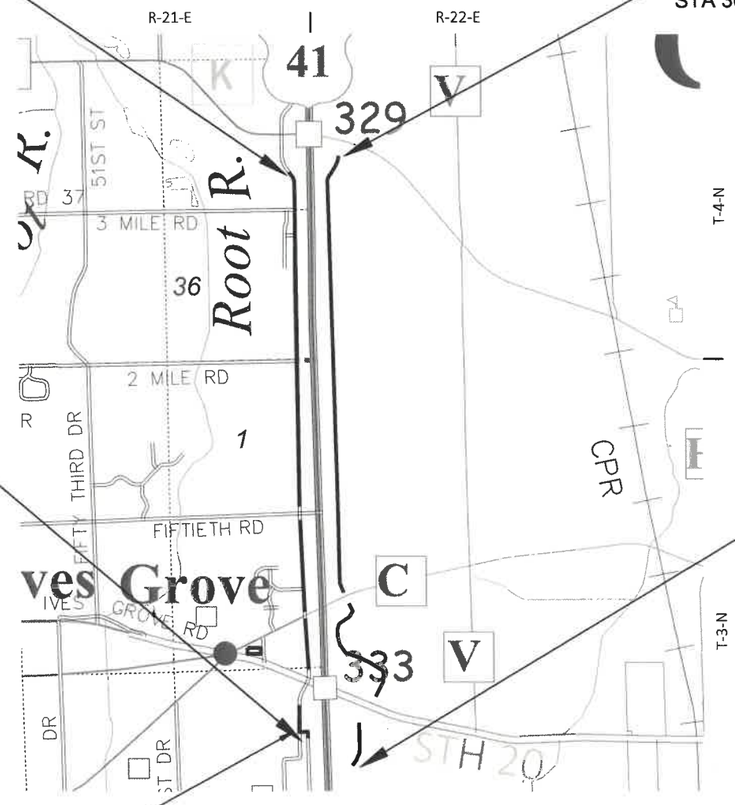
OFF SYS
RACINE COUNTY

STATE PROJECT NUMBER
1030-09-76



END CONSTRUCTION (W FRONTAGE RD)
STA 5043+10

END PROJECT (E FRONTAGE RD)
STA 3052+35



BEGIN CONSTRUCTION (W FRONTAGE RD)
STA 2838+77

BEGIN PROJECT (E FRONTAGE RD)
STA 3835+00
Y = 182,834.64
X = 594,498.07

STA EQUATION
STA 4864+22.42 AH =
STA 2865+23.97 BK

LAYOUT
SCALE 0 1 MI

TOTAL NET LENGTH OF CENTERLINE = 7.571 MI

DESIGN DESIGNATION			E. FRONTAGE RD SOUTH OF STH 20	W. FRONTAGE RD SOUTH OF STH 20	E. FRONTAGE RD NORTH OF STH 20	W. FRONTAGE RD NORTH OF STH 20
A.A.D.T.	2024	=	3,000	4,280	2,320	2,480
A.A.D.T.	2044	=	4,050	4,920	4,655	2,852
D.H.V.		=	515	625	590	365
D.D.		=	59/41	59/41	59/41	59/41
T.		=	14.9%	14.9%	14.9%	14.9%
DESIGN SPEED		=	40 MPH	40 MPH	40 MPH/50 MPH	40 MPH/50 MPH
ESALS		=	850,000	850,000	650,000	650,000

CONVENTIONAL SYMBOLS

PLAN		PROFILE		UTILITIES	
CORPORATE LIMITS		GRADE LINE		ELECTRIC	E
PROPERTY LINE		ORIGINAL GROUND		FIBER OPTIC	FO
LOT LINE		MARSH OR ROCK PROFILE (To be noted as such)	ROCK	GAS	G
LIMITED HIGHWAY EASEMENT		SPECIAL DITCH	LABEL	SANITARY SEWER	SAN
EXISTING RIGHT OF WAY		GRADE ELEVATION	95.36	STORM SEWER	SS
PROPOSED OR NEW R/W LINE		CULVERT (Profile View)		TELEPHONE	T
SLOPE INTERCEPT				WATER	W
REFERENCE LINE	300'ER'			UTILITY PEDESTAL	
EXISTING CULVERT				POWER POLE	
PROPOSED CULVERT (Box or Pipe)				TELEPHONE POLE	
COMBUSTIBLE FLUIDS	CAUTION				
MARSH AREA					
WOODED OR SHRUB AREA					

COORDINATES ON THIS PLAN ARE REFERENCES TO THE WISCONSIN COUNTY COORDINATE SYSTEM (WCCS), RACINE COUNTY, NAD83 (1997)

ELEVATIONS SHOWN ON THIS PLAN ARE REFERENCED TO NAVD88 (1991)

SINGH + ASSOCIATES, INC.
CONSULTING ENGINEERS
10101 West Greenfield Ave.
Suite 210
Milwaukee, Wisconsin 53214

WISCONSIN
JILLYN O'SHEA
E-48858
CHICAGO IL
PROFESSIONAL ENGINEER

Oct 27, 2022 (Date) (Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	GRAEF
Designer	SINGH AND ASSOCIATES, INC.
Project Manager	DIEGO SILVA
Regional Examiner	
Regional Supervisor	MANOJOY NAG

APPROVED FOR THE DEPARTMENT
DATE: 10/31/2022 Diego Silva (Signature)

E

FILE NAME : W:\PROJECTS\21234\04_CADD_01\CADD_SHEETS\010101-TI.DWG PLOT DATE : 10/20/2022 2:14 PM PLOT BY : ALEXANDER UNDERWOOD PLOT NAME :

UTILITY CONTACTS

AT&T LEGACY - COMMUNICATION LINE
KENNETH M. NINE
110 N. MAIN ST.
CULVER, IN 46511
(574) 842-8830; (574) 904-6336 (MOBILE)
KNINE@JMCEAINC.COM

AT&T LOCAL NETWORK - COMMUNICATION LINE
DALE DEFEVER
39869 LINN ST
CANTON, MI 48147
(586) 242-2671
DD2579@ATT.COM

AT&T WISCONSIN - COMMUNICATION LINE
MIKE VANBOVEN
411 7TH STREET
RACINE, WI 53403
(262) 676-3958
MV3658@ATT.COM

LEVEL 3 COMMUNICATIONS LLC - COMMUNICATION LINE
JASON BUSSE
3235 INTERTECH DR. SUITE 600
BROOKFIELD, WI 53405
(414) 224-6713; (715) 415-3214 (MOBILE)
JASON.BUSSE@LUMEN.COM

MIDWEST FIBER NETWORKS LLC - COMMUNICATION LINE
CORY SCHMUKI
6070 NORTH FLINT RD
GLENDALE, WI 53209
(414) 459-3561; (414) 349-2764 (MOBILE)
CSCHMUKI@MIDWESTFIBERNETWORKS.COM

RACINE WATER WORKS COMMISSION - WATER
CHAD REGALIA
100 HUBBARD ST
RACINE, WI 53403
(262) 497-4611
CHAD.REGALIA@CITYOFRACINE.ORG

SPECTRUM - COMMUNICATION LINE
GERALD SCHULTZ
1320 N DR MARTIN LUTHER KING JR DR
MILWAUKEE, WI 53212
(414) 908-4863; (414) 232-7178 (MOBILE)
GERALD.SCHULTZ@CHARTER.COM

TDS METROCOM LLC - COMMUNICATION LINE
JASON KENNY
525 JUNCTION RD
MADISON, WI 53717
(262) 514-2127
JASON.KENNY@TDSTELECOM.COM

VILLAGE OF CALEDONIA - SEWER
ROBERT LUI
333 4 1/2 MILE ROAD
RACINE, WI 53402
(262) 681-3900
BLUI@CALEDONIAWIUTILITY.COM

VILLAGE OF CALEDONIA - WATER
ROBERT LUI
333 4 1/2 MILE ROAD
RACINE, WI 53402
(262) 681-3900
BLUI@CALEDONIAWIUTILITY.COM

VILLAGE OF MOUNT PLEASANT - SEWER
LINSEY WEBER
8811 CAMPUS DR
MOUNT PLEASANT, WI 53406
(262) 664-7833
LWEBER@MTPLEASANTWI.GOV

WE ENERGIES - ELECTRIC
JAMES NELSON
7815 NORTHWESTERN AVE.
RACINE, WI 53406
(262) 884-6734; (414) 315-1189 (MOBILE)
JAMES.NELSON@WE-ENERGIES.COM

WE ENERGIES - GAS OPERATIONS
CHRIS DEGRAVE
7815 NORTHWESTERN AVE.
RACINE, WI 53406
(262) 886-7018; (262) 939-9814 (MOBILE)
CHRIS.DEGRAVE@WE-ENERGIES.COM

YORKVILLE SEWER UTILITY DISTRICT NO 1 - SEWER
GARY HANSON
925 15TH AVE
UNION GROVE, WI 53182
(262) 888-9439
GHANSON@VILLAGEOFYORKVILLE.COM

YORKVILLE SEWER UTILITY DISTRICT NO 1 - WATER
GARY HANSON
925 15TH AVE
UNION GROVE, WI 53182
(262) 888-9439
GHANSON@VILLAGEOFYORKVILLE.COM

WISCONSIN DEPARTMENT OF TRANSPORTATION - SIGNAL
WISDOT SIGNAL OPERATIONS
141 NW BARSTOW STREET
WAUKESHA, WI 53187
(414) 750-2605

WISDOT ELECTRICAL FIELD UNIT
935 S. 60TH STREET
WEST ALLIS, WI 53214
(414) 266-1170

WISCONSIN DEPARTMENT OF TRANSPORTATION - COMMUNICATION LINE
JOHN MITTELSTADT
433 WEST ST. PAUL AVE.
MILWAUKEE, WI 53203
(608) 205-7859
JOHN.MITTELSTADT@DOT.WI.GOV

OTHER AGENCIES

WDNR LIASON
BENTON STELZEL
ENVIRONMENTAL ANALYSIS & REVIEW SPECIALIST
141 NW BARSTOW ST., ROOM 180
WAUKESHA, WI, 53188
PHONE (262) 623-0194
EMAIL: BENTON.STELZEL@WISCONSIN.GOV

WISDOT DESIGN
PROJECT MANAGER
WISDOT SE REGION
DIEGO SILVA
141 NW BARSTOW ST.,
WAUKESHA, WI, 53187
PHONE: (262) 548-6433
EMAIL: DIEGO.SILVA@DOT.WI.GOV

CONSULTANT DESIGN
SINGH + ASSOCIATES, INC.
SIA PROSPER
10101 W GREENFIELD AVE., SUITE 210
WEST ALLIS, WI, 53214
PHONE: (414) 443-0840
EMAIL: SPROSPER@SINGHINC.COM

2

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

TO OBTAIN LOCATION OF PARTICIPANTS UNDERGROUND FACILITIES BEFORE YOU DIG IN WISCONSIN

WIS. STATUTE 182.0175 (1974) REQUIRES MIN. OF 3 WORK DAYS NOTICE BEFORE YOU EXCAVATE

OTHER CONTACTS

SEWRPC
ROB MERRY
CHIEF SURVEYOR
W239 N1812 ROCKWOOD DRIVE
P.O. BOX 1607
WAUKESHA, WI 53187-4289
PHONE: (262) 953-4289
CELL: (920) 912-1036
EMAIL: RMERRY@SEWRPC.ORG

SEWRPC
ANDY TRAEGER
CONSTRUCTION COORDINATOR
W239 N1812 ROCKWOOD DRIVE
P.O. BOX 1607
WAUKESHA, WI 53187-4289
PHONE: (262) 953-4296
CELL: (262) 853-8463
EMAIL: ATRAEGER@SEWRPC.ORG

RYDE RACINE TRANSIT
TREVOR JUNG
TRANSIT MANAGER
CITY OF RACINE - RYDE RACINE
730 WASHINGTON AVENUE
RACINE, WI 54303
PHONE: (262) 636-9121
DIRECT: (262) 636-9123
EMAIL: TREVOR.JUNG@CITYOFRACINE.ORG

GENERAL NOTES

EXISTING R/W LINES SHOWN ON PLANS ARE FROM RACINE COUNTY GIS AND ARE APPROXIMATE.

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

THE CONTRACTOR SHALL NOTIFY DIGGERS HOTLINE AND AFFECTED UTILITIES PRIOR TO THE START OF WORK. ANY LOCAL MUNICIPAL UTILITY WHICH IS NOT A MEMBER OF THE DIGGERS HOTLINE MUST BE CONTACTED SEPARATELY.

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

CONTRACTOR WILL BE RESPONSIBLE FOR RESHAPING AND SEEDING ANY PREVIOUSLY GRASSED AREAS WHICH ARE DISTURBED BY THEIR OPERATION OUTSIDE OF THE NORMAL CONSTRUCTION LIMITS.

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

FERTILIZER SHALL NOT BE USED WITHIN 20' OF NAVIGABLE WATERWAYS OR WETLANDS.

CONTACT THE PROJECT ENGINEER AND THE SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION (SEWRPC), AT LEAST TWO WEEKS PRIOR TO WORK NEAR ANY PUBLIC SURVEY MONUMENT.

ASPHALTIC PAVEMENT SHALL BE CONSTRUCTED WITH THE FOLLOWING LAYERS AND GRADATIONS:

LOCATION	TOTAL LAYER PAVEMENT THICKNESS	LAYERS	HMA PAVEMENT ITEMS
STH 20 - CTH C MAINLINE	4"	1 3/4" (UPPER) 2 1/4" (LOWER)	4 LT 58-28 S (UPPER) 3 LT 58-28 S (LOWER)
CTH C - CTH K MAINLINE	3 1/2"	1 3/4" (UPPER) 1 3/4" (LOWER)	4 LT 58-28 S (UPPER) 4 LT 58-28 S (LOWER)
SHOULDERS	1 3/4"	1 3/4" (UPPER)	4 LT 58-28 S (UPPER)
EBS LOCATIONS SOUTH OF CTH C	7"	1 3/4" (UPPER) 2 1/4" (MIDDLE) REPAIR DEPTH (3") (LOWER)	4 LT 58-28 S (UPPER) 3 LT 58-28 S (MIDDLE) 3 LT 58-28 S (LOWER)
EBS LOCATIONS SOUTH OF CTH C	8 3/4"	1 3/4" (UPPER) 2 1/4" (MIDDLE) REPAIR DEPTH (4 3/4") (LOWER)	4 LT 58-28 S (UPPER) 3 LT 58-28 S (MIDDLE) 3 LT 58-28 S (LOWER)
EBS LOCATIONS NORTH OF CTH C	7"	1 3/4" (UPPER) 1 3/4" (MIDDLE) REPAIR DEPTH (3 1/2") (LOWER)	4 LT 58-28 S (UPPER) 4 LT 58-28 S (MIDDLE) 3 LT 58-28 S (LOWER)
EBS LOCATIONS NORTH OF CTH C	7 1/4"	1 3/4" (UPPER) 1 3/4" (MIDDLE) REPAIR DEPTH (3 3/4") (LOWER)	4 LT 58-28 S (UPPER) 4 LT 58-28 S (MIDDLE) 3 LT 58-28 S (LOWER)
EBS LOCATIONS NORTH OF CTH C	8 3/4"	1 3/4" (UPPER) 1 3/4" (MIDDLE) REPAIR DEPTH (5 1/4") (LOWER)	4 LT 58-28 S (UPPER) 4 LT 58-28 S (MIDDLE) 3 LT 58-28 S (LOWER)

ORDER OF SECTION 2 SHEETS

GENERAL NOTES
PROJECT OVERVIEW
TYPICAL SECTIONS
CONSTRUCTION DETAILS
PLAN DETAILS
CURB RAMP DETAIL
EROSION CONTROL
LIGHTING REMOVAL
LIGHTING PLAN
PAVEMENT MARKING
TRAFFIC CONTROL
DETOURS
ALIGNMENT DETAILS
CONTROL POINTS

STANDARD ABBREVIATIONS

AP	ACCESS POINT
AC	ACRE
AGG	AGGREGATE
ADT	AVERAGE DAILY TRAFFIC
AADT	ANNUAL AVERAGE DAILY TRAFFIC
ASPH	ASPHALT
AVG	AVERAGE
BL	BASE LINE
BASE AGG	BASE AGGREGATE DENSE
CL	CENTER LINE
CE	COMMERCIAL ENTRANCE
CONC	CONCRETE
CO	COUNTY
CTH	COUNTY TRUNK HIGHWAY
CABC	CRUSHED AGGREGATE BASE COURSE
CY	CUBIC YARD
C&G	CURB & GUTTER
DHV	DESIGN HOURLY VOLUME
D	DEFLECTION
DD	DIRECTIONAL DISTRIBUTION
DWY	DRIVEWAY
E	EAST
EFR	EAST FRONTAGE ROAD
X	EAST GRID COORDINATE
EB	EASTBOUND
ELEV	ELEVATION
ESALS	EQUIVALENT SINGLE AXLE LOADS
EXC	EXCAVATION
EBS	EXCAVATION BELOW SUBGRADE
EXIST	EXISTING
FERT	FERTILIZER
FE	FIELD ENTRANCE
FAB	FLASHING ARROW BOARD
HES	HIGH EARLY STRENGTH
CWT	HUNDREDWEIGHT
IN DIA	INCH DIAMETER
IP	IRON PIPE OR PIN
HMOD	HEIGHT MODERNIZATION
HMA	HOT MIX ASPHALT
IN DIA	INCH DIAMETER
IP	IRON PIPE OR PIN
L	LENGTH
LT	LEFT
LF	LINEAR FOOT
LS	LUMP SUM
MP	MARKER POST
M/L	MATCH LINE
MB	MESSAGE BOARD
NC	NORMAL CROWN
N	NORTH
Y	NORTH GRID COORDINATE
NB	NORTHBOUND
NO	NUMBER
PAVT	PAVEMENT
PT	POINT
PC	POINT OF CURVATURE
PCC	POINT OF COMPOUND CURVE
PI	POINT OF INTERSECTION
PID	PERMANENT IDENTIFIER
PRC	POINT OF REVERSE CURVATURE
PT	POINT OF TANGENCY
PCC	PORTLAND CEMENT CONCRETE
LB	POUND
PE	PRIVATE ENTRANCE
PROJ	PROJECT
R	RADIUS
R/L	REFERENCE LINE
REQ'D	REQUIRED
RT	RIGHT
R/W	RIGHT OF WAY
RD	ROAD
RDWY	ROADWAY
SE	SUPER ELEVATION
SEC	SECTION
SHLDR	SHOULDER
S	SOUTH
SB	SOUTHBOUND
SI	SLOPE INTERCEPT
SP	SPECIAL
SPECS	SPECIFICATION
SF	SQUARE FEET
SY	SQUARE YARD
STD	STANDARD
SSPRC	STORM SEWER PIPE REINFORCED CONCR
SDD	STANDARD DETAIL DRAWINGS
STH	STATE TRUNCK HIGHWAYS
STA	STATION
SSPRC	STORM SEWER PIPE REINFORCED CONCR
SSD	STOPPING SIGHT DISTANCE
STR	STRUCTURE OR STRUCTURAL
SE	SUPER ELEVATION
SURF	SURFACE
S/L	SURVEY LINE
T	TANGENT LENGTH
TEMP	TEMPORARY
TPM	TEMPORARY PAVEMENT MARKING
MBM	THOUSAND FEET BOARD MEASURE
T	TON
TC	TOP OF CURB
T OR TN	TOWN
T	TRUCKS (PERCENT OF)
TYP	TYPICAL
UG	UNDERGROUND
USH	UNITED STATES HIGHWAY
VAR	VARIABLE
VERT	VERTICAL
V	VELOCITY OR DESIGN SPEED
VCL	VERTICAL CURVE LENGTH
VPC	VERTICAL POINT OF CURVATURE
VPI	VERTICAL POINT OF INTERSECTION
VPT	VERTICAL POINT OF TANGENCY
VOL	VOLUME
W	WEST
WB	WESTBOUND
WFR	WEST FRONTAGE ROAD

2

2

N

TOWN OF YORKVILLE

VILLAGE OF RAYMOND

VILLAGE OF MOUNT PLEASANT

VILLAGE OF CALEDONIA

CONSTRUCTION LIMITS
STA. 4868+00

NET EXCEPTION TO C/L LENGTH
STA 2857+00 TO STA 4868+00

CONSTRUCTION LIMITS
STA. 2857+00

EQUATION
STA. 5858+84.34 AH
STA. 3858+95.99 BK

BEGIN CONSTRUCTION
WEST FRONTAGE ROAD
STA. 2838+77

CONSTRUCTION LIMITS
STA 64+10 TO STA 66+15

CONSTRUCTION LIMITS
STA. 68+70 to 70+70

EQUATION
STA. 2045+03.29 AH
STA. 5045+09.86 BK

END CONSTRUCTION
WEST FRONTAGE ROAD
STA. 5043+10

BEGIN CONSTRUCTION
EAST FRONTAGE ROAD
STA. 3835+00

EQUATION
STA. 4864+22.42 AH
STA. 2865+23.97 BK

CONSTRUCTION LIMITS
STA. 3852+25

CONSTRUCTION LIMITS
STA. 5863+15

NET EXCEPTION TO C/L LENGTH
STA 3852+25 TO STA 5863+15

EQUATION
STA. 3046+10.60 AH
STA. 6049+53.84 BK

END CONSTRUCTION
EAST FRONTAGE ROAD
STA. 3052+35

MUNICIPAL BOUNDARY TYP.

GRANDVIEW PKWY

STH 20

CTH C

EVANS LANE

50TH ROAD

2 MILE ROAD

GOLF ROAD

CTH K

IH 41

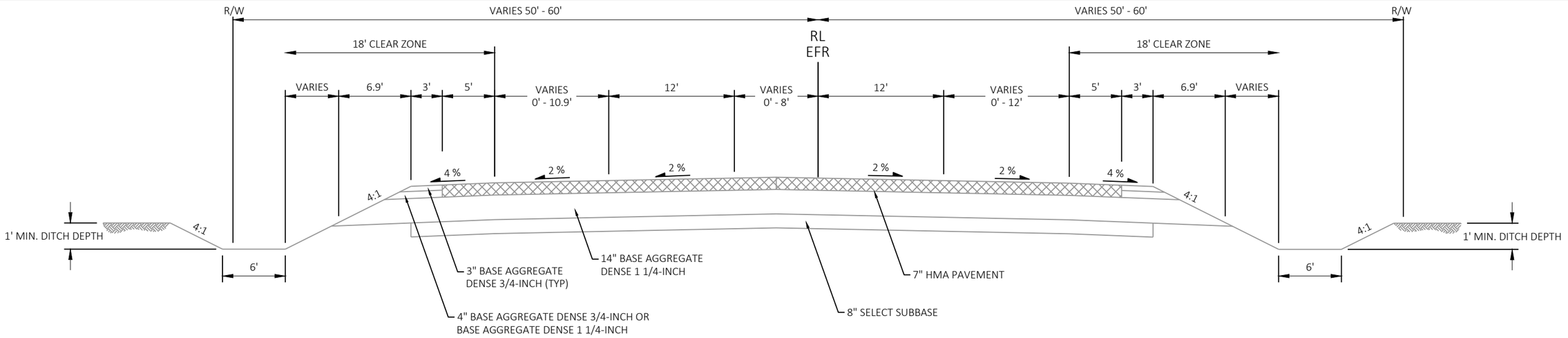
IH 94

WEST FRONTAGE ROAD

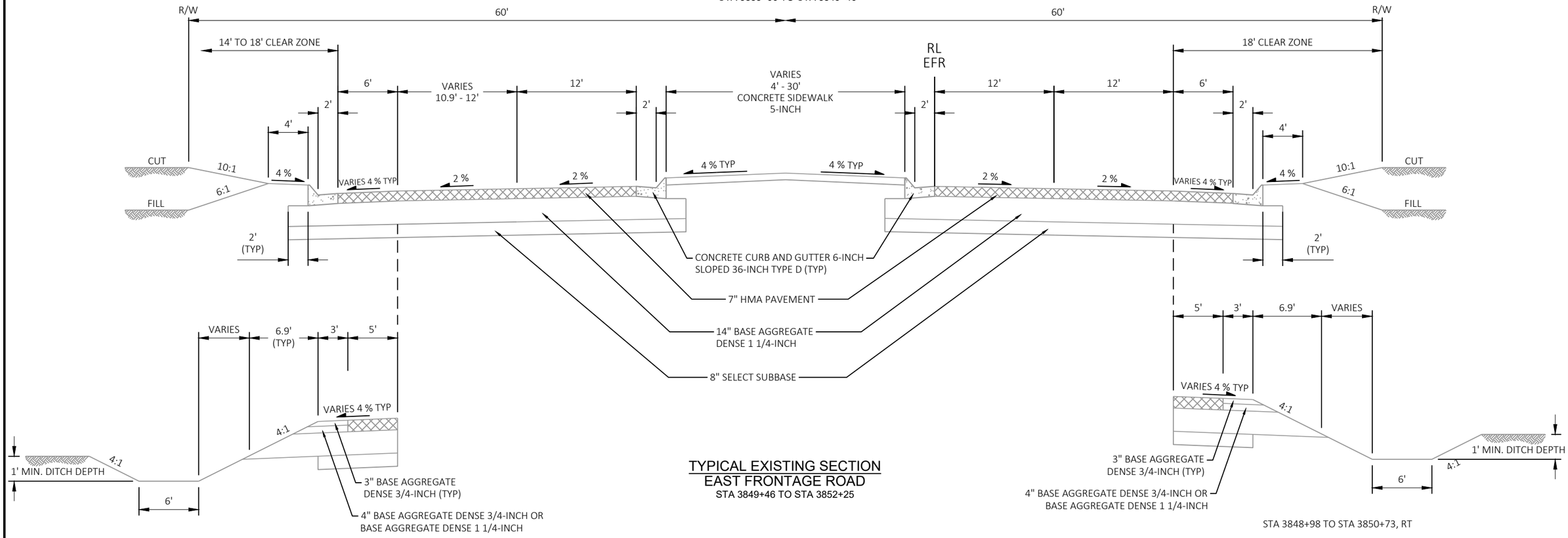
EAST FRONTAGE ROAD

PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	PROJECT OVERVIEW	SHEET 4	E

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PLOT DATE : 10/25/2022 12:27 PM
PLOT BY : ALEXANDER UNDERWOOD
PLOT NAME :
PLOT SCALE : 1 IN:2000 FT
WISDOT/CADDS SHEET 42



TYPICAL EXISTING SECTION
EAST FRONTAGE ROAD
STA 3835+00 TO STA 3849+46



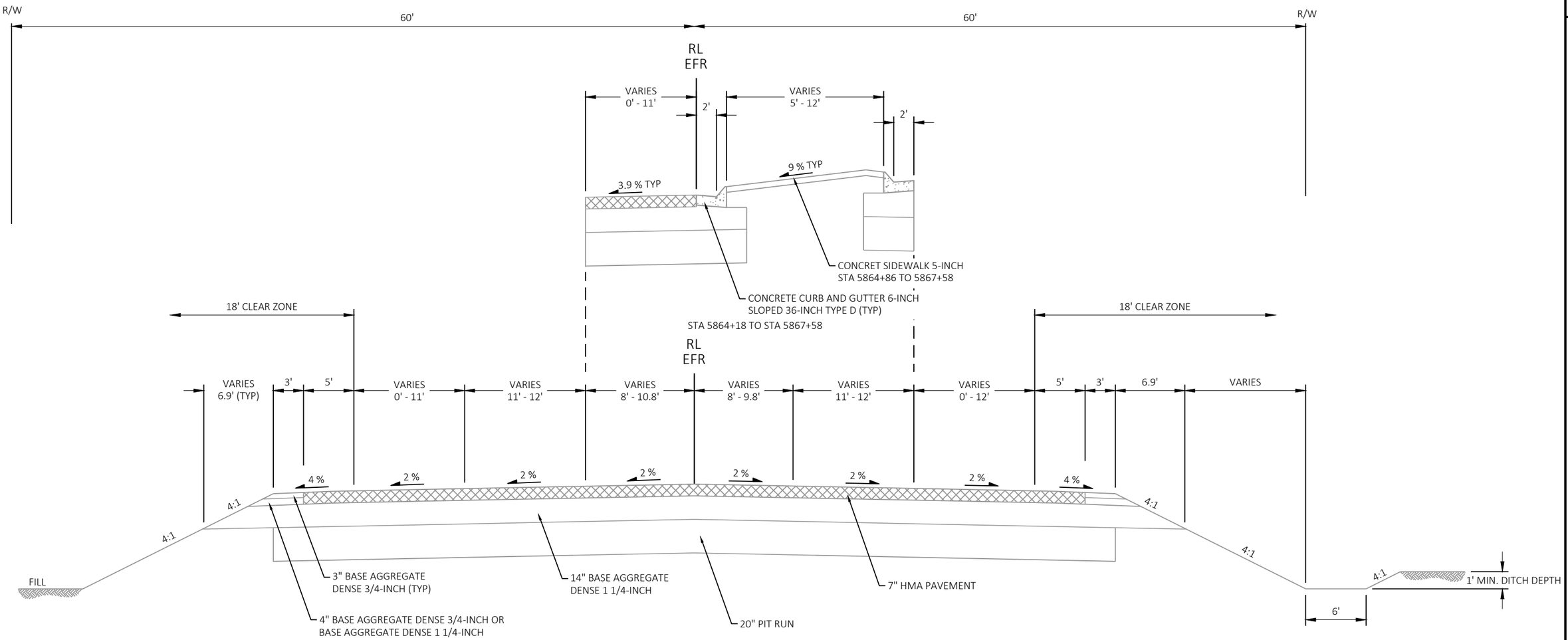
STA 3848+98 TO STA 3851+90, LT

TYPICAL EXISTING SECTION
EAST FRONTAGE ROAD
STA 3849+46 TO STA 3852+25

STA 3848+98 TO STA 3850+73, RT

PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	TYPICAL SECTION	SHEET 5	E

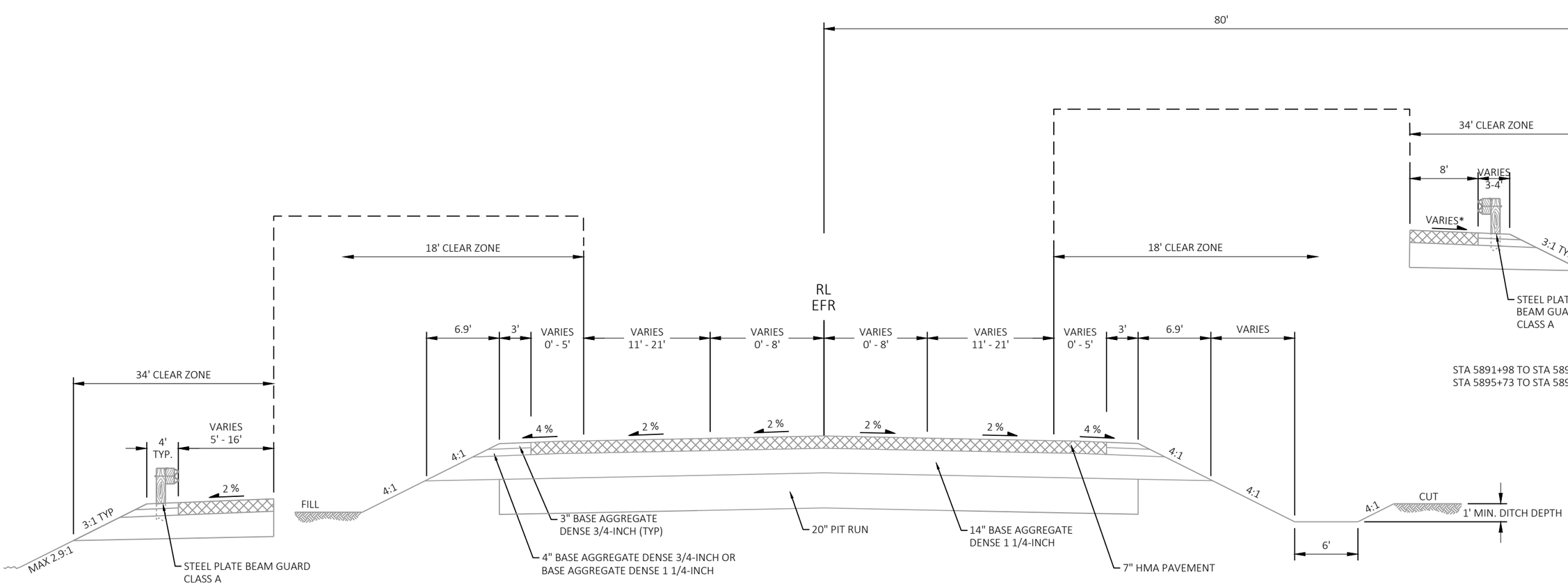
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TYPICAL EXISTING SECTION
EAST FRONTAGE ROAD
STA 5863+15 TO STA 5874+59

PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	TYPICAL SECTION	SHEET 6	E

2



STA 5892+51 TO STA 5894+23, LT
STA 5895+73 TO STA 5897+00, LT

STA 5891+98 TO STA 5894+23, RT
STA 5895+73 TO STA 5896+40, RT

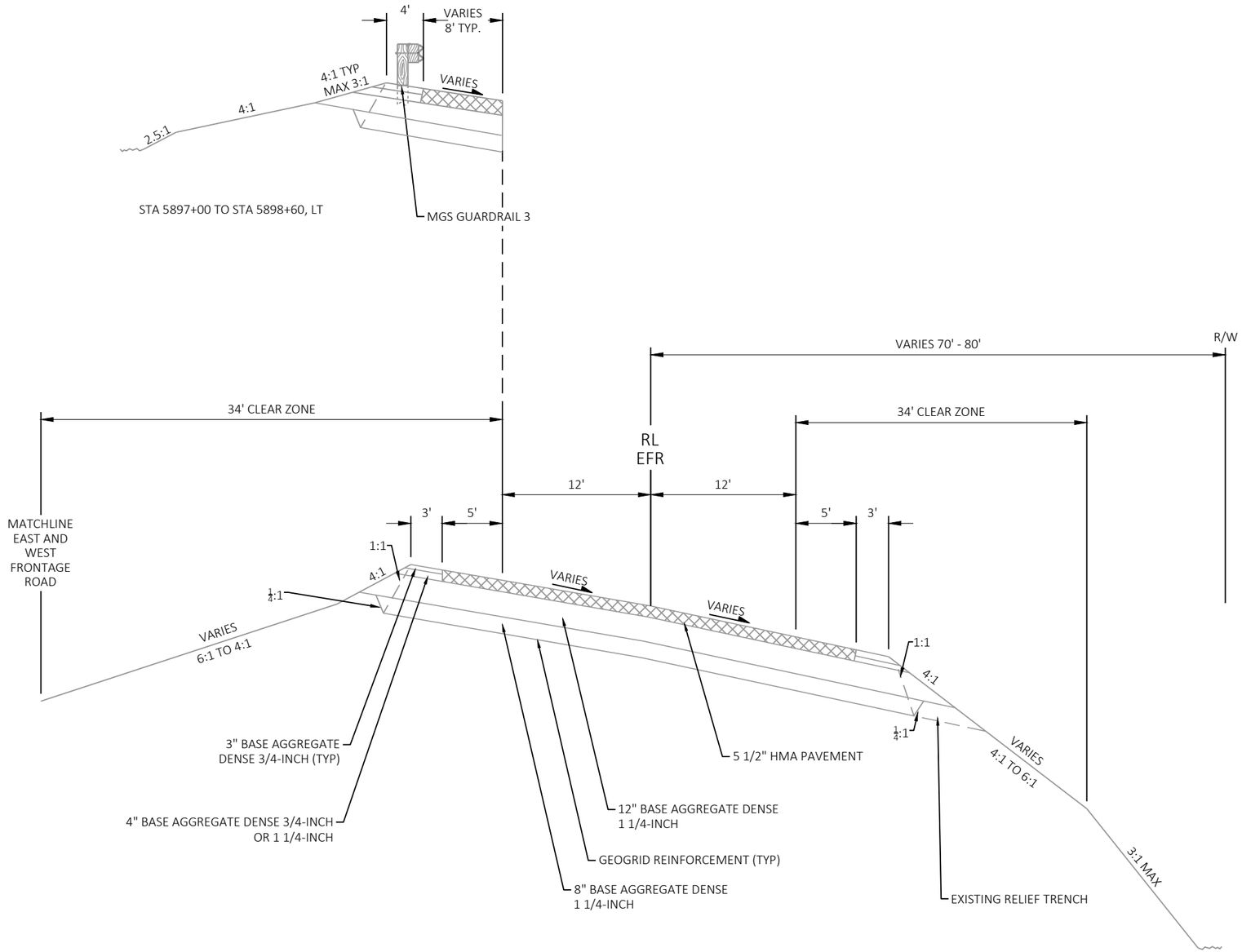
TYPICAL EXISTING SECTION
EAST FRONTAGE ROAD

STA 5874+59 TO STA 5894+23
STA 5895+73 TO STA 5901+23

PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	TYPICAL SECTION	SHEET 7	E

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PLOT DATE : 10/27/2022 12:45 PM
PLOT BY : ALEXANDER UNDERWOOD
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

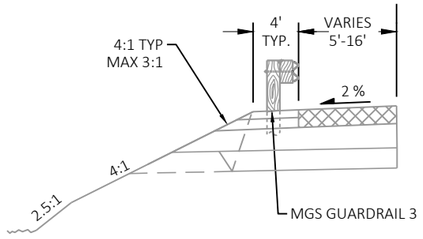
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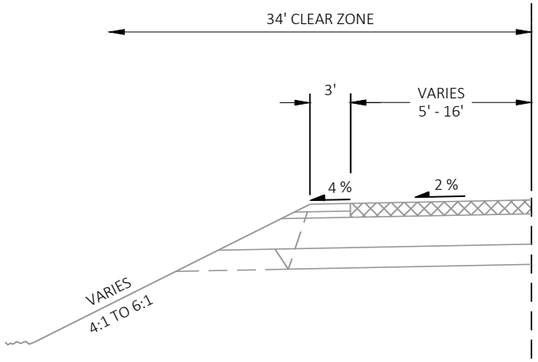
TYPICAL EXISTING SUPERELEVATED SECTION
EAST FRONTAGE ROAD
STA 5901+23 TO STA 5901+50
STA 6027+20 TO STA 6031+50

PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	TYPICAL SECTION	SHEET 8	E

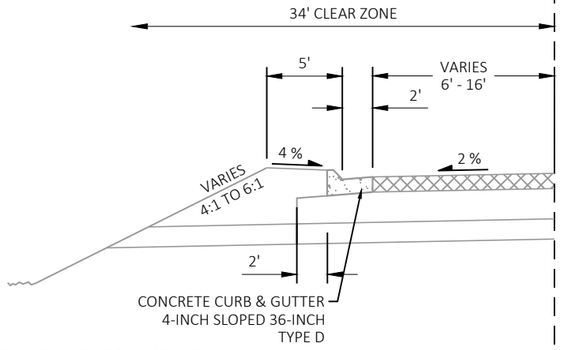
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LAYOUT NAME - 02-10ft
PLOT DATE : 10/27/2022 12:45 PM
PLOT BY : ALEXANDER UNDERWOOD
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42



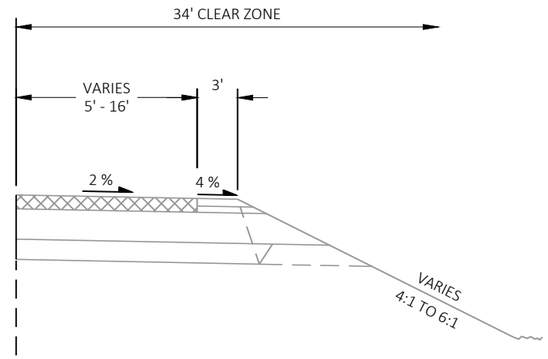
STA 5918+75 TO STA 5925+75, LT
STA 5975+75 TO STA 5988+75, LT



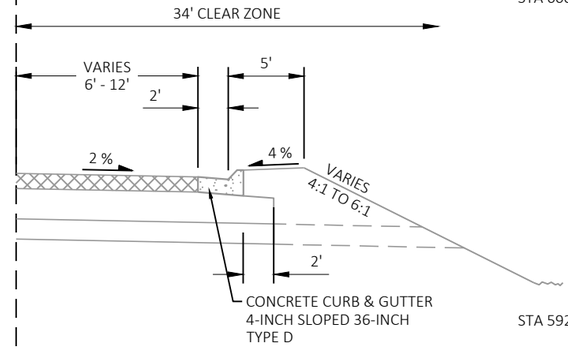
STA 5926+25 TO STA 5926+42, LT



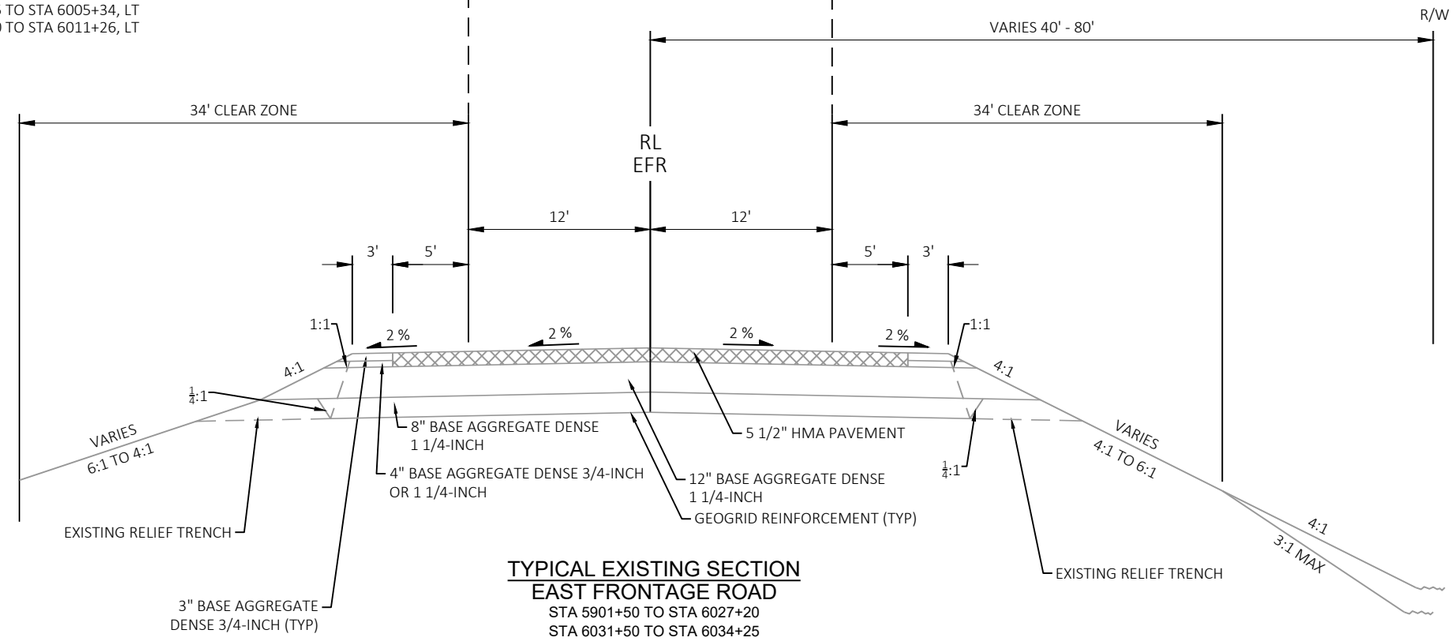
STA 5927+79 TO STA 5931+16, LT
STA 5998+75 TO STA 6005+34, LT
STA 6007+20 TO STA 6011+26, LT



STA 5922+32 TO STA 5926+22, RT
STA 6001+63 TO STA 6005+59, RT
STA 6007+00 TO STA 6008+00, RT

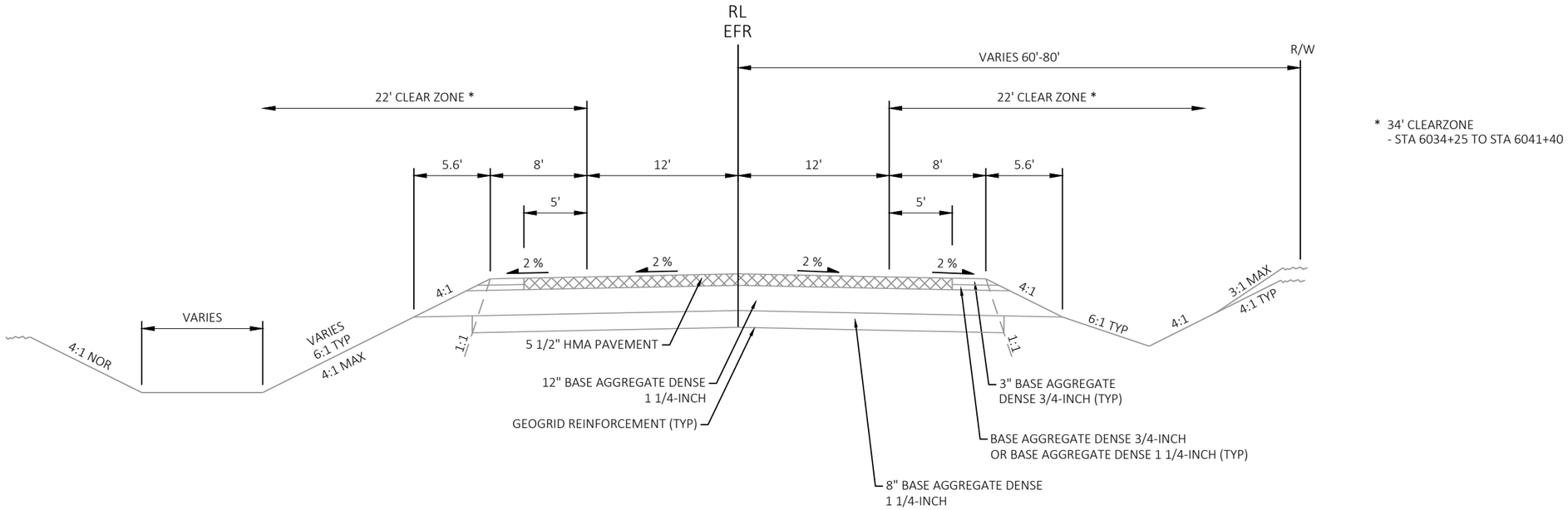


STA 5927+57 TO STA 5933+25, RT



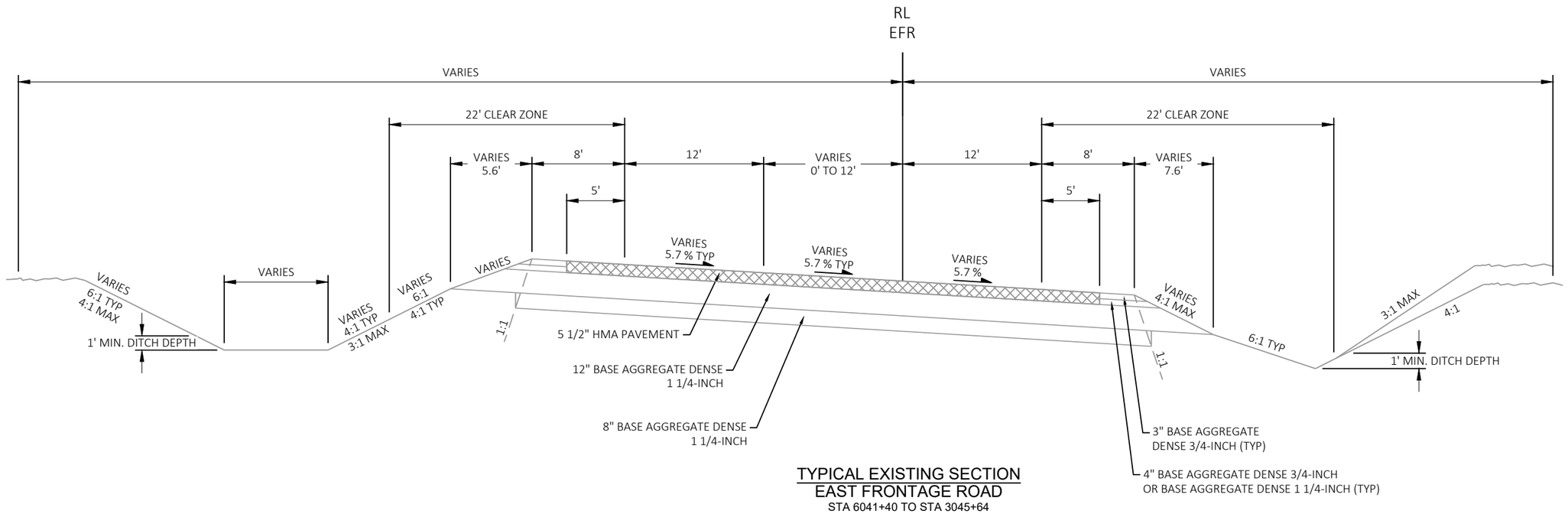
TYPICAL EXISTING SECTION
EAST FRONTAGE ROAD
STA 5901+50 TO STA 6027+20
STA 6031+50 TO STA 6034+25

PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	TYPICAL SECTION	SHEET 9	E



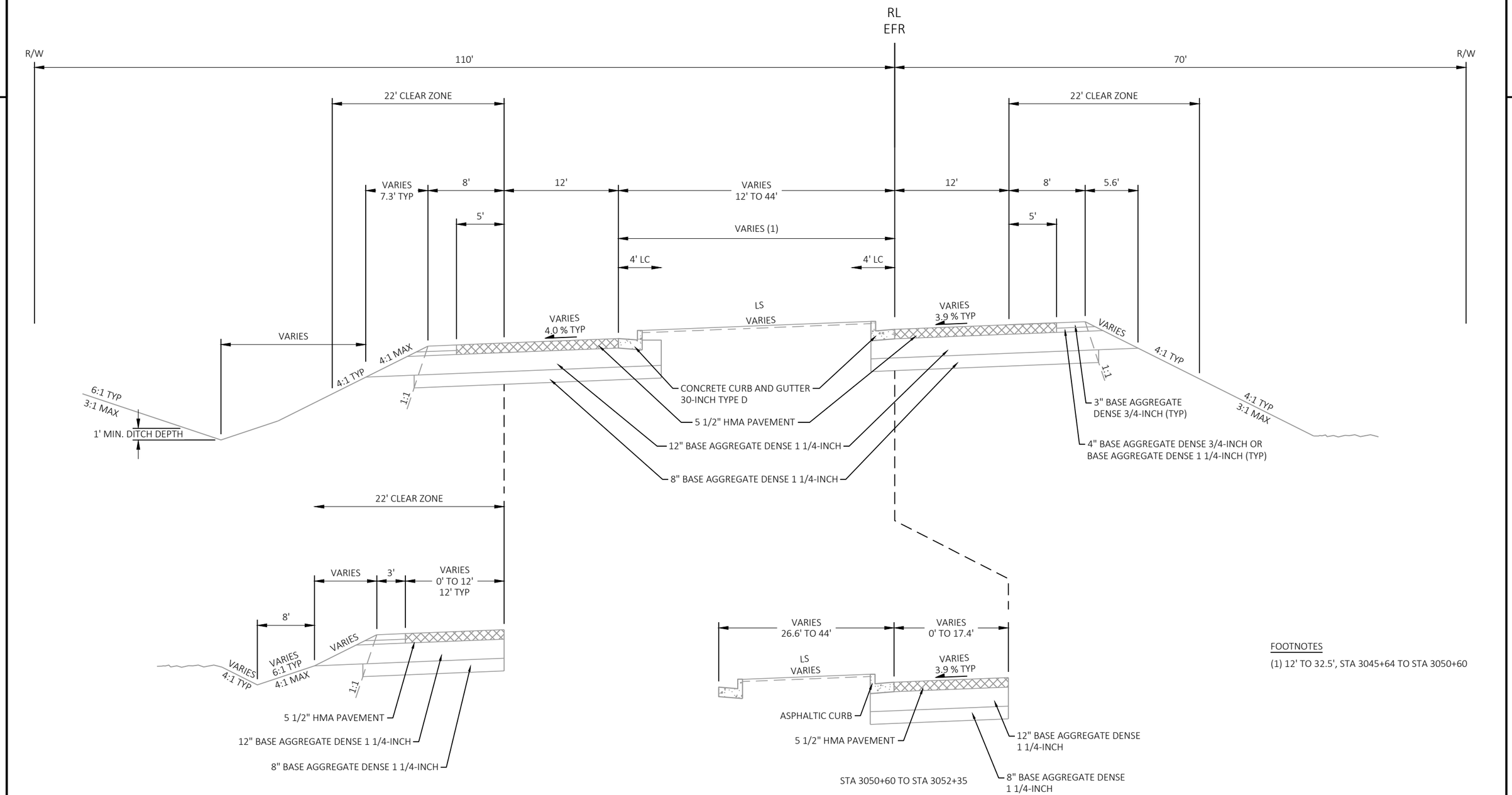
* 34' CLEARZONE
- STA 6034+25 TO STA 6041+40

TYPICAL EXISTING SECTION
EAST FRONTAGE ROAD
STA 6034+25 TO STA 6041+40



TYPICAL EXISTING SECTION
EAST FRONTAGE ROAD
STA 6041+40 TO STA 3045+64

PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	TYPICAL SECTION	SHEET 10	E



RIGHT TURN LANE

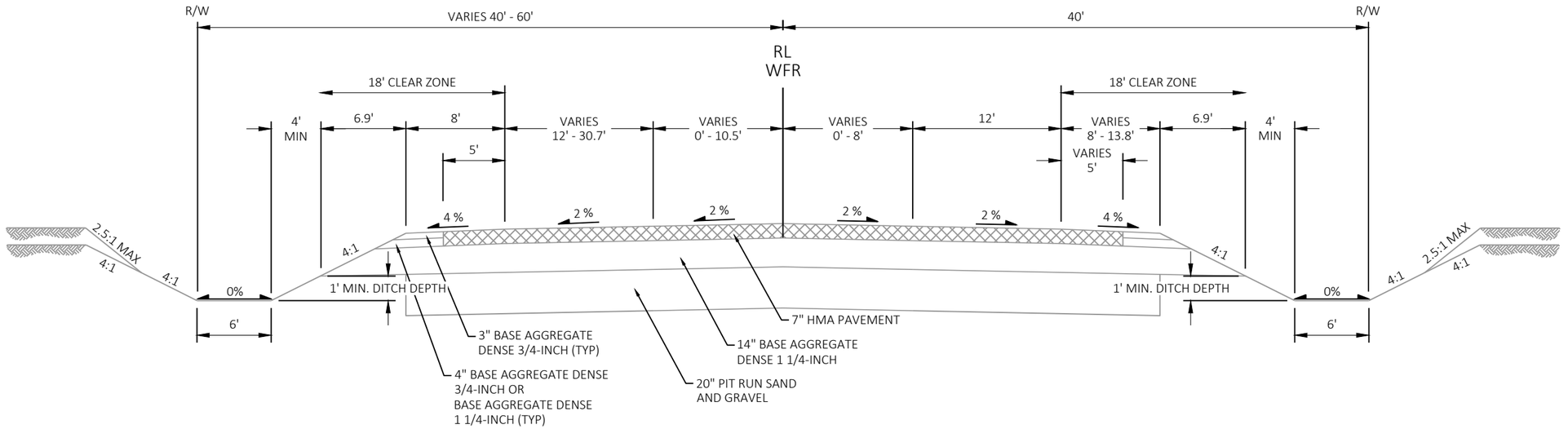
STA 3045+64 TO STA 3048+52, LT

FOOTNOTES

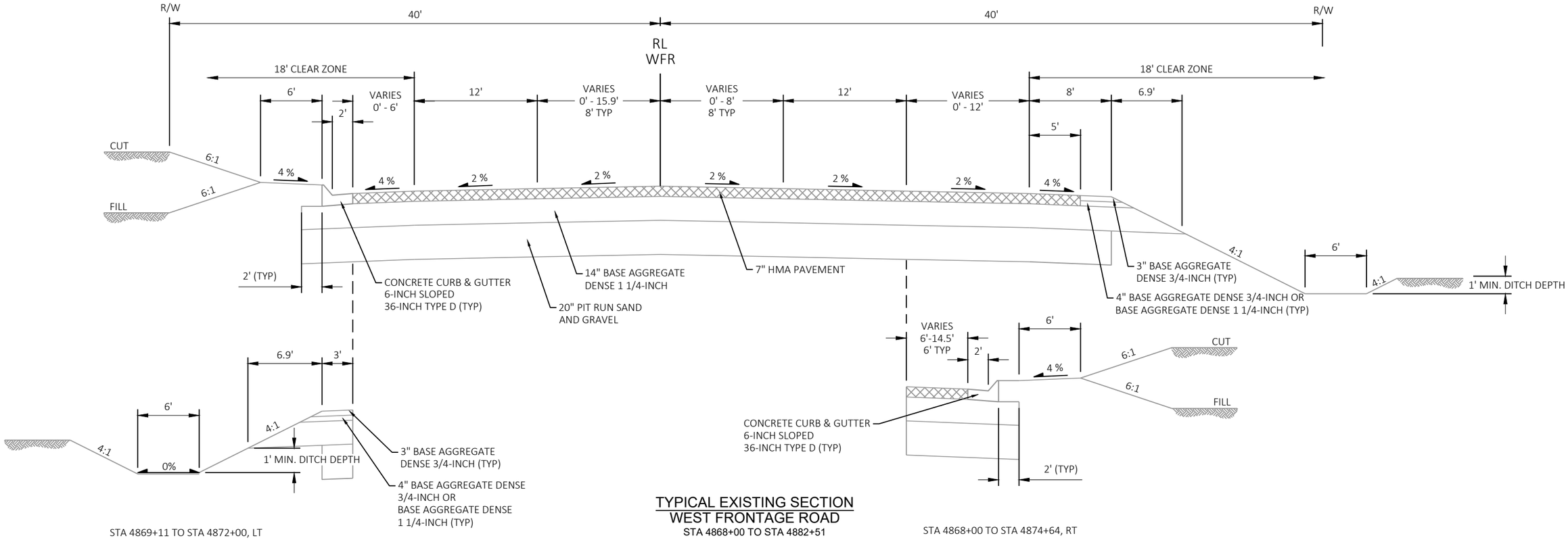
(1) 12' TO 32.5', STA 3045+64 TO STA 3050+60

TYPICAL EXISTING SECTION
EAST FRONTAGE ROAD
STA 6049+00 TO STA 3052+35

PROJECT NO: 1030-09-79	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	TYPICAL SECTION	SHEET 11	E



TYPICAL EXISTING SECTION
WEST FRONTAGE ROAD
STA 2838+77 TO 2857+00



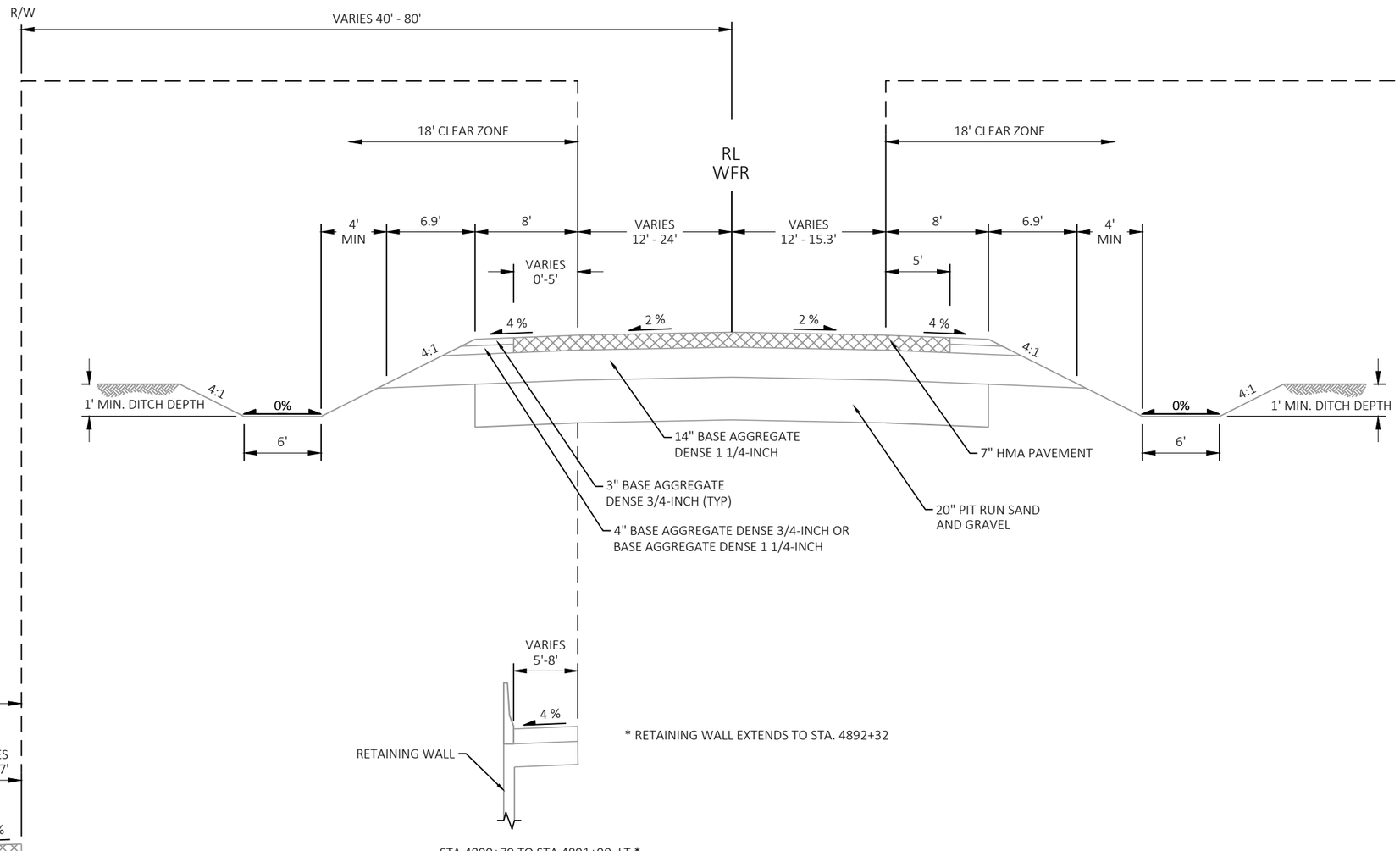
TYPICAL EXISTING SECTION
WEST FRONTAGE ROAD
STA 4868+00 TO STA 4882+51

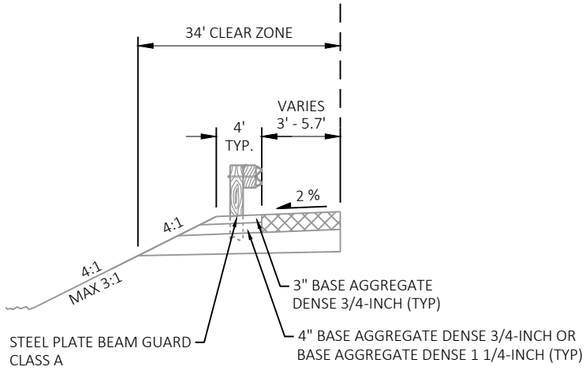
STA 4869+11 TO STA 4872+00, LT

STA 4868+00 TO STA 4874+64, RT

PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	TYPICAL SECTION	SHEET 12	E

FILE NAME : W:\PROJECTS\21234\04_CADD_01\CADD_SHEETS\020301-TS (3).DWG
LAYOUT NAME - 01-10ft
PLOT DATE : 10/27/2022 12:45 PM
PLOT BY : ALEXANDER UNDERWOOD
PLOT NAME :
PLOT SCALE : 1 IN:10 FT

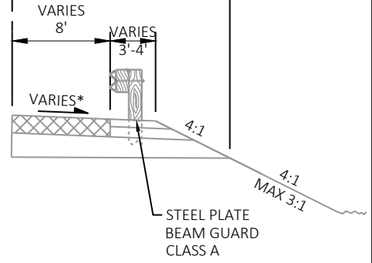




STA 4887+98 TO STA 4888+84, LT

STA 4890+79 TO STA 4891+90, LT *

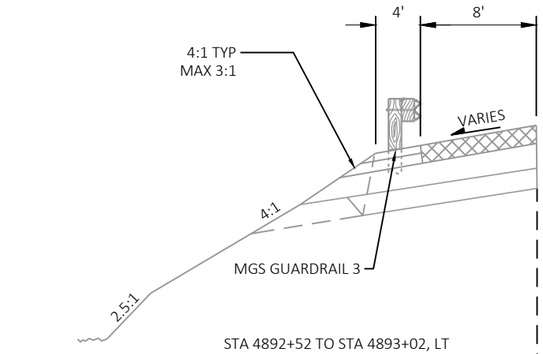
* RETAINING WALL EXTENDS TO STA. 4892+32



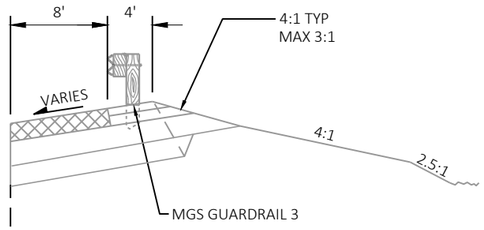
STA 4886+93 TO STA 4884+84, RT

TYPICAL EXISTING SECTION
WEST FRONTAGE ROAD
STA 4882+51 TO STA 4888+84
STA 4890+79 TO STA 4891+90

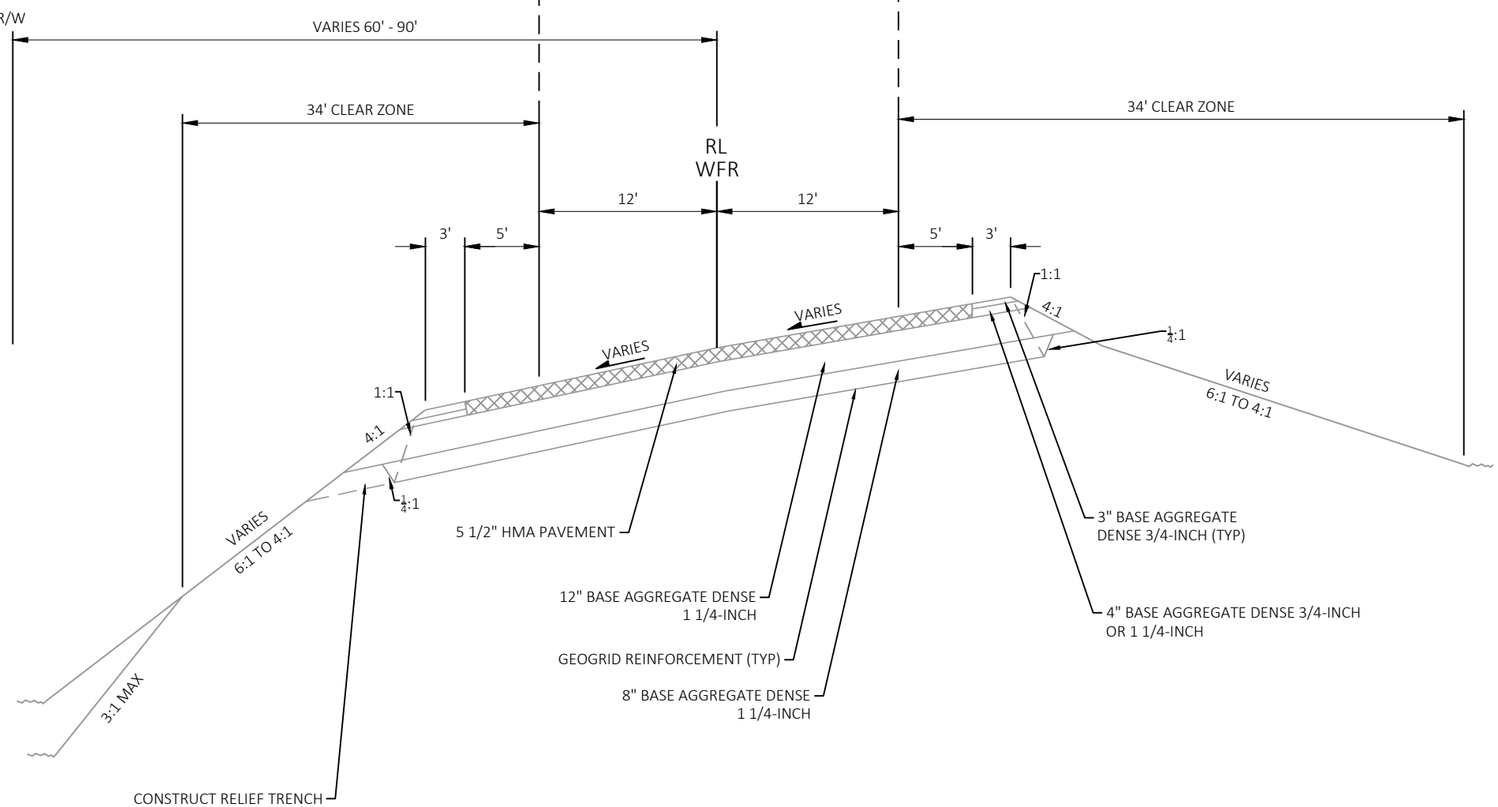
2



STA 4892+52 TO STA 4893+02, LT



STA 4891+90 TO STA 4893+50, RT

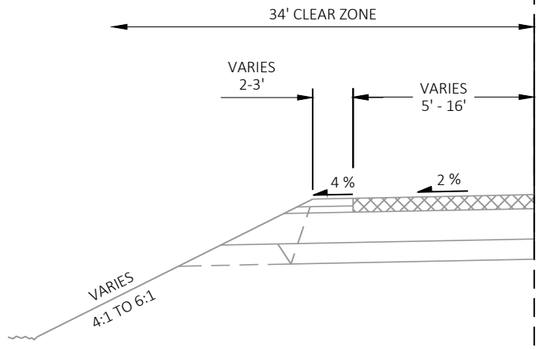


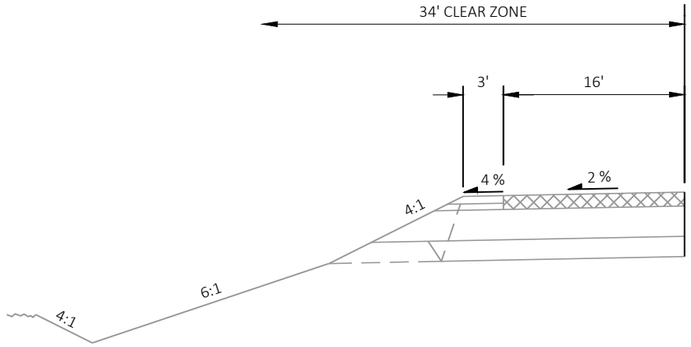
TYPICAL EXISTING SUPERELEVATED SECTION
WEST FRONTAGE ROAD

STA 4891+90 TO STA 4897+75
STA 4965+50 TO STA 4970+50
STA 4984+25 TO STA 4988+00

PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	TYPICAL SECTION	SHEET 14	E

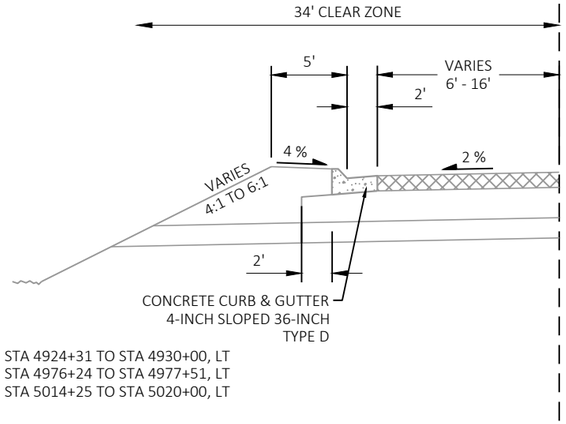
STA 4897+28 TO STA 4900+00, LT
STA 4922+02 TO STA 4924+31, LT
STA 4975+21 TO STA 4976+24, LT
STA 4977+51 TO STA 4980+84, LT
STA 4999+00 TO STA 5006+60, LT
STA 5021+81 TO STA 5025+18, LT
STA 5027+82 TO STA 5028+82, LT



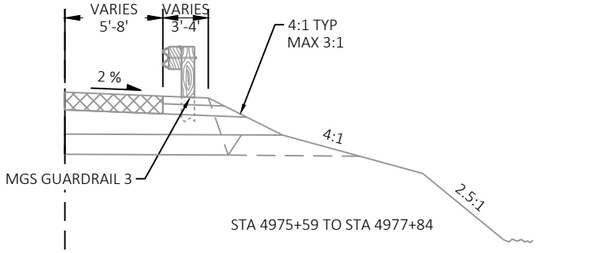


STA 5030+00 TO STA 5030+25, LT

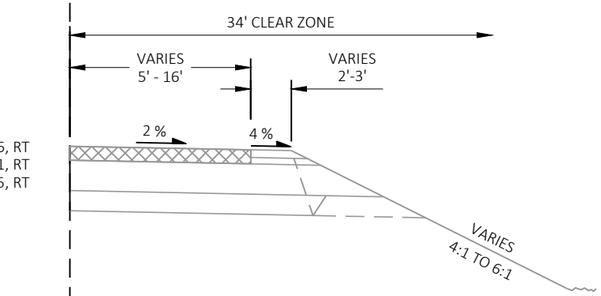
STA 4924+31 TO STA 4930+00, LT
STA 4976+24 TO STA 4977+51, LT
STA 5014+25 TO STA 5020+00, LT

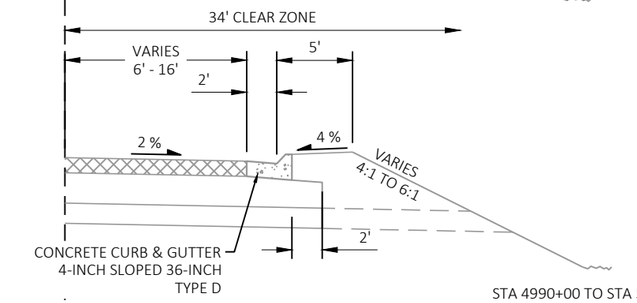


STA 4918+76 TO STA 4925+16, RT
STA 5003+61 TO STA 5004+61, RT
STA 5025+04 TO STA 5030+25, RT

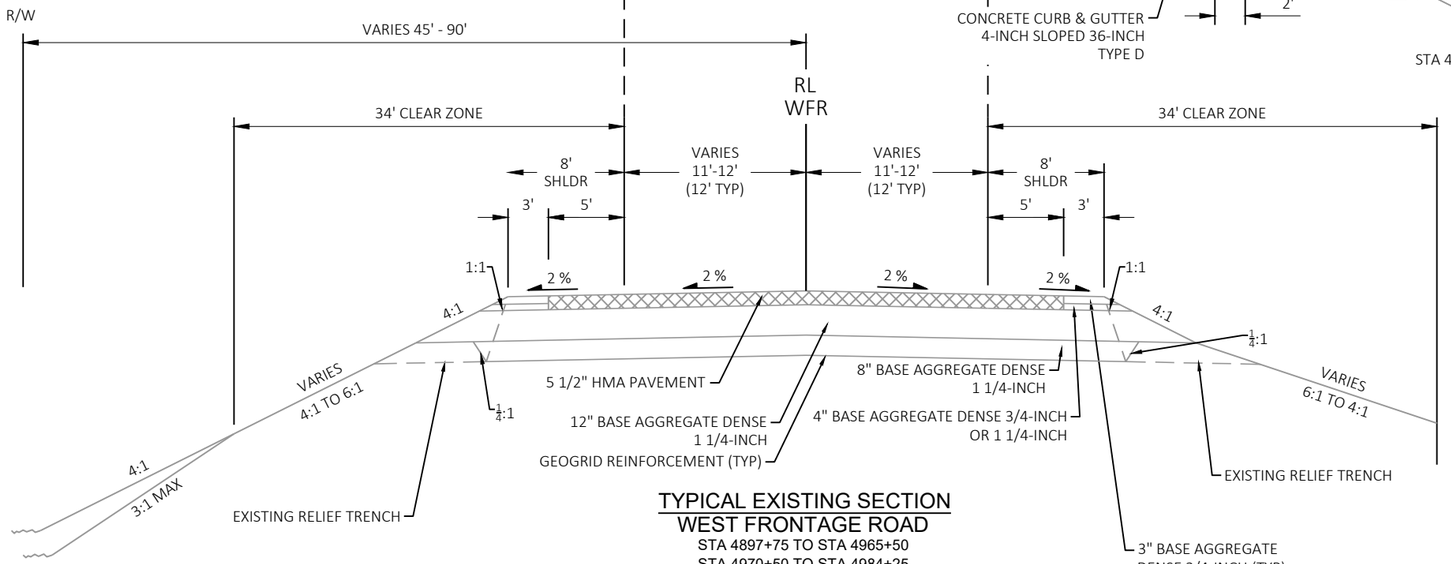


STA 4975+59 TO STA 4977+84





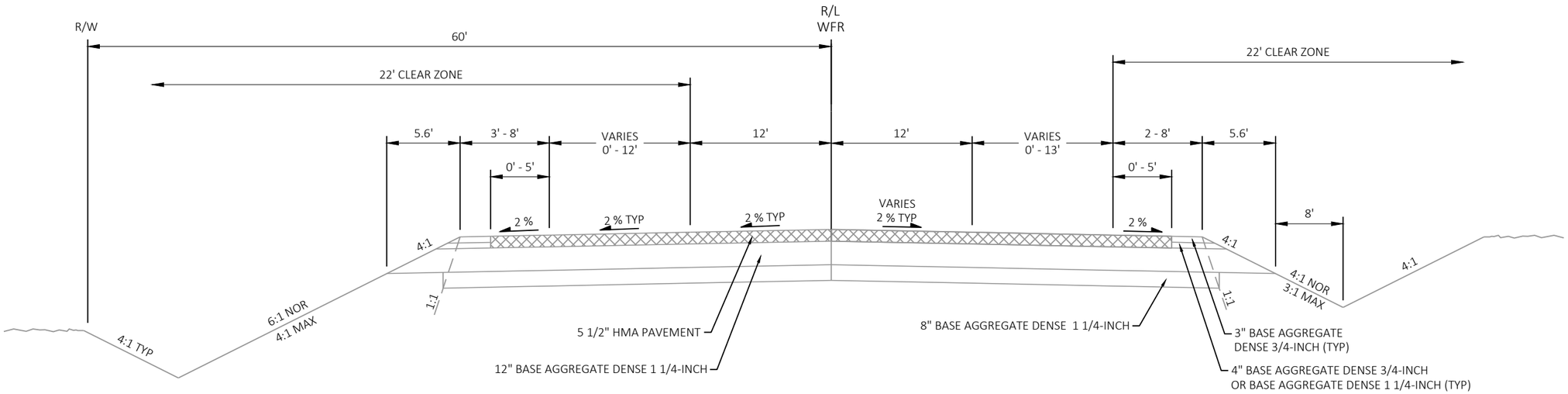
STA 4990+00 TO STA 5002+24



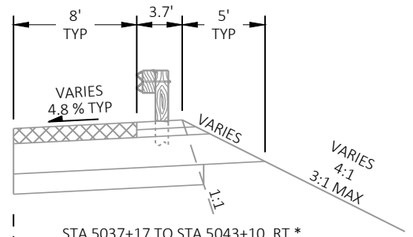
TYPICAL EXISTING SECTION
WEST FRONTAGE ROAD

STA 4897+75 TO STA 4965+50
STA 4970+50 TO STA 4984+25
STA 4988+00 TO STA 5030+25

2

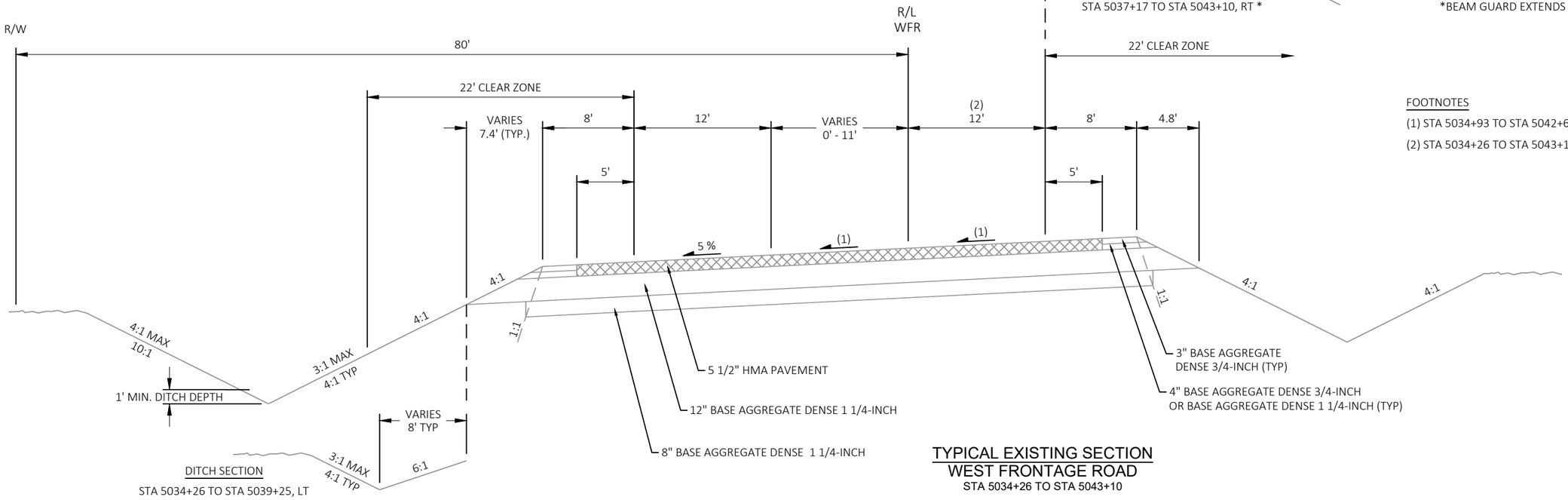


TYPICAL EXISTING SECTION
WEST FRONTAGE ROAD
STA 5030+25 TO STA 5034+26



STA 5037+17 TO STA 5043+10, RT *

*BEAM GUARD EXTENDS TO STA 5043+21, RT



DITCH SECTION
STA 5034+26 TO STA 5039+25, LT

FOOTNOTES

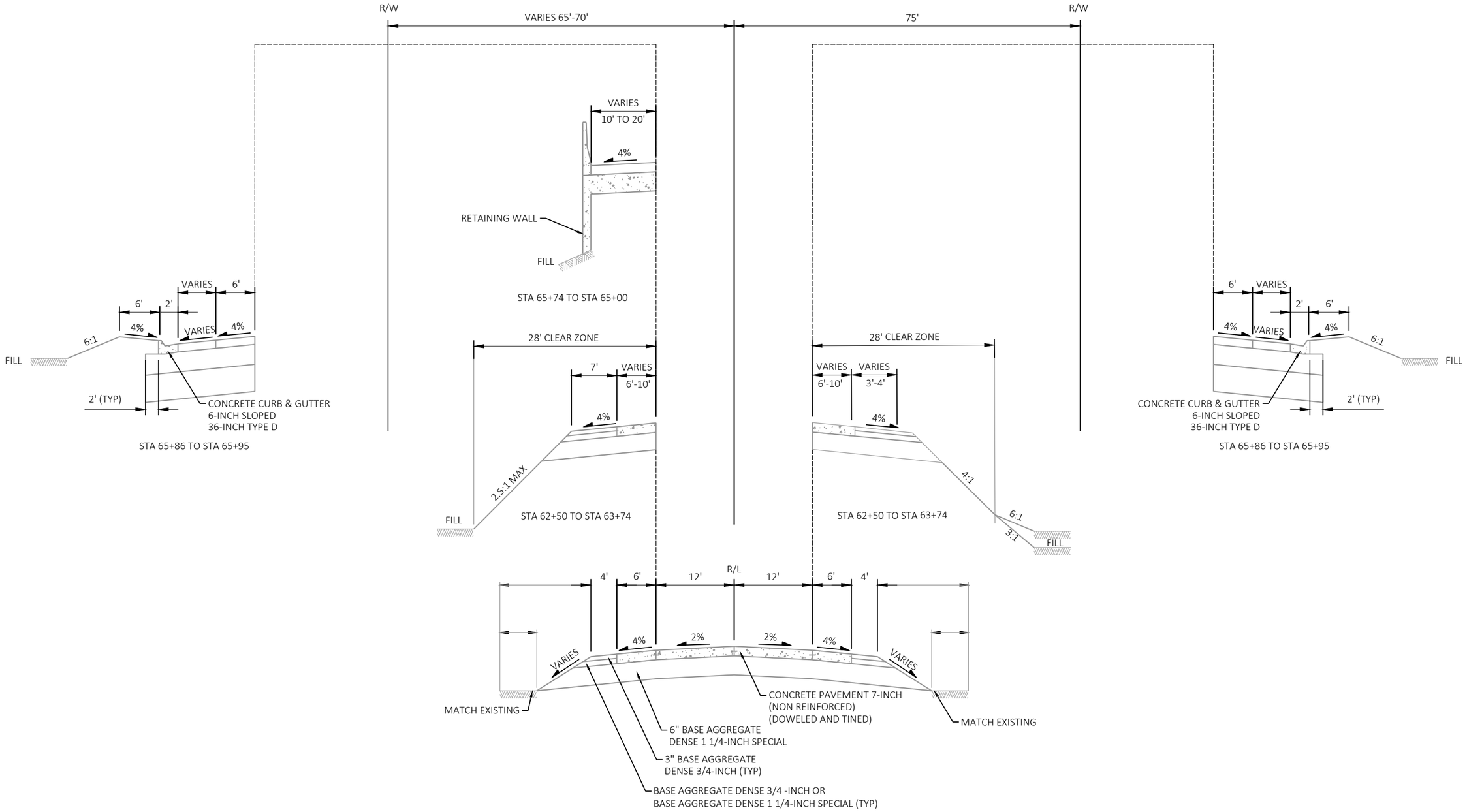
(1) STA 5034+93 TO STA 5042+60, 5.30%

(2) STA 5034+26 TO STA 5043+10 VARIES 12' TO 13'

TYPICAL EXISTING SECTION
WEST FRONTAGE ROAD
STA 5034+26 TO STA 5043+10

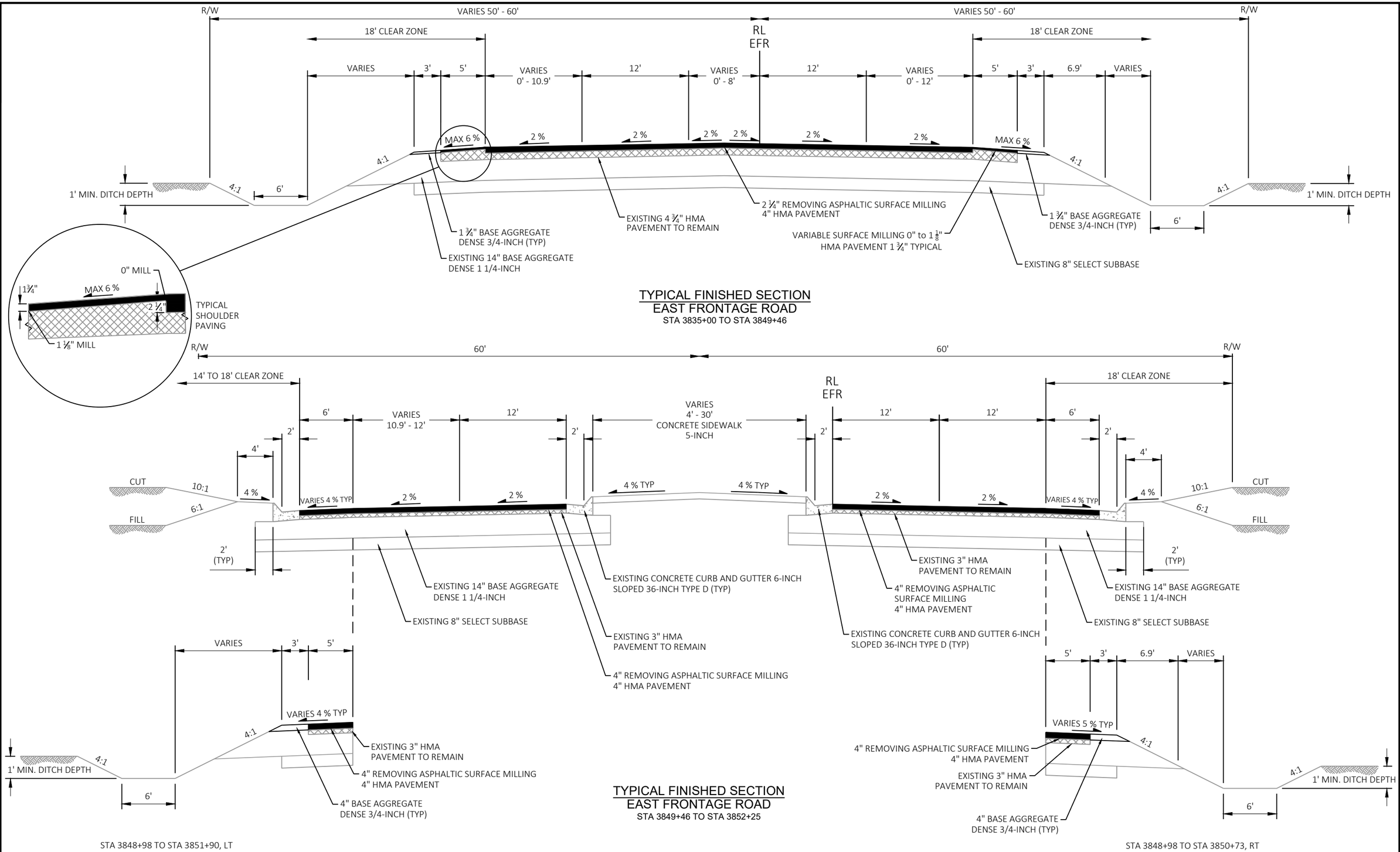
PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	TYPICAL SECTION	SHEET 16 E

2



TYPICAL EXISTING SECTION
CTH C
STA 64+10 TO STA 66+15
STA 68+70 TO STA 70+10

PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	TYPICAL SECTION	SHEET 17	E



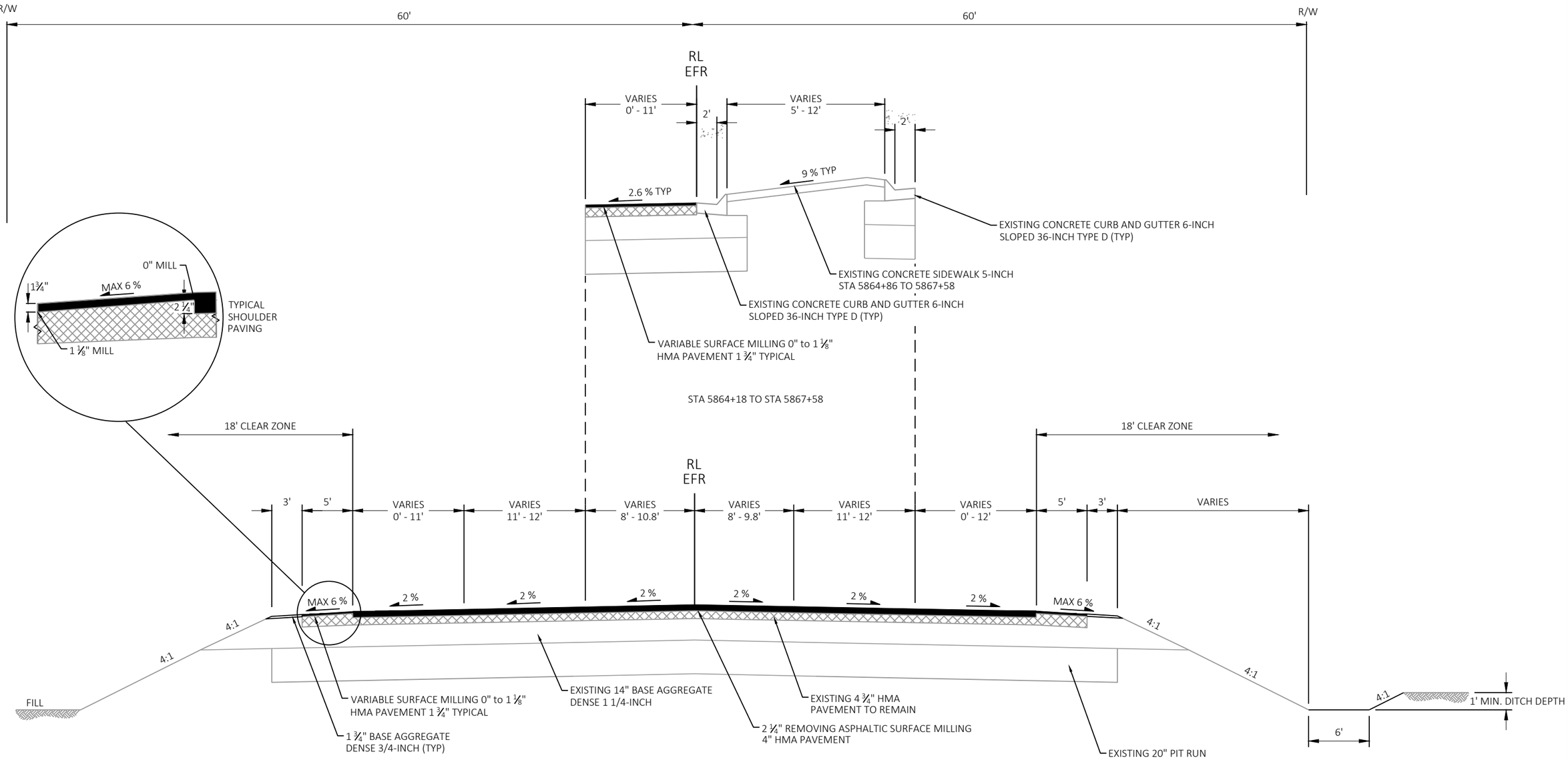
TYPICAL FINISHED SECTION
EAST FRONTAGE ROAD
STA 3835+00 TO STA 3849+46

TYPICAL FINISHED SECTION
EAST FRONTAGE ROAD
STA 3849+46 TO STA 3852+25

STA 3848+98 TO STA 3851+90, LT

STA 3848+98 TO STA 3850+73, RT

PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	TYPICAL SECTION	SHEET 18	E

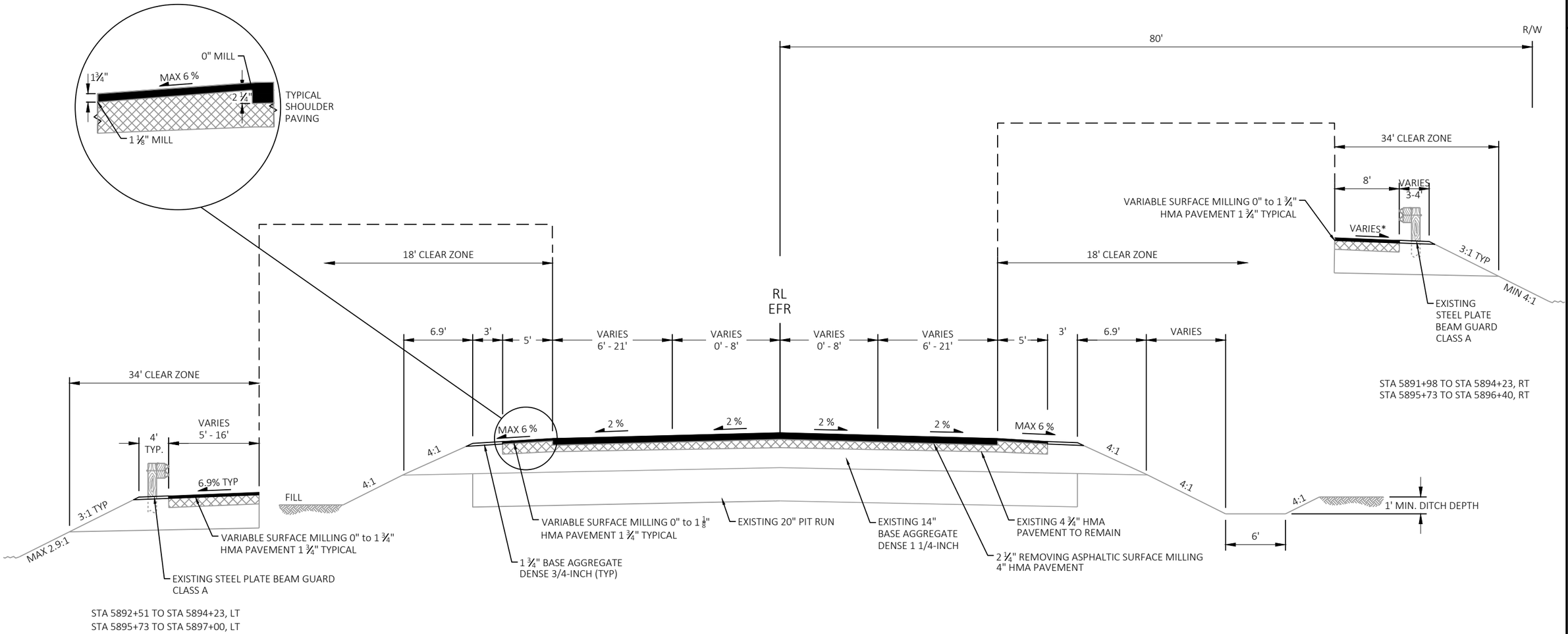


TYPICAL FINISHED SECTION
EAST FRONTAGE ROAD
STA 5863+15 TO STA 5874+59

PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	TYPICAL SECTION	SHEET 19	E

FILE NAME : W:\PROJECTS\21234\04_CADD_01\CADD_SHEETS\020301-TS.DWG
LAYOUT NAME - 06-10ft
PLOT DATE : 10/27/2022 12:46 PM
PLOT BY : ALEXANDER UNDERWOOD
PLOT NAME :
PLOT SCALE : 1 IN:10 FT

2

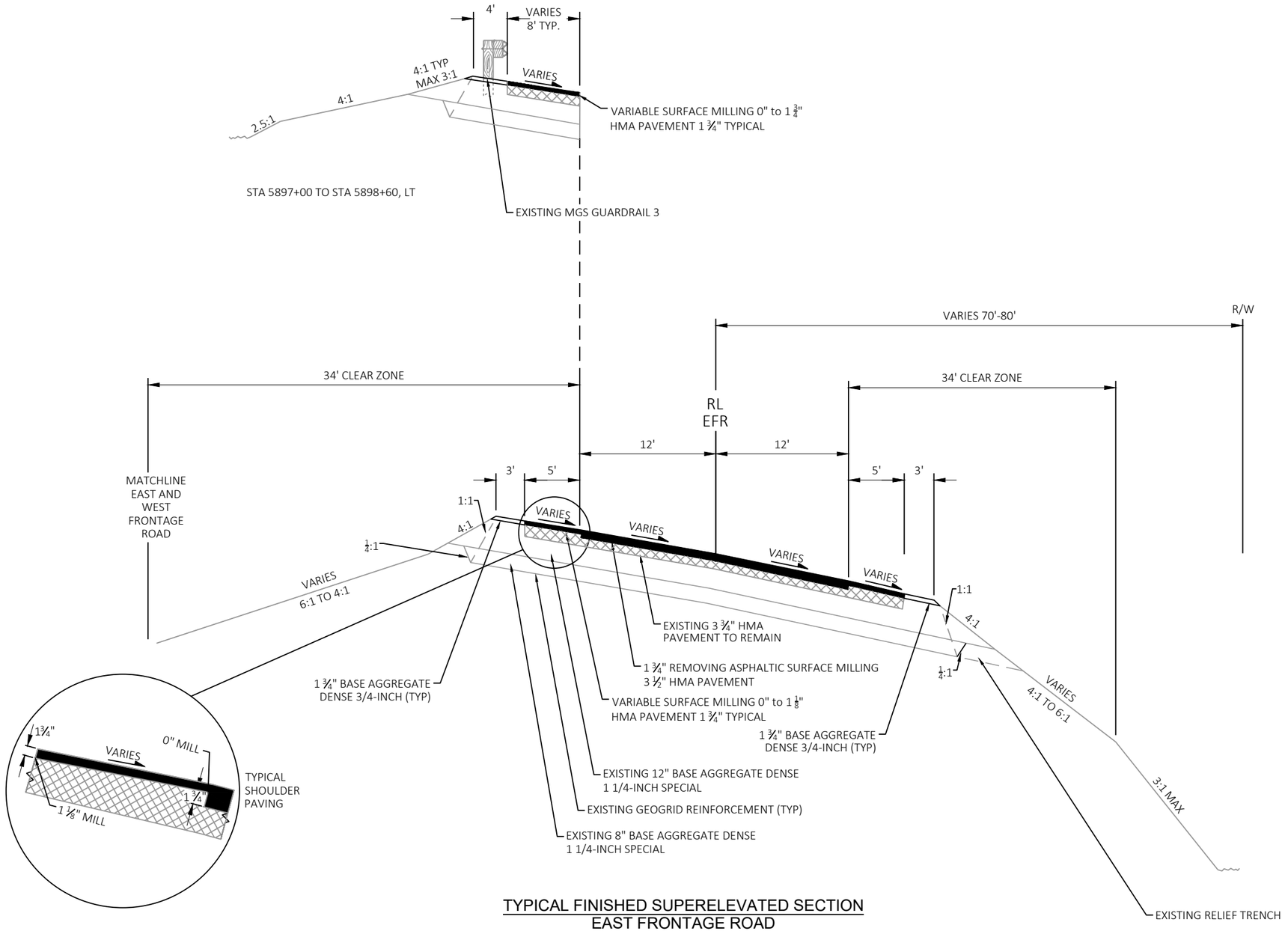


STA 5891+98 TO STA 5894+23, RT
STA 5895+73 TO STA 5896+40, RT

STA 5892+51 TO STA 5894+23, LT
STA 5895+73 TO STA 5897+00, LT

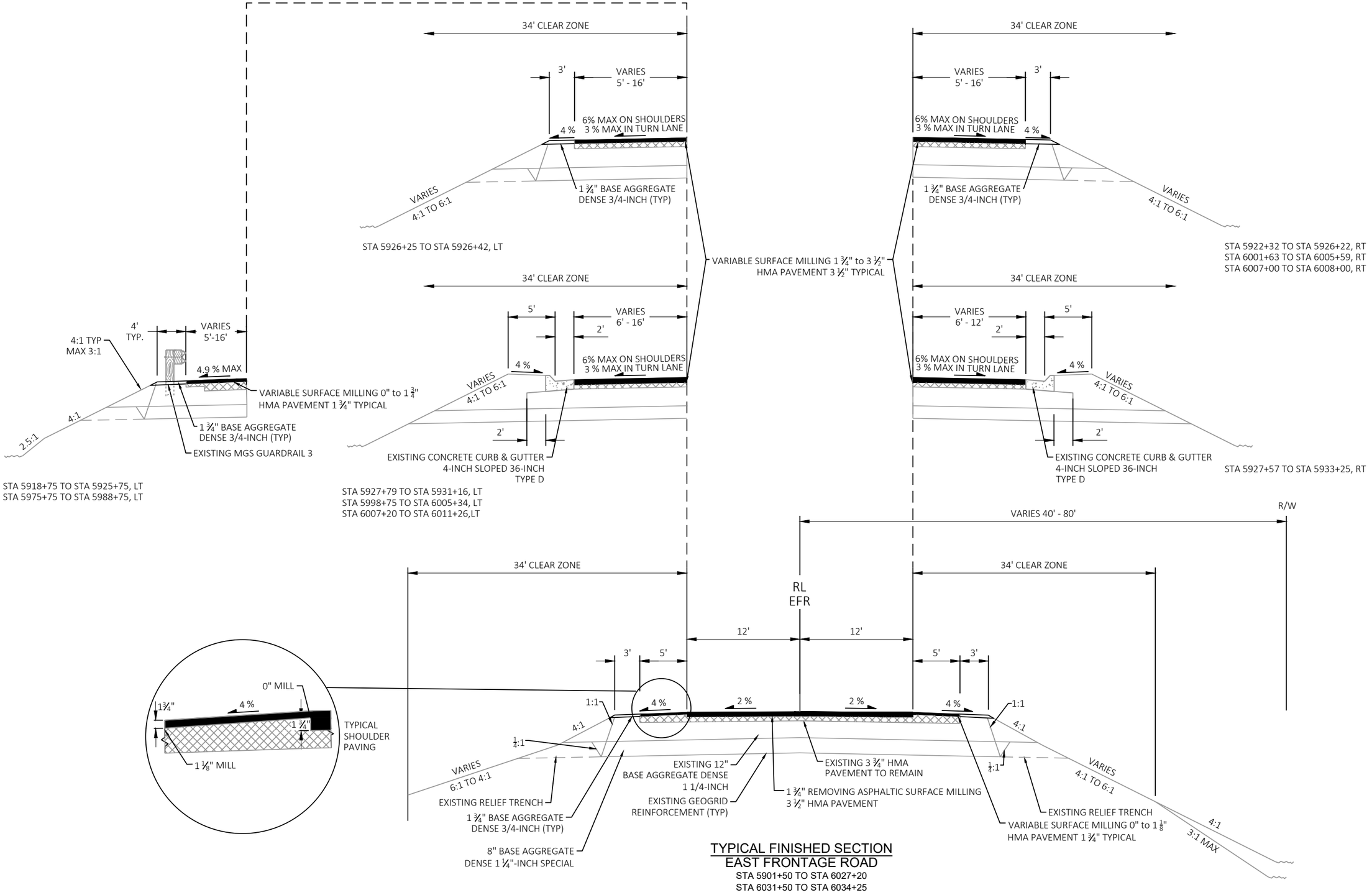
TYPICAL FINISHED SECTION
EAST FRONTAGE ROAD
STA 5874+59 TO STA 5901+23

2



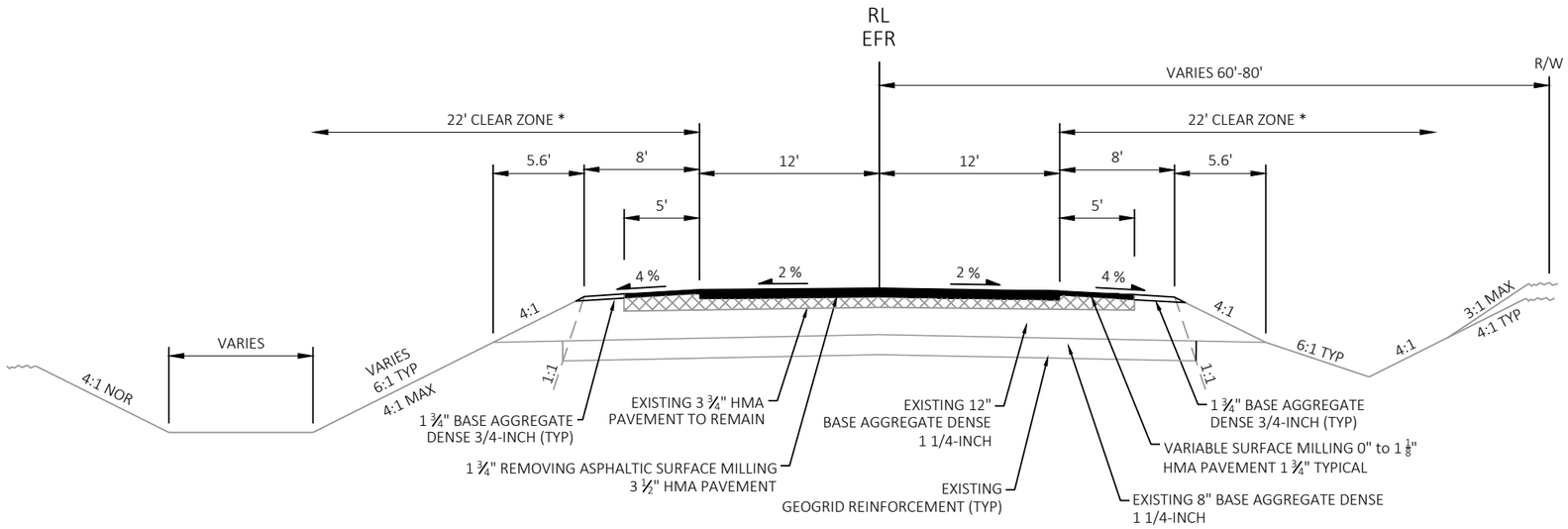
TYPICAL FINISHED SUPERELEVATED SECTION
EAST FRONTAGE ROAD
STA 5901+23 TO STA 5901+50
STA 6027+20 TO STA 6031+50

PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	TYPICAL SECTION	SHEET 21	E



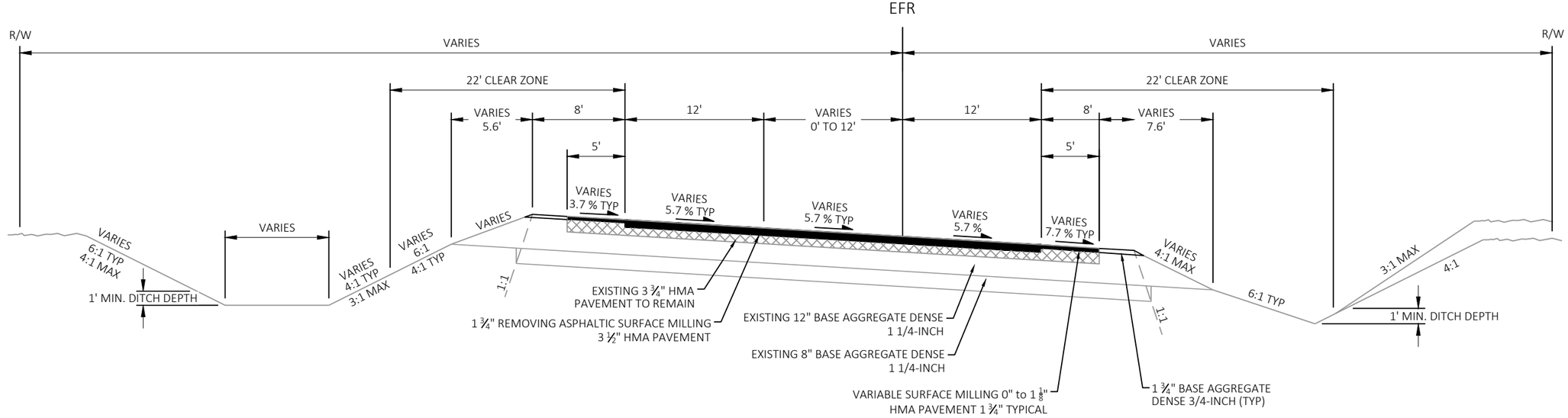
TYPICAL FINISHED SECTION
EAST FRONTAGE ROAD
STA 5901+50 TO STA 6027+20
STA 6031+50 TO STA 6034+25

PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	TYPICAL SECTION	SHEET 22	E



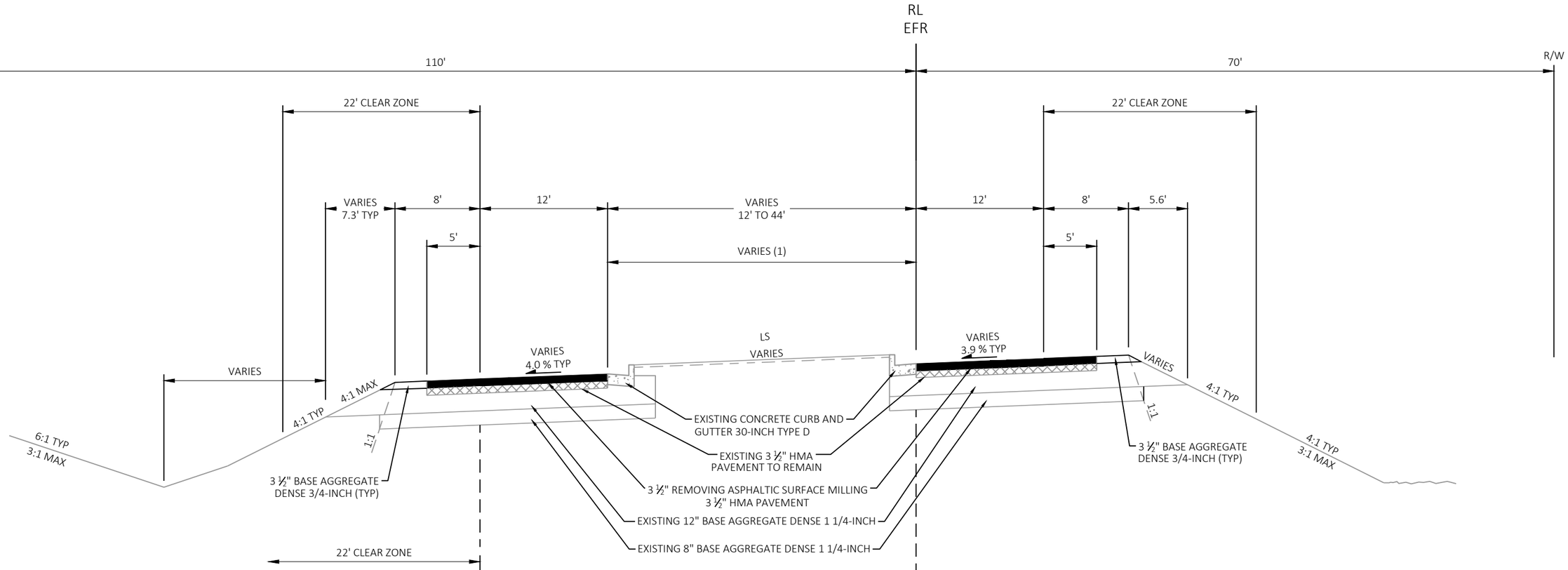
* 34' CLEARZONE
- STA 6034+25 TO STA 6041+40

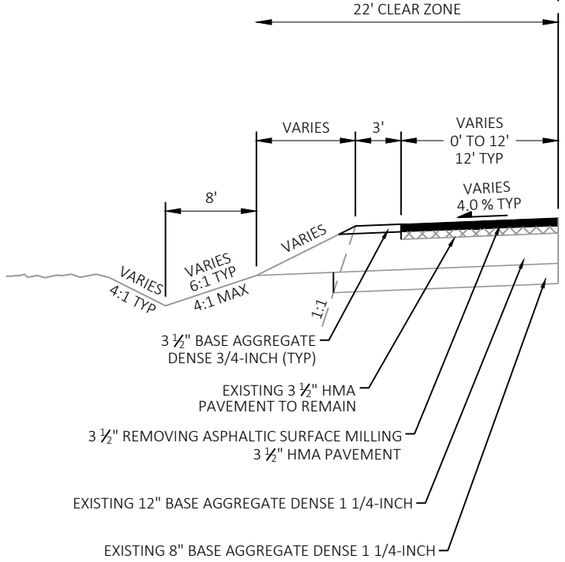
TYPICAL FINISHED SECTION
EAST FRONTAGE ROAD
STA 6034+25 TO STA 6041+40



TYPICAL FINISHED SECTION
EAST FRONTAGE ROAD
STA 6041+40 TO STA 3045+64

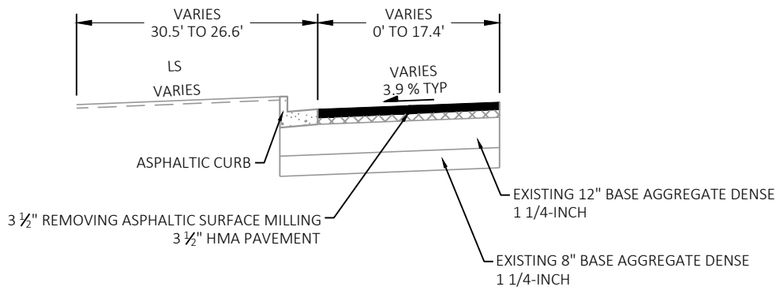
PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	TYPICAL SECTION	SHEET 23	E





RIGHT TURN LANE

STA 3045+64 TO STA 3048+52



STA 3050+60 TO STA 3052+35

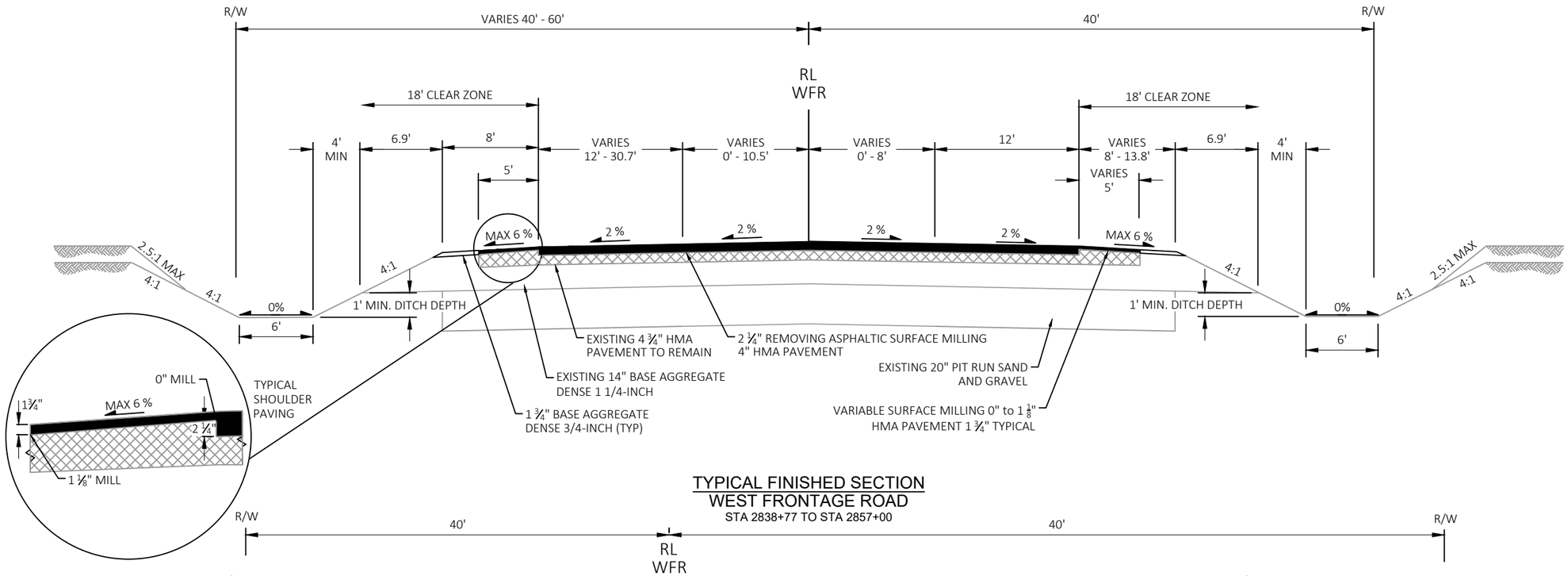
FOOTNOTES

(1) 12' TO 32.5', STA 3045+64 TO STA 3050+60

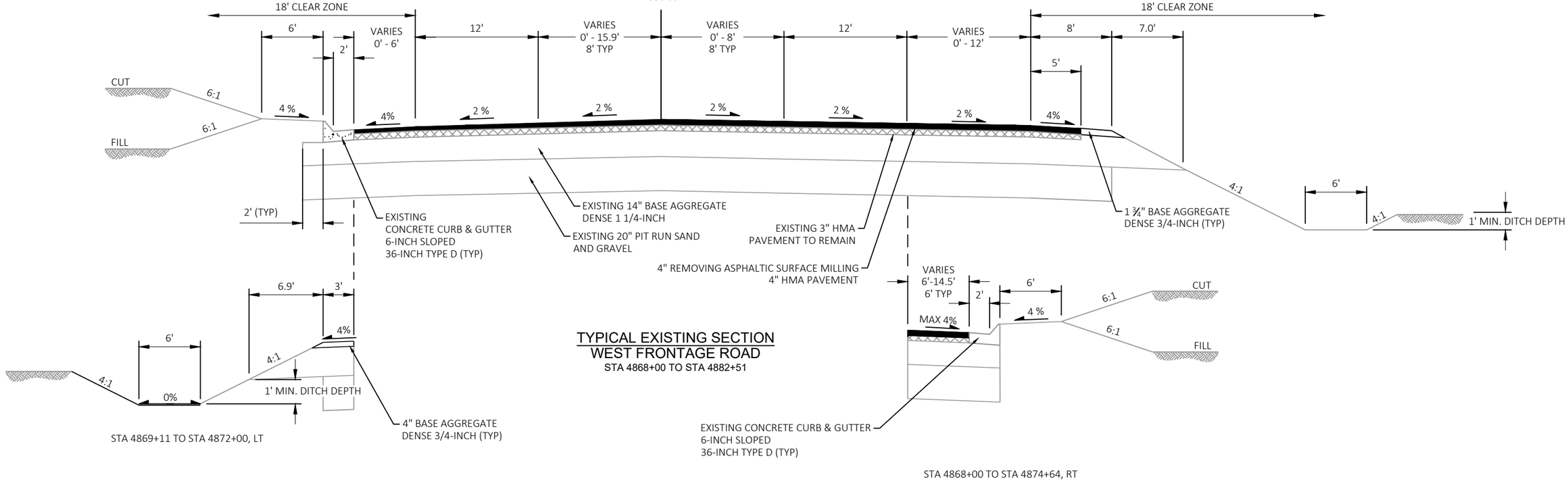
(2) PROFILE TRANSITION OVER 25'

TYPICAL FINISHED SECTION
EAST FRONTAGE ROAD
STA 6049+00 TO STA 3052+35

PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	TYPICAL SECTION	SHEET 24	E



TYPICAL FINISHED SECTION
WEST FRONTAGE ROAD
STA 2838+77 TO STA 2857+00

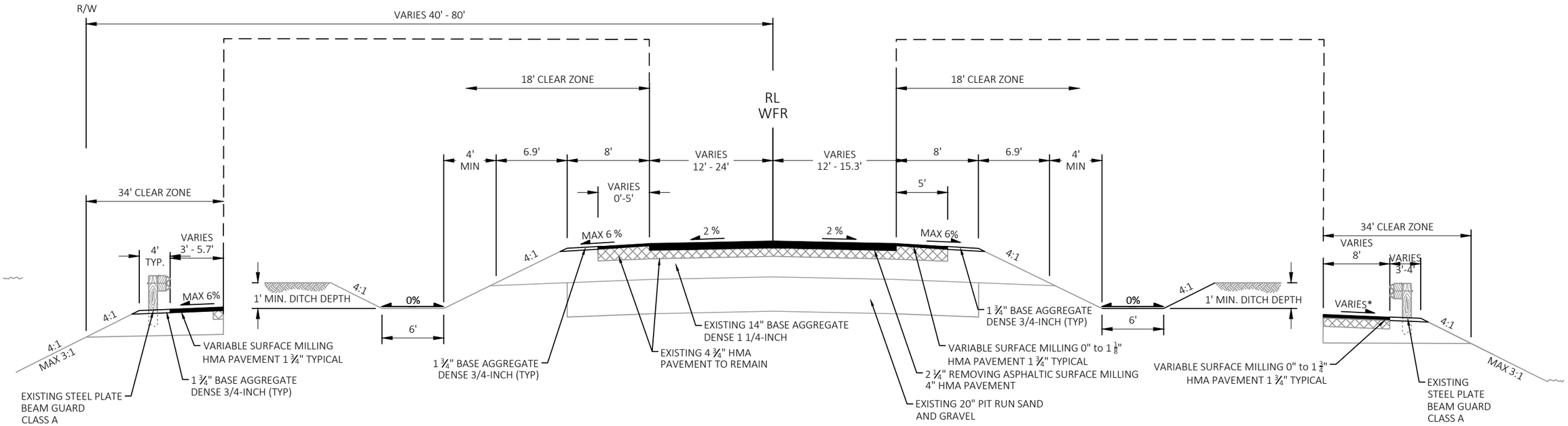


TYPICAL EXISTING SECTION
WEST FRONTAGE ROAD
STA 4868+00 TO STA 4882+51

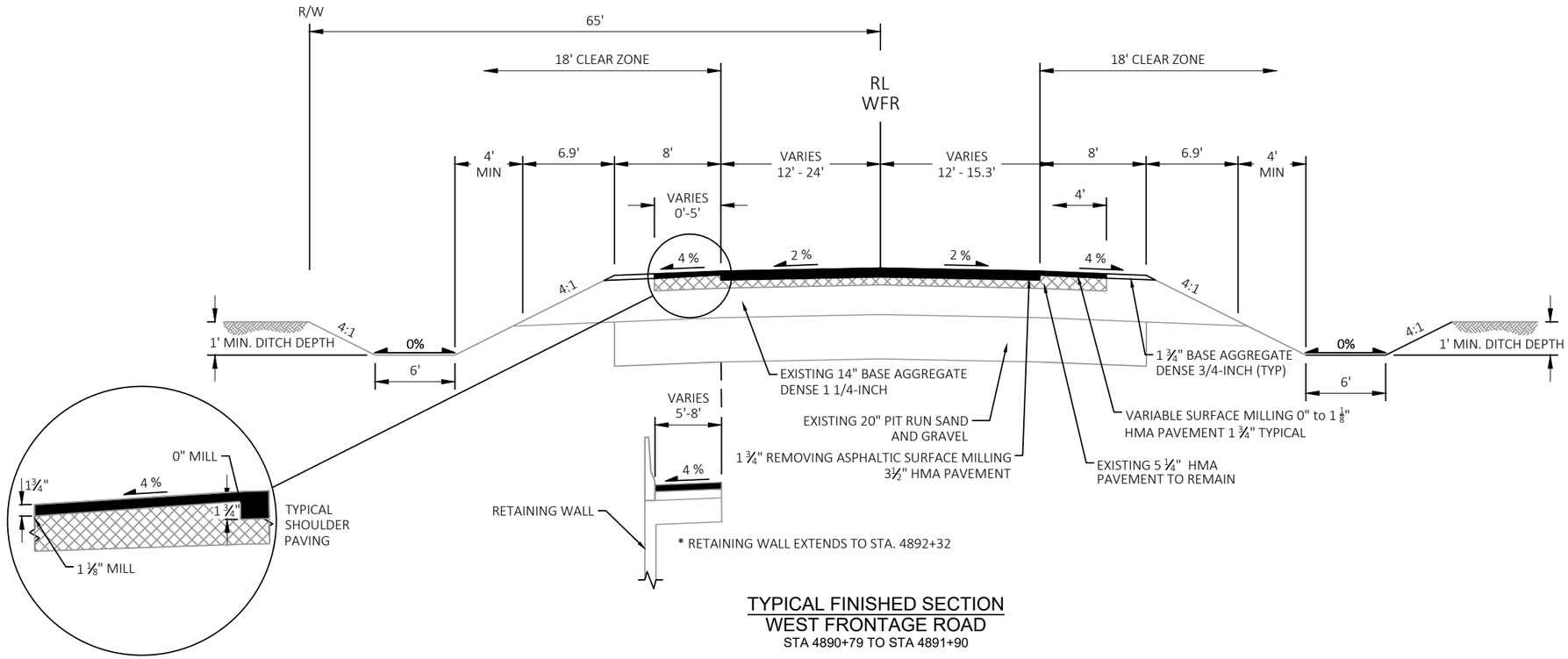
STA 4869+11 TO STA 4872+00, LT

STA 4868+00 TO STA 4874+64, RT

PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	TYPICAL SECTION	SHEET 25	E



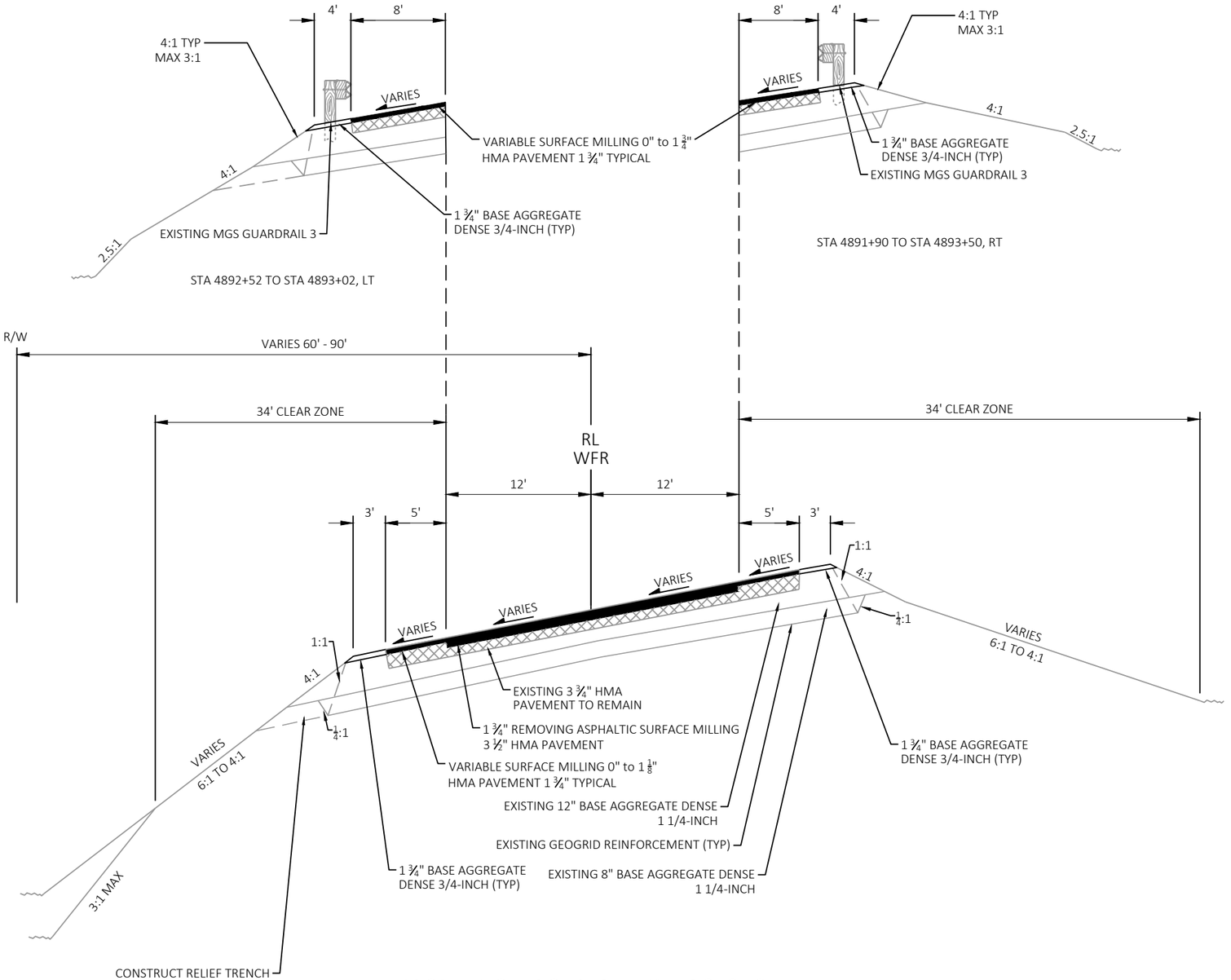
TYPICAL FINISHED SECTION
WEST FRONTAGE ROAD
STA 4882+51 TO STA 4888+84



TYPICAL FINISHED SECTION
WEST FRONTAGE ROAD
STA 4890+79 TO STA 4891+90

PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	TYPICAL SECTION	SHEET 26	E

2



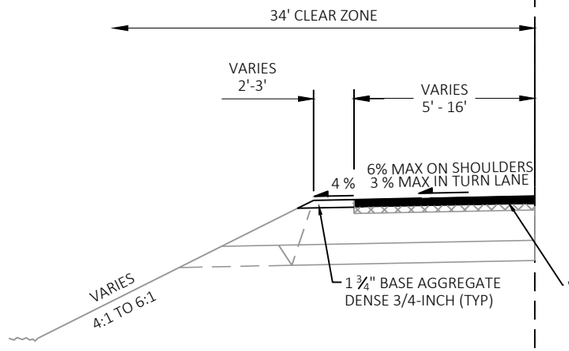
TYPICAL FINISHED SUPERELEVATED SECTION
WEST FRONTAGE ROAD

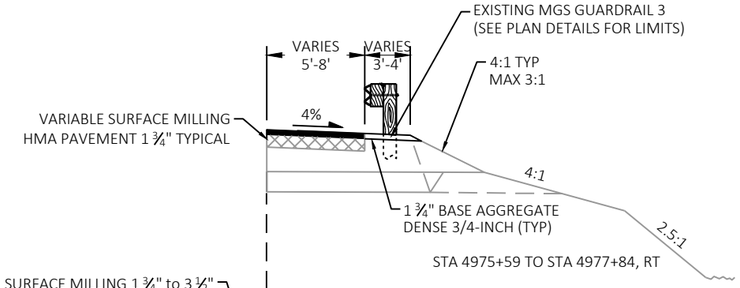
STA 4891+90 TO STA 4897+75
STA 4965+50 TO STA 4970+50
STA 4984+25 TO STA 4988+00

PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	TYPICAL SECTION	SHEET 27	E

FILE NAME : W:\PROJECTS\21234\04_CADD_01\CADD_SHEETS\020301-TS (5).DWG
LAYOUT NAME - 04-10ft
PLOT DATE : 10/27/2022 12:47 PM
PLOT BY : ALEXANDER UNDERWOOD
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

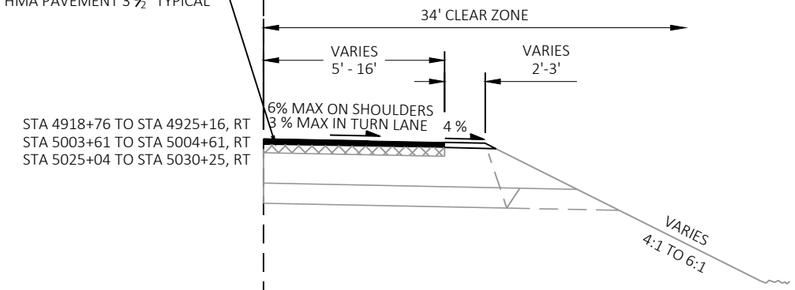
STA 4897+28 TO STA 4900+00, LT
STA 4922+02 TO STA 4924+31, LT
STA 4975+21 TO STA 4976+24, LT
STA 4999+00 TO STA 5006+60, LT
STA 4997+76 TO STA 5007+36, LT
STA 5021+81 TO STA 5025+18, LT
STA 5027+82 TO STA 5028+82, LT



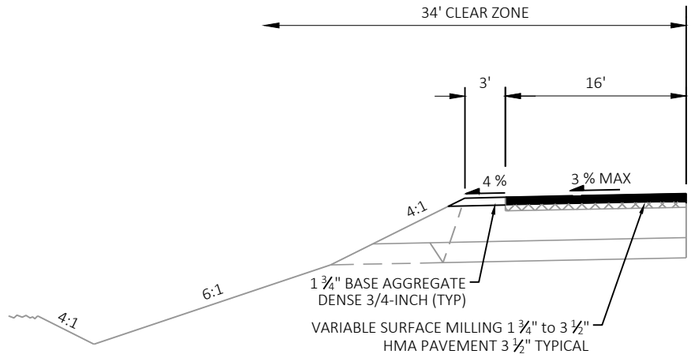


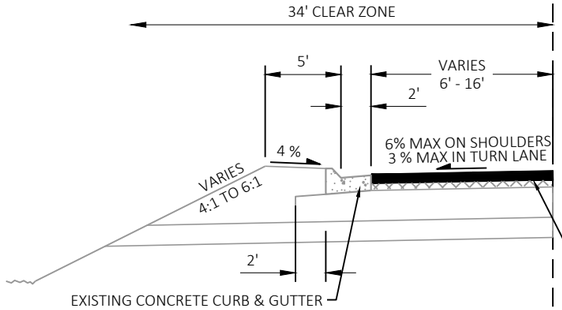
STA 4975+59 TO STA 4977+84, RT

STA 4918+76 TO STA 4925+16, RT
STA 5003+61 TO STA 5004+61, RT
STA 5025+04 TO STA 5030+25, RT



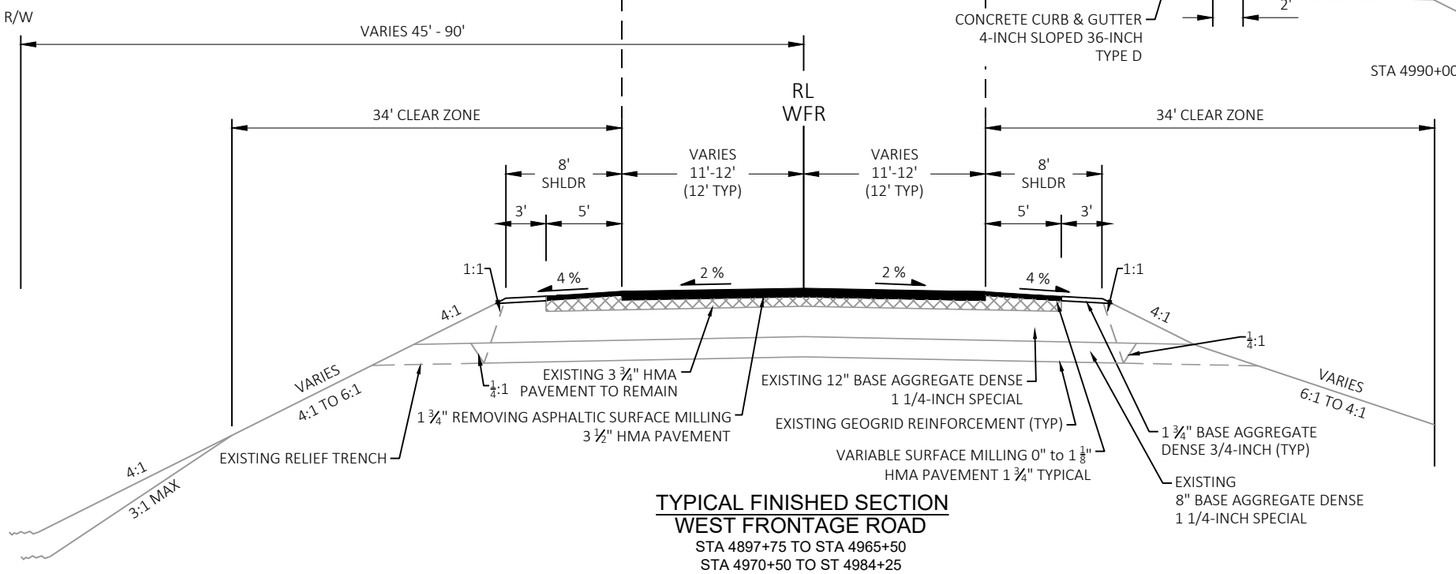
STA 5030+00 TO STA 5030+25, LT





STA 4924+31 TO STA 4930+00, LT
STA 4976+24 TO STA 4977+51, LT
STA 5014+25 TO STA 5020+00, LT

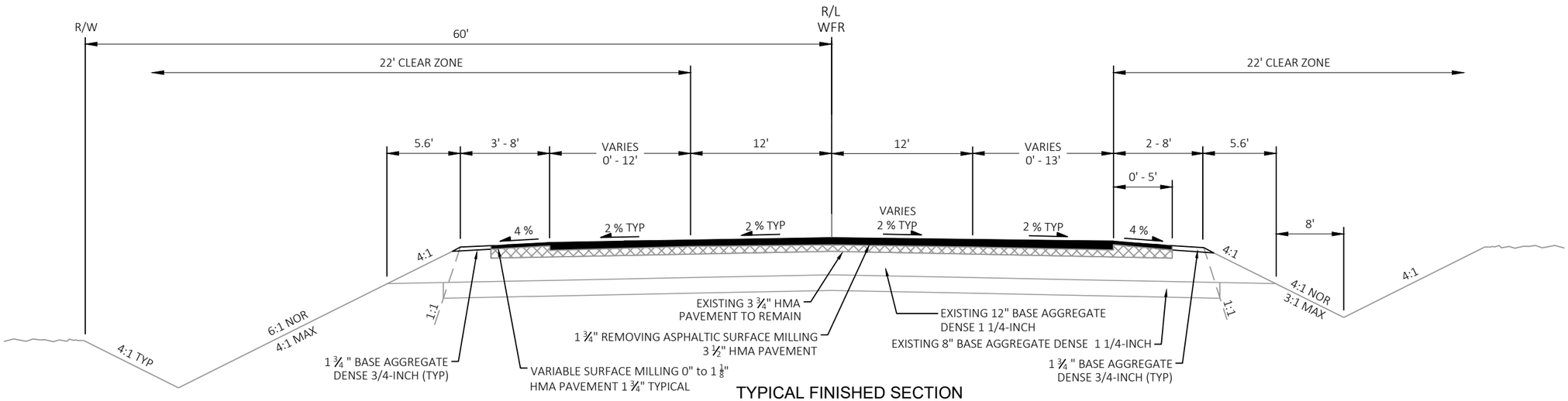
STA 4990+00 TO STA 5002+24, RT



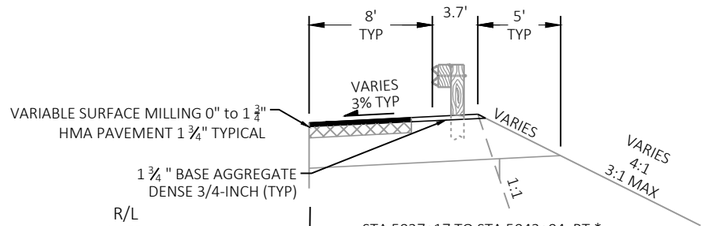
TYPICAL FINISHED SECTION
WEST FRONTAGE ROAD

STA 4897+75 TO STA 4965+50
STA 4970+50 TO ST 4984+25
STA 4988+00 TO STA 5030+25

PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	TYPICAL SECTION	SHEET 28	E

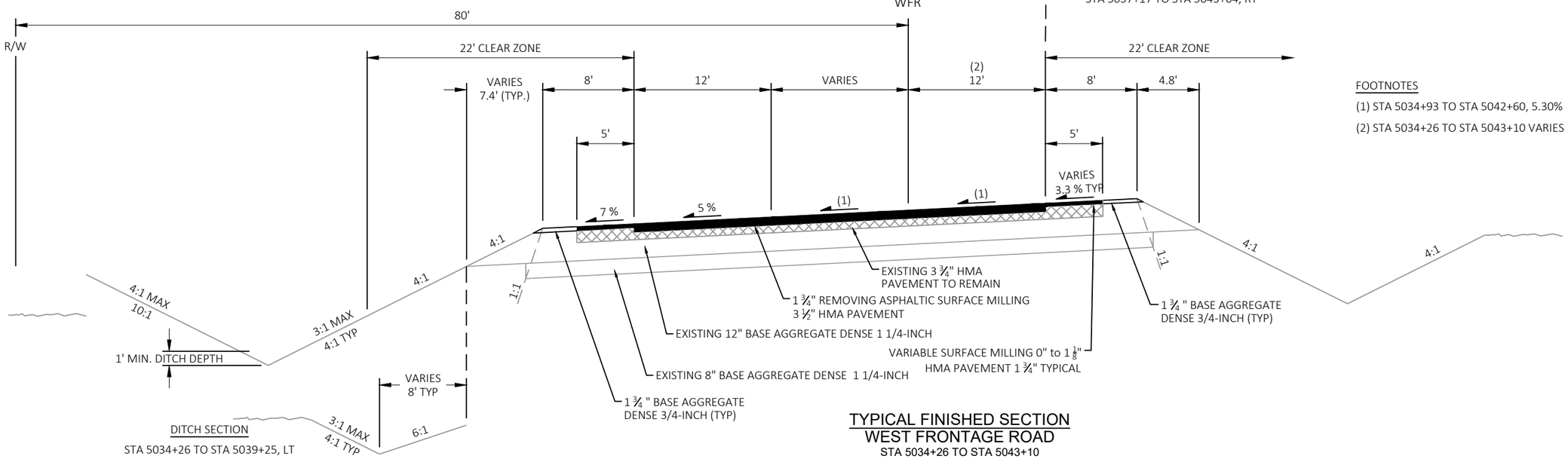


TYPICAL FINISHED SECTION
WEST FRONTAGE ROAD
STA 5030+25 TO STA 5034+26



STA 5037+17 TO STA 5043+04, RT *

*BEAM GUARD EXTENDS TO STA 5043+21, RT



DITCH SECTION
STA 5034+26 TO STA 5039+25, LT

TYPICAL FINISHED SECTION
WEST FRONTAGE ROAD
STA 5034+26 TO STA 5043+10

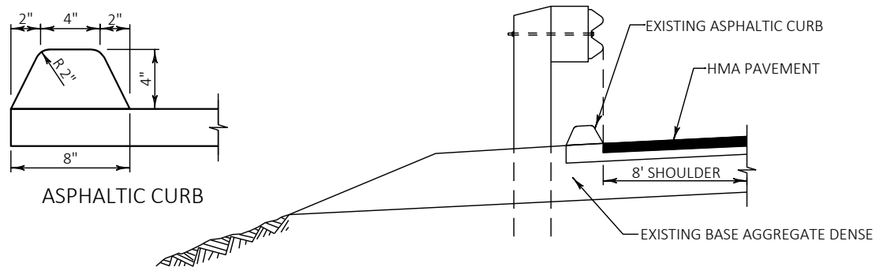
FOOTNOTES

(1) STA 5034+93 TO STA 5042+60, 5.30%

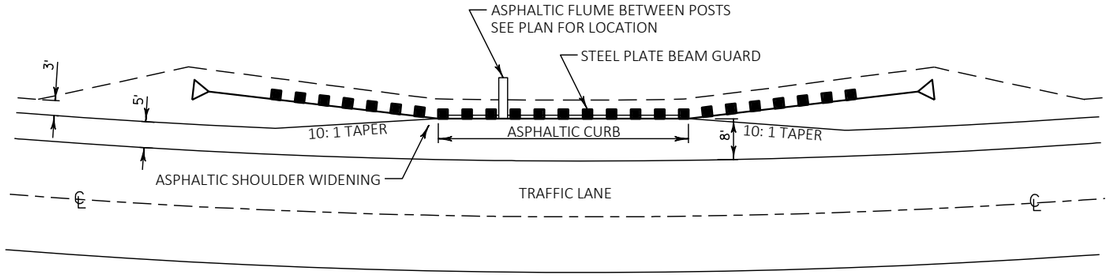
(2) STA 5034+26 TO STA 5043+10 VARIES 12' TO 13'

PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	TYPICAL SECTION	SHEET 29	E

2



ASPHALTIC CURB

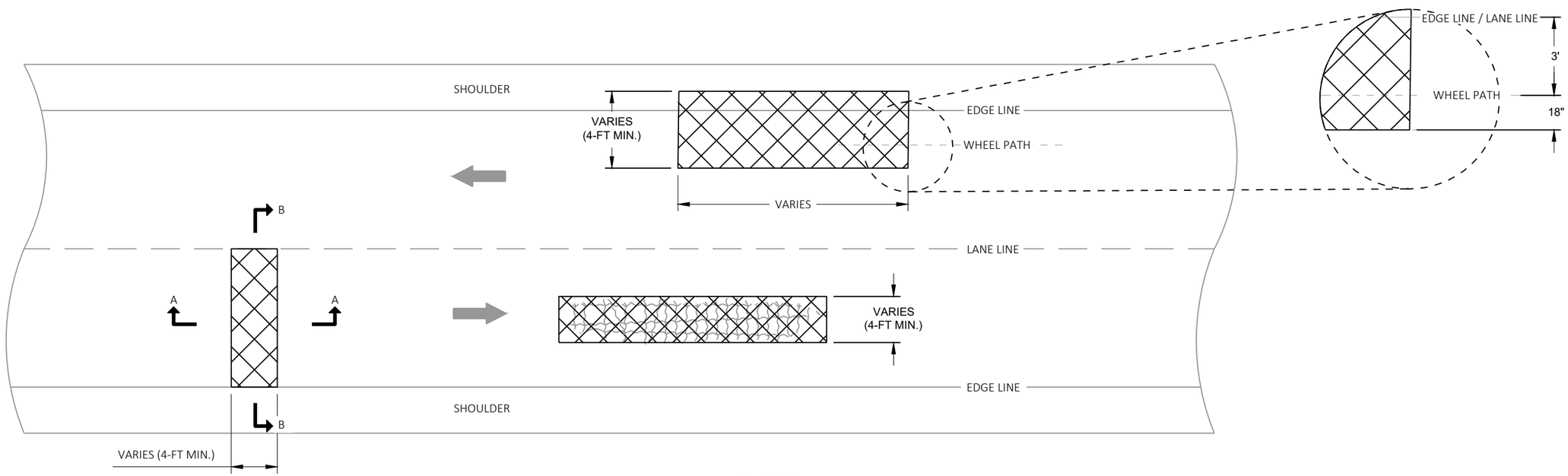


PAVED SHOULDER AT BEAM GUARD

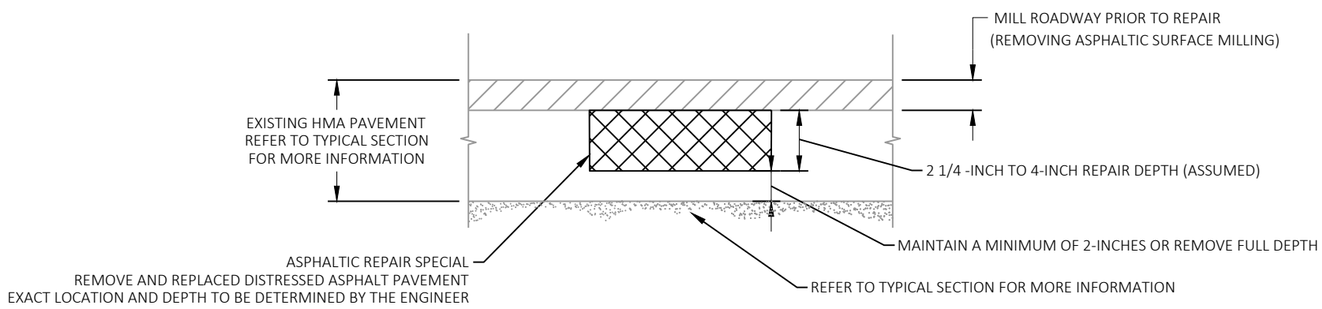
FOR LOW SHOULDER IN SUPERELEVATION SECTIONS
EFR STA 5892+90 TO STA 5894+23
EFR STA 5895+73 TO STA 5896+40
WFR STA 4887+58 TO STA 4888+84
WFR STA 4890+88 TO STA 4893+51

GENERAL NOTES

1. EXACT LOCATION, DEPTH AND SIZE OF REPAIR TO BE DETERMINED BY THE ENGINEER IN THE FIELD.
2. MILL PAVEMENT PER PLAN PRIOR TO MAKING ASPHALTIC REPAIR SPECIAL.
3. NEW LONGITUDINAL REPAIR JOINTS SHALL BE A MINIMUM OF 18-INCHES FROM THE CENTER OF THE WHEEL PATH.
4. ASPHALTIC REPAIR SPECIAL PAVING TO BE DONE ON THE SAME DAY AS REMOVAL.



PLAN VIEW



SECTION VIEW A-A

ASPHALTIC REPAIR SPECIAL

2

PRIOR TO MILLING AND PAVING.

A. SAWCUT EXISTING PAVEMENT FULL DEPTH.
B. REMOVE AND STORE MANHOLE COVER.
C. FURNISH AND INSTALL TEMPORARY COVER PLATE.
D. BACKFILL USING ASPHALT SURFACE PATCHING.

AFTER PAVING HMA LOWER LAYER(S)

A. REMOVE ASPHALTIC SURFACE PATCHING.
B. EXCAVATE AROUND MANHOLE.
C. ADJUST OR RECONSTRUCT MANHOLE AND RE-INSTALL MANHOLE FRAME AND COVER.
D. POUR MONOLITHIC CONCRETE SHIM SO CONCRETE FILLS IN VOIDS BELOW THE CASTING BETWEEN THE SHIMS.
E. PAVE UPPER LAYER HMA.

PAVEMENT REMOVAL, ASPHALT PATCH REMOVAL, EXCAVATING, PREPARING THE FOUNDATION AND SHIMMING ARE INCIDENTAL TO THE ADJUSTING OR RECONSTRUCTING BID ITEMS.

THE DEPARTMENT WILL PAY SEPARATELY FOR SAWING ASPHALT, COVER PLATES TEMPORARY, ASPHALTIC SURFACE PATCHING AND BASE PATCHING CONCRETE SHES.

MONOLITHIC SHIM CONCRETE, CONCRETE PLACEMENT AND FINISHING IS INCIDENTAL TO THE BASE PATCHING CONCRETE SHES BID ITEM.

PREVENT CONCRETE AND OTHER DEBRIS FROM FALLING INTO STRUCTURE.

REFER TO PLAN DETAILS AND MISCELLANEOUS QUANTITIES FOR ADDITIONAL INFORMATION.

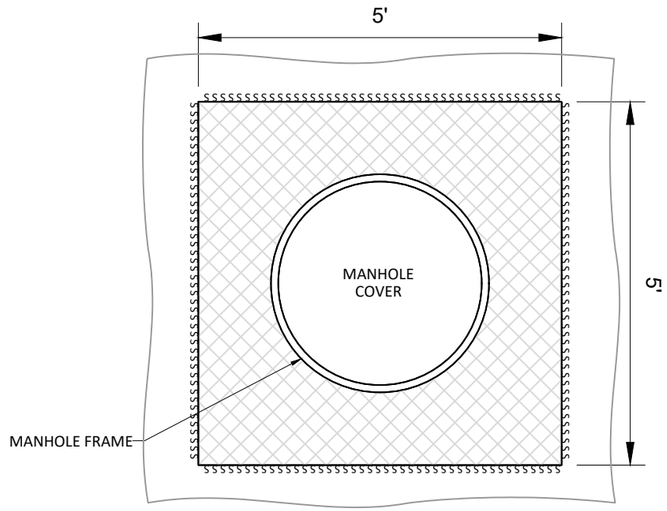
*SAWCUT WILL ONLY BE PAID ONCE. REMOVE ASPHALT SURFACE PATCHING MATERIAL TO THE ORIGINAL SAWCUT LIMITS.

S S S SAWING ASPHALT

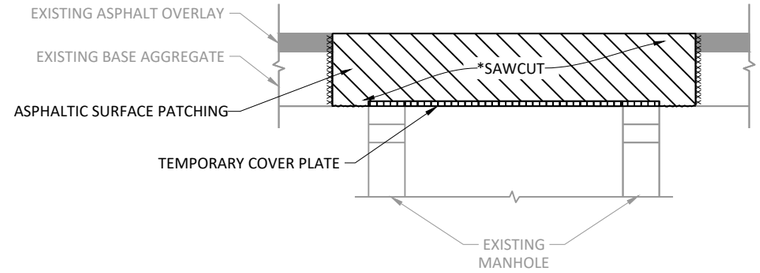
REMOVING PAVEMENT
(INCIDENTAL TO ADJUSTING / RECOSNTRUCTING BID ITEMS)

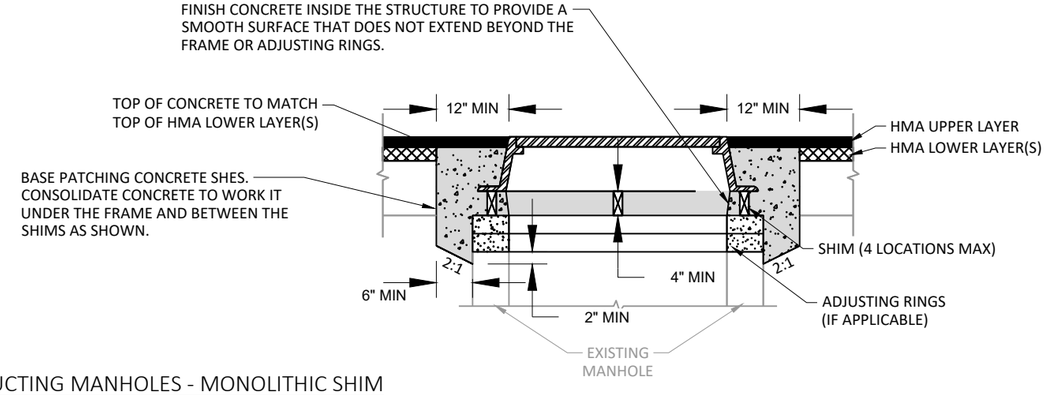
ASPHALTIC SURFACE PATCHING

MONOLITHIC CONCRETE



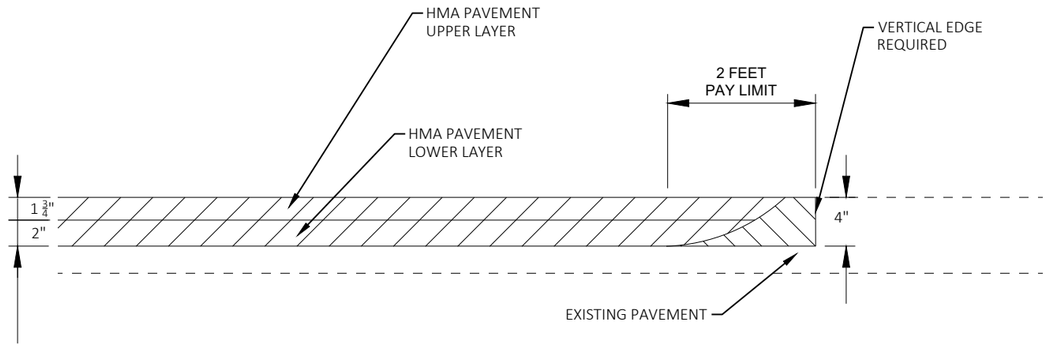
PLAN VIEW





ADJUSTING / RECONSTRUCTING MANHOLES - MONOLITHIC SHIM

2



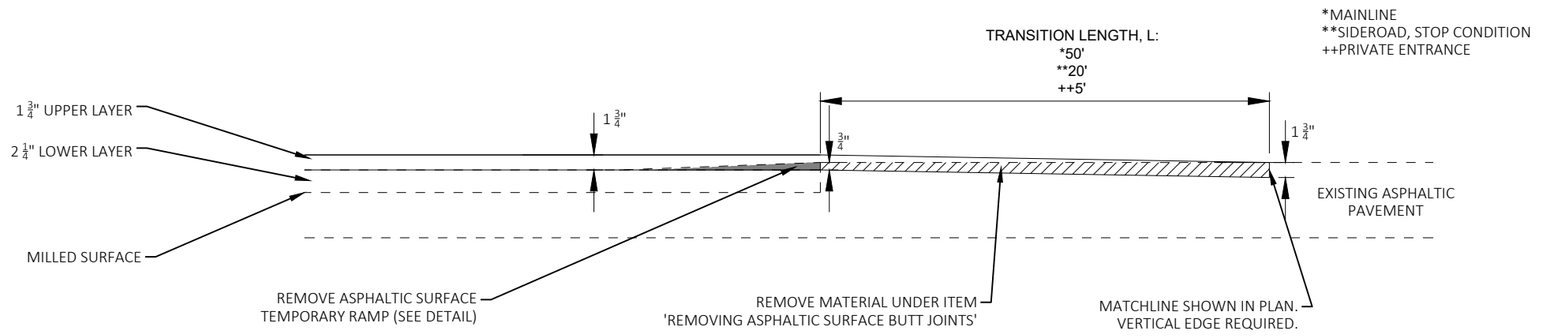
REMOVE MATERIAL UNDER ITEM 'REMOVING ASPHALTIC SURFACE BUTT JOINT'

REMOVING ASPHALTIC SURFACE MILLING

BUTT JOINT - NO CHANGE IN PROFILE

STA 3835+00 (BEGIN PROJECT)
STA 3852+25 (END CONSTRUCTION)
STA 5863+15 (BEGIN CONSTRUCTION)
STA 5894+23 (END CONSTRUCTION)
STA 2838+77 (BEGIN CONSTRUCTION)
STA 2857+00 (END CONSTRUCTION)
STA 4868+00 (BEGIN CONSTRUCTION)
STA 4888+84 (END CONSTRUCTION)

2



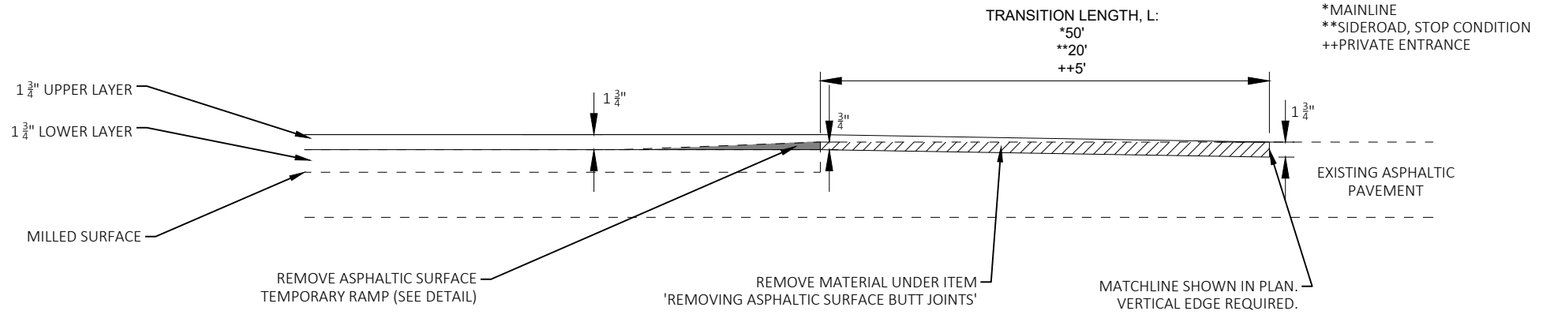
MILLING BUTT JOINT AND PAVING UPPER LAYER

OPERATIONS

- REMOVING ASPHALTIC SURFACE BUTT JOINT, REMOVE TEMPORARY RAMP.
- PAVE UPPER LAYER.

BUTT JOINT - CHANGE IN PROFILE (MILL 2 1/4", PAVE 4")

STA 3835+00 (BEGIN PROJECT)
STA 3852+25 (END CONSTRUCTION)
STA 5863+15 (BEGIN CONSTRUCTION)
STA 5894+23 (END CONSTRUCTION)
STA 2838+77 (BEGIN PROJECT)
STA 2857+00 (END CONSTRUCTION)
STA 4868+00 (BEGIN CONSTRUCTION)
STA 4888+84 (END CONSTRUCTION)

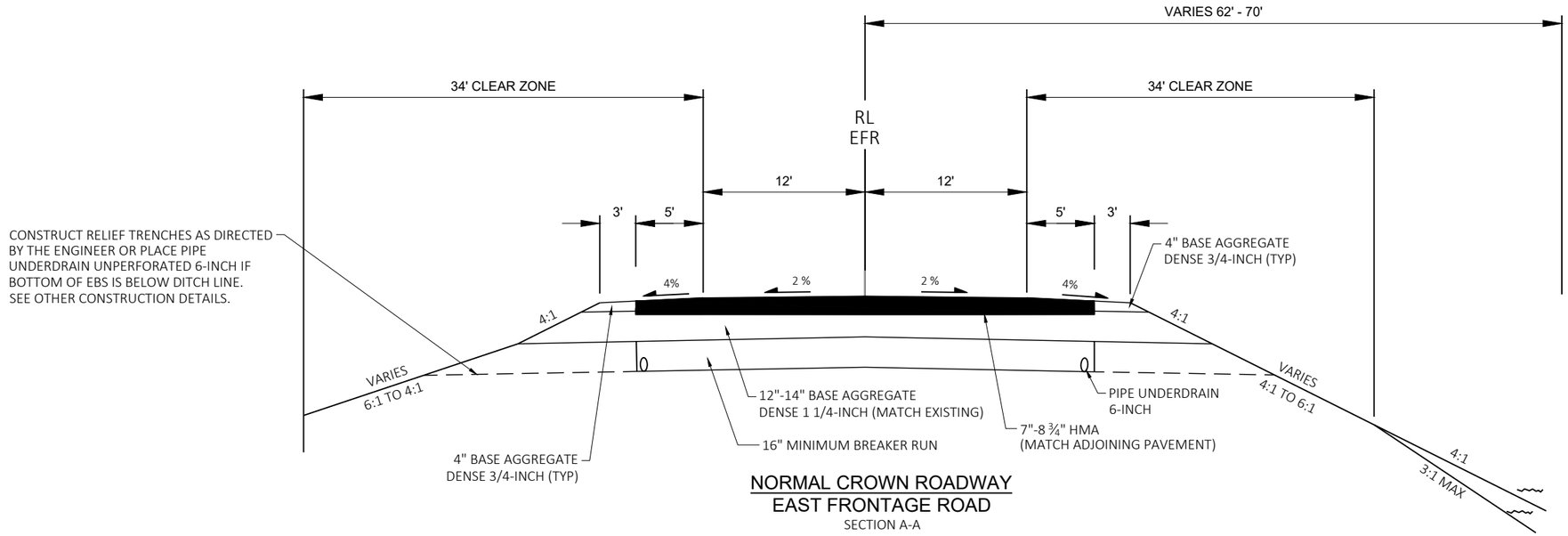


MILLING BUTT JOINT AND PAVING UPPER LAYER

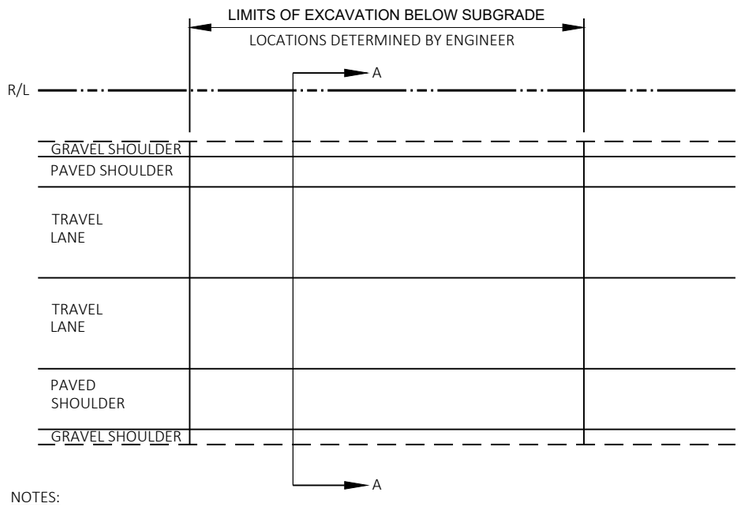
BUTT JOINT - CHANGE IN PROFILE (MILL 2", PAVE 3 1/2")

STA 5895+73 (BEGIN CONSTRUCTION)
STA 3045+64 (END PROJECT)
STA 4890+79 (BEGIN CONSTRUCTION)
STA 5043+10 (END PROJECT)

2



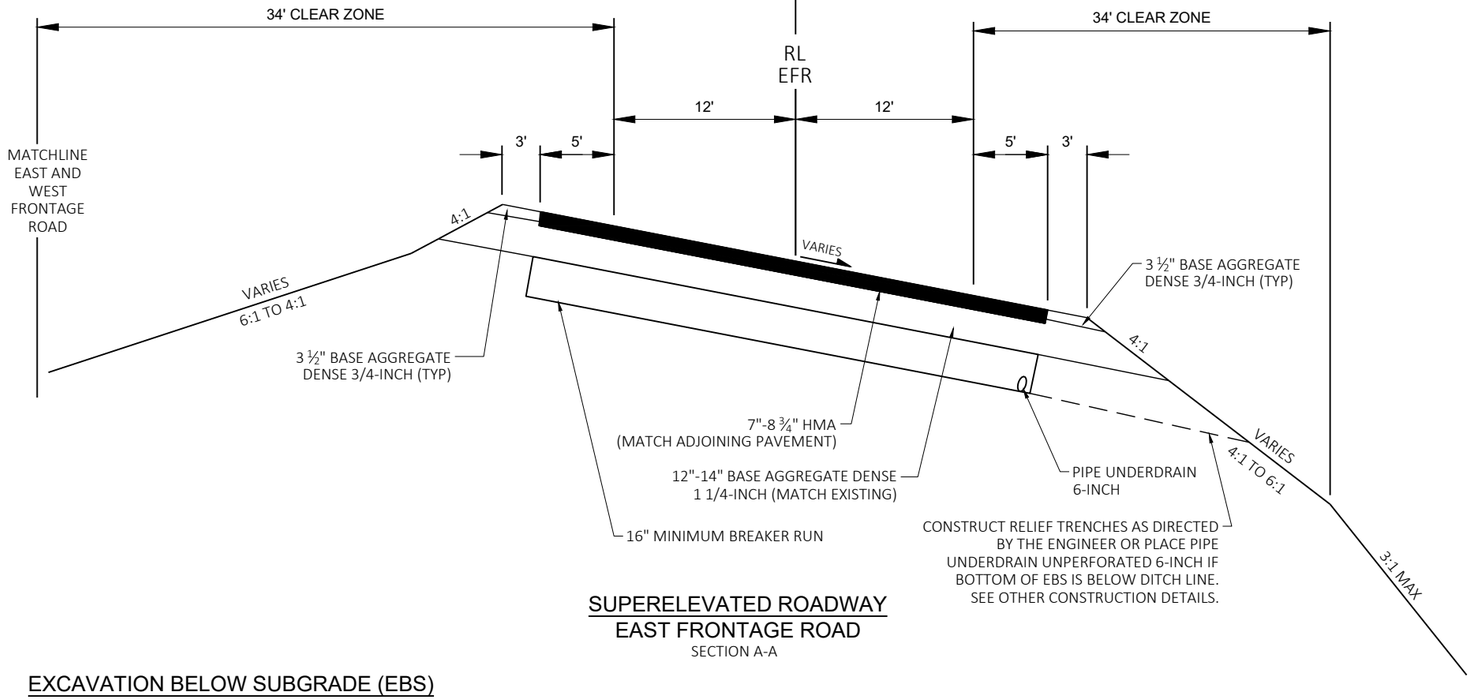
NORMAL CROWN ROADWAY
EAST FRONTAGE ROAD
SECTION A-A



NOTES:

(*) MATCH SLOPE OF EXISTING SUBGRADE FOR BREAKER RUN, OR AS DIRECTED BY ENGINEER.

INSPECT REMAINING PAVEMENT AFTER MILLING TO GRADE. IDENTIFY AREAS OF SUBGRADE DISTRESS. ENGINEER TO IDENTIFY AREAS NEEDING EBS.

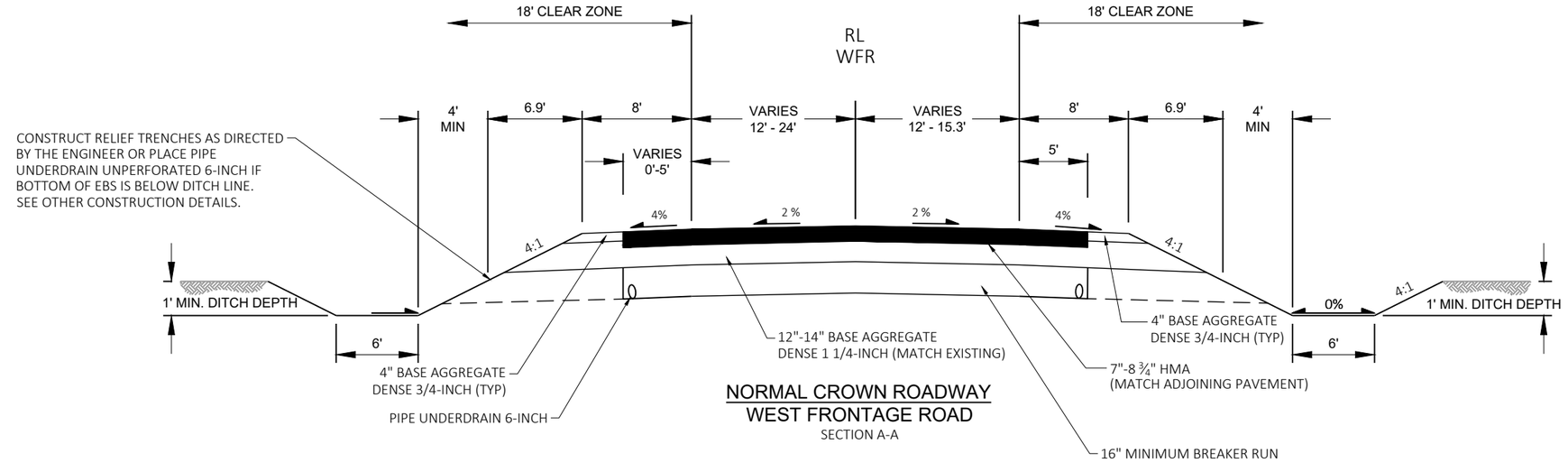


SUPERELEVATED ROADWAY
EAST FRONTAGE ROAD
SECTION A-A

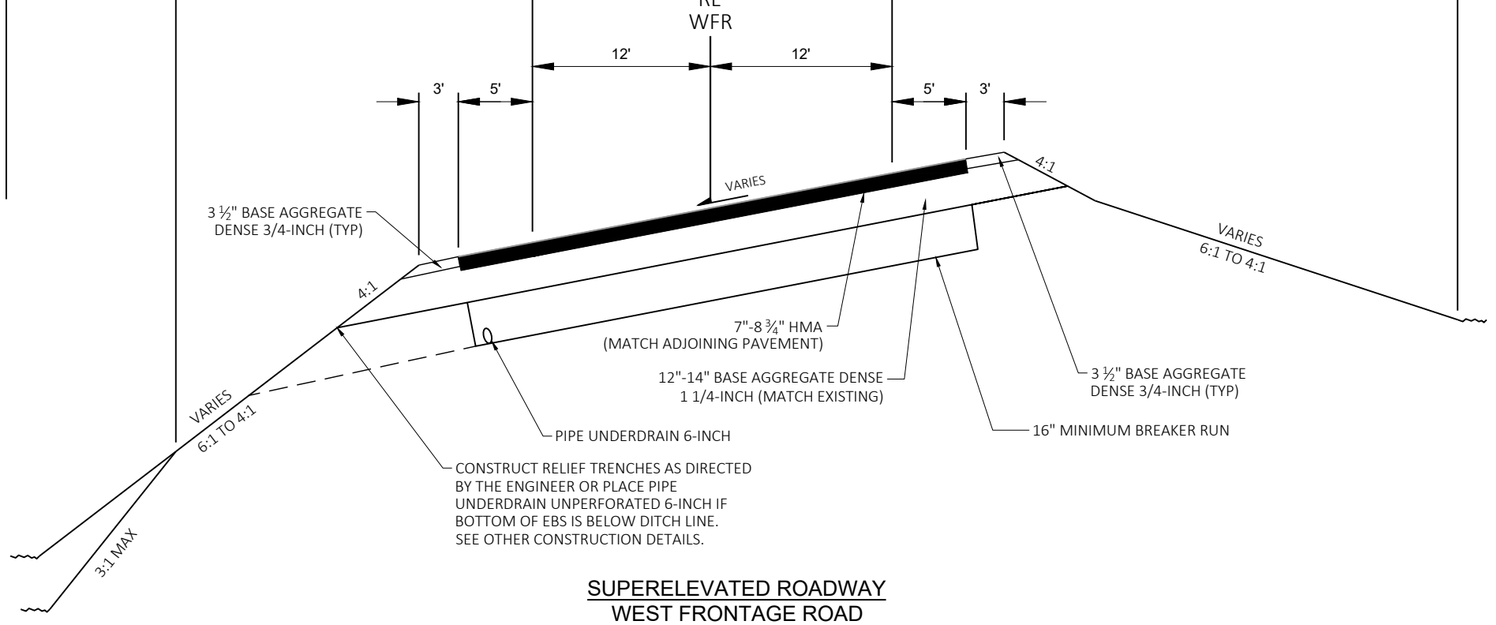
EXCAVATION BELOW SUBGRADE (EBS)

LOCATION AND LIMITS TO BE DETERMINED BY ENGINEER IN THE FIELD

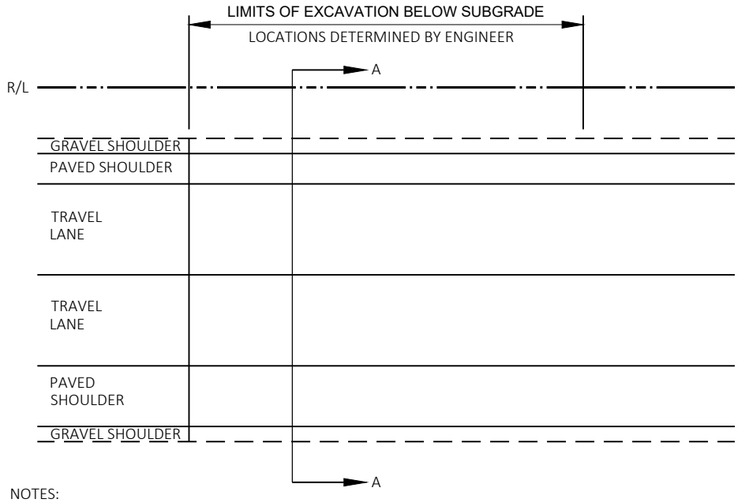
PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	CONSTRUCTION DETAILS	SHEET 35	E



NORMAL CROWN ROADWAY
WEST FRONTAGE ROAD
SECTION A-A



SUPERELEVATED ROADWAY
WEST FRONTAGE ROAD
SECTION A-A



NOTES:

(*) MATCH SLOPE OF EXISTING SUBGRADE FOR BREAKER RUN, OR AS DIRECTED BY ENGINEER.

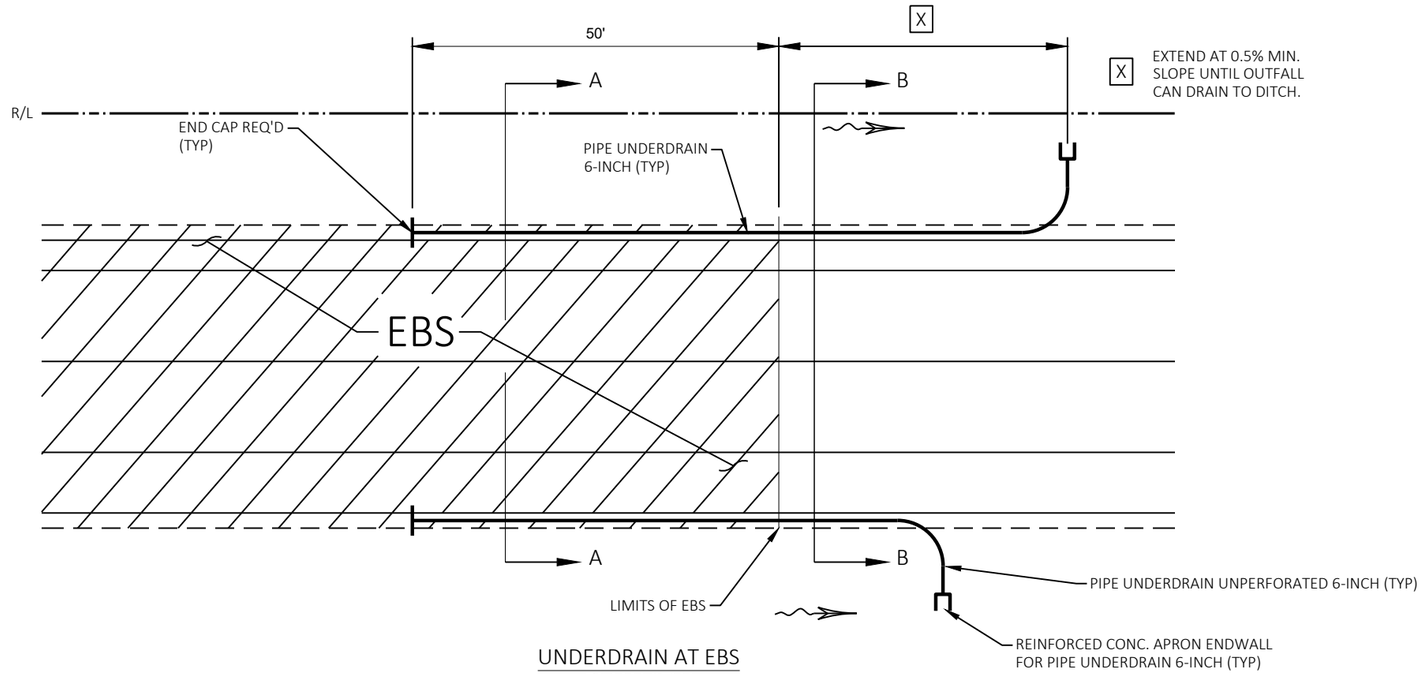
INSPECT REMAINING PAVEMENT AFTER MILLING TO GRADE. IDENTIFY AREAS OF SUBGRADE DISTRESS. ENGINEER TO IDENTIFY AREAS NEEDING EBS.

EXCAVATION BELOW SUBGRADE (EBS)

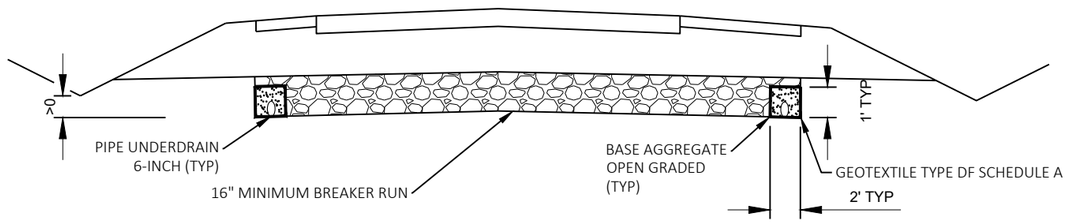
LOCATION AND LIMITS TO BE DETERMINED BY ENGINEER IN THE FIELD

PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	CONSTRUCTION DETAILS	SHEET 36	E

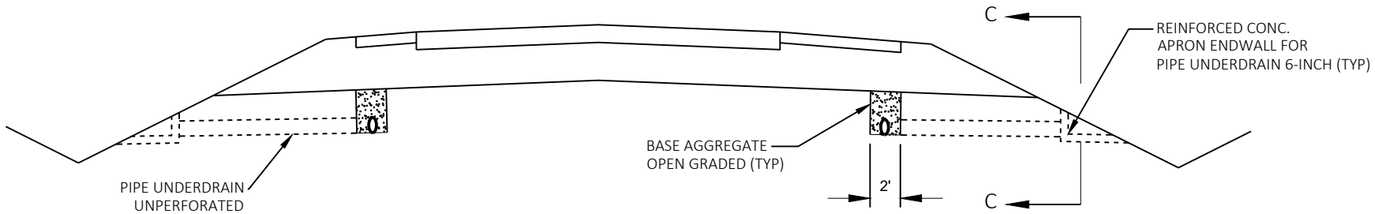
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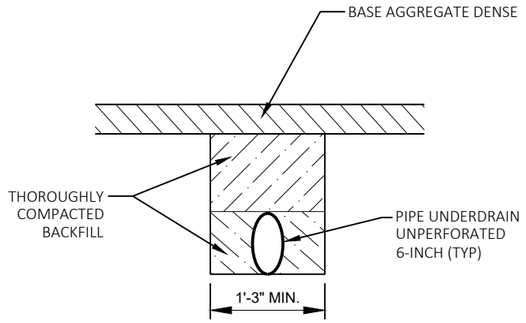
UNDERDRAIN AT EBS
PLAN VIEW



UNDERDRAIN AT EBS BELOW
PROPOSED DITCH
SECTION A-A

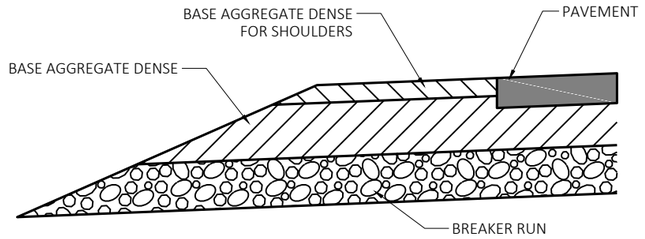


OUTFALL PIPE FOR EBS
DRAINAGE TO DITCH

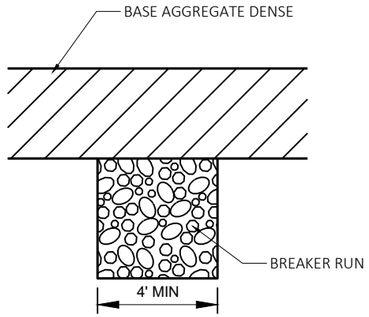


TRENCH FOR OUTFALL PIPE
SECTION C-C

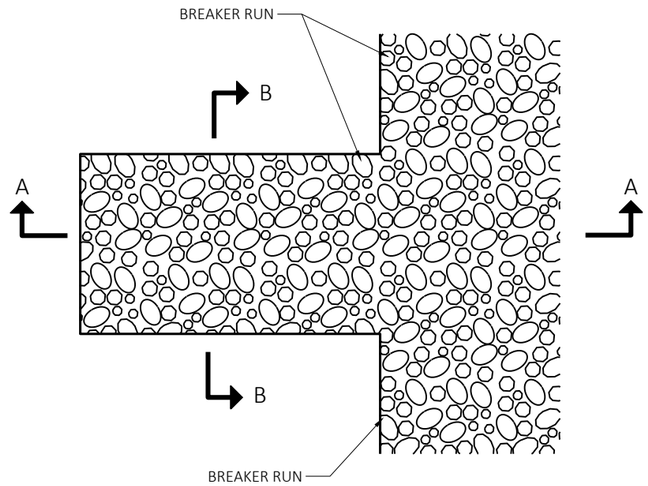
2



SECTION A-A



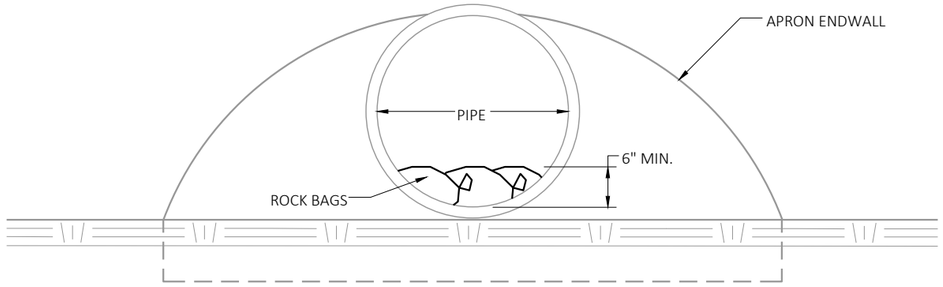
SECTION B-B



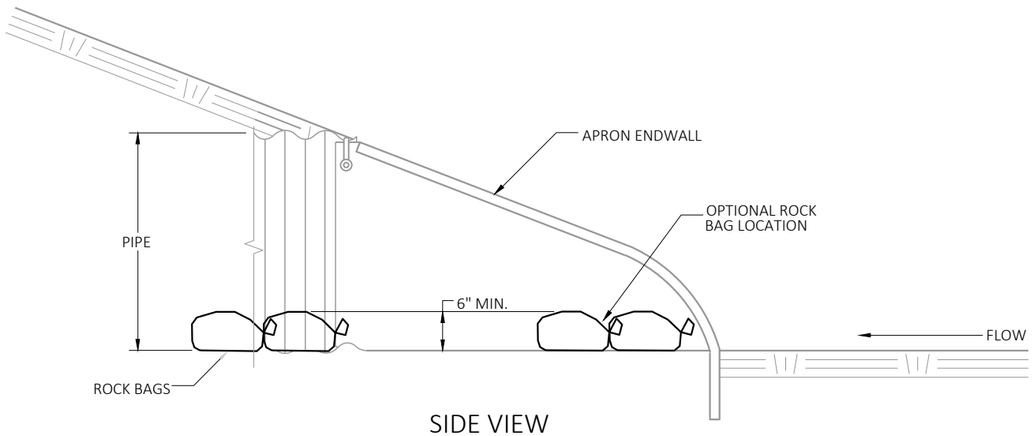
DETAIL FOR RELIEF TRENCH

DRAINS ARE TO BE CONSTRUCTED AT LEAST EVERY 250'
AND AT EACH SAG VERTICAL CURVE IN THE PROFILE.
LOCATIONS TO BE DETERMINED IN THE FIELD BY THE ENGINEER.
EXCAVATION REQUIRED TO CONSTRUCT RELIEF TRENCH SHALL
BE CONSIDERED INCIDENTAL TO THE ITEM "BREAKER RUN".

2



END VIEW



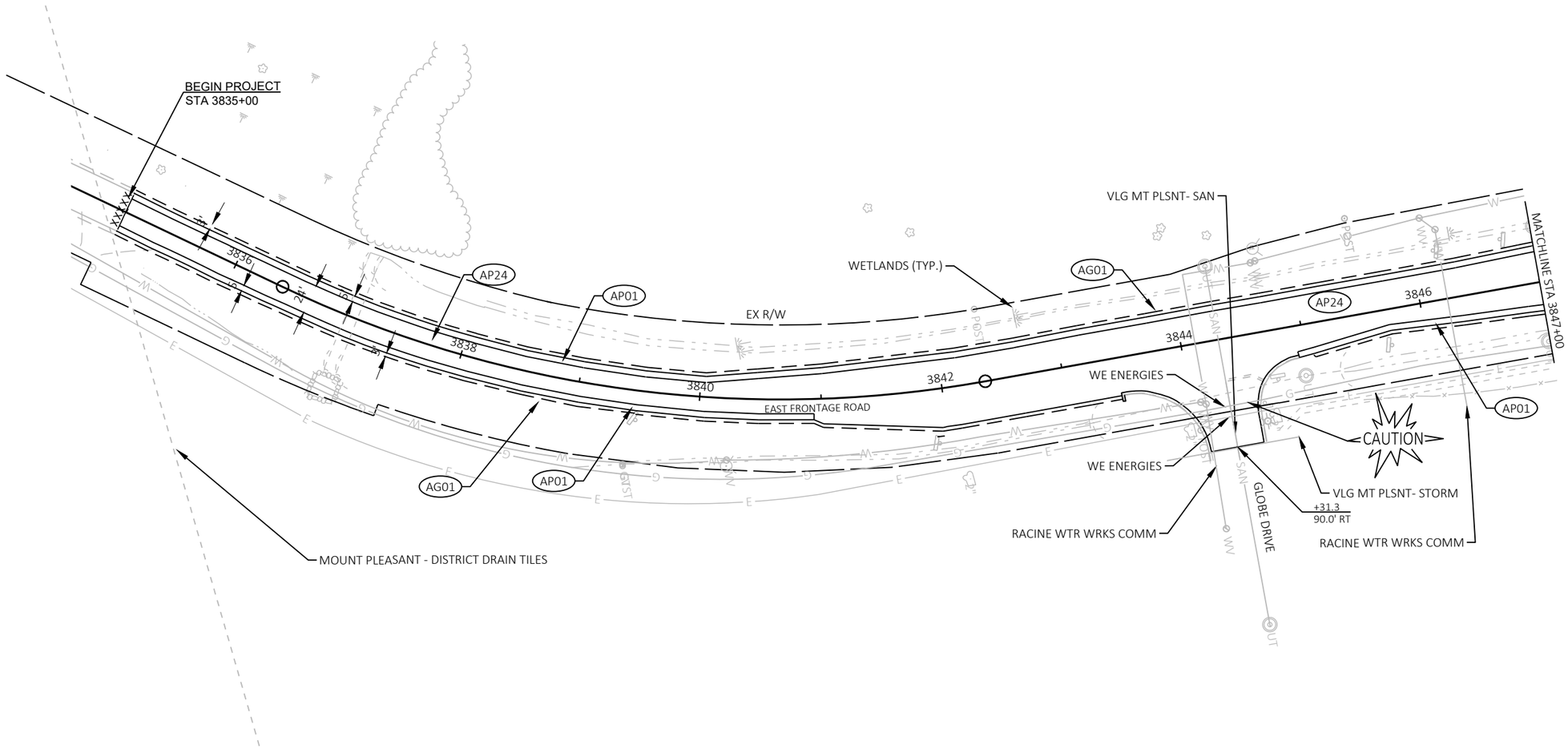
SIDE VIEW

ESTIMATED BAG SIZE =18" X12"X6"	
PIPE SIZE	MINIMUM NUMBER OF BAGS
12"	1
15"	2
18"	2
21"	3
24"	3
30"	5
36"	7
42"	7
48"	10
54"	10
60"	13
66"	14
72"	16
14"X23"	3
19"X30"	5
24"X38"	8
29"X45"	10
34"X53"	10
38"X60"	13
48"X76"	18

CULVERT PIPE CHECK

PLAN DETAIL LEGEND

- (AG01) BASE AGGREGATE DENSE ¾-INCH
- (AM01) ADJUSTING MANHOLE COVERS
- (AM02) ADJUSTING SANITARY MANHOLE COVERS
- (AP01) VARIABLE HMA MILL AND 1 3/4" OVERLAY
- (AP03) VARIABLE HMA MILL AND 3 1/2" OVERLAY
- (AP13) 1 3/4" HMA MILL AND 3 1/2" OVERLAY
- (AP24) 2 1/4" HMA MILL AND 4" OVERLAY
- (AP33) 3 1/2" HMA MILL AND OVERLAY
- (AP44) 4" HMA MILL AND OVERLAY
- (CC01) CLEAN OUT CATCH BASIN
- (CG02) CONCRETE CURB AND GUTTER 4% SLOPE 30-INCH TYPE D
- (CI01) CLEAN OUT INLET
- (CM01) CLEAN OUT MANHOLE
- (P01) CONCRETE PAVEMENT REPAIR
- (PV05) ASPHALTIC FLUMES
- (RE01) REPLACE ENDWALL
- (RM01) RECONSTRUCTING MANHOLES
- ' XXXXX ' SAWING ASPHALT
- ' YYYYY ' SAWING CONCRETE

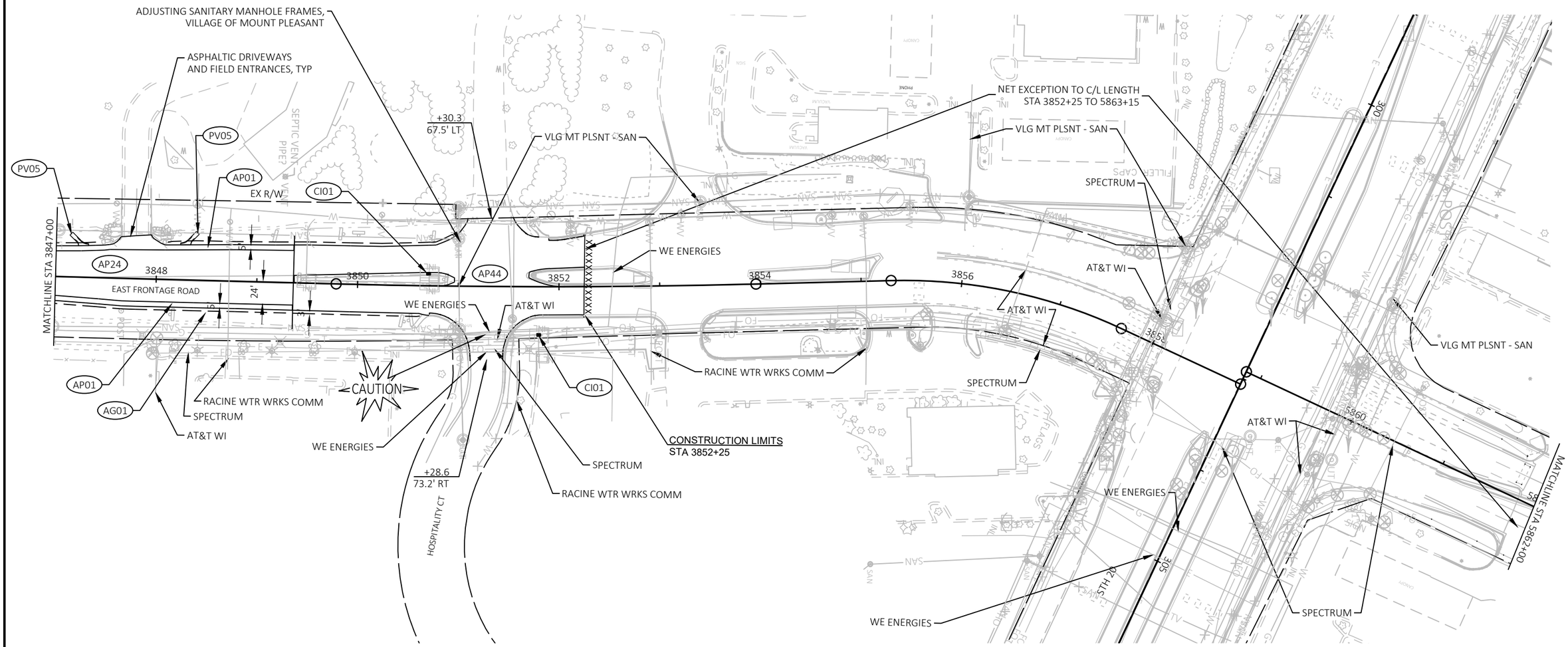


PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	PLAN DETAIL	SHEET 40	E

FILE NAME : W:\PROJECTS\21234\04_CADD_01\CADD_SHEETS\021201-PD.DWG
LAYOUT NAME - 01
PLOT DATE : 10/27/2022 1:54 PM PLOT BY : ALEXANDER UNDERWOOD PLOT NAME : PLOT SCALE : 1 IN:100 FT

PLAN DETAIL LEGEND

- AG01 BASE AGGREGATE DENSE ¾-INCH
- AM01 ADJUSTING MANHOLE COVERS
- AM02 ADJUSTING SANITARY MANHOLE COVERS
- AP01 VARIABLE HMA MILL AND 1 3/4" OVERLAY
- AP03 VARIABLE HMA MILL AND 3 1/2" OVERLAY
- AP13 1 3/4" HMA MILL AND 3 1/2" OVERLAY
- AP24 2 1/4" HMA MILL AND 4" OVERLAY
- AP33 3 1/2" HMA MILL AND OVERLAY
- AP44 4" HMA MILL AND OVERLAY
- CC01 CLEAN OUT CATCH BASIN
- CG02 CONCRETE CURB AND GUTTER 4% SLOPE 30-INCH TYPE D
- CI01 CLEAN OUT INLET
- CM01 CLEAN OUT MANHOLE
- P01 CONCRETE PAVEMENT REPAIR
- PV05 ASPHALTIC FLUMES
- RE01 REPLACE ENDWALL
- RM01 RECONSTRUCTING MANHOLES
- XXXXX SAWING ASPHALT
- YYYYY SAWING CONCRETE

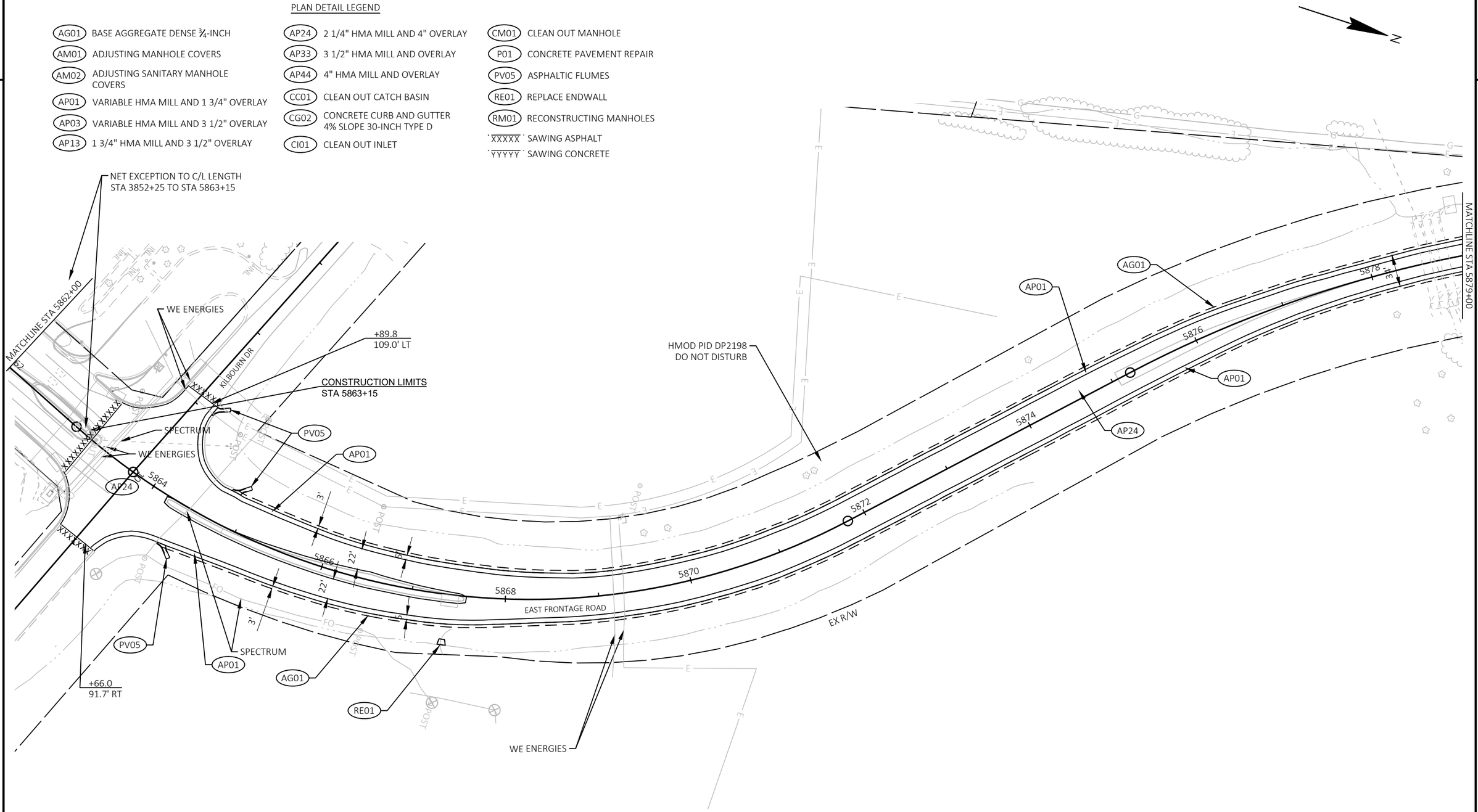


PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	PLAN DETAIL	SHEET 41	E

FILE NAME : W:\PROJECTS\21234\04_CADD_01\CADD_SHEETS\021201-PD.DWG
LAYOUT NAME - 02
PLOT DATE : 10/27/2022 1:55 PM PLOT BY : ALEXANDER UNDERWOOD PLOT NAME : PLOT SCALE : 1 IN:100 FT

PLAN DETAIL LEGEND

- AG01 BASE AGGREGATE DENSE ¾-INCH
- AM01 ADJUSTING MANHOLE COVERS
- AM02 ADJUSTING SANITARY MANHOLE COVERS
- AP01 VARIABLE HMA MILL AND 1 3/4" OVERLAY
- AP03 VARIABLE HMA MILL AND 3 1/2" OVERLAY
- AP13 1 3/4" HMA MILL AND 3 1/2" OVERLAY
- AP24 2 1/4" HMA MILL AND 4" OVERLAY
- AP33 3 1/2" HMA MILL AND OVERLAY
- AP44 4" HMA MILL AND OVERLAY
- CC01 CLEAN OUT CATCH BASIN
- CG02 CONCRETE CURB AND GUTTER 4% SLOPE 30-INCH TYPE D
- CI01 CLEAN OUT INLET
- CM01 CLEAN OUT MANHOLE
- P01 CONCRETE PAVEMENT REPAIR
- PV05 ASPHALTIC FLUMES
- RE01 REPLACE ENDWALL
- RM01 RECONSTRUCTING MANHOLES
- XXXXX SAWING ASPHALT
- YYYYY SAWING CONCRETE

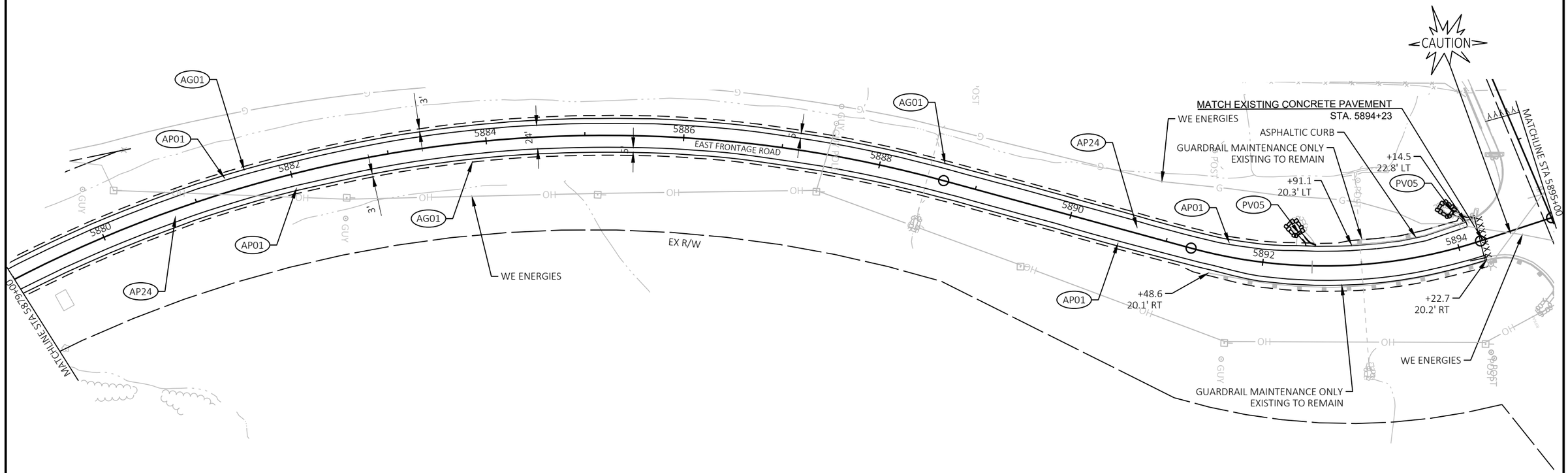


PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	PLAN DETAIL	SHEET 42	E

FILE NAME : W:\PROJECTS\21234\04_CADD_01\CADD_SHEETS\021201-PD.DWG
LAYOUT NAME - 03
PLOT DATE : 10/27/2022 1:55 PM
PLOT BY : ALEXANDER UNDERWOOD
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

PLAN DETAIL LEGEND

- AG01 BASE AGGREGATE DENSE ¾-INCH
- AM01 ADJUSTING MANHOLE COVERS
- AM02 ADJUSTING SANITARY MANHOLE COVERS
- AP01 VARIABLE HMA MILL AND 1 3/4" OVERLAY
- AP03 VARIABLE HMA MILL AND 3 1/2" OVERLAY
- AP13 1 3/4" HMA MILL AND 3 1/2" OVERLAY
- AP24 2 1/4" HMA MILL AND 4" OVERLAY
- AP33 3 1/2" HMA MILL AND OVERLAY
- AP44 4" HMA MILL AND OVERLAY
- CC01 CLEAN OUT CATCH BASIN
- CG02 CONCRETE CURB AND GUTTER 4% SLOPE 30-INCH TYPE D
- CI01 CLEAN OUT INLET
- CM01 CLEAN OUT MANHOLE
- P01 CONCRETE PAVEMENT REPAIR
- PV05 ASPHALTIC FLUMES
- RE01 REPLACE ENDWALL
- RM01 RECONSTRUCTING MANHOLES
- XXXXX SAWING ASPHALT
- YYYYY SAWING CONCRETE

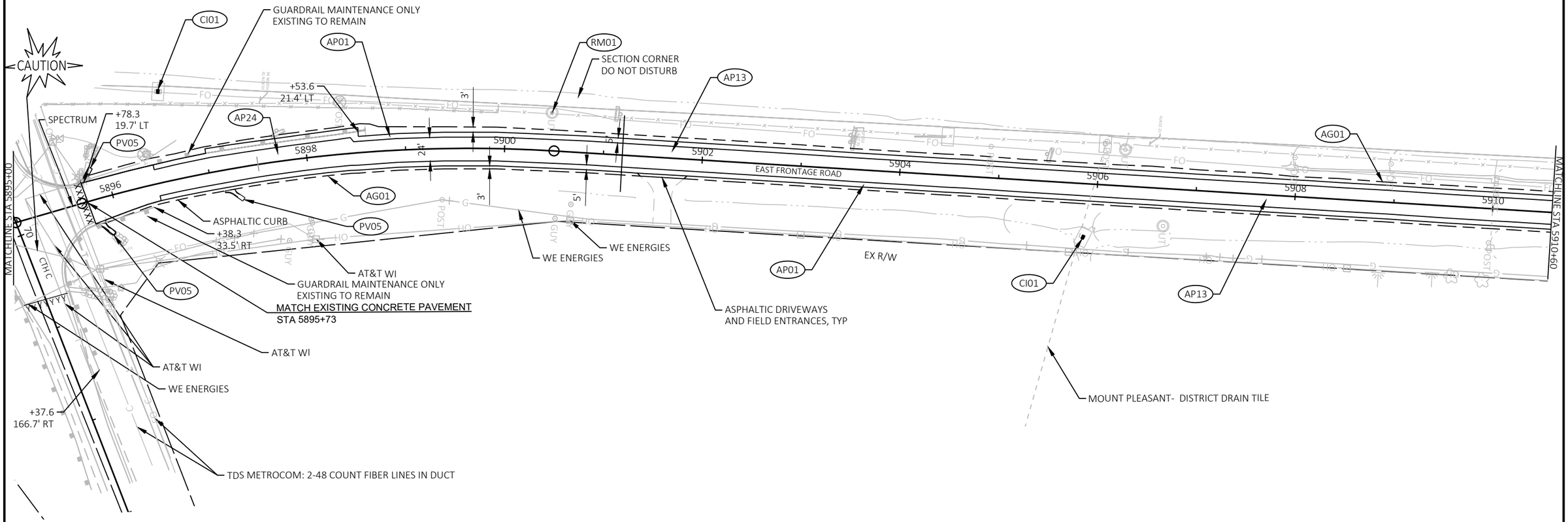


PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	PLAN DETAIL	SHEET 43	E

PLAN DETAIL LEGEND

- AG01 BASE AGGREGATE DENSE ¾-INCH
- AM01 ADJUSTING MANHOLE COVERS
- AM02 ADJUSTING SANITARY MANHOLE COVERS
- AP01 VARIABLE HMA MILL AND 1 3/4" OVERLAY
- AP03 VARIABLE HMA MILL AND 3 1/2" OVERLAY
- AP13 1 3/4" HMA MILL AND 3 1/2" OVERLAY
- AP24 2 1/4" HMA MILL AND 4" OVERLAY
- AP33 3 1/2" HMA MILL AND OVERLAY
- AP44 4" HMA MILL AND OVERLAY
- CC01 CLEAN OUT CATCH BASIN
- CG02 CONCRETE CURB AND GUTTER 4% SLOPE 30-INCH TYPE D
- CI01 CLEAN OUT INLET
- CM01 CLEAN OUT MANHOLE
- P01 CONCRETE PAVEMENT REPAIR
- PV05 ASPHALTIC FLUMES
- RE01 REPLACE ENDWALL
- RM01 RECONSTRUCTING MANHOLES
- XXXXX SAWING ASPHALT
- YYYYY SAWING CONCRETE

N



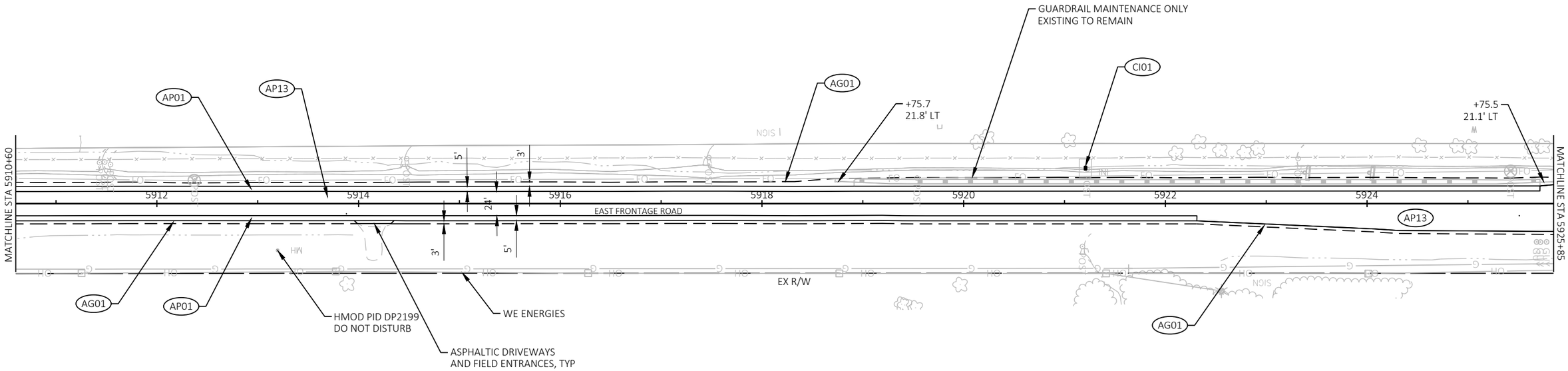
PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	PLAN DETAIL	SHEET 44	E

FILE NAME : W:\PROJECTS\21234\04_CADD_01\CADD_SHEETS\021201-PD.DWG
LAYOUT NAME - 05
PLOT DATE : 10/27/2022 1:56 PM
PLOT BY : ALEXANDER UNDERWOOD
PLOT NAME :
PLOT SCALE : 1 IN:100 FT

PLAN DETAIL LEGEND

- AG01 BASE AGGREGATE DENSE ¾-INCH
- AM01 ADJUSTING MANHOLE COVERS
- AM02 ADJUSTING SANITARY MANHOLE COVERS
- AP01 VARIABLE HMA MILL AND 1 3/4" OVERLAY
- AP03 VARIABLE HMA MILL AND 3 1/2" OVERLAY
- AP13 1 3/4" HMA MILL AND 3 1/2" OVERLAY
- AP24 2 1/4" HMA MILL AND 4" OVERLAY
- AP33 3 1/2" HMA MILL AND OVERLAY
- AP44 4" HMA MILL AND OVERLAY
- CC01 CLEAN OUT CATCH BASIN
- CG02 CONCRETE CURB AND GUTTER 4% SLOPE 30-INCH TYPE D
- CI01 CLEAN OUT INLET
- CM01 CLEAN OUT MANHOLE
- P01 CONCRETE PAVEMENT REPAIR
- PV05 ASPHALTIC FLUMES
- RE01 REPLACE ENDWALL
- RM01 RECONSTRUCTING MANHOLES
- XXXXX SAWING ASPHALT
- YYYYY SAWING CONCRETE

N

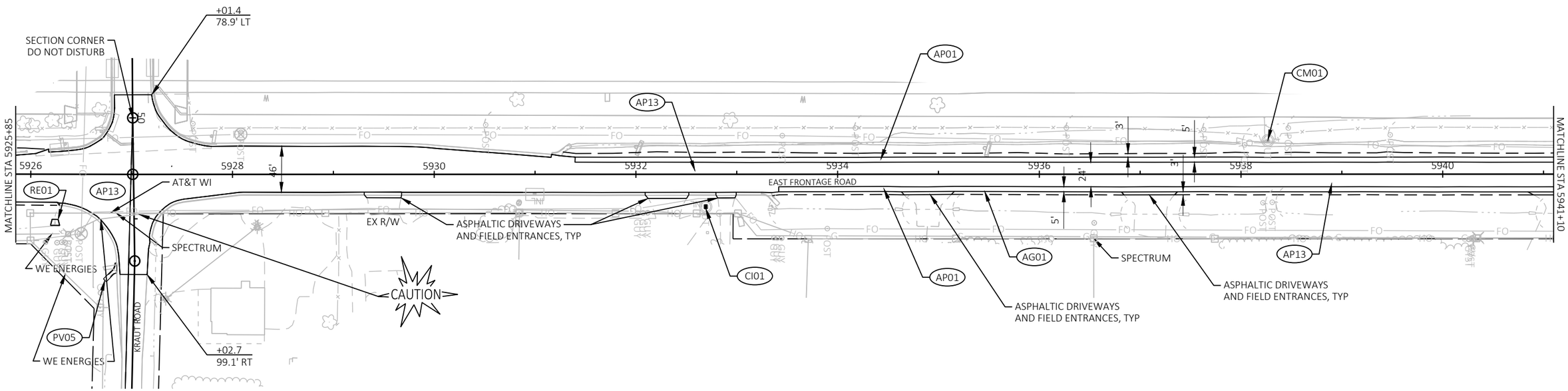


PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	PLAN DETAIL	SHEET 45	E

PLAN DETAIL LEGEND

- AG01 BASE AGGREGATE DENSE ¾-INCH
- AM01 ADJUSTING MANHOLE COVERS
- AM02 ADJUSTING SANITARY MANHOLE COVERS
- AP01 VARIABLE HMA MILL AND 1 3/4" OVERLAY
- AP03 VARIABLE HMA MILL AND 3 1/2" OVERLAY
- AP13 1 3/4" HMA MILL AND 3 1/2" OVERLAY
- AP24 2 1/4" HMA MILL AND 4" OVERLAY
- AP33 3 1/2" HMA MILL AND OVERLAY
- AP44 4" HMA MILL AND OVERLAY
- CC01 CLEAN OUT CATCH BASIN
- CG02 CONCRETE CURB AND GUTTER 4% SLOPE 30-INCH TYPE D
- CI01 CLEAN OUT INLET
- CM01 CLEAN OUT MANHOLE
- P01 CONCRETE PAVEMENT REPAIR
- PV05 ASPHALTIC FLUMES
- RE01 REPLACE ENDWALL
- RM01 RECONSTRUCTING MANHOLES
- XXXXX SAWING ASPHALT
- YYYYY SAWING CONCRETE

N



PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	PLAN DETAIL	SHEET 46	E

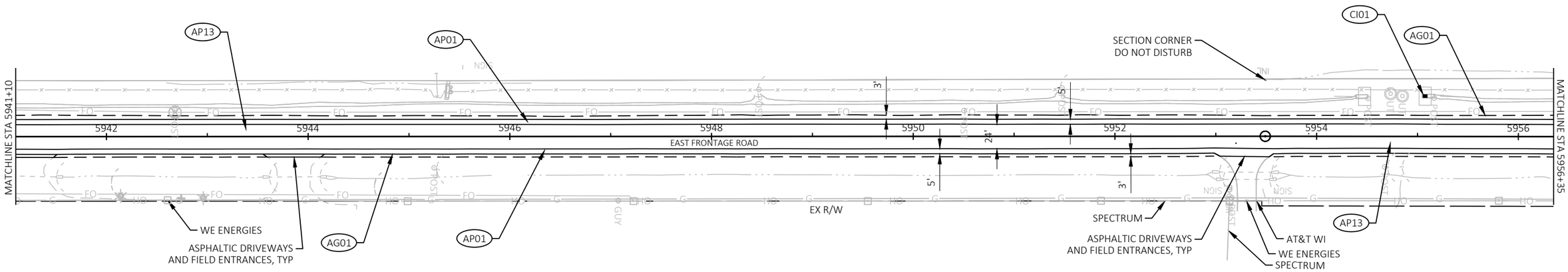
FILE NAME : W:\PROJECTS\21234\04_CADD_01\CADD_SHEETS\021201-PD.DWG
LAYOUT NAME - 07
PLOT DATE : 10/27/2022 1:56 PM
PLOT BY : ALEXANDER UNDERWOOD
PLOT NAME :
PLOT SCALE : 1 IN:100 FT

2

PLAN DETAIL LEGEND

- AG01 BASE AGGREGATE DENSE ¾-INCH
- AM01 ADJUSTING MANHOLE COVERS
- AM02 ADJUSTING SANITARY MANHOLE COVERS
- AP01 VARIABLE HMA MILL AND 1 3/4" OVERLAY
- AP03 VARIABLE HMA MILL AND 3 1/2" OVERLAY
- AP13 1 3/4" HMA MILL AND 3 1/2" OVERLAY
- AP24 2 1/4" HMA MILL AND 4" OVERLAY
- AP33 3 1/2" HMA MILL AND OVERLAY
- AP44 4" HMA MILL AND OVERLAY
- CC01 CLEAN OUT CATCH BASIN
- CG02 CONCRETE CURB AND GUTTER 4% SLOPE 30-INCH TYPE D
- CI01 CLEAN OUT INLET
- CM01 CLEAN OUT MANHOLE
- P01 CONCRETE PAVEMENT REPAIR
- PV05 ASPHALTIC FLUMES
- RE01 REPLACE ENDWALL
- RM01 RECONSTRUCTING MANHOLES
- XXXXX SAWING ASPHALT
- YYYYY SAWING CONCRETE

N

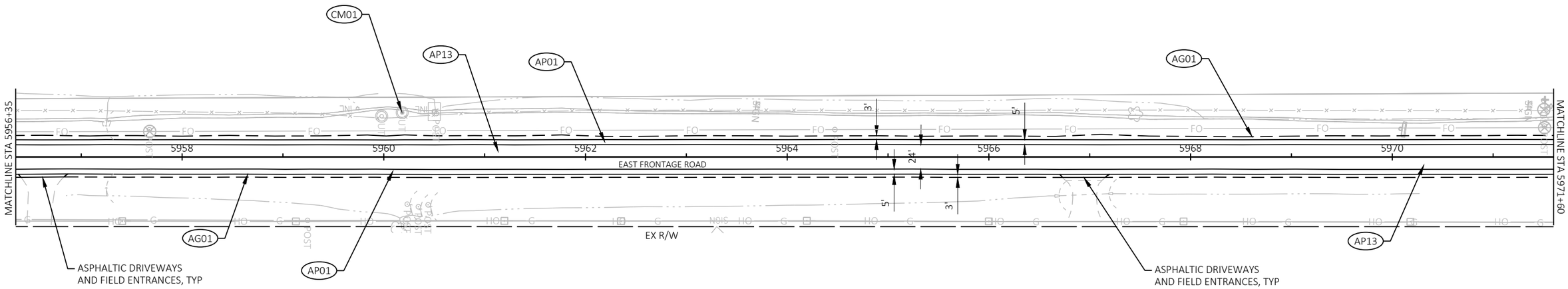


PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	PLAN DETAIL	SHEET 47	E

PLAN DETAIL LEGEND

- AG01 BASE AGGREGATE DENSE ¾-INCH
- AM01 ADJUSTING MANHOLE COVERS
- AM02 ADJUSTING SANITARY MANHOLE COVERS
- AP01 VARIABLE HMA MILL AND 1 3/4" OVERLAY
- AP03 VARIABLE HMA MILL AND 3 1/2" OVERLAY
- AP13 1 3/4" HMA MILL AND 3 1/2" OVERLAY
- AP24 2 1/4" HMA MILL AND 4" OVERLAY
- AP33 3 1/2" HMA MILL AND OVERLAY
- AP44 4" HMA MILL AND OVERLAY
- CC01 CLEAN OUT CATCH BASIN
- CG02 CONCRETE CURB AND GUTTER 4% SLOPE 30-INCH TYPE D
- CI01 CLEAN OUT INLET
- CM01 CLEAN OUT MANHOLE
- P01 CONCRETE PAVEMENT REPAIR
- PV05 ASPHALTIC FLUMES
- RE01 REPLACE ENDWALL
- RM01 RECONSTRUCTING MANHOLES
- XXXXX SAWING ASPHALT
- YYYYY SAWING CONCRETE

N



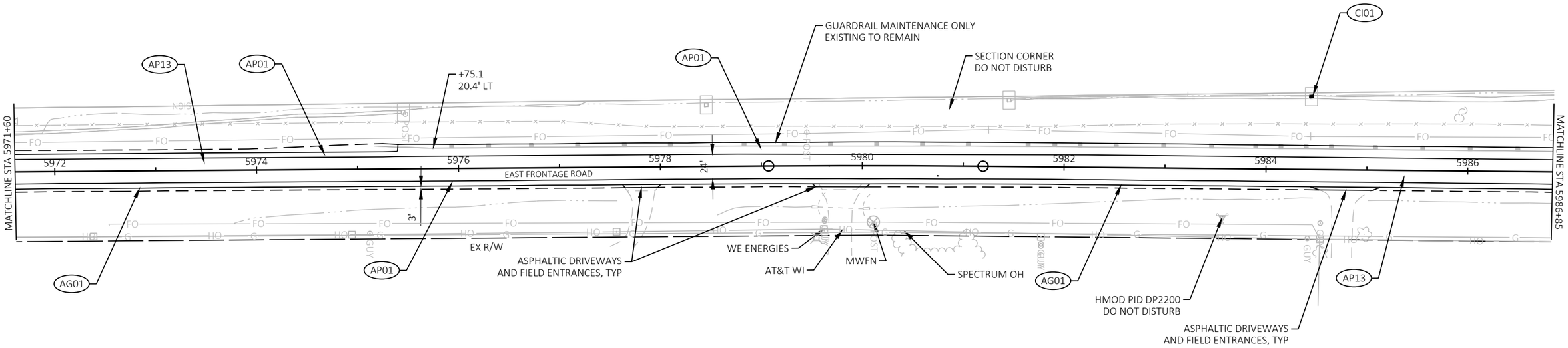
PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	PLAN DETAIL	SHEET 48	E

FILE NAME : W:\PROJECTS\21234\04_CADD_01\CADD_SHEETS\021201-PD.DWG
LAYOUT NAME - 09
PLOT DATE : 10/27/2022 1:57 PM
PLOT BY : ALEXANDER UNDERWOOD
PLOT NAME :
PLOT SCALE : 1 IN:100 FT

PLAN DETAIL LEGEND

- AG01 BASE AGGREGATE DENSE ¾-INCH
- AM01 ADJUSTING MANHOLE COVERS
- AM02 ADJUSTING SANITARY MANHOLE COVERS
- AP01 VARIABLE HMA MILL AND 1 3/4" OVERLAY
- AP03 VARIABLE HMA MILL AND 3 1/2" OVERLAY
- AP13 1 3/4" HMA MILL AND 3 1/2" OVERLAY
- AP24 2 1/4" HMA MILL AND 4" OVERLAY
- AP33 3 1/2" HMA MILL AND OVERLAY
- AP44 4" HMA MILL AND OVERLAY
- CC01 CLEAN OUT CATCH BASIN
- CG02 CONCRETE CURB AND GUTTER 4% SLOPE 30-INCH TYPE D
- CI01 CLEAN OUT INLET
- CM01 CLEAN OUT MANHOLE
- P01 CONCRETE PAVEMENT REPAIR
- PV05 ASPHALTIC FLUMES
- RE01 REPLACE ENDWALL
- RM01 RECONSTRUCTING MANHOLES
- XXXXX SAWING ASPHALT
- YYYYY SAWING CONCRETE

N



PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	PLAN DETAIL	SHEET 49	E

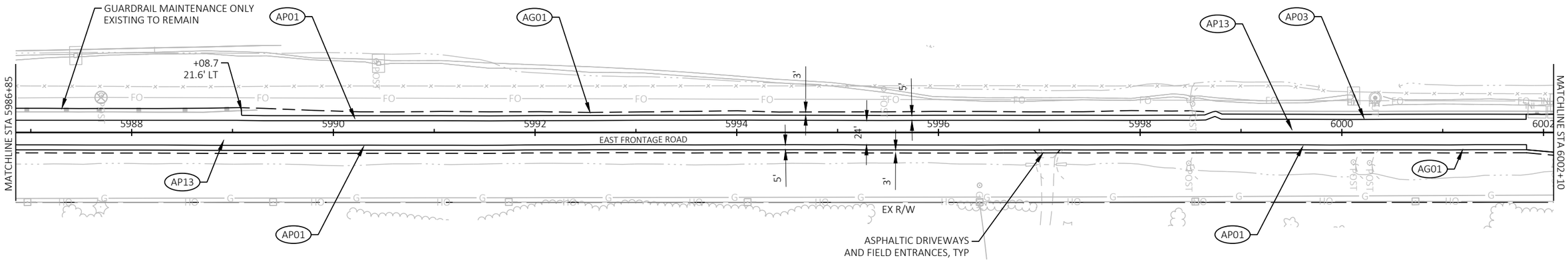
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LAYOUT NAME - 10

PLOT DATE : 10/27/2022 1:57 PM PLOT BY : ALEXANDER UNDERWOOD PLOT NAME : PLOT SCALE : 1 IN:100 FT

PLAN DETAIL LEGEND

- AG01 BASE AGGREGATE DENSE ¾-INCH
- AM01 ADJUSTING MANHOLE COVERS
- AM02 ADJUSTING SANITARY MANHOLE COVERS
- AP01 VARIABLE HMA MILL AND 1 3/4" OVERLAY
- AP03 VARIABLE HMA MILL AND 3 1/2" OVERLAY
- AP13 1 3/4" HMA MILL AND 3 1/2" OVERLAY
- AP24 2 1/4" HMA MILL AND 4" OVERLAY
- AP33 3 1/2" HMA MILL AND OVERLAY
- AP44 4" HMA MILL AND OVERLAY
- CC01 CLEAN OUT CATCH BASIN
- CG02 CONCRETE CURB AND GUTTER 4% SLOPE 30-INCH TYPE D
- CI01 CLEAN OUT INLET
- CM01 CLEAN OUT MANHOLE
- P01 CONCRETE PAVEMENT REPAIR
- PV05 ASPHALTIC FLUMES
- RE01 REPLACE ENDWALL
- RM01 RECONSTRUCTING MANHOLES
- XXXXX SAWING ASPHALT
- YYYYY SAWING CONCRETE

N



PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	PLAN DETAIL	SHEET 50	E

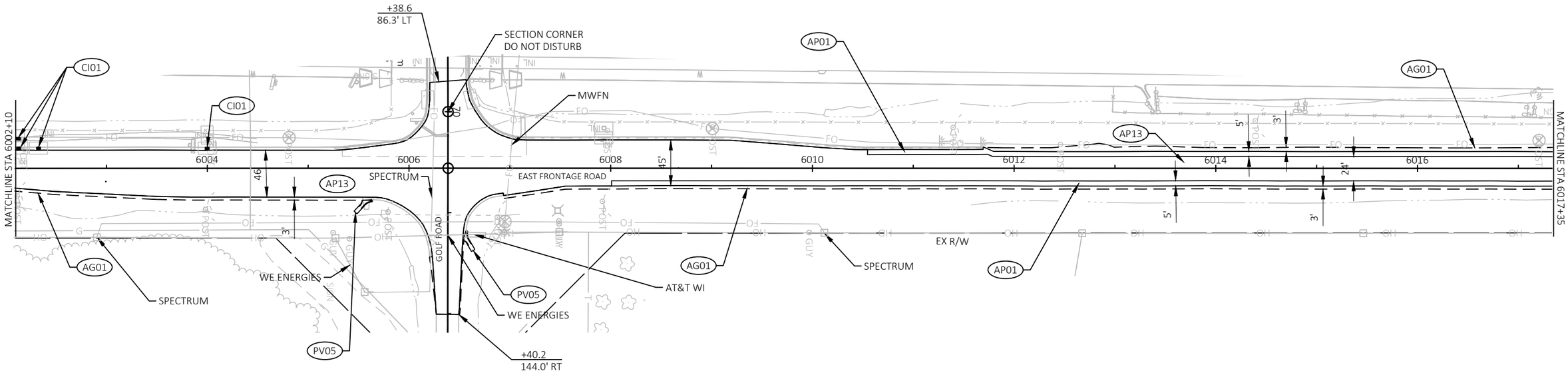
FILE NAME : W:\PROJECTS\21234\04_CADD_01\CADD_SHEETS\021201-PD.DWG
LAYOUT NAME - 11

PLOT DATE : 10/27/2022 1:58 PM PLOT BY : ALEXANDER UNDERWOOD PLOT NAME : PLOT SCALE : 1 IN:100 FT

PLAN DETAIL LEGEND

- AG01 BASE AGGREGATE DENSE ¾-INCH
- AM01 ADJUSTING MANHOLE COVERS
- AM02 ADJUSTING SANITARY MANHOLE COVERS
- AP01 VARIABLE HMA MILL AND 1 3/4" OVERLAY
- AP03 VARIABLE HMA MILL AND 3 1/2" OVERLAY
- AP13 1 3/4" HMA MILL AND 3 1/2" OVERLAY
- AP24 2 1/4" HMA MILL AND 4" OVERLAY
- AP33 3 1/2" HMA MILL AND OVERLAY
- AP44 4" HMA MILL AND OVERLAY
- CC01 CLEAN OUT CATCH BASIN
- CG02 CONCRETE CURB AND GUTTER 4% SLOPE 30-INCH TYPE D
- CI01 CLEAN OUT INLET
- CM01 CLEAN OUT MANHOLE
- P01 CONCRETE PAVEMENT REPAIR
- PV05 ASPHALTIC FLUMES
- RE01 REPLACE ENDWALL
- RM01 RECONSTRUCTING MANHOLES
- XXXXX SAWING ASPHALT
- YYYYY SAWING CONCRETE

N

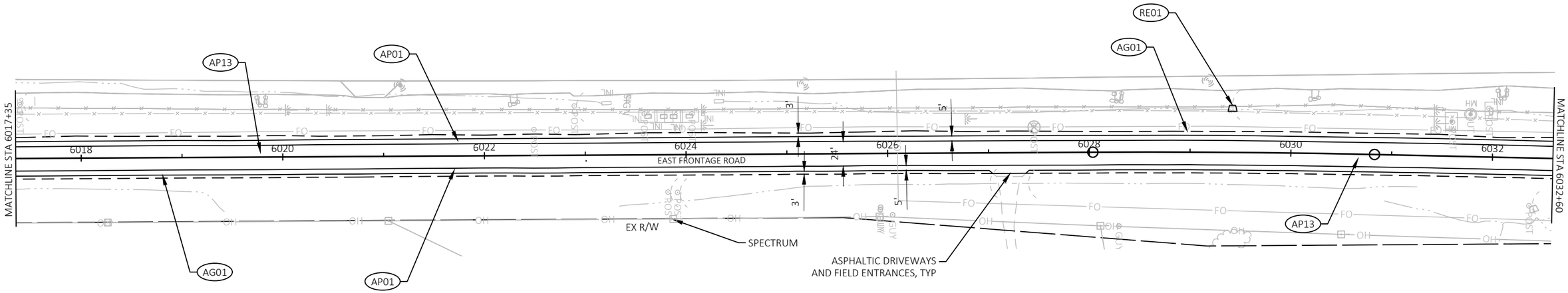


PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	PLAN DETAIL	SHEET 51	E

PLAN DETAIL LEGEND

- AG01 BASE AGGREGATE DENSE ¾-INCH
- AM01 ADJUSTING MANHOLE COVERS
- AM02 ADJUSTING SANITARY MANHOLE COVERS
- AP01 VARIABLE HMA MILL AND 1 3/4" OVERLAY
- AP03 VARIABLE HMA MILL AND 3 1/2" OVERLAY
- AP13 1 3/4" HMA MILL AND 3 1/2" OVERLAY
- AP24 2 1/4" HMA MILL AND 4" OVERLAY
- AP33 3 1/2" HMA MILL AND OVERLAY
- AP44 4" HMA MILL AND OVERLAY
- CC01 CLEAN OUT CATCH BASIN
- CG02 CONCRETE CURB AND GUTTER 4% SLOPE 30-INCH TYPE D
- CI01 CLEAN OUT INLET
- CM01 CLEAN OUT MANHOLE
- P01 CONCRETE PAVEMENT REPAIR
- PV05 ASPHALTIC FLUMES
- RE01 REPLACE ENDWALL
- RM01 RECONSTRUCTING MANHOLES
- 'XXXXX' SAWING ASPHALT
- 'YYYYY' SAWING CONCRETE

N



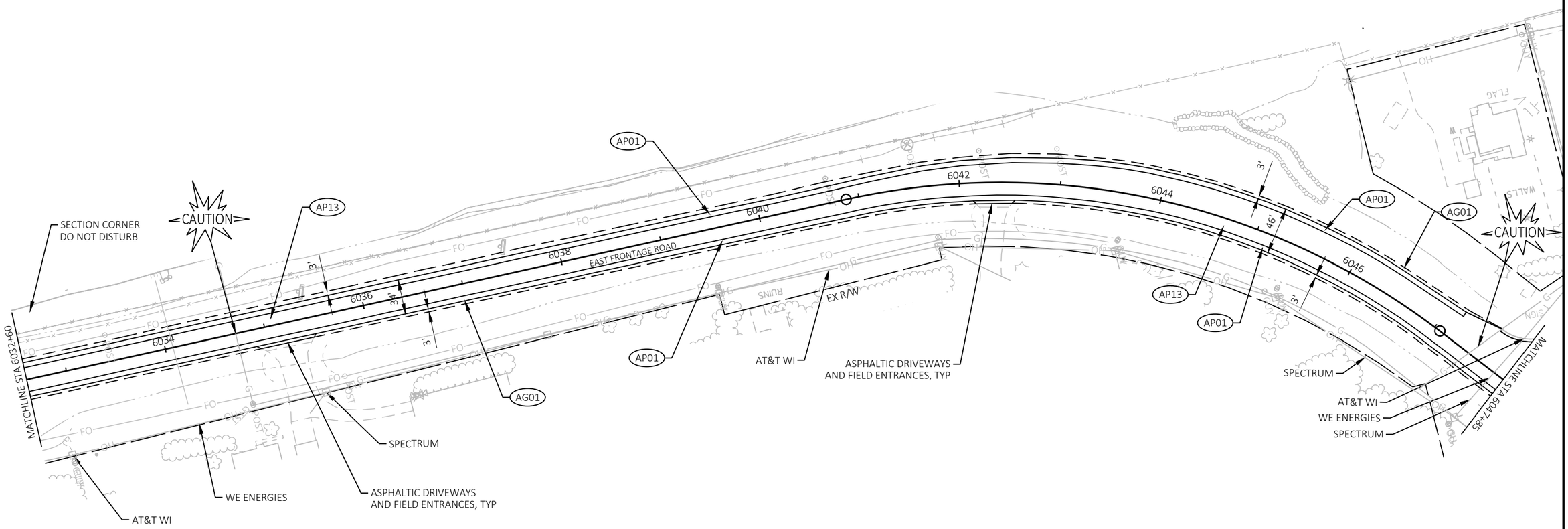
PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	PLAN DETAIL	SHEET 52	E

FILE NAME : W:\PROJECTS\21234\04_CADD_01\CADD_SHEETS\021201-PD.DWG
LAYOUT NAME - 13
PLOT DATE : 10/27/2022 1:58 PM
PLOT BY : ALEXANDER UNDERWOOD
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

PLAN DETAIL LEGEND

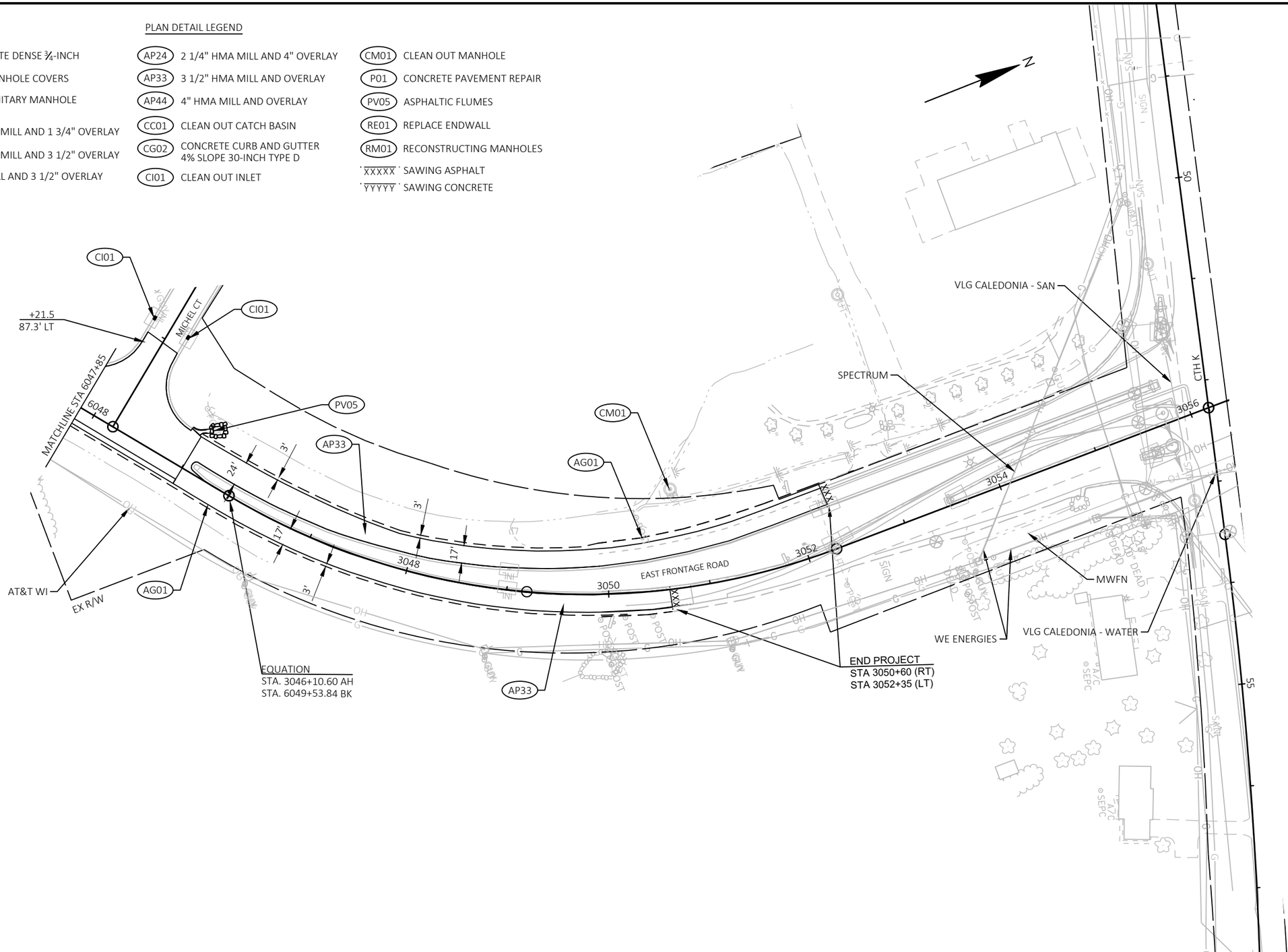
- AG01 BASE AGGREGATE DENSE ¾-INCH
- AM01 ADJUSTING MANHOLE COVERS
- AM02 ADJUSTING SANITARY MANHOLE COVERS
- AP01 VARIABLE HMA MILL AND 1 3/4" OVERLAY
- AP03 VARIABLE HMA MILL AND 3 1/2" OVERLAY
- AP13 1 3/4" HMA MILL AND 3 1/2" OVERLAY
- AP24 2 1/4" HMA MILL AND 4" OVERLAY
- AP33 3 1/2" HMA MILL AND OVERLAY
- AP44 4" HMA MILL AND OVERLAY
- CC01 CLEAN OUT CATCH BASIN
- CG02 CONCRETE CURB AND GUTTER 4% SLOPE 30-INCH TYPE D
- CI01 CLEAN OUT INLET
- CM01 CLEAN OUT MANHOLE
- P01 CONCRETE PAVEMENT REPAIR
- PV05 ASPHALTIC FLUMES
- RE01 REPLACE ENDWALL
- RM01 RECONSTRUCTING MANHOLES
- XXXXX SAWING ASPHALT
- YYYYY SAWING CONCRETE



PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	PLAN DETAIL	SHEET 53	E

PLAN DETAIL LEGEND

- AG01 BASE AGGREGATE DENSE ¾-INCH
- AM01 ADJUSTING MANHOLE COVERS
- AM02 ADJUSTING SANITARY MANHOLE COVERS
- AP01 VARIABLE HMA MILL AND 1 3/4" OVERLAY
- AP03 VARIABLE HMA MILL AND 3 1/2" OVERLAY
- AP13 1 3/4" HMA MILL AND 3 1/2" OVERLAY
- AP24 2 1/4" HMA MILL AND 4" OVERLAY
- AP33 3 1/2" HMA MILL AND OVERLAY
- AP44 4" HMA MILL AND OVERLAY
- CC01 CLEAN OUT CATCH BASIN
- CG02 CONCRETE CURB AND GUTTER 4% SLOPE 30-INCH TYPE D
- CI01 CLEAN OUT INLET
- CM01 CLEAN OUT MANHOLE
- P01 CONCRETE PAVEMENT REPAIR
- PV05 ASPHALTIC FLUMES
- RE01 REPLACE ENDWALL
- RM01 RECONSTRUCTING MANHOLES
- XXXXX SAWING ASPHALT
- YYYYY SAWING CONCRETE

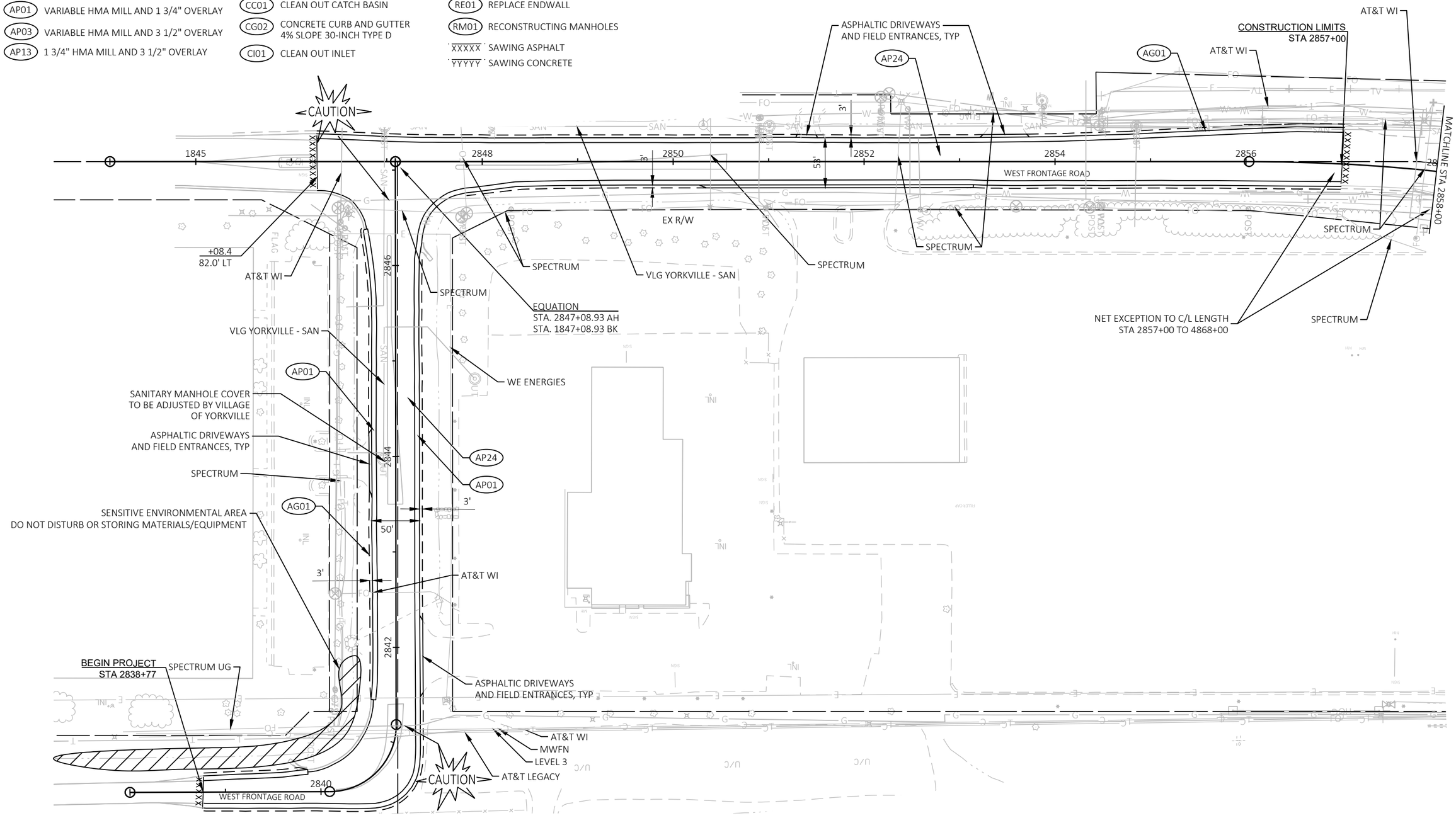


PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	PLAN DETAIL	SHEET 54	E

FILE NAME : W:\PROJECTS\21234\04_CADD_01\CADD_SHEETS\021201-PD.DWG
LAYOUT NAME - 15
PLOT DATE : 10/27/2022 1:59 PM PLOT BY : ALEXANDER UNDERWOOD PLOT NAME : PLOT SCALE : 1 IN:100 FT

PLAN DETAIL LEGEND

- (AG01) BASE AGGREGATE DENSE ¾-INCH
- (AM01) ADJUSTING MANHOLE COVERS
- (AM02) ADJUSTING SANITARY MANHOLE COVERS
- (AP01) VARIABLE HMA MILL AND 1 3/4" OVERLAY
- (AP03) VARIABLE HMA MILL AND 3 1/2" OVERLAY
- (AP13) 1 3/4" HMA MILL AND 3 1/2" OVERLAY
- (AP24) 2 1/4" HMA MILL AND 4" OVERLAY
- (AP33) 3 1/2" HMA MILL AND OVERLAY
- (AP44) 4" HMA MILL AND OVERLAY
- (CC01) CLEAN OUT CATCH BASIN
- (CG02) CONCRETE CURB AND GUTTER 4% SLOPE 30-INCH TYPE D
- (CI01) CLEAN OUT INLET
- (CM01) CLEAN OUT MANHOLE
- (P01) CONCRETE PAVEMENT REPAIR
- (PV05) ASPHALTIC FLUMES
- (RE01) REPLACE ENDWALL
- (RM01) RECONSTRUCTING MANHOLES
- XXXXX SAWING ASPHALT
- YYYYY SAWING CONCRETE

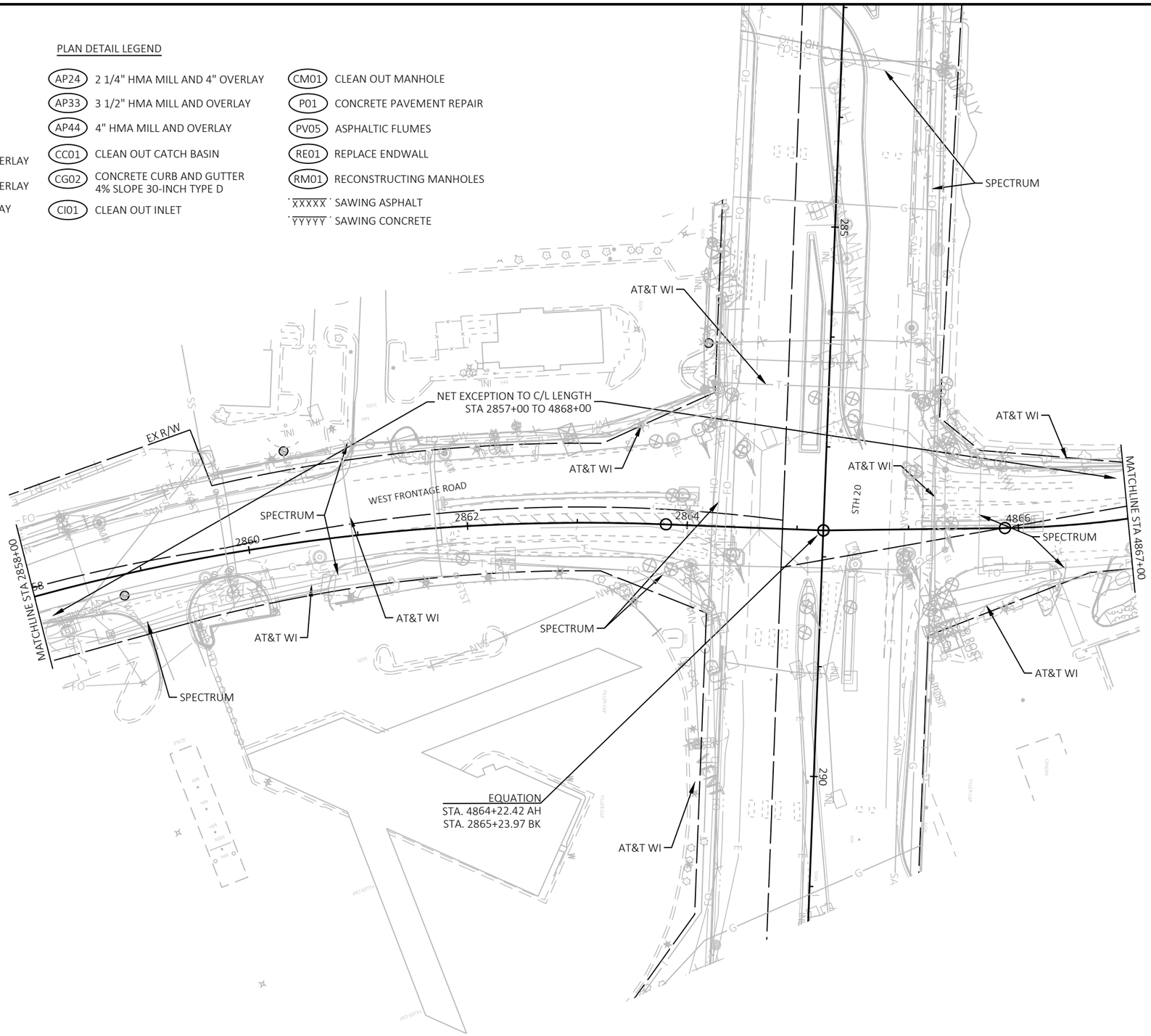


PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	PLAN DETAIL	SHEET 55	E

2

PLAN DETAIL LEGEND

- AG01 BASE AGGREGATE DENSE ¾-INCH
- AM01 ADJUSTING MANHOLE COVERS
- AM02 ADJUSTING SANITARY MANHOLE COVERS
- AP01 VARIABLE HMA MILL AND 1 3/4" OVERLAY
- AP03 VARIABLE HMA MILL AND 3 1/2" OVERLAY
- AP13 1 3/4" HMA MILL AND 3 1/2" OVERLAY
- AP24 2 1/4" HMA MILL AND 4" OVERLAY
- AP33 3 1/2" HMA MILL AND OVERLAY
- AP44 4" HMA MILL AND OVERLAY
- CC01 CLEAN OUT CATCH BASIN
- CG02 CONCRETE CURB AND GUTTER 4% SLOPE 30-INCH TYPE D
- CI01 CLEAN OUT INLET
- CM01 CLEAN OUT MANHOLE
- P01 CONCRETE PAVEMENT REPAIR
- PV05 ASPHALTIC FLUMES
- RE01 REPLACE ENDWALL
- RM01 RECONSTRUCTING MANHOLES
- XXXXX SAWING ASPHALT
- YYYYY SAWING CONCRETE

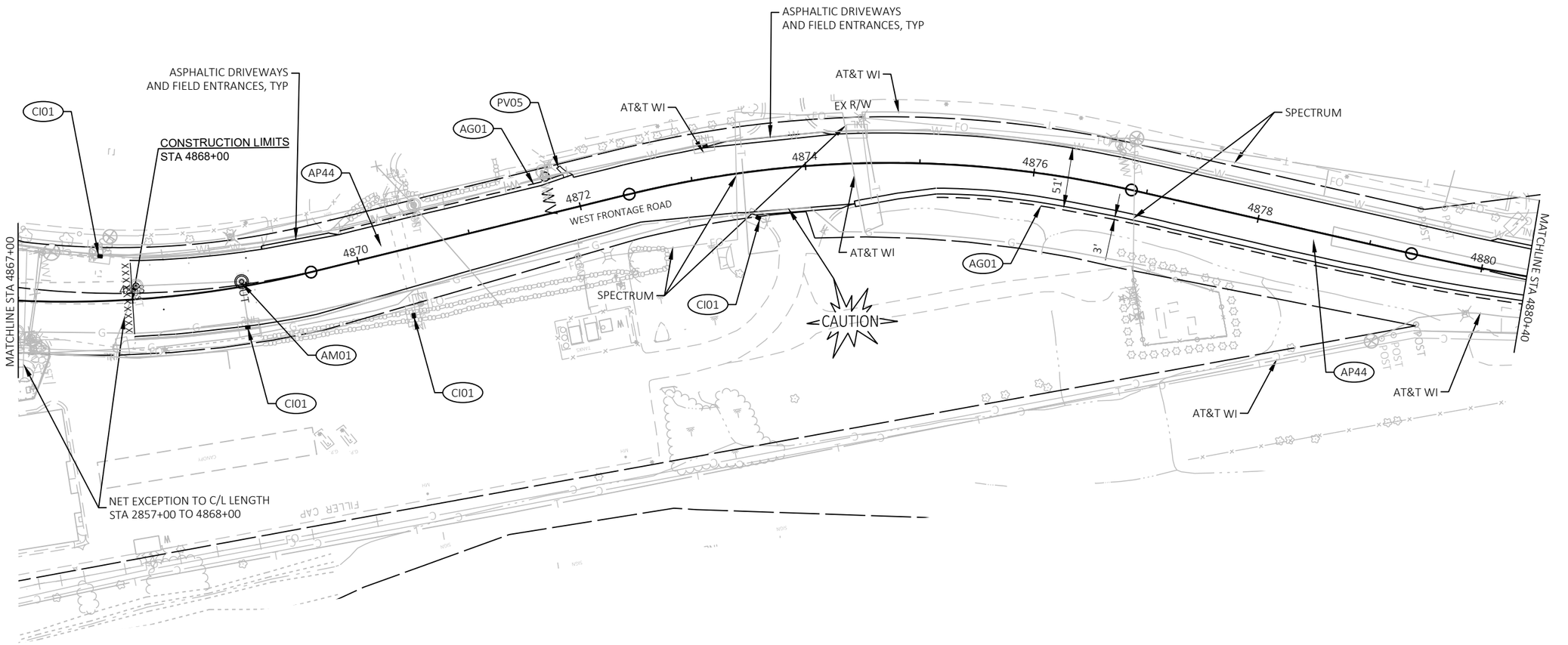


PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	PLAN DETAIL	SHEET 56	E

2

PLAN DETAIL LEGEND

- AG01 BASE AGGREGATE DENSE ¾-INCH
- AM01 ADJUSTING MANHOLE COVERS
- AM02 ADJUSTING SANITARY MANHOLE COVERS
- AP01 VARIABLE HMA MILL AND 1 3/4" OVERLAY
- AP03 VARIABLE HMA MILL AND 3 1/2" OVERLAY
- AP13 1 3/4" HMA MILL AND 3 1/2" OVERLAY
- AP24 2 1/4" HMA MILL AND 4" OVERLAY
- AP33 3 1/2" HMA MILL AND OVERLAY
- AP44 4" HMA MILL AND OVERLAY
- CC01 CLEAN OUT CATCH BASIN
- CG02 CONCRETE CURB AND GUTTER 4% SLOPE 30-INCH TYPE D
- CI01 CLEAN OUT INLET
- CM01 CLEAN OUT MANHOLE
- P01 CONCRETE PAVEMENT REPAIR
- PV05 ASPHALTIC FLUMES
- RE01 REPLACE ENDWALL
- RM01 RECONSTRUCTING MANHOLES
- XXXXX SAWING ASPHALT
- YYYYY SAWING CONCRETE



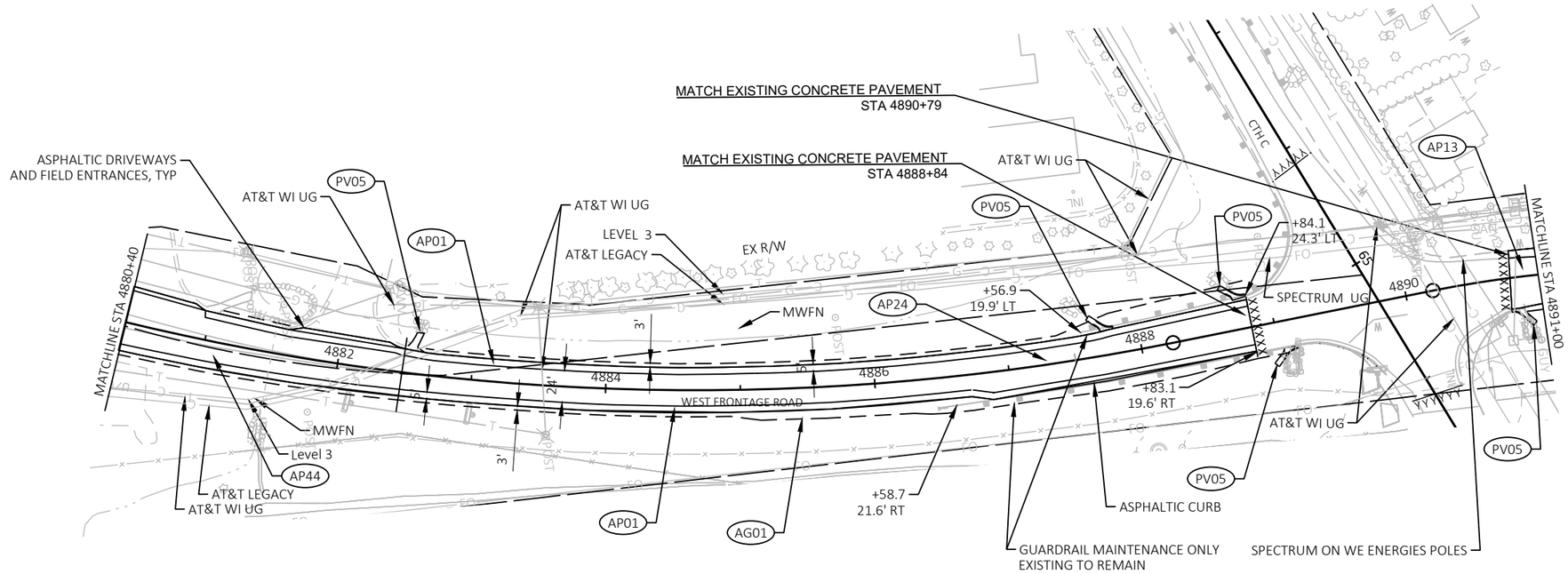
PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	PLAN DETAIL	SHEET 57	E

FILE NAME : W:\PROJECTS\21234\04_CADD_01\CADD_SHEETS\021201-PD.DWG
LAYOUT NAME - 17

PLOT DATE : 10/27/2022 2:00 PM PLOT BY : ALEXANDER UNDERWOOD PLOT NAME : PLOT SCALE : 1 IN:100 FT

PLAN DETAIL LEGEND

- AG01 BASE AGGREGATE DENSE ¾-INCH
- AM01 ADJUSTING MANHOLE COVERS
- AM02 ADJUSTING SANITARY MANHOLE COVERS
- AP01 VARIABLE HMA MILL AND 1 3/4" OVERLAY
- AP03 VARIABLE HMA MILL AND 3 1/2" OVERLAY
- AP13 1 3/4" HMA MILL AND 3 1/2" OVERLAY
- AP24 2 1/4" HMA MILL AND 4" OVERLAY
- AP33 3 1/2" HMA MILL AND OVERLAY
- AP44 4" HMA MILL AND OVERLAY
- CC01 CLEAN OUT CATCH BASIN
- CG02 CONCRETE CURB AND GUTTER 4% SLOPE 30-INCH TYPE D
- CI01 CLEAN OUT INLET
- CM01 CLEAN OUT MANHOLE
- P01 CONCRETE PAVEMENT REPAIR
- PV05 ASPHALTIC FLUMES
- RE01 REPLACE ENDWALL
- RM01 RECONSTRUCTING MANHOLES
- XXXXX SAWING ASPHALT
- YYYYY SAWING CONCRETE



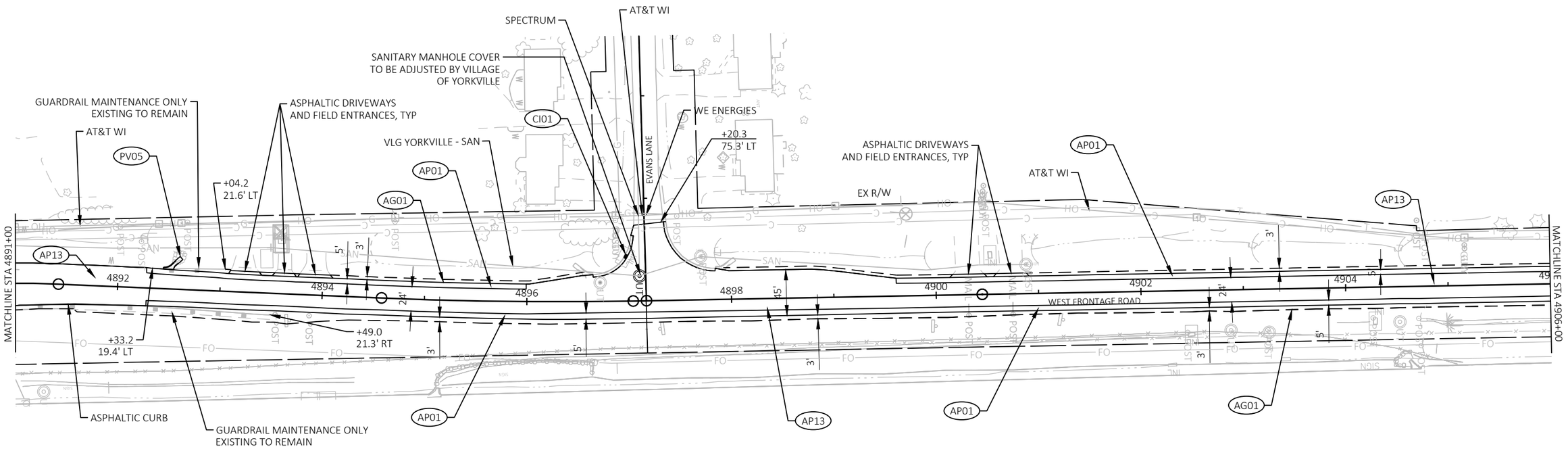
PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	PLAN DETAIL	SHEET 58	E

FILE NAME : W:\PROJECTS\21234\04_CADD_01\CADD_SHEETS\021201-PD.DWG
LAYOUT NAME - 18
PLOT DATE : 10/27/2022 2:00 PM PLOT BY : ALEXANDER UNDERWOOD PLOT NAME : PLOT SCALE : 1 IN:100 FT

PLAN DETAIL LEGEND

- AG01 BASE AGGREGATE DENSE ¾-INCH
- AM01 ADJUSTING MANHOLE COVERS
- AM02 ADJUSTING SANITARY MANHOLE COVERS
- AP01 VARIABLE HMA MILL AND 1 3/4" OVERLAY
- AP03 VARIABLE HMA MILL AND 3 1/2" OVERLAY
- AP13 1 3/4" HMA MILL AND 3 1/2" OVERLAY
- AP24 2 1/4" HMA MILL AND 4" OVERLAY
- AP33 3 1/2" HMA MILL AND OVERLAY
- AP44 4" HMA MILL AND OVERLAY
- CC01 CLEAN OUT CATCH BASIN
- CG02 CONCRETE CURB AND GUTTER 4% SLOPE 30-INCH TYPE D
- CI01 CLEAN OUT INLET
- CM01 CLEAN OUT MANHOLE
- P01 CONCRETE PAVEMENT REPAIR
- PV05 ASPHALTIC FLUMES
- RE01 REPLACE ENDWALL
- RM01 RECONSTRUCTING MANHOLES
- XXXXX SAWING ASPHALT
- YYYYY SAWING CONCRETE

N

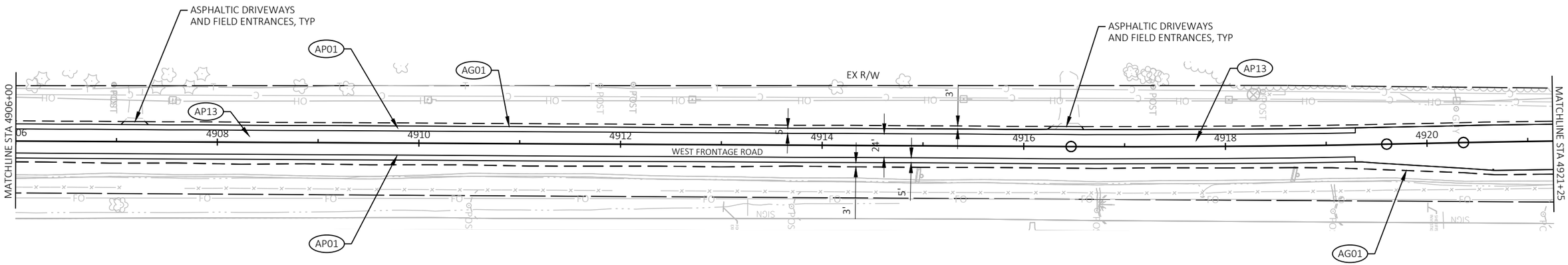


PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	PLAN DETAIL	SHEET 59	E

PLAN DETAIL LEGEND

- AG01 BASE AGGREGATE DENSE ¾-INCH
- AM01 ADJUSTING MANHOLE COVERS
- AM02 ADJUSTING SANITARY MANHOLE COVERS
- AP01 VARIABLE HMA MILL AND 1 3/4" OVERLAY
- AP03 VARIABLE HMA MILL AND 3 1/2" OVERLAY
- AP13 1 3/4" HMA MILL AND 3 1/2" OVERLAY
- AP24 2 1/4" HMA MILL AND 4" OVERLAY
- AP33 3 1/2" HMA MILL AND OVERLAY
- AP44 4" HMA MILL AND OVERLAY
- CC01 CLEAN OUT CATCH BASIN
- CG02 CONCRETE CURB AND GUTTER 4% SLOPE 30-INCH TYPE D
- CI01 CLEAN OUT INLET
- CM01 CLEAN OUT MANHOLE
- P01 CONCRETE PAVEMENT REPAIR
- PV05 ASPHALTIC FLUMES
- RE01 REPLACE ENDWALL
- RM01 RECONSTRUCTING MANHOLES
- XXXXX SAWING ASPHALT
- YYYYY SAWING CONCRETE

N



PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	PLAN DETAIL	SHEET 60	E

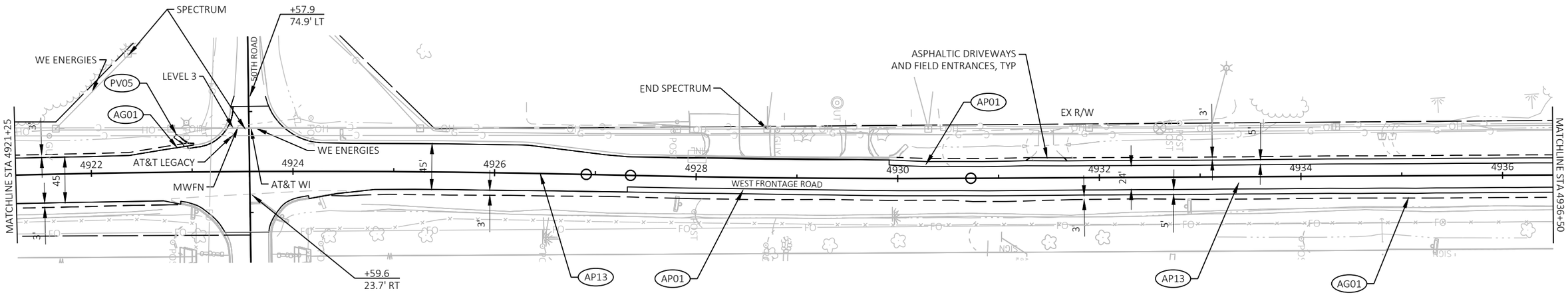
FILE NAME : W:\PROJECTS\21234\04_CADD_01\CADD_SHEETS\021201-PD.DWG
LAYOUT NAME - 20

PLOT DATE : 10/27/2022 2:01 PM PLOT BY : ALEXANDER UNDERWOOD PLOT NAME : PLOT SCALE : 1 IN:100 FT

PLAN DETAIL LEGEND

- AG01 BASE AGGREGATE DENSE ¾-INCH
- AM01 ADJUSTING MANHOLE COVERS
- AM02 ADJUSTING SANITARY MANHOLE COVERS
- AP01 VARIABLE HMA MILL AND 1 3/4" OVERLAY
- AP03 VARIABLE HMA MILL AND 3 1/2" OVERLAY
- AP13 1 3/4" HMA MILL AND 3 1/2" OVERLAY
- AP24 2 1/4" HMA MILL AND 4" OVERLAY
- AP33 3 1/2" HMA MILL AND OVERLAY
- AP44 4" HMA MILL AND OVERLAY
- CC01 CLEAN OUT CATCH BASIN
- CG02 CONCRETE CURB AND GUTTER 4% SLOPE 30-INCH TYPE D
- CI01 CLEAN OUT INLET
- CM01 CLEAN OUT MANHOLE
- P01 CONCRETE PAVEMENT REPAIR
- PV05 ASPHALTIC FLUMES
- RE01 REPLACE ENDWALL
- RM01 RECONSTRUCTING MANHOLES
- XXXXX SAWING ASPHALT
- YYYYY SAWING CONCRETE

N

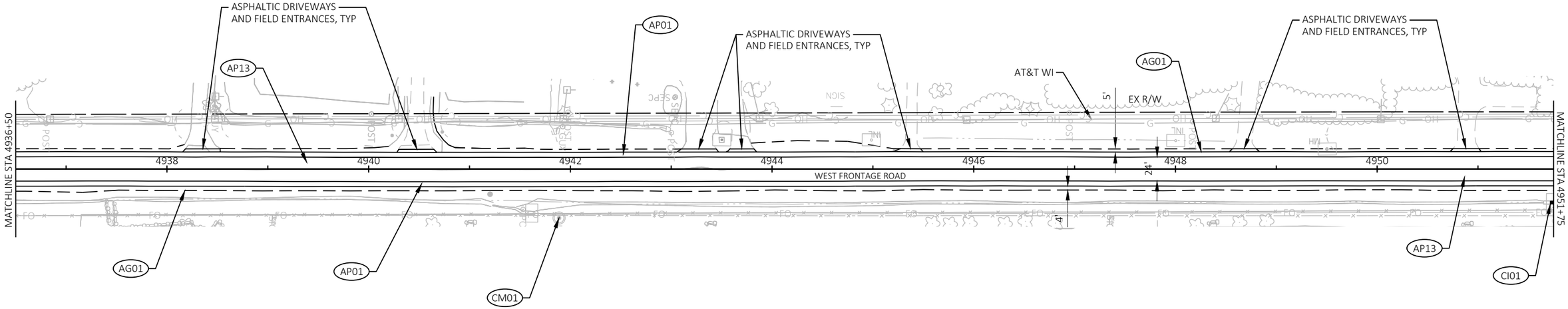


PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	PLAN DETAIL	SHEET 61	E

PLAN DETAIL LEGEND

- AG01 BASE AGGREGATE DENSE ¾-INCH
- AM01 ADJUSTING MANHOLE COVERS
- AM02 ADJUSTING SANITARY MANHOLE COVERS
- AP01 VARIABLE HMA MILL AND 1 3/4" OVERLAY
- AP03 VARIABLE HMA MILL AND 3 1/2" OVERLAY
- AP13 1 3/4" HMA MILL AND 3 1/2" OVERLAY
- AP24 2 1/4" HMA MILL AND 4" OVERLAY
- AP33 3 1/2" HMA MILL AND OVERLAY
- AP44 4" HMA MILL AND OVERLAY
- CC01 CLEAN OUT CATCH BASIN
- CG02 CONCRETE CURB AND GUTTER 4% SLOPE 30-INCH TYPE D
- CI01 CLEAN OUT INLET
- CM01 CLEAN OUT MANHOLE
- P01 CONCRETE PAVEMENT REPAIR
- PV05 ASPHALTIC FLUMES
- RE01 REPLACE ENDWALL
- RM01 RECONSTRUCTING MANHOLES
- XXXXX SAWING ASPHALT
- YYYYY SAWING CONCRETE

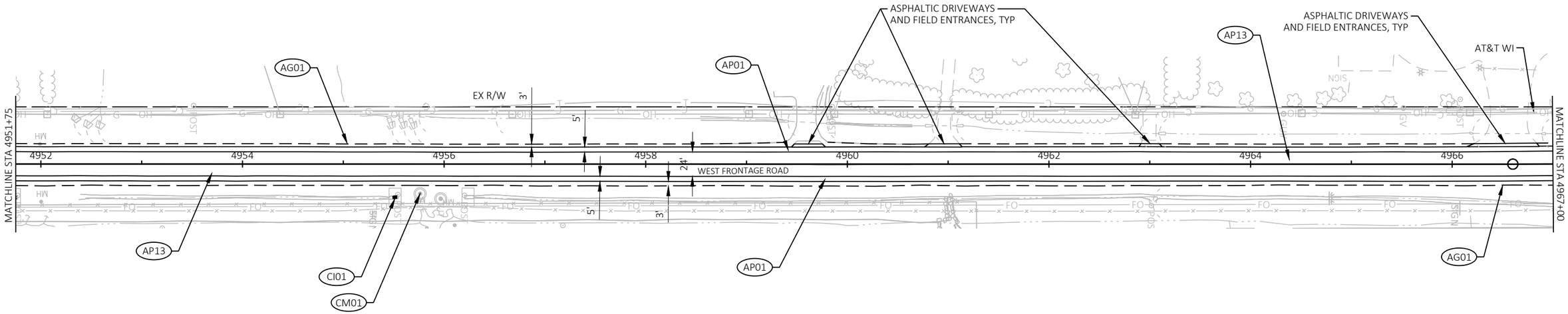
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PLAN DETAIL LEGEND

- AG01 BASE AGGREGATE DENSE ¾-INCH
- AM01 ADJUSTING MANHOLE COVERS
- AM02 ADJUSTING SANITARY MANHOLE COVERS
- AP01 VARIABLE HMA MILL AND 1 3/4" OVERLAY
- AP03 VARIABLE HMA MILL AND 3 1/2" OVERLAY
- AP13 1 3/4" HMA MILL AND 3 1/2" OVERLAY
- AP24 2 1/4" HMA MILL AND 4" OVERLAY
- AP33 3 1/2" HMA MILL AND OVERLAY
- AP44 4" HMA MILL AND OVERLAY
- CC01 CLEAN OUT CATCH BASIN
- CG02 CONCRETE CURB AND GUTTER 4% SLOPE 30-INCH TYPE D
- CI01 CLEAN OUT INLET
- CM01 CLEAN OUT MANHOLE
- P01 CONCRETE PAVEMENT REPAIR
- PV05 ASPHALTIC FLUMES
- RE01 REPLACE ENDWALL
- RM01 RECONSTRUCTING MANHOLES
- XXXXX SAWING ASPHALT
- YYYYY SAWING CONCRETE

N



PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	PLAN DETAIL	SHEET 63	E

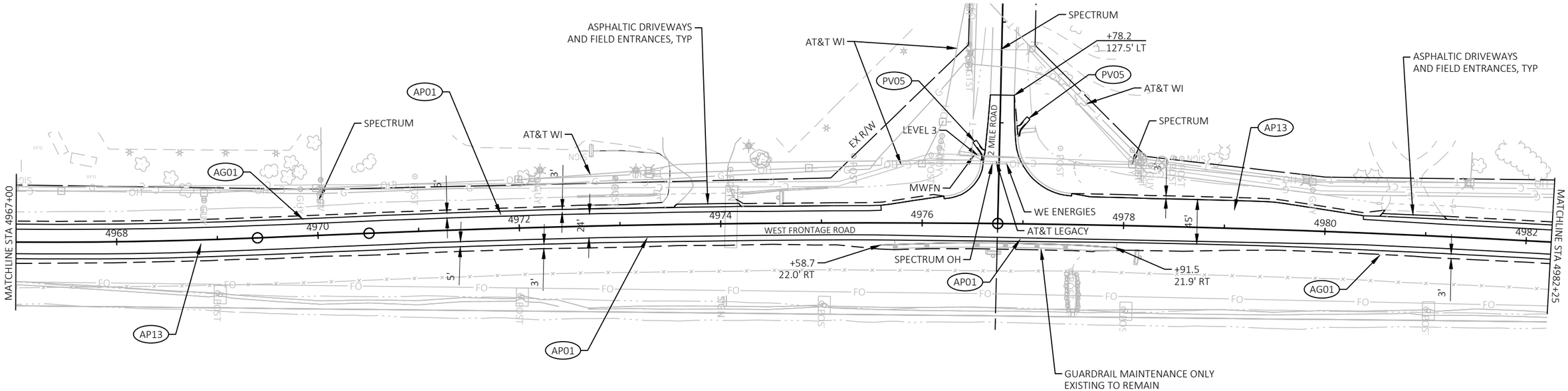
FILE NAME : W:\PROJECTS\21234\04_CADD_01\CADD_SHEETS\021201-PD.DWG
LAYOUT NAME - 23

PLOT DATE : 10/27/2022 2:02 PM PLOT BY : ALEXANDER UNDERWOOD PLOT NAME : PLOT SCALE : 1 IN:100 FT

PLAN DETAIL LEGEND

- AG01 BASE AGGREGATE DENSE ¾-INCH
- AM01 ADJUSTING MANHOLE COVERS
- AM02 ADJUSTING SANITARY MANHOLE COVERS
- AP01 VARIABLE HMA MILL AND 1 3/4" OVERLAY
- AP03 VARIABLE HMA MILL AND 3 1/2" OVERLAY
- AP13 1 3/4" HMA MILL AND 3 1/2" OVERLAY
- AP24 2 1/4" HMA MILL AND 4" OVERLAY
- AP33 3 1/2" HMA MILL AND OVERLAY
- AP44 4" HMA MILL AND OVERLAY
- CC01 CLEAN OUT CATCH BASIN
- CG02 CONCRETE CURB AND GUTTER 4% SLOPE 30-INCH TYPE D
- CI01 CLEAN OUT INLET
- CM01 CLEAN OUT MANHOLE
- P01 CONCRETE PAVEMENT REPAIR
- PV05 ASPHALTIC FLUMES
- RE01 REPLACE ENDWALL
- RM01 RECONSTRUCTING MANHOLES
- XXXXX SAWING ASPHALT
- YYYYY SAWING CONCRETE

N



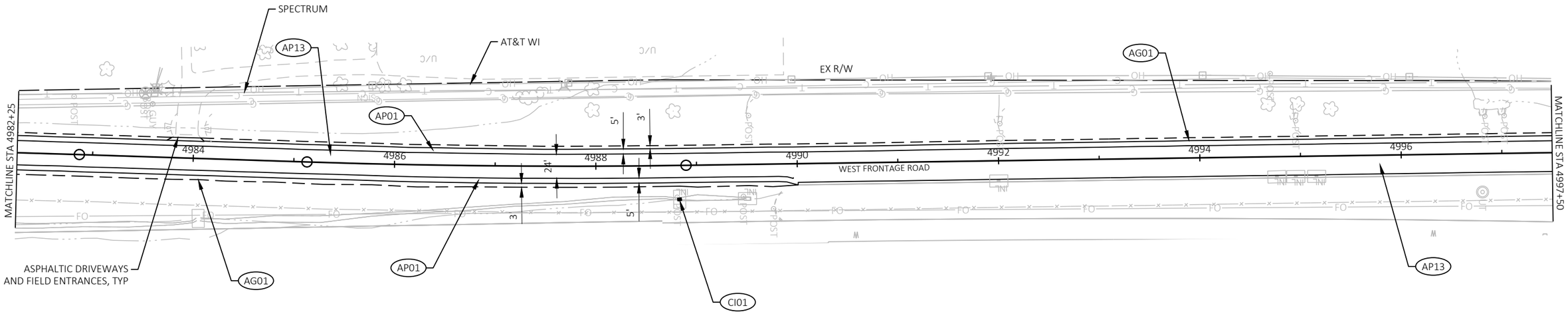
PROJECT NO: 1030-0-9-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	PLAN DETAIL	SHEET 64	E

2

PLAN DETAIL LEGEND

- (AG01) BASE AGGREGATE DENSE ¾-INCH
- (AM01) ADJUSTING MANHOLE COVERS
- (AM02) ADJUSTING SANITARY MANHOLE COVERS
- (AP01) VARIABLE HMA MILL AND 1 3/4" OVERLAY
- (AP03) VARIABLE HMA MILL AND 3 1/2" OVERLAY
- (AP13) 1 3/4" HMA MILL AND 3 1/2" OVERLAY
- (AP24) 2 1/4" HMA MILL AND 4" OVERLAY
- (AP33) 3 1/2" HMA MILL AND OVERLAY
- (AP44) 4" HMA MILL AND OVERLAY
- (CC01) CLEAN OUT CATCH BASIN
- (CG02) CONCRETE CURB AND GUTTER 4% SLOPE 30-INCH TYPE D
- (CI01) CLEAN OUT INLET
- (CM01) CLEAN OUT MANHOLE
- (P01) CONCRETE PAVEMENT REPAIR
- (PV05) ASPHALTIC FLUMES
- (RE01) REPLACE ENDWALL
- (RM01) RECONSTRUCTING MANHOLES
- XXXXX SAWING ASPHALT
- YYYYY SAWING CONCRETE

N



PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	PLAN DETAIL	SHEET 65	E

FILE NAME : W:\PROJECTS\21234\04_CADD_01\CADD_SHEETS\021201-PD.DWG
LAYOUT NAME - 25

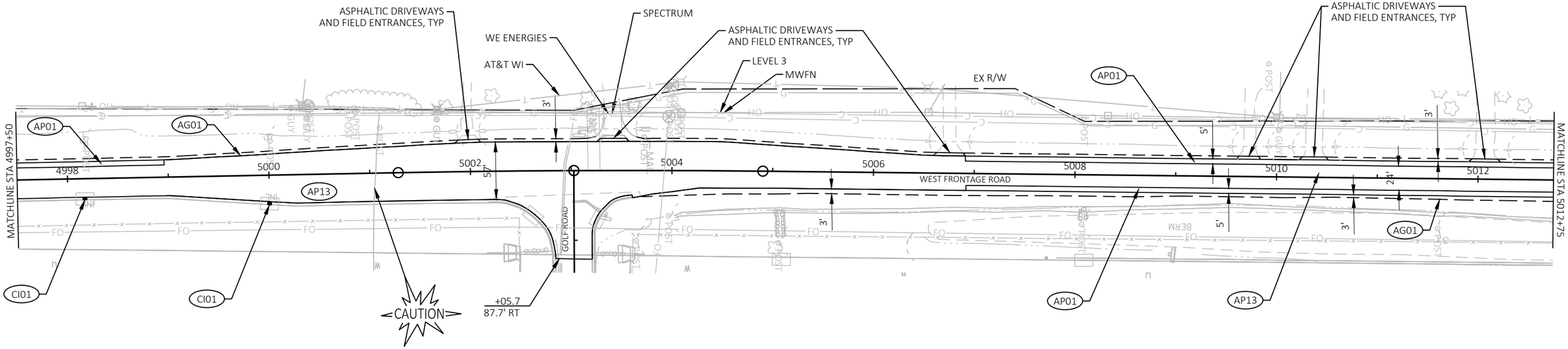
PLOT DATE : 10/27/2022 2:03 PM PLOT BY : ALEXANDER UNDERWOOD PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

PLAN DETAIL LEGEND

- (AG01) BASE AGGREGATE DENSE ¾-INCH
- (AM01) ADJUSTING MANHOLE COVERS
- (AM02) ADJUSTING SANITARY MANHOLE COVERS
- (AP01) VARIABLE HMA MILL AND 1 3/4" OVERLAY
- (AP03) VARIABLE HMA MILL AND 3 1/2" OVERLAY
- (AP13) 1 3/4" HMA MILL AND 3 1/2" OVERLAY
- (AP24) 2 1/4" HMA MILL AND 4" OVERLAY
- (AP33) 3 1/2" HMA MILL AND OVERLAY
- (AP44) 4" HMA MILL AND OVERLAY
- (CC01) CLEAN OUT CATCH BASIN
- (CG02) CONCRETE CURB AND GUTTER 4% SLOPE 30-INCH TYPE D
- (CI01) CLEAN OUT INLET
- (CM01) CLEAN OUT MANHOLE
- (P01) CONCRETE PAVEMENT REPAIR
- (PV05) ASPHALTIC FLUMES
- (RE01) REPLACE ENDWALL
- (RM01) RECONSTRUCTING MANHOLES
- 'XXXXX' SAWING ASPHALT
- 'YYYYY' SAWING CONCRETE

N



PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	PLAN DETAIL	SHEET 66	E

FILE NAME : W:\PROJECTS\21234\04_CADD_01\CADD_SHEETS\021201-PD.DWG
LAYOUT NAME - 26

PLOT DATE : 10/27/2022 2:03 PM PLOT BY : ALEXANDER UNDERWOOD PLOT NAME : PLOT SCALE : 1 IN:100 FT

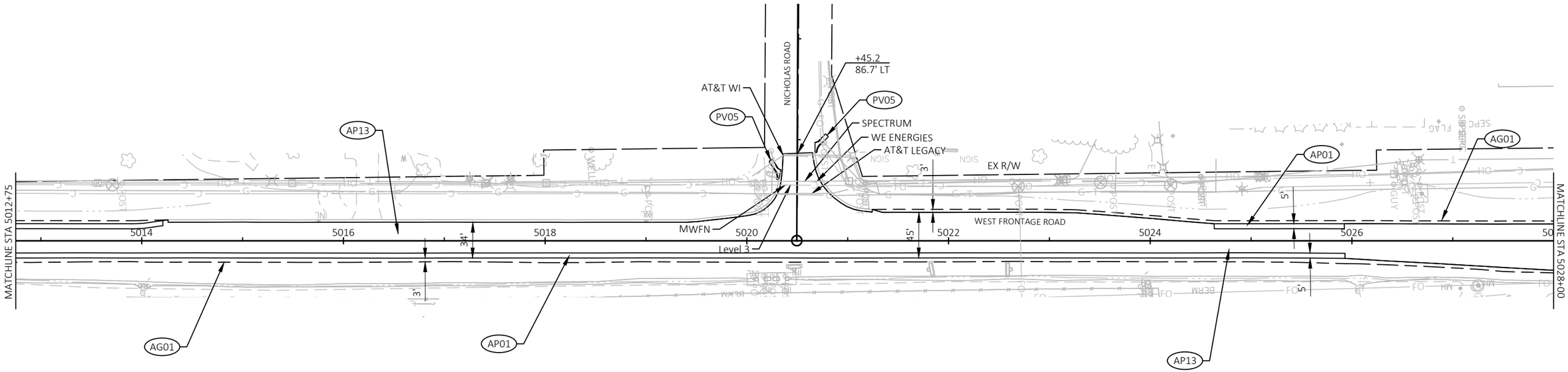
WISDOT/CADDS SHEET 42

2

PLAN DETAIL LEGEND

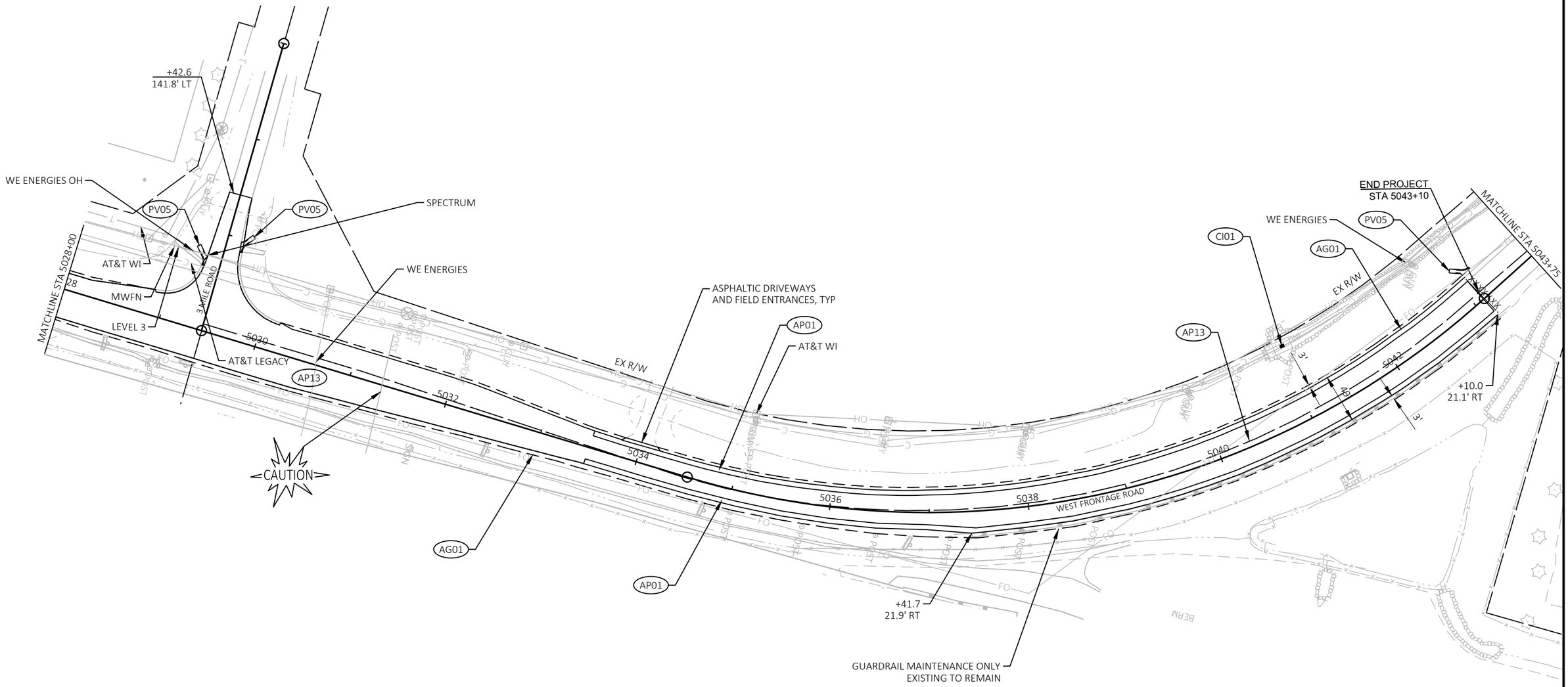
- AG01 BASE AGGREGATE DENSE ¾-INCH
- AM01 ADJUSTING MANHOLE COVERS
- AM02 ADJUSTING SANITARY MANHOLE COVERS
- AP01 VARIABLE HMA MILL AND 1 3/4" OVERLAY
- AP03 VARIABLE HMA MILL AND 3 1/2" OVERLAY
- AP13 1 3/4" HMA MILL AND 3 1/2" OVERLAY
- AP24 2 1/4" HMA MILL AND 4" OVERLAY
- AP33 3 1/2" HMA MILL AND OVERLAY
- AP44 4" HMA MILL AND OVERLAY
- CC01 CLEAN OUT CATCH BASIN
- CG02 CONCRETE CURB AND GUTTER 4% SLOPE 30-INCH TYPE D
- CI01 CLEAN OUT INLET
- CM01 CLEAN OUT MANHOLE
- P01 CONCRETE PAVEMENT REPAIR
- PV05 ASPHALTIC FLUMES
- RE01 REPLACE ENDWALL
- RM01 RECONSTRUCTING MANHOLES
- XXXXX SAWING ASPHALT
- YYYYY SAWING CONCRETE

N



PLAN DETAIL LEGEND

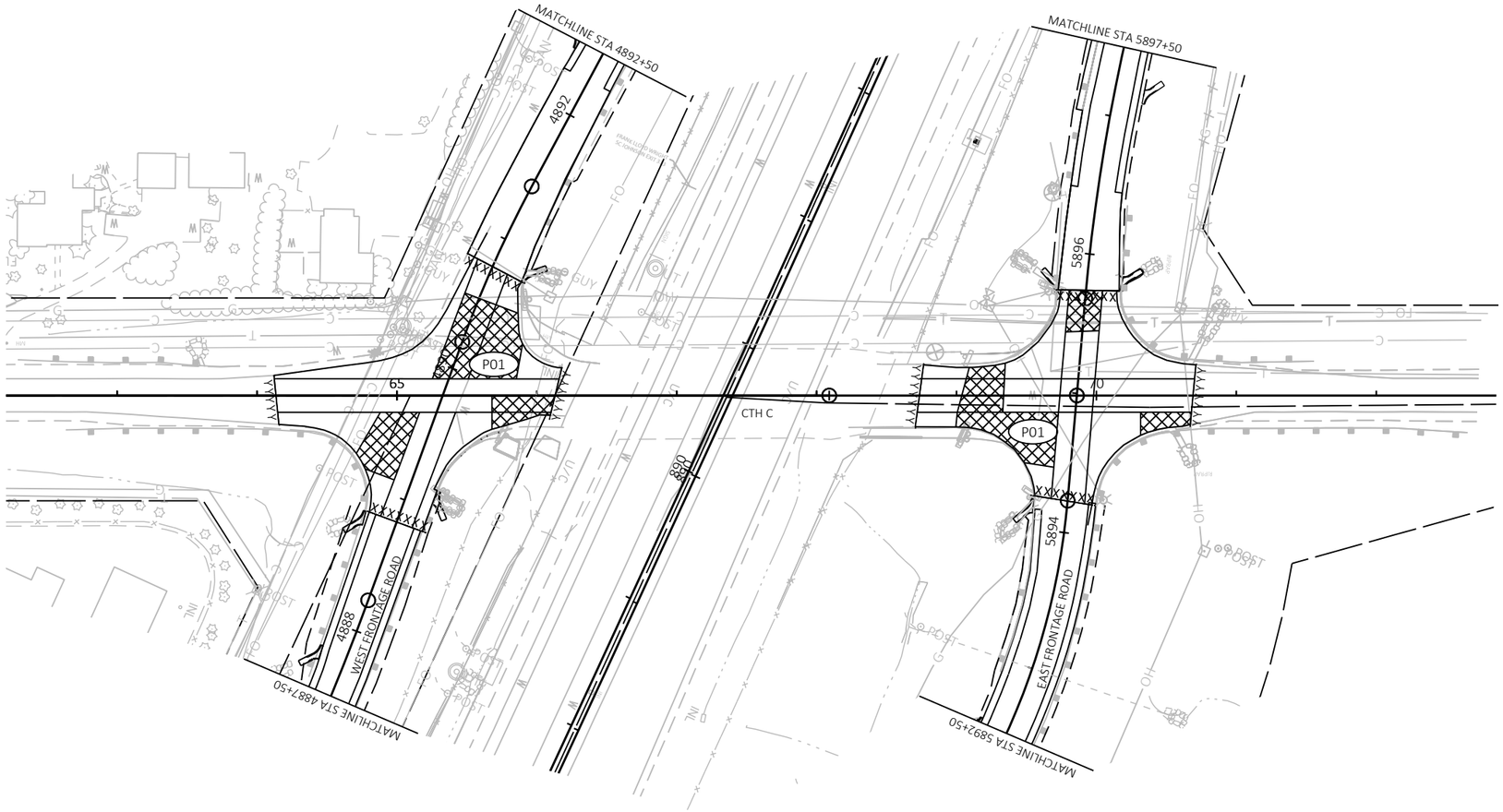
- (AG01) BASE AGGREGATE DENSE ¾-INCH
- (AM01) ADJUSTING MANHOLE COVERS
- (AM02) ADJUSTING SANITARY MANHOLE COVERS
- (AP01) VARIABLE HMA MILL AND 1 3/4" OVERLAY
- (AP03) VARIABLE HMA MILL AND 3 1/2" OVERLAY
- (AP13) 1 3/4" HMA MILL AND 3 1/2" OVERLAY
- (AP24) 2 1/4" HMA MILL AND 4" OVERLAY
- (AP33) 3 1/2" HMA MILL AND OVERLAY
- (AP44) 4" HMA MILL AND OVERLAY
- (CC01) CLEAN OUT CATCH BASIN
- (CG02) CONCRETE CURB AND GUTTER 4% SLOPE 30-INCH TYPE D
- (CI01) CLEAN OUT INLET
- (CM01) CLEAN OUT MANHOLE
- (P01) CONCRETE PAVEMENT REPAIR
- (PV05) ASPHALTIC FLUMES
- (RE01) REPLACE ENDWALL
- (RM01) RECONSTRUCTING MANHOLES
- XXXXX SAWING ASPHALT
- YYYYY SAWING CONCRETE



PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	PLAN DETAIL	SHEET 68	E

PLAN DETAIL LEGEND

- AG01 BASE AGGREGATE DENSE ¾-INCH
- AM01 ADJUSTING MANHOLE COVERS
- AM02 ADJUSTING SANITARY MANHOLE COVERS
- AP01 VARIABLE HMA MILL AND 1 3/4" OVERLAY
- AP03 VARIABLE HMA MILL AND 3 1/2" OVERLAY
- AP13 1 3/4" HMA MILL AND 3 1/2" OVERLAY
- AP24 2 1/4" HMA MILL AND 4" OVERLAY
- AP33 3 1/2" HMA MILL AND OVERLAY
- AP44 4" HMA MILL AND OVERLAY
- CC01 CLEAN OUT CATCH BASIN
- CG02 CONCRETE CURB AND GUTTER 4% SLOPE 30-INCH TYPE D
- CI01 CLEAN OUT INLET
- CM01 CLEAN OUT MANHOLE
- P01 CONCRETE PAVEMENT REPAIR
- PV05 ASPHALTIC FLUMES
- RE01 REPLACE ENDWALL
- RM01 RECONSTRUCTING MANHOLES
- 'XXXXX' SAWING ASPHALT
- 'YYYYY' SAWING CONCRETE



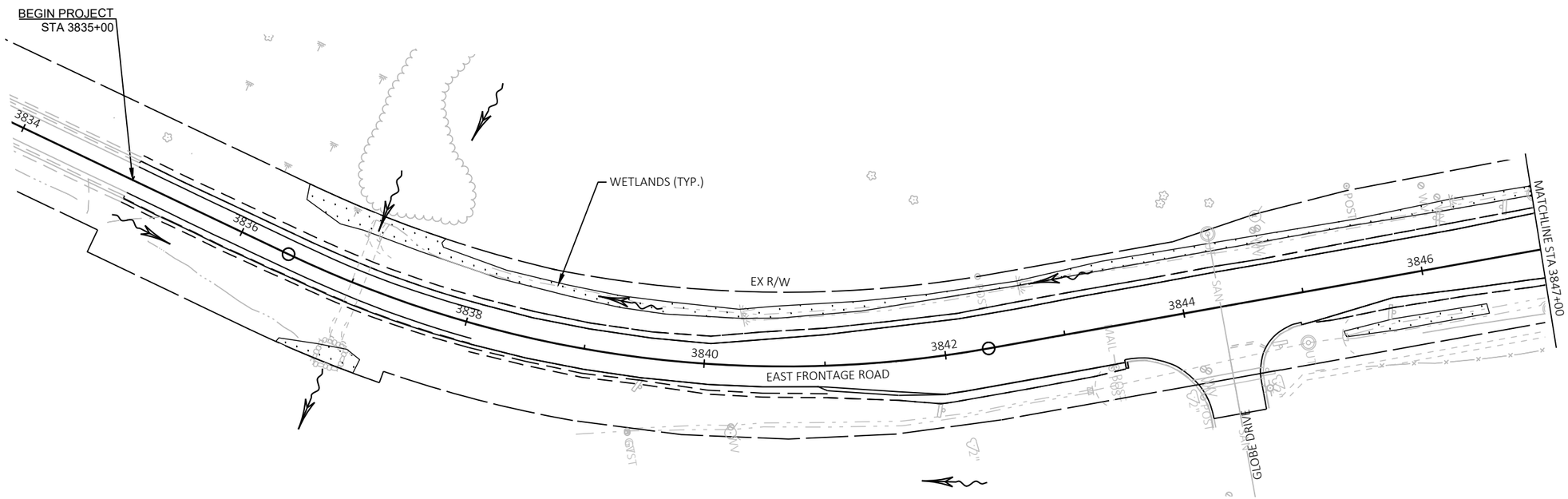
NOTE:
*LIMIT OF REPAIR TO BE ADJUSTED BY ENGINEER IN THE FIELD

PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	PLAN DETAIL	SHEET 69	E

FILE NAME : W:\PROJECTS\21234\04_CADD_01\CADD_SHEETS\021201-PD.DWG
LAYOUT NAME - 32
PLOT DATE : 10/27/2022 2:04 PM
PLOT BY : ALEXANDER UNDERWOOD
PLOT NAME :
PLOT SCALE : 1 IN:100 FT

LEGEND

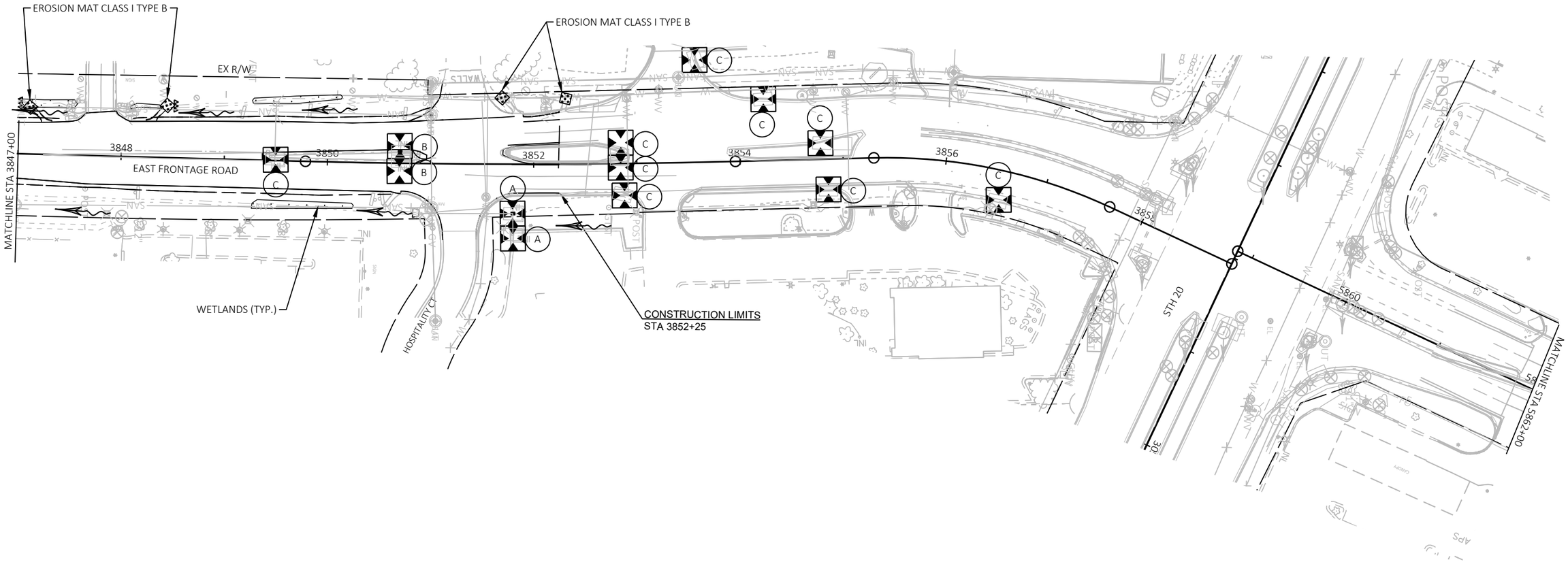
- A — INLET PROTECTION (TYPE A)
- B — INLET PROTECTION (TYPE B)
- C — INLET PROTECTION (TYPE C)
- TEMPORARY DITCH CHECK
- SURFACE WATER FLOW
- EROSION MAT CLASS I TYPE B
- RIP RAP
- CULVERT PIPE CHECK
- AM01 — ADJUSTING MANHOLE COVERS
- AM02 — ADJUSTING SANITARY MANHOLE COVERS
- CM01 — CLEAN OUT MANHOLE
- RE01 — REPLACE ENDWALL
- RM01 — RECONSTRUCTING MANHOLES



LEGEND

- A — INLET PROTECTION (TYPE A)
- B — INLET PROTECTION (TYPE B)
- C — INLET PROTECTION (TYPE C)
- TEMPORARY DITCH CHECK
- SURFACE WATER FLOW
- EROSION MAT CLASS I TYPE B
- RIP RAP
- CULVERT PIPE CHECK
- AM01 — ADJUSTING MANHOLE COVERS
- AM02 — ADJUSTING SANITARY MANHOLE COVERS
- CM01 — CLEAN OUT MANHOLE
- RE01 — REPLACE ENDWALL
- RM01 — RECONSTRUCTING MANHOLES

N



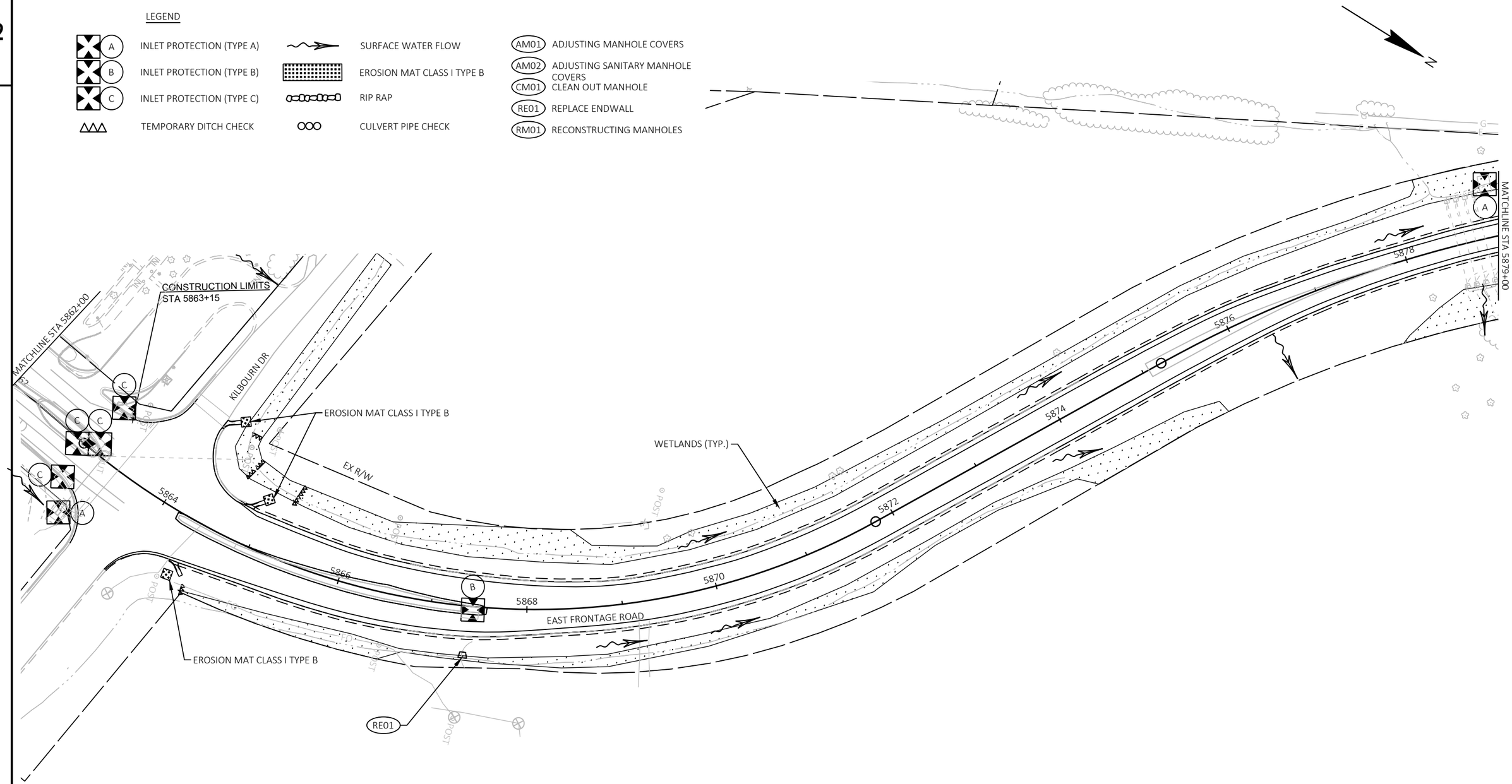
PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	EROSION CONTROL	SHEET 71	E

FILE NAME : W:\PROJECTS\21234\04_CADD_01\CADD_SHEETS\022001-EC.DWG
LAYOUT NAME - 02

PLOT DATE : 10/18/2022 3:42 PM PLOT BY : ALEXANDER UNDERWOOD PLOT NAME : PLOT SCALE : 1 IN:100 FT

LEGEND

- A — INLET PROTECTION (TYPE A)
- B — INLET PROTECTION (TYPE B)
- C — INLET PROTECTION (TYPE C)
- TEMPORARY DITCH CHECK
- SURFACE WATER FLOW
- EROSION MAT CLASS I TYPE B
- RIP RAP
- CULVERT PIPE CHECK
- AM01 — ADJUSTING MANHOLE COVERS
- AM02 — ADJUSTING SANITARY MANHOLE COVERS
- CM01 — CLEAN OUT MANHOLE
- RE01 — REPLACE ENDWALL
- RM01 — RECONSTRUCTING MANHOLES

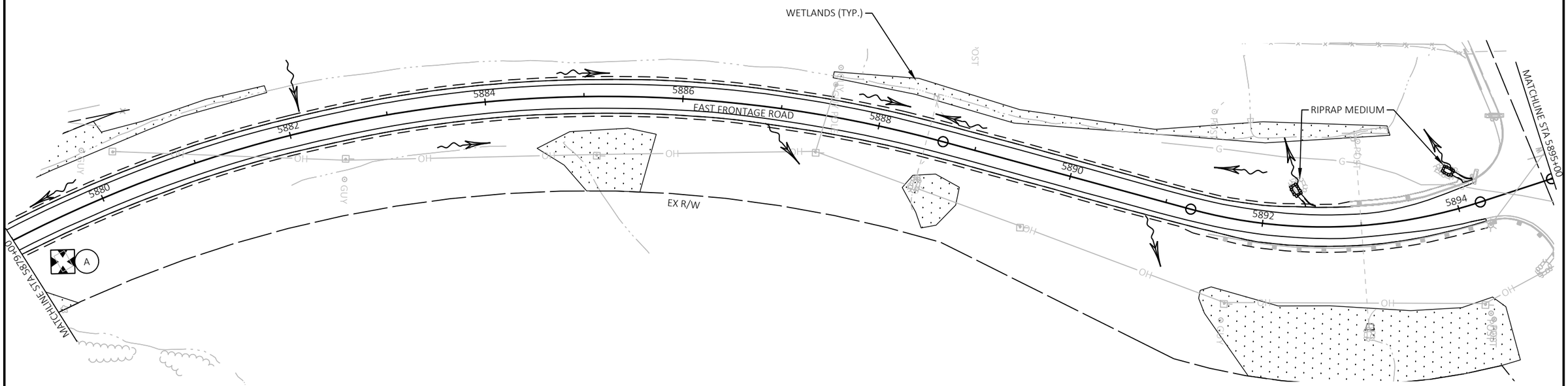


PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	EROSION CONTROL	SHEET 72	E

LEGEND

- A — INLET PROTECTION (TYPE A)
- B — INLET PROTECTION (TYPE B)
- C — INLET PROTECTION (TYPE C)
- TEMPORARY DITCH CHECK
- SURFACE WATER FLOW
- EROSION MAT CLASS I TYPE B
- RIP RAP
- CULVERT PIPE CHECK
- AM01 — ADJUSTING MANHOLE COVERS
- AM02 — ADJUSTING SANITARY MANHOLE COVERS
- CM01 — CLEAN OUT MANHOLE
- RE01 — REPLACE ENDWALL
- RM01 — RECONSTRUCTING MANHOLES

N

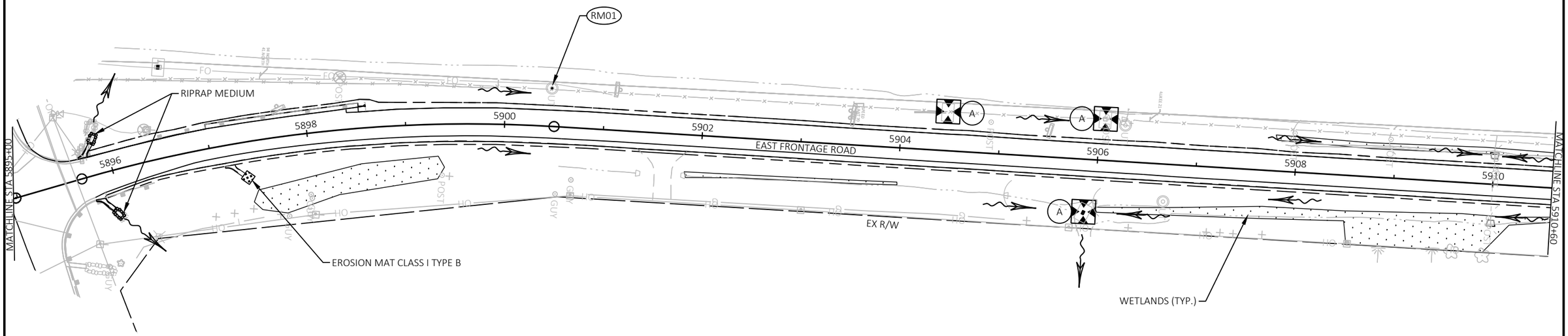


2

LEGEND

- A — INLET PROTECTION (TYPE A)
- B — INLET PROTECTION (TYPE B)
- C — INLET PROTECTION (TYPE C)
- TEMPORARY DITCH CHECK
- SURFACE WATER FLOW
- EROSION MAT CLASS I TYPE B
- RIP RAP
- CULVERT PIPE CHECK
- AM01 — ADJUSTING MANHOLE COVERS
- AM02 — ADJUSTING SANITARY MANHOLE COVERS
- CM01 — CLEAN OUT MANHOLE
- RE01 — REPLACE ENDWALL
- RM01 — RECONSTRUCTING MANHOLES

N



PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	EROSION CONTROL	SHEET 74	E

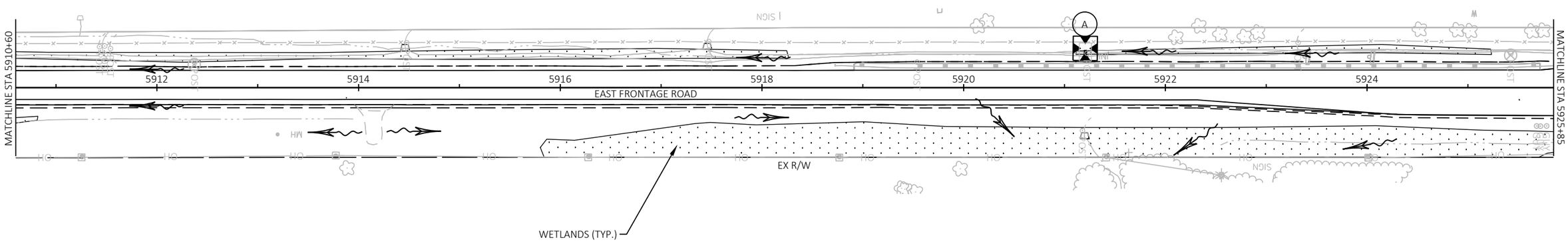
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LAYOUT NAME - 05

PLOT DATE : 10/18/2022 3:43 PM PLOT BY : ALEXANDER UNDERWOOD PLOT NAME : PLOT SCALE : 1 IN:100 FT

LEGEND

- A — INLET PROTECTION (TYPE A)
- B — INLET PROTECTION (TYPE B)
- C — INLET PROTECTION (TYPE C)
- TEMPORARY DITCH CHECK
- SURFACE WATER FLOW
- EROSION MAT CLASS I TYPE B
- RIP RAP
- CULVERT PIPE CHECK
- AM01 — ADJUSTING MANHOLE COVERS
- AM02 — ADJUSTING SANITARY MANHOLE COVERS
- CM01 — CLEAN OUT MANHOLE
- RE01 — REPLACE ENDWALL
- RM01 — RECONSTRUCTING MANHOLES

N



2

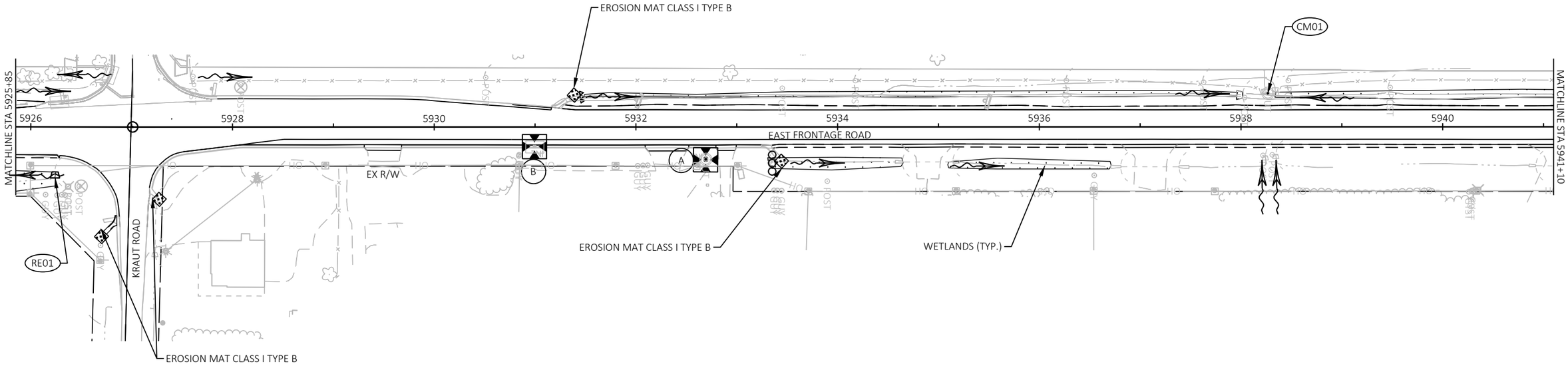
PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	EROSION CONTROL	SHEET 75	E

FILE NAME : W:\PROJECTS\21234\04_CADD_01\CADD_SHEETS\022001-EC.DWG
LAYOUT NAME - 06
PLOT DATE : 10/18/2022 3:43 PM
PLOT BY : ALEXANDER UNDERWOOD
PLOT NAME :
PLOT SCALE : 1 IN: 100 FT
WISDOT/CADDS SHEET 42

LEGEND

- A — INLET PROTECTION (TYPE A)
- B — INLET PROTECTION (TYPE B)
- C — INLET PROTECTION (TYPE C)
- TEMPORARY DITCH CHECK
- SURFACE WATER FLOW
- EROSION MAT CLASS I TYPE B
- RIP RAP
- CULVERT PIPE CHECK
- AM01 — ADJUSTING MANHOLE COVERS
- AM02 — ADJUSTING SANITARY MANHOLE COVERS
- CM01 — CLEAN OUT MANHOLE
- RE01 — REPLACE ENDWALL
- RM01 — RECONSTRUCTING MANHOLES

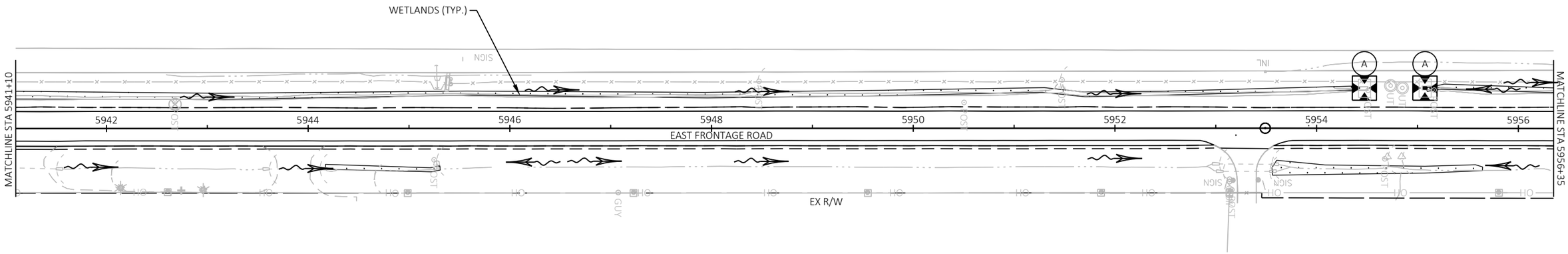
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LEGEND

- A — INLET PROTECTION (TYPE A)
- B — INLET PROTECTION (TYPE B)
- C — INLET PROTECTION (TYPE C)
- TEMPORARY DITCH CHECK
- SURFACE WATER FLOW
- EROSION MAT CLASS I TYPE B
- RIP RAP
- CULVERT PIPE CHECK
- AM01 — ADJUSTING MANHOLE COVERS
- AM02 — ADJUSTING SANITARY MANHOLE COVERS
- CM01 — CLEAN OUT MANHOLE
- RE01 — REPLACE ENDWALL
- RM01 — RECONSTRUCTING MANHOLES

N



PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	EROSION CONTROL	SHEET 77	E

FILE NAME : W:\PROJECTS\21234\04_CADD_01\CADD_SHEETS\022001-EC.DWG
LAYOUT NAME - 08

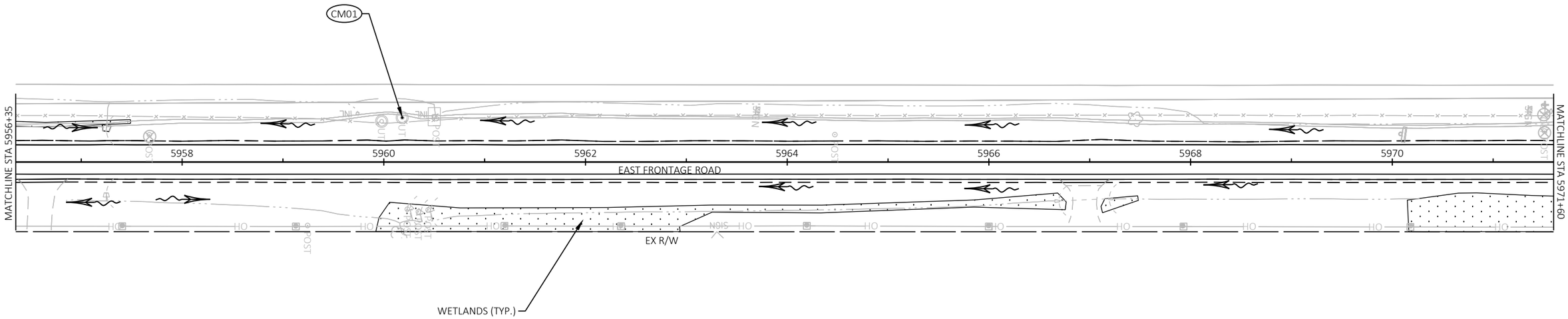
PLOT DATE : 10/18/2022 3:44 PM PLOT BY : ALEXANDER UNDERWOOD PLOT NAME : PLOT SCALE : 1 IN: 100 FT

2

LEGEND

- A — INLET PROTECTION (TYPE A)
- B — INLET PROTECTION (TYPE B)
- C — INLET PROTECTION (TYPE C)
- TEMPORARY DITCH CHECK
- SURFACE WATER FLOW
- EROSION MAT CLASS I TYPE B
- RIP RAP
- CULVERT PIPE CHECK
- AM01 — ADJUSTING MANHOLE COVERS
- AM02 — ADJUSTING SANITARY MANHOLE COVERS
- CM01 — CLEAN OUT MANHOLE
- RE01 — REPLACE ENDWALL
- RM01 — RECONSTRUCTING MANHOLES

N



2

PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	EROSION CONTROL	SHEET 78	E

FILE NAME : W:\PROJECTS\21234\04_CADD_01\CADD_SHEETS\022001-EC.DWG
LAYOUT NAME - 09

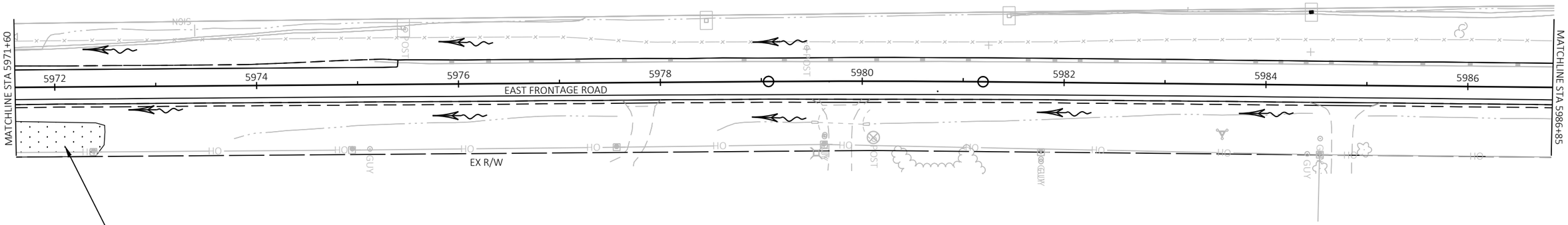
PLOT DATE : 10/18/2022 3:45 PM PLOT BY : ALEXANDER UNDERWOOD PLOT NAME : PLOT SCALE : 1 IN: 100 FT

WISDOT/CADDS SHEET 42

LEGEND

- A — INLET PROTECTION (TYPE A)
- B — INLET PROTECTION (TYPE B)
- C — INLET PROTECTION (TYPE C)
- TEMPORARY DITCH CHECK
- SURFACE WATER FLOW
- EROSION MAT CLASS I TYPE B
- RIP RAP
- CULVERT PIPE CHECK
- AM01 — ADJUSTING MANHOLE COVERS
- AM02 — ADJUSTING SANITARY MANHOLE COVERS
- CM01 — CLEAN OUT MANHOLE
- RE01 — REPLACE ENDWALL
- RM01 — RECONSTRUCTING MANHOLES

N



2

PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	EROSION CONTROL	SHEET 79	E

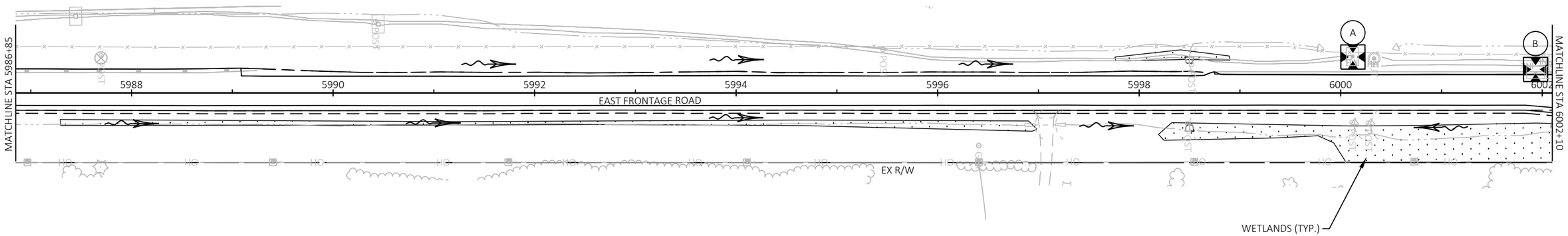
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LAYOUT NAME - 10

PLOT DATE : 10/18/2022 3:45 PM PLOT BY : ALEXANDER UNDERWOOD PLOT NAME : PLOT SCALE : 1 IN: 100 FT

LEGEND

- A — INLET PROTECTION (TYPE A)
- B — INLET PROTECTION (TYPE B)
- C — INLET PROTECTION (TYPE C)
- TEMPORARY DITCH CHECK
- SURFACE WATER FLOW
- EROSION MAT CLASS I TYPE B
- RIP RAP
- CULVERT PIPE CHECK
- AM01 — ADJUSTING MANHOLE COVERS
- AM02 — ADJUSTING SANITARY MANHOLE COVERS
- CM01 — CLEAN OUT MANHOLE
- RE01 — REPLACE ENDWALL
- RM01 — RECONSTRUCTING MANHOLES

N



2

PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	EROSION CONTROL	SHEET 80	E

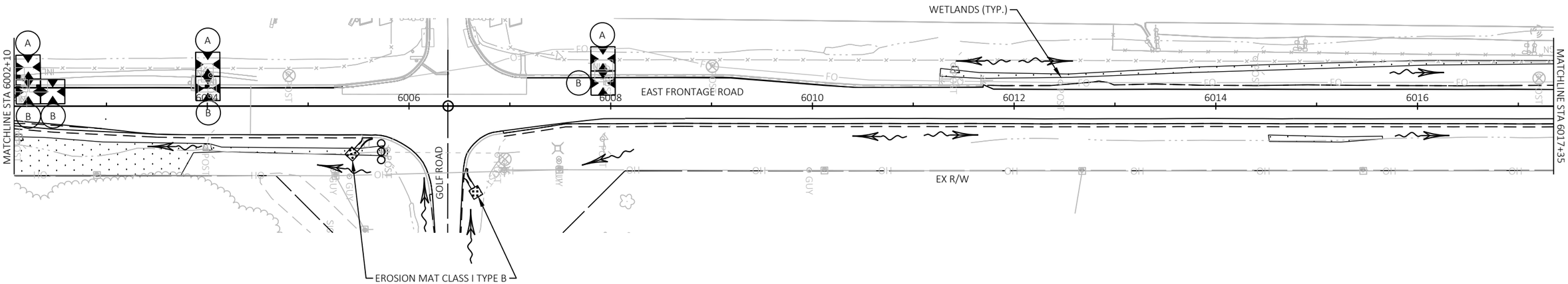
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LAYOUT NAME - 11
PLOT DATE : 10/18/2022 3:45 PM
PLOT BY : ALEXANDER UNDERWOOD
PLOT NAME :
PLOT SCALE : 1 IN: 100 FT
WISDOT/CADDS SHEET 42

2

LEGEND

- A — INLET PROTECTION (TYPE A)
- B — INLET PROTECTION (TYPE B)
- C — INLET PROTECTION (TYPE C)
- TEMPORARY DITCH CHECK
- SURFACE WATER FLOW
- EROSION MAT CLASS I TYPE B
- RIP RAP
- CULVERT PIPE CHECK
- AM01 — ADJUSTING MANHOLE COVERS
- AM02 — ADJUSTING SANITARY MANHOLE COVERS
- CM01 — CLEAN OUT MANHOLE
- RE01 — REPLACE ENDWALL
- RM01 — RECONSTRUCTING MANHOLES

N



PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	EROSION CONTROL	SHEET 81	E

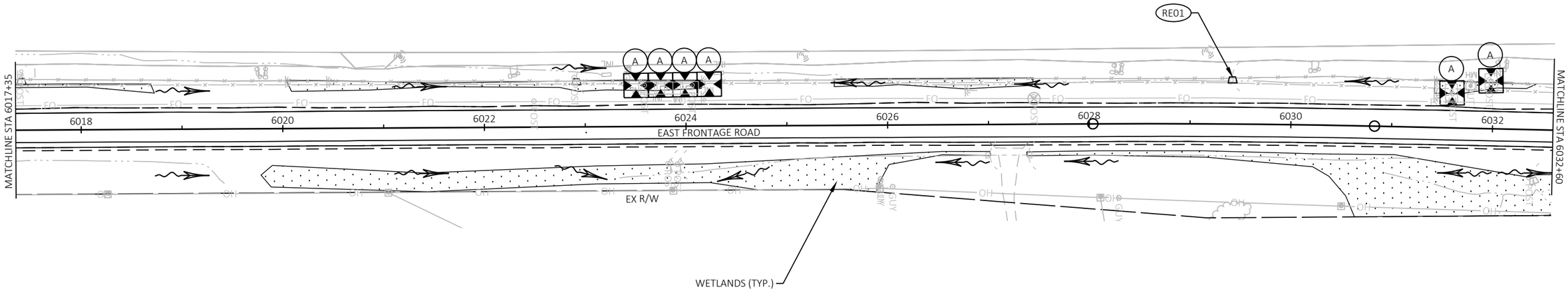
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LAYOUT NAME - 12

PLOT DATE : 10/18/2022 3:46 PM PLOT BY : ALEXANDER UNDERWOOD PLOT NAME : PLOT SCALE : 1 IN: 100 FT

LEGEND

- A — INLET PROTECTION (TYPE A)
- B — INLET PROTECTION (TYPE B)
- C — INLET PROTECTION (TYPE C)
- TEMPORARY DITCH CHECK
- SURFACE WATER FLOW
- EROSION MAT CLASS I TYPE B
- RIP RAP
- CULVERT PIPE CHECK
- AM01 — ADJUSTING MANHOLE COVERS
- AM02 — ADJUSTING SANITARY MANHOLE COVERS
- CM01 — CLEAN OUT MANHOLE
- RE01 — REPLACE ENDWALL
- RM01 — RECONSTRUCTING MANHOLES

N



PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	EROSION CONTROL	SHEET 82	E

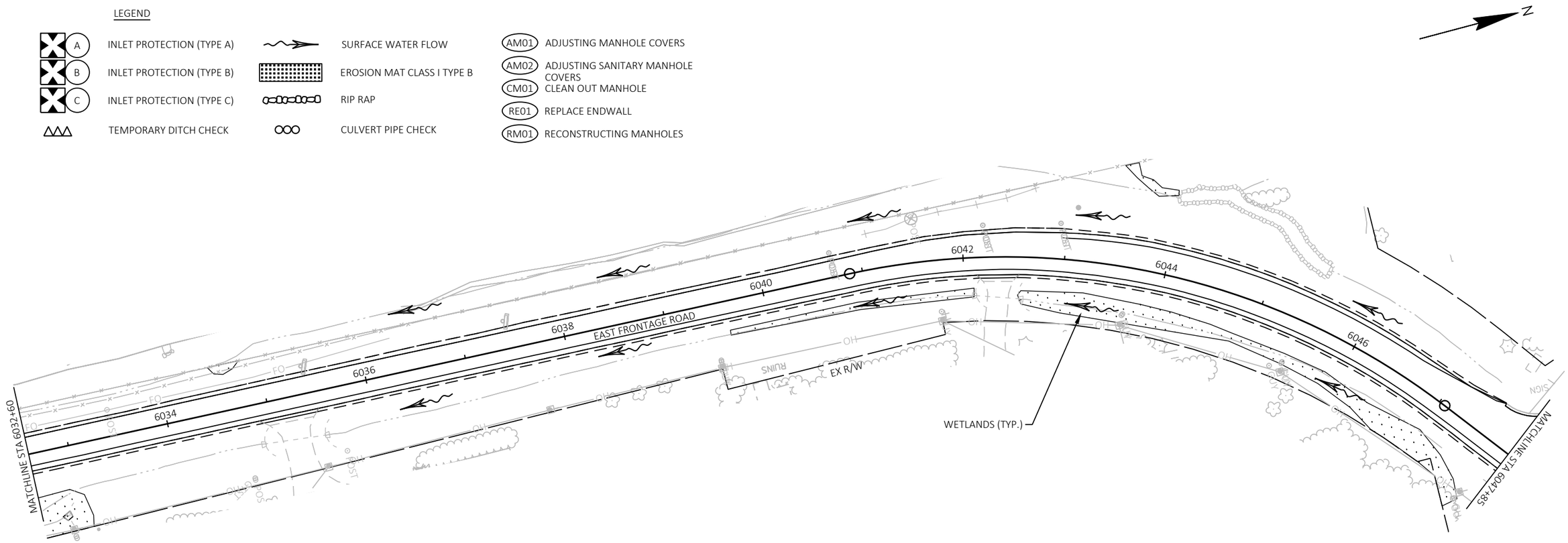
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LAYOUT NAME - 13

PLOT DATE : 10/18/2022 3:46 PM PLOT BY : ALEXANDER UNDERWOOD PLOT NAME : PLOT SCALE : 1 IN: 100 FT

WISDOT/CADDS SHEET 42

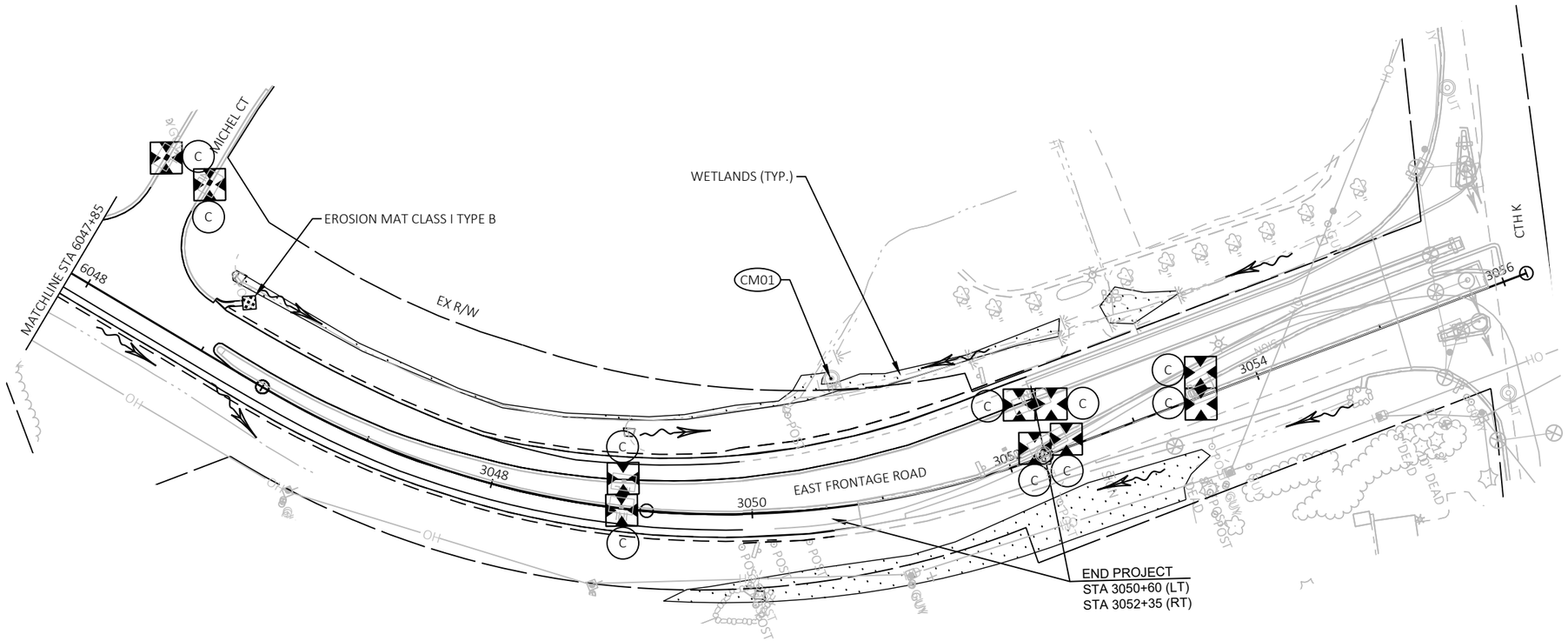
LEGEND

- A — INLET PROTECTION (TYPE A)
- B — INLET PROTECTION (TYPE B)
- C — INLET PROTECTION (TYPE C)
- TEMPORARY DITCH CHECK
- SURFACE WATER FLOW
- EROSION MAT CLASS I TYPE B
- RIP RAP
- CULVERT PIPE CHECK
- AM01 — ADJUSTING MANHOLE COVERS
- AM02 — ADJUSTING SANITARY MANHOLE COVERS
- CM01 — CLEAN OUT MANHOLE
- RE01 — REPLACE ENDWALL
- RM01 — RECONSTRUCTING MANHOLES



LEGEND

- A — INLET PROTECTION (TYPE A)
- B — INLET PROTECTION (TYPE B)
- C — INLET PROTECTION (TYPE C)
- TEMPORARY DITCH CHECK
- SURFACE WATER FLOW
- EROSION MAT CLASS I TYPE B
- RIP RAP
- CULVERT PIPE CHECK
- AM01 — ADJUSTING MANHOLE COVERS
- AM02 — ADJUSTING SANITARY MANHOLE COVERS
- CM01 — CLEAN OUT MANHOLE
- RE01 — REPLACE ENDWALL
- RM01 — RECONSTRUCTING MANHOLES



PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	EROSION CONTROL	SHEET 84	E

FILE NAME : W:\PROJECTS\21234\04_CADD_01\CADD_SHEETS\022001-EC.DWG
LAYOUT NAME - 15

PLOT DATE : 10/18/2022 3:47 PM PLOT BY : ALEXANDER UNDERWOOD PLOT NAME : PLOT SCALE : 1 IN: 100 FT

LEGEND

- A — INLET PROTECTION (TYPE A)
- B — INLET PROTECTION (TYPE B)
- C — INLET PROTECTION (TYPE C)
- TEMPORARY DITCH CHECK
- SURFACE WATER FLOW
- EROSION MAT CLASS I TYPE B
- RIP RAP
- CULVERT PIPE CHECK
- AM01 — ADJUSTING MANHOLE COVERS
- AM02 — ADJUSTING SANITARY MANHOLE COVERS
- CM01 — CLEAN OUT MANHOLE
- RE01 — REPLACE ENDWALL
- RM01 — RECONSTRUCTING MANHOLES

N

CONSTRUCTION LIMITS
STA 2857+00

2848 2850 2852 2854 2856

WEST FRONTAGE ROAD

EX R/W

CLASS I EROSION MAT TYPE B

2846

WETLANDS (TYP.)

2844

THREATENED & ENDANGERED SPECIES HABITAT
DO NOT DISTURB OR STORE MATERIALS/EQUIPMENT

2842

BEGIN PROJECT
STA 2838+77

2840

WEST FRONTAGE ROAD

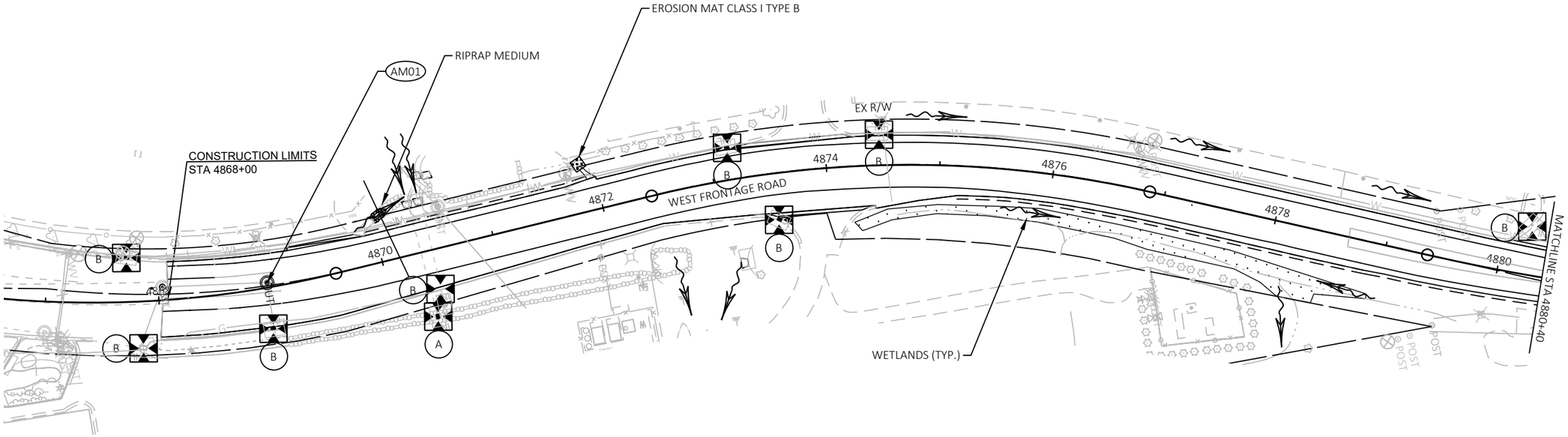
PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	EROSION CONTROL	SHEET 85	E

2

LEGEND

- A — INLET PROTECTION (TYPE A)
- B — INLET PROTECTION (TYPE B)
- C — INLET PROTECTION (TYPE C)
- TEMPORARY DITCH CHECK
- SURFACE WATER FLOW
- EROSION MAT CLASS I TYPE B
- RIP RAP
- CULVERT PIPE CHECK
- AM01 — ADJUSTING MANHOLE COVERS
- AM02 — ADJUSTING SANITARY MANHOLE COVERS
- CM01 — CLEAN OUT MANHOLE
- RE01 — REPLACE ENDWALL
- RM01 — RECONSTRUCTING MANHOLES

N



PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	EROSION CONTROL	SHEET 86	E

FILE NAME : W:\PROJECTS\21234\04_CADD_01\CADD_SHEETS\022001-EC.DWG
LAYOUT NAME - 17

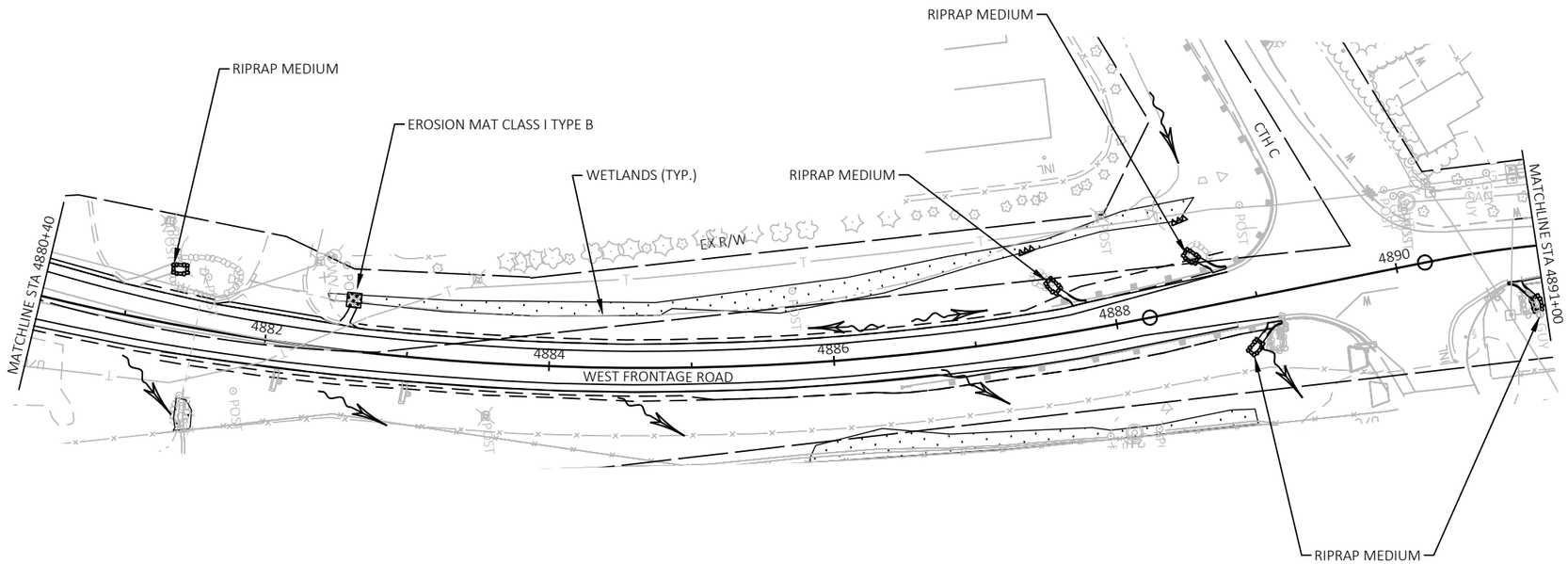
PLOT DATE : 10/18/2022 3:48 PM PLOT BY : ALEXANDER UNDERWOOD PLOT NAME : PLOT SCALE : 1 IN: 100 FT

WISDOT/CADDS SHEET 42

LEGEND

- A — INLET PROTECTION (TYPE A)
- B — INLET PROTECTION (TYPE B)
- C — INLET PROTECTION (TYPE C)
- TEMPORARY DITCH CHECK
- SURFACE WATER FLOW
- EROSION MAT CLASS I TYPE B
- RIP RAP
- CULVERT PIPE CHECK
- AM01 — ADJUSTING MANHOLE COVERS
- AM02 — ADJUSTING SANITARY MANHOLE COVERS
- CM01 — CLEAN OUT MANHOLE
- RE01 — REPLACE ENDWALL
- RM01 — RECONSTRUCTING MANHOLES

N



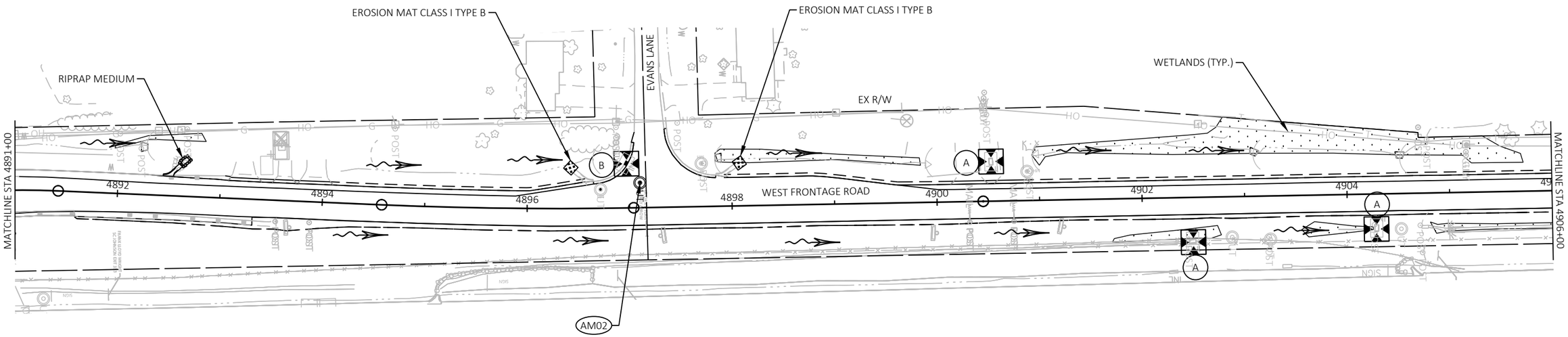
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PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	EROSION CONTROL	SHEET 87	E

LEGEND

- A — INLET PROTECTION (TYPE A)
- B — INLET PROTECTION (TYPE B)
- C — INLET PROTECTION (TYPE C)
- TEMPORARY DITCH CHECK
- SURFACE WATER FLOW
- EROSION MAT CLASS I TYPE B
- RIP RAP
- CULVERT PIPE CHECK
- AM01 — ADJUSTING MANHOLE COVERS
- AM02 — ADJUSTING SANITARY MANHOLE COVERS
- CM01 — CLEAN OUT MANHOLE
- RE01 — REPLACE ENDWALL
- RM01 — RECONSTRUCTING MANHOLES

N



2

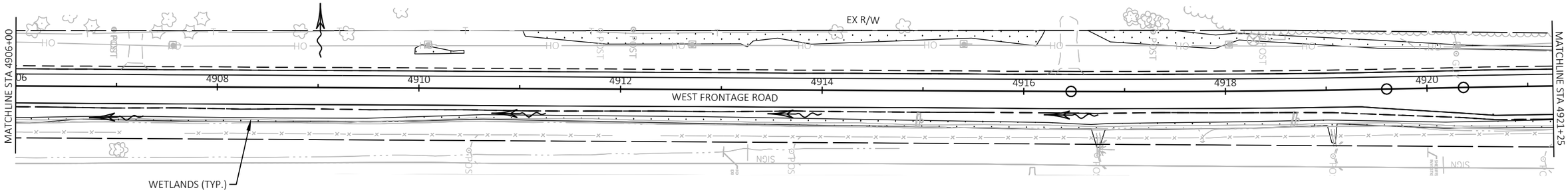
PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	EROSION CONTROL	SHEET 88	E

FILE NAME : W:\PROJECTS\21234\04_CADD_01\CADD_SHEETS\022001-EC.DWG
LAYOUT NAME - 19
PLOT DATE : 10/18/2022 3:49 PM
PLOT BY : ALEXANDER UNDERWOOD
PLOT NAME :
PLOT SCALE : 1 IN: 100 FT
WISDOT/CADDS SHEET 42

LEGEND

- A — INLET PROTECTION (TYPE A)
- B — INLET PROTECTION (TYPE B)
- C — INLET PROTECTION (TYPE C)
- TEMPORARY DITCH CHECK
- SURFACE WATER FLOW
- EROSION MAT CLASS I TYPE B
- RIP RAP
- CULVERT PIPE CHECK
- AM01 — ADJUSTING MANHOLE COVERS
- AM02 — ADJUSTING SANITARY MANHOLE COVERS
- CM01 — CLEAN OUT MANHOLE
- RE01 — REPLACE ENDWALL
- RM01 — RECONSTRUCTING MANHOLES

N



PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	EROSION CONTROL	SHEET 89	E

FILE NAME : W:\PROJECTS\21234\04_CADD_01\CADD_SHEETS\022001-EC.DWG
LAYOUT NAME - 20

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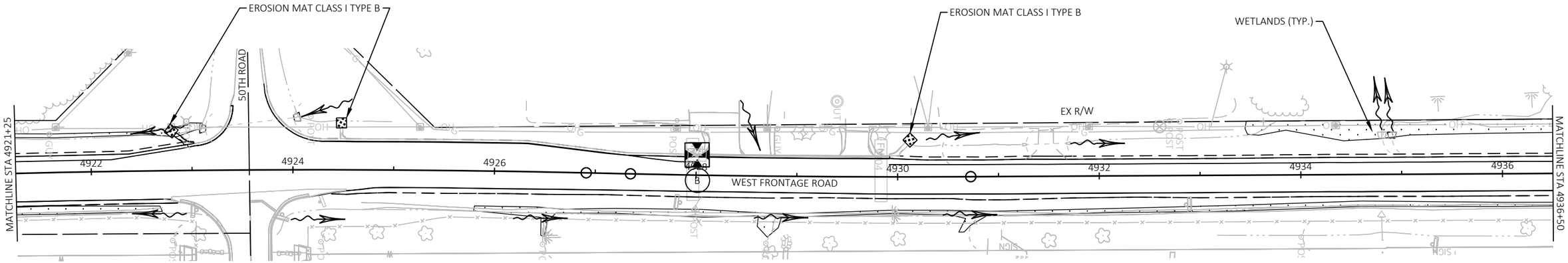
WISDOT/CADDS SHEET 42

2

LEGEND

A	INLET PROTECTION (TYPE A)	SURFACE WATER FLOW	AM01 ADJUSTING MANHOLE COVERS
B	INLET PROTECTION (TYPE B)	EROSION MAT CLASS I TYPE B	AM02 ADJUSTING SANITARY MANHOLE COVERS
C	INLET PROTECTION (TYPE C)	RIP RAP	CM01 CLEAN OUT MANHOLE
	TEMPORARY DITCH CHECK	CULVERT PIPE CHECK	RE01 REPLACE ENDWALL
			RM01 RECONSTRUCTING MANHOLES

N



PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	EROSION CONTROL	SHEET 90	E

FILE NAME : W:\PROJECTS\21234\04_CADD_01\CADD_SHEETS\022001-EC.DWG
LAYOUT NAME - 21

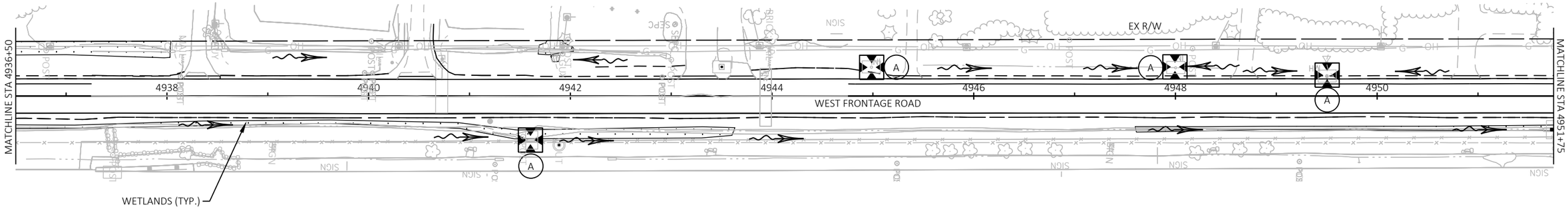
PLOT DATE : 10/18/2022 3:50 PM PLOT BY : ALEXANDER UNDERWOOD PLOT NAME : PLOT SCALE : 1 IN: 100 FT

WISDOT/CADDS SHEET 42

LEGEND

- A — INLET PROTECTION (TYPE A)
- B — INLET PROTECTION (TYPE B)
- C — INLET PROTECTION (TYPE C)
- TEMPORARY DITCH CHECK
- SURFACE WATER FLOW
- EROSION MAT CLASS I TYPE B
- RIP RAP
- CULVERT PIPE CHECK
- AM01 — ADJUSTING MANHOLE COVERS
- AM02 — ADJUSTING SANITARY MANHOLE COVERS
- CM01 — CLEAN OUT MANHOLE
- RE01 — REPLACE ENDWALL
- RM01 — RECONSTRUCTING MANHOLES

N



PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	EROSION CONTROL	SHEET 91	E

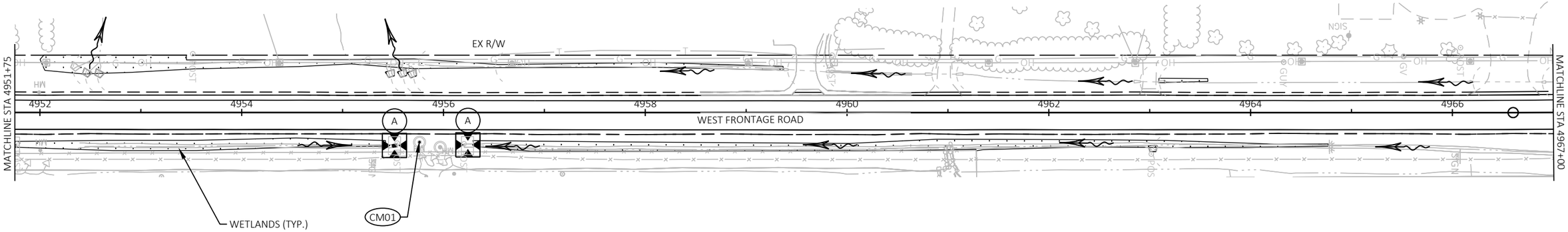
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LAYOUT NAME - 22

PLOT DATE : 10/18/2022 3:50 PM PLOT BY : ALEXANDER UNDERWOOD PLOT NAME : PLOT SCALE : 1 IN: 100 FT

LEGEND

- A — INLET PROTECTION (TYPE A)
- B — INLET PROTECTION (TYPE B)
- C — INLET PROTECTION (TYPE C)
- TEMPORARY DITCH CHECK
- SURFACE WATER FLOW
- EROSION MAT CLASS I TYPE B
- RIP RAP
- CULVERT PIPE CHECK
- AM01 — ADJUSTING MANHOLE COVERS
- AM02 — ADJUSTING SANITARY MANHOLE COVERS
- CM01 — CLEAN OUT MANHOLE
- RE01 — REPLACE ENDWALL
- RM01 — RECONSTRUCTING MANHOLES

N



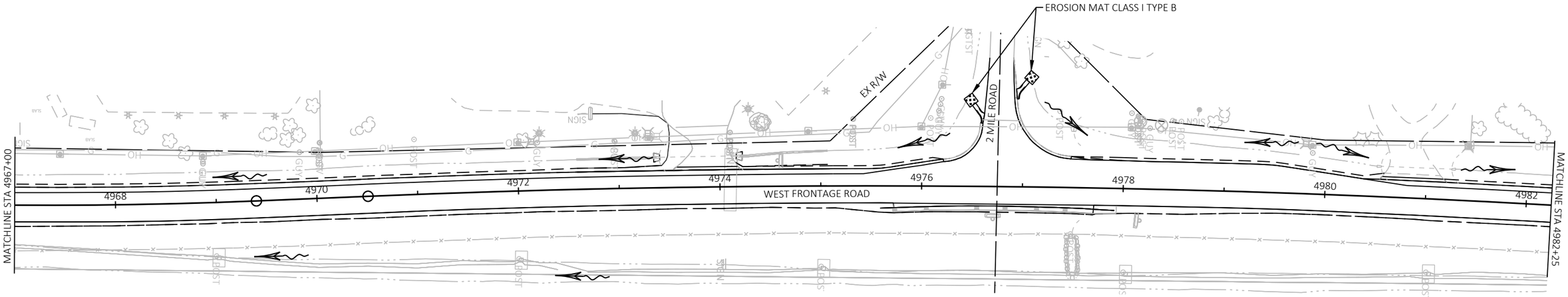
2

PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	EROSION CONTROL	SHEET 92	E

LEGEND

- A — INLET PROTECTION (TYPE A)
- B — INLET PROTECTION (TYPE B)
- C — INLET PROTECTION (TYPE C)
- TEMPORARY DITCH CHECK
- SURFACE WATER FLOW
- EROSION MAT CLASS I TYPE B
- RIP RAP
- CULVERT PIPE CHECK
- AM01 — ADJUSTING MANHOLE COVERS
- AM02 — ADJUSTING SANITARY MANHOLE COVERS
- CM01 — CLEAN OUT MANHOLE
- RE01 — REPLACE ENDWALL
- RM01 — RECONSTRUCTING MANHOLES

N

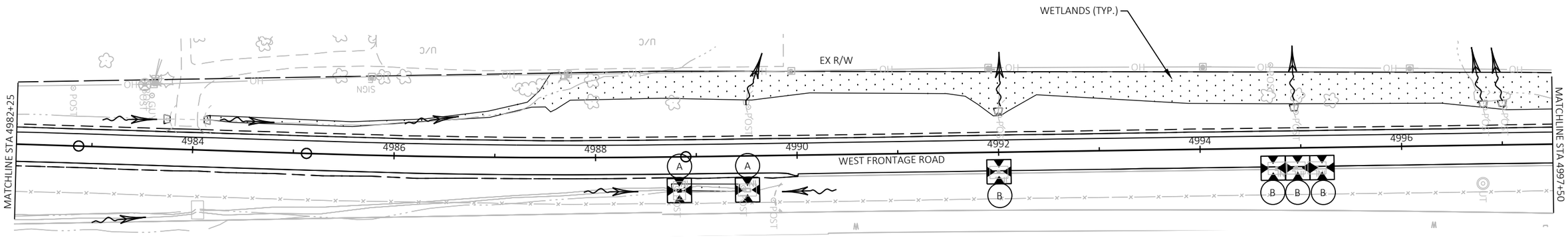


2

LEGEND

- A — INLET PROTECTION (TYPE A)
- B — INLET PROTECTION (TYPE B)
- C — INLET PROTECTION (TYPE C)
- TEMPORARY DITCH CHECK
- SURFACE WATER FLOW
- EROSION MAT CLASS I TYPE B
- RIP RAP
- CULVERT PIPE CHECK
- AM01 — ADJUSTING MANHOLE COVERS
- AM02 — ADJUSTING SANITARY MANHOLE COVERS
- CM01 — CLEAN OUT MANHOLE
- RE01 — REPLACE ENDWALL
- RM01 — RECONSTRUCTING MANHOLES

N



PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	EROSION CONTROL	SHEET 94	E

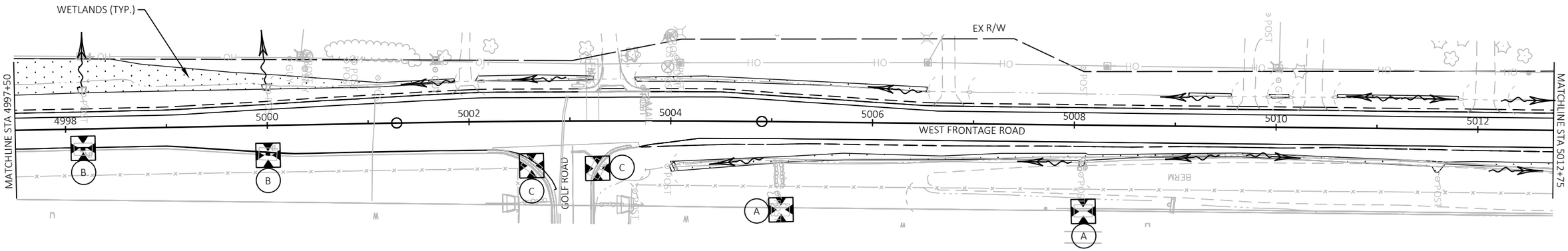
FILE NAME : W:\PROJECTS\21234\04_CADD_01\CADD_SHEETS\022001-EC.DWG
LAYOUT NAME - 25

PLOT DATE : 10/18/2022 3:51 PM PLOT BY : ALEXANDER UNDERWOOD PLOT NAME : PLOT SCALE : 1 IN: 100 FT

LEGEND

- A — INLET PROTECTION (TYPE A)
- B — INLET PROTECTION (TYPE B)
- C — INLET PROTECTION (TYPE C)
- TEMPORARY DITCH CHECK
- SURFACE WATER FLOW
- EROSION MAT CLASS I TYPE B
- RIP RAP
- CULVERT PIPE CHECK
- AM01 — ADJUSTING MANHOLE COVERS
- AM02 — ADJUSTING SANITARY MANHOLE COVERS
- CM01 — CLEAN OUT MANHOLE
- RE01 — REPLACE ENDWALL
- RM01 — RECONSTRUCTING MANHOLES

N



PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	EROSION CONTROL	SHEET 95	E

FILE NAME : W:\PROJECTS\21234\04_CADD_01\CADD_SHEETS\022001-EC.DWG
LAYOUT NAME - 26

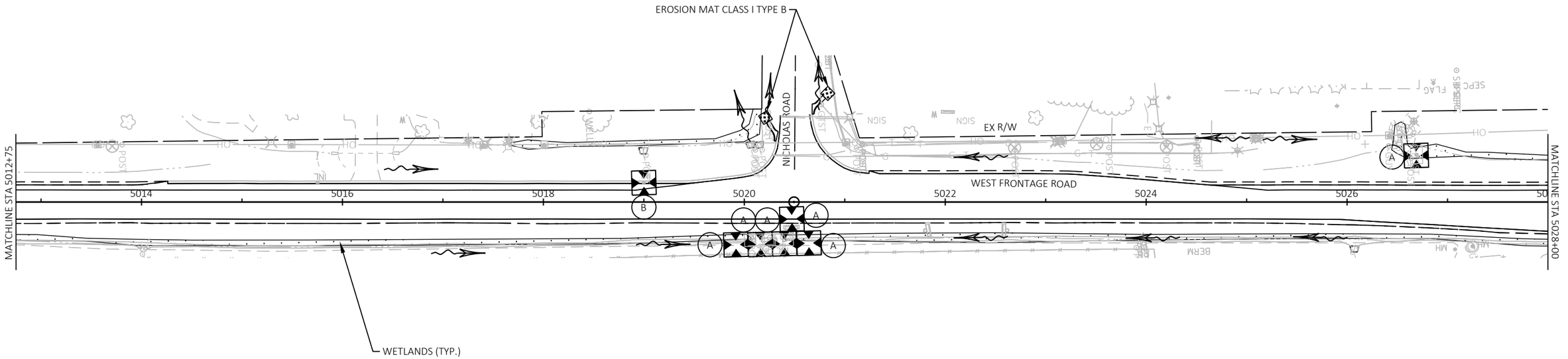
PLOT DATE : 10/18/2022 3:52 PM PLOT BY : ALEXANDER UNDERWOOD PLOT NAME : PLOT SCALE : 1 IN: 100 FT

WISDOT/CADDS SHEET 42

LEGEND

- A — INLET PROTECTION (TYPE A)
- B — INLET PROTECTION (TYPE B)
- C — INLET PROTECTION (TYPE C)
- TEMPORARY DITCH CHECK
- SURFACE WATER FLOW
- EROSION MAT CLASS I TYPE B
- RIP RAP
- CULVERT PIPE CHECK
- AM01 — ADJUSTING MANHOLE COVERS
- AM02 — ADJUSTING SANITARY MANHOLE COVERS
- CM01 — CLEAN OUT MANHOLE
- RE01 — REPLACE ENDWALL
- RM01 — RECONSTRUCTING MANHOLES

N



2

PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	EROSION CONTROL	SHEET 96	E

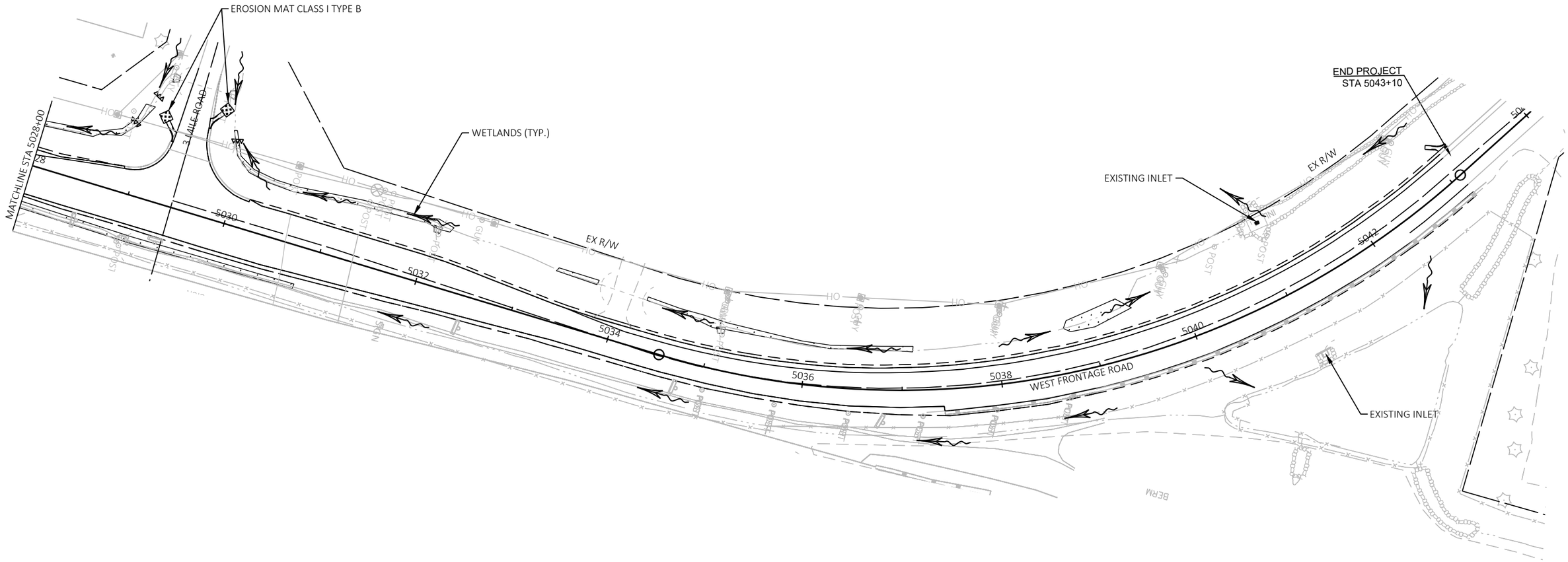
FILE NAME : W:\PROJECTS\21234\04_CADD_01\CADD_SHEETS\022001-EC.DWG
LAYOUT NAME - 27

PLOT DATE : 10/18/2022 3:52 PM PLOT BY : ALEXANDER UNDERWOOD PLOT NAME : PLOT SCALE : 1 IN: 100 FT

LEGEND

A	INLET PROTECTION (TYPE A)		SURFACE WATER FLOW
B	INLET PROTECTION (TYPE B)		EROSION MAT CLASS I TYPE B
C	INLET PROTECTION (TYPE C)		RIP RAP
	TEMPORARY DITCH CHECK		CULVERT PIPE CHECK

AM01	ADJUSTING MANHOLE COVERS
AM02	ADJUSTING SANITARY MANHOLE COVERS
CM01	CLEAN OUT MANHOLE
RE01	REPLACE ENDWALL
RM01	RECONSTRUCTING MANHOLES



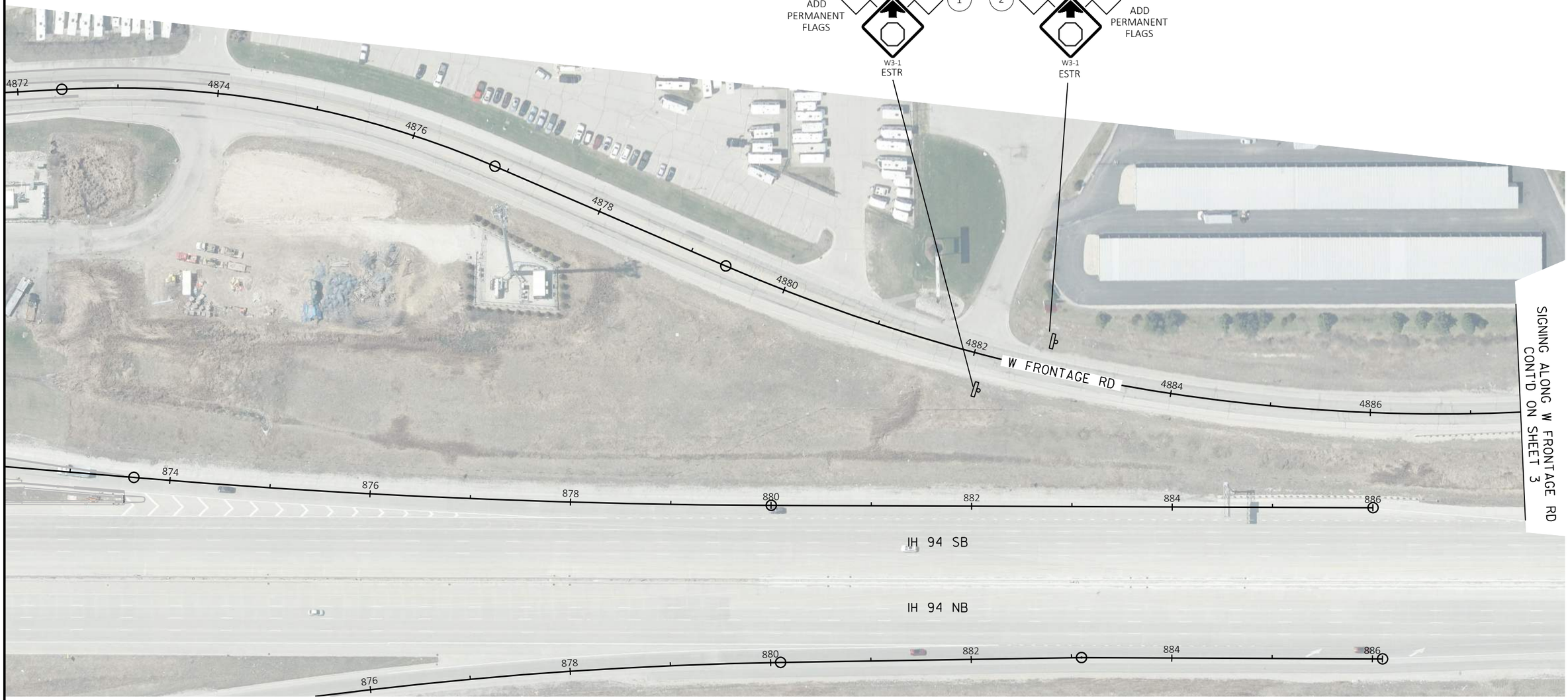
2

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
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE
- (20XX) — YEAR OF SIGN

N

2



SHEET 1 OF 6

PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROAD	COUNTY: RACINE	PERMANENT SIGNING	SHEET 98	E

FILE NAME : N:\PDS\C3D\CAD\10300906\SIGN\023201_PS_1030-09-76.DWG
LAYOUT NAME - SHEET01

PLOT DATE : 1/20/2023 1:57 PM PLOT BY : MARTENS, KAREN L PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

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
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE
- (20XX) — YEAR OF SIGN

N

W FRONTAGE RD

4884 4886 4888 4890

IH 94 SB

882 884 886

IH 94 NB

876 878 880 882 884 886

CTH C (SPRING ST)

56 68

E FRONTAGE RD

5880 5882 5884 5886 5888 5890 5892 5894

ADD PERMANENT FLAGS

3

W3-1
ESTR

4

W3-1
ESTR

ADD PERMANENT FLAGS

2

SHEET 2 OF 6

PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROAD	COUNTY: RACINE	PERMANENT SIGNING	SHEET 99	E

FILE NAME : N:\PDS\C3D\CAD\10300906\SIGN\023201_PS_1030-09-76.DWG
LAYOUT NAME - SHEET02

PLOT DATE : 1/20/2023 1:57 PM PLOT BY : MARTENS, KAREN L PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

2

N

SIGNING ALONG W FRONTAGE RD CONT'D FROM SHEET 1

W FRONTAGE RD

E FRONTAGE RD

EVANS LN

CTH C (SPRING ST)

IH 94 SB

IH 94 NB

4888 4890 4892 4894 4896 4898 4900

5886 5890 5892 5894 5896 5898 5900 5902 5904

64 66 68 70 72

ADD PERMANENT FLAGS

STOP R1-1

ALL WAY R1-3P

ESTR

COUNTY C J13-1 ESTR

5 6 7 8 9 10 11 12 13 14

W1-2L ESTR

40 MPH W13-1 ESTR

W3-1 ESTR

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
- VMS VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- (20XX) YEAR OF SIGN

SHEET 3 OF 6

PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROAD	COUNTY: RACINE	PERMANENT SIGNING	SHEET 100	E

FILE NAME : N:\PDS\C3D\CAD\10300906\SIGN\023201_PS_1030-09-76.DWG
LAYOUT NAME - SHEET03

PLOT DATE : 1/20/2023 1:57 PM PLOT BY : MARTENS, KAREN L PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

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
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE
- (20XX) — YEAR OF SIGN

N

15 W3-1 ESTR — ADD PERMANENT FLAGS

4902 4904 4906 4908 W FRONTAGE RD 4910 4912 4914 4916

16 W3-1 ESTR — ADD PERMANENT FLAGS

IH 94 SB

IH 94 NB

5904 5906 5908 5910 5912 E FRONTAGE RD 5914 5916 5918

2

SHEET 4 OF 6

PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROAD	COUNTY: RACINE	PERMANENT SIGNING	SHEET 101	E

FILE NAME : N:\PDS\C3D\CAD\10300906\SIGN\023201_PS_1030-09-76.DWG
LAYOUT NAME - SHEET04

PLOT DATE : 1/20/2023 1:57 PM PLOT BY : MARTENS, KAREN L PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

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
- VMS — VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX — DENOTES SIGN NUMBER
- (X) — INDICATES SIGN SIZE
- (20XX) — YEAR OF SIGN



SHEET 5 OF 6

PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROAD	COUNTY: RACINE	PERMANENT SIGNING	SHEET 102	E

FILE NAME : N:\PDS\C3D\CAD\10300906\SIGN\023201_PS_1030-09-76.DWG
LAYOUT NAME - SHEET05

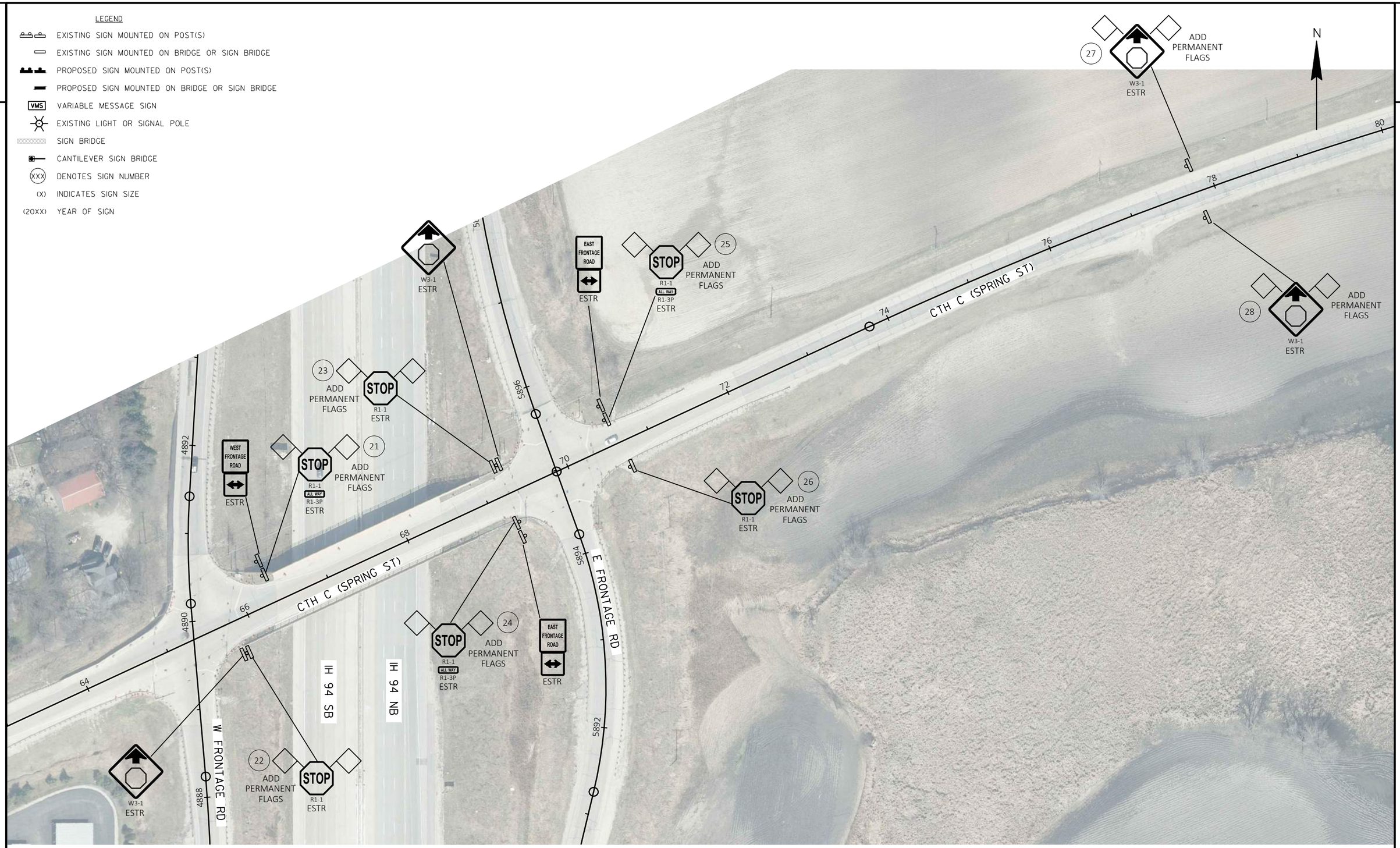
PLOT DATE : 1/20/2023 1:58 PM PLOT BY : MARTENS, KAREN L PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

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
- VMS VARIABLE MESSAGE SIGN
- EXISTING LIGHT OR SIGNAL POLE
- SIGN BRIDGE
- CANTILEVER SIGN BRIDGE
- XXX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- (20XX) YEAR OF SIGN



SHEET 6 OF 6

PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROAD	COUNTY: RACINE	PERMANENT SIGNING	SHEET 103	E

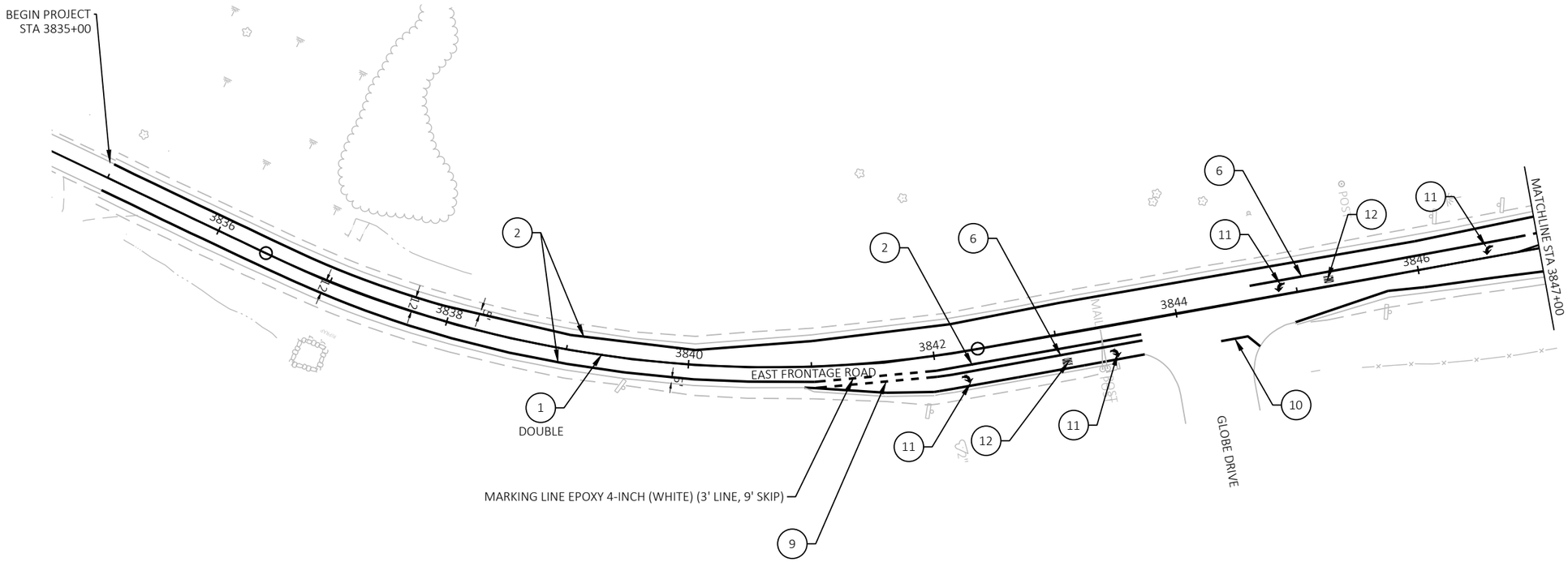
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LAYOUT NAME - SHEET06

PLOT DATE : 1/20/2023 1:58 PM PLOT BY : MARTENS, KAREN L PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

LEGEND

1. MARKING LINE EPOXY 4-INCH (YELLOW)
2. MARKING LINE EPOXY 4-INCH (WHITE)
3. MARKING LINE EPOXY 4-INCH (WHITE) (12.5' LINE, 37.5' SKIP)
4. MARKING LINE EPOXY 4-INCH (YELLOW) (12.5' LINE, 37.5' SKIP)
5. MARKING DIAGONAL EPOXY 12-INCH (WHITE)
6. MARKING LINE EPOXY 8-INCH (WHITE)
7. MARKING CURB EPOXY (YELLOW)
8. MARKING ISLAND NOSE EPOXY
9. MARKING LINE EPOXY 8-INCH (WHITE) (3' LINE, 9' SKIP)
10. MARKING STOP LINE EPOXY 18-INCH (WHITE)
11. MARKING ARROW EPOXY
12. MARKING WORD EPOXY
13. MARKING LINE GROOVED WET REFLECTIVE EPOXY (WHITE)



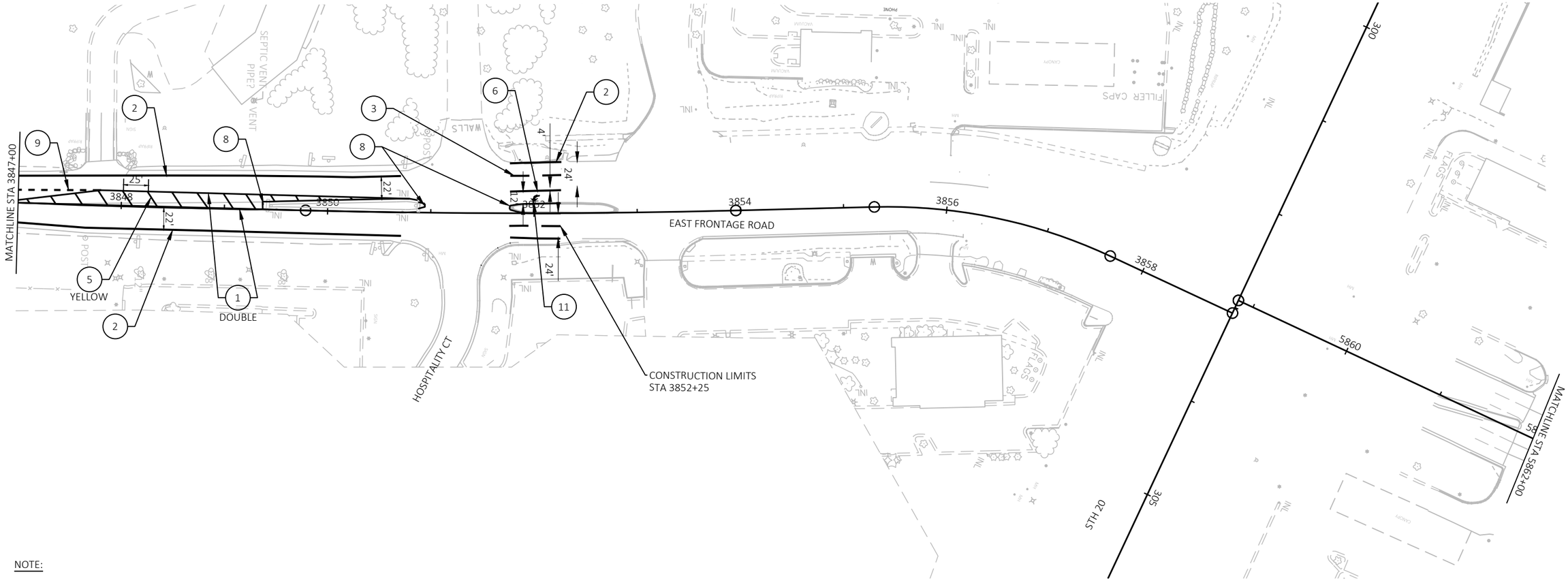
NOTE:

EXACT LOCATION OF PASSING ZONES TO BE PER
LOCATING NO PASSING ZONE ITEM.
SEE SDD 2-LANE RURAL CENTERLINE RUMBLE STRIP,
MILLING FOR GROOVE SPACING AND GAP LOCATIONS.

PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	PAVEMENT MARKING	SHEET 104	E

LEGEND

1. MARKING LINE EPOXY 4-INCH (YELLOW)
2. MARKING LINE EPOXY 4-INCH (WHITE)
3. MARKING LINE EPOXY 4-INCH (WHITE) (12.5' LINE, 37.5' SKIP)
4. MARKING LINE EPOXY 4-INCH (YELLOW) (12.5' LINE, 37.5' SKIP)
5. MARKING DIAGONAL EPOXY 12-INCH (WHITE)
6. MARKING LINE EPOXY 8-INCH (WHITE)
7. MARKING CURB EPOXY (YELLOW)
8. MARKING ISLAND NOSE EPOXY
9. MARKING LINE EPOXY 8-INCH (WHITE) (3' LINE, 9' SKIP)
10. MARKING STOP LINE EPOXY 18-INCH (WHITE)
11. MARKING ARROW EPOXY
12. MARKING WORD EPOXY
13. MARKING LINE GROOVED WET REFLECTIVE EPOXY (WHITE)



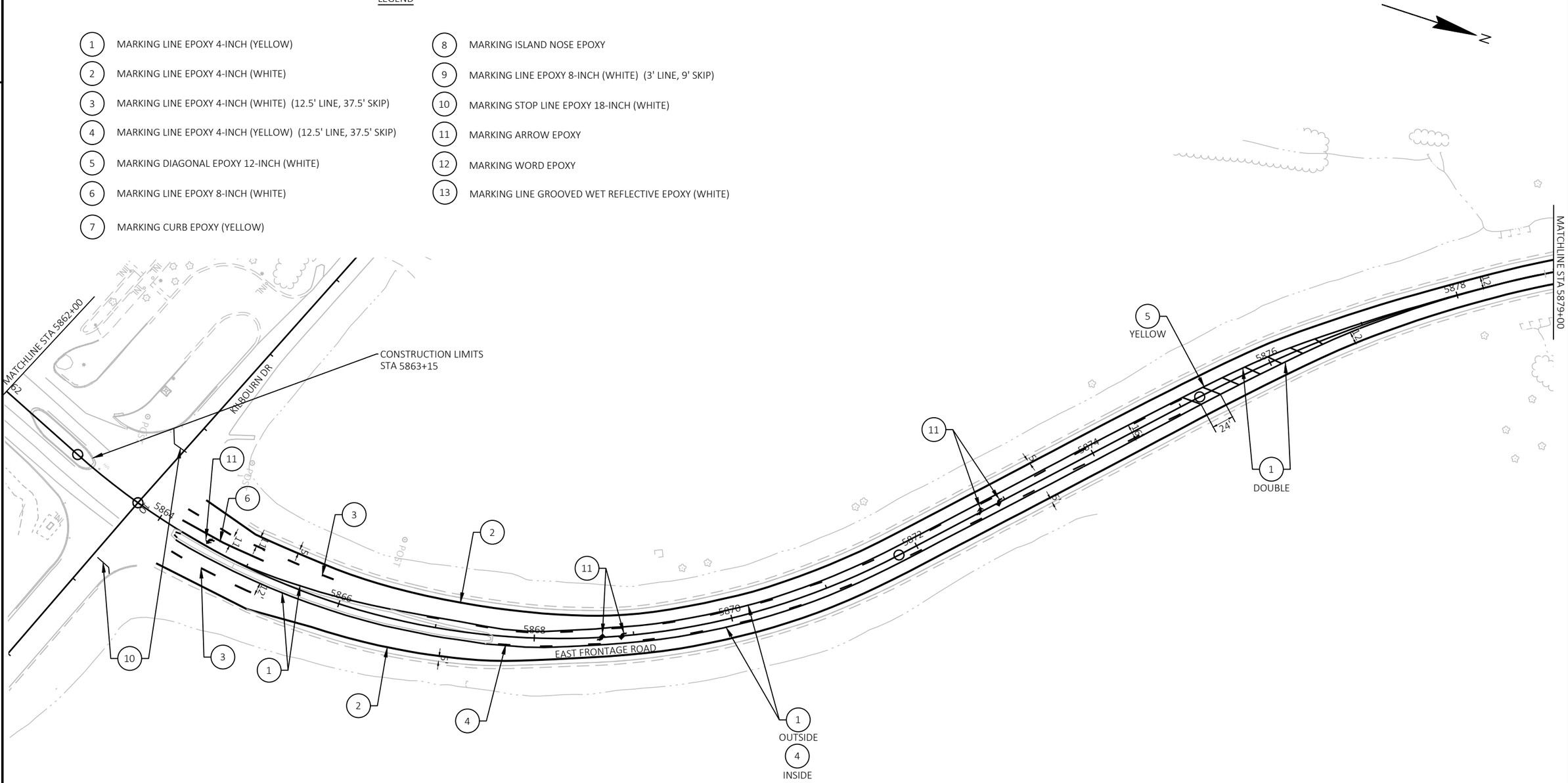
NOTE:

EXACT LOCATION OF PASSING ZONES TO BE PER LOCATING NO PASSING ZONE ITEM.
SEE SDD 2-LANE RURAL CENTERLINE RUMBLE STRIP, MILLING FOR GROOVE SPACING AND GAP LOCATIONS.

PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	PAVEMENT MARKING	SHEET 105	E

LEGEND

1. MARKING LINE EPOXY 4-INCH (YELLOW)
2. MARKING LINE EPOXY 4-INCH (WHITE)
3. MARKING LINE EPOXY 4-INCH (WHITE) (12.5' LINE, 37.5' SKIP)
4. MARKING LINE EPOXY 4-INCH (YELLOW) (12.5' LINE, 37.5' SKIP)
5. MARKING DIAGONAL EPOXY 12-INCH (WHITE)
6. MARKING LINE EPOXY 8-INCH (WHITE)
7. MARKING CURB EPOXY (YELLOW)
8. MARKING ISLAND NOSE EPOXY
9. MARKING LINE EPOXY 8-INCH (WHITE) (3' LINE, 9' SKIP)
10. MARKING STOP LINE EPOXY 18-INCH (WHITE)
11. MARKING ARROW EPOXY
12. MARKING WORD EPOXY
13. MARKING LINE GROOVED WET REFLECTIVE EPOXY (WHITE)



NOTE:

EXACT LOCATION OF PASSING ZONES TO BE PER
LOCATING NO PASSING ZONE ITEM.
SEE SDD 2-LANE RURAL CENTERLINE RUMBLE STRIP,
MILLING FOR GROOVE SPACING AND GAP LOCATIONS.

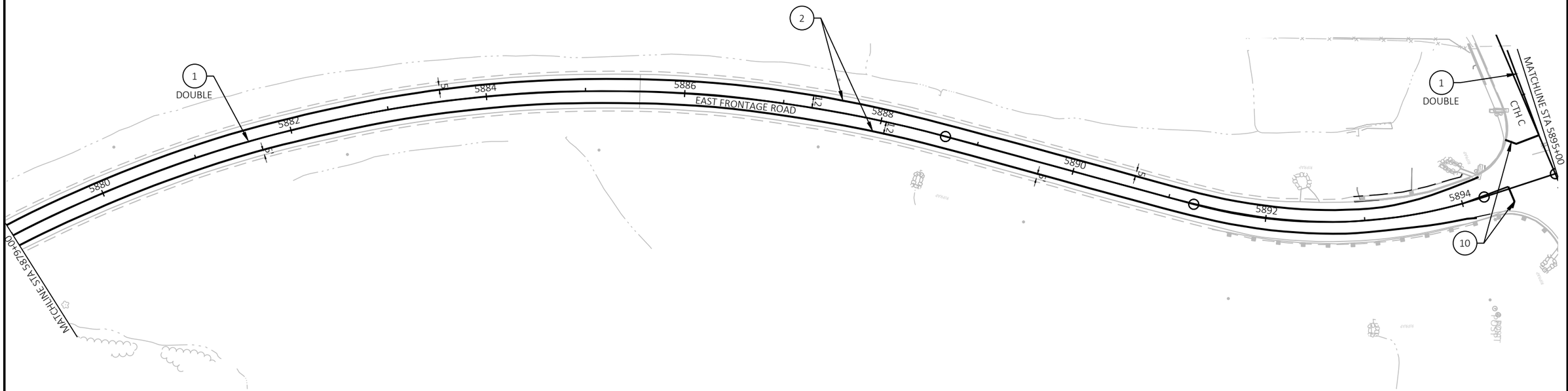
PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	PAVEMENT MARKING	SHEET 106	E

2

LEGEND

1. MARKING LINE EPOXY 4-INCH (YELLOW)
2. MARKING LINE EPOXY 4-INCH (WHITE)
3. MARKING LINE EPOXY 4-INCH (WHITE) (12.5' LINE, 37.5' SKIP)
4. MARKING LINE EPOXY 4-INCH (YELLOW) (12.5' LINE, 37.5' SKIP)
5. MARKING DIAGONAL EPOXY 12-INCH (WHITE)
6. MARKING LINE EPOXY 8-INCH (WHITE)
7. MARKING CURB EPOXY (YELLOW)
8. MARKING ISLAND NOSE EPOXY
9. MARKING LINE EPOXY 8-INCH (WHITE) (3' LINE, 9' SKIP)
10. MARKING STOP LINE EPOXY 18-INCH (WHITE)
11. MARKING ARROW EPOXY
12. MARKING WORD EPOXY
13. MARKING LINE GROOVED WET REFLECTIVE EPOXY (WHITE)

N



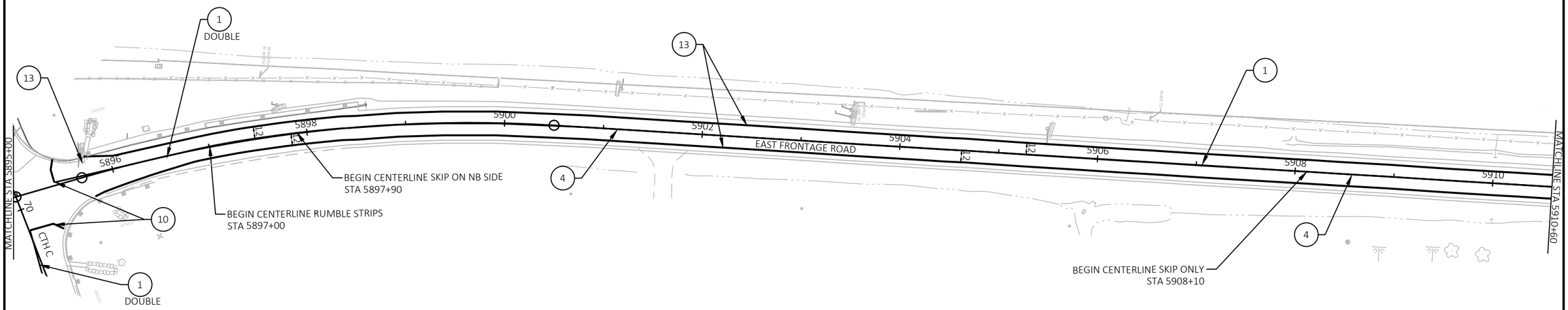
NOTE:

EXACT LOCATION OF PASSING ZONES TO BE PER
LOCATING NO PASSING ZONE ITEM.
SEE SDD 2-LANE RURAL CENTERLINE RUMBLE STRIP,
MILLING FOR GROOVE SPACING AND GAP LOCATIONS.

PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	PAVEMENT MARKING	SHEET 107	E

LEGEND

1. MARKING LINE EPOXY 4-INCH (YELLOW)
2. MARKING LINE EPOXY 4-INCH (WHITE)
3. MARKING LINE EPOXY 4-INCH (WHITE) (12.5' LINE, 37.5' SKIP)
4. MARKING LINE EPOXY 4-INCH (YELLOW) (12.5' LINE, 37.5' SKIP)
5. MARKING DIAGONAL EPOXY 12-INCH (WHITE)
6. MARKING LINE EPOXY 8-INCH (WHITE)
7. MARKING CURB EPOXY (YELLOW)
8. MARKING ISLAND NOSE EPOXY
9. MARKING LINE EPOXY 8-INCH (WHITE) (3' LINE, 9' SKIP)
10. MARKING STOP LINE EPOXY 18-INCH (WHITE)
11. MARKING ARROW EPOXY
12. MARKING WORD EPOXY
13. MARKING LINE GROOVED WET REFLECTIVE EPOXY (WHITE)



NOTE:

EXACT LOCATION OF PASSING ZONES TO BE PER
LOCATING NO PASSING ZONE ITEM.
SEE SDD 2-LANE RURAL CENTERLINE RUMBLE STRIP,
MILLING FOR GROOVE SPACING AND GAP LOCATIONS.

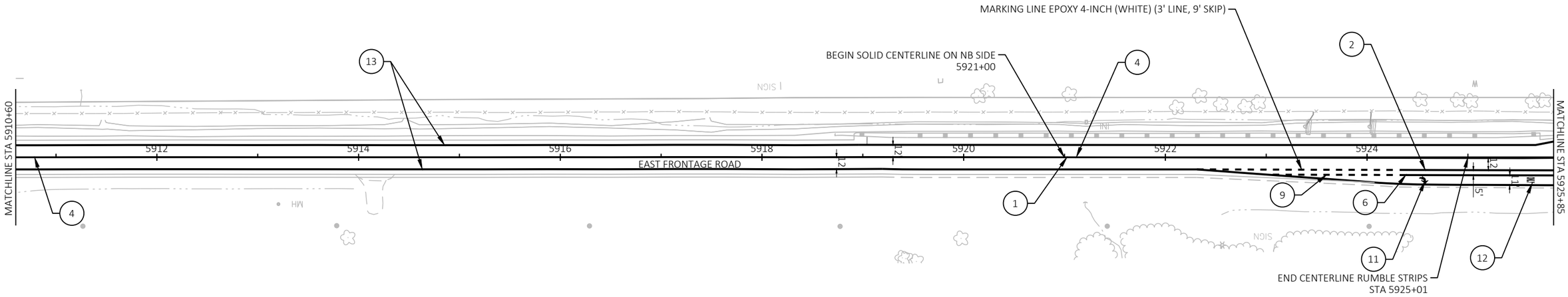
PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	PAVEMENT MARKING	SHEET 108	E

2

LEGEND

1. MARKING LINE EPOXY 4-INCH (YELLOW)
2. MARKING LINE EPOXY 4-INCH (WHITE)
3. MARKING LINE EPOXY 4-INCH (WHITE) (12.5' LINE, 37.5' SKIP)
4. MARKING LINE EPOXY 4-INCH (YELLOW) (12.5' LINE, 37.5' SKIP)
5. MARKING DIAGONAL EPOXY 12-INCH (WHITE)
6. MARKING LINE EPOXY 8-INCH (WHITE)
7. MARKING CURB EPOXY (YELLOW)
8. MARKING ISLAND NOSE EPOXY
9. MARKING LINE EPOXY 8-INCH (WHITE) (3' LINE, 9' SKIP)
10. MARKING STOP LINE EPOXY 18-INCH (WHITE)
11. MARKING ARROW EPOXY
12. MARKING WORD EPOXY
13. MARKING LINE GROOVED WET REFLECTIVE EPOXY (WHITE)

N



NOTE:

EXACT LOCATION OF PASSING ZONES TO BE PER
LOCATING NO PASSING ZONE ITEM.
SEE SDD 2-LANE RURAL CENTERLINE RUMBLE STRIP,
MILLING FOR GROOVE SPACING AND GAP LOCATIONS.

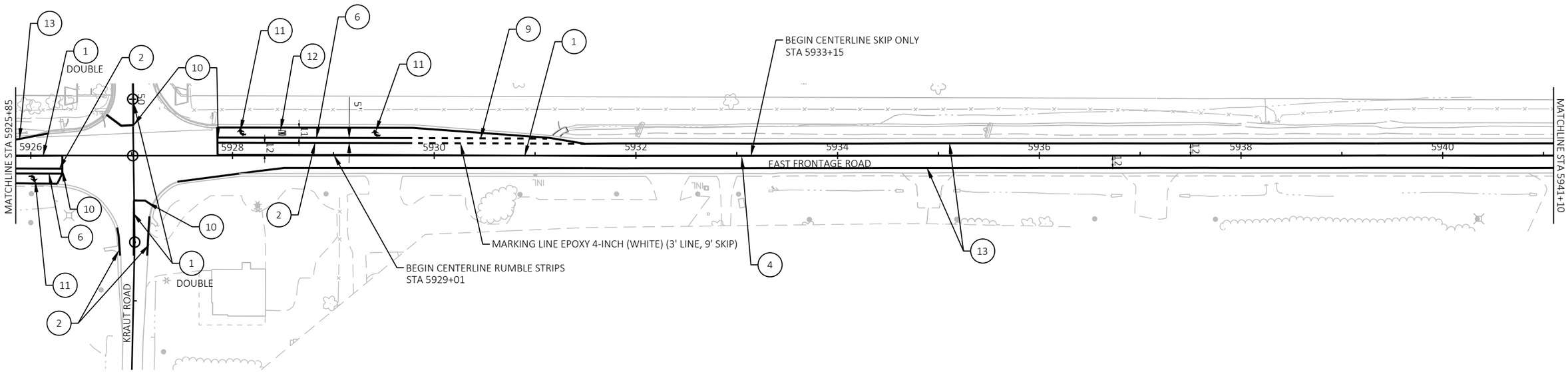
PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	PAVEMENT MARKING	SHEET 109	E

FILE NAME : W:\PROJECTS\21234\04_CADD_01\CADD_SHEETS\024501-PM.DWG
LAYOUT NAME - 06
PLOT DATE : 10/27/2022 2:44 PM
PLOT BY : ALEXANDER UNDERWOOD
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

LEGEND

1. MARKING LINE EPOXY 4-INCH (YELLOW)
2. MARKING LINE EPOXY 4-INCH (WHITE)
3. MARKING LINE EPOXY 4-INCH (WHITE) (12.5' LINE, 37.5' SKIP)
4. MARKING LINE EPOXY 4-INCH (YELLOW) (12.5' LINE, 37.5' SKIP)
5. MARKING DIAGONAL EPOXY 12-INCH (WHITE)
6. MARKING LINE EPOXY 8-INCH (WHITE)
7. MARKING CURB EPOXY (YELLOW)
8. MARKING ISLAND NOSE EPOXY
9. MARKING LINE EPOXY 8-INCH (WHITE) (3' LINE, 9' SKIP)
10. MARKING STOP LINE EPOXY 18-INCH (WHITE)
11. MARKING ARROW EPOXY
12. MARKING WORD EPOXY
13. MARKING LINE GROOVED WET REFLECTIVE EPOXY (WHITE)

N



NOTE:

EXACT LOCATION OF PASSING ZONES TO BE PER
LOCATING NO PASSING ZONE ITEM.
SEE SDD 2-LANE RURAL CENTERLINE RUMBLE STRIP,
MILLING FOR GROOVE SPACING AND GAP LOCATIONS.

PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	PAVEMENT MARKING	SHEET 110	E

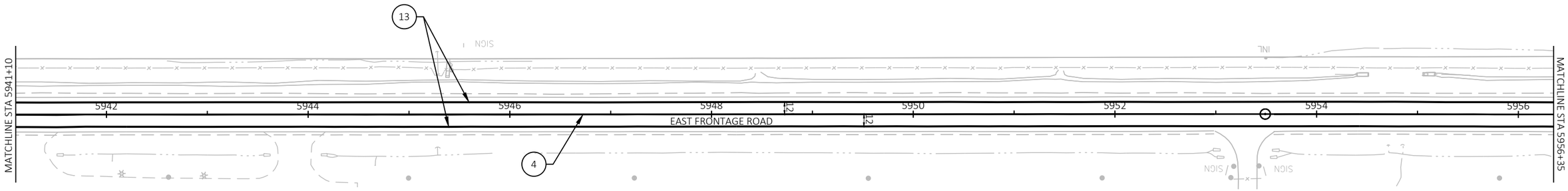
FILE NAME : W:\PROJECTS\21234\04_CADD_01\CADD_SHEETS\024501-PM.DWG
LAYOUT NAME - 07
PLOT DATE : 10/27/2022 2:44 PM
PLOT BY : ALEXANDER UNDERWOOD
PLOT NAME :
PLOT SCALE : 1 IN:100 FT

2

LEGEND

1. MARKING LINE EPOXY 4-INCH (YELLOW)
2. MARKING LINE EPOXY 4-INCH (WHITE)
3. MARKING LINE EPOXY 4-INCH (WHITE) (12.5' LINE, 37.5' SKIP)
4. MARKING LINE EPOXY 4-INCH (YELLOW) (12.5' LINE, 37.5' SKIP)
5. MARKING DIAGONAL EPOXY 12-INCH (WHITE)
6. MARKING LINE EPOXY 8-INCH (WHITE)
7. MARKING CURB EPOXY (YELLOW)
8. MARKING ISLAND NOSE EPOXY
9. MARKING LINE EPOXY 8-INCH (WHITE) (3' LINE, 9' SKIP)
10. MARKING STOP LINE EPOXY 18-INCH (WHITE)
11. MARKING ARROW EPOXY
12. MARKING WORD EPOXY
13. MARKING LINE GROOVED WET REFLECTIVE EPOXY (WHITE)

N



NOTE:

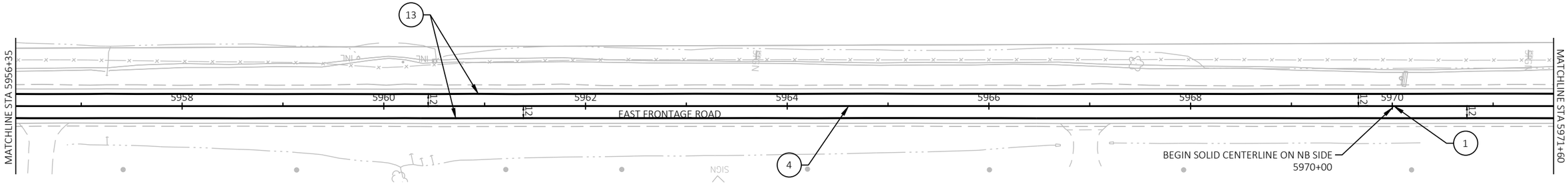
EXACT LOCATION OF PASSING ZONES TO BE PER
LOCATING NO PASSING ZONE ITEM.
SEE SDD 2-LANE RURAL CENTERLINE RUMBLE STRIP,
MILLING FOR GROOVE SPACING AND GAP LOCATIONS.

PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	PAVEMENT MARKING	SHEET 111	E

LEGEND

1. MARKING LINE EPOXY 4-INCH (YELLOW)
2. MARKING LINE EPOXY 4-INCH (WHITE)
3. MARKING LINE EPOXY 4-INCH (WHITE) (12.5' LINE, 37.5' SKIP)
4. MARKING LINE EPOXY 4-INCH (YELLOW) (12.5' LINE, 37.5' SKIP)
5. MARKING DIAGONAL EPOXY 12-INCH (WHITE)
6. MARKING LINE EPOXY 8-INCH (WHITE)
7. MARKING CURB EPOXY (YELLOW)
8. MARKING ISLAND NOSE EPOXY
9. MARKING LINE EPOXY 8-INCH (WHITE) (3' LINE, 9' SKIP)
10. MARKING STOP LINE EPOXY 18-INCH (WHITE)
11. MARKING ARROW EPOXY
12. MARKING WORD EPOXY
13. MARKING LINE GROOVED WET REFLECTIVE EPOXY (WHITE)

N



NOTE:

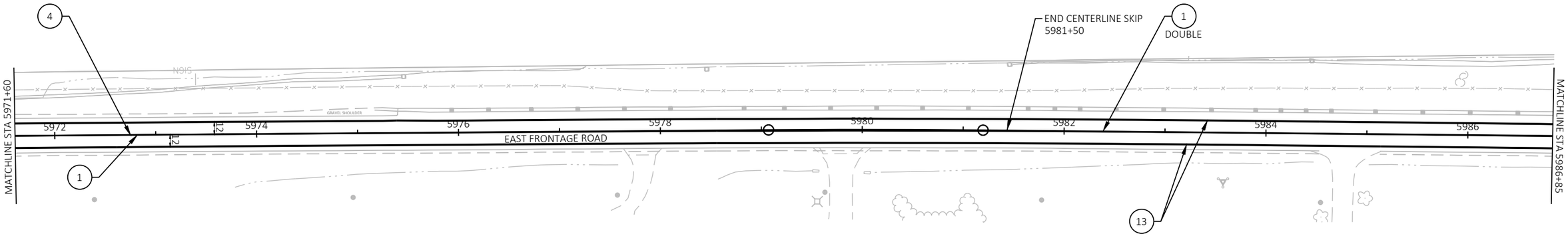
EXACT LOCATION OF PASSING ZONES TO BE PER
LOCATING NO PASSING ZONE ITEM.
SEE SDD 2-LANE RURAL CENTERLINE RUMBLE STRIP,
MILLING FOR GROOVE SPACING AND GAP LOCATIONS.

PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	PAVEMENT MARKING	SHEET 112	E

LEGEND

1. MARKING LINE EPOXY 4-INCH (YELLOW)
2. MARKING LINE EPOXY 4-INCH (WHITE)
3. MARKING LINE EPOXY 4-INCH (WHITE) (12.5' LINE, 37.5' SKIP)
4. MARKING LINE EPOXY 4-INCH (YELLOW) (12.5' LINE, 37.5' SKIP)
5. MARKING DIAGONAL EPOXY 12-INCH (WHITE)
6. MARKING LINE EPOXY 8-INCH (WHITE)
7. MARKING CURB EPOXY (YELLOW)
8. MARKING ISLAND NOSE EPOXY
9. MARKING LINE EPOXY 8-INCH (WHITE) (3' LINE, 9' SKIP)
10. MARKING STOP LINE EPOXY 18-INCH (WHITE)
11. MARKING ARROW EPOXY
12. MARKING WORD EPOXY
13. MARKING LINE GROOVED WET REFLECTIVE EPOXY (WHITE)

N



NOTE:

EXACT LOCATION OF PASSING ZONES TO BE PER
LOCATING NO PASSING ZONE ITEM.
SEE SDD 2-LANE RURAL CENTERLINE RUMBLE STRIP,
MILLING FOR GROOVE SPACING AND GAP LOCATIONS.

PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	PAVEMENT MARKING	SHEET 113	E

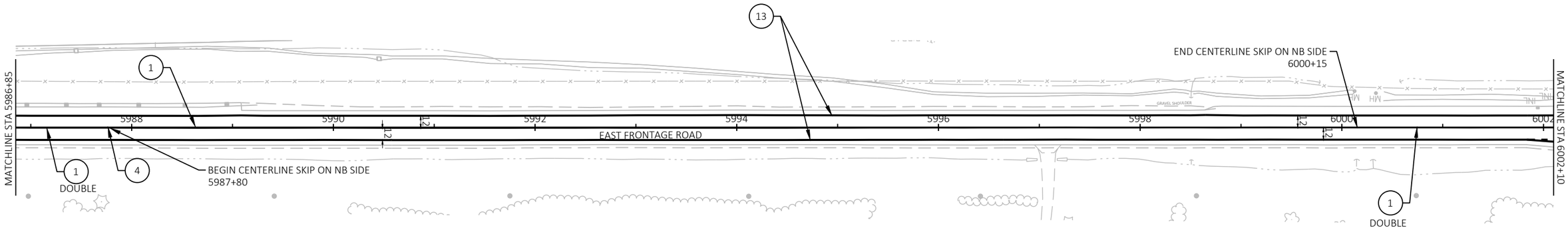
FILE NAME : W:\PROJECTS\21234\04_CADD_01\CADD_SHEETS\024501-PM.DWG
LAYOUT NAME - 10
PLOT DATE : 10/27/2022 2:45 PM
PLOT BY : ALEXANDER UNDERWOOD
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

LEGEND

1. MARKING LINE EPOXY 4-INCH (YELLOW)
2. MARKING LINE EPOXY 4-INCH (WHITE)
3. MARKING LINE EPOXY 4-INCH (WHITE) (12.5' LINE, 37.5' SKIP)
4. MARKING LINE EPOXY 4-INCH (YELLOW) (12.5' LINE, 37.5' SKIP)
5. MARKING DIAGONAL EPOXY 12-INCH (WHITE)
6. MARKING LINE EPOXY 8-INCH (WHITE)
7. MARKING CURB EPOXY (YELLOW)
8. MARKING ISLAND NOSE EPOXY
9. MARKING LINE EPOXY 8-INCH (WHITE) (3' LINE, 9' SKIP)
10. MARKING STOP LINE EPOXY 18-INCH (WHITE)
11. MARKING ARROW EPOXY
12. MARKING WORD EPOXY
13. MARKING LINE GROOVED WET REFLECTIVE EPOXY (WHITE)

N



NOTE:

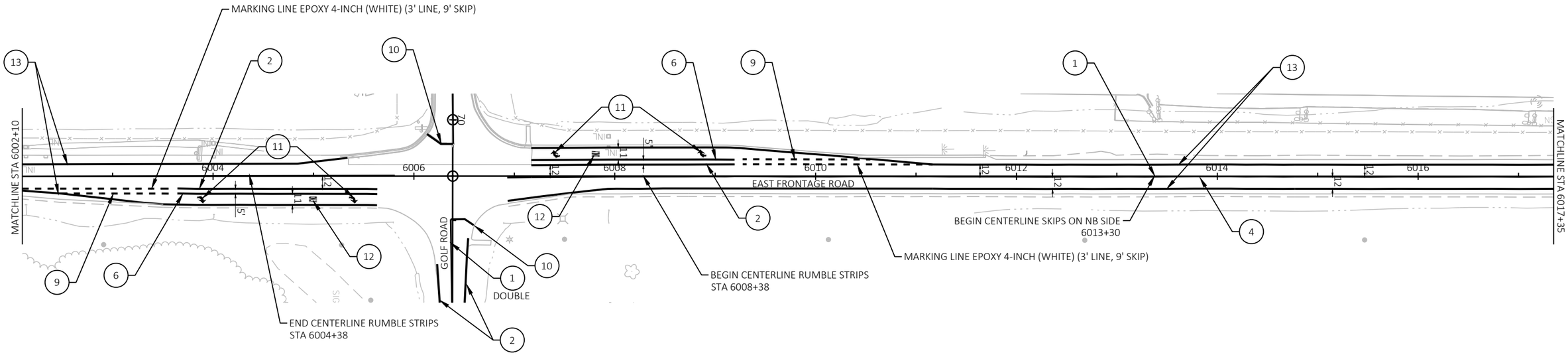
EXACT LOCATION OF PASSING ZONES TO BE PER
LOCATING NO PASSING ZONE ITEM.
SEE SDD 2-LANE RURAL CENTERLINE RUMBLE STRIP,
MILLING FOR GROOVE SPACING AND GAP LOCATIONS.

PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	PAVEMENT MARKING	SHEET 114	E

LEGEND

1	MARKING LINE EPOXY 4-INCH (YELLOW)
2	MARKING LINE EPOXY 4-INCH (WHITE)
3	MARKING LINE EPOXY 4-INCH (WHITE) (12.5' LINE, 37.5' SKIP)
4	MARKING LINE EPOXY 4-INCH (YELLOW) (12.5' LINE, 37.5' SKIP)
5	MARKING DIAGONAL EPOXY 12-INCH (WHITE)
6	MARKING LINE EPOXY 8-INCH (WHITE)
7	MARKING CURB EPOXY (YELLOW)
8	MARKING ISLAND NOSE EPOXY
9	MARKING LINE EPOXY 8-INCH (WHITE) (3' LINE, 9' SKIP)
10	MARKING STOP LINE EPOXY 18-INCH (WHITE)
11	MARKING ARROW EPOXY
12	MARKING WORD EPOXY
13	MARKING LINE GROOVED WET REFLECTIVE EPOXY (WHITE)

N



NOTE:

EXACT LOCATION OF PASSING ZONES TO BE PER
LOCATING NO PASSING ZONE ITEM.
SEE SDD 2-LANE RURAL CENTERLINE RUMBLE STRIP,
MILLING FOR GROOVE SPACING AND GAP LOCATIONS.

PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	PAVEMENT MARKING	SHEET 115	E

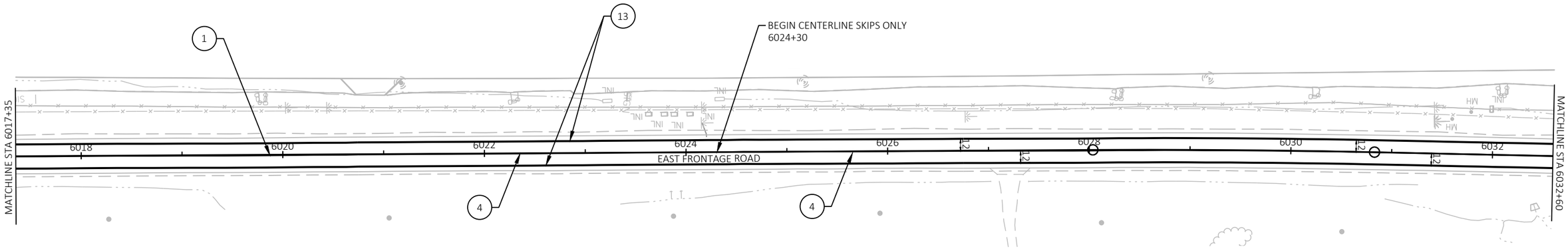
FILE NAME : W:\PROJECTS\21234\04_CADD_01\CADD_SHEETS\024501-PM.DWG
LAYOUT NAME - 12
PLOT DATE : 10/27/2022 2:45 PM PLOT BY : ALEXANDER UNDERWOOD PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

LEGEND

N

1. MARKING LINE EPOXY 4-INCH (YELLOW)
2. MARKING LINE EPOXY 4-INCH (WHITE)
3. MARKING LINE EPOXY 4-INCH (WHITE) (12.5' LINE, 37.5' SKIP)
4. MARKING LINE EPOXY 4-INCH (YELLOW) (12.5' LINE, 37.5' SKIP)
5. MARKING DIAGONAL EPOXY 12-INCH (WHITE)
6. MARKING LINE EPOXY 8-INCH (WHITE)
7. MARKING CURB EPOXY (YELLOW)
8. MARKING ISLAND NOSE EPOXY
9. MARKING LINE EPOXY 8-INCH (WHITE) (3' LINE, 9' SKIP)
10. MARKING STOP LINE EPOXY 18-INCH (WHITE)
11. MARKING ARROW EPOXY
12. MARKING WORD EPOXY
13. MARKING LINE GROOVED WET REFLECTIVE EPOXY (WHITE)



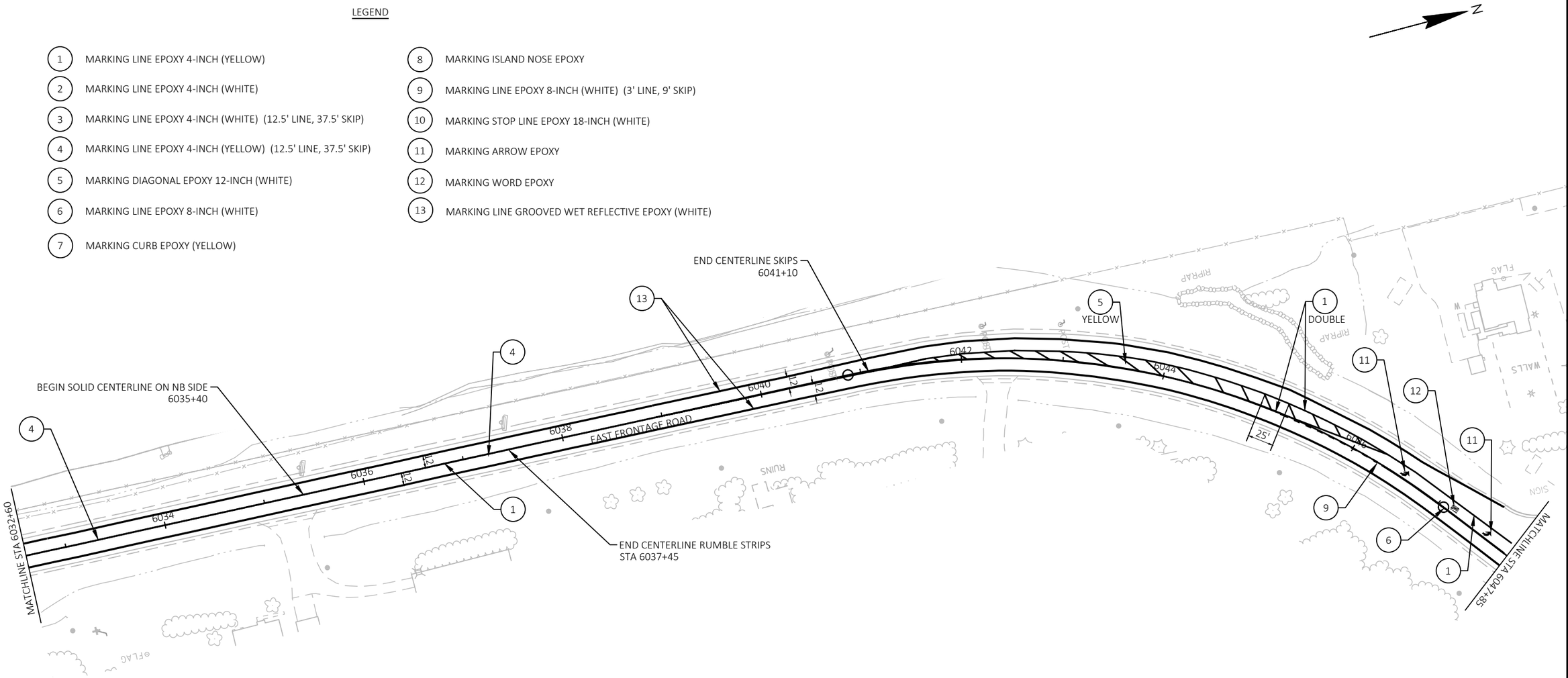
NOTE:

EXACT LOCATION OF PASSING ZONES TO BE PER
LOCATING NO PASSING ZONE ITEM.
SEE SDD 2-LANE RURAL CENTERLINE RUMBLE STRIP,
MILLING FOR GROOVE SPACING AND GAP LOCATIONS.

PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	PAVEMENT MARKING	SHEET 116	E

LEGEND

1. MARKING LINE EPOXY 4-INCH (YELLOW)
2. MARKING LINE EPOXY 4-INCH (WHITE)
3. MARKING LINE EPOXY 4-INCH (WHITE) (12.5' LINE, 37.5' SKIP)
4. MARKING LINE EPOXY 4-INCH (YELLOW) (12.5' LINE, 37.5' SKIP)
5. MARKING DIAGONAL EPOXY 12-INCH (WHITE)
6. MARKING LINE EPOXY 8-INCH (WHITE)
7. MARKING CURB EPOXY (YELLOW)
8. MARKING ISLAND NOSE EPOXY
9. MARKING LINE EPOXY 8-INCH (WHITE) (3' LINE, 9' SKIP)
10. MARKING STOP LINE EPOXY 18-INCH (WHITE)
11. MARKING ARROW EPOXY
12. MARKING WORD EPOXY
13. MARKING LINE GROOVED WET REFLECTIVE EPOXY (WHITE)



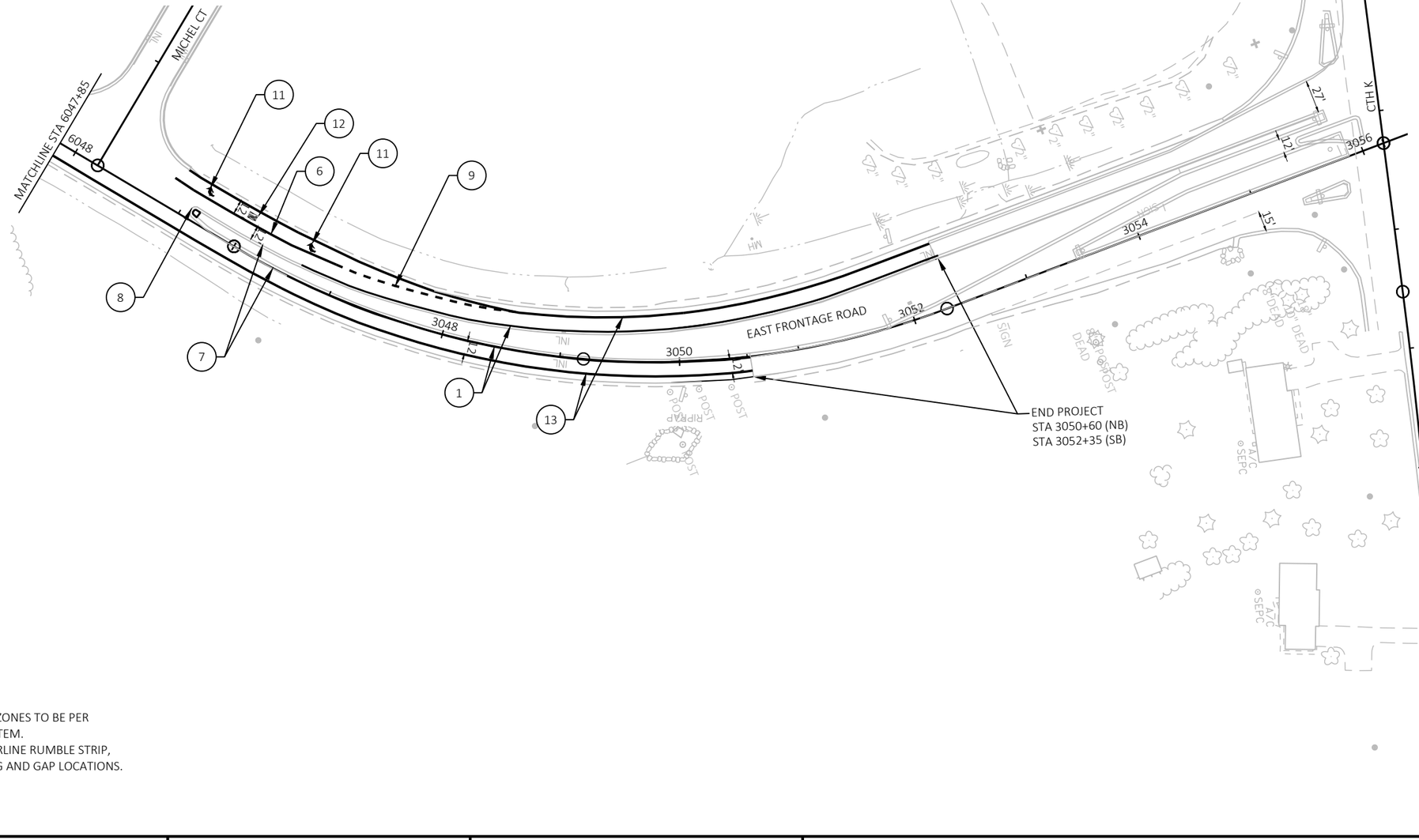
NOTE:

EXACT LOCATION OF PASSING ZONES TO BE PER
LOCATING NO PASSING ZONE ITEM.
SEE SDD 2-LANE RURAL CENTERLINE RUMBLE STRIP,
MILLING FOR GROOVE SPACING AND GAP LOCATIONS.

PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	PAVEMENT MARKING	SHEET 117	E

LEGEND

1. MARKING LINE EPOXY 4-INCH (YELLOW)
2. MARKING LINE EPOXY 4-INCH (WHITE)
3. MARKING LINE EPOXY 4-INCH (WHITE) (12.5' LINE, 37.5' SKIP)
4. MARKING LINE EPOXY 4-INCH (YELLOW) (12.5' LINE, 37.5' SKIP)
5. MARKING DIAGONAL EPOXY 12-INCH (WHITE)
6. MARKING LINE EPOXY 8-INCH (WHITE)
7. MARKING CURB EPOXY (YELLOW)
8. MARKING ISLAND NOSE EPOXY
9. MARKING LINE EPOXY 8-INCH (WHITE) (3' LINE, 9' SKIP)
10. MARKING STOP LINE EPOXY 18-INCH (WHITE)
11. MARKING ARROW EPOXY
12. MARKING WORD EPOXY
13. MARKING LINE GROOVED WET REFLECTIVE EPOXY (WHITE)



NOTE:

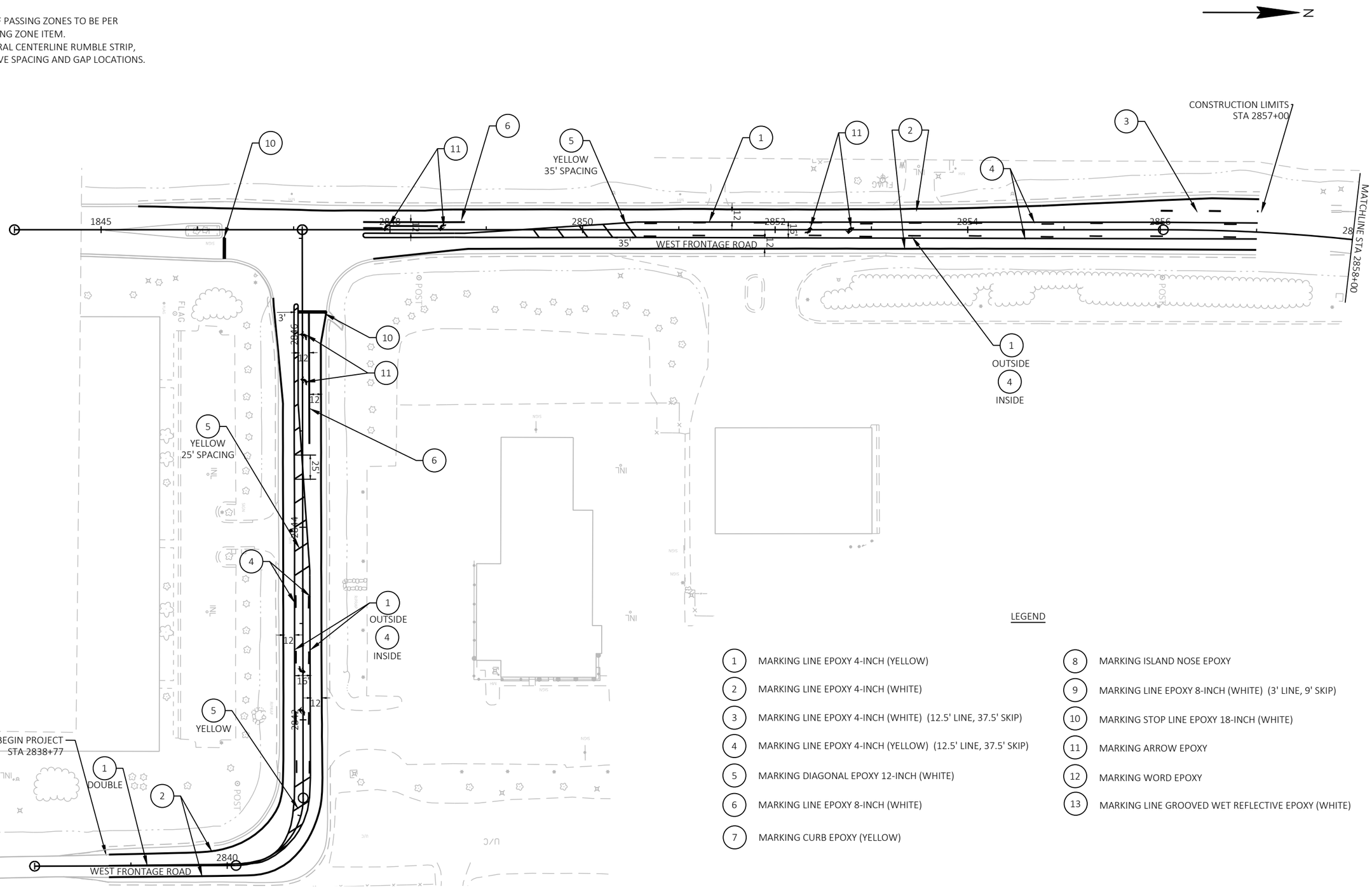
EXACT LOCATION OF PASSING ZONES TO BE PER
LOCATING NO PASSING ZONE ITEM.
SEE SDD 2-LANE RURAL CENTERLINE RUMBLE STRIP,
MILLING FOR GROOVE SPACING AND GAP LOCATIONS.

PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	PAVEMENT MARKING	SHEET 118	E

FILE NAME : W:\PROJECTS\21234\04_CADD_01\CADD_SHEETS\024501-PM.DWG
LAYOUT NAME - 15
PLOT DATE : 10/27/2022 2:46 PM PLOT BY : ALEXANDER UNDERWOOD PLOT NAME : PLOT SCALE : 1 IN:100 FT

NOTE:

EXACT LOCATION OF PASSING ZONES TO BE PER
LOCATING NO PASSING ZONE ITEM.
SEE SDD 2-LANE RURAL CENTERLINE RUMBLE STRIP,
MILLING FOR GROOVE SPACING AND GAP LOCATIONS.



LEGEND

1. MARKING LINE EPOXY 4-INCH (YELLOW)
2. MARKING LINE EPOXY 4-INCH (WHITE)
3. MARKING LINE EPOXY 4-INCH (WHITE) (12.5' LINE, 37.5' SKIP)
4. MARKING LINE EPOXY 4-INCH (YELLOW) (12.5' LINE, 37.5' SKIP)
5. MARKING DIAGONAL EPOXY 12-INCH (WHITE)
6. MARKING LINE EPOXY 8-INCH (WHITE)
7. MARKING CURB EPOXY (YELLOW)
8. MARKING ISLAND NOSE EPOXY
9. MARKING LINE EPOXY 8-INCH (WHITE) (3' LINE, 9' SKIP)
10. MARKING STOP LINE EPOXY 18-INCH (WHITE)
11. MARKING ARROW EPOXY
12. MARKING WORD EPOXY
13. MARKING LINE GROOVED WET REFLECTIVE EPOXY (WHITE)

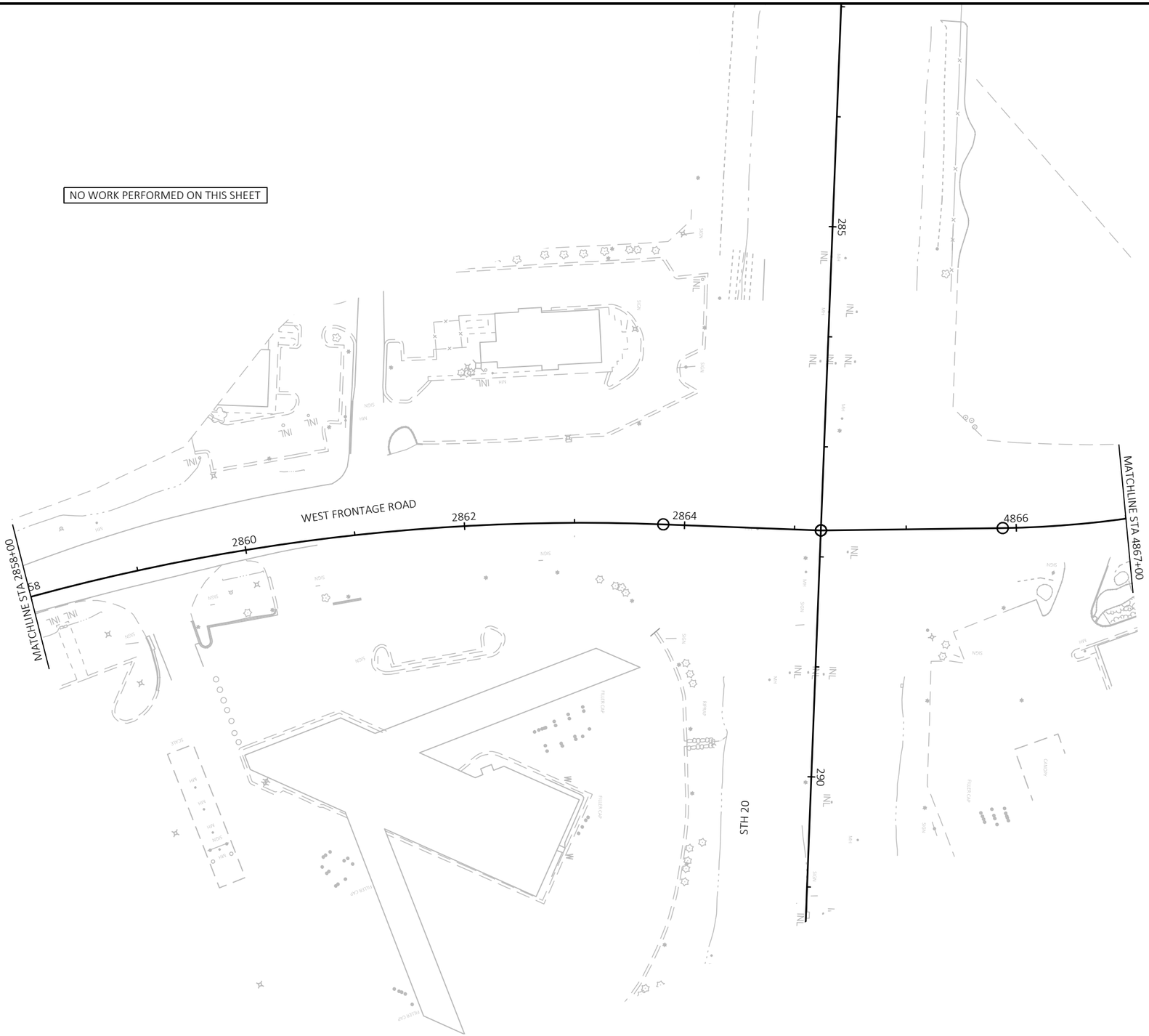
PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	PAVEMENT MARKING	SHEET 119	E

FILE NAME : W:\PROJECTS\21234\04_CADD_01\CADD_SHEETS\024501-PM.DWG
LAYOUT NAME - 16
PLOT DATE : 10/27/2022 2:46 PM PLOT BY : ALEXANDER UNDERWOOD PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

2

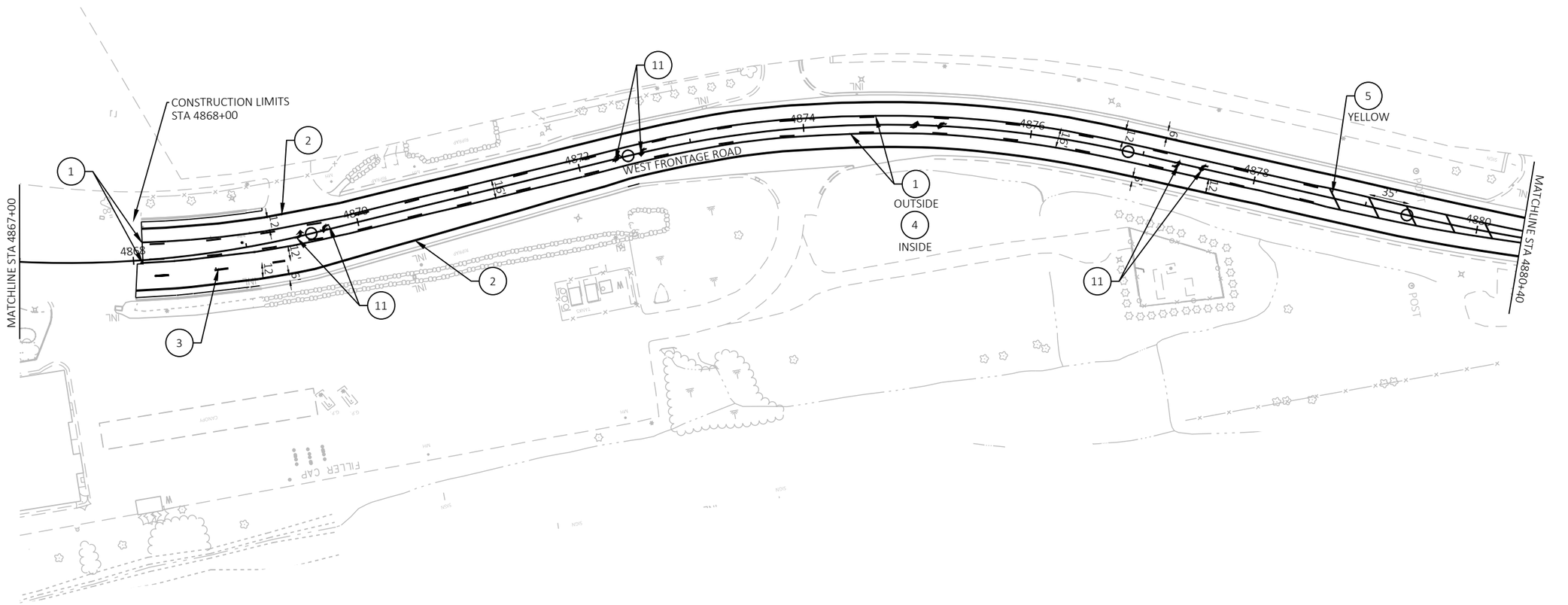
NO WORK PERFORMED ON THIS SHEET



PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	PAVEMENT MARKING	SHEET 120	E

LEGEND

1. MARKING LINE EPOXY 4-INCH (YELLOW)
2. MARKING LINE EPOXY 4-INCH (WHITE)
3. MARKING LINE EPOXY 4-INCH (WHITE) (12.5' LINE, 37.5' SKIP)
4. MARKING LINE EPOXY 4-INCH (YELLOW) (12.5' LINE, 37.5' SKIP)
5. MARKING DIAGONAL EPOXY 12-INCH (WHITE)
6. MARKING LINE EPOXY 8-INCH (WHITE)
7. MARKING CURB EPOXY (YELLOW)
8. MARKING ISLAND NOSE EPOXY
9. MARKING LINE EPOXY 8-INCH (WHITE) (3' LINE, 9' SKIP)
10. MARKING STOP LINE EPOXY 18-INCH (WHITE)
11. MARKING ARROW EPOXY
12. MARKING WORD EPOXY
13. MARKING LINE GROOVED WET REFLECTIVE EPOXY (WHITE)



NOTE:

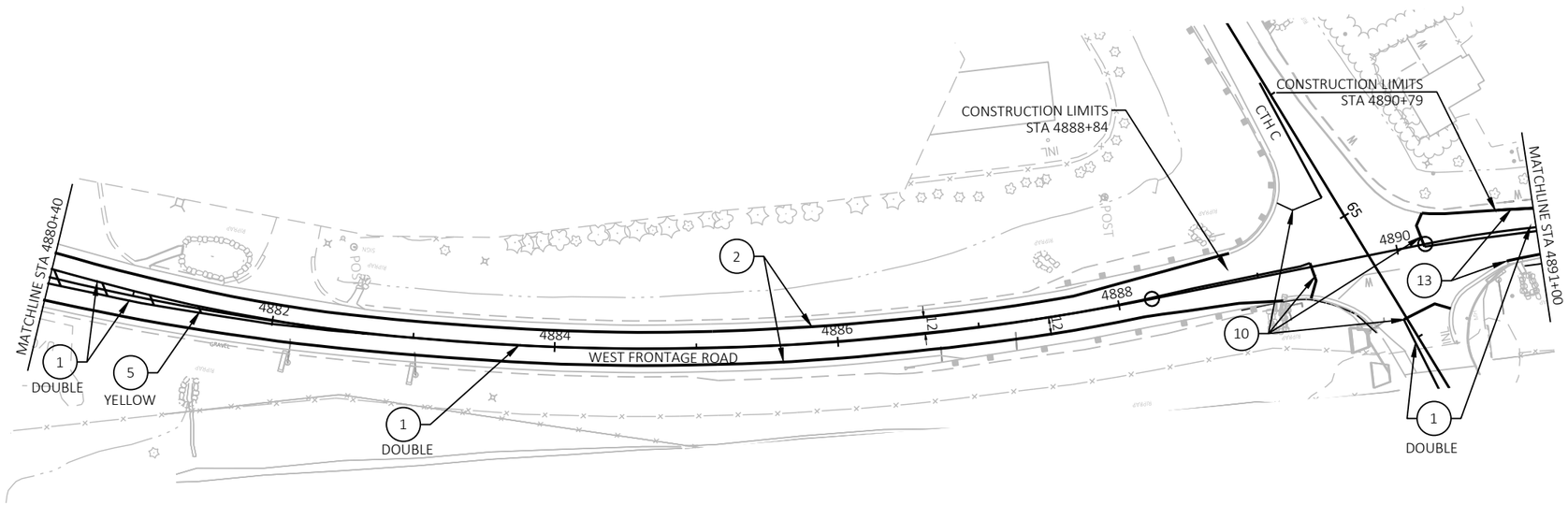
EXACT LOCATION OF PASSING ZONES TO BE PER
LOCATING NO PASSING ZONE ITEM.
SEE SDD 2-LANE RURAL CENTERLINE RUMBLE STRIP,
MILLING FOR GROOVE SPACING AND GAP LOCATIONS.

PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	PAVEMENT MARKING	SHEET 121	E

FILE NAME : W:\PROJECTS\21234\04_CADD_01\CADD_SHEETS\024501-PM.DWG
LAYOUT NAME - 17
PLOT DATE : 10/27/2022 2:47 PM PLOT BY : ALEXANDER UNDERWOOD PLOT NAME : PLOT SCALE : 1 IN:100 FT

LEGEND

1. MARKING LINE EPOXY 4-INCH (YELLOW)
2. MARKING LINE EPOXY 4-INCH (WHITE)
3. MARKING LINE EPOXY 4-INCH (WHITE) (12.5' LINE, 37.5' SKIP)
4. MARKING LINE EPOXY 4-INCH (YELLOW) (12.5' LINE, 37.5' SKIP)
5. MARKING DIAGONAL EPOXY 12-INCH (WHITE)
6. MARKING LINE EPOXY 8-INCH (WHITE)
7. MARKING CURB EPOXY (YELLOW)
8. MARKING ISLAND NOSE EPOXY
9. MARKING LINE EPOXY 8-INCH (WHITE) (3' LINE, 9' SKIP)
10. MARKING STOP LINE EPOXY 18-INCH (WHITE)
11. MARKING ARROW EPOXY
12. MARKING WORD EPOXY
13. MARKING LINE GROOVED WET REFLECTIVE EPOXY (WHITE)



NOTE:

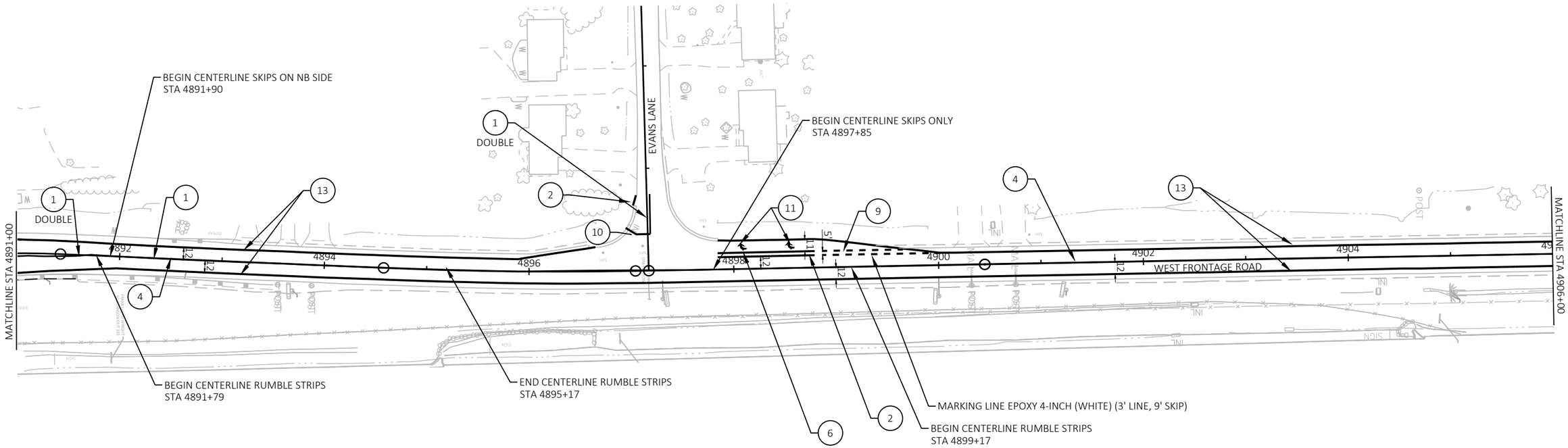
EXACT LOCATION OF PASSING ZONES TO BE PER
LOCATING NO PASSING ZONE ITEM.
SEE SDD 2-LANE RURAL CENTERLINE RUMBLE STRIP,
MILLING FOR GROOVE SPACING AND GAP LOCATIONS.

PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	PAVEMENT MARKING	SHEET 122	E

LEGEND

1. MARKING LINE EPOXY 4-INCH (YELLOW)
2. MARKING LINE EPOXY 4-INCH (WHITE)
3. MARKING LINE EPOXY 4-INCH (WHITE) (12.5' LINE, 37.5' SKIP)
4. MARKING LINE EPOXY 4-INCH (YELLOW) (12.5' LINE, 37.5' SKIP)
5. MARKING DIAGONAL EPOXY 12-INCH (WHITE)
6. MARKING LINE EPOXY 8-INCH (WHITE)
7. MARKING CURB EPOXY (YELLOW)
8. MARKING ISLAND NOSE EPOXY
9. MARKING LINE EPOXY 8-INCH (WHITE) (3' LINE, 9' SKIP)
10. MARKING STOP LINE EPOXY 18-INCH (WHITE)
11. MARKING ARROW EPOXY
12. MARKING WORD EPOXY
13. MARKING LINE GROOVED WET REFLECTIVE EPOXY (WHITE)

N



NOTE:

EXACT LOCATION OF PASSING ZONES TO BE PER
LOCATING NO PASSING ZONE ITEM.
SEE SDD 2-LANE RURAL CENTERLINE RUMBLE STRIP,
MILLING FOR GROOVE SPACING AND GAP LOCATIONS.

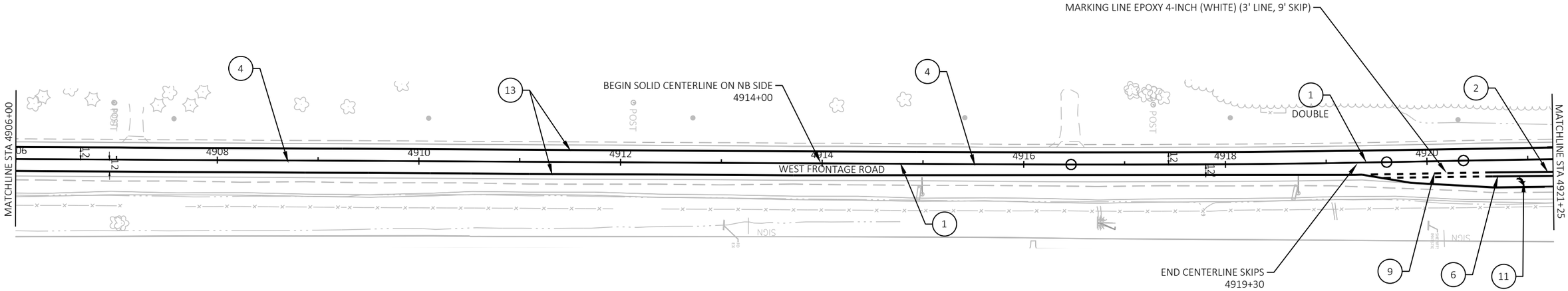
PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	PAVEMENT MARKING	SHEET 123	E

FILE NAME : W:\PROJECTS\21234\04_CADD_01\CADD_SHEETS\024501-PM.DWG
LAYOUT NAME - 19
PLOT DATE : 10/27/2022 2:47 PM
PLOT BY : ALEXANDER UNDERWOOD
PLOT NAME :
PLOT SCALE : 1 IN:100 FT

LEGEND

1. MARKING LINE EPOXY 4-INCH (YELLOW)
2. MARKING LINE EPOXY 4-INCH (WHITE)
3. MARKING LINE EPOXY 4-INCH (WHITE) (12.5' LINE, 37.5' SKIP)
4. MARKING LINE EPOXY 4-INCH (YELLOW) (12.5' LINE, 37.5' SKIP)
5. MARKING DIAGONAL EPOXY 12-INCH (WHITE)
6. MARKING LINE EPOXY 8-INCH (WHITE)
7. MARKING CURB EPOXY (YELLOW)
8. MARKING ISLAND NOSE EPOXY
9. MARKING LINE EPOXY 8-INCH (WHITE) (3' LINE, 9' SKIP)
10. MARKING STOP LINE EPOXY 18-INCH (WHITE)
11. MARKING ARROW EPOXY
12. MARKING WORD EPOXY
13. MARKING LINE GROOVED WET REFLECTIVE EPOXY (WHITE)

N



NOTE:

EXACT LOCATION OF PASSING ZONES TO BE PER
LOCATING NO PASSING ZONE ITEM.
SEE SDD 2-LANE RURAL CENTERLINE RUMBLE STRIP,
MILLING FOR GROOVE SPACING AND GAP LOCATIONS.

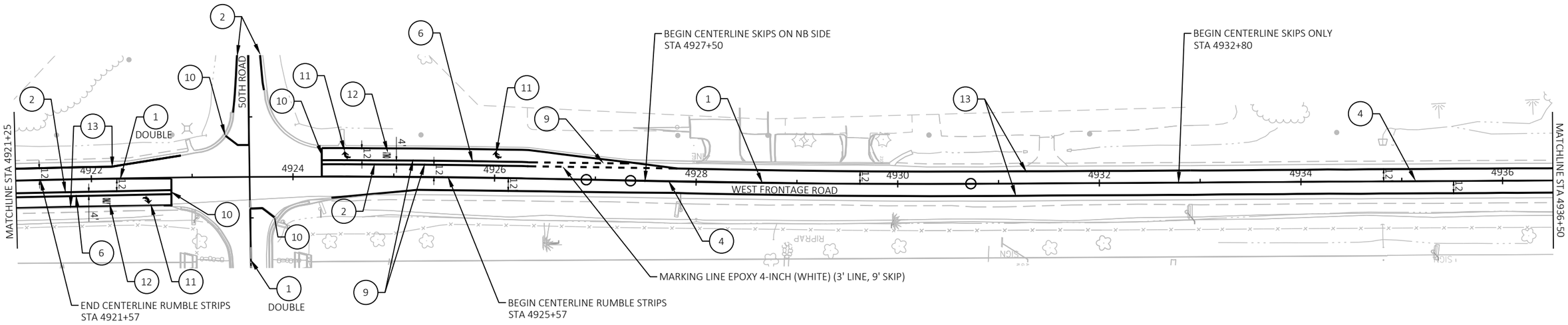
PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	PAVEMENT MARKING	SHEET 124	E

FILE NAME : W:\PROJECTS\21234\04_CADD_01\CADD_SHEETS\024501-PM.DWG
LAYOUT NAME - 20
PLOT DATE : 10/27/2022 2:48 PM
PLOT BY : ALEXANDER UNDERWOOD
PLOT NAME :
PLOT SCALE : 1 IN:100 FT

LEGEND

1. MARKING LINE EPOXY 4-INCH (YELLOW)
2. MARKING LINE EPOXY 4-INCH (WHITE)
3. MARKING LINE EPOXY 4-INCH (WHITE) (12.5' LINE, 37.5' SKIP)
4. MARKING LINE EPOXY 4-INCH (YELLOW) (12.5' LINE, 37.5' SKIP)
5. MARKING DIAGONAL EPOXY 12-INCH (WHITE)
6. MARKING LINE EPOXY 8-INCH (WHITE)
7. MARKING CURB EPOXY (YELLOW)
8. MARKING ISLAND NOSE EPOXY
9. MARKING LINE EPOXY 8-INCH (WHITE) (3' LINE, 9' SKIP)
10. MARKING STOP LINE EPOXY 18-INCH (WHITE)
11. MARKING ARROW EPOXY
12. MARKING WORD EPOXY
13. MARKING LINE GROOVED WET REFLECTIVE EPOXY (WHITE)

N



NOTE:

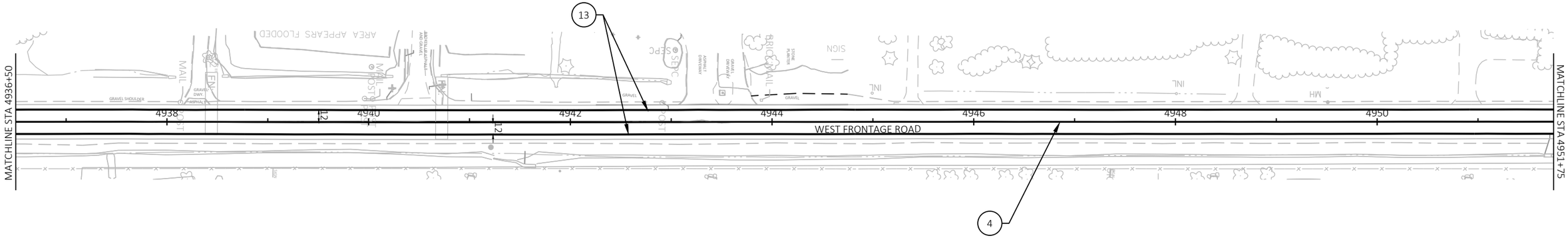
EXACT LOCATION OF PASSING ZONES TO BE PER
LOCATING NO PASSING ZONE ITEM.
SEE SDD 2-LANE RURAL CENTERLINE RUMBLE STRIP,
MILLING FOR GROOVE SPACING AND GAP LOCATIONS.

PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	PAVEMENT MARKING	SHEET 125	E

LEGEND

1. MARKING LINE EPOXY 4-INCH (YELLOW)
2. MARKING LINE EPOXY 4-INCH (WHITE)
3. MARKING LINE EPOXY 4-INCH (WHITE) (12.5' LINE, 37.5' SKIP)
4. MARKING LINE EPOXY 4-INCH (YELLOW) (12.5' LINE, 37.5' SKIP)
5. MARKING DIAGONAL EPOXY 12-INCH (WHITE)
6. MARKING LINE EPOXY 8-INCH (WHITE)
7. MARKING CURB EPOXY (YELLOW)
8. MARKING ISLAND NOSE EPOXY
9. MARKING LINE EPOXY 8-INCH (WHITE) (3' LINE, 9' SKIP)
10. MARKING STOP LINE EPOXY 18-INCH (WHITE)
11. MARKING ARROW EPOXY
12. MARKING WORD EPOXY
13. MARKING LINE GROOVED WET REFLECTIVE EPOXY (WHITE)

N



NOTE:

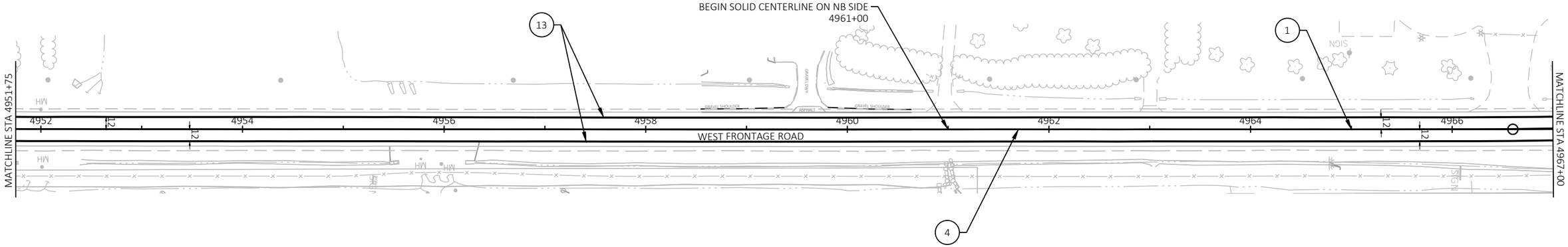
EXACT LOCATION OF PASSING ZONES TO BE PER
LOCATING NO PASSING ZONE ITEM.
SEE SDD 2-LANE RURAL CENTERLINE RUMBLE STRIP,
MILLING FOR GROOVE SPACING AND GAP LOCATIONS.

PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	PAVEMENT MARKING	SHEET 126	E

LEGEND

1. MARKING LINE EPOXY 4-INCH (YELLOW)
2. MARKING LINE EPOXY 4-INCH (WHITE)
3. MARKING LINE EPOXY 4-INCH (WHITE) (12.5' LINE, 37.5' SKIP)
4. MARKING LINE EPOXY 4-INCH (YELLOW) (12.5' LINE, 37.5' SKIP)
5. MARKING DIAGONAL EPOXY 12-INCH (WHITE)
6. MARKING LINE EPOXY 8-INCH (WHITE)
7. MARKING CURB EPOXY (YELLOW)
8. MARKING ISLAND NOSE EPOXY
9. MARKING LINE EPOXY 8-INCH (WHITE) (3' LINE, 9' SKIP)
10. MARKING STOP LINE EPOXY 18-INCH (WHITE)
11. MARKING ARROW EPOXY
12. MARKING WORD EPOXY
13. MARKING LINE GROOVED WET REFLECTIVE EPOXY (WHITE)

N



NOTE:

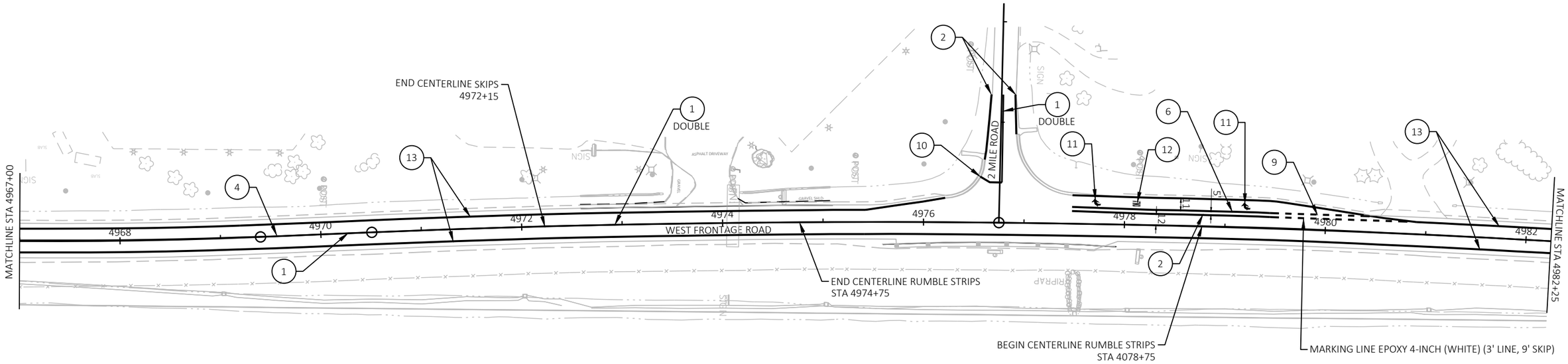
EXACT LOCATION OF PASSING ZONES TO BE PER
LOCATING NO PASSING ZONE ITEM.
SEE SDD 2-LANE RURAL CENTERLINE RUMBLE STRIP,
MILLING FOR GROOVE SPACING AND GAP LOCATIONS.

PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	PAVEMENT MARKING	SHEET 127	E

LEGEND

1. MARKING LINE EPOXY 4-INCH (YELLOW)
2. MARKING LINE EPOXY 4-INCH (WHITE)
3. MARKING LINE EPOXY 4-INCH (WHITE) (12.5' LINE, 37.5' SKIP)
4. MARKING LINE EPOXY 4-INCH (YELLOW) (12.5' LINE, 37.5' SKIP)
5. MARKING DIAGONAL EPOXY 12-INCH (WHITE)
6. MARKING LINE EPOXY 8-INCH (WHITE)
7. MARKING CURB EPOXY (YELLOW)
8. MARKING ISLAND NOSE EPOXY
9. MARKING LINE EPOXY 8-INCH (WHITE) (3' LINE, 9' SKIP)
10. MARKING STOP LINE EPOXY 18-INCH (WHITE)
11. MARKING ARROW EPOXY
12. MARKING WORD EPOXY
13. MARKING LINE GROOVED WET REFLECTIVE EPOXY (WHITE)

N



NOTE:

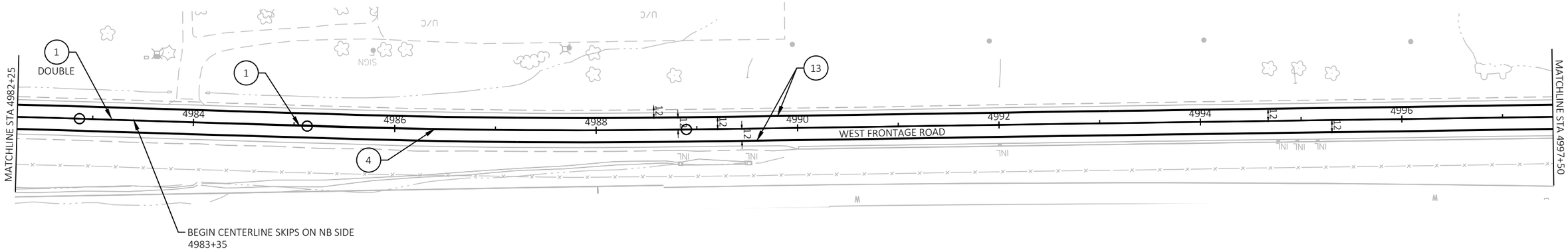
EXACT LOCATION OF PASSING ZONES TO BE PER
LOCATING NO PASSING ZONE ITEM.
SEE SDD 2-LANE RURAL CENTERLINE RUMBLE STRIP,
MILLING FOR GROOVE SPACING AND GAP LOCATIONS.

PROJECT NO: 1030-0-9-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	PAVEMENT MARKING	SHEET 128	E

LEGEND

1. MARKING LINE EPOXY 4-INCH (YELLOW)
2. MARKING LINE EPOXY 4-INCH (WHITE)
3. MARKING LINE EPOXY 4-INCH (WHITE) (12.5' LINE, 37.5' SKIP)
4. MARKING LINE EPOXY 4-INCH (YELLOW) (12.5' LINE, 37.5' SKIP)
5. MARKING DIAGONAL EPOXY 12-INCH (WHITE)
6. MARKING LINE EPOXY 8-INCH (WHITE)
7. MARKING CURB EPOXY (YELLOW)
8. MARKING ISLAND NOSE EPOXY
9. MARKING LINE EPOXY 8-INCH (WHITE) (3' LINE, 9' SKIP)
10. MARKING STOP LINE EPOXY 18-INCH (WHITE)
11. MARKING ARROW EPOXY
12. MARKING WORD EPOXY
13. MARKING LINE GROOVED WET REFLECTIVE EPOXY (WHITE)

N



NOTE:

EXACT LOCATION OF PASSING ZONES TO BE PER
LOCATING NO PASSING ZONE ITEM.
SEE SDD 2-LANE RURAL CENTERLINE RUMBLE STRIP,
MILLING FOR GROOVE SPACING AND GAP LOCATIONS.

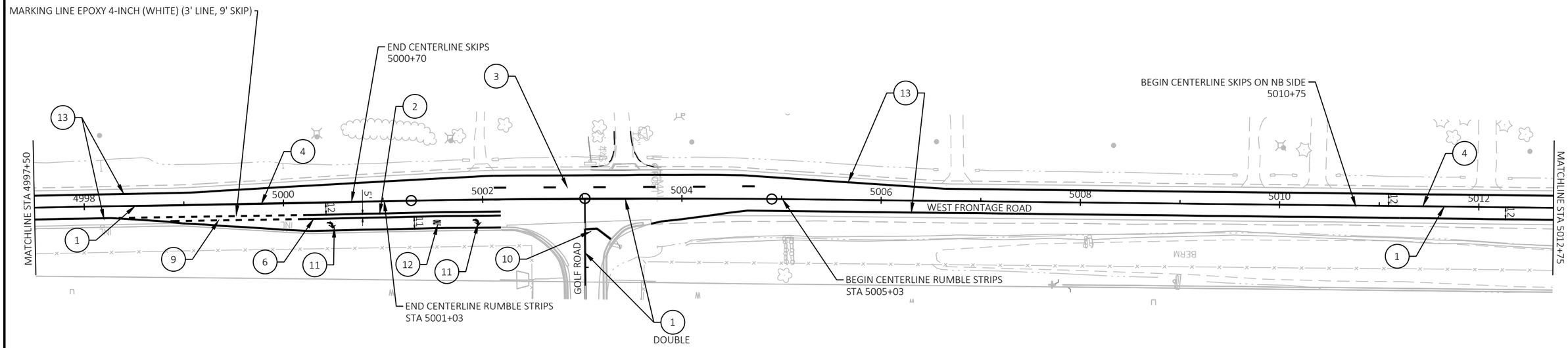
PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	PAVEMENT MARKING	SHEET 129	E

2

LEGEND

1. MARKING LINE EPOXY 4-INCH (YELLOW)
2. MARKING LINE EPOXY 4-INCH (WHITE)
3. MARKING LINE EPOXY 4-INCH (WHITE) (12.5' LINE, 37.5' SKIP)
4. MARKING LINE EPOXY 4-INCH (YELLOW) (12.5' LINE, 37.5' SKIP)
5. MARKING DIAGONAL EPOXY 12-INCH (WHITE)
6. MARKING LINE EPOXY 8-INCH (WHITE)
7. MARKING CURB EPOXY (YELLOW)
8. MARKING ISLAND NOSE EPOXY
9. MARKING LINE EPOXY 8-INCH (WHITE) (3' LINE, 9' SKIP)
10. MARKING STOP LINE EPOXY 18-INCH (WHITE)
11. MARKING ARROW EPOXY
12. MARKING WORD EPOXY
13. MARKING LINE GROOVED WET REFLECTIVE EPOXY (WHITE)

N



NOTE:

EXACT LOCATION OF PASSING ZONES TO BE PER
LOCATING NO PASSING ZONE ITEM.
SEE SDD 2-LANE RURAL CENTERLINE RUMBLE STRIP,
MILLING FOR GROOVE SPACING AND GAP LOCATIONS.

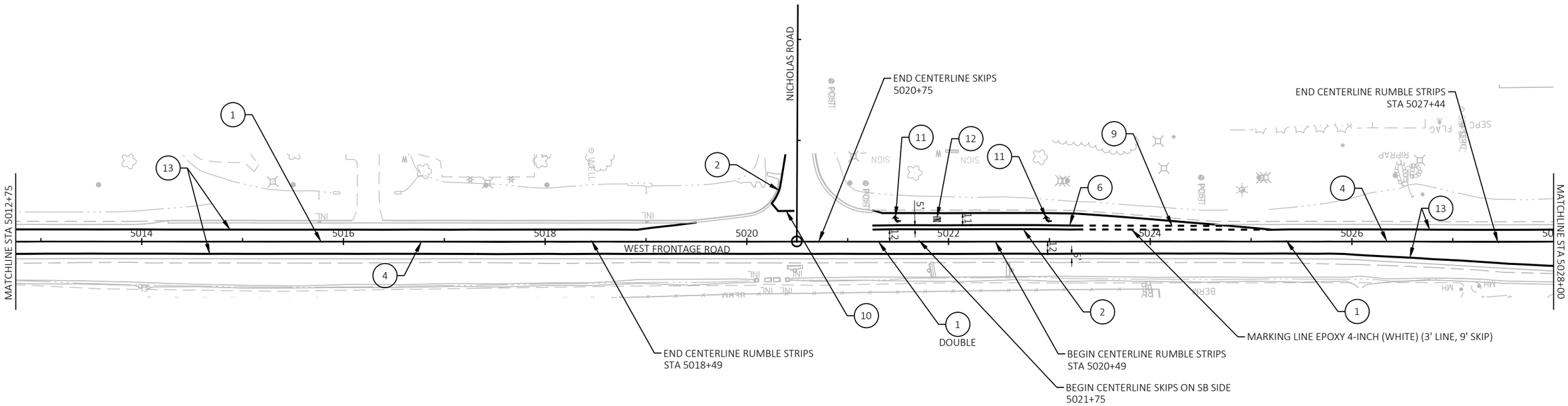
PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	PAVEMENT MARKING	SHEET 130	E

2

LEGEND

1. MARKING LINE EPOXY 4-INCH (YELLOW)
2. MARKING LINE EPOXY 4-INCH (WHITE)
3. MARKING LINE EPOXY 4-INCH (WHITE) (12.5' LINE, 37.5' SKIP)
4. MARKING LINE EPOXY 4-INCH (YELLOW) (12.5' LINE, 37.5' SKIP)
5. MARKING DIAGONAL EPOXY 12-INCH (WHITE)
6. MARKING LINE EPOXY 8-INCH (WHITE)
7. MARKING CURB EPOXY (YELLOW)
8. MARKING ISLAND NOSE EPOXY
9. MARKING LINE EPOXY 8-INCH (WHITE) (3' LINE, 9' SKIP)
10. MARKING STOP LINE EPOXY 18-INCH (WHITE)
11. MARKING ARROW EPOXY
12. MARKING WORD EPOXY
13. MARKING LINE GROOVED WET REFLECTIVE EPOXY (WHITE)

N



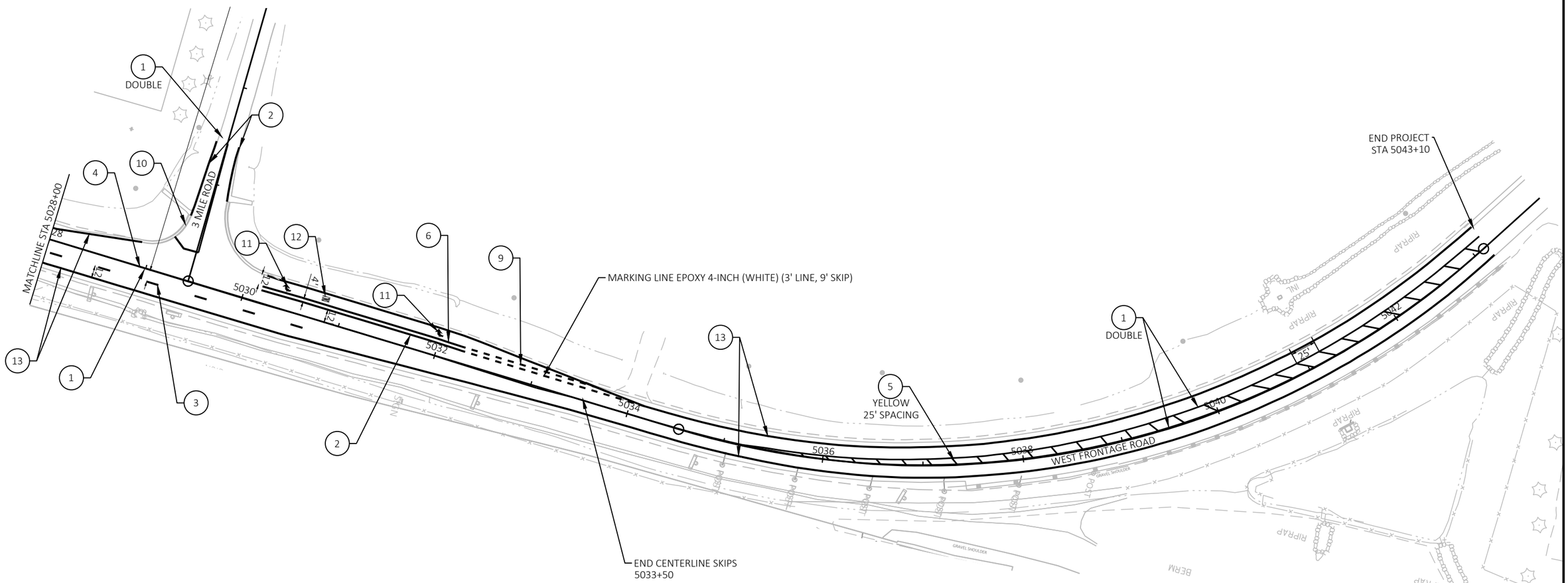
NOTE:

EXACT LOCATION OF PASSING ZONES TO BE PER
LOCATING NO PASSING ZONE ITEM.
SEE SDD 2-LANE RURAL CENTERLINE RUMBLE STRIP,
MILLING FOR GROOVE SPACING AND GAP LOCATIONS.

PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	PAVEMENT MARKING	SHEET 131	E

LEGEND

1. MARKING LINE EPOXY 4-INCH (YELLOW)
2. MARKING LINE EPOXY 4-INCH (WHITE)
3. MARKING LINE EPOXY 4-INCH (WHITE) (12.5' LINE, 37.5' SKIP)
4. MARKING LINE EPOXY 4-INCH (YELLOW) (12.5' LINE, 37.5' SKIP)
5. MARKING DIAGONAL EPOXY 12-INCH (WHITE)
6. MARKING LINE EPOXY 8-INCH (WHITE)
7. MARKING CURB EPOXY (YELLOW)
8. MARKING ISLAND NOSE EPOXY
9. MARKING LINE EPOXY 8-INCH (WHITE) (3' LINE, 9' SKIP)
10. MARKING STOP LINE EPOXY 18-INCH (WHITE)
11. MARKING ARROW EPOXY
12. MARKING WORD EPOXY
13. MARKING LINE GROOVED WET REFLECTIVE EPOXY (WHITE)



NOTE:

EXACT LOCATION OF PASSING ZONES TO BE PER
LOCATING NO PASSING ZONE ITEM.
SEE SDD 2-LANE RURAL CENTERLINE RUMBLE STRIP,
MILLING FOR GROOVE SPACING AND GAP LOCATIONS.

PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	PAVEMENT MARKING	SHEET 132	E

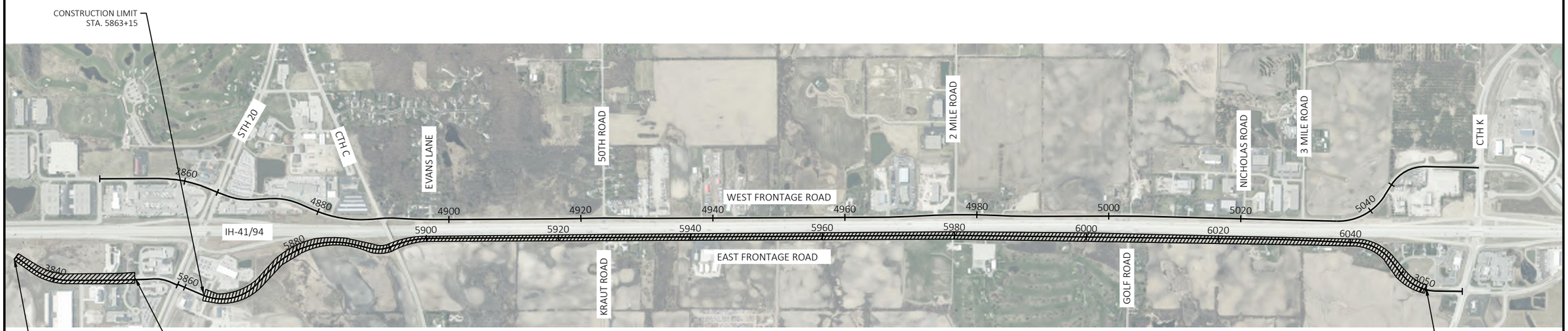
FILE NAME : W:\PROJECTS\21234\04_CADD_01\CADD_SHEETS\024501-PM.DWG
LAYOUT NAME - 28
PLOT DATE : 10/27/2022 2:50 PM
PLOT BY : ALEXANDER UNDERWOOD
PLOT NAME :
PLOT SCALE : 1 IN:100 FT

2

LEGEND

WORK ZONE

N



CONSTRUCTION ACTIVITIES

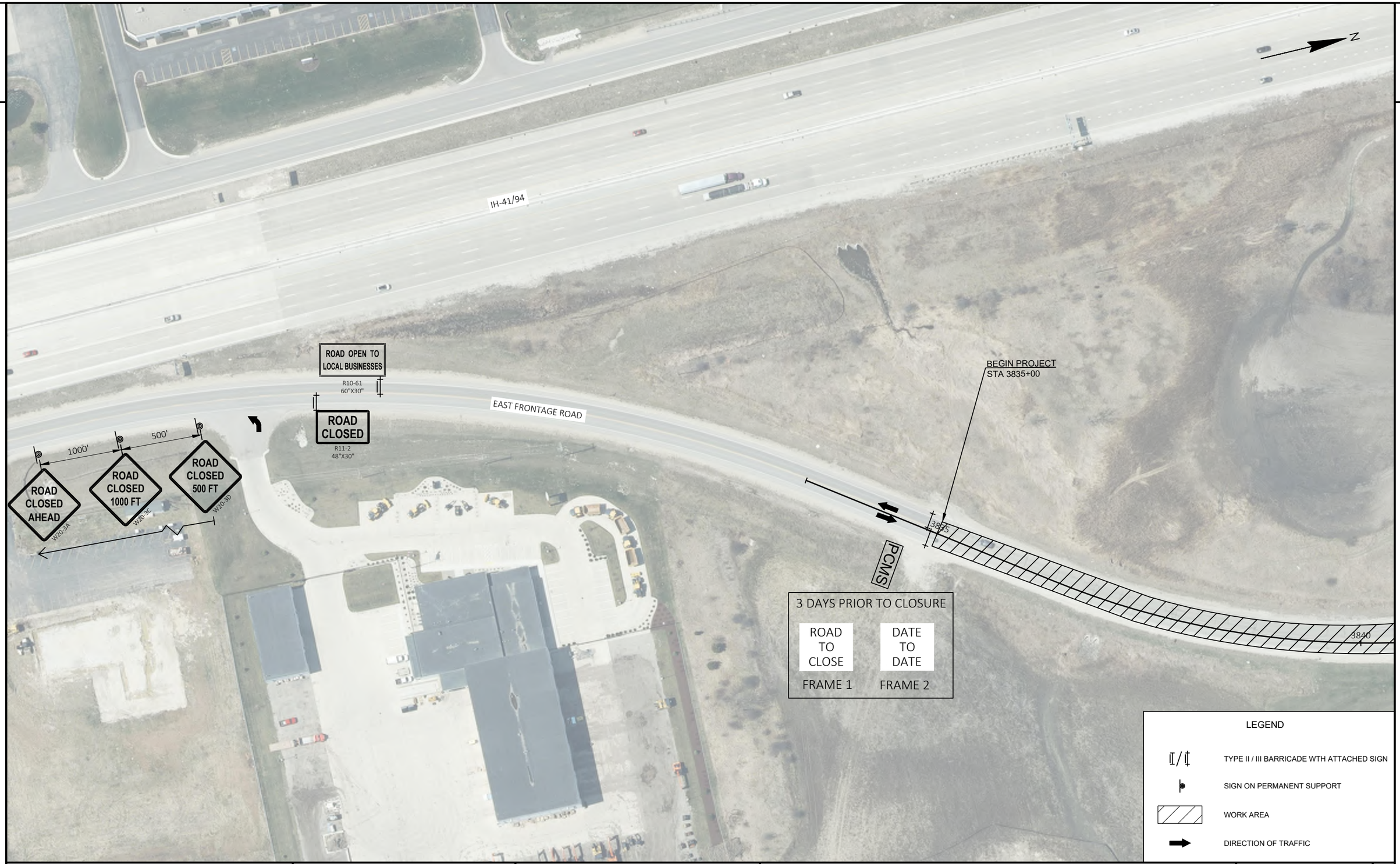
1. ALL CONSTRUCTION OPERATIONS ARE FROM STA 3835+00 TO STA 3052+35. CONSTRUCTION OPERATIONS INCLUDE MILLING, ASPHALT PAVING, SIGNING, PAVEMENT MARKING, BEAM GUARD, GRADING, AND CURB RAMP UPGRADES.
2. WORK TO BE PERFORMED DURING DAYTIME

MAINTENANCE OF TRAFFIC

1. EAST FRONTAGE ROAD CLOSURE FROM STH 11 TO CTH K
2. THROUGH TRAFFIC IS TO BE DETOURED TO THE WEST FRONTAGE ROAD
3. ACCESS TO ALL BUSINESSES AND RESIDENTS SHALL BE MAINTAINED AT ALL TIMES.

PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	TRAFFIC CONTROL - STAGE 1 OVERVIEW	SHEET 133	E

2



PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	TRAFFIC CONTROL - STAGE 1 DETAIL	SHEET 134	E

2



PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	TRAFFIC CONTROL - STAGE 1 DETAIL	SHEET 135	E

FILE NAME : W:\PROJECTS\21234\04_CADD_01\CADD_SHEETS\025100-TC.DWG
LAYOUT NAME - 2
PLOT DATE : 10/20/2022 2:11 PM
PLOT BY : ALEXANDER UNDERWOOD
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

2

N

ROAD WORK AHEAD
W20-1A

ROAD CLOSED AHEAD
W20-3A

END ROAD WORK
G20-2A
48"X24"

CONSTRUCTION LIMITS
STA 5863+15

ROAD CLOSED
R11-2
48"X30"

3855

5860

EAST FRONTAGE ROAD

ROAD CLOSED
R11-2
48"X30"

5865

3850

ROAD OPEN TO LOCAL BUSINESSES
R10-61
60"X30"

END ROAD WORK
G20-2A
48"X24"

ROAD CLOSED AHEAD
W20-3A

ROAD WORK AHEAD
W20-1A

ROAD CLOSED
R11-2
48"X30"

CONSTRUCTION LIMITS
STA 3852+25

STH 20

KILBOURN DRIVE

MILL AND OVERLAY IN CENTER OF INTERSECTION
TO BE COMPLETED USING FLAGGING

LEGEND

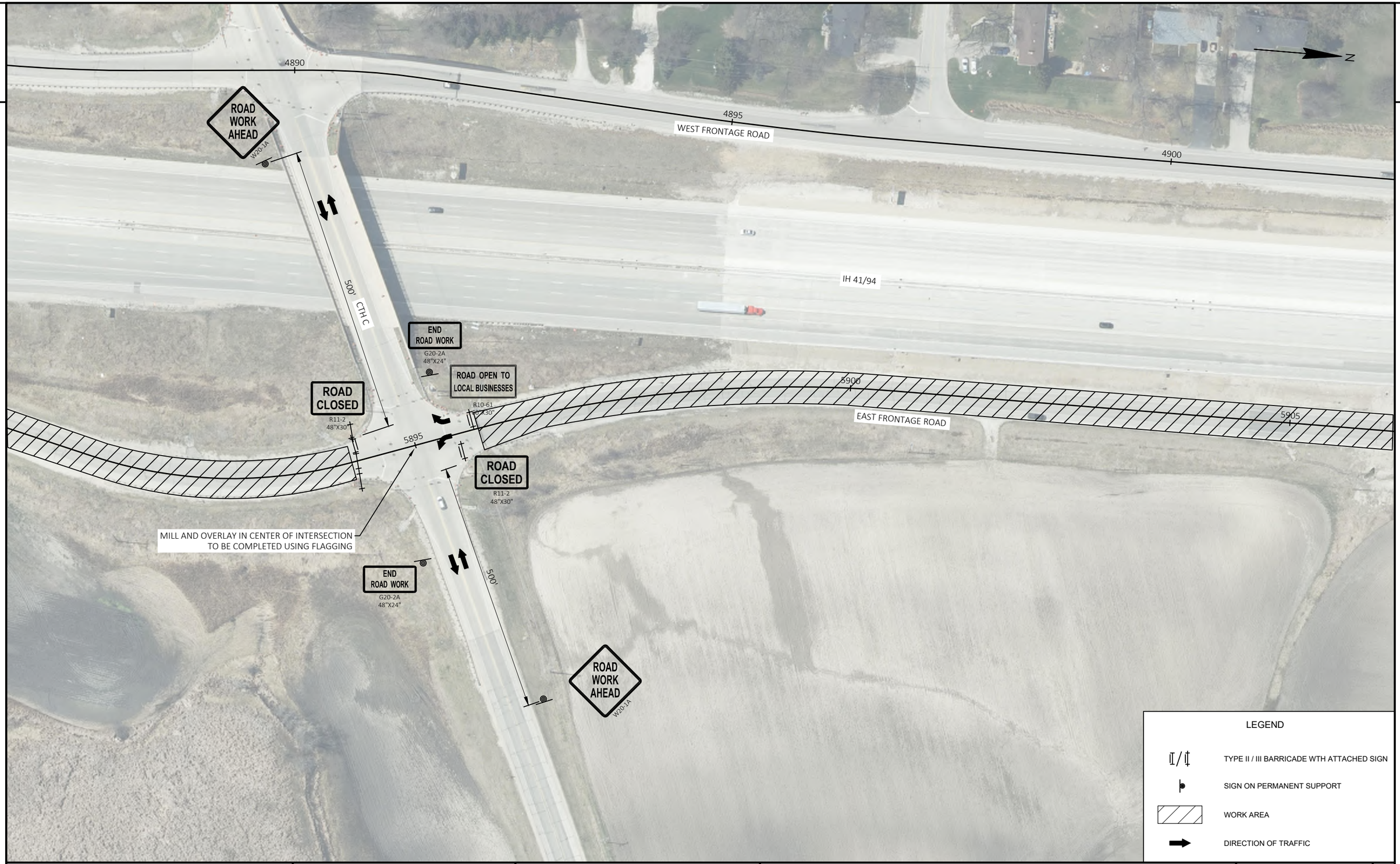
- TYPE II / III BARRICADE WTH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC

PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	TRAFFIC CONTROL - STAGE 1 DETAIL	SHEET 136	E

FILE NAME : W:\PROJECTS\21234\04_CADD_01\CADD_SHEETS\025100-TC.DWG
LAYOUT NAME - 3

PLOT DATE : 10/20/2022 2:11 PM PLOT BY : ALEXANDER UNDERWOOD PLOT NAME : PLOT SCALE : 1 IN:100 FT

2



2

PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	TRAFFIC CONTROL - STAGE 1 DETAIL	SHEET 137	E

FILE NAME : W:\PROJECTS\21234\04_CADD_01\CADD_SHEETS\025100-TC.DWG
LAYOUT NAME - 6

PLOT DATE : 10/20/2022 2:11 PM PLOT BY : ALEXANDER UNDERWOOD PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

N

50TH ROAD

4920

4925

WEST FRONTAGE ROAD

4930

ROAD WORK AHEAD
W20-1A

END ROAD WORK
G20-2A
48"X24"

IH 41/94

ROAD OPEN TO LOCAL BUSINESSES
R10-61
60"X30"

ROAD CLOSED
R11-2
48"X30"

5925

5930

5935

EAST FRONTAGE ROAD

ROAD OPEN TO LOCAL BUSINESSES
R10-61
60"X30"

ROAD CLOSED
R11-2
48"X30"

END ROAD WORK
G20-2A
48"X24"

500'

MILL AND OVERLAY IN CENTER OF INTERSECTION
TO BE COMPLETED USING FLAGGING

KRAUT ROAD

ROAD WORK AHEAD
W20-1A

LEGEND

- TYPE II / III BARRICADE WTH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC

PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	TRAFFIC CONTROL - STAGE 1 DETAIL	SHEET 138	E

FILE NAME : W:\PROJECTS\21234\04_CADD_01\CADD_SHEETS\025100-TC.DWG
LAYOUT NAME - 8

PLOT DATE : 10/20/2022 2:11 PM PLOT BY : ALEXANDER UNDERWOOD PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

2

END ROAD WORK
G20-2A
48"X24"

ROAD WORK AHEAD
W20-1A

5000

5005

5010

WEST FRONTAGE ROAD

END ROAD WORK
G20-2A
48"X24"

ROAD WORK AHEAD
W20-1A

IH 41/94

R10-61
60"X30"

ROAD OPEN TO LOCAL BUSINESSES

ROAD CLOSED
R11-2
48"X30"

6005

6010

6015

EAST FRONTAGE ROAD

ROAD CLOSED
R11-2
48"X30"

ROAD OPEN TO LOCAL BUSINESSES
R10-61
60"X30"

END ROAD WORK
G20-2A
48"X24"

500'

MILL AND OVERLAY IN CENTER OF INTERSECTION
TO BE COMPLETED USING FLAGGING

ROAD WORK AHEAD
W20-1A

GOLF ROAD

N

LEGEND

TYPE II / III BARRICADE WTH ATTACHED SIGN

SIGN ON PERMANENT SUPPORT

WORK AREA

DIRECTION OF TRAFFIC

PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	TRAFFIC CONTROL - STAGE 1 DETAIL	SHEET 139	E

FILE NAME : W:\PROJECTS\21234\04_CADD_01\CADD_SHEETS\025100-TC.DWG
LAYOUT NAME - 13

PLOT DATE : 10/20/2022 2:11 PM PLOT BY : ALEXANDER UNDERWOOD PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

2

END ROAD WORK
G20-2A
48"X24"

ROAD WORK AHEAD
W20-1A

1000'

500'

ROAD CLOSED AHEAD
W20-3A

ROAD CLOSED 1000 FT
W20-3C

ROAD CLOSED 500 FT
W20-3D

CTH K

3055

3 DAYS PRIOR TO CLOSURE

ROAD TO CLOSE	DATE TO DATE
FRAME 1	FRAME 2

PCMS

ROAD CLOSED
R11-2
48"X30"

EAST FRONTAGE ROAD

ROAD OPEN TO LOCAL BUSINESSES
R10-61
60"X30"

END PROJECT
STA 3050+60 (NB)
STA 3052+35 (SB)

3050

ROAD CLOSED
R11-2
48"X30"

ROAD CLOSED
R11-2
48"X30"

END ROAD WORK
G20-2A
48"X24"

ROAD WORK AHEAD
W20-1A

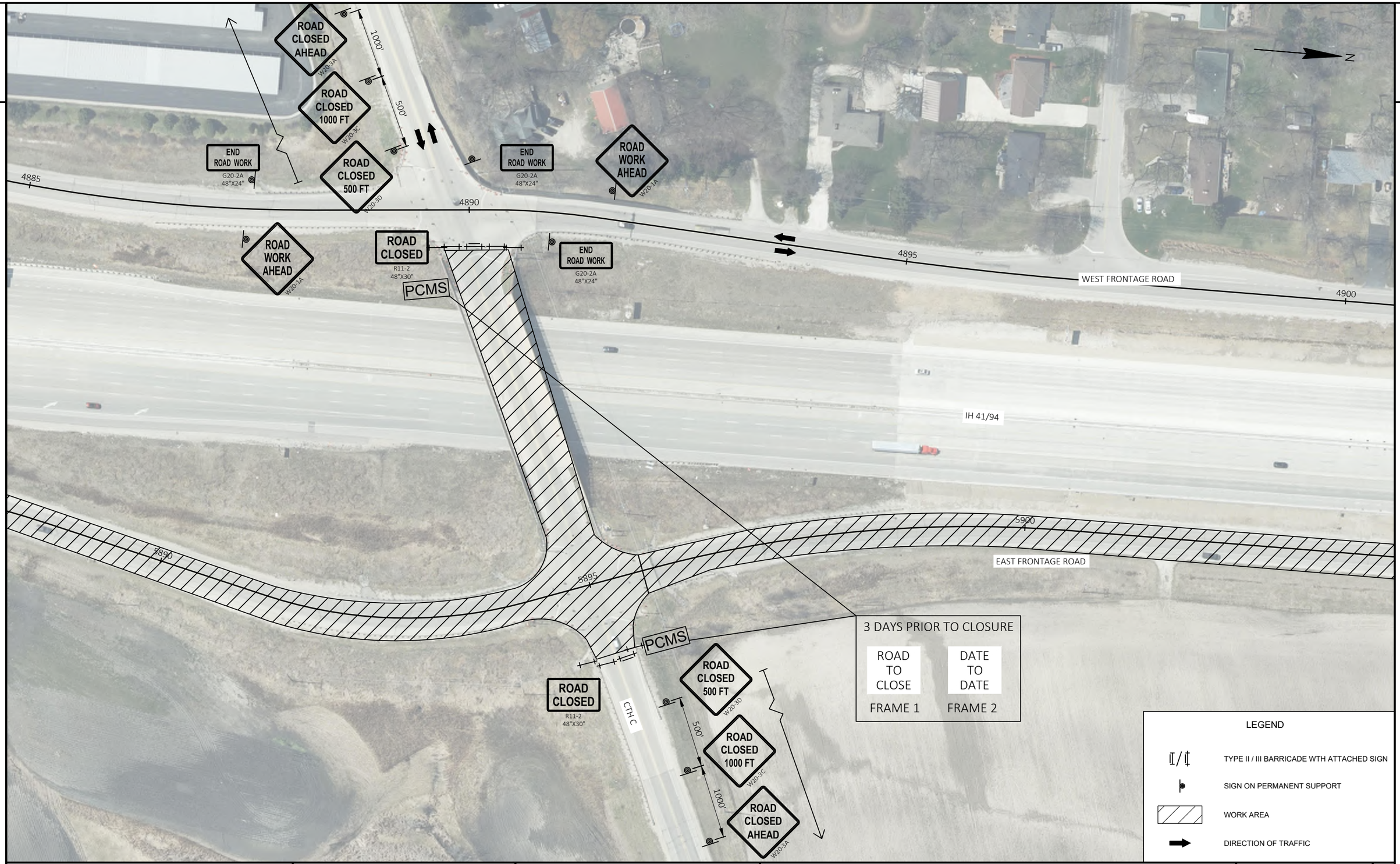
N

LEGEND

- TYPE II / III BARRICADE WTH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC

PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	TRAFFIC CONTROL - STAGE 1 DETAIL	SHEET 140	E

2



PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	TRAFFIC CONTROL - STAGE 1 DETAIL DURING CONCRETE REPAIR	SHEET 141	E

FILE NAME : W:\PROJECTS\21234\04_CADD_01\CADD_SHEETS\025100-TC.DWG
LAYOUT NAME - STAGE 1B
PLOT DATE : 10/20/2022 2:11 PM
PLOT BY : ALEXANDER UNDERWOOD
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

LEGEND

WORK ZONE

N



CONSTRUCTION ACTIVITIES

1. ALL CONSTRUCTION OPERATIONS ARE FROM STA 2838+77 TO STA 5043+10. CONSTRUCTION OPERATIONS INCLUDE MILLING, ASPHALT PAVING, SIGNING, PAVEMENT MARKING, BEAM GUARD, GRADING, AND CURB RAMP UPGRADES.
2. WORK TO BE PERFORMED DURING DAYTIME

MAINTENANCE OF TRAFFIC

1. WEST FRONTAGE ROAD CLOSURE FROM STH 11 TO CTH K
2. THROUGH TRAFFIC IS TO BE DETOURED TO THE WEST FRONTAGE ROAD
3. ACCESS TO ALL BUSINESSES AND RESIDENTS SHALL BE MAINTAINED AT ALL TIMES.

PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	TRAFFIC CONTROL - STAGE 2 OVERVIEW	SHEET 142	E

FILE NAME : W:\PROJECTS\21234\04_CADD_01\CADD_SHEETS\025100-TC OVERVIEW.DWG
LAYOUT NAME - OVERVIEW 2
PLOT DATE : 10/20/2022 2:11 PM
PLOT BY : ALEXANDER UNDERWOOD
PLOT NAME :
PLOT SCALE : 1 IN:1500 FT

2

2

ROAD CLOSED AHEAD
W20-3A

500'

ROAD CLOSED 1000 FT
W20-3C

GRANDVIEW PARKWAY

ROAD CLOSED 500 FT
W20-3D

ROAD OPEN TO LOCAL BUSINESSES
R10-61
60"X30"

ROAD CLOSED
R11-2
48"X30"

N

2850

3 DAYS PRIOR TO CLOSURE

ROAD TO CLOSE	DATE TO DATE
FRAME 1	FRAME 2

BEGIN PROJECT
STA 2838+77

R10-61
60"X30"
ROAD OPEN TO LOCAL BUSINESSES

R11-2
48"X30"
ROAD CLOSED

PCMS

WEST FRONTAGE ROAD

1000'

500'

ROAD CLOSED AHEAD
W20-3A

ROAD CLOSED 1000 FT
W20-3C

ROAD CLOSED 500 FT
W20-3D

IH 41/94

LEGEND

- TYPE II / III BARRICADE WTH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC

PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	TRAFFIC CONTROL - STAGE 2 DETAIL	SHEET 143	E

FILE NAME : W:\PROJECTS\21234\04_CADD_01\CADD_SHEETS\025100-TC.DWG
LAYOUT NAME - 17

PLOT DATE : 10/20/2022 2:12 PM PLOT BY : ALEXANDER UNDERWOOD PLOT NAME : PLOT SCALE : 1 IN:100 FT

2



PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	TRAFFIC CONTROL - STAGE 2 DETAIL	SHEET 144	E

FILE NAME : W:\PROJECTS\21234\04_CADD_01\CADD_SHEETS\025100-TC.DWG
LAYOUT NAME - 18

PLOT DATE : 10/20/2022 2:12 PM PLOT BY : ALEXANDER UNDERWOOD PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

2

STH 20

ROAD WORK AHEAD
W20-1A

END ROAD WORK
G20-2A
48"X24"

CONSTRUCTION LIMITS
STA 4868+00

ROAD OPEN TO LOCAL BUSINESSES
R10-61
60"X30"

ROAD CLOSED
R11-2
48"X30"

ROAD CLOSED
R11-2
48"X30"

ROAD CLOSED
R11-2
48"X30"

ROAD CLOSED AHEAD
W20-3A

ROAD WORK AHEAD
W20-1A

WEST FRONTAGE ROAD

4865

4870

4875

N

LEGEND

- TYPE II / III BARRICADE WTH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC

PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	TRAFFIC CONTROL - STAGE 2 DETAIL	SHEET 145	E

FILE NAME : W:\PROJECTS\21234\04_CADD_01\CADD_SHEETS\025100-TC.DWG
LAYOUT NAME - 19

PLOT DATE : 10/20/2022 2:12 PM PLOT BY : ALEXANDER UNDERWOOD PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

2

LEGEND

TYPE II / III BARRICADE WTH ATTACHED SIGN

SIGN ON PERMANENT SUPPORT

WORK AREA

DIRECTION OF TRAFFIC

N

ROAD WORK AHEAD
W20-1A

500'

MILL AND OVERLAY IN CENTER OF INTERSECTION
TO BE COMPLETED USING FLAGGING

END ROAD WORK
G20-2A
48"X24"

ROAD OPEN TO LOCAL BUSINESSES
R10-61
60"X30"

4880

4890

4895

WEST FRONTAGE ROAD

4885

ROAD CLOSED
R11-2
48"X30"

ROAD OPEN TO LOCAL BUSINESSES
R10-61
60"X30"

ROAD CLOSED
R11-2
48"X30"

END ROAD WORK
G20-2A
48"X24"

CTH C

500'

IH 41/94

ROAD WORK AHEAD
W20-1A

5895

5885

5890

EAST FRONTAGE ROAD

PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	TRAFFIC CONTROL - STAGE 2 DETAIL	SHEET 146	E

FILE NAME : W:\PROJECTS\21234\04_CADD_01\CADD_SHEETS\025100-TC.DWG
LAYOUT NAME - 20

PLOT DATE : 10/20/2022 2:12 PM PLOT BY : ALEXANDER UNDERWOOD PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2



2

PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	TRAFFIC CONTROL - STAGE 2 DETAIL	SHEET 147	E

FILE NAME : W:\PROJECTS\21234\04_CADD_01\CADD_SHEETS\025100-TC.DWG
LAYOUT NAME - 21

PLOT DATE : 10/20/2022 2:12 PM PLOT BY : ALEXANDER UNDERWOOD PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

2

ROAD WORK AHEAD
W20-1A

500'

50TH ROAD

MILL AND OVERLAY IN CENTER OF INTERSECTION
TO BE COMPLETED USING FLAGGING

ROAD CLOSED
R11-2
48"X30"

ROAD OPEN TO LOCAL BUSINESSES
R10-61
60"X30"

WEST FRONTAGE ROAD

4915

4920

4925

ROAD OPEN TO LOCAL BUSINESSES
R10-61
60"X30"

ROAD CLOSED
R11-2
48"X30"

N

500'

IH 41/94

END ROAD WORK
G20-2A
48"X24"

ROAD WORK AHEAD
W20-1A

915

5920

EAST FRONTAGE ROAD

5925

5930

KRAUT ROAD

LEGEND

TYPE II / III BARRICADE WTH ATTACHED SIGN

SIGN ON PERMANENT SUPPORT

WORK AREA

DIRECTION OF TRAFFIC

PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	TRAFFIC CONTROL - STAGE 2 DETAIL	SHEET 148	E

FILE NAME : W:\PROJECTS\21234\04_CADD_01\CADD_SHEETS\025100-TC.DWG
LAYOUT NAME - 22

PLOT DATE : 10/20/2022 2:12 PM PLOT BY : ALEXANDER UNDERWOOD PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2



LEGEND

- TYPE II / III BARRICADE WTH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC

PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	TRAFFIC CONTROL - STAGE 2 DETAIL	SHEET 149	E

FILE NAME : W:\PROJECTS\21234\04_CADD_01\CADD_SHEETS\025100-TC.DWG
LAYOUT NAME - 26
PLOT DATE : 10/20/2022 2:12 PM
PLOT BY : ALEXANDER UNDERWOOD
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

2

N

WEST FRONTAGE ROAD

4995

5000

5005

IH 41/94

EAST FRONTAGE ROAD

5995

6000

6005

ROAD WORK AHEAD
W20-1A

G20-2A
48"X24"
END
ROAD WORK

ROAD OPEN TO LOCAL BUSINESSES
R10-61
60"X30"

ROAD CLOSED
R11-2
48"X30"

ROAD WORK AHEAD
W20-1A

GOLF ROAD

ROAD CLOSED 500 FT
W20-3D

ROAD CLOSED 1000 FT
W20-3C

ROAD CLOSED AHEAD
W20-3A

G20-2A
48"X24"
END
ROAD WORK

LEGEND

- TYPE II / III BARRICADE WTH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC

PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	TRAFFIC CONTROL - STAGE 2 DETAIL	SHEET 150	E

FILE NAME : W:\PROJECTS\21234\04_CADD_01\CADD_SHEETS\025100-TC.DWG
LAYOUT NAME - 27

PLOT DATE : 10/20/2022 2:12 PM PLOT BY : ALEXANDER UNDERWOOD PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

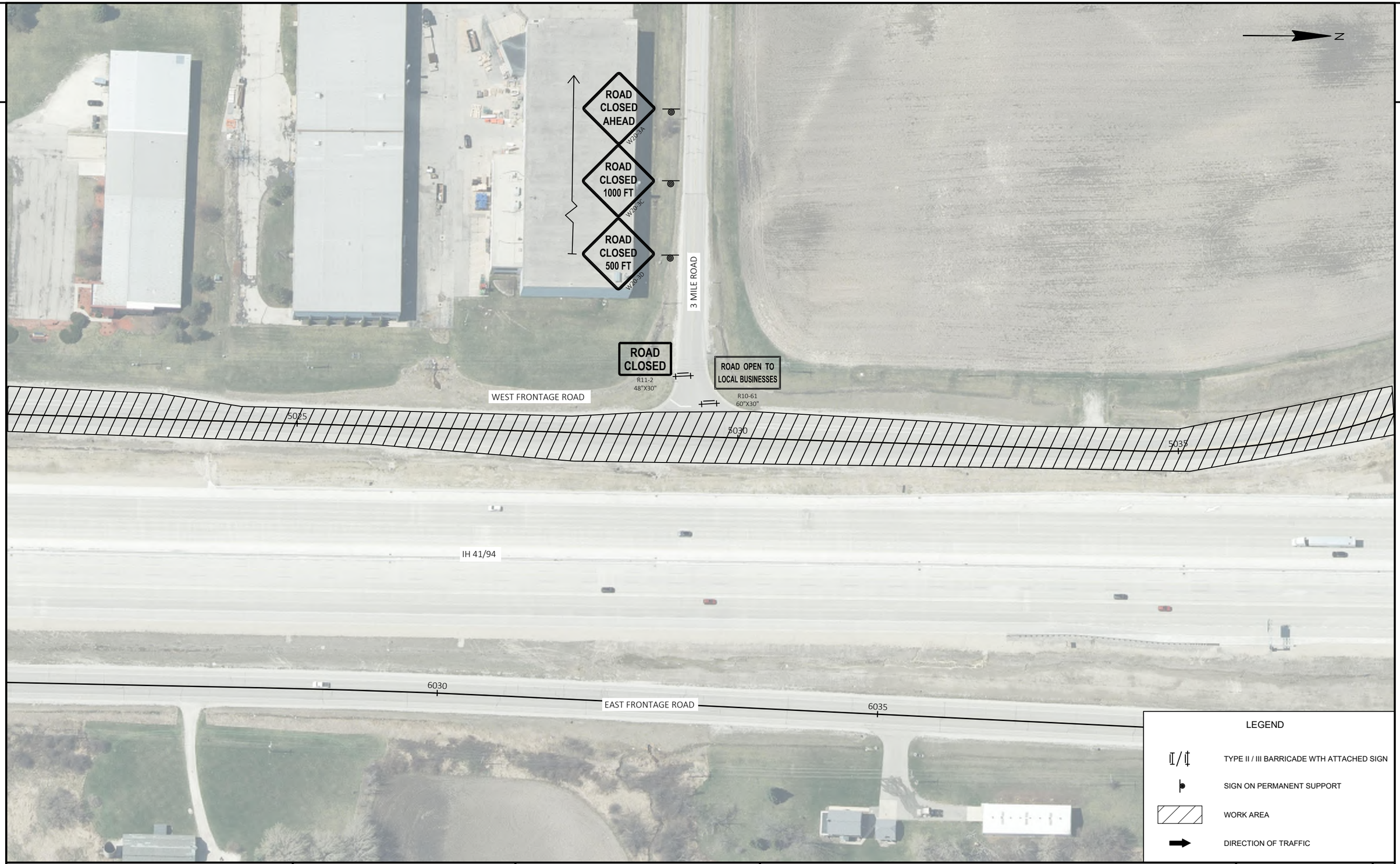


2

PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	TRAFFIC CONTROL - STAGE 2 DETAIL	SHEET 151	E

FILE NAME : W:\PROJECTS\21234\04_CADD_01\CADD_SHEETS\025100-TC.DWG
LAYOUT NAME - 28
PLOT DATE : 10/20/2022 2:13 PM
PLOT BY : ALEXANDER UNDERWOOD
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2



2

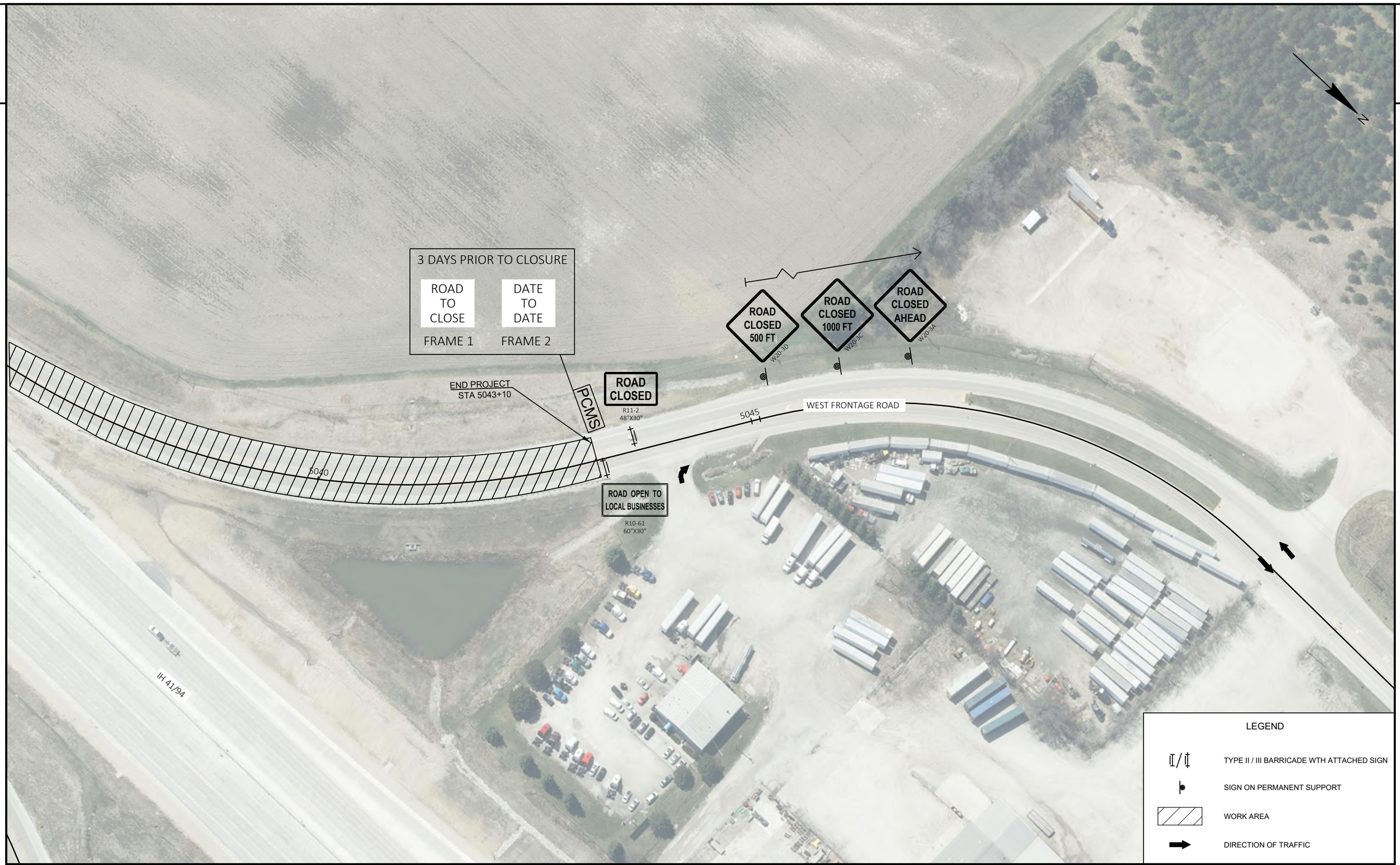
PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	TRAFFIC CONTROL - STAGE 2 DETAIL	SHEET 152	E

FILE NAME : W:\PROJECTS\21234\04_CADD_01\CADD_SHEETS\025100-TC.DWG
LAYOUT NAME - 29

PLOT DATE : 10/20/2022 2:13 PM PLOT BY : ALEXANDER UNDERWOOD PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2



PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	TRAFFIC CONTROL - STAGE 2 DETAIL	SHEET 153	E

FILE NAME : W:\PROJECTS\21234\04_CADD_01\CADD_SHEETS\025100-TC.DWG
LAYOUT NAME - 30

PLOT DATE : 10/20/2022 2:13 PM PLOT BY : ALEXANDER UNDERWOOD PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

LEGEND

- TYPE II / III BARRICADE WTH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC

ROAD CLOSED AHEAD W20-3A

1000'

ROAD CLOSED 1000 FT W20-3C

500'

ROAD CLOSED 500 FT W20-3D

PCMS

ROAD CLOSED R11-2 48"X30"

WEST FRONTAGE ROAD

4885

4890

4895

IH 41/94

3 DAYS PRIOR TO CLOSURE

ROAD TO CLOSE	DATE TO DATE
FRAME 1	FRAME 2

5885

5890

EAST FRONTAGE ROAD

ROAD WORK AHEAD W20-1A

PCMS

ROAD CLOSED R11-2 48"X30"

END ROAD WORK G20-2A 48"X24"

5895

END ROAD WORK G20-2A 48"X24"

ROAD WORK AHEAD W20-1A

END ROAD WORK G20-2A 48"X24"

ROAD CLOSED 500 FT W20-3D

500'

ROAD CLOSED 1000 FT W20-3C

1000'

ROAD CLOSED AHEAD W20-3A

N

2

PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	TRAFFIC CONTROL - STAGE 2 DETAIL DURING CONCRETE REPAIR	SHEET 154	E

FILE NAME : W:\PROJECTS\21234\04_CADD_01\CADD_SHEETS\025100-TC.DWG
LAYOUT NAME - STAGE 2B

PLOT DATE : 10/20/2022 2:13 PM PLOT BY : ALEXANDER UNDERWOOD PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

DETOUR NOTES

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

ALL SIGNS INAPPROPRIATE TO THE STATUS OF THE TRAFFIC CONTROL PLAN, INCLUDING PRE-EXISTING SIGNING IN THE VICINITY, SHALL BE COVERED OR REMOVED AS SPECIFIED IN THE PLANS AND/OR AS DIRECTED BY THE ENGINEER.

ALL EXISTING SIGNS THAT NEED TO BE COVERED SHALL BE COVERED WITH A BLANK ORANGE PANEL. PAID FOR AS TRAFFIC CONTROL COVERING SIGNS TYPE II UNLESS OTHERWISE NOTED.

ALL "W" AND "WO" SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED.

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

ALL "STOP" SIGNS THAT ARE REMOVED FOR A CONSTRUCTION OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED.

SEE SDD "BARRICADES AND SIGNS FOR MAINLINE CLOSURES" AND SDD "DETOUR SIGNING FOR MAINLINE CLOSURES" FOR ADDITIONAL DETAILS.

TRAFFIC CONTROL PCMS MESSAGE	
PHASE	MESSAGE
1	ROAD TO CLOSE
2	DAY/TIME

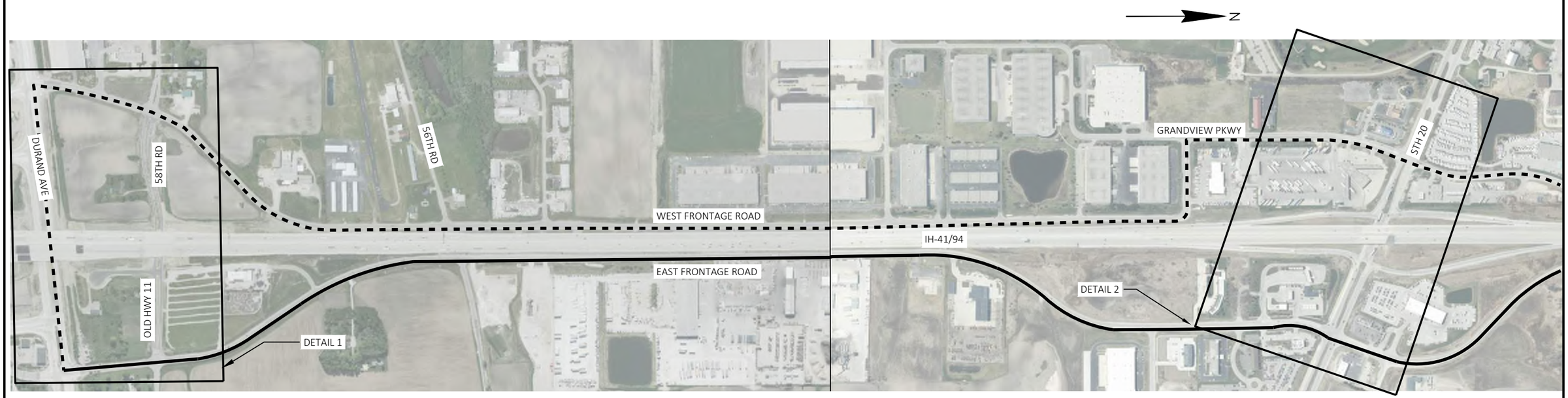
LEGEND

- NEW SIGN
- EXISTING SIGN
- TRAFFIC CONTROL COVERING SIGNS TYPE II
- POST MOUNTED SIGN (NEW)
- POST MOUNTED SIGN (EXISTING)
- MULTIPLE POST MOUNTED SIGN (EXISTING)
- TYPE III BARRICADE WITH/WITHOUT SIGN

2

LEGEND

- DETOUR ROUTE
- WORK ZONE



PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROAD	COUNTY: RACINE	DETOUR EAST FRONTAGE ROAD - OVERVIEW 1	SHEET 155	E

FILE NAME : W:\PROJECTS\21234\04_CADD_01\CADD_SHEETS\027101-DT.DWG
LAYOUT NAME - STAGE 1 OVERVIEW 1

PLOT DATE : 10/7/2022 1:03 PM PLOT BY : ALEXANDER UNDERWOOD PLOT NAME : PLOT SCALE : 1 IN:800 FT

2

DETOUR NOTES

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

ALL SIGNS INAPPROPRIATE TO THE STATUS OF THE TRAFFIC CONTROL PLAN, INCLUDING PRE-EXISTING SIGNING IN THE VICINITY, SHALL BE COVERED OR REMOVED AS SPECIFIED IN THE PLANS AND/OR AS DIRECTED BY THE ENGINEER.

ALL EXISTING SIGNS THAT NEED TO BE COVERED SHALL BE COVERED WITH A BLANK ORANGE PANEL. PAID FOR AS TRAFFIC CONTROL COVERING SIGNS TYPE II UNLESS OTHERWISE NOTED.

ALL "W" AND "WO" SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED.

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

ALL "STOP" SIGNS THAT ARE REMOVED FOR A CONSTRUCTION OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED.

SEE SDD "BARRICADES AND SIGNS FOR MAINLINE CLOSURES" AND SDD "DETOUR SIGNING FOR MAINLINE CLOSURES" FOR ADDITIONAL DETAILS.

TRAFFIC CONTROL PCMS MESSAGE	
PHASE	MESSAGE
1	ROAD TO CLOSE
2	DAY/TIME

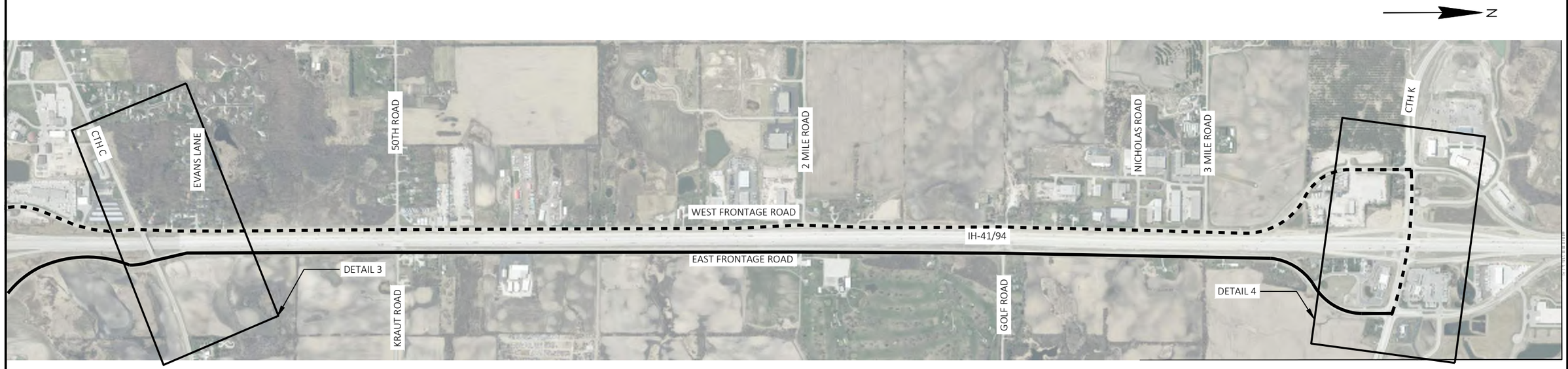
LEGEND

- NEW SIGN
- EXISTING SIGN
- TRAFFIC CONTROL COVERING SIGNS TYPE II
- POST MOUNTED SIGN (NEW)
- POST MOUNTED SIGN (EXISTING)
- MULTIPLE POST MOUNTED SIGN (EXISTING)
- TYPE III BARRICADE WITH/WITHOUT SIGN

2

LEGEND

- DETOUR ROUTE
- WORK ZONE



PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROAD	COUNTY: RACINE	DETOUR EAST FRONTAGE ROAD - OVERVIEW 2	SHEET 156	E

FILE NAME : W:\PROJECTS\21234\04_CADD_01\CADD_SHEETS\027101-DT.DWG
LAYOUT NAME - STAGE 1 OVERVIEW 2

PLOT DATE : 10/7/2022 1:04 PM PLOT BY : ALEXANDER UNDERWOOD PLOT NAME : PLOT SCALE : 1 IN:1300 FT

2

LEGEND

- NEW SIGN
- EXISTING SIGN
- TRAFFIC CONTROL COVERING SIGNS TYPE II
- POST MOUNTED SIGN (NEW)
- POST MOUNTED SIGN (EXISTING)
- MULTIPLE POST MOUNTED SIGN (EXISTING)
- TYPE III BARRICADE WITH/WITHOUT SIGN

N

2

WEST FRONTAGE ROAD

EAST FRONTAGE ROAD

DURAND AVE

STH 11

IH-94

DETOUR SOUTH M4-8 24"X12" M3-3 24"X12" "EAST" FRONTAGE ROAD M1-95A 24"X24" MO5-1L 21"X21"

DETOUR NORTH M4-8 24"X12" M3-1 24"X12" "EAST" FRONTAGE ROAD M1-95A 24"X24"

DETOUR NORTH M4-8 24"X12" M3-1 24"X12" "EAST" FRONTAGE ROAD M1-95A 24"X24" MO5-1R 21"X21"

DETOUR SOUTH M4-8 24"X12" M3-3 24"X12" "EAST" FRONTAGE ROAD M1-95A 24"X24" MO6-1 21"X21"

DETOUR NORTH M4-8 24"X12" M3-1 24"X12" "EAST" FRONTAGE ROAD M1-95A 24"X24" MO6-1 21"X21"

DETOUR NORTH M4-8 24"X12" M3-1 24"X12" "EAST" FRONTAGE ROAD M1-95A 24"X24" MO5-1L 21"X21"

DETOUR SOUTH M4-8 24"X12" M3-3 24"X12" "EAST" FRONTAGE ROAD M1-95A 24"X24"

NORTH M3-1 24"X12" "EAST" FRONTAGE ROAD M1-95A 24"X24"

DETOUR AHEAD W20-2A

DETOUR M4-9L 30"X24" ROAD OPEN TO LOCAL TRAFFIC ONLY R10-61 60"X30"

ROAD CLOSED TO THRU TRAFFIC 1 MILES AHEAD R11-3 60"X30"

END DETOUR SOUTH M4-8A 24"X18" M3-3 24"X12" "EAST" FRONTAGE ROAD M1-95A 24"X24"

"NORTH" FRONTAGE ROAD

OH

300' 500' 1000'

PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	DETOUR EAST FRONTAGE ROAD - DETAIL 1	SHEET 157 E

FILE NAME : W:\PROJECTS\21234\04_CADD_01\CADD_SHEETS\027101-DT.DWG
LAYOUT NAME - Detail 1

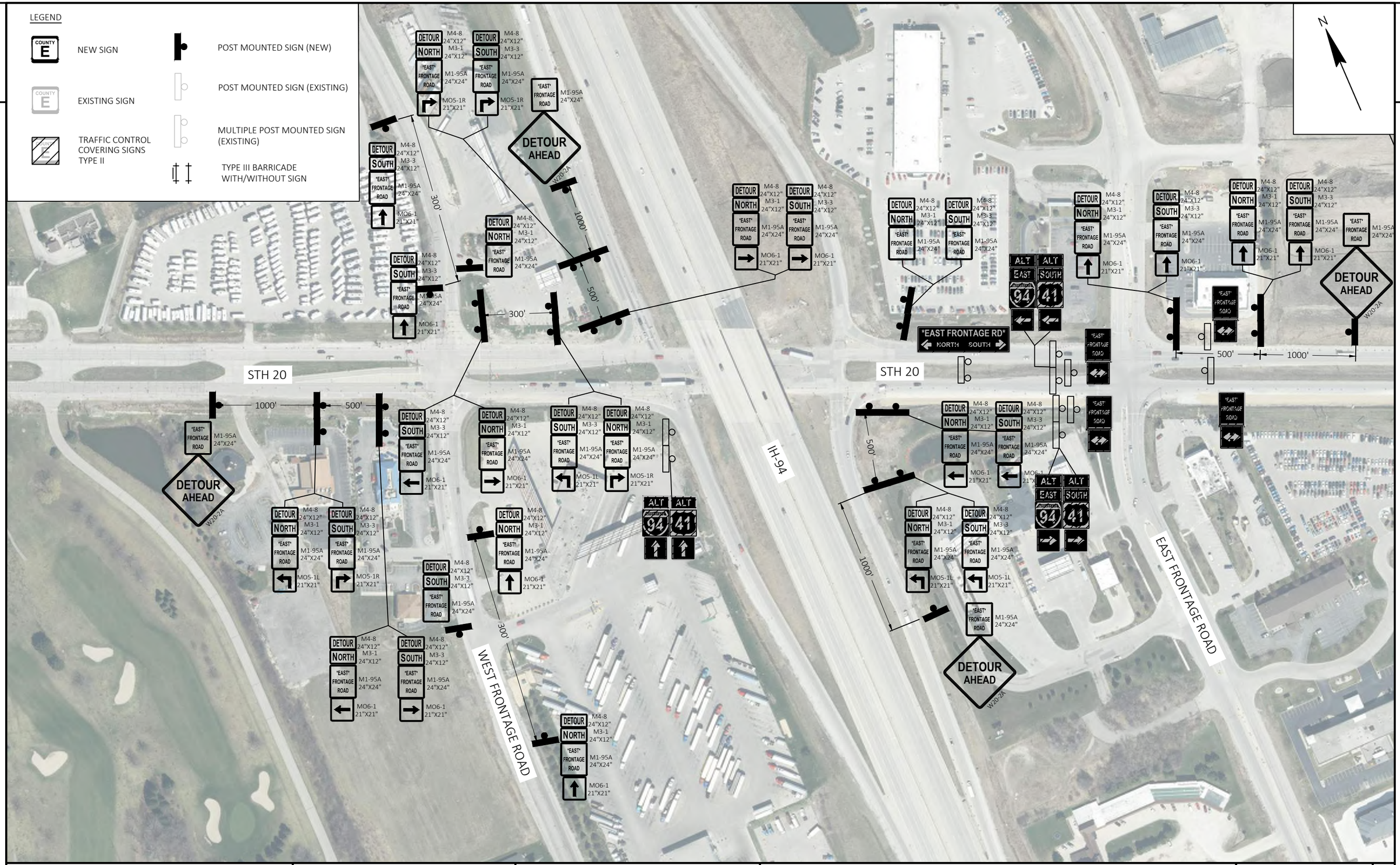
PLOT DATE : 10/7/2022 1:04 PM PLOT BY : ALEXANDER UNDERWOOD PLOT NAME : PLOT SCALE : 1 IN:200 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- NEW SIGN
- EXISTING SIGN
- TRAFFIC CONTROL COVERING SIGNS TYPE II
- POST MOUNTED SIGN (NEW)
- POST MOUNTED SIGN (EXISTING)
- MULTIPLE POST MOUNTED SIGN (EXISTING)
- TYPE III BARRICADE WITH/WITHOUT SIGN



PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	DETOUR EAST FRONTAGE ROAD - DETAIL 2	SHEET 158	E

FILE NAME : W:\PROJECTS\21234\04_CADD_01\CADD_SHEETS\027101-DT.DWG
LAYOUT NAME - Detail 2

PLOT DATE : 10/7/2022 1:04 PM PLOT BY : ALEXANDER UNDERWOOD PLOT NAME : PLOT SCALE : 1 IN:200 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- NEW SIGN
- EXISTING SIGN
- TRAFFIC CONTROL COVERING SIGNS TYPE II
- POST MOUNTED SIGN (NEW)
- POST MOUNTED SIGN (EXISTING)
- MULTIPLE POST MOUNTED SIGN (EXISTING)
- TYPE III BARRICADE WITH/WITHOUT SIGN

N

2

DETOUR SOUTH M4-8 24"X12" M3-3 24"X12" "EAST" FRONTAGE ROAD M1-95A 24"X24" MO6-1 21"X21"

DETOUR NORTH M4-8 24"X12" M3-1 24"X12" "EAST" FRONTAGE ROAD M1-95A 24"X24"

300'

IH-41/94

DETOUR SOUTH M4-8 24"X12" M3-3 24"X12" "EAST" FRONTAGE ROAD M1-95A 24"X24" MO6-1 21"X21"

DETOUR NORTH M4-8 24"X12" M3-1 24"X12" "EAST" FRONTAGE ROAD M1-95A 24"X24" MO6-1 21"X21"

DETOUR SOUTH M4-8 24"X12" M3-3 24"X12" "EAST" FRONTAGE ROAD M1-95A 24"X24" MO5-1L 21"X21"

DETOUR NORTH M4-8 24"X12" M3-1 24"X12" "EAST" FRONTAGE ROAD M1-95A 24"X24" MO5-1R 21"X21"

DETOUR SOUTH M4-8 24"X12" M3-3 24"X12" "EAST" FRONTAGE ROAD M1-95A 24"X24" MO6-1 21"X21"

DETOUR NORTH M4-8 24"X12" M3-1 24"X12" "EAST" FRONTAGE ROAD M1-95A 24"X24" MO6-1 21"X21"

DETOUR SOUTH M4-8 24"X12" M3-3 24"X12" "EAST" FRONTAGE ROAD M1-95A 24"X24" MO6-1 21"X21"

DETOUR NORTH M4-8 24"X12" M3-1 24"X12" "EAST" FRONTAGE ROAD M1-95A 24"X24" MO6-1 21"X21"

DETOUR SOUTH M4-8 24"X12" M3-3 24"X12" "EAST" FRONTAGE ROAD M1-95A 24"X24" MO6-1 21"X21"

DETOUR NORTH M4-8 24"X12" M3-1 24"X12" "EAST" FRONTAGE ROAD M1-95A 24"X24" MO6-1 21"X21"

"EAST" FRONTAGE ROAD M1-95A 24"X24" DETOUR AHEAD W20-2A

300'

CTH C

500'

1000'

WEST FRONTAGE ROAD

EAST FRONTAGE ROAD

PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	DETOUR EAST FRONTAGE ROAD - DETAIL 3	SHEET 159	E

FILE NAME : W:\PROJECTS\21234\04_CADD_01\CADD_SHEETS\027101-DT.DWG
LAYOUT NAME - Detail 3

PLOT DATE : 10/7/2022 1:04 PM PLOT BY : ALEXANDER UNDERWOOD PLOT NAME : PLOT SCALE : 1 IN:200 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- NEW SIGN
- EXISTING SIGN
- TRAFFIC CONTROL COVERING SIGNS TYPE II
- POST MOUNTED SIGN (NEW)
- POST MOUNTED SIGN (EXISTING)
- MULTIPLE POST MOUNTED SIGN (EXISTING)
- TYPE III BARRICADE WITH/WITHOUT SIGN

N

2

WEST FRONTAGE ROAD

IH-41/94

50TH RD

KRAUT RD

EAST FRONTAGE ROAD

1000'

500'

300'

300'

500'

1000'

"EAST" FRONTAGE ROAD M1-95A 24"X24"

DETOUR AHEAD W20-2A

DETOUR M4-8 24"X12"
NORTH M3-1 24"X12"
"EAST" FRONTAGE ROAD M1-95A 24"X24"
MO5-1L 21"X21"

DETOUR M4-8 24"X12"
SOUTH M3-3 24"X12"
"EAST" FRONTAGE ROAD M1-95A 24"X24"
MO5-1R 21"X21"

DETOUR M4-8 24"X12"
NORTH M3-1 24"X12"
"EAST" FRONTAGE ROAD M1-95A 24"X24"
MO6-1 21"X21"

DETOUR M4-8 24"X12"
SOUTH M3-3 24"X12"
"EAST" FRONTAGE ROAD M1-95A 24"X24"
MO6-1 21"X21"

PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	DETOUR EAST FRONTAGE ROAD - DETAIL 4	SHEET 160	E

FILE NAME : W:\PROJECTS\21234\04_CADD_01\CADD_SHEETS\027101-DT.DWG
LAYOUT NAME - Detail 4
PLOT DATE : 10/7/2022 1:04 PM
PLOT BY : ALEXANDER UNDERWOOD
PLOT NAME :
PLOT SCALE : 1 IN:200 FT
WISDOT/CADDS SHEET 42

2

LEGEND

- NEW SIGN
- EXISTING SIGN
- TRAFFIC CONTROL COVERING SIGNS TYPE II
- POST MOUNTED SIGN (NEW)
- POST MOUNTED SIGN (EXISTING)
- MULTIPLE POST MOUNTED SIGN (EXISTING)
- TYPE III BARRICADE WITH/WITHOUT SIGN

N

2

WEST FRONTAGE ROAD

IH-41/94

EAST FRONTAGE ROAD

GOLF RD

300'

300'

500'

1000'

DETOUR SOUTH "EAST" FRONTAGE ROAD — M4-8 24"X12", M3-3 24"X12", M1-95A 24"X24", MO6-1 21"X21"

DETOUR NORTH "EAST" FRONTAGE ROAD — M4-8 24"X12", M3-1 24"X12", M1-95A 24"X24", MO6-1 21"X21"

DETOUR SOUTH "EAST" FRONTAGE ROAD — M4-8 24"X12", M3-3 24"X12", M1-95A 24"X24", MO5-1L 21"X21"

DETOUR NORTH "EAST" FRONTAGE ROAD — M4-8 24"X12", M3-1 24"X12", M1-95A 24"X24", MO5-1R 21"X21"

"EAST" FRONTAGE ROAD M1-95A 24"X24"

DETOUR AHEAD W7D-2A

PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	DETOUR EAST FRONTAGE ROAD - DETAIL 5	SHEET 161	E

FILE NAME : W:\PROJECTS\21234\04_CADD_01\CADD_SHEETS\027101-DT.DWG
LAYOUT NAME - Detail 5

PLOT DATE : 10/7/2022 1:04 PM PLOT BY : ALEXANDER UNDERWOOD PLOT NAME : PLOT SCALE : 1 IN:200 FT

2

LEGEND

- NEW SIGN
- EXISTING SIGN
- TRAFFIC CONTROL COVERING SIGNS TYPE II
- POST MOUNTED SIGN (NEW)
- POST MOUNTED SIGN (EXISTING)
- MULTIPLE POST MOUNTED SIGN (EXISTING)
- TYPE III BARRICADE WITH/WITHOUT SIGN

N

2

CTH K

CTH K

IH-41/94

WEST FRONTAGE ROAD

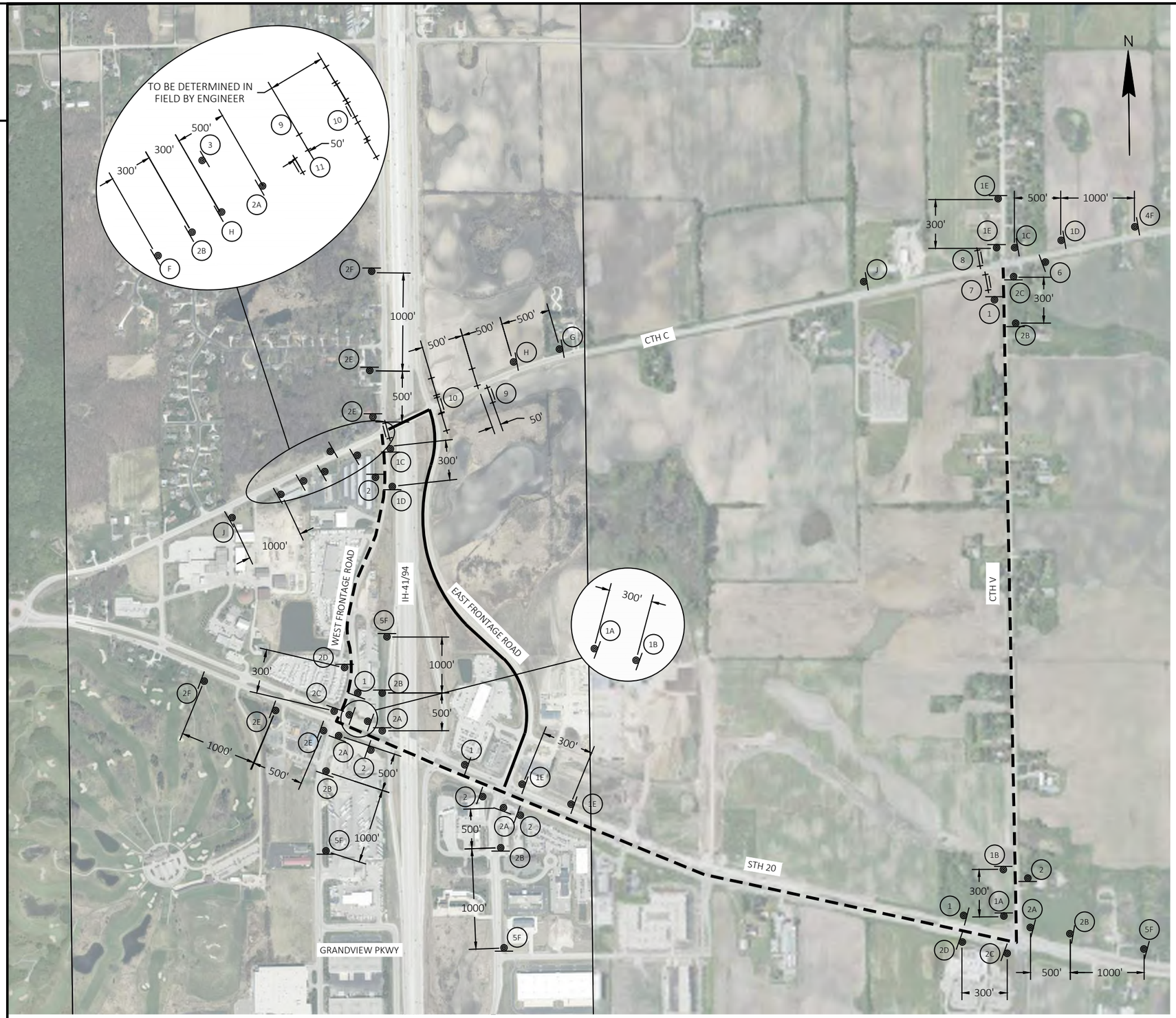
EAST FRONTAGE ROAD

PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	DETOUR EAST FRONTAGE ROAD - DETAIL 6	SHEET 162 E

FILE NAME : W:\PROJECTS\21234\04_CADD_01\CADD_SHEETS\027101-DT.DWG
LAYOUT NAME - Detail 6

PLOT DATE : 10/7/2022 1:04 PM PLOT BY : ALEXANDER UNDERWOOD PLOT NAME : PLOT SCALE : 1 IN:200 FT

WISDOT/CADDS SHEET 42



DETOUR NOTES

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

ALL SIGNS INAPPROPRIATE TO THE STATUS OF THE TRAFFIC CONTROL PLAN, INCLUDING PRE-EXISTING SIGNING IN THE VICINITY, SHALL BE COVERED OR REMOVED AS SPECIFIED IN THE PLANS AND/OR AS DIRECTED BY THE ENGINEER.

ALL EXISTING SIGNS THAT NEED TO BE COVERED SHALL BE COVERED WITH A BLANK ORANGE PANEL. PAID FOR AS TRAFFIC CONTROL COVERING SIGNS TYPE II UNLESS OTHERWISE NOTED.

ALL "W" AND "WO" SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED.

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

ALL "STOP" SIGNS THAT ARE REMOVED FOR A CONSTRUCTION OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED.

SEE SDD "BARRICADES AND SIGNS FOR MAINLINE CLOSURES" AND SDD "DETOUR SIGNING FOR MAINLINE CLOSURES" FOR ADDITIONAL DETAILS.

LEGEND

- DETOUR ROUTE
- WORK ZONE
- (1A) SIGN NUMBER
- POST MOUNTED SIGN (NEW)
- TYPE III BARRICADE WITH/ WITHOUT SIGN

1. DETOUR M4-8 24"X12" / WEST M3-4 24"X12" / COUNTY C M1-5A 24"X24"
2. DETOUR M4-8 24"X12" / EAST M3-2 24"X12" / COUNTY C M1-5A 24"X24"
3. END DETOUR M4-8A 24"X18" / WEST M3-4 24"X12" / COUNTY C M1-5A 24"X24"
4. WEST M3-4 24"X12" / COUNTY C M1-5A 24"X24"
5. EAST M3-2 24"X12" / COUNTY C M1-5A 24"X24"
6. END DETOUR M4-8A 24"X18" / EAST M3-2 24"X12" / COUNTY C M1-5A 24"X24"
7. ROAD CLOSED TO THRU TRAFFIC R11-4 60"X30"
8. DETOUR M4-9L 30"X24"
9. BRIDGE OUT R11-2B 48"X30"
10. ROAD CLOSED R11-2 48"X30"
11. DETOUR M4-9R 30"X24"

A. MO6-1 21"X21"
B. MO5-1R 21"X21"
C. MO6-1 21"X21"
D. MO5-1L 21"X21"
E. MO6-1 21"X21"
F. DETOUR AHEAD W20-2A
G. ROAD CLOSED 1000 FT W20-3C
H. ROAD CLOSED 500 FT W20-3D
J. ROAD CLOSED AHEAD W20-3A

PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	DETOUR CTH C DURING EAST FRONTAGE ROAD CLOSURE - STAGE 1	SHEET 163	E

2

DETOUR NOTES

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

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ALL "STOP" SIGNS THAT ARE REMOVED FOR A CONSTRUCTION OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED.

SEE SDD "BARRICADES AND SIGNS FOR MAINLINE CLOSURES" AND SDD "DETOUR SIGNING FOR MAINLINE CLOSURES" FOR ADDITIONAL DETAILS.

TRAFFIC CONTROL PCMS MESSAGE	
PHASE	MESSAGE
1	ROAD TO CLOSE
2	DAY/TIME

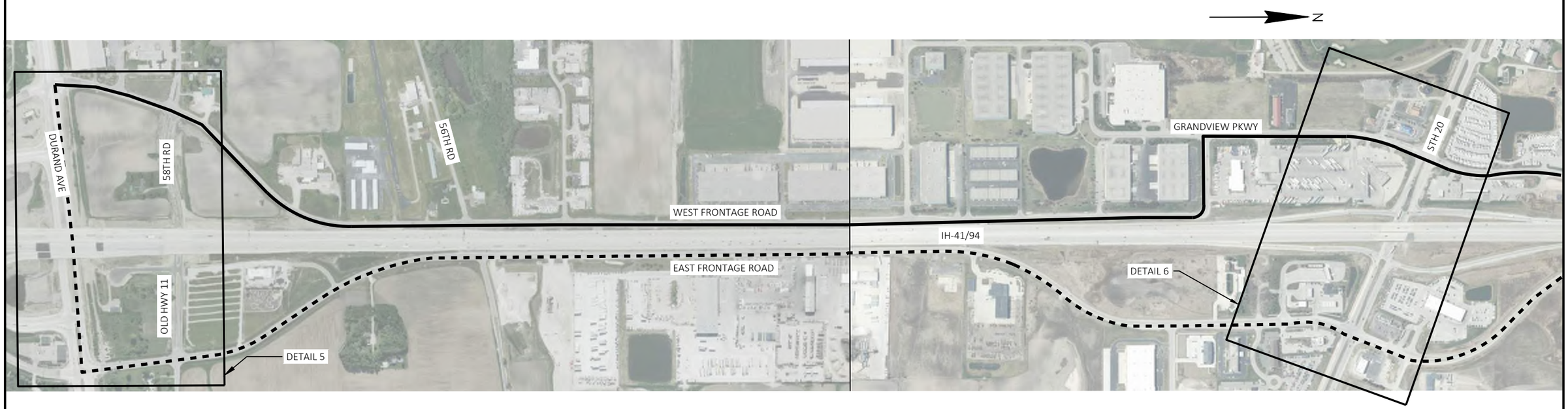
LEGEND

- NEW SIGN
- EXISTING SIGN
- TRAFFIC CONTROL COVERING SIGNS TYPE II
- # TRAFFIC CONTROL COVERING SIGNS TYPE II
- NEW SIGN
- POST MOUNTED SIGN (NEW)
- POST MOUNTED SIGN (EXISTING)
- MULTIPLE POST MOUNTED SIGN (EXISTING)
- TYPE III BARRICADE WITH/WITHOUT SIGN

2

LEGEND

- DETOUR ROUTE
- WORK ZONE



PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROAD	COUNTY: RACINE	DETOUR WEST FRONTAGE ROAD - OVERVIEW 1	SHEET 164	E

FILE NAME : W:\PROJECTS\21234\04_CADD_01\CADD_SHEETS\027101-DT.DWG
LAYOUT NAME - STAGE 2 OVERVIEW 1

PLOT DATE : 10/7/2022 1:05 PM PLOT BY : ALEXANDER UNDERWOOD PLOT NAME : PLOT SCALE : 1 IN:800 FT

2

DETOUR NOTES

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

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SEE SDD "BARRICADES AND SIGNS FOR MAINLINE CLOSURES" AND SDD "DETOUR SIGNING FOR MAINLINE CLOSURES" FOR ADDITIONAL DETAILS.

TRAFFIC CONTROL PCMS MESSAGE	
PHASE	MESSAGE
1	ROAD TO CLOSE
2	DAY/TIME

LEGEND

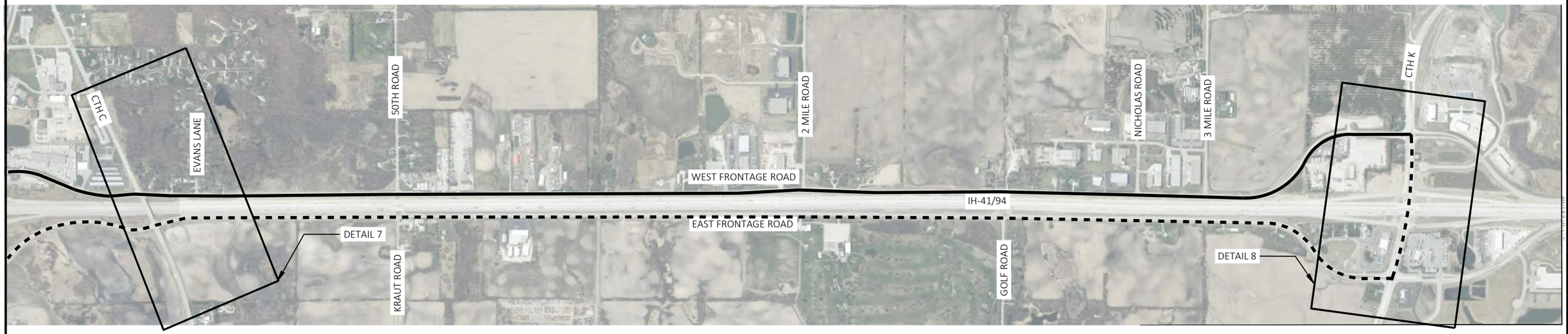
- NEW SIGN
- EXISTING SIGN
- TRAFFIC CONTROL COVERING SIGNS TYPE II
- # TRAFFIC CONTROL COVERING SIGNS TYPE II
- NEW SIGN
- POST MOUNTED SIGN (NEW)
- POST MOUNTED SIGN (EXISTING)
- MULTIPLE POST MOUNTED SIGN (EXISTING)
- TYPE III BARRICADE WITH/WITHOUT SIGN

2

LEGEND

- DETOUR ROUTE
- WORK ZONE

N



PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROAD	COUNTY: RACINE	DETOUR WEST FRONTAGE ROAD - OVERVIEW 2	SHEET 165	E

FILE NAME : W:\PROJECTS\21234\04_CADD_01\CADD_SHEETS\027101-DT.DWG
LAYOUT NAME - STAGE 2 OVERVIEW 2

PLOT DATE : 10/7/2022 1:05 PM PLOT BY : ALEXANDER UNDERWOOD PLOT NAME : PLOT SCALE : 1 IN:1300 FT

WISDOT/CADDS SHEET 42

LEGEND

- NEW SIGN
- EXISTING SIGN
- TRAFFIC CONTROL COVERING SIGNS TYPE II
- POST MOUNTED SIGN (NEW)
- POST MOUNTED SIGN (EXISTING)
- MULTIPLE POST MOUNTED SIGN (EXISTING)
- TYPE III BARRICADE WITH/WITHOUT SIGN

N

WEST FRONTAGE ROAD

EAST FRONTAGE ROAD

IH-94

STH 11

DURAND AVE

WEST FRONTAGE RD SOUTH NORTH

ROAD CLOSED TO THRU TRAFFIC 1 MILES AHEAD R11-3 60"X30"

DETOUR ROAD OPEN TO LOCAL BUSINESSES M4-9R 30"X24" R10-61 60"X30"

DETOUR SOUTH "WEST" FRONTAGE ROAD M4-8 24"X12" M3-3 24"X12" M1-95A 24"X24" MO6-1 21"X21"

DETOUR SOUTH "WEST" FRONTAGE ROAD M4-8 24"X12" M3-3 24"X12" M1-95A 24"X24" MO5-1L 21"X21"

300'

DETOUR NORTH "WEST" FRONTAGE ROAD M4-8 24"X12" M3-1 24"X12" M1-95A 24"X24" MO5-1L 21"X21"

DETOUR SOUTH "WEST" FRONTAGE ROAD M4-8 24"X12" M3-3 24"X12" M1-95A 24"X24" MO5-1R 21"X21"

DETOUR SOUTH "WEST" FRONTAGE ROAD M4-8 24"X12" M3-3 24"X12" M1-95A 24"X24" MO6-1 21"X21"

DETOUR NORTH "WEST" FRONTAGE ROAD M4-8 24"X12" M3-1 24"X12" M1-95A 24"X24" MO6-1 21"X21"

DETOUR NORTH "WEST" FRONTAGE ROAD M4-8 24"X12" M3-1 24"X12" M1-95A 24"X24" MO5-1R 21"X21"

NORTH "WEST" FRONTAGE ROAD M3-1 24"X12" M1-95A 24"X24" DETOUR AHEAD W20-2A

DETOUR NORTH "WEST" FRONTAGE ROAD M4-8 24"X12" M3-1 24"X12" M1-95A 24"X24" MO6-1 21"X21"

500' 1000'

1000' 500'

END DETOUR SOUTH "WEST" FRONTAGE ROAD M4-8A 24"X18" M3-3 24"X12" M1-95A 24"X24"

NORTH "WEST" FRONTAGE ROAD M3-1 24"X12" M1-95A 24"X24" DETOUR AHEAD W20-2A

PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	DETOUR WEST FRONTAGE ROAD - DETAIL 7	SHEET 166	E

FILE NAME : W:\PROJECTS\21234\04_CADD_01\CADD_SHEETS\027101-DT.DWG
LAYOUT NAME - Detail 7

PLOT DATE : 10/7/2022 1:05 PM PLOT BY : ALEXANDER UNDERWOOD PLOT NAME : PLOT SCALE : 1 IN:200 FT

WISDOT/CADDS SHEET 42

LEGEND

- NEW SIGN
- EXISTING SIGN
- TRAFFIC CONTROL COVERING SIGNS TYPE II
- POST MOUNTED SIGN (NEW)
- POST MOUNTED SIGN (EXISTING)
- MULTIPLE POST MOUNTED SIGN (EXISTING)
- TYPE III BARRICADE WITH/WITHOUT SIGN

STH 20

STH 20

IH-94

WEST FRONTAGE ROAD

EAST FRONTAGE ROAD

PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	DETOUR WEST FRONTAGE ROAD - DETAIL 8	SHEET 167	E

FILE NAME : W:\PROJECTS\21234\04_CADD_01\CADD_SHEETS\027101-DT.DWG
LAYOUT NAME - Detail 8

PLOT DATE : 10/20/2022 2:06 PM PLOT BY : ALEXANDER UNDERWOOD PLOT NAME : PLOT SCALE : 1 IN:200 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- NEW SIGN
- EXISTING SIGN
- TRAFFIC CONTROL COVERING SIGNS TYPE II
- POST MOUNTED SIGN (NEW)
- POST MOUNTED SIGN (EXISTING)
- MULTIPLE POST MOUNTED SIGN (EXISTING)
- TYPE III BARRICADE WITH/WITHOUT SIGN

N

2

DETOUR M4-8 24"X12" / NORTH M3-1 24"X12" / "WEST" FRONTAGE ROAD M1-95A 24"X24" / MO6-1 21"X21"

DETOUR M4-8 24"X12" / SOUTH M3-3 24"X12" / "WEST" FRONTAGE ROAD M1-95A 24"X24" / MO6-1 21"X21"

DETOUR M4-8 24"X12" / NORTH M3-1 24"X12" / "WEST" FRONTAGE ROAD M1-95A 24"X24" / MO6-1 21"X21"

DETOUR M4-8 24"X12" / SOUTH M3-3 24"X12" / "WEST" FRONTAGE ROAD M1-95A 24"X24" / MO6-1 21"X21"

"WEST" FRONTAGE ROAD M1-95A 24"X24"

DETOUR M4-8 24"X12" / SOUTH M3-3 24"X12" / "WEST" FRONTAGE ROAD M1-95A 24"X24"

DETOUR M4-8 24"X12" / NORTH M3-1 24"X12" / "WEST" FRONTAGE ROAD M1-95A 24"X24"

IH-41/94

300'

DETOUR M4-8 24"X12" / NORTH M3-1 24"X12" / "WEST" FRONTAGE ROAD M1-95A 24"X24" / MO6-1 21"X21"

DETOUR M4-8 24"X12" / SOUTH M3-3 24"X12" / "WEST" FRONTAGE ROAD M1-95A 24"X24" / MO6-1 21"X21"

DETOUR M4-8 24"X12" / NORTH M3-1 24"X12" / "WEST" FRONTAGE ROAD M1-95A 24"X24" / MO5-1L 21"X21"

DETOUR M4-8 24"X12" / NORTH M3-1 24"X12" / "WEST" FRONTAGE ROAD M1-95A 24"X24" / MO5-1R 21"X21"

500'

1000'

"WEST" FRONTAGE ROAD M1-95A 24"X24" / DETOUR AHEAD W20-2A

1000'

500'

300'

CTH C

"WEST" FRONTAGE ROAD

DETOUR M4-8 24"X12" / NORTH M3-1 24"X12" / "WEST" FRONTAGE ROAD M1-95A 24"X24" / MO5-1L 21"X21"

DETOUR M4-8 24"X12" / SOUTH M3-3 24"X12" / "WEST" FRONTAGE ROAD M1-95A 24"X24" / MO5-1R 21"X21"

DETOUR M4-8 24"X12" / NORTH M3-1 24"X12" / "WEST" FRONTAGE ROAD M1-95A 24"X24" / MO6-1 21"X21"

DETOUR M4-8 24"X12" / SOUTH M3-3 24"X12" / "WEST" FRONTAGE ROAD M1-95A 24"X24" / MO6-1 21"X21"

300'

DETOUR M4-8 24"X12" / SOUTH M3-3 24"X12" / "WEST" FRONTAGE ROAD M1-95A 24"X24"

DETOUR M4-8 24"X12" / NORTH M3-1 24"X12" / "WEST" FRONTAGE ROAD M1-95A 24"X24" / MO6-1 21"X21"

WEST FRONTAGE ROAD

EAST FRONTAGE ROAD

PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	DETOUR WEST FRONTAGE ROAD - DETAIL 9	SHEET 168	E

FILE NAME : W:\PROJECTS\21234\04_CADD_01\CADD_SHEETS\027101-DT.DWG
LAYOUT NAME - Detail 9

PLOT DATE : 10/7/2022 1:05 PM PLOT BY : ALEXANDER UNDERWOOD PLOT NAME : PLOT SCALE : ##########

2

LEGEND

- NEW SIGN
- EXISTING SIGN
- TRAFFIC CONTROL COVERING SIGNS TYPE II
- POST MOUNTED SIGN (NEW)
- POST MOUNTED SIGN (EXISTING)
- MULTIPLE POST MOUNTED SIGN (EXISTING)
- TYPE III BARRICADE WITH/WITHOUT SIGN

N

2

WEST FRONTAGE ROAD

IH-41/94

50TH RD

KRAUT RD

EAST FRONTAGE ROAD

1000'

500'

300'

300'

500'

1000'

"EAST" FRONTAGE ROAD M1-95A 24"X24"

DETOUR AHEAD W20-2A

DETOUR M4-8 24"X12"
NORTH M3-1 24"X12"
"EAST" FRONTAGE ROAD M1-95A 24"X24"
MO6-1 21"X21"

DETOUR M4-8 24"X12"
SOUTH M3-3 24"X12"
"EAST" FRONTAGE ROAD M1-95A 24"X24"
MO6-1 21"X21"

DETOUR M4-8 24"X12"
NORTH M3-1 24"X12"
"EAST" FRONTAGE ROAD M1-95A 24"X24"
MO5-1L 21"X21"

DETOUR M4-8 24"X12"
SOUTH M3-3 24"X12"
"EAST" FRONTAGE ROAD M1-95A 24"X24"
MO5-1R 21"X21"

PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	DETOUR WEST FRONTAGE ROAD - DETAIL 10	SHEET 169	E

2

LEGEND

NEW SIGN

EXISTING SIGN

TRAFFIC CONTROL COVERING SIGNS TYPE II

POST MOUNTED SIGN (NEW)

POST MOUNTED SIGN (EXISTING)

MULTIPLE POST MOUNTED SIGN (EXISTING)

TYPE III BARRICADE WITH/WITHOUT SIGN

N

2

WEST FRONTAGE ROAD

IH-41/94

EAST FRONTAGE ROAD

GOLF RD

300'

500'

1000'

DETOUR M4-8 24"X12"
SOUTH M3-3 24"X12"
"WEST" FRONTAGE ROAD M1-95A 24"X24"
MO6-1 21"X21"

DETOUR M4-8 24"X12"
NORTH M3-1 24"X12"
"WEST" FRONTAGE ROAD M1-95A 24"X24"

DETOUR M4-8 24"X12"
SOUTH M3-3 24"X12"
"WEST" FRONTAGE ROAD M1-95A 24"X24"
MO6-1 21"X21"

DETOUR M4-8 24"X12"
NORTH M3-1 24"X12"
"WEST" FRONTAGE ROAD M1-95A 24"X24"
MO6-1 21"X21"

DETOUR M4-8 24"X12"
SOUTH M3-3 24"X12"
"WEST" FRONTAGE ROAD M1-95A 24"X24"
MO5-1L 21"X21"

DETOUR M4-8 24"X12"
NORTH M3-1 24"X12"
"WEST" FRONTAGE ROAD M1-95A 24"X24"
MO5-1R 21"X21"

DETOUR M4-8 24"X12"
SOUTH M3-3 24"X12"
"WEST" FRONTAGE ROAD M1-95A 24"X24"

"WEST" FRONTAGE ROAD M1-95A 24"X24"
DETOUR AHEAD W20-2A

PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	DETOUR WEST FRONTAGE ROAD - DETAIL 11	SHEET 170	E

FILE NAME : W:\PROJECTS\21234\04_CADD_01\CADD_SHEETS\027101-DT.DWG
LAYOUT NAME - Detail 11

PLOT DATE : 10/7/2022 1:05 PM PLOT BY : ALEXANDER UNDERWOOD PLOT NAME : PLOT SCALE : 1 IN:200 FT

LEGEND

- NEW SIGN
- EXISTING SIGN
- TRAFFIC CONTROL COVERING SIGNS TYPE II
- POST MOUNTED SIGN (NEW)
- POST MOUNTED SIGN (EXISTING)
- MULTIPLE POST MOUNTED SIGN (EXISTING)
- TYPE III BARRICADE WITH/WITHOUT SIGN

N

CTH K

WEST FRONTAGE ROAD

IH-41/94

EAST FRONTAGE ROAD

PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	DETOUR WEST FRONTAGE ROAD - DETAIL 12	SHEET 171 E

FILE NAME : W:\PROJECTS\21234\04_CADD_01\CADD_SHEETS\027101-DT.DWG
LAYOUT NAME - Detail 12

PLOT DATE : 10/7/2022 1:05 PM PLOT BY : ALEXANDER UNDERWOOD PLOT NAME : PLOT SCALE : 1 IN:200 FT

WISDOT/CADDS SHEET 42



DETOUR NOTES

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SEE SDD "BARRICADES AND SIGNS FOR MAINLINE CLOSURES" AND SDD "DETOUR SIGNING FOR MAINLINE CLOSURES" FOR ADDITIONAL DETAILS.

LEGEND

- DETOUR ROUTE
- WORK ZONE
- (1A) SIGN NUMBER
- POST MOUNTED SIGN (NEW)
- TYPE III BARRICADE WITH/ WITHOUT SIGN

1 — DETOUR / WEST / COUNTY C — M4-8 24"X12", M3-4 24"X12", M1-5A 24"X24"

2 — DETOUR / EAST / COUNTY C — M4-8 24"X12", M3-2 24"X12", M1-5A 24"X24"

3 — END DETOUR / WEST / COUNTY C — M4-8A 24"X18", M3-4 24"X12", M1-5A 24"X24"

4 — WEST / COUNTY C — M3-4 24"X12", M1-5A 24"X24"

5 — EAST / COUNTY C — M3-2 24"X12", M1-5A 24"X24"

6 — END DETOUR / EAST / COUNTY C — M4-8A 24"X18", M3-2 24"X12", M1-5A 24"X24"

7 — ROAD CLOSED TO THRU TRAFFIC — R11-4 60"X30"

8 — DETOUR — M4-9L 30"X24"

9 — BRIDGE OUT — R11-2B 48"X30"

10 — ROAD CLOSED — R11-2 48"X30"

11 — DETOUR — M4-9R 30"X24"

A — MO6-1 21"X21"

B — MO5-1R 21"X21"

C — MO6-1 21"X21"

D — MO5-1L 21"X21"

E — MO6-1 21"X21"

F — DETOUR AHEAD — W20-2A

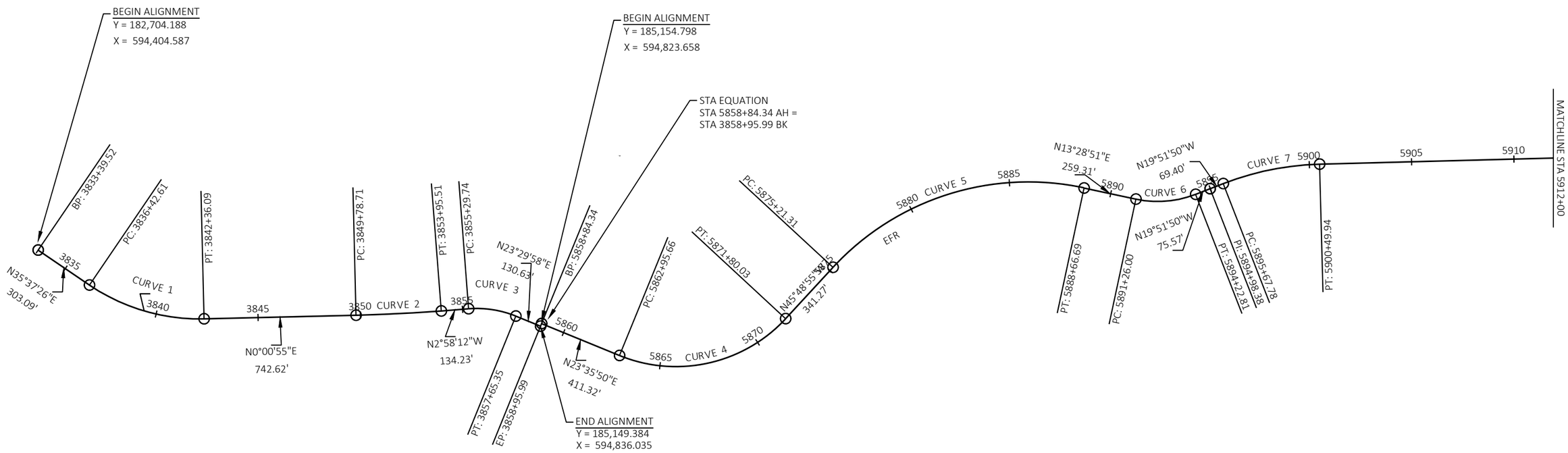
G — ROAD CLOSED 1000 FT — W20-3C

H — ROAD CLOSED 500 FT — W20-3D

J — ROAD CLOSED AHEAD — W20-3A

PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	DETOUR CTH C DURING WEST FRONTAGE ROAD CLOSURE - STAGE 2	SHEET 172	E

2



CURVE NO. 1
PI STA = 3839+49.29
Y = 183199.843
X = 594759.752
DELTA = 35°36'30"
D = 6°00'00"
T = 306.67'
L = 593.47'
R = 954.93'
PC STA = 3836+42.61
Y = 182950.562
X = 594581.128
PT STA = 3842+36.09
Y = 183506.515
X = 594759.834
BK = N35°37'25.5"E
AH = N00°00'55.0"E

CURVE NO. 2
PI STA = 3851+87.16
Y = 184457.582
X = 594760.087
DELTA = 2°59'07"
D = 0°42'58"
T = 208.45'
L = 416.81'
R = 8000.00'
PC STA = 3849+78.71
Y = 184249.132
X = 594760.032
PT STA = 3853+95.51
Y = 184665.753
X = 594749.287
BK = N00°00'55.0"E
AH = N02°58'11.6"W

CURVE NO. 3
PI STA = 3856+49.69
Y = 184919.587
X = 594736.118
DELTA = 26°28'10"
D = 11°14'04"
T = 119.95'
L = 235.61'
R = 510.00'
PC STA = 3855+29.74
Y = 184799.802
X = 594742.333
PT STA = 3857+65.35
Y = 185029.584
X = 594783.946
BK = N02°58'11.6"W
AH = N23°29'58.4"E

CURVE NO. 4
PI STA = 5868+01.25
Y = 185995.038
X = 595190.699
DELTA = 69°24'45"
D = 7°50'55"
T = 505.59'
L = 884.38'
R = 730.00'
PC STA = 5862+95.66
Y = 185531.721
X = 594988.309
PT STA = 5871+80.03
Y = 186347.423
X = 594828.141
BK = N23°35'49.6"E
AH = N45°48'54.9"W

CURVE NO. 5
PI STA = 5882+61.25
Y = 187101.004
X = 594052.804
DELTA = 59°17'46"
D = 4°24'27"
T = 739.95'
L = 1345.39'
R = 1300.00'
PC STA = 5875+21.31
Y = 186585.281
X = 594583.416
PT STA = 5888+66.69
Y = 187820.562
X = 594225.300
BK = N45°48'54.9"W
AH = N13°28'51.0"E

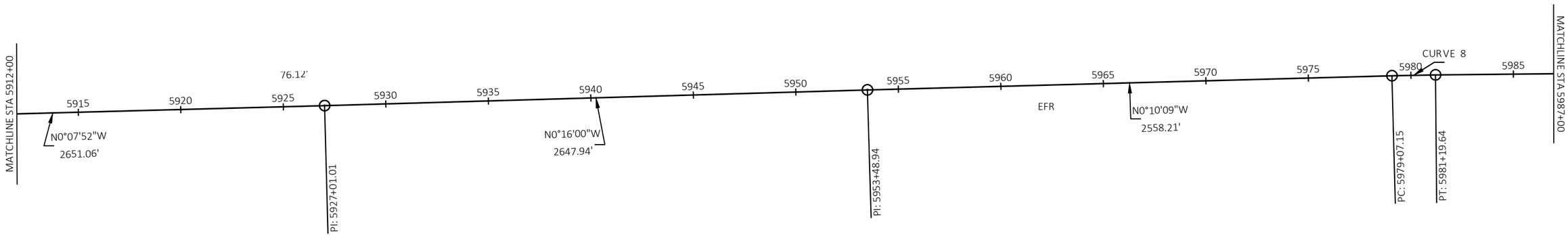
CURVE NO. 6
PI STA = 5892+78.74
Y = 188221.262
X = 594321.358
DELTA = 33°20'41"
D = 11°14'04"
T = 152.74'
L = 296.81'
R = 510.00'
PC STA = 5891+26.00
Y = 188072.731
X = 594285.751
PT STA = 5894+22.81
Y = 188364.914
X = 594269.459
BK = N13°28'51.0"E
AH = N19°51'50.2"W

CURVE NO. 7
PI STA = 5898+11.27
Y = 188730.264
X = 594137.464
DELTA = 19°43'58"
D = 4°05'33"
T = 243.49'
L = 482.16'
R = 1400.00'
PC STA = 5895+67.78
Y = 188501.259
X = 594220.200
PT STA = 5900+49.94
Y = 188973.755
X = 594136.906
BK = N19°51'50.2"W
AH = N00°07'52.4"W

PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROAD	COUNTY: RACINE	ALIGNMENT DETAILS	SHEET 173	E

2

N

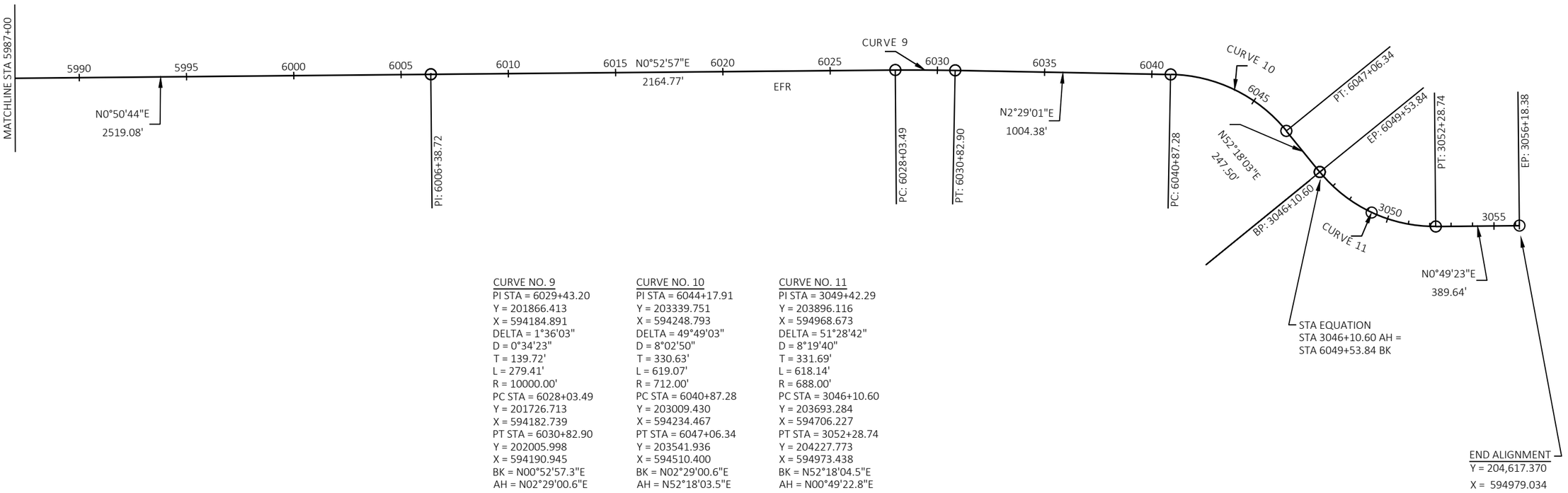


CURVE NO. 8
PI STA = 5980+13.40
Y = 196937.163
X = 594110.655
DELTA = 1°00'52"
D = 0°28'39"
T = 106.25'
L = 212.48'
R = 12000.00'
PC STA = 5979+07.15
Y = 196830.918
X = 594110.969
PT STA = 5981+19.64
Y = 197043.397
X = 594112.223
BK = N00°10'08.6"W
AH = N00°50'43.8"E

PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROAD	COUNTY: RACINE	ALIGNMENT DETAILS	SHEET 174	E

FILE NAME : W:\PROJECTS\21234\04_CADD_01\CADD_SHEETS\ALIGNMENT PLAN.DWG
LAYOUT NAME - 2
PLOT DATE : 5/6/2022 10:18 AM
PLOT BY : WILLIAM NEAVE
PLOT NAME :
PLOT SCALE : 1 IN:500 FT

2



CURVE NO. 9
PI STA = 6029+43.20
Y = 201866.413
X = 594184.891
DELTA = 1°36'03"
D = 0°34'23"
T = 139.72'
L = 279.41'
R = 10000.00'
PC STA = 6028+03.49
Y = 201726.713
X = 594182.739
PT STA = 6030+82.90
Y = 202005.998
X = 594190.945
BK = N00°52'57.3"E
AH = N02°29'00.6"E

CURVE NO. 10
PI STA = 6044+17.91
Y = 203339.751
X = 594248.793
DELTA = 49°49'03"
D = 8°02'50"
T = 330.63'
L = 619.07'
R = 712.00'
PC STA = 6040+87.28
Y = 203009.430
X = 594234.467
PT STA = 6047+06.34
Y = 203541.936
X = 594510.400
BK = N02°29'00.6"E
AH = N52°18'03.5"E

CURVE NO. 11
PI STA = 3049+42.29
Y = 203896.116
X = 594968.673
DELTA = 51°28'42"
D = 8°19'40"
T = 331.69'
L = 618.14'
R = 688.00'
PC STA = 3046+10.60
Y = 203693.284
X = 594706.227
PT STA = 3052+28.74
Y = 204227.773
X = 594973.438
BK = N52°18'04.5"E
AH = N00°49'22.8"E

PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROAD	COUNTY: RACINE	ALIGNMENT DETAILS	SHEET 175	E

2

N

CURVE NO. 12
PI STA = 2840+78.93
Y = 183978.018
X = 593881.127
DELTA = 89°52'47"
D = 81°51'04"
T = 69.85'
L = 109.81'
R = 70.00'
PC STA = 2840+09.08
Y = 183908.166
X = 593881.489
PT STA = 2841+18.89
Y = 183977.803
X = 593811.275
BK = N00°17'47.0"W
AH = S89°49'26.1"W

CURVE NO. 13
PI STA = 2859+97.38
Y = 185264.440
X = 593219.320
DELTA = 23°26'47"
D = 3°00'56"
T = 394.27'
L = 777.51'
R = 1900.00'
PC STA = 2856+03.11
Y = 184870.166
X = 593219.908
PT STA = 2863+80.62
Y = 185626.393
X = 593375.659
BK = N00°05'07.4"W
AH = N23°21'39.8"E

CURVE NO. 14
PI STA = 4867+75.38
Y = 186088.898
X = 593555.311
DELTA = 23°34'02"
D = 6°21'58"
T = 187.75'
L = 370.19'
R = 900.00'
PC STA = 4865+87.63
Y = 185912.877
X = 593489.985
PT STA = 4869+57.82
Y = 186276.356
X = 593544.810
BK = N20°21'40.4"E
AH = N03°12'22.0"W

CURVE NO. 15
PI STA = 4874+69.32
Y = 186787.057
X = 593516.203
DELTA = 26°33'09"
D = 6°00'00"
T = 225.32'
L = 442.54'
R = 954.93'
PC STA = 4872+44.01
Y = 186562.093
X = 593528.804
PT STA = 4876+86.55
Y = 186993.926
X = 593605.493
BK = N03°12'22.0"W
AH = N23°20'46.5"E

CURVE NO. 16
PI STA = 4883+89.58
Y = 187639.400
X = 593884.096
DELTA = 28°12'42"
D = 3°10'59"
T = 452.32'
L = 886.30'
R = 1800.00'
PC STA = 4879+37.26
Y = 187224.109
X = 593704.845
PT STA = 4888+23.55
Y = 188090.095
X = 593845.731
BK = N23°20'46.5"E
AH = N04°51'55.7"W

CURVE NO. 17
PI STA = 4890+81.27
Y = 188346.886
X = 593823.872
DELTA = 8°12'41"
D = 6°44'26"
T = 61.01'
L = 121.82'
R = 850.00'
PC STA = 4890+20.26
Y = 188286.093
X = 593829.047
PT STA = 4891+42.08
Y = 188407.795
X = 593827.433
BK = N04°51'55.7"W
AH = N03°20'44.8"E

CURVE NO. 18
PI STA = 4895+80.98
Y = 188845.950
X = 593853.048
DELTA = 3°31'27"
D = 1°25'57"
T = 123.06'
L = 246.03'
R = 4000.00'
PC STA = 4894+57.92
Y = 188723.103
X = 593845.866
PT STA = 4897+03.96
Y = 188969.005
X = 593852.665
BK = N03°20'44.8"E
AH = N00°10'42.2"W

END ALIGNMENT
Y = 183,975.990
X = 593,221.240

BEGIN ALIGNMENT
Y = 183,677.062
X = 593,221.685

BEGIN ALIGNMENT
Y = 183,975.990
X = 593,221.240

BEGIN ALIGNMENT
Y = 185,757.991
X = 593,432.503

EP: 1847+08.93
BP: 2847+08.93
BP: 1844+10.00
PC: 2856+03.11
PT: 2863+80.62
BP: 4864+22.42
PC: 4865+87.63
PT: 4869+57.82
PC: 4872+44.01
PT: 4876+86.55
PC: 4879+37.26
PT: 4888+23.55
PC: 4890+20.26
PT: 4891+42.08
PC: 4894+57.92
PT: 4897+03.96
PI: 4900+45.00

N0°05'07"W
894.18'

CURVE 13

WFR

N4°51'56"W
196.71'

N0°10'42"W
341.04'

2850 2855 2860 2865 4865 4870 4875 4880 4885 4890 4895 4900 4905

BP: 2838+00.00
PC: 2840+09.08
2845
EP: 2847+08.93
S89°49'26"W
590.04'
END ALIGNMENT
Y = 183,975.990
X = 593,221.240
PT: 2841+18.89
2840
CURVE 12
N0°17'47"W
209.08'

N23°21'40"E
143.35'

N20°21'40"E
165.21'

N3°12'22"W
286.18'

CURVE 15

N23°20'47"E
250.71'

CURVE 16

N3°20'45"E
315.85'

CURVE 18

MATCHLINE STA 4908+00

STA EQUATION
STA 4864+22.42 AH =
STA 2865+23.97 BK

EP: 2865+23.97

END ALIGNMENT
Y = 185,757.994
X = 593,432.502

BEGIN ALIGNMENT
Y = 183,908.166
X = 593,882.570

PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROAD	COUNTY: RACINE	ALIGNMENT DETAILS	SHEET 176	E

FILE NAME : W:\PROJECTS\21234\04_CADD_01\CADD_SHEETS\ALIGNMENT PLAN.DWG
LAYOUT NAME - 4
PLOT DATE : 5/6/2022 10:18 AM
PLOT BY : WILLIAM NEAVE
PLOT NAME :
PLOT SCALE : 1 IN:500 FT
WISDOT/CADDS SHEET 42

2

N

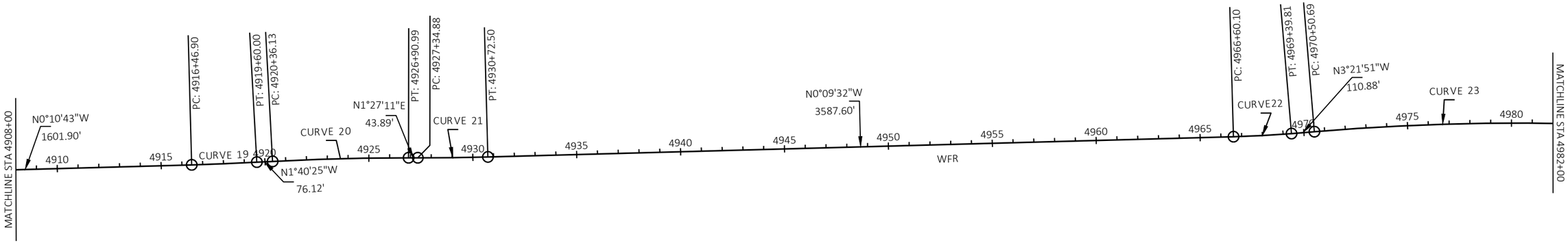
CURVE NO. 19
PI STA = 4918+03.46
Y = 191068.495
X = 593846.121
DELTA = 1°29'42"
D = 0°28'39"
T = 156.56'
L = 313.11'
R = 12000.00'
PC STA = 4916+46.90
Y = 190911.933
X = 593846.609
PT STA = 4919+60.00
Y = 191224.992
X = 593841.549
BK = N00°10'43.0"W
AH = N01°40'25.0"W

CURVE NO. 20
PI STA = 4923+63.64
Y = 191628.454
X = 593829.760
DELTA = 3°07'36"
D = 0°28'39"
T = 327.51'
L = 654.86'
R = 12000.00'
PC STA = 4920+36.13
Y = 191301.080
X = 593839.325
PT STA = 4926+90.99
Y = 191955.862
X = 593838.066
BK = N01°40'25.0"W
AH = N01°27'11.3"E

CURVE NO. 21
PI STA = 4929+03.70
Y = 192168.505
X = 593843.460
DELTA = 1°36'43"
D = 0°28'39"
T = 168.82'
L = 337.62'
R = 12000.00'
PC STA = 4927+34.88
Y = 191999.739
X = 593839.179
PT STA = 4930+72.50
Y = 192337.325
X = 593842.992
BK = N01°27'11.3"E
AH = N00°09'31.9"W

CURVE NO. 22
PI STA = 4967+99.99
Y = 196064.802
X = 593832.657
DELTA = 3°12'19"
D = 1°08'45"
T = 139.89'
L = 279.71'
R = 5000.00'
PC STA = 4966+60.10
Y = 195924.912
X = 593833.044
PT STA = 4969+39.81
Y = 196204.451
X = 593824.448
BK = N00°09'31.9"W
AH = N03°21'50.7"W

CURVE NO. 23
PI STA = 4976+69.29
Y = 196932.671
X = 593781.642
DELTA = 5°54'07"
D = 0°28'39"
T = 618.60'
L = 1236.10'
R = 12000.00'
PC STA = 4970+50.69
Y = 196315.140
X = 593817.941
PT STA = 4982+86.79
Y = 197550.661
X = 593809.033
BK = N03°21'50.7"W
AH = N02°32'16.3"E



PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROAD	COUNTY: RACINE	ALIGNMENT DETAILS	SHEET 177	E

FILE NAME : W:\PROJECTS\21234\04_CADD_01\CADD_SHEETS\ALIGNMENT PLAN.DWG
LAYOUT NAME - 5
PLOT DATE : 5/6/2022 10:18 AM
PLOT BY : WILLIAM NEAVE
PLOT NAME :
PLOT SCALE : 1 IN:500 FT

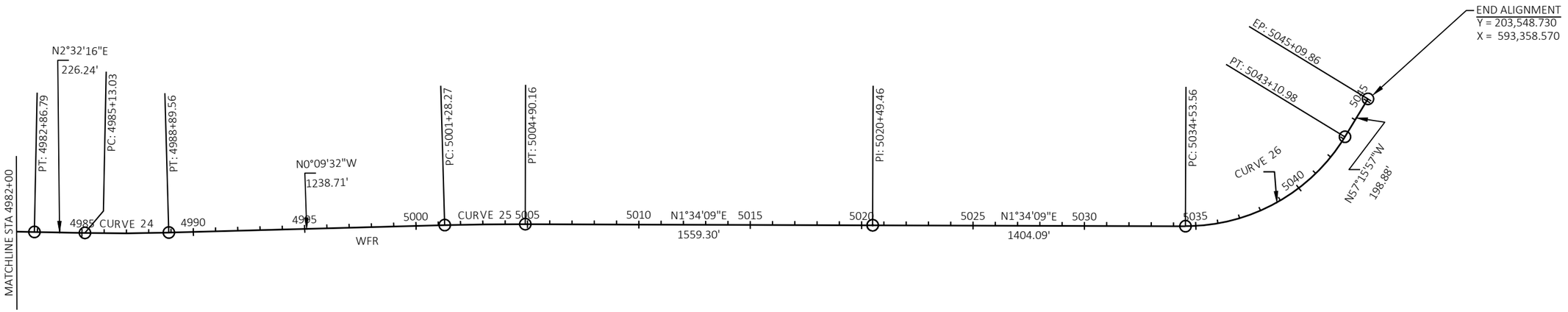
2

N

CURVE NO. 24
PI STA = 4987+01.33
Y = 197964.794
X = 593827.388
DELTA = 2°41'48"
D = 0°42'58"
T = 188.30'
L = 376.53'
R = 8000.00'
PC STA = 4985+13.03
Y = 197776.678
X = 593819.051
PT STA = 4988+89.56
Y = 198153.095
X = 593826.866
BK = N02°32'16.3"E
AH = N00°09'31.9"W

CURVE NO. 25
PI STA = 5003+09.23
Y = 199572.762
X = 593822.930
DELTA = 1°43'40"
D = 0°28'39"
T = 180.96'
L = 361.89'
R = 12000.00'
PC STA = 5001+28.27
Y = 199391.802
X = 593823.432
PT STA = 5004+90.16
Y = 199753.654
X = 593827.885
BK = N00°09'31.9"W
AH = N01°34'08.6"E

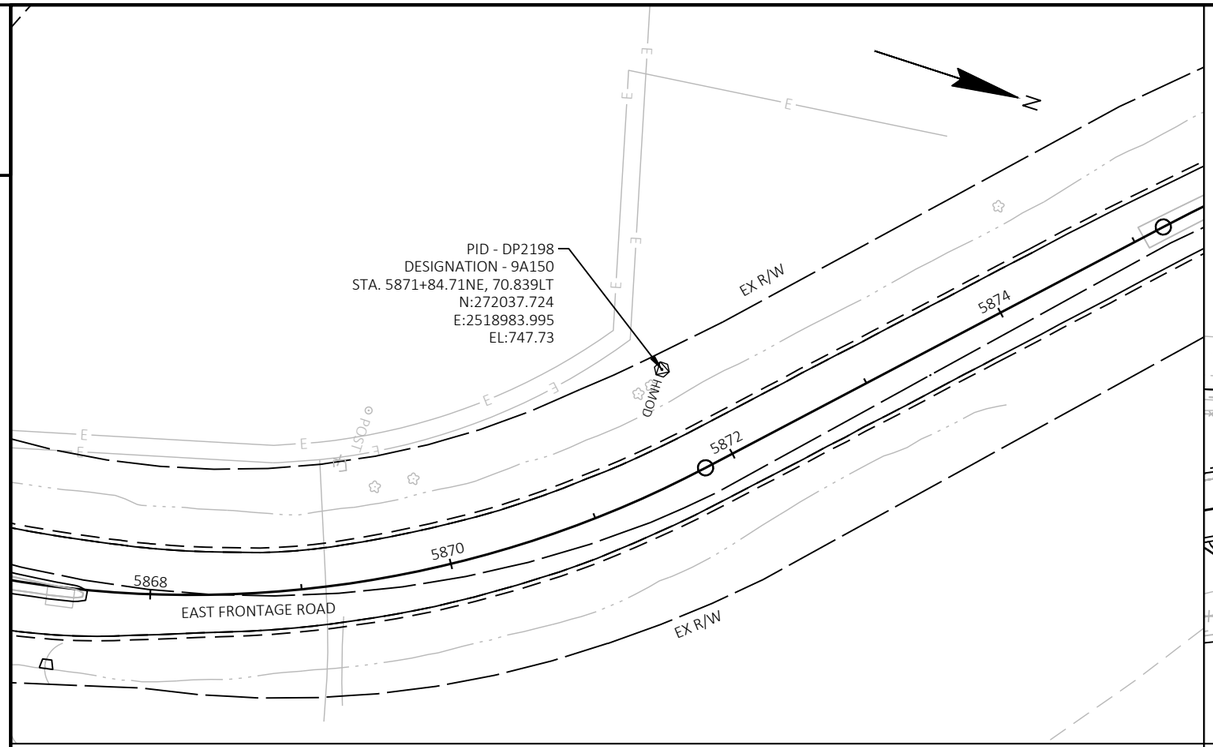
CURVE NO. 26
PI STA = 5039+24.39
Y = 203186.590
X = 593921.920
DELTA = 58°50'05"
D = 6°51'42"
T = 470.83'
L = 857.43'
R = 835.00'
PC STA = 5034+53.56
Y = 202715.934
X = 593909.028
PT STA = 5043+10.98
Y = 203441.189
X = 593525.861
BK = N01°34'08.6"E
AH = N57°15'56.7"W

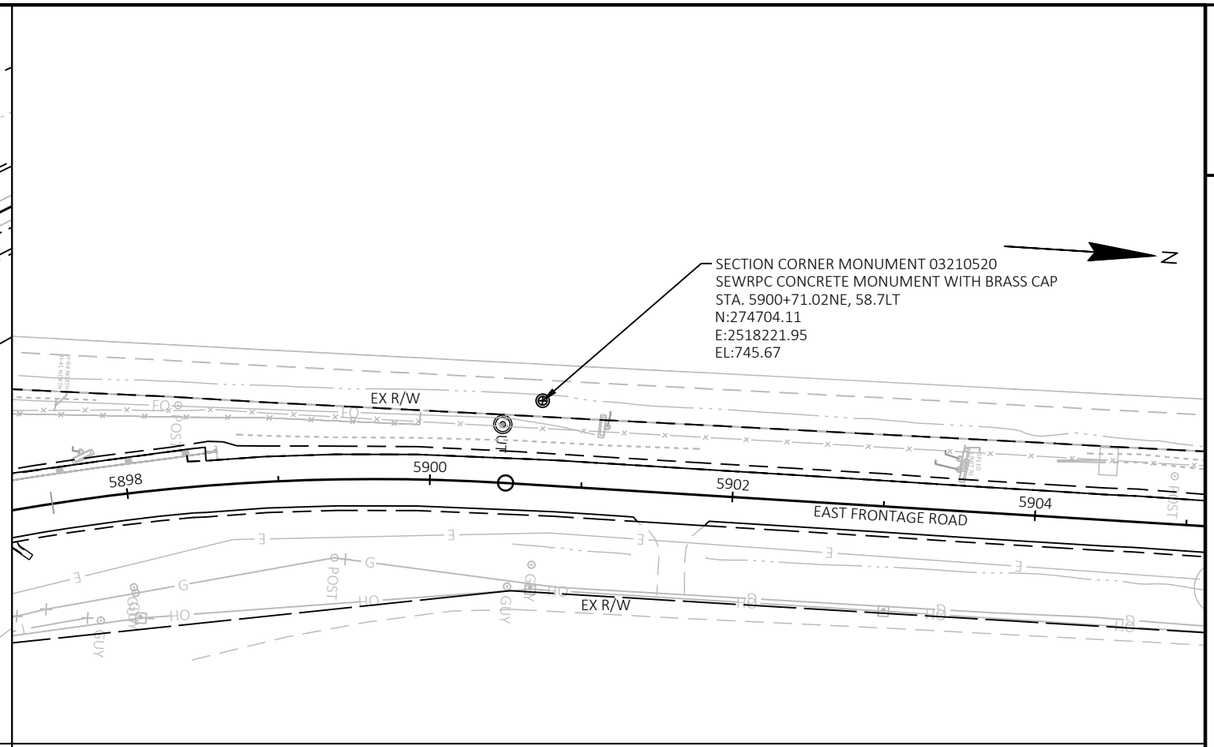


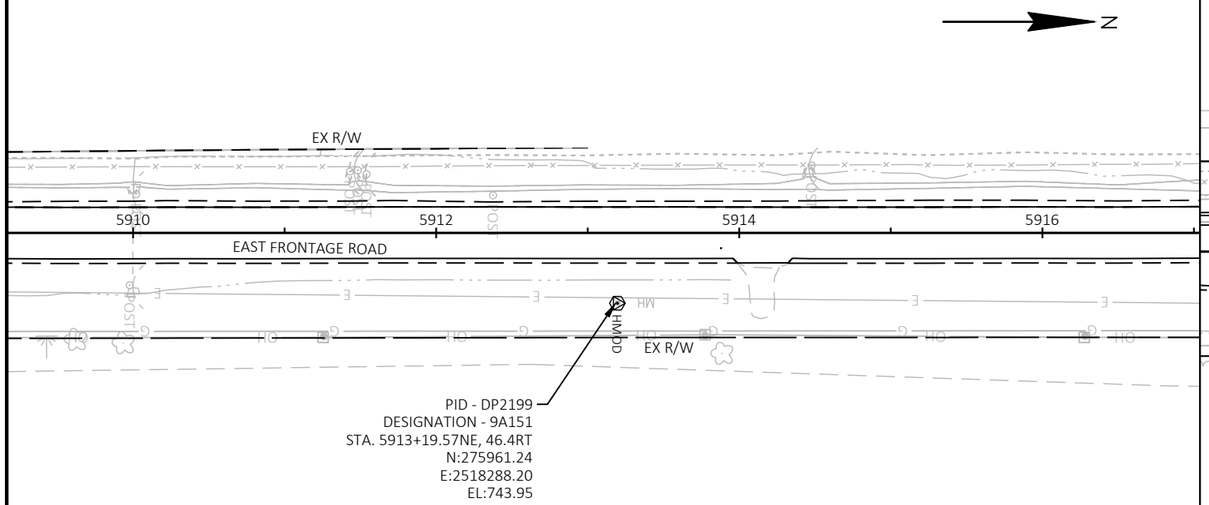
PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROAD	COUNTY: RACINE	ALIGNMENT DETAILS	SHEET 178	E

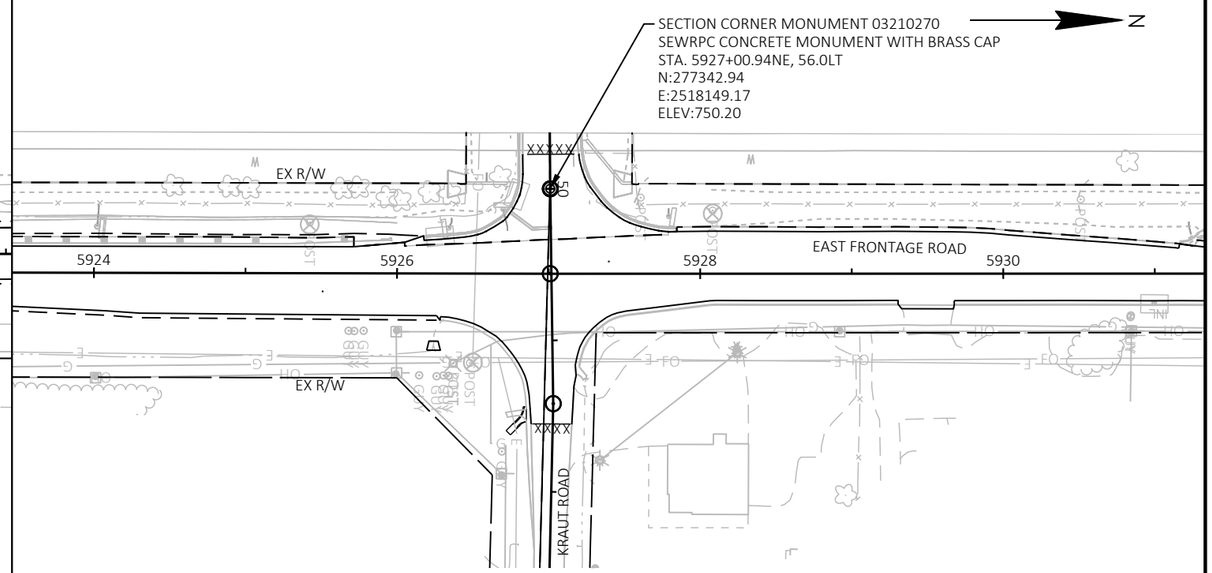
FILE NAME : W:\PROJECTS\21234\04_CADD_01\CADD_SHEETS\ALIGNMENT PLAN.DWG
LAYOUT NAME - 6
PLOT DATE : 5/6/2022 10:18 AM
PLOT BY : WILLIAM NEAVE
PLOT NAME :
PLOT SCALE : 1 IN:500 FT

2









2

PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	ALIGNMENT LAYOUT SURVEY CONTROL	SHEET 179	E

FILE NAME : W:\PROJECTS\21234\04_CADD_01\CADD_SHEETS\027220-AD-CP.DWG
LAYOUT NAME - 01

PLOT DATE : 10/18/2022 12:24 PM PLOT BY : ALEXANDER UNDERWOOD PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

N

SECTION CORNER MONUMENT 032100260
SEWRPC CONCRETE MONUMENT WITH BRASS CAP
STA. 5953+49.79NE, 56.12LT
N:279989.59
E:2518069.96
ELEV:738.10

EX R/W

5950 5952 5954 5956

EAST FRONTAGE ROAD

EX R/W

N

SECTION CORNER MONUMENT 03210010
CONCRETE MONUMENT
STA. 5980+86.45NE, 57.02LT
N:282653.46
E:2517995.02
ELEV:757.65

EX R/W

5980 5982 5984

EAST FRONTAGE ROAD

EX R/W

PID - DP2200
DESIGNATION - 9A152
STA. 5983+57.06NE, 48.35RT
N:282998.69
E:2518095.80
ELEV:774.46

2

N

SECTION CORNER MONUMENT 04211560
SEWRPC CONCRETE MONUMENT WITH BRASS CAP
STA 6006+38.61NE, 55.96LT
N:285278.87
E:2517967.53
ELEV:745.07

EX R/W

6004 6006 6008 6010

EAST FRONTAGE ROAD

GOLF ROAD

EX R/W

N

SECTION CORNER MONUMENT 04211310
SEWRPC CONCRETE MONUMENT WITH BRASS CAP
STA. 6032+77.56NE, 65.39LT
N:287919.41
E:2517941.50
ELEV:743.91

EX R/W

6030 6032 6034 6036

EAST FRONTAGE ROAD

EX R/W

PROJECT NO: 1030-09-76	HWY: EAST AND WEST FRONTAGE ROADS	COUNTY: RACINE	ALIGNMENT LAYOUT SURVEY CONTROL	SHEET 180	E

FILE NAME : W:\PROJECTS\21234\04_CADD_01\CADD_SHEETS\027220-AD-CP.DWG
LAYOUT NAME - 02
PLOT DATE : 10/18/2022 12:25 PM
PLOT BY : ALEXANDER UNDERWOOD
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

1030-09-76

Line	Item	Item Description	Unit	Total	Qty
0006	204.0115	Removing Asphaltic Surface Butt Joints	SY	3,794.000	3,794.000
0008	204.0120	Removing Asphaltic Surface Milling	SY	183,202.000	183,202.000
0012	204.9060.S	Removing (item description) 01. Apron Endwalls	EACH	1.000	1.000
0016	205.0100	Excavation Common	CY	6,855.000	6,855.000
0020	213.0100	Finishing Roadway (project) 01. 1030-09-76	EACH	1.000	1.000
0024	305.0110	Base Aggregate Dense 3/4-Inch	TON	3,570.000	3,570.000
0026	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	5,778.000	5,778.000
0028	305.0500	Shaping Shoulders	STA	808.000	808.000
0030	310.0110	Base Aggregate Open-Graded	TON	456.000	456.000
0032	311.0110	Breaker Run	TON	5,308.000	5,308.000
0034	416.0610	Drilled Tie Bars	EACH	31.000	31.000
0036	416.0620	Drilled Dowel Bars	EACH	365.000	365.000
0038	416.1710	Concrete Pavement Repair	SY	965.000	965.000
0040	455.0605	Tack Coat	GAL	23,421.000	23,421.000
0042	460.0105.S	HMA Percent Within Limits (PWL) Test Strip Volumetrics	EACH	2.000	2.000
0044	460.0110.S	HMA Percent Within Limits (PWL) Test Strip Density	EACH	2.000	2.000
0046	460.2000	Incentive Density HMA Pavement	DOL	3,870.000	3,870.000
0048	460.2005	Incentive Density PWL HMA Pavement	DOL	14,704.000	14,704.000
0050	460.2007	Incentive Density HMA Pavement Longitudinal Joints	DOL	19,990.000	19,990.000
0052	460.2010	Incentive Air Voids HMA Pavement	DOL	28,460.000	28,460.000
0054	460.5223	HMA Pavement 3 LT 58-28 S	TON	5,403.000	5,403.000
0056	460.5224	HMA Pavement 4 LT 58-28 S	TON	29,080.000	29,080.000
0058	465.0105	Asphaltic Surface	TON	1,611.000	1,611.000
0060	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	97.000	97.000
0062	465.0310	Asphaltic Curb	LF	734.000	734.000
0064	465.0315	Asphaltic Flumes	SY	450.000	450.000
0066	465.0475	Asphalt Centerline Rumble Strips 2-Lane Rural	LF	24,884.000	24,884.000
0068	522.1012	Apron Endwalls for Culvert Pipe Reinforced Concrete 12-Inch	EACH	2.000	2.000
0070	522.1021	Apron Endwalls for Culvert Pipe Reinforced Concrete 21-Inch	EACH	1.000	1.000
0078	606.0200	Riprap Medium	CY	36.000	36.000
0080	611.0420	Reconstructing Manholes	EACH	1.000	1.000
0082	611.8110	Adjusting Manhole Covers	EACH	6.000	6.000
0084	611.8120.S	Cover Plates Temporary	EACH	7.000	7.000
0086	612.0106	Pipe Underdrain 6-Inch	LF	1,762.000	1,762.000
0088	612.0206	Pipe Underdrain Unperforated 6-Inch	LF	750.000	750.000
0090	612.0806	Apron Endwalls for Underdrain Reinforced Concrete 6-Inch	EACH	30.000	30.000
0092	614.0397	Guardrail Mow Strip Emulsified Asphalt	SY	830.000	830.000
0094	614.0400	Adjusting Steel Plate Beam Guard	LF	795.000	795.000
0096	614.0950	Replacing Guardrail Posts and Blocks	EACH	78.000	78.000
0098	614.0951	Replacing Guardrail Rail and Hardware	LF	163.000	163.000
0100	614.0952	Replacing Guardrail Reflectors	EACH	225.000	225.000
0104	619.1000	Mobilization	EACH	0.870	0.870
0106	624.0100	Water	MGAL	46.000	46.000
0108	625.0100	Topsoil	SY	900.000	900.000
0114	628.1905	Mobilizations Erosion Control	EACH	4.000	4.000
0116	628.1910	Mobilizations Emergency Erosion Control	EACH	8.000	8.000
0120	628.2004	Erosion Mat Class I Type B	SY	145.000	145.000
0122	628.7005	Inlet Protection Type A	EACH	48.000	48.000
0124	628.7010	Inlet Protection Type B	EACH	30.000	30.000

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Line	Item	Item Description	Unit	Total	Qty
0126	628.7015	Inlet Protection Type C	EACH	26.000	26.000
0128	628.7504	Temporary Ditch Checks	LF	175.000	175.000
0130	628.7555	Culvert Pipe Checks	EACH	8.000	8.000
0132	629.0210	Fertilizer Type B	CWT	0.400	0.400
0136	630.0160	Seeding Mixture No. 60	LB	12.000	12.000
0138	630.0170	Seeding Mixture No. 70	LB	12.000	12.000
0140	630.0200	Seeding Temporary	LB	12.000	12.000
0142	630.0500	Seed Water	MGAL	24.000	24.000
0144	634.0618	Posts Wood 4x6-Inch X 18-FT	EACH	10.000	10.000
0150	637.0620	Sign Flags Permanent Type II	EACH	28.000	28.000
0154	637.2210	Signs Type II Reflective H	SF	50.000	50.000
0156	637.2230	Signs Type II Reflective F	SF	50.000	50.000
0158	638.2102	Moving Signs Type II	EACH	10.000	10.000
0162	638.2602	Removing Signs Type II	EACH	5.000	5.000
0164	638.3000	Removing Small Sign Supports	EACH	10.000	10.000
0168	642.5201	Field Office Type C	EACH	1.000	1.000
0170	643.0300	Traffic Control Drums	DAY	8,700.000	8,700.000
0172	643.0420	Traffic Control Barricades Type III	DAY	5,613.000	5,613.000
0174	643.0705	Traffic Control Warning Lights Type A	DAY	6,080.000	6,080.000
0176	643.0900	Traffic Control Signs	DAY	67,445.000	67,445.000
0178	643.0920	Traffic Control Covering Signs Type II	EACH	117.000	117.000
0180	643.1050	Traffic Control Signs PCMS	DAY	372.000	372.000
0182	643.3770	Temporary Marking Raised Pavement Marker Type II	EACH	804.000	804.000
0184	643.5000	Traffic Control	EACH	0.990	0.990
0186	645.0111	Geotextile Type DF Schedule A	SY	2,348.000	2,348.000
0188	645.0120	Geotextile Type HR	SY	243.000	243.000
0190	646.1020	Marking Line Epoxy 4-Inch	LF	75,827.000	75,827.000
0192	646.1040	Marking Line Grooved Wet Ref Epoxy 4-Inch	LF	60,426.000	60,426.000
0194	646.3020	Marking Line Epoxy 8-Inch	LF	3,799.000	3,799.000
0196	646.5020	Marking Arrow Epoxy	EACH	50.000	50.000
0198	646.5120	Marking Word Epoxy	EACH	14.000	14.000
0202	646.6120	Marking Stop Line Epoxy 18-Inch	LF	796.000	796.000
0204	646.7120	Marking Diagonal Epoxy 12-Inch	LF	1,060.000	1,060.000
0206	646.8120	Marking Curb Epoxy	LF	207.000	207.000
0208	646.8220	Marking Island Nose Epoxy	EACH	4.000	4.000
0212	648.0100	Locating No-Passing Zones	MI	6.750	6.750
0214	650.4000	Construction Staking Storm Sewer	EACH	1.000	1.000
0216	650.6000	Construction Staking Pipe Culverts	EACH	3.000	3.000
0218	650.8000	Construction Staking Resurfacing Reference	LF	40,448.000	40,448.000
0220	650.9911	Construction Staking Supplemental Control (project) 01. 1030-09-76	EACH	1.000	1.000
0256	690.0150	Sawing Asphalt	LF	1,322.000	1,322.000
0258	690.0250	Sawing Concrete	LF	400.000	400.000
0260	715.0715	Incentive Flexural Strength Concrete Pavement	DOL	500.000	500.000
0262	740.0440	Incentive IRI Ride	DOL	30,400.000	30,400.000
0272	SPV.0060	Special 05. Adjusting Sanitary Manhole Frames Village of Mount Pleasant	EACH	1.000	1.000
0274	SPV.0075	Special 01. Pavement Cleanup	HRS	100.000	100.000
0276	SPV.0195	Special 01. Asphaltic Repair Special	TON	5,773.000	5,773.000

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REMOVING ASPHALTIC ITEMS

STAGE	LOCATION	LIMIT	STATION	TO	STATION	204.0115 REMOVING ASPHALTIC SURFACE BUTT JOINTS SY	204.0120 REMOVING ASPHALTIC SURFACE MILLING SY
1							
	EAST FRONTAGE ROAD	SOUTH OF STH 20	3835+00	-	3852+25	628	10,756
	EAST FRONTAGE ROAD	STH 20 TO CTH C	5863+15	-	5894+23	778	16,602
	EAST FRONTAGE ROAD	CTH C TO CTH K	5895+73	-	5927+00	222	12,953
	EAST FRONTAGE ROAD	KRAUT RD TO GOLF RD	5927+00	-	6006+37	--	33,271
	EAST FRONTAGE ROAD	GOLF RD TO CTH K	6006+37	-	3052+35	111	21,042
2							
	WEST FRONTAGE ROAD	SOUTH OF STH 20	2838+77	-	2857+00	889	11,118
	WEST FRONTAGE ROAD	STH 20 TO CTH C	4868+00	-	4888+84	611	11,213
	WEST FRONTAGE ROAD	CTH C TO 50TH RD	4890+79	-	4923+55	278	13,908
	WEST FRONTAGE ROAD	KRAUT RD TO GOLF RD	4923+55	-	5003+02	--	33,031
	WEST FRONTAGE ROAD	GOLF RD TO CTH K	5003+02	-	5043+10	278	19,308
PROJECT TOTAL						3,794	183,202

ALL ITEMS CATEGORY 1000

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BASE AGGREGATE ITEMS

STAGE	LOCATION	LIMIT	STATION TO STATION	305.0110 BASE AGGREGATE DENSE 3/4-INCH TON	305.0500 SHAPING SHOULDERS STA
1					
	EAST FRONTAGE ROAD	SOUTH OF STH 20	3835+00 - 3852+25	100	36
	EAST FRONTAGE ROAD	STH 20 TO CTH C	5863+15 - 5894+23	201	62
	EAST FRONTAGE ROAD	CTH C TO KRAUT RD	5895+73 - 5927+00	301	64
	EAST FRONTAGE ROAD	KRAUT RD TO GOLF RD	5927+00 - 6006+37	800	246
	EAST FRONTAGE ROAD	GOLF RD TO CTH K	6006+37 - 3052+35	472	14
2					
	WEST FRONTAGE ROAD	SOUTH OF STH 20	2838+77 - 2857+00	99	38
	WEST FRONTAGE ROAD	STH 20 TO CTH C	4868+00 - 4888+84	241	42
	WEST FRONTAGE ROAD	CTH C TO 50TH RD	4890+79 - 4923+55	266	66
	WEST FRONTAGE ROAD	KRAUT RD TO GOLF RD	4923+55 - 5003+02	758	160
	WEST FRONTAGE ROAD	GOLF RD TO CTH K	5003+02 - 5043+10	333	80
PROJECT TOTAL				3,570	808

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ASPHALTIC REPAIR SPECIAL

STAGE	LOCATION	LIMIT	STATION	TO	STATION	SPV.0195.01 TON
1						
	EAST FRONTAGE ROAD	SOUTH OF STH 20	3835+00	-	3852+25	602
	EAST FRONTAGE ROAD	STH 20 TO CTH C	5863+15	-	5894+23	930
	EAST FRONTAGE ROAD	CTH C TO KRAUT RD	5895+73	-	5927+00	290
	EAST FRONTAGE ROAD	KRAUT RD TO GOLF RD	5927+00	-	6006+37	745
	EAST FRONTAGE ROAD	GOLF RD TO CTH K	6006+37	-	3052+35	471
2						
	WEST FRONTAGE ROAD	SOUTH OF STH 20	2838+77	-	2857+00	623
	WEST FRONTAGE ROAD	STH 20 TO CTH C	4868+00	-	4888+84	628
	WEST FRONTAGE ROAD	CTH C TO 50TH RD	4890+79	-	4923+55	312
	WEST FRONTAGE ROAD	KRAUT RD TO GOLF RD	4923+55	-	5003+02	740
	WEST FRONTAGE ROAD	GOLF RD TO CTH K	5003+02	-	5043+10	432
PROJECT TOTAL						5,773

ALL ITEMS CATEGORY 1000

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UNDERDRAIN ITEMS

STAGE	STREET	LIMIT	STATION	TO	STATION	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON	310.0110 BASE AGGREGATE OPEN-GRADED TON	311.0110 BREAKER RUN TON	465.0105 ASPHALTIC SURFACE TON	612.0106 PIPE UNDERDRAIN 6-INCH LF	612.0206 PIPE UNDERDRAIN UNPERFORATED 6-INCH LF	612.0806 APRON ENDWALLS FOR UNDERDRAIN REINFORCED CONCRETE 6-INCH EACH	624.0100 WATER MGAL	645.0111 GEOTEXTILE TYPE DF SCHEDULE A SY
1														
	EAST FRONTAGE ROAD	SOUTH OF STH 20	3835+00	-	3852+25	775	58	676	221	224	100	4	6	299
	EAST FRONTAGE ROAD	STH 20 TO CTH C	5863+15	-	5894+23	1,397	105	1,218	420	404	150	6	10	539
	EAST FRONTAGE ROAD	CTH C TO KRAUT RD	5895+73	-	5927+00	185	16	189	52	63	50	2	2	83
	EAST FRONTAGE ROAD	KRAUT RD TO GOLF RD	5927+00	-	6006+37	470	41	479	131	159	50	2	4	212
	EAST FRONTAGE ROAD	GOLF RD TO CTH K	6006+37	-	3052+35	293	26	298	81	99	50	2	3	132
2														
	WEST FRONTAGE ROAD	SOUTH OF STH 20	2838+77	-	2857+00	819	61	714	247	237	100	4	6	316
	WEST FRONTAGE ROAD	STH 20 TO CTH C	4868+00	-	4888+84	937	70	817	208	271	100	4	7	361
	WEST FRONTAGE ROAD	CTH C TO 50TH RD	4890+79	-	4923+55	194	17	198	54	66	50	2	2	87
	WEST FRONTAGE ROAD	KRAUT RD TO GOLF RD	4923+55	-	5003+02	471	41	479	131	159	50	2	4	212
	WEST FRONTAGE ROAD	GOLF RD TO CTH K	5003+02	-	5043+10	238	21	242	66	80	50	2	2	107
PROJECT TOTALS						5,778	456	5,308	1,611	1,762	750	30	46	2,348

LOCATION	STA TO STA		205.0100 EXCAVATION COMMON (1) EBS EXCAVATION	SALVAGED/UNUSABLE PAVEMENT MATERIAL (2)	AVAILABLE MATERIAL (3)	EXPANDED EBS FILL (4) FACTOR 1.3	MASS ORDINATE +/- (5)	WASTE (6)
EAST FRONTAGE RD.	3835+00 - 3852+25		905	151	0	1177	-1177	905
EAST FRONTAGE RD.	5863+15 - 5894+23		1631	272	0	2120	-2120	1631
EAST FRONTAGE RD.	5895+73 - 3052+35		1163	194	0	1512	-1512	1163
SUBTOTAL			3699	617	0	4809	-4809	3699
WEST FRONTAGE RD.	2838+77 - 2857+00		957	159	0	1244	-1244	957
WEST FRONTAGE RD.	4868+00 - 4888+84		1094	182	0	1422	-1422	1094
WEST FRONTAGE RD.	4890+79 - 5043+10		1107	184	0	1439	-1439	1107
SUBTOTAL			3157	526	0	4104	-4104	3157
PROJECT TOTAL			6855	1143	0	8913	-8913	6856

NOTES:

(1)Salvaged/Unusable pavement material is included in the excavation unless existing pavement is below subgrade
(2)Existing pavement volume (CY), not available for fill
(3)Excavated EBS material is assumed to be unused in Fills
(4)Expanded EBS Backfill: This is to be filled with 1 ¼" Base Aggregate Dense and Breaker Run
(5)Mass Ordinate = Available Material – Expanded EBS Fill. Minus indicates a shortage of material
(6)Waste = EBS Excavation + (Mass Ordinate if positive within limits)

ALL ITEMS CATEGORY 1000

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CONCRETE PAVEMENT REPAIR

STAGE	LOCATION	LIMIT	416.0610 DRILLED TIE BARS EACH	416.0620 DRILLED DOWEL BARS EACH	416.1710 CONCRETE PAVEMENT REPAIR SY
1					
	EAST FRONTAGE ROAD	CTH C	19	188	419
2					
	WEST FRONTAGE ROAD	CTH C	12	177	546
PROJECT TOTAL			31	365	965

PWL ITEMS

STAGE	LOCATION	460.0105.S HMA PERCENT WITHIN LIMITS (PWL) TEST STRIP VOLUMETRICS EACH	460.0110.S HMA PERCENT WITHIN LIMITS (PWL) TEST STRIP DENSITY EACH
1			
	EAST FRONTAGE ROAD	1	1
2			
	WEST FRONTAGE ROAD	1	1
PROJECT TOTAL		2	2

ALL ITEMS CATEGORY 1000

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ASPHALTIC ITEMS

STAGE	LOCATION	LIMIT	STATION	TO	STATION	OFFSET	455.0605 TACK COAT GAL	460.5223 HMA PAVEMENT 3 LT 58-28 S TON	460.5224 HMA PAVEMENT 4 LT 58-28 S TON	465.0120 ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES TON	465.0310 ASPHALTIC CURB LF
1											
	EAST FRONTAGE ROAD	SOUTH OF STH 20	3835+00	-	3852+25	--	1,451	1,208	1,079	4	--
	EAST FRONTAGE ROAD	STH 20 TO CTH C	5863+15	-	5894+23	--	2,193	1,722	1,685	--	--
	EAST FRONTAGE ROAD	STH 20 TO CTH C	5892+93	-	5894+22	LT	--	--	--	--	167
	EAST FRONTAGE ROAD	CTH C to KRAUT RD	5895+73	-	3052+35	--	1,605	--	2,303	3	--
	EAST FRONTAGE ROAD	CTH C TO KRAUT RD	5895+74	-	5897+13	RT	--	--	--	--	135
	EAST FRONTAGE ROAD	KRAUT RD TO GOLF RD	5927+00	-	6006+37	--	4,072	--	5,843	20	--
	EAST FRONTAGE ROAD	GOLF RD TO CTH K	6006+37	-	3052+35	--	2,672	--	3,837	4	--
2											
	WEST FRONTAGE ROAD	SOUTH OF STH 20	2838+77	-	2857+00	--	1,459	1,179	1,108	16	--
	WEST FRONTAGE ROAD	STH 20 TO CTH C	4868+00	-	4888+84	--	1,538	1,292	1,121	14	--
	WEST FRONTAGE ROAD	STH 20 TO CTH C	4886+71	-	4889+04	RT	--	--	--	--	234
	WEST FRONTAGE ROAD	CTH C TO 50TH RD	4890+49	-	4892+44	LT	--	--	--	--	198
	WEST FRONTAGE ROAD	CTH C TO 50TH RD	4890+79	-	4923+55	--	1,765	--	2,534	7	--
	WEST FRONTAGE ROAD	KRAUT RD TO GOLF RD	4923+55	-	5003+02	--	4,134	--	5,933	22	--
	WEST FRONTAGE ROAD	GOLF RD TO CTH K	5003+02	-	5043+10	--	2,531	--	3,639	7	--
PROJECT TOTAL							23,421	5,403	29,080	97	734

ALL ITEMS CATEGORY 1000

HMA MIXTURE USE TABLE - EAST FRONTAGE ROAD: STAGE 1 CONSTRUCTION

THE FOLLOWING ACCEPTANCE CRITERIA ARE APPLICABLE FOR THIS PROJECT:

STREET	LIMIT	STATION	MIXTURE USE	UNDERLYING SURFACE	BID ITEM	TONS	THICKNESS	QUALITY MANAGEMENT PROGRAM TO BE USED FOR:	
								MIXTURE ACCEPTANCE	DENSITY ACCEPTANCE
12 FOOT DRIVING LANES (NB AND SB) EAST FRONTAGE ROAD	SOUTH OF STH 20	3835+00 - 3852+25	LOWER LAYER	MILLED EXISTING SURFACE	HMA PAVEMENT 3 LT 58-28 S	1,100	2.25	QMP AS PER SS 460	QMP HMA PAVEMENT NUCLEAR DENSITY
			UPPER LAYER	HMA PAVEMENT 3 LT 58-28 S	HMA PAVEMENT 4 LT 58-28 S	939	1.75	PWL INCENTIVE AIR VOIDS HWA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
12 FOOT DRIVING LANES (NB AND SB) EAST FRONTAGE ROAD	STH 20 TO CTH C	5863+15 - 5894+23	LOWER LAYER	MILLED EXISTING SURFACE	HMA PAVEMENT 3 LT 58-28 S	1,554	2.25	QMP AS PER SS 460	QMP HMA PAVEMENT NUCLEAR DENSITY
			UPPER LAYER	HMA PAVEMENT 3 LT 58-28 S	HMA PAVEMENT 4 LT 58-28 S	1,339	1.75	PWL INCENTIVE AIR VOIDS HWA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
12 FOOT DRIVING LANES (NB AND SB) EAST FRONTAGE ROAD	CTH C TO KRAUT RD	5895+73 - 5927+00	LOWER LAYER	MILLED EXISTING SURFACE	HMA PAVEMENT 4 LT 58-28 S	988	1.75	PWL INCENTIVE AIR VOIDS HWA PAVEMENT 460.2010	QMP HMA PAVEMENT NUCLEAR DENSITY
			UPPER LAYER	HMA PAVEMENT 4 LT 58-28 S	HMA PAVEMENT 4 LT 58-28 S	988	1.75	PWL INCENTIVE AIR VOIDS HWA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
12 FOOT DRIVING LANES (NB AND SB) EAST FRONTAGE ROAD	KRAUT RD TO GOLF RD	5927+00 - 6006+37	LOWER LAYER	MILLED EXISTING SURFACE	HMA PAVEMENT 4 LT 58-28 S	2,466	1.75	PWL INCENTIVE AIR VOIDS HWA PAVEMENT 460.2010	QMP HMA PAVEMENT NUCLEAR DENSITY
			UPPER LAYER	HMA PAVEMENT 4 LT 58-28 S	HMA PAVEMENT 4 LT 58-28 S	2,466	1.75	PWL INCENTIVE AIR VOIDS HWA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
12 FOOT DRIVING LANES (NB AND SB) EAST FRONTAGE ROAD	GOLF RD TO CTH K	6006+37 - 3052+35	LOWER LAYER	MILLED EXISTING SURFACE	HMA PAVEMENT 4 LT 58-28 S	1,701	1.75	PWL INCENTIVE AIR VOIDS HWA PAVEMENT 460.2010	QMP HMA PAVEMENT NUCLEAR DENSITY
			UPPER LAYER	HMA PAVEMENT 4 LT 58-28 S	HMA PAVEMENT 4 LT 58-28 S	1,701	1.75	PWL INCENTIVE AIR VOIDS HWA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
SHOULDERS, SIDEROADS, BEAMGUARD WIDENINGS, BYPASS LANES, TURN LANES	SOUTH OF STH 20	VARIES	LOWER LAYER	MILLED EXISTING SURFACE	HMA PAVEMENT 3 LT 58-28 S	109	VARIES	QMP AS PER SS 460	QMP HMA PAVEMENT NUCLEAR DENSITY
			UPPER LAYER	HMA PAVEMENT 3 LT 58-28 S	HMA PAVEMENT 4 LT 58-28 S	140	1.75	PWL INCENTIVE AIR VOIDS HWA PAVEMENT 460.2010	QMP HMA PAVEMENT NUCLEAR DENSITY
SHOULDERS, SIDEROADS, BEAMGUARD WIDENINGS, BYPASS LANES, TURN LANES	STH 20 TO CTH C	VARIES	LOWER LAYER	MILLED EXISTING SURFACE	HMA PAVEMENT 3 LT 58-28 S	169	VARIES	QMP AS PER SS 460	QMP HMA PAVEMENT NUCLEAR DENSITY
			UPPER LAYER	HMA PAVEMENT 3 LT 58-28 S	HMA PAVEMENT 4 LT 58-28 S	346	1.75	PWL INCENTIVE AIR VOIDS HWA PAVEMENT 460.2010	QMP HMA PAVEMENT NUCLEAR DENSITY
SHOULDERS, SIDEROADS, BEAMGUARD WIDENINGS, BYPASS LANES, TURN LANES	CTH C TO CTH K	VARIES	LOWER LAYER	MILLED EXISTING SURFACE	HMA PAVEMENT 4 LT 58-28 S	311	VARIES	QMP AS PER SS 460	QMP HMA PAVEMENT NUCLEAR DENSITY
			UPPER LAYER	HMA PAVEMENT 3 LT 58-28 S	HMA PAVEMENT 4 LT 58-28 S	1,361	1.75	PWL INCENTIVE AIR VOIDS HWA PAVEMENT 460.2010	QMP HMA PAVEMENT NUCLEAR DENSITY
VARIOUS BASE PATCHES	EAST FRONTAGE ROAD	VARIES	LOWER LAYER	BASE AGGREGATE	ASPHALTIC SURFACE	905	VARIES	QMP AS PER SS 460	QMP HMA PAVEMENT NUCLEAR DENSITY

STANDARD QMP FOR HMA PAVEMENT 3 LT 58-28 S AND PWL FOR HMA PAVEMENT 4 LT 58-28 S WILL BE EXTENDED TO THE APPURTENANCES, RESPECTIVELY

ALL ITEMS CATEGORY 1000

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HMA MIXTURE USE TABLE - WEST FRONTAGE ROAD: STAGE 2 CONSTRUCTION

THE FOLLOWING ACCEPTANCE CRITERIA ARE APPLICABLE FOR THIS PROJECT:

STREET	LIMIT	STATION	MIXTURE USE	UNDERLYING SURFACE	BID ITEM	TONS	THICKNESS	QUALITY MANAGEMENT PROGRAM TO BE USED FOR:	
								MIXTURE ACCEPTANCE	DENSITY ACCEPTANCE
12 FOOT DRIVING LANES (NB AND SB) WEST FRONTAGE ROAD	SOUTH OF STH 20	2383+77 - 2587+00	LOWER LAYER	MILLED EXISTING SURFACE	HMA PAVEMENT 3 LT 58-28 S	1,066	2.25	QMP AS PER SS 460	QMP HMA PAVEMENT NUCLEAR DENSITY
			UPPER LAYER	HMA PAVEMENT 3 LT 58-28 S	HMA PAVEMENT 4 LT 58-28 S	917	1.75	PWL INCENTIVE AIR VOIDS HWA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
12 FOOT DRIVING LANES (NB AND SB) WEST FRONTAGE ROAD	STH 20 TO CTH C	4868+00 - 4888+84	LOWER LAYER	MILLED EXISTING SURFACE	HMA PAVEMENT 3 LT 58-28 S	1,179	2.25	QMP AS PER SS 460	QMP HMA PAVEMENT NUCLEAR DENSITY
			UPPER LAYER	HMA PAVEMENT 3 LT 58-28 S	HMA PAVEMENT 4 LT 58-28 S	1,005	1.75	PWL INCENTIVE AIR VOIDS HWA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
12 FOOT DRIVING LANES (NB AND SB) WEST FRONTAGE ROAD	CTH C TO KRAUT RD	4890+79 - 4923+55	LOWER LAYER	MILLED EXISTING SURFACE	HMA PAVEMENT 4 LT 58-28 S	1,122	1.75	PWL INCENTIVE AIR VOIDS HWA PAVEMENT 460.2010	QMP HMA PAVEMENT NUCLEAR DENSITY
			UPPER LAYER	HMA PAVEMENT 3 LT 58-28 S	HMA PAVEMENT 4 LT 58-28 S	1,122	1.75	PWL INCENTIVE AIR VOIDS HWA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
12 FOOT DRIVING LANES (NB AND SB) WEST FRONTAGE ROAD	KRAUT RD TO GOLF RD	4923+55 - 5003+02	LOWER LAYER	MILLED EXISTING SURFACE	HMA PAVEMENT 4 LT 58-28 S	2,580	1.75	PWL INCENTIVE AIR VOIDS HWA PAVEMENT 460.2010	QMP HMA PAVEMENT NUCLEAR DENSITY
			UPPER LAYER	HMA PAVEMENT 3 LT 58-28 S	HMA PAVEMENT 4 LT 58-28 S	2,580	1.75	PWL INCENTIVE AIR VOIDS HWA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
12 FOOT DRIVING LANES (NB AND SB) WEST FRONTAGE ROAD	GOLF RD TO CTH K	5003+02 - 5043+10	LOWER LAYER	MILLED EXISTING SURFACE	HMA PAVEMENT 4 LT 58-28 S	1,679	1.75	PWL INCENTIVE AIR VOIDS HWA PAVEMENT 460.2010	QMP HMA PAVEMENT NUCLEAR DENSITY
			UPPER LAYER	HMA PAVEMENT 3 LT 58-28 S	HMA PAVEMENT 4 LT 58-28 S	1,679	1.75	PWL INCENTIVE AIR VOIDS HWA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
SHOULDERS, SIDEROADS, BEAMGUARD WIDENINGS, BYPASS LANES, TURN LANES	SOUTH OF STH 20	VARIES	LOWER LAYER	MILLED EXISTING SURFACE	HMA PAVEMENT 3 LT 58-28 S	113	VARIES	QMP AS PER SS 460	QMP HMA PAVEMENT NUCLEAR DENSITY
			UPPER LAYER	HMA PAVEMENT 3 LT 58-28 S	HMA PAVEMENT 4 LT 58-28 S	192	1.75	PWL INCENTIVE AIR VOIDS HWA PAVEMENT 460.2010	QMP HMA PAVEMENT NUCLEAR DENSITY
SHOULDERS, SIDEROADS, BEAMGUARD WIDENINGS, BYPASS LANES, TURN LANES	STH 20 TO CTH C	VARIES	LOWER LAYER	MILLED EXISTING SURFACE	HMA PAVEMENT 3 LT 58-28 S	114	VARIES	QMP AS PER SS 460	QMP HMA PAVEMENT NUCLEAR DENSITY
			UPPER LAYER	HMA PAVEMENT 3 LT 58-28 S	HMA PAVEMENT 4 LT 58-28 S	116	1.75	PWL INCENTIVE AIR VOIDS HWA PAVEMENT 460.2010	QMP HMA PAVEMENT NUCLEAR DENSITY
SHOULDERS, SIDEROADS, BEAMGUARD WIDENINGS, BYPASS LANES, TURN LANES	CTH C TO CTH K	VARIES	LOWER LAYER	MILLED EXISTING SURFACE	HMA PAVEMENT 4 LT 58-28 S	311	VARIES	QMP AS PER SS 460	QMP HMA PAVEMENT NUCLEAR DENSITY
			UPPER LAYER	HMA PAVEMENT 3 LT 58-28 S	HMA PAVEMENT 4 LT 58-28 S	1,032	1.75	PWL INCENTIVE AIR VOIDS HWA PAVEMENT 460.2010	QMP HMA PAVEMENT NUCLEAR DENSITY
VARIOUS BASE PATCHES	WEST FRONTAGE ROAD	VARIES	LOWER LAYER	BASE AGGREGATE	ASPHALTIC SURFACE	706	VARIES	QMP AS PER SS 460	QMP HMA PAVEMENT NUCLEAR DENSITY

STANDARD QMP FOR HMA PAVEMENT 3 LT 58-28 S AND PWL FOR HMA PAVEMENT 4 LT 58-28 S WILL BE EXTENDED TO THE APPURTENANCES, RESPECTIVELY

ALL ITEMS CATEGORY 1000

ASPHALTIC FLUMES

465.0315

STAGE	LOCATION	LIMIT	STATION	OFFSET	SY
1					
	EAST FRONTAGE ROAD	SOUTH OF STH 20	3847+53	LT	13
	EAST FRONTAGE ROAD	SOUTH OF STH 20	3848+04	LT	10
	EAST FRONTAGE ROAD	SOUTH OF STH 20	3851+83	LT	17
	EAST FRONTAGE ROAD	SOUTH OF STH 20	3852+27	LT	20
	EAST FRONTAGE ROAD	STH 20 TO CTH C	5864+12	LT	19
	EAST FRONTAGE ROAD	STH 20 TO CTH C	5864+80	LT	10
	EAST FRONTAGE ROAD	STH 20 TO CTH C	5864+34	RT	13
	EAST FRONTAGE ROAD	STH 20 TO CTH C	5892+44	LT	11
	EAST FRONTAGE ROAD	STH 20 TO CTH C	5894+18	LT	26
	EAST FRONTAGE ROAD	CTH C TO KRAUT RD	5895+78	LT	12
	EAST FRONTAGE ROAD	CTH C TO KRAUT RD	5895+81	RT	10
	EAST FRONTAGE ROAD	KRAUT RD TO GOLF RD	5931+25	LT	16
	EAST FRONTAGE ROAD	KRAUT RD TO GOLF RD	5933+30	RT	11
2					
	WEST FRONTAGE ROAD	STH 20 TO CTH C	4869+84	LT	9
	WEST FRONTAGE ROAD	STH 20 TO CTH C	4871+96	LT	11
	WEST FRONTAGE ROAD	STH 20 TO CTH C	4880+96	LT	12
	WEST FRONTAGE ROAD	STH 20 TO CTH C	4882+57	LT	27
	WEST FRONTAGE ROAD	STH 20 TO CTH C	4887+75	LT	24
	WEST FRONTAGE ROAD	STH 20 TO CTH C	4888+73	LT	21
	WEST FRONTAGE ROAD	STH 20 TO CTH C	4889+09	RT	22
	WEST FRONTAGE ROAD	CTH C TO 50TH RD	4890+84	RT	18
	WEST FRONTAGE ROAD	CTH C TO 50TH RD	4892+55	LT	18
	WEST FRONTAGE ROAD	CTH C TO 50TH RD	4896+59	LT	17
	WEST FRONTAGE ROAD	CTH C TO 50TH RD	4897+88	LT	14
	WEST FRONTAGE ROAD	KRAUT RD TO GOLF RD	4924+49	LT	15
	WEST FRONTAGE ROAD	KRAUT RD TO GOLF RD	4976+60	LT	10
	WEST FRONTAGE ROAD	KRAUT RD TO GOLF RD	4976+93	LT	12
	WEST FRONTAGE ROAD	GOLF RD TO CTH K	5020+34	LT	13
	WEST FRONTAGE ROAD	GOLF RD TO CTH K	5029+28	LT	10
	WEST FRONTAGE ROAD	GOLF RD TO CTH K	5029+58	LT	9
PROJECT TOTAL					450

ASPHALTIC CENTERLINE RUMBLE STRIPS 2-LANE RURAL

465.0475

STAGE	LOCATION	STATION	TO	STATION	OFFSET	LF
1						
	EAST FRONTAGE ROAD	5897+00	-	5925+01	CL	2,801
	EAST FRONTAGE ROAD	5929+01	-	6004+38	CL	7,537
	EAST FRONTAGE ROAD	6008+38	-	6037+45	CL	2,907
	SUBTOTOAL					13,245
2						
	WEST FRONTAGE ROAD	4891+79	-	4895+17	CL	338
	WEST FRONTAGE ROAD	4899+17	-	4921+57	CL	2,240
	WEST FRONTAGE ROAD	4925+57	-	4974+75	CL	4,918
	WEST FRONTAGE ROAD	4978+75	-	5001+03	CL	2,228
	WEST FRONTAGE ROAD	5005+03	-	5018+49	CL	1,346
	WEST FRONTAGE ROAD	5021+75	-	5027+44	CL	569
	SUBTOTAL					11,639
PROJECT TOTAL						24,884

3

ALL ITEMS CATEGORY 1000

3

CONCRETE CULVERT PIPES

STAGE	LOCATION	LIMITS	STATION	OFFSET	204.9060.S.01 REMOVING APRON ENDWALLS EACH	522.1012 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 12-INCH EACH	522.1021 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 21-INCH EACH
1							
	EAST FRONTAGE ROAD	STH 20 TO CTH C	5867+37	48' RT	--	1	--
	EAST FRONTAGE ROAD	CTH C TO KRAUT ROAD	5926+24	44' RT	1	--	1
	EAST FRONTAGE ROAD	GOLF ROAD TO CTH K	6029+41	45' LT	--	1	--
PROJECT TOTALS					1	2	1

3

RESTORATION ITEMS

STAGE	STREET	LIMIT	STATION	TO	STATION	625.0100 TOPSOIL SY	629.0210 FERTILIZER TYPE B CWT	630.0160 SEEDING MIXTURE NO.60 LB	630.0170 SEEDING MIXTURE NO.70 LB	630.0200 SEEDING TEMPORARY LB	630.0500 SEED WATER MGAL
1											
	EAST FRONTAGE ROAD	SOUTH OF STH 20	3835+00	-	3852+25	60	--	1	1	1	2
	EAST FRONTAGE ROAD	STH 20 TO CTH C	5863+15	-	5894+23	60	--	1	1	1	2
	EAST FRONTAGE ROAD	CTH C TO KRAUT RD	5895+73	-	5927+00	60	--	1	1	1	2
	EAST FRONTAGE ROAD	KRAUT RD TO GOLF RD	5927+00	-	6006+37	60	--	1	1	1	2
	EAST FRONTAGE ROAD	GOLF RD TO CTH K	6006+37	-	3052+35	60	--	1	1	1	2
	UNDISTRIBUTED					150	0.2	1	1	1	2
2											
	WEST FRONTAGE ROAD	SOUTH OF STH 20	2838+77	-	2857+00	60	--	1	1	1	2
	WEST FRONTAGE ROAD	STH 20 TO CTH C	4868+00	-	4888+84	60	--	1	1	1	2
	WEST FRONTAGE ROAD	CTH C TO 50TH RD	4890+79	-	4923+55	60	--	1	1	1	2
	WEST FRONTAGE ROAD	KRAUT RD TO GOLF RD	4923+55	-	5003+02	60	--	1	1	1	2
	WEST FRONTAGE ROAD	GOLF RD TO CTH K	500302	-	504310	60	--	1	1	1	2
	UNDISTRIBUTED					150	0.2	1	1	1	2
PROJECT TOTALS						900	0.4	12	12	12	24

ALL ITEMS CATEGORY 1000

3

RIPRAP & GEOTEXTILE FABRIC

STAGE	LOCATION	LIMIT	STATION	606.0200 RIPRAP MEDIUM CY	645.0120 GEOTEXTILE TYPE HR SY
1					
	EAST FRONTAGE ROAD	STH 20 TO CTH C	5892+44	3	20.25
	EAST FRONTAGE ROAD	STH 20 TO CTH C	5894+18	3	20.25
	EAST FRONTAGE ROAD	CTH C TO KRAUT RD	5895+78	3	20.25
	EAST FRONTAGE ROAD	CTH C TO KRAUT RD	5895+81	3	20.25
2					
	WEST FRONTAGE ROAD	STH 20 TO CTH C	4869+84	3	20.25
	WEST FRONTAGE ROAD	STH 20 TO CTH C	4880+96	3	20.25
	WEST FRONTAGE ROAD	STH 20 TO CTH C	4881+30	3	20.25
	WEST FRONTAGE ROAD	STH 20 TO CTH C	4887+75	3	20.25
	WEST FRONTAGE ROAD	STH 20 TO CTH C	4888+73	3	20.25
	WEST FRONTAGE ROAD	STH 20 TO CTH C	4889+09	3	20.25
	WEST FRONTAGE ROAD	CTH C TO 50TH RD	4890+84	3	20.25
	WEST FRONTAGE ROAD	CTH C TO 50TH RD	4892+55	3	20.25
PROJECT TOTAL				36	243

ALL ITEMS CATEGORY 1000

3

ADJUSTING MANHOLES

STAGE	LOCATION	LIMITS	STATION	OFFSET		611.0420 RECONSTRUCTING MANHOLES EACH	611.8110 ADJUSTING MANHOLE COVERS EACH	611.8120.S COVER PLATES TEMPORARY EACH
1								
	EAST FRONTAGE ROAD	CTH C TO KRAUT RD	5900+46	38.5'	LT	1	--	1
	EAST FRONTAGE ROAD	KRAUT RD TO GOLF RD	5938+17	33.2'	LT	--	1	1
	EAST FRONTAGE ROAD	KRAUT RD TO GOLF RD	5960+18	43.9'	LT	--	1	1
	EAST FRONTAGE ROAD	GOLF RD TO CTH K	3050+73	97.4'	LT	--	1	1
2								
	WEST FRONTAGE ROAD	SOUTH OF STH 20	2843+97	13.1'	LT	--	--	--
	WEST FRONTAGE ROAD	STH 20 TO CTH C	4868+04	11.5'	LT	--	--	--
	WEST FRONTAGE ROAD	STH 20 TO CTH C	4868+96	4.2'	LT	--	1	1
	WEST FRONTAGE ROAD	CTH C TO 50TH RD	4897+10	24.3'	LT	--	--	--
	WEST FRONTAGE ROAD	KRAUT RD TO GOLF RD	4941+89	48.6'	RT	--	1	1
	WEST FRONTAGE ROAD	KRAUT RD TO GOLF RD	4955+76	29.4'	RT	--	1	1
PROJECT TOTAL						1	6	7

ALL ITEMS CATEGORY 1000

3

GUARDRAIL ITEMS

STAGE	STREET	LIMIT	STATION TO STATION		614.0397 GUARDRAIL MOW STRIP EMULSIFIED ASPHALT SY	614.0400 ADJUSTING STEEL PLATE BEAM GUARD LF	614.0950 REPLACING GUARDRAIL POSTS AND BLOCKS EACH	614.0951 REPLACING GUARDRAIL RAIL AND HARDWARE LF	614.0952 REPLACING GUARDRAIL REFLECTORS EACH
1									
	EAST FRONTAGE ROAD	STH 20 TO CTH K	5892+51 - 5894+23	LT	40	30	2	13	10
	EAST FRONTAGE ROAD	STH 20 TO CTH K	5895+73 - 5897+00	LT	30	25	1	13	10
	EAST FRONTAGE ROAD	STH 20 TO CTH K	5891+98 - 5894+23	RT	50	45	3	13	15
	EAST FRONTAGE ROAD	STH 20 TO CTH K	5895+73 - 5896+40	RT	20	15	1	13	5
	EAST FRONTAGE ROAD	STH 20 TO CTH K	5897+00 - 5898+60	LT	40	30	2	13	10
	EAST FRONTAGE ROAD	STH 20 TO CTH K	5918+75 - 5925+75	LT	120	140	10	13	40
	EAST FRONTAGE ROAD	STH 20 TO CTH K	5975+75 - 5988+75	LT	220	260	20	13	60
2									
	WEST FRONTAGE ROAD	STH 20 TO CTH K	4887+98 - 4888+84	LT	20	15	1	13	5
	WEST FRONTAGE ROAD	STH 20 TO CTH K	4886+93 - 4888+84	RT	40	30	2	13	10
	WEST FRONTAGE ROAD	STH 20 TO CTH K	4892+52 - 4893+02	LT	20	10	1	13	5
	WEST FRONTAGE ROAD	STH 20 TO CTH K	4891+90 - 4893+50	RT	40	30	2	13	10
	WEST FRONTAGE ROAD	STH 20 TO CTH K	4975+59 - 4977+84	RT	50	45	9	13	15
	WEST FRONTAGE ROAD	STH 20 TO CTH K	5037+17 - 5043+10	RT	140	120	24	13	30
PROJECT TOTAL					830	795	78	163	225

ALL ITEMS CATEGORY 1000

ROADWAY ITEMS

SPV.0075.01
PAVEMENT CLEANUP

213.0100
FINISHING ROADWAY
(1030-09-76)

STAGE	LOCATION	HRS	EACH
1-2	PROJECT 1030-09-76	100	1
PROJECT TOTAL		100	1

MOBILIZATION

619.1000

STAGE	LOCATION	EACH
1-2	PROJECT 1030-09-76	0.87
PROJECT TOTAL		0.87

FIELD OFFICE TYPE C

642.5201

STAGE	LOCATION	EACH
1-2	PROJECT 1030-09-76	1
PROJECT TOTAL		1

TRAFFIC CONTROL

643.5000

STAGE	LOCATION	EACH
1-2	PROJECT 1030-09-76	0.99
PROJECT TOTAL		0.99

ALL ITEMS CATEGORY 1000

3

EROSION CONTROL MOBILIZATIONS

STAGE	LOCATION	628.1905 MOBILIZATIONS EROSION CONTROL EACH	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL EACH
1			
	EAST FRONTAGE ROAD	2	4
2			
	WEST FRONTAGE ROAD	2	4
PROJECT TOTAL		4	8

INLET PROTECTION ITEMS

STAGE	LOCATION	LIMITS	STATION	TO	STATION	628.7005 INLET PROTECTION TYPE A EACH	628.7010 INLET PROTECTION TYPE B EACH	628.7015 INLET PROTECTION TYPE C EACH
1								
	EAST FRONTAGE ROAD	SOUTH OF STH 20	3835+00	-	3852+25	2	2	9
	EAST FRONTAGE ROAD	STH 20 TO CTH C	5863+15	-	5894+23	3	1	4
	EAST FRONTAGE ROAD	CTH C TO KRAUT RD	5895+73	-	5927+00	4	--	--
	EAST FRONTAGE ROAD	KRAUT RD TO GOLF RD	5927+00	-	6006+37	6	5	--
	EAST FRONTAGE ROAD	GOLF RD TO CTH K	6006+37	-	3052+35	7	1	10
2								
	WEST FRONTAGE ROAD	SOUTH OF STH 20	2838+77	-	2857+00	1	--	--
	WEST FRONTAGE ROAD	STH 20 TO CTH C	4868+00	-	4888+84	1	8	--
	WEST FRONTAGE ROAD	CTH C TO 50TH RD	4890+79	-	4923+55	3	1	--
	WEST FRONTAGE ROAD	KRAUT RD TO GOLF RD	4923+55	-	5003+02	8	7	1
	WEST FRONTAGE ROAD	GOLF RD TO CTH K	5003+02	-	5043+10	8	1	1
	UNDISTRBUTED					5	4	1
PROJECT TOTALS						48	30	26

ALL ITEMS CATEGORY 1000

EROSION MAT

628.2004

EROSION MAT
CLASS I
TYPE B

STAGE	LOCATION	LIMIT	STATION	OFFSET	SY
1					
	EAST FRONTAGE ROAD	SOUTH OF STH 20	3847+53	LT	4
	EAST FRONTAGE ROAD	SOUTH OF STH 20	3848+04	LT	4
	EAST FRONTAGE ROAD	SOUTH OF STH 20	3851+83	LT	4
	EAST FRONTAGE ROAD	SOUTH OF STH 20	3852+27	LT	4
	EAST FRONTAGE ROAD	STH 20 TO CTH C	5864+12	LT	4
	EAST FRONTAGE ROAD	STH 20 TO CTH C	5864+34	RT	4
	EAST FRONTAGE ROAD	STH 20 TO CTH C	5864+80	LT	4
	EAST FRONTAGE ROAD	CTH C TO KRAUT RD	5897+10	RT	4
	EAST FRONTAGE ROAD	KRAUT RD TO GOLF RD	6005+58	RT	4
	EAST FRONTAGE ROAD	GOLF RD TO CTH K	6006+54	RT	4
	EAST FRONTAGE ROAD	KRAUT RD TO GOLF RD	5931+25	LT	4
	EAST FRONTAGE ROAD	KRAUT RD TO GOLF RD	5933+30	RT	4
	EAST FRONTAGE ROAD	KRAUT RD TO GOLF RD	6005+58	RT	4
	EAST FRONTAGE ROAD	GOLF RD TO CTH K	6006+54	RT	4
	EAST FRONTAGE ROAD	GOLF RD TO CTH K	6049+00	LT	4
	UNDISTRIBUTED				15
2					
	WEST FRONTAGE ROAD	SOUTH OF STH 20	2846+18	RT	4
	WEST FRONTAGE ROAD	STH 20 TO CTH C	4871+96	LT	4
	WEST FRONTAGE ROAD	STH 20 TO CTH C	4882+57	LT	4
	WEST FRONTAGE ROAD	CTH C TO 50TH RD	4896+59	LT	4
	WEST FRONTAGE ROAD	CTH C TO 50TH RD	4897+88	LT	4
	WEST FRONTAGE ROAD	CTH C TO 50TH RD	4922+98	LT	4
	WEST FRONTAGE ROAD	KRAUT RD TO GOLF RD	4924+49	LT	4
	WEST FRONTAGE ROAD	KRAUT RD TO GOLF RD	4929+94	LT	4
	WEST FRONTAGE ROAD	KRAUT RD TO GOLF RD	4976+60	LT	4
	WEST FRONTAGE ROAD	KRAUT RD TO GOLF RD	4976+93	LT	4
	WEST FRONTAGE ROAD	GOLF RD TO CTH K	5020+34	LT	4
	WEST FRONTAGE ROAD	GOLF RD TO CTH K	5020+72	LT	4
	WEST FRONTAGE ROAD	GOLF RD TO CTH K	5029+28	LT	4
	WEST FRONTAGE ROAD	GOLF RD TO CTH K	5029+58	LT	4
	UNDISTRIBUTED				14
PROJECT TOTAL					145

PIPE & DITCH CHECKS

628.7504 628.7555

STAGE	LOCATION	STATION	TO	STATION	OFFSET	TEMPORARY DITCH CHECKS LF	CULVERT PIPE CHECKS EACH
1							
	EAST FRONTAGE ROAD	3835+00	-	3852+25	--	20	--
	EAST FRONTAGE ROAD	5863+15	-	5894+23	--	60	--
	EAST FRONTAGE ROAD	5895+73	-	3050+60	RT	10	6
2							
	WEST FRONTAGE ROAD	2838+77	-	2857+00	--	--	--
	WEST FRONTAGE ROAD	4868+00	-	4888+84	--	20	--
	WEST FRONTAGE ROAD	4890+79	-	5043+10	--	30	--
	UNDISTRIBUTED				--	35	2
PROJECT TOTAL						175	8

ALL ITEMS CATEGORY 1000

TYPE II PERMANENT SIGNING 1030-09-76

SIGN NO.	SIGN CODE & SIZE	SIGN MESSAGE	SIGN SIZE W [IN.] x H [IN.]	637.2210 SIGNS TYPE II REFLECTIVE H [SF]	637.2230 SIGNS TYPE II RELFECTIVE F [SF]	637.0620 SIGN FLAGS PERMANENT TYPE II [EA]	638.2102 MOVING SIGNS TYPE II [EA]	638.2602 REMOVING SIGNS TYPE II (EA)	638.3000 REM SMALL SIGN SUP [EA]	634.0618 POSTS WOOD 4" X 6" X 18' [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION
1	W3-1					1						
2	W3-1					1						
3	W3-1					1						
4	W3-1					1						
5	R1-1					1						
6	R1-1					1						
7	R1-1					1						
8	R1-1					1						
9	R1-1					1						
10	R1-1					1						
11	R1-1					1						
12	R1-1					1						
13	W3-1					1						
14	W3-1					1						
15	W3-1					1						
16	W3-1					1						
17	W3-1					1						
18	W3-1					1						
19	R1-1					1						
20	R1-1					1						
21	R1-1					1						
22	R1-1					1						
23	R1-1					1						
24	R1-1					1						
25	R1-1					1						
26	R1-1					1						
27	W3-1					1						
28	W3-1					1						
		UNDISTRIBUTED		50.000	50.000	--	10	5	10	10		
		TOTALS		50.000	50.000	28	10	5	10	10		

SHEET: 1 OF 1

3

TRAFFIC CONTROL ITEMS

			643.0300		643.0420		643.0705		643.0900		643.1050	
			TRAFFIC CONTROL DRUMS		TRAFFIC CONTROL BARRICADES TYPE III		TRAFFIC CONTROL WARNING LIGHTS TYPE A		TRAFFIC CONTROL SIGNS		TRAFFIC CONTROL SIGNS PCMS	
STAGE	LOCATION	DAY	EACH	DAY	EACH	DAY	EACH	DAY	EACH	DAY	EACH	DAY
1												
	EAST FRONTAGE ROAD	44	0	0	40	1,760	44	1,936	75	3,300	0	0
	WEST FRONTAGE ROAD		0	0	0	0	0	0	186	8,184	0	0
	STH 11		0	0	0	0	0	0	44	1,936	0	0
	STH 20		0	0	0	0	0	0	132	5,808	0	0
	CTH C		0	0	26	1,144	16	704	103	4,532	4	188
	KRAUT RD		0	0	0	0	0	0	52	2,288	0	0
	GOLF RD		0	0	0	0	0	0	34	1,496	0	0
	CTH K		0	0	0	0	0	0	48	2,112	0	0
	CTH V		0	0	0	0	0	0	30	1,320	0	0
	IH-94		0	0	0	0	0	0	91	4,004	0	0
	UNDISTRIBUTED		100	4,400	0	0	0	0	0	0	0	0
	SUBTOTAL		100	4,400		2,904		2,640		34,980		188
2												
	EAST FRONTAGE ROAD	43	0	0	4	172	4	172	191	8,213	0	0
	WEST FRONTAGE ROAD		0	0	33	1,419	60	2,580	90	3,870	0	0
	STH 11		0	0	0	0	0	0	44	1,892	0	0
	STH 20		0	0	0	0	0	0	126	5,418	0	0
	CTH C		0	0	26	1,118	16	688	88	3,784	4	184
	KRAUT RD		0	0	0	0	0	0	52	2,236	0	0
	GOLF RD		0	0	0	0	0	0	18	774	0	0
	CTH K		0	0	0	0	0	0	44	1,892	0	0
	CTH A		0	0	0	0	0	0	11	473	0	0
	IH-94		0	0	0	0	0	0	91	3,913	0	0
	UNDISTRIBUTED		100	4,300	0	0	0	0	0	0	0	0
	SUBTOTAL			4,300		2,709		3,440		32,465		184
PROJECT TOTAL		87		8,700		5,613		6,080		67,445		372

ALL ITEMS CATEGORY 1000

3

TRAFFIC CONTROL COVERING SIGNS

STAGE	LOCATION	CYCLES	643.0920 TRAFFIC CONTROL COVERING SIGNS TYPE II SIGNS	EACH
1				
	EAST FRONTAGE ROAD	1	8	8
	WEST FRONTAGE ROAD		0	0
	STH 11		3	3
	STH 20		31	31
	CTH C		4	4
	KRAUT RD		0	0
	GOLF RD		0	0
	CTH K		13	13
	CTH V		0	0
	IH-94		0	0
	SUBTOTAL			59
2				
	EAST FRONTAGE ROAD	1	0	0
	WEST FRONTAGE ROAD		0	0
	STH 11		1	1
	STH 20		24	24
	CTH C		4	4
	KRAUT RD		0	0
	GOLF RD		0	0
	CTH K		29	29
	CTH A		0	0
	IH-94		0	0
	SUBTOTAL			58
PROJECT TOTAL				117

ALL ITEMS CATEGORY 1000

3

PAVEMENT MARKING ITEMS

STAGE	LOCATION	LIMITS	STATION	TO	STATION	646.1020 MARKING LINE EPOXY 4-INCH WHITE LF	646.1020 MARKING LINE EPOXY 4-INCH YELLOW LF	646.1040 MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH WHITE LF	646.3020 MARKING LINE EPOXY 8-INCH WHITE LF	646.5020 MARKING ARROW EPOXY EACH	646.5120 MARKING WORD EPOXY EACH	646.6120 MARKING STOP LINE EPOXY 18-INCH WHITE LF	646.7120 MARKING DIAGONAL EPOXY 12-INCH WHITE LF	646.7120 MARKING DIAGONAL EPOXY 12-INCH YELLOW LF	646.8120 MARKING CURB EPOXY YELLOW LF	646.8220 MARKING ISLAND NOSE EPOXY EACH
1																
	EAST FRONTAGE ROAD	SOUTH OF STH 20	3835+00	-	3852+25	3,037	4,139	--	500	5	2	47	--	158	--	3
	EAST FRONTAGE ROAD	STH 20 TO CTH C	5863+15	-	5894+23	6,026	8,627	--	226	5	--	111	--	112	--	--
	EAST FRONTAGE ROAD	CTH C TO KRAUT RD	5895+73	-	5927+00	277	2,909	6,106	229	2	1	120	--	--	--	--
	EAST FRONTAGE ROAD	KRAUT RD TO GOLF RD	5927+00	-	6006+37	571	6,907	16,309	451	4	2	76	--	--	--	--
	EAST FRONTAGE ROAD	GOLF RD TO CTH K	6006+37	-	3052+35	333	5,774	8,658	584	6	3	24	--	294	207	1
	SUBTOTAL					10,244	28,356	31,073	1,990	22	8	378	0	564	207	4
2																
	WEST FRONTAGE ROAD	SOUTH OF STH 20	2838+77	-	2857+00	3,603	3,960	--	242	8	--	51	--	260	--	--
	WEST FRONTAGE ROAD	STH 20 TO CTH C	4868+00	-	4888+84	4,224	5,976	--	--	6	--	61	--	129	--	--
	WEST FRONTAGE ROAD	CTH C TO 50TH RD	4890+79	-	4923+55	368	2,724	6,871	356	4	1	141	--	--	--	--
	WEST FRONTAGE ROAD	KRAUT RD TO GOLF RD	4923+55	-	5003+02	898	8,110	14,808	731	6	3	79	--	--	--	--
	WEST FRONTAGE ROAD	GOLF RD TO CTH K	5003+02	-	5043+10	816	6,549	7,674	480	4	2	86	--	107	--	--
	SUBTOTAL					9,909	27,319	29,353	1,809	28	6	418	0	496	0	0
PROJECT TOTAL						75,827		60,426	3,799	50	14	796	1,060		207	4

TEMPORARY PAVEMENT MARKING

STAGE	LOCATION	LIMITS	STATION	TO	STATION	643.3770 TEMPORARY MARKING RAISED PAVEMENT MARKER TYPE II EACH
1						
	EAST FRONTAGE ROAD	SOUTH OF STH 20	3835+00	-	3852+25	34
	EAST FRONTAGE ROAD	STH 20 TO CTH C	5863+15	-	5894+23	63
	EAST FRONTAGE ROAD	CTH C TO KRAUT RD	5895+73	-	5927+00	62
	EAST FRONTAGE ROAD	KRAUT RD TO GOLF RD	5927+00	-	6006+37	156
	EAST FRONTAGE ROAD	GOLF RD TO CTH K	6006+37	-	3052+35	107
2						
	WEST FRONTAGE ROAD	SOUTH OF STH 20	2838+77	-	2857+00	37
	WEST FRONTAGE ROAD	STH 20 TO CTH C	4868+00	-	4888+84	42
	WEST FRONTAGE ROAD	CTH C TO 50TH RD	4890+79	-	4923+55	64
	WEST FRONTAGE ROAD	KRAUT RD TO GOLF RD	4923+55	-	5003+02	158
	WEST FRONTAGE ROAD	GOLF RD TO CTH K	5003+02	-	5043+10	81
PROJECT PROJECT TOTAL						804

LOCATING NO-PASSING ZONES

STAGE	LOCATION	648.0100 MI
1-2	PROJECT 1030-09-76	6.75
PROJECT TOTAL		6.75

ALL ITEMS CATEGORY 1000

3

CONSTRUCTION STAKING ITEMS

STAGE	LOCATION	650.4000 CONSTRUCTION STAKING STORM SEWER EACH	650.6000 CONSTRUCTION STAKING PIPE CULVERTS EACH	650.8000 CONSTRUCTION STAKING RESURFACING REFERENCE LF	650.9910 CONSTRUCTION STAKING SUPPLEMENTAL CONTROL EACH
1-2	PROJECT 1030-09-76	1	3	40448	1
PROJECT TOTAL		1	3	40448	1

3

SAWING ITEMS

STAGE	LOCATION	LIMIT	STATION TO STATION	690.0150 SAWING ASPHALT LF	690.0250 SAWING CONCRETE LF
1					
	EAST FRONTAGE ROAD	SOUTH OF STH 20	3835+00 - 3852+25	231	--
	EAST FRONTAGE ROAD	STH 20 TO CTH C	5863+15 - 5894+23	221	--
	EAST FRONTAGE ROAD	CTH C TO KRAUT RD	5895+73 - 5927+00	102	--
	EAST FRONTAGE ROAD	KRAUT RD TO GOLF RD	5927+00 - 6006+37	60	--
	EAST FRONTAGE ROAD	GOLF RD TO CTH K	6006+37 - 3052+35	72	--
	EAST FRONTAGE ROAD	CTH C	5894+23 - 5895+73	--	200
2					
	WEST FRONTAGE ROAD	SOUTH OF STH 20	2838+77 - 2857+00	156	--
	WEST FRONTAGE ROAD	STH 20 TO CTH C	4868+00 - 4888+84	106	--
	WEST FRONTAGE ROAD	CTH C TO 50TH RD	4890+79 - 4923+55	211	--
	WEST FRONTAGE ROAD	KRAUT RD TO GOLF RD	4923+55 - 5003+02	60	--
	WEST FRONTAGE ROAD	GOLF RD TO CTH K	5003+02 - 5043+10	103	--
	WEST FRONTAGE ROAD	CTHC	4888+84 - 4890+79	--	200
PROJECT TOTAL				1,322	400

ALL ITEMS CATEGORY 1000

3

ADJUSTING MANHOLES

SPV.0060.05

ADJUSTING SANITARY MANHOLE FRAMES VILLAGE OF MOUNT PLEASANT

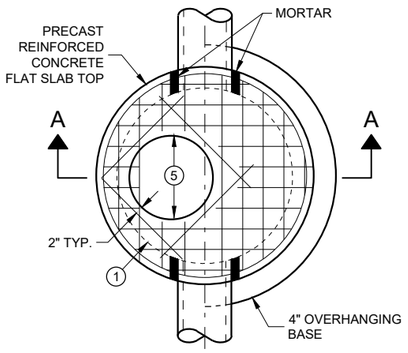
STAGE	LOCATION	LIMITS	STATION	OFFSET		EACH
1						
	EAST FRONTAGE ROAD	SOUTH OF STH 20	3851+00	47.0'	LT	1
						1

ALL ITEMS CATEGORY 8000

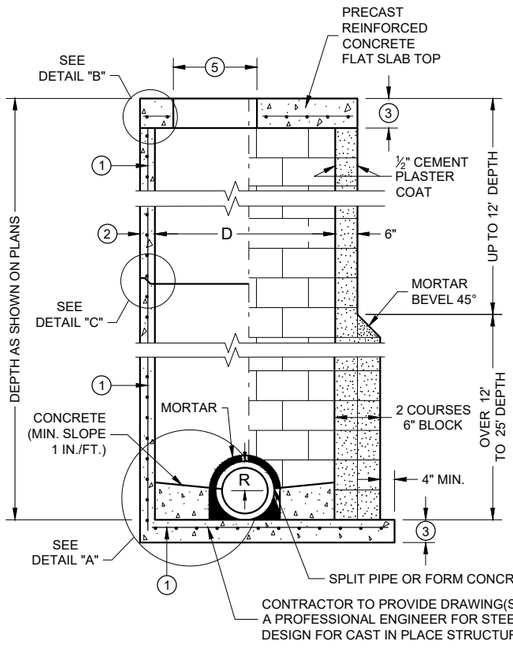
Standard Detail Drawing List

08B09-03	MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT, 8-FT, 9-FT, 10-FT DIAMETER
08D04-06	CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES
08D15-05A	EDGEDRAIN OUTLET AND OUTFALL MARKERS
08D15-05B	EDGEDRAIN AND BASE AGGREGATE OPEN GRADED
08D15-05C	EDGEDRAIN AND BASE AGGREGATE OPEN GRADED
08D21-01	DRIVEWAYS WITHOUT CURB & GUTTER
08D22-01	DRIVEWAYS WITHOUT CURB & GUTTER RESURFACING PROJECTS RURAL
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E10-02	INLET PROTECTION TYPE A, B, C AND D
08E15-01	CULVERT PIPE CHECK
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
08F04-08	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
08F06-04	REINFORCED CONCRETE APRON ENDWALL FOR PIPE UNDERDRAIN
13A11-03A	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
13A11-03B	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
13C01-19	CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES
13C09-16A	CONCRETE PAVEMENT REPAIR AND REPLACEMENT
13C09-16B	CONCRETE PAVEMENT REPAIR AND REPLACEMENT
13C09-16C	CONCRETE PAVEMENT REPAIR AND REPLACEMENT
13C18-07A	CONCRETE PAVEMENT JOINTING
13C18-07B	CONCRETE PAVEMENT STEEL REINFORCEMENT
13C18-07C	CONCRETE PAVEMENT JOINT TYPES
13C19-03	HMA LONGITUDINAL JOINTS
14B24-09A	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL
14B24-09B	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL
14B24-09C	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL
14B28-04A	GUARDRAIL MOW STRIP
14B28-04B	GUARDRAIL MOW STRIP
14B29-01	SAFETY EDGE
14B42-07A	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-07B	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-07C	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-07D	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
15C02-08A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-08B	BARRICADES AND SIGNS FOR VARIOUS CLOSURES
15C02-08C	DETOUR SIGNING FOR MAINLINE CLOSURES
15C03-05	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C04-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C05-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS
15C07-15B	PAVEMENT MARKING WORDS
15C07-15C	PAVEMENT MARKING ARROWS
15C08-21C	PAVEMENT MARKING (TURN LANES)
15C08-21D	PAVEMENT MARKING (TURN LANES)
15C08-22A	LONGITUDINAL MARKING (MAINLINE)
15C08-22B	TEMPORARY LONGITUDINAL PAVEMENT MARKING
15C08-22C	PAVEMENT MARKING (TURN LANES)
15C08-22D	PAVEMENT MARKING (TURN LANES)
15C11-09B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C12-09A	TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION
15C18-06A	MEDIAN ISLAND MARKING PAVEMENT MARKINGS
15C18-06B	MEDIAN ISLAND MARKING MEDIAN ISLAND NOSE
15C18-06C	MEDIAN PAVEMENT MARKINGS DOUBLE ARROW WARNING SIGN PLACEMENT
15C19-07A	MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
15C29-07A	BICYCLE LANE MARKING
15C33-04	STOP LINE AND CROSSWALK PAVEMENT MARKING
15C34-03	STANDARD APPLICATION FOR TEMPORARY RAISED PAVEMENT MARKER, TYPE 2
15C35-05A	PAVEMENT MARKING (INTERSECTIONS)
15D27-03	TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH
15D43-02	TRAFFIC CONTROL, SHORT DURATION MOBILE OPERATIONS

6



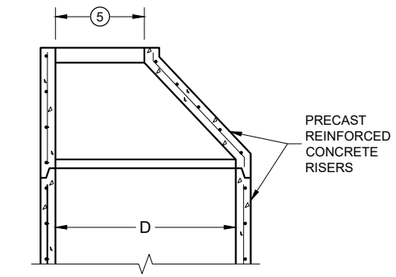
PLAN VIEW
CIRCULAR OPENING



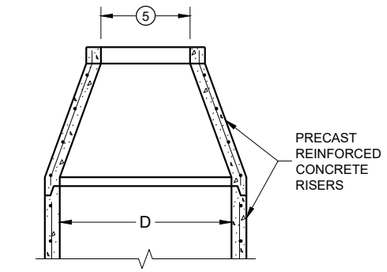
SECTION A - A

PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

CONCRETE BLOCK WITH CAST IN PLACE OR PRECAST REINFORCED CONCRETE BASE (1)



OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP



OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP

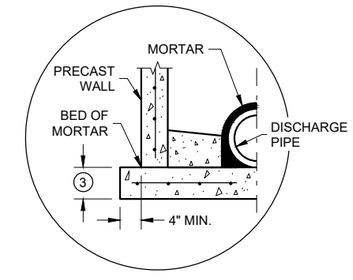
MANHOLE COVER OPENING MATRIX

OPENING SIZE (FT.) \ MANHOLE COVER TYPE	C	ALL J'S	K	L	M
2 DIA.	X	X		X	
3 DIA.			X		X

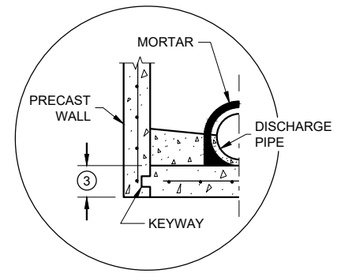
PIPE MATRIX

MANHOLE SIZE (DIA.)	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES		MINIMUM WALL THICKNESS (IN)	MINIMUM PRECAST FLAT SLAB TOP AND BASE THICKNESS
	180° SEPARATION (IN)	90° SEPARATION (IN)		
3-FT	15	12	4	6
4-FT	24	18	4	6
5-FT	36	24	5	8
6-FT	42	36	6	8
7-FT	48	36/42*	7	8
8-FT	60	42	8	8
9-FT	66	54	9	10
10-FT	72	60	10	10

*A 36" PIPE AND A 42" PIPE CAN BE PLACED WITHIN 90 DEGREES.
SEE MINIMUM HORIZONTAL PIPE SEPARATION DETAIL.

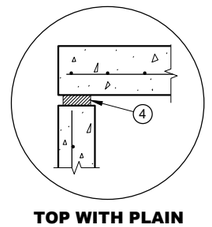


SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

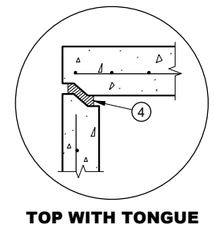


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION

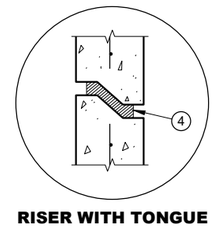
DETAIL "A"



TOP WITH PLAIN END JOINT



TOP WITH TONGUE AND GROOVE JOINT



RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B" **DETAIL "C"**

GENERAL NOTES

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

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

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

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

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

PRECAST REINFORCED CONCRETE CONE TOPS (ECCENTRIC OR CONCENTRIC) OR PRECAST REINFORCED CONCRETE FLAT SLAB TOPS MAY BE USED ON CONCRETE BLOCK STRUCTURES.

ECCENTRIC CONE TOPS MAY BE USED ON ALL STRUCTURES. CONCENTRIC CONE TOPS SHALL BE USED ONLY ON STRUCTURES 5 FEET OR LESS IN DEPTH UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

STEPS MEETING AASHTO M199 AND THE FOLLOWING REQUIREMENTS SHALL BE INSTALLED IN ALL STRUCTURES OVER 5 FEET IN DEPTH: 16 INCH C-C MAXIMUM SPACING; PROJECT A MINIMUM CLEAR DISTANCE OF 4 INCHES FROM THE WALL AT THE POINT OF EMBEDMENT; MINIMUM LENGTH OF 10 INCHES; MINIMUM WALL EMBEDMENT OF 3 INCHES. FERROUS METAL STEPS NOT PAINTED OR TREATED TO RESIST CORROSION SHALL HAVE A MINIMUM CROSS SECTIONAL DIMENSION OF 1 INCH.

STEPS OF APPROVED POLYPROPYLENE PLASTIC COATED REINFORCEMENT BAR ARE ACCEPTABLE. REINFORCING BAR MUST BE A MINIMUM OF ½ INCH AND MEET THE REQUIREMENTS OF ASTM A615.

CERTIFICATION SHALL BE PROVIDED THAT INSTALLED STEPS WHEN TESTED IN ACCORDANCE WITH SECTION 10 OF AASHTO T280 CAN WITHSTAND A VERTICAL LOAD OF 800 LBS. AND A HORIZONTAL LOAD OF 400 LBS.

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

ALL PRECAST MANHOLE UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M199.

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

CONCRETE BLOCK WILL NOT BE PERMITTED FOR STRUCTURES GREATER THAN 4 FEET IN DIAMETER.

4" OVERHANGING BASES ARE REQUIRED FOR ALL CONCRETE BLOCK INSTALLATIONS. 4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

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

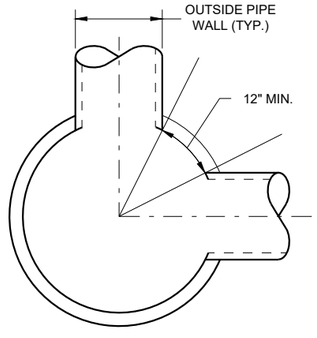
(1) FOR PRECAST MANHOLES PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

(2) SEE PIPE MATRIX TABLE FOR MINIMUM WALL THICKNESS FOR PRECAST MANHOLES

(3) SEE PIPE MATRIX TABLE FOR MINIMUM THICKNESS OF PRECAST FLAT SLAB TOPS AND BASES.

(4) JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C 990 (TYP.).

(5) SEE MANHOLE COVER OPENING MATRIX.



MINIMUM HORIZONTAL PIPE SEPARATION

MANHOLES, 3-FT, 4-FT 5-FT, 6-FT, 7-FT, 8-FT, 9-FT AND 10-FT DIAMETER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2021 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE ENGINEER
206
FHWA

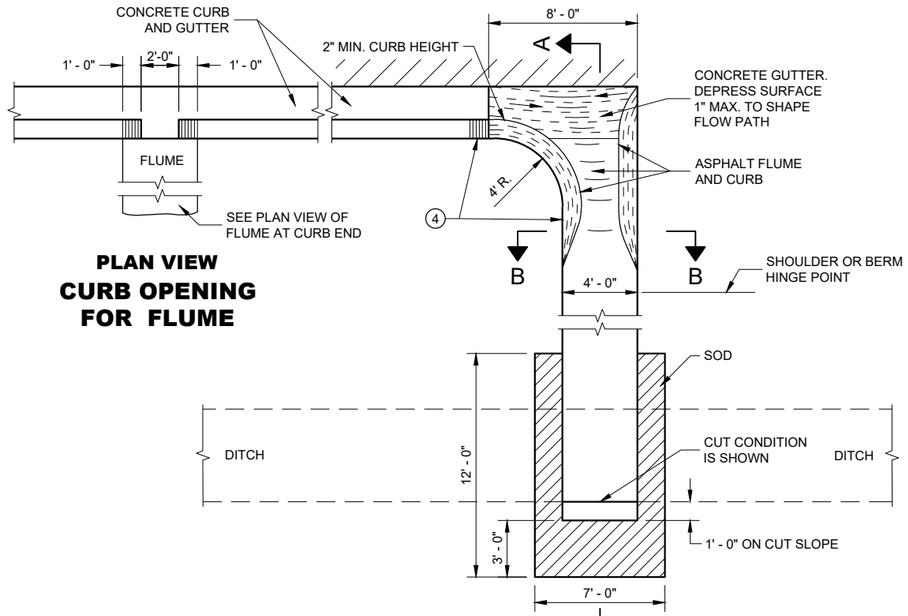
MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT, 8-FT, 9-FT AND 10-FT DIAMETER

6

SDD 08B09 - 03

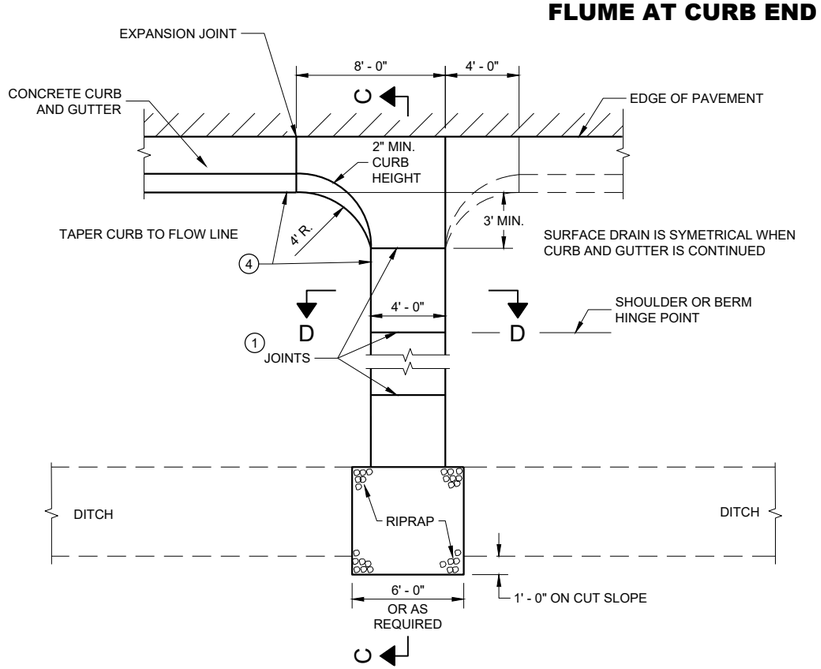
NOTE: TAPER CURB ENDS TO GUTTER IN 1' - 0"

ASPHALTIC FLUME



PLAN VIEW
CURB OPENING FOR FLUME

PLAN VIEW
FLUME AT CURB END



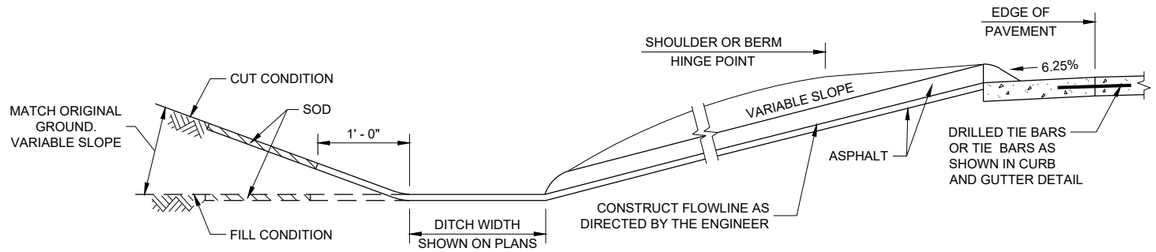
PLAN VIEW
CONCRETE SURFACE DRAIN

GENERAL NOTES

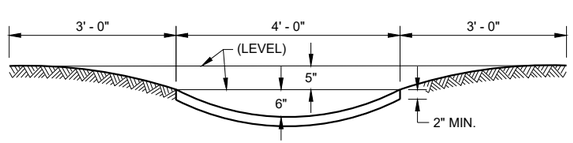
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

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

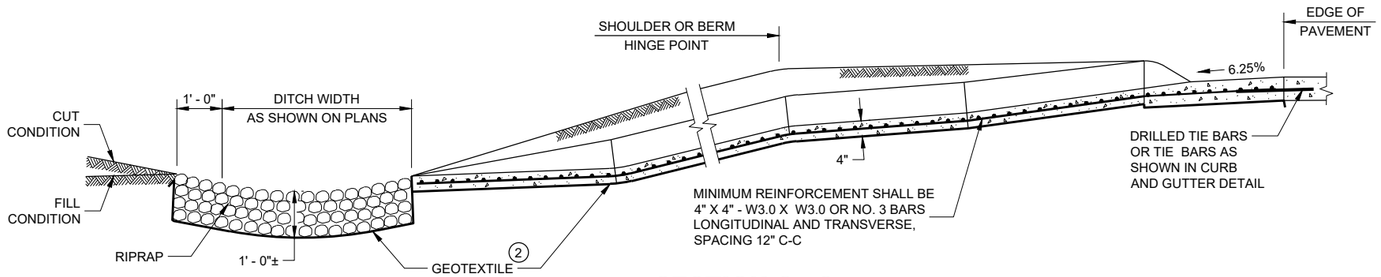
1. JOINTS SHALL BE ⅛" TO ¼" WIDE BY 1½" DEEP AND SPACED AT UNIFORM INTERVALS OF APPROXIMATELY 4 FEET.
2. GEOTEXTILE TYPE "R" SHALL UNDERLAY THE FULL LENGTH AND WIDTH OF THE CONCRETE SURFACE DRAIN AND RIPRAP.
3. CONCRETE SURFACE DRAIN WITHOUT CURB AND GUTTER MAY BE USED ON BACKSLOPES WHEN SPECIFIED.
4.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



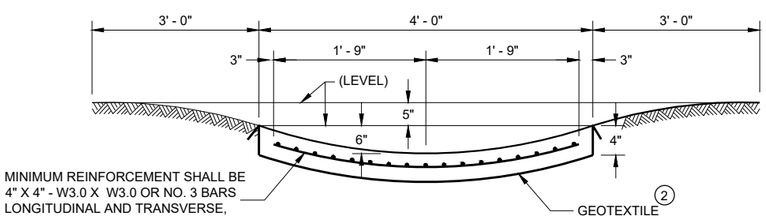
SECTION A - A



SECTION B - B



SECTION C - C



SECTION D - D

CONCRETE SURFACE DRAINS AND ASPHALTIC FLUMES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2021
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

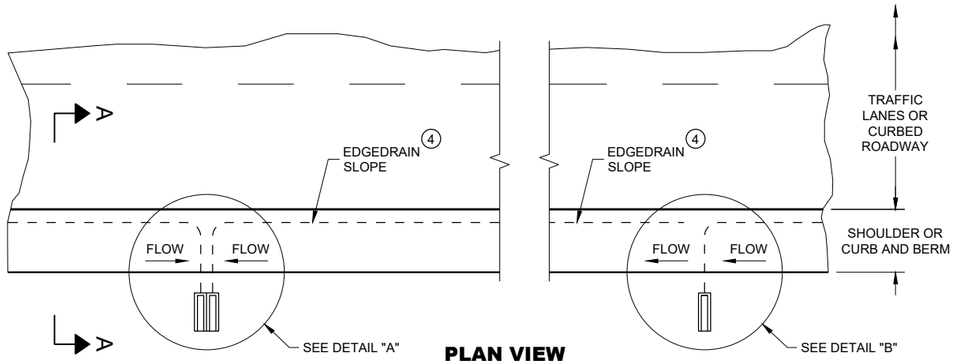
FHWA

6

SDD 08D04 - 06

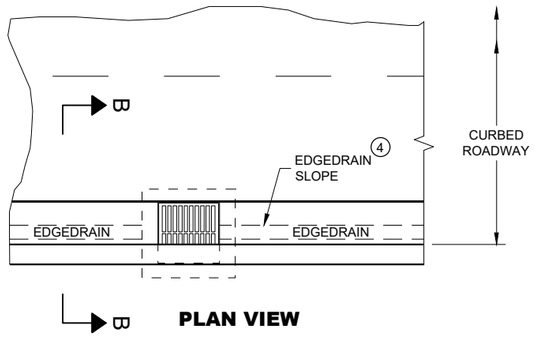
6

SDD 08D04 - 06



PLAN VIEW

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



PLAN VIEW

ROADWAY WITH CURBS
(EDGEDRAIN CONNECTS INTO INLET STRUCTURE)

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:

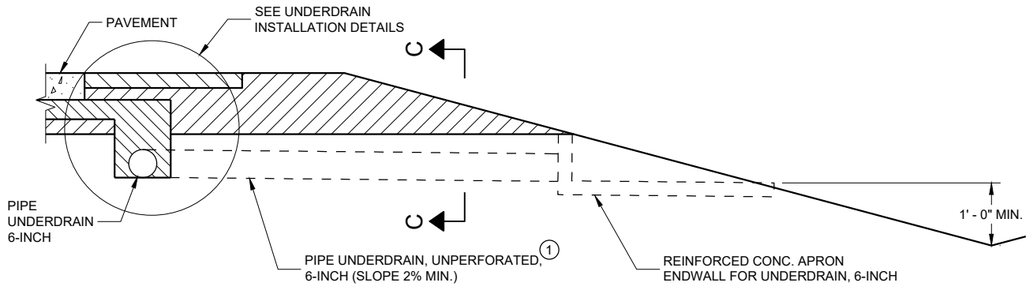
POLYVINYL CHLORIDE (PVC) PLASTIC DRAIN, WASTE, AND VENT PIPE AND FITTINGS, ASTM D 2665, SCHEDULE 40 PVC.

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.

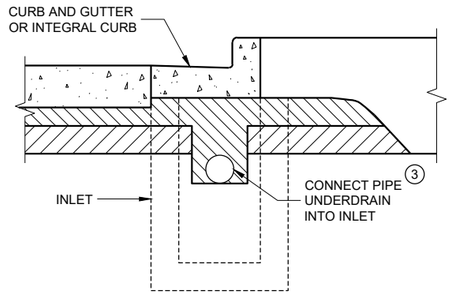
(3) EDGEDRAIN SHALL BE CONNECTED TO INLETS REGARDLESS OF FLOW DIRECTION FOR DRAINAGE AND MAINTENANCE ACCESS.

(4) EDGEDRAIN SHALL BE LAID PARALLEL TO THE GRADE OF ROADWAY.



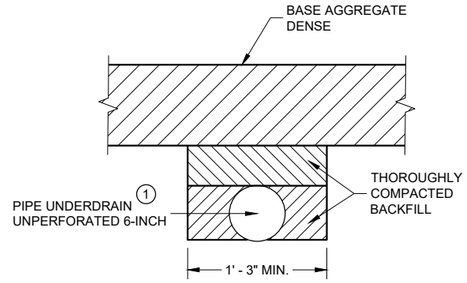
SECTION A - A

RURAL CROSS SECTION



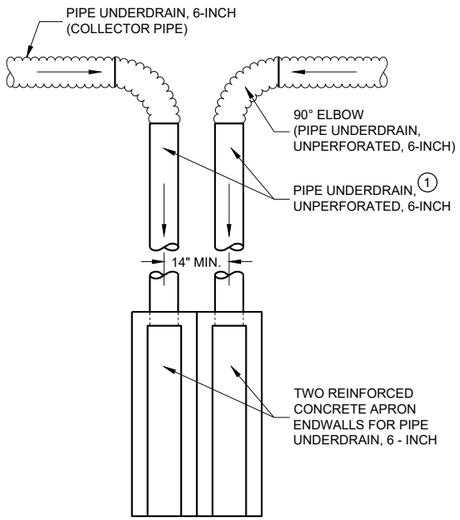
SECTION B - B

URBAN CROSS SECTION

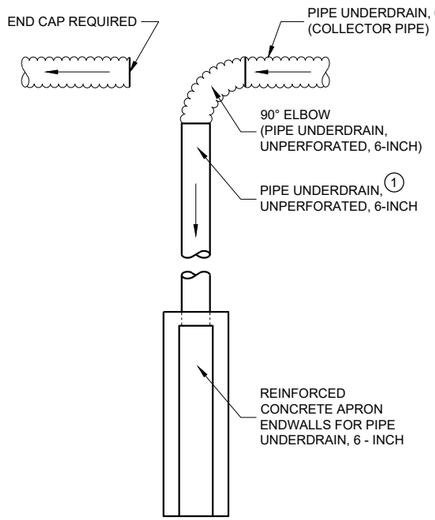


SECTION C - C

TRENCH FOR OUTFALL PIPE

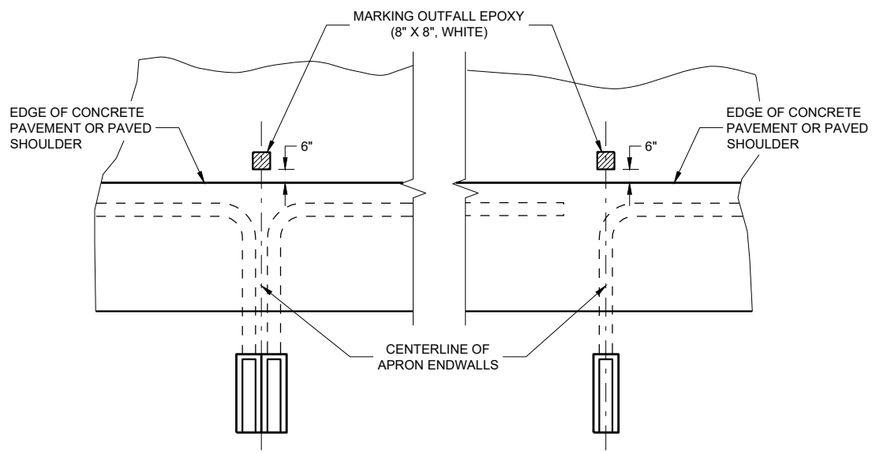


DETAIL "A"
TO BE USED AT LOW POINT LOCATIONS



DETAIL "B"
TO BE USED AT INTERMEDIATE LOCATIONS

TYPICAL DRAIN OUT DETAILS



LOW POINT LOCATIONS — INTERMEDIATE LOCATIONS

PAVEMENT MARKINGS FOR OUTFALL MARKERS

EDGEDRAIN OUTLET AND OUTFALL MARKERS

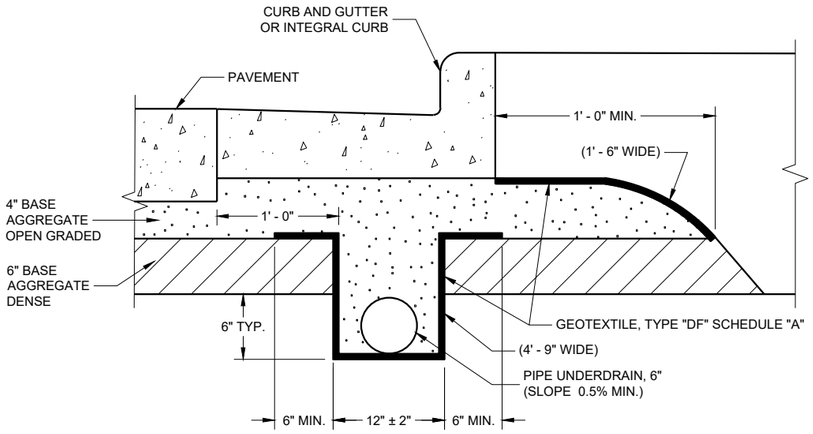
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD08D15 - 05a

6

SDD08D15 - 05a



EDGEDRAIN IN URBAN ROADWAY

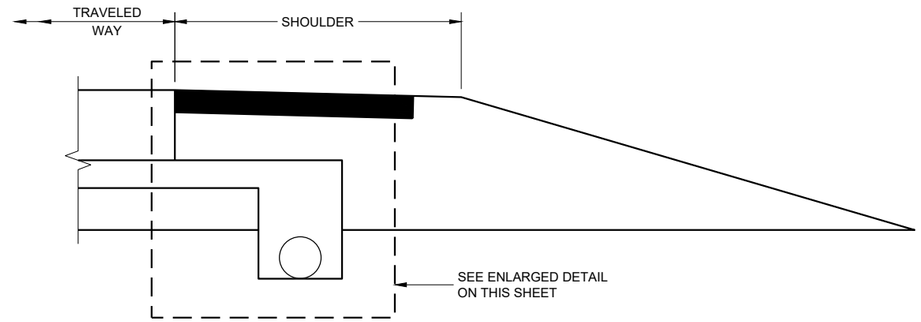
GENERAL NOTES

THE DIMENSIONS SHOWN ON THE TYPICAL CROSS SECTIONS WILL GOVERN IN THE EVENT THERE IS A CONFLICT WITH THE DETAILS SHOWN ON THIS DRAWING.

PIPE UNDERDRAIN SHALL BE LAID PARALLEL TO THE GRADE OF THE ROADWAY.

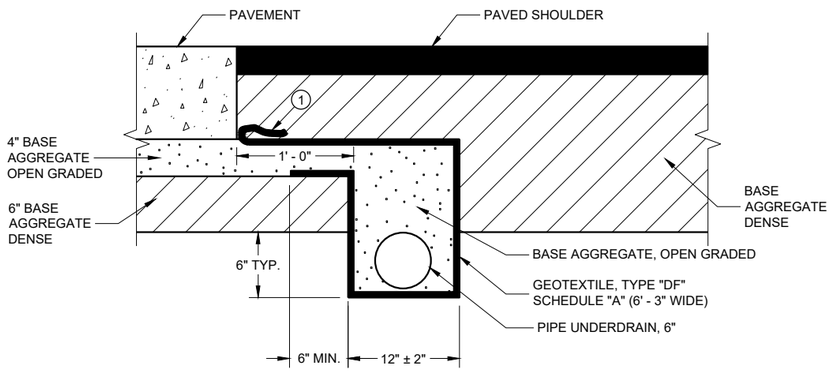
(1) FOLD OVER EXCESS GEOTEXTILE AT THIS LOCATION.

(2) TOTAL GEOTEXTILE WIDTH IS 6'-3" FOR PAYMENT.



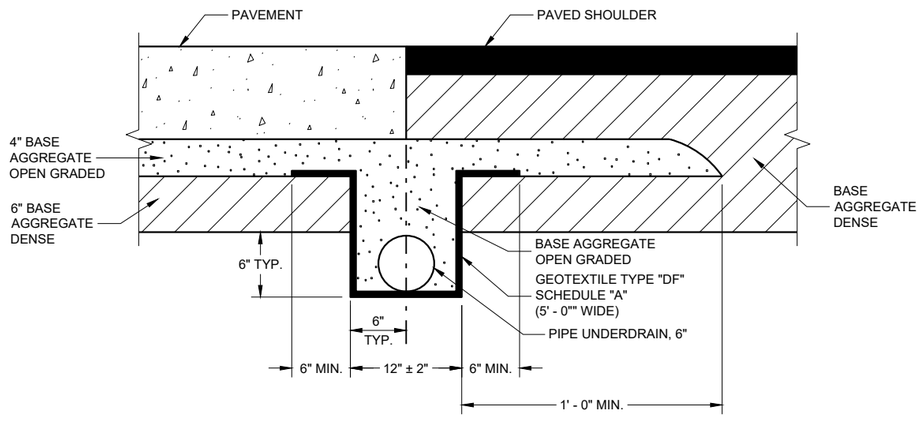
RURAL CROSS SECTION

6



POST PAVING INSTALLATION

(QUANTITIES ARE BASED ON THIS DETAIL)



PRE-PAVING INSTALLATION ALTERNATIVE

EDGEDRAIN IN RURAL ROADWAY

6

SDD 08D15 - 05b

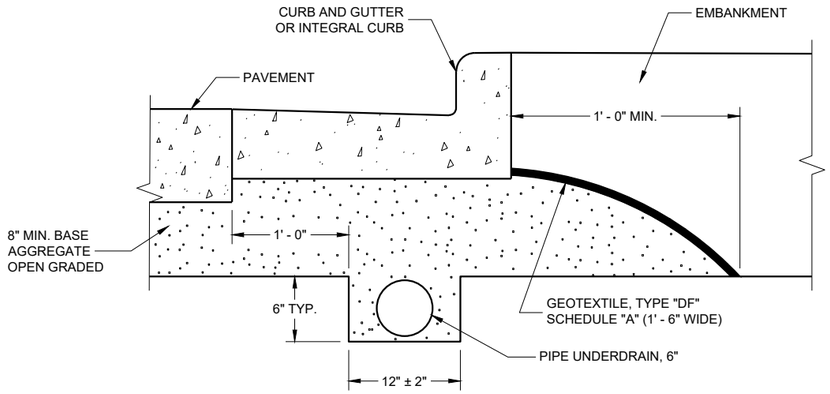
EGEDRAIN AND BASE AGGREGATE OPEN GRADED

SDD 08D15 - 05b

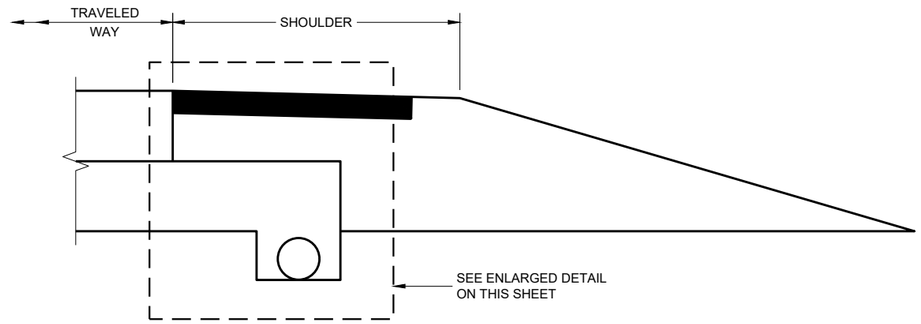
GENERAL NOTES

THE DIMENSIONS SHOWN ON THE TYPICAL CROSS SECTIONS WILL GOVERN IN THE EVENT THERE IS A CONFLICT WITH THE DETAILS SHOWN ON THIS DRAWING.

PIPE UNDERDRAIN SHALL BE LAID PARALLEL TO THE GRADE OF THE ROADWAY.



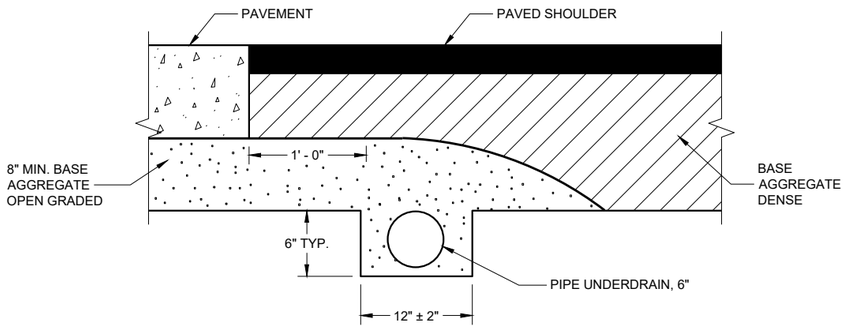
EDGEDRAIN IN URBAN ROADWAY



RURAL CROSS SECTION

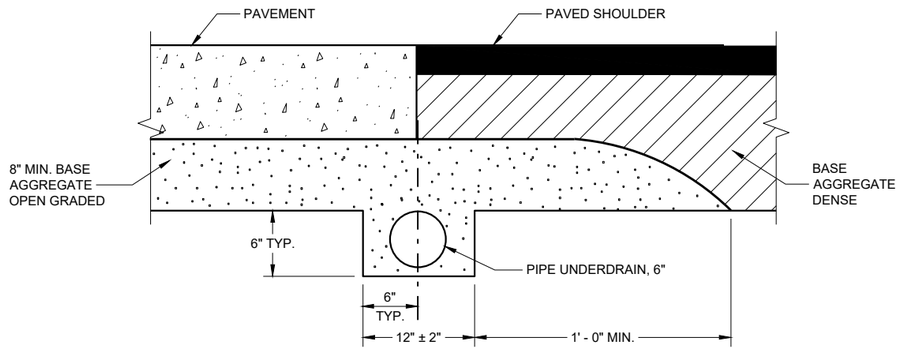
6

6



POST PAVING INSTALLATION

(QUANTITIES ARE BASED ON THIS DETAIL)



PRE-PAVING INSTALLATION ALTERNATIVE

EDGEDRAIN IN RURAL ROADWAY

EDGEDRAIN AND BASE AGGREGATE OPEN GRADED

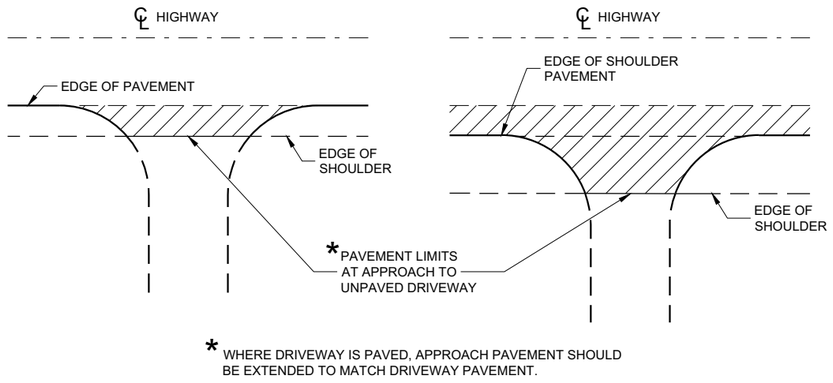
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
September 2015
DATE
/S/ Peter Kemp, P.E.
PAVEMENT SUPERVIS

FHWA

SDD 08D15 - 05c

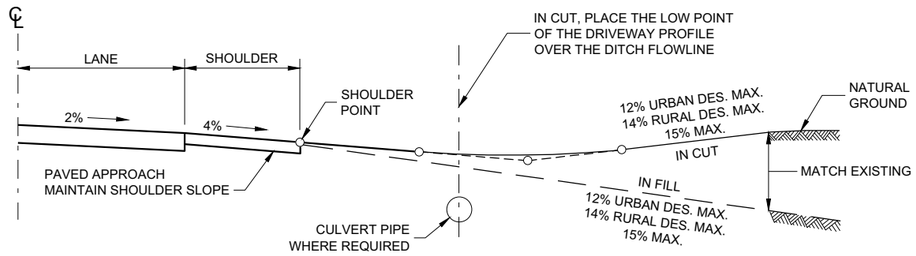
SDD 08D15 - 05c



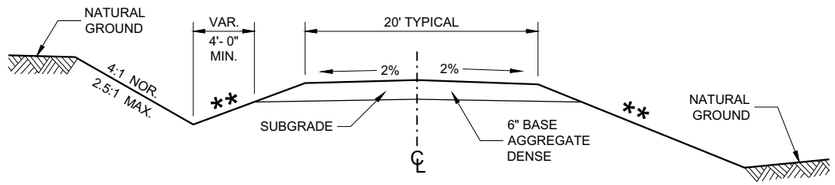
PLAN VIEW
(UNPAVED SHOULDER ON HIGHWAY)

PLAN VIEW
(PAVED SHOULDER ON HIGHWAY)

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



TYPICAL DRIVEWAY PROFILES

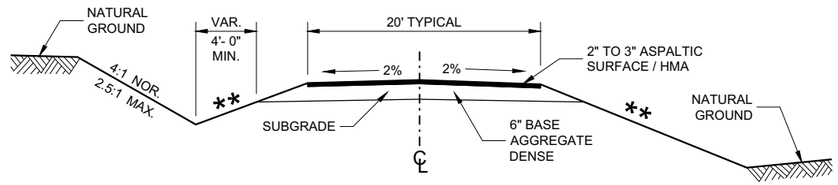


IN CUT **IN FILL**

TYPICAL CROSS SECTION FOR PRIVATE DRIVE OR FIELD ENTRANCE AGGREGATE SURFACE

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

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



IN CUT **IN FILL**

TYPICAL CROSS SECTION FOR PRIVATE DRIVE OR FIELD ENTRANCE ASPHALTIC SURFACE

6

6

SDD 08D21 - 01

SDD 08D21 - 01

DRIVEWAYS WITHOUT CURB AND GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

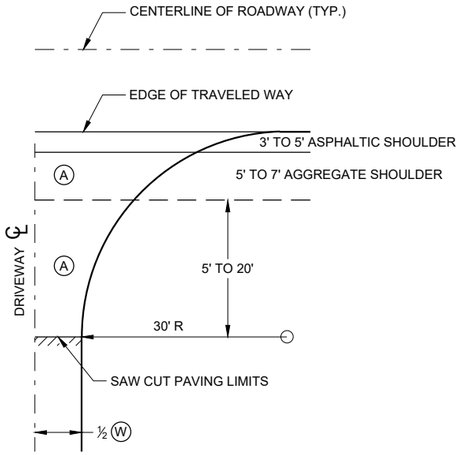
APPROVED
December 2017
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVE
UNIT SUPERVISOR

FHWA

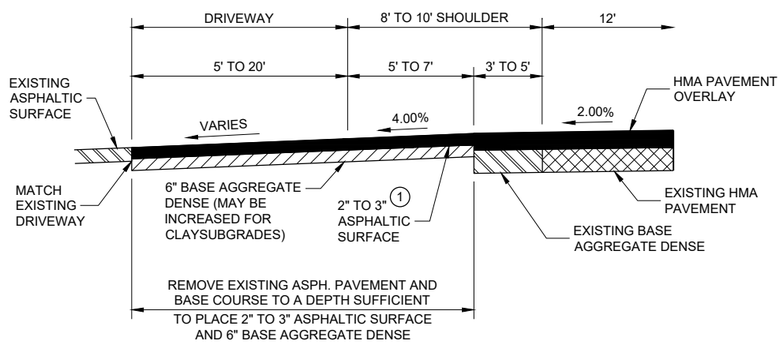
GENERAL NOTES

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



PLAN VIEW

HALF SECTION



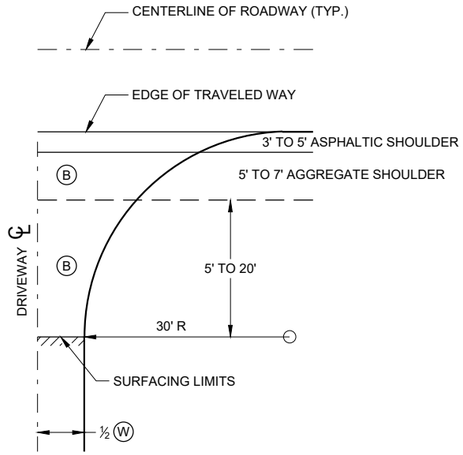
PROFILE VIEW

RURAL ENTRANCE
WITH ASPHALTIC SURFACE
RESURFACING PROJECTS

(A) : PAID FOR AS ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES. (TON)

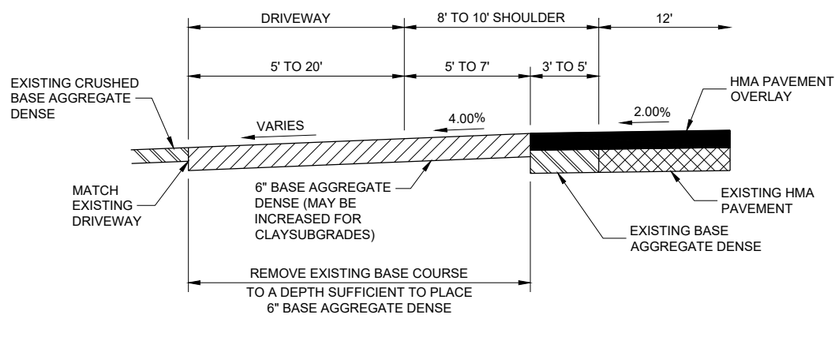
(B) : PAID FOR AS BASE AGGREGATE DENSE 1 ¼" (TON)

(W) : DRIVEWAY WIDTH 16' MIN. - 24' MAX.



PLAN VIEW

HALF SECTION



PROFILE VIEW

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

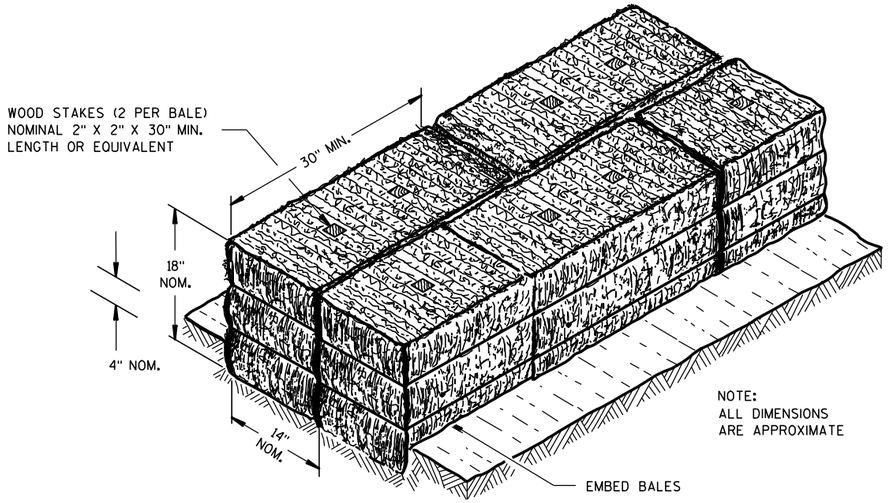
DRIVEWAYS WITHOUT CURB AND GUTTER RESURFACING PROJECTS RURAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

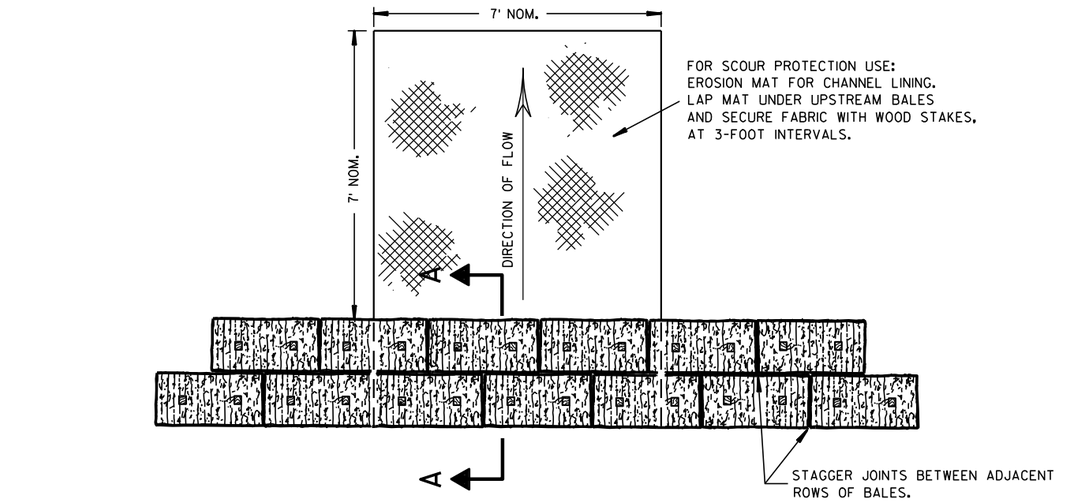
APPROVED
December 2016 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE ENGINEER
FHWA

6

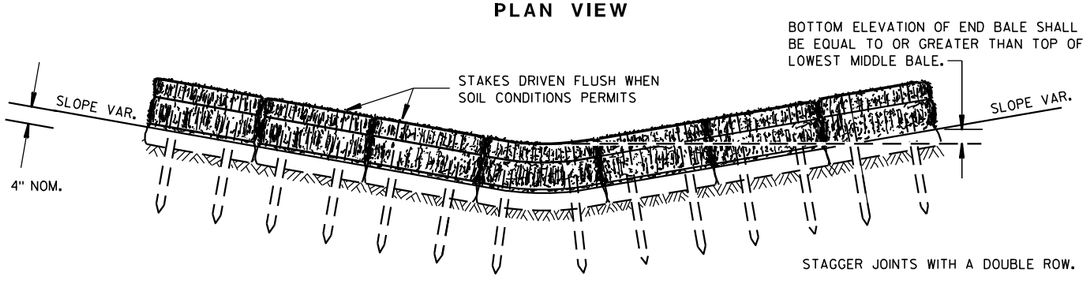
SDD 08D22 - 01



SECTION A-A



PLAN VIEW



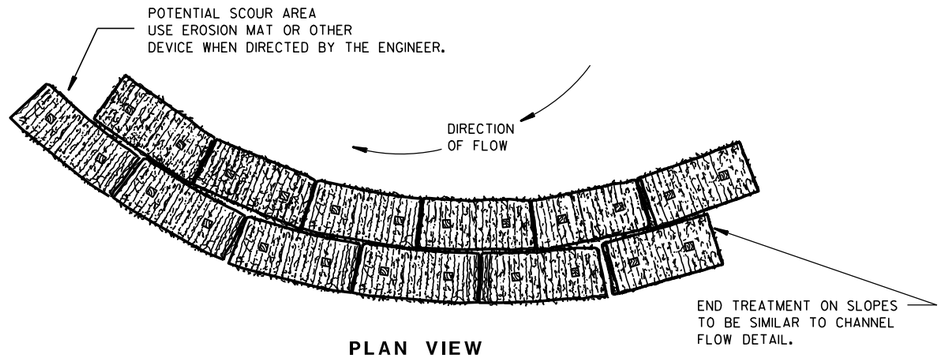
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES (1)

GENERAL NOTES

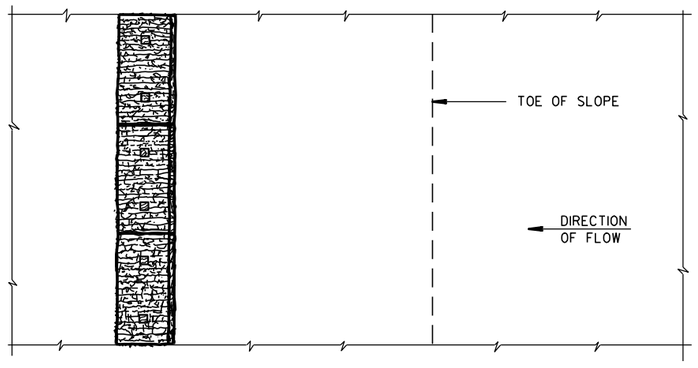
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

(1) TEMPORARY DITCH CHECKS EITHER EROSION BALES OR MANUFACTURED SHALL BE PAID FOR UNDER THE BID ITEM OF TEMPORARY DITCH CHECK. THE DEPARTMENT WILL NOT PAY FOR TEMPORARY DITCH CHECKS CONSTRUCTED OF A SINGLE ROW OF EROSION BALES.

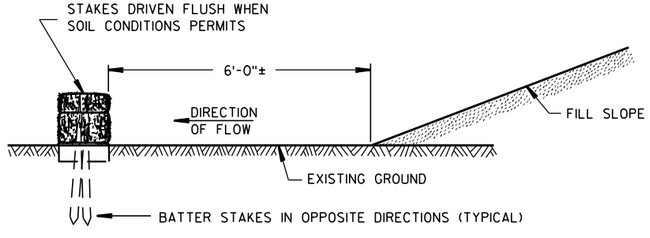


PLAN VIEW

WHEN ALTERING THE DIRECTION OF FLOW



PLAN VIEW



FRONT ELEVATION

WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

EROSION BALES FOR SHEET FLOW

TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6/04/02 DATE

/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER

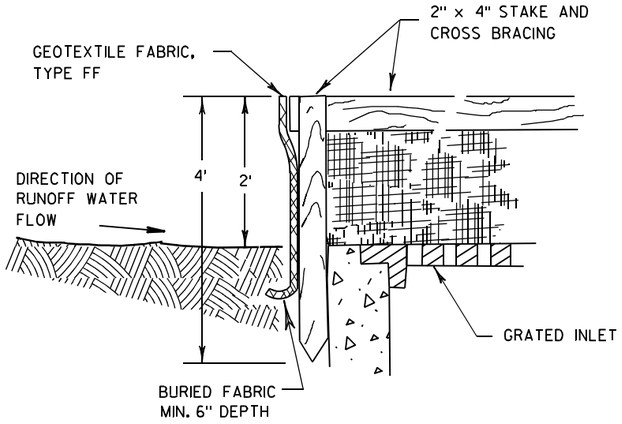
FHWA

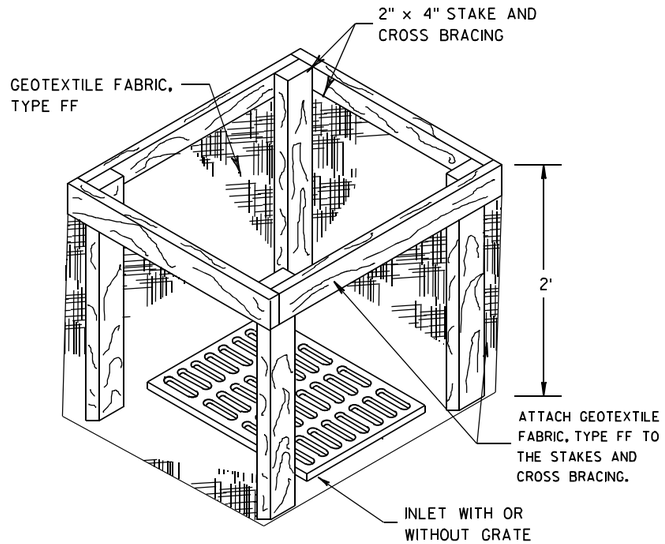
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S.D.D. 8 E 8-3

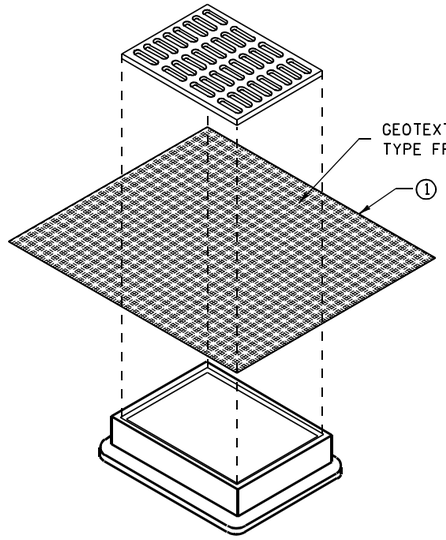
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S.D.D. 8 E 8-3



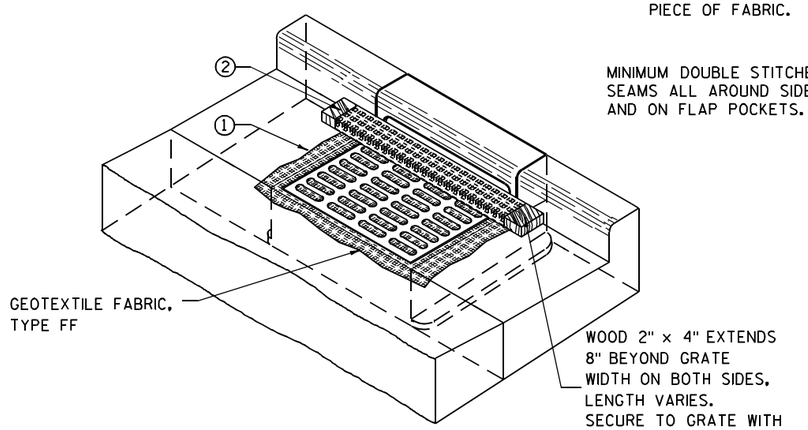


INLET PROTECTION, TYPE A

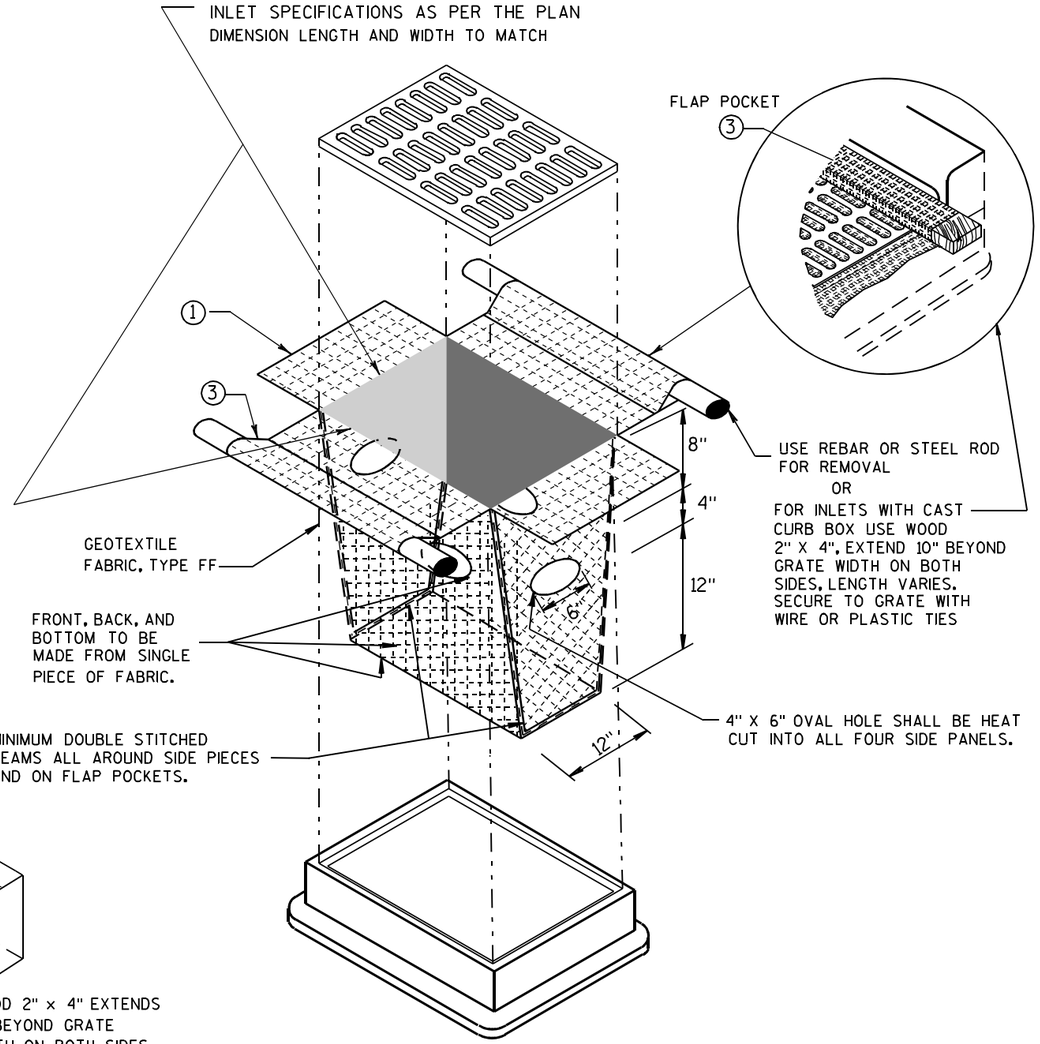


INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

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



INLET PROTECTION, TYPE C (WITH CURB BOX)



INLET PROTECTION, TYPE D

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

GENERAL NOTES

INLET PROTECTION DEVICES SHALL BE MAINTAINED OR REPLACED AT THE DIRECTION OF THE ENGINEER.

MANUFACTURED ALTERNATIVES APPROVED AND LISTED ON THE DEPARTMENT'S EROSION CONTROL PRODUCT ACCEPTABILITY LIST MAY BE SUBSTITUTED.

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

① FINISHED SIZE, INCLUDING FLAP POCKETS WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10" AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.

② FOR INLET PROTECTION, TYPE C (WITH CURB BOX), AN ADDITIONAL 18" OF FABRIC IS WRAPPED AROUND THE WOOD AND SECURED WITH STAPLES. THE WOOD SHALL NOT BLOCK THE ENTIRE HEIGHT OF THE CURB BOX OPENING.

③ FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2X4.

INSTALLATION NOTES

TYPE B & C

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

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

TYPE D

DO NOT INSTALL INLET PROTECTION TYPE D IN INLETS SHALLOWER THAN 30", MEASURED FROM THE BOTTOM OF THE INLET TO THE TOP OF THE GRATE.

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

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

INLET PROTECTION
TYPE A, B, C, AND D

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

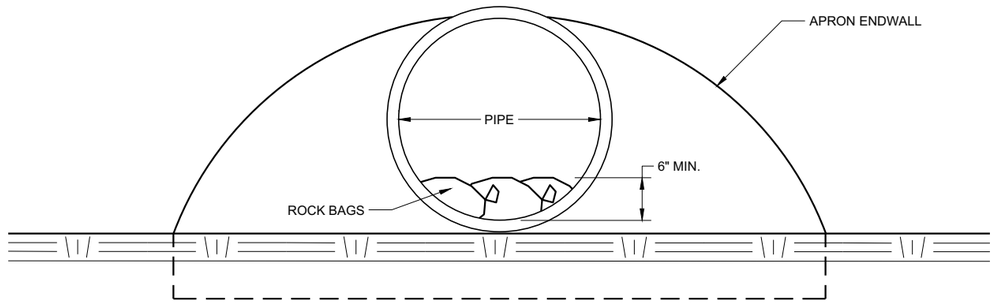
APPROVED
10/16/02
DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6

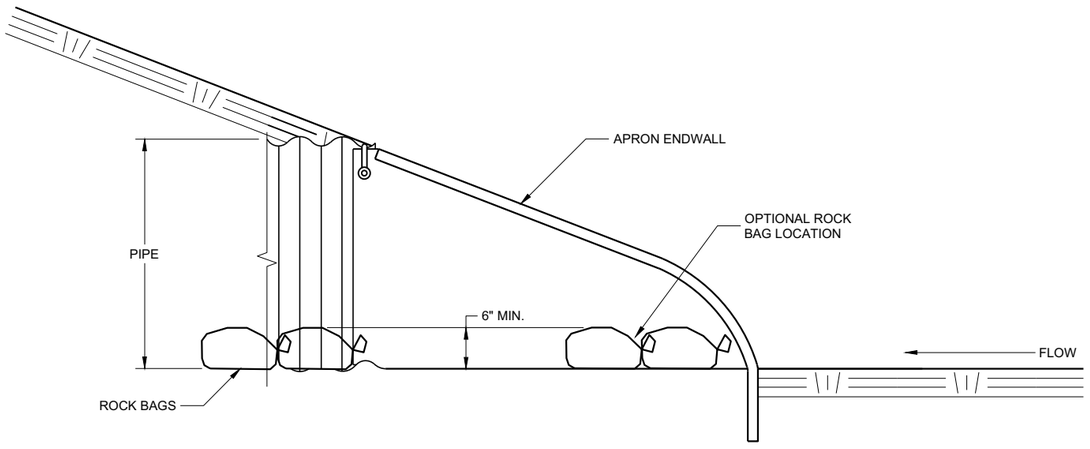
S.D.D. 8 E 10-2

6

S.D.D. 8 E 10-2



END VIEW



SIDE VIEW

CULVERT PIPE CHECK

(INSTALL ON INLET END ONLY)

CULVERT PIPE CHECK	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED May 2019 DATE	/S/ Daniel Schave EROSION CONTROL ENGI
FHWA	

6

SDD 08E15 - 01

METAL APRON ENDWALLS

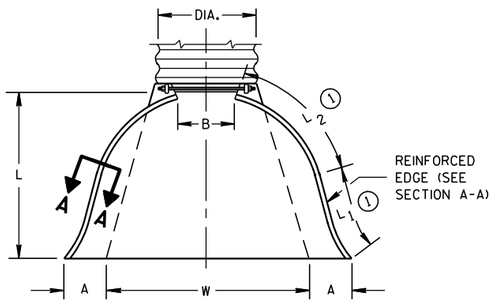
PIPE DIA. (IN.)	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4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

× EXCEPT CENTER PANEL SEE GENERAL NOTES

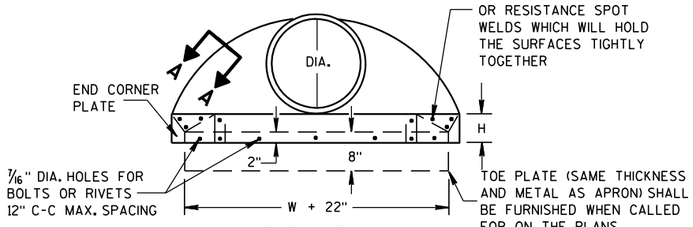
REINFORCED CONCRETE APRON ENDWALLS

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

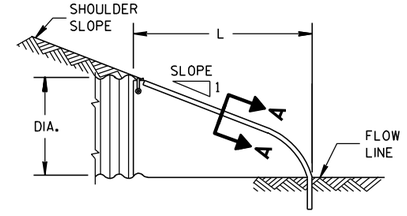
*MINIMUM
**MAXIMUM



PLAN VIEW

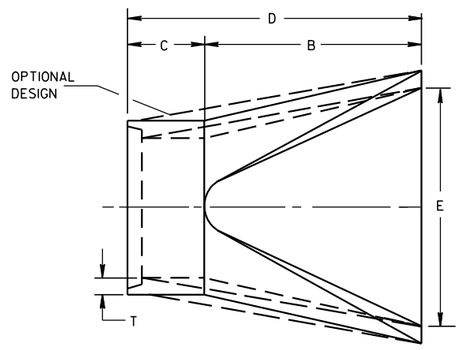


END VIEW

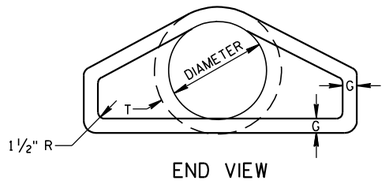


SIDE ELEVATION

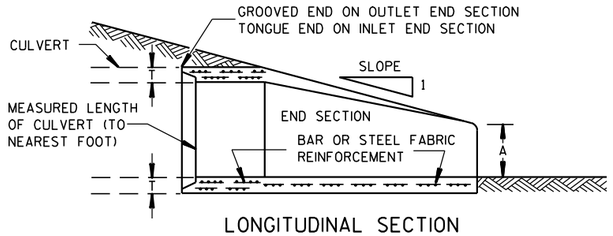
METAL ENDWALLS



PLAN

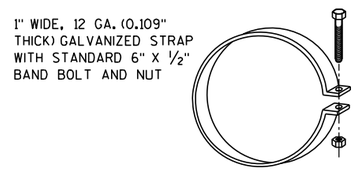


END VIEW



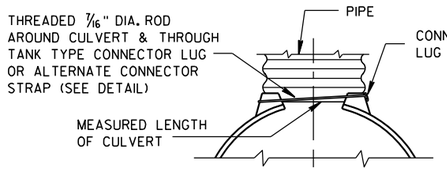
LONGITUDINAL SECTION

CONCRETE ENDWALLS

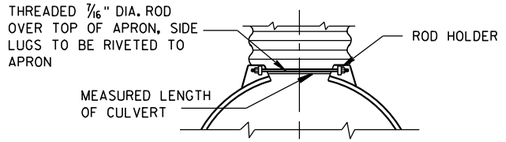


ALTERNATE FOR TYPE 1 CONNECTION

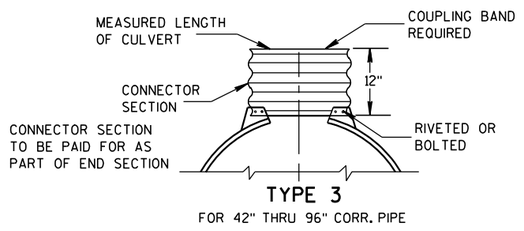
END SECTION CONNECTOR STRAP



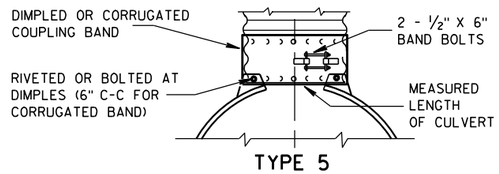
TYPE 1
FOR 12" THRU 24" CORR. PIPE



TYPE 2
FOR 30" THRU 96" CORR. PIPE



TYPE 3
FOR 42" THRU 96" CORR. PIPE



TYPE 5
ALTERNATE FOR:
ALL SIZES CORRUGATED CIRCULAR PIPE

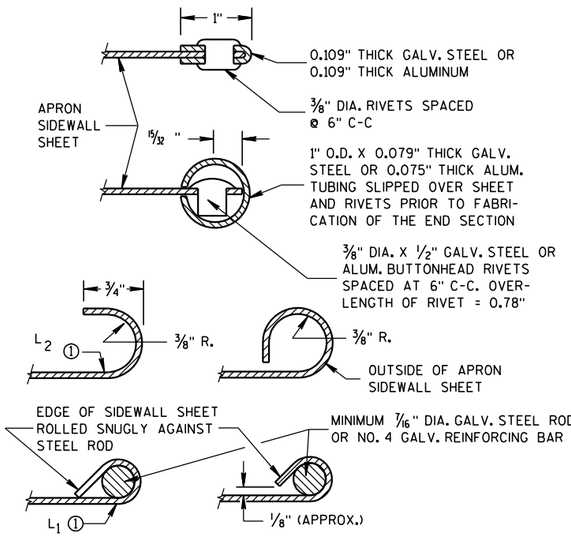
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

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

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

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

CONNECTION DETAILS



SECTION A-A

GENERAL NOTES

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

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

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

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

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

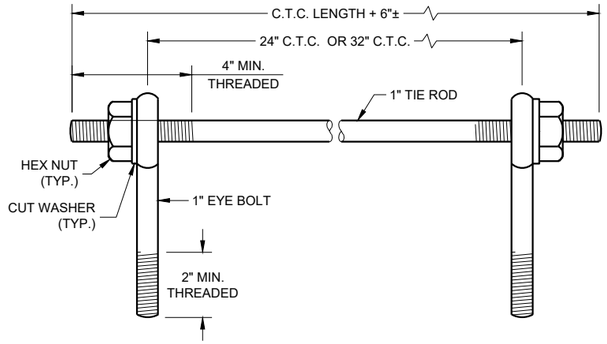
① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR CULVERT PIPE

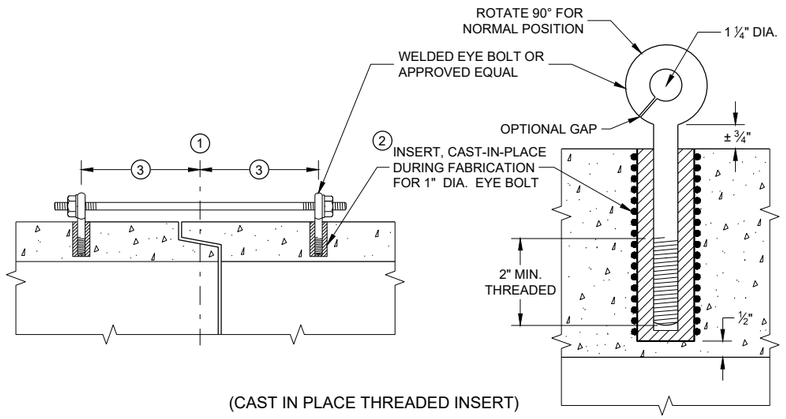
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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



EYE BOLTS AND TIE ROD



(CAST IN PLACE THREADED INSERT)

LONGITUDINAL SECTIONS

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

GENERAL NOTES

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

CONCRETE CULVERT AND STORM SEWER PIPE SHALL BE TIED TOGETHER IN THE MANNER ILLUSTRATED BY THIS DETAIL AT LOCATIONS DESIGNATED IN THE STANDARD SPECIFICATIONS AND THE PLAN. THE CONTRACTOR MAY USE EITHER ALTERNATE 1, 2 OR 3 FOR DRAINAGE STRUCTURES. ONLY ALTERNATE 1 AND 3 MAY BE USED FOR CATTLE PASSES, UNLESS OTHERWISE STATED IN THE CONTRACT. THE MATERIALS, FABRICATION AND WORK NECESSARY TO TIE THE PIPE BY THIS DETAIL WILL BE CONSIDERED INCIDENTAL TO THE PIPE AND APRON ENDWALLS IF REQUIRED.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR JOINT TIES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

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

(1) CENTER LINE OF TONGUE AND GROOVE OR BELL AND SPIGOT JOINTS.

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

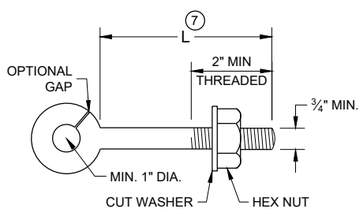
(3) HOLES SHALL BE CAST-IN-PLACE OR DRILLED PER THE APPLICABLE DETAIL, AND EQUAL DISTANCE FROM THE CENTERLINE OF THE JOINT.

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

(5) OPENING TO BE ROD DIAMETER PLUS 1 INCH.

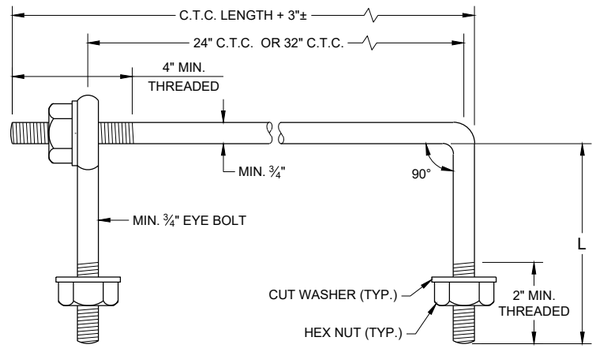
(6) LENGTH ADEQUATE TO EXTEND TO WITHIN ½ INCH OF THE INNER SURFACE OF THE PIPE.

(7) EYE BOLT LENGTH DETERMINED BY WALL THICKNESS, BELL THICKNESS AND BOLT PROJECTION INSIDE PIPE.

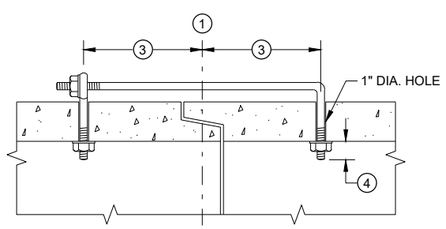


EYE BOLT (7)

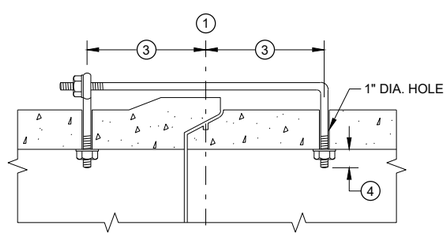
NOTE: TWO EYE BOLTS MAY BE USED WITH A 30" OR 38" LONG THREADED ROD IN LIEU OF THE 90° BENT TIE ROD.



EYE BOLT AND TIE ROD



(TONGUE AND GROOVE PIPE)



(MODIFIED BELL PIPE)

LONGITUDINAL SECTION

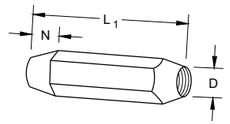
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

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

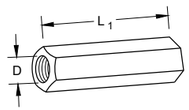
ADJUSTABLE TIE ROD TABLE

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

DIMENSIONS SHOWN ARE IN INCHES



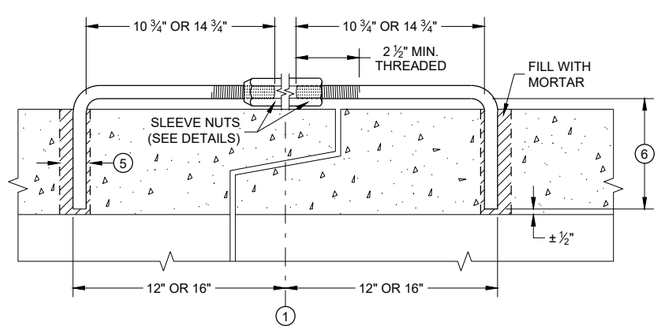
TAPERED



PLAIN

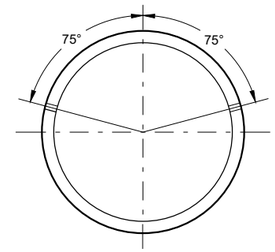
RIGHT AND LEFT THREADS

SLEEVE NUTS



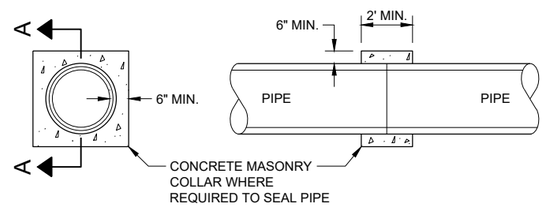
LONGITUDINAL SECTION

ADJUSTABLE TIE ROD (ALTERNATE NO. 3)



PLACEMENT OF (2) CAST-IN-PLACE INSERTS OR HOLES DURING FABRICATION FOR PIPE SECTIONS REQUIRING TIE RODS

TRANSVERSE SECTION



SECTION A - A

CONCRETE COLLAR DETAIL

JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

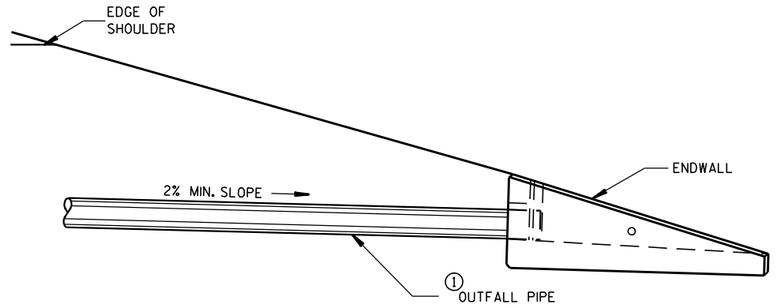
APPROVED
November 2021 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE ENGINEER
FHWA

SDD 08F04 - 08

SDD 08F04 - 08

DIMENSIONS IN INCHES											
PIPE DIA.	A	B	C	D	E	F	G	H	J	L	Z
**4	6	12	5 1/4	9	8	32	36	11	2 3/8	6 1/2	4
6	8	14	7 1/4	11	10	42	44	13	3 5/8	8 1/2	6

**APRON ENDWALL FOR 6 INCH DIAMETER PIPE MAY BE SUBSTITUTED FOR THIS SIZE PROVIDED THE HOLE IN THE HEADWALL IS SIZED AND LOCATED TO CONFORM TO THE 4 INCH DIAMETER PIPE DIMENSIONS (C & J)



INSTALLATION DETAIL

GENERAL NOTES

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

ALTERNATIVE DESIGNS WHICH PROVIDE EQUIVALENT CAPACITY AND STRENGTH MAY BE USED WHEN APPROVED BY THE ENGINEER. ENDWALL MAY BE EITHER PRECAST OR CAST-IN-PLACE CONCRETE.

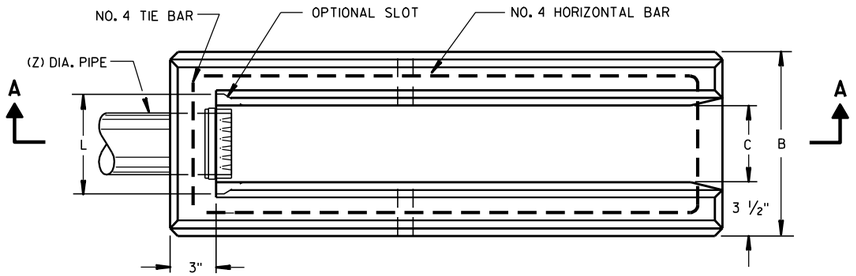
THE UNDERDRAIN PIPE SHALL BE FULLY INSERTED AND SEALED INTO THE ENDWALL WITH CEMENT MORTAR PRIOR TO BACKFILLING AROUND THE STRUCTURE.

THE UPPERMOST POINT OF THE ENDWALL SHALL BE PLACED FLUSH WITH THE ROADWAY SLOPE. ADJACENT EMBANKMENT SLOPES SHALL BE SHAPED TO FIT THE SIDES AND TOE OF THE ENDWALL. EXACT PLACEMENT OF THE OUTFALL PIPE AND ENDWALL SHALL BE DETERMINED BY THE ENGINEER TO MATCH THE ELEVATIONS AND FLOW DIRECTION OF THE ROADSIDE DITCH.

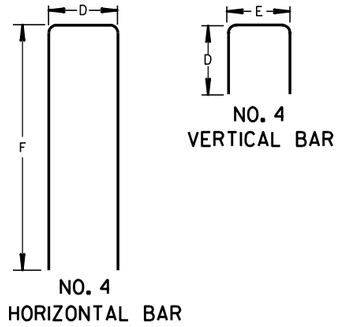
① THE OUTFALL PIPE UNDERDRAIN AND FITTINGS SHALL CONFORM TO THE REQUIREMENTS OF THE SPECIFICATION FOR POLY (VINYL CHORIDE) (PVC) PLASTIC DRAIN, WASTE AND VENT PIPE AND FITTINGS, ASTM DESIGNATION: D 2665, SCHEDULE 40 PVC OR THE STANDARD SPECIFICATION FOR TYPE PSM POLY (VINYL CHORIDE) (PVC) SEWER PIPE AND FITTINGS, ASTM DESIGNATION: D 3034, TYPE PSM SDR 23.5 PVC SEWER PIPE, ALL JOINTS SHALL BE SOLVENT WELDED.

THE OUTFALL PIPE INCLUDING ALL FITTINGS AND THE RODENT SHIELD SHALL BE MEASURED AND PAID FOR AS PIPE UNDERDRAIN UNPERFORATED.

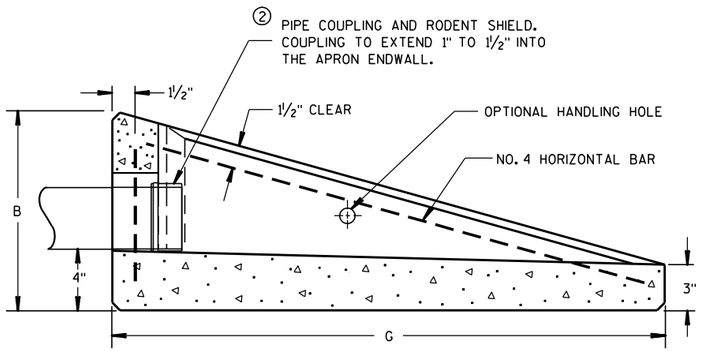
② THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALLY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE OUTFALL PIPE. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH STAINLESS STEEL SHEET METAL SCREWS.



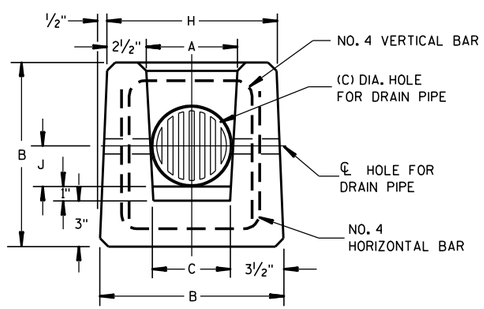
PLAN VIEW



BAR STEEL REINFORCEMENT DETAILS

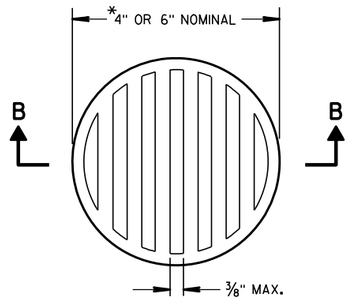


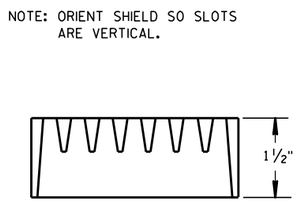
SECTION A-A



END VIEW

CONCRETE APRON ENDWALL FOR UNDERDRAIN





SECTION B-B

② RODENT SHIELD

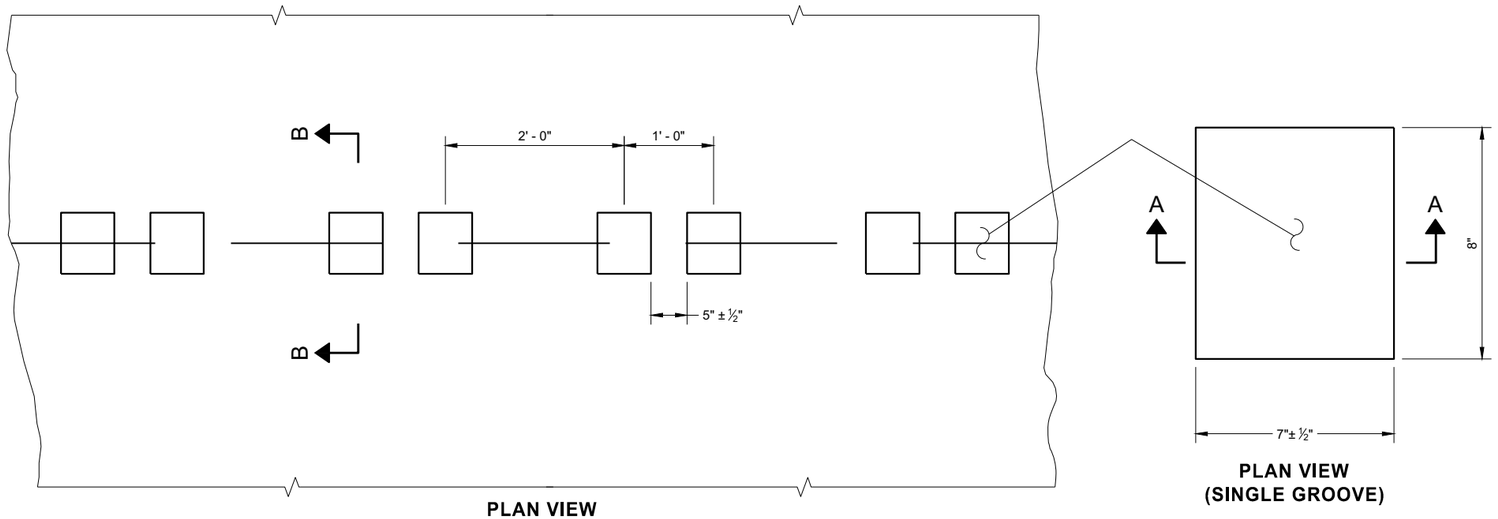
*NOTE: DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING.

REINFORCED CONCRETE APRON ENDWALL FOR PIPE UNDERDRAIN

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
3/10/98 DATE
/S/ Rory L. Rhinesmith
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6
S.D.D. 8 F 6-4



PLAN VIEW
SHOULDER WITH GROOVES

PLAN VIEW
(SINGLE GROOVE)

PLACEMENT DETAIL FOR TYPE 1 MILLED RUMBLE STRIP

GENERAL NOTES

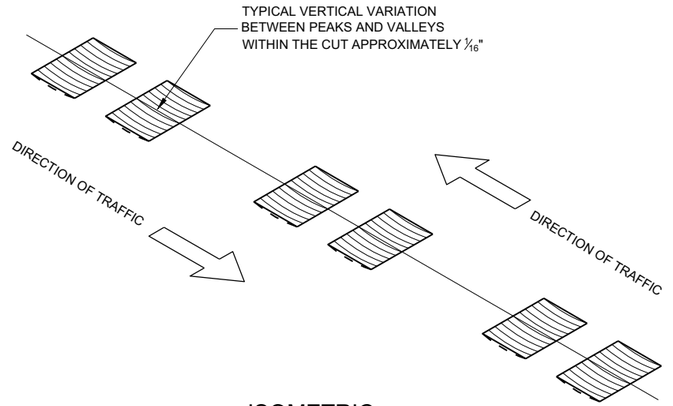
DETAILS OF CONSTRUCTION NO SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

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

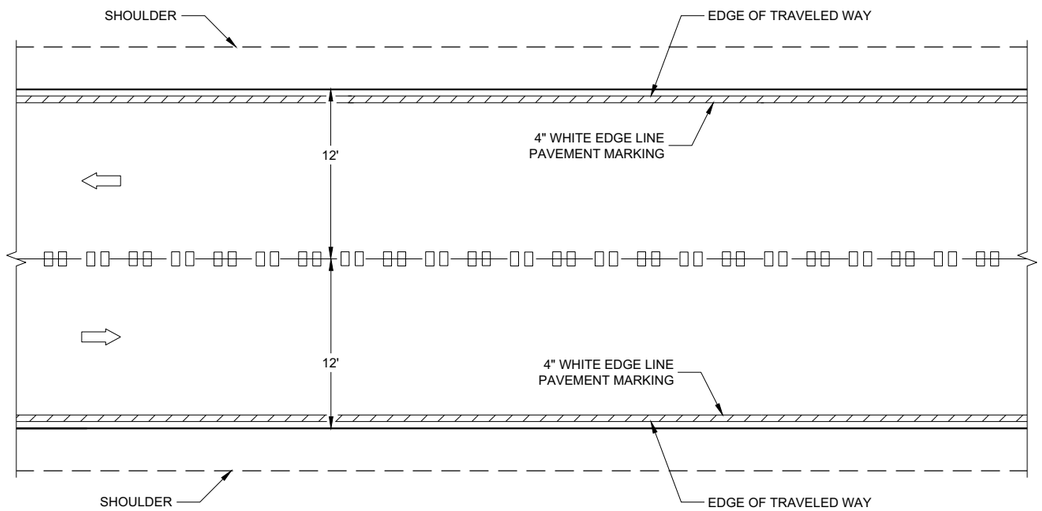
INSTALL PAVEMENT MARKING AFTER THE GROOVES ARE INSTALLED.

SEE SIGNING PLAN FOR SIGN REQUIREMENTS THAT MAY BE NEEDED.

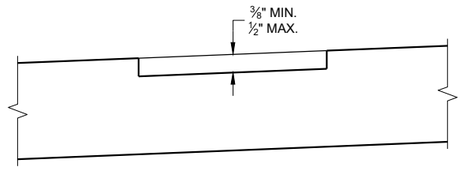
(1) CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS. WHEN DIRECTED BY THE ENGINEER.



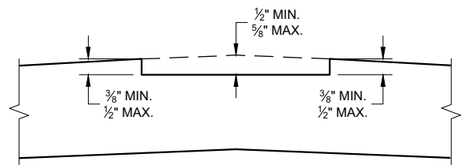
ISOMETRIC



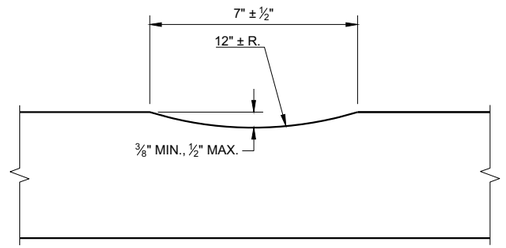
CENTERLINE GROOVES ON TWO-WAY ROADWAYS



SECTION B - B
SUPERELEVATED ROADWAY



SECTION B - B
CROWNED ROADWAY



SECTION A - A

2-LANE RURAL
CENTER LINE RUMBLE STRIP, MILLING

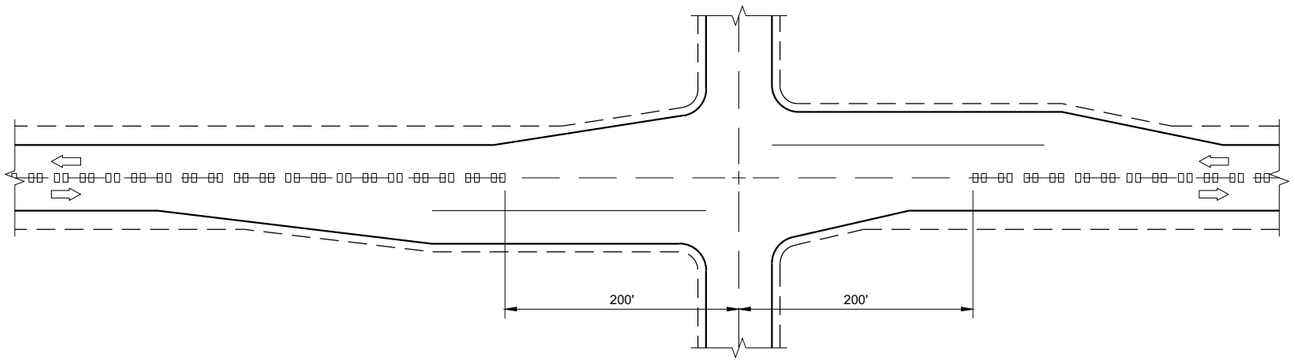
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

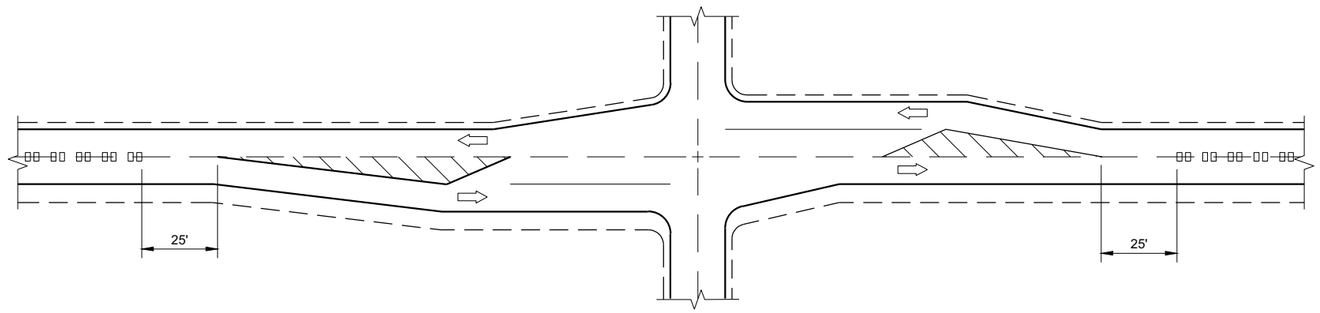
SDD 13A11 - 03a

6

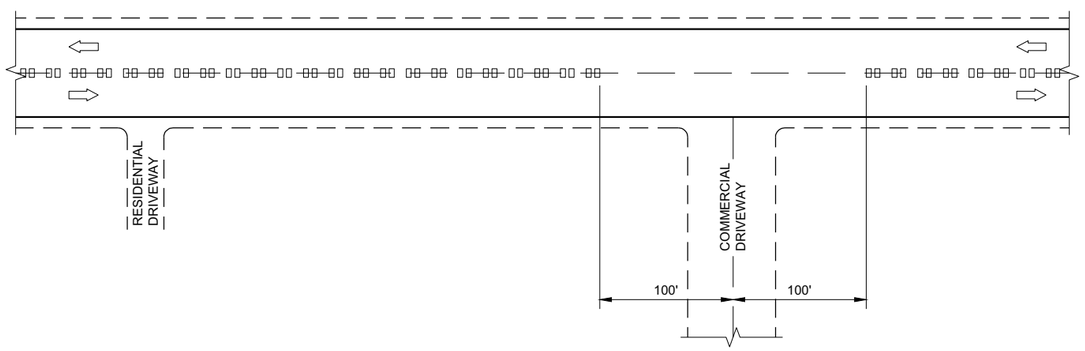
SDD 13A11 - 03a



CENTERLINE GROOVES AT INTERSECTIONS



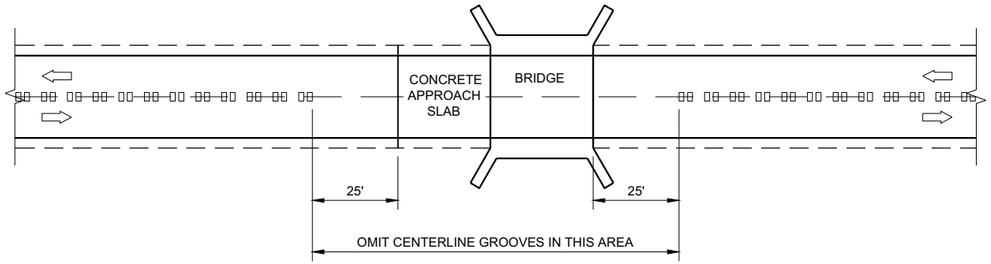
CENTERLINE GROOVES AT INTERSECTIONS (WITH LEFT TURN LANES)



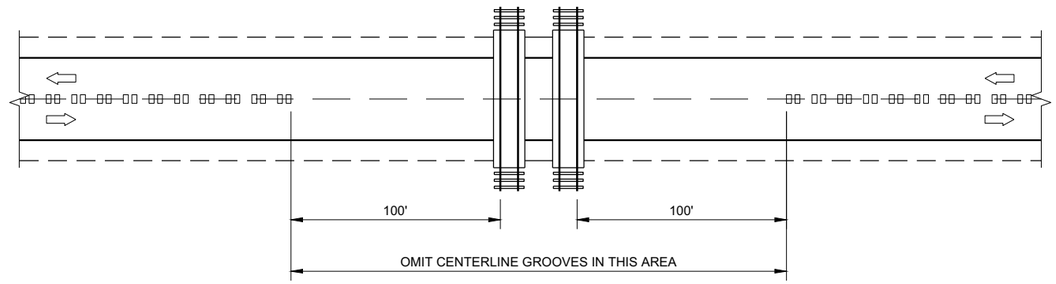
CENTERLINE GROOVES AT DRIVEWAYS (1)

GENERAL NOTES

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



CENTERLINE GROOVES AT BRIDGES



CENTERLINE GROOVES AT RAILROADS

2-LANE RURAL CENTERLINE RUMBLE STRIP, MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

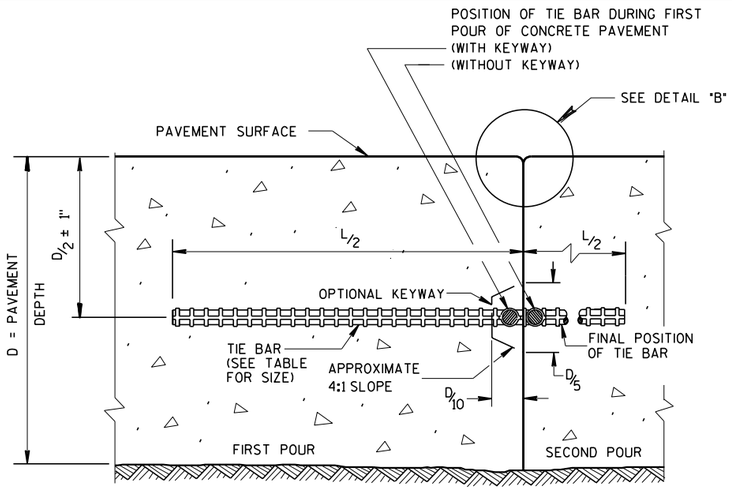
FHWA

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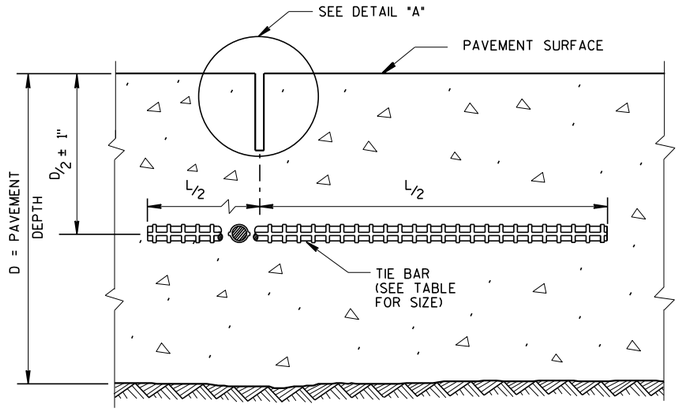
SDD 13A11 - 03b

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SDD 13A11 - 03b



CONSTRUCTION JOINT



SAWED JOINT

GENERAL NOTES

CREATE A LONGITUDINAL JOINT FOR PAVEMENT WIDTHS GREATER THAN 15 FEET.

CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

(1) ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

(2) PAVEMENT THAT WAS IN PLACE PRIOR TO THE CONTRACT.

PLAN VIEW

SECTION A-A

LONGITUDINAL CONSTRUCTION JOINT TIE BARS ANCHORED INTO EXISTING PAVEMENT

DETAIL "A"

DETAIL "B"

DETAIL "C"

TIE BAR TABLE

PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 1/2"	NO. 4	30"	36"
≥ 10 1/2"	NO. 5	36"	36"
	NO. 4 *	30"	24" **

* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

** CONFORM TO 15" MINUMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.

PLAN VIEW
SHOWING LOCATION OF TIE BARS

CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

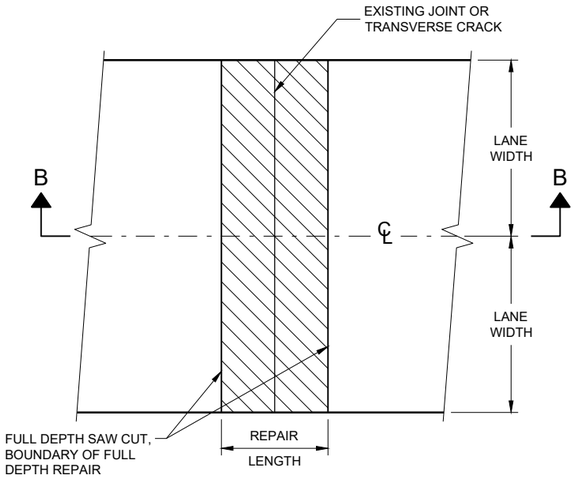
APPROVED
March 2018
DATE
/S/ Peter Kemp PE
PAVEMENT SUPE
FHWA

6

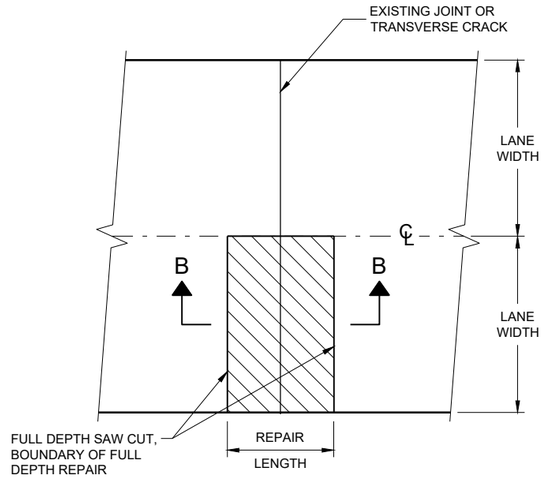
S.D.D. 13 C 1-19

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S.D.D. 13 C 1-19



PLAN VIEW
(DOUBLE LANE REPAIR)



PLAN VIEW
(SINGLE LANE REPAIR)

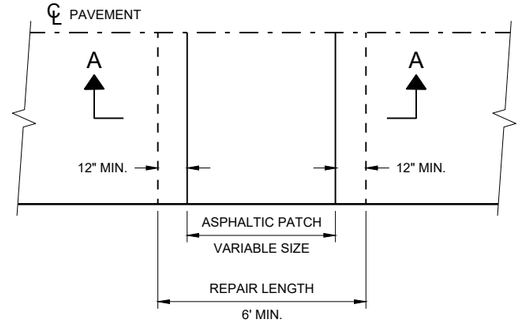
GENERAL NOTES

SAW CUT, DRILL, AND LIFT OUT EXISTING CONCRETE PAVEMENT WITHIN THE BOUNDARIES OF CONCRETE REPAIR AREAS. THE CONTRACTOR MAY MAKE ADDITIONAL SAW CUTS INSIDE THE REPAIR LIMITS TO REDUCE WEIGHT AND SIZE OF CONCRETE PIECES.

PROVIDE A 6 FOOT MINIMUM DISTANCE FROM BOUNDARIES OF CONCRETE REPAIR AREA TO ADJACENT TRANSVERSE JOINT OR CRACK.

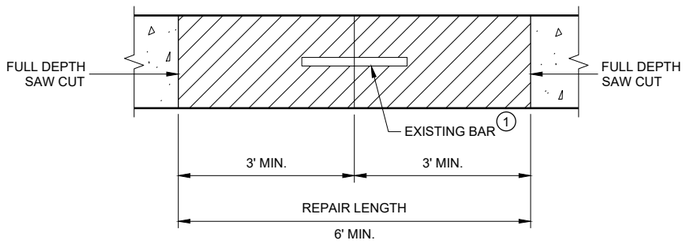
THE LENGTH OF THE REPAIRS MAY VARY FROM THE DIMENSIONS SHOWN IF THE EXISTING CONCRETE PAVEMENT IS NON-DOWELED AND THE PAVEMENT IS TO BE OVERLAID AFTER REPAIRING.

(1) DOWEL BARS MAY NOT BE PRESENT.



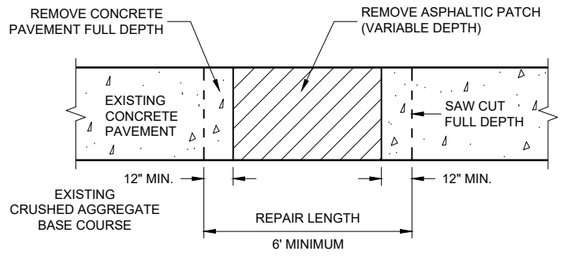
PLAN VIEW

FULL DEPTH CONCRETE PAVEMENT REMOVAL



SECTION B - B

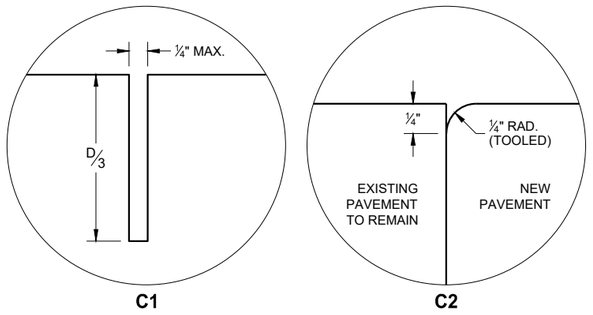
CONCRETE REMOVAL



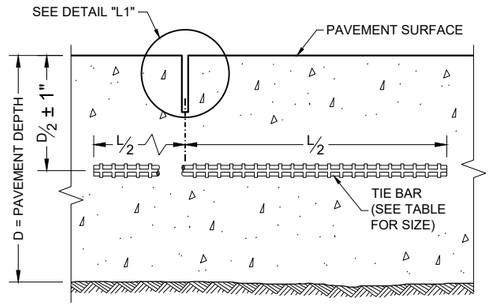
SECTION A - A

HMA PATCH REMOVAL

CONCRETE PAVEMENT REPAIR AND REPLACEMENT

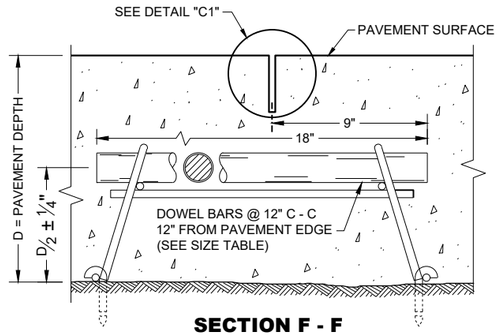


TRANSVERSE JOINTS



SECTION C - C

SAWED LONGITUDINAL JOINT



SECTION F - F

DOWELED CONTRACTION JOINT

GENERAL NOTES

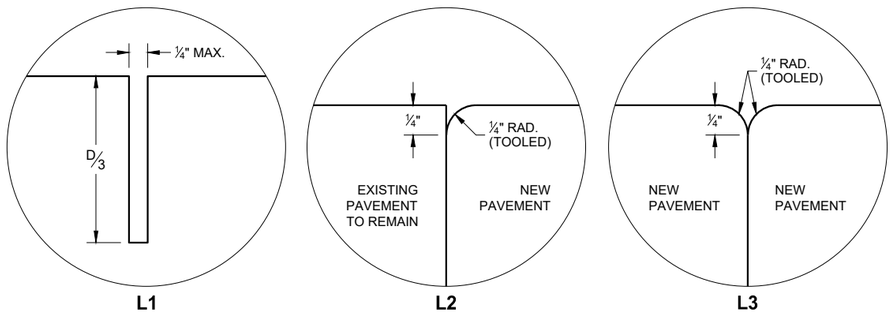
INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

CONCRETE PAVEMENT REPAIRS OF EXISTING NON-DOWELED CONCRETE PAVEMENTS DO NOT NEED TO BE DOWELED.

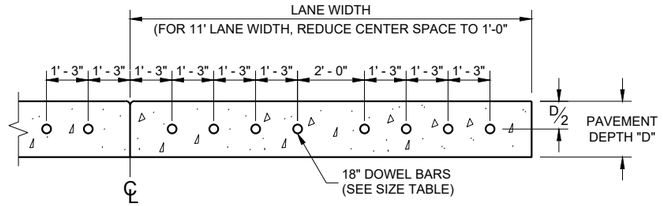
ANCHOR DOWEL BARS AND TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

FOR MULTI-LANE CONCRETE PAVEMENT REPLACEMENTS, PROVIDE A MINIMUM DISTANCE OF 15 INCHES FROM ALL TRANSVERSE JOINTS OR EDGES OF REPLACEMENT TO THE CENTER OF THE TIE BAR NEAREST THAT JOINT OR EDGE.

(1) APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.

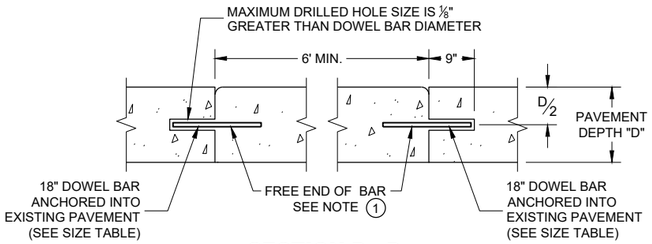


LONGITUDINAL JOINTS



SECTION E - E

DRILLED DOWEL BAR CONSTRUCTION JOINT



SECTION D - D

TIE BAR TABLE

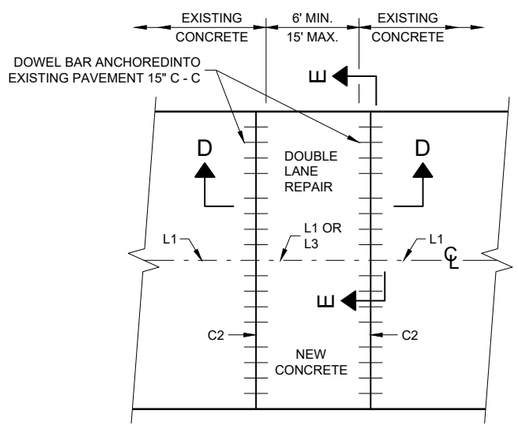
PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 ½"	NO. 4	30"	36"
≥ 10 ½"	NO. 5	36"	36"
	NO. 4 *	30"	24" **

* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

** CONFORM TO 15" MINIMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.

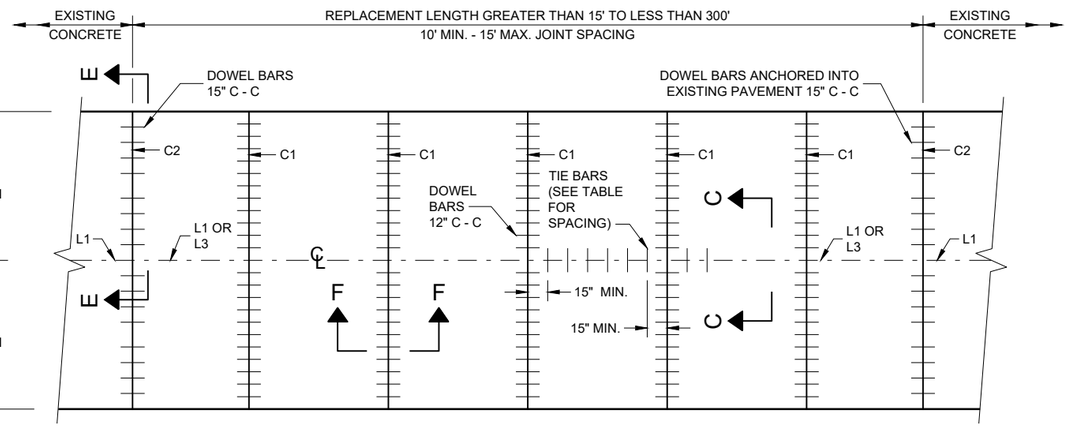
PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	DOWEL BAR DIAMETER	DRILLED DOWEL BAR DIAMETER	CONTRACTION JOINT SPACING
5 ½", 6", 6 ½"	NONE	NONE	12'
7", 7 ½"	1"	1"	14'
8", 8 ½"	1 ¼"	1 ¼"	15'
9" & ABOVE	1 ¼"	1 ¼"	15'



PLAN VIEW

MULTILANE CONCRETE PAVEMENT REPAIR



PLAN VIEW

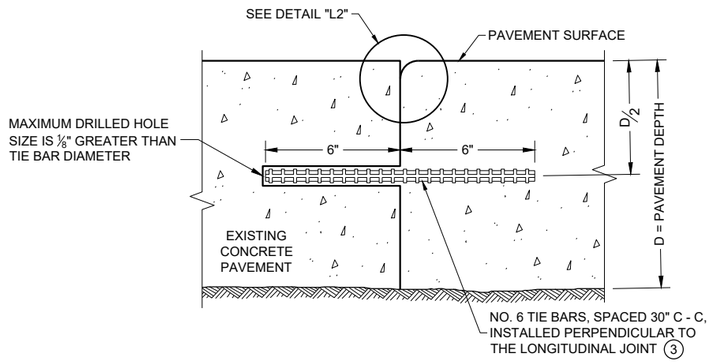
MULTILANE CONCRETE PAVEMENT REPLACEMENT

SDD 13C09 - 16b

6

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SDD 13C09 - 16b

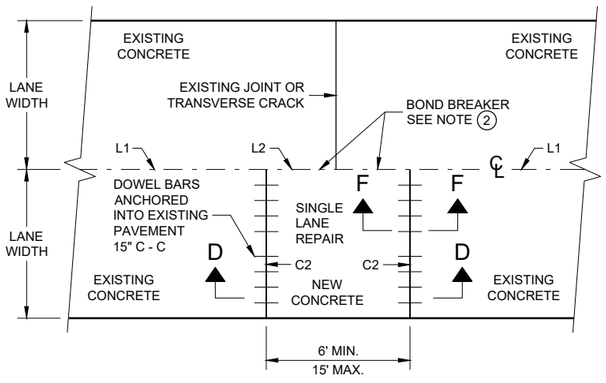


SECTION G - G

TIE BARS ANCHORED INTO EXISTING PAVEMENT

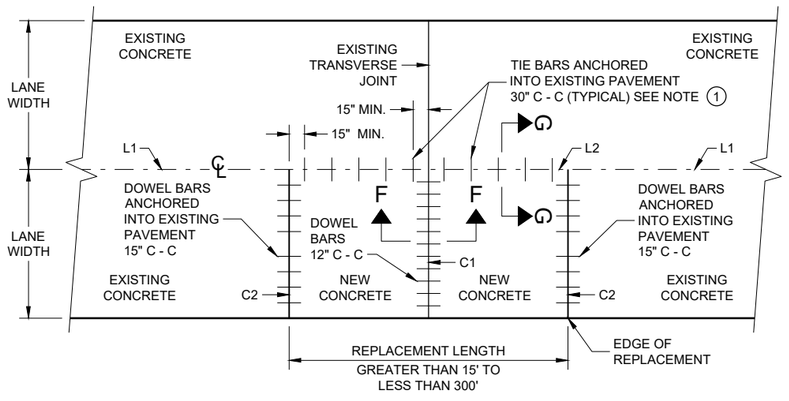
GENERAL NOTES

1. WITH THE APPROVAL OF THE ENGINEER, FOR SINGLE LANE PAVEMENT REPLACEMENTS LESS THAN 30 FEET IN LENGTH, THE CONTRACTOR MAY INSTALL DRILLED TIE BARS ON 6:1 SKEW HORIZONTALLY, DIRECTION OF SKEW ALTERNATING WITH EACH SUCCESSIVE BAR. DRIVE SKEWED TIE BARS TO A DEPTH OF 6 INCHES IN A HOLE OF SUCH A DIAMETER AS TO PROVIDE A TIGHT DRIVEN FIT.
2. USE AN ENGINEER APPROVED BOND BREAKER (E.G. RELEASE AGENT, CURING COMPOUND) FOR SINGLE LANE REPAIRS UP TO 15 FEET IN LENGTH.
3. ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.



PLAN VIEW

SINGLE LANE CONCRETE PAVEMENT REPAIR



PLAN VIEW

SINGLE LANE CONCRETE PAVEMENT REPLACEMENT

CONCRETE REPAIR AND REPLACEMENT

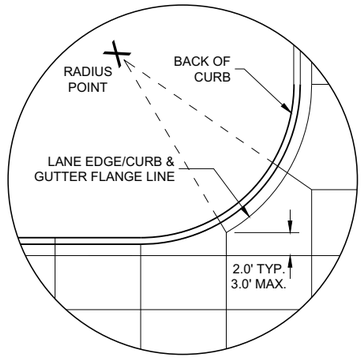
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2022
DATE
/S/ Peter Kemp P.E.
PAVEMENT SUPERVISO

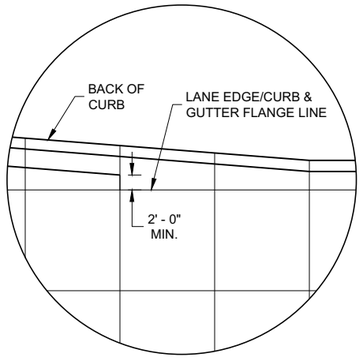
FHWA

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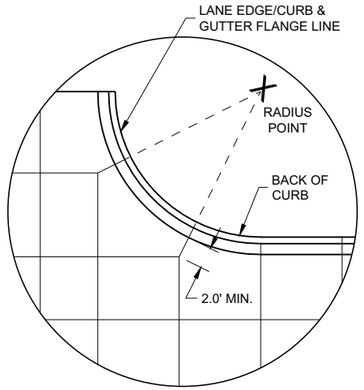
SDD 13C09 - 16c



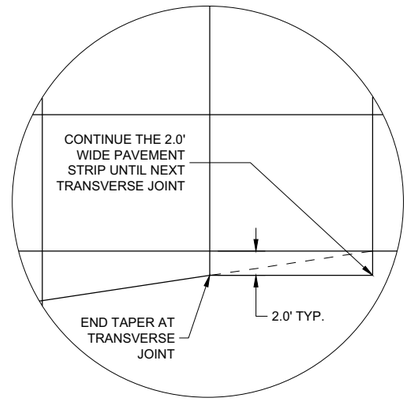
DETAIL "A"



DETAIL "B"



DETAIL "C"



DETAIL "D"

GENERAL NOTES

THE PRIMARY ROADWAY CONTROLS THE TRANSVERSE JOINT PATTERN.

ALIGN NEW JOINTS WITH EXISTING JOINTS OR CRACKS.

CONSTRUCT TRANSVERSE JOINTS PERPENDICULAR TO THE ROADWAY.

ADJUST TRANSVERSE JOINTS TO ALIGN WITH UTILITY FIXTURES (E.G MANHOLES AND INLETS) IN THE PAVEMENT STRUCTURE WHEN POSSIBLE. WATER VALVES DO NOT REQUIRE JOINT ADJUSTMENT.

AVOID SLABS LESS THAN 2 FEET WIDE OR GREATER THAN 15 FEET WIDE.

SEE TABLE FOR TRANSVERSE JOINT SPACING. JOINT SPACING SPECIFIED IS MAXIMUM AND ACTUAL SPACING CAN BE ADJUSTED TO ACCOMMODATE INTERSECTIONS.

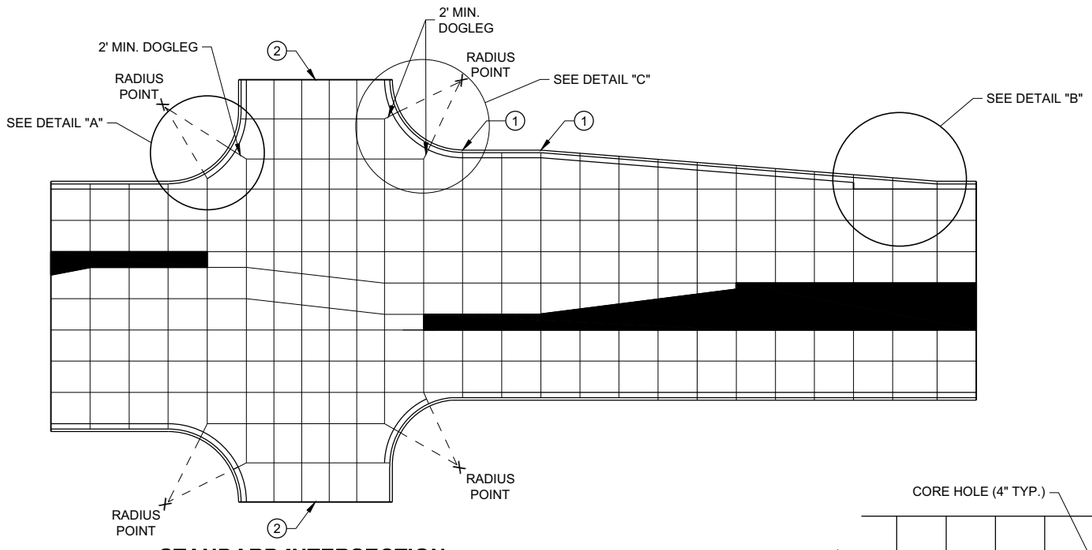
AVOID ANGLES LESS THAN 60° BY DOGLEGGING JOINTS THROUGH CURVE RADIUS POINTS. USE 90° ANGLES WHEN POSSIBLE.

CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

(1) PROVIDE TRANSVERSE JOINTS AT ALL PAVEMENT WIDTH CHANGES.

(2) CONSTRUCT DOWELED EXPANSION JOINT ON THE SIDE ROAD OF AN INTERSECTION IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH. ALIGN EXPANSION JOINT WITHEDGE OF RADIUS.

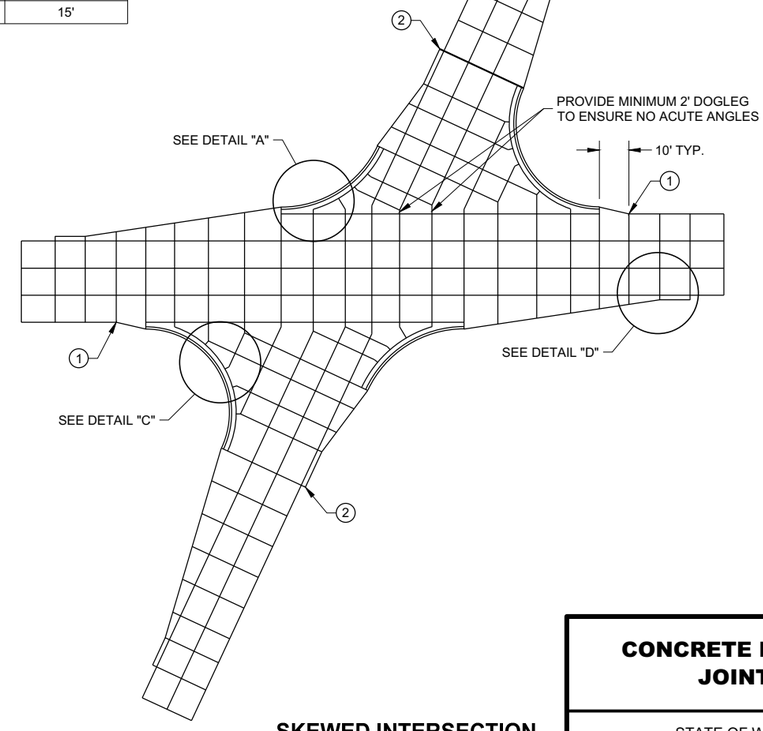
(3) THE ENGINEER MAY APPROVE SLIGHT VARIATIONS FROM THESE JOINTING DETAILS.



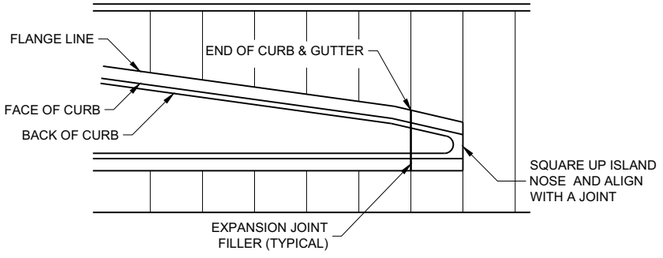
STANDARD INTERSECTION

PAVEMENT DEPTH AND JOINT SPACING TABLE

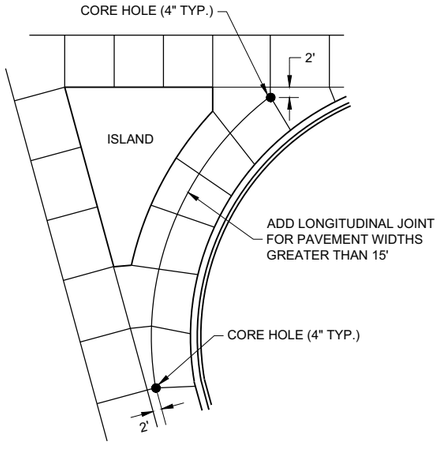
PAVEMENT DEPTH (D)	CONTRACTION JOINT SPACING
6", 6 ½"	12'
7", 7 ½"	14'
8" & ABOVE	15'



SKEWED INTERSECTION



APPROACH TO MEDIAN



LARGE RIGHT TURN

CONCRETE PAVEMENT JOINTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 13C18 - 07a

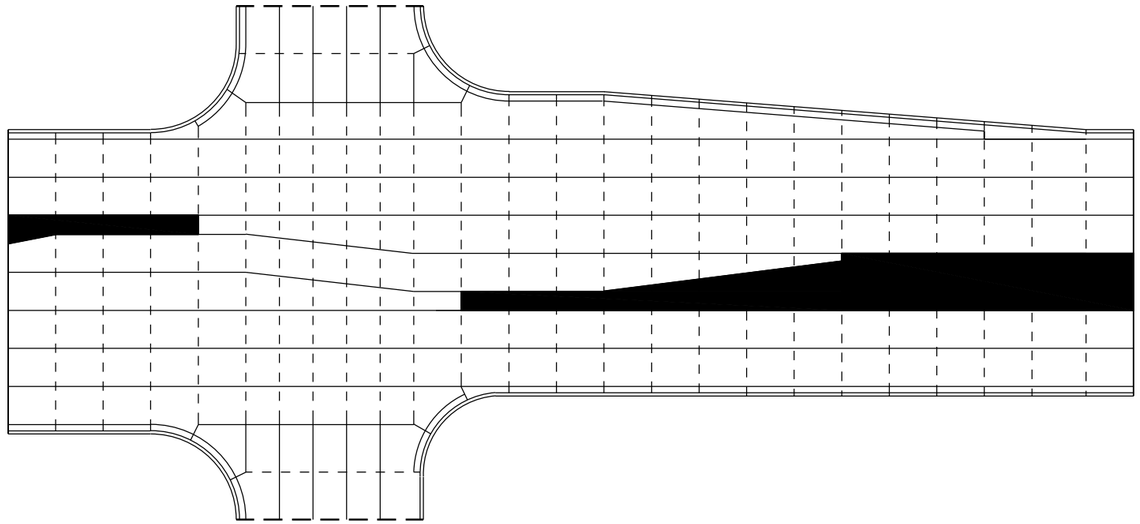
SDD 13C18 - 07a

LEGEND

POTENTIAL DOWELED EXPANSION JOINT

DOWELED JOINT

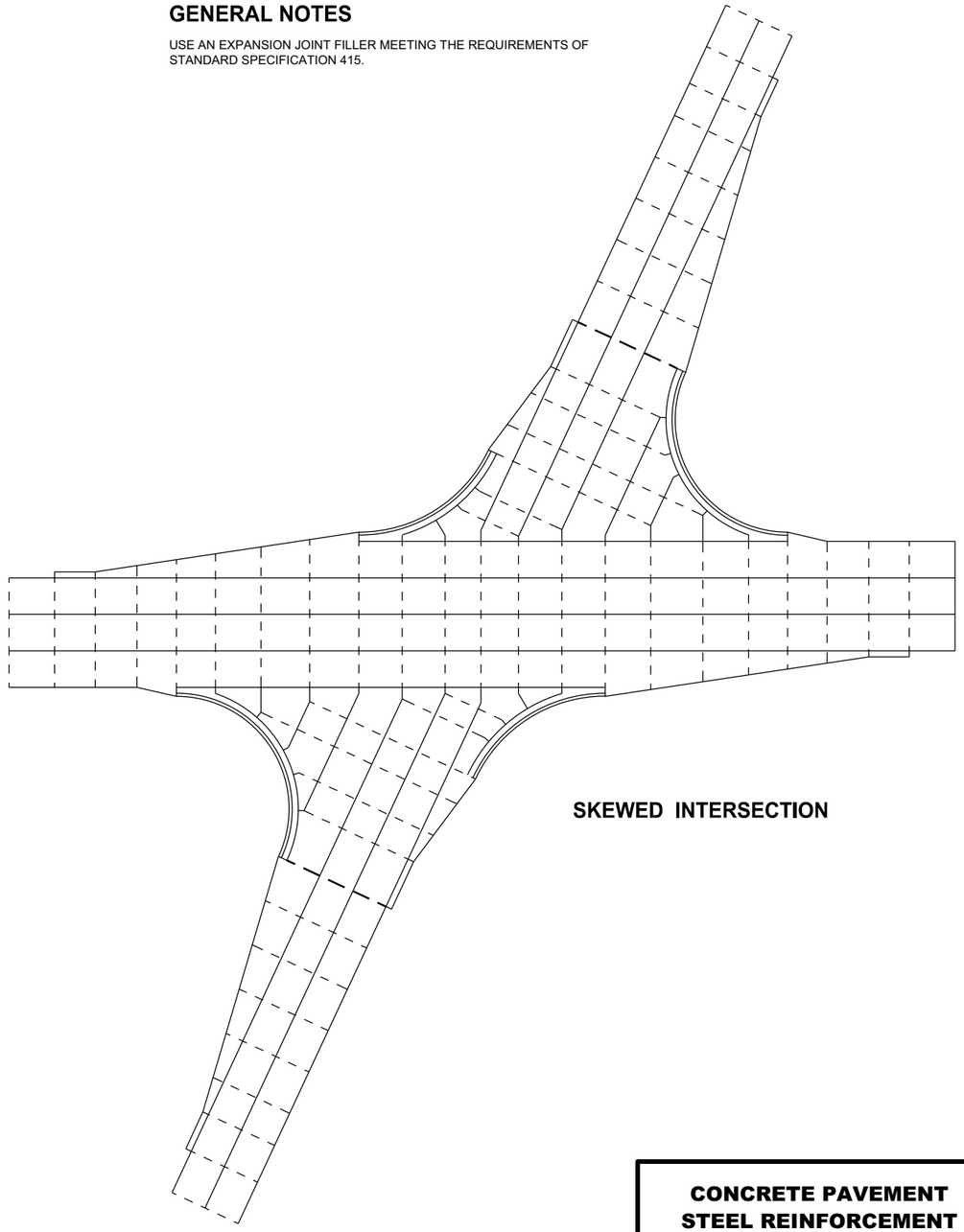
TIED JOINT



STANDARD INTERSECTION

GENERAL NOTES

USE AN EXPANSION JOINT FILLER MEETING THE REQUIREMENTS OF STANDARD SPECIFICATION 415.



SKEWED INTERSECTION

6

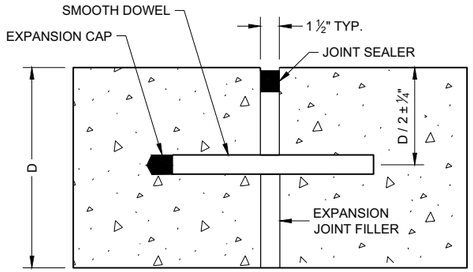
SDD 13C18 - 07b

CONCRETE PAVEMENT
STEEL REINFORCEMENT

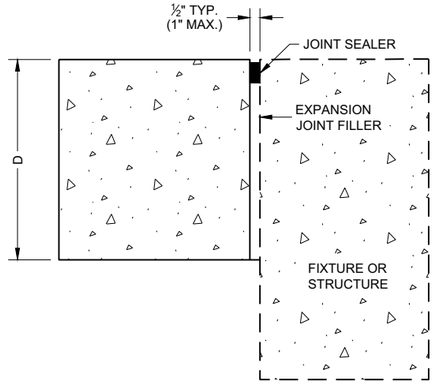
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 13C18 - 07b



DOWELED TRANSVERSE (1)



UNTIED - LONGITUDINAL

EXPANSION JOINTS

TIE BAR TABLE

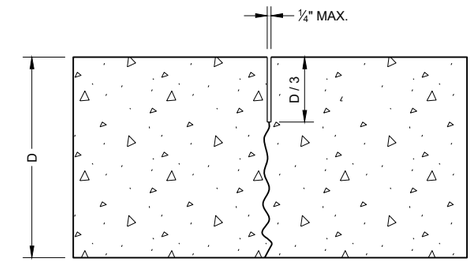
PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 ½"	NO. 4	30"	36"
≥ 10 ½"	NO. 5	36"	36"
	NO. 4*	30"	24"**

* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

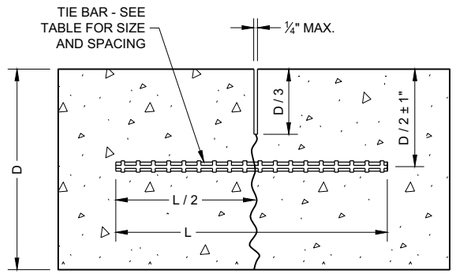
** CONFORM TO 15" MINIMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.

GENERAL NOTES

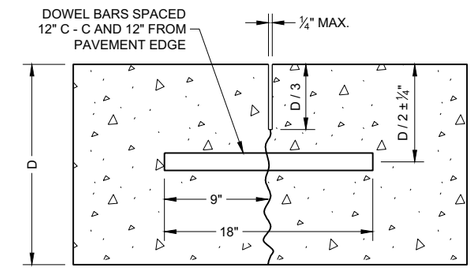
1. USE DOWELED EXPANSION JOINTS ON SIDE ROADS AT INTERSECTIONS (TO ISOLATETHE SIDE ROAD FROM THE THROUGH STREET) IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH.
2. SPACE CONTRACTION JOINTS IN ACCORDANCE WITH SDD 13C4, 13C11 OR 13C13.
3. LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO CONTRACTION JOINTS.
4. CONSTRUCTION JOINTS CAN BE FORMED OR SAWED.
5. IF JOINT IS FORMED, PROVIDE A ¼" RADIUS.
6. ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.



UNDOWELED TRANSVERSE

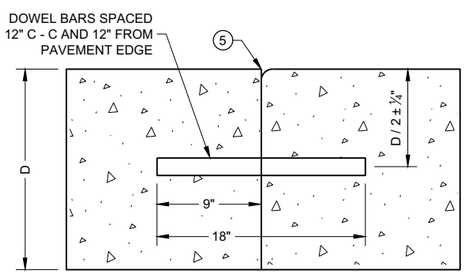


TIED LONGITUDINAL

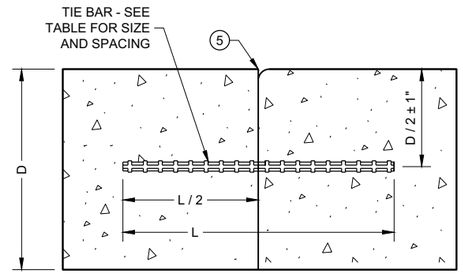


DOWELED TRANSVERSE

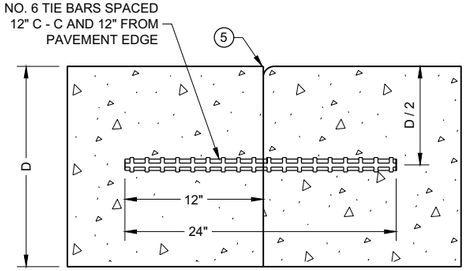
CONTRACTION JOINTS (2)



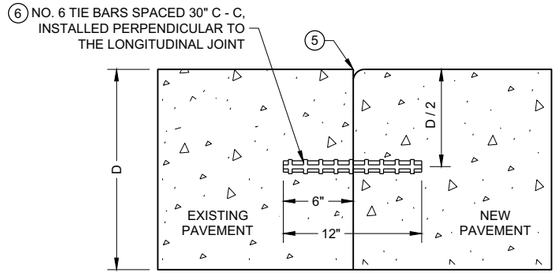
DOWELED TRANSVERSE (3)



TIED LONGITUDINAL



TIED TRANSVERSE (3)
(FOR USE ON NON-DOWELED PAVEMENTS ONLY)



TIED LONGITUDINAL TO EXISTING

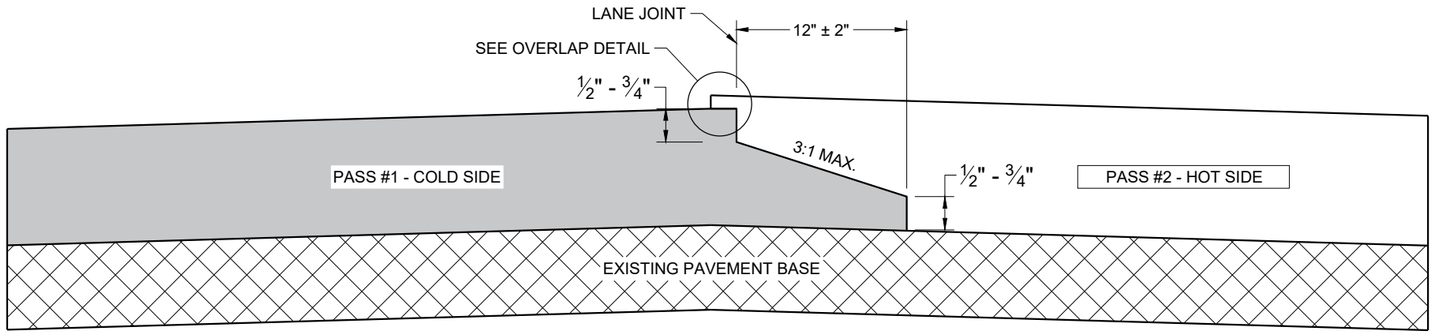
CONSTRUCTION JOINTS (4)

CONCRETE PAVEMENT JOINT TYPES

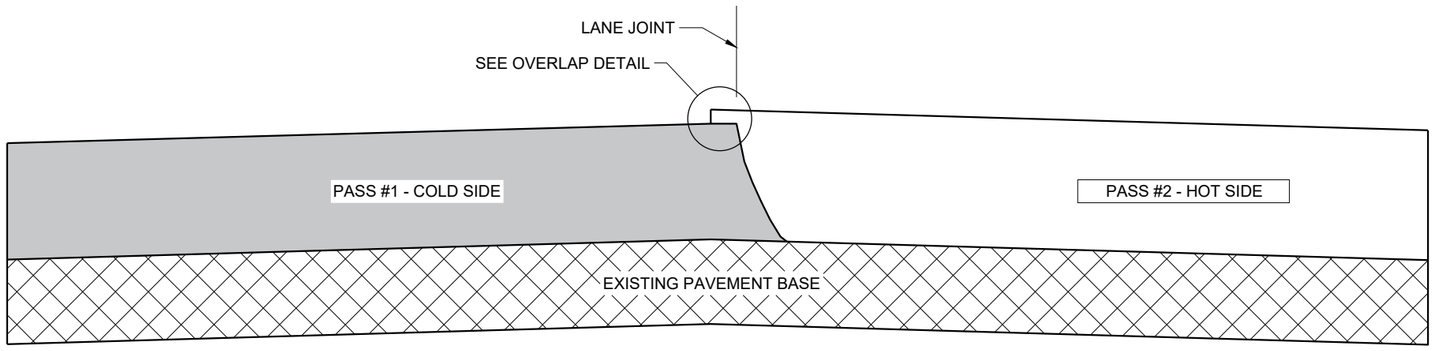
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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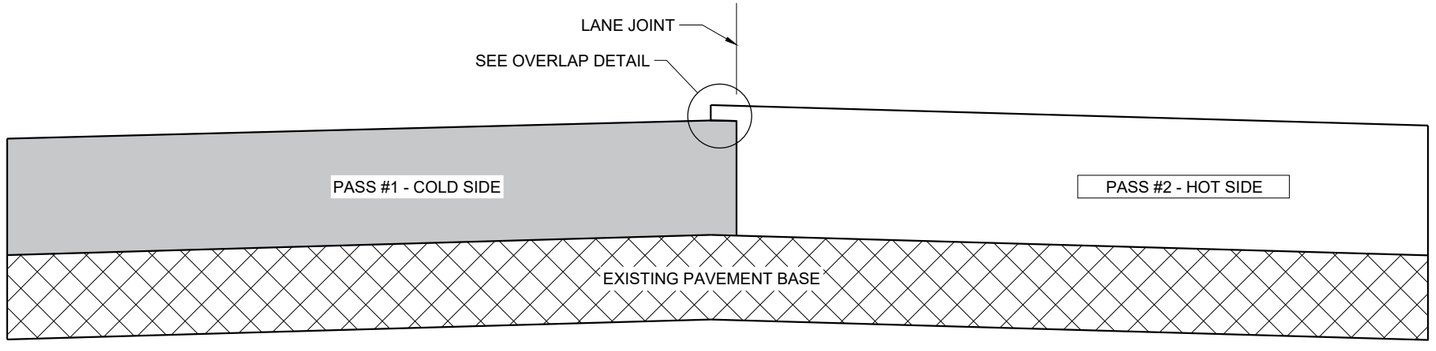
SDD 13C18 - 07c



TYPICAL PAVEMENT CROSS SECTION
NOTCHED WEDGE JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT (MILLED)

GENERAL NOTES

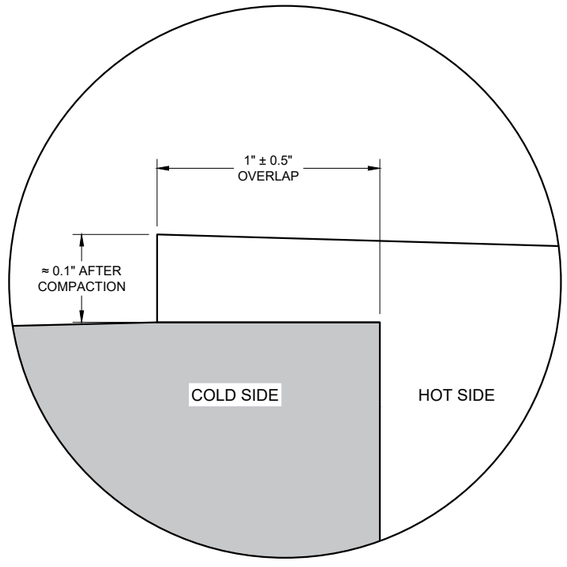
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

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

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

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

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



OVERLAP DETAIL (TYPICAL)

HMA LONGITUDINAL JOINTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2020
DATE

/S/ Steven Hefel
HMA PAVEMENT ENGIN

FHWA

6

SDD 13C19 - 03

BILL OF MATERIALS

NOTE NO.	DESCRIPTION
①	WOOD BREAKAWAY TERMINAL POST: 5½" X 7½" X 3'-9"
②	STEEL TUBE TS 8" X 6" X 0.188", 6'-0"
④	WOOD BREAKAWAY CRT POST: 6" X 8" X 6'-0"
⑤	WOOD OFFSET BLOCKS: 6' X 8" X 1'-2"
⑥	PIPE SLEEVE: 2" X 5 ½" STANDARD PIPE
⑦	BEARING PLATE
⑧	BCT CABLE ASSEMBLY
⑨	CABLE ANCHOR BOX
⑩	STRUT & YOKE
⑪	STEEL PLATE BEAM, END PANEL 12 GA.
⑫	STEEL PLATE BEAM: 12 GA. 13'-6½"
⑬	IMPACT HEAD
⑭	0.040" ALUMINUM SHEET WITH REFLECTIVE SHEETING TYPE F PER SECTION 637 OF THE STANDARD SPECIFICATIONS

GENERAL NOTES

FOLLOW MANUFACTURE'S BOLTING RECOMMENDATIONS.

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

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

(D) THE TOP OF THE STEEL TUBE ON POSTS 1 AND 2 SHALL NOT BE MORE THAN 3" ABOVE THE FINISH GROUND ELEVATION.

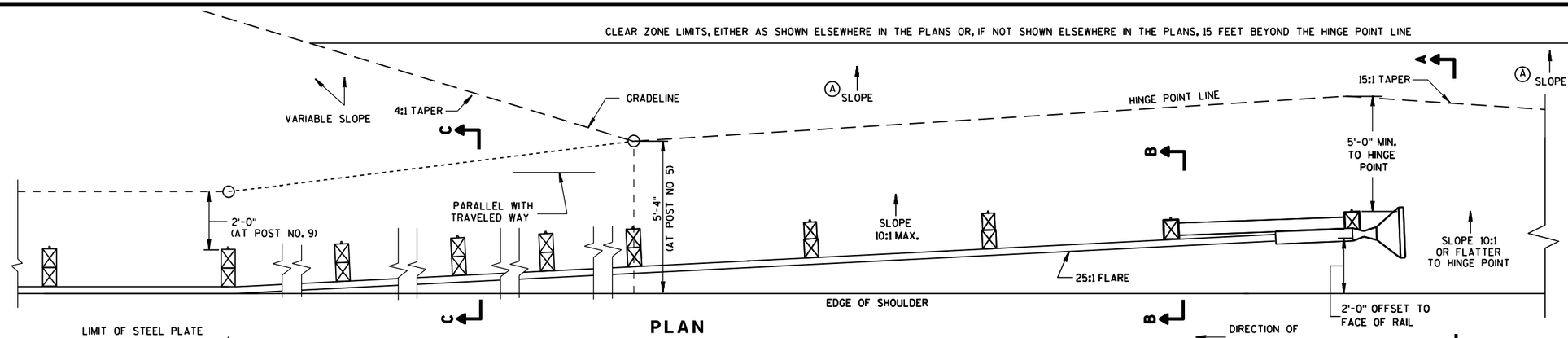
(E) THE CENTER OF THE UPPER 3½" DIAMETER HOLE ON POST 3 THROUGH 8 SHALL BE ¾" ABOVE THE FINISHED GROUND LINE.

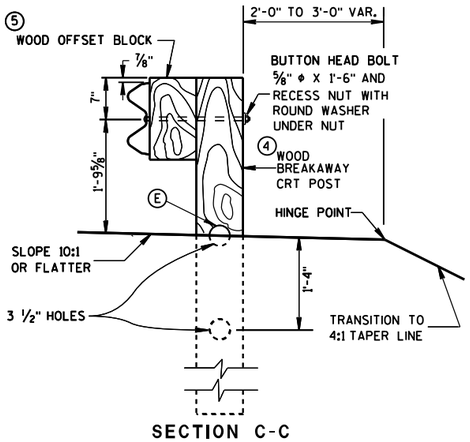
(F) ATTACH ALUMINUM SHEET TO E.A.T. HEAD USING 4 STAINLESS STEEL SELF-TAPPING SCREWS. ONE SCREW PER CORNER.

STEEL POSTS SHALL NOT BE ALLOWED FOR USE WITH ENERGY ABSORBING TERMINALS.

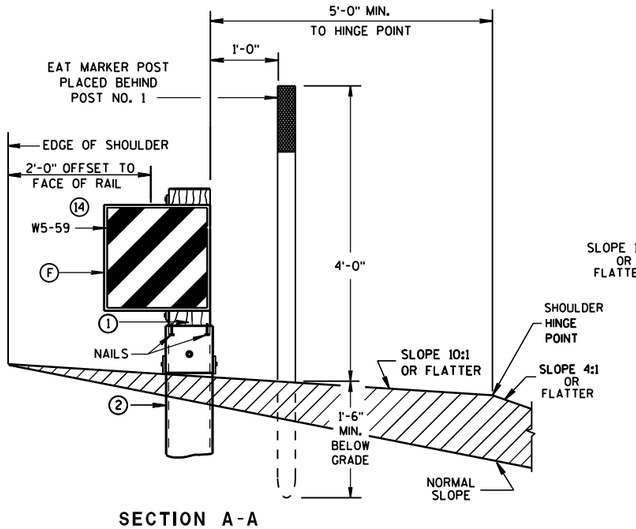
DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

* DO NOT ATTACH BLOCKOUTS TO POSTS 1 AND 2.

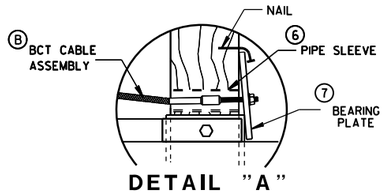




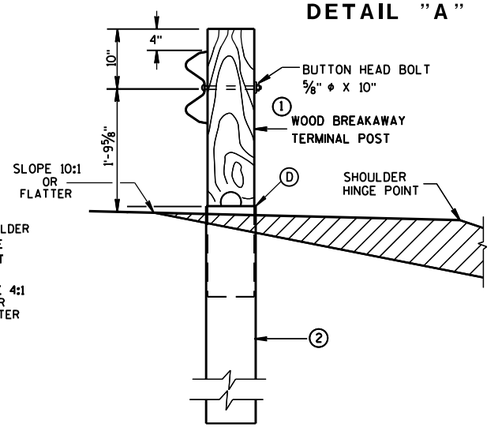
SECTION C-C
TYPICAL AT POST NOS. 6, 8



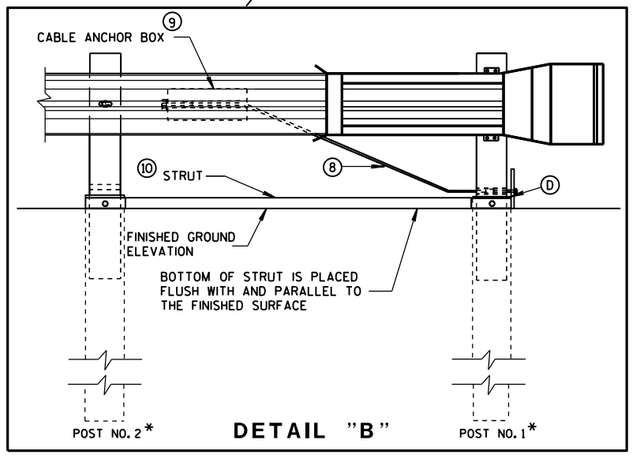
SECTION A-A
TYPICAL AT POST NO. 1*



DETAIL "A"



SECTION B-B
TYPICAL AT POST NO. 2*

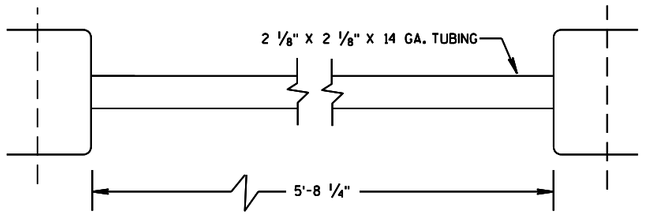


DETAIL "B"

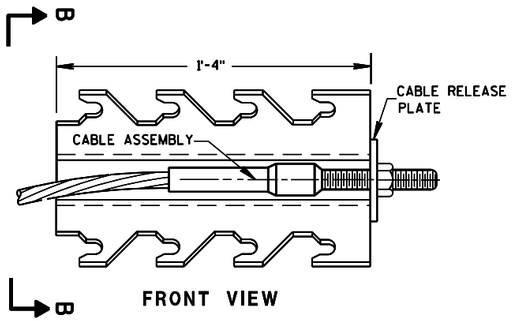
STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

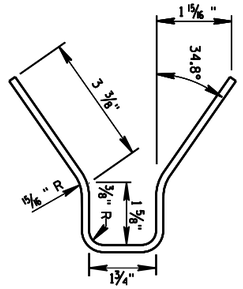
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S.D.D. 14 B 24-9a



⑩ STRUT DETAIL

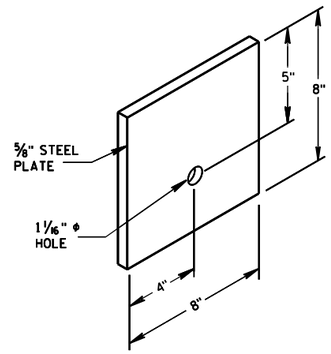


FRONT VIEW



SECTION B-B

⑨ CABLE ANCHOR BOX



⑦ STEEL BEARING PLATE

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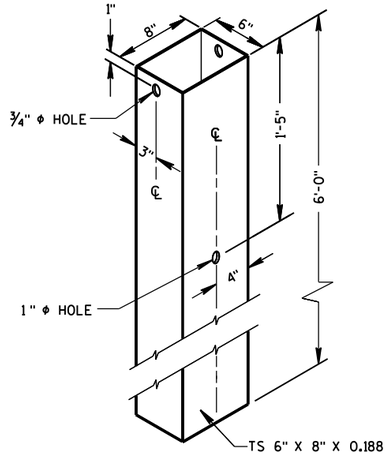
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S.D.D. 14 B 24-9b

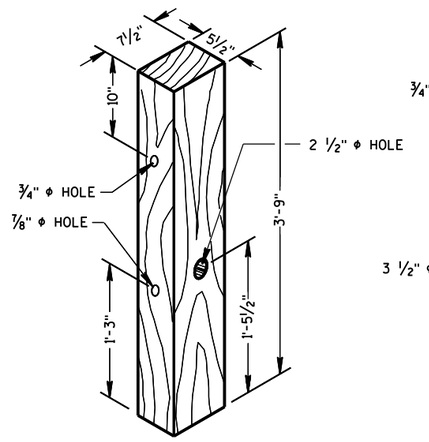
S.D.D. 14 B 24-9b

STEEL PLATE BEAM GUARD
ENERGY ABSORBING TERMINAL

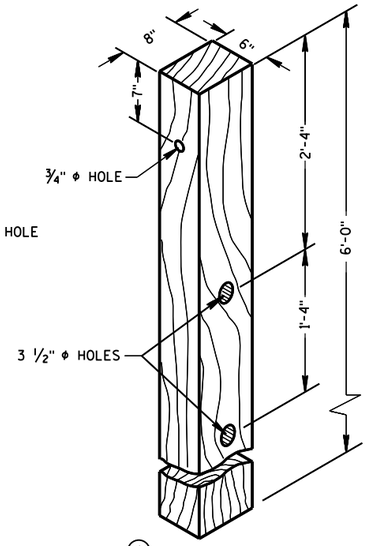
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI



② 72" STEEL TUBE
(POSTS NO. 1-2



① TERMINAL POST

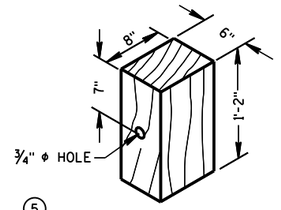


④ CRT POST
(POSTS NO'S 5-8

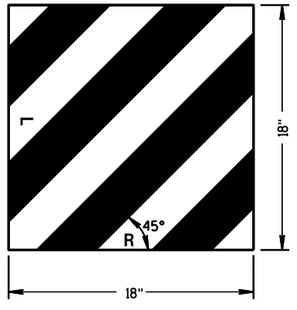
WOOD BREAKAWAY POSTS

GENERAL NOTES

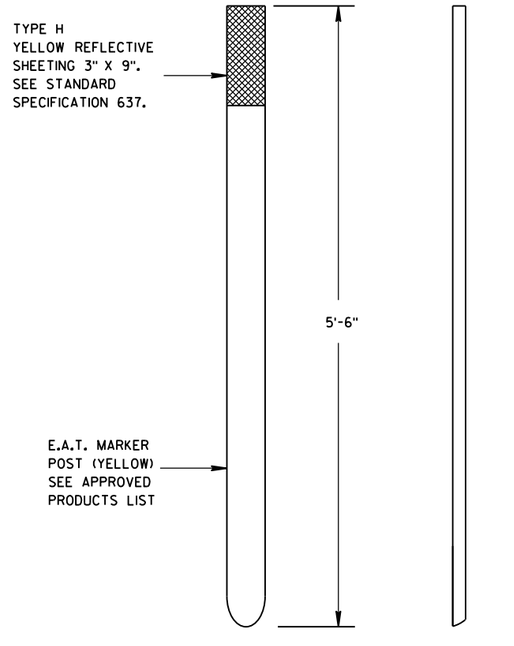
WHEN ROCK IS ENCOUNTERED DURING EXCAVATION, A 12 INCH DIA. POST HOLE EXTENDING 20 INCHES DEEP INTO THE ROCK MAY BE USED IF APPROVED BY THE ENGINEER. GRANULAR MATERIAL SHALL BE PLACED IN THE BOTTOM OF THE HOLE APPROXIMATELY 2 ½" INCHES DEEP TO PROVIDE DRAINAGE. THE SOIL TUBES SHALL BE FIELD CUT TO LENGTH, PLACED IN THE HOLE AND BACKFILLED WITH ADEQUATELY COMPACTED MATERIAL EXCAVATED FROM THE HOLE.



⑤ WOOD OFFSET BLOCK
REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2



⑭ REFLECTIVE SHEETING DETAILS



E.A.T. MARKER POST

STEEL PLATE BEAM GUARD
ENERGY ABSORBING TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017
DATE
FHWA

/S/ Rodney Taylor
ROADWAY STANDARDS
UNIT SUPERV...

231

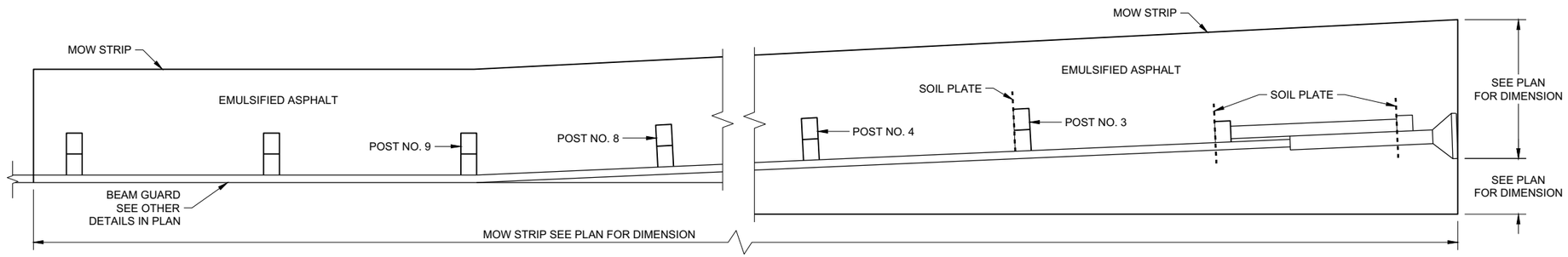
ENT

6

S.D.D. 14 B 24-9c

6

S.D.D. 14 B 24-9c



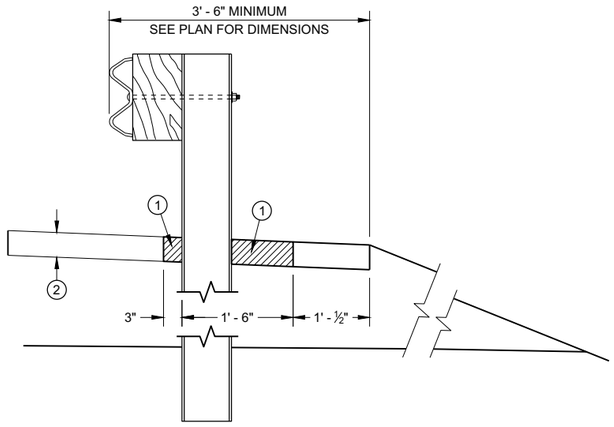
PLAN VIEW

MOW STRIP LAYOUT FOR ENERGY ABSORBING TERMINAL

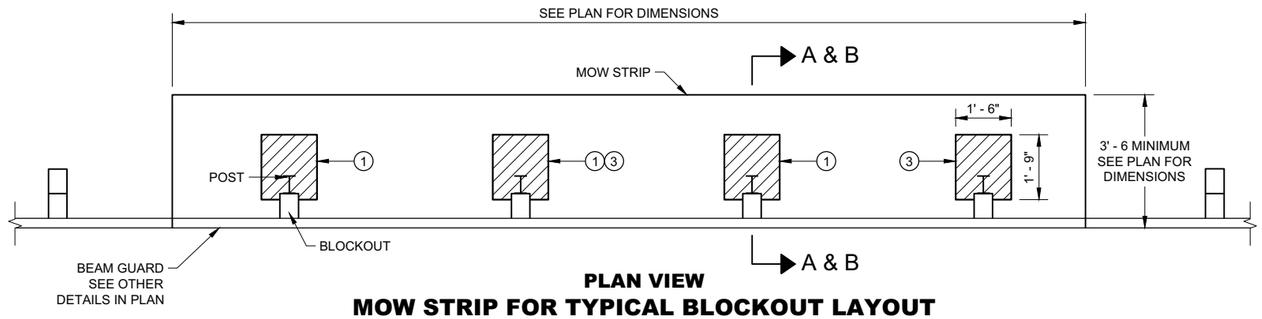
GENERAL NOTES

ONLY USE STEEL POSTS IN CONCRETE AND ASPHALT MOW STRIPS.

1. CONTROLLED LOW-STRENGTH BACKFILL OR EMULSIFIED ASPHALT.
2. DEPTH OF MOW STRIP:
   ASPHALT - 4"
   CONCRETE - 4"
   EMULSIFIED ASPHALT - 1" OR LESS
3. FOR EMULSIFIED ASPHALT, MOW STRIP STRIP LEAVE OUTS NOT REQUIRED. (TYPICAL FOR ALL POSTS)

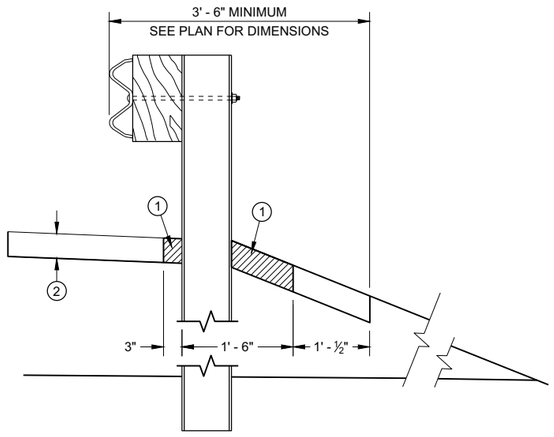


SECTION A - A

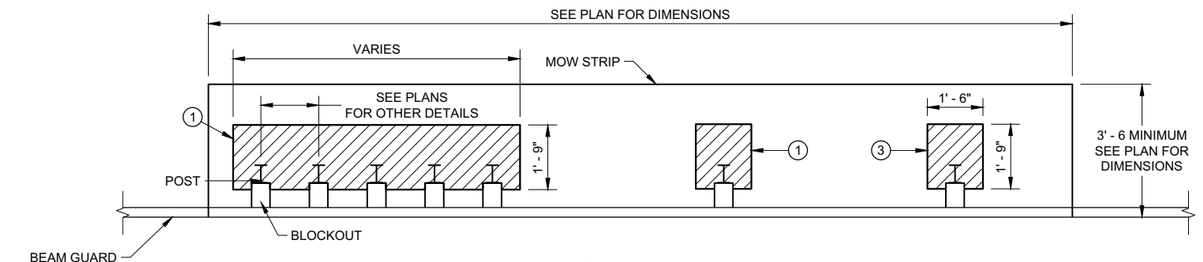


PLAN VIEW

MOW STRIP FOR TYPICAL BLOCKOUT LAYOUT

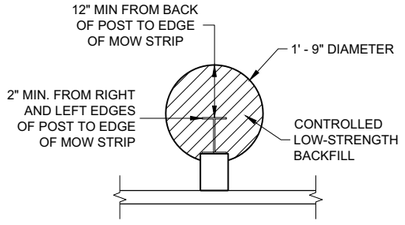


SECTION B - B

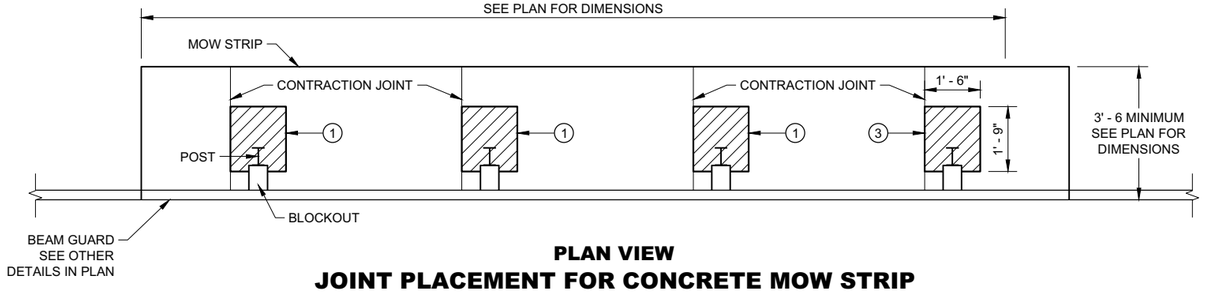


PLAN VIEW

MOW STRIP FOR TIGHT SPACING LAYOUT



ALTERNATIVE HMA MOW STRIP DESIGN



PLAN VIEW

JOINT PLACEMENT FOR CONCRETE MOW STRIP

GUARDRAIL MOW STRIP

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 14B28 - 04a

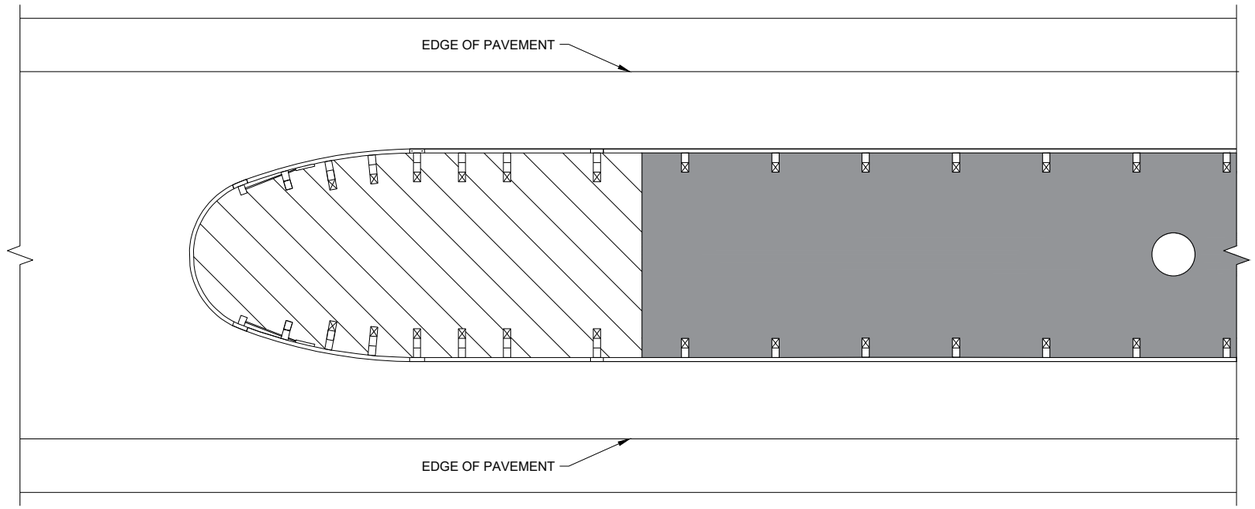
LEGEND

CONCRETE, ASPHALT, OR EMULSIFIED ASPHALT MOW STRIP (SEE OTHER DETAILS)

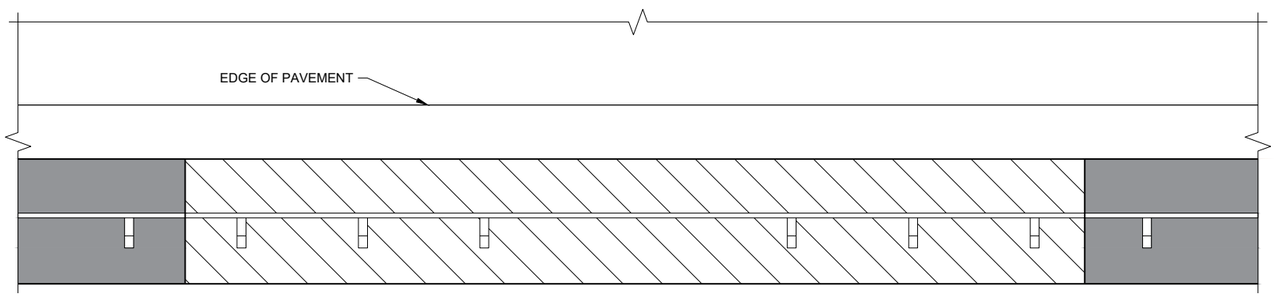
EMULSIFIED ASPHALT MOW STRIP (SEE OTHER DETAILS)

GENERAL NOTES

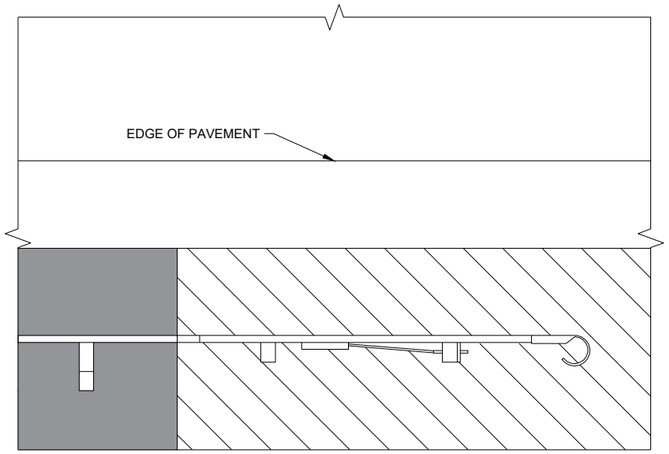
EXISTING THRIE BEAM BULLNOSES MAY HAVE WOOD POSTS. NEW THRIE BEAM BULLNOSE WILL HAVE STEEL POSTS.



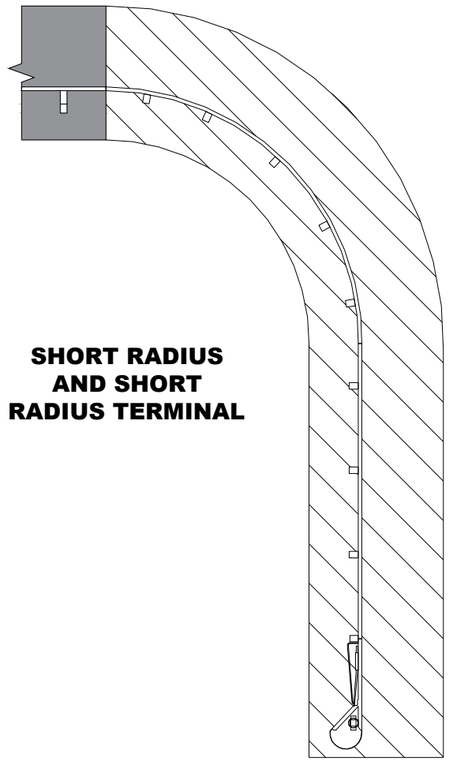
THRIE BEAM BULLNOSE



LONG - SPAN



TYPE 2 TERMINAL



SHORT RADIUS AND SHORT RADIUS TERMINAL

GUARDRAIL MOW STRIP

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2020
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

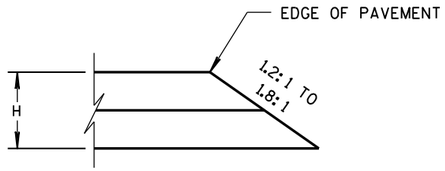
FHWA

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SDD 14B28 - 04b

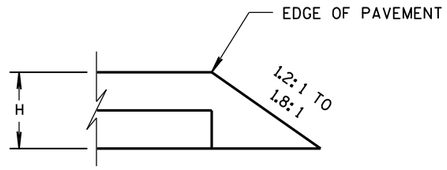
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SDD 14B28 - 04b



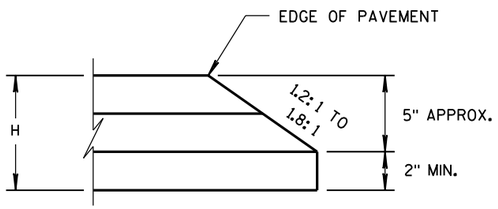
CONSTRUCTED WITH FINAL TWO LAYERS

FOR H 5" OR LESS



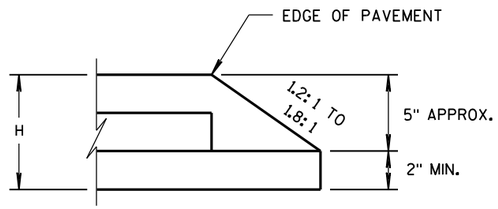
CONSTRUCTED WITH FINAL LAYER

FOR H 5" OR LESS



CONSTRUCTED WITH FINAL TWO LAYERS

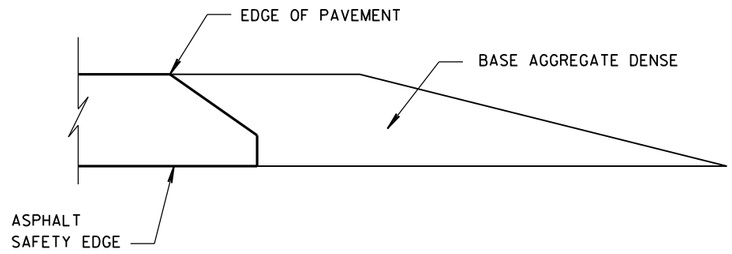
FOR H GREATER THAN 5"



CONSTRUCTED WITH FINAL LAYER

FOR H GREATER THAN 5"

HMA PAVEMENT AND HMA OVERLAYS



FINISHED SHOULDER AGGREGATE PLACEMENT

6

6

S.D.D. 14 B 29-1

S.D.D. 14 B 29-1

SAFETY EDGE SM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

11/30/2012
DATE

/S/ Jerry H. Zoda
ROADWAY STANDARDS DEVELOPMENT ENGINEER

FHWA

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

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

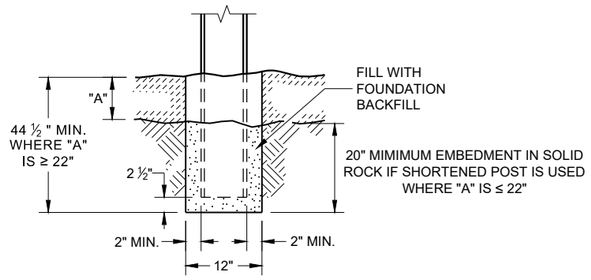
(3) IF ROCK IS ENCOUNTERED DURING EXCAVATION, PROVIDE A HOLE 12 INCHES IN DIAMETER EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE APPROXIMATELY 2 1/2" INCHES OF GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE. CUT THE POSTS THE TO LENGTH AMD INSTALL. BACKFILL WITH EXCAVATED MATERIAL AND COMPACT. BACKFILL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

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

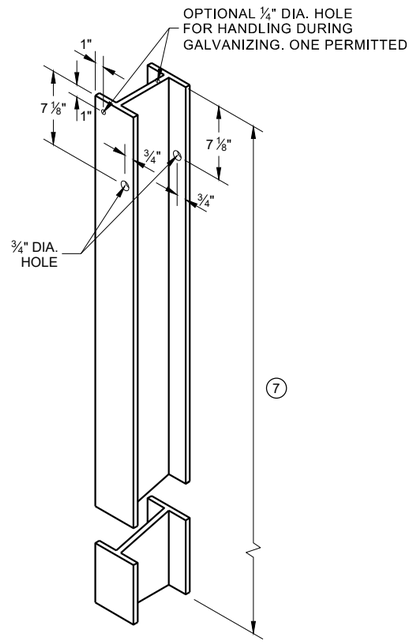
(5) FOR NEW MGS INSTALLATION TOP OF W-BEAM RAIL TOLERANCE IS ±1". FOR EXISTING MGS INSTALLATION TOP OF W-BEAM IS BETWEEN 27 ¾" TO 32".

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

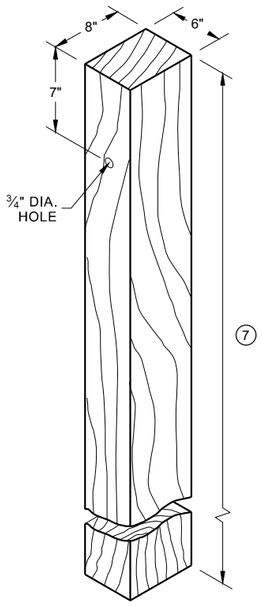
(7) TOTAL POST LENGTH FOR TYPE K IS 7' - 0".
TOTAL POST LENGTH FOR OTHER MGS TYPES IS 6' - 0".



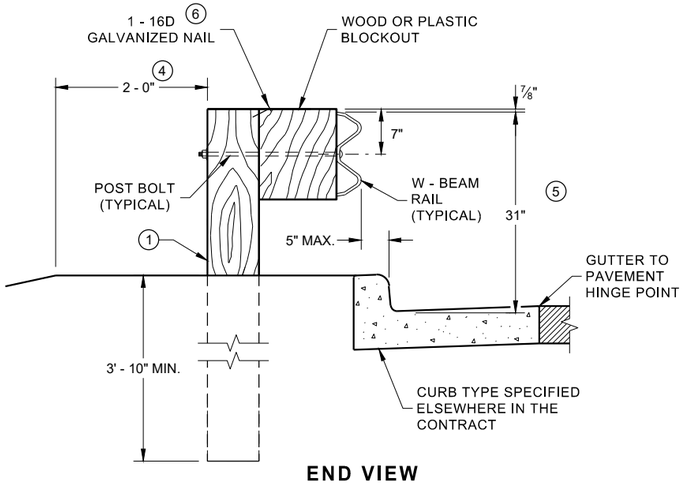
END VIEW
SETTING STEEL OR WOOD POST IN ROCK (3)



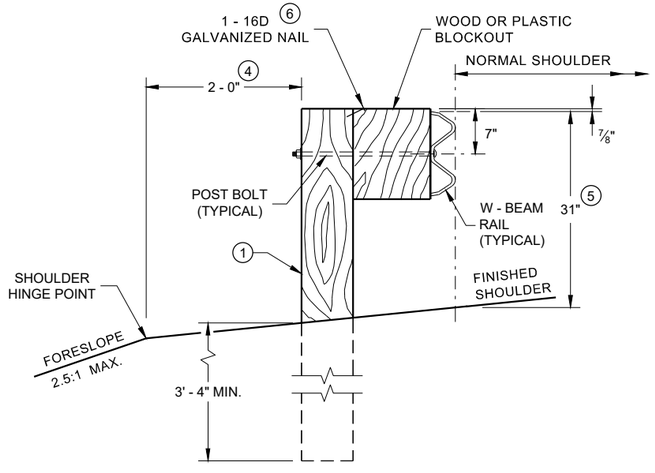
STEEL POST & HOLE PUNCHING DETAIL (W 6 X 9) (1)



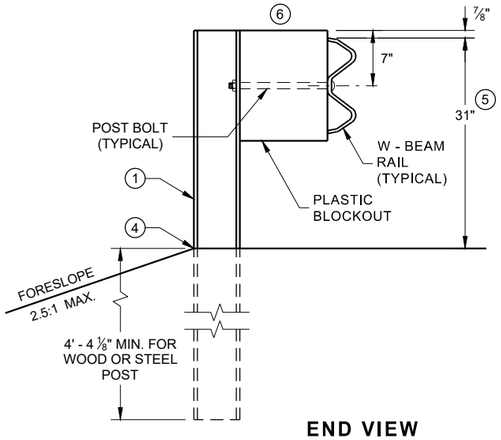
WOOD POST (6" X 8") NOMINAL (1)



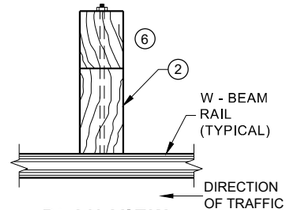
END VIEW
LOCATED ALONG A CURBED ROADWAY



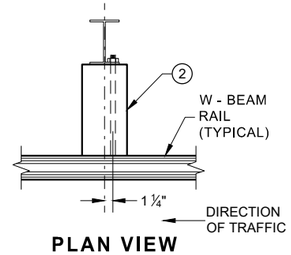
END VIEW
LOCATED ALONG A ROADWAY SHOULDER STANDARD INSTALLATION



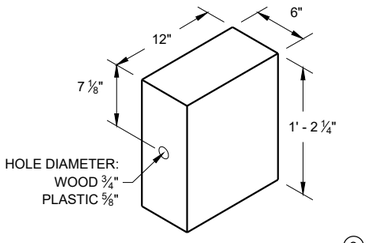
END VIEW
MGS LONGER POST AT HALFPOST SPACING W BEAM (K)



PLAN VIEW
WOOD POST, BLOCKOUT & BEAM



PLAN VIEW
STEEL POST, PLASTIC BLOCKOUT & BEAM



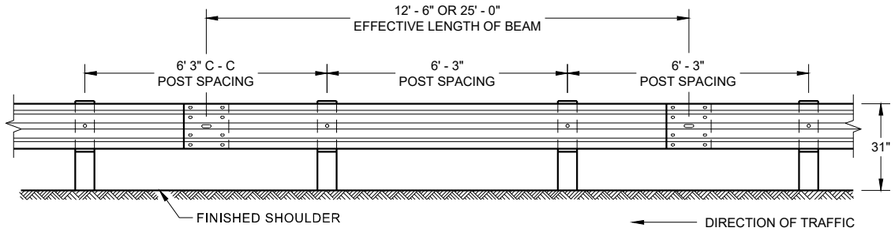
WOOD OR PLASTIC BLOCKOUT (2)

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

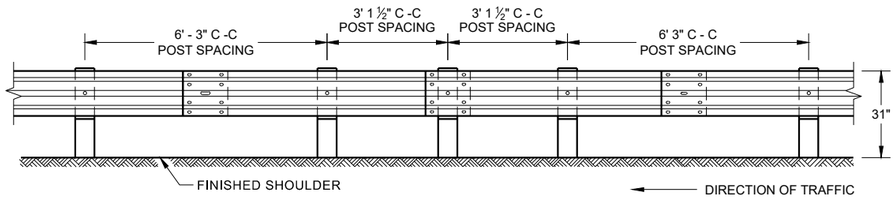
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 14B42 - 07a

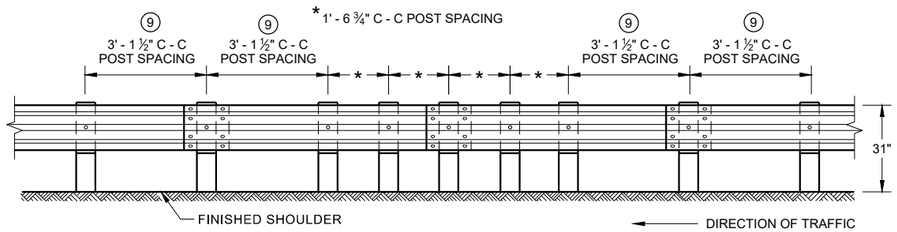
SDD 14B42 - 07a



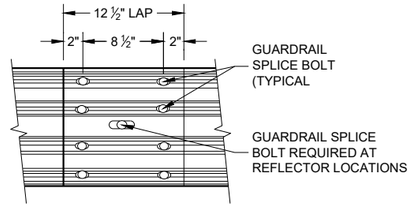
FRONT VIEW
POST SPACING STANDARD INSTALLATION



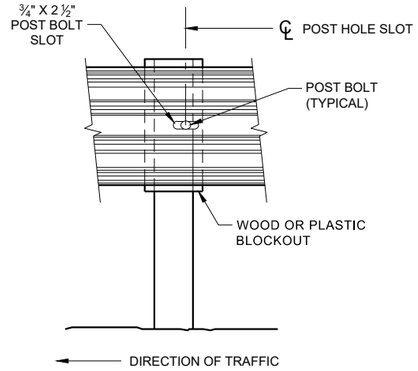
FRONT VIEW
HALF POST SPACING (HS) AND HALF POST SPACING WITH LONGER POSTS (K)



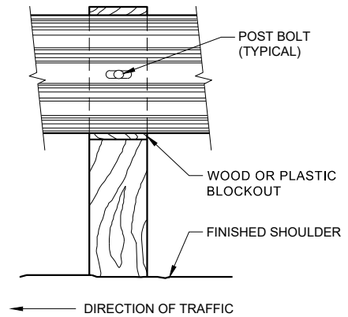
FRONT VIEW
QUARTER POST SPACING (QS)



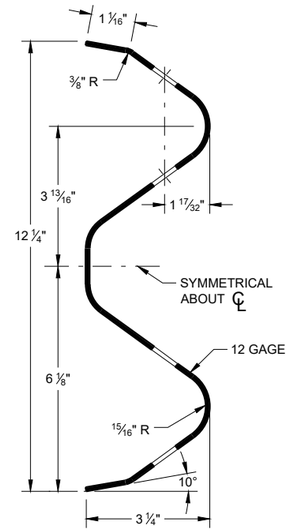
FRONT VIEW
MID-SPAN BEAM SPLICE



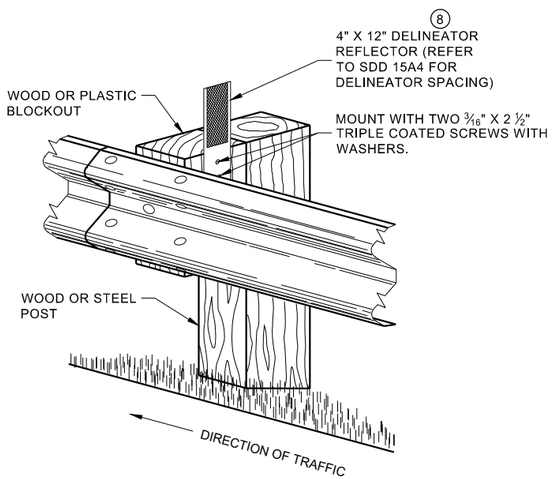
FRONT VIEW AT STEEL POST



FRONT VIEW AT WOOD POST



SECTION THRU W-BEAM RAIL



ONE SIDED REFLECTOR DETAIL AND TYPICAL INSTALLATION

GENERAL NOTES

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

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

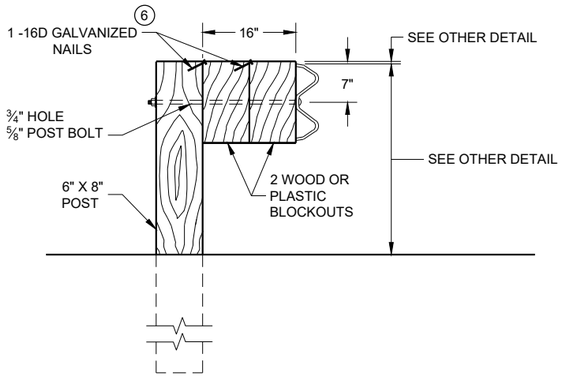
POST BOLTS ARE A ⅝" DIAMETER ASTM A307 GUARDRAIL BOLT. A POST BOLT REQUIRES ⅝" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT AND ⅝" DIAMETER F844 FLAT WASHER. POST BOLTS MAY BE LONGER IF MULTIPLE BLOCKOUTS ARE BEING USED.

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

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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SDD 14B42 - 07b

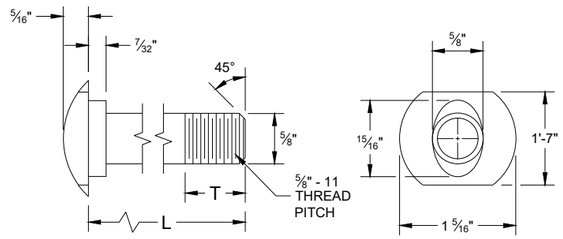


DETAIL FOR 16" BLOCKOUT DEPTH

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

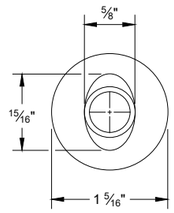
NOTE:

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

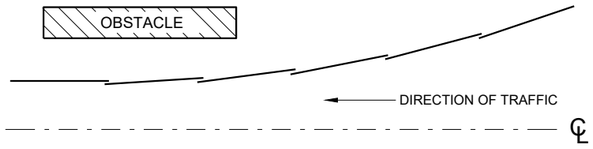


POST BOLT TABLE

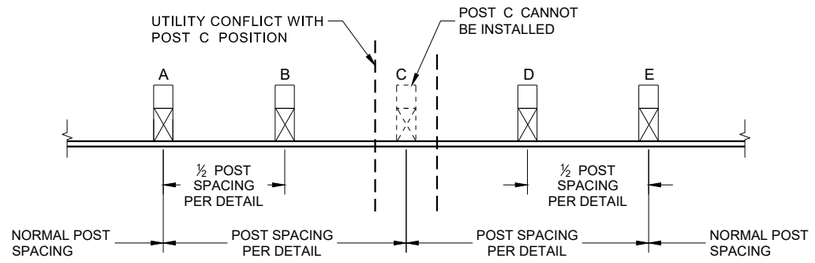
L	T (MIN.)
1 ¼"	1 ⅛"
2"	1 ¾"
10"	4"
14"	4 1⁄16"
18"	4"
21"	4 1⁄16"
25"	4"



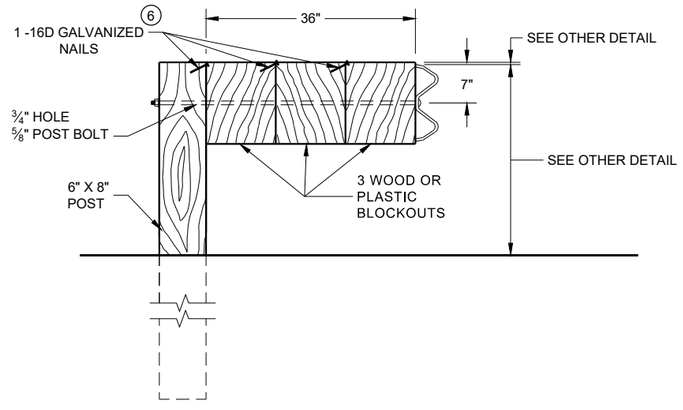
ALTERNATE BOLT HEAD



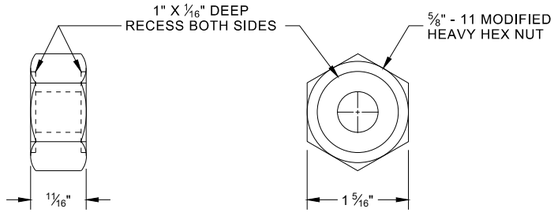
PLAN VIEW
BEAM LAPPING DETAIL



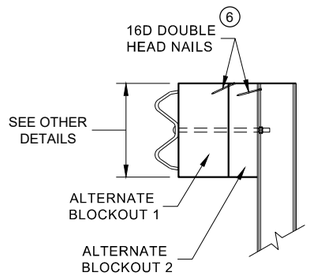
POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION



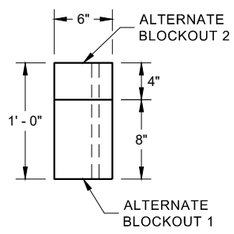
DETAIL FOR 36" BLOCKOUT DEPTH



POST BOLT, SPLICE BOLT AND RECESS NUT



SIDE VIEW



PLAN VIEW

ALTERNATE WOOD BLOCKOUT DETAIL

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

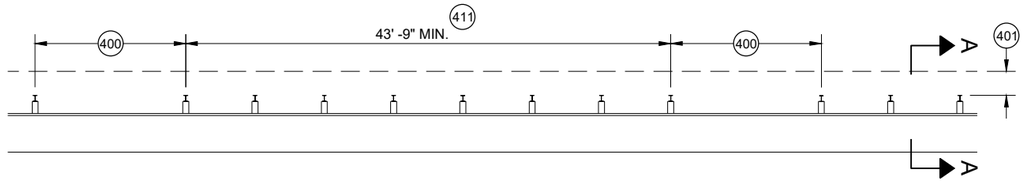
DO NOT USE 16" OR 36" BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION DISTANCE OF THE BARRIER.

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

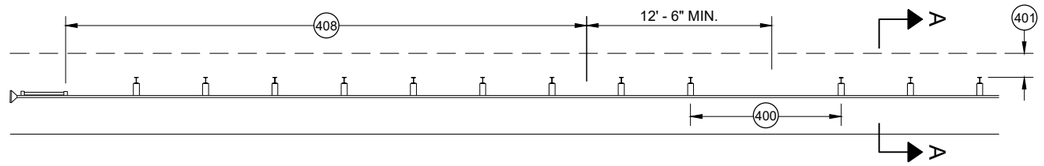
MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

6

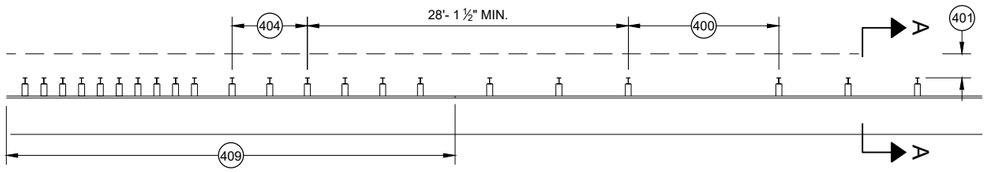
SDD 14B42 - 07c



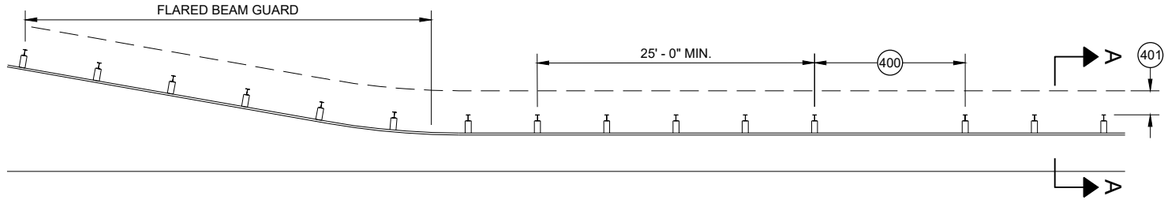
MISSING POST IN MGS GUARDRAIL



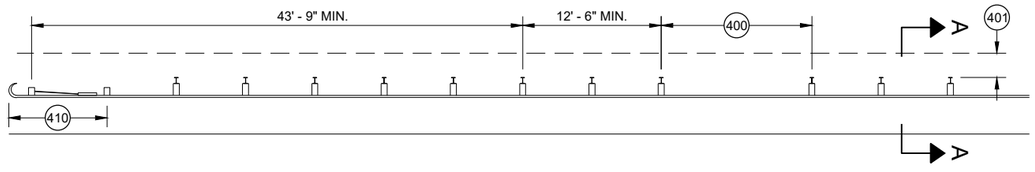
MISSING POST IN MGS GUARDRAIL NEAR EAT



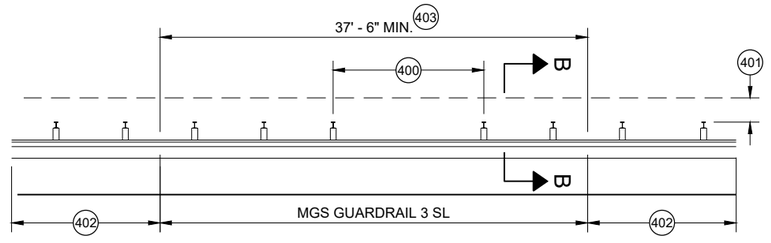
MISSING POST IN MGS GUARDRAIL NEAR AN APPROACH TRANSITION



MISSING POST IN MGS GUARDRAIL NEAR FLARED BEAM GUARD

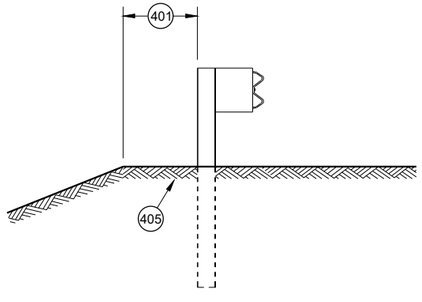


MISSING POST IN MGS GUARDRAIL NEAR A TYPE 2 END TERMINAL

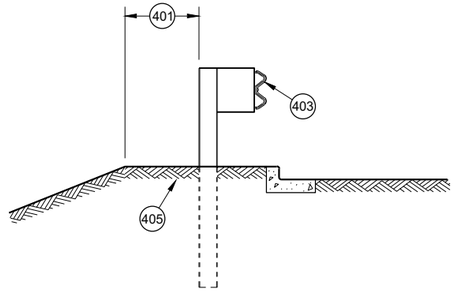


MISSING POST IN SHORT SPAN MGS GUARDRAIL NEAR CURB (SL) 407

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



SECTION A - A 406



SECTION B - B 406

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

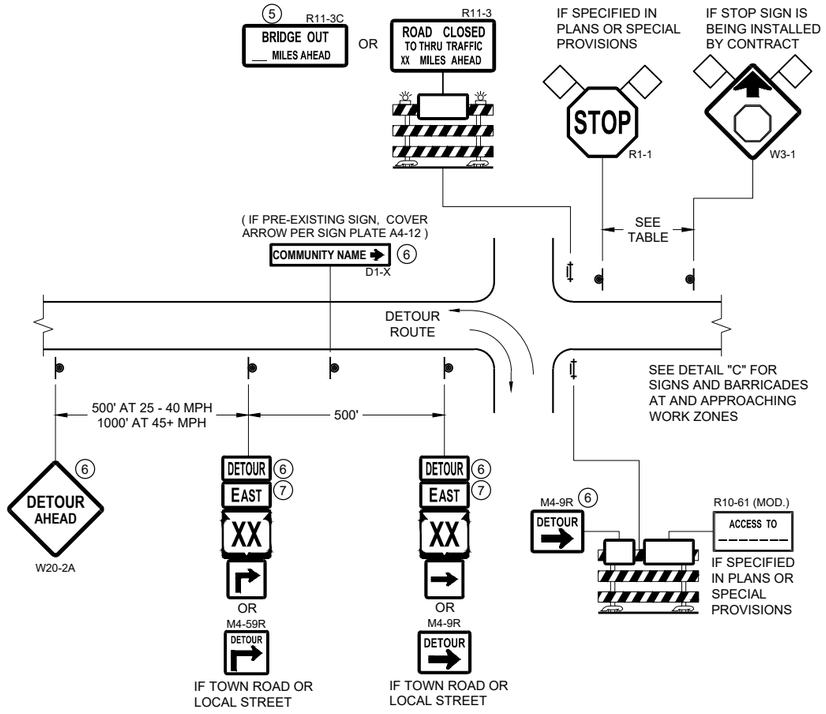
APPROVED
May 2021
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS DEVE
UNIT SUPERVISOR

FHWA

6

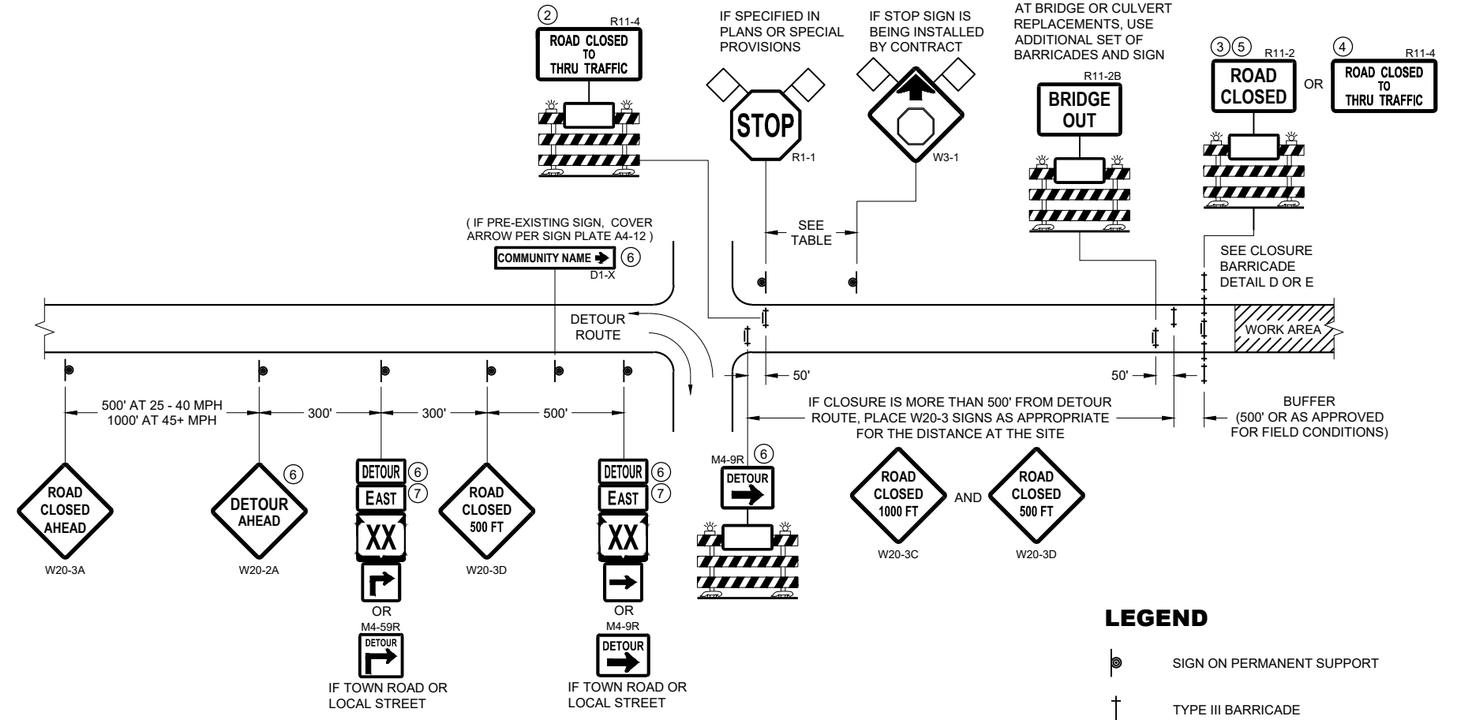
SDD 14B42 - 07d

SDD 14B42 - 07d



DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

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



DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR

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

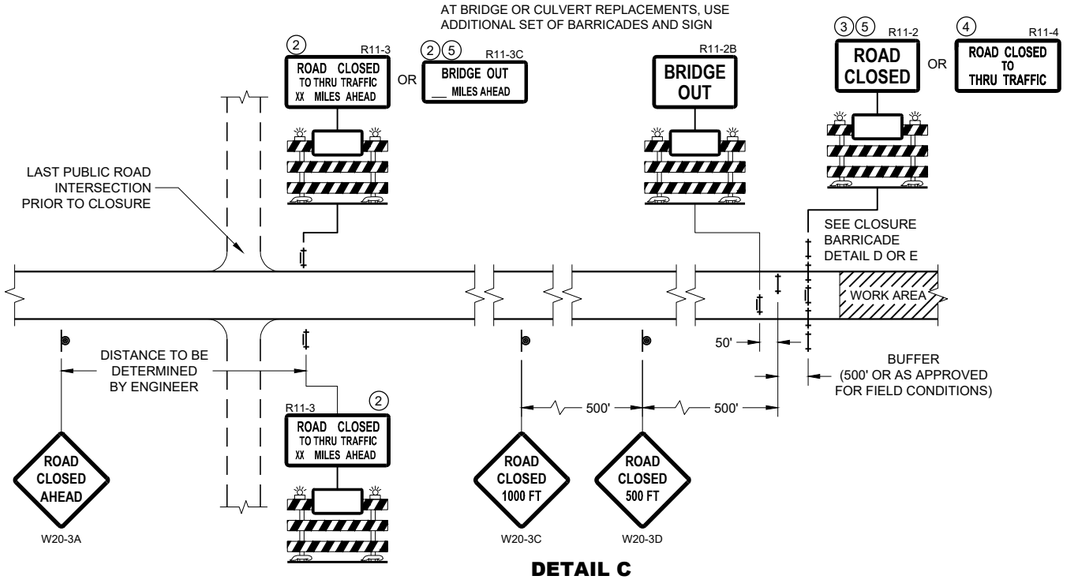
SPEED LIMIT (MPH)	"STOP AHEAD" ADVANCE WARNING DISTANCE (FT)
25	200
30	200
35	350
40	350
45	500
50	550
55	750

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

LEGEND

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

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



DETAIL C
MAINLINE CLOSURE, NO POSTED DETOUR

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

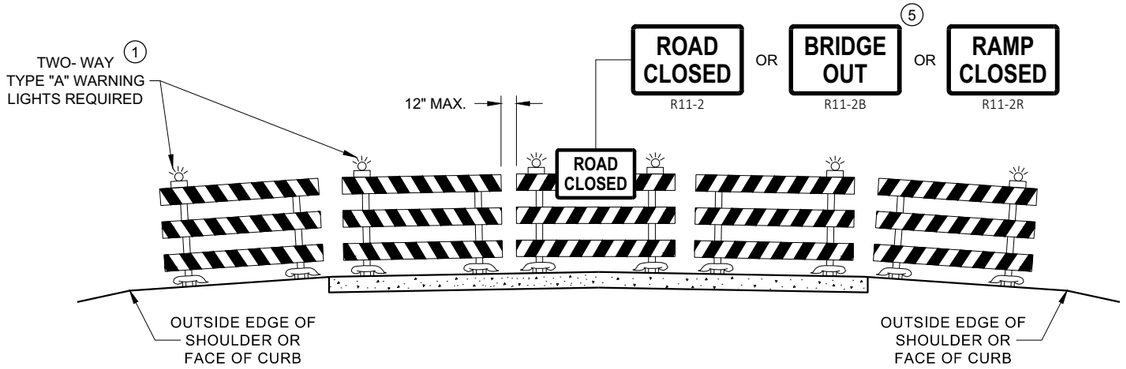
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

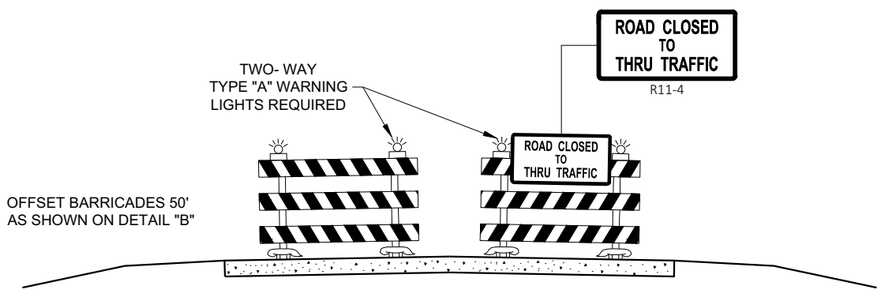
FHWA

SDD 15C02 - 08a

6
SDD 15C02 - 08a



DETAIL D
ROAD CLOSURE BARRICADE DETAIL
APPROACH VIEW



DETAIL E
LANE CLOSURE BARRICADE DETAIL
APPROACH VIEW

SEE SDD 15C2 - SHEET "a" FOR LEGEND

GENERAL NOTES

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

BARRICADES AND SIGNS FOR VARIOUS CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

6

SDD 15C02 - 08b

6

SDD 15C02 - 08b

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

LEGEND

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

GENERAL NOTES

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

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

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

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

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

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

SIGN SIZES SHALL BE AS FOLLOWS:

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

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

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

M3-X 24" X 12"
M1-X 24" X 24"
DETOUR AHEAD
W20-2A
USE ON STATE TRUNK, U.S. OR INTERSTATE HIGHWAYS, OR AS SPECIFIED IN THE CONTRACT

500' AT 25-40 MPH
1000' AT 45+ MPH

500'

D1-X COMMUNITY NAME *
(IF PRE-EXISTING SIGN, COVER ARROW PER SIGN PLATE A4-12)

M4-8a END DETOUR WEST *

DETOUR ROUTE

WORK AREA

DETOUR NEXT X MILES *
G20-51

M4-9L DETOUR ** OR
IF TOWN ROAD OR LOCAL STREET

M4-59L DETOUR * ** OR
IF TOWN ROAD OR LOCAL STREET

MATCH POINT

M4-59L DETOUR * ** OR
IF TOWN ROAD OR LOCAL STREET

D1-X COMMUNITY NAME *
(IF PRE-EXISTING SIGN, COVER ARROW PER SIGN PLATE A4-12)

M4-9L DETOUR ** OR
IF TOWN ROAD OR LOCAL STREET

M4-9R DETOUR ** OR
IF TOWN ROAD OR LOCAL STREET

M4-59R DETOUR * ** OR
IF TOWN ROAD OR LOCAL STREET

500' AT 25 - 40 MPH
1000' AT 45+ MPH

500'

M3-X 24" X 12"
M1-X 24" X 24"
DETOUR AHEAD
W20-2A
USE ON STATE TRUNK, U.S. OR INTERSTATE HIGHWAYS, OR AS SPECIFIED IN THE CONTRACT

D1-X COMMUNITY NAME *
(IF PRE-EXISTING SIGN, COVER ARROW PER SIGN PLATE A4-12)

DETOUR ROUTE

D1-X COMMUNITY NAME *
(IF PRE-EXISTING SIGN, COVER ARROW PER SIGN PLATE A4-12)

PLACE SIGNS BEYOND INTERSECTIONS WITH STATE OR COUNTY TRUNK HIGHWAYS OR AT 4 MILE MAXIMUM SPACING (4 BLOCKS IF URBAN AREA)

500' AT 25 - 40 MPH
1000' AT 45+ MPH

M3-X 24" X 12"
M1-X 24" X 24"
DETOUR AHEAD
W20-2A
USE ON STATE TRUNK, U.S. OR INTERSTATE HIGHWAYS, OR AS SPECIFIED IN THE CONTRACT

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

DETAIL F
DETOUR SIGNING

DETOUR SIGNING FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020
DATE

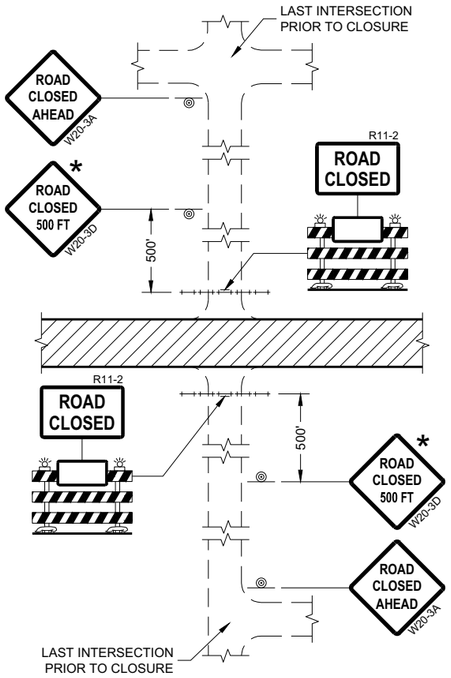
/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

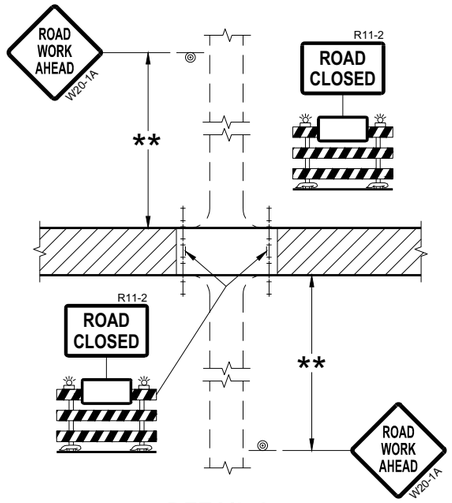
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SDD 15C02 - 08c

SDD 15C02 - 08c



DETAIL 1
(NO ACCESS TO PROJECT)



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

GENERAL NOTES

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

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

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

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

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

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

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

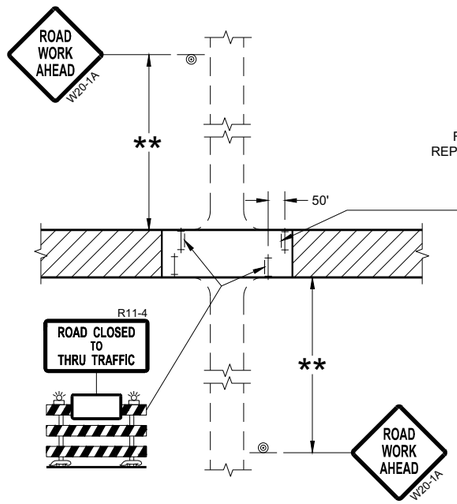
TYPE "A" LOW-INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

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

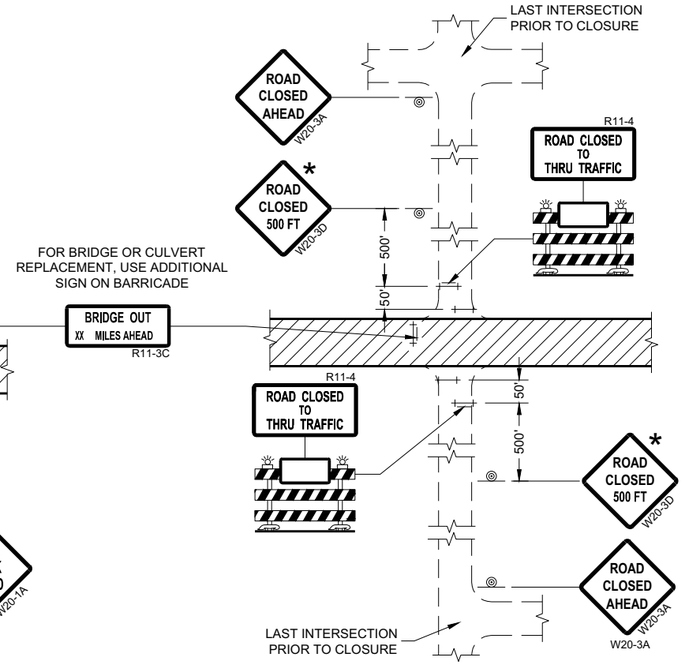
ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
R11-2 SHALL BE 48" X 30".
R11-4 AND R11-3 SHALL BE 60" X 30".

* OMIT THE "ROAD CLOSED 500 FT." SIGN IF THE LAST INTERSECTION IS 500 FEET OR LESS FROM THE WORK ZONE.

** 500' MAX. OR AT LAST INTERSECTION, WHICHEVER IS CLOSEST.



DETAIL 3
(PUBLIC CROSS-TRAFFIC MAINTAINED.
CONTRACTOR, LOCAL BUSINESS AND
RESIDENT ACCESS TO PROJECT)



DETAIL 4
(CONTRACTOR, LOCAL BUSINESS AND
RESIDENT ACCESS TO PROJECT)

LEGEND

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA

BARRICADES AND SIGNS FOR SIDEROAD CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

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SDD 15C03 - 05

SDD 15C03 - 05

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

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

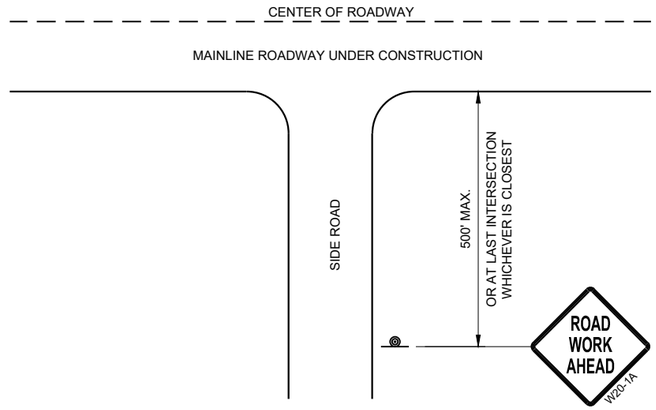
ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

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

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

* OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS

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



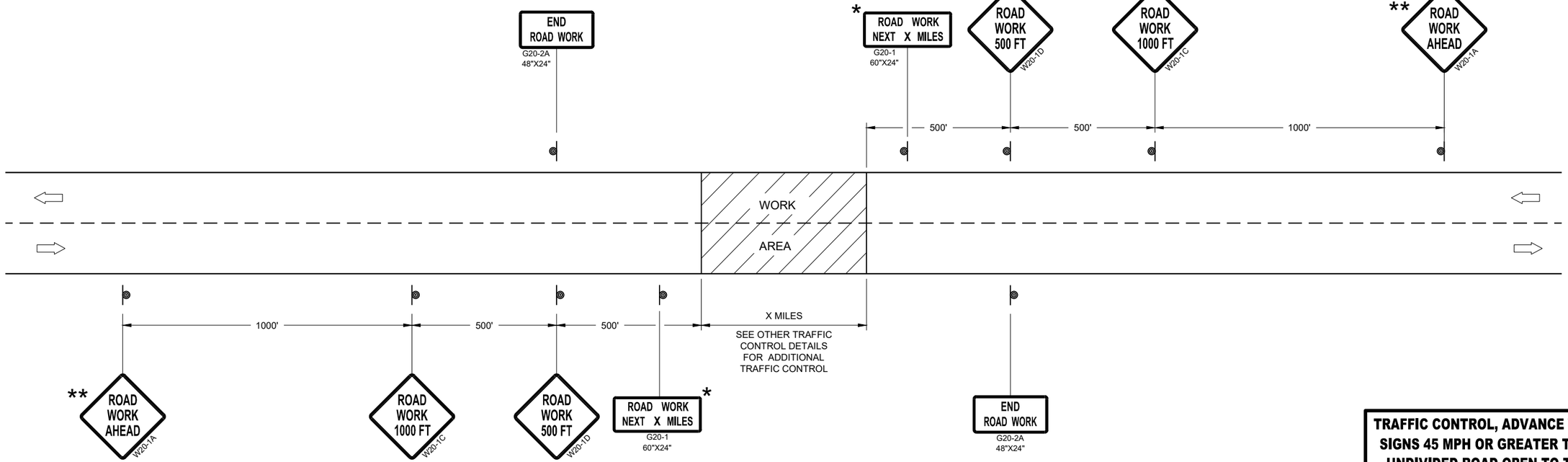
TYPICAL SIDE ROAD APPROACH WARNING SIGN DETAIL

LEGEND

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC

WORK AREA



TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45MPH OR GREATER

TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 MPH OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15C04 - 05

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

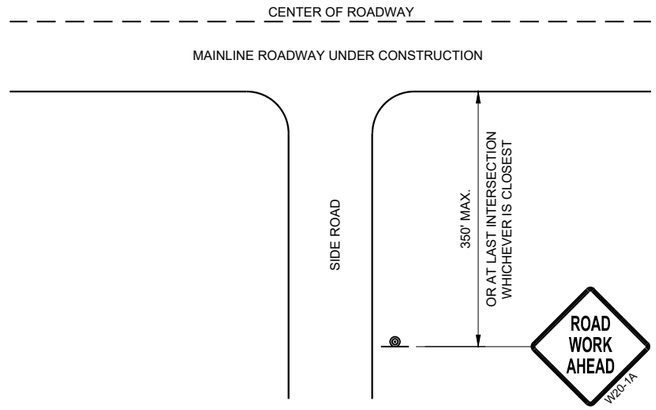
THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS, 36"X36" SIGNS MAY BE USED INSTEAD OF 48" X 48" SIGNS.

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.

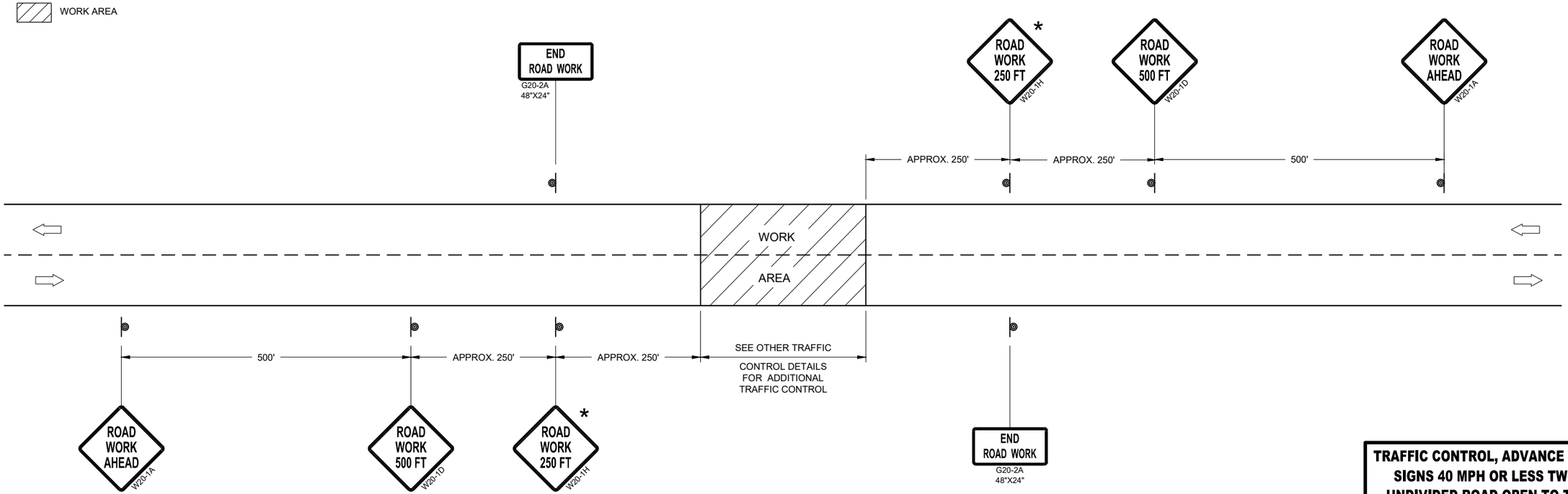
* THE THIRD W20-1 SIGN IS REQUIRED ONLY IF THERE IS AN INTERSECTION BETWEEN THE "ROAD WORK 500 FEET" SIGN AND THE WORK ZONE. ADJUST THE PLACEMENT OF THIS SIGN BASED ON INTERSECTION LOCATION AND OTHER FIELD CONDITIONS.



TYPICAL SIDE ROAD APPROACH WARNING SIGN DETAIL

LEGEND

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



TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40MPH OR LESS

TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 MPH OR LESS TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

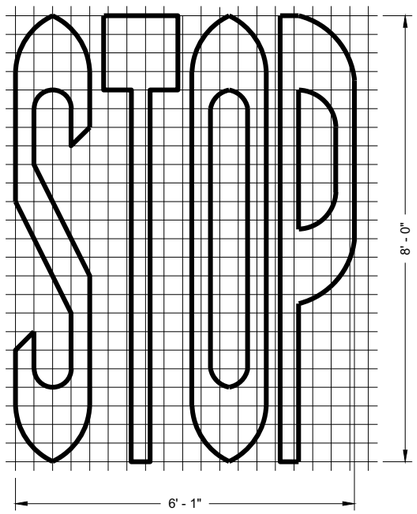
APPROVED
July 2018
DATE

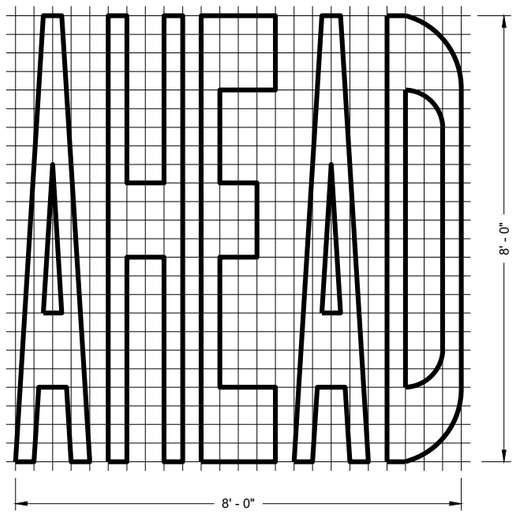
/S/ Andrew Heidtke
WORK ZONE ENGINEE

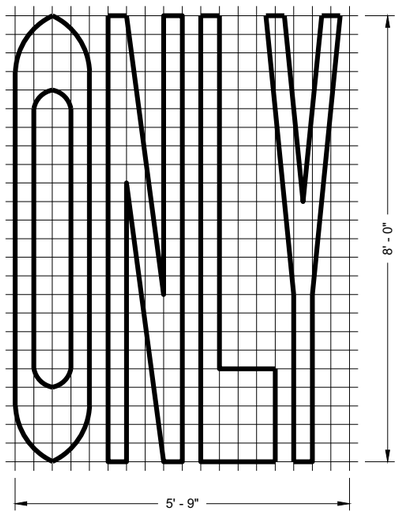
FHWA

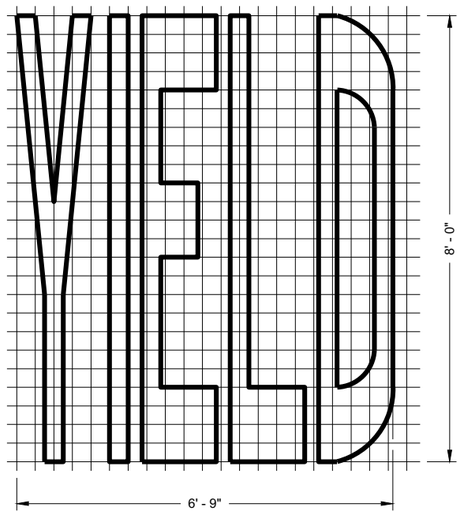
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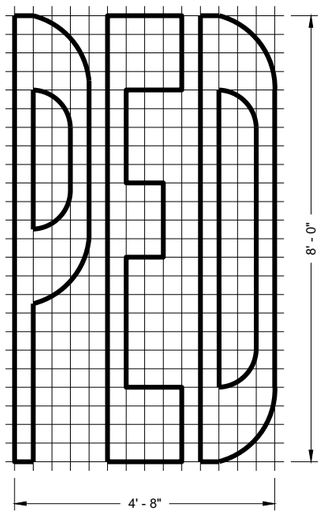
SDD 15C05 - 05



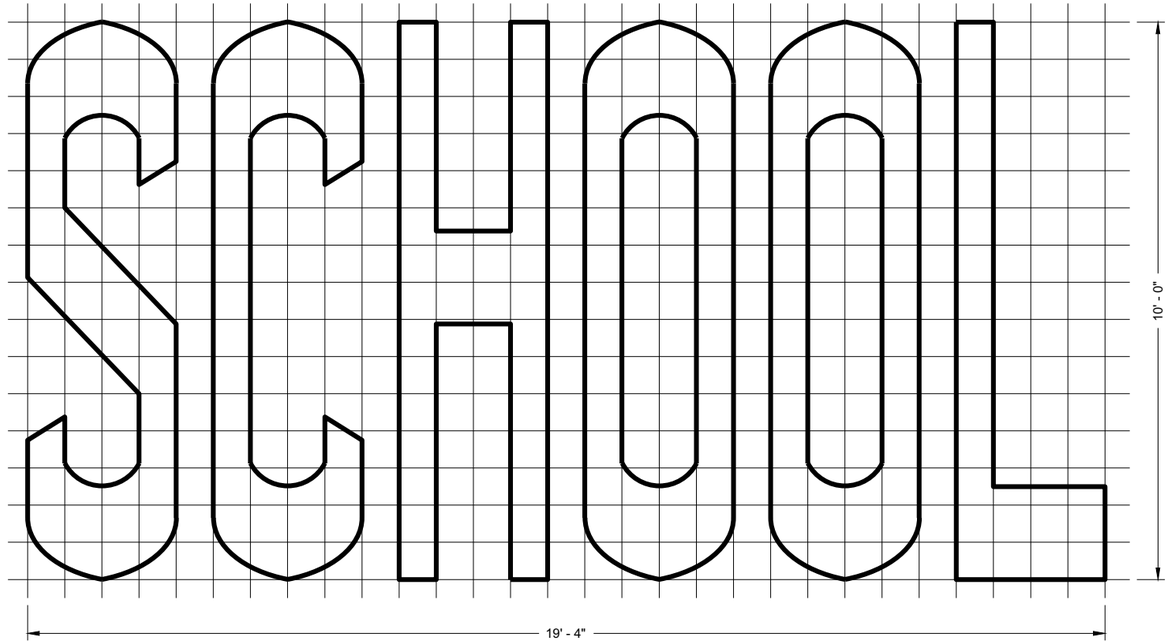








SINGLE LANE



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

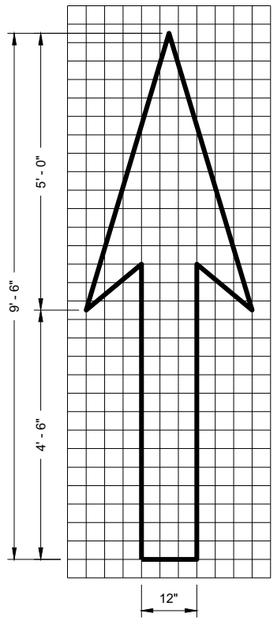
/S/ Matthew Rauch
STATE SIGNING AND MAF ENGINEER

FHWA

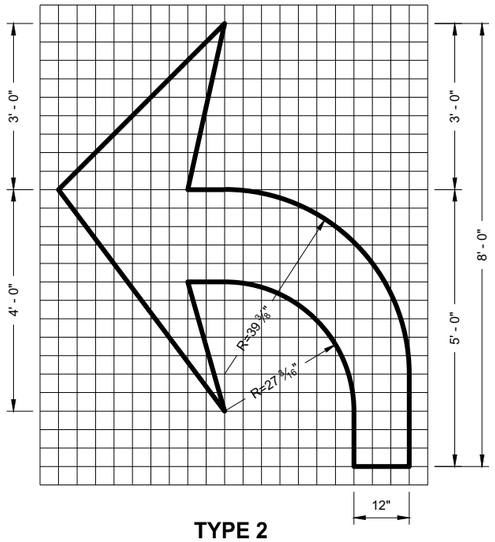
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SDD 15C07 - 15b

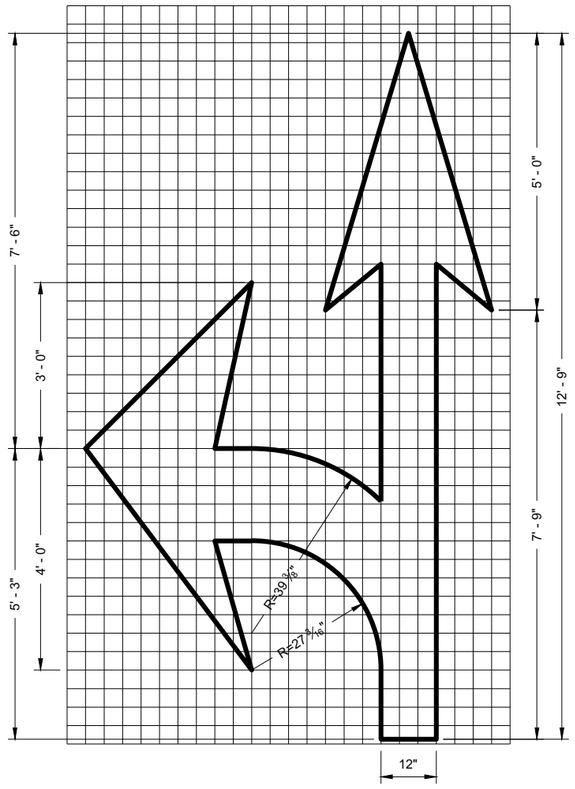
SDD 15C07 - 15b



TYPE 1



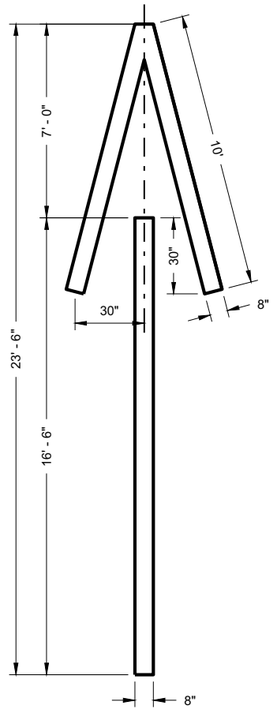
TYPE 2



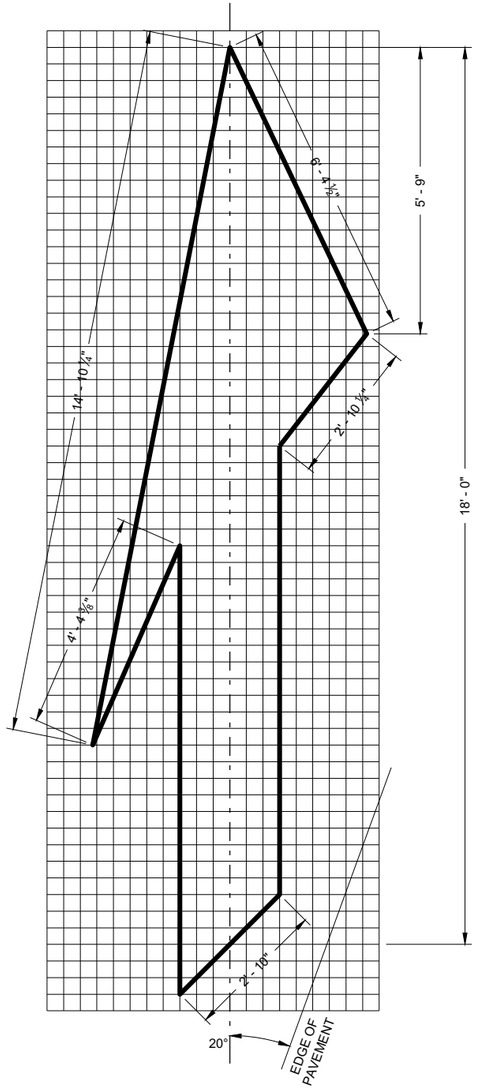
TYPE 3

GENERAL NOTES

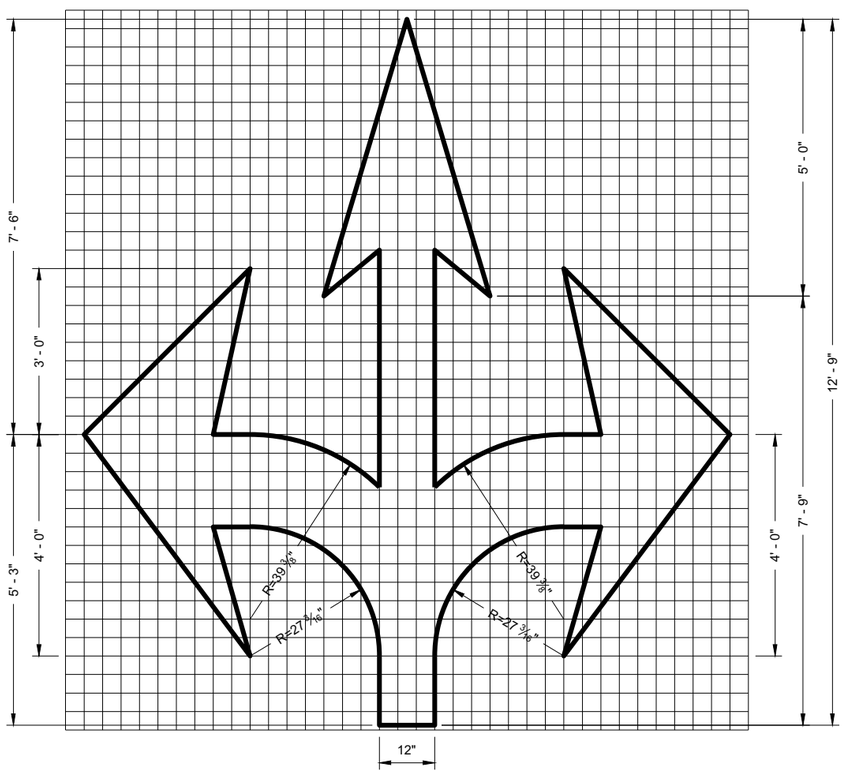
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.



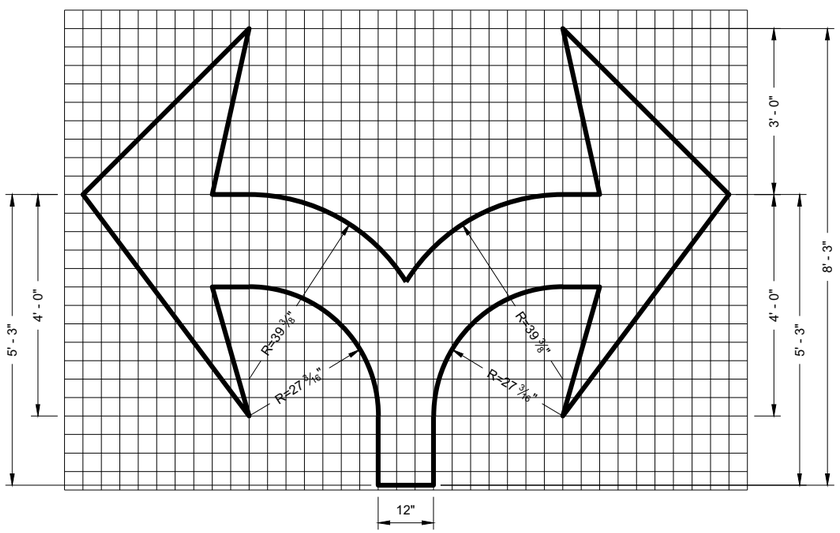
TYPE 4



TYPE 5 LANE DROP ARROW



TYPE 6



TYPE 7

PAVEMENT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019 — DATE
/S/ Matthew Rauch — STATE SIGNING AND MAF ENGINEER

FHWA

6

SDD 15C07 - 15c

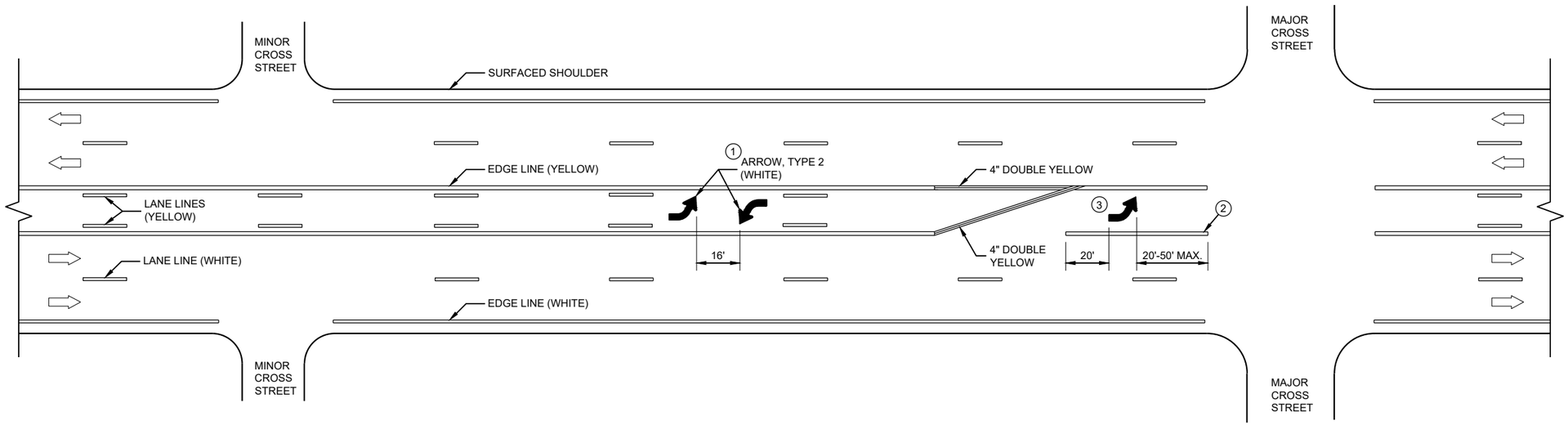
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SDD 15C07 - 15c

GENERAL NOTES

1. A SET OF ARROWS IS REQUIRED EVERY 400 FEET OR NEAR INTERSECTIONS OR DRIVEWAYS WITH TURNING TRAFFIC.
2. 8" WHITE
3. TURN BAY LENGTH OF LESS THAN 48' DOES NOT REQUIRE PAVEMENT ARROWS OR TEXT.

DIRECTION OF TRAFFIC



TWO WAY LEFT TURN LANE

6

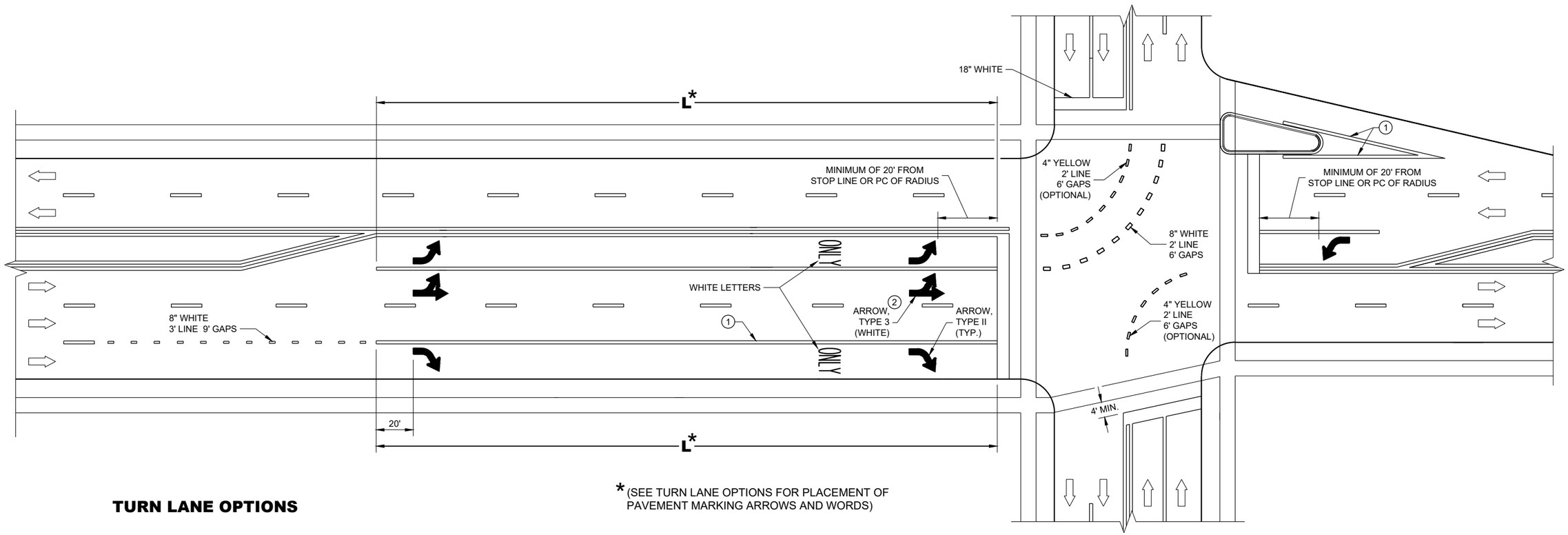
SDD 15C08 - 21c

PAVEMENT MARKING (TURN LANES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

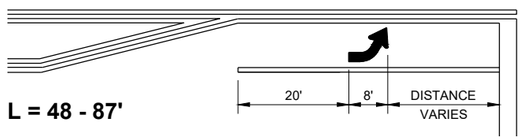
SDD 15C08 - 21c



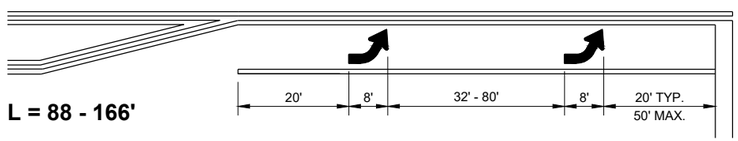
* (SEE TURN LANE OPTIONS FOR PLACEMENT OF PAVEMENT MARKING ARROWS AND WORDS)

TURN LANE OPTIONS

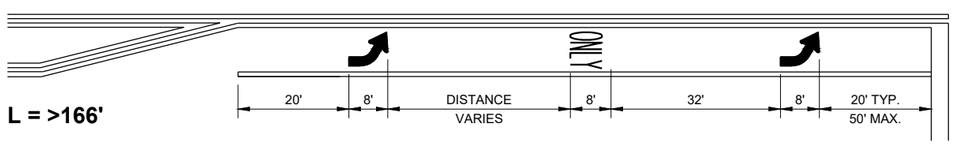
LENGTH OF TURN BAY (**L**) OF 0 - 47' DOES NOT REQUIRE PAVEMENT MARKING ARROWS OR WORDS



L = 48 - 87'



L = 88 - 166'



L = >166'

GENERAL NOTES

1. 8" WHITE
2. QUANTITY AND LOCATION OF TYPE 3 ARROWS ARE THE SAME AS THE TYPE II ARROWS IN THE ADJACENT TURN LANE. FOR TURN LANES WITH A PHYSICAL SEPARATION IN THE SAME DIRECTION OF TRAVEL, THE ARROWS AND "ONLY" MARKING MAY BE ELIMINATED.

DIRECTION OF TRAFFIC

L = LENGTH OF TURN BAY

PAVEMENT MARKING (TURN LANES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15C08 - 21d

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

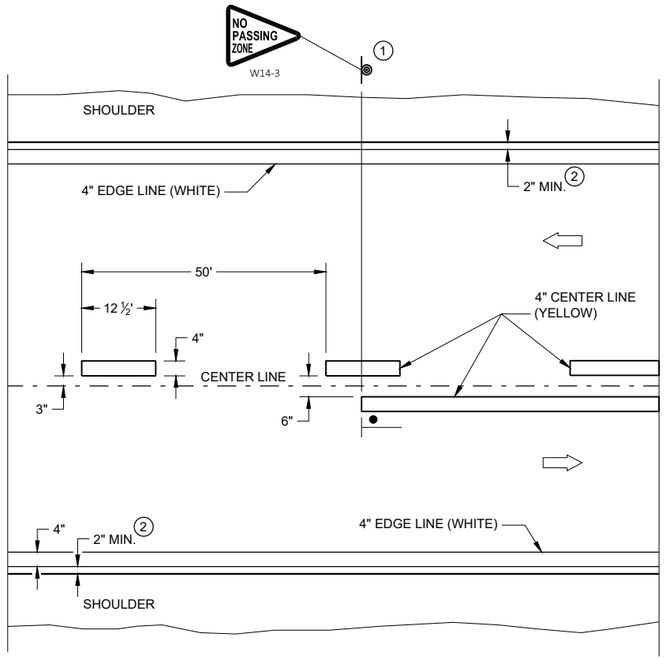
(2) MEASURE FROM EDGE OF MARKING TO JOINT LINE. THIS DOES NOT INCLUDE SPACE NEEDED FOR GROOVING OPERATIONS.

LEGEND

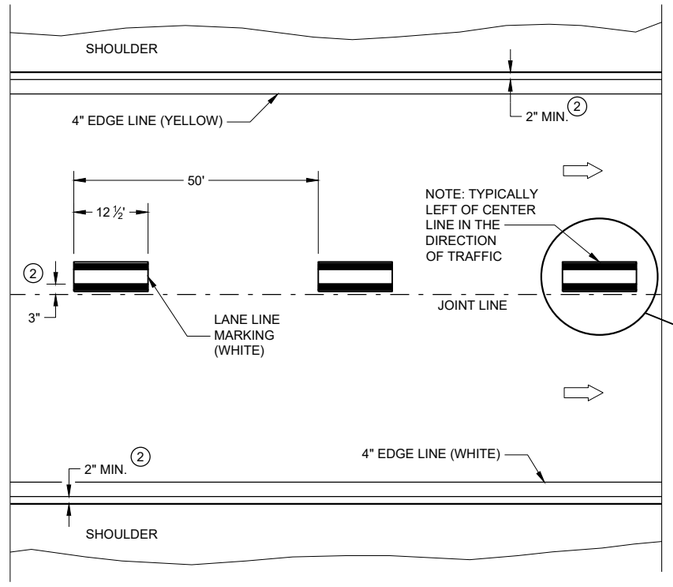
"T" MARKING

SIGN ON PERMANENT SUPPORT

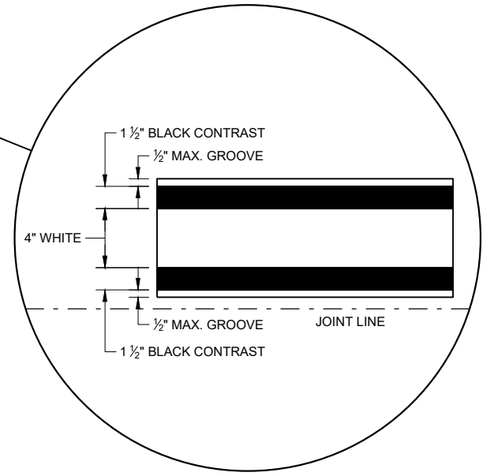
DIRECTION OF TRAFFIC



TWO WAY TRAFFIC



ONE WAY TRAFFIC



PERMANENT PAVEMENT MARKING

PERMANENT LONGITUDINAL PAVEMENT MARKINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2022 — DATE
/S/ Jeannie Silver — STATEWIDE SIGNING AND M ENGINEER

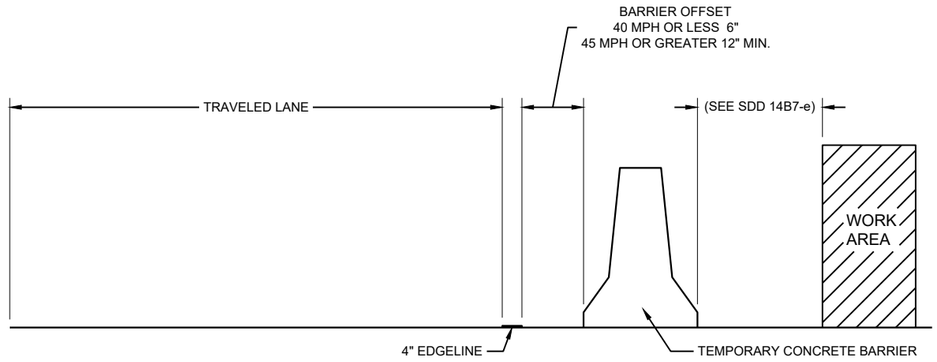
FHWA

6

SDD 15C08 - 22a

6

SDD 15C08 - 22a



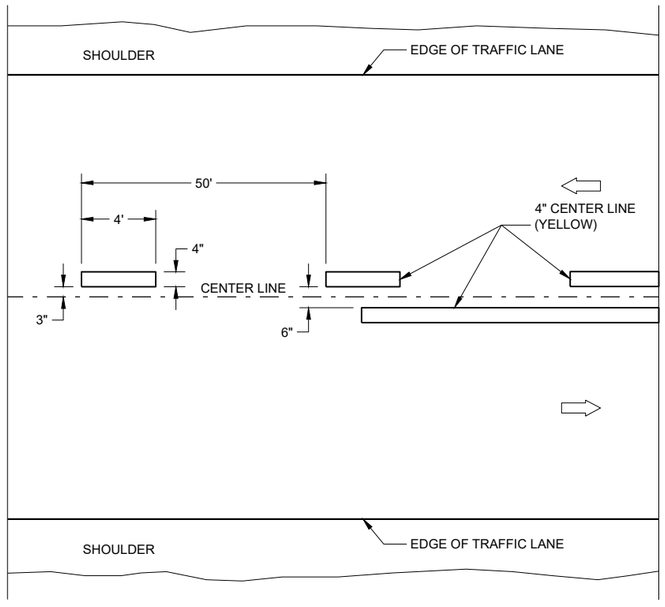
TEMPORARY BARRIER OFFSET FROM EDGELINE

GENERAL NOTES

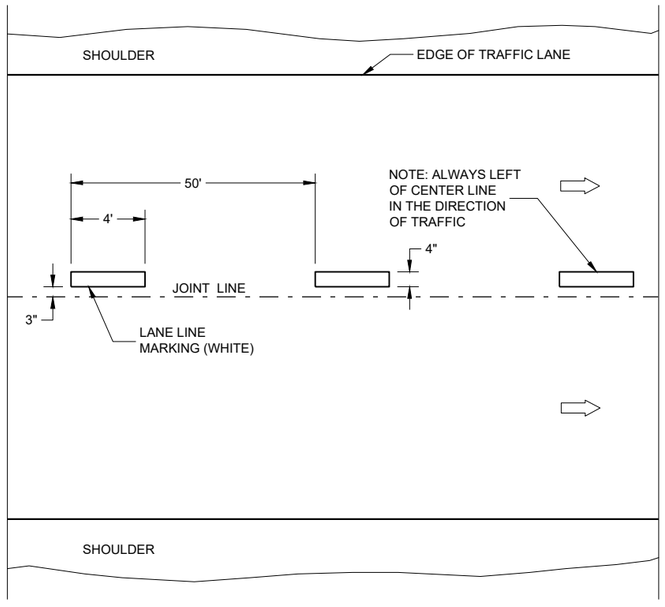
DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.

LEGEND

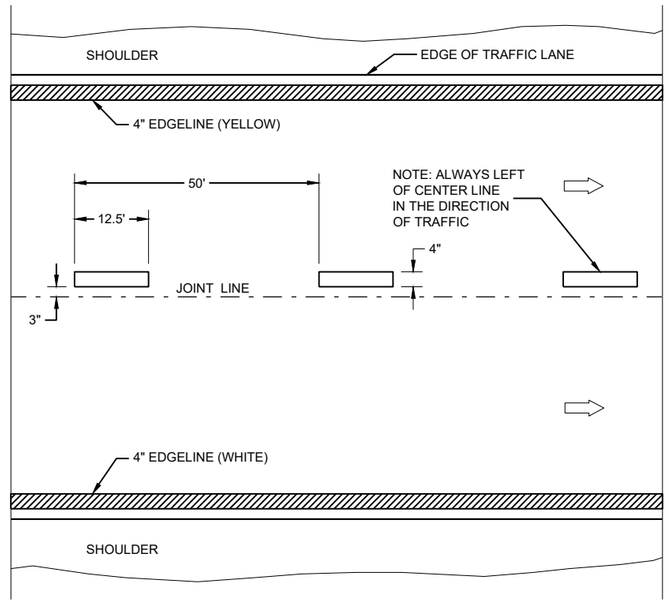
DIRECTION OF TRAFFIC



TWO WAY TRAFFIC



ONE WAY TRAFFIC



FREEWAYS AND EXPRESSWAYS

TEMPORARY PAVEMENT MARKING

TEMPORARY LONGITUDINAL PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

May 2022
DATE

/S/ Jeannie Silver
STATEWIDE SIGNING AND M
ENGINEER

FHWA

6

SDD 15C08 - 22b

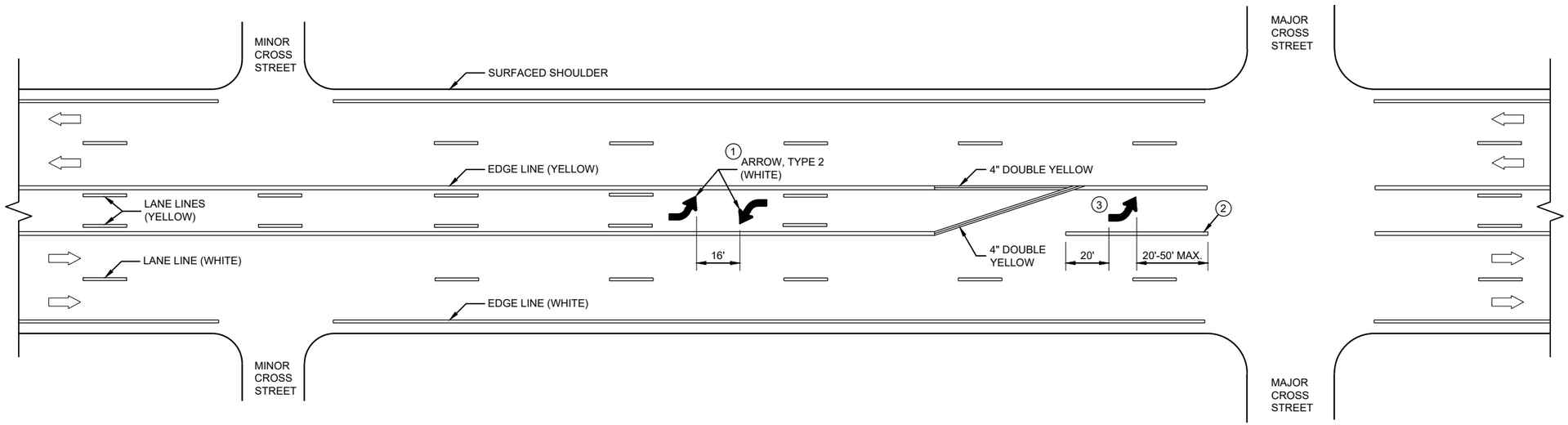
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SDD 15C08 - 22b

GENERAL NOTES

1. A SET OF ARROWS IS REQUIRED EVERY 400 FEET OR NEAR INTERSECTIONS OR DRIVEWAYS WITH TURNING TRAFFIC.
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3. TURN BAY LENGTH OF LESS THAN 48' DOES NOT REQUIRE PAVEMENT ARROWS OR TEXT.

DIRECTION OF TRAFFIC



TWO WAY LEFT TURN LANE

6

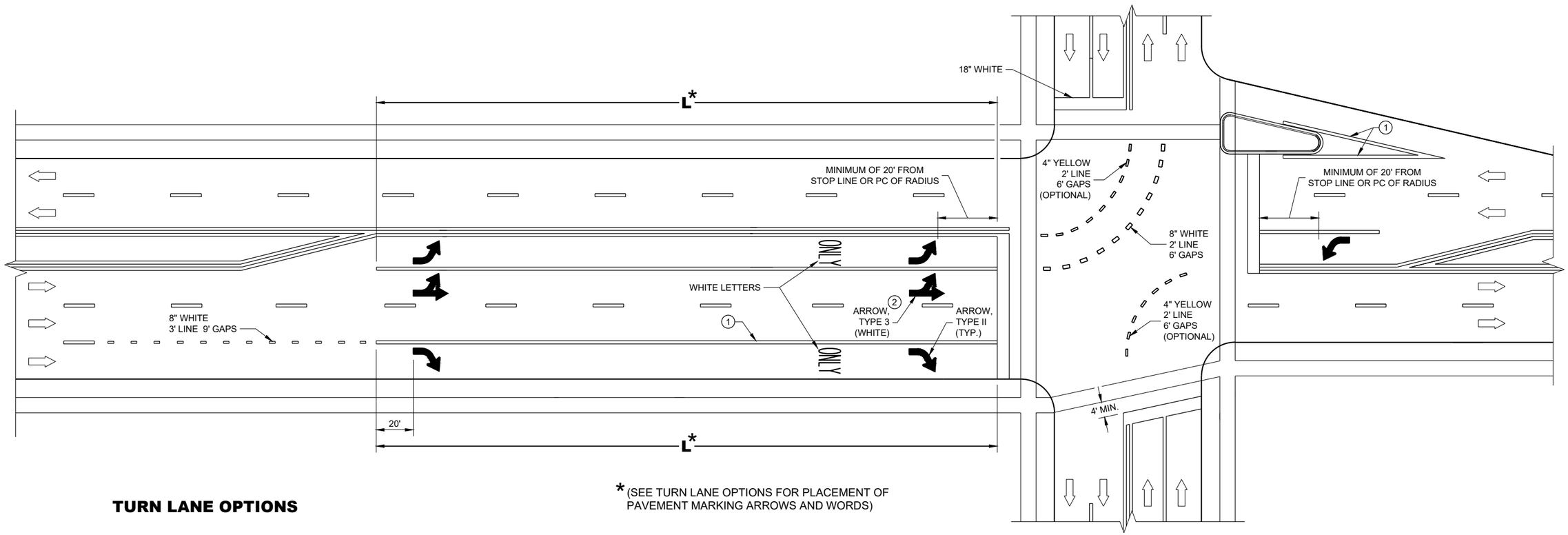
SDD 15C08 - 22c

PAVEMENT MARKING (TURN LANES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

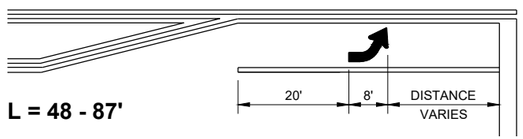
SDD 15C08 - 22c



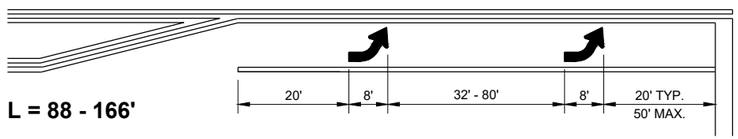
* (SEE TURN LANE OPTIONS FOR PLACEMENT OF PAVEMENT MARKING ARROWS AND WORDS)

TURN LANE OPTIONS

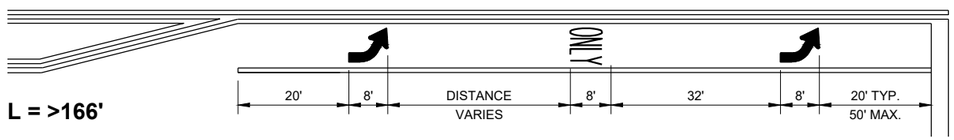
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L = 48 - 87'



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GENERAL NOTES

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DIRECTION OF TRAFFIC

L = LENGTH OF TURN BAY

PAVEMENT MARKING (TURN LANES)

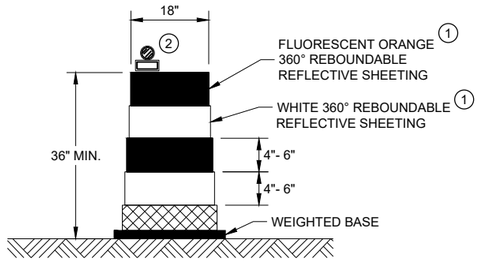
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 15C08 - 22d

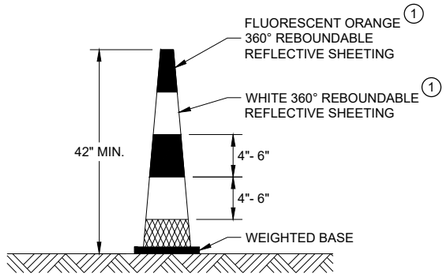
6
SDD 15C08 - 22d

GENERAL NOTES

1. REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.
2. LOCATION OF WARNING LIGHTS WHEN SHOWN ON THE PLAN.

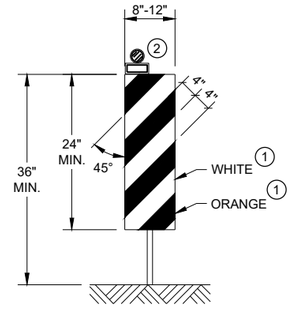


DRUM



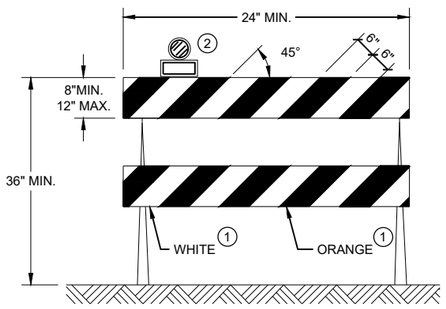
42" CONE

DO NOT USE IN TAPERS
½ SPACING OF DRUMS



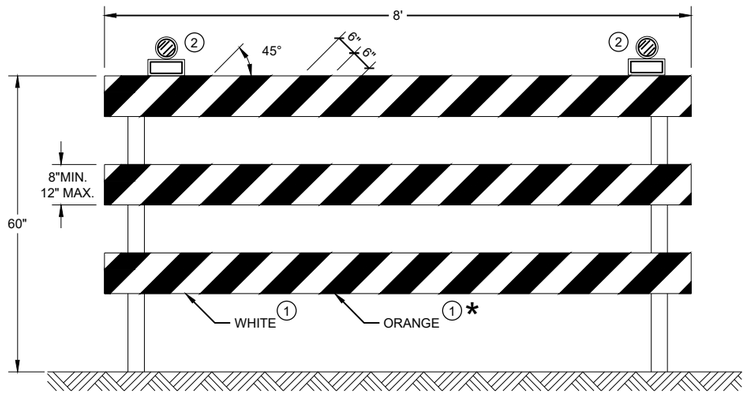
VERTICAL PANEL

THE STRIPES SHALL SLOPE DOWNWARD TO
THE TRAFFIC SIDE FOR CHANNELIZATION.



TYPE II BARRICADE

FOR RAILS LESS THAN 36" LONG, 4" WIDE STRIPES
MAY BE USED. ALL STRIPES SHALL SLOPE DOWNWARD
TO THE TRAFFIC SIDE FOR CHANNELIZATION.



TYPE III BARRICADE

IF SIGN MOUNTED, DO NOT COVER MORE THAN 50% OF THE TOP
TWO RAILS OR 33% OF THE TOTAL AREA OF THE THREE RAILS.

* IF USED FOR A PERMANENT APPLICATION USE RED SHEETING.

CHANNELIZING DEVICES
DRUMS, CONES, BARRICADES
AND VERTICAL PANELS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2021
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15C11 - 09b

6

SDD 15C11 - 09b

LEGEND

SIGN ON PORTABLE OR PERMANENT SUPPORT

TEMPORARY PORTABLE RUMBLE STRIP ARRAY

DIRECTION OF TRAFFIC

WORK AREA

FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF

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.

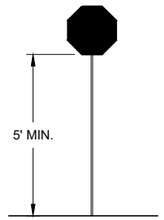
(3) EACH TEMPORARY PORTABLE RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS PLACED TRANSVERSE ACROSS THE LANE AT THE LOCATIONS SHOWN. WITHIN EACH ARRAY, SPACING BETWEEN RUMBLE STRIPS SHALL BE 15 FEET ON CENTER

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.



STOP/SLOW PADDLE ON SUPPORT STAFF

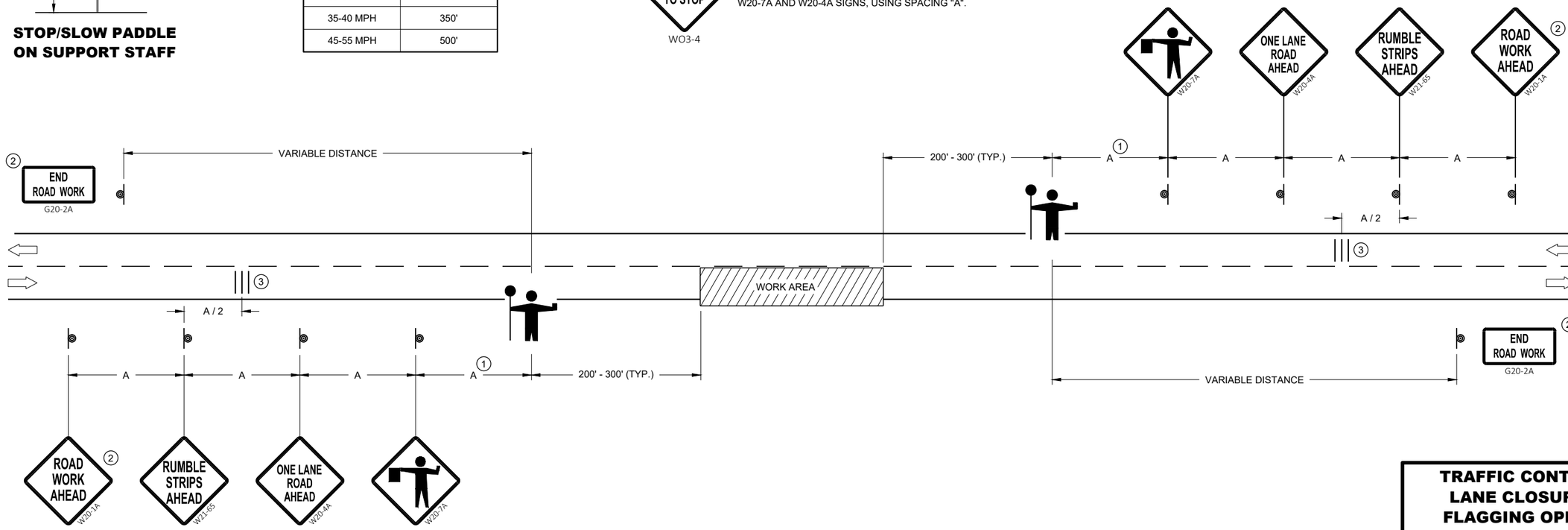
SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

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



WO3-4

USE OF WO3-4 SIGN IS OPTIONAL. WHEN USED, THIS SIGN SHALL BE LOCATED BETWEEN THE W20-7A AND W20-4A SIGNS, USING SPACING "A".



TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

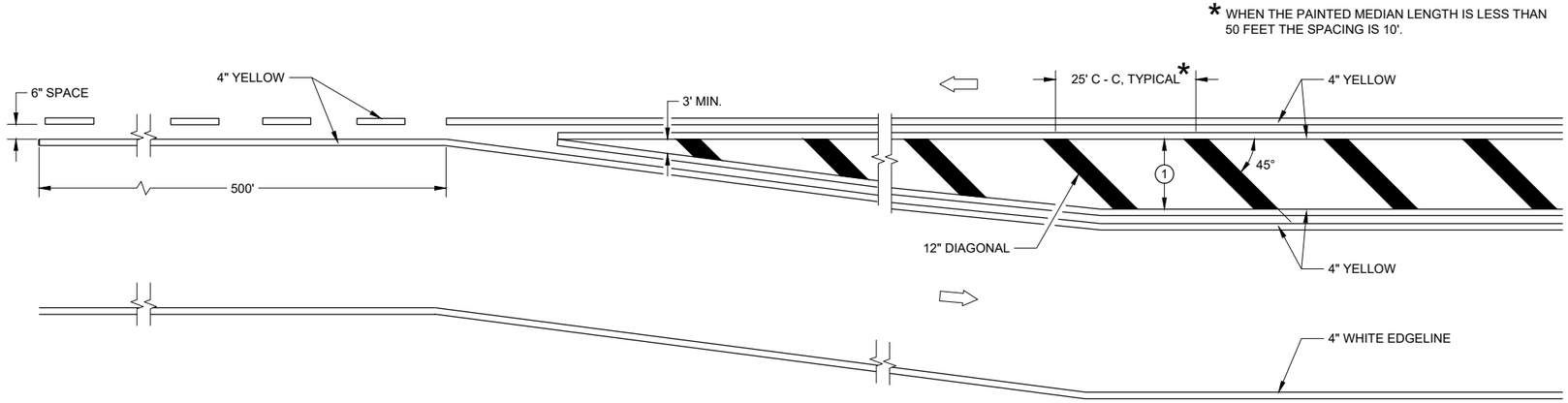
APPROVED
May 2022
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

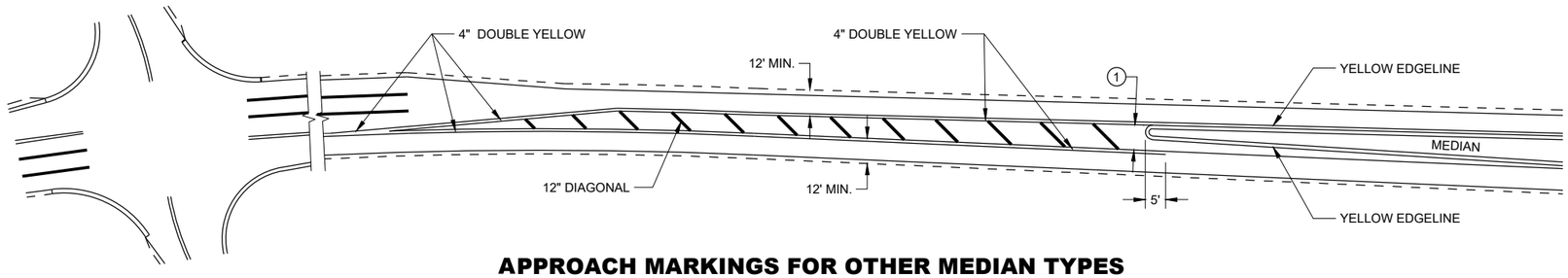
FHWA

SDD 15C12 - 09a

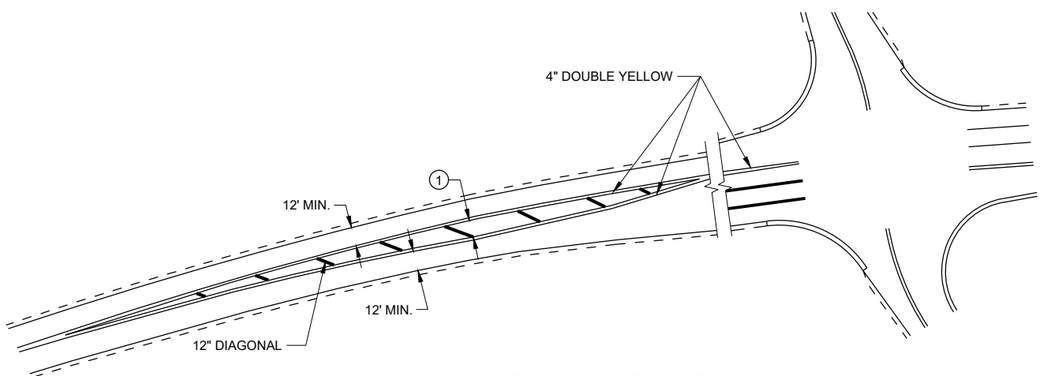
SDD 15C12 - 09a



MEDIAN ISLAND DETAIL



APPROACH MARKINGS FOR OTHER MEDIAN TYPES



NON-APPROACH MARKINGS

GENERAL NOTES

1. DIAGONALS ARE OPTIONAL WHEN PAINTED ISLAND IS LESS THAN 6 FEET AT THE WIDEST POINT. OMIT DIAGONALS IF WIDTH IS LESS THAN 4 FEET.

DIRECTION OF TRAVEL

6

SDD 15C18 - 06a

MEDIAN ISLAND PAVEMENT MARKINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

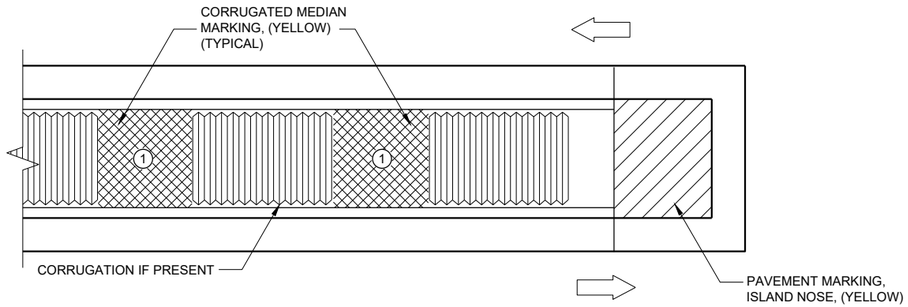
APPROVED
May 2022
DATE

/S/ Jeannie Silver
STATE SIGNING AND MAF ENGINEER

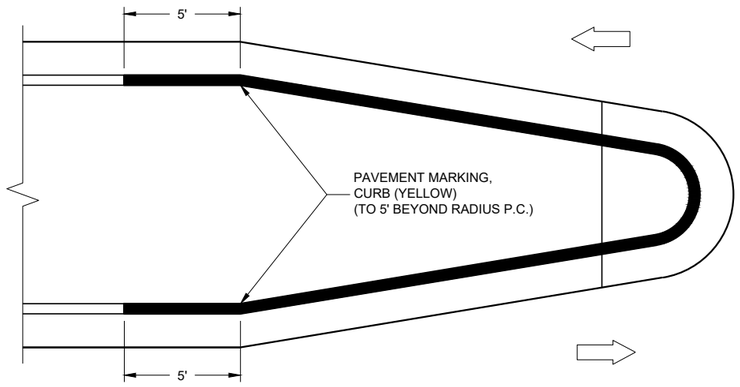
FHWA

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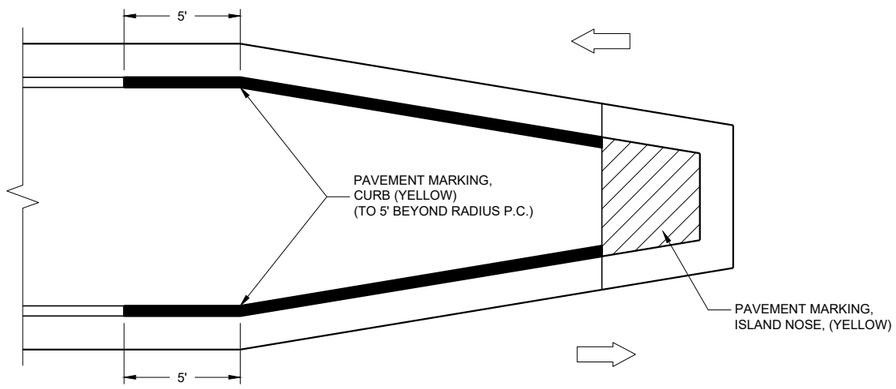
SDD 15C18 - 06a



MEDIAN ISLAND WITH SQUARE BLUNT NOSE



MEDIAN ISLAND WITH ROUND BLUNT NOSE



MEDIAN ISLAND WITH SLOPED NOSE

TYPICAL PLACEMENT OF PAVEMENT MARKING ON MEDIAN ISLANDS

GENERAL NOTES

WHEN CONCRETE CORRUGATED MEDIAN IS CONSTRUCTED TO SEPARATE TRAFFIC OPERATING IN THE OPPOSING DIRECTION, YELLOW PAVEMENT MARKING SHALL BE APPLIED TO THE FLAT PORTION OF THE CONCRETE CORRUGATED MEDIAN. THE ITEM OF PAVEMENT MARKING, CONCRETE CORRUGATED MEDIAN, WILL BE MEASURED IN PLACE AND ACCEPTED IN ACCORDANCE WITH THE CONTRACT AND PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE FOOT.

(1) APPLY PAVEMENT MARKING TO THE FLAT PORTION OF CORRUGATED MEDIAN.

ISLAND NOSE MARKING

CURB MARKING

CORRUGATED MEDIAN MARKING

DIRECTION OF TRAVEL

PAVEMENT MARKINGS, MEDIAN ISLAND NOSE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

May 2022
DATE

/S/ Jeannie Silver
STATE SIGNING AND MAF ENGINEER

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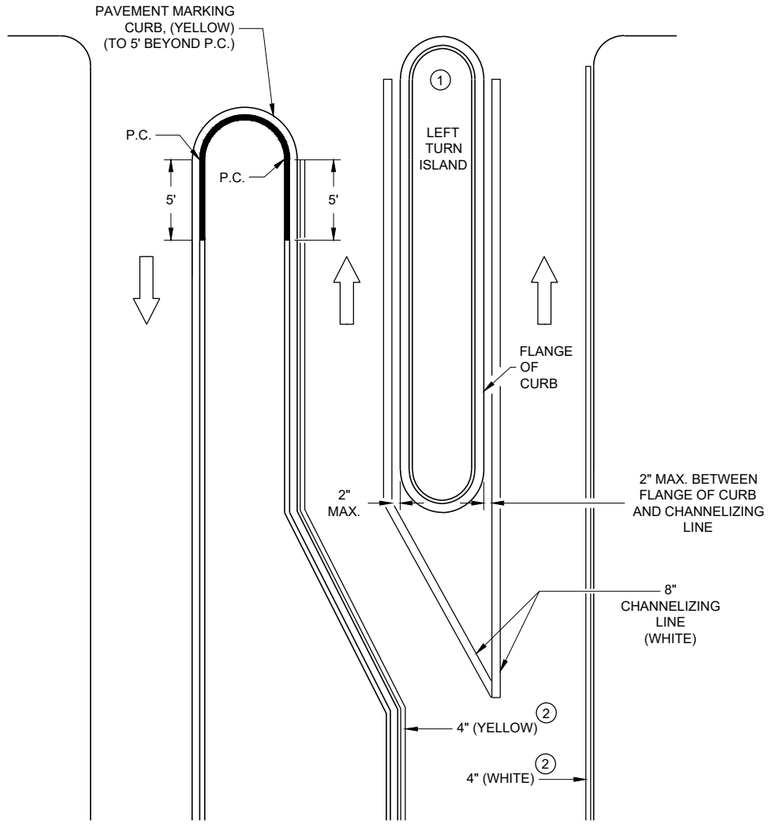
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SDD 15C18 - 06b

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SDD15C18 - 06b

REQUIREMENTS FOR EDGE LINES		
POSTED SPEED	IS THERE CONTINUOUS LIGHTING?	
	YES	NO
≤ 30 MPH	NO	OPTIONAL
35 OR 40 MPH	OPTIONAL	RECOMMENDED
≥ 45 MPH	RECOMMENDED	REQUIRED



LEFT TURN & MEDIAN ISLAND

GENERAL NOTES

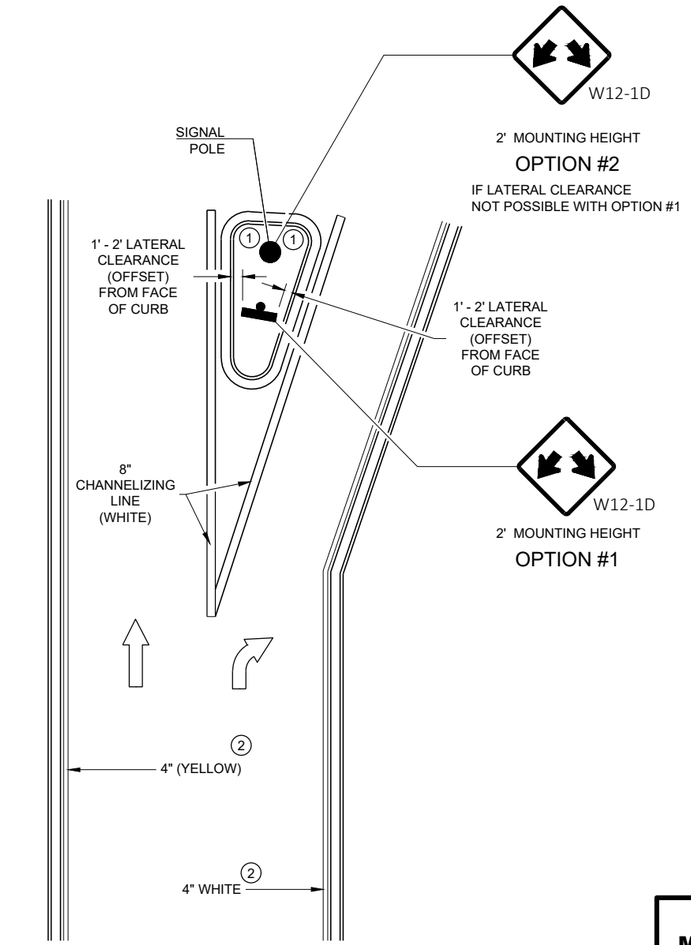
APPLIES TO ISLANDS AT LEFT TURNS AT ONE WAY ROADWAYS AS WELL.

SEE MISCELLANEOUS QUANTITIES FOR SIGN SIZE.

(1) MARK CURB NOSES YELLOW.

(2) MARK ACCORDING TO TABLE.

DIRECTION OF TRAVEL



RIGHT TURN ISLAND

MEDIAN PAVEMENT MARKINGS, DOUBLE ARROW WARNING SIGN PLACEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

May 2022 — DATE

/S/ Jeannie Silver — STATE SIGNING AND MAF ENGINEER

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SDD 15C18 - 06c

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SDD15C18 - 06c

LEGEND

V1 LEAD VEHICLE

V2 MARKING VEHICLE

V3 SHADOW VEHICLE

TRUCK MOUNTED ATTENUATOR (TMA)

SIGN ON TEMPORARY SUPPORT

DIRECTION OF TRAFFIC

FLASHING ARROW PANEL (CAUTION)

GENERAL NOTES

ALL VEHICLES SHALL BE EQUIPPED WITH TWO 360 DEGREE HIGH INTENSITY YELLOW FLASHING LIGHTS OR STROBE LIGHTS AND OPERATED WITH HEADLIGHTS TURNED ON.

ALL VEHICLES SHALL BE EQUIPPED WITH REAR FACING TYPE B OR C FLASHING ARROW PANEL OPERATING IN CAUTION MODE. SIGNS PLACED ON VEHICLES MUST NOT OBSCURE THE ARROW PANEL.

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

DISTANCE BETWEEN VEHICLES MAY VARY ACCORDING TO TERRAIN, SIGHT DISTANCE, PAINT DRYING TIME, AND OTHER FACTORS. WHENEVER ADEQUATE STOPPING SIGHT DISTANCE EXISTS TO THE REAR, SHADOW VEHICLES SHOULD MAINTAIN THE MINIMUM DISTANCE FROM THE WORK VEHICLE AND PROCEED AT THE SAME SPEED AS THE WORK VEHICLE. SHADOW VEHICLES SHOULD SLOW DOWN IN ADVANCE OF VERTICAL AND HORIZONTAL CURVES THAT RESTRICT SIGHT DISTANCE.

THE WORK AND SHADOW VEHICLES SHOULD PULL OVER PERIODICALLY TO ALLOW TRAFFIC TO PASS.

WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR LAY STATIONARY SIGNS AND SUPPORTS FLAT ON THE GRADE WITH UPRIGHTS ORIENTED PARALLEL TO AND DOWNSTREAM FROM TRAFFIC.

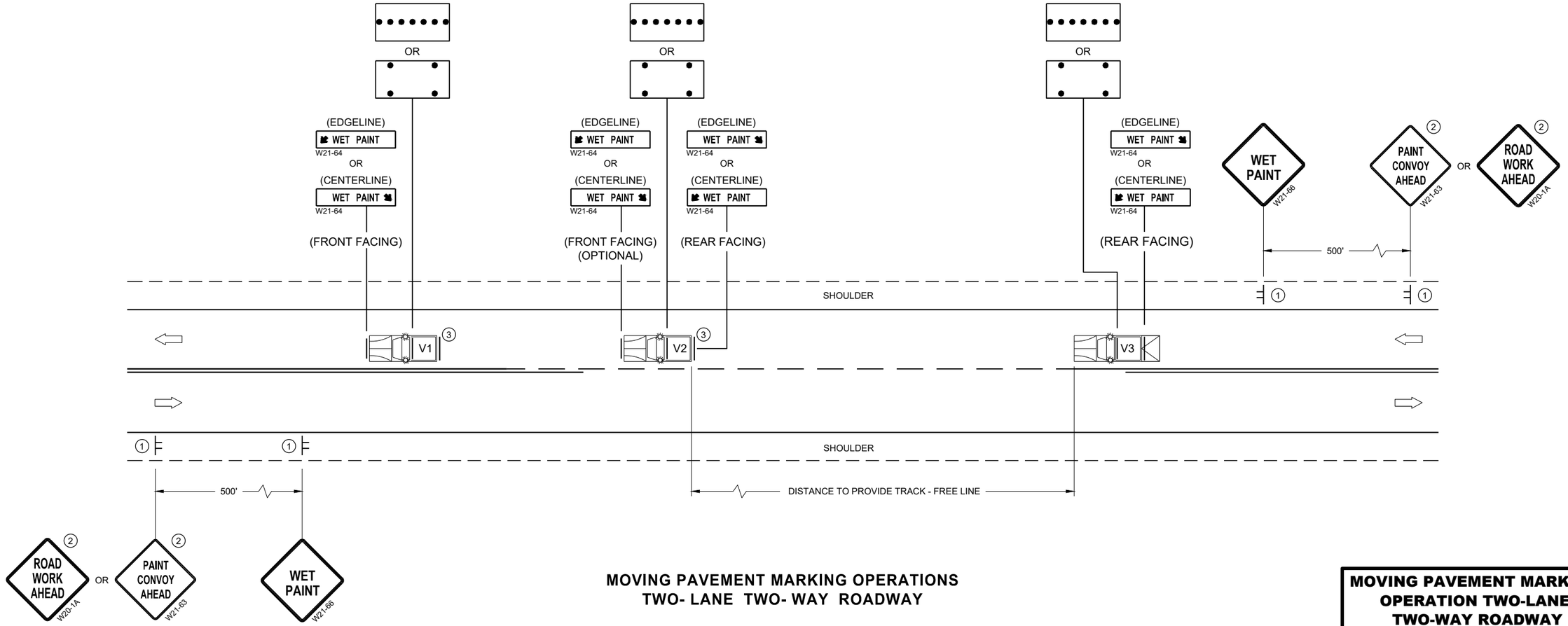
CONES SHOULD BE USED BETWEEN THE MARKING AND SHADOW VEHICLE AT 100 FOOT SPACING. CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.

CONES SHALL BE A MINIMUM OF 28" FOR WET PAVEMENT MARKING .

(1) SIGNS SHALL BE REPEATED APPROXIMATELY EVERY THREE MILES.

(2) IF CONSTRUCTION WORK ZONE SIGNS ARE IN PLACE, W20-1A OR W21-63 ARE NOT REQUIRED.

(3) V1 AND V2 CAN BE SWITCHED SO THAT THE MARKER IS THE LEAD VEHICLE.



MOVING PAVEMENT MARKING OPERATIONS TWO- LANE TWO- WAY ROADWAY

MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2022 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEE

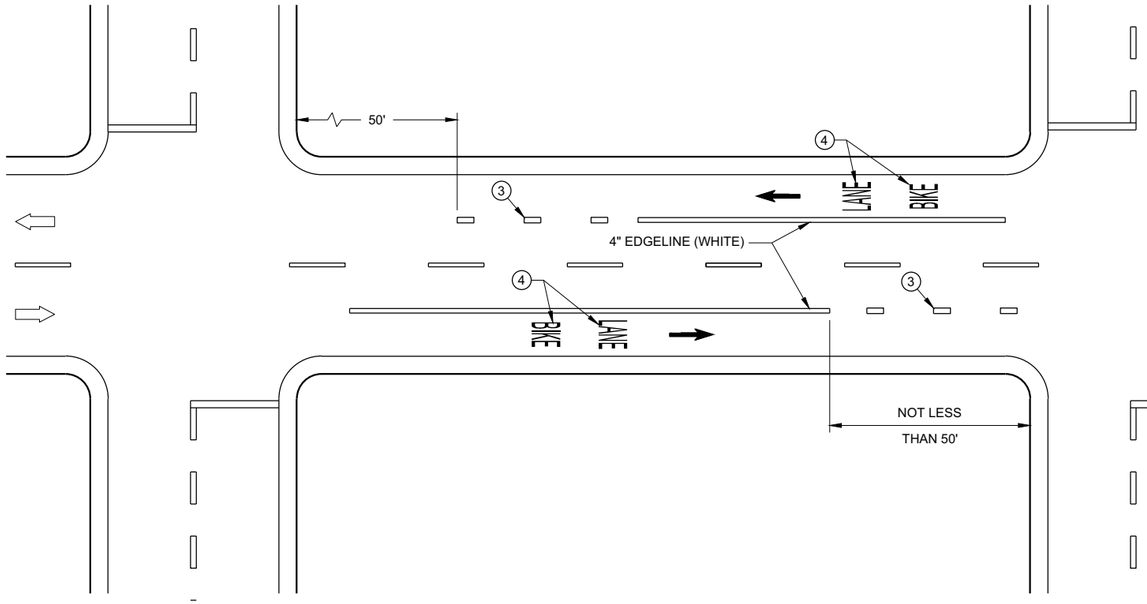
FHWA

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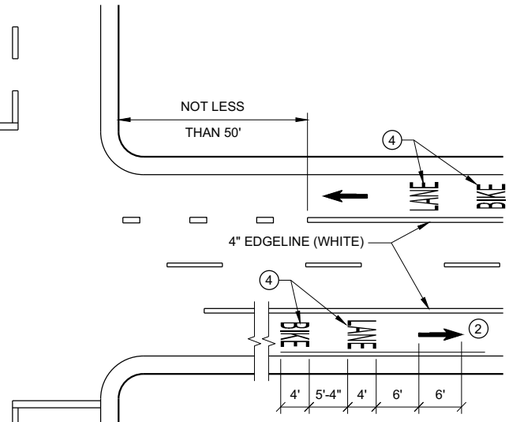
SDD 15C19 - 07a

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SDD 15C19 - 07a



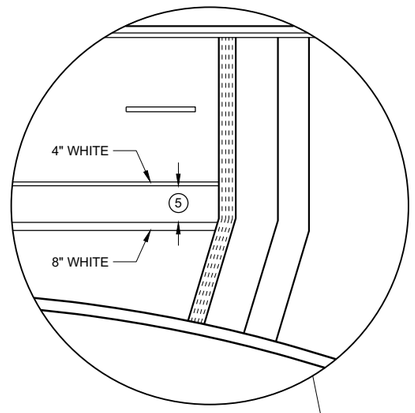
DESIGNATED BIKE LANE - NO PARKING



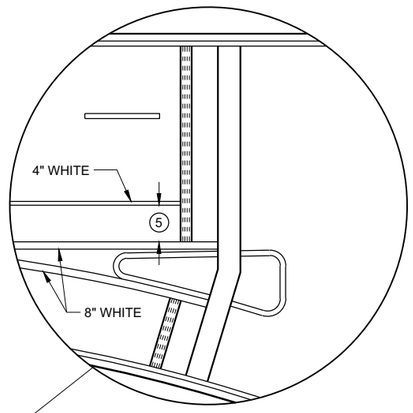
GENERAL NOTES

1. DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.
2. MINIMUM OF ONE PER BLOCK. MAXIMUM OF 250 FEET.
3. DOTTED LINES (3' LINE, 9' GAP) SHOULD BE USED 50 FEET TO 200 FEET IN ADVANCE OF AN INTERSECTION WHERE THERE IS NO RIGHT TURN ONLY LANE AND THERE IS HEAVY RIGHT TURN TRAFFIC OR THERE IS A NEAR-SIDE BUS STOP. AT OTHER INTERSECTIONS WHERE RIGHT TURN TRAFFIC IS LIGHT TO MODERATE, A SOLID LINE CAN BE USED UP TO THE INTERSECTION.
4. BIKE SYMBOLS OR WORDS MAY BE USED.
5. BIKE ACCOMMODATION IS TYPICAL 5 FEET WIDE AND MINIMUM OF 4 FEET FROM A LONGITUDINAL JOINT. USE 5 FEET AT ≥ 45 MPH.
6. OMIT THESE MARKINGS FOR WIDER TURN LANE APPLICATIONS (MINIMUM OF 15 FOOT WIDE TURN LANE).
7. REFER TO CONTRACT PLANS FOR LANE WIDTH.

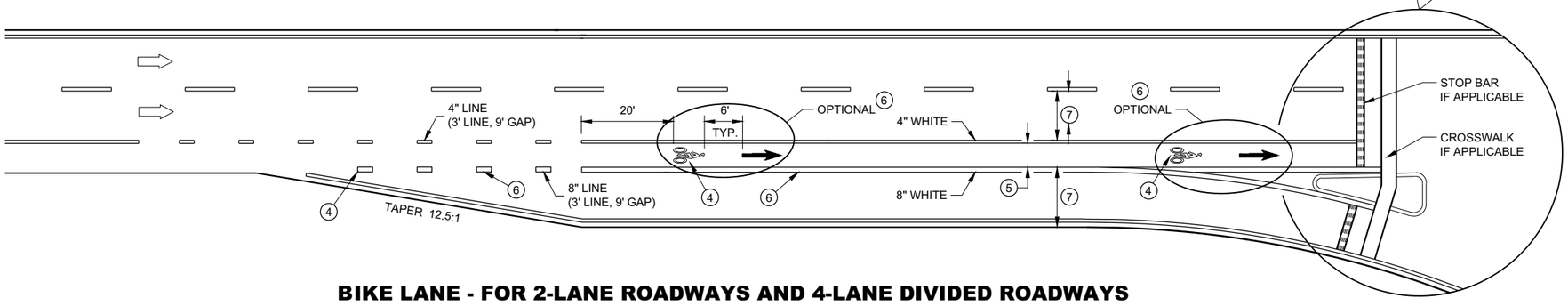
DIRECTION OF TRAVEL



4 LANE DIVIDED WITHOUT ISLAND



4 LANE DIVIDED WITH ISLAND



BIKE LANE - FOR 2-LANE ROADWAYS AND 4-LANE DIVIDED ROADWAYS
(4-LANE DIVIDED WITH RIGHT TURN LANE SHOWN)

BIKE LANE MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

May 2020
DATE

/S/ Matthew Rauch
STATE SIGNING AND MAF ENGINEER

FHWA

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SDD 15C29 - 07a

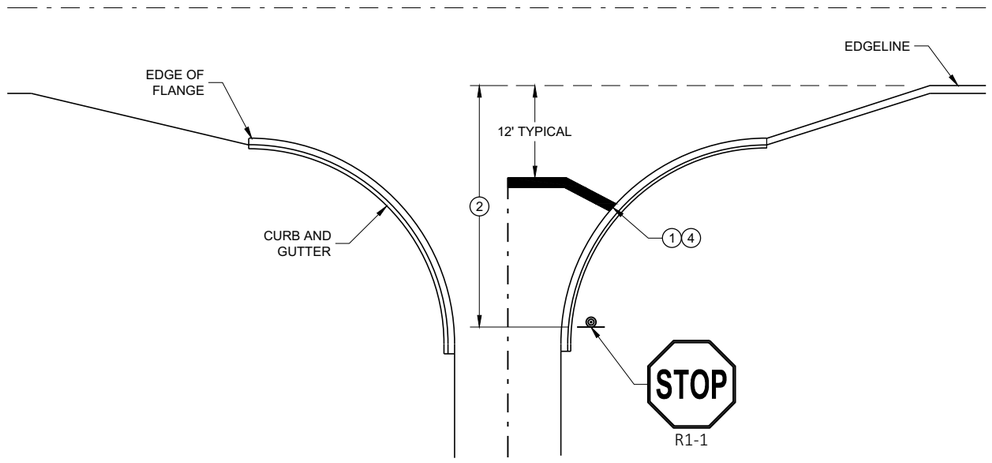
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SDD 15C29 - 07a

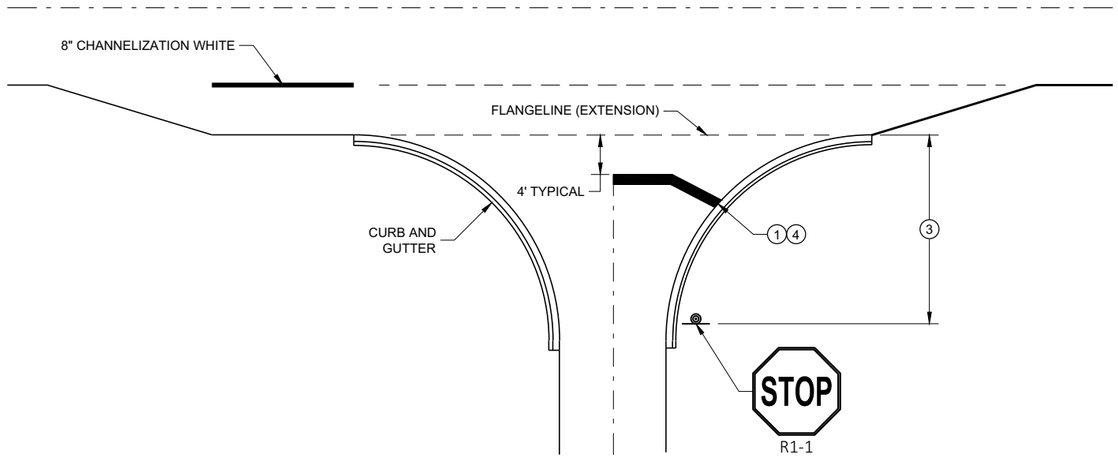
GENERAL NOTES

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

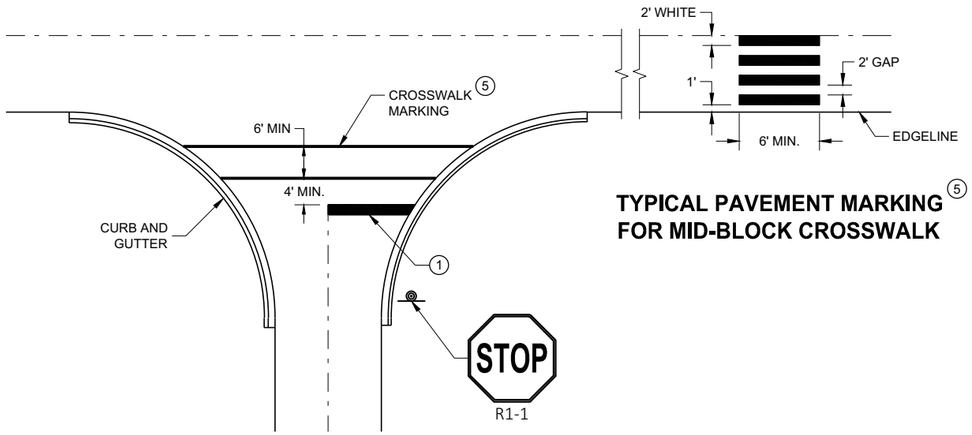
1. 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE REGION MARKING ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
2. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGELINE.
3. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGELINE EXTENSION.
4. MOVE CLOSER TO THE EDGE OF TRAVEL LINE AS NEEDED FOR VISIBILITY AND SIGHT LINES (NO CLOSER THAN 4 FEET).
5. LADDER BAR CROSSWALKS SHOULD ONLY BE USED FOR MID BLOCK CROSSINGS. USE 2 - 6" TRANSVERSE LINES INSTEAD.



TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER

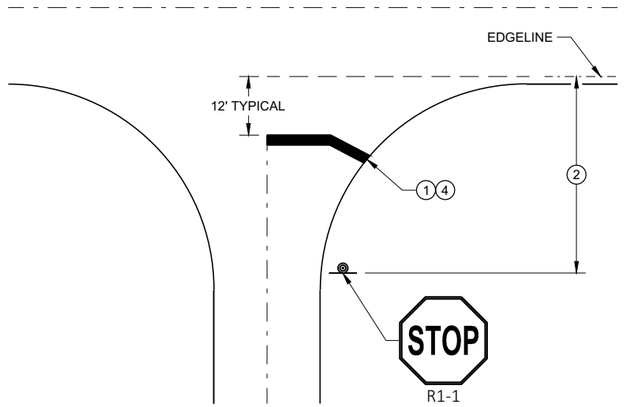


TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH RIGHT TURN LANE



TYPICAL PAVEMENT MARKING FOR MID-BLOCK CROSSWALK 5

TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH CROSSWALK MARKING



TYPICAL STOP LINE PAVEMENT MARKING WITHOUT CURB AND GUTTER

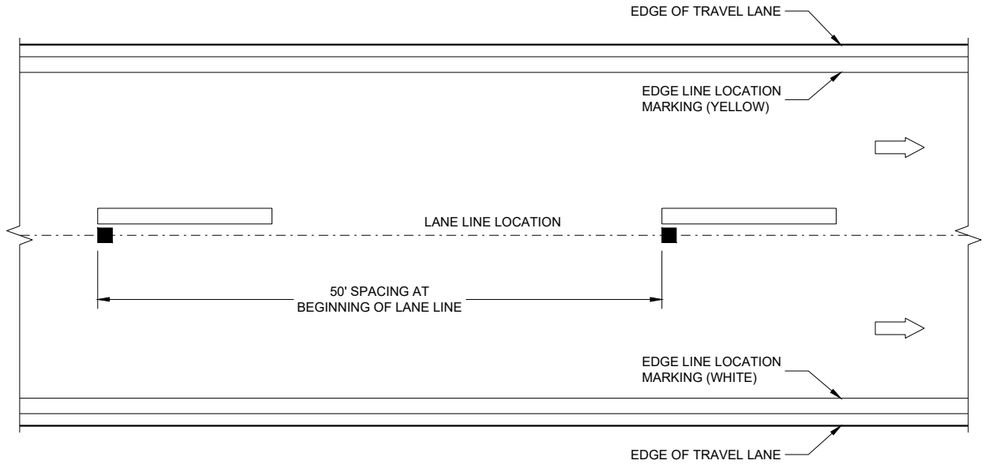
STOP LINE AND CROSSWALK PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

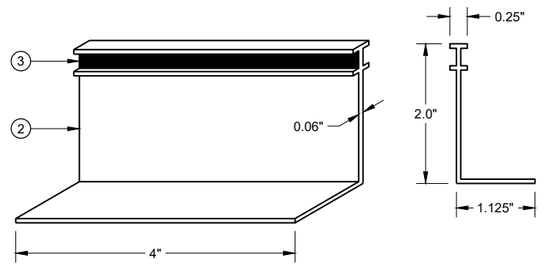
APPROVED
November 2019 — DATE
/S/ Matthew Rauch — STATE SIGNING AND MARKING ENGINEER
FHWA

SDD 15C33 - 04

SDD 15C33 - 04



LONGITUDINAL PLACEMENT 4 - INCH LANE LINE



ISOMETRIC VIEW **SIDE VIEW**

TEMPORARY RAISED PAVEMENT MARKER, TYPE II

GENERAL NOTES

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

COLOR OF TEMPORARY RAISED PAVEMENT MARKERS, TYPE II, SHALL MATCH THE COLOR OF THE MARKING THEY SUPPLEMENT.

PLACEMENT OF TEMPORARY RAISED PAVEMENT MARKERS ON EDGE LINES IS OPTIONAL. IF PLACED ON EDGE LINES, MAXIMUM SPACING SHALL BE 50 FEET.

PROVIDE SINGLE OR MULTI-COVER TEMPORARY RAISED PAVEMENT MARKERS AS SHOWN ON PLAN.

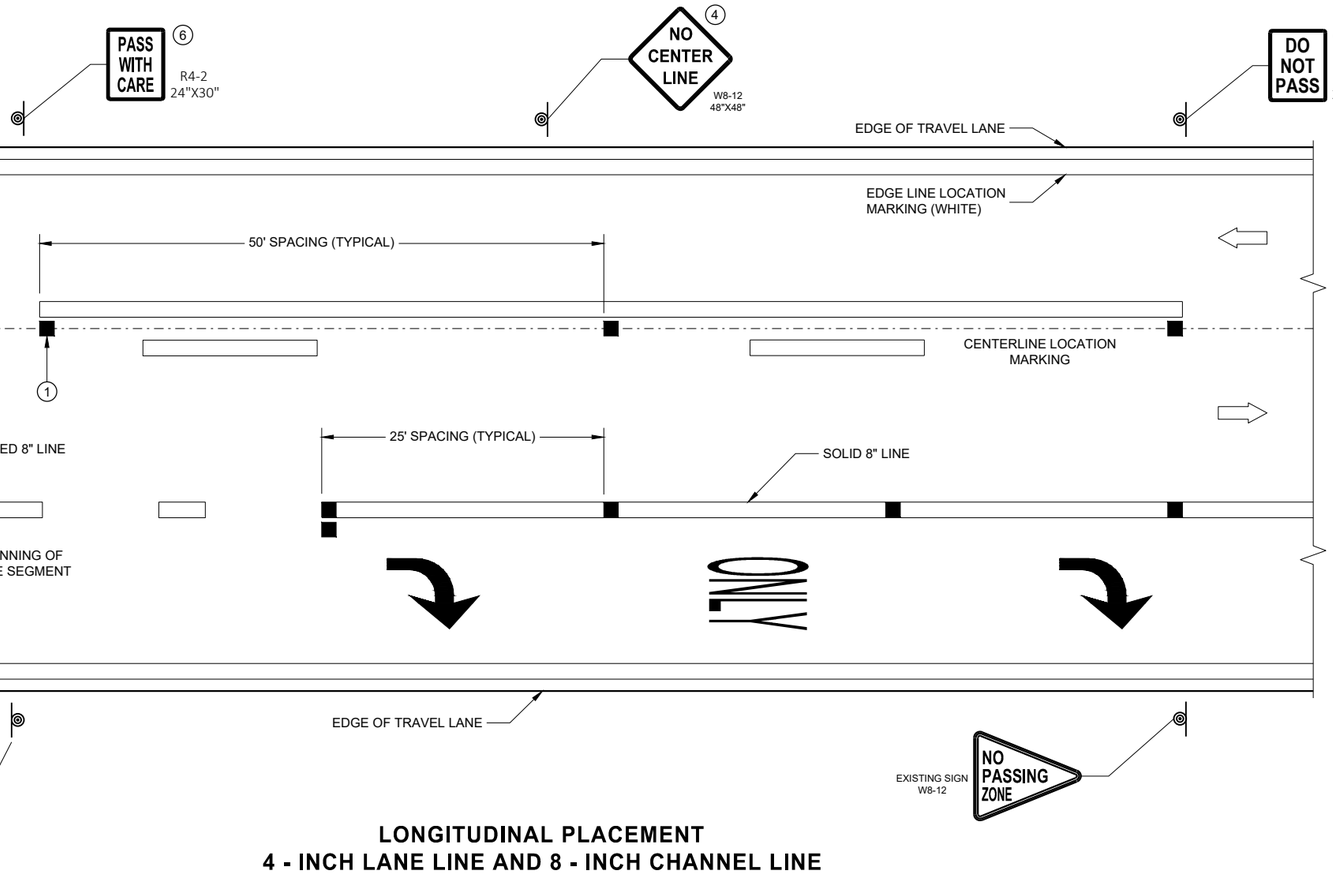
MARK "T"s ON PAVEMENT FOR REESTABLISHING NO PASSING ZONES.

SAME DAY TEMPORARY PAVEMENT MARKING MAY BE USED IN LIEU OF TEMPORARY RAISED PAVEMENT MARKERS, TYPE II.

SIGNS THAT WILL BE IN PLACE LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE MAY BE MOUNTED ON PORTABLE SUPPORTS.

IF TEMPORARY SAME DAY PAVEMENT MARKING IS USED, ENSURE PROPOSED PAVEMENT MARKING ARE PLACED IN THE EXACT LOCATIONS AS THE EXISTING MARKINGS, USING A MINIMAL AMOUNT OF TEMPORARY RAISED MARKERS, TYPE II OR OTHER METHODS AS APPROVED BY THE ENGINEER.

IF ROADWAY IS DETOURED DURING CONSTRUCTION, THE "DO NOT PASS, "PASS WITH CARE" AND "NO CENTERLINE" SIGNS MAY BE OMITTED, PROVIDING A LIQUID MARKING IS INSTALLED BEFORE THE ROADWAY IS REOPENED TO TRAFFIC.



LONGITUDINAL PLACEMENT 4 - INCH LANE LINE AND 8 - INCH CHANNEL LINE

1. FOR DOUBLE SOLID YELLOW, PLACE THE MARKERS BETWEEN THE LINES.
2. MARKERS SHALL BE OF POLYURETHANE MATERIAL.
3. MARKERS SHALL HAVE A MINIMUM SIZE REFLECTIVE SURFACE OF 4 INCH WIDTH X 0.25 INCH HEIGHT.
4. "NO CENTER LINE" SIGNS SHALL BE PLACED AT THE BEGINNING OF PROJECT, AT TWO MILE INTERVALS AND AFTER STATE AND COUNTY HIGHWAY INTERSECTIONS.
5. "DO NOT PASS" SIGNS SHALL BE INSTALLED AT THE BEGINNING OF NO PASSING ZONES. ADDITIONAL "DO NOT PASS" SIGNS SHALL BE INSTALLED AT ONE MILE INTERVALS AND AFTER STATE AND COUNTY HIGHWAY INTERSECTIONS WITHIN THE NO PASSING ZONE.
6. "PASS WITH CARE" SIGNS SHALL BE PLACED AT THE DOWNSTREAM END OF NO PASSING ZONES.

LEGEND

- TEMPORARY RAISED PAVEMENT MARKER, TYPE II
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- DIRECTION OF TRAFFIC.

STANDARD APPLICATION FOR TEMPORARY RAISED PAVEMENT MARKERS, TYPE II

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/2017 DATE
/S/ Matthew Rauch
STATE SIGNING AND MAF ENGINEER

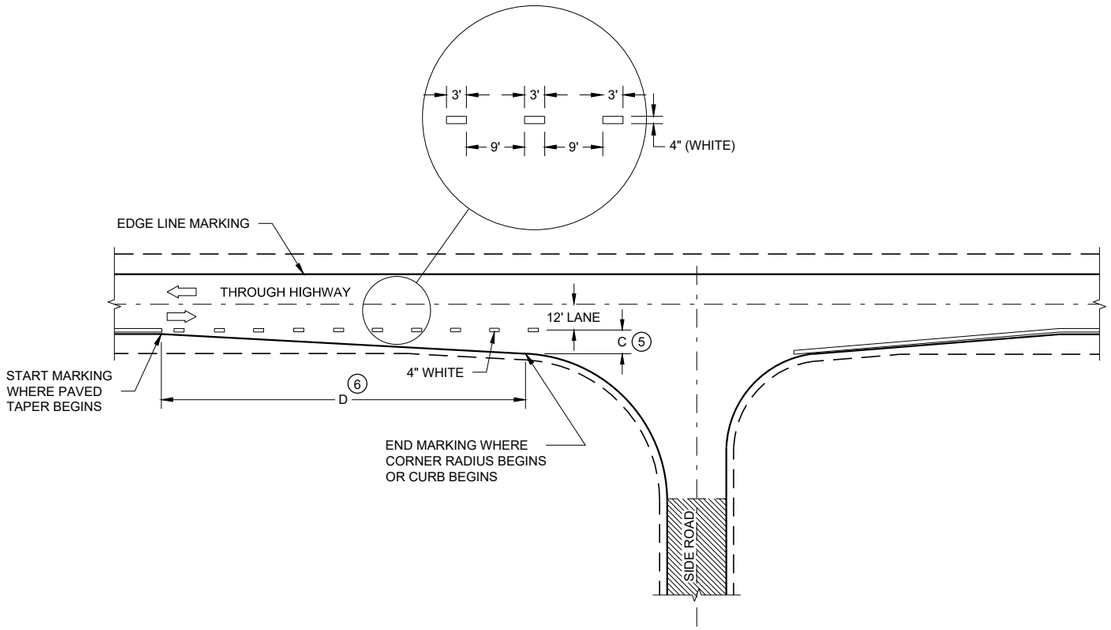
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SDD 15C34 - 03

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SDD 15C34 - 03



MINOR INTERSECTION

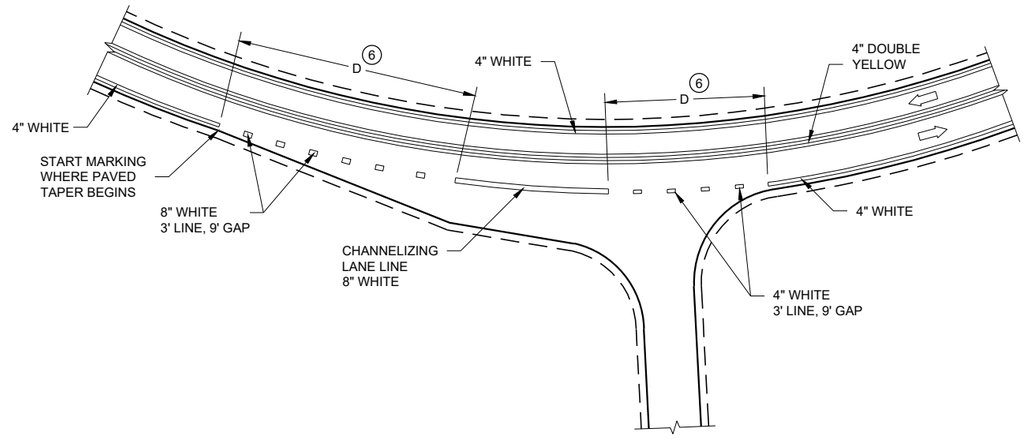
GENERAL NOTES

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

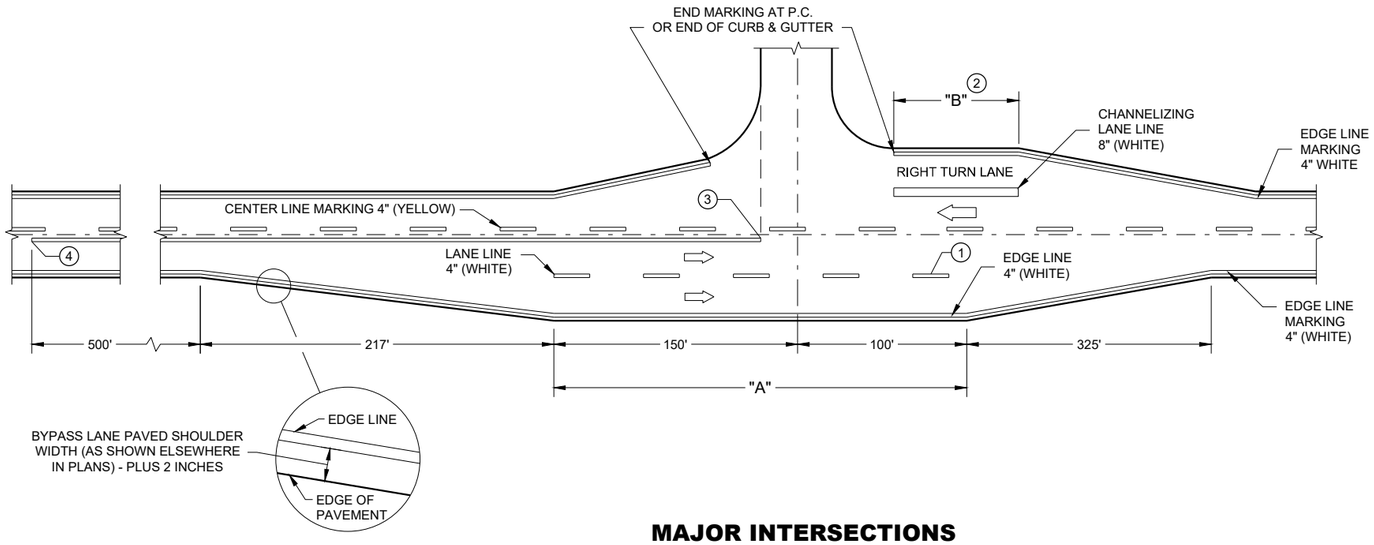
1. WHEN DISTANCE "A" IS LESS THAN 250 FEET, OMIT LANE LINE.
2. WHEN DISTANCE "B" IS LESS THAN 100 FEET, OMIT CHANNELIZING LANE LINE.
3. BARRIER LINE ENDS AT SIDE ROAD PAVEMENT / SURFACE EDGE EXTENSION.
4. BARRIER LINE STARTS 500 FEET PRIOR TO THE BYPASS TAPER.
5. WHEN DISTANCE "C" IS LESS THAN 4 FEET, OMIT DOTTED EXTENSION.
6. WHEN DISTANCE "D" IS LESS THAN 50 FEET, OMIT DOTTED EXTENSION.

LEGEND

DIRECTION OF TRAVEL



INTERSECTION ON OUTSIDE OF CURVE



MAJOR INTERSECTIONS

(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANE)

PAVEMENT MARKING (INTERSECTIONS)

SDD 15C35 - 05a

6

LEGEND

- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC
- FLASHING ARROW BOARD
- WORK AREA

GENERAL NOTES

THIS DETAIL IS TYPICAL FOR CLOSING THE RIGHT SHOULDER. FOR CLOSING THE LEFT SHOULDER, REVERSE THE TRAFFIC CONTROL.

THIS DETAIL MAY BE USED FOR DIVIDED ROADWAYS WITH ANY NUMBER OF TRAVEL LANES.

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

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

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

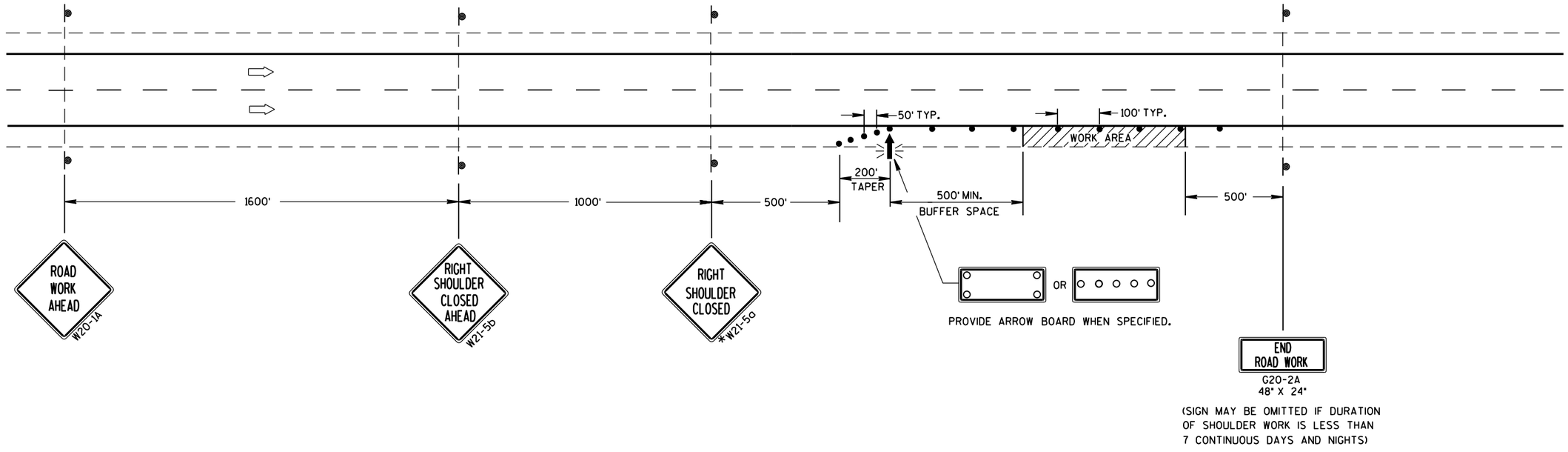
SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

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

CHANNELIZING DEVICES PLACED ADJACENT TO THE WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

WHEN A RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.

*FOR SHORT DURATION SHOULDER WORK OF LESS THAN ONE HOUR, THE W21-5a SIGN MAY BE OMITTED.



TRAFFIC CONTROL SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

June 2016 — DATE

/S/ Peter Amakobe Atepe
STATEWIDE WORK ZO[illegible] SAFETY ENGI[illegible]

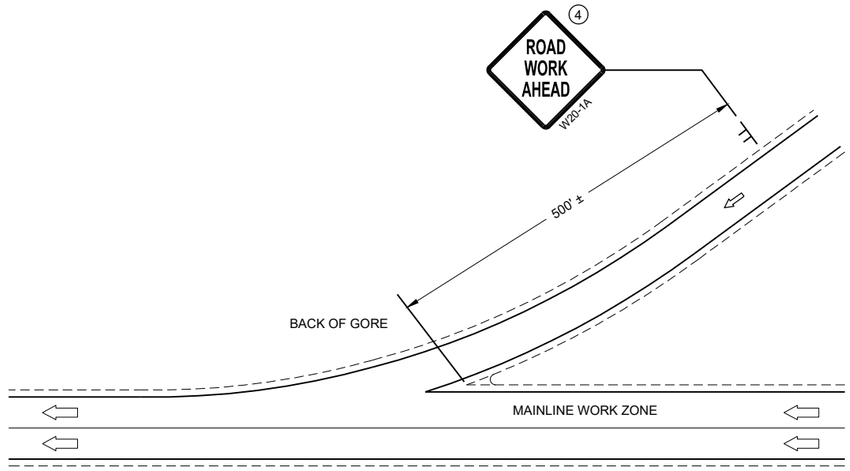
FHWA

6

S.D.D. 15 D 27-3

LEGEND

- V1 SHADOW VEHICLE 1
- V2 SHADOW VEHICLE 2
- V3 ADVANCE WARNING TRUCK
- ● TRAFFIC CONTROL DRUM
- TRUCK MOUNTED ATTENUATOR (TMA)
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC
- FLASHING ARROW PANEL (MERGE)
- FLASHING ARROW PANEL (CAUTION)
- PCMS PORTABLE CHANGEABLE MESSAGE SIGN
- WORK AREA



GENERAL NOTES

SHORT DURATION IS WORK THAT OCCUPIES A LOCATION UP TO 1 HOUR.

MOBILE IS WORK THAT MOVES INTERMITTENTLY OR CONTINUOUSLY.

ALL VEHICLES SHALL BE EQUIPPED WITH TWO 360 DEGREE HIGH INTENSITY YELLOW FLASHING LIGHTS OR STROBE LIGHTS AND OPERATED WITH HEADLIGHTS TURNED ON.

ALL VEHICLES SHALL BE EQUIPPED WITH REAR FACING TYPE B OR C FLASHING ARROW PANEL. SIGNS PLACED ON VEHICLES MUST NOT OBSCURE THE ARROW PANEL.

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

WHEN WORK ACTIVITY BLOCKS THE RIGHT LANE, REVERSE TRAFFIC CONTROL.

WHEN A RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, PROVIDE ADDITIONAL TRAFFIC CONTROLS AS SPECIFIED IN THE CONTRACT OR AS APPROVED BY THE ENGINEER.

USE DOUBLE ARROWS WHEN CONVOY IS IN CENTER LANE ONLY.

WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR LAY STATIONARY SIGNS AND SUPPORTS FLAT ON THE GRADE WITH UPRIGHTS ORIENTED PARALLEL TO AND DOWNSTREAM FROM TRAFFIC

(1) DISTANCE BETWEEN VEHICLES MAY VARY ACCORDING TO 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 AND HORIZONTAL CURVES THAT RESTRICT SIGHT DISTANCE.

(2) DRUMS ARE TO BE USED FOR BRIDGE DECK SEALING AND OTHER PROJECTS THAT REQUIRE DELINEATION.

(3) WITHIN 5 MILES, RELOCATE SIGNS AS WORK PROGRESSES AND NECESSARY OR AS DIRECTED BY THE ENGINEER.

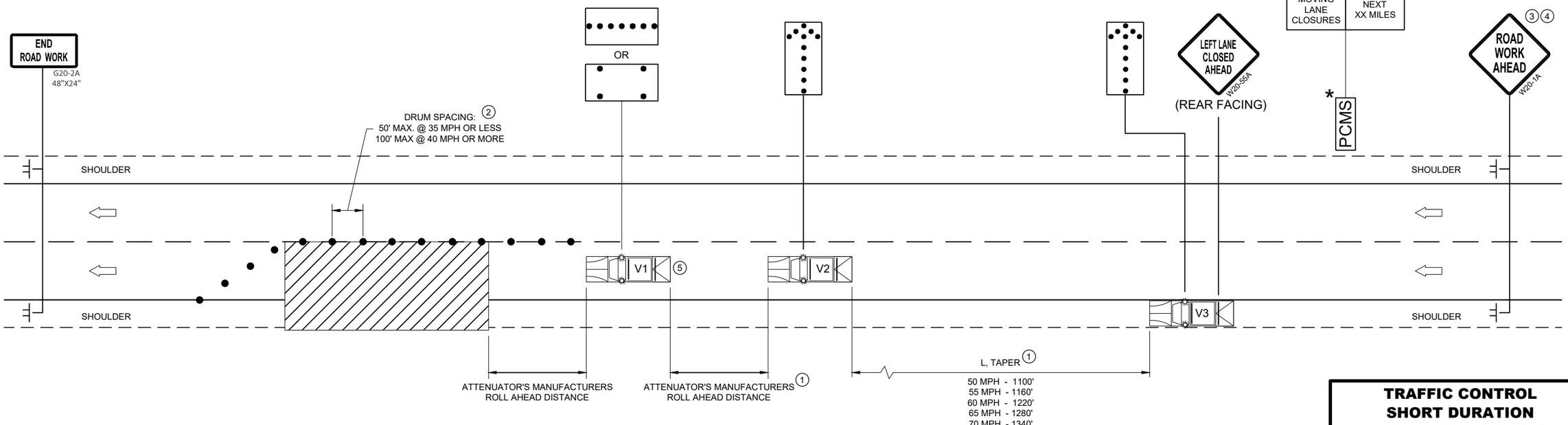
(4) SIGN NOT REQUIRED IF MOVING OPERATION OCCURS WITHIN A SIGNED ROAD WORK ZONE AREA.

(5) SHADOW VEHICLE 1 (V1) IS OPTIONAL

* PCMS OPTIONAL

PCMS MESSAGING

FRAME 1	FRAME 2
MOVING LANE CLOSURES	NEXT XX MILES



TRAFFIC CONTROL SHORT DURATION MOBILE OPERATIONS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2021
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

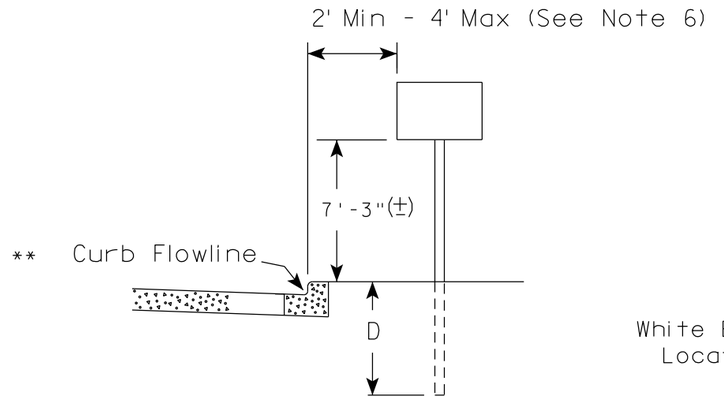
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SDD 15D43 - 02

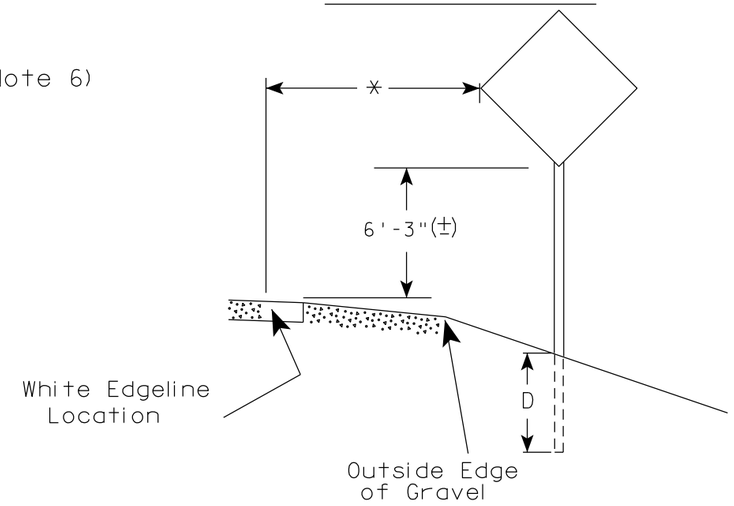
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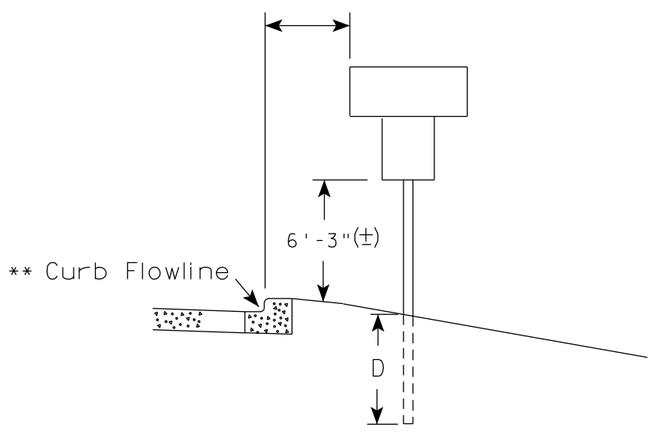
SDD 15D43 - 02

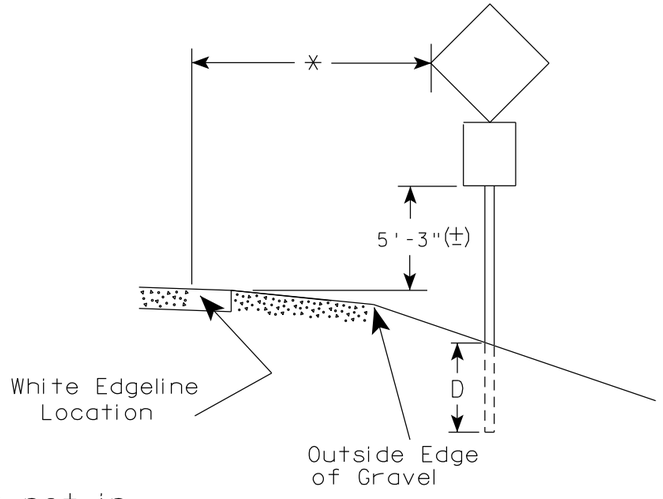
URBAN AREA



RURAL AREA (See Note 2)







** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

POST EMBEDMENT DEPTH

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

GENERAL NOTES

1. Signs wider than 4 feet or 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on or behind barrier wall, see A4-10 sign plate.
   The Double Arrow sign (W12-1D) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Enhanced Reference Markers, Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±).
3. For expressways and freeways, mounting height is 7'- 3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
4. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±).
5. Offset distance shall be consistent with existing signs or consistent throughout length of project.
6. The (±) tolerance for mounting height is 3 inches.
7. Folding signs shall be mounted at a height of 5'-3" (±) or as directd by the Engineer.

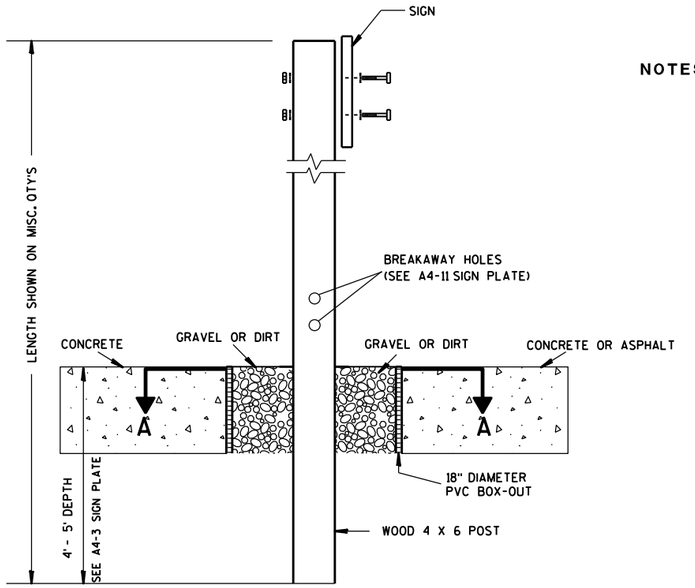
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

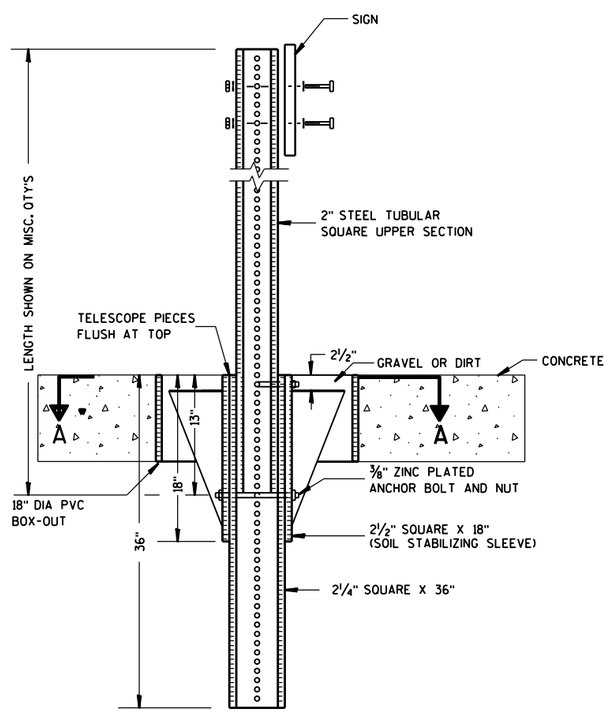
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 265	E



ELEVATION VIEW

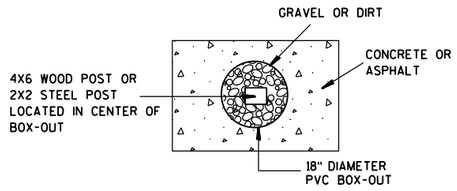
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

NOTES:
1. ALL MATERIAL TO BE APPROVED BY ENGINEER PRIOR TO INSTALLATION
2. SEE SIGN PLATE A4-8 FOR SIGN HARDWARE REQUIREMENTS
3. 18 INCH X 18 INCH SQUARE BOX-OUTS MAY BE USED FOR INSTALLATIONS IN EXISTING CONCRETE OR ASPHALT LOCATIONS.



ELEVATION VIEW

DETAIL OF STEEL 2 X 2 SIGN POST IN BOX-OUT



PLAN VIEW

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST BOX-OUTS A4-3B

WISCONSIN DEPT OF TRANSPORTATION

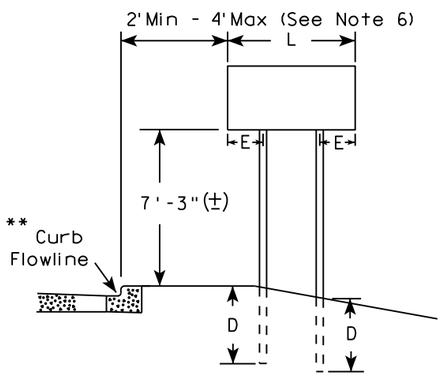
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/27/14 PLATE NO. A4-3B.1

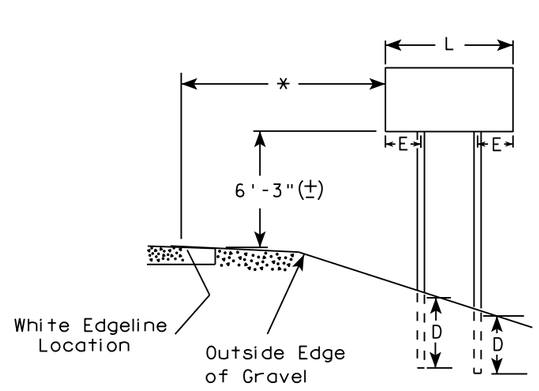
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

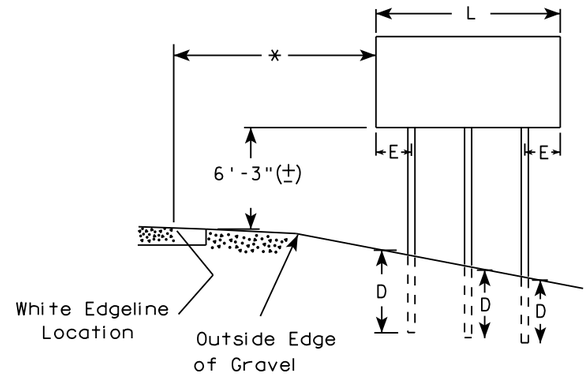
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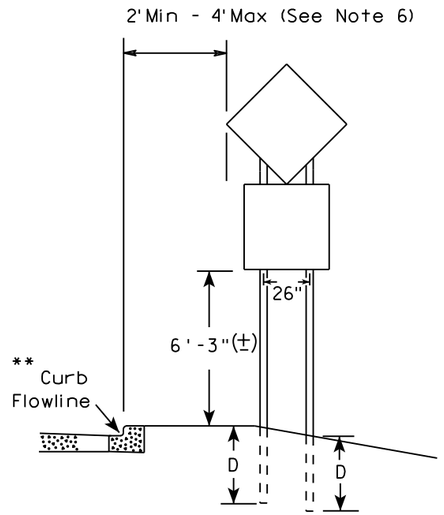
URBAN AREA



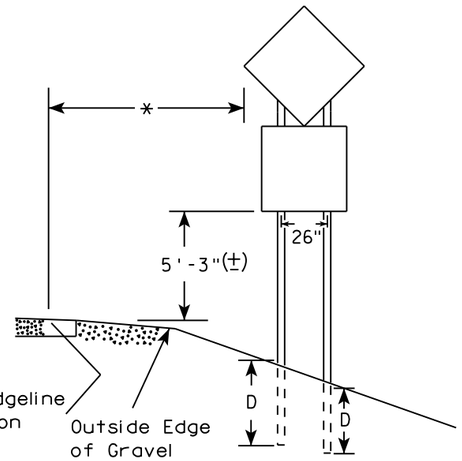
RURAL AREA (See Note 3)







48" DIAMOND WARNING SIGN



48" DIAMOND WARNING SIGN

SIGN SHAPE OTHER THAN DIAMOND (TWO POSTS REQUIRED)		
	L	E
***	Greater than 48" Less than 60"	12"
	60" to 108"	L/5

SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED)	
L	E
Greater than 108" to 144"	12"

GENERAL NOTES

1. For 3 or 4 post installations, individual post spacing shall be greater than 3'-6".
2. See tables below for required number of posts.
3. For expressways and freeways, mounting height is 7'-3" (±) or 6'-3" (±) depending upon existence of sub-sign.
4. The (±) tolerance for mounting height is 3 inches.
5. J-Assemblies are considered to be one sign for mounting height.
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. Folding signs shall be mounted at a height of 5'-3" (±) or as directed by the engineer.
8. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4"-3" (±).

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

*** See A4-3 sign plate for signs 4' or less in width and less than 20 S.F. in area.

POST EMBEDMENT DEPTH

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

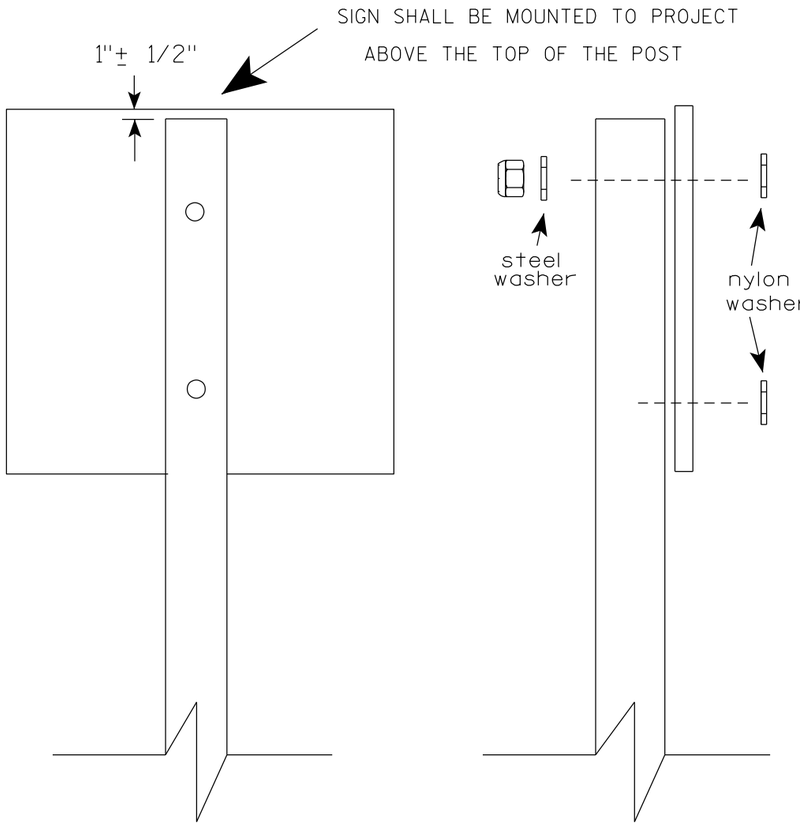
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

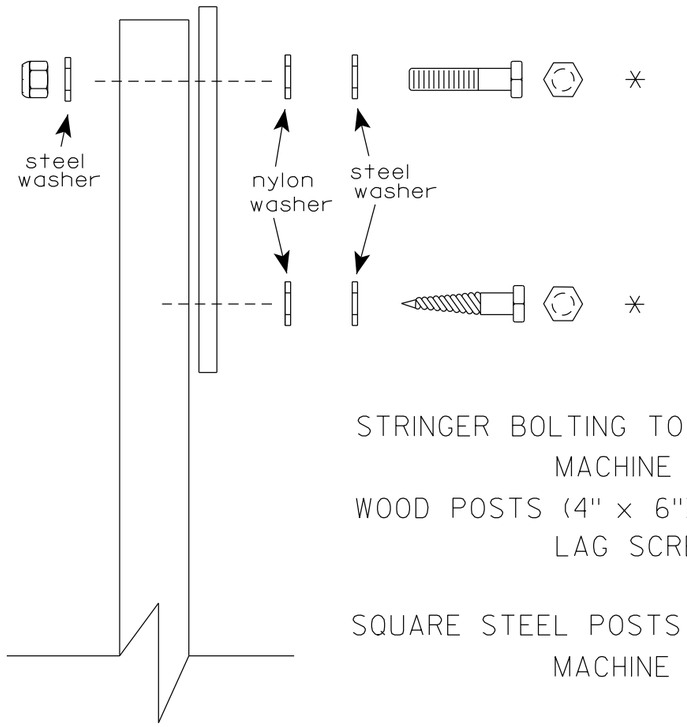
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 267	E





Nuts, bolts and lags used for mounting signs shall have hexagonal heads and shall be either :

a. Hot dip galvanized in accordance with ASTM Designation: A 153, Class D, or SC 3

b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

Threads on bolts and nuts shall be manufactured with sufficient allowance for the cadmium plate or galvanized coating to permit the nuts to run freely on the bolts.

STRINGER BOLTING TO ALUMINUM SIGNS (SEE SIGN PLATE A4-18)

MACHINE BOLTS - 5/16" X 1-3/4" Length w/ lock nuts

WOOD POSTS (4" x 6")

LAG SCREWS - 3/8" X 3" (NO STRINGERS ON BACK OF SIGN)
3/8" X 4" (STRINGERS ON BACK OF SIGN)

SQUARE STEEL POSTS (2" x 2")

MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts (NO STRINGER ON BACK OF SIGN)
3/8" X 5" Length w/ nuts (STRINGERS ON BACK OF SIGN)

RIVETS - 9/32" (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL
O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH

WASHERS (ALL POSTS) -

1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON

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

ATTACHMENT OF SIGNS TO POSTS

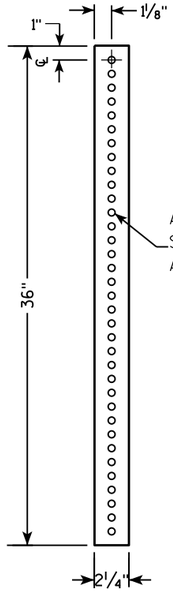
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

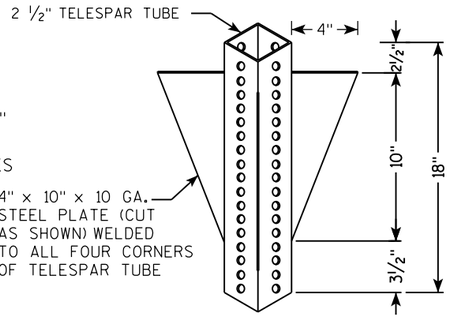
DATE 4/1/2020 PLATE NO. A4-8.9

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

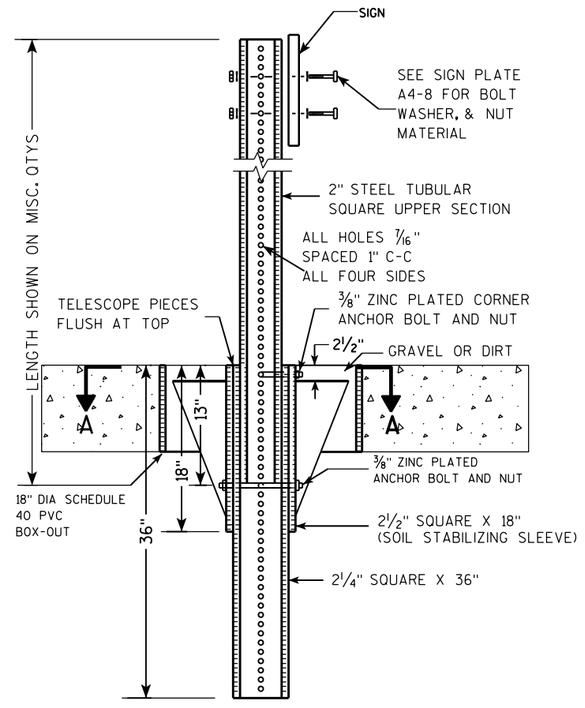
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



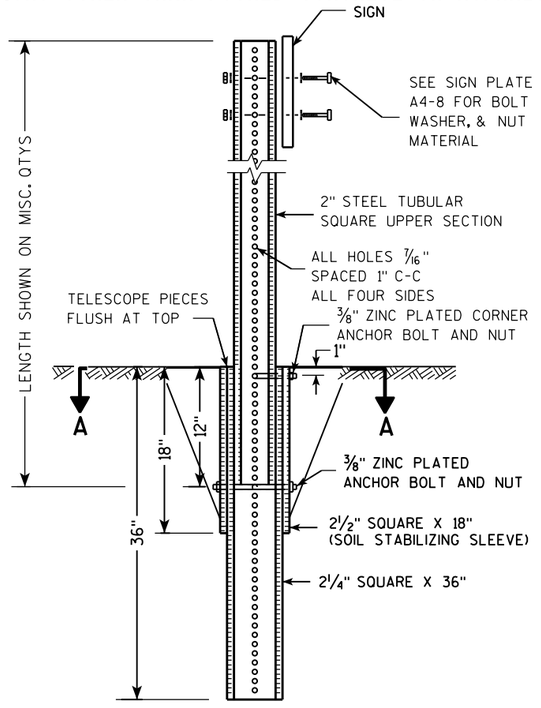
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12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

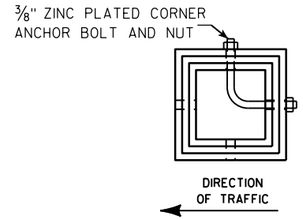


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



DETAIL OF TUBULAR STEEL SIGN POST
(IN LOCATIONS OTHER THAN POURED CONCRETE OR ASPHALT)





SECTION A-A

Area of Sign Installation (Sq. Ft.)	Number of Required Posts
9 or less	1
Greater than 9 less than or equal to 18	2
Greater than 18 less than or equal to 27	3

Signs wider than 3 feet or larger than 9 sq. ft shall be mounted on multiple posts (see above table).

TUBULAR STEEL
SIGN POST
A4-9

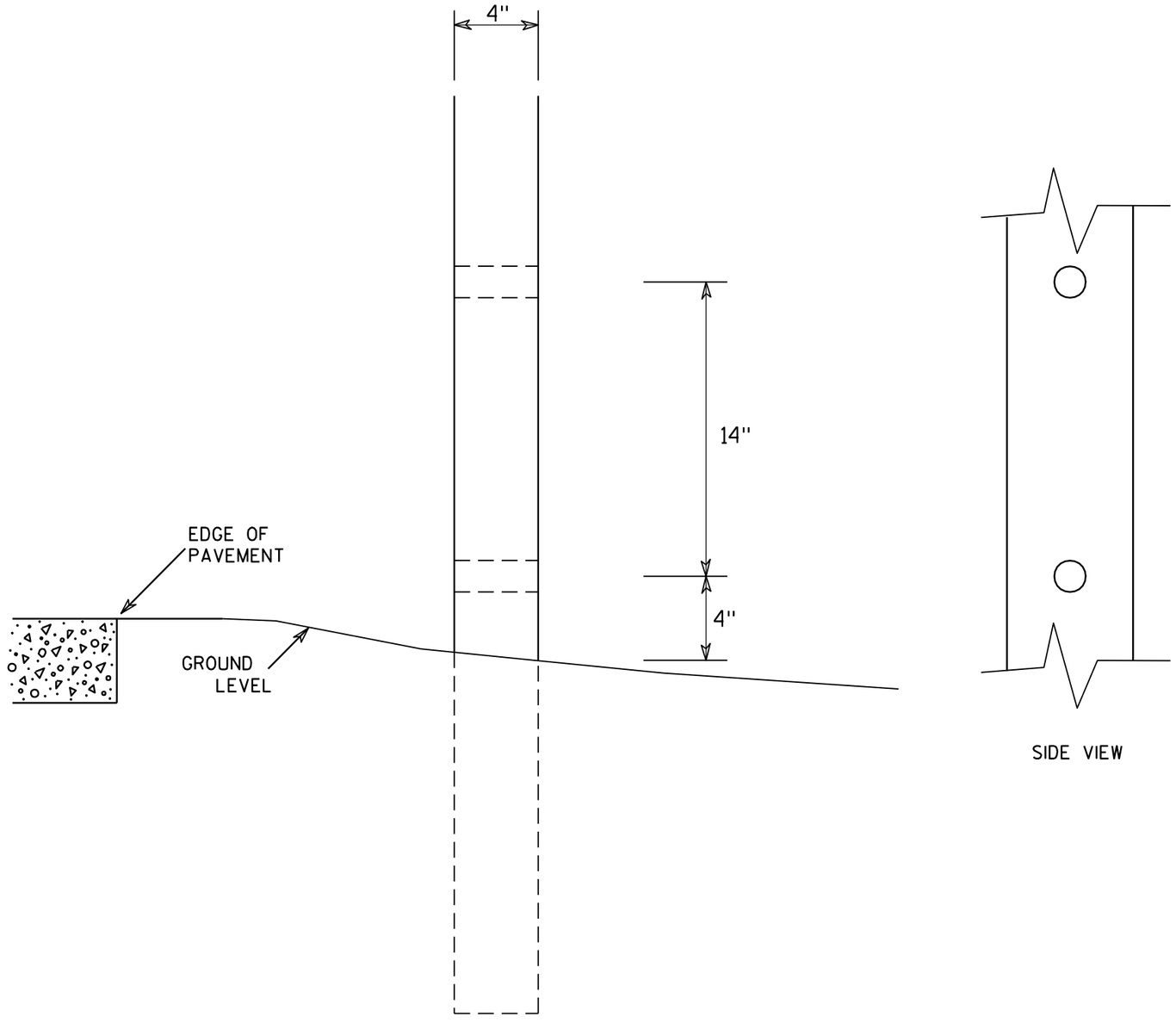
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE A4-9.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A49.DGN PLOT DATE : 05-FEB-2015 17:09 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000 WISDOT/CADDS SHEET 42



SIDE VIEW

GENERAL NOTES

1. All 4 x 6 Wood Posts shall be modified by having two 1½" diameter holes drilled perpendicular to the roadway centerline.

7

7

4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

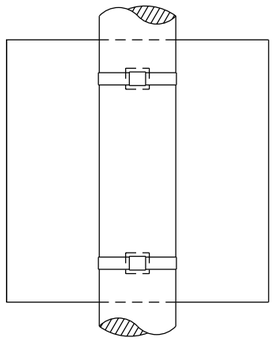
APPROVED Chester J Spang for State Traffic Engineer

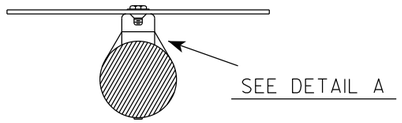
DATE 3/27/97 PLATE NO. A4-11.2

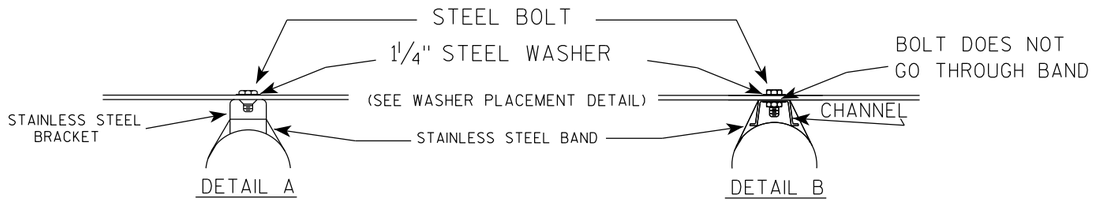
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 270	E

BANDING

SINGLE SIGN



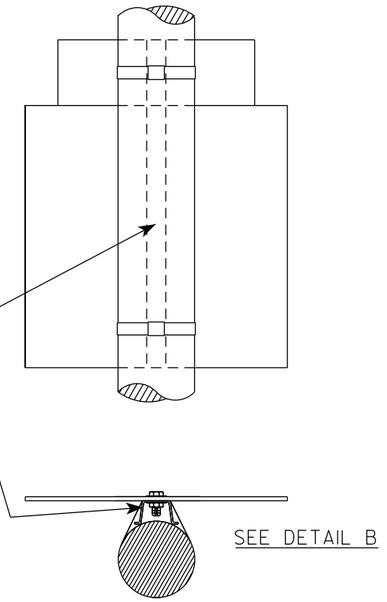




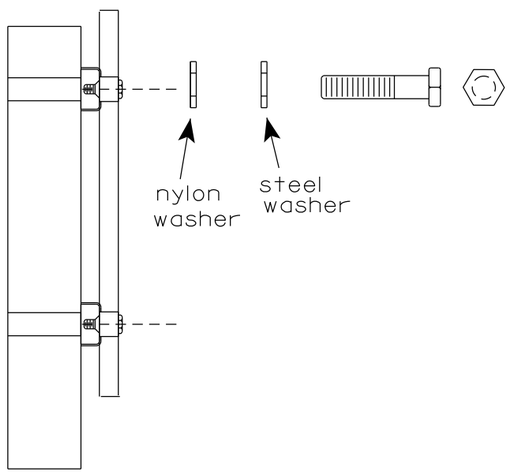
GENERAL NOTES

1. Any sign over 3 feet in width shall use the V-Block banding method. See A5-10 standard plate.
2. Signs 3 feet or greater in height shall have three bracket bands installed. Signs less than 3 feet in height shall have two bracket bands installed.
3. Banding and assembly bracket shall be stainless steel. All bands shall be ¾" in width and 0.025" thickness.
4. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
   a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D
   b. Electro-galvanized in accordance with ASTM designation: B 633, Type III, SC 3

"J" ASSEMBLY



WASHER PLACEMENT



WASHERS (ALL POSTS) -
1-1/4" O.D. X ⅜" I.D. X 1/16" STEEL
1-1/4" O.D. X ⅜" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

STANDARD SIGN
SIGN BANDING DETAILS

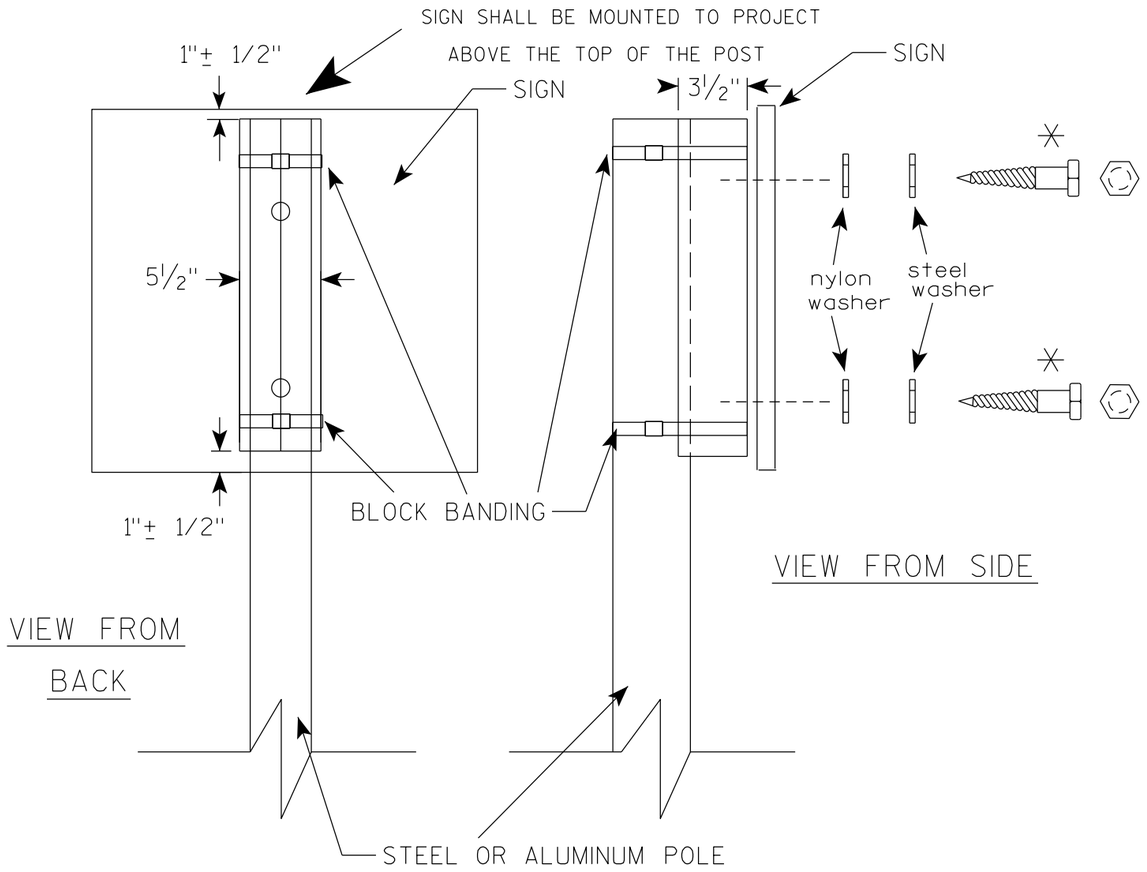
WISCONSIN DEPT OF TRANSPORTATION

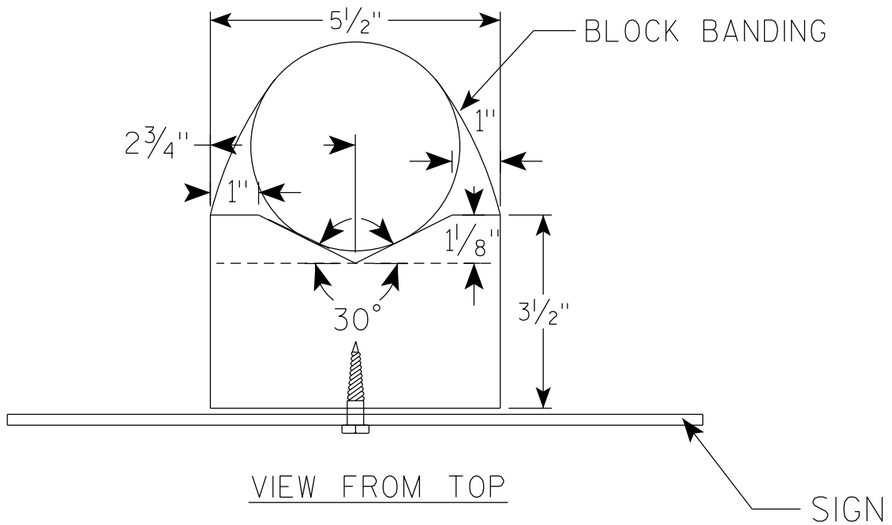
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/10/19 PLATE NO. A5-9.4

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 271	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A59.dgn PLOT DATE : 10-JUN 2019 4:10 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : $$.....plotscale.....$$





GENERAL NOTES

1. WOOD 4"X6" POST MATERIAL SHALL CONFORM TO 507.2.2 OF THE WisDOT STANDARD SPECIFICATIONS
2. BLOCK BANDING AND CLIPS SHALL BE STAINLESS STEEL, ¾" WIDTH AND 0.025" THICKNESS
3. SIGNS 3' OR GREATER IN HEIGHT SHALL UTILIZE 3 BLOCK BANDS. SIGNS UNDER 3' IN HEIGHT SHALL UTILIZE 2 BLOCK BANDS
4. ACTUAL NUMBER OF FASTENERS PER SIGN VARIES WITH THE SIGN AREA, BUT NORNALLY THERE ARE TWO. FOR SIGNS GREATER THAN 9 S.F. 3 FASTENERS SHALL BE USED.
5. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
   a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D
   b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3
6. ALL BOLTS SHALL HAVE HEXAGONAL HEADS.
7. STEEL WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X 1/16"
8. NYLON WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X .080 FOR TYPE H OR TYPE F FACE SIGN

✳ LAG BOLTS SHALL BE ⅜" X 2½"

BLOCK BANDING DETAIL (V-BLOCK OPTION)

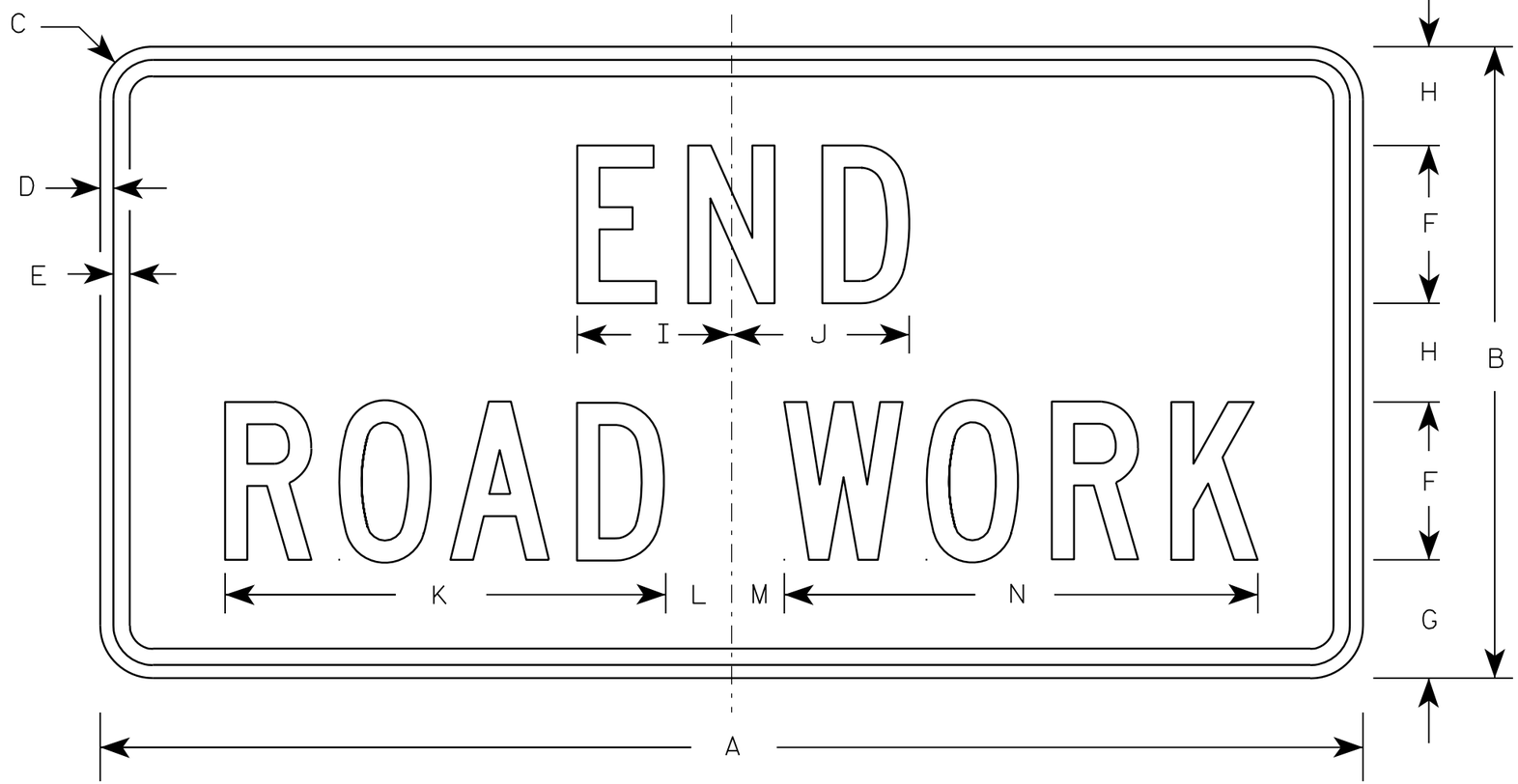
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/19/2022 PLATE NO. A5-10.3

PROJECT NO:

SHEET NO: 272 E



G20-2A

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - 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.

Metric equivalent for this sign is:

SIZE	
1	900 mm X 450 mm
2	1200 mm X 600 mm
3	1200 mm X 600 mm
4	1200 mm X 600 mm
5	1200 mm X 600 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1	36	18	1 1/8	3/8	1/2	4	3 3/4	2 1/2	4 1/8	4 1/8	11 1/8	2	1	12 1/8													4.5	0.41
2	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
3	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
4	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
5	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72

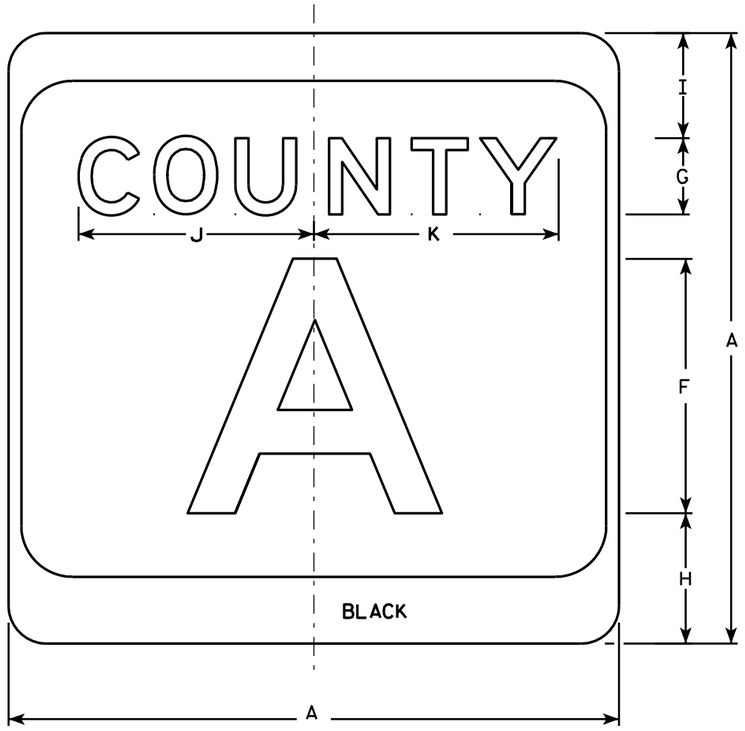
STANDARD SIGN
G20-2A

WISCONSIN DEPT OF TRANSPORTATION

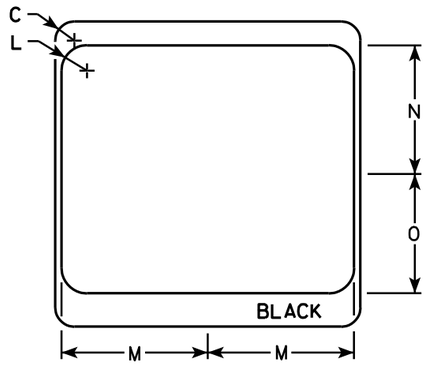
APPROVED Matthew R Rauch
for State Traffic Engineer

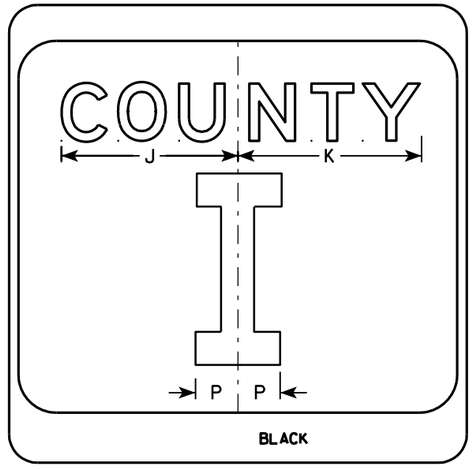
DATE 9/30/09 PLATE NO. G20-2A.8

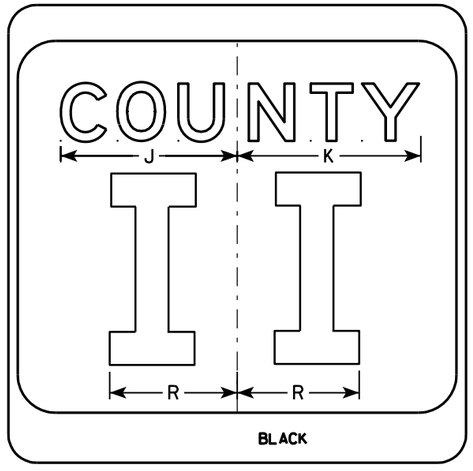
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 273	E



M1-5A







NOTES

1. Sign is Type II - see Note 7 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White & Black - See Note 7
   Message - Black
3. Message Series - see Note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Message Series E for 1 letter.
   Message Series D for 2 letters unless message is too big then Series C.
   Message Series C for 3 letters unless message is too big then Series B.
6. Substitute appropriate letters & optically center to achieve proper balance.
7. Permanent Signs
   Background - Type H Reflective
   Detour or temporary Signs
   Background - Reflective

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24		1 1/2			10	3	5 1/8	4 1/8	9 1/4	9 5/8	2	11 1/2	10 1/8	9 3/8	2 1/4		6 5/8									4.0
3	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0
4	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0
5	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0

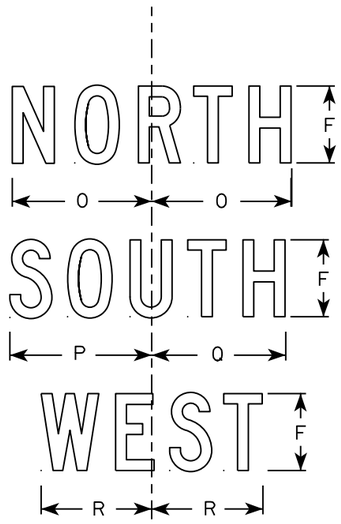
CTH MARKER
M1-5A FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/27/11 PLATE NO. M1-5A.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 274	E



NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - C
4. Substitute appropriate message as required.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	24	1 1/8	3/8	1/2	4	3	3	5	5 1/4	9 7/8	10 1/4	5 3/8	6	7 1/4	7 3/8	7	5 3/4									4.0
3																											
4	36	36	1 3/8	5/8	5/8	6	4 1/2	4 1/2	7 1/2	7 7/8	14 3/4	15 3/8	8	9	10 7/8	11	10 1/2	8 5/8									9.0
5																											

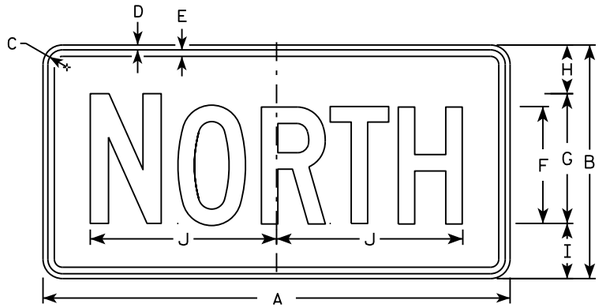
STANDARD SIGN
M1-95A

WISCONSIN DEPT OF TRANSPORTATION

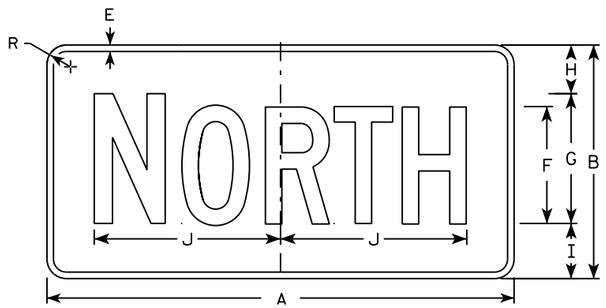
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/15/18 PLATE NO. M1-95A.4

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 275 | E



M3-1
MM3-1
MP3-1



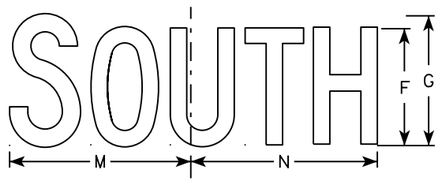
MB3-1
MK3-1
MN3-1



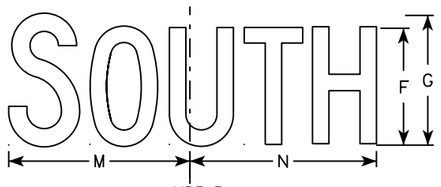
M3-2
MM3-2
MP3-2



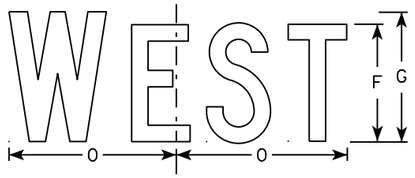
MB3-2
MK3-2
MN3-2



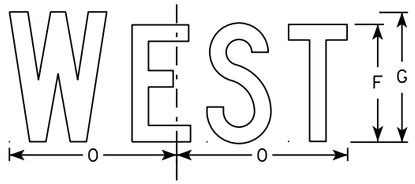
M3-3
MM3-3
MP3-3



MB3-3
MK3-3
MN3-3



M3-4
MM3-4
MP3-4



MB3-4
MK3-4
MN3-4

NOTES

1. All Signs Type II - Type H
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M3-1 thru M3-4 Background - White
   Message - Black
   MB3-1 thru MB3-4 Background - Blue
   Message - White
   MK3-1 thru MK3-4 Background - Green
   Message - White
   MM3-1 thru MM3-4 Background - White
   Message - Green
   MN3-1 thru MN3-4 Background - Brown
   Message - White
   MP3-1 thru MP3-4 Background - White
   Message - Blue
6. Note the first letter of each direction is larger than the remainder of the message.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/8	3/8	3/8	6	7	2 1/4	2 3/4	10 1/4	7 7/8	8 3/8	10 1/4	9 3/4	8 3/4			1 1/2									2.00
3	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5
4	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5
5	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5

STANDARD SIGNS
M3-1 thur M3-4
SERIES

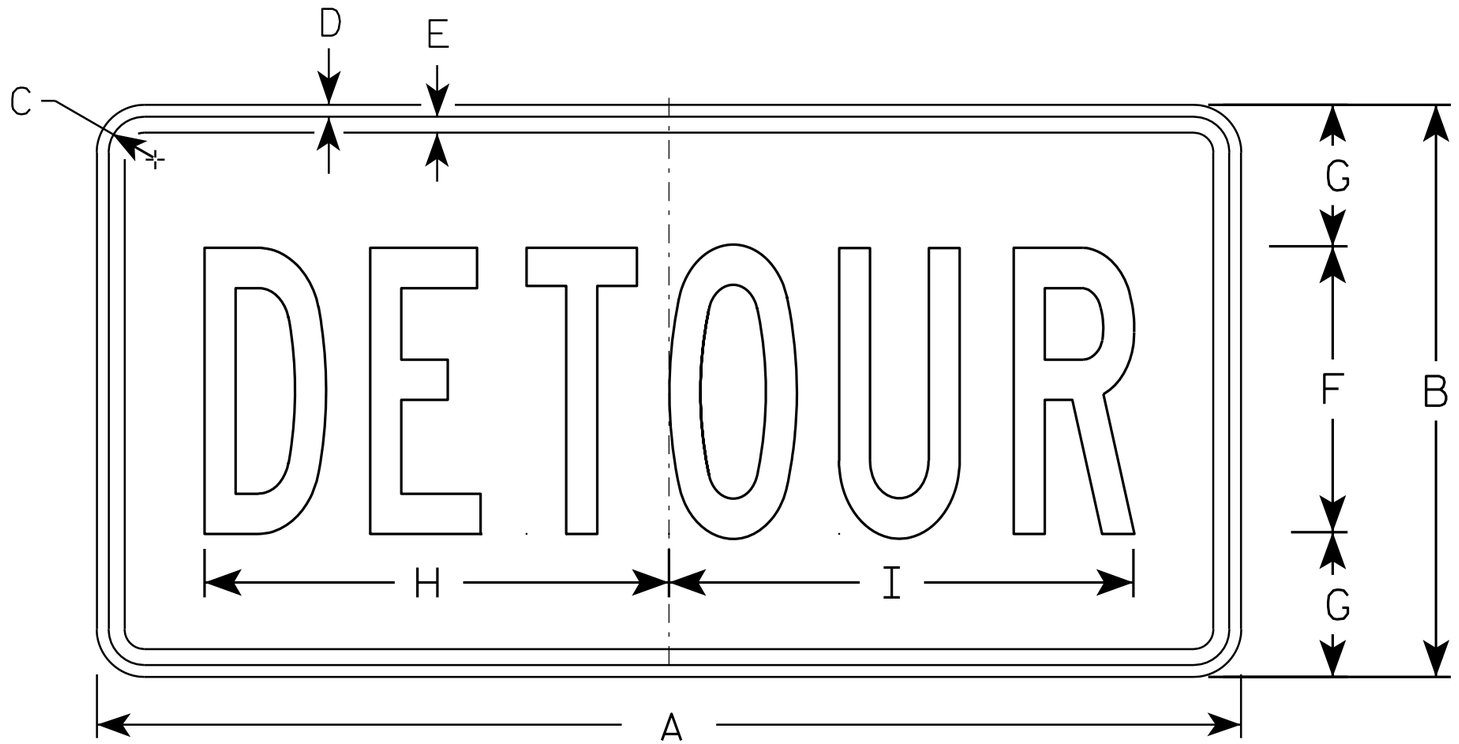
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew P Rauch for State Traffic Engineer

DATE 10/15/15 PLATE NO M3-1.14

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M31.DGN PLOT DATE : 01-DEC-2015 17:54 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



M4-8

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - B
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/8	3/8	3/8	6	3	10	10 1/4																		2.0
3	36	18	1 1/8	3/8	1/2	9	4 1/2	14 5/8	14 1/2																		4.5
4																											
5																											

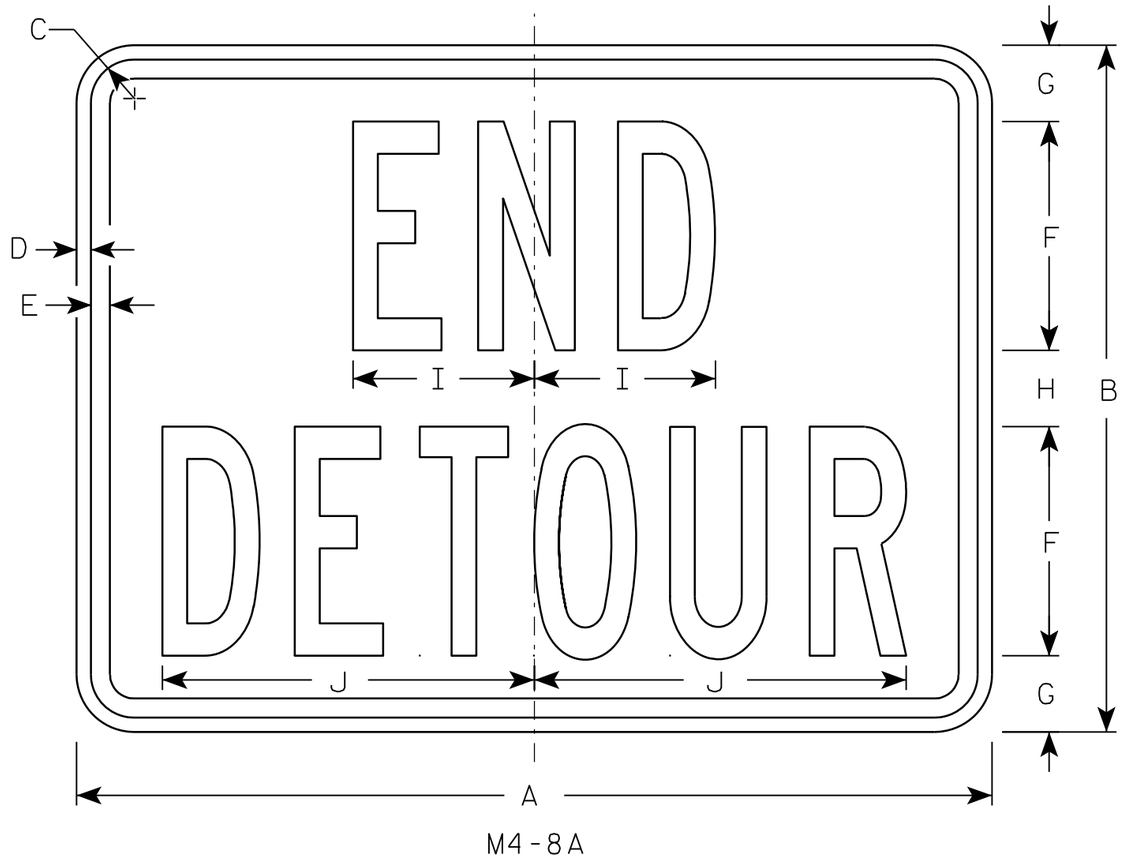
STANDARD SIGN
M4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/10/10 PLATE NO. M4-8.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 277	E



M4-8A

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - B
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	18	1 1/8	3/8	1/2	6	2	2	4 3/4	9 3/4																	3.0
3	30	24	1 1/8	3/8	1/2	8	2 1/2	3	6 3/4	13																	5.0
4																											
5																											

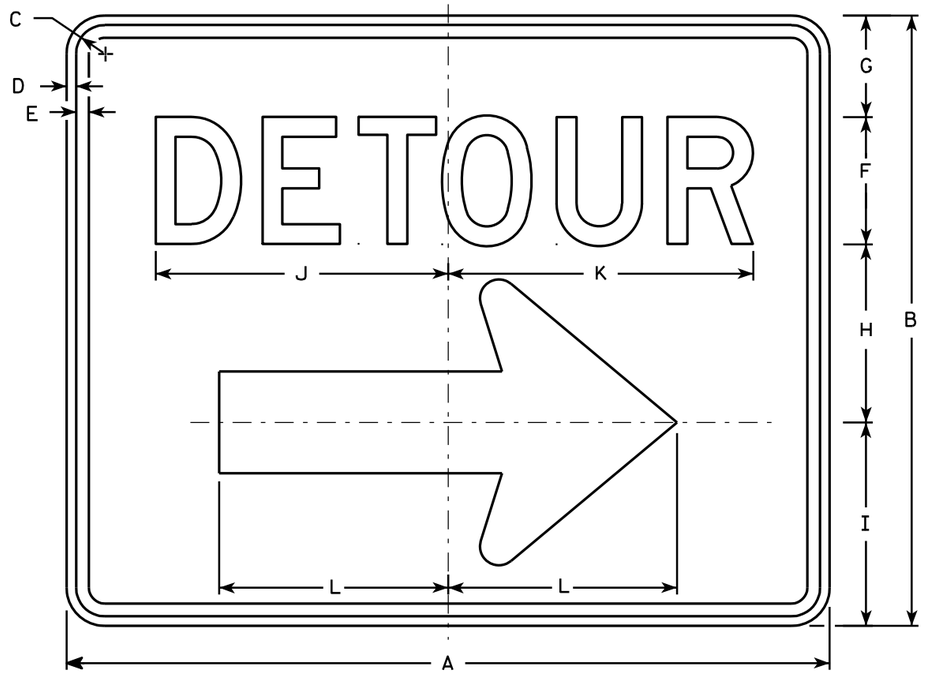
STANDARD SIGN
M4-8A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/9/11 PLATE NO. M4-8A.2

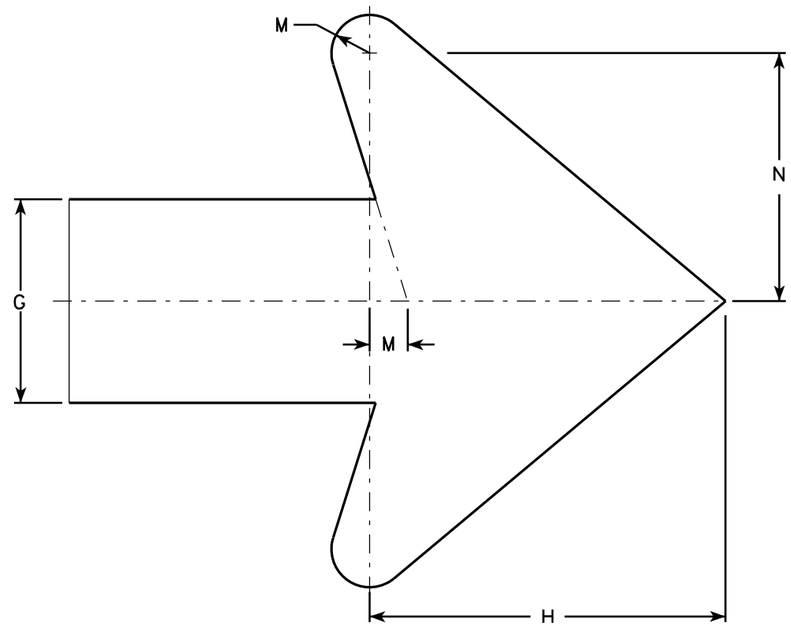
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 278	E



M4-9R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M4-9L is the same as M4-9R except the arrow is reversed.



Arrow Detail

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	30	24	1 1/8	3/8	1/2	5	4	7	8	11 1/2	12	9	3/4	4 7/8													5.00
3	30	24	1 1/8	3/8	1/2	5	4	7	8	11 1/2	12	9	3/4	4 7/8													5.00
4	48	36	1 3/8	1/2	5/8	8	6	10 1/2	11 5/8	20 5/8	20 1/2	13 1/4	1 1/8	6 7/8													12.0
5	48	36	1 3/8	1/2	5/8	8	6	10 1/2	11 5/8	20 5/8	20 1/2	13 1/4	1 1/8	6 7/8													12.0

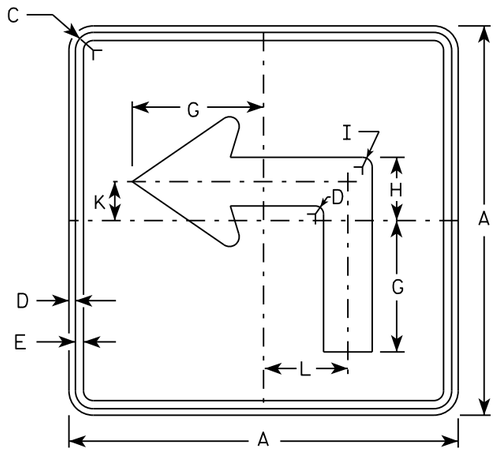
STANDARD SIGN
M4-9 R & L

WISCONSIN DEPT OF TRANSPORTATION

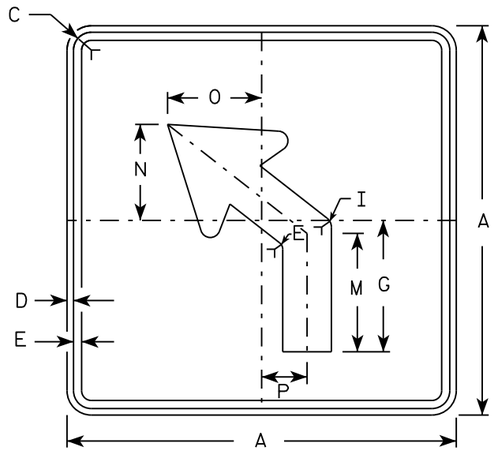
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/9/11 PLATE NO. M4-9R.4

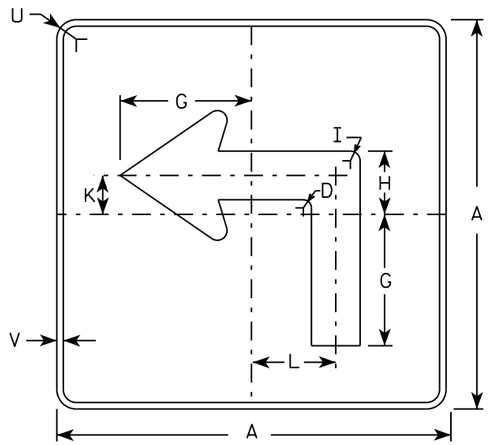
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 279 | E



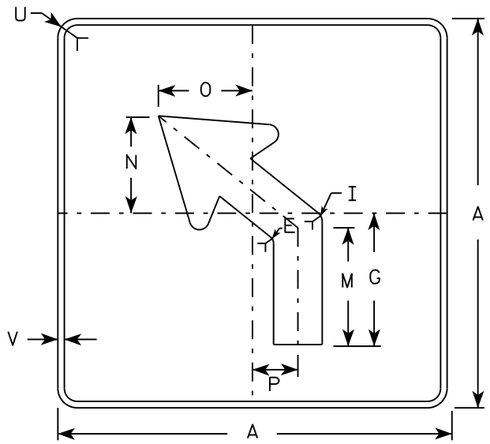
M5-1L
MM5-1L
MO5-1L
MP5-1L



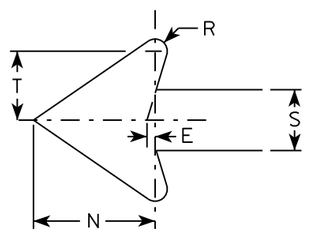
M5-2L
MM5-2L
MO5-2L
MP5-2L



MB5-1L
MK5-1L
MN5-1L
MR5-1L



MB5-2L
MK5-2L
MN5-2L
MR5-2L



NOTES

1. Signs are Type II - Type H reflective except as shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M5-1 and M5-2 Background - White
   Message - Black
   MB5-1 and MB5-2 Background - Blue
   Message - White
   MK5-1 and MK5-2 Background - Green
   Message - White
   MM5-1 and MM5-2 Background - White
   Message - Green
   MN5-1 and MN5-2 Background - Brown
   Message - White
   MO5-1 and MO5-2 Background - Orange - Type F Reflective
   Message - Black
   MP5-1 and MP5-2 Background - White - Type H Reflective
   Message - Blue
   MR5-1 and MR5-2 Background - Brown
   Message - Yellow
5. M5-1R same as M5-1L except arrow points right.
6. M5-2R same as M5-2L except arrow tilts right.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21		1 1/8	3/8	3/8		7	3 3/8	5/8		2 1/8	4 1/2	6 3/8	5 1/4	5	2 1/2		1/2	2 5/8	3	1 1/2	1/2					3.06
3	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25
4	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25
5	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25

STANDARD SIGN
M5-1 & M5-2

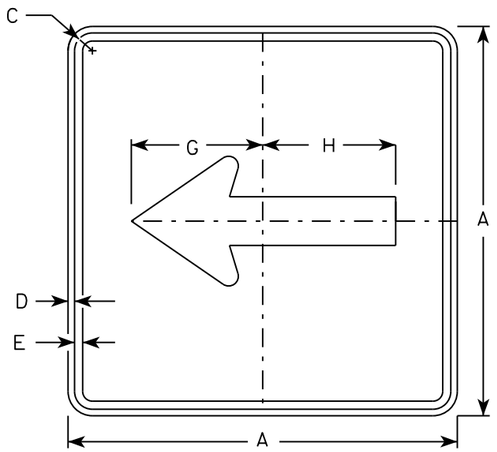
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

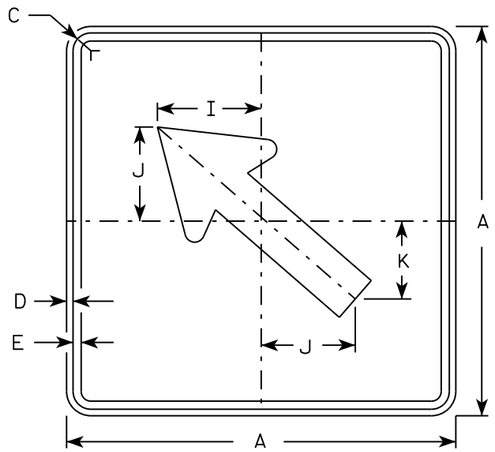
DATE 10/15/15 PLATE NO. M5-1.13

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M51.DGN PLOT DATE : 01-DEC-2015 18:07 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



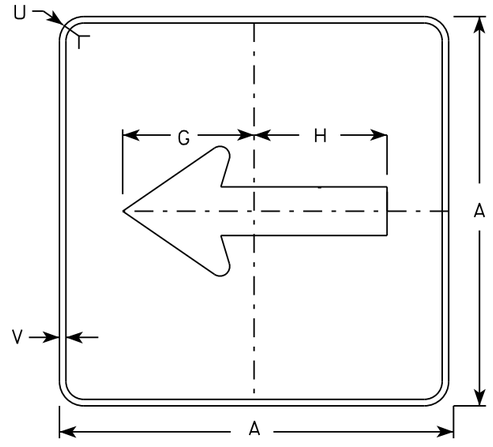
M6-1
MM6-1
MO6-1
MP6-1



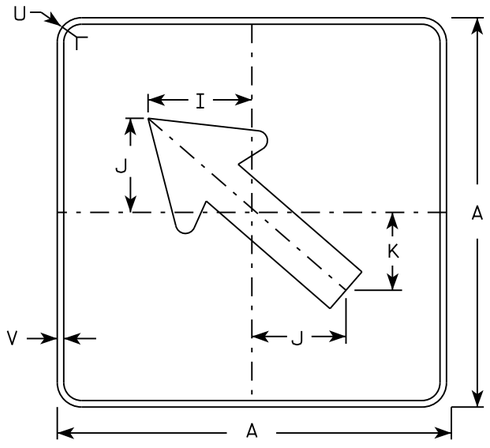
M6-2
MM6-2
MO6-2
MP6-2

NOTES

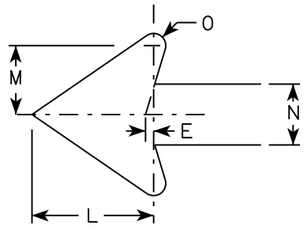
1. Signs are Type II - Type H except as Shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-1 and M6-2 Background - White
   Message - Black
   MB6-1 and MB6-2 Background - Blue
   Message - White
   MK6-1 and MK6-2 Background - Green
   Message - White
   MM6-1 and MM6-2 Background - White
   Message - Green
   MN6-1 and MN6-2 Background - Brown
   Message - White
   MO6-1 and MO6-2 Background - Orange - Type F Reflective
   Message - Black
   MP6-1 and MP6-2 Background - White
   Message - Blue
   MR6-1 and MR6-2 Background - Brown
   Message - Yellow



MB6-1
MK6-1
MN6-1
MR6-1



MB6-2
MK6-2
MN6-2
MR6-2



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21		1 1/8	3/8	3/8		7 1/2	7 1/8	5 5/8	5	4 1/4	5 1/4	3	2 5/8	1/2						1 1/2	1/2						3.06
3	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2						6.25
4	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2						6.25
5	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2						6.25

STANDARD SIGN M6-1 & M6-2 SERIES

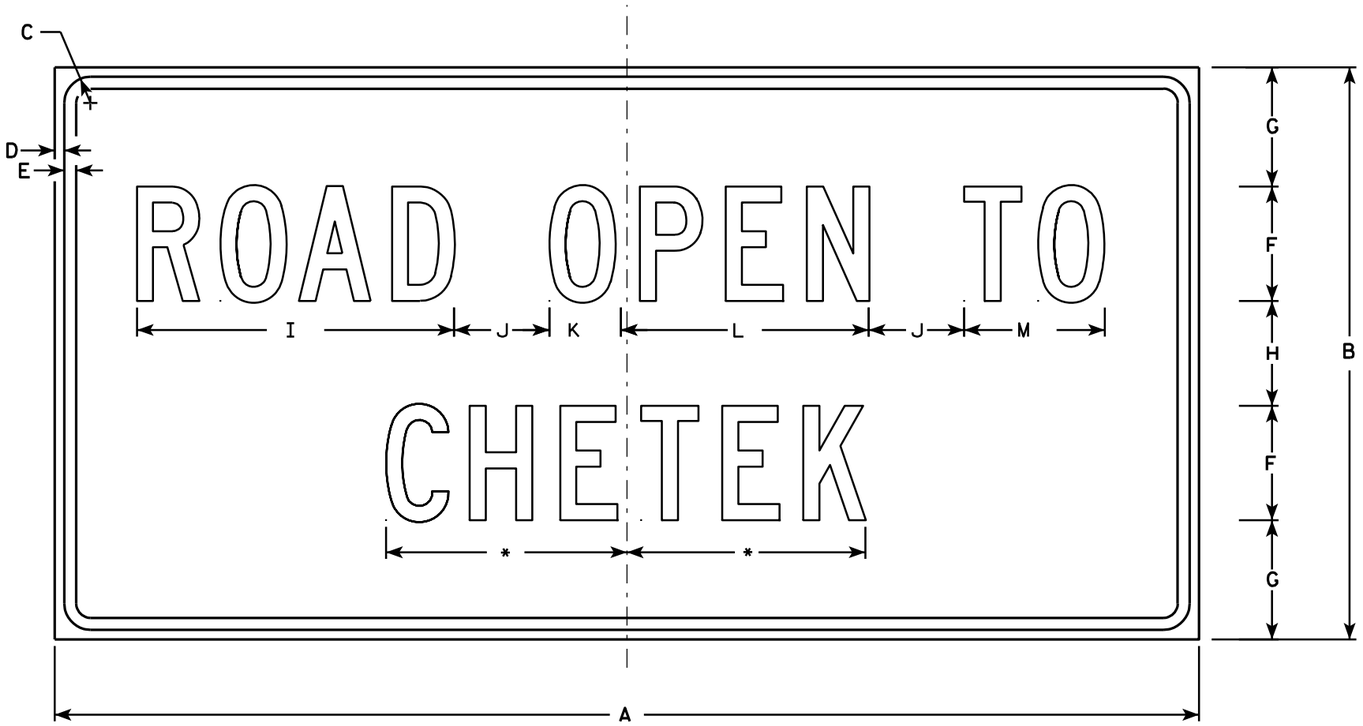
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE 281 M6-1.15

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M61.DGN PLOT DATE : 01-DEC-2015 17:57 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



R10-61

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. Substitute appropriate message and optically balance.

*See note 5

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	24	1 3/8	1/2	5/8	4	5 1/2	5	10 3/4	2	2 1/8	8 3/8	4 5/8														6.0
2S	60	30	1 3/8	1/2	5/8	6	6 1/4	5 1/2	16 5/8	5	3 3/4	13	7 3/8														12.5
2M	60	30	1 3/8	1/2	5/8	6	6 1/4	5 1/2	16 5/8	5	3 3/4	13	7 3/8														12.5
3																											
4																											
5																											

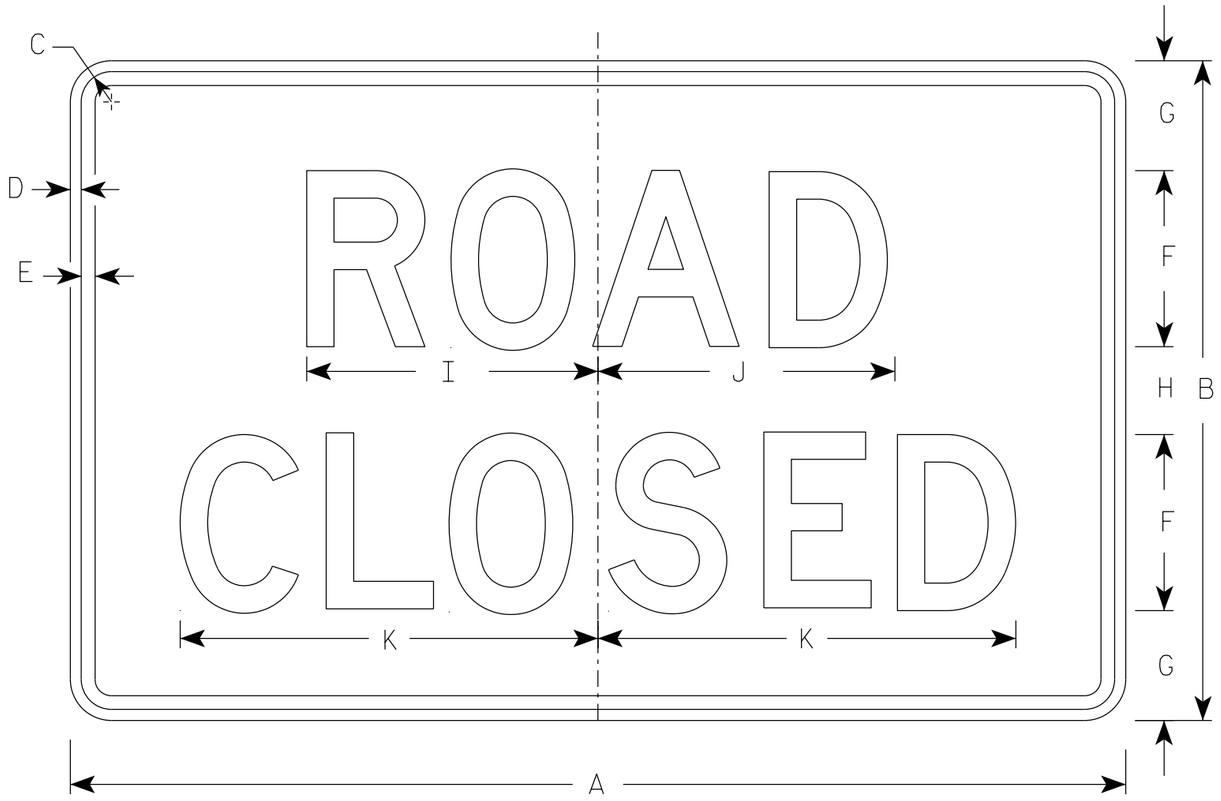
STANDARD SIGN
R10-61

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/4/11 PLATE NO. R10-61.5

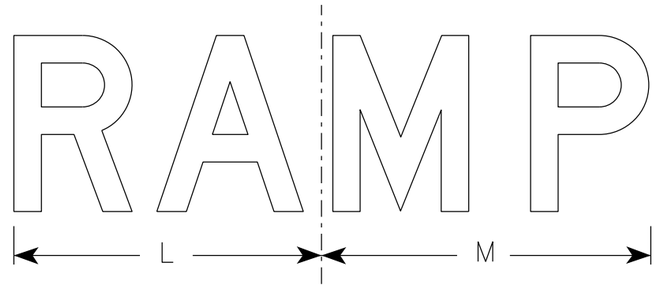
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 282	E



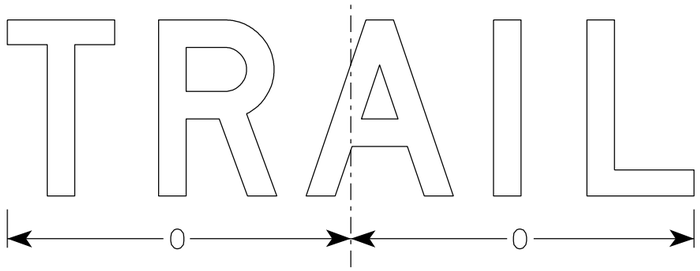
R11-2

NOTES

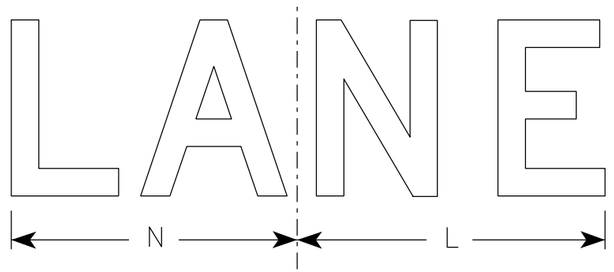
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Modify the message as required.



R11-2R



R11-2T



R11-2L

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
2M	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
3	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
4	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
5	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0

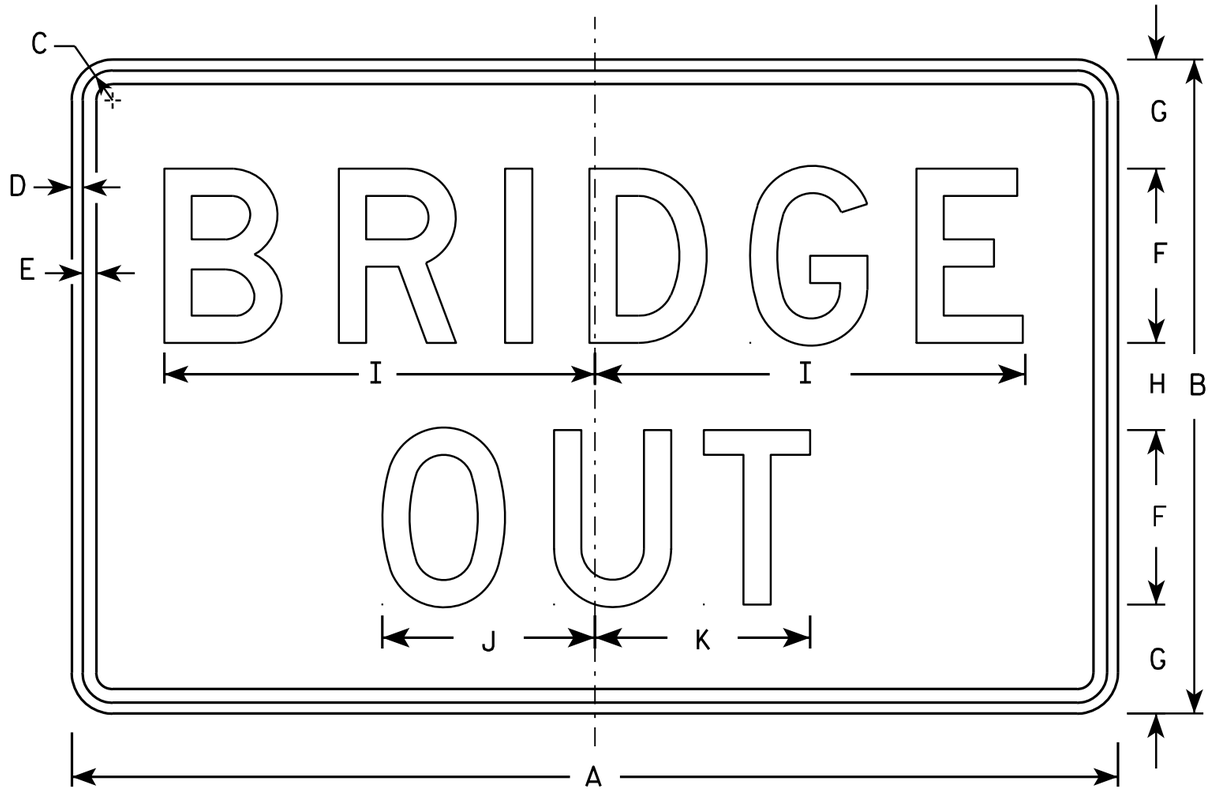
STANDARD SIGN
R11-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/29/2021 PLATE NO. R11-2.11

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 283	E



R11-2B

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	30	1 3/8	1/2	5/8	8	5	4	19 3/4	9 3/4	9 7/8																10.0
2M	48	30	1 3/8	1/2	5/8	8	5	4	19 3/4	9 3/4	9 7/8																10.0
3	48	30	1 3/8	1/2	5/8	8	5	4	19 3/4	9 3/4	9 7/8																10.0
4	48	30	1 3/8	1/2	5/8	8	5	4	19 3/4	9 3/4	9 7/8																10.0
5	48	30	1 3/8	1/2	5/8	8	5	4	19 3/4	9 3/4	9 7/8																10.0

STANDARD SIGN
R11-2B

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

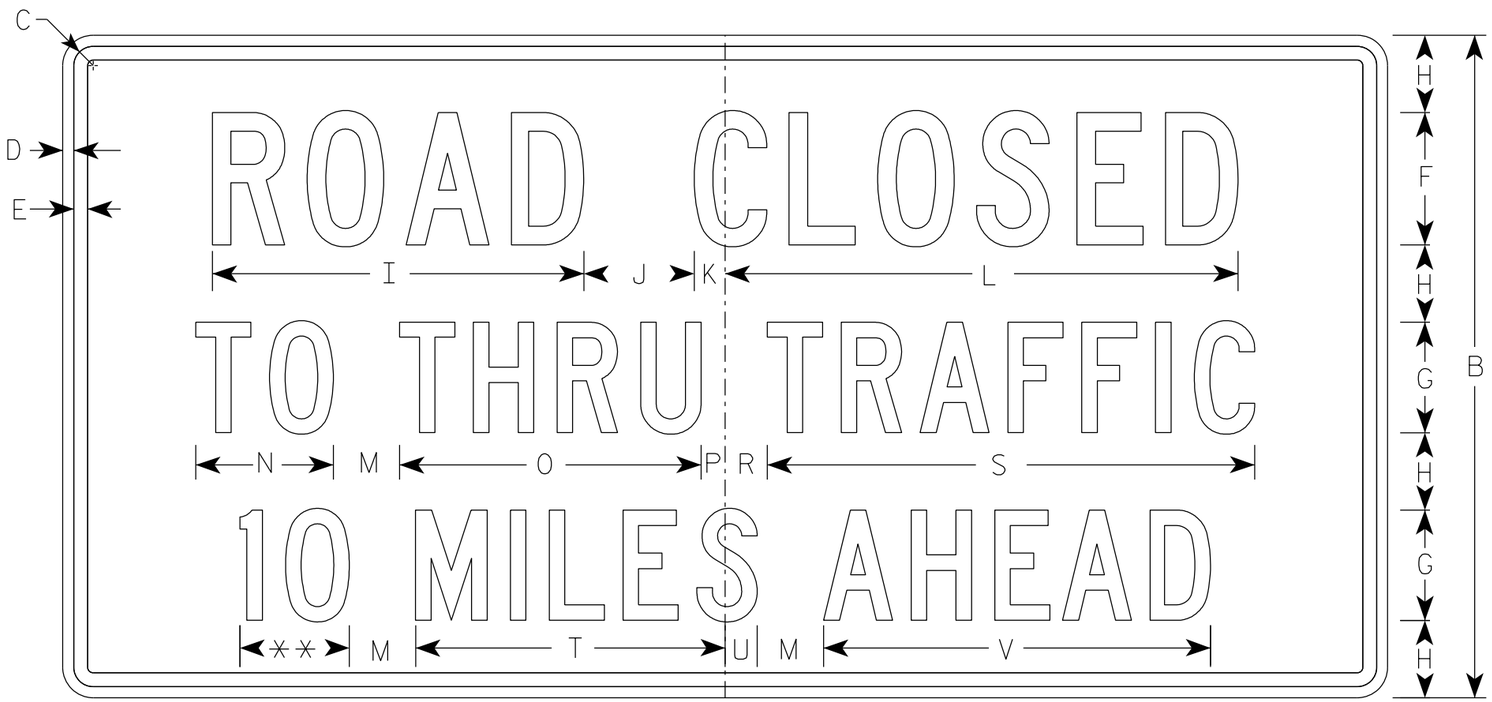
DATE 4/1/11 PLATE NO. R11-2B.2

PROJECT NO:

SHEET NO: 284 E

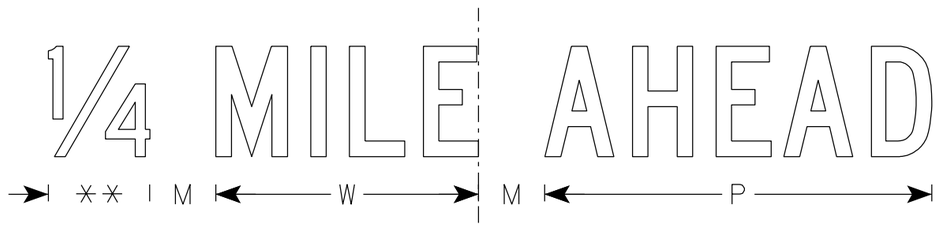
NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals to nearest quarter mile and optically adjust spacing to achieve proper balance.



R11-3

** See Note 5



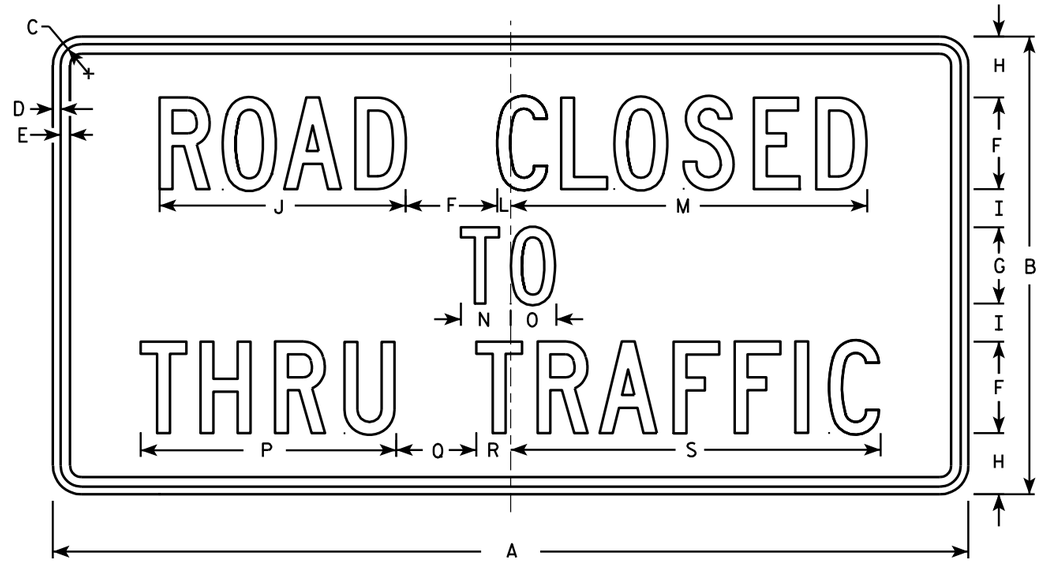
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	18	1 1/4	3/8	3/8	4	3	2	11 1/4	3	1 1/8	15 3/8	2	3 3/4	8 1/4	5/8		1 3/8	13 1/4	8 3/8	7/8	10 1/2	7 1/8				4.5
2S	60	30	1 3/8	1/2	5/8	6	5	3 1/2	16 7/8	5	1 3/8	23 1/4	3	6 1/4	13 5/8	1 1/8		1 7/8	22 1/8	14	1 1/2	17 1/2	11 7/8				12.5
2M	60	30	1 3/8	1/2	5/8	6	5	3 1/2	16 7/8	5	1 3/8	23 1/4	3	6 1/4	13 5/8	1 1/8		1 7/8	22 1/8	14	1 1/2	17 1/2	11 7/8				12.5
3																											
4																											
5																											

STANDARD SIGN
R11-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer
DATE 6/14/2021 PLATE NO. R11-3.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 285	E



R11-4

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	60	30	1 3/8	1/2	5/8	6	5	4	2 1/2	16 1/8		7/8	23 3/8	3 1/4	3	16 3/4	5 1/4	2 1/4	24 1/4								12.5
2M	60	30	1 3/8	1/2	5/8	6	5	4	2 1/2	16 1/8		7/8	23 3/8	3 1/4	3	16 3/4	5 1/4	2 1/4	24 1/4								12.5
3																											
4																											
5																											

STANDARD SIGN
R11 - 4

WISCONSIN DEPT OF TRANSPORTATION

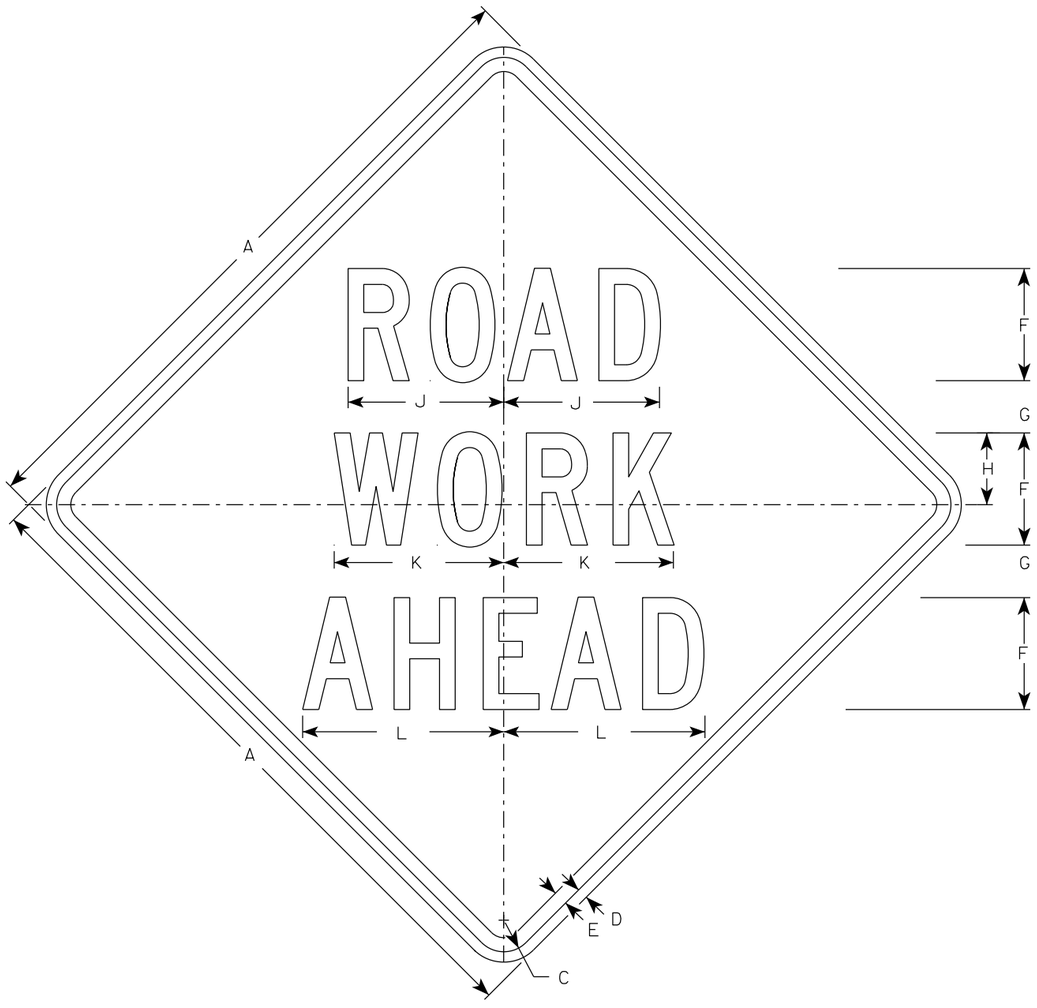
APPROVED Matthew R Rauch for State Traffic Engineer

DATE 4/1/11 PLATE NO. R11-4.3

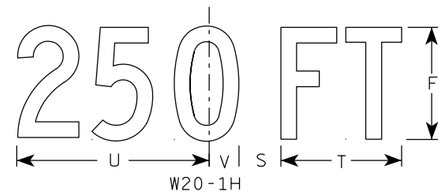
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 286 | E

NOTES

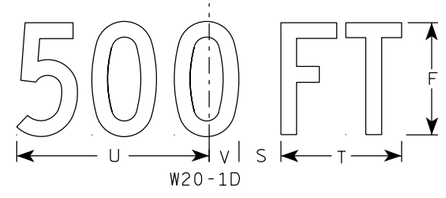
1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



W20-1A



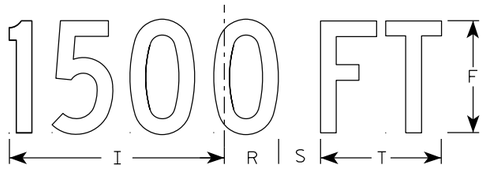
W20-1H



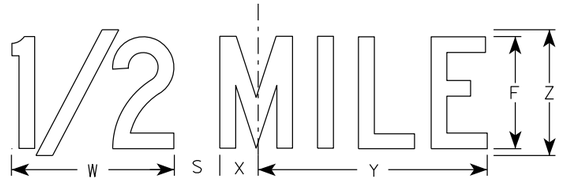
W20-1D



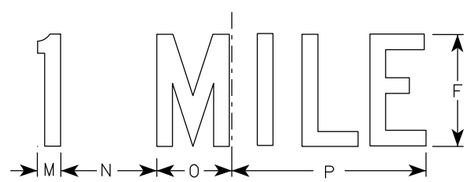
W20-1C



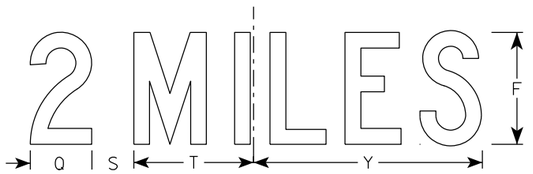
W20-1B



W20-1G



W20-1F



W20-1E

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	5	2 5/8	3 1/4	10 1/8	7	7 5/8	8 7/8	1 1/8	4 1/2	3 1/2	9	3 1/4	2 1/2	2 1/4	5 5/8	9	1 3/8	8	1 3/4	10 3/4	6	9.0
2S	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
2M	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
3	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
4	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
5	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0

STANDARD SIGN
W20-1A, B, C, D, E, F, G & H

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/25/2020 PLATE NO. W20-1.11

PROJECT NO:

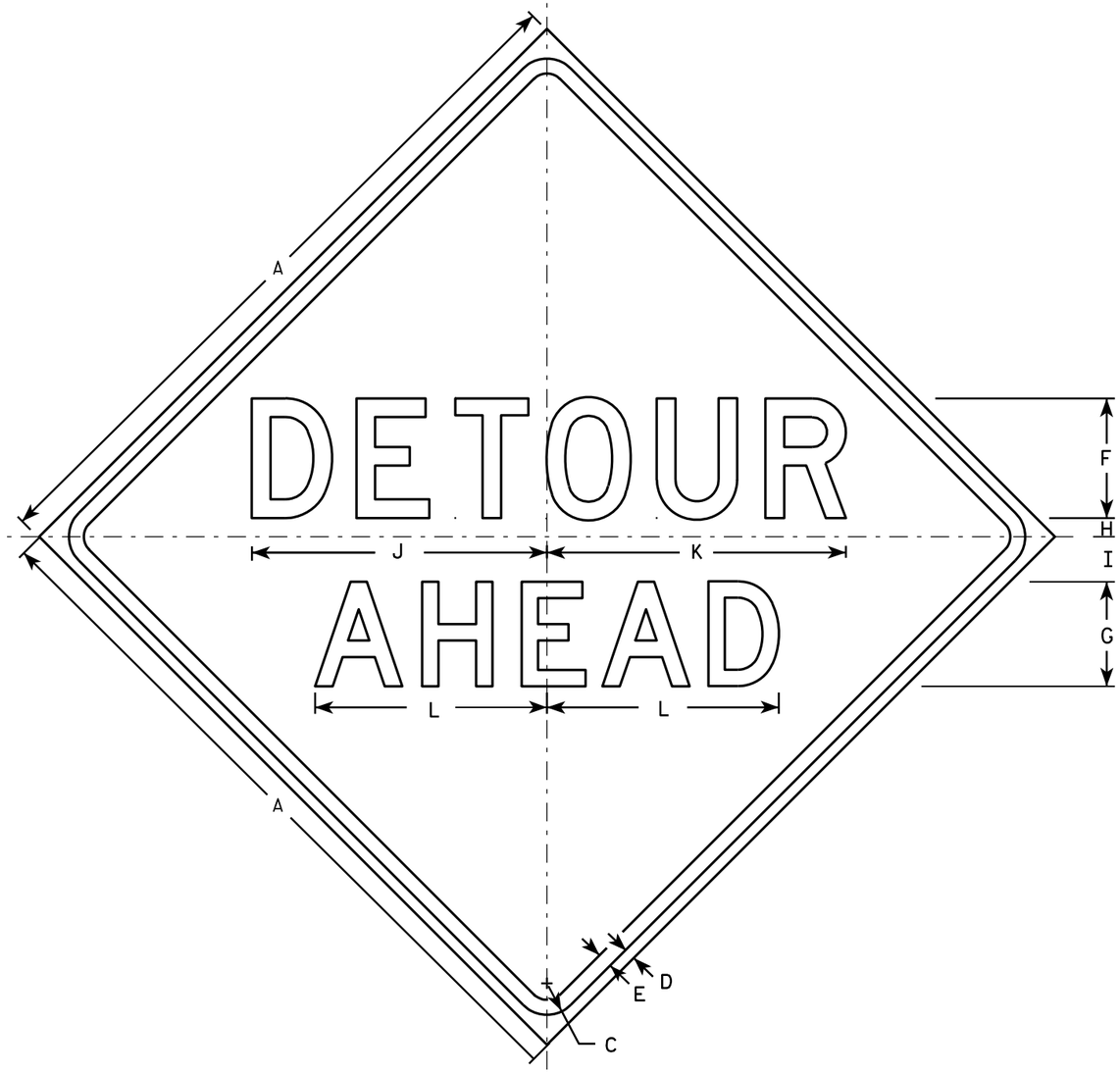
SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W201.DGN PLOT DATE : 25-MARCH-2020 PLOT BY : dotc4c

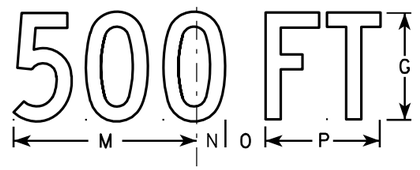
WISDOT/CADDS SHEET 42

7

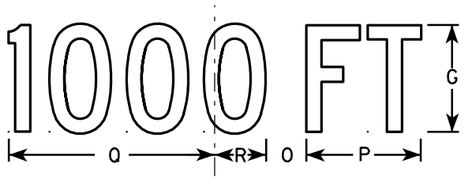
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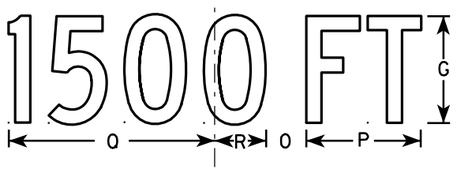
W20-2A



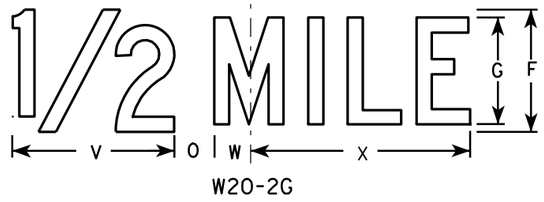
W20-2D



W20-2C



W20-2B



W20-2G



W20-2F

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - See note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Line 1 is Series D.
   Line 2 is Series D for AHEAD and Series C for all other distances.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	6	5	1	2 1/4	14 3/4	15	11 5/8	9	1 3/8	1 7/8	5 5/8	10 1/8	2 1/2	1 1/8	4 1/2	3 1/2	8	1 3/4	10 3/4			9.0
2S	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
2M	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
3	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
4	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
5	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0

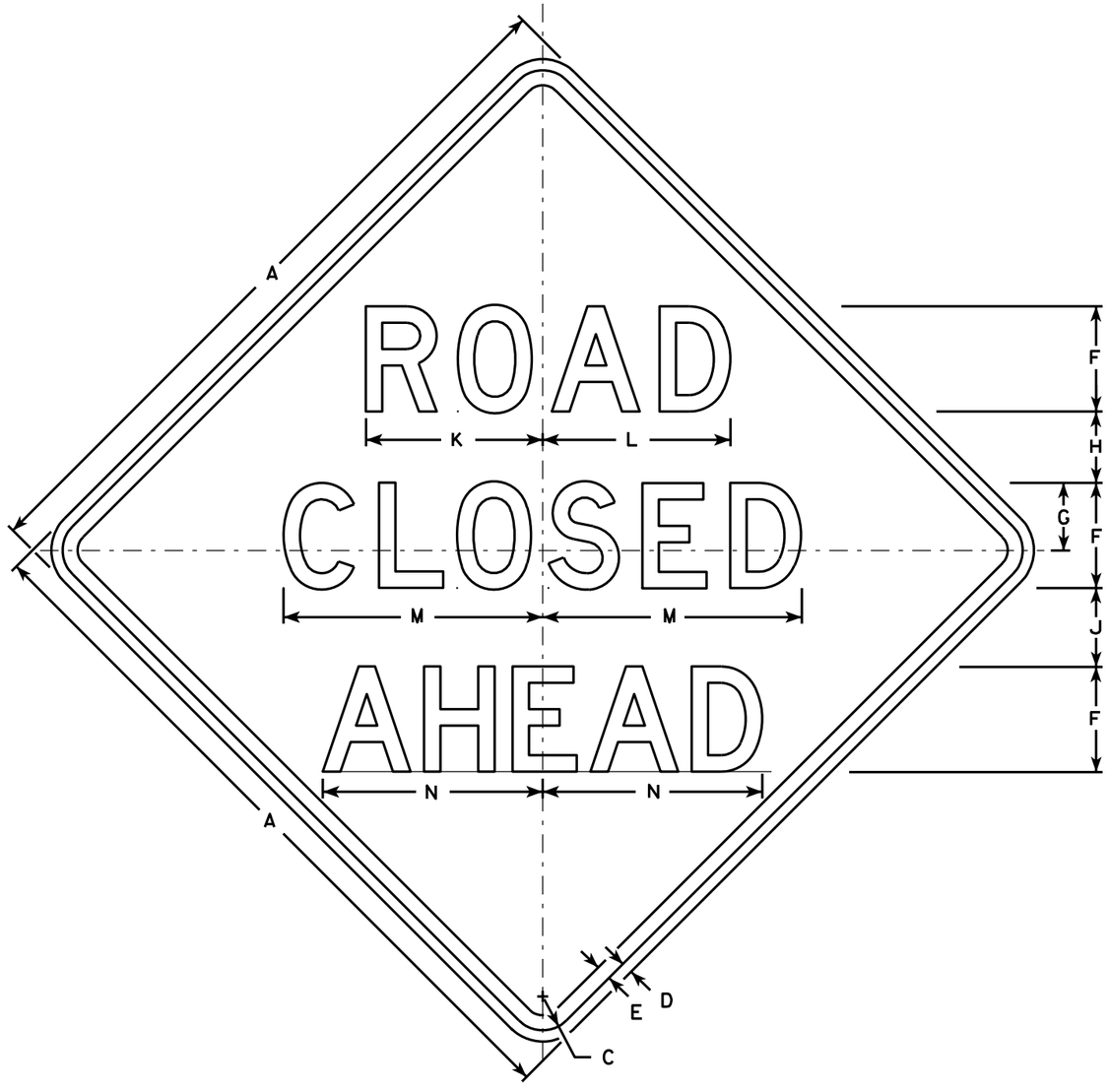
STANDARD SIGN
W20-2A,B,C,D,F & G

WISCONSIN DEPT OF TRANSPORTATION

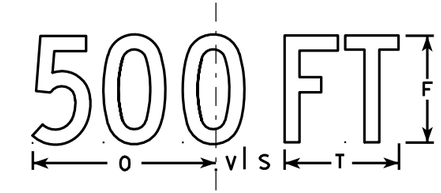
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-2.6

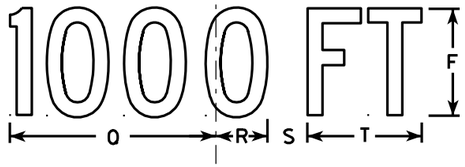
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 288	E



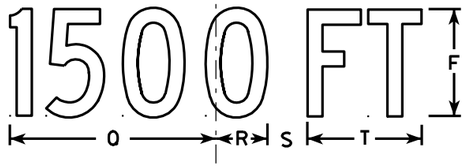
W20-3A



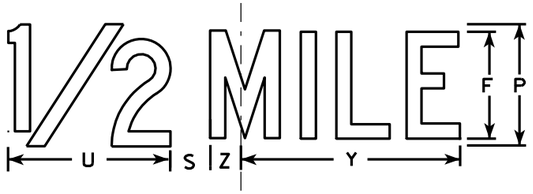
W20-3D



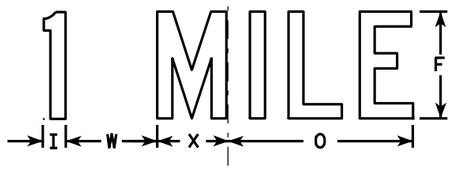
W20-3C



W20-3B



W20-3G



W20-3F

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
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5. Lines 1 and 2 are Series D.
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SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	5	3 3/8	3 1/2	1 1/8	4	8 3/8	8 7/8	12 1/2	11	9	6	10 1/8	2 1/2	1 7/8	5 5/8	8	1 3/8	4 1/2	3 1/2	10 3/4	1 3/4	9.0
2S	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
2M	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
3	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
4	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
5	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0

STANDARD SIGN
W20-3A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-3.7

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 289 | E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\W203.DGN PLOT DATE : 18-MAR-2011 12:08 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 9.931739:1.000000

WISDOT/CADDS SHEET 42

7

7

Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

http://www.dot.wisconsin.gov

WKE Mar 14, 2023

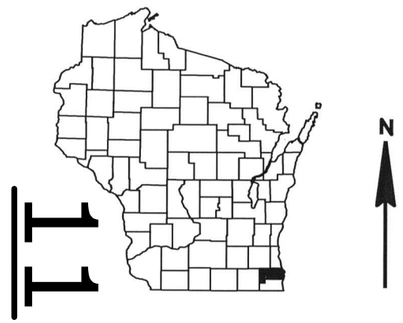
PROJECT ID: 1320-23-75
WITH: 1030-09-76

COUNTY: RACINE

ORDER OF SHEETS

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

TOTAL SHEETS = 80



N

DESIGN DESIGNATION

A.A.D.T.	=	NA
A.A.D.T.	=	NA
D.H.V.	=	NA
D.D.	=	NA
T.	=	NA
DESIGN SPEED	=	NA
ESALS	=	NA

CONVENTIONAL SYMBOLS

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

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

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

BURLINGTON - RACINE

STH 11 PARK AND RIDE

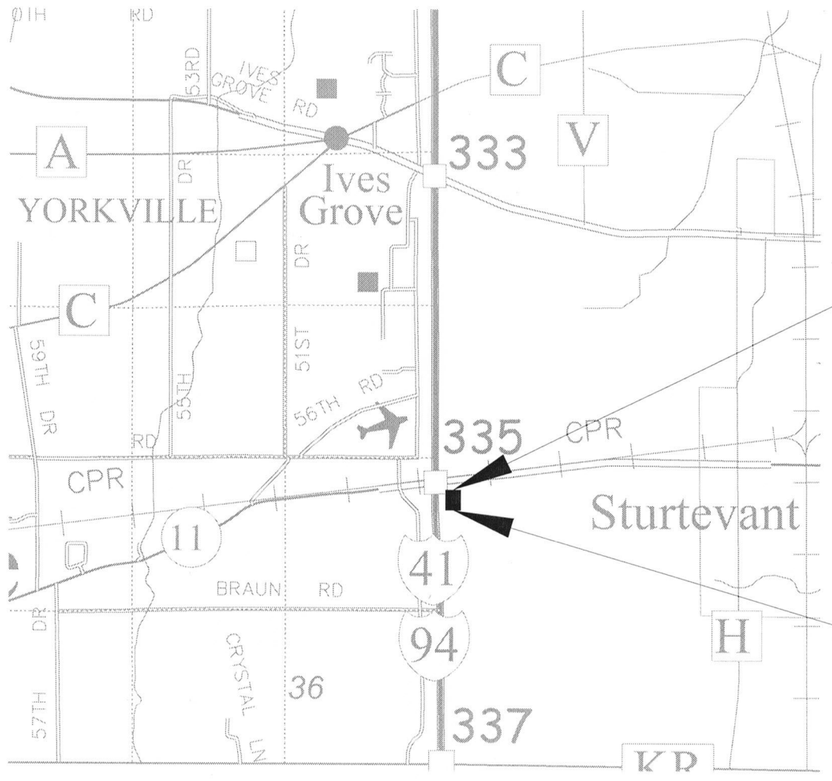
OFF SYS

RACINE

STATE PROJECT NUMBER
1320-23-75

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1320-23-75		

R-22-E



END PROJECT
STA 30+15.44
N=174761.101
E=594867.738

BEGIN PROJECT
STA 26+51.65
N=174397.314
E=594866.769

LAYOUT
SCALE 0 1 MI

TOTAL NET LENGTH OF CENTERLINE = 0.000

COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS), RACINE COUNTY, NAD 1983(1997)

ELEVATIONS SHOWN ON THIS PLAN ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF NAVD 88(1991)

ORIGINAL PLAN PREPARED BY

WISCONSIN JUSTIN M. ARNDT E-37695 ONTARIO WI PROFESSIONAL ENGINEER

10/26/2022 (Date) (Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	KAPUR & ASSOCIATES
Designer	KAPUR & ASSOCIATES
Project Manager	DIEGO SILVA
Regional Examiner	
Regional Supervisor	MANOJOY NAG

APPROVED FOR THE DEPARTMENT

DATE: 10/27/2022 Diego Silva (Signature)

E

FILE NAME : S:\DOT\DOT_SE\200578_STH 11 PARK AND RIDE LOT\13202305\SHEETSPLAN\010101-TI.DWG

PLOT DATE : 10/5/2022 12:05 PM PLOT BY : WALTER A. WOLAK II PLOT NAME :

UTILITY CONTACTS

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MV3658@ATT.COM

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BROOKFIELD, WI 53045
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GERALD.SCHULTZ@CHARTER.COM

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JAMES.NELSON@WE-ENERGIES.COM

WE ENERGIES EMERGENCY ELECTRIC DISPATCH – 1-800-662-4797

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CHRIS.DEGRAVE@WE-ENERGIES.COM

WE ENERGIES EMERGENCY GAS DISPATCH – 1-800-261-5325

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JEFFREY.MADSON@DOT.WI.GOV

ERIC PEREA
WISCONSIN DEPARTMENT OF TRANSPORTATION - STREET LIGHTING
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PHONE: (262) 548-6459
TIMOTHY.MCELMEEL@DOT.WI.GOV

WISCONSIN DEPARTMENT OF NATURAL RESOURCES
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141 NW BARSTOW STREET #180
WAUKESHA, WISCONSIN 53188
PHONE: (262) 623-0194
BENTON.STELZEL@WISCONSIN.GOV

WISCONSIN DEPARTMENT OF TRANSPORTATION
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WAUKESHA, WI 53188-3789
PHONE: (262) 548-5910
MARGARET.LIEDTKE@DOT.WI.GOV

WISCONSIN DEPARTMENT OF TRANSPORTATION
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WAUKESHA, WI 53187-0798
PHONE: (262) 548-6433
DIEGO.SILVA @DOT.WI.GOV

OTHER AGENCIES

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STURTEVANT, WI 53177
PHONE: (262) 886-8440
ALEXANDER.VALLEY@RACINECOUNTY.COM

SYLVANIA AIRPORT
AERIS AVIATION, LLC
2624 SOUHT SLYVANIA AVENUE
STURTEVANT, WI 53177
PHONE: (888) 882-3747
FLY@AEROSAVIATION.COM

SOUTHEASTERN WISCONSIN REGIONAL
PLANNING COMMISSION
ROB MERRY
W239 N1812 ROCKWOOD DRIVE
P.O. BOX 1607
WAUKESHA, WI 53187-1607
PHONE: (262) 953-4289
CELL: (920) 912-1036
RMERRY@SEWRPC.ORG

DESIGN CONTACTS

JUSTIN ARNDT
KAPUR AND ASSOCIATES
7711 N. PORT WASHINGTON RD
MILWAUKEE WI 53217
PHONE: (414) 255-4580

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

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.

THE CONTRACTOR SHALL NOTIFY DIGGERS HOTLINE AND AFFECTED UTILITIES PRIOR TO THE START OF WORK. ANY LOCAL MUNICIPAL UTILITY WHICH IS NOT A MEMBER OF DIGGERS HOTLINE MUST BE CONTACTED SEPARATELY.

TEMPORARY STORAGE OF ANY EXCAVATED MATERIAL WILL NOT BE PERMITTED IN WETLAND AREAS.

FERTILIZER SHALL NOT BE USED WITHIN 20 FEET OF NAVIGABLE WATERWAYS OR WETLANDS.

TOPSOIL SHALL NOT BE PLACED UNTIL APPROVED BY ENGINEER.

RE-TOPSOIL OF GRADED AREAS, AS DESIGNATED BY THE ENGINEER, IMMEDIATELY AFTER GRADING IS COMPLETED WITHIN THOSE AREAS. SEED, FERTILIZE, AND MULCH/EROSION MAT TOP-SOILED AREAS, AS DESIGNATED BY THE ENGINEER, WITHIN FIVE (5) CALENDAR DAYS AFTER PLACEMENT OF TOPSOIL.
IF GRADED AREAS ARE LEFT EXPOSED FOR MORE FIVE (5) CALENDAR DAYS, SEED THOSE AREAS WITH TEMPORARY SEED AND MULCH.

STOCKPILE EXCESS MATERIAL OR SPOILS ON UPLAND AREAS AWAY FROM WETLANDS, FLOODPLAINS AND WATERWAYS. STOCKPILED SOIL SHALL BE PROTECTED AGAINST EROSION. IF STOCKPILED MATERIAL IS LEFT FOR MORE THAN FIVE (5) CALENDAR DAYS, SEED THE STOCKPILE WITH TEMPORARY SEED AND MULCH.

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

ALL HOLES OR OPENINGS BELOW SUBGRADE RESULTING FROM ABANDONMENT OR REMOVAL OF EXISTING STRUCTURES WILL BE FILLED WITH COMPACTED BACKFILL GRANULAR GRADE 1 UNLESS REGULATIONS REQUIRE OTHERWISE. BACKFILL GRANULAR GRADE 1 IS INCIDENTAL TO THE REMOVAL ITEM.

BROKEN CONCRETE CONTAINING RE-BAR SHALL NOT BE USED AS RIPRAP.

TRAFFIC CONTROL DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FEDERAL HIGHWAY ADMINISTRATION MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).

SIGNS TO BE MOVED SHALL BE STORED AND PROTECTED BY THE CONTRACTOR, FREE FROM DAMAGE, UNTIL SUCH TIME AS THEY ARE RE-INSTALLED.

REFER TO SPECIAL PROVISIONS FOR EROSION CONTROL REQUIREMENTS.

STANDARD ABBREVIATIONS

AEW	APRON ENDWALL
AGG	AGGREGATE
BAD	BASE AGGREGATE DENSE
BM	BENCHMARK
C&G	CURB AND GUTTER
C/L	CENTER OR CONSTRUCTION LINE
CMCP	CULVERT PIPE CORRUGATED METAL
CONC	CONCRETE
CP	CULVERT PIPE
CPRC	CULVERT PIPE REINFORCED CONCRETE
CSD	CONCRETE SURFACE DRAIN
CY	CUBIC-YARD
D	DEGREE OF CURVE
Δ	DELTA
DISCH	DISCHARGE
FE	FIELD ENTRANCE
HMA	HOT MIX ASPHALT
INV	INVERT
L	LENGTH OF CURVE
LHF	LEFT HAND FORWARD
LT	LEFT
MIN	MINIMUM
M/L	MATCHLINE
NB	NORTHBOUND
NC	NORMAL CROWN
PAVT	PAVEMENT
PC	POINT OF CURVE
PCC	POINT OF COMPOUND CURVE
PE	PRIVATE ENTRANCE
PI	POINT OF INTERSECTION
PLE	PERMANENT LIMITED EASEMENT
PT	POINT OF TANGENT
R	RADIUS OF CURVE
R/L	REFERENCE LINE
R/W	RIGHT OF WAY
RC	REVERSE CROWN
RCAEW	APRON ENDWALL FOR CULVERT PIPE REINFORCED CONCRETE
REQD	REQUIRED
RHF	RIGHT HAND FORWARD
RO	RUN OFF LENGTH
RRSP	RAILROAD SPIKE
RT	RIGHT
SALV	SALVAGED
SAPBC	SALVAGED ASPHALTIC PAVEMENT BASE COURSE
SB	SOUTHBOUND
SDD	STANDARD DETAIL DRAWING
SE	SUPERELEVATION
SF	SQUARE FOOT
STA	STATION
SY	SQUARE YARD
T	TANGENT LENGTH
TLE	TEMPORARY LIMITED EASEMENT
VCL	VERTICAL CURVE LENGTH
VPC	POINT OF VERTICAL CURVE
VPI	POINT OF VERTICAL INTERSECTION
VPT	POINT OF VERTICAL TANGENT

ORDER OF SECTION 2 DETAIL SHEETS

GENERAL NOTES
PROJECT OVERVIEW
TYPICAL SECTIONS
REMOVAL PLAN
EROSION CONTROL PLAN
PERMANENT SIGNING
LIGHTING PLAN
PAVEMENT MARKING
TRAFFIC CONTROL
ALIGNMENT DIAGRAM

2

CONSTRUCT HMA PAVEMENT WITH THE FOLLOWING LAYERS AND GRADATIONS:

4-INCH HMA PAVEMENT
2” HMA PAVEMENT 4 LT 58-28 S UPPER LAYER
2” HMA PAVEMENT 4 LT 58-28 S LOWER LAYER

FILE NAME : S:\DOT\DOT_SE\200578_STH 11 Park and Ride Lot\13202375\SheetsPlan\020201_gn.ppt PLOT DATE : 10/27/2022 8:34:25 AM PLOT BY : WWOLAK PLOT NAME : 020101_gn.ppt PLOT SCALE : 1:1

2

N

I-41/94 NB RAMPS

BP: 24+60.62
N=174206.289
E=594866.260

BEGIN PROJECT
STA 26+51.65
N=174397.314
E=594866.769

END PROJECT
STA 30+15.44
N=174761.101
E=594867.738

EP: 30+57.73
N=174803.392
E=594867.852

R/L PARK AND RIDE

25+00 26+00 27+00 28+00 29+00 30+00

PARK AND RIDE LOT

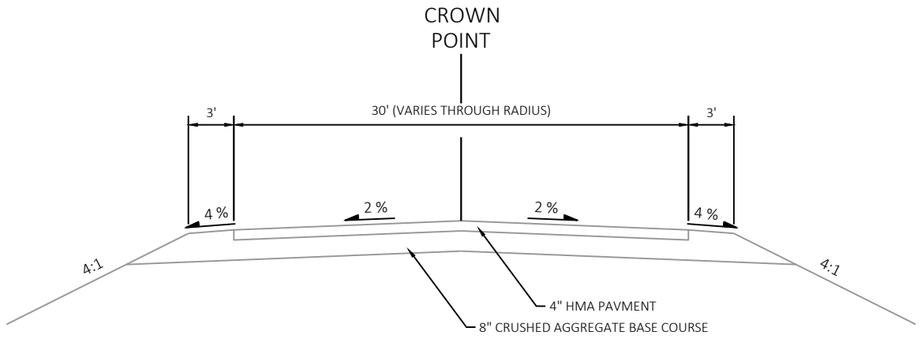
EAST FRONTAGE RD

STH 11

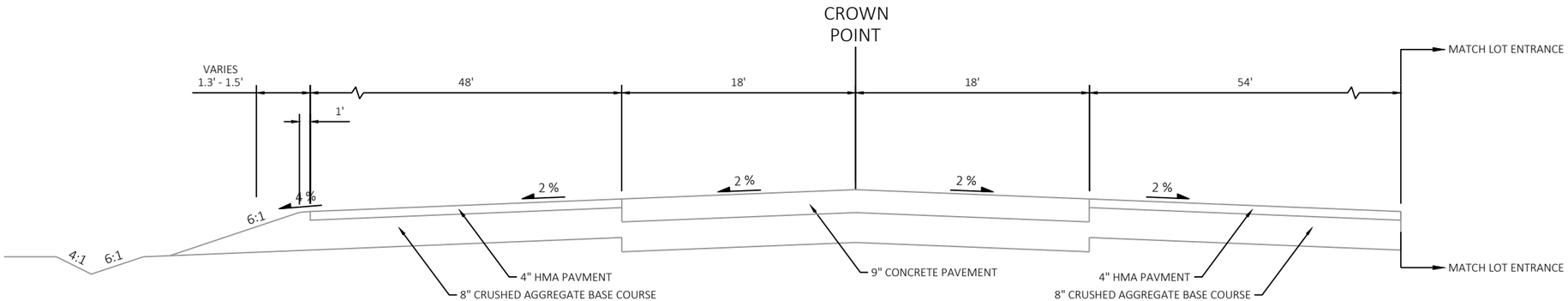
PROJECT NO: 1320-23-75	HWY: OFF SYS	COUNTY: RACINE	PROJECT OVERVIEW	SHEET 4	E

FILE NAME : S:\DOT\DOT_SE\200578_STH 11 PARK AND RIDE LOT\13202305\SHEETSPLAN\020201-PO.DWG
LAYOUT NAME - Sheet - (1)

PLOT DATE : 10/27/2022 7:51 AM PLOT BY : WALTER A. WOLAK II PLOT NAME : PLOT SCALE : 1 IN:50 FT

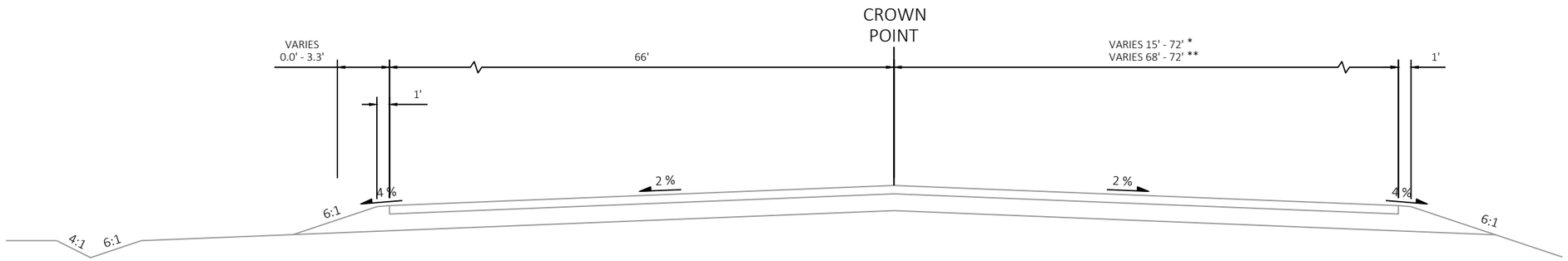


EXISTING TYPICAL SECTION - LOT ENTRANCE



EXISTING TYPICAL SECTION - EXISTING PARK AND RIDE

STA 28+01.73 TO STA 28+23.52



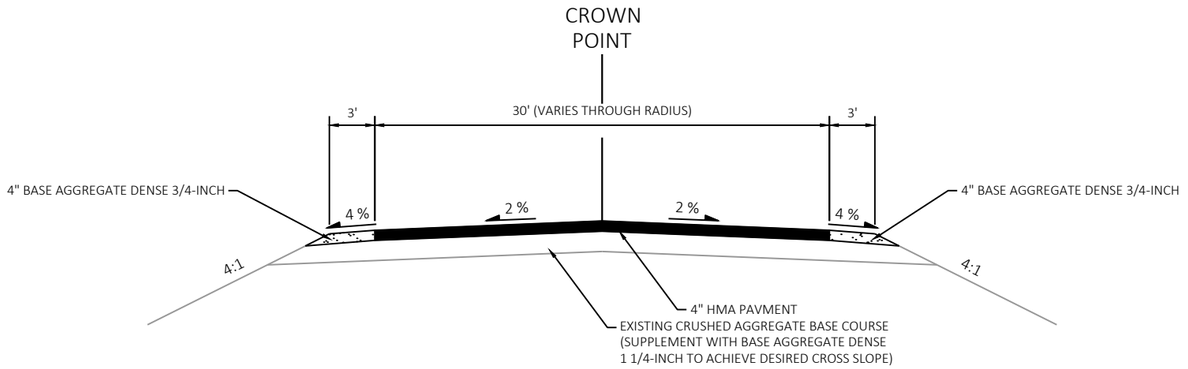
EXISTING TYPICAL SECTION - PARKING LOT

STA 26+51.65 TO STA 28+01.73 *

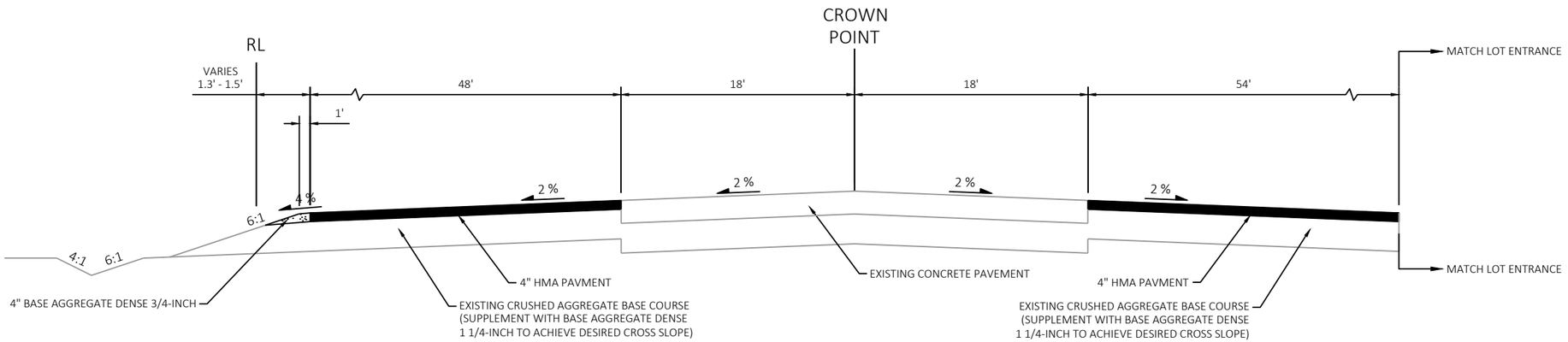
STA 28+23.52 TO STA 30+15.44 **

PROJECT NO: 1320-23-75	HWY: OFF SYS	COUNTY: RACINE	EXISTING TYPICAL SECTION	SHEET 5	E

FILE NAME : S:\DOT\DOT_SE\200578_STH 11 PARK AND RIDE LOT\13202305\SHEETSPLAN\020301-TS.DWG
LAYOUT NAME - 01
PLOT DATE : 10/27/2022 7:51 AM PLOT BY : WALTER A. WOLAK II PLOT NAME : PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

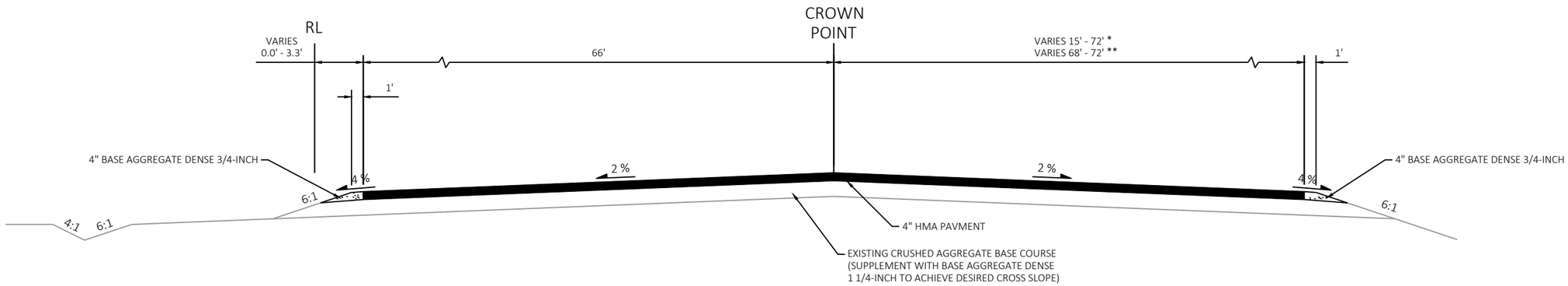


PROPOSED TYPICAL SECTION - LOT ENTRANCE



PROPOSED TYPICAL SECTION - PARK AND RIDE

STA 28+01.73 TO STA 28+14.76



PROPOSED TYPICAL SECTION - PARKING LOT

STA 26+51.65 TO STA 28+01.73 *

STA 28+14.76 TO STA 30+15.44 **

PROJECT NO: 1320-23-75	HWY: OFF SYS	COUNTY: RACINE	PROPOSED TYPICAL SECTION	SHEET 6	E

FILE NAME : S:\DOT\DOT_SE\200578_STH 11 PARK AND RIDE LOT\13202305\SHEETSPLAN\020401-TS.DWG
LAYOUT NAME - 01

PLOT DATE : 10/27/2022 7:51 AM PLOT BY : WALTER A. WOLAK II PLOT NAME : PLOT SCALE : 1 IN:10 FT

2

2

BEGIN PROJECT
STA 26+51.65

END PROJECT
STA 30+15.44

R/L PARK AND RIDE

N

26+00

27+00

28+00

29+00

30+00

PARK AND RIDE LOT

STH 11

SLOPE INTERCEPT (TYP)

EAST FRONTAGE RD

LEGEND

REMOVING ASPHALTIC SURFACE

REMOVING CONCRETE PAVEMENT

XXXXXXXXX SAWCUT

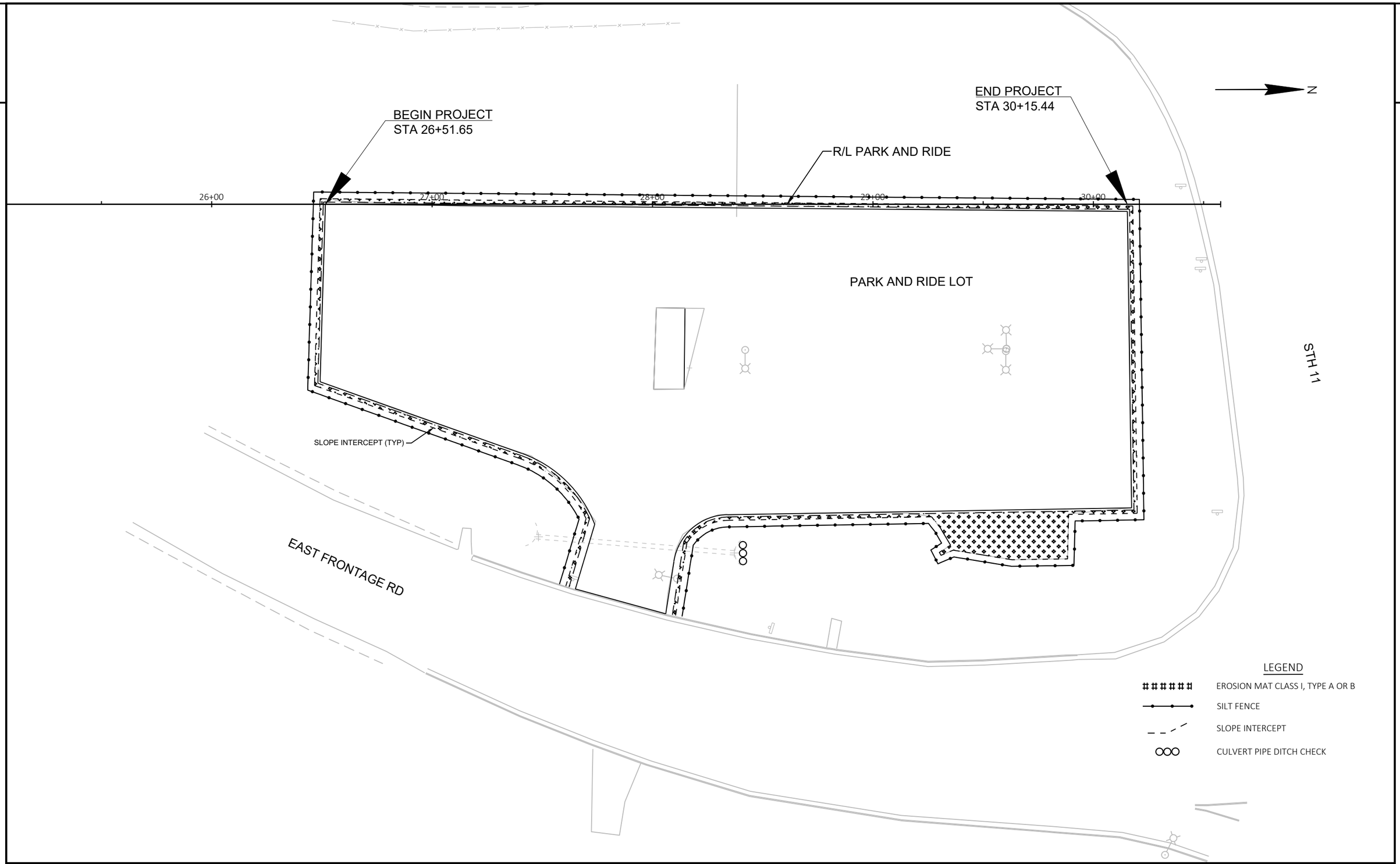
PROJECT NO: 1320-23-75	HWY: OFF SYS	COUNTY: RACINE	REMOVAL PLAN	SHEET 7	E

FILE NAME : S:\DOT\DOT_SE\200578_STH 11 PARK AND RIDE LOT\13202305\SHEETSPLAN\021150-RM.DWG
LAYOUT NAME - 01

PLOT DATE : 10/27/2022 7:51 AM PLOT BY : WALTER A. WOLAK II PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2



PROJECT NO: 1320-23-75	HWY: OFF SYS	COUNTY: RACINE	EROSION CONTROL PLAN	SHEET 8	E

FILE NAME : S:\DOT\DOT_SE\200578_STH 11 PARK AND RIDE LOT\13202305\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 01

PLOT DATE : 10/27/2022 7:51 AM PLOT BY : WALTER A. WOLAK II PLOT NAME : PLOT SCALE : 1 IN:40 FT

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
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN

N

26+00 27+00 28+00 29+00 30+00

STH 11 (DURAND AVE)

SE SERVICE RD

1 STOP R1-1 (3) REMOVE

2 DO NOT ENTER R5-1 (2S)

3 R7-8A (2S)

4 R7-8A (2S) ON STEEL POST

5 6 R7-8A (2S) R7-8V (2S) ON STEEL POST

5A 6A

7 8 R7-8A (2S) R7-8V (2S)

7A 8A

9 ONE WAY R6-2R (2S)

10 PARK & RIDE D4-5R (3)

11 12 Sylvania PARK & RIDE TYPE I SIGN ON STEEL POSTS

13 NO PARKING ANY TIME R7-1L (2S)

14 NO PARKING ANY TIME R7-1R (2S)

15 PARK & RIDE D4-5R (3)

16 WRONG WAY R5-1A MOVE

RIGHT LANE MUST TURN RIGHT R3-7R ESTR

ALTERNATE WEST 94 ALTERNATE EAST 94 ESTR

EAST FRONTAGE ROAD M1-95A ESTR

STOP R1-1F ESTR

DO NOT ENTER R5-1 ESTR

TYPE II ALUMINUM SIGNS REMOVED UNDER THE CONTRACT SHALL BE DELIVERED TO THE COUNTY SIGN SHOP. 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.

PROJECT NO: 1320-23-75	HWY: STH 11	COUNTY: RACINE	PERMANENT SIGNING PLAN	SHEET 9	E

FILE NAME : N:\PDS\C3D\CAD\13202305\SIGN\023201_PS.DWG
LAYOUT NAME - 01
PLOT DATE : 10/5/2022 1:31 PM
PLOT BY : MARTENS, KAREN L
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

2

IH 41/94 SB

IH 41/94 NB

EAST FRONTAGE RD

STH 11 (DURAND AVE)

STH 11 (DURAND AVE)

WEST FRONTAGE RD

N

20
PARK & RIDE
D4-5L (3)

EAST FRONTAGE ROAD
ESTR

17
PARK & RIDE
D4-5R (2S)

GAS LODGING SIGN
ESTR

WEST 11 EAST 11
J2-2
ESTR

18
PARK & RIDE
D4-5R (2S)

19
PARK & RIDE
D4-5L (3)

GAS LODGING SIGN
ESTR

30+00
29+00
28+00
27+00
26+00
25+00

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
- XXX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN

SHEET 2 OF 4

PROJECT NO: 1320-23-75	HWY: STH 11	COUNTY: RACINE	PERMANENT SIGNING PLAN	SHEET 10	E

FILE NAME : N:\PDS\C3D\CAD\13202305\SIGN\023202_PS.DWG
LAYOUT NAME - 02

PLOT DATE : 10/5/2022 1:31 PM PLOT BY : MARTENS, KAREN L PLOT NAME : PLOT SCALE : 1 IN:200 FT

WISDOT/CADDS SHEET 42

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
- (XXX) DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN



2

SHEET 3 OF 4

PROJECT NO: 1320-23-75	HWY: STH 11	COUNTY: RACINE	PERMANENT SIGNING PLAN	SHEET 11	E

FILE NAME : N:\PDS\C3D\CAD\13202305\SIGN\023202_PS.DWG
LAYOUT NAME - 03

PLOT DATE : 10/5/2022 1:31 PM PLOT BY : MARTENS, KAREN L PLOT NAME : PLOT SCALE : 1 IN:200 FT

WISDOT/CADDS SHEET 42

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
- XXX DENOTES SIGN NUMBER
- (X) INDICATES SIGN SIZE
- ESTR EXISTING SIGN TO REMAIN

IH 41/94 SB

GRANDVIEW PKWY

IH 41/94 NB

N

Yorkville
EXIT 335

REMOVE

22

Park & Ride

Yorkville
EXIT 335

TYPE I SIGN
ON STEEL POSTS

2

SHEET 4 OF 4

PROJECT NO: 1320-23-75	HWY: STH 11	COUNTY: RACINE	PERMANENT SIGNING PLAN	SHEET 12	E

FILE NAME : N:\PDS\C3D\CAD\13202305\SIGN\023202_PS.DWG
LAYOUT NAME - 04

PLOT DATE : 10/5/2022 1:31 PM PLOT BY : MARTENS, KAREN L PLOT NAME : PLOT SCALE : 1 IN:200 FT

WISDOT/CADDS SHEET 42

2

2

GENERAL NOTES

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

LOCATIONS OF THE PVC CONDUITS ARE IDENTIFIED IN THE PLANS WHERE THEY ARE REQUIRED. APPROPRIATE ADJUSTMENT ON CONDUIT LOCATIONS MAY BE MADE IF THE FIELD CONDITIONS ARE SUCH THAT THE CONDUIT CANNOT BE INSTALLED AT THE SPECIFIED LOCATIONS. FIELD MARK EACH CONDUIT LOCATION IN RED.

ALL CONDUITS SHALL BE CAPPED OR PLUGGED WITH ENGINEER APPROVED FITTINGS IMMEDIATELY AFTER INSTALLATION. THE TRENCH SHALL NOT BE BACK FILLED PRIOR TO INSPECTION OF THE CONDUIT.

BENDING OF PVC ELECTRICAL CONDUIT SHALL BE ACCOMPLISHED BY USING A BLANKET OR IMMERSION TYPE TANK DESIGNED FOR THE PURPOSE OF BENDING PVC ELECTRICAL CONDUIT. ALL CUT ENDS SHALL BE TRIMMED INSIDE AND OUTSIDE TO REMOVE ALL ROUGH EDGES ON ALL CONDUITS.

PRIOR TO CONDUIT ACCEPTANCE, ALL CONDUIT ENDS SHALL BE THOROUGHLY CLEANED AND BE CAPPED WITH THE APPROPRIATE CAST PLASTIC CAP WHICH FITS SNUGGLY ON THE CONDUIT, BUT EASILY REMOVED IN THE FUTURE. DUCT TAPE OR ANY OTHER CAPPING METHOD IS NOT ACCEPTABLE.

CONDUIT RUNS SHALL BE THE SAME SIZE PIPE FROM ONE END TO THE OTHER (FROM PULL BOX–TO–PULL BOX OR JUNCTION BOX OR BASE–TO–BASE, ETC.) UNLESS OTHERWISE NOTED ON PLANS.

PULL ROPE (3/8–INCH NYLON) SHALL BE INSTALLED IN ALL NEW CONDUITS.

CONTRACTOR SHALL SUPPLY AS–BUILT DRAWING FOR ALL THE WORK BEING DONE.

INSTALLATION OF LATERAL UNDERGROUND CONDUIT UNDER PAVEMENT SHALL BE INSTALLED MINIMUM 30 INCHES BELOW PROPOSED GRADE. CONDUIT LATERALS SHALL BE TRENCHED UNDER PAVEMENT BEFORE PAVEMENT CONSTRUCTION. CONTRACTOR IS RESPONSIBLE TO COORDINATE WITH ROADWAY CONSTRUCTION FOR CONDUIT LATERALS INSTALLATION.

PITCH ALL CONDUITS TOWARD PULL BOXES. INSTALL A 2" DRAIN DUCT TO STORM SEWER OR DRAIN SUMP AS REQUIRED FOR DRAINAGE. THE 2" DRAIN DUCT OR SUMP IS INCIDENTAL TO THE PULL BOX BID ITEM AND IS NOT SHOWN.

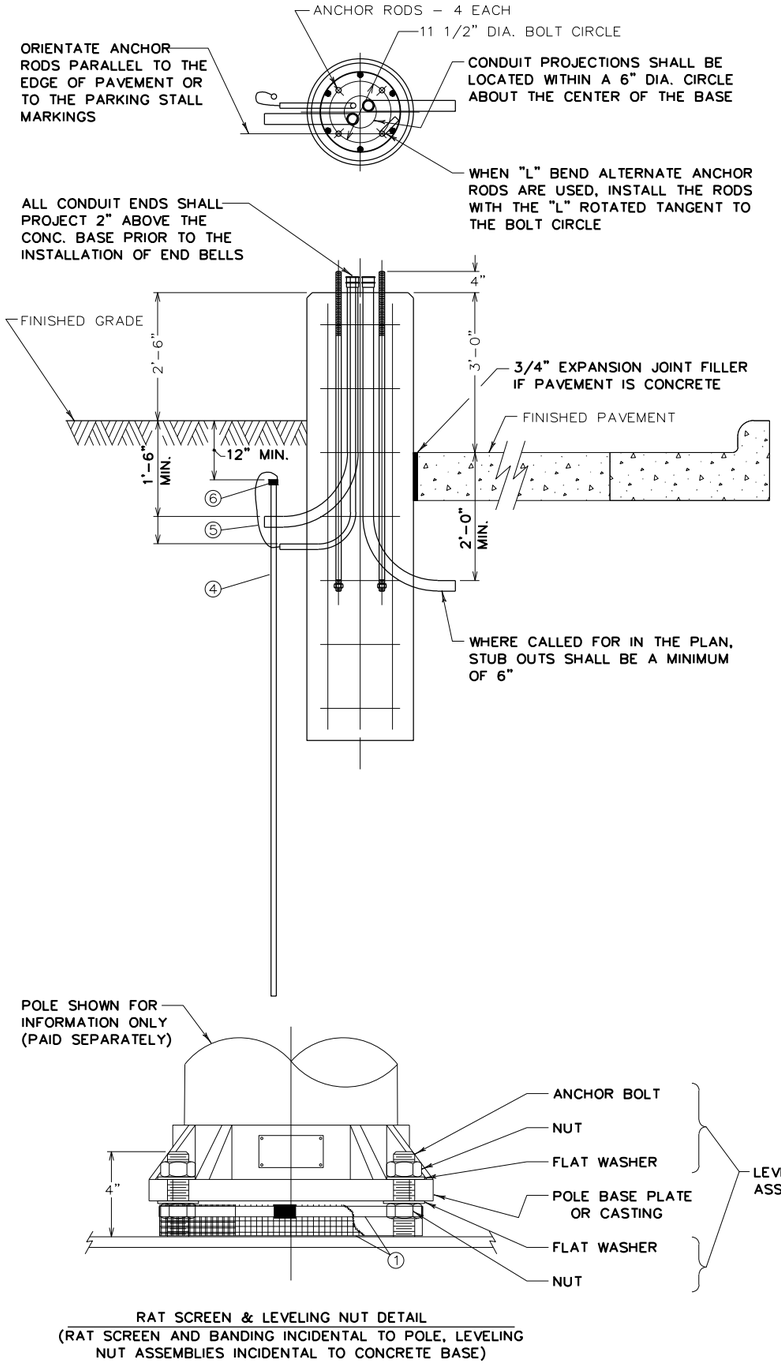
THE LOCATION OF EXISTING AND PROPOSED UTILITIES AS SHOWN ON THE PLANS ARE APPROXIMATE, IN ADDITION, THERE MAY BE OTHER UTILITIES WITHIN THE PROJECT AREA WHICH ARE NOT SHOWN. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL UTILITIES PRIOR TO CONSTRUCTION.

HAND DIGGING MAY BE REQUIRED FOR LOCATIONS ADJACENT TO EXISTING GAS AND POWER LINES. HAND EXCAVATION SHOULD BE ANTICIPATED & WILL BE CONSIDERED INCIDENTAL TO THE CONCRETE BASES BID ITEM. COORDINATE ALL WORK NEAR GAS LINE WITH WE ENERGIES.

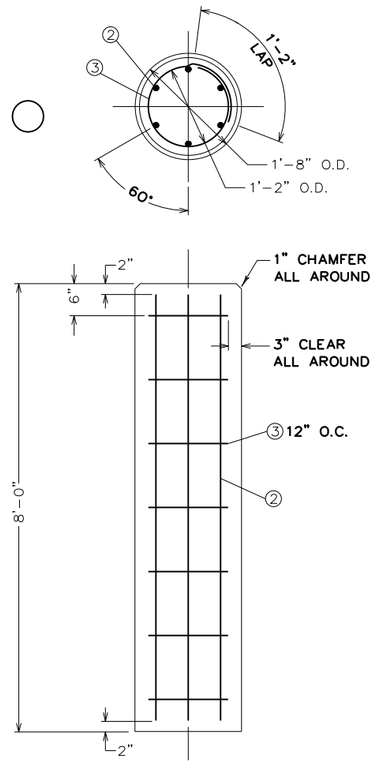
PROVIDE MINIMUM CABLE SLACK AS NOTED BELOW:

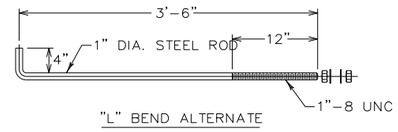
PULL BOXES:	10–FT
POLES	5–FT IN AND 5–FT OUT
DISTRIBUTION CENTER/LOAD CENTER:	10–FT
CONDUCTOR COLORS:	120/240 VAC, 1 PHASE – RED/BLACK/WHITE (NEUTRAL)/GREEN OR BARE (GROUND)

PROJECT NO:1320-23-75	HWY:NON-HWY	COUNTY:RACINE	LIGHTING PLANS - GENERAL NOTES	SHEET 13 E

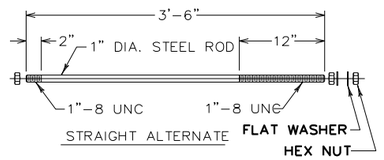


RAT SCREEN & LEVELING NUT DETAIL
(RAT SCREEN AND BANDING INCIDENTAL TO POLE, LEVELING NUT ASSEMBLIES INCIDENTAL TO CONCRETE BASE)





"L" BEND ALTERNATE



STRAIGHT ALTERNATE

ANCHOR ROD ASSEMBLY DETAIL
(INCIDENTAL TO CONCRETE BASE – 4 EACH PER BASE)

GENERAL NOTES:

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF SECTION 654 OF THE STANDARD SPECIFICATIONS AND THE SPECIAL PROVISIONS.

CONCRETE BASES SHALL BE EXCAVATED BY USE OF A CIRCULAR AUGER.

FORMING SHALL BE LIMITED TO 6" BELOW THE EXISTING GRADE. UNLESS LOOSE SOIL OR FILL IS ENCOUNTERED. FORMING SHALL BE STRIPPED AFTER CONCRETE HAS SET.

IF A BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE SOIL OR FILL, THE FORM SHALL BE STRIPPED BEFORE BACK FILLING AROUND THE BASE. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE STRIPPED CONCRETE BASE IN LAYERS OF 6" OR LESS.

TOP SURFACE OF CONCRETE BASES SHALL BE TROWEL FINISHED AND LEVEL.

THE NUMBER, SIZE, AND LOCATION OF LINE AND LOAD SIDE CONDUITS WILL BE SHOWN IN THE PLANS. NOTE, SOME BASES MAY HAVE MORE THAN ONE LOAD SIDE CONDUIT REQUIRED (SEE THE PLAN). ALL BASES SHALL HAVE A 1" CONDUIT FOR THE EQUIPMENT GROUNDING CONDUCTOR.

CONDUIT ENDS PROJECTING ABOVE THE BASE SHALL BE SUITABLY PLUG-GED BEFORE THE CONCRETE IS POURED, TO PREVENT DEBRIS CONTAM-INATION OF THE RACEWAY.

ENDS OF CONDUIT INSTALLED BELOW GRADE FOR FUTURE USE (STUB OUTS) SHALL BE PLUGGED.

THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE INSTALLED WITH A MINIMUM OF 6'-6" OF SLACK MEASURED FROM THE TOP OF THE CONCRETE BASE TO THE END OF THE CONDUCTOR. THE SLACK SHALL BE NEATLY TIED IN A COIL THAT FITS INSIDE THE ANCHOR BOLT CIRCLE UNTIL THE LIGHT POLE IS INSTALLED. GREAT CARE SHALL BE EXERCISED TO AVOID DAMAGE TO THE CONDUCTOR.

THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 24". THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18". THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36". THE MAXIMUM DEPTH MAY ONLY BE EXCEEDED WITH THE WRITTEN APPROVAL OF THE ENGINEER.

ANCHOR RODS SHALL NOT BE WELDED TO THE BAR STEEL REINF. HOWEVER, TIE WIRES MAY BE USED.

BAR STEEL REINF. SHALL BE "COATED HIGH STRENGTH BAR STEEL REINFORCEMENT".

① STAINLESS STEEL MESH (RAT SCREEN) AND 3/4" STAINLESS STEEL BANDING

② NO. 6 BAR STEEL REINF., 6'-8" LONG (6 EACH)

③ NO. 4 BAR STEEL REINF., 5'-0" LONG (7 EACH)

④ 5/8" x 8'-0" COPPER CLAD EQUIPMENT GROUNDING ELECTRODE (GROUND ROD) TOP OF ROD 12" MIN. BELOW FINISHED GRADE OR FINISHED PAVEMENT.

⑤ A NO. 4 AWG, STRANDED COPPER GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUNDING ROD)

⑥ EXOTHERMIC WELD (CAD WELD)

CONCRETE BASE, TYPE 5, SPECIAL

(1" ANCHOR RODS, 11.5" BOLT CIRCLE, 4" PROJECTION)

2

N

26 27 28 29 30

27+26
ASA2

28+44
BSA3

BSA2

ASA3

26+95
ASA1

LEGEND

DOUBLE ARM LIGHTING UNIT

SINGLE ARM LIGHTING UNIT

CONDUIT - 2" UNLESS OTHERWISE NOTED

PROJECT NO: 1320-23-75	HWY: NON-HWY	COUNTY: RACINE	LIGHTING PLAN - REMOVAL	SHEET 15	E

FILE NAME : W:\PROJECTS\19254\1320-02-05\04_CADD_01\CADD_SHEETS\023401_LR.DWG
LAYOUT NAME - 1

PLOT DATE : 3/1/2022 11:10 AM PLOT BY : WILLIAM NEAVE PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

N

26 27 28 29 30

27+26, 58.7' RT
LED-C-5(T)-6-BSA3

#8 A,N,B,GND
SEE NOTE 1

LED-C-5(T)-6-ASA3

28+45, 65.9' RT
LED-C-5(T)-6-ASA2

#8 A,N,B,GND
SEE NOTE 1

LED-C-5(T)-6-BSA2

29+59, 66.1' RT
LED-C-5(T)-6-BSA1

LED-C-5(T)-6-ASA1

#8 A,N,B,GND
SEE NOTE 1

30+23, 66.1' RT
LPB-SA-02

#8 A,N,B,GND

30+45, 154.8' RT
HL-51-SA

2-3"

30+25, 140.1' RT
LPB-SA-01

#8 A,N,GND

3" C, #8 A,N,B,GND
3" C, #8 A,N,GND

28+09, 179.0' RT
LED-C-5(T)-6-ASA4

PROPOSED

HL-51-SA	
A	RED
B	BLACK
N	WHITE
GND	GREEN OR BARE
A,B	30 A
120/240VAC 3 WIRE ISOLATED NEUTRAL	

LEGEND

- PROPOSED DOUBLE ARM LIGHTING UNIT
- PROPOSED SINGLE ARM LIGHTING UNIT
- PROPOSED CONDUIT - 2" UNLESS OTHERWISE NOTED
- PROPOSED CONTROL CABINET
- PROPOSED PULL BOX
- PROPOSED CONDUIT STUB OUT

NOTES

1. CONDUIT SPECIAL 2-INCH

PROJECT NO: 1320-23-75	HWY: NON-HWY	COUNTY: RACINE	LIGHTING PLANS - PROPOSED	SHEET 16	E

FILE NAME : W:\PROJECTS\19254\1320-02-05\04_CADD_01\CADD_SHEETS\023601_LP.DWG
LAYOUT NAME - 1
PLOT DATE : 10/5/2022 2:43 PM
PLOT BY : ALEXANDER UNDERWOOD
PLOT NAME :
PLOT SCALE : 1 IN:40 FT

2

BEGIN PROJECT
STA 26+51.65

END PROJECT
STA 30+15.44

R/L PARK AND RIDE

N

26+00 27+00 28+00 29+00 30+00

PARK AND RIDE LOT

STH 11

EAST FRONTAGE RD

20' 18' 20' 20' 9' TYP 24' 27.5' 18' TYP 25.5'

24' 18' 12' 24' 4' 18' TYP

MOTORCYCLE 8' ACCESSIBLE VAN ACCESSIBLE 10' TYP (ACCESSIBLE) ACCESSIBLE VAN ACCESSIBLE

61° (TYP) 17.5' 18' TYP 36' 8' TYP

LEGEND

1. MARKING PARKING STALL EPOXY (WHITE)
2. MARKING ARROW EPOXY TYPE 1
3. MARKING ARROW EPOXY TYPE 2
4. MARKING SYMBOL EPOXY

133 TOTAL SPACES
- 6 ACCESSIBLE
- 9 MOTORCYCLE

PROJECT NO: 1320-23-75	HWY: OFF SYS	COUNTY: RACINE	PAVEMENT MARKING	SHEET 17	E

FILE NAME : S:\DOT\DOT_SE\200578_STH 11 PARK AND RIDE LOT\13202305\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - 01
PLOT DATE : 10/27/2022 7:51 AM PLOT BY : WALTER A. WOLAK II PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

2

LEGEND

WORK AREA

TRAFFIC CONTROL BARRICADES TYPE 3
WITH WARNING LIGHTS TYPE A

TRAFFIC CONTROL BARRICADES TYPE 3
WITH WARNING LIGHTS TYPE A AND ATTACHED SIGN

DIRECTION OF TRAFFIC

N

BEGIN PROJECT
STA 26+51.65

R/L PARK AND RIDE

END PROJECT
STA 30+15.44

26+00 27+00 28+00 29+00 30+00

PARK AND RIDE LOT

STH 11

EAST FRONTAGE RD

LOT
CLOSED
R11-2 (MOD)
48"X30"

PROJECT NO: 1320-23-75	HWY: OFF SYS	COUNTY: RACINE	TRAFFIC CONTROL PLAN	SHEET 18	E

FILE NAME : S:\DOT\DOT_SE\200578_STH 11 PARK AND RIDE LOT\13202305\SHEETSPLAN\025101-TC.DWG
LAYOUT NAME - 01

PLOT DATE : 10/27/2022 7:51 AM PLOT BY : WALTER A. WOLAK II PLOT NAME : PLOT SCALE : 1 IN:40 FT

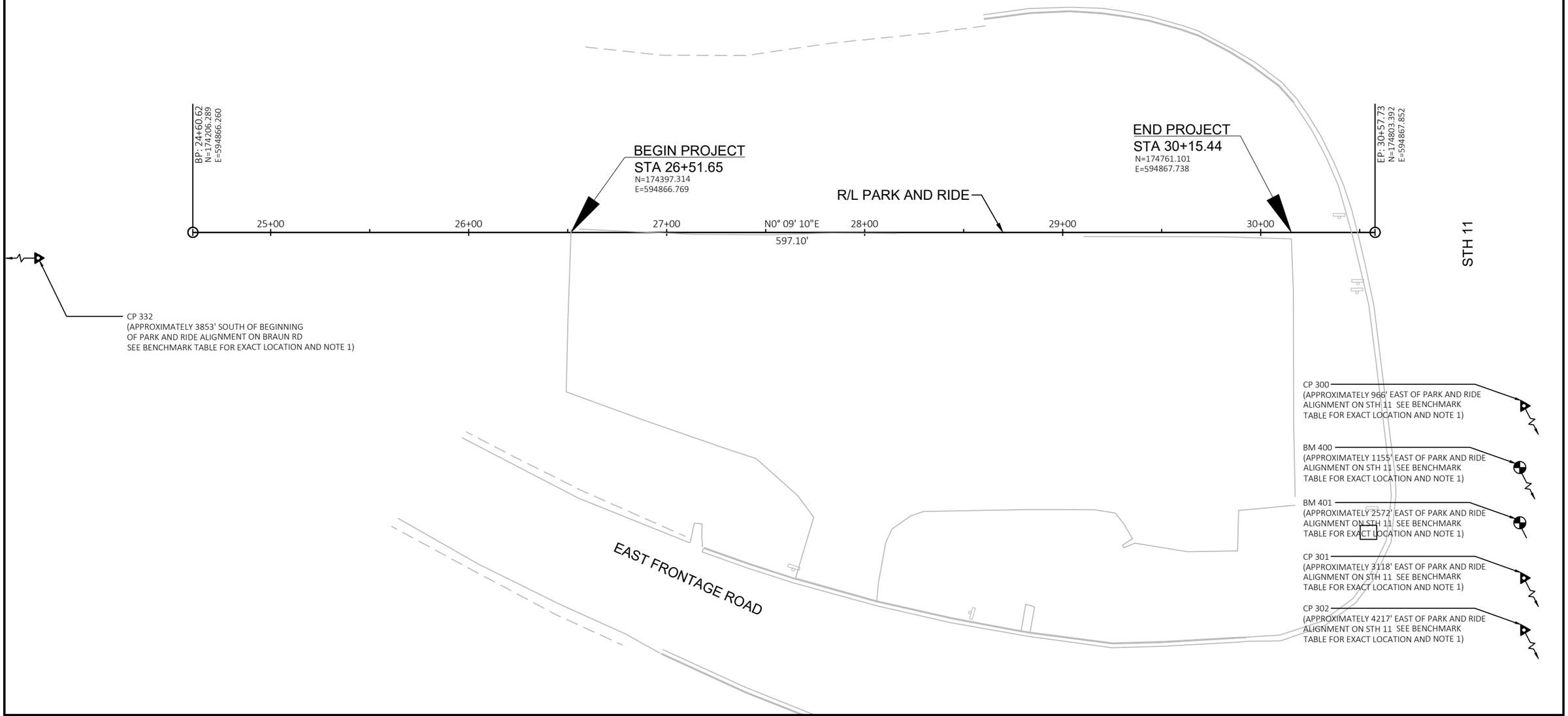
WISDOT/CADDS SHEET 42

CONTROL POINT TABLE			
NUMBER	LOCATION	DESCRIPTION	ELEVATION
CP300	Y = 174952.457 X= 595834.269	CP FENO	752.738
CP301	Y = 175207.534 X= 597987.232	CP FENO	746.769
CP302	Y = 175555.660 X= 599087.001	CP FENO	750.622
CP332	Y = 170353.095 X= 594829.476	CP	749.096

BENCHMARK TABLE				
NUMBER	NORTHING	EASTING	DESCRIPTION	ELEVATION
BM 400	174971	596023	CUT BOX N MANHOLE RIM AMERITECH	753.341
BM 401	175160	597441	BM 401 CUT BOX TOP CMP 15	746.977

N

NOTE:
1) SEE CONTROL POINT AND BENCHMARK LOCATION MAP FOR OVERVIEW OF CONTROL POINT AND BENCHMARK LOCATIONS .



PROJECT NO: 1320-23-75	HWY: OFF SYS	COUNTY: RACINE	ALIGNMENT DIAGRAM	SHEET 19	E

FILE NAME : S:\DOT\DOT_SE\200578_STH 11 PARK AND RIDE LOT\13202305\SHEETSPLAN\027201-AD.DWG
LAYOUT NAME - 01 - (1)
PLOT DATE : 10/27/2022 7:52 AM PLOT BY : WALTER A. WOLAK II PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42



PROJECT NO: 1320-23-75	HWY: OFF SYS	COUNTY: RACINE	CONTROL POINT AND BENCHMARK LOCATION MAP	SHEET 20	E

FILE NAME : S:\DOT\DOT_SE\200578_STH 11 PARK AND RIDE LOT\13202305\SHEETSPLAN\027202-AD.DWG
LAYOUT NAME - 01 - (1)
PLOT DATE : 10/27/2022 7:52 AM PLOT BY : WALTER A. WOLAK II PLOT NAME : PLOT SCALE : 1 IN:500 FT
WISDOT/CADDS SHEET 42

1320-23-75

Line	Item	Item Description	Unit	Total	Qty
0002	204.0100	Removing Concrete Pavement	SY	18.000	18.000
0004	204.0110	Removing Asphaltic Surface	SY	5,380.000	5,380.000
0010	204.0195	Removing Concrete Bases	EACH	3.000	3.000
0014	204.9060.S	Removing (item description) 02. Lighting Units	EACH	3.000	3.000
0018	211.0101	Prepare Foundation for Asphaltic Paving (project) 01. 1320-23-75	EACH	1.000	1.000
0022	213.0100	Finishing Roadway (project) 02. 1320-23-75	EACH	1.000	1.000
0024	305.0110	Base Aggregate Dense 3/4-Inch	TON	61.000	61.000
0026	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	787.000	787.000
0040	455.0605	Tack Coat	GAL	386.000	386.000
0046	460.2000	Incentive Density HMA Pavement	DOL	850.000	850.000
0056	460.5224	HMA Pavement 4 LT 58-28 S	TON	1,326.000	1,326.000
0072	531.1100	Concrete Masonry Ancillary Structures Type NS	CY	5.600	5.600
0074	531.1140	Steel Reinforcement HS Ancillary Structures Type NS	LB	582.000	582.000
0076	531.2024	Drilling Shaft 24-Inch	LF	45.000	45.000
0102	616.0700.S	Fence Safety	LF	100.000	100.000
0104	619.1000	Mobilization	EACH	0.130	0.130
0106	624.0100	Water	MGAL	4.000	4.000
0108	625.0100	Topsoil	SY	149.000	149.000
0110	628.1504	Silt Fence	LF	1,250.000	1,250.000
0112	628.1520	Silt Fence Maintenance	LF	1,250.000	1,250.000
0114	628.1905	Mobilizations Erosion Control	EACH	2.000	2.000
0116	628.1910	Mobilizations Emergency Erosion Control	EACH	2.000	2.000
0118	628.2002	Erosion Mat Class I Type A	SY	446.000	446.000
0130	628.7555	Culvert Pipe Checks	EACH	5.000	5.000
0132	629.0210	Fertilizer Type B	CWT	0.200	0.200
0134	630.0130	Seeding Mixture No. 30	LB	8.000	8.000
0140	630.0200	Seeding Temporary	LB	11.000	11.000
0142	630.0500	Seed Water	MGAL	1.000	1.000
0144	634.0618	Posts Wood 4x6-Inch X 18-FT	EACH	11.000	11.000
0146	634.0814	Posts Tubular Steel 2x2-Inch X 14-FT	EACH	3.000	3.000
0148	635.0200	Sign Supports Structural Steel HS	LB	2,800.000	2,800.000
0152	637.1220	Signs Type I Reflective SH	SF	336.000	336.000
0154	637.2210	Signs Type II Reflective H	SF	98.710	98.710
0158	638.2102	Moving Signs Type II	EACH	1.000	1.000
0160	638.2601	Removing Signs Type I	EACH	2.000	2.000
0162	638.2602	Removing Signs Type II	EACH	1.000	1.000
0164	638.3000	Removing Small Sign Supports	EACH	2.000	2.000
0166	638.3100	Removing Structural Steel Sign Supports	EACH	4.000	4.000
0172	643.0420	Traffic Control Barricades Type III	DAY	225.000	225.000
0174	643.0705	Traffic Control Warning Lights Type A	DAY	450.000	450.000
0176	643.0900	Traffic Control Signs	DAY	45.000	45.000
0184	643.5000	Traffic Control	EACH	0.010	0.010
0196	646.5020	Marking Arrow Epoxy	EACH	4.000	4.000
0200	646.5220	Marking Symbol Epoxy	EACH	6.000	6.000
0210	646.8320	Marking Parking Stall Epoxy	LF	3,500.000	3,500.000
0222	652.0225	Conduit Rigid Nonmetallic Schedule 40 2-Inch	LF	220.000	220.000
0224	652.0235	Conduit Rigid Nonmetallic Schedule 40 3-Inch	LF	100.000	100.000
0226	652.0605	Conduit Special 2-Inch	LF	370.000	370.000
0228	653.0140	Pull Boxes Steel 24x42-Inch	EACH	2.000	2.000

1320-23-75

Line	Item	Item Description	Unit	Total	Qty
0230	654.0105	Concrete Bases Type 5	EACH	1.000	1.000
0232	654.0230	Concrete Control Cabinet Bases Type L30	EACH	1.000	1.000
0234	655.0610	Electrical Wire Lighting 12 AWG	LF	468.000	468.000
0236	655.0615	Electrical Wire Lighting 10 AWG	LF	105.000	105.000
0238	655.0620	Electrical Wire Lighting 8 AWG	LF	2,725.000	2,725.000
0240	655.0640	Electrical Wire Lighting 1 AWG	LF	18.000	18.000
0242	656.0201	Electrical Service Meter Breaker Pedestal (location) 01. 1320-23-75	EACH	1.000	1.000
0244	657.0255	Transformer Bases Breakaway 11 1/2-Inch Bolt Circle	EACH	4.000	4.000
0246	657.0322	Poles Type 5-Aluminum	EACH	4.000	4.000
0248	657.0610	Luminaire Arms Single Member 4 1/2-Inch Clamp 6-FT	EACH	7.000	7.000
0250	659.1125	Luminaires Utility LED C	EACH	7.000	7.000
0252	659.2130	Lighting Control Cabinets 120/240 30-Inch	EACH	1.000	1.000
0254	659.5000.S	Lamp, Ballast, LED, Switch Disposal by Contractor	EACH	5.000	5.000
0258	690.0250	Sawing Concrete	LF	37.000	37.000
0264	SPV.0060	Special 01. Survey Project 1320-23-75	EACH	1.000	1.000
0266	SPV.0060	Special 02. Concrete Bases Type 5 Special	EACH	3.000	3.000
0268	SPV.0060	Special 03. Lighting System Integrator	EACH	1.000	1.000
0270	SPV.0060	Special 04. Lighting System Survey	EACH	1.000	1.000

3

REMOVING CONCRETE PAVEMENT

STATION		STATION	OFFSET	LOCATION	204.0100 REMOVING CONCRETE PAVEMENT SY
28+14	-	28+24	RT	PARK & RIDE	18
PROJECT 1320-23-75 TOTAL					18

REMOVING ASPHALTIC SURFACE

STATION		STATION	LOCATION	204.0110 REMOVING ASPHALTIC SURFACE SY
26+52	-	30+15	PARK & RIDE	5380
PROJECT 1320-23-75 TOTAL				5,380

3

PREPARE FOUNDATION FOR ASPHALTIC PAVING

LOCATION	211.0101 PREPARE FOUNDATION FOR ASPHALTIC PAVING PROJECT 1320-23-75 EACH
PROJECT 1320-23-75	1
PROJECT 1320-23-75 TOTAL	1

FINISHING ROADWAY

LOCATION	213.0100.02 FINISHING ROADWAY PROJECT ID 1320-23-75 EACH
PROJECT 1320-23-75	1
PROJECT 1320-23-75 TOTAL	1

AGGREGATE ITEMS

STATION		STATION	OFFSET	LOCATION	305.0110 BASE AGGREGATE DENSE 3/4-INCH TON	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON	REMARK
26+52	-	30+15	PARK & RIDE	RT	0	715	SUPPLEMENT EXISTING AGGREGATE
26+52	-	30+15	PARK & RIDE	RT	55	0	SHOULDER
UNDISTRIBUTED					6	72	
PROJECT 1320-23-75 TOTAL					61	787	

PAVEMENT ITEMS

STATION		STATION	LOCATION	OFFSET	455.0605 TACK COAT GAL	460.5224 HMA PAVEMENT 4 LT 58-28 S TON
26+52	-	30+15	PARK & RIDE	RT	386	1,326
PROJECT 1320-23-75 TOTAL					386	1,326

ALL ITEMS ARE CATEGORY **1000** UNLESS OTHERWISE SPECIFIED.

WATER

LOCATION	624.0100 WATER MGAL	630.0500 SEED WATER MGAL
AGGREGATE COMPACTION	2	--
DUST CONTROL	2	--
SEEDED AREAS	--	1
PROJECT 1320-23-75 TOTAL	4	1

FENCE SAFETY

LOCATION	616.0700.S FENCE SAFETY LF
UNDISTRIBUTED	100
PROJECT 1320-23-75 TOTAL	100

3

RESTORATION

STATION	LOCATION	625.0100 TOPSOIL SY	629.0210 FERTILIZER TYPE B CWT	630.0130 SEEDING MIXTURE NO. 30 LB	630.0200 SEEDING TEMPORARY LB
26+52 - 30+15	PARK & RIDE	135	0.2	7	10
UNDISTRIBUTED		14	--	1	1
PROJECT 1320-23-75 TOTAL		149	0.2	8	11

MOBILIZATION

LOCATION	619.1000 MOBILIZATION EACH
PROJECT 1320-23-75	0.13
PROJECT 1320-23-75 TOTAL	0.13

EROSION CONTROL

STATION	LOCATION	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF	628.1905 MOBILIZATIONS EROSION CONTROL EACH	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL EACH	628.2002 EROSION MAT CLASS I TYPE A SY	628.7555 CULVERT PIPE CHECKS EACH
26+52 - 30+15	PARK & RIDE	1,000	1,000	--	--	357	4
UNDISTRIBUTED		250	250	2	2	89	1
PROJECT 1320-23-75 TOTAL		1,250	1,250	2	2	446	5

ALL ITEMS ARE CATEGORY **1000** UNLESS OTHERWISE SPECIFIED.

3

SIGN NO.	SIGN CODE & SIZE	SIGN TYPE	SIGN MESSAGE	TYPE II SIGN SIZE W [IN.]	x	H [IN.]	637.2210 SIGNS TYPE II REFLC H [SF]	638.2602 REMOVING SIGNS TYPE II [EA]	638.3000 REMOVING SMALL SIGN SUPPORTS [EA]	634.0618 POSTS WOOD 4"X 6"X18' [EA]	634.0814 POSTS TUBULAR STEEL 2"X2"X14' [EA]	638.2102 MOVING SIGNS TYPE II [EA]	MOUNT ON SAME POST AS SIGN #	REMARKS / NEW SIGN LOCATION	TYPE I SIGN SIZE W [FT.]	x	H [FT.]	637.1220 SIGNS TYPE I REFLC SH [SF]	638.2601 REMOVING SIGNS TYPE I [EA]	638.3100 REMOVING STR STEEL SIGN SUPPORTS [EA]	STEEL POST TYPE	531.1100 CONCRETE MASONRY ANCILLARY STRUCTURES TYPE NS [CY]	531.1140 STEEL REINF HS ANCILLARY STRUCTURES TYPE NS [LBS]	531.2024 DRILLING SHAFT 24-INCH [EST.LF]	635.0200 SIGN SUPPORTS STRUCTURAL STEEL HS [EST.LBS]
1	R1-1(3)	II	--	36	x	36	7.460	1	1	1	--	--	--	--	--	x	--	--	--	--	--	--	--	--	--
2	R5-1(2S)	II	--	30	x	30	6.250	--	--	1	--	--	--	--	--	x	--	--	--	--	--	--	--	--	--
3	R7-8A(2S)	II	--	12	x	18	1.500	--	--	--	1	--	--	--	--	x	--	--	--	--	--	--	--	--	--
4	R7-8A(2S)	II	--	12	x	18	1.500	--	--	--	--	--	3	--	--	x	--	--	--	--	--	--	--	--	--
5	R7-8A(2S)	II	--	12	x	18	1.500	--	--	--	1	--	--	--	--	x	--	--	--	--	--	--	--	--	--
5A	R7-8V(2S)	II	--	12	x	6	0.500	--	--	--	--	--	5	--	--	x	--	--	--	--	--	--	--	--	--
6	R7-8A(2S)	II	--	12	x	18	1.500	--	--	--	1	--	--	--	--	x	--	--	--	--	--	--	--	--	--
6A	R7-8V(2S)	II	--	12	x	6	0.500	--	--	--	--	--	6	--	--	x	--	--	--	--	--	--	--	--	--
7	R7-8A(2S)	II	--	12	x	18	1.500	--	--	--	--	--	5	--	--	x	--	--	--	--	--	--	--	--	--
7A	R7-8V(2S)	II	--	12	x	6	0.500	--	--	--	--	--	7	--	--	x	--	--	--	--	--	--	--	--	--
8	R7-8A(2S)	II	--	12	x	18	1.500	--	--	--	--	--	6	--	--	x	--	--	--	--	--	--	--	--	--
8A	R7-8V(2S)	II	--	12	x	6	0.500	--	--	--	--	--	8	--	--	x	--	--	--	--	--	--	--	--	--
9	R6-2R(2S)	II	--	24	x	30	5.000	--	--	1	--	--	--	--	--	x	--	--	--	--	--	--	--	--	--
10	D4-5R(3)	II	--	36	x	48	12.000	--	--	1	--	--	--	--	--	x	--	--	--	--	--	--	--	--	--
11	--	I	SYLVANIA [LOGO] PARK & RIDE	--	x	--	--	--	--	--	--	--	--	--	12	x	7	84.00	--	--	W6X15	1.6	142	13	600
12	--	I	SYLVANIA [LOGO] PARK & RIDE	--	x	--	--	--	--	--	--	--	11	BACK OF SIGN #11	--	x	--	--	--	--	--	--	--	--	--
13	R7-1L(2S)	II	--	18	x	24	3.000	--	--	1	--	--	--	--	--	x	--	--	--	--	--	--	--	--	--
14	R7-1R(2S)	II	--	18	x	24	3.000	--	--	1	--	--	--	--	--	x	--	--	--	--	--	--	--	--	--
15	D4-5R(3)	II	--	36	x	48	12.000	--	--	1	--	--	--	--	--	x	--	--	--	--	--	--	--	--	--
16	R5-1A	II	--	--	x	--	--	--	1	--	--	1	15	--	--	x	--	--	--	--	--	--	--	--	--
17	D4-5R(2S)	II	--	30	x	36	7.500	--	--	1	--	--	--	--	--	x	--	--	--	--	--	--	--	--	--
18	D4-5R(2S)	II	--	30	x	36	7.500	--	--	1	--	--	--	--	--	x	--	--	--	--	--	--	--	--	--
19	D4-5L(3)	II	--	36	x	48	12.000	--	--	1	--	--	--	--	--	x	--	--	--	--	--	--	--	--	--
20	D4-5L(3)	II	--	36	x	48	12.000	--	--	1	--	--	--	--	--	x	--	--	--	--	--	--	--	--	--
21	E3-1	I	[LOGO] PARK & RIDE YORKVILLE EXIT 335	--	x	--	--	--	--	--	--	--	--	20' SOUTH OF EXISTING TYPE I SIGN	12	x	10.5	126.00	1	2	W8X21	2	220	16	1100
22	E3-1	I	[LOGO] PARK & RIDE YORKVILLE EXIT 335	--	x	--	--	--	--	--	--	--	--	20' NORTH OF EXISTING TYPE I SIGN	12	x	10.5	126.00	1	2	W8X21	2	220	16	1100
--	--	--	--	--	x	--	--	--	--	--	--	--	--	--	--	x	--	--	--	--	--	--	--	--	--
TOTALS							98.710	1	2	11	3	1						336.000	2	4		5.6	582	45	2800

SHEET 1 OF 1

PROJECT NO: 1320-23-75	HWY: STH 11	COUNTY: RACINE	MISCELLANEOUS QUANTITIES – PERMANENT SIGNING	SHEET:	E

3

TRAFFIC CONTROL ITEMS

		643.0420 TRAFFIC CONTROL BARRICADES TYPE III		643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A		643.0900 TRAFFIC CONTROL SIGNS		643.5000 TRAFFIC CONTROL
	DURATION							
	DAYS	EACH**	DAY	EACH**	DAY	EACH**	DAY	EACH
TRAFFIC CONTROL	45	5	225	10	450	1	45	--
UNDISTRIBUTED		--	--	--	--	--	--	0.01
PROJECT 1320-23-75 TOTAL			225		450		45	0.01

** FOR INFORMATION ONLY

SAWCUTS

STATION				LOCATION	690.0250 SAWING CONCRETE LF
28+14	84' RT	- 28+15	47' RT	PARK & RIDE	37
PROJECT 1320-23-75 TOTAL					37

PAVEMENT MARKING

STATION	LOCATION	646.5020 MARKING ARROW EPOXY TYPE 1 EACH	646.5020 MARKING ARROW EPOXY TYPE 2 EACH	646.5220 MARKING SYMBOL EPOXY 4-INCH EACH	646.8320 MARKING PARKING STALL EPOXY WHITE LF
26+52 - 30+15	PARK & RIDE	2	2	6	3,500
PROJECT 1320-23-75 TOTAL		2	2	6	3,500
		4			

SURVEY PROJECT

LOCATION	SPV.0060.01 SURVEY PROJECT ID 1320-23-75 EACH
PROJECT 1320-23-75	1
PROJECT 1320-23-75 TOTAL	1

ALL ITEMS ARE CATEGORY **1000** UNLESS OTHERWISE SPECIFIED.

3

3

LIGHTING - REMOVALS

204.0195 REMOVING CONCRETE BASES
204.9060.S.02 REMOVING LIGHTING UNITS
659.5000.S LAMP, BALLAST, LED, SWITCH DISPOSAL BY CONTRACTOR

CATEGORY	STAGE	SYSTEM	DESCRIPTION	LOCATION	OFFSET	204.0195 REMOVING CONCRETE BASES	204.9060.S.02 REMOVING LIGHTING UNITS	659.5000.S LAMP, BALLAST, SWITCH DISPOSAL BY CONTRACTOR	COMMENTS
						EACH	EACH	EACH	
1100	1 - 3	HL-51-SA	ASA1	26+95	--	1	1	1	--
			ASA2/BSA2	27+26	--	1	1	2	--
			BSA3/ASA3	28+44	--	1	1	2	--
1100					TOTALS	3	3	5	

SHEET 1 OF 4

PROJECT NO: 1320-23-75	HWY: NON-HWY	COUNTY: RACINE	MISCELLANEOUS QUANTITIES	SHEET:	E

3

3

LIGHTING - CONDUIT AND WIRE

652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH
652.0235 CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH
652.0605 CONDUIT SPECIAL 2-INCH
655.0620 ELECTRICAL WIRE LIGHTING 8 AWG

CATEGORY	STAGE	SYSTEM	CIRCUIT	FROM	TO	652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH	652.0235 CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH	652.0605 CONDUIT SPECIAL 2-INCH	655.0620 ELECTRICAL WIRE LIGHTING 8 AWG	COMMENTS
						LF	LF	LF	LF	
1100	1 - 3	HL-51-SA	A/N/GND	HL-51-SA	LPB -SA-01	--	25	--	105	--
				LPB-AL-01	ASA4	150	--	80	720	--
			A/N/B/GND	HL-51-SA	LPB-SA-01	--	25	--	140	--
				LPB-SA-01	LPB-SA-02	70	50	--	480	--
				LPB-SA-02	BSA1/ASA1	--	--	60	280	--
				BSA1/ASA1	ASA2/BSA2	--	--	110	480	--
				ASA2/BSA2	BSA3/ASA3	--	--	120	520	--
1100					TOTALS	220	100	370	2,725	

LIGHTING - PULL BOXES

653.0140 PULL BOXES STEEL 24X42-INCH
655.0615 ELECTRICAL WIRE LIGHTING 10 AWG

CATEGORY	STAGE	SYSTEM	DESCRIPTION	LOCATION	OFFSET	653.0140 PULL BOXES STEEL 24X42-INCH	655.0615 ELECTRICAL WIRE LIGHTING 10 AWG	COMMENTS
						EACH	LF	
1100	1 - 3	HL-51-SA	LPB-SA-01	30+25	140.1' RT	1	35	--
			LPB-SA-02	30+23	66.1' RT	1	70	--
1100					TOTALS	2	105	

PROJECT NO: 1320-23-75	HWY: NON-HWY	COUNTY: RACINE	MISCELLANEOUS QUANTITIES	SHEET:	E

LIGHTING - LUMINAIRE ARMS AND POLES

654.0105	CONCRETE BASES TYPE 5
655.0610	ELECTRICAL WIRE LIGHTING 12 AWG
657.0255	TRANSFORMER BASES BREAKAWAY 11 1/2 - INCH BOLT CIRCLE
657.0322	POLES TYPE 5 - ALUMINUM
657.0610	LUMINAIRE ARMS SINGLE MEMBER 4 1/2-INCH CLAMP 6-FT
659.1125	LUMINAIRES UTILITY LED C
SPV.0060.02	CONCRETE BASES TYPE 5 SPECIAL

CATEGORY	STAGE	SYSTEM	DESCRIPTION / SEQUENCE	LOCATION STATION	LOCATION OFFSET	654.0105 CONCRETE BASES TYPE 5	655.0610 ELECTRICAL WIRE LIGHTING 12 AWG	657.0255 TRANSFORMER BASES BREAKAWAY 11 1/2 - INCH BOLT CIRCLE	657.0322 POLES TYPE 5 ALUMINUM	657.0610 LUMINAIRE ARMS SINGLE MEMBER 4 1/2-INCH CLAMP 6-FT	659.1125 LUMINAIRES UTILITY LED C	SPV.0060.02 CONCRETE BASES TYPE 5 SPECIAL	COMMENTS
						EACH	LF	EACH	EACH	EACH	EACH	EACH	
1100	1 - 3	HL-51-SA	BSA3/ASA3	27+26	58.7' RT	--	117	1	1	2	2	1	--
			ASA2/BSA2	28+45	65.9' RT	--	117	1	1	2	2	1	--
			BSA1/ASA1	29+59	66.1' RT	--	117	1	1	2	2	1	--
			ASA4	28+09	179.0' RT	1	117	1	1	1	1	--	--
1100					TOTALS	1	468	4	4	7	7	3	

3

3

LIGHTING - CONTROL AND SERVICES
120/240 VAC 3-WIRE

654.0230	CONCRETE CONTROL CABINET BASES TYPE L30
655.0640	ELECTRICAL WIRE LIGHTING 1 AWG
656.0201	ELECTRICAL SERVICE METER BREAKER PEDESTAL (1320-23-75)
659.2130	LIGHTING CONTROL CABINETS 120/240 30-INCH
SPV.0060.03	LIGHTING SYSTEM INTEGRATOR (1320-23-75)
SPV.0060.04	LIGHTING SYSTEM SURVEY (1320-23-75)

CATEGORY	STAGE	DESCRIPTION / SEQUENCE	LOCATION STATION	LOCATION OFFSET	654.0230 CONCRETE CONTROL CABINET BASES TYPE L30	655.0640 ELECTRICAL WIRE LIGHTING 1 AWG	656.0201 ELECTRICAL SERVICE METER BREAKER PEDESTAL (1320-23-75)	659.2130 LIGHTING CONTROL CABINETS 120/240 30-INCH	SPV.0060.03 LIGHTING SYSTEM INTEGRATOR (1320-23-75)	SPV.0060.04 LIGHTING SYSTEM SURVEY (1320-23-75)	COMMENTS
					EACH	LF	EACH	EACH	EACH	EACH	
1100	1	HL-51-SA	PROJECT LIMIT		--	--	--	--	1	1	IH 94 / STH 11 - PARK & RIDE
			30+45	154.8' RT	1	18	1	1	--	--	IH 94 / STH 11 - PARK & RIDE
1100				TOTALS	1	18	1	1	1	1	

PLAQUE TEXT LIGHTING CONTROL
IH 94 / STH 11
2 - 240 VAC WARNING (2 REQUIRED PER LOCATION; METER PEDESTAL AND CABINET DOOR)

LEGEND

AP01 4-INCH BASE AGGREGATE DENSE 3/4-INCH

AP11 4-INCH HMA PAVEMENT

N

BEGIN PROJECT
STA 26+51.65

R/L PARK AND RIDE

END PROJECT
STA 30+15.44

SLOPE INTERCEPT (TYP)

26+00 27+00 28+00 29+00 30+00

STA 26+51.65
0.00'

STA 28+33.55
1.63'

STA 30+15.44
3.27'

1'

AP01

PARK AND RIDE LOT

STA 28+14.76
47.26'

STA 28+01.73
47.01'

EXISTING CONCRETE
PAVEMENT 9-INCH
TO REMAIN

STA 28+00.55
83.89'

STA 28+14.37
83.85'

STA 26+49.21
80.47'

SLOPE INTERCEPT (TYP)

STA 27+40.78
113.04'

STA 28+34.02
140.85'

STA 30+17.38
137.72'

SLOPE INTERCEPT (TYP)

STA 27+22.35
164.86'
R=55'

STA 27+73.76
145.31'

3'

STA 27+65.01
174.48'

STA 28+34.45
165.85'
R=25'

STA 28+09.75
162.00'

STA 28+06.04
185.78'

EAST FRONTAGE RD

STH 11

5

5

PROJECT NO: 1320-23-75	HWY: OFF SYS	COUNTY: RACINE	PLAN DETAILS	SHEET 31	E

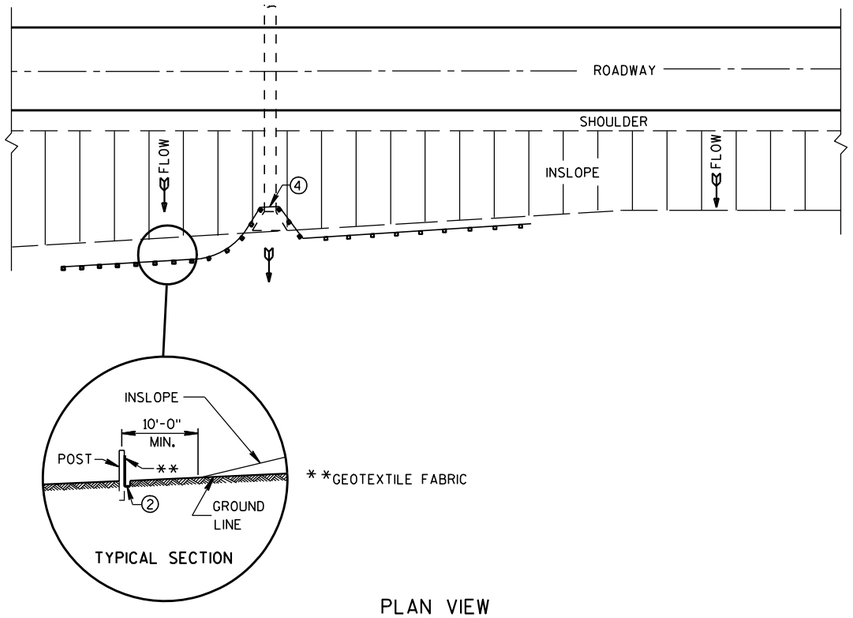
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LAYOUT NAME - 01

PLOT DATE : 10/27/2022 7:52 AM PLOT BY : WALTER A. WOLAK II PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 44

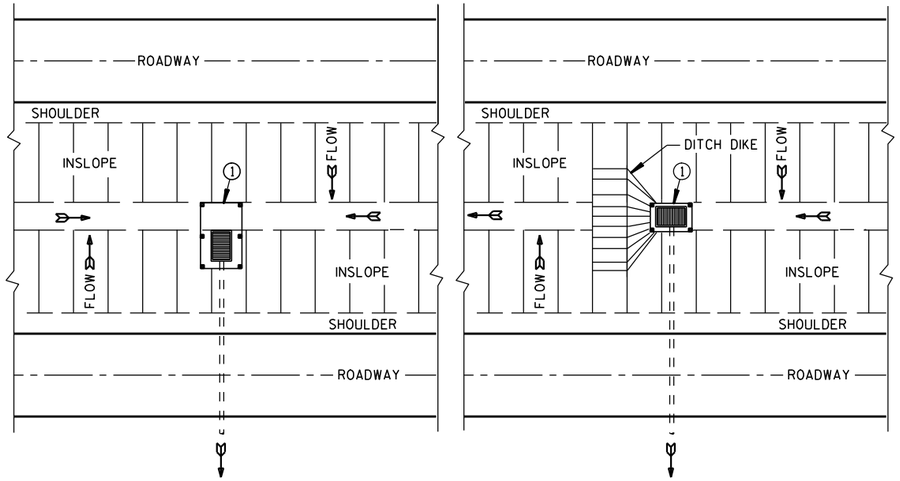
Standard Detail Drawing List

08E09-06	SILT FENCE
08E15-01	CULVERT PIPE CHECK
09B02-10	CONDUIT
09B04-12	PULL BOX
09C02-09	CONCRETE BASES, TYPES 1, 2, 5, & 6
09C03-04	TRANSFORMER/PEDESTAL BASES
09C14-03	CONCRETE CONTROL CABINET BASE, TYPE L
09D01-05	CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)
09D04-03	LIGHTING CONTROL CABINET 120/240 VOLT
09E01-15D	POLE MOUNTINGS FOR LIGHTING UNITS, TYPE 5 (30 FEET)
09E01-15G	HARDWARE DETAILS FOR POLE MOUNTINGS
09E03-06	NON-FREEWAY LIGHTING UNIT POLE WIRING
10A01-04	ELECTRICAL HANDHOLE WIRING
10A02-03	IDENTIFICATION PLAQUES LIGHT POLES
10A05-03	ELECTRICAL DETAILS GROUND MOUNT LIGHT POLES ISOLATED NEUTRAL SYSTEMS
13C19-03	HMA LONGITUDINAL JOINTS
14B29-01	SAFETY EDGE
15C02-08A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-08B	BARRICADES AND SIGNS FOR VARIOUS CLOSURES
15C07-15A	PAVEMENT MARKING SYMBOLS
15C11-09B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C36-01	PARKING STALL MARKING
15D43-02	TRAFFIC CONTROL, SHORT DURATION MOBILE OPERATIONS



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



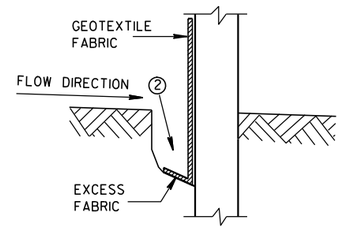
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

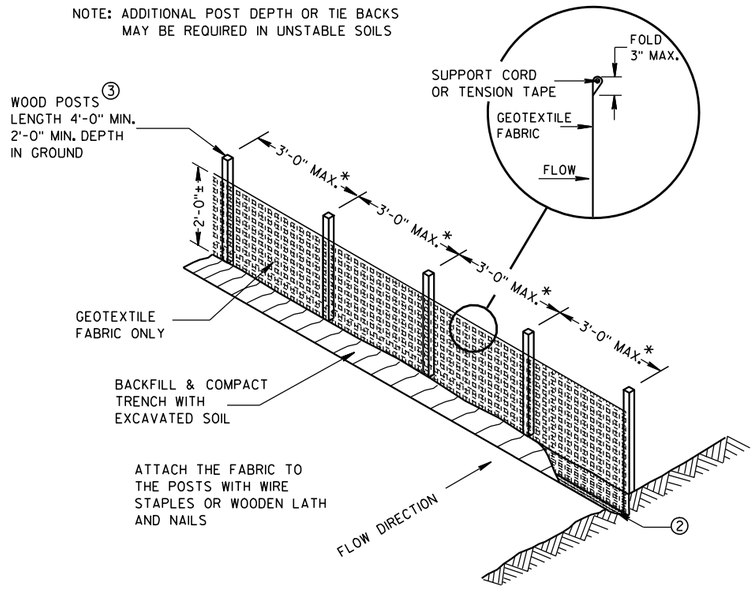
GENERAL NOTES

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

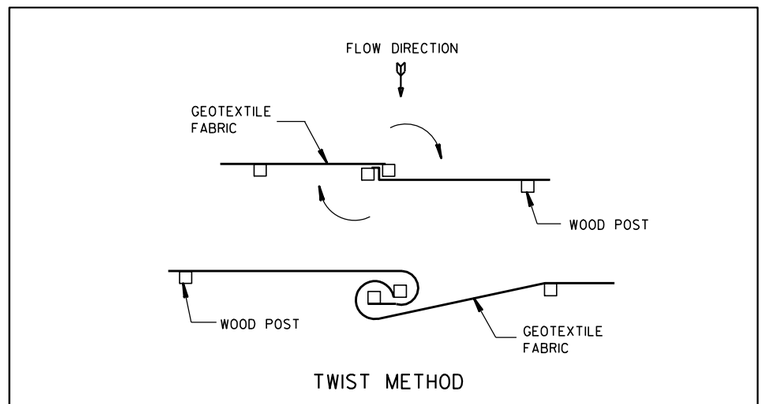
1. HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
2. FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
3. WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OF OAK OR HICKORY.
4. SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.
5. CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.



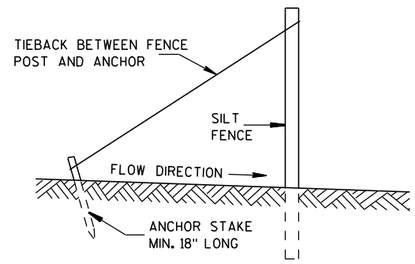
TRENCH DETAIL



SILT FENCE



JOINING TWO LENGTHS OF SILT FENCE 5



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

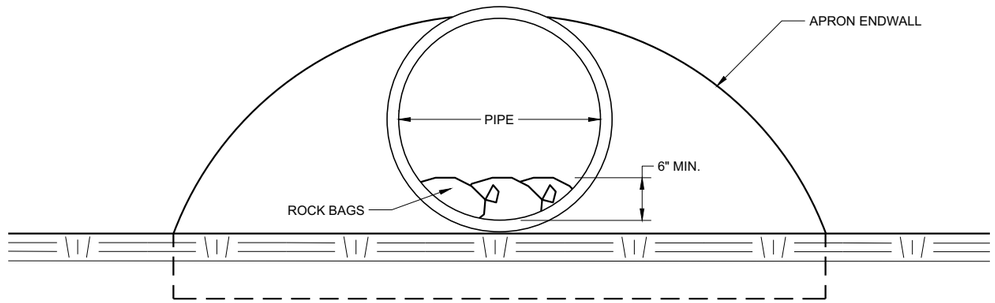
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6

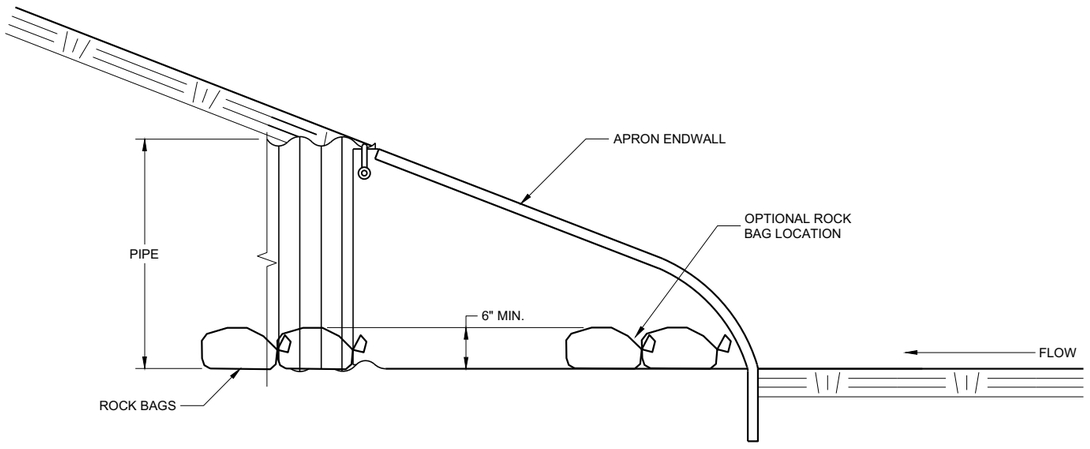
S.D.D. 8 E 9-6

6

S.D.D. 8 E 9-6



END VIEW



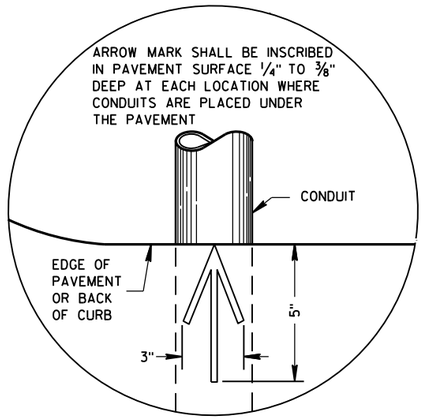
SIDE VIEW

CULVERT PIPE CHECK

(INSTALL ON INLET END ONLY)

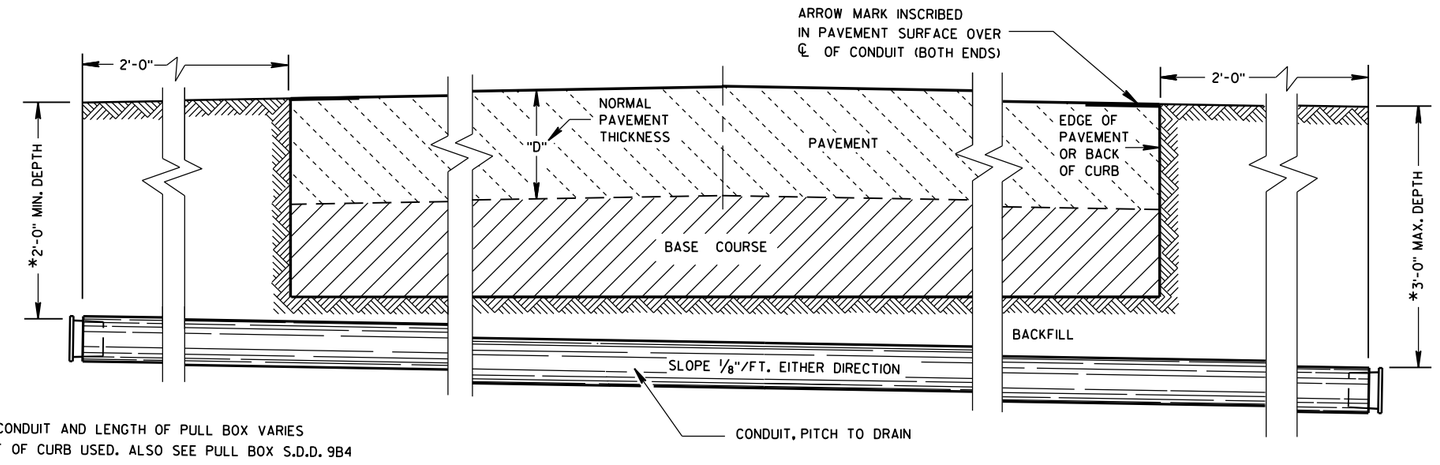
CULVERT PIPE CHECK	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED May 2019 DATE	/S/ Daniel Schave EROSION CONTROL ENGI
FHWA	

6
SDD 08E15 - 01



PLAN VIEW

ARROW MARK



*DEPTH OF CONDUIT AND LENGTH OF PULL BOX VARIES WITH HEIGHT OF CURB USED. ALSO SEE PULL BOX S.D.D. 9B4

SIDE ELEVATION

DETAIL FOR CONDUIT UNDER PAVED HIGHWAYS

GENERAL NOTES

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

METALLIC (STANDARD SPECIFICATION 652.2.2) OR NONMETALLIC (STANDARD SPECIFICATION 652.2.3) CONDUIT SHALL BE FURNISHED AND PLACED AS SHOWN.

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

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

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

THE TRENCH SHALL NOT BE BACKFILLED PRIOR TO INSPECTION OF THE CONDUIT.

ALL METALLIC CONDUIT RACEWAY ENDS SHALL BE REAMED AND THREADED.

ALL METALLIC CONDUIT IN WHICH WIRE OR CABLE IS TO BE INSTALLED SHALL BE BUSHED WITH APPROVED THREADED BUSHINGS BEFORE INSTALLATION OF THE WIRE OR CABLE.

ALL METALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT TO BE INSTALLED SHALL BE CAPPED WITH THREADED PROTECTIVE CAPS, AS APPROVED BY THE ENGINEER.

ALL NONMETALLIC CONDUIT SHALL BE CAPPED OR PLUGGED IMMEDIATELY AFTER INSTALLATION AND SHALL REMAIN CAPPED OR PLUGGED UNTIL WIRE/CABLES ARE INSTALLED.

NONMETALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

BENDING OF PVC ELECTRICAL CONDUIT SHALL BE ACCOMPLISHED BY USING A BLANKET OR EMERSION TYPE TANK DESIGNED FOR THE PURPOSE OF BENDING PVC ELECTRICAL CONDUIT.

ALL CUT ENDS SHALL BE TRIMMED INSIDE AND OUTSIDE TO REMOVE ALL ROUGH EDGES ON NONMETALLIC CONDUIT. (SEE NEC 347.5)

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

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

ALL CONDUIT BEING FURNISHED AND INSTALLED SHALL HAVE THE U.L. LABEL FIRMLY ATTACHED.

CONDUIT RUNS SHALL BE THE SAME SIZE OF CONDUIT FROM ONE END TO THE OTHER (FROM PULL BOX TO PULL BOX-OR-JUNCTION BOX TO JUNCTION BOX-OR-BASE TO BASE, ETC.).

TRACER WIRE SHALL BE INSTALLED AS STATED IN THE STANDARD SPECIFICATION, ITEM 652.3.1.1.

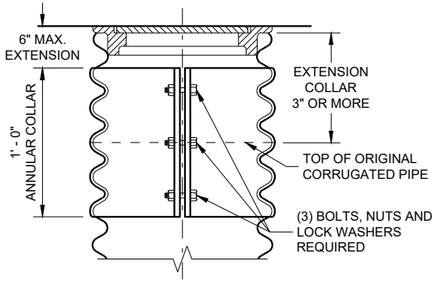
ALL CONDUIT RUNS SHALL BE STRAIGHT (WITHOUT BENDS) FROM PULL BOX TO PULL BOX, PULL BOX TO BASE AND BASE TO BASE AS SHOWN ON THE PLANS.

CONDUIT

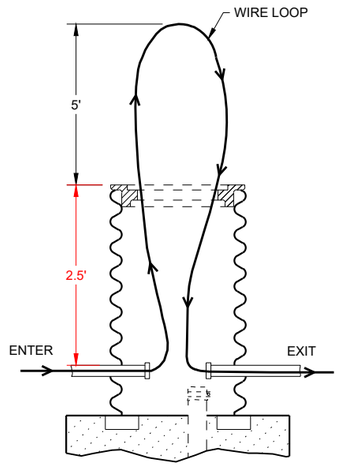
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March, 2017 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL 35
FHWA

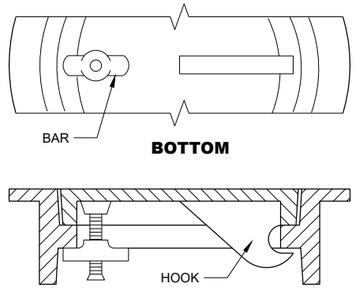
6
S.D.D. 9 B 2-10



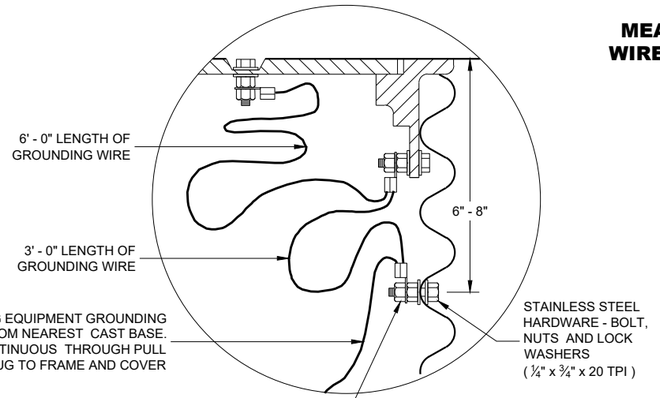
CORRUGATED PIPE EXTENDER



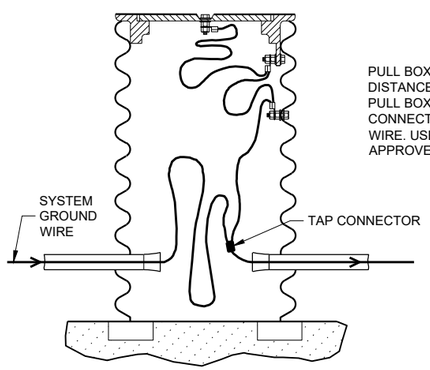
MEASUREMENT DETAIL FOR WIRE/CABLE IN THE PULL BOX



ALTERNATE COVER (LOCKING)
TIGHTENING BAR TYPE

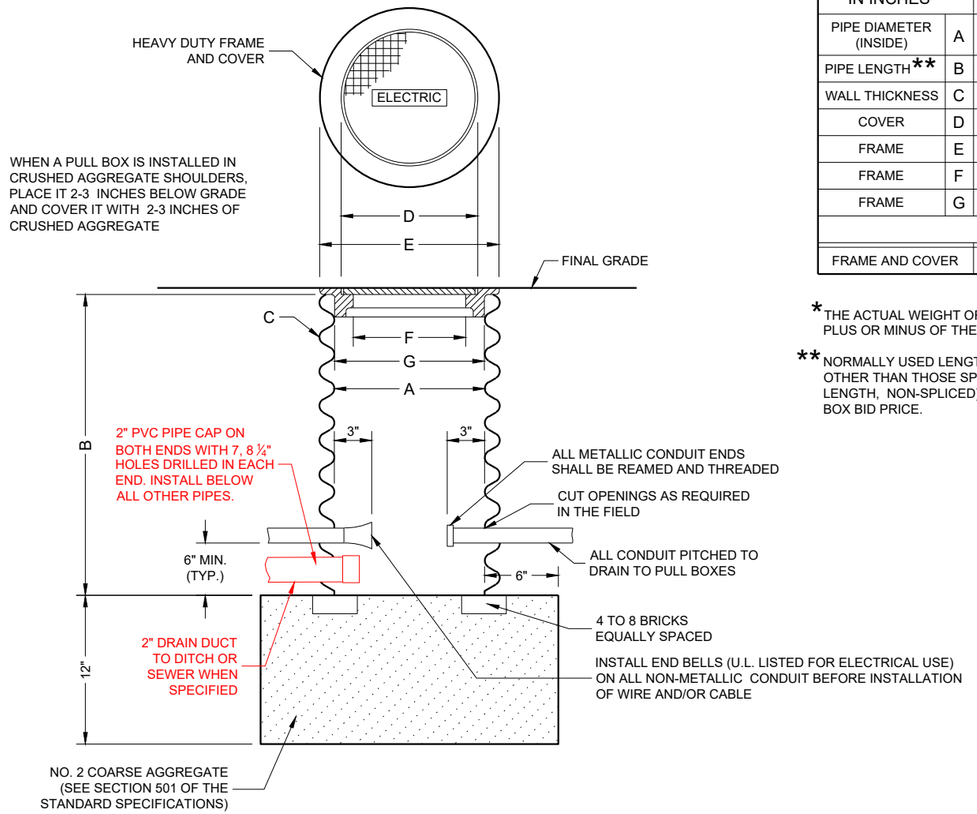


EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES



PULL BOX TO NEAREST BASE DISTANCE MORE THAN 20 FEET. PULL BOX GROUND WIRE SHALL CONNECT AT SYSTEM GROUNDING WIRE. USE DEPARTMENT APPROVED TAP CONNECTOR.

EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES



PULL BOX

GENERAL NOTES

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

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

PULL BOXES LOCATED IN THE ROADWAYS SHALL HAVE LOCKING COVERS.

ENTRANCE HOLES INTO PULL BOXES SHALL BE CUT WITH A CIRCULAR HOLE SAW OR HYDRAULIC CONDUIT PUNCH. HOLE SIZE SHALL BE THE OUTSIDE DIAMETER OF THE CONDUIT THAT IS TO FIT IN THE OPENING PLUS NO MORE THAN ¼".

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

GROUNDING LUGS (MECHANICAL CONNECTORS) SHALL BE U.L. LISTED AND APPROVED FOR USE WITH COPPER WIRE.

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

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

TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

DIMENSION IN INCHES		CORRUGATED STEEL PIPE								
PIPE DIAMETER (INSIDE)	A	12	12	12	18	18	18	24	24	24
PIPE LENGTH**	B	24	30	36	24	30	36	36	42	48
WALL THICKNESS	C	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064
COVER	D	10 ¼	10 ¼	10 ¼	16 ¼	16 ¼	16 ¼	22 ¼	22 ¼	22 ¼
FRAME	E	14 ½	14 ½	14 ½	20 ½	20 ½	20 ½	26 ½	26 ½	26 ½
FRAME	F	8 ½	8 ½	8 ½	14 ½	14 ½	14 ½	20 ½	20 ½	20 ½
FRAME	G	11 ½	11 ½	11 ½	17 ½	17 ½	17 ½	23 ½	23 ½	23 ½
WEIGHT IN POUNDS*										
FRAME AND COVER		60	60	60	110	110	110	155	155	155

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

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

PULL BOX

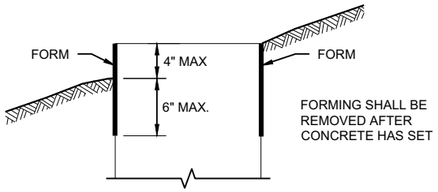
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2022
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI

FHWA

FORM DEPTH SHALL BE NO MORE THAN 6" BELOW GRADE ON THE LOWER SIDE OF BASE



FORMING DETAIL

QUANTITY REQUIREMENTS	CONCRETE BASE TYPE		
	1	2	5 & 6
APPROX. CUBIC YARDS OF CONCRETE	0.40	0.57	0.40
LBS. OF HOOP BAR STEEL	NONE	23	16
LBS. OF VERTICAL BAR STEEL	NONE	60	18

GENERAL NOTES

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

BASES SHALL BE EXCAVATED BY USE OF A CIRCULAR AUGER.

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

CONDUIT SIZES AND LOCATIONS SHALL BE SHOWN ON THE PLANS

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

ENDS OF CONDUIT INSTALLED BELOW GRADE FRO FUTURE USE SHALL BE CAPPED IF METALLIC OR PLUGGED IF NON-METALLIC.

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

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

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

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

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

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

A NO. 4 AWG STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD) FOR TYPE 2, TYPE 5 AND TYPE 6 BASES.

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

ANCHOR RODS SHALL BE THREADED 12" IN LENGTH ON EACH END OF THE ROD. ANCHOR RODS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 654.2.1 OF THE STANDARD SPECIFICATIONS.

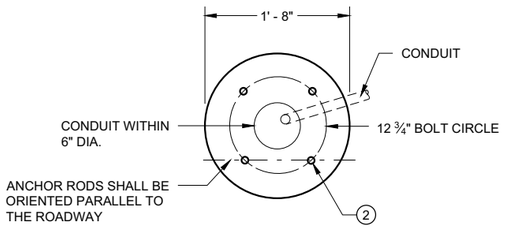
WASHERS AND LOCK WASHERS ARE REQUIRED ON ALL ANCHOR RODS.

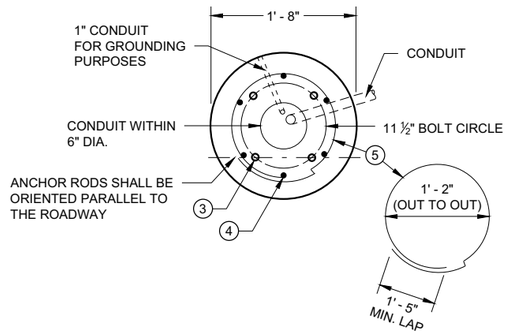
WHEN ANCHOR RODS USING THE ALTERNATE "L" BEND ARE FURNISHED, THE 4 INCH"L" BEND SHALL BE IN ADDITION TO THE SPECIFIED ANCHOR ROD BAR LENGTH. THE "L" BEND SHALL NOT BE THREADED.

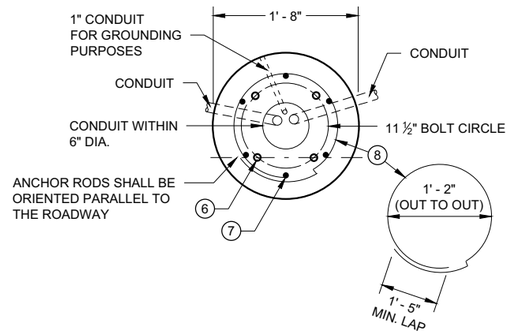
ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

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

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







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

2 (4) 1" DIA. X 3' - 6" ANCHOR RODS.

3 (4) 1" DIA. X 5' - 0" ANCHOR RODS.

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

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

6 (4) 1" DIA. X 3' - 6" ANCHOR RODS.

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

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

9 EXOTHERMIC CONNECTION TO EUIPMENT GROUNDING CONDUCTOR

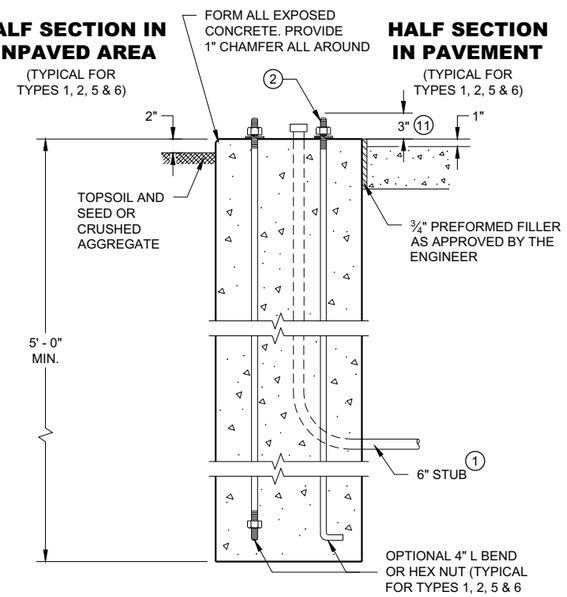
10 ⅝" DIA. X 8' -0" COPPERCLAD EQUIPMENT GROUNDING ELECTRODE REQUIRED

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

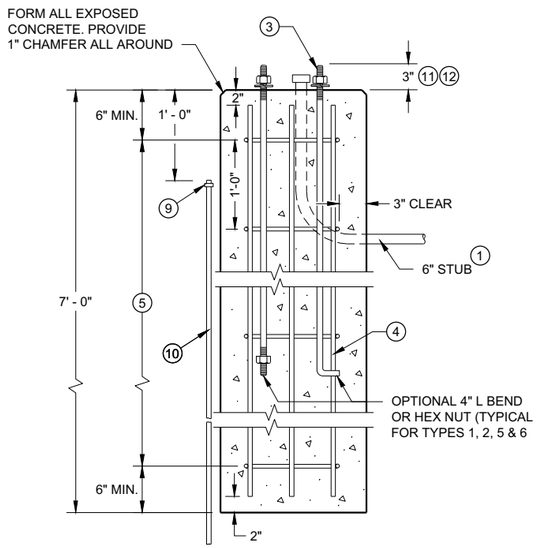
12 FOR NON - BREAKAWAY INSTALLATIONS, 4 ½" ± ANCHOR ROD PROJECTION WITH THE USE OF LEVELING NUTS. RODENT SCREEN REQUIRED.

HALF SECTION IN UNPAVED AREA
(TYPICAL FOR TYPES 1, 2, 5 & 6)

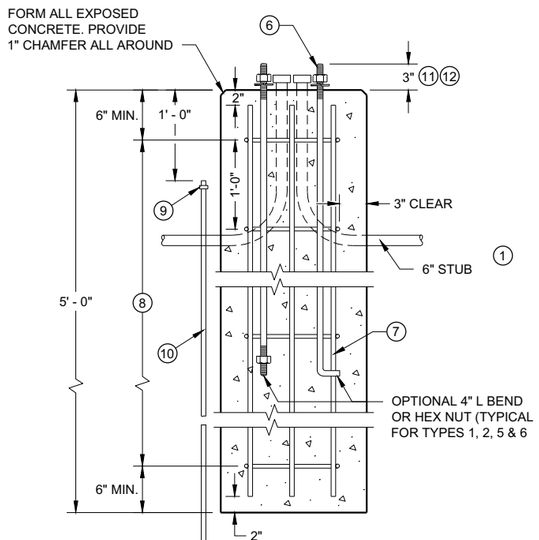
HALF SECTION IN PAVEMENT
(TYPICAL FOR TYPES 1, 2, 5 & 6)



TYPE 1



TYPE 2



TYPE 5 & 6

CONCRETE BASES

CONCRETE BASES
TYPES 1, 2, 5, & 6

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019
DATE
/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI
FHWA

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SDD 09C02 - 09

GENERAL NOTES

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

FOUR (4) BOLTS SHALL BE FURNISHED WITH EACH TRANSFORMER BASE. BOLTS SHALL BE 1" DIAMETER, 4" IN LENGTH, WITH WASHERS, LOCK WASHERS AND NUTS. BOLTS, NUTS AND WASHERS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 531.2.2 OF THE STANDARD SPECIFICATIONS.

LEVELING SHIMS, IF NEEDED, SHALL BE DESIGNED FOR THE PURPOSE AND USED UNDER CAST BASES WHEN PLUMBING POLES OR STANDARDS DURING INSTALLATION. THE USE OF WASHERS IN LIEU OF PROPER LEVELING SHIMS IS NOT ACCEPTABLE.

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

DOUBLE NUTTING IS NOT ACCEPTABLE FOR LEVELING OR MOUNTING PURPOSES.

A NEMA APPROVED, U.L. LISTED, COPPER WITH BRASS OR STAINLESS STEEL SET SCREW, DIRECT BURY RATED, MECHANICAL CONNECTOR (LUG), SIZED TO ACCEPT AWG. #10 TO #4 COPPER STRANDED WIRE SHALL BE FURNISHED AND INSTALLED IN THE PEDESTAL AND TRANSFORMER BASES.

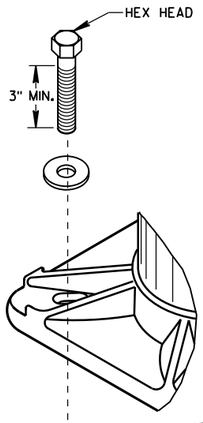
THE MECHANICAL CONNECTOR SHALL BE INSTALLED USING A 1/4" - 20 (TPI) STAINLESS STEEL HEX HEAD BOLT OF SUFFICIENT LENGTH TO FIRMLY ATTACH THE LUG TO THE BASE.

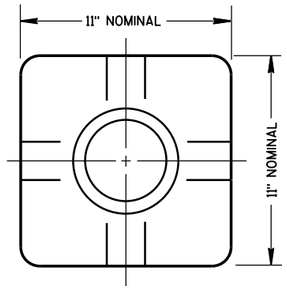
SHOULD THE MANNER OF ATTACHMENT OF THE LUG REQUIRE WASHERS, HEX NUTS, LOCK WASHER - THEY SHALL BE STAINLESS STEEL AS IS THE BOLT. THE MANNER OF ATTACHMENT SHALL NOT BLOCK ACCESSIBILITY TO WIRE PLACEMENT IN THE CONNECTOR.

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

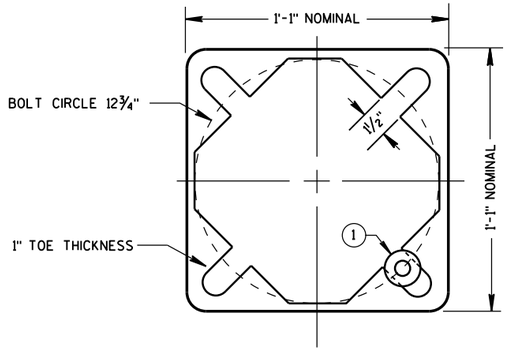
BASE COLLAR THREADING SHALL EXTEND INTO THE BASE COLLAR WITH SUFFICIENT DEPTH TO ACCEPT THE INSTALLATION OF TRAFFIC SIGNAL STANDARDS TO A DEPTH OF 1 1/2", THEN TIGHTENING TO A POINT OF BEING IMMOVABLE.

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

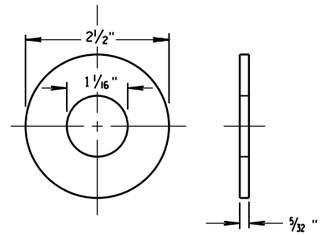




TOP VIEW
(PEDESTAL BASE)

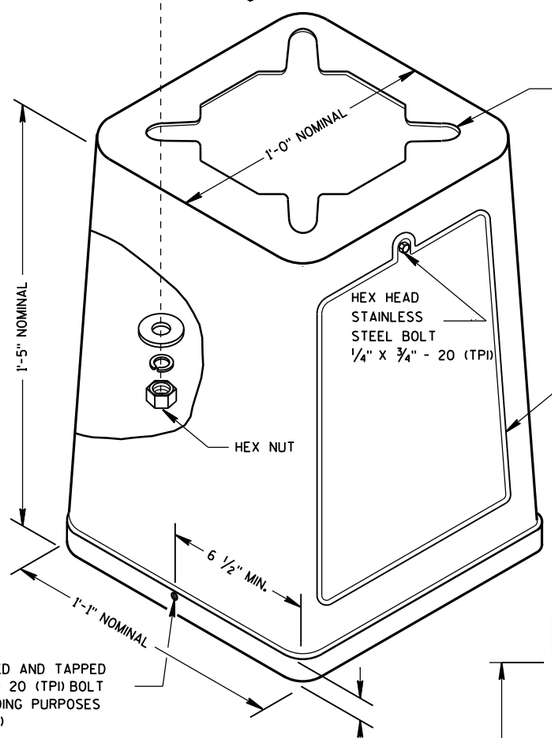


BOTTOM VIEW
(PEDESTAL BASE)

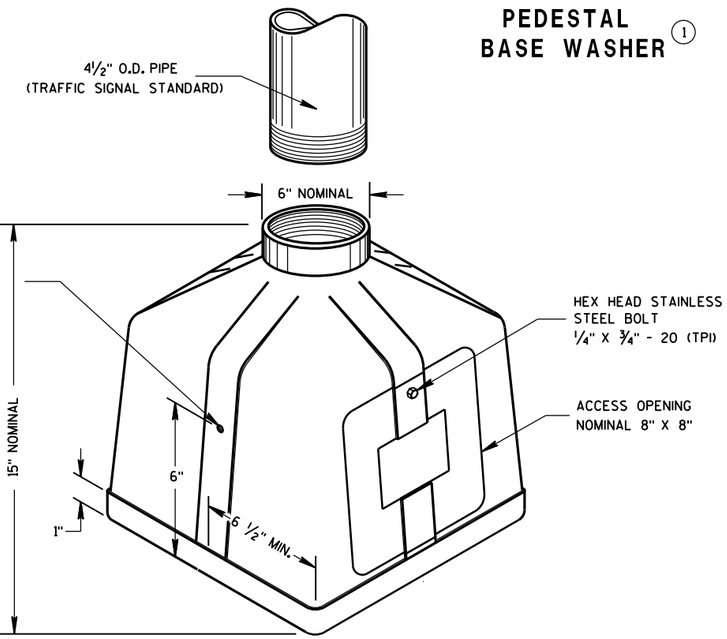


ZINC COATED STEEL WASHER
TO BE PROVIDED BY THE CONTRACTOR

PEDESTAL BASE WASHER (1)

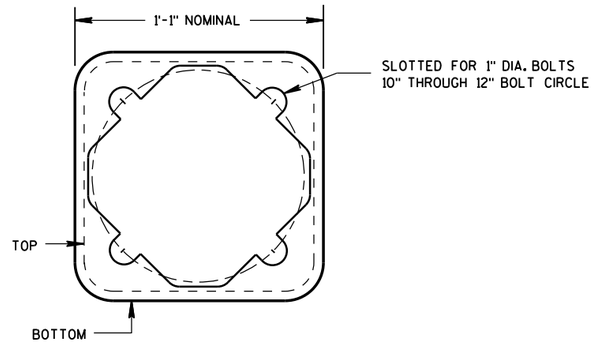


ISOMETRIC VIEW

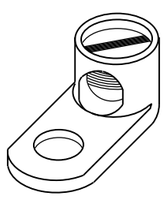


ISOMETRIC VIEW

PEDESTAL BASE



BOTTOM VIEW
(TRANSFORMER BASE)

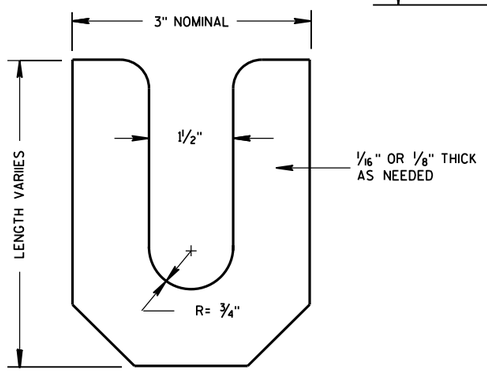


TYPICAL MECHANICAL CONNECTOR LUG

TO BE FURNISHED WITH EACH BASE

TRANSFORMER BASE

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



LEVELING SHIM

TRANSFORMER/PEDESTAL BASES

STATE OF WISCONSIN
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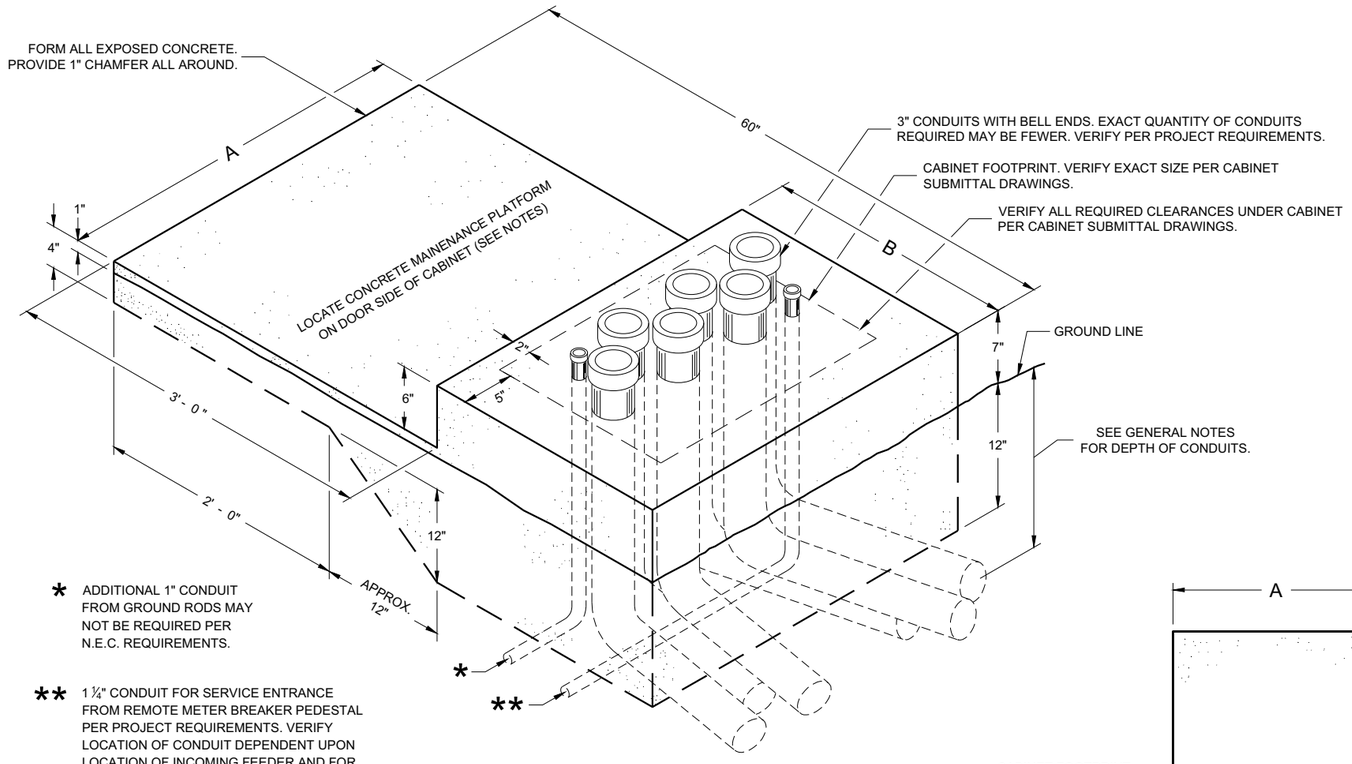
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* ADDITIONAL 1" CONDUIT FROM GROUND RODS MAY NOT BE REQUIRED PER N.E.C. REQUIREMENTS.

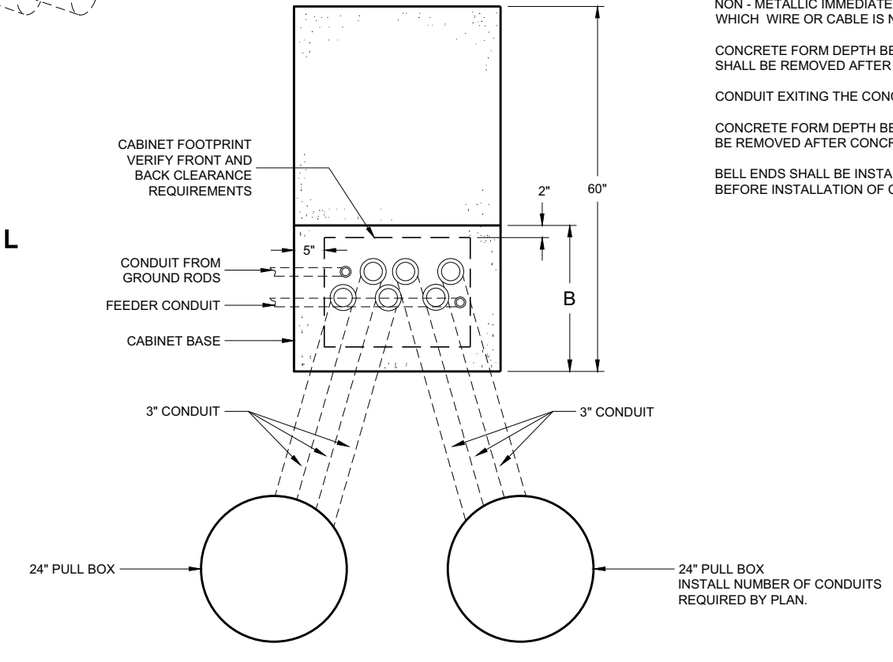
** 1 ¼" CONDUIT FOR SERVICE ENTRANCE FROM REMOTE METER BREAKER PEDESTAL PER PROJECT REQUIREMENTS. VERIFY LOCATION OF CONDUIT DEPENDENT UPON LOCATION OF INCOMING FEEDER AND FOR EASE OF CONNECTION TO LOAD CENTER.

ISOMETRIC VIEW

CONCRETE CONTROL CABINET BASE, TYPE L

(C.Y. CONCRETE = APPROX. 0.4)

CONCRETE BASE TYPE	CABINET WIDTH	DIMENSIONS		MAXIMUM 3" CONDUITS
		A	B	
L24	24"	34"	24"	4
L30	30"	40"	24"	6



PLAN VIEW

CONCRETE CONTROL CABINET BASE, TYPE L

GENERAL NOTES

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

INSTALL FOUR STAINLESS STEEL APPROVED CONCRETE MASONRY ANCHORS TO ANCHOR THE CABINET BASES. THE ANCHORS SHALL BE LOCATED AS DIRECTED BY THE ENGINEER TO PROPERLY ANCHOR THE CONTROL CABINET TO THE BASE.

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

CONDUIT HEIGHT ABOVE THE CONCRETE BASE SHALL BE 1 INCH.

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

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

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

LOCATIONS SHALL BE AS SHOWN ON THE PLANS UNLESS DETERMINED BY THE ENGINEER IN THE FIELD.

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

MAINTENANCE PLATFORM SHALL BE FLOAT OR BROOM FINISHED AND LEVEL.

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

MINIMUM BENDING RADIUS OF CONDUIT EQUALS 6 TIMES THE DIAMETER.

ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

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

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

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

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

CONDUIT EXITING THE CONCRETE BASE SHALL TERMINATE IN PULL BOXES AS SHOWN ON THE PLANS.

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

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

CONCRETE CONTROL CABINET BASE, TYPE L

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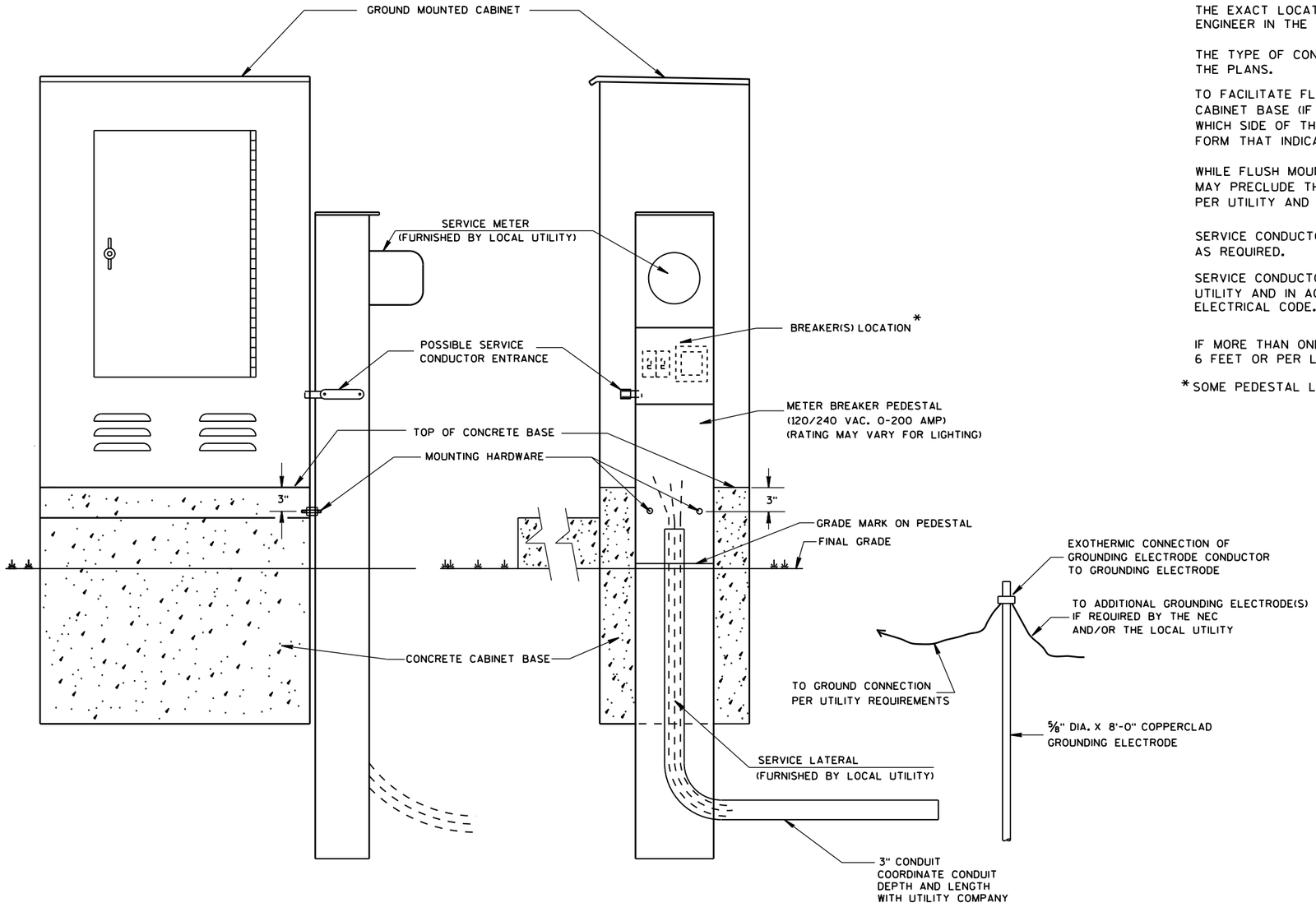
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November 2018
DATE

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TYPICAL CABINET SERVICE INSTALLATION

GENERAL NOTES

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

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

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

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

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

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

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

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

* SOME PEDESTAL LIGHTING PLANS SHOW MAIN LUGS ONLY.

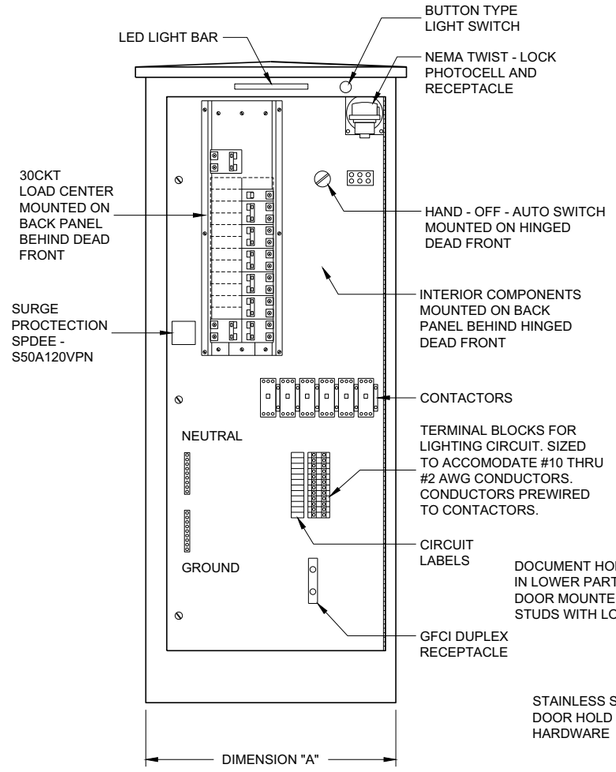
CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)

STATE OF WISCONSIN
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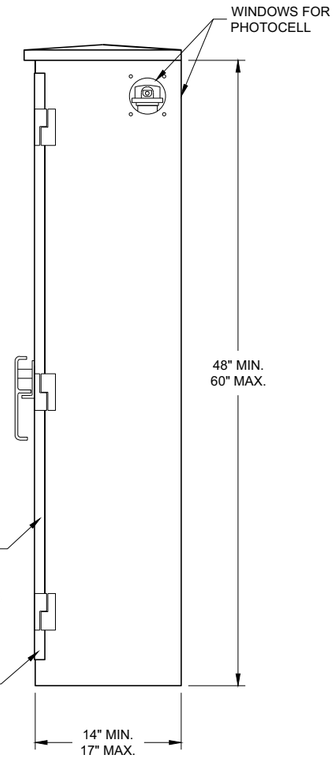
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FRONT INTERIOR ELEVATION



SIDE VIEW



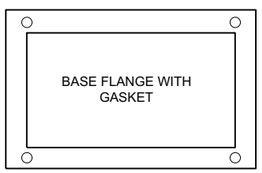
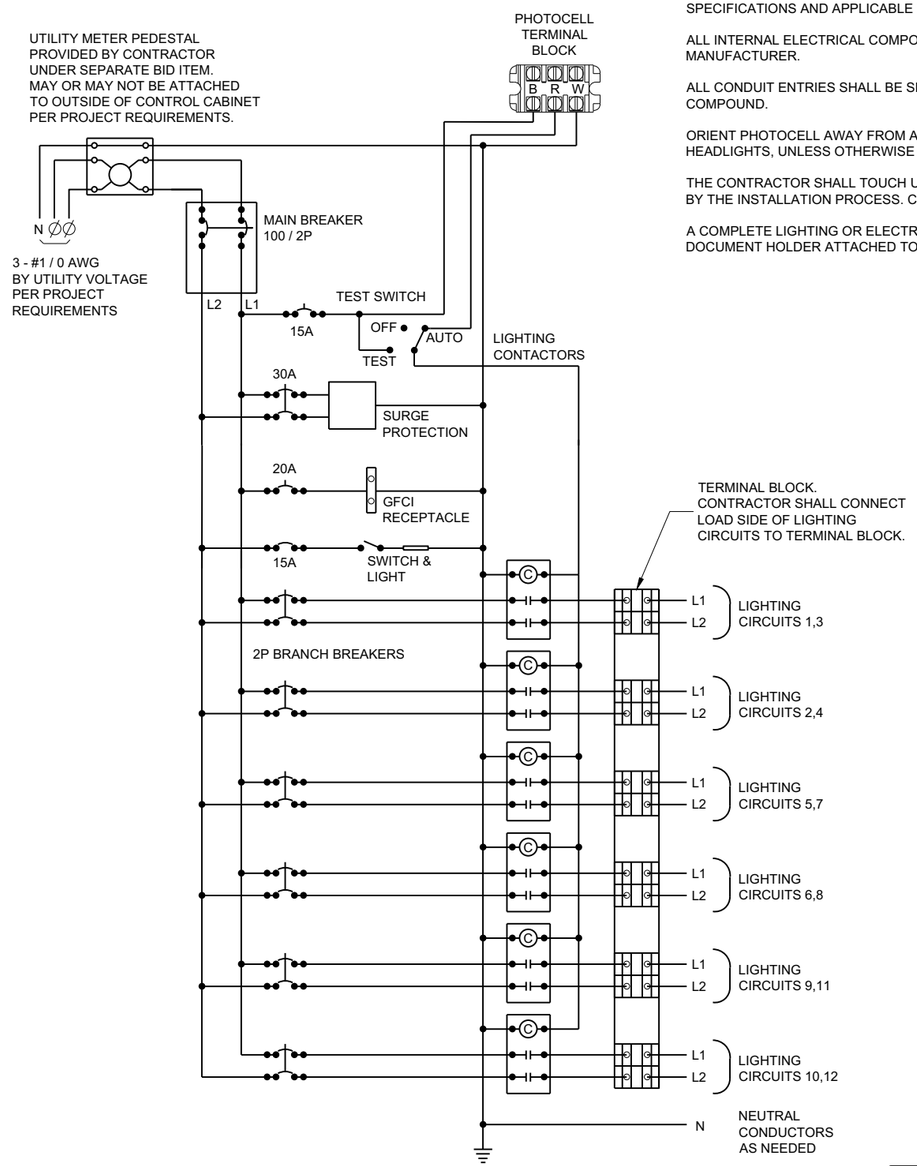


TABLE OF DIMENSIONS (INCHES)		
CONCRETE BASE TYPE	CABINET WIDTH	DIMENSION "A"
L24	24"	24"
L30	30"	30"

LIGHTING CONTROL CABINET



CONTROL CABINET SCHEMATIC

GENERAL NOTES

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

ALL INTERNAL ELECTRICAL COMPONENTS WILL BE PRE - WIRED BY THE CABINENT MANUFACTURER.

ALL CONDUIT ENTRIES SHALL BE SEALED WITH AN APPROPRIATE DUCT SEALING COMPOUND.

ORIENT PHOTOCELL AWAY FROM AMBIENT LIGHT SOURCES AND ONCOMING TRAFFIC HEADLIGHTS, UNLESS OTHERWISE CALLED FOR IN THE SPECIAL PROVISION.

THE CONTRACTOR SHALL TOUCH UP ANY DAMAGE TO THE ANODIZED FINISH CAUSED BY THE INSTALLATION PROCESS. COLOR MATCH PAINT SHALL BE USED.

A COMPLETE LIGHTING OR ELECTRICAL PLAN SHALL BE SECURELY PLACED IN THE DOCUMENT HOLDER ATTACHED TO THE DOOR.

LIGHTING CONTROL CABINET
120 / 240 VOLT

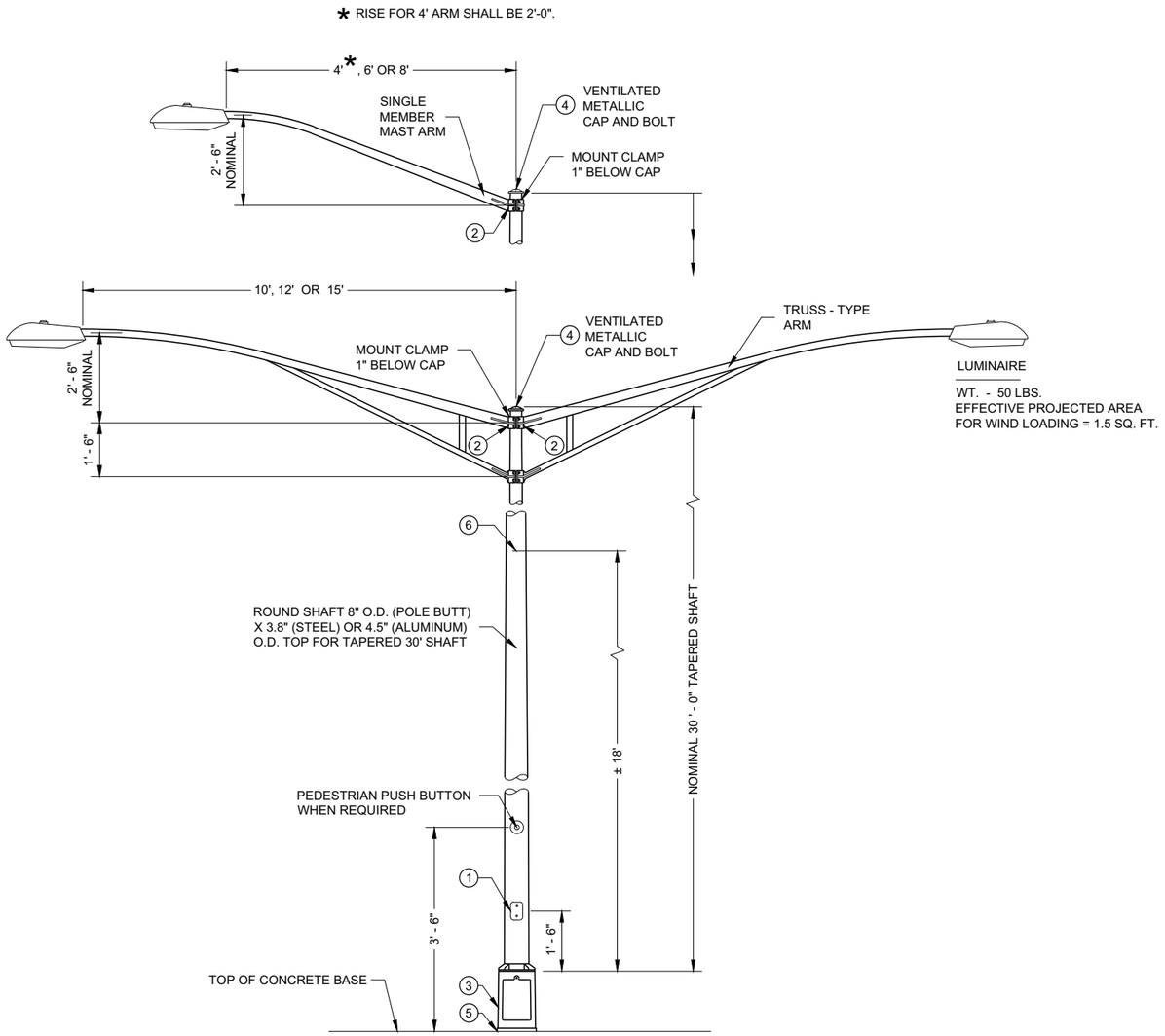
STATE OF WISCONSIN
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TYPE 5 POLE MOUNTING CONFIGURATION
(MAXIMUM LOAD)
LIGHTING ONLY

GENERAL NOTES

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

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

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

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

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

TYPE 5 ALUMINUM POLES SHALL HAVE A MINIMUM WALL THICKNESS OF 0.1888".

TYPE 5 STEEL POLES SHALL HAVE A MINIMUM WALL THICKNESS OF U.S. STANDARD 11 GAGE (0.1196").

THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 2 ⅜ INCHES IN OUTSIDE DIAMETER. THE STRAIGHT PORTION OF THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 12 INCHES IN LENGTH.

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

(1) 4" X 6" REINFORCED HANDHOLE AND COVER ASSEMBLY WITH TWO (2) ¼" X ¾" - 20 TPI , STAINLESS STEEL, HEX HEAD BOLTS.

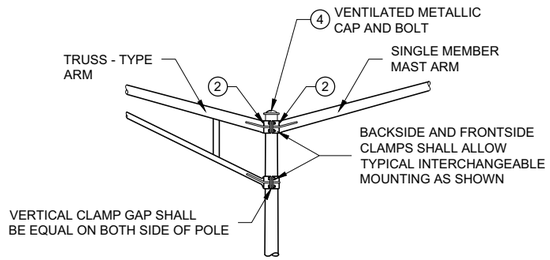
(2) GROMMETS. 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1 ⅜" HOLE IN POLE SHAFT FOR WIRING.

(3) CAST ALUMINUM TRANSFORMER BASE, WHEN REQUIRED.

(4) FURNISH AND INSTALL VENTILATED, CAST METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.

(5) SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND POLE.

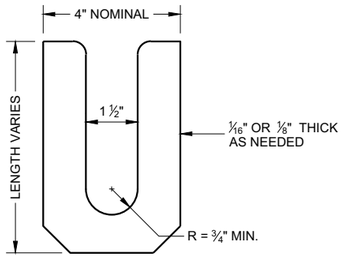
(6) INTERNAL DUMBBELL - TYPE VIBRATION DAMPER.



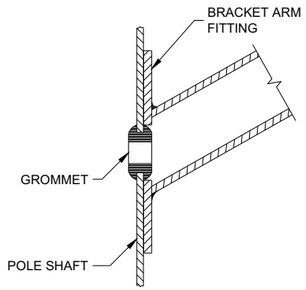
INTERCHANGEABLE MOUNTING DETAIL

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

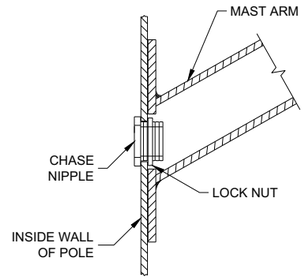
6
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LEVELING SHIM (1)
SHALL BE ALUMINUM



TYPICAL APPLICATION OF GROMMET IN POLE SHAFT



TYPICAL APPLICATION OF CHASE NIPPLE IN POLE SHAFT

GENERAL NOTES

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

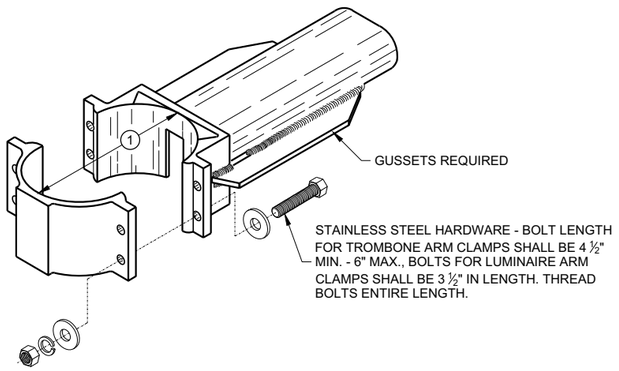
(1) 4.5" I.D. FOR LUMINAIRE MAST ARM CLAMP. 6.625" I.D. FOR TROMBONE MAST ARM CLAMP.

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

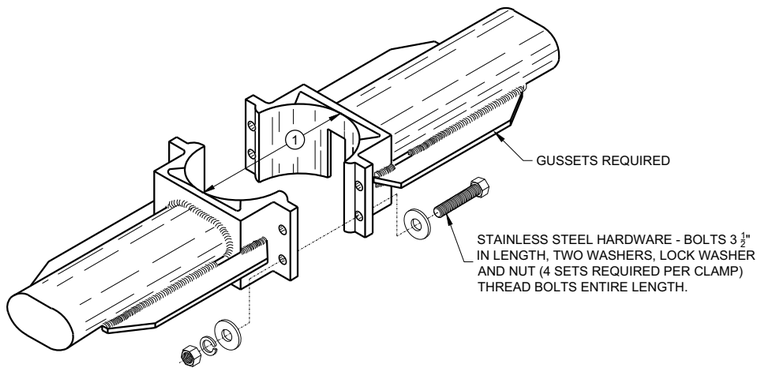
(3) BASE PLATE SLOTTED TO ACCEPT 11" THROUGH 12" BOLT CIRCLE USING 1" DIAMETER ANCHOR RODS.

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

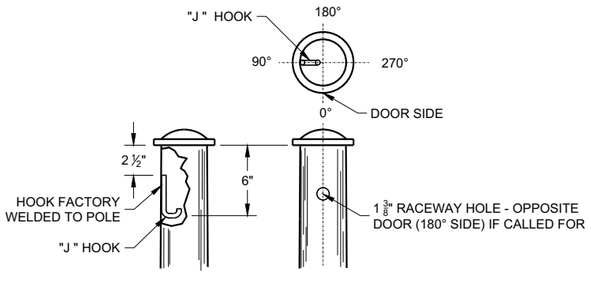
SHIMS SHALL BE LONG ENOUGH AND WIDE ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.



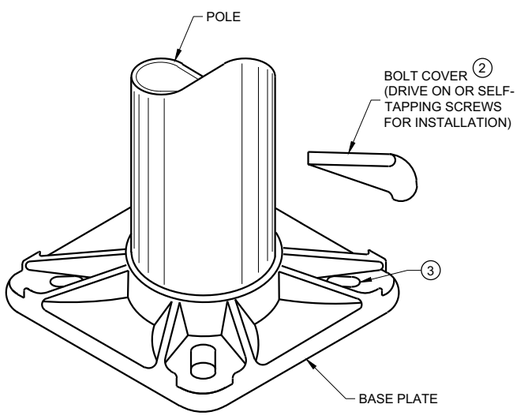
TYPICAL TROMBONE MAST ARM AND SINGLE LUMINAIRE MAST ARM MOUNTING CLAMP



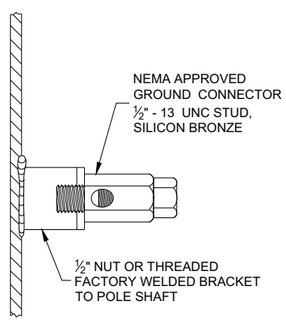
TYPICAL LUMINAIRE MAST ARM (DOUBLE) MOUNTING BRACKETS

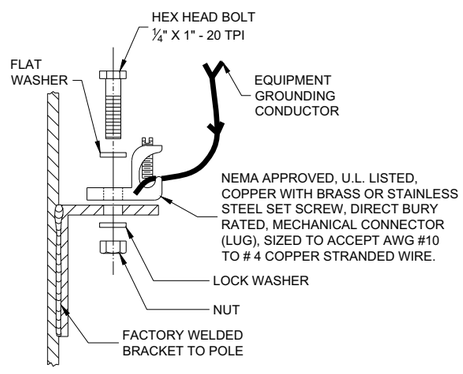


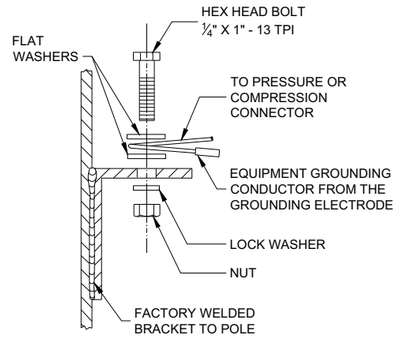
TYPICAL "J" HOOK LOCATION



BASE PLATE







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

HARDWARE DETAILS FOR POLE MOUNTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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November 2018
DATE

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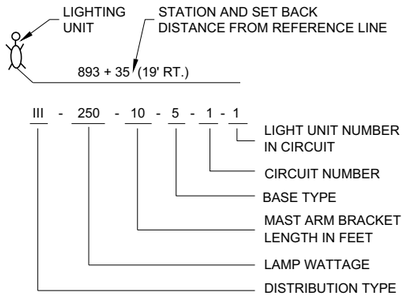
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GENERAL NOTES

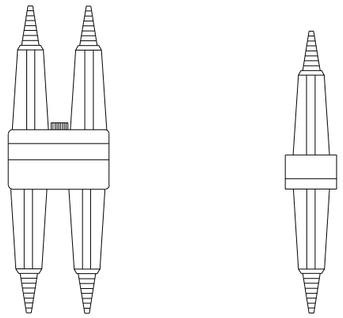
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

THE EQUIPMENT GROUND CONNECTOR SHALL BE TAPED WITH 3 WRAPS (MINIMUM) OF APPROVED RUBBER TAPE AND 3 WRAPS (MINIMUM) OF APPROVED VINYL TAPE TO COVER SHARP WIRE ENDS AFTER THE CONNECTION IS COMPLETED.

WHEN TRANSFORMER BASES ARE USED, ALL WIRING CONNECTIONS SHALL OCCUR WITHIN THE TRANSFORMER BASES.

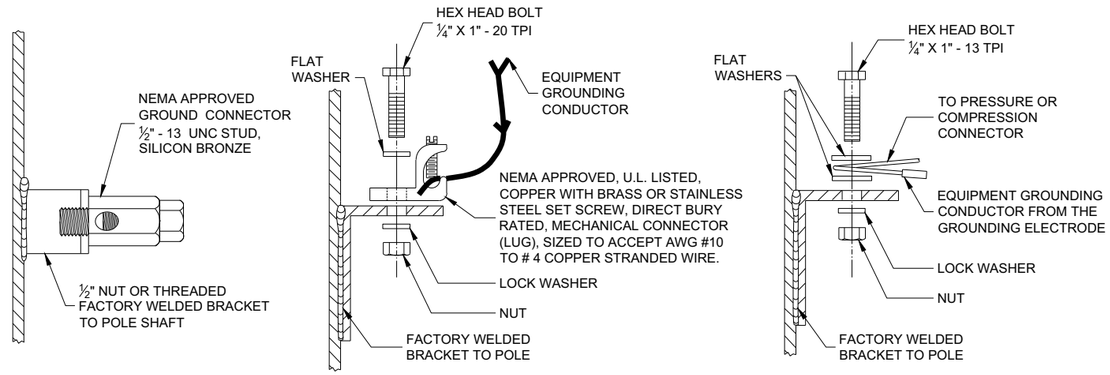


LIGHTING UNIT CODE
(TYPICAL)

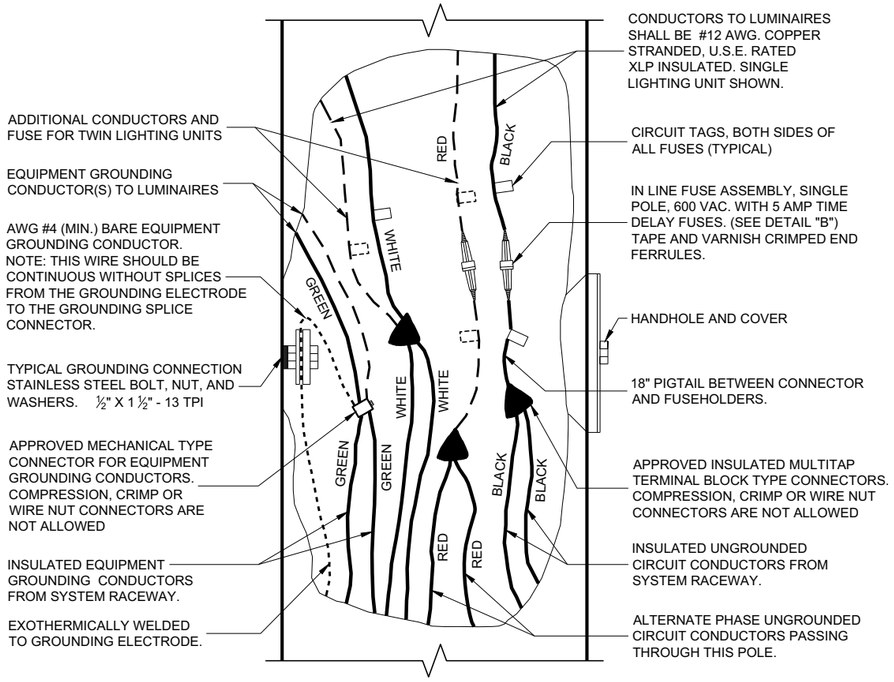


DETAIL "A"
BREAKAWAY DOUBLE POLE WITH WATERPROOF INSULATING BOOT

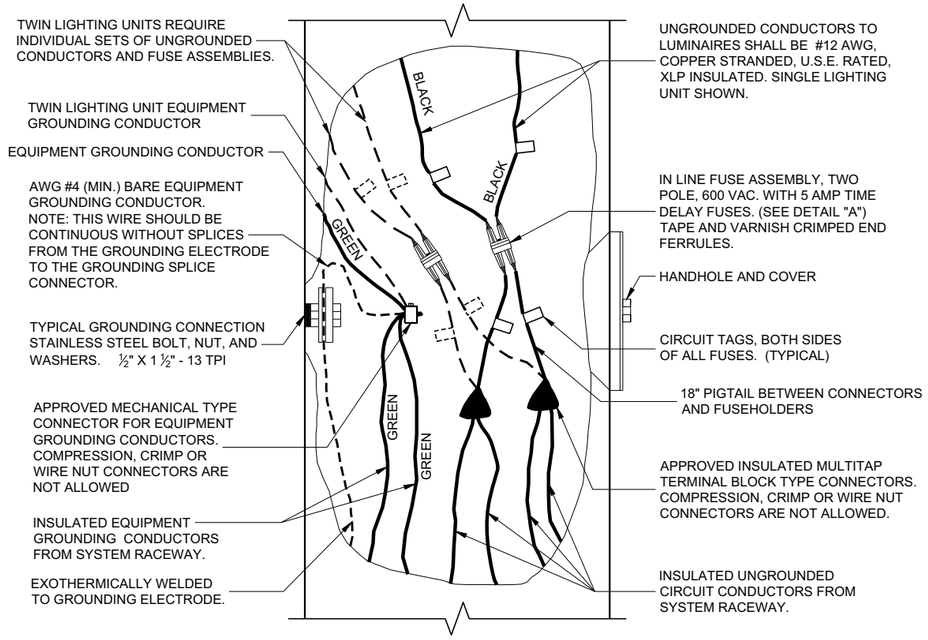
DETAIL "B"
BREAKAWAY SINGLE POLE WITH WATERPROOF INSULATING BOOT



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



3 WIRE - 120, 240 OR 480 VAC (UNGROUNDED CONDUCTORS) WITH GROUNDING CONDUCTOR AND EQUIPMENT GROUNDING CONDUCTOR



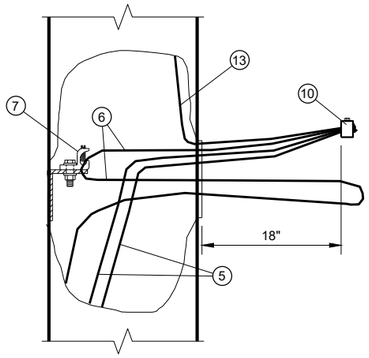
2 WIRE - 240 OR 480 VAC (UNGROUNDED CONDUCTORS) WITH EQUIPMENT GROUNDING CONDUCTOR

NON - FREEWAY LIGHTING UNIT POLE WIRING

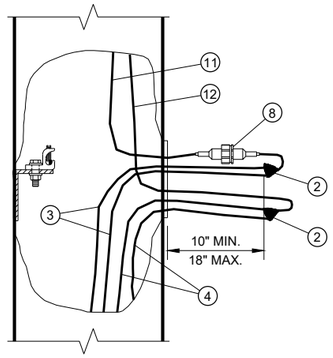
STATE OF WISCONSIN
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November 2018
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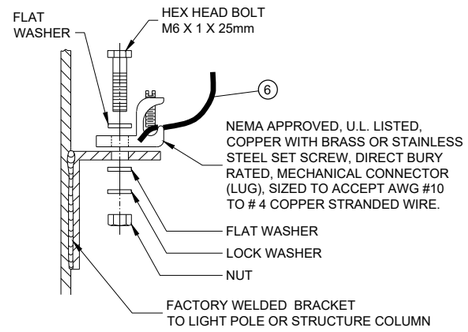


EQUIPMENT GROUNDING CONDUCTOR SLACK



UNGROUNDED CONDUCTOR SLACK (AND GROUNDED NEUTRAL SLACK IN GROUNDED NEUTRAL SYSTEM)

TYPICAL CONDUCTOR SLACK AT HANDHOLES



HANDHOLE GROUNDING LUG

NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL

GENERAL NOTES

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

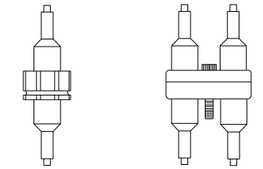
USE THIS DETAIL IN CONJUNCTION WITH THE ELECTRICAL DETAILS FOR THE APPLICATION, WHICH MAY BE A LIGHT POLE, SIGN BRIDGE, ETC.

THE GROUNDING ELECTRODE CONDUCTOR SHALL BE CONTINUOUS WITHOUT SPLICES FROM THE GROUNDING ELECTRODE THROUGH THE HANDHOLE GROUNDING LUG TO THE CONNECTOR.

THREE POLE WIRES ARE SHOWN FOR A SINGLE LUMINAIRE LIGHT POLE. THREE ADDITIONAL POLE WIRES REQUIRED FOR TWIN LUMINAIRE LIGHT POLES ARE OMITTED FROM THE DRAWING FOR CLARITY. IN THE TWIN POLE CASE, BUNDLE EACH SET OF THREE WIRES WITH A NYLON CABLE TIE.

IN 3-PHASE SYSTEMS, THERE WILL BE ONE MORE UNGROUNDED LINE WIRE, WHICH IS OMITTED FROM THE DRAWING FOR CLARITY.

CIRCUIT TAGS SHALL BE INSTALLED ONLY WHERE REQUIRED IN THE SPECIAL PROVISIONS.



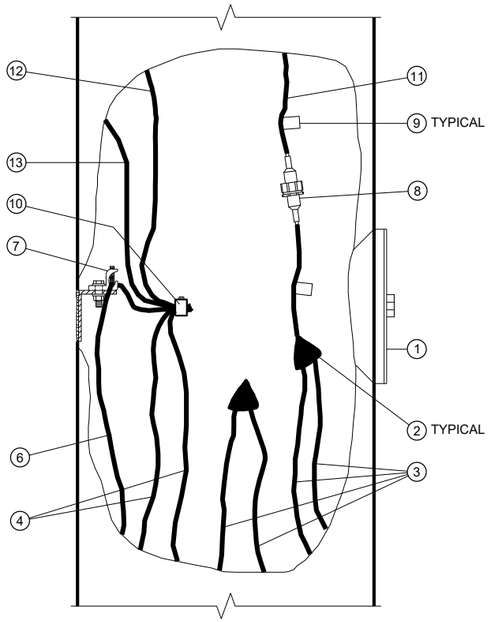
1 POLE (1P) 2 POLE (2P)

FUSE ASSEMBLIES

CONDUCTOR COLOR CODES

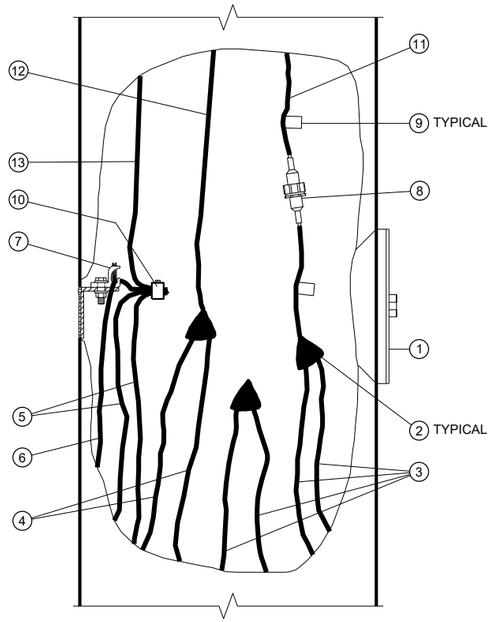
KEY	CONDUCTOR	COLOR
3	UNGROUNDED LINE WIRE	*
4	GROUNDED LINE WIRE	WHITE
5	SYSTEM GROUNDING LINE WIRE	GREEN
6	GROUNDING ELECTRODE CONDUCTOR	BARE
11	UNGROUNDED POLE WIRE	*
12	GROUNDED POLE WIRE	WHITE
13	EQUIPMENT GROUNDING POLE WIRE	GREEN

* FOLLOW COLOR CODING SHOWN IN THE PLANS. WHERE THE PLANS DO NOT SHOW COLOR CODING, USE BLACK FOR SINGLE LUMINAIRE POLES; BLACK AND RED FOR TWIN LUMINAIRE POLES.



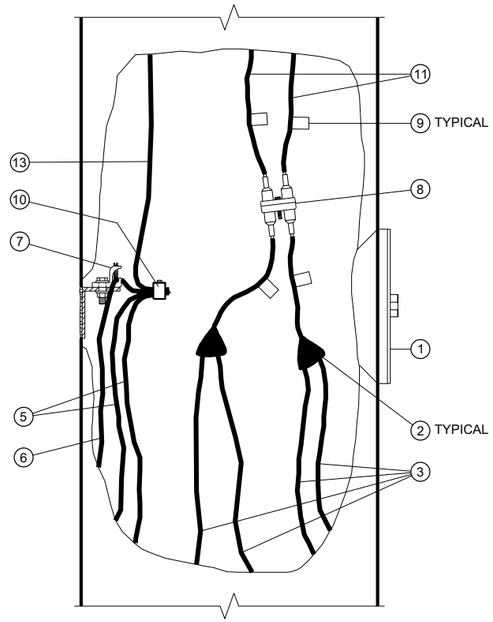
CUTAWAY HANDHOLE DETAIL

GROUNDED NEUTRAL SYSTEMS
1-ϕ



CUTAWAY HANDHOLE DETAIL

ISOLATED NEUTRAL SYSTEMS
1-ϕ SHOWN; 3-ϕ WYE SIMILAR
(SEE GENERAL NOTE)



CUTAWAY HANDHOLE DETAIL

PHASE TO PHASE SYSTEMS
1-ϕ SHOWN; 3-ϕ DELTA SIMILAR
(SEE GENERAL NOTE)

NOTE: REQUIRED CONDUCTOR SLACK NOT SHOWN ON "CUTAWAY HAND HOLE" DETAILS FOR DRAWING CLARITY, SEE "TYPICAL CONDUCTOR SLACK AT HANDHOLES" ON THIS SHEET.

1. HANDHOLE AND COVER
2. INSULATED SPLICE
3. UNGROUNDED LINE WIRE
4. GROUNDED LINE WIRE
5. SYSTEM GROUNDING LINE WIRE
6. GROUNDING ELECTRODE CONDUCTOR
7. HANDHOLE GROUNDING LUG
8. FUSE ASSEMBLY, 1P OR 2P AS REQUIRED
9. CIRCUIT TAG (SEE GENERAL NOTE)
10. REVERSIBLE PRESSURE OR COMPRESSION GROUNDING CONNECTOR (NOT INSULATED)
11. UNGROUNDED POLE WIRE
12. GROUNDED POLE WIRE
13. EQUIPMENT GROUNDING POLE WIRE

ELECTRICAL HANDHOLE WIRING

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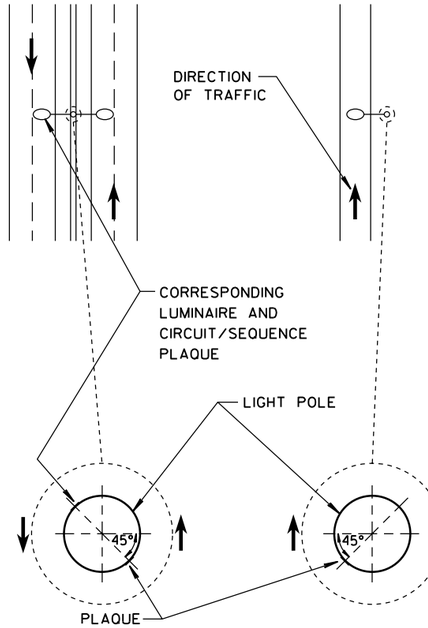
APPROVED
May 2022
DATE

/S/ Ahmet Demirbilek
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SDD 10A01 - 04



MEDIAN POLE SINGLE ARM POLE

LOCATION OF LIGHT POLE CIRCUIT/SEQUENCE PLAQUE

GENERAL NOTES

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

PLAQUES SHALL BE INCIDENTAL TO ALL NEW INSTALLATIONS.

WHERE SHOWN IN THE PLANS, REPLACEMENT PLAQUES WILL BE MEASURED AND PAID SEPARATELY.

FASTEN TOP, CENTER AND BOTTOM OF PLAQUE TO POLE OR OTHER LOCATION AS FOLLOWS:

GALVANIZED STEEL SHAFT - STAINLESS STEEL POP RIVETS

A588 STEEL SHAFT - SHIM FOR DRAINAGE WITH STAINLESS WASHERS; FASTEN WITH STAINLESS SELF-TAPPING SCREWS

ALUMINUM SHAFTS - ALUMINUM POP RIVETS

MOUNTING HEIGHT SHALL BE APPROXIMATELY 5.0' ABOVE CURB OR SHOULDER. ADJUST IF IT IS KNOWN THAT REQUIRED TRAFFIC SIGNS WILL OBSTRUCT.

PLAQUE MATERIALS:

BASE - SHEET ALUMINUM, 0.060" THICK.

FACE - WHITE, SELF-ADHESIVE VINYL SHEETING, NON-RETRORFLECTIVE

LINES - BLACK, 1/2" WIDE, SELF-ADHESIVE

CHARACTERS - BLACK, SELF-ADHESIVE, SERIES "D", SIZE AS SHOWN

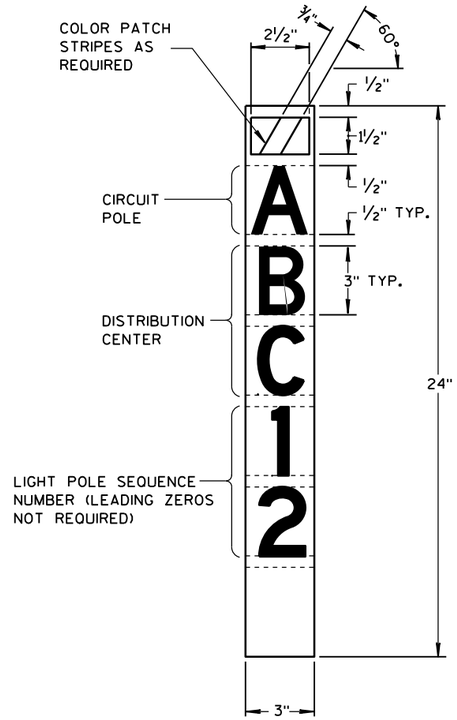
COLOR PATCHES - VARIOUS COLORS, SELF-ADHESIVE VINYL SHEETING

WITH THE APPROVAL OF THE ENGINEER, THE BASE MATERIAL MAY BE OMITTED AND THE FACE ADHERED DIRECTLY TO THE SURFACE, IN CASES SUCH AS SMOOTH, CLEAN ALUMINUM POLES.

ALTERNATIVE COMPUTER-GENERATED SIGN LETTERING MAY BE ACCEPTED IF THE ENGINEER FINDS IT TO BE EQUIVALENT.

COLOR PATCH CODE FOR HPS AND LED LUMINAIRES

HPS	LED	COLOR PATCH CODE
1000 WATT		NO PATCH
400 WATT	CATEGORY D	ORANGE
310 WATT		BLUE
250 WATT	CATEGORY C	ORANGE WITH WHITE STRIPE
200 WATT		RED
150 WATT	CATEGORY B	GREEN
100 WATT	CATEGORY A	BROWN
70 WATT	CATEGORY UDL	BROWN WITH WHITE STRIPE



LIGHT POLE CIRCUIT/SEQUENCE PLAQUE

IDENTIFICATION PLAQUES LIGHT POLES

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DEPARTMENT OF TRANSPORTATION

APPROVED
Feb. 2015 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
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S.D.D. 10 A 2-3

GENERAL NOTES

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

USE THIS DETAIL IN CONJUNCTION WITH THE DETAIL FOR ELECTRICAL HANDHOLE WIRING, SDD10A01.

USE TIME DELAY FUSE PER LUMINAIRE MANUFACTURER RECOMMENDATION.

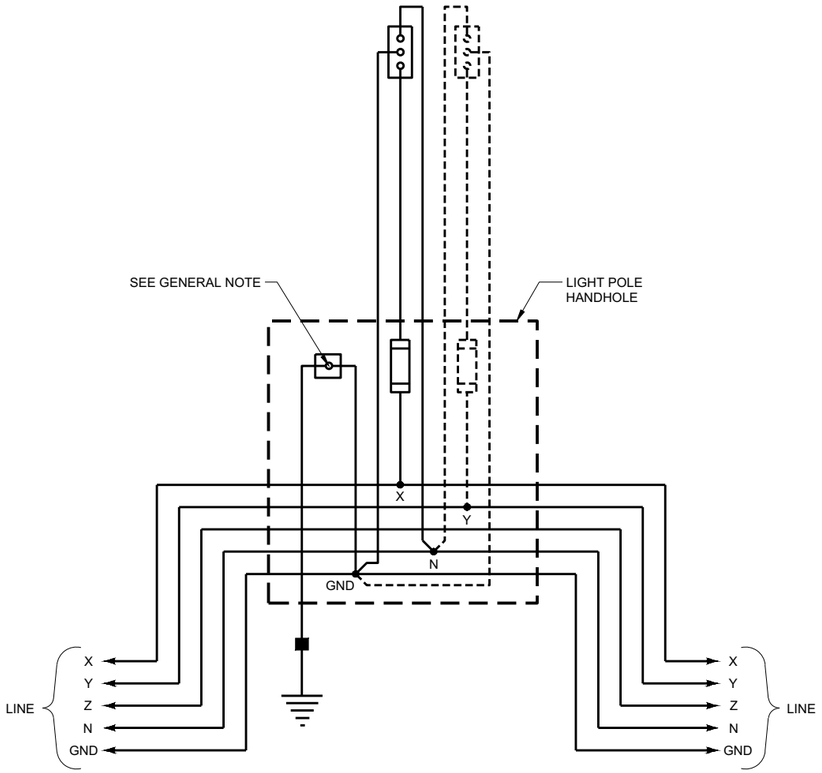
THE GROUNDING ELECTRODE CONDUCTOR SHALL BE CONTINUOUS WITHOUT SPLICES FROM THE GROUNDING ELECTRODE THROUGH THE HANDHOLD GROUNDING LUG TO THE CONNECTOR.

WIRING FOR SINGLE LUMINAIRE POLES IS SHOWN WITH SOLID LINES. WIRING FOR THE SECOND LUMINAIRE OF TWIN LUMINAIRE POLES IS SHOWN WITH DOTTED LINES.

THE PLANS WILL SHOW WHICH CIRCUIT LEG(S) ARE CONNECTED TO EACH INSTALLATION.

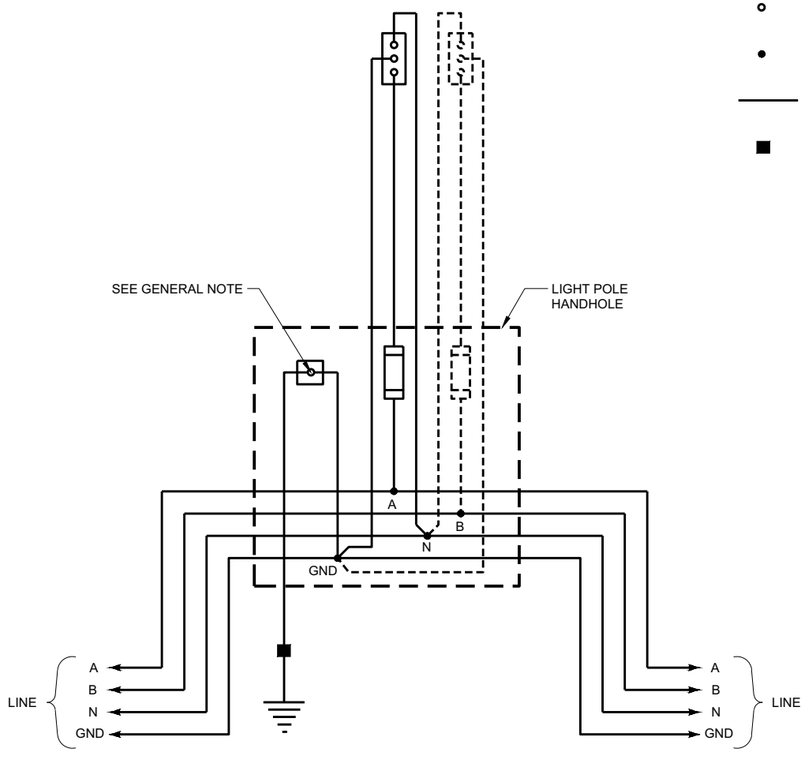
LEGEND

A,B,X,Y,Z	UNGROUNDED CIRCUIT CONDUCTORS
N	GROUNDED CIRCUIT CONDUCTORS
GND	EQUIPMENT GROUNDING CONDUCTOR
P	POLE (ELECTRICAL CIRCUIT)
ϕ	PHASE (ELECTRICAL CURRENT)
	HANDHOLE GROUND LUG
	SINGLE-POLE (1P) FUSE ASSEMBLY
	UNFUSED LUMINAIRE
	EQUIPMENT GROUNDING ELECTRODE
	TERMINAL
	SPLICE
	CONDUCTOR
	EXOTHERMIC WELD



TYPICAL WIRING DIAGRAM

ISOLATED NEUTRAL SYSTEM
3 - ϕ 208Y / 120VAC OR 480Y / 277VAC 4 WIRE



TYPICAL WIRING DIAGRAM

ISOLATED NEUTRAL SYSTEM
1 - ϕ 120 / 240VAC OR 240 / 480VAC 3 WIRE

ELECTRICAL DETAILS
GROUND MOUNT LIGHT POLES
ISOLATED NEUTRAL SYSTEM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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November 2018
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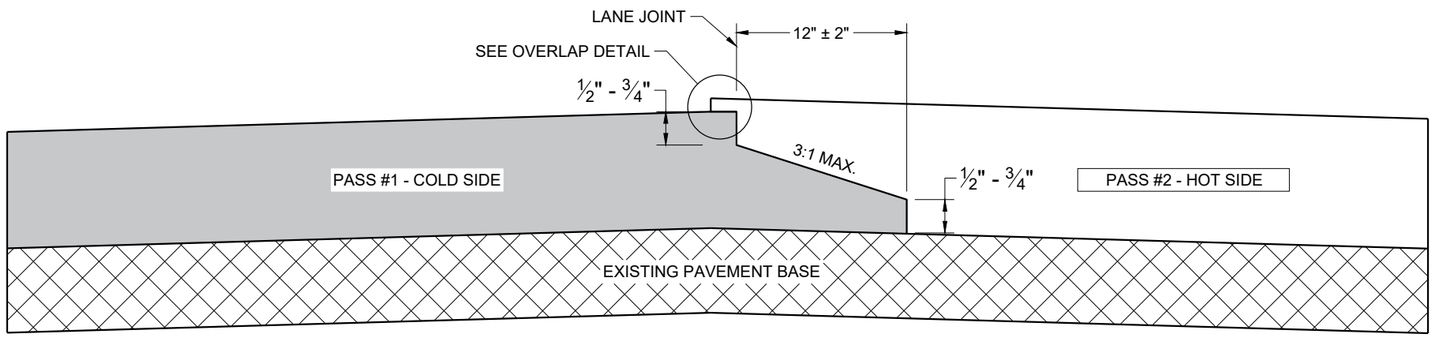
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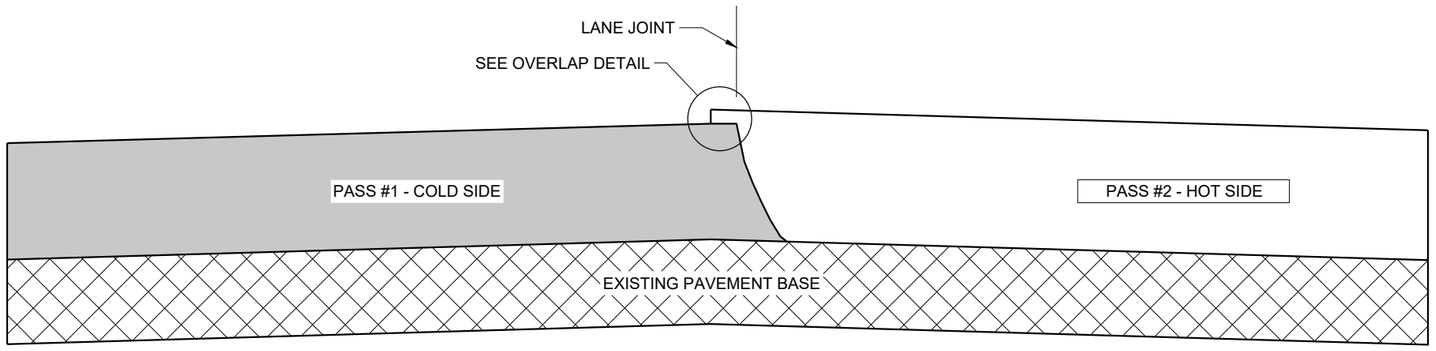
SDD 10A05 - 03

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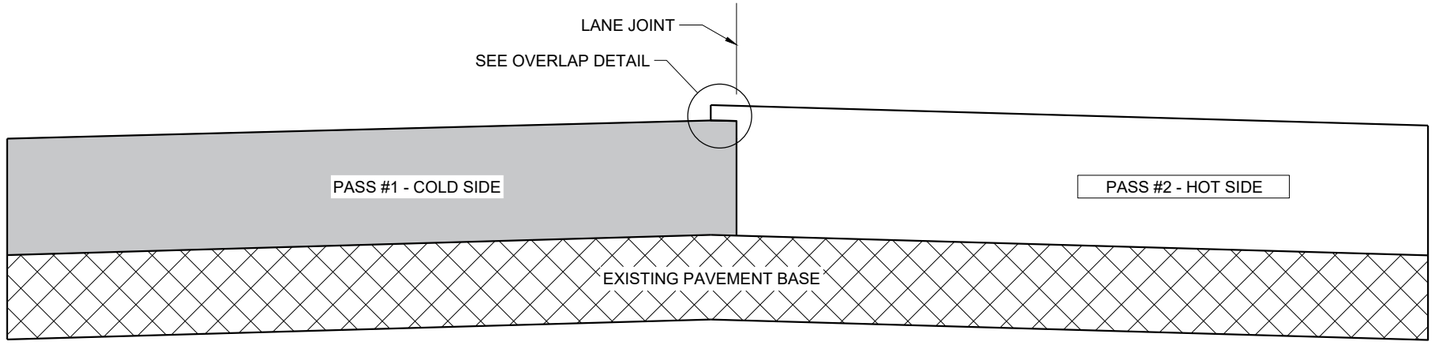
SDD 10A05 - 03



TYPICAL PAVEMENT CROSS SECTION
NOTCHED WEDGE JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT (MILLED)

GENERAL NOTES

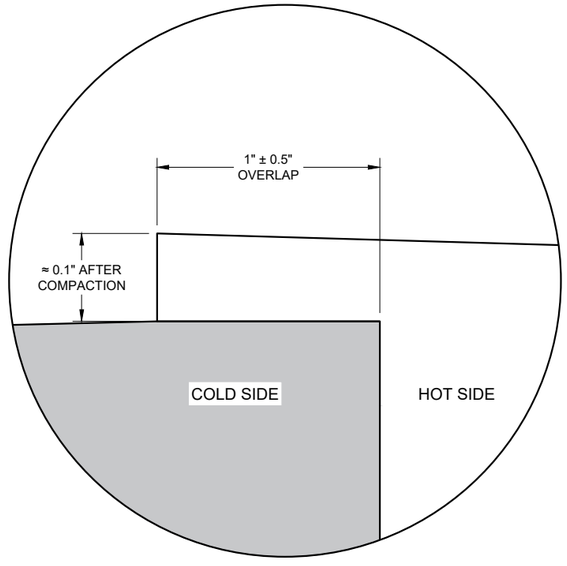
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

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

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

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

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



OVERLAP DETAIL (TYPICAL)

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SDD 13C19 - 03

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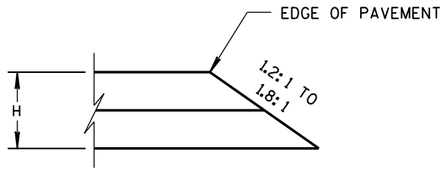
HMA LONGITUDINAL JOINTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2020
DATE

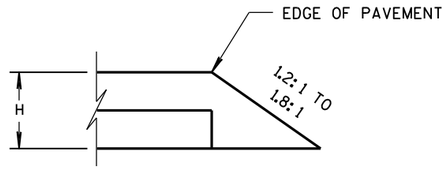
/S/ Steven Hefel
HMA PAVEMENT ENGIN

FHWA



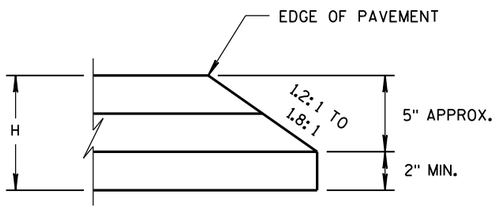
CONSTRUCTED WITH FINAL TWO LAYERS

FOR H 5" OR LESS



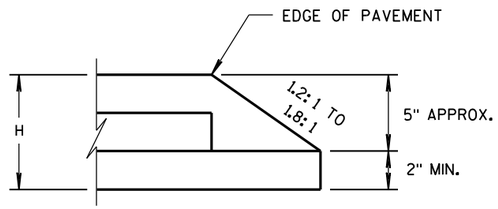
CONSTRUCTED WITH FINAL LAYER

FOR H 5" OR LESS



CONSTRUCTED WITH FINAL TWO LAYERS

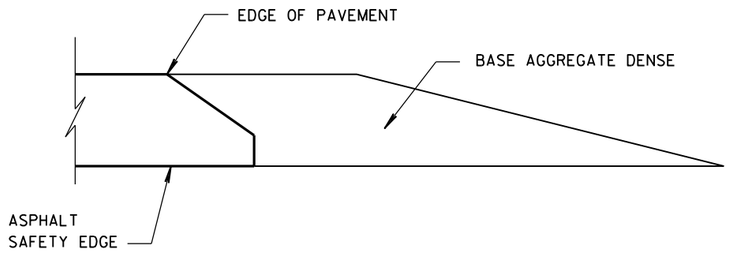
FOR H GREATER THAN 5"



CONSTRUCTED WITH FINAL LAYER

FOR H GREATER THAN 5"

HMA PAVEMENT AND HMA OVERLAYS



FINISHED SHOULDER AGGREGATE PLACEMENT

6

6

S.D.D. 14 B 29-1

S.D.D. 14 B 29-1

SAFETY EDGE SM

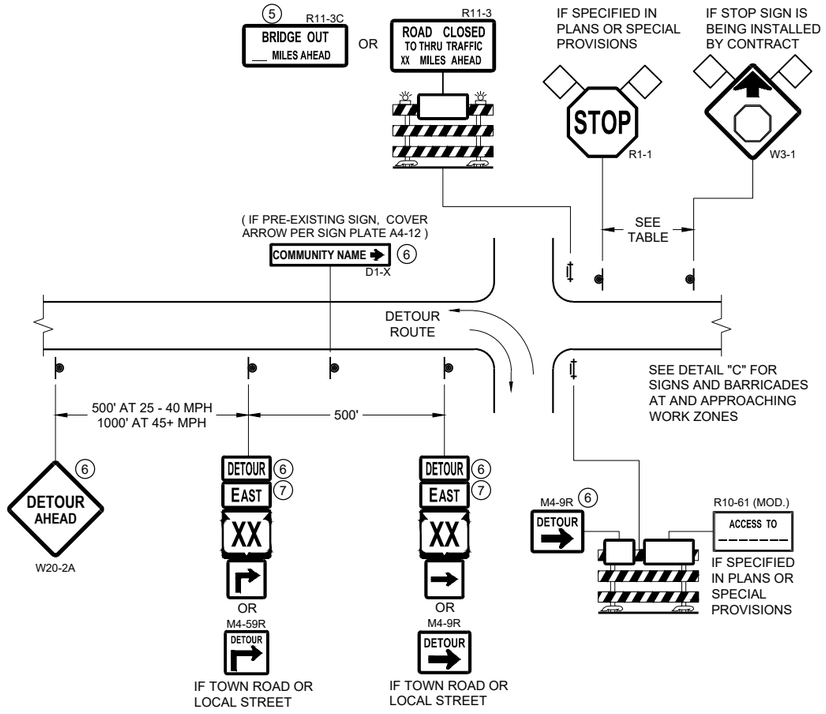
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

11/30/2012
DATE

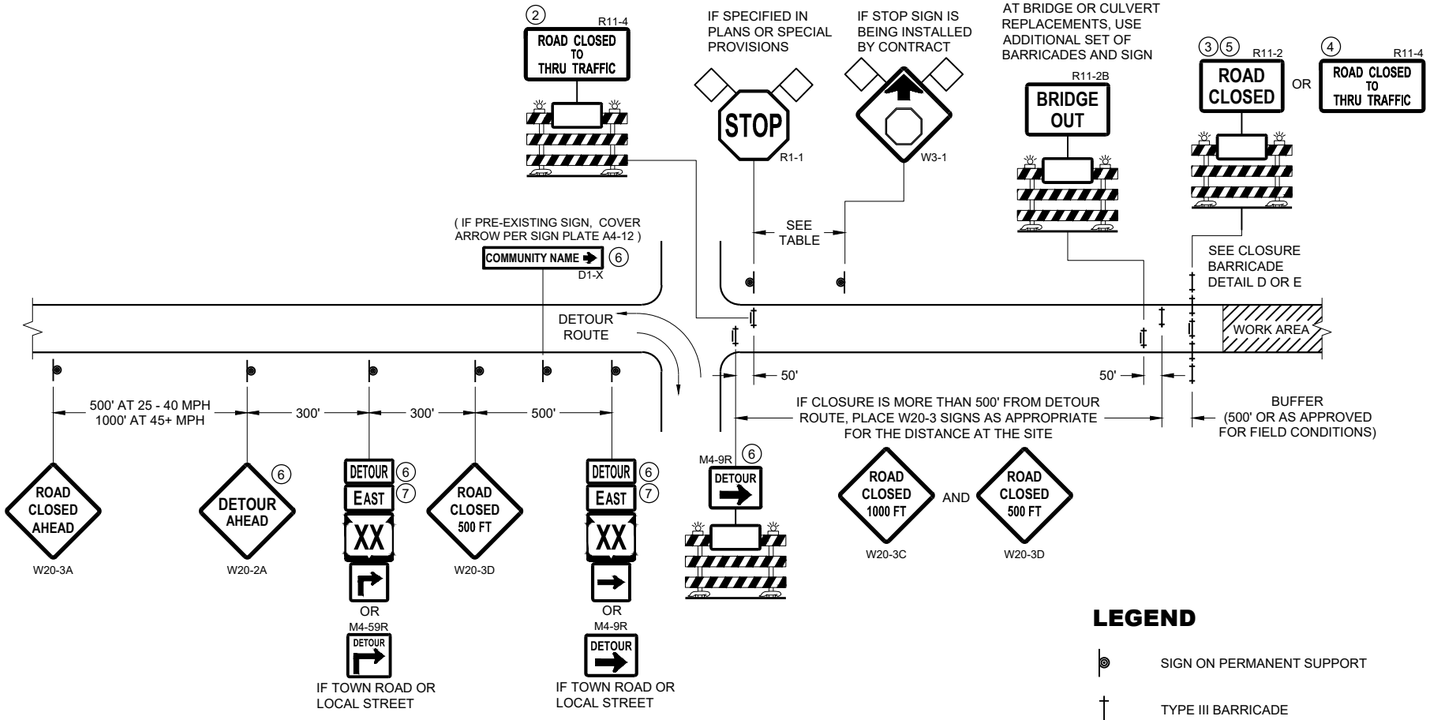
/S/ Jerry H. Zoda
ROADWAY STANDARDS DEVELOPMENT ENGINEER

FHWA



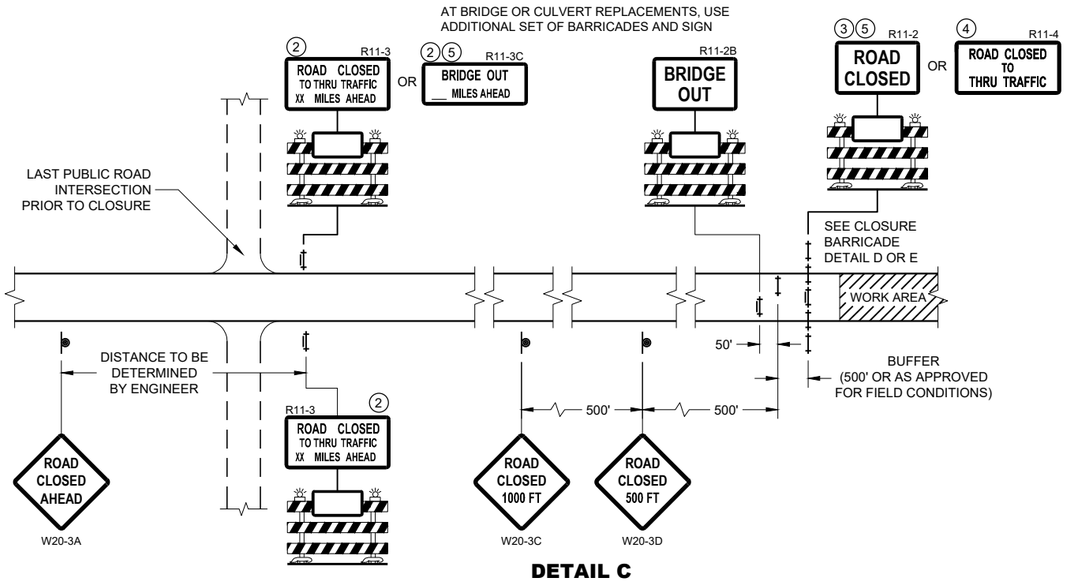
DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

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



DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR

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



DETAIL C
MAINLINE CLOSURE, NO POSTED DETOUR

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

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

LEGEND

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

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

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

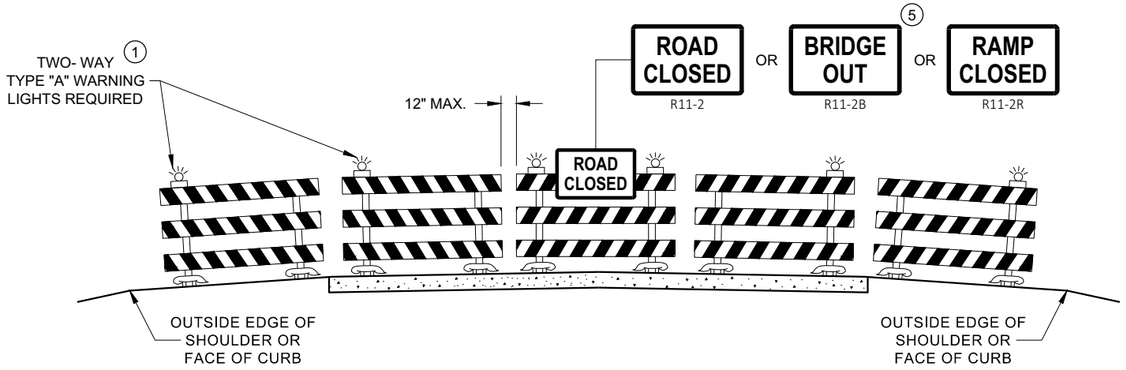
APPROVED
February 2020
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

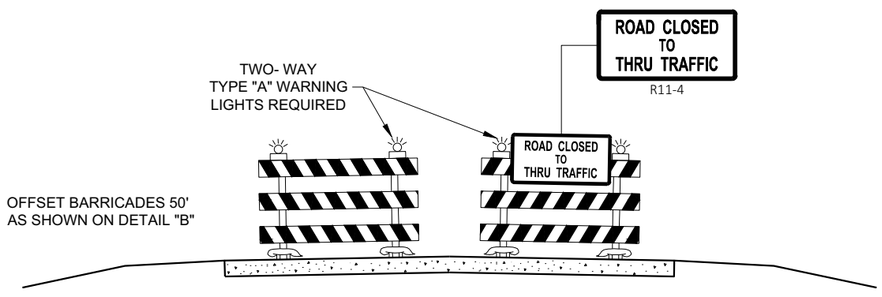
6

SDD 15C02 - 08a

SDD 15C02 - 08a



DETAIL D
ROAD CLOSURE BARRICADE DETAIL
APPROACH VIEW



DETAIL E
LANE CLOSURE BARRICADE DETAIL
APPROACH VIEW

SEE SDD 15C2 - SHEET "a" FOR LEGEND

GENERAL NOTES

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

BARRICADES AND SIGNS FOR VARIOUS CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

6

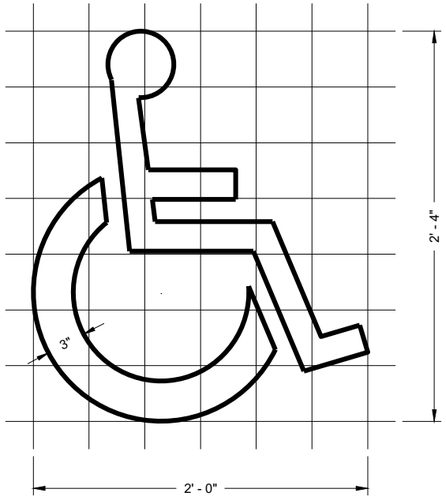
SDD 15C02 - 08b

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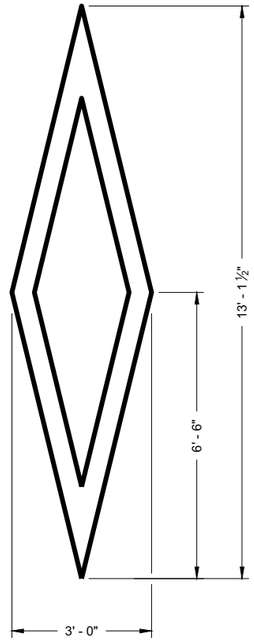
SDD 15C02 - 08b

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.



HANDICAP SYMBOL



PREFERENTIAL LANE SYMBOL

6

6

SDD 15C07 - 15a

SDD 15C07 - 15a

PAVEMENT MARKING SYMBOLS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

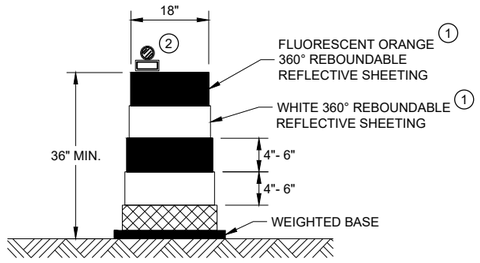
November 2019
DATE

/S/ Matthew Rauch
STATE SIGNING AND MAR ENGINEER

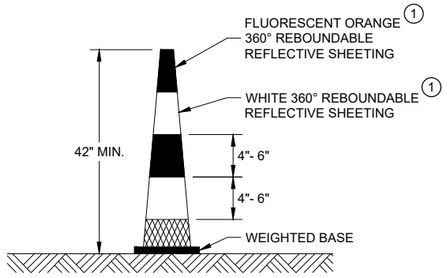
FHWA

GENERAL NOTES

1. REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.
2. LOCATION OF WARNING LIGHTS WHEN SHOWN ON THE PLAN.

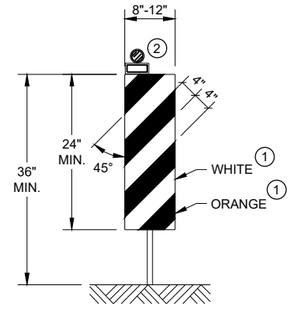


DRUM



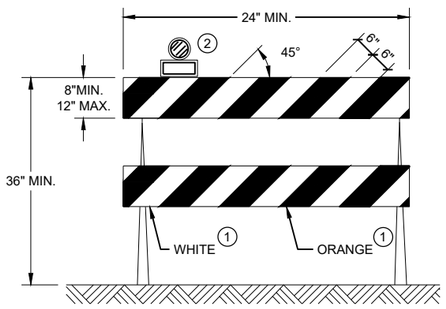
42" CONE

DO NOT USE IN TAPERS
½ SPACING OF DRUMS



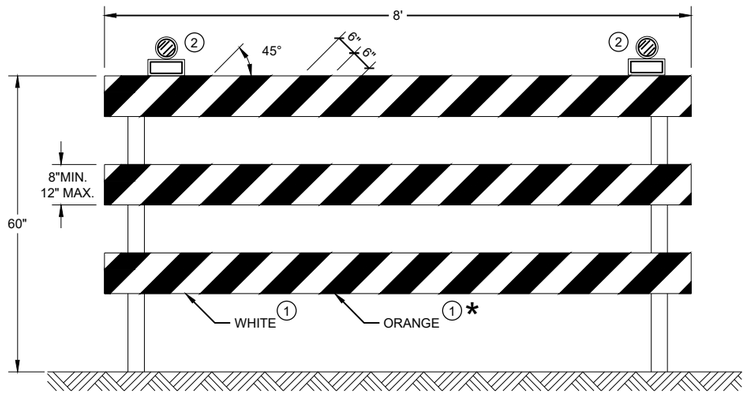
VERTICAL PANEL

THE STRIPES SHALL SLOPE DOWNWARD TO
THE TRAFFIC SIDE FOR CHANNELIZATION.



TYPE II BARRICADE

FOR RAILS LESS THAN 36" LONG, 4" WIDE STRIPES
MAY BE USED. ALL STRIPES SHALL SLOPE DOWNWARD
TO THE TRAFFIC SIDE FOR CHANNELIZATION.



TYPE III BARRICADE

IF SIGN MOUNTED, DO NOT COVER MORE THAN 50% OF THE TOP
TWO RAILS OR 33% OF THE TOTAL AREA OF THE THREE RAILS.

* IF USED FOR A PERMANENT APPLICATION USE RED SHEETING.

CHANNELIZING DEVICES
DRUMS, CONES, BARRICADES
AND VERTICAL PANELS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

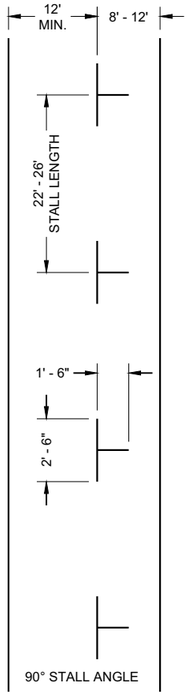
APPROVED
May 2021 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER
FHWA

6

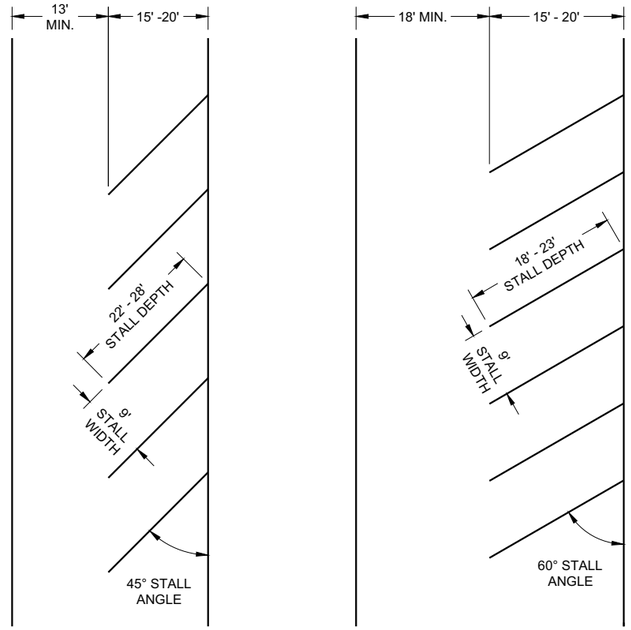
SDD15C11 - 09b

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SDD15C11 - 09b

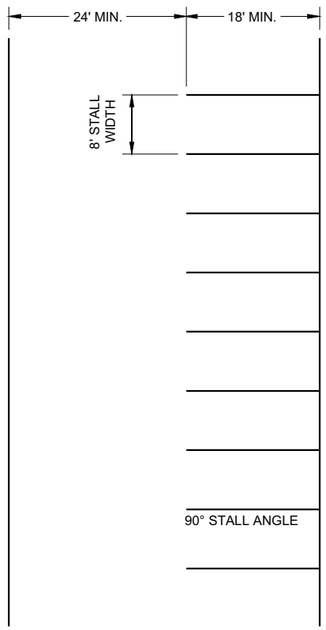


PARALLEL PARKING



ANGLED PARKING

(ANGLED PARKING IS NOT ALLOWED ON STATE HIGHWAYS UNLESS A DESIGN JUSTIFICATION HAS BEEN COMPLETED.)



PARKING LOTS

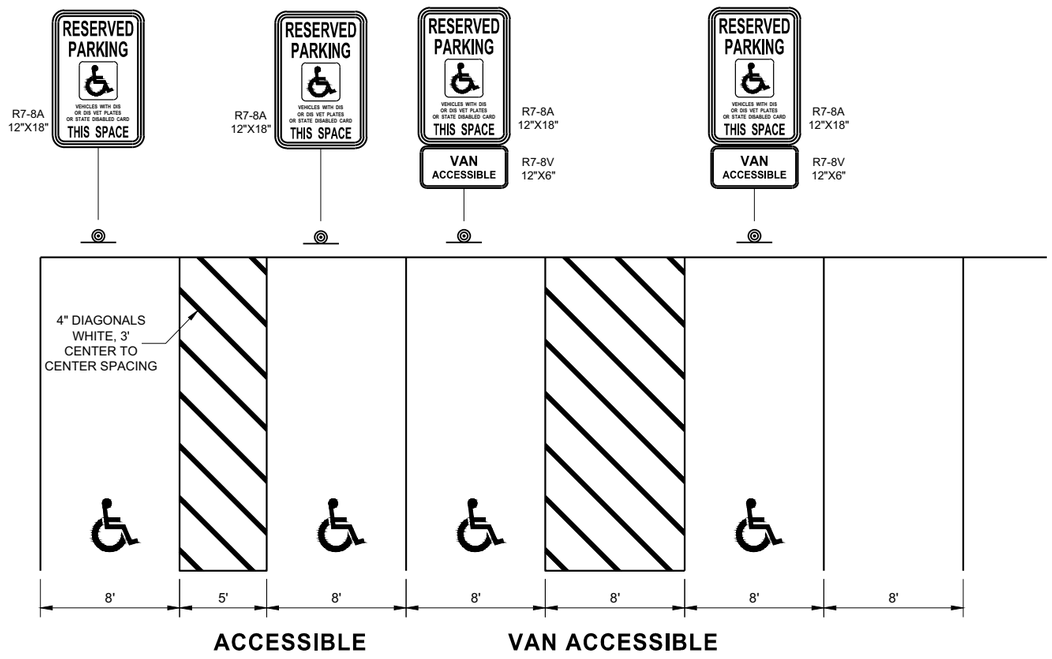
GENERAL NOTES

ALL LINES 4" WHITE (UNLESS OTHERWISE NOTED)

LAST PARKING STALL IS A MINIMUM OF 15' FROM THE CROSSWALK.

LEGEND

SIGN ON PERMANENT SUPPORT



ACCESSIBLE

VAN ACCESSIBLE

PARKING STALL MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2019 — DATE
/S/ Matthew Rauch — STATE SIGNING AND MAR ENGINEER

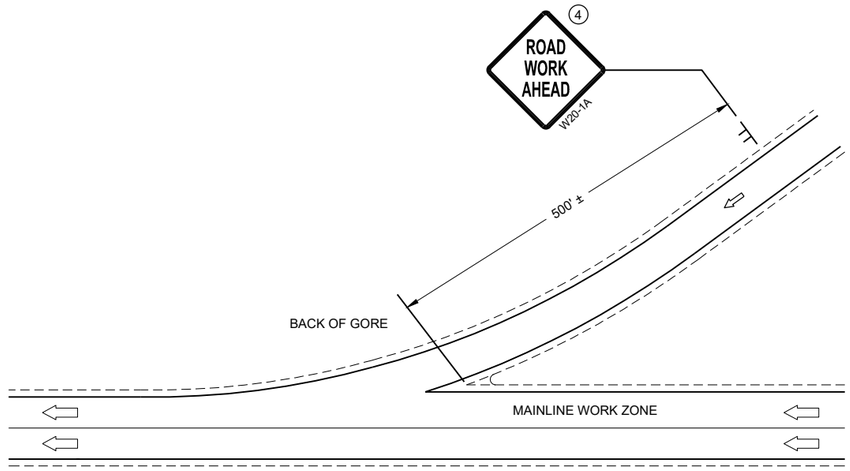
FHWA

SDD 15C36 - 01

SDD 15C36 - 01

LEGEND

- V1 SHADOW VEHICLE 1
- V2 SHADOW VEHICLE 2
- V3 ADVANCE WARNING TRUCK
- ● TRAFFIC CONTROL DRUM
- TRUCK MOUNTED ATTENUATOR (TMA)
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC
- FLASHING ARROW PANEL (MERGE)
- FLASHING ARROW PANEL (CAUTION)
- PCMS PORTABLE CHANGEABLE MESSAGE SIGN
- WORK AREA



GENERAL NOTES

SHORT DURATION IS WORK THAT OCCUPIES A LOCATION UP TO 1 HOUR.

MOBILE IS WORK THAT MOVES INTERMITTENTLY OR CONTINUOUSLY.

ALL VEHICLES SHALL BE EQUIPPED WITH TWO 360 DEGREE HIGH INTENSITY YELLOW FLASHING LIGHTS OR STROBE LIGHTS AND OPERATED WITH HEADLIGHTS TURNED ON.

ALL VEHICLES SHALL BE EQUIPPED WITH REAR FACING TYPE B OR C FLASHING ARROW PANEL. SIGNS PLACED ON VEHICLES MUST NOT OBSCURE THE ARROW PANEL.

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

WHEN WORK ACTIVITY BLOCKS THE RIGHT LANE, REVERSE TRAFFIC CONTROL.

WHEN A RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, PROVIDE ADDITIONAL TRAFFIC CONTROLS AS SPECIFIED IN THE CONTRACT OR AS APPROVED BY THE ENGINEER.

USE DOUBLE ARROWS WHEN CONVOY IS IN CENTER LANE ONLY.

WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR LAY STATIONARY SIGNS AND SUPPORTS FLAT ON THE GRADE WITH UPRIGHTS ORIENTED PARALLEL TO AND DOWNSTREAM FROM TRAFFIC

(1) DISTANCE BETWEEN VEHICLES MAY VARY ACCORDING TO 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 AND HORIZONTAL CURVES THAT RESTRICT SIGHT DISTANCE.

(2) DRUMS ARE TO BE USED FOR BRIDGE DECK SEALING AND OTHER PROJECTS THAT REQUIRE DELINEATION.

(3) WITHIN 5 MILES, RELOCATE SIGNS AS WORK PROGRESSES AND NECESSARY OR AS DIRECTED BY THE ENGINEER.

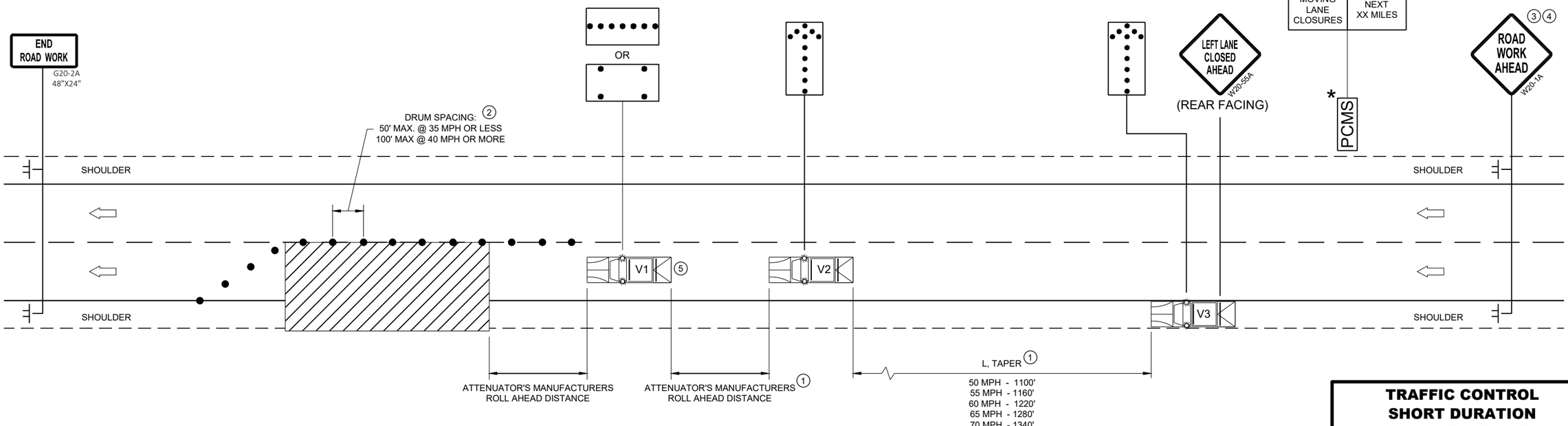
(4) SIGN NOT REQUIRED IF MOVING OPERATION OCCURS WITHIN A SIGNED ROAD WORK ZONE AREA.

(5) SHADOW VEHICLE 1 (V1) IS OPTIONAL

* PCMS OPTIONAL

PCMS MESSAGING

FRAME 1	FRAME 2
MOVING LANE CLOSURES	NEXT XX MILES



TRAFFIC CONTROL SHORT DURATION MOBILE OPERATIONS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2021
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

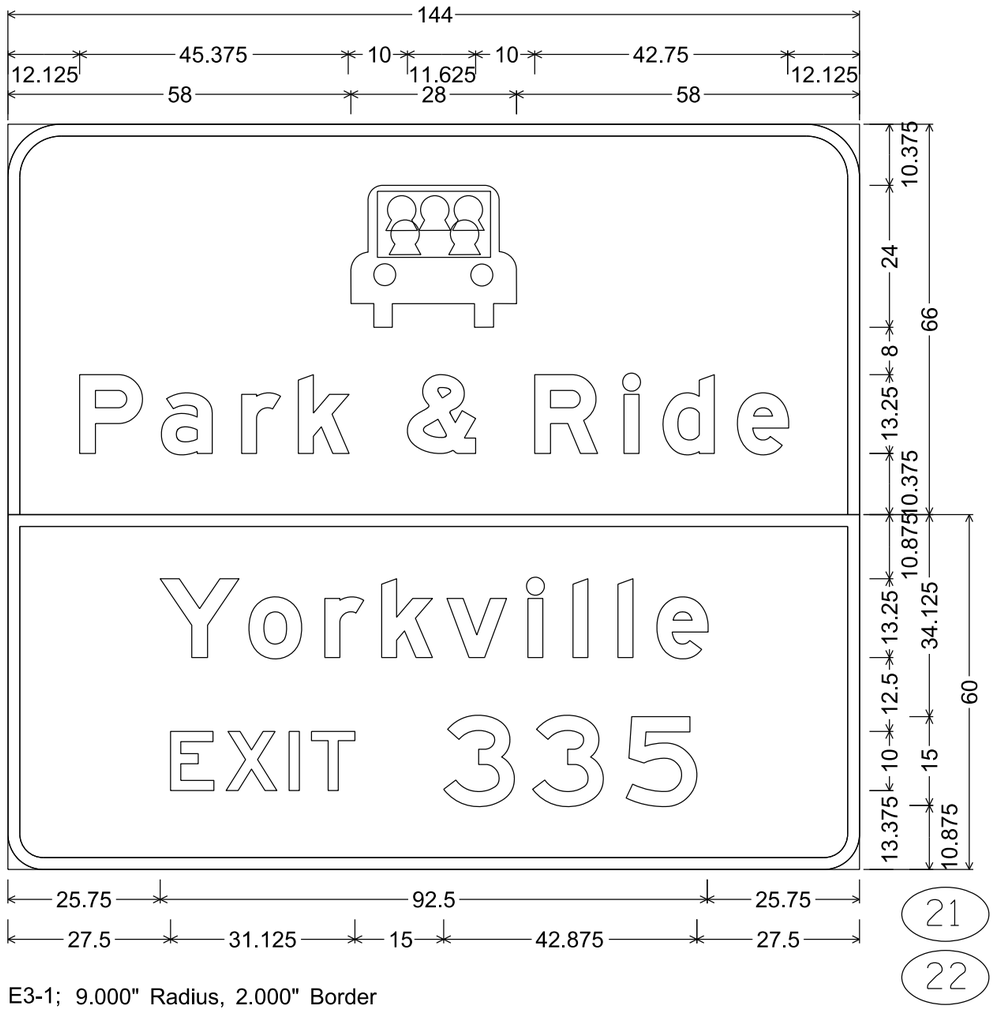
SDD 15D43 - 02

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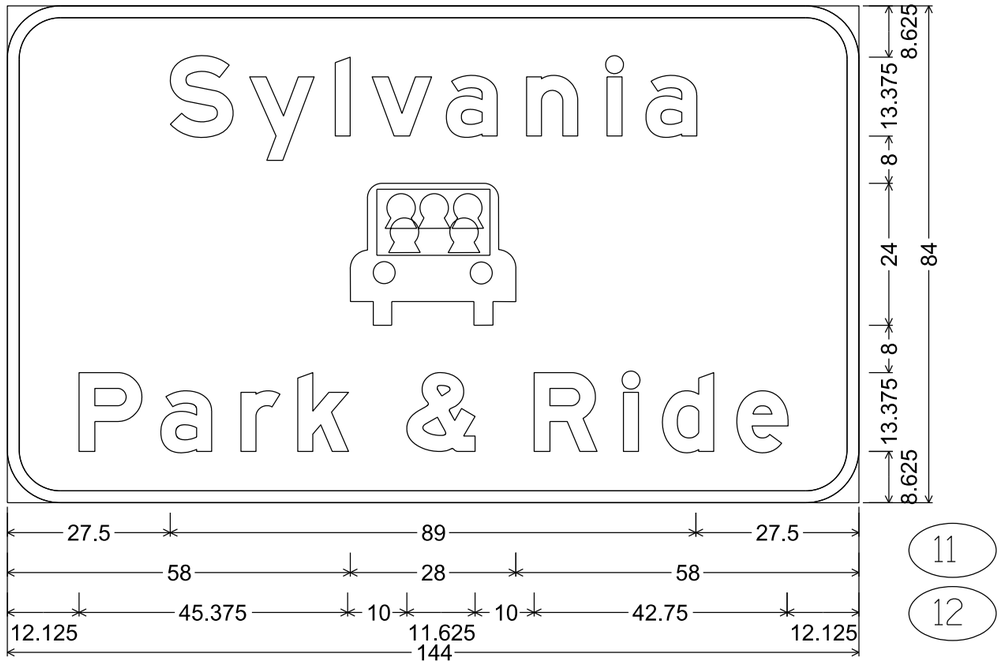
SDD 15D43 - 02

NOTES

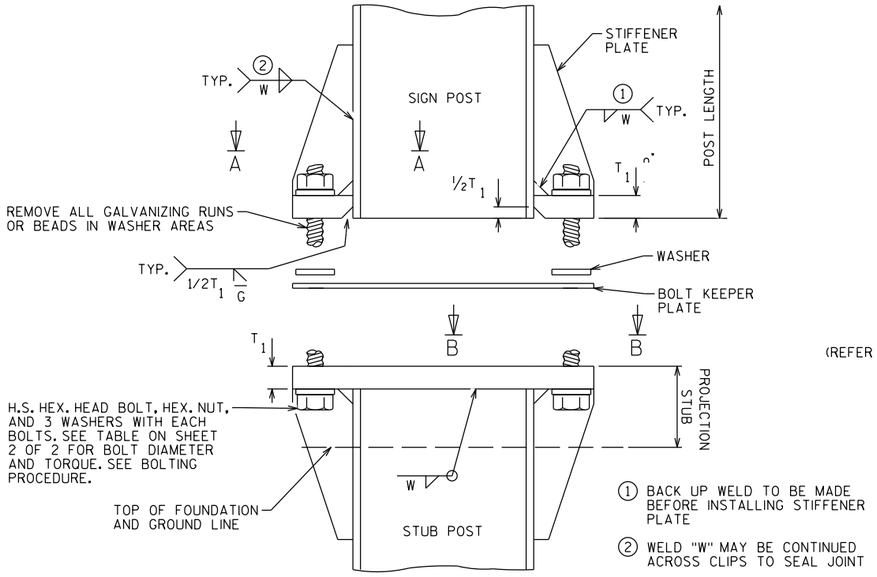
1. All Signs Type I - Type SH Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - E Modified except all CAP words Series E



E3-1; 9.000" Radius, 2.000" Border



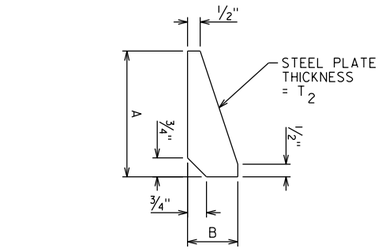
E3-1; 9.000" Radius, 2.000" Border



① BACK UP WELD TO BE MADE BEFORE INSTALLING STIFFENER PLATE

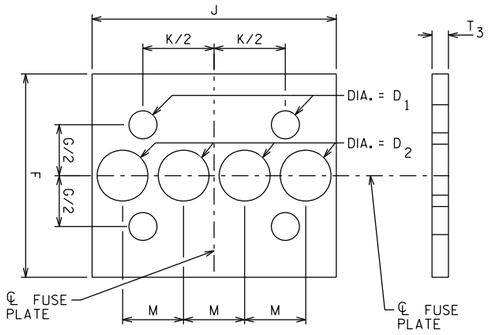
② WELD "W" MAY BE CONTINUED ACROSS CLIPS TO SEAL JOINT

SIGN POST & STUB POST ELEVATION



STIFFENER PLATE DETAIL

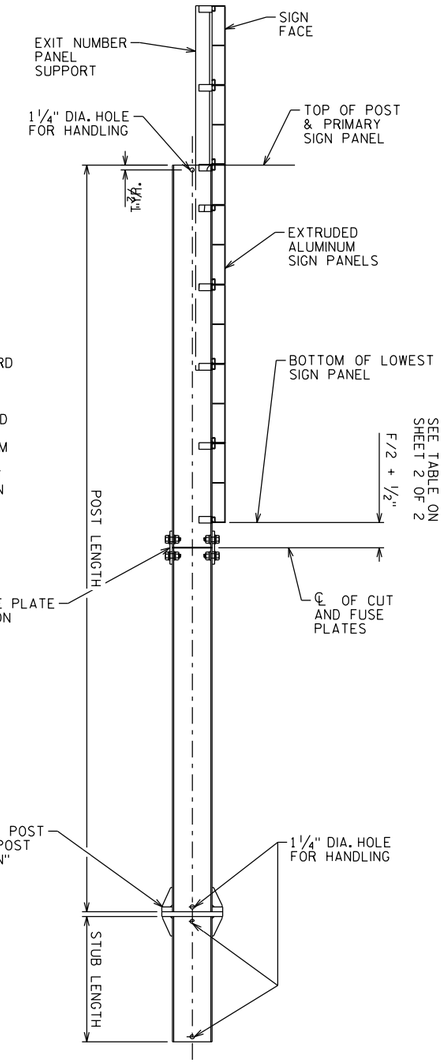
(REFER TO TABLE ON SHEET 2 OF 2 FOR DIMENSIONS)



PERFORMED FUSE PLATE DETAIL

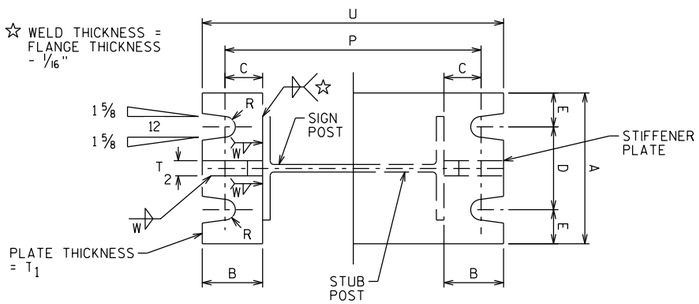
USE H.S. HEX HEAD BOLTS, HEX HEAD NUT AND FLAT WASHER UNDER NUT. INSTALL BOLTS PER THE WISCONSIN DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATION SECTION 506.3.12.3.

ALL HOLES SHALL BE DRILLED, SUB-PUNCHED AND REAMED. ALL PLATE CUTS SHALL PREFERABLY BE SAW CUTS. HOWEVER, FLAME CUTTING WILL BE PERMITTED PROVIDED ALL EDGES ARE GROUND. METAL PROJECTING BEYOND THE PLANE OF THE PLATE FACE WILL NOT BE PERMITTED. STEEL FUSE PLATES SHALL CONFORM TO THE REQUIREMENTS OF ASTM A36. ASTM A572 GRADE 50 OR ASTM A588 MAY BE SUBSTITUTED FOR A36 AT THE OPTION OF THE FABRICATOR. MILL TEST REPORTS SHALL BE SUBMITTED FOR FUSE PLATES. STEEL USED SHALL HAVE AN ULTIMATE TENSILE STRENGTH NOT TO EXCEED 80 KSI.



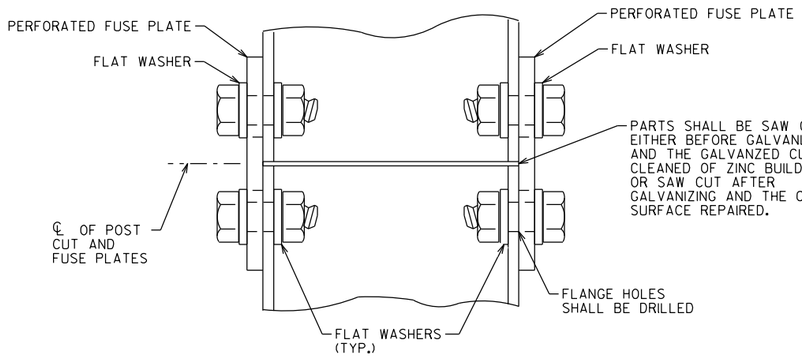
POST DETAIL

☆ WELD THICKNESS = FLANGE THICKNESS - 1/16"

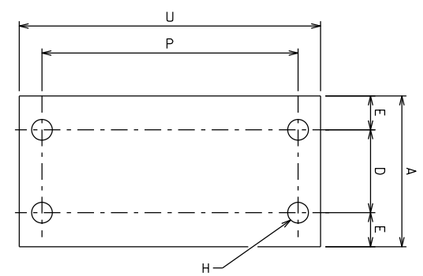


SECTION A-A

SECTION B-B



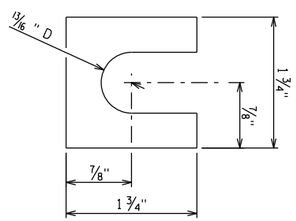
FUSE PLATE CONNECTION DETAIL



H = BOLT DIA. + 1/8"

BOLT KEEPER PLATE DETAIL

30 GA GALVANIZED SHEET STEEL



SHIM DETAIL

FURNISH TWO .012"± THICK AND TWO .032"± THICK SHIMS PER POST. SHIMS SHALL BE FABRICATED FROM BRASS SHIM STOCK OR STRIP CONFORMING TO ASTM B36.

BOLTING PROCEDURE FOR BASE CONNECTION

1. ASSEMBLE SIGN POST, BOLT KEEPER PLATE, AND STUB POST WITH BOLTS AND THREE FLAT WASHERS PER BOLT AS SHOWN.
2. SHIM AS REQUIRED TO PLUMB POST.
3. PRIOR TO BOLT TIGHTENING, LUBRICATE BASE CONNECTION BOLTS WITH BEESWAX OR OTHER HIGH-WAX LUBRICANT.
4. TIGHTEN ALL BOLTS THE MAXIMUM POSSIBLE WITH A 12" OR 15" WRENCH TO BED WASHERS & SHIMS AND TO CLEAN BOLT THREADS.
5. LOOSEN EACH BOLT IN TURN AND RETIGHTEN IN A SYSTEMATIC ORDER TO THE PERSCRIBED TORQUE. (SEE TABLE FOR PERSCRIBED TORQUE). DO NOT OVER-TIGHTEN.
6. BURR THREADS AT JUNCTION WITH NUT USING A CENTER PUNCH TO PREVENT NUT LOOSENING.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE BTO TYPE I SIGNS

DRAWN BY	PLANS CK'D.

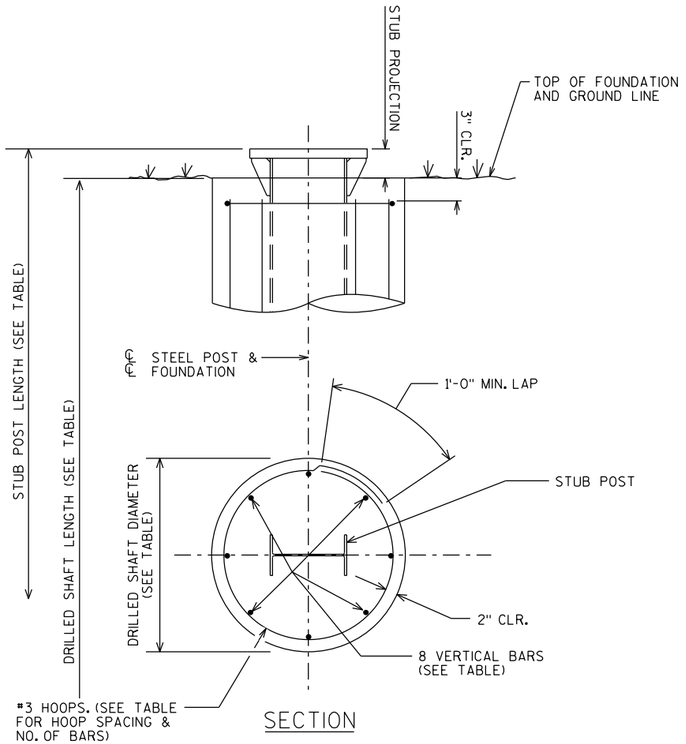
CONNECTION & FOUNDATION DETAILS 1 OF 2

SHEET A3-1.20

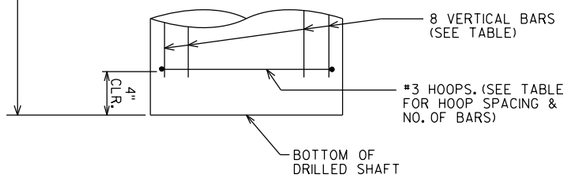
57

7

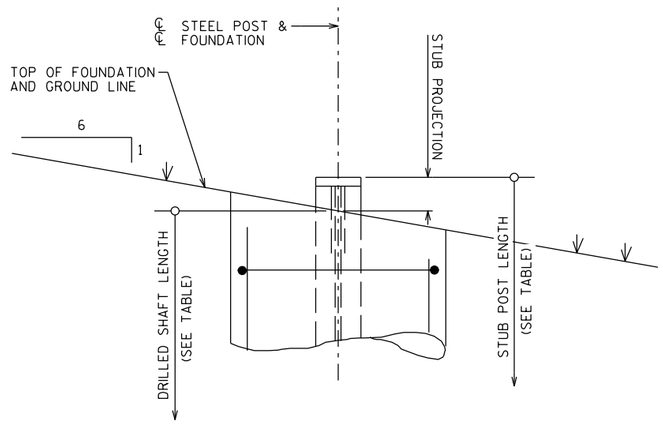
7



SECTION



FOUNDATION DETAIL



SHAFT PLACEMENT

FOUNDATION DATA TABLE

POST SHAPE	STUB LENGTH	STUB PROJECTION	DRILLED SHAFT DIAMETER	DRILLED SHAFT LENGTH	VERTICAL BARS		HOOPS		CONCRETE VOLUME ◆	TOTAL REINF. WEIGHT ◆
					SIZE	LENGTH	MAX SPA.	NO.		
W6X15	2'-6"	3"	24"	6'-6"	#5	5'-11"	10"	9	0.8 CY	71 LB
W8X18	2'-6"	3"	24"	7'-6"	#6	6'-11"	12"	8	0.9 CY	102 LB
W8X21	3'-0"	2½"	24"	8'-0"	#6	7'-5"	12"	9	1.0 CY	110 LB
W10X22	3'-0"	2½"	24"	8'-6"	#7	7'-11"	12"	9	1.0 CY	151 LB
W12X26	3'-0"	2½"	24"	10'-0"	#7	9'-5"	12"	11	1.2 CY	180 LB

◆ QUANTITIES SHOWN ARE FOR ONE DRILLED SHAFT

BASE CONNECTION & FUSE PLATE DATA TABLE

POST SHAPE	WEIGHT PER FOOT	BASE CONNECTION DATA: BOLT SIZE & TORQUE	A	B	C	D	E	T1	T2	W	R	BOLT KEEPER PLATE DATA: P	U	PERFORATED FUSE PLATE DATA: F	G	J	K	M	D1	D2	T3	BOLT DIA.	WGT. EA. LBS	BOLT LENGTH	V ◪
W6X15	15 LB	⅝" DIA. X 4" 36 TO 38 FT-LB	5"	2"	1¼"	2¾"	1⅛"	1¼"	½"	¼"	11/32"	8½"	10"	5"	2½"	6"	3½"	1½"	11/16"	1¼"	⅜"	⅝"	2.4	2	73.0 LB
W8X18	18 LB											10⅝"	12⅛"	5"	2½"	5¼"	2¾"	1¼"	11/16"	1 1/16"	⅜"	⅝"	2.0	2	83.0 LB
W8X21	21 LB	¾" DIA. X 4¾" 62 TO 63 FT-LB	6"	2¼"	1⅜"	3½"	1¼"	1½"	¾"	5/16"	13/32"	11"	12¾"	5½"	2½"	5¼"	2¾"	1¼"	13/16"	1"	½"	¾"	3.1	2¼"	124.0 LB
W10X22	22 LB											12⅞"	14⅝"	6"	3"	5¾"	2¾"	1⅜"	13/16"	1⅛"	½"	¾"	3.9	2¼"	134.0 LB
W12X26	26 LB											15"	16¾"	6"	3"	6½"	3½"	1⅝"	13/16"	1 5/16"	½"	¾"	4.5	2¼"	152.0 LB

◪ TOTAL STRUCTURAL CARBON STEEL WEIGHT FOR ONE POST = V + (POST LENGTH X POST WEIGHT PER FOOT)

"V" INCLUDES STUB POST, BASE PLATES, STIFFENER PLATES, PERFORATED FUSE PLATES, BOLTS, NUTS, AND WASHERS.

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED

MATERIALS SHALL CONFORM TO THE WISCONSIN DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS SECTION 506, UNLESS NOTED OTHERWISE.

FABRICATION SHALL CONFORM TO THE WISCONSIN DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS SECTION 506.

ALL POST, POST STUBS & ATTACHMENTS SHALL BE ASTM A709 GRADE 50, GALVANIZED IN ACCORDANCE WITH ASTM A123.

THE POST, BASE PLATES, UPPER SIX INCHES OF STUB POST, FLANGE SPLICE PLATE AND FUSE PLATE SHALL BE GALVANIZED AFTER FABRICATION.

H.S. BOLTS, WASHERS, & NUTS SHALL BE A325 GALVANIZED.

FOUNDATION MATERIAL PROPERTIES

CONCRETE MASONRY	F'C = 3,500 P.S.I.
BAR STEEL REINFORCEMENT (UNCOATED), GRADE 60	FY = 60,000 P.S.I.

DESIGN DATA

DESIGN CONFORMS TO AASHTO LRFD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS 1ST EDITION 2015 (WITH 2017 & 2018 INTERIM REVISIONS).

DEAD LOADS (DL):

- STEEL POST SELF WEIGHT
- SIGN PANEL WEIGHT = 3 PSF

WIND LOADS (WL):

WIND LOADS WERE APPLIED TO THE PROJECTED AREAS OF THE SIGN PANELS AND THE STEEL SIGN POSTS.

- BASIC WIND SPEED = 76 MPH
- MEAN RECURRANCE INTERVAL (MRI) = 10 YEARS
- HEIGHT & EXPOSURE FACTOR = 1.00
- DIRECTIONALITY FACTOR = 0.85
- GUST EFFECT FACTOR = 1.14

WIND LOAD CASES:

- WL CASE 1: 1.0 X NORMAL WIND
- WL CASE 2: 1.0 X TRANSVERSE WIND
- WL CASE 3: 0.75 X NORMAL WIND + 0.75 X TRANSVERSE WIND

LOAD COMBINATIONS:

LOAD COMBINATION	TYPE	DL FACTOR	WL FACTOR
STRENGTH I	GRAVITY	1.25	-
EXTREME I	WIND	1.10	1.0
		0.9	1.0
SERVICE I	DEFLECTION	1.0	1.0

FOUNDATION DESIGN DATA

THE FOUNDATION DESIGN ASSUMED COHESIONLESS SOILS (LOOSE SAND) ABOVE THE WATER TABLE WITH THE FOLLOWING PROPERTIES:

- SOIL UNIT WEIGHT = 115 PCF
- ANGLE OF INTERNAL FRICTION = 24 DEGREES
- SOIL MODULUS PARAMETER = 25 LB/IN3

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE BTO TYPE I SIGNS

DRAWN BY | PLANS CK'D.

CONNECTION & FOUNDATION DETAILS 2 OF 2

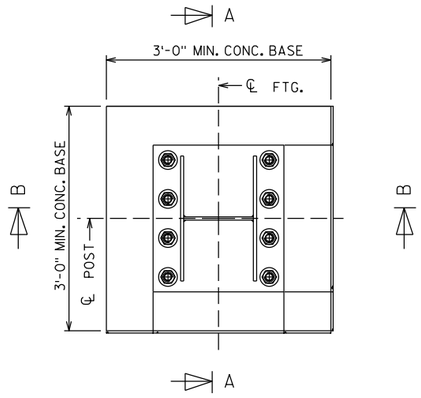
SHEET A3-1.20

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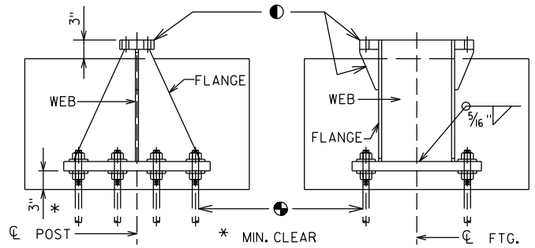
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PLOT DATE : 3-MAR-2020
PLOT BY : dotc4c

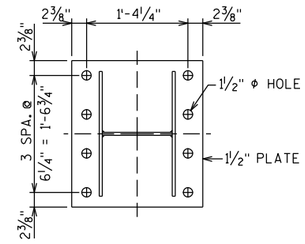
STUB AND ADHESIVE ANCHOR DETAILS



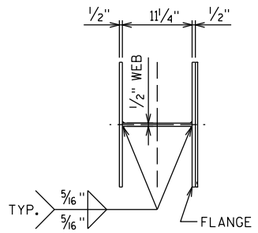
STUB SECTION



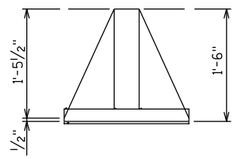
SECTION A-A SECTION B-B



BASE PLATE



STUB



FLANGE

◐ SEE BASE CONNECTION DETAILS ON "CONNECTIONS & FOUNDATION DETAILS" SHEETS.

◔ ADHESIVE ANCHORS 1¼-INCHES. ALLOWABLE PULL OUT CAPACITY = 15 KIPS. EMBED 1'-3" INTO ROCK.

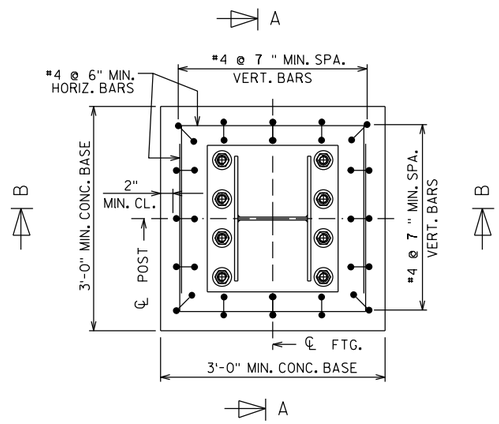
GENERAL NOTES:

QUANTITIES PER BASE:
REINFORCING STEEL = 62 LB
CONCRETE = 0.6 CY
STRUCTURAL STEEL = 335 LB

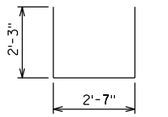
ALL MATERIALS, EXCEPT FOR ANCHOR ROD, NUTS, AND WASHERS, SHALL BE ASTM A709 GRADE 50. ALL MATERIALS TO BE GALVANIZED AFTER FABRICATION.

IF ROCK IS ENCOUNTERED PRIOR TO REACHING THE MINIMUM DRILLED SHAFT EMBEDMENT DEPTH DEFINED ON THE FOUNDATION DATA TABLE OF THE "CONNECTIONS & FOUNDATION DETAILS 2 OF 2" SHEET, THE CONTRACTOR SHALL INSTALL A TEST ADHESIVE ANCHOR AND DETERMINE THE PULL-OUT CAPACITY. IF THE FIELD TEST RESULTS IN A PULL-OUT CAPACITY GREATER THAN OR EQUAL TO 15 KIPS, THE CONTRACTOR MAY INSTALL THE ALTERNATE CONCRETE BASE AND BREAK-WAY STUB PER THE DETAILS ON THIS SHEET.

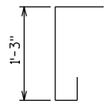
CONCRETE BASE DETAILS



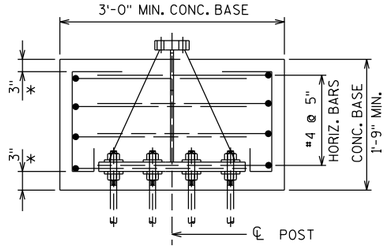
CONCRETE BASE PLAN



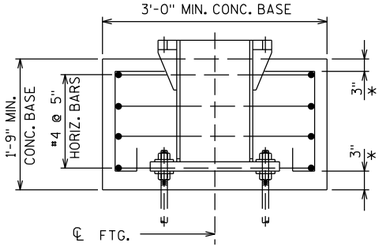
HORIZONTAL BAR
8 BARS @ 6'-11" LENGTH



VERTICAL BARS
16 BARS @ 2'-4" LENGTH
MAY BE PLACED IN SKEW
FOR CLEARANCE NEED



SECTION A-A



SECTION B-B

* MIN. CLEAR

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE BTO TYPE I SIGNS

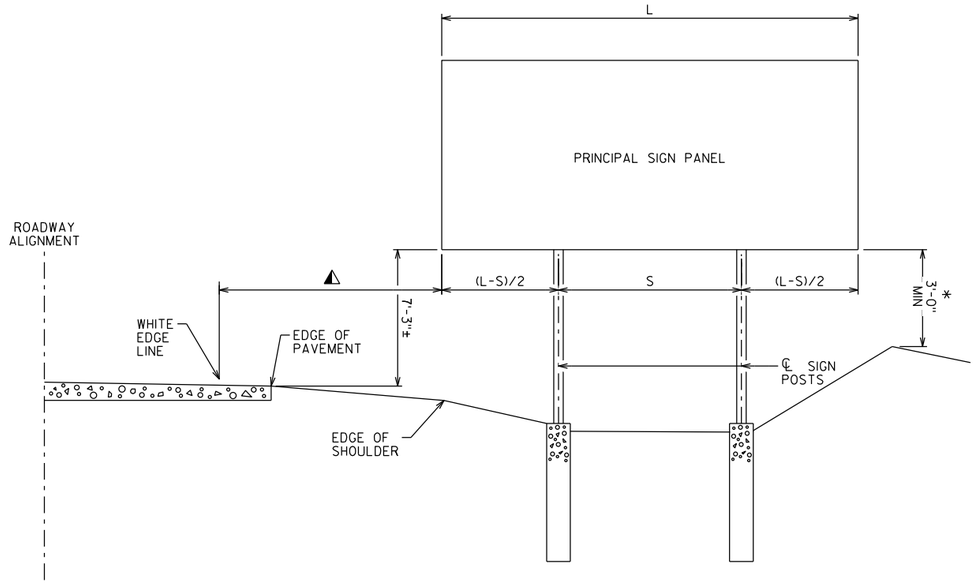
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ALTERNATE BREAK-AWAY BASE ON ROCK

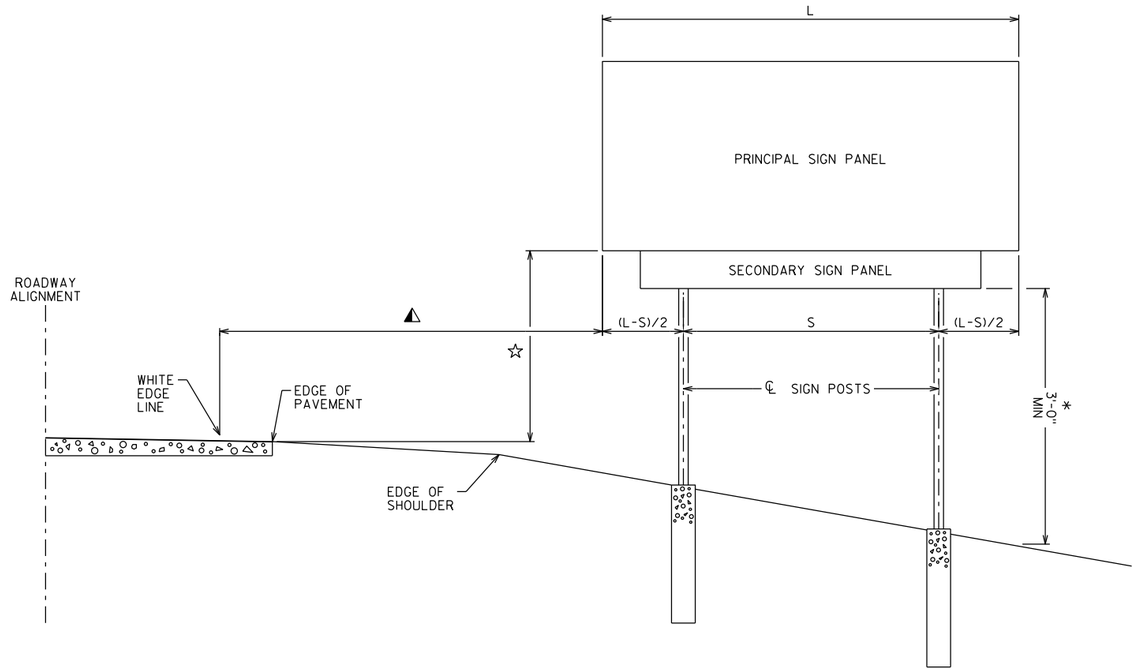
SHEET A3-1M.2

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FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A31M.DGN PLOT DATE : 9-SEPT-2019 PLOT BY : dotc4c



INSTALLATION WITHOUT SECONDARY SIGN



INSTALLATION WITH SECONDARY SIGN

TYPE 1 SIGN INSTALLATION NOTES:

FOR A 2-POST INSTALLATION, "S" EQUALS 3L/5, BUT SHALL NOT BE LESS THAN 6'-0".

FOR A 3-POST INSTALLATION, "S" EQUALS 5L/7, BUT SHALL NOT BE LESS THAN 12'-0". THE SPACING BETWEEN ANY TWO POSTS SHALL NOT BE LESS THAN 6'-0".

◭ UNLESS NOTED IN THE PLANS, THE SIGN OFFSET DISTANCE SHALL BE A MINIMUM OF 17'-6" FROM THE WHITE EDGE LINE, DESIRABLE 30'-0".

THE ± TOLERANCE SHOWN ON THIS SHEETS IS 3".

THE VERTICAL SIGN HEIGHT CLEARANCES SHOWN ON THIS SHEET ARE MEASURED FROM THE BOTTOM OF THE SIGN PANEL TO THE NEAR EDGE OF PAVEMENT.

☆ THE VERTICAL CLEARANCE SHALL BE 8'-3"± WHEN THE SECONDARY SIGN HEIGHT IS 3'-0" OR LESS. FOR SECONDARY SIGN HEIGHTS LARGER THAN 3'-0", THE VERTICAL CLEARANCE TO THE BOTTOM OF THE SECONDARY SIGN PANEL SHALL BE 5'-3"±.

* THE VERTICAL SIGN GROUND CLEARANCE ON RIGHT END OF SIGN SHALL BE A MINIMUM OF 3'-0"±.

POST LENGTHS SHOWN IN THE MISCELLANEOUS QUANTITIES ARE ESTIMATED LENGTHS. THE CONTRACTOR SHALL VERIFY POST LENGTHS AT THE TIME OF FINAL GRADING.

REFER TO THE TRAFFIC ENGINEERING OPERATIONS AND SAFETY MANUAL FOR FURTHER GUIDANCE ON MINIMUM VERTICAL CLEARANCE REQUIREMENTS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE BTO TYPE I SIGNS

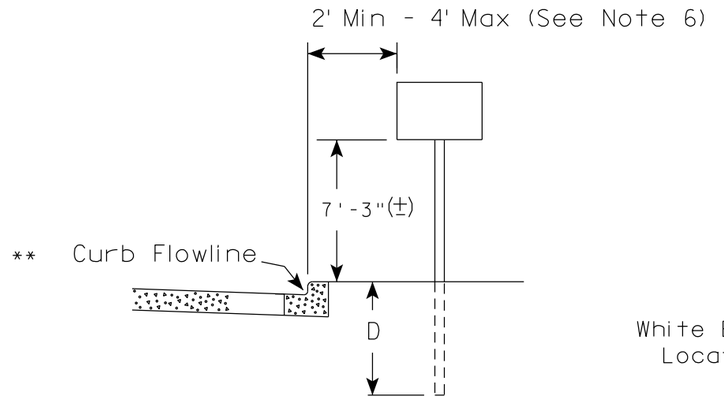
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TYPICAL TYPE I SIGN INSTALLATION

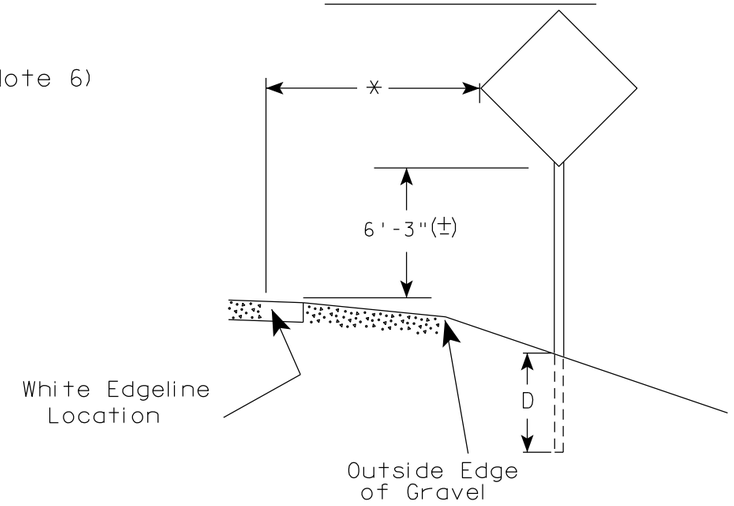
SHEET A4-1.10

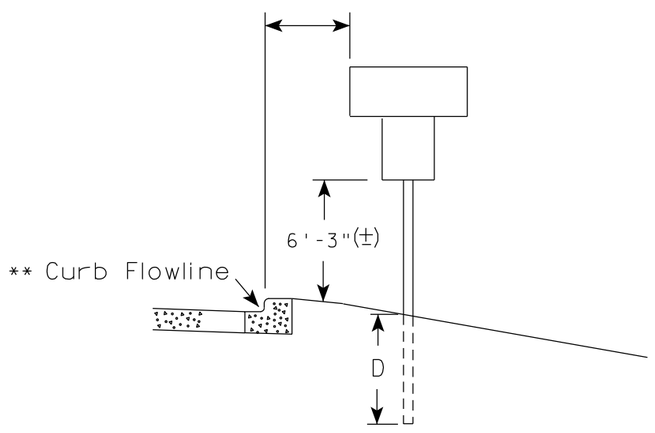
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 60 | E

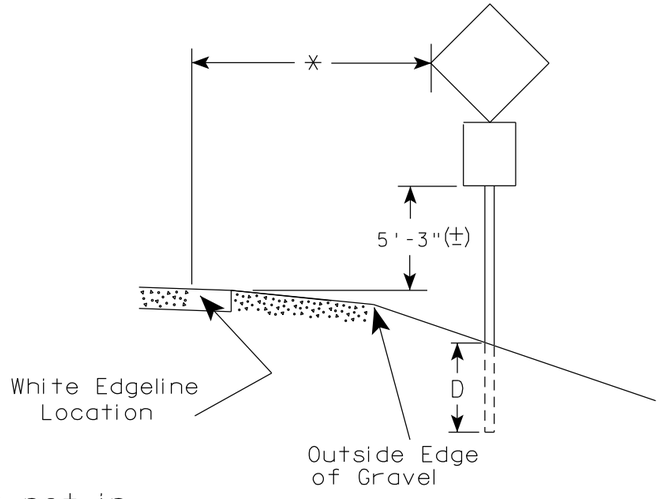
URBAN AREA



RURAL AREA (See Note 2)







** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

POST EMBEDMENT DEPTH

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

GENERAL NOTES

1. Signs wider than 4 feet or 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on or behind barrier wall, see A4-10 sign plate.
   The Double Arrow sign (W12-1D) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Enhanced Reference Markers, Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±).
3. For expressways and freeways, mounting height is 7'- 3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
4. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±).
5. Offset distance shall be consistent with existing signs or consistent throughout length of project.
6. The (±) tolerance for mounting height is 3 inches.
7. Folding signs shall be mounted at a height of 5'-3" (±) or as directd by the Engineer.

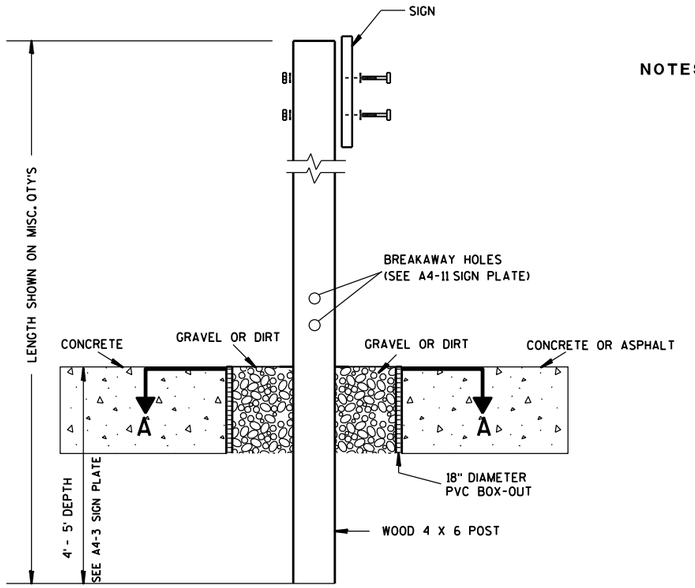
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

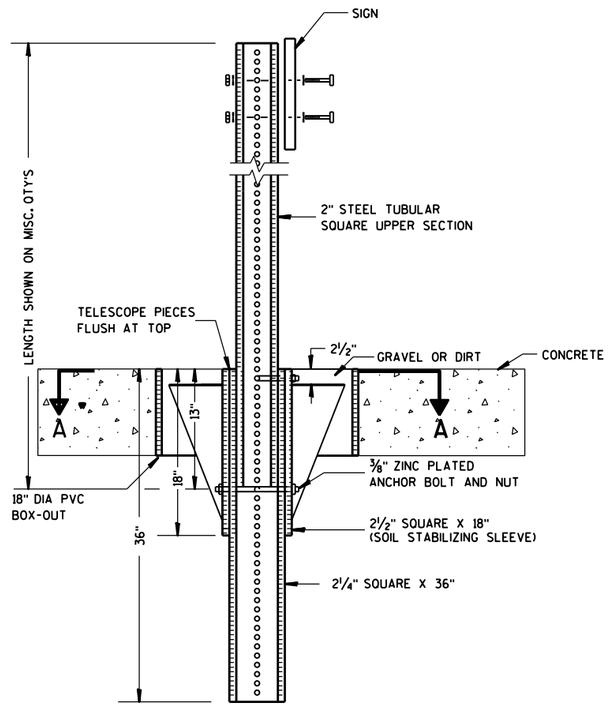
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 61	E



ELEVATION VIEW

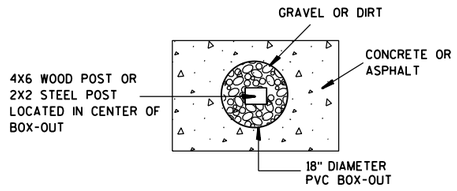
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

NOTES:
1. ALL MATERIAL TO BE APPROVED BY ENGINEER PRIOR TO INSTALLATION
2. SEE SIGN PLATE A4-8 FOR SIGN HARDWARE REQUIREMENTS
3. 18 INCH X 18 INCH SQUARE BOX-OUTS MAY BE USED FOR INSTALLATIONS IN EXISTING CONCRETE OR ASPHALT LOCATIONS.



ELEVATION VIEW

DETAIL OF STEEL 2 X 2 SIGN POST IN BOX-OUT



PLAN VIEW

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST BOX-OUTS A4-3B

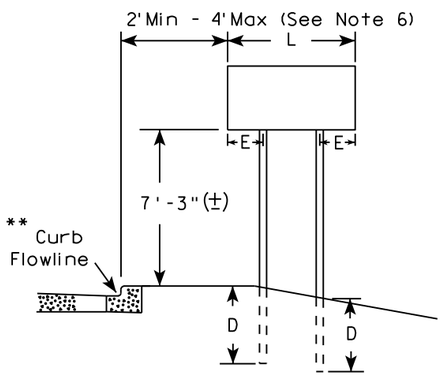
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

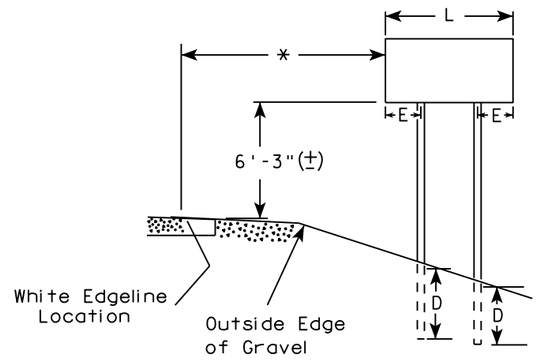
DATE 1/27/14 PLATE NO. A4-3B.1

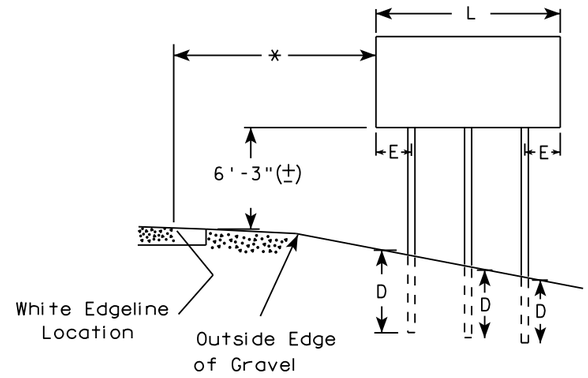
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

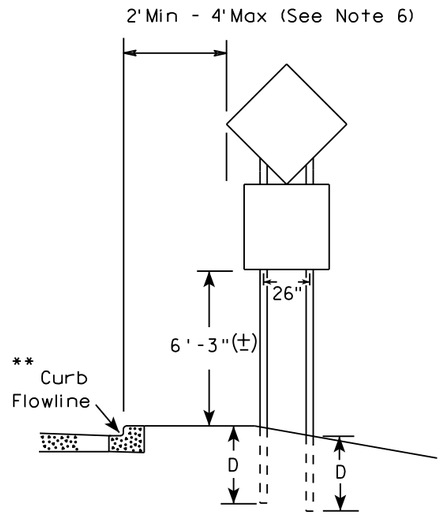
URBAN AREA



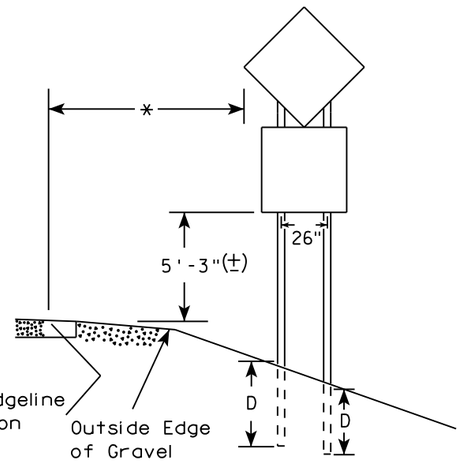
RURAL AREA (See Note 3)







48" DIAMOND WARNING SIGN



48" DIAMOND WARNING SIGN

SIGN SHAPE OTHER THAN DIAMOND (TWO POSTS REQUIRED)		
	L	E
***	Greater than 48" Less than 60"	12"
	60" to 108"	L/5

SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED)	
L	E
Greater than 108" to 144"	12"

GENERAL NOTES

1. For 3 or 4 post installations, individual post spacing shall be greater than 3'-6".
2. See tables below for required number of posts.
3. For expressways and freeways, mounting height is 7'-3" (±) or 6'-3" (±) depending upon existence of sub-sign.
4. The (±) tolerance for mounting height is 3 inches.
5. J-Assemblies are considered to be one sign for mounting height.
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. Folding signs shall be mounted at a height of 5'-3" (±) or as directed by the engineer.
8. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4"-3" (±).

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

*** See A4-3 sign plate for signs 4' or less in width and less than 20 S.F. in area.

POST EMBEDMENT DEPTH

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

TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

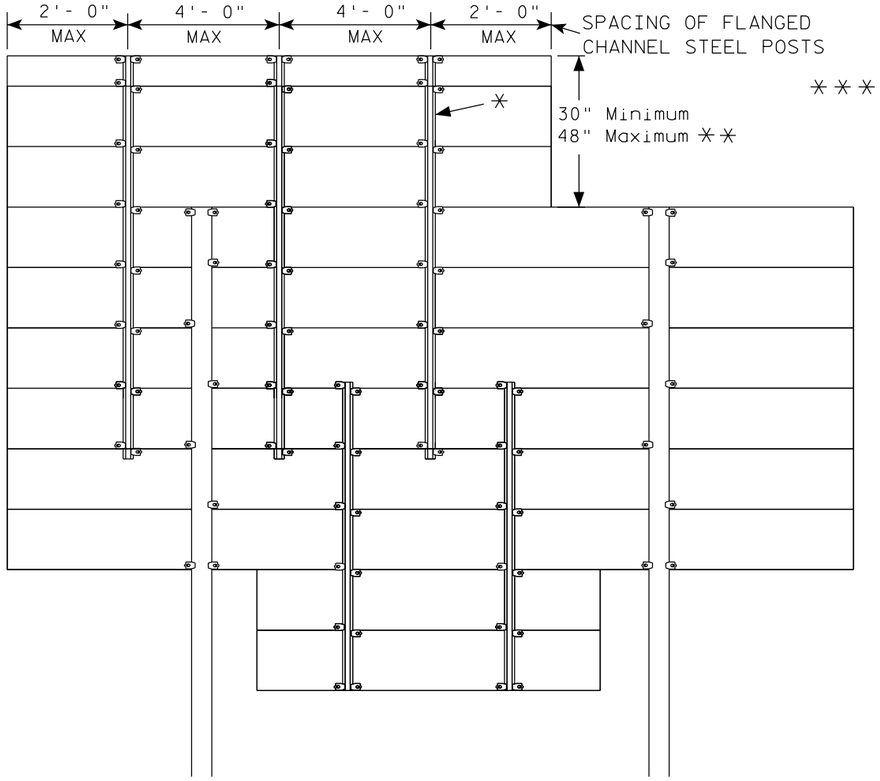
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 63	E

GROUND MOUNTED SIGN



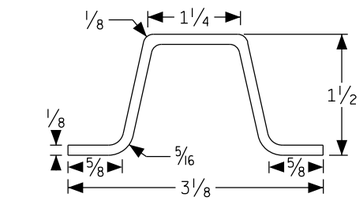
✳=2.00 lb/ft AND 4.00 lb/ft FLANGED CHANNEL, MIN. YIELD STRENGTH = 60,000 PSI (GRADE 60) GALVANIZED

✳✳=FOR 48" HEIGHT PANELS ON OVERHEAD STRUCTURES, ENTIRE SIGN SHALL BE CENTERED VERTICALLY ABOUT THE DEPTH OF THE TRUSS.

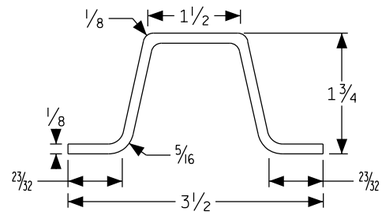
✳✳✳ THESE SPACING DISTANCES SHALL ONLY BE USED WHEN THE MAIN SIGN HAS A MAXIMUM HEIGHT (DIMENSION H) OF 15 FT OR LESS. FOR SIGNS WITH A HEIGHT OF GREATER THAN 15 FT, STRUCTURAL CALCULATIONS SHALL BE PERFORMED.

FLANGE CHANNEL DETAILS

NOT TO SCALE

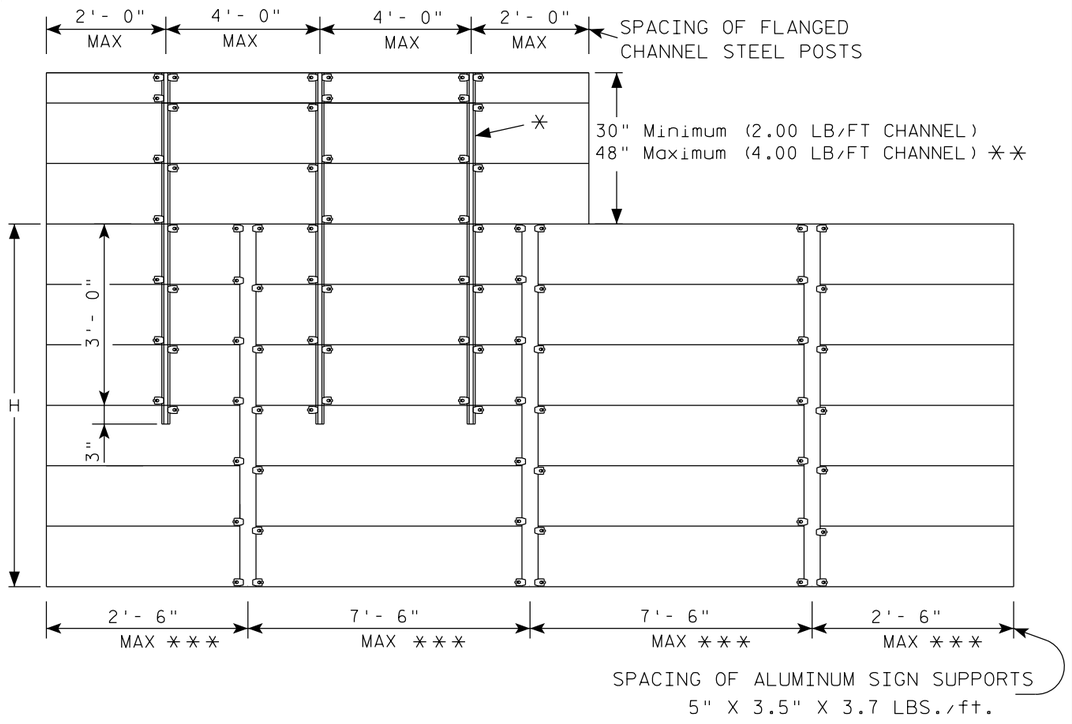


2.00 LB/FT CHANNEL



4.00 LB/FT CHANNEL

SIGN BRIDGE MOUNTED SIGN



GENERAL NOTES

1. Flanged channel steel posts shall conform to size and material above, and shall be considered as incidental to other items in the contract.
2. Number of Flanged channel steel supports varies with length of panel and shall be spaced as shown:

   PANEL LENGTH 8'-0" OR LESS = 2 CHANNELS
   PANEL LENGTH 9'- 0" - 12'- 0" = 3 CHANNELS
   PANEL LENGTH 13'- 0" OR MORE = 4 CHANNELS

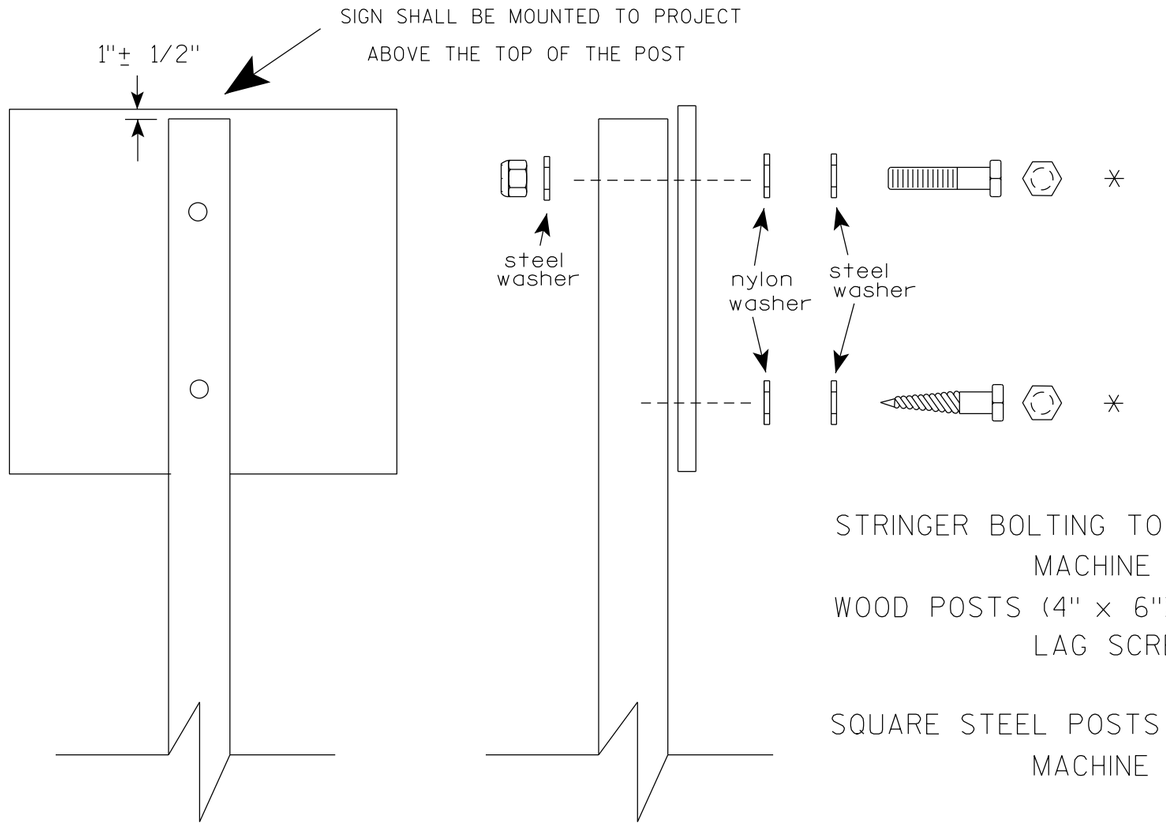
   If the flanged channel steel posts can not be horizontally spaced as shown, they can be moved so as to securely hold the sign.
3. The EXIT NUMBER PANEL shall normally be positioned above the guide sign aligned with the right edge of the guide sign. If the guide sign indicates a left exit, the EXIT NUMBER PANEL shall be aligned with the left edge of the guide sign.
4. If the bolt holes in the top panel (EXIT NUMBER), or sub panel (NEXT EXIT) line up with holes in main sign panel, stitch bolts shall be used in addition to the channels.
5. Provide post clips for each sign as shown. (Please note the differences between a ground mounted versus Sign bridge mounted sign as far as number of clips required on the main supports or beams)
6. Structural steel sign supports shall extend to the top of the main signs, as shown on the above details.

ATTACHMENT OF GUIDE SIGNS TO SUPPORTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/07/20 PLATE NO. A4-6.12



Nuts, bolts and lags used for mounting signs shall have hexagonal heads and shall be either :

a. Hot dip galvanized in accordance with ASTM Designation: A 153, Class D, or SC 3

b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

Threads on bolts and nuts shall be manufactured with sufficient allowance for the cadmium plate or galvanized coating to permit the nuts to run freely on the bolts.

STRINGER BOLTING TO ALUMINUM SIGNS (SEE SIGN PLATE A4-18)

MACHINE BOLTS - 5/16" X 1-3/4" Length w/ lock nuts

WOOD POSTS (4" x 6")

LAG SCREWS - 3/8" X 3" (NO STRINGERS ON BACK OF SIGN)
3/8" X 4" (STRINGERS ON BACK OF SIGN)

SQUARE STEEL POSTS (2" x 2")

MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts (NO STRINGER ON BACK OF SIGN)
3/8" X 5" Length w/ nuts (STRINGERS ON BACK OF SIGN)

RIVETS - 9/32" (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL
O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH

WASHERS (ALL POSTS) -

1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON

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

ATTACHMENT OF SIGNS TO POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

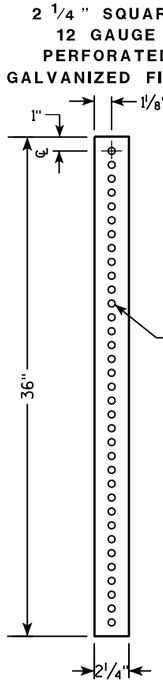
DATE 4/1/2020 PLATE NO. A4-8.9

PROJECT NO:

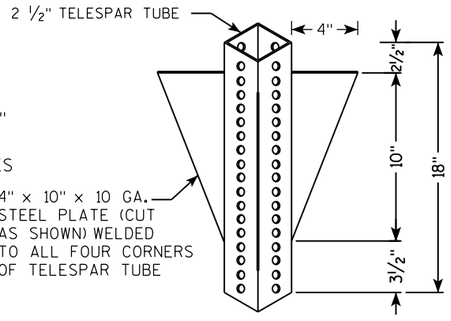
SHEET NO: 65 E

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

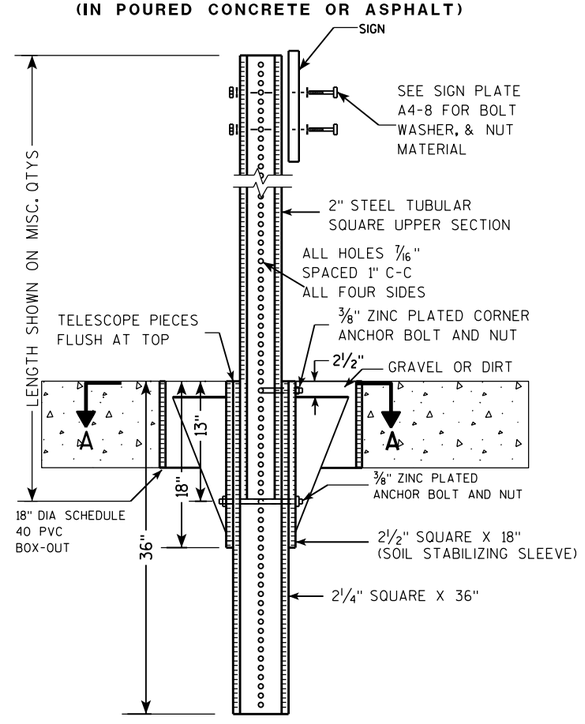
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



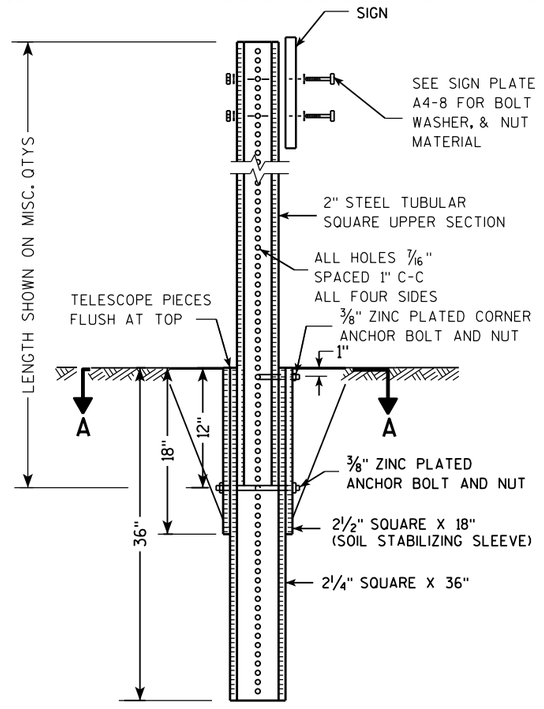
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

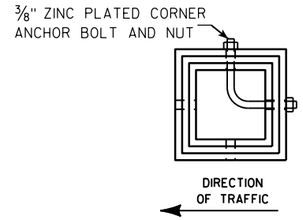


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



DETAIL OF TUBULAR STEEL SIGN POST
(IN LOCATIONS OTHER THAN POURED CONCRETE OR ASPHALT)





SECTION A-A

Area of Sign Installation (Sq. Ft.)	Number of Required Posts
9 or less	1
Greater than 9 less than or equal to 18	2
Greater than 18 less than or equal to 27	3

Signs wider than 3 feet or larger than 9 sq. ft shall be mounted on multiple posts (see above table).

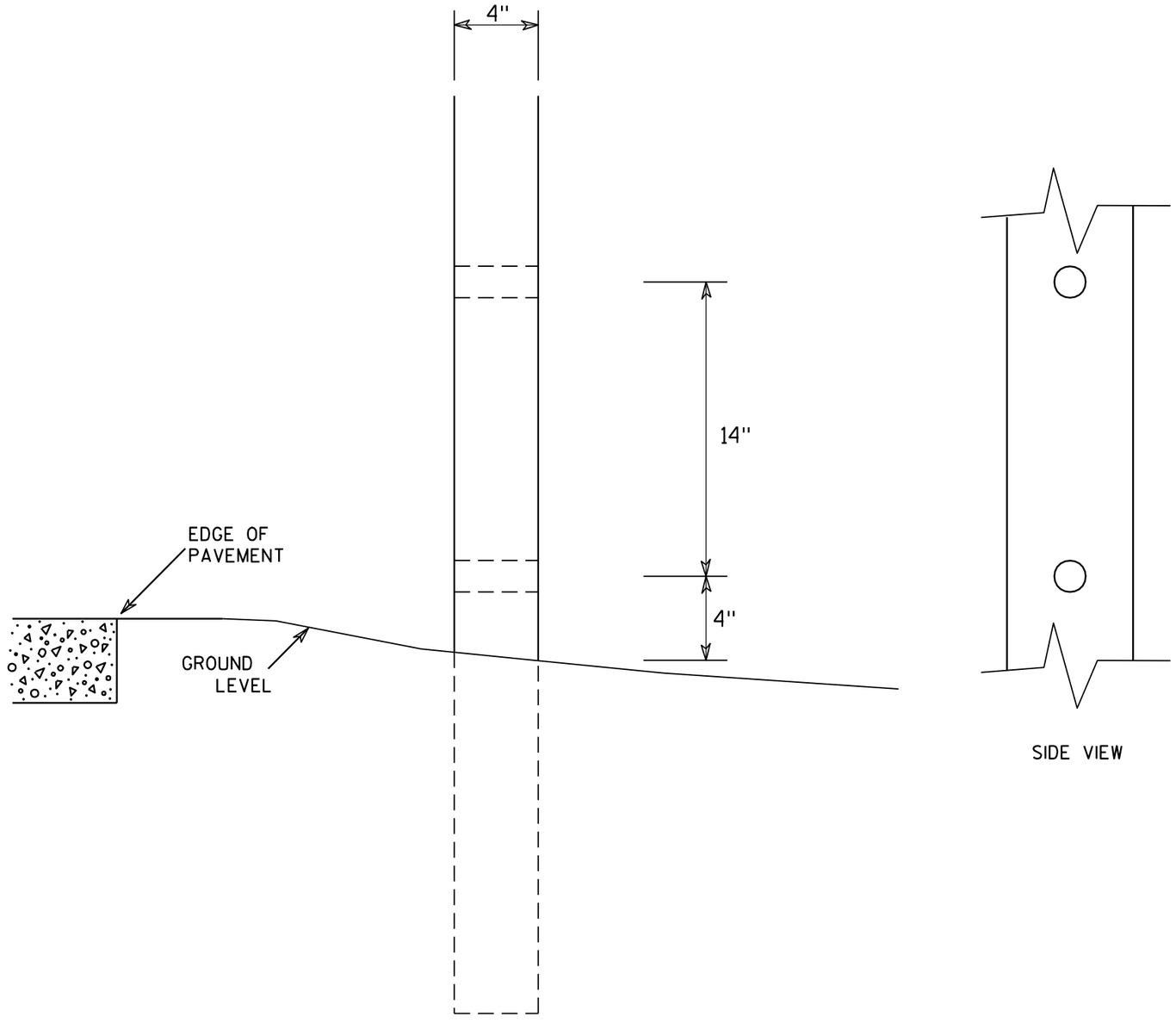
TUBULAR STEEL
SIGN POST
A4-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE 66 A4-9.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



SIDE VIEW

GENERAL NOTES

1. All 4 x 6 Wood Posts shall be modified by having two 1½" diameter holes drilled perpendicular to the roadway centerline.

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4 X 6 WOOD POST MODIFICATIONS

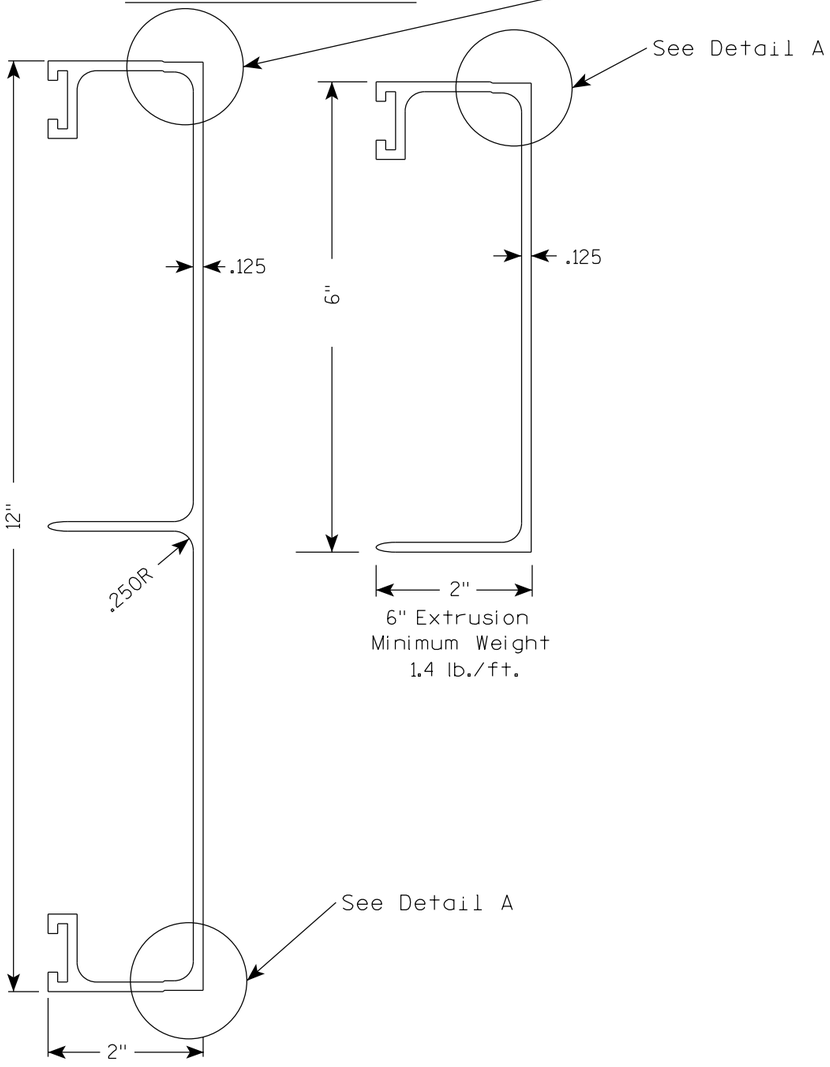
WISCONSIN DEPT OF TRANSPORTATION

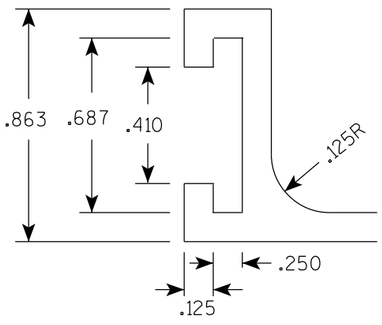
APPROVED Chester J Spang for State Traffic Engineer

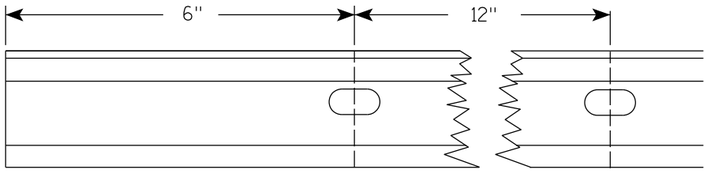
DATE 3/27/97 PLATE NO. A4-11.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 67	E

Extruded Shape







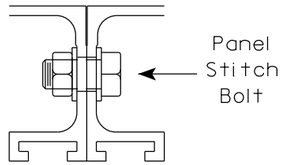
Punch 7/16" x 7/8" oval holes beginning 6" in from end of extrusion 12" CC on both edges of 6" and 12" panels.

Hardware

STITCH BOLT, WASHER & NUT

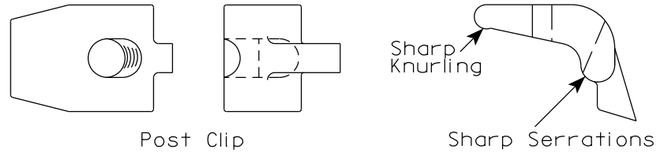
The hardware includes:

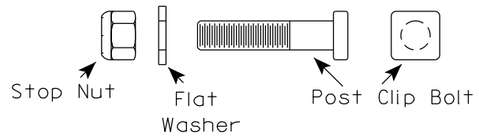
3/8 " - 16 X 3/4 " Economy Bolt 2024-T4 alloy
3/8 " - Stainless steel stop nut
3/8" X .064 Flat Washers, Alclad 2024-T4 alloy



POST CLIP, POST CLIP BOLT, WASHER & NUT

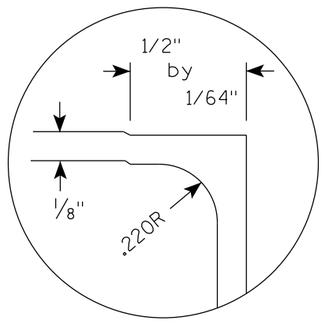
Post Clip shall be Alum. Alloy 356-T6
Post Clip Bolt shall be Stainless Steel.
Flat washer shall be 3/8" X .091, Stainless Steel.
Stop nut shall be stainless steel.





NOTES

1. The contractor may select any brand of extrusion that conforms to the illustrations or meets with the approval of the engineer, but all extrusions used on this contract shall be of the same brand.
2. Panel Stitch Bolts shall be used to assemble adjacent panels. Maximum stitch bolt spacing shall be 24" C-C, and a minimum of 4 bolts shall be used to connect any two extrusions.
3. Post Clips shall be used to attach the sign panel to the sign support.
4. Edge wrapping of sign sheeting required on all extrusions joints shown in Detail A.



DETAIL A (EDGE WRAP JOINT)

ALUMINUM EXTRUSIONS FOR TYPE I SIGNS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

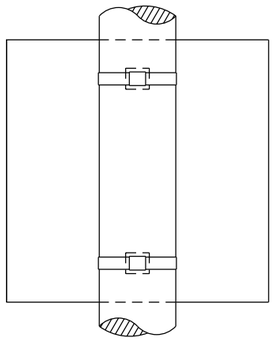
DATE 1/07/20 PLATE NO. A5-2.10

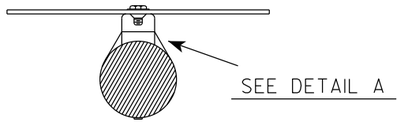
PROJECT NO:

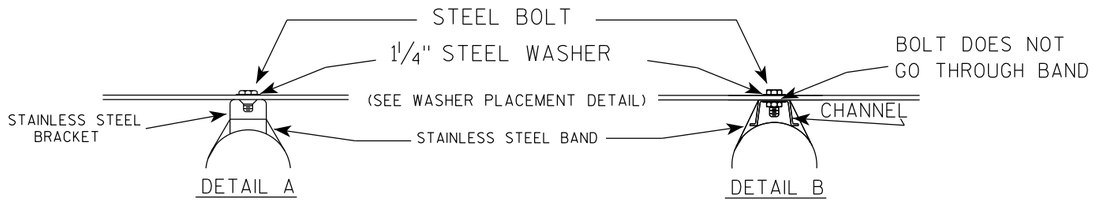
SHEET NO: 68 E

BANDING

SINGLE SIGN



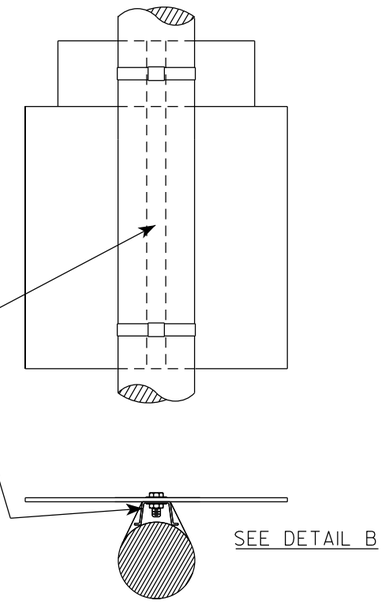




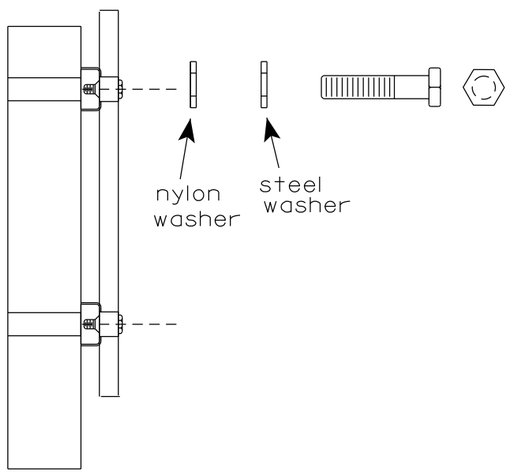
GENERAL NOTES

1. Any sign over 3 feet in width shall use the V-Block banding method. See A5-10 standard plate.
2. Signs 3 feet or greater in height shall have three bracket bands installed. Signs less than 3 feet in height shall have two bracket bands installed.
3. Banding and assembly bracket shall be stainless steel. All bands shall be ¾" in width and 0.025" thickness.
4. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
   a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D
   b. Electro-galvanized in accordance with ASTM designation: B 633, Type III, SC 3

"J" ASSEMBLY



WASHER PLACEMENT



WASHERS (ALL POSTS) -
1-1/4" O.D. X ⅜" I.D. X 1/16" STEEL
1-1/4" O.D. X ⅜" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

STANDARD SIGN
SIGN BANDING DETAILS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

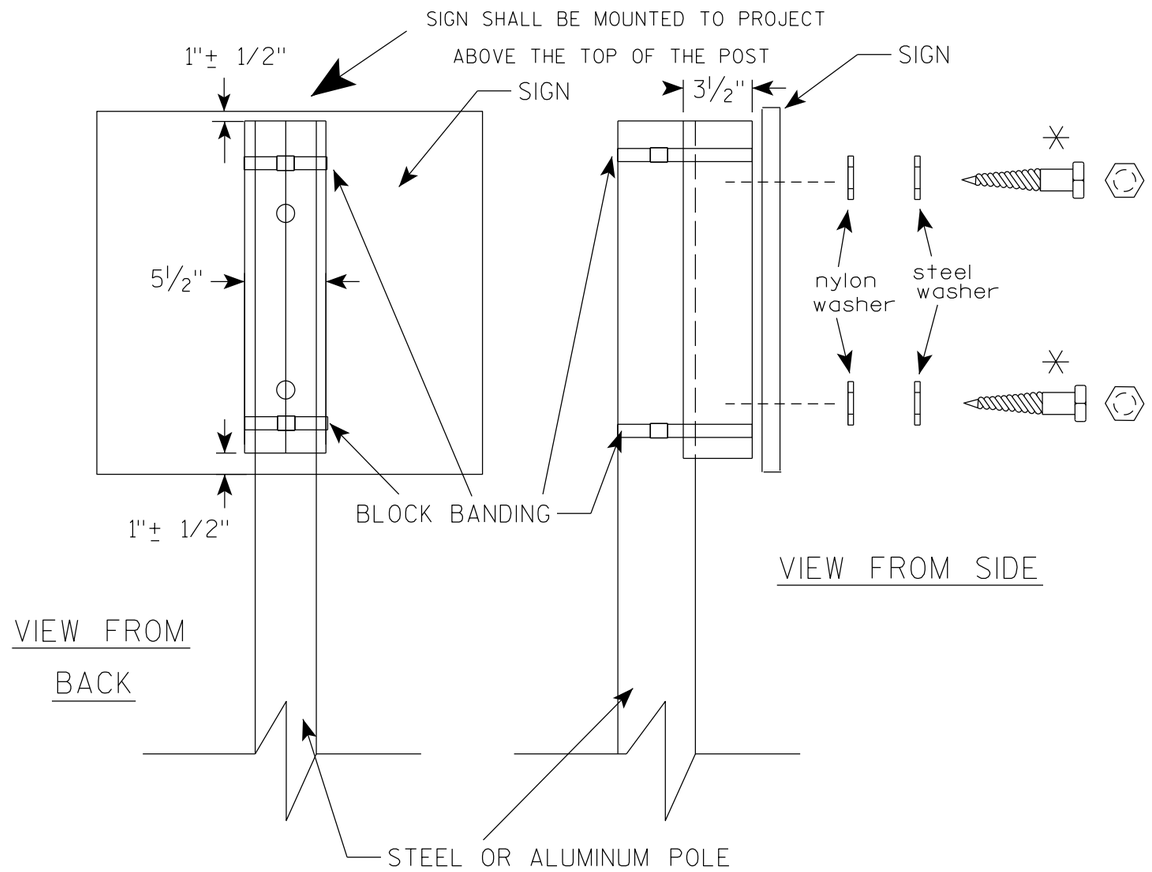
DATE 6/10/19 PLATE NO. A5-9.4

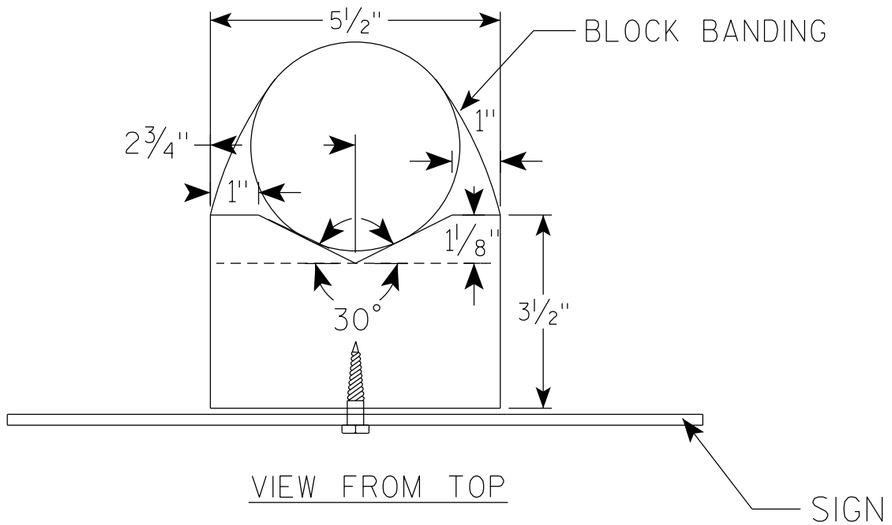
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 69	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A59.dgn PLOT DATE : 10-JUN 2019 4:10 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

7

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GENERAL NOTES

1. WOOD 4"X6" POST MATERIAL SHALL CONFORM TO 507.2.2 OF THE WisDOT STANDARD SPECIFICATIONS
2. BLOCK BANDING AND CLIPS SHALL BE STAINLESS STEEL, ¾" WIDTH AND 0.025" THICKNESS
3. SIGNS 3' OR GREATER IN HEIGHT SHALL UTILIZE 3 BLOCK BANDS. SIGNS UNDER 3' IN HEIGHT SHALL UTILIZE 2 BLOCK BANDS
4. ACTUAL NUMBER OF FASTENERS PER SIGN VARIES WITH THE SIGN AREA, BUT NORNALLY THERE ARE TWO. FOR SIGNS GREATER THAN 9 S.F. 3 FASTENERS SHALL BE USED.
5. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
   a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D
   b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3
6. ALL BOLTS SHALL HAVE HEXAGONAL HEADS.
7. STEEL WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X 1/16"
8. NYLON WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X .080 FOR TYPE H OR TYPE F FACE SIGN

✳ LAG BOLTS SHALL BE ⅜" X 2½"

BLOCK BANDING DETAIL (V-BLOCK OPTION)

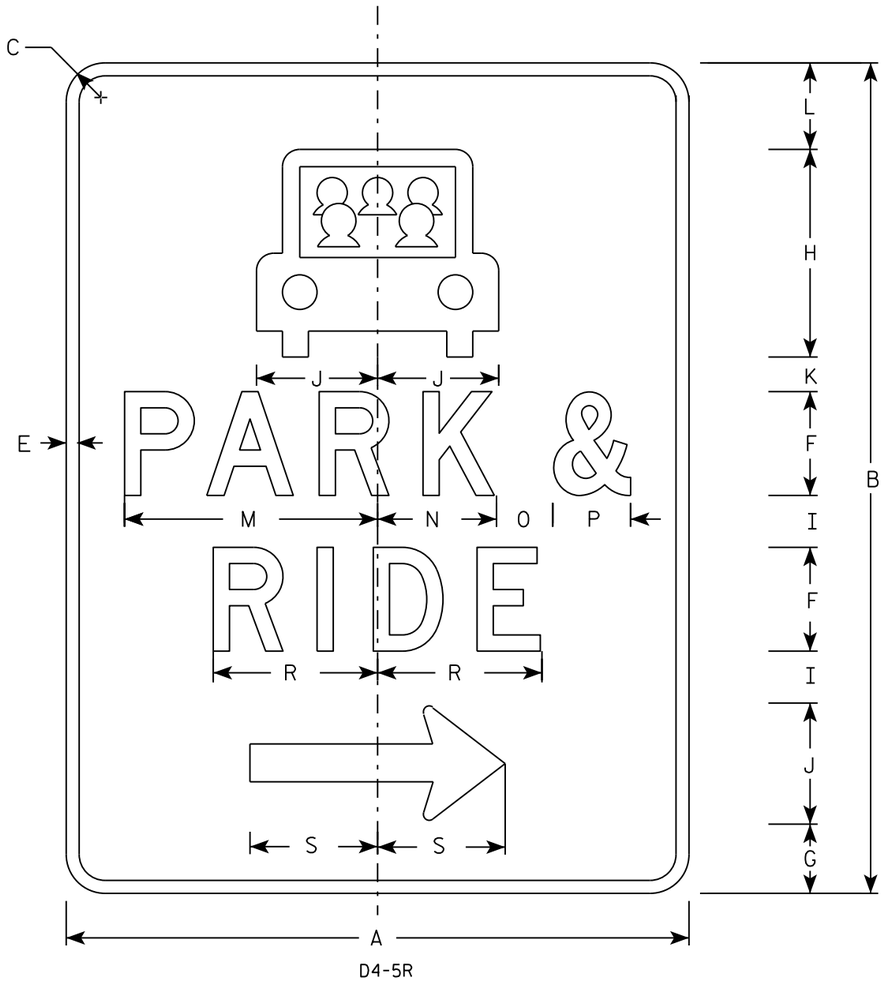
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/19/2022 PLATE NO. A5-10.3

PROJECT NO:

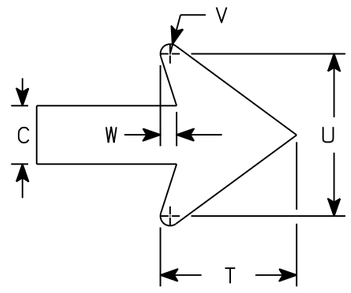
SHEET NO: 70 E



D4-5R

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - D
4. The D4-5L is the same as a D4-5R except the arrow is reversed.



Arrow Detail

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	30	36	1 3/8		5/8	5	3 1/8	9	2	5	1 5/8	3 1/4	11 3/4	5 1/2	2 3/4	3 3/4		8	6 1/8	4	4 3/8	3/8	1/2				7.50
3	36	48	2 1/4		3/4	6	4	12	3	7	2	5	14 5/8	6 7/8	3 1/4	4 1/2		9 1/2	7 1/2	5 1/4	6 1/4	3/8	5/8				12.0
4																											
5																											

STANDARD SIGN
D4-5 L&R

WISCONSIN DEPT OF TRANSPORTATION

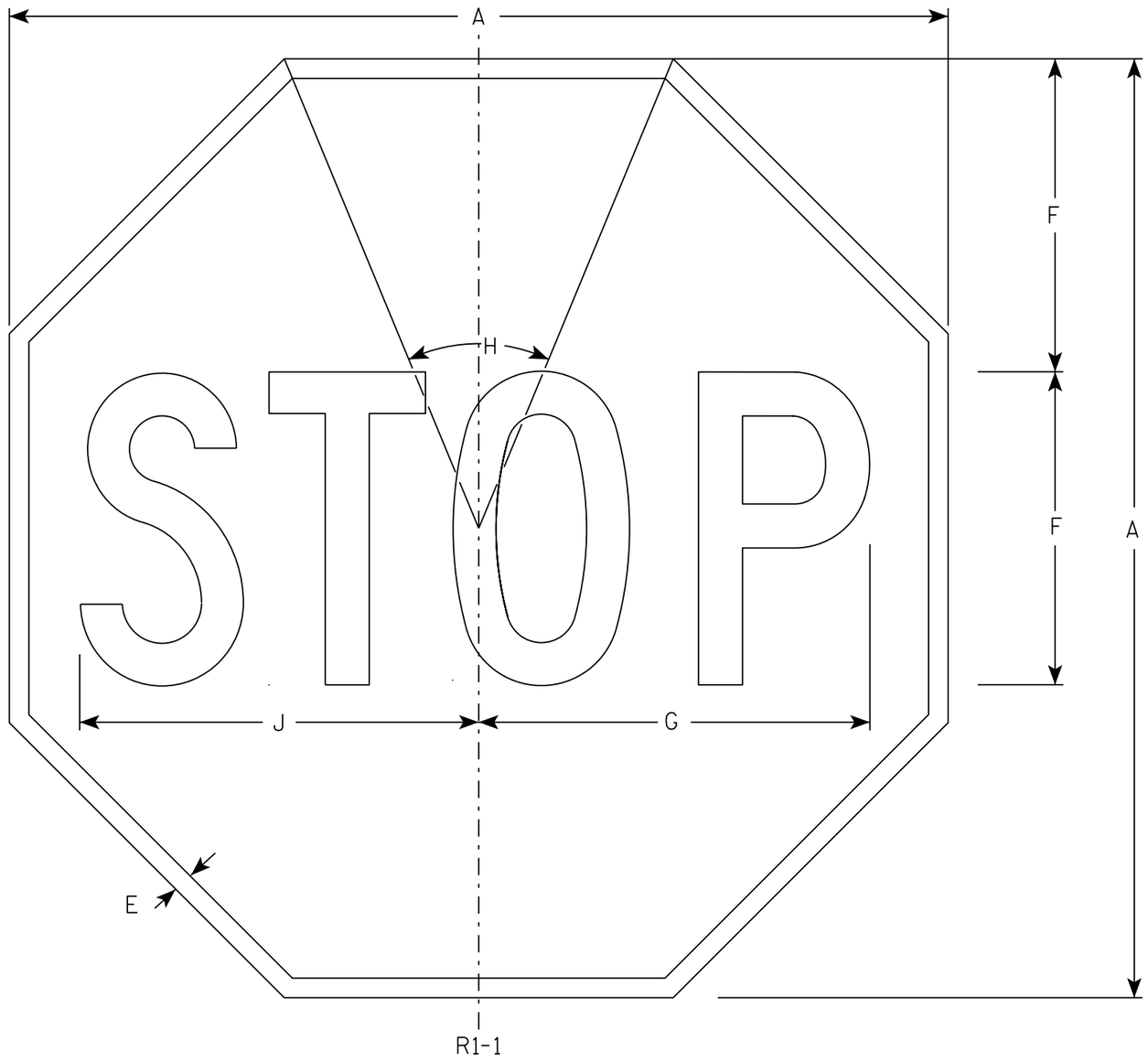
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/7/18 PLATE 71 D4-5.3

PROJECT NO:

SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\D45.DGN PLOT DATE : 07-MAY-2018 10:18 PLOT BY : $$ plotuser $$



NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Red
   Message - White
3. Message Series - C

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2S	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2M	36				3/4	12	15	45°		15 3/8																	7.46
3	36				3/4	12	15	45°		15 3/8																	7.46
4	48				1	16	20	45°		20 1/2																	13.25
5	48				1	16	20	45°		20 1/2																	13.25
6	18				3/8	6	7 3/4	45°		7 3/4																	1.86
7	12				1/4	4	5	45°		5 1/8																	0.78

STANDARD SIGN

R1-1

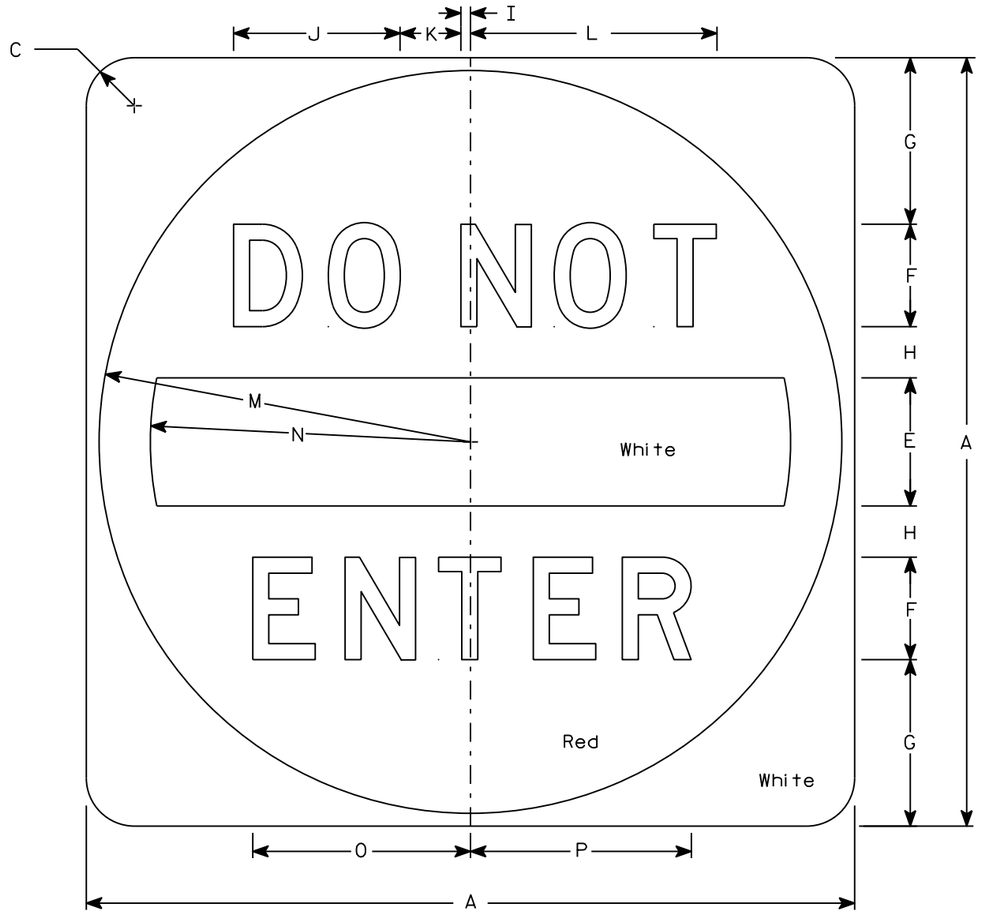
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch

for State Traffic Engineer

DATE 11/12/15 PLATE NO. R1-1.13

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 72	E



R5-1

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - See detail
   Message - White
3. Message Series - D

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30		1 7/8		5	4	6 1/2	2	3/8	6 1/2	2 3/8	9 5/8	14 1/2	12 1/2	8 1/2	8 5/8											6.25
2M	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4											9.0
3	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4											9.0
4	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4											9.0
5	48		3		8	6	11	3	5/8	9 3/4	3 5/8	14 1/2	23 1/2	20	12 3/4	12 7/8											16.0

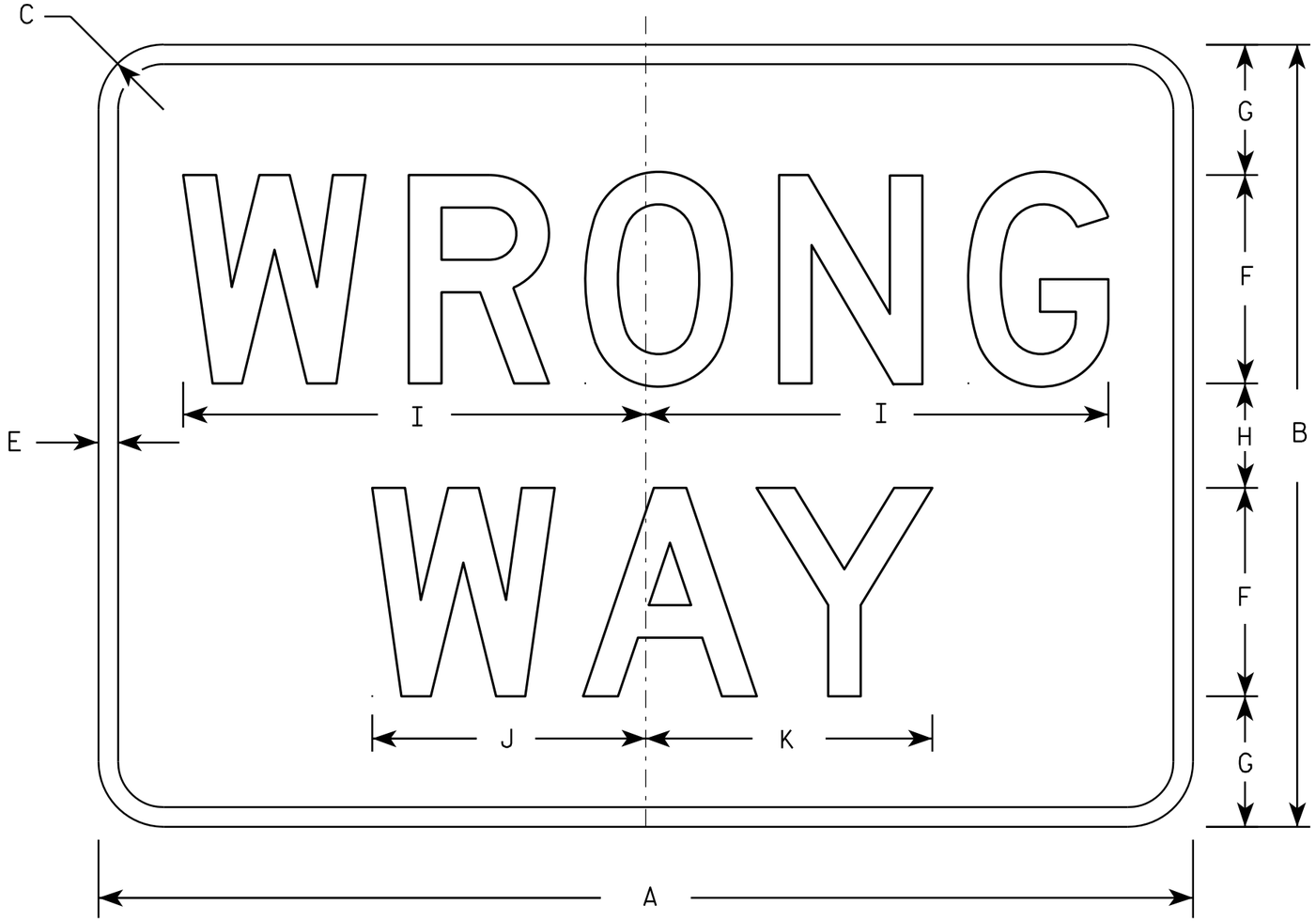
STANDARD SIGN
R5-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/15/18 PLATE NO. R5-1.16

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 73 | E



R5-1A

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Red
   Message - White
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30	18	1 1/2		1/2	5	3	2	11	6 1/2	6 7/8																3.75
2S	36	24	2		5/8	6	4 1/2	3	13 1/4	7 7/8	8 1/4																6.00
2M	42	30	2 1/2		3/4	8	5	4	17 3/4	10 1/2	11																8.75
3	42	30	2 1/2		3/4	8	5	4	17 3/4	10 1/2	11																8.75
4	42	30	2 1/2		3/4	8	5	4	17 3/4	10 1/2	11																8.75
5	42	30	2 1/2		3/4	8	5	4	17 3/4	10 1/2	11																8.75

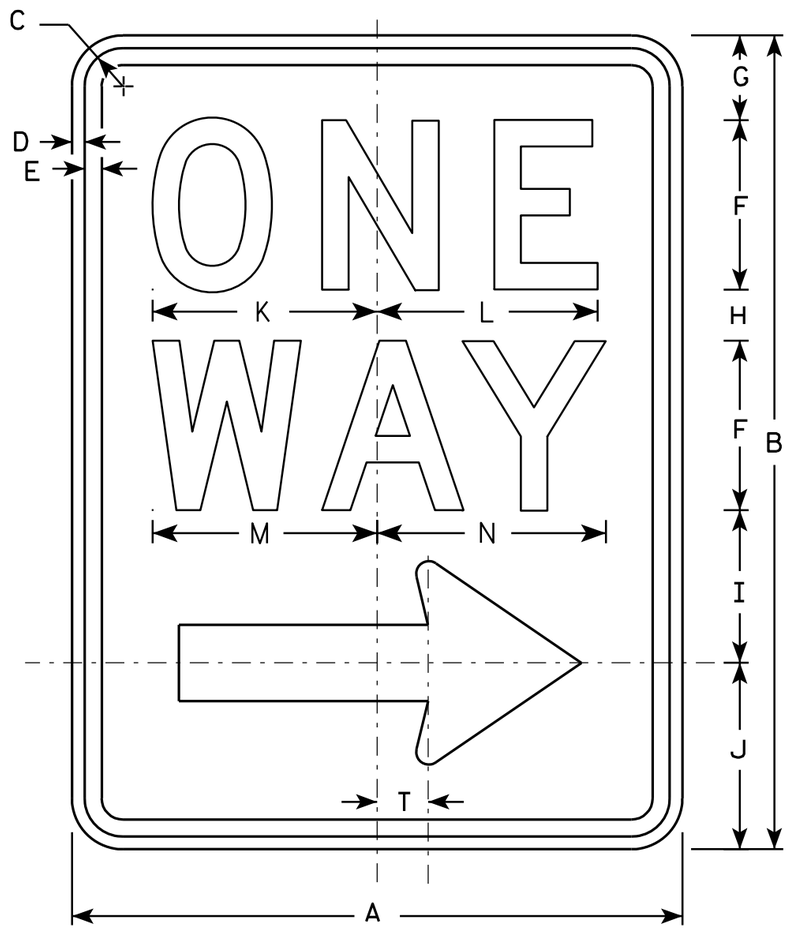
STANDARD SIGN
R5-1A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/17/10 PLATE NO. R5-1A.2

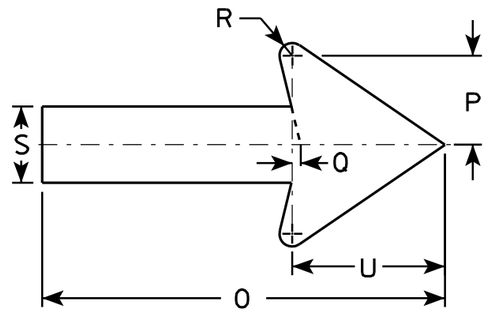
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 74 | E



R6-2R

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. R6-2L same as R6-2R except arrow points to the left.



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
1	18	24	1 1/8	3/8	1/2	5	2 1/2	1 1/2	4 1/2	5 1/2	6 5/8	6 1/2	6 5/8	6 3/4	11 7/8	2 5/8	1/4	3/8	2 1/4	1 1/2	4 1/2					
2S	24	30	1 1/8	3/8	1/2	6	3	2 1/2	5 1/2	7	8 1/8	8 1/8	8 1/2	8 5/8	16	3 1/2	3/8	1/2	3	2	6					
2M	30	36	1 3/8	1/2	5/8	8	2 1/2	2 5/8	6 7/8	8	10 1/2	10 1/2	11 1/4	11 1/4	20	4 3/8	1/2	5/8	3 3/4	2 1/2	7 1/2					
3	36	48	1 7/8	1/2	5/8	10	5 1/4	3 1/4	9	10 1/2	12 3/4	12 3/4	13 1/4	13 1/2	24	5 5/8	1/2	3/4	4 3/4	3	9					
4	36	48	1 7/8	1/2	5/8	10	5 1/4	3 1/4	9	10 1/2	12 3/4	12 3/4	13 1/4	13 1/2	24	5 5/8	1/2	3/4	4 3/4	3	9					
5																										

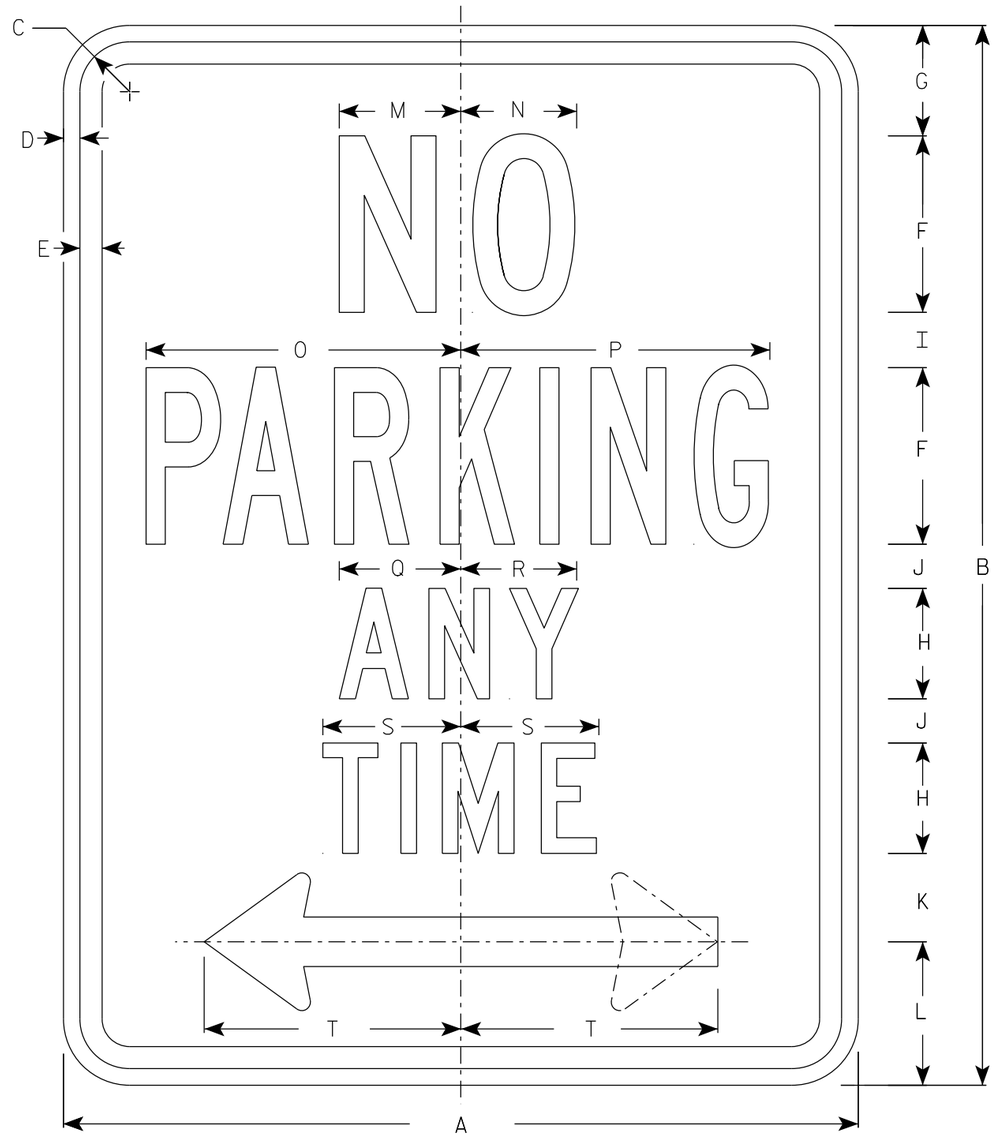
STANDARD SIGN
R6-2 R&L

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/2/10 PLATE NO. R6-2.8

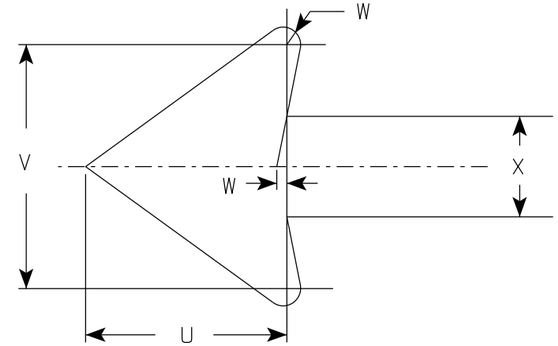
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 75 | E



R7-1

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Red
3. Message Series - See Note 5
4. Lines 1, 3 and 4 are series C, line 2 is series B.
5. R7-1D (double arrow)
   R7-1L (left arrow)
   R7-1R (right arrow)



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	12	18	1 1/8	3/8	3/8	3	1 7/8	2	7/8	5/8	1 1/2	2 1/2	2	2	4 7/8	4 7/8	2 1/4	2 1/8	2 1/2	3 7/8	1 1/2	1 3/4	1/8	3/4			1.5
2S	18	24	1 1/8	3/8	1/2	4	2 1/2	2 1/2	1 1/4	1	2	3 1/4	2 3/4	2 5/8	7 1/8	7	2 3/4	2 5/8	3 1/8	5 7/8	2 1/4	2 5/8	1/4	1 1/8			3.0
2M	24	30	1 1/8	3/8	1/2	5	3	3	2	1 1/4	2 1/2	4	3 1/4	3 3/8	9 1/4	9 1/4	3 1/4	3 1/4	3 3/4	7 3/4	3	3 1/2	1/4	1 1/2			5.0
3	24	30	1 1/8	3/8	1/2	5	3	3	2	1 1/4	2 1/2	4	3 1/4	3 3/8	9 1/4	9 1/4	3 1/4	3 1/4	3 3/4	7 3/4	3	3 1/2	1/4	1 1/2			5.0
4																											
5																											

STANDARD SIGN
R7-1

WISCONSIN DEPT OF TRANSPORTATION

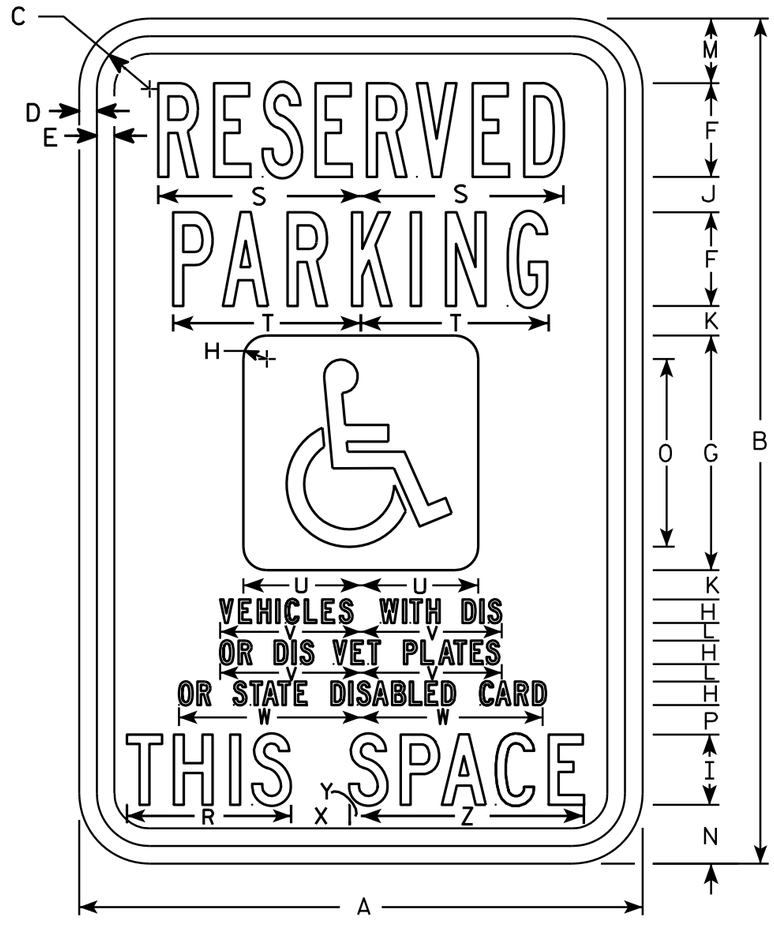
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/31/2021 PLATE NO. R7-1.10

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 76 E

7

7



R7-8A

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Sign is white Type H Reflective; paraplegic background is blue.
   Message - Legend and border are green; paraplegic symbol is white
3. Message Series - Lines 1 & 2 are Series B
   Lines 3, 4, 5 & 6 are Series C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	12	18	1 1/8	3/8	3/8	2	5	1/2	1 1/2	3/4	5/8	3/8	1 3/8	1 1/4	4	5/8		3 1/2	4 3/8	4	2 1/2	3	3 7/8	1 1/4	1/4	4 3/4	1.5
2M	18	24	1 1/8	3/8	1/2	3	6	3/4	2	7/8	5/8	1/2	1 7/8	2	5	3/4		4 5/8	6 1/2	5 3/8	3	4 1/2	5 7/8	1 1/2	1/4	6 3/8	3.0
3	18	24	1 1/8	3/8	1/2	3	6	3/4	2	7/8	5/8	1/2	1 7/8	2	5	3/4		4 5/8	6 1/2	5 3/8	3	4 1/2	5 7/8	1 1/2	1/4	6 3/8	3.0
4																											
5																											

STANDARD SIGN
R7-8A

WISCONSIN DEPT OF TRANSPORTATION

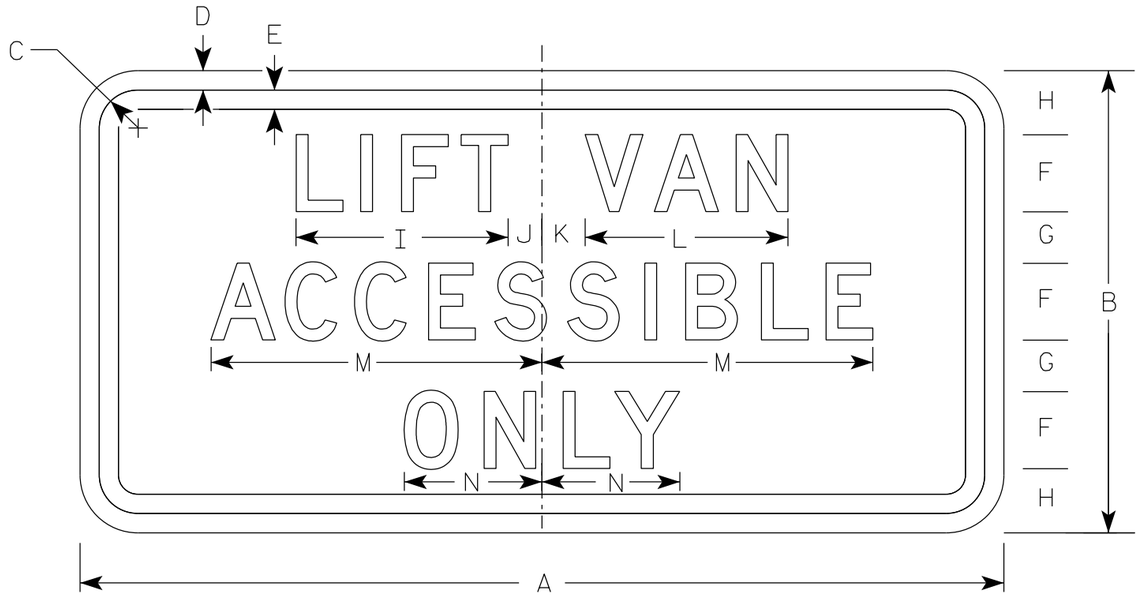
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/25/2011 PLATE NO. R7-8A.6

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 77 | E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Green
3. Message Series - D



R7-8V

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	12	6	1 1/8	3/8	3/8	1	1/2	1	2 3/4	1/2	1/2	2 5/8	4 1/4	1 3/4													0.50
2M	18	9	1 1/8	3/8	3/8	1 1/2	1	1 1/4	4 1/8	5/8	7/8	4	6 1/2	2 5/8													1.125
3	18	9	1 1/8	3/8	3/8	1 1/2	1	1 1/4	4 1/8	5/8	7/8	4	6 1/2	2 5/8													1.125
4																											
5																											

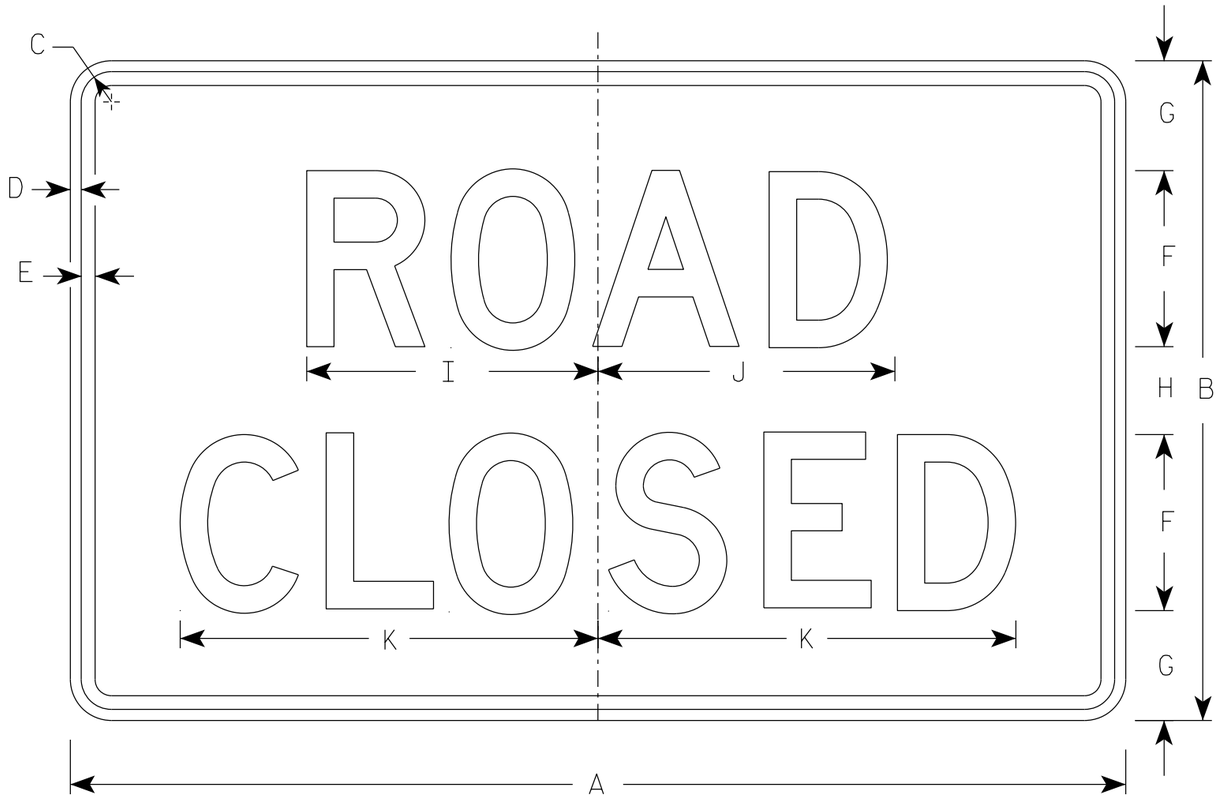
STANDARD SIGN
R7-8V

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/26/2022 PLATE NO. R7-8V.7

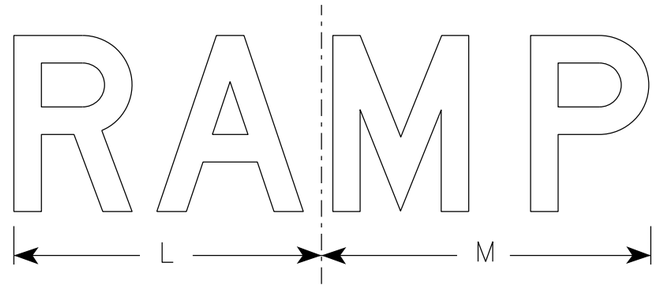
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 78 E



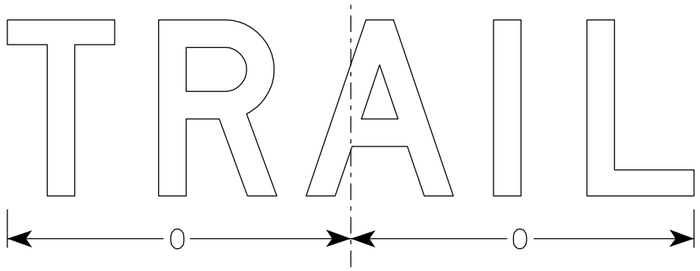
R11-2

NOTES

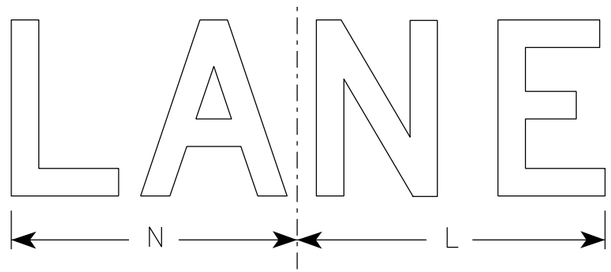
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Modify the message as required.



R11-2R



R11-2T



R11-2L

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
2M	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
3	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
4	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
5	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0

STANDARD SIGN
R11-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/29/2021 PLATE NO. R11-2.11

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 79	E

Wisconsin Department of Transportation

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